

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-21757

5. LEASE DESIGNATION AND SERIAL NO.
NM 14921

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Valencia Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
29

10. FIELD AND POOL, OR WILDCAT
Choza Mesa-Pictured Cliffs

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SW/4 SW/4 Section 27
T-28-N, R-4-W

12. COUNTY OR PARISH 13. STATE
Rio Arriba NM

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 M 1030' FSL x 1140' 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*
9 miles SE of Gobernador

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1030'

16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2600'

19. PROPOSED DEPTH 4365'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DP, RT, GR, etc.)
7244' est. GL

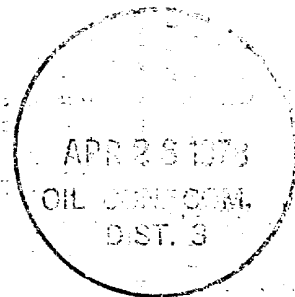
22. APPROX. DATE WORK WILL START*
As soon as well permitted

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# | 4365' | 1230 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.

gas well drilled



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 J. L. K... 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:



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 1-1-61

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

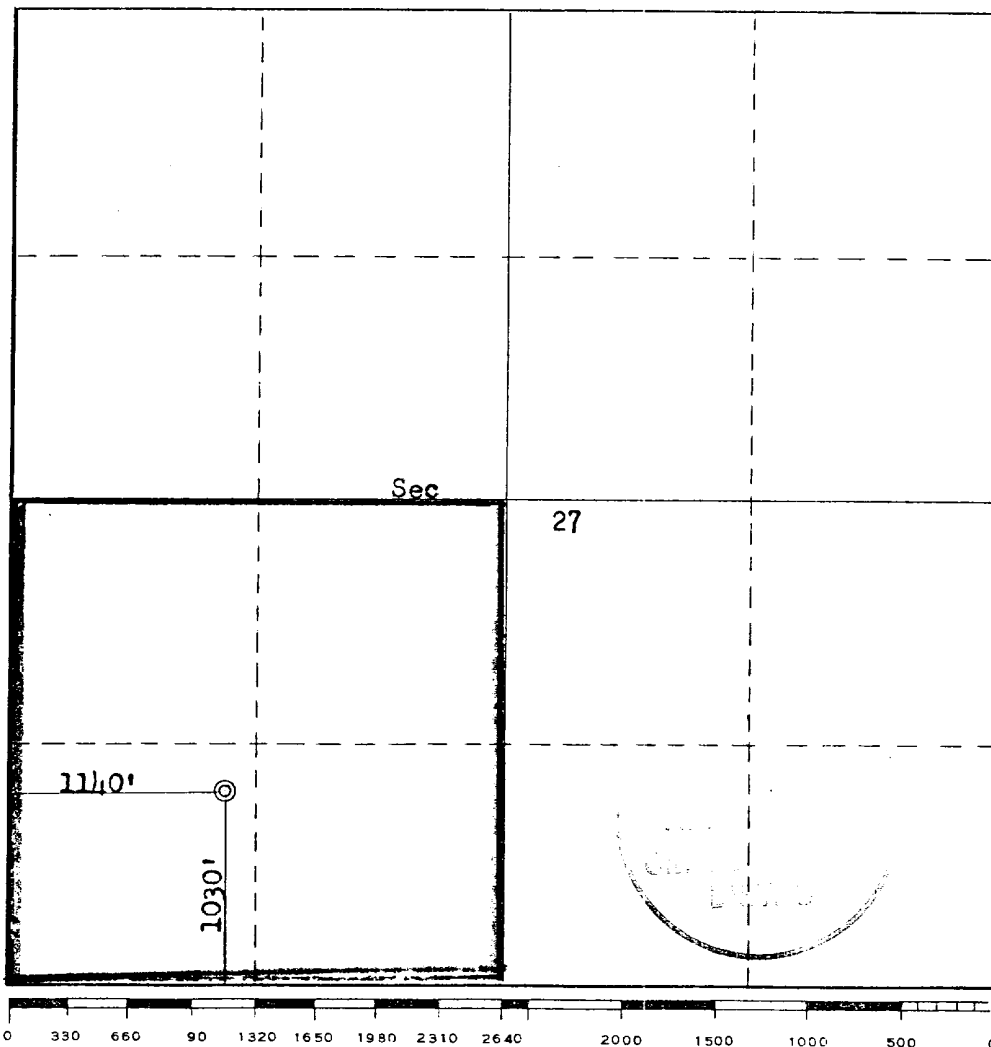
| | | | | | |
|--|---|---|--------------------|-----------------------------|--|
| Operator Amoco Production Company | | Lease Valencia Canyon Unit | | | Well No. 29 |
| Unit Letter M | Section 27 | Township 28N | Range 4W | County Rio Arriba | |
| Actual Footage Location of Well: 1030 feet from the South line and 1140 feet from the West line | | | | | |
| Ground Level Elev. 7244 | Producing Formation Pictured Cliffs | Pool Choza Mesa Pictured Cliffs | | | Dedicated Acreage: 100 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. L. Krupka

