-06-12 FORM APPROVED SUBMIT IN TRIPLICATE. Form 3160-3 If earthen pits are used in (July 1992) (Other instructions on OMB NO. 1004-0136 association with the drilling of this Expires: February 28, 1995 1027 NOR OCD-ARTESIA well, an OCD pit permit must be 5. LEASE DESIGNATION AND SERIAL NO. obtained prior to pit construction. T NM-29233 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPL ∟ OR DEEPEN 1a. TYPE OF WORK DRILL X  $\Box c_{0}$ SECRETARY'S POTA b. TYPE OF WELL WELL X SINGLE X 8. FARM OR LEASE NAME, WELL NO. 2. NAME OF OPERATOR # 12 FEDERAL "12" POGO PRODUCING COMPANY (RICHARD, WRIGHT 432-685-8140) 9. API WELL NO. P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (432-685-8100) 10. FIELD AND POOL, OR 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) IVINGSTON RIDGE-DELAWARE 11. SEC., T., B., M., OR BLK. AND SURVEY OR AREA 2010' FSL & 2310' FEL SECTION 12 T22S-R31E EDDY CO. NM At proposed prod. zone SECTION 12 T22S-R31E SAME 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* 12. COUNTY OR PARISH | 13. STATE Approximately 45 miles East of Carlsbad New Mexico EDDY CO. NEW MEXICO 15. DISTANCE FROM PROPUSED 16. NO. OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED TO THIS WELL LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any) 640 40 2010' 18. DISTANCE FROM PROPOSED LOCATION 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOULS TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1350' 86001 ROTARY 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START\* 3609' GR. WHEN APPROVED 23. Carlsbud Controlled Water Back PROPOSED CASING AND CEMENTING PROGRAM QUANTITY OF CEMENT SIZE OF HOLE GRADE, SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH 26" 40 T Conductor 20" NA Redi-mix to surface 17 1 " 8001 H - 4013 3/8" 48# 900 Sx. circulate cement 11" 8 5/8" J - 5532# 4350' 1200 Sx 7 7/8" J - 555½" 17# & 15.5# 8600' 1650 Sx. 1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix. 2. Drill  $17\frac{1}{2}$ " hole to 800'. Run and set 800' of 13 3/8" 48# H-40 ST&C casing. Cement with 700 Sx. of 65/35/6 Class "C" POZ/GEL, tail in with 200 Sx. of Class "C" cement + 2% CaCl. Circulate cement to surface. 3. Drill 11" hole to 4350'. Run and set 4350' of 8 5/8" 32# J-55 ST&C casing. Cement with 1000 Sx. of 65/35/6 Class "C" POZ/GEL + 5% Salt. Tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface. 4. Drill 7 7/8" hole to 8600'. Run and set 8600' of  $5\frac{1}{2}$ " casing as follows: 2600' of  $5\frac{1}{2}$ " 17# J-55 LT&C, 5000' of 5½" 15.5# J-55 LT&C, 1000' of 5½" 17# J-55 LT&C casing. Cement in 3 Stages with DV Tools at 5800'± & 3700'±. Cement 1st stage with 650 Sx. of Class "H" cement 2nd stage with 600 Sx. of Class "C" cement + 8# of Gilsonite/Sx., cement 3rd stage with 400 Sx. of 65/35/6 "C" POZ/GEL, tail in with 100 Sx. of "C" + 1% CaCl.CIRCULATE 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. DATE 09/05/06 ce for Federal or State office use) **APPROVAL SUBJECT TO** 

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease whether the

GENERAL REQUIREMENTS AND

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1801 W. Grand Avenue, Artesia, NM 88210

