

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WELL DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. 30-645-24645 SF-078905	
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR 501 Airport Drive, Farmington, New Mexico 87401		7. UNIT AGREEMENT NAME Gallegos Canyon Unit	
4. DEEPEN OR PLUG BACK (Report location clearly and in accordance with any State requirements.) At surface 840' FWL and 1050' FWL, Section 13, T28N, R12W At proposed location Same		8. FARM OR LEASE NAME	
9. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 10.5 miles Southeast of Farmington, New Mexico		9. WELL NO. 217E	
10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest dir. unit line, if any) 840'		10. FIELD AND POOL, OR WILDCAT Basin Dakota	
11. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL DRILLING COMPLETED, OR APPLIED FOR, AT THIS LEASE, FT. 2300'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA NW/4, NW/4, Section 13 T28N, R12W	
12. NO. OF ACRES IN LEASE 1207.18		12. COUNTY OR PARISH San Juan	
13. PROPOSED DEPTH 6500'		13. STATE New Mexico	
14. ELEVATIONS (Give whether DF, RT, GR, etc.) 5541' GL		14. NO. OF ACRES ASSIGNED TO THIS WELL W/320	
15. APPROX. DATE WORK WILL START* As soon as permitted		15. ROTARY OR CABLE TOOLS Rotary	

## 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 "R" 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.
			Active	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 NMCC 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 4172'.

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SEP 10 1980

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

IN ABOVE 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 prevention program, if any.

SIGNED: [Signature] TITLE: District Engineer DATE: September 17, 1980APPROVED  
AS AMENDEDNOV 04 1980  
[Signature]  
JAMES F. SIMS  
DISTRICT ENGINEER

TITLE: DATE:

All distances must be from the outer boundaries of the Section

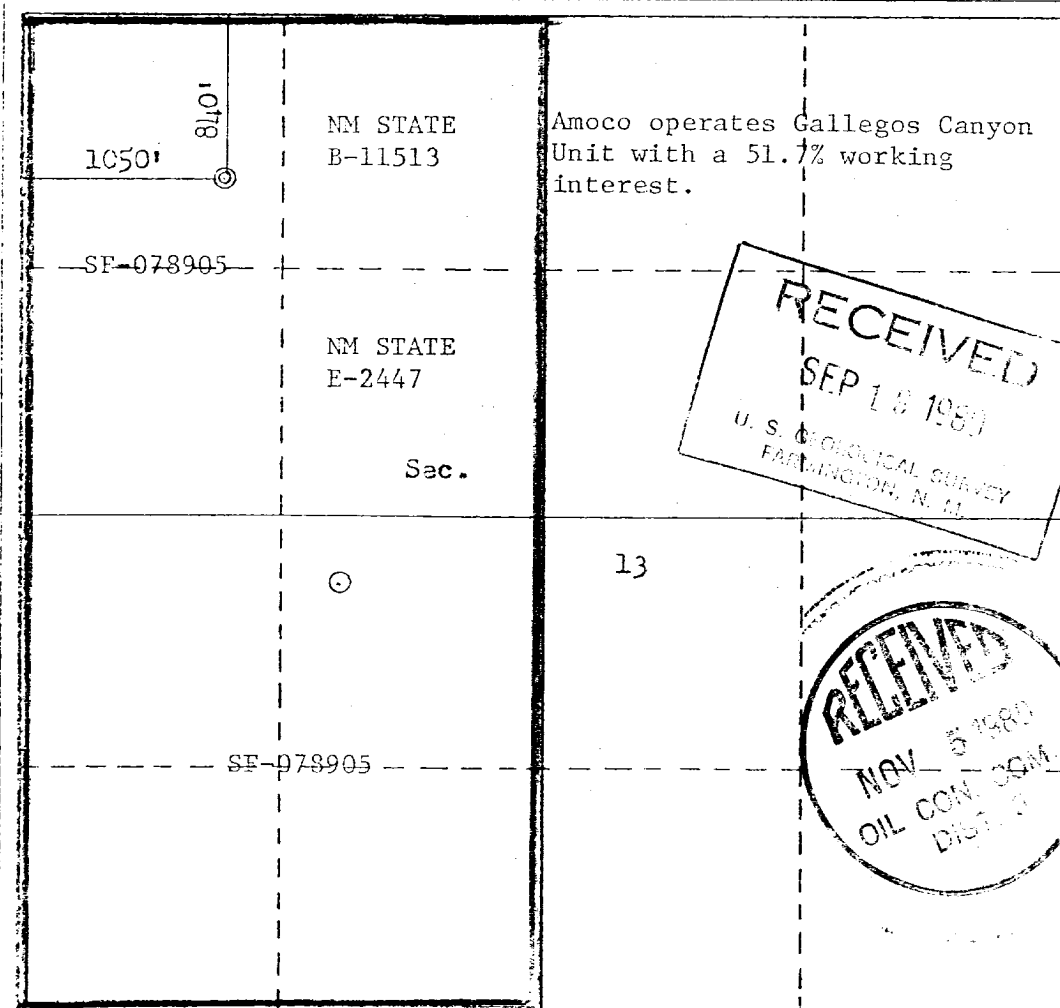
Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>GALLEGOS CANYON UNIT</b>		Well No. <b>217-E</b>
Unit Letter <b>D</b>	Section <b>13</b>	Township <b>28N</b>	Range <b>12W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>840</b> feet from the <b>North</b> line and <b>1050</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5541</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.



