

Bureau of Land Management
 Form 3100-2 (July 1997)
 AUG - 1 2000
 Carlsbad Field Office
 Carlsbad, NM

N.M. Oil Conservation Division
 UNITED STATES DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT
 849 S. 1st Street
 Artesia, NM 88210-2834

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

905
 JGF

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
 DRILL DEEPEN

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER 17891
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 POGO PRODUCING COMPANY (RICHARD WRIGHT) 915-685-8140

3. ADDRESS AND TELEPHONE NO.
 P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 915-685-8100

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface Unit M
 660' FSL & 660' FWL SEC. 33 T19S-R27E EDDY CO. NM
 At proposed prod. zone SAME
 Undes. Mc Millan, Morrow, Neath

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE
 Approximately 10 miles North of Carlsbad New Mexico

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
 640±

17. NO. OF ACRES ASSIGNED TO THIS WELL
 320

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

19. PROPOSED DEPTH
 11,000'

20. ROTARY OR CABLE TOOLS
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 3432' GR.

22. APPROX. DATE WORK WILL START*
 WHEN APPROVED
 12-31-07

5. LEASE DESIGNATION AND SERIAL NO.
 NM-13409

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
 ----- 26687

8. FARM OR LEASE NAME, WELL NO.
 PECOS "33" FEDERAL # 1

9. AP WELL NO.
 30-015-31356

10. FIELD AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SEC. 33 T19S-R27E

12. COUNTY OR PARISH
 EDDY CO.

13. STATE
 NEW MEXICO

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface with Redi-mix
17 1/2"	H-40 13 3/8"	48	500'	550 Sx. circulate to surface
12 1/2"	J-55 9 5/8"	40.5	3000'	1200 Sx. circulate to surface
*8 1/2" & 7 7/8"	J-55 & N-80 5 1/2"	17	11000'	1200 Sx. Stage Tools @ 9100'± & 6000'±

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 500'. Run and set 500' of 13 3/8" H-40 48# ST&C casing. Cement with 550 Sx. of Class "C" cement + 1/2# Flocele/Sx. + 2% CaCl, circulate cement to surface.
3. Drill 12 1/2" hole to 3000'. Run and set 3000' of 9 5/8" J-55 40.5# ST&C casing. Cement with 1200 Sx. of Class "C" cement + additives, circulate cement to surface.
- * 4. Drill 8 1/2" hole to the Cisco estimated to be 9000'±, if no problems are encountered reduce hole size to 7 7/8" and drill to TD. 11,000'. Run and set 5 1/2" casing as follows: 3000' of 17# N-80 LT&C, 6000' of 17# J-55 LT&C, 2000' of 17# N-80 LT&C. Cement in three stages, DV Tools at 9100'± & 6000'±. Cement with 1200 Sx. of Cement, circulate cement to surface.

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 Loet Garcia TITLE Agent DATE 07/26/00

(This space for Federal or State office use)
 PERMIT NO. _____ APPROVAL DATE _____
 Notify OCD at SPUD & TIME to witness cementing the 133/8" casing

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 _____ TITLE Assistant Field Manager, Lands And Minerals DATE SEP 3 2 2000

APPROVED FOR _____

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

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name
Property Code		Property Name	Well Number
OGRID No.		Operator Name	Elevation
		WILDCAT - MORROW	
		PECOS 33 FED.	1
17891		POGO PRODUCING COMPANY	3432

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	33	19 S	27 E		660	SOUTH	660	WEST	EDDY

Bottom Hole Location If Different From Surface

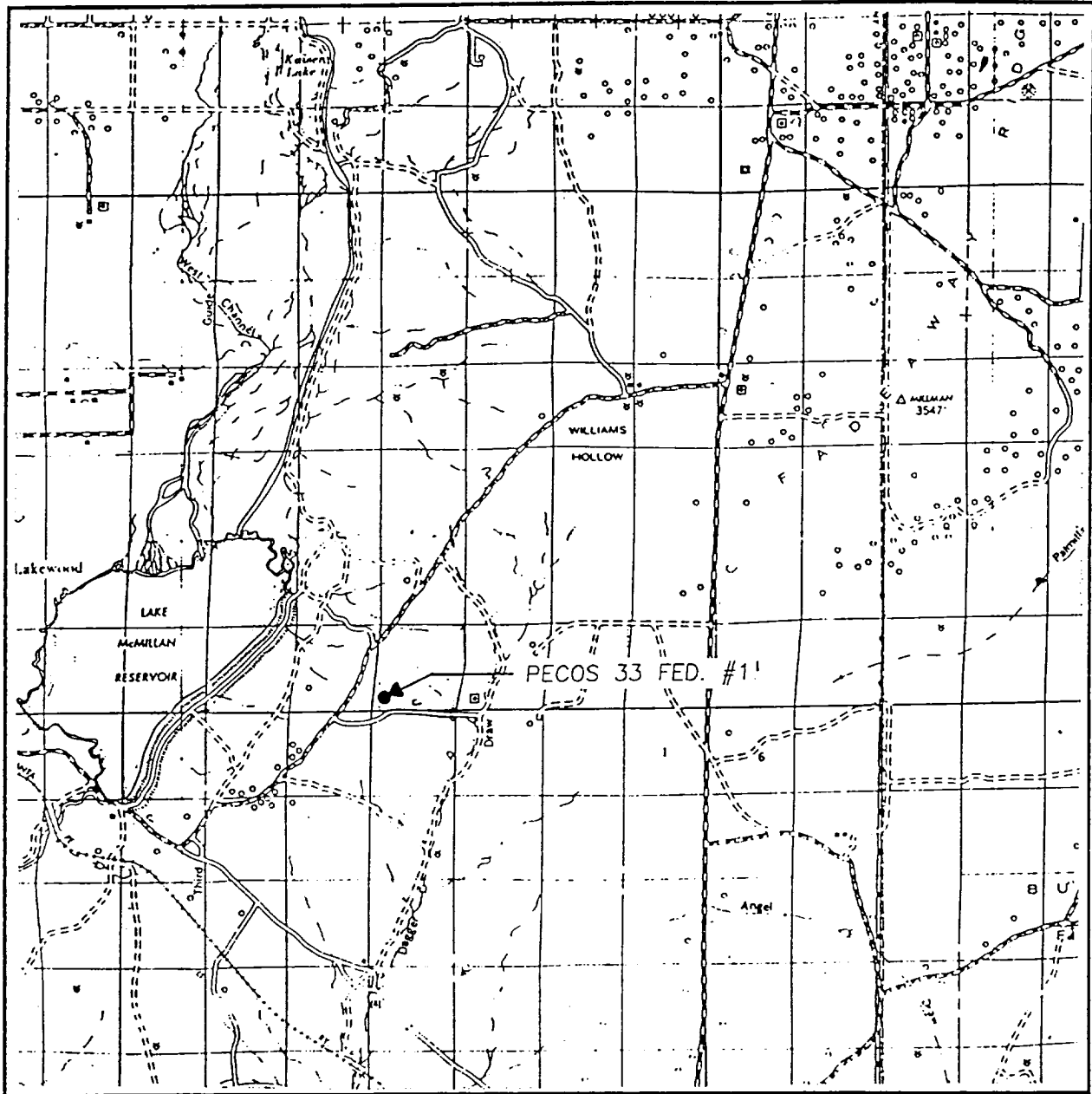
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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 align="center">OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p align="right"><i>Joe T. Janica</i></p> <p>Signature Joe T. Janica Printed Name Agent Title 07/26/00 Date</p>
	<p align="center">SURVEYOR CERTIFICATION</p> <p><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></p> <p align="right">JULY 12, 2000</p> <p>Date Surveyed DC</p> <p>Signature & Seal of Professional Surveyor <i>Ronald J. Eidson 7/14/00</i> 00-11-0869</p> <p>Certificate No. RONALD J. EIDSON 3239 GARY KIDSON 12641 MAURIN McDONALD 12185</p>

