

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, NM 87401

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

At surface

820' FNL x 860' FWL, Section 27, T-28-N, R-4-W

At proposed prod. zone

Same

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

8 miles SE of Gobernador

15. DISTANCE FROM PROPOSED*

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

820'

16. NO. OF ACRES IN LEASE

640

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

1875'

19. PROPOSED DEPTH

4400'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

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

7270' est. GL

22. APPROX. DATE WORK WILL START*

As soon as well permitted

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	300'	250 sx
7-7/8"	4-1/2"	10.5#	4400'	1240 sx

The above well is being drilled to further develop the Choza Mesa-Pictured Cliffs Field. The well will be drilled with a low solids non-dispersed mud system. Completion design will be based on open hole logs. This acreage is not dedicated. Additional information required by NTL-6 for the application to drill and a Multi-Point Surface Use Plan are 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

April 24, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

DATE

APR 26 1978

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

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 Valencia Canyon Unit		Well No. 28
Unit Letter D	Section 27	Township 28N	Range 4W	County Rio Arriba	

Actual Footage Location of Well:

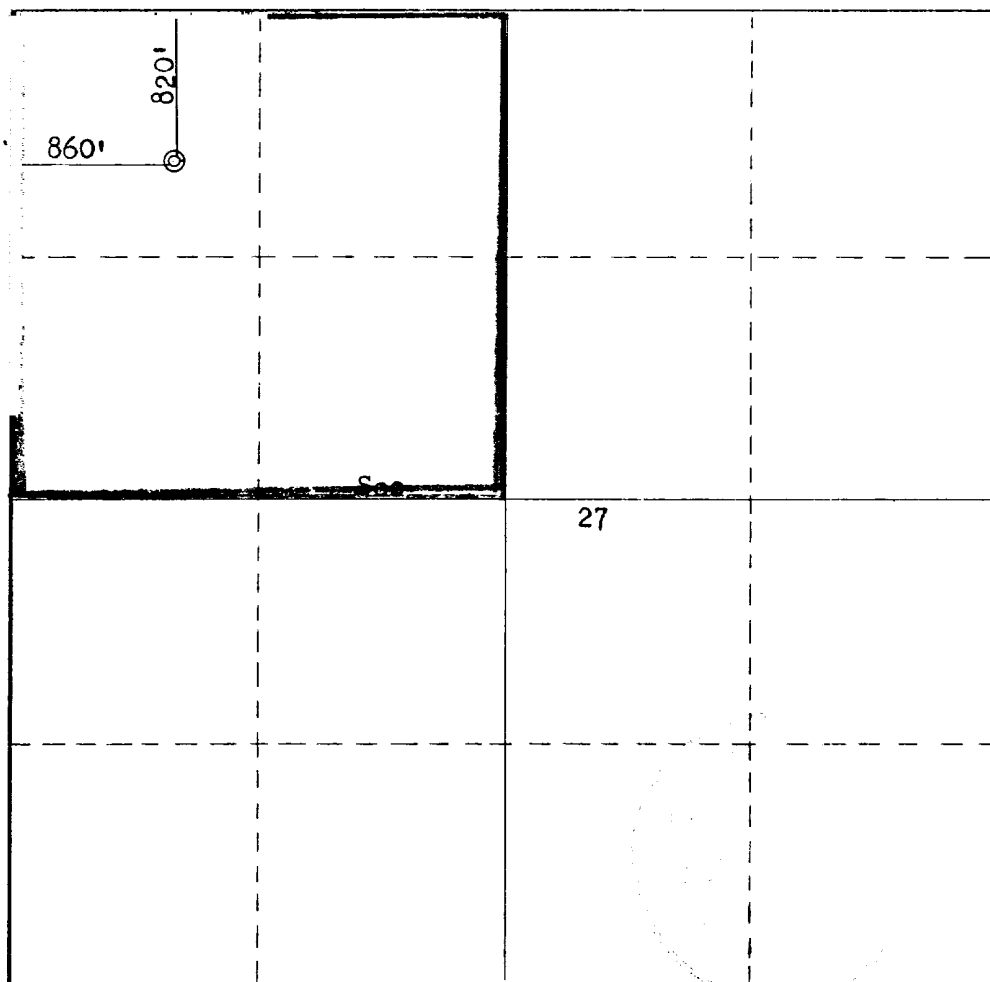
820	feet from the North	line and	860	feet from the West	line
Ground Level Elev. 7270	Producing Formation Pictured Cliffs		Pool Choza Mesa Pictured Cliffs	Dedicated Acreage: 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

[Signature]

Name
J. L. KRUPKA

Position
AREA ENGINEER

Company
AMOCO PRODUCTION COMPANY

Date
DECEMBER 14, 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
December 8, 1977

Registered Professional Engineer and/or Land Surveyor

[Signature]
Fred B. Kern Jr.

