

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 1630' FNL & 1850' VEL, Section 30, T-31-N, R-4-W

At proposed prod. zone

Same

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

54 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)1630' FNL
1630'18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

None

16. NO. OF ACRES IN LEASE

1920

19. PROPOSED DEPTH

8250'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

6533' est. GL

22. APPROX. DATE WORK WILL START*

Within 90 days

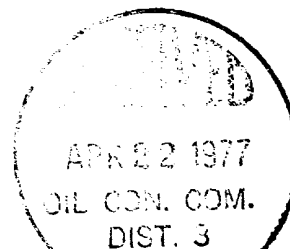
23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15"	10-3/4"	40.5#	300'	300 sx - circ.
9-7/8"	7-5/8"	26.4#	3800'	600 sx - circ.
6-3/4"	4-1/2"	11.6#	8250'	600 sx - 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 and transportation sketch, and Amoco's blowout prevention hookup 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 H. H. Montgomery TITLE Area Engineer DATE April 13, 1977
(This space for Federal or State office use)

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

APPROVED BY _____

*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.

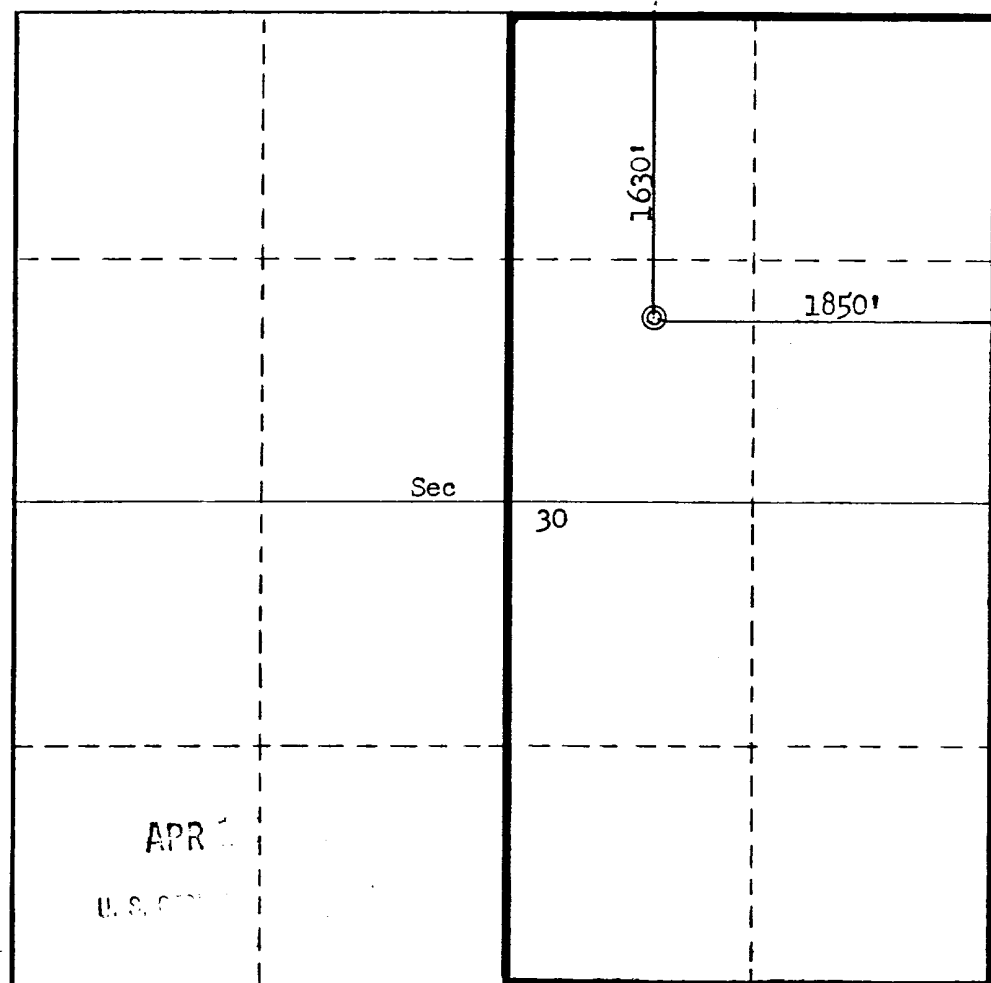
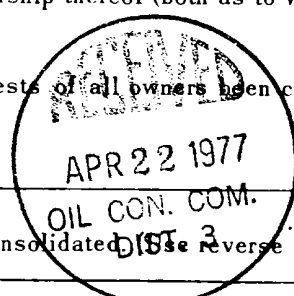
Operator Amoco Production Company			Lease Rosa Unit		Well No. 59
Unit Letter G	Section 30	Township 31N	Range 4W	County Rio Arriba	
Actual Footage Location of Well:					
1630 feet from the North line and		1850 feet from the East line			
Ground Level Elev. 6533 est.	Producing Formation Dakota	Pool Basin Dakota	Dedicated Acreage 320 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 (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. _____

