

(July 1992)

UNITED STATES Mexico Oil Conservation Division, District 1

OMB NO. 1004-0136 February 28, 1995

B-06-43

**DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
 1625 N. French Drive  
 Hobbs, NM 88240

# APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

229

## b. TYPE OF WELL

OIL WELL ☐GAS WELL ☒

OTHER

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

1090' FWL &amp; 660' FNL SECTION 30 T26S-R35E LEA CO. NM

At proposed prod. zone SAME

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Approximately 17 miles Southwest of Jal New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

660'

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

264'

## 16. NO. OF ACRES IN LEASE

520

## 19. PROPOSED DEPTH

16,500'

## 17. NO. OF ACRES ASSIGNED TO THIS WELL.

320

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

3186' 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
26"	Conductor 20"	NA	40'	Redi-mix cement to surface
17 1/2"	J-55 13 3/8"	54.5#	650'	600 Sx. Circulate to surface
12 1/4"	N-80 9 5/8"	40#	5200'	1400 Sx. " " "
8 1/2"	HCP-110 7"	29#	13,100'	1200 Sx. Est TOC 3000' FS
6 1/8"	HCP-110 4 1/2"	15.1#	12,900-16,500'	250 Sx. cement to top of liner.

**APPROVAL SUBJECT TO  
 GENERAL REQUIREMENTS AND  
 SPECIAL STIPULATIONS  
 ATTACHED**

Controlled Controlled Water Basin

SEE ATTACHED SHEET

POGO PRODUCING COMPANY ACCEPTS THE RESPONSIBILITY FOR THE OPERATION OF THIS LEASE.

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

Agent

DATE 11/16/05

(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:

APPROVED BY

/s/ Joe G. Lara

ACTING

TITLE

FIELD MANAGER

DATE

FEB 10 2006

\*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 650'. Run and set 650' of 13 3/8" 54.5# ST&C J-55 casing. Cement with 600 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. circulate cement to surface.
3. Drill 12¼" hole to 5200'. Run and set 5200' of 9 5/8" 40# N-80 ST&C casing. Cement with 1400 Sx. of Class "C" cement + additives, circulate cement to surface.
4. Drill 8½" hole to 13,100'. Run and set 13,100' of 7" 29# HCP-110 LT&C casing. Cement in 2 stages with DV Tool at 7000'±. Cement 1st stage with 800 Sx. of Class "H" premium Plus cement + additives, Cement 2nd stage with 400 Sx. of Class "H" Premium Plus cement + additives, estimate top of cement 3000' from surface.
5. Drill 6 1/8" hole to 16,500'. Run and set a 3600' 4½" 15.1# HCP-110 ULTRA SF casing. Cement to top of liner with 250 Sx. of Class "H" low water loss cement. Mix cement a 15.8 PPG. Cement is calculated to reach the top of liner.

DISTRICT I  
1625 N. PERNCH DR., HOBBS, NM 88240

DISTRICT II  
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102  
Revised JUNE 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-025-37733</b>	Pool Code 79123	Pool Name JABALINA ATOKA SOUTHWEST (GAS)
Property Code <b>35421</b>	Property Name <b>MADERA 30 FEDERAL</b>	Well Number 2
OGRID No. 17891	Operator Name <b>POGO PRODUCING COMPANY</b>	Elevation 3186'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	30	26-S	35-E		660	NORTH	1090	WEST	LEA

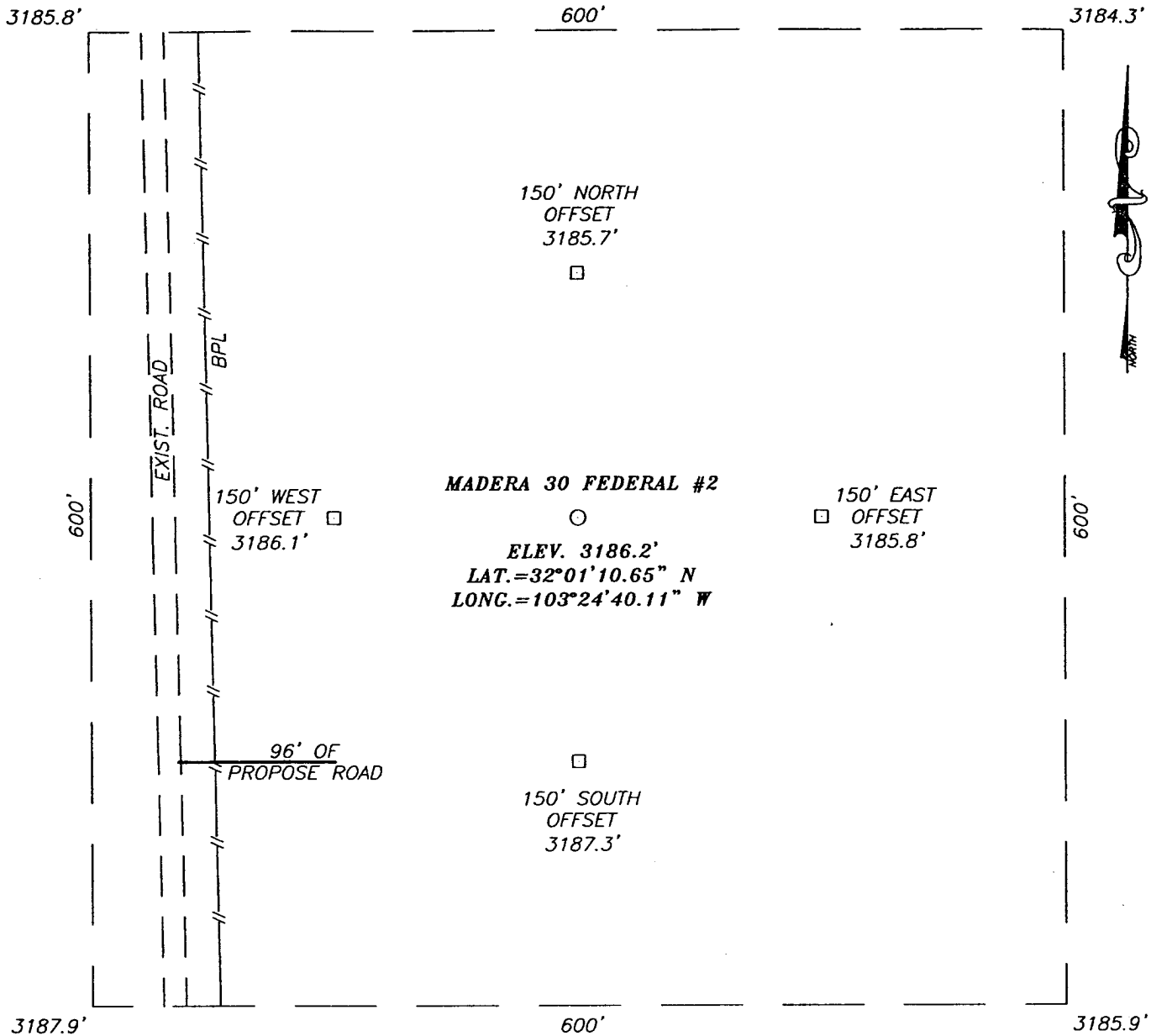
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	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

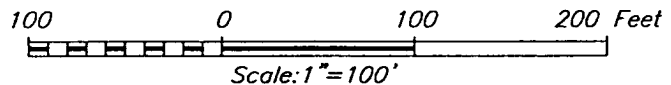
<p>LOT 1 3185.8' 3184.3' 1090' 600' 3187.9' 3185.9' 40.66 AC</p> <p>LOT 2 NM-62937 40.73 AC</p> <p>LOT 3 40.81 AC</p> <p>LOT 4 40.88 AC</p> <p>Existing Gas Well</p>	<p>GEODETIC COORDINATES NAD 27 NME Y=372085.7 N X=785819.0 E LAT.=32°01'10.65" N LONG.=103°24'40.11" W</p>	<p>OPERATOR CERTIFICATION</p> <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 Joe T. Janica Printed Name Agent Title 11/16/05 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>NOVEMBER 4, 2005</p> <p>Date Surveyed Signature &amp; Seal of Professional Surveyor RONALD J. REDSON 105.11.1724 Certificate No. RONALD J. REDSON 3239</p>
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**SECTION 30, TOWNSHIP 26 SOUTH, RANGE 35 EAST, N.M.P.M.,**  
**LEA COUNTY, NEW MEXICO**



