

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
N.M. Oil Cons. Div. Dist. 2  
1001 W. Grand Avenue  
Artesia, NM 88210

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO. NM-104730

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

SUNDANCE FEDERAL # 24

9. API WELL NO. 30-015-33385

10. FIELD AND POOL, OR WILDCAT SAND DUNES DELAWARE WEST

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SECTION 4 T24S-R31E

12. COUNTY OR PARISH EDDY CO. 13. STATE NEW MEXICO

1a. TYPE OF WORK DRILL  DEEPEN  R-111-POTASH

b. TYPE OF WELL OIL WELL  GAS WELL  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 1980' FNL & 1980' FEL SECTION 4 T24S-R31E EDDY CO. NM  
At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* Approximately 35 miles East of Carlsbad New Mexico

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 1980'

16. NO. OF ACRES IN LEASE 600

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320'

19. PROPOSED DEPTH 8400'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3412' GR.

22. APPROX. DATE WORK WILL START\* WHEN APPROVED

23. PROPOSED CASING AND CEMENTING PROGRAM CARLSBAD CONTROLLED WATER BASIN

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface W/Redi-mix.
WITNESS 17 1/2"	H-40 13 3/8"	48	650'	800 Sx. cement to surface
11"	J-55 8 5/8"	32	4250'	1500 Sx. " " "
7 7/8"	J-55 5 1/2"	17 & 15.5	8400'	1300 Sx. in 2 stages TOC 3500±'

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 650'. Run and set 650' of 13 3/8" 48# H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. circulate cement to surface.
3. Drill 11" hole to 4250'. Run and set 4250' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of Class "C" cement + additives. Circulate cement to surface.
4. Drill 7 7/8" hole to 8400'. Run and set 8400' of 5 1/2" casing as follows: 2400' of 5 1/2" 17# J-55 LT&C, 5000' of 5 1/2" 15.5# J-55 LT&C, 1000' of 5 1/2" 17# J-55 LT&C. Cement in 2 stages with DV Tool at 6200'±. Cement 1st stage with 550 Sx. of Class "H" cement + additives, cement 2nd stage with 750 Sx. of Class "C" cement + additives, estimate top of cement 3500'± from surface.

POGO PRODUCING COMPANY ACCEPTS THE RESPONSIBILITY OF OPERATING THIS LEASE ACCORDING TO LEASE SPECIFICATIONS.

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. SIGNER [Signature] APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED DATE 02/24/04

(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/ Linda S. C. Rundell STATE DIRECTOR DATE MAR 26 2004

\*See Instructions On Reverse Side APPROVAL FOR 1 YEAR

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

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

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code 53815	Pool Name SAND DUNES DELAWARE-WEST
Property Code	Property Name SUNDANCE FEDERAL	Well Number 24
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 3412'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	4	24-S	31-E		1980	NORTH	1980	EAST	EDDY

Bottom Hole Location If Different From Surface

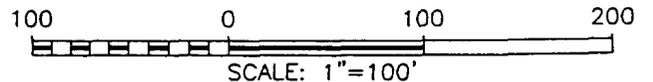
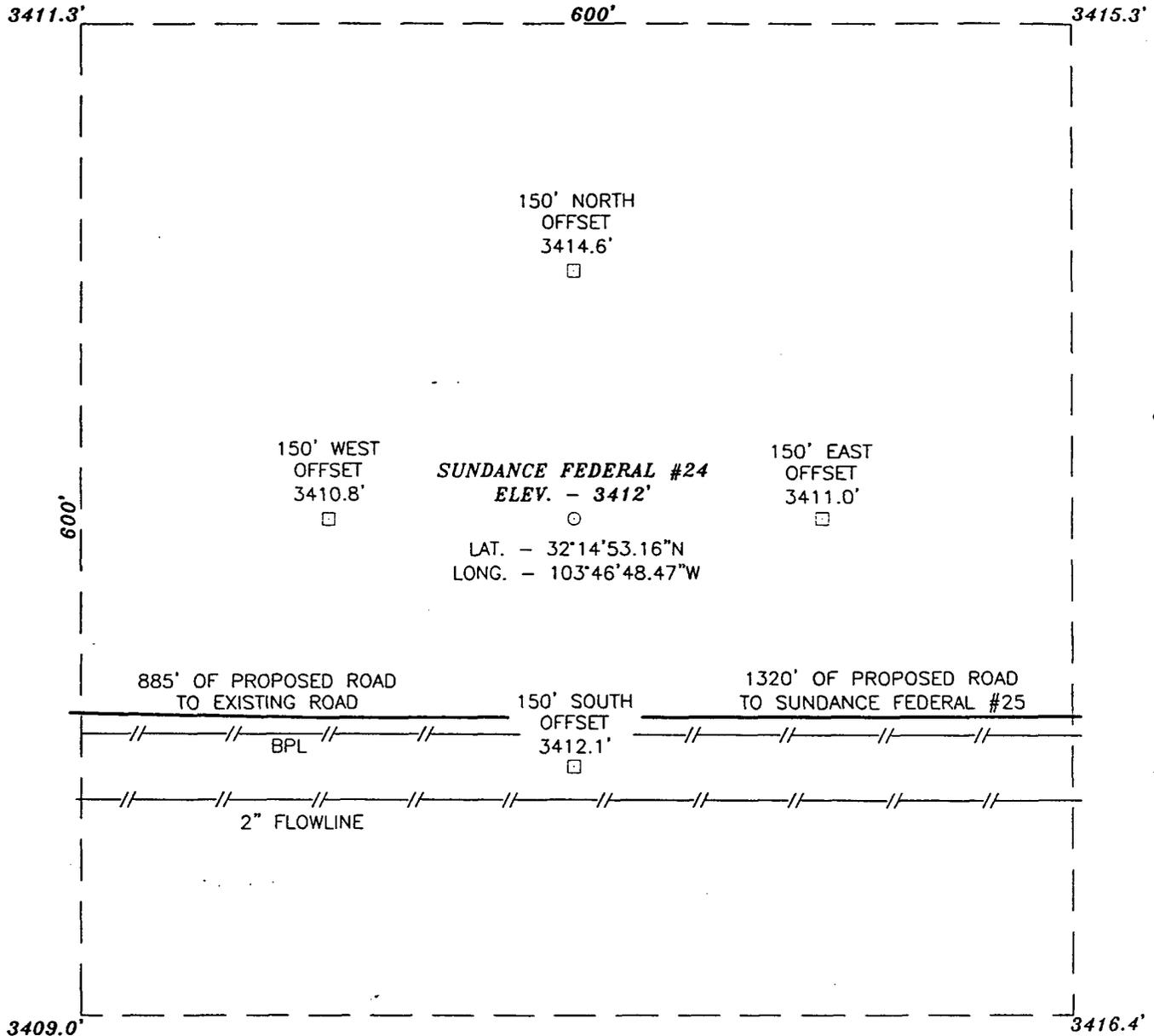
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
-----------------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

LOT 4 40.29 AC.	LOT 3 40.27 AC.	LOT 2 40.25 AC.	LOT 1 40.23 AC.
<p>GEODETIC COORDINATES NAD 27 NME Y = 454417.3 N X = 671027.4 E LAT. 32°14'53.16"N LONG. 103°46'48.47"W</p>			<p><b>OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><i>Joe T. Janica</i> Signature</p> <p>Joe T. Janica Printed Name</p> <p>Agent Title</p> <p>02/24/04 Date</p> <hr/> <p><b>SURVEYOR CERTIFICATION</b></p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>FEBRUARY 9, 2004 Date Surveyed</p> <p>L.A. Signature &amp; Seal of Professional Surveyor</p> <p><i>Gary Eidsen 2/18/04</i> 04.11.0157</p> <p>Certificate No. GARY EIDSON 12841</p>

SECTION 4, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,  
 EDDY COUNTY, NEW MEXICO.



