

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

925' FWL &amp; 790' FWL, Section 24, T-30-N, R-10-W

At proposed prod. zone

Same

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

Approximately 6 miles north of Blanco, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

790'

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

2650'

## 16. NO. OF ACRES IN LEASE

320

## 19. PROPOSED DEPTH

5400'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

W

320 315.36

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6281' 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
12-1/4"	new 9-5/8"	32.3#/H-40	250'	280 sx
8-3/4"	new 7"	20# /K-55	3300'	780 sx
6-1/4"	new 4-1/2"	10.5#/X-52	3100-5400'	320 sx

Amoco proposes to drill the above well to prevent drainage caused by offsetting infill drilling. The well will be drilled through the Mesaverde formation using rotary tools with drilling mud as a circulating media from surface to 3300' and with gas as a circulating media from 3300' to TD. Completion design will be based on open hole logs. A diagram and acreage plat are attached. A copy of all logs will be filed with your office on completion. The acreage is dedicated to El Paso Natural Gas Company.

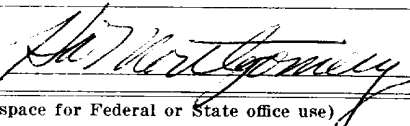
RECEIVED

SEP 29 1976

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and whether 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

September 28, 1976

(This space for Federal or State office use)

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, 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.

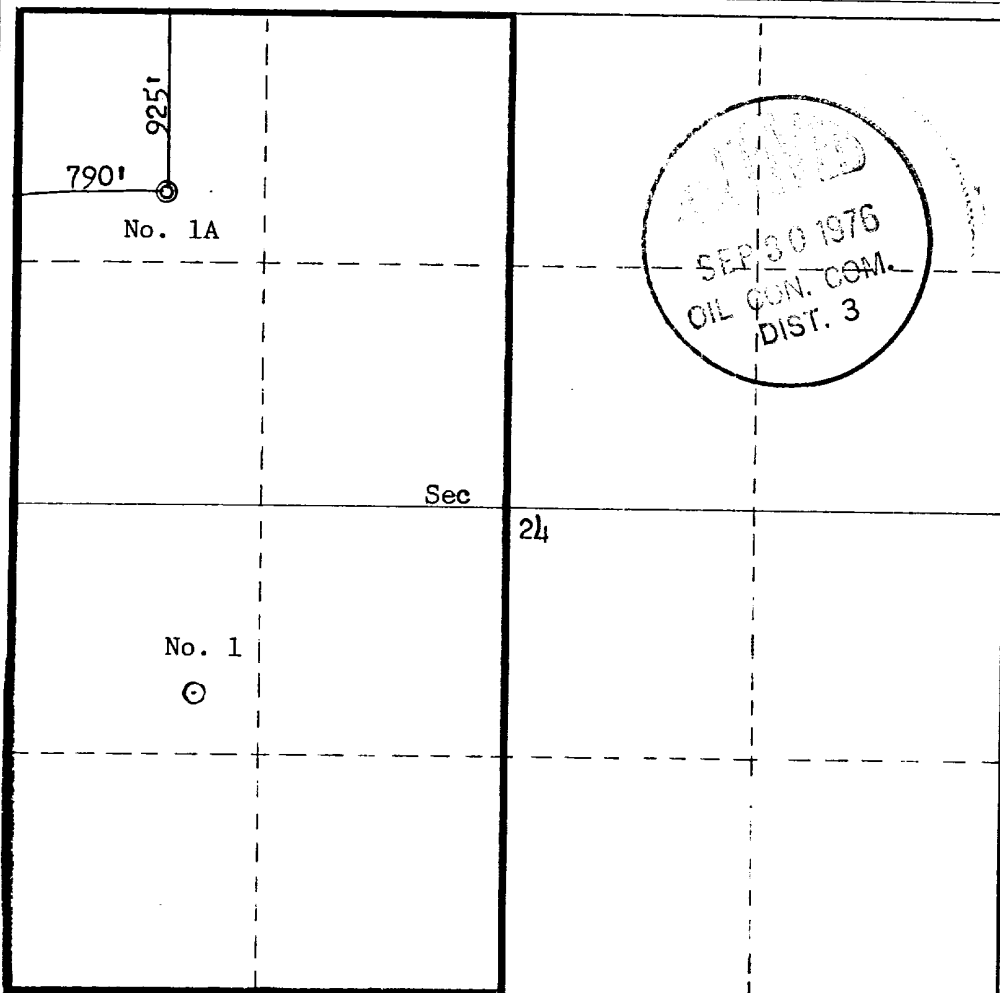
Operator <b>Amoco Production Company</b>			Lease <b>W. H. Riddle</b>		Well No. <b>1A</b>
Unit Letter <b>D</b>	Section <b>24</b>	Township <b>30N</b>	Range <b>10W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>925</b> feet from the <b>North</b> line and <b>790</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6281</b> est.	Producing Formation <b>Mesa Verde</b>		Pool <b>Blanco Mesaverde</b>	Dedicated Acreage: <b>320 31 5.36</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 \_\_\_\_\_

