

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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, NM, 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

870' FNL x 1030' FEL

At proposed prod. zone Same

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

3 miles east of Farmington, NM

15. DISTANCE FROM PROPOSED\*

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

870'

16. NO. OF ACRES IN LEASE

1200

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

1/2 mile N

19. PROPOSED DEPTH

6180'

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

5505' GR

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED

"GENERAL REQUIREMENTS"

PROPOSED CASING AND CEMENTING PROGRAM

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

N/320

20. ROTARY OR CABLE TOOL

Rotary

22. APPROX. DATE WORK WILL START\*

As soon as possible

This action is subject to administrative  
appeal pursuant to 30 CFR 290.

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#, K-55	300'	354 c.f. Class B
7-7/8"	4-1/2"	10.5#, K-55	6180'	2119 c.f. Class B

Amoco proposes to drill the above well to further develop the Basin Dakota reservoir. The well will be drilled to the surface casing point using native mud. The well will then be drilled to TD with a low solids nondispersed mud system. Completion design will be based on open hole logs. Copy of all logs will be filed upon completion. Amoco's standard blowout prevention will be employed; see attached drawing for blowout preventer design. Upon completion the well site will be cleaned and the reserve pit filled and leveled. The gas from this well is dedicated to El Paso Natural Gas under Contract No. 56742.

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.

Original Signed By

SIGNED B. D. Shaw

TITLE Administrative Supervisor

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

COMMENTS ON APPROVAL, IF ANY:

NMOCC

CON. DIV.  
DIST. 3

\*See Instructions On Reverse Side 3

RECEIVED  
MAR 12 1985

APPROVED  
AS AMENDED  
MAR 08 1985  
J. Stan McKee  
AREA MANAGER  
FARMINGTON RESOURCE AREA

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

Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>GALLEGOS CANYON UNIT</b>			Well No. <b>102E</b>
Unit Letter <b>A</b>	Section <b>13</b>	Township <b>29N</b>	Range <b>13W</b>	County <b>San Juan</b>		
Actual Footage Location of Well: <b>870</b> feet from the <b>North</b> line and <b>1030'</b> feet from the <b>East</b> line						
Ground Level Elev: <b>5505</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 Unitized

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.

		<p>870'</p> <p>1030'</p>	
		<p>Sec. 13</p>	
<p>RECEIVED</p> <p>MAR 12 1985</p> <p>OIL CON. DIV</p> <p>DIST. 2</p>			

Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Original Signed By  
**B. D. Shaw**

Name  
**B. D. Shaw**

Position  
**Administrative Supervisor**

Company  
**Amoco Production Company**

Date  
**12/15/84**

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  
**November 27, 1984**

Registered Professional Engineer and Land Surveyor  
**Fred B. Kern Jr.**

Certificate No. **3950**

GALLEGOS CANYON UNIT #102E  
870' FNL, 1030' FEL, Sec. 13, T29N-R13W  
SAN JUAN COUNTY, NM

MULTI-POINT SURFACE USE PLAN

1. The attached topographic map shows the proposed route to the location.
2. An access road approximately 700' in length will be built.  
If conditions merit it, additional surface materials such as gravel and/or surface fill will be applied to the proposed road and/or location.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the vicinity map.
4. There is a well and facilities approximately 1/2 mile North.
5. Water will be hauled from San Juan River.
6. No construction materials will be hauled in for this location.
7. A 125' by 125' pit, fenced on 3 sides, will be built on location to hold all drilling waste and upon completion of the well, the 4th side will be fenced. Drilling mud will be allowed to evaporate. Sanitary facilities and a steel mesh portable trash container will remain on location throughout drilling operations and will then be trucked to a designated disposal area.
8. There are neither airstrips nor camps in the vicinity.
9. The well site layout, reserve, burn and trash pits are shown on the attached Drill Site Specification Sheet.
10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well. Reseeding of the site will be carried out as instructed by the Bureau of Land Management.
11. The general topography is sloping with sandy loam, cedar, sage brush, and native grasses.
12. Representatives of Bureau of Land Management, Amoco Production Co., Jicarilla Archaeological Services, Farmington, inspected the site.

Operator's Representative: W. J. Holcomb  
Office Phone: (505) 325-8841  
Address: 501 Airport Drive, Farmington, NM 87401

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.

Date: 12/20/84

W. J. Holcomb B.S.S.  
W. J. Holcomb - District Manager

## GALLEGOS CANYON UNIT NO. 102E

## SUPPLEMENTAL INFORMATION TO FORM 9-331C

The geological name of the surface formation is the tertiary naciemento.

