

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 **1020' FSL & 1570' FWL, Section 13, T-31-N, R-5-W**  
At proposed prod. zone **Same**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**58 miles northeast of Blanco, New Mexico**

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
**1020' FSL**  
**1020'**

16. NO. OF ACRES IN LEASE  
**1920**

17. NO. OF ACRES ASSIGNED TO THIS WELL  
**320**

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
**None**

19. PROPOSED DEPTH  
**8250'**

20. ROTARY OR CABLE TOOLS  
**Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**6527' est. GL**

22. APPROX. DATE WORK WILL START\*  
**Within 90 days**

23. PROPOSED CASING AND CEMENTING PROGRAM

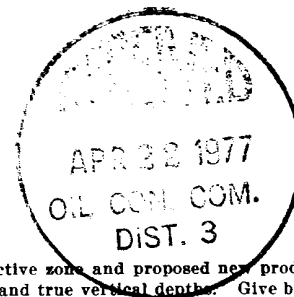
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	10-3/4"	40.5#	300'	300 - circ.
9-7/8"	7-5/8"	26.4#	3800'	600 - circ.
6-3/4"	4-1/2"	11.6#	8250'	600 - circ.

Well to be drilled to develop Dakota formation. Completion interval and stimulation program to be determined from study of open hole logs.

Copies of Location Plat, Development Plan, Topo Map, location, transportation sketch, and Amoco's blowout prevention design for this well are attached.

The Forest permit is being prepared.

The gas purchaser will be Northwest Pipeline Corporation.



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 *John Montgomery* TITLE Area Engineer DATE April 12, 1977  
(This space for Federal or State office use)

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

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

CONDITIONS OF APPROVAL, IF ANY:

*OK*

*St*

\*See Instructions On Reverse Side

## 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.

NEW MEXICO OIL CONSERVATION COMMISSION  
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.

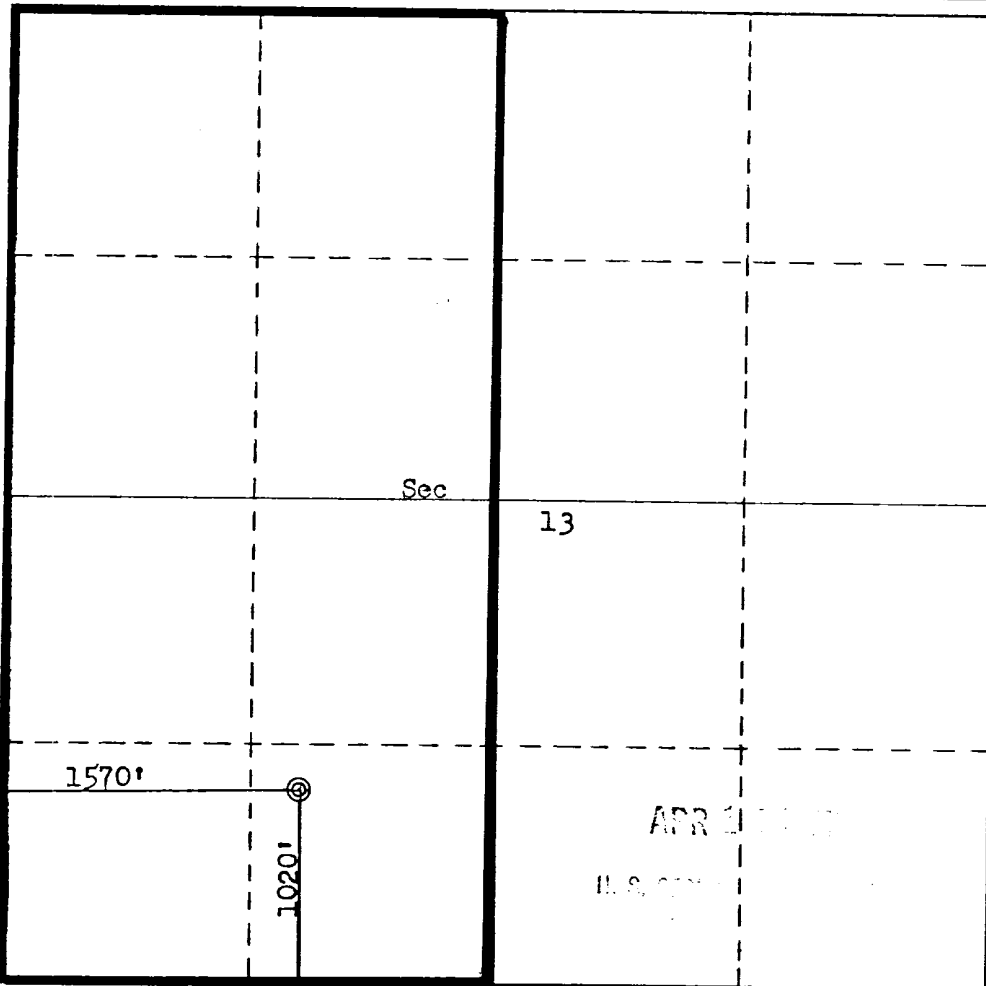
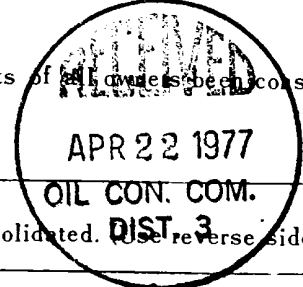
Operator <b>Amoco Production Company</b>			Lease <b>Rosa Unit</b>		Well No. <b>57</b>
Unit Letter <b>E</b>	Section <b>13</b>	Township <b>31N</b>	Range <b>5W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>1020</b> feet from the <b>South</b> line and <b>1570</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6527 est.</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>320</b> 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.

