

NMOCC COPY

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R1425.UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL FOR OIL OR GAS PLUG BACK

1a. TYPE OF WORK  
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL  
OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR  
Anadarko Production Company

3. ADDRESS OF OPERATOR  
P. O. Box 67, Loco Hills, New Mexico 88255

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface  
660' FNL & 1980' FWL Sec. 33, T-17S, R-30E  
At proposed prod. zone  
Same  
Eddy County, New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
Approximately 1 1/2 miles South of Loco Hills Townsite

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)  
660'

16. NO. OF ACRES IN LEASE  
160 835.32

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.  
2513'

19. PROPOSED DEPTH  
3400

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3616.6 CL

22. APPROX. DATE WORK WILL START\*  
Oct. - Nov. 1978

5. LEASE DESIGNATION AND SERIAL NO.  
LC 00936-D028'986-D

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. INTEREST AGREEMENT NAME

8. FARM OR LEASE NAME  
Federal N

9. WELL NO.  
2

10. FIELD AND POOL, OR WILDCAT  
X Grayburg-Jackson

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA  
33 - 17 - 30

12. COUNTY OR PARISH  
Eddy

13. STATE  
New Mexico

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	7-5/8"	26.40#	350'	150 sx.
6 1/2"	4-1/2"	10.50#	3400'	250 sx.

1. Rig up rotary tools.
2. Drill to approximately 350'; set & circulate or ready mix cement to surface on 7-5/8" casing. Install & test Services 900 Double Ram Hydraulic Blowout Preventor.
3. Drill to T. D., approximately 3400'; set & cement 4 1/2" casing on T. D.
4. Run cased hole logs.
5. Perforate, acidize and fracture treat.
6. Run 2-3/8" tubing, rods & bottom hole pump; install pumping equipment & place well on production.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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.

Original Signed by  
SIGNED Jerry E. Buckles TITLE Area Supervisor DATE June 2, 1978

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side



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# United States Department of the Interior

GEOLOGICAL SURVEY  
P. O. Drawer U  
Artesia, New Mexico 88210

August 21, 1978

Anadarko Production Company  
P. O. Box 67  
Loco Hills, New Mexico 88255

ANADARKO PRODUCTION COMPANY Federal N No. 2 660 FNL 1980 FWL Sec. 33, T17S, R30E Eddy County Lease No. LC-028936D
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Above Data Required on Well Sign
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Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 3,400 feet to test the Grayburg formation is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the SURFACE USE PLAN and his approval including the GENERAL REQUIREMENTS.
3. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-330) is filed. The progress report should be not less than 8" x 5" in size and each page should identify the well.
4. All above-ground structures and equipment shall be painted in accordance with the attached Painting Requirements. The color used should simulate sandstone brown (Federal Standard Color #595A, color 20318 or 30318).
5. Notify Survey if water flow is encountered while drilling.

Sincerely yours,

(Orig. Sgd.) ALBERT R. STALL

Albert R. Stall  
Acting District Engineer

## WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes C-120  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator <b>Anadarko Production Co.</b>			Lease <b>Federal "N"</b>		Well No. <b>2</b>
Unit Letter <b>C</b>	Section <b>33</b>	Township <b>17</b>	Range <b>30</b>	County <b>EDDY</b>	
Actual Footage Location of Well: <b>660</b> feet from the <b>North</b> line and <b>1980</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3616.6</b>	Producing Formation <b>Fren - Queen - Grayburg</b>		Pool <b>Grayburg - Jackson</b>		Dedicated Acreage: <b>40</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure mark on this plat.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