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 28, 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. 217E  
840' FNL & 1050' FWL, SECTION 13, 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	182'	5372'
Kirtland	272'	5282'
Fruitland	1052'	4502'
Pictured Cliffs	1402'	4152'
Chacra (if present)	'	'
Mesaverde	Cliff House 2955'	2599'
	Point Lookout 3872'	1682'
Gallup	5042'	512'
Dakota	5802'	- 348'
TD	6500'	- 946'

Estimated KB elevation: 5554'

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.

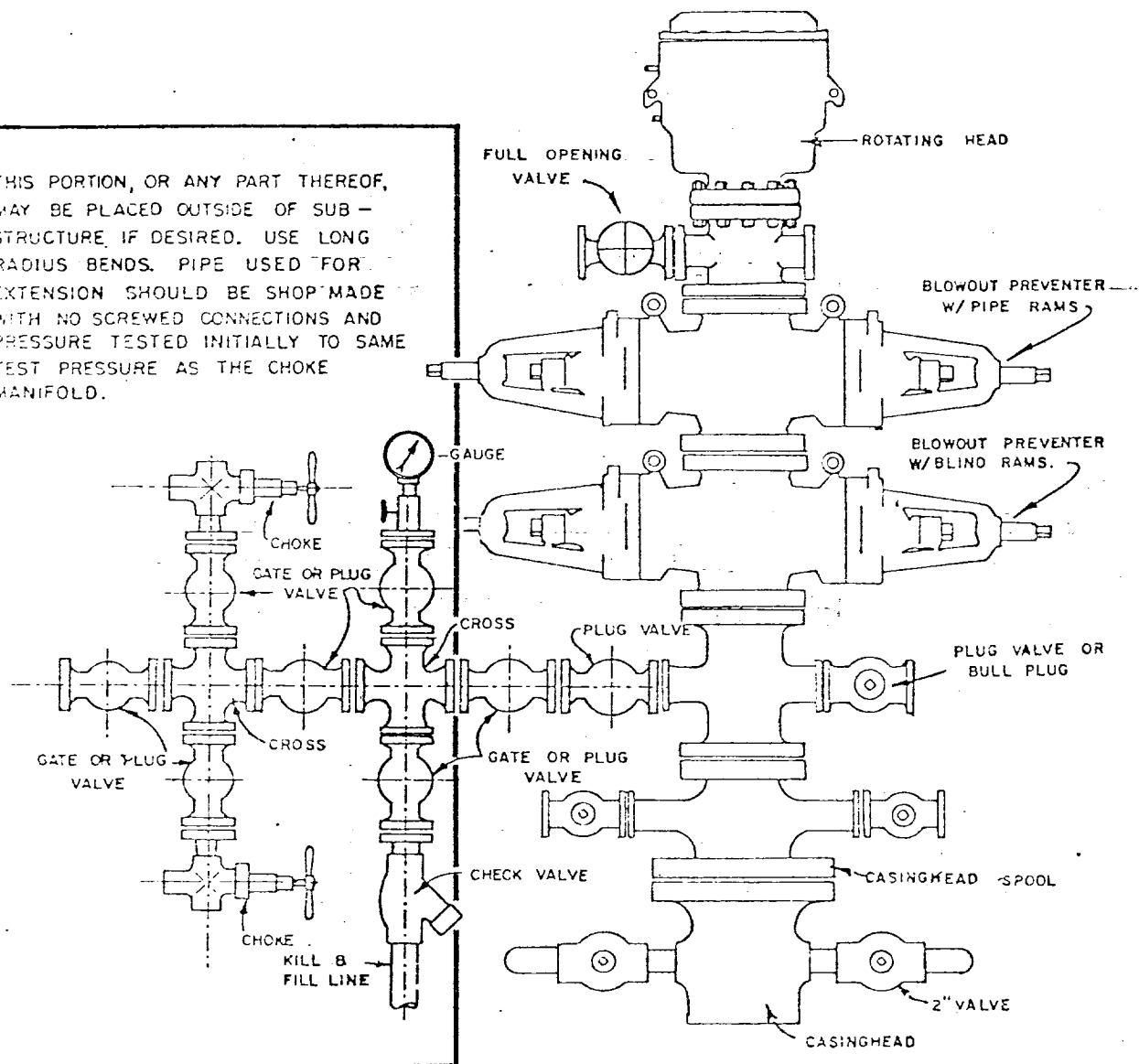
Operations will commence when permitted and last approximately 3 weeks.