~1000 Rio Brazos Rd., Aztec, NM 87410

1220 S. St. Francis Dr., Santa Fe, NM 87505

DISTRICT III

DISTRICT IV

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

### OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Santa Fe, New Mexico 87505

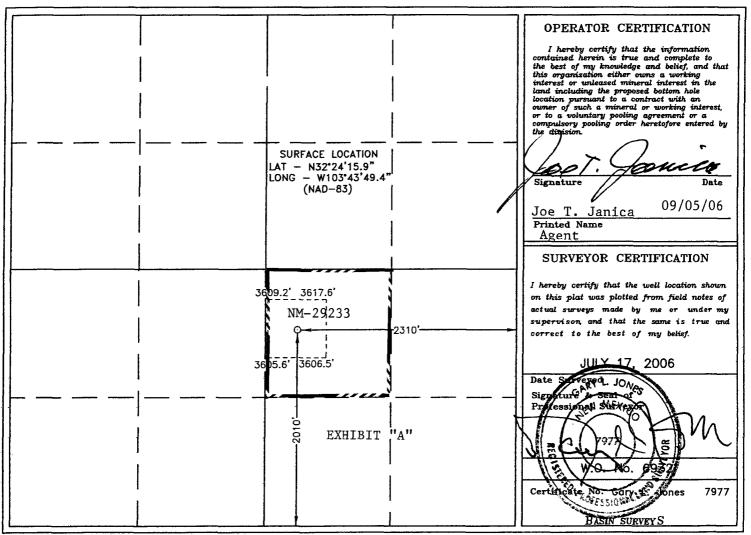
☐ AMENDED REPORT

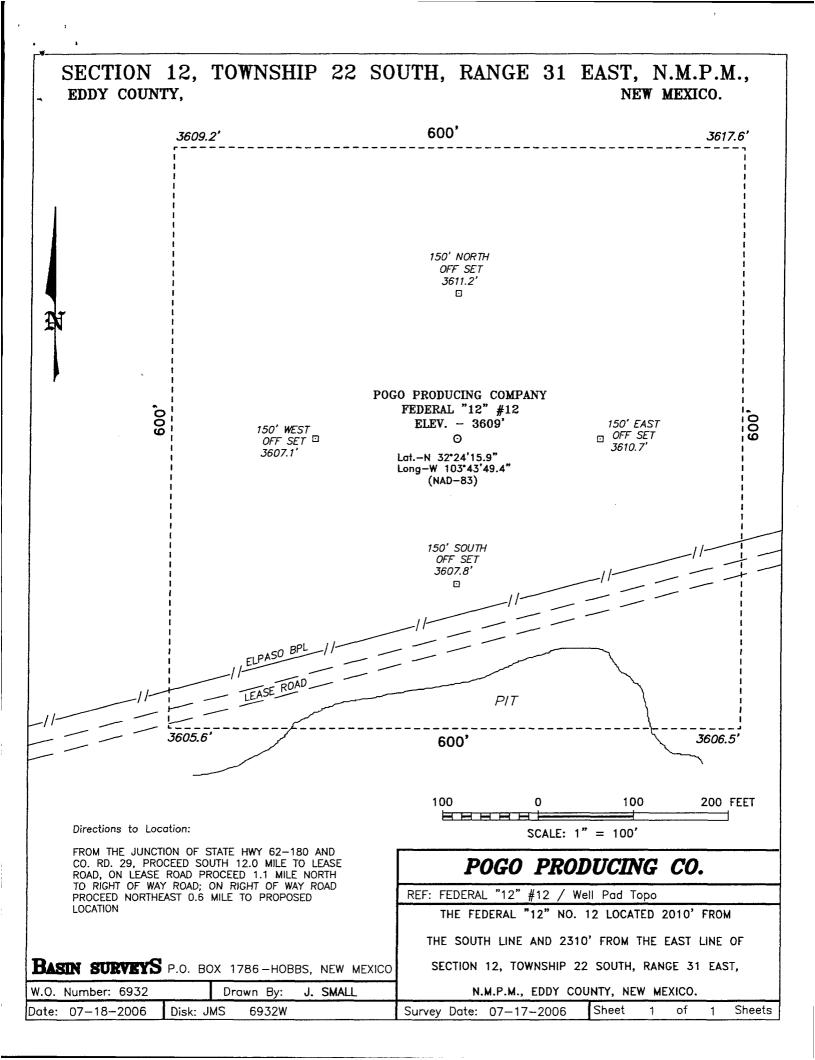
		ŗ	WELL LO	CATION	AND ACREA	GE DEDICATI	ON PLAT		
API	API Number		Pool Code Pool Name						
			393	60	LIV	INGSTON RIDGE	-DELAWARE		
Property	Code		Property Name				Well Number		
			FEDERAL "12"				12		
OGRID N	OGRID No.		Operator Name					. Elevation	
017891			POGO PRODUCING COMPANY			360	9'		
					Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	12	22 S	31 E		2010	SOUTH	2310	EAST	EDDY

