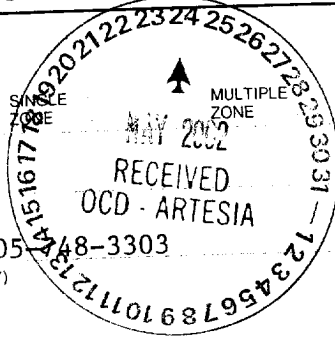


**N.M. Oil Cons. Div. Dist. 2**  
**1301 W. Grand Avenue**  
**Artesia, NM 88210**  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**

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

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK **DRILL X** **DEEPEN**  
b. TYPE OF WELL  
OIL WELL **X** GAS WELL OTHER  
2. NAME OF OPERATOR **MARBOB ENERGY CORPORATION**  
3. ADDRESS AND TELEPHONE NO. **14049**  
**PO BOX 227, ARTESIA, NM 88211-0227 505-48-3303**  
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface **430 FNL 2310 FWL, LOT 3**  
At proposed prod. zone  
**SAME**  
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE  
**SEE SURFACE USE PLAN**  
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drig. unit line, if any) **430'**  
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
21. ELEVATIONS (Show whether DF, RT, GR, etc.)



5. LEASE DESIGNATION AND SERIAL NO. **NM 0557371**  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
7. UNIT AGREEMENT NAME **29793**  
8. FARM OR LEASE NAME, WELL NO. **AAO FEDERAL #2**  
9. API WELL NO. **30-015-32308**  
10. FIELD AND POOL, OR WILDCAT  
**RED LAKE; GLORIETA YESO,**  
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA **NORTHEAST**  
**SEC. 1-T18S-R27E**  
12. COUNTY OR PARISH 13. STATE  
**EDDY NM**  
16. NO. OF ACRES IN LEASE **440.30**  
17. NO. OF ACRES ASSIGNED TO THIS WELL **40**  
20. ROTARY OR CABLE TOOLS **ROTARY**  
22. APPROX. DATE WORK WILL START **5/5/02**

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8" J55	24#	1320'	300 SX TO SURFACE
7 7/8"	5 1/2" J55	17#	4000'	750 SX

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

**ATTACHED ARE:**

1. WELL LOCATION AND ACREAGE DEDICATION PLAN
2. SUPPLEMENTAL DRILLING DATA
3. SURFACE USE PLAN

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED**

**Rugwell Controlled Water Basin**

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 *[Signature]* TITLE **PRODUCTION ANALYST** DATE **4/11/02**  
(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 **/s/ Mary J. Rugwell**

*ACTING FOR*  
TITLE **FIELD MANAGER**

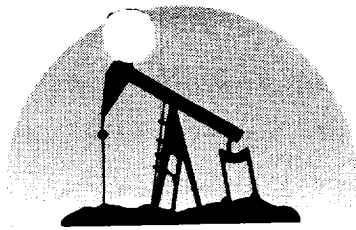
DATE **MAY 23 2002**

\*See Instructions On Reverse Side

**APPROVAL FOR 1 YEAR**

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.

RECEIVED  
2002 APR 12 AM 10:16  
BUREAU OF LAND MGMT  
FOREST OFFICE



---

**marbob**  
energy corporation

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STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

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

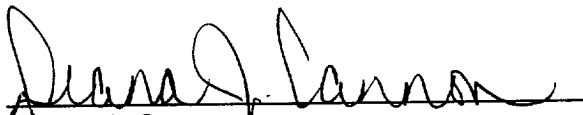
LEASE NO.: NM 0557371

LEGAL DESCRIPTION OF LAND: Section 1-T18S-R27E  
EDDY COUNTY, NEW MEXICO

FORMATION (S) (if applicable): Red Lake; Glorieta Yeso, Northeast

BOND COVERAGE: Statewide

BLM BOND FILE NO.: 585716

  
Diana J. Cannon  
Production Analyst

Date: 4/11/02

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

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 30-015	Pool Code 96836	Pool Name RED LAKE; GLORIETA YESO, NORTHEAST
Property Code	Property Name AAO FEDERAL	Well Number 2
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3611'