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  
**H. D. Montgomery**

Position  
**Area Engineer**

Company  
**AMOCO PRODUCTION COMPANY**

Date  
**September 28, 1976**

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  
**September 16, 1976**

Registered Professional Engineer and/or Land Surveyor

**Fred B. Kerr Jr.**

Certificate No.  
**3950**

W. H. RIDDLE NO. 1A  
925' FNL & 790' FWL, SECTION 24, T-30-N, R-10-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 sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

September 28, 1976  
Date

W. H. Riddle Area Engineer  
Name and Title

DEVELOPMENT PLAN  
W. H. RIDDLE NO. 1A  
925' FNL & 790' FWL, SECTION 24, T-30-N, R-10-W  
SAN JUAN COUNTY, NEW MEXICO

The proposed location is located on coarse, sandy soil with juniper and pinon pine trees, snakeweed, rabbitbrush, Mormon tea, prickly pear, and cholla cacti. The geologic name of the surface formation is the Nacimientos. No new road will be built as the location will tie into an existing road. No construction materials will be used for building the location; dirt will be leveled at the well site. Verbal approval of the drill site has been obtained from Mr. Bob Moore, BLM; Ray Swanson, U.S.G.S.; and Ms. Pat Zarnowski, Archaeologist.

Arrangements are being made to haul water from the San Juan River, approximately 12 miles. Drilling fluid to 3300' will be low solids, non-dispersed drilling mud, and gas drilled from 3300' to TD (5400'). Upon completion the location will be cleaned up, leveled and 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 no airstrips in the vicinity.

The estimated tops of important geological formations bearing hydrocarbons are:

<u>Formation</u>	<u>Depth</u>	<u>Elevation</u>
Pictured Cliffs	2896'	+3385'
Cliffhouse	4481'	+1800'
Menefee	4661'	+1620'
Point Lookout	5161'	+1120'

Estimated KB Elevation 6281'

The proposed setting depth of each casing string and type of cement to be used for each is as follows:

<u>Est. Depth</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Hole Size</u>	<u>Sx Cement &amp; Type</u>
250'	9-5/8"	32.3#	12-1/4"	280 - Class "B", 2% CaCl <sub>2</sub> .
3300'	7"	20#	8-3/4"	730 - Class "B", 2% Gel, 2# med Tuf Plug/sx. 50 - Class "B" Neat.
3100-5400'	4-1/2"	10.5#	6-1/4"	245 - Class "B" 50:50 Poz, 2% Gel, 2# med Tuf Plug/sx, 0.2% Friction Reducer. 75 - Class "B" 50:50 Poz, 2% Gel.

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

Amoco plans to run the following logs from TD to the intermediate casing:  
Induction-Gamma Ray, Density-Gamma Ray. No cores or drill stem tests will  
be taken.

Our experience in this area has shown that no abnormal pressures, temperatures  
or hydrogen sulfide gas will be encountered.

Our proposed starting date is in October, 1976, and a three week 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.

