(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

(Other instructions on reverse side)

OCD-HOBBS

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] D-06-33

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

2. NAME OF OPERATOR: POGO PRODUCING COMPANY (RICHARD WRIGHT 432-685-8140 <1789>)

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' FNL & 2100' FEL SECTION 21 T25S-R32E LEA CO. NM
At proposed prod. zone: SAME Unit B

5. LEASE DESIGNATION AND SERIAL NO.: LC ~~NM~~-061869

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

7. UNIT AGREEMENT NAME: COTTON DRAW UNIT

8. FARM OR LEASE NAME, WELL NO.: COTTON DRAW UNIT # 106 <30629>

9. API WELL NO.: 30-025-37775

10. FIELD AND POOL, OR WILDCAT: PADUCA-DELAWARE

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 21 - T25S-R32E

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

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 25 miles West of Jal 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: 720

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.: 1650'

19. PROPOSED DEPTH: 5000'

20. ROTARY OR CABLE TOOLS: ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3420' GR.

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

23. PROPOSED CASING AND CEMENTING PROGRAM — Subject to Controlled Water Basin

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	Conductor 20"	NA	40'	Cement to surface W/Redi-mix.
12¼"	J-55 8 5/8"	24#	815'	300 Sx. circulate cement
7/7/8"	J-55 5½"	15.5#	5000'	725 Sx. " "

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

2. Drill 12¼" hole to 815'. Run and set 815' of 8 5/8" 24# J-55 ST&C casing. Cement with 150 Sx. of Class "C" 65/35/6 POZ/GEL, tail in with 150 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. circulate cement to surface.

3. Drill 7 7/8" hole to 5000'. Run and set 5000' of 5½" 15.5# J-55 ST&C casing. Cement with 475 Sx. of Class "C" Light Weight Cement + 5% Salt mixed at 12.9 #/Gal, tail in in with 250 Sx. of Class "C" cement + 8# of Gilsonite/Sx., mixed at 14.1#/Gal. Circulate cement to surface. Slurry may have to be re-calculated after logs are run.

POGO PRODUCING COMPANY ACCEPTS THE RESPONSIBILITY FOR THE OPERATION OF THIS LEASE.

Witness Surface Casing

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 Joel T Janicek TITLE Agent DATE 01/18/06

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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:

KZ

APPROVED BY /S/ Russell E. Sorensen TITLE ACTING FIELD MANAGER DATE MAR 22 2006

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-37775	49460	PADUCA-DELAWARE

Property Code	Property Name	Well Number
301629	COTTON DRAW UNIT	106

OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	3420'

Surface Location

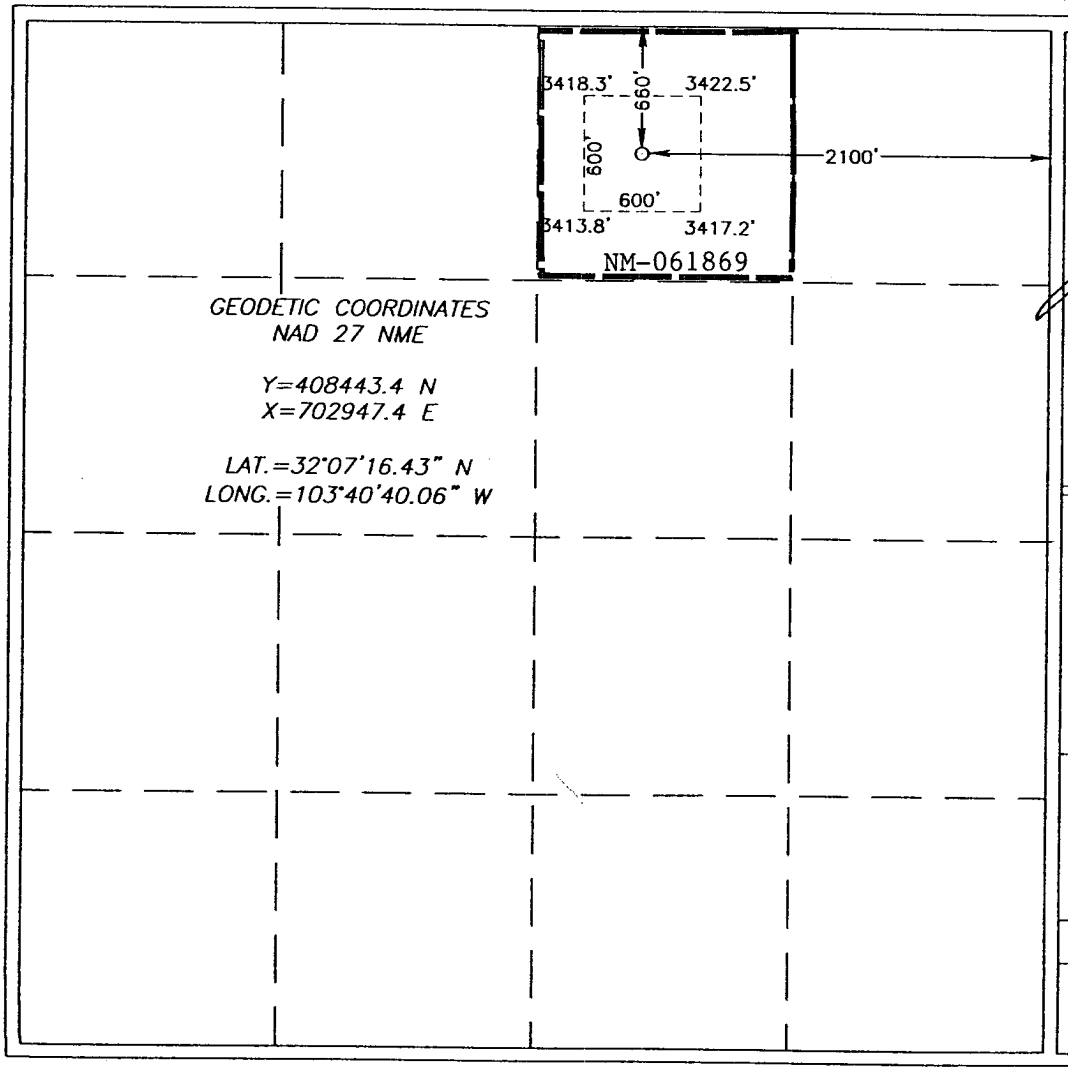
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	21	25-S	32-E		660	NORTH	2100	EAST	LEA

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.

Signature: Joe T Janica

Joe T Janica
Printed Name

Agent
Title

01/18/06
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.

