

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 INFILL 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  
940' FNL and 1590' FEL, Section 18, T29N, R12W  
At proposed prod. zone  
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
3 miles East of Farmington, New Mexico

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 940'

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 3200'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5601' GL

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12-1/4"	8-5/8" (New)	24# K-55	300'
7-7/8"	4-1/2" (New)	10.5# K-55	6500'

5. LEASE DESIGNATION AND SERIAL NO.

SF-078370

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Gallegos Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.

96E

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

NW/4, NE/4, Section 18, T29N, R12W

12. COUNTY OR PARISH 13. STATE

San Juan New Mexico

17. NO. OF ACRES ASSIGNED TO THIS WELL

E 320

20. ROTARY OR CABLE TOOLS

Rotary

22. APPROX. DATE WORK WILL START\*

As soon as permitted

This application to drill an Infill Basin Dakota well is pursuant to Order No. R-1670-V approved by the NMOCC on May 22, 1979. This well will qualify under Section 103 of the Natural Gas Policy Act under Order No. R-1670-V. The gas from this well is dedicated to Amoco 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 B.E. Jarchull TITLE District Engineer DATE March 7, 1980

(This space for Federal or State office use)

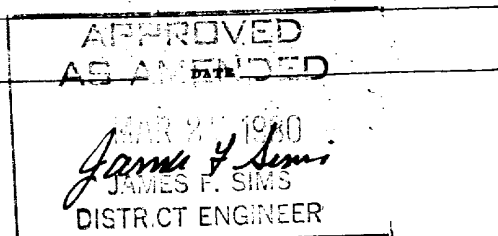
PERMIT NO. APPROVAL DATE

APPROVED BY TITLE

CONDITIONS OF APPROVAL, IF ANY:

*ad. Encl*

NMOCC



All distances must be from the outer boundaries of the Section

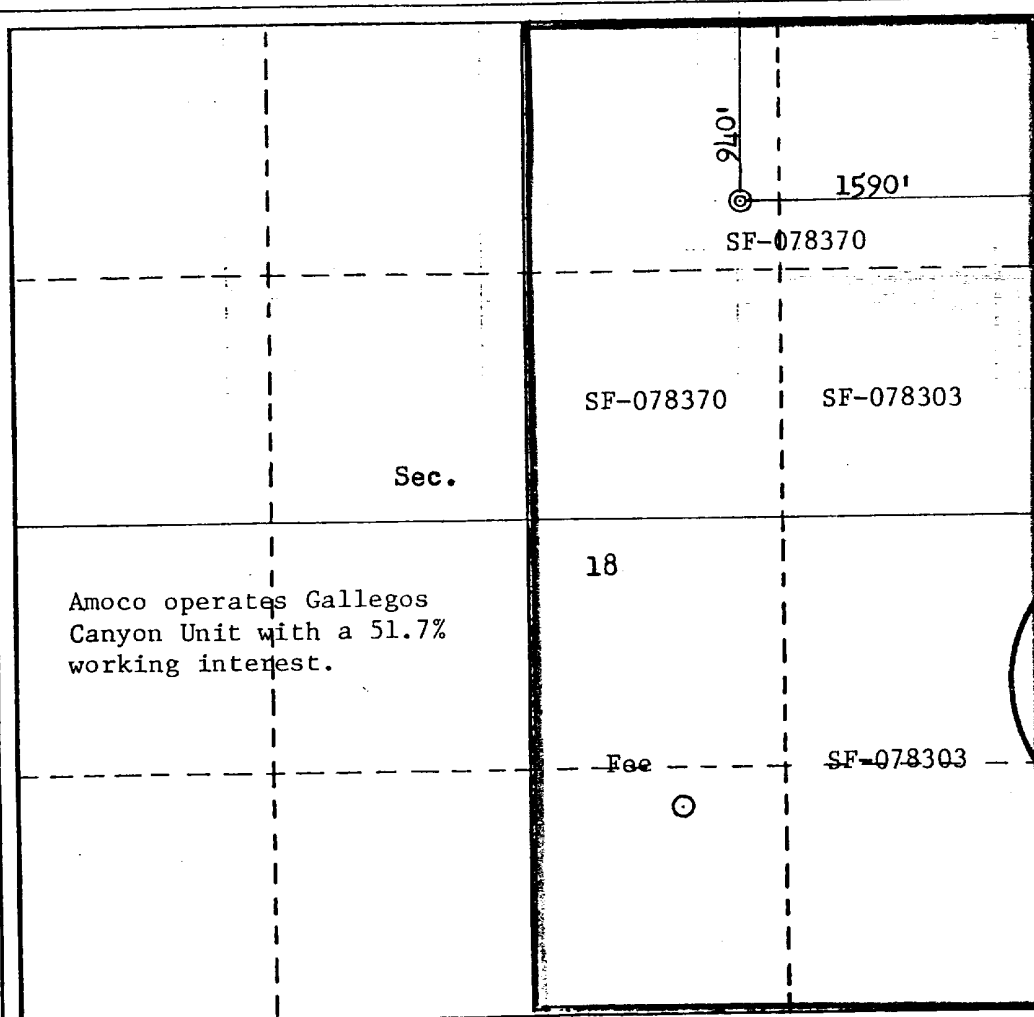
Operator <b>AMOCO PRODUCTION COMPANY</b>		Lease <b>GALLEGOS CANYON UNIT</b>		Well No. <b>96-E</b>
Unit Letter <b>B</b>	Section <b>18</b>	Township <b>29N</b>	Range <b>12W</b>	County <b>San Juan</b>
Actual Footage Location of Well: <b>940</b> feet from the <b>North</b> line and <b>1590</b> feet from the <b>East</b> line				
Ground Level Elev. <b>5601</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>E 320</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 Unitization (Gallegos Canyon Unit)

