

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-275-27

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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.
28
10. FIELD AND POOL OR WILDCAT
Gonzales Mesaverde
Otero Chacra
11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
NW/4, NW/4, Section 31,
T26N, R5W
12. COUNTY OR PARISH
Rio Arriba
13. STATE
New Mexico

a. 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
1080' FNL and 920' FWL, Section 31, T26N, R5W
At proposed prod. zone
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
16-1/2 miles North of Counselor, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any)
920'

16. NO. OF ACRES IN LEASE
2477.56

17. NO. OF ACRES ASSIGNED TO THIS WELL
159.40 + 159.40 = 318.80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
130'

19. PROPOSED DEPTH
5315'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6594' GL

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# K-55	300'	300x Class "B" w/2% CaCl2-circ
7-7/8"	5-1/2" (New)	15.5# K-55	5315'	Stage 1: 360 sx Class "B" Neat-circ Stage 2: 550 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.

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.

Set DV tool at 3900'.

The gas from this well is not dedicated to a gas sales contract.



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.

SIGNED W. L. Peterson TITLE District Engineer DATE October 3, 1980

(This space for Federal or State use)
APPROVED AS AMENDED
OCT 16 1980
James F. Sims
for JAMES F. SIMS
DISTRICT ENGINEER

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____ DATE _____

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.

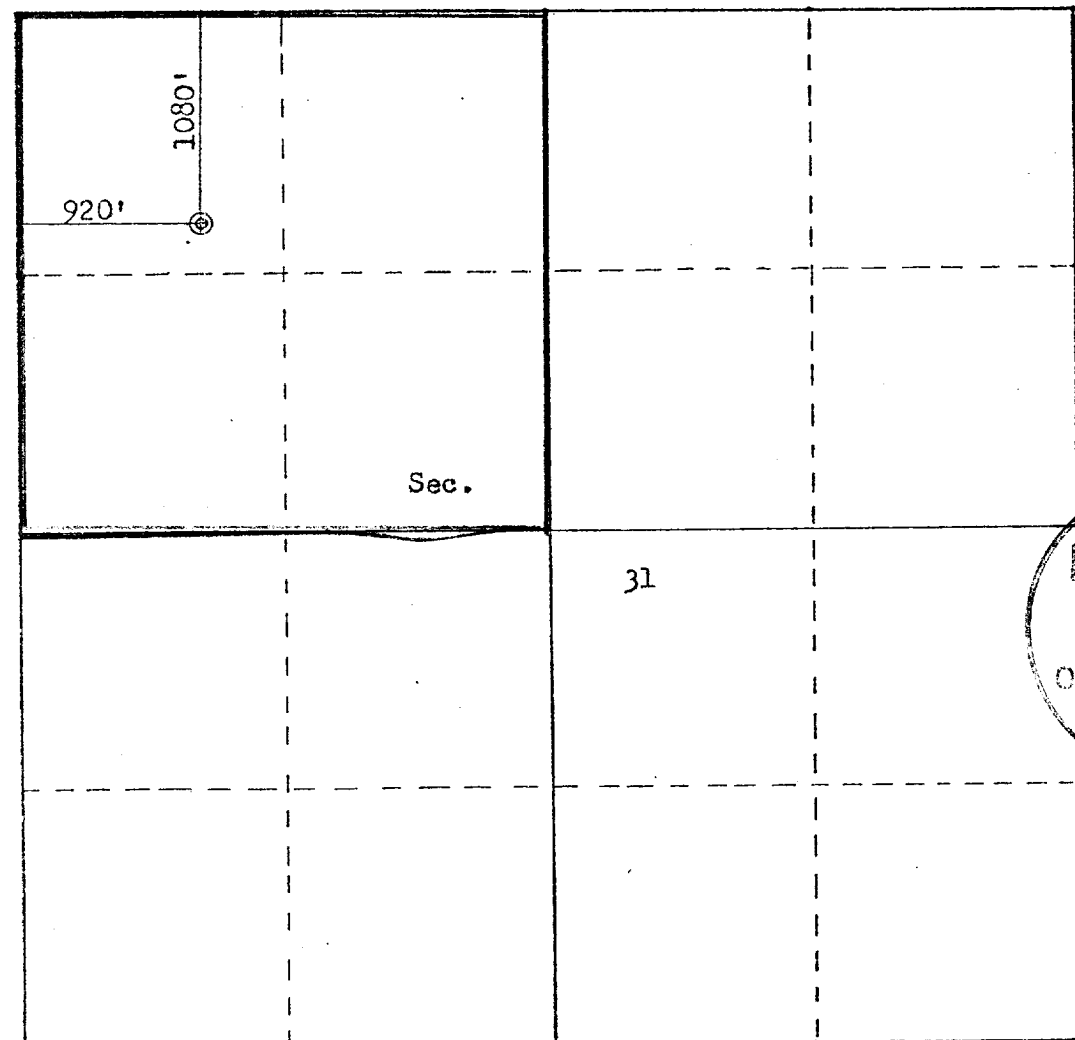
Operator AMOCO PRODUCTION COMPANY		Lease JICARILLA CONTRACT 155		Well No. 28
Unit Letter D	Section 31	Township 26N	Range 5W	County Rio Arriba
Actual Footage Location of Well: 1080 feet from the North line and 920 feet from the West line				
Ground Level Elev: 6594	Producing Formation Chacra/ Mesaverde	Pool Otero Chacra/Gonzales Mesaverde	Dedicated Acreage: 159.40-160 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.



