N. M. OIL CONS. COMMISSION
P. O. BOX [illegible]
HOBBS, NEW MEXICO [illegible]

Form 3160-3
(July 1989)
(formerly 9-331C)

CONTACT RECEIVING OFFICE FOR NUMBER OF COPIES REQUIRED (Other instructions on reverse side)

BLM Roswell District
Modified Form No.
NM060-3160-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [X] 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
1650 FSL 1650 FEL
At proposed prod. zone
SAME
Unit J

5. LEASE DESIGNATION AND SERIAL NO.
NM-8255

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
CHANNEL CAT FEDERAL

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
VEST RANCH MORROW, EAST

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC. 15-T14S-R30E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
APPROXIMATELY 25 MILES EAST OF HAGERMAN

12. COUNTY OR PARISH
CHAVES

13. STATE
NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
1650'

16. NO. OF ACRES IN LEASE
2560

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
11,000'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3909' GR

22. APPROX. DATE WORK WILL START*
JUNE 1, 1997

23.
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#	H-40	STC	480'	400 SX CIRCULATE
12 1/4"	8 5/8"	24#	S-80	STC	3050'	1200 SX CIRCULATE
7 7/8"	5 1/2"	17#	N-80	LTC	9730'	AS NEEDED TO ISOLATE PRODUCTION ZONES

See drilling requirements (Att.)

OPER. OGRID NO. 14049
PROPERTY NO. 20999
POOL CODE 86980
EFF. DATE 6/4/97
API NO. 30-005-2115[illegible]

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

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

RECEIVED
APR 11 97

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 Rhonda Nelson TITLE *Production Clerk* DATE 4/10/97

(This space for Federal or State office use)

PERMIT NO. ______ APPROVAL DATE ______

APPROVED BY T R Kreager TITLE Area Manager DATE 5/28/97
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001 [illegible]

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 Departn

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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
30-005-21150	86980	VEST RANCH MORROW, EAST

Property Code	Property Name	Well Number
20899	CHANNEL CAT FEDERAL	1

OGRID No.	Operator Name	Elevation
14049	MARBOB ENERGY CORPORATION	3909

Surface Location

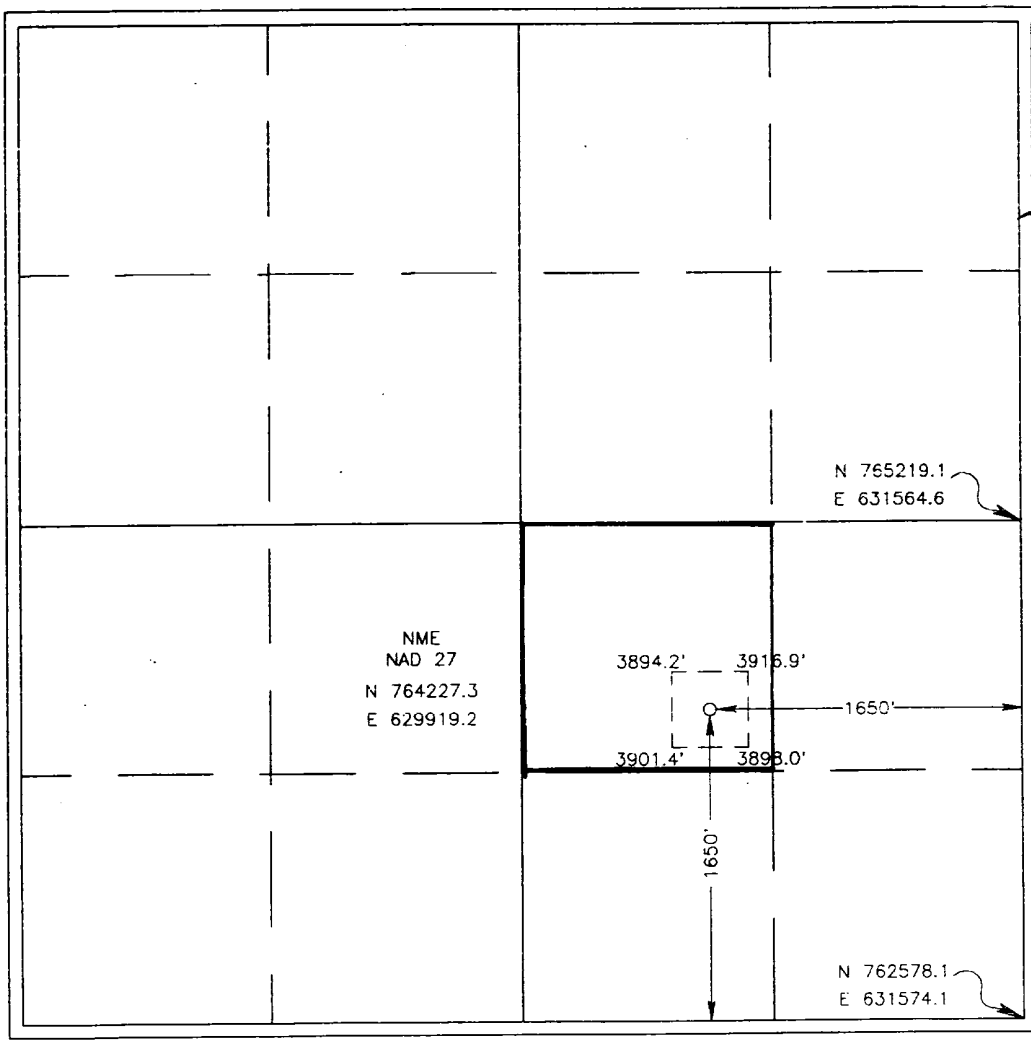
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	15	14 S	30 E		1650	SOUTH	1650	EAST	CHAVES