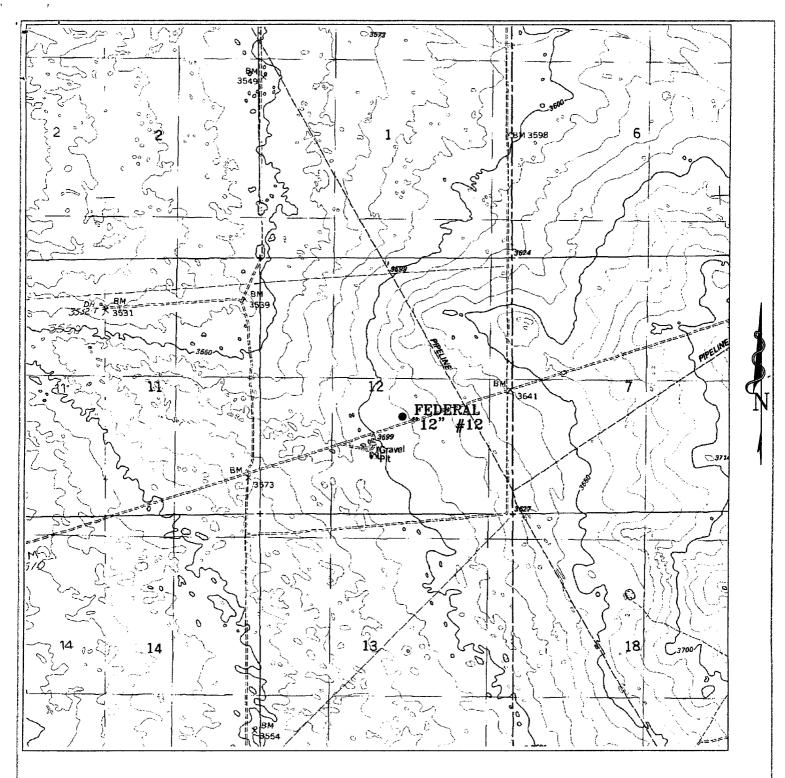
#### Bottom Hole Location If Different From Surface

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	r Infill Co	nsolidation	Code Or	der No.		· Walan		

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







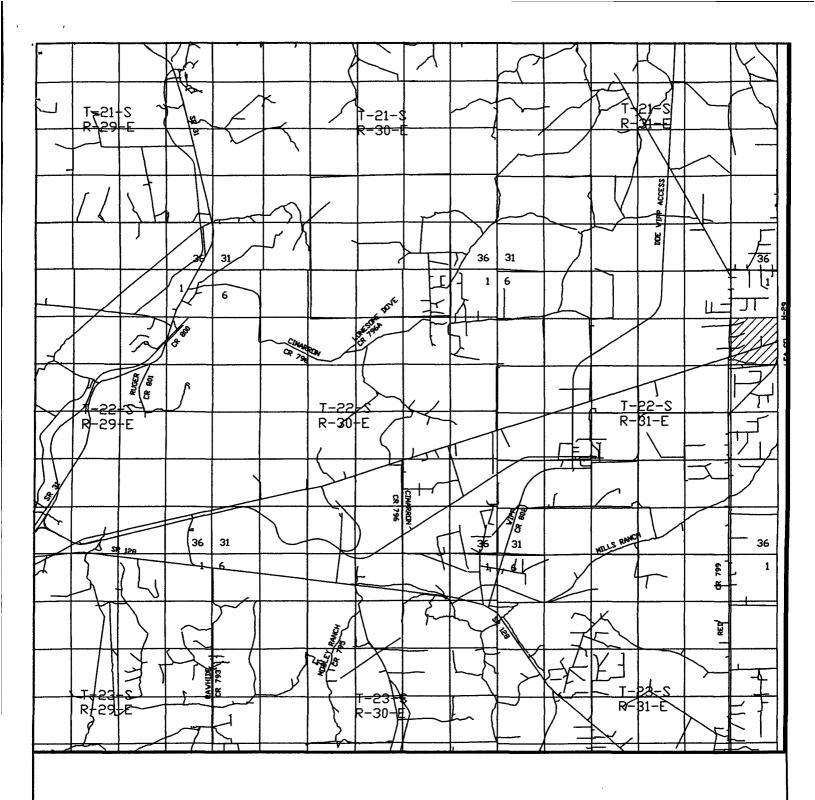
FEDERAL "12" #12 Located at 2010' FSL and 2310' FEL Section 12, Township 22 South, Range 31 East, N.M.P.M., Eddy County, New Mexico.



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

W.O. Nur	mber: JMS	6932T
Survey [	Date: 07-	
Scale: 1	" = 2000'	
Date: C	7-18-2006	

P<sub>0</sub>G<sub>0</sub> **PRODUCING COMPANY** 



FEDERAL "12" #12 Located at 2010' FSL and 2310' FEL Section 12, Township 22 South, Range 31 East, N.M.P.M., Eddy County, New Mexico.



