

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-045-24290

5. LEASE DESIGNATION AND SERIAL NO.

SF-078109

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Gallegos Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.

151E

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK.

AND SURVEY OR AREA  
NW/4, NW/4, Section 21,  
T29N, R12W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

## 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

850' FNL and 910' FWL, Section 21, T29N, R12W

At proposed prod. zone

Same

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

5 miles East of Farmington, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest dsg. unit line, if any)

850'

16. NO. OF ACRES IN LEASE

43,146.62

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

N 320

18. DISTANCE FROM PROPOSED LOCATION\*

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

2950'

19. PROPOSED DEPTH

6500'

20. ROTARY OR CABLE TOOLS

Rotary

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

5582' GL

22. APPROX. DATE WORK WILL START\*

As soon as permitted

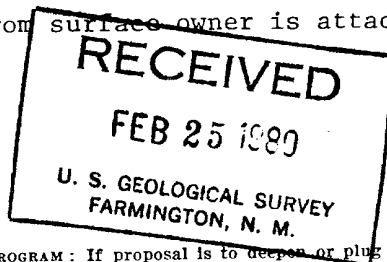
23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	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. Jackall

TITLE

District Engineer

DATE

February 19, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

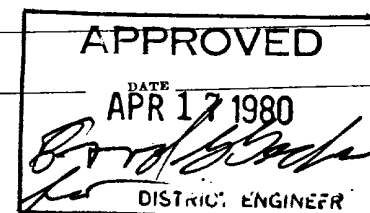
APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

ok Jack

NMOCC



## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-107  
Revised 10-1-78

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>151-E</b>
Unit Letter <b>D</b>	Section <b>21</b>	Township <b>29N</b>	Range <b>12W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>850</b> feet from the <b>North</b> line and <b>910</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5582</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage: <b>320</b> 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.

850'		RECEIVED FEB 25 1980 U. S. GEOLOGICAL SURVEY FARMINGTON, N. M.
910'	SF078109	
Sec.		NM 06237

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

Subject well located on Fee Surface and Federal Mineral ownership.

RECEIVED

APR 18 1980

OIL CON. COM.  
DIST. 3

## 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 10, 1980

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

January 13, 1980

Registered Professional Engineer  
and/or Land Surveyor

*Fred B. Kerr, Jr.*

Certificate No.

3950

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

Lease No.: G.C.U.; Well Name and No.: GCU 151 E  
Location: 250 FNL 910 FNL, Sec. 21, T. 29 N., R. 12 W.

Amoco Prod. Co. intends to drill a well on surface  
owned by San Juan Wild/life Fed.. 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: Keep gate locked AT ALL TIMES & PUT UP  
STARTING FROM SIGN

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.

BLM specs.

☐ 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: San Juan Wild/life Fed.  
Address: PO BOX 1411  
City: Farmington N.M.  
State: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Date: \_\_\_\_\_

Operator/Lessee:

Name: Amoco Prod. Co.  
Address: 501 AIR PORT DR.  
City: Farmington  
State: N.M. 87401  
Telephone: 325-8841  
Date: \_\_\_\_\_

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

Kenneth M. Bonney President SWF  
(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. 151E  
850' FNL & 910' FWL, SECTION 21, T29N, R12W  
SAN JUAN COUNTY, NEW MEXICO

The geologic name of the surface formation is the Tertiary Nacimiento.

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	451'	5144'
Kirtland	511'	5084'
Fruitland	991'	4604'
Pictured Cliffs	1521'	4074'
Chacra (if present)	'	'
Mesaverde [ Cliff House	3091'	2504'
[ Point Lookout	3891'	1704'
Gallup	5181'	414'
Dakota	6041'	-446'
TD	6500'	-905'

Estimated KB elevation: 5595'

