

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OIL CORP.
N.M. DIST. 2
1801 W. Grand Avenue
Artesia, NM 88210

FORM 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-100852		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----		
2. NAME OF OPERATOR POGO PRODUCING COMPANY (RICHARD WRIGHT 915-685-8140)			7. UNIT AGREEMENT NAME -----		
3. ADDRESS AND TELEPHONE NO. P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (915-695-8100)			8. FARM OR LEASE NAME, WELL NO. McGWIRE "11" FEDERAL # 1		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1650' FSL & 330' FWL SECTION 11 T26S-R29E EDDY CO. NM At proposed prod. zone SAME			9. AM WELL NO. 30-015-32897		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE Approximately 16 miles Southeast of Malaga New Mexico.			10. FIELD AND POOL, OR WILDCAT BRUSHY DRAW-DELAWARE NORTH		
13. 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 440	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 5500'	20. ROTARY OR CABLE TOOLS ROTARY		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 2992' GR.			22. APPROX. DATE WORK WILL START WHEN APPROVED		

PROPOSED CASING AND CEMENTING PROGRAM				CARLSBAD CONTROLLED WATER BASIN
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.
WITNESS 12 1/4"	J-55 8 5/8"	32	600' WITNESS	655 Sx. Circulate cement to surface.
7 7/8"	J-55 5 1/2"	15.5	5500'	1500 Sx. cement in 3 stages "

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 600'. Run and set 600' of 8 5/8" 32# J-55 ST&C casing. Cement with 655 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
3. Drill 7 7/8" hole to 5500'. Run and set 5500' of 5 1/2" 15.5# J-55 ST&C casing. Cement in three stages, place DV Tools at 4000'± and 2000'±. Cement 1st stage with 400 Sx. of Class "C" cement + additives, cement 2nd stage with 600 Sx. of Class "C" cement + additives, cement 3rd stage with 500 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 productive zone and proposed new productive zone. If proposal is to drill or open directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Joe T. Garcia TITLE Agent DATE 06/11/03

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE JUL 2003

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:

APPROVED BY /s/ Joe G. Lara TITLE FIELD MANAGER DATE 21 JUL 2003

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

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 8085	Pool Name BRUSHY DRAW DELAWARE-NORTH
Property Code	Property Name McGWIRE 11 FEDERAL	Well Number 1
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 2992'

Surface Location

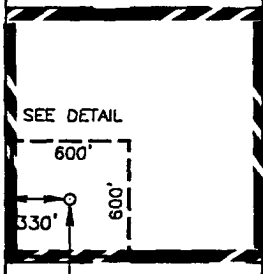
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	11	26-S	29-E		1650'	SOUTH	330'	WEST	EDDY

