

UNDES WASHINGTON RANCH; MORROW, SOUTH

Form 3160-3
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL

GAS
WELL ☒

OTHER ☐

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

MARBOB ENERGY CORPORATION

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 227, ARTESIA, NM 88210 505-748-3303

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

At surface 1650 FNL 660 FEL

At proposed prod. zone

SAME

Unit H

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

SOUTH FROM WHITE CITY ON US 62/180 FOR 13 MILES

15. DISTANCE FROM PROPOSED*

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

660'

16. NO. OF ACRES IN LEASE

3100.50

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.

19. PROPOSED DEPTH

8200'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3816' GR

22. APPROX. DATE WORK WILL START*

04/23/00

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	J-55, 8 5/8"	24#	1075'	350 SX, CIRC
7 7/8"	J-55, 5 1/2"	17#	8200'	SUFFICIENT TO COVER 200' ABOVE ALL KNOWN O&G HORIZONS

PAY ZONE WILL BE SELECTIVELY PERFORATED AND STIMULATED AS NEEDED FOR OPTIMUM PRODUCTION

ATTACHED ARE: 1. WELL LOCATION AND ACREAGE DEDICATION PLAT
2. SURFACE USE PLAN
3. SUPPLEMENTAL DRILLING DATA

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

Robin Cockburn

TITLE PRODUCTION ANALYST

DATE 03/22/00

(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:

APPROVED BY

TITLE

DATE

*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.

DISTRICT I

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

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

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT IV

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name WILDCAT
Property Code	Property Name PRIMERO RNR 26 FEDERAL	Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3816

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	26	26 S	24 E		1650	NORTH	660	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 320	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

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature ROBIN COCKRUM Printed Name PRODUCTION ANALYST Title 3/22/00 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. MARCH 9, 2000 Date Surveyed LMP Signature & Seal of Professional Surveyor 00-11-0309 Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641 MACON McDONALD 12185

DRILLING PROGRAM

Attached to Form 3160-3
Marbob Energy Corporation
Primero RNR "26" Federal No. 1
1650' FNL and 660' FEL
Section 26-26S-24E
Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Castile

2. Estimated Tops of Important Geologic Markers:

Delaware	1040'	Strawn	6835'
Bone Springs	4335'	Atoka	7145'
Dean	6235'	Morrow	7785'
Wolfcamp	6585'		

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Delaware	1040'
Bone Springs	4335'
Dean	6235'
Wolfcamp	6585'
Strawn	6835'
Atoka	7145'
Morrow	7785'

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 intermediate casing to the top of the Delaware Lime Formation at $\pm 1075'$ and circulate cement to surface or sufficient to tie in. 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.

DRILLING PROGRAM

PAGE 2

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD csg</u>	<u>Weight, Grade, Jt. Cond. Type</u>
12 1/4"	0 - 1075'	8 5/8"	24# J-55 LTC NEW R-3
7 7/8"	1075' - 8200'	5 1/2"	17# J-55 LTC NEW R-3

Cement Program:

8 5/8" Casing: Cemented to surface with 350sx of Class C w/2% cc.
5 1/2" Production Casing: Cemented with 325sx Class C or sufficient to cover 200' above all known oil and gas horizons.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (3000 psi wp) preventer. This unit will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4-1/2" drill pipe rams on bottom. This BOP will be nipped up on the 8 5/8" csg and used continuously until TD is reached. All BOP's and accessory equipment will be tested by independent tester to 3000 psi.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and a 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with cut brine. The applicable depths and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (sec)</u>	<u>Waterloss (cc)</u>
0 - 1075'	Fresh Water	8.5	28	N.C.
1075'-8000'	Cut Brine	9.5 - 9.6+	29 - 32	5-15

DRILLING PROGRAM

PAGE 3

7. Auxiliary Well Control and Monitoring Equipment:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

8. Logging, Testing, and Coring Program:

- (A) The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Casing Log, and Depth Control Log.
- (B) No conventional coring is anticipated .
- (C) Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD based on drill shows, and log evaluation, and drill stem test results.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 105' and estimated bottom hole pressure (BHP) is 3200 psig.

10. Anticipated Starting Date and Duration of Operations:

Location and road work will not begin until approval has been received from the BLM. The anticipated spud date is April 23, 1999. Once commenced, the drilling operation should be finished in approximately 21 days. If the well is productive, an additional 30 to 60 days will be required for completion and testing before a decision is made to install permanent facilities.

