

N.M. Oil Cons. Div-Dist. 2  
1301 W. Grand Avenue  
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Artesia, NM 88210FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN			5. LEASE DESIGNATION AND SERIAL NO. NM 105217	
1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			7. UNIT AGREEMENT NAME	
2. NAME OF OPERATOR Nearburg Producing Company			8. FARM OR LEASE NAME, WELL NO. Red Cloud 4 Federal #1	
3. ADDRESS AND TELEPHONE NO. 3300 North "A" Street, Bldg 2, Ste 120, Midland, TX 79705 (915) 686-8235			9. API WELL NO. 30-015-32191	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface Unit M, 810' FSL and 660' FWL At proposed prod. zone			10. FIELD AND POOL, OR WILDCAT Lusk Morrow; West (Gas)	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 9 miles northwest of Halfway, New Mexico			11. SEC. T., R. M., OR BLK. AND SURVEY OR AREA Section 4-19S-31E	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 660'			12. COUNTY OR PARISH Eddy	
16. NO. OF ACRES IN LEASE 320			13. STATE NM	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320			18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 12,500'	
19. PROPOSED DEPTH 12,500'			20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3554' GR CAPITAN CONTROLLED WATER BASIN			22. APPROX. DATE WORK WILL START* 09/01/2003	
23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" J55 H40	48#	650' 1300'	400 sx cmt, circ to surface
12-1/4"	8-5/8" J55 HCK	24# & 32#	3600'	1500 sx cmt, circ to surface
7-7/8"	5-1/2" J55 N80	17# & 20#	12,500'	1500 sx cmt

Propose to drill the well to sufficient depth to evaluate the Morrow formation. After reaching TD, logs will be run and casing set if the evaluation is positive. Perforate, test and stimulate as necessary to establish production.

Acreege dedication 320; S/2 of Section 4

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

IN ABOVE SPACE DESCRIBE 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 Sarah Jordan 203 TITLE Production Analyst DATE 07/17/2003  
(This space for Federal or State office use)

PERMIT 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:

ACTING

APPROVED BY /s/ Joe G. Lara TITLE FIELD MANAGER DATE 31 JUL 2003

\*See Instructions On Reverse Side

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.

## STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Nearburg Producing Company  
3300 North "A" Street, Building 2, Suite 120  
Midland, Texas 79705

The undersigned accepts all applicable terms, conditions, stipulations and restrictions covering operations conducted on the leased land or portion thereof, as described below:

Lease No: NM 105217

Legal Description of Land: Unit M, 810' FSL & 660' FWL  
Section 4, T19S, R31E  
Eddy County, New Mexico


Formation(s) (if applicable): Morrow

Bond Coverage: \$25,000 statewide bond of Nearburg Producing Company

BLM Bond File No: NM1307

Date

7/10/03

  
H. R. Willis  
Drilling Manager

**ATTACHMENT TO FORM 3160-3  
RED CLOUD 4 FEDERAL COM #1  
SECTION 4, T19S, R31E  
EDDY COUNTY, NEW MEXICO**

**DRILLING PROGRAM**

**1. GEOLOGIC NAME OF SURFACE FORMATION**

Red Bed

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS**

Rustles	750'	Wolfcamp	9900'
Yates	2700'	Strawn	10,850'
Queen	3350'	Atoka	11,200'
Delaware	4920'	Morrow	11,400'
Bone Spring	6500'	TD	12,300'
T/1 <sup>st</sup> Bone Spring	7950'		

**3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL, OR GAS**

Bone Spring	Oil	8000'
Morrow	Gas	12,000'

**4. CASING AND CEMENTING PROGRAM**

<u>Casing Size</u>	<u>From</u> <u>To</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
13-3/8"	0' - 650'	48#	H40	STC
8-5/8"	0' - 3,600'	32#	J55	STC
5-1/2"	0' - 12,500'	17#	K55,N80	LTC&BTC

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability.

We plan to drill a 17-1/2" hole to equal <sup>650'</sup>~~1300'~~. 13-3/8" casing will be cemented with 800 sxs Class "C" or volume necessary to bring cement back to surface.

12-1/4" hole will be drilled to 3,600' and 8-5/8" casing will be cemented with 1,500 sxs Class "C" or volume necessary to bring cement back to surface.

7-7/8" hole will be drilled to 12,500' and 5-1/2" production casing will be cemented with approximately 1000 sxs of Class "H" cement covering productive zones.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

The BOP stack will consist of a 5,000 psi working pressure, dual ram type preventer and annular.

A BOP sketch is attached.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM

Spud and drill to 650' with fresh water mud for surface string. The intermediate section will be drilled with 10 ppg Brine water mud to 3,200'. Intermediate casing will be run at this depth. The production section from 3,200' to 12,500' will be 9.2 – 9.6 ppg cut Brine system with mud weight sufficient to control formation pressures.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT

None required.

8. LOGGING, TESTING, AND CORING PROGRAM

DLL/CNL/LDT/CAL/GR logging is planned. Drill stem tests, cores and sidewall cores are possible.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL HAZARDS

None anticipated.

