

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

M 940' FSL and 1020' FWL, Section 13, T25N, R5W
At proposed prod. zone

Same

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

14 miles North Northeast of Counselor, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

940'

16. NO. OF ACRES IN LEASE

2560

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1813'

19. PROPOSED DEPTH

5665'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160 + 160 + 160

20. ROTARY OR CABLE TOOLS

Rotary

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

6918' 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)	15.5# K-55	5665'	Stage 1: 400 sx Cl B Neat-circ
This action is subject to administrative appeal pursuant to 30 CFR 290.				Stage 2: 735 sx Cl B 50:50 POZ, 6% gel, 2# med tuf plug/sx and 0.8% FLA. Tail in w/100 sx of Class "B" Neat-circ. Cement basket at 4185'. DV tool at 4135'.

Amoco proposes to drill this dual well to further develop the Otero Chacra/Mesaverde/Pictured Cliffs reserves. Production from the Chacra and Mesaverde formations will be commingled down hole and dualled with the Pictured Cliffs. 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.

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 prevention program, if any.



SIGNED

R. A. Lowmyer

TITLE District Engineer

DATE August 6, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

Bruce W. ...

TITLE

DATE

CONDITIONS OF APPROVAL IF ANY

ch 3-24

AMOCO

OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-102
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

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

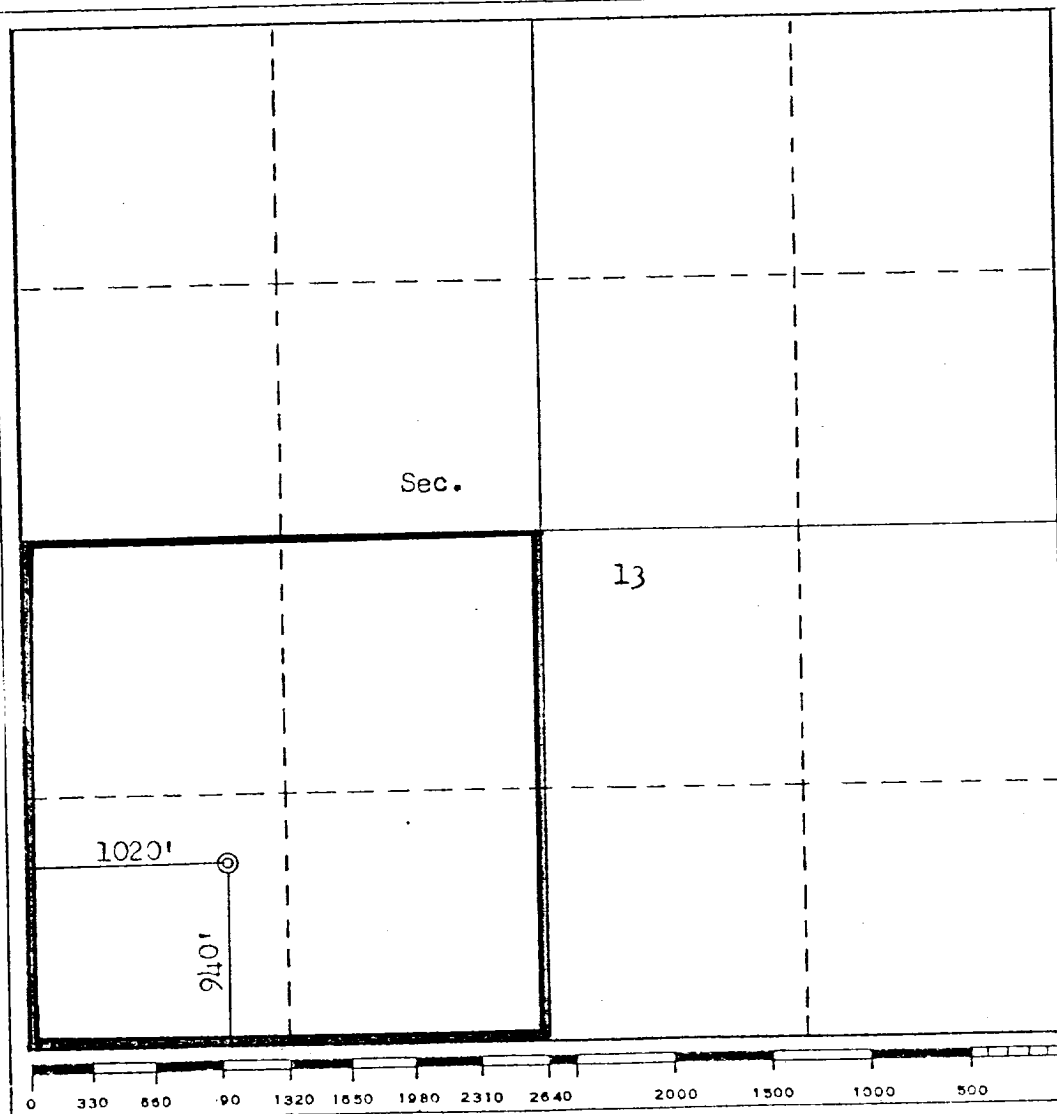
Operator AMOCO PRODUCTION COMPANY			Lease JICARILLA CONTRACT 118		Well No. 22
Unit Letter M	Section 13	Township 25N	Range 5W	County Rio Arriba	
Actual Footage Location of Well:					
940 feet from the South line and		1020 feet from the West line			
Ground Level Elev. 6918	Producing Formation Pictured Cliffs Chacra/Mesaverde		Pool Blanco Pictured Cliffs/Otera Chacra-Gonzales MV		Dedicated Acreage: 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 3, 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 27, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.