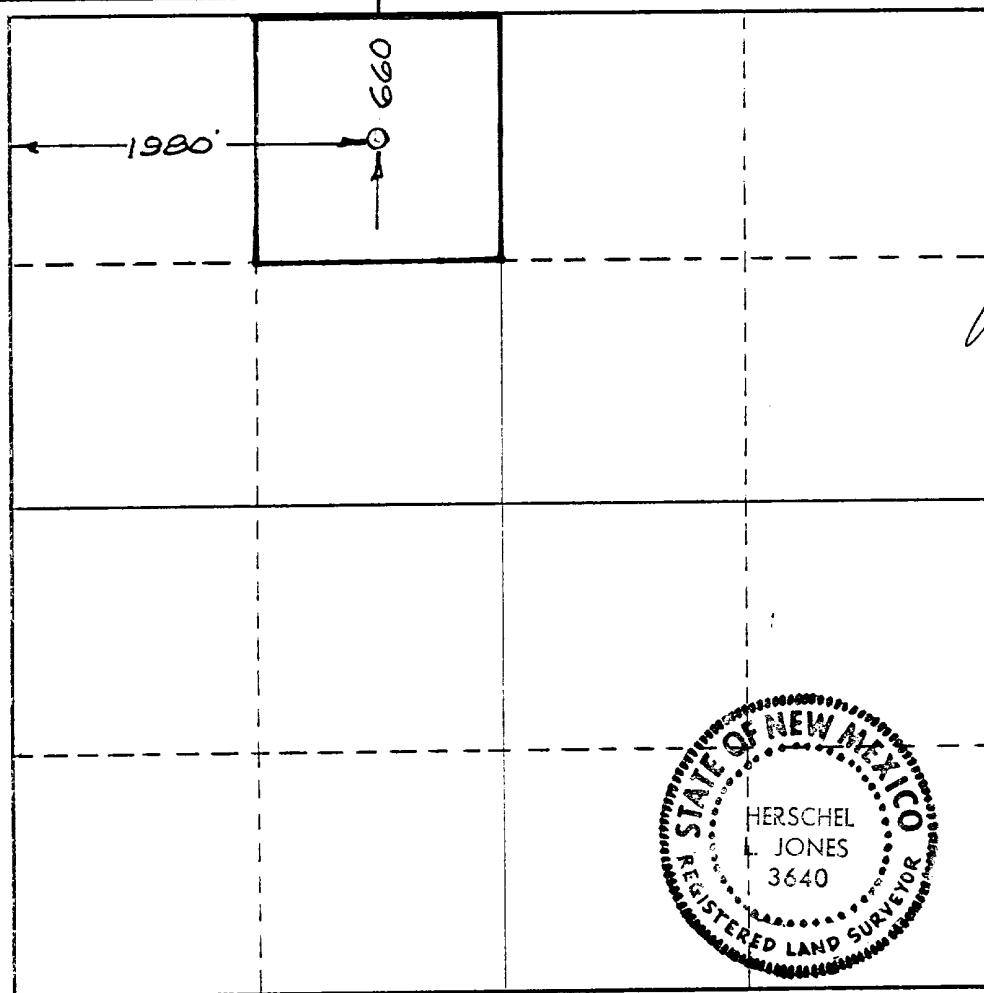
☐ Yes ☒ No

If answer is "yes," type of consolidation

**See backside for WI Ownership**

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



## CERTIFICATION

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

Name

**Jerry E. Buckles**

Position

**Area Supervisor**

Company

**Anadarko Production**

Date

**April 28, 1978**

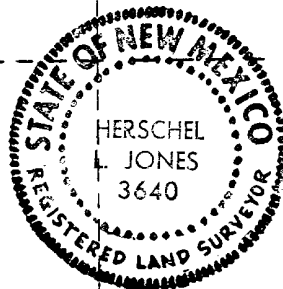
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

**April 25, 1978**

Registered Professional Engineer and/or Land Surveyor

Certificate No.

**3640**

# DATA SHEET

This data sheet is provided in reference to the attached "Application for Permit to Drill" Anadarko's:

Federal N - Well No. 2

1. Location: 660' INE & 100' FNE Sec. 33, T-17S, R-30E, Eddy County, New Mexico
2. Elevation: 3616.0 G. S.
3. Geological Name of Surface Formation: Triassic - Doakum (Santa Rosa)
4. Type of Drilling Tools to be Utilized: Rotary Tools
5. Proposed Drilling Depth: 3400'
6. Tops of Important Geological Markers:

T. Salt	590	7-Rivers	1820
B. Salt	1140	Queen	2365
Tansill	1215	Grayburg	2750
Yates	1335	San Andres	3185

7. Estimated Depth of Anticipated Water, Oil or Gas:  
Oil - 1930 - 1940, 2840 - 3185
8. Casing Program:  
7-5/8" - 26.40#, N-80, Cond B.  
4-1/2" - 10.5#, K-55, New
9. Setting Depth of Casing:  
7-5/8" - 350' - 150 sx Class H w/2% CaCL  
4-1/2" - 3400' - 250 sx Class H w/.2 of 1% CFR-2, 5# Salt, 10# sand per sack
10. Specifications for Pressure Control Equipment (See Attached Schematic):  
WEK Drilling Rig #3 is equipped with Shaffer Type E 10" Series 900 BOP with 4" Blind Rams, kill line and choke manifold. Kookey Hydraulic Controls and Accumulator with remote controls. When nipping up, test BOP and Choke to 1500 psi. Operate BOP equipment once a day, or as directed by Company Representative.
11. Mud Program:  
Drill with Fresh Water Native Mud to within 200' of T. D. Jell will be added at this point to increase viscosity and clean hole prior to running casing.
12. Testing, Logging & Coring Program:
  - a. Testing: No drill stem tests will be made.
  - b. Coring: No coring planned.
  - c. Logging: Run Gamma Ray/Compensated Neutron Log after 4 1/2" pipe is set.
13. Potential Hazards:  
None are expected. Above described BOP should take care of any blowout problems. Numerous wells have been drilled in this area without problems.
14. Anticipated Starting Date & Duration:  
Plan to begin drilling operations approximately Oct. or Nov. 1978 (possibly earlier if Permits are approved promptly).  
Approximately 10 days required to drill well and 2 weeks for completion.
15. Other Facts:  
There is a chance that W E K Rig #2 will drill this well; it is equipped with similar Pressure Control Equipment. The rig layout might be slightly different.

# Anadarko

PRODUCTION COMPANY

A  
Panhandle  
Eastern  
Company

P. O. Box 67 • Loco Hills, New Mexico 88255 • (505) 677-2411

June 2, 1978

United States Geological Survey  
P. O. Drawer U  
Artesia, New Mexico 88210

Gentlemen:

Following is the "Surface Use and Operation Plan" for the drilling of Anadarko Production Company's Federal N Well No. 2 located 660' FNL & 1980' FWL Section 33, T-17S, R-30E, Eddy County, New Mexico

1. Existing Roads - A small scale map is attached (Exhibit #1); it shows the location of this well in relation to Loco Hills, New Mexico, Townsite.

A larger scale map (Exhibit #2) shows County Road #139 in blue. The existing caliche roads are shown in orange.

2. Planned Access Roads - The black dashed lines on (Exhibit #2) are proposed roads which will be needed to drill Federal S Well No. 7 & Federal S Well No. 8. Separate "Surface Use and Operation Plans" are being filed in regard to these wells. Federal N Well No. 2 will require a 2000' extension of the road used to drill Fed. S Well No. 7. This extension is shown in purple.

There will be no fence to cut or cattleguard to set.

3. Location of Existing Wells - All existing wells on lease are indicated on enclosed map. There are no exploratory wells being drilled within a two mile radius.

4. Location of Tank Batteries, Production Facilities and Lines - Tank battery is indicated on Exhibit #3. The drilling pad will be converted into the production pad where all production facilities, tank battery and lines will be located.

5. Location and Type of Water Supply - Fresh water to be used at drilling site will be furnished by two sources: (1) A fresh water tap will be installed near the center of Sec. 29 ( $\frac{1}{2}$  mile West of drill site) and a temporary plastic water line will be used and (2) The remainder will be supplied by I & W Trucking Company of Loco Hills and will be hauled from Double Eagle Water Company taps in the Loco Hills Area.

