N. M. OIL CONS. COMMISSION
P. O. BOX 1980
HOBBS, NEW MEXICO

Form 3160-3
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM ~~0268967-A~~ 12226 A

1a. TYPE OF WORK: Drill ___ Deepen ___ X Re-Enter

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

b. TYPE OF WELL: Oil Well ___ Gas Well X Other ___ Single Zone X Multiple Zone ___

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Boyd & McWilliams Energy Group, Inc.

8. FARM OR LEASE NAME, WELL NO.: Federal 22 No. 1

3. ADDRESS AND TELEPHONE NO.: c/o Melanie J. Parker, PO Box 123, Artesia, NM 88211-0123 505-748-2415

9. API WELL NO.: 30-005-20392

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FSL & 1980' FWL, Unit J
At proposed prod. zone: Section 22, T13S, R30E

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 22, T13S, R30E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 23 E of Hagerman, NM then 13 miles N to location

12. COUNTY OR PARISH: Chaves County 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: ~~320~~ 880

17. NO. ACRES ASSIGNED TO THIS WELL: ~~40~~ 320 BWC

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 9950'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3937' GR

22. APPROX. DATE WORK WILL START*: June 1, 1997

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	12 3/4"	34#	400'	500 sx Cl C w/2% CC (existing)
11"	8 5/8"	24#	2027' -435	200 sx Cl C w/2% CC (existing)
~~7 7/8"~~	~~5 1/2~~	~~4 1/2"~~	~~15.5# & 11.6 & 10.5# 17#~~	~~9950'~~
		~~K-55~~	~~N-80~~	~~1500 sx Cl C w/2% CC~~

BWC

change to drilling program. See attached Sundry Notice 6/17/97

This well was originally drilling by The Rodman Corporation as the Federal "22" No. 1 in 1971 and was a dry hole. The well was transferred to Robert N. Enfield who plugged it in June 1972. Boyd & McWilliams Energy Group, Inc. plans to drill out the plugs at the surface, 483', 2027', and 4200'. We will tie back in to the 8 5/8" casing at 483' to surface. At 7400' we will kick off and drill directionally to TD the well at a bottom hole location of 2210' FSL & 1675' FWL, Section 22. The true vertical depth will be approximately 9950'. (We are currently applying for Permission to Drill a straight hole at 2210' FSL & 1675' FWL, Section 22, T13S, R30E [surface location] should this re-entry not be successful.)

MUD PROGRAM: This is a re-entry and will use brine and gel to TD.
BOP PROGRAM: BOP will be installed on the 8 5/8" casing and tested daily.

DD-175

IN ABOVE SPACE DESCRIBE PROPOSED 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 Melanie Parker TITLE Agent DATE 5/5/97

(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/TIM KREAGER TITLE Area Manager DATE JUN 20 1997

*See Instructions On Reverse Side

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.

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 Departm

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
30-005-20392	✓	Wildcat

Property Code	Property Name	Well Number
21037	FEDERAL 22	2

OGRID No.	Operator Name	Elevation
002685	BOYD & MCWILLIAMS ENERGY GROUP, INC.	3890