*H. D. Montgomery*  
Name  
**H. D. Montgomery**

Position

**Area Engineer**

Company

**AMOCO PRODUCTION COMPANY**

Date

**April 12, 1977**

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 30, 1977**

Registered Professional Engineer and/or Land Surveyor

*Fred B. Kerr Jr.*  
**Fred B. Kerr Jr.**

Certificate No.

**3950**

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

ROSA UNIT NO. 57  
1020' FSL & 1570' FWL, SECTION 13, T31N, R5W  
RIO ARriba COUNTY, NEW MEXICO

CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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 AMOCO PRODUCTION  
COMPANY and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

April 12, 1977  
Date

L.O. Jones Area Supt.  
Name and Title

APR 1 1977

U. S. GEOLOGICAL SURVEY

DEVELOPMENT PLAN  
ROSA UNIT NO. 57  
1020' FSL & 1570' FWL, SECTION 13, T31N, R5W  
RIO ARRIBA COUNTY, NEW MEXICO

The proposed location is in the Carson National Forest, a pinon-juniper forest. The ground cover on the location is mostly sagebrush with very few cedar and pinon trees. The geological name of the surface formation is the Tertiary San Jose. Access will require 3.2 miles of existing road to be improved and 3/4 mile of new road will have to be built across Martinez Wash and on to the location. The location is fairly level; a 5% cut will be needed to level the location for drilling. No construction materials will be used for building the location; material from high points will be used to level the location for proper drilling.

Preliminary approval has been obtained from the U. S. Forest Service and formal approval is presently being sought. Archaeological clearance has been applied for, but not yet granted. The U.S.G.S. has granted preliminary approval.

We anticipate hauling water from a proposed water hole in a wash approximately 1-1/2 miles south of the location (map attached). In the event of rejection of this proposal by the U. S. Forest Service, we will make arrangements to haul water by truck from the Gomez water hole at La Jara Wash over 15.6 miles of permanent existing roads. Water will be used to drill the first 300 feet, gel mud from 300' to 3800' and gas from 3800' to TD (8250'). A 150' x 150' pit will be built on location to hold all drilling waste and other trash, trees, and brush. Upon completion, all waste liquids will be hauled by truck and bladed into existing roads and the pit will be covered. All the pits will be covered; the location pits and drilling site will be cleaned and reseeded according to U. S. Forest Service specifications (seeding plan attached).

There are no airstrips or camps in the vicinity.

