

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  
B 830' FNL & 1780' FEL Section 3 T25N R5W  
At proposed prod. zone  
Same

6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
17 Miles NNE of Gobernador, New Mexico

16. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest dls. unit line, if any)  
830'

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.  
658'

21. ELEVATIONS (Show whether DE, RT, GR, etc.)  
6574' GL

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12-1/4"	8-5/8" (New)	24# K-55	300'
7-7/8"	5-1/2" (New)	15.5# K-55	5322'

Amoco proposes to drill the above dual well to further develop the Otero Chacra/Gonzales Mesaverde 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 to a gas sales contract.

10. ABOVE SPACE DESCRIBING PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed 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 By  
W. L. Peterson  
District Engineer  
DATE  
October 29, 1980

APPROVED  
(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY  
Bruce Wamsley  
DISTRICT ENGINEER  
DATE

30-C-34-22560

5. LEASE DESIGNATION AND SERIAL NO.  
Jicarilla Contract 146

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Jicarilla Contract 146

9. WELL NO.  
34

10. FIELD AND POOL, OR WELDCV  
Gonzales  
Otero Chacra/Mesaverde

11. SEC., T., R., N., OR BLK.  
AND SURVEY OF AREA  
R5W  
NW/4 NE/4 SECTION 3, T25N,

12. COUNTY OR PARISH  
Rio Arriba

13. STATE  
New Mexico

14. NO. OF ACRES IN LEASE  
2557.20

15. NO. OF ACRES ASSIGNED  
TO THIS WELL  
160 159.25

16. ROTARY OR CABLE TOOLS  
Rotary

17. APPROX. DATE WORK WILL START  
As soon as permitted

RECEIVED  
NOV 1980

U. S. GEOLOGICAL SURVEY

RECEIVED  
DEC 22 1980  
OIL CON. COM.  
DIST. 3

AMOCO

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

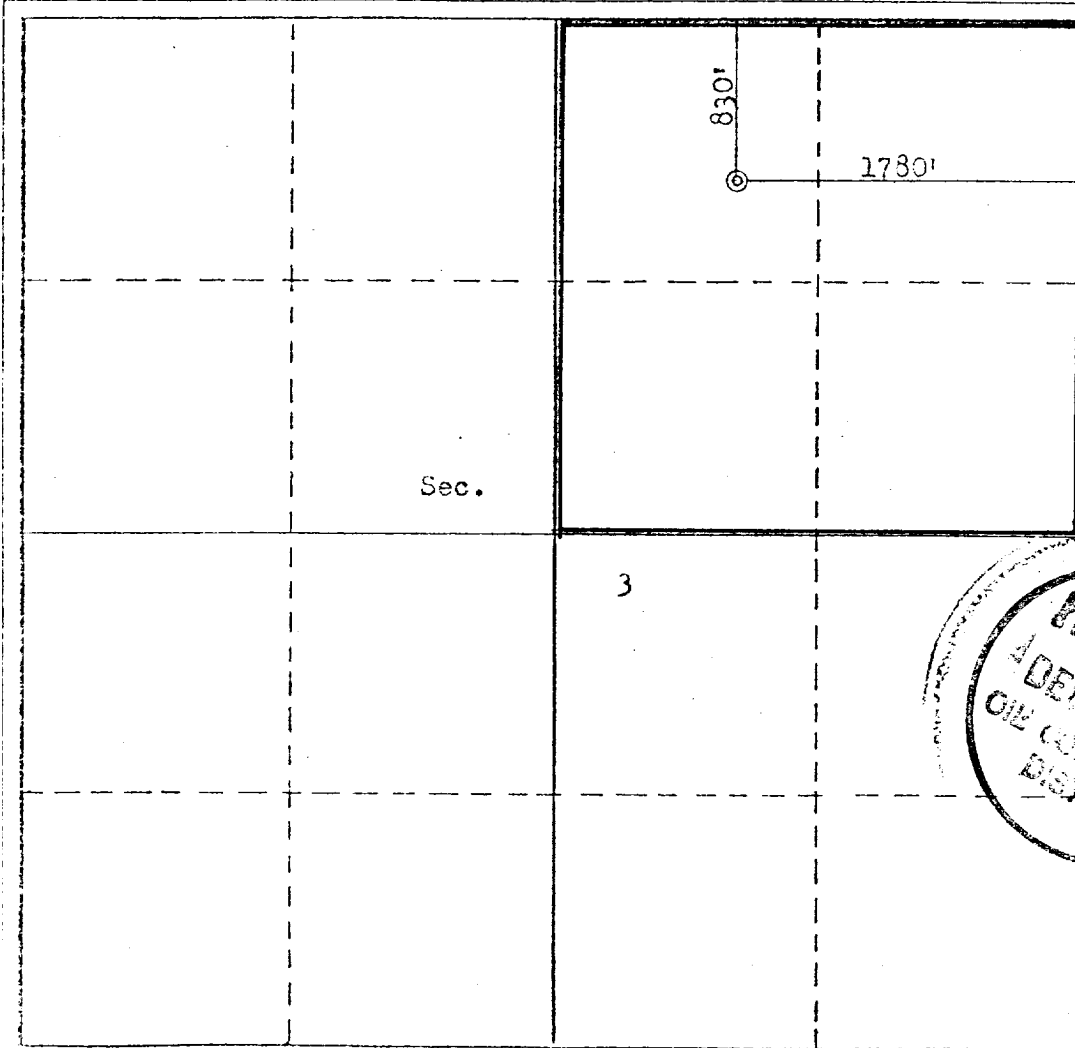
Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>JICARILLA CONTRACT 1146</b>		Well No. <b>34</b>
Unit Letter <b>B</b>	Section <b>3</b>	Township <b>25N</b>	Range <b>5W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>830</b> feet from the <b>North</b> line and <b>1780</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6574</b>	Producing Formation <b>Chacra/Mesaverde</b>		Pool <b>Otero Chacra Gonzales MV</b>	Dedicated Acreage: <b>160.159.25</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 \_\_\_\_\_