| |
|--|
| 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 <i>Fred B. Kerr Jr.</i> Fred B. Kerr Jr. |
| Certificate No. 3950 |

SUPPLEMENTAL INFORMATION TO FORM 9-331C
 REQUIRED BY NTL-6
 VALENCIA CANYON UNIT NO. 29
 1030' FSL & 1140' 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 | 4064' | +3190' |
| Lewis Shale | 4264' | +2990' |
| TD | 4365' | |

Estimated KB Elevation: 7254'

| <u>EST. DEPTH</u> | <u>CSG. SIZE</u> | <u>WEIGHT</u> | <u>HOLE SIZE</u> | <u>SACKS CEMENT</u> | <u>- TYPE</u> |
|-------------------|------------------|---------------|------------------|---------------------|---|
| 300' | 8-5/8" | 24# | 12-1/4" | 250 | sx - Class "B", 2% CaCl ₂ . |
| 4365' | 4-1/2" | 10.5# | 7-7/8" | 1130 | sx - Class "B", 6% Gel, 2# Med. Tuf Plug/sx. |
| | | | | 100 | sx - Class "B" Neat. |

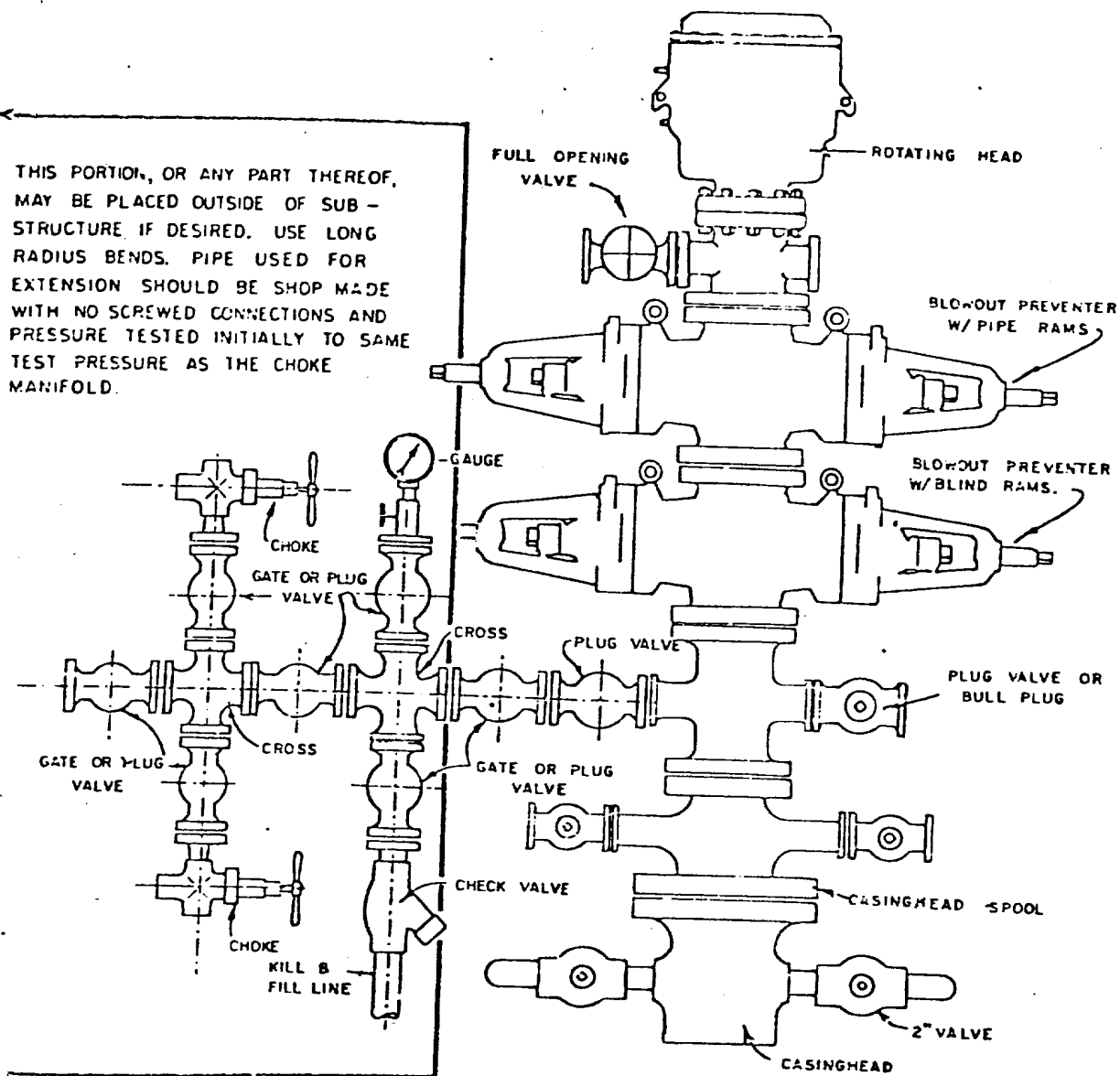
Amoco's standard blowout prevention will be employed; see attached drawing of our blowout preventer design.

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-2365', 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