Estimated tops of important potential hydrocarbon bearing formations:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Ojo Alamo	210'	5305'
Fruitland	1048'	4470'
Pictured Cliffs	1368'	4150'
Chacra	---	---
Cliffhouse	2968'	2550'
Menefee	3118'	2400'
Point Lookout	3853'	1665'
Gallup	5094'	424'
Dakota	5961'	-443'
Morrison Bluff		
Summerville		
Todilto		
Entrada		
Navajo		
Wingate		
Chinle		
DeChelly		
Hermosa		
Molas		
Mississippian Leadville		
TD	6180'	-662'

Estimated KB elevation: 5518'.

Drilling fluid to TD will be a low solids non-dispersed mud system. Open hole logging program will include logs from TD to below surface casing.

DIL, SP, GR - 4500-TD  
CDL, CNL, GR- 4500-TD

Completion design will be based on these logs. No cores or drill stem tests will be taken.

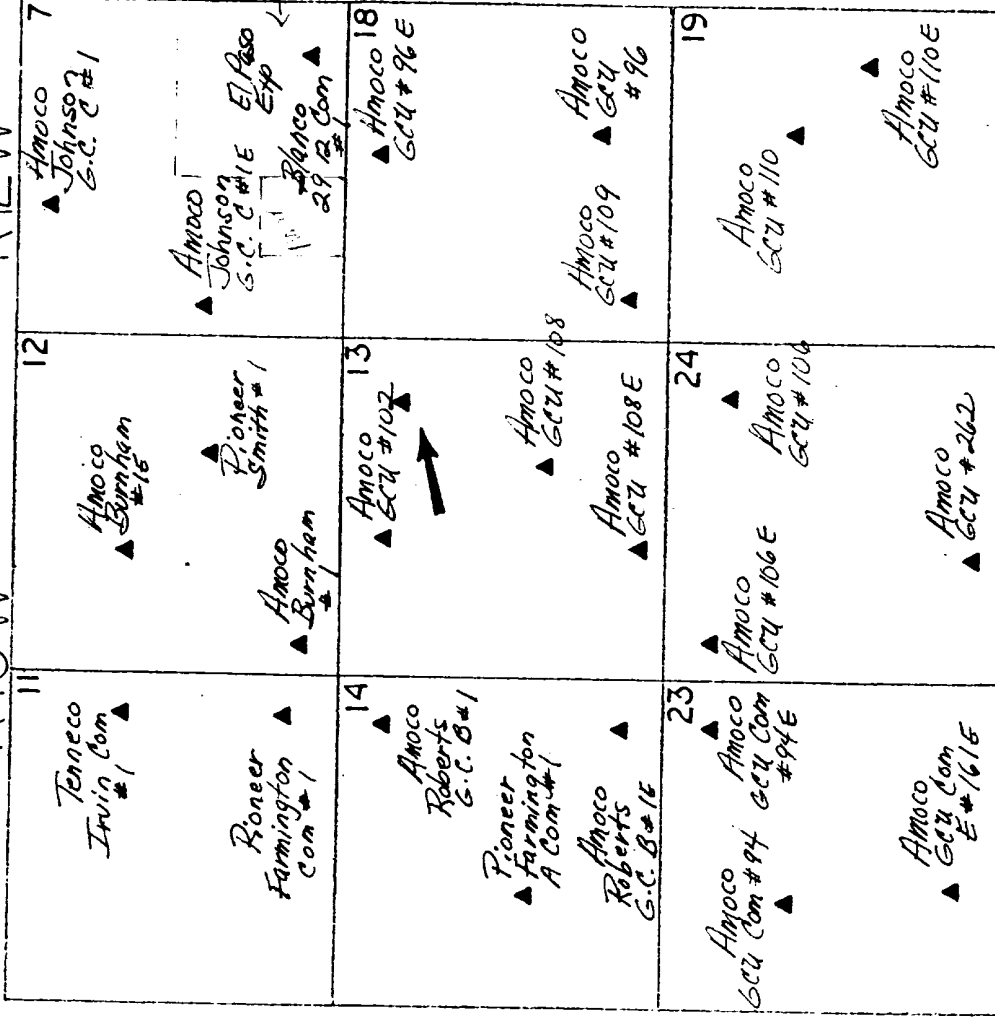
Operations will commence when permitted and last approximately 10 weeks.

Amoco's standard blowout prevention will be employed (see attached drawing).

