

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒ Re-Entry DEEPEN ☒ PLUG BACK ☐

b. TYPE OF WELL

OIL WELL ☐ GAS WELL ☐ OTHER SWD SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Marbob Energy Corporation

3a. Area Code & Phone No.

505-748-3303

3. ADDRESS OF OPERATOR

P. O. Drawer 217, Artesia, NM 88210

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

At surface

1980 FSL 1880 FEL

At proposed prod. zone

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

5 miles west of Loco Hills, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any) 1980'

16. NO. OF ACRES IN LEASE

600

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

9600'

20. ROTARY OR CABLE TOOLS

Rotary

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

3551' GL

22. APPROX. DATE WORK WILL START\*

December, 1993

PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	11 3/4"	42#			285'	250 sx (Existing)
11"	8 5/8"	24 & 32#			3500'	400 sx (Existing)
7 7/8"	5 1/2"	17#	J-55	LT&C	9600'	(tie back to 6600' min)

Marbob Energy proposes to drill out cmt to 3450', attempt to tie back into the 8 5/8" csg to surface and cmt it to surface, hole will be cleaned out to a depth below 9600' subsurface, 5 1/2" csg will be run w/cmt brought up above 6600', injection interval will be perforated & cleaned up w/1000 gals. 15% NE ac if needed.

Attached is a copy of OCD-Santa Fe approval & a copy of form C-108. Administrative Order SWD-523.

Former:  
Marbob-Dodd #1  
OTD-10,880  
PMA-4-22-21

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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

Phonda Nelson

TITLE Production Clerk

DATE 7/9/93

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

AREA MANAGER

DATE

APPROVAL SUBJECT TO

GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS

ATTACHED

\*See Instructions On Reverse Side

RECEIVED

AUG 27 11 53 AM '53

DRILLING PROGRAM

Attached to Form 3160-3  
Marbob Energy Corporation  
Dodd #1 SWD  
1980' FSL and 1880' FEL  
Section 22, T-17S, R-29E  
Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface	Glorietta	4020'
Salt	360'	Tubb	5475'
Base of Salt	780'	Abo	6076'
Yates	840'	Wolfcamp	7255'
Seven Rivers	1145'	Cisco	8847'
Queen	1815'		
Grayburg	2140'		
San Andres	2520'		

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

Upper Permian Sands	100'	Fresh Water
Yates	930'	Oil
Seven Rivers	1145'	Oil
Queen	1815'	Oil
Grayburg	2140'	Oil
San Andres	2510'	Oil
Glorietta	3900'	Oil

DRILLING PROGRAM  
PAGE 2

The surface fresh water sands are protected by 11 3/4" casing at 285' which had cement circulated back to surface.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD csg</u>	<u>Weight, Grade, Jt. Cond. Type</u>
11"	0 - 3500"	8 5/8"	24#, J-55, LTC, NEW, R-3 tied back
7 7/8"	0 - TD	5 1/2"	17# J-55 LTC NEW R-3

Cement Program:

8 5/8" Surface Casing: Tie Back into and cement to surface with Class C w/2% cc.

5 1/2" Production Casing: Cemented with Class C to a minimum depth of 6600'.

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 11 3/4" 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.

DRILLING PROGRAM  
PAGE 3

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 - TD	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 and Testing Program:

N/A

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

N/A. Re-entry.

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 after September 1, 1993. Once commenced, the drilling operation should be finished in approximately 21 days.

## SURFACE USE AND OPERATING PLAN

Attached to Form 3160-3  
Marbob Energy Corporation  
Dodd #1 SWD  
1980' FSL and 1880' FEL  
Section 22, T-17S, R-29E  
Eddy County, New Mexico

### 1. Existing Roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit #2. 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: Proceed on U.S. Highway 82 East from Artesia for 21 miles. Turn right or South on paved road and proceed .2 miles, then turn East or left and proceed past the M. Dodd #6 well a total of .1 miles. A dry hole marker next to the road marks the location of the plugged Dodd #1 well.
- 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:

Exhibit #3 shows the road in the area. Because current lease roads will service this well, no new roads will be needed.

- 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.

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. Marbob Energy Corporation already has a collection facility set up for this lease.

B. Rehabilitation plans are as follows:

(1) The 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 brine 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 #2.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and the proposed new access road (approximately 500 cubic yards) will be obtained from a BLM - approved caliche pit. The pad 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. Water produced from the well during completion may be disposed into the pit.

SURFACE USE AND OPERATING PLAN  
PAGE 3

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, with elevations staked by John West Engineering, is shown in Exhibit #4. Dimensions of the pad and pits are shown.

