

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. Jicarilla Contract 148	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache	
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 501 Airport Drive, Farmington, New Mexico 87401		8. FARM OR LEASE NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1050' ENL x 1090' FEL		9. WELL NO. 29	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 16 miles Northeast of Counselor, New Mexico		10. FIELD AND POOL, OR WILDCAT Otero Chacra	
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drill unit line, if any) 1050'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA NE/4 NE/4 Section 24	
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DRILLING, COMPLETED, OR APPLYING FOR ON THIS LEASE, FT. 215'		12. COUNTY OR PARISH AND STATE Rio Arriba New Mexico	
16. NO. OF ACRES IN LEASE 2560		17. NO. OF ACRES ASSIGNED TO THIS WELL 160	
19. DEPOSED DEPTH 4291		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DE, RT, GR, etc.) 6886' SL		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)	24.0# K-55	300'	315 sx Class B x 2% CaCl ₂ -Circ
7-7/8"	4-1/2" (Now)	9.5# K-55	4291'	865 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"

1. ABOVE SPACE RESERVING 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 depths and true vertical depths. Give blowout prevention program, if any.

SIGNED: _____ TITLE: District Engineer DATE: November 17, 1980

APPROVED
AS AMENDED

DEC 23 1980

JAMES F. SIMS
DISTRICT ENGINEER

OIL CON. COM.
DIST. 3

NMOCC

SUPPLEMENTAL INFORMATION TO FORM 9-331C
JICARILLA CONTRACT 148 NO. 29
1050' FNL & 1090' FEL, SECTION 24, T25N, R5W
RIO ARriba COUNTY, NEW MEXICO

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

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	2663 '	4236 '
Kirtland	2863 '	4036 '
Fruitland	3058 '	3841 '
Pictured Cliffs	3238 '	3661 '
Chacra (if present)	4108 '	2791 '
Mesaverde [Cliff House	'	'
Point Lookout	'	'
Gallup	'	'
Dakota	'	'
TD	4291 '	2608 '

Estimated KB elevation: 6899 '.

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:

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.

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.

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

P. O. BOX 2088

Form C-107
Revised 10-1-78

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. 29
Unit Letter A	Section 24	Township 25N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1050 feet from the North line and 1090 feet from the East line					
Ground Level Elev. 6886	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.

		1050'
		1090'

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 this same is true and correct to the best of my knowledge and belief.

