Form 3166-3 (July 1992)

UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

UNDES .WASHINGTON RANCH; MCRROW SON

dar

5. LEASE DESIGNATION AND SERIAL NO. NM-100317

BUREAU OF LAND MANAGEMENT 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL OR DEEPEN 1a TYPE OF WORK DRILL X DEEPEN 7. UNIT AGREEMENT NAME b TYPE OF WELL SINGLE ZONE MULTIPLE ZONE GAS WELL X OIL 8. FARM OR LEASE NAME, WELL NO OTHER PRIMERO RNR 26 FEDERAL #2 2. NAME OF OPERATOR MARBOB ENERGY CORPORATION 9 APIWELL NO 30*-015 - 3147*1 3. ADDRESS AND TELEPHONE NO 10. FIELD AND POOL, OR WILDCAT P.O. BOX 227, ARTESIA, NM 88210 505-748-3303 WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 1650 FNL 1650 FWL 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA At proposed prod. zone SEC. 26-T26S-R24E SAME 12. COUNTY OR PARISH 14 DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* SOUTH FROM WHITE CITY ON US 62/180 FOR 13 MILES **EDDY** NM 17. NO. OF ACRES ASSIGNED 15. DISTANCE FROM PROPOSED 16. NO. OF ACRES IN LEAS TO THIS WELL LOCATION TO NEAREST 320 3100.50 1650 PROPERTY OR LEASE LINE, FT (Also to nearest drlg. unit line, if any) 20, ROTARY OR CABLE TOOLS 19. PROPOSED DEPTH 18 DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 8200 ROTARY 22. APPROX. DATE WORK WILL START 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 04/23/00 3856' GR 23 PROPOSED CASING AND CEMENTING PROGRAM QUANTITY OF CEMENT WEIGHT PER FOOT SETTING DEPTH GRADE, SIZE OF CASING SIZE OF HOLE 1075 350 SX, CIRC 24# J-55, 8 5/8" 12 1/4" SUFFICIENT TO COVER 200' ABOVE 8200 J-55, 5 1/2' 17# 7 7/8" ALL KNOWN O&G HORIZONS

PAY ZONE WIL 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

SIGNED SCOM	Cochrun	TITLE PRODUCTION ANALYST	DATE 03/22/00
his space for Federal or St	ate office use)		
RMIT NO.		APPROVAL DATE	
plication approval does not war	rant or certify that the applicant holds legal or ANY:	equitable title to those rights in the subject lease which would en	title the applicant to conduct operations thereon.
ONDITIONS OF APPROVAL, IF			
ÖNDITIONS OF APPROVAL, IF		en e	₹.

DISTRICT I

P.O. Box 1960, Hobbs, NM 86241-1960

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., Astec, NM 87410 OIL CONSERVATION DIVISION

DISTRICT IV P.O. BOX 2088, SANTA FE, N.M. 87504-2088 P.O. Box 2088 Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	WIL	DCAT
Property Code	Property Name	Well Number
	PRIMERO RNR 26 FEDERAL	2
OGRID No.	Operator Name	Elevation
14049	MARBOB ENERGY CORPORATION	ON 3856

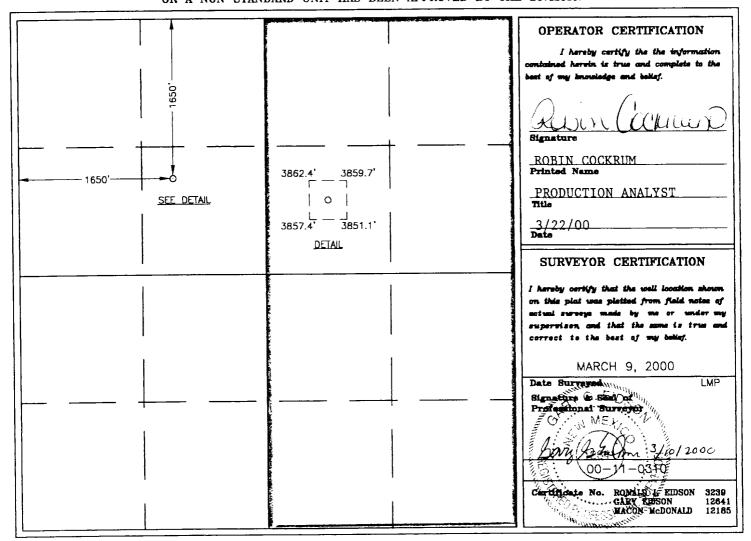
Surface Location

							· · · · · · · · · · · · · · · · · · ·				ı
- 1	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	ı
	F	26	26 S	24 E		1650	NORTH	1650	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	Joint of	r Infill Co	nsolidation	Code Or	der No.				
320									