**DIRECTIONS TO LOCATION:**

FROM THE INTERSECTION OF STATE HIGHWAY #128 AND CO. ROAD C-29 GO NORTHWEST ON HWY #128 4.0 MILES. TURN LEFT AT CATTLE GUARD AND GO 3.0 MILES SOUTH. TURN LEFT AT POGO BATTERY AND GO EAST 0.33 MILES. TURN LEFT AND GO 0.1 MILES TO A PROPOSED ROAD SURVEY. TURN RIGHT AND FOLLOW PROPOSED ROAD 0.17 MILES TO THIS LOCATION.

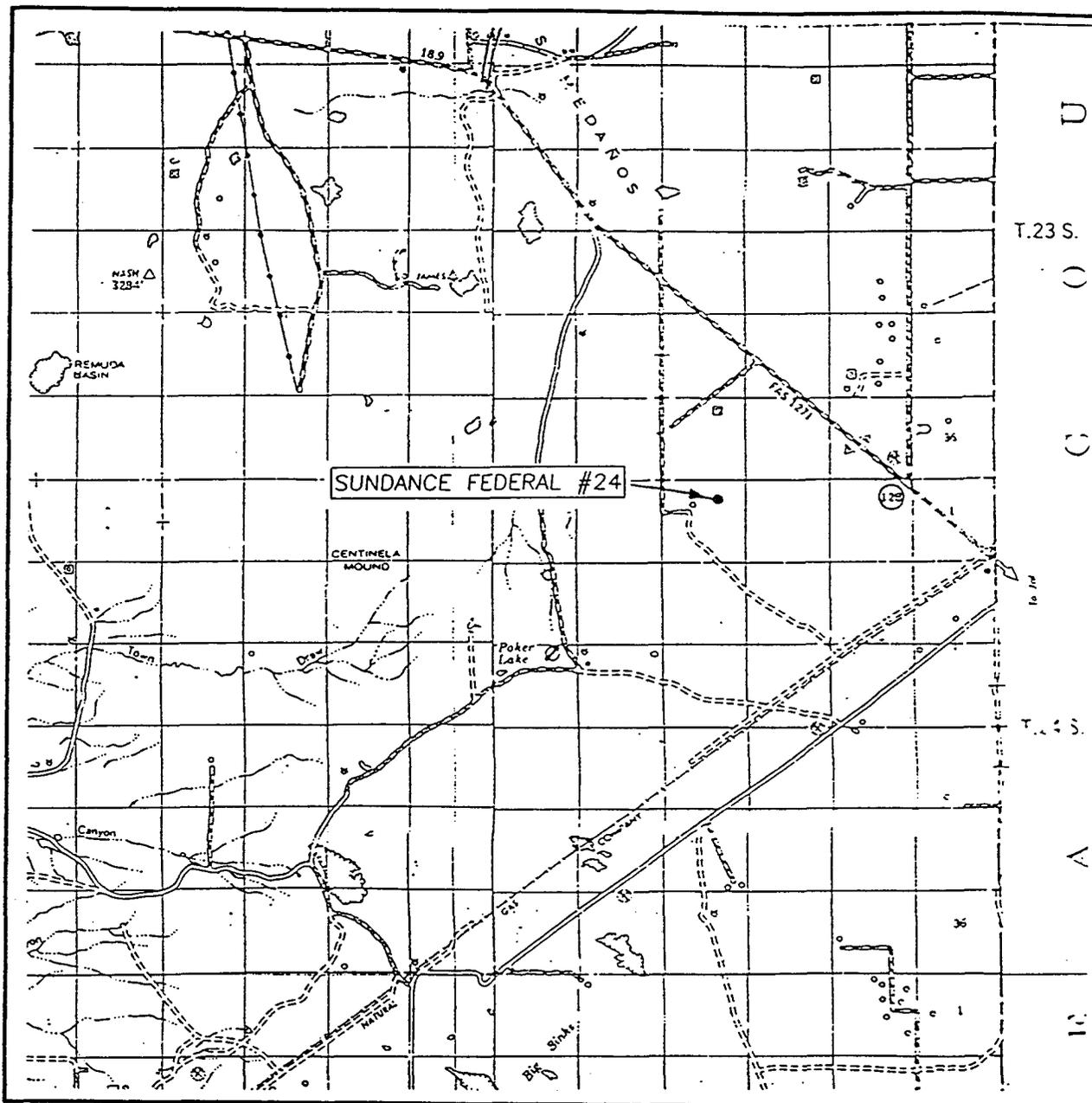
**POGO PRODUCING COMPANY**

*THE SUNDANCE FEDERAL #24 LOCATED 1980 FROM THE NORTH LINE AND 1980 FROM THE EAST LINE SECTION 4, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.*

Survey Date: 2/09/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0157	Drawn By: L.A.
Date: 2/16/04	DISK:CD#3 04110157

**JOHN WEST SURVEYING COMPANY**  
 412 N. DAL PASO - HOBBS, NEW MEXICO - 505-393-3117

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 4 TWP. 24-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FNL & 1980' FEL