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.

*B. E. Fackrell*

Name

**B. E. FACKRELL**

Position

**DISTRICT ENGINEER**

Company

**AMOCO PRODUCTION COMPANY**

Date

**JANUARY 22, 1980**

I hereby certify that the well location shown on this plat was plotted from field notes or other surveys made by me or under my supervision, and that the same are true and correct to the best of my knowledge and belief.

**RECEIVED  
MAR 28 1980  
OIL CON. COM.  
DIST. 3**

Date Surveyed

**January 22, 1980**

Registered Professional Engineer  
and/or Land Surveyor

**Fred B. Kerr**

Certification No. **B. KERR**

**3950**

SUPPLEMENTAL INFORMATION TO FORM 9-331C  
GALLEGOS CANYON UNIT NO. 96E  
940' FNL & 1590' FEL, SECTION 18, T29N, R12W  
SAN JUAN COUNTY, NEW MEXICO

The geologic name of the surface formation is the Tertiary Ojo Alamo.

Estimated tops of important geologic markers and potential water, oil, or gas bearing formations:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Ojo Alamo	'	'
Kirtland	'	'
Fruitland	1262 '	4352 '
Pictured Cliffs	1522 '	4092 '
Chacra (if present)	'	'
Mesaverde [ Cliff House	3032 '	2582 '
Point Lookout	3927 '	1687 '
Gallup	5187 '	427 '
Dakota	5992 '	-378 '
TD	6500 '	-886 '

Estimated KB elevation: 5614 '

Drilling fluid to TD will be a fresh water, low solids non-dispersed mud system. Open hole logging program will include logs from TD to below surface casing:

- SP-GR-Induction -  
FDC-CNL-GR

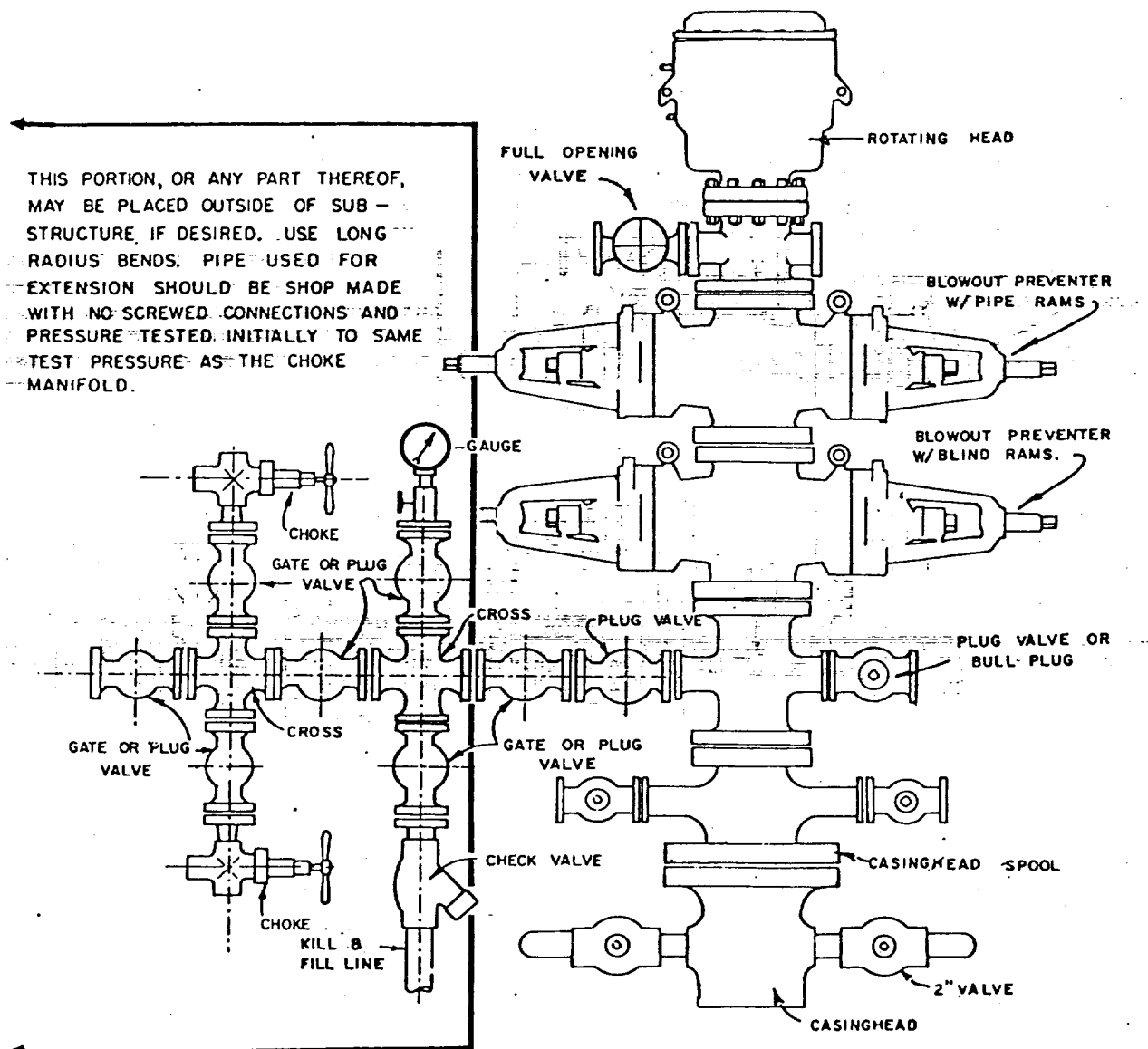
Completion design will be based on these logs. No cores or drill stem tests will be taken.

Operations will commence when permitted and last approximately 3 weeks.

Amoco's standard blowout prevention will be employed (see attached drawing).

In the past, drilling in this area has shown that no abnormal pressures, temperatures, nor hydrogen sulfide gas will be encountered.

1. Blowout Preventers and Master Valve to be fluid operated, and all fittings must be in good condition.
2. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
3. Nipple above Blowout Preventer shall be same size or larger than BOP being drilled through.
4. All fittings to be flanged.
5. Omsco or comparable safety valve must be available on rig floor at all times with proper connection or sub. The I.D. of safety valve should be as great as I.D. of tool joints of drill pipe, or at least as great as I.D. of drill collars.



## BLOWOUT PREVENTER HOOKUP

API Series # 900

EXHIBIT D-4

OCTOBER 16, 1969

Operation of BOP by closing both pipe and blind rams will be tested each trip or, on long bit runs, pipe rams will be closed once each 24 hours.