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 33 TWP. 19-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 660' FWL

ELEVATION 3432

OPERATOR POGO PRODUCING COMPANY

LEASE PECOS 33 FED.

**JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505 393-3117)**

APPLICATION TO DRILL

POGO PRODUCING COMPANY
 PECOS "33" FEDERAL # 1
 UNIT "M" SECTION 33
 T19S-R27E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location: 660' FSL & 660' FWL SEC. 33 T19S-R27E EDDY CO. NM.
2. Elevation above Sea Level: 3432' GR.
3. Geologic name of surface formation: Quaternary Aeolian Deposits.
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
5. Proposed drilling depth: 11,000'
6. Estimated tops of geological markers:

San Andres	1550'	Cisco	8370'
Bone Spring Lime	2600'	Strawn	9330'
2nd Bone spring Sd.	6200	Atoka	9680'
Wolfcamp	7860'	Morrow Clastics	10180'
7. Possible mineral bearing formations:

Bone Spring	Oil	Strawn	Gas
Wolfcamp	Oil	Atoka	Gas
Cisco	Gas	Morrow	Gas
8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-500'	13 3/8"	48	8-R	ST&C	H-40
12 1/4"	0-3000'	9 5/8"	40.5	8-R	ST&C	J-55
8½"	0-9000'	5½"	17	8-R	LT&C	N-80 J-55
7 7/8"	0-11,000'	5½"	17	8-R	LT&C	N-80 J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
 PECOS "33" FEDERAL # 1
 UNIT "M" SECTION 33
 T19S-R27E EDDY CO. NM

9. CEMENTING CASING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
13 3/8"	Surface	Set 500' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx. of Class "C" cement + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 3000' of 9 5/8" 40.5# J-55 ST&C casing. Cement with 1200 Sx. of Class "C" cement + additives, circulate cement to surface.
5 1/2"	Production	Set 11,000' of 5 1/2" 17# LT&C casing as follows: 3000' of N-80, 6000' of J-55 & 2000' of N-80. Cement in 3 stages with DV tools at 9100' & 6000'. Cement with 1100 Sx. of Class "H" + additives, circulate cement on 3rd stage to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" A 1500 Series 5000 PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. B.O.P. will be hydraulically operated. Exhibit "E-1" shows choke manifold & closing unit. B.O.P. will be nipped up on 13 3/8" casing and will be operated at least once each 24 Hr. period while drilling and blind rams will be worked when out of hole on trips. Flow sensor, PVT, full opening stabbing valve and upper kelly cock will be utilized. No abnormal pressure or temperature is expected while drilling.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD
40-500'	8.6-8.8	29-32	NC	Fresh water spud mud use paper to control seepage.
500-3000'	10.5-10.8	29-34	NC	Brine water use paper to control seepage and Lime to control pH.
3000-9500'	8.6-8.8	29-36	NC	Fresh water use paper to control seepage.
9500-11000'	8.6-8.8	29-38	10 cc or less	Fresh water Dris-pac System use Gel to control viscosity, use high viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, unexpected kicks. In order to run DST's, open hole logs, and run casing water loss & viscosity may have to be adjusted to meet these conditions.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PECOS "33" FEDERAL # 1
UNIT "M" SECTION 33
T19S-R27E EDDY CO. NM

12. TESTING, LOGGING, & COREING PROGRAM:

- A. Open hole logs: Dual-Laterolog, Gamma Ray Caliper, SNP, Sonic from TD to 3000'
Run Gamma Ray, Neutron from 3000' to surface.
- B. Mud logger will be placed on hole from a depth to be decided on by Geologist
and will remain on the hole to TD.
- C. DST's will be run as shows dictate.
- D. Cores will be taken at the discretion of the Geologist.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H₂S detectors will be in place to detect any presence of unsafe levels of H₂S. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operations of all equipment that will be used. Estimated BHP 5000 PSI & estimated BHT 178°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Roads and location construction will begin after the BLM approves the APD. Anticipated spud date will be as soon as pad & road construction has been completed. Drilling time for the well is estimated to take 43 days. If production casing is run an additional 30 days will be required to complete well and construct surface facilities.

