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APPL	ICATION FOR P					8. DE INDIAN, ALLOT	15 433
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DR	ILL X	DEEPEN	□ Alles	ia, M	VI 88210	7. UNIT AGREEMENT	NAMA
oir 🔄 c	AS OTHER ALL	2.1	BINGLE Z		ONE G	S. FARM OR LEASE HAME	WELL NO.
2. NAME OF OPERATOR	118	11			4330	NEL FEDERAL #	<i>‡</i> 10
POGO PRODUCIN  3. ADDRESS AND TELEPHONE NO.	G COMPANY (R)	CHARD WRIG	HT 432-685	-8140)		9. AM WELL NO.	
	O MIDLAND, TEXA	IS 79702_73	40 (4326	85_8100		10. FIELD AND POOL	34648
4. LOCATION OF WELL (R At surface	eport location clearly and	in accordance wi	th any State requ	irements.	)	Laving; Boush	5 Co. 111
660' FSL & 87	O' FEL SECTION S	T23S-R28E	E EDDY CO.	NM R	ECELYED	11. SEC., T., R., M., O AND SURVEY OR	
At proposed prod. zon	s SAME			F	EB 2 7 2006	SECTION 9	T23S-R28E
14. DISTANCE IN MILES	AND DIRECTION FROM NEAR	LEST TOWN OR POS	T OFFICE.		UNATERN	12. COUNTY OR PARIS	BH   13. BTATE
	y 2 miles North	of Loving N			e at te ti tien den ita.	EDDY CO.	New Mexico
15. DISTANCE FROM PROPE LOCATION TO NEAREST PROPERTY OR LEASE I	r ·	660'	16. NO. OF ACE			F ACRES ASSIGNED	
(Also to nearest drig	g. unit line, if any)		320 19. PROPOSED I		20 50	RT OR CABLE TOOLS	40
	RILLING, COMPLETED,	1320'	6250'	,•114			
21. ELEVATIONS (Show who			1 0230		ı ROT	ARY 22. APPROX. DATE V	WORK WILL START*
		041' GR.				WHEN APPRO	OVED
23.		PROPOSED CASI	NG AND CEMEN	TING PRO	GRAM		
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER F	OOT SET	TING DEPTH	1	QUANTITY OF CEM	LNT
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12½"	J-55 8 5/8"			00'		c. circulate d Sx. 2 stage co	
7 7/8"	J-55 5½"	15.5#	- 62	50'	2030 8	on. 2 stage c	II Calote 15
with 655 to surface 3. Drill 7 7 Cement in Class "C" 2nd stage in with 1	7/8" hole to 6250 two stages with cement + 8# of with 1200 Sx. of Class  APPROVAL SU GENERAL REQ SPECIAL STIPLES	" cement +  O'. Run and h DV Tool a Gilsonite/ of Class "C' "C" neat m  UREMENT  LATIONS	2% CaCl, +  set 6250' t 3700'±. Sx, cement ' Light We: ixed at 14	of 5½ Cement to be ight ce .8#/Gal	15.5# "J- lst stage mixed at l ment mixed . Circulate	circulate construction of the construction of	ement  of  nent  , tail  urface.
epen directionally, give pertur	nent data on subsurface location				preventer program, i		
SIGNED R	et for	Ma TIT	LE Agent			DATE	7/05
PERMIT NO.	or state office use)		APPROVAL	DATE	association well, an O	pits are used is with the drillin CD pit permit m rior to pit const	nust be ms themo
	c' James Stovall	ACTIN	G FIELD I	/ANA	GER	FEB 2	2 3 2006
APPROVED BY	M GHIICE DIGGE	TILE .				_ DATE	

