Form 3160-3
(July 1992)

1625 N. French, Hobbs, NM

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM-77060

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

7. UNIT AGREEMENT NAME: ---

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME, WELL NO.: RED TANK "33" FEDERAL # 1

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

9. API WELL NO.: 30-025-35429

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

10. FIELD AND POOL, OR WILDCAT: RED TANK-BONE SPRING

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 330' FNL & 10' FEL SEC. 33 T22S-R32E LEA CO. NM
At proposed prod. zone: SAME

SUBJECT TO LIKE APPROVAL BY STATE

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SECTION 33 T22S-R32E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 30 miles EAST of Carlsbad, New Mexico

12. COUNTY OR PARISH: LEA 13. STATE: NEW MEXICO

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
10	1160	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
NA	9000'	ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3614' GR.

22. APPROX. DATE WORK WILL START*: WNEN APPROVED

23. PROPOSED CASING AND CEMENTING PROGRAM

CARLSBAD CONTROLLED WATER BASIN

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	20" Conductor	NA	40'	Cement to surface with Redi-mix
14 3/4"	H-40 10 3/4"	32.75	~~800~~ 975	840 Sx. circulate to sur.
9 7/8"	J-55 7 5/8"	24.60	4500'	1000' Sx. " " " "
6 3/4"	J-55,N-80 4½"	11.6	9000'	1000 Sx. (DV tool @ 6400'± TOC 3000

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.

2. Drill 14 3/4" hole to ~~800~~ 975'. Run and set ~~800~~ 975' of 10 3/4" H-40 32.75# ST&C casing. Cement with 840 Sx. of Class "C" cement + additives, circulate cement to surface.

3. Drill 9 7/8" hole to 4500'. Run and set 4500' of 7 5/8" J-55 24.6# ST&C casing. Cement with 1000 Sx. of Class "C" cement + additives, circulate cement to surface.

4. Drill 6 3/4" hole to 9000'. Run and set 9000' of 4½" casing as follows: 1500' of 4½" N-80 11.6# ST&C, 5500' of 4½" J-55 11.6# ST&C, 2000' of 4½" N-80 11.6# LT&C. Cement in two stages with DV tool at 6400'± Cement with 1000 Sx. of Class "H" cement + additives, estimate top of cement 3000' from surface.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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.

24.

SIGNED Joe T Janica TITLE Agent DATE 11/14/00

(This space for Federal or State office use)

APPROVED BY CHRIS WILLIAMS DISTRICT I SUPERVISOR DATE FEB 28 2001

PERMIT NO. ---

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.

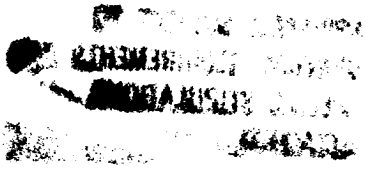
CONDITIONS OF APPROVAL, IF ANY:

OPER. OGRID NO. 17891
PROPERTY NO. 17271
POOL CODE 51683
EFF. DATE 2-28-01
API NO. 30-025-35429

*See Instructions On Reverse Side

APPROVED FOR 1 YEAR

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



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, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-35429	51683	RED TANK BONE SPRING

Property Code	Property Name	Well Number
17271	RED TANK "33" FEDERAL	1

OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	3614

Surface Location

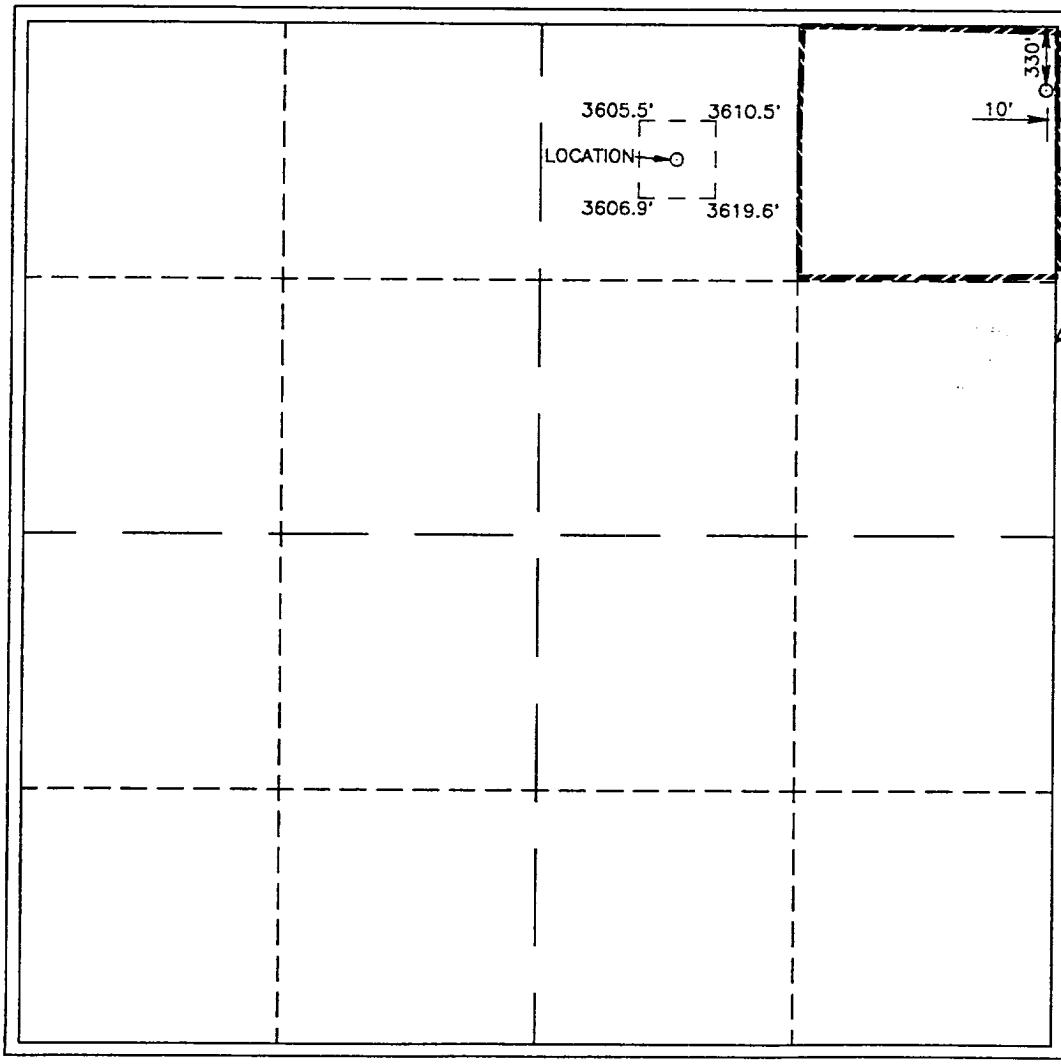
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	22 S	32 E		330	NORTH	10	EAST	LEA

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.

