

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-22663

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.
SFM 076337

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
W. D. Heath "A"

9. WELL NO.
1A

10. FIELD AND POOL, OR WILDCAT
Blanco Mesaverde

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA
SE/4 SE/4 Sec. 9

12. COUNTY OR PARISH
T-29-N, R-9-W

13. STATE
San Juan NM

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 **1160 PSL & 790 FEL, Section 9, T-29-N, R-9-W**
At proposed prod. zone
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
3 miles east of Blanco, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
790'

16. NO. OF ACRES IN LEASE
320

17. NO. OF ACRES ASSIGNED TO THIS WELL
320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
2840'

19. PROPOSED DEPTH
4850'

20. ROTARY OR CABLE TOOLS
Rotary

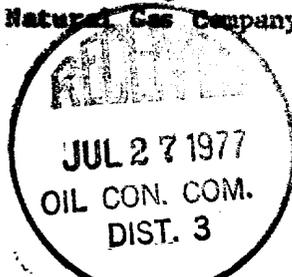
21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5759' CL

22. APPROX. DATE 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 sx
8-3/4"	7"	20#	2700'	469 sx
6-1/4"	4-1/2"	10.5#	4850'	275 sx

The above referenced well is being drilled to further develop the Mesaverde reservoir. The well will be drilled to the intermediate casing point using water and Benax. 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 WTL-6.



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JUL 26 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 J. L. Kruph TITLE Area Engineer DATE 7/19/77
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

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.

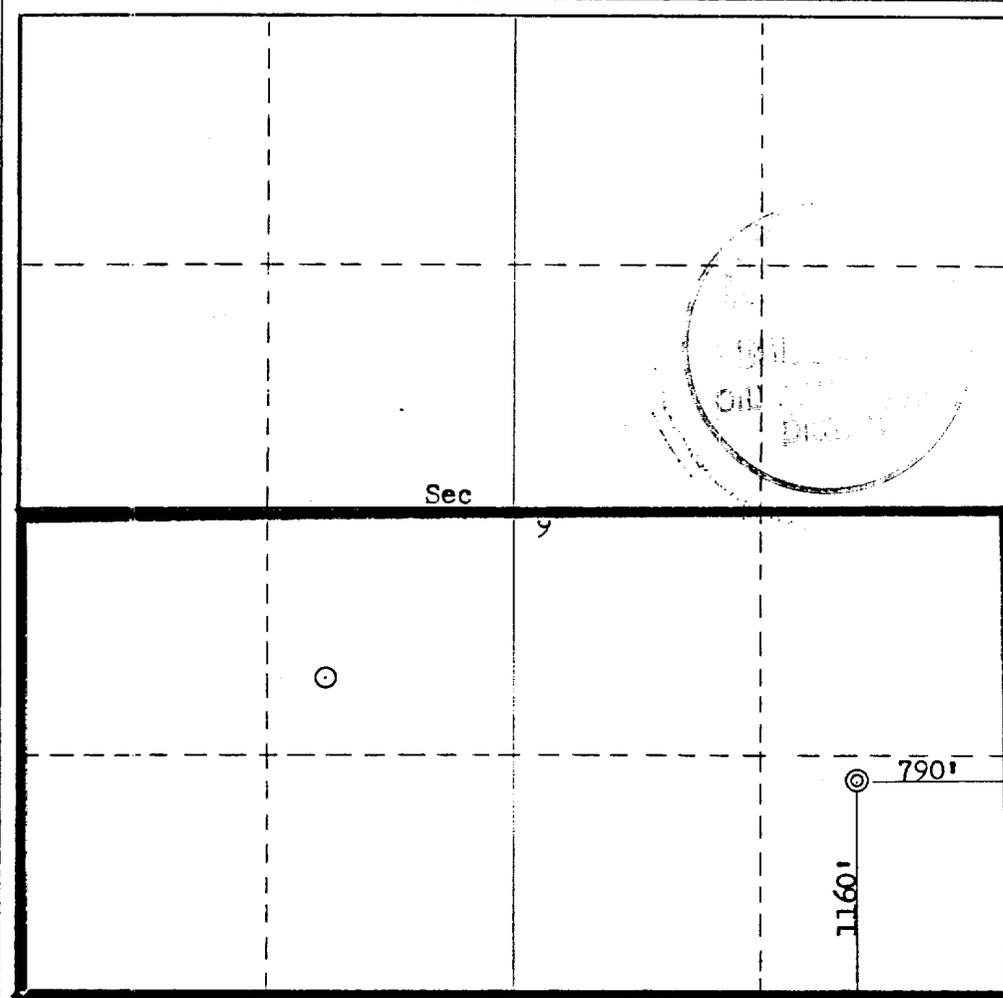
Operator Amoco Production Company		Lease W. D. Heath "A"		Well No. 1A
Unit Letter P	Section 9	Township 29N	Range 9W	County San Juan
Actual Footage Location of Well: 1160 feet from the South line and 790 feet from the East line				
Ground Level Elev. 5759	Producing Formation Mesa Verde	Pool BLANCO MESAVERDE		Dedicated Acreage: 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 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
JULY 19, 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. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.
3950

