

## BUREAU OF LAND MANAGEMENT

NM-89819

## APPLICATION FOR PERMIT TO DRILL WELL

## A. TYPE OF WORK

DRILL ☒

DEEPEN Artesia, NM 88210

## B. TYPE OF WELL

OIL WELL ☒GAS WELL ☐

SECRETARY'S POTASH

SINGLE ZONE ☒MULTIPLE ZONE ☐

## 2. NAME OF OPERATOR

POGO PRODUCING COMPANY

(RICHARD WRIGHT 432-685-8140)

## 3. ADDRESS AND TELEPHONE NO.

P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (432-685-8100)

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

660' FNL &amp; 2310' FWL SECTION 18 T24S-R31E EDDY CO. NM

At proposed prod. zone

SAME

## 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)

660'

## 16. NO. OF ACRES IN LEASE

640

## 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.

990'

## 19. PROPOSED DEPTH

8400'

## 20. ROTARY OR CABLE TOOLS

ROTARY

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3534' 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.
17 1/2"	H-40 13 3/8"	48	915'	800 Sx. circulate cement
11"	J-55 8 5/8"	32 & 24	2200'	1200 Sx. " "
7 7/8"	J-55, N-80 4 1/2"	11.6	8400'	1300 Sx. 2 Stage TOC 3500+'

## CARLSBAD CONTROLLED WATER BASIN

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 915'. Run and set 915' of 13 3/8" 48# H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + additives, circulate cement to surface.
3. Drill 11" hole to 4200'. Run and set 4200' of 8 5/8" casing as follows: 2400' of 8 5/8" 32# J-55 ST&C, 1200' of 8 5/8" 24# J-55 ST&C, 1000' of 8 5/8" 32# J-55 ST&C casing. Cement with 1200 Sx. of Class "C" cement + additives, circulate cement to surface.
4. Drill 7 7/8" hole to 8400'. Run and set 8400' of 4 1/2" casing as follows: 2400' of 4 1/2" 11.6# J-55 LT&C, 5000' of 4 1/2" 11.6# J-55 LT&C, 1000' of 4 1/2" 11.6# J-55 LT&C. Cement in 2 stages, with DV Tool at 6200'±. Cement 1st stage with 550 Sx. of Class "H" Premium Plus cement + additives, cement 2nd stage with 750 Sx. of Class "C" cement + additives, estimate top of cement 3500'± from 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

*[Signature]*  
 (This space for Federal or State office use)

APPROVAL SUBJECT TO  
 GENERAL REQUIREMENTS DATE 02/21/05

AND SPECIAL STIPULATIONS  
 ATTACHED

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:

APPROVED BY

/s/ Linda S. C. Rundell

TITLE

STATE DIRECTOR

DATE

APR 20 2004

\*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 13 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.

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

## 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
Property Code		Property Name	Well Number
30489		PATTON "18" FEDERAL	9
OGRID No.		Operator Name	Elevation
17891		POGO PRODUCING COMPANY	3534'

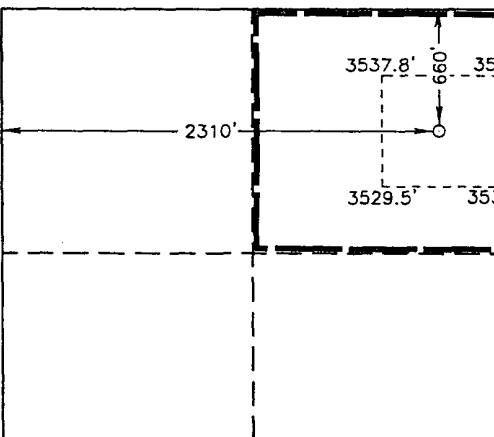
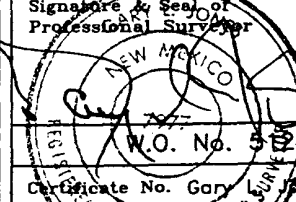
### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	18	24 S	31 E		660	NORTH	2310	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 40	Joint or Infill	Consolidation Code	Order No.						

