

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-24250

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK DRILL ☒ DEEPEN ☐ PLUG BACK ☐

2. TYPE OF WELL
OIL WELL ☐ GAS WELL ☒ OTHER INFILL SINGLE ZONE ☒ MULTIPLE ZONE ☐

3. NAME OF OPERATOR
AMOCO PRODUCTION COMPANY

4. ADDRESS OF OPERATOR
501 Airport Drive, Farmington, New Mexico 87401

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface

N 960' FSL and 1530' FWL, Section 25, T29N, R13W
At proposed prod. zone

Same

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

7. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) 960'

8. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 3050'

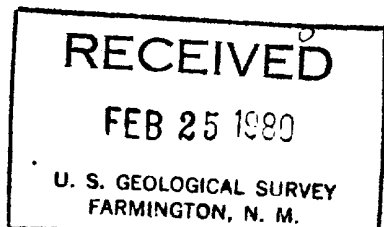
9. ELEVATIONS (Show whether DF, RT, GR, etc.)
5669' GL

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" (New)	24# K-55	300'	315 sx Class "B" w/2% CaCl2-circ.
7-7/8"	4-1/2" (New)	10.5# K-55	6500'	Stage 1-360 sx Class "B" 50:50 POZ 6% gel, 2# med tuf plug/sx, and 0.8% FLA. Tail in w/ 100 sx Class "B" Neat-circ.
				Stage 2-640 sx Class "B" 65:35 POZ, 6% gel, 2# med tuf plug/sx, and 0.8% FLA. Tail in w/ 100 sx Class "B" Neat-circ.

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 El Paso Natural Gas Co.

Rehabilitation Plan from surface owner is attached.



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. Jackwell TITLE District Engineer DATE February 19, 1980

(This space for Federal or State office use)

PERMIT NO. _____

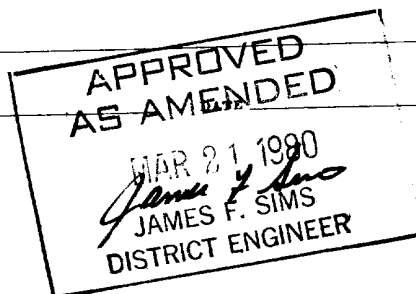
APPROVAL DATE _____

APPROVED BY _____

TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

ok Burt



NMOCC

All distances must be from the outer boundaries of the Section

Operator AMOCO PETROLEUM COMPANY			Lease GALLEGOS CANYON UNIT		Well No. 172-E
Unit Letter N	Section 25	Township 29N	Range 13W	County San Juan	
Actual Footage Location of Well: 960 feet from the South line and 1530 feet from the West line					
Ground Level Elev. 5669	Producing Formation Dakota		Pool Basin Dakota	Dedicated Acreage: 5 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

RECEIVED

FEB 25 1980

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

Amoco operates Gallegos Canyon Unit
with a 51.7% working interest.

Subject well located on Fee Surface and Federal Mineral
Ownership. Sec.

25

SF

078926

1530'

960'

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

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 15, 1980

RECEIVED
MAR 24 1980
OIL CON. COM.
DIST. 3

I hereby certify that the well location shown on this plat was plotted from field notes of actual survey 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

January 15, 1980

Registered Professional Engineer
and/or Land Surveyor

Fred B. Kerr, Jr.

Certificate No.

3950

Lease No.: Gallegos Canyon Unit; Well Name and No.: Gallegos Canyon Unit No. 172E
Location: 960' FSL & 1530' FWL, Sec. 25, T. 29 N., R. 13W W.

AMOCO PRODUCTION COMPANY intends to drill a well on surface
owned by Tom Bolack. The lessee/operator
agrees to complete the following rehabilitation work if the well is a producer:

☒ Yes ☐ No Maintain access road and provide adequate drainage to road.

☒ Yes ☐ No Reshape and reseed any area not needed for maintenance of the
pump and support facilities.

