RESUBMITTAL

N.M. Oil Cons. DIV-Dist. 2

Form 3160 -3 (April 2004) 1301 W. Grand Avenue UNITE Artasia, NM 88210

FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

v. NW(SW)

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

5. Lease Serial No. NM-57273

APPLICATION FOR PERMIT TO D	O. H III.	or Tribe Name					
la. Type of work: XX DRILL REPORT	7 If Unit or CA Agree	ement, Name and No.					
			LICIA	8. Lease Name and V	Vell No.		
lb. Type of Well: XXOil Well Gas Well Other	Type of Well: X Oil Well Gas Well Other X Single Zone Multiple Zone						
2. Name of Operator Pogo Producing Company							
3a. Address 3		(include area code)		10. Field and Pool, or I	Exploratory		
P.O. Box 10340, Midland, TX	432-685	5-8100		Sand Dunes	Dealware South		
4. Location of Well (Report location clearly and in accordance with any	State requireme	rate.*)		11. Sec., T. R. M. or B	lk and Survey or Area		
At surface 2310' FNL & 660' FWL							
At proposed prod. zone				Sec 7, T24			
14. Distance in miles and direction from nearest town or post office*			. NIM	12 County or Parish	13. State		
Approximately 30 miles South Sout	heast (of Carisba		Eddy Count	<u> </u>		
15 Distance from proposed* location to nearest	16. No. of ac	res in lease	17. Spacin	ng Unit dedicated to this v	well		
property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	600		40)	RECEIVED		
18. Distance from proposed location*	19. Proposed	Depth	20. BLM/	BIA Bond No. on file	JAN 1 0 2005		
to nearest well, drilling, completed, applied for, on this lease, ft.	840	0'	297	771			
	22 1	nate date work will sta		23 Estimated duration	OULAHTE8		
		pproved		23. Estimated duration	n		
	24. Attac						
The following, completed in accordance with the requirements of Onshore	Oil and Gas (Order No.1, shall be a	ttached to the	nis form:			
Well plat certified by a registered surveyor. A Drilling Plan.		4. Bond to cover t Item 20 above).	he operation	ons unless covered by an	existing bond on file (see		
3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification							
SUPO shall be filed with the appropriate Forest Service Office).	·	6. Such other site authorized office		formation and/or plans as	s may be required by the		
25. Signature Oshing Ullishit		<i>(Printed/Typed)</i> thy Wright			Date 11/03/04		
Title Sr. Eng. Tech					<u> </u>		
Approved by (Signature) /s/ Linda S. C. Rune	de l ^{Name}	(Printed/Tlygefl) Lit	ida S.	C. Rundell	Date 2 2 DEC 2004		
Title STATE DIRECTOR	Office	:	NM	STATE OFFI	CE		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

*(Instructions on page 2)

conduct operations thereon. Conditions of approval, if any, are attached.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

CARLSBAD CONTROLLED WATER BASIN

APPROVAL FOR 1 YEAR

PALLADIUM 7 FEDERAL #8 Drilling Plan

- 1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cmt to surface w/ Redimix.
- 2. Drill 17-1/2" hole to 975'. Run & set 975' of 13-3/8" 48# H-40 ST&C csg. Cmt w/ 600 sks Cl "C" cmt followed by 200 sks Cl "C" + 2% CaCl2. Circ cmt to surface.
- 3. Drill 11" hole to 4150'. Run & set 4150' 8-5/8" 32# J-55 ST&C casing. Cmt w/ 1000 sks Cl "C" cmt + add followed by 200 sks Cl "C" + 2% CaCl2. Circ cmt to surface.
- 4. Drill 7-7/8" hole to 8400'. Run & set 8400' of 5-1/2" csg as follows: 2400' 17# J-55 LT&C, 5000' 15.5# J-55 LT&C, 1000' 17# J-55 LT&C. Cmt in 3 stages w/ DV tools at 5800' & 3800' ±. Cmt 1st stage w/ 650 sks Cl "H" + add. Cmt 2nd stage w/ 600 sks Cl "C" + add. Cmt 3rd stage w/ 400 sks Cl "C" followed by 100 sks Cl "C" + 1% CaCl2. Circ cmt to surface.