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 style="text-align: center;">             2310'      3537.8'      660'      3541.7'              Lat.: N32°13'22.1"              Long.: W103°49'05.5"              3529.5'      3515.3'         </p>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;"><b>OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p style="text-align: center;"><i>Joe T. Janica</i></p> <p>Signature _____</p> <p>Joe T. Janica</p> <p>Printed Name _____</p> <p>Agent</p> <p>Title _____</p> <p>02/21/05</p> <p>Date _____</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></p> <p><i>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.</i></p> <p style="text-align: center;">FEBRUARY 16, 2005</p> <p>Date Surveyed _____</p> <p>Signature &amp; Seal of Professional Surveyor _____</p> <div style="text-align: center;">  </div> <p>Certificate No. Gary L. Jones 7977</p> </div>
<p>EXHIBIT "A"</p>	

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

RECEIVED

MAR 01 2005

OCD-ARTESIA

**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: Patton 18 Fed #9 API # 30-015-34080 U/L or Qtr/Qtr C Sec 18 T 24 R 31  
County: Eddy Latitude 32:13:22.1N Longitude 103:49:05.5W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume

16000 bbl

**Below-grade tank**

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	(20 points)
50 feet or more, but less than 100 feet	(10 points)
100 feet or more	( 0 points)
X	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	(20 points)
No	( 0 points)
X	0

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet	(20 points)
200 feet or more, but less than 1000 feet	(10 points)
1000 feet or more	( 0 points)
X	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 ID

Signature [Signature]

Water Resources

Data Category:

Site Information

Geographic Area:

