

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

ANOCO 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 surfaceD 870' FNL and 800' FWL, Section 23, T28N, R12W  
at proposed prod. zone

Same

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

10 miles Southeast of Farmington, New Mexico

15. DISTANCE FROM PROPOSED\*

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

800'

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

3700'

18. NO. OF ACRES IN LEASE

480.00

19. PROPOSED DEPTH

6500'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

N/320

20. ROTARY OR CABLE TOOLS

Rotary

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

5758' GL

22. APPROX. DATE WORK WILL START\*

As soon as permitted

## PROPOSED CASING AND CEMENTING PROGRAM

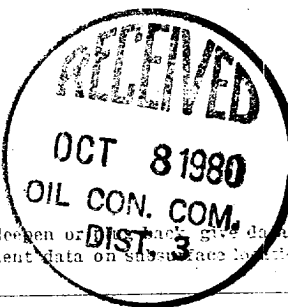
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" (New)	24# K-55	300'	315 sx Class "B" w/2% CaCl2-circ.
7-7/8"	4-1/2" (New)	10.5# K-55	6500'	Stage 1-360 sx Class "E" 50:50 POZ 6% gel, 2# med tuf plug/sx, and 0.8% FLA. Tail in w/ 100 sx Class "B" Neat-circ.
		This action is subject to administrative appeal pursuant to 30 CFR 290.		

This application to drill an Infill Basin Dakota well is pursuant to Order No. R-1670-V approved by the NMOC 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.

DV Tool set at 4335'

RECEIVED

SEP 16 1980

U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.APPROVED  
AS AMENDED

OCT 06 1980

JAMES F. SIMS  
DISTRICT ENGINEER

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 surface locations and measured and true vertical depths. Give blowout prevention program, if any.

SIGNED

Ra. Rowney

TITLE

District Engineer

DATE

September 17, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

SIGNATURES FOR APPROVAL, IF ANY:

## OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-102

Revised 10-1-73

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

All distances must be from the outer boundaries of the Section.

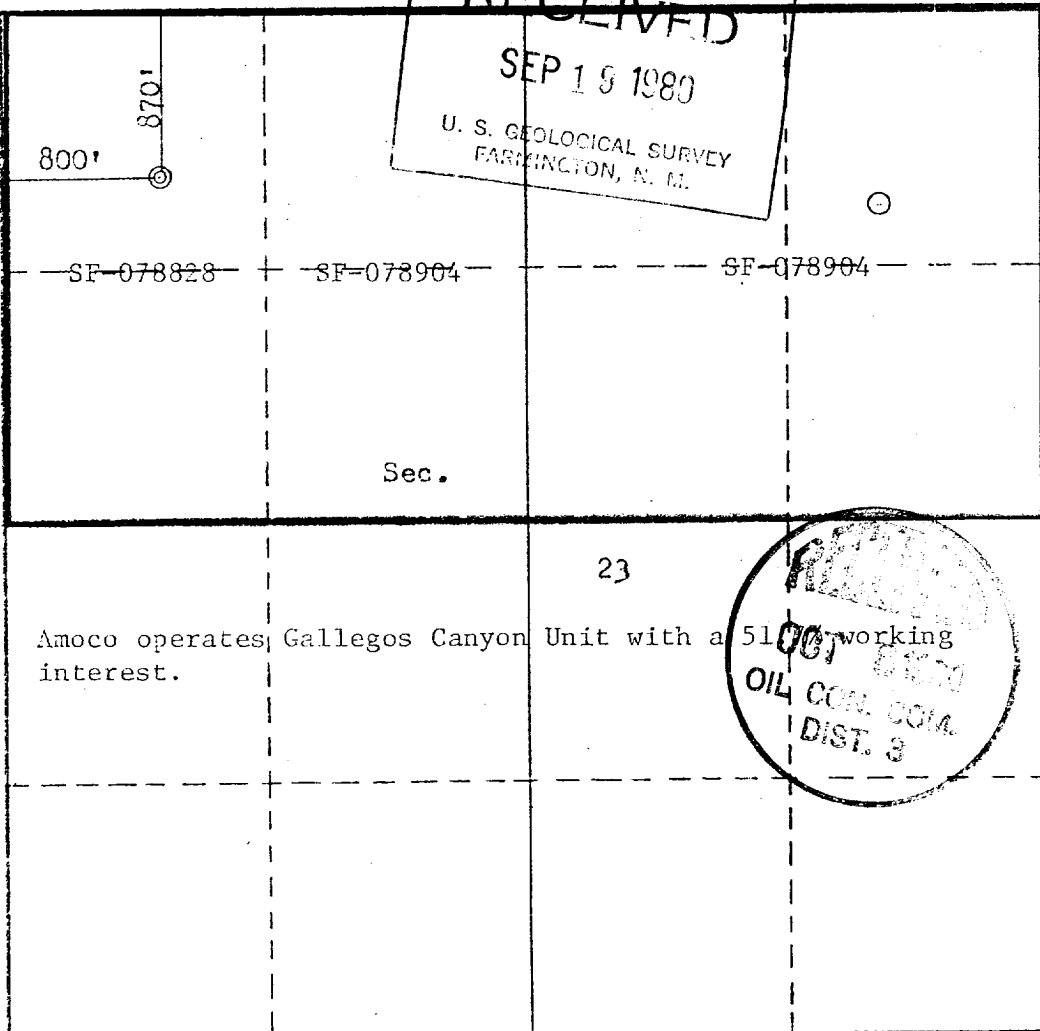
Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>GALLEGOS CANYON UNIT</b>		Well No. <b>219-E</b>
Unit Letter <b>D</b>	Section <b>23</b>	Township <b>28N</b>	Range <b>12W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>870</b> feet from the <b>North</b> line and <b>800</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5758</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 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