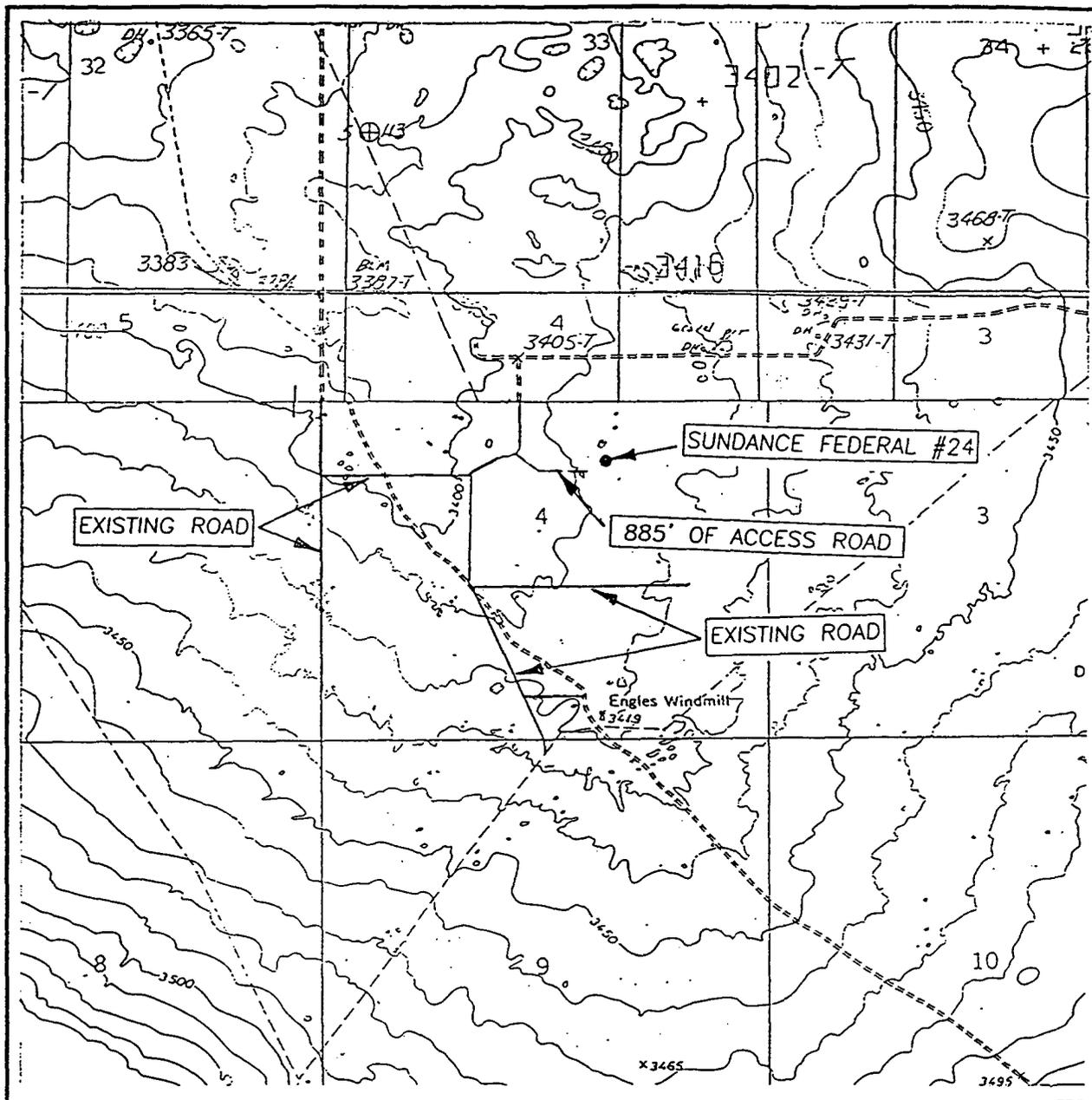
ELEVATION 3412'

OPERATOR POGO PRODUCING COMPANY

LEASE SUNDANCE FEDERAL

**JOHN WEST SURVEYING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'  
BIG SINKS, N.M.

SEC. 4 TWP. 24-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FNL & 1980' FEL

ELEVATION 3412'

OPERATOR POGO PRODUCING COMPANY

LEASE SUNDANCE FEDERAL

U.S.G.S. TOPOGRAPHIC MAP  
BIG SINKS, N.M.

**JOHN WEST SURVEYING**  
**HOBBS, NEW MEXICO**  
**(505) 393-3117**

APPLICATION TO DRILL

POGO PRODUCING COMPANY  
 SUNDANCE FEDERAL #24  
 UNIT "G" SECTION 4  
 T24S-R31E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location: 1980' FNL & 1980' FEL SECTION 4 T24S-R31E EDDY CO. NM.
2. Elevation above Sea Level: 3412' GR.
3. Geologic name of surface formation: Quaternary Aeolian Deposits.
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
5. Proposed drilling depth: 8400'
6. Estimated tops of geological markers:

Rustler Anhydrite	675'	Cherry Canyon	5200'
Basal Anhydrite	4055'	Brushy Canyon	6440'
Delaware Lime	4280'	Bone Spring	8140'
Bell Canyon	4315'	Upper Bone Spring Sd.	8200'
7. Possible mineral bearing formations:

Brushy Canyon	Oil
Bone Spring	Oil
8. Casing program:

Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-650'	13 3/8"	48#	8-R	ST&C	H-40
11"	0-4250'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-8400'	5½"	17 &# 15.5	8-R	LT&C	J-55

APPLICATION TO DRILL

POGO PRODUCING COMPANY  
 SUNDANCE FEDERAL #24  
 UNIT "G" SECTION 4  
 T24S-R31E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
13 3/8"	Surface	Set 650' of 13 3/8" 48# H-40 ST&C casing. Cement with 800 Sx. of Class "C" cement + 1/4# Flocele/Sx. + 2% CaCl circulate cement to surface.
8 5/8"	Intermediate	Set 4250' of 8 5/8" 32# J-55 ST&C casing. Cement with 1500 Sx. of Class "C" cement + additives, circulate cement to surface.
5 1/2"	Production	Set 8400' of 5 1/2" casing as follows: 2400' of 5 1/2" 17# J-55 LT&C, 5000' of 5 1/2" 15.5# J-55 LT&C, 1000' of 5 1/2" 17# J-55 LT&C. Cement in two stages DV Tool at 6200'±. Cement 1st stage with 550 Sx. of Class "H" cement + additives, cement 2nd stage with 750 Sx. of Class "C" cement + additives, estimate top of cement 3500' FS.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nipped up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once each 24 Hr. period and the blind rams will be operated when the drill pipe is out of on trips. Full opening stabbing valve and upper kelly cock will be available in case if needed. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 3000 PSI choke manifold with adjustable chokes. No abnormal pressures or temperatures are expected while drilling this well. No problems in offset wells.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-650'	8.4-8.7	29-34	NC	Fresh water spud mud add paper to control seepage.
650-4250'	10.0-10.2	29-37	NC	Brine water use paper to control seepage and high viscosity sweeps to clean hole.
4250-8400'	8.4-8.7	29-38	NC*	Fresh water mud add fresh water Gel to control viscosity and high viscosity sweeps to clean hole if water loss use aPolymer system.

\* If water loss control is needed to log well and run casing a switch to a Polymer system may be necessary.

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, and casing, viscosity, and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

POGO PRODUCING COMPANY  
SUNDANCE FEDERAL #24  
UNIT "G" SECTION 4  
T24S-R31E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: If two runs are necessary: run dual laterolog, SNP, LDT, Gamma Ray, Caliper from 4250' to 650', Gamma Ray-Neutron from 650' to surface. Run #2 Run dual Induction, SNP, LDT, Gamma Ray, Caliper from TD back to 8 5/8" casing shoe.
- B. No cores or DST's are planned at this time, a mud logger may be placed on hole at 4250' and remain on hole to TD.

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 4250 PSI, and Estimated BHT 165°.

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 28 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 Delaware formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as an oil well.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
  
2. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
  
3. Windsock and/or wind streamers
  - A. Windsock at mudpit area should be high enough to be visible.
  - B. Windsock at briefing area should be high enough to be visible.
  - C. There should be a windsock at entrance to location.
  