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

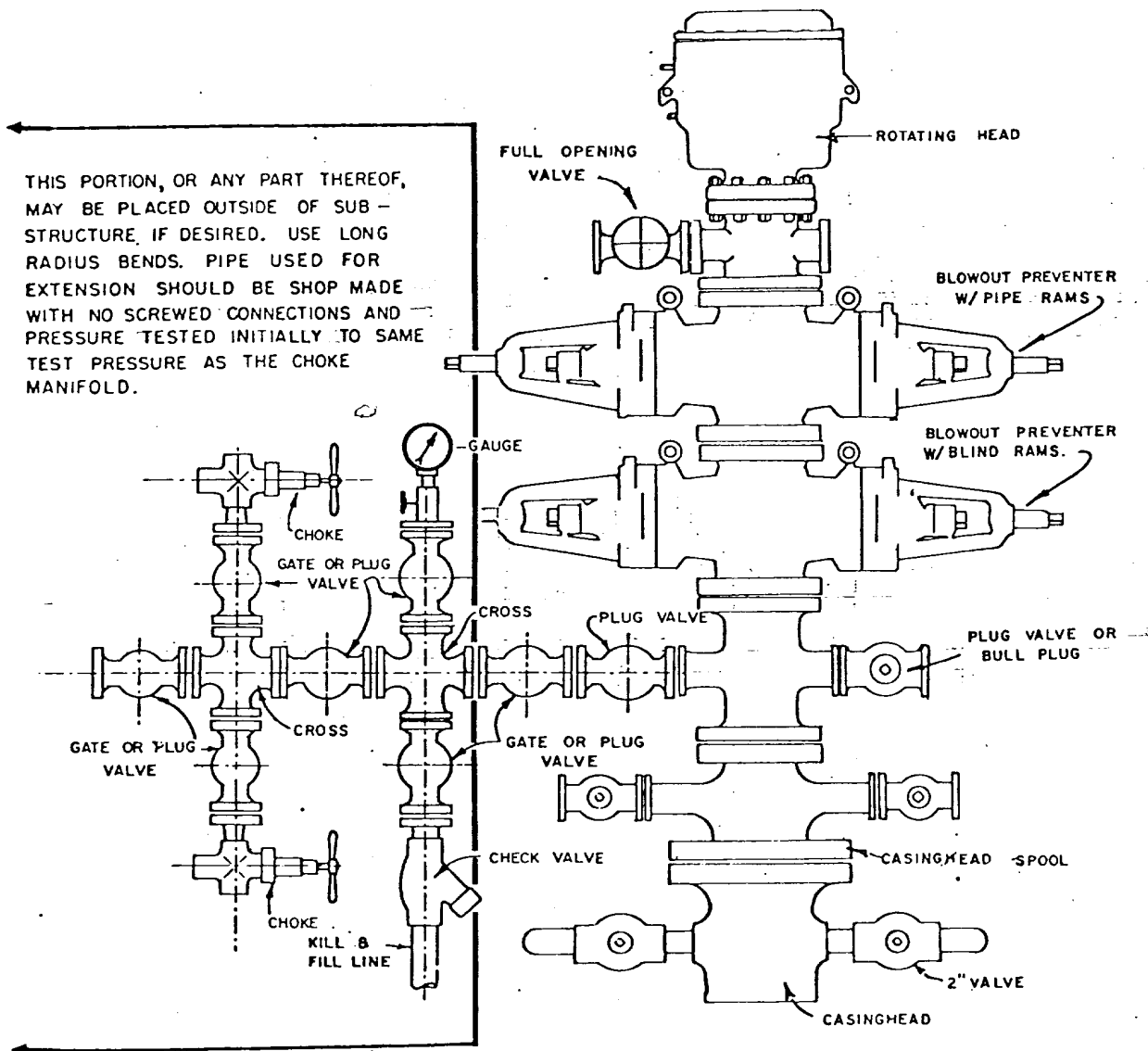
Completion design will be based on these logs. No cores or drill stem tests will be taken.

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. 151E  
850' FNL & 910' FWL, SECTION 21, 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 blade and improve one and one-tenth mile of road and build three-tenths mile of road 20 feet wide, bar ditched on upper side.
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. 151, NE/4 Section 21, T29N, R12W.
5. Water will be hauled from the San Juan River a distance of about 6 miles.
6. No construction materials will be hauled in for this location.
7. A 150' by 150' 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. No cuts will be necessary as location is nearly level.
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 clay-type soil, rocky and sandy, with vegetation consisting of a few cedar trees and native grasses. The location is on gentle slope of hill. o

