

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Expires: February 20, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☒

CAS WELL ☐

OTHER

2. NAME OF OPERATOR

POGO PRODUCING COMPANY 17891 (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

990' FWL & 820' FSL SECTION 22 T24S-R29E EDDY CO. NM

At proposed prod. zone

660' FSL & 2310' FEL SECTION 21 T24S-R29E EDDY CO. NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

Approximately 8 miles East of Malaga New Mexico

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

820'

16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED TO THIS WELL

120

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

990'

19. PROPOSED DEPTH

MD-10,467'

20. ROTARY OR CABLE TOOLS

ROTARY

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

2931' GR.

22. APPROX. DATE WORK WILL START*

WHEN APPROVED

23. CARLSBAD CONTROLLED WATER BASIN PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	Conductor	NA	40"	Cement to surface W/Redi-mix.
17 1/2"	H-40 13 3/8"	48#	550'	550 Sx. Circulate cement
12 1/4"	J-55 9 5/8"	36#	2900'	1000 Sx. " "
8 1/2" & 7 7/8"	N-80 5 1/2"	17#	10,467'	1500 Sx. Est TOC 2000' FS

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 550'. Run and set 550' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
3. Drill 12 1/4" hole to 2900'. Run and set 2900' of 9 5/8" 36# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" cement + additives, circulate cement to surface.
4. Drill 8 1/2" hole to 8200'. Run logs and plug back hole to 7225' for kick off point, then change bit size to 7 7/8" and drill to TD of 10,467±' of 5 1/2" 17# N-80 LT&C, & BTC casing. Cement with 1500 Sx. of Class "C" cement + additives, estimate top of cement 2000' from surface.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed 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.

SIGNATURE *Dee. Janice* TITLE Agent

DATE 09/01/06

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease.
CONDITIONS OF APPROVAL IF ANY:

/s/ Tony J. Herrell

FIELD MANAGER

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

State of New Mexico

DISTRICT I

1625 W. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

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

OIL CONSERVATION DIVISION

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

L-06-07

9/05/06

Form C-102

Revised October 12, 2005

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 96473	Pool Name PIERCE CROSSING-BONE SPRING East
Property Code	Property Name GAINES "22" FEDERAL	Well Number 1
OGRID No. 017891	Operator Name POGO PRODUCING COMPANY	Elevation 2931'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	22	24-S	29-E		820	SOUTH	990	WEST	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
0	21	24-S	29-E		660	SOUTH	2310	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
120			