MULTI-POINT SURFACE USE PLAN

GALLEGOS CANYON UNIT NO. 96E  
940' FNL & 1590' FEL, SECTION 18, T29N, R12W  
SAN JUAN COUNTY, NEW MEXICO

1. The attached topographic map shows the proposed route to the location.
2. It will be necessary to build an access road approximately one-half mile in length and 20 feet wide. Road to be bar ditched on two sides.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the lease road map.
4. There is a 380-barrel tank and facilities located at Gallegos Canyon Unit Well No. 96 (O-18-29-12).
5. Water will be hauled from the San Juan River.
6. No construction materials will be hauled in for this location.
7. A 125' by 125' pit will be built on location to hold all drilling waste. Upon completion of the well, pit will be fenced and waste and liquids left to dry, then pit will be filled and leveled.
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. A 10-foot cut will be made on South side.
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 instructed by the Bureau of Land Management.
11. The general topography is a broken slope on rolling mesa-top with sandstone outcrops. The soil is a sandy, clayey loam. Vegetation consists of Juniper, rabbitbrush, yucca, snakeweed, saltbush, and native grasses.

Representatives of the U. S. Geological Survey's Farmington Office and the Bureau of Land Management inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.

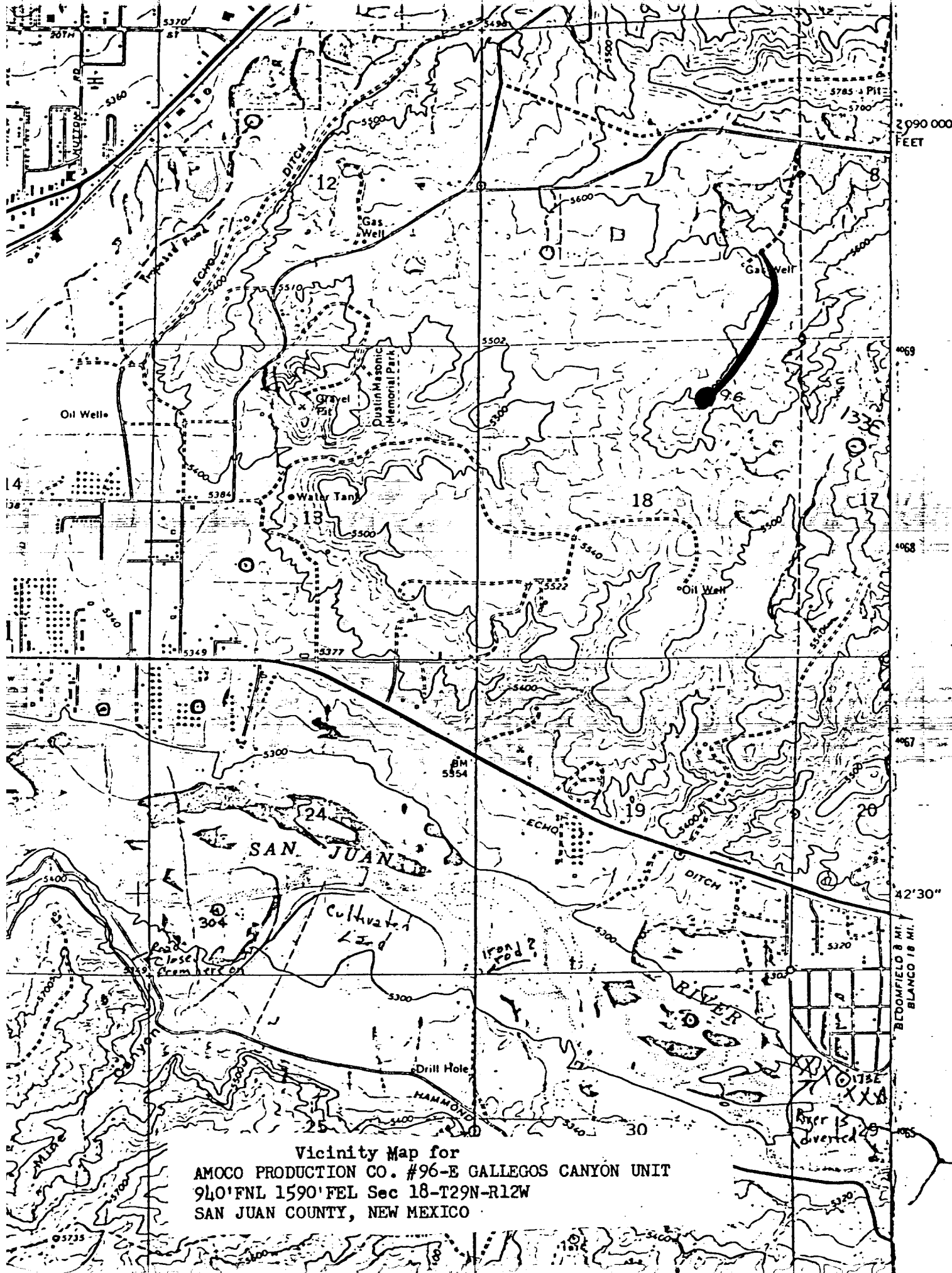
12. Operator's Representative: R. W. Schroeder  
Phone: Office: 505-325-8841; Home: 505-325-6164  
Address: 501 Airport Drive, Farmington, NM 87401