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

W.O. Number: JMS 6932T	
Survey Date: 07-17-2006	
Scale: 1" = 2 MILES	
Date: 07-18-2006	

POGO PRODUCING COMPANY

#### APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL "12" #12
UNIT "J" SECTION 12
T22S-R32E EDDY CO. NM

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

- 1. Location: 2010' FSL & 2310' FEL SECTION 12 T22S-R31E EDDY CO. NM
- 2. Elevation above sea level: 3609' GR.
- 3. Geologic name of surface formation:
- 4. <u>Drilling tools and associated equipment:</u> Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
- 5. Proposed drilling depth: 8600'

### 6. Estimated tops of geological markers:

Basal Anhydrite	4210	Cherry Canyon	5399
Delaware Lime	4499 <b>'</b>	Brushy Canyon	6650 <b>'</b>
Bell Canyon	4568 <b>¹</b>	Bone Spring	8424

### 7. Possible mineral bearing formation:

Brushy Canyon 0il
Bone Spring 0il

### 8. Casing program:

<u>Hole size</u>	Interval	OD casing	Weight	Thread	Collar	Grade
26"	0-40	20"	NA	NA	NA	Conductor
17½"	0-800'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4350'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-8600'	5½"	17# 15.5#	8-R	LT&C	J-55

POGO PRODUCING COMPANY
FEDERAL "12" #12
UNIT "J" SECTION 12
T22S-R32E EDDY CO. NM

### 9. CEMENTING & CASING SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 800' of 13 $3/8$ " $48\#$ H-40 ST&C casing. Cement with 700 Sx. of $65/35/6$ Class "C" POZ/GEL, tail in with 200 Sx. of Class "C" cement + $2\%$ CaCl, circulate cement.
8 5/8"	Intermediate	Set 4350' of 8 5/8" $32\#$ J-55 ST&C casing. Cement with 1000 Sx. of Class "C" POZ/GEL + 5% Salt, tail in with 200 Sx. of Class "C" cement + 2% CaCl circulate cement.
5½"	Production .	Set 8600' of $5\frac{1}{2}$ " $17\#$ & $15.5\#$ casing as follows: 2600' of $5\frac{1}{2}$ " $17\#$ J-55 LT&C, 5000' of $5\frac{1}{2}$ " $15.5\#$ J-55 LT&C, 1000' 0f $5\frac{1}{2}$ " $17\#$ J-55 LT&C casing. Cement in 3 stages DV Tools @ $5800'\pm$ & $3700'\pm$ . Cement 1st stage with 650 Sx. of Class "H" Premium Plus cement, cement 2nd stage with 600 Sx. of Class "C" + $8\#$ PS of Gilsonite, cement 3rd stage with 400 Sx. of $65/35/6$ Class "C" POZ/GEL, tail in with 100 Sx. of Class "C" cement + $1\%$ CaCl, circulate cement to surface.

### 10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI working pressure B.O.P., consisting of a stripper head instead of an annular preventor, blind rams, and pipe rams. This B.O.P. stack is being used because of Substructure height limitations of the drilling rig being used to drill this well. Pressures encountered during drilling are not expected to exceed 4250 PSI at total depth. Popo requests permission to 3rd party test of B.O.P., after setting intermediate casing at 4350'. 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
40-800 <b>'</b>	8.4-8.7	29-32	NC	Fresh water use paper to control seepage.
800-4350 <b>'</b>	10.0-10.2	29-38	NC .	Brine water use paper to control seepage, use high viscosity sweeps to clean hole.
4350-8600'	8.4-8.7 s control may be	29-40	NC*	Fresh water use high viscosity sweeps to clean hole, and Dris/ Pac system if water loss is needed to run logs and/or casing

and casing if so reduce water loss to 10 cc or less.

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/or casing the viscosity and water loss may have to be adjusted in order to meet these needs.

#### APPLICATION TO DRILL

POGO PRODUCING COMPANY FEDERAL "12" #12
UNIT "J" SECTION 12
T22S-R3PE EDDY CO. NM

### 12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Induction, SNP LDT. MSFL, Gamma Ray, and Caliper from TD back to the  $8\ 5/8"$  casing shoe.
- B. Run Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- C.Rig up mud logger on hole at 4350± and keep on hole to TD.
- D. No DST's or cores 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 \_\_4400 $\pm$ \_\_ PSI, and Estimated BHT \_\_185 $^{\circ}$ \_\_.

### 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 28 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 <u>Bone Spring</u> 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<sub>2</sub>S 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<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S 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<sub>2</sub>S 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.

