SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANT

CAL-MON WELL NO. 6

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	750'
Base Salt	4200'
Delaware Lime	4440'
Bell Canyon	4480'
Cherry Canyon	5300'
Brushy Canyon	6650'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Delaware	Oil

4. PROPOSED CASING AND CEMENTING PROGRAM:

13-3/8" 54.5# K-55 ST&C casing is to be set at approximately 800 feet in 17-1/2" hole. Casing to be cemented with with 500 sacks of Light cement tailed in with 200 sacks of Class "C" with 2% CaCl. Cement to circulate.

8-5/8" 24#, 28#, and 32# J-55 and S-80 ST&C casing is to be set at approximately 4300 feet in 11" hole. Casing is to be cemented with 1200 sacks of Light cement tailed in with 200 sacks of Class "C" with 1% CaCl. Cement to circulate.

5-1/2" 15.5# and 17# K-55 and N-80 LTC casing is to be set at 8500 feet in 7-7/8" hole. Casing is to be cemented with 900 sacks of Class H cement. Cement to tie-back.

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 4300 feet: Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10. pH 9 to 10. Viscosity 32 to 36.

4300 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.

7. AUXILIARY EQUIPMENT:

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

8. TESTING, LOGGING, AND CORING PROGRAMS:

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.

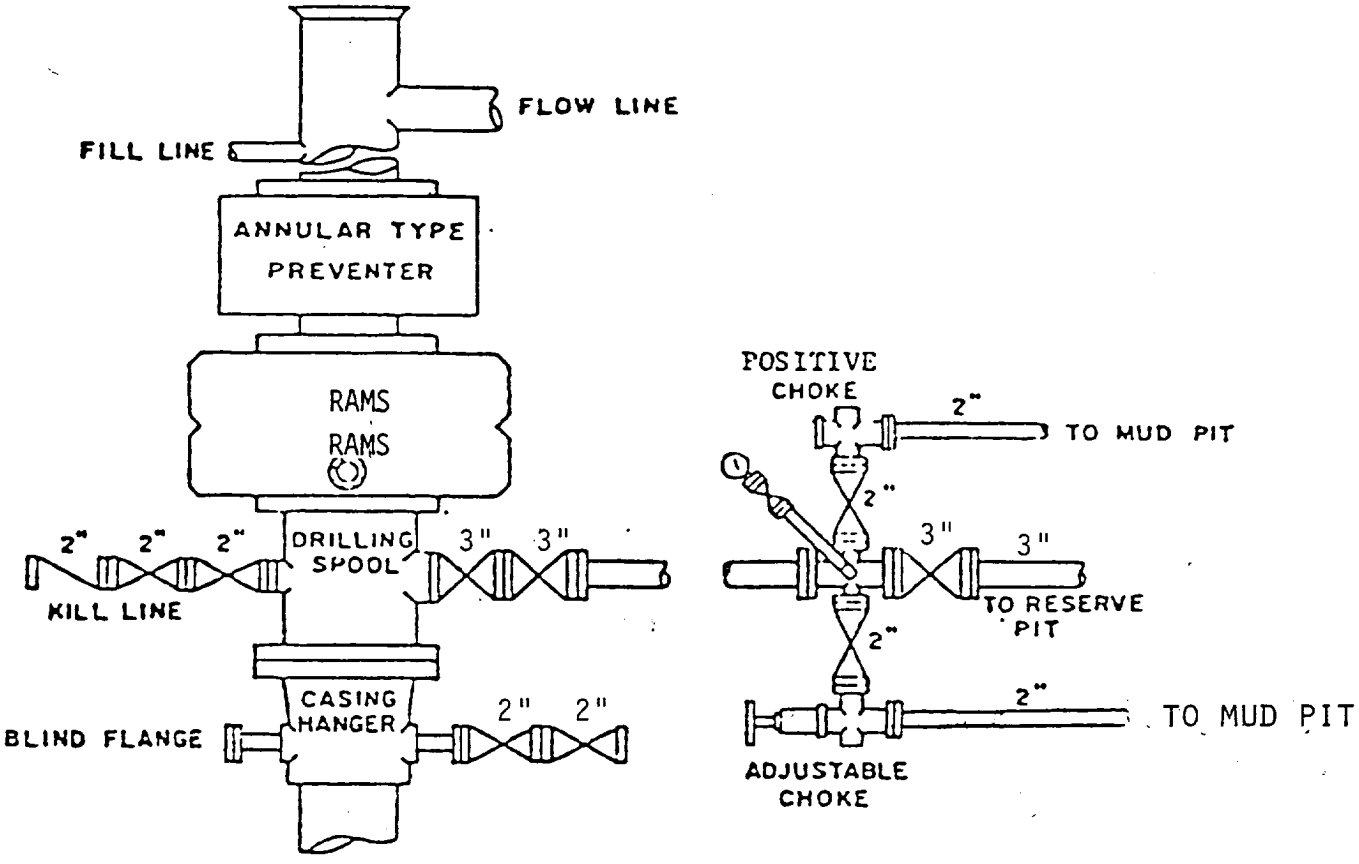
No coring is planned.