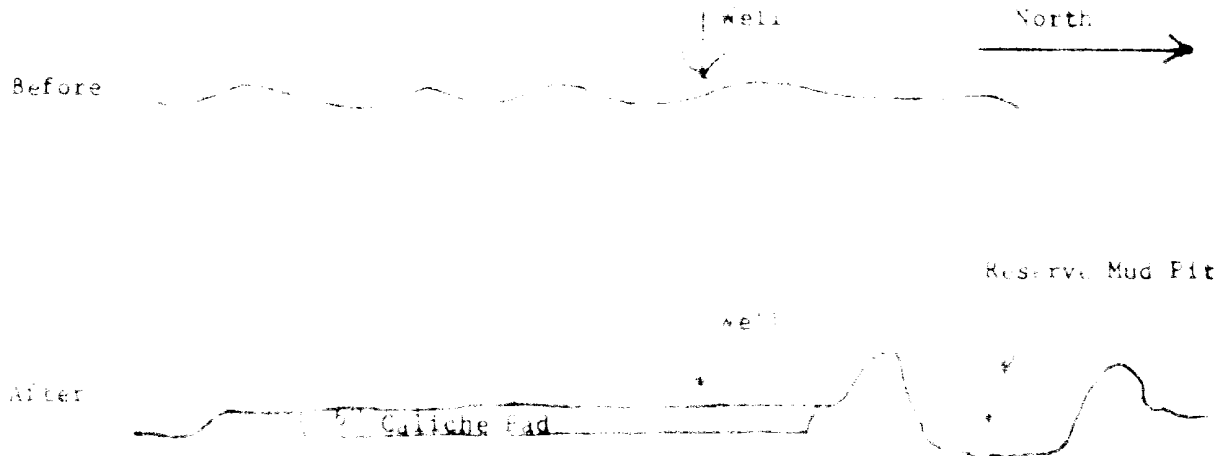
6. Source of Construction Material - Primary source of caliche will be the reserve pit area of the new drilling location. Alternate source will be an existing caliche pit located approximately one mile North of the drilling location and shown on Exhibit #2 in green. Location of this pit is SE/4 of SW/4 Sec. 21, T-17S, R-30E.

7. Methods for Handling Waste Disposal - Enclosed drill site plat (Exhibit #4) indicates location of drilling pits, reserve pit and a rubbish pit. After sufficient time has passed to allow drilling fluids to dry, all pits will be closed and leveled. The rubbish pit adjacent to drilling site will be deep enough to contain all rubbish when covered and leveled.

8. Ancillary Facilities - There are no camps or airstrips planned.

9. Well Site Layout - Well site (Exhibit #4) has been staked and is indicated by red area on enclosed maps (Exhibits #1 & #2). Drilling site is a sandy area covered by sparse native vegetation. Drilling pad will be 6" of caliche measuring 130' East, 120' West, 30' North & 110' South. Drilling pad will blend with terrain since the topography is relatively flat.

Cross Section - Before & After - is shown below:



10. Plans for Reclamation of Surface - Commercial Well.

Reshaped topography - Rubbish will be buried upon completion of drilling operations. All refuse trash will be removed to the individual generating same.  
Caliche pad - Caliche drilling pad will remain intact until well is abandoned.  
Road - This caliche road will remain intact as long as there are prospective wells to be drilled on this and other Anadarko leases in immediate vicinity.  
Limetab - The well should be closed for several years.

Plans for Reclamation of Surface - Abandoned and Abandoning Wells.

Surface will be restored in accordance with all regulations in effect at time of abandonment.

11. Site Information - The campsite is located on the surface of the well site.

Soil Characteristics - Consists of sand and loam.

Flora - Sparse grass and weeds.

Fauna - Rabbits, rats, mice, birds and insects.

Other Surface Use Activities - Cased grazing land.

Surface Ownership - Federal Land.

Water Wells - None.

Lakes, streams and ponds - None located within 5 or 4 miles.

Dwellings - None.

Other Facilities - None.

Archaeological - None.

Historical - None.

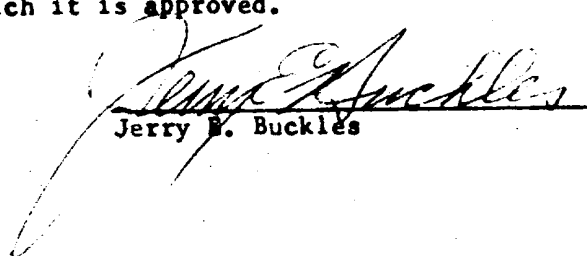
Cultural - None.