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.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

Rhonda Nelson
Signature

RHONDA NELSON
Printed Name

PRODUCTION CLERK
Title

4/10/97
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 supervison, and that the same is true and correct to the best of my belief.

MARCH 31, 1997

Date Surveyed DMCC

Signature & Seal of Professional Surveyor

RONALD J. EIDSON NEW MEXICO 3239

Ronald J. Eidson 4-03-97

11-0583

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY EIDSON 12641

DRILLING PROGRAM

Attached to Form 3160-3
Marbob Energy Corporation
Channel Cat Federal No. 1
1650' FSL & 1650' FEL
Sec. 15, T-14S, R-30E
Chaves County, New Mexico

1. Geologic Name of Surface Formation:

Permian
Quaternary Sandy Alluvium

2. Estimated Tops of Important Geologic Markers:

Permian	Surface		
Rustler	450'	Abo	6600'
Yates	1350'	Wolfcamp	7875'
Queen	2250'	Cisco	9125'
San Andres	3020'	Morrow	10475'
Glorietta	4325'	Missippian	10750'

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

Fresh Water	400'
Queen	2250'
Devonian	10475'

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" 300' and circulating cement back to surface.

4. Casing Program:

Hole Size	Interval	OD csg	Weight	Grade,	Jt. Cond.	Type
17 1/2"	0 - 480'	13 3/8"	48#	H-40	STC NEW	R-3
12 1/4"	0 - 3050'	8 5/8"	24#	S-80	STC NEW	R-3
7 7/8"	0 - 9730'	5 1/2"	17#	N-80	LTC NEW	R-3

Cement Program:

13 3/8" Surface Casing:	Cement w/250sx Class C lite cmt with .25# sx Cement to surface w/ 150sx of Class C w/2% cc.
8 5/8" Intermediate Casing:	Cement w/1000sx C lite w/ six lb. salt per sx Cement to surface w/ 200sx Class C neat w/2%cc
5 1/2" Production Casing:	Cement as necessary to isolate productive zones

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 csg and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 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:

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0 - 500'	Fresh Water (Spud)	8.5	28	N.C.
500'-3050'	Sat Brine	9.8 - 10.2	28-32	N.C.
3050-6500'	Cut Brine	8.6 - 10.2	32-38	N.C.
6500-9500'	Cut Brine/Oil	9.0 - 9.5	35-40	N.C.
9500-TD'	Brine/Oil	9.5 - 10.2	40+	10 - 15 cc

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) Drillstem tests as needed.

(B) Samples will be caught at 10' intervals from 500' - TD. A 2-man mudlogging unit will be utilized from 6500' - TD.

(C) The electric logging program will consist of Dual Laterolog Micro SFL, Gamma Ray/Borehole Compensated Sonic Log, Gamma Ray / Neutron / Density / PC / Caliper Log

(D) Sidewall coring in producing formations as needed.

(E) 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 150' and estimated bottom hole pressure (BHP) is < 3750 psig. Hydrogen Sulfide has not been encountered on any of the previously drilled wells in the nearby area.

