

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-095-22682  
5. LEASE DESIGNATION AND SERIAL NO.

SF 076337

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER   
 SINGLE ZONE  MULTIPLE ZONE

8. FARM OR LEASE NAME

W. D. Heath "B"

2. NAME OF OPERATOR  
**AMOCO PRODUCTION COMPANY**

9. WELL NO.

1A

3. ADDRESS OF OPERATOR

501 AIRPORT DRIVE, FARMINGTON, NM 87401

10. FIELD AND POOL, OR WILDCAT

Blanco Mesaverde  
 11. SEC., T., R., M., OR B.LK.  
 AND SURVEY OR AREA

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
**1570 FSL & 850 FEL, Section 31, T-30-N, R-9-W**  
 At proposed prod. zone

NE/4 SE/4 Sec. 31  
 T-30-N, R-9-W

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

6 miles S of Blanco, NM

12. COUNTY OR PARISH 13. STATE

San Juan NM

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.  
 (Also to nearest drlg. unit line, if any) **850'**

16. NO. OF ACRES IN LEASE **316.5**

17. NO. OF ACRES ASSIGNED TO THIS WELL **316.5**

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. **2720'**

19. PROPOSED DEPTH **4903'**

20. ROTARY OR CABLE TOOLS  
**Rotary**

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

22. APPROX. DATE WORK WILL START\*

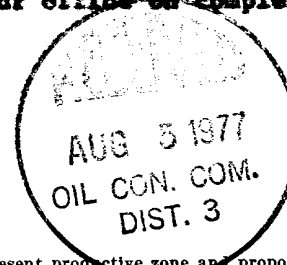
**5783 GL**

**September 1977**

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"	32.34	250'	250 sx
8-3/4"	7"	20#	2770'	580 sx
6-1/4"	4-1/2"	10.5#	4903'	305 sx

This well will be drilled to prevent drainage from offset wells. The well will be drilled through the Mesaverde formation using rotary tools. Fresh mud will be used for circulation from 2770' to surface and gas from TD (4903') to 2770'. Completion design will be based upon 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.



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. Krupka TITLE Area Engineer DATE 8/1/77

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

AUG 4 1977

## 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.

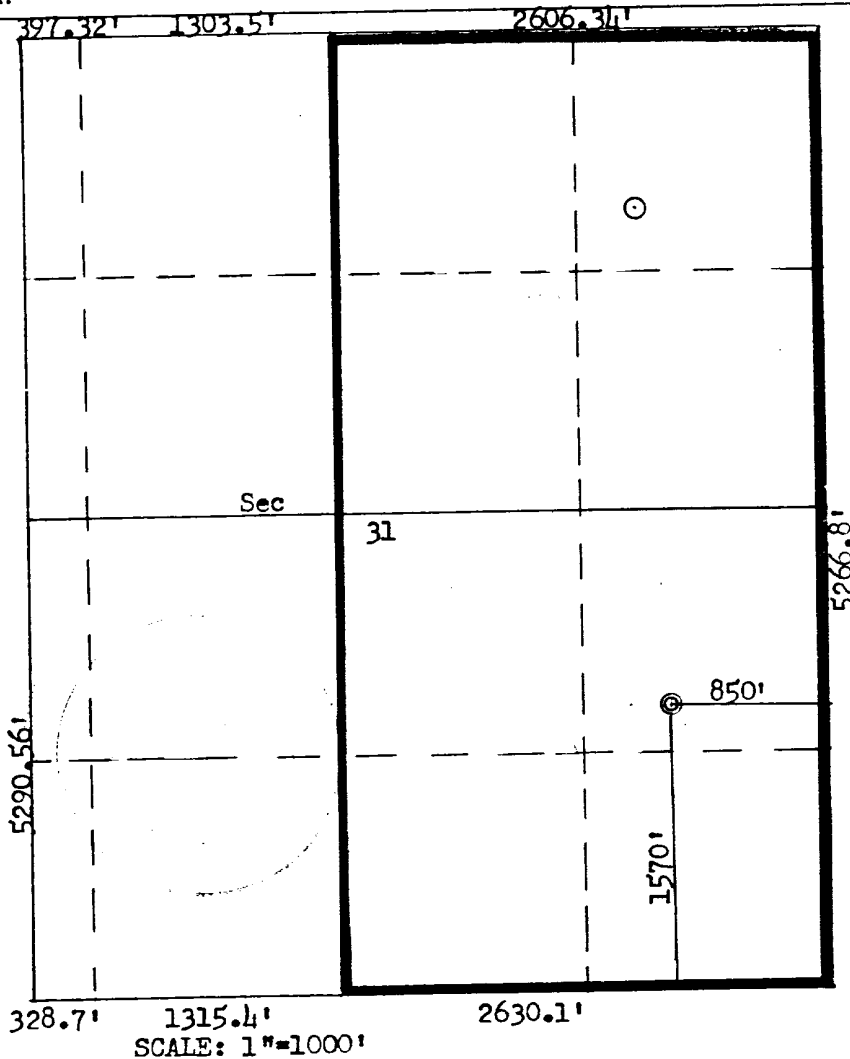
Operator <b>Amoco Production Company</b>		Lease <b>W. D. Heath "B"</b>			Well No. <b>1A</b>
Unit Letter <b>I</b>	Section <b>31</b>	Township <b>30N</b>	Range <b>9W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1570</b> feet from the <b>South</b> line and <b>850</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5783</b>	Producing Formation <b>Mesa Verde</b>	Pool <b>BLANCO MESAVERDE</b>		Dedicated Acreage: <b>320</b> <b>316.5</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  
**J. L. KRUPKA**