0 330 650 90 1320 1650 1980 2310 2640 2000 1500 1000 500 0

W. D. HEATH "A" NO. 1A
1160 FSL & 790 FEL, SECTION 9, 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 sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

JULY 19, 1977

Date



AREA SUPERINTENDENT

Name and Title

DEVELOPMENT PLAN
W. D. HEATH "A" NO. 1A
1160 FSL & 790 FEL, SECTION 9, T-29-N, R-9-W
SAN JUAN COUNTY, NEW MEXICO

The proposed location has rabbit brush and four cedars as vegetation. The soil is sandy. The geological name of the surface formation is the Animas. 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 irrigation ditch in Blanco. Drilling fluid to 2700' will be a water and Benex and the well will be gas drilled from 2700' to TD (4850'). 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	2299'	+3473'
Cliffhouse	3949'	+1823'
Menefee	4120'	+1652'
Point Lookout	4563'	+1209'

Estimated KB elevation: 5772'

<u>ESI. DEPTH</u>	<u>CSG. SIZE</u>	<u>WEIGHT</u>	<u>HOLE SIZE</u>	<u>SACKS CEMENT</u>	<u>-</u>	<u>TYPE</u>
250'	9-5/8"	32.3#	12-1/4"	265	-	Class "B", 2% CaCl ₂ .
2700'	7"	20#	8-3/4"	470	-	Class "B", 6% Gel, 2# Med. Tuf Plug/sx.
2500-4850'	4-1/2"	10.5#	6-1/4"	50	-	Class "B", 2% CaCl ₂ .
				200	-	Class "B", 50:50 Poz, 6% Gel, 2# Med. Tuf Plug/sx, 0.2% Friction Reducer.
				75	-	Class "B", 50:50 Poz, 6% 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 2700': 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-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) - $3\frac{1}{4}$ lbs.

