

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 ☒ OTHERSINGLE 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 surface1650' FSL and 1850' FEL, Section 23, T25N, R4W
At proposed prod. zone

Same

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

10.5 miles West of Gavilan, New Mexico

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

1650'

16. NO. OF ACRES IN LEASE

2560.0

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

2700'

19. PROPOSED DEPTH

7824'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

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

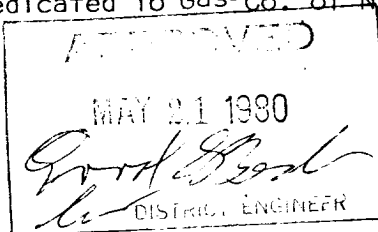
6974' GL

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"	5-1/2" (New)	17# N-80	7824'	Stage 1-360 sx Class "B" 50:50 POZ, 6% gel, 0.8% FLA, and 2 lbs med tuf plug/sx. Tail in w/125 sx Class "B" Neat-circ.

The above well is being drilled to test the Gallup and
Dakota formations.The gas from this acreage is dedicated to Gas Co. of New
Mexico.

DV tool @ 5615'

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

March 27, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED
APR 1 1980
U. S. GEOLOGICAL SURVEY
DANANGO, COLO.*Brooks*
state

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

All distances must be from the outer boundaries of the Section

Operator AMOCO PRODUCTION COMPANY		Lease JICARILLA APACHE TRIBAL 124		Well No. 4
Unit Letter J	Section 23	Township 25N	Range 4W	County Rio Arriba
Actual Footage Location of Well: 1650' feet from the South line and 1850 feet from the East line				
Ground Level Elev. 6974	Producing Formation Gallup - Dakota	Pool Lindrith Gallup-Dakota West		Dedicated Acreage: 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

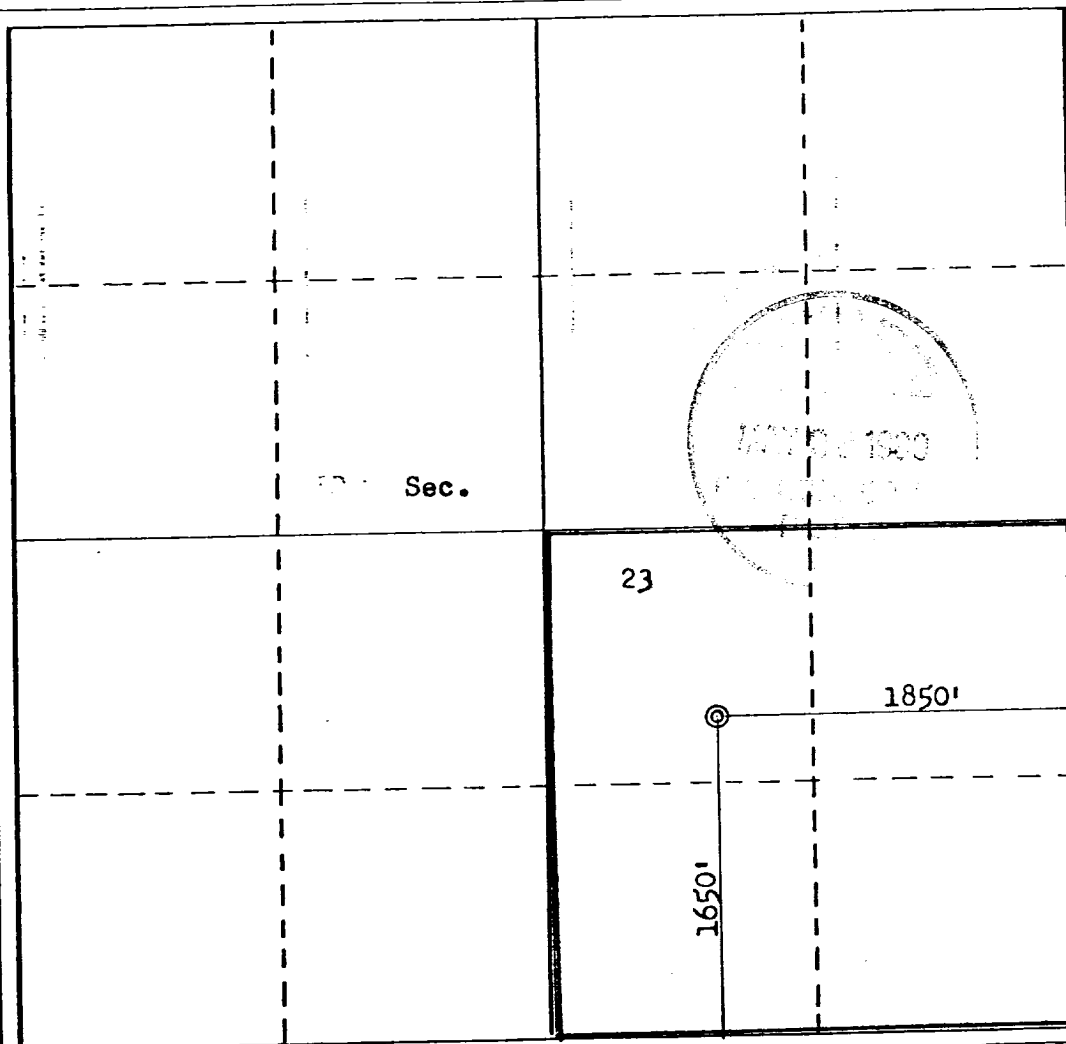
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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

