

UNITED STATES M. Oil Cons. Dist. 2
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1301 W. Grand Avenue
Artesia, NM 88210FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-93475		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----		
2. NAME OF OPERATOR POGO PRODUCING COMPANY (RICHARD WRIGHT 432-685-8140)		7. UNIT AGREEMENT NAME -----		
3. ADDRESS AND TELEPHONE NO. POGO PRODUCING COMPANY P.O. BOX 10340 PH. 432-685-8100 MIDLAND, TEXAS 79702-7340		8. FARM OR LEASE NAME, WELL NO. HARROUN "20" FEDERAL #1		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 990' FSL & 2310' FEL SEC. 20 T23S-R29E EDDY CO. NM At proposed prod. zone SAME		9. API WELL NO. 30-015-33599		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approximately 6 miles East of Loving New Mexico		10. FIELD AND POOL, OR WILDCAT SALADO SOUTH BONE SPRING		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 990'		11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA SECTION 20 T23S-R29E		
16. NO. OF ACRES IN LEASE 80		12. COUNTY OR PARISH 13. STATE EDDY CO. NEW MEXICO		
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		20. ROTARY OR CABLE TOOLS ROTARY		
19. PROPOSED DEPTH 6700'		21. APPROX. DATE WORK WILL START* WHEN APPROVED		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 2978' GR.				
23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25" WITNESS	Conductor	NA	40'	Cement to surface W/Redi-mix
12 1/4"	J-55 8 5/8"	24	550'	300 Sx. Circulate to surface
7 7/8"	J-55 4 1/2"	11.6	6700'	1550 Sx. " " "

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 12 1/4" hole to 550'. Run and set 550' of 8 5/8" 24# J-55 ST&C casing. Cement with 100 Sx. of 65/35/6 Class "C" POZ Gel, tail in with 200 Sx. of Class "C" cement + 1/4# Flocele/Sx, + 2% CaCl, circulate cement to surface.
3. Drill 7 7/8" hole to 6700'. Run and set 6700' of 4 1/2" 11.6# J-55 ST&C casing. Cement in 2 stages with DV Tool at 3000'±. Cement 1st stage with 850 Sx. of Class "C" cement + 8# of Gilsonite/Sx., cement 2nd stage with 600 Sx. of Class "C" 65/35/6 POZ-Gel + 5% NaCl, tail in with 100 Sx. of Class "C" cement +2% CaCl. Top of cement surface.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

CARLSBAD CONTROLLED WATER BASIN

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 04/15/04
(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: **ACTING**APPROVED BY /s/ Joe G. Lara TITLE FIELD MANAGER DATE 2 JUN 2004

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

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
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
March 12, 2004
For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Pogo Producing Company Telephone: 432-685-8100 e-mail address: wrightc@pogoproducing.com
Address: P. O. Box 10340, Midland, TX 79702-7340
Facility or well name: Harroun 20 Fed #1 API #: 0 U/L or Qtr/Qu 0 Sec 20 T 23 R 29
County: Eddy Latitude 32:17:08.88N Longitude 104:00:19.62W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Volume <u>16000</u> bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet <input checked="" type="checkbox"/> 100 feet or more	(20 points) (10 points) <u>10</u> (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No <input checked="" type="checkbox"/>	(20 points) (0 points) <u>0</u>
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more <input checked="" type="checkbox"/>	(20 points) (10 points) (0 points) <u>0</u>
Ranking Score (Total Points)		<u>10</u>

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite ☐ offsite ☐ If offsite, name of facility: _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 08/26/04

Printed Name/Title: Cathy Wright, Sr Engineering Tech

Cathy Wright

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Aug 26 2004

Printed Name/Title: Wild Sep 20

Signature: *[Signature]*

DISTRICT I
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
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

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

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
		SALADO SOUTH BONE SPRING
Property Code	Property Name	Well Number
	HARROUN "20" FEDERAL	1
OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	2978'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	20	23-S	29-E		990	SOUTH	2310	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 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