4. Condition Flags and Signs
  - A. Warning sign on access road to location.
  - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H<sub>2</sub>S present in dangerous concentration. Only emergency personnel admitted to location.
  
5. Well control equipment
  - A. See exhibit "E" & "E-1"
  
6. Communication
  - A. While working under masks chalkboards will be used for communication.
  - B. Hand signals will be used where chalk board is inappropriate.
  - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
  
7. Drillstem Testing
  - A. Exhausts will be watered.
  - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
  - C. If the location is near to a dwelling a closed DST will be performed.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
9. If H<sub>2</sub>S 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<sub>2</sub>S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY  
SUNDANCE FEDERAL #24  
T24S-R31E EDDY CO. NM

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

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

B. From Hobbs New Mexico take U.S. Hi-way 62-180 West toward Carlsbad go 40± miles to the WIPP road. Turn Left go 13 miles South to CR 802, turn Right follow CR-802 4.2 miles to State Hi-way 128, turn Left go 3.4 miles, turn Right go 2.8 miles, turn Left (East) go .45 miles turn Right and go 885' to location on the North side of road.

C. Flowlines and Powerlines will be constructed along lease roads or on existing R-O-W's, as shown on Exhibit "F".

2. PLANNED ACCESS ROADS: Approximately 885' 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 the roads will be surfaced to the BLM requirements with material obtained from from a local source.

E. Center line for the new access road will be flagged.

F. The road will be constructed to utilize low water crossings where drainage currently exist, and Culverts will be installed where necessary.

3. EXHIBIT "A-1" SHOWS WELLS AND DRY HOLES WITHIN A 1 MILE RAIDUS.

A. Water wells - One located approximately .8 miles South 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  
SUNDANCE FEDERAL #24  
T24S-R31E EDDY CO. NM

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "F".

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 furthed 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  
SUNDANCE FEDERAL #24  
T24S-R31E EDDY CO. NM

### 9. WELL SITE LAYOUT

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

### 10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B 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 erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

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  
SUNDANCE FEDERAL #24  
T24S-R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of low lying sand dunes with a slight dip to the West. The deep sandy soil supports shinnery oak, native grasses, plains yucca, broom snake weed and mesquite.
- B. The surface is owned by The U.S. Department of Interior and is administered by The Bureau of Land Management. The surface is used for the grazing of livestock and the production of Oil & Gas.
- C. An archaeological survey has been done and is on file in the Carlsbad Field Office of The Bureau of Land Management.
- D. There are no dwellings in the near vicinity of this location.

12. OPERATOR'S REPRESENTATIVES:

Before Construction:

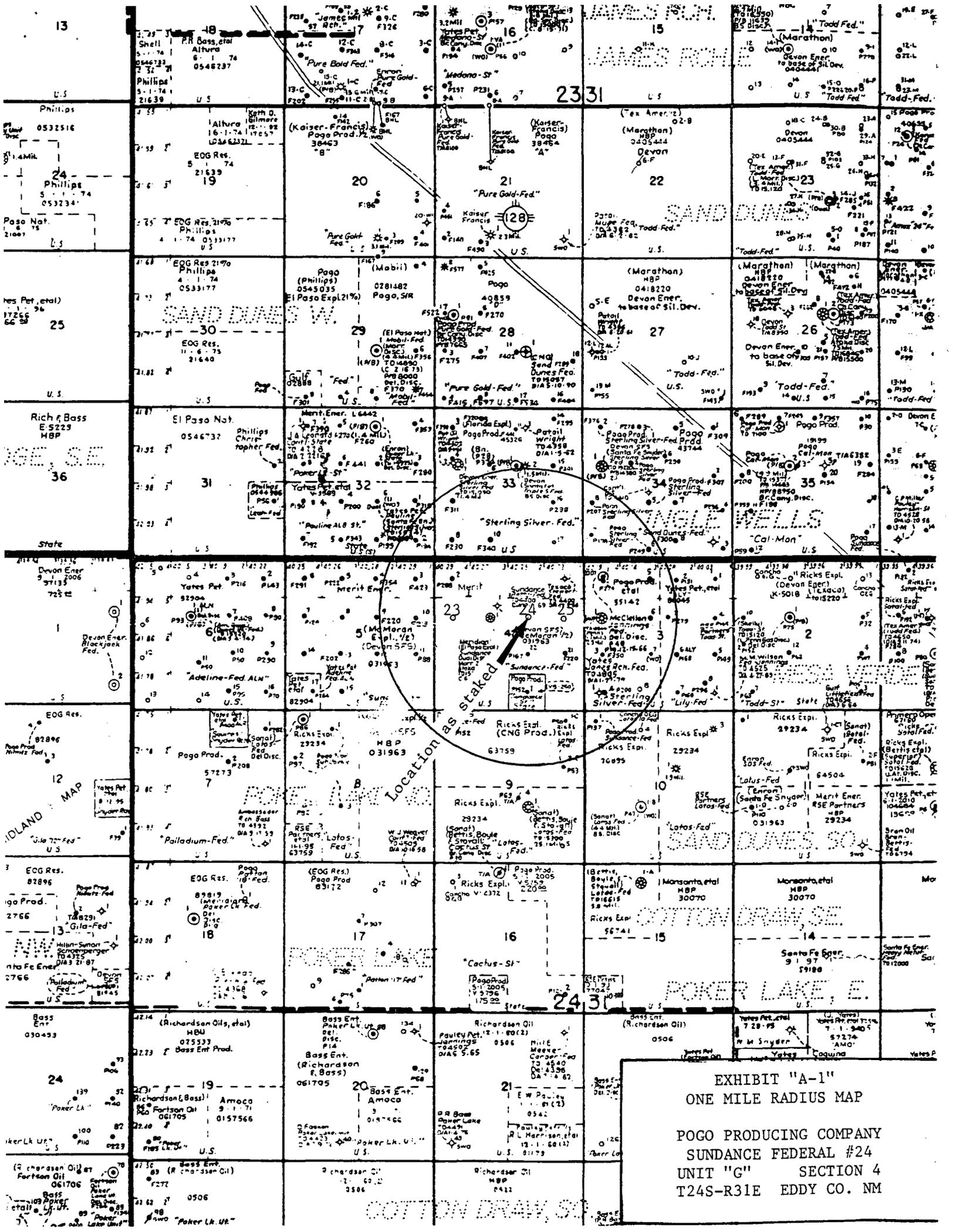
TIERRA EXPLORATION, INC.  
P.O. BOX 2188  
HOBBS, NEW MEXICO 88241  
OFFICE Ph. 505-391-8503  
JOE T. JANICA

During and after Construction:

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

13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and the 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 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 confirmity 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 *Joe T. Janica*  
DATE : 02/24/04  
TITLE : Agent



**EXHIBIT "A-1"**  
**ONE MILE RADIUS MAP**  
**POGO PRODUCING COMPANY**  
**SUNDANCE FEDERAL #24**  
**UNIT "G" SECTION 4**  
**T24S-R31E EDDY CO. NM**