SURFACE USE AND OPERATING PLAN

Attached to Form 3160-3
Marbob Energy Corporation
Primero RNR "26" Federal No. 1
1650' FNL and 660' FEL
Section 26-26S-24E
Eddy County, New Mexico

1. Existing Roads:

- A. The well site and elevation plat for the proposed well is attached. It was staked by John West Engineering.
- B. All roads to the location are shown in Exhibit #2. The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.
- C. Directions to location: From White City, proceed south on U.S. 62/180 for 13 miles. Turn east on lease road at approximately mile marker 3, proceed for 1.8 miles to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

No new road will be built for this well. Existing roads will be used to access the proposed well.

- A. The average grade will be less than 1%.
- B. No turnouts are planned.
- C. No culverts, cattleguard, gates, low-water crossings, or fence cuts are necessary.
- D. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM-approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.
- E. The proposed access road as shown in Exhibit #3 has been centerline flagged by John West Engineering.

SURFACE USE AND OPERATING PLAN

PAGE 2

3. Location of Existing Wells:

Exhibit #3 shows all existing wells within a one-half mile radius of this well.

4. Location of Existing and/or Proposed Facilities:

A. Marbon Energy Corporation proposes a collection facility, if well is productive, to be located on the Primero RNR "26" Federal #1 well pad.

B. If the well is productive, rehabilitation plans are within ten months of completion, or as soon as contents are dry. The reserve pit will be back filled in a manner so that there is a minimum of 3' of cover over the remaining cuttings. Top soil removed from the drill site will then be used to recontour the pit area so that approximately one foot of cover remains above natural terrain. Recontouring the pits in this manner allows rain fall to run off of and around the pit area. Area will be reseeded as to BLM specifications.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from water wells in the area and hauled to the location by transport truck over the existing and proposed access roads shown in Exhibit #2. If a commercial fresh water source is nearby, pipeline may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and the proposed new access road (approximately 1500 cubic yards) will be obtained from the T. A. Mayes Ranch. All roads and pads will be constructed of 4" of rolled and compacted caliche.

7. Methods of Handling Water Disposal:

A. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing, and completion operations. The reserve pit will be two earthen pits, approximately 80' X 10' X 10' deep. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

B. Garbage and trash produced during drilling or completion operations will be hauled off. All waste material will be contained to prevent scattering by the wind. All water and fluids will be disposed of into the reserve pit. Salts and other

SURFACE USE AND OPERATING PLAN

PAGE 3

chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.

- C. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 30 days. No adverse materials will be left on location. The reserve pit will be completely fenced until it has dried. When the reserve pit is dry enough to breakout and fill, the reserve pit will be leveled and reseeded as per BLM specifications. In the event of a dry hole, the location will be ripped and seeded, as per BLM Specifications, and a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite, or other facilities will be built as a result of the operations on this well.

9. Well Site Layout:

- A. The drill pad layout is shown in Exhibit #4. Dimensions of the pad and pits are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection.

- B. The reserve pit will be lined with a high-quality plastic sheeting.

10. Plans for Restoration of the Surface:

- A. Upon finishing drilling and/or completion operations, all equipment and other material not needed for operations will be removed.
All trash, garbage, and pit lining will be hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 10 months after abandonment.
- B. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side. The fencing will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit.
- C. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. Any additional caliche required for facilities will be obtained from the T.A. Mayes Ranch caliche pit. Topsoil removed from the drill site will be used to recontour the pit area and reseeded as per BLM specifications.

SURFACE USE AND OPERATING PLAN
PAGE 4

11. Surface Ownership:

The wellsite and lease is located on Federal Surface.

- A. The area around the well site is grassland and the top soil is gyp. The vegetation is native scrub grasses.
- B. A Cultural Resources Examination has been requested and will be forwarded to your office.

12. Lessee's and Operator's Representative:

The Marbob Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

Doug Chandler
Marbob Energy Corporation
324 W. Main, Suite 103
P. O. Drawer 227
Artesia, New Mexico 88211
Phone: 505/748-3303 (office)
505/887-6934 (home)

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 currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Marbob Energy Corporation and its contractors and subcontractors in conformity with this plan and the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 3-22-2000

Signed: _____


Johnny C. Gray
Vice-President

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:

1. The hazards and characteristics of hydrogen sulfide (H_2S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

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

1. The effects of H_2S 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_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S 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. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S 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 H_2S .