Joe T Janica
Signature

Joe T. Janica
Printed Name

Agent
Title

11/14/00
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.

NOVEMBER 2, 2000
Date Surveyed JLP

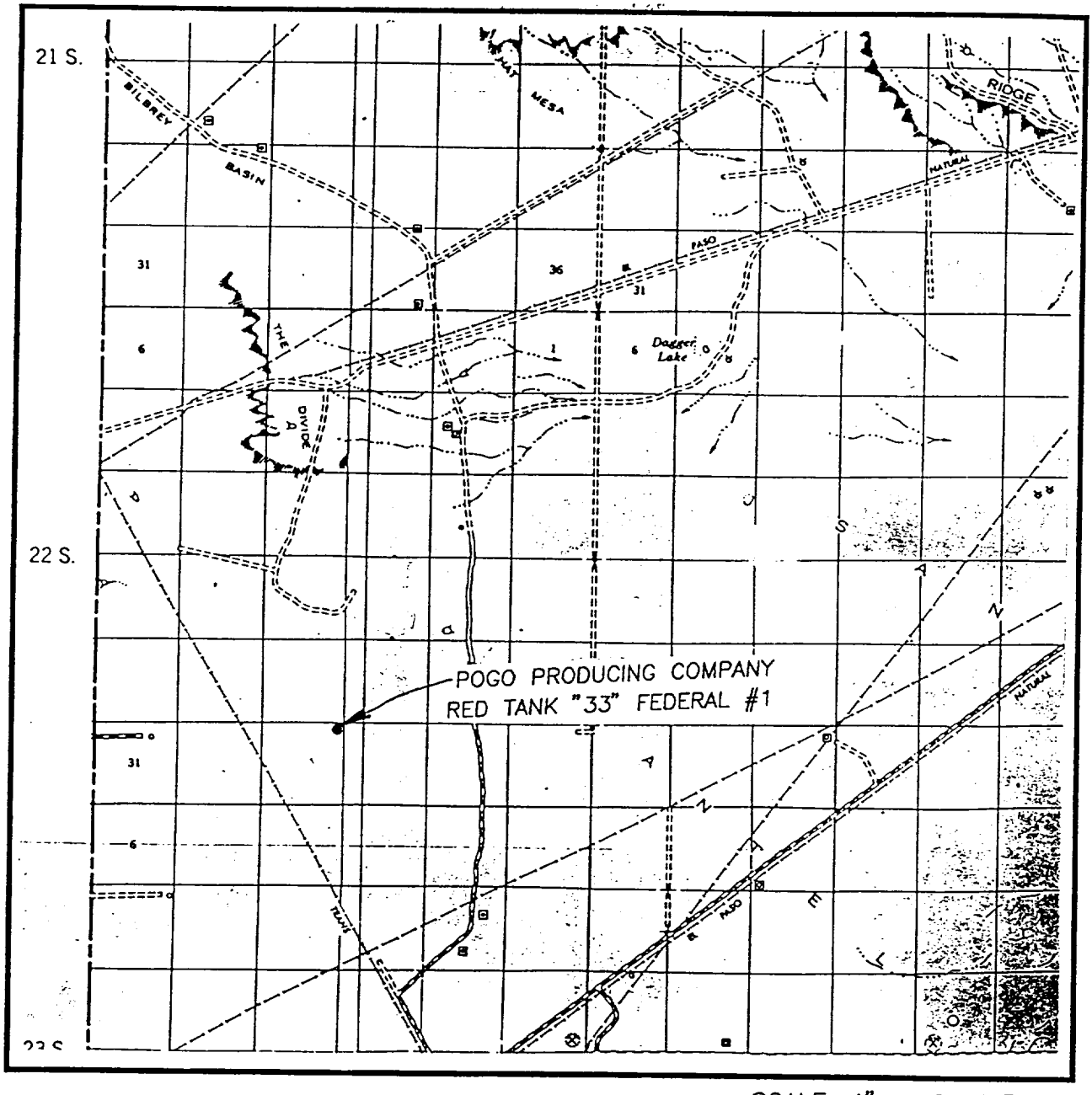
Signature & Seal of Professional Surveyor

Ronald J Eidson 11/03/00

W.O. Num. 00-11-1364

Certificate No. RONALD J. EIDSON, 3239
GARY L. EIDSON, 12641

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 33 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FNL & 10' FEL