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



DRILLING PROGRAM

Attached to Form 3160-3 Marbob Energy Corporation Primero RNR "26" Federal No. 2 1650' FNL and 1650' FWL 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>	OD csg	<u>Weight</u>	, Grade	e, Jt. Cond. Ty	<u>vpe</u>
12 1/4" 7 7/8"	0 - 1075' 1075' - 8200'	8 5/8" 5 1/2"		,	LTC NEW LTC NEW	

Cement Program:

8 5/8" Casing:5 1/2" Production Casing:

Cemented to surface with 350sx of Class C w/2% cc. 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 by 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 nippled 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:

01 01112		Weight	Viscosity	Waterloss
<u>Depth</u>	Type	(ppg)	<u>(sec)</u>	<u>(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 Csng 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, 2000. 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. 2 1650' FNL and 1650' FWL 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 mile. Location and access road are on the south side of lease road.
- 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:

Marbob realizes the sensitive condition of the surface soils in this area and have conducted meetings with the dirt contractor prior to this Application in an attempt to minimize any surface damage. The result being the following proposed access road:

A new access road of 365' will be constructed as follows:

A crowned road will be constructed of 4" rolled and compacted caliche. The width of the running surface will be 14' with an average grade of less than 1%. Water will be diverted where necessary to prevent erosion, maintain good drainage, and to remain consistent with local drainage patterns.

SURFACE USE AND OPERATING PLAN PAGE 2

Surfacing material will consist of native caliche. Caliche will be obtained from the T. A. Mayes Ranch. Any additional materials needed will be purchased from the dirt contractor.

The proposed access road as shown in Exhibit #2 has been centerline flagged by John West Engineering.

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. Marbob Energy Corporation proposes a collection facility, if well is productive, to be located on the Primero RNR "26" Federal #2 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, fasline 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 $80' \times 10' \times 10'$ deep. Drill cuttings not retained for

SURFACE USE AND OPERATING PLAN PAGE 3

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 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

SURFACE USE AND OPERATING PLAN PAGE 4

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.

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 gypy. The vegetation is native scrub grasses.
- B. A Cultural Resources Examination has been requested and will be forwarded to vour 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:

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 H₂S 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 H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- 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 H₂S 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. $\underline{\text{H}_2\text{S}}$ 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. H_2S detection and monitoring equipment: 2 - portable H_2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S 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 H_2S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H_2S scavengers will minimize hazards when penetrating H_2S bearing zones.
- B. A mud-gas separator will be utilized.
- 6. Communication:

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

WARNING

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

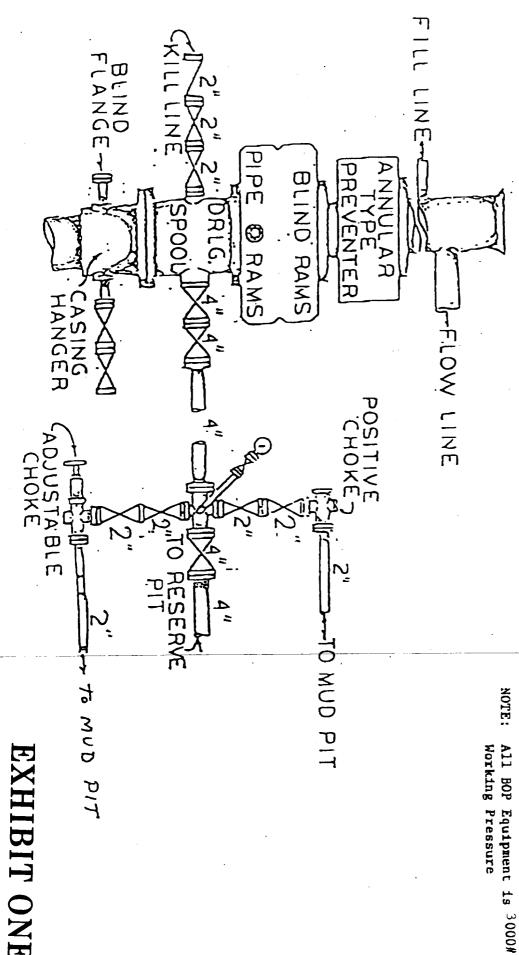
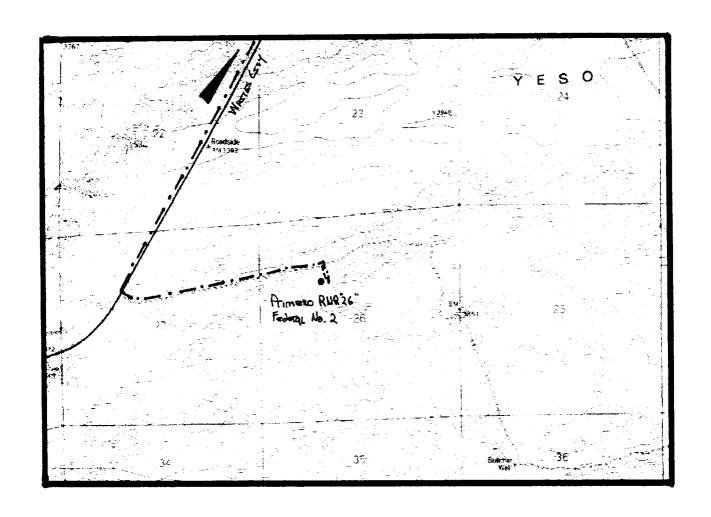


