

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 ☒ OTHER ☐ SINGLE 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 surface  
1810' FNL and 1520' FWL, Section 32, T26N, R5W  
At proposed prod. zone  
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
17 miles North of Counselor, New Mexico

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)  
1520'

16. NO. OF ACRES IN LEASE  
2477.56

17. NO. OF ACRES ASSIGNED  
TO THIS WELL  
160 + 160

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.  
209

19. PROPOSED DEPTH  
5303'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
6583' GL

22. APPROX. DATE WORK WILL START\*  
As soon as permitted

30-039-22531

5. LEASE DESIGNATION AND SERIAL NO.  
Jicarilla Contract 155

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Jicarilla Contract 155

9. WELL NO.  
29

10. FIELD AND POOL, OR WILDCAT  
Gonzales Mesaverde  
Otero Chacra *Ext*

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA  
SE/4, NW/4, Section 32,  
T26N, R5W

12. COUNTY OR PARISH  
Rio Arriba

13. STATE  
New Mexico

23. PROPOSED CASING AND CEMENTING PROGRAM

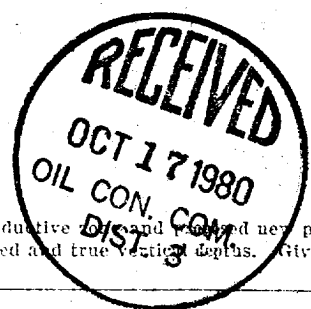
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" (New)	24# K-55	300'	300 sx Class "B" w/2% CaCl2-circ
7-7/8"	5-1/2" (New)	15.5# K-55	5303'	Stage 1: 355 sx Class "B" Neat-circ Stage 2: 555 sx CI B 65:35 POZ, 6% gel, 2# med tuf plug/sx and .8% FLA. Tail in w/100 sx CI B Neat-circ.

*This section is subject to review and approval pending to Section 290.*

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.

Set DV tool at 3930'.



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 W. J. Peterson TITLE District Engineer DATE October 3, 1980  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

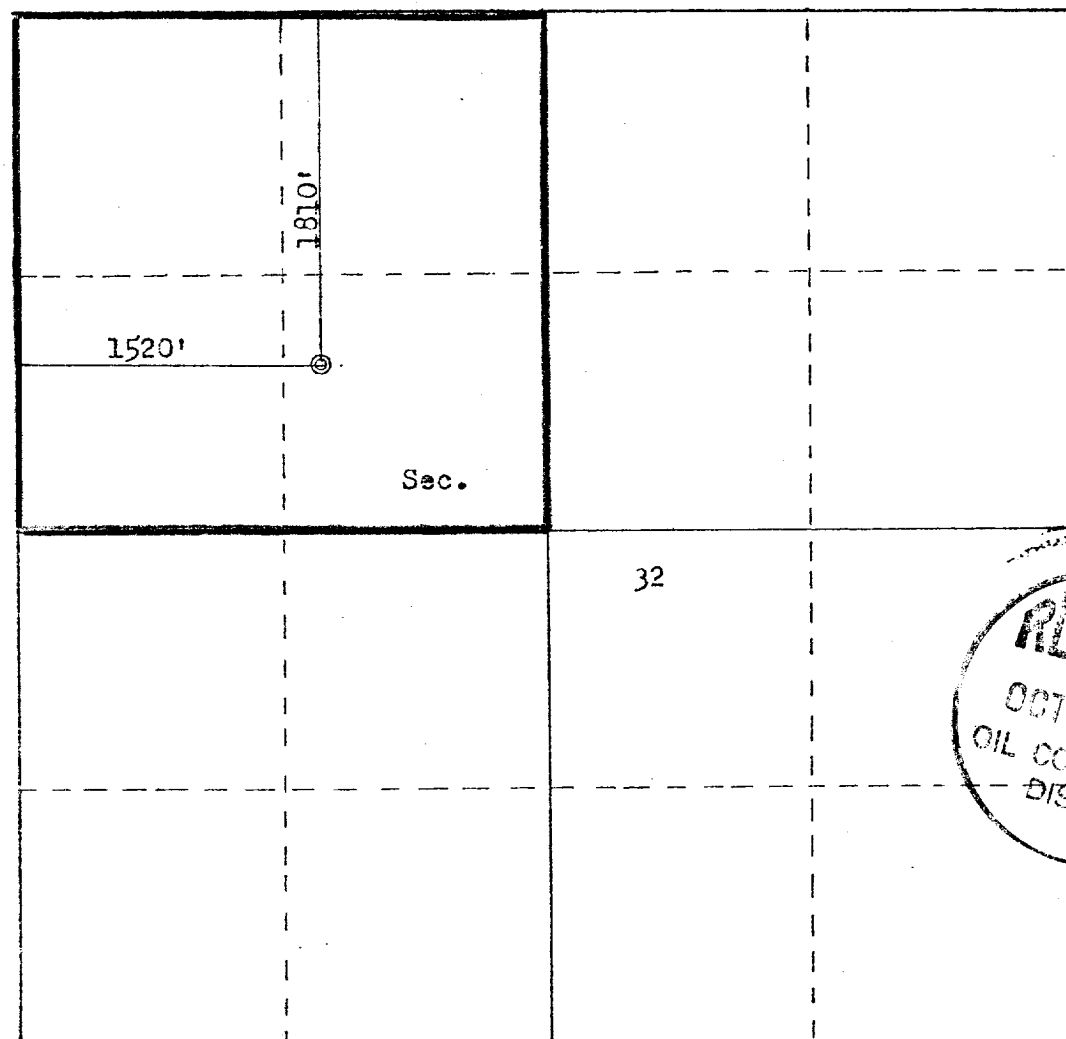
P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-78

