

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

1025 N. 11th Drive
Hobbs, NM 88240

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
 DRILL DEEPEN 0599

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

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

3. ADDRESS AND TELEPHONE NO.
 P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (915-695-8100)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface
 660' INL & 330' FWL SEC. 19 T22S=R32E LEA CO. NM
 At proposed prod. zone SAME D

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 Approximately 30 miles East of Carlsbad New Mexico

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 330'

16. NO. OF ACRES IN LEASE
 80

17. NO. OF ACRES ASSIGNED TO THIS WELL
 40

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 NA

19. PROPOSED DEPTH
 8600'

20. ROTARY OR CABLE TOOLS
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 3594' GR. **Carlsbad Controlled Water Basin**

22. APPROX. DATE WORK WILL START*
 WHEN APPROVED

5. LEASE DESIGNATION AND SERIAL NO.
 NM- 90587

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME WELL NO.
 LIVINGSTON RIDGE "19" FED # 1

9. API WELL NO.
 30-025-35960

10. FIELD AND POOL, OR WILDCAT
 Livingston Ridge, Delaware

11. SEC., T., R., M., OR BLM, AND SURVEY OR AREA
 SECTION 19 T22S-R32E

12. COUNTY OR PARISH
 LEA CO.

13. STATE
 NEW MEXICO

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface with Redi-mix.
17 1/2"	H-40 13 3/8"	48	800'	800 Sx. circulate to surface-
11"	J-55 8 5/8"	32	4400'	1500 Sx " " "
7 7/8"	J-55 5 1/2"	17 & 15.5	8600'	1650 Sx. " " "

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 800'. Run and set 800' of 13 3/8" 48# H-40 ST&C. Cement with 800 Sx. of Class "C" cement + 2% CaCl, + 1/2# Flocele/Sx. Circulate cement to surface.
3. Drill 11" hole to 4400'. Run and set 4400' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of Class "C" cement + additives, circulate cement to surface.
4. Drill 7 7/8" hole to 8600'. Run and set 8600' of 5 1/2" casing as follows: 2500' of 5 1/2" 17# J-55 LT&C, 5100' of 5 1/2" 15.5# J-55 LT&C, 1000' of 5 1/2" 17# J-55 LT&C. Set DV tools at 6100' & 3700'±. Cement 1st stage with 650 Sx. of Class "H" cement + additives, 2nd stage cement with 600 Sx. of Class "C" cement + additives, 3rd stage cement with 400 Sx. of Class "C" cement + additives, circulate cement to surface.

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present well depth and proposed depth. 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.

SIGNED Joel Jarama TITLE Agent DATE 05/20/02

(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

CONDITIONS OF APPROVAL, IF ANY:

OPER. OGRID NO. 17891
 PROPERTY NO. 15706
 POOL CODE 39360
 EFF. DATE 7-29-02
 API NO. 30-025-35960

APPROVED BY /s/ Mary J. Rugwell TITLE FIELD MANAGER DATE JUL 26 2002

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

RECEIVED

2009 MAY 21 AM 9:28

RECEIVED

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., Artec, 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 30-025-35960	Pool Code 39360 39366	Pool Name LIVINGSTON RIDGE-DELAWARE East
Property Code 15706	Property Name LIVINGSTON RIDGE "19" FEDERAL	Well Number 1
GRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 3594'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1/D	19	22-S	32-E		660	NORTH	330	WEST	LEA

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

<p>LOT 1 660' 330' SEE DETAIL</p> <p>3591.2' 3597.5' 3585.8' 3601.4' DETAIL</p> <p>44.70 AC LOT 2</p> <p>44.75 AC LOT 3</p> <p>44.79 AC LOT 4</p> <p>77.84 AC</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Joe T. Janica</i> Signature Joe T. Janica Printed Name Agent Title 05/20/02 Date</p>	
	<p>SURVEYOR CERTIFICATION</p> <p>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 supervision, and that the same is true and correct to the best of my belief.</p> <p>MAY 16, 2002 Date Surveyed A.W.B.</p> <p>Signature & Seal of Professional Surveyor <i>Ronald J. Edson</i> 02.11.0358 Certificate No. RONALD J. EDSON 3239 GARY EDSON 12641</p>	

EXHIBIT "A"

APPLICATION TO DRILL

POGO PRODUCING COMPANY
 LIVINGSTON RIDGE "19" FEDERAL # 1
 LOT # 1 (UNIT "D") SECTION 19
 T22S-R32E LEA 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: 660' FNL & 330' FWL SECTION 19 T22S-R32E LEA CO. NM
2. Elevation above Sea Level: 3594' 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: 8600'
6. Estimated tops of geological markers:

Basal Anhydrite	4250'	Cherry Canyon	5390'
Delaware Lime	4515'	Brushy Canyon	6630'
Bell Canyon	4540'	Bone Spring	8400'
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"	0-800'	13 3/8"	48	8-R	ST&C	H-40
11"	0-4400'	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-8600'	5½"	17 & 15.5	8-R	LT&C	J-55