FEBRUARY 6, 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 30, 1980

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

Certificate No.

3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C

GALLEGOS CANYON UNIT NO. 219E  
870' FNL & 800' FWL, SECTION 23, T28N, 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	395'	5376'
Kirtland	475'	5296'
Fruitland	1245'	4526'
Pictured Cliffs	1595'	4176'
Chacra (if present)	'	'
Mesaverde [ Cliff House	3175'	2596'
Point Lookout	4035'	1736'
Gallup	5255'	516'
Dakota	6135'	- 364'
TD	6500'	- 729'

Estimated KB elevation: 5771'

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

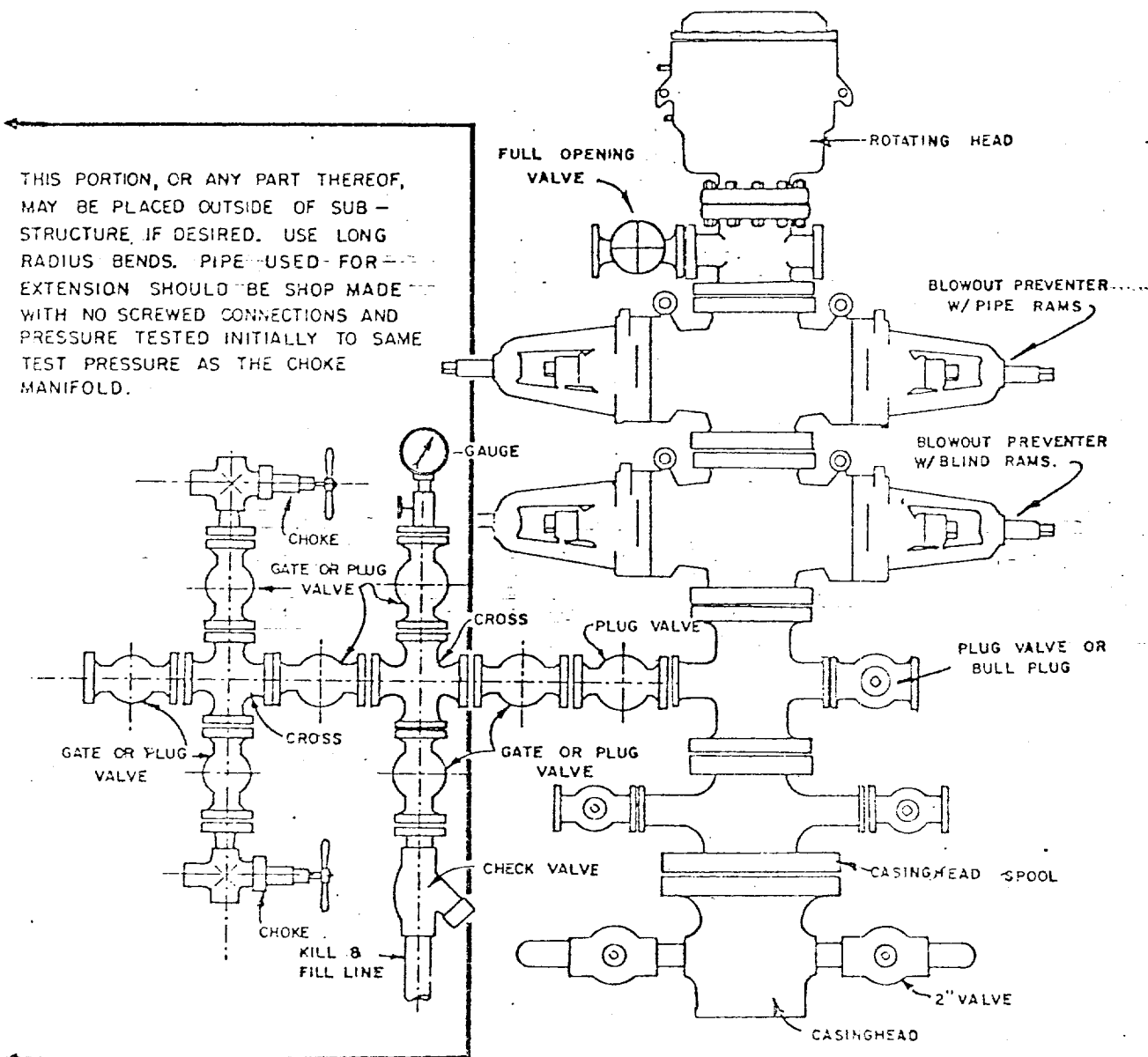
Completion design will be based on these logs. No cores or drill stem tests will be taken.