Position  
**AREA ENGINEER**

Company  
**AMOCO PRODUCTION COMPANY**

Date  
**JULY 27, 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 29, 1977**

Registered Professional Engineer and Land Surveyor  
**Fred B. Kerr, Jr.**

Certificate No.  
**3950**

W. D. HEATH "B" NO. 1A  
1570 FSL & 850 FEL, SECTION 31, T-30-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 27, 1977

Date



AREA SUPERINTENDENT

Name and Title

DEVELOPMENT PLAN  
W. D. HEATH "B" NO. 1A  
1570 FSL & 850 FEL, SECTION 31, T-30-N, R-9-W  
SAN JUAN COUNTY, NEW MEXICO

The proposed location is located on coarse sandy soil with juniper and pinon pine trees, snakeweed, rabbit brush, Mormon tea, prickly pear, and Challa cacti. The geological name of the surface formation is the Nacimiento. No new road will be required. No construction materials will be required to build the location, and the location will be leveled and cleaned up upon completion.

The water will be hauled to the location from a ditch in Blanco, over existing roads. The hole will be drilled using fresh mud from surface to 2770' and gas from 2770' to TD (4903'). Upon completion the location will be cleaned, leveled, and the reserve pit will be backfilled. Attached is the BLM seeding plan to be followed for this well.

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	2351'	+3445'
Cliffhouse	3986'	+1810'
Menefee	4150'	+1646'
Point Lookout	4579'	+1217'

Estimated KB elevation is: 5796'

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

<u>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"	250 - Class "B", 2% CaCl <sub>2</sub> .	2# Med. Tuf Plug/sx.
2770'	7"	20#	8-3/4"	450 - Class "B", 2% CaCl <sub>2</sub> .	
2770-4903'	4-1/2"	10.5#	6-1/4"	100 - Class "B" Neat.	2# Med Tuf Plug/sx, 0.2% Friction Reducer.
				255 - Class "B" 50:50 Poz, 2% Gel.	
				50 - Class "B" 50:50 Poz, 2% Gel.	

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

Amoco plans to run the following logs from TD to intermediate casing: Induction Gamma Ray, Density Gamma Ray. No cores or Drill Stem Tests will be taken.

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

Our proposed starting date is September 1977, 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.

