OPER. OGRID NO. 17891
PROPERTY NO. 9350
POOL CODE 51683
EFF. DATE 7/17/98
API NO. 30-025-34464

Form 3160-3
(July 1992)

UNI
DEPARTMEN
BUREAU OF

IPLICATE*
(tions on
de)

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

APPLICATION FOR P

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

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

2. NAME OF OPERATOR
POGO PRODUCING COMPANY (RICHARD WRIGHT)

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
2080' FSL & 1980' FEL SEC. 13 T22S-R32E LEA CO. NM.
At proposed prod. zone Same Unit J

5. LEASE DESIGNATION AND SERIAL NO.
NM-58940

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

7. UNIT AGREEMENT NAME
---

8. FARM OR LEASE NAME, WELL NO
WBR FEDERAL # 4

9. API WELL NO.

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

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC. 13 T22S-R32E

12. COUNTY OR PARISH
Lea Co.

13. STATE
New Mexico

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 760'

16. NO. OF ACRES IN LEASE 600

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. 3000'

19. PROPOSED DEPTH 10,250'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3675' GR.

22. APPROX. DATE WORK WILL START* When 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
26"	20" Conductor	NA	40'	Cement to surface W/Redi-Mix
17½"	J-55 13 3/8"	54.5	800'	700 Sx. Circ. Cement to surface
11"	J-55 S-80 8 5/8"	32	4600'	1400 Sx. " " " "
7 7/8"	J-55, N-80 5½"	17	10,250'	1100 Sx. Top cement 4400'

WITNESS

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe & cement to surface with Redi-mix.

2. Drill 17½" hole to 800'. Run and set 800' of 13 3/8" J-55 54.5# ST&C casing. Cement with 500 Sx. of Class "C" Halco Light + additives, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.

3. Drill 11" hole to 4600'. Run and set 4600' of 8 5/8" casing as follows: 300' of S-80 32# ST&C , 4300' of J-55 32# ST&C casing. Cement with 1200 Sx. of Halco Light + additives, tail in with 200 Sx. of Class "C" Premium cement + 2% CaCl, circulate cement to surface.

4. Drill 7 7/8" hole to 10,250', Run and set 10,250' of 5½" 17# casing as follows: 3200' of N-80 LT&C, 6000' of J-55 LT&C, 1050' of N-80 LT&C casing. Cement with 750 Sx. of Halco Light cement + additives, tail in with 350 Sx. of Class "H" Premium cement, tie cement back to 4400' , 200' back into 8 5/8' Intermediate casing.

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, if any.

24.
SIGNED Joe T. Janica TITLE Agent DATE 06/04/98

(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 (ORIG. SGD.) ARMANDO A. LOPEZ TITLE Acting Assistant Field Office Manager, Lands and Minerals DATE JUL 13 1998

*See Instructions On Reverse Side

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

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
30-025-34464	51683	RED TANK-BONE SPRING

Property Code	Property Name	Well Number
9350	WRB FEDERAL	4

OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	3675

Surface Location

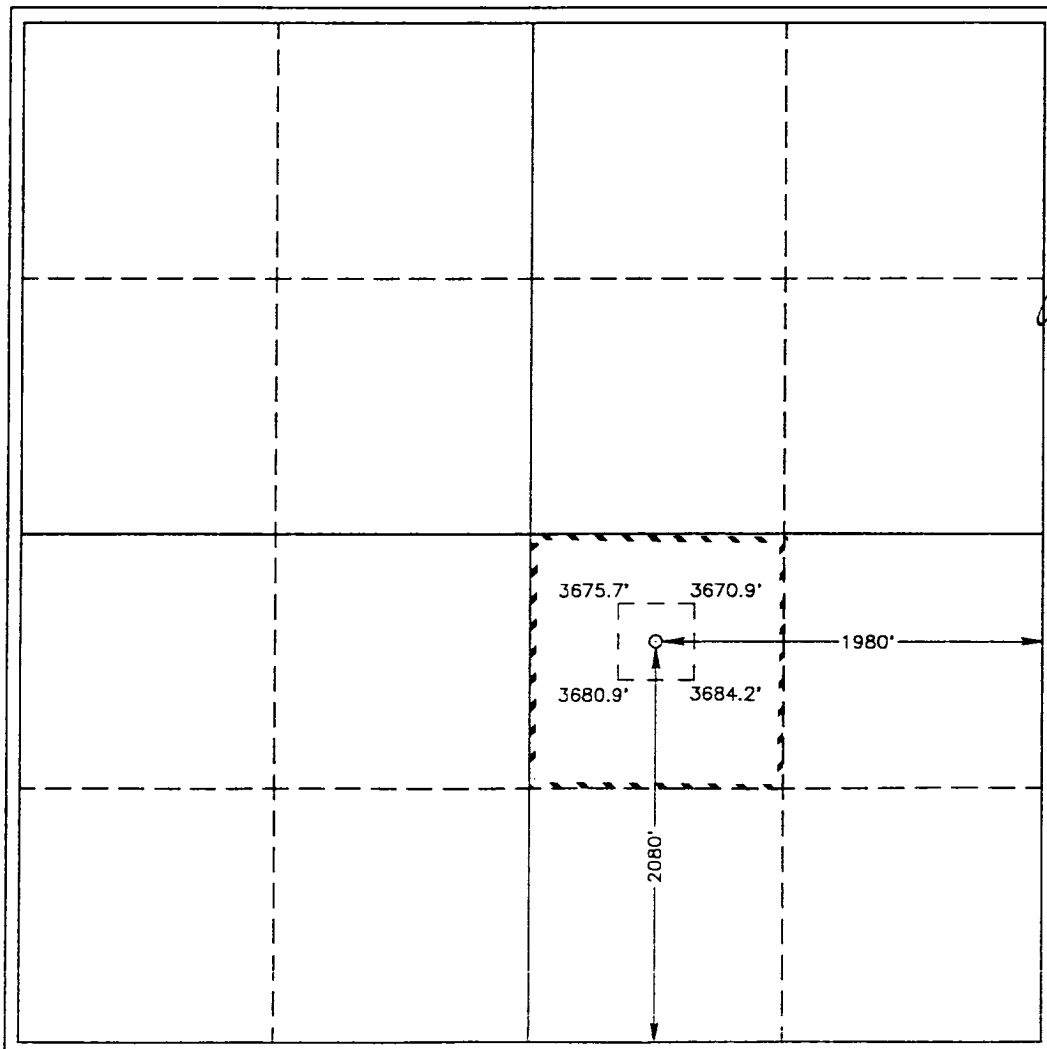
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	13	22 S	32 E		2080	SOUTH	1980	EAST	LEA

