

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Cons. Div.-Dist. 2
1001 W. Grand Avenue
Albuquerque, NM 88210(Other instructions on
reverse side)OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

R-111-POTASH

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

POGO PRODUCING COMPANY (RICHARD WRIGHT 432-685-8140)

3. ADDRESS AND TELEPHONE NO.

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

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

At surface

660' FSL & 660' FEL SECTION 4 T24S-R31E EDDY CO. NM

At proposed prod. zone SAME

OCT 21 2004

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

Approximately 25 miles East of Carlsbad, New Mexico

OCD-ARTESIA

15. DISTANCE FROM PROPOSED*

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

660'

16. NO. OF ACRES IN LEASE

1200

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.)

3430' GR.

22. APPROX. DATE WORK WILL START*

WHEN APPROVED

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Cement to surface/Redi-mix
WITNESS 1 1/2"	H-40 13 3/8"	48	650'	800 Sx. circulate to surface
11"	J-55 8 5/8"	32	4250'	1500 Sx. " " "
7 7/8"	N-80 & J-55 4 1/2"	11.6	8400'	1800 Sx. " " "

CARLSBAD CONTROLLED WATER BASIN

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17 1/2" hole to 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, + 1/2# 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 4 1/2" casing as follows: 1400' of 4 1/2" 11.6# N-80 LT&C, 6000' of 4 1/2" 11.6# J-55 LT&C, 1000' of 4 1/2" 11.6# N-80 LT&C casing. Cement in 3 stages with DV Tools at 6200', 3800'±. Cement 1st stage with 550 Sx. of Class "C" + additives, cement 2nd stage with 750 Sx. of Class "C" cement + additives, cement 3rd stage with 500 Sx. of Class "C" Lite Weight cement + additives, circulate cement to surface.

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

24.

SIGNED

(This space for Federal or State office use)

PERMIT NO.

TITLE

Agent

APPROVAL SUBJECT TO

GENERAL REQUIREMENTS 08/15/04

AND SPECIAL STIPULATIONS

ATTACHED

APPROVAL DATE

ACTING

Application approval does not warrant or certify that the applicant holds legal or equitable title to these rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

STATE DIRECTOR

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

I, the undersigned, do hereby approve and willfully make to any department or agency of the

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-14
March 12, 2004

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: Pogo Producing Company Telephone: 432-685-8100 e-mail address: wrightc@pogoproducing.com
Address: P. O. Box 10340, Midland, TX 79702-7340
Facility or well name: Sundance Federal 31 API #: U/L or Qtr/Qtr P Sec 4 T 24 R 31
County: Eddy Latitude 32 14 26.95N Longitude 103 46 33.16W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank
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"/> Volume <u>16000</u> bbl	Volume: <u> </u> bbl Type of fluid: <u> </u> Construction material: <u> </u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: <u> </u>
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 <input checked="" type="checkbox"/> (0 points) <u>0</u>
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 <input checked="" type="checkbox"/> (0 points) <u>0</u>
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 <input checked="" type="checkbox"/> (0 points) <u>0</u>
Ranking Score (Total Points) <u>0</u>	

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 08/25/04

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.

Approved

Date: AUG 26 2004

Printed Name/Title Gail Rep ID

Signature [Signature]

State of New Mexico

DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

Revised JUNE 10, 2003
Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name
		53815	SAND DUNES DELAWARE-WEST
Property Code	Property Name		Well Number
	SUNDANCE FEDERAL		31
OGRID No.	Operator Name		Elevation
17891	POGO PRODUCING COMPANY		3430'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	4	24-S	31-E		660'	SOUTH	660'	EAST	EDDY

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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

LOT 1	LOT 3	LOT 2	LOT 1
40.29 AC	40.27 AC	40.25 AC	40.23 AC
<p>GEODETIC COORDINATE NAD 27 NME</p> <p>Y=451775.6 N X=672356.6 E</p> <p>LAT.=32°14'26.95" N LONG.=103°46'33.16" W</p>			