DECEMBER 1, 2005
Date Surveyed LA

Signature & Seal of Professional Surveyor

GARY G. EIDSON 12641 REGISTERED PROFESSIONAL SURVEYOR

12/14/05

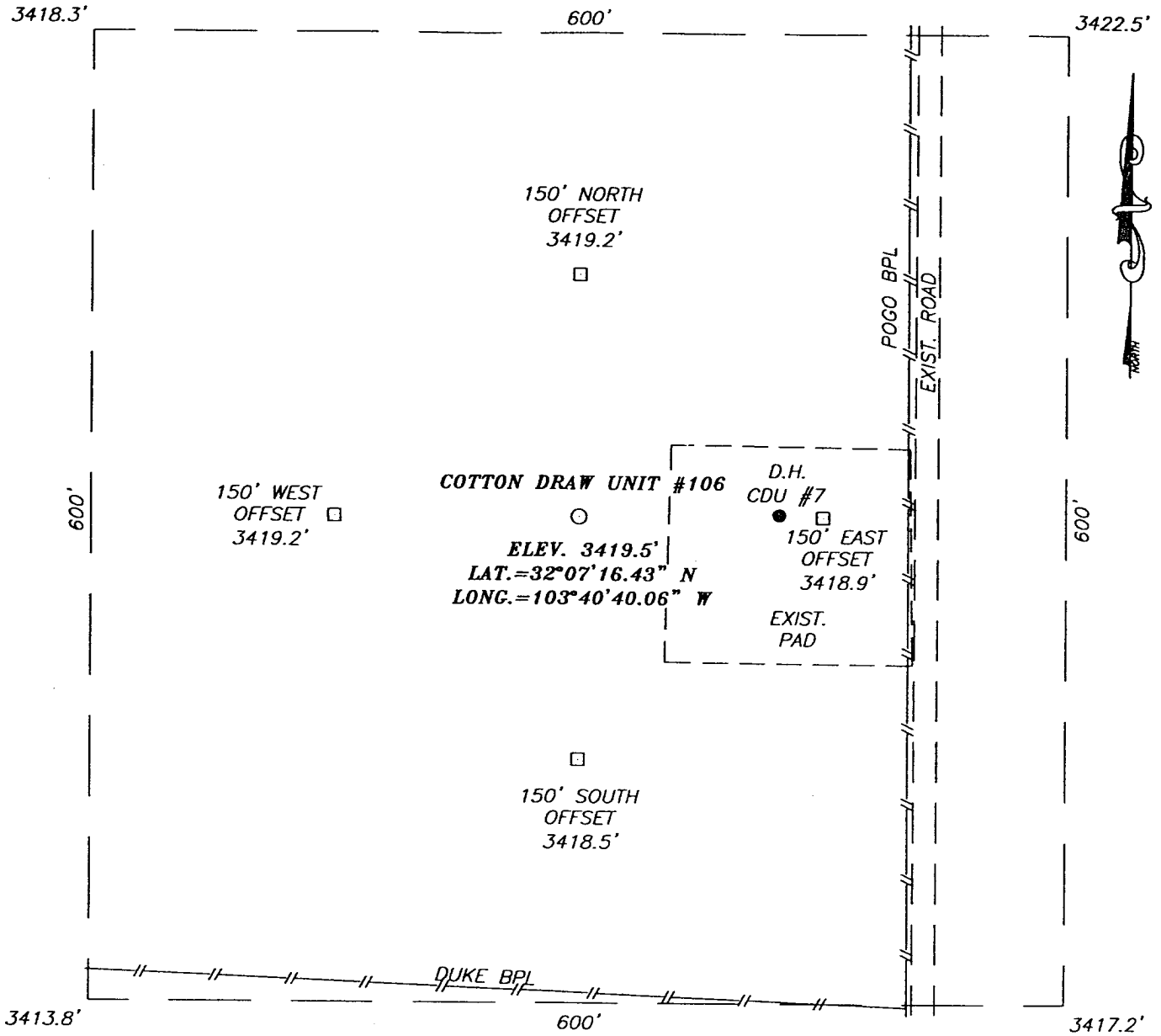
05.11.1861

Certificate No. GARY EIDSON 12641

EXHIBIT "A"

SECTION 21, TOWNSHIP 25 SOUTH, RANGE 32 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #126 AND CO.R D. #1 GO SOUTH ON CO. RD. #1 APPROX. 6.0 MILES. TURN RIGHT AND GO WEST APPROX. 0.2 MILES. TURN LEFT AND GO SOUTH APPROX. 0.2 MILES TO A DRY HOLE MARKER. THIS LOCATION IS APPROX. 150 FEET WEST.

100 0 100 200 Feet

Scale: 1"=100'

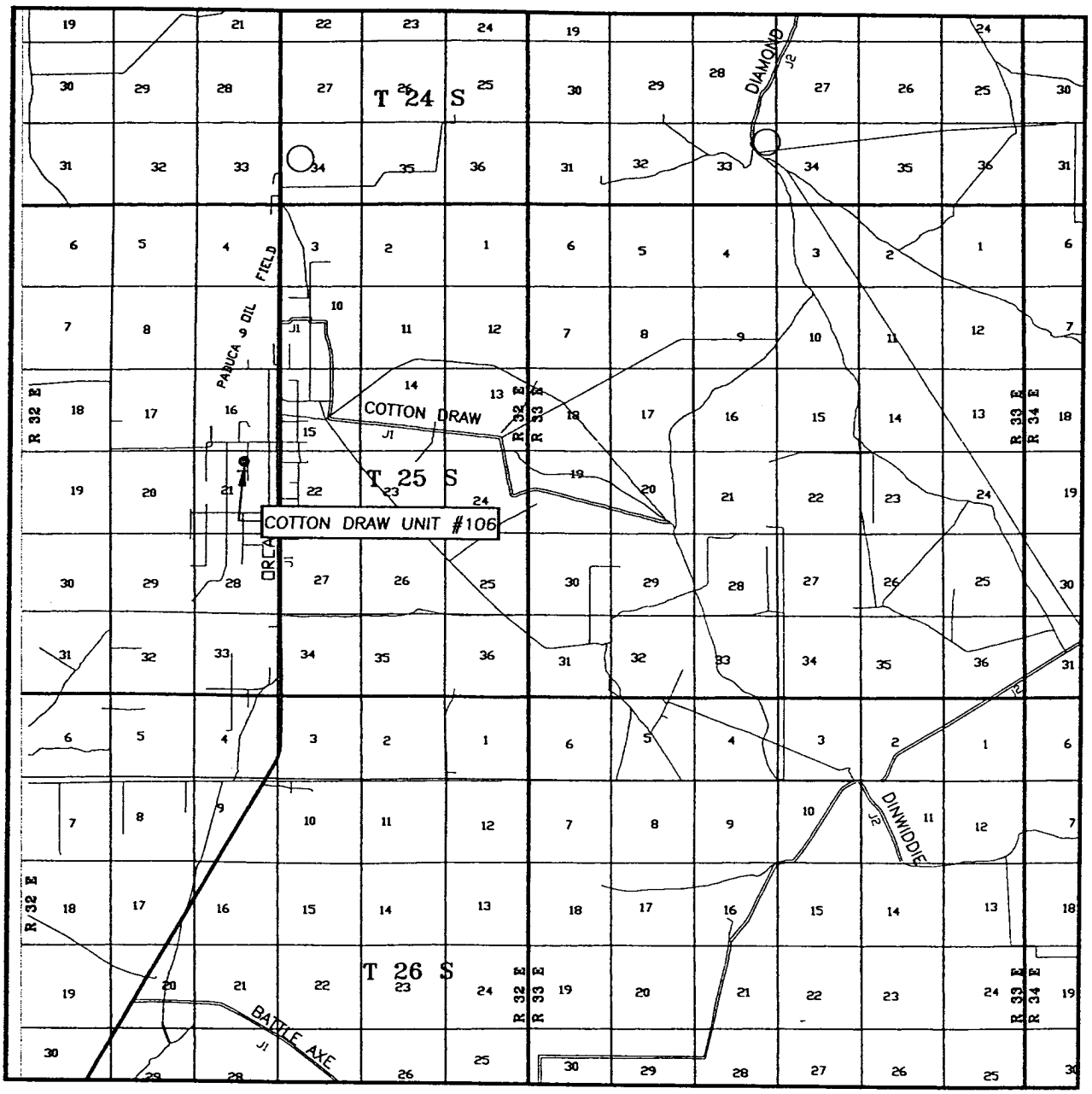
POGO PRODUCING COMPANY

COTTON DRAW UNIT #106 WELL
LOCATED 660 FEET FROM THE SOUTH LINE
AND 2100 FEET FROM THE EAST LINE OF SECTION 21,
TOWNSHIP 25 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 12/1/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.1861	Dr By: LA	Rev 1: N/A	
Date: 12/9/05	Disk: CD#4	05111861	Scale: 1"=100'

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 21 TWP. 25-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 660' FNL & 2100' FEL