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 LOT # 1 (UNIT "D") SECTION 19
 T22S-R32E LEA 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 800' of 13 3/8" 48# H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + additives, circulate cement to surface.
8 5/8"	Intermediate	Set 4400' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of Class "C" cement + additives, circulate cement to surface.
5 1/2"	Production	Set 8600' of 5 1/2" casing as follows: 2500' of 5 1/2" 17# J-55 LT&C, 5100" of 5 1/2" 15.5# J-55 LT&C, 1000' of 5 1/2" 17# J-55 LT&C. Set DV Tools at 6100' & 3700" ±. Cement 1st stage with 650 Sx. of Class "H" cement + additives, 2nd stage cement with 600 Sx. of Class "C" cement + additives, 3rd stage cement with 400 Sx. of Class "C" cement + additives, 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 nipped 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 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
40-800'	8.5-8.8	29-38	NC	Fresh water spud mud add paper to control seepage.
800-4400'	10-10.2	29-38	NC	Brine water, add paper to control seepage and use high viscosity sweeps to clean hole.
4400-8600'	8.4-8.7	29-38	NC	Fresh water mud use fresh water Gel to control viscosity use high viscosity sweeps to clean hole and if water loss control is needed 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, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
LIVINGSTON RIDGE "19" FEDERAL # 1
LOT # 1 (UNIT "D") SECTION 19
T22S-R32E LEA CO. NM

12. TESTING, LOGGING, & COREING PROGRAM:

- A. Open hole logs: Run 1 Dual Laterolog, SNP, LDT, Gamma Ray Caliper from 4400' to 800', Gamma Ray, Neutron from 800' to surface. Run 2 Dual Induction SNP, LDT, Gamma Ray Caliper from TD to 4400'.
- B. Mud logger will be put on hole at 4400' and remain to TD.
- C. 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, H₂S detectors will be in place to detect any presence of unsafe levels of H₂S. 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 4200 PSI & estimated BHT 168°.

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 28 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.