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

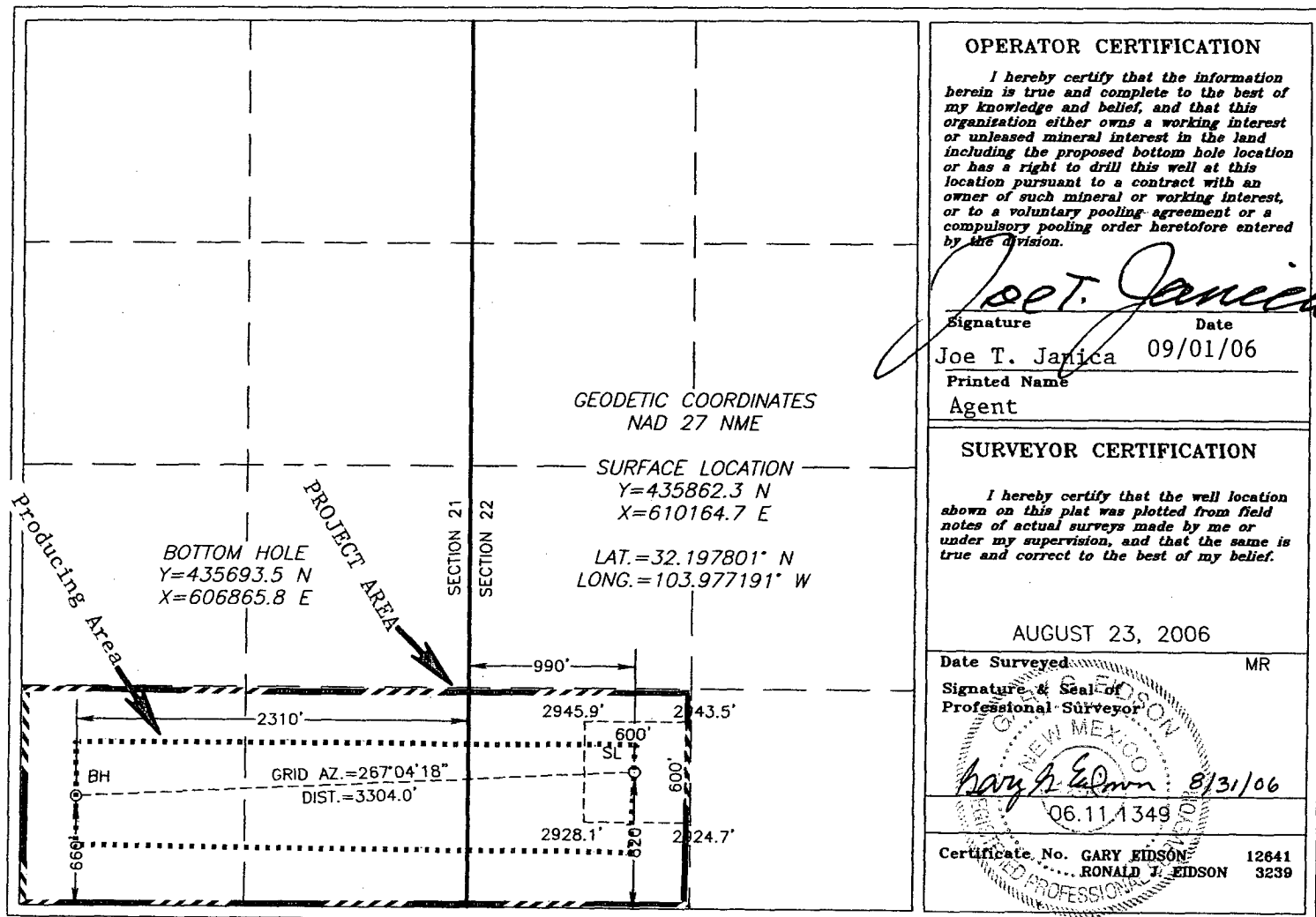
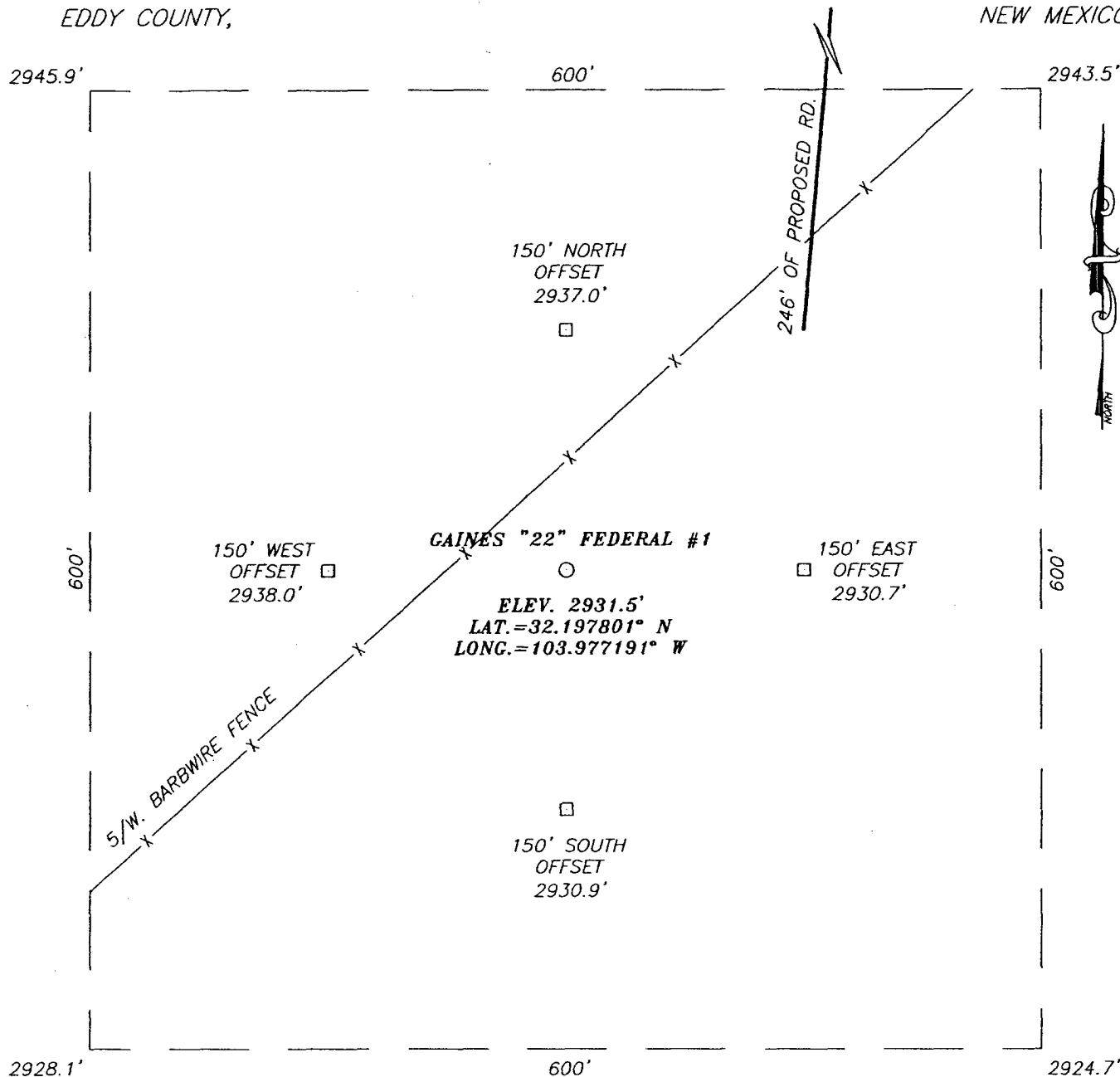


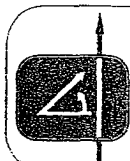
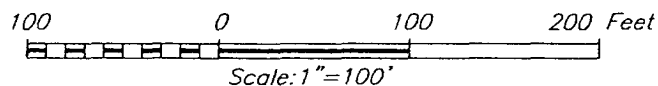
EXHIBIT "A"

SECTION 22, TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF McDONALD RD. AND CO. RD. #788A, FOLLOW McDONALD RD. SOUTHEASTERLY AND NORTHERLY APPROX. 2.5 TO A "Y" INTERSECTION. MILES. TURN LEFT AND GO WEST APPROX. 300 FEET. TURN RIGHT AND GO NORTH APPROX. 0.5 MILES. THIS LOCATION IS APPROX. 600 FEET EAST.



