

**UNITED STATES
DEPARTMENT OF THE INTERIOR**

BUREAU OF LAND MANAGEMENT

(Other instructions on reverse side)

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER ☐

SECRETARY'S POTASH

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

POGO PRODUCING COMPANY

(RICHARD WRIGHT 432-685-8140)

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (432-685-8100)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface

660' SL & 660' FWL

At proposed prod. zone

SAME

7-24-31

FEB 24 2005

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)

660'

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.

1100'

19. PROPOSED DEPTH

8300'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3532' 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
25"	Conductor	NA	40"	Cement to surface W/Redi-mix.
17 1/2"	H-40 13 3/8"	48	975'	1200 Sx. circulate to surface
11"	J-55 8 5/8"	32	4150'	1200 Sx. " " "
7 7/8"	J-55 5 1/2"	17 & 15.5	8300'	1750 Sx. " " "

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 975'. Run and set 975' of 13 3/8" 48# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" 65/35/6 POZ GEL, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
3. Drill 11" hole to 4150'. Run and set 4150' of 8 5/8" 32# J-55 ST&C casing. Cement with 1000 Sx. of 65/35/6 Class "C" POZ GEL + 5% salt, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
4. Drill 7 7/8" hole to 8300'. Run and set 8300' of 5 1/2" casing as follows" 2300' of 5 1/2" 17# J-55 LT&C, 5000' of 5 1/2" 15.5# J-55 LT&C, 1000' of 5 1/2" 17# J-55 LT&C casing. Cement in 3 stages with DV Tools at 5800' & 3700'±. Cement 1st stage with 650 Sx. of Class "H" cement + additives, cement 2nd stage with 600 Sx. of Class "C" cement + 8# of Gilsonite/Sx., cement 3rd stage with 400 Sx. of Class "C" 65/35/6 POZ GEL, tail in with 100 Sx. of Class "C" cement + 1% CaCl, 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

Jesse J. Juen

TITLE Agent

(This space for Federal or State office use)

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS 10/19/04
AND SPECIAL STIPULATIONS
ATTACHED**

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:

ACTING

STATE DIRECTOR

FEB 15 2005

APPROVED BY

/s/ Jesse J. Juen

TITLE

DATE

*See Instructions On Reverse Side

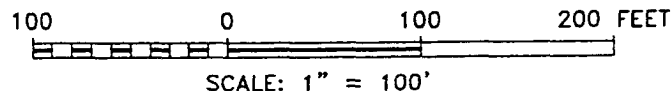
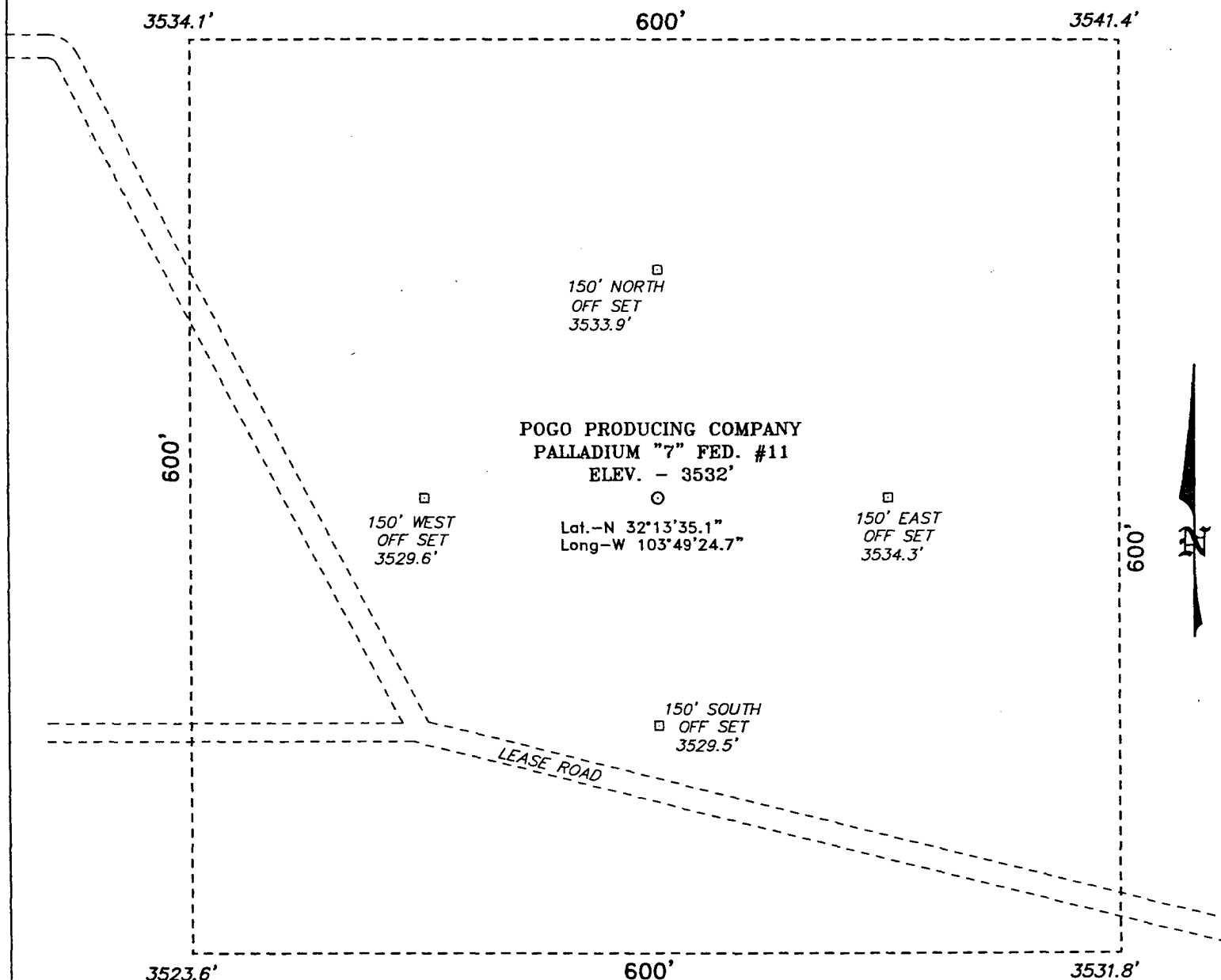
APPROVAL FOR 1 YEAR

