

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 surface800 FSL & 1460 FSL, Section 15, T-29-N, R-9-W
At proposed prod. zone

Same

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

4 miles east of Blanco

15. DISTANCE FROM PROPOSED*

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

800'

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

2200

16. NO. OF ACRES IN LEASE

320

19. PROPOSED DEPTH

4980

17. NO. OF ACRES ASSIGNED
TO THIS WELL

303.67

20. ROTARY OR CABLE TOOL

Rotary

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

5933' GL

22. APPROXIMATE WORK WILL START*

As soon as permitted

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	32.3#	250'	265 cu
8-3/4"	7"	20#	2860'	497 cu
6-1/4"	4-1/2"	10.5#	4980'	271 cu

The above referenced well is being drilled to further develop the Manzanillo reservoir. The well will be drilled to the intermediate casing point using water and Benex. The well will then be gas drilled to TD. Completion design will be based on open hole logs. The acreage is dedicated to El Paso Natural Gas Company. Attached is a Development Plan required by NTL-6.

RECEIVED
JUL 27 1977
OIL CON. COM.
DIST. 3RECEIVED
JUL 27 1977
U.S. GEOLOGICAL SURVEY

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

(This space for Federal or State office use)

TITLE Area Engineer

DATE 7/18/77

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*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, leave blank. If there are, consult the applicable State regulations for the appropriate 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.

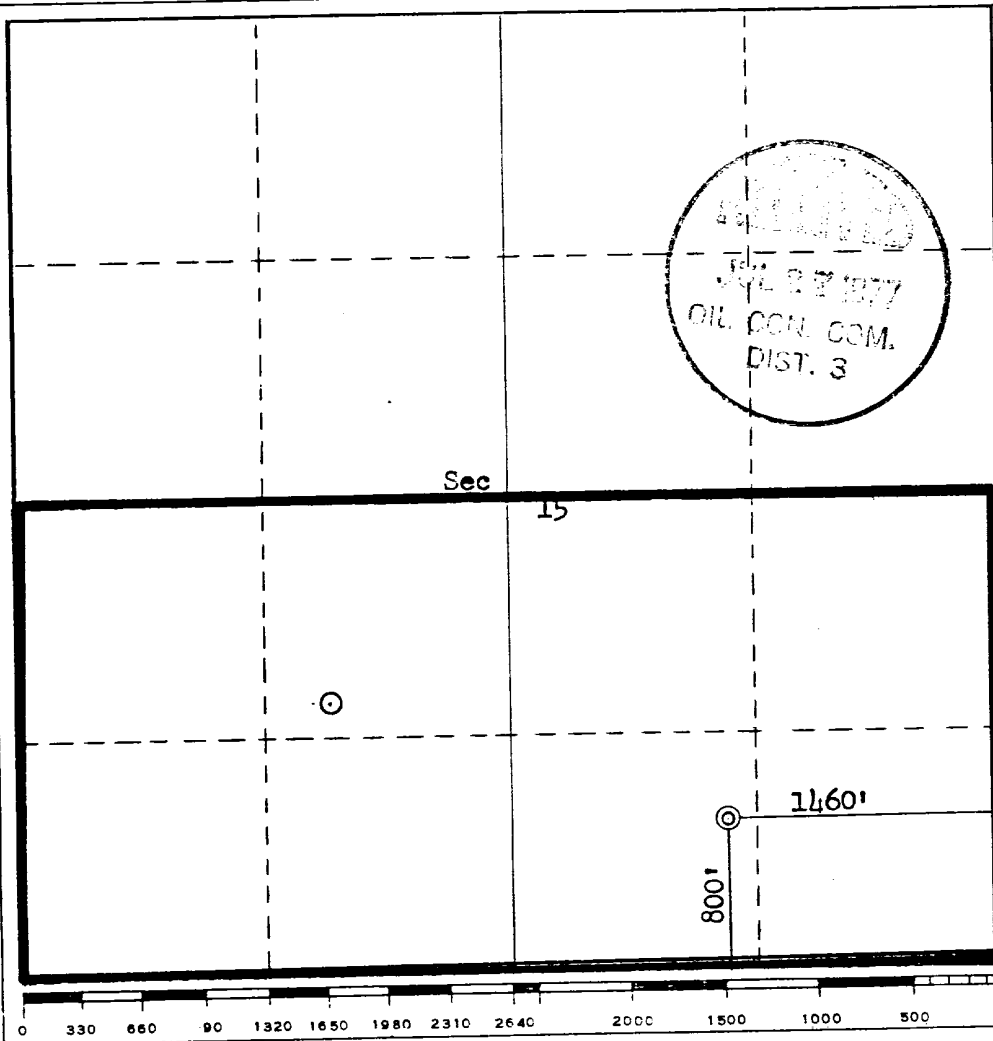
Operator Amoco Production Company			Lease Cole Gas Com "A"		Well No. 1A
Unit Letter 0	Section 15	Township 29N	Range 9W	County San Juan	
Actual Footage Location of Well: 800 feet from the South line and 1460 feet from the East line					
Ground Level Elev. 5933	Producing Formation Mesa Verde		Pool Blanco Mesaverde		Dedicated Acreage: 5.320 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 thereon (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.