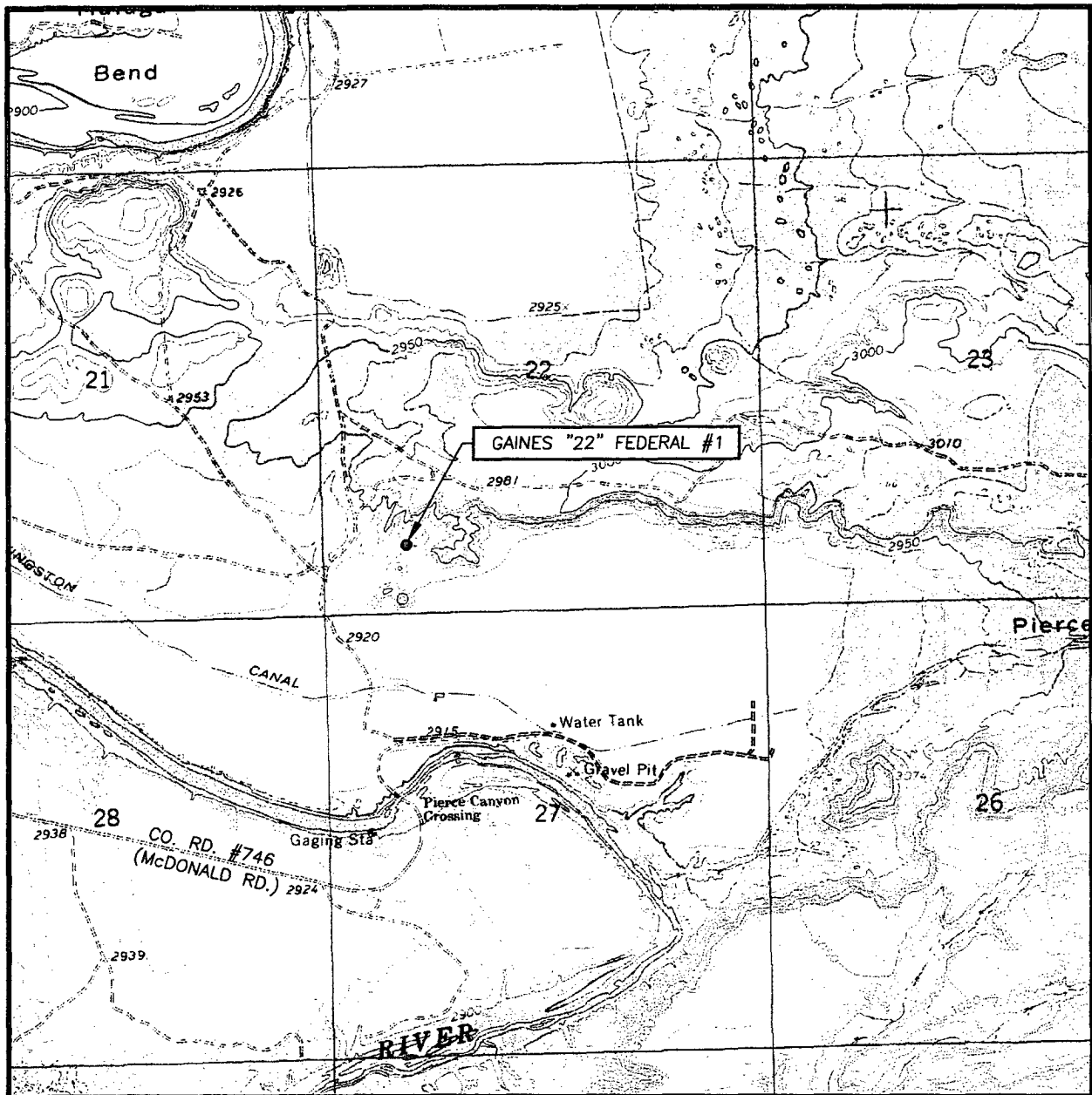
PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

POGO PRODUCING COMPANY

GAINES "22" FEDERAL #1
 LOCATED 820 FEET FROM THE SOUTH LINE
 AND 990 FEET FROM THE WEST LINE OF SECTION 22,
 TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 08/23/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.1349	Dr By: M.R.
Date: 08/30/06	Disk: CD#6
06111349	Scale: 1"=100'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
PIERCE CANYON, N.M. - 10'

SEC. 22 TWP. 24-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

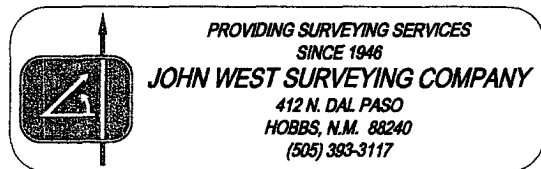
DESCRIPTION 820' FSL & 990' FWL

ELEVATION 2931'

POGO
OPERATOR PRODUCING COMPANY

LEASE GAINES "22" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
PIERCE CANYON, N.M.