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

Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>JICARILLA CONTRACT 155</b>		Well No. <b>29</b>
Unit Letter <b>F</b>	Section <b>32</b>	Township <b>26N</b>	Range <b>5W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>1810</b> feet from the <b>North</b> line and <b>1520</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6583</b>	Producing Formation <b>Chacra/Mesaverde</b>		Pool <b>Otero Chacra/Gonzales Mesaverde</b>		Dedicated Acreage: <b>160</b> Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.</p> <p>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).</p> <p>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?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes," type of consolidation _____</p> <p>If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>					



Scale: 1"=1000'

CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
<i>R.A. Downey</i>	
Name	R.A. DOWNEY
Position	DISTRICT ENGINEER
Company	AMOCO PRODUCTION COMPANY
Date	SEPTEMBER 8, 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	<i>Fred B. Kerr Jr.</i>
Certificate No.	3950
FRED B. KERR, JR.	

FORM 24-11

SUPPLEMENTAL INFORMATION TO FORM 9-331C

JICARILLA CONTRACT 155 NO. 29  
1810' FNL & 1520' FWL, SECTION 32, T26N, 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	2370'	4226'
Kirtland	2422'	4174'
Fruitland	2718'	3878'
Pictured Cliffs	2868'	3728'
Chacra (if present)	3752'	2844'
Mesaverde	Cliff House	2082'
	Point Lookout	1568'
Gallup	'	'
Dakota	'	'
TD	5303'	1293'

Estimated KB elevation: 6596'

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: Surf-TD  
FDC-CNL-GR: Surf-TD  
GR: 0-2000'

