

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. 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 146	
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache	
3. ADDRESS OF OPERATOR 501 Airport Drive, Farmington, New Mexico 87401		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 870' FEL and 840' FEL, Section 9, T25N, R5W At proposed prod. zone		8. FARM OR LEASE NAME Jicarilla Contract 146	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE Same 15-1/2 miles North Northeast of Counselor, New Mexico		9. WELL NO. 29	
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest deep unit line, if any) 840'		10. FIELD AND POOL, OR WILDCAT AND SURVEY OR AREA Otero Chacra/ Blanco Pictured Cliffs	
16. NO. OF ACRES IN LEASE 2557.23		11. SEC., T., R., N., OR ECK. AND SURVEY OR AREA NE/4, NE/4, Section 9 T25N, R5W	
17. NO. OF ACRES ASSIGNED TO THIS WELL 160 + 160		12. COUNTY OR PARISH Rio Arriba	
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR ABANDONED, ON THIS LEASE, FT. 1976'		13. STATE New Mexico	
19. PROPOSED DEPTH 3953'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DE, RT, GR, etc.) 6743' 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	DEPTH - FEET	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)	15.5# K-55	3953'	Stage 1-190 sx Class "B" Neat-circ Stage 2-520 sx Class "B" 50:50 POZ, 6% gel, 2# med tuf plug/sx, and 0.8% FLA. Tail in w/70 sx Class "B" Neat-circ.

Amoco proposes to drill this dual well to further develop the Otero Chacra/Blanco Pictured Cliffs 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 NGL-6 for the application to drill and a multi-point surface use plan are attached.

The gas from this well is dedicated to El Paso Natural Gas Co.



18. AT OLD WELLS PROVIDE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present production zone. If proposal is to drill or deepen directionally, give pertinent data on sub-surface locations and measured and true vertical depths. Give blowout prevention program, if any.

SIGNED: R.A. Doreau TITLE: District Engineer DATE: July 18, 1980
(This space for Federal or State office use)

PERMIT NO. Burn Wanship APPROVAL DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____
(CONDITIONS OF APPROVAL, IF ANY)