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.

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

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. 217E  
840' FNL & 1050' FWL, SECTION 13, T28N, 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 300 feet 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. 201, one-half mile north.
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 12-foot cut will be made on southwest 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 Land Management.
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, and the Bureau of Land Management inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.

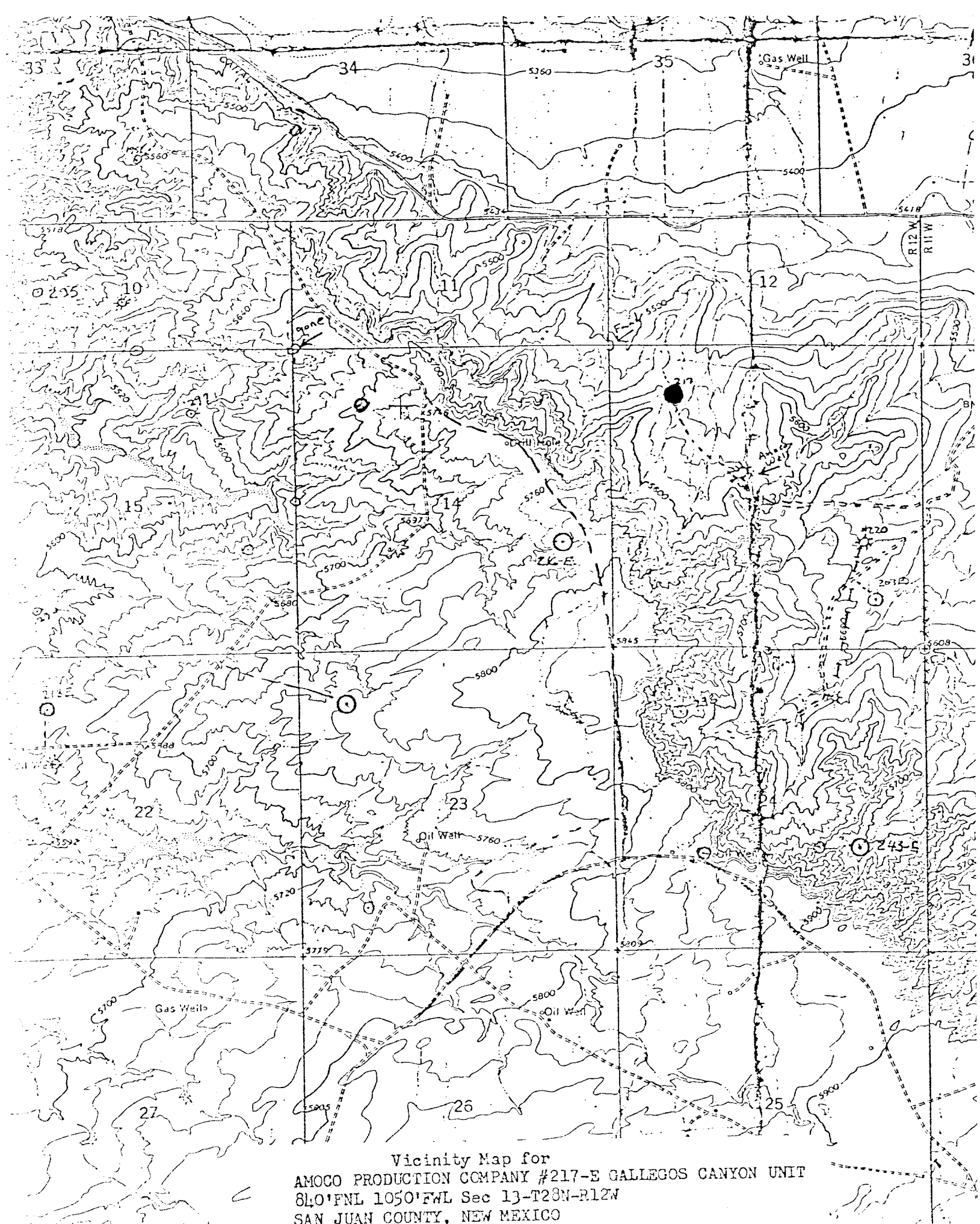
12. Operator's Representative: R. W. Schroeder  
Phone: Office: 505-325-8841; Home: 505-325-6164  
Address: 501 Airport Drive, Farmington, NM 87401