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

None anticipated.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 45 days.



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT

SURFACE USE AND OPERATIONS PLAN

FOR

POGO PRODUCING COMPANY
CAL-MON WELL NO. 6
330'FNL & 380'FWL SEC.35, T.23 S., R.31 E.
EDDY COUNTY, NEW MEXICO

LOCATED: 20 miles east of Loving, New Mexico.

FEDERAL LEASE NUMBER: NM-19199.

LEASE DATE: October 1, 1973. Lease is in producing status.

ACRES IN LEASE: 640.

LESSEE: Pogo Producing Company.

SURFACE OWNERSHIP: Federal.

GRAZING PERMITTEE: Charles F. James (505-885-3938)
1207 W. Riverside Drive
Carlsbad, New Mexico 88220

POOL: Undesignated Ingle Wells Delaware

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

EXHIBITS: 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. Point "A" on the plat is on State highway 128 at Mile Marker 16.8, approximately 20 miles east of Loving, New Mexico, where a caliche road goes north through a swing gate cattle guard. This point is near the west end of the roadside park. Also see Exhibits "B" and "D". To go to the proposed well site from this point, go northerly on the caliche road about 0.2 mile to arrive at Pogo's Cal-Mon well No. 2. Continue north and west about 0.2 mile to arrive at well No. 1, a plugged and abandoned well. The proposed well is about 1300 feet west-northwest 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 approximately 1100 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: Less than one percent.

D. Turnouts: None necessary.

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

F. Culverts: None needed.

G. Cuts and Fills: None necessary.

H. Gates and Cattle Guards: None necessary. 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. Production from this well will be delivered to the existing lease

battery located on the well pad at well No. 2. The flow line will be 3" SDR-7 polyethylene pipe laid on the ground, and will extend from the well to the tank battery as shown on Exhibit "B". The anticipated flow line pressure is estimated to be about 60 psi.

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 400'x 400' work area. Otherwise, caliche will be taken from the existing pit on Federal land in the SE¼SE¼ of Section 35, T.23 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

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

E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".

F. All trash and debris will be buried or removed from the well site within thirty days after finishing drilling and/or completion operations.

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 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 duny. In the immediate area of the well site the land surface slopes gently to the north. 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-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. There is a windmill about 2000 feet northeast of the well site.

F. Archaeological, Historical, and Cultural Sites: None observed. 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 Wright
Drilling and Production Superintendent
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.

October 23, 1991
Date:

Richard Wright
Drilling and Production Supt.

