

(July 1992)

UNITED STATES OF AMERICA  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
New Mexico Oil Conservation Division, District 1  
French Drive  
Tobbs, NM 88248

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

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) 17891

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' FSL & 1980' FWL SECTION 5 T24S-R35E LEA CO. NM ✓

At proposed prod. zone SAME

UL "N"

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

Approximately 15 miles Northwest 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.

990'

16. NO. OF ACRES IN LEASE

600

19. PROPOSED DEPTH

14,400'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

ROTARY

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

3434' 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
17½"	H-40 13 3/8"	48#	825'	800 Sx. 11 1/2" 15' to surface.
12½"	N-80 9 5/8"	40#	5150'	1600 Sx. " " "
8½"	P-110 7"	29#	12,100'	1300 Sx. 2 stage Eel TOC 4000'
6 1/8"	P-110 5"	18#	11,800-14,400'	175 Sx. 2 1/2" 17'

CAPITAN CONTROLLED WATER BASIN

SEE ATTACHED SHEET.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Joe T. Garcia TITLE Agent

DATE 09/28/05

(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:

ACTING

APPROVED BY /s/ Joe G. Lara

TITLE

FIELD MANAGER

DATE

OCT 31 2005

\*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

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

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 825'. Run and set 825' of 13 3/8" 48# H-40 ST&C casing. Cement with 600 Sx. of 65/35/6 Class "C" POZ/GEL, tail in with 200 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. Circulate cement to surface.
3. Drill 12¼" hole to 5150'. Run and set 5150' of 9 5/8" N-80 ST&C casing. Cement with 1400 Sx. of 65/35/6 Class "C" POZ/GEL, + 5% NaCl, tail in with 200 Sx. of Class "C" cement + 25 CaCl, + ¼# Flocele/Sx. Circulate cement to Surface.
4. Drill 8½" hole to 12,100'. Run and 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 stage with 400 Sx. of Class "C" cement + 8# of Gilsonite/Sx. Estimate top of cement 4000' from surface.
5. Drill 6 6/8" hole to 14,400'. Run and set a 5" 18# P-110 flush joint liner from 14,400' back to 11,800'. (2600') Cement with 175 Sx. of Class "H" Premium Plus cement + additives, cement to top of liner.

DISTRICT I  
1625 N. FRENCH 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>30-025-37538</b>	Pool Code <b>75000</b>	Pool Name <b>CINTA ROJA, MORROW (GAS)</b>
Property Code <b>15992</b>	Property Name <b>ANTELOPE 5 FEDERAL DEEP</b>	Well Number <b>3</b>
OGRID No. <b>17891</b> ✓	Operator Name <b>POGO PRODUCING COMPANY</b>	Elevation <b>3434'</b>

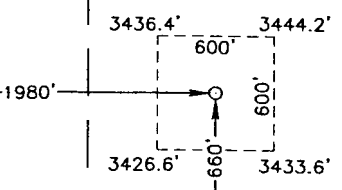
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	5	24-S	35-E		660	SOUTH	1980	WEST	LEA

Bottom Hole Location If Different From Surface

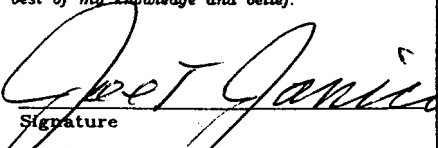
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>320</b>	Joint or Infill	Consolidation Code	Order No.						

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

LOT 4	LOT 3	LOT 2	LOT 1
40.05 AC	40.06 AC	40.08 AC	40.08 AC
<b>NM-14164</b>			
GEODETIC COORDINATES NAD 27 NME Y=452668.1 N X=791288.0 E LAT.=32°14'27.56" N LONG.=103°23'28.41" W			
			

**OPERATOR CERTIFICATION**

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

  
Signature  
**Joe T. Janica**  
Printed Name  
Agent  
Title  
**09/28/05**  
Date

**SURVEYOR CERTIFICATION**

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

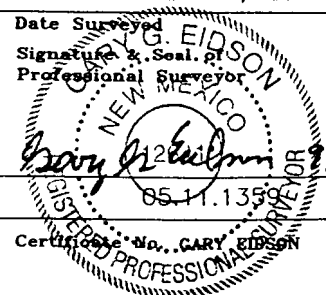
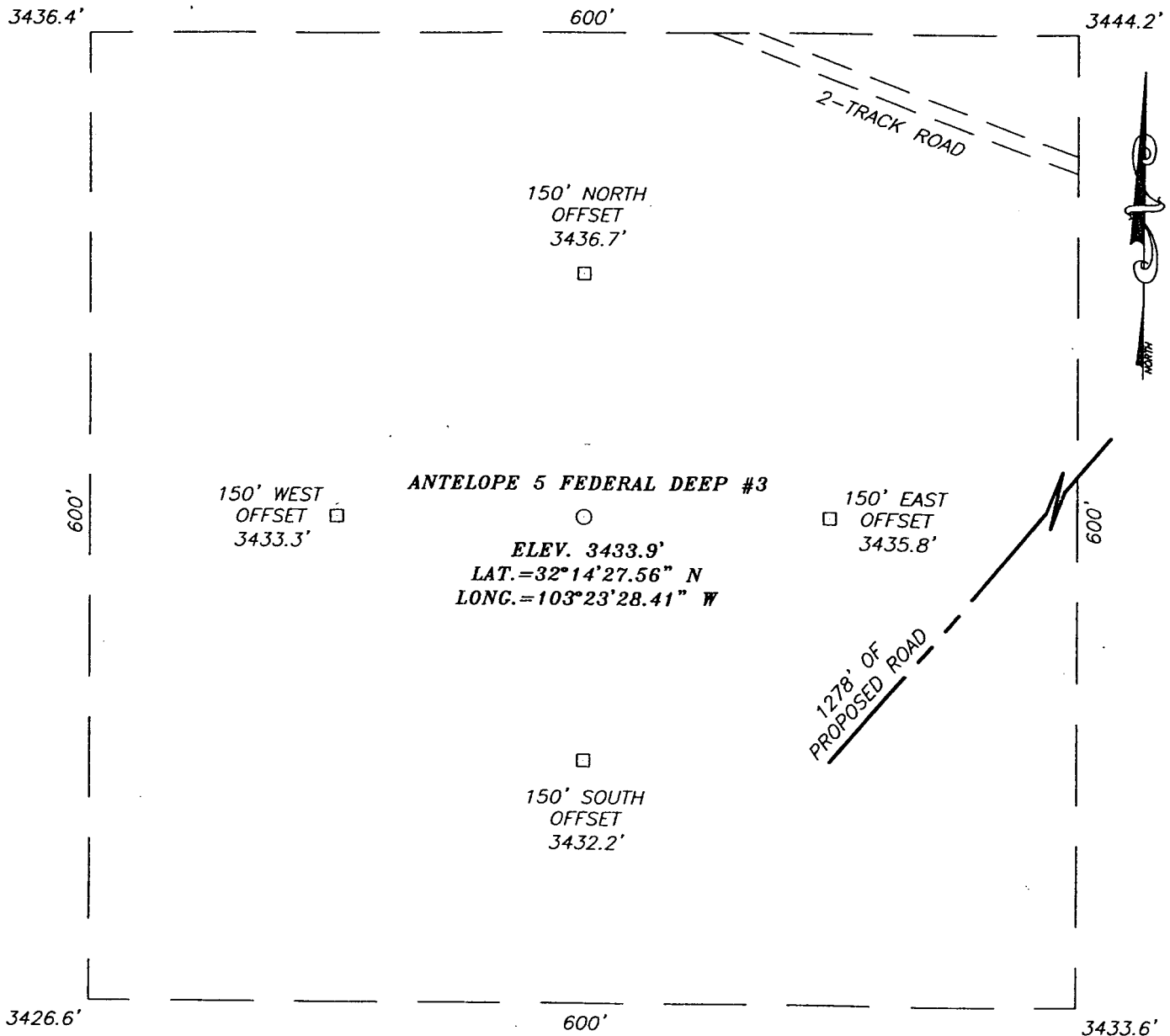
**AUGUST 31, 2005**  
Date Surveyed  
  
Signature & Seal of Professional Surveyor  
**GARY G. EDISON**  
Certificate No. 12841

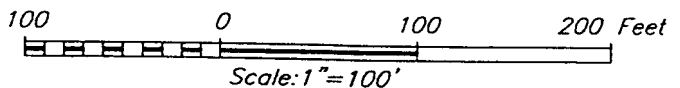
EXHIBIT "A"

**SECTION 5, TOWNSHIP 24 SOUTH, RANGE 35 EAST, N.M.P.M.,**  
LEA COUNTY, NEW MEXICO



**DIRECTIONS TO LOCATION**

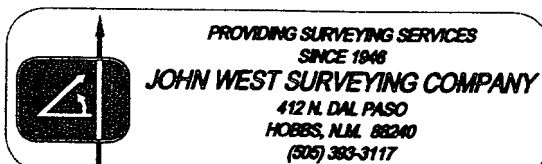
FROM THE INTERSECTION OF CO. RD. #E21  
(ANTELOPE RD.) AND CO. RD. #J21 (SHELL RD.).  
GO SOUTH ON ANTELOPE RD. APPROX. 0.7 MILES.  
TURN LEFT (EAST) AND GO APPROX. 4.4 MILES TO  
PROPOSED ROAD SURVEY. THIS LOCATION IS  
APPROX. 1278' SOUTHWEST ALONG PROPOSED  
ROAD SURVEY.



