Form 3160-3
(July 1992)

E-07

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

N.M. Oil Cons. Div. Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

5 P

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM-70895

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

7. UNIT AGREEMENT NAME: 15752

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME, WELL NO.: SUNDANCE "10" FEDERAL #3

2. NAME OF OPERATOR: POGO PRODUCING COMPANY 17891 (RICHARD WRIGHT 915-685-8140)

9. API WELL NO.: 30-015-32776

3. ADDRESS AND TELEPHONE NO.: P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (915-685-8100)

10. FIELD AND POOL, OR WILDCAT: SAND DUNES DELAWARE WEST

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: ~~660'~~ 330 FWL & 1980' FNL SEC. 10 T24S-R31E EDDY CO. NM
At proposed prod. zone: SAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SECTION 10 T24S-R31E

13-VG Lt. E

R-111-P Potash

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 18 miles East of Carlsbad New Mexico

12. COUNTY OR PARISH: EDDY CO. 13. STATE: NEW MEXICO

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660'	320	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
1320'	8500'	ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3446' GR. Carlsbad Controlled Water Basin

22. APPROX. DATE WORK WILL START*: WHEN APPROVED

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor 20"	NA	40'	Cement to surface with Redi-mix
17½"	H-40 13 3/8"	48	~~600'~~ 850'	800 Sx. circulate to surface
11"	J-55 8 5/8"	32	4200'	1200 Sx. " " "
7 7/8"	J-55 5½"	17 & 15.5	8500'	1750 Sx. " " "

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 600'. Run and set 600' of 13 3/8" 48# H-40 ST&C casing. Cement with 600 Sx. of Class "C" POZ-GEL 65/35/6, tail in with 200 Sx. of Class "C" cement + 2% CaCl. Circulate cement to surface.
3. Drill 11" hole to 4200'. Run and set 4200' of 8 5/8" 32# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" 65/35/6 POZ-GEL + 5% NaCl, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
4. Drill 7 7/8" hole to 8500'. Run and set 8500' of 5½" casing as follows: 2500' of 5½" 17# J-55 LT&C , 5000' of 15.5# J-55 LT&C, 1000' of 17# J-55 LT&C casing. Cement in 3 stages, DV Tools at 5800' & 3700' ±. Cement 1st stage with 650 Sx. of Class "H" Premium Plus cement + additives, 2nd stage cement with 600 Sx. of Class "C" cement + 8# of Gilsonite/Sx., cement 3rd stage with 400 Sx. of Class "C" 65/35/6 POZ-Gel, tail in with 100 Sx. of Class "C" cement + 1% CaCl, circulate cement to surface.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Joe T Janica TITLE Agent DATE 02/06/03

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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 conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

APPROVED BY /S/ GARY L. JOHNSON TITLE ACTING STATE DIRECTOR DATE APR 28 2003

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

RECEIVED
MAY 2003
OCD - ARTESIA

Title 18 U.S.C. Section 1001, makes 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.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

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

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	53815	SAND DUNES DELAWARE-WEST

Property Code	Property Name	Well Number
	SUNDANCE "10" FEDERAL	3

OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	3446'

