

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 INFILL

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 1110' FSL and 1065' FWL, Section 10, T26N, R4W

At proposed prod. zone

Same

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

12 miles Southeast of Gobernador, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1065'

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

3082'

16. NO. OF ACRES IN LEASE

2567.94

19. PROPOSED DEPTH

7998'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

6839' GL

22. APPROX. DATE WORK WILL START*

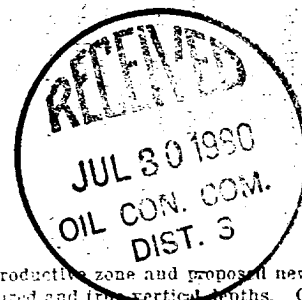
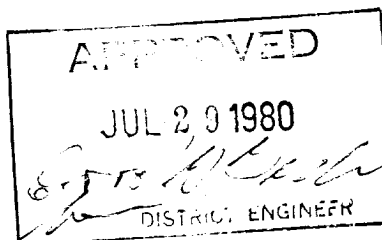
As soon as permitted

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" (New)	32.3# H-40	300'	240 sx Class "B" w/2% CaCl ₂ -circ
8-3/4"	7" (New)	23# K-55	3664'	425 sx Class "B" 65:35 POZ, 6% gel, 2% med tuf plug/sx, and 0.8% FLA. Tail in w/100 sx Class "B"
6-1/4"	4-1/2" (New)	11.6# K-55	7998'	Neat-circ. 340 sx Class "B" 65:35 POZ, 6% gel, 2% med tuf plug/sx, and 0.8% FLA. Tail in w/160 sx Class "B"

This application to drill an Infill Basin Dakota well is pursuant to Order No. R-1670-V approved by the NMOCDC on May 22, 1979. This well will qualify under Section 13 of the Natural Gas Policy Act under Order No. R-1670-V.

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



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

B.E. Fackrell

TITLE District Engineer

DATE May 16, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ak B...