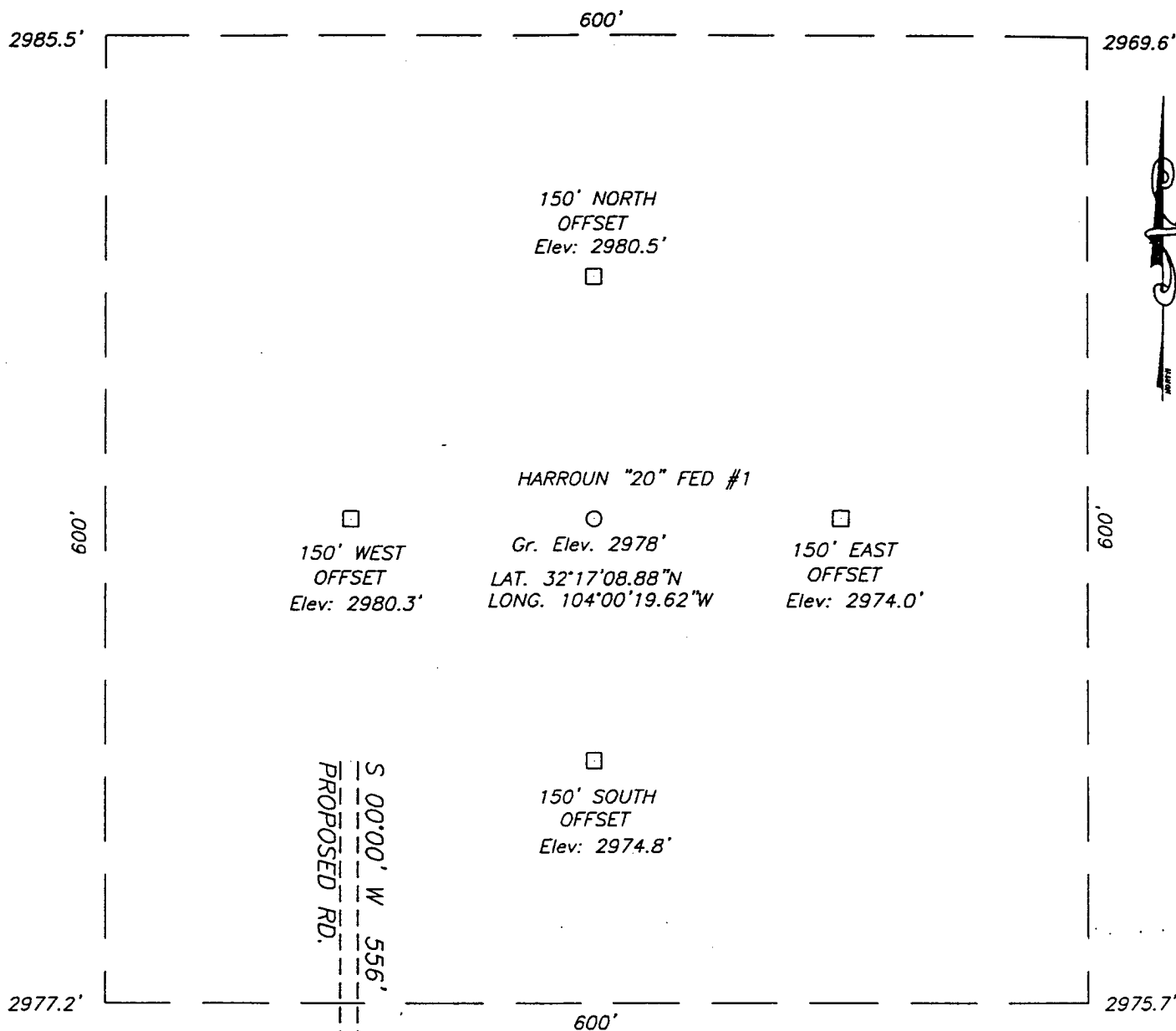
<p><u>GEODETIC COORDINATES</u> NAD 27 NME Y = 467845.9 N X = 601325.7 E LAT. 32°17'08.88"N LONG. 104°00'19.62"W</p> <p>2985.5' 600' 2989.6' 2310' 2977.2' 990' 2975.7'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Joe T. Janica</i> Signature Joe T. Janica Printed Name Agent Title 04/15/04 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>April 06, 2004</p> <p>Date Surveyed Signature Professional Surveyor GARY KIDSON 04.11.0402 Certificate No. GARY KIDSON 12641</p>

EXHIBIT "A"

SECTION 20, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.,

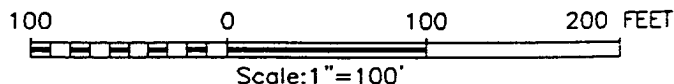
EDDY COUNTY,

NEW MEXICO.



DRIVING DIRECTIONS

FROM THE INTERSECTION OF STATE HWY. #128 (JAL HWY.) AND CO. RD. #793 (RAWHIDE RD.). GO SOUTH ON CO. RD. 793 FOR 3.0 MILES TO A GOOD CALICHE RD. ON THE RIGHT (WEST). GO IN A WESTERLY DIRECTION ON CALICHE RD. FOR 4.0 MILES TO A FORK IN THE RD. TAKE THE RIGHT FORK AND GO 0.5 MILES TO PROPOSED RD. SURVEYED TO THIS LOCATION WHICH IS APPROX. 700' TO THE NORTH.



POGO PRODUCING COMPANY

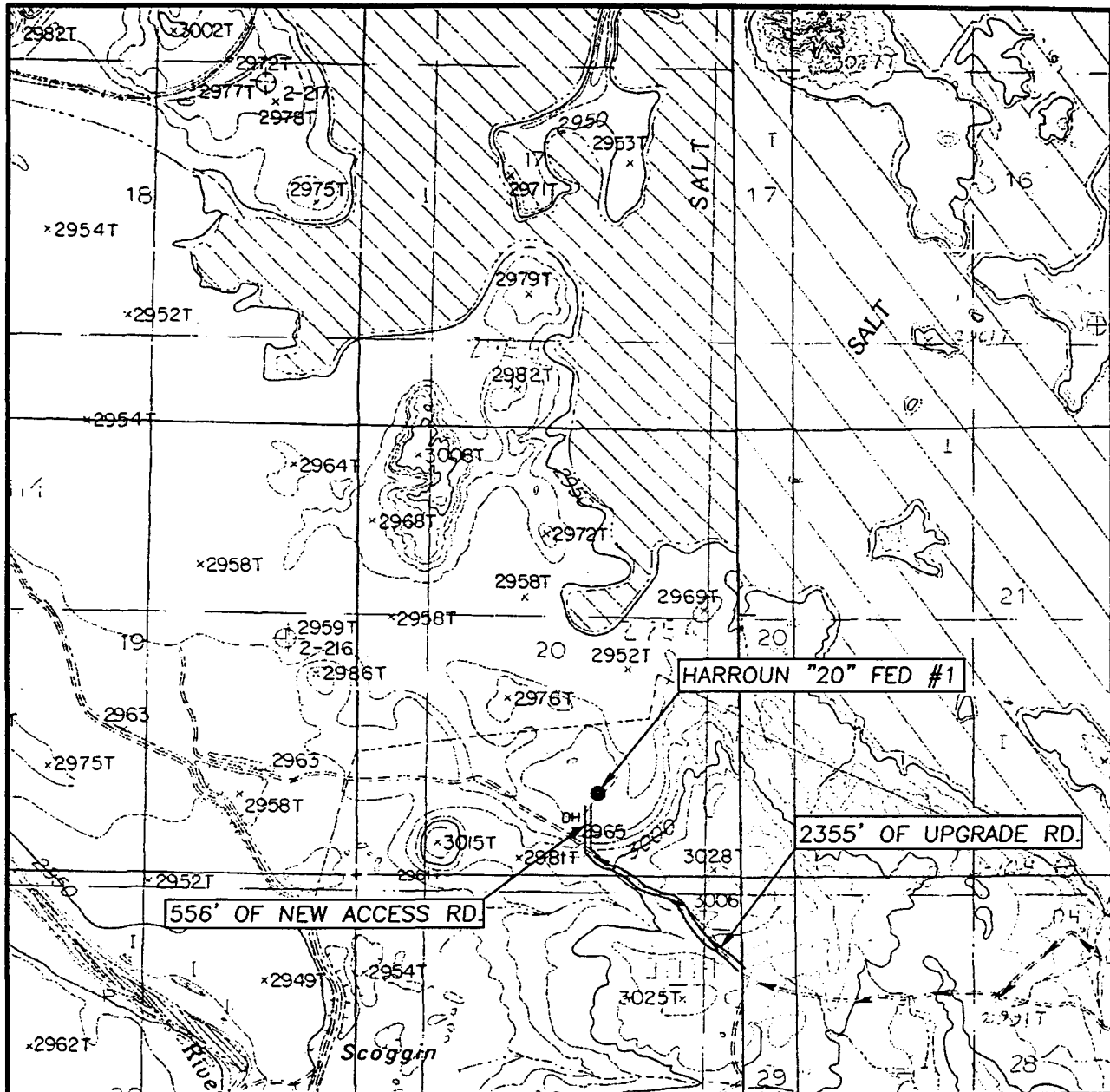
HARROUN "20" FEDERAL #1 LOCATED 990' FROM THE SOUTH LINE AND 2310' FROM THE EAST LINE OF SECTION 20, TOWNSHIP 23 SOUTH, RANGE 29 EAST, EDDY COUNTY, NEW MEXICO



