

UNITED STATES  
DEPARTMENT OF THE  
BUREAU OF LAND MANAGEMENT

OPER. OGRID NO. 1404  
PROPERTY NO. 19671  
POOL CODE \_\_\_\_\_  
EFF. DATE 10-23-96  
API NO. 30-005 21144

BLM Roswell District  
Modified Form No.  
MD60-3160-2

APPLICATION FOR PERMIT TO DRILL

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER ☐

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. BOX 227, Artesia, NM 88210

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

At surface

330 FNL 1010 FWL

At proposed prod. zone

SAME

UNIT D

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

SEE SURFACE USE AND OPERATING PLAN 1.(C)

16. DISTANCE FROM PROPOSED\*

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

330

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*

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

19. PROPOSED DEPTH

11,400

20. ROTARY OR CABLE TOOLS

ROTARY

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

4037' GR

22. APPROX. DATE WORK WILL START\*

OCTOBER 20, 1996

PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48 & 40#		LTC NEW R-3	500'	500 SX CIRC
12 1/4"	8 5/8"	32# 24#	J-55	LTC NEW R-3	3125'	500 SX CIRC
7 7/8"	5 1/2"	17#	N-80	LTC NEW R-3	11,400'	SUFFICIENT TO ISOLATE PROD. INTERVAL.

N-80 → 0-11000'

S-95 → 11000'-11400'

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

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

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.

SIGNED Phonda Nelson TITLE Production Clerk

DATE 9/13/96

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY TR Keagan

TITLE Area Manager

DATE 10/21/96

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

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

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

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		WILDCAT DEVONIAN
Property Code	Property Name LAMBERT J 58	Well Number 1
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 4037

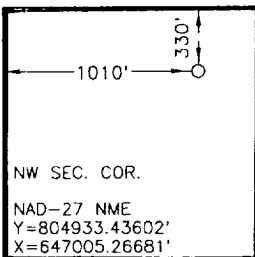
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	13 S	31 E		330	NORTH	1010	WEST	CHAVES

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 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

 <p>LOCATION NAD-27 NME Y=804609.18344' X=648016.49838'</p> <p>NW SEC. COR. NAD-27 NME Y=804933.43602' X=647005.26681'</p>			NE SEC. COR. NAD-27 NME Y=804964.04670' X=652280.35693'

**OPERATOR CERTIFICATION**

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

*Rhonda Nelson*  
Signature

RHONDA NELSON  
Printed Name

PRODUCTION CLERK  
Title

9/13/96  
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.

AUGUST 29, 1996

Date Surveyed \_\_\_\_\_ DMCC

Signature & Seal of Professional Surveyor  
*Ronald J. Eidson* 9-04-96  
96-11-1076

Certificate No. JOHN W. WEST 675  
RONALD J. EIDSON 3239  
GARY EIDSON 12641

## DRILLING PROGRAM

Attached to Form 3160-3  
Marbob Energy Corporation  
Lambert Federal Deep Unit No. 1  
330' FNL and 1010' FWL  
Section 8, T-13S, R-31E  
Chaves County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface	Abo	6725'
Rustler	925'	Wolfcamp	7925'
Yates	1725'	Upper Penn	8650'
Queen	2500'	Atoka	9900'
San Andres	3100'	Chester	10400'
Glorietta	4500'	Lower Miss	10675'
Tubb	5950'	Devonian	11300'

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

Upper Permian Sands	0 - 200'	Fresh Water
Devonian	11,300'	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 13 3/8 casing at 500' and circulating cement back to surface.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD csg</u>	<u>Weight, Grade, Jt. Cond. Type</u>
17"	0 - 500	13 3/8"	48# #40 LTC NEW R-3
12 1/4"	500-3125	8 5/8"	32# 24# J-55 LTC NEW R-3
7 7/8"	3125-TD	5 1/2"	17# J-55 LTC NEW R-3
	0 - 11000'		N-80
	11000' - 11400'		S-95

24# 0-2300'  
32# 2300'-7125'  
52C

# DRILLING PROGRAM

## PAGE 2

### Cement Program:

13 3/8" Surface Casing:	Cement w/ 500sx - circulate cement.
8 5/8" Intermediate Casing:	Cemented with 500sx - circulate cement.
5 1/2" Production Casing:	Cemented with sufficient cement to isolate production interval..