PE7

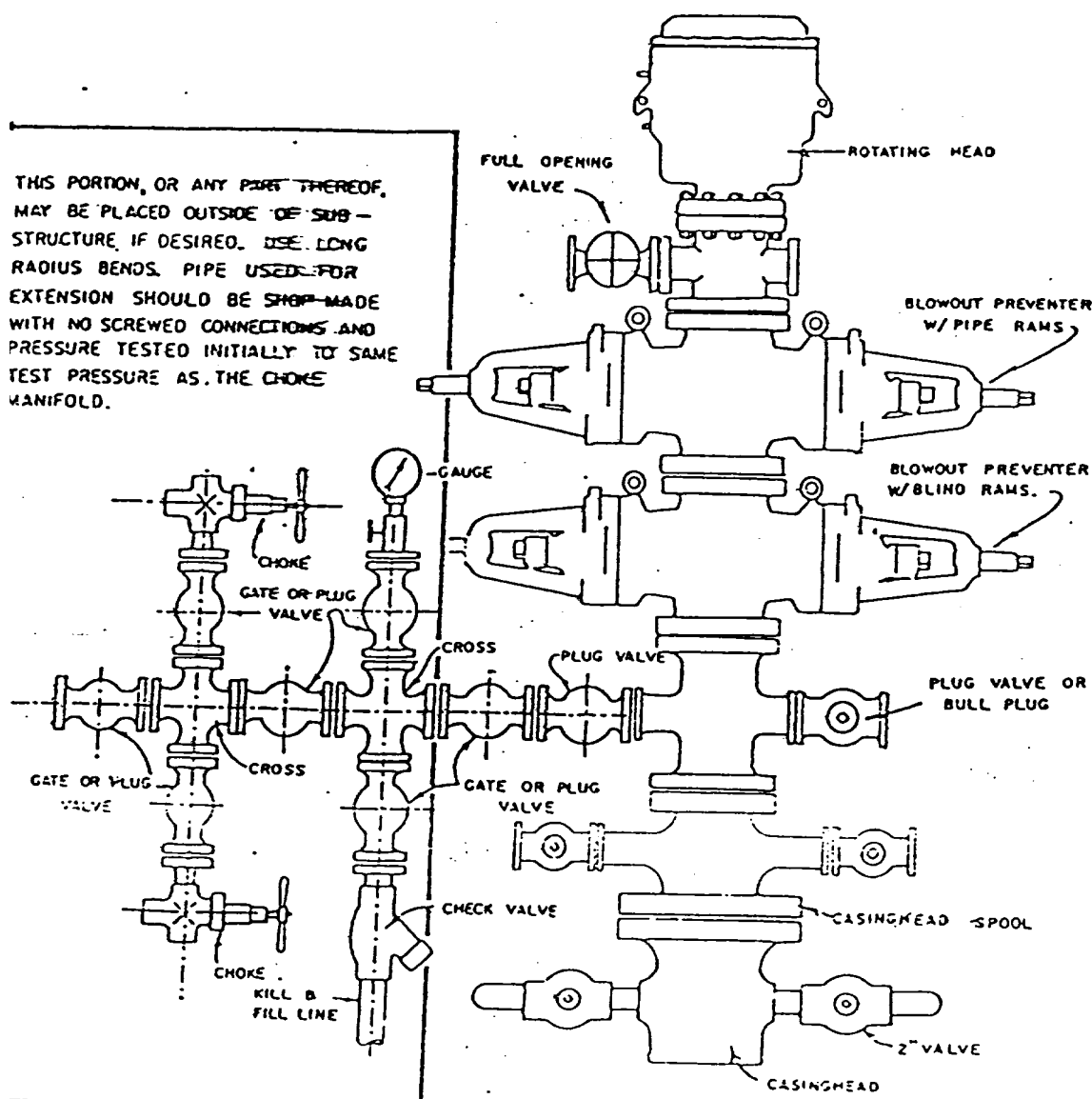
R13W R12W

T 29 N



▲ BASIN DAKOTA

1. Blowout Preventers and Master Valve to be fluid operated, and all fittings must be in good condition.
2. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
3. Nipple above Blowout Preventer shall be same size or larger than BOP being drilled through.
4. All fittings to be flanged.
5. Omsco or comparable safety valve must be available on rig floor at all times with proper connection or sub. The I.D. of safety valve should be as great as I.D. of tool joints of drill pipe, or at least as great as I.D. of drill collars.



## BLOWOUT PREVENTER HOOKUP

API Series # 900

EXHIBIT D-4

OCTOBER 16, 1955

Operation of BOP by closing both pipe and blind rams will be tested each trip or, on long bit runs, pipe rams will be closed once each 24 hours.

REHABILITATION PLAN

Lease No.: \_\_\_\_\_; Well Name and No.: G.C.U. #102E  
Location: 870' ENL, 1030' FEL, Sec. 13, T. 29 N., R. 13 W.

Amoco Prod. Co. intends to drill a well on surface owned by A.E. Dustin. The lessee/operator agrees to complete the following rehabilitation work if the well is a producer:

- ☒ Yes ☐ No Maintain access road and provide adequate drainage to road.  
☒ Yes ☐ No Reshape and reseed any area not needed for maintenance of the pump and support facilities.

Other requirements: \_\_\_\_\_

The following work will be completed when the well is abandoned:

- ☒ Yes ☐ No Pit will be fenced until dry, then filled to conform to surrounding topography.  
☒ Yes ☐ No Water bars will be constructed as deemed necessary.  
☒ Yes ☐ No Site will require reshaping to conform to surrounding topography.  
☒ Yes ☐ No Entire disturbed area will be reseeded. If yes, the following seed mixture will be used.