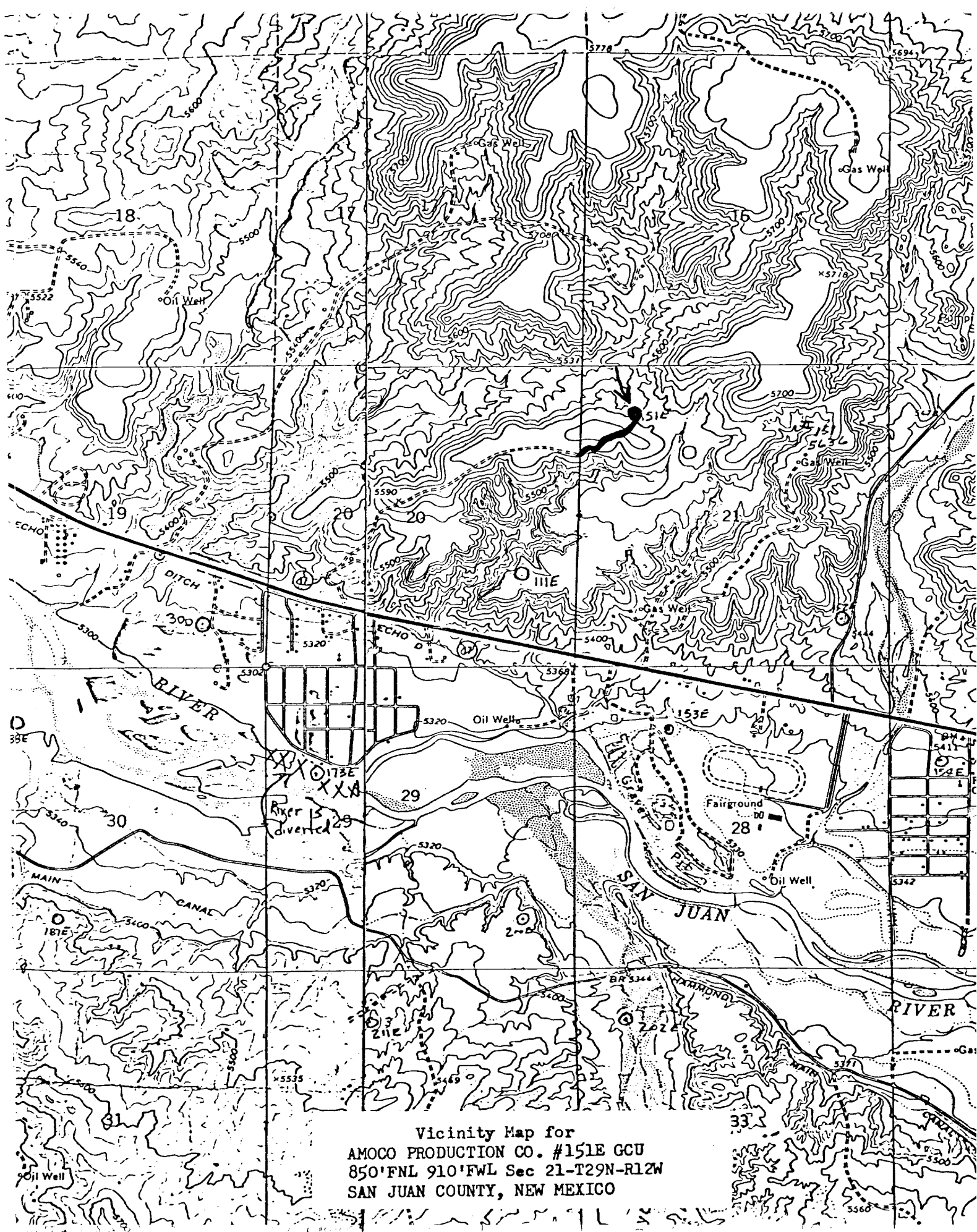
Amoco personnel met with the surface owner and worked out rehabilitation plans for surface disturbance. Representatives of the U. S. Geological Survey's Farmington Office and the Bureau of Land Management will inspect the site with Amoco personnel. Cultural resources inspection will be conducted by an 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. #151E GCU  
850'FNL 910'FWL Sec 21-T29N-R12W  
SAN JUAN COUNTY, NEW MEXICO