Operations will commence when permitted and last approximately 3 weeks.

Aneco'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. 219E  
870' FNL & 800' FWL, SECTION 23, T28N, R12W  
SAN JUAN COUNTY, NEW MEXICO

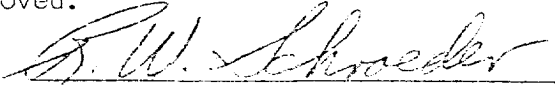
1. The attached topographic map shows the proposed route to the location.
2. It will not be necessary to build any access road.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the lease road map.
4. There is a 380-barrel tank and facilities located at Gallegos Canyon Unit Well No. 218, 1800 feet west.
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. If any liquids remain, they will be hauled away prior to back filling.
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 5-foot cut will be made on east side.
10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well. Reseeding of the site will be carried out as instructed by the Bureau of Indian Affairs.
11. The general topography is an uneven terrain with sandy loam soil; vegetation consists of juniper trees and native grasses.

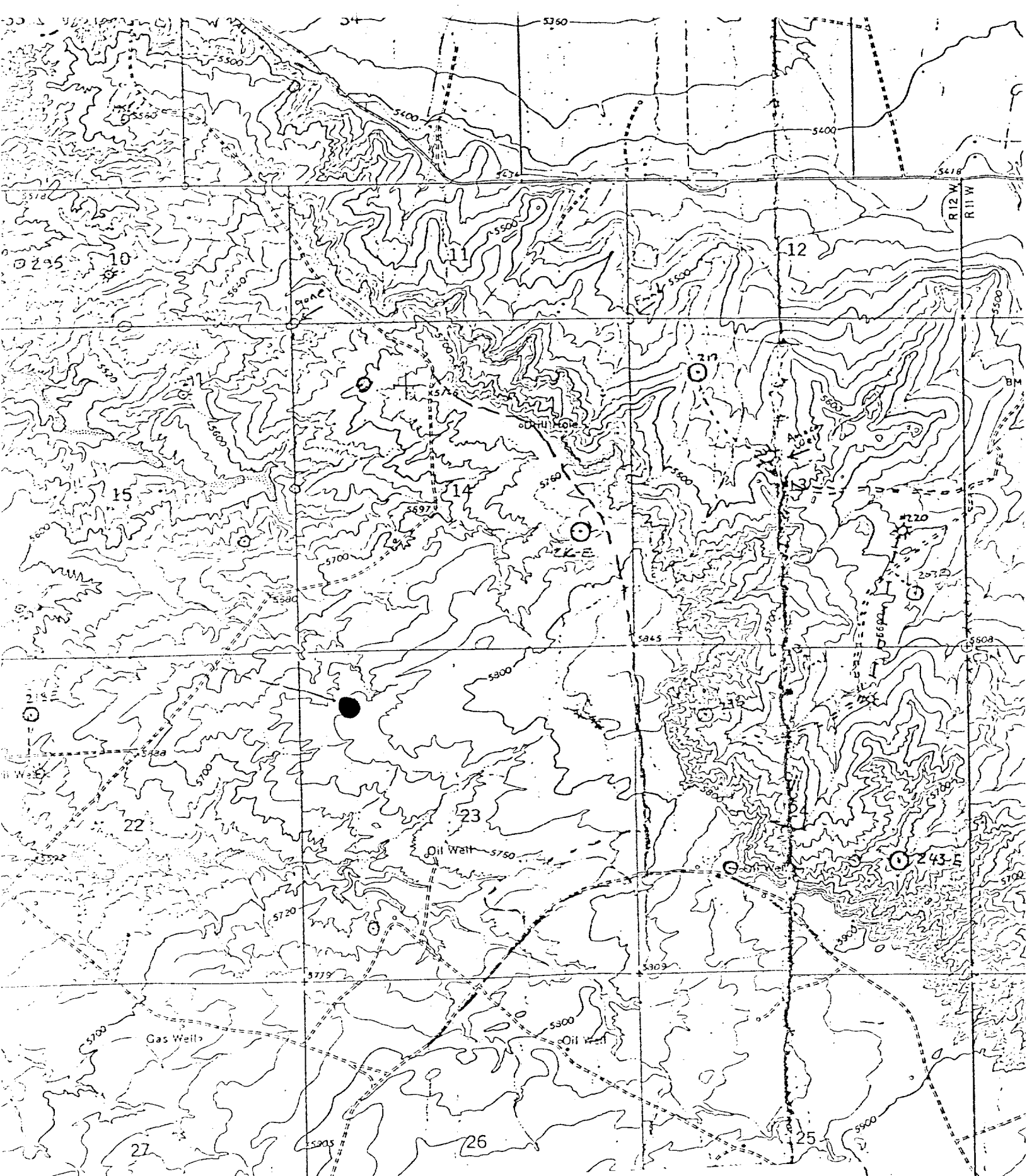
Representatives of the U. S. Geological Survey's Farmington Office, NAPI, and the Bureau of Indian Affairs' Window Rock office inspected the site with Amoco personnel. Cultural resources inspection was not conducted as a blanket archaeological clearance has been previously established for the area in which this well is located.