The estimated tops of important geological formations bearing hydrocarbons are:

<u>Formation</u>	<u>Depth</u>	<u>Elevation</u>
Fruitland-Pictured Cliffs	3000-3300'	+3500-3200'
Mesaverde	5500'	+1000'
Dakota	8050'	-1550'

Estimated KB elevation: 6540'

<u>Est. Depth</u>	<u>Csg. Size</u>	<u>Weight</u>	<u>Hole Size</u>	<u>Sacks Cement</u>	<u>Type Cement</u>
300'	10-3/4"	40.5#	15"	300 - Class "B", 2% CaCl <sub>2</sub> .	
3800'	7-5/8"	26.4#	9-7/8"	600 - Class "B", 50:50 Poz, 6% Gel.	
8250'	4-1/2"	11.6#	6-3/4"	600 - Class "B", 50:50 Poz, 6% Gel.	

APR 1

U. S. G. S.

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

Amoco plans to run the following logs: From 0 to 300' - Induction, Compensated Density. From 3800' to TD - Induction Gamma Ray, Formation Density. No cores or drill stem tests will be taken.

In the past, drilling in this area encountered no abnormal temperatures or hydrocarbon gas.

We anticipate the starting date to be the last week of May and expect a two week operation.

APR 1 1971

U.S. G.P.O.

SEEDING PLAN  
FOREST LANDS

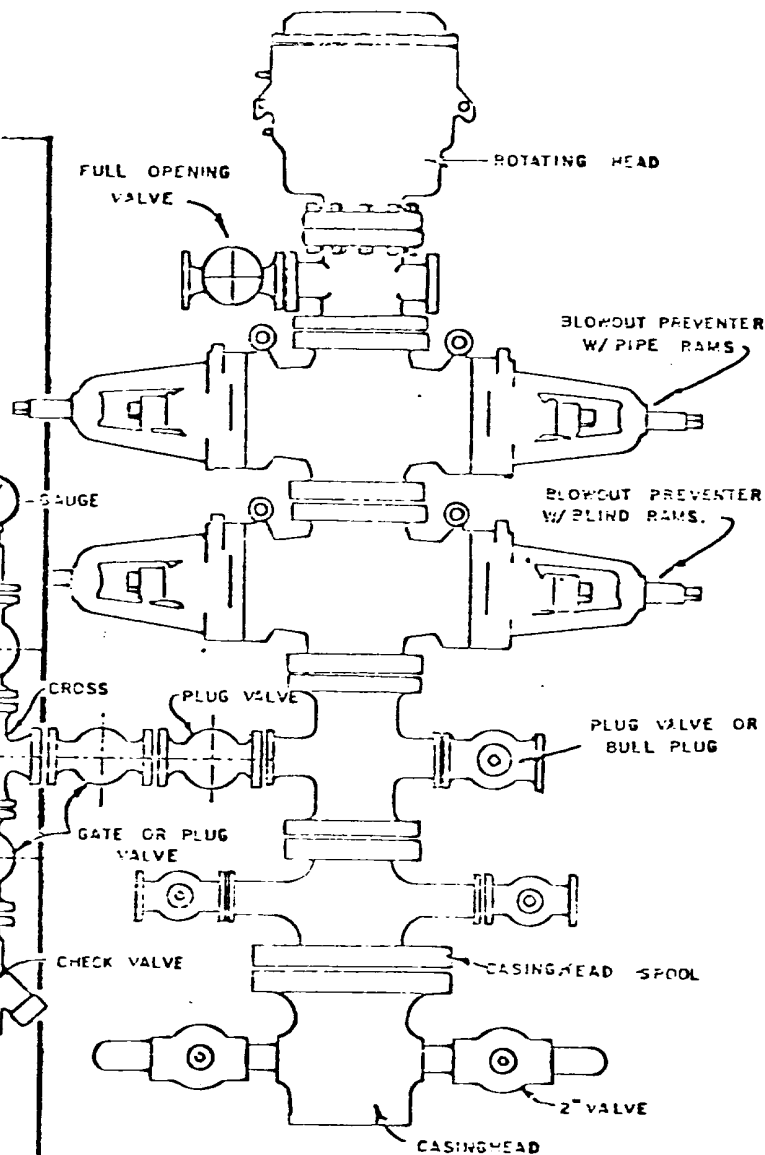
4 lbs./acre  
6 lbs./acre  
1 lb./acre  
1 lb./acre

Crested Wheatgrass  
Pubescent Wheatgrass  
Ranger Alfalfa  
Weeping Lovegrass

APR 1

U.S.D.