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

06/04/98
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.

MAY 20, 1998
Date Surveyed JLP

Signature & Seal of Professional Surveyor

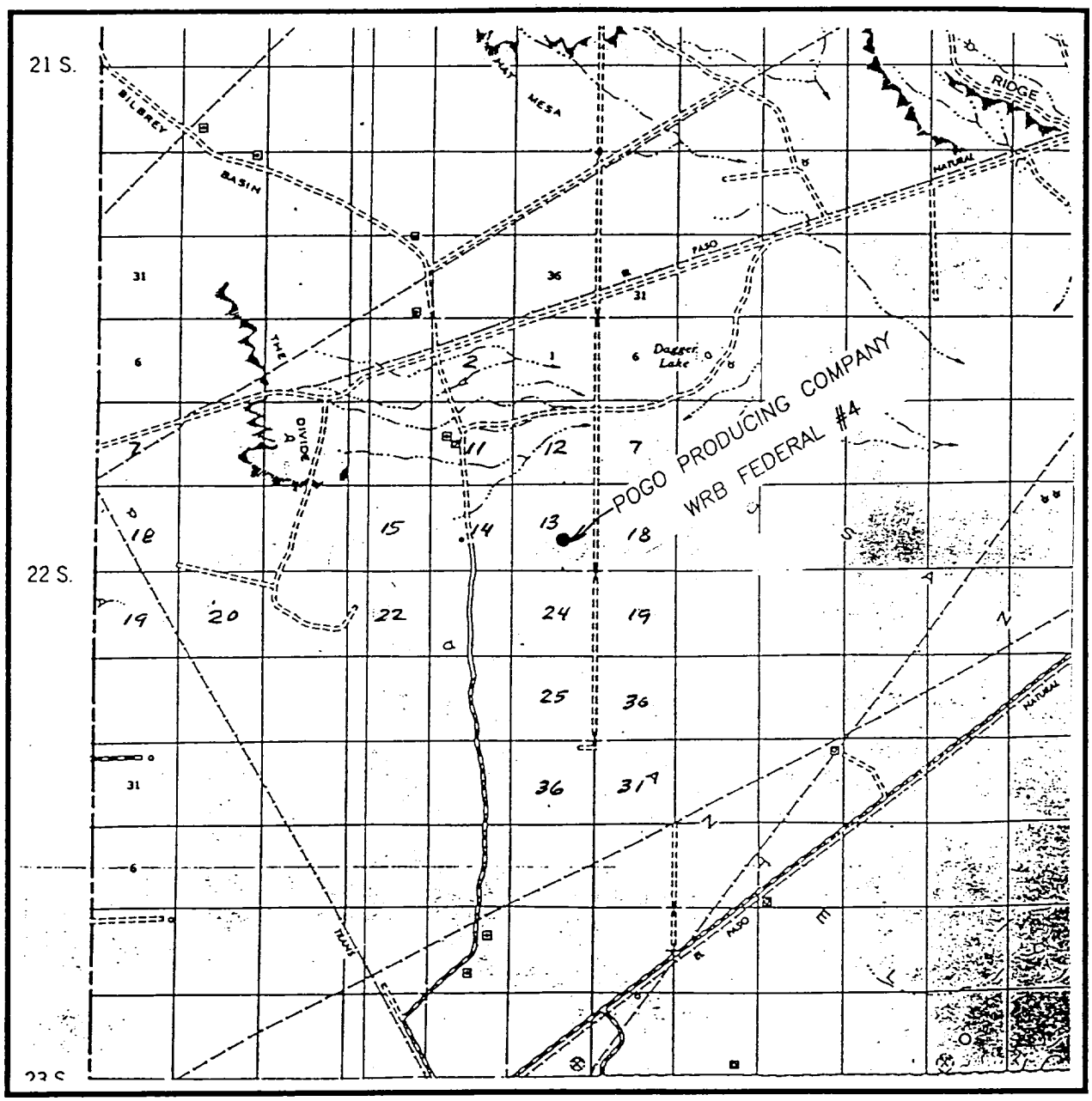
RONALD J. EIDSON
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

5-26-98

W.O. Num. 98-11-08741

Certificate No. RONALD J. EIDSON, 3239
GARY L. EIDSON, 12641
JASON McDONALD, 12185

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 13 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2080 FSL & 1980' FEL

