Other instr 1s on OMB NO. 1004-0136 Expires: February 28, 1995

| | 10 | ED S | STATE | ES " | |
|--------|-------|------|-------|------|------|
| DEPART | MEN I | OF | THE | INTE | RIOR |

TO THE SE LEASE DESIGNATION AND

| ************************************** | BUREAU C | F LAND MANAC | SEMENT AT OSIA, 🦒 | IVI EBE | NM-89172 | TON AND BERIAL NO. |
|--|---|-----------------|--------------------------------------|---------------------|---|--------------------|
| APP | LICATION FOR | PERMIT TO | ORILL OR DEEPE | 1 | 6. IF INDIAN, ALLO | TEB OR TRIBE NAME |
| 1a. TYPE OF WORK | ORILL A | DEEPEN [| 7 1234E | TIPLE P | 7. UNIT AGREEMENT 8. FARMOR LBASE HAME | |
| 2. NAME OF OPERATOR POGO PRODUCI | * / V | PATTON "17" F | | | | |
| 3. ADDRESS AND TELEPHONE N P.O. BOX 103 | 40 MIDLAND, TEX | TA A | 30-015- | 32434 OR WILDEAT | | |
| At surface 1850' FSL & 990' FEL SEC. 17 T24S-R31E EDDY CO. NELZOZGI SILL At proposed prod. zone SAME At proposed prod. zone SAME POST CH SECTION 17 T24S-R31E | | | | | | |
| Approximatel | | Southeast o | f Carlsbad New Mex | ico. | 12. COUNTY OF PARIS | |
| S. DISTANCE FROM PRO | ST LINE, FT. ig. unit line, if any) POSED LOCATION® | 90' | 640 | | OF ACRIS ASSIGNED HIS WELL 40 | |
| OR APPLIED FOR, ON TH | LIB LEASE, F | 50' | 19. PROPOSED DEPTH 20. ROTARY ROTARY | | | |
| 3530 GR. Carlabad Controlled Water Bushin WHEN APPROVED 3630 GR. Carlabad Controlled Water Bushin | | | | | | |
| | | PROPOSED CASING | G AND CEMENTING PROGR. | A.M | • | |
| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOO | E SETTING DEPTH | | QUANTITY OF CEME | TX |
| 25" | Conductor | NA NA | 40 ' | Cement | to surface wi | th Redi-mix. |
| 17½" 11" | H-40 13 3/8" J-55 8 5/8" | 48 32 | 850' 4250' | 800 Sx. | circulate ce | ement to surfa |
| 7 7/8" | J-55 5½" | 17 & 15.5 | 8500' | | | culate cement |
| | | | | <u> L</u> | | |

- 1. Drill 25" hole to 40'. Set 40' of 20" conductor and cement to surface with Redi-mix.
- 2. Drill $17\frac{1}{2}$ " hole to 850'. Run and set 850' of 13 3/8" 48# H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + additives, circulate cement to surface.
- 3. Drill 11" hole to 4250'. Run and set 4250' 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of Class "C" cement + additives, circulate cement to surface.
- 4. Drill 7 7/8" hole to 8500' Run and set 8500' s, es, 00