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 CHOKER MANIFOLD.



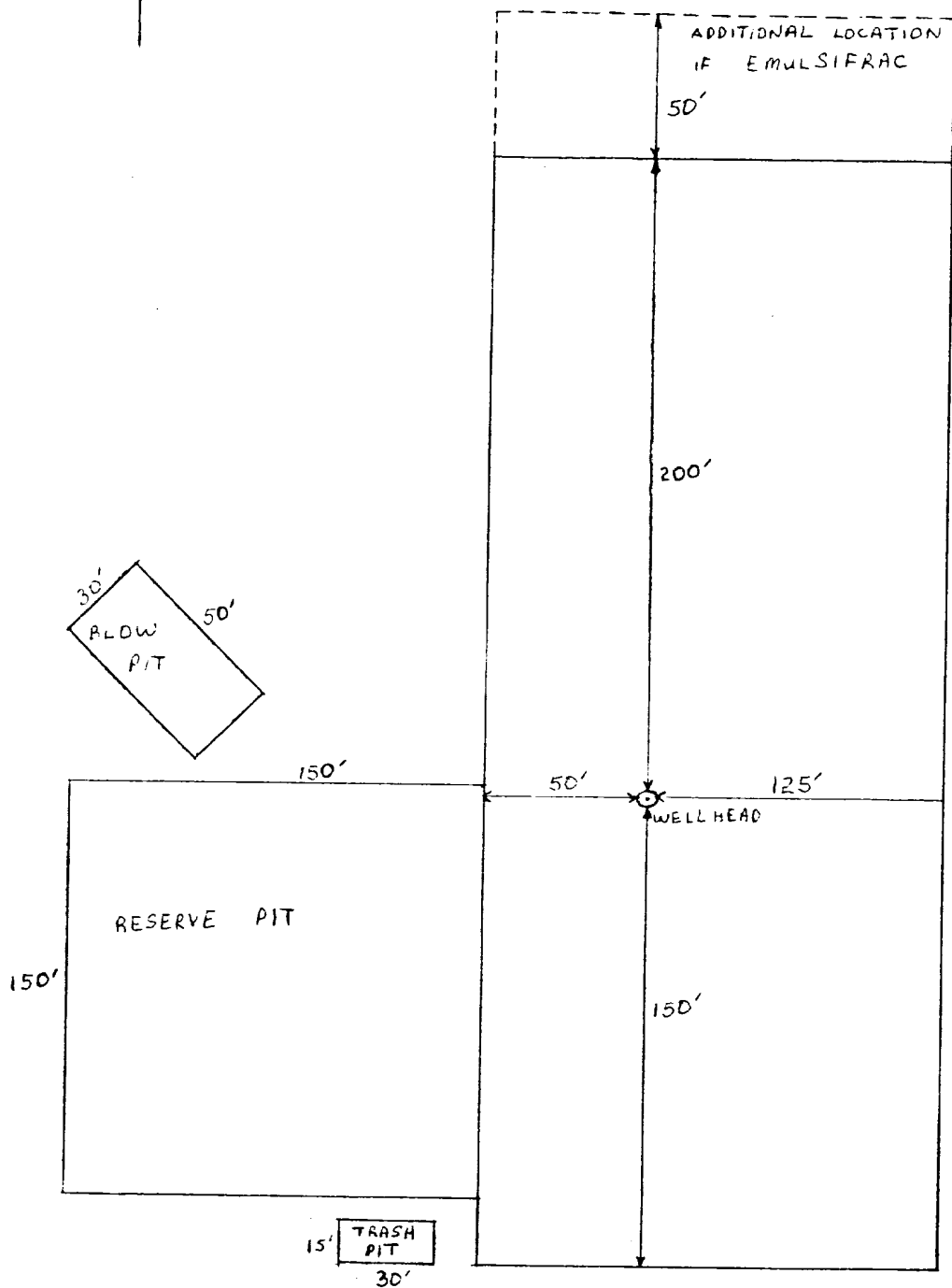
BLOWOUT PREVENTER HOOKUP

APR 1 EXHIBIT D-4  
OCTOBER 16, 1969

U.S. 001



SE



APR 10 1977

U.S. GEOLOGICAL SURVEY