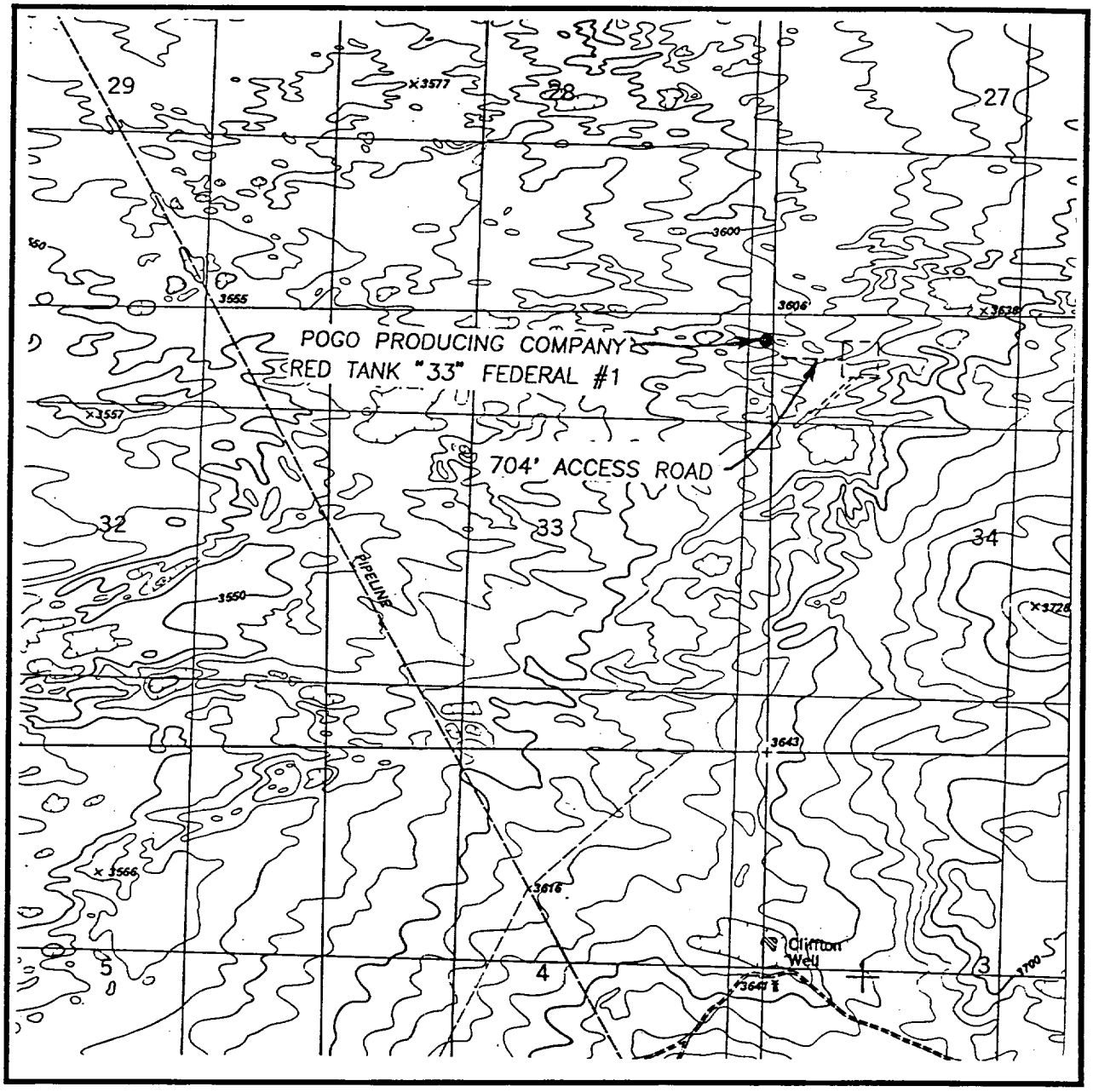
ELEVATION 3614

OPERATOR POGO PRODUCING COMPANY

LEASE RED TANK "33" FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL – 10'

SEC. 33 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FNL & 10' FEL

ELEVATION 3614

OPERATOR POGO PRODUCING COMPANY

LEASE RED TANK "33" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

BOOTLEG RIDGE, N.M.

JOHN WEST SURVEYING

HOBBS, NEW MEXICO

(505) 393-3117

APPLICATION TO DRILL

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA 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: 330' FNL & 10' EEL SEC. 33 T22S-R32E LEA CO. NM

2. Elevation above Sea Level: 3614' GR.

3. Geologic name of surface formation: Quaternery 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: 9000'

6. Estimated tops of geological markers:

Rustler Anhydrite	830'	Brushy Canyon	7390'
Delaware Lime	4790'	Bone Spring	8810'
Cherry Canyon	6090'		

7. Possible mineral bearing formations:

Delaware	Oil
Bone Spring	Oil

8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Cnductor
14 3/4"	0-800'	10 3/4"	32.75	8-R	ST&C	H-40
9 7/8"	0-4500'	7 5/8"	26.4	8-R	ST&C	J-55
6 3/4"	0-9000'	4½"	11.6	8-R	LT&C	N-80 J-55

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
10 3/4"	Surface	Set 800' of 10 3/4" 32.75# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" cement, circulate to surface.
7 5/8"	Intermediate	Set 4500' of 7 5/8" 26.4# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" cement , circulate to surface.
4½"	Production	Set 9000' of 4½' casing as follows: 1500' of 4½" N-80 11.6# ST&C, 5500' of 4½" J-55 11.6# ST&C, 2000' of 4½" N-80 11.6# LT&C casing. Cement in two stages,DV tool at 6400'±, Cement with 1000Sx. of class "H" cement, estimate top of cement 3000'.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E". A Series 900 3000 PSI working pressure B.O.P. consting of a double ram type preventor with a bag type annular preventor. The B.O.P. unit will be hydraulically operated. Exhibit "E-1". Choke manifold and closing unit. The B.O.P. will be nipped up on 10 3/4" casing and will be operated at least once each 24 hour period while drilling and blind rams will be operated when out of hole on trips. 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 System
40-800'	8.6-8.8	29-32	NC	Fresh water spud mud add paper to control seepage.
800-4500'	10.1-10.3	29-38	NC	Brine water add paper to control seepage and high visc. sweeps to clean hole, use line for pH control.
4500-9000'	8.6-8.8	30-38	NC	Fresh water using paper to control seepage, fresh water Gel for viscosity control and high viscosity sweeps to clean hole.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM

12. Testing, Logging and Coring Program:

A. Open hole logs: Dual-Induction, SNP-Density, Gamma Ray, Caliper from TD to 4650'.

B. Gamma Ray Neutron from 4500' to surface.

C. Mud logger on hole from 4500' to TD.

D. No cores or DST's are planned at this time.

13. Potential Hazards:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H_2S detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 3700 PSI, estimated BHT 145° .

14. Anticipated Starting Date and Duration of Operation:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 25 - 30 days. If production casing is run an additional 30 days to complete and construct surface facility and place well on production.

15. Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Bone Spring pay will be perforated and stimulated. The well will be swab tested and potentialed as an oil well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H_2S safety instructor to the following:

   A. Characteristics of H_2S
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of H_2S detectors, warning system and briefing areas.
   E. Evacuation procedure, routes and first aid.
   F. Proper use of 30 minute pressure demand air pack.

2. H_2S Detection and Alarm Systems

   A. H_2S detectors and audio alarm system to be located at bell nipple, end of blooie 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, H_2S 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.

8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.

9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM

1. EXISTING ROADS. Area map, Exhibit "B" is a reproduction of the New Mexico General Hi-way Co. Map. Exhibit "C" is a reproduction of a topographic map. Existings roads and proposed roads are shown on each exhibit. All roads will be maintained in a condition equal to or better than esisted prior to start of construction.

   A. Exhibit "A" shows the proposed development well as staked.

   B. From Hobbs New Mexico take U.S. Highway 62-180 West toward Carlsbad NM, go 38 miles to mile post 67. Turn South on C-29 go 14 miles to Mills Ranch Road, turn East go 5.2 miles on well traveled road turn Southeast go 1.7 miles to Pogo "34" Fed. # 1 turn West follow road to Red Tank "34" Federal # 13, follow new road West to location.