- 1. EXISTING AND PROPOSED ROADS: Area maps: Exhibit "B" is a reproduction of a County General Hi-way map showing access roads to the location. Exhibit "C" is a reproduction of a USGS Topographic map showing existing roads in close proximity to the location and the proposed access roads. All existing roads will be maintained in a condition equal to or better than their current conditions. All new roads will be constructed to BLM specifications.
  - A. Exhibit "A" shows the location of the proposed well site as staked.
  - B. From Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico, go 38± miles to CR-29, turn Left (South) go 10± miles to pipeline road, turn Right (West) follow pipeline road .5± miles and location is on the North side of road.
  - C. Exhibit "C" is a topographic map showing existing roads, proposed roads, proposed flowlines, and proposed powerlines.
- 2. PLANNED ACCESS ROADS: No additional road will be required.
  - A. The access road will be crowned and ditched to a 12' wide traveled surface with a 40' Right-Of-Way.
  - B. Gradient on all roads will be less than 5% if possible.
  - C. Turn-outs will be constructed where necessary.
  - D. If needed roads will be surfaced to the BLM requirements with material obtained from a local source.
  - E. Center line of new road will be flagged.
  - F. The new road will be constructed to utilize low water crossings where drainage currently exists, and culverts will be installed where necessary.
- 3. EXHIBIT "A-1" SHOWS THE BELOW LISTED TYPE WELLS WITHIN A 1 MILE RADIUS:
  - A. Water wells Water well approximately 2.5 miles Southwest of location .
  - B. Disposal wells None known
  - C. Drilling wells None known
  - D. Producing wells As shown on Exhibit "A-1"
  - E. Abandoned wells As shown on Exhibit "A-1"

POGO PRODUCING COMPANY FEDERAL "12" #12 UNIT "J" SECTION 12 T22S-R31E EDDY CO. NM

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's.

Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "C".

### 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 FEDERAL "12" #12 UNIT "J" SECTION 12 T22S-R31E EDDY CO. NM

### 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the proposed well site layout.
- B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions 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.

POGO PRODUCING COMPANY FEDERAL "12" #12 UNIT "J" SECTION 12 T22S-R31E EDDY CO. NM

### 11. OTHER INFORMATION:

- A. Environmental setting: This project is located on the Southwest side of a low rise. Soils are sandy with caliche lag gravel, vegetation consists of native grasses, snakeweed, and mesquite.
- B. The surface and minerals are owned by The U.S. Department of Interior and is administered by The Bureau of Land Management. The surface is used to graze livestock and for the production of oil and gas.
- C. An archaeological survey will be conducted on the roads and the location and the results will be filed in The Roswell Field Office.
- D. There are no dwellings in the near vicinity of this location.

### 12. OPERATOR'S REPRESENTIVES:

### BEFORE CONSTRUCTION:

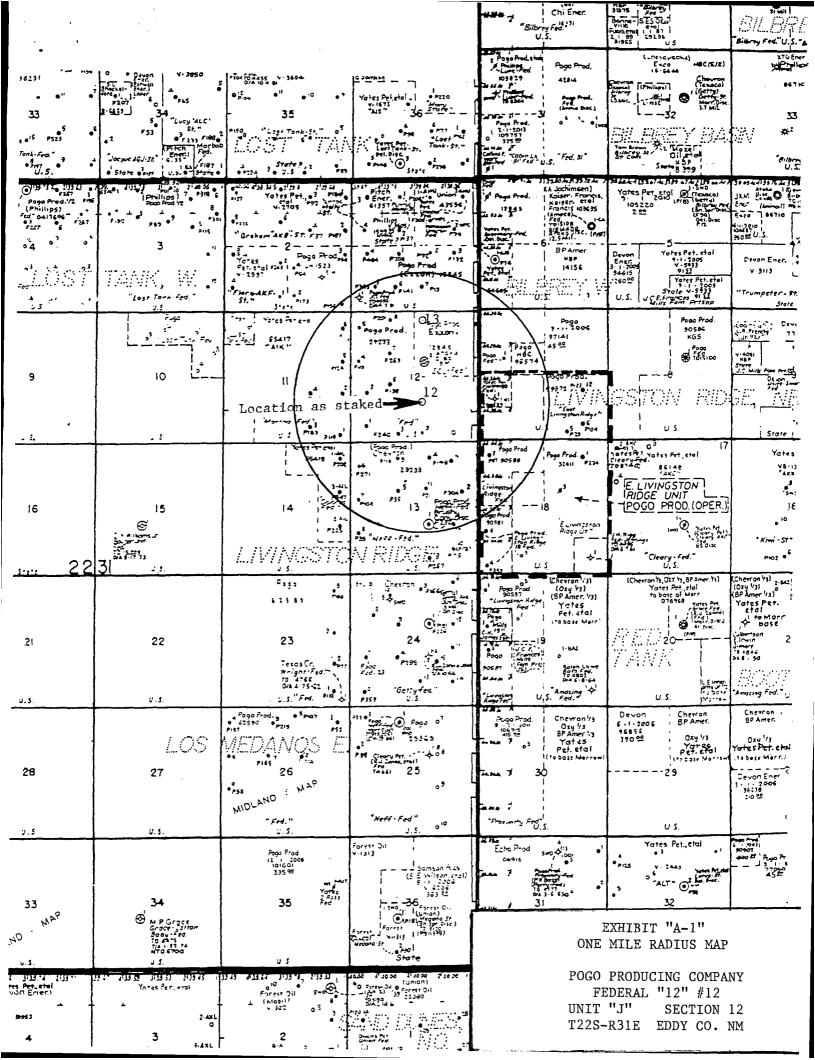
TIERRA EXPLORATION, INC
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE PHONE 505-391-8503
CELL PHONE 505-390-1598