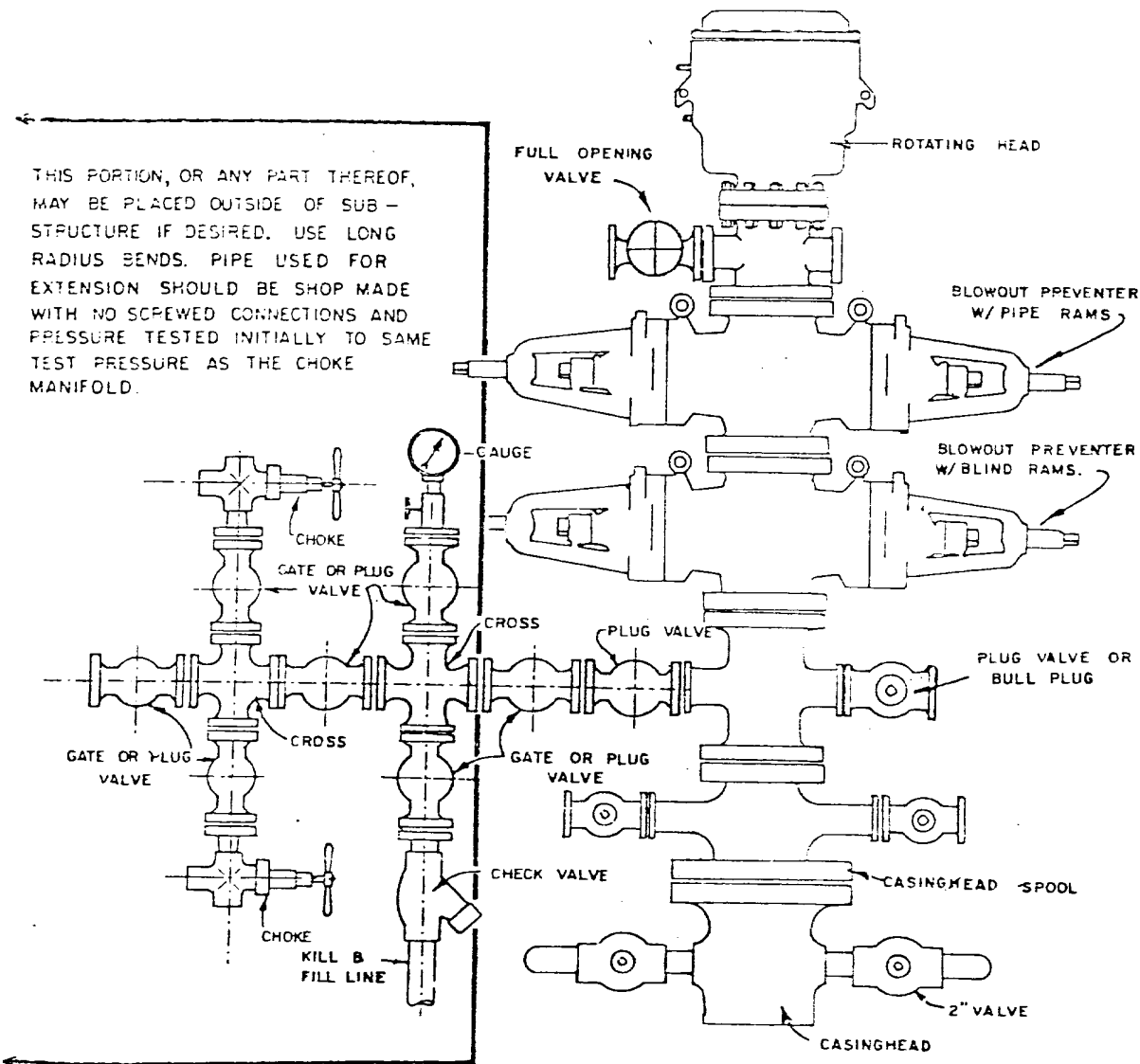
FOURWING SALTBUSH (dewinged) (Atriplex canescens) -  $\frac{1}{2}$  lb.