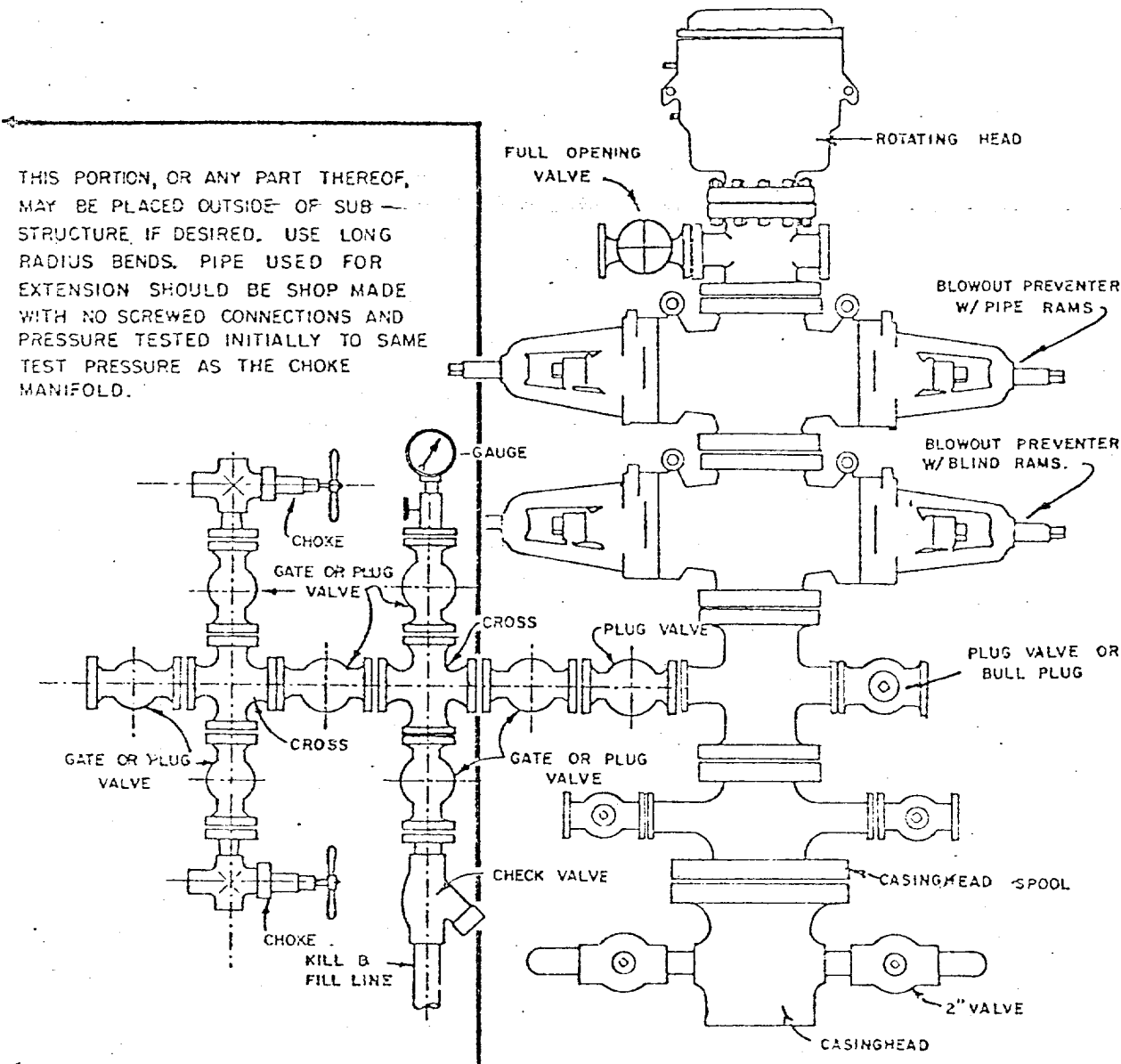
Completion design will be based on these logs. No cores or drill stem tests will be taken.

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.



## 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 CONTRACT 155 NO. 29  
1810' FNL & 1520' FWL, SECTION 32, T26N, 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 155 Well No. 23, approximately one-half mile south.
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 12-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 rough, broken ridge top, sloping to the northwest, with a sandy clay loam soil; vegetation consists of pinon and juniper trees and sagebrush, yucca and grasses.