| J-55 LT&C, 5000' of $5\frac{1}{2}$ " 1 | 5.5# J-55 LT&C, 1000' of 5½" | casing as follows: $2500'$ of $5\frac{1}{2}$ " 1. $17\#$ J-55 LT&C. Cement in 3 stages |
|--|--|---|
| DV tools at 6100' & 3700' | . Cement 1st stage with 650 | <pre>Sx. of Class "H" cement + additive</pre> |
| 2nd stage cement with 600 | Sx. of Class "C" cement + a | dditives, 3rd stage cement with 40 |
| Sx. of Class "C" cement + | additives, circulate cement | to surface |
| | terrory deliberated dement | to burrace. |
| | | |
| ABOVE SPACE DESCRIBE PROPOSED PROVIDAMANA | | |
| epen directionally, give portinent data on subsurface locations a | nd measured and true vertical deoths. Give blowout pre- | se and proposed new productive zone. If proposal is to drill or venter program, if any, |
| | | |
| (last (less | Agent | 07/10/00 |
| SIGNED | Agent Agent | 07/19/02 |
| (This space for Federal or State office use) | | APPROVAL SUBJECT TO |
| | | |
| PE 41T NO | | ENERAL REQUIREMENTS AND |
| Application approval does not warrant or certify that the applica- | nt holds legal or equitable title to those rights in the subject | PECIAL STIPULATIONS |
| CONDITIONS OF APPROVAL IF ANY: | F | MIACHLU |
| | -110 | |
| /S/ RICHARD A. WHITLEY | ALTIN DIDECT | OP 0.7. 000 |
| APPROVED BY | STATE DIRECTO | AUG 2 7 2002 |
| | *See Instructions On Reverse Side | |

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

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION P.O. Box 2088

Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87504-2088

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| API Number | Pool Code | Pool N | ame |
|--------------------|-----------|---------------------------------|--------------------|
| | 50382 | POKER LAKE - DELAWA | RE |
| Property Code | | Property Name ON 17 FEDERAL | Well Number 8 |
| OGRID No. 17891 | | Operator Name DUCING COMPANY | Elevation 3530' |

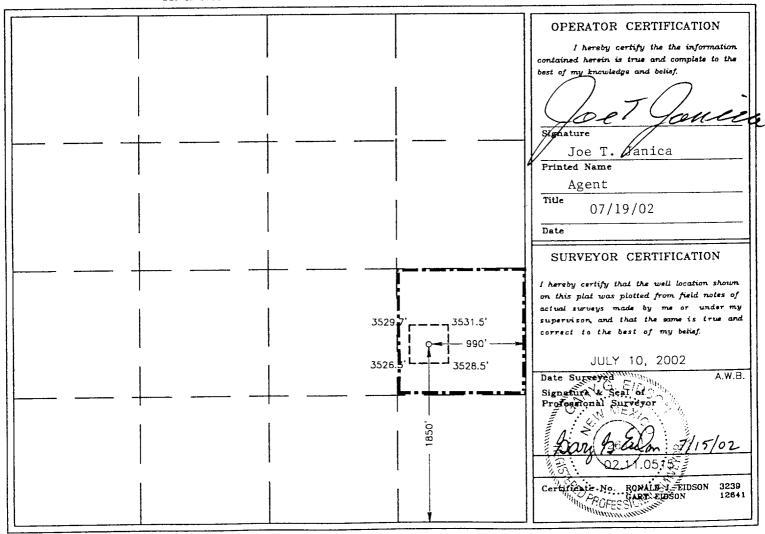
Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| f | 17 | 24-S | 31-E | | 1850 | SOUTH | 990 | EAST | EDDY |

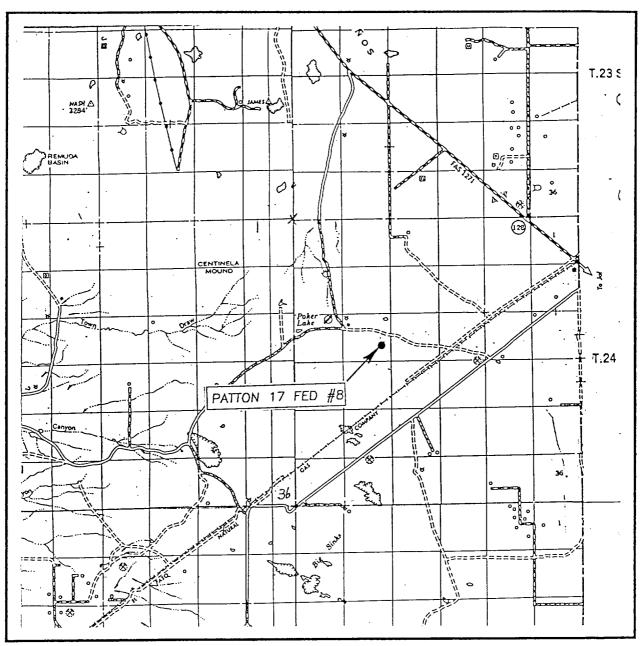
Bottom Hole Location If Different From Surface

| 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 o | or Infill Co | nsolidation | Code Or | der No. | | | | <u> </u> |
| 40 | <u> </u> | | | | | | | | |

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



VICINITY MAP



SCALE: 1" = 2 MILES

SEC. __17 __TWP. _24-S __RGE. __31-E

SURVEY _____ N.M.P.M.