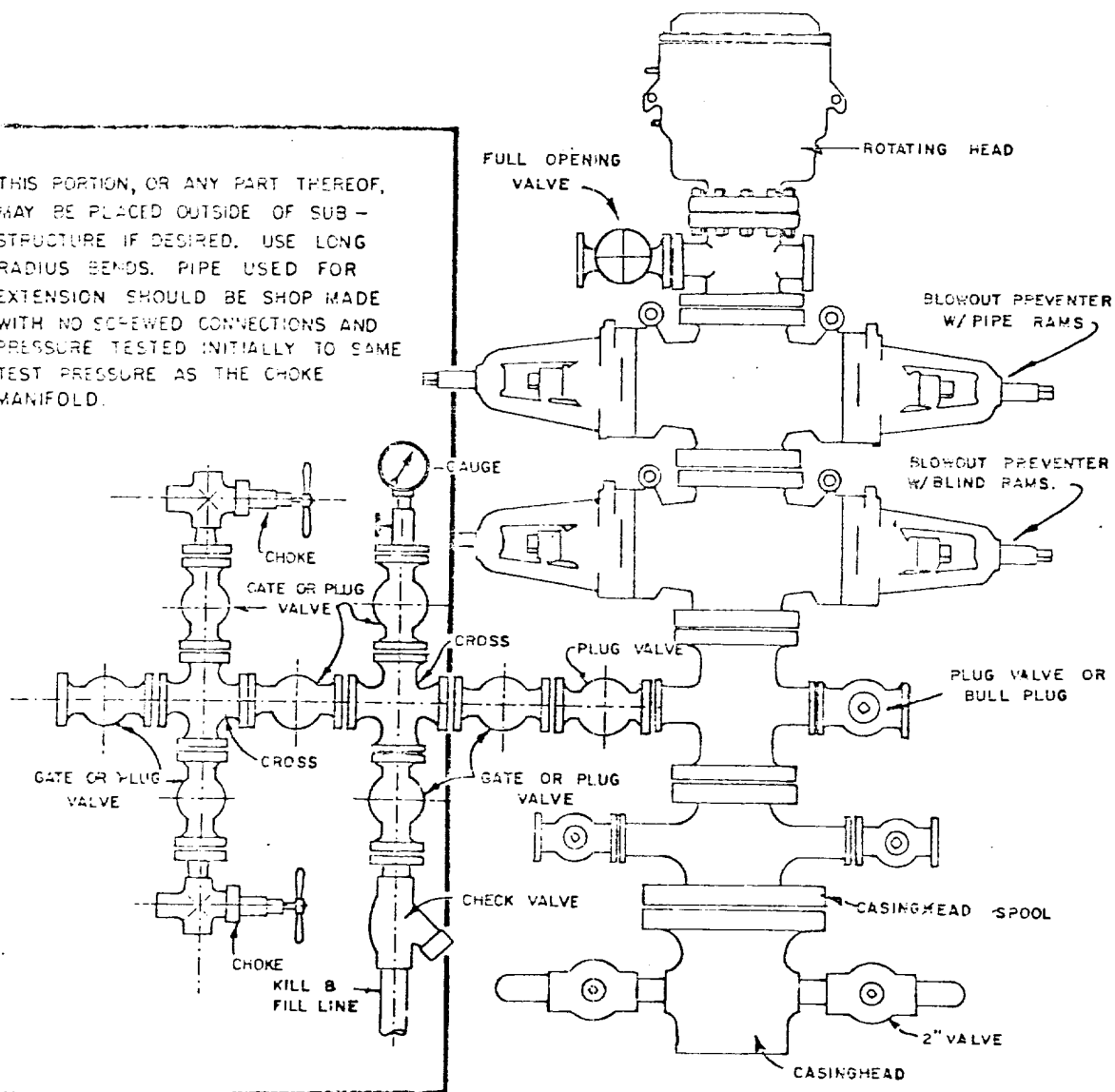
FOURWING SALTBUSH (dewinged) (Atriplex canescens) -  $\frac{1}{2}$  lb.