   C. Construct pipelines and powerlines along road R-O-W's or along existing R-O-W's that will be necessary to transport oil, gas, and produced water to storage, sale, and disposal. Powerlines to furnish power to pumping units and related facilities.

2. PLANNED ACCESS ROADS: Approximately 1000' of new road will be constructed.

   A. The access road will be crowned and ditched to a 12'00" wide travel surface with 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 Lopography.

3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A-1"

   A. Water wells - One approximately 1.75 miles Northwest
   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"

4. If on completion this well is a producer Pogo Producing Company will furnish maps of plats showing on well pad facilities. Exhibit "F" shows Possible powerlines and flowlines that may be required to produce this well.

5. LOCATION AND TYPE OF WATER SUPPLY

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

6. SOURCE OF CONSTRUCTION MATERIALS

If needed, construction materials will be obtained from the drill site's excavations or from a local source. These materials will be transported over the access route as shown on Exhibit "A".

7. METHODS FOR HANDLING WASTE DISPOSAL

A. 1. Drill cuttings will be disposed of in the reserve pit.

2. Trash, waste paper, and garbage will either be contained in a fenced trash trailer or in a trash pit, fenced with mesh wire to prevent wind-scattering during storage. When the rig moves out, all trash and debris left at the site will be contained to prevent scattering and will be buried at least 36" deep within a reasonable period of time.

3. Salts remaining after completion of the well will be picked up by the supplier, including broken sacks.

4. Sewage from trailer houses will drain into holes with minimum depth of 10'00". These holes will be covered during drilling and backfilled upon completion. A "porta John" will be provided for the rig crews. This will be properly maintained during the drilling operations and removed upon completion of the well.

B. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for backfilling. In the event drilling fluids will not evaporate in a reasonable period of time they will be transported by tank truck to a state approved disposal site.

Water produced during testing of the well will be disposed of in the reserve pit. Oil produced during testing of the well will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITILS

No camps or airstrips will be constructed.

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 entend 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.

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM

11. OTHER INFORMATION

A. Topography consists of sand dunes with a slight regional dip to the West. Soil supports native grasses mesquites and miniature oaks.

B. The surface and minerals are owned by THE BUREAU OF LAND MANAGEMENT THE U.S. DEPARTMENT OF INTERIOR. The surface is leased out to ranchers for grazing of livestock.

C. An Archeological survey will be conducted and copies will be sent to the BLM., Carlsbad Resource Area in Carlsbad, N.M.

D. There are no dwellings or habitation within three miles of this location.

12. OPERATOR'S REPRESENTATIVE

Field representative to contact regarding compliance with surface use plan:

Before Construction:

Tierra Exploration Inc.
P.O. Box 2188
Hobbs, NM 88241
Office Phone: 505-391-8503
Joe T. Janica

During and after Construction

Pogo Producing Company
P.O. Box 10340
Midland, Tx 79702-7340
Office Phone: 915-685-8140
Mr. Richard Wright

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, are true and correct; and that the work associated with the operations proposed herein will be performed by Pogo Producing Company, its' Contractors/ Subcontractors in conformity with this plan and the terms and conditions underwhich it is approved. This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