Other requirements: _____

The following work will be completed when the well is abandoned:

☒ Yes ☐ No Pit will be fenced until dry, then filled to conform to
surrounding topography.

☒ Yes ☐ No Water bars will be constructed as deemed necessary.

☒ Yes ☐ No Site will require reshaping to conform to surrounding topography.

☒ Yes ☐ No Entire disturbed area will be reseeded. If yes, the following
seed mixture will be used.

Native Grasses, Crested Wheat, and Gramma

☒ Yes ☐ No Access road will be closed, rehabilitated and reseeded using
the same seed mixture as above.

☐ Yes ☒ No Access road will remain for surface owner's use.

☐ Yes ☒ No Water bars will be constructed on the access road as deemed
necessary.

Other requirements: _____

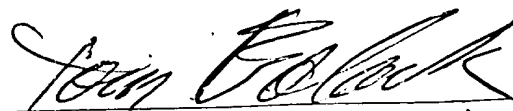
Surface Owner:

Name: Tom Bolack
Address: Box 47, Rt. #3 South
City: Farmington
State: New Mexico 87401
Telephone: 325-4275
Date: February 21, 1980

Operator/Lessee:

Name: Amoco Production Company
Address: 501 Airport Drive
City: Farmington
State: New Mexico 87401
Telephone: (505) 325-8841
Date: January 18, 1980

I CERTIFY that above rehabilitation plan is acceptable to me. I also waive an intensive
Cultural Resource Field Inventory.


(Surface owner's signature)

This plan does not affect any other agreements between the lessee/operator and
surface owner.

SUPPLEMENTAL INFORMATION TO FORM 9-331C

GALLEGOS CANYON UNIT NO. 172E
960' FSL & 1530' FWL, SECTION 25, T29N, R13W
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	621'	5061'
Kirtland	681'	5001'
Fruitland	1031'	4651'
Pictured Cliffs	1521'	4161'
Chacra (if present)	'	'
Mesaverde [Cliff House	3051'	2631'
Point Lookout	4011'	1671'
Gallup	5191'	491'
Dakota	6056'	-374'
TD	6500'	-818'

Estimated KB elevation: 5682'