Scale: 1"=1000'

CERTIFICATION
<i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>
<i>R. A. Downey</i>
Name R. A. DOWNEY
Position DISTRICT ENGINEER
Company AMOCO PRODUCTION COMPANY
Date SEPTEMBER 8, 1980
<i>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.</i>
Date Surveyed July 29, 1980
Registered Professional Engineer and Land Surveyor <i>Fred B. Kerr Jr.</i>
Certificate No. 3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C
 JICARILLA CONTRACT 155 NO. 28
 1080' FNL & 920' FWL, SECTION 31, 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	2360'	4247'
Kirtland	2494'	4113'
Fruitland	2666'	3941'
Pictured Cliffs	2866'	3741'
Chacra (if present)	3764'	2843'
Mesaverde	Cliff House	4563'
	Point Lookout	4982'
Gallup	'	'
Dakota	'	'
TD	5315'	1292'

Estimated KB elevation: 6607'

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'

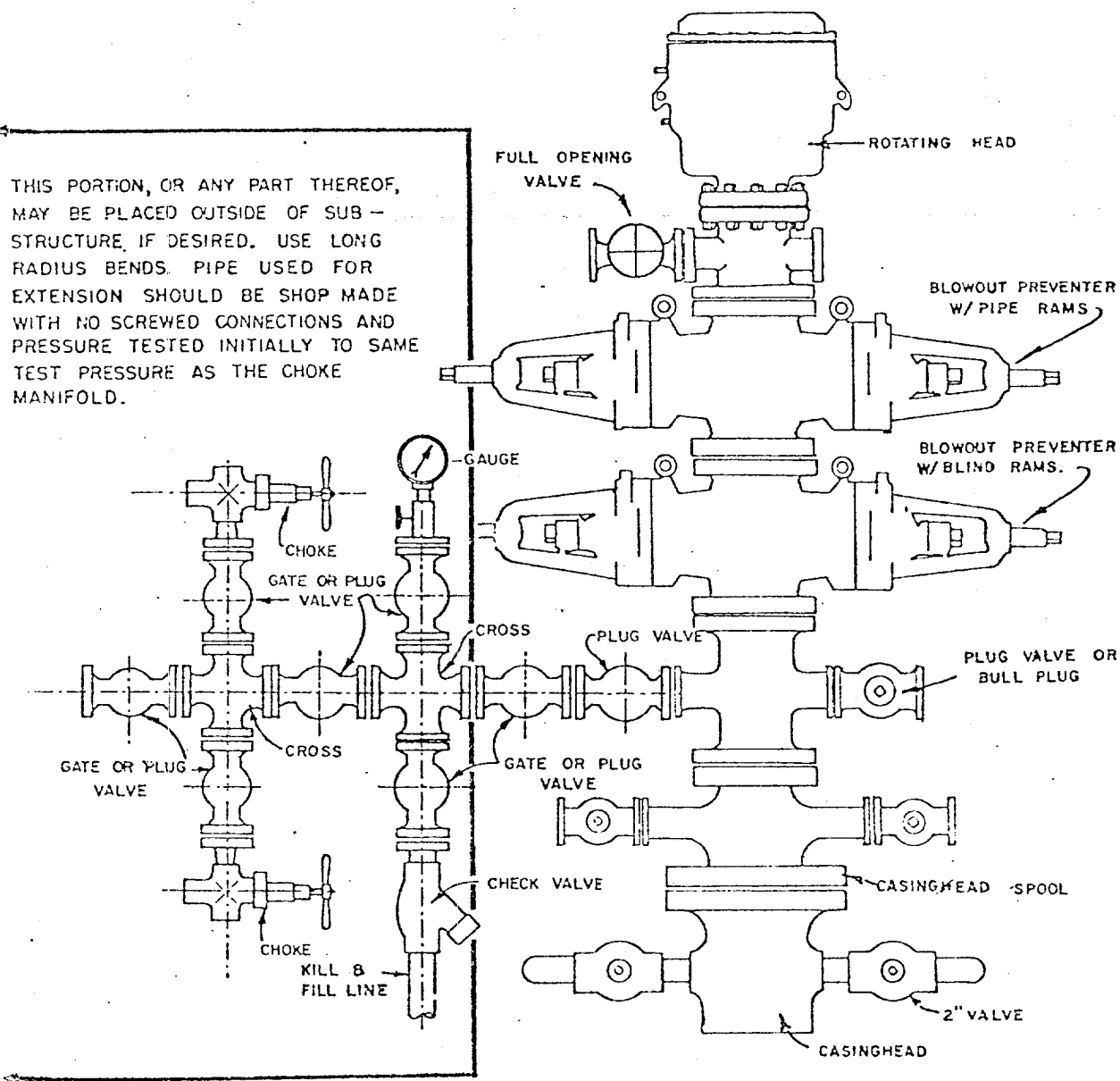
Completion design will be based on these logs. No cores or drill stem tests will be taken.

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. 28
1080' FNL & 920' FWL, SECTION 31, 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. 22, approximately three-fourths mile southeast.
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 4-foot cut will be made on north corner.
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 mesa top rim over Tapacito Creek with southwesterly drainage, alluvial surface deposits, and sandstone outcrops, with a sandy clay loam soil; vegetation consists of pinon and juniper, sagebrush and native grasses.