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

State of New Mexico

Snergy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV

DISTRICT II

DISTRICT III

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

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	ame	
	53818	SAND DUNES DELAWARE SO	UTH
Property Code	PALLAD	Well Number 8	
OGRID No. 17891	POGO PRODUCING COMPANY		Elevation 3508'

Surface Location

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	7	24-S	31-E		2310	NORTH	660	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
Dedicated Acres	Joint o	r Infill C	onsolidation	Code Or	der No.				·

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

	OR A NON-STANDARD UNIT HA	AS BEEN APPROVED BY TH	E DIVISION
3502.9'3497.9'	SEODETIC COORDINATES NAD 27 NME Y = 448732.5 X = 657789.2 LAT. 32'13'57.55'N ONG. 103'49'22.93'W		OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature Joe P. Janica Printed Name Agent Title 08/22/03 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. AUGUST 11, 2003 Date Surveyermining AUGUST 11, 2003
41.83 AC.			Certificatio No. RONALD SEEDSON 3239 GARY EUGEN 12641

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 8
UNIT "E" LOT 2 SECTION &
T24S-R31E EDDY CO. NM

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

- 1. Location of well: 660' FWL 2310' FNL SECTION 7 T24S-R31E EDDY CO. NM
- 2. Ground Elevation above Sea Level: 3508' GR.
- 3. Geological age of surface formation: Quaternary Deposits:
- 4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
- 5. Proposed drilling depth: 8400'
- 6. Estimated tops of geological markers:

Rustler Anhydrite	940'	Cherry Canyon	5160'
Basal Anhydrite	4020'	Manzanita	53401
Delaware Lime	4240	Brushy CAnyon	6400°
Bell Canyon	4260	Bone Spring	80701

7. Possible mineral bearing formations:

Bone Spring Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-401	20"	NA	NA	NA	Conductor
17½"	0-975'	13 3/8"	48 <i>‡</i>	8-R	ST&C	H-40
11"	0-4150'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-8400	5½"	17 & 15.5	8-R	LT&C	J - 55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 8
UNIT "E" LOT 2 SECTION &
T24S-R31E 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 975' of 13 $3/8$ " $48\#$ H-40 ST&C casing. Cement with 600 Sx. of $65/35/6$ Class "C" POZ/GEL, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate to surface.
8 5/8"	Intermediate	Set 4150' of 8 $5/8$ " $32\#$ J-55 ST&C casing. cement with 1000 Sx. of Class "C" $65/35/6$ POZ/GEL \pm 5% Salt, tail in with 200 Sx. of Class "C" \pm 2% CaCl, circulate cement.
5½"	Production	Set 8400' of 5½" 17 & 15.5# J-55 LT&C casing as follows: 2400' of 5½" 17# J-55 LT&C, 5000' of 5½" 15.5# J-55 LT&C, 1000' of 5½" 17# J-55 LT&C. Cement in 3 stages W/DV Too1 at 5800',3700'±. Cement 1st stage with 650 Sx. of Class "H" + additives, cement 2nd stage with 600 Sx. of Class "C" + 5# Gilsonite/Sx., 3rd stage cement with 400 Sx. of 65/35/6 Class "C" POZ/Gel, tail in with 100 Sx. of Class "C" + 1% CaCl, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 series 3000 PSI working perssure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once 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
40-975'	8.4-8.7	29-34	NC	Fresh water, add paper to control seepage.
975-4150	10.0-10.2	29–38	NC	Brine water add paper to control seepage, use high viscosity sweeps to clean hole.
4150-8400'	8.4-8.7	29-40	NC *	Fresh water using high viscosity sweeps to clean hole, if water loss is
interval	to protect for	red while drilling mation, run DST's Dris-pac to mud sy	, logs, and	desired through the pay section use a Dris-pac system.

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
PALLADIUM "7" FEDERAL # 8
UNIT "E" LOT 2 SECTION &
T24S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Induction, LDR, SNP Gamma Ray, CAliper from TD back to 8 5/8" casing shoe.
- B. Cased hole logs: Run Gamma Ray, Neutron logs from 8 5/8" casing shoe back to surface.
- C. No cores or DST's are planned at this time, mud logger will be rigged up on hole at 4150'± and remain on hole to TD.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of $\rm H^2S$ in this area. If $\rm H^2S$ is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP __4500 __PSI, and Estimated BHT __165° .