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.

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 site is 100' from an existing well.
- B. Previous development has caused considerable disturbance such that no Cultural Resource Examination would be beneficial. Proposed operations are confined to a much smaller area than normally needed for drilling a new well.

SURFACE USE AND OPERATING PLAN  
PAGE 4

12. Lessee's and Operator's Representative:

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

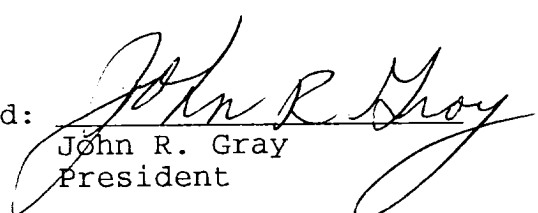
Johnny C. Gray  
Marbob Energy Corporation  
324 W. Main, Suite 103  
P. O. Drawer 217  
Artesia, New Mexico 88210  
Phone: 505/748-3303 (office)  
505/885-3879 (home)

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: AUG. 25, 1993

Signed: \_\_\_\_\_

  
John R. Gray  
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. Flare line with electronic igniter or continuous pilot.
  - B. Choke manifold with a minimum of one remote choke.
  - 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, and flare gun with flares.
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.
  - B. 1 - portable SO<sub>2</sub> monitor positioned near flare line.
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 and an H<sub>2</sub>S gas buster 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. 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 will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H<sub>2</sub>S environment will use the closed chamber method of testing.