### 5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a *annular* 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 *as covered* to ~~1000 psi~~ before drilling out of surface casing.

*in Onshore Order No. 2, Part 3A*

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 - 500'	Fresh Water (Spud)	8.6 - 9.5	28 - 30	N.C. Oil - 0%
500'-3125'	Brine	10	28 - 32	N.C. Oil - 0%
3125'-6000'	Cut Brine	9.1 - 10	29 - 30	N.C. Oil - 0%
6000'-9000'	Salt Gel	9.1 - 9.7	35 - 38	N.C. Oil - 6%
9000'-11200'	Salt Gel/Starch	9 - 9.5	35 - 40	15-20 Oil - 3%
11200'-11400'	Gel / Starch	9 - 9.5	35 - 40	8-10 Oil - 1%

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) DST as conditions dictate. A minimum of one DST will be run.
- (B) The electric logging program will consist of GR/DLL/MSFL and GR/BHC Sonic will probably also run NEU/DEN. Other logging surface may be run as conditions dictate.
- (C) Sidewall cores possible. Possible conventional core in Devonian.
- (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 late October. Once commenced, the drilling operation should be finished in approximately 35 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  
Lambert Federal Deep Unit No. 1  
330' FNL and 1010' FWL  
Section 8, T-13S, R-31E  
Chaves County, New Mexico

### 1. Existing Roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit . 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 Maljamar, proceed east on U.S. 82 1.5 miles. Turn north on NM State road #249/172 and proceed north 24.7 miles. Turn west at mile marker 13. There will be two signs by the road - Culp Ranch Unit and Bel Foy Middlebrook. Proceed 3.4 miles west on lease road, then turn south on ranch road. Proceed .1 miles open barbed wire gate and continue .1 mile. The access road to location will be on the east side of ranch 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:

Exhibit #2 shows the new access road to be constructed and is illustrated in yellow. The road will be constructed as follows:

- A. The maximum width of the running surface will be 10'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.

## SURFACE USE AND OPERATING PLAN

### PAGE 2

- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. A cattle guard and gate will be installed where the rancher's barbed wire gate is.
- E. 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.
- F. 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. If the well is productive, collection facilities will be constructed upon the well pad.
- B. If the well is productive, power maybe obtained from Central Valley Electric. If necessary, Central Valley Electric will apply for ROW for their power lines.
- C. 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 #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.

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 120' X 80' X 6' deep. The reserve pit will be plastic-lined to minimize loss of drilling fluids and saturation of the ground with brine water.
- 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. 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.



## SURFACE USE AND OPERATING PLAN

### PAGE 4

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.

11. Surface Ownership:

The wellsite and lease is located on Fee 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, bluestem, threeawn, and sandbar, wildlife consists of deer, antelope, coyote, jackrabbit, dove, quail, and reptiles.
- B. There is no permanent or live water in the immediate area.
- C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

SURFACE USE AND OPERATING PLAN  
PAGE 5

13. Lessee's and Operator's Representative:

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

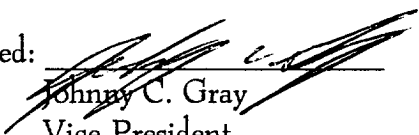
Johnny C. Gray  
Marbob Energy Corporation  
324 W. Main, Suite 103  
P. O. Drawer 227  
Artesia, New Mexico 88211-0227  
Phone: 505/748-3303 (office)  
505/885-3879 (home)

Certification:

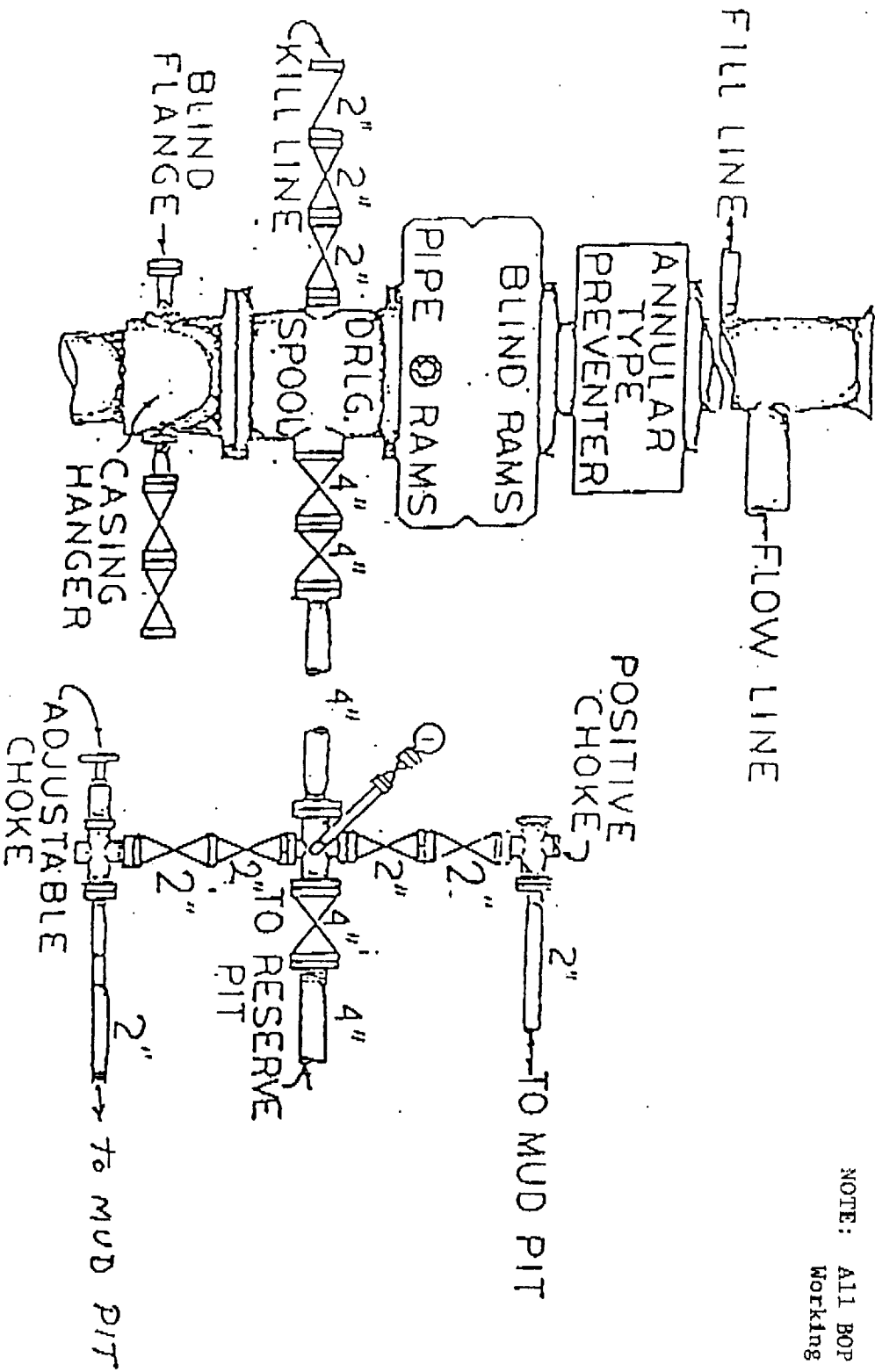
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with 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: September 13, 1996