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

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

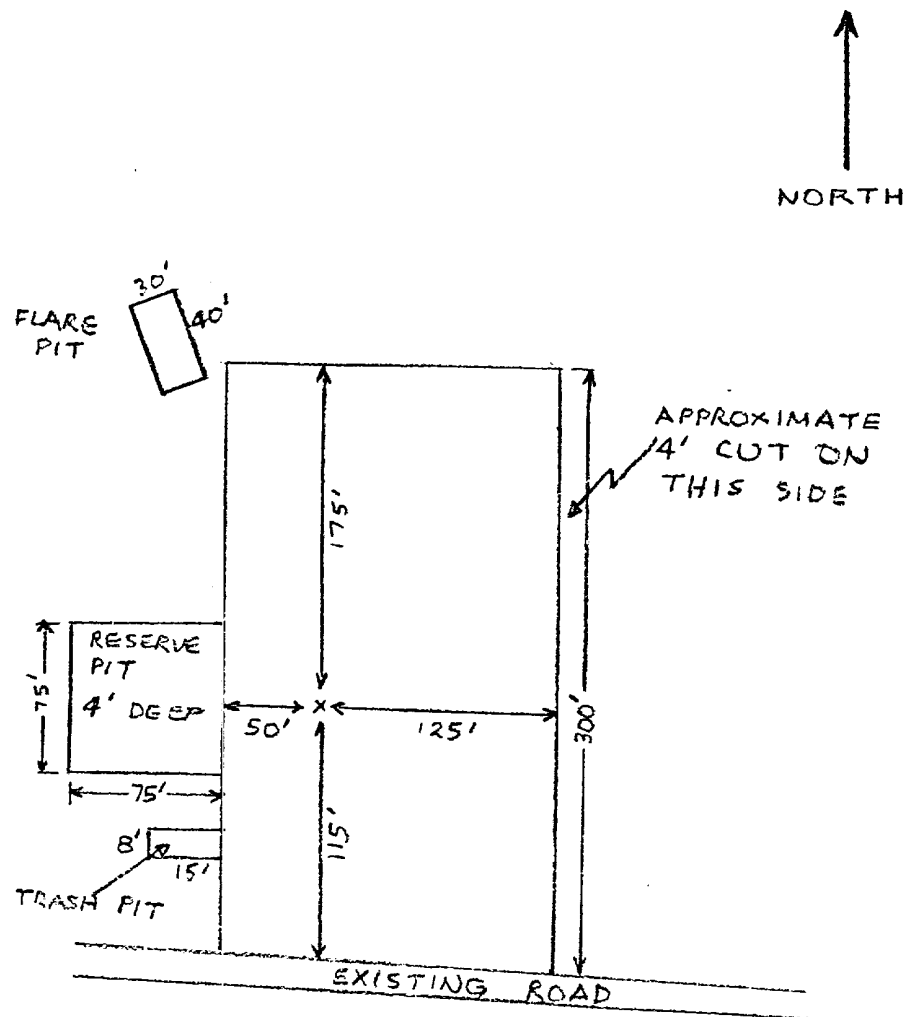
ALKALI SACATON (Sporobolus airoides) -  $\frac{3}{4}$  lb.

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.