15. OTHER FACETS OF OPERATION:

After running production casing, cased hole Gamma-Neutron & Collar logs will be run over all possible pay intervals. If commercial production from the MORROW pay is indicated it will be perforated and stimulated. Then if necessary the pay will be swab tested and completed as a gas well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of bleed line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E"
6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If location is near any dwelling a closed D.S.T. will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
9. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
PECOS "33" FEDERAL # 1
UNIT "M" SECTION 33
T1-S-R27E EDDY CO. NM

1. EXISTING ROADS: Area maps, Exhibit "B" is a reproduction of a County General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. From junction of U.S. Hi-way 62-180 and North Loop Road (CR-604) follow CR-604 North & West 4.5 miles turn on to CR-206 go 2.5 miles to CR-34 turn on to CR-34 go 8.7 miles to CR-236 (Netherlin Road) go Northeast 2.6 miles turn East on to lease road go .6 miles turn North go 900'± to location.
 - C. If necessary lay pipelines and construct powerlines along road R-O-W.
2. PLANNED ACCESS ROADS: Approximately 900' of new road will be constructed.
 - A. The access road will be crowned and dirched to a 12'00" wide travel surface with a 40' right-of-way.
 - B. Gradient on all roads will be less than 5.00%.
 - C. No turnouts will be necessary.
 - D. If needed, road will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
 - E. Centerline for the new access road has been flagged. Earthwork will be as required by field conditions.
 - F. Culverts in the access road will not be used. The road will be constructed to utilize low water crossings for drainage as required by the Topography.
3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A-1"

A. Water wells	-	None known
B. Disposal wells	-	None known
C. Drilling wells	-	None Known
D. Producing wells	-	As shown on Exhibit "A-1"
E. Abandoned wells	-	As shown on Exhibit "A-1"

SURFACE USE PLAN

POGO PRODUCING COMPANY
PECOS "33" FEDERAL # 1
UNIT "M" SECTION 33
T1-S-R27E EDDY CO. NM

4. If, upon completion this well is a producer Pogo Producing Company will furnish maps and/or plats showing on site facilities or off site facilities if needed. This will be accompanied with a Sundry Notice.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction will be obtained from the excavation of drill site, if additional material is needed it will be purchased from a local source and transported over the access route as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pit.
- B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
- D. Sewage from living quarters will drain into holes with a minium depth of 10'. These holes will be covered during drilling and will be back filled upon completion. A Ports-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for breaking out. In the event that drilling fluids do not evaporate in a reasonable time they will be hauled off by transports and be disposed of at a state approved disposal facility. Later pits will be broken out to speed drying. Water produced during testing will be put in reserve pits. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES:

- A. No camps or airstrips to be constructed.

SURFACE USE PLAN

POGO PRODUCING COMPANY
PECOS "33" FEDERAL # 1
UNIT "M" SECTION 33
T1-S-R27E EDDY CO. NM

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum of 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

SURFACE USE PLAN

POGO PRODUCING COMPANY
PECOS "33" FEDERAL # 1
UNIT "M" SECTION 33
T1-S-R27E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of low lying caliche hills, with mesquite and native grasses growing in the valleys.
- B. Surface is owned by the Bureau of Land Management U.S. Department of Interior. Surface is used for grazing of livestock and is leased to ranchers for this purpose.
- C. An archaeological survey will be conducted and copies of the survey will be filed in the Carlsbad Office of The Bureau of Land Management.
- D. There are no dwellings or habitation within three miles of this location.

12. OPERATORS REPRESENTATIVE:

Before construction:

TIERRA EXPLORATION INC.
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE PHONE 505-392-2112
JOE T. JANICA

During and after construction:

POGO PRODUCING COMPANY
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
OFFICE PHONE 915-685-8100
MR. RICHARD WRIGHT 915-685-8140

13. CERTIFICATION: - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 that the work associated with the operations proposed herein will be performed by Pogo Producing company, its contractors/subcontractors is in the conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME : Joe T Janica
DATE : 07/26/00
TITLE : Agent