BHP expected to be 3,500 psi.

10. ANTICIPATED STARTING DATE:

Is planned that operations will commence on September 1, 2003 with drilling and completion operation lasting about 45 day.

**SURFACE USE AND OPERATIONS PLAN FOR**  
**DRILLING, COMPLETION, AND PRODUCING**

**NEARBURG PRODUCING COMPANY**  
**RED CLOUD 4 FEDERAL COM #1**  
**SECTION 4-T19S-R31E**  
**LEA COUNTY, NEW MEXICO**

**LOCATED**

9 miles Northwest of Halfway, New Mexico

**OIL & GAS LEASE**

NM 105217

**RECORD LESSEE**

Yates Petroleum Corp.

**BOND COVERAGE**

\$25,000 statewide bond of Nearburg Producing Company

**ACRES IN LEASE**

320.00 acres

**GRAZING LEASE**

Wayne Hardin  
799 S. Roosevelt Road 8  
Portales, NM 88130

**POOL**

Lusk; Morrow West (Gas) (80840)

**EXHIBITS**

- A. Area Road Map
- B. Drilling Rig Layout
- C. Vicinity Oil & Gas Map
- D. Topographic & Location Verification Map
- E. Well Location & Acreage Dedication Map

This well will be drilled to a depth of approximately 12,500'.

1. EXISTING ROADS

A. Exhibit A is a portion of a section map showing the location of the proposed well as staked.

B. Exhibit C is a plat showing existing roads in the vicinity of the proposed well site.

2. ACCESS ROADS

A. Length and Width

The access road will be built and is shown on Exhibit D.

B. Surface Material

Existing.

C. Maximum Grade

Less than five percent

D. Turnouts

None necessary.

E. Drainage Design

Existing.

F. Culverts

None necessary.

G. Gates and Cattle Guards

None needed.

3. LOCATION OF EXISTING WELLS

Existing wells in the immediate area are shown in Exhibit C.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Necessary production facilities for this well will be located on the well pad.

5. LOCATION AND TYPE OF WATER SUPPLY

It is not contemplated that a water well will be drilled. Water necessary for drilling will be purchased and hauled to the site over existing roads shown on Exhibit D.

6. METHODS OF HANDLING WASTE DISPOSAL

- A. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- B. Water produced during tests will be disposed of in the drilling pits.
- C. Oil produced during tests will be stored in test tanks.
- D. Trash will be contained in a trash trailer and removed from well site.
- E. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

7. ANCILLARY FACILITIES

None required.

8. WELL SITE LAYOUT

Exhibit B shows the relative location and dimensions of the well pad, mud pits, reserve pit, and trash pit, and the location of major rig components.

9. PLANS FOR 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. The well site will be cleaned of all trash and junk to leave the site in an as aesthetically pleasing condition as possible.
- B. After abandonment, all equipment, trash, and junk will be removed and the site will be clean.

10. OTHER INFORMATION

A. Topography

The land surface at the well site is rolling native grass with a regional slope being to the east.

B. Soil

Topsoil at the well site is sandy soil.

C. Flora and Fauna

The location is in an area sparsely covered with mesquite and range grasses.

D. Ponds and Streams

There are no rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures

There are no residences within a mile of the proposed well site.

F. Archaeological, Historical, and Cultural Sites

None observed on this area.

G. Land Use

Grazing

H. Surface Ownership

Bureau of Land Management

11. OPERATOR'S REPRESENTATIVE

H. R. Willis  
3300 North "A" Street, Bldg 2, Suite 120  
Midland, Texas 79705  
Office: (915) 686-8235  
Home: (915) 697-2484

12. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Nearburg Producing Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