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.

*R. A. Downey*

Name  
**R.A. DOWNEY**

Position  
**DISTRICT ENGINEER**

Company  
**AMOCO PRODUCTION COMPANY**

Date  
**JUNE 12, 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  
**May 22, 1980**  
Registered Professional Engineer  
and/or Land Surveyor

*Fred B. Kier Jr.*  
**Fred B. Kier Jr.**

Certificate No.  
**3950**

SUPPLEMENTAL INFORMATION TO FORM 9-331C  
JICARILLA CONTRACT 146 No. 34  
830' FNL & 1780' FEL, SECTION 3, 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	2360 '	4227 '
Kirtland	2510 '	4077 '
Fruitland	2700 '	3887 '
Pictured Cliffs	2880 '	3707 '
Chacra (if present)	3771 '	2816 '
Mesaverde	Cliff House 4572 '	2015 '
	Point Lookout 5042 '	1545 '
Gallup	'	'
Dakota	'	'
TD	5322 '	1265 '

Estimated KB elevation: 6587 '

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:

IND-SP-GR

FDC-CNL-GR

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

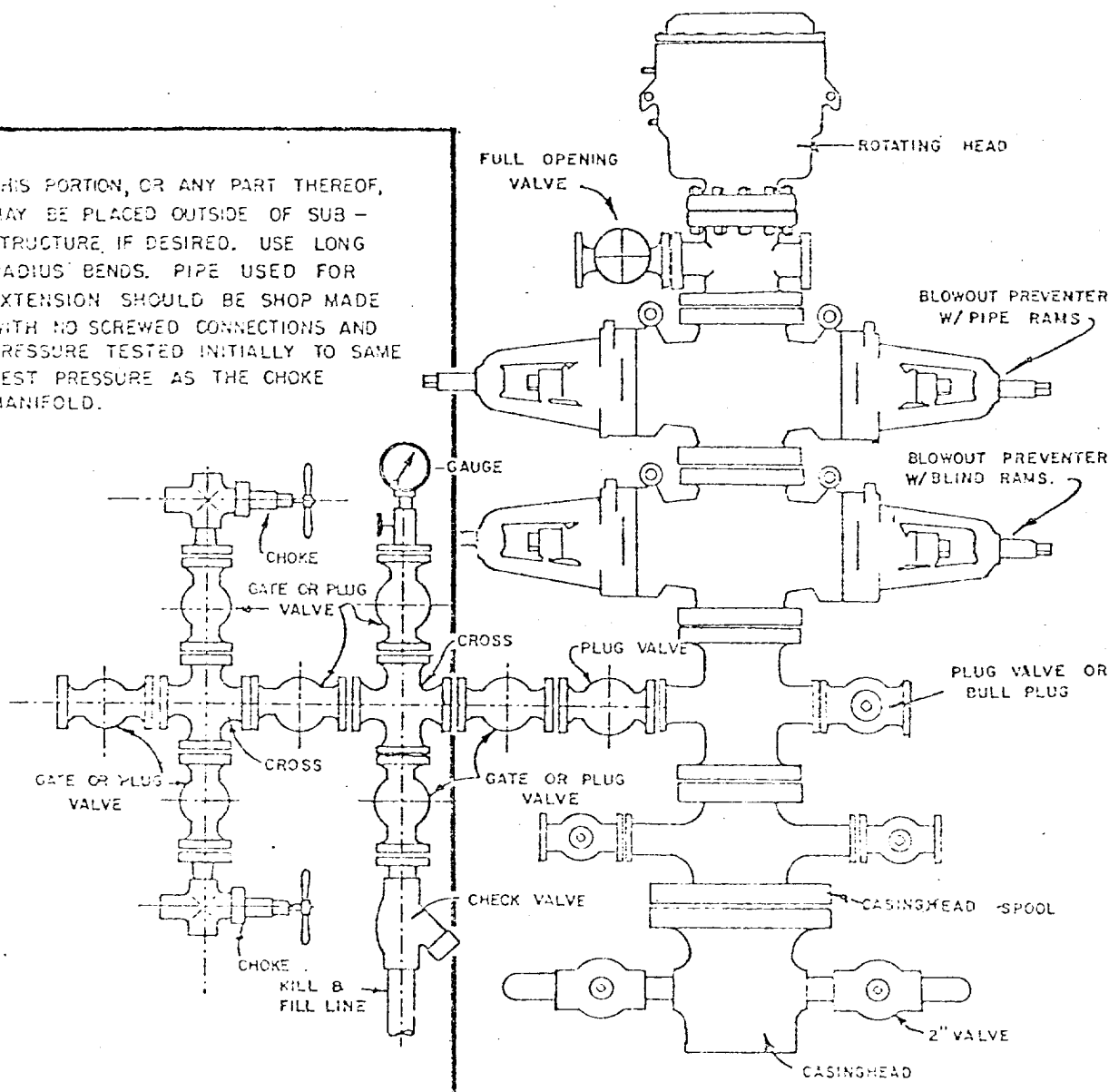
Operations will commence when permitted and last approximately 3 weeks.

Amoco's standard blowout prevention will be employed (see attached drawing).

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, 1959

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 146 NO. 34  
830' FNL & 1780' FEL, SECTION 3, T25N, R5W  
RIO ARRIBA COUNTY, NEW MEXICO

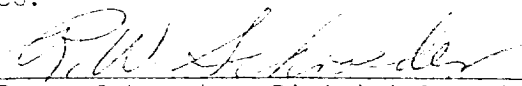
1. The attached topographic map shows the proposed route to the location.
2. It will not be necessary to build any access road.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the lease road map.
4. There is a 380-barrel tank and facilities located at Jicarilla Contract 146 Well No. 17, approximately 600 feet south.
5. Water will be hauled from Tapacito Water Hole.
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 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 a flat area, with a sandy loam soil; vegetation consists of sagebrush and native grasses.