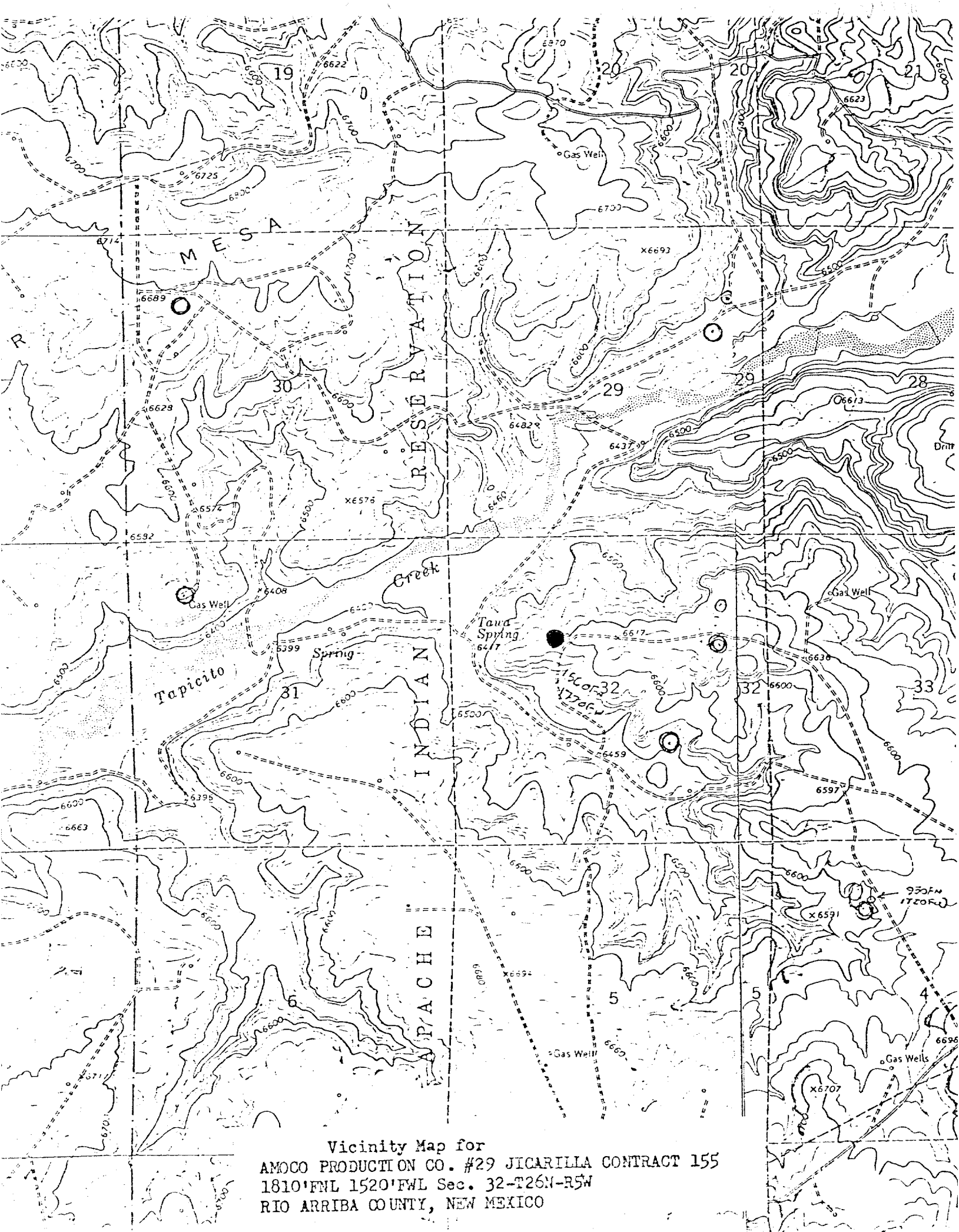
Representatives of the U. S. Geological Survey's Farmington Office and the Jicarilla Tribe's Dulce Office inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.