Surface Location

UL or lot No. 3	Section 1	Township 18-S	Range 27-E	Lot Idn	Feet from the 430	North/South line NORTH	Feet from the 2310	East/West line WEST	County EDDY
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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 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

LOT 4	LOT 3	LOT 2	LOT 1
<b>OPERATOR CERTIFICATION</b> <i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature DIANA J. CANNON Printed Name PRODUCTION ANALYST Title APRIL 11, 2002 Date			
<b>SURVEYOR CERTIFICATION</b> <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> MARCH 13, 2002 Date Surveyed Signature & Seal of Professional Surveyor  02.11.0198 Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641			

## DRILLING PROGRAM

Attached to Form 3160-3  
Marbob Energy Corporation  
AAO Federal No. 2  
430' FNL and 2310' FWL  
Section 1, T-18S, R-27E  
Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface	San Andres	1850'
Seven Rivers	450'	Glorietta	3250'
Queen	1050'		

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

Upper Permian Sands	180'	Fresh Water
Queen	1050'	Oil
San Andres	1850'	Oil
Glorietta	3250'	Oil

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 casing at 350' and circulating cement back to surface. 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.

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 - 1320'	8 5/8"	24# J-55 LTC NEW R-3
7 7/8"	350' - TD	5 1/2"	17# J-55 LTC NEW R-3

Cement Program:

8 5/8" Surface Casing: Cemented to surface with 300sx of Class C w/2% cc.  
5 1/2" Production Casing: Cemented with 750sx Class C.

DRILLING PROGRAM  
PAGE 2

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" surface csg and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing.

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 - 350'	Fresh Water	8.5	28	N.C.
350'-4000'	Brine	9.8 - 10.2	40 - 45	N.C.

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) No Drillstem tests are anticipated.
- (B) The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csg Log, and Depth Control Log.

DRILLING PROGRAM  
PAGE 3

- (C) No conventional coring is anticipated.
  - (D) 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 104' and estimated bottom hole pressure (BHP) is 2250 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 May 5, 2002. 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  
AAO Federal No. 2  
430' FNL and 2310' FWL  
Section 1, T-18S, R-27E  
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 #3. 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 Artesia, proceed east on US82 for 9.5 miles. Turn south on Hilltop Road (CR-204) and proceed to Empire Road (CR-225). Turn south and proceed 1.5 miles to Evans Road (CR-226). Turn east and proceed .3 miles. Turn southeast on lease road and proceed .5 mile. Turn south and proceed 300 feet. Location is on east 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:

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.

SURFACE USE AND OPERATING PLAN  
PAGE 2

- 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.

3. Location of Existing Wells:

Exhibit #2 shows all existing wells within a one-half mile radius of this well.

4. Location of Existing and/or Proposed Facilities:

- A. If well is successful, Marbob Energy will establish a collection facility on the AAO Federal No. 2 well pad.
- B. If the well is productive, a 3" plastic flowline (grade SDR 7 @ 265 psi) will be laid on the surface following the existing lease road and/or pipeline Right-of-Way to the tank battery. The flowline is shown in blue on Exhibit #3. Anticipated pressures in the flowline should not exceed 75 psi.
- C. If the well is productive, power will be obtained from Central Valley Electric. Central Valley Electric will apply for ROW for their power lines.
- D. If the well is productive, rehabilitation plans are as follows:
- (1) The reserve pit will be back-filled after the contents of the pit are dry (within 10 months after the well is completed).
  - (2) Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level, as nearly as possible, and reseeded as per 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 commercial water stations in the area and hauled to the location by transport truck over the existing and proposed access roads shown in Exhibit #3. 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.

## SURFACE USE AND OPERATING PLAN

### PAGE 3

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 a BLM - approved caliche pit. All roads and pads will be constructed of 6" of rolled and compacted caliche.