Date Surveyed

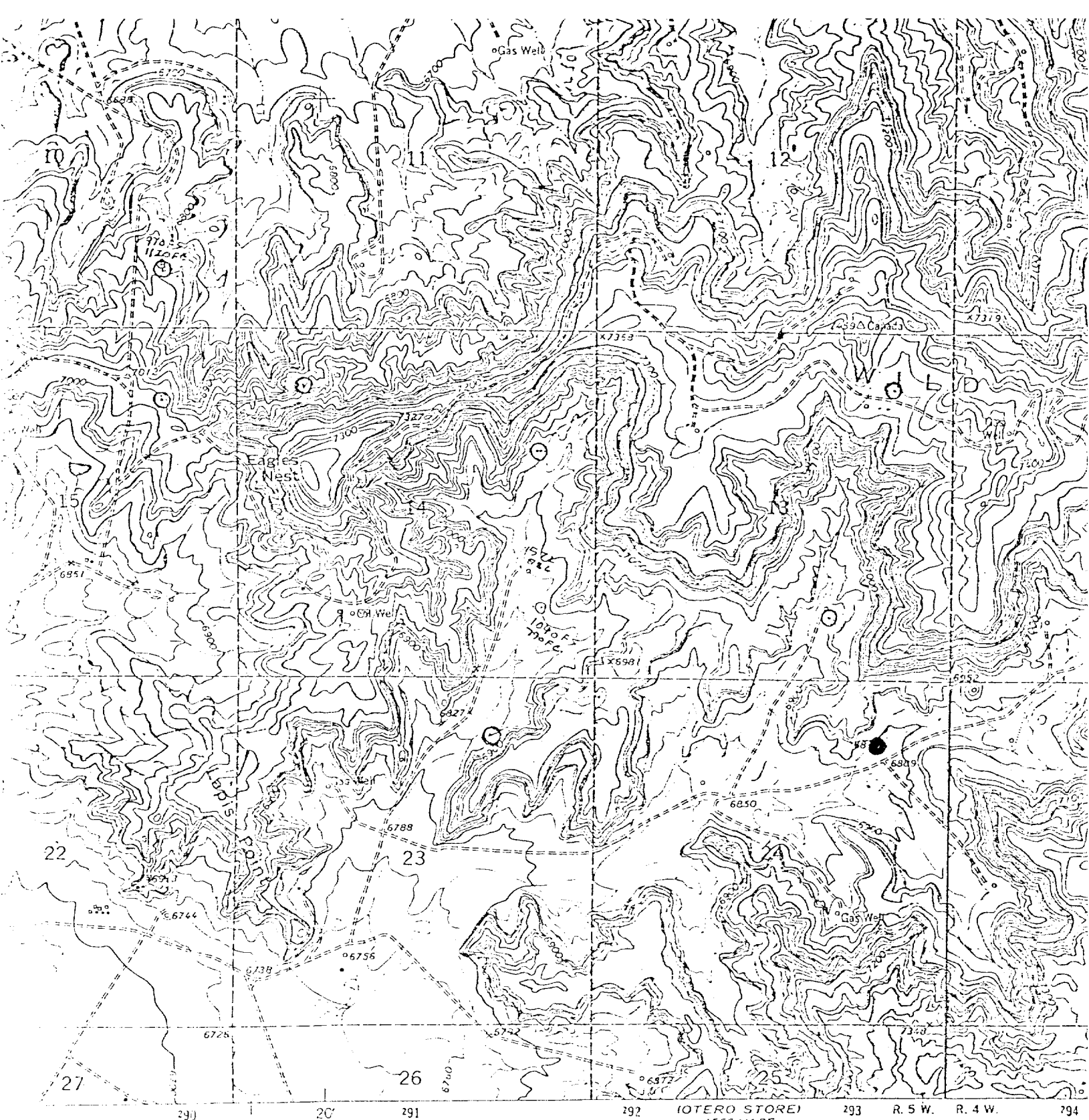
July 30, 1980

Registered Professional Engineer
and Lead Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.

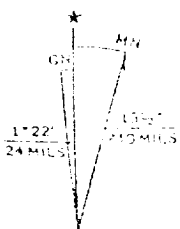
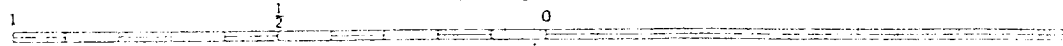
3950



