

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

74.5' Sub. to 214.5' Well, Section 22, 1-26-N, 2-18-W

At proposed prod. zone

214.5'

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

22 miles south of Farmington, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

74.5'

16. NO. OF ACRES IN LEASE

2844.50

17. NO. OF ACRES ASSIGNED
TO THIS WELL

100 (Jt. with "U" #9)

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

145.0'

19. PROPOSED DEPTH

6500'

20. ROTARY OR CABLE TOOLS

Rotary

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

to be determined when drilled

22. APPROX. DATE WORK WILL START*

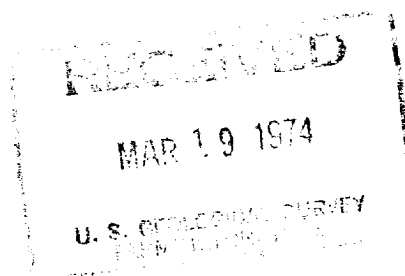
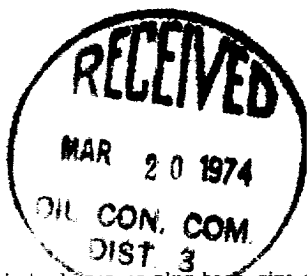
March 1974

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/4"	12-5/8"	41.5	100'	100 sz
12-1/4"	9-5/8"	28.5	1200'	500 sz
8-5/8"	7"	24.5 & 25.5	6500'	200 sz

Amoco Production Company proposes to drill the subject well to test the Pennsylvanian formation. Intermediate casing will be set across the Fortson water zones. The well will then be drilled through the Pennsylvanian and completion designed from open hole logs. A copy of all logs will be furnished to your office upon completion. A copy of the location plat is attached.



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

TITLE

Area Engineer

DATE

March 18, 1974

(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.

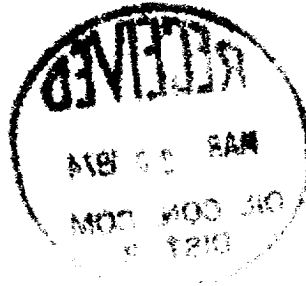
Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal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

U.S. GOVERNMENT PRINTING OFFICE : 1963-O-711-396

839-171



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-100
Supersedes C-128
Effective 1-1-65

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

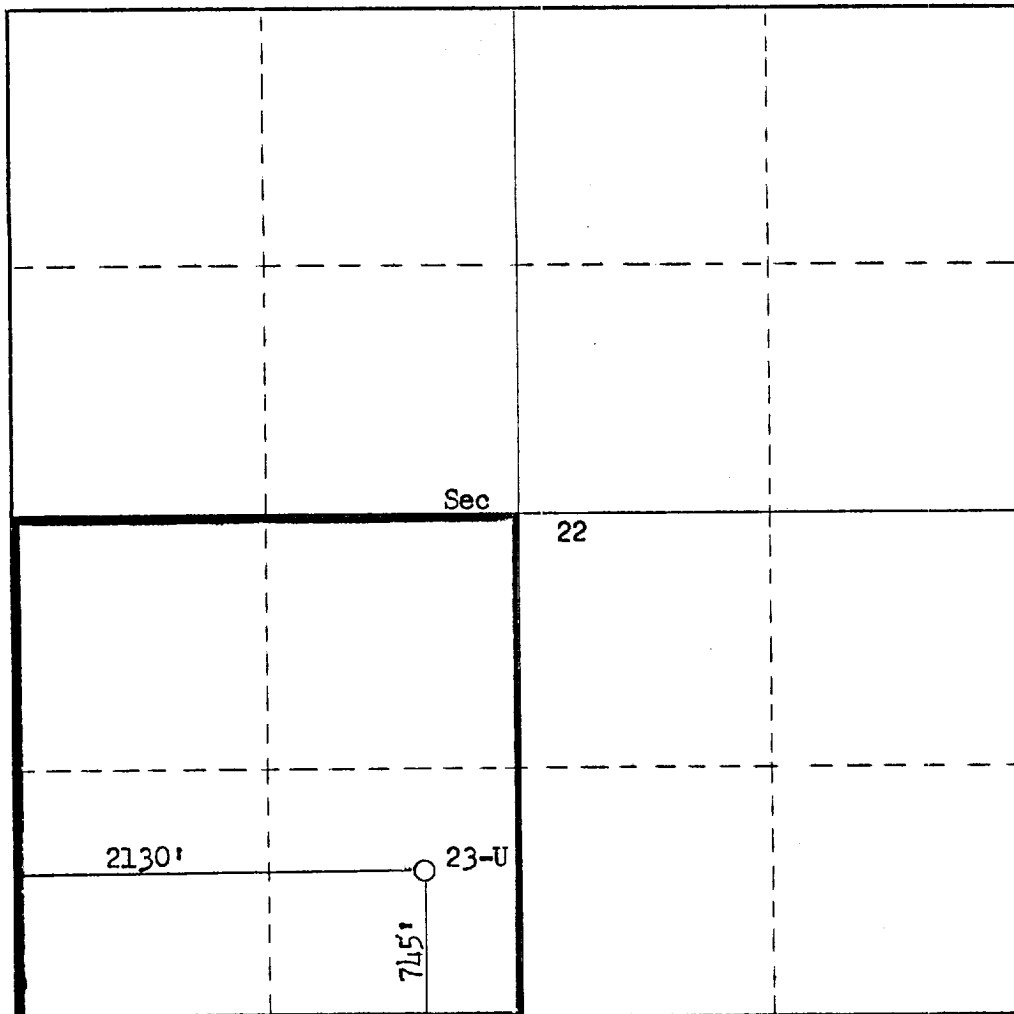
Operator Amoco Production Company			Lease Navajo Tribal "U"		Well No. 23
Unit Letter N	Section 22	Township 26N	Range 18W	County San Juan	
Actual Footage Location of Well: 745 feet from the South line and 2130 feet from the West line					
Ground Level Elev. Report Later	Producing Formation Penn. "D"		Pool Tocito Dome	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, 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 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.