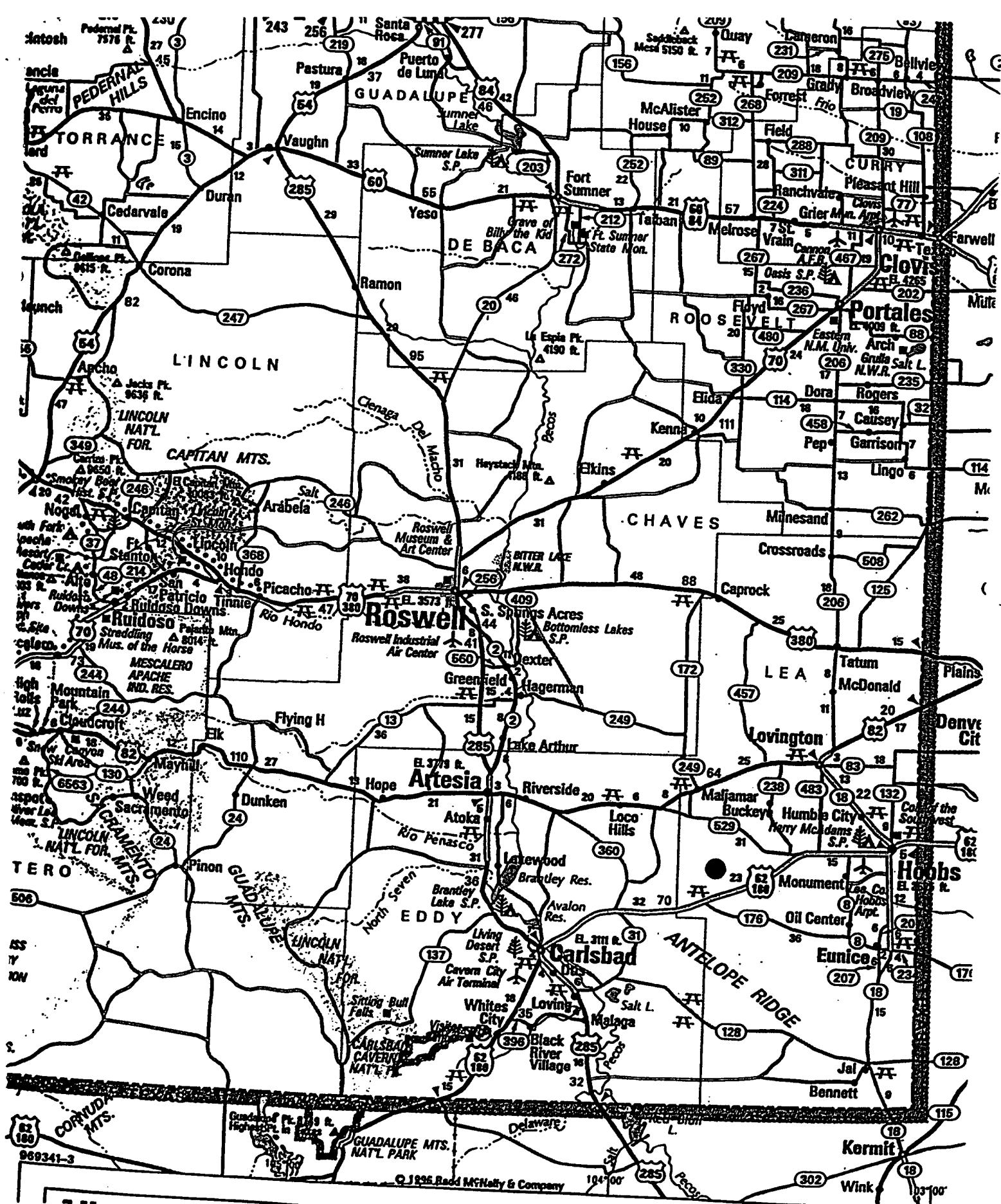
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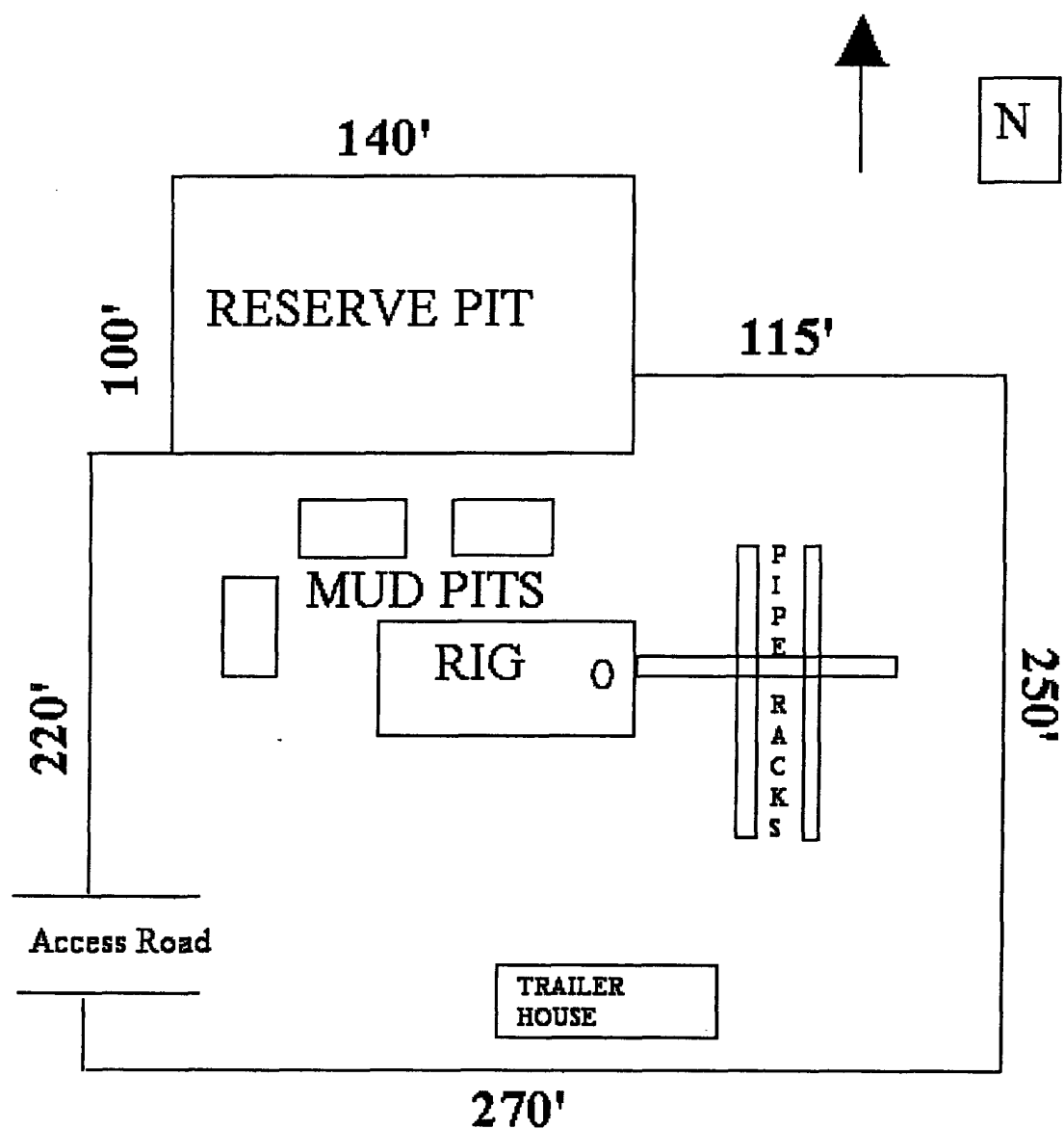
7/18/03