Seed mixture II

- ☐ Yes ☒ No Access road will be closed, rehabilitated and reseeded using the same seed mixture as above.  
☒ Yes ☐ No Access road will remain for surface owner's use.  
☒ Yes ☐ No Water bars will be constructed on the access road as deemed necessary.

Other requirements: \_\_\_\_\_

Surface Owner:

Name: A.E. Dustin  
Address: 2809 S.S. Rd.  
City: Farmington  
State: N.M.  
Telephone: \_\_\_\_\_  
Date: \_\_\_\_\_

Operator/Lessee:

Name: Amoco Prod. Co.  
Address: 501 Airport Dr.  
City: Farmington  
State: N.M.  
Telephone: 325-8841  
Date: \_\_\_\_\_

I CERTIFY that above rehabilitation plan is acceptable to me. I also waive an intensive Cultural Resource Field Inventory.

1-4-85  
(Date)

A.E. Dustin  
(Surface owner's signature)

This plan does not affect any other agreements between the lessee/operator and surface owner.

Operator: AMOCO PRODUCTION

Well Name: 1026CU

Legal Location: 870 FNH 1030 FEL

Sec. 13 T 29 N R. 13 W

Lease Number: \_\_\_\_\_

Field Inspection Date: 12-20-84

1. The operator or his contractor will contact the BLM Farmington Resource Area Office, Fluids Surface Management Staff, at (505) 325-4572, approximately 48 hours prior to construction activities.
2. No construction or drilling activities shall be conducted between November 1 and March 31 because of elk/deer/bald eagle winter habitat areas. Contact BLM wildlife biologist (Dave Renwald) at 325-3581, with any questions.
3. The Fluids Surface Management Staff shall be notified upon site completion, prior to moving on drilling rig.. (505) 325-4572.
4. A \_\_\_\_\_ (ft.) tree screen will be left on the \_\_\_\_\_ sides of the location.
5. Pits and/or pad will be constructed long and narrow, or to conform to natural contour of terrain, so as to avoid the edge of hazard by an amount that prevents pit failure.
6. Pits will be lined.
7. Earthen berm(s) will be placed on the \_\_\_\_\_ side(s) of the location between the reserve pit and the wash.
8. The \_\_\_\_\_ corner of the well pad will be rounded off to avoid \_\_\_\_\_.
9. The wash shall be diverted around the \_\_\_\_\_ side of the well pad.
10. Diversion ditch(es) will be constructed on the \_\_\_\_\_ side of the location above/below (circle one) the cut slope, draining to the \_\_\_\_\_.
11. A culvert of sufficient size will be placed where the drainage crosses access road.
12. The proposed access road shall utilize the upgraded 2-track trail approximately \_\_\_\_\_ (ft. or mi.) as agreed upon during on-site inspection. Remainder of planned access road will follow flagged route.
13. The access road shall be rerouted around the \_\_\_\_\_ edge of the well pad during construction and drilling activities for safety reasons. Upon completion of drilling and cleanup, the road will be returned to its original alignment.
- ☒ 14. Recommended paint color GREEN seed mix II.
15. Net wire shall be required on all reserve pits located on Sheep ranges.
16. \_\_\_\_\_