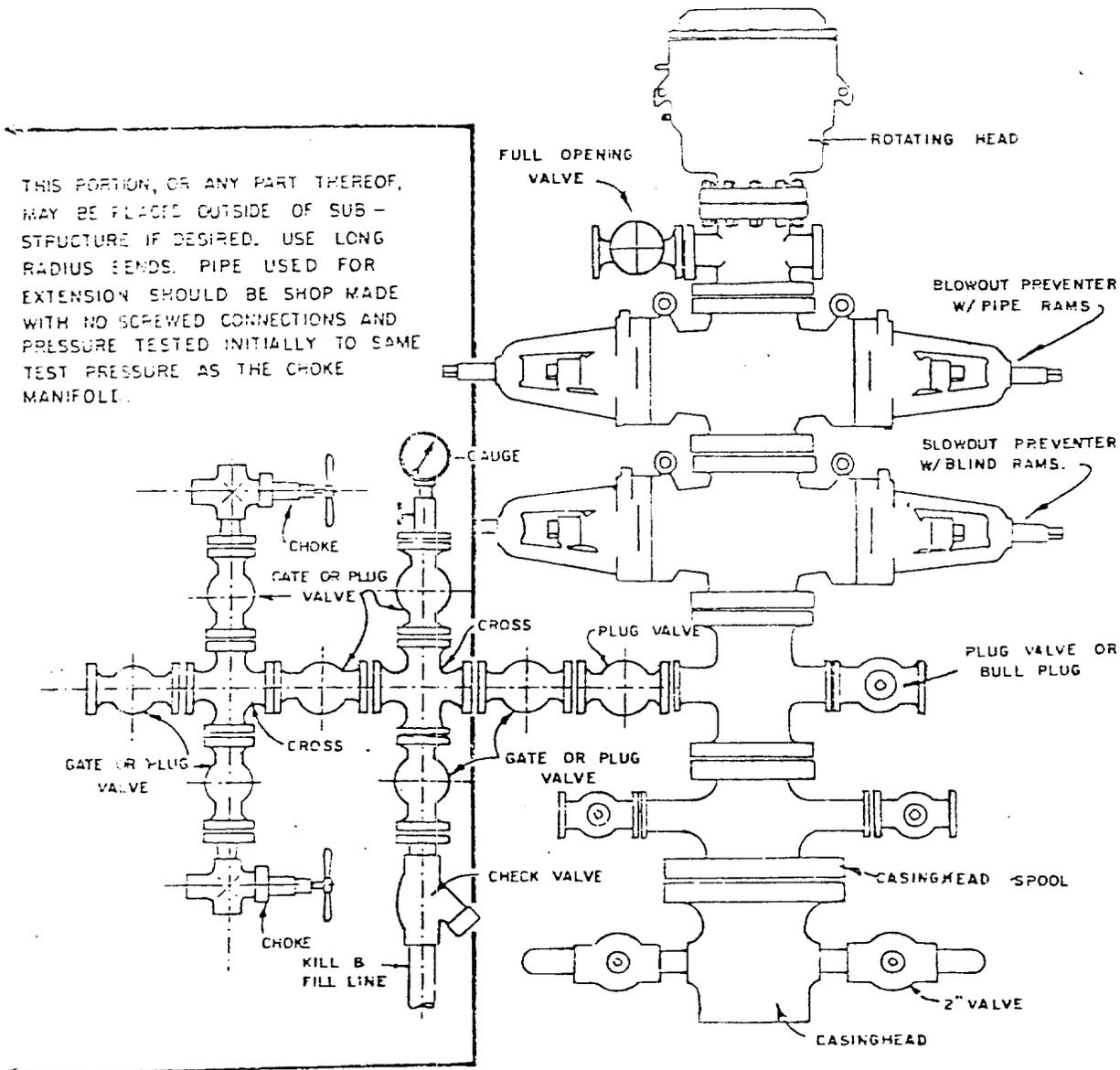
FOURWING SALTBUSH (dewinged) (Atriplex canescens) - $\frac{1}{2}$ lb.

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

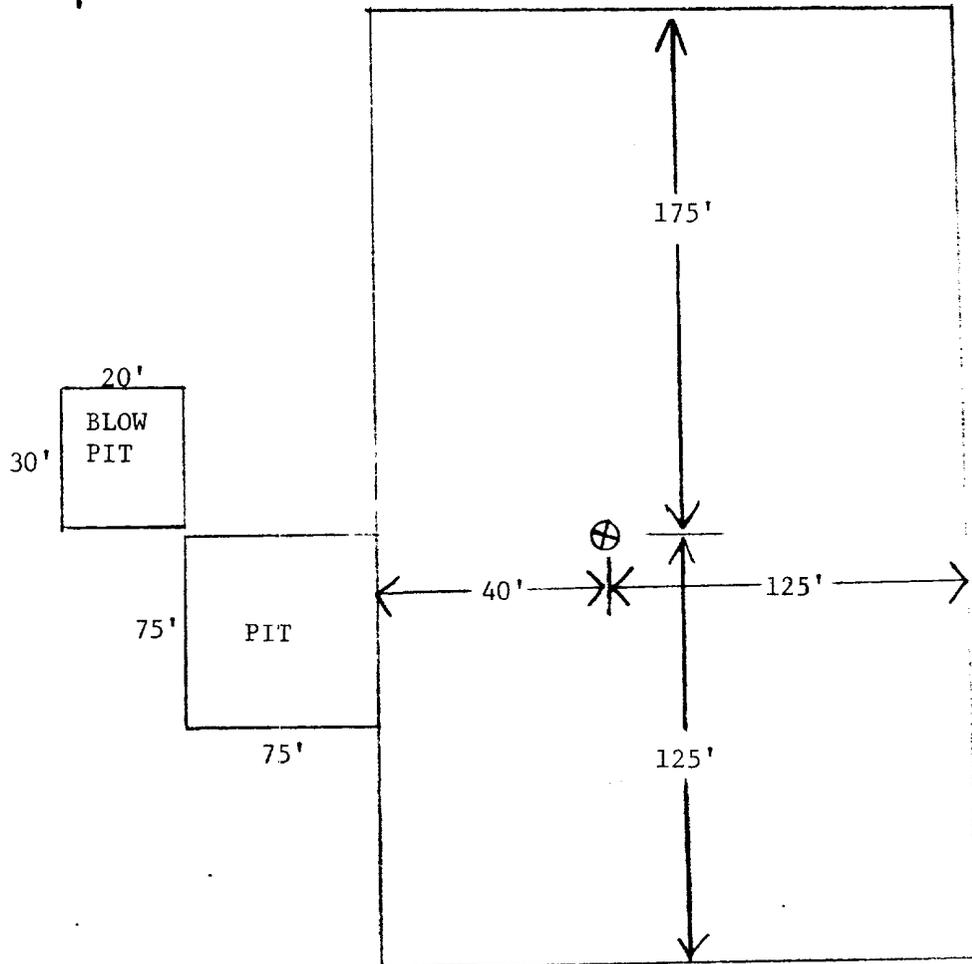
WINTERFAT (Eurotia lanata) - $\frac{1}{2}$ lb.