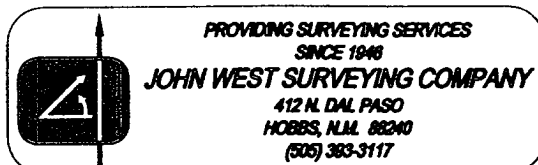
**DIRECTIONS TO LOCATION**

FROM THE INTERSECTION OF ST. HWY. #18 AND WHITWORTH DR (JAL LAKE RD) GO WEST ON WHITWORTH DR. APPROX. 0.3 MILES TO THIRD AVE. (CO. RD. #214) AND GO SOUTH ON CO. RD. #214 APPROX. 7.0 MILES TO BECKHAM RD. FOLLOW BECKHAM RD. APPROX. 2.1 MILES TO A RANCH HOUSE. GO APPROX. 3.0 MILES TO A "Y" INTERSECTION AND STAY RIGHT (MOST EASTERLY) ON MAIN ROAD AND GO APPROX. 3.7 MILES TO A CATTLE GUARD. GO APPROX. 0.6 MILES. TURN LEFT AND GO SOUTH APPROX. 0.5 MILES. THIS LOCATION IS EAST OF ROAD APPROX. 250 FEET.



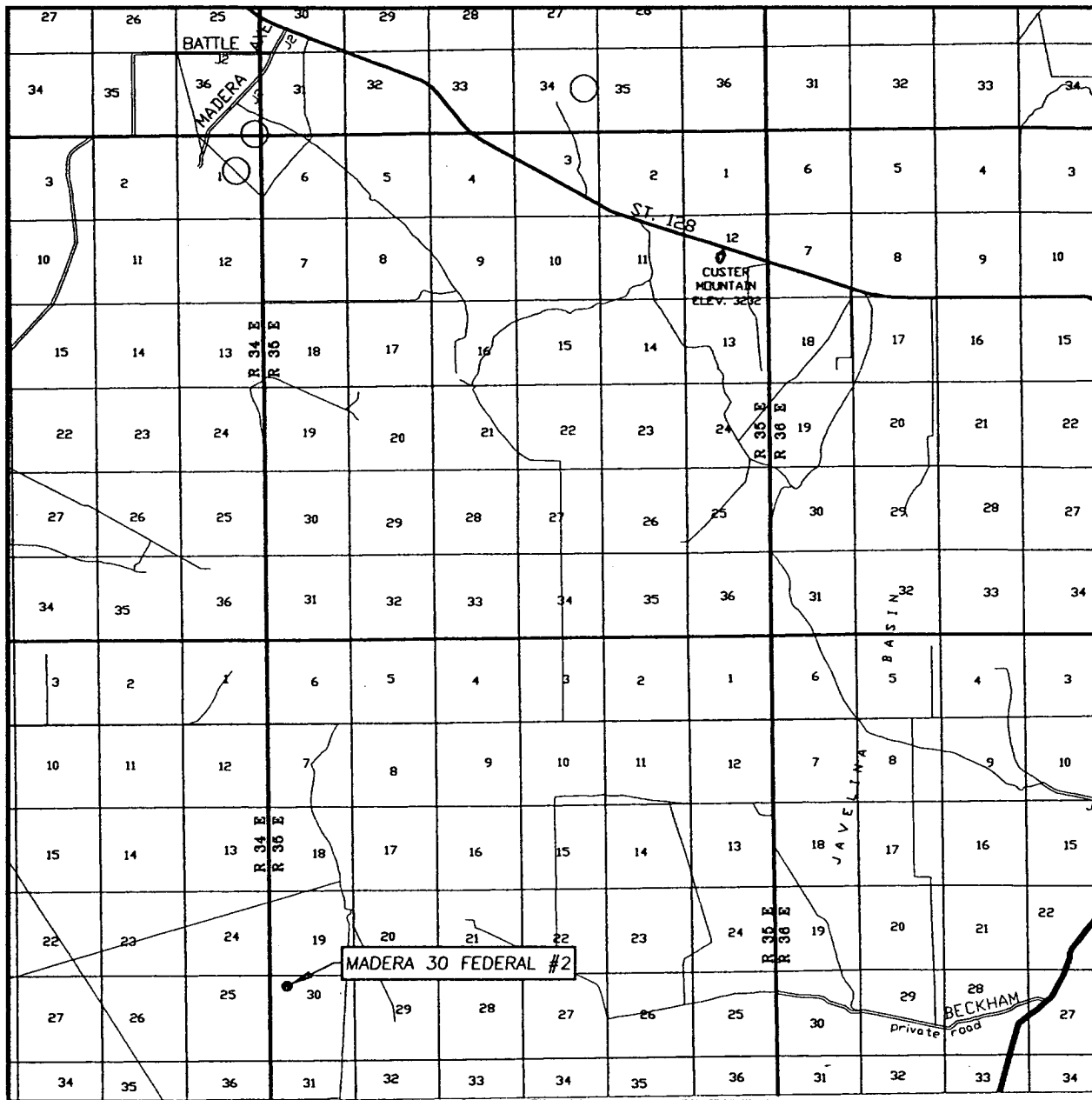
**POGO PRODUCING COMPANY**

MADERA 30 FEDERAL #2 WELL  
 LOCATED 660 FEET FROM THE NORTH LINE  
 AND 1090 FEET FROM THE WEST LINE OF SECTION 30,  
 TOWNSHIP 26 SOUTH, RANGE 35 EAST, N.M.P.M.,  
 LEA COUNTY, NEW MEXICO.



Survey Date: 11/04/05	Sheet 1 of 1 Sheets
W.O. Number: 05.11.1724	Dr By: LA
Date: 11/07/05	Disk: CD#4
05111724	Scale: 1"=100'

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 30 TWP. 26-S RGE. 35-E

SURVEY N.M.P.M.

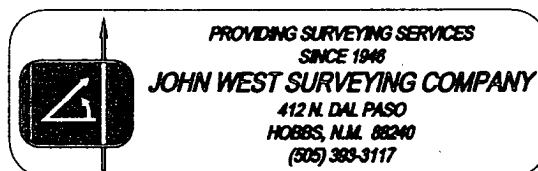
COUNTY LEA

DESCRIPTION 660' FNL & 1090' FWL

ELEVATION 3186'

OPERATOR POGO PRODUCING COMPANY

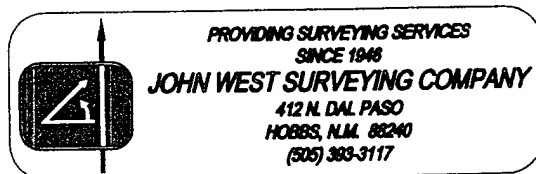
LEASE MADERA 30 FEDERAL





CONTOUR INTERVAL:  
ANDREWS PLACE, N.M. - 10'

U.S.G.S. TOPOGRAPHIC MAP  
ANDREWS PLACE, N.M.



APPLICATION TO DRILL  
POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1            SECTION 30  
T26S-R35E      LEA 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 & 1090' FWL SECTION 30 T26S-R35E LEA CO. NM
2. Ground Elevation above Sea Level: 3186' 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: 16,500'
6. Estimated tops of geological markers:

Rustler Anhydrite	950'	Strawn	14,683'
Delaware lime	5385'	Atoka Lime	15,200'
Bone Spring	9480'	Morrow Sand	16,110'
Wolfcamp	12,554'	TD	16,500'
7. Possible mineral bearing formations:

Delaware	Oil	Strawn	Gas
Bone Spring	Oil	Atoka	Gas
Wolfcamp	Gas	Morrow	Gas
8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-650'	13 3/8"	54.5#	8-R	ST&C	J-55
12¼"	0-5200'	9 5/8"	40#	8-R	ST&C	N-80
8½"	0-13,100'	7"	29#	8-R	LT&C	HCP-110
6 1/8"	12,900-16,500' Liner	4½"	15.1#	8-R	LT&C	P-110 ULTRA SF CASING.