APPLICATION TO DRILL

POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E 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: 990' FWL & 820' FSL SECTION 22 T24S-R29E 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: 10,467' MD TVD-8200'

6. Estimated tops of geological markers:

Basal Anhydrite	2720'	Manzanita	3980'
Delaware Lime	2930'	Brushy Canyon	5050'
Bell Canyon	2960'	Bone Spring	6700'
Cherry Canyon	3830'	1st Bone Spring Sd	7700'

7. Possible mineral bearing formations:

Brushy Canyon	5050'
Bone Spring	7700'

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40	20"	NA	NA	NA	Conductor
17½"	0-550'	13 3/8"	48#	8-R	ST&C	H-40
12¼"	0-2900'	9 5/8"	36#	8-R	ST&C	J-55
8½" & 7 7/8"	0-10,467'±	5½"	17#	8-R & Butt.	LT&C BTC	N-80

APPLICATION TO DRILL

POGO PRODUCING COMPANY
 GAINES "22" FEDERAL #1
 UNIT "M" SECTION 22
 T24S-R29E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 550' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
9 5/8"	Intermediate	Set 2900' of 9 5/8" 36# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" cement + additives, circulate cement to surface.
5 1/2"	Production	Set 10,467' of 5 1/2" casing as follows: 3467' of 5 1/2" 17# N-80 BTC, 7000' of 5 1/2" 17# N-80 LT&C casing. Cement with 1600 Sx. of Class "C" cement + additives, estimate top of cement 2000' from 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 nipped up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once each 24 Hr. period and the blind rams will be operated when the drill pipe is out of on trips. Full opening stabbing valve and upper kelly cock will be available in case if needed. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 3000 PSI choke manifold with adjustable chokes. No abnormal pressures or temperatures are expected while drilling this well. No problems in offset wells.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-550'	8.4-8.7	29-30	NC	Fresh water use paper to control seepage.
550-2900'	10.0-10.2	29-38	NC	Brine water use paper to control seepage and use high viscosity sweeps to clean hole.
2900-10,467'	8.4-8.7	29-40	NC*	Drill with fresh water Gel using high viscosity sweeps to clean hole, if water loss is needed use a Dris-Pac or like system.

* Water loss control may be required in order to run logs and or casing.

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 water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E EDDY CO. NM

12. LOGGING, CORING, & TESTING PROGRAM:

- A. Open hole logs: Dual Latelog, SNP, LDT, MSFL, Gamma Ray and Caliper from 8200' back to 9 5/8" casing shoe.
- B. Run Gamma Ray Neutron from 9 5/8" casing shoe back to surface.
- C. Mud logger may be rigged up on hole any time after 2900'.
- D. 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 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 4200 PSI, and Estimated BHT 165°.

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 42 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"
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 separator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E 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 Malaga New Mexico take CR-720 (Duarte Road) East for 1.3 miles to CR-746 (McDonald Road) follow CR-726 5.8 miles to Pecos River, continue on CR-746 for .7 miles to location on the East side of road.
 - C. Exhibit "C" shows the proposed roads, powerlines if required and flow-lines that will be required to produce this well.
2. PLANNED ACCESS ROADS:
 - 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. Turn outs 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"

A. Water wells	-	None known
B. Disposal wells	-	None known
C. Drilling wells	-	None Known
D. Producing wells	-	As shown on Exhibit "A-1"
E. Abandoned wells	-	As shown on Exhibit "A-1"

SURFACE USE PLAN

POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E 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. 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 quarters will be drained into holes with a minimum 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 further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits 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
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E 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.

SURFACE USE PLAN

POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT M, SECTION 22
T24S, R29E, EDDY COUNTY, NM

11. OTHER INFORMATION:

- A. Topography consists of limestone hills with shallow canyons for drainage to the Pecos River to the West. Vegetation consists of mesquite, snakeweed and native grasses.
- B. The surface (I.E. surface location) is owned by private parties, with the minerals to the extent of the lateral described hereinabove, being owned by the U. S. Department of Interior as to the SW/4 SW/4 Section 22 (NM13996), and private parties as to the S/2 SE/4 Section 21. Also, Pogo has reached an agreement with Tyson and Leslie Mahaffey as to the use of their surface for drilling purposes.
- C. An archaeological survey will be conducted on the roads and location and the report will be filed with the Carlsbad Field Office of The Bureau of Land Management.
- D. There is a dwelling approximately 1 mile South of the location.