7. Methods of Handling Water Disposal:

A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

B. Drilling fluids will be contained in lined working pits. 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 an earthen pit, approximately 100' X 150' X 6' deep. A dike will be built across the pit, dividing it in half. One-half of the reserve pit will be plastic-lined to minimize loss of drilling fluids and saturation of the ground with brine water. The other half of the reserve pit will be lined with plastic and used only if we encounter a waterflow during drilling operations and find that we need additional space. This portion of the pit is a precautionary measure only. The portion of the pit that will be lined with plastic should be more than adequate for normal drilling operations. If a water flow is encountered, we should have ample time to line the other half of the pit with plastic before the water encroaches.

C. Water produced from the well during completion may be disposed into the reserve pit.

D. 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.

E. 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.

SURFACE USE AND OPERATING PLAN  
PAGE 4

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 a BLM - approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area to the original natural level and reseeded as per BLM specifications.

SURFACE USE AND OPERATING PLAN  
PAGE 5

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 sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.
- B. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

12. Lessee's and Operator's Representative:

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

Johnny C. Gray  
Marbob Energy Corporation  
324 W. Main, Suite 103  
P. O. Drawer 227  
Artesia, New Mexico 88211  
Phone: 505/748-3303 (office)  
505/885-3879 (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: 4-10-2002

Signed: 

Dean Chumbley

## 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<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.

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 and the Public Protection Plan.

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 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<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS

Note: All H<sub>2</sub>S 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<sub>2</sub>S.

1. Well Control Equipment:
  - A. Flare line.
  - B. Choke manifold.
  - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - D. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
2. Protective equipment for essential personnel:
  - A. Mark II Surviveair 30-minute units located in the dog house and at briefing areas, as indicated on well site diagram.
3. H<sub>2</sub>S detection and monitoring equipment:
  - A. 2 - portable H<sub>2</sub>S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H<sub>2</sub>S 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<sub>2</sub>S circulated to the surface. Proper mud weight, 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.
- B. A mud-gas separator will be utilized.

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.
- B. All elastomers used for packing and seals shall be H<sub>2</sub>S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephone and 2-way radio.
- B. Land line (telephone) communications at field office.

8. Well testing:

- A. No drill stem testing is planned.

# WARNING

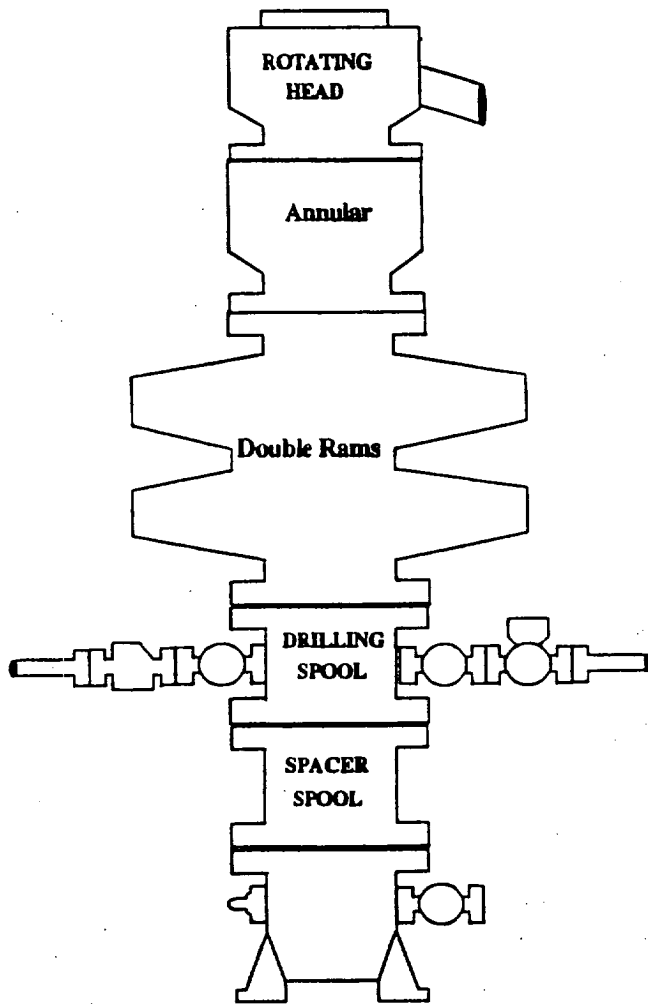
YOU ARE ENTERING AN H<sub>2</sub>S AREA  
AUTHORIZED PERSONNEL ONLY