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

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 H₂S 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. 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" & "E-1"
- 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 the location is near to a dwelling a closed DST will be performed.

- 8. Drilling contractor supervisor will be required to be familiar with the effects H2S 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.

- 1. EXISTING ROADS & PROPOSED ROADS: Area maps; Exhibit "B" is a reproduction of a County General Hi-way Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. From Hobbs New Mexico take U.S. HI-way 62-180 West toward Carlsbad New Mexico for approximately 40 miles, to WIPP Road, turn South go 13 miles to CR-802, turn Right follow road to State Hi-way 128, turn Left go 2.4 miles to Twin Wells Road, tutn Right go 4.7± miles, turn West go past well # 2 follow road west to well # 5 location continue West approximately 1250' to location.
 - C. Exhibit "F" shows the proposed routes of roads, powerlines, amd flowlines.
- 2. PLANNED ACCESS ROADS: Approximately 1250' of new road will be constructed.
- A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.
 - B, Gradient of all roads will be less than 5.00%.
 - C. If turn-outs are necessary they will be constructed.
 - D. If needed roads will be surfaced with a mimimum of 4" of caliche. This material will be obtained from a local source.
 - E. Center-line for new roads will be flagged. Earth-work will be will be done as field conditions require.
 - F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilaze low water crossings for drainage as required by topography.
- LOCATIONS OF EXISTING WELLS IN A ONE MILE RADIUS. EXHIBIT "A-1"
 - A. Water wells -One approximately 1.3 miles Southeast of location
 - B. Dispusal 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
PALLADIUM "7" FEDERAL # 8
UNIT "E" LOT 2 SECTION 7
T24S-R31E EDDY CO. NM

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "F".

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped to location in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of drill site, if additional material is needed it will be obtained from a local source and transported over the access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
- D. Waste water from living quaters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthed drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

A. No camps or air strips will be constructed on location.

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 8
UNIT "E" LOT 2 SECTION 7
T24S-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
PALLADIUM "7" FEDERAL # 8
UNIT "E" LOT 2 SECTION 7
T24S-R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of open rolling plain covered with low dune hummocks. Soil is tan to red silty sand, mixed with caliche nodules and lag gravels. Vegetation is mesquite, desert holly, saltbush, snakeweed, sand sage, wolfberry, and native grasses.
- B. The surface is owned by The U.S. Department of Interior and is administered by The Bureau of Land Management. The surface is used for the grazing of livestock and the production of Oil & Gas.
- C. An archaeological survey has been done and is on file in the Carlsbad Field Office of The Bureau of Land Management.
- D. There are no dwellings in the near vicinity of this location.

12. OPERATIOR'S REPRESENTIVES:

Before Construction:

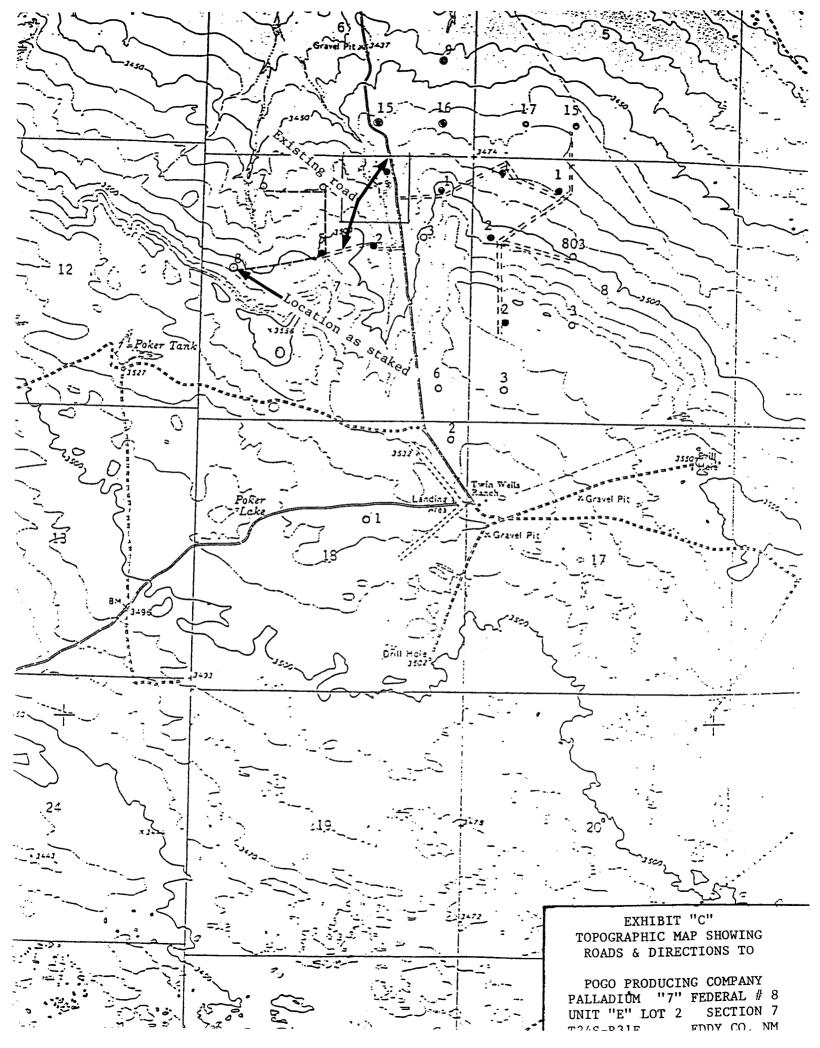
TIERRA EXPLORATION, INC. P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE Ph. 505-391-8503
JOE T. JANICA

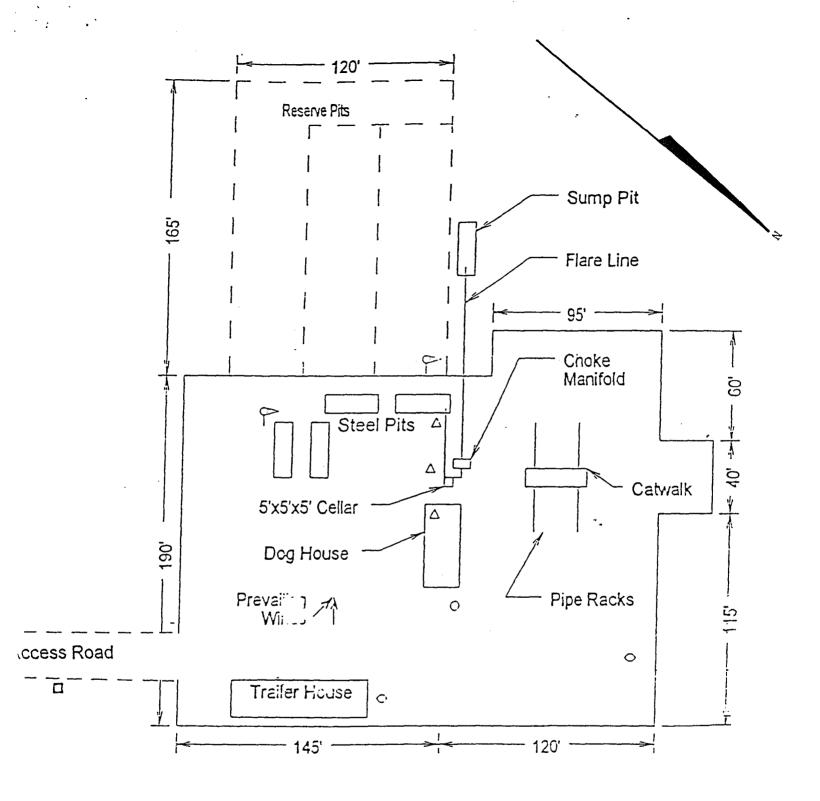
During and after Construction:

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

13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and the 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 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 confirmity 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.