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

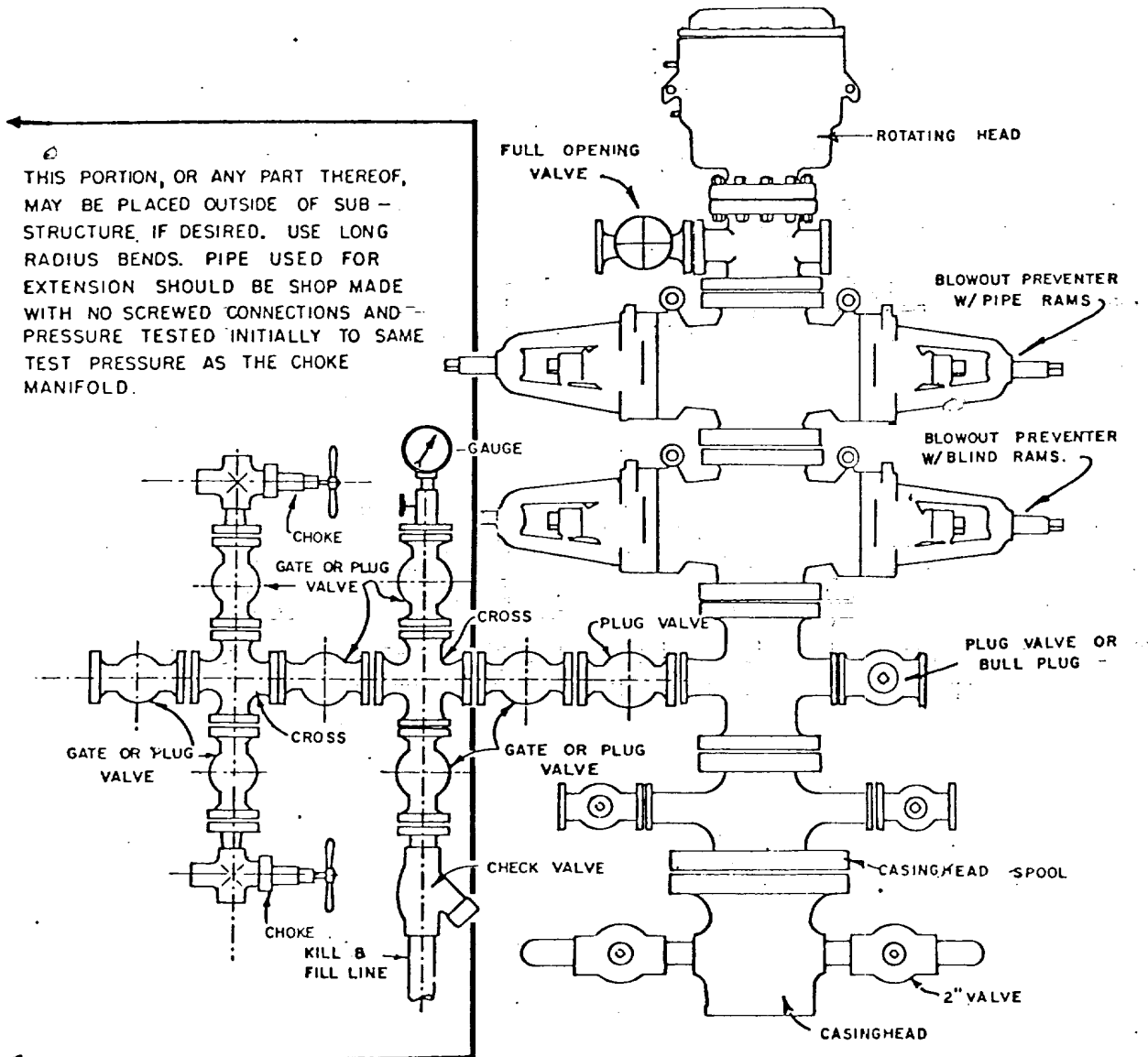
Completion design will be based on these logs. No cores or drill stem tests will be taken.

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. 172E
960' FSL & 1530' FWL, SECTION 25, T29N, R13W
SAN JUAN COUNTY, NEW MEXICO

1. The attached topographic map shows the proposed route to the location.
2. An access road approximately six-tenths mile in length and 20 feet wide will be built, 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 vicinity map.
4. There is a 380-barrel tank and facilities located at Gallegos Canyon Unit Well No. 172, SE/4 Section 25, T29N, R13W.
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 3-foot cut will be made on West 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 detailed on Rehabilitation Plan with surface owner.
11. The general topography is a sandy soil, with uneven terrain. Vegetation consists of sagebrush and native grasses, with some cedar trees.

