

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 ☐
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
840' FNL x 820' FEL
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
15 1/2 miles Northeast of Counselor, New Mexico

16. NO. OF ACRES IN LEASE
2560
17. NO. OF ACRES ASSIGNED TO THIS WELL
160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
633'

19. PROPOSED DEPTH
4753
20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
7348' GL
22. APPROX. DATE WORK WILL START*

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)	24.0# K-55	300'	315 sx Class B x 2% CaCl2-Circ
7-7/8"	4-1/2" (New)	9.5# K-55	4753'	965 sx Class B 50:50 Poz w/6% gel
				2# med tuf plug/sx and .8% FLA.
				Tail in w/100 sx Class B Neat-Circ.

Amoco proposes to drill the above well to further develop the Otero Chacra reserves. The well will be drilled to the surface casing point using native mud. The well will then be drilled to TD with a low solids nondispersed mud system. Completion design will be based on open hole logs. A copy of all logs will be filed upon completion. Additional information required by NTL-6 for the application to drill and a multi-point surface use plan are attached.

The gas from this well is not dedicated.

This action is subject to administrative
appeal pursuant to 30 CFR 290.

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

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. Original Signed By
W. L. Peterson

TITLE District Engineer DATE November 17, 1980

SIGNED
(This space for Federal or State office use)

PERMIT NO. APPROVED
AS AMENDED

APPROVED BY
CONDITIONS OF APPROVAL
JAMES F. SIMS
DISTRICT ENGINEER

TITLE

APPROVED



DATE

NMOCC

SUPPLEMENTAL INFORMATION TO FORM 9-331C

JICARILLA CONTRACT 148 NO. 27
840' FNL & 820' FEL, SECTION 13, T25N, R5W
RIO ARRIBA

The geologic name of the surface formation is the Tertiary San Jose.

Estimated tops of important potential hydrocarbon bearing formations:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Ojo Alamo	3125 '	4236 '
Kirtland	3325 '	4036 '
Fruitland	3520 '	3841 '
Pictured Cliffs	3700 '	3661 '
Chacra (if present)	4570 '	2791 '
TD	4753 '	2608

Estimated KB elevation: 7361 '.

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

DIL-SP-GR
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).

OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-107
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

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

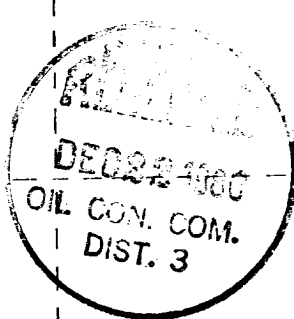
Operator AMOCO PRODUCTION COMPANY			Lease JICARILLA CONTRACT 148		Well No. 27
Unit Letter A	Section 13	Township 25N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 840 feet from the North line and 820 feet from the East line					
Ground Level Elev. 7348	Producing Formation Chacra		Pool Otero Chacra		Dedicated Acreage: 160 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 _____

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.