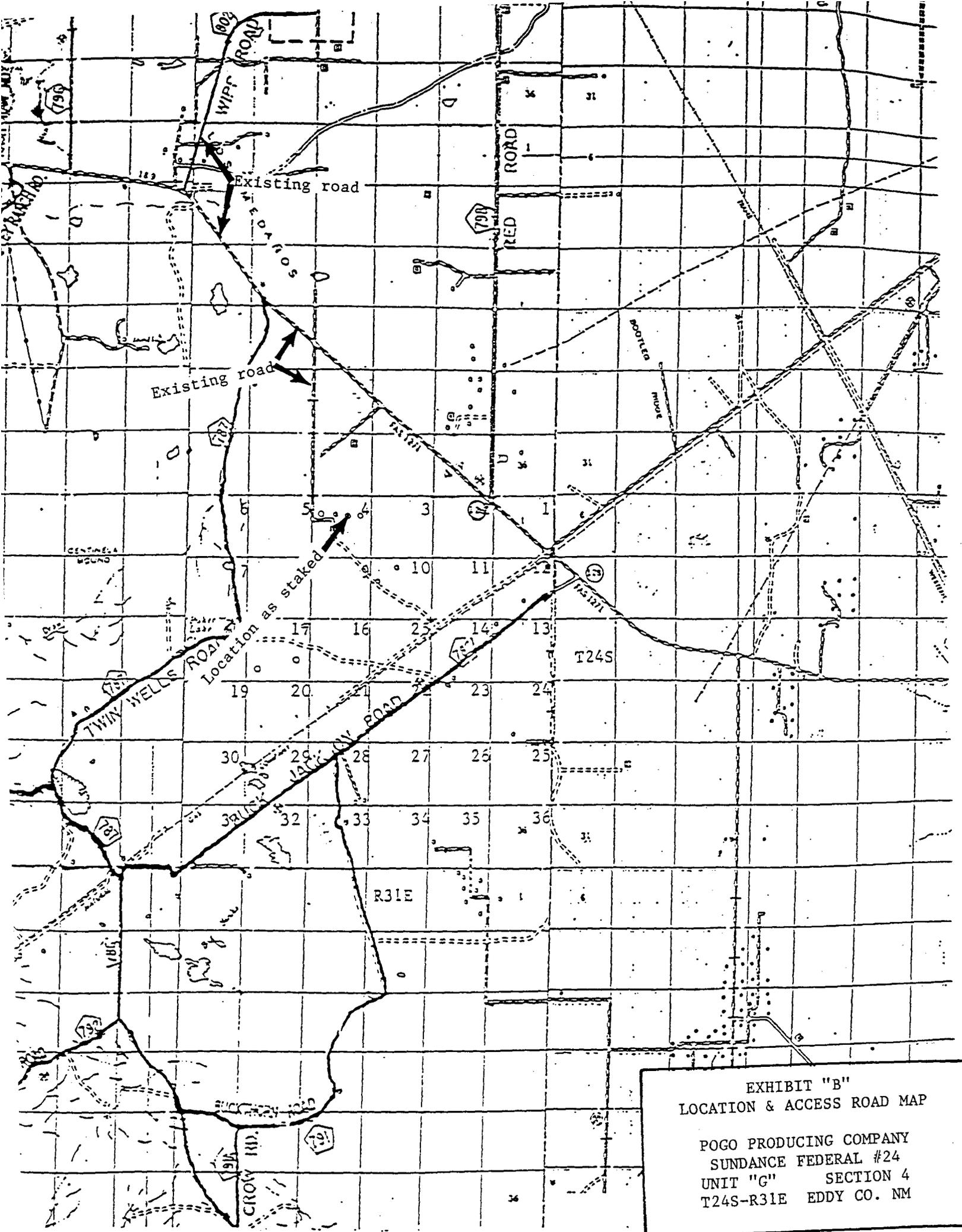


EXHIBIT "B"  
 LOCATION & ACCESS ROAD MAP  
 POGO PRODUCING COMPANY  
 SUNDANCE FEDERAL #24  
 UNIT "G" SECTION 4  
 T24S-R31E EDDY CO. NM