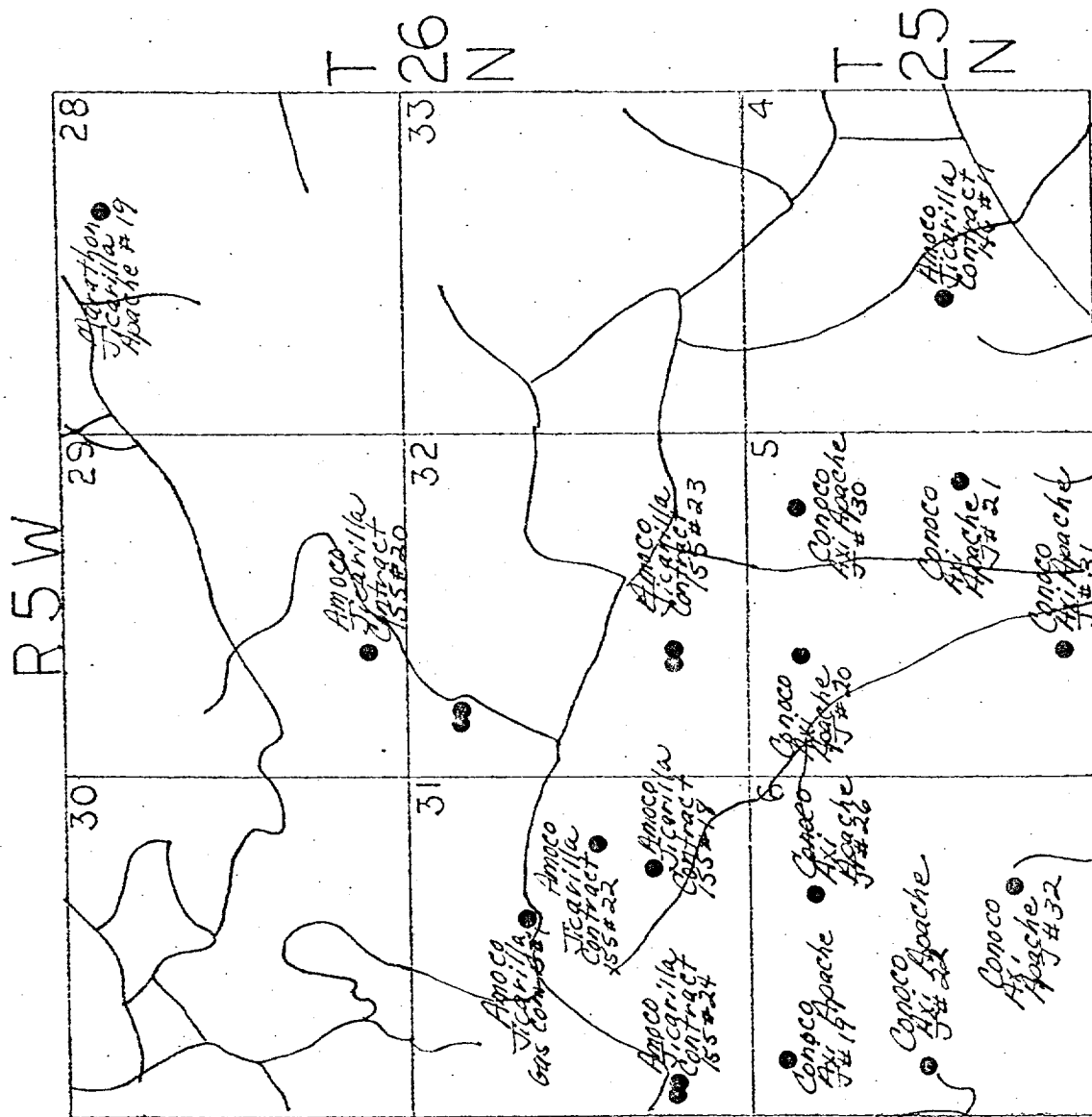
12. Operator's Representative: R. W. Schroeder  
Phone: Office: 505-325-8841; Home: 505-325-6164  
Address: 501 Airport Drive, Farmington, NM 87401

