N.M. Oil Cons. DIV-Dist. 2 RESUBMITTA 301 W. Grand Avenue Artesia, NM 8821Qorm APPROVED OMB No. 1004-0137 Expires March 11, 2007

Form 3160-3 (April 2004)

0171

UNITED STATES

DEPARTMENT OF THE I	NM-69369				
BUREAU OF LAND MAN APPLICATION FOR PERMIT TO			6. If Indian, Allotee o	r Tribe Name	
la. Type of work: XX DRILL STREERIE	TARY'S POTAS	SH	7 If Unit or CA Agreement, Name and No.		
Ib. Type of Well: XOil Well Gas Well Other	XX Single Zone Multi	ple Zone	8. Lease Name and Well No. Sundance 1 Federal #9		
2 Name of Operator Pogo Producing Company		1	2 API Well No.	.3389 3	
3a Address P.O. Box 10340, Midland, TX		10. Field and Pool, or Ex Mesa Verde	•		
4. Location of Well (Report location clearly and in accordance with an At surface 660' FSL & 190' FWL At proposed prod. zone	ry Skate requirements.*)		11. Sec., T. R. M. or Blk Sec. 1, T24S	•	
14 Distance in miles and direction from nearest town or post office* Approximately 30 miles East of Ca	rlsbad NM		12 County or Parish Eddy County	13. State NM	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacin	g Unit dedicated to this we 40	e]]	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1320	19. Proposed Depth 8650	1	BIA Bond No. on file 29771	RECEIVED	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3554 'GR	22. Approximate date work will sta When Approved	art*	23. Estimated duration		
	24. Attachments				
The following, completed in accordance with the requirements of Onsho	re Oil and Gas Order No.1, shall be a	attached to th	is form:		
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	Lands, the Item 20 above). S. Operator certifi	cation specific info	ns unless covered by an o	-	
25. Signature Cashy Whit	Name (Printed/Typed) Cathy Wright	Name (Printed/Typed) Cathy Wright		Date 11/03/04	
Sr. Eng. Tech					
Approved by (Signature) /s/ Linda S. C. Rund	Name (Printed Typed)	a S. C.	Rundell	Date 2 2 DEC 2004	
Title STATE DIRECTOR			ATE OFFICE		
Application approval does not warrant or certify that the applicant hole	ds legal or equitable title to those rig		•		
conduct operations thereon. Conditions of approval, if any, are attached.		API	ROVALFO	OR 1 YEAR	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as	time for any person knowingly and to any matter within its jurisdiction.	willfully to r	nake to any department o	r agency of the United	

*(Instructions on page 2)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

CARLSBAD CONTROLLED WATER BASIN

SUNDANCE 1 FEDERAL #9 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 850'. Run & set 850' of 13-3/8" 54.5# J-55 ST&C csg. Cmt w/ 900 sks C1 "C" cmt + 2% CaCl2. Circ cmt to surface.
- 3. Drill 11" hole to 4450'. Run & set 4450' 8-5/8" 32# J-55 ST&C casing. Cmt w/ 1200 sks C1 "C" cmt + add. Circ cmt to surface.
- 4. Drill 7-7/8" hole to 8650'. Run & set 8650' of 5-1/2" csg as follows: 2650' 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/ 500 sks Cl "H" + add. Cmt 2nd stage w/ 300 sks Cl "C" + add. Cmt 3rd stage w/ 450 sks Cl "C" + add. Circ cmt to surface.

DISTRICT I ' P.O. Box 1980, Hobbs, PM 86241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department.

Form C-102 Revised February 10, 1994

Submit to Appropriate District Office State Lease - 4 Copies

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0718

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Fee Lease - 3 Copies

DISTRICT IV

DISTRICT III

P.O. BOX 2088, SANTA FE, N.M. 87604-2088

1000 Rio Brazos Bd., Axtec, NM 67410

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Code Pool Name		
1	96229	MESA VERDE - BONE SPRNG		
Property Code	-	erty Name E 1 FEDERAL	Well Number	
OGRID No. 17891	•	ator Name CING COMPANY	Elevation 3554	

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Ν	1	24-S	31-E		660'	SOUTH	1980'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section 1	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or	Infill Con	solidation Co	ode Ord	er No.				

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

LOT 4	LOT 3	LOT 2	LOT 1	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
39.95 AC	39.96 AC	39.98 AC	39.99 AC	Signature Joe T. Janica Printed Name
				Agent Title 08/19/03 Date
	GEODETIC COORDINATES NAD 27 NME Y = 451858.6 N X = 685560.6 E LAT. 32"14"27.06"N LONG. 10.3"43"59.42"W			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 an correct to the best of my belief.
				Date Surveyed G. E/D. A.W.E. Signatura Spain of Surveyor A.W.E. Professional Surveyor
1980' ——	3547.1' 3554.1' 3554.1' 3554.1' 3550.4' 3561.7'			Cerunda No. BONATO PETSON 3234