- 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*

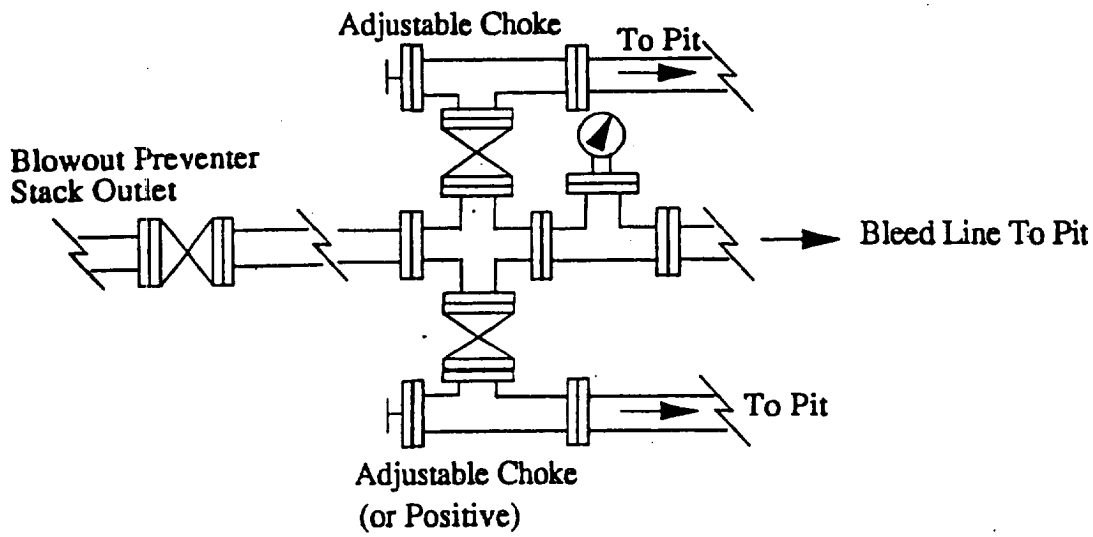
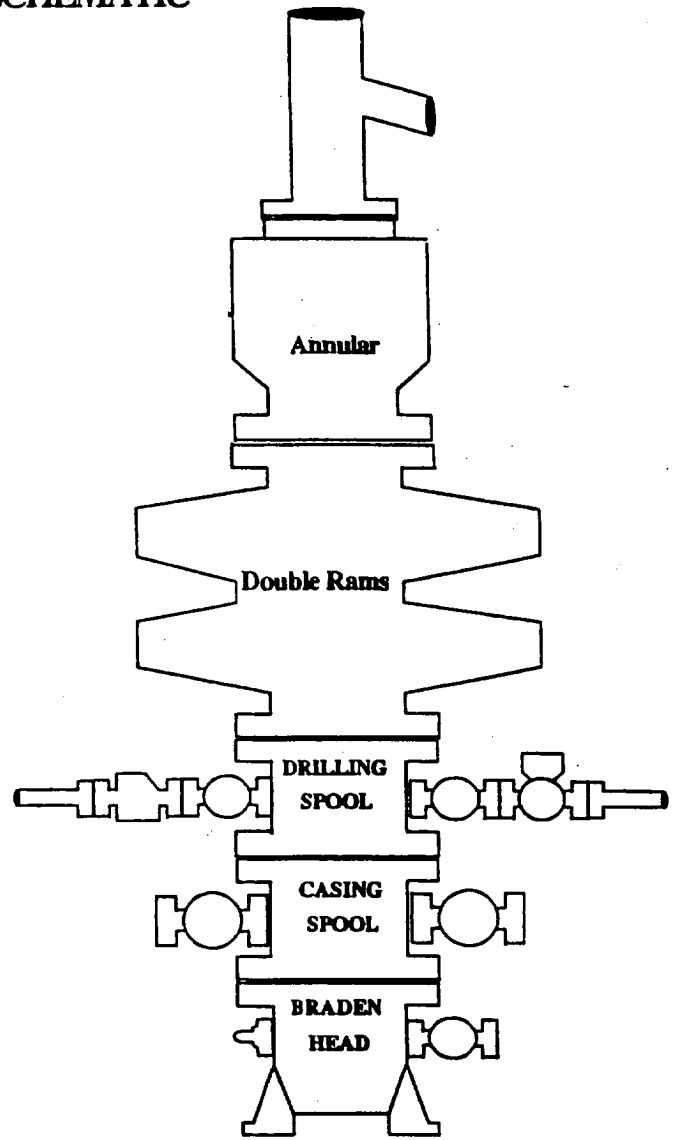
MARBOB ENERGY CORPORATION