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 United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

PROFESSIONAL
BASIN SURVEY

SECTION 7, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM STATE HWY 128 AND CO. RD. 787, GO SOUTH
ON CO. RD. 787 FOR 5.0 MILES TO A LEASE ROAD;
THENCE WEST ON LEASE ROAD FOR 0.7 MILE TO
PROPOSED WELL LOCATION.

POGO PRODUCING CO.

REF: PALLADIUM "7" FED. #11 / Well Pad Topo

THE PALLADIUM "7" FED. No. 11 LOCATED 660' FROM
THE SOUTH LINE AND 660' FROM THE WEST LINE OF
SECTION 7, TOWNSHIP 24 SOUTH, RANGE 31 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 4690

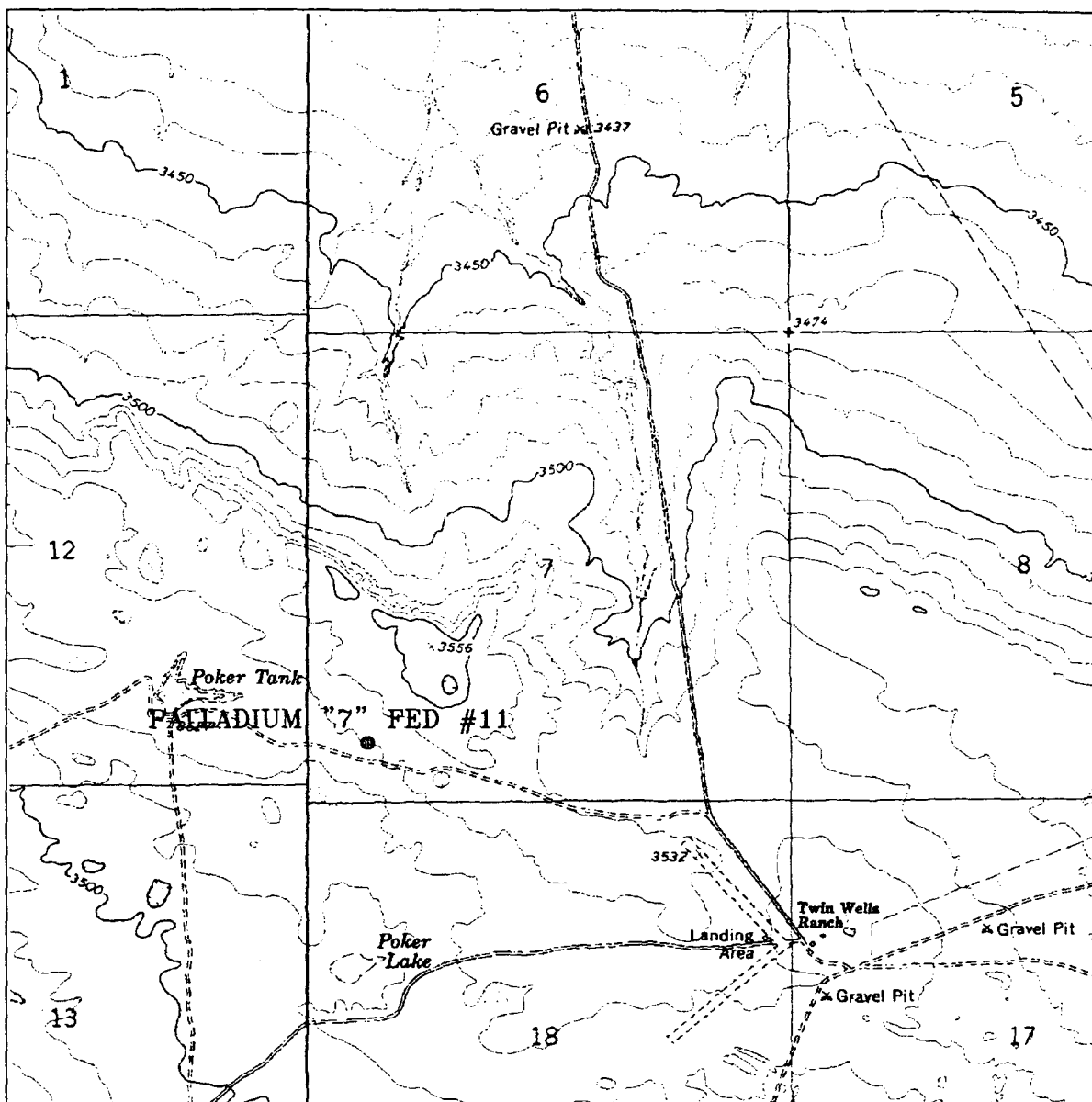
Drawn By: K. GOAD

Date: 09-30-2004

Disk: KJG CD#4 - 4690A.DWG

Survey Date: 09-29-2004

Sheet 1 of 1 Sheets



PALLADIUM "7" FEDERAL #11

Located at 660' FSL and 660' FWL
 Section 7, Township 24 South, Range 31 East,
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
basinsurveys.com

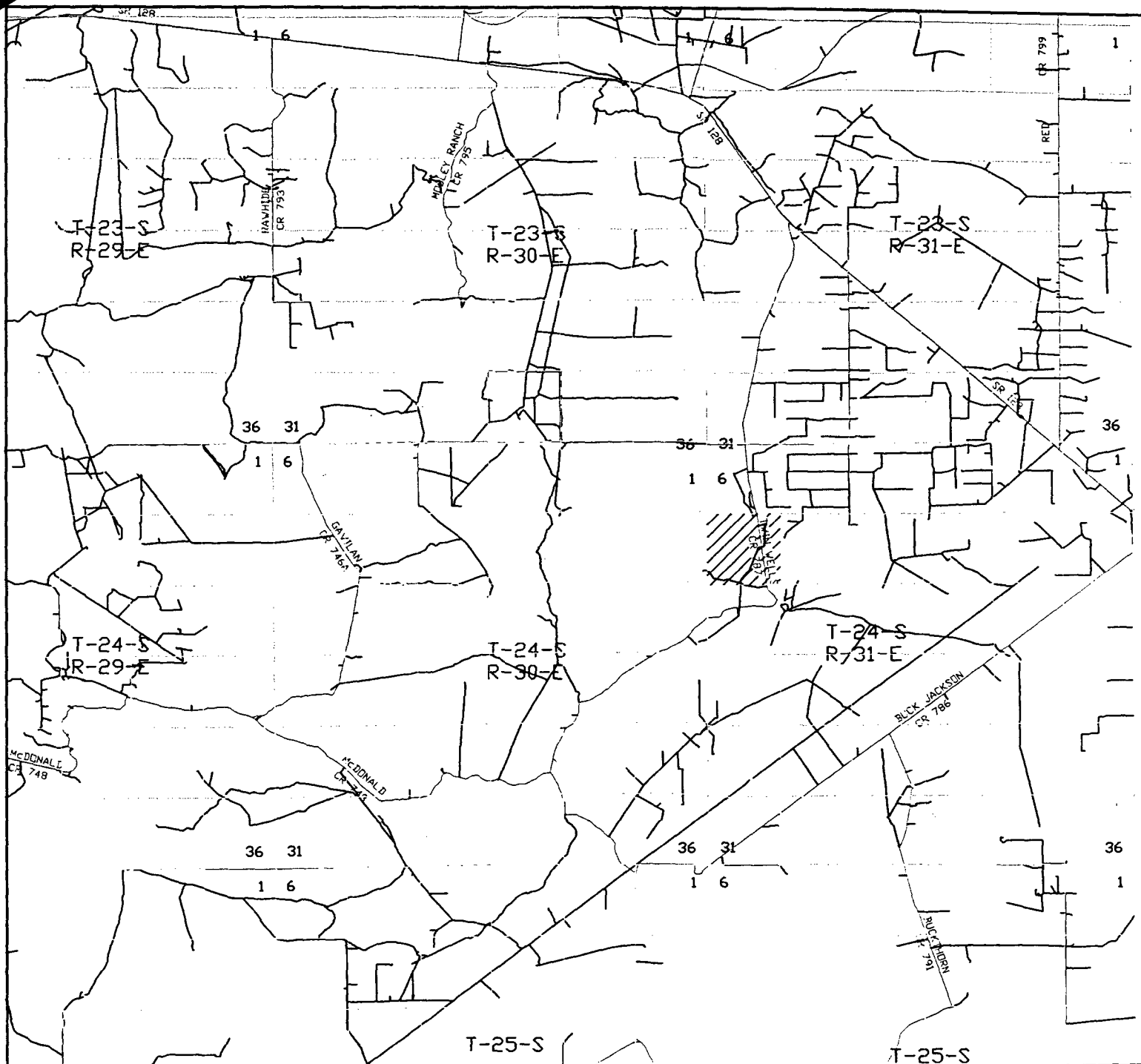
W.O. Number: 4690AA - KJG CD#5

Survey Date: 09-29-2004

Scale: 1" = 2000'