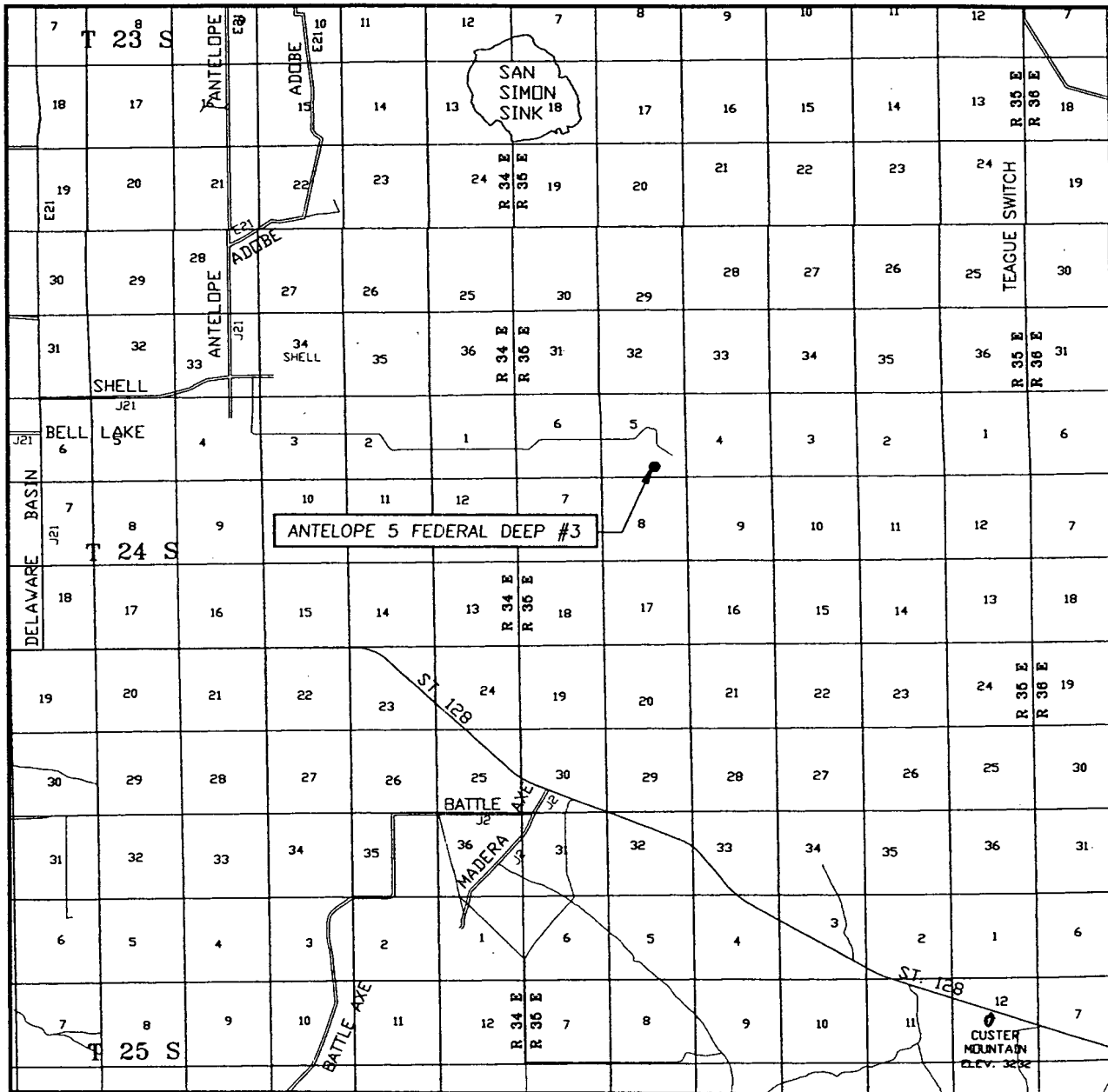
**POGO PRODUCING COMPANY**

ANTELOPE 5 FEDERAL DEEP #3 WELL  
LOCATED 660 FEET FROM THE SOUTH LINE  
AND 1980 FEET FROM THE WEST LINE OF SECTION 5,  
TOWNSHIP 24 SOUTH, RANGE 35 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.

Survey Date: 08/31/05		Sheet 1 of 1 Sheets	
W.O. Number: 05.11.1359		Dr By: DEL	Rev 1:N/A
Date: 09/02/05	Disk: CD#4	05111359	Scale:1"=100'

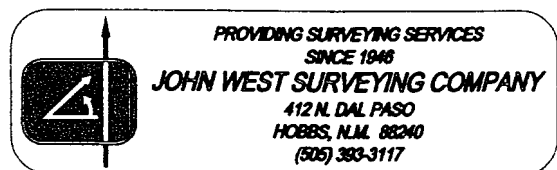


# VICINITY MAP

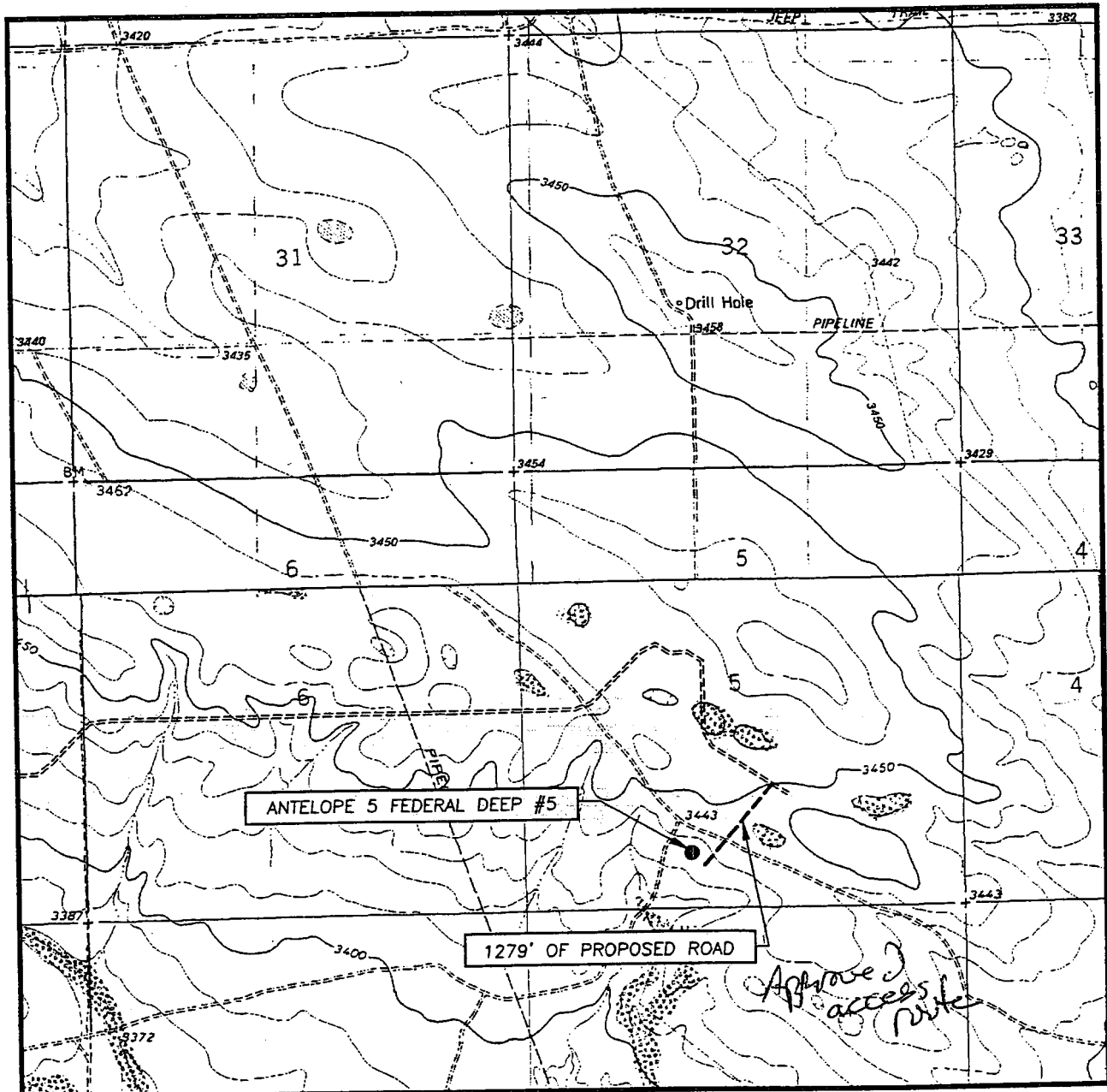


SCALE: 1" = 2 MILES

SEC. 5 TWP. 24-S RGE. 35-E  
 SURVEY N.M.P.M.  
 COUNTY LEA  
 DESCRIPTION 660' FSL & 1980' FWL  
 ELEVATION 3434'  
 POGO  
 OPERATOR PRODUCING COMPANY  
 LEASE ANTELOPE 5 FEDERAL DEEP



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
WOODLEY FLAT, N.M. - 10'  
SANS IMON SINK, N.M. - 10'

SEC. 5 TWP. 24-S RGE. 35-E

SURVEY N.M.P.M.

COUNTY LEA

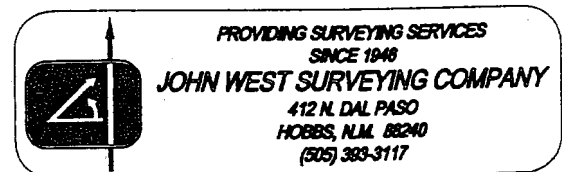
DESCRIPTION 660' FSL & 1980' FWL

ELEVATION 3434'

OPERATOR POGO PRODUCING COMPANY

LEASE ANTELOPE 5 FEDERAL DEEP

U.S.G.S. TOPOGRAPHIC MAP  
WOODLEY FLAT & SAN SIMON SINK, N.M.