Surface Location

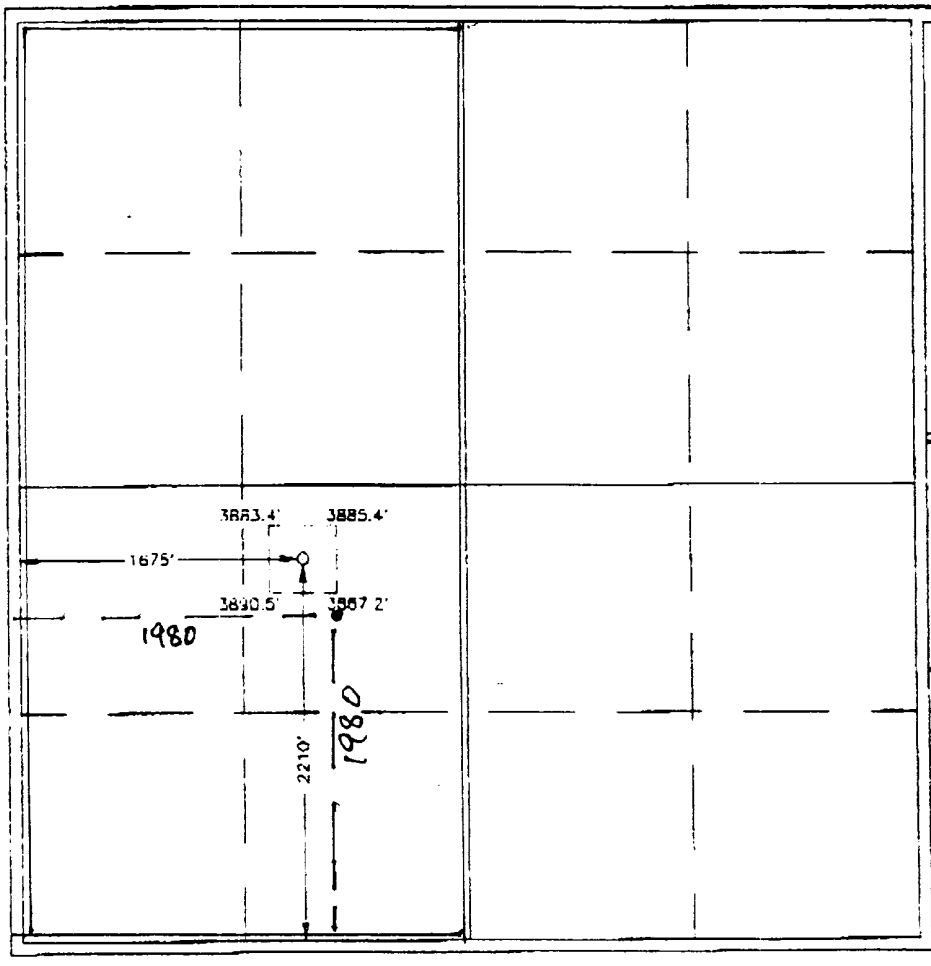
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	22	13 S	30 E		~~2210~~ 1980	SOUTH	~~1675~~ 1980	WEST	CHAVES

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
K	22	13S	30E		2210	S	1675	W	Chaves

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320 W/2			DD-175

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.

Melanie Parker
Signature

Melanie J Parker
Printed Name

Agent
Title

5/6/97
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 supervision, and that the same is true and correct to the best of my belief.

APRIL 25, 1997

Date Surveyed DMCC

Signature & Seal of Professional Surveyor
RONALD J. EIDSON
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR
3239
4-29-97

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY L. JONES 7977

WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-128
Effective 1-1-65

A stances must be from the outer boundaries of the S[illegible].

Operator	Lease	Well No.
THE [illegible] CORPORATION	22	1

Unit Letter	Section	Township	Range	County
X	[illegible]	13S	30E	Chaves

Actual Footage Location of Well: [illegible] feet from the [illegible] line and 1980 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3937	9000' Mississippian Test	Wildcat	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