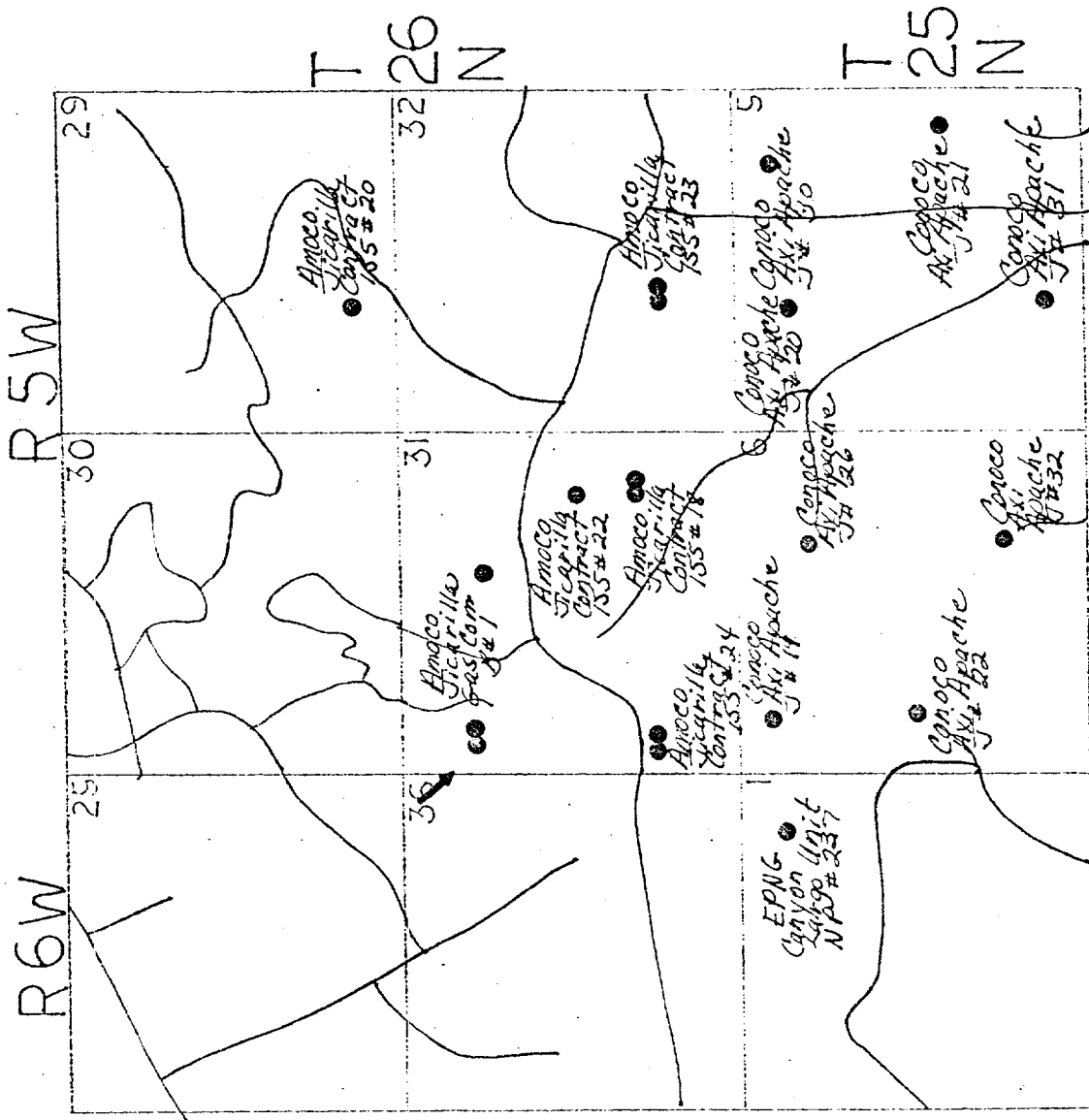
Representatives of the U. S. Geological Survey's Farmington Office and the Jicarilla Tribe's Dulce Office inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.