Sec.		1078	
		820'	
13			

Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

R. A. Downey
Name
R.A. DOWNEY

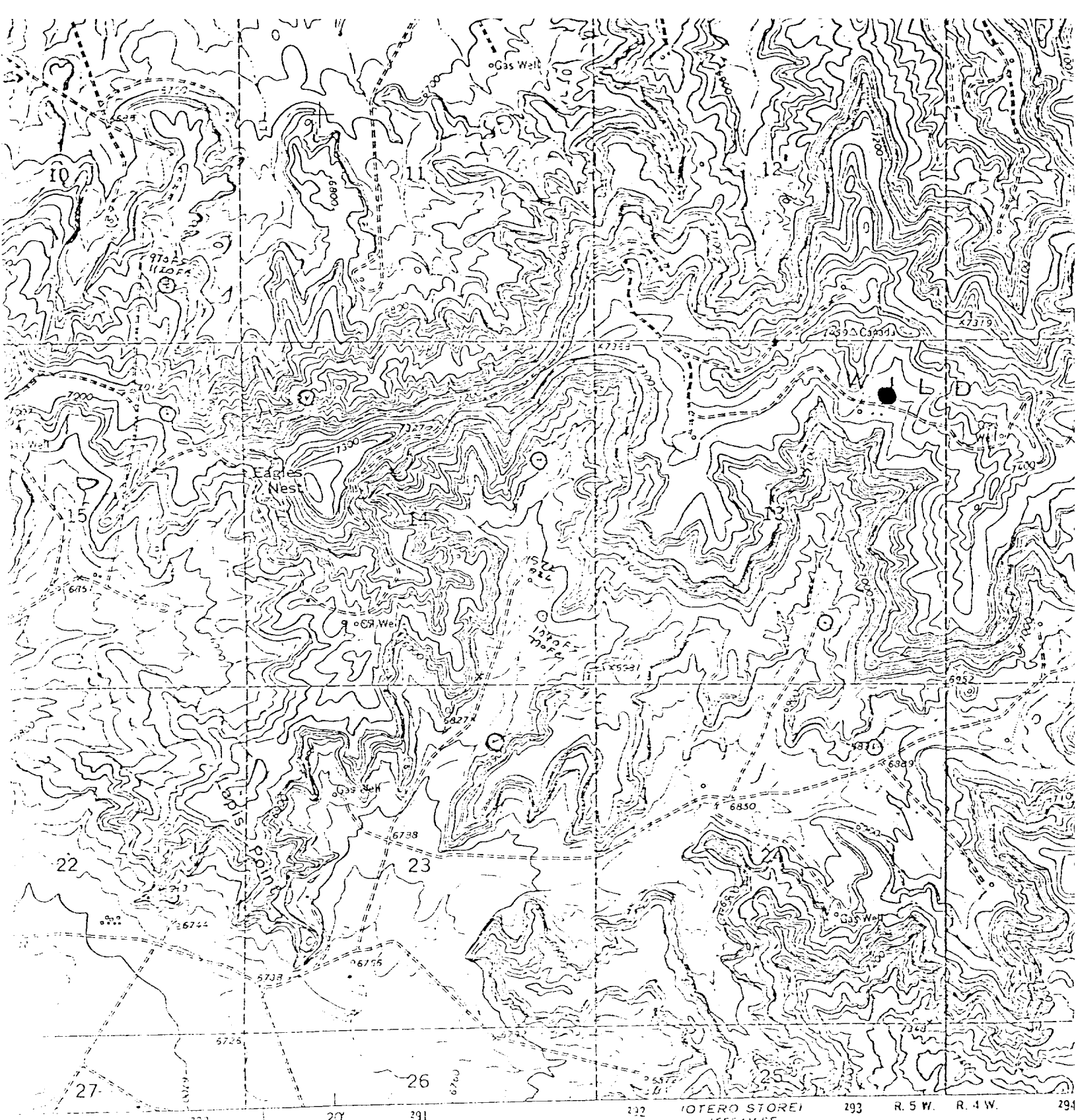
Position
DISTRICT ENGINEER

Company
AMOCO PRODUCTION COMPANY

Date
SEPTEMBER 11, 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
July 29, 1980
Registered Professional Engineer
and Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.
Certificate No. **3950**