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.

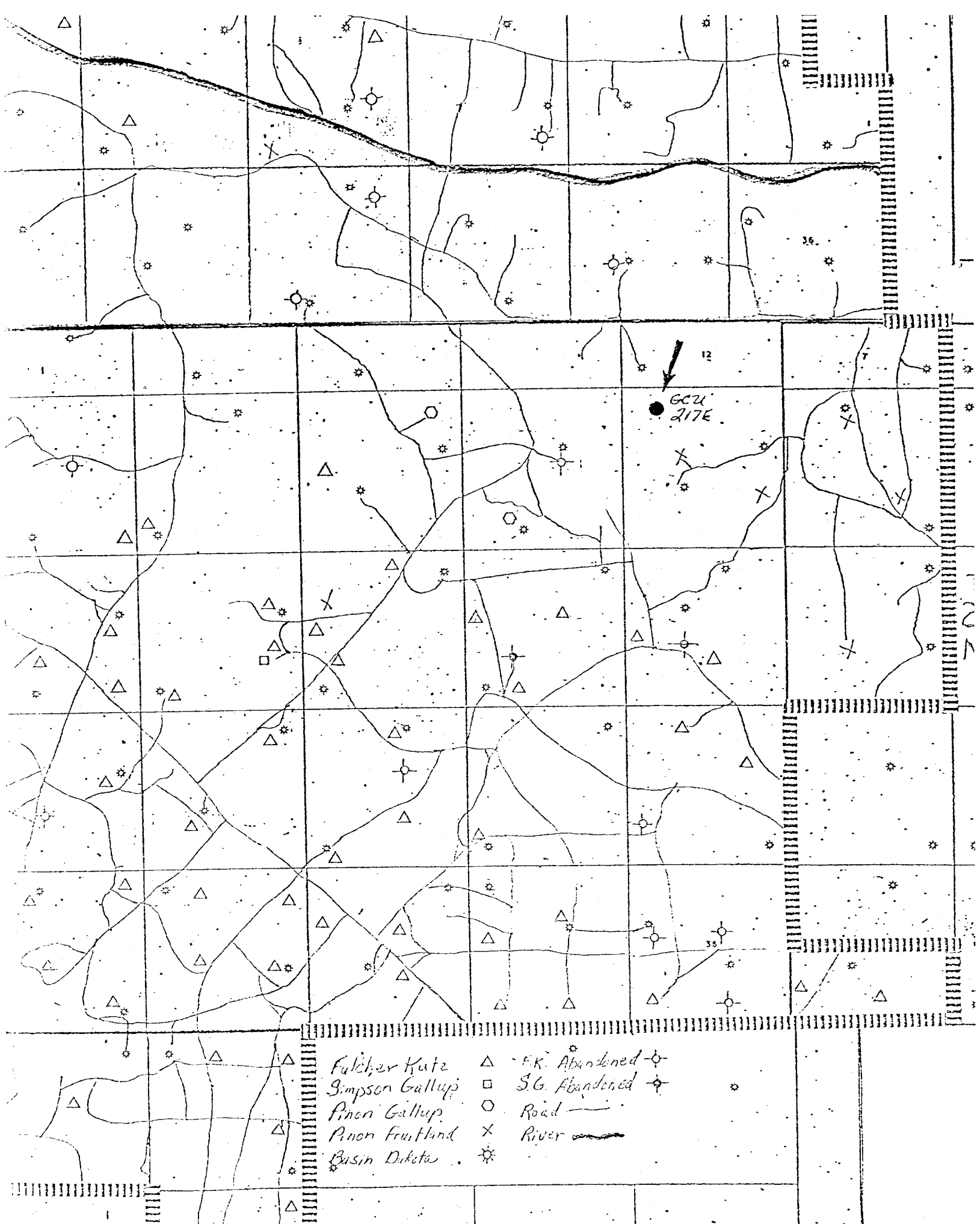
Date September 10, 1980

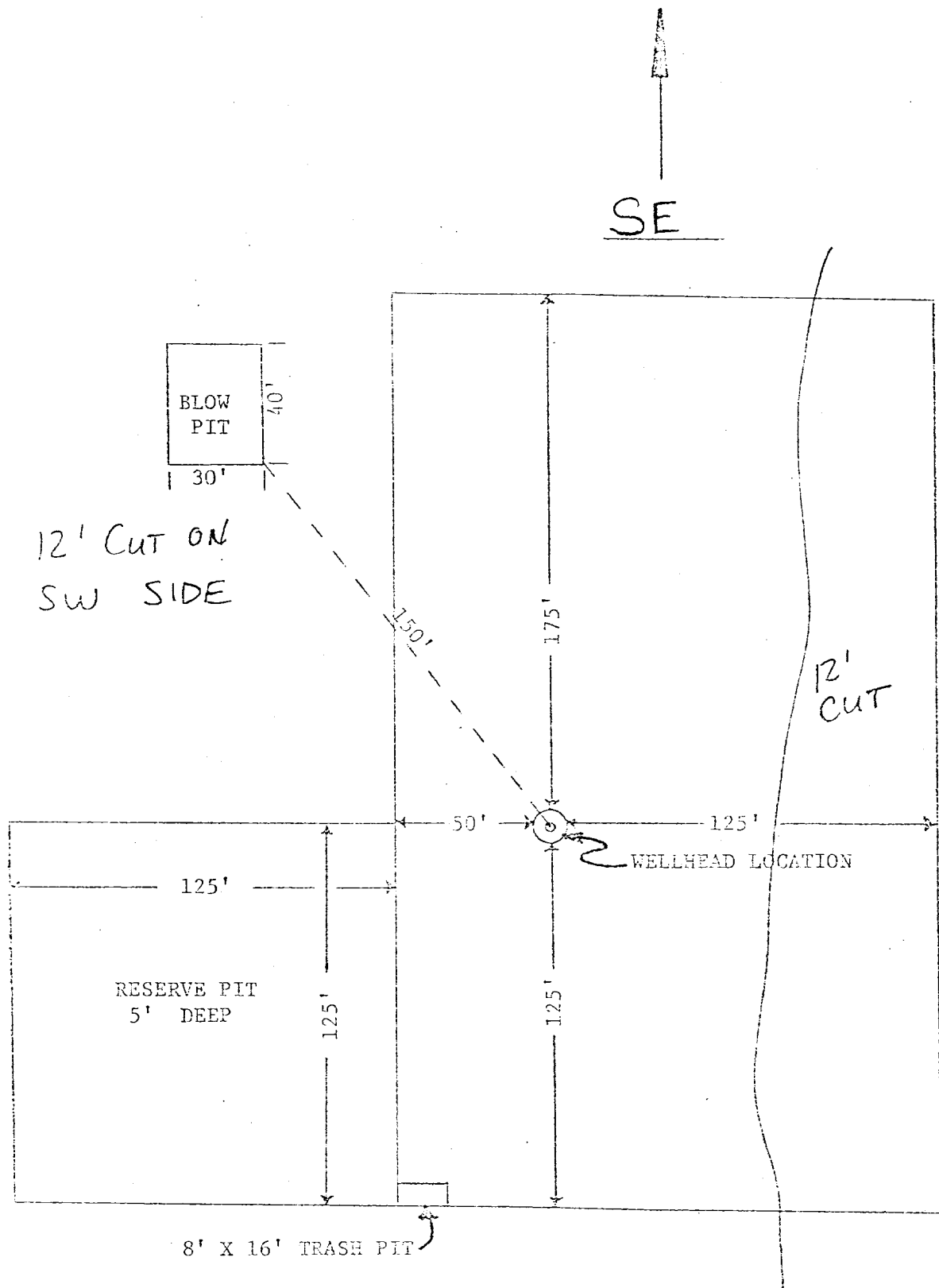


R. W. Schroeder, District Superintendent



Vicinity Map for  
AMOCO PRODUCTION COMPANY #217-E GALLEGOS CANYON UNIT  
840'FNL 1050'FWL Sec 13-T28N-R12W  
SAN JUAN COUNTY, NEW MEXICO





APPROXIMATELY 1.2 ACRES

Amoco Production Company	SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS	
GALLENS CANYON UNIT # 217E	DRG. NO.