

RESUBMITTAL
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE*
(Other instructions on
reverse side)

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK <div style="display: flex; justify-content: space-around;">DRILL <input checked="" type="checkbox"/>DEEPEN <input type="checkbox"/></div> b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> 2. NAME OF OPERATOR Pogo Producing Company 3. ADDRESS AND TELEPHONE NO. P. O. Box 10340, Midland, TX 7902-7340 (915)685-8100 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 330' FSL & 330' FWL, Section 18 At proposed prod. zone Same 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 29 miles west of Eunice, New Mexico 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 330' (Also to nearest drig. unit line, if any) 16. NO. OF ACRES IN LEASE 343.55 17. NO. OF ACRES ASSIGNED TO THIS WELL 44.64 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 990' 19. PROPOSED DEPTH 10,100 20. ROTARY OR CABLE TOOLS Rotary 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3599' GR 22. APPROX. DATE WORK WILL START* When approved		5. LEASE DESIGNATION AND SERIAL NO. NM-90587 6. IF INDIAN, ALLOTTEE OR TRIBE NAME 7. UNIT AGREEMENT NAME 8. FARM OR LEASE NAME, WELL NO. Livingston Ridge 18 Fed # 9. API WELL NO. 30-025-36012 10. FIELD AND POOL, OR WILDCAT Wildcat 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 18, T22S, R32E 12. COUNTY OR PARISH Lea County 13. STATE NM
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23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	54.5	800	Sufficient to circulate
11	8-5/8	32	4500	Sufficient to circulate
7-7/8	5-1/2	17	10,100	To tie back 200' into 8-5/8"

After setting production casing, pay zone will be perforated and stimulated as necessary.

See attached for: Supplemental drilling data
BOP Sketch
Surface use and operations plan
Hydrogen sulfide drilling operations plan

OPER. OGRID NO. 17891
PROPERTY NO. 13271
POOL CODE ✓
EFF. DATE 10-7-02
API NO. 30-025-36012

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

IN ABOVE SPACE DESCRIBE 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 Cathy Timberli TITLE Sr. Operation Tech DATE 08/21/02
(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:

FOR

APPROVED BY /s/ Mary J. Rugwell TITLE FIELD MANAGER DATE SEP 26 2002

*See Instructions On Reverse Side

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.

APPROVAL FOR 1 YEAR

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Instruction on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <i>30-025-36012</i>	Pool Code <i>L</i>	Pool Name <i>WILDCAT, Bode Spring</i>
Property Code <i>13271</i>	Property Name LIVINGSTON RIDGE 18 FEDERAL	Well Number 4
OGRID No. 17891	Operator Name POGO PRODUCING CO.	Elevation 3599'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	18	22 S	32 E		330	SOUTH	330	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 44.64	Joint or Infill N	Consolidation Code	Order No.
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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

1465.2' Lot 1 44.44 AC.				<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Richard L. Wright</i> Signature</p> <p>Richard L. Wright Printed Name</p> <p>Division Operations Mgr. Title</p> <p>August 15, 1994 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p><i>GARY L. JONES</i> Signature & Seal of Professional Surveyor</p> <p>DATE SURVEYED JULY 22, 1994</p> <p>W.O. Num. 94-1-1311</p> <p>Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3239 GARY L. JONES, 7877</p>
Lot 2 44.50 AC.				
Lot 3 44.58 AC.				
1471.4' Lot 4 44.64 AC.				
3595.9' 3607.5' 330.0' 330.0' 3595.1' 3601.6'				

SUPPLEMENTAL DRILLING DATA
POGO PRODUCING COMPANY
LIVINGSTON RIDGE 18 FEDERAL WELL NO. 4

1. SURFACE FORMATION: Quaternary.
2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Anhydrite	800'
Delaware	4650'
Cherry Canyon	5600'
Brushy Canyon	7300'
Bone Springs	8600'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Delaware	Oil
Bone Springs	Oil

4. PROPOSED CASING AND CEMENTING PROGRAM:

CASING SIZE	SETTING DEPTH		WEIGHT	GRADE	JOINT
	FROM	TO			
13-3/8"	0	800'	54.5#	J-55	STC
8-5/8"	0	4300'	32#	J-55	STC
"	4300'	4500'	32#	S-80	STC
5-1/2"	0	1000'	17#	N-80	LTC
"	1000'	7000'	17#	J-55	LTC
"	7000'	10,100'	17#	N-80	LTC

MINIMUM

DESIGN FACTORS: COLLAPSE 1.125 BURST 1.1 TENSION 1.7

13-3/8" casing to be cemented with 500 sacks of light cement tailed in with 200 sacks of Class "C" with 2% CaCl. Cement to circulate.

8-5/8" casing to be cemented with 1200 sacks of light cement with 10% salt tailed in with 200 sacks of premium cement with 1% CaCl. Cement to circulate.

5-1/2" production casing is to be cemented with approximately 700 sacks

of light cement followed by 400 sacks of premium cement. Cement to tie back 200' into the 8-5/8" casing.

If, during drilling operations, need for stage cementing of casing is indicated, staging tool(s) will be run and positioned to best suit hole conditions at time casing is run.

Cement volumes may be adjusted and cement may have lost circulation and/or other additives depending on hole conditions at the time casing is run.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling the 11" hole, will be either a 3000 psi working pressure double ram type preventer or a 3000 psi working pressure annular type preventer.

Blow out prevention equipment, while drilling below the 8-5/8" casing seat, will be a 3000 psi working pressure BOP stack. A BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 800 feet: Fresh water spud mud. Viscosity 30 to 36 as required for hole cleaning.

800 feet to 4500 feet: Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10. pH 9 to 10. Viscosity 32 to 36.

4500 feet to T.D.: Water base drilling fluid conditioned as necessary for control of weight, viscosity, pH and water-loss. ~~Weight 9 to 10.~~ Viscosity 38-45. pH 9 to 10. Filtrate while drilling pay zone 6 to 15.

→ 8.5 ppg per telecon w/ R. Wright.

SSS

7. AUXILIARY EQUIPMENT:

A mud logging trailer will be in use while drilling below the intermediate casing.

8. TESTING, LOGGING, AND CORING PROGRAM:

Drill stem tests will be made when well data indicate a test is warranted.

It is planned that electric logs will include GR-CNL-Density logs and GR-DLL logs.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

No abnormal pressures or temperatures are expected.