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 383-3117

Survey Date: 04/06/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0402	DRAWN BY: A.W.B
Date: 04/08/04	DISK: CD#10
04.11.0402	Scale: 1"=100'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
LOVING, N.M.

SEC. 20 TWP. 23-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 990' FSL & 2310' FEL

ELEVATION 2978'

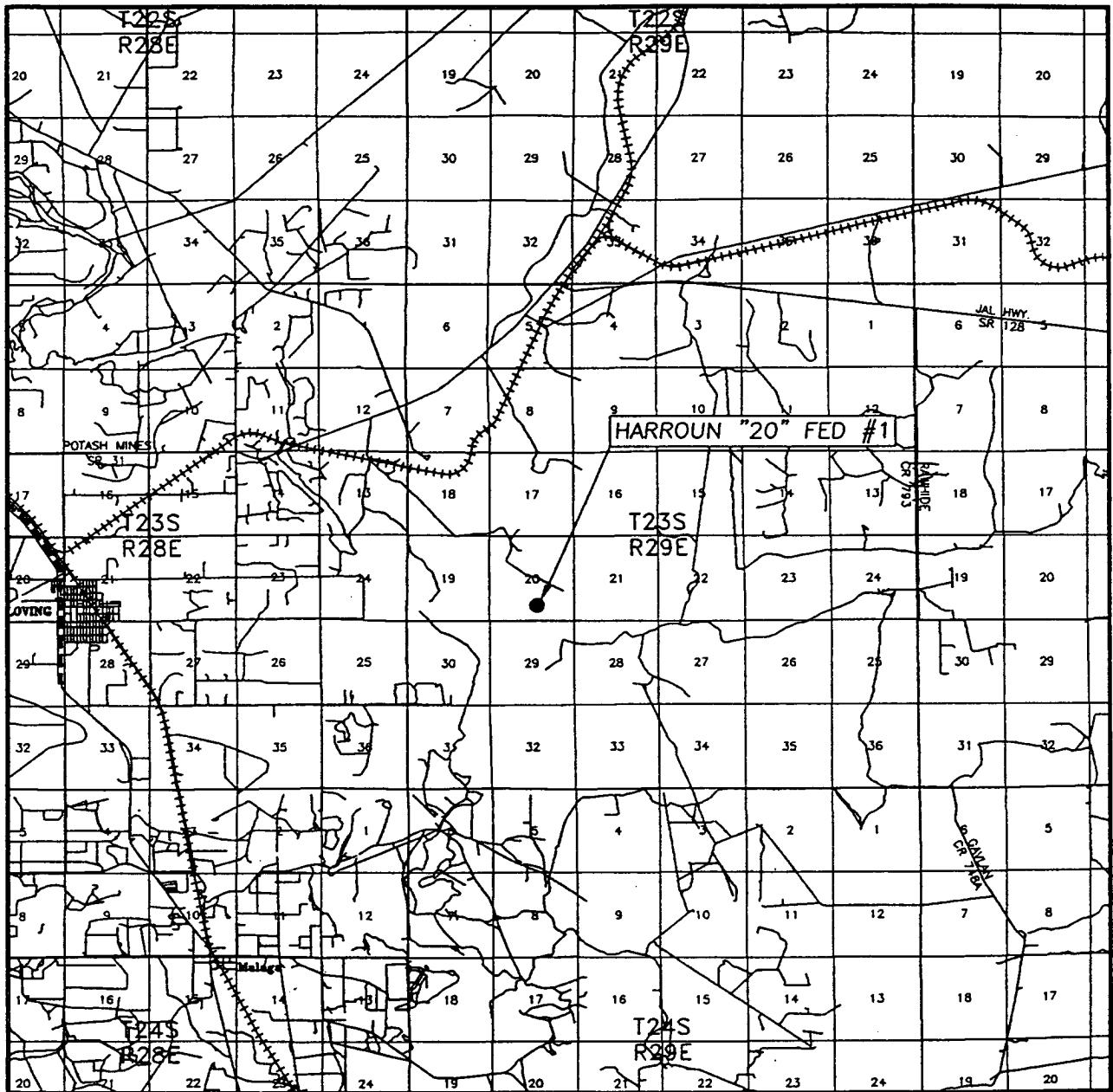
OPERATOR POGO PRODUCING COMPANY

LEASE HARROUN "20" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
LOVING, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 20 TWP. 23-S RGE. 29-E
 SURVEY N.M.P.M.
 COUNTY EDDY
 DESCRIPTION 990' FSL & 2310' FEL
 ELEVATION 2978'
 OPERATOR POGO PRODUCING COMPANY
 LEASE HARROUN "20" FEDERAL