Name
J. L. KRUPKA
Position
AREA ENGINEER
Company
AMOCO PRODUCTION COMPANY
Date
JULY 28, 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
June 28, 1977
Registered Professional Engineer and/or Land Surveyor
Fred B. Bert, Jr.
Certificate No.
3950



COLE GAS COM "A" NO. 1A
800 PSL, 1460 FEL, SECTION 15, T-29-N, R-9-W
SAN JUAN 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 subcontractors in conformity with this plan and the terms and conditions under which it is approved.

JULY 18, 1977

Date



AREA SUPERINTENDENT

Name and Title



DEVELOPMENT PLAN
 COLE GAS COM "A" NO. 1A
 800 FSL, 1460 FEL, SECTION 15, T-29-N, R-9-W
 SAN JUAN COUNTY, NEW MEXICO

The proposed location has sage brush and a few cedar trees as vegetation. The soil is sandy. The geological name of the surface formation is the Anas. No new road will be required. No construction materials will be used for building the location; dirt will be leveled at the well site. No location cut will be required. Verbal approval of the drill site has been obtained from Mr. Bob Moore, BLM; Mr. Leigh Freeman, USGS; and Ms. Dabney Ford, Archaeologist.

Arrangements are being made to haul water from the San Juan River, approximately 5 miles. Drilling fluid to 2860' will be water and Benex and the well will be gas drilled from 2860' to TD (4980'). Upon completion the location will be cleaned up and leveled. Drilling mud and water will be hauled away and the reserve pit backfilled. Attached is the BLM seeding plan to be followed for this well. In addition, all surface equipment will be painted green so as to follow BLM requirements.

There are neither airstrips nor camps in the vicinity.

The estimated tops of important geological formations bearing hydrocarbons are:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Pictured Cliffs	2457'	3489'
Cliffhouse	4122'	1824'
Menefee	4213'	1733'
Point Lookout	4712'	1234'

Estimated KB elevation: 5946'

<u>Est. Depth</u>	<u>Csg. Size</u>	<u>Weight</u>	<u>Hole Size</u>	<u>Sacks Cement</u>	<u>Type</u>
250'	9-5/8"	32.3#	12-1/4"	265 - Class "B", 2%	CaCl2.
2860'	7"	20#	8-3/4"	500 - Class "B", 6% Tuf Plug/sx.	Gel, 2# Med.
				50 - Class "B", 2%	CaCl2.
2660-4980'	4-1/2"	10.5#	6-1/4"	200 - Class "B", 50% Gel, 2# Med. Tuf Plug/sx, 0.2% Friction Reducer.	80 Poz, 6% Gel.
				75 - Class "B", 50%	80 Poz, 6% Gel.

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

Amoco plans to run the following logs from TD to 2860': Induction-Electric, 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, or hydrocarbon gas will be encountered.

We will start operation as soon as well is permitted, and a three-well operation is anticipated.



BLM SEEDING REQUIREMENTS
IN THE FARMINGTON RESOURCE AREA

1. SEED MIXTURE 2

2. TIME:

All seeding will take place between July 1 and September 15.