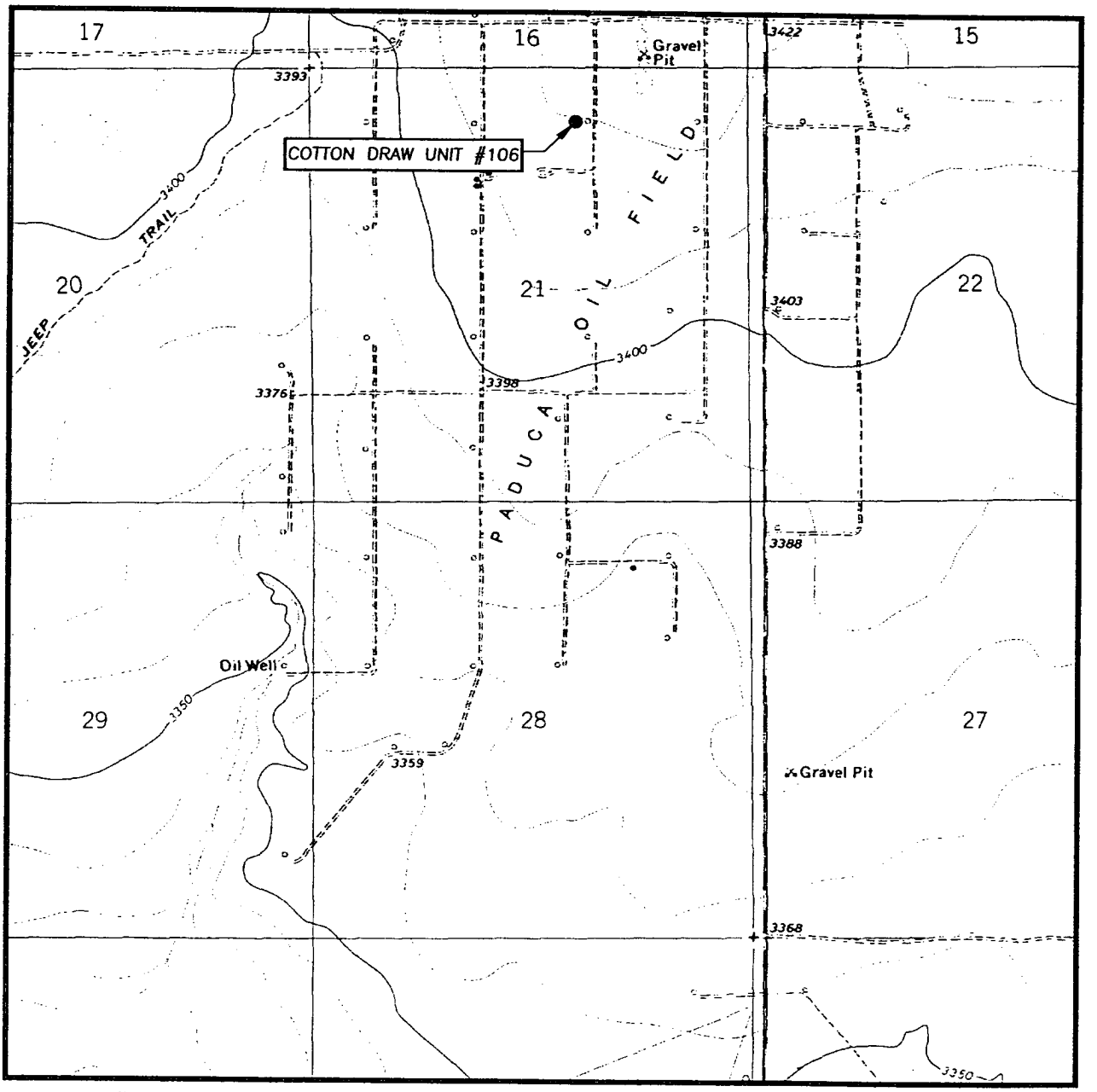
ELEVATION 3420'

OPERATOR POGO PRODUCING COMPANY

LEASE COTTON DRAW UNIT

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
PADUCA BREAKS, N.M. – 10'

SEC. 21 TWP. 25-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 660' FNL & 2100' FEL

ELEVATION 3420'

OPERATOR POGO PRODUCING COMPANY

LEASE COTTON DRAW UNIT

U.S.G.S. TOPOGRAPHIC MAP
PADUCA BREAKS, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

APPLICATION TO DRILL

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

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

1. Location of well: 660' FNL & 2100' FEL SECTION 21 T25S-R32E LEA CO. NM.

2. Ground Elevation above Sea Level: 3420' GR.

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: 5000'

6. Estimated tops of geological markers:

Rustler Anhydrite	753'	Ramsey	4680'
Salt	1072'	Ford	4780'
Lamar Lime	4638'	Olds	4787'
Delaware	4662'	TD	5000'

7. Possible mineral bearing formations:

Delaware	Oil	Olds	Oil
Ramsey	Oil		
Ford	Oil		

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40	20"	NA	NA	NA	Conductor
12¼"	0-815'	8 5/8"	24#	8-R	ST&C	H-40
7 7/8"	0-5000'	5½"	15.5#	8-R	ST&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

9. CEMENTING & CASING SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set 815' of 85/8" 24# J-55 ST&C casing. Cement with 150 Sx. of 65/35/6 Class "C" POX/GEL, tail in with 150 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. Circulate cement to sutface.
5½"	Production	Set 5000' of 5½" 15.5# J-55 ST&C casing. Cement with 475 Sx. of Class "C" Light weight cement with 5% salt, mixed at 12.9 PPG, tail in with 250 Sx. of Class "C" cement + 8# Gilsonite/Sx. Mix at 14.1 PPG circulate cement to surface. Cement volumes may have to be adjusted if caliper logs show more is required to circulate.

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 2000 PSI at total depth. Pogo requests permission to 3rd party test of B.O.P. B.O.P. will be installed after setting the 8 5/8" surface casing, 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
40-815'	8.4-8.7	29-34	NC	Fresh water spud mud use paper to control seepage.
815-5000'	10.0-10.2	29-38	NC*	Brine water add paper to control seepage and high viscosity sweeps to clean hole.

* Water loss control may be necessary in order to run logs and casing. Use starch to control water loss or a Polymer system.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Dual Laterolog, LDT, SNP, MICRO SFL, Gamma Ray, Caliper run from TD Back to 8 5/8" casing shoe.

B. Run Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.

C. No DST's are planned at this time.

D. Cores may be taken at the advice of Geologist.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H^2S in this area. If 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 BHT 130°. Estimated BHP 2000 PSI, and

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 20 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 Delaware 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 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.

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.

SURFACE USE PLAN

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA 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 Eunice New Mexico take State Road 207 South 2.6 miles to Delaware Basin road, turn Right (West) follow Delaware Basin Road to the junction with State Hi-way 128, turn Right (West) go 9.5 miles to CR-1, turn Left (South) go 6 miles turn Right (West go .2 miles, turn Left South) go .2 miles to location on the West side of road.

C. Exhibit "C" shows proposed flowlines, and powerlines that will be constructed.

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 mimimum 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 2 miles North.

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 the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Exhibit "C" shows proposed routes of roads, flowlines and powerlines.

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.

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 encontered 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 completionphases. 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 furture 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
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

11. OTHER INFORMATION:

A. Topography is relatively flat with a slight dip to the Southwest withshallow drainage patterns. Vegetation consists of creosote bush, little leaf sumac, broom-snakeweed, and native grasses.

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 and the minerals are owned by the U.S. Government and used by oil companies for the production of oil and gas.

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 are no domestic dwellings located within one mile of the location.

