Form 3160-3 (reverse side)

Expires: February 28, 1995

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

NM. Oil Cons. DIV-Dist. 2

1301 West Grand Avenue

Artesia, NM 88210

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM-57273

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: ---

7. UNIT AGREEMENT NAME: ---

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

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SECRETARY'S POTASH SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME, WELL NO.: PALLAIDUM "7" FEDERAL # 12

2. NAME OF OPERATOR: POGO PRODUCING COMPANY (RICHARD WRIGHT 432-685-8140)

9. API WELL NO.: 30-015-34106

3. ADDRESS AND TELEPHONE NO.: P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (432-685-8100)

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

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1650' FSL & 660' FEL SECTION 7 T24S-R31E EDDY CO. NM
At proposed prod. zone: SAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SECTION 7 T24S-R31E

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MAY 06 2005
OCD ARTESIA

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 30 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'	600	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'	8400'	ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3528' GR.

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	NA	40"	Cement to surface W/Redi-mix.
17½"	H-40 13 3/8"	48	975'	800 Sx. circulate cement to Sur.
11"	J-55 8 5/8"	32	4150'	1200 Sx " " " "
7 7/8"	J-55 5½"	17 & 15.5	8400'	1750 Sx. 3stage circulate

WITNESS WITNESS

1. Drill 25" hole to 40'. set 40' of 20" conductor pipe and cement to surface with Redi-mix.

CARLSBAD CONTROLLED WATER BASIN

2. Drill 17½" hole to 975'. Run and set 975' of 13 3/8" 48# H-40 ST&C casing. Cement with 600 Sx. of 65/35/6 Class "C" POZ Gel + 5%NaCl, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.

3. Drill 11" hole to 4150'. Run and set 4150' of 8 5/8" 32# J-55 ST&C casing. Cement with 1000 Sx. of 65/35/5 Class "C" 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 8400'. Run and set 8400' of 5½" casing as follows: 2400' of 5½" 17# J-55 LT&C, 5000' of 5½" 15.5# J-55 LT&C, 5000' of 5½" 15.5# J-55 LT&C, 1000' of 5½" 17# J-55 LT&C casing. Cement in three stages with DV Tools at 5800' and 3700'. Cement 1st stage with 650 Sx. of Class "H" cement + additives, cement 2nd stage with 600 Sx. of Class "C" cement + 8# of Gilsonite/Sx. cement 3rd stage with 400 Sx. of 65/35/6 Class "C" 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 02/21/05

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

(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:

See 19.2

APPROVED BY /s/ Jesse J. Juen TITLE ACTING STATE DIRECTOR DATE MAY - 2 2005

*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

[redacted]nch Dr., Hobbs, NM 88240
[redacted] II
[redacted]01 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

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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: Palladium 7 Fed #12 API #: 30-015-34104 U/L or Qtr/Qtr I Sec 7 T 24 R 31
County: Eddy Latitude 32:13:45N Longitude 103:48:37.9W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit	**Below-grade tank**		
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume 16000bbl	Volume: ____bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ 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 100 feet or more X	(20 points) (10 points) (0 points)	0
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)	0
	Ranking Score (Total Points)		0

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: 02/28/05
Printed Name/Title Cathy Wright, Sr Eng Tech Signature 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:
Date: MAR 2 2005
Printed Name/Title Field Rep II Signature

Water Resources

Data Category: Site Information | Geographic Area: New Mexico | go

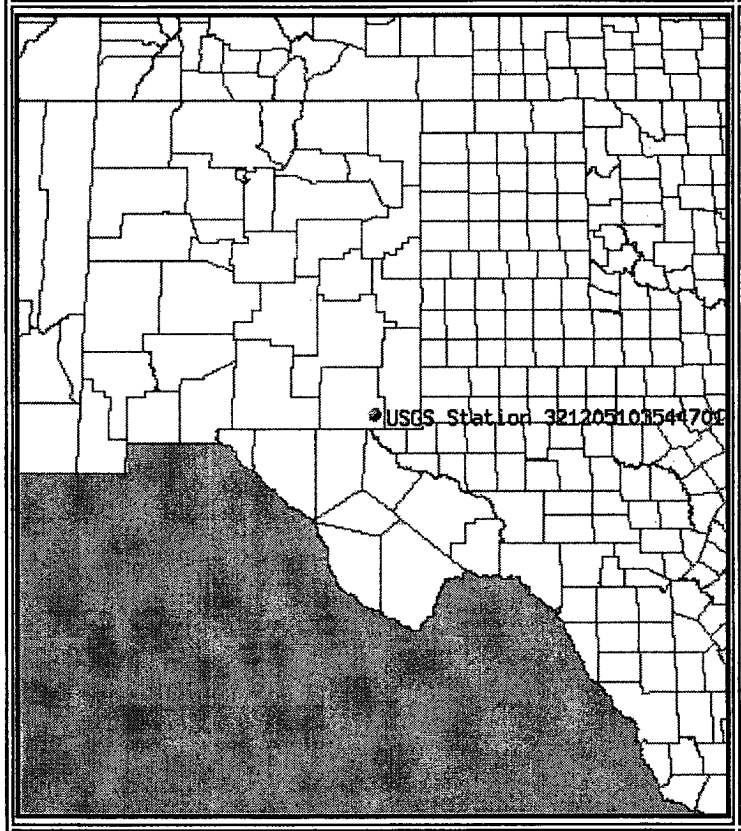
Site Map for New Mexico

USGS 321205103544701 24S.30E.19.42113

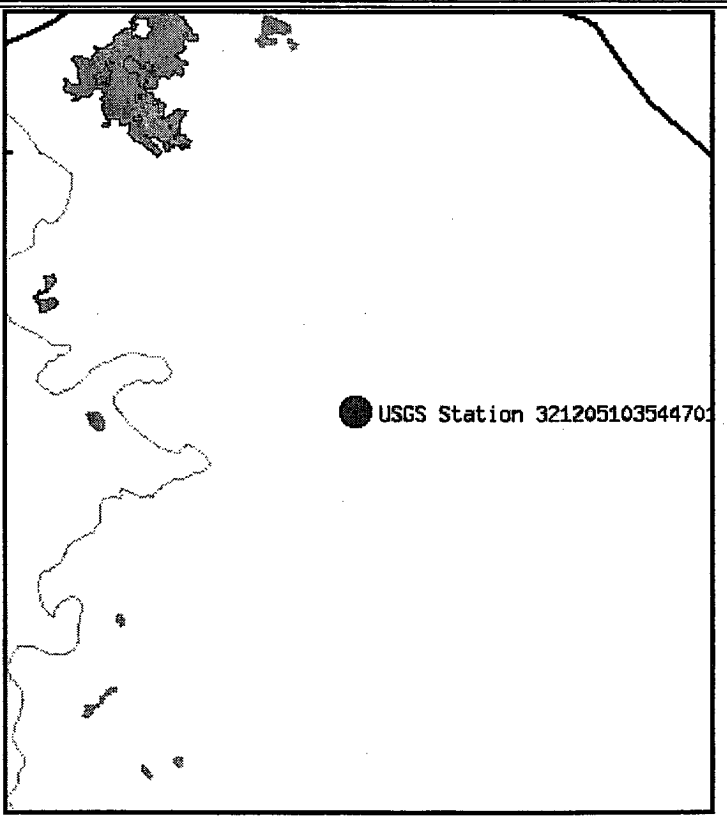
Available data for this site site map GO

Eddy County, New Mexico
Hydrologic Unit Code
Latitude 32°12'05", Longitude 103°54'47" NAD27
Gage datum 3,167.00 feet above sea level NGVD29

Location of the site in New Mexico.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X. 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data New Mexico NWISWeb Data Inquiries
Feedback on this website New Mexico NWISWeb Maintainer

Top
Explanation of terms

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

Retrieved on 2005-02-25 17:54:05 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of New Mexico
Privacy Statement || Disclaimer || Accessibility || FOIA
1.18 0.96 nadww01

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 = • 321205103544701

Save file of selected sites to local disk for future upload

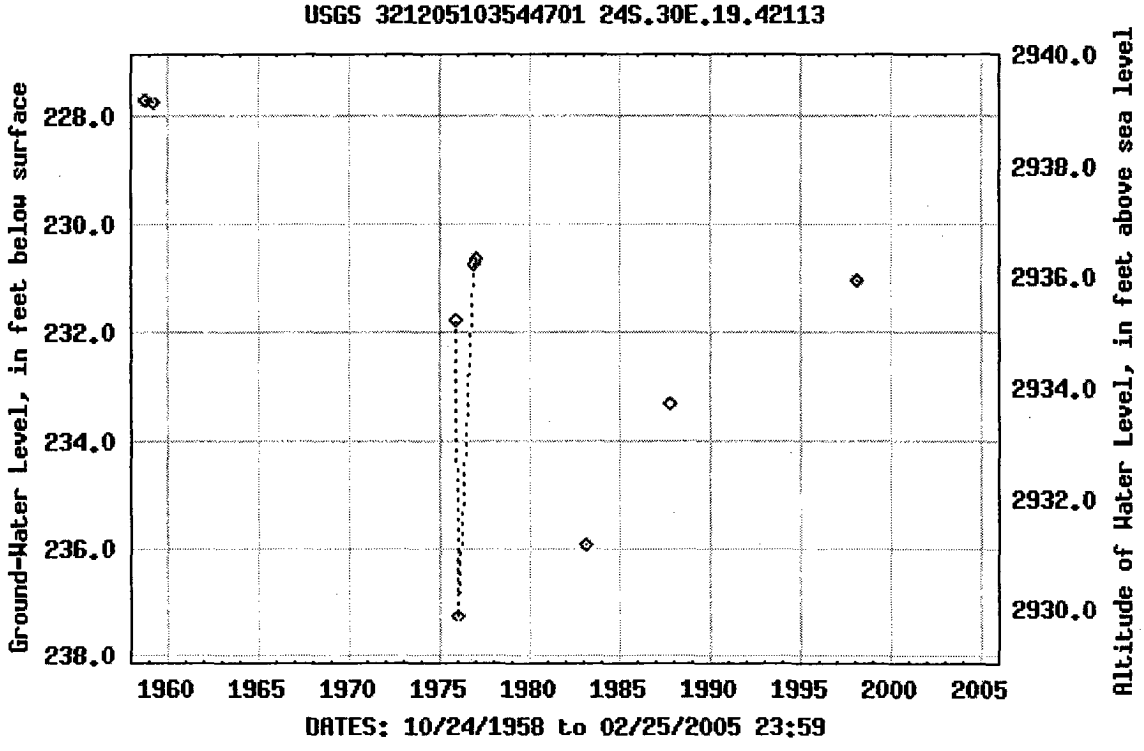
USGS 321205103544701 24S.30E.19.42113

Available data for this site Ground-water: Levels GO

Eddy County, New Mexico
Hydrologic Unit Code
Latitude 32°12'05", Longitude 103°54'47" NAD27
Gage datum 3,167.00 feet above sea level NGVD29
The depth of the well is 452 feet below land surface.
This well is completed in RUSTLER FORMATION (312RSLR)

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.
Download a presentation-quality graph

Questions about data New Mexico NWISWeb Data Inquiries
Feedback on this website New Mexico NWISWeb Maintainer

Top
Explanation of terms

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.

Input Data

Lat1		Lon1	
32:12:05	N	103:54:47	W
Lat2		**Lon2**	
32:13:45	N	103:48:37.9	W

Output

Course 1-2	Course 2-1	Distance
72.2161516	252.270809	5.46496895

Distance Units: nm Earth model: Spherical (1'=1nm)

Compute Reset

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.

Input data

Lat1		Lon1	
0:00.00	N	0:00.00	W
Course 1-2		Distance 1-2	
360		0.0	

DISTRICT I
N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	53818	SAND DUNES-DELAWARE SOUTH

Property Code	Property Name	Well Number
	PALLADIUM "7" FEDERAL	12

OGRID No.	Operator Name	Elevation
17891	POGO PRODUCING COMPANY	3528'

Surface Location

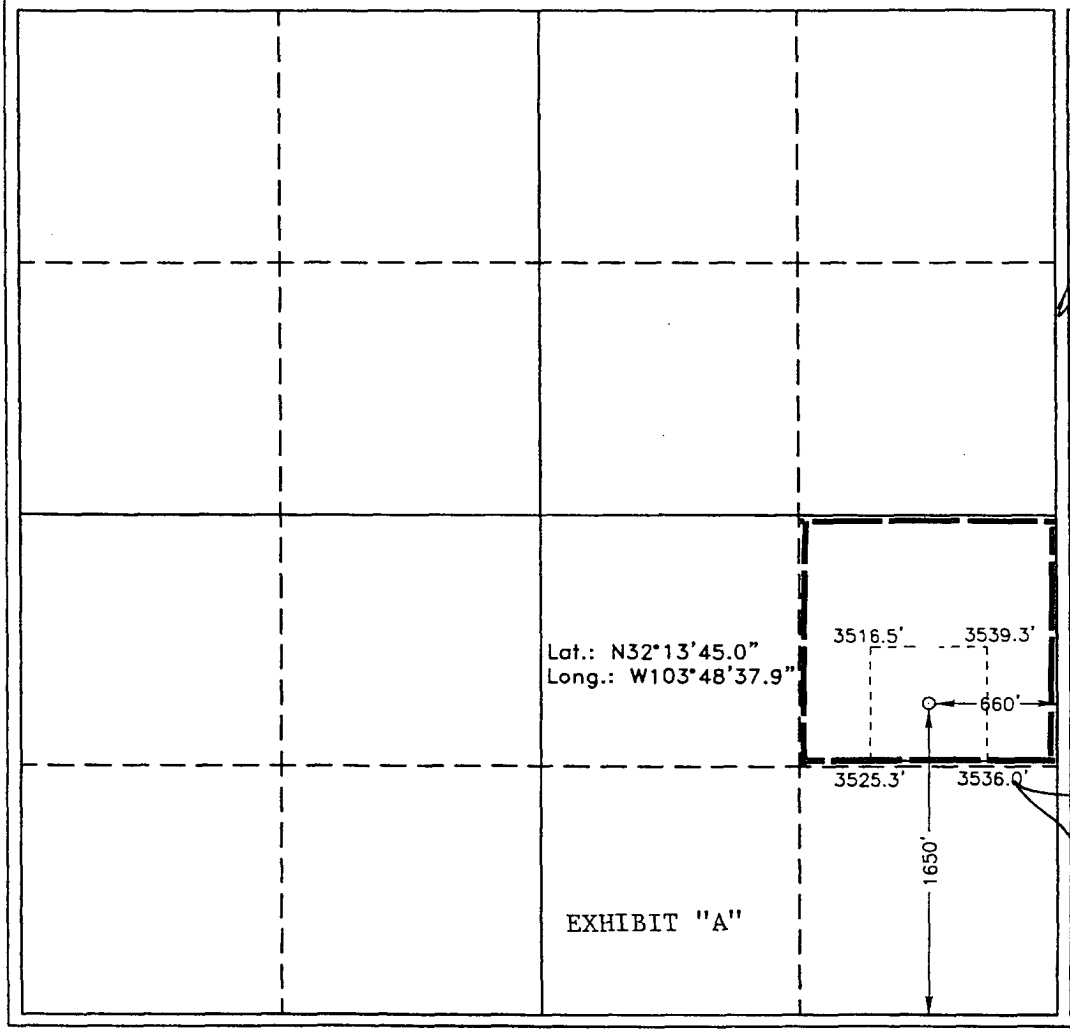
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	7	24 S	31 E		1650	SOUTH	660	EAST	EDDY

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



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
02/21/05
Date

SURVEYOR CERTIFICATION

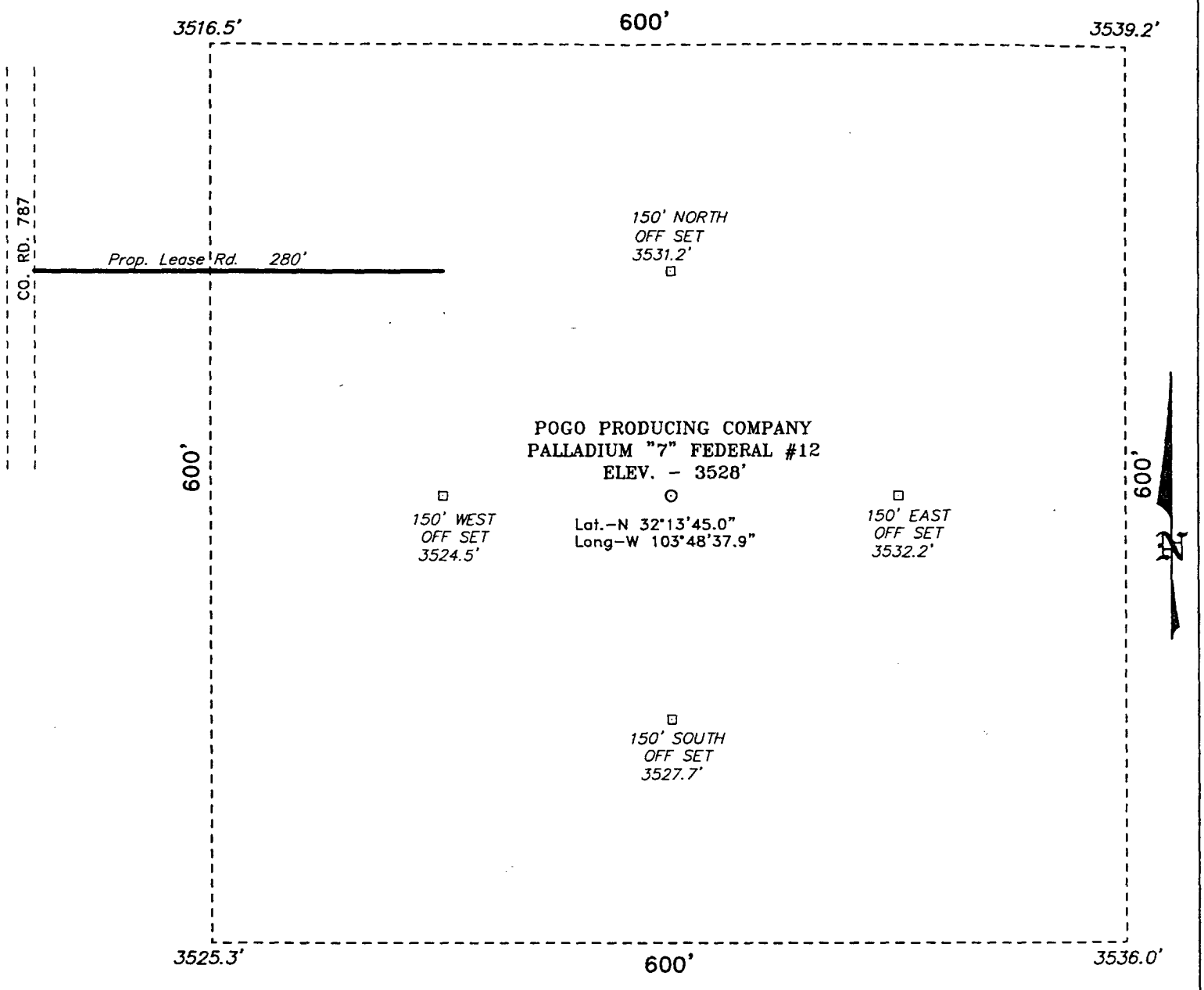
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

FEBRUARY 16, 2005
Date Surveyed
Signature & Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. No. 5129
Certificate No. Gary L. Jones 7977
BASIN SURVEYS

SECTION 7, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



100 0 100 200 FEET

SCALE: 1" = 100'

Directions to Location:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 787, GO SOUTH ON 787 FOR 4.5 MILES TO PROPOSED LEASE ROAD.

POGO PRODUCING CO.

REF: PALLADIUM "7" FEDERAL #12 / Well Pad Topo

THE PALLADIUM "7" FEDERAL No. 12 LOCATED 1650' FROM THE SOUTH LINE AND 660' FROM THE EAST LINE OF SECTION 7, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 5129	Drawn By: K. GOAD		
Date: 02-18-2005	Disk: KJG CD#1 - 5129A.DWG	Survey Date: 02-16-2005	Sheet 1 of 1 Sheets

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 12
UNIT "I" SECTION 7
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 providedfor your consideration.

1. Location of well: 1650' FSL & 660' FEL SECTION 7 T24S-R31E EDDY CO. NM

2. Ground Elevation above Sea Level: 3528' 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: 8400'

6. Estimated tops of geological markers:

Basal Anhydrite	4020'	Manzanita	5340'
Delaware Lime	4240'	Brushy Canyon	6400'
Bell Canyon	4260'	Bone Spring	8070'
Cherry Canyon	5160'	TD	8400'

7. Possible mineral bearing formations:

Manzanita	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"	0-975'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4150'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-8400'	5½"	17 & 15.5	8-R	LT&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 12
UNIT "I" SECTION 7
T24S-R31E EDDY CO. NM

9. CEMENTING & CASING SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 975' of 13 3/8" 48# H-40 ST&C casing. Cement with 600 Sx. of 65/35/6 Class "C" POZ-Gel + 5% Salt, tail in with 200 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/ Sx. circulate cement to surface.
8 5/8"	Intermediate	Set 4150' of 8 5/8" 32# J-55 ST&C casing. Cement with 1000 Sx. of 65/35/6 Class "C" POZ-Gel + 5% NaCl, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
5½"	Production	Set 8400' of 5½" casing as follows: 2400' 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" Premium Plus cement + additives, cement 2nd stage with 600 Sx. of Class "C" cement + 8# Gilsonite/Sx., cement 3rd stage with 400 Sx. of 65/35/6 Class "C" POZ-Gel, tail in with 100 Sx. of Class "C" cement + 1% CaCl, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 2000 PSI WP B.O.P. consisting of a stripper head instead of an annular preventor, blind rams, & pipe rams. This B.O.P. stack is being used because of substructure height limitations, this stack will be nippled up on the 8 5/8" at 4150'. Pressures encountered while drilling this well are not expected to exceed 1800 PSI. Pogo Producing Company requests permission for a 3rd party test of this B.O.P. arrangement after setting intermediate casing at 4150'±. The B.O.P. will be tested according to API specifications. Exhibit "E-1" shows a manually operated choke manifold, as no remote B.O.P. closing equipment will be necessary.

11. PROPOSED MUD CIRCILATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD
40-975'	8.4-8.7	29-34	NC	Fresh water use paper to control seepage.
975-4150'	10.1-10.3	29-36	NC	Brine water use paper to control seepage and use high viscositu sweeps to clean hole.
4150-8400'	8.4-8.7	29-38	NC*	Fresh water add Gel for high viscosity sweeps to clean hole.

* If water loss control is required to log, run casing or run DST's use a Dris-pac system.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, of unexpected kicks, In order to run logs, casing, and/or DST's the water loss and viscosity may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 12
UNIT "I" SECTION 7
T24S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

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

B. Cased hole log: Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.

C. Mud logger to be rigged up on hole at 4150' and remain on hole to TD.

D. 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 H^2S in this area. If 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 1800 PSI, and Estimated BHT 145°.

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 25 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 potentialed as an oil well.

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

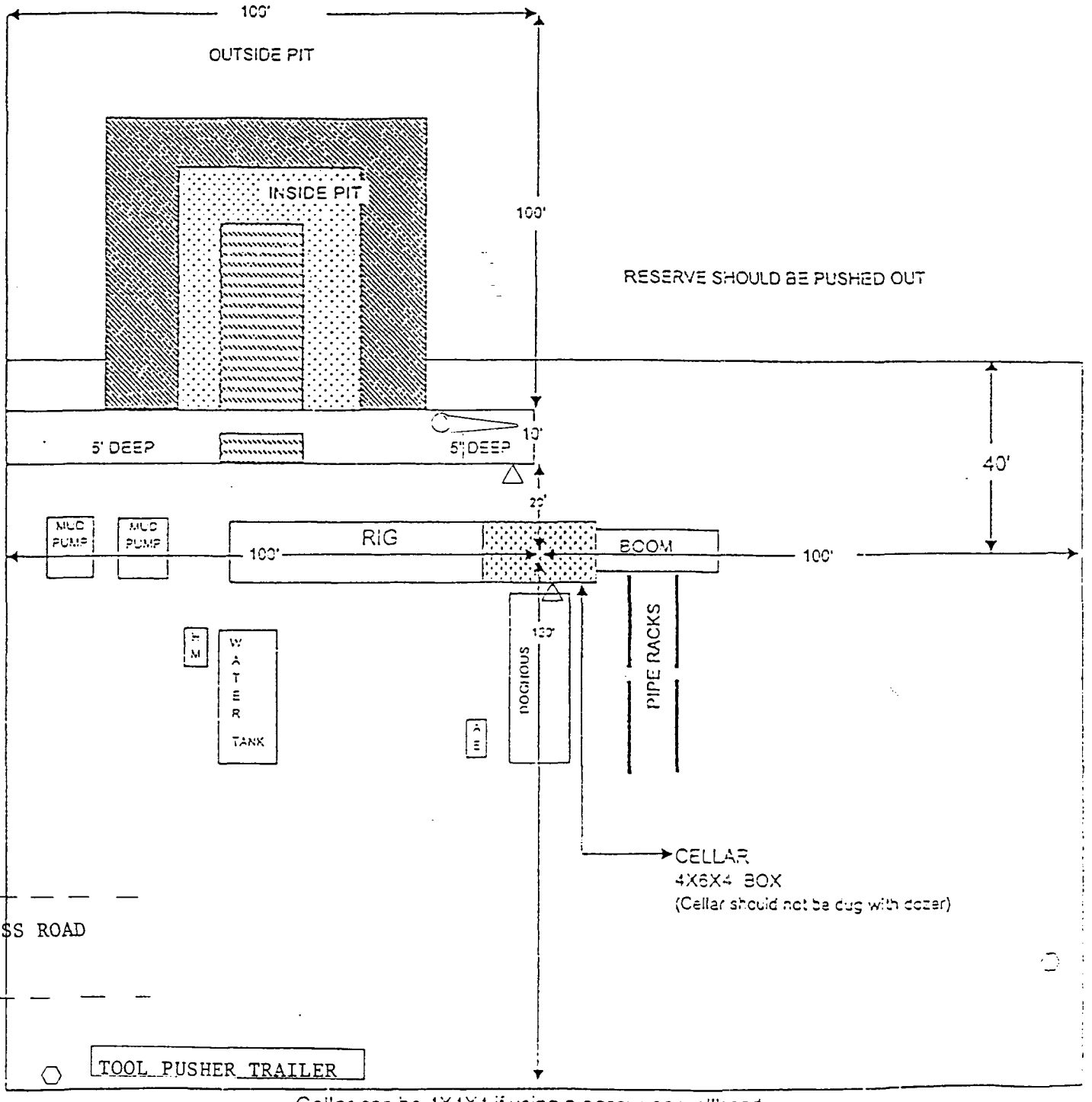
   A. Exhausts will be watered.
   B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
   C. If the location is near to a dwelling a closed DST will be performed.

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.

LOCATION SPECIFICATIONS AND RIG LAYOUT FOR EARTH PITS



Cellar can be 4X4X4 if using a screw-on wellhead
Working Pits dug 5' below ground level

- 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

Location Specs

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 12
UNIT "I" SECTION 7
T24S-R31E EDDY CO. NM

11" 2M

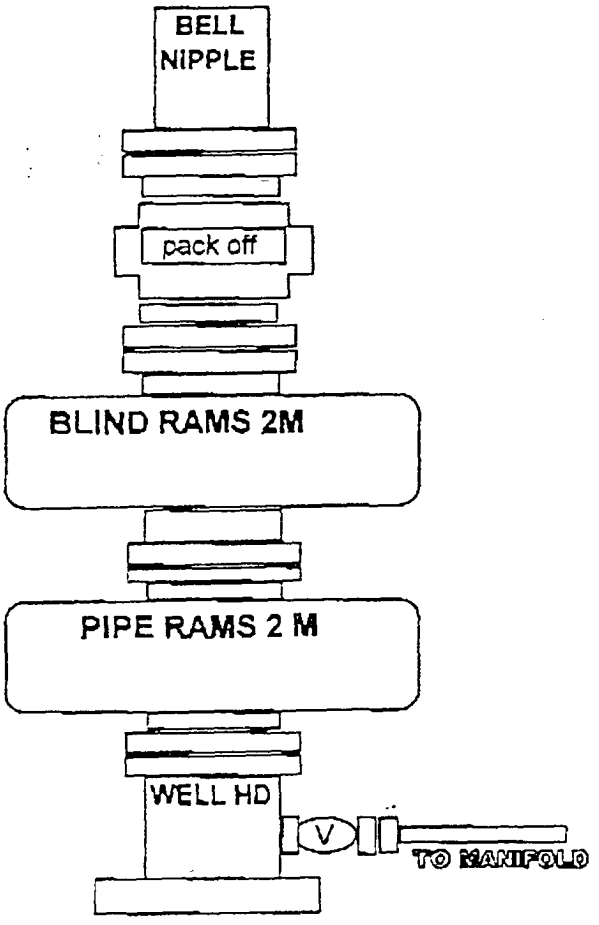


EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 12
UNIT "I" SECTION 7
T24S-R31E EDDY CO. NM

CHOKE MANIFOLD

3000 PSI WP

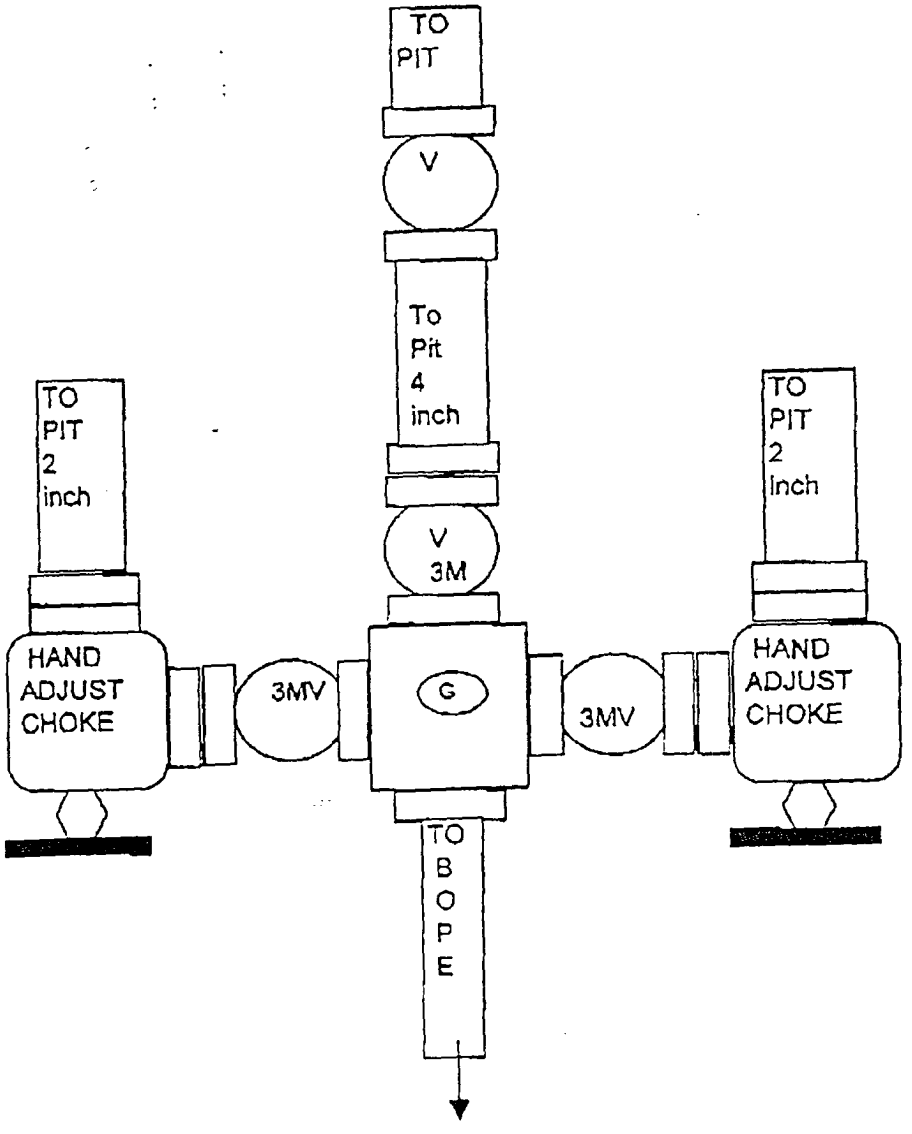


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
PALLADIUM "7" FEDERAL # 12
UNIT "I" SECTION 7
T24S-R31E EDDY CO. NM