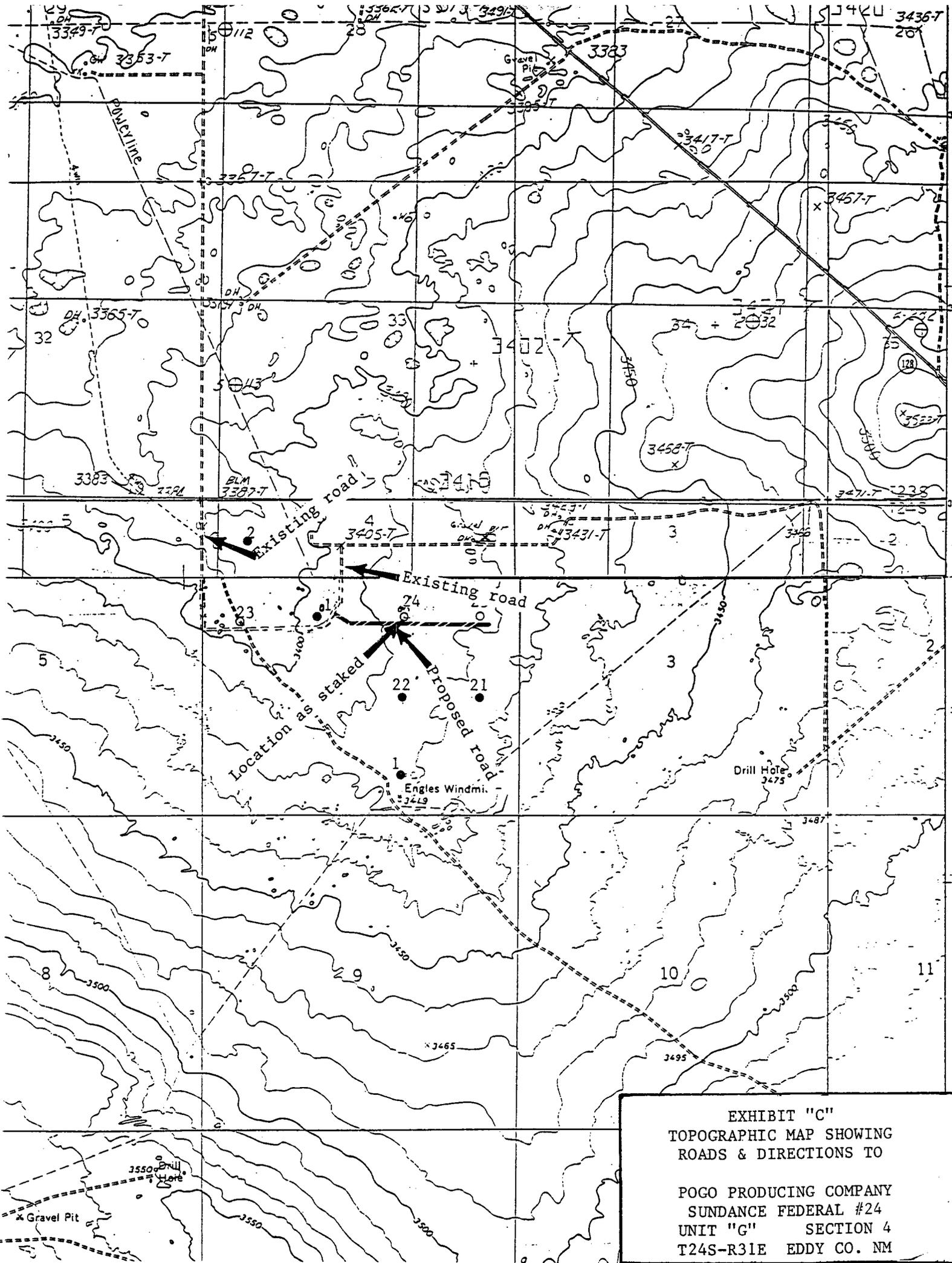
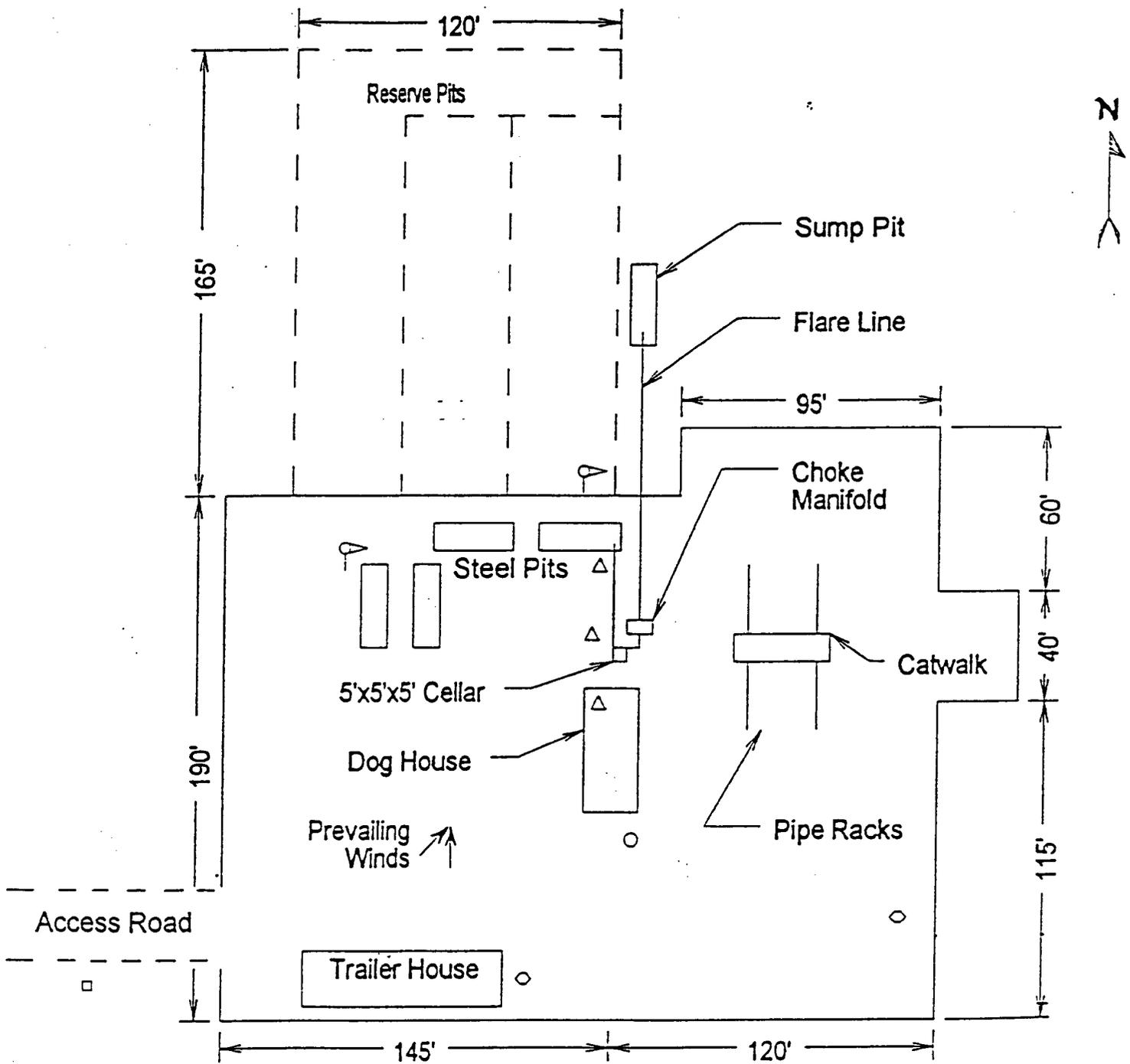


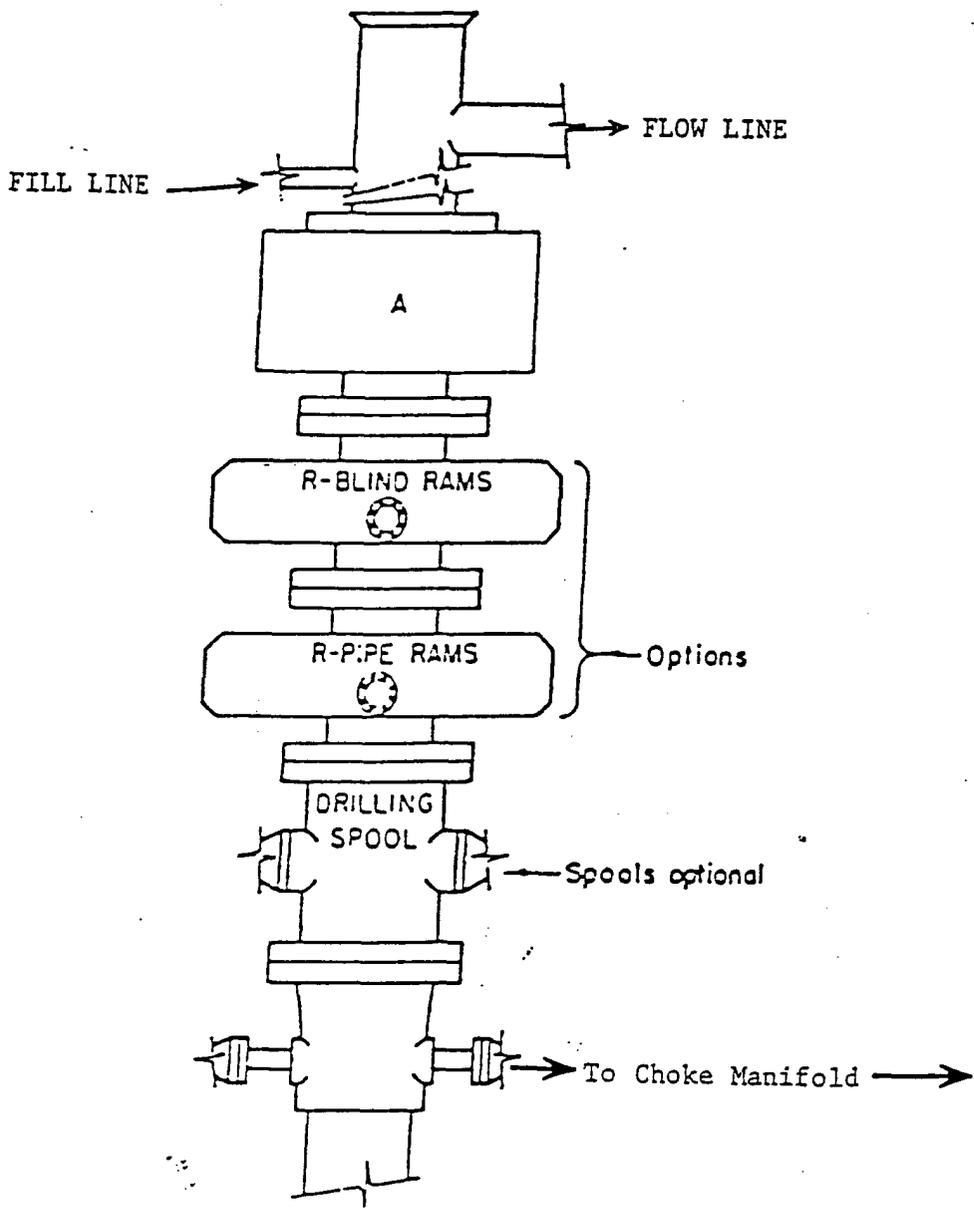
EXHIBIT "C"  
 TOPOGRAPHIC MAP SHOWING  
 ROADS & DIRECTIONS TO  
  