Operator's Representative \_\_\_\_\_

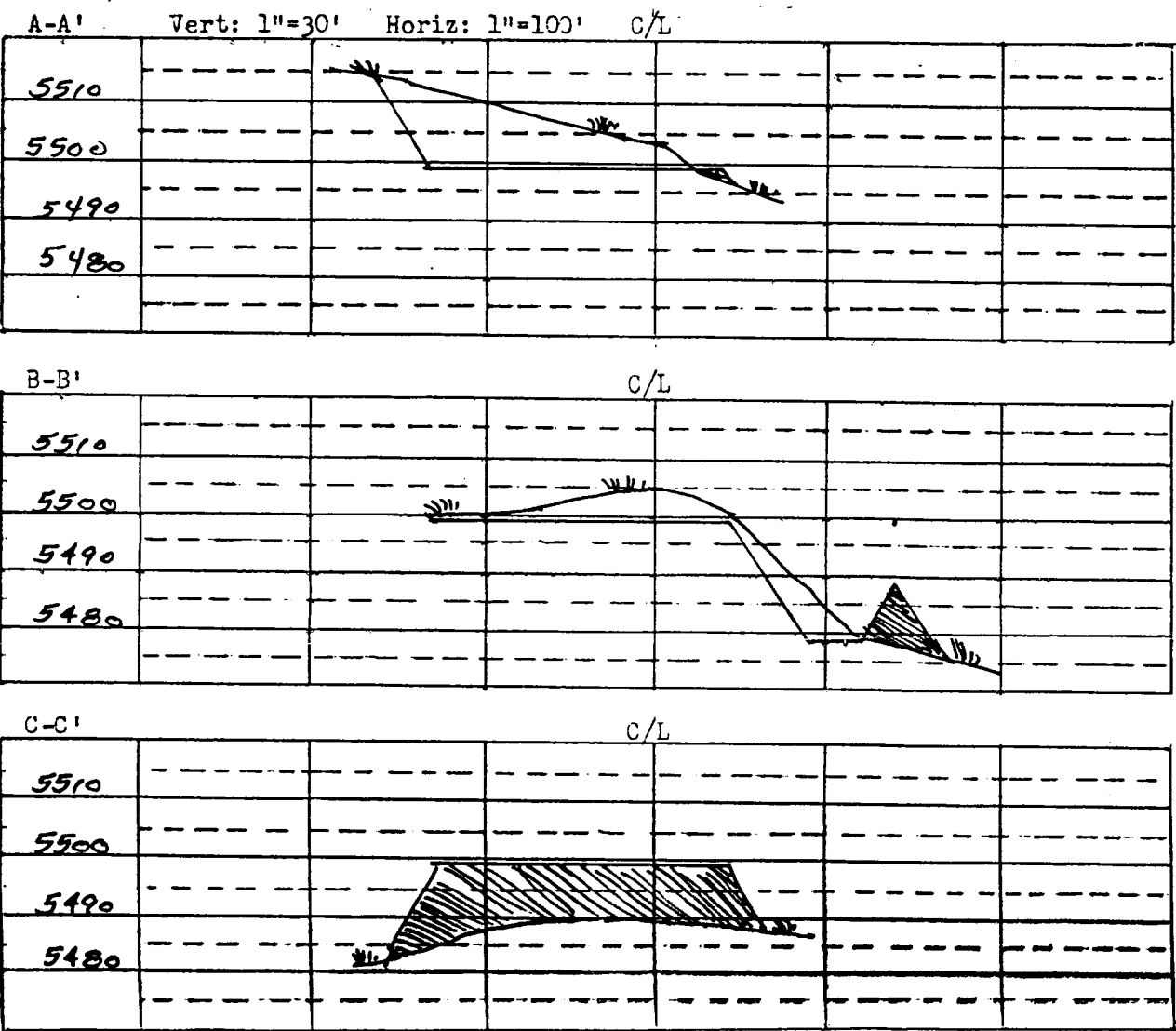
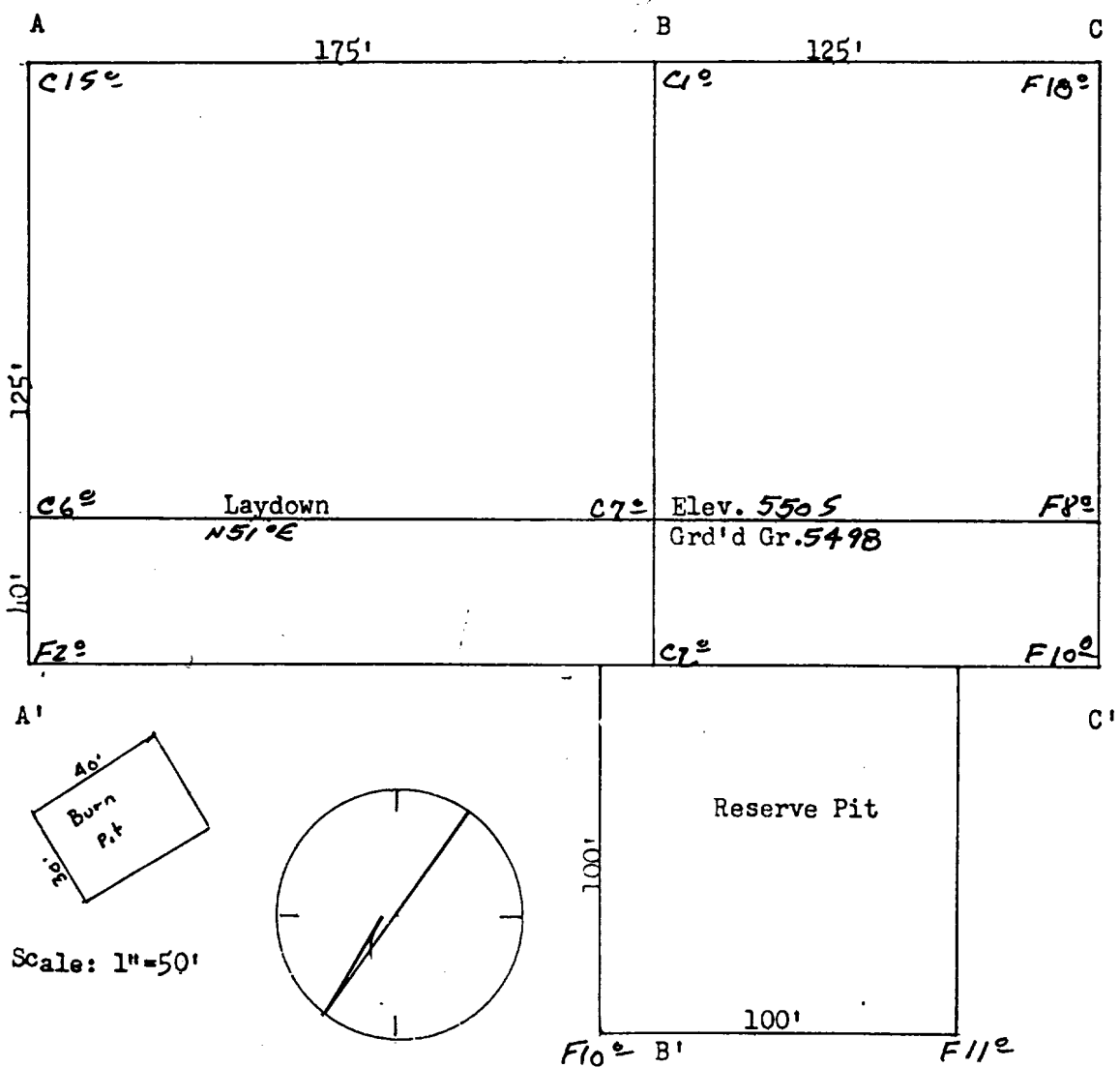
Bureau of Land Management Representative \_\_\_\_\_