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 October 1, 1980


R. W. Schroeder, District Superintendent

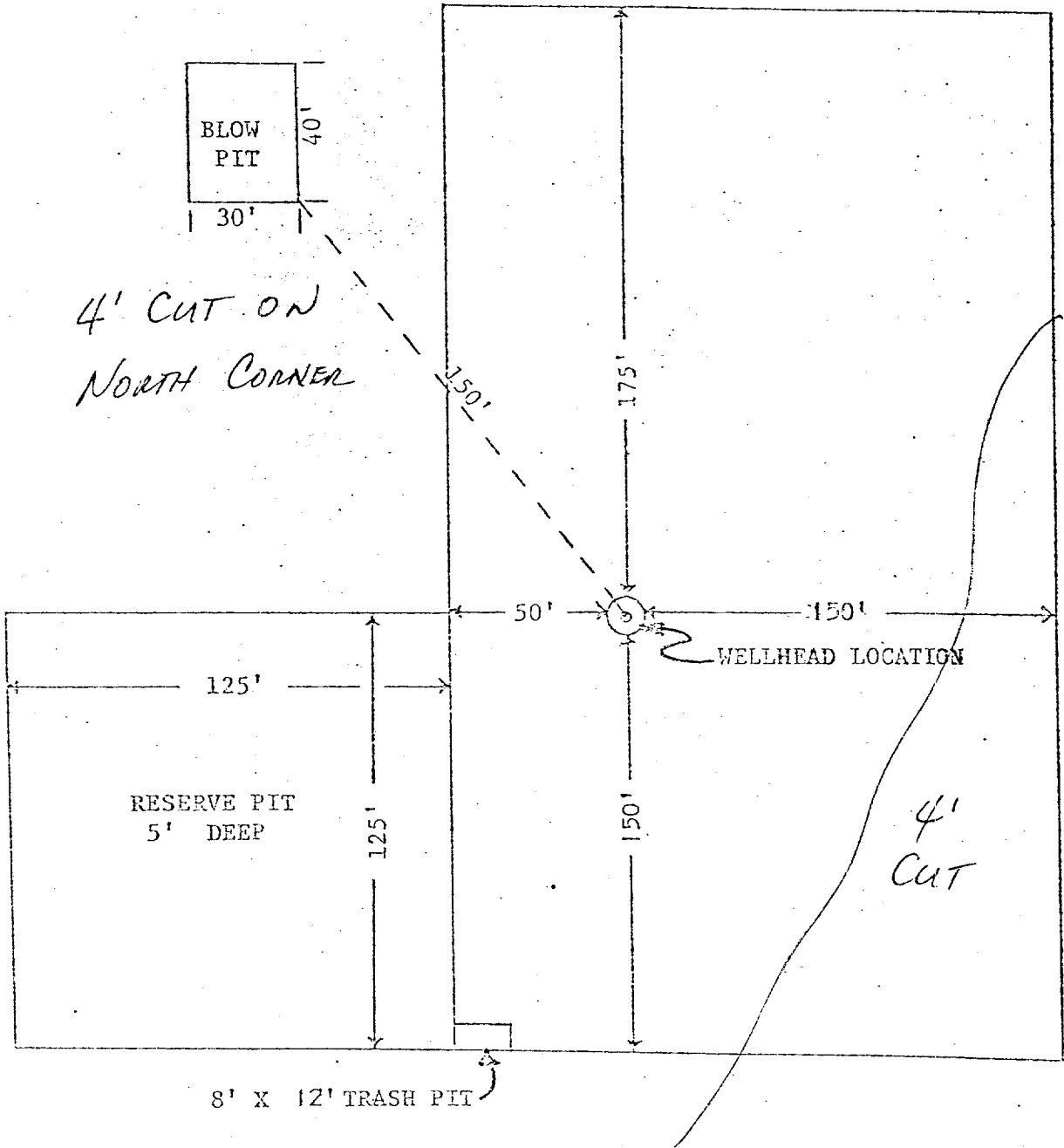
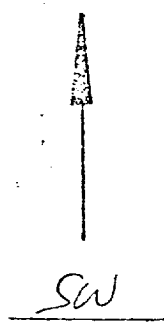


● PROPOSED WELL LOCATION ●

● EXISTING OTERO CHACRA WELLS

● EXISTING GONZALES MESAVERDE WELLS

~ ROADS



APPROXIMATELY 1.2 ACRES

Amoco Production Company	SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS	
JICARILLA CONTRACT 155 #28	DRG. NO.