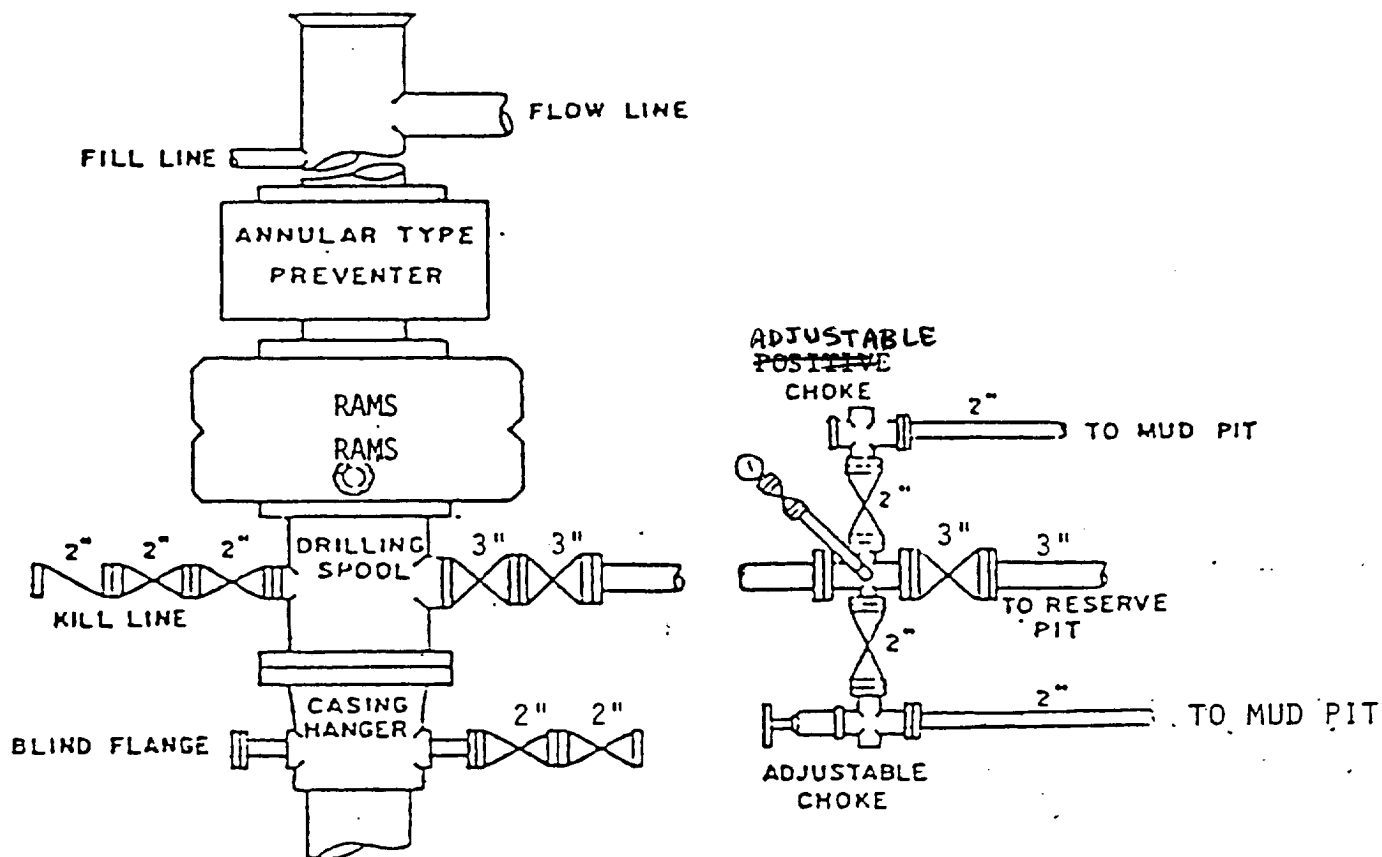
Expected bottom hole pressure is about 4100 psi.

Expected bottom hole temperature is about 135 degrees Fahr.

No hydrogen sulfide gas is expected. The production stream of Pogo Producing Company's wells in this area have been tested specifically for hydrogen sulfide gas and test results were negative. However, since it is possible that low-volume hydrogen sulfide gas may be present in permeable water zones of the Castile formation, drilling operations below the surface casing will be in accordance with the attached "HYDROGEN SULFIDE DRILLING OPERATIONS PLAN" until intermediate casing is set and cemented and this possible source of hydrogen sulfide gas is cased off.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 30 days.



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

APPLICABILITY:

The provisions of this plan are effective when drilling operations are conducted in areas where zones may be penetrated that are known to contain, or may be reasonably expected to contain, hydrogen sulfide gas in concentrations of 100 parts per million or more.

TRAINING REQUIREMENTS:

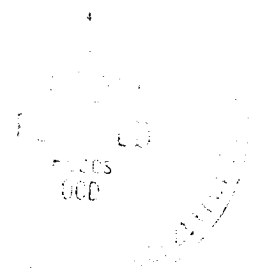
A. When conducting drilling operations in an area where hydrogen sulfide gas might be encountered, all personnel at the well site will have had proper training in the following areas:

1. The hazards and characteristics of hydrogen sulfide gas (H₂S).
2. Toxicity of hydrogen sulfide and sulfur dioxide.
3. Hydrogen sulfide gas detectors, warning systems, evacuation procedures, and proper use and maintenance of personal protective equipment.
4. Proper rescue procedures, first aid, and artificial respiration.

B. In addition, supervisory personnel will be trained in the following areas:

1. The effects of hydrogen sulfide on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention and well control procedures.
3. The contents and requirements of the Hydrogen Sulfide Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable hydrogen sulfide zone (within 3 days or 500 feet) and weekly hydrogen sulfide and well control drills for all personnel in each crew. The initial training session will include a review of the site specific Hydrogen Sulfide Drilling Operations Plan and the Public Protection Plan. This plan will be available at the well site. All personnel will be required to carry documentation that they have received the proper training.