Date 12-20-84

Note: If the land is privately owned, these requirements may be varied to comply with the operator - landowner agreement.



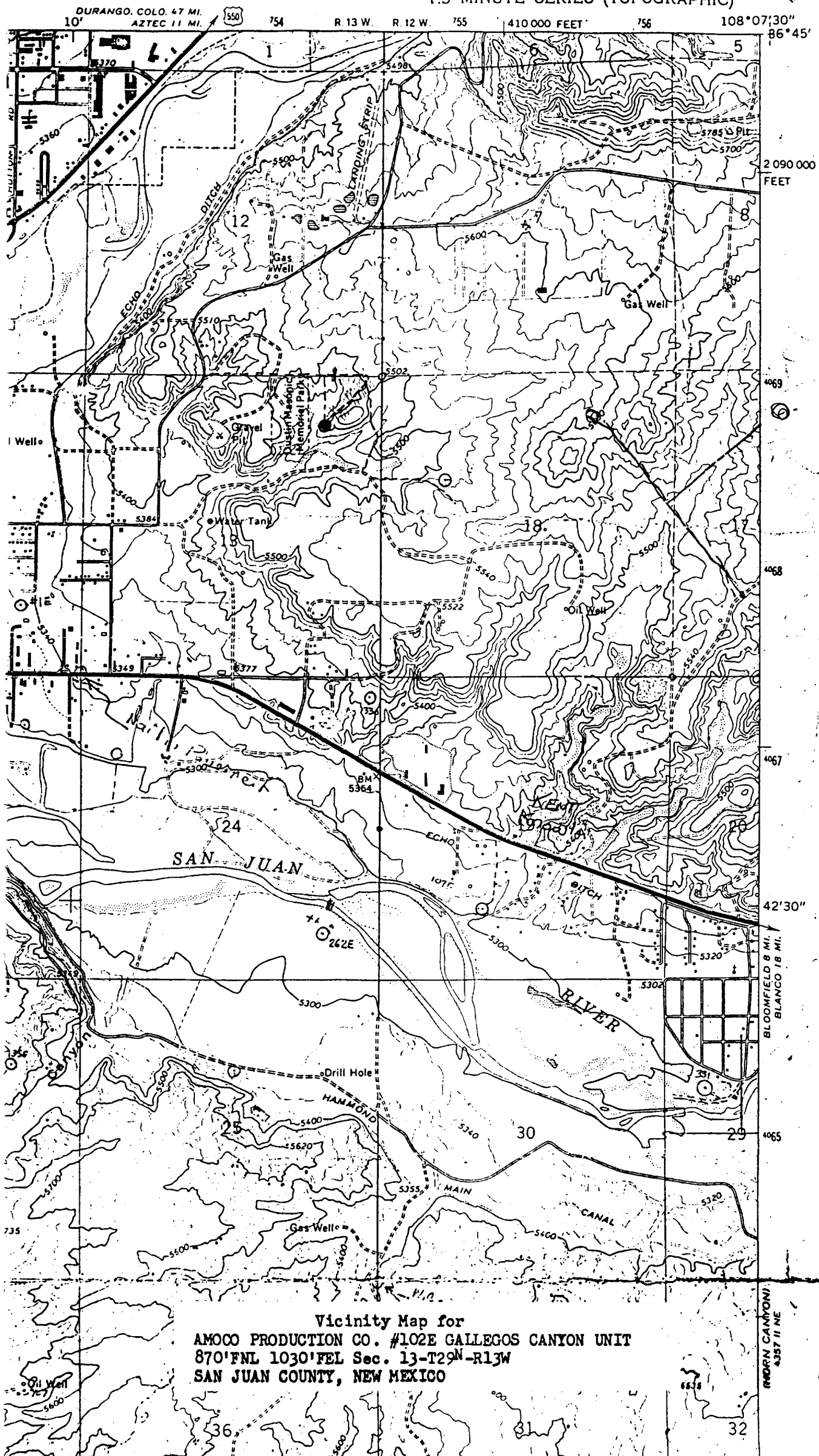
Profile for  
 AMOCO PRODUCTION COMPANY #102E GALLEGOS CANYON UNIT  
 870'FNL 1030'FEL Sec. 13-T29N-R13W  
 SAN JUAN COUNTY, NEW MEXICO