Certificate No.
3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C
REQUIRED BY NTL-6
VALENCIA CANYON UNIT NO. 28
820' FNL & 860' FWL, SECTION 27, T-28-N, R-4-W
RIO ARriba COUNTY, NEW MEXICO

The geologic name of the surface formation is the Paleozoic San Juan.

The estimated tops of important geological formations bearing hydrocarbons are:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Pictured Cliffs	4100'	+3180'
Lewis Shale	4300'	+2980'
TD	4400'	

Estimated KB Elevation: 7280'

<u>EST. DEPTH</u>	<u>CSG. SIZE</u>	<u>WEIGHT</u>	<u>HOLE SIZE</u>	<u>SACKS CEMENT - TYPE</u>
300'	8-5/8"	24#	12-1/4"	250 sx - Class "B", 2% CaCl ₂ .
4400'	4-1/2"	10.5#	7-7/8"	1140 sx - Class "B", 6% Gel, 2# Med. Tuf Plug/sx.
				100 sx - Class "B" Neat.

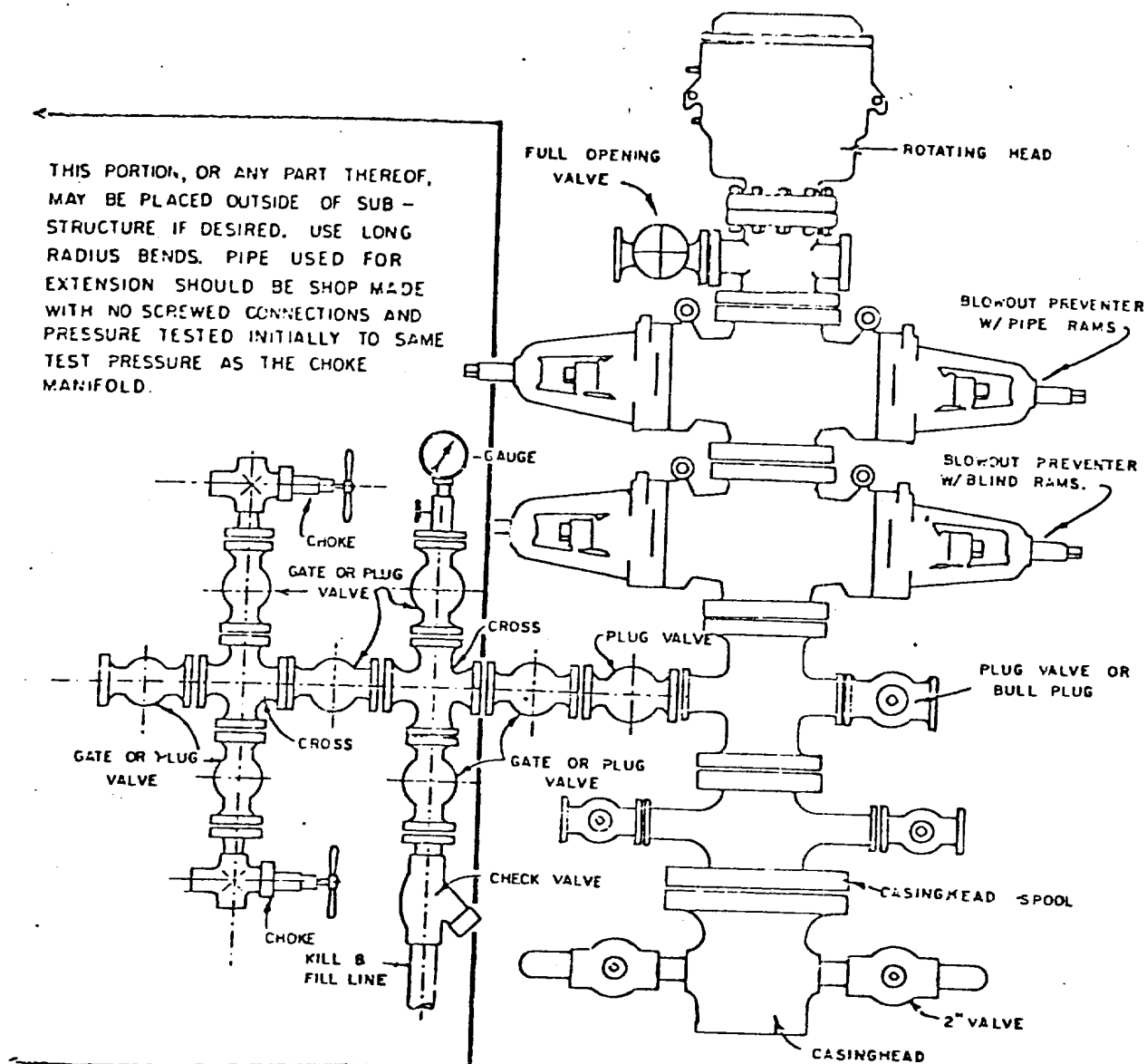
Amoco's standard blowout prevention will be employed; see attached drawing of our blowout preventer design.