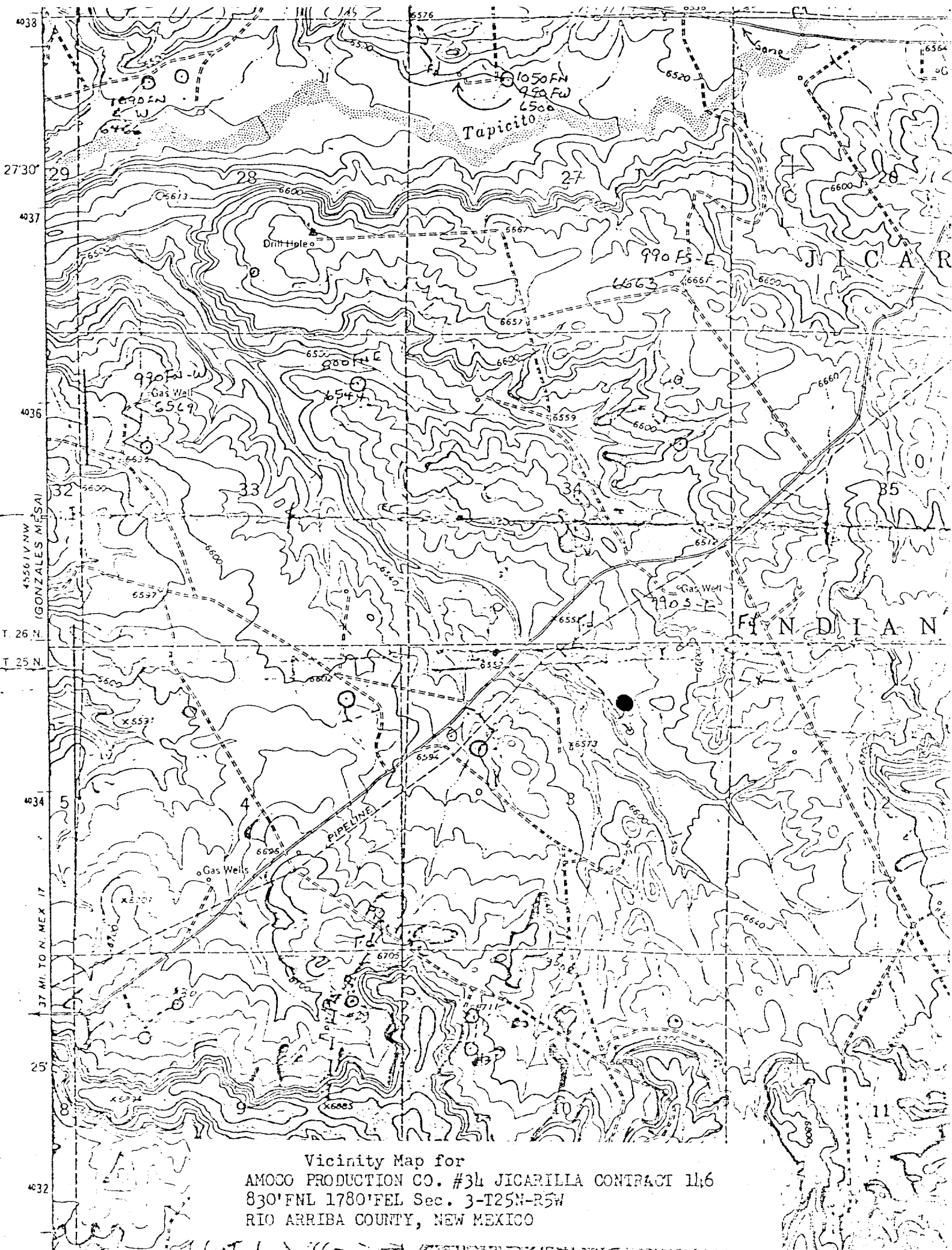
Representatives of the U. S. Geological Survey's Farmington Office and the Jicarilla Tribe's Dulce Office inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archeologist from San Juan College.