## APPLICATION TO DRILL

POGO PRODUCING COMPANY  
 ANTELOPE "5" FEDERAL DEEP #1  
 UNIT "N" SECTION 5  
 T24S-R35E LEA CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1. Location: 660' FSL & 1980' FWL SEC. 5 T24S-R35E LEA CO. NM
2. Elevation above sea level: 3434' GR.
3. Geologic name of surface formation: Aeolian Quaternary
4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5. Proposed drilling depth: 14,400'

6. Estimated tops of geological markers:

Basal Anhydrite	5050'	Brushy Canyon	7450'	Atoka	12,650'
Delaware Lime	5240'	Bone Spring	9100'	Morrow	13,300'
Bell Canyon	5300'	Wolfcamp	11,900'		
Cherry Canyon	6200'	Strawn	12,250'		

7. Possible mineral bearing formation:

Delaware	Oil	Strawn	Gas
Bone Spring	Oil	Atoka	Gas
Wolfcamp	Gas	Morrow	Gas

8. Casing program:

Hole size	Interval	OD casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-825	13 3/8"	48#	8-R	ST&C	H-40
12¼"	0-5150'	9 5/8"	40#	8-R	ST&C	N-80
8 ½"	0-12,100'	7"	29#	8-R & BTC	LT&C	P-110
6 1/8"	11,800-14,400'*	5"	18#	BTC	LT&C	P-110

\* 5" flush joint P-110 liner.

# APPLICATION TO DRILL

POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-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  
 ANTELOPE "5" FEDERAL DEEP #1  
 UNIT "N" SECTION 5  
 T24S-R35E LEA CO. NM

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT"	VISC.	WATER LOSS	TYPE MUD SYSTEM
40-825'	8.4-8.7	29-34	NC	Fresh water Spud mud use paper to control seepage.
825-5150'	10.0-10.2	29-38	NC	Brine water use paper to control seepage and high viscosity sweeps to clean hole.
5150-12,100'	8.4-8.7	29-38	NC*	Fresh water with fresh water Gel to control viscosity. use high viscosity sweeps to clean hole.
12,100-14,400'	10.0-12.0	29-40	NC*	Cut brine mud system use Polymer/Starch to control water loss, use Gel for viscosity control. and weighting material to control mud weight.

\* Water loss may be require to protect from formation damage and to run DST's, logs and casing.

Sufficient mud materials to maintain mud properties, lost circulation, increased weight requirements, will be kept at the well site at all times. In order to run logs, casing, and DST's the viscosity and water loss may have to be altered. These mud materials will be on location.

APPLICATION TO DRILL

POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-R35E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Appropriate electric logs will be run over the intervals of interest before the casing is run.
- B. Mud logger may be placed on the hole at 5150' or when the geologist deems it advisable.
- C. Cores and or DST's may be run over zones of interest.

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 7500 PSI, and Estimated BHT 195°.

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 45 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 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  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-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 Eunice New Mexico take State Road 205 South for 2.6 miles to the Delaware Basin Road, turn Right (West) follow road for 22 miles to Antelope Road. Turn Left (South) go 5.3 miles, turn Left (East) go 5.3± miles, the location is on the South side of road.
  - C. Exhibit "C" shows the route of flow line to tank battery located at well # 1.
2. PLANNED ACCESS ROADS: Approximately 1250' of new road will be constructed.
  - 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 1.6 miles Southeast 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  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-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. Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "C".

### 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 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  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-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  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-R35E LEA CO. NM

11. OTHER INFORMATION:

- A. Topography consists of open rolling plain slopes, relatively flat with open exposure with drainage to the Southwest. Soil consists of tan/brown gray loamy silty sands mixed with caliche cobbles. Vegetation consists of broom snakeweed, mesquite, prickley pear, and various other native grasses.
- B. The surface is owned by The State of New Mexico with the minerals owned by The U.S. Government. Surface is used for the grazing of livestock and the production of oil and gas.
- C. An archaeological survey of the location and access roads will be made and the results will be filed with The Bureau of Land Management in the Carlsbas Field Office.
- D. There are no dwellings in the near vicinity of this location.

12. OPERATORS REPRESENTATIVES:

Before construction:

TIERRA EXPLORATION, INC  
P.O. BOX 2183  
HOBBS, NEW MEXICO 88241  
OFFICE Ph. 505-391-8503  
JOE T. JANICA

During and after construction:

POGO PRODUCING COMPANY  
P.O. BOX 10340  
MIDLAND, TEXAS 79702-7340  
OFFICE Ph. 432-685-8100  
Mr. RICHARD WRIGHT 432-685-8140

13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access roads, and that I am familiar with the conditions which currently exist, that the statements made in this plan are to the best of my knowledge 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 compformity 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 report.

NAME : Joe T. Janica

DATE : 09/28/05

TITLE : Agent



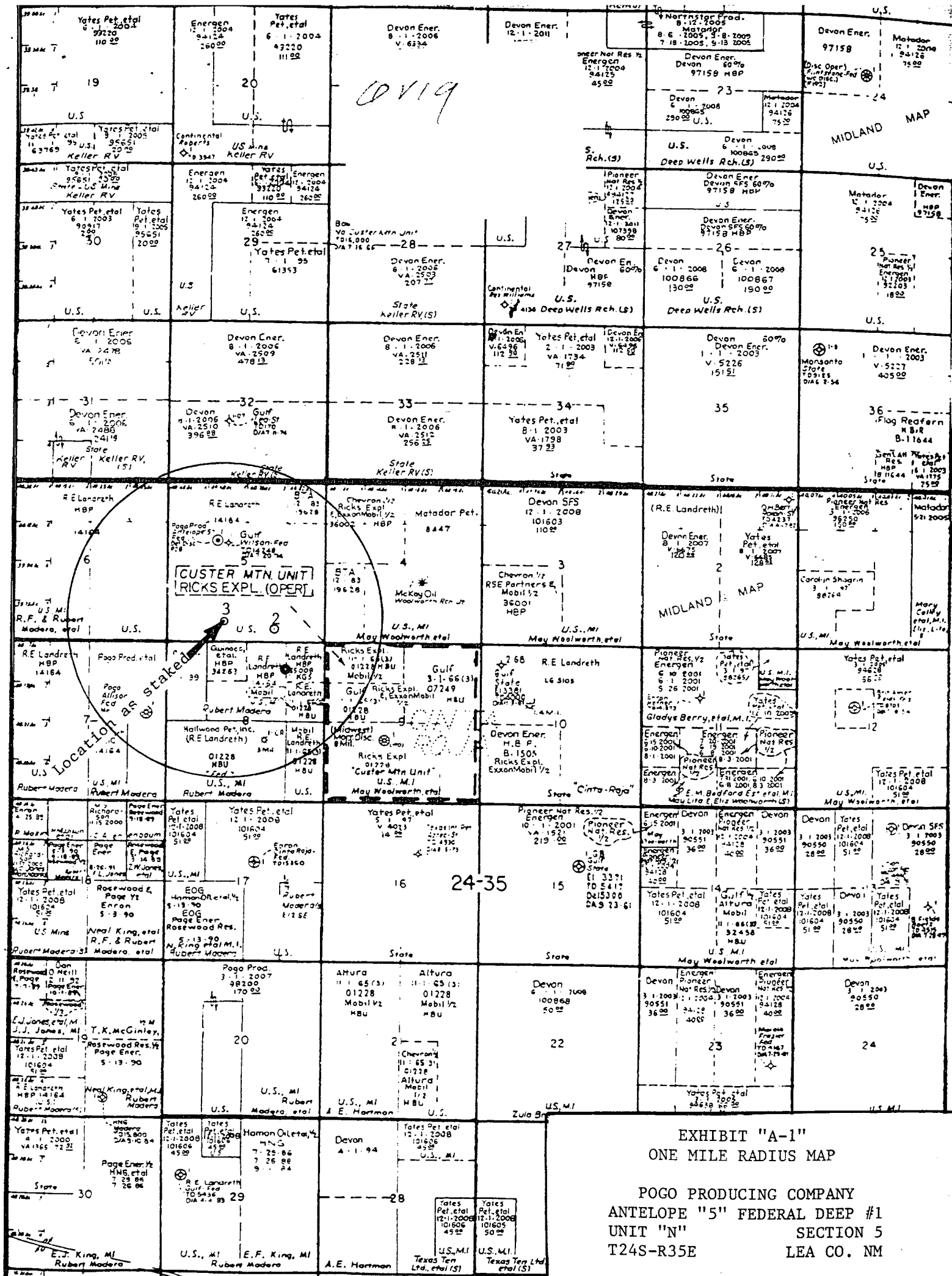


EXHIBIT "A-1"  
ONE MILE RADIUS MAP

POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N"  
T24S-R35E  
SECTION 5  
LEA CO. NM