WELL SITE DIAGRAM:

A. Attached is a detailed well site diagram showing:

- Drilling rig orientation
- Prevailing wind direction (Southwest)
- Location of briefing areas
- Location of Caution/Danger Signs
- Location of hydrogen sulfide monitors
- Location of wind direction Indicators

HYDROGEN SULFIDE SAFETY EQUIPMENT:

- A. All safety equipment and systems will be installed, tested, and deemed operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone reasonably expected to contain hydrogen sulfide.
- B. During drilling operations, a flare line will be routed from the BOP manifold to the reserve pit. Should suspected sour gas be vented through the flare line, a flare pistol will be used to ignite the flare.
- C. Protective equipment for essential personnel will be installed and maintained as follows:
1. 30-minute air packs will be maintained on the rig floor and near the briefing area.
 2. 30-minute work units will be maintained at the H2S trailer and/or on the rig floor.
 3. 30-minute escape units will be maintained on the rig floor.
 4. 300 cu.ft. air cylinders will be maintained in the H2S trailer.
 5. Associated breathing air equipment will also be installed and maintained.
 6. Hydrogen sulfide monitor will be located in the dog house on the rig floor with sensors placed on the rig floor, at the bell nipple, the shale shaker, and in the pit area.
 7. An audible /visual alarm will be located near the dog house on the rig floor.

VISUAL WARNING SYSTEMS:

- A. High visibility Caution/Danger signs will be posted on roads providing direct access to the well location.
- B. Green, yellow, and red condition flags to be displayed to denote Normal Conditions, Potential Danger, and Danger, H2S Present.
- C. Wind socks to be located at the protection center and in the pit area to continuously indicate wind direction.

CIRCULATING MEDIUM:

- A. Drilling fluid to be conditioned to minimize the volume of H2S circulated to the surface,

SPECIAL WELL CONTROL EQUIPMENT:

- A. In addition to the normal BOP stack and choke manifold, a drilling head will be used to help control an H2S contaminated drilling fluid.

WELL TESTING:

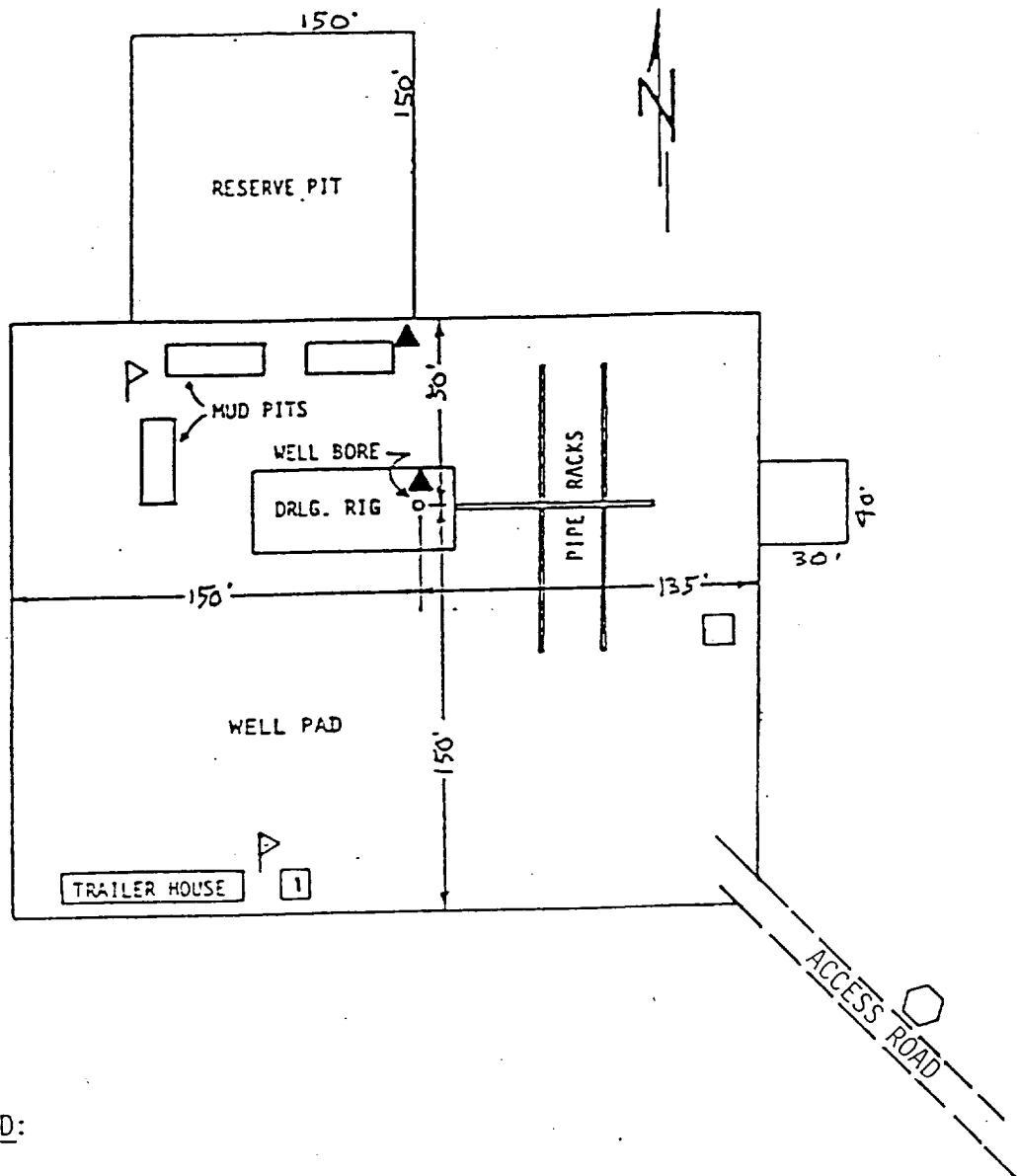
- A. Drill stem testing of zones known, or reasonably expected, to contain hydrogen sulfide in concentrations of 100 ppm or more will use the closed chamber method of testing.

COMMUNICATION:

- A. Radio communication will be available at the drilling rig and also in company vehicles.

ADDITIONAL INFORMATION:

- A. Additional information concerning Emergency Reaction Steps, Ignition Procedures, Training Requirements, and Emergency Equipment Requirements will be available on location at the well site.



SURFACE USE AND OPERATIONS PLAN

FOR

POGO PRODUCING COMPANY
LIVINGSTON RIDGE 18 FEDERAL WELL NO. 4
330'FSL & 330'FWL SEC.18, T.22 S., R.32 E.
LEA COUNTY, NEW MEXICO

LOCATED: 31 miles east of Carlsbad, New Mexico.

FEDERAL LEASE NUMBER: NM-90587.

ACRES IN LEASE: 343.55.