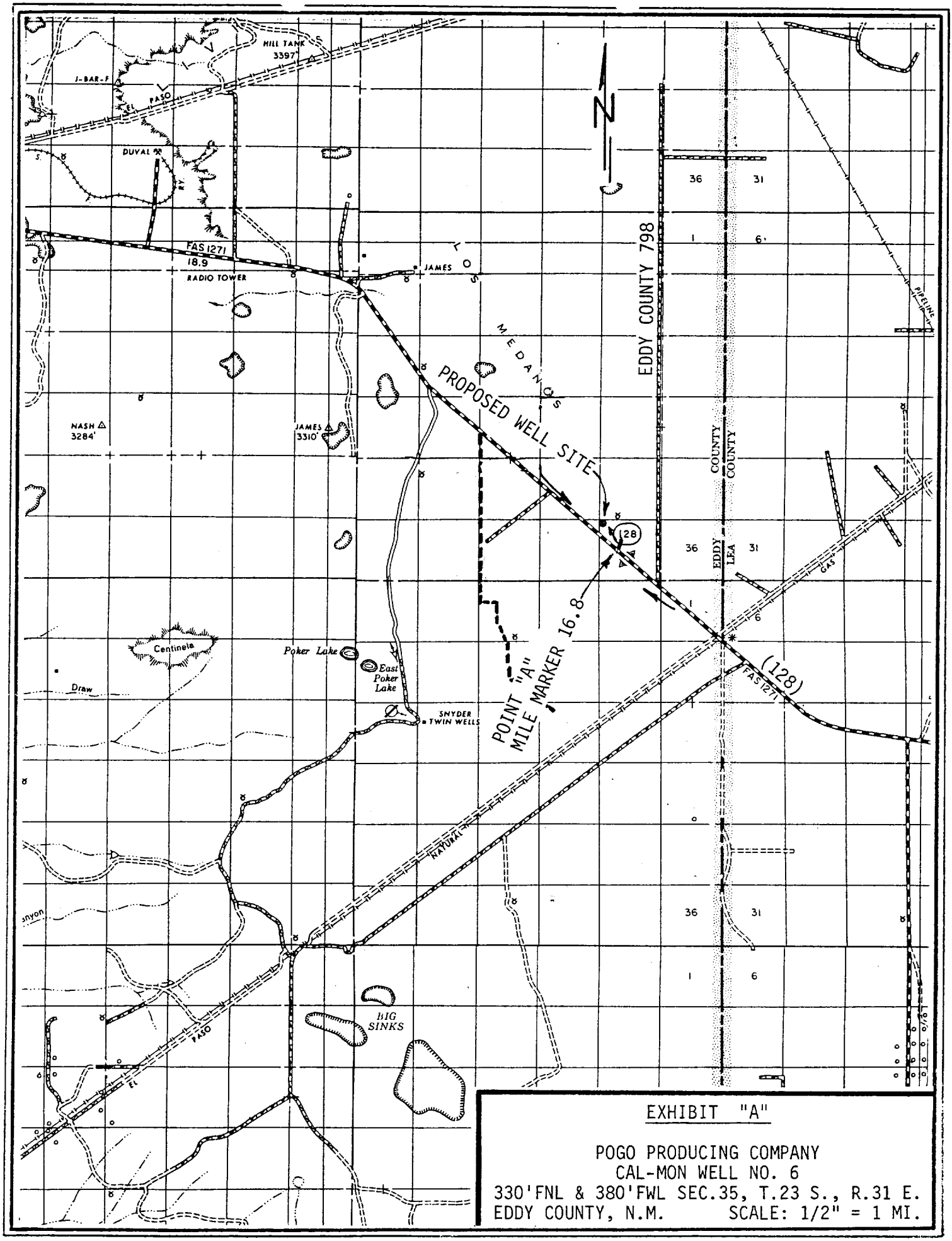