3. 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, not 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.

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

CRESTED WHEATGRASS (Agropyron desertorum) - $3\frac{1}{2}$ lbs.

FOURWING SALTBUCH (dewinged) (Atriplex canescens) - $\frac{1}{2}$ lb

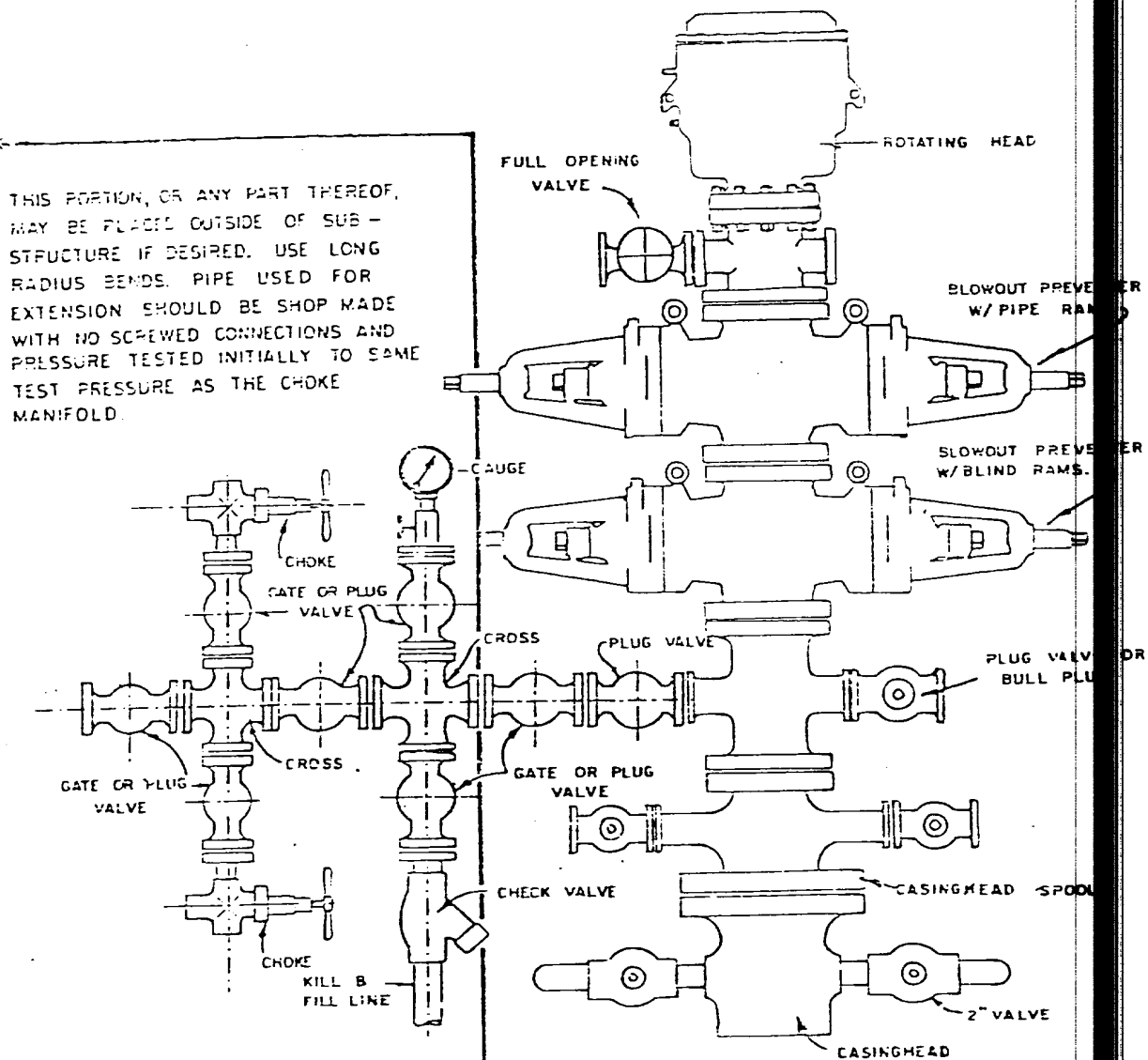
SAND DROPSEED (Sporobolus cryptandrus) - $\frac{3}{4}$ lb.