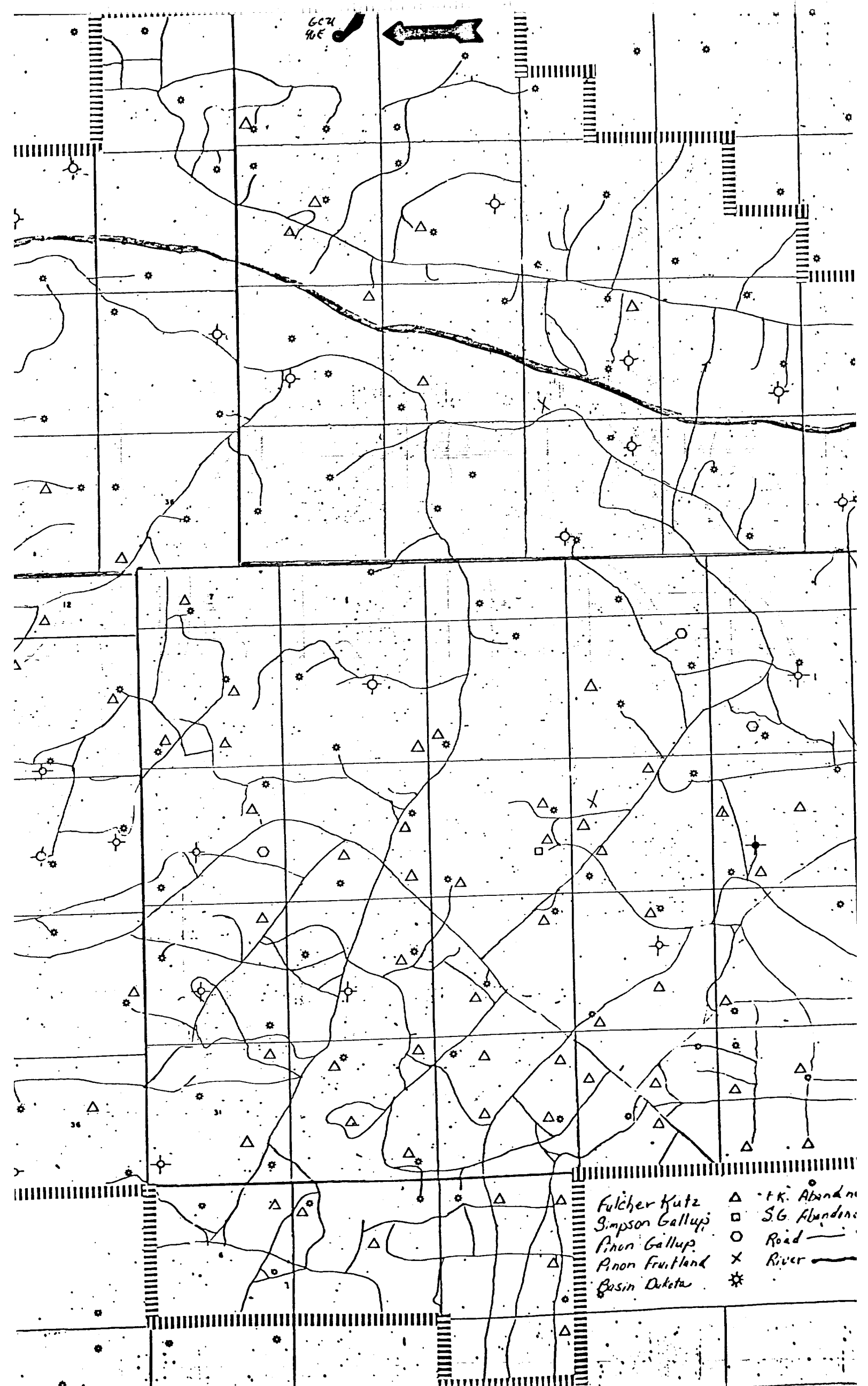
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the 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.