Drilling fluid to TD will be a low solids non-dispersed mud system.

Amoco plans to run the following logs: from TD-300', Induction-Electric; from TD-2400', Density-Gamma Ray. No Cores or Drill Stem Tests will be taken.

In the past, drilling in this area has shown that no abnormal pressure, temperatures, nor hydrocarbon gas will be encountered.

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

MULTI-POINT SURFACE USE PLAN

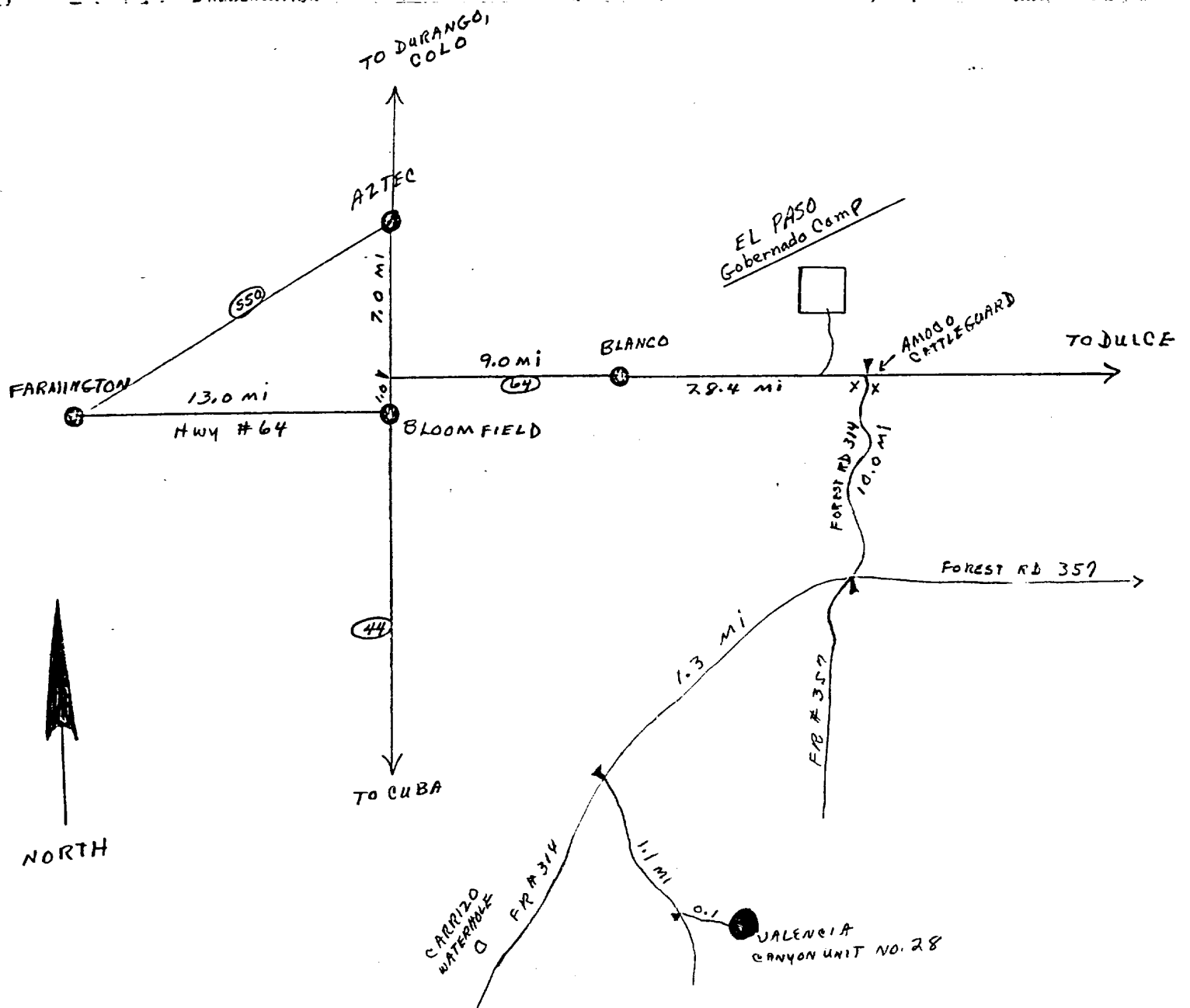
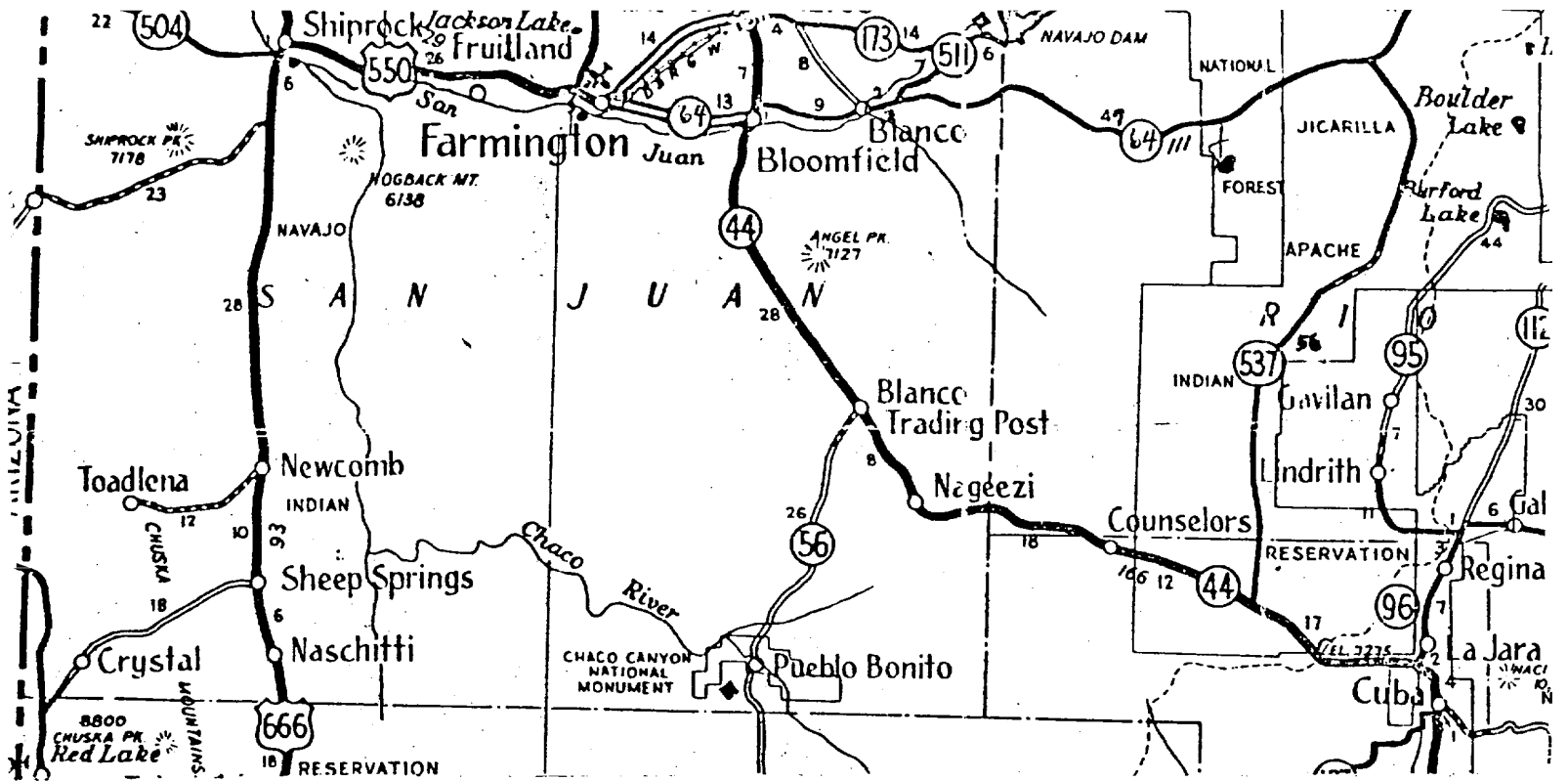
VALENCIA CANYON UNIT NO. 28