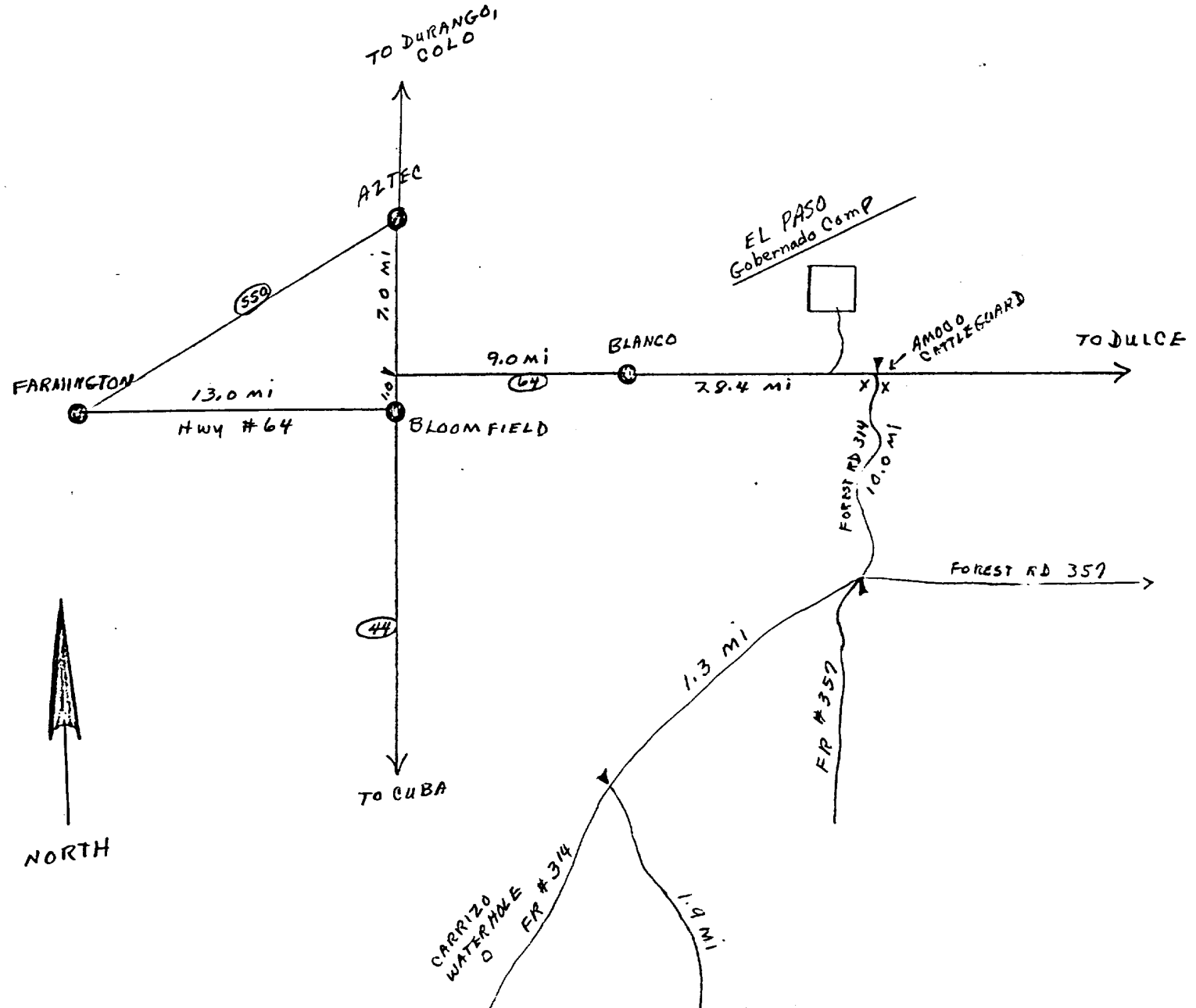