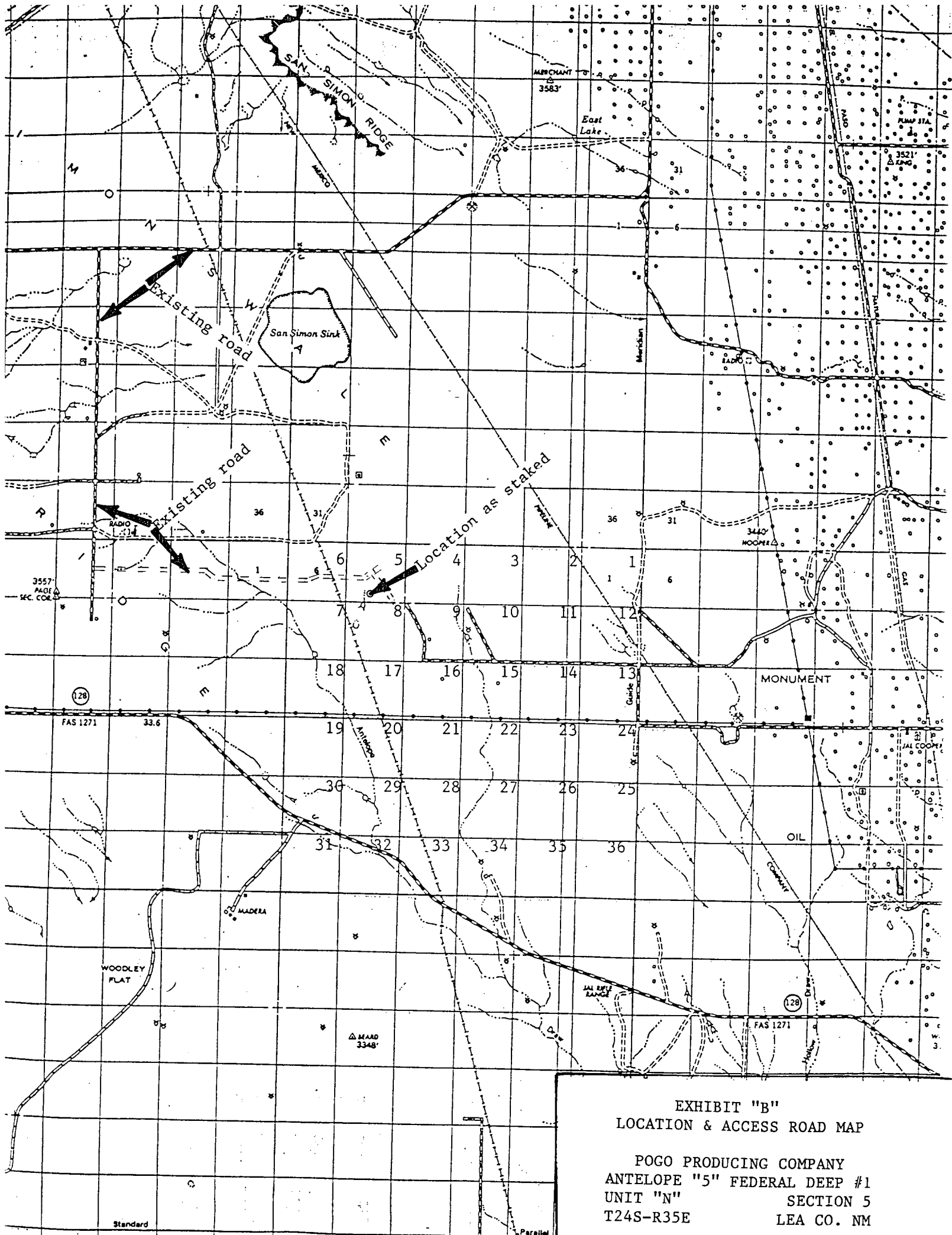
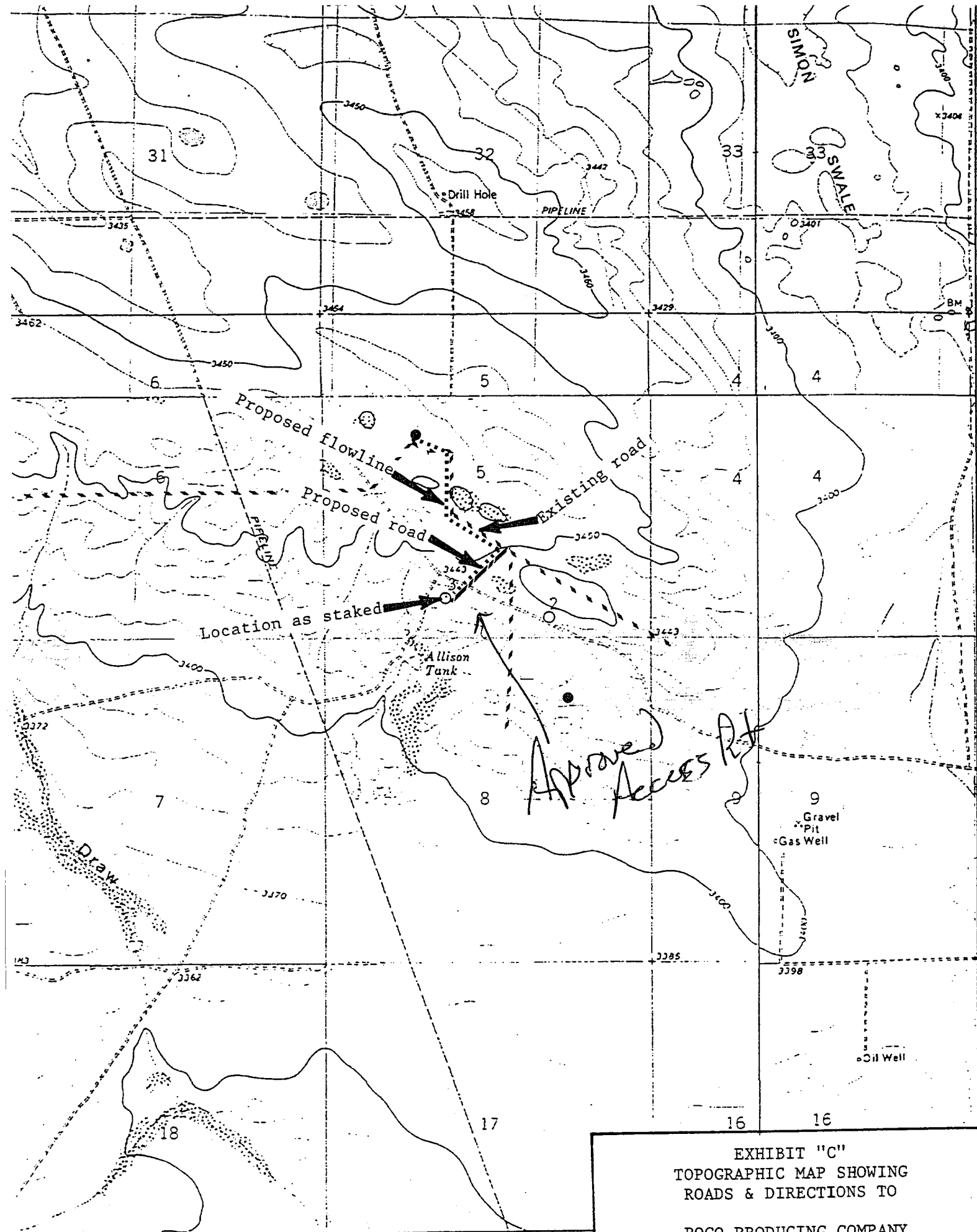


EXHIBIT "B"  
LOCATION & ACCESS ROAD MAP

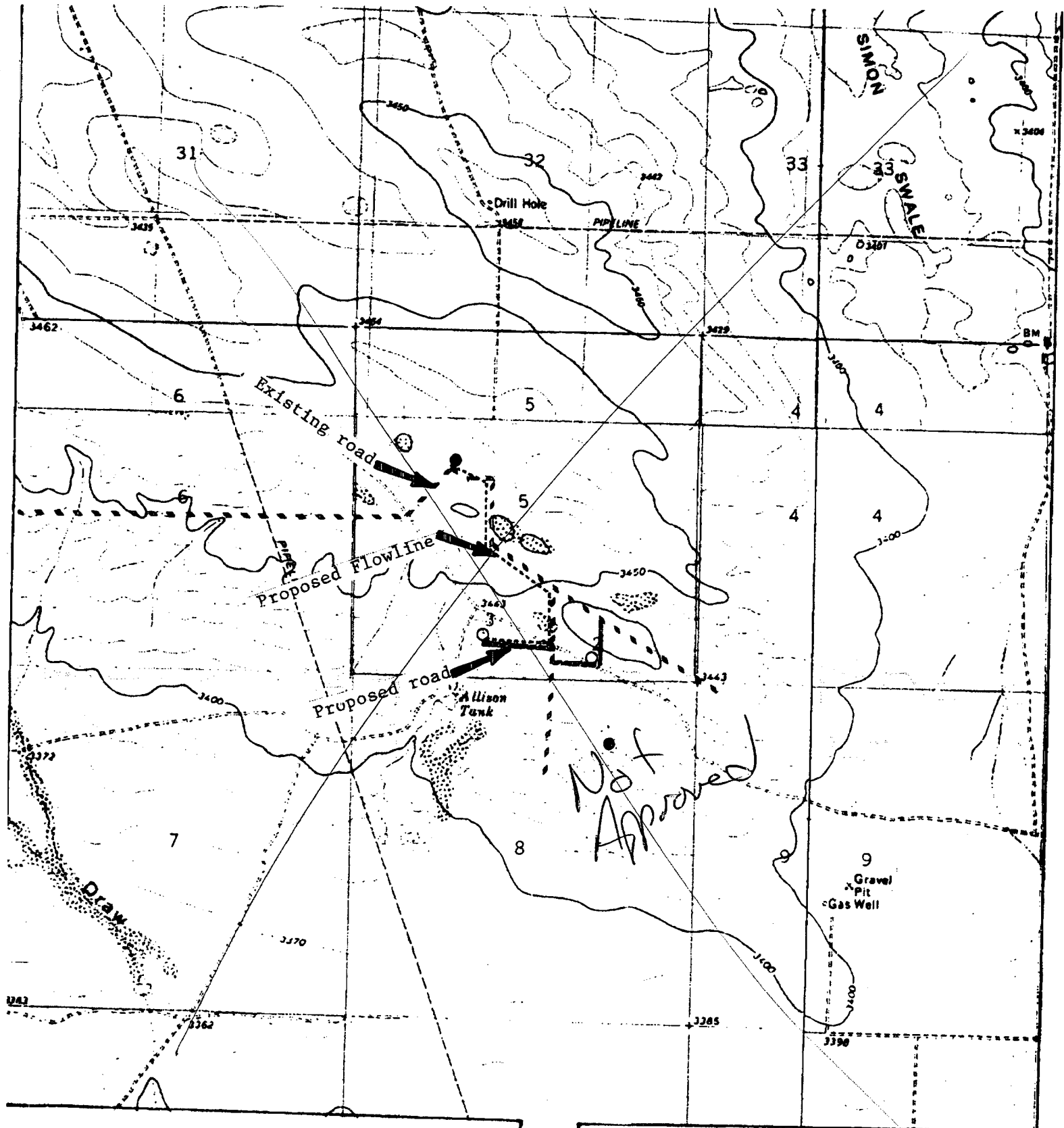
POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-R35E LEA CO. NM