12. OPERATORS REPRESENTITIVES:

Before Construction:

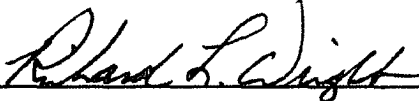
Tierra Exploration, Inc.
P. O. Box 2188
Hobbs, NM
Office Ph. 505-391-8503
Joe T. Janica

During and after construction

Pogo Producing Company
P. O. Box 10340
Midland, TX 79702-7340
Office Ph. 432-685-8100
Richard L. Wright 432-685-8140

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 familiar 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 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 report.

NAME:


Richard L. Wright

DATE:

09/07/06

TITLE:

Division Operations Manager

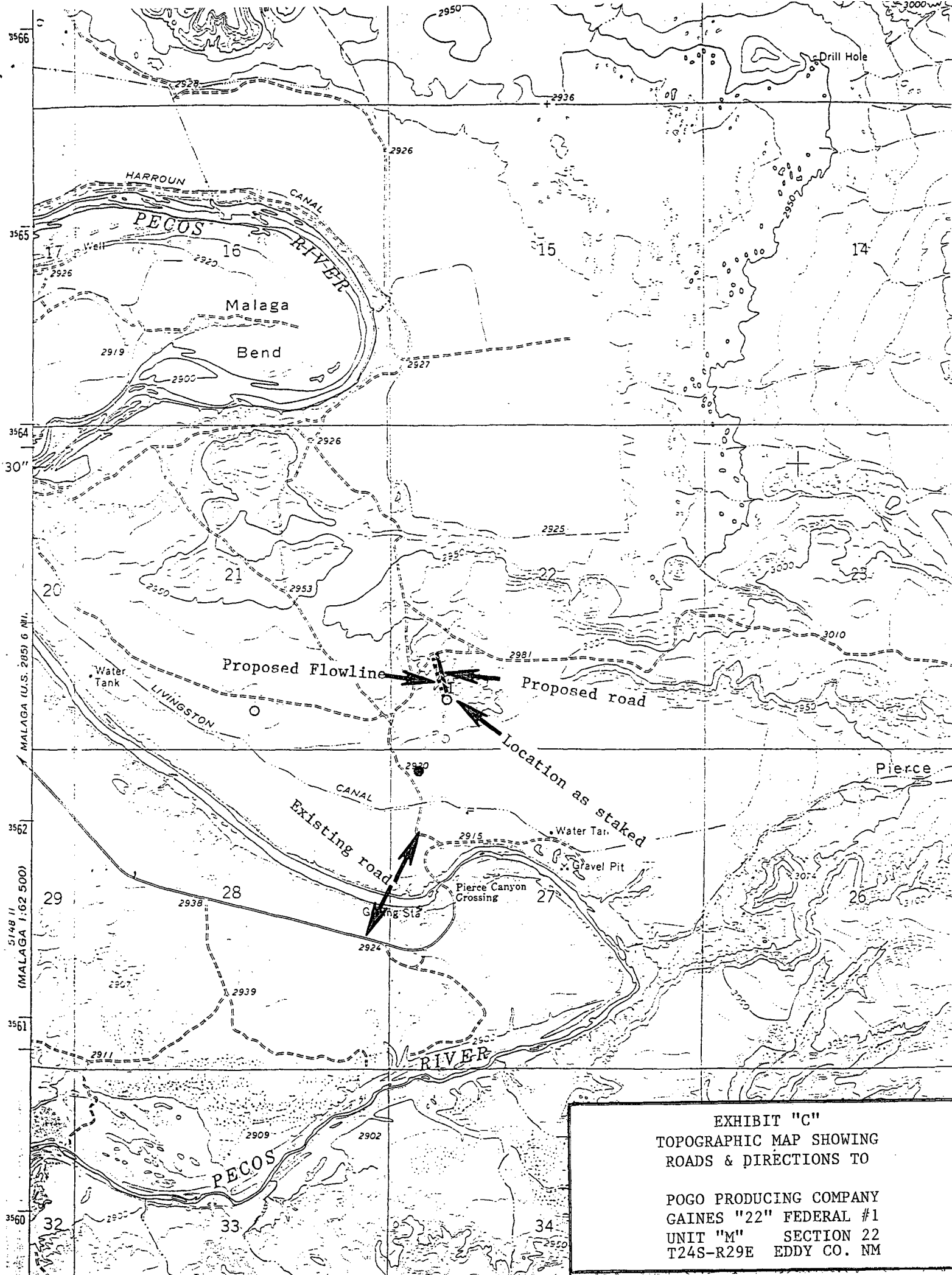
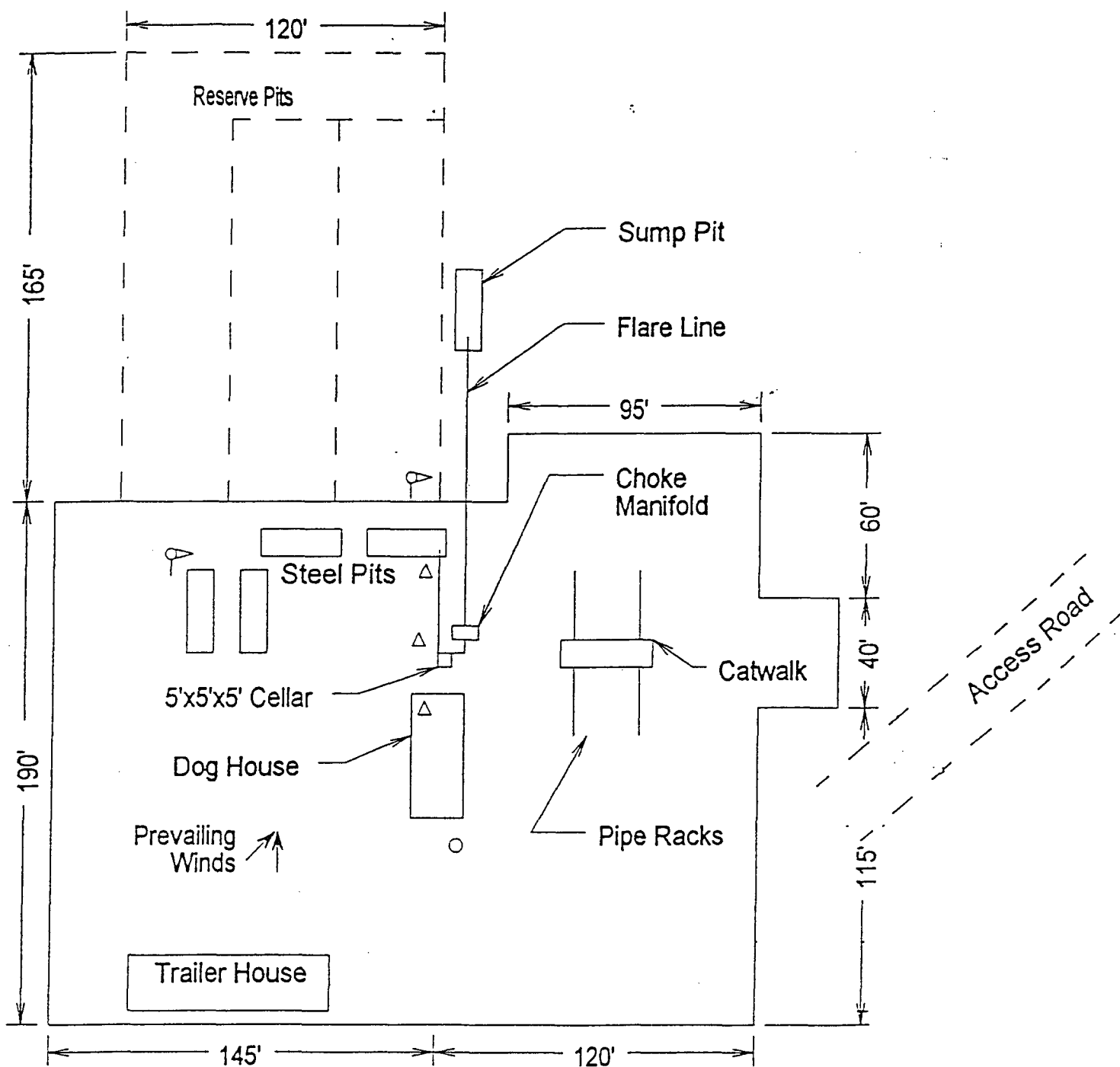