Vicinity Map for
 AMOCO PRODUCTION CO. #29 JICARILLA CONTRACT 11/8

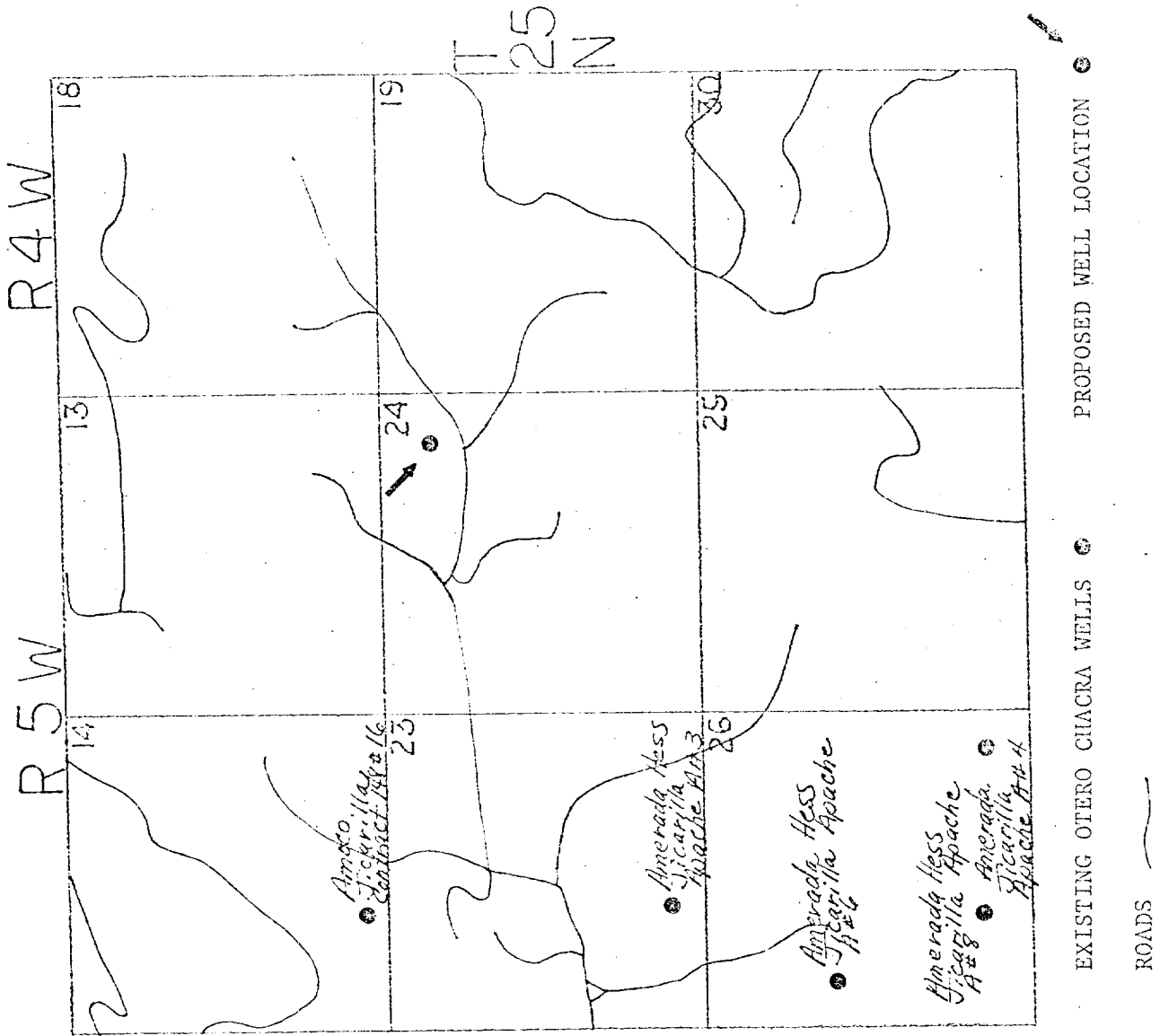
1050'FNL 1020'FEL Sec. 24-T25N-R5W
 RIO ARriba COUNTY, NEW MEXICO