J. Arnold Snell
Name
J. Arnold Snell, Area Engr.
Position
AMOCO PRODUCTION COMPANY
Company
March 19, 1974
Date

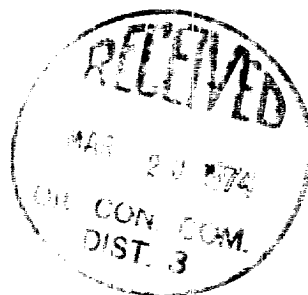
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

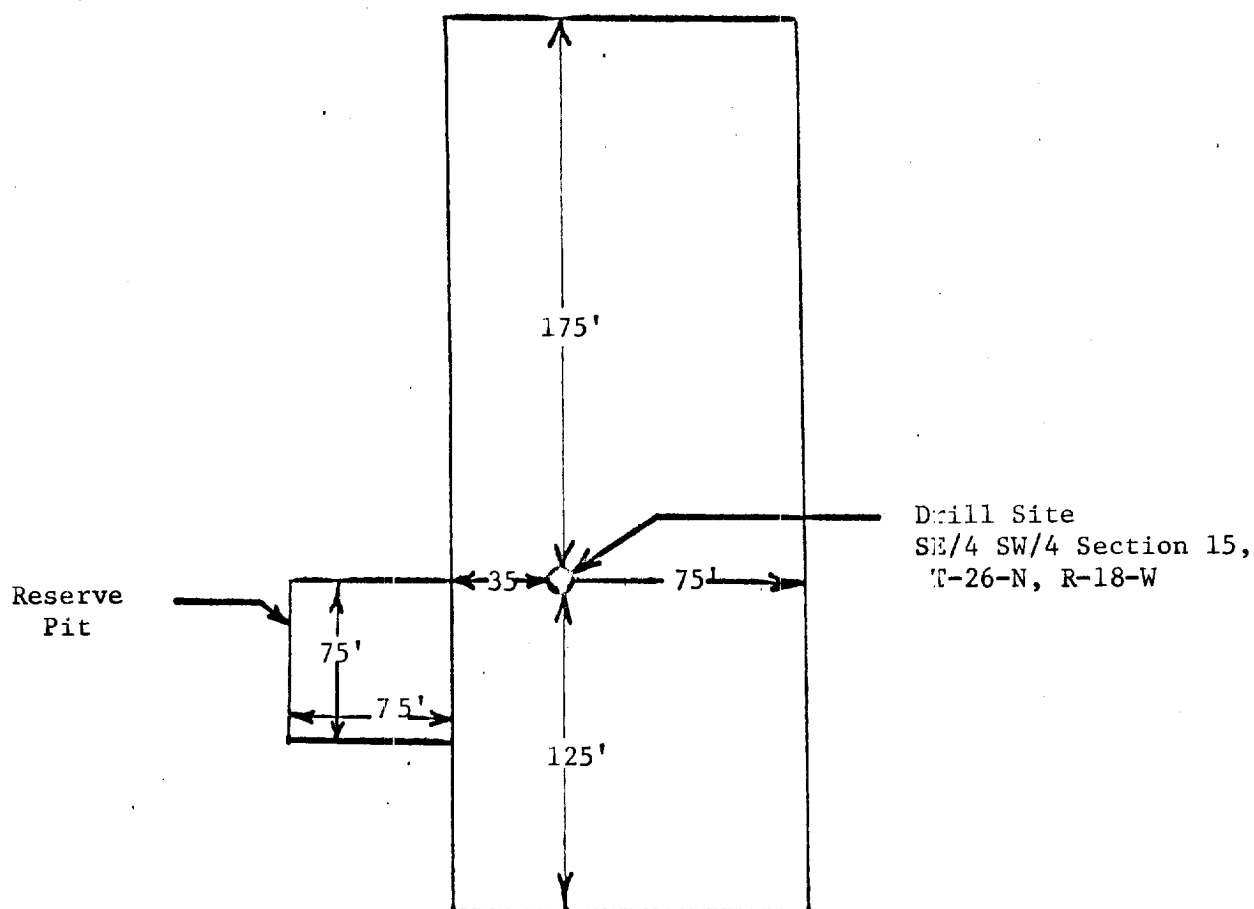
Date Surveyed
March 19, 1974
Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.
Certificate No.
3950