OPERATOR CERTIFICATION

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

Joe T. Janica
Signature
Joe T. Janica
Printed Name
Agent
Title
08/15/04
Date

SURVEYOR CERTIFICATION

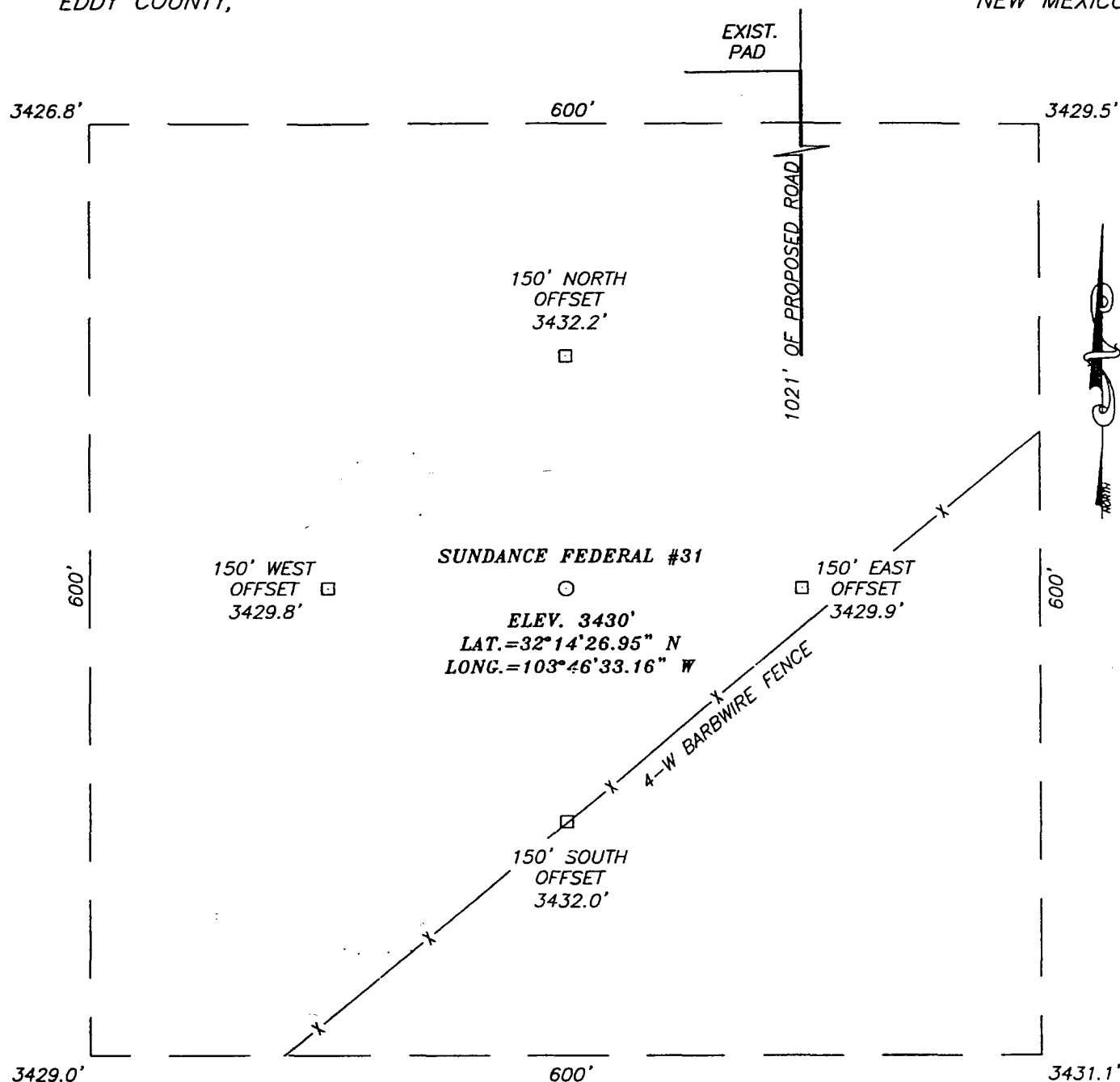
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JULY 15, 2004

