

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

b. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
501 Airport Drive, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
At surface **1050' FNL & 1980' FNL**
At proposed prod. zone **Same**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
9 miles southeast of Shiprock, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) **1100'**

16. NO. OF ACRES IN LEASE **4160**

17. NO. OF ACRES ASSIGNED TO THIS WELL **40 joint**

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. **420'**

19. PROPOSED DEPTH **660'**

20. ROTARY OR CABLE TOOLS **Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3026' GL est.

22. APPROX. DATE WORK WILL START*
May 1973

5. LEASE DESIGNATION AND SERIAL NO.
I-89-IND-58

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
USC Section 19

9. WELL NO.
37

10. FIELD AND POOL, OR WILDCAT
Hogback Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SE/4 NE/4 Section 19, T-29-N, R-16-W

12. COUNTY OR PARISH
San Juan

13. STATE
New Mexico

RECEIVED
MAY 15 1973
OIL CON. COM.
DIST. 3

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9-7/8"	7"	20#	80'	75 ex
6-1/8"	5-1/2"	14#	660'	100 ex

Amoco proposes to drill this well with rotary tools and run 5-1/2" casing to top of Dakota, drill Dakota porosity pay sand and complete in open hole.

Copies of location plat attached.

Copies of logs will be furnished upon completion, if logged.

Copies of Development Plan attached.

This well in accordance with NMCC Order No. R-3296.

RECEIVED

MAY 14 1973

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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 J. ARNOLD SWELL TITLE Area Engineer DATE May 11, 1973

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

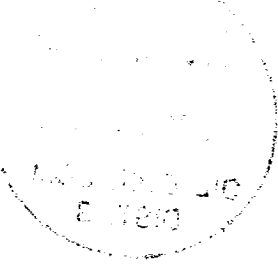
Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.



WELL LOG

PLAT

All distances shall be from the outer boundaries of the section.

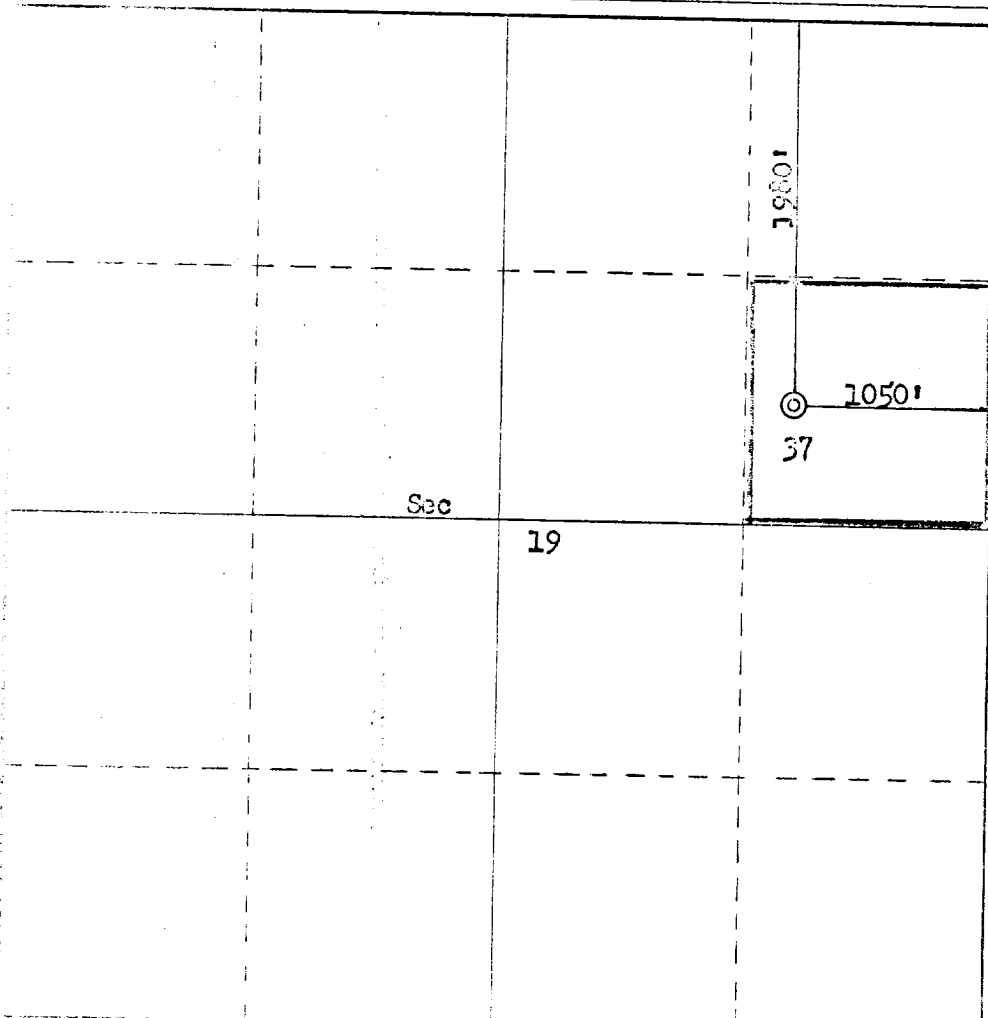
Operator AMOCO PRODUCTION COMPANY		Lease 101 Section 19		Well No. 37
Section 32	Township 29N	Range 16W	County San Juan	
Location of Well: From the North line and 1050 feet from the East line				
Producing Formation Dakota		Foot Hogback Dakota		Dedicated Acreage 40

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (as to working interest and royalty).
- 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 _____

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

No acreage will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-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

J. Arnold Snell

Position

Area Engineer

Company

AMOCO PRODUCTION COMPANY

Date

May 11, 1973

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

May 8, 1973

Registered Professional Engineer and/or Land Surveyor

Fred B. Snell
Fred B. Snell

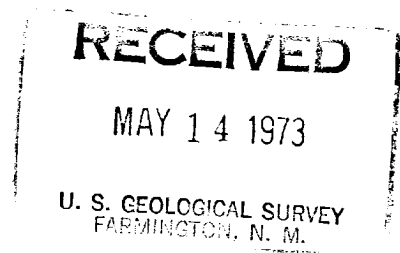
Certification No.

3950

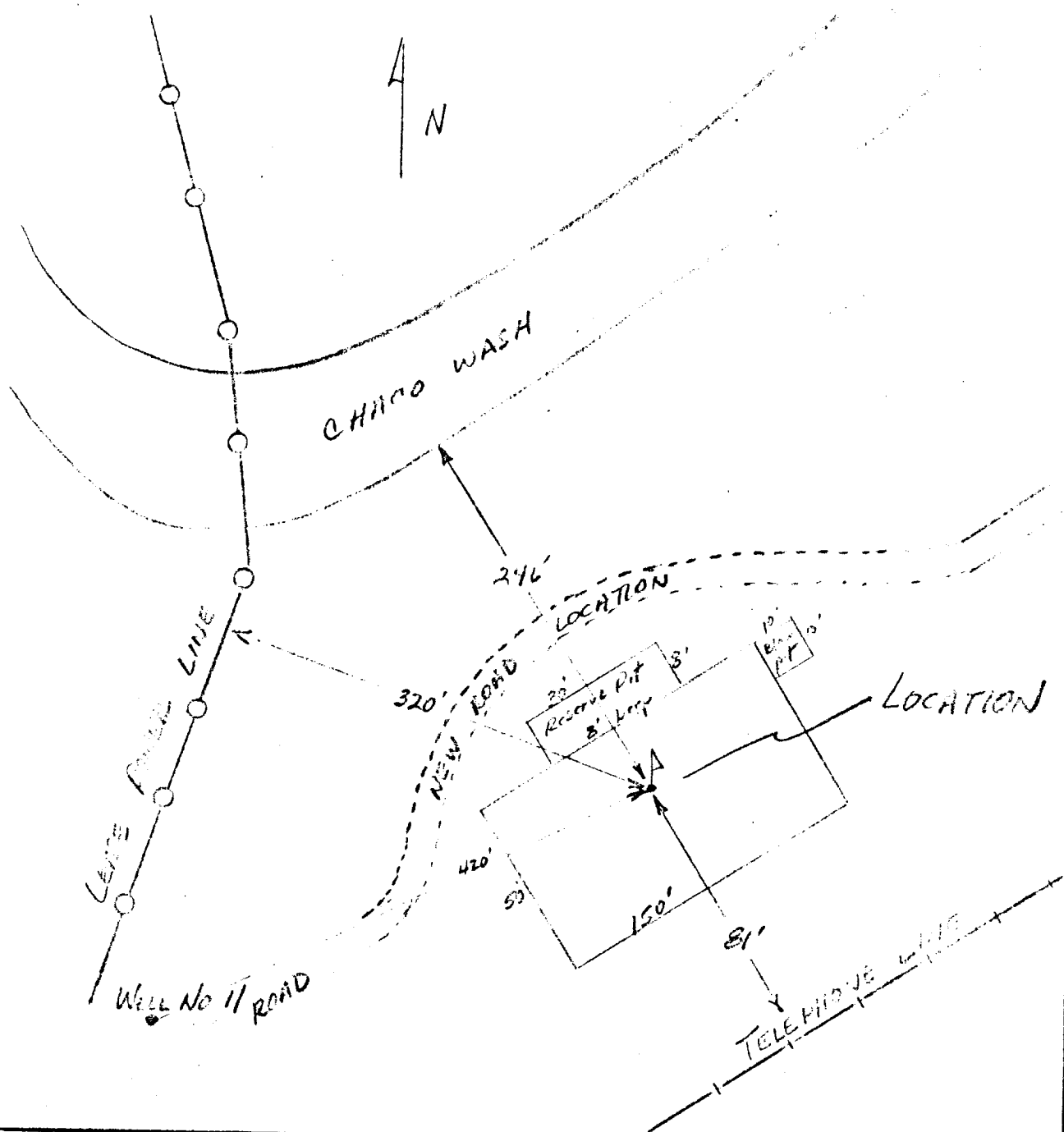
DEVELOPMENT PLAN FOR SURFACE USE
USG SECTION 19 NO. 37

Amoco Production Company proposes to drill the subject well with rotary tools on a graded location as shown on the attachments. The location is in accordance with NMOCC Order No. R-3296. Well established roads exist in the area. An existing road will be moved about 25' northwestward to make room for the location. About 200 feet of new road will be constructed. Archeological sites exist in this region and Archeological clearance will be obtained from the proper authority. Clearance for work will also be obtained from Navajo Tribal authorities.

No airstrips or field camps exist nearby. The vegetation in the area is extremely sparse. Water for drilling operations will be supplied by hauling from the San Juan River about three miles away. If this water is unuseable, water will be hauled from a different source. Upon completion of the well the location will be cleaned up and the reserve pit backfilled.



DEVELOPMENT PLAN
 11561 SECTION 19 W. 1/4, N. 37
 HOGGERS LANE FLD
 1050 FEET 1980' FUL, SECTION 19
 T 27 N, R 16 W, SAN JUAN CO., NEW MEXICO

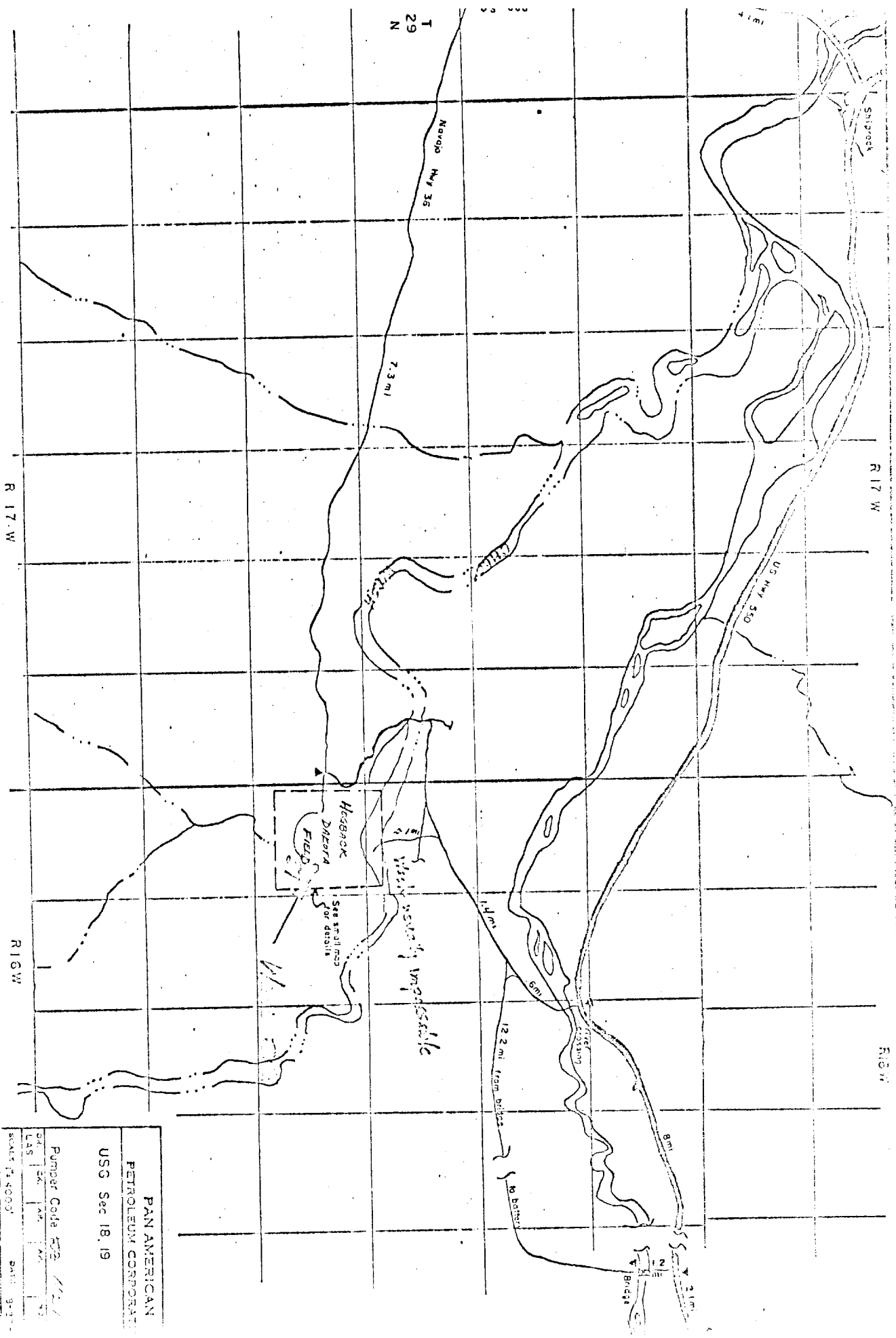


Amoco Production Company

DRILLING LOCATION STRONGHOLD

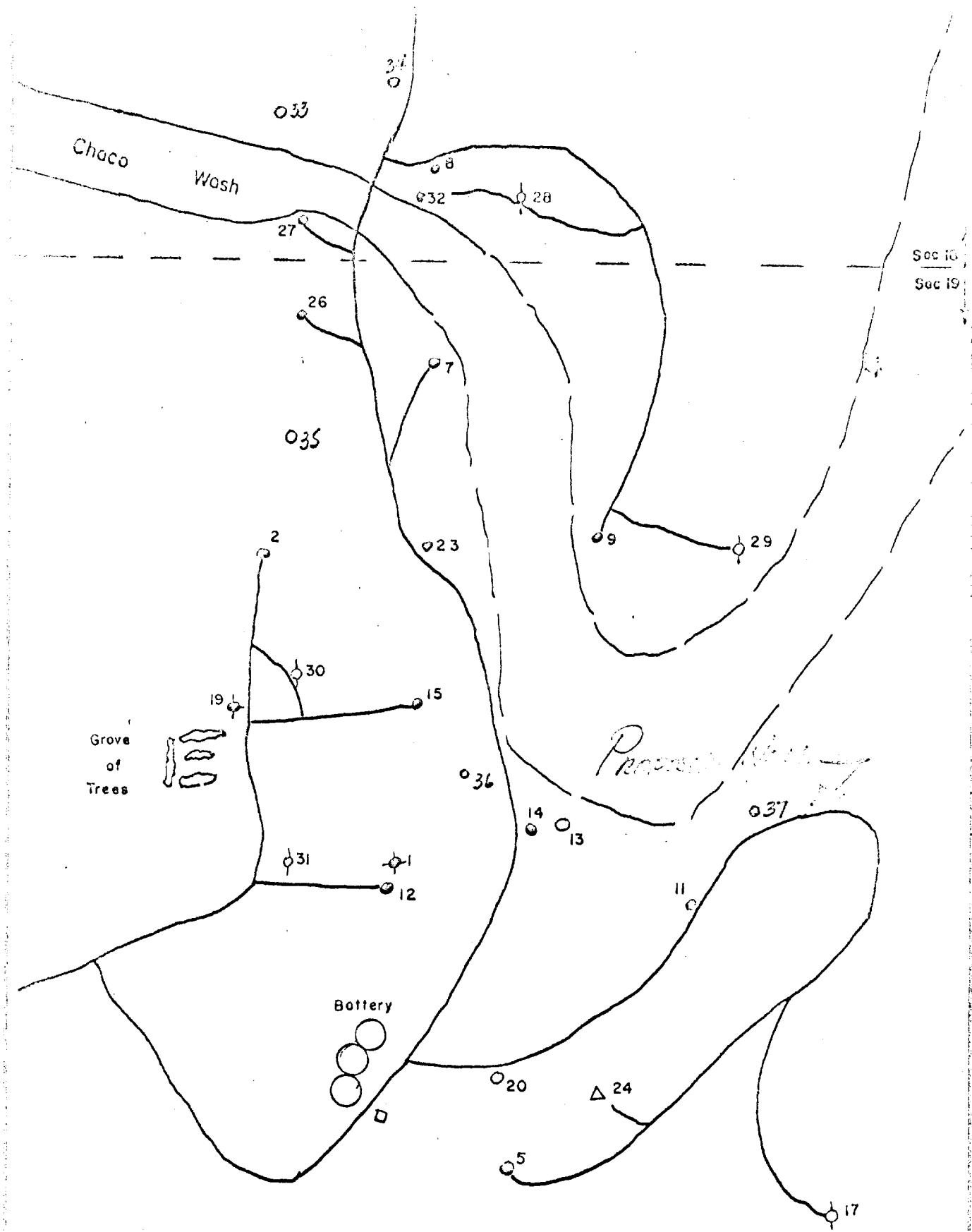
SCALE:

DRG.
NO.



General description of area

PAN AMERICAN PETROLEUM CORPORATION	
USC Sec 18, 19	
Pumper Code 502	11/1
Lat 34° 14' 00"	11
Long 118° 00' 00"	11
Scale 1:4000'	Date 9-12