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19
S

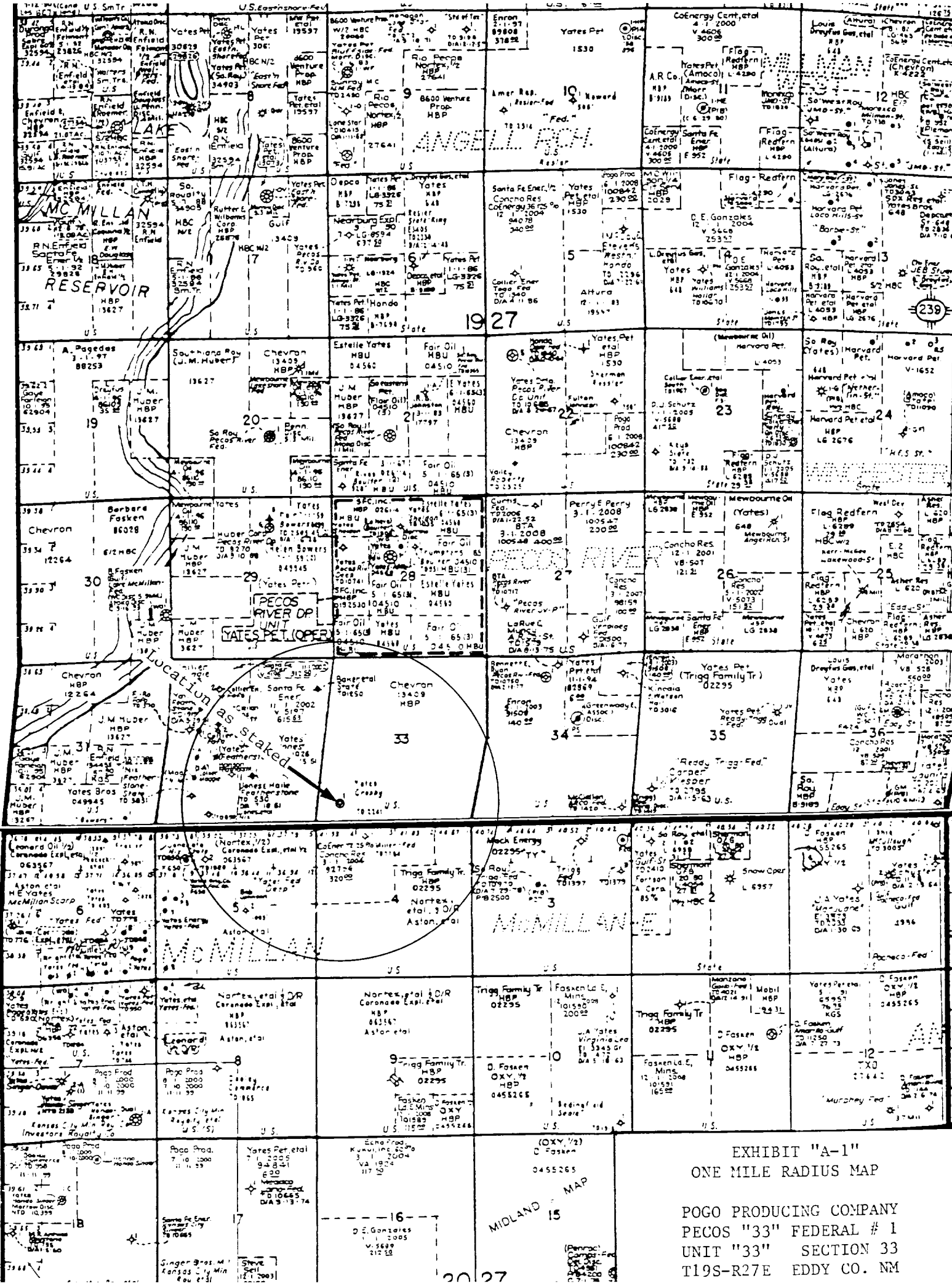


EXHIBIT "A-1"
ONE MILE RADIUS MAP

PEGO PRODUCING COMPANY