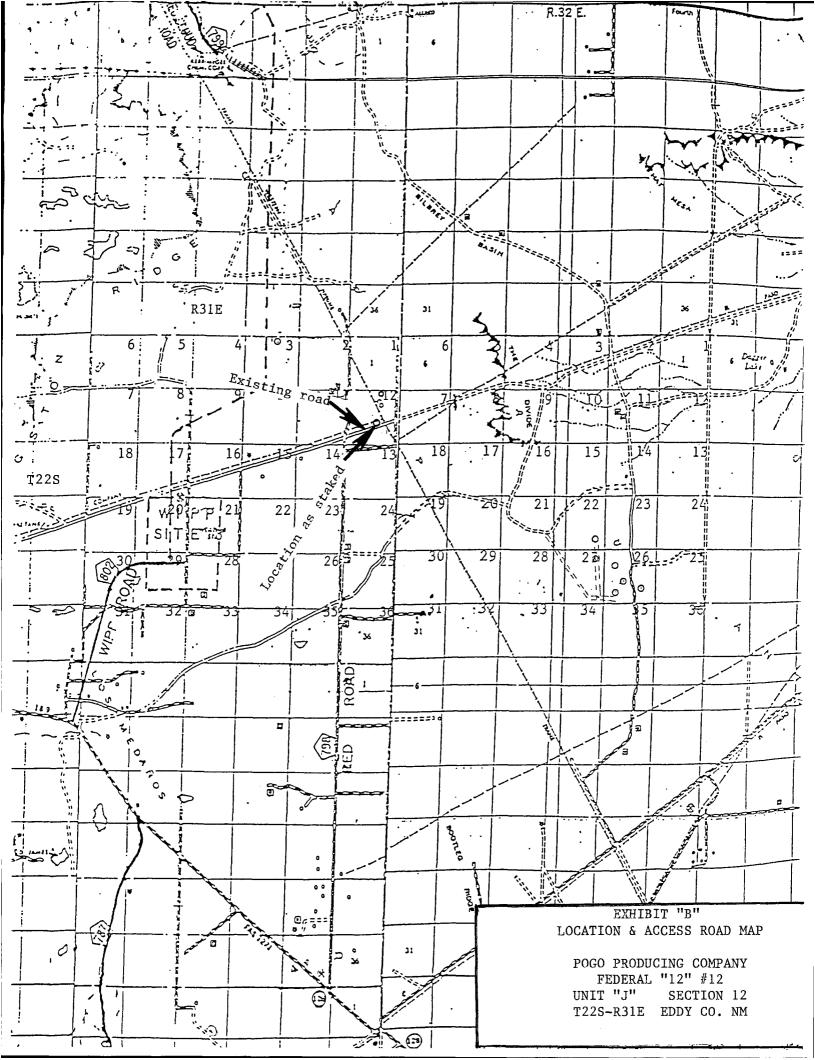
#### DURING AND AFTER CONSTRUCTION:

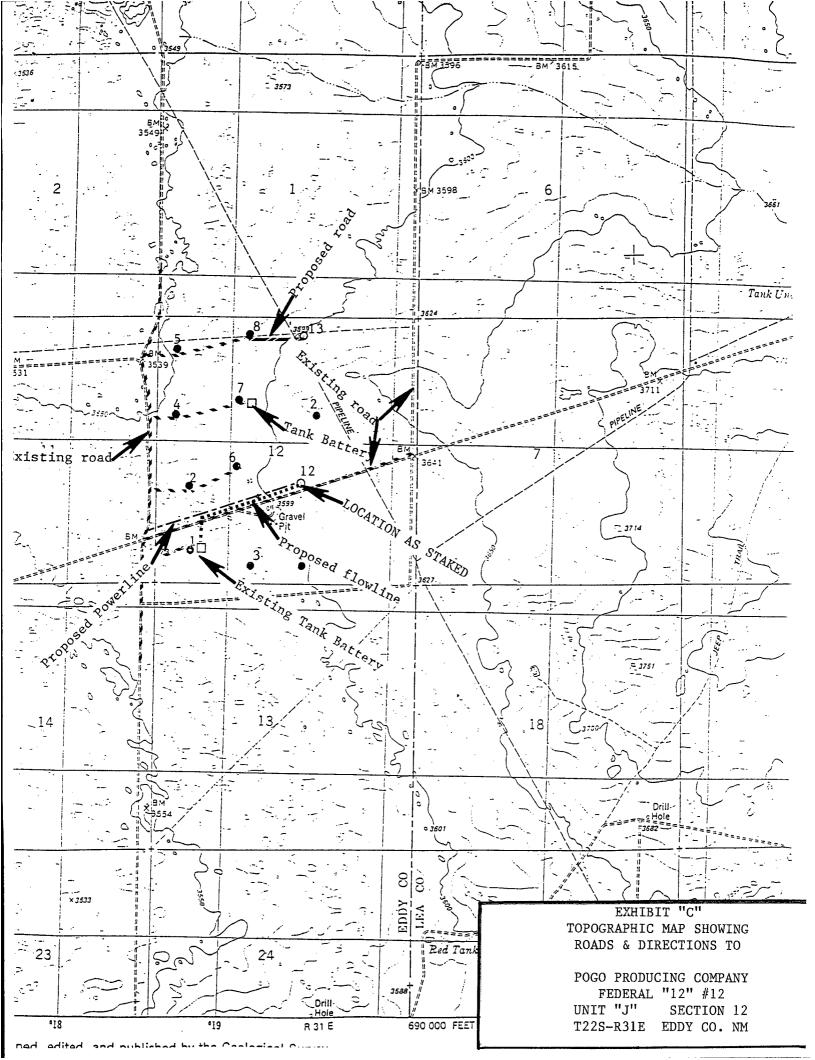
POGO PRODUCING COMPANY
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
MR. RICHARD WRIGHT 432-685-8140
OFFICE 432-685-8100

13. CERTIFICATION: I hereby certify that I or persons under my supervision have inspected the proposed drill site and access route, that I am fimiliar with the conditions which currently exist, that the statements made in this plan are to the best of my knlwledge, 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 the 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 Co. P. Charles
DATE	: 09/05/06
TITLE	: Agent