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

  
Johnny C. Gray  
Vice-President

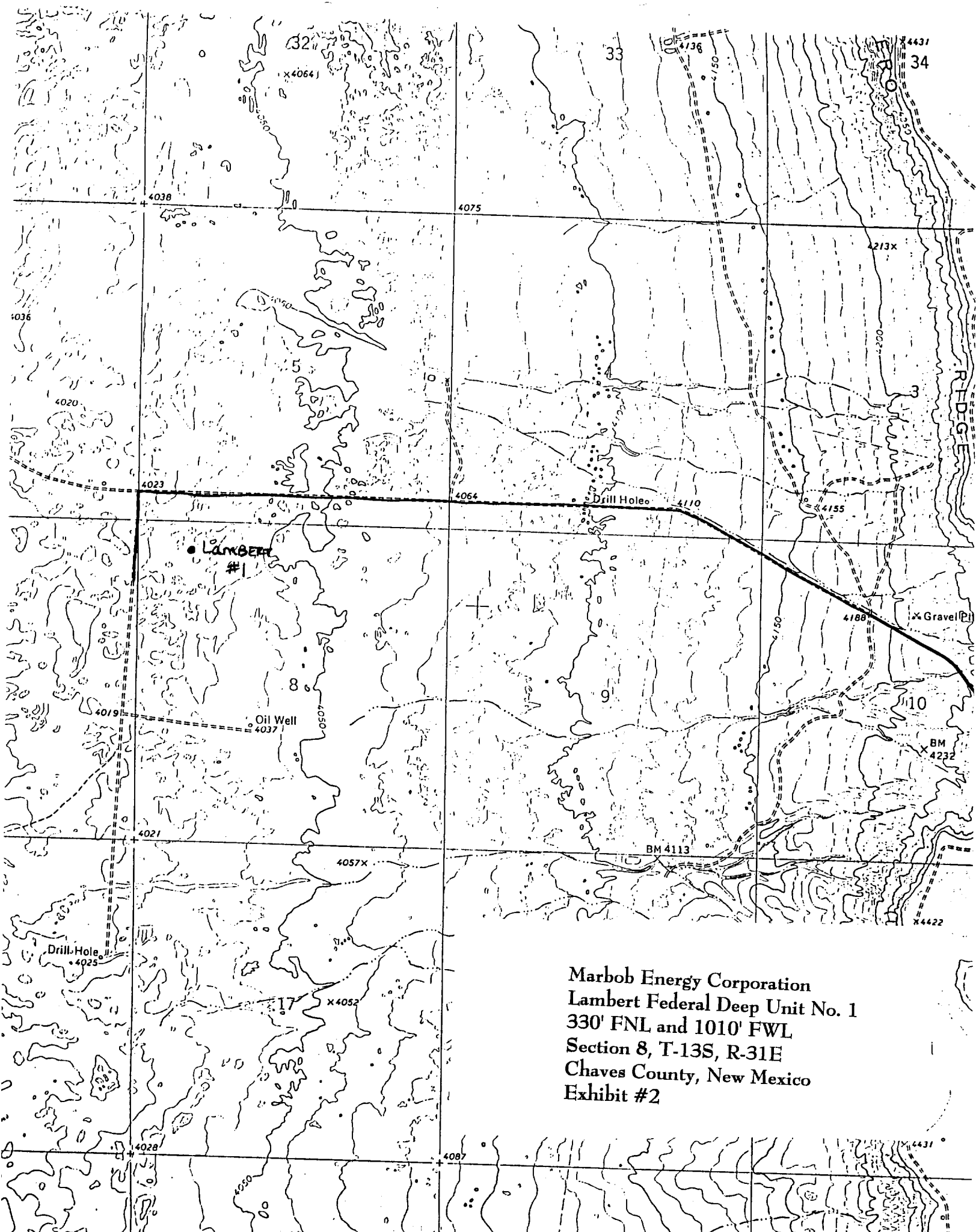
# B.O.P. ARRANGEMENT RIG NO. 8



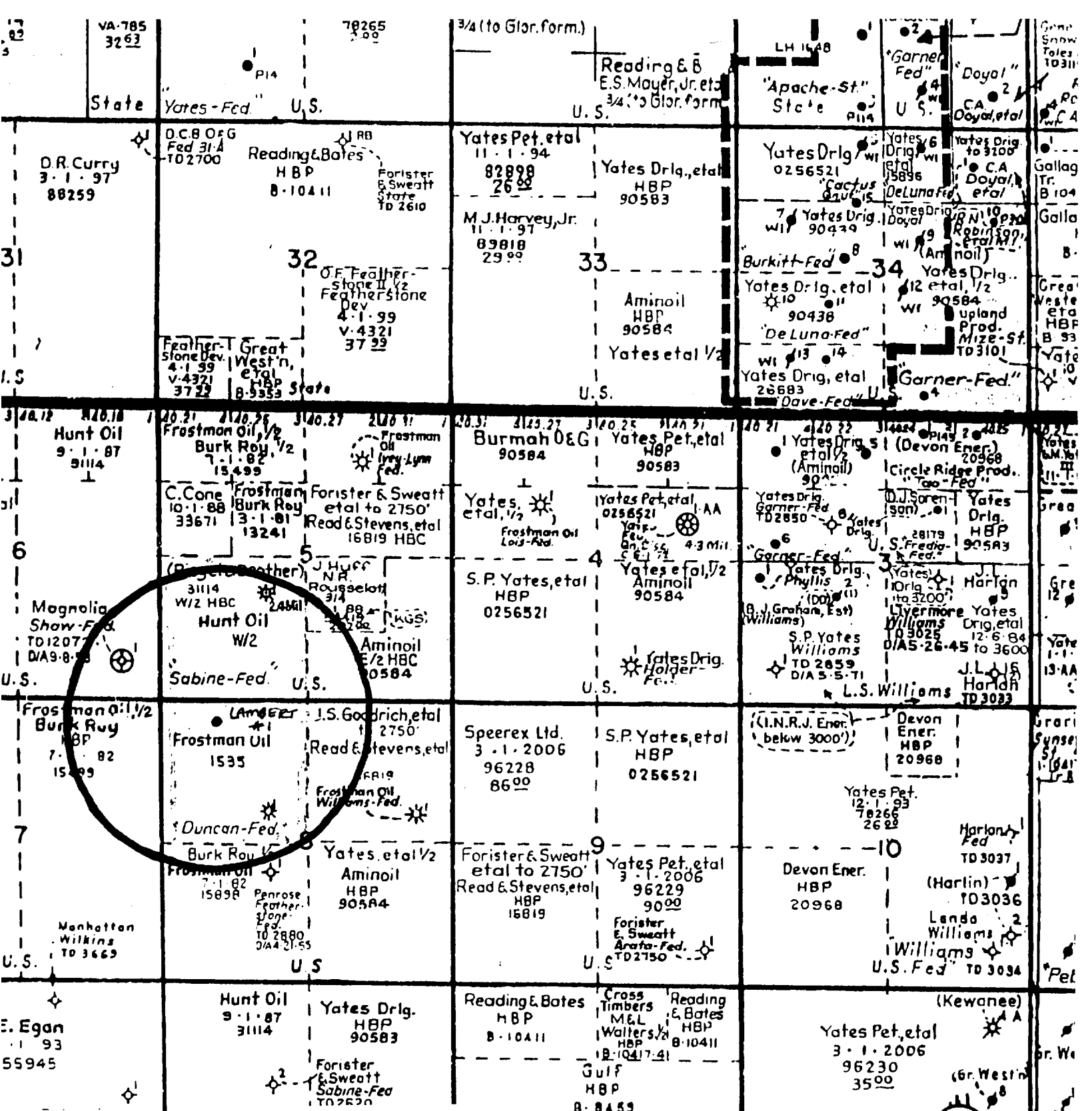
NOTE: All BOP Equipment is 5000#  
Working Pressure

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.

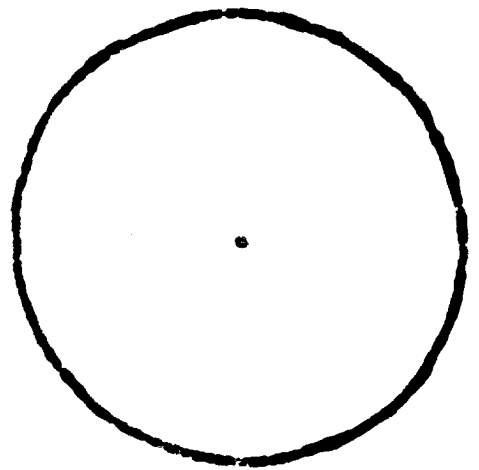


Marbob Energy Corporation  
Lambert Federal Deep Unit No. 1  
330' FNL and 1010' FWL  
Section 8, T-13S, R-31E  
Chaves County, New Mexico  
Exhibit #2



Marbob Energy Corporation  
Lambert Federal Deep Unit No. 1  
330' FNL and 1010' FWL  
Section 8, T-13S, R-31E  
Chaves County, New Mexico  
Exhibit #3