1-505-748-3303

# BOPE SCHEMATIC

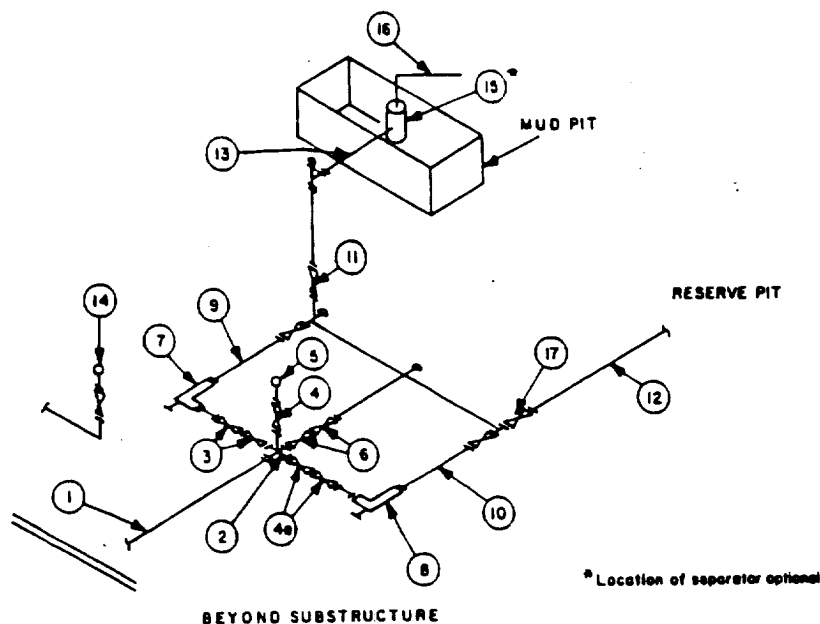


**Choke Manifold**



**MINIMUM CHOKE MANIFOLD**  
3,000, 5,000 and 10,000 PSI Working Pressure

**3 MWP - 5 MWP - 10 MWP**



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves(1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke(3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