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 June 1, 1997. Once commenced, the drilling operation should be finished in approximately 35 days. If the well is productive, an additional 30 to 60 days may be required for completion and testing before a decision is made to install permanent facilities.

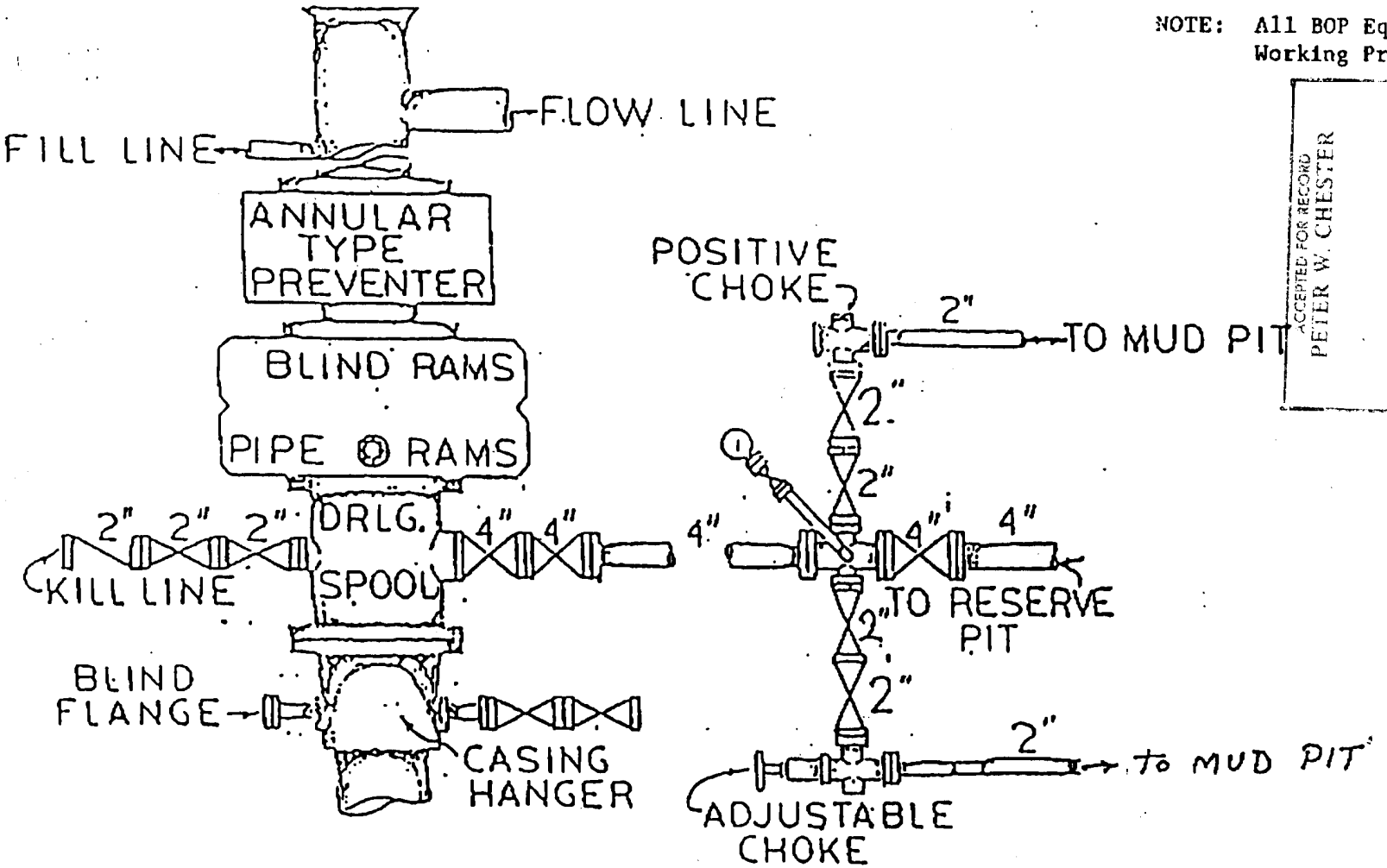
PETERSON DRILLING COMPANY

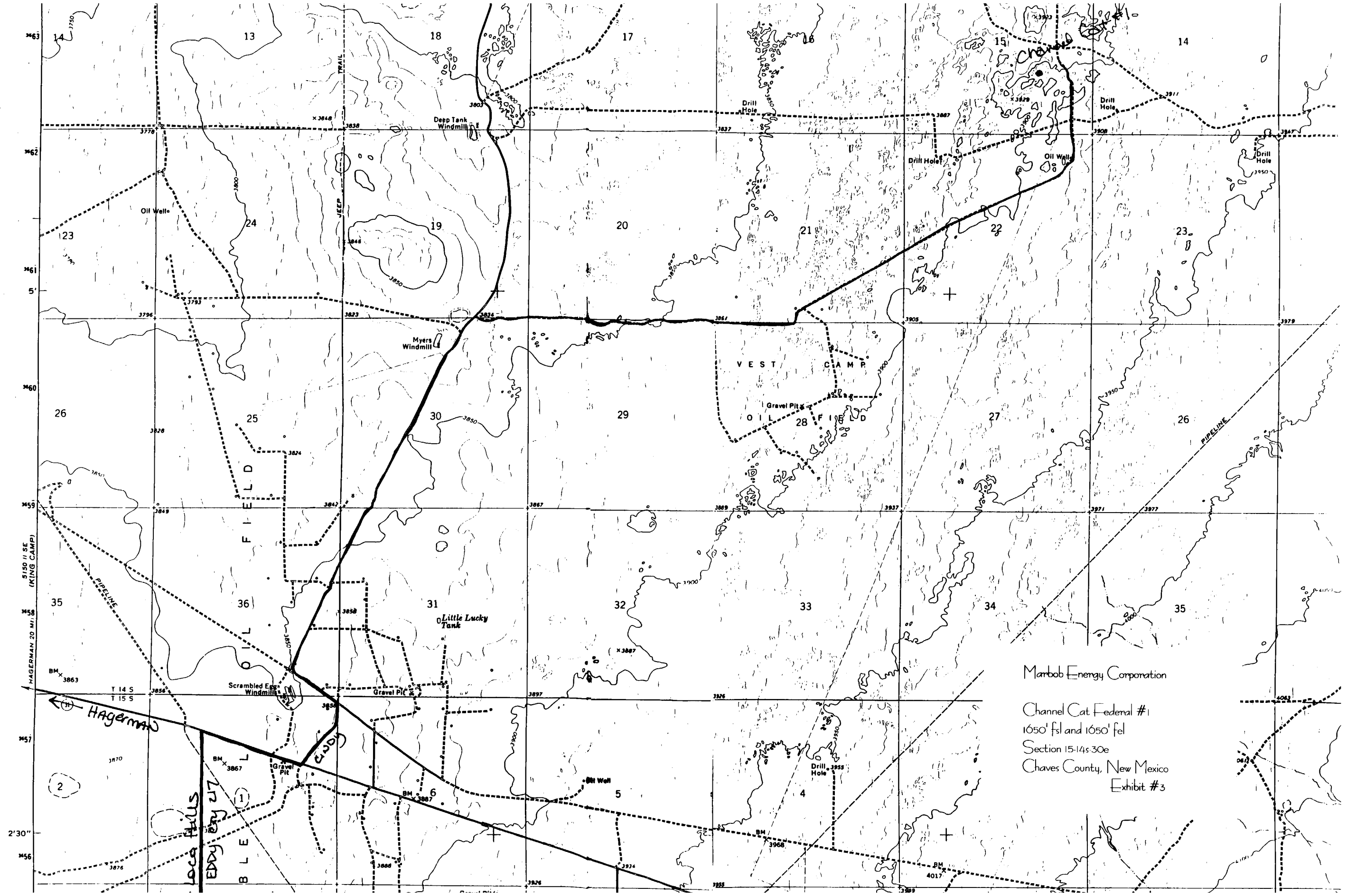
B.O.P. ARRANGEMENT RIG NO. 8

MARBOB ENERGY CORPORATION

Channel Cat Federal #1
1650' FSL & 1650' FEL
Section 15-14S-30E
Chaves County, New Mexico
Exhibit #1

NOTE: All BOP Equipment is 5000# Working Pressure




Marbob Energy Corporation
Channel Cat Federal #1
1650' fsl and 1650' fel
Section 15-14s-30e
Chaves County, New Mexico
Exhibit #3
Hagerman
Eddy
Loco Hills
Deep Tank Windmill
Myers Windmill
Scrambled Eggs Windmill
Little Lucky Tank
Gravel Pit
Oil Well
Drill Hole
Pipeline
JEEP TRAIL
VEST CAMP OIL FIELD
HAGERMAN 20 MI.
T 14 S
T 15 S