APPLICATION TO DRILL  
POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM

9. CASING CEMENTING & SETTING DEPTHS:

20"	Conductor	Set 40' of 20" conductor pipe and cement with Redi-mix to surface.
13 3/8"	Surface	Set 825' of 13 3/8" 48# H-40 ST&C casing and cement with 600 Sx. of 65/35/6 Class "C" POZ/GEL, tail in with 200 Sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
9 5/8"	1st Intermediate	Set 5150' of 9 5/8" 40# N-80 ST&C casing. Cement with 1400 Sx. of 65/35/6 Class "C" POZ/GEL + 5% Salt, tail in with 200 Sx. of Class "C" + 2% CaCl, circulate cement to surface.
7"	2nd Intermediate	Set 12,100' of 7" 29# P-110 LT&C casing. Cement in two stages DV Tool at 6500'±. Cement 1st stage with 900 Sx. of Class "H" cement + additives, cement 2nd with 400 Sx. of Class "C" cement + 8# Gilsonite/Sx. Estimate top of cement 4000' from surface.
5"	Production Liner	Set 2600' of 5" 18# P-110 flush jointliner to TD. Cement with 175 Sx. of Class "H Premium Plus cement + additives, mixed at 15.7#/Gal.

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 1500 Series 5000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middleblind rams, and bottom pipe rams. The B.O.P. will be nipped up on the 9 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once each 24 hour period and the blind rams will be operated when the drill pipe is out of the hole on trips. Full opening stabbing valve and upper kelly cock will be available on the derrick floor if needed. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI choke manifold with adjustable chokes.

Exhibit "F" shows a 10,000 PSI working pressure B.O.P. to be placed on the well after the 7" casing is run and remain on the hole till the well reaches TD. The B.O.P. will be tested to API specifications by an outside testing Co. The B.O.P. will be operated once in each 24 hour period and the blind rams will be worked when the drill pipe is out of hole on trips. Exhibit "F-1" shows a 3" 10,000 PSI choke manifold with adjustable chokes and remote controlled chokes and a remote closing assembly.



APPLICATION TO DRILL  
 POGO PRODUCING COMPANY  
 MADERA "30" FEDERAL #1  
 LOT #1 SECTION 30  
 T26S-R35E LEA CO. NM

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH__	MUD WT.	VISC.	FLUID LOSS	TYPE MUD__
40-650'	8.4-8.7	29-36	NC	Fresh water spud mud add paper to control seepage
650-5200'	10.0-10.2	29-36	NC	Brine water using paper to control seepage, Lime for pH control and high viscosity sweeps to clean hole.
5200-13,100'	8.4-8.8	29-40	NC *	Fresh water mud system use Gel for viscosity, Lime for pH control. Use high viscosity sweeps to clean hole.
13,100-16,500'	11.5-11.8	29-40	10 cc or less	Weight mud up to 11.5 PPG use a Polymer mud system to control water loss, use Barite for weighting material.

\* Water loss may have to be controled in some potential productive zones to prevent formation damage, or run logs and casing.

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

APPLICATION TO DRILL  
POGO PRODUCING COMPANY

MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM

12. LOGGING, CORING, & TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, SNP, LDT, MSFL, Gamma Ray, Caliper from 5200' to 13 3/8" casing shoe. Gamma Ray Neutron from 13 3/8" casing shoe to surface. Dual Induction, SNP LDT MSFL, Gamma Ray, Caliper from 13,100' back to 5200'. Dual Laterolog SNP LDT, MSFL Gamma Ray Caliper from 16,500' back to 13,100'.
- B. Mud logger may be rigged up on hole at 5200' and remain on hole to TD.
- C. Cores and or DST's may be taken as shows dictate, and at the discretion of Geologist.

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 8000-10,00 PSI, and Estimated BHT 220°.

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 60 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 Morrow/Atoka formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as a gas 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"
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 location is near any dwelling a closed D.S.T. 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  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM

1. EXISTING AND PROPOSED ROADS: Area maps: Exhibit "B" is a reproduction of a County General Hi-way map showing access roads to the location. Exhibit "C" is a reproduction of a USGS Topographic map showing existing roads in close proximity to the location and the proposed access roads. All existing roads will be maintained in a condition equal to or better than their current conditions. All new roads will be constructed to BLM specifications.

A. Exhibit "A" shows the location of the proposed well site as staked.

B. From Jal New Mexico take 3rd street (turns into SR-205) go 8.6± miles to Beckham Ranch road, turn Right (West) go 2.3± miles to ranch house, continue West for 3± miles, turn Right (North) go .5 miles, turn Left (West) follow lease road 3.4 miles to locked gate, continue .5 miles, turn Left (South) go .6 miles to location on the East side of road.

C. Exhibit "C" shows proposed roads and routes of flowlines that will be used to produce this lease.

2. PLANNED ACCESS ROADS: No new road will be required to access this location.

A. The access road will be crowned and ditched to a 12' wide traveled surface with a 40' Right-Of-Way.

B. Gradient on all roads will be less than 5% if possible.

C. Turn-outs will be constructed where necessary.

D. If needed roads will be surfaced to the BLM requirements with material obtained from a local source.

E. Center line of new road will be flagged.

F. The new road will be constructed to utilize low water crossings where drainage currently exists, and culverts will be installed where necessary.

3. EXHIBIT "A-1" SHOWS THE BELOW LISTED TYPE WELLS WITHIN A 1 MILE RADIUS:

A. Water wells - One approximately 1 mile Northeast 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  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA 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 quaters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthred drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

### 8. ANCILLARY FACILITIES:

- A. No camps or air strips will be constructed on location.

## SURFACE USE PLAN

POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM

### 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

POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM

11. OTHER INFORMATION:

- A. Low relief topography in a deep aeolian sand field, soils consists of tan/brown silty sands, and small caliche fragments. The vegetation consists of mesquite, cholla, yuccaelata, catclaw acacia, Christmas cactus and native grasses.
- 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 are no dwellings within 3 miles of this location.

12. OPERATORS REPRESENTATIVE:

Before construction:

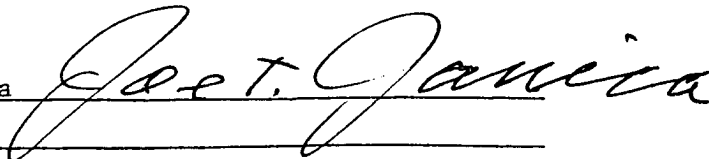
TIERRA EXPLORATION, INC.  
P.O. BOX 2188  
HOBBS, NEW MEXICO 88241  
JOE T. JANICA  
OFFICE PHONE 505-391-8503