APPLICATION TO DRILL

POGO PRODUCING COMPANY
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
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' FSL & 1980' FWL SECTION 1 T24S-R31E EDDY CO. NM
- 2. Ground Elevation above Sea Level: 3554
- 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: 8650'
- 6. Estimated tops of geological markers:

Basal Anhydrite	4340 '	Cherry Canyon	5443
Delaware Lime	4580*	Brushy Canyon	66801
Bell Canyon	4600 '	Bone Spring	8410'

7. Possible mineral bearing formations:

Bone Spring

Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20''	NA	NA	NA	Conductor
17½"	0-850'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4450	8 5/8"	32#	8-R	ST&C'	J-55
7 7/8"	0-8650'	5½"	17 & 15.5	8-R	LT&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY SUNDANCE "1" FEDERAL # 9 UNIT "N" SECTION 1 T24S-R31E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTH:

	20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
WITNESS	13 3/8"	Surface	Set 850' of 13 3/8" 48# H-40 ST&C casing. cement with 900 Sx. of Class "C" cement + additives, circulate cement to surface.
WITNESS	8 5/8"	Intermediate	Set 4450' of 8 $5/8$ " $32\#$ J-55 ST&C casing. Cement with 1200 Sx. of Class "C" cement + additives, circulate cement to surface.
	5 ¹ 2''	Production	Set 8650' of 5½" casing as follows: 2650' of 5½" 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 DV Tools at 5800' & 3800'±. 1st stage cement with 500 Sx. of Class "H" + additives, 2nd stage cement with 300 Sx. of Class "C" + additives, 3rd stage cement with 450 Sx. of Class "C" + additives. Circulate cement to surface.
- 10	. PRESSUE	RE CONTROL EQUIPM	ENT: Exhibit "E" shows a 900 series 3000 PSI working

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 WI.	VISC.	FLUID LOS	S TYPE MUD SYSTEM
40-850 '	8.4-8.7	29-32	NC	Fresh water spud mud add paper to control seepage.
850-4450'	10.0-10.2	29-38	NC	Brine water addpaper to control seepage, use high viscosity sweeps to clean hole.
4450-8650'	8.4-8.7	29-40	*	Fresh water system add Polymer to mud system if water loss control is desired. Use high vistesity sweeps to clean
* If water lo	ss control is re	equired in order to	o log	hole.

^{*} If water loss control is required in order to log well, run DST's and run casing reduce water with a Polymer 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
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
T24S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Induction, SNP, LDT, CNL, Gamma Ray Caliper from TD back to 8 5/8" casing shoe. Run Cased Hole Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- B. Mud logger may be rigged up on hole at 4450' and remain on hole to TD.
- C. 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 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 4250 PSI, and Estimated BHT 180°

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 30 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 Springs</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

HI JGEN SULFIDE DRILLING OPERATION 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 H₂S 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 H₂S scavengers if necessary.

POGO PRODUCING COMPANY
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
T24S-R31E EDDY CO. NM

- 1. EXISTING 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 location of the proposed well site as staked.
 - B. From Hobbs New Maxico take U.S. Fi-way West toward Carlsbad New Maxico go 38 miles to CO-29, turn South go 21.5 miles:to State Hi-way 128 turn Left (South-East) on State Hi-way 128, go .8 miles, turn Right (South) follow lease road 900'± to Pogo well #-2-turn Left (South) go 1250' to location.
 - C. Exhibit "F" shows where flowlines and powerlines may be constructed to produce this lease.
- 2. PLANNED ACCESS ROADS: Approximately 1250' of new road will be constructed.
 - 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 the roads will be surfaced to the BLM requirements with material obtained from from a local source.
 - E. Center line for the new access road will be flagged.
 - F. The road will be constructed to utilize low water crossings where drainage currently exist, and Culverts will be installed where necessary.
- 3. EXHIBIT "A-1" SHOWS WELLS AND DRY HOLES WITHIN A 1 MILE RAIDUS.
 - A. Water wells None known
 - B. Disposal wells None known
 - C. Drilling wells Mone known
 - D. Producing walls As shown on Exhibit "A-1"
 - E. Abandoned wells As shown on Exhibit "A-1"

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POGO PRODUCING COMPANY
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
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 operation 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
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
T24S-R31E EDDY CO. NM

J. WELL SILE 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.

POGO PRODUCING COMPANY
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
T24S-R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of low lying sand dunes with a slight dip to the West. The deep sandy soil supports shinnery oak, native grasses, and an occasional mesquite tree.
- 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. 432-685-8140

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 filling of a false report.