 POGO PRODUCING COMPANY  
 SUNDANCE FEDERAL #24  
 UNIT "G" SECTION 4  
 T24S-R31E EDDY CO. NM



- ⚓ 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 LAYOUT PLAT

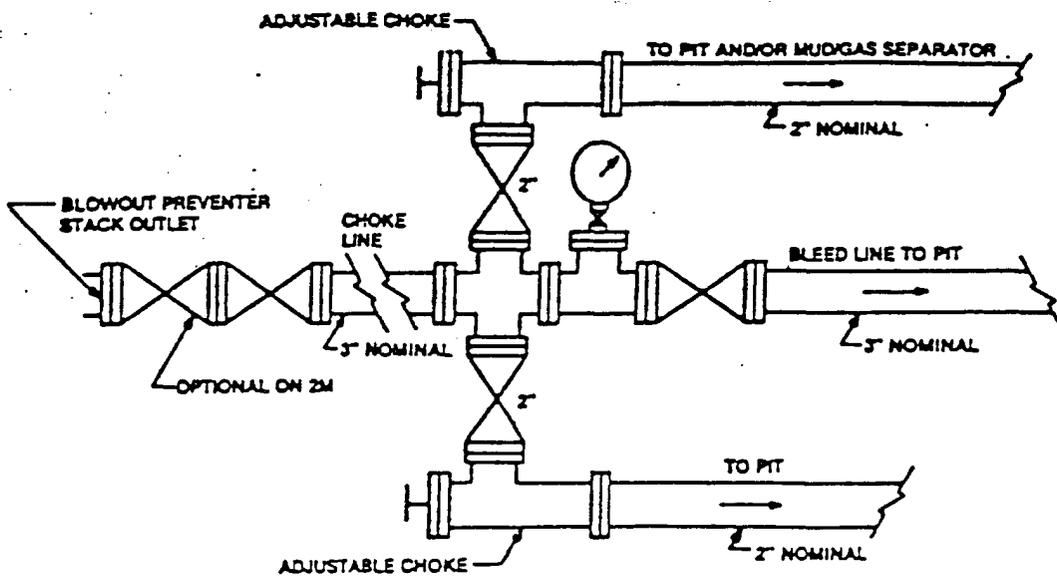
POGO PRODUCING COMPANY  
SUNDANCE FEDERAL #24  
UNIT "G" SECTION 4  
T24S-R31E EDDY CO. NM



**ARRANGEMENT SRRA**

900 Series  
3000 PSI WP

EXHIBIT "E"  
 SKETCH OF B.O.P. TO BE USED ON  
 POGO PRODUCING COMPANY  
 SUNDANCE FEDERAL #24  
 UNIT "G" SECTION 4  
 T24S-R31E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