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

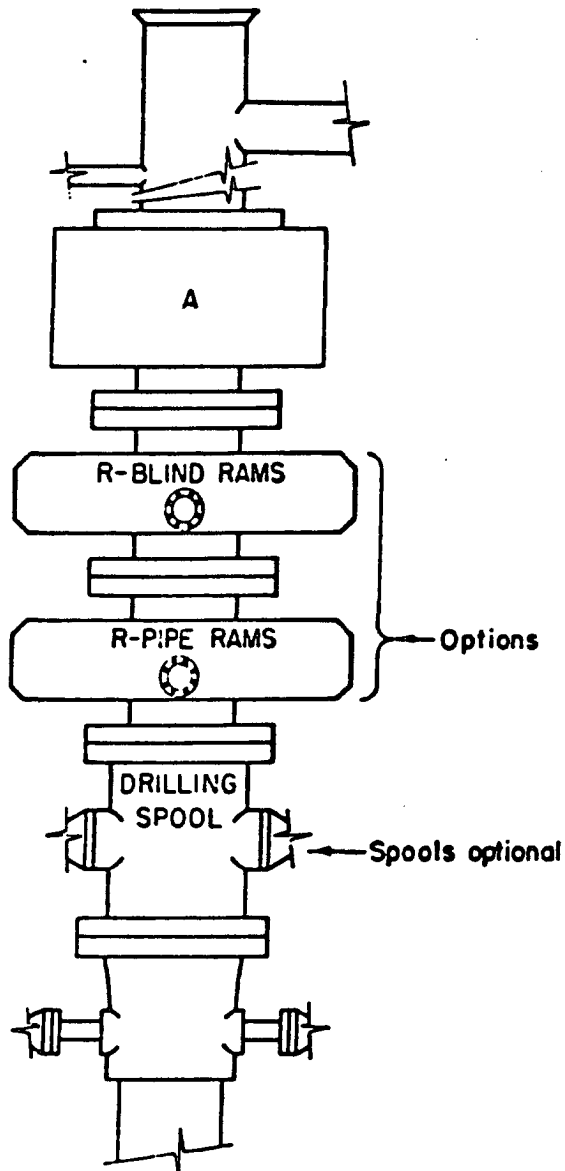
POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E EDDY CO. NM