1. Well Control Equipment:
 - A. Choke manifold
 - B. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - C. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
2. 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.
3. 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.
4. Visual warning systems:
 - A. Wind direction indicators as shown on well site diagram.
 - B. 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.
5. Mud Program:
 - A. The mud program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.
 - B. A mud-gas separator will be utilized.
6. Communication:

Radio communications in company vehicles including cellular telephone and 2-way radio.

W A R N I N G

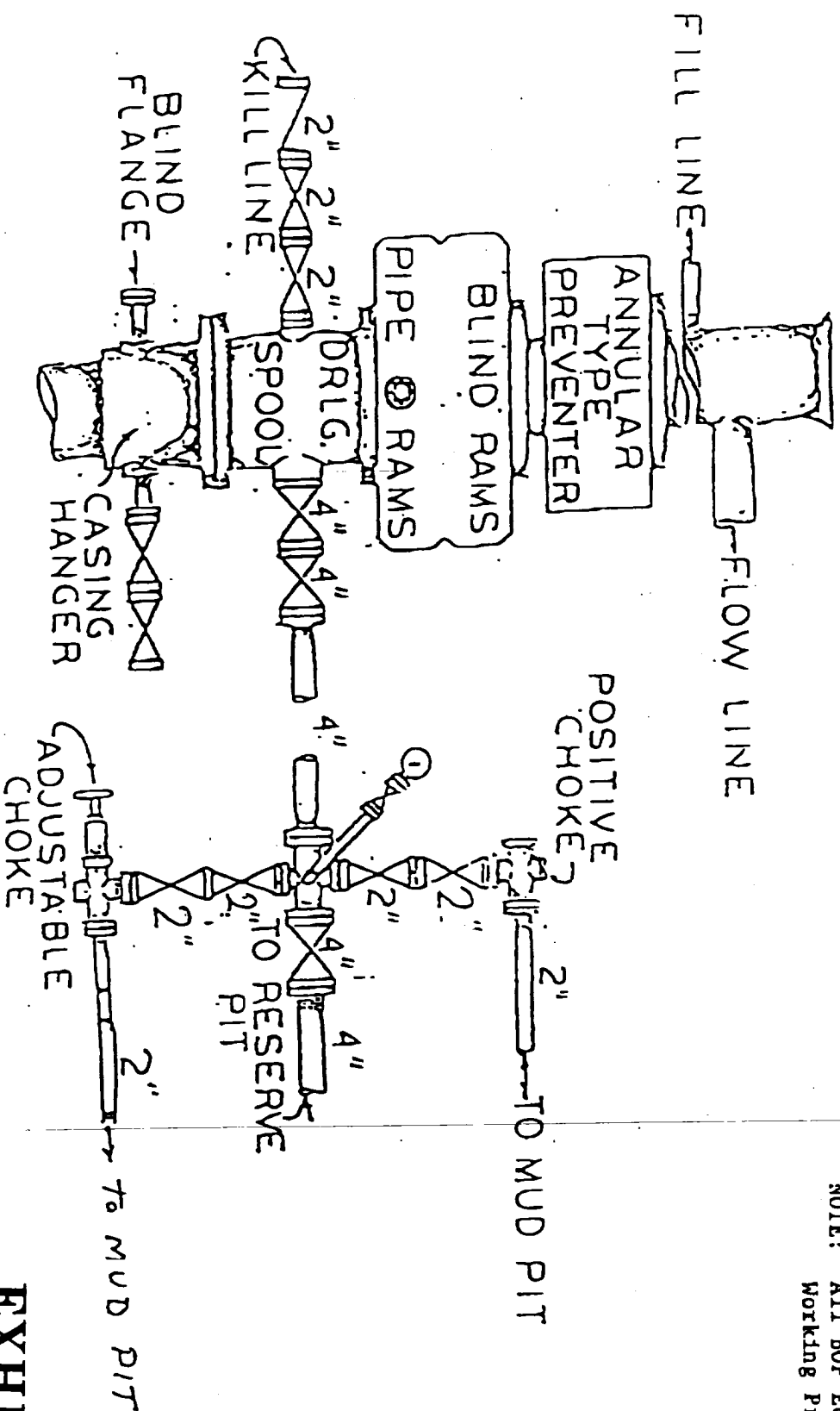
**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 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