DRILLING OPERATIONS AUTHORIZED ARE
... ATTACHED

NMOCDC

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

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

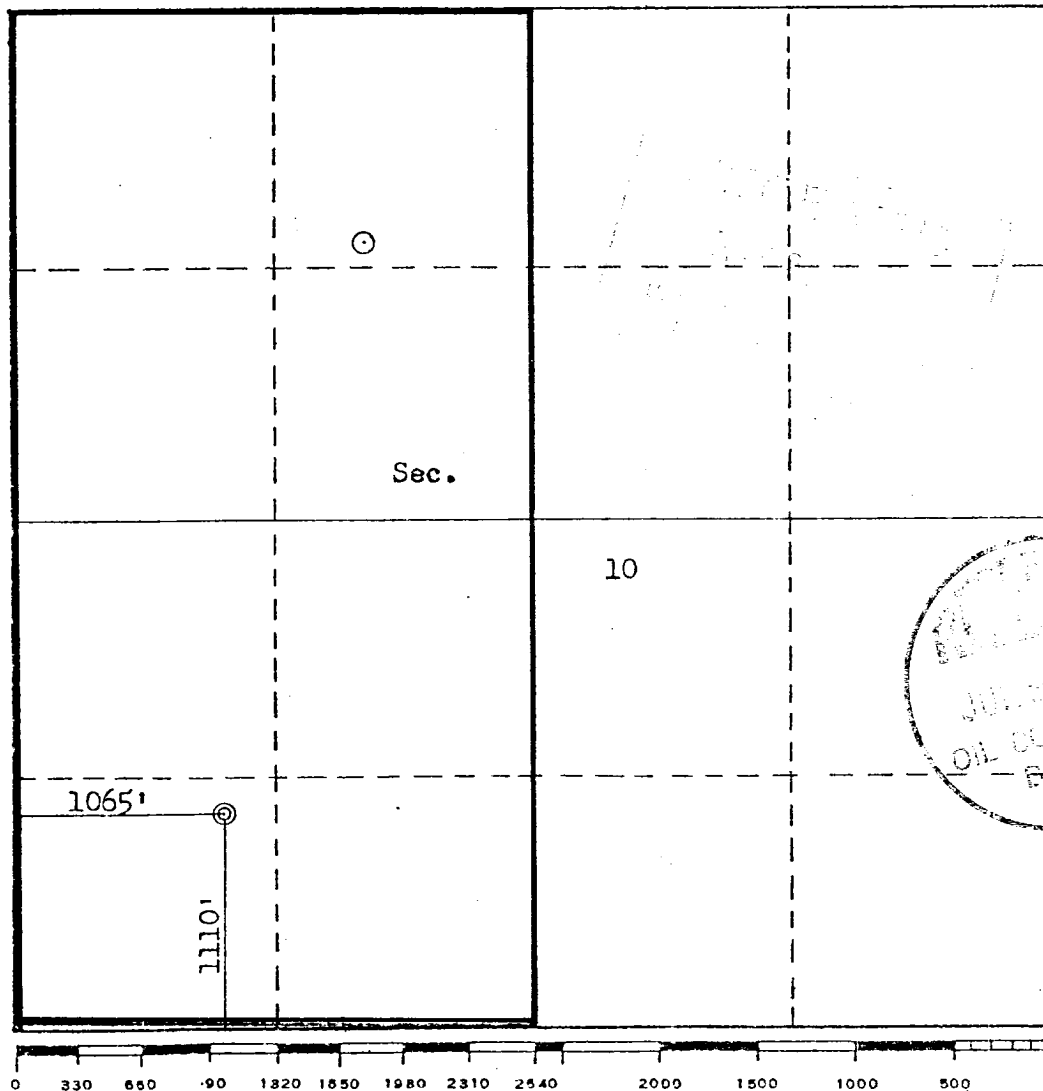
Operator AMOCO PRODUCTION COMPANY			Lease JICARILLA APACHE 102		Well No. 11-E
Unit Letter M	Section 10	Township 26N	Range 4W	County Rio Arriba	
Actual Footage Location of Well: 1110 feet from the South line and 1065 feet from the West line					
Ground Level Elev. 6839	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 320 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.

B.E. Fackrell

Name

B.E. FACKRELL

Position

DISTRICT ENGINEER

Company

AMOCO PRODUCTION COMPANY

Date

APRIL 29, 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

April 29, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certification No.

3950**F. B. KERR, JR.**

SUPPLEMENTAL INFORMATION TO FORM 9-331C

JICARILLA APACHE 102 NO. 11E
1110' FSL & 1065' FWL, SECTION 10, T26N, R4W
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	3242 '	3610 '
Kirtland	3288 '	3564 '
Fruitland	3488 '	3364 '
Pictured Cliffs	3564 '	3290 '
Chacra (if present)	'	'
Mesaverde	Cliff House 4508 '	2344 '
	Point Lookout 5248 '	1604 '
Gallup	6901 '	- 49 '
Dakota	7738 '	- 886 '
TD	7998 '	- 1146 '

Estimated KB elevation: 6852 '

Drilling fluid to intermediate point will be a fresh water, low solids non-dispersed mud system. Air or gas will be used to drill to TD. Open hole logging program will include logs from TD to below intermediate casing:

Induction Electric-SP-Gamma Ray
Compensated Formation Density-Compensated Neutron-Gamma Ray