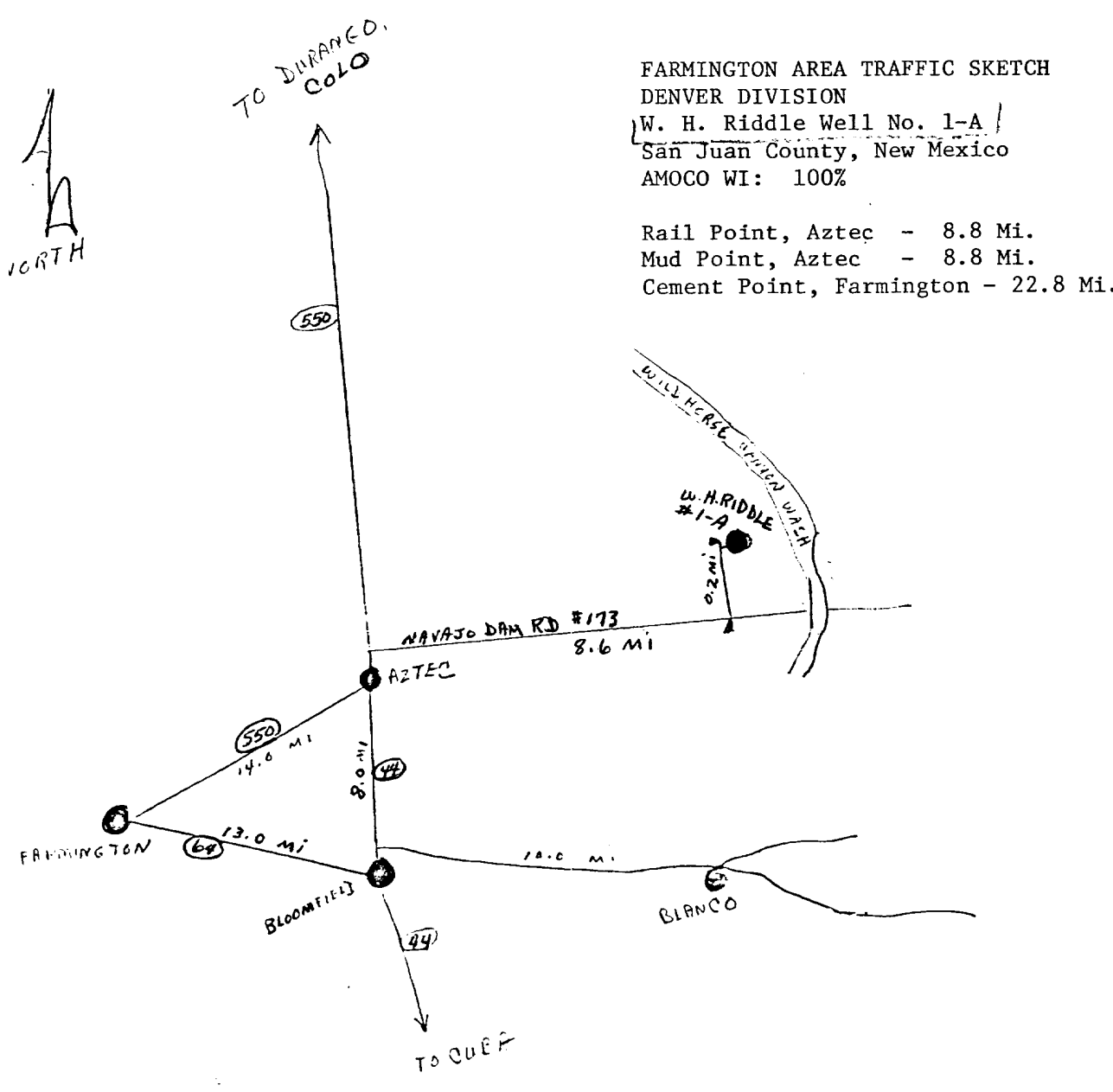