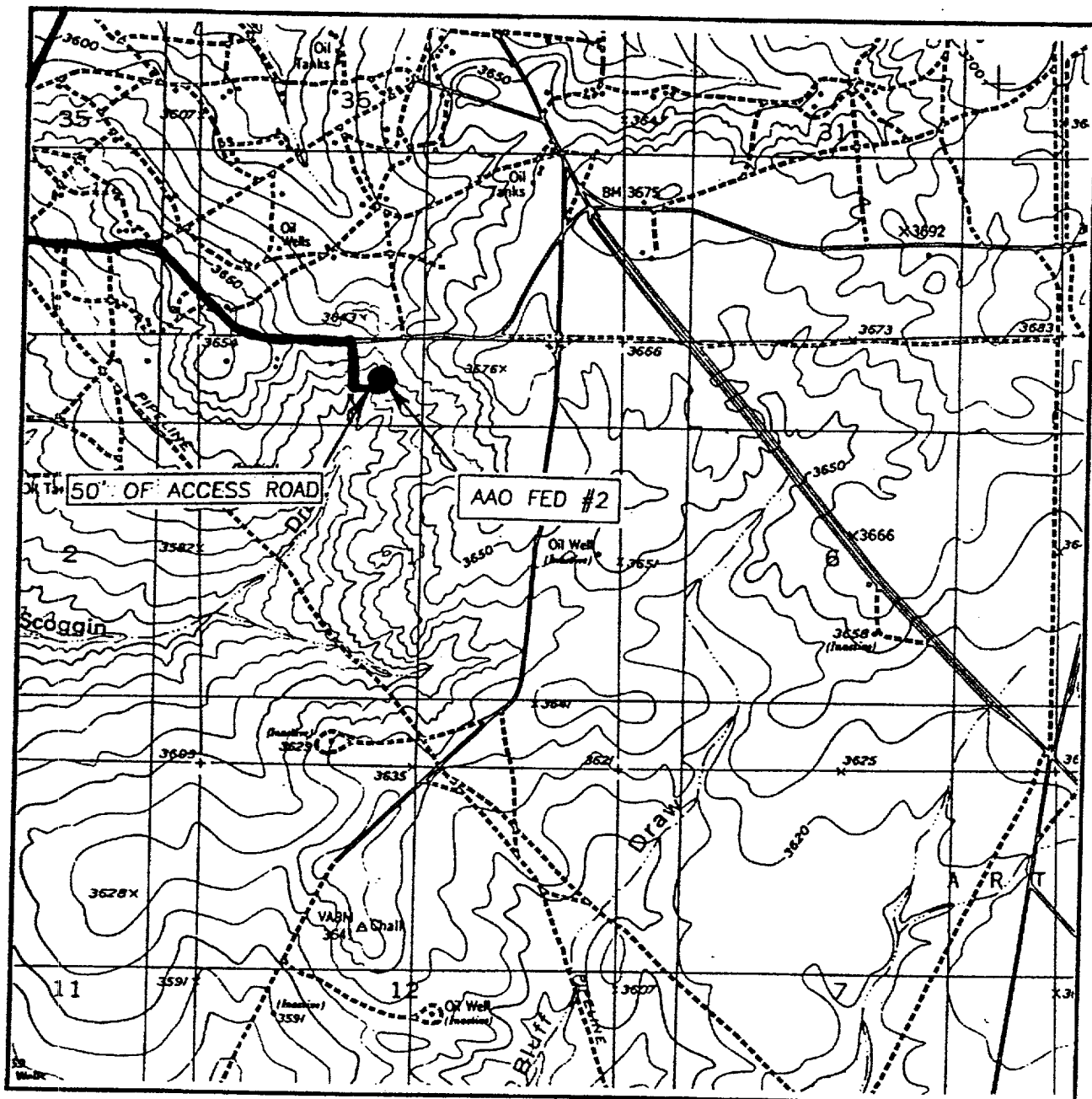
(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic chokes required on 5,000 psi and 10,000 psi for drilling.

**EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS**

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'  
RED LAKE, N.M.