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

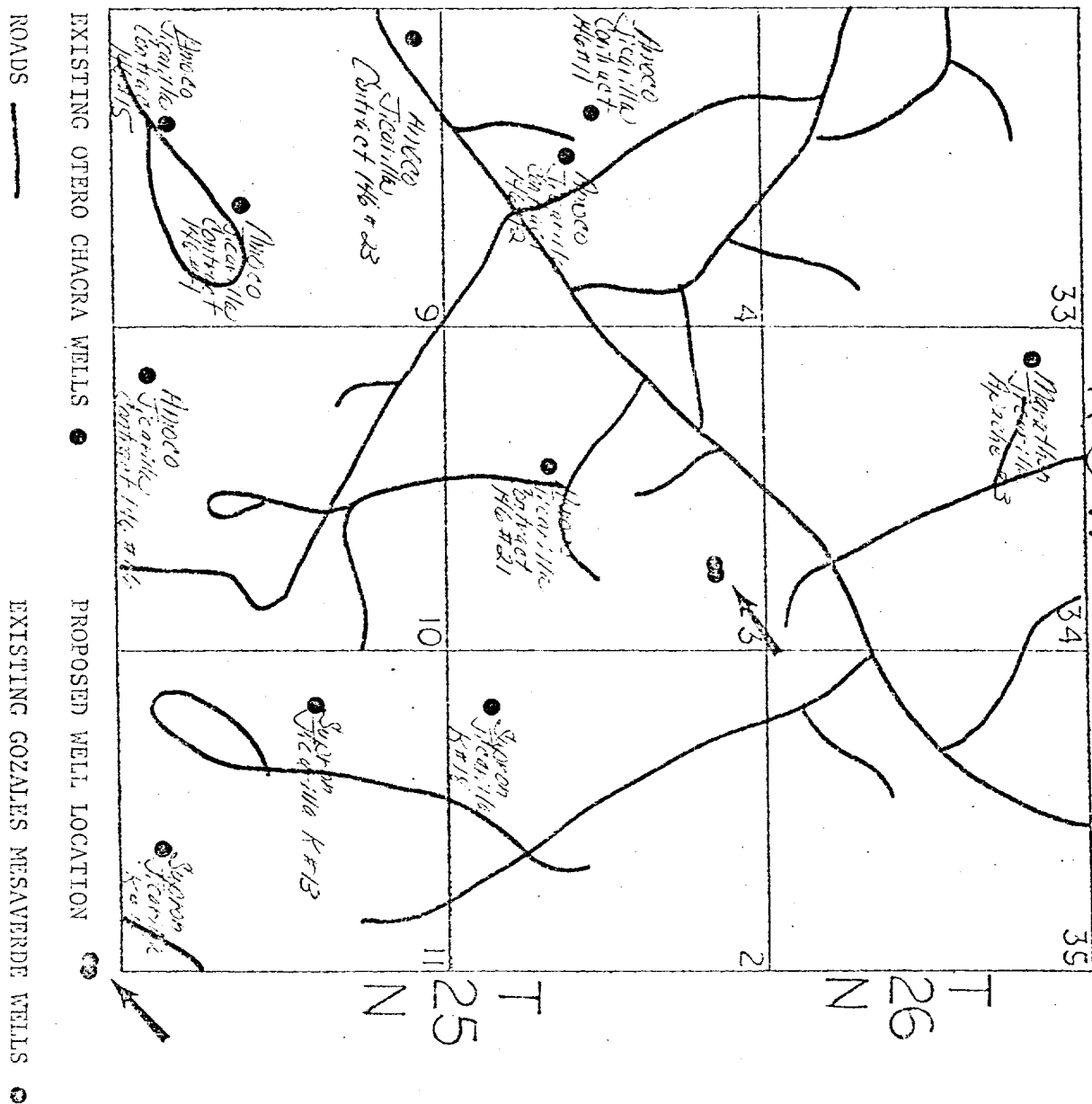
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the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