H. R. Willis

Drilling Manager

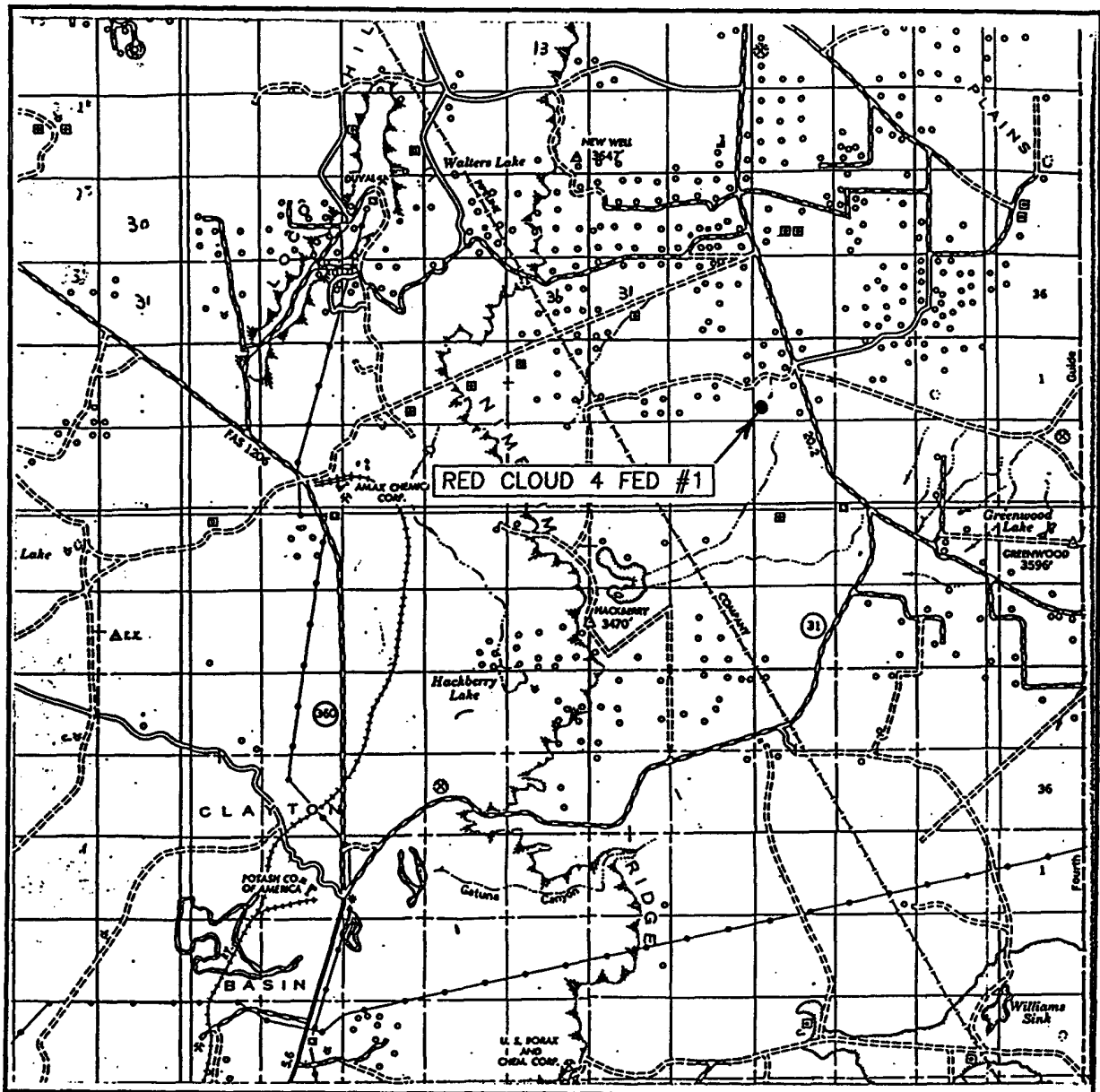






**EXHIBIT B**  
**DRILLING RIG LAYOUT**  
**NEARBURG PRODUCING COMPANY**  
**RED CLOUD 4 FEDERAL COM #1**

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 4 TWP. 19-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 810' FSL & 660' FWL