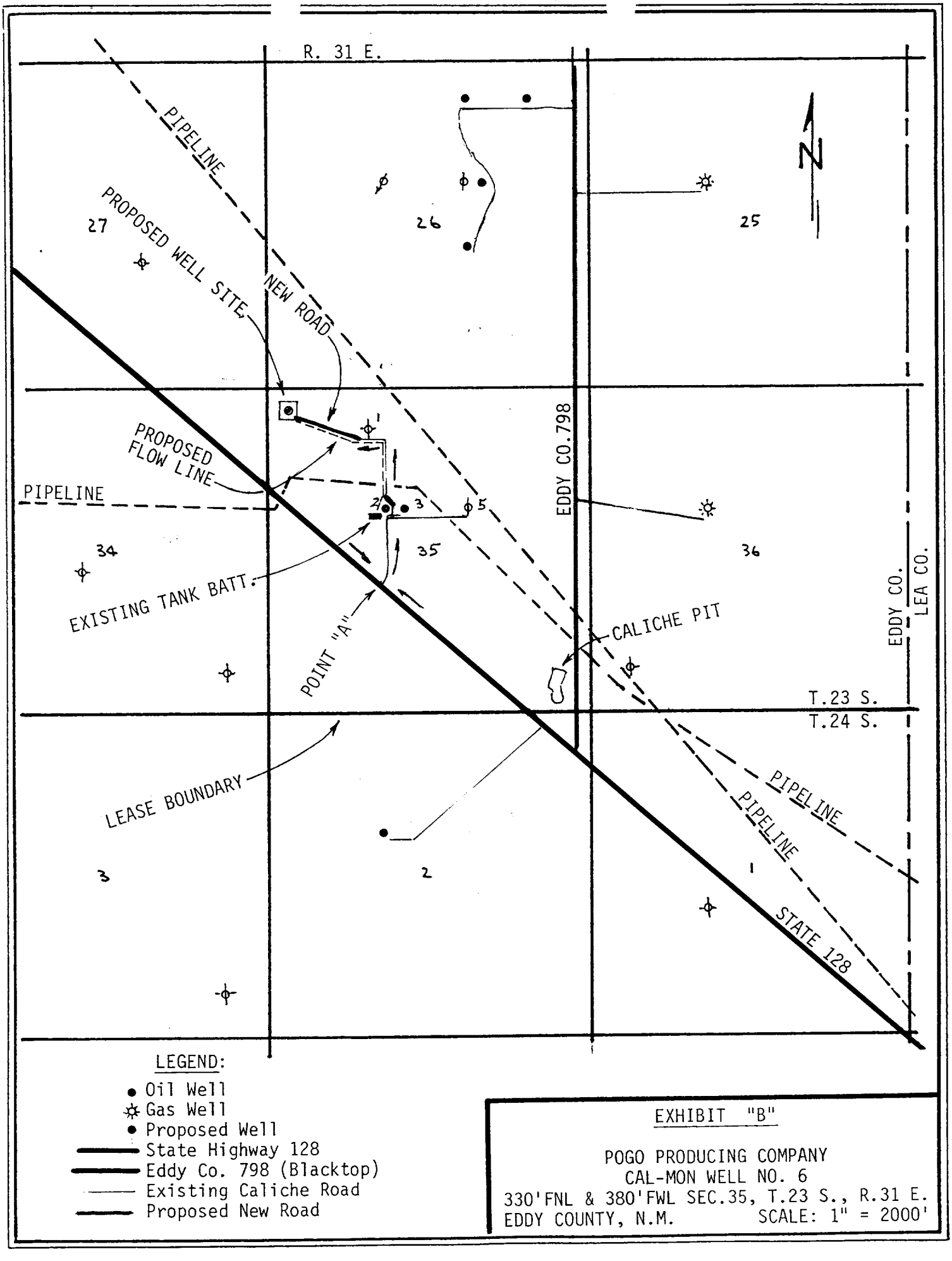