Bottom Hole Location If Different From Surface

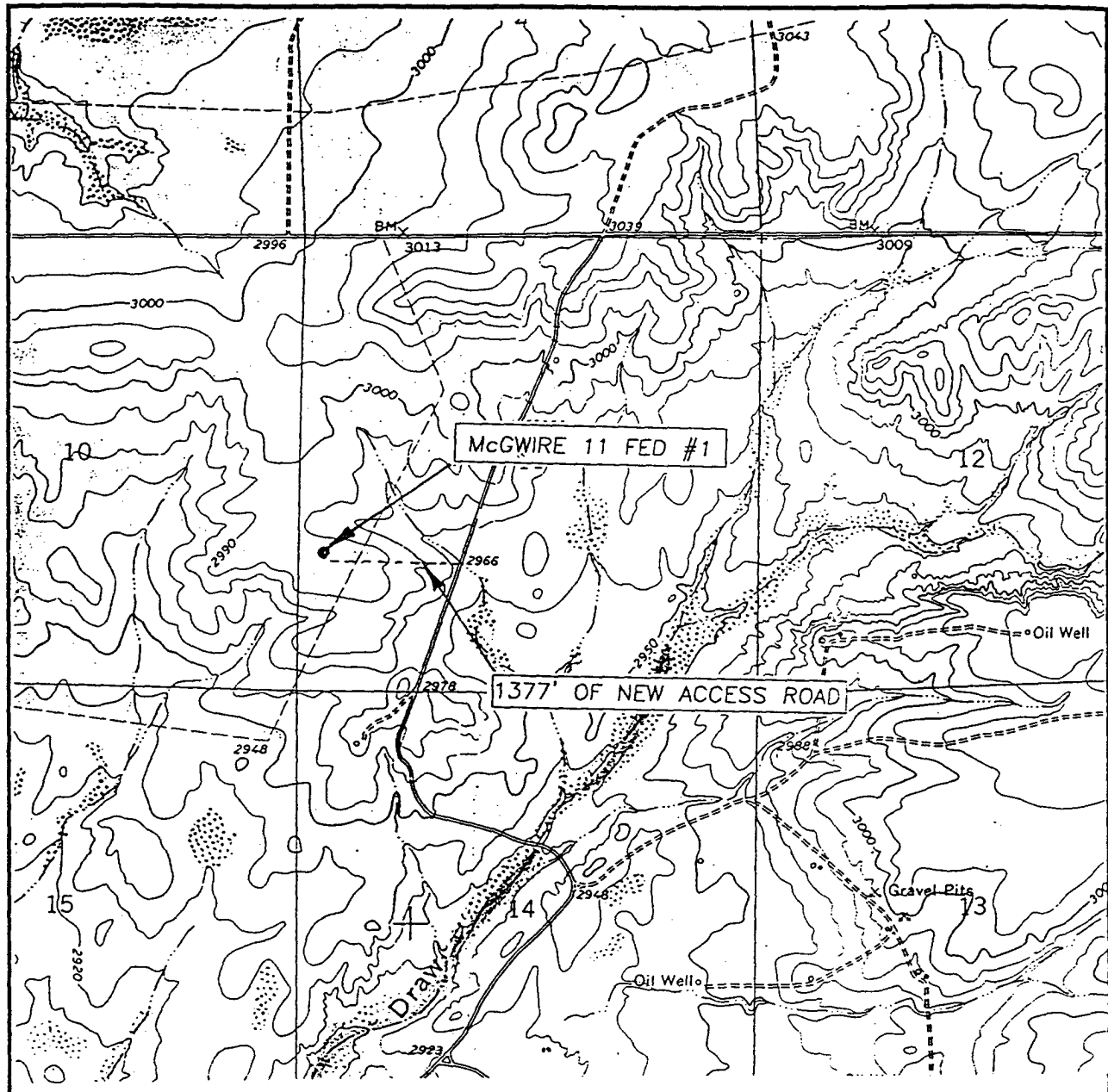
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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

 <p>SEE DETAIL</p> <p>600'</p> <p>330'</p> <p>600'</p> <p>1650'</p> <p>2989.9'</p> <p>2981.5'</p> <p>2991.9'</p> <p>2992.0'</p>	<p>GEODETIC COORDINATES NAD 27 NME Y = 383510.1 N X = 615202.0 E LAT. 32°03'13.82"N LONG. 103°57'41.37"W</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</p> <p>Joe T. Janica Printed Name Agent</p> <p>Title</p> <p>06/11/03 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>June 06, 2003</p> <p>Date Surveyed</p> <p>A.W.B.</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Barry E. Edson</i> 6/9/03 03.17.0554</p>
		<p>Certificate No. RONALD J. EDSON 3239 GARY EDSON 12641</p>

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
ROSS RANCH, N.M.

SEC. 11 TWP. 26-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1650' FSL & 330' FWL

ELEVATION 2992'

OPERATOR POGO PRODUCING COMPANY

LEASE McGWIRE 11 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
ROSS RANCH, N.M.