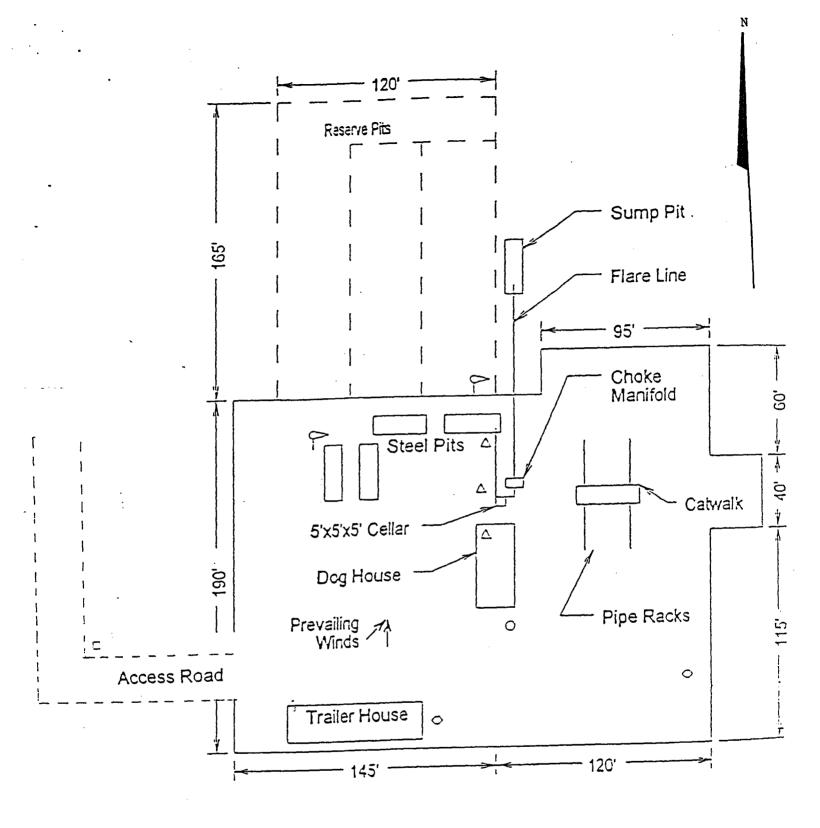
NAME

DATE

08/19/03

TITLE

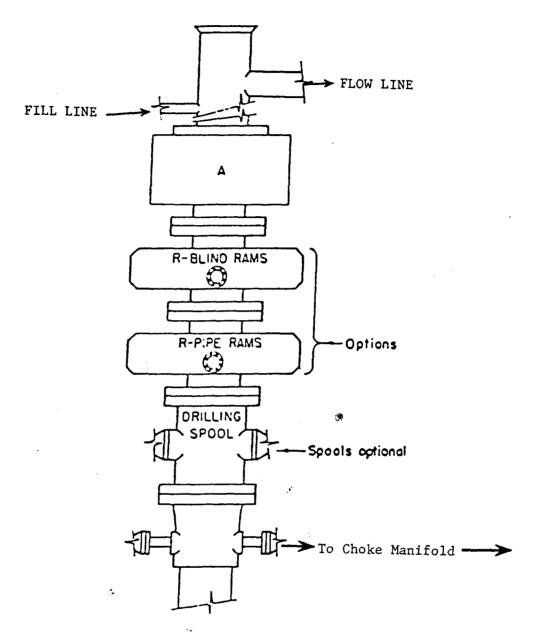
Agent



- Wind Direction Indicators (wind sock or streamers)
- Δ 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

POGO PRODUCING COMPANY
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
T24S-R31E EDDY CO. NM

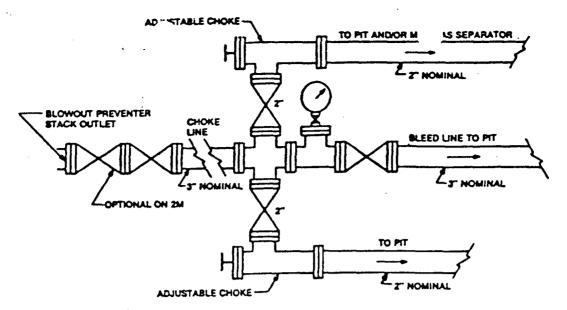


ARRANGEMENT SRRA

900 Series 3000 PSI WP

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

POGO PRODUCING COMPANY
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
T24S-R31E EDDY CO. NM



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

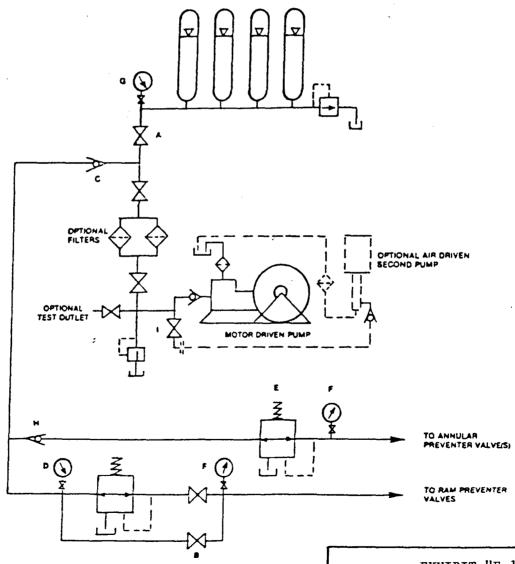


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
SUNDANCE "1" FEDERAL # 9
UNIT "N" SECTION 1
T24S-R31E EDDY CO. NM