PECOS "33" FEDERAL # 1
UNIT "33" SECTION 33
T19S-R27E EDDY CO. NM

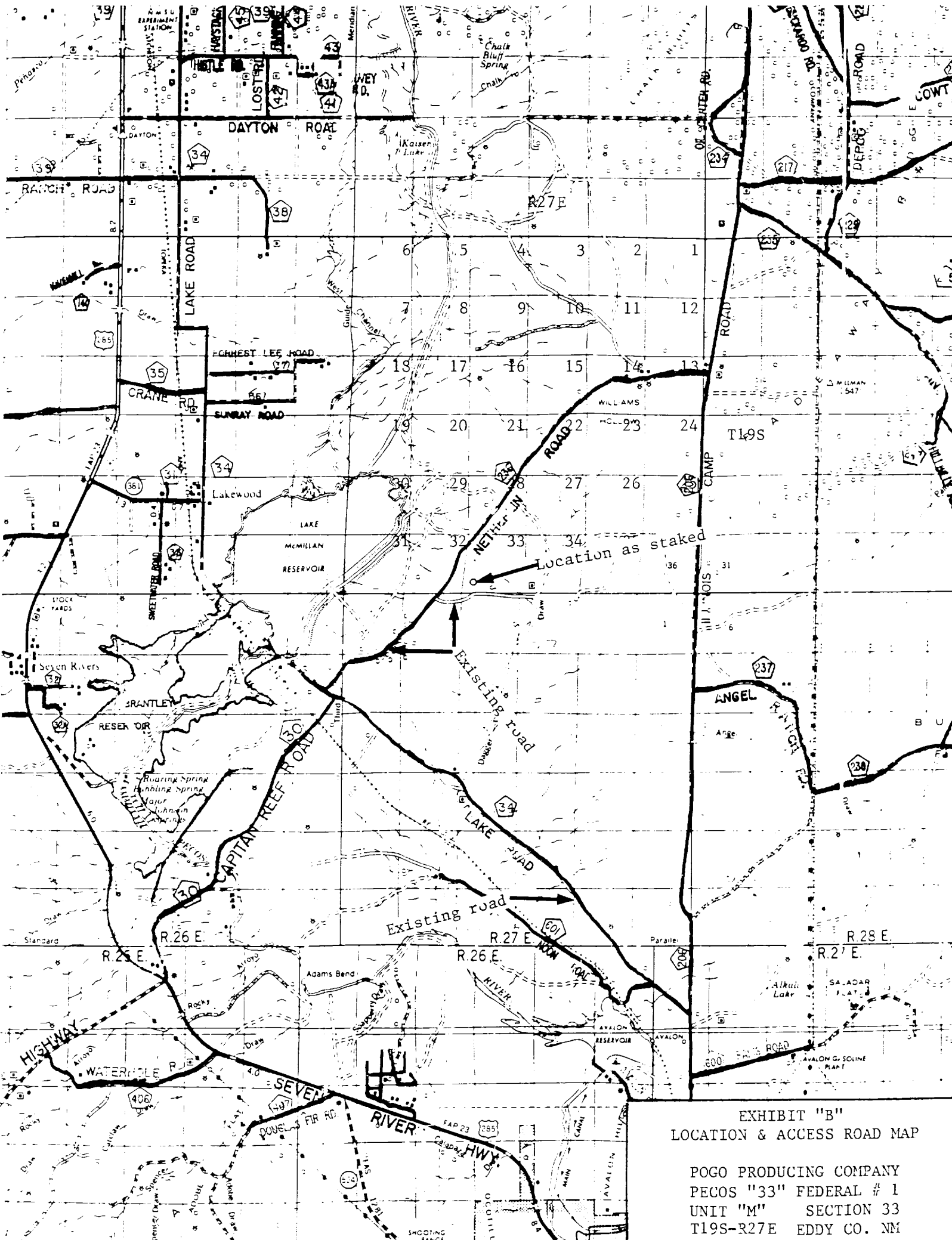


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