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 : 11/16/05  
TITLE : Agent









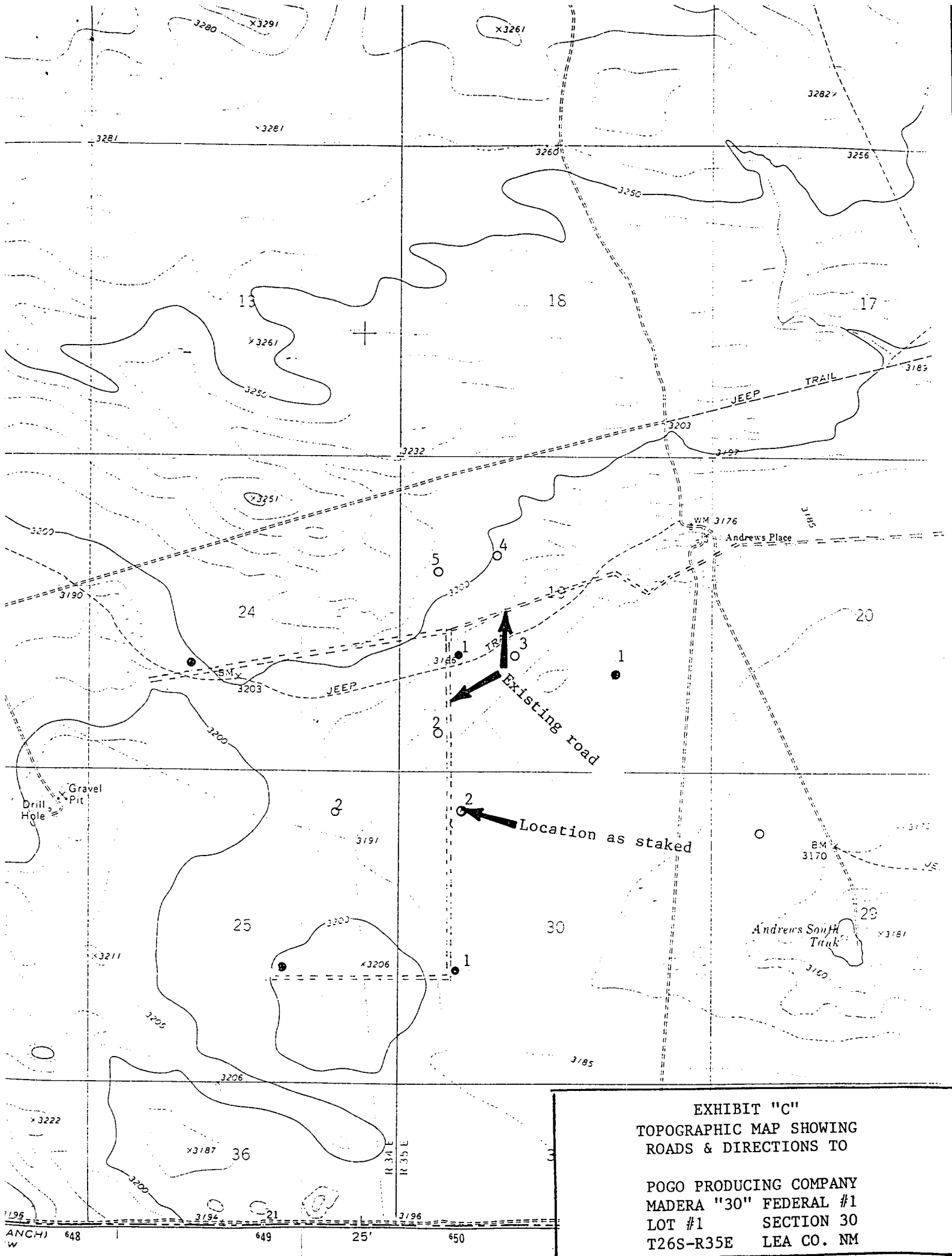
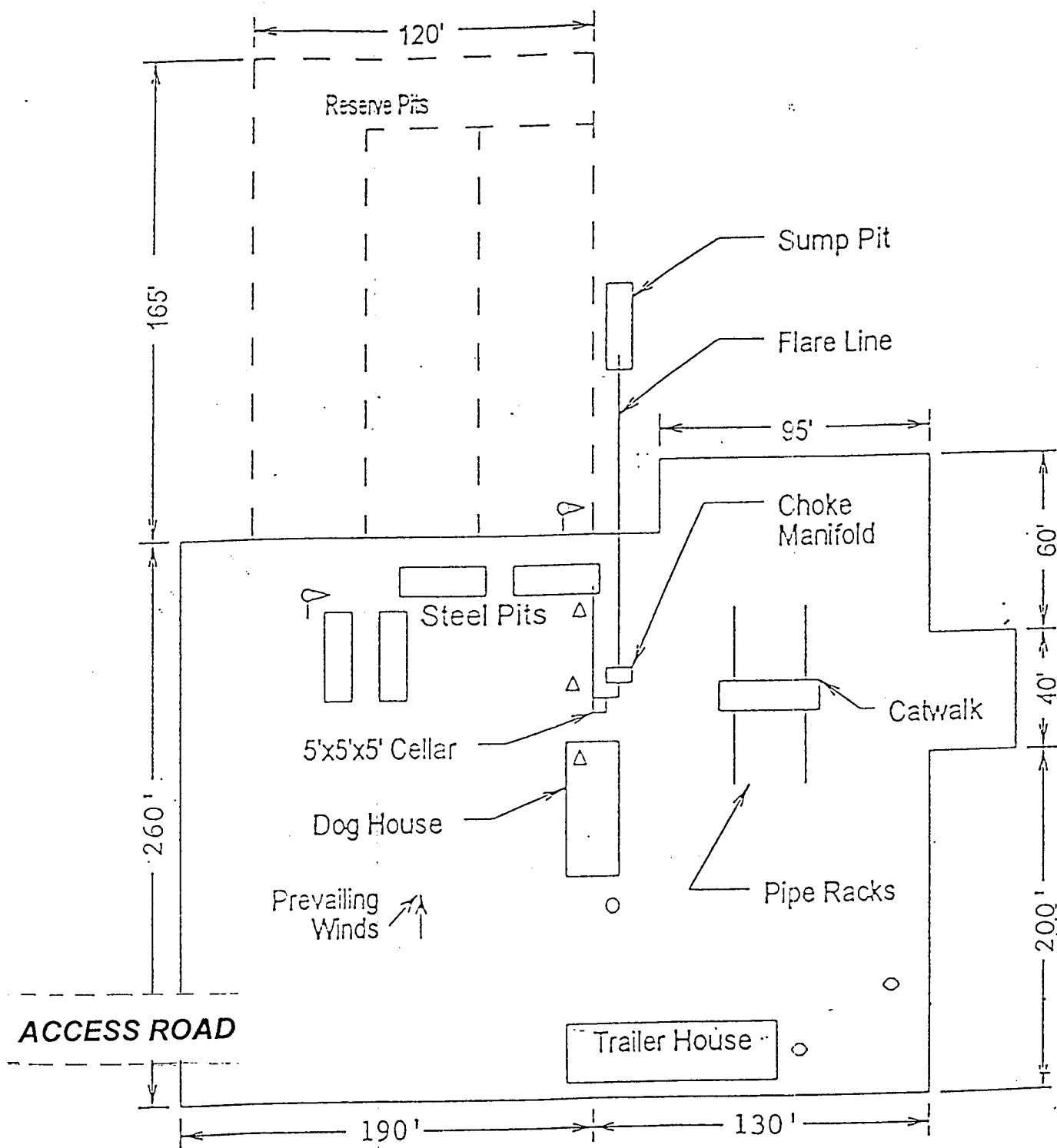


EXHIBIT "C"  
TOPOGRAPHIC MAP SHOWING  
ROADS & DIRECTIONS TO

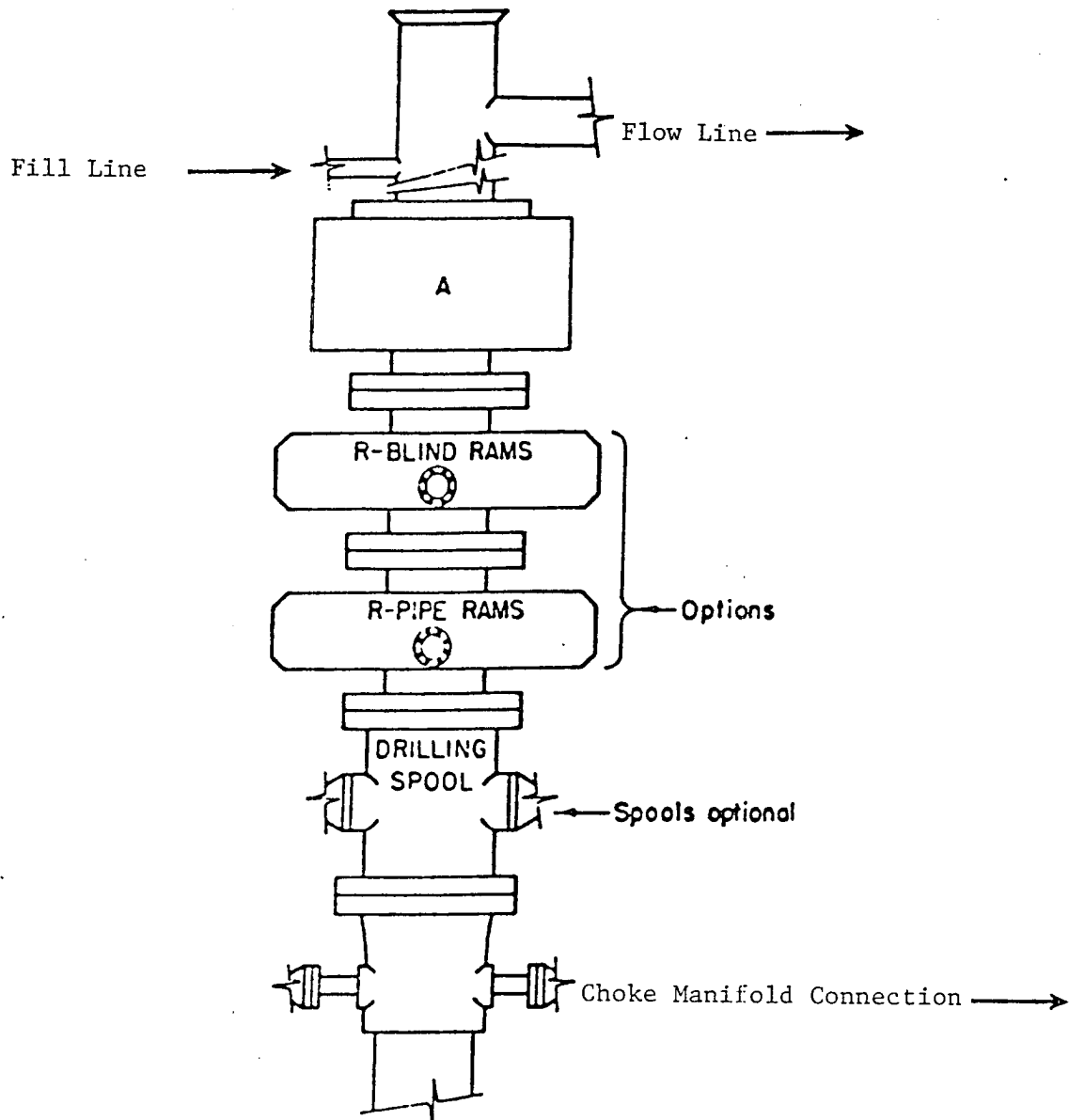
POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM



- Wind Direction Indicators (wind sock or streamers)
- H2S Monitors (alarms at bell nipple and shale)
- Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"  
RIG LAY OUT PLAT

POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM



# **ARRANGEMENT SRRA**

1500 Series  
5000 PSI WP

EXHIBIT "E"  
5000 PSI  
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM

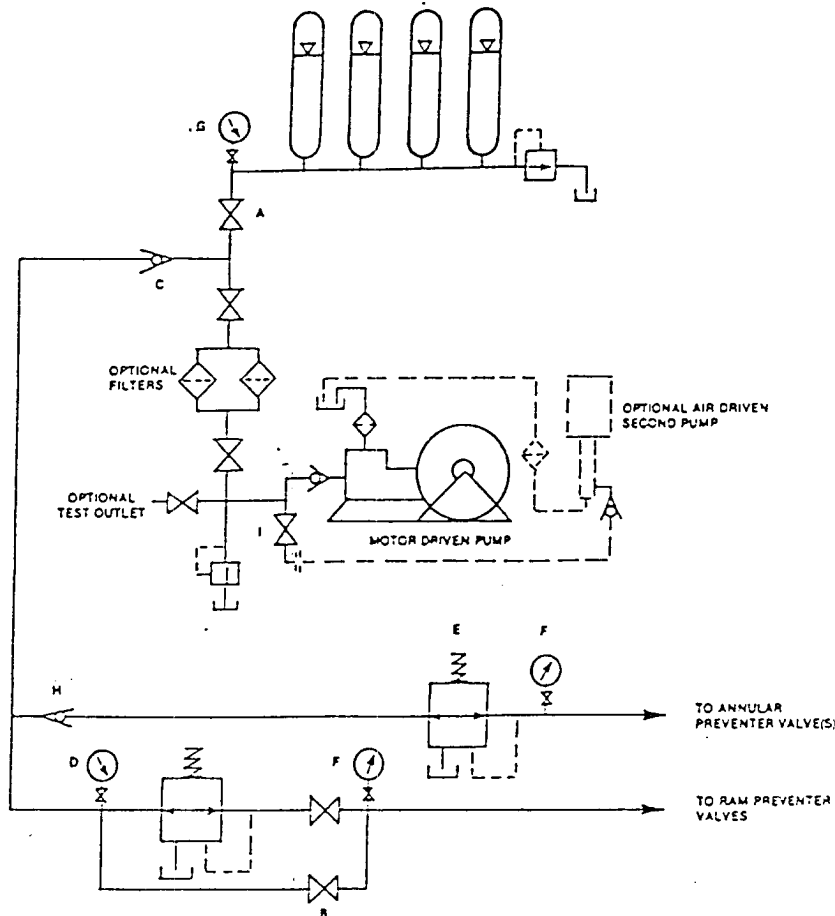


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

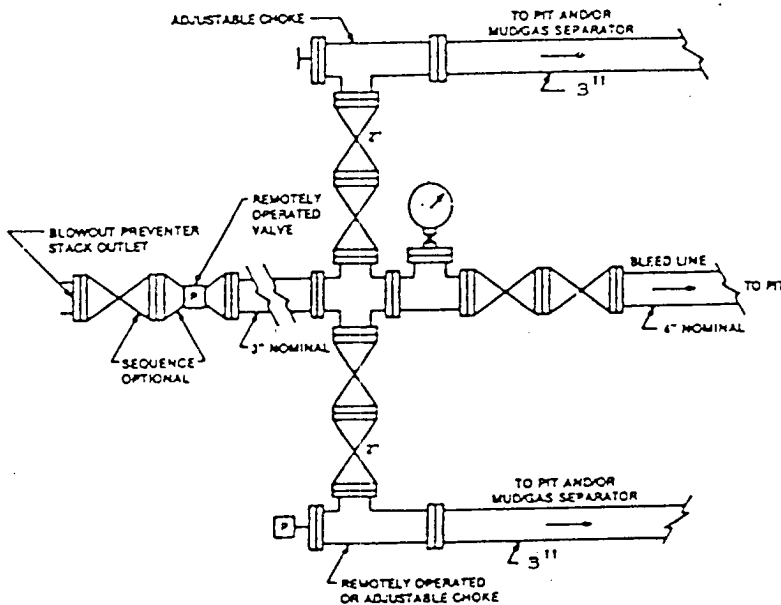


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"  
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM



# DRILLING MANUAL

## BLOWOUT PREVENTION EQUIPMENT IADC Recommended BOP Stacks

Section K1  
Page 3

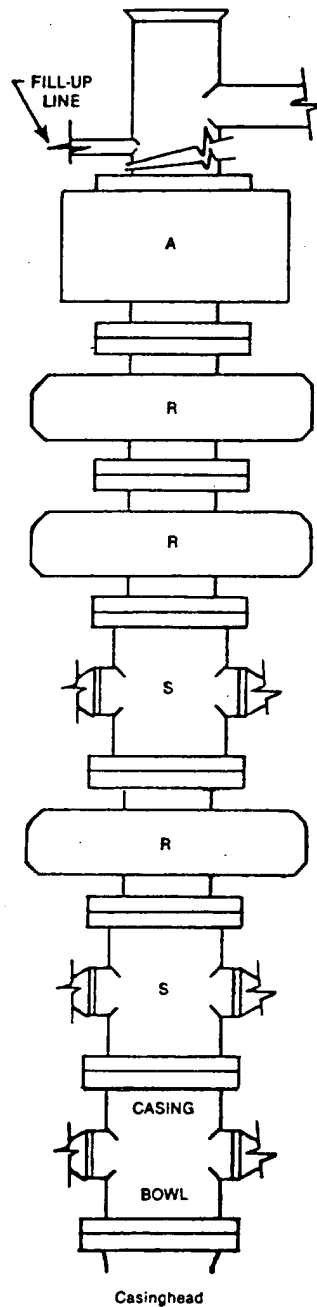
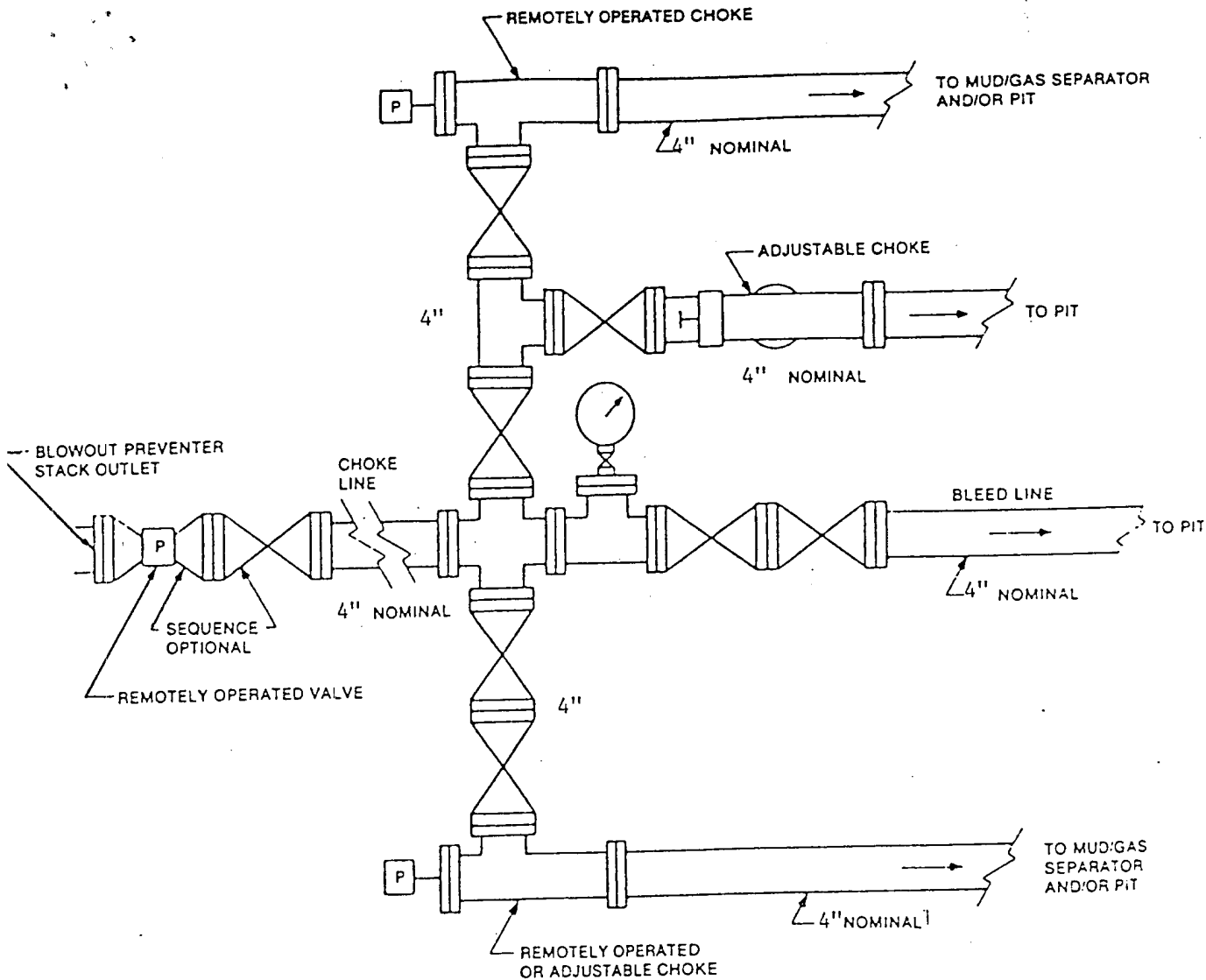


FIGURE K1-3. Recommended IADC Class 10 BOP stack arrangement  
SRSRRA, 10,000 psi WP. Lower drilling spool is optional with outlets on  
lower ram. Annular preventers 10,000 psi.

EXHIBIT "F"  
10,000 PSI  
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26C-D35E TFA CO. NM



Section K6  
Page 2

BLOWOUT PREVENTION  
EQUIPMENT  
Accumulators

DRILLING MANUAL

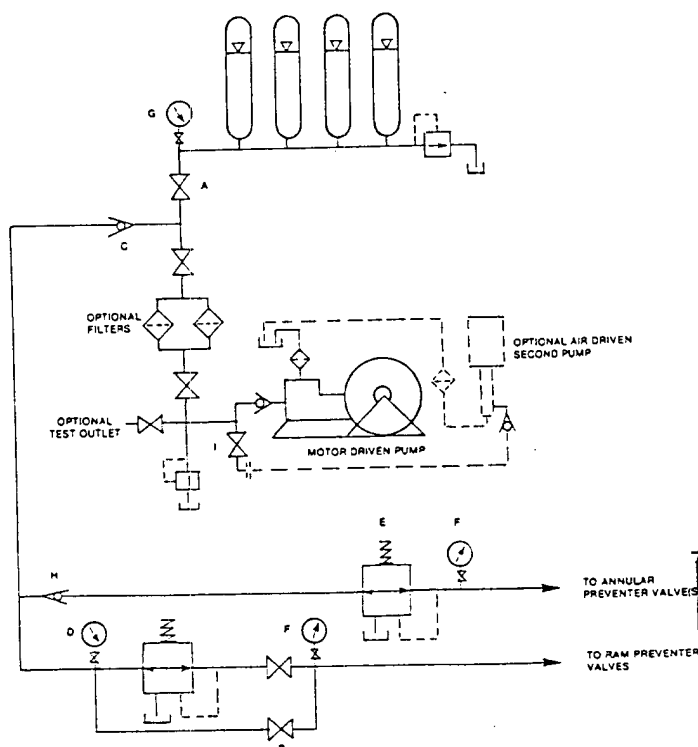


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "F-1"  
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY  
MADERA "30" FEDERAL #1  
LOT #1 SECTION 30  
T26S-R35E LEA CO. NM



## SPECIAL DRILLING STIPULATIONS

### THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name Pogo Producing Co. Well Name & No. Madera 30 Federal #2  
Location 660 F N L & 1090 F W L Sec. 30, T. 26 S, R 35 E.  
Lease No. NM-62932 County Lea State New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

#### I. SPECIAL ENVIRONMENT REQUIREMENTS

- (X) Lesser Prairie Chicken (stips attached) ( ) Flood plain (stips attached)  
( ) San Simon Swale (stips attached) ( ) Other

#### II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(X) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

(X) Other.

#### III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(X) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

( ) A. Seed Mixture 1 (Loamy Sites)  
Side Oats Grama (*Bouteloua curtipendula*) 5.0  
Sand Dropseed (*Sporobolus cryptandrus*) 1.0

(x) B. Seed Mixture 2 (Sandy Sites)  
Sand Dropseed (*Sporobolus crptandrus*) 1.0  
Sand Lovegrass (*Eragostis trichodes*) 1.0  
Plains Bristlegrass (*Setaria magrostachya*) 2.0

( ) C. Seed Mixture 3 (Shallow Sites)  
Side oats Grama (*Boute curtipendula*) 1.0

( ) D. Seed Mixture 4 (Gypsum Sites)  
Alkali Sacaton (*Sporobollud airoides*) 1.0  
Four-Wing Saltbush (*Atriplex canescens*) 5.0

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other.

## RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

---

## OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and it capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from the BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

## CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to processed by BLM.

## TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the lands described below: All of Section 30 T. 26 S., R. 36 E.

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: POGO Producing Company

Well Name & No: Madera "30" Federal No. 02

Location: Surface: 660' FNL & 1090' FWL, Sec.30, T. 26 S. R. 35 E.

Lease: NMNM 62932

Lea County, New Mexico

.....

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 13 $\frac{3}{8}$  inch; 9 $\frac{5}{8}$  inch; 7 inch, 4 $\frac{1}{2}$  inch liner

C. BOP Tests

2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan is not required for this wellbore. However, there are some shows of H<sub>2</sub>S presence in the Strawn formation estimated to be at 14,650 ft. The APD calls to have an immediate H<sub>2</sub>S Safety Plan applied if any signs of H<sub>2</sub>S become evident.

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 13 $\frac{3}{8}$  inch shall be set at 945 Feet or use the Lea County Alternative Conditions of Approval ( Attached) with cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 9 $\frac{5}{8}$  inch Intermediate casing is to circulate to surface.

3. The minimum required fill of cement behind the 7 inch Intermediate casing is to place TOC at approximately 3000 ft.

4. The minimum required fill of cement behind the 4 $\frac{1}{2}$  inch liner is to circulate to top of liner.

### III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13 $\frac{3}{8}$  inch

casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be a minimum 2M BOPE to 5200 feet of drilling depth. A 5 M BOPE shall be installed and in operations prior to drilling below the 7.0" casing shoe and a 10M BOPE shall be installed on the 4-1/2 inch casing to drill to a TD of 16,500 feet.

4-5/8" (52)

7 (52)

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.