SURFACE OWNERSHIP: Federal.

GRAZING PERMITTEE: J. C. Mills
P. O. Box 190
Abernathy, Texas 79311

POOL: Wildcat.

POOL RULES: Statewide Rules. 40 acre spacing for oil.

- A. Road Map
- B. Plat Showing Existing Wells and Existing Roads
- C. Drilling Rig Layout
- D. Topo Plat

1. EXISTING ROADS:

A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The proposed well site can be reached by, either going south off US 62-180, or by going north off State 128. Point "A" on the plat is on 62-180 at Milepost 66.8, approximately 38 miles west of Hobbs, New Mexico, where Lea County road C-29 goes south. Also see Exhibits "B" and "D". To go to the proposed well site from this point, exit 62-180 to the south on the paved road and go 14 miles to where Eddy 797 (Mills Ranch road) goes southwest and a caliche road goes northeast. Turn northeast and go northeasterly 2.2 miles, passing Red Tank at about 2.0 miles, to where there is a road stake on the north side of the road. The proposed well site is approximately 1800 feet north and 1300 feet west of this point.

B. Exhibit "B" shows existing pertinent roads in the vicinity of the proposed well site. Existing roads are color coded.

2. PLANNED ACCESS ROAD:

A. Length and Width: The new road will be 12 feet wide and about 2300 feet long, and is shown labeled and color coded red on Exhibit "B". The centerline of the proposed new road is staked and flagged.

B. Surfacing Material: Caliche. Watered, compacted, and graded.

C. Maximum Grade: Approximately two percent.

D. Road Turnouts: Probably one.

E. Drainage Design: The new road will be crowned with drainage to the side.

F. Culverts: Not needed.

G. Cuts and Fills: Not necessary.

H. Gates and Cattle Guards: Not needed. No fences involved.

3. LOCATION OF EXISTING WELLS:

A. Existing wells in the immediate area are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Necessary production facilities for this well will be located on the well pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is not planned that a water well will be drilled. Water necessary for drilling operations will be purchased and trucked to the well site, or will be moved to the well site by temporary pipeline laid on the ground alongside existing and proposed roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche needed for construction work will be taken, if present, from a pit opened on-site within the archaeologically cleared work area. Otherwise, caliche will be taken from an existing pit on Federal land in the W $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 12, T.22 S., R.31 E., Eddy County, New Mexico, and will be trucked to the well site over existing and proposed roads.

7. METHODS OF HANDLING WASTE MATERIAL:

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

C. Water produced during tests will be disposed of in the drilling pits or will be stored in tanks for disposal in an approved disposal system.

D. Oil produced during tests will be stored in test tanks until sold.

E. All trash, junk, and other waste material will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill.

8. ANCILLARY FACILITIES:

A. None necessary.

9. WELL SITE LAYOUT:

A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, and reserve pits, and the location of major drilling rig components.

B. Clearing and levelling of the pad and pit area will be required.

C. The pad and pit area is staked and flagged.

10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed from the well site. Pits will be filled and the location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids will be fenced.

C. After abandonment, all equipment, trash, and junk will be removed and the well site will be cleaned. Any special rehabilitation requirements of the surface management agency will be complied with and accomplished as rapidly as possible.

11. OTHER INFORMATION:

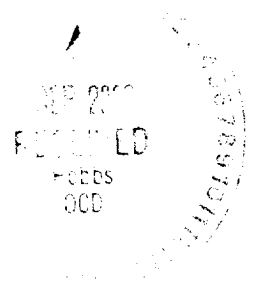
A. Topography: The land surface in the general area is gently undulating and dunny. In the immediate area of the well site, the land surface slopes gently to the west. Regionally, drainage is to the west and southwest.

B. Soil: Top soil at the well site is sand.

C. Flora and Fauna: The vegetative cover is moderate and includes mesquite, shinnery oak, sand sage, yucca, weeds, and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.

D. Ponds and Streams: There are no rivers, lakes, ponds, or streams in the area.

E. Residences and Other Structures: There are no occupied dwellings or other structures within a mile of the proposed well site.



F. Archaeological, Historical, and Cultural Sites: None observed in the area. However, an archaeological reconnaissance is to be accomplished and a report furnished.

G. Land Use: Grazing and wildlife habitat.

H. Surface Ownership: Federal.

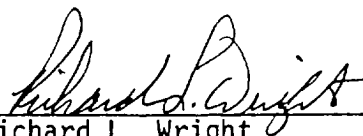
12. OPERATOR'S REPRESENTATIVE:

Richard L. Wright
Division Operations Manager
Pogo Producing Company
P. O. Box 10340
Midland, Texas 79702
Office Phone: 915-682-6822