AMOCO

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

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

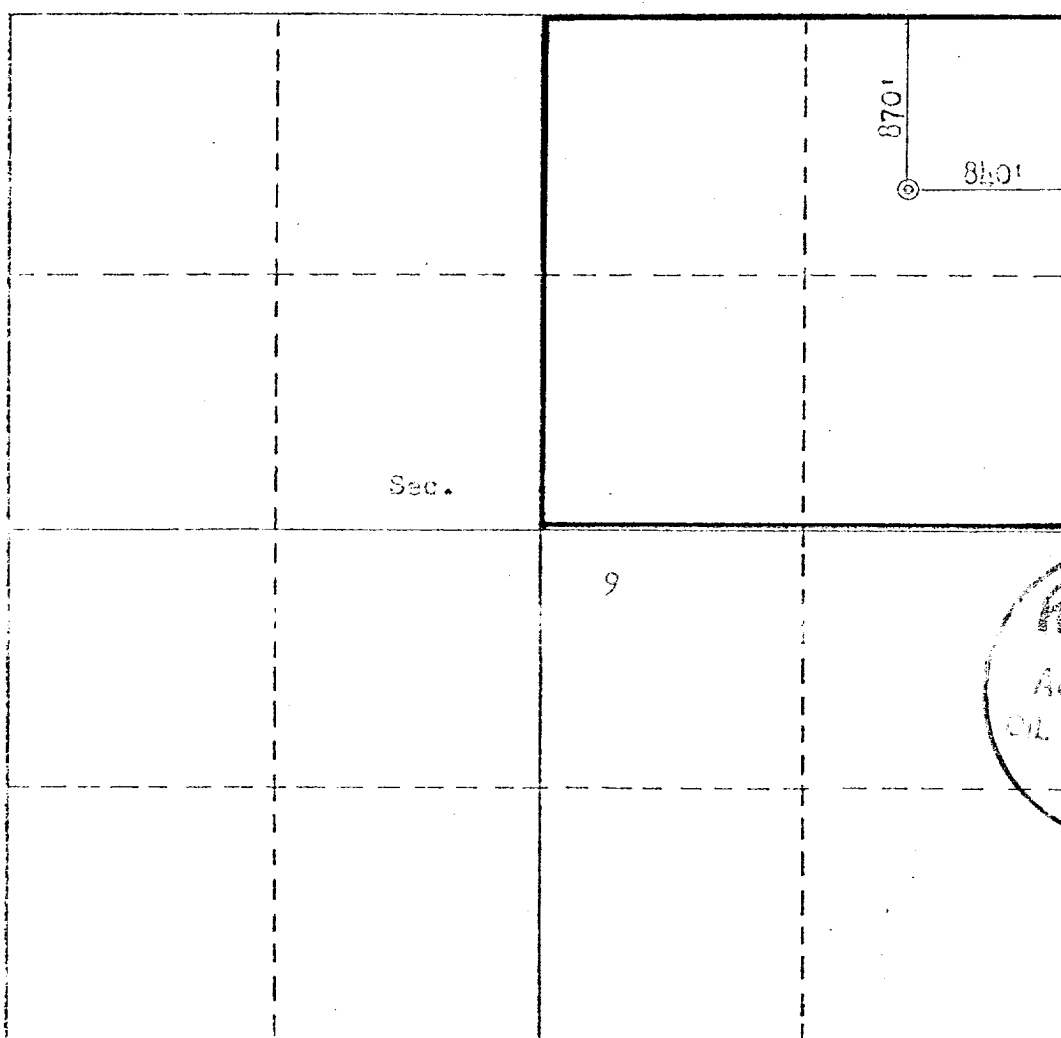
Operator AMOCO PRODUCTION COMPANY		Lease JICARILLA CONTRACT 146		Well No. 29	
Unit Letter A	Section 9	Township 25N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 870 feet from the North line and 840 feet from the East line					
Ground Level Elev. 6743	Producing Formation Chacra/PINEDO CLIFFS		Pool Otero Chacra/SC BLANCO PC	Dedicated Acreage: 150 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
MAY 28, 1980

Fred B. Kerr, Jr.
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 28, 1980
Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr, Jr.
Certificate No.
3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C

JICARILLA CONTRACT 146 NO. 29
870' FNL & 840' FEL, SECTION 9, T5N, 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	2403 '	+4353 '
Kirtland	2608 '	+4148 '
Fruitland	2858 '	+3898 '
Pictured Cliffs	2973 '	+3783 '
Chacra (if present)	3868 '	+2888 '
Mesaverde [Cliff House	'	'
Point Lookout	'	'
Gallup	'	'
Dakota	'	'
TD	3953 '	+2803 '

Estimated KB elevation: 6756 ,

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	Special Coal-Logging Program
FDC-CNL-GR	over Fruitland interval.

Completion design will be based on these logs. 4 rubber sleeve cores will be taken. No drill stem tests will be taken.