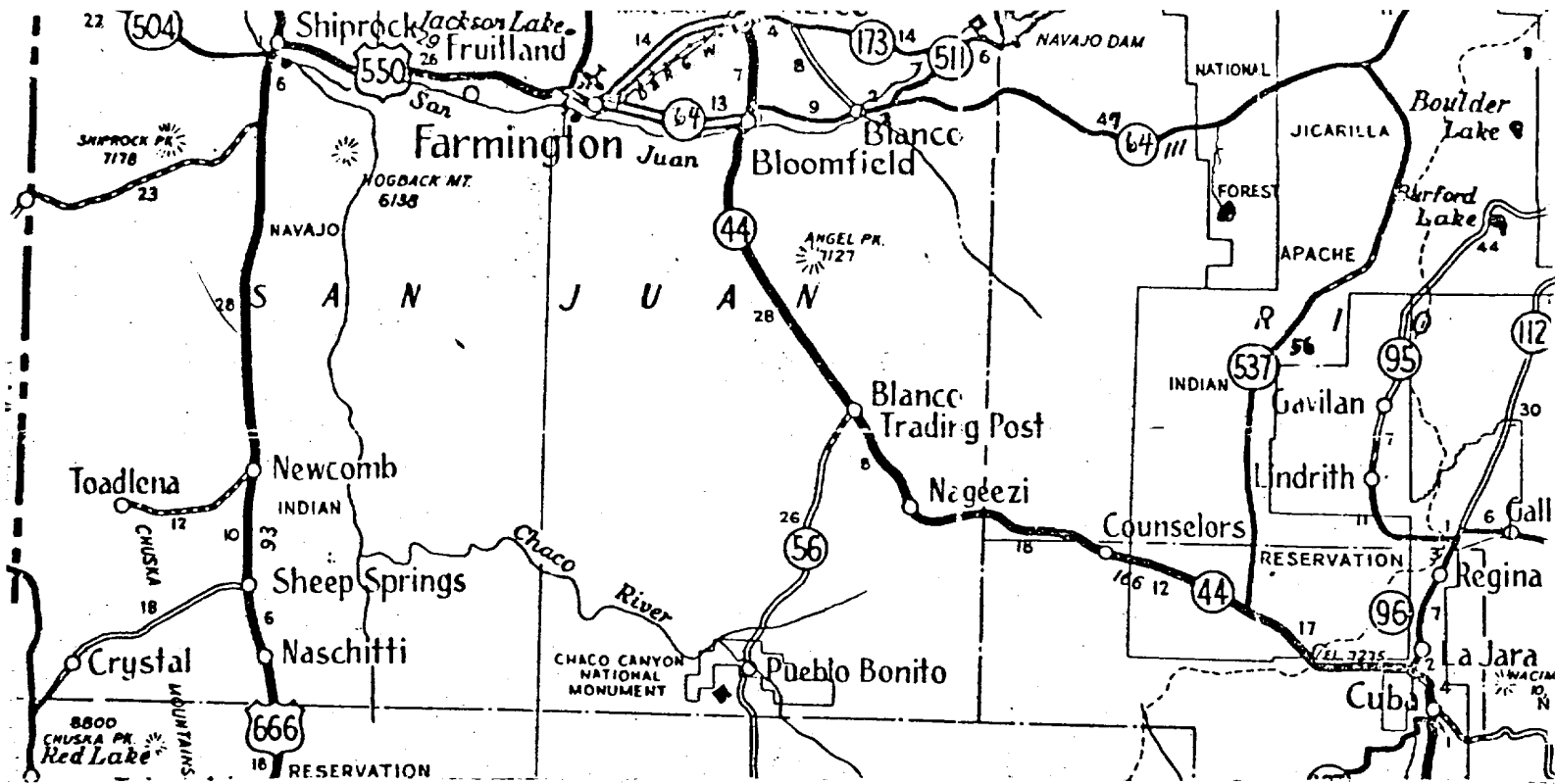
EXHIBIT D-4
OCTOBER 16, 1969