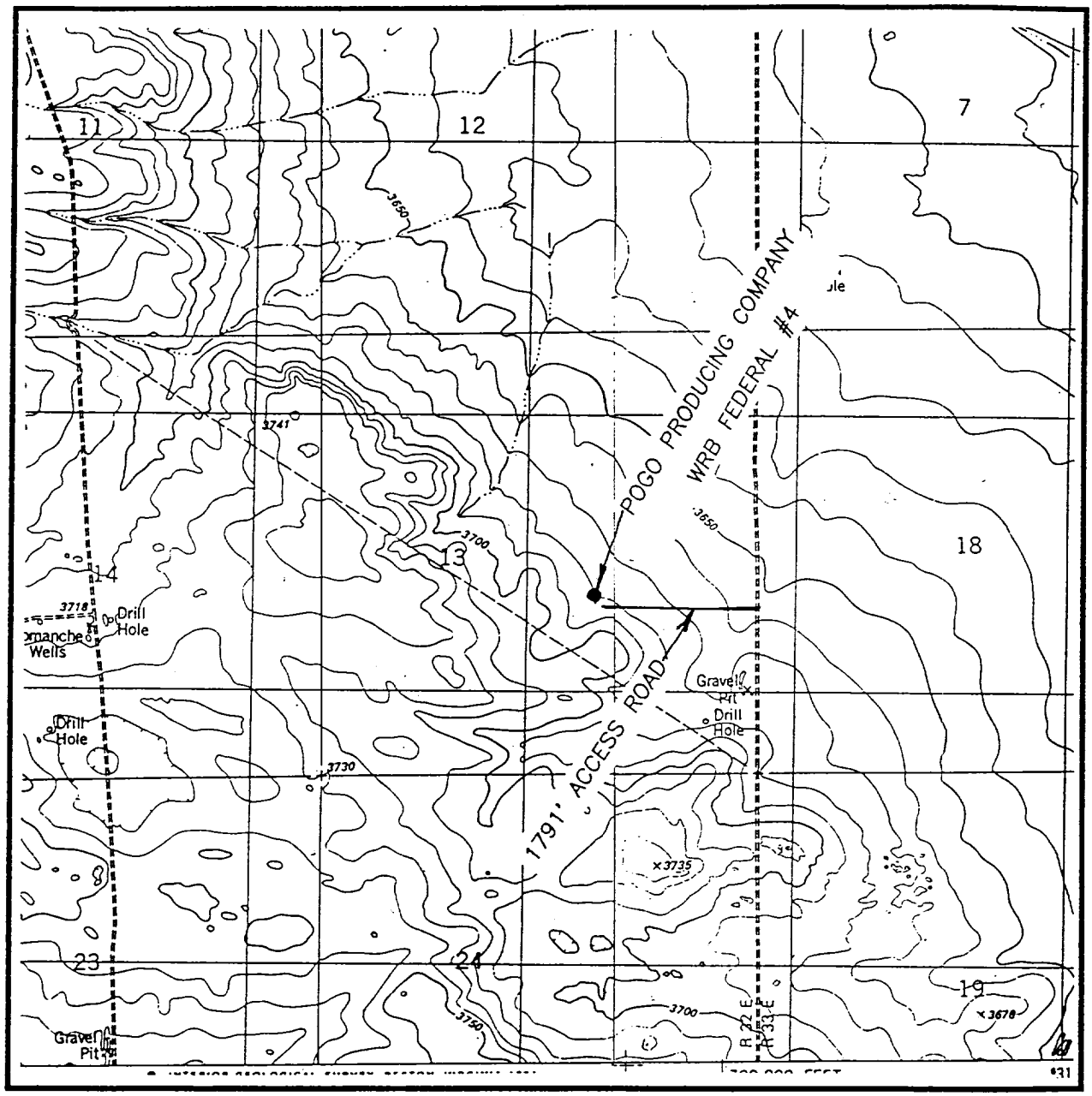
ELEVATION 3675'

OPERATOR POGO PRODUCING COMPANY

LEASE WRB FEDERAL

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL – 10'

SEC. 13 TWP. 22-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2080 FSL & 1980' FEL

ELEVATION 3675'

OPERATOR POGO PRODUCING COMPANY

LEASE WRB FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

GRAMA RIDGE, & THE DIVIDE, N.M.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
WBR FEDERAL # 4
UNIT "J" SECTION 13
T22S-R32E LEA CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1. Location: 2080' FSL & 1980' FEL SEC. 13 T22S-R32E LEA CO. NM

2. Elevation above sea level: 3675' GR.

3. Geologic name of surface formation: Quaternery Aeolian Deposits.

4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5. Proposed drilling depth: 10,250'

6. Estimated tops of geological markers:

Anhydrite	775'	Cherry Canyon	5700'
Delaware Lime	4825'	Brushy Canyon	7035'
Bell Canyon	4920'	Bone Spring	8720'

7. Possible mineral bearing formation:

Delaware	Oil
Bone Spring	Oil

8. Casing program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-800'	13 3/8"	54.5	8-R	ST&C	J-55
11"	0-4600'	8 5/8"	32	8-R	ST&C	J-55 S-80
7 7/8"	0-10,250'	5½"	17	8-R	LT&C	N-80 J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
WBR FEDERAL # 4
UNIT "J" SECTION 13
T22S-R32E LEA CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 800' of 800' of 13 3/8" J-55 54.5# ST&C casing and cement with 500 Sx. of Class "C" Halco Light, tail in with 200 Sx. of Class "C" + 2% CaCl, circulate cement.
8 5/8"	Intermediate	Set 4600' of 8 5/8" J-55 & S-80 32# ST&C casing. Cement with 1200 Sx. of Halco LIght + additives, tail in with 200 Sx. of Class "C" Premium cement + 2% CaCl, circulate cement to surface.
5½"	Production	Set 10,250' of 5½" 17# J-55 & N-80 LT&C casing. Cement in two stages if deemed necessary, DV tool at 6500'±. Cement 1st stage with 100 Sx. of Class "H" + 5# expanding agent/SX. + 2.5# KCl/Sx. 2nd stage cement with 600 Sx. of Class "C" + additives, estimate top of cement 4400', 200' into 8 5/8" Intermediate.