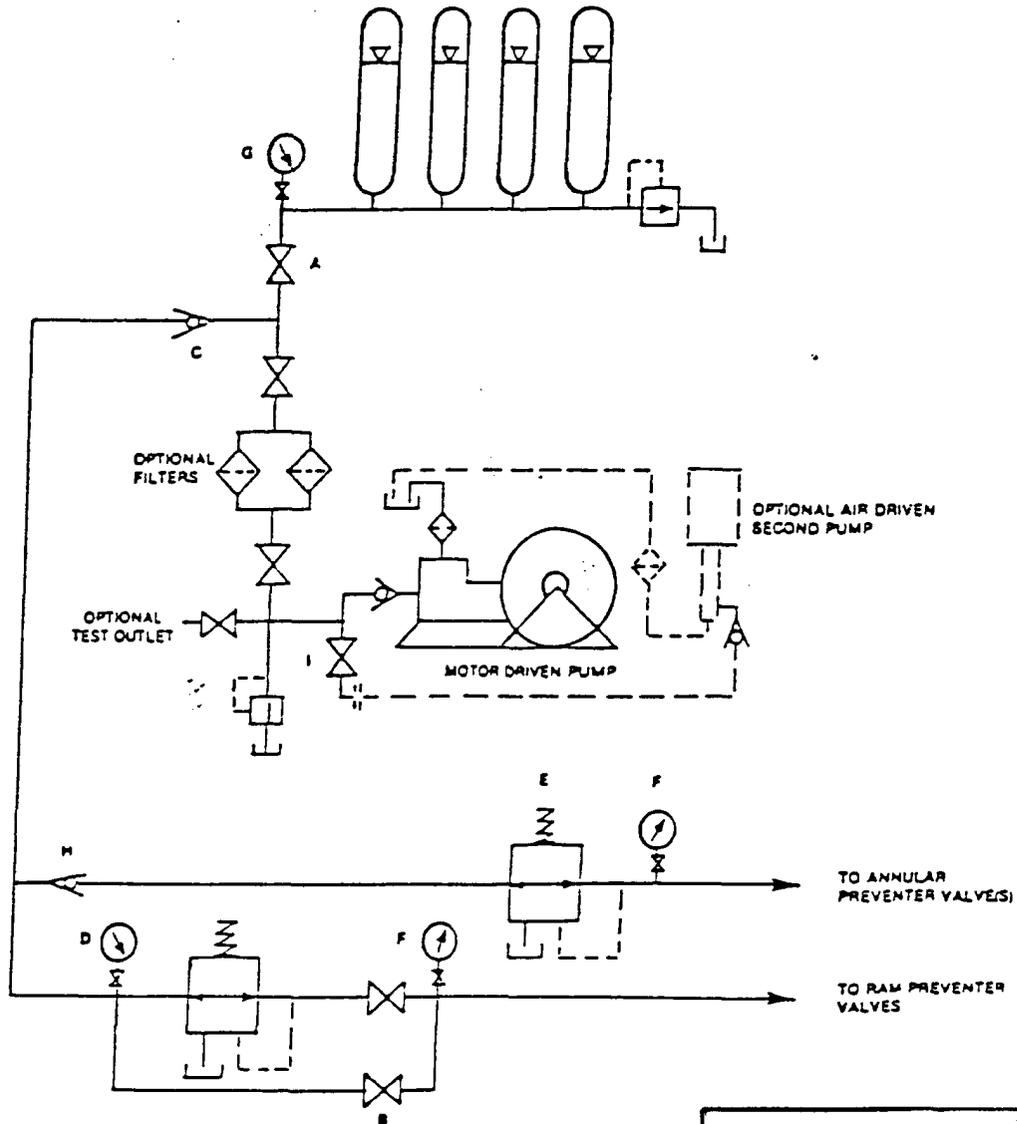
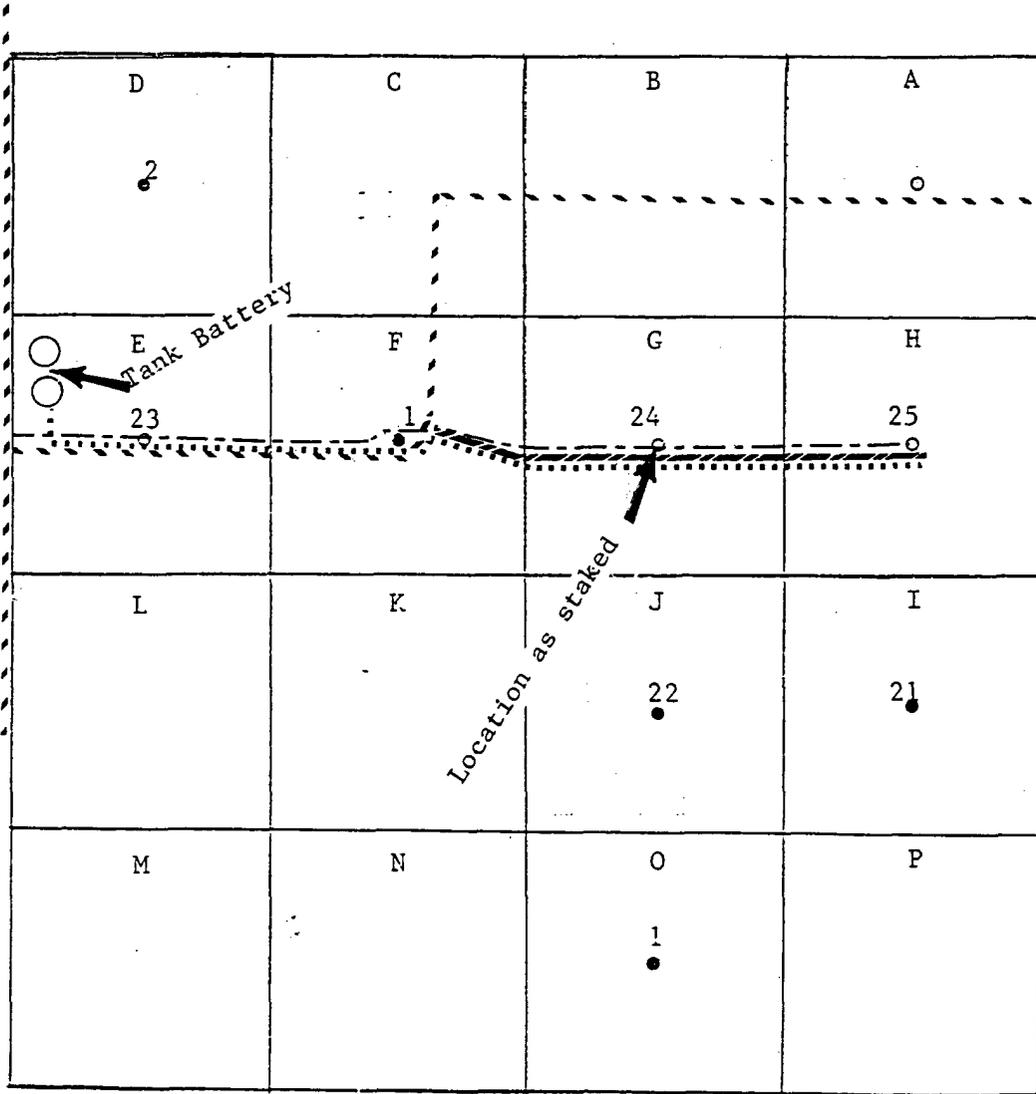


EXHIBIT "E-1"  
 CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY  
 SUNDANCE FEDERAL #24  
 UNIT "G" SECTION 4  
 T24S-R31E EDDY CO. NM



EXISTING ROAD      - - - - -  
 PROPOSED ROAD      = = = = =  
 PROPOSED FLOWLINE      ·······  
 PROPOSED POWERLINE      - · - · - ·

EXHIBIT "F"  
 PROPOSED ROUTE OF  
 FLOWLINE & POWERLINE

POGO PRODUCING COMPANY  
 SUNDANCE FEDERAL #24  
 UNIT "G"      SECTION 4  
 T24S-R31E      EDDY CO. NM



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

RECEIVED

**BILL RICHARDSON**  
Governor

2004 APR 8 AM 7 41

**Joanna Prukop**  
Cabinet Secretary  
Acting Director

STATE LAND OFFICE  
SANTE FE, N.M. Oil Conservation Division

New Mexico State Land Office  
Oil, Gas and Minerals Division  
310 Old Santa Fe Trail  
P.O. Box 1148  
Santa Fe, N.M. 87504-1148

Attn: Joe Mraz or To Whom It May Concern

**RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA**

RECEIVED

APR 12 2004

000-ARTESIA

**OPERATOR:** Pogo Producing Company  
**LEASE NAME:** Sundance Federal # 24  
**LOCATION:** SEC. 4, TOWNSHIP 24 SOUTH, RANGE 31 EAST,  
1980' FNL & 1980' FEL  
EDDY COUNTY, NM, NMPM

**PROPOSED DEPTH: 8400'.**

Dear Mr. Joe Mraz or To Whom It May Concern,

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuit to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether or not this application is within an established Life-of-Mine Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by this order.

Thank you for your assistance.

Sincerely,

Bryan G. Arrant  
PES, District II Artesia NMOCD

JRM  
4-8-04

In LMR Yes \_\_\_\_\_ No X  
In Buffer Zone Yes \_\_\_\_\_ No X

Comments:

Signature: \_\_\_\_\_

Date: 4/8/04