# W A R N I N G

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**

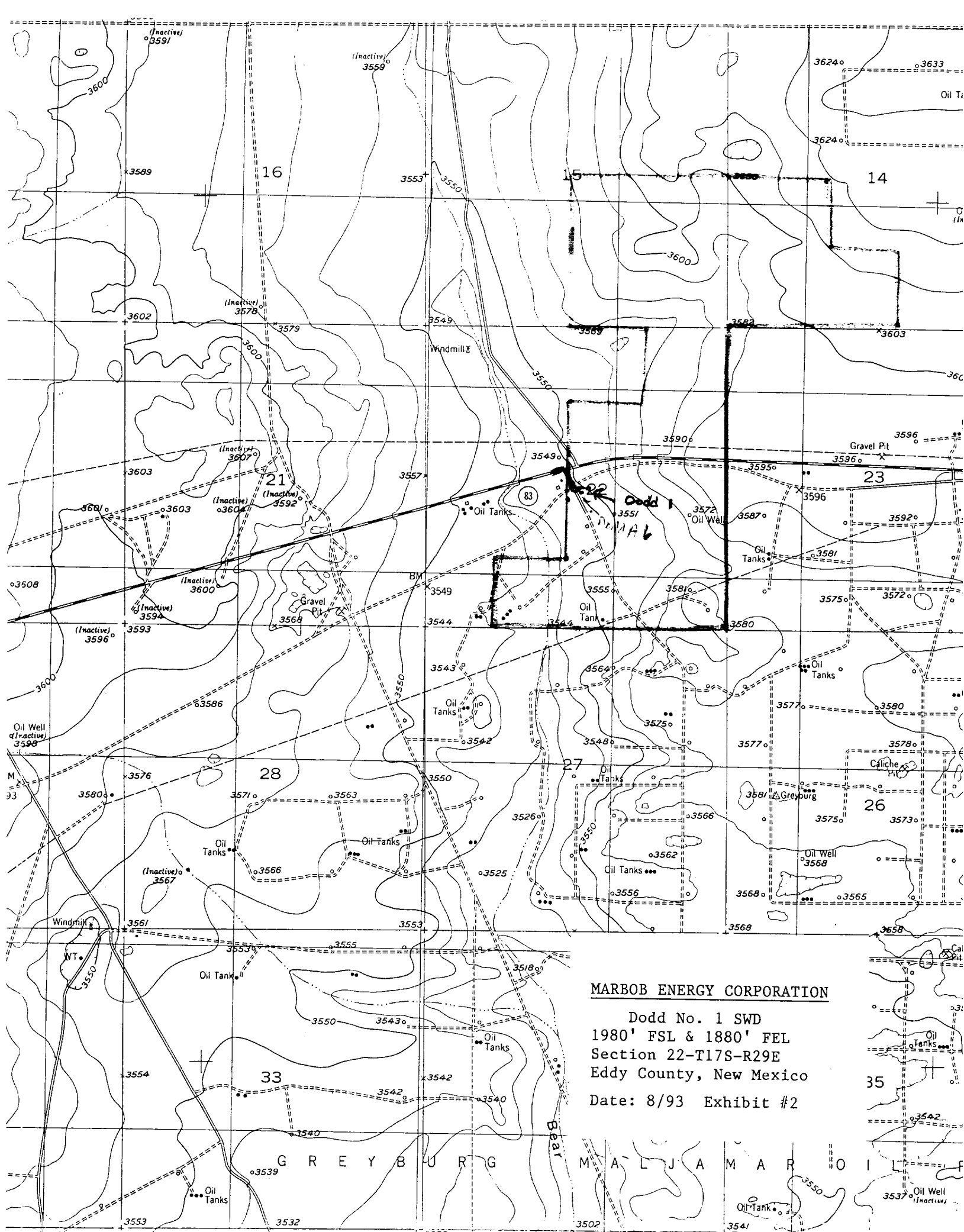
MARBOB ENERGY CORPORATION

1-505-748-3303



Attachment to Exhibit #1  
NOTES REGARDING THE BLOWOUT PREVENTERS

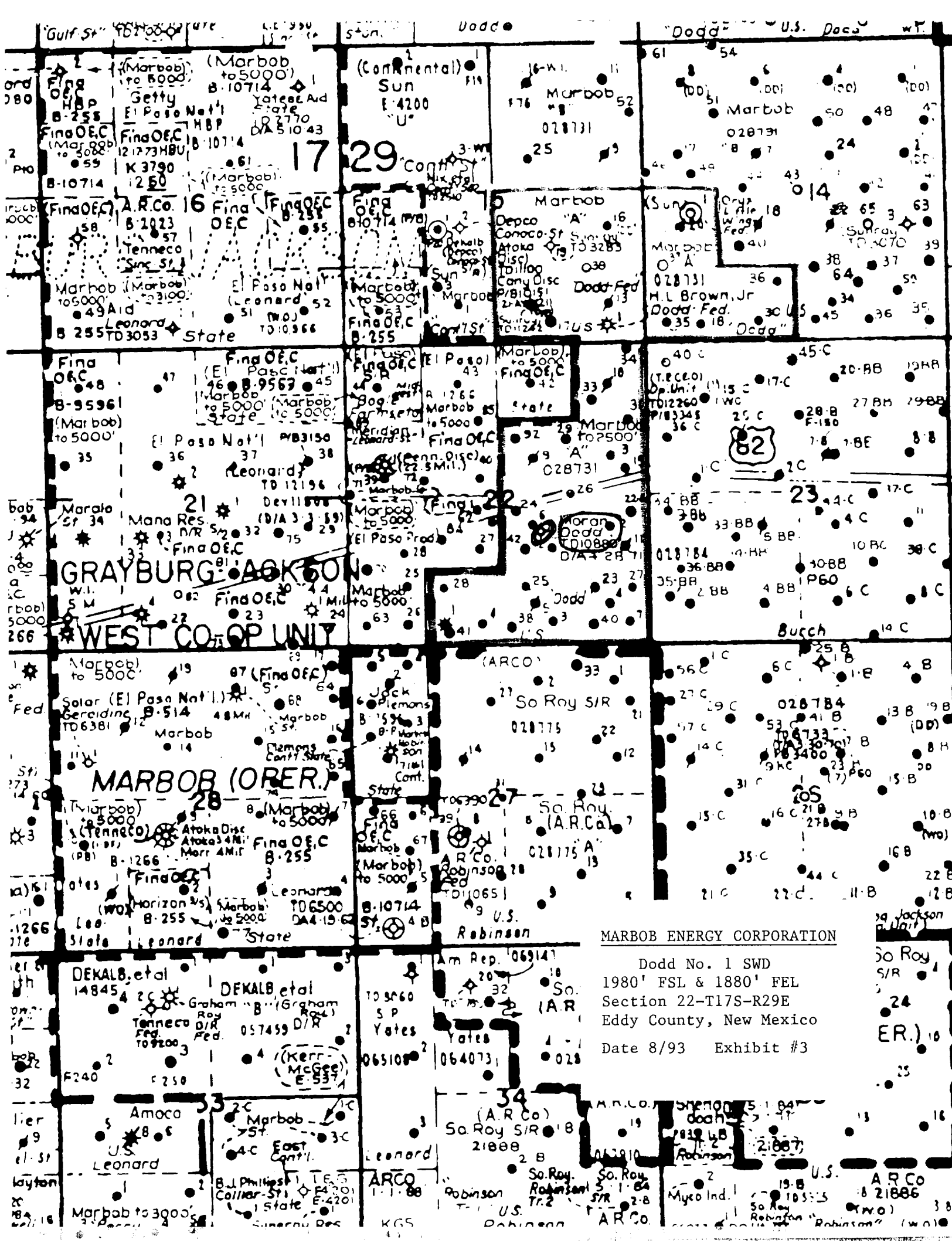
1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.
4. All 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.