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EXHIBIT "C"  
TOPOGRAPHIC MAP SHOWING  
ROADS & DIRECTIONS TO

POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-R35E LEA CO. NM



EXISTING ROAD  
 PROPOSED ROAD  
 PROPOSED FLOWLINE

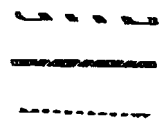
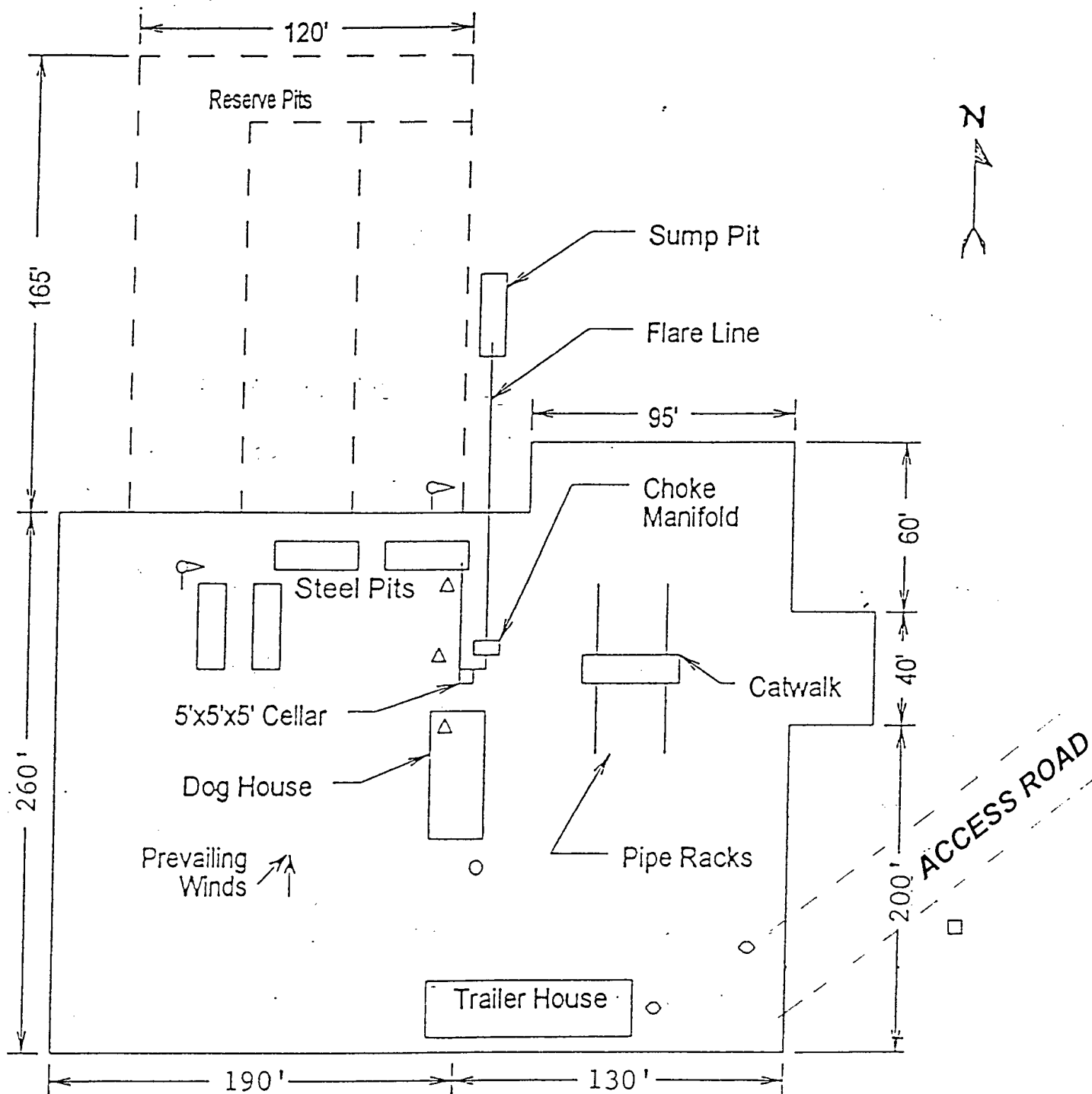


EXHIBIT SHOWING  
 EXISTING ROADS  
 PROPOSED ROADS  
 PROPOSED FLOWLINE

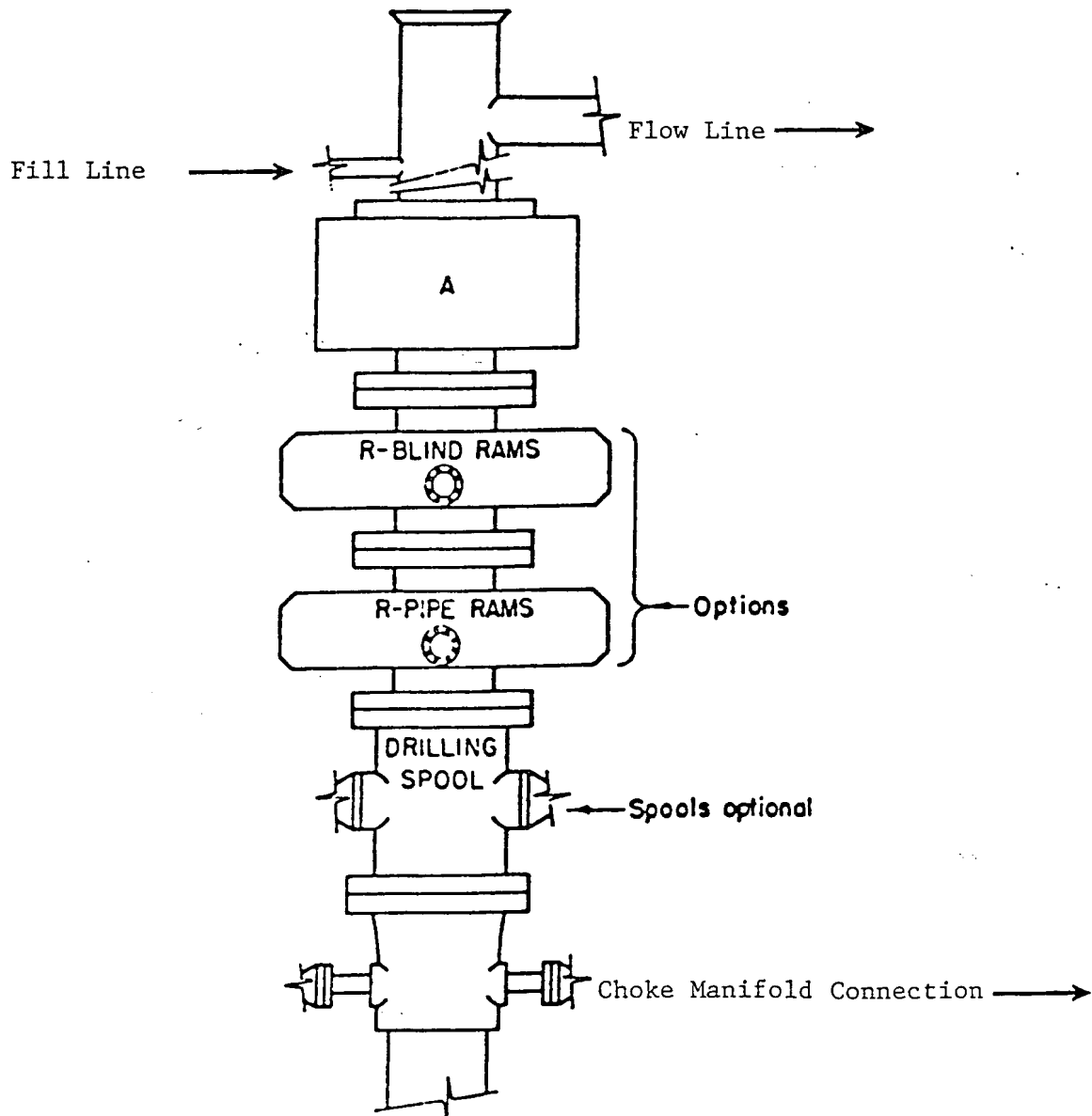
POGO PRODUCING COMPANY  
 ANTELOPE "5" FEDERAL DEEP #1  
 T24S-R35E LEA CO. NM