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



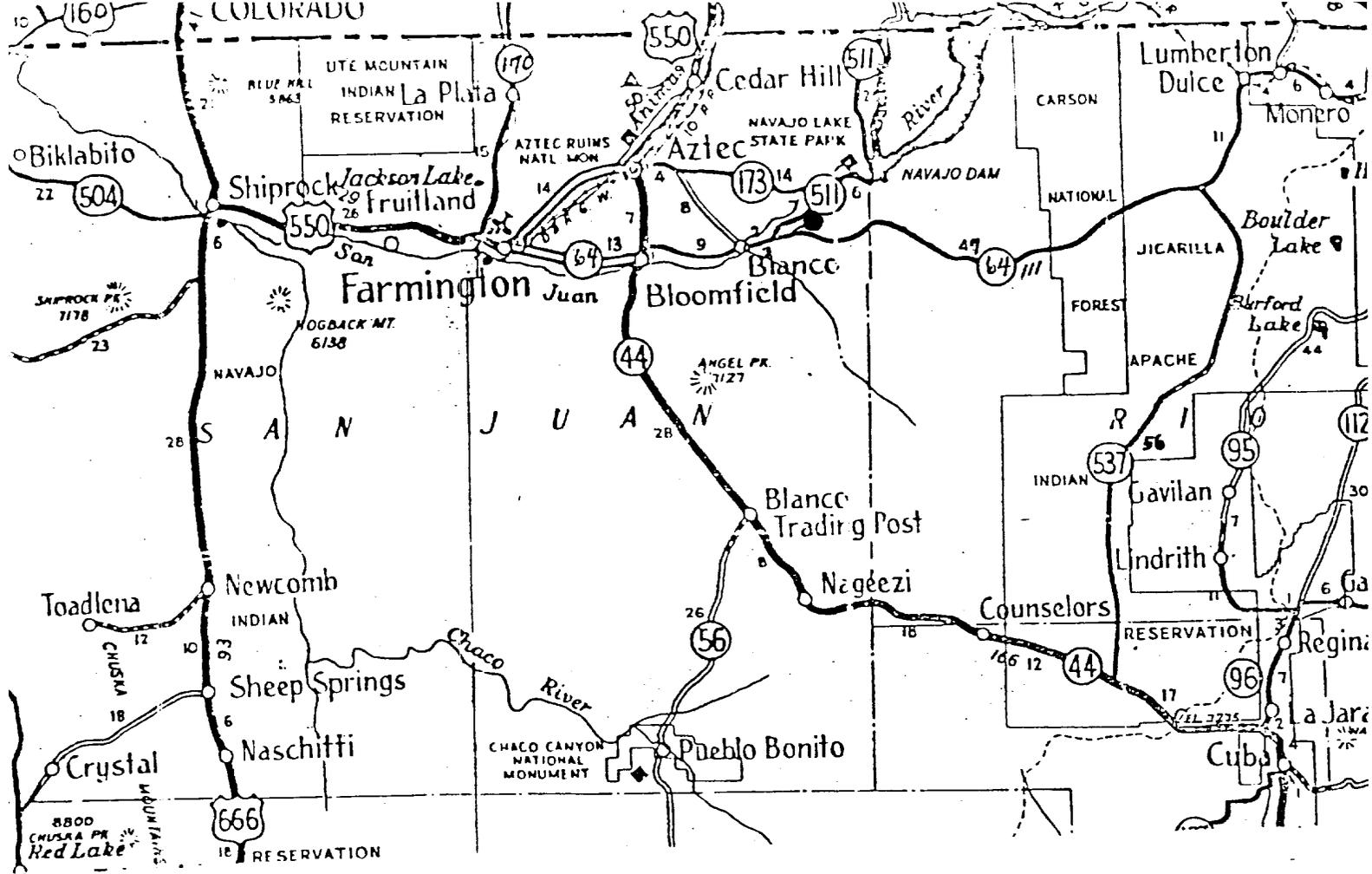
Amoco Production Company

SCALE:

Location Diagram: W. D. Heath "A" No. 1, Section 9-T29N-R9W,
1160' FSL & 790' FEL, SE 1/4 SE 1/4

None

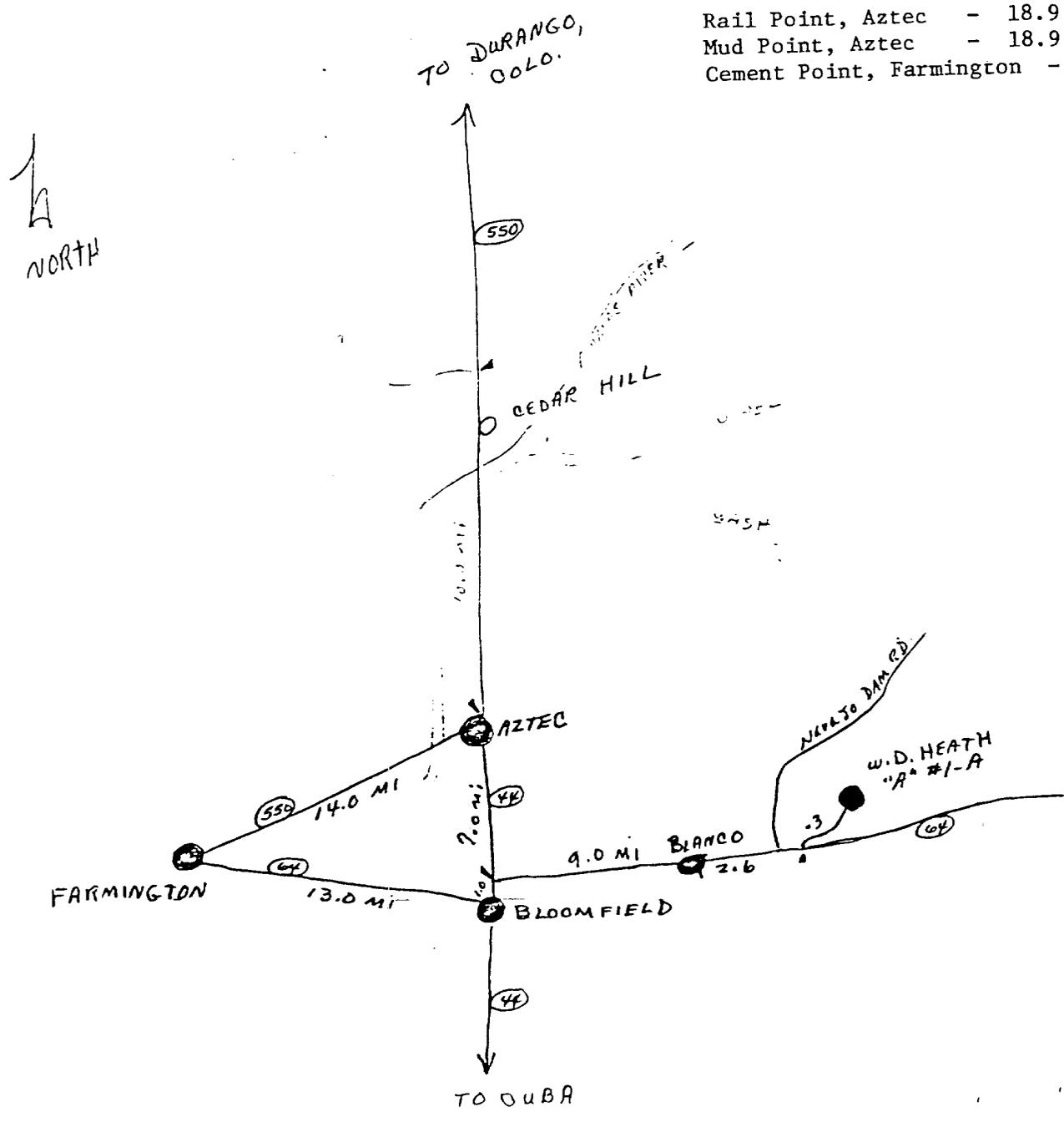
DRG.
NO.