- The test shall be done by an independent service company
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures.
- Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in safe workman-like manner. Hard line connections shall be required.
- Both low pressure and high pressure testing of BOPE is required.

GGourley 1/23/06

# **ALTERNATIVE CONDITIONS OF APPROVAL - DRILLING**

## **Drilling Fluids, Casing and Cementing Requirements for Most of Lea County:**

### **Casing and Cementing**

Surface casing is to be set at a sufficient depth to protect useable water zones and cement circulated to surface. In areas where the salt section (Salado) is present, surface casing should be set at least 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface.

As an alternative, surface casing may be set through the Santa Rosa Formation or other potable water bearing zones and circulate cement to surface. For wells requiring an intermediate casing string, such string shall be cemented to the ground surface. In the case where intermediate casing is not required the operator shall case and cement the production hole to the ground surface.

While drilling from the surface casing to the Rustler formation it is recommended that operators periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds.

### **Drilling Fluid**

Fresh water or fresh water spud mud shall be used to drill to surface casing depth. If surface casing is set at a lesser depth than the top of the Rustler formation, fresh water spud mud may be used to drill down to the first salt in the Rustler Formation. after which brine or fresh water may be used.

Non-toxic or biodegradable water based polymers, drilling paper, starch and gels may be used in the mud system in order to retard seepage into the redbeds.

Two to five percent diesel or crude oil may be used in the redbed section in order to control heaving shales and mudstones.

Caustics and Lime shall not be used in the red beds but may be added when the Rustler formation is reached. However, sodium carbonate maybe used for alkalinity or ph control while drilling the redbeds above the Rustler formation.

Additionally, questions of whether an additive may be used should be referred to the Roswell Field office.

BLM Serial Number: NM-62932  
Company Reference: Pogo Producing Co.  
Well No. & Name: Madera 30 Federal #2

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS  
CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, *et. seq.*) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et. seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et. seq.*) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting there from the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar. The Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

☐ Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).



☒ Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

☐ Flat-blading is authorized on segment(s) delineated on the attached map.

### 3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, out-sloping, in-sloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

#### SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

☒ 400 foot intervals.

☐ \_\_\_\_\_ foot intervals.

☐ locations staked in the field as per spacing intervals above.

☐ locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

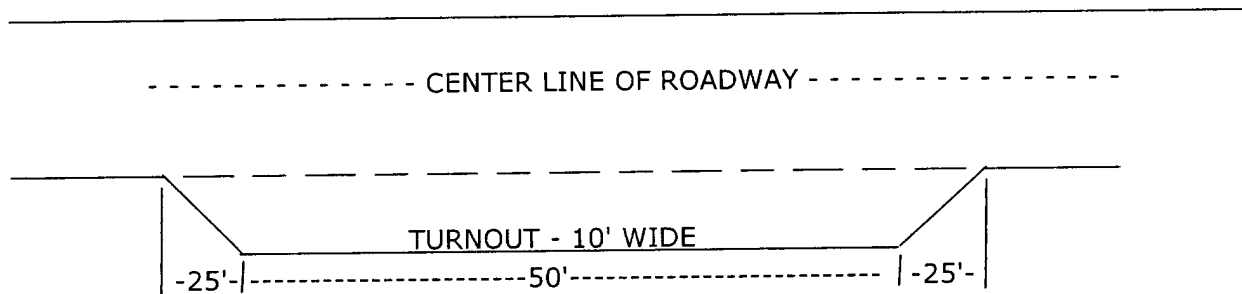
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Example: 4% slope: spacing interval =  $\frac{400}{4} + 100 = 200$  feet

#### 4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

#### 5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

#### 6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS:

**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 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 432-685-8100  
 Telephone: \_\_\_\_\_ e-mail address: wrightc@pogoproducing.com

Address: P. O. Box 10340, Midland, TX 79702-7340

Facility or well name: Madera 30 Federal #2 API #: 30-015-37733 U/L or Qtr/Qtr D Sec 30 T 26S R 35E

County: Lea Latitude 32:01:10.65N Longitude 103:24:40.11W 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 <span style="float:right">X</span>	( 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	(20 points)
No <span style="float:right">X</span>	( 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	(20 points)
200 feet or more, but less than 1000 feet	(10 points)
1000 feet or more <span style="float:right">X</span>	( 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: 3/1/06

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: 3/1/06

Printed Name/Title CHRIS WILLIAMS - DIST SUP

Signature Chris Williams

USGS Site Map for USGS 320721103221201 25S.35E.21.122212

Page 1 of 2

Water Resources

Data Category:

Site Information

Geographic Area:

New Mexico



# Site Map for New Mexico

USGS 320721103221201 25S.35E.21.122212

Available data for this site

site map



Lea County, New Mexico

Hydrologic Unit Code

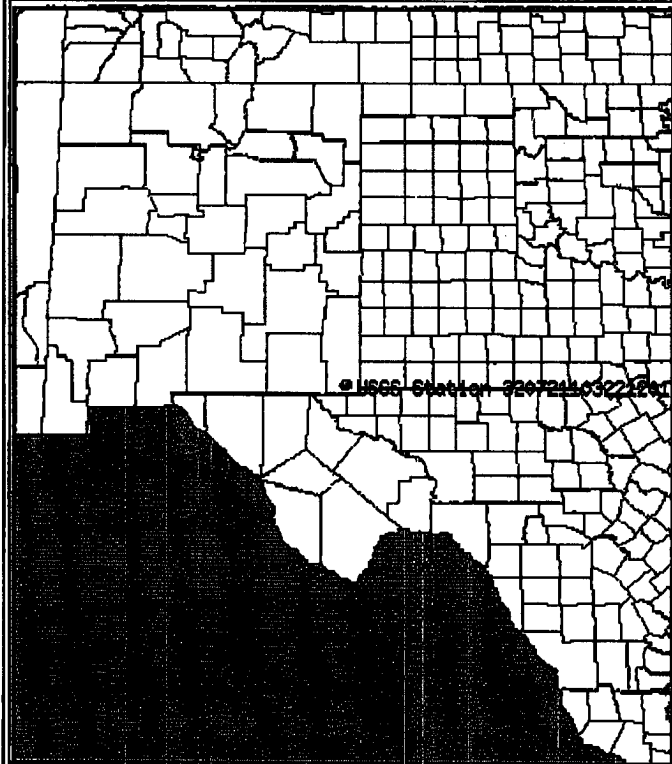
Latitude 32°07'21", Longitude 103°22'12" NAD27

Land-surface elevation 3,228.00 feet above sea level NGVD29

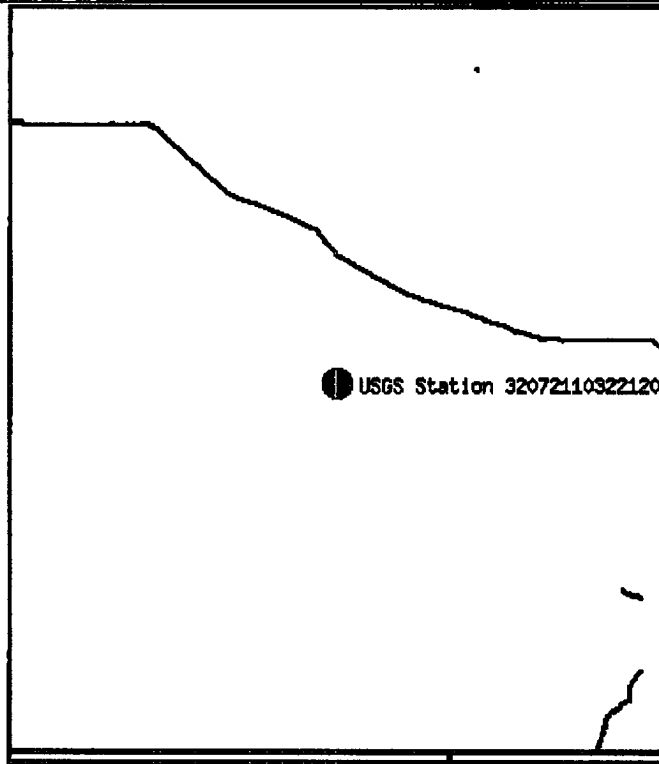
The depth of the well is 275 feet below land surface.