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

APPLICATION TO DRILL

POGO PRODUCING COMPANY
McGWIRE "11" FEDERAL # 1
UNIT "L" SECTION 11
T26S-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: 1650' FSL & 330' FWL SECTION 11 T26S-R29E EDDY CO. NM
2. Ground Elevation above Sea Level: 2992' 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: 5500'
6. Estimated tops of geological markers:

Base of salt	2800'	Bell Canyon	3080'
Delaware Lime	2990'	Brushy Canyon	5200'

7. Possible mineral bearing formations:

Bell Canyon	Oil
Brushy Canyon	Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
12½"	0-600'	8 5/8"	32	8-R	ST&C	J-55
5½"	0-5500'	5½"	15.5	8-R	ST&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
McGWIRE "11" FEDERAL # 1
UNIT "L" SECTION 11
T26S-R29E EDDY CO. NM

9. CASING SETTING DEPTHS & CEMENTING:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
8 5/8"	Surface	Set 600' of 8 5/8" 32# J-55 ST&C casing. Cement with 655 Sx. of Class "C" cement + 2% CaCl ₂ + 1/4# Flocele/Sx. Circulate cement to surface.
5 1/2"	Production	Set 5500' of 5 1/2" 15.5# J-55 ST&C casing. Cement in 3 stages, DV Tools at 4000'± and 2000'±. Cement 1st stage with 400 Sx. of Class "C" cement + additives, 2nd stage cement with 600 Sx. of Class "C" cement + additives, Cement 3rd stage with 500 Sx. of Class "C" cement + additives, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI double ram B.O.P. with a rotating head in lieu of an annular preventor. The drilling rig that will be used to drill this well is unable to accomodate an annular preventor because of the sub-structure. No abnormal pressures are expected in this well. The B.O.P. will be rigged up on the 8 5/8" casing. Exhibit "E-1" shows a hydraulically operated closing unit and choke manifold. A full opening stabbing valve and upper kelly cock will be utilized.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-600'	8.4-8.7	29-34	NC	Fresh water spud mud use paper if necessary to control seepage.
600-5500	10.0-10.2	29-38	NC*	Brine water use paper control seepage and high viscosity sweeps to clean hole.

* If water loss control is needed to condition hole for DST's, running logs or casing use 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 logs, DST's, and casing the viscosity and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
McGWIRE "11" FEDERAL # 1
UNIT "L" SECTION 11
T26S-R29E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Run Dual Laterlog SNP, LDT, Gamma Ray, Caliper from TD to the 8 5/8" casing shoe. Cased hole logs: Run Gamma Ray, Neutron from 8 5/8" casing shoe to surface, Run collar locator log and gamma Ray in order to perforate well in the proper zone.
- B. Mud logger may be placed on the hole at the Geologist's request and DST's and cores may be taken as shows dictate.

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 2600 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 10 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 Delaware 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.