12. OPERATORS REPRESENTIVE:

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 432-685-8140

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 Joe T. Janica

DATE : 01/18/06

TITLE : Agent

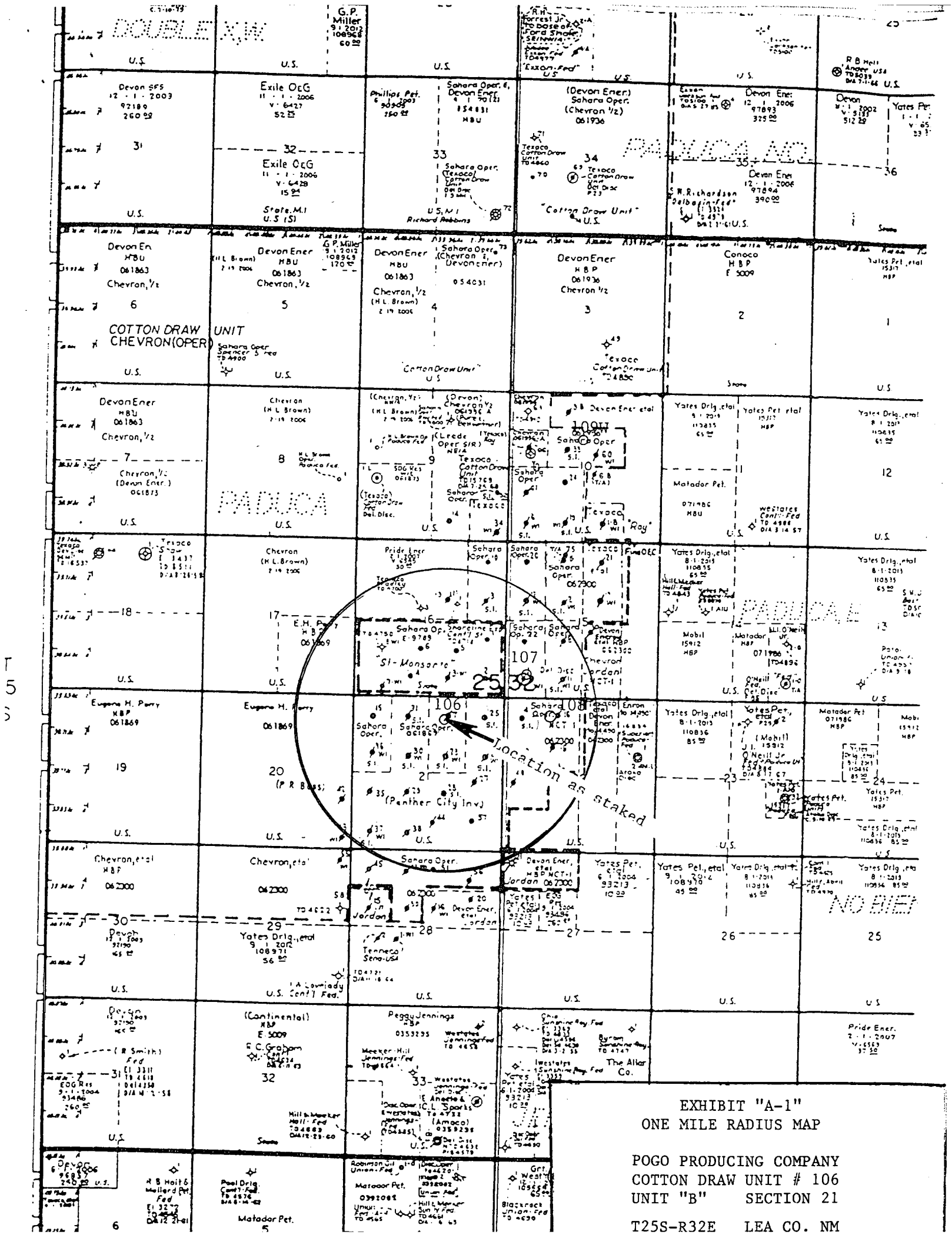
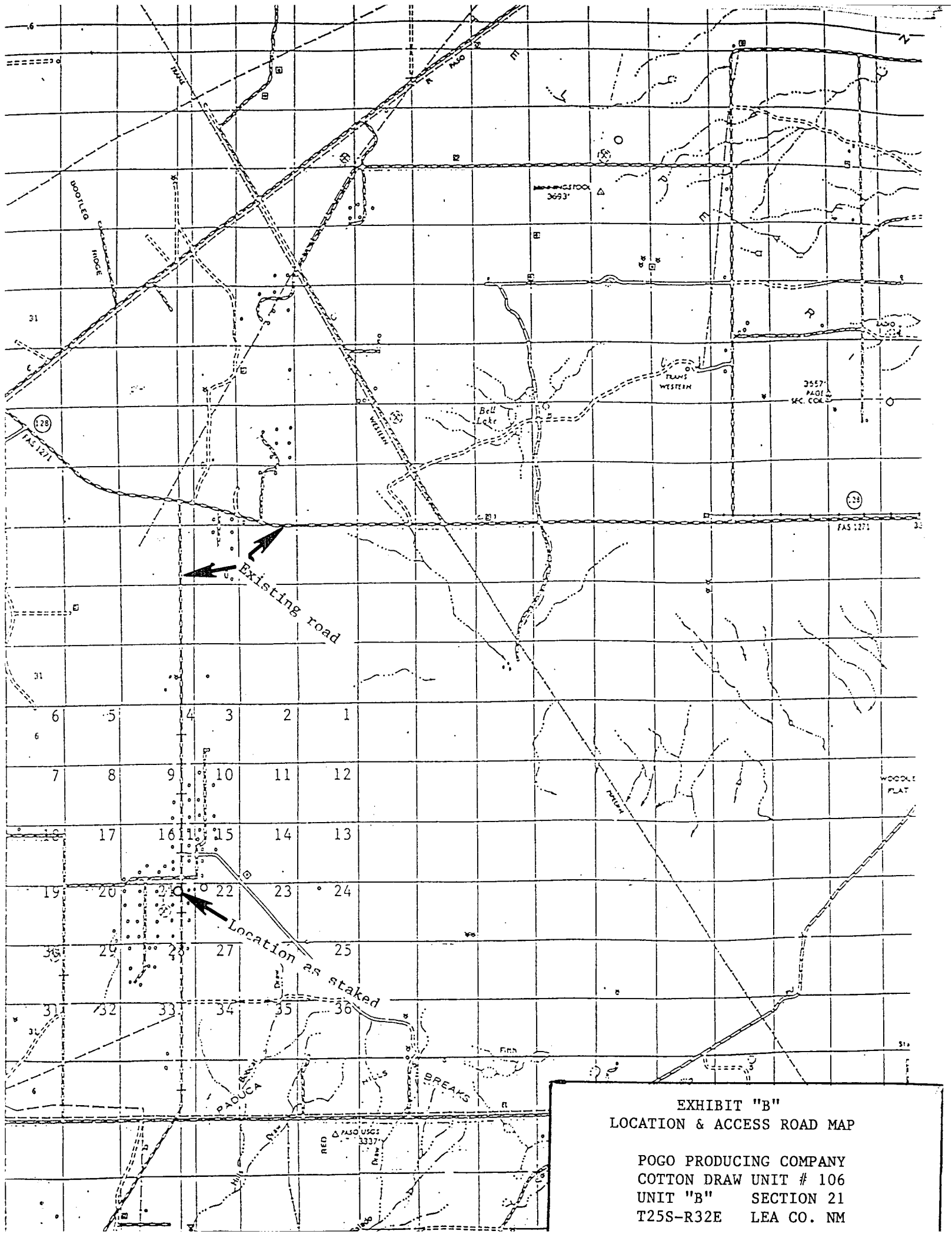


EXHIBIT "A-1"
ONE MILE RADIUS MAP

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21

T25S-R32E LEA CO. NM


Existing road
Location as staked
EXHIBIT "B"
LOCATION & ACCESS ROAD MAP
POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