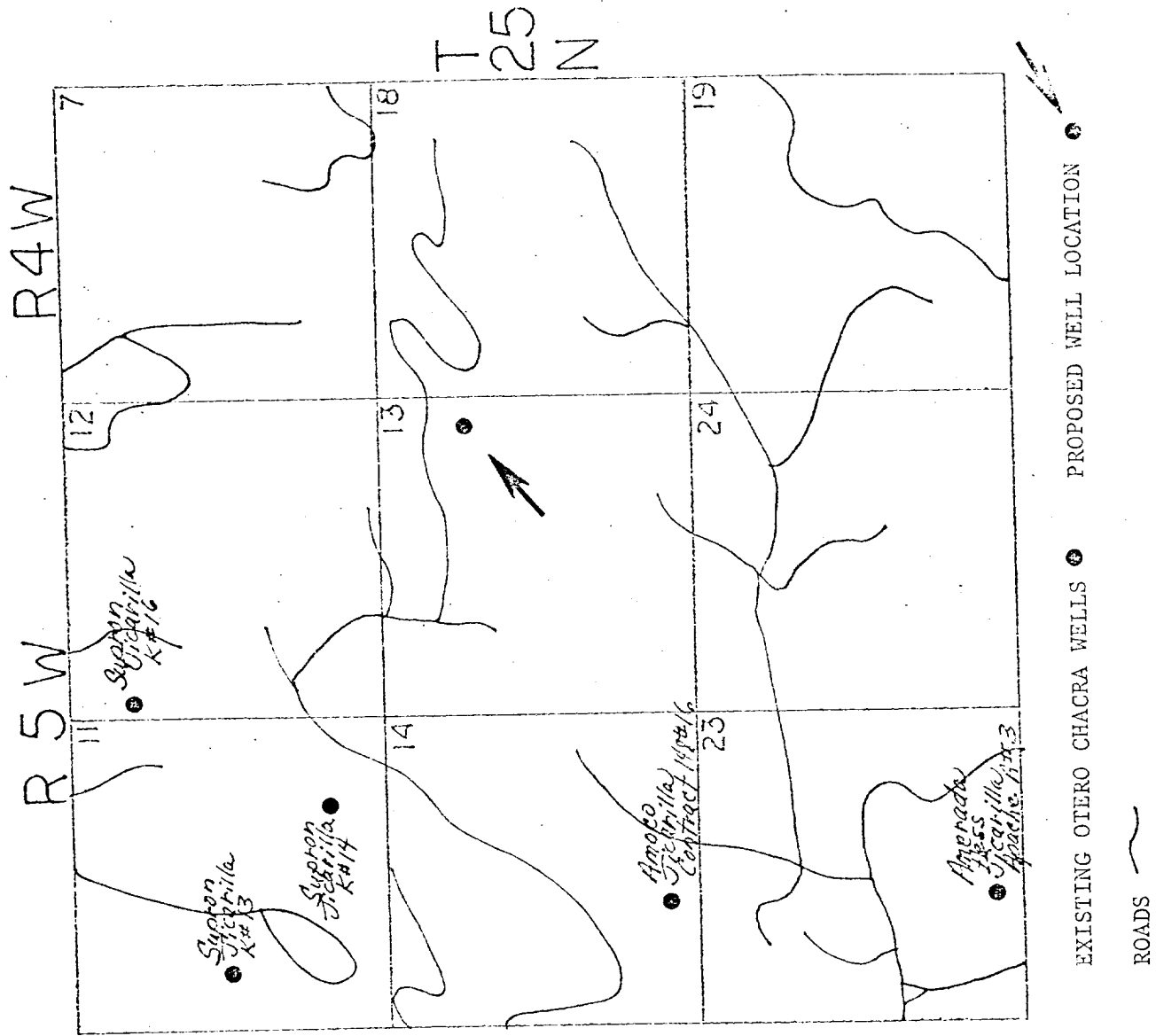


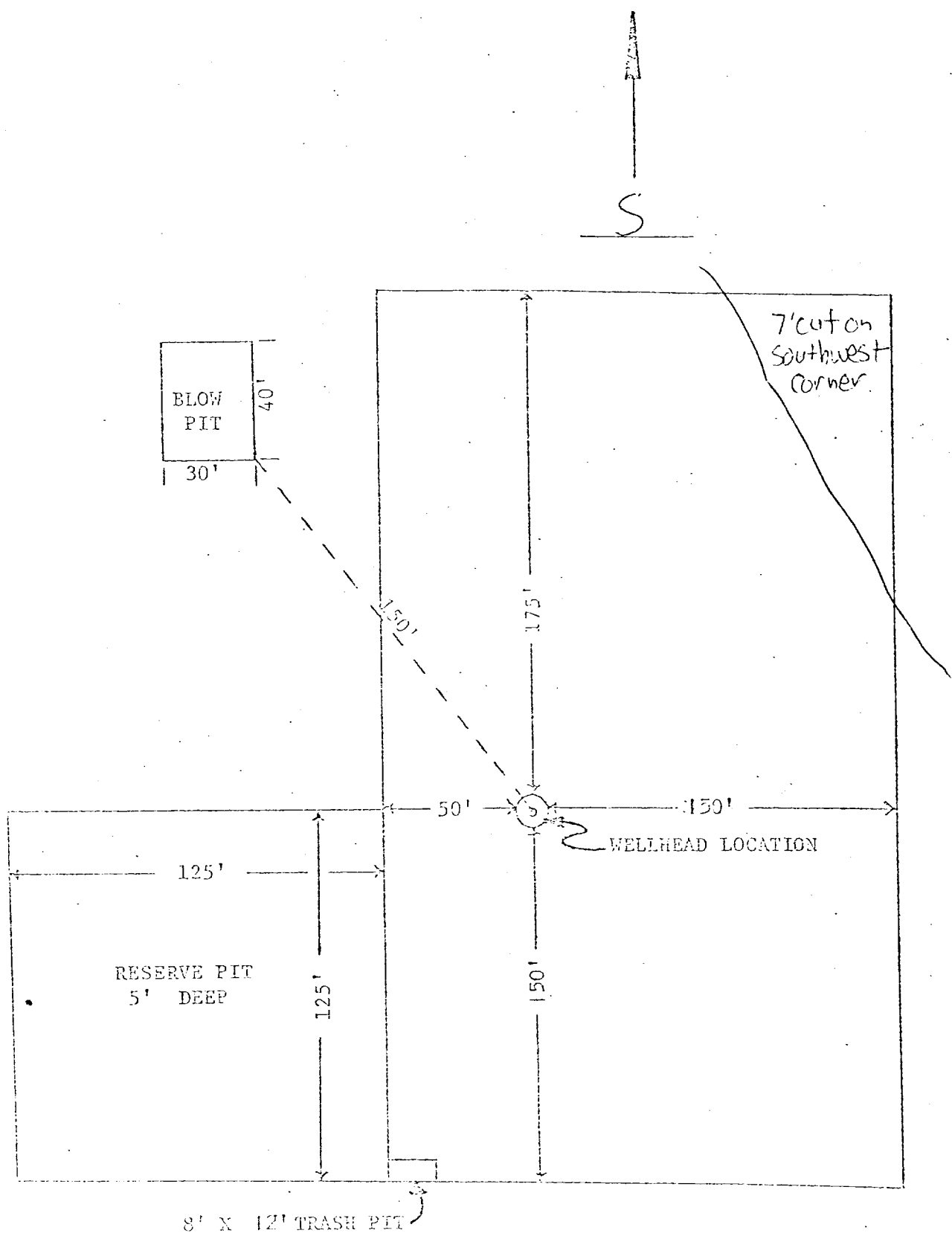
Vicinity Map for
 AMOCO PRODUCTION CO. #27 JICARILLA CONTRACT 148
 340' FNL 820' FEL Sec. 13-T25N-R5W
 RIO ARriba COUNTY, NEW MEXICO



UTM GRID AND 1983 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

THIS MAP COMPLES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D.C.