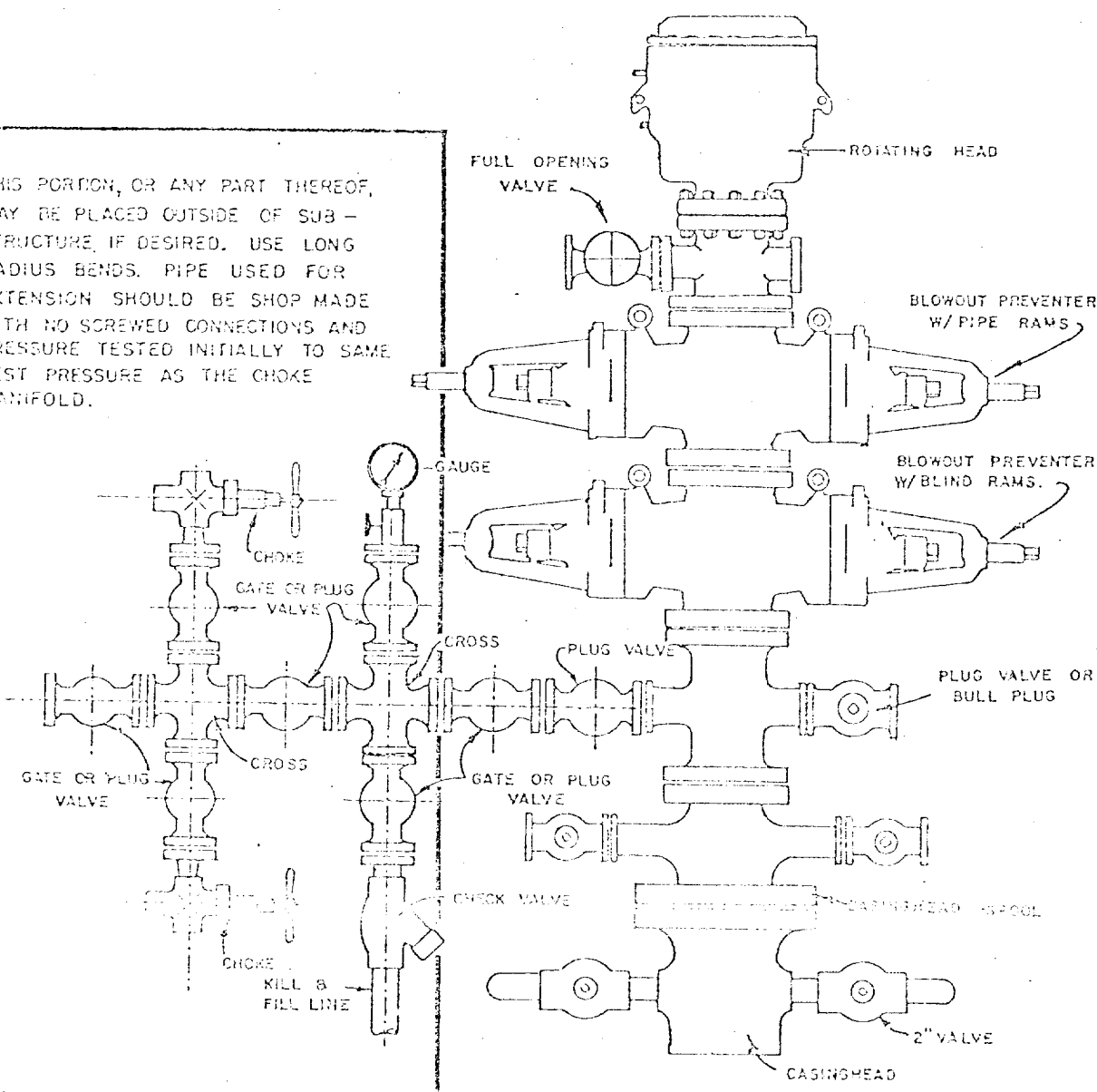
Operations will commence when permitted and last approximately 3 weeks.

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. 29
870' FNL & 840' FEL, SECTION 9, T5N, R5W
RIO ARriba COUNTY, NEW MEXICO

1. The attached topographic map shows the proposed route to the location.
2. An existing road three-eighths mile in length will be improved for an 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 300-barrel tank and facilities located at Jicarilla Contract 146 Well No. 22E, 2000 feet east.
5. Water will be hauled from Tapacito Water holes.
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 6-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 sloping area with sandy loam-type soil; vegetation consists of sagebrush, native grasses and juniper trees.