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 September 30, 1980

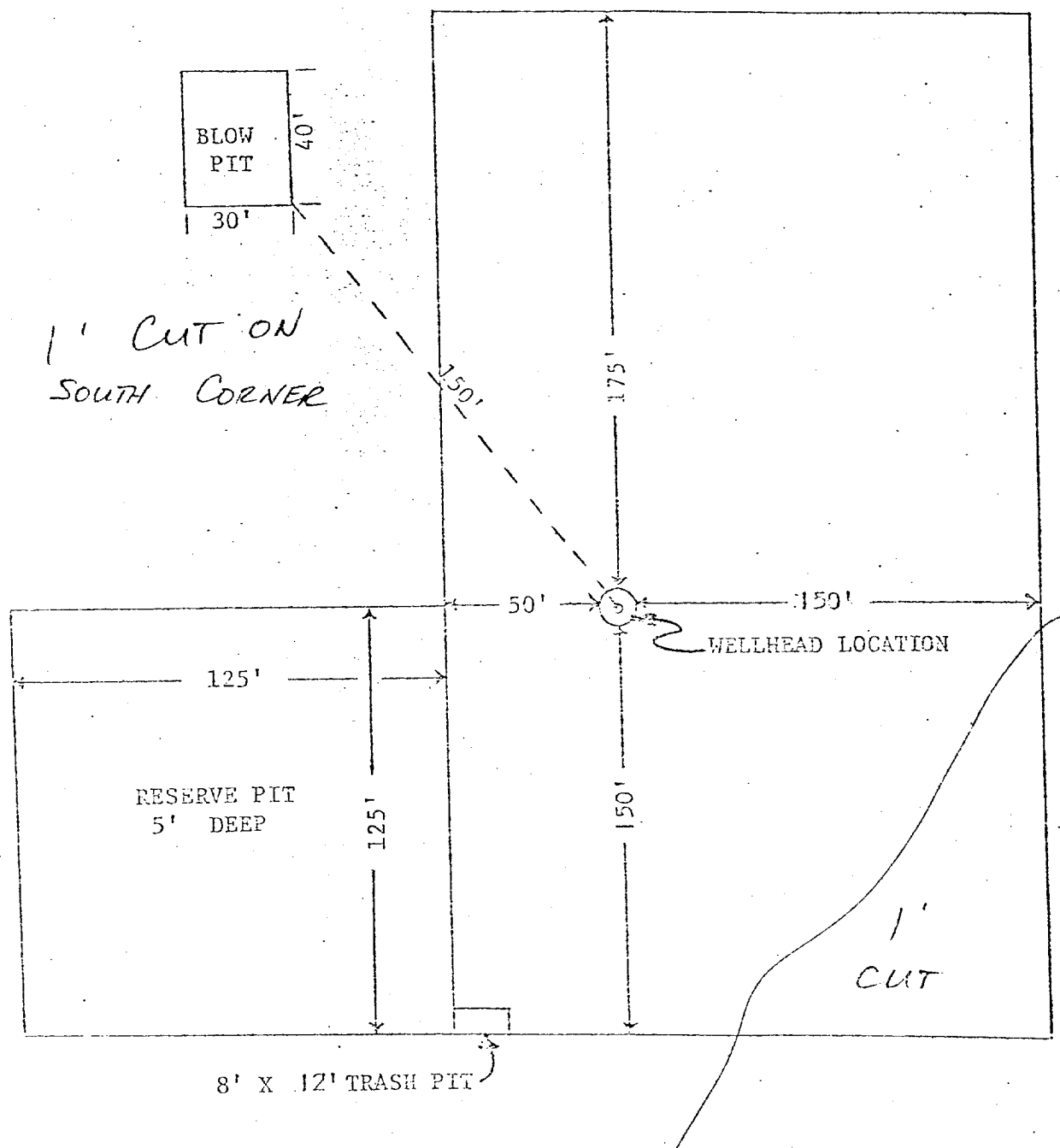
  
R. W. Schroeder, District Superintendent





- EXISTING OTERO CHACRA WELLS
- PROPOSED WELL LOCATION
- EXISTING GONZALES MESAVERDE WELLS

NE



APPROXIMATELY 1.2 ACRES

Amoco Production Company

DRILLING LOCATION SPECIFICATIONS

JICARILLA CONTRACT 155 #29

SCALE: 1"=50'

DRG.  
NO.