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
4-12-77

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

APR 1
U. S. GEOLOGICAL SURVEY

ROSA UNIT NO. 59
1630' FNL & 1850' FEL, SECTION 30, T31N, R4W
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 13, 1977
Date

Lo. J. J. J. Area Supt.
Name and Title

APR 13

U. S. GEOLOGICAL SURVEY

DEVELOPMENT PLAN
ROSA UNIT NO. 59
1630' FNL & 1850' FEL, SECTION 30, T31N, R4W
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 sagebrush with a few cedar and pinon trees. The geological name of the surface formation is the Tertiary San Jose. Access will require the improving of 1000' of permanent existing road and 1000' of new road will be built across Cabresto Wash. The location is fairly level; material from high points will be used to level the location for proper drilling and no construction materials will be used for building the location.

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 west 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 about 12 miles of permanent existing roads. Water will be used to drill the first 300', 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 reserve pit will be covered. All the pits will be covered; the location pits and drilling site will be cleaned and reseeded 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'	-1500'

Estimated KB elevation: 6546'

<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 ₂ .	
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 1967
U. S. GEOLOGICAL SURVEY

Amoco's standard blowout preventer 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. A 100' core will be taken from the Dakota formation. No drill stem tests will be taken.

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

We anticipate the starting date to be in June and expect a two week operation.