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II

DISTRICT IV

## State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies

Fee Lease - 3 Copies

811 South First, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

2040 South Pacheco, Santa Fe, NM 87505

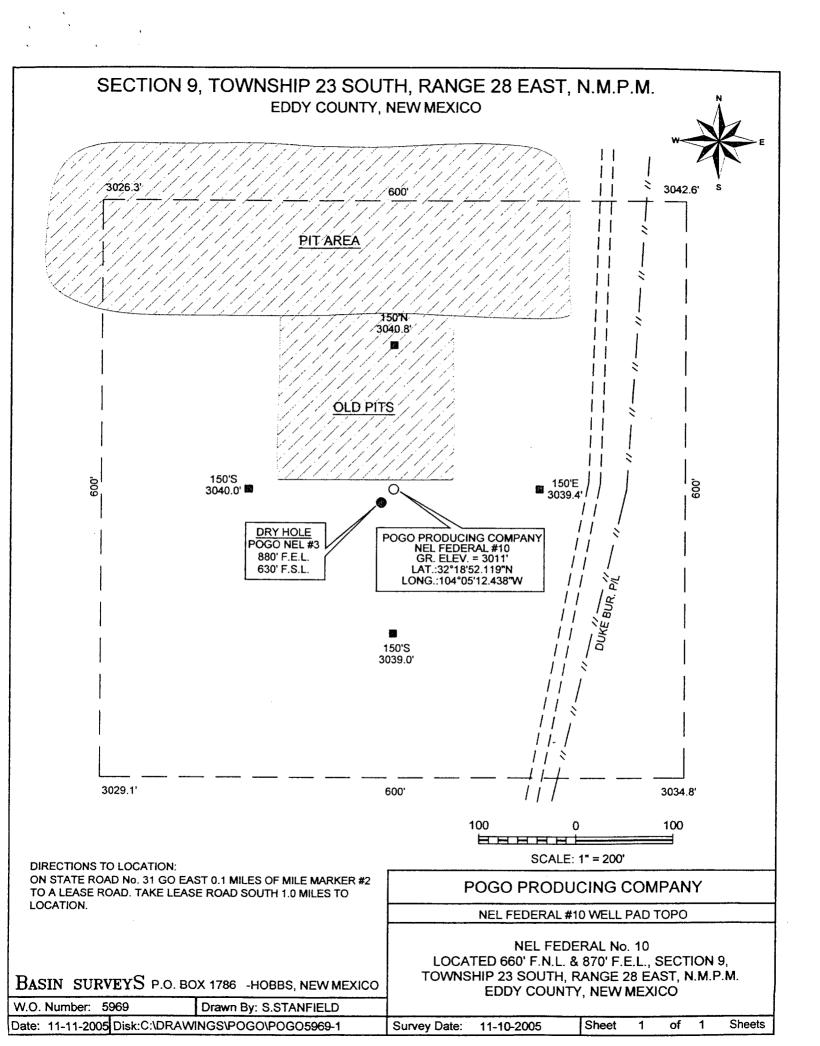
### OIL CONSERVATION DIVISION

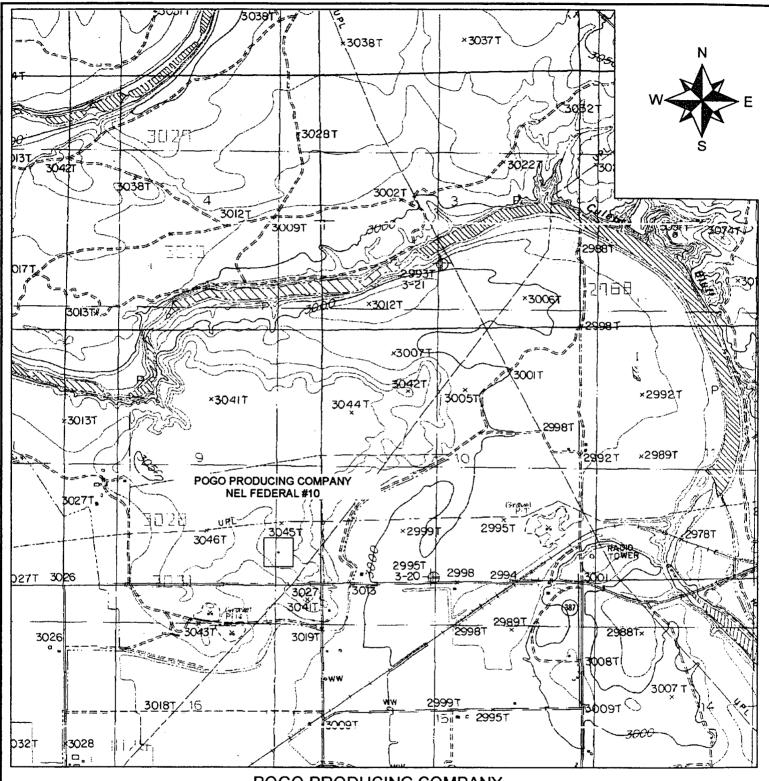
2040 South Pacheco Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