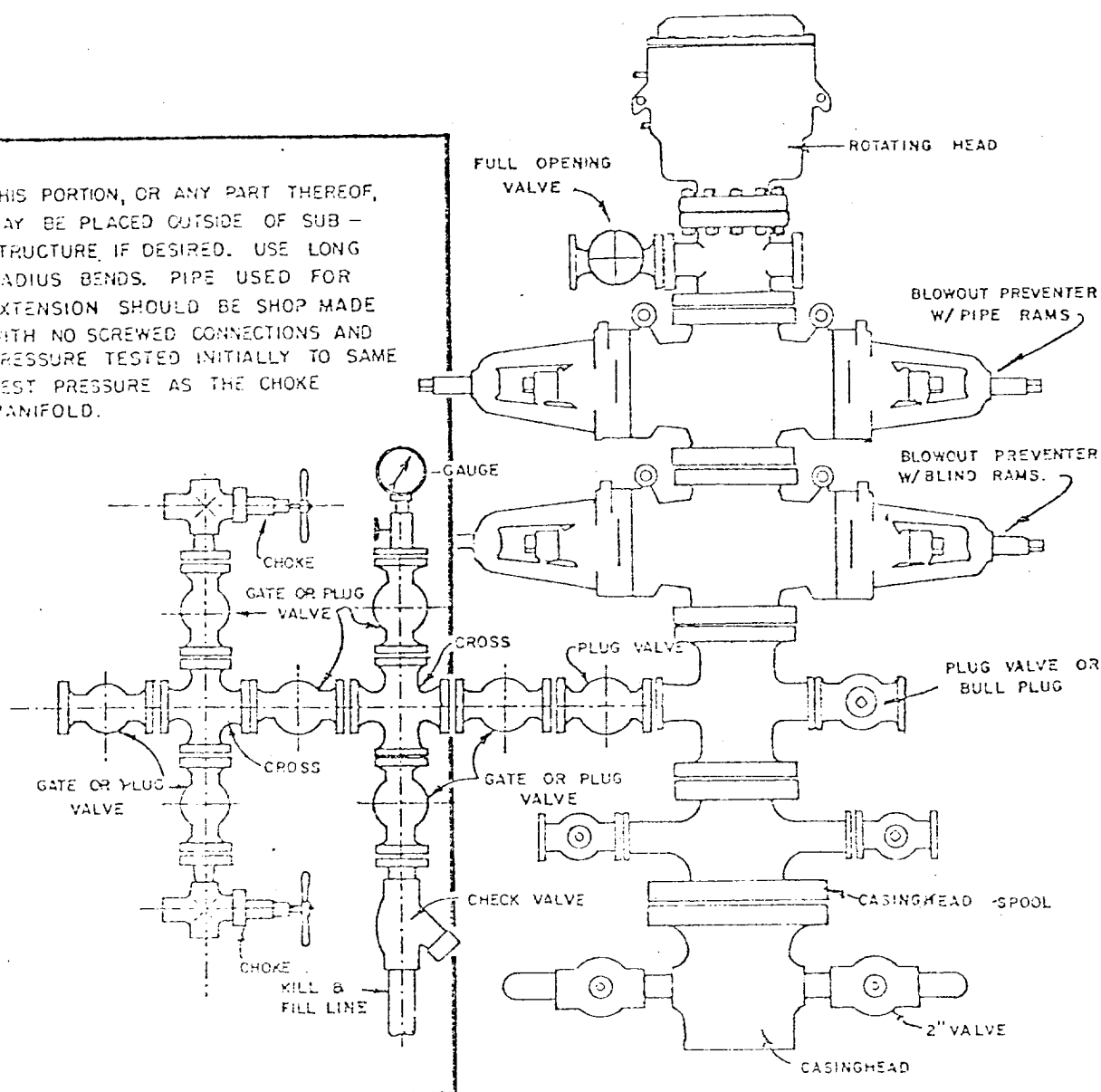


APPROXIMATELY 1.2 ACRES

Anoco Production Company	SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS	
Ticovilla Contract 148 No. 2.7	DRG. 510

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

APT 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

JICARILLA CONTRACT 148 NO. 27
840' FNL & 820' FEL, SECTION 13, T25N, R5W
RIO ARriba 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 150 feet in length and 20 feet wide. Road to be bar ditched on one 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 are two 380-barrel tanks and facilities located at Jicarilla Contract 148 Well No. 10 (N-14-25N-12W).
5. Water will be hauled from Tapacito Wash.
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 7-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 Indian Affairs.
11. The general topography is a broken and eroded slope with southeasterly drainage, alluvial surface deposits and sandstone gravel outcrops, with a sandy clay loam soil. Vegetation consists of Cedar, Pinon, and native grasses.

Representatives of the U. S. Geological Survey's Farmington Office and the Jicarilla Tribe's Dulce Office 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 November 17, 1980


R. W. Schroeder, District Superintendent