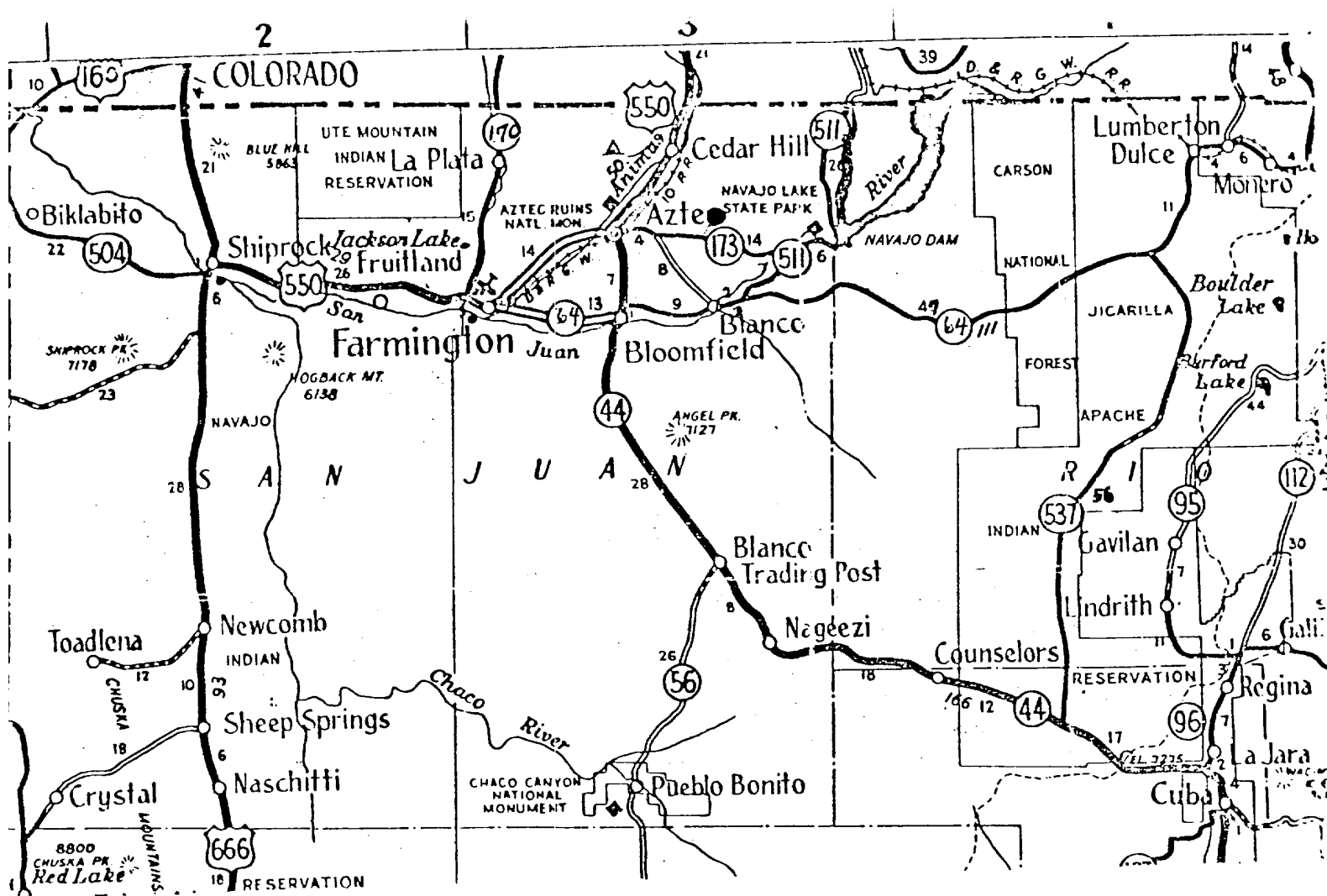