 PECOS "33" FEDERAL # 1
 UNIT "M" SECTION 33
 T19S-R27E EDDY CO. NM

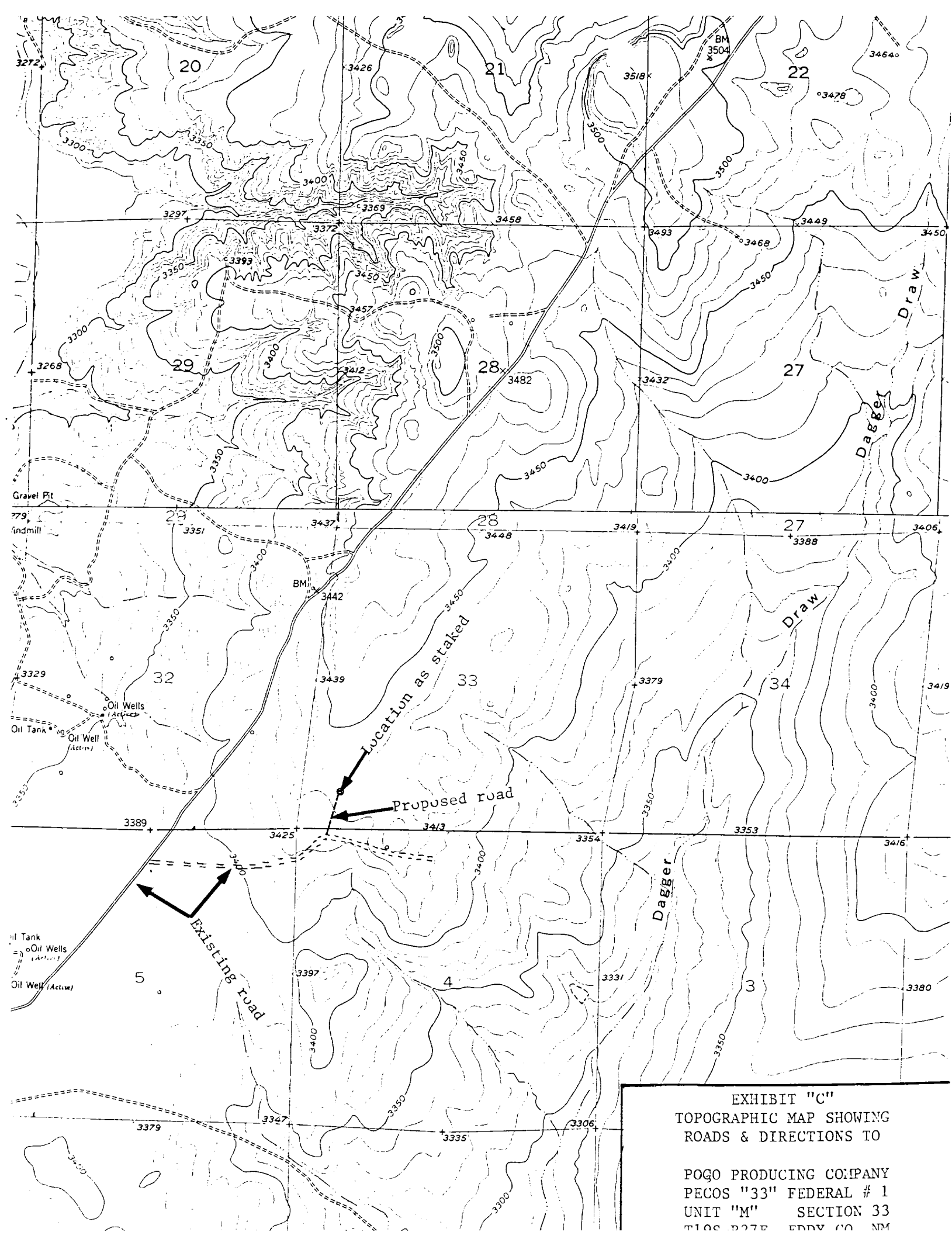
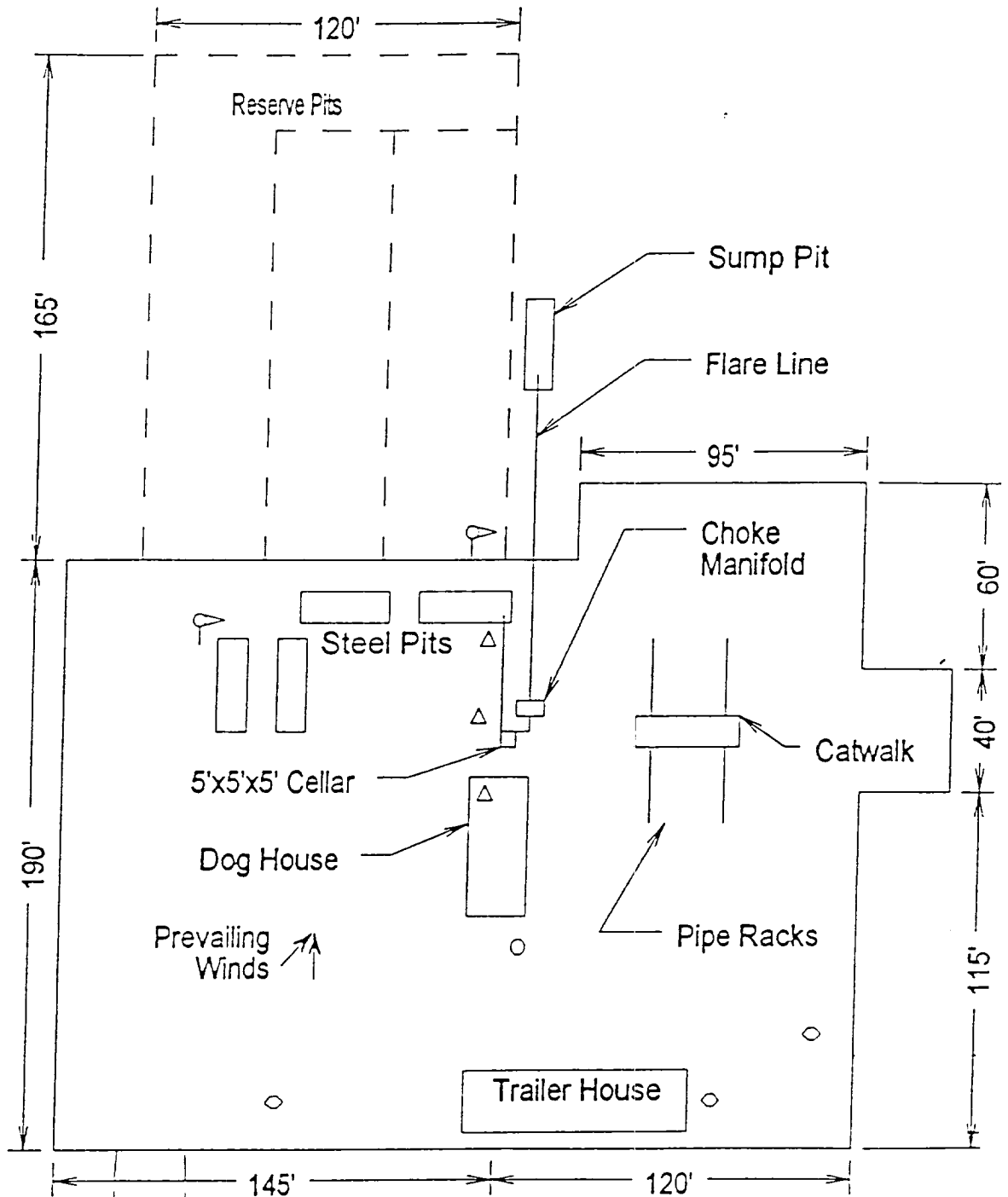