820' FNL & 860' FWL, SECTION 27, T-28-N, R-4-W

RIO ARriba COUNTY, NEW MEXICO

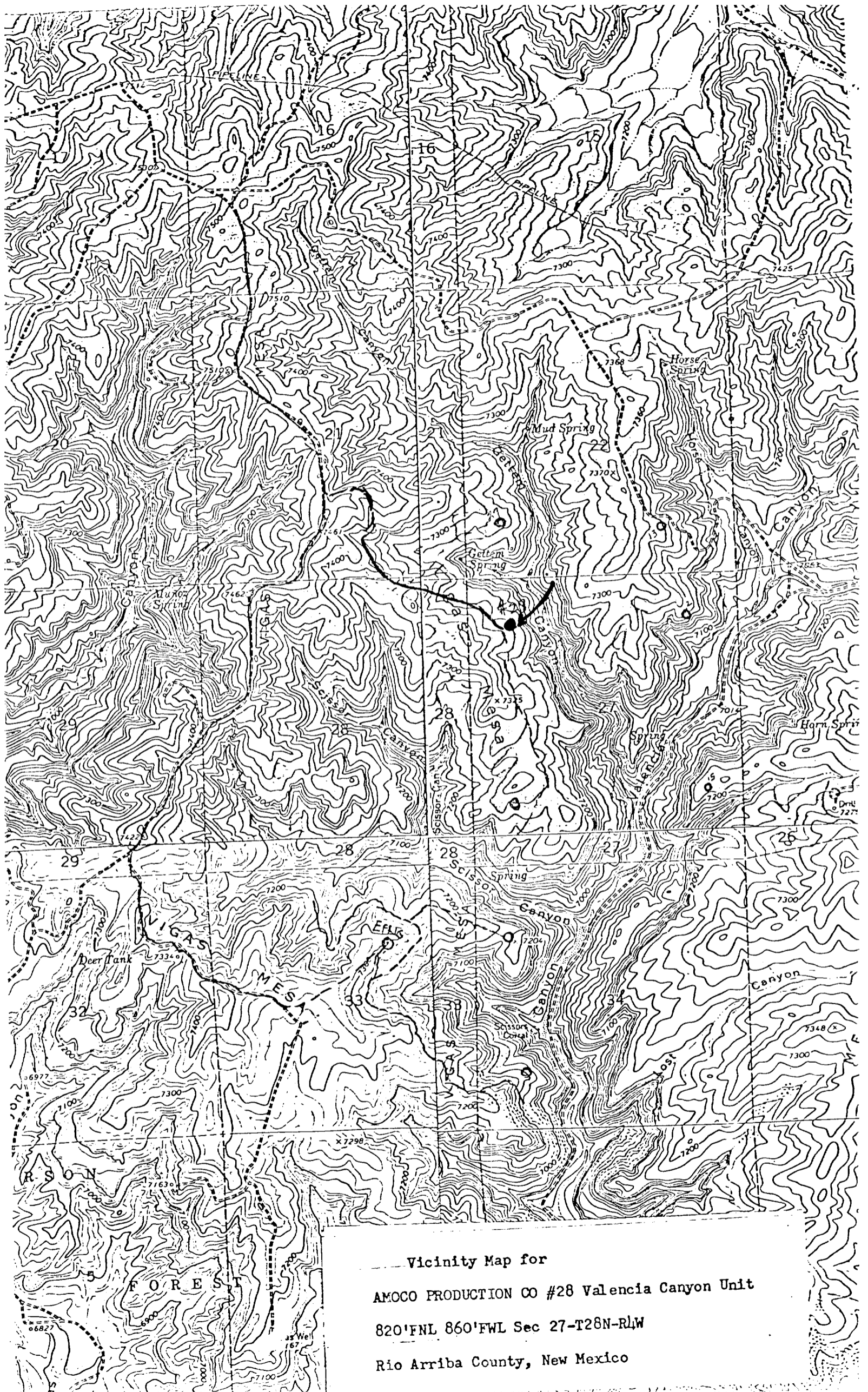
1. The attached road map and sketch show the proposed route to the location and distances from towns.
2. An 18-foot wide access road one-half mile in length from Valencia Canyon Unit No. 27 turnoff to be reconstructed and one-tenth mile to be built to location. It will be bar ditched on high side.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the vicinity map.
4. There are no tank batteries located at nearby wells spotted on the vicinity map.
5. Water will be hauled from Carrizo Wash or from the El Paso water hole approximately .8 miles on existing roads.
6. No construction materials will be hauled in for this location.
7. A 75' X 75' pit will be built on location to hold all drilling waste. Upon completion of well, all waste and liquid will be hauled out and bladed into existing roads. The Forest Ranger will be notified before mud is bladed into roads.
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. A cut of approximately 7 feet will be made on southwest side of location.
10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well. Drilling mud will be hauled away and the reserve pit back filled. Reseeding of the site will be carried out as detailed in the attached seeding plan.
11. The general topography and soil characteristics are a level mesa/terrace top with northerly drainage. The soil is a sandy, rocky loam, with vegetation consisting of several large pine trees, pinon, juniper, and sagebrush and native grasses.

Representatives of the U. S. Geological Survey's Durango Office and U. S. Forest Service have inspected the site and found it suitable for drilling. Ms. Dabney Ford of San Juan College conducted the archaeological clearance survey and no cultural resources were found at this site.
12. A Certification Statement by Amoco's representative is included.

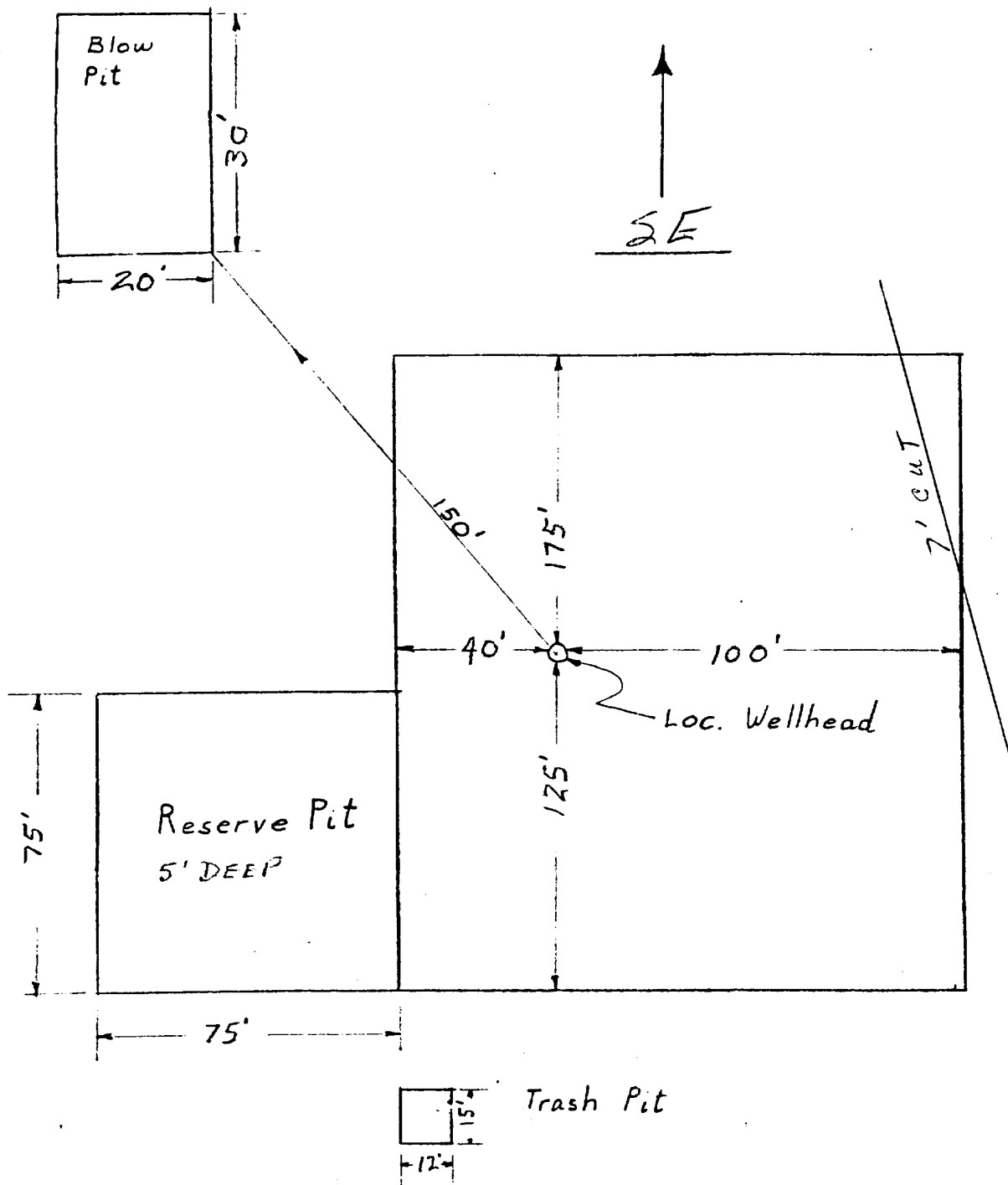


FARMINGTON AREA TRAFFIC SKETCH
DENVER DIVISION
VALENCIA CANYON UNIT NO. 28
RIO ARriba COUNTY, NEW MEXICO
AMOCO WI: 100%

Rail Point, Aztec - 57 miles
Mud Point, Aztec - 57 miles
Cement Point, Farmington - 64 miles



Vicinity Map for
AMOCO PRODUCTION CO #28 Valencia Canyon Unit
820'FNL 860'FWL Sec 27-T28N-R4W
Rio Arriba County, New Mexico



APPROXIMATELY 1.2 Acres

Amoco Production Company		SCALE: NONE
DRILLING LOCATION SPECS		
VALENCIA CANYON UNIT NO. 28		DRG. NO.

SEEDING PLAN

1. TIME:

All seeding will take place between July 1, and September 15, 1978, or as required by the U. S. Forest Service.

2. EQUIPMENT:

Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. The seed will be planted not less than one-half inch deep or more than one inch deep. The seeder will be followed with a drag, packer, or roller to insure uniform coverage of the seed, and adequate compaction. Drilling will be done on the contour where possible, no up and down the slope. Where slopes are too steep for contour drilling, a "cyclone" hand seeder or similar broadcast seeder will be used. Seed will then be covered to the depth described above by whatever means is practical.

3. SPECIES TO BE PLANTED IN POUNDS PURE-LIVE-SEED PER ACRE:

Crested Wheatgrass	0.71 lbs.
Russian Wild Rye	0.86 lbs.
Perennial Rye Grass	0.57 lbs.
Western Wheatgrass	1.43 lbs.
Smooth Brome	1.14 lbs.
Intermediate Wheat	0.91 lbs.
Pubescent Wheatgrass	1.09 lbs.
Orchard Grass	.298 lbs.

VALENCIA CANYON UNIT NO. 28
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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 be 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 24, 1978

Date



L. O. Speer, Jr. - Area Supt.
Name and Title

Amoco Production Company's Representative:

L. O. Speer, Jr.

Phone: Office: 505-325-8841; Home: 505-325-3247

Address: 501 Airport Drive
Farmington, NM 87401