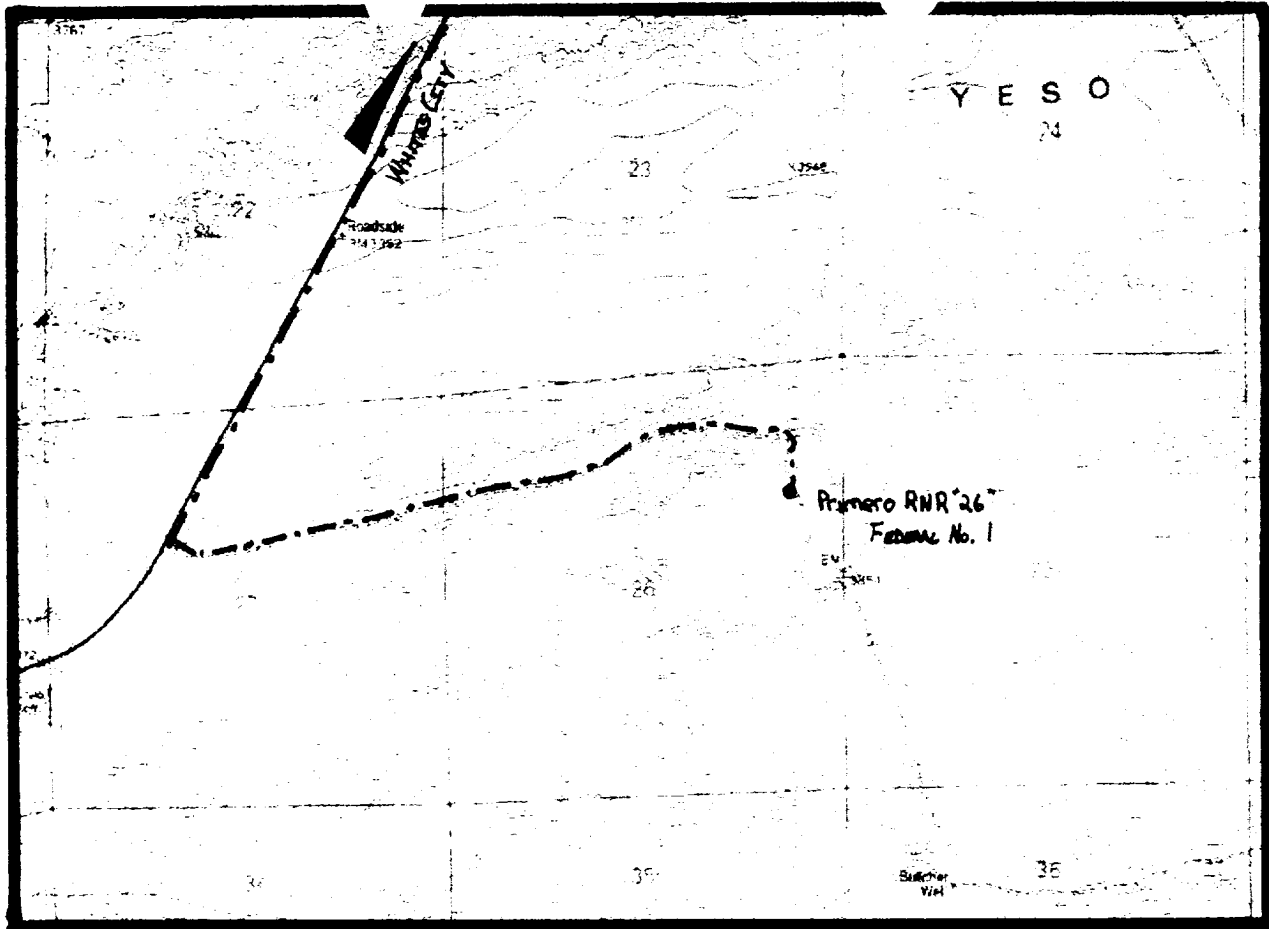
B.O.P. ARRANGEMENT RIG NO. 8



NOTE: All BOP Equipment is 3000# Working Pressure

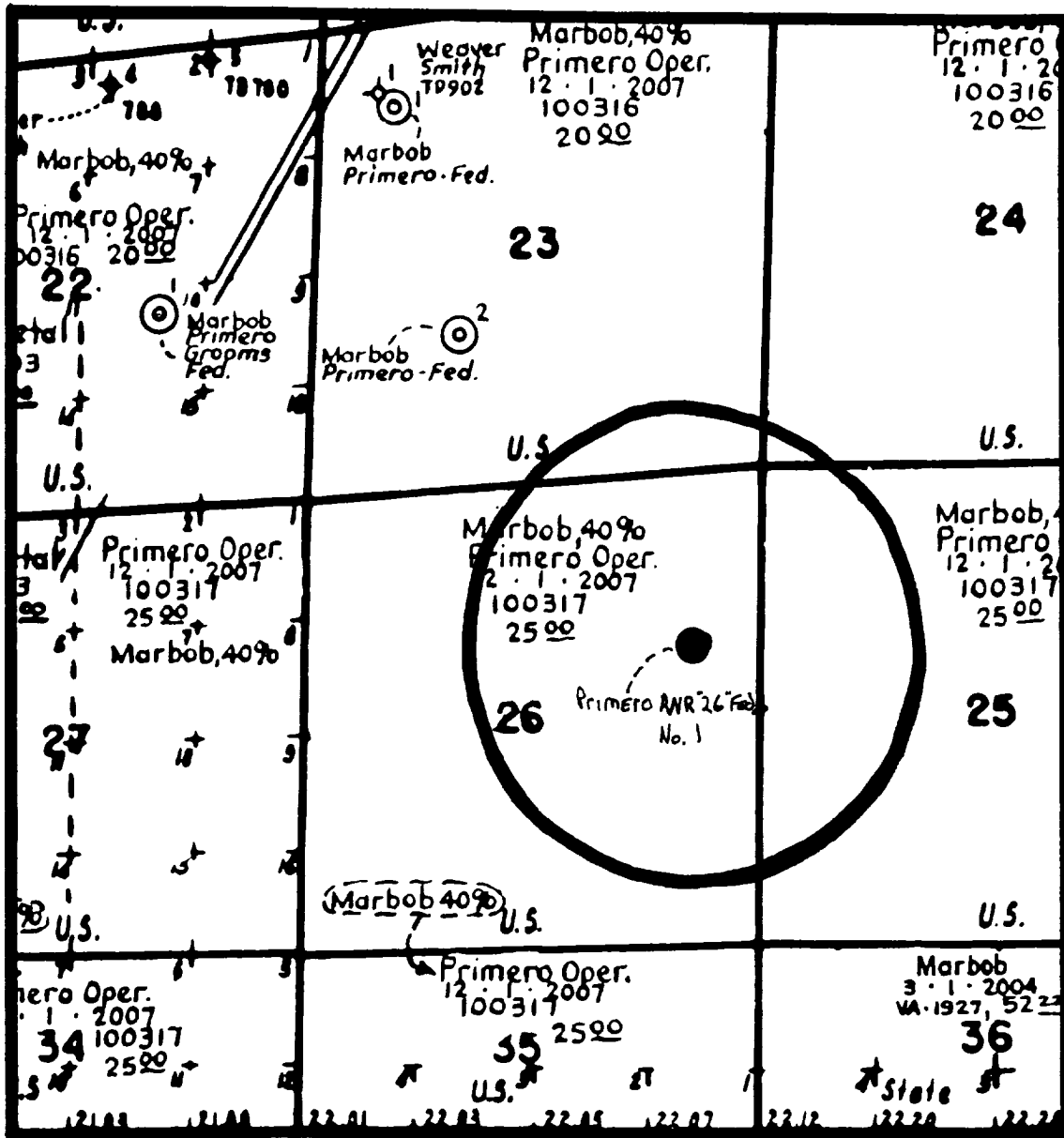
Attachment to Exhibit #1
NOTES REGARDING THE BLOWOUT PREVENTERS

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.
4. All fittings to be flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi W.P. minimum.
6. All choke and fill lines to be securely anchored, especially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on kelly.
9. Extension wrenches and hand wheels to be properly installed.
10. Blow out preventer control to be located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.