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 nippled up on 13 3/8" 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'	8.4-8.7	28-32	NC	Fresh water base mud use paper to control seepage high viscosity sweeps to clean hole.
800-4600'	10-10.5	28-36	NC	Brine water base system add salt Gel & paper to control seepage & clean hole.
4600-8700'	8.5-8.7	28-34	NC	Fresh water system use paper to control seepage & high viscosity sweeps to clean hole.
8700-10,250'	8.5-8.7	32-38	10cc or less	Same as above add water loss material to control water loss.

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
WBR FEDERAL # 4
UNIT "J" SECTION 13
T22S-R32E LEA CO. NM

12. Testing, Logging and Coring Program:

A. Open hole logs: Dual Induction Gamma Ray, CNL-Density, and caliper from TD to 4600'. Run gamma Ray Neutron from 4600' to surface.

B. Mud logger will be rigged up on hole at 4600' and remain on hole to TD.

C. No cores are planned at this time.

D. No DST's are planned at this time but will be run if operator feels that they will be benificial.

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 4250 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 30-40 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

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
WBR FEDERAL # 4
UNIT "J" SECTION 13
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 of construction.

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

   B. From Hobbs, New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico go 38 miles to CR-C29 turn South go 14 miles to Mills Ranch Road turn East follow road 7.3 miles turn South go 1.3 miles turn East go 1.5 miles turn North go 1.8 miles turn West go .2 miles turn Southwest go .3 miles to location.

   C. Construct necessary powerlines and pipelines that will be necessary to produce this lease along road R-O-W.

2. PLANNED ACCESS ROADS: Approximately 1600' 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 - 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 Exhibie "A-1"

4. If on completion this well is a producer Pogo Producing Company will furnish plats showing the production and storage facilities.

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 quaters 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 Porta-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.

9. WELL SITE LAYOUT

A. Exhibit "D" shows the proposed well site laycut.

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 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
WBR FEDERAL # 4
UNIT "J" SECTION 13
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: 505-392-2112
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: 06/04/98