MULTI-POINT SURFACE USE PLAN

VALENCIA CANYON UNIT NO. 29
1030' FSL & 1140' FWL, SECTION 27, T-28-N, R-4-W
RIO ARRIBA COUNTY, NEW MEXICO

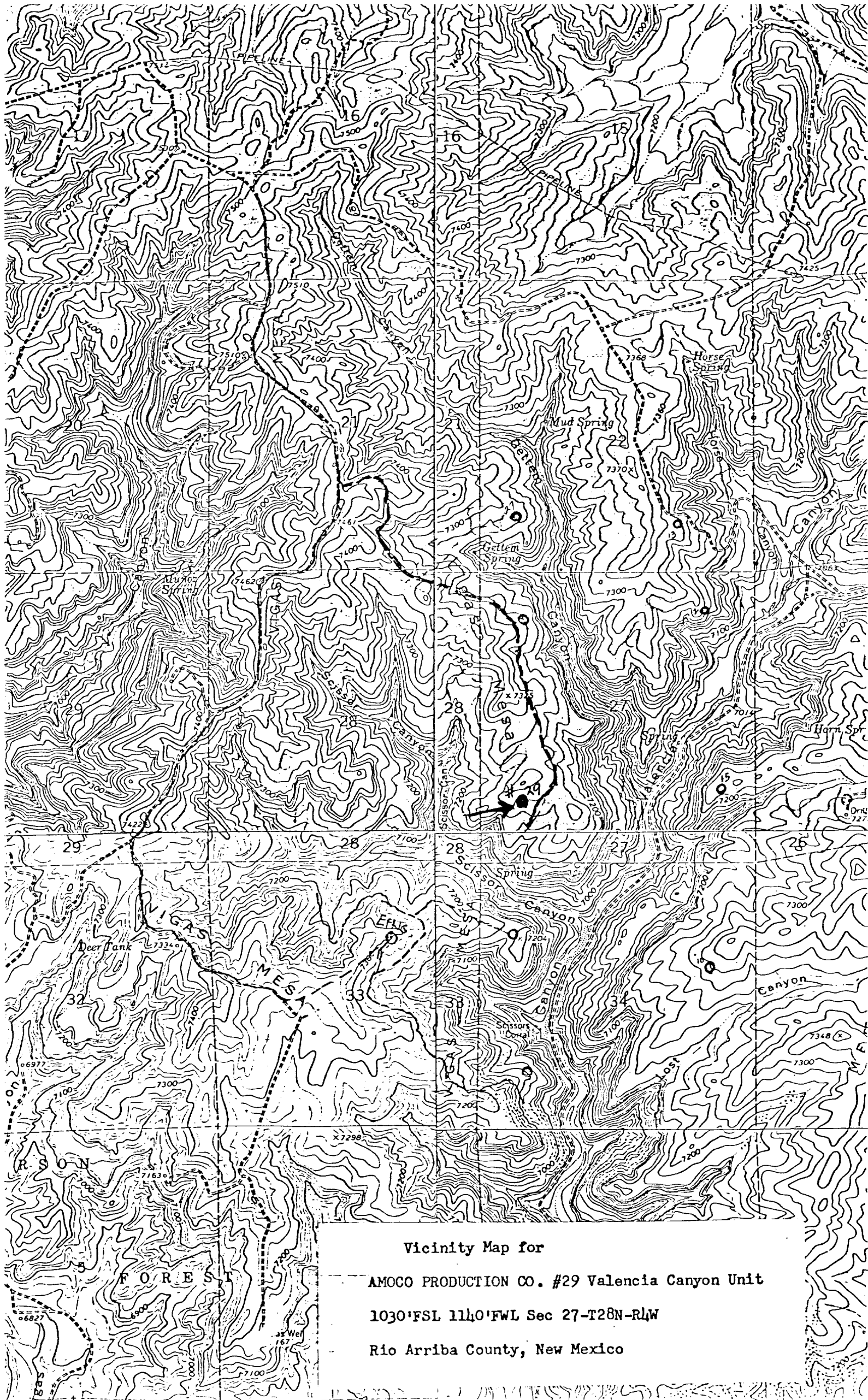
1. The attached road map and sketch show the proposed route to the location and distances from towns.
2. The planned access road eight-tenths of a mile in length to be reconstructed from Valencia Canyon Unit No. 28. Road will be 18' wide and bar ditched on high side.
3. Existing oil and gas wells within 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.
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 terrace/ mesa top with southerly drainage. The soil is a sandy, loamy clay, with vegetation consisting of pinon and juniper trees, 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. 29
 RIO ARRIBA COUNTY, NEW MEXICO
 AMOCO WI: 100%

- Rail Point, Aztec - 58 miles
- Mud Point, Aztec - 58 miles
- Cement Point, Farmington - 65 miles