WINTERFAT (Eurotia lanata) - $\frac{1}{2}$ lb.

ALKALI SACATON (Sporobolus airoides) - $\frac{3}{4}$ lb.



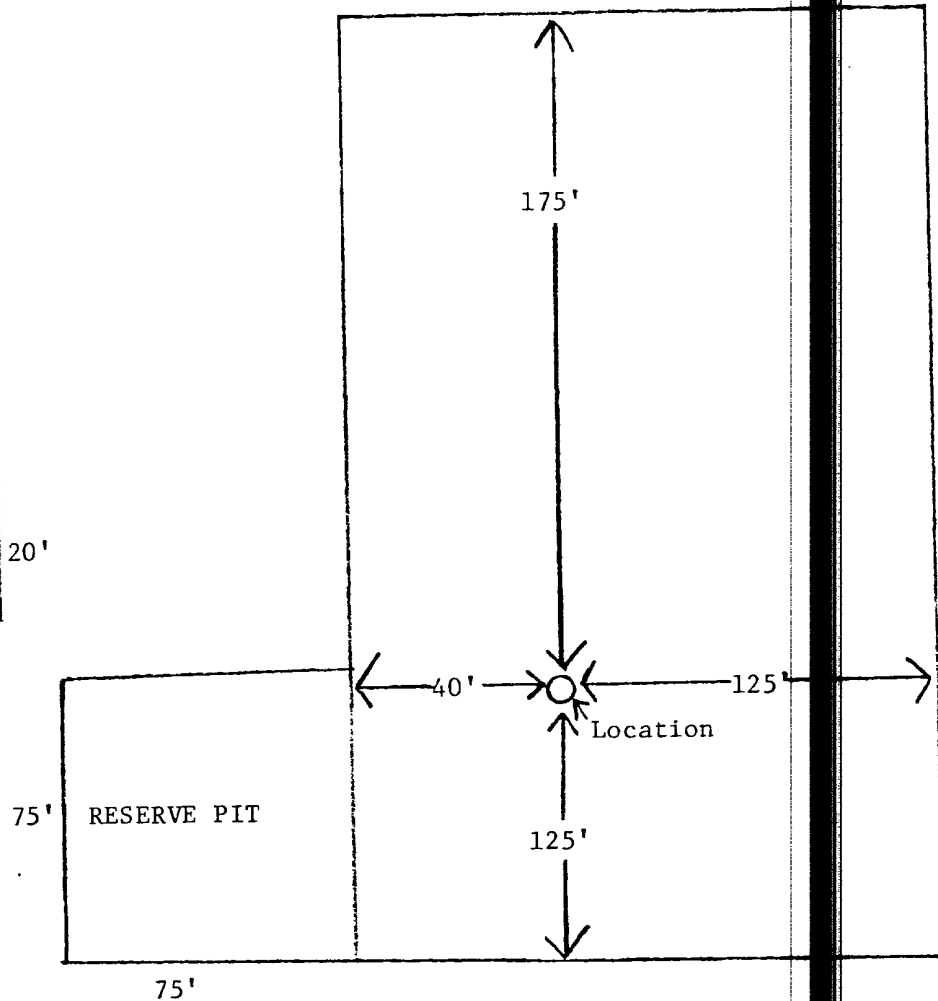
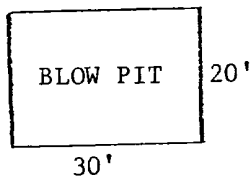
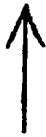
THIS PORTION, OR ANY PART THEREOF, MAY BE PLACED OUTSIDE OF SUB-STRUCTURE IF DESIRED. USE LONG RADIUS BENDS. PIPE USED FOR EXTENSION SHOULD BE SHOP MADE WITH NO SCREWED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOKE MANIFOLD.