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

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E EDDY CO. NM

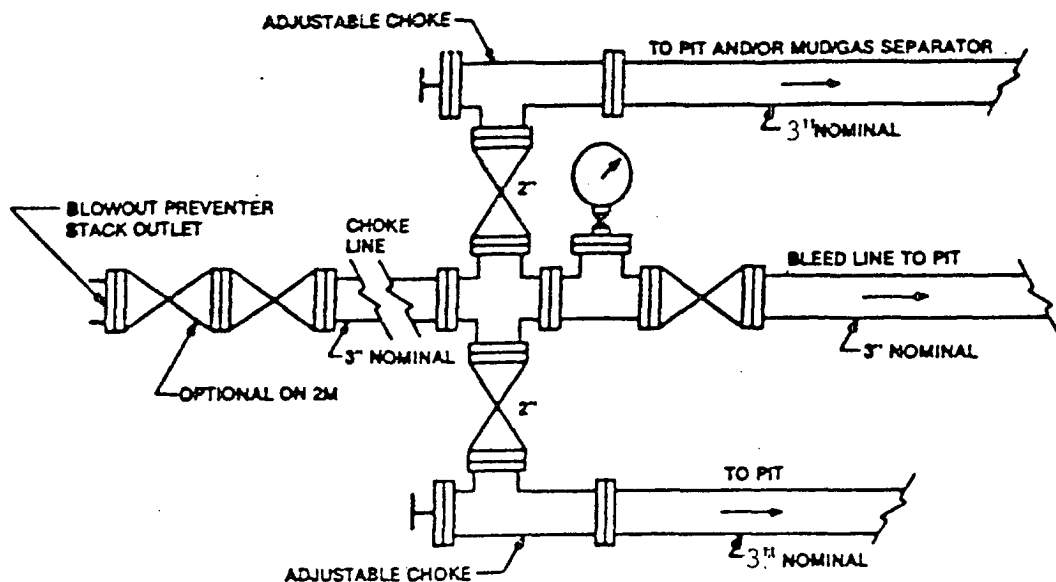


ARRANGEMENT SRRA

SERIES 900 3000 PSI WP

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

POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

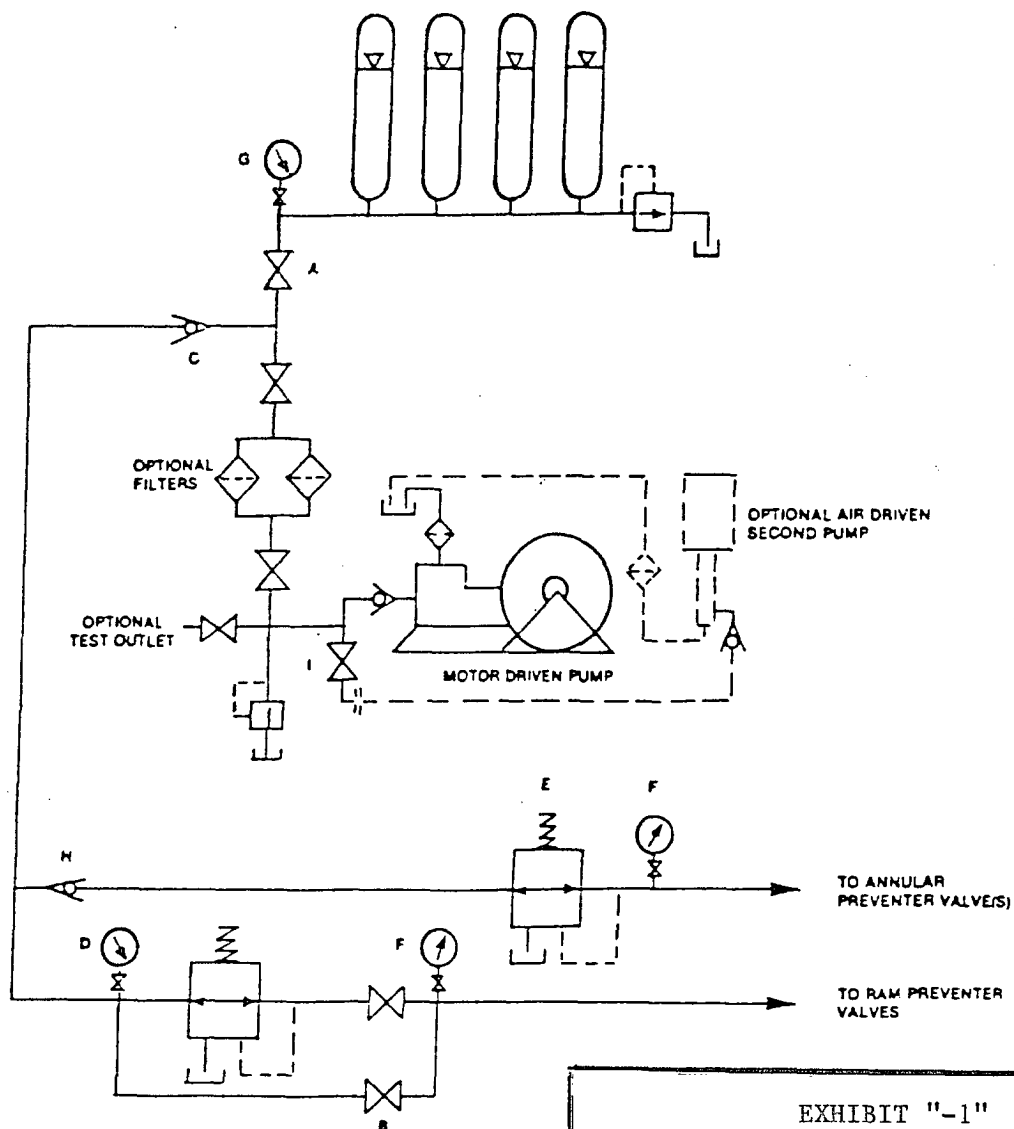


EXHIBIT "-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
GAINES "22" FEDERAL #1
UNIT "M" SECTION 22
T24S-R29E EDDY CO. NM

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Pogo Producing Company Well Name & #: Gaines 22 Fed. #1
Location SHL: 820' FSL & 990' FWL; Sec. 22, T. 24 S., R. 29 E.
Location BHL: 660' FSL & 2310' FEL; Sec. 22, T. 24 S., R. 29 E.
Lease #: NM-13996 County: Eddy 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 CFR 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) ☐ Flood plain (stips attached)
☐ San Simon Swale (stips attached) ☒ Other **See attached Archaeological and Visual Resource stipulations**

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

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

☒ 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. **V-Door North (Reserve pits to the West).**

III. WELL COMPLETION REQUIREMENTS

☐ A Communitization 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.

☒ 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. If broadcasting, the seeding rate must be doubled.

☐ A. Seed Mixture 1 (Loamy Sites)

Side Oats Grama (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0
Plains lovegrass (*Eragrostis intermedia*) 0.5

☐ B. Seed Mixture 2 (Sandy Sites)

Sand Dropseed (*Sporobolus crptandrus*) 1.0
Sand Lovegrass (*Eragrostis trichodes*) 1.0
Plains Bristlegrass (*Setaria magrostachya*) 2.0

☒ C. Seed Mixture 3 (Shallow Sites)

Side oats Grama (*Bouteloua curtipendula*) 5.0
Green Spangletop (*Leptochloa dubia*) 2.0
Plains Bristlegrass (*Setaria magrostachya*) 1.0

☐ D. Seed Mixture 4 (Gypsum Sites)

Alkali Sacaton (*Sporobolus 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.

VISUAL RESOURCES STIPULATIONS

The proposed project is located within a Class Three Visual Resource Area. The project will be built in a manner to minimize visibility. The proposed project will be a linear feature for the life of the project, impacting visual resources.

Surface Mitigation

The following stipulations will apply to minimize impacts during construction, drilling and production.

1. The proposed construction will be limited to the approved pad size.