API Number 40350 LOVE					Pool Name LOVING-DBrushy Cangen Cart				
Property	Code	e Property Name Well Numbe					ımber		
		NEL FEDERAL 10							
ogrid N 17891				1	Elevation 3041				
17091	<del>-</del>	<u> </u>		10001	Surface Loc		<u> </u>	3041	
UL or lot No.	Section	Township	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	9	238	28E		660	SOUTH	870	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
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									
	     						I hereb contained herei	OR CERTIFICAT ny certify the the in n is true and compl wledge and belief.	formation

# Agent Title 11/27/05 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. NOVEMBER 10, 2005 LAT.:N32°18'52.119" LONG.:W104°05'12.438" Date Surveyed (EAID) Signature & Seal of NM-88954/5433 Professional Surveyor 3042.6 EXHIBIT "A" 870 W.O. No. 5969 Certificate No. Gary L. Jones 7977 3034.8 BASIN SURVEYS





## POGO PRODUCING COMPANY NEL FEDERAL #10

SECTION 9, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO



P.O. Box 1786 1120 West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-2206 - Fax basinsurveys.com

W.O. Number:	C:\DRAWNGS\POGO\ POGO5969-1
Survey Date:	NOVEMBER 10, 2005
SCALE:	1"= 2000'
Date:	NOVEMBER 11, 2005

POGO PRODUCING COMPANY

#### APPLICATION TO DRILL

POGO PRODUCING COMPANY
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E 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: 660' FSL & 870' FEL SECTION 9 T23S-R28E EDDY CO. NM
- 2. Elevation above sea level: 3041' GR.
- 3. Geologic name of surface formation:
- 4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
- 5. Proposed drilling depth: 6250'
- 6. Estimated tops of geological markers:

Rustler Anhydrite	1018'	Bell Canyon	26001
Basal Anhydrite	2350'	Brushy Canyon	4650'
Base of Salt	2440'	Bone Spring	6100'
Delaware Lime	2550'	TD	6250'

7. Possible mineral bearing formation:

Brushy CAnyon

Oil

Bone Spring

Oil

## 8. Casing program:

Hole size	Interval	OD casing	Weight	Thread	Collar	<u>Grade</u>
26''	0-40'	20"	NA	NA	NA	Conductor
12½"	0-900'	8 5/8"	24#	8-R [	ST&C	J <b>-</b> 55
7 7/8"	0-6250'	5½"	15.5#	8-R	ST&C	J <b>-</b> 55

#### APPLICATION TO DRILL

POGO PRODUCING COMPANY
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E EDDY 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 900' of 8 5/8" 24# J-55 ST&C casing. Cement with 655 Sx. of Class "C" cement + 2% CaCl, + $\frac{1}{4}$ # Flocele per Sx. circulate cement to surface.
5½"	Production	Set 6250' of 5½" 15.5# J-55 ST&C casing. Cement in 2 Stages with the DV Tool at 3700'±. Cement 1st stage with 750 Sx. of Class "C" Light Weight cement + 8# of Gilsonite/Sx., mixed at 14.1#/Gal. Cement 2nd stage with 1200 Sx. of Class "C" Light Weight cement, mixed at 12.8#/Gal., tail in with 100 Sx. of Class "C" neat cement mixed at 14.8#/Gal. 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 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-I" 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
40-900	8.4-8.7	29-34	NC	Fresh water Spud mud add paper to control seepage.
900-6250'	10.0-10.2	29-38	NC*	Brine water use paper to control seepage and
hole cond	e necessary to reduc ditions cause a prob ging open hole.		High viscosity sweeps to clean hole. If water loss control is necessary go to a Polymer system.	

Sufficient mud materials will be kept on location at all times in order to combat lost circulation and unexpected kicks. In order to run DST's, open hole logs and casing the viscosity and water loss may have to be adjusted to meet these needs.

## APPLICATION TO DRILL

POGO PRODUCING COMPANY
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E EDDY CO. NM

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

- A. Open hole logs: Dual Laterolog, MSFL, LDT, SNP, Gamma Ray, Caliper from TD back to 8 5/8" casing shoe. Run Gamma Ray Neutron from 8 5/8" casing shoe back to surface.
- B. No DST's or cores are planned at this time.
- C. A mud logger may be used at the Geologists suggestion.

## 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 3300 PSI, and Estimated BHT  $165^\circ$ 

### 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 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 Bone Spring formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

### HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - 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, H2S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well control equipment
  - A. See exhibit "E"
- 6. Communication
  - A. While working under masks chalkboards will be used for communication.
  - B. Hand signals will be used where chalk board is inappropriate.
  - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
- 7. Drillstem Testing
  - A. Exhausts will be watered.
  - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
  - C. If location is near any dwelling a closed D.S.T. will be performed.

### HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 8. Drilling contractor supervisor will be required to be familiar with the effects  $H_2S$  has on tubular goods and other mechanical equipment.
- 9. If  $H_2S$  is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with  $H_2S$  scavengers if necessary.

POGO PRODUCING COMPANY
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E EDDY CO. NM

- 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 Loving New Mexico take CR. # 712 (Carter Road) go 1.5 miles North to State Road 31, turn Right (East) go 1 mile turn North on lease road and follow road 660' to location on the West side of road.
  - C. Exhibit "C" shows roads, flowlines, and powerlines that will be required to produce this lease.
- 2. PLANNED ACCESS ROADS: No new 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 None known in the immediate area
  - 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
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E 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 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
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E 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
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E EDDY CO. NM

## 11. OTHER INFORMATION:

- A. Topography is relatively flat with a slight dip toward the North drainage in shallow patterns into the Pecos River. Vegetation consists of Grease wood mesquite, and native grasses. Soil is a pale tan with clay and calinhe nodules.
- B. Surface is owned by the U.S. Department of Interior and is administered by the Bureau of Land Management. The surface is leased to ranchers for grazing of live stock 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 near to the location.

## 12. OPERATORS REPRESENTIVE:

### Before construction:

TIERRA EXPLORATION, INC. P.O. BOK 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	er Jania
DATE	: 11/27/05	
TITLE	: Agent	

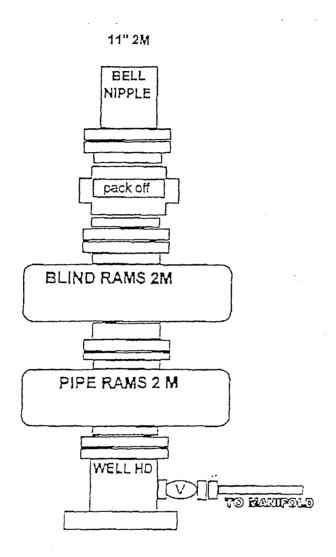


EXHIBIT "E"
SKETCH OF B.O.P TO BE USED ON

POGO PRODUCING COMPANY
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E EDDY CO. NM

# CHOKE MANIFOLD

3000 PSI WP

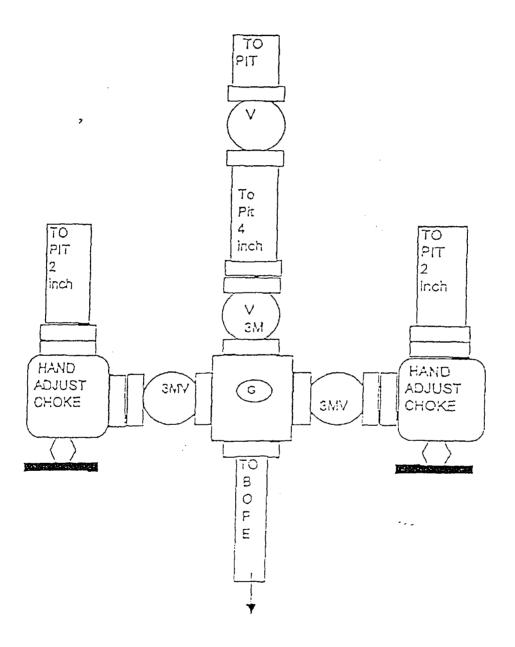


EXHIBIT "E-1 CHOKE MANIFOLD

POGO PRODUCING COMPANY
NEL FEDERAL # 10
UNIT "P" SECTION 9
T23S-R28E EDDY CO. NM

#### **CONDITIONS OF APPROVAL - DRILLING**

Operator's Name:

**POGO Producing Company** 

Well Name & No.

NEL Federal #10

Location:

660' FSL, 870' FEL, Section 9, T.23 S., R. 28 E., Eddy County, New Mexico

Lease:

NM-15433

## 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 in sufficient time for a representative to witness:
  - A. Well spud
  - B. Cementing casing: 8-5/8 inch 5-1/2 inch
  - C. BOP tests
- 2. 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.
- 3. 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.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

- 1. The <u>8-5/8</u> inch surface casing shall be set at <u>approximately 900 feet</u> 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 <u>5-1/2</u> inch production casing is <u>to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.</u>

### **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 <u>8-5/8</u> 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) shall be 2000 psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- 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.