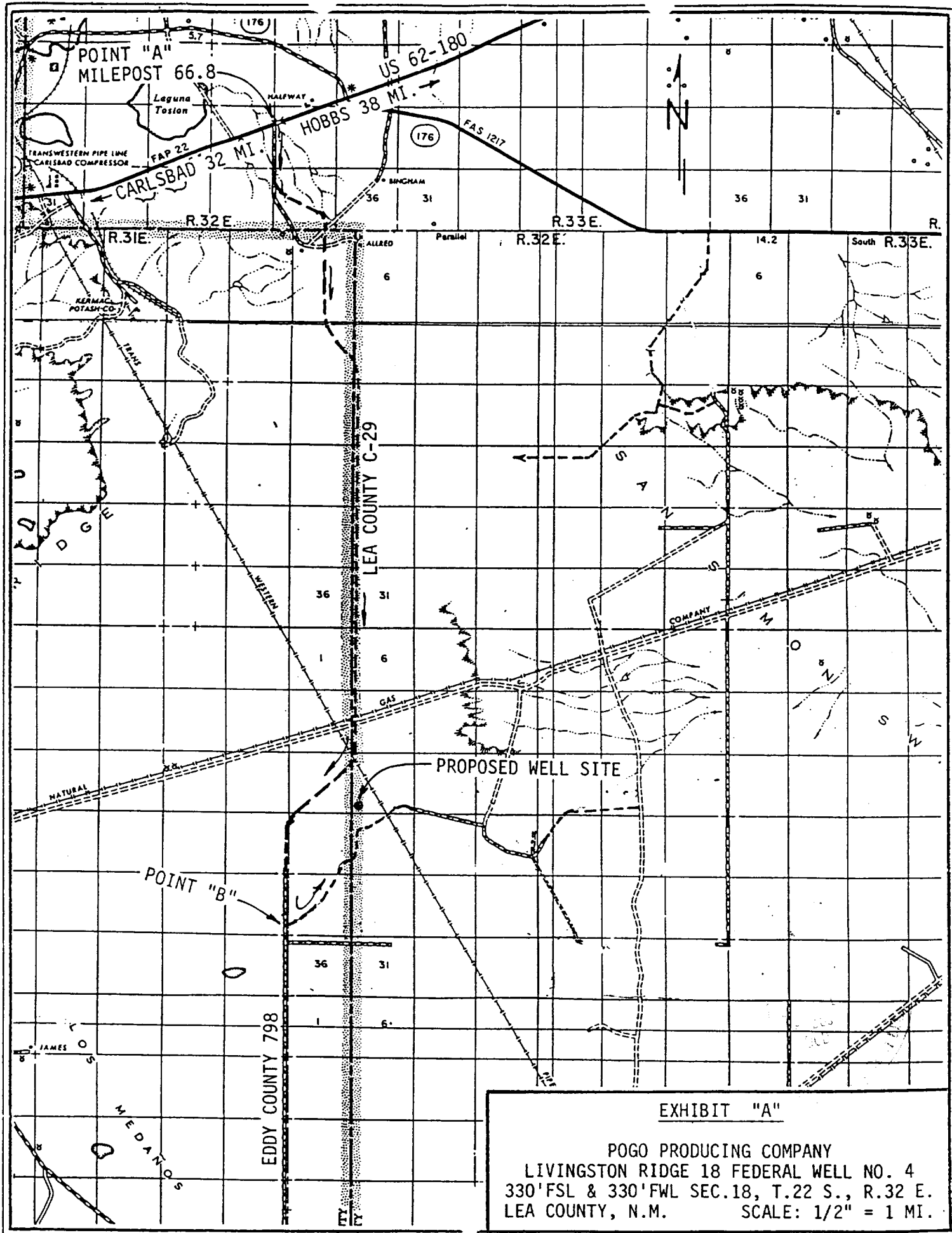
13. CERTIFICATION:

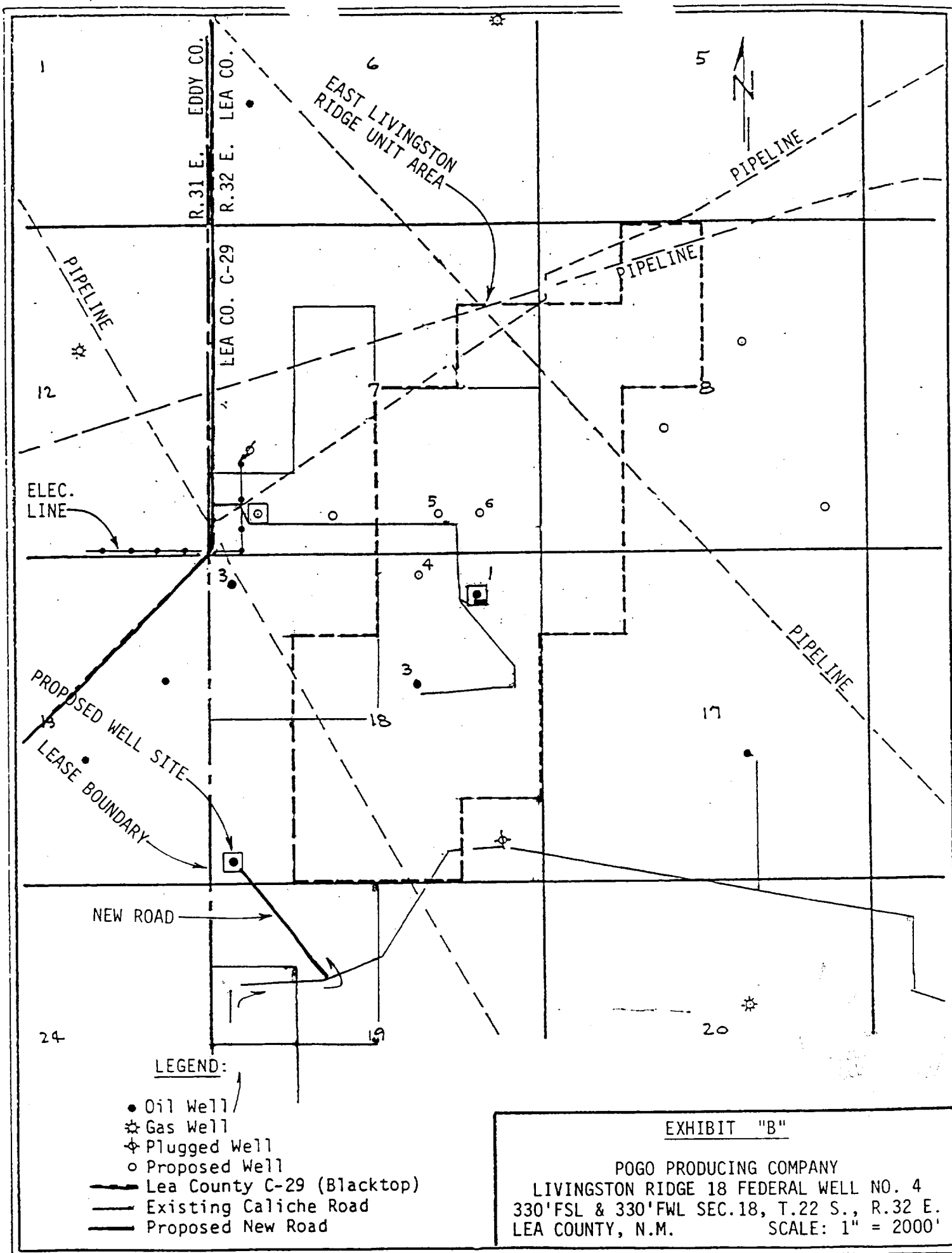
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Pogo Producing Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

August 3, 1994
Date:



Richard L. Wright
Division Operations Manager





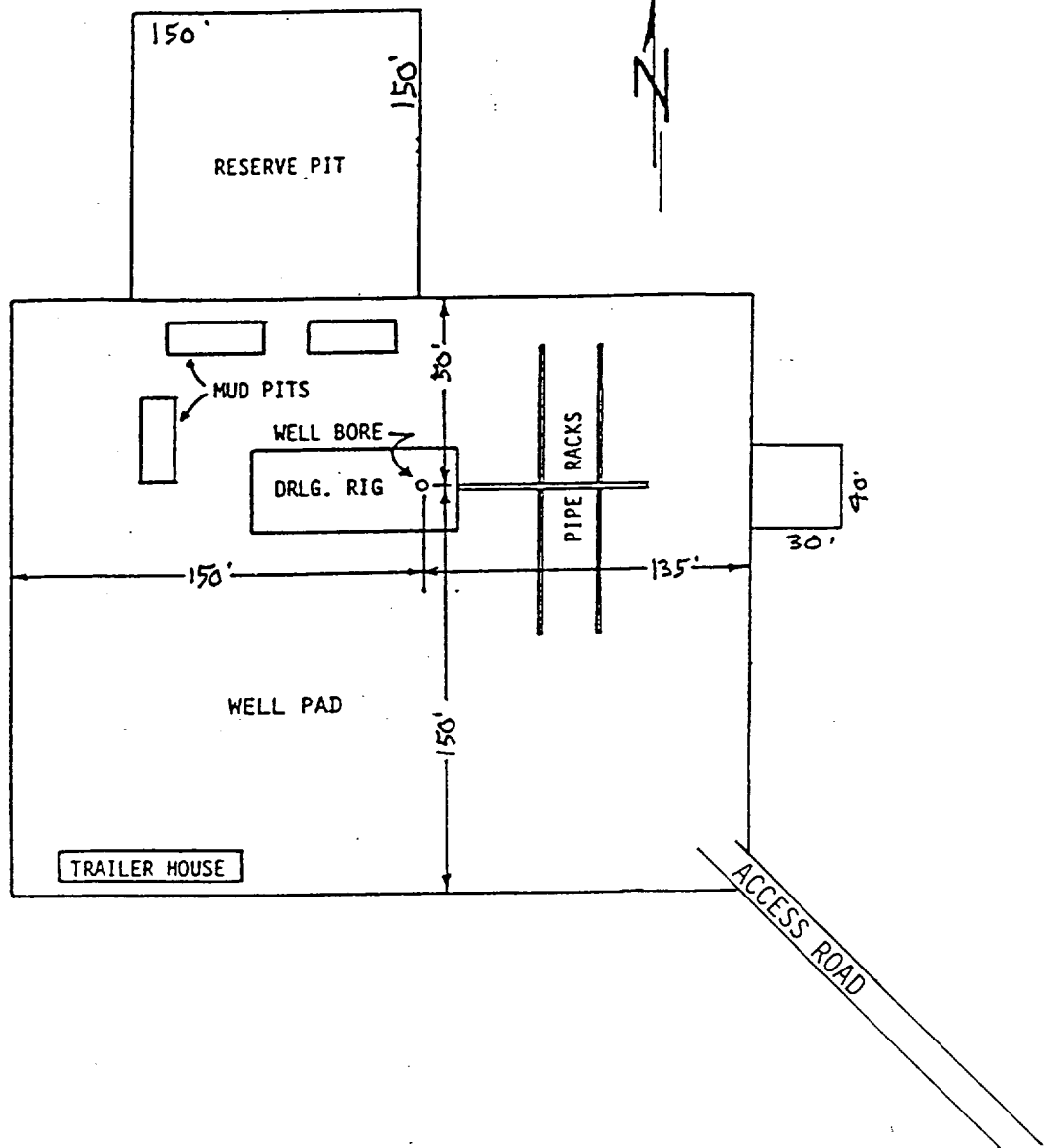
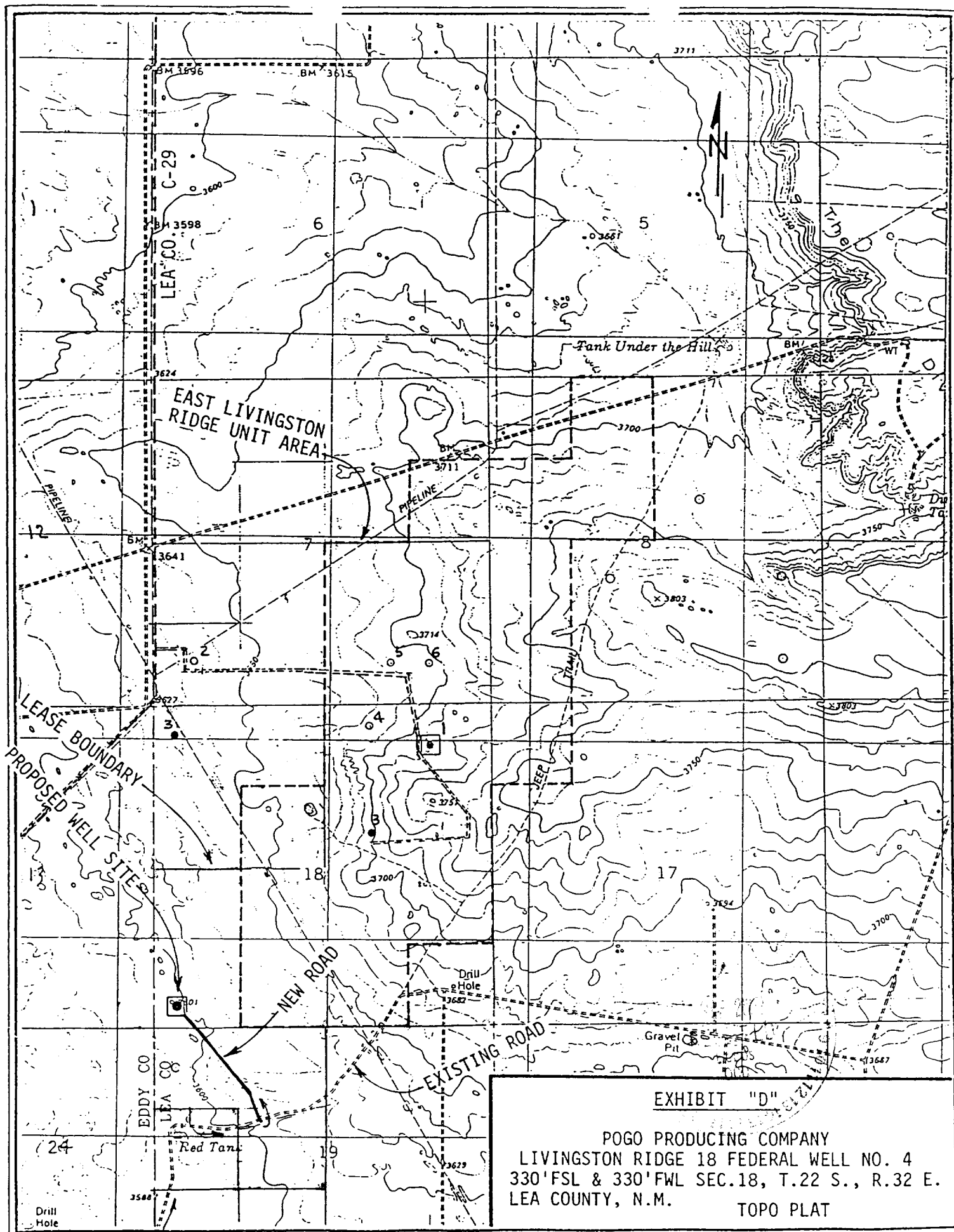