BLOWOUT PREVENTER HOOKUP



WSW



Amoco Production Company

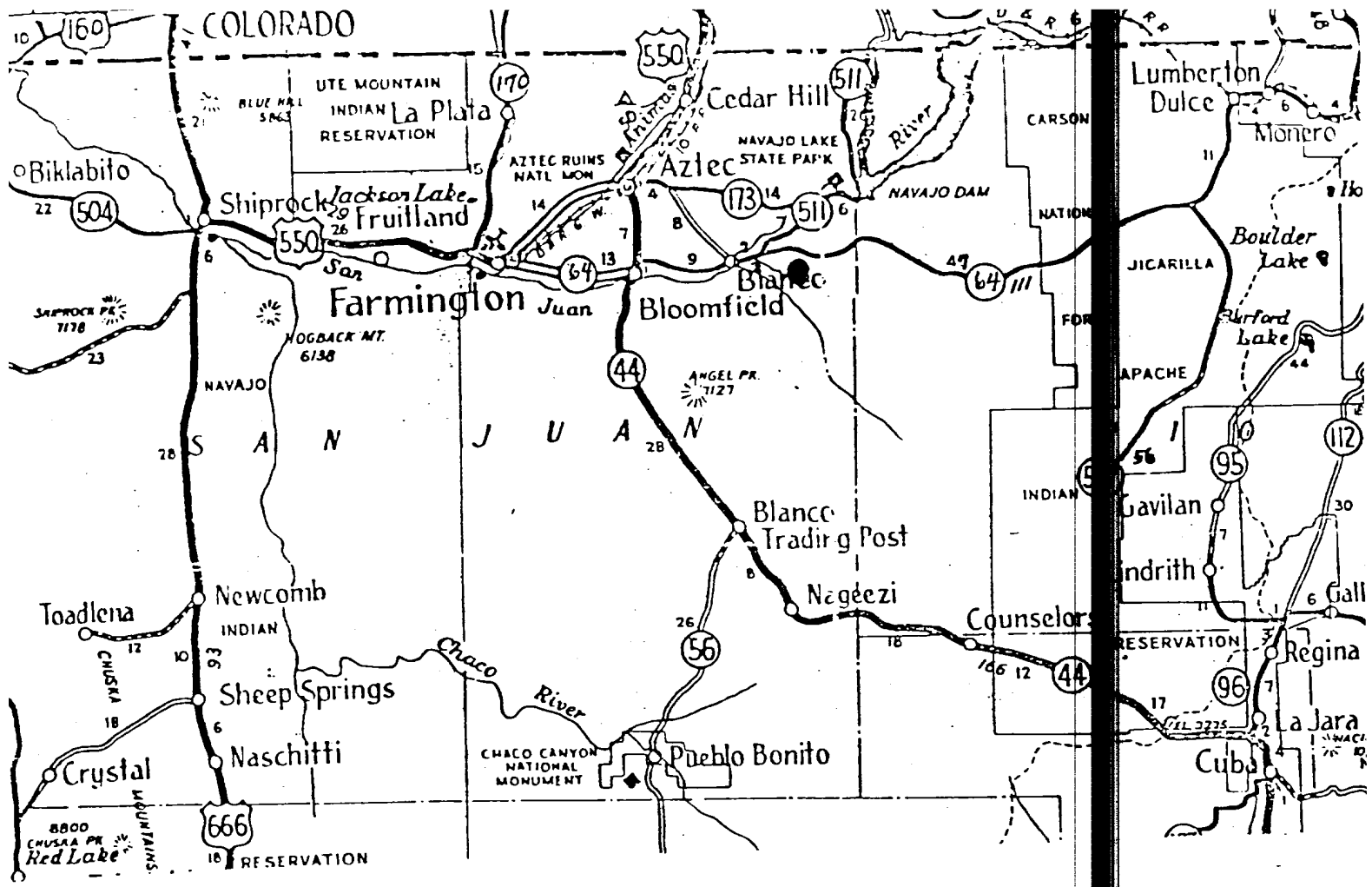
Location Diagram: Cole Gas Com "A" No. 1A
Section 15-T29N-R9W, 800' FSL & 1460' FEL, SE 1/4 SE 1/4

SCALE:

None

RG.
O.