APR 1971

U.S. GEOLOGICAL SURVEY

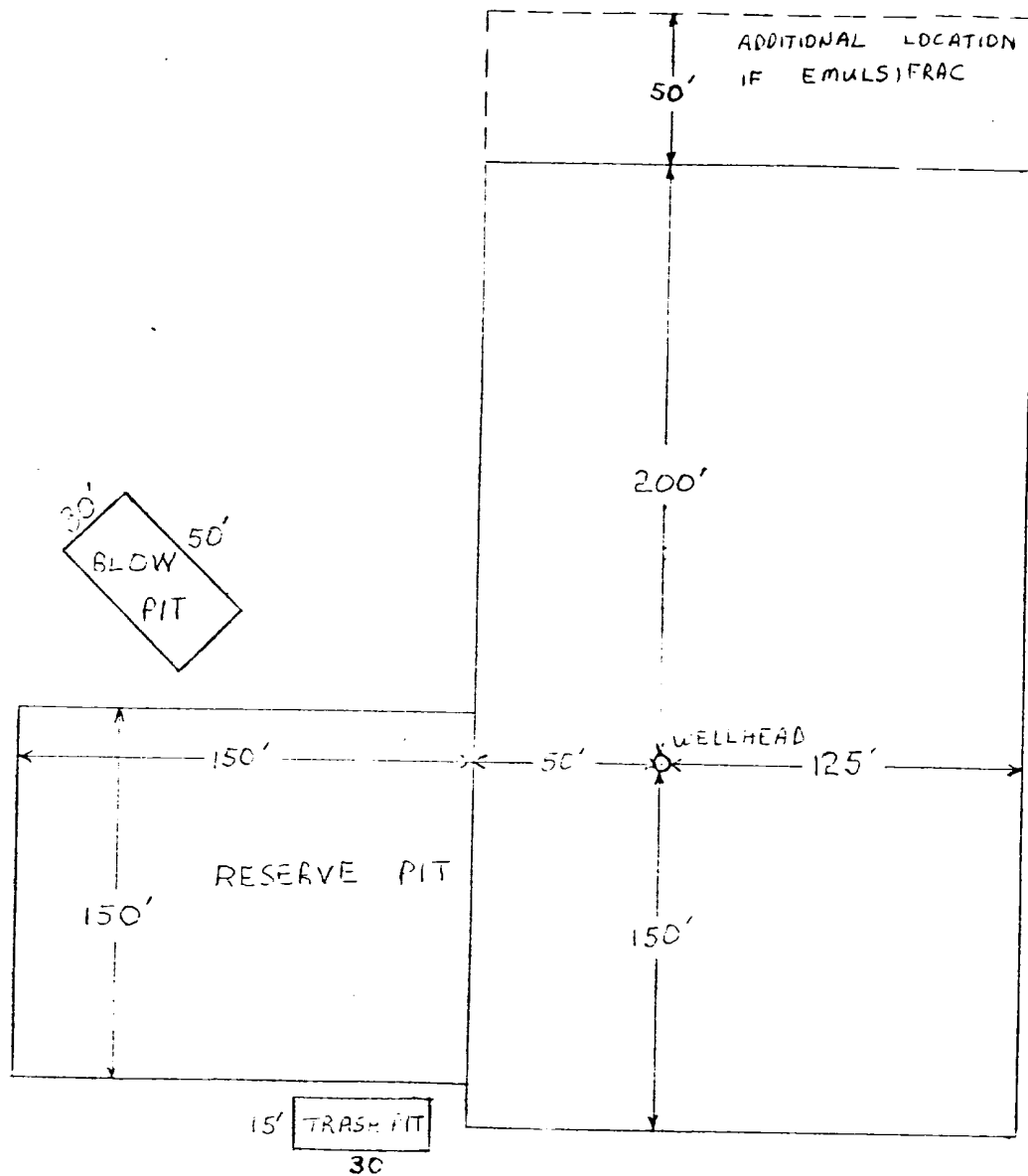
SEEDING PLAN
FOREST LANDS

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

Crested Wheatgrass
Pubescent Wheatgrass
Ranger Alfalfa
Weeping Lovegrass

APR 1 1961

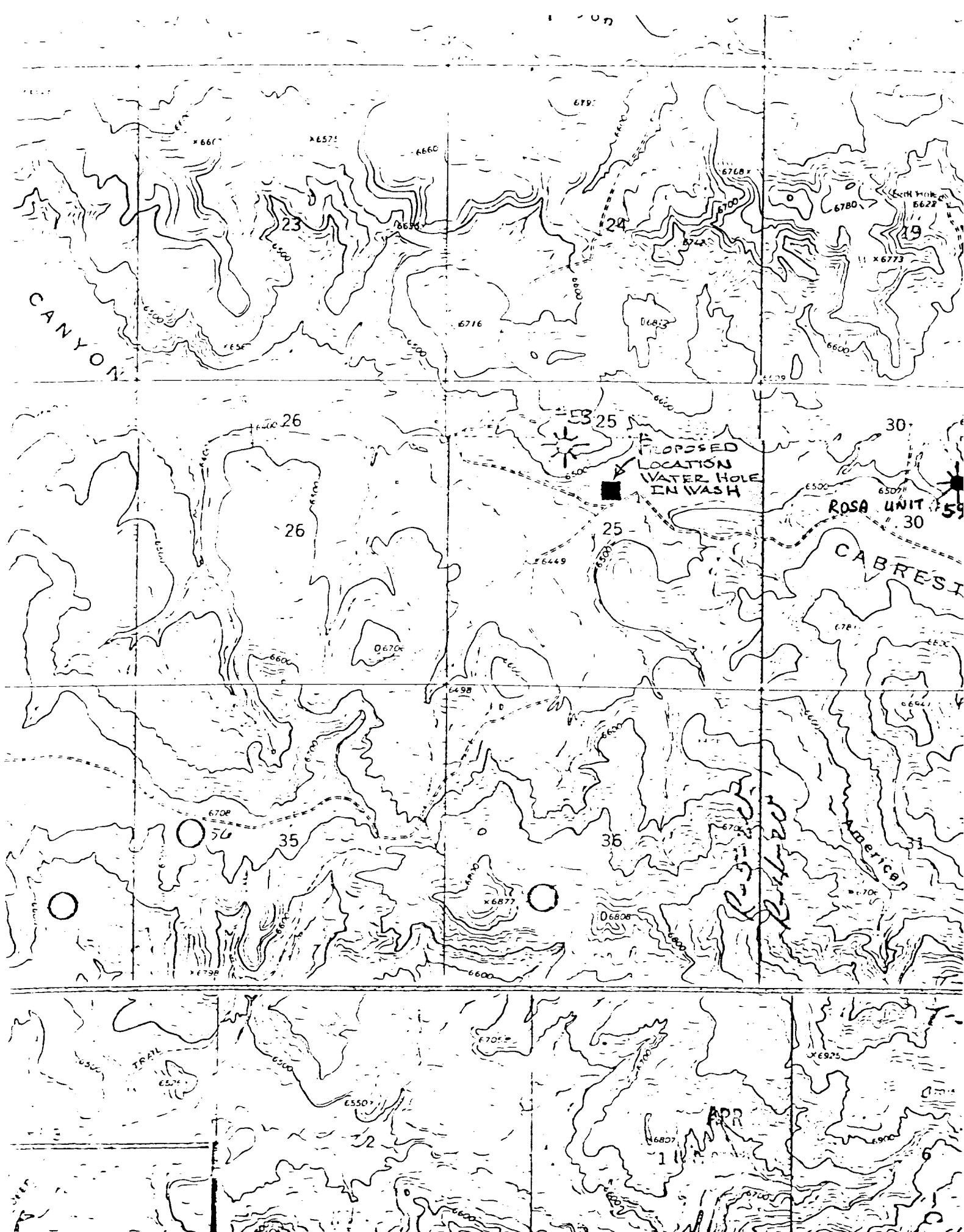
U.S. G.P.O.