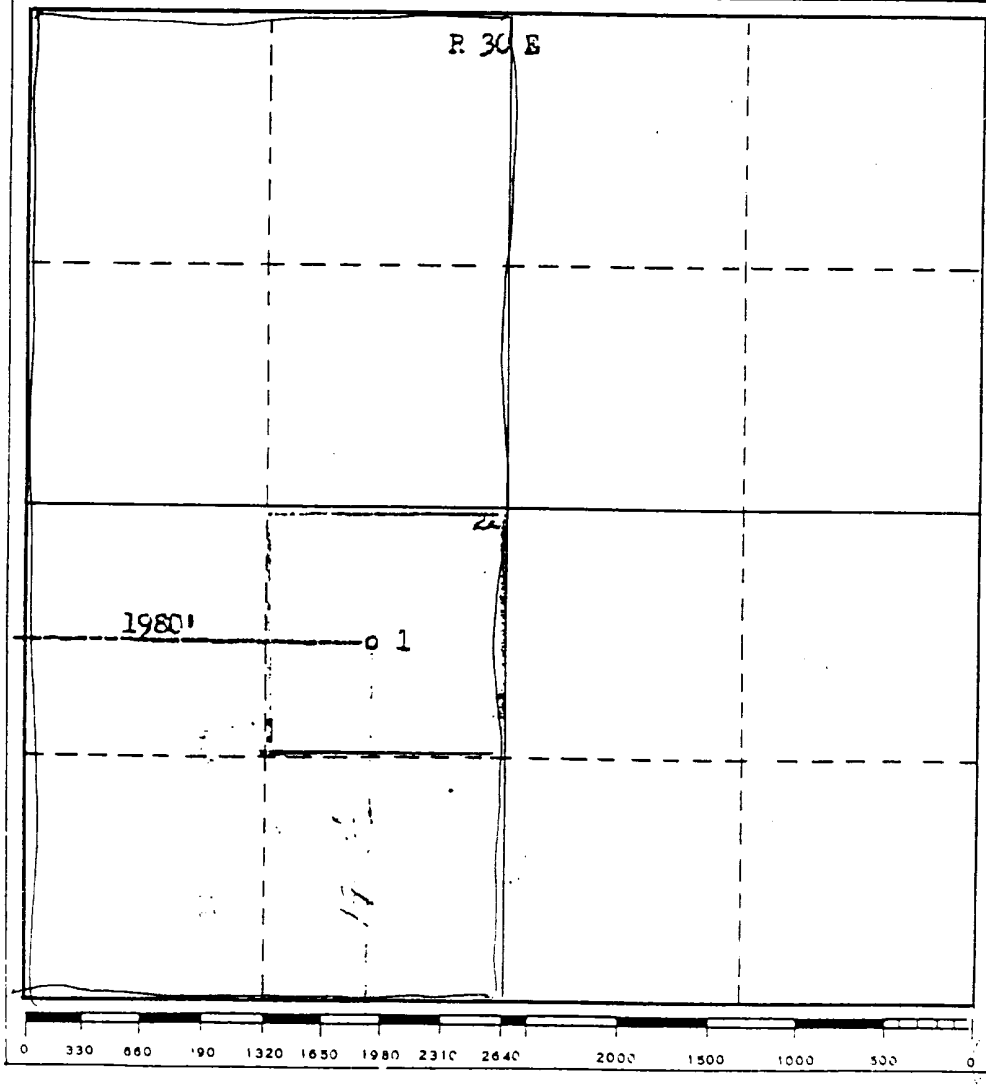
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

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.



CERTIFICATION

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

Name: Jim Thompson

Position: Area Supt.

Company: The Roberson Corp.

Date: 10-6-71

RECEIVED
OCT 7 1971
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

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 knowledge and belief.

JAMES H. BROWN
NEW MEXICO

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

DRILLING PROGRAM

Boyd & McWilliams Energy Group, Inc.
Federal "22" No. 1
1980' FSL & 1980' FWL, Unit K
Section 22, T13S, R30E
Chaves County, New Mexico

In connection with Form 3160-3, Application for Permit to Drill subject well, Boyd & McWilliams Energy Group, Inc. submits the following items of pertinent information in accordance with BLM requirements:

1. Geologic Name of Surface Formation: Permian

2. Estimated Tops of Important Geologic Markers and

Formation	Depth
Yates	1420'
Queen	2142'
San Andres	2762'
Glorietta	4165'
Abo	6425'
Wolfcamp	7615'
Strawn	8980'
Atoka	9490'
Morrow	9798'

3. Estimated Depths of Fresh Water, Oil and Gas:

Water:	+-250' (already cased off)
Oil or Gas:	9340' & 9490'

No other formations are expected to give up oil, gas or fresh water in measurable quantities. The surface fresh water sands are already cased off. ~~4 1/2"~~ production casing will be set at TD. No abnormal pressures are anticipated. 5 1/2

4. Casing and Cement Program

Hole Size	Casing From	To	Casing OD	Weight, Grade, Coupling, Cond.
15"	0'	400'	12 3/4"	34#
11"	0'	2027'	8 5/8"	24# J-55 LTC
7 7/8"	0'	TD	~~4 1/2"~~ 5 1/2	~~11.6 & 10.5# J-55 LTC~~ 15.5 lb/ft K-55 Y 17 lb/ft N-80

Minimum Design Factors: Collapse 1.125, Burst 1.0, Tension 1.7.

13 3/8" Surface Casing Set at 400' - in place - 500 sx circulated

8 5/8" Intermediate Casing Set at 2027' - in place - 350 sx

4 1/2" Production Casing Set at TD - Cement with 1500 sx Class C cmt

5. Minimum Specifications for Pressure Control:

BOP will be installed on the 8 5/8" casing and rated for 3M BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and oeprated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit "B".