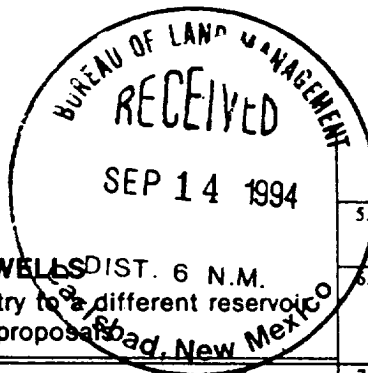
EXHIBIT "C"

POGO PRODUCING COMPANY
LIVINGSTON RIDGE 18 FEDERAL WELL NO. 4

DRILLING RIG LAYOUT
SCALE: None



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT



FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
POGO PRODUCING COMPANY

3. Address and Telephone No.
P.O. BOX 10340, MIDLAND, TEXAS 79702 (915-682-6822)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
330' FROM SOUTH LINE AND 330' FROM WEST LINE
OF SECTION 18, T.22 S., R.32 E., NMPM

5. Lease Designation and Serial No.

NM-90587

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No. LIVINGSTON
RIDGE 18 FED. WELL #4

9. API Well No.

30-025-36012

10. Field and Pool, or Exploratory Area

WILDCAT

11. County or Parish, State

LEA COUNTY, NEW MEXICO

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other TO CHANGE PLANNED
ACCESS ROAD ROUTE
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

THIS IS TO AMEND OUR APPLICATION FOR PERMIT TO DRILL THIS PROPOSED WELL, DATED 8-15-94, TO CHANGE THE PLANNED ACCESS ROAD TO AVOID AN ARCHAEOLOGICAL SITE.

THE ACCESS ROUTE INITIALLY PROPOSED AND THE LOCATION OF THE ARCHAEOLOGICAL SITE ARE SHOWN ON THE ENCLOSED REVISED EXHIBIT "D".

THE ACCESS ROUTE NOW PROPOSED IS SHOWN ON THE ENCLOSED REVISED EXHIBITS "B" AND "D". LENGTH OF THE PROPOSED NEW ROAD IS APPROXIMATELY 2100 FEET. A CATTLE GUARD IS TO BE INSTALLED IN THE EXISTING FENCE WHICH PARALLELS THE WEST LINE OF SECTION 18 AS INDICATED ON EXHIBIT "B".

ALSO ENCLOSED IS A REVISED PAGE 2 OF THE SURFACE USE AND OPERATIONS PLAN AND A REVISED EXHIBIT "C".

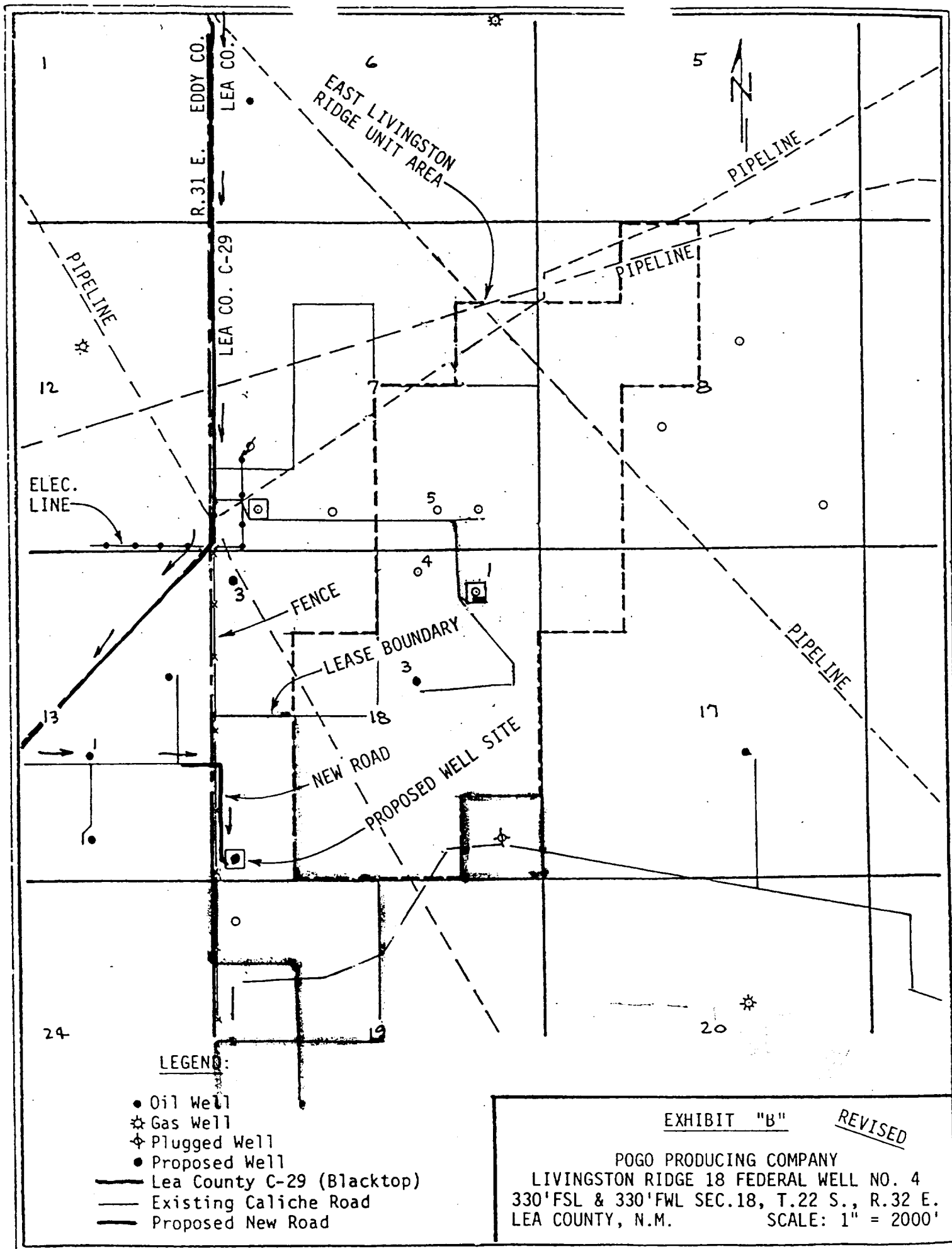
14. I hereby certify that the foregoing is true and correct