EXHIBIT "C"
 TOPOGRAPHIC MAP SHOWING
 ROADS & DIRECTIONS TO
 POGO PRODUCING COMPANY
 PECOS "33" FEDERAL # 1
 UNIT "M" SECTION 33
 T108 227E 5NDY CO NM



- Access Road
- ⊙ Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
PECOS "33" FEDERAL # 1
UNIT "M" SECTION 33
T19S-R27E EDDY CO. NM

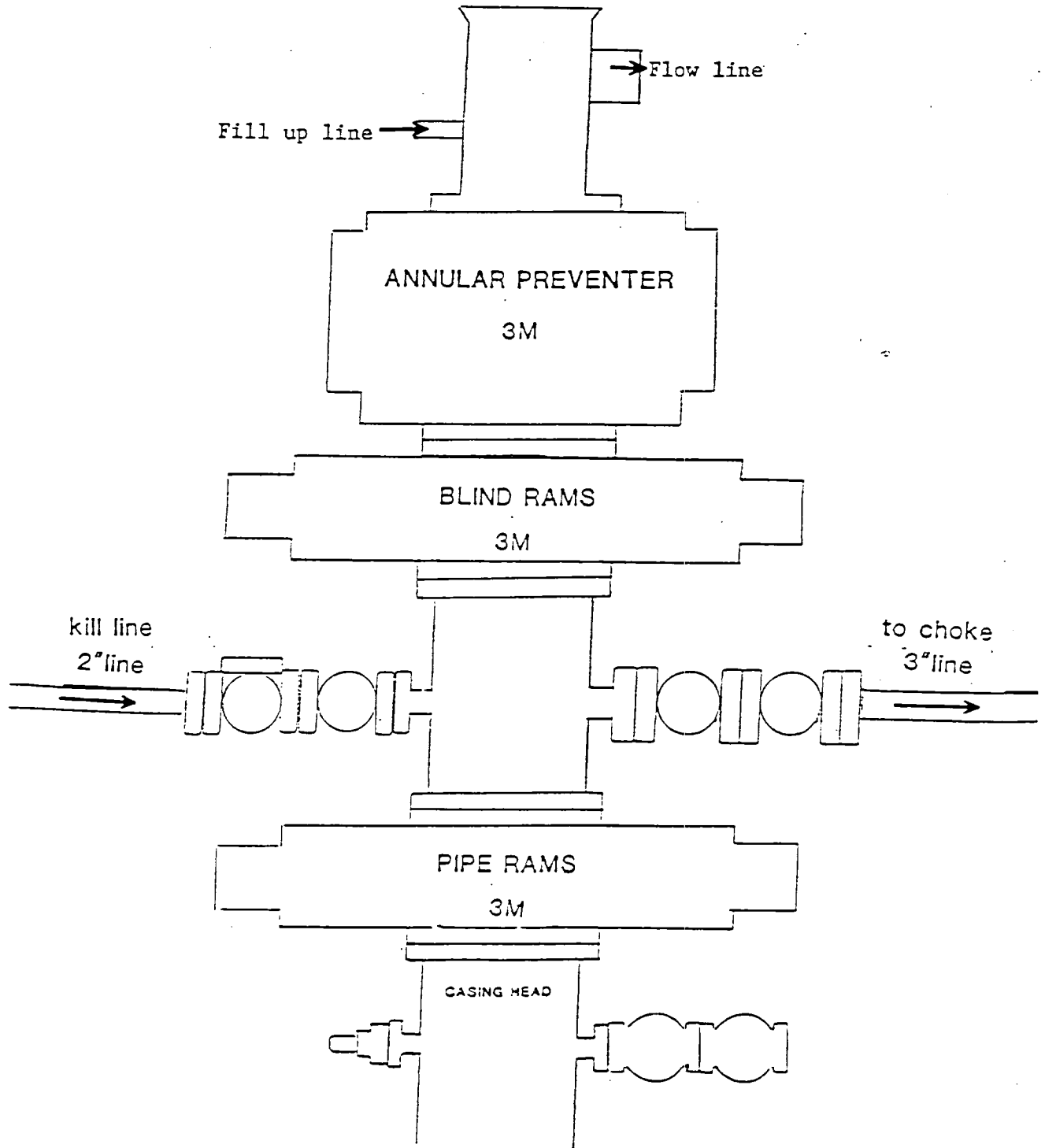
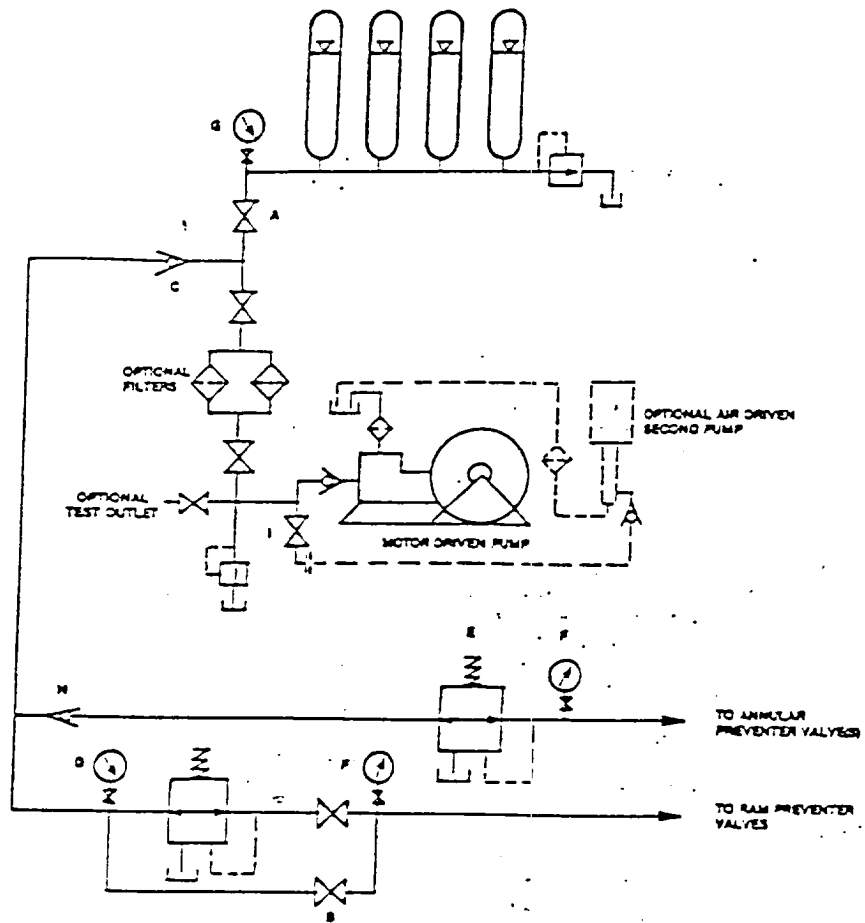


EXHIBIT "E"
 SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
 PECOS "33" FEDERAL # 1
 UNIT "M" SECTION 33
 T19S-R27E EDDY CO. NM