6. Proposed Mud System:

The well will be drilled to TD with a combination of fresh water and 10# brine. The applicable depths and properties of this system are as follows:

Depth	Type	Weight (ppg)	Viscosity (sec)	Water Loss cc

Sufficient mud weight for each zone as this is a re-entry.

Sufficient mud material(s) to maintain mud proeprties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

7. Logging, Testing and Coring Programs:

Samples: N/A
Logging: Cased hole GR-CNL over zones of interest. GR-CBL over same
Coring: N/A
DST's: N/A
Further testing procedures will be determined after the ~~4 1/2~~ 5 1/2" production casing has been cemented at TD.

8. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures, temperatures, or other potential hazards are anticipated.

No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported, or are known to exist at this depth in this area. No major lost circulation zones have been reported in offsetting wells.

The maximum anticipated bottom hole pressure is approximately 4407 psi.
(9950' x .46 psi/ft = 4577 psi)
The maximum anticipated bottom hole temperature is 138 degrees F.

9. Anticipated Starting Date and Duration of Operations:

Plans are to re-enter this well as soon as possible after receiving approval. Once commenced, the drilling operation should be complete in 15 days. If the well is productive, an additional 30 days will be required for completion, testing, and installation of permanent facilities.

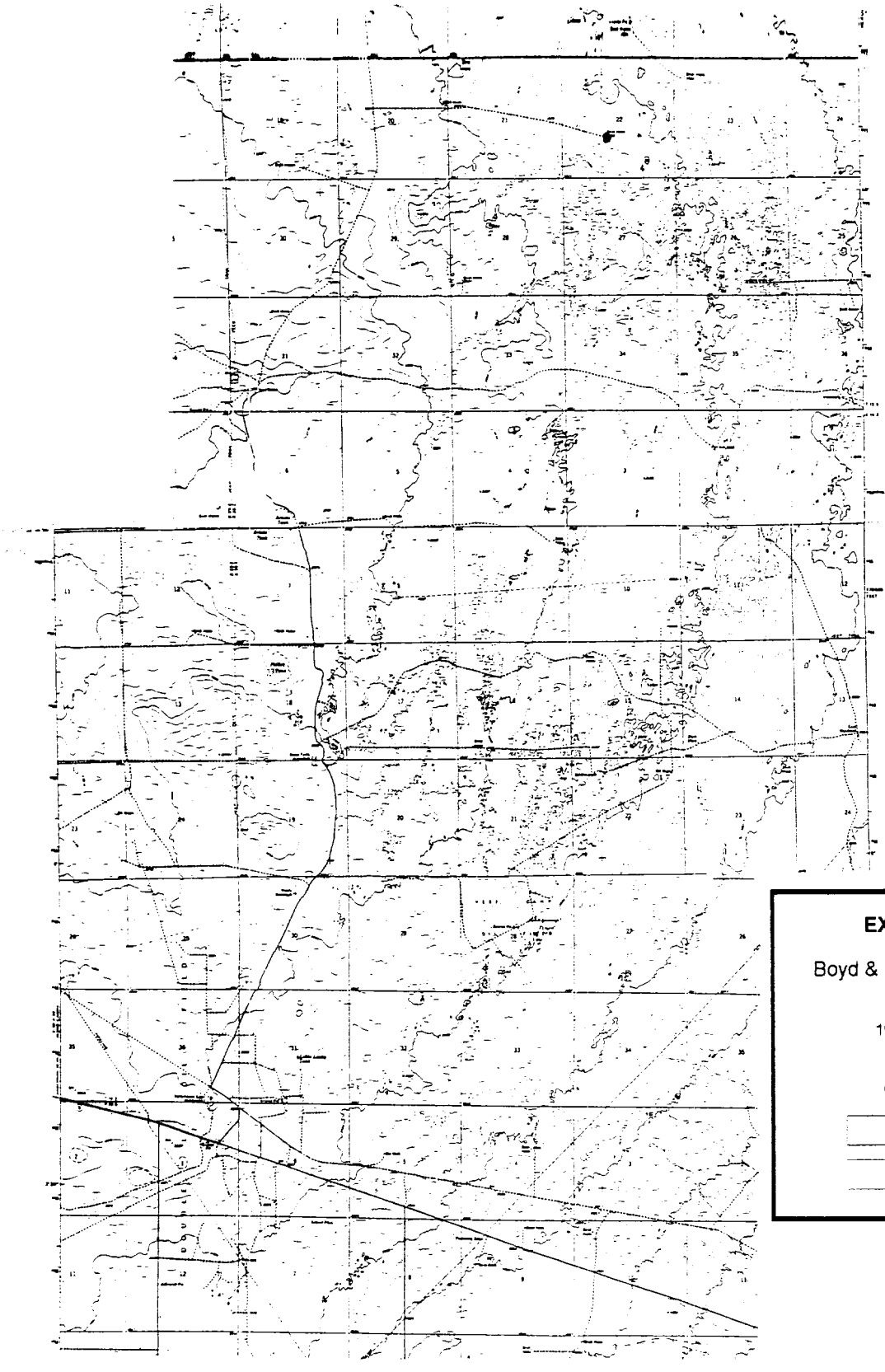