DEVELOPMENT PLAN FOR SURFACE USE
NAVAJO TRIBAL "U" NO. 23
SAN JUAN COUNTY, NEW MEXICO

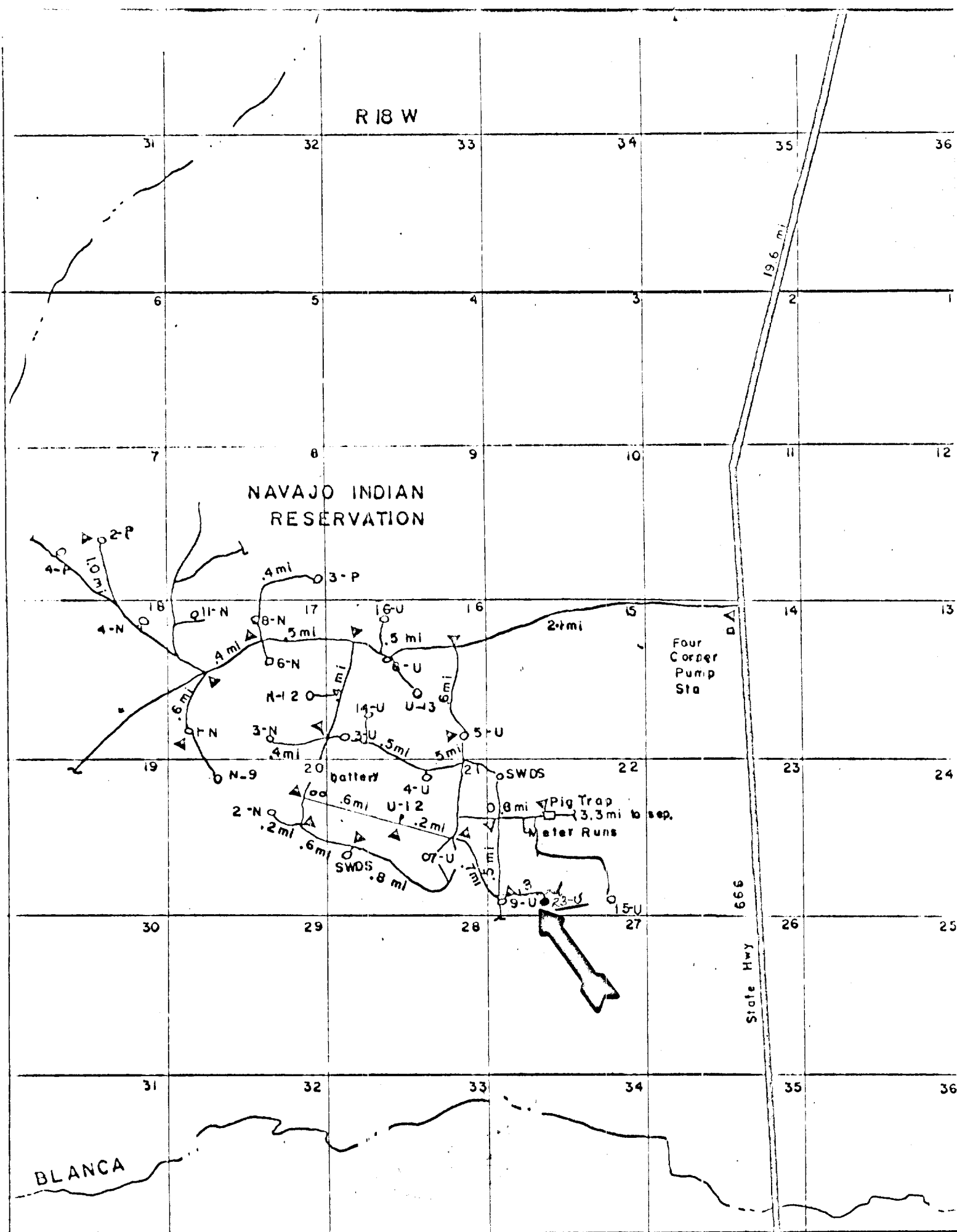
Amoco Production Company proposes to drill the subject well with rotary tools on a graded location as shown on the attachments. The location is in accordance with NMOCC Order R-2758. Established roads exist in the area and only 300 feet of new road will need to be constructed. Archeological clearance to drill this well will be obtained from the proper authorities. Clearance to perform work on this location will also be obtained from the Navajo Tribe.