Date Surveyed
Signature & Seal of Professional Surveyor
Gary E. Eidsen
04.11.0878
Certificate No. GARY EIDSON 12641

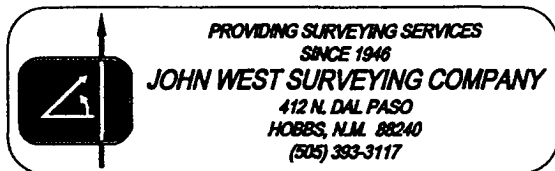
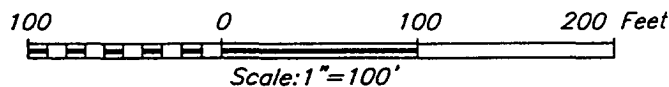
EXHIBIT "A"

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



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF STATE HWY. #128 AND CO. RD. #787 (TWIN WELLS ROAD), GO SOUTHEAST ON HWY. #128 APPROX. 1.0 MILE TO A LEASE ROAD. GO SOUTH ON LEASE ROAD FOR 3.5 MILES. TURN LEFT AND GO EAST ON LEASE ROAD APPROX. 1400' TO A LEASE ROAD. TURN RIGHT AND GO SOUTHEAST 0.3 MILES. TURN LEFT AND GO EAST 0.6 MILES TO EXISTING WELL PAD. THIS LOCATION IS APPROX. 1200' SOUTH.