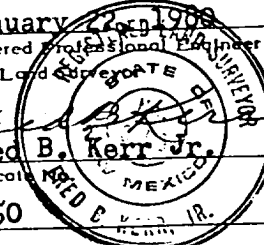
FEBRUARY 1, 1980

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 22, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.Certificate No. **3950**

SUPPLEMENTAL INFORMATION TO FORM 9-331C

JICARILLA APACHE TRIBAL 124 NO. 4
1650' FSL & 1850' FEL, SECTION 23, T25N, R4W
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	2817 '	4170 '
Kirtland	3024 '	3963 '
Fruitland	3247 '	3740 '
Pictured Cliffs	3383 '	3604 '
Chacra (if present)	4246 '	2741 '
Mesaverde	Cliff House 5048 '	1939 '
	Point Lookout 5335 '	1652 '
Gallup	6664 '	323 '
Dakota	7546 '	-559 '
TD	7824 '	-837 '

Estimated KB elevation: 6987 '

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:

Induction Electric-SP-Gamma Ray
Compensated Formation Density-Compensated Neutron-Gamma Ray

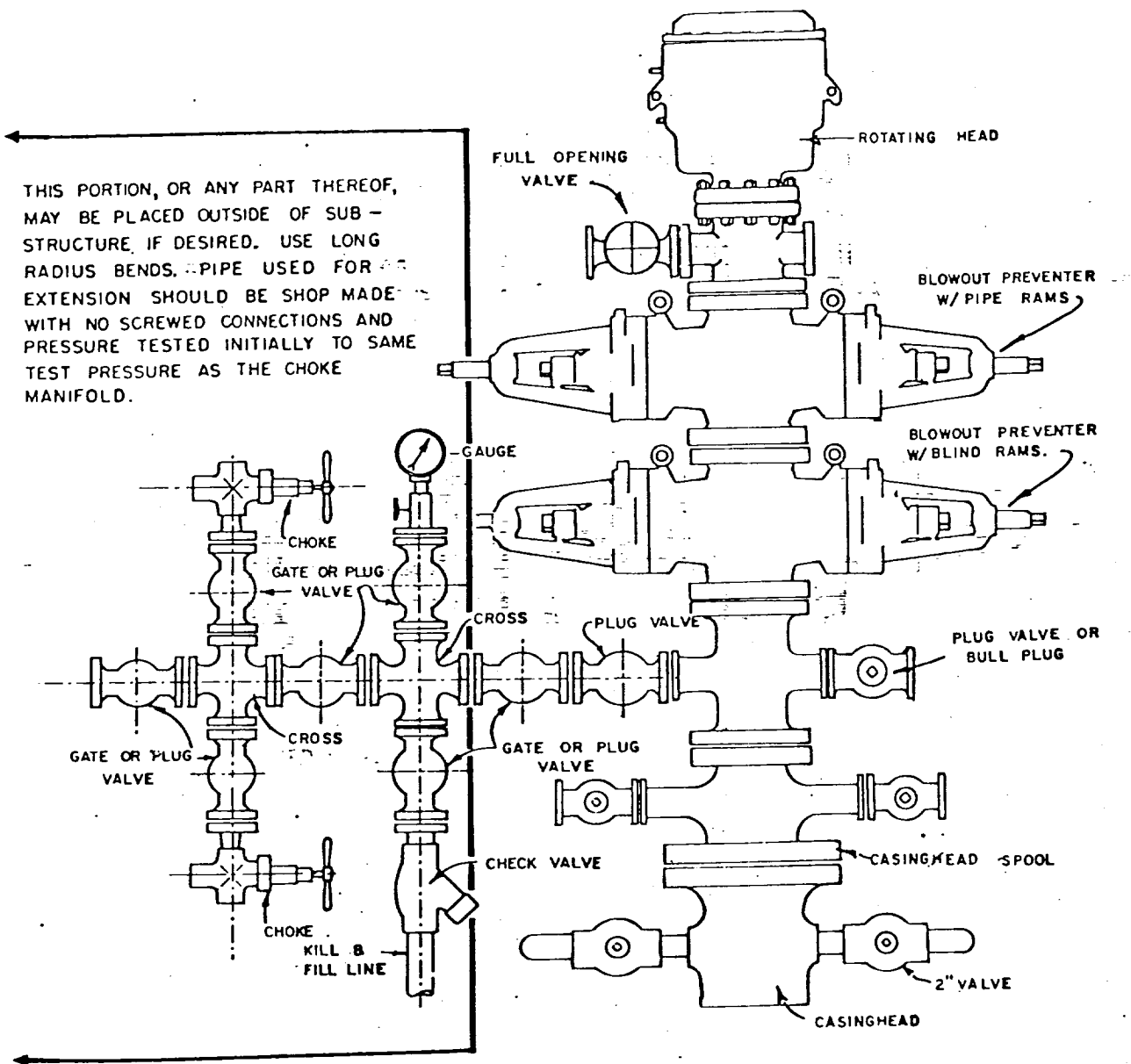
Completion design will be based on these logs. No cores or drill stem tests will be taken.

Operations will commence when permitted and last approximately 4 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

JICARILLA APACHE TRIBAL 124 NO. 4
1650' FSL & 1850' FEL, SECTION 23, T25N, R4W
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 750 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 are three 300-barrel tanks and facilities located at Jicarilla Apache Tribal 124 No. 1, approximately one-half mile west.
5. Water will be hauled from Cottonwood Water Hole and 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 3-foot cut will be made on northwest 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. The soil is sandy, clayey loam. Vegetation consists of rabbitbrush, sagebrush, prickly pear, and native grasses.

