RESUBMITTAL

N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

Form 3160-3 (April 2004) \$/\(\ell\)/03

UNITED STATISTICS, NM 88210

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

	IVI
DEPARTMENT OF THE INTERIOR	4 441
BUREAU OF LAND MANAGEMENT	

5. Lease Serial No. NM-57273

APPLICATION FOR PERMIT TO	DRILL OR REENTER	6. If Indian,	Allotee or Tribe Name
la. Type of work: XX DRILL REENT	1	CA Agreement, Name and No.	
SI	ECRETARY'S PO	DTASTIS Lease Na	me and Well No.
lb. Type of Well: XXOil Well Gas Well Other	X Single Zone Mult	ple Zone Pallad	ium 7 Federal #6
2. Name of Operator		9. API Well	No.
Pogo Producing Company		30 20	170=33890
3a. Address	3b. Phone No. (include area code)	10. Field and	Pool, or Exploratory
P.O. Box 10340, Midland, TX	432-685-8100	Sand D	<u>unes Delaware So</u> uth
4. Location of Well (Report location clearly and in accordance with at At surface 660' FSL & 660' FEL	ny State requirements.*)	11. Sec., T. R.	M. or Blk. and Survey or Area
At proposed prod. zone		Sec 7,	T24S, R31E
14. Distance in miles and direction from nearest town or post office* Approximately 15 miles East Sou	utheast of Carlsba	d NM Eddy (
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 640	17. Spacing Unit dedicates 40	MEOFIACO
18. Distance from proposed location*	19. Proposed Depth	20. BLM/BIA Bond No. o	JAN 1 0 2005
to nearest well, drilling, completed, applied for, on this lease, ft.	8500'	29771	o spiantesia
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3518 GR	22 Approximate date work will st When Approved		
	24. Attachments	CARLSBAD C	ONTROLLED WATER BASIN
The following, completed in accordance with the requirements of Onsho	ore Oil and Gas Order No.1, shall be	attached to this form:	
Well plat certified by a registered surveyor. A Drilling Plan.	4. Bond to cover Item 20 above		ed by an existing bond on file (see
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).		specific information and/or	plans as may be required by the
25. Signature Cathy Must	Name (Printed/Typed) Cathy Wright		Date 11/03/04
Sr. Eng. Tech			
Approved by (Signature) /s/ Linda S. C. Rundel	Name (Printed/Typeff)Li	nda S. C. Run	dell Date 2 2 DEC 2004
STATE DIRECTOR		STATE OFFIC	Ε
Application approval does not warrant or certify that the applicant hol conduct operations thereon. Conditions of approval, if any, are attached.	lds legal or equitable title to those riq	· · · · · · · · · · · · · · · · · · ·	h would entitle the applicant to OVAL FOR 1 YEAR

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.

*(Instructions on page 2)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

PALLADIUM 7 FEDERAL #6 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/ 800 sks Cl "C" cmt + add followed by 250 sks Cl "C" + 2% CaCl2 + add. 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 8500'. Run & set 8500' of 5-1/2" csg as follows: 2500' 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 8500' & 3700' ±. Cmt 1st stage w/ 650 sks Cl "H" cmt + add. Cmt 2nd stage w/ 600 sks Cl "C" + add. Cmt 3rd stage w/ 400 sks 65:35:6 Cl "C" followed by 100 sks Cl "C" + 1% CaCl2. Circ cmt to surface.

DISTRICT | P.O. Box 1980, Hobbs, NM 88241-1980 '

State of New Mexico

Energy, Minerals and Natural Resources Department.

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

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT III

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code Pool Name		me
	53818	SAND DUNES DELAWARE SOU	TH
Property Code	PALLAD	Well Number	
ogrid no. 17891	POGO PRO	Elevation 3518	

Surface Location

UL or lot N	. Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	7	24-S	31-E		660,	SOUTH	660'	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 Acre	s Joint o	r Infill Co	nsolidation (ode Oro	der No.				
40									

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 1			OPERATOR CERTIFICATION
			I hereby certify the the information contained herein is true and complete to the
	1	1	best of my knowledge and belief.
		ł	for T. Janica
41.75 AC	 		Signature Joe/T. Janica
LOT 2			Printed Name
	1		Agent
			Title
			03/21/03 Date
		1	
41.78 AC LOT 3			SURVEYOR CERTIFICATION
,	NAD 27 NME	•	I hereby certify that the well location shown
, ,	Y = 446438.0	!	on this plat was plotted from field notes of actual surveys made by me or under my
	X = 661821.0 LAT. 32*13*34.65*N		supervison, and that the same is true and correct to the best of my belief.
	LONG. 103'48'36.13"W 1	Į.	WARGIL OG 2007
			MARCH 06, 2003 Date Surveyed A.W.B.
41.80 AC	 		Signature & Seal of Professional Surveyor
	1		Frotestidia
		3518.1' 35	519.3' han hallom 3/11/03
	1	9 - 1 666	03:11_0281
	1	3518.4'	Certificate No. RONALD J. EMSON 3238
		9	Table To CARY EMSONE 12841
41.83 AC	11		- million