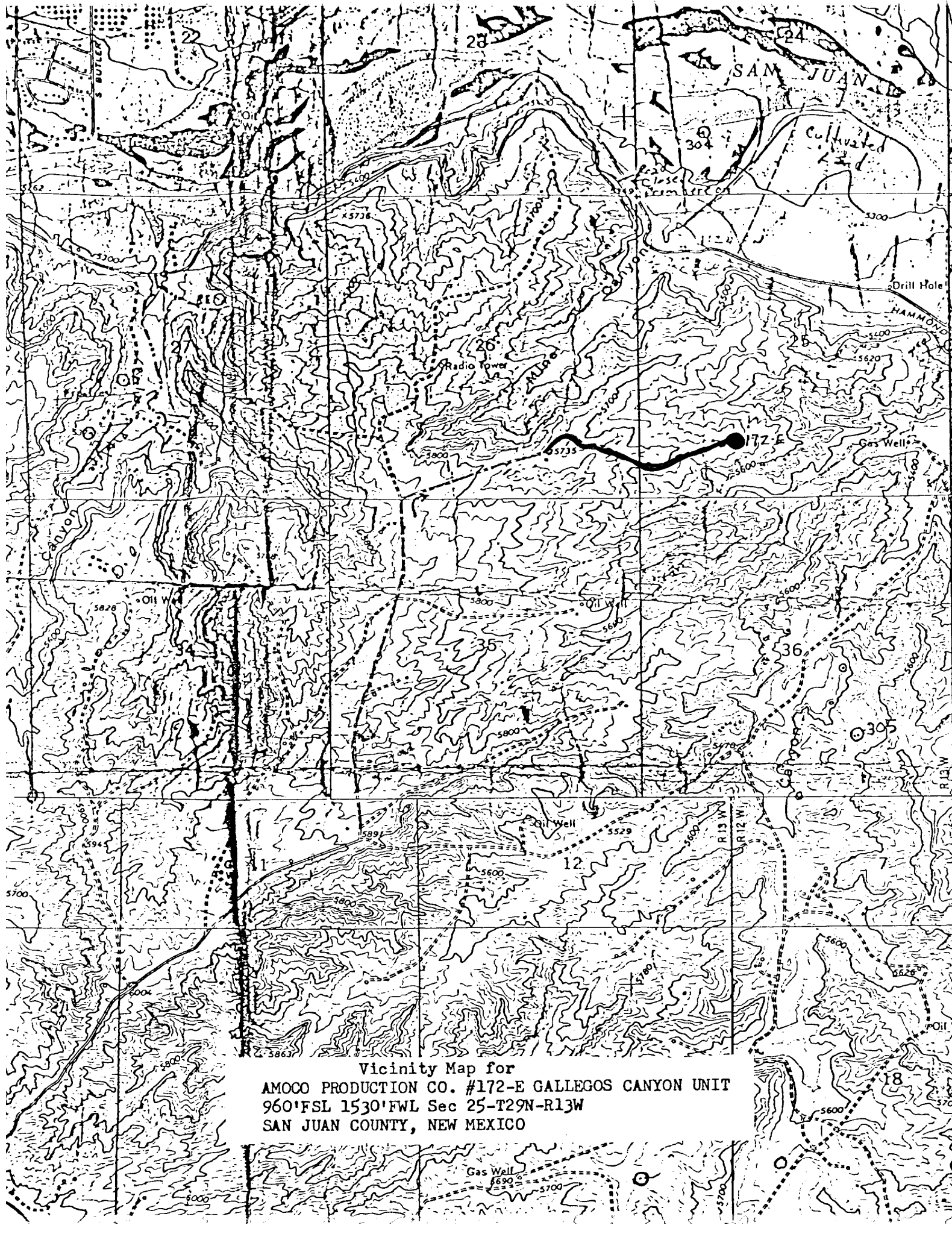
Amoco personnel met with the surface owner and worked out rehabilitation plans for surface disturbance. Representatives of the U. S. Geological Survey's Farmington Office and the Bureau of Land Management will inspect the site with Amoco personnel. Cultural resources inspection will be conducted by an 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