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

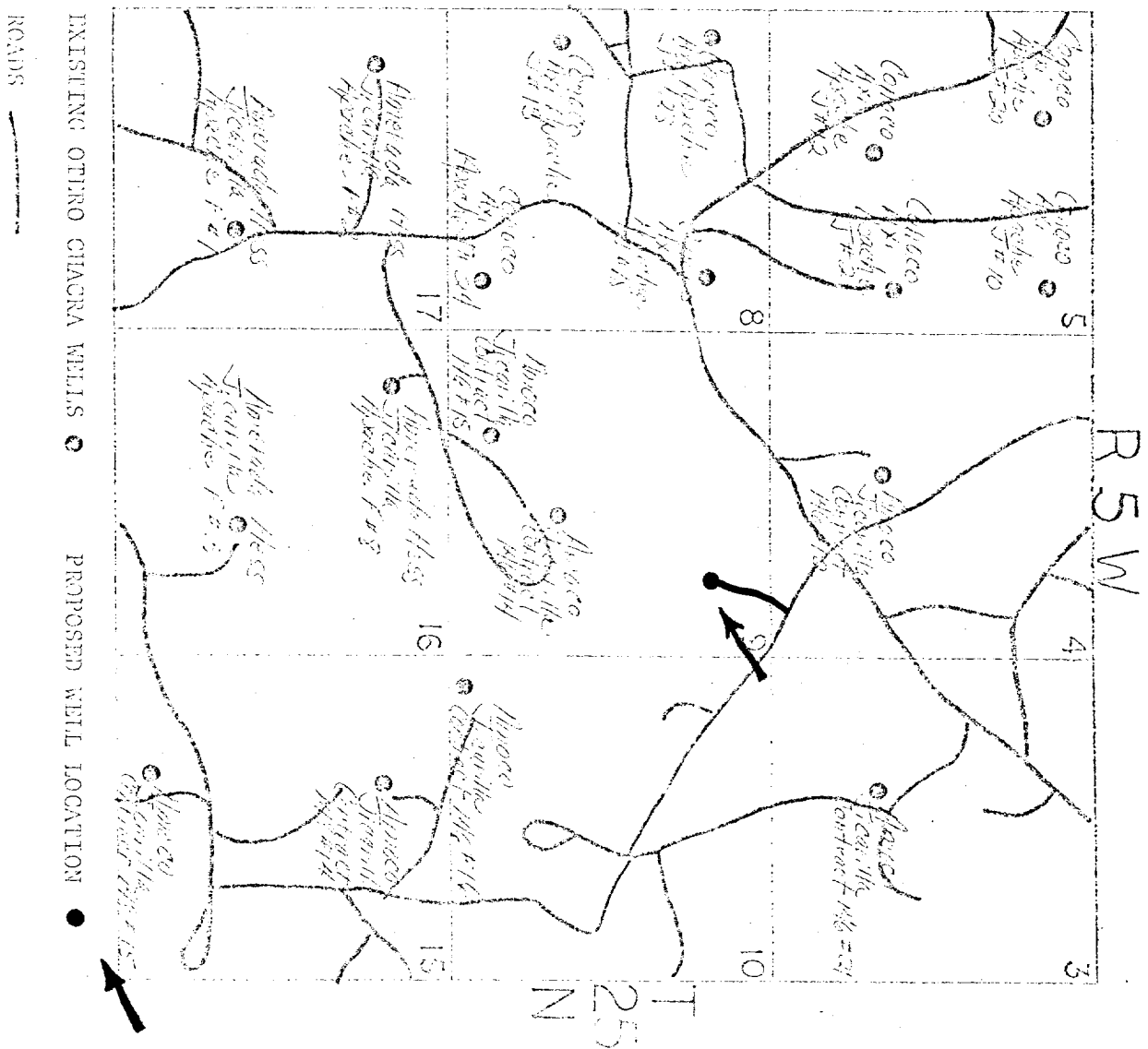
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the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