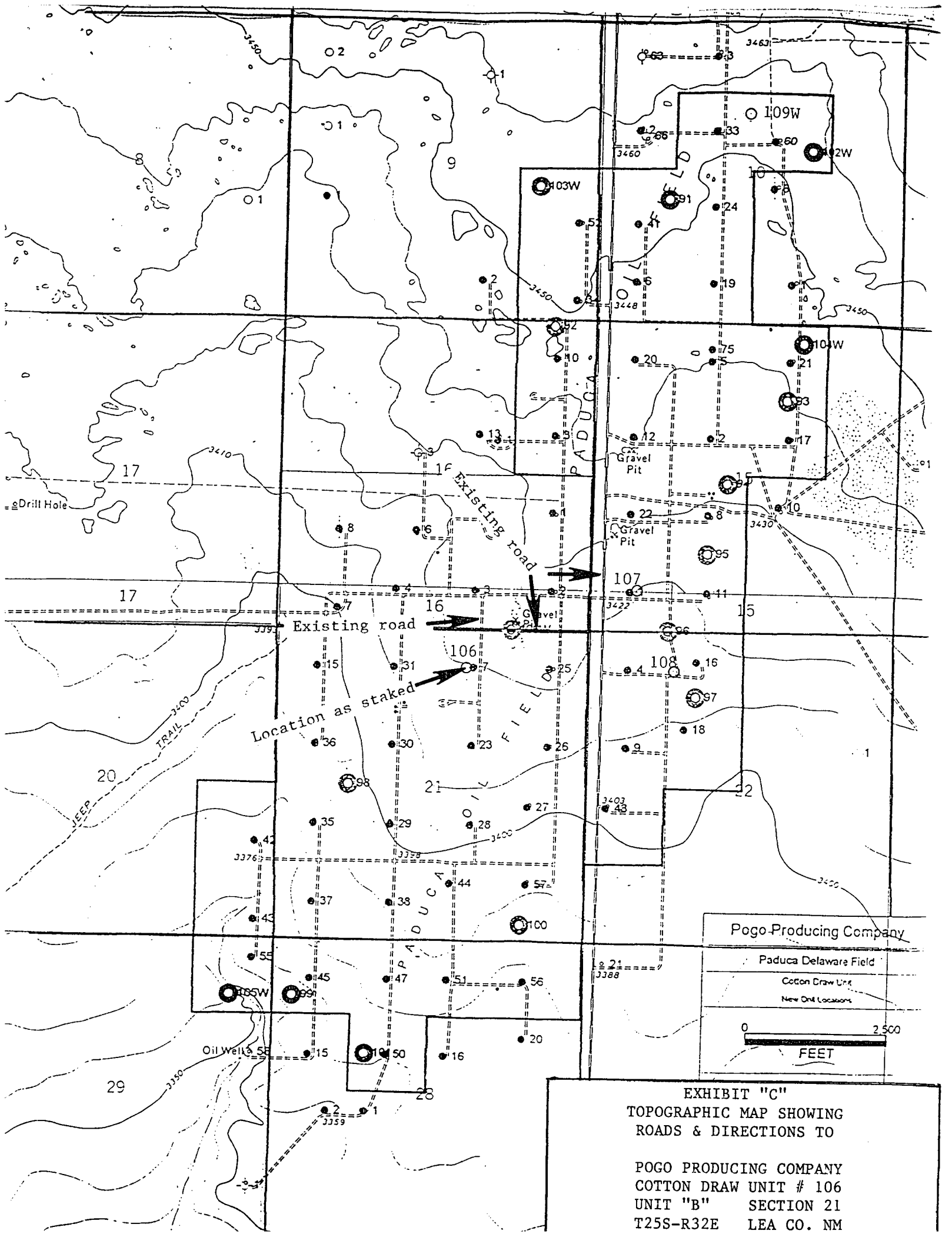


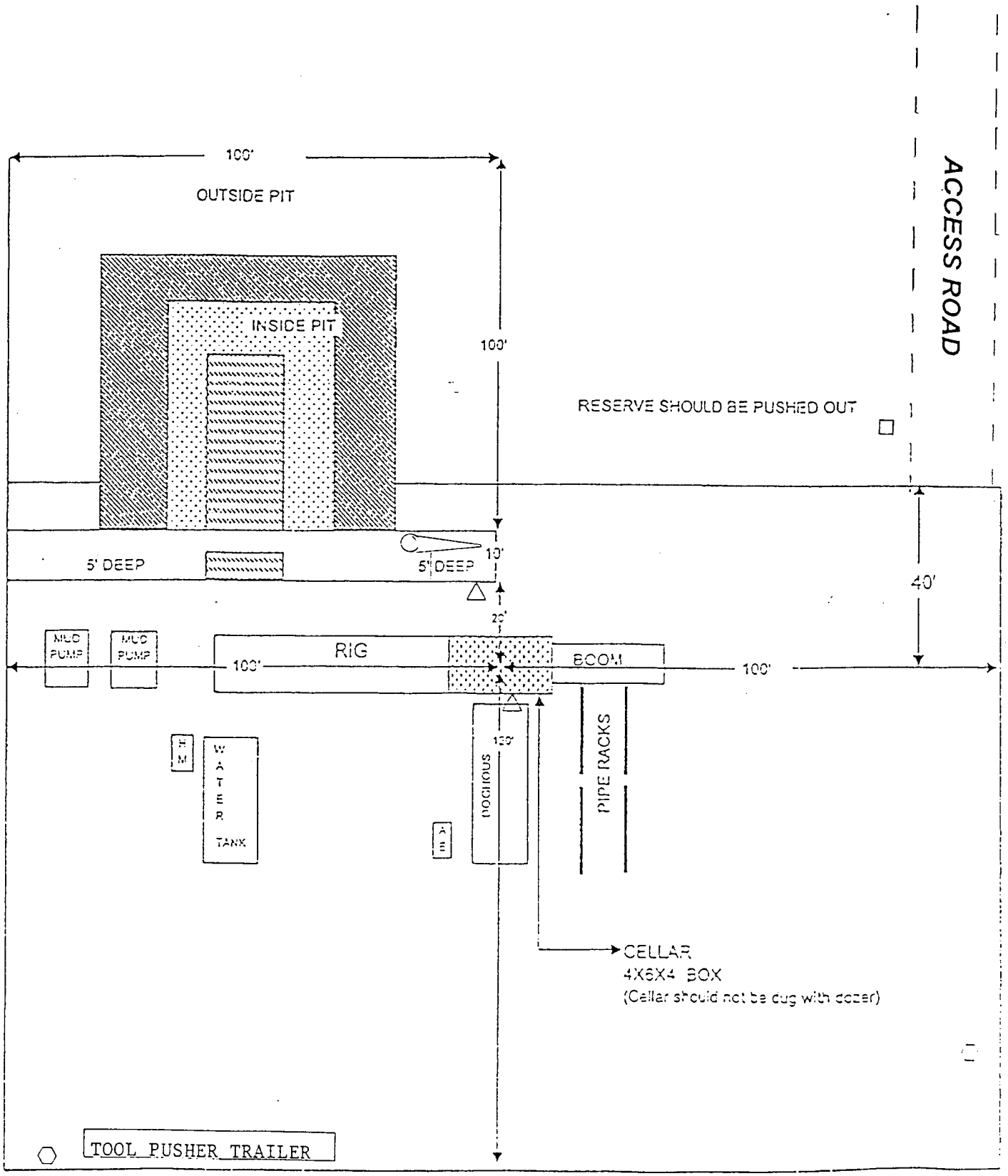
EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

CapStar Drilling, Inc.