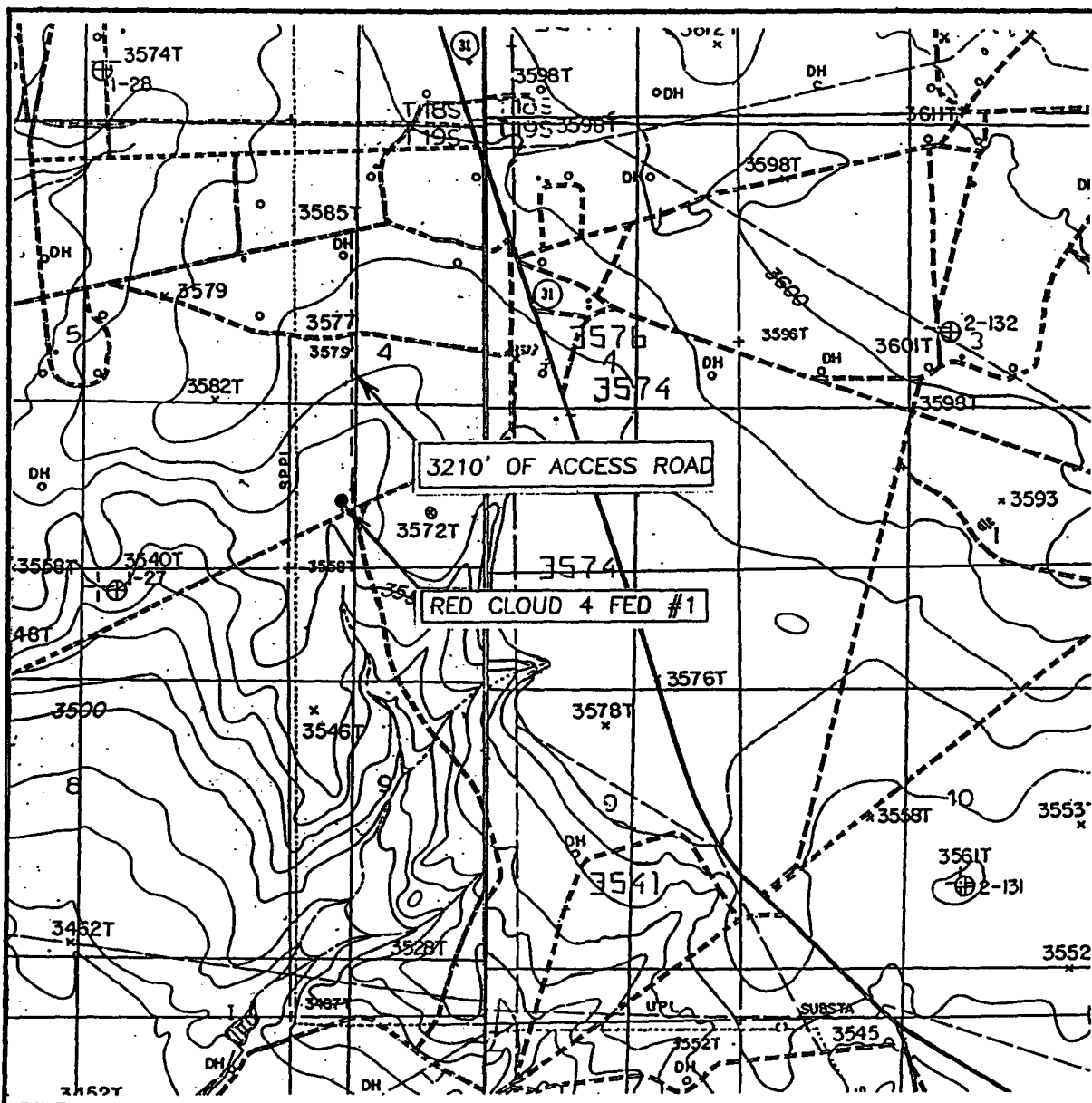
ELEVATION 3554'

OPERATOR NEARBURG PRODUCING COMPANY

LEASE RED CLOUD 4 FEDERAL

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

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 4 TWP. 19-S RGE. 31-E

HACKBERRY LAKE &  
GREENWOOD LAKE, N.M.

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 810' FSL & 660' FWL

ELEVATION 3554'

OPERATOR NEARBURG PRODUCING COMPANY

LEASE RED CLOUD 4 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

HACKBERRY LAKE & GREENWOOD LAKE, N.M.