Signed Richard L. Wright Title Division Operations Mgr. Date September 12, 1994

(This space for Federal or State office use)

Approved by Scott Power Title Acting AREA MANAGER Date 9/27/94

Conditions of approval, if any:



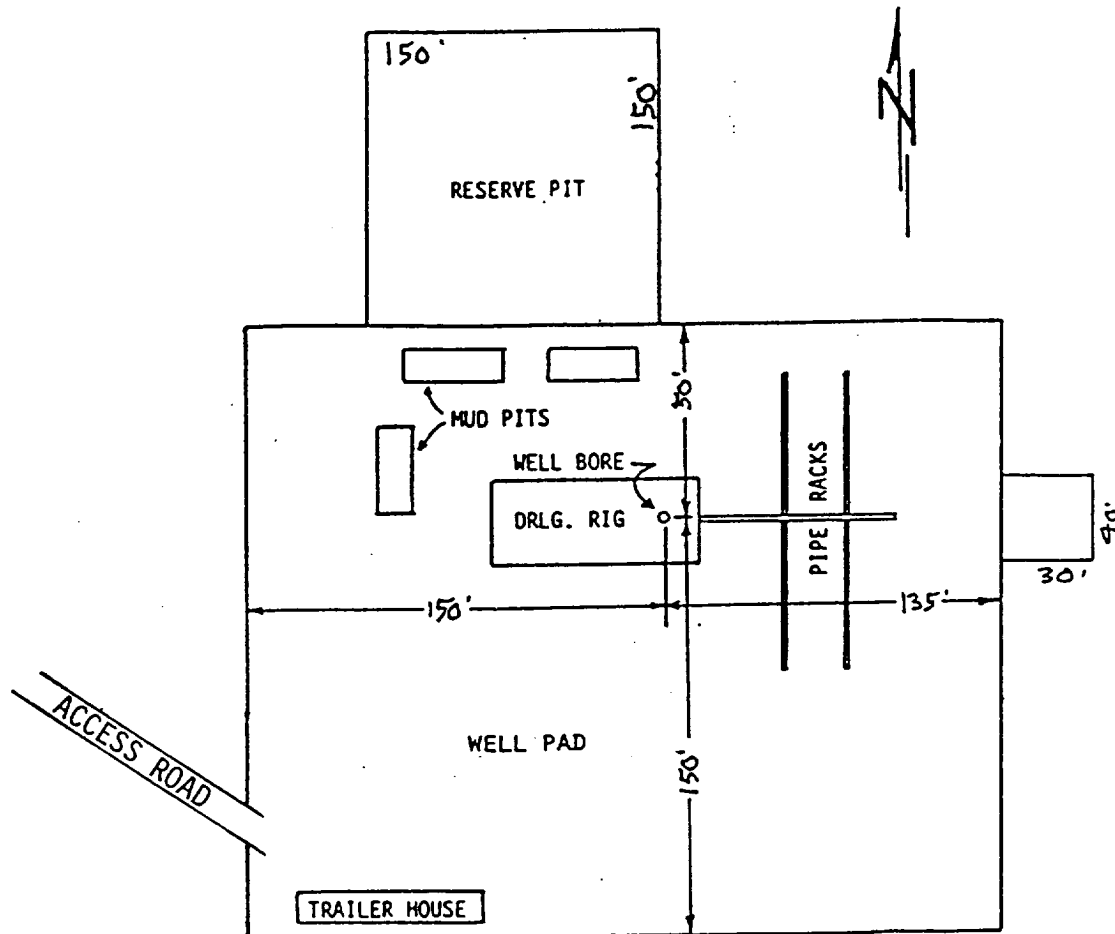


EXHIBIT "C"

POGO PRODUCING COMPANY
LIVINGSTON RIDGE 18 FEDERAL WELL NO. 4

DRILLING RIG LAYOUT
SCALE: None

1. EXISTING ROADS:

A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The proposed well site can be reached by, either going south off US 62-180, or by going north off State 128. Point "A" on the plat is on 62-180 at Milepost 66.8, approximately 38 miles west of Hobbs, New Mexico, where Lea County road C-29 goes south. Also see Exhibits "B" and "D". To go to the proposed well site from this point, exit 62-180 to the south on the paved road and go 11.7 miles, passing Transwestern's compressor and pig station at about 10.8 miles, to a point where a caliche road goes east. Turn east and go 0.25 mile to arrive at Pogo Producing Company's Neff 13 Federal well No. 1. The proposed well site is 2310 feet east and 1650 feet south of this well.

B. Exhibit "B" shows existing pertinent roads in the vicinity of the proposed well site. Existing pertinent roads are color coded.

2. PLANNED ACCESS ROAD:

A. Length and Width: The new road will be 12 feet wide and about 2100 feet long, and is shown labeled and color coded red on Exhibit "B". The centerline of the proposed new road is staked and flagged.

B. Surfacing Material: Caliche. Watered, compacted, and graded.

C. Maximum Grade: Approximately two percent.

D. Road Turnouts: Probably two.

E. Drainage Design: The new road will be crowned with drainage to the side.

F. Culverts: Not needed.

G. Cuts and Fills: Not necessary.

H. Gates and Cattle Guards: A cattle guard is to be installed in the existing fence which parallels the the west line of Section 18 as indicated on Exhibit "B".

3. LOCATION OF EXISTING WELLS:

A. Existing wells in the immediate area are shown on Exhibit "B".