LOCATION SPECIFICATIONS AND RIG LAYOUT

FOR EARTH PITS



Cellar can be 4X4X4 if using a screw-on wellhead

Working Pits dug 5' below ground level

> 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

Location Specs

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

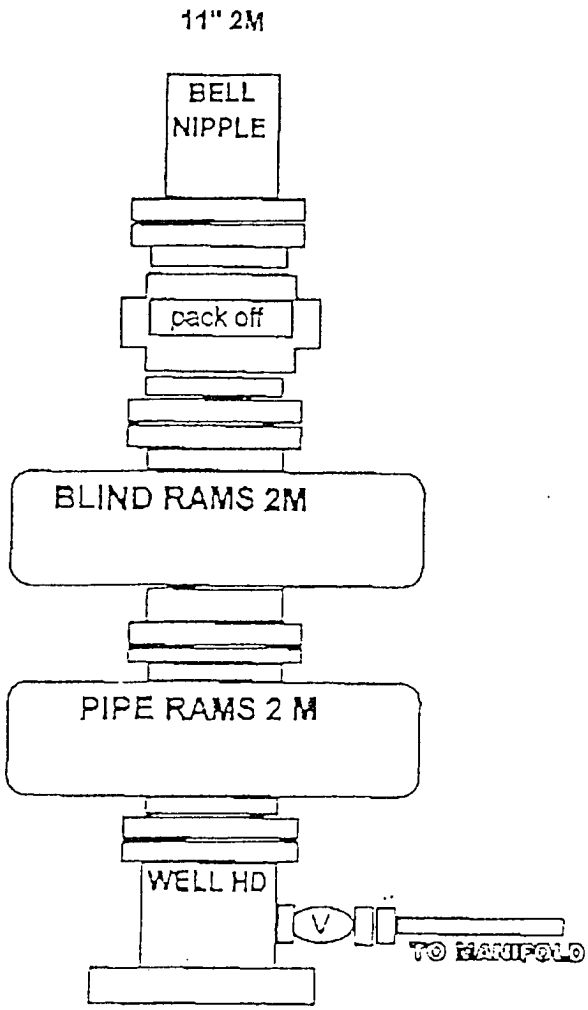


EXHIBIT "E"
SKETCH ON B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

CHOKE MANIFOLD

3000 PSI WP

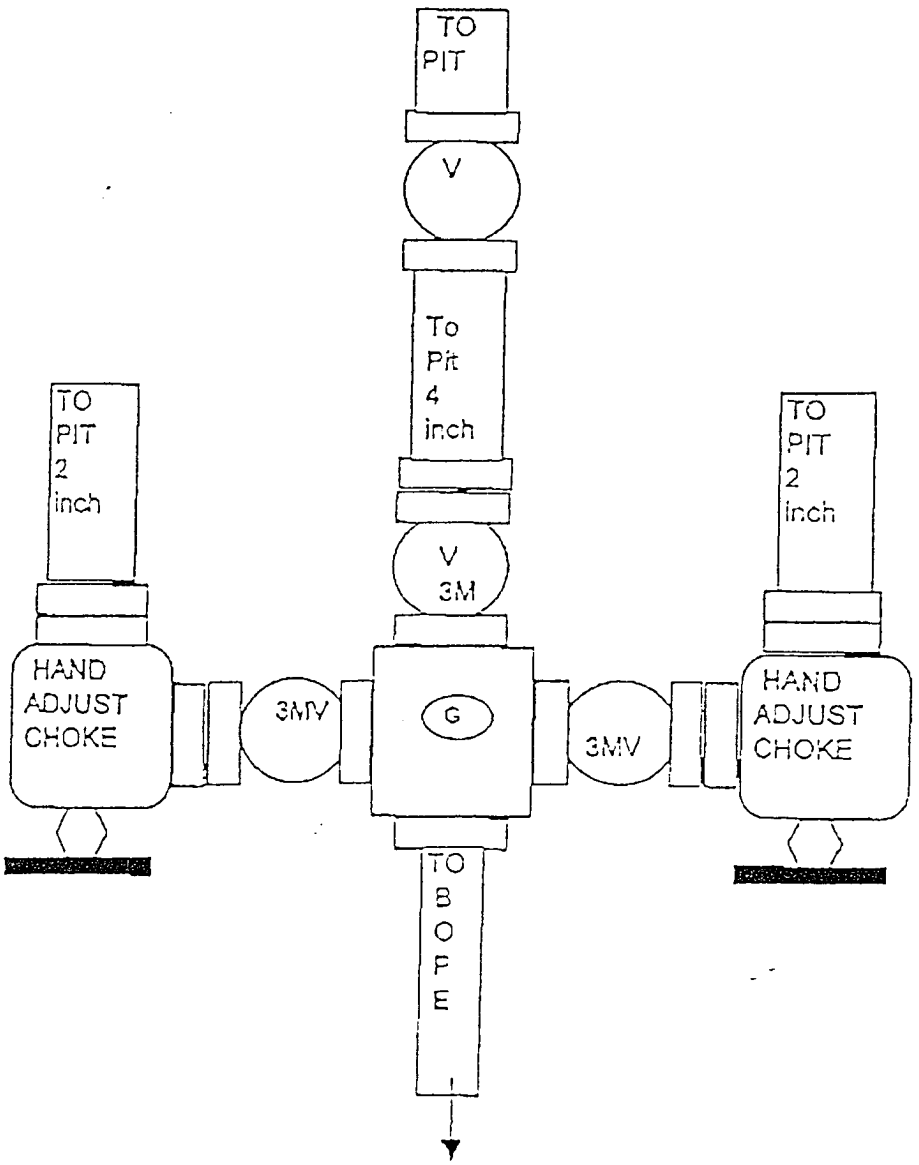


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
COTTON DRAW UNIT # 106
UNIT "B" SECTION 21
T25S-R32E LEA CO. NM

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: POGO Producing Comapany Well Name & #: Cotton Draw Unit # 106
Location 660' F N L & 2100' F E L; Sec. 21, T. 25 S., R. 32 E.
Lease #: LC-061869 County: LEA State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

( ) Lesser Prairie Chicken (stips attached)
( ) San Simon Swale (stips attached)
( ) Flood plain (stips attached)
( ) Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(X) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____inches in depth. Approximately _____cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other.

III. WELL COMPLETION REQUIREMENTS

( ) A Communlitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

( ) A. Seed Mixture 1 (Loamy Sites)
Side Oats Grama (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0

(X) B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (*Sporobolus crptandrus)* 1.0
Sand Lovegrass (*Eragostis trichodes*) 1.0
Plains Bristlegrass (*Setaria magrostachya*) 2.0

( ) C. Seed Mixture 3 (Shallow Sites)
Side oats Grama (*Boute curtipendula*) 1.0

( ) D. Seed Mixture 4 (Gypsum Sites)
Alkali Sacaton (*Sporobollud airoides*) 1.0
Four-Wing Saltbush (*Atriplex canescens*) 5.0

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.
The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

(1) Lined as specified above and

(2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

BLM SERIAL #: LC-061869
COMPANY REFERENCE: POGO Producing Company
WELL # & NAME: Cotton Draw Unit # 106

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The see mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**POGO PRODUCING COMPANY**
Well Name & No.	**106 – COTTON DRAW UNIT**
Location:	**660' FNL & 2100' FEL – SEC 21 – T25S – R32E – LEA COUNTY**
Lease:	**LC-061869**

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:

1. Spudding (Setting of a conductor pipe does not constitute the spudding of a well)
2. Setting and/or Cementing of all casing strings
3. BOPE tests

- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- Lea County call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612

B. **There is no reported occurrence of Hydrogen Sulfide (H2S) gas in Sec 21 – T25S – R32E. The operator will have a H2S Drilling Plan in effect as a precautionary measure.**

C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

II. CASING:

A. The **8-5/8** inch surface casing shall be set at **815** **feet** and cemented to the surface.

1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey (an electronic type temperature survey will be used) or cement bond log shall be run to verify the top of the cement.
2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, or 24 hours in the potash area.
3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours or 500 psi compressive strength (which ever is greater) after bringing cement to surface.
4. If cement falls back, remedial action will be done prior to drilling out that string.