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

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

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

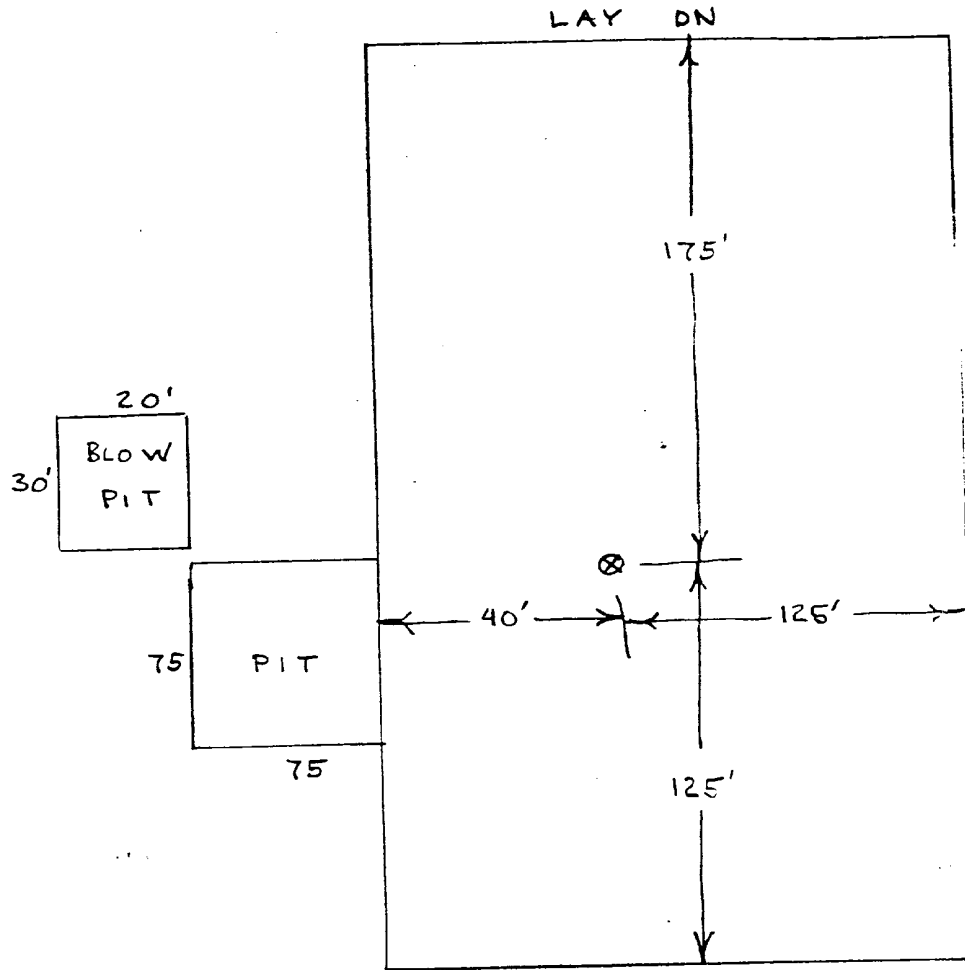
THIS PORTION, OR ANY PART THEREOF, MAY BE PLACED OUTSIDE OF SUB-STRUCTURE IF DESIRED. USE LONG RADIUS BENDS. PIPE USED FOR EXTENSION SHOULD BE SHOP MADE WITH NO SCREWED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOKE MANIFOLD.