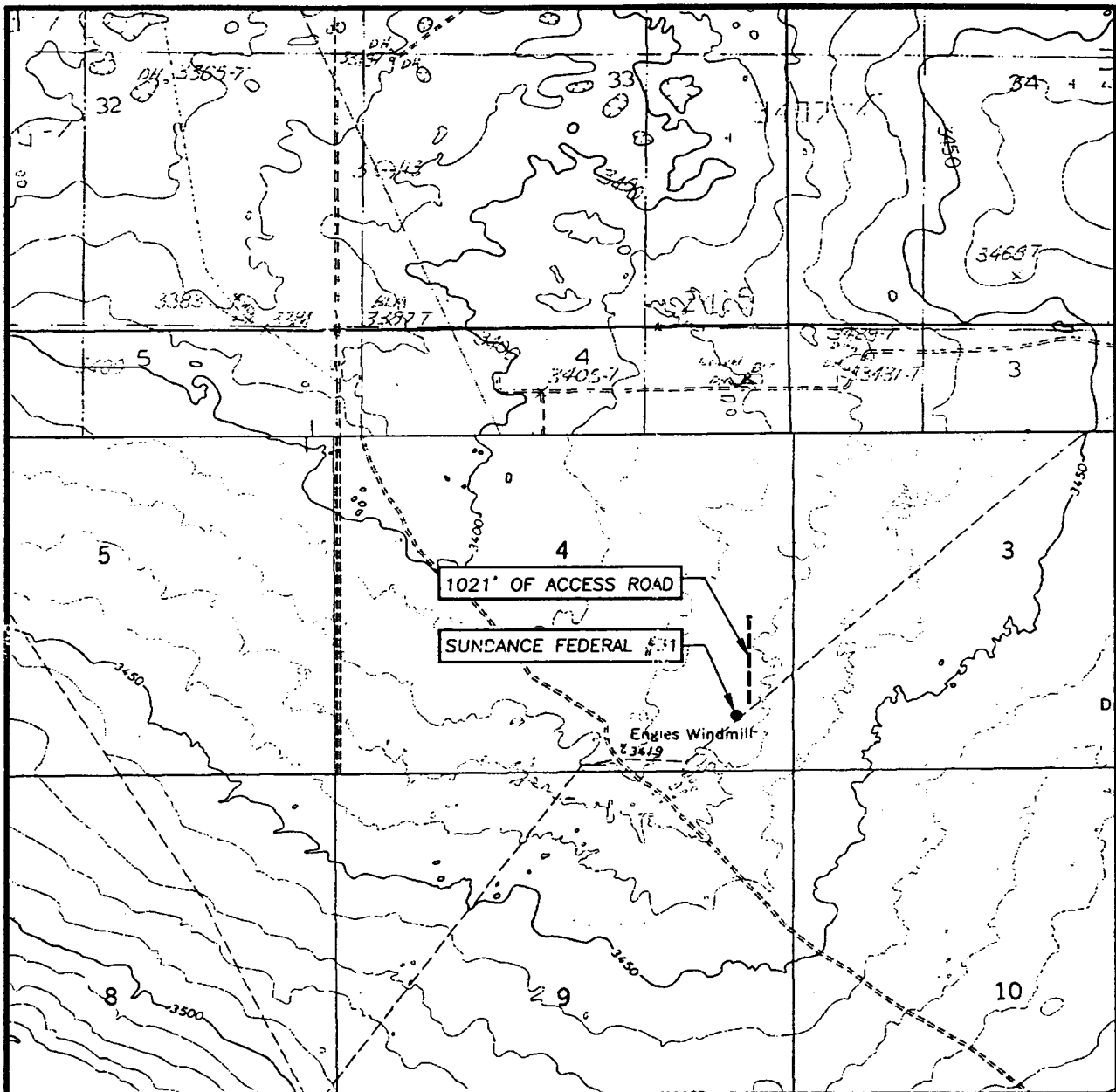


POGO PRODUCING COMPANY

SUNDANCE FEDERAL #31 WELL
 LOCATED 660 FEET FROM THE SOUTH LINE
 AND 660 FEET FROM THE EAST LINE OF SECTION 4,
 TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 7/15/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0876	Dr By: LA
Date: 7/22/04	Disk: CD#3
04110876	Scale: 1"=100'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

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

SURVEY N.M.P.M.

COUNTY EDDY

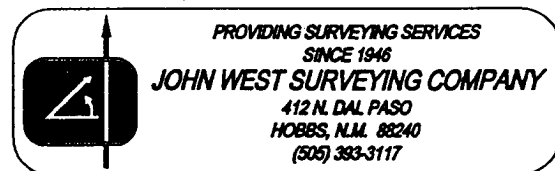
DESCRIPTION 660' FSL & 660' FEL

ELEVATION 3430'

OPERATOR POGO PRODUCING COMPANY

LEASE SUNDANCE FEDERAL

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



APPLICATION TO DRILL

POGO PRODUCING COMPANY
SUNDANCE FEDERAL # 31
UNIT "P" 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.