3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C
JICARILLA CONTRACT 148 NO. 22
940' FSL & 1020' FWL, SECTION 13, 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	2610'	+4321'
Kirtland	2800'	4131'
Fruitland	2990'	3941'
Pictured Cliffs	3150'	3781'
Chacra (if present)	4035'	2896'
Mesaverde	Cliff House 4858'	2073'
	Point Lookout 5365'	1566'
Gallup	'	'
Dakota	'	'
TD	5665'	1266'

Estimated KB elevation: 6931'

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:

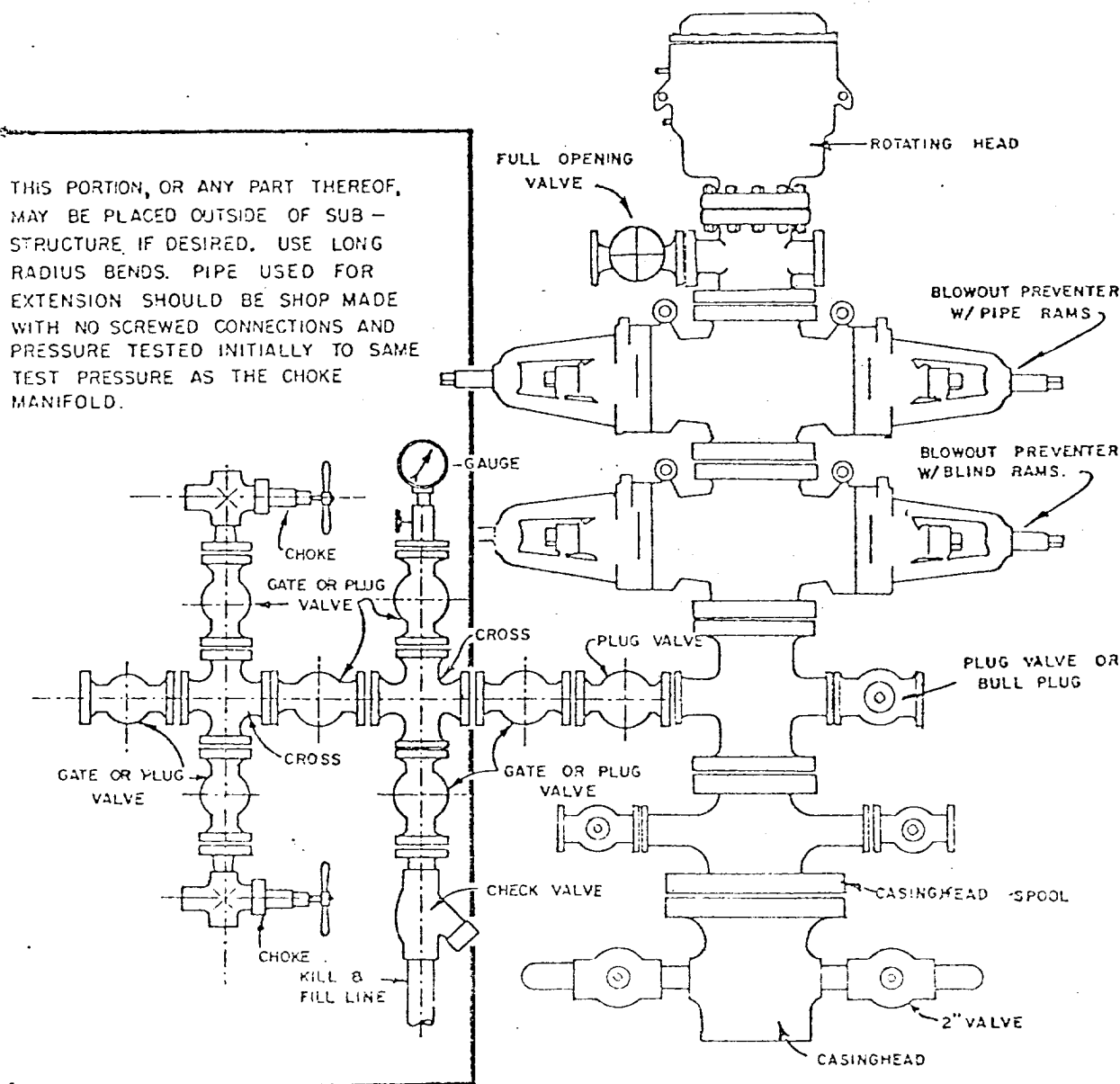
IND-SP-GR
FDC-CNL-GR

Completion design will be based on these logs. No drill stem tests will be taken. Special coal logging program over Fruitland interval will be conducted. Three rubber sleeve cores (20' each) over intervals to be specified by wellsite geologist. Cores to be taken between approximately 3134'-3184'. 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 148 NO. 22
940' FSL & 1020' FWL, SECTION 13, T25N, R5W
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 one-half mile 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 two 380-bbl. tanks & facilities at Jicarilla Contract 148 Well No. 10.
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 3-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 and native grasses with some junipers.

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

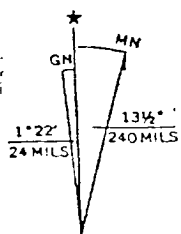
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the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

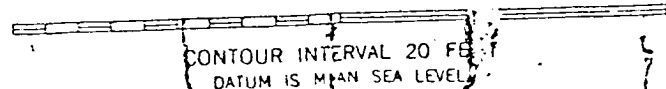


Vicinity Map for
 AMOCO PRODUCTION COMPANY #22 JICARILLA CONTRACT 148
 940' FSL 1020' FWL Sec. 13-T25N-R5W
 RIO ARriba COUNTY, NEW MEXICO