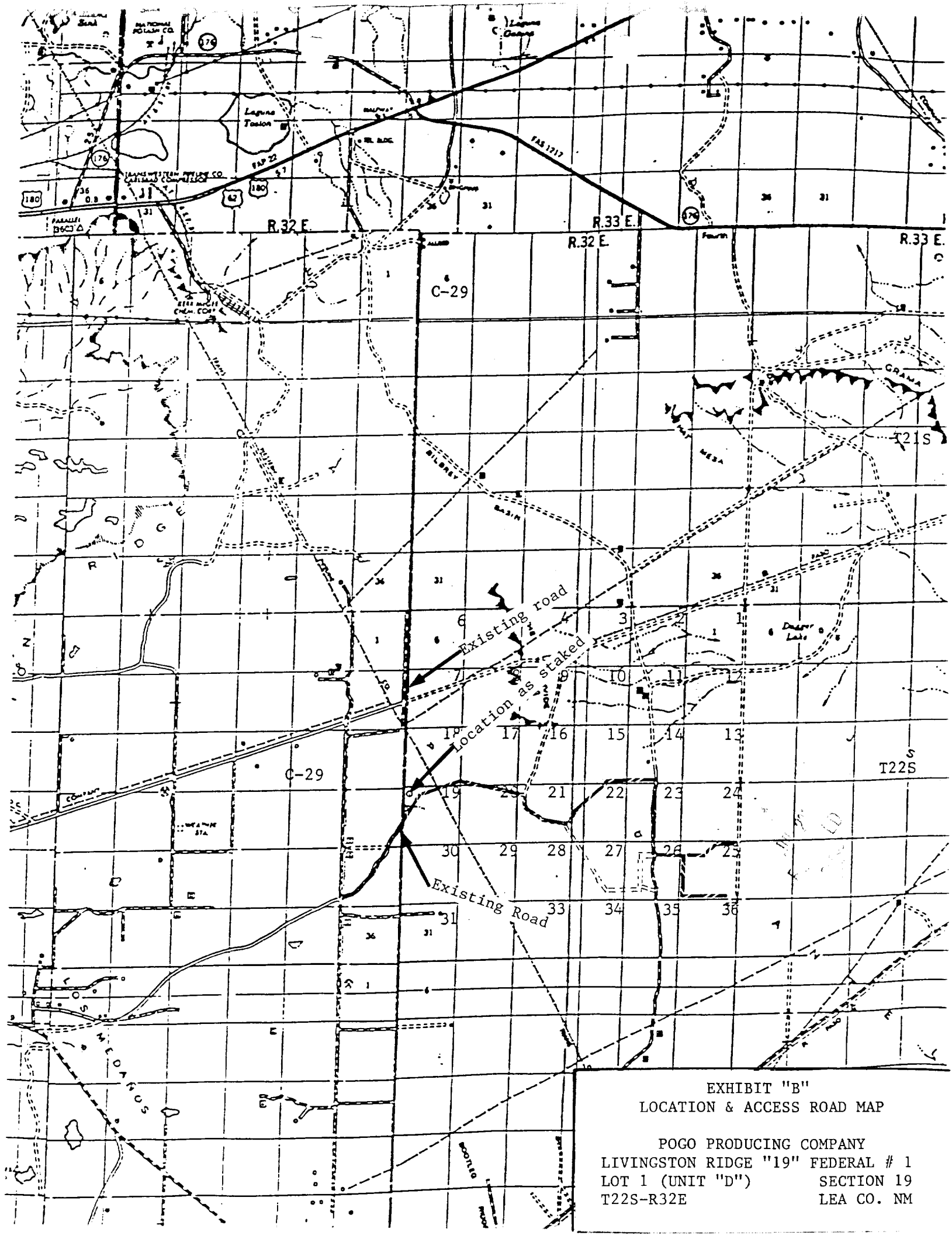
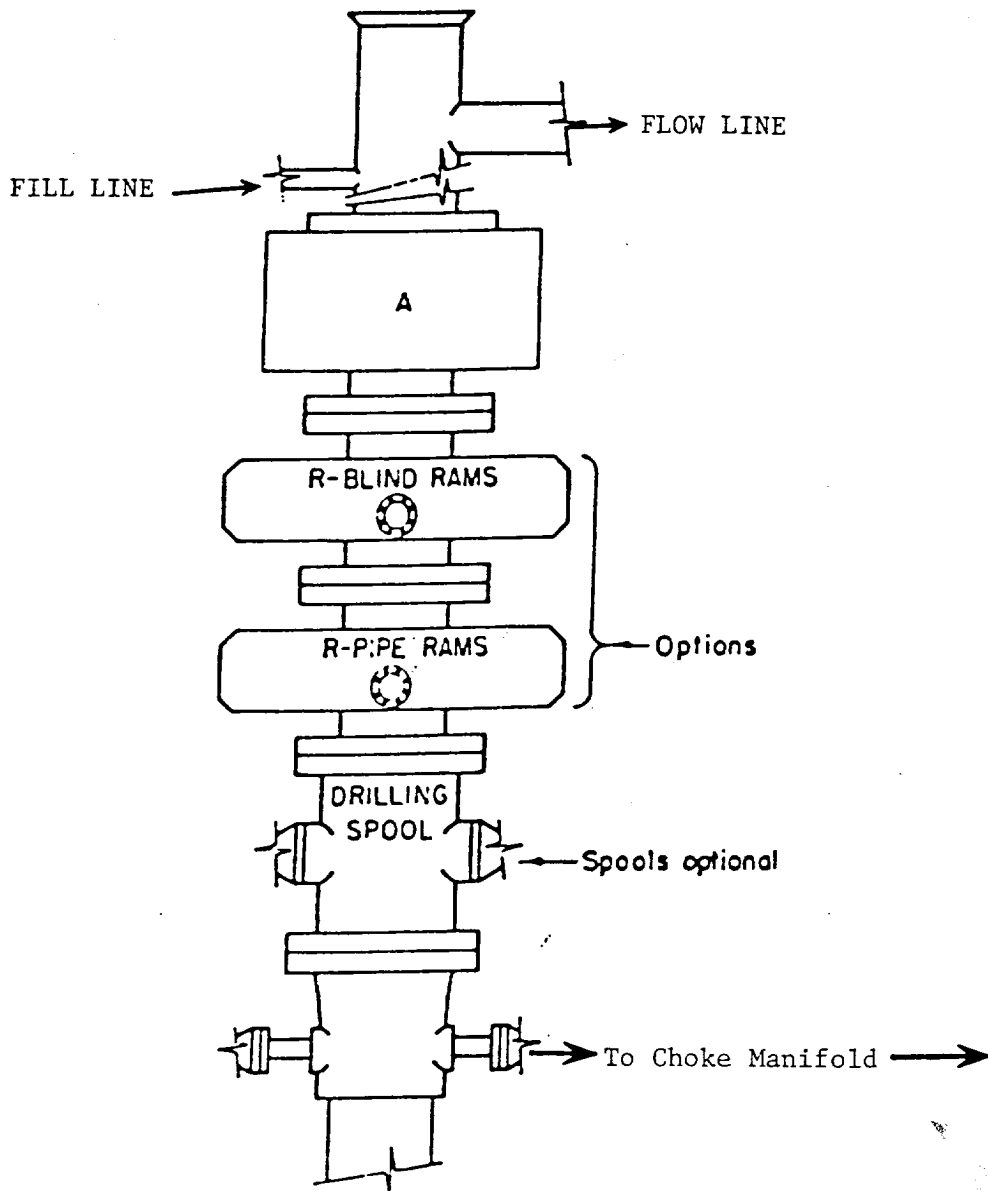


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
LIVINGSTON RIDGE "19" FEDERAL # 1
LOT 1 (UNIT "D") SECTION 19
T22S-R32E LEA CO. NM



ARRANGEMENT SRRA

900 Series
3000 PSI WP

ED
100

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

POGO PRODUCING COMPANY
LIVINGSTON RIDGE "19" FEDERAL # 1
LOT 1 (UNIT "D") SECTION 19
T22S-R32E LEA CO. NM

ELF
2/11/03
ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED