

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-21711

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-5034	
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"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribe	
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 501 Airport Drive, Farmington, New Mexico		8. FARM OR LEASE NAME Navajo Tribal "U"	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 2010' FNL, 1650' FNL, Section 22, T-26N, R-18-W At proposed prod. zone Same		9. WELL NO. 18	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 23 miles south of Shiprock, New Mexico		10. FIELD AND POOL, OR WILDCAT Tocito Dome Penn. "D"	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1850' 790'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SE/4 NW/4 Section 22, T-26-N, R-18-W	
16. NO. OF ACRES IN LEASE 2544.50		12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL 160		13. STATE New Mexico	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2585' 6350'		19. PROPOSED DEPTH 6350'	
20. ROTARY OR CABLE TOOLS Rotary		21. APPROX. DATE WORK WILL START* March 10, 1975	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5650' Gr. est.		22. APPROX. DATE WORK WILL START*	
23. PROPOSED CASING AND CEMENTING PROGRAM			

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/4"	13-3/8"	48#	100'	100 sx
12-1/4"	9-5/8"	32.3#	1500'	500 sx
8-3/4"	7	20# & 23#	6350'	550 sx

Amoco Production Company proposes to drill the subject well to test the Pennsylvanian Formation. Intermediate casing will be set across the Morrison water zones. The well will be drilled through the Pennsylvanian and completed from open hole logs. A copy of all logs will be furnished to your office upon completion.

Copy of Location Plat is attached.

FEB 24 1975

U. S. GEOLOGICAL SURVEY

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. SIGNED GL Hamilton TITLE Area Adm. Supvr. DATE February 20, 1975
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY GL 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 LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

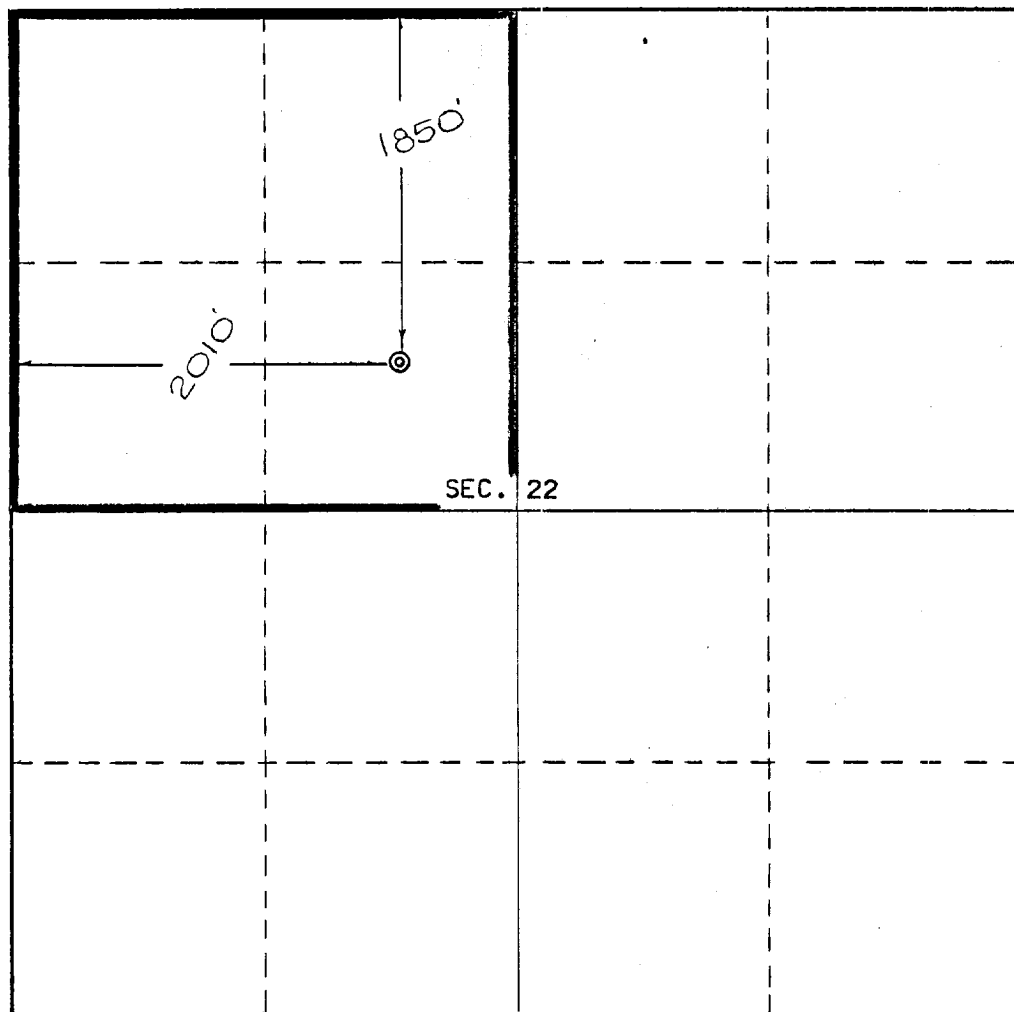
Operator AMOCO PRODUCTION COMPANY			Lease Navajo Tribal "U"		Well No. 18
Unit Letter F	Section 22	Township 26 North	Range 18 West	County San Juan	
Actual Footage Location of Well: <div style="display: flex; justify-content: space-between;"> 1850 feet from the North line and 2010 feet from the West line </div>					
Ground Level Elev. 5650 est.	Producing Formation Pennsylvanian "D"	Pool Tocito Dome Pennsylvanian "D"		Dedicated Acreage: 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
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, forced 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 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.

G. L. Hamilton

Name

G. L. Hamilton

Position

Area Adm. Supvr.

Company

AMOCO PRODUCTION COMPANY

Date

February 20, 1975

Date Surveyed

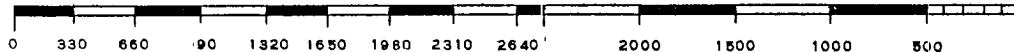
February 4, 1975

Registered Professional Engineer
and/or Land Surveyor

E. V. Echohawk

Certificate No. **3602**

E. V. Echohawk LS



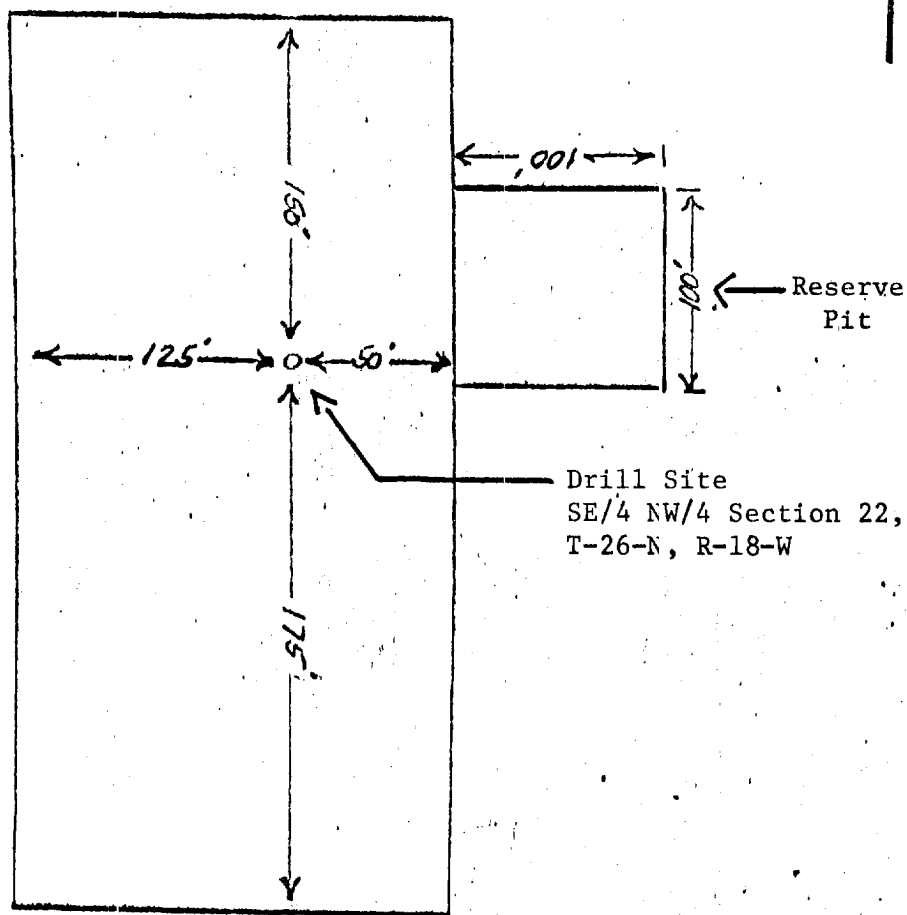
DEVELOPMENT PLAN
NAVAJO TRIBAL "U" NO. 18
SAN JUAN COUNTY, NEW MEXICO

Amoco Production Company proposes to drill the subject well with rotary tools on a graded location as shown on the attached plat. Established roads exist in the area and approximately 350 feet of new road will need to be constructed to reach the location. Archaeological clearance to drill this location has been obtained from the proper authorities; also clearance from the Navajo Tribe has been obtained.

The area of the location is sandy soil with sparse vegetation. Drilling fluid will be a low solid, non-dispersed drilling mud. As well is located in an active oil field, Amoco has previously completed a water source well to provide water for the drilling. Upon completion the well location will be cleaned, and the reserve pit backfilled and location leveled.

Amoco's standard blowout prevention will be employed; see attached drawing for blowout preventer design.