New Mexico

GO

# Site Map for New Mexico

USGS 320856103502801 25S.30E.12.113211

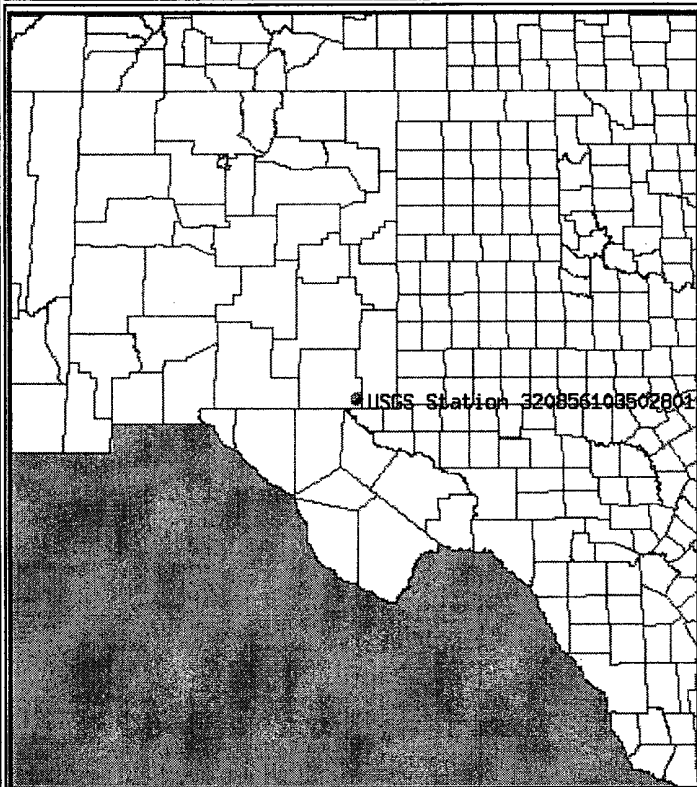
Available data for this site

site map

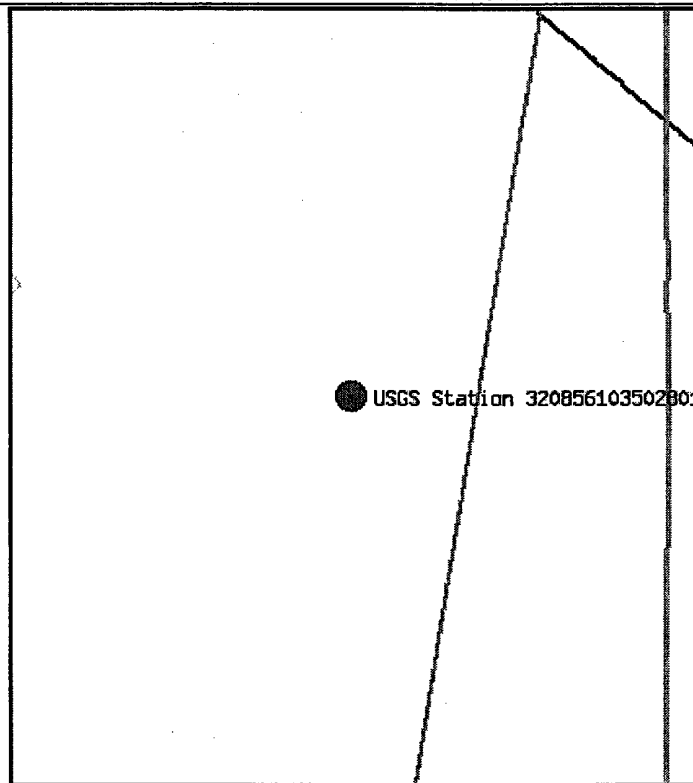
GO

Eddy County, New Mexico  
Hydrologic Unit Code  
Latitude 32°08'56", Longitude 103°50'28" NAD27  
Gage datum 3,359.10 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](#)  
NWIS Site Inventory for New Mexico: Site Map  
<http://waterdata.usgs.gov/nm/nwis/nwismap?>

[Top](#)  
[Explanation of terms](#)

Retrieved on 2005-02-28 14:11:55 EST  
Department of the Interior, U.S. Geological Survey  
USGS Water Resources of New Mexico  
[Privacy Statement](#) || [Disclaimer](#) || [Accessibility](#) || [FOIA](#)  
1.7 0.94 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 =	• 320856103502801
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Save file of selected sites to local disk for future upload

USGS 320856103502801 25S.30E.12.113211

Available data for this site

Ground-water: Levels

GO

Eddy County, New Mexico

Hydrologic Unit Code

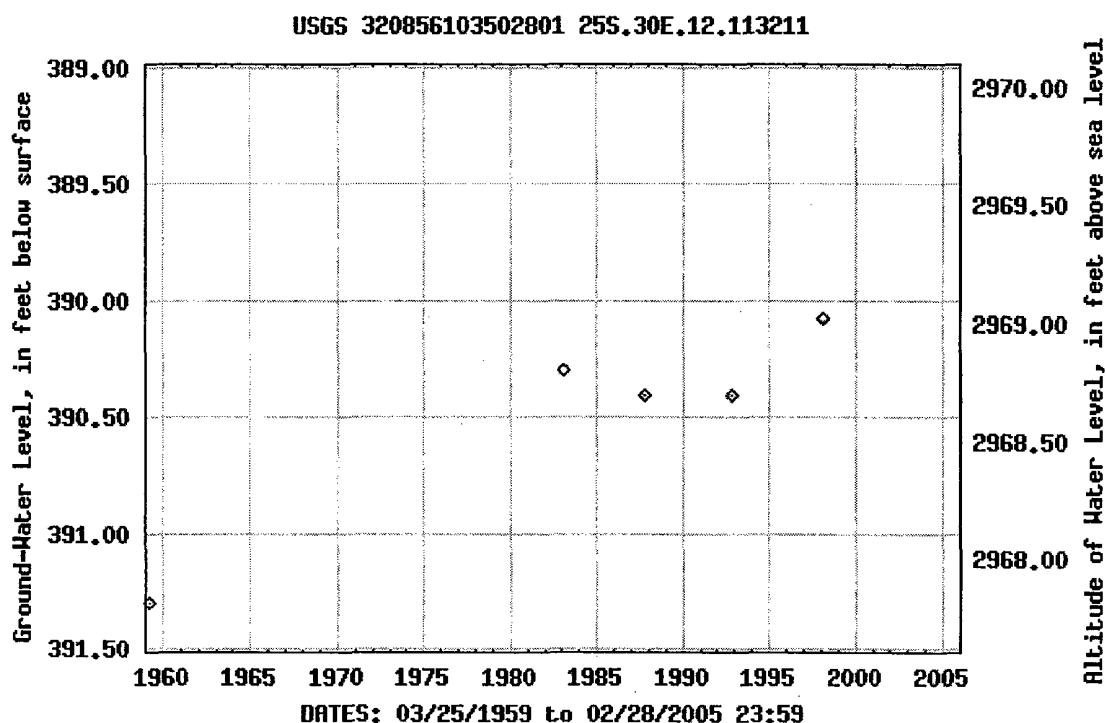
Latitude 32°08'56", Longitude 103°50'28" NAD27

Gage datum 3,359.10 feet above sea level NGVD29

The depth of the well is 482 feet below land surface.