Date: 09-30-2004

**POGO
 PRODUCING
 COMPANY**



PALLADIUM "7" FEDERAL #11
 Located at 660' FSL and 660' FWL
 Section 7, Township 24 South, Range 31 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basin-surveys.com

W.O. Number: 4690AA - KJG CD#5

Survey Date: 09-29-2004

Scale: 1" = 2 MILES

Date: 09-30-2004

POGO
PRODUCING
COMPANY

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E 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 of well: 660' FSL & 660' FWL SECTION 7 T24S-R31E EDDY CO. NM

2. Ground Elevation above Sea Level:

3. Geological age of surface formation: Quaternary Deposits:

4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.

5. Proposed drilling depth: 8300'

6. Estimated tops of geological markers:

Rustler Anhydrite	930'	Cherry Canyon	5160'
Base of anhydrite	4020'	Manzanita	5340'
Delaware Lime	4240'	Brushy Canyon	6400'
Bell Canyon	4260'	Bone Spring	8070'

7. Possible mineral bearing formations:

Brushy Canyon	Oil
Bone Spring	Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
17½"	0-975'	13 3/8"	48	8-R	ST&C	H-40
11"	0-4150'	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-8300'	5½"	17 & 15.5	8-R	LT&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM

9. CEMENTING & CASING SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 975' of 13 3/8" 48# H-40 ST&C casing. Cement with 1000 Sx. of Class "C" 65/35/6 POZ GEL tail in with 200 Sx. of Class "C" + 2% CaCl, circulate cement to surface.
8 5/8"	Intermediate	Set 4150' of 8 5/8" 32# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" 65/35/6 POZ GEL + 5% Salt, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
5 1/2"	Production	Set 8300' of 5 1/2" 17 & 15.5# J-55 LT&C casing. Cement in 3 stages with DV Tools at 5800' & 3700'±. Cement 1st stage with 650 Sx. of Class "H" cement + additives, cement 2nd stage with 600 Sx. of Class "C" cement + 8# of Gilsonite /Sx., cement 3rd stage with 400 Sx. of Class "C" 65/35/6 POZ GEL, tail in with 100 Sx. of class "C" cement + 1% CaCl, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI working pressure B.O.P., consisting of a stripper head instead of an annular preventor, blind rams, and pipe rams. This B.O.P. stack is being used because of Substructure height limitations of the drilling rig being used to drill this well. Pressures encountered during drilling are not expected to exceed 1700 PSI at total depth. Pogo requests permission to 3rd party test of the B.O.P., after setting intermediate casing at 4150'. The B.O.P. will be tested according to API specifications. Exhibit "E-1" shows a manually operated choke manifold, as no remote B.O.P. equipment will be necessary.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD
40-975'	8.4-8.7	29-34	NC	Fresh water Spud mud add paper to control seepage.
975-4150'	10.0-10.2	29-38	NC	Brine water ann paper to control seepage and use high viscosity sweeps to clean hole.
4150'-8300'	8.4-8.7	29-40	NC*	Fresh water add Gel to control viscosity and use high viscosity sweeps to clean hole. Use a Polymer to control water loss.

* Water loss may have to be controlled in order to run logs, casing, and prevent formation damage.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Induction, LDT, SNP, Gamma Ray, Caliper from TD back to 8 5/8" casing shoe.
- B. Run cased hole logs Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- C. No DST's or cores are planned at this time.
- D. Rig up mud logger on hole after 8 5/8" casing is run and remain on hole to TD.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 1800± PSI, and Estimated BHT 160°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 25 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Bone Spring formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as an oil 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 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, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E" & "E-1"
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 the location is near to a dwelling a closed DST 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
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM

1. EXISTING ROADS & PROPOSED ROADS: Area maps; Exhibit "B" is a reproduction of a County General Hi-way Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing 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 Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico go approximately 40 miles to the WIPP road, turn Left on to the WIPP road go South 13 miles to CR-802, turn Right go go 4.2 miles to State Hi-way 128, turn Left go 2.4 miles to CR-787 (Twin Wells Road) turn Right go 5 miles turn Left (West) go .8 miles to location on the North side of road.

C. Exhibits "C & "F" shows the proposed roads flowlines and powerlines.

2. PLANNED ACCESS ROADS: No new road will be required.

A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.

B, Gradient of all roads will be less than 5.00%.