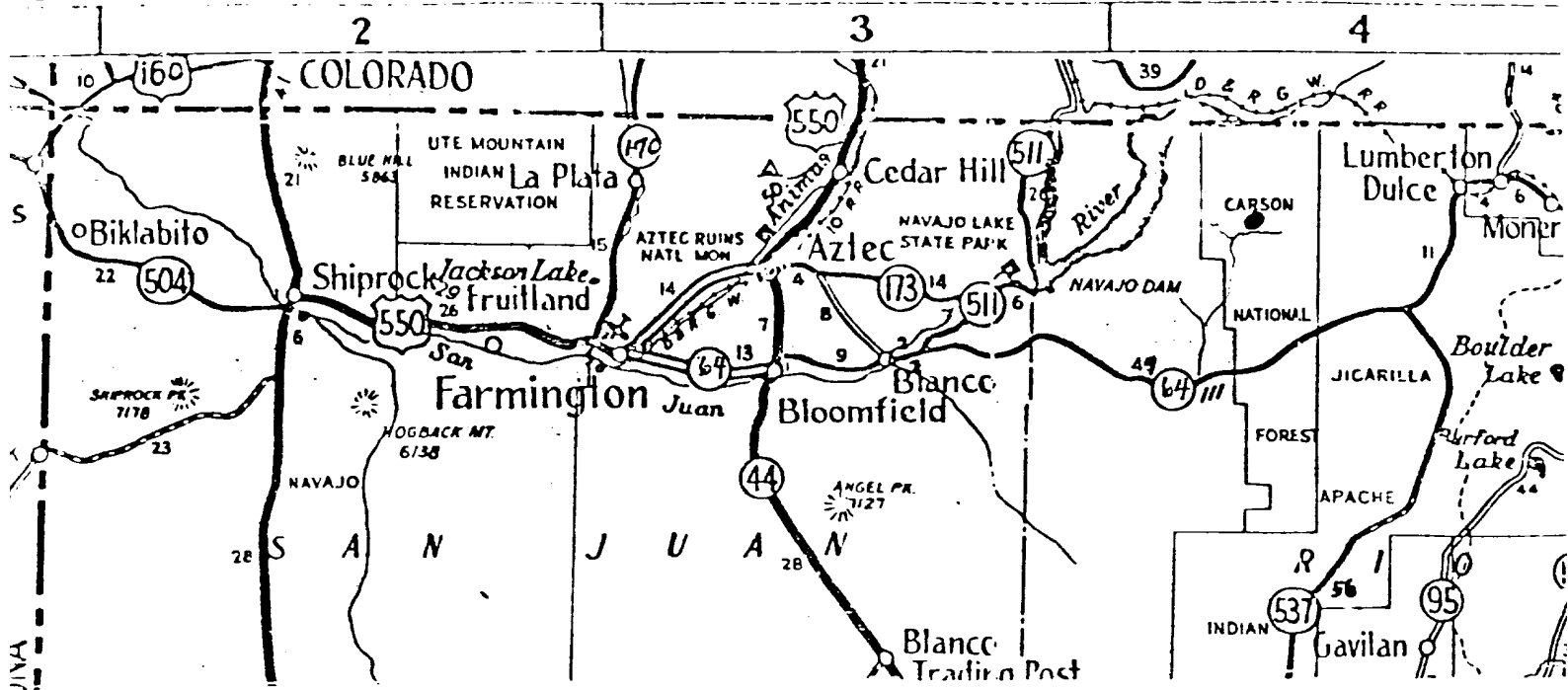


APR 1977

U.S. GEOLOGICAL SURVEY

Amoco Production Company		SCALE: NONE
DRILLING LOCATION SKETCH: ROSA UNIT #59		DRG. NO.