This well is completed in ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE  
DEPOSITS (110AVMB)

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](#)
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[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	
32:13:22.1	N	103:49:05.5	W
Lat2		Lon2	
32:08:56	N	103:50:28	W

### Output

Course 1-2	Course 2-1	Distance
194.776350	14.7641439	4.577067954

Distance Units:  Earth model:

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

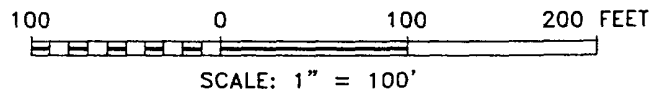
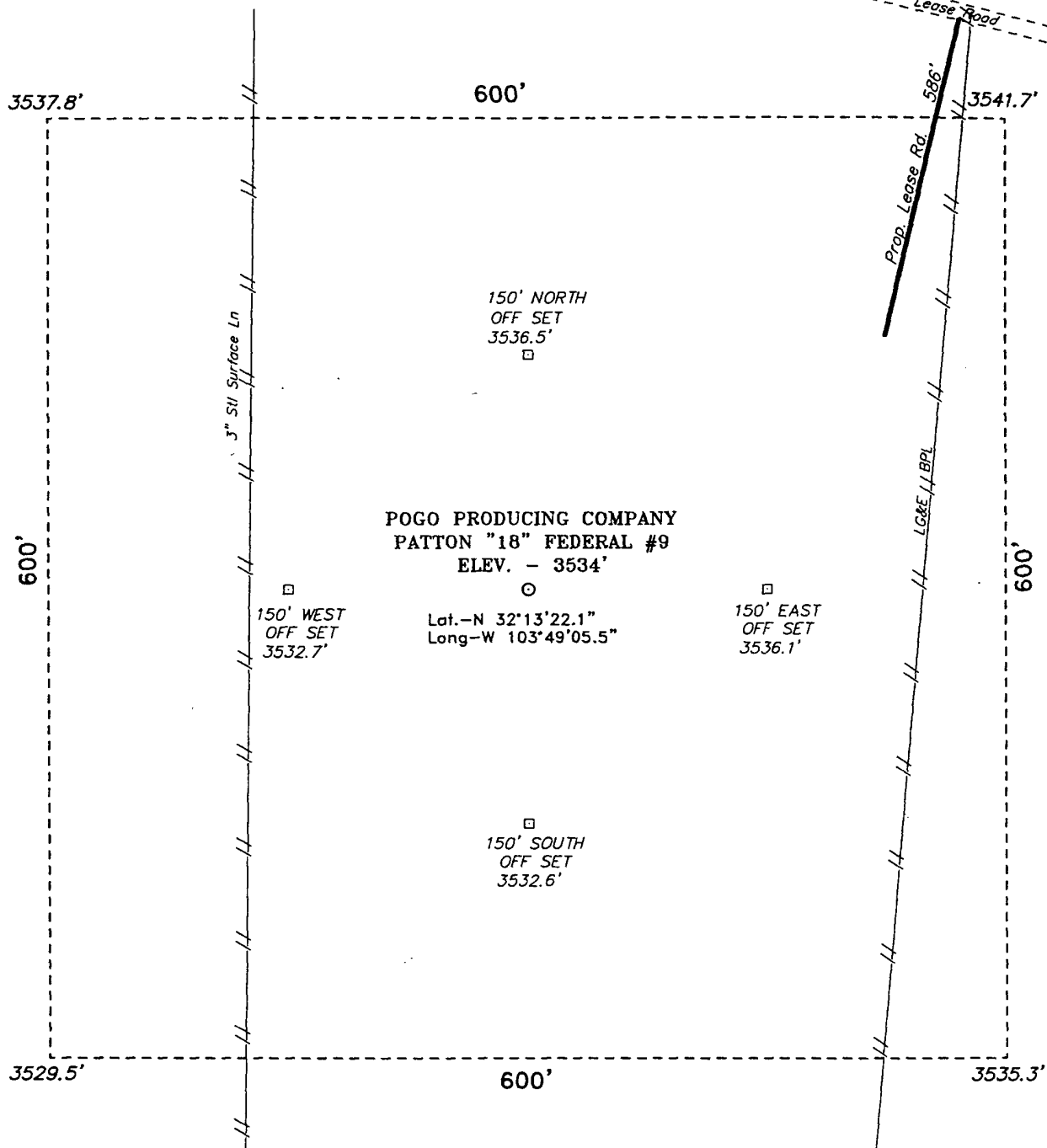
Enter lat/lon of initial point, true course and distance. Select distance units and earth model and click "compute". Lat/lons may be entered in DD.DD, DD:MM.MM or DD:MM:SS.SS formats.