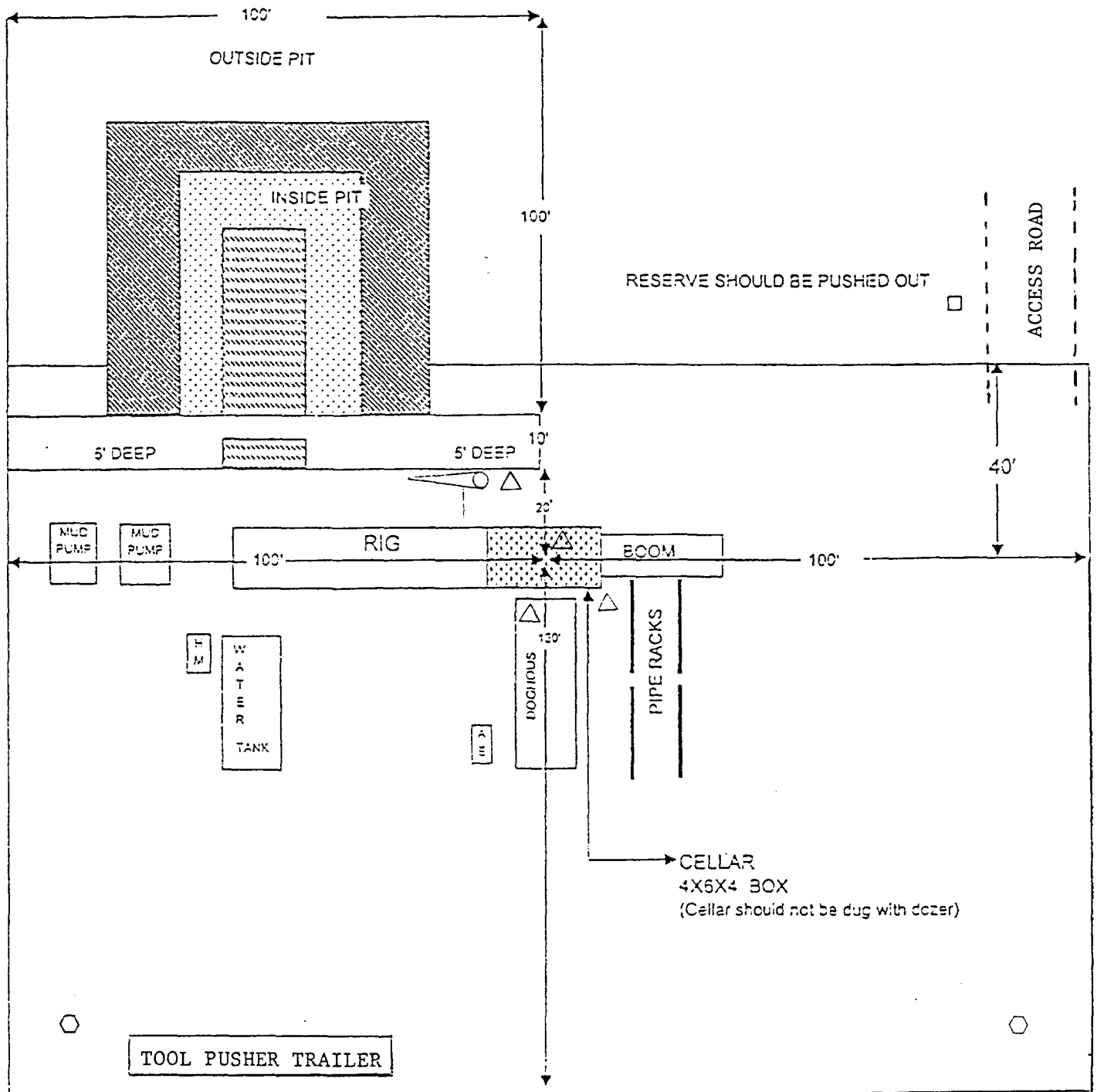
1. Location: 660' FSL & 660' FEL SECTION 4 T24S-R31E EDDY CO. NM
2. Elevation above Sea Level: 3430' GR.
3. Geologic name of surface formation: Quaternary Aeolian Deposits.
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium for solids 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'	4½"	11.6#	8-R	LT&C	J-55 N-80