EXHIBIT ONE

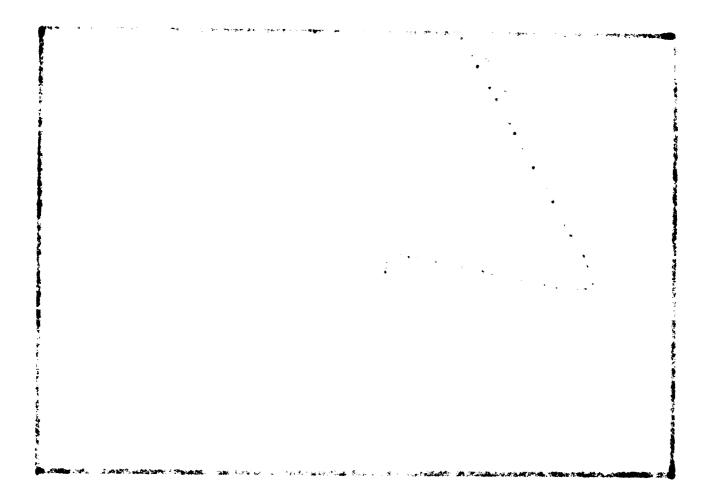
Attachment to Exhibit #1 NOTES REGARDING THE BLOWOUT PREVENTERS

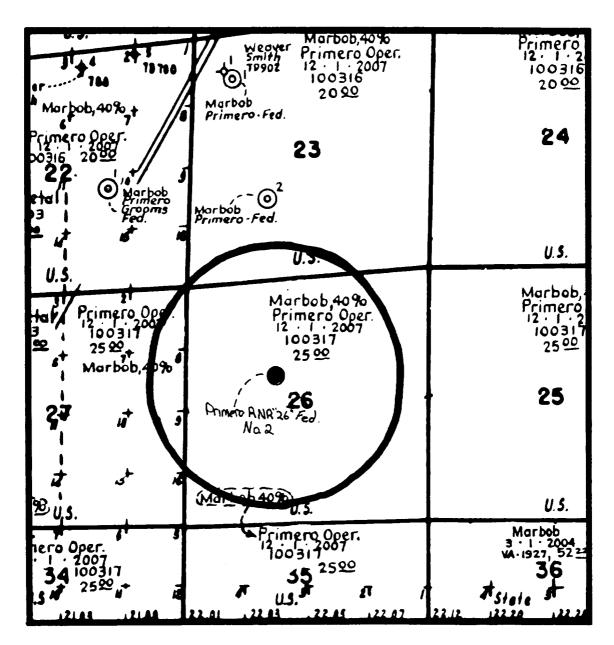
- 1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
- 2. Wear ring to be properly installed in head.
- 3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.
- 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. 2 1650' FNL & 1650' FWL Section 26; T-26s - R-24e Eddy County, New Mexico