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

## State of New Mexico

Energy, Minerals and Natural Resources Department

## 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

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 80840	Pool Name Lusk Morrow; West (Gas)
Property Code	Property Name RED CLOUD 4 FEDERAL	Well Number 1
OGRID No. 015742	Operator Name NEARBURG PRODUCING CO.	Elevation 3554'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	4	19-S	31-E		810	SOUTH	660	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 320	Joint or Infill N	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

LOT 4	LOT 3	LOT 2	LOT 1
39.62 AC	39.63 AC	39.63 AC	39.64 AC

**OPERATOR CERTIFICATION**

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

Kim Stewart  
Signature

Kim Stewart  
Printed Name

Regulatory Analyst  
Title

December 28, 2001  
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.

DECEMBER 18, 2001

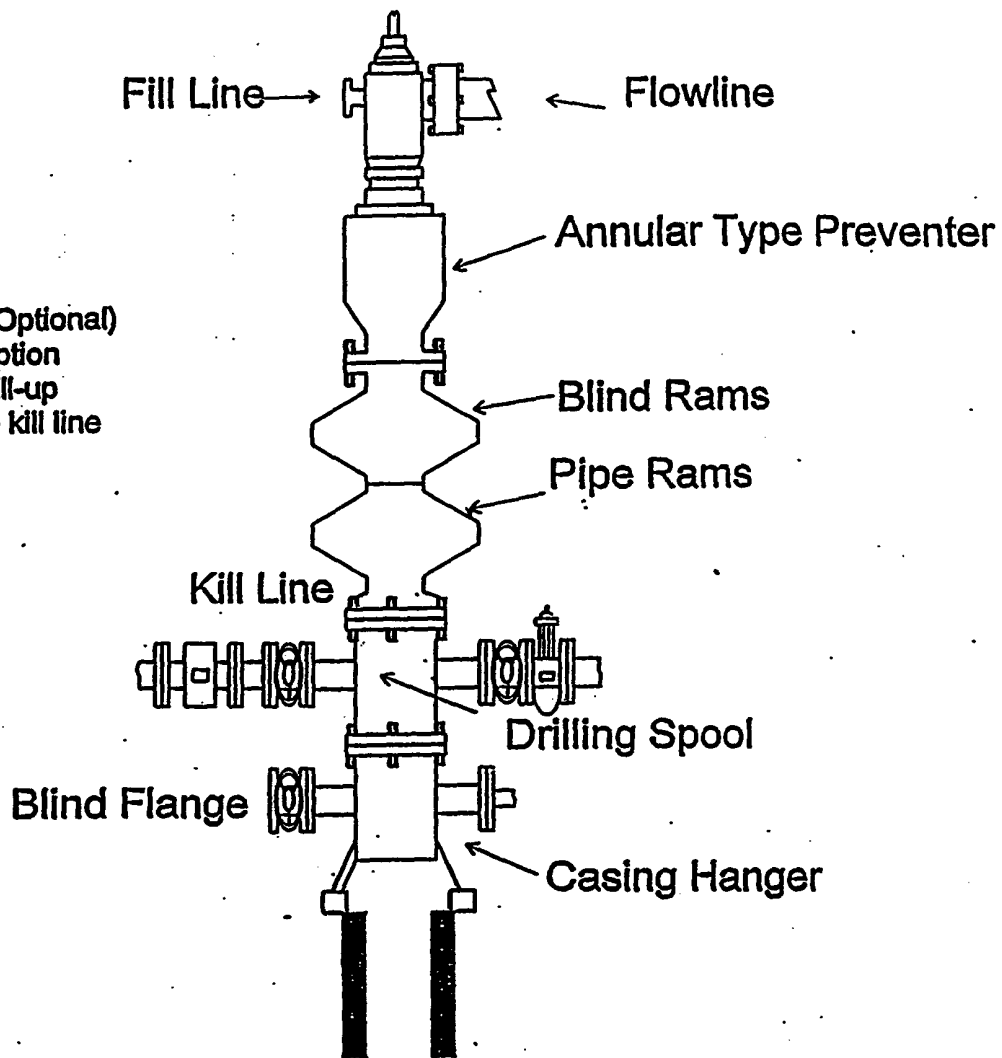
Date Surveyed  
Signature: Ronald E. Edson AWB  
Professional Surveyor