No airstrips or field camps will be built and none exist nearby. There are no trees in the area and therefore no timber damage will result. Vegetation in the area is extremely sparse and consists primarily of tumbleweed. As the well is located in the middle of an active oil field, Amoco has previously completed a water source well. All water for drilling operations will come from this well. Upon completion of the subject well the location will be thoroughly cleaned and the reserve pit backfilled.





Amoco Production Company		SCALE: None
DRILLING LOCATION DIAGRAM		
NAVAJO TRIBAL "U" WELL NO. 23, TOCITO DOME FIELD		DRG. NO. 74-JWC-03-18



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-5034

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribe

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo Tribal "U"

9. WELL NO.

23

10. FIELD AND POOL, OR WILDCAT

Tocito Dome Penn. "D"

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA6E/4 SW/4 Section 22,
T-26-N, R-18-W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)1. OIL WELL ☒ GAS WELL ☐ OTHER ☐

APR 30 1974

2. NAME OF OPERATOR

AMOCO PRODUCTION COMPANY

U. S. GEOLOGICAL SURVEY

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.*
See also space 17 below.)
At surface

745' FSL & 2130' FWL, Section 22, T-26-N, R-18-W

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5628' GL, 5641' KB

16. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐

(Other)

PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON* ☐CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐

(Other)

Set casing

REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT* ☐

X

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

17. 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.)*

On 3-27-74 the 9-5/8" intermediate casing was set at 1520' and cemented with 500 sacks Class "A" cement with 4% Gel and 2 lbs. Medium Tuf Plug per sack. Tailed in with 75 sacks Class "A" Neat. Plug did not bump. Shut well in 4 hours and released pressure. Drilled float and fell to shoe. Ran Cement Bond Log and found no cement around bottom 180' casing with good bond at 1250' and 1320'. Perforated the casing with 2 shots at 1360'. Set a retrievable packer at 1477'. Unable to break circulation. Pumped 13 barrels in formation at 2-1/2 BPM and 900 psi and pressure dropped to 750 psi. Pulled packer and perforated 1410' with 2 shots. Pumped 8 barrels into formation at 2-1/2 BPM at 900 psi. Pumped down annulus and broke circulation. Set cement retainer at 1438'. Pumped 75 sacks Class "A" cement. Stung out of retainer and dumped 75 sacks Class "A" Neat on retainer. Pulled drill pipe to 1164' and bradenhead squeezed with maximum pressure 775 psi. Cement above perfs and 1310'. Shut well in and waited on cement to set 27-1/2 hours. Ran Cement Bond Log and showed good bond. Drilled cement and retainer at 1415'. Continued drilling to a total depth of 6369' with the 7" casing set at 6369' and DV tool at 3960'. Cemented first stage with 400 sacks Class "B" cement with 50-50 Poz and 6% Gel and 2 lbs. Medium Tuf Plug per sack followed by 200 sacks Class "B" Neat cement. Cemented second stage with 700 sacks Class "B" 50-50 Poz and 6% Gel and 2 lbs. Medium Tuf Plug per sack followed by 50 sacks Class "B" Neat cement, 4-26-74. The cement circulated on both stages.

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

SIGNED

TITLE

Area Engineer

DATE

April 29, 1974

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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 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 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