Surface Location

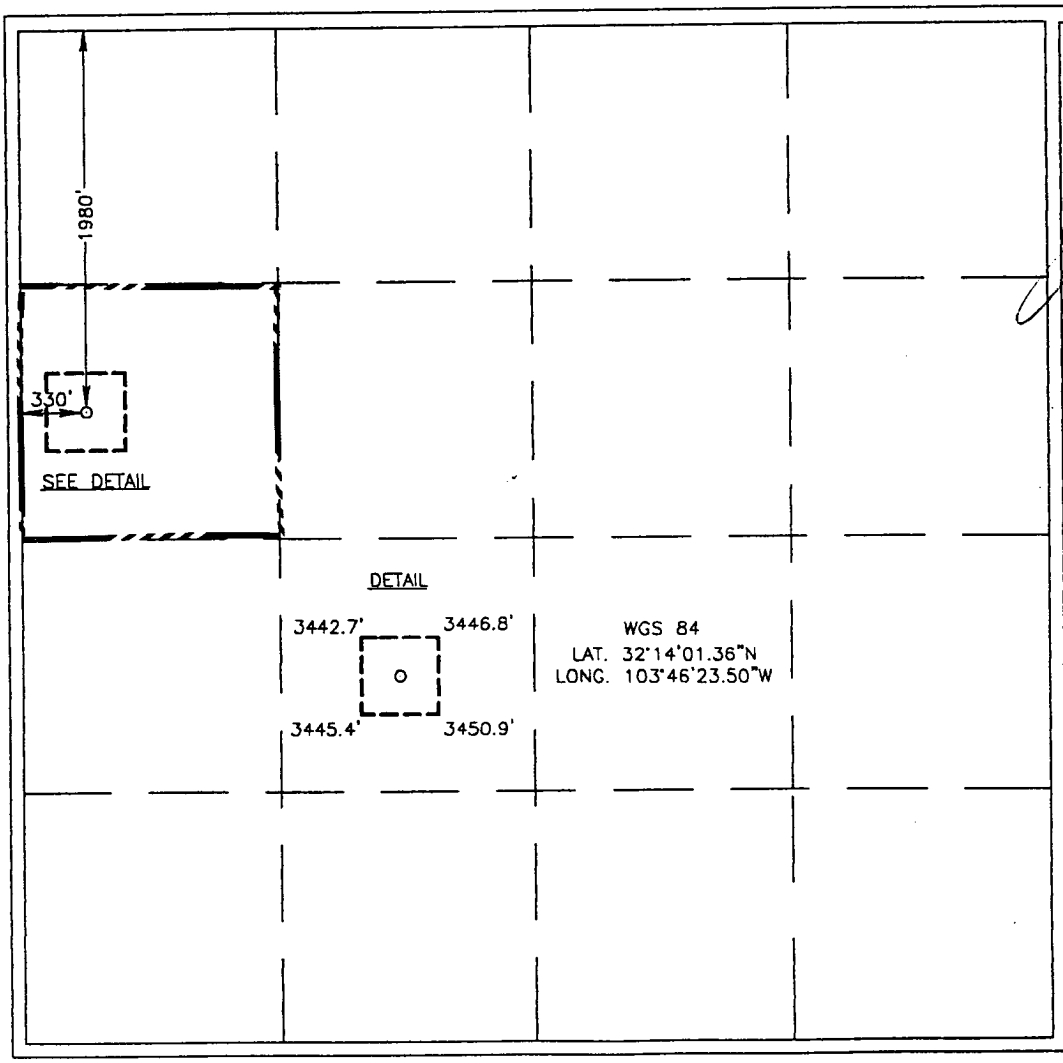
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	10	24-S	31-E		1980	NORTH	~~660~~ 330	WEST	EDDY

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 or Infill	Consolidation Code	Order 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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Joe T. Janica

Printed Name

Agent

Title

02/06/03

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.

JANUARY 24, 2003

Date Surveyed L.A.

Signature & Seal of Professional Surveyor

Ronald J. Eidson 1/31/03

03.11.0101

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

EXHIBIT "A"

APPLICATION TO DRILL

POGO PRODUCING COMPANY
SUNDANCE "10" FEDERAL # 3
UNIT "E" SECTION 10
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: 1980' FNL & ~~660'~~ 330' FWL SECTION 10 T24S-R31E EDDY CO. NM

2. Elevation above Sea Level: 3446' GR.

3. Geologic name of surface formation: Quaternery Aeolian Deposits.

4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.

