DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANNEMENDII CONS. DIV-DIST. 2 LEASE DESIGNATION AND SERIAL NO. APPLICATION FOR PERMIT TO DE OL DE EREN AVENUES. IF INDIAN, ALLOTTER OR TRIBE NAME 1a. TYPE OF WORK Artesia, NM 88210 DRILL X 7. UNIT AGREEMENT NAME b. TYPE OF WELL WELL X MULTIPLE ZONE S. FARM OR LEASE NAME WELL NO. OTHER 2. NAME OF OPERATOR CIMARRON "23" FEDERAL # 6 POGO PRODUCING COMPANY ARI WELL NO. (RICHARD WRIGHT 432-685-8140) 30-015 3. ADDRESS AND TELEPHONE NO. P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (432-685-8100) 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) BRUSHY DRAW-DELAWARE 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 1900' FNL & 2310' FWL SECTION 23 T26S-R29E EDDY CO.RECEIVED At proposed prod. zone SAME SECTION 23 T26S-R29E SEP 2 2 2004 14. DISTANCE IN MILES AND DIRECTION FROM NEABEST TOWN OR POST OFFICE* 12. COUNTY OR PARISH! 13. STATE Approximately 20 miles Southeast of Malaga New Mexicoppin TESM EDDY CO NEW MEXICO 15. DISTANCE FROM PROPUSED* 16. NO. OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED TO THIS WELL LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any) 1900' 600 40 18. DISTANCE FROM PROPOSED LOCATIONS 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 5300' OR APPLIED FOR, ON THIS LEASE, FT. ROTARY 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START* 29281 GR. WHEN APPROVED 23. PROPOSED CASING AND CEMENTING PROGRAM SIZE OF HOLE GRADE SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH QUANTITY OF CEMENT 25" 40 Cement to surface W/Redi-mix. Conductor 1 2½" 8 5/8"WI J-55 NES§2 50 I 600 655 Sx. circulate to surface 7/8" 51/3" J - 5515.5 5300*** 1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface W/Redi-mix. 2. Drill 12½" 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, + 14# Flocele/Sx. circulate cement to surface. 3. Drill 7 7/8" hole to 5300'. Run and set 5300' of $5\frac{1}{2}$ " 15.5# J-55 ST&C casing, Cement in 2 stages with DV Tool at 2800'. Cement 1st stage with 750 Sx. of Class "C" cement + additives, cement 2nd stage with 600 Sx. of Class "C" cement + additives, circulate cement to surface. APPROVAL SUBJECT TO CARLSBAD CONTROLLED WATER BASIN GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED 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 delicate deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any 24. 09/03/04 SIGNED (This space for Federal or State office use) 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 executions thereon. CONDITIONS OF APPROVAL, IF ANY: /s/ Joe G. Lara FIELD MANAGER 2 0 SEP 2004 APPROVED BY APPROVAL FOR 1 YEAR *See Instructions On Reverse Side

OMB NO. 1004-0136 Expires: February 28, 1995 DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 811 South First, Artesia, NM 88210

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

Fee Lease - 3 Copies

State Lease - 4 Copies

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

2040 South Pacheco, Santa Fe, NM 87505

Dedicated Acres

40

Joint or Infill

Consolidation Code

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe. New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number | | | Pool Code | | Pool Name | | | | | | |
|---------------|---------|----------|------------------------|----------|----------------------|---------|------------------|---------------|----------------|-------------|--|
| | | | 8080 | | BRUSHY DRAW-DELAWARE | | | | | | |
| Property | Code | | <u> </u> | | Prope | rty Nam | e | | Well No | Well Number | |
| | | | | CIMA | MARRON "23" FEDERAL | | | 6 | | | |
| OGRID N | 0. | Oper | | | Opera | tor Nam | e | | Eleva | lion | |
| 17891 | | | POGO PRODUCING COMPANY | | | COMPANY | 2928' | | 8' | | |
| | | | | | Surfac | e Loca | tion | | | | |
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from | m the | North/South line | Feet from the | East/West line | County | |
| F | 23 | 26 S | 29 E | | 190 | 00 | NORTH | 2310 | WEST | EDDY | |
| | | | Bottom | Hole Loc | cation I | Diffe | rent From Sur | face | | | |
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from | m the | North/South line | Feet from the | East/West line | County | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

Order No.

| | OR A NON-STAN | DARD UNIT HAS BEEN | APPROVED BY TH | E DIVISION |
|-------------|---------------|---|----------------|--|
| -2310 | | Lat.: N32*01'45.7" Long.: W103*57'20.5" 2921.2' | v | 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 09/03/04 Date SURVEYOR CERTIFICATION |
| | | EXHIBIT "A" | | 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. JULY 19, 2004 Date Surveyed Signature & Sgallof ONES Professional Surveyed Signature & Sgallof ONES Professional Surveyed Certificate No Gory L. Jones 7977 BASIN SURVEY |

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 For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Form C-144

March 12, 2004

Pit or Below-Grade Tank Registration or Closure

| Is pit or below-grade tank of Type of action: Registration of a pit or be | covered by a "general plan"? Yes No K elow-grade tank Closure of a pit or below-grade | tank 🗆 |
|---|---|--|
| Operator: Pogo Producing Company 432-68 Address: P. O. Box 10340, Midland, TX 79702- Facility or well name: Cima-ron 23 Fed #6 API#: County: Eddy Latitude 32:01:45.7N Longitude 103: | 5-8100 e-mail address: <u>wrightc@pog</u> 7340 | · |
| Pit Type: Drilling XX Production □ Disposal □ Workover □ Emergency □ Lined XX Unlined □ Liner type: Synthetic X Thickness 12 mil Clay □ Volume 16,000bbl | Below-grade tank Volume: bbl Type of fluid: Construction material: Double-walled, with leak detection? Yes If not | HECEIVED |
| 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 X 100 feet or more | (20 points) (10 points) 10 (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 X | (20 points) (0 points) 0 |
| 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 X | (20 points) (10 points) (0 points) |
| | Ranking Score (Total Points) | 10 |
| If this is a pit closure: (1) attach a diagram of the facility showing the pit's onsite If offsite, name of facility end date. (4) Groundwater encountered: No Yes If yes, show depth and a diagram of sample locations and excavations. | (3) Attach a general description of remedial action below ground surface ft. and attach sa | on taken including remediation start date and mple results. (5) Attach soil sample results |
| been/will be constructed or closed according to NMOCD guidelines , a Date: 09/23/04 Printed Name/Title Cathy Wright, Sr Eng Tech Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve the cregulations. Approval: Date: SEP 2 R 2004 Gerry Guye | general permit , or an (attached) alternative Of Signature Signature the operator of liability should the contents of | CD-approved plan . the pit or tank contaminate ground water or |
| Printed Name/Title Compliance Officer | Signature Office Signature | : |

Water Resources

Data Category: Site Information Geographic Area: **New Mexico**

go

Site Map for New Mexico

USGS 320154103562301 26S.29E.22.23341

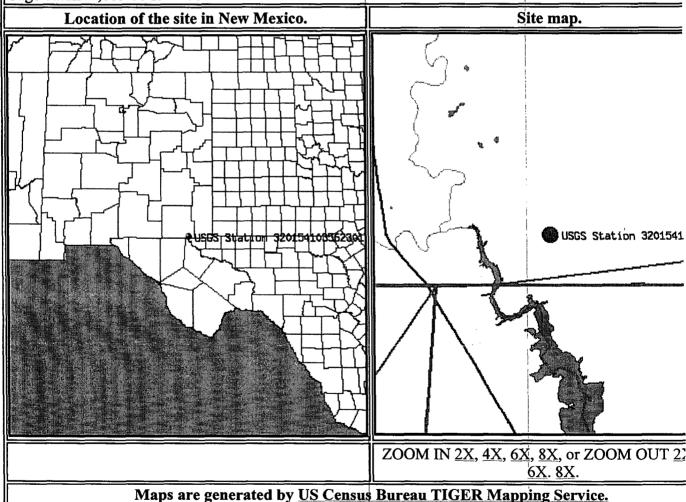
Available data for this site

Station site map

GO

Eddy County, New Mexico Hydrologic Unit Code

Latitude 32°01'54", Longitude 103°56'23" NAD27 Gage datum 2,885.60 feet above sea level NGVD29



Questions about data

gs-w-nm NWISWeb Data Inquiries@usgs.gov

Feedback on this websitegs-w-nm NWISWeb Maintainer@usgs.gov

NWIS Site Inventory for New Mexico: Site Map http://waterdata.usgs.gov/nm/nwis/nwismap?

Top Explanation of terms **Water Resources**

Data Category: Ground Water Geographic Area: **New Mexico**

go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site no list =

Eddy County, New Mexico

• 320154103562301

Save file of selected sites to local disk for future upload

USGS 320154103562301 26S.29E.22.23341

Available data for this site

Ground-water: Levels

GO

Output formats

Hydrologic Unit Code Table of data Latitude 32°01'54", Longitude 103°56'23" NAD27 Tab-separated data Gage datum 2,885.60 feet above sea level NGVD29 The depth of the well is 200 feet below land surface. Graph of data This well is completed in RUSTLER FORMATION (312RSLR) Reselect period USGS 320154103562301 265.29E.22.23341 Ground-Mater Level, in feet below surface 50 2835 55 2830 60 2825 65 2820 1980 1985 1975 1990 1995 2000 2005 DATES: 12/09/1975 to 07/01/2004 23:59 Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Great Circle Calculator.

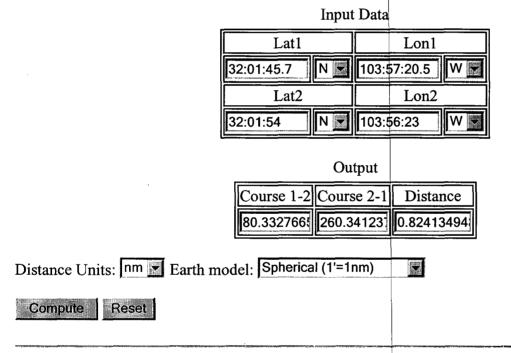
By Ed Williams

You need Javascript enabled if you want this page to do anything useful! For Netscape, it's under Options/Network Preferences/Languages.

Compute true course and distance between points.

Enter lat/lon of points, select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

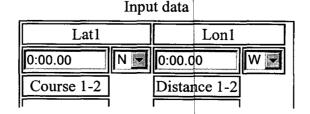
Note that if either point is very close to a pole, the course may be inaccurate, because of its extreme sensitivity to position and inevitable rounding error.

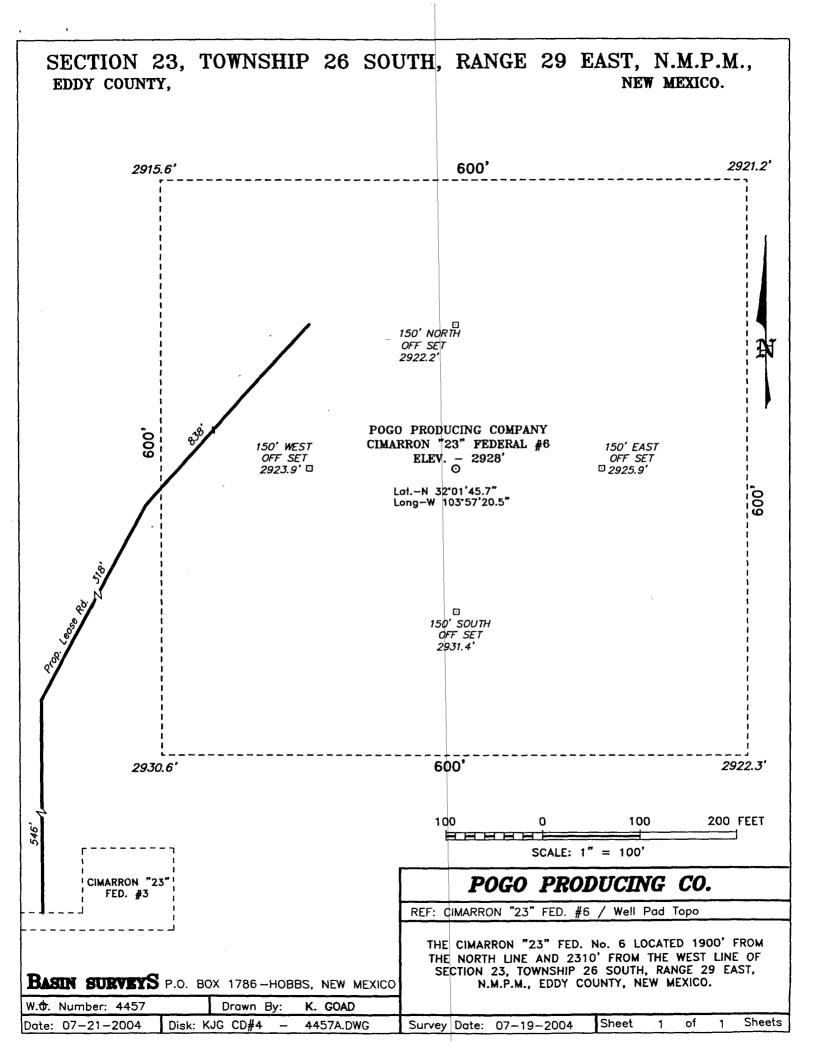


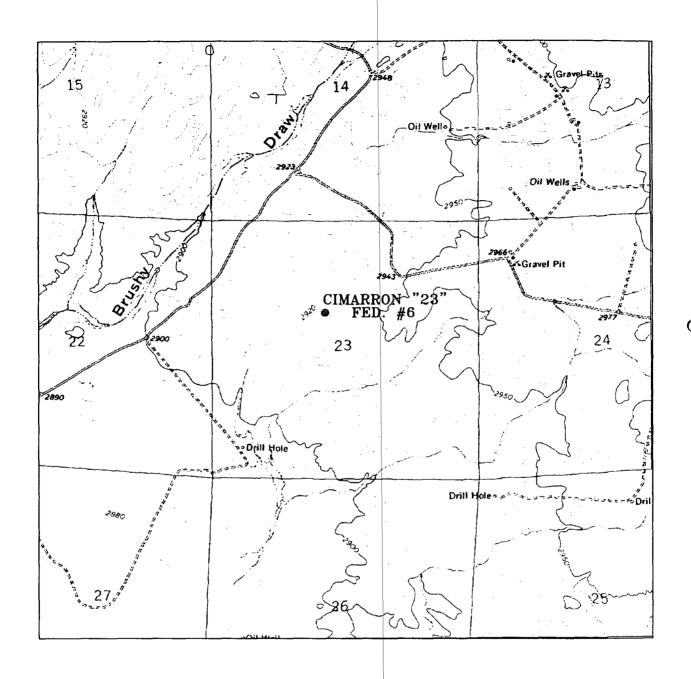
Compute lat/lon given radial and distance from a known point

Enter lat/lon of initial point, true course and distance. Select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

Note that the starting point cannot be a pole.







CIMARRON "23" FEDERAL #6
Located at 1900' FNL and 2310' FWL
Section 23, Township 26 South, Range 29 East,
N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 — Office (505) 392-3074 — Fax basinsurveys.com

| W.O. Number: | 4457AA — KJG CD#5 |
|----------------|-------------------|
| Survey Date: | 07-19-2004 |
| Scale: 1" = 20 | 000, |
| Data: 07-21- | 2004 |

POGO PRODUCING COMPANY

APPLICATION TO DRILL

POGO PRODUCING COMPANY
CIMARRON "23" FEDERAL # 6
UNIT "F" SECTION 23
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: 1900' FNL & 2310' FWL SECTION 23 T26S-R29E EDDY CO. NM
- 2. Elevation above Sea Level: 2928' GR.
- 3. Geologic name of surface formation: Quaternery Aeolian Deposits.
- 4. <u>Drilling tools and associated equipment:</u> Conventional rotary drilling rig using drilling mud as a circulating medium for splids removal from hole.
- 5. Proposed drilling depth:

5300'

6. Estimated tops of geological markers:

| Basal Anhydrite | 2776' | Cherry CAnyon | 3914' |
|-----------------|---------------|---------------|-------|
| Delaware Lime | 2979 ' | Brushy Canyon | 5176 |
| Bell Canyon | 3080' | Bone Spring | 6900 |

7. Possible mineral bearing formations:

Brushy Canyon

011

8. Casing program:

| Hole size | Incerval | OD of casing | Weight | Thread | Collar | Grade |
|-----------|---------------|--------------|--------|--------|--------|---------------|
| 25" | 0-40 | 20" | NA | NA | NA | Conductor |
| 124" | 0-6,06' (690' | 8 5/8" | 32# | 8-R | ST&C | J - 55 |
| 7 7/8" | 0-5300' | 5½'' | 15.5# | 8-R | ST&C | J-55 |

APPLICATION TO DRILL

POGO PRODUCING COMPANY
CIMARRON "23" FEDERAL # 6
UNIT "F" SECTION 23
T26S-R29E EDDY CO. NM

9. CEMENTING & CASING SETTING DEPTHS:

| 20" | Conductor | Set 40' of 20" conductor and cement to surface wity Redi-mix. |
|--------|-----------|--|
| 8 5/8" | Surface | Set 650' of 8 5/8" 32# J-55 ST&C casing. CEment with 655 Sx. of Class "C" cement + 2% CaCl, + ½# Flocele/Sx, circulate cement to surface. |
| 5½" | | Set 5300' of 5½" 15.5# J-55 ST&C casing. Cement in two stages with DV Tool at 2800'±. Cement 1st stage with 750 Sx. of Class "C" cement + additives, Cement 2nd stage with 600 Sx. of Class "C" cement + additives, circulate cement to surface. |

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI working pressure B.O.P., consisting of a stripper heas instead of an annular preventor, blind rams, and pipe rams. This B.O.P. stack is being used because of Substructure height limitations of the drilling rig being used to drill this well. Pressures encountered during drilling are not expected to exceed 1700 PSI at total depth. Pogo requests permission to 3rd party test of the B.O.P. The B.O.P. will be nippled up on the 8 5/8" casing and will be tested according to API specifications. Exhibit "E-1" shows a manually operated chole manifold, as no remote closing unit will be required.

11. PROPOSED MUD CIRCULATING SYSTEM:

| DEPTH | MUD WT. | VISC. | FLUID LOSS | TYPE MUD |
|-----------------|-----------|-------|------------|---|
| 40-650 ' | 8.4-8.7 | 29-32 | nc . | Fresh water use paper to control seepage. |
| 650-5300' | 10.0-10.2 | 29-38 | NC* | Brine water use paper to control seepage and high viscosity sweeps to clesn hole. |

^{*} Water loss may have to be controlled in order to protect formation from damage, run open hole logs, DST's and casing. If these conditions are required then a Polymer base mud should be be be a polymer base mud should be be be controlled in order to protect formation from damage, run open hole logs, DST's and casing. If these conditions are required then a polymer base mud should be used.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
CIMARRON "23" FEDERAL # 6
UNIT "F" SECTION 23
T26S-R29E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, SNP, LDT, Gamma Ray, CAliper from TD back to the 8 5/8" casing shoe.
- B. Cased hole log: Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- C. No cores, DST's are planned at this time, a mud logger may be placed on the hole at the geologists reccommendation.

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 1700 PSI, and Estimated BHT 130°

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 8 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.

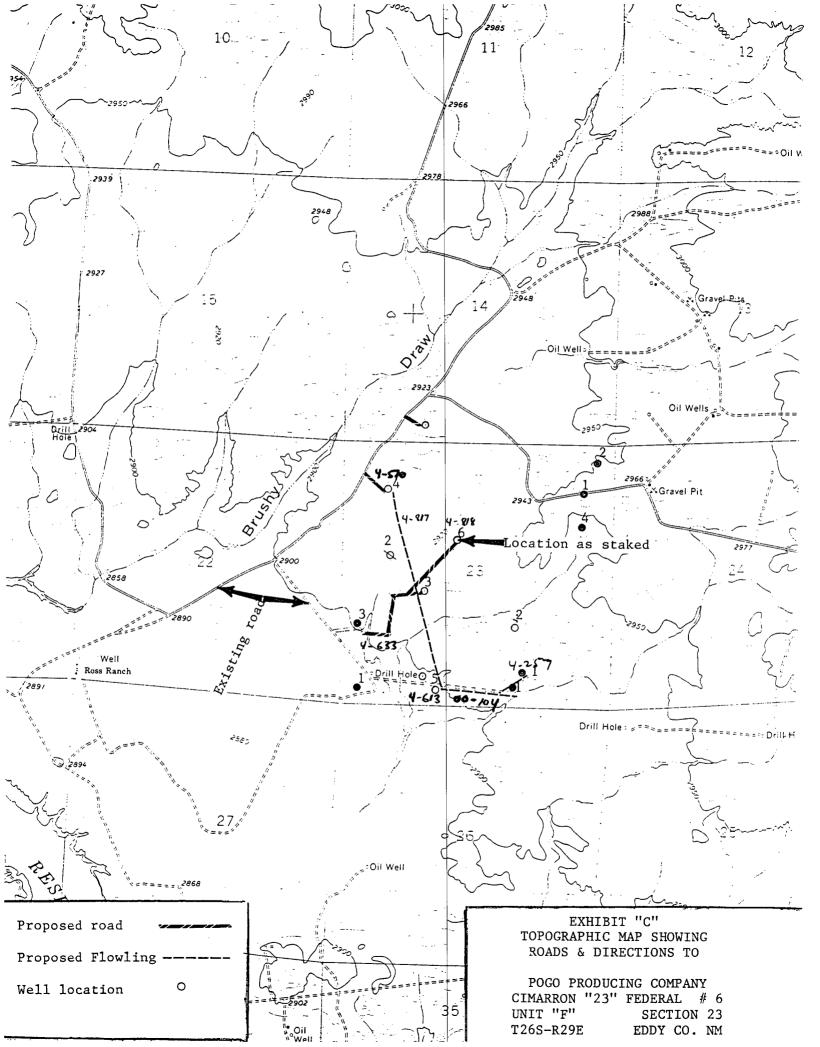
15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The <u>DELAWARE</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed 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 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 H₂S 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 H₂S scavengers if necessary.



in specifications and RIG LAYOUT FOR EARTH PITS 100 **OUTSIDE PIT** INSIDE PIT 100 RESERVE SHOULD BE PUSHED OUT 40' RIG BOOM PIPE PACKS NOCHOUS ٥٩ TANK ►CELLAR 4X6X4 BOX (Cellar should not be dug with dozer) \bigcirc TRAILER HOUSE Cellar can be 4X4X4 if using a screw-on wellhead Working Pits dug 5' below ground level Wind Direction Indicators (wind sock or streamers) EXHIBIT "D" RIG LAY OUT PLAT (alarms at bell nipple and shale shaker) Location Specs POG PRODUCING COMPANY CIMARRON "23" FEDERAL #6 Remote BOP Closing Unit UNIT "F" SECTION 23

EDDY CO. NM

T26S-R29E

5' DEEP

MUC PUMP

MUD

CESS ROAD

H2S Monitors

Briefing Areas

Sign and Condition Flags

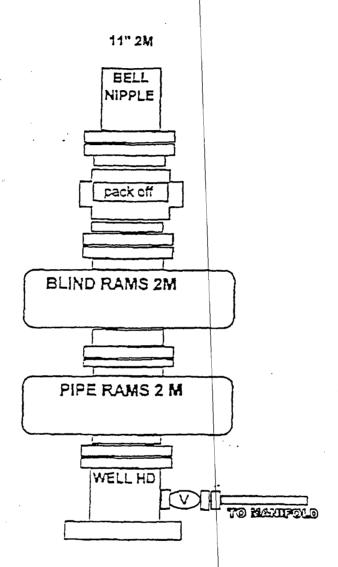


EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
CIMARRON "23" FEDERAL # 6
UNIT "F" SECTION 23
T26S-R29E EDDY CO. NM

CHOKE MANIFOLD

3000 PSI WP

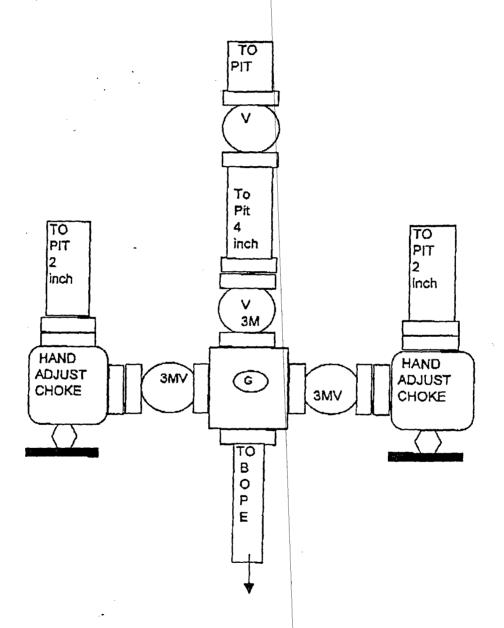


EXHIBIT "E-1"
SKETCH OF CHOKE MANIFOLD

POGO PRODUCING COMPANY
CIMARRON "23" FEDERAL #6
UNIT "F" SECTION 23
T26S-R29E EDDY CO. NM