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

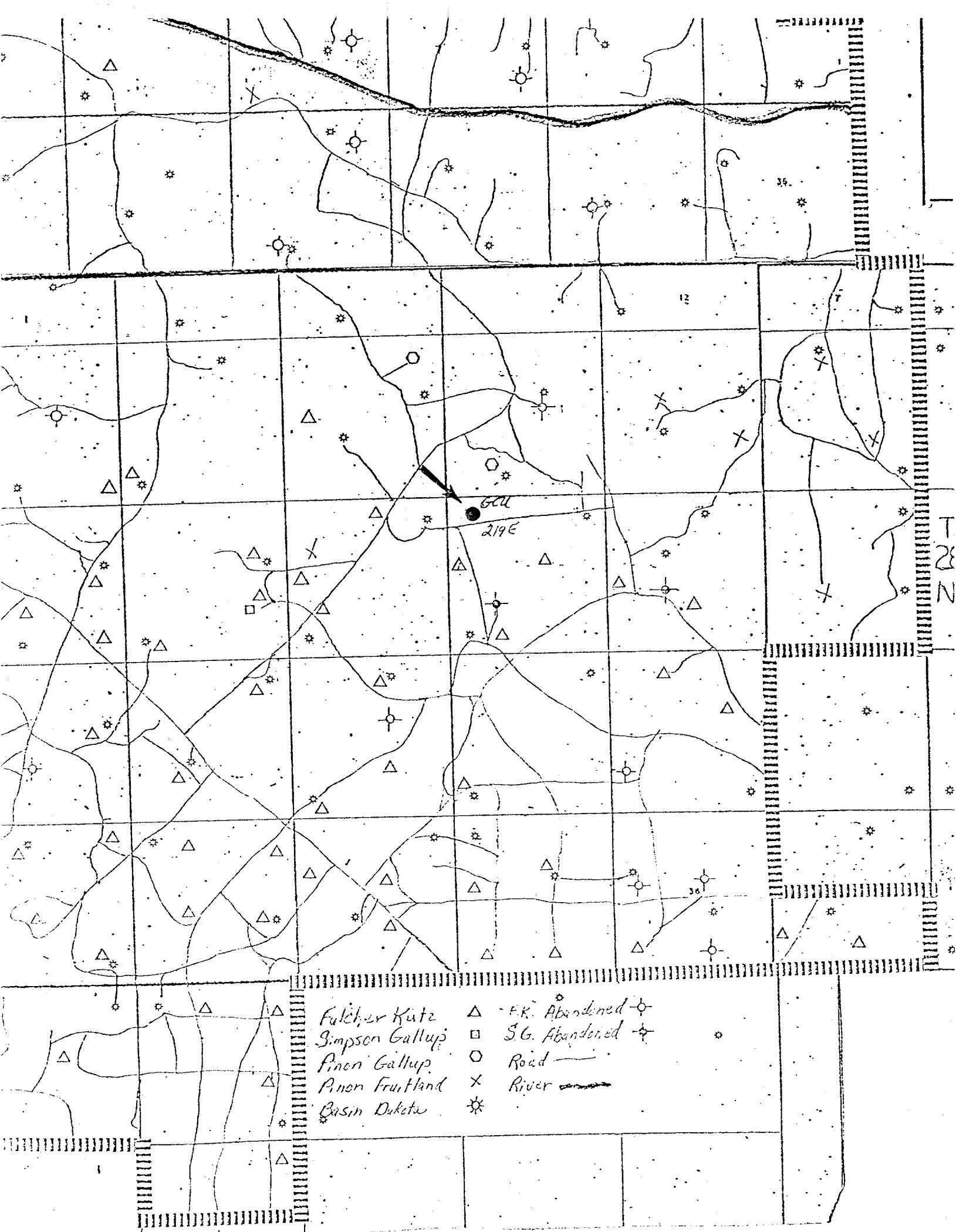
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the 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 September 10, 1980