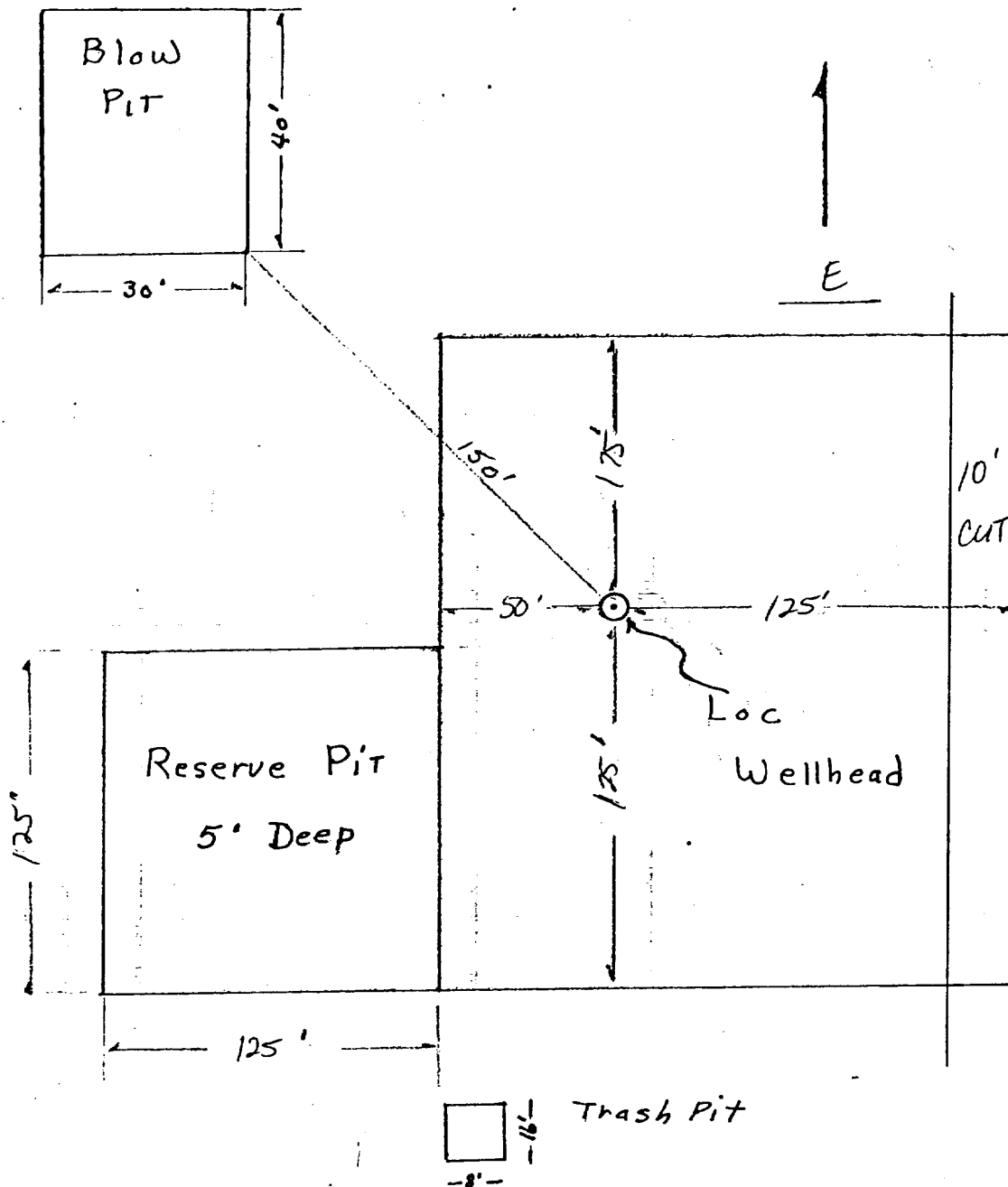
Date March 6, 1980



R. W. Schroeder, District Superintendent







Approximately 1.2 Acres

Amoco Production Company		SCALE: <i>NONE</i>
Drilling Location Specs Gallegos Canyon Unit No. 96E		DRG. NO.