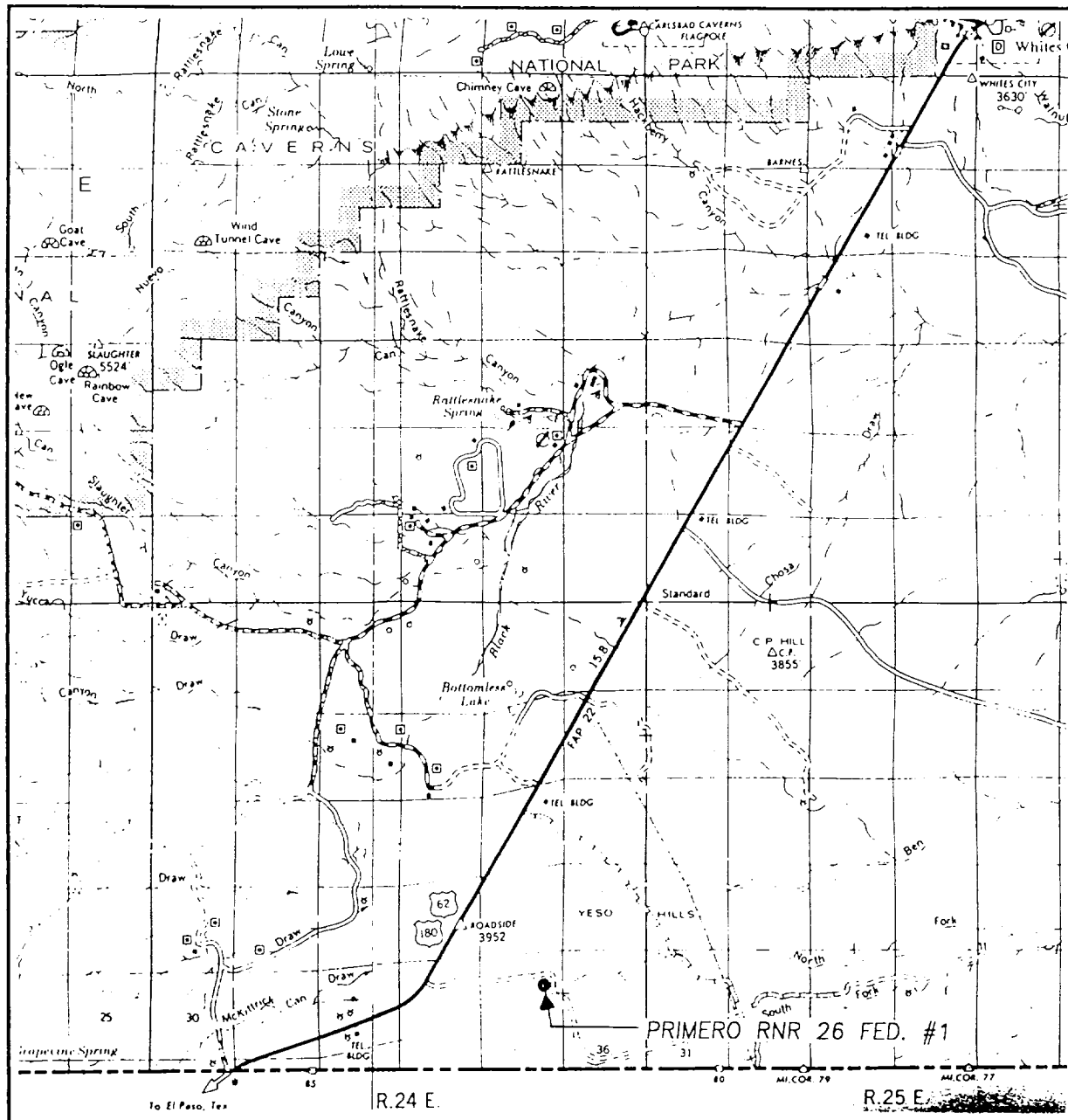
Primero Federal RNR "26" No. 1
1650' FNL & 660' FEL
Section 26 ; T-26s - R-24e
Eddy County, New Mexico

EXHIBIT TWO



Primero Federal RNR "26" No. 1
 1650' FNL & 660' FEL
 Section 26 ; T-26s - R-24e
 Eddy County, New Mexico