TITLE: AGENT

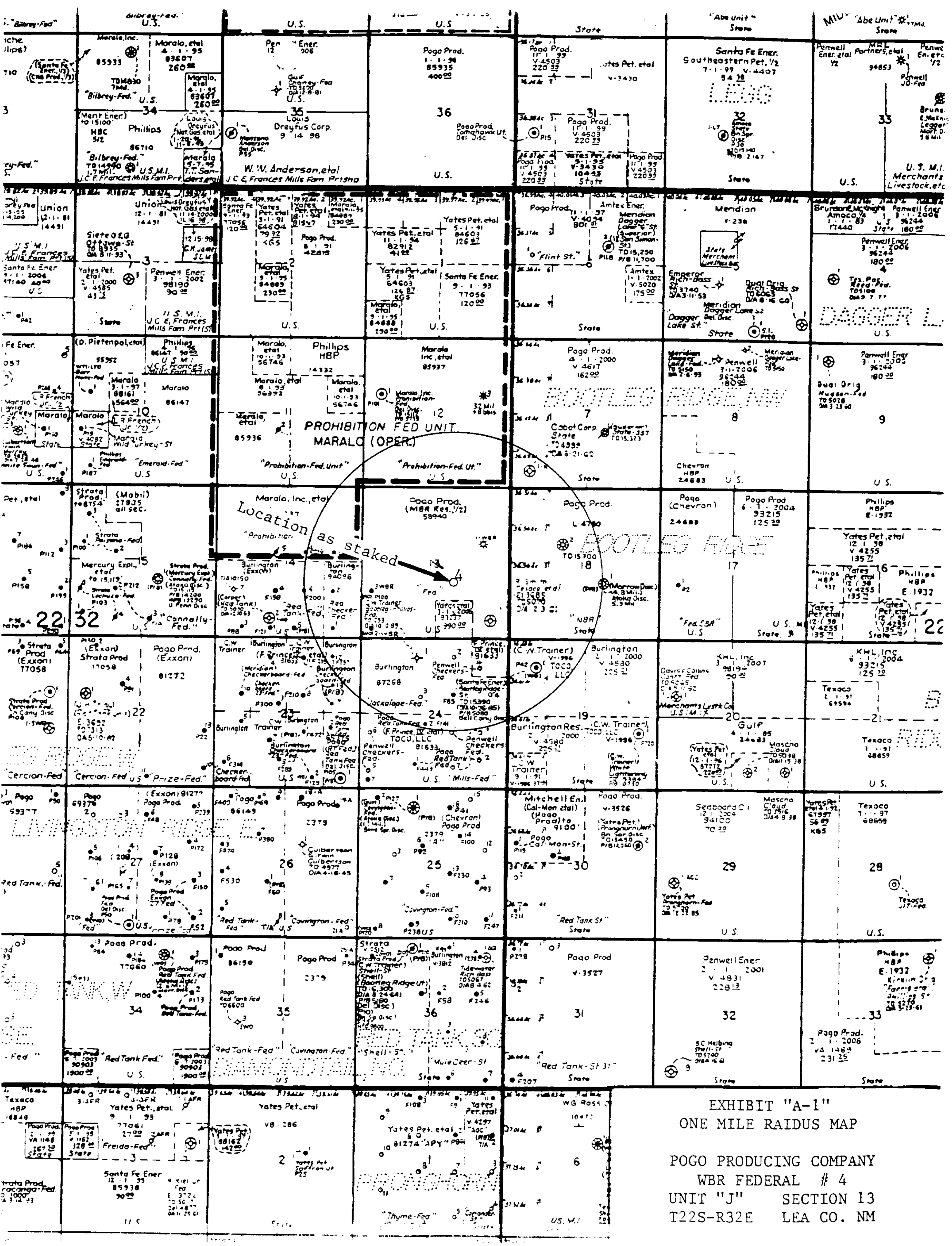


EXHIBIT "A-1"
ONE MILE RAIDUS MAP

POGO PRODUCING COMPANY
WBR FEDERAL # 4
UNIT "J" SECTION 13
T22S-R32E LEA CO. NM

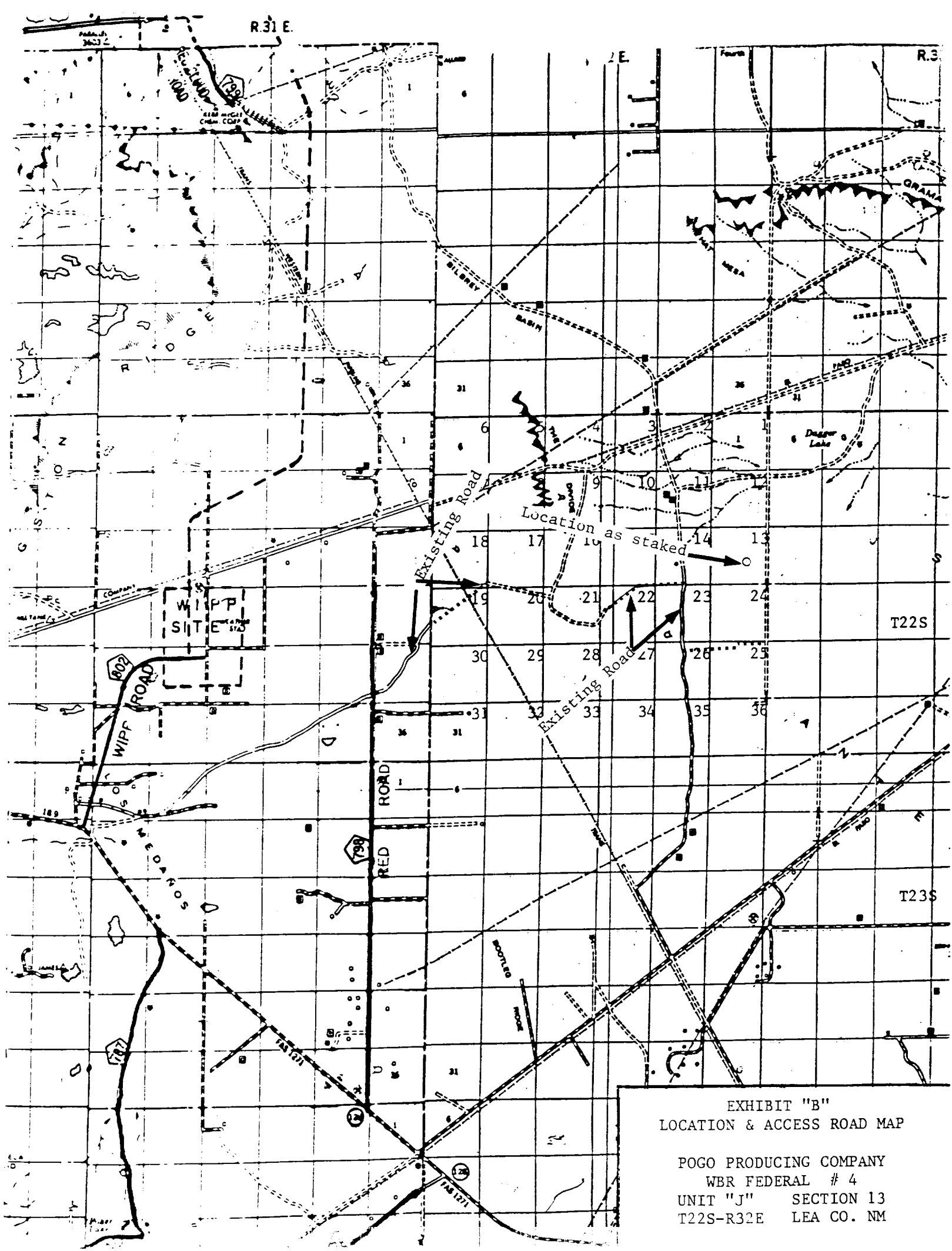


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
WBR FEDERAL # 4
UNIT "J" SECTION 13
T22S-R32E LEA CO. NM