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	

SECTION 18, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF STATE HWY 128 AND CO.  
RD. 787, GO SOUTH ON 787 FOR 5.0 MILES TO  
LEASE ROAD; THENCE WEST ON LEASE ROAD FOR  
0.4 MILE TO PROPOSED LEASE ROAD.

**POGO PRODUCING CO.**

REF: PATTON "18" FEDERAL #9 / Well Pad Topo

THE PATTON "18" FEDERAL No. 9 LOCATED 660' FROM  
THE NORTH LINE AND 2310' FROM THE WEST LINE OF  
SECTION 18, 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: 5128 Drawn By: K. GOAD

Date: 02-18-2005 Disk: KJG CD#1 - 5128A.DWG

Survey Date: 02-16-2005 Sheet 1 of 1 Sheets

# APPLICATION TO DRILL

POGO PRODUCING COMPANY  
PATTON "18" FEDERAL # 9  
UNIT "C" SECTION 18  
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 provided for your consideration.

1. Location of well: 660' FNL & 2310' FWL SECTION 18 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:

Rustler Anhydrite	500'	Cherry Canyon	5184'
Salado Salt	750'	Brushy Canyon	6421'
Delaware	4274'	Bone Spring	8104'
Bell Canyon	4299'	TD	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"	0-915'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4200'	8 5/8"	24 & 32#	8-R	ST&C	J-55
7 7/8"	0-8400'	4½"	11.6#	8-R	LT&C	J-55



## APPLICATION TO DRILL

POGO PRODUCING COMPANY  
 PATTON "18" FEDERAL # 9  
 UNIT "C" SECTION 18  
 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 915' of 13 3/8" 48# H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
8 5/8"	Intermediate	Set 4200' of 8 5/8" casing as follows: 2000; of 8 5/8" 32# J-55 ST&C, 1200' of 8 5/8" 24# J-55 ST&C. 1000' of 8 5/8" 32# J-55 ST&C casing. Cement with 1200 Sx. of Class "C" cement + additives, circulate cement to surface.
4 1/2"	Production	Set 8400' of 4 1/2" casing as follows: 2400' of 4 1/2" 11.6# N-80 LT&C, 6000' of 4 1/2" 11.6# J-55 LT&C, 1000' of 4 1/2" 11.6# N-80 LT&C casing. Cement in 2 stages DV Tool at 6200'. cement 1st stage with 550 Sx. of Class "H" cement. Cement 2nd stage with 750 Sx. of Class "C" cement + additives. Estimate top of cement 3500' from surface.

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI working pressure B.O.P., consisting of a stripper head 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., after setting intermediate casing at 4200'. 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. equipment will be necessary.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD
40-915'	8.4-8.7	29-36	NC	Fresh water Spud Mud use paper to control seepage.
9-15-4200'	10.1-10.2	29-38	NC	Brine water use paper to control seepage and high viscosity sweeps to clean hole.
4200-8400'	8.4-8.8	29-40	NC*	Fresh water with Dris-pac if water loss control is needed, high viscosity sweeps to clean hole.

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/or water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY  
PATTON "18" FEDERAL # 9  
UNIT "C" SECTION 18  
T24S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Induction, SNP, LDT, Gamma Ray; Caliper from TD back to 8 5/8" casing shoe.
- B. Cased hole logs: Gamma Ray, Neutron from 8 5/8" casing shoe back to surface.
- C. Mud logger will be placed on hole at 4200'± and remain on hole to TD.
- D. No Cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H<sup>2</sup>S in this area. If H<sup>2</sup>S 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 1850 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 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 H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H<sub>2</sub>S 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<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S 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<sub>2</sub>S 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 separator will be brought into service along with  $H_2S$  scavengers if necessary.