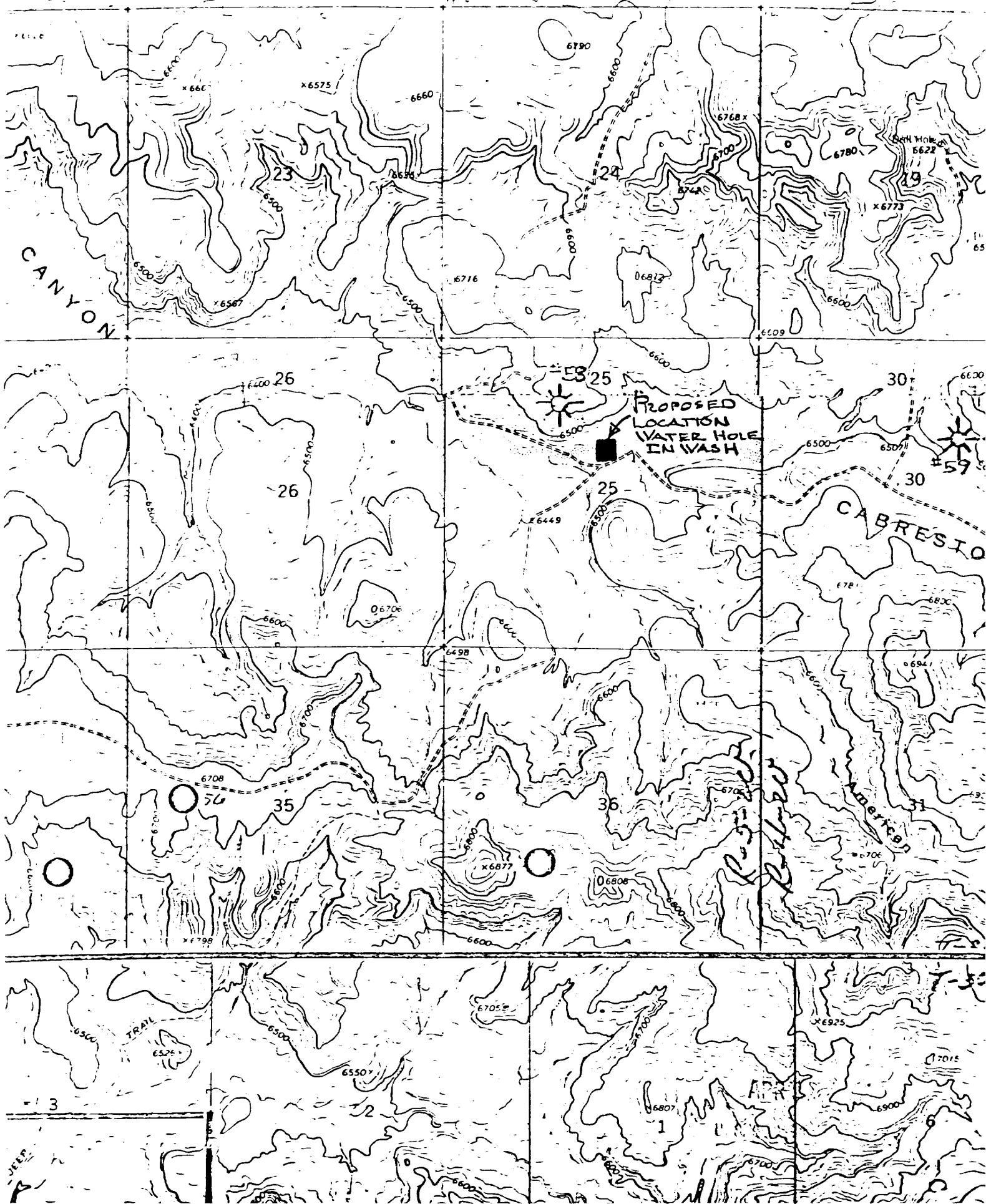
Amoco Production Company

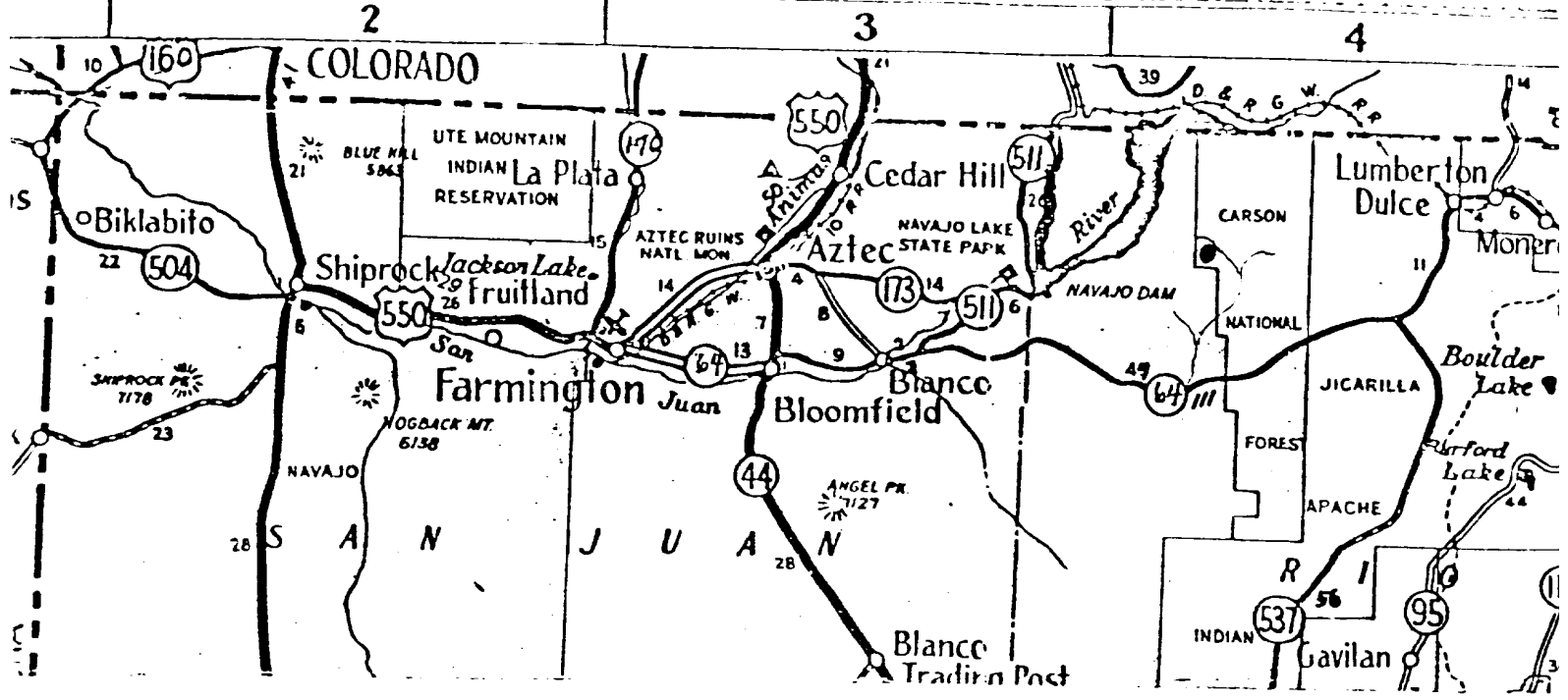
SCALE: NONE

DRILLING LOCATION SKETCH : ROSA UNIT # 57

DRG.  
NO.

POUGHAMOUNT BRANCH





FARMINGTON AREA TRAFFIC SKETCH  
 DENVER DIVISION  
 Rosa Unit Well No. 57  
 Rio Arriba County, New Mexico  
 Amoco WI: 50%

Rail Point, Aztec - 73.6 miles  
 Mud Point, Aztec - 73.6 miles  
 Cement Point, Farmington - 80.6 mi.

4-6-77