C. If turn-outs are necessary they will be constructed.

D. If needed roads will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.

E. Center-line for new roads will be flagged. Earth-work will be will be done as field conditions require.

F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilize low water crossings for drainage as required by topography.

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

A. Water wells - One approximately .9 miles East of location.

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
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "C" & "F".

5. LOCATION AND TYPE OF WATER SUPPLY:

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

6. SOURCE OF CONSTRUCTION MATERIAL:

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

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. All trash, junk and other waste material will be contained in trash cages or trash 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 the supplier, including broken sacks.
- D. Waste water from living quarters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthred drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

- A. No camps or air strips will be constructed on location.

SURFACE USE PLAN

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the proposed well site layout.
- B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encountered during pit construction indicate that a plastic liner is required to contain lateral migration.
- D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than 6 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.
- E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completion phases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out. If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pits will be allowed to dry properly, fluids may be moved and disposed of in accordance with article 7-E 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 future erosion. In case of the well completed as a producer the drilling pad will be necessary to construct production facilities. After the area has been shaped and contoured top soil from the spoil pile will be placed over the disturbed area to the extent possible so that revegetation procedures can be accomplished to comply with the BLM specifications.

If the well is a dry hole the pad and road area will be contoured to match the existing terrain. Top soil will be spread to the extent possible and revegetation will be carried out according to the BLM specifications.

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
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography has a slight dip to the North. Vegetation consists of catclaw, creosote, acacia, gyp coldenia, mesquite, prickly pear, various native grasses. Soil is tan in color, tan/brown/grey loamysandy silts mixed with caliche nodules.
- B. Surface is owned by the U.S. Department of Interior and is administered by the Bureau of Land Management. The surface is leased to ranchers for grazing of live stock.
- C. An archaeological survey will be conducted and the results will be filed with The Bureau of Land Management Carlsbad Field office in Carlsbad NM.
- D. There is a ranch dwelling approximately .8 miles East of location.

12. OPERATORS REPRESENTATIVE:

Before construction:

TIERRA EXPLORATION, INC.
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
JOE T. JANICA
OFFICE PHONE 505-391-8503

During and after construction:

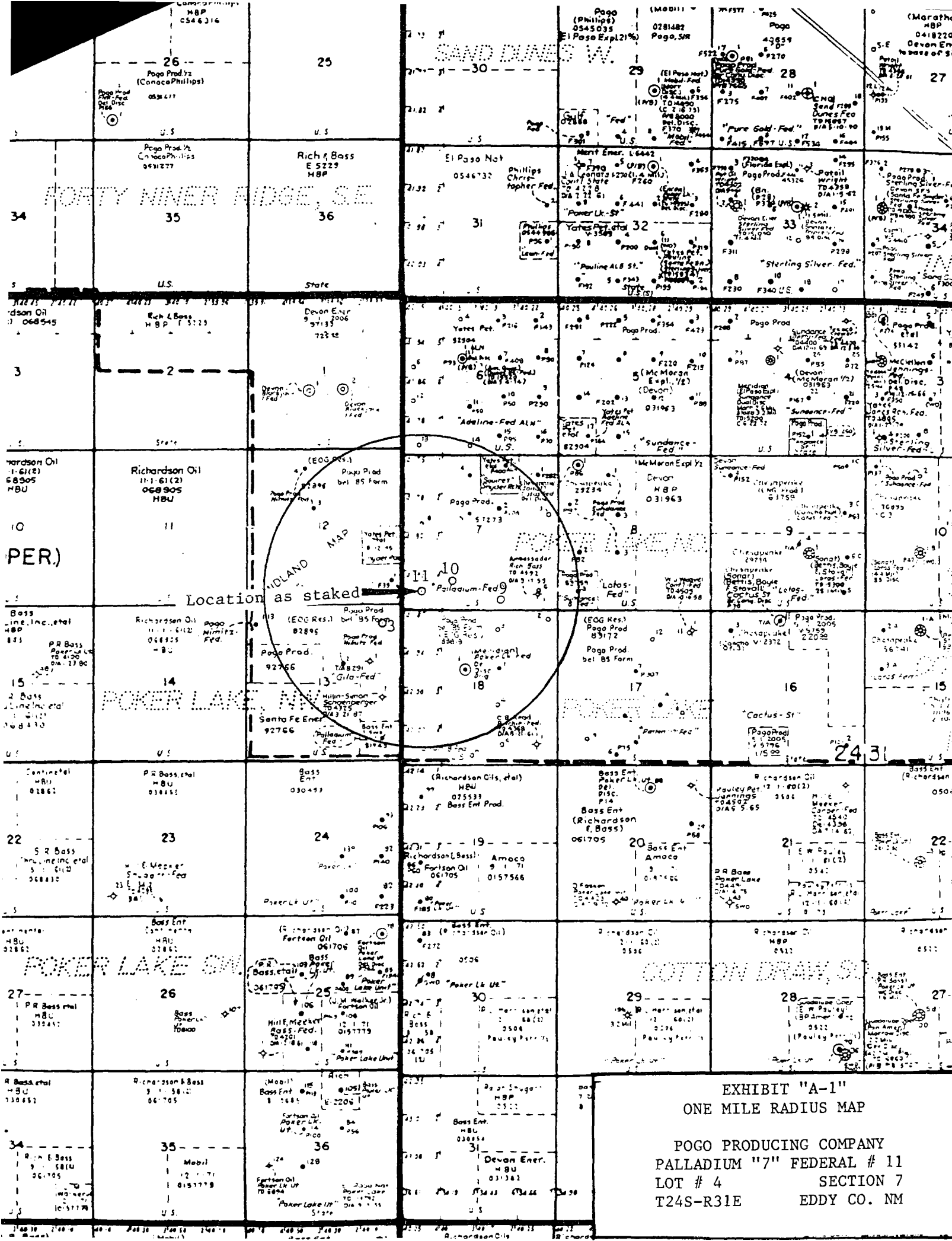
POGO PRODUCING COMPANY
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
RICHARD WRIGHT
OFFICE PHONE 915-685-8140