EXHIBIT "A" - ROAD MAP

Boyd & McWilliams Energy Group, Inc.

Federal "22" No. 1 ●

1980' FSL & 1980' FWL, Unit K

Section 22, T13S, R30E

Chaves County, New Mexico

Paved Highway NM 249

Existing Access Road Cindy Rd

EXHIBIT "E" - BOP EQUIPMENT

Boyd & McWilliams Energy Group, Inc.

Federal "22" No. 1

1980' FSL & 1980' FWL, Unit K

Section 22, T13S, R30E

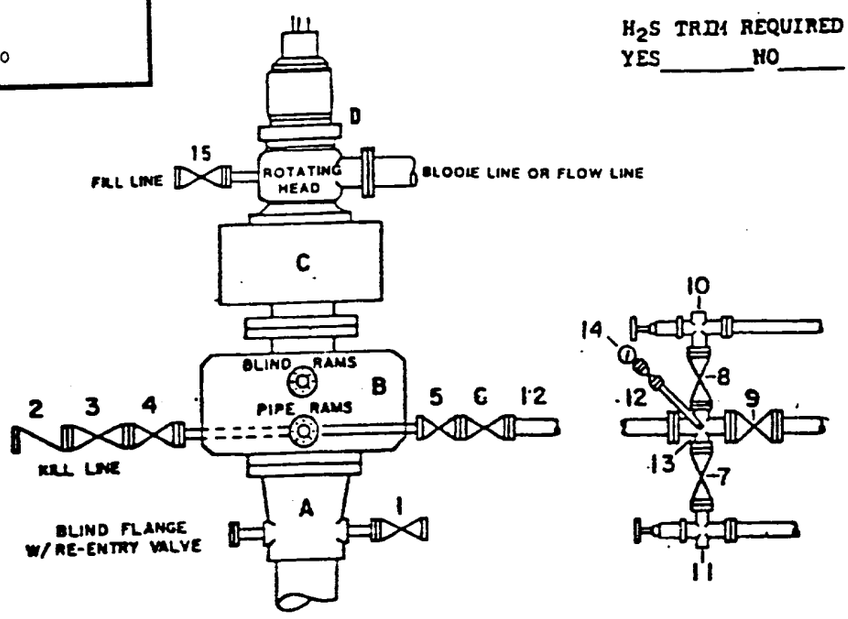
Chaves County, New Mexico

DRILLING CONTROL

CONDITION III-B 3000 PSI WP

H_2S TRIM REQUIRED

YES_____NO_____



DRILLING CONTROL

MATERIAL LIST - CONDITION III - B

A	Wellhead
B	3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram preventers may be utilized with 3000# W.P. drilling spool with 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line. The drilling spool is to be installed below the single ram type preventers).
C	3000# W.P. Annular Preventer with 1" steel, 3000# W.P. control lines.
D	Rotating Head with fill up outlet and extended Blooie line.
1,3,4, 7,8,	2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
2	2" minimum 3000# W.P. back pressure valve.
5,6,9	3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
12	3" minimum Schedule 80, Grade B, seamless line pipe.
13	2" minimum x 3" minimum 3000# W.P. flanged cross.
10,11	2" minimum 3000# W.P. adjustable choke bodies.
14	Cameron Mud Gauge or equivalent (location optional in Choke line).
15	2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.

SCALE	DATE	EST. NO	DRG NO
DRAWN BY			
CHECKED BY			
APPROVED BY			

EXHIBIT E