5. Proposed drilling depth: 8500'

6. Estimated tops of geological markers:

Rustler Anhydrite	550'	Cherry Canyon	5250'
Basal Anhydrite	4080'	Manzanita	5460'
Delaware Lime	4320'	Brushy Canyon	6500'
Bell Canyon	4360'	Bone Spring	8208'

7. Possible mineral bearing formations:

Brushy Canyon	Oil
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"	0-600'	13 3/8"	48	8-R	ST&C	H-40
11"	0-4200'	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
SUNDANCE "10" FEDERAL # 3
UNIT "E" SECTION 10
T24S-R31E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 600' 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 cement to surface.
8 5/8"	Intermediate	Set 4200' 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"	Eroduction	Set 8500' of 5½" casing as follows: 2500' 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 with DV Tools at 5800' & 3700'±. cement 1st stage with 650 Sx. of Class "H" cement + additives, 2nd stage with 600 Sx. of Class "C" + 8# of 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, + ¼# Flocele/Sx. circulate cement to surface.

10. 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
40-600'	8.4-8.7	29-30	NC	Fresh water Spud Mud add paper to control seepage
600-4200'	10.1-10.2	29-38	NC	Brine water add paper to control seepage and use high viscosity sweeps to clean hole.
4200-8500'	8.4-8.7	29-40	NC *	Fresh water use Gel to control viscosity and high viscosity sweeps to clean hole if water loss is required go to a Poly-mer system

* If water loss control is needed to run logs and casing go to a Poly-mer 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, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
SUNDANCE "10" FEDERAL # 3
UNIT "E" SECTION 10
T24S-R31E EDDY CO. NM

12. TESTING, LOGGING, & COREING PROGRAM:

A. Open hole logs: Dual Induction, LDT,CNL, Gamma Ray Caliper from TD back to 8 5/8" casing shoe.

B. cased hole logs: Gamma Ray, Neutron from 4200'± back to surface.

C. Mud logger may be placed on hole at 4200' and remain on to TD.

D. No cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H_2S detectors will be in place to detect any presence of unsafe levels of H_2S. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operations of all equipment that will be used. Estimated BHP 4000 PSI & estimated BHT 160°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Roads and location construction will begin after the BLM approves the APD. Anticipated spud date will be as soon as pad & road construction has been completed. Drilling time for the well is estimated to take 30 days. If production casing is run an additional 30 days will be required to complete well and construct surface facilities.

15. OTHER FACETS OF OPERATION:

After running production casing, cased hole Gamma-Neutron & Collar logs will be run over all possible pay intervals. If commercial production from the BONE SPRING pay is indicated it will be perforated and stimulated. Then if necessary the pay will be swab tested and completed 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_2S safety instructor to the following:

   A. Characteristics of H_2S
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of H_2S 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_2S Detection and Alarm Systems

   A. H_2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.

3. Windsock and/or wind streamers

   A. Windsock at mudpit area should be high enough to be visible.
   B. Windsock at briefing area should be high enough to be visible.
   C. There should be a windsock at entrance to location.

4. Condition Flags and Signs

   A. Warning sign on access road to location.
   B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H_2S 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.