NAME: Joe T Janica

DATE: 11/14/00

TITLE: AGENT

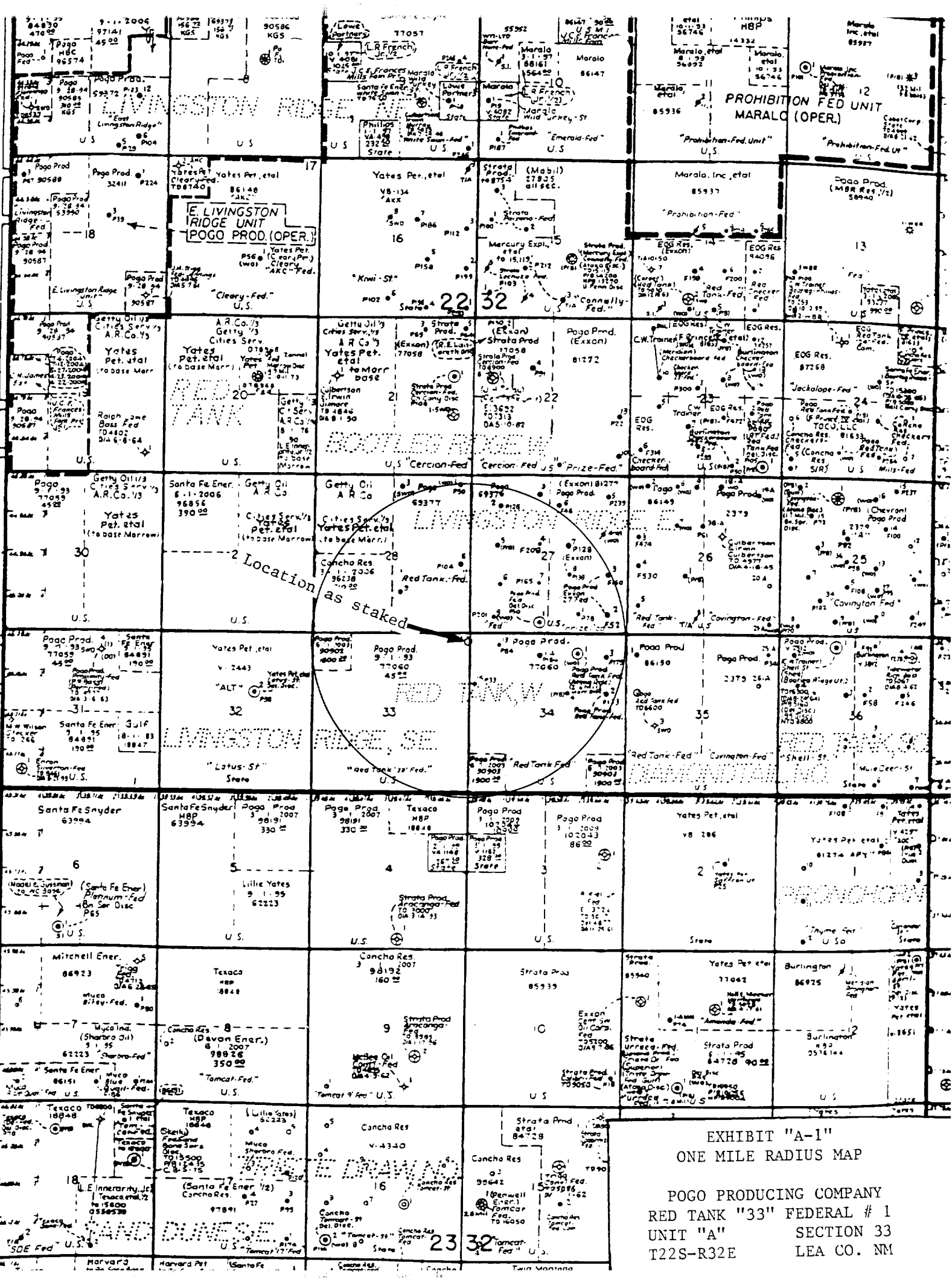


EXHIBIT "A-1"
ONE MILE RADIUS MAP

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM

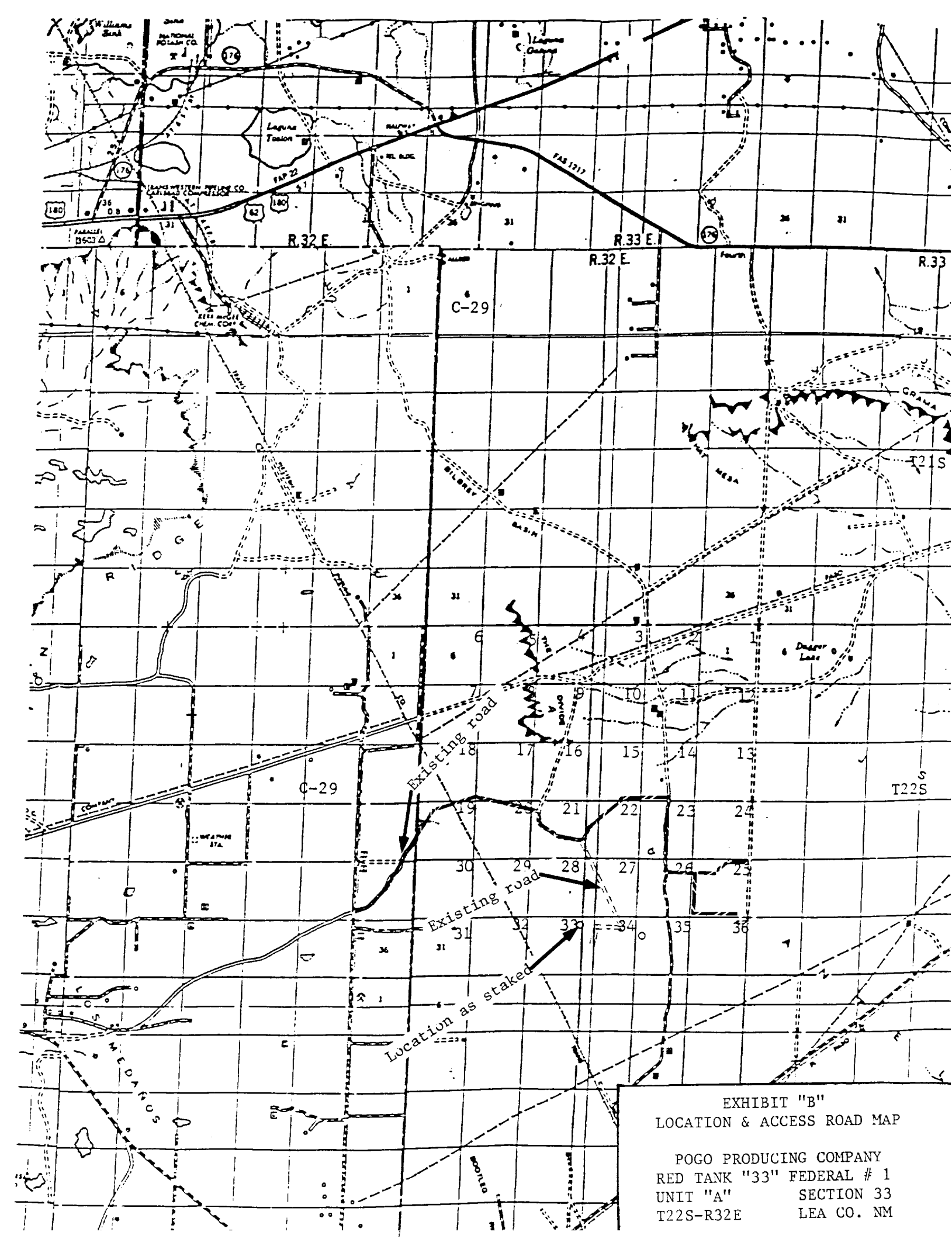


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM

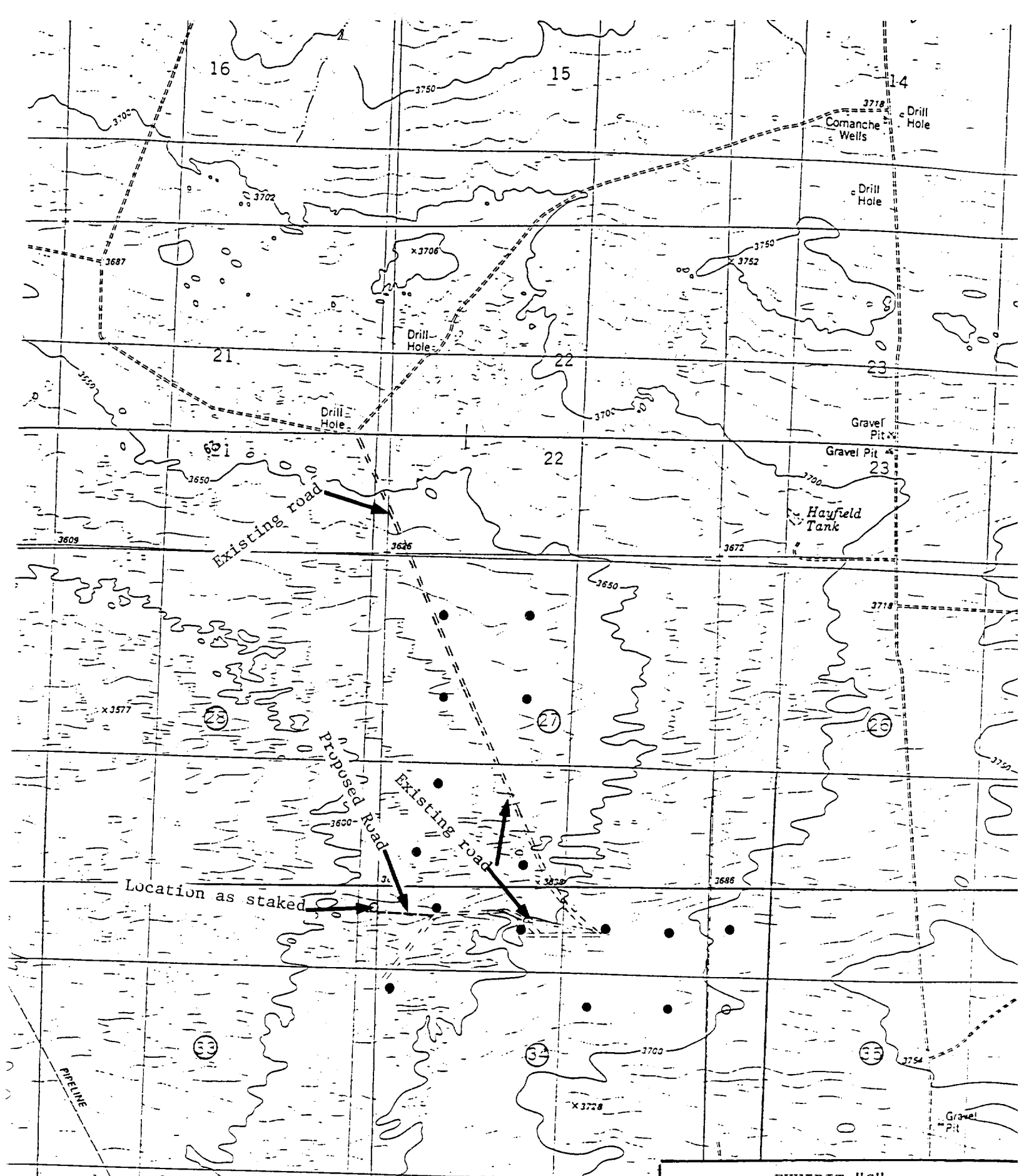
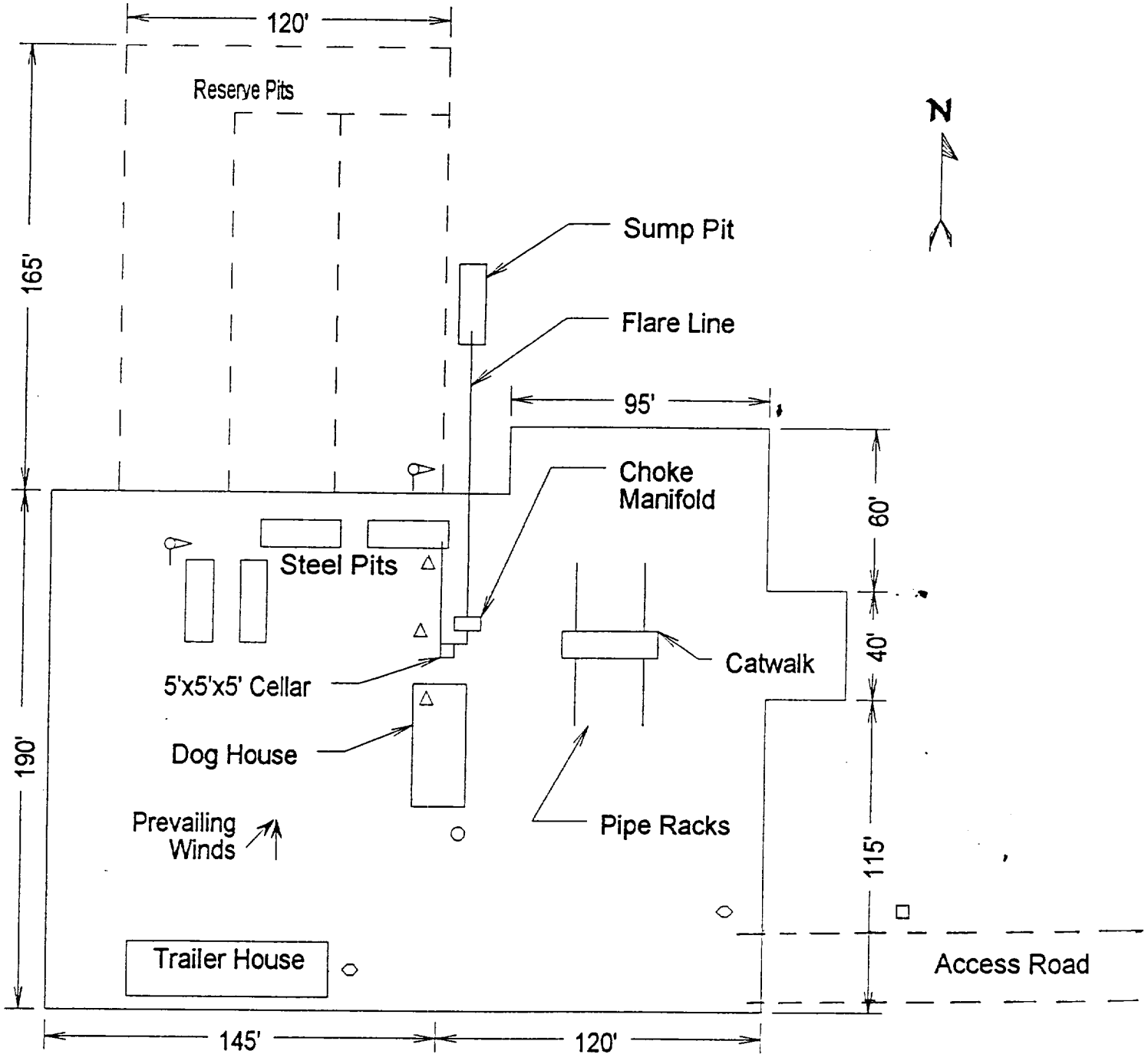