B. The minimum required fill of cement behind the **5-1/2** inch production casing is **circulate cement to the surface.**

C. No "new" hardband drill pipe will be rotated inside the casing. Hardband drill pipe will be considered new until it has a smooth surface.

III. PRESSURE CONTROL:

A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53.

B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface shoe shall be **2M** psi.

C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

1. The tests shall be done by an independent service company.
2. The results of the test shall be reported to the appropriate BLM office.
3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
4. The BOP/BOPE test shall include a low pressure test in accordance with API RP 53. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

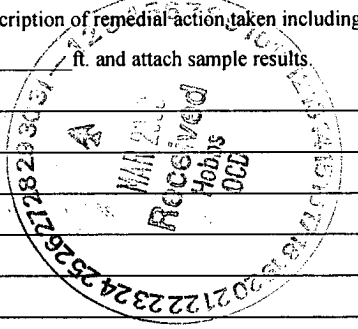
Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: POGO PRODUCING COMPANY Telephone: 432-685-8100 e-mail address: wrightc@pogoproducing.com
Address: P. O. Box 10340, Midland, TX 79702-7340
Facility or well name: Cotton Draw Unit 106 API #: 30-025- 37775 U/L or Qtr/Qtr B Sec 21 T 25S R 32E
County: Lea County Latitude 32:07:16.43N Longitude 103:40:40.06W NAD: 1927 ☒ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Pit Volume 16000 bbl	Volume: ____bbl Type of fluid: ____ Construction material: ____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more X	(20 points) (10 points) (0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No X	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more X	(20 points) (10 points) (0 points) 0
	Ranking Score (Total Points)	0

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☐ If offsite, name of facility____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:



I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date: 03/28/06
Printed Name/Title Cathy Wright, Sr. Eng Tech Signature Cathy Wright

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title PETROLEUM ENGINEER Signature Date: MAR 31 2006

Water Resources

Data Category: Site Information | Geographic Area: New Mexico | go

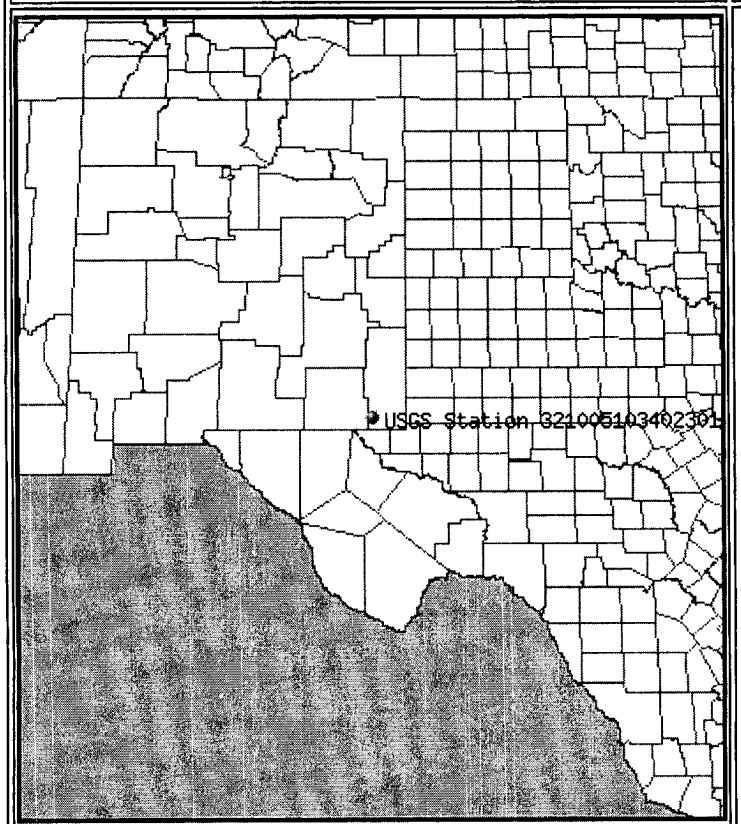
Site Map for New Mexico

USGS 321005103402301 24S.32E.33.42241

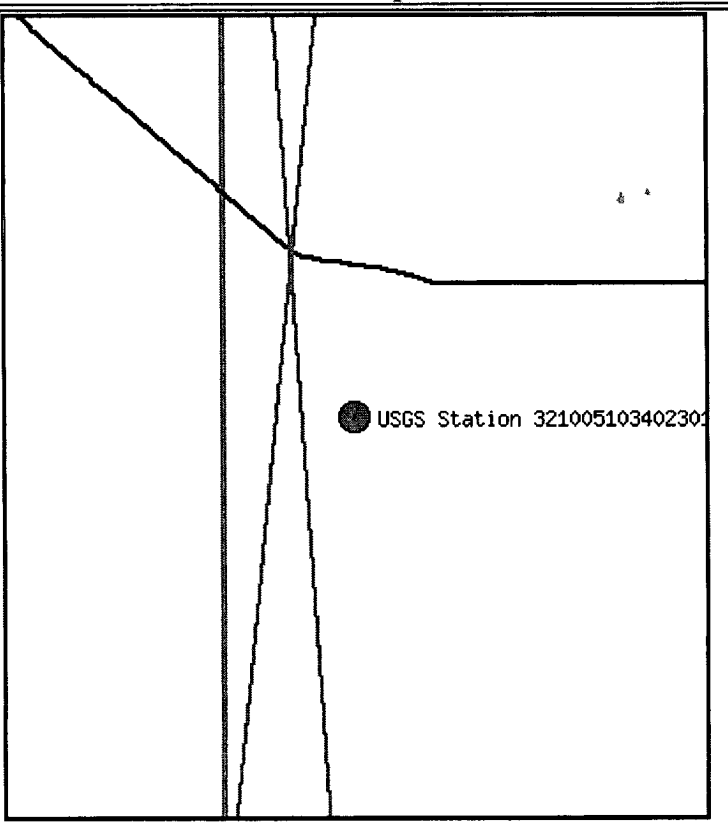
Available data for this site site map GO

Lea County, New Mexico
Hydrologic Unit Code 13070001
Latitude 32°10'05", Longitude 103°40'23" NAD27
Land-surface elevation 3,499.00 feet above sea level NGVD29
The depth of the well is 367 feet below land surface.
This well is completed in the CHINLE FORMATION (231CHNL) local aquifer.

Location of the site in New Mexico.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X. 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data New Mexico NWISWeb Data Inquiries
Feedback on this website New Mexico NWISWeb Maintainer

Top
Explanation of terms

NWIS Site Inventory for New Mexico: Site Map
http://waterdata.usgs.gov/nm/nwis/nwismap?