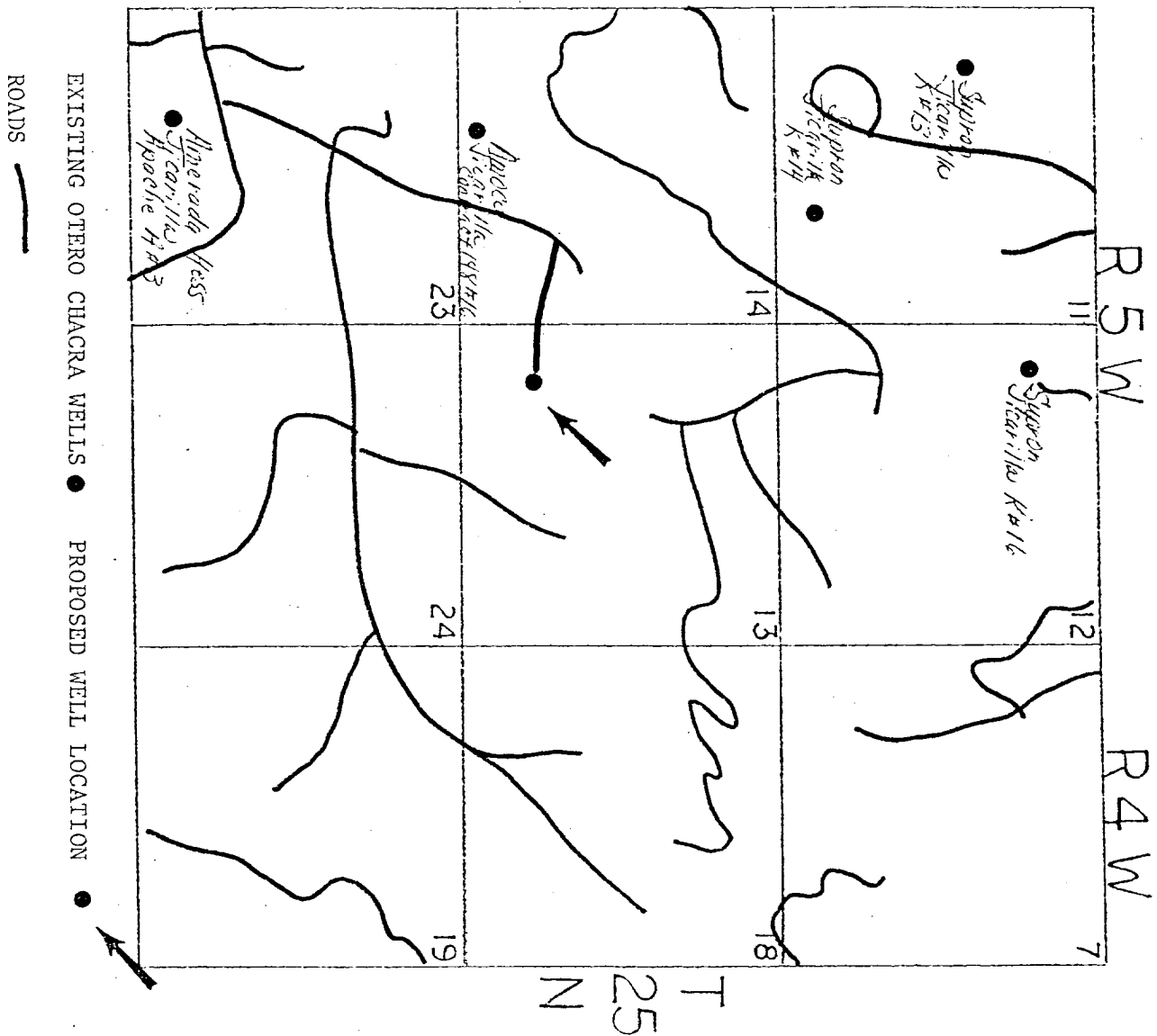
UTM GRID AND 1963 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