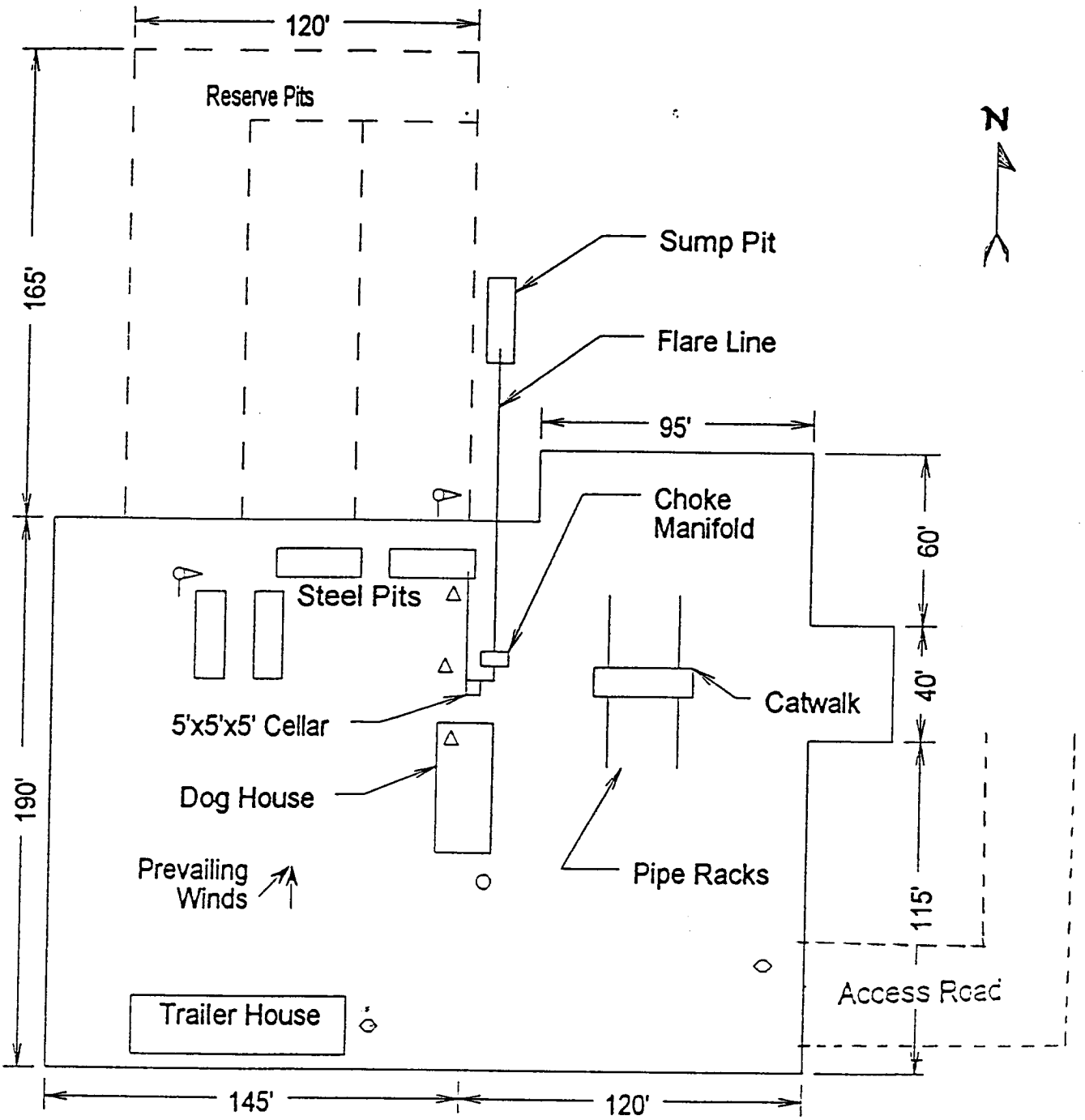
7. Drillstem Testing

   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.

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.