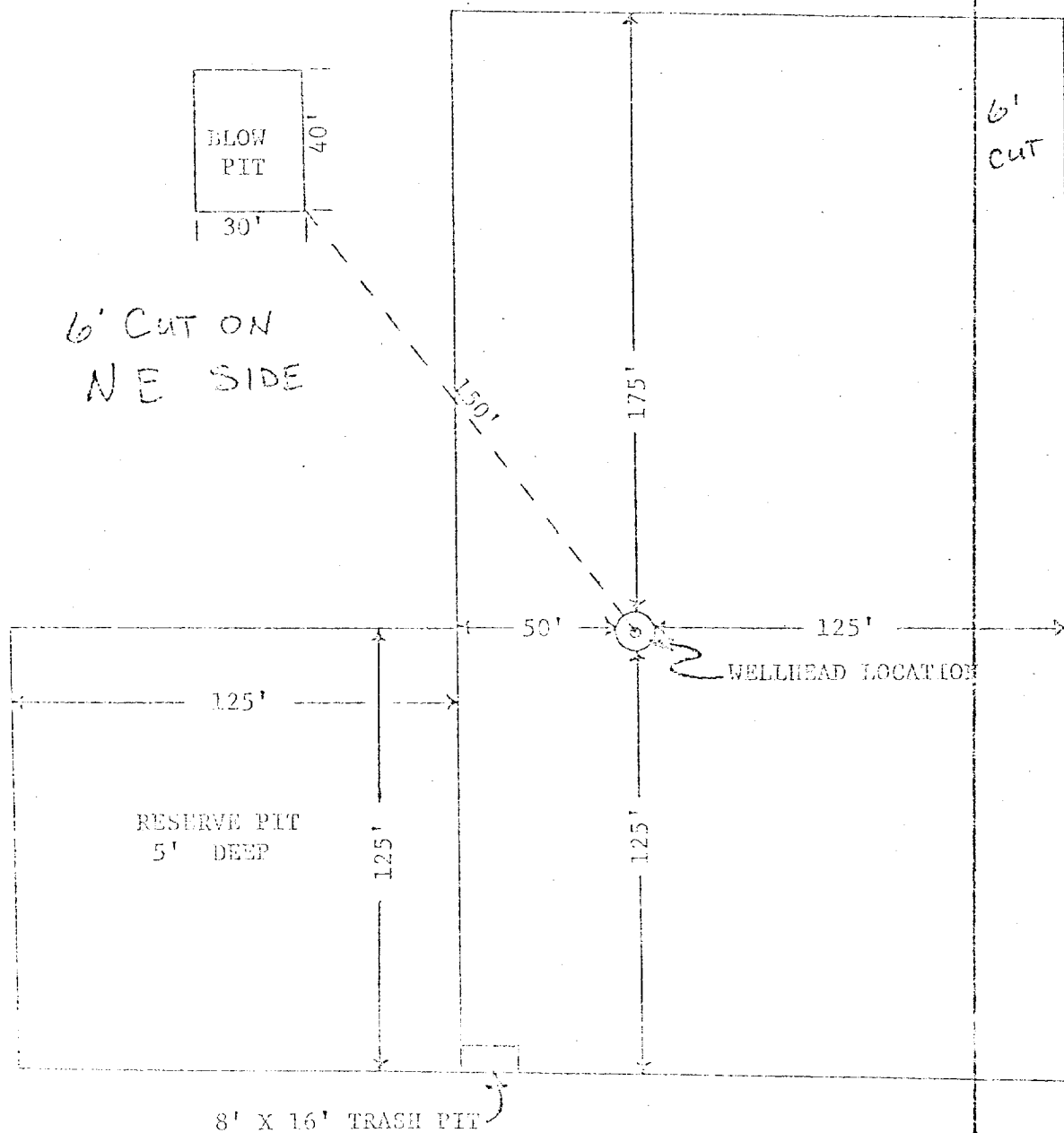
Date June 25, 1980


R. W. Schroeder, District Superintendent



Vicinity Map for
ANOCO PRODUCTION COMPANY #29 JICARILLA CONTRACT 146
870' PNL 840' FEL Sec..9-T25N-R5W
RIO ARriba COUNTY, NEW MEXICO





APPROXIMATELY 1.2 ACRES

Amoco Production Company		SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS		
JOCILLA CONTRACT 146 No. 29		DWS. RWS.