  
R. W. Schroeder, District Superintendent

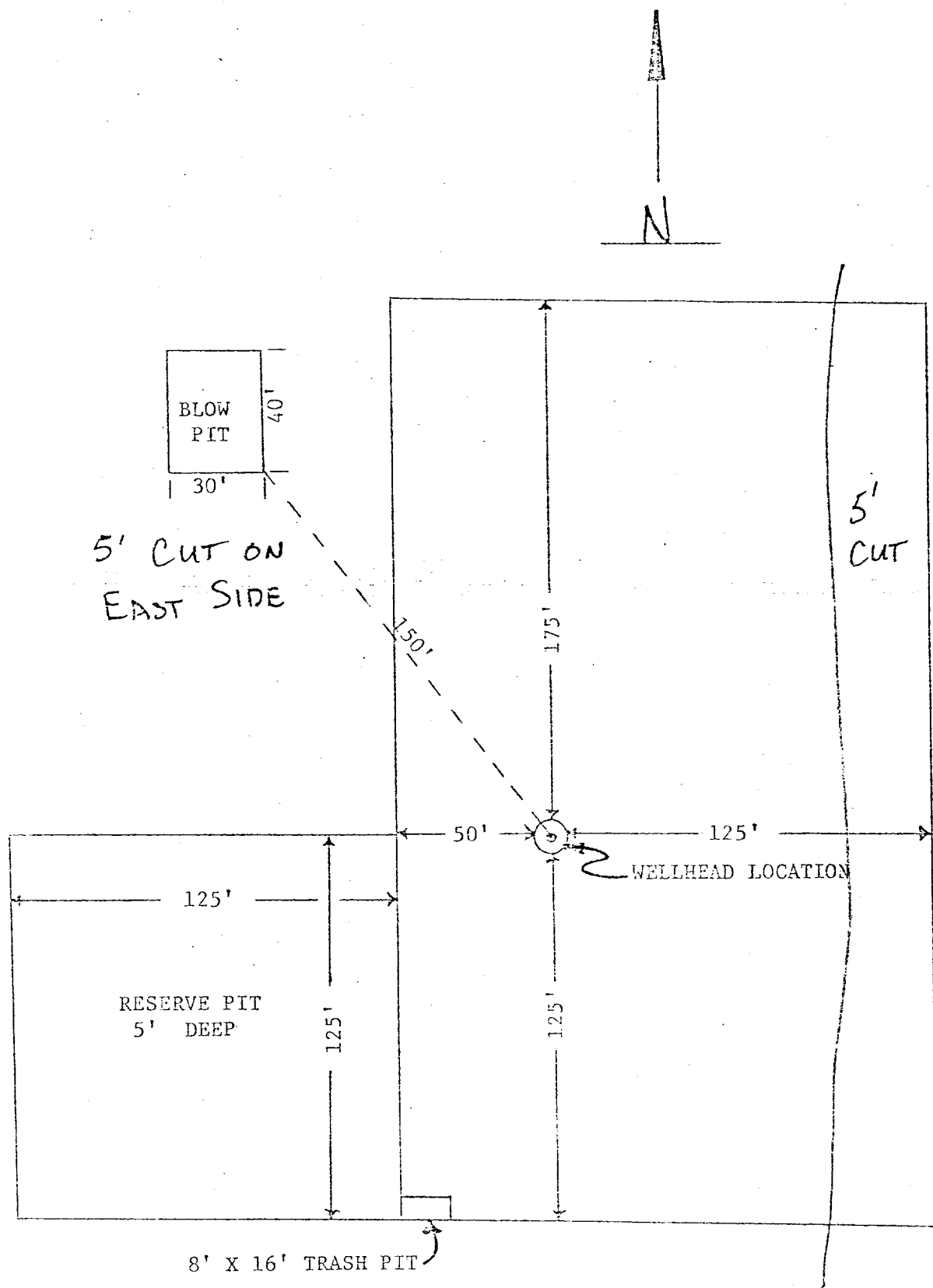


Vicinity Map for  
AMOCO PRODUCTION COMPANY #219-E GALLEGOS CANYON UNIT  
870'FNL 800'FWL Sec 23-T28N-R12W  
SAN JUAN COUNTY, NEW MEXICO



Fulcher Kutz  
Simpson Gallup  
Pinon Gallup  
Pinon Fruitland  
Basin Dakota

△ - F.K. Abandoned  
□ - S.G. Abandoned  
○ Road  
× River  
☼



APPROXIMATELY 1.2 ACRES

Amoco Production Company	SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS	
GALLEGOS CANYON UNIT # 219E	DRG. NO.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ well gas ☒ well other ☐  
2. NAME OF OPERATOR  
Amoco Production Company  
3. ADDRESS OF OPERATOR  
501 Airport Dr., Farmington, N.M. 87401  
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 870' FNL X 802' FWL  
AT TOP PROD. INTERVAL: Same  
AT TOTAL DEPTH: Same

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) <u>APD Extension</u>			

5. LEASE  
SF-078828  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
  
7. UNIT AGREEMENT NAME  
Gallegos Canyon Unit  
8. FARM OR LEASE NAME  
  
9. WELL NO.  
219E  
10. FIELD OR WILDCAT NAME  
Basin Dakota  
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
NW/4, NW/4, Section 23, T28N, R12W  
12. COUNTY OR PARISH  
San Juan  
13. STATE  
New Mexico  
14. API NO.  
30-045-24601  
15. ELEVATIONS (SHOW DF, KDB, AND WD)  
5758' G.L.

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Amoco Production Company requests an extension of approval for drilling, as the approval expires October 6, 1981. Our plans call for drilling this well in the near future.



Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Original Signed By TITLE District Engineer DATE 9-25-81

(This space for Federal or State office use)

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

\*See Instructions on Reverse Side

NMOCC

(Orig. Sgd.) RAYMOND W. VINYARD

*Acting*