COUNTY _____ EDDY

DESCRIPTION __1850' FSL & 990' FEL

ELEVATION ___ 3530

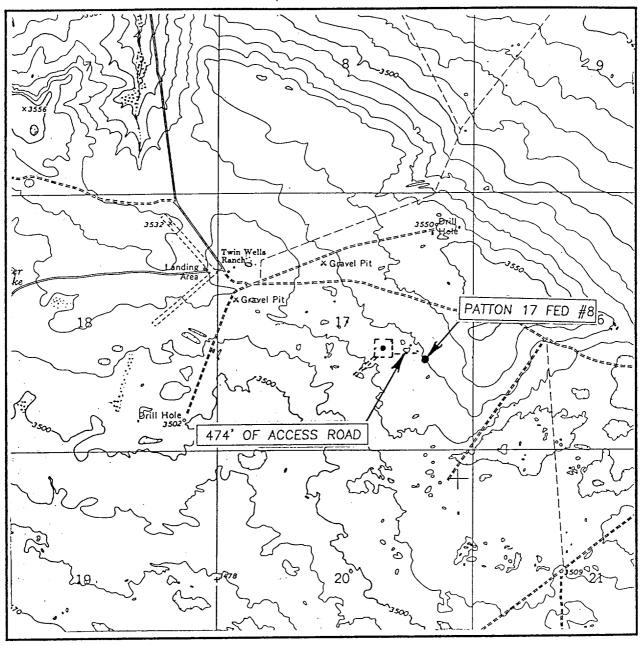
OPERATOR __POGO __PRODUCING __COMPANY

LEASE ____ PATTON __17 FEDERAL

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



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' BIG SINKS, N.M.

SEC. _17 TWP. 24-S RGE. _31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION _1850' FSL & 990' FEL

ELEVATION __3530

OPERATOR _POGO _PRODUCING COMPANY

LEASE __PATTON _17 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

BIG SINKS, N.M.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
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. <u>Location:</u> 1850' FSL & 990' FEL SEC. 17 T24S-R31E EDDY CO. NM
- 2. Elevation above Sea Level: 3530' 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: 8500'
- 6. Estimated tops of geological markers:

| Basal Anhydrite | 3960' | OI - | |
|-----------------|--------|---------------|-------|
| | 3700 | Cherry Canyon | 5184 |
| Delaware Lime | 4274 ' | Brushy Canyon | 6421' |
| Bell Canyon | 42991 | Pana Gara | • |
| | , _ , | Bone Spring | 8104' |

7. Possible mineral bearing formations:

Delaware Lime 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" | 0-850' | 13 3/8" | 48 | 8-R | ST&C | H-40 |
| 11" | 0-4250 | 8 5/8" | 32 | 8-R | ST&C | J-55 |
| 7 7/8" | 0-8500' | 5½" | 17 & 15.5 | 8-R | LT&C | J-55 : |

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
T24S-R31E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPT.