This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

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 2006-03-01 15:45:59 EST

Department of the Interior, U.S. Geological Survey

USGS Water Resources of New Mexico

[http://nwis.waterdata.usgs.gov/nm/nwis/nwismap/?site\\_no=320721103221201](http://nwis.waterdata.usgs.gov/nm/nwis/nwismap/?site_no=320721103221201)

3/1/2006

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 = • 320721103221201

Save file of selected sites to local disk for future upload

USGS 320721103221201 25S.35E.21.122212

Available data for this site

Ground-water: Levels

GO

Lea County, New Mexico

Hydrologic Unit Code

Latitude 32°07'21", Longitude 103°22'12" NAD27

Land-surface elevation 3,228.00 feet above sea level NGVD29

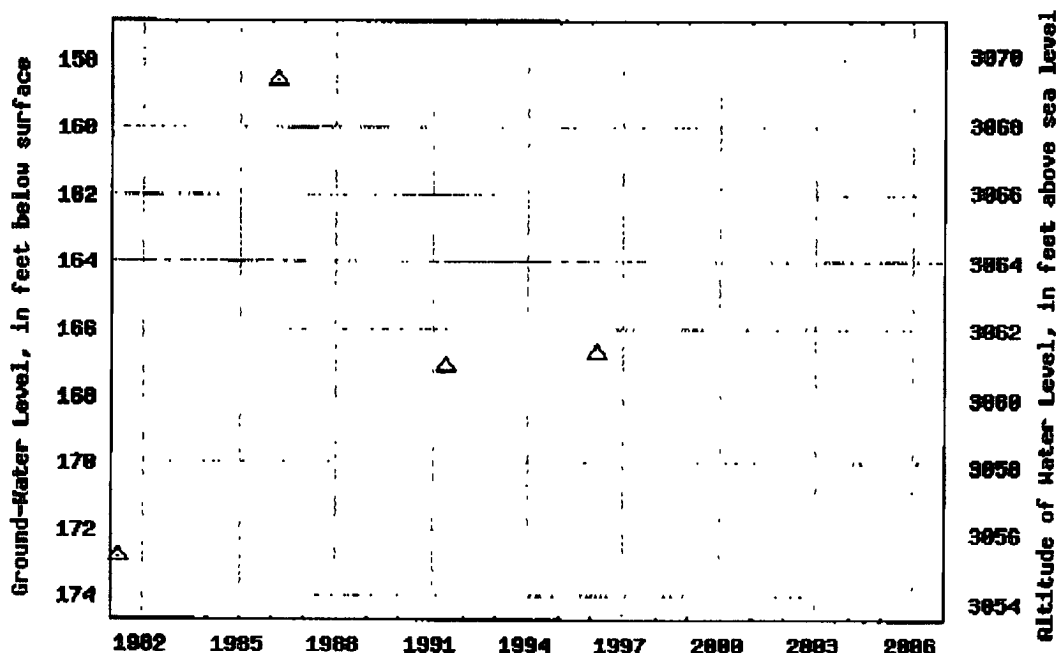
The depth of the well is 275 feet below land surface.

This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats

[Table of data](#)[Tab-separated data](#)[Graph of data](#)[Reselect period](#)

USGS 320721103221201 25S.35E.21.122212



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	
32:01:10.65	N	103:24:40.11	W
Lat2		Lon2	
32:07:21	N	103:22:12	W

### Output

Course 1-2	Course 2-1	Distance
18.7099546	198.731796	6.517308380

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.

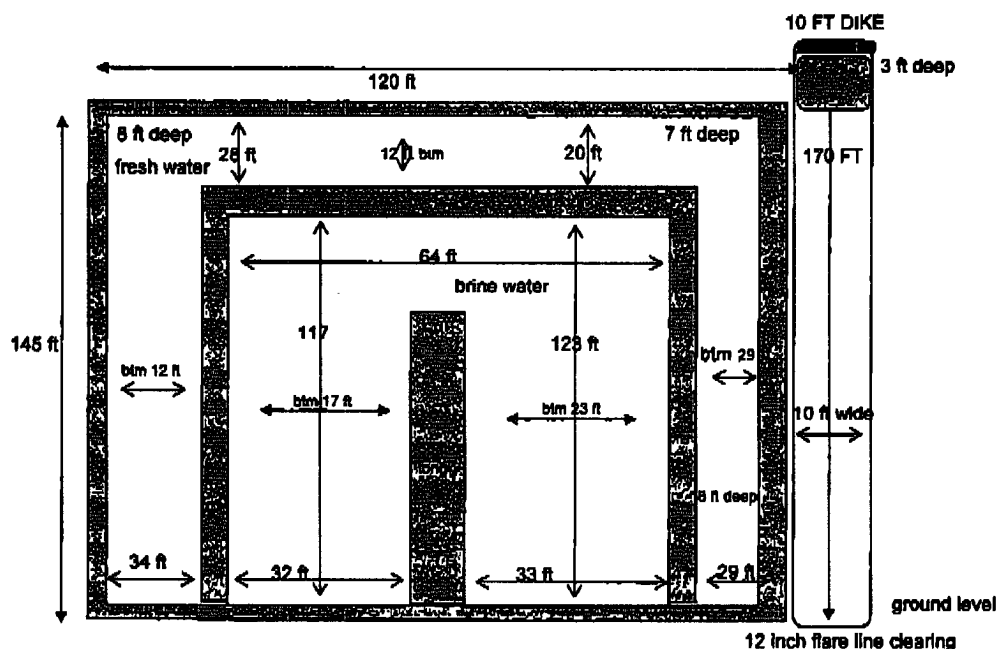
Note that the starting point cannot be a pole.

### Input data

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

**POGO Producing Company  
Madera 30 Federal #2  
Approximate Pit Dimensions**

D/30/26S/35E, Lea County, New Mexico



**PIT NOTES:**

Pit will be lined with 12 mil Black plastic w/ UV protection.

Pit walls are 6 ft to 8 ft wide.

Pit is 8 ft deep below ground level plus 2 ft walls

Pit walls are 2 ft above ground level.

Caliches mined from pit used to make Well Pad.

Fresh Water volume to ground level =  $\pm$  7950 bbls

Brine Water volume to ground level =  $\pm$  7730 bbls

12 inch Flare line laid on gradual descending graded ROW away from rig to avoid fluid trapping

Fresh water well = (Nad 27) 32° 07' 21" N & 103° 22' 12" W "Published data"

This well produces from a depth greater than 100 ft.

Pit equals approx 16000 bbls



 The sender of this message has requested a read receipt. [Click here to send a receipt.](#)

**Mull, Donna, EMNRD**

**From:** Phillips, Dorothy, EMNRD  
**To:** Mull, Donna, EMNRD  
**Cc:**  
**Subject:** RE: Financial Assurance Requirement  
**Attachments:**

**Sent:** Wed 3/1/2006 9:08 AM

Donna, Paladin has 9 Inactive wells and it owns 61 wells and they are allowed to have only 2 inactive wells - I am asking Gail about this one also.

Pogo has 719 wells and are allowed 7 wells and they have 15 inactive and are purchsing 23 inactive from Arch but they do not appear on Jane's list. I have asked Gail about Pogo to see if she has contacted them. The system has been updated so that whenever an operator tries to do an operator change if they are out of compliance with Rule 40 a Warning appears that they are out of compliance and to contact me. I refer them either to Gail or Daniel. They let me know when to proceed with the operator change. However, Pogo submitted the name change before this was in place. Will let you know what Gail says. All the rest are okay.

---

**From:** Mull, Donna, EMNRD  
**Sent:** Wednesday, March 01, 2006 7:42 AM  
**To:** Phillips, Dorothy, EMNRD  
**Subject:** Financial Assurance Requirement

Dorothy, These Operators have Intent to drill in District 1 for approval:

Trilogy Operating Inc, (21602)  
 Range Operating New Mexico Inc. (227588)  
 Marbob Energy Corp. (14049)  
 Paladin Energy Corp. (164070)  
 Energen Resources Corp (162928)  
 Marathon Oil Co. (14021)  
 BTA Oil Producers (3002)  
 Northstar Operating Co. (152527)  
 EverQuest Energy Corp (212929)  
 Yates Petroleum Corp (35575)  
 Arch Petroleum Inc, (962)  
 Chevron USA Inc (4323)  
 Pogo Producing Co. (17891)

Please check if the Financial Assurance Requirements are OK for these operators to drill. Thanks Donna