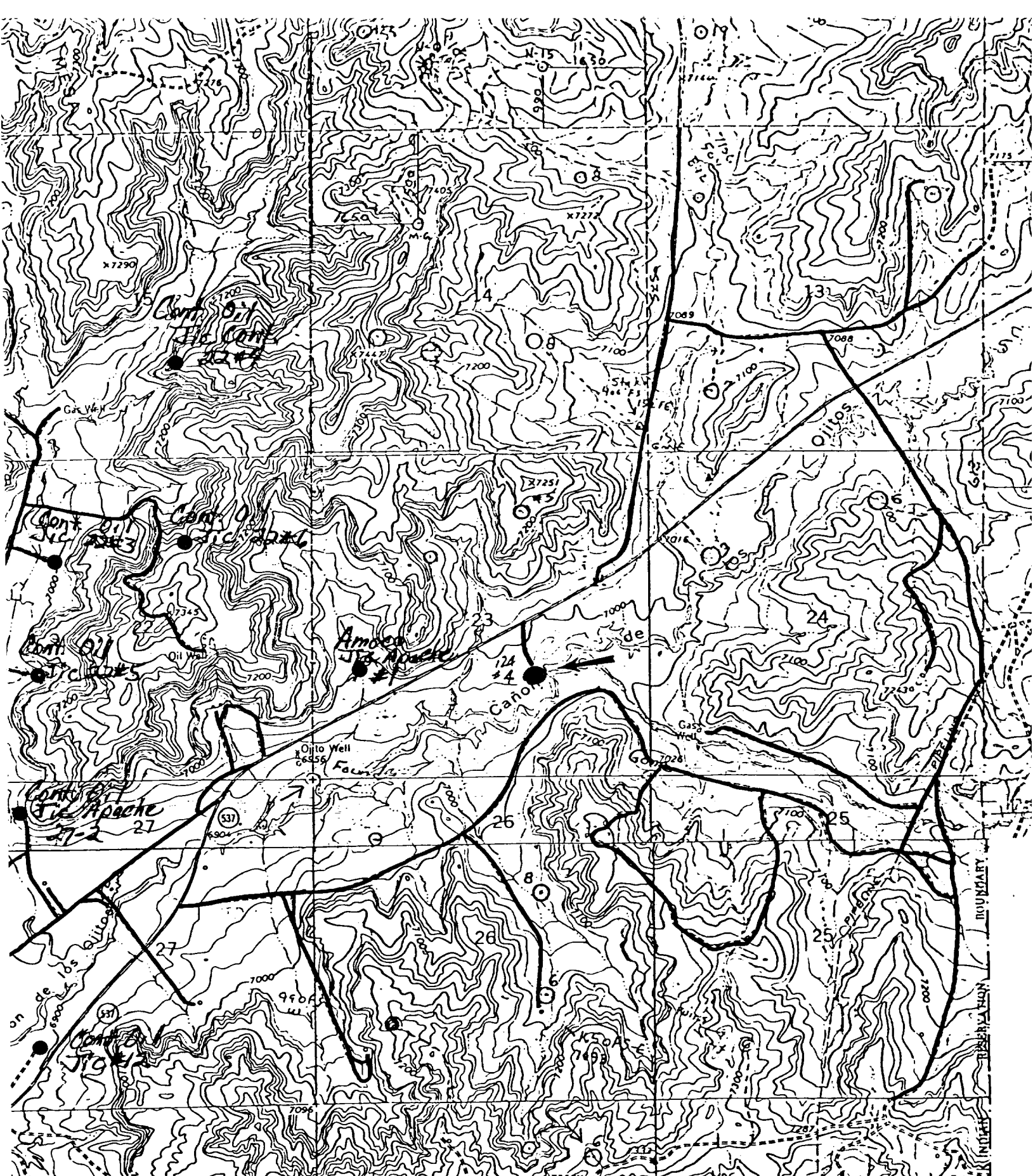
Representatives of the U. S. Geological Survey's Durango-Office and the Jicarilla Tribe's Dulce Office inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.