| 20" | Conductor | Set $40'$ of $20''$ conductor and cement to surface with Redi-mix. |
|---------|--------------|--|
| 13 3/8" | Surface | Set 850' of 8 $5/8$ " $48\#$ H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + additives, circulate cement to surface. |
| 8 5/8'' | Intermediate | Set 4250' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of Class "C" cement + 2% CaCl, + $\frac{1}{4}$ # Flocele/Sx., circulate cement to surface. |
| 5½'' | Production | Set 8500' of $5\frac{1}{2}$ " casing as follows: 2500' of $5\frac{1}{2}$ " $17\#$ J-55 LT&C, 5000' of $5\frac{1}{2}$ " $15.5\#$ J-55 LT&C, 1000' of $5\frac{1}{2}$ " $17\#$ J-55 LT&C. Cement in 3 stages with DV Tools at 6100' & 3700'±. 1st stage cement with 650 Sx. of Class "H", 2nd stage cement with 600 Sx. of Class "C" cement + additives, 3rd stage cement with 400 Sx. of Class "C" cement + additives, circulate cment to surface. |

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 Series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibi "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.

11. PROPOSED MUD CIRCULATING SYSTEM:

| DEPTH | MUD WI. | VISC | FLUID LOSS | TYPE MUD SYSTEM |
|------------|-----------|-------|--------------|--|
| 40-850' | 8.4-8.8 | 29-34 | NC | Fresh water spud mud add paper to control seepage. |
| 850-4250' | 10.0-10.3 | 29-38 | NC | Brine water add paper to control seepage, use high viscosity sweeps to clean hole. |
| 4250-8000' | 8.4-8.6 | 29-36 | NC | Fresh water use high viscosity sweeps to clean hole. |
| 8000-8500' | 8.4-8.6 | 29–36 | 10 ccor less | Fresh water Dris-pac system for water loss 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 viscosity and/or water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
T24S-R31E EDDY CO. NM

12. LOGGING, CORING, & TESTING PROGRAM:

- A. Open hole logs: Dual Induction, LDT, SNP, Gamma ray, Caliper from TD to 4250'.
- B. Cased hole logs: Run Gamma Ray, Neutron from 4250' to surface.
- C. No cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of $\rm H^2S$ in this area. If $\rm H^2S$ 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 4500 PSI, and Estimated BHT 175°.

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 30 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 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 $\rm H_2S$ safety instructor to the following:
 - A. Characteristics of H2S
 - B. Physical effects and hazzards
 - 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. H_2S 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"
- 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 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.

POGO PRODUCING COMPANY
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
T24S-R31E 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 Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad NM, go approximately 40 miles to WIPP road turn Left go 13 miles to CR 802 turn Left follow road to State Hi-way 128. Turn Left go 9.4 miles to Buck Jackson Road turn Right go 3 miles turn Right go 2.3 miles to Patton lease and follow roads to location.
 - C. Flow lines will be laid on the surface of the ground to existing tank battery. See Exhibit "F"
- 2. PLANNED ACCESS ROADS: Approximately 500' 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. If required turnouts will be constructed where 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"

| Α. | Water wells | - | One approximately ½ Mile Northwest. |
|----|-----------------|---|-------------------------------------|
| R | Dispusal realls | | |

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"

POGO PRODUCING COMPANY
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
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 "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 quaters 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 furthed 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.

POGO PRODUCING COMPANY
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
T24S-R31E 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 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
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
T24S-R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of sand dunes with a slight dip to the West. Deep sandy soil supports shinnery oak, native grasses, and an occasional mesquite tree.
- B. Surface is owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is used for grazing livestock and the production of oil and gas.
- C. An archaeological survey will be conducted on the location and access roads. This report will be filed with The Bureau of Land Management in the Carlsbad field office.
- D. Ranch House located approximately ½ mile form location.

12. OPERATORS REPRESENTIVES:

Before construction:

TIERRA EXPLORATION, INC P.O. BOX 2188 HOBBS, NEW MEXICO 88241 OFFICE Ph. 505-391-8503 JOE T. JANICA During and after construction:

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

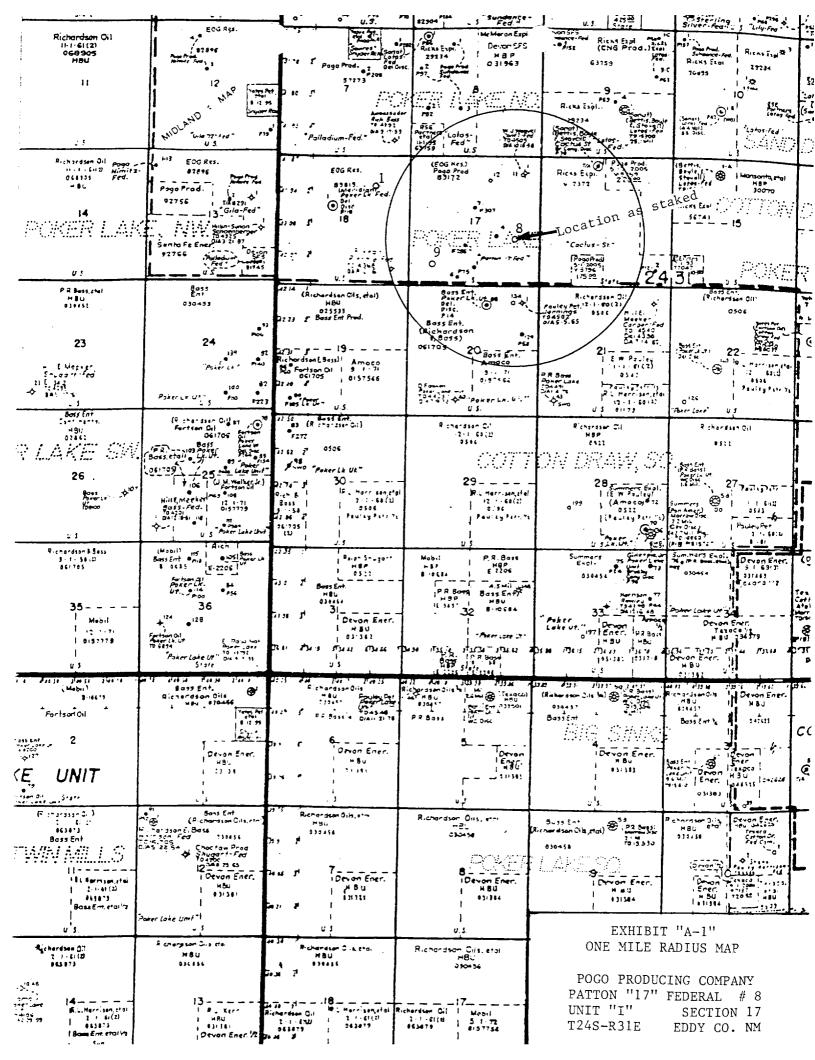
13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access roads, and that I am fimiliar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge true and correct, and that the work associated with the operations proposed herein will be performed by POGO PRODUCING COMPANY it's contractors/subcontractors is in compformity 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 report.