2. All above ground facilities, structures, appurtenances, and pipelines will be low profile (less than 10 feet in height).
3. All above ground facilities, structures, appurtenances, and pipelines will be painted with the non-reflective (flat) paint color Shale Green.
4. Any existing tanks will be replaced with a low profile tank and painted the same color as the proposed tanks.
5. Upon completion of the well and installation of the production facilities (if the well is a producer) the pad will be reclaimed back to a size necessary for production operations only. The edges will be recontoured and the extra caliche and pad material will be hauled off-site. After one year, the BLM may require reclamation.
6. The reclaimed area will be grid rolled and reseeded.

CONDITIONS OF APPROVAL - DRILLING

Well Name & No. **Gaines 22 Federal 1**

Operator's Name: **POGO Producing Co.**

Location: **SHL: 820' FSL & 990' FWL, Sec. 22, T. 24S., R. 29E., EDDY Co., NM**

Location: **BHL: 660' FSL & 2310' FEL, Sec. 22, T. 24 S., R. 29 E., Eddy Co., NM**

Lease: **NM-13996**

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:
 - A. Spudding
 - B. Cementing casing: 20 inch 13 3/8 inch 9 5/8 inch, 5 1/2 inch
 - C. BOP tests
2. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated prior to drilling into the N/A Formation. A copy of the plan shall be posted at the drilling site.
- 3 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.
4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

1. The 13 3/8 inch surface casing shall be set at 550 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the _____ inch salt protection casing is
3. The minimum required fill of cement behind the 9 5/8 inch intermediate casing is **cement shall be circulated to the surface. This casing shall be set @ approximately 2900 feet in the Basal Anhydrite or the Delaware Limestone, below the salt and above the Delaware Sandstone.**
4. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall extend upward a minimum of 200 feet above THE BASE OF THE 9 5/8 INTERMEDIATE CASING SHOE.**
5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13 3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 3000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- A variance to test the _____ to the reduced pressure of ____psi with the rig pumps is approved.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. ENGINEERING CAN BE CONTACTED AT 505-706-2779 FOR VARIANCE APPROVAL.