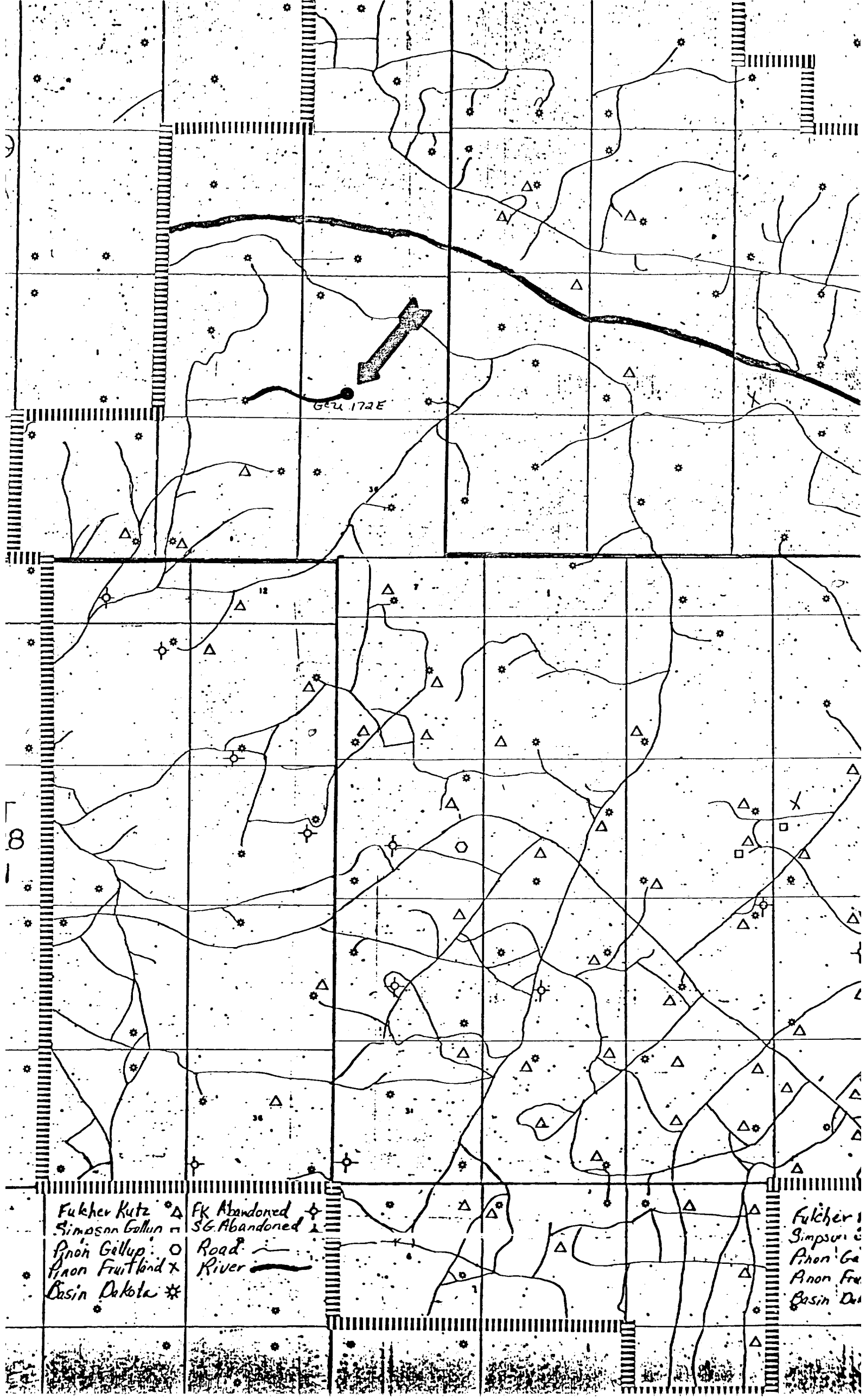
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the 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 February 6, 1980