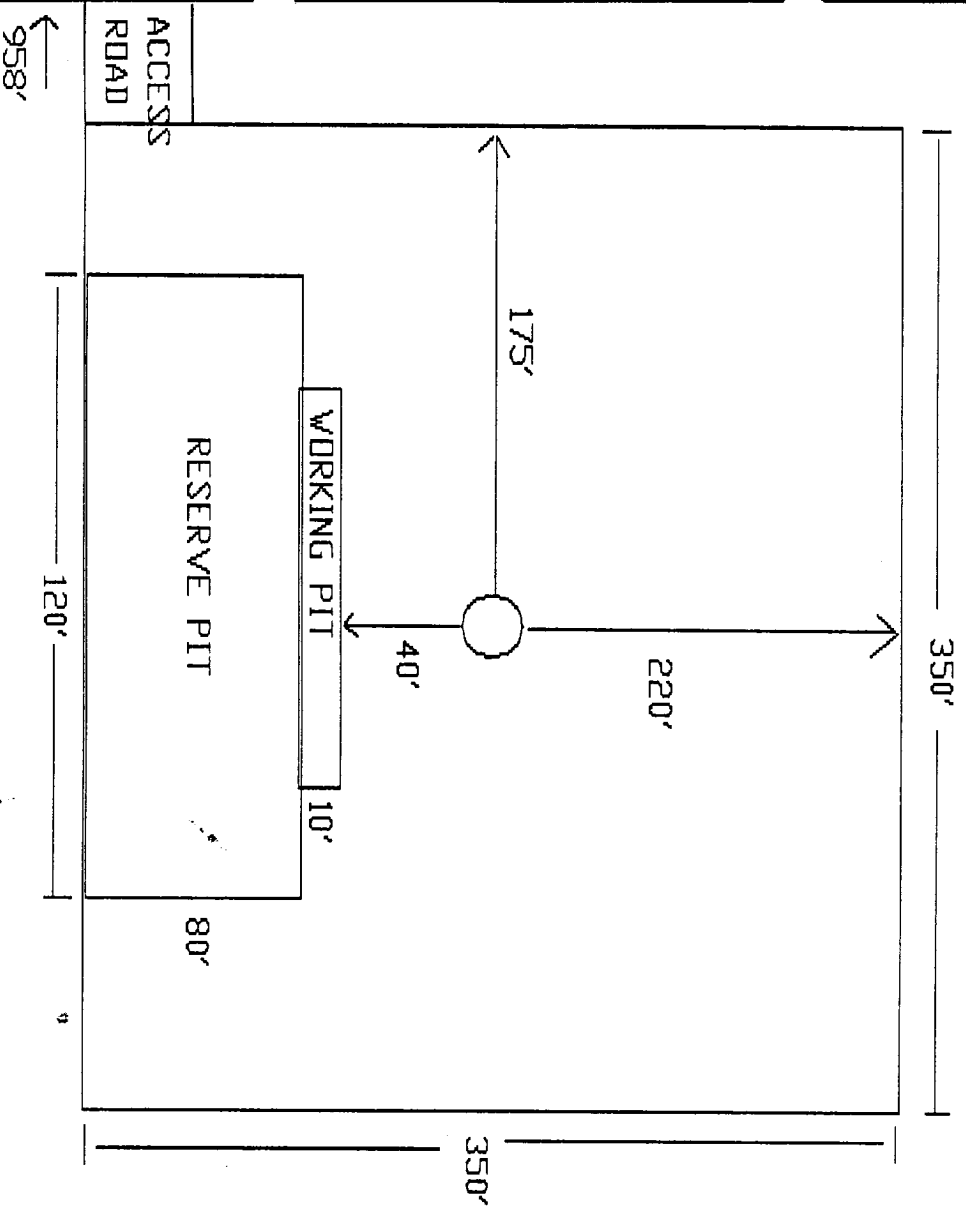
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4588  
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Hondo O & G  
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Frostman Oil  
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Gulf  
HBP  
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Yates  
Pet., etal  
HBP  
B-10419-391  
V-2619  
1252  
State  
13  
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Kewange)-  
Federal  
Gulf  
HBP  
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E-5883  
BMD  
W. Adams  
E-7659  
HBP  
Landa  
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Ross  
Sears  
B-10419-39  
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Tr. 7  
Gero  
B-831



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OCT 1966  
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EXHIBIT #9

N 1



MARBOD ENERGY

LAMERI FEDERAL DEEP UNIT #1  
330' FNL & 1010' FWL  
SEC. 8-113S-R31E  
CHAVES COUNTY, NEW MEXICO



4/12/97

  
OCT 1996  
Received  
Hobos  
OCP