HAND ADJUSTABLE CHOKE

POGO PRODUCING CO
3M CHOKE MANIFOLD

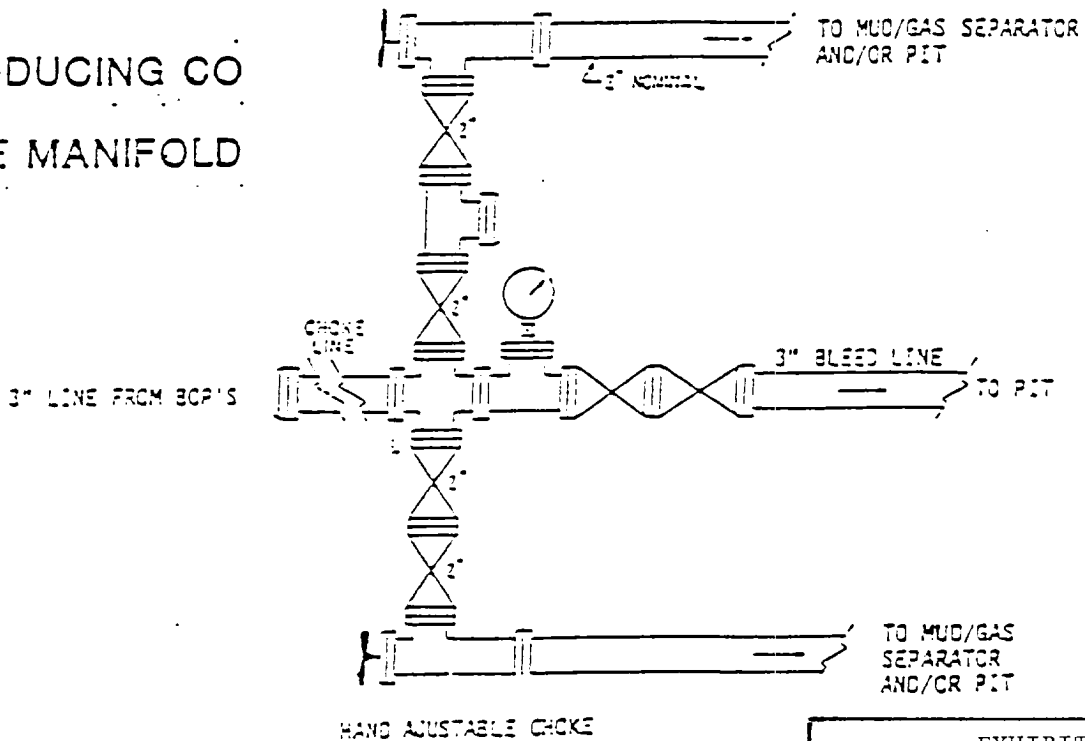


EXHIBIT "E-1"
CHOKE MANIFOLD & COLSING UNIT

POGO PRODUCING COMPANY
PECOS "33" FEDERAL # 1
UNIT "M" SECTION 33
T19S-R27E EDDY CO. NM

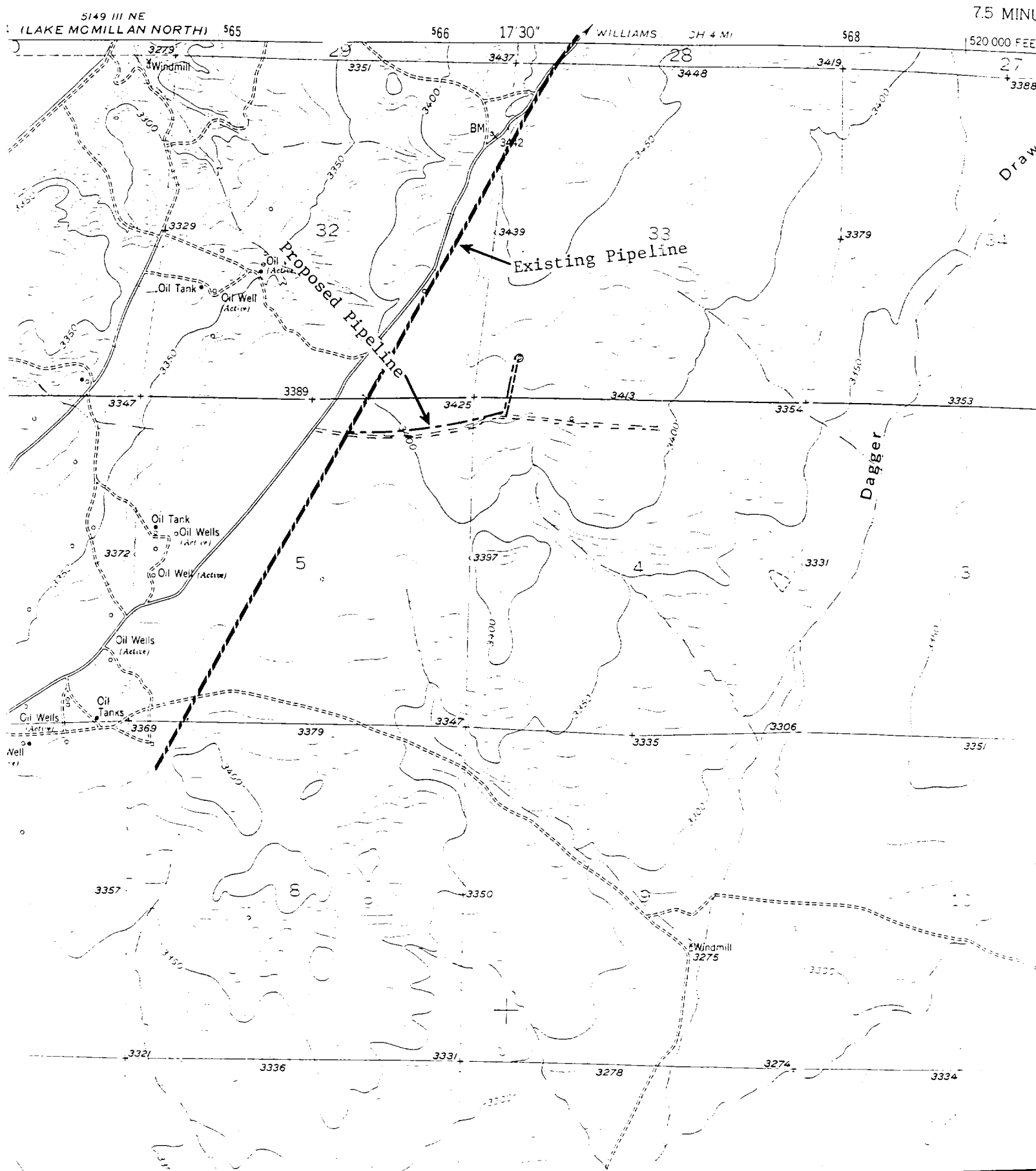


EXHIBIT "F"
 ROUTE OF POSSIBLE
 POWERLINES & PIPELINES

POGO PRODUCING COMPANY
 PECOS "33" FEDERAL # 1
 UNIT "M" SECTION 33