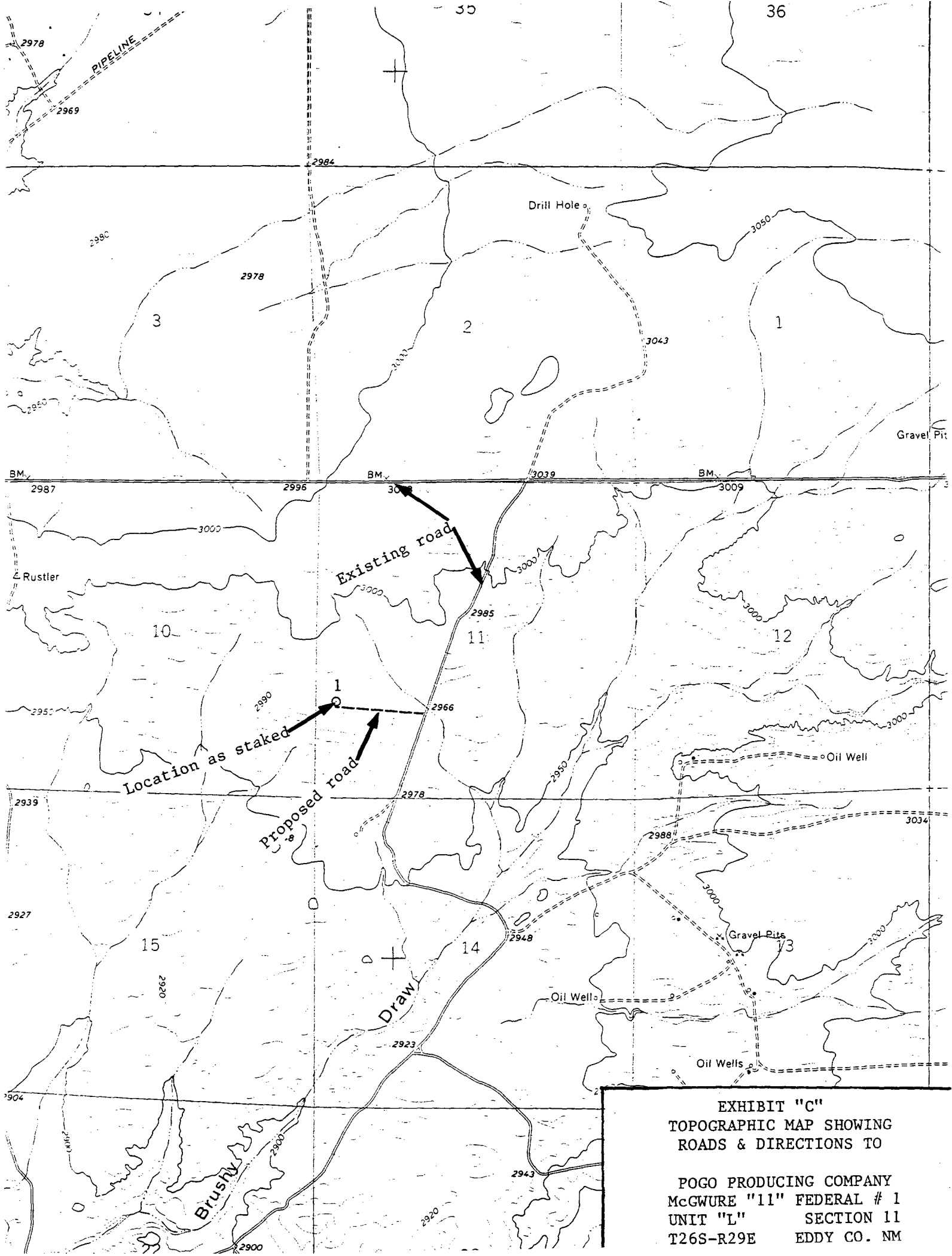
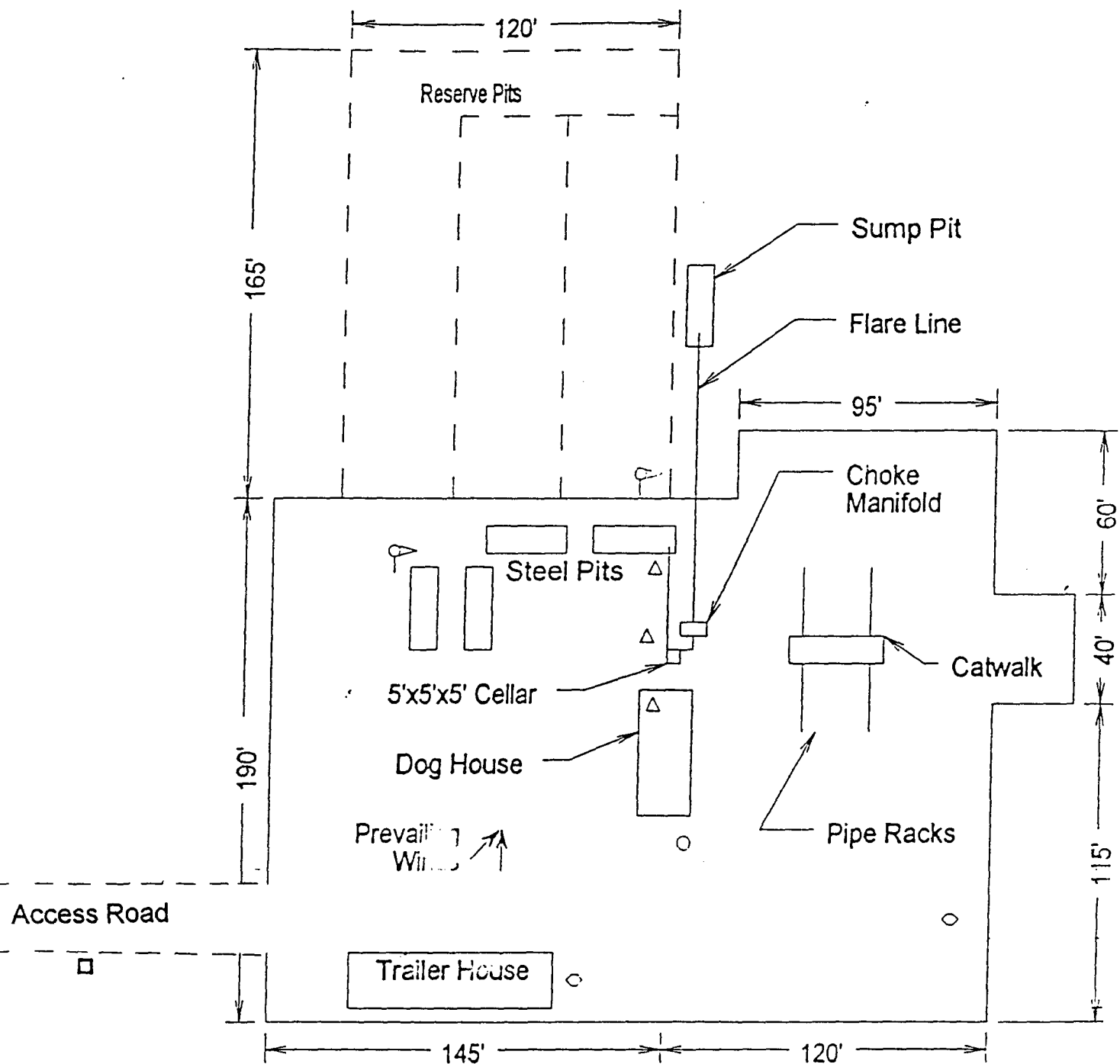