VICINITY MAI

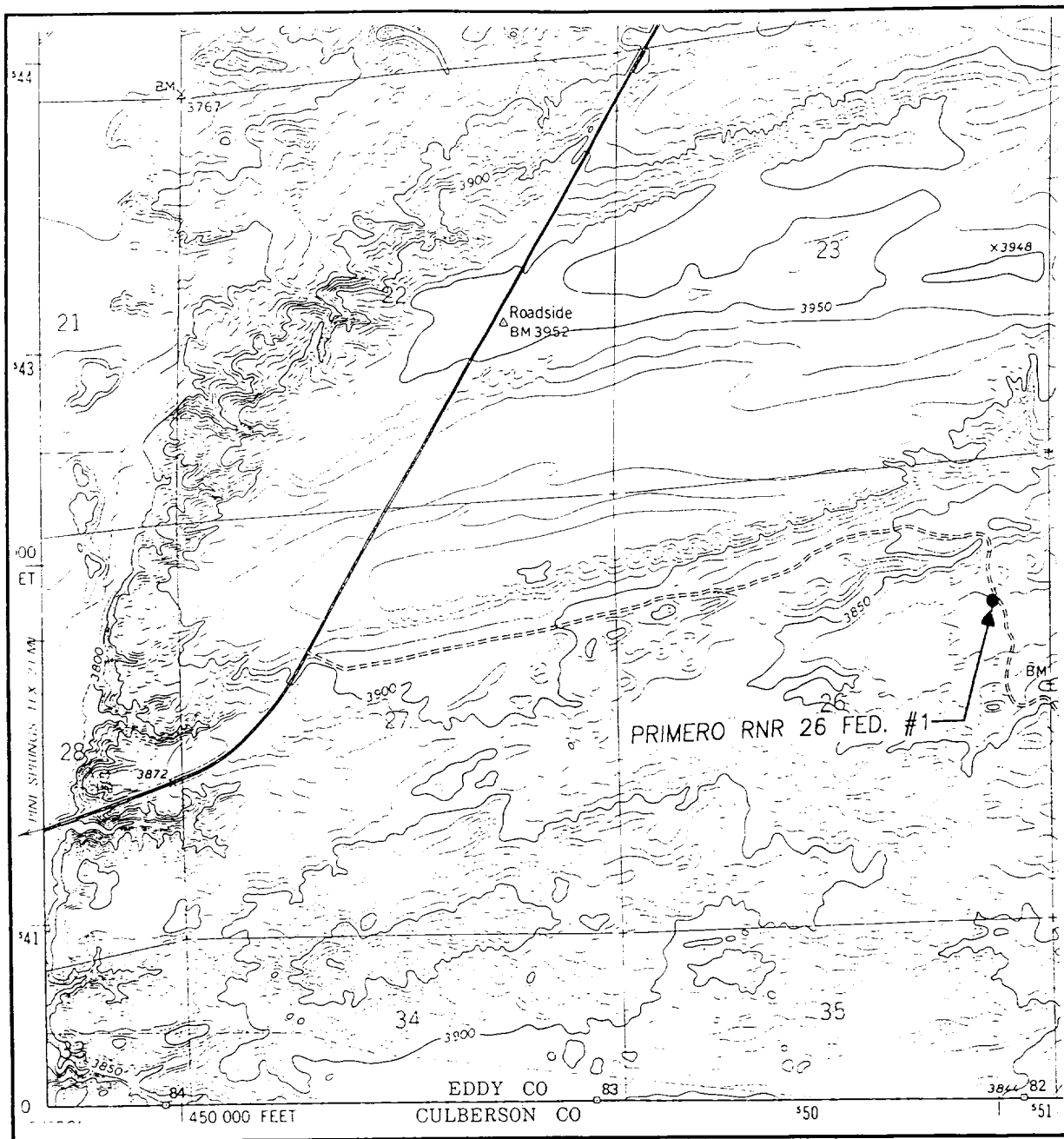


SCALE: 1" = 2 MILES

SEC. 26 TWP. 26-S RGE. 24-E
 SURVEY N.M.P.M.
 COUNTY EDDY
 DESCRIPTION 1650' FNL & 660' FEL
 ELEVATION 3816
 OPERATOR MARBOB ENERGY CORPORATION
 LEASE PRIMERO RNR 26 FED.

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
RATTLESNAKE SPRING, N.M.-TEX. - 10'

SEC. 26 TWP. 26-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1650' FNL & 660' FEL

ELEVATION 3816

OPERATOR MARBOB ENERGY CORPORATION

LEASE PRIMERO RNR 26 FED.

U.S.G.S. TOPOGRAPHIC MAP
RATTLESNAKE SPRING, N.M.-TEX.

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