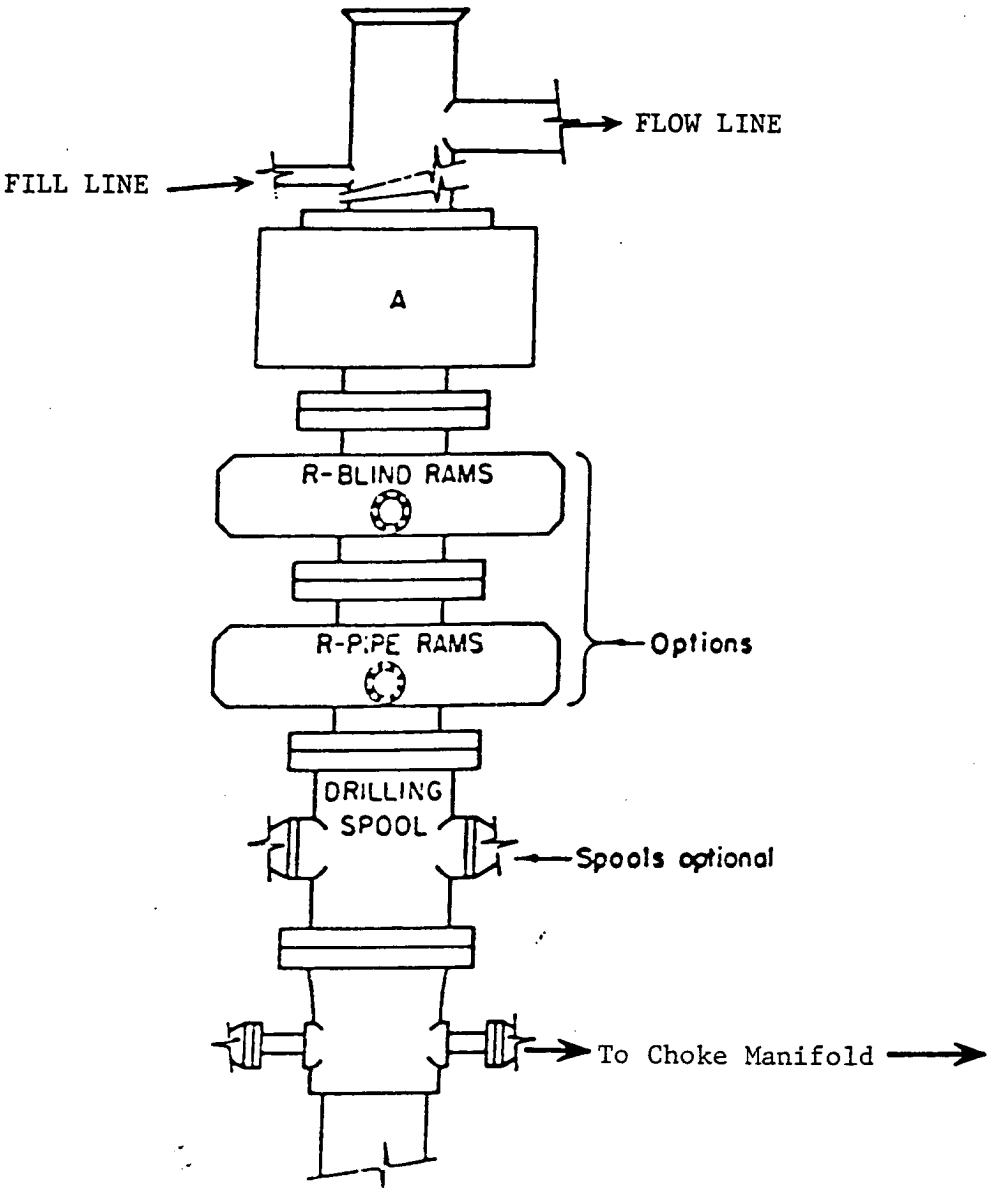


- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- ◇ Briefing Areas
- ○ Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"

RIG LAY OUT PLAT

POGO PRODUCING COMPANY
SUNDANCE "10" FEDERAL # 3
UNIT "E" SECTION 10
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 "10" FEDERAL # 3
UNIT "E" SECTION 10
T24S-R31E EDDY CO. NM