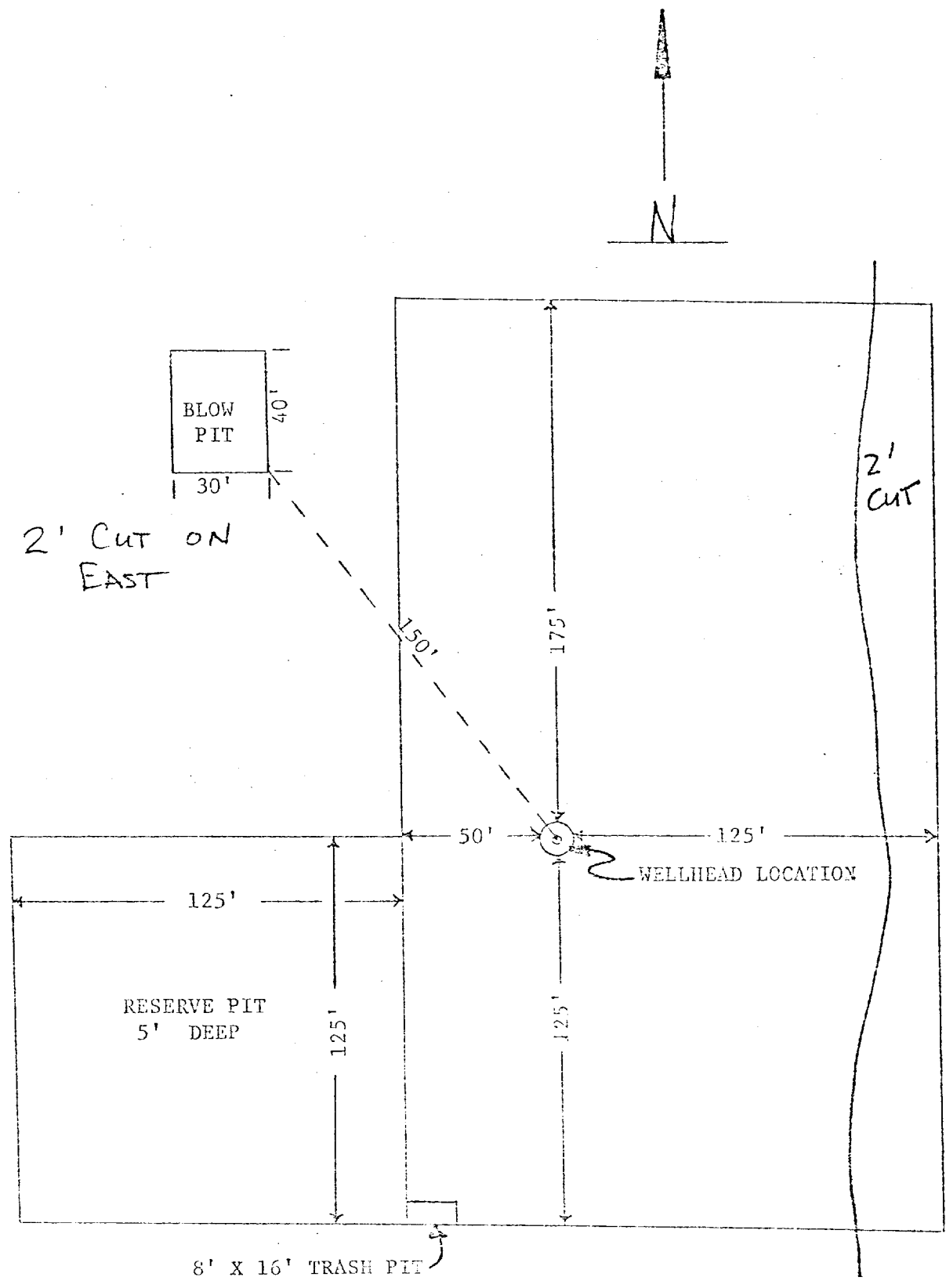
Date October 27, 1980

  
R. W. Schroeder, District Superintendent



Vicinity Map for  
AMOCO PRODUCTION CO. #34 JICARILLA CONTRACT 11,6  
830'FNL 1780'FEL Sec. 3-T25N-R5W  
RIO ARriba COUNTY, NEW MEXICO





APPROXIMATELY 1.2 ACRES

Amoco Production Company		SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS		
JICARILLA CONTRACT 146 No. 34		DRG. NO.