BLOWOUT PREVENTER HOOKUP





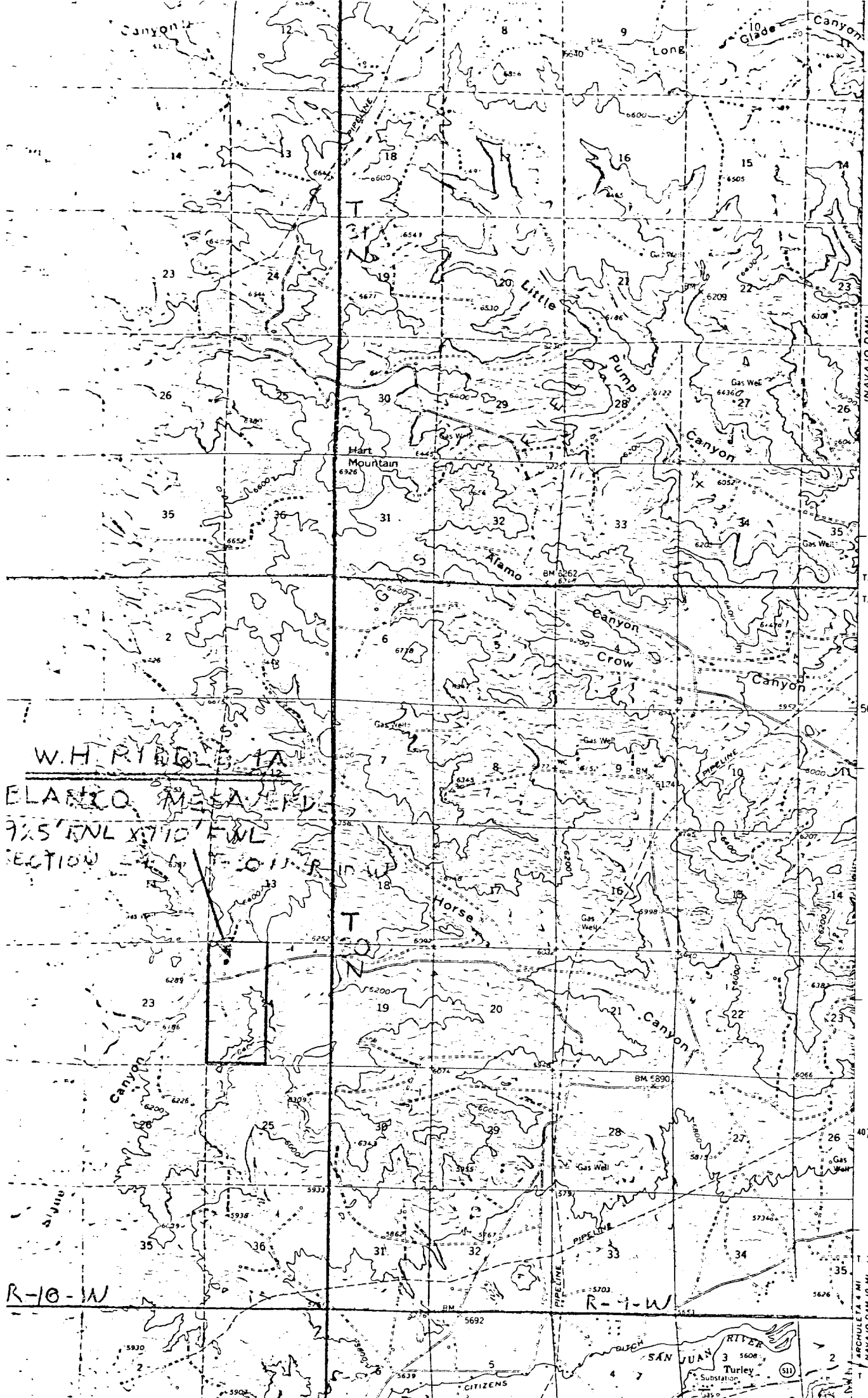
Amoco Production Company		SCALE: NONE
LOCATION DIAGRAM W H RIDDLE NO 1A		
925' FNL X 790' FWL SECTION 24 T-30-N R-10-W		DRG. NO. 9/28/76



FARMINGTON AREA TRAFFIC SKETCH  
DENVER DIVISION  
W. H. Riddle Well No. 1-A  
San Juan County, New Mexico  
AMOCO WI: 100%

Rail Point, Aztec - 8.8 Mi.  
Mud Point, Aztec - 8.8 Mi.  
Cement Point, Farmington - 22.8 Mi.

9-28-76



3 4 MILES  
15000 18000 21000 FEET  
5 KILOMETERS

Property of  
**Pan American Petroleum  
Corporation**

NEW MEXICO

QUADRANGLE LOCATION

ROAD CLASSIFICATION  
Medium duty ——— Light duty ———  
Unimproved dirt ———  
U.S. Route ○ State Route

14 MI TO N MEX 17  
BLANCO 4.2 MI

INTERIOR-GEOLOGICAL SURVEY, WASHINGTON D.C. 1962  
MR 4886

GOULD PASS

AZTEC, N. MEX.  
N3645 - W10745/15

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