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

POGO PRODUCING COMPANY
McGWURE "11" FEDERAL # 1
UNIT "L" SECTION 11
T26S-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 LAYOUT PLAT

POGO PRODUCING COMPANY
McGWIRE "11" FEDERAL # 1
UNIT "L" SECTION 11
T26S-R29E EDDY CO. NM

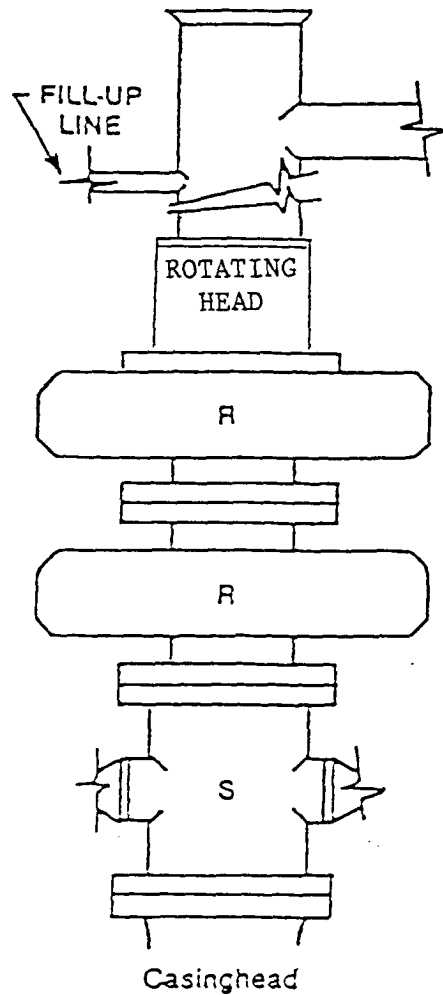


FIGURE K1-1. Recommended IADC Class 2 BOP stack, 2000 psi WP. Either SRd (left) or SA (right) arrangement is acceptable and drilling spool is optional.