## SURFACE USE PLAN

POGO PRODUCING COMPANY  
PATTON "18" FEDERAL # 9  
UNIT "C" SECTOPN 18  
T24S-R31E EDDY CO. NM

1. EXISTING ROADS & PROPOSED 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 proposed well site as staked.
  - B. From Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad New Mexico go approximately 40 miles to the WIPP road, turn Left on to the WIPP road go South 13 miles to CR-802, turn Right go 4.2 miles to State Hi-way 128, turn Left go 2.4 miles to CR-787 ( Twin Wells Road) turn Right go 5.3 miles turn Right (West) go .2 miles turn Left go to well # 3 turn Right go 900'± to location .
  - C. Exhibit "C" shows the routes of new roads, existing roads, proposed powerline, and proposed flowlines.
2. PLANNED ACCESS ROADS: Approximately 990' of new road will be constructed.
  - A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.
  - B. Gradient of all roads will be less than 5.00%.
  - C. If turn-outs are necessary they will be constructed.
  - D. If needed roads will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
  - E. Center-line for new roads will be flagged. Earth-work will be done as field conditions require.
  - F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilize low water crossings for drainage as required by topography.
3. LOCATIONS OF EXISTING WELLS IN A ONE MILE RADIUS. EXHIBIT "A-1"
  - A. Water wells - One approximately .6 miles East of location.
  - 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  
PATTON "18" FEDERAL # 9  
UNIT "C" SECTOPN 18  
T24S-R31E 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. Exhibit "C" shows proposed routes of roads, flowlines and powerlines.

### 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 minimum 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 further 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 pits 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

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### 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the proposed well site layout.
- B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encountered during pit construction indicate that a plastic liner is required to contain lateral migration.
- D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than 6 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.
- E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completion phases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out. If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

### 10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pits will be allowed to dry properly, fluids may be moved and disposed of in accordance with article 7-E 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 future erosion. In case of the well completed as a producer the drilling pad will be necessary to construct production facilities. After the area has been shaped and contoured top soil from the spoil pile will be placed over the disturbed area to the extent possible so that revegetation procedures can be accomplished to comply with the BLM specifications.

If the well is a dry hole the pad and road area will be contoured to match the existing terrain. Top soil will be spread to the extent possible and revegetation will be carried out according to the BLM specifications.

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

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11. OTHER INFORMATION:

- A. Topography is relatively flat with little or no dip. Soil consists of shallow , silty clay loams with caliche caprock throughout. Vegetation consists of catclawacacia, mesquite, prickley pear, broom snake weed, creosote, Christmas tree cactus, and various other cactus.
- B. Surface is owned by the U.S. Department of Interior and is administered by the Bureau of Land Management. The surface is leased to ranchers for grazing of live stock.
- C. An archaeological survey will be conducted and the results will be filed with The Bureau of Land Management Carlsbad Field office in Carlsbad NM.
- D. There is a ranch dwelling approximately .8 of a mile to the East of the location.

12. OPERATORS REPRESENTATIVE:

Before construction:

TIERRA EXPLORATION, INC.  
P.O. BOX 2188  
HOBBS, NEW MEXICO 88241  
JOE T. JANICA  
OFFICE PHONE 505-391-8503

During and after construction:

POGO PRODUCING COMPANY  
P.O. BOX 10340  
MIDLAND, TEXAS 79702-7340  
RICHARD WRIGHT  
OFFICE PHONE 915-685-8140

13. CERTIFICATION: I hereby certify that I or persons under my direct supervision have inspected the proposed drill site and access route, 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 the 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 statement.