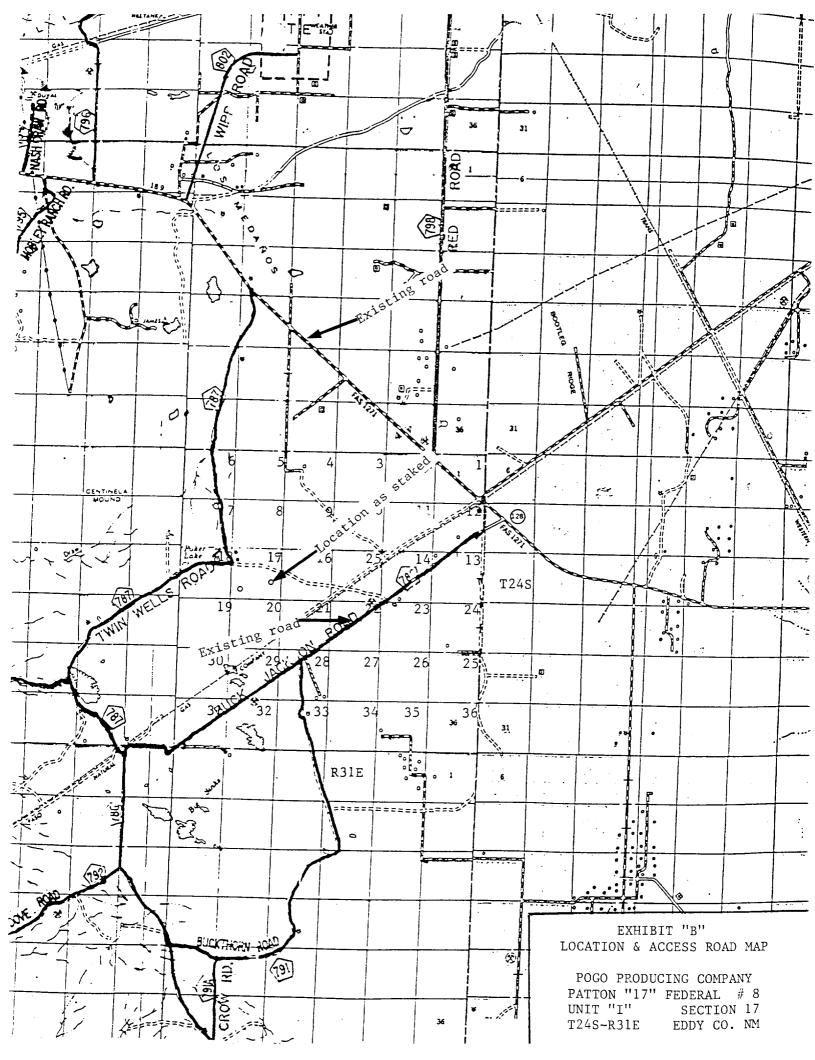
NAME

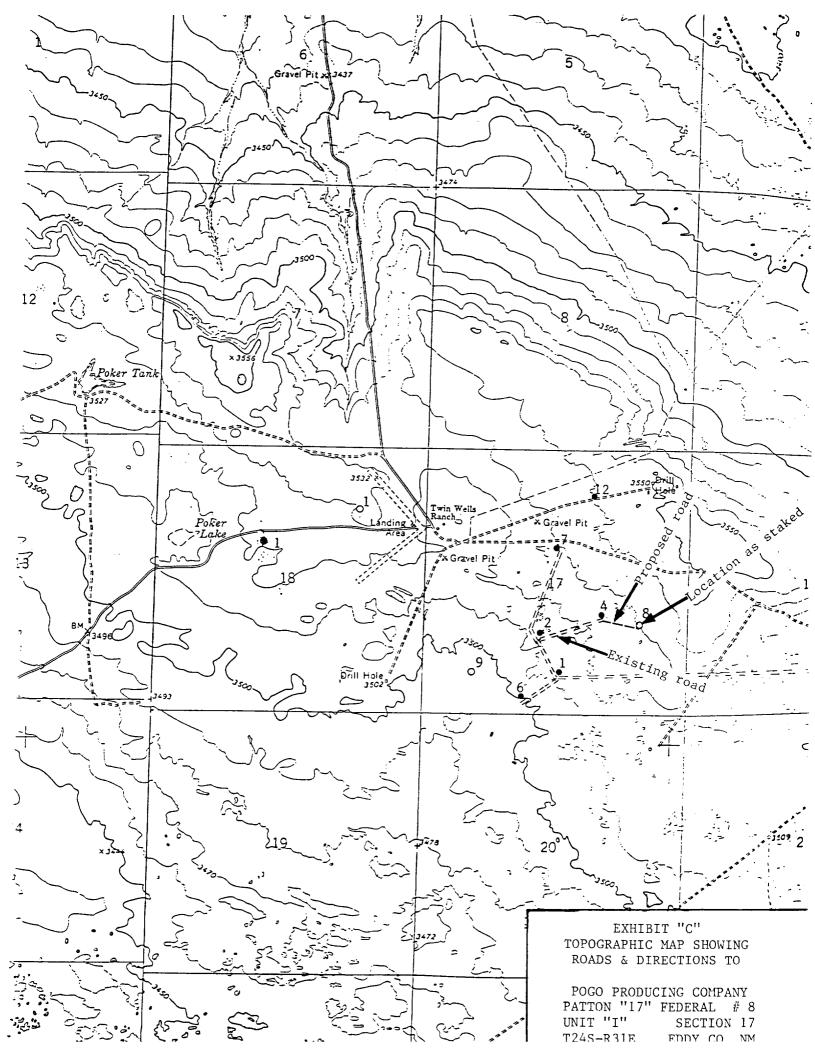
DATE / 07/19/02

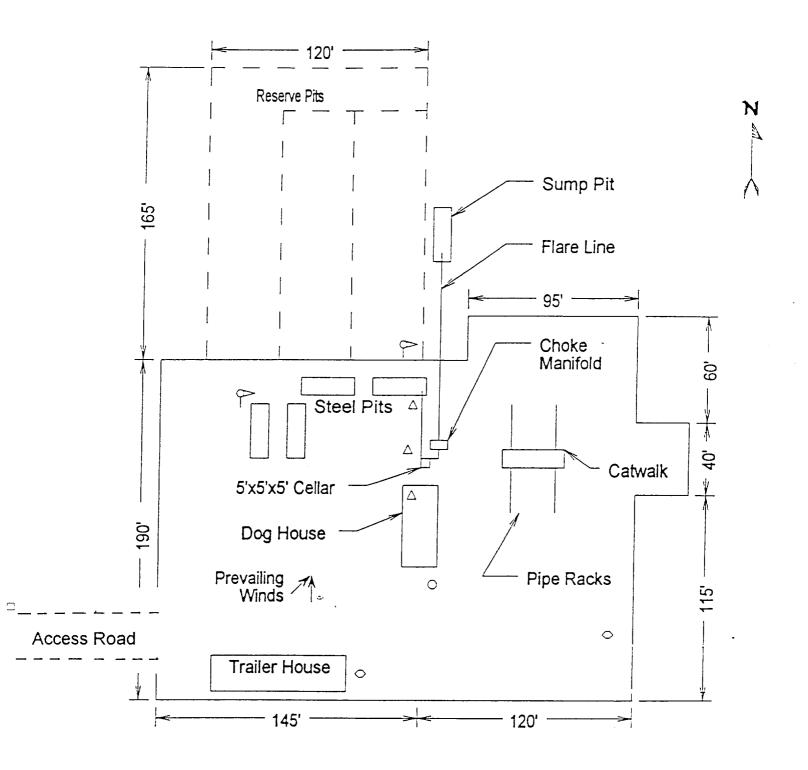
TITLE U:

Agent





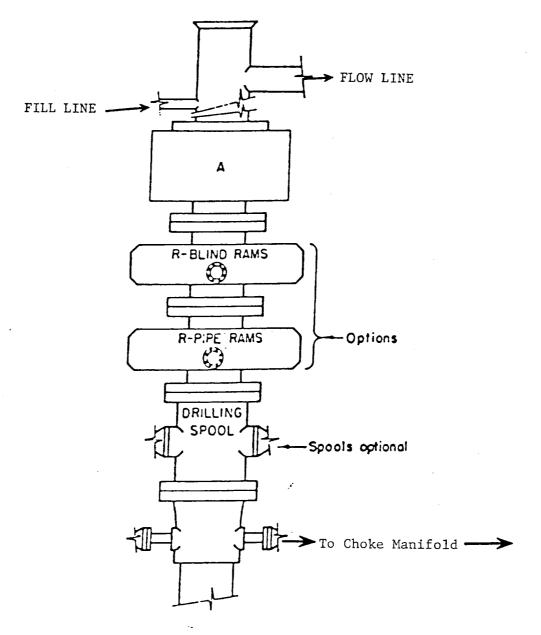




- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- Briefing Areas
- O Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
T24S-R31E EDDY CO. NM



ARRANGEMENT SRRA

900 Series 3000 PSI WP

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

POGO PRODUCING COMPANY
PATTON "17" FEDERAL # 8
UNIT "I" SECTION 17
T24S-R31E EDDY CO. NM