**MARBOB ENERGY CORPORATION**

Dodd No. 1 SWD  
1980' FSL & 1880' FEL  
Section 22-T17S-R29E  
Eddy County, New Mexico

Date: 8/93 Exhibit #2





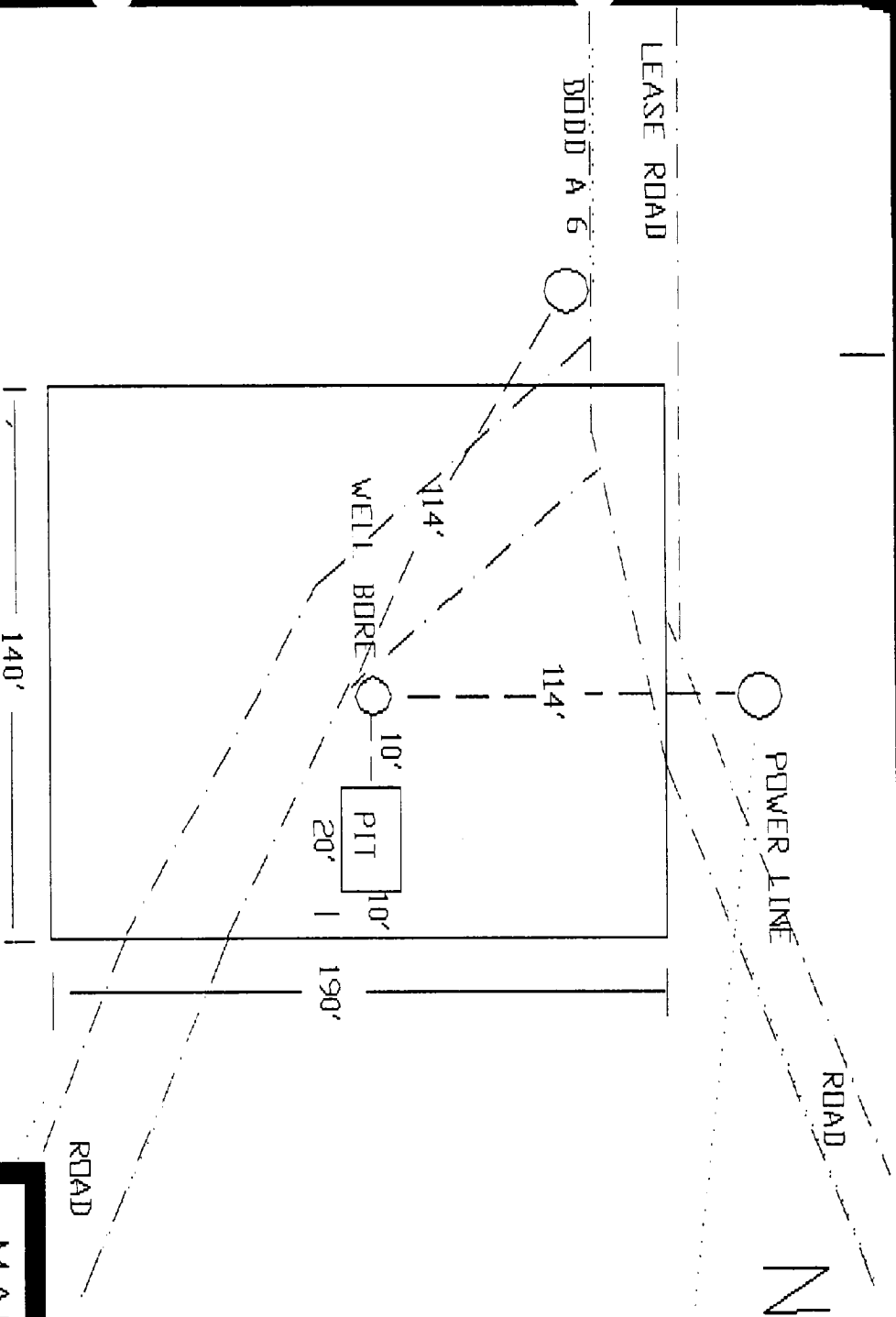


Exhibit #4

MARBOD ENERGY

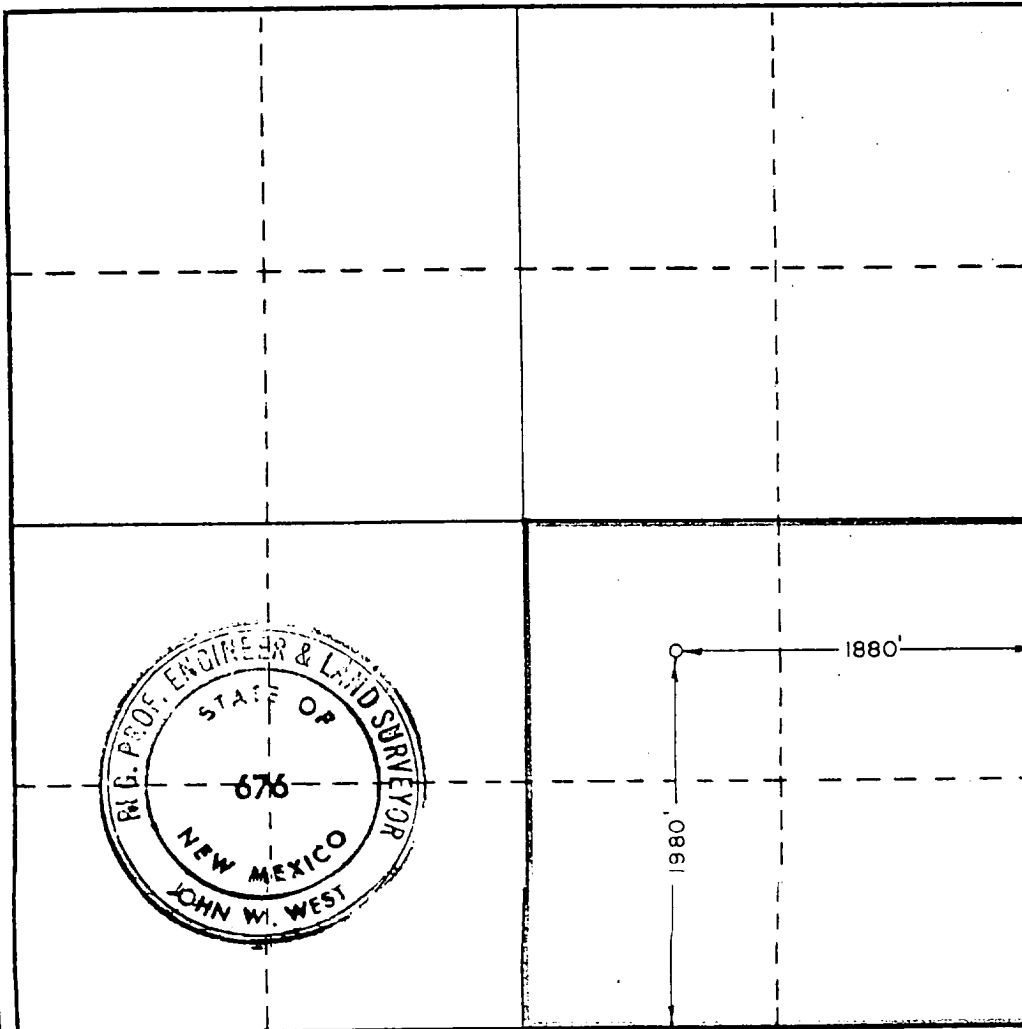
DODD NO. 1 SWD  
 1980' FSL & 1880' FEL  
 SEC 22-T17S-R29E  
 EDDY COUNTY, NM

Form C-102  
Supersedes C-128  
Effective 1-1-65

Operator <b>C. W. TRAINER and Marvin C. GROSS</b>		Lease <b>Dodd</b>		Well No. <b>1</b>	
Unit Letter <b>J</b>		Section <b>22</b>	Township <b>T17S</b>	Range <b>R29E</b>	County <b>EDDY</b>
Actual Footage Location of Well:					
<b>1980</b>		feet from the <b>SOUTH</b>		line and <b>1880</b>	
				feet from the <b>EAST</b>	
				line	
Ground Level Elev. <b>3551</b>		Producing Formation <b>Penn</b>		Pool <i>and atoka</i> <b>Grayburg Penn</b>	
				Dedicated Acreage: <b>160</b>	
				Acres	

- ☐ Yes    ☐ No    If answer is "yes," type of consolidation \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



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

Name

Position

Agent

Company

C. W. TRAINER

Date \_\_\_\_\_

3-18-71

I hereby certify that the well location shown on this plat was taken 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 knowledge and belief.

U.S. GEOLOGICAL SURVEY  
 ANTESIA, NEW MEXICO

Date Surveyed

MARCH 10, 1971

Registered Professional Engineer  
and/or Land Surveyor

Certificate No.

676