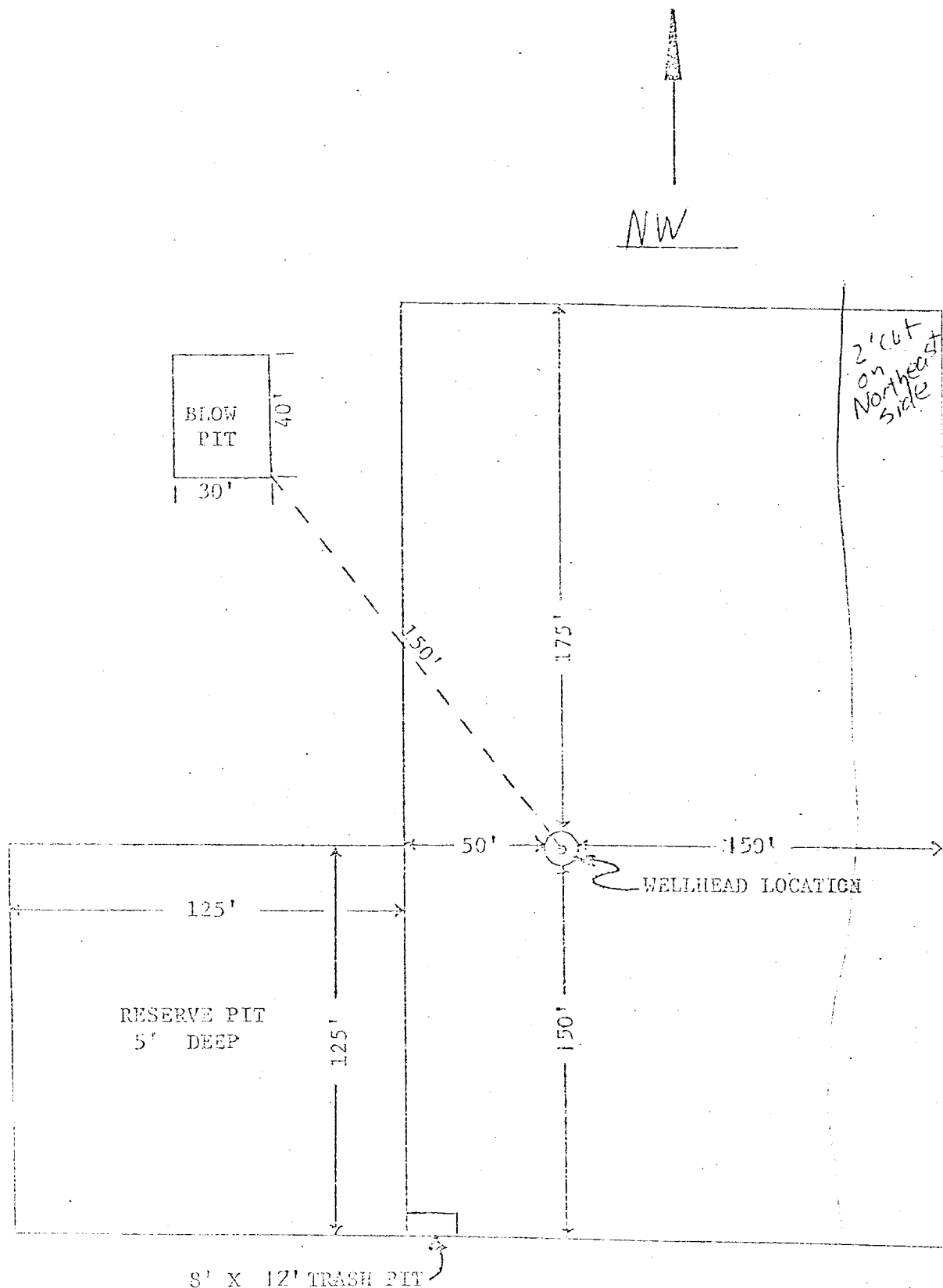
SCALE 1:24 000



1954 GRID AND 1941 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C.
 A COLORED GEOLOGICAL TABULATING MAP AND SYMBOLS IS AVAILABLE ON REQUEST