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

POGO PRODUCING COMPANY
McGWURE "11" FEDERAL # 1
UNIT "L" SECTION 11
T26S-R29E EDDY CO. NM

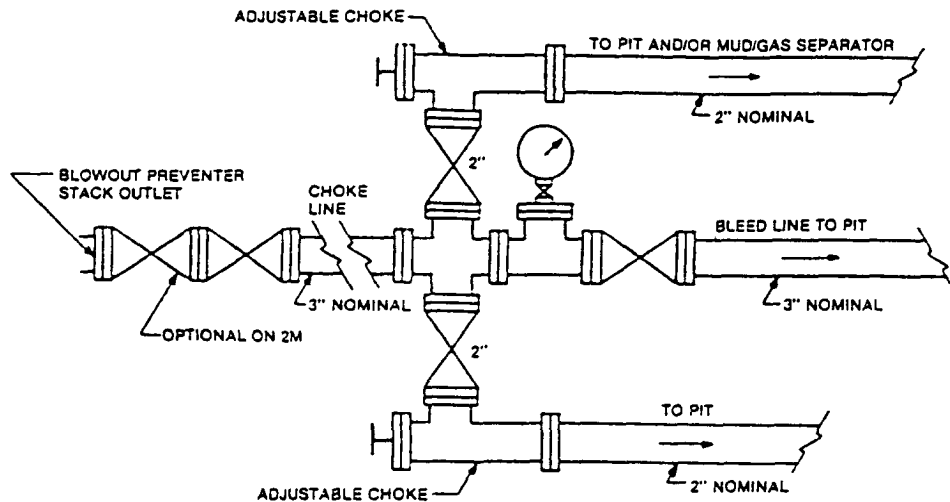


FIGURE K4-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

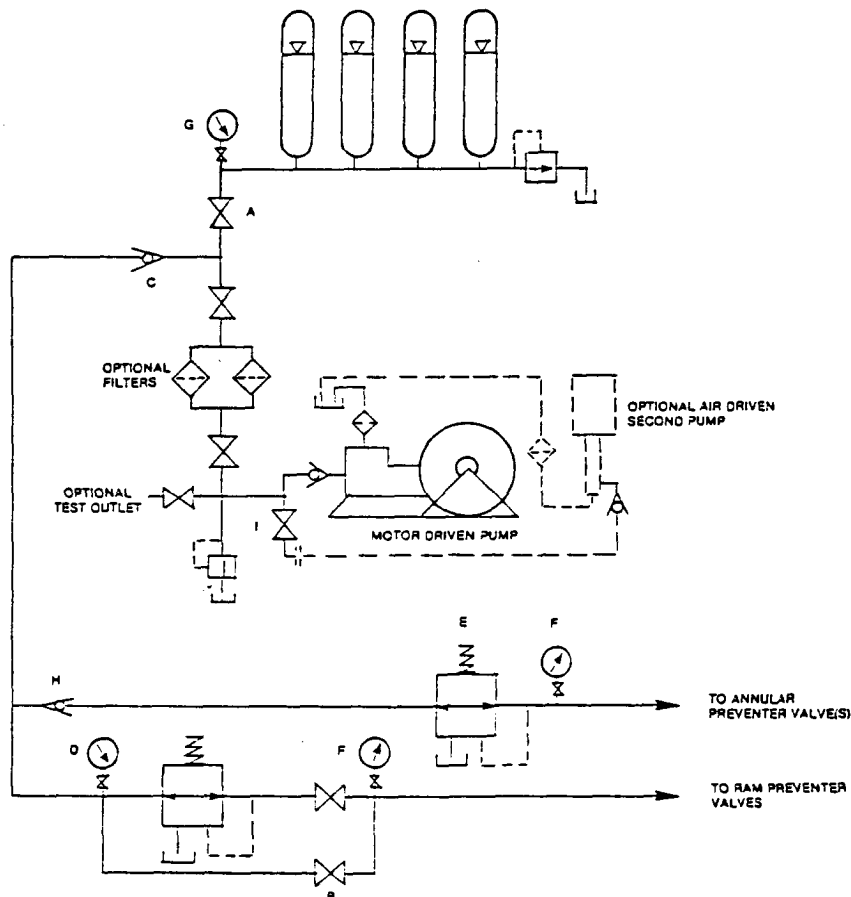


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
McGWIRE "11" FEDERRL # 1
UNIT "L" SECTION 11
T26S-R29E EDDY CO. NM