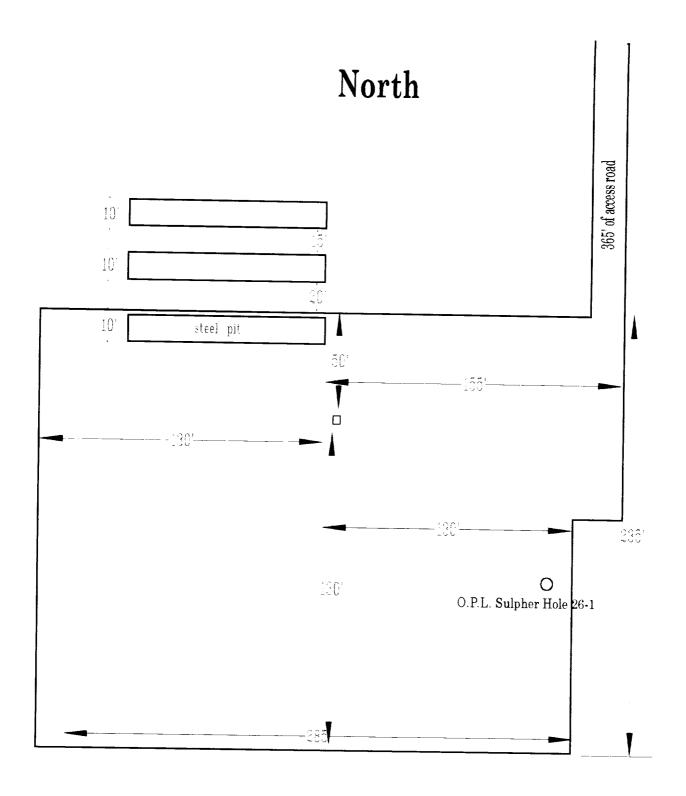
EXHIBIT TWO





Primero Federal RNR "26" No. 2 1650' FNL & 1650' FWL Section 26; T-26s - R-24e Eddy County, New Mexico

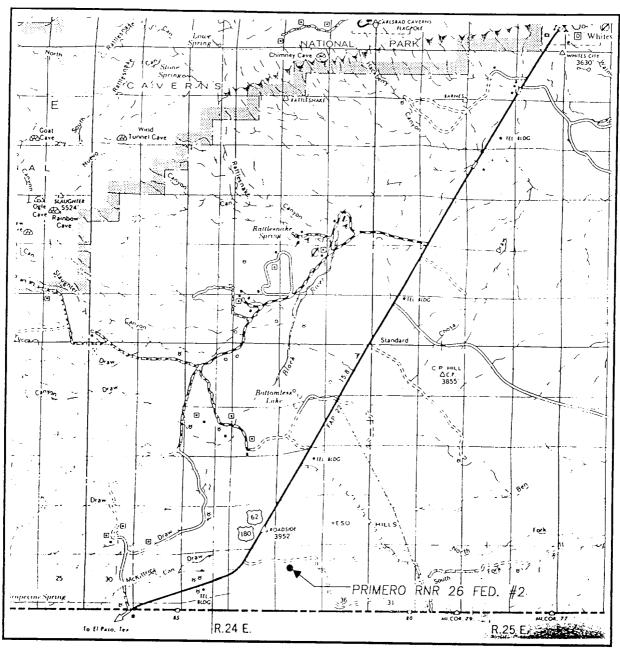
EXHIBIT THREE



Primero Federal RNR "26" No. 2 1650' FNL & 1650' FWL Section 26; T-26s - R-24e Eddy County, New Mexico

Exhibit Four

VICINITY MA.

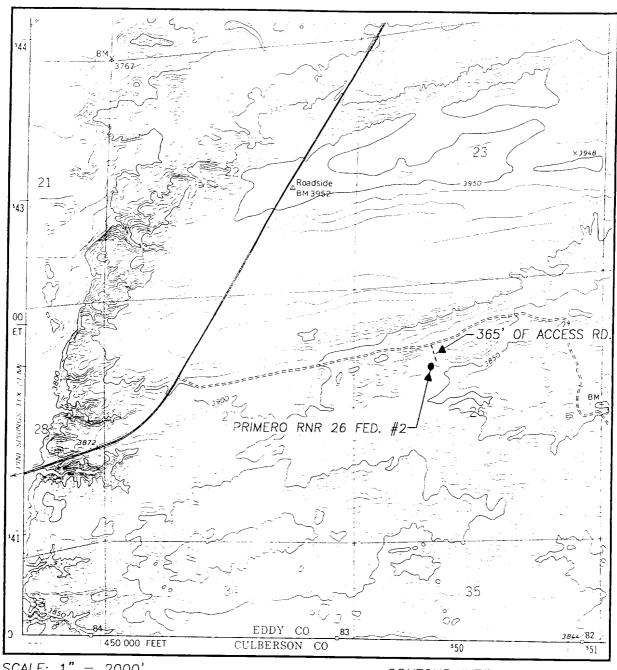


SCALE: 1" = 2 MILES

SEC. <u>26</u>	TWP. <u>26-S</u> RGE. <u>24-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTIO	N 1650' FNL & 1650' FWL
ELEVATION_	3856
OPERATOR_	MARBOB ENERGY CORPORATION
LEASE	PRIMERO RNR 26 FED.

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

LOCATION VERFICATION 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 & 1650' FWL ELEVATION_____ 3856 MARBOB ENERGY OPERATOR _____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