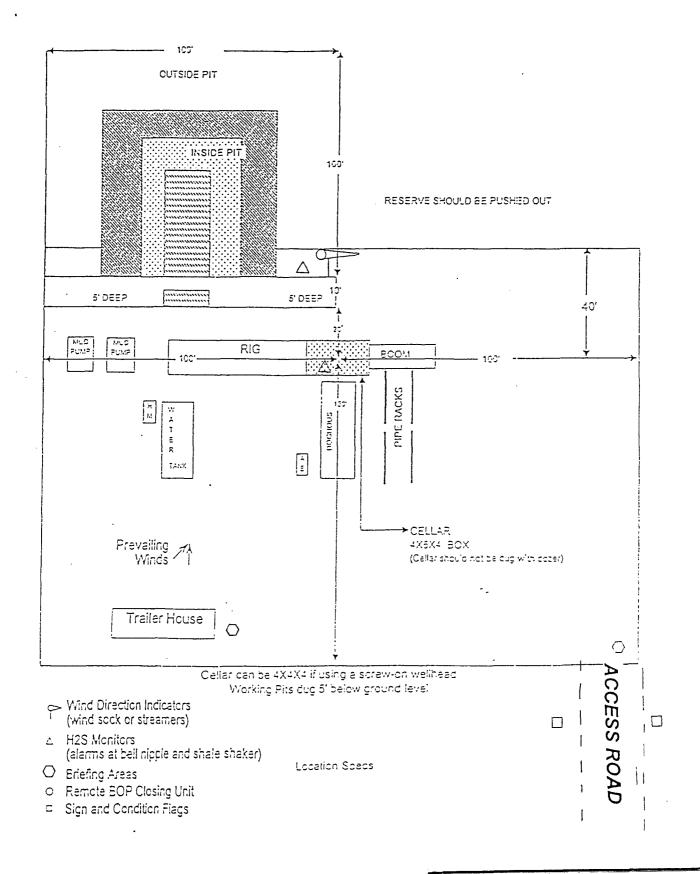


EXHIBIT "D"
RIG LAY OUT PLAT

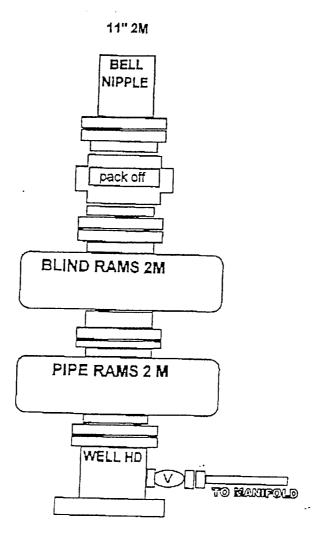


EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

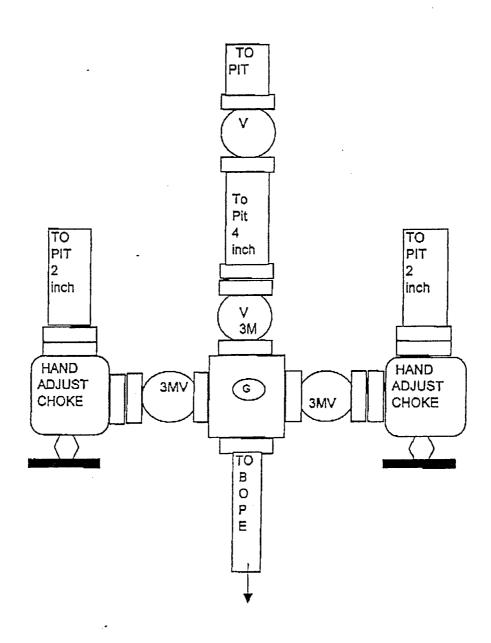


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

### SPECIAL DRILLING STIPULATIONS

## THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Pogo Producing Company Well Name & #: Federal 12 #12
Location <u>2010</u> F S L & <u>2310</u> F E L; Sec. <u>12</u> , T. <u>22</u> S., R. <u>31</u> E.
Lease #: NM-29233 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
(x) Lesser Prairie Chicken (stips attached)( ) Flood plain (stips attached)( ) San Simon Swale (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 $\underline{}$ 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 approximatelyinches in depth. Approximatelycubic yards of topsoil material will be stockpiled for reclamation.
(x ) Other. V-Door East Northeast (Reserve pits to the North Northwest).
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.
(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. If broadcasting, the seeding rate must be doubled.
( ) A. Seed Mixture 1 (Loamy Sites) (x ) B. Seed Mixture 2 (Sandy Sites)
Side Oats Grama (Bouteloua curtipendula) 5.0 Sand Dropseed (Sporobolus crptandrus) 1.0 Sand Dropseed (Sporobolus cryptandrus) 1.0 Sand Lovegrass (Eragostis trichodes) 1.0
Sand Dropseed (Sporobolus cryptandrus) 1.0 Sand Lovegrass (Eragostis trichodes) 1.0 Plains lovegrass (Eragrostis intermedia) 0.5 Plains Bristlegrass (Setaria magrostachya) 2.0
( ) C. Seed Mixture 3 (Shallow Sites) ( ) D. Seed Mixture 4 (Gypsum Sites)
Side oats Grama (Bouteloua curtipendula) 5.0 Alkali Sacaton (Sporobolus airoides) 1.0
Green Spangletop ( <i>Leptochloa dubia</i> ) 2.0 Four-Wing Saltbush ( <i>Atriplex canescens</i> ) 5.0 Plains Bristlegrass ( <i>Setaria magrostachya</i> ) 1.0
( ) 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.

<u>Reclamation</u>: 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.

### PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the lands described below:

T. 22 S., R. 31 E Section 12: ALL

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

#### CONDITIONS OF APPROVAL - DRILLING

Well Name & No.

Federal 12 # 12

Operator's Name:

**POGO Producing Co** 

Location:

2010 FSL, 2310 FEL, SEC 12, T22S, R31E, Eddy County, NM

Lease:

NM-29233

### 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:  $13 \ 3/8$  inch  $8 \ 5/8$  inch  $5 \ 1/2$  inch
- C. BOP tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling into the <u>N/A</u> 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 ABOVE THE SALT and AT LEAST 25 feet INTO THE RUSTLER ANHYDRITE, 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 8 5/8 inch salt protection casing is circulate to surface.
- 3. The minimum required fill of cement behind the n/a inch intermediate casing is
- 4. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall</u> <u>CIRCULATE TO THE SURFACE.</u>
- 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 **2000** 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.
- 4. Approval is given to use a stripper head instead of an annular preventer; as per the modified BOP schematic attached.

# FEDERAL 12 # 12 BOP SCHEMATIC