No camps or airstrips are necessary for the drilling of this well and the nearest airstrip is located near Shiprock, New Mexico.



Ameco Production Company

SCALE: None

DRILLING LOCATION DIAGRAM

NAVAJO TRIBAL "U" NO. 18, TOCITO DOME PENN. "D" FIELD

DRG. NO. MFT-75-2-20

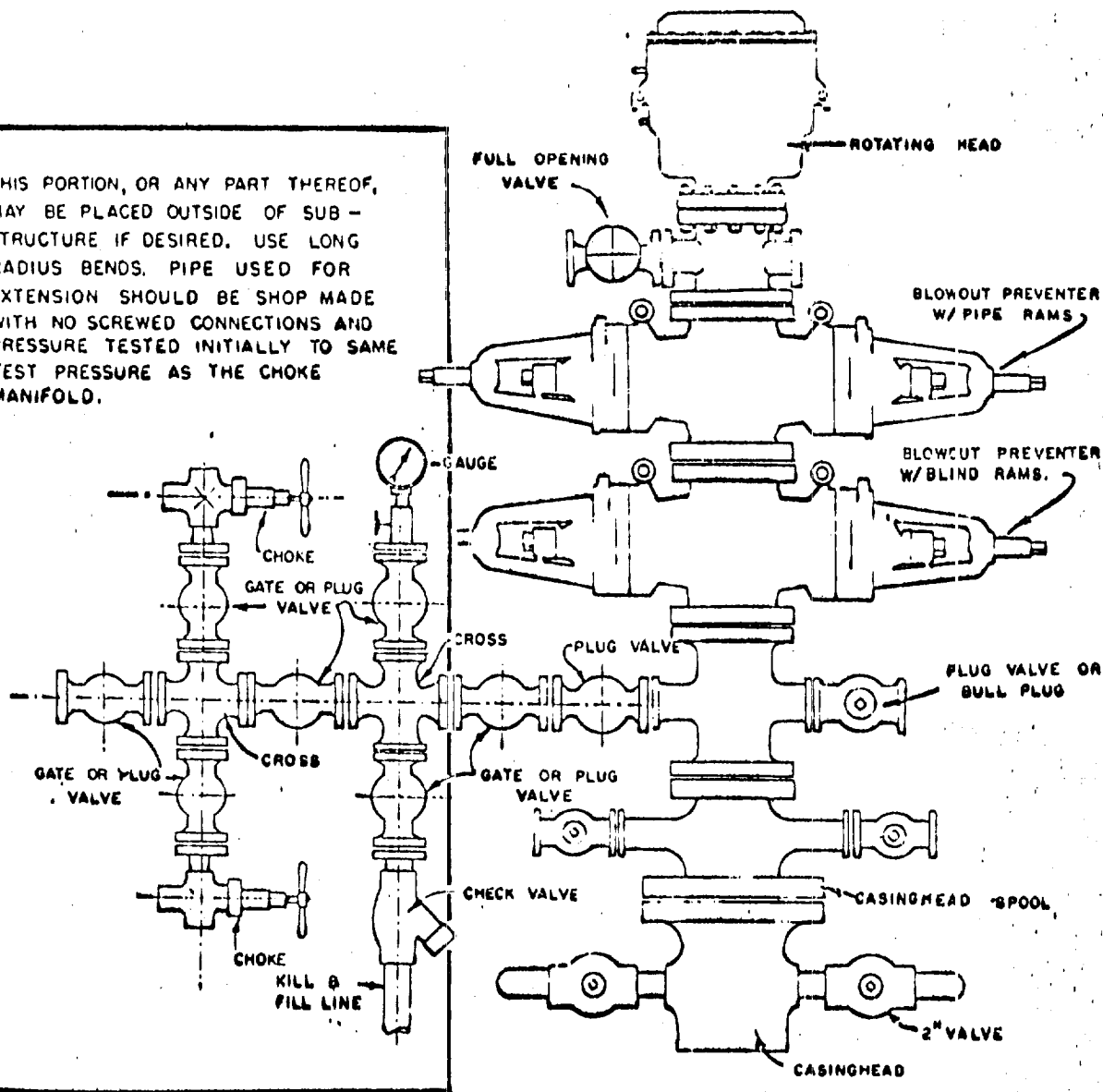
NAVAJO INDIAN
RESERVATION

Four
Corner
Pump
Sta

9991

BLANCA

THIS PORTION, OR ANY PART THEREOF, MAY BE PLACED OUTSIDE OF SUB-STRUCTURE IF DESIRED. USE LONG RADIUS BENDS. PIPE USED FOR EXTENSION SHOULD BE SHOP MADE WITH NO SCREWED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOKE MANIFOLD.



BLOWOUT PREVENTER HOOKUP
AMOCO PRODUCTION COMPANY

EXHIBIT D-4
OCTOBER 16, 1961