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

EXHIBIT "D"  
RIG LAY OUT PLAT

POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-R35E LEA CO. NM



# **ARRANGEMENT SRRA**

1500 Series  
5000 PSI WP

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

POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-R35E LEA CO. NM

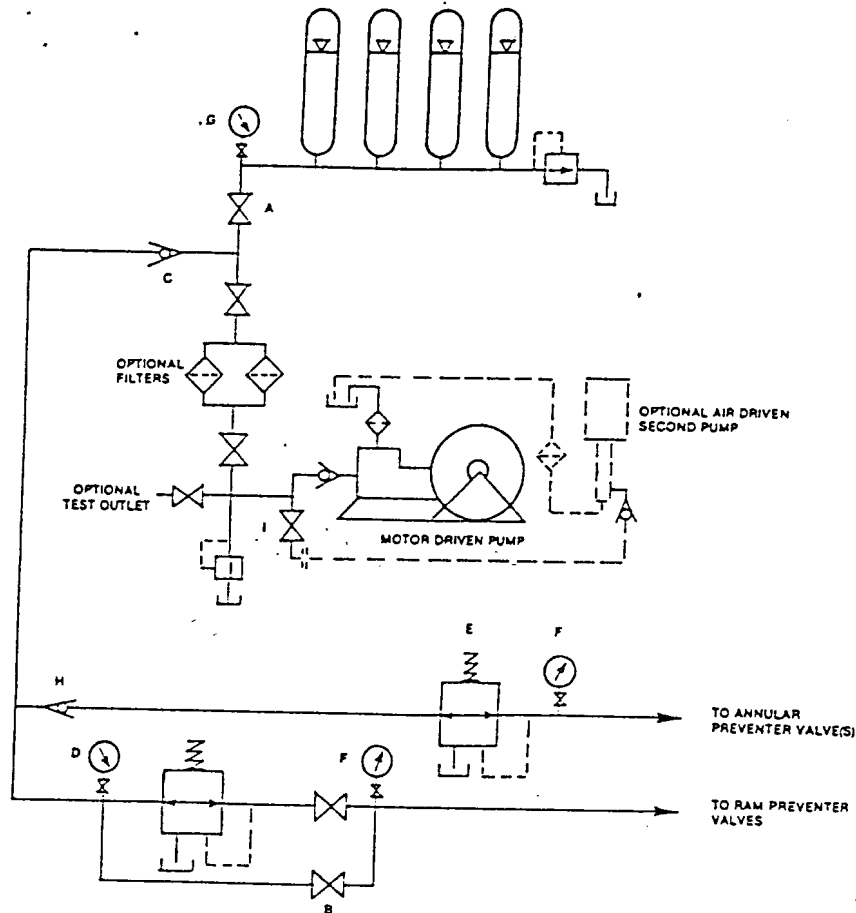


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

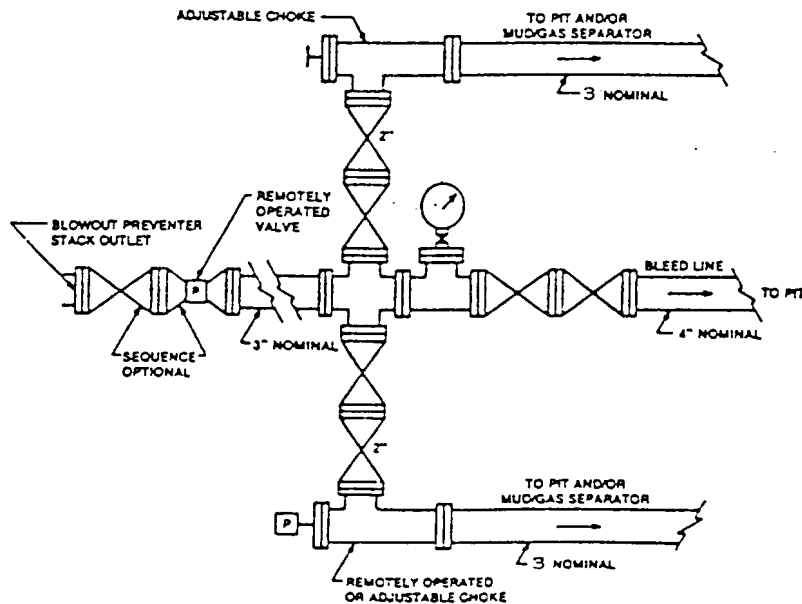


FIGURE K4-2. Typical choke manifold assembly for SM rated working pressure service — surface installation.

EXHIBIT "E-1"  
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-R35E LEA CO. NM

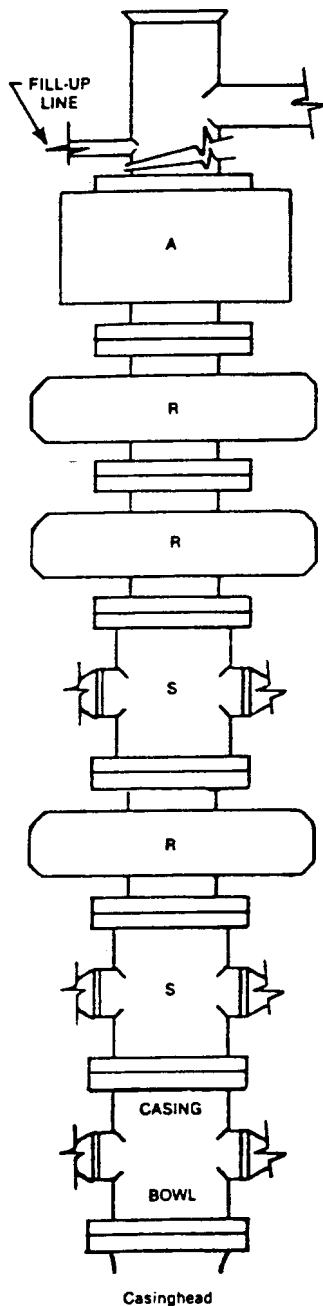


FIGURE K1-3. Recommended IADC Class 10 BOP stack arrangement  
SRSRRA, 10,000 psi WP. Lower drilling spool is optional with outlets on  
lower ram. Annular preventers 10,000 psi.

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

POGO PRODUCING COMPANY<sup>2</sup>  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-R35E LEA CO. NM



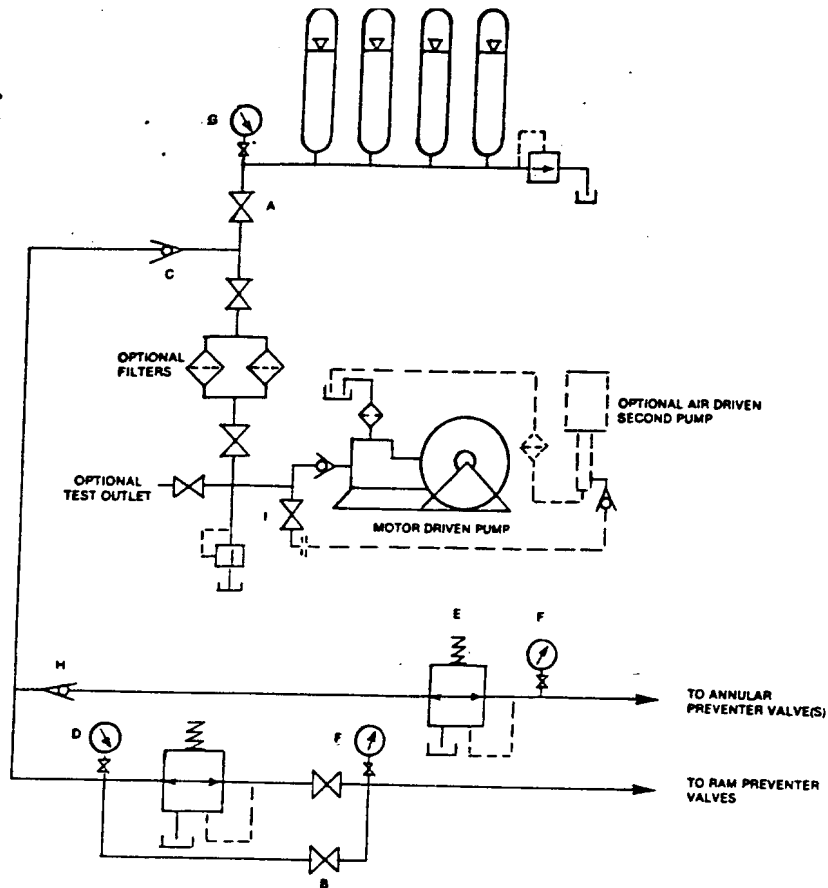


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

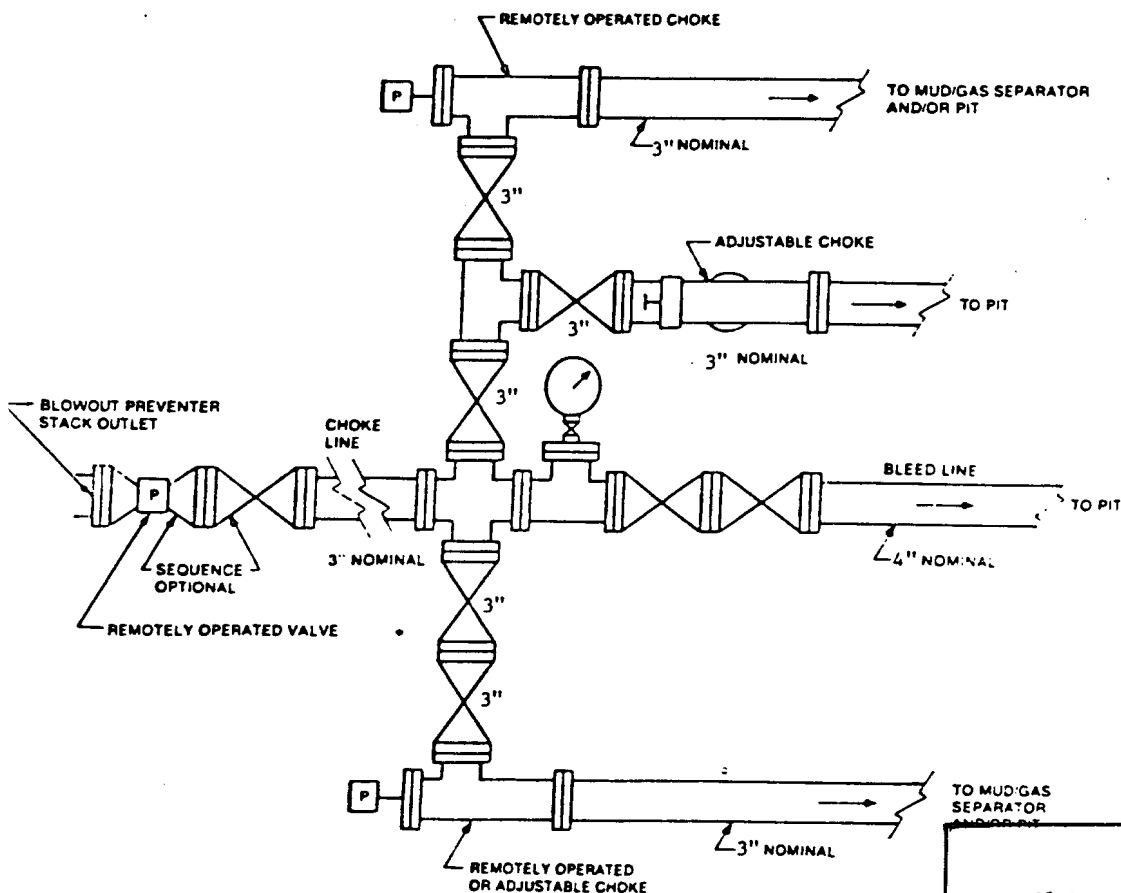


FIGURE K4-3. Typical choke manifold assembly for 10M and 15M rated working pressure service — surface installation.