JOHN WEST SURVEYING
 HOBBS, NEW MEXICO
 (505) 393-3117

APPLICATION TO DRILL

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E 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: 990' FSL & 2310' FEL SECTION 20 T23S-R29E EDDY CO. NM

2. Ground Elevation above Sea Level: 2978' 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: 6700'

6. Estimated tops of geological markers:

Basal Anhydrite	2690'	Cherry Canyon	3620'
Belaware Lime	2800'	Brushy Canyon	4850'
Bell Canyon	2850'	Bone Spring	6500'

7. Possible mineral bearing formations:

Bone Spring	Oil
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8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
12 $\frac{1}{2}$ "	0-550'	8 5/8"	24#	8-R	ST&C	J-55
7 7/8"	0-6700'	4 $\frac{1}{2}$ "	11.6#	8-R	ST&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
8 5/8"	Surface	Set 550' of 8 5/8" 24# J-55 ST&C casing. Cement with 100 Sx. of 65/35/6 Class "C" POZ Gel, tail in with 200 Sx. if Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
4 1/2"	Production	Set 6700' of 4 1/2" 11.6# J-55 ST&C casing. Cement in 2 stages with DV Tool at 3000'±. Cement 1st stage with 850 Sx. of Class "C" cement + 8# of Gilsonite/Sx. + other additives, cement 2nd stage with 600 Sx. Class "C" 65/35/6 POZ-Gel, + 5% Salt, tail in with 100 Sx. of Class "C" cement + 2% CaCl. 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 8-5/8" 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
40-550'	8.4-8.7	29-36	NA	Fresh water Spud Mud, add paper to control seepage.
550-6700'	10.0-10.2	29-40	NC *	Brine water use paper to control seepage and use high viscosity sweeps to clean hole.

* If water loss is needed in order to run logs, casing, and/or DST's go to a Polymer mud 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
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Laterolog, CNL, LDT, Gamma Ray, Caliper from TD back to 8 5/8" casing shoe. Run Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- B. Mud logger may be placed on hole at the direction of the Geologist.
- 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 3500± PSI, and Estimated BHT 135°.

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 12 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 BONE SPRING formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized 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 hazards
 - 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.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

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 separator will be brought into service along with H₂S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E 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 Mexico take U.S. Hi-way 62-180 toward Carlsbad New Mexico go approximately 40 miles to the WIPP road, turn Left (South) go 13 miles to CR. -802, turn Right and follow Cr-802 3.8 miles to State Hi-way 128, turn Right and go 6 miles to Rawhide Road, turn Left (South) go 35. miles, turn Right (West) follow road for 4.7 miles, turn Right and follow reclaimed, and new road .6 miles to location.
 - C. No powerlines or flowlines are anticipated at this time if they will be required at a later date the request for them will be applied for on a Sundry report.
2. PLANNED ACCESS ROADS: Approximately .5 miles of old road will be reclaimed and approximately 600' 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 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 - None known
 - D. Producing wells - As shown on Exhibit "A-1"
 - E. Abandoned wells - As shown on Exhibit "A-1"

SURFACE USE PLAN

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E 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". No pipelines or powerlines are planned at this time.

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 quarters 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 furthred 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.

SURFACE USE PLAN

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E 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.

SURFACE USE PLAN

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of low lying sand dunes with a thin layer of sand under lying caliche and gypsum. Slight dip to the North, drainage is into the salt lake that is North of the location. Vegetation consists of prickley pear, cat-claw, 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 will be conducted on the location and the access road. The report of findings will be made and filed with The Bureau of Land Management Carlsbad Field Office.
- D. There are no dwellings in the near vicinity of this location.