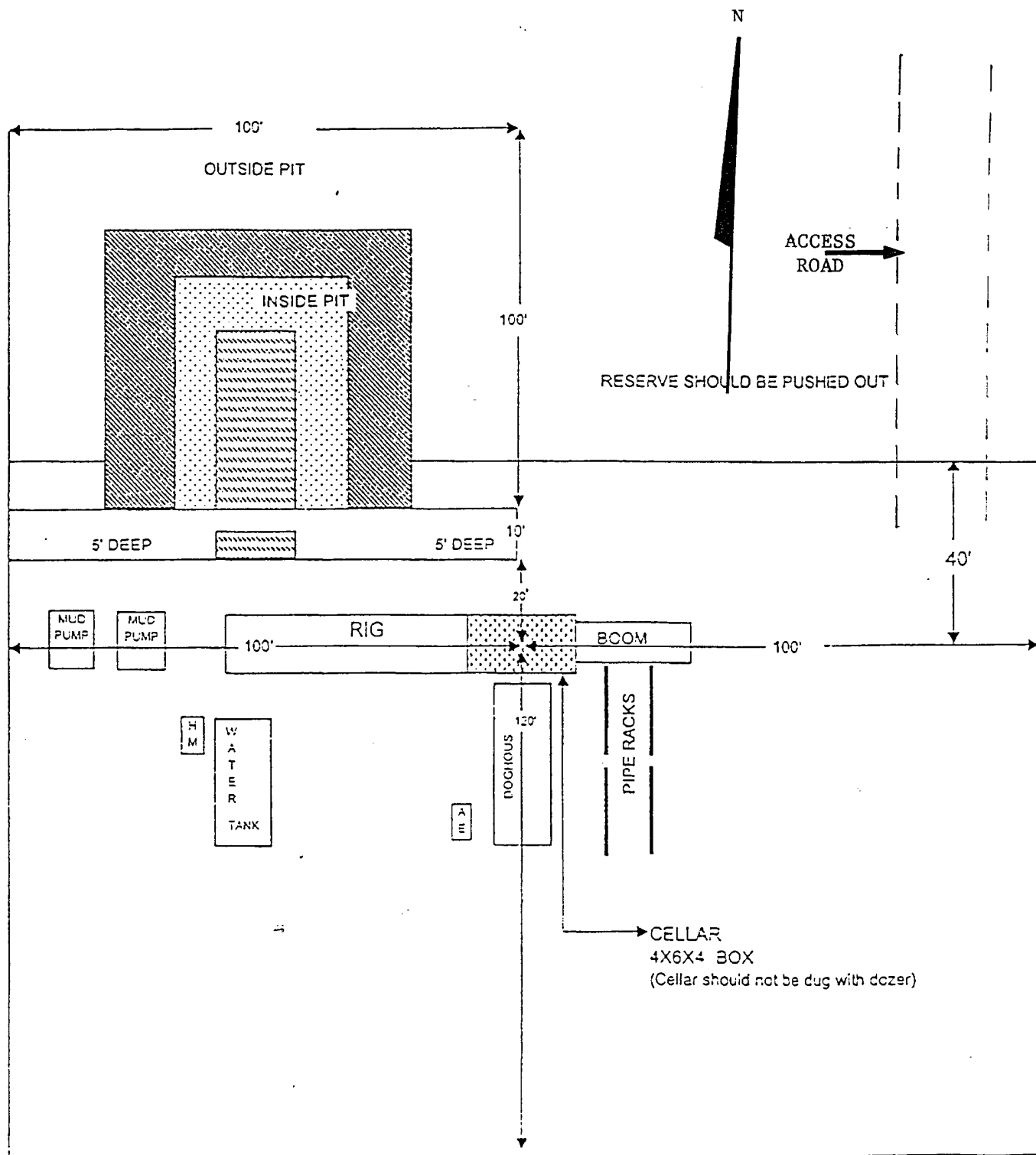
NAME : Joe T. Janica

DATE : 02/21/05

TITLE : Agent



# 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  
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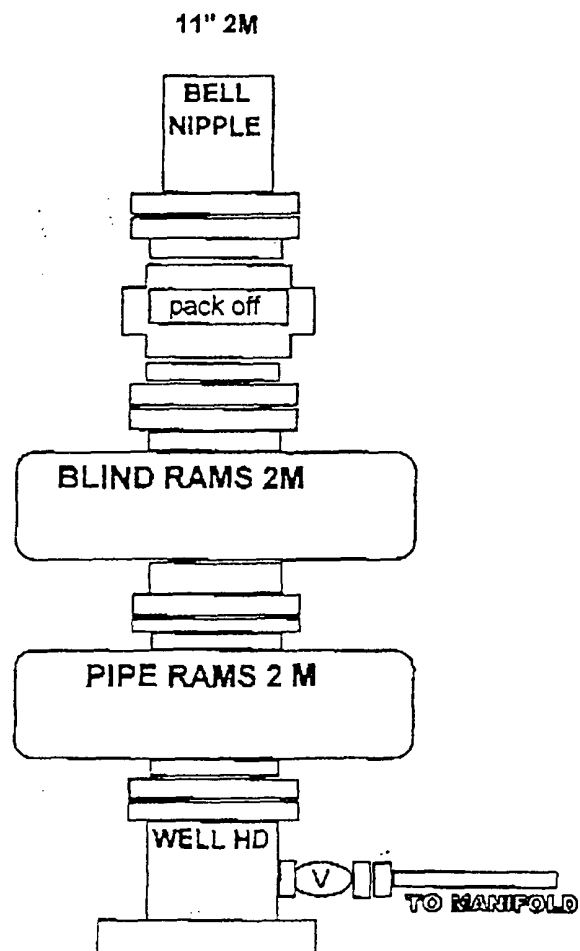