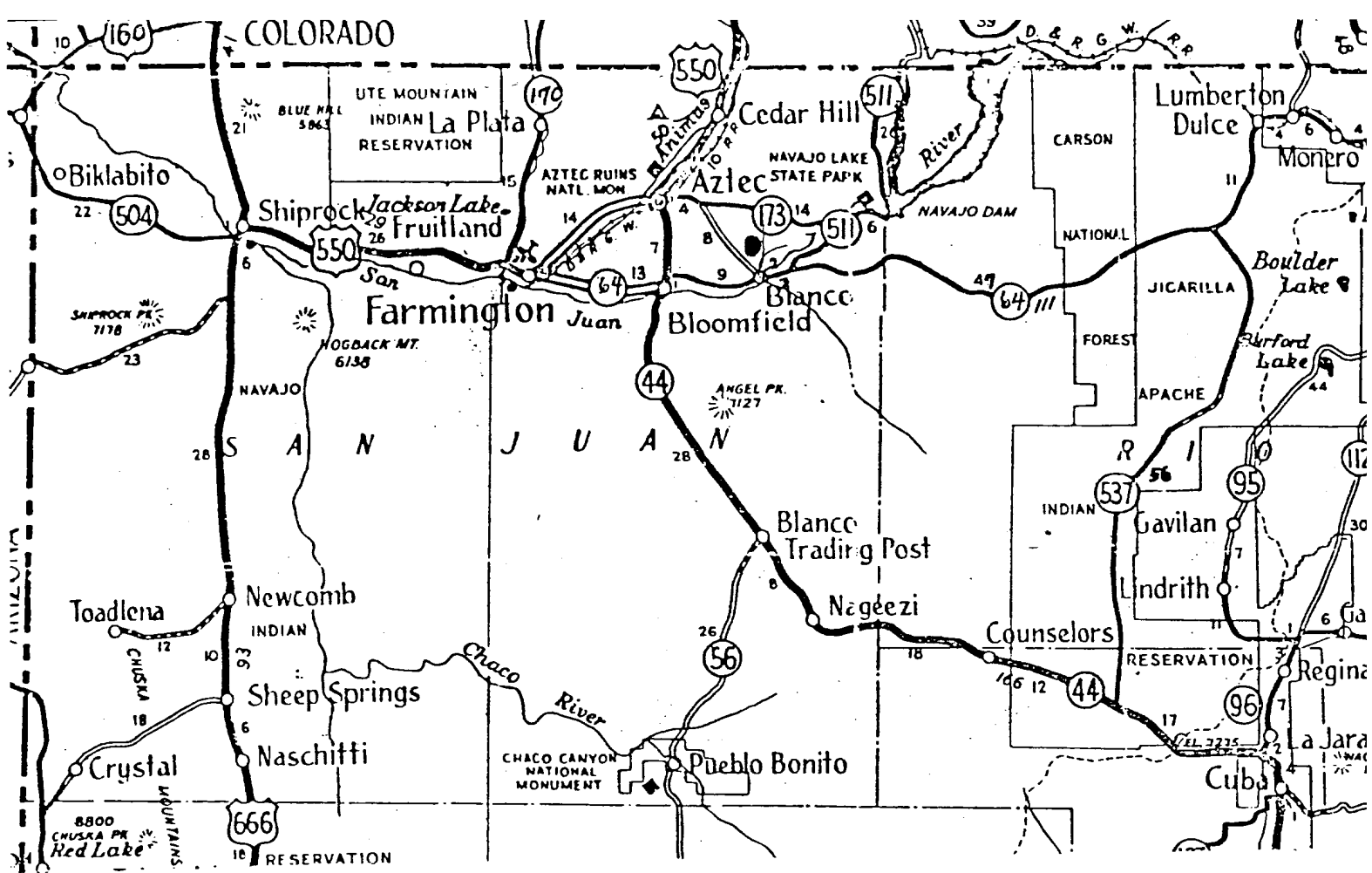
BLOWOUT PREVENTER HOOKUP



S.E.