12. OPERATION'S REPRESENTATIVES:

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

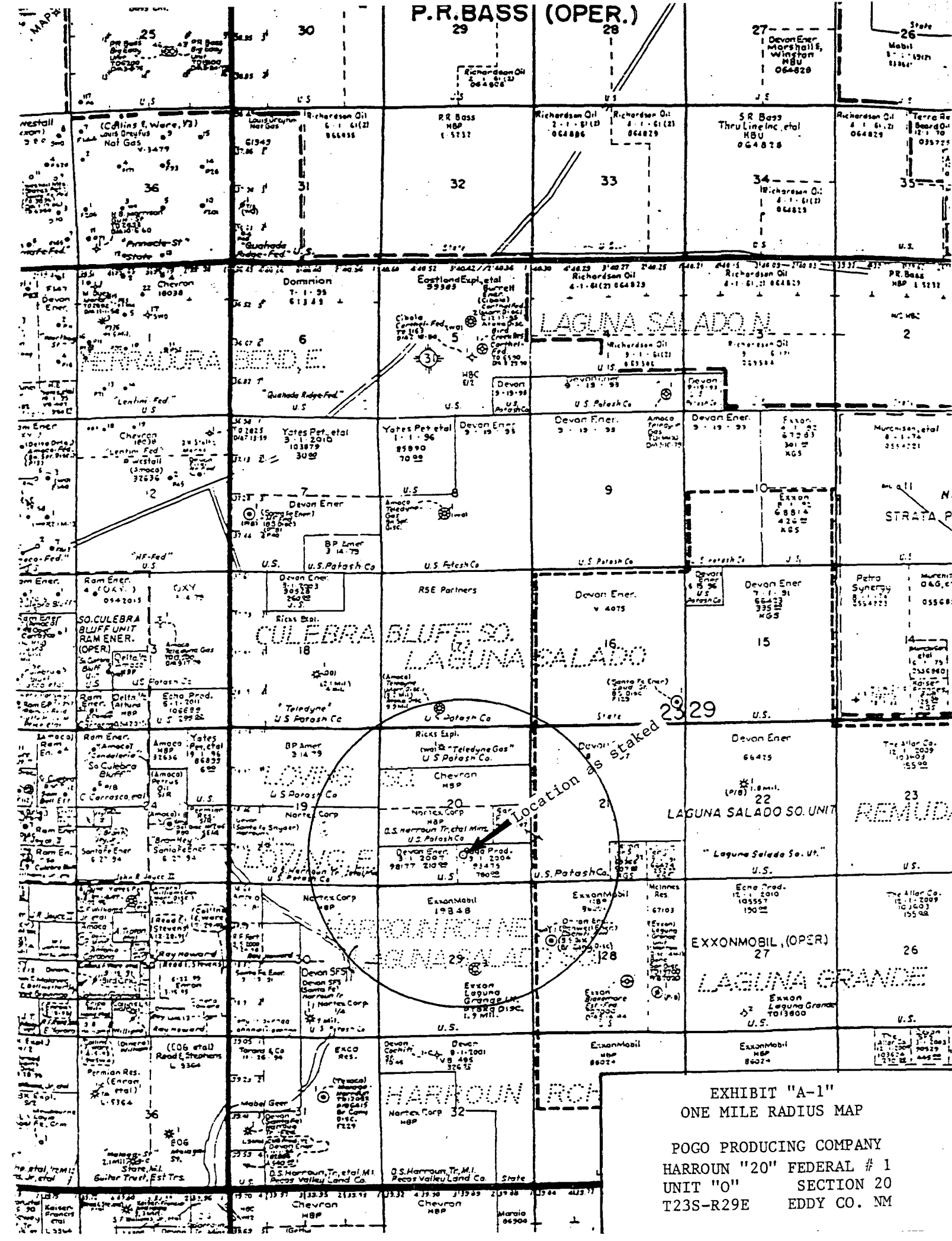
13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and the access roads, and that I am familiar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge are true and correct, and that the work associated with the operations proposed herein will be performed by POGO PRODUCING COMPANY it's contractors/subcontractors is in conformity 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 : Joe T. Janica

DATE : 04/15/04

TITLE : Agent

(OPER.