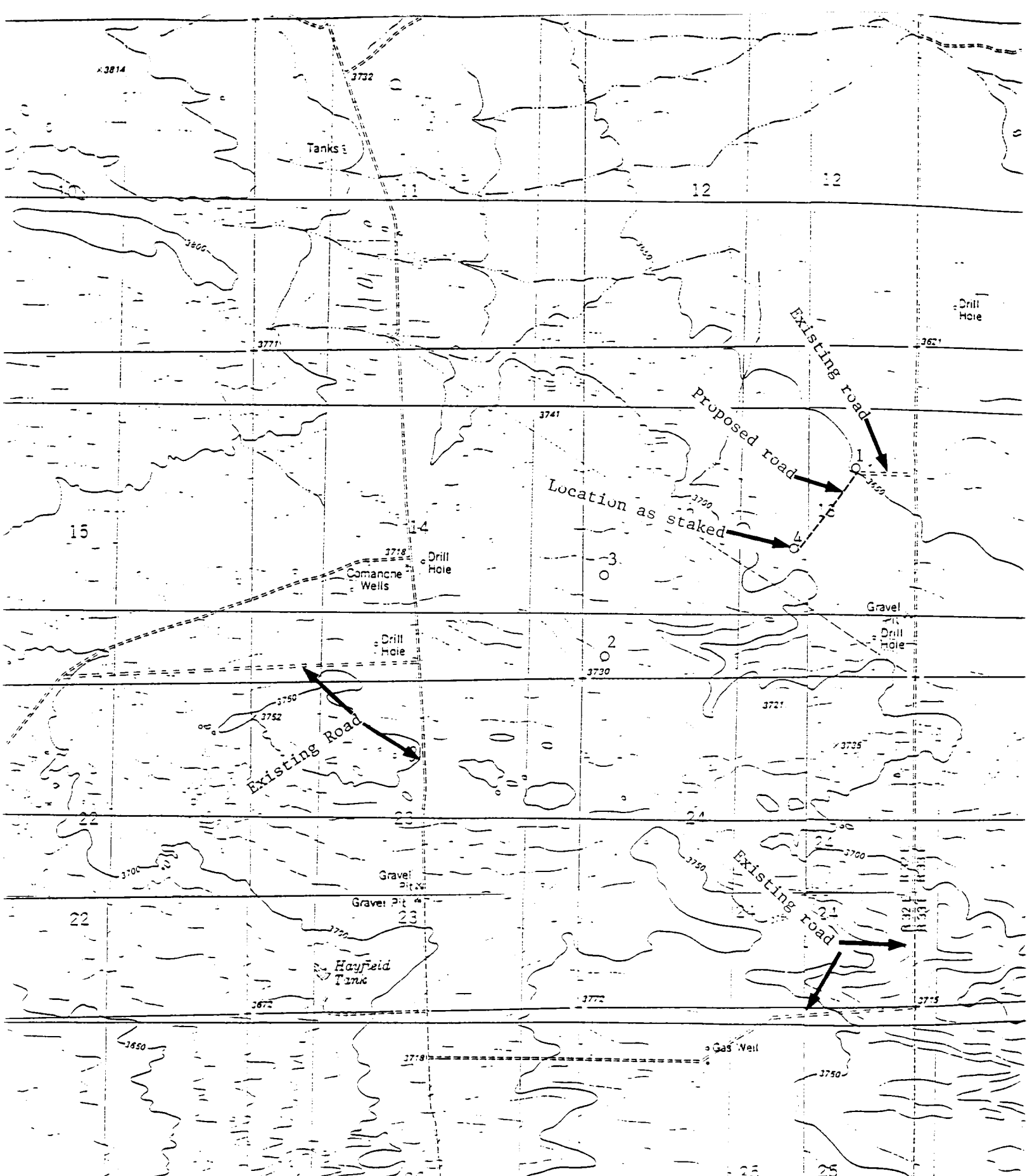
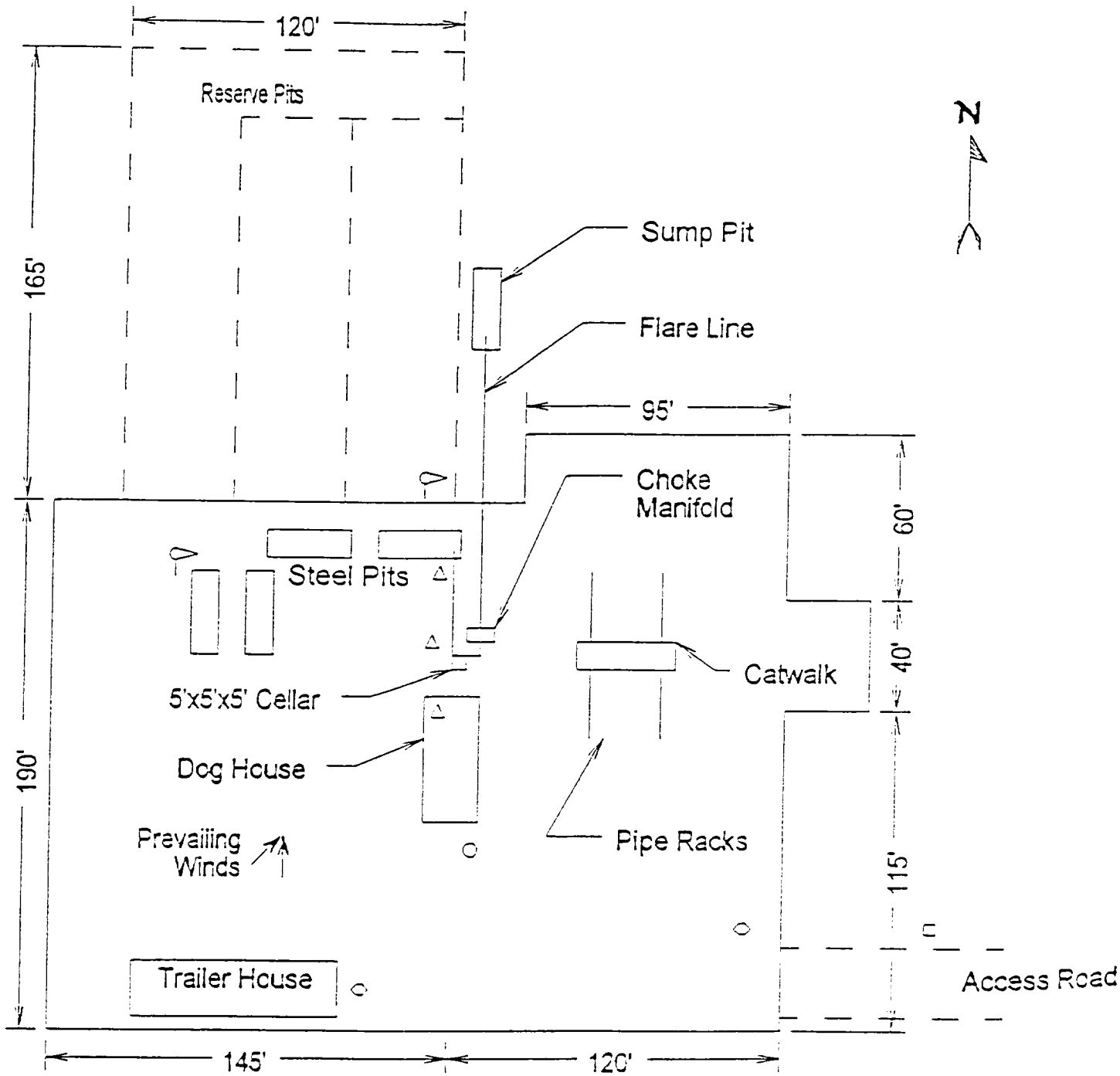