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

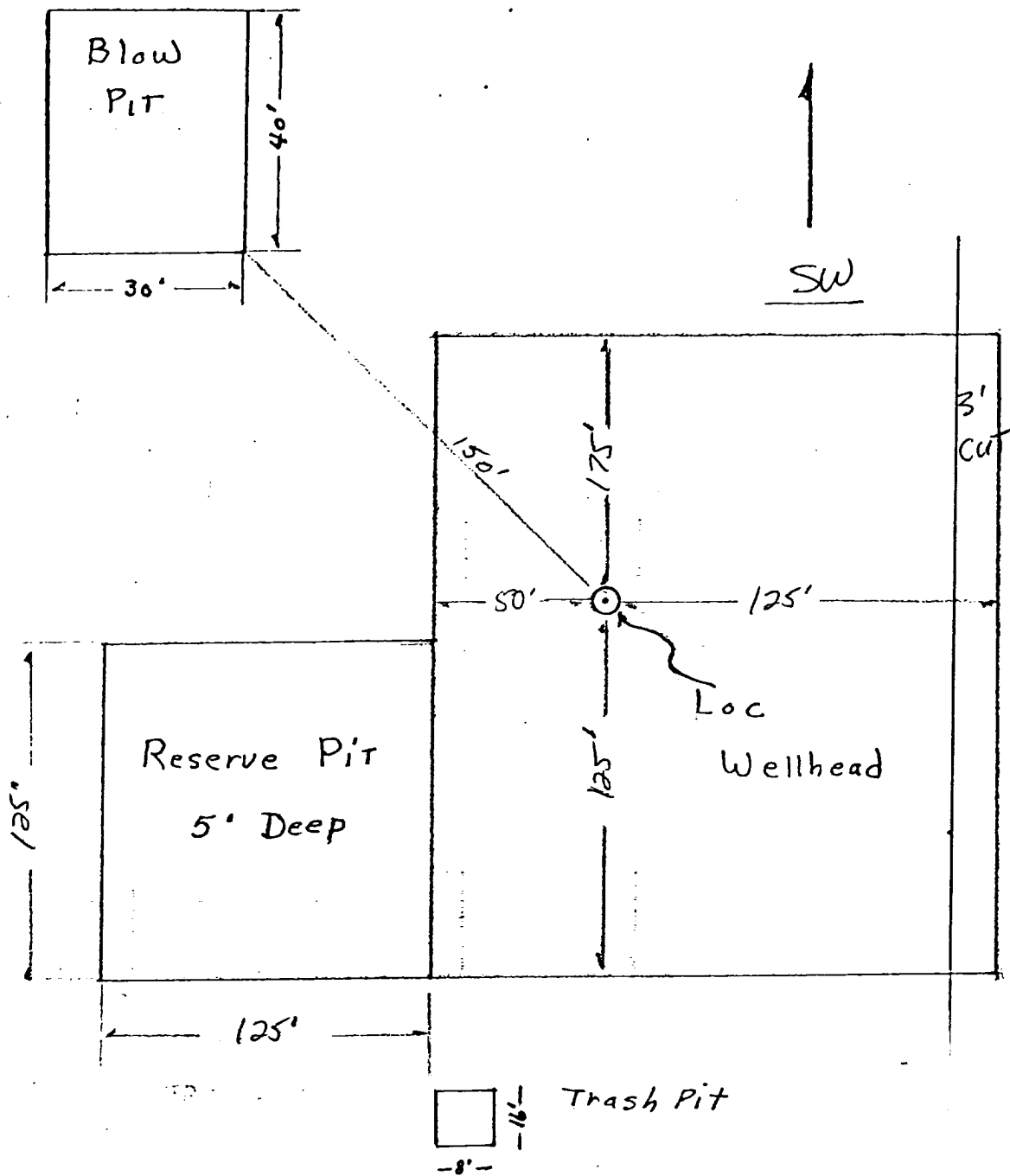
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the 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 March 25, 1980


R. W. Schroeder, District Superintendent



Vicinity Map for
AMOCO PRODUCTION CO. #4 JICARILLA APACHE TRIBAL 124
1650'FSL 1850'FEL Sec 23-T25N-R1W
RIO ARRIBA COUNTY, NEW MEXICO



Approximately 1.2 Acres

Amoco Production Company		SCALE: NONE
Drilling Location Specs		
JICARILLA APACHE TRIBAL 124 #4		DRG. NO.