EXHIBIT "A"

POGO PRODUCING COMPANY
CAL-MON WELL NO. 6
330'FNL & 380'FWL SEC.35, T.23 S., R.31 E.
EDDY COUNTY, N.M. SCALE: 1/2" = 1 MI.


R. 31 E.
PIPELINE
PROPOSED WELL SITE
NEW ROAD
27
26
25
PROPOSED FLOW LINE
PIPELINE
EDDY CO. 798
34
35
36
EXISTING TANK BATT.
POINT "A"
CALICHE PIT
EDDY CO.
LEA CO.
T.23 S.
T.24 S.
LEASE BOUNDARY
PIPELINE
PIPELINE
3
2
1
STATE 128
LEGEND:
Oil Well
Gas Well
Proposed Well
State Highway 128
Eddy Co. 798 (Blacktop)
Existing Caliche Road
Proposed New Road
EXHIBIT "B"
POGO PRODUCING COMPANY
CAL-MON WELL NO. 6
330'FNL & 380'FWL SEC.35, T.23 S., R.31 E.
EDDY COUNTY, N.M.
SCALE: 1" = 2000'

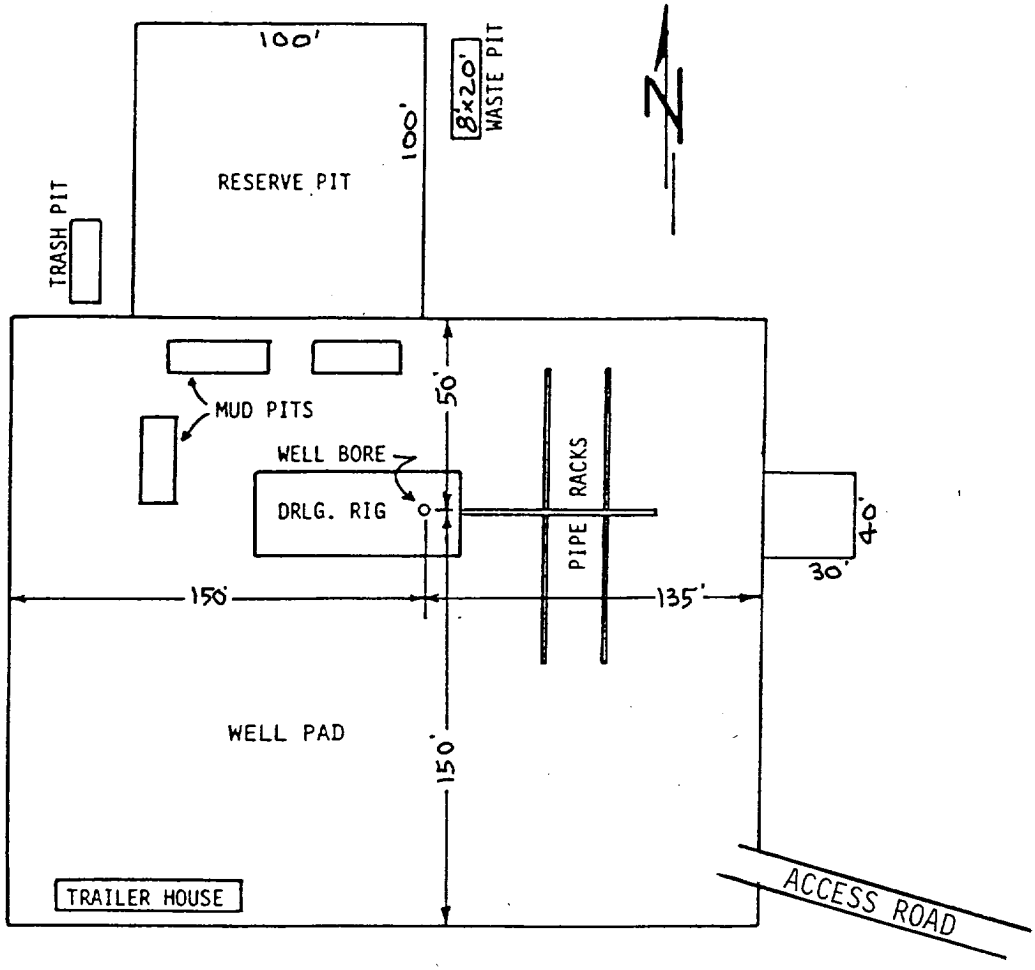


EXHIBIT "C"