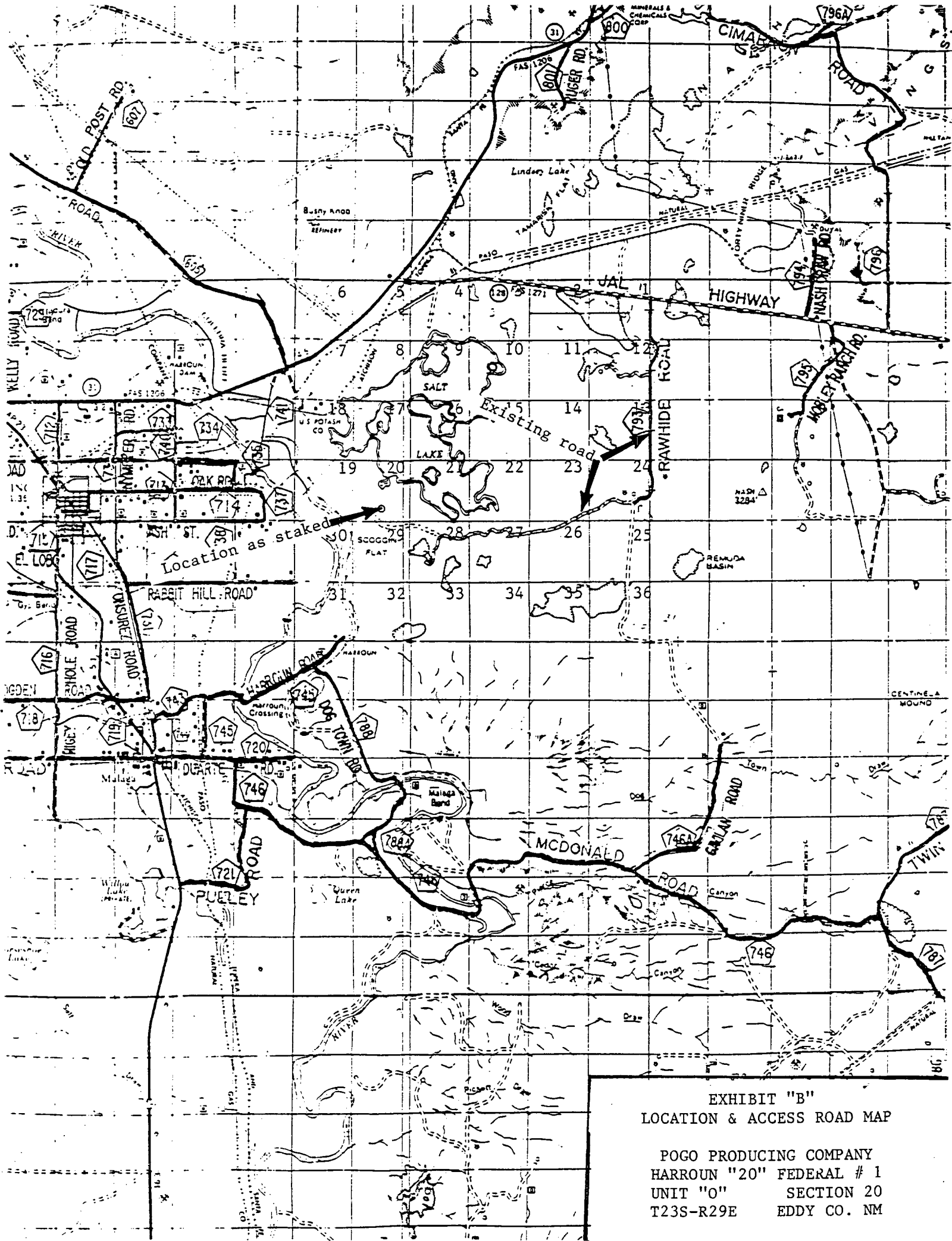


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E EDDY CO. NM

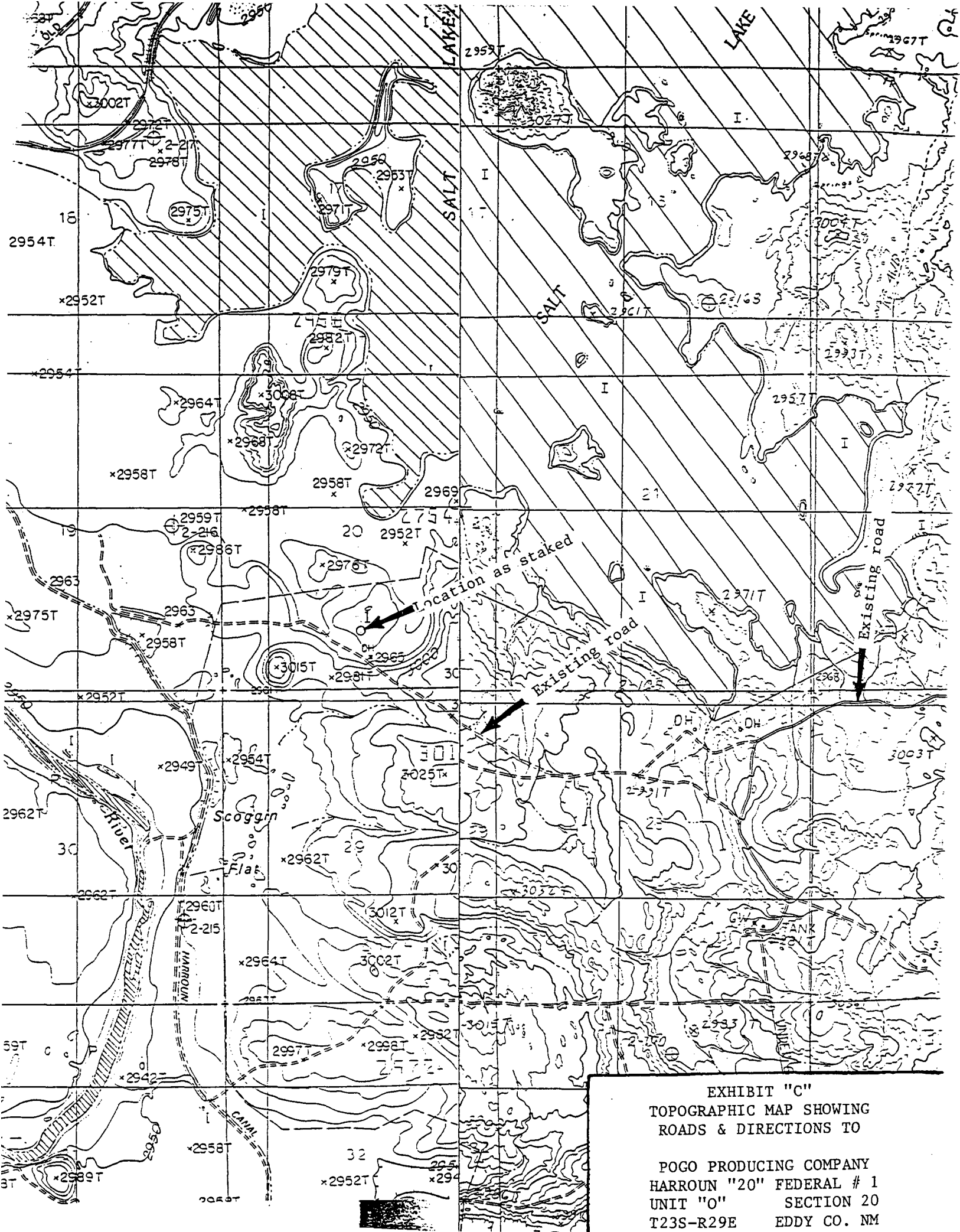
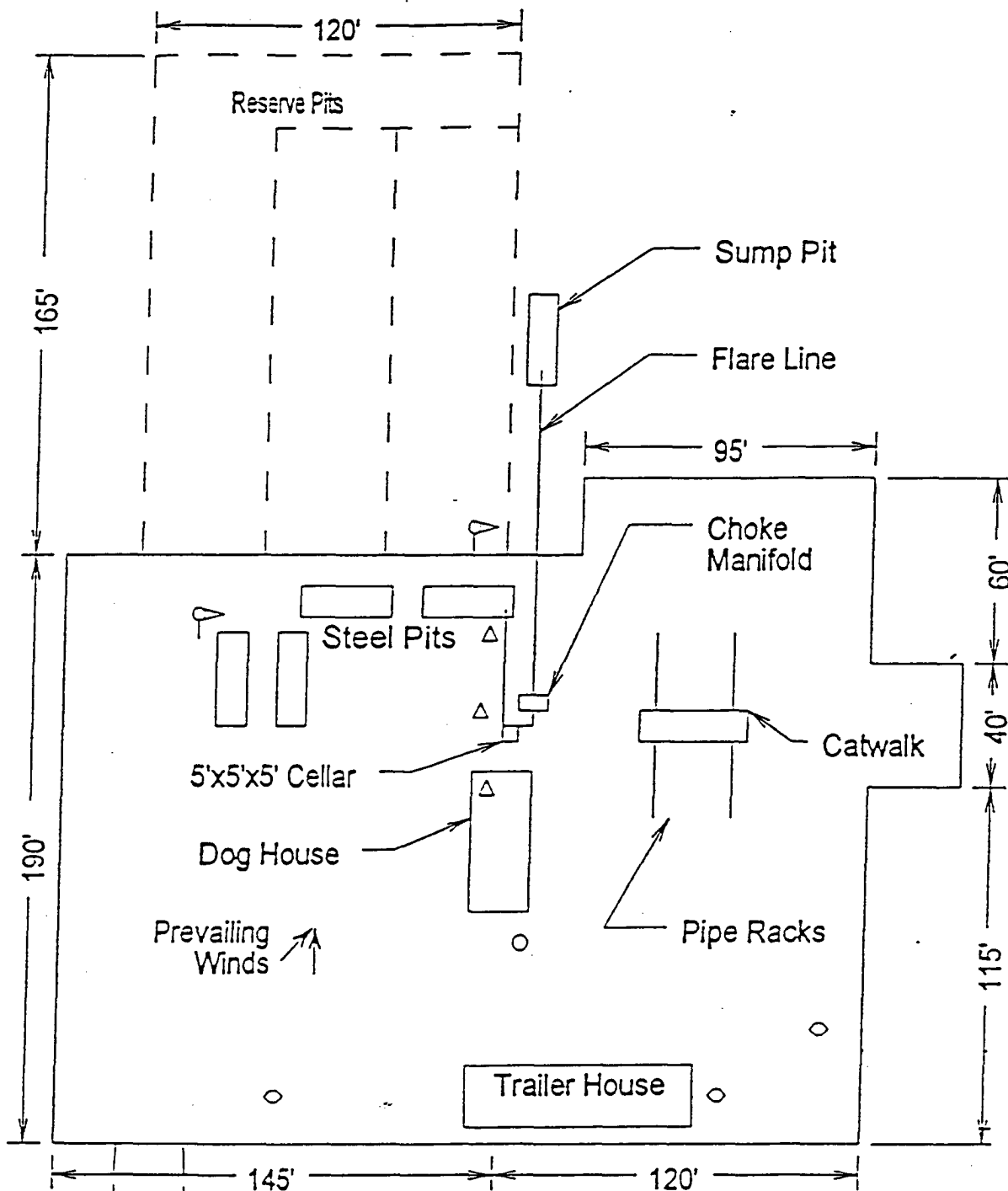