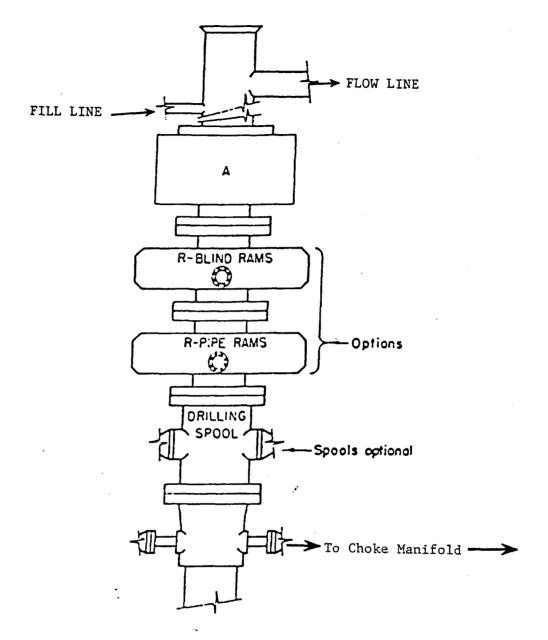
NAME : 08/22/03/
TITLE : Agent





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

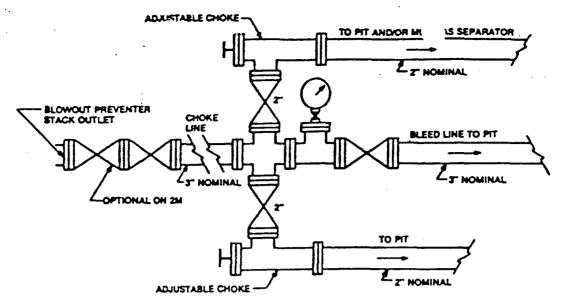
EXHIBIT "D"
RIG LAY OUT PLAT



ARRANGEMENT SRRA

900 Series 3000 PSI WP

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



Typical choke manifold assembly for $3M\ WP$ system

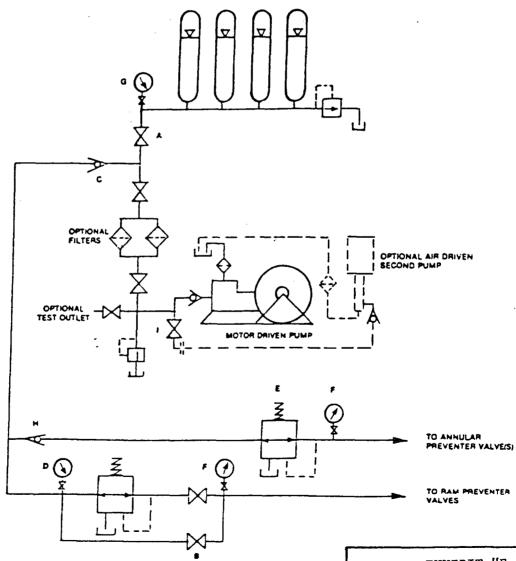
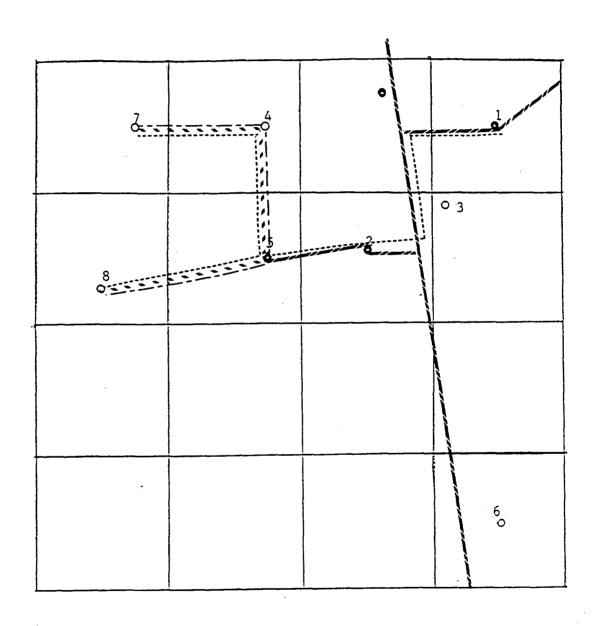


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL LEASE
SECTION 7 T24S-R31E
EDDY CO. NM



EXISTING	ROAD	
PROPOSED	ROAD	
PROPOSED	FLOWLIN	E
PROPOSED	POWERLI	NE

EXHIBIT "F"
ROUTE OF PROPOSED ROADS
FLOWLINE & POWERLINE