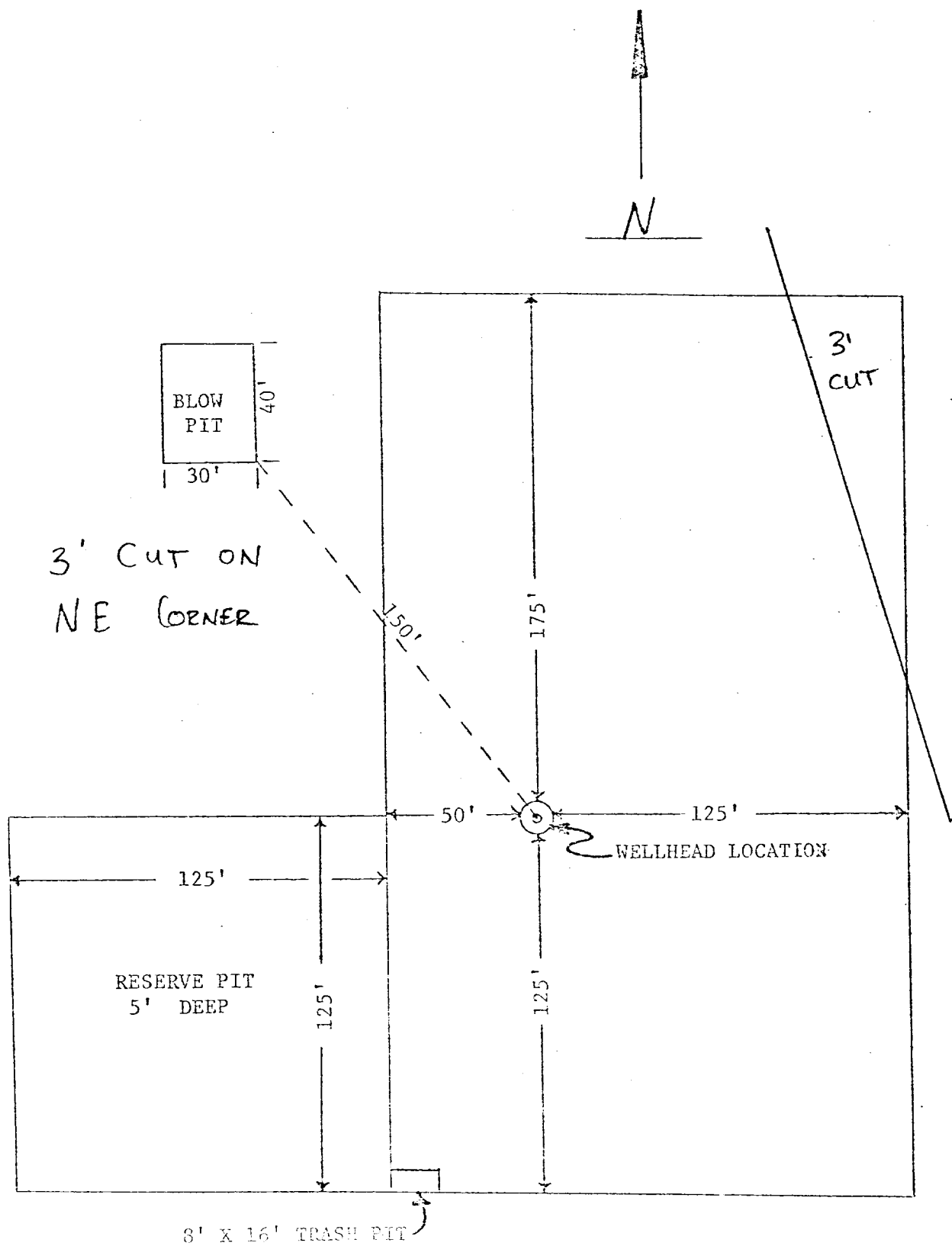
790 FE



CONTOUR INTERVAL 20 FEET
 DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 COLORADO 80225 OR WASHINGTON





APPROXIMATELY 1.2 ACRES

Amoco Production Company		SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS		
JICARILLA CONTRACT 148 No. 22		DRG. NO.