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

POGO PRODUCING COMPANY
WBR FEDERAL # 4
UNIT "J" SECTION 13
T23S-R32E LEA CO., NM


JUL 1998
Received
Hobbs
OCD



- 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
WBR FEDERAL # 4
UNIT "J" SECTION 13
T22S-R32E LEA CO. NM

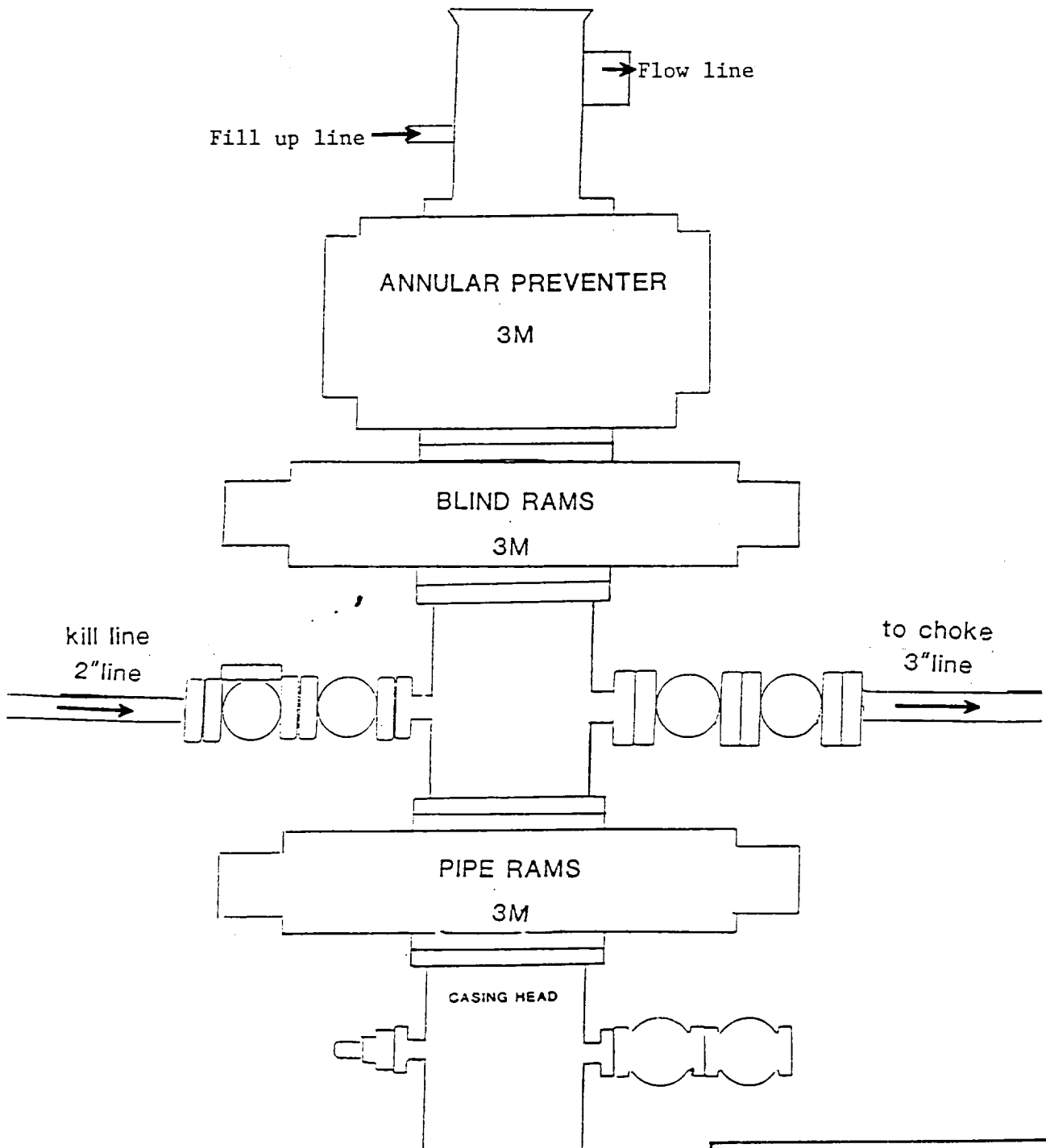
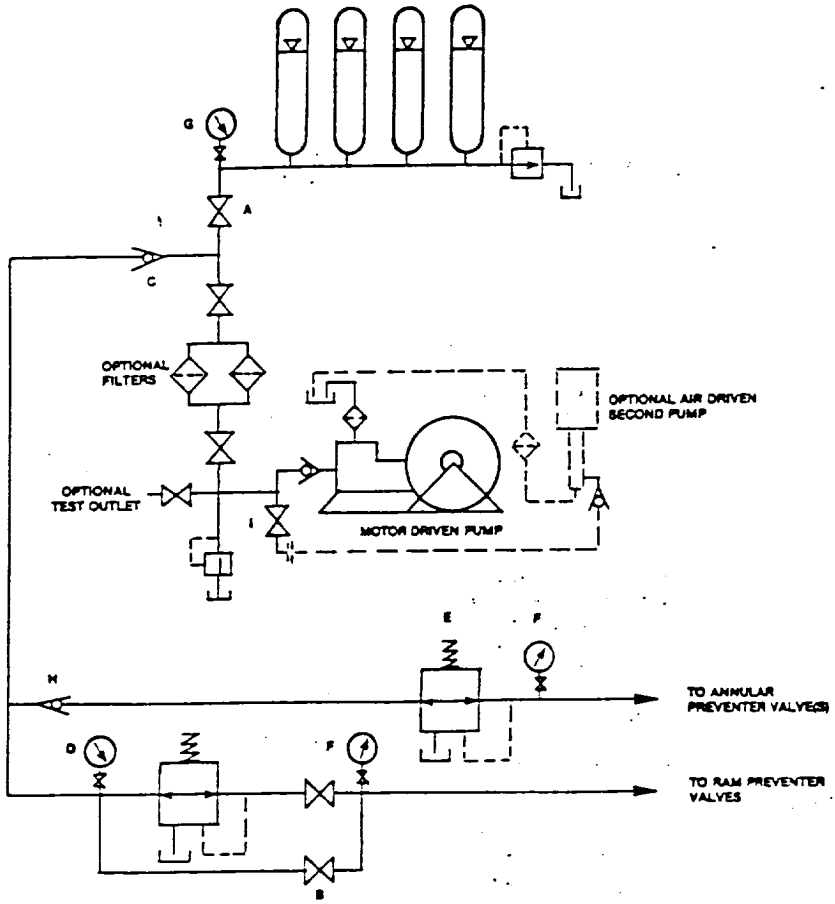