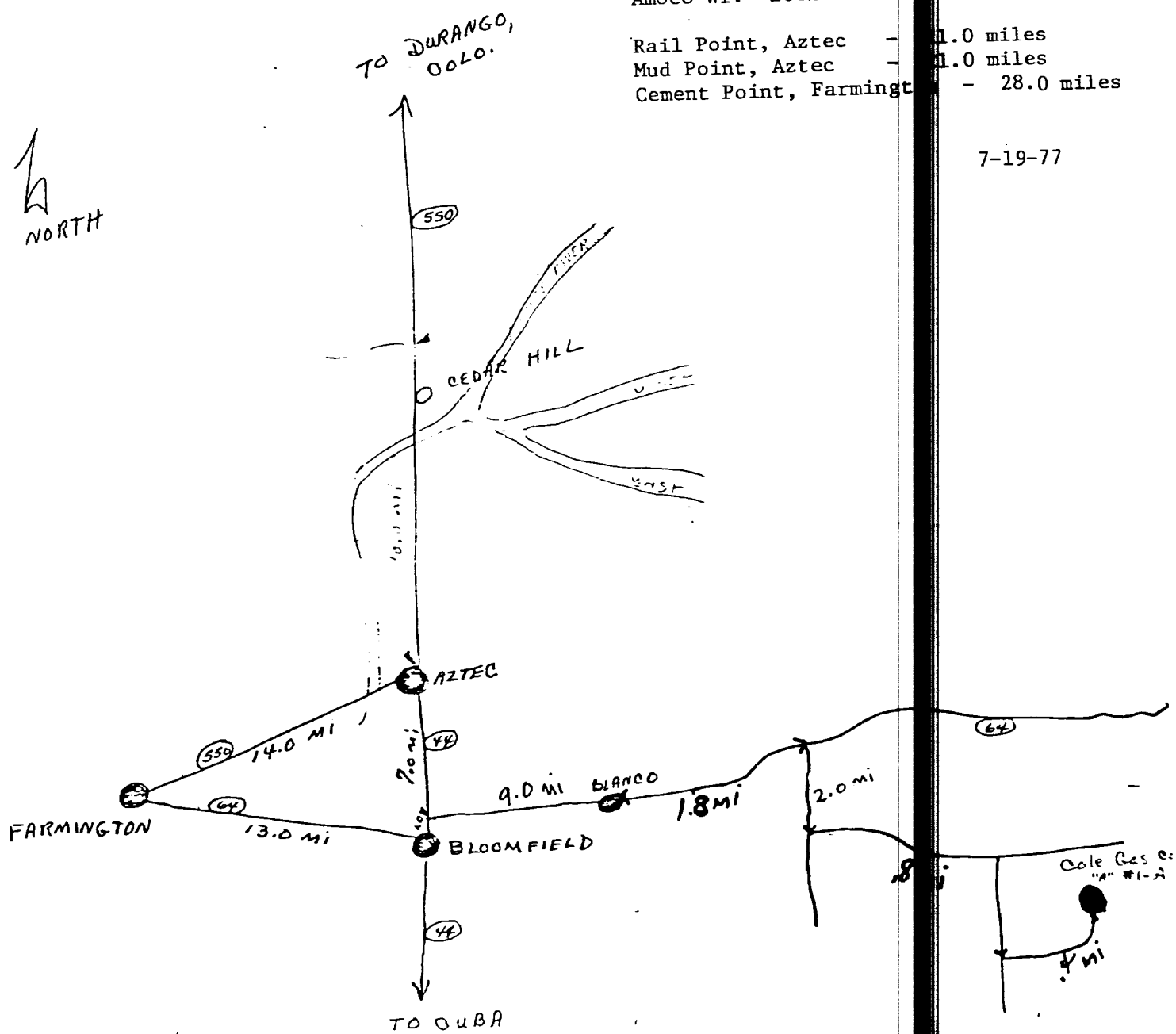


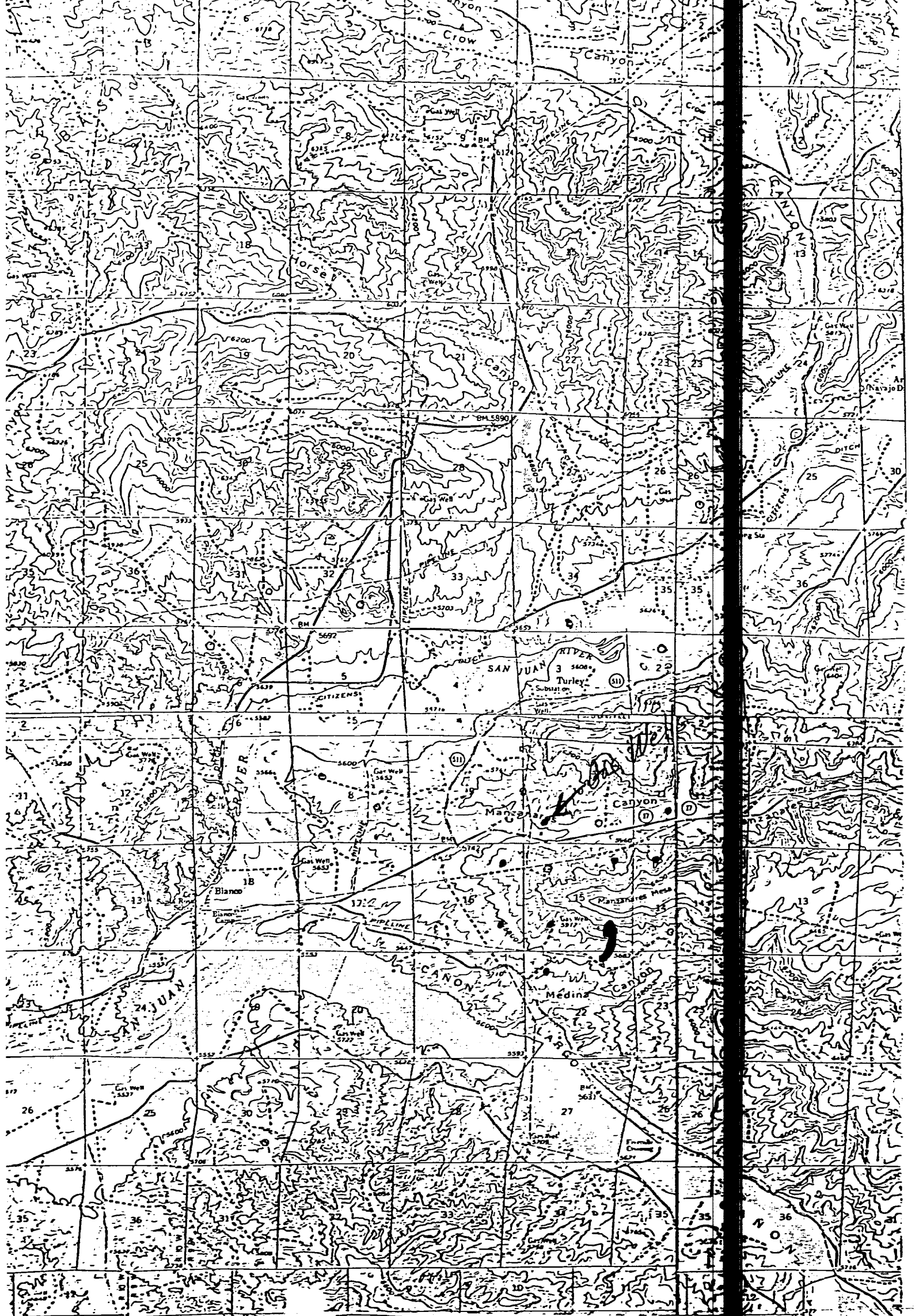


FARMINGTON AREA TRAFFIC SKETCH
 DENVER DIVISION
 Cole Gas Com "A" No. 1-
 San Juan County, New Mexico
 Amoco WI: 100%

- Rail Point, Aztec - 11.0 miles
- Mud Point, Aztec - 11.0 miles
- Cement Point, Farmington - 28.0 miles

7-19-77





Vicinity Map for
AMOCO PRODUCTION CO. #1A Cole Gas Com
800'FSL 1460'FEL Sec 15-T29N-R9W
San Juan County, New Mexico