R. W. Schroeder, District Superintendent



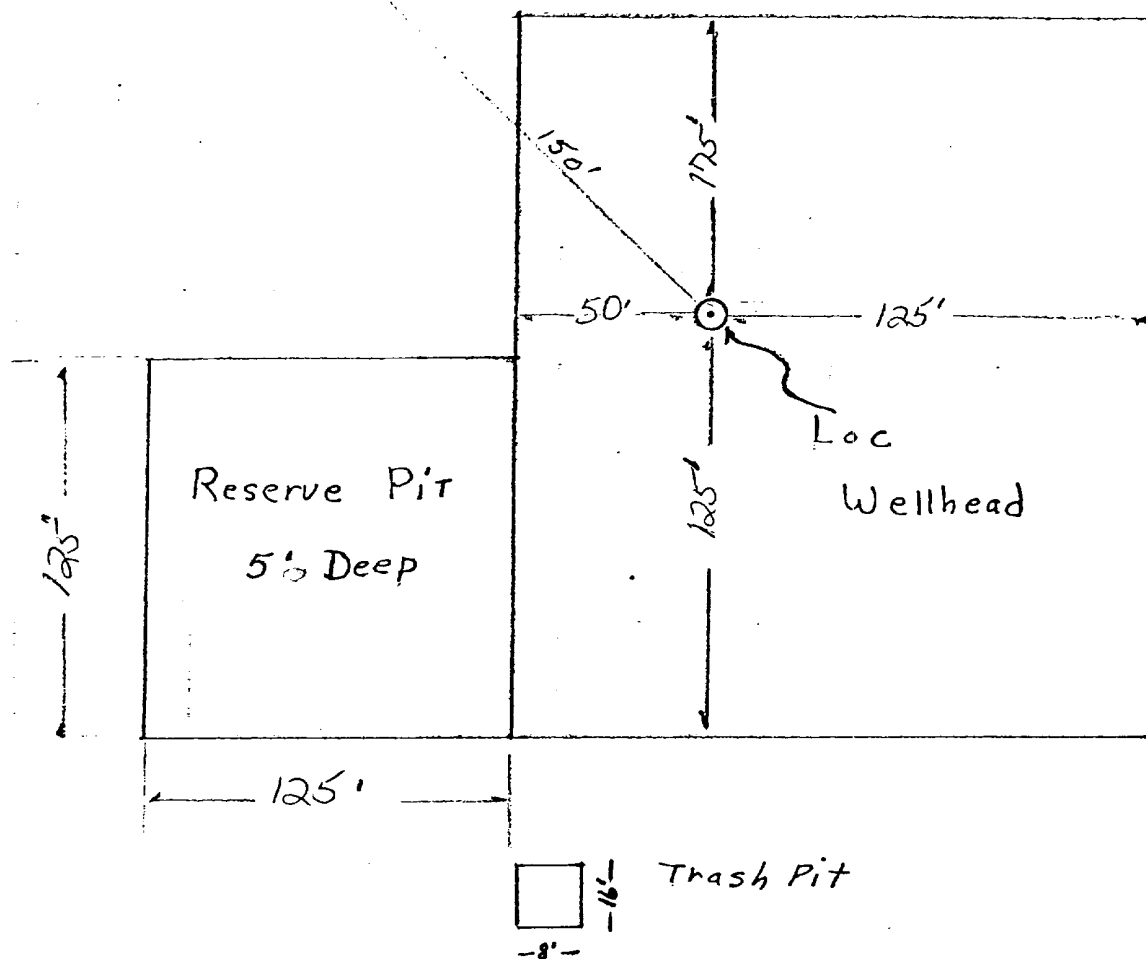
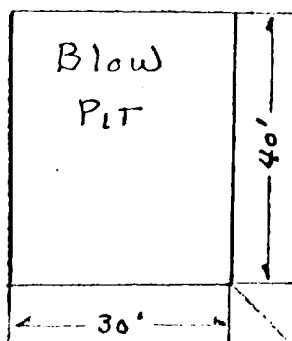
Vicinity Map for
AMOCO PRODUCTION CO. #172-E GALLEGOS CANYON UNIT
960'FSL 1530'FWL Sec 25-T29N-R13W
SAN JUAN COUNTY, NEW MEXICO



Fulcher Kutz *
Simpson Gallun *
Anon Gallup *
Anon Fruitland *
Basin Dakota *

FK Abandoned *
SG Abandoned *
Road ~~~~~
River ———

Fulcher *
Simpson *
Anon Ga *
Anon Fru *
Basin Da *



Approximately 1.2 Acres

Amoco Production Company

SCALE: None

Drilling Location Specs
Gallegos Canyon Unit No. 172E

DRG.
NO.