EXHIBIT "E"
B.O.P. SKETCH TO BE USED ON

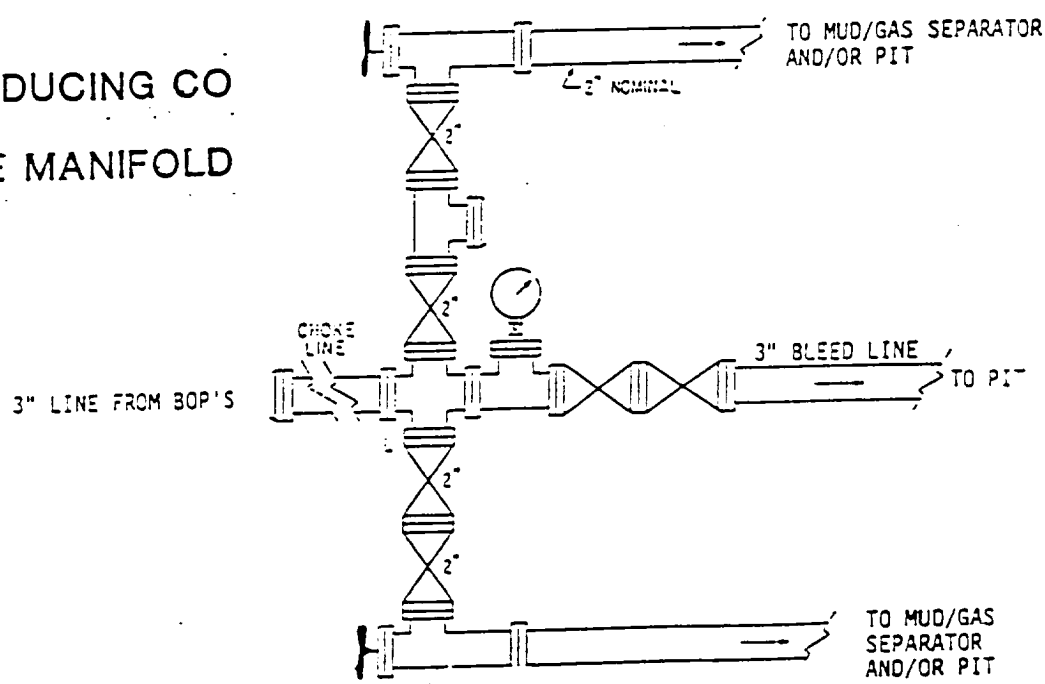
POGO PRODUCING COMPANY
WBR FEDERAL # 4
UNIT "J" SECTION 13
T22S-R32E LEA CO. NM



HAND AJUSTABLE CHOKE

POGO PRODUCING CO

3M CHOKE MANIFOLD



HAND AJUSTABLE CHOKE

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
WBR FEDERAL # 4
UNIT "J" SECTION 13
T22S-R32E LEA CO. NM


JUL 1998
Received
Hobbs
OCD