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33



- 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 LAYOUT PLAT

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM

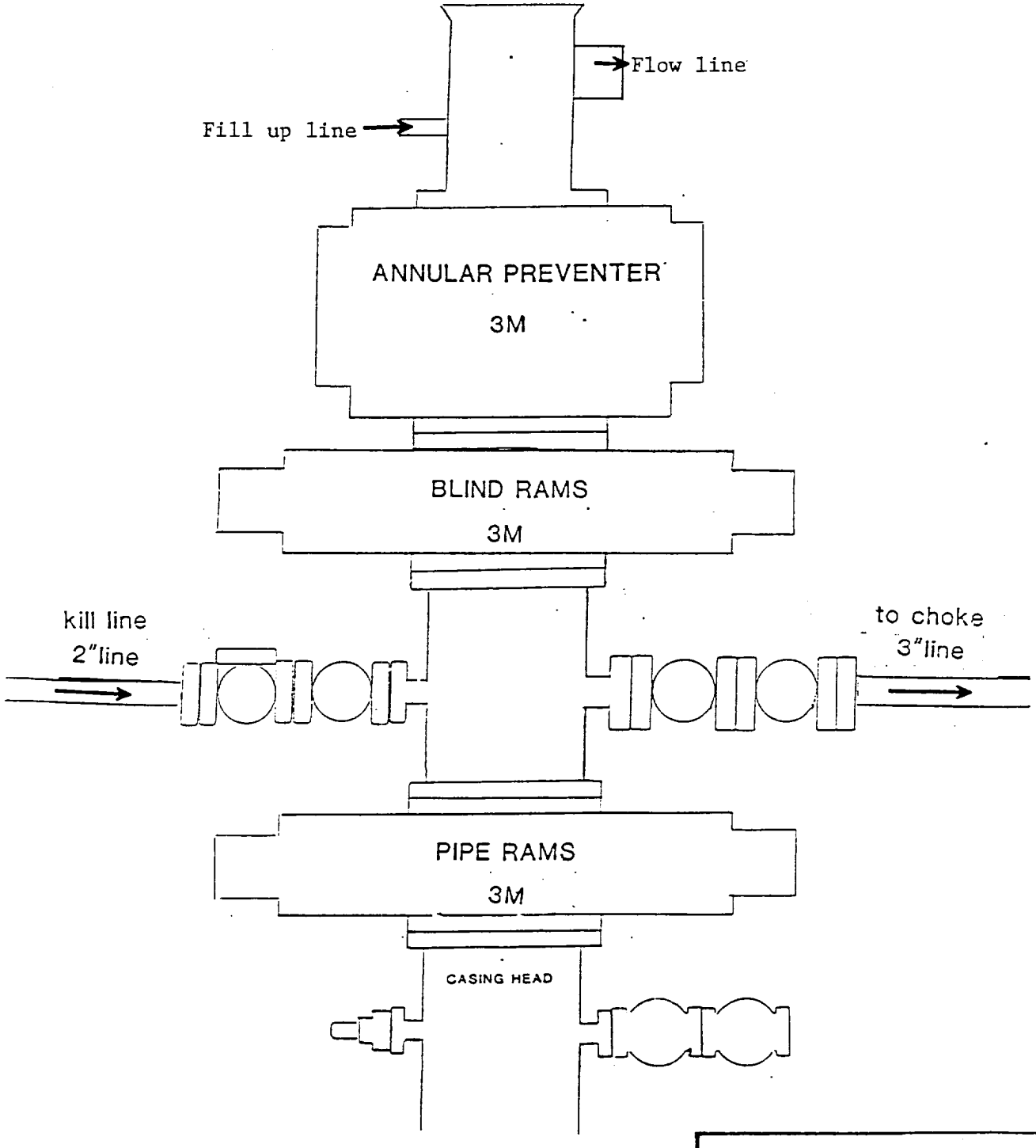
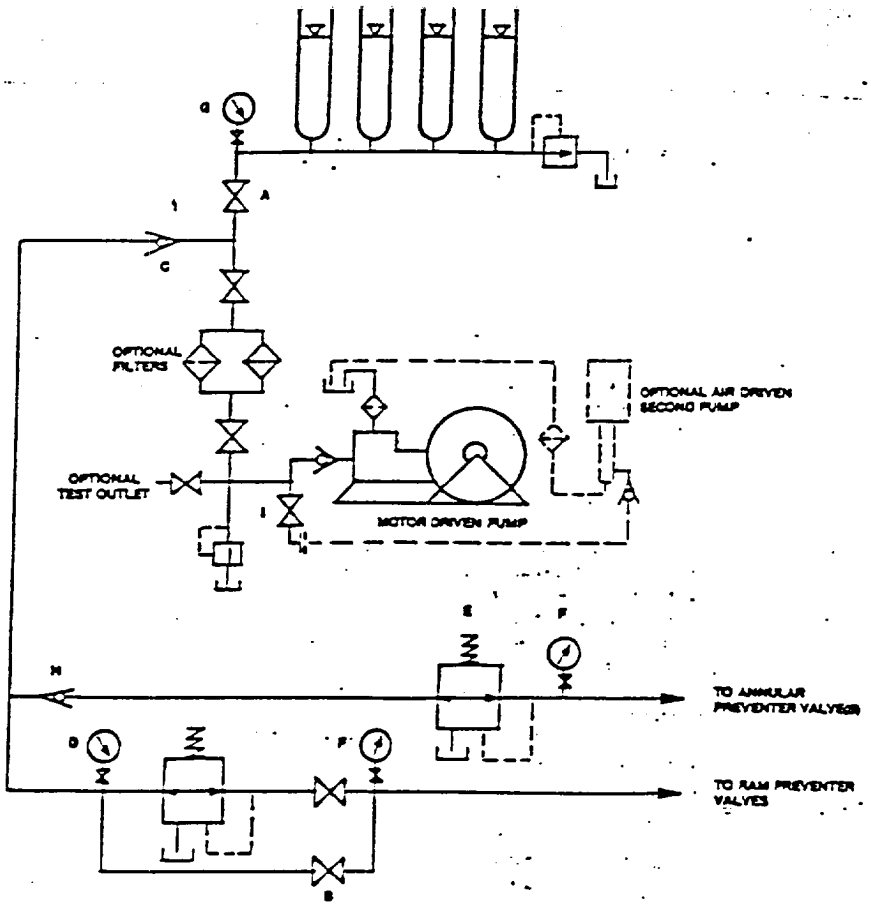


EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

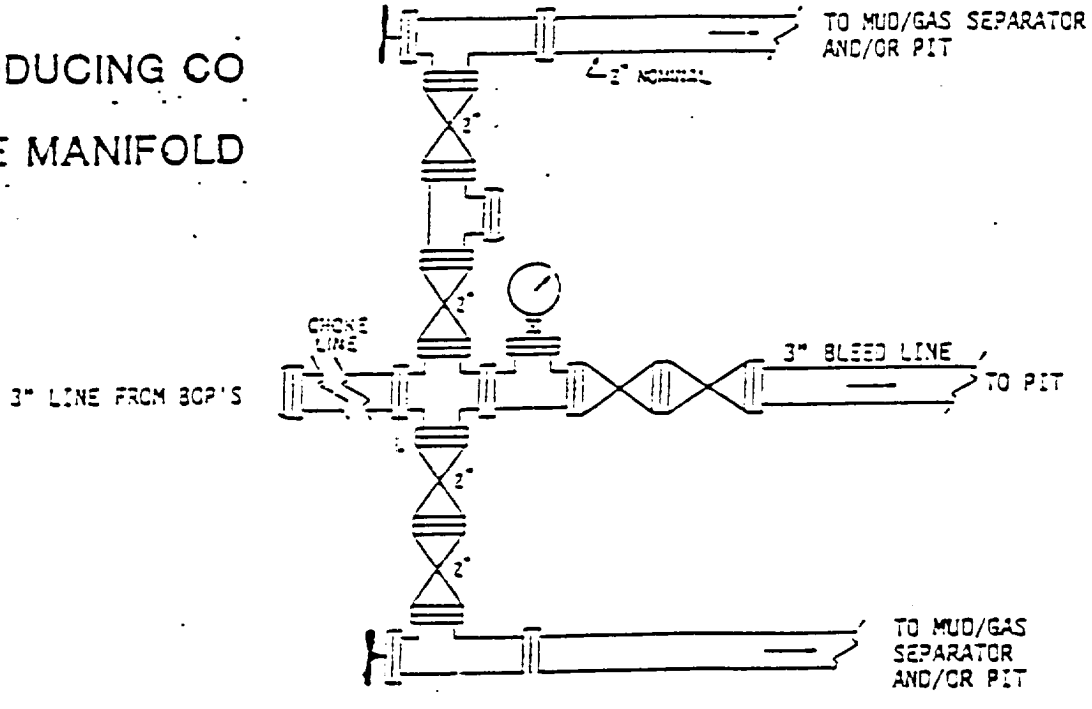
POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM



HAND ADJUSTABLE CHOKE

POGO PRODUCING CO

3M CHOKE MANIFOLD



HAND ADJUSTABLE CHOKE

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33
T22S-R32E LEA CO. NM

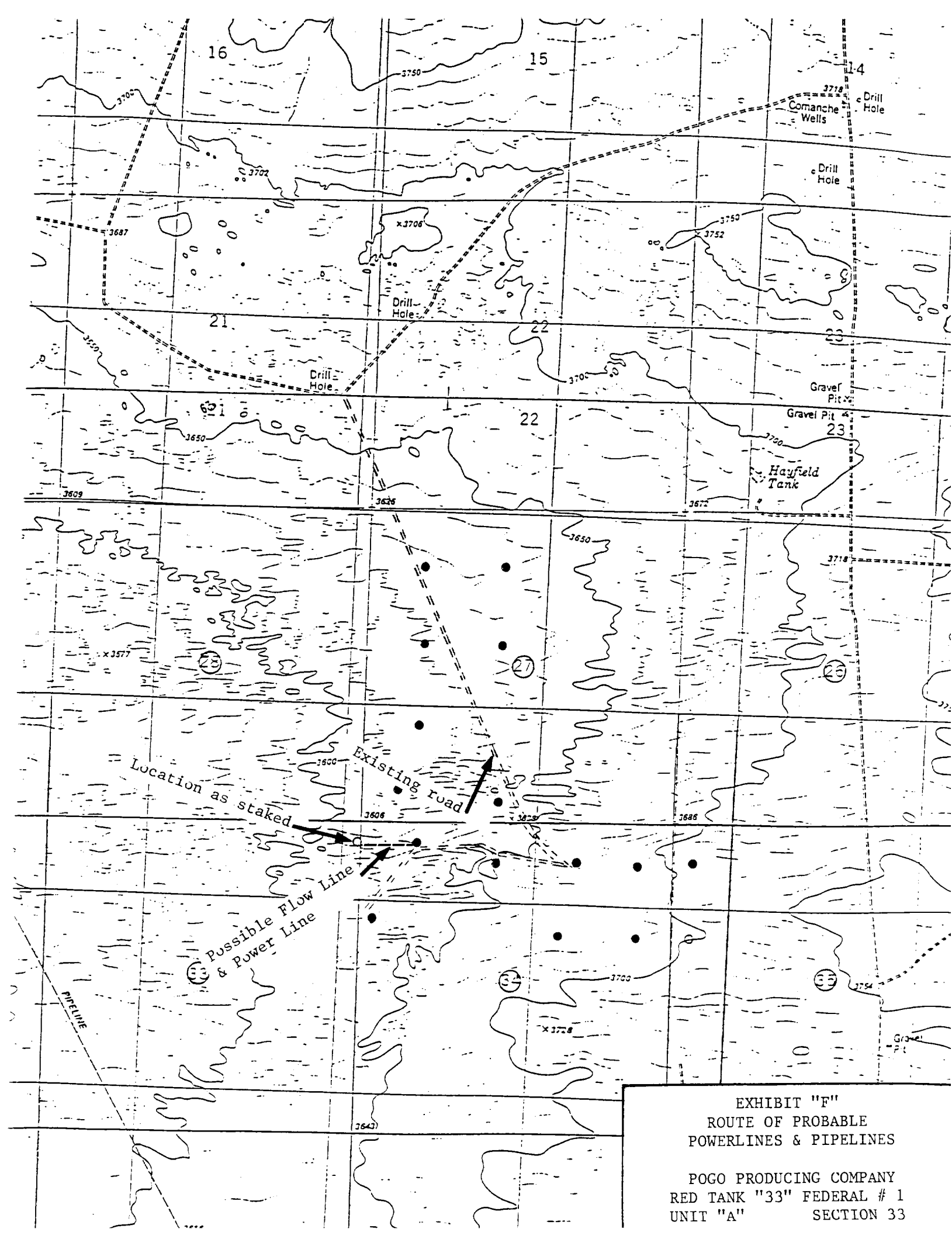


EXHIBIT "F"
ROUTE OF PROBABLE
POWERLINES & PIPELINES

POGO PRODUCING COMPANY
RED TANK "33" FEDERAL # 1
UNIT "A" SECTION 33