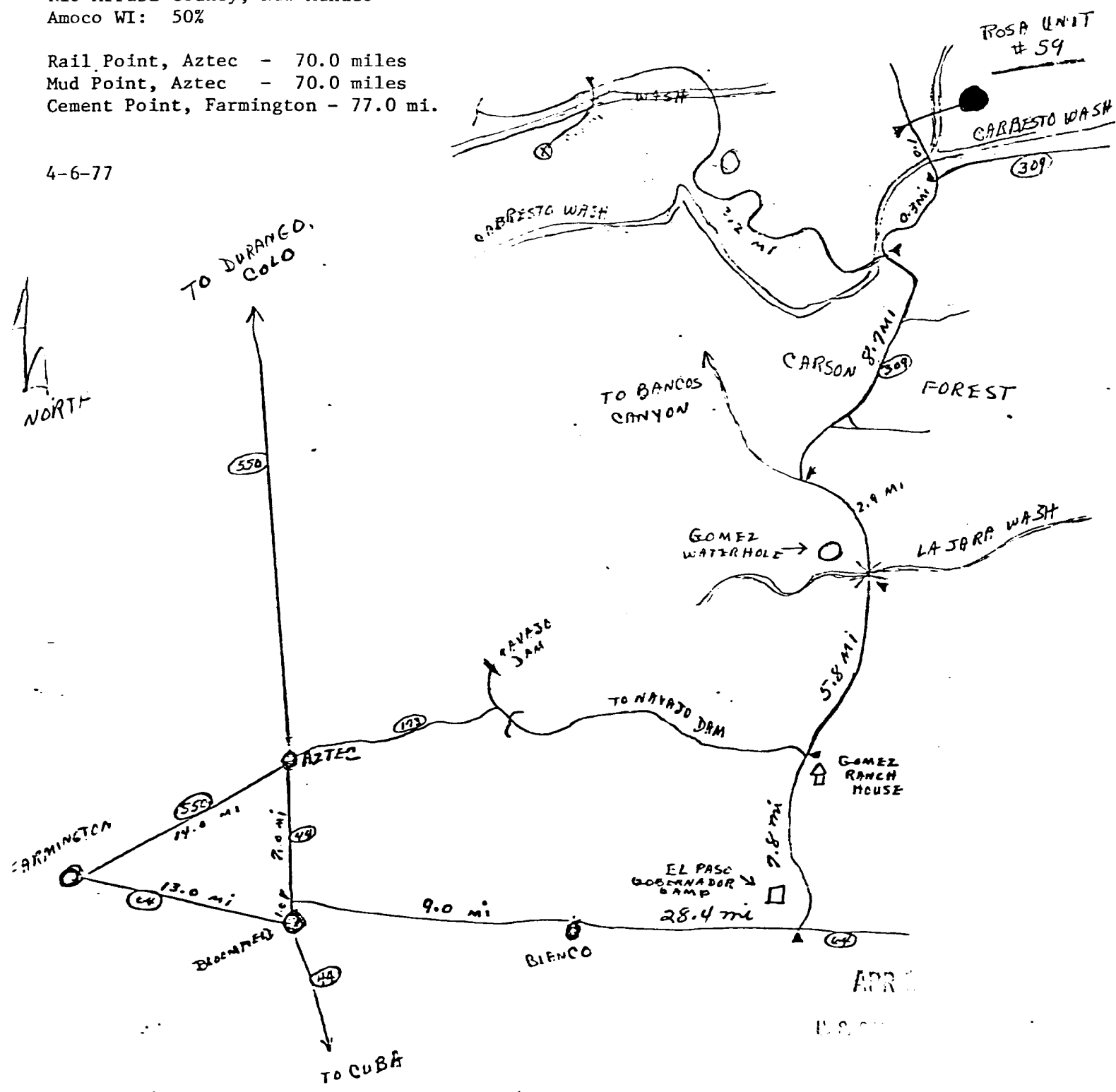


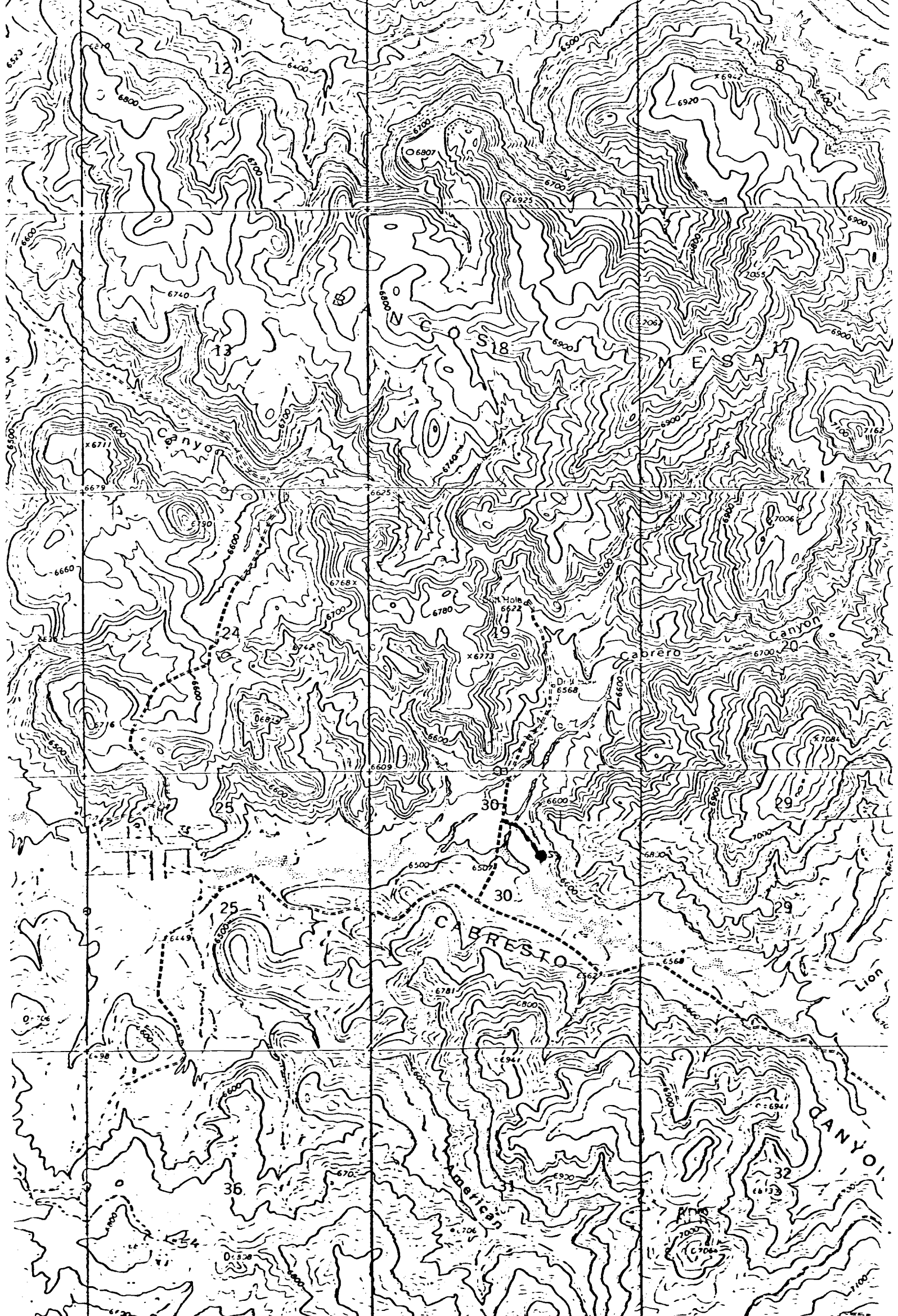


FARMINGTON AREA TRAFFIC SKETCH
 DENVER DIVISION
 Rosa Unit Well No. 59
 Rio Arriba County, New Mexico
 Amoco WI: 50%

Rail Point, Aztec - 70.0 miles
 Mud Point, Aztec - 70.0 miles
 Cement Point, Farmington - 77.0 mi.

4-6-77





A vicinity map for
AMOCO PRODUCTION COMPANY #59 Rosa Unit
1630' FNL 1850' FEL Sec 30-T31N-RLW
Rio Arriba County, New Mexico