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

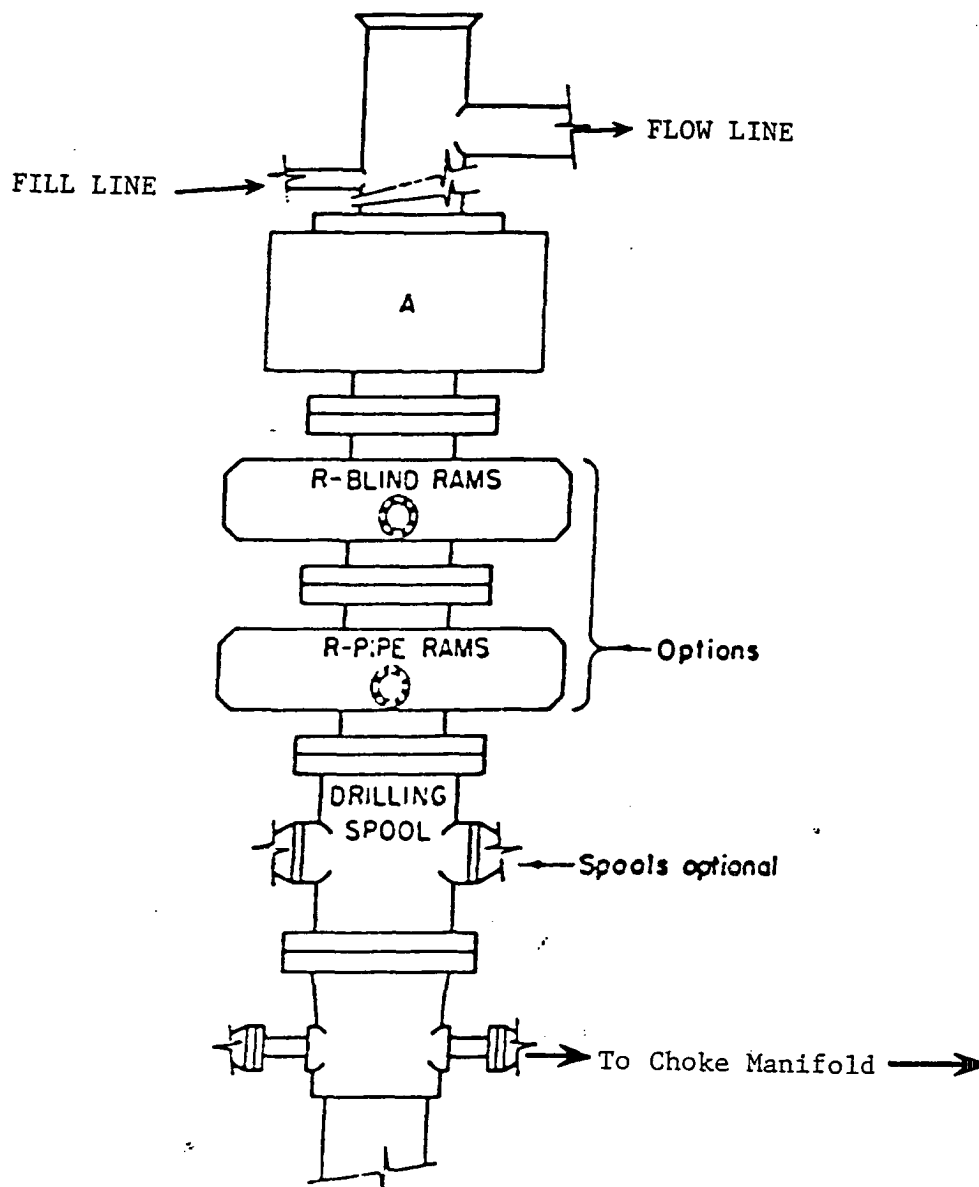
POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E EDDY CO. NM



- 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
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E EDDY CO. NM