W. D. HEATH "B" 1A  
SEC 31 T30N R9W  
950 FEL 1570 FSL  
NE 1/4 SE 1/4

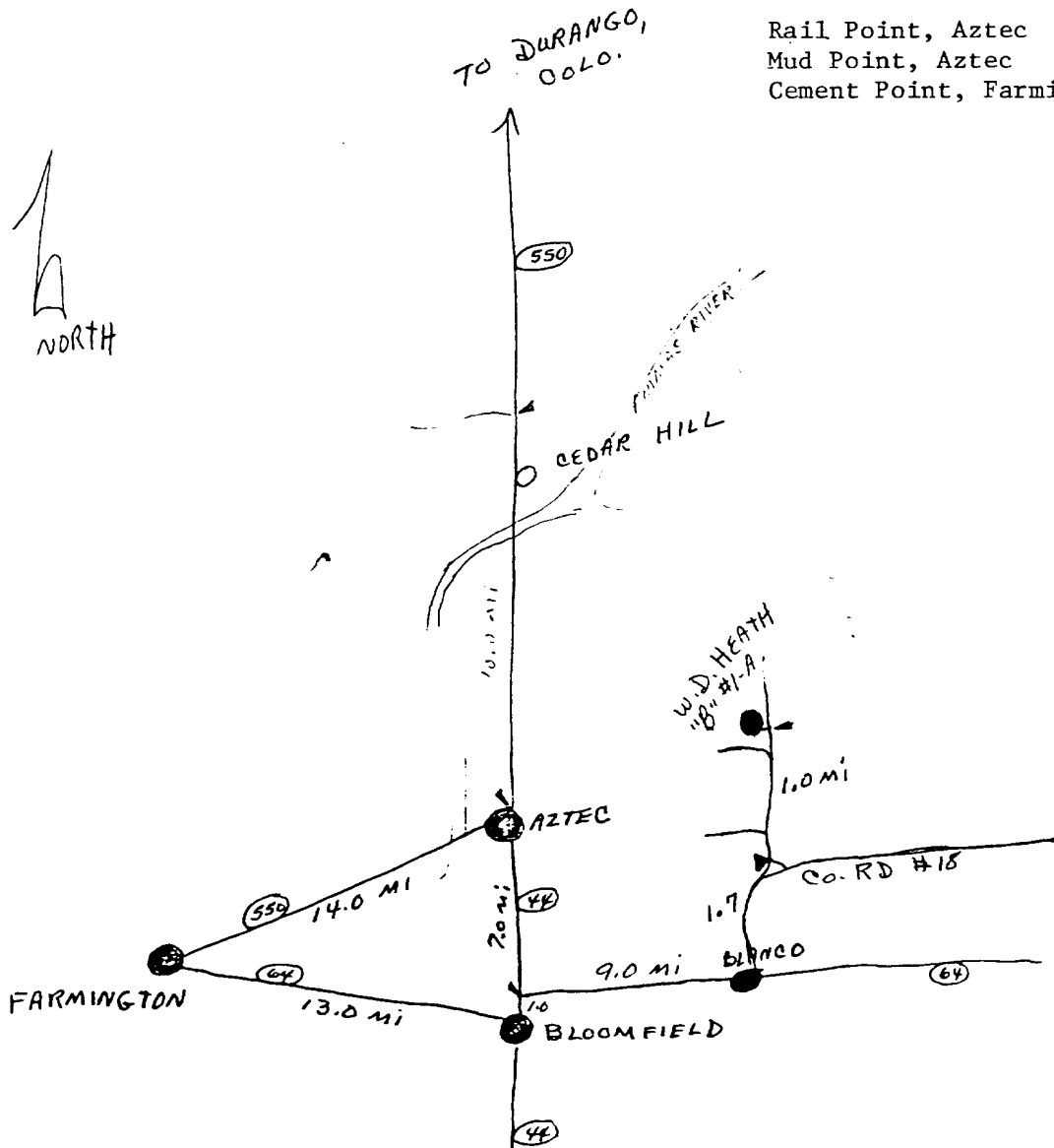


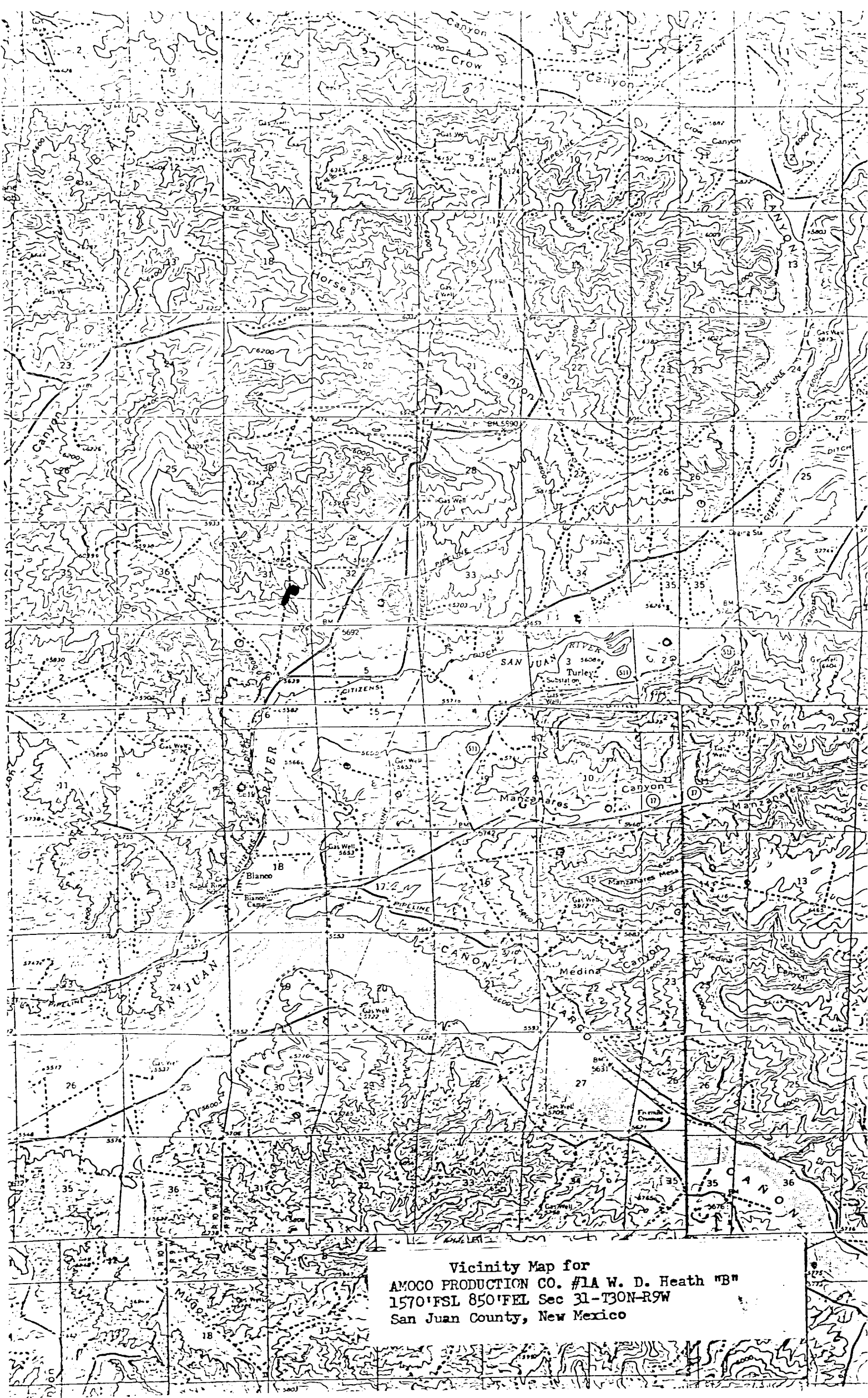
FARMINGTON AREA TRAFFIC SKETCH  
DENVER DIVISION

W. D. Heath "B" No. 1-A  
San Juan County, New Mexico  
Amoco WI: 100%

Rail Point, Aztec - 18.7 miles  
Mud Point, Aztec - 18.7 miles  
Cement Point, Farmington - 25.7 miles

7-19-77





Vicinity Map for  
AMOCO PRODUCTION CO. #1A W. D. Heath "B"  
1570'FSL 850'FEL Sec 31-T30N-R9W  
San Juan County, New Mexico