Ronald E. Edson  
Professional Surveyor  
01.11.1312

Certificate No. RONALD E. EDSON 3239  
12841

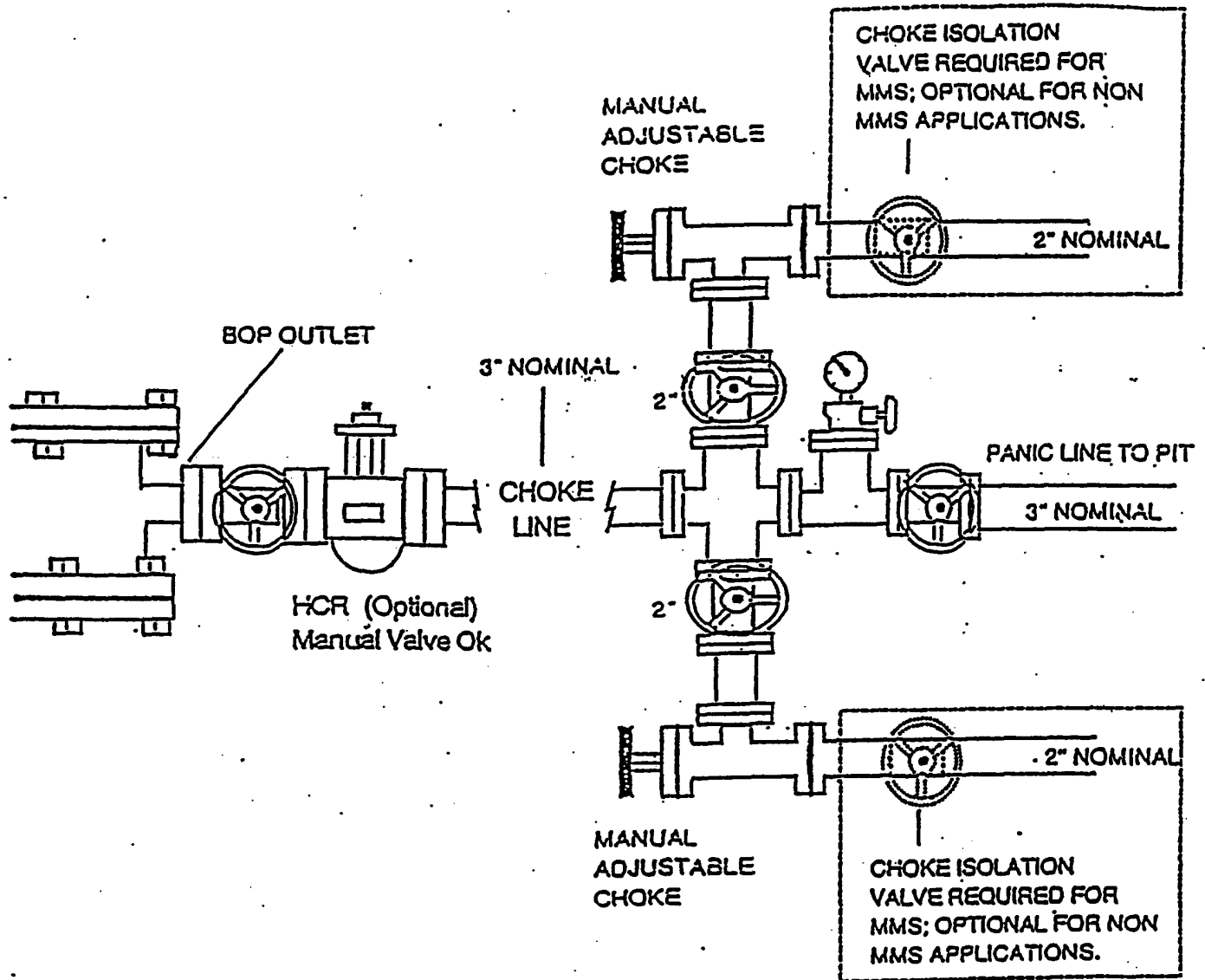
# BOPE SCHEMATIC

Rotating Head (Optional)  
Drilling Nipple option  
must include a fill-up  
line. Do not use kill line  
for fill up.



1500 Series

NEARBURG PRODUCING COMPANY  
CHOKE MANIFOLD  
5M SERVICE



**HYDROGEN SULFIDE DRILLING OPERATIONS PLANS  
NEARBURG PRODUCING COMPANY  
RED CLOUD 4 FEDERAL #1**

**1. HYDROGEN SULFIDE TRAINING**

- A. All regularly assigned personnel, contracted or employed by Nearburg Producing Company, will receive training from a qualified instructor in the following areas prior to commencing drilling potential hydrogen sulfide bearing formations in this well:
  - 1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
  - 2. The proper use and maintenance 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.
- B. 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 tubulars are to be used, personnel will be trained in their special maintenance requirements.
  - 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
  - 3. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan.
- C. There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations 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.



# **HYDROGEN SULFIDE DRILLING OPERATIONS PLANS**

## **PAGE 2**

### **2. 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:**

1. Flare line with continuous pilot.
2. Choke manifold with a minimum of one remote choke.
3. Blind rams and pipe rams to accommodate all sizes with properly sized closing unit.
4. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head and flare gun with flares as needed.

#### **B. Protective Equipment for Essential Personnel:**

Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.

#### **C. H2S Detection and Monitoring Equipment:**

1. Two portable H2S monitors positioned and location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
2. One portable SO2 monitor positioned near flare line.

#### **D. Visual Warning systems:**

1. Wind direction indicators as shown on well site diagram.
2. 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.

## **HYDROGEN SULFIDE DRILLING OPERATIONS PLANS**

### **PAGE 3**

#### **E. Mud Program**

1. The Mud Program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface. Proper mud weights, safe drilling practices and the use of H<sub>2</sub>S scavengers will minimize hazards when penetrating H<sub>2</sub>S bearing zones.
2. A mud-gas separator will be utilized as needed.