Purnper Code: 102 1/2.1

PAN AMERICAN PETROLEUM CORPORATION

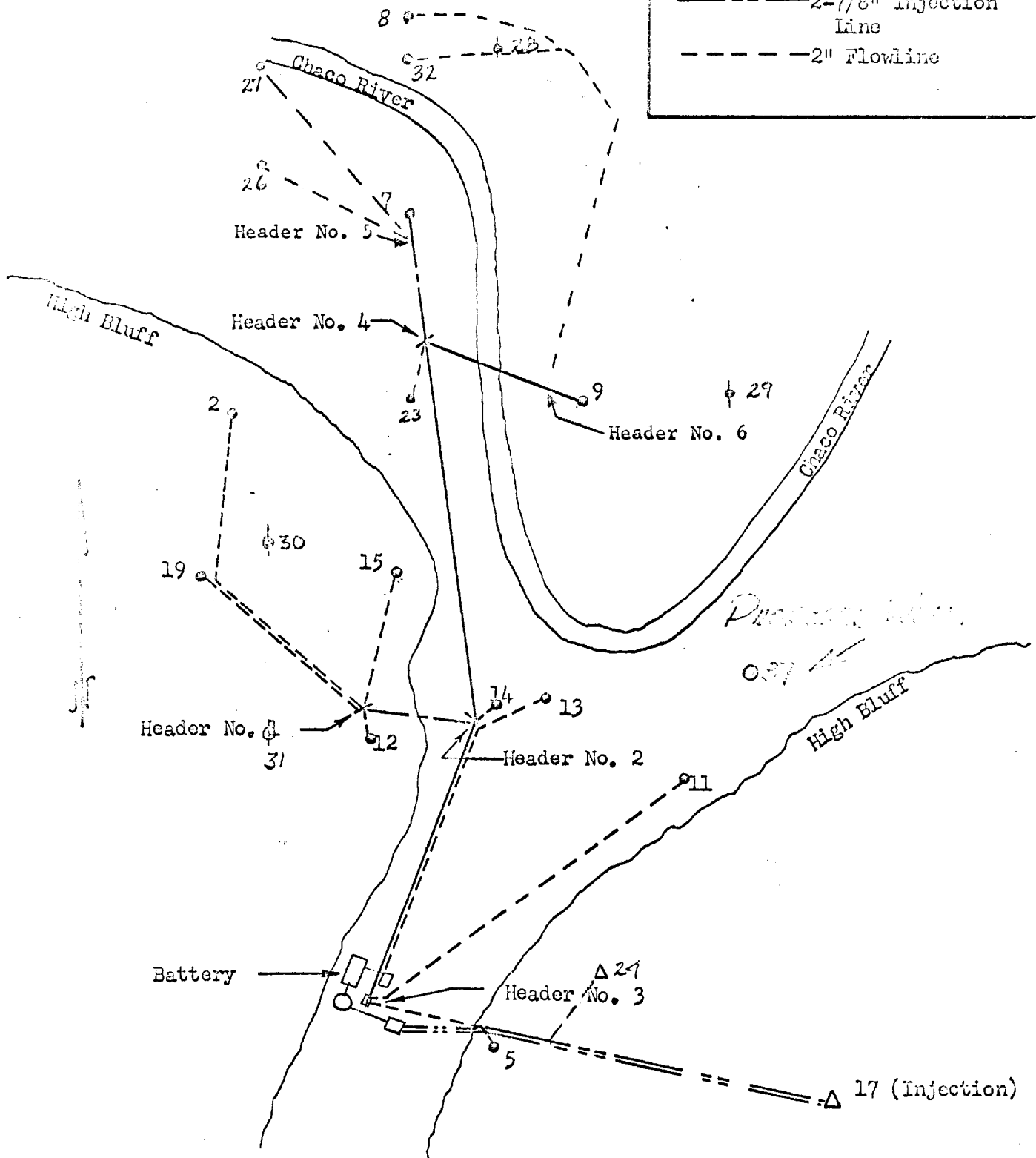
SCALE: 1" = 500'

LEASE ROADS

TOWN BLW

from map by LRC

- 4" Production Line & 2" Flowline
- 3" Production Line & 2" Flowline
- 2-7/8" Injection Line
- 2" Flowline



PAN AMERICAN PETROLEUM CORPORATION

HOGBACK DAKOTA FIELD FLOWLINE SYSTEM

SCALE: None

DRG. 1