POGO PRODUCING COMPANY
CAL-MON WELL NO. 6

DRILLING RIG LAYOUT
SCALE: None

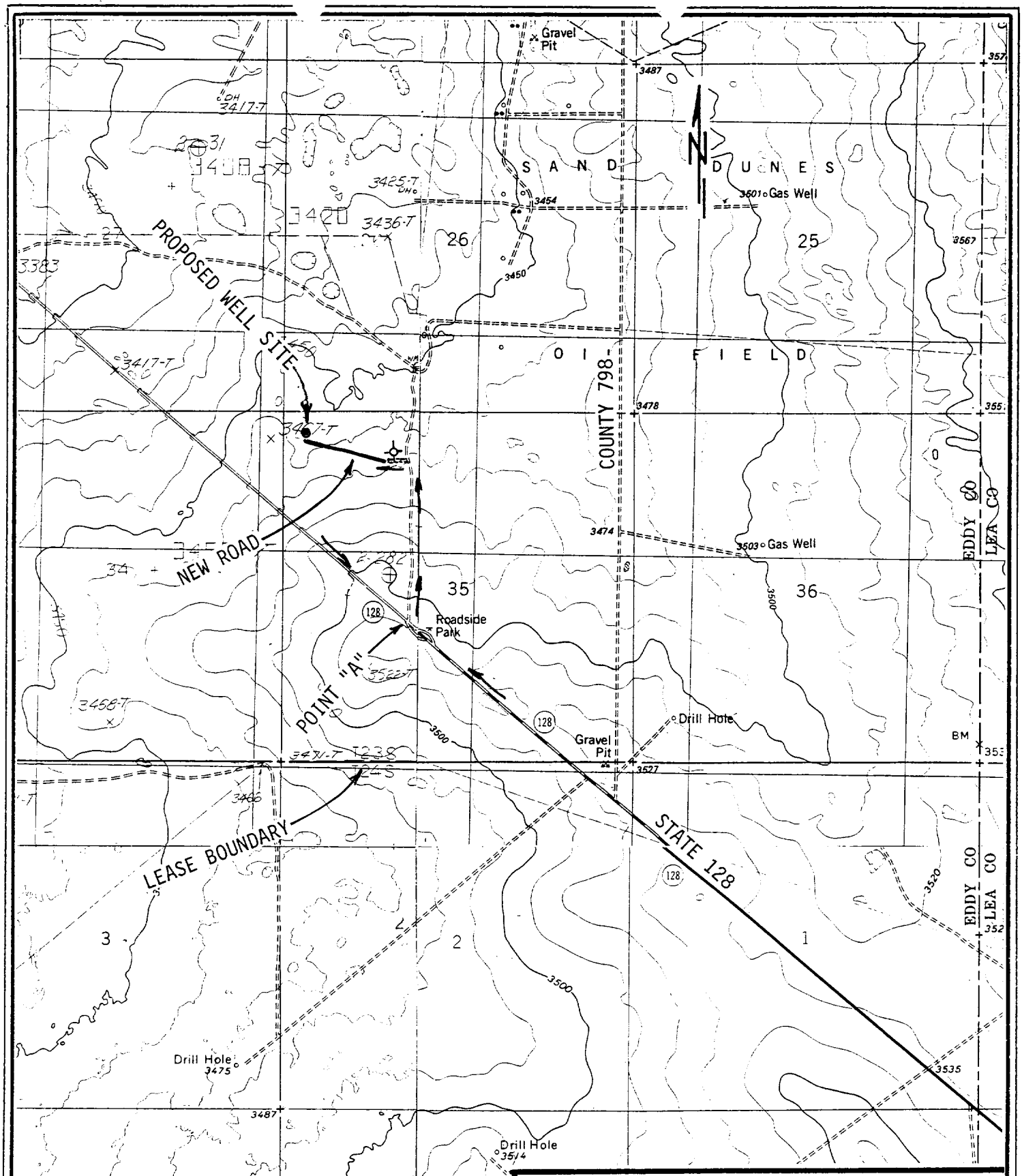


EXHIBIT "D"

POGO PRODUCING COMPANY
CAL-MON WELL NO. 6
330'FNL & 380'FWL SEC.35, T.23 S., R.31 E.
EDDY COUNTY, N.M.
TOPO PLAT