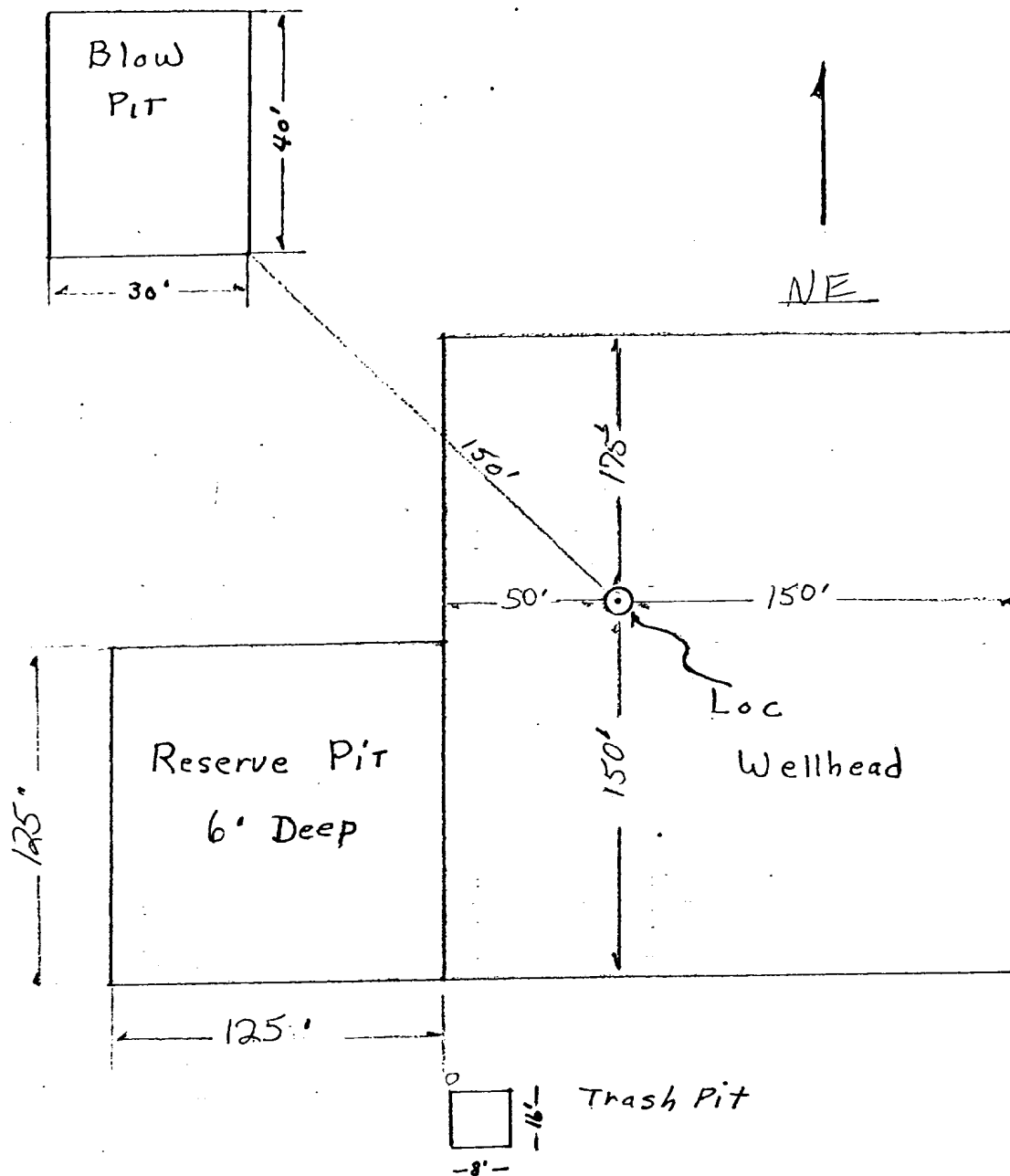


T 29 N

T 28 N

- |          |   |                |   |
|----------|---|----------------|---|
| 64 151 E | △ | F. Abandoned   | + |
|          | □ | S.G. Abandoned | + |
|          | ○ | Road           | — |
|          | x | River          | — |
|          | * |                |   |
- Pinon Fruitland  
Basin Dakota





Approximately 1.2 Acres

Amoco Production Company		SCALE: <i>NONE</i>
Drilling Location Specs		DRG. NO.
Gallegos Canyon Unit No. 151 E		