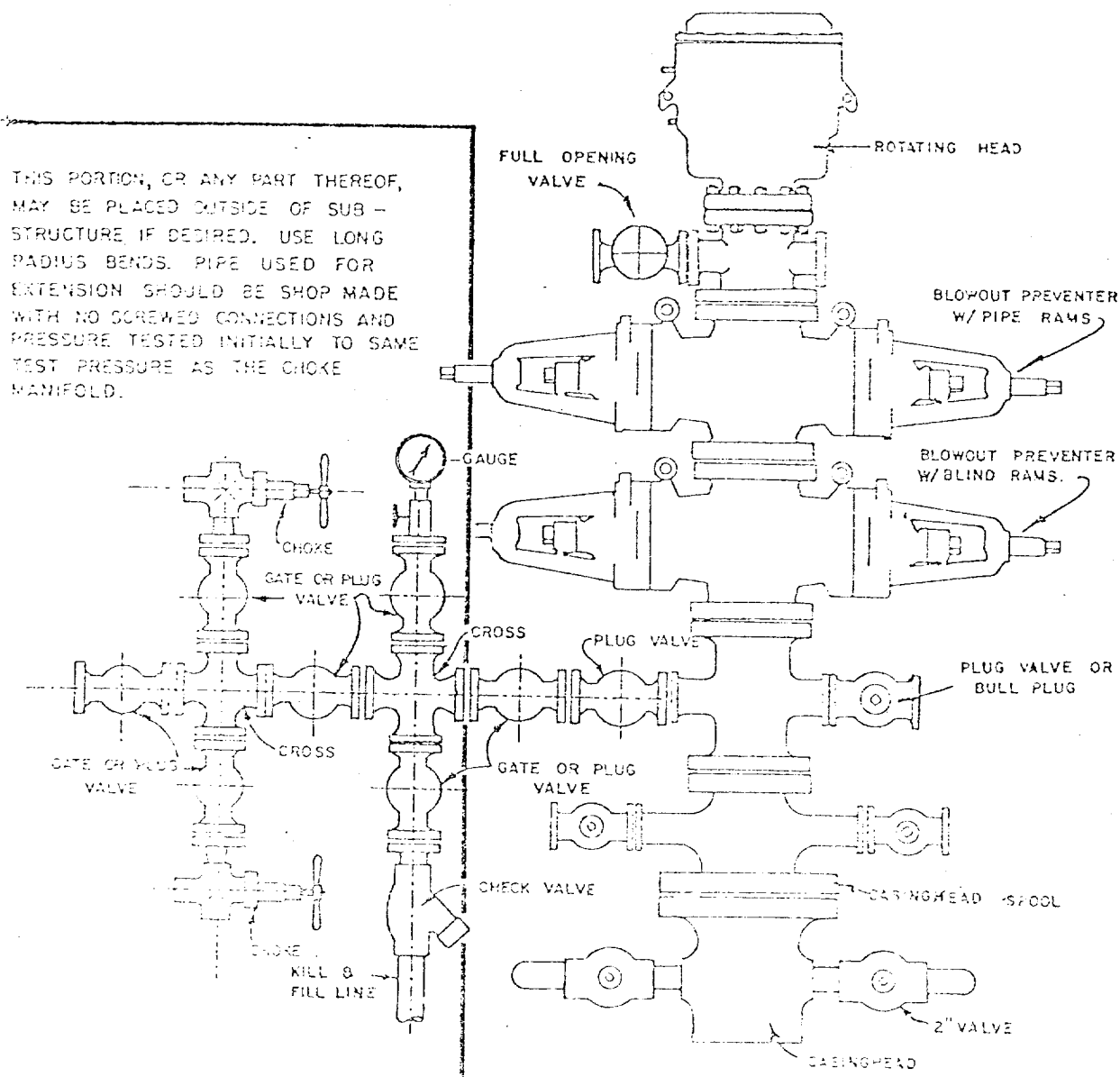




APPROXIMATELY 1.2 ACRES

Amoco Production Company	SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS	
Jesavilla Contract 148 No 20	DRG. NO.

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 on, on bit runs, pipe rams will be closed once each 24 hours.

MULTI-POINT SURFACE USE PLAN

JICARILLA CONTRACT 148 NO. 29
1050' FNL & 1090' FEL, SECTION 24, T25N, R5W
RIO ARriba COUNTY, NEW MEXICO

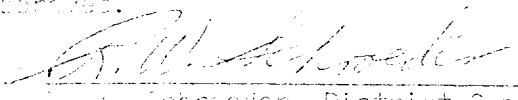
1. The attached topographic map shows the proposed route to the location.
2. It will not be necessary to build any access road.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the lease road map.
4. There are two 380-barrel tanks and facilities located at Jicarilla Contract 148 well No. 10 (N-14-25N-12W).
5. Water will be hauled from Largo 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 2-foot cut will be made on northeast 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 canyon bottom with southwesterly drainage and alluvial surface deposits, with a sandy clay loam soil. Vegetation consists of sagebrush, Russian thistle, greasewood, and brome grass.

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: 531 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 awarded.

Date: November 17, 1980


R. W. Schroeder, District Superintendent