#### **F. Metallurgy**

All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and line and valves shall be suitable for H<sub>2</sub>S service.

#### **G. Communication**

1. Cellular telephone communications in company vehicles and mud logging trailer.
2. Land line (telephone) communications at area office.

#### **H. Well Testing**

Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing in an H<sub>2</sub>S environment will be conducted during the daylight hours.

## **WARNING**

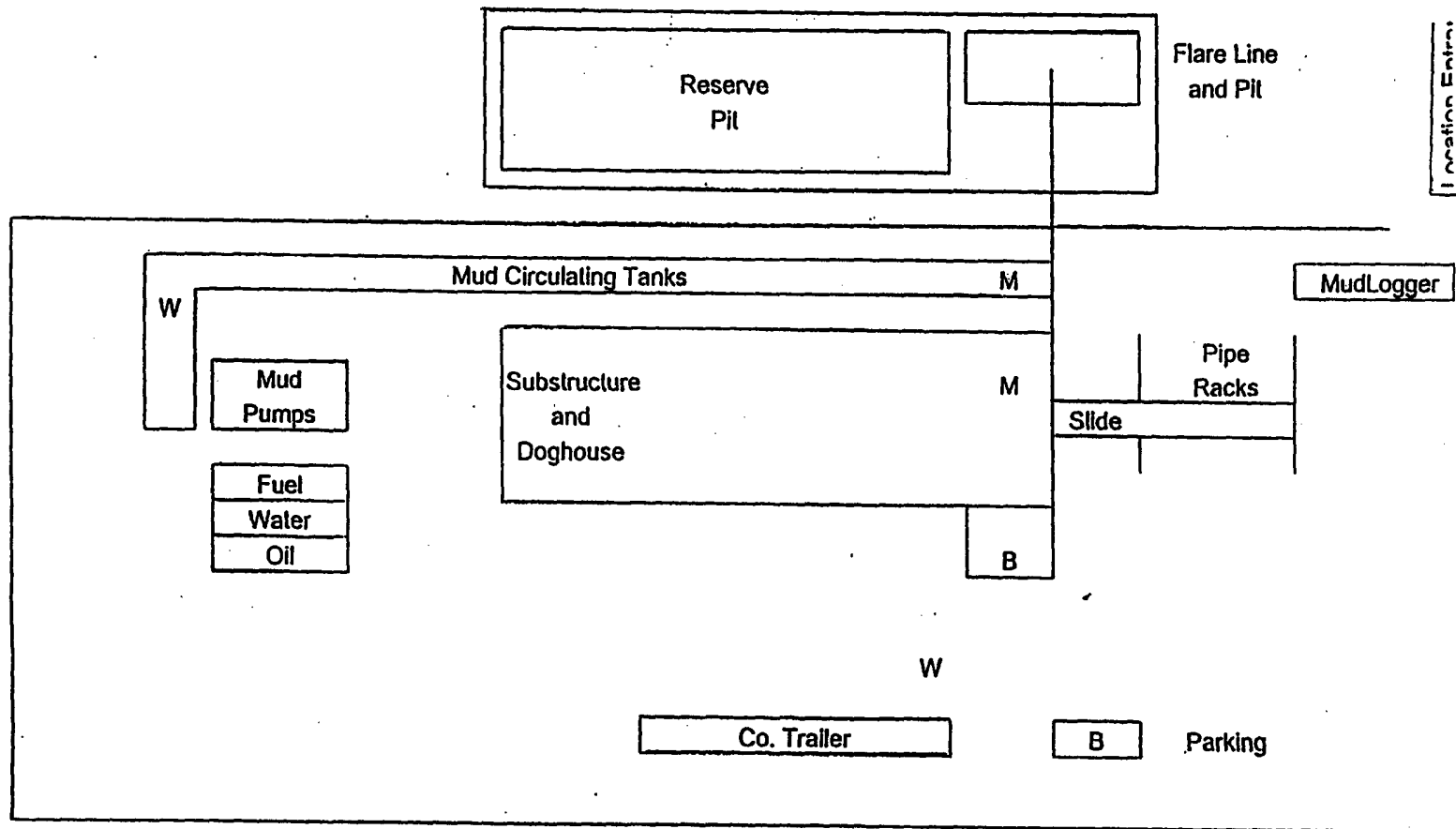
**YOU ARE ENTERING A H2S AREA  
AUTHORIZED PERSONNEL ONLY**

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. CHECK WITH NEARBURG SUPERINTENDENT AT MAIN OFFICE

**NEARBURG PRODUCING COMPANY**

(432) 686-8235

# NEARBURG PRODUCING COMPANY HYDROGEN SULFIDE DRILLING OPERATIONS LOCATION PLAN



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

W - Wind Direction Indicators

B - Safe Briefing areas with caution signs and protective breathing equipment.  
Minimum 150' from wellhead.

Prevailing Wind Directions: Summer - South/Southwest  
Winter - North/Northwest