APPLICATION TO DRILL

POGO PRODUCING COMPANY PALLADIUM "7" FEDERAL # 6 UNIT "P" SECTION 7 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 & 660' FEL SECTION 7 T24S-R31E EDDY CO. NM
- 2. Ground Elevation above Sea Level: 3518' GR.
- 3. Geological age of surface formation: QUATERNARY
- 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: 8500'
- 6. Estimated tops of geological markers:

Rustler Anhydrite	621!	Cherry Canyon	51601
Top Salt	990'	Manzanita	5340 '
Delaware Lime	4240 '	Brushy Canyon	6400 '
Bell Canyon	4260°	Bone Spring	8070 '

7. Possible mineral bearing formations:

Brushy CAnyon

0i1

Bone Spring

Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17 ¹ 2"	0-975	13 3/8"	54.5	8-R	ST&C	J-55
11"	0-4150'	8 5/8"	32	8-R	ST&C	J - 55
7 7/8"	0-8500'	5½''	17 & 15.5	8-R	LT&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
T24S-R31E EDDY CO. NM

9. CEMENTING & SETTING DEPTH:

20" Conductor	Set 40' of 20" conductor 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 800 Sx of 65/35/6 Class "C" POZ-GEL, tail in with 250 Sx. of Class "C" cement + 2% CaCl, \div ½# Flocele/Sx. circulate cement.
8 5/8" Intermediate	Set 4150' of 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.
5½" Production	Set 8500' of $5\frac{1}{2}$ " casing as follows: 2500' of $5\frac{1}{2}$ " $17\frac{2}{3}$ " 15.5 LT&C, 5000' of $5\frac{1}{2}$ " 15.5 J=55 LT&C, 1000' of $5\frac{1}{2}$ " 17 J=55 LT&C casing. Cement in 3 stages. 1st stage cement with 650 Sx. of Class "H" cement + additives, 2nd stage cement with 600 Sx. of Class "C" cement + $8\frac{2}{3}$ Gilsonite/Sx., 3rd stage cement 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.

PRESSURE CONTROL.EQUIPMENT: Exhibit "E" shows a 900 Series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected in this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE SYSTEM
40-975'	8.4-8.7	29-34	NC .	Fresh water Spud Mud add paper to control seepage
975-4150'	10.0-10.2	29-38	NC	Brine water add paper to control seepage and use high viscosity sweeps to clean hole.
4150'-8500'	8.4-8.6	29-38	NC*	Fresh water use high viscosity sweeps to clean hole.

^{*} If water loss control is required to log and run casing go to a fresh water Polymer system to control water loss and a fresh water Gel for viscosity.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
T24S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Induction, SNP, LDT, Gamma Ray, Caliper from TD back to 4150' (8 5/8" casing shoe).
- B. Run Cased hole Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- C. Rig up mud logger on hole at 4150' and keep on hole to TD.
- D. No cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of $\rm H^2S$ 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 4200 PSI, and Estimated BHT 160°.

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 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.

HYDR GEN SULFIDE DRILLING OPERATIONS LAN

- 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 seperator will be brought into service along with H_2S scavengers if necessary.

POGO PEODUCING COMPANY
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
T24S-R31E EDDY CO. NM

- 1. EXISTING ROADS: Area roads, Exhibit "B" is a reproduction of a County General Hiway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing exixting roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site location as staked.
 - B. From Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico. Go approximately 40 miles to the WIPP road and turn Left go 13 miles to CR-802, turn Right and follow road to State Hi-way 128, turn Left and go 2.4 miles to Twin Wells Road, turn Right and go 5.3 milest, turn Left go 300' to location.
 - C. Flowlines and Powerlines will be constructed along lease roads and along existing R-O-W's. See Exhibit "F" for new proposed routes.
- 2. PLANNED ACCESS ROADS: Approximately 300' of new road will be constructed.
 - A. The access road will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.
 - B. Gradient on all roads will be less than 5%.
 - C. Turnouts will be constructed as required or as directed by the BLM.
 - D. If needed roads will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
 - E. Center line for the new access road has been staked and flagged. Earthwork will be done as required by field and topographic conditions.
 - F. Colverts in the access road will be used where necessary. The road will be constructed to utilize low water crossings for drainage as dictated by the topography.
- 3. LOCATION OF EXISTING WELLS WITHIN A ONE-MILE RADIUS SHOWN ON EXHIBIT "A-1".