7-13

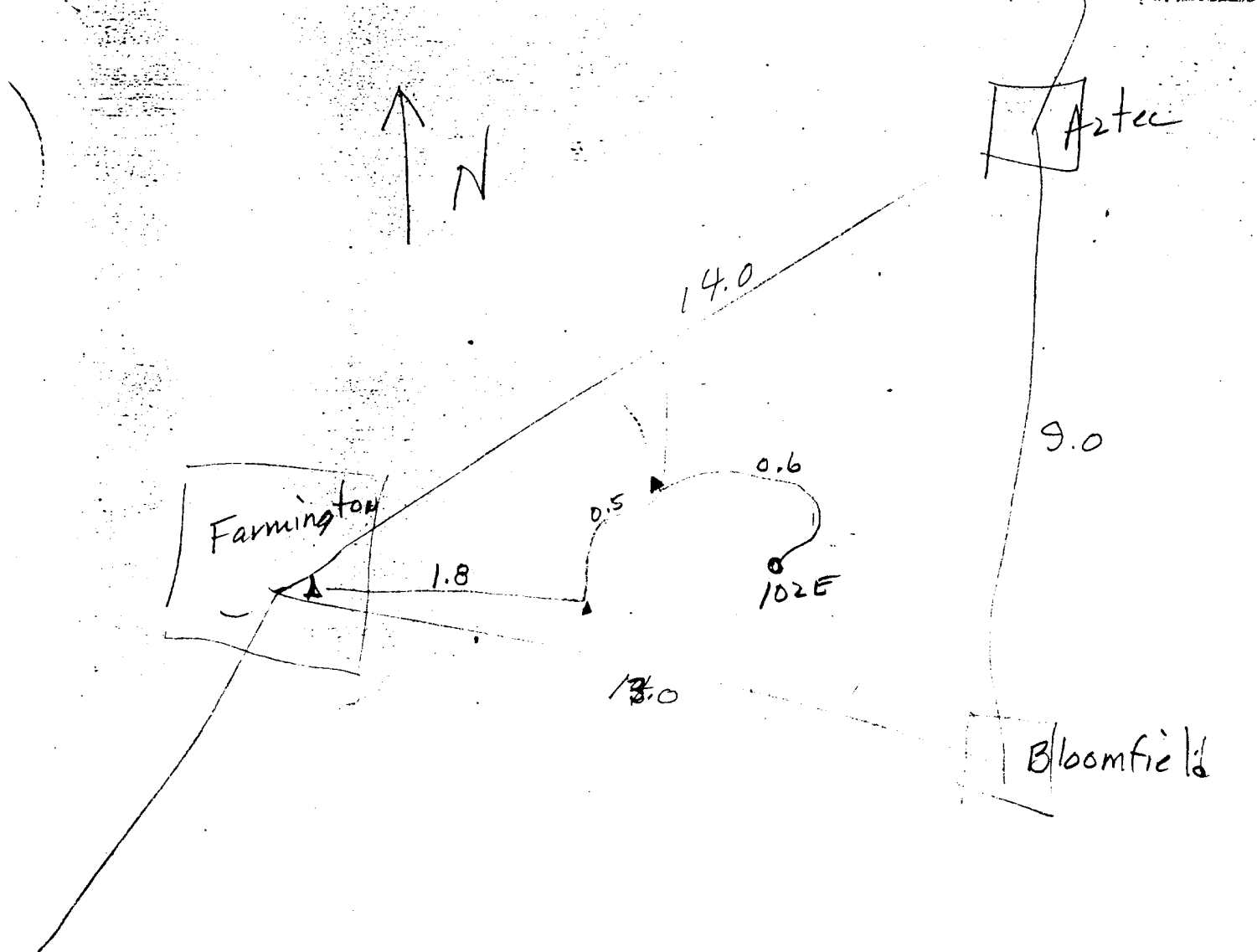
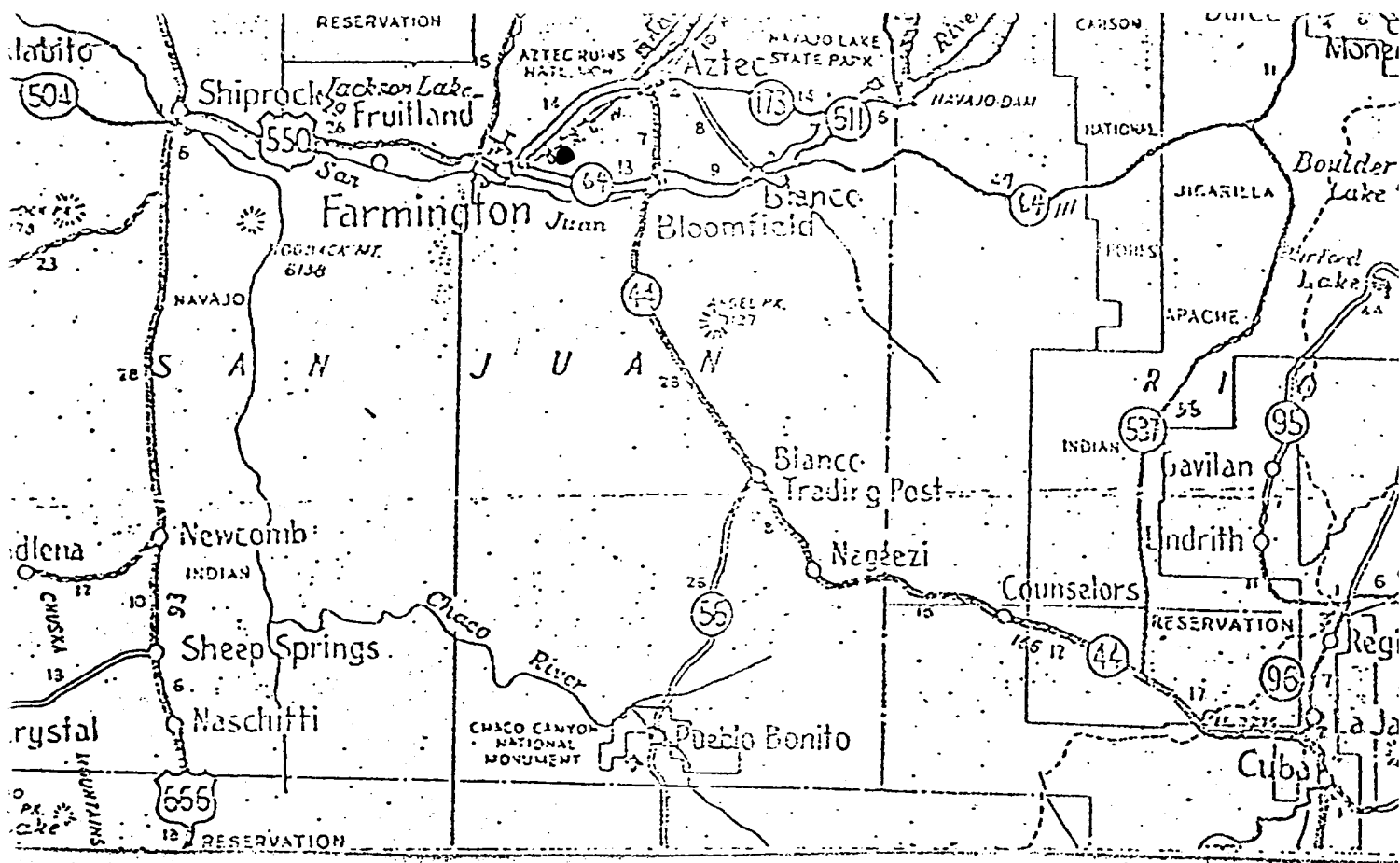
FARMINGTON SOUTH QUADRANGLE  
NEW MEXICO—SAN JUAN CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)

4357 1 SE  
(FLORA VISTA)



Vicinity Map for  
AMOCO PRODUCTION CO. #102E GALLEGOS CANYON UNIT  
870'FNL 1030'FEL Sec. 13-T29N-R13W  
SAN JUAN COUNTY, NEW MEXICO

BLOOMFIELD 8 MI.  
BLANCO 18 MI.  
BROWN CANYON  
4357 11 NE



Rail Point: 126 mi. Gallup, NM

Mud Point: 3 mi. Farmington, NM

Cement Point: 3 mi. Farmington, NM

G.C.U. \* 102E

870' FNL 1030' FEL

Sec. 13, T29N- R13W

San Juan Co. N.M.