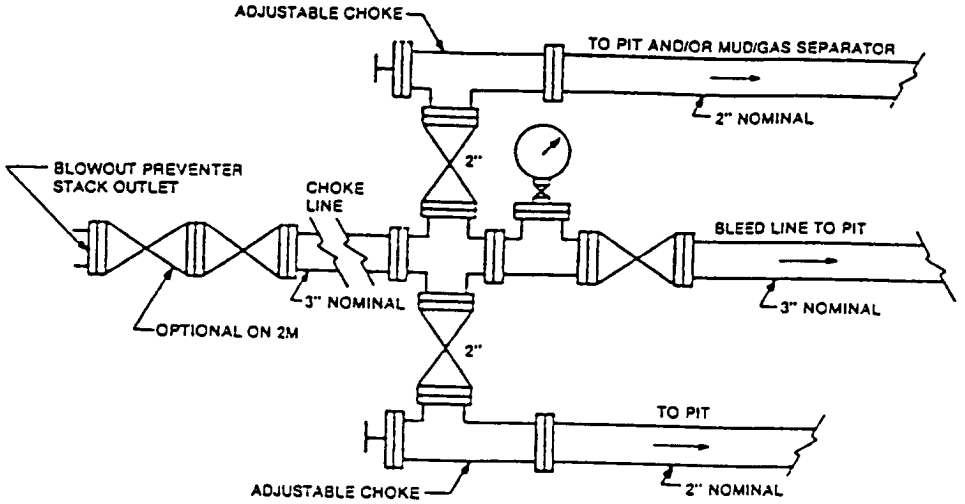


FIGURE K4-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

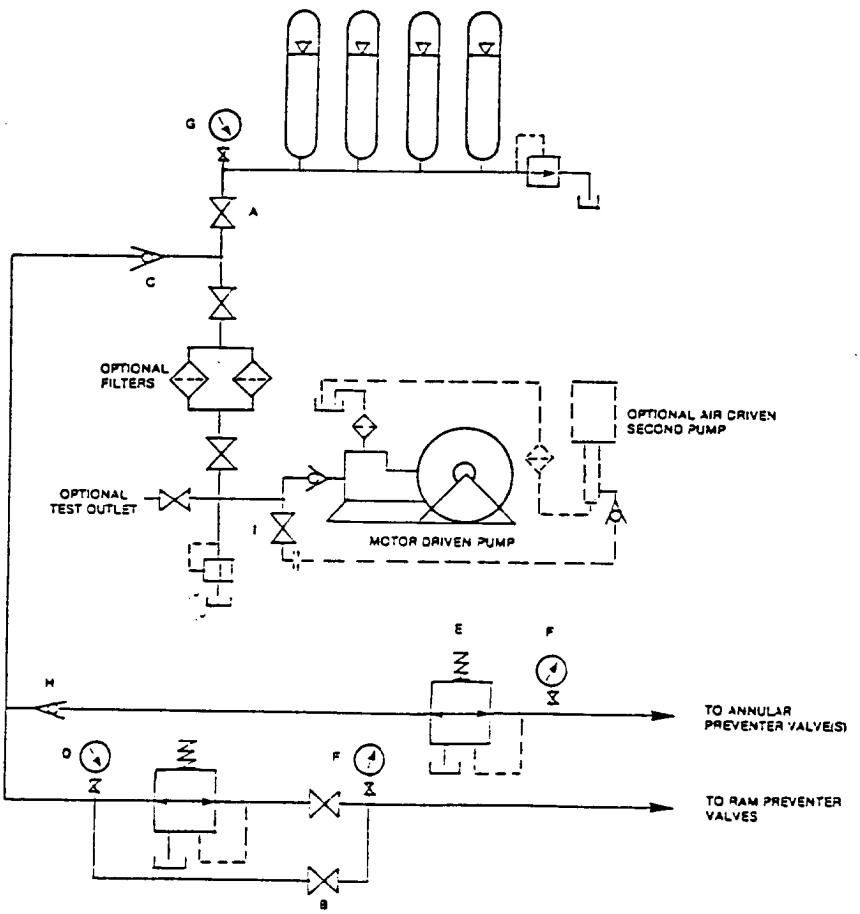


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
SUNDANCE "10" FEDERAL # 3
UNIT "E" SECTION 10
T24S-R31E EDDY CO. NM