A. Water wells One approximately .4 miles Southeast 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"

F. Injection wells None known

POGO PEODUCING COMPANY
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
T24S\rightarrow 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 PEODUCING COMPANY
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
T24S-R31E EDDY CO. NM

9. WELL SITE LAYOUT

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

POGO PEODUCING COMPANY
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
T24S~R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of sand dunes with a slight dip to the West. Deep sandy soil supports shinnery oak, native grasses, and an occasional mesquite tree.
- B. Surface is owned by the U.S. Government and is administered by the Bureau of Land Management. The surface is used for grazing livestock and the production of oil and gas.
- C. An archaeological survey will be conducted on the location and access roads. This report will be filed with The Bureau of Land Management in the Carlsbad field office.
- D. A dwelling is located approximately .5 miles South Southeast of location.

12. OPERATORS 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
OFFICE Ph. 915-685-8100
Mr. RICHARD WRIGHT 915-685-8140

13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access roads, and that I am fimiliar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge true and correct, and that the work associated with the operations proposed herein will be performed by POGO PRODUCING COMPANY it's contractors/subcontractors is in compformity 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.

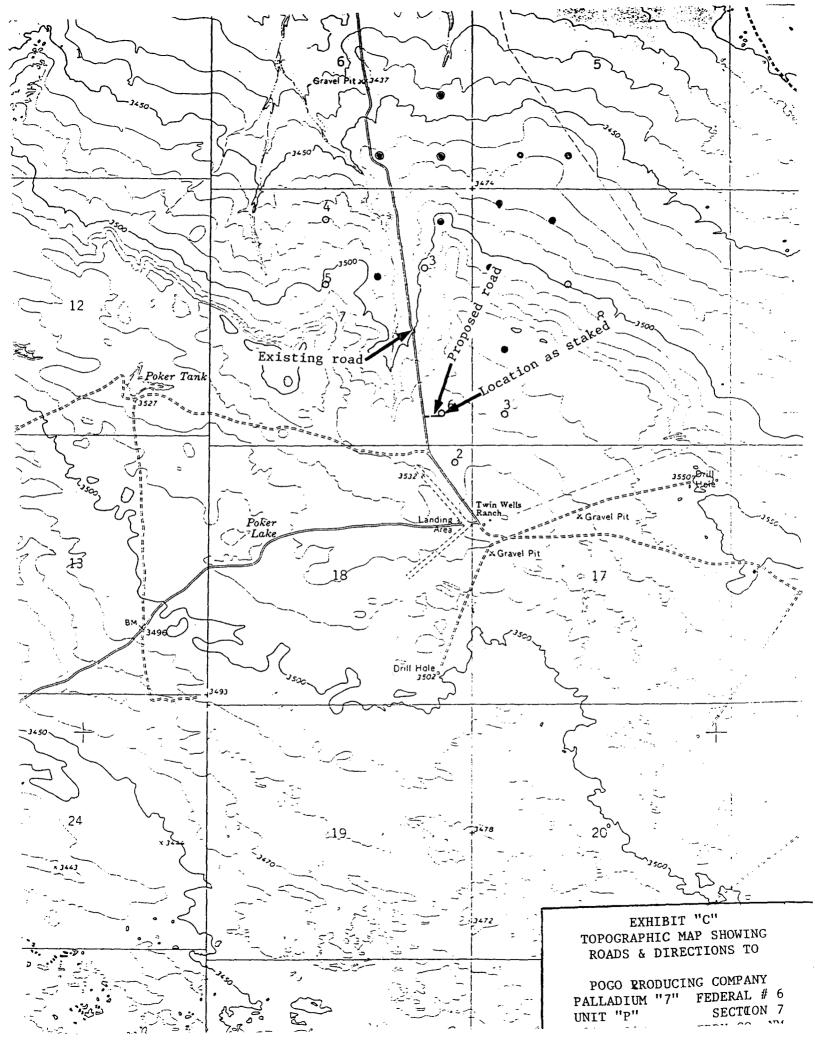
NAME

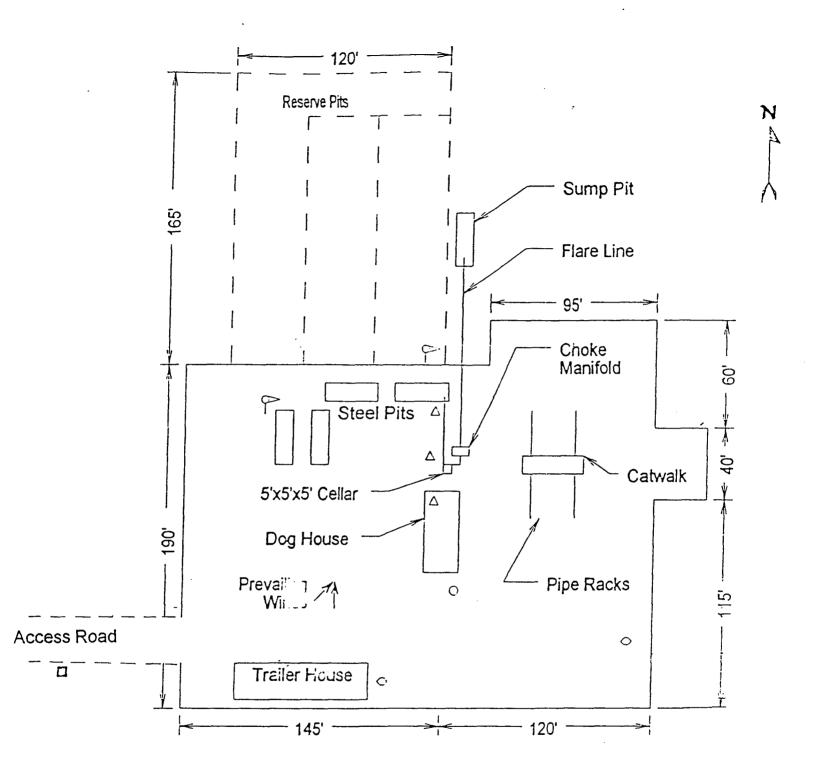
DATE

Lf : Agent

100

03/21/03

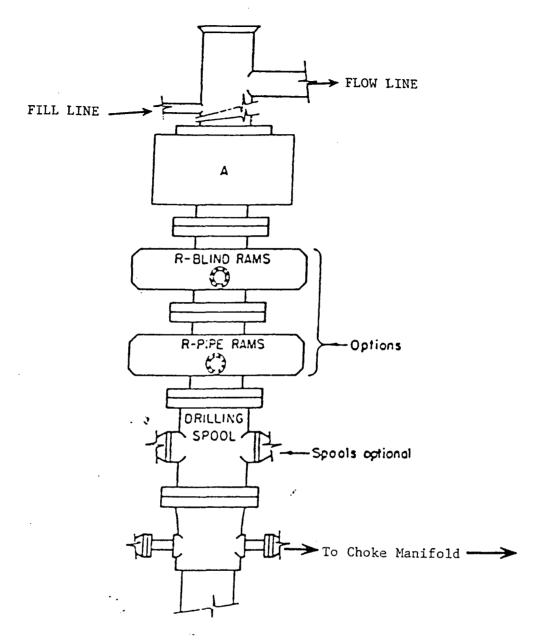




- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- Briefing Areas
- O Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
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
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
T24S-R31E EDDY CO. NM



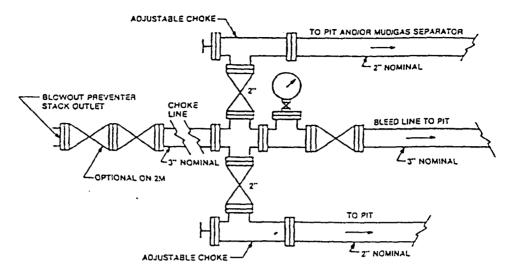


FIGURE K+1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

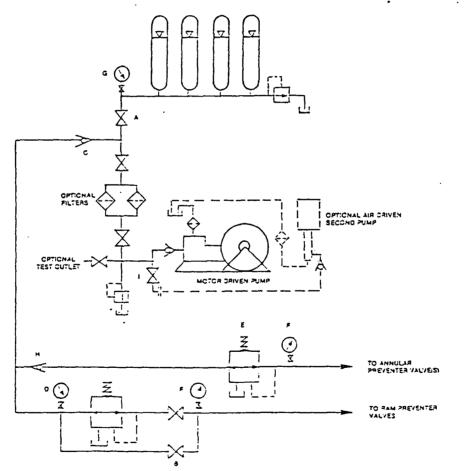


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 6
UNIT "P" SECTION 7
T24S-R31E EDDY CO. NM