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, are true and correct, and that the work associated with the operations proposed herein will be performed by POGO PRODUCING COMPANY it's 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 : 10/19/04

TITLE : Agent



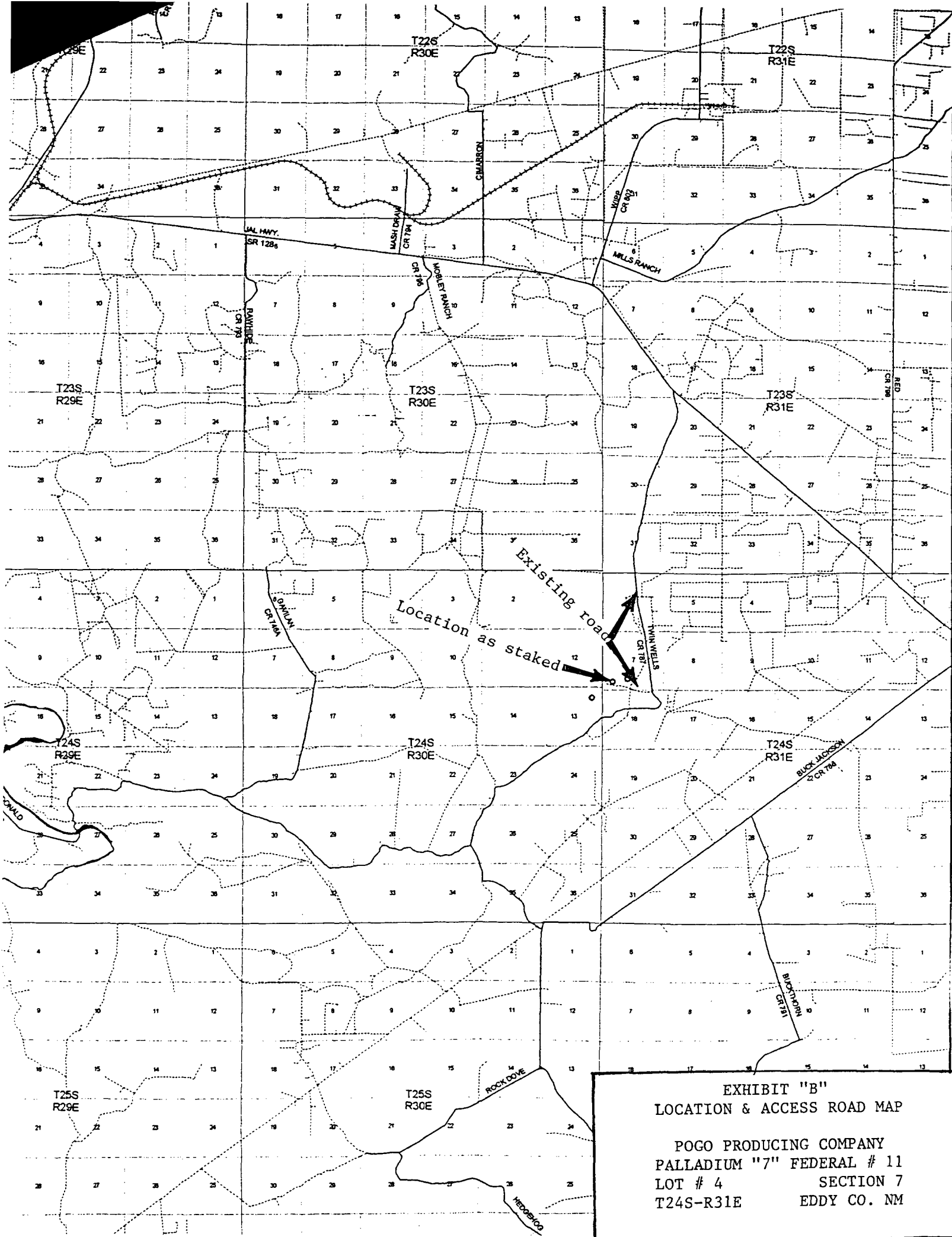
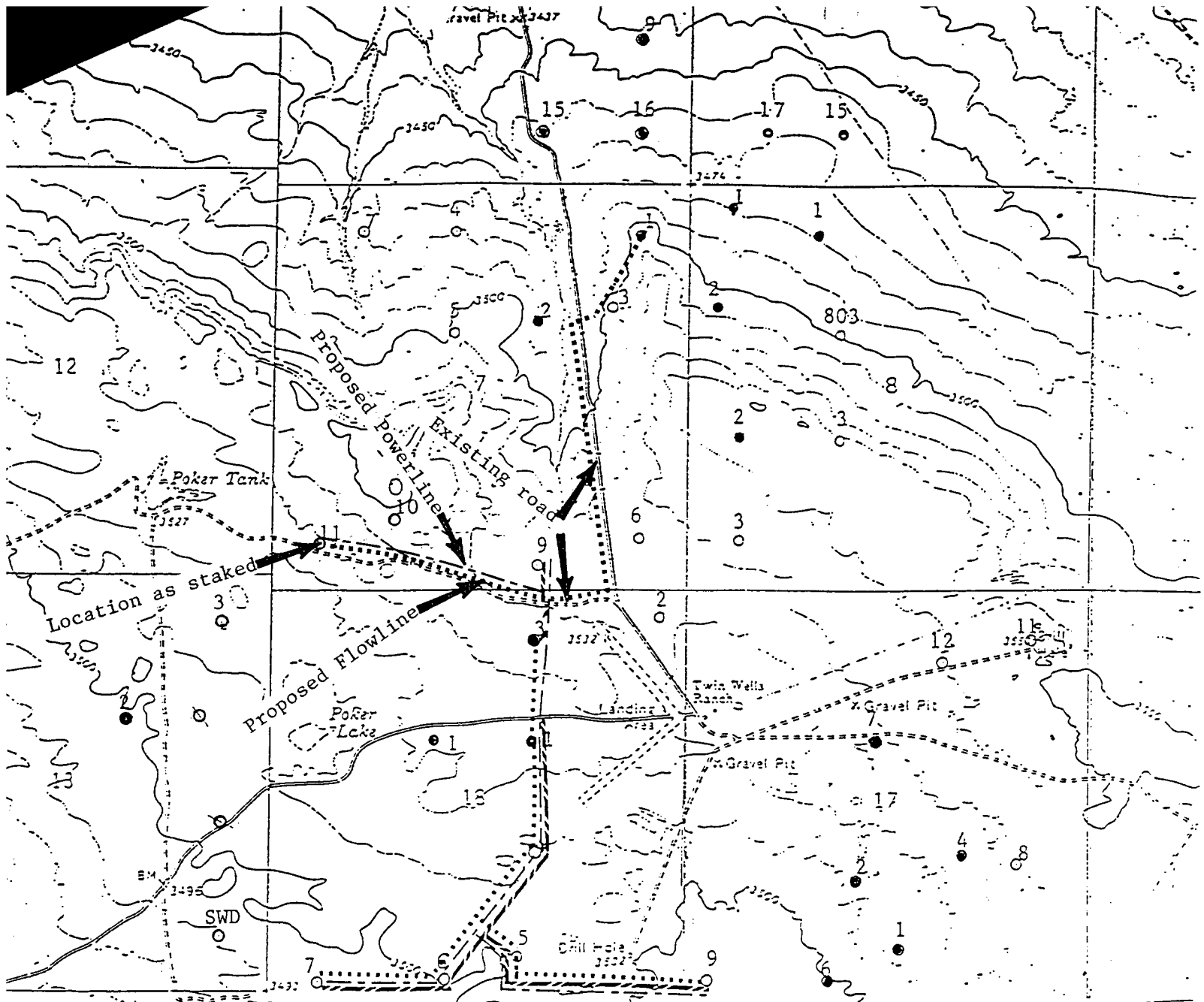


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM



EXISTING ROAD

PROPOSED ROAD

PROPOSED FLOWLINE

PROPOSED POWERLINE

EXHIBIT "C"

TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM

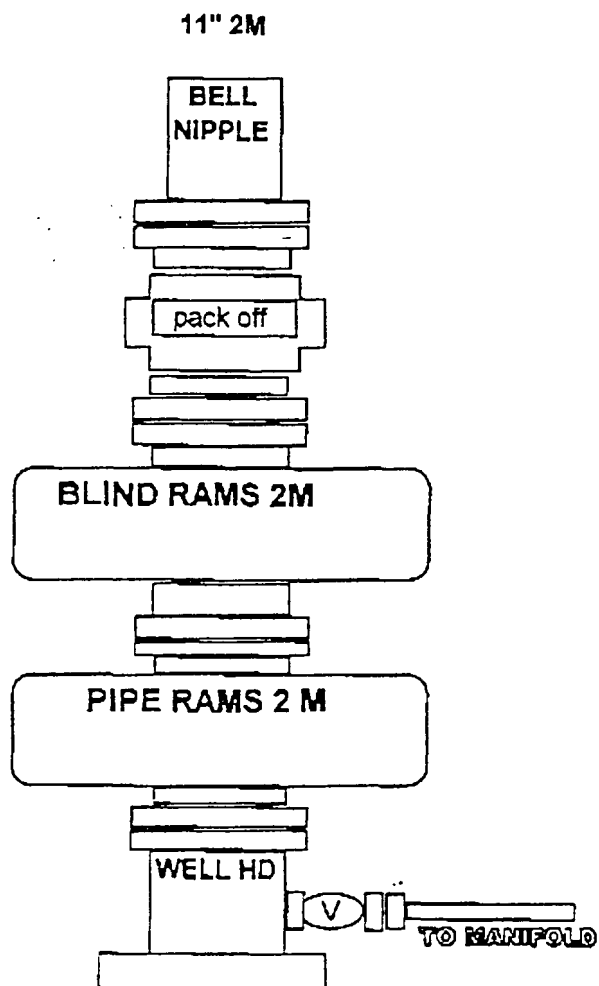


EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM

CHOKE MANIFOLD

3000 PSI WP

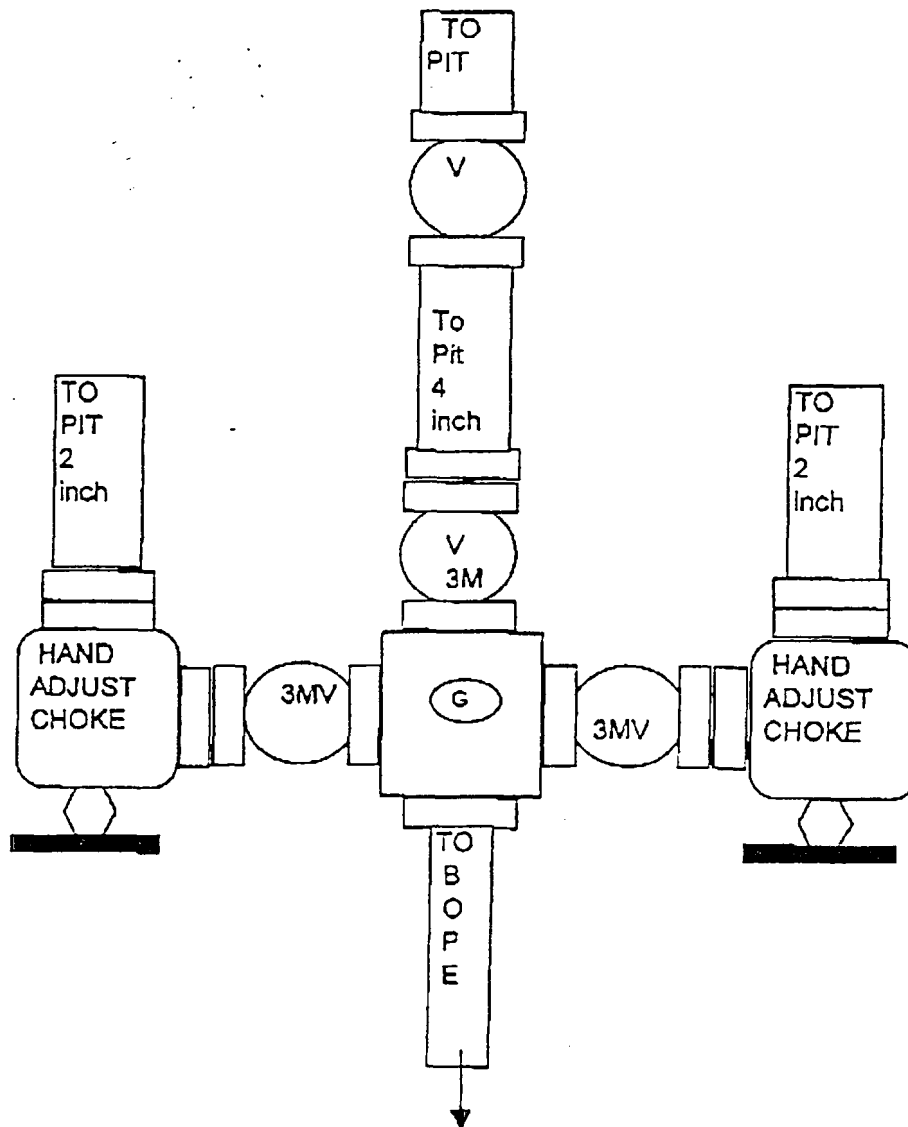


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOAING UNIT

POGO PRODUCING COMPANY
PALLADIUM."7" FEDERAL # 11
LOT # 4 SECTION 7
T24S-R31E EDDY CO. NM