EXHIBIT "F-1"  
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY  
ANTELOPE "5" FEDERAL DEEP #1  
UNIT "N" SECTION 5  
T24S-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. Antelope 5 Federal #3  
 Location 660 F S L & 1980 F W L Sec. 5, T. 24 S, R. 35 E.  
 Lease No. NM-14164 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

- ( ) 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 upon completion of well and it is determined to be a producer.

( ) 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. Utilize the NE to SW access route. (East/west access route not approved).  
 Construct 1-2' high berm around south, east, west sides of pad.

### 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 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- |   |   |
|---|---|
| ( X ) A. Seed Mixture 1 (Loamy Sites)                 | ( ) B. Seed Mixture 2 (Sandy Sites)                     |
| Side Oats Grama ( <i>Bouteloua curtipendula</i> ) 5.0 | Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0     |
| Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0   | Sand Lovegrass ( <i>Eragrostis trichodes</i> ) 1.0      |
|   | Plains Bristlegrass ( <i>Setaria macrostachya</i> ) 2.0 |
| ( ) C. Seed Mixture 3 (Shallow Sites)                 | ( ) D. Seed Mixture 4 (Gypsum Sites)                    |
| Side oats Grama ( <i>Boute curtipendula</i> ) 1.0     | Alkali Sacaton ( <i>Sporobolus airoides</i> ) 1.0       |
|   | Four-Wing Saltbush ( <i>Atriplex canescens</i> ) 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.

( X ) Other. V-door east. Construct 2 ft. high berm around south, west, east sides of pad to prevent run-off.

## RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first 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 temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

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.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Pogo Producing Company Well No. 3 - Antelope 5 Federal  
Location: 660' FSL & 1980' FWL sec. 5, T. 24 S., R. 35 E.  
Lease: NM-14164

.....

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 393-3612 in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 13-3/8 inch 9-5/8 inch 7 inch 5 inch liner.

JL

C. BOP Test

2. 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.

3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the Delaware formation. A copy of the plan shall be posted at the drilling site.

### II. CASING:

1. 13-3/8 inch surface casing should be set at approximately 825 feet in the Rustler Anhydrite above the top of the Salt, below usable water and circulate cement to the surface. If cement does not circulate to the surface this 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. Minimum required fill of cement behind the 9-5/8 inch intermediate casing is sufficient to circulate to the surface. If cement does not circulate to the surface the BLM Hobbs 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.

3. Minimum required fill of cement behind the 7 inch production casing is sufficient to tie back 500 feet above the top of the uppermost perforation in the pay zone.

4. Minimum required fill of cement behind the 5 inch production liner is sufficient to tie back 200 feet into the 7 inch production casing set at approximately 12100 feet.

### III. PRESSURE CONTROL:

1. Before drilling below the 13-3/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the 9-5/8 inch intermediate casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

2. Before drilling below the 13-3/8 inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi. Before drilling below the 9-5/8 inch intermediate casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi. Before drilling below the 7 inch production casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 10000 psi.

**CONDITIONS OF APPROVAL – DRILLING (CONTINUED)**

Operator's Name: Pogo Producing Company Well No. 3 – Antelope 5 Federal

Location: 660' FSL & 1980' FWL sec. 5, T. 24 S., R. 35 E.

Lease: NM-14164

---

**III. PRESSURE CONTROL:**

3. After setting the 7 inch production casing and before drilling into the Wolfcamp formation, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The BLM Hobbs Office shall be notified at (505) 393-3612 in sufficient time for a representative to witness the tests.

B. The tests shall be done by an independent service company.

C. The results of the test shall be reported to the BLM Hobbs Office at 414 West Taylor, Hobbs, New Mexico 88240.

D. 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.

E. Testing must be done in a safe workman like manner. Hard line connections shall be required.

**IV. DRILLING MUD:**

1. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

A. Recording pit level indicator to indicate volume gains and losses.

B. Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

BLM Serial Number: NM-14164  
Company Reference: Pogo Producing Co.  
Well No. & Name: Antelope 5 Federal Deep #3

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS  
CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view 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.

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).

/ X / 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, outsloping, insloping, 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

    
/ X / 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:

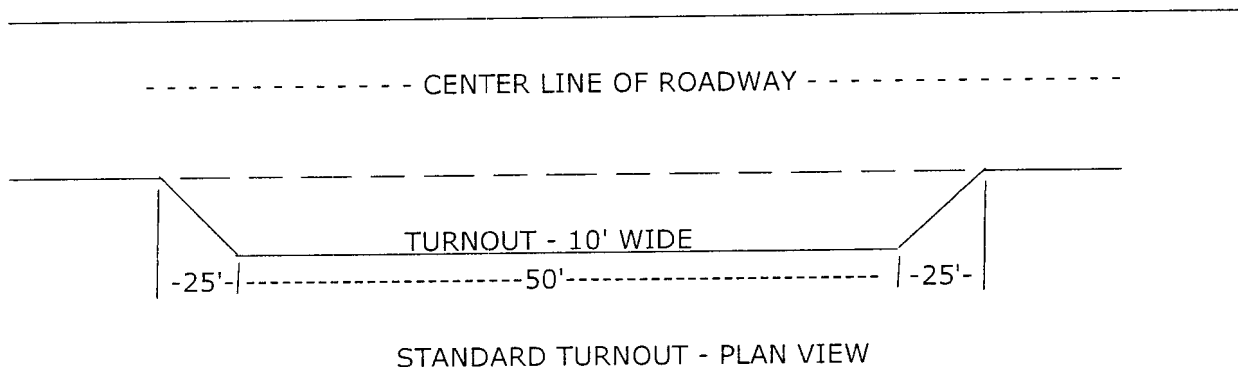


$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

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:



#### 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:

BLM Serial Number: NM-14164  
Company Reference: Pogo Producing Co.  
Well No. & Name: Antelope 5 Federal Deep #3

## STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. 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.
2. 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 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way 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.
3. 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 activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder 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.
4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
  - a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
  - b. Activities of other parties including, but not limited to:
    - (1) Land clearing.
    - (2) Earth-disturbing and earth-moving work.

- (3) Blasting.
- (4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, 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 resulting there from, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up 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 responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 10 feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 36 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. 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 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. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. 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 cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. Special Stipulations:

(March 1989)

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
31 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

Form C-144  
June 1, 2004

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

**Pit or Below-Grade Tank Registration or Closure**

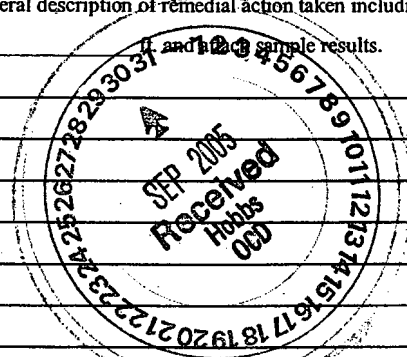
Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: <u>Pogo Producing Company</u> Telephone: <u>432-685-8100</u> e-mail address: <u>wrightc@pogoproducing.com</u>		
Address: <u>P. O. Box 10340, Midland, TX 79702-7340</u>		
Facility or well name: <u>Antelope 5 Fed #3</u> API #: <u>30-025-37538</u> U/L or Qtr/Qtr <u>N</u> Sec <u>5</u> T <u>24S</u> R <u>35E</u>		
County: <u>Lea</u> Latitude <u>32:14:27.56N</u> Longitude <u>103:23:28.41W</u> NAD: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/>		
Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>		
<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>1600</u> bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> 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 X	( 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 X	( 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 X	( 0 points) 0
<b>Ranking Score (Total Points)</b>		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: (check the onsite box if you are burying in place) 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 \_\_\_\_\_. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:



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: 09/28/05

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:

Printed Name/Title

*[Signature]*

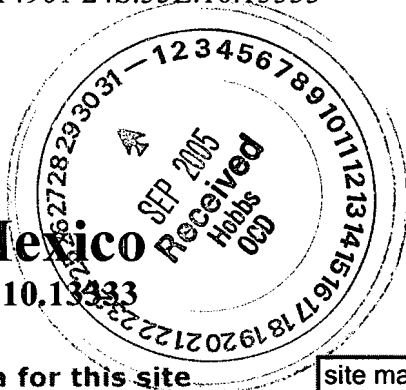
Signature

**PETROLEUM ENGINEER**

Date:

**NOV 03 2005**

Water Resources



Data Category:

Site Information

Geographic Area:

New Mexico

go

# Site Map for New Mexico

USGS 321335103214901 24S.35E.10.13333

Available data for this site

site map

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

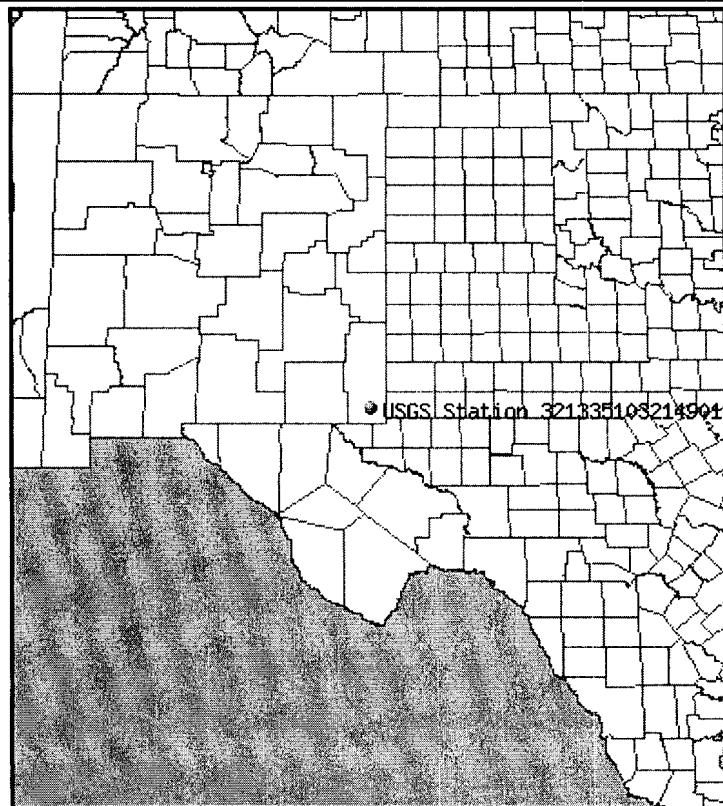
Latitude 32°13'35", Longitude 103°21'49" NAD27