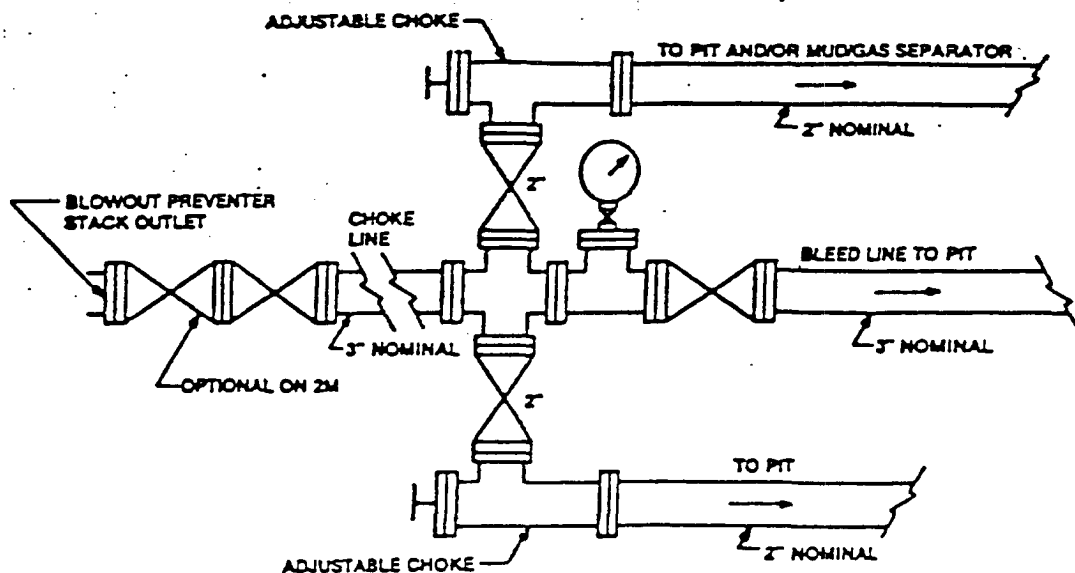


ARRANGEMENT SRRA

900 Series
3000 PSI WP

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

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

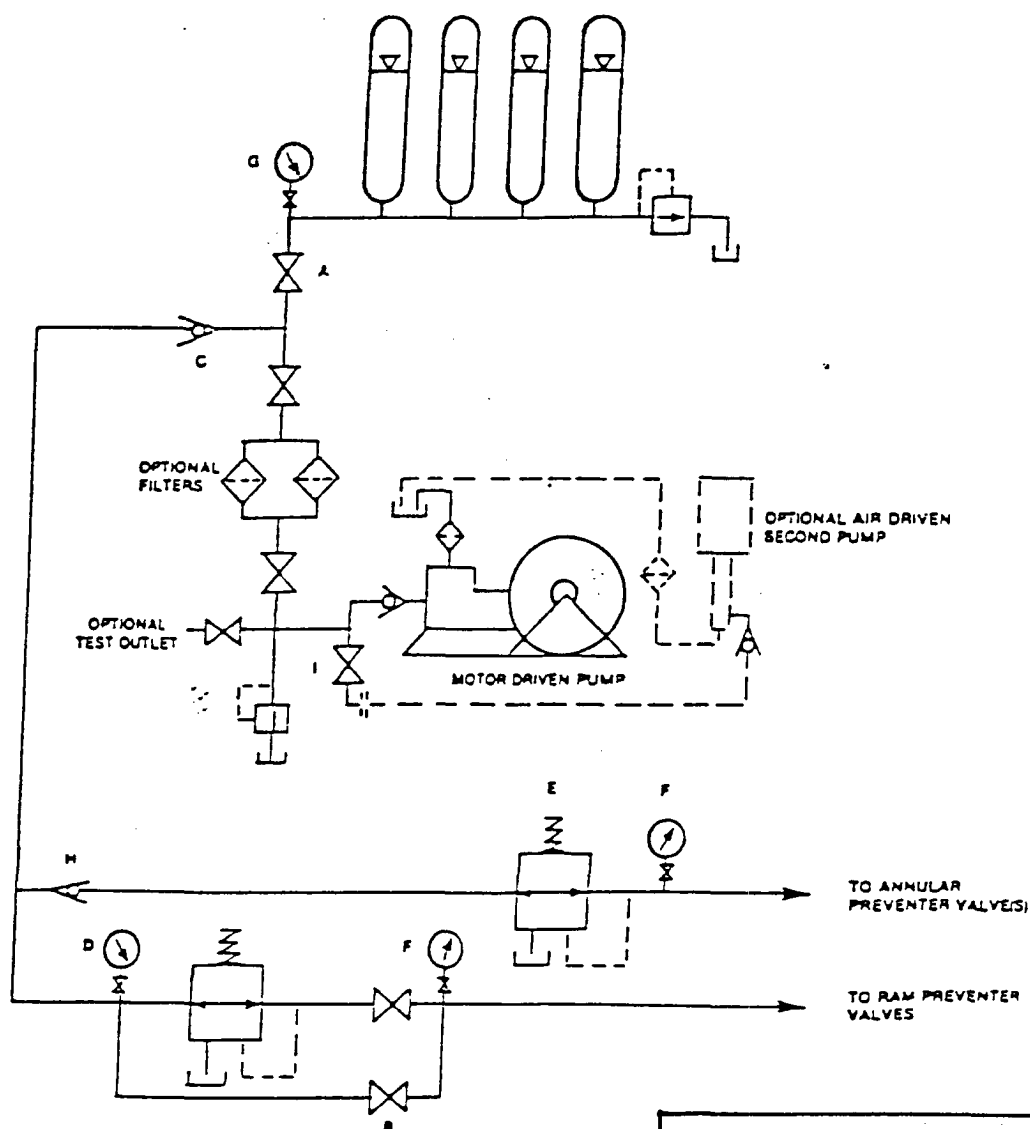


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
HARROUN "20" FEDERAL # 1
UNIT "O" SECTION 20
T23S-R29E EDDY CO. NM