12. Operator's Representative - Ozie W. Farris, Field Foreman for Anadarko Production Company.

- Office Phone - 677-2411  
- Home Phone - 677-3230

13. Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site and access route; that I am familiar with the conditions which presently 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 Sweatt Construction Company or Jabo Rowland Construction Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

June 3, 1978  
Date

  
Jerry E. Buckles, Area Supervisor  
Title

R 30 E

R 29 W R 30 E

Location

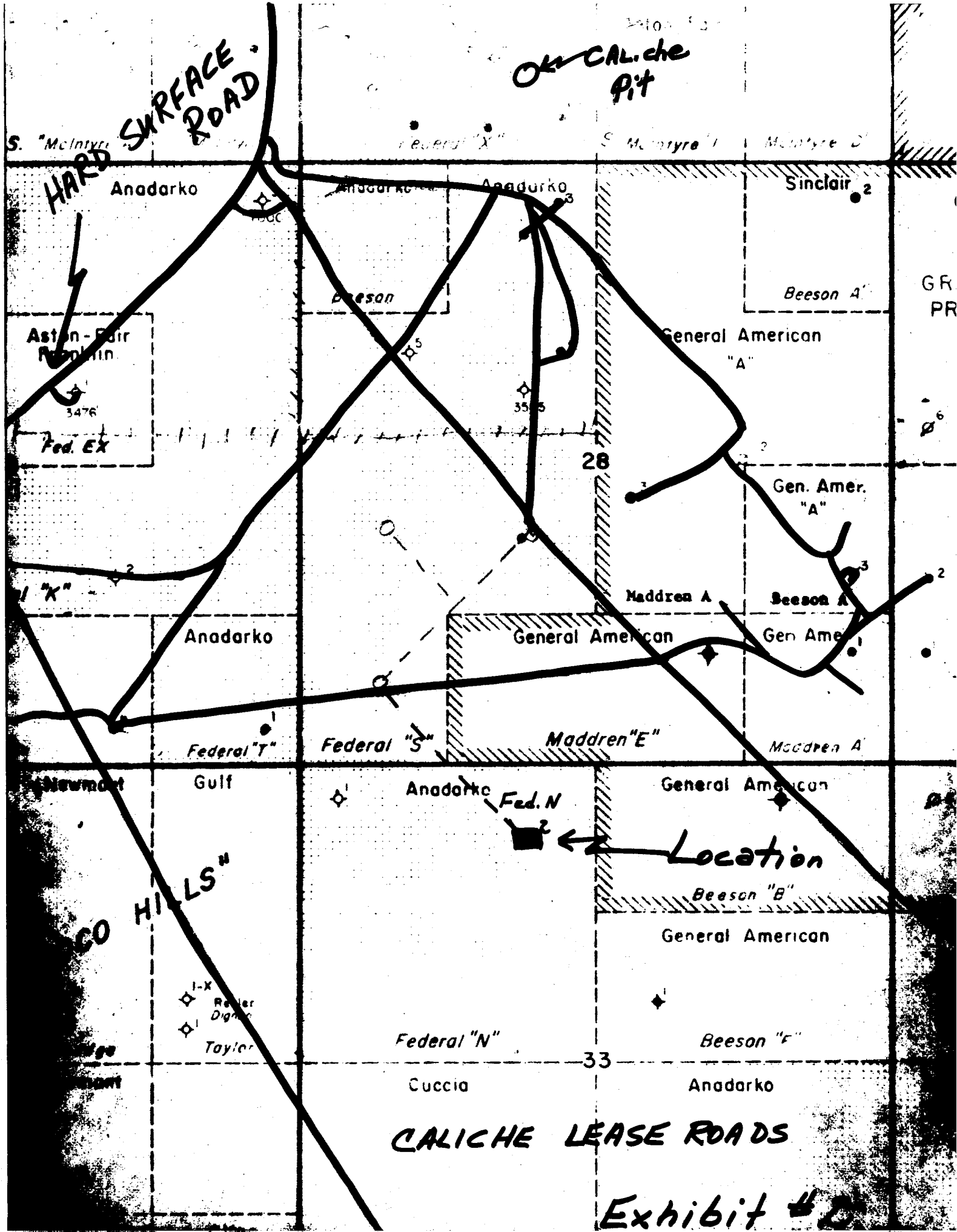
T 175  
T 185

T 185

North



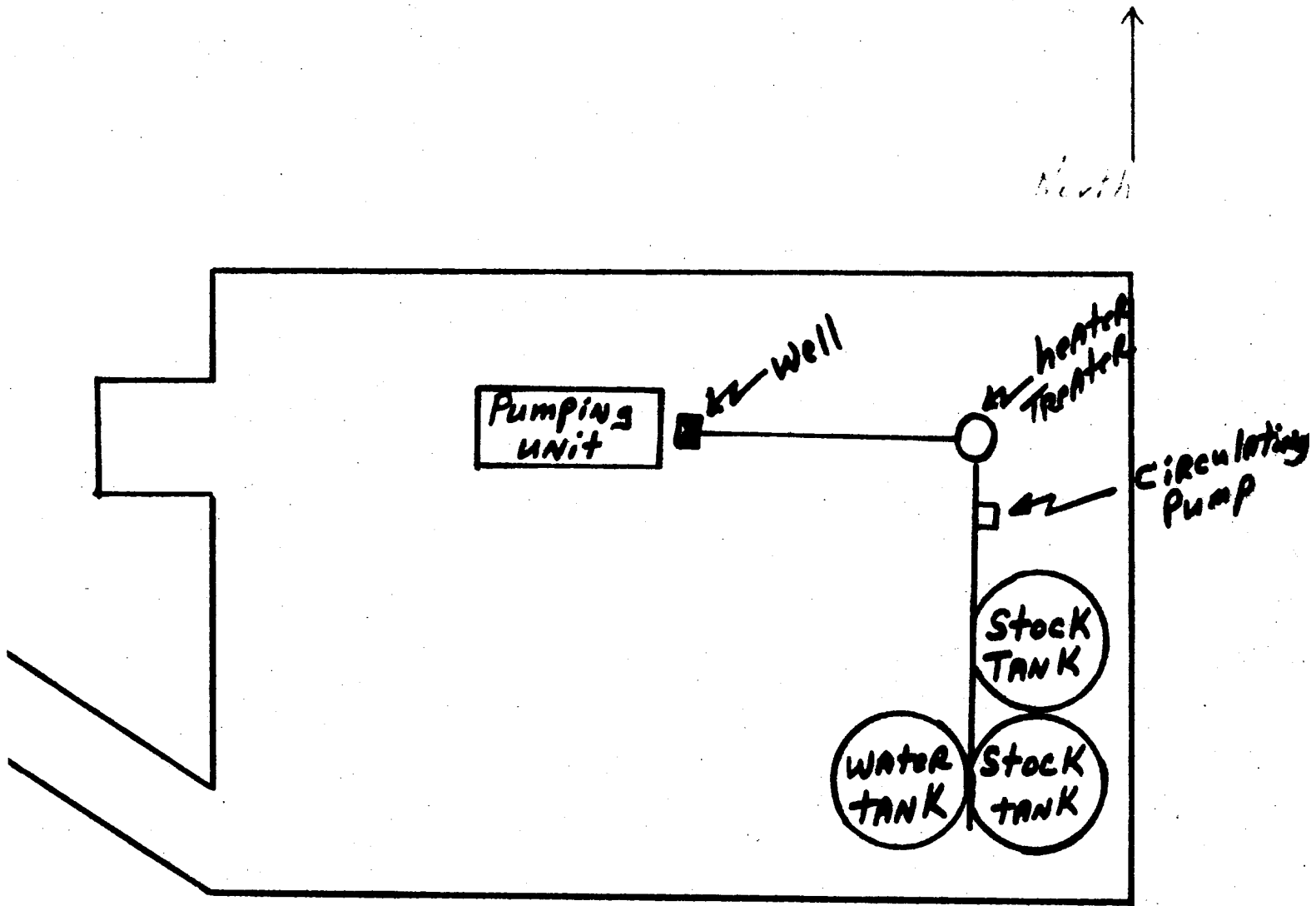




CALICHE LEASE ROADS

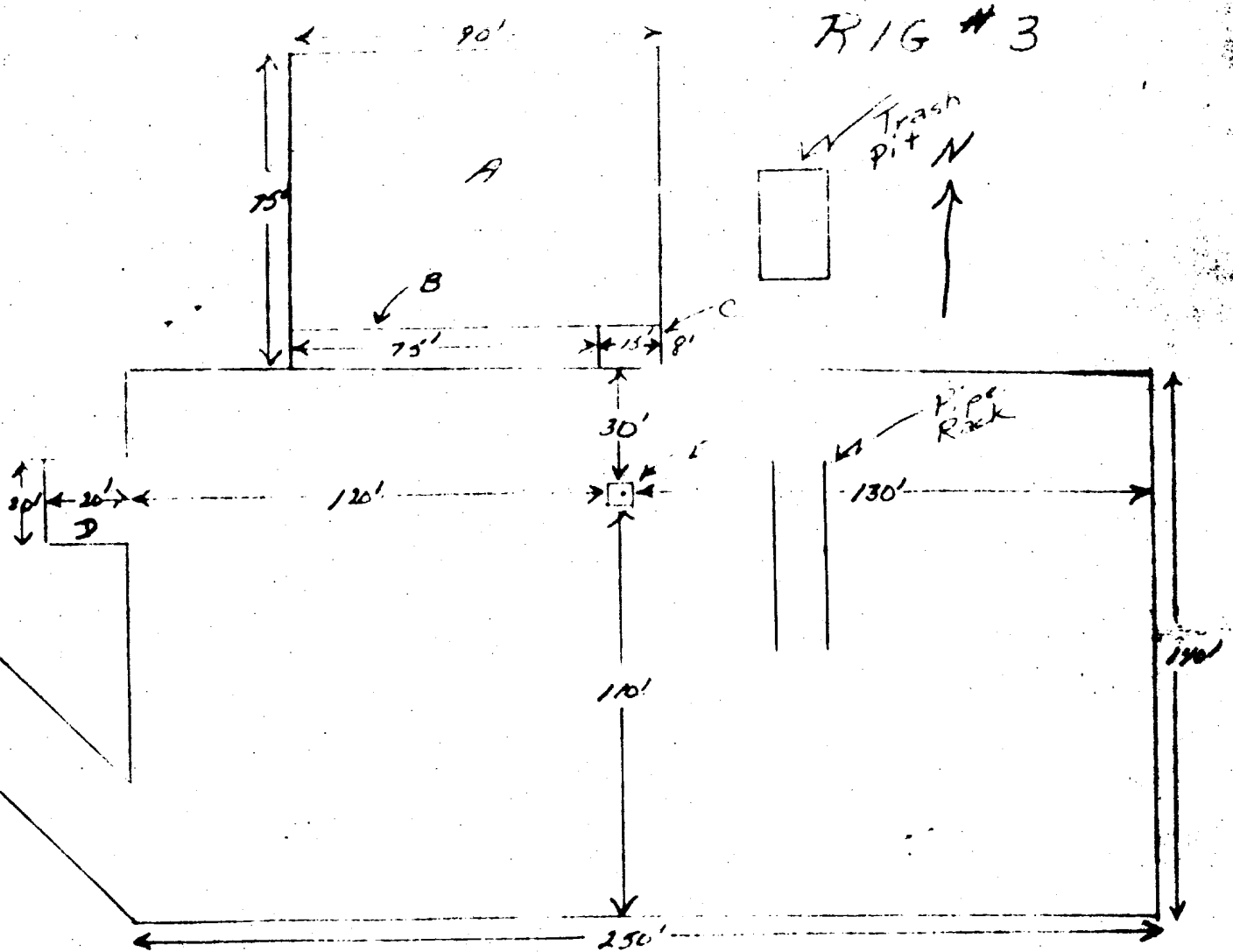
Exhibit #2

# Federal N#2



Proposed TANK BATTERY

Exhibit #3



- A - RESERVE PIT      D - STINGER  
 B - MUD PIT      E - CELLAR 4' x 5' x 5'  
 C - SHAFT PIT

This rig equipped with Shaffer Type E 10" Series 900 BOP with 4" Blind Rams, kill line and choke manifold. Koomey Hydraulic Controls and Accumulator with remote controls.

ANADARKO PRODUCTION COMPANY  
 Federal N Well No 2

Exhibit 1