Capital Drilling, Inc.
LOCATION SPECIFICATIONS AND RIG LAYOUT
FOR EARTH PITS



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

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

Location Specs

EXHIBIT "D"
RIG LAY OUT PLAT

POGO PRODUCING COMPANY
SUNDANCE FEDERAL # 31
UNIT "P" SECTION 4
T24S-R31E EDDY CO. NM

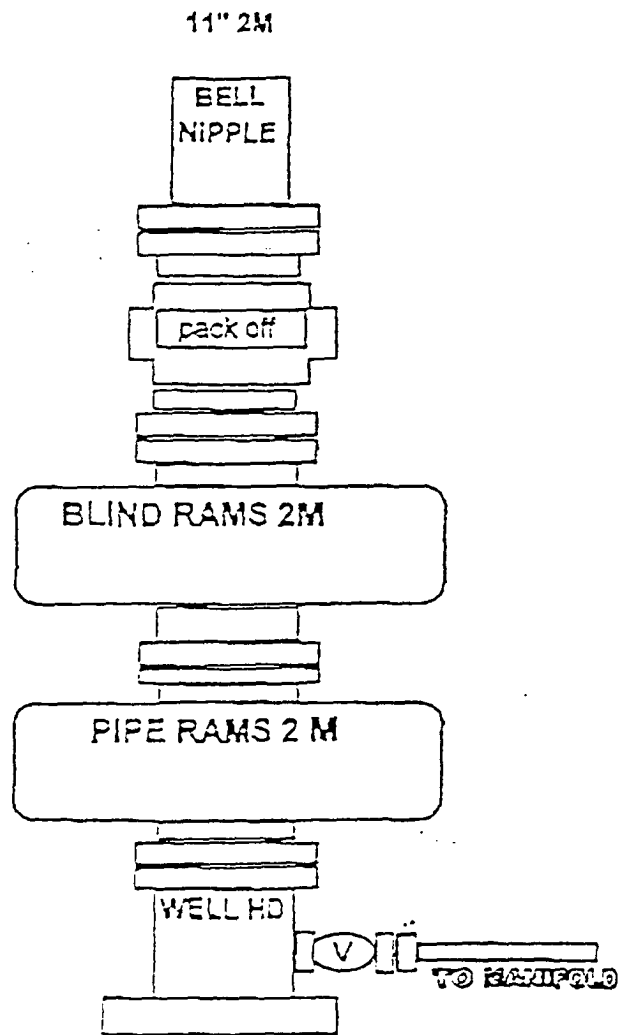


EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

POGO PRODUCING COMPANY
SUNDANCE FEDERAL # 31
UNIT "P" SECTION 4
T24S-R31E EDDY CO. NM

3000 PSI WP

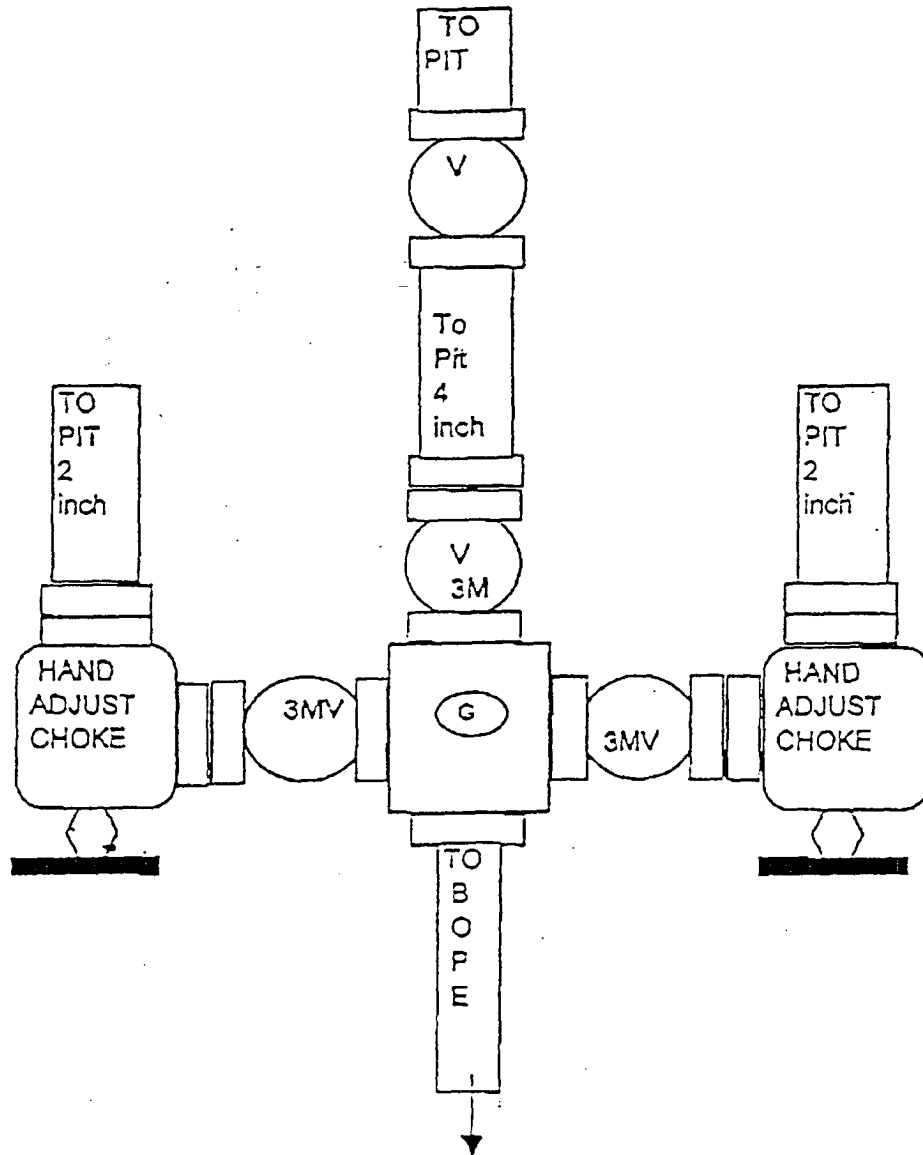


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

POGO PRODUCING COMPANY
SUNDANCE FEDERAL # 31
UNIT "P" SECTION 4
T24S-R31E EDDY CO. NM

APPLICATION TO DRILL

POGO PRODUCING COMPANY
SUNDANCE FEDERAL # 31
UNIT "P" SECTION 4
T24S-R31E EDDY CO. NM

9. CEMENTING & CASING SETTING DEPTHS:

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 + 2% CaCl, + 1/2# Flocele/Sx. 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.
4 1/2"	Production	Set 8400' of 4 1/2" 11.6# casing as follows: 1400' of 4 1/2" 11.6# N-80 LT&C, 6000' of 4 1/2" 11.6# J-55 LT&C, 1000' of 4 1/2" 11.6# N-80 LT&C. Cement in 3 stages, DV Tools at 6200'±, & 3800'±. Cement 1st stage with 550 Sx. of Class "C" + additives, Cement 2nd stage with 750 Sx. of Class "C" cement + additives, Cement 3rd stage with 500 Sx. of Class "C" Light circulate to surface.

10. PRESSURE CONTROL EQUIPMENT:

Exhibit "E" shows a 2000 PSI working pressure B.O.P. consisting of a stripper head instead of an annular preventor, blind rams, and pipe rams. This B.O.P. stack is being used because of substructure height limitations of the drilling rig being used to drill this well. Pressures encountered while drilling are not expected to exceed 1700 PSI at total depth, Pogo requests permission to 3rd party test of the B.O.P. after setting the intermediate casing at 4250'. The B.O.P. will be tested according to API specifications. Exhibit "E-1" shows a manually operated choke manifold as no remote B.O.P. equipment will be necessary.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD
40-650'	8.4-8.7	29-32	NC	Fresh water spud mud use paper to control seepage
650-4250'	10.0-10.2	29-38	NC	Brine water use paper to control seepage and high viscosity sweeps to clean hole.
4250-8400'	8.4-8.7	29-40	NC*	Fresh water mud use high viscosity sweeps to clean hole.

* Water loss may be required in order to run open hole logs, DST's and casing, if required go to a Polymer mud system.

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
SUNDANCE FEDERAL # 31
UNIT "P" 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 H²S in this area. If H²S 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 H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of bloopie 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, H₂S 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 H₂S has on tubular goods and other mechanical equipment.
9. If H₂S 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 H₂S scavengers if necessary.

SURFACE USE PLAN

POGO PRODUCING COMPANY
SUNDANCE FEDERAL # 31
UNIT "P" SECTION 4
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 "C" & "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 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 pits will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

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

SURFACE USE PLAN

POGO PRODUCING COMPANY
SUNDANCE FEDERAL # 31
UNIT "P" SECTION 4
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 # 31
UNIT "P" SECTION 4
T24S-R31E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of West-sloping plains with low rises with scattered small playas, Coppice dunes with low shallow blowouts. Loose sands and fine gravel. Vegetation consists of scattered Mesquite, Sandsage, Yucca, Shinnery oak, mixed native grasses, and Snakeweed.
- 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. OPERATION'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 conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false report.

NAME : Joe T. Janica

DATE : 08/15/04

TITLE : Agent