Land-surface elevation 3,360.10 feet above sea level NGVD29

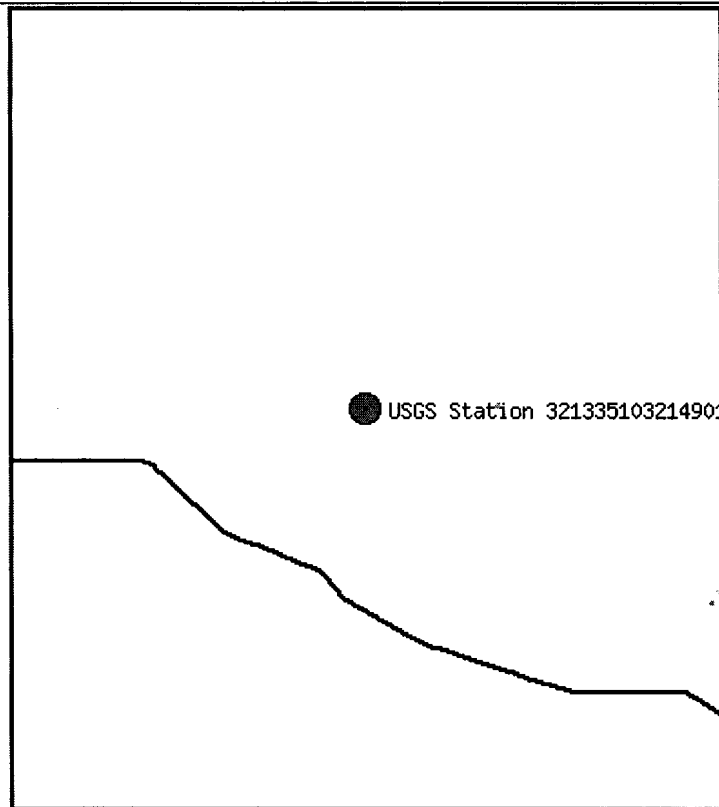
The depth of the well is 190 feet below land surface.

This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) 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 2005-09-28 10:53:07 EDT

[http://nwis.waterdata.usgs.gov/nm/nwis/nwismap/?site\\_no=321335103214901](http://nwis.waterdata.usgs.gov/nm/nwis/nwismap/?site_no=321335103214901)

9/28/2005

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 = • 321335103214901

Save file of selected sites to local disk for future upload

USGS 321335103214901 24S.35E.10.13333

Available data for this site

Ground-water: Levels

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°13'35", Longitude 103°21'49" NAD27

Land-surface elevation 3,360.10 feet above sea level NGVD29

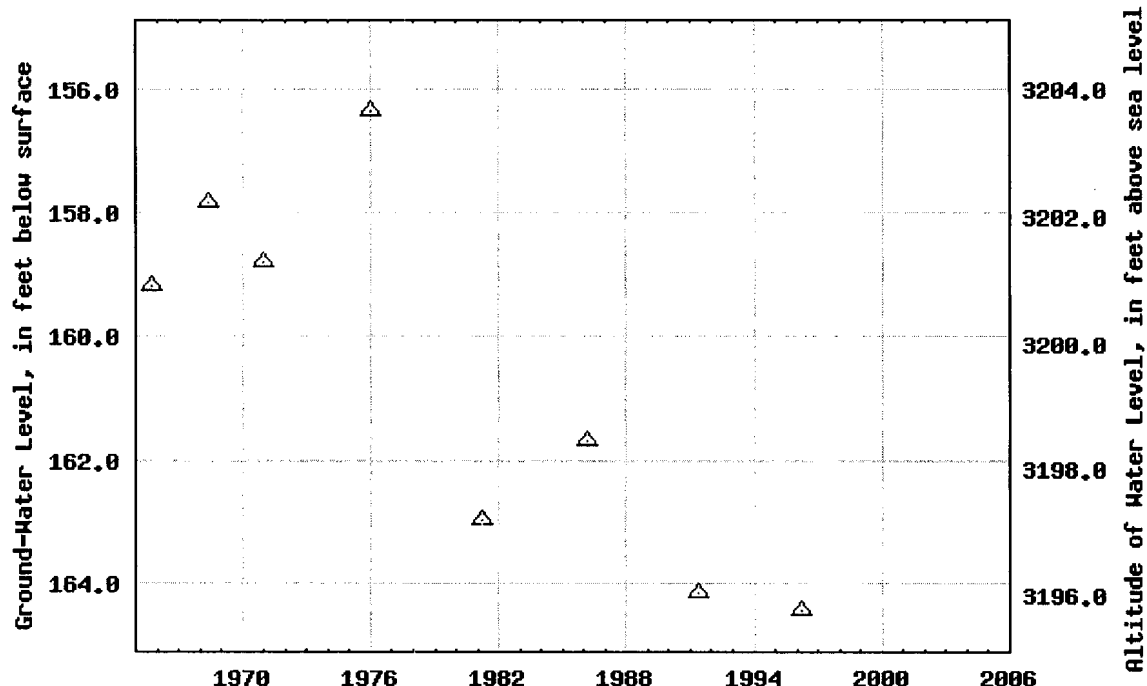
The depth of the well is 190 feet below land surface.

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

Output formats

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

USGS 321335103214901 24S.35E.10.13333



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.

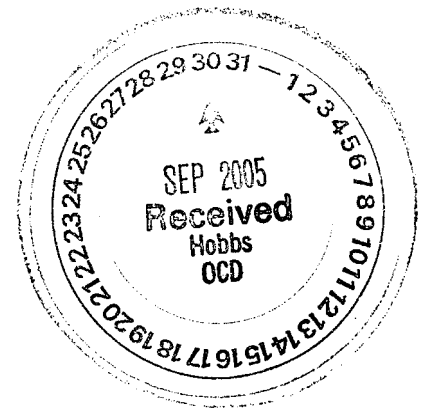
Note that if either point is very close to a pole, the course may be inaccurate, because of its extreme sensitivity to position and inevitable rounding error.

Input Data

Lat1		Lon1	
32:14:27.56	N	103:23:28.41	W
Lat2		Lon2	
32:13:35	N	103:21:49	W

Output

Course 1-2	Course 2-1	Distance
122.000192	302.014920	1.652733149



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.

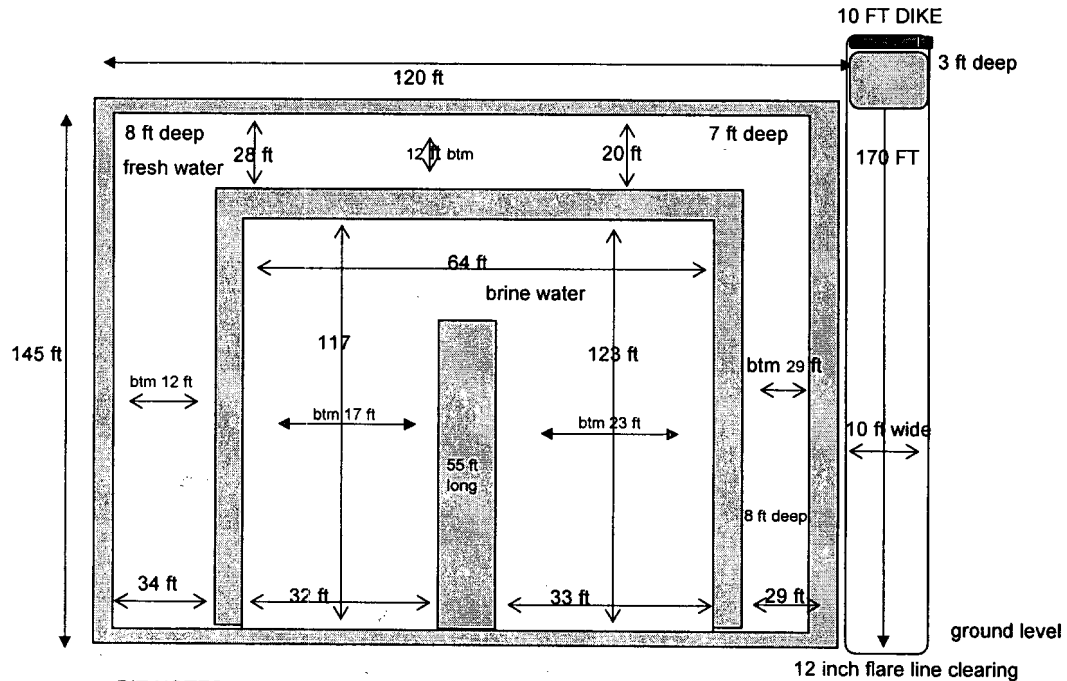
Note that the starting point cannot be a pole.

Input data

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

# **POGO Producing Company** **Antelope 5 Federal #3** **Approximate Pit Dimensions**

N/5/24S/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° 13' 35" N & 103° 21' 49" W "Published data"

This well produces from a depth greater than 100 ft.

Pit equals approx 16000 bbls