EXHIBIT "E"  
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY  
PATTON "18" FEDERAL # 9  
UNIT "C" SECTION 18  
T24S-R31E EDDY CO. NM

# CHOKE MANIFOLD

3000 PSI WP

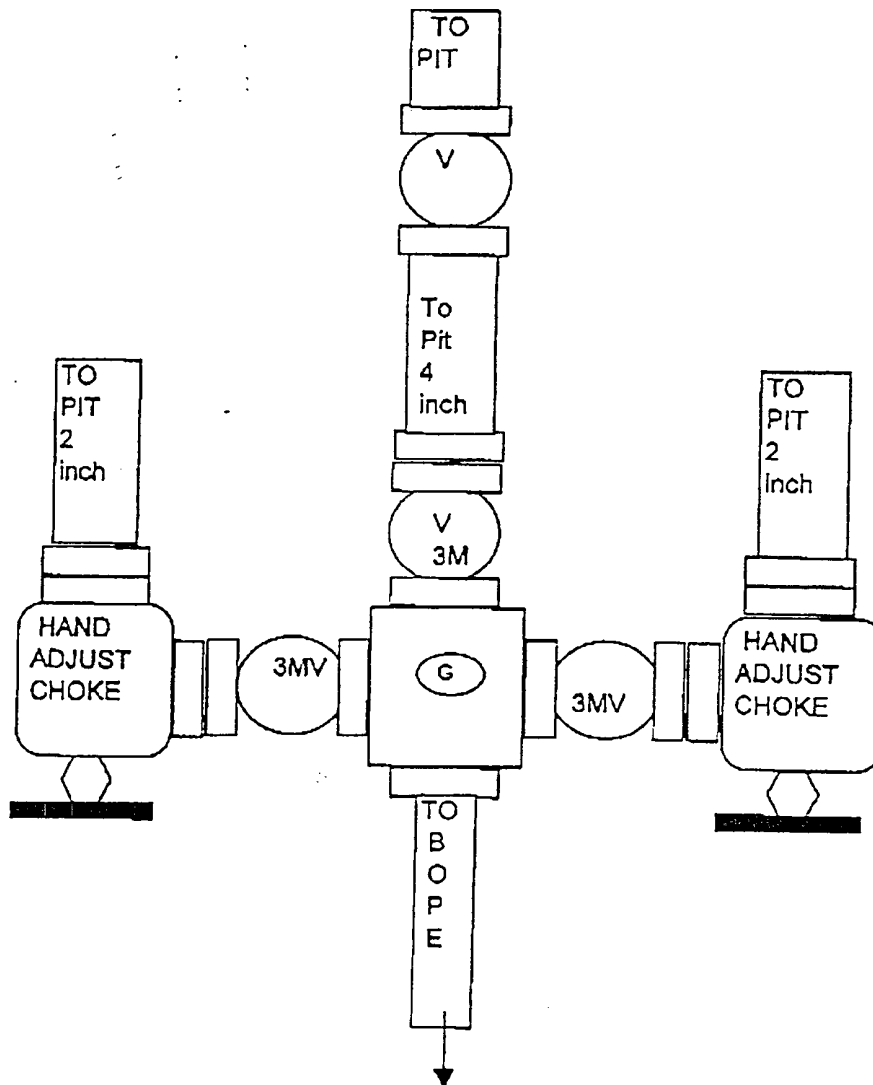


EXHIBIT "E-1"  
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY  
PATTON "18" FEDERAL # 9  
UNIT "C" SECTION 18  
T24S-R31E EDDY CO. NM