Retrieved on 2006-03-28 12:01:11 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of New Mexico

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321005103402301

Save file of selected sites to local disk for future upload

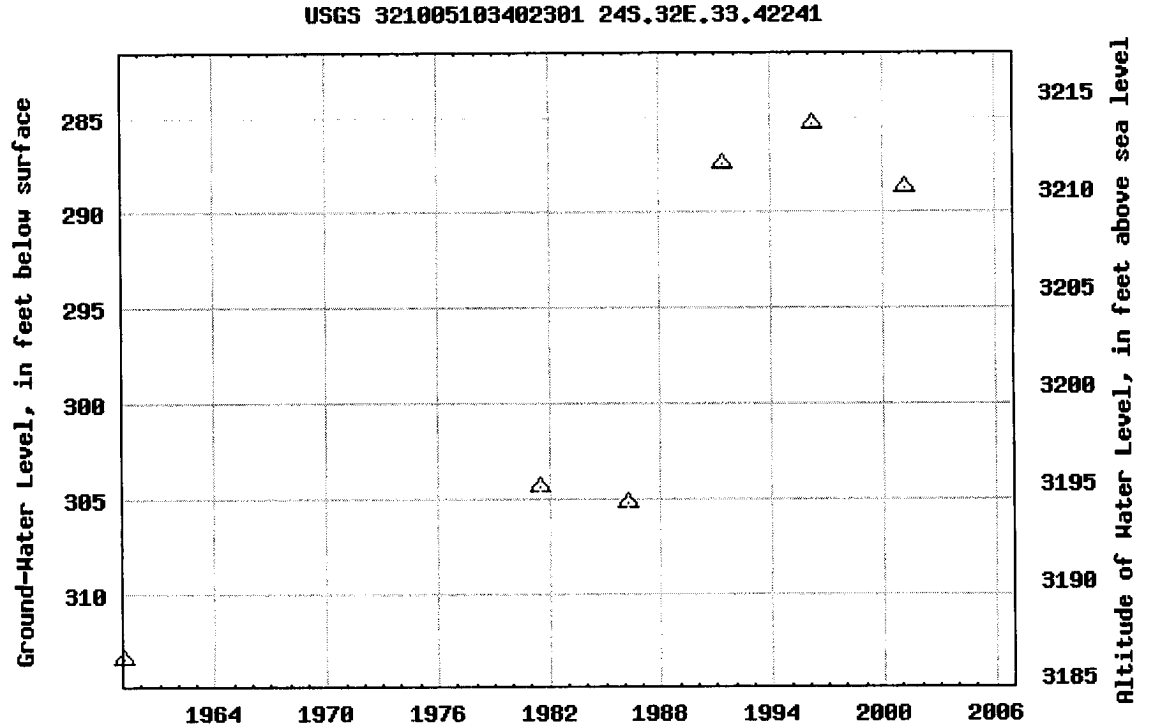
USGS 321005103402301 24S.32E.33.42241

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070001
Latitude 32°10'05", Longitude 103°40'23" NAD27
Land-surface elevation 3,499.00 feet above sea level NGVD29
The depth of the well is 367 feet below land surface.
This well is completed in the CHINLE FORMATION (231CHNL) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.
Download a presentation-quality graph

Questions about data New Mexico NWISWeb Data Inquiries
Feedback on this website New Mexico NWISWeb Maintainer

Top
Explanation of terms

Great Circle Calculator.

By Ed Williams

You need Javascript enabled if you want this page to do anything useful! For Netscape, it's under Options/Network Preferences/Languages.

Compute true course and distance between points.

Enter lat/lon of points, select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

Note that if either point is very close to a pole, the course may be inaccurate, because of its extreme sensitivity to position and inevitable rounding error.

Input Data

Lat1		Lon1	
32:10:05	N	103:40:23	W
Lat2		**Lon2**	
32:07:16.43	N	103:40:40.06	W

Output

Course 1-2	Course 2-1	Distance
184.898994	4.89647358	2.81979599

Distance Units: nm Earth model: Spherical (1'=1nm)

Compute Reset

Compute lat/lon given radial and distance from a known point

Enter lat/lon of initial point, true course and distance. Select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

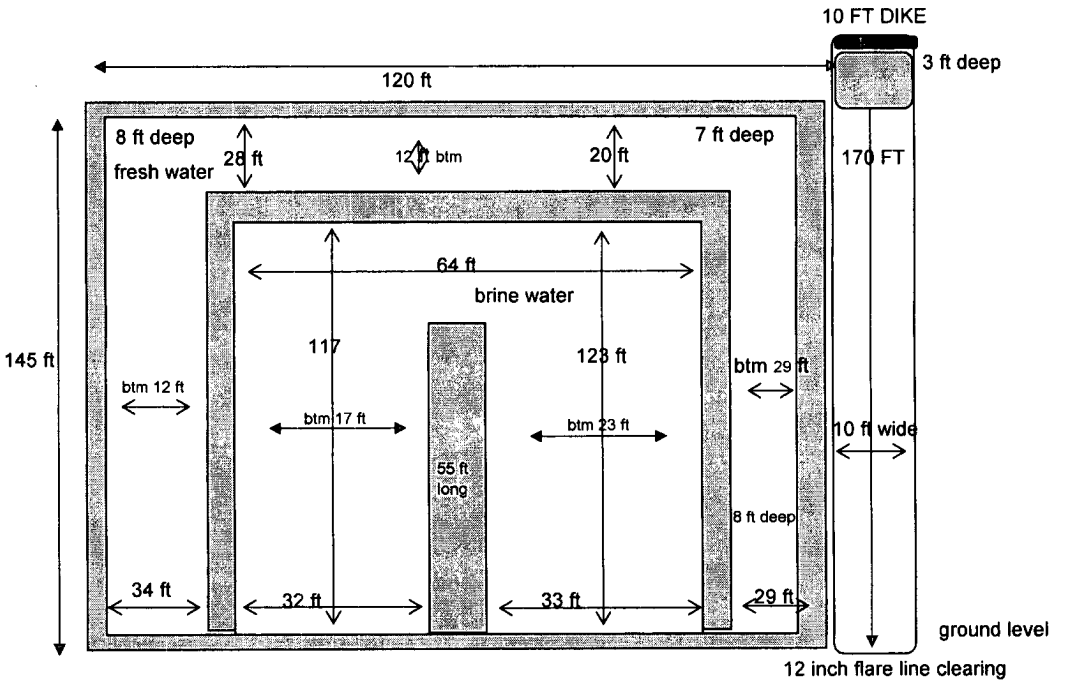
Note that the starting point cannot be a pole.

Input data

Lat1		Lon1	
0:00.00	N	0:00.00	W
Course 1-2		Distance 1-2	
360		0.0	

POGO Producing Company
Cotton Draw Unit 106
Approximate Pit Dimensions

B/21/25S/32E, Lea County, New Mexico



PIT NOTES:

Pit will be lined with 12 mil Black plastic w/ UV protection.
Pit walls are 6 ft to 8 ft wide.
Pit is 8 ft deep below ground level plus 2 ft walls
Pit walls are 2 ft above ground level.
Caliches mined from pit used to make Well Pad.
Fresh Water volume to ground level = ± 7950 bbls
Brine Water volume to ground level = ± 7730 bbls
12 inch Flare line laid on gradual descending graded ROW away from rig to avoid fluid trapping
Fresh water well = (Nad 27) 32° 10' 05" N & 103° 40' 23" W "Published data"
This well produces from a depth greater than 100 ft.

Pit equals approx 16000 bbls

The sender of this message has requested a read receipt. Click here to send a receipt.

Mull, Donna, EMNRD

From: Phillips, Dorothy, EMNRD **Sent:** Fri 3/31/2006 10:14 AM
To: Mull, Donna, EMNRD
Cc:
Subject: RE: Financial Assurance Requirement
Attachments:

Nione of these appear on Jane's list and all but Roca have blanket bonds. Roca only has one well bonds for 5 wells.

From: Mull, Donna, EMNRD
Sent: Friday, March 31, 2006 7:54 AM
To: Phillips, Dorothy, EMNRD
Cc: Macquesten, Gail, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Financial Assurance Requirement

Dorothy, Is the Financial Assurance Requirements OK for these Operators?

Range Operating NM Inc (224588)
BTA Oil Producers (3002)
Marbob Energy Corp (14049)
ROCA Operating Inc (152374)
McGowan Working Partners Inc (220397)
Apache Corp (873)
Manzano LLC (231429)
Pogo Producing Co (17891)

Please let me know. Thanks and have a nice day. Donna