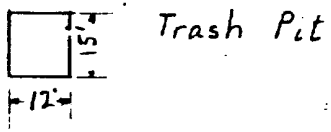
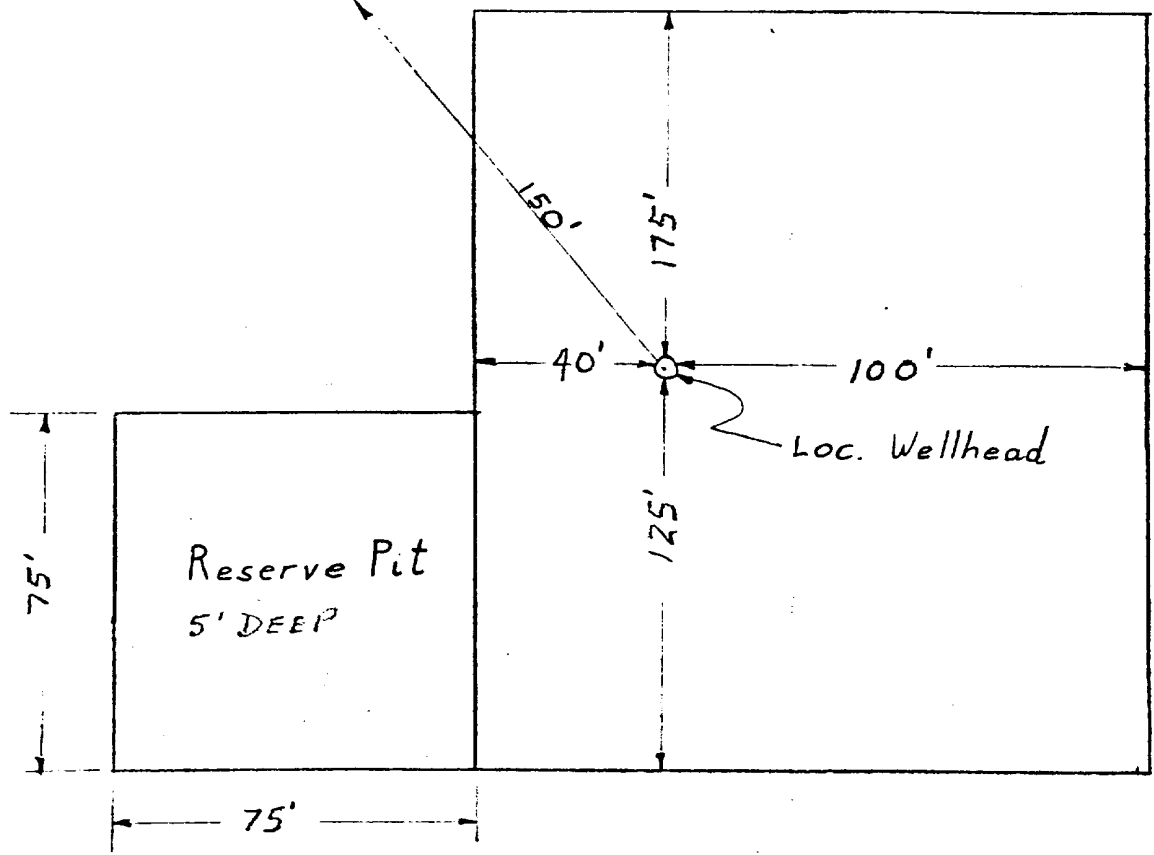
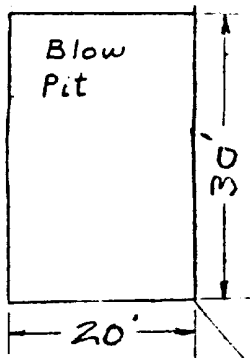


VICINIA MAP FOR

AMOCO PRODUCTION CO. #29 Valencia Canyon Unit

1030'FSL 11140'FWL Sec 27-T28N-R14W

Rio Arriba County, New Mexico



APPROXIMATELY 1.2 Acres

| | | |
|--|--|-------------|
| Amoco Production Company | | SCALE: NONE |
| DRILLING LOCATION SPECS VALENCIA CANYON UNIT NO. 29 | | 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. 29
1030' FSL & 1140' FWL, SECTION 27, T-28-N, R-4-W
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



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