SEC. 1 TWP. 18-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 430' FNL & 2310' FWL

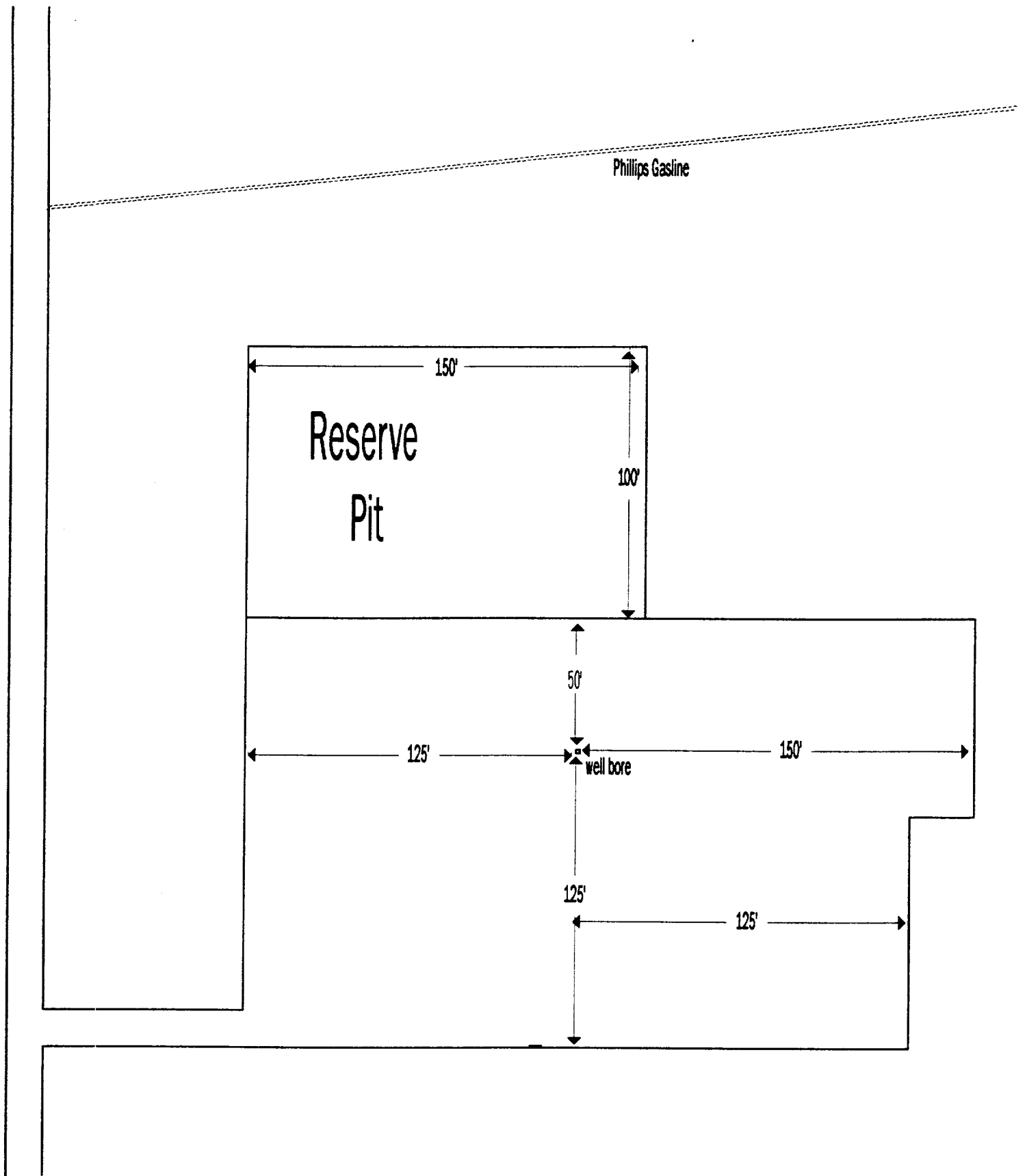
ELEVATION 3611'

OPERATOR MARBOB ENERGY CORPORATION

LEASE AAO FEDERAL

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

**EXHIBIT THREE**



A A O Federal No. 2  
430' FNL & 2310' FWL  
Section 1; T18S - R27E  
Eddy County, New Mexico

Exhibit Four