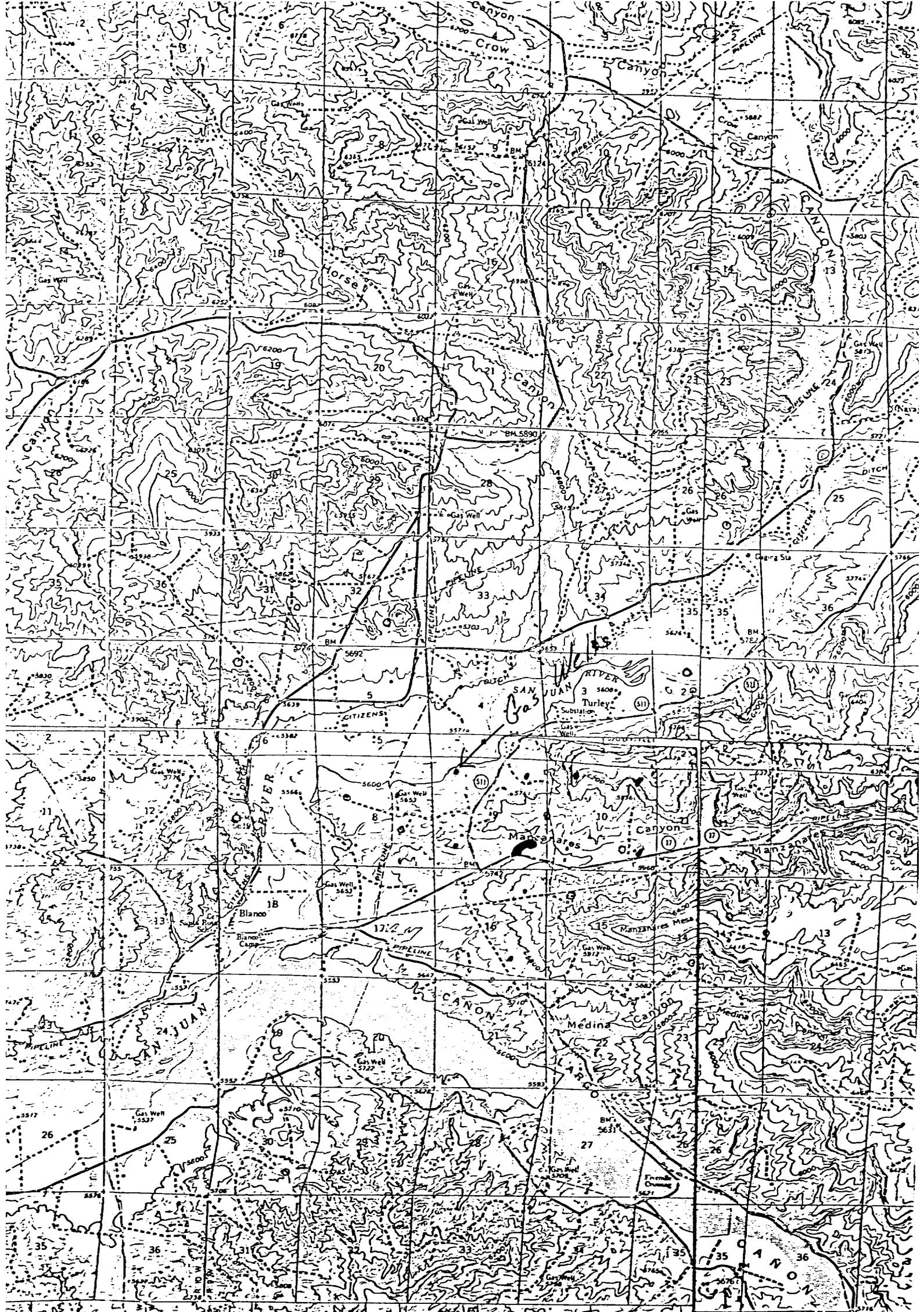


FARMINGTON AREA TRAFFIC SKETCH
 DENVER DIVISION
 W. D. Heath "A" No. 1-A
 San Juan County, New Mexico
 Amoco WI: 100%

- Rail Point, Aztec - 18.9 miles
- Mud Point, Aztec - 18.9 miles
- Cement Point, Farmington - 25.9 miles

7-19-77





Vicinity Map for
AMOCO PRODUCTION CO. #1A W. D. Heath "A"
1160' FSL 790' FEL Sec 9-T29N-R9W
San Juan County, New Mexico