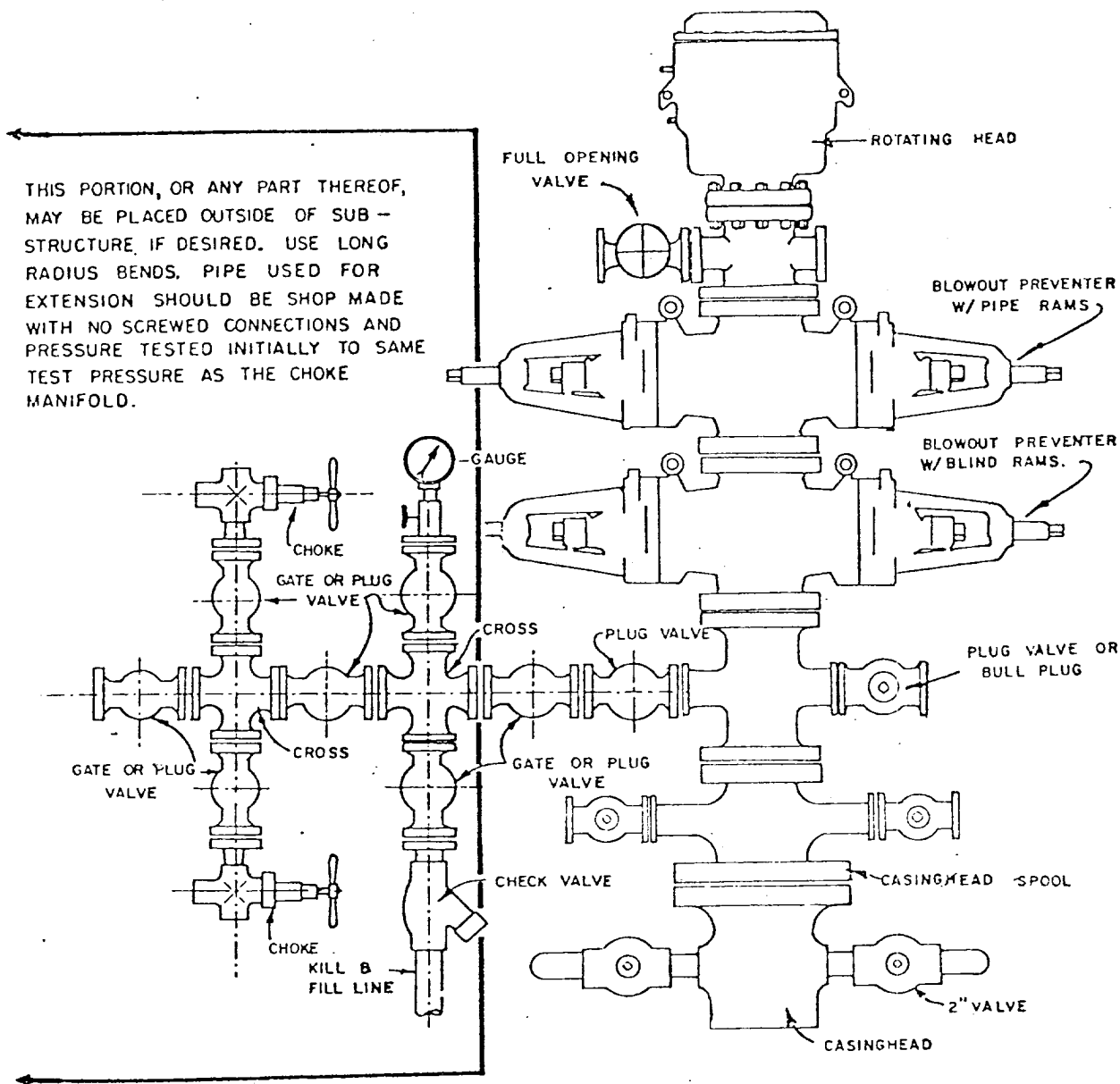
Completion design will be based on these logs. No cores or drill stem tests will be taken.

Operations will commence when permitted and last approximately 4 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 APACHE 102 NO. 11E
1110' FSL & 1065' FWL, SECTION 10, T26N, R4W
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 Apache 102 Well No. 16A, approximately 250 feet south.
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 5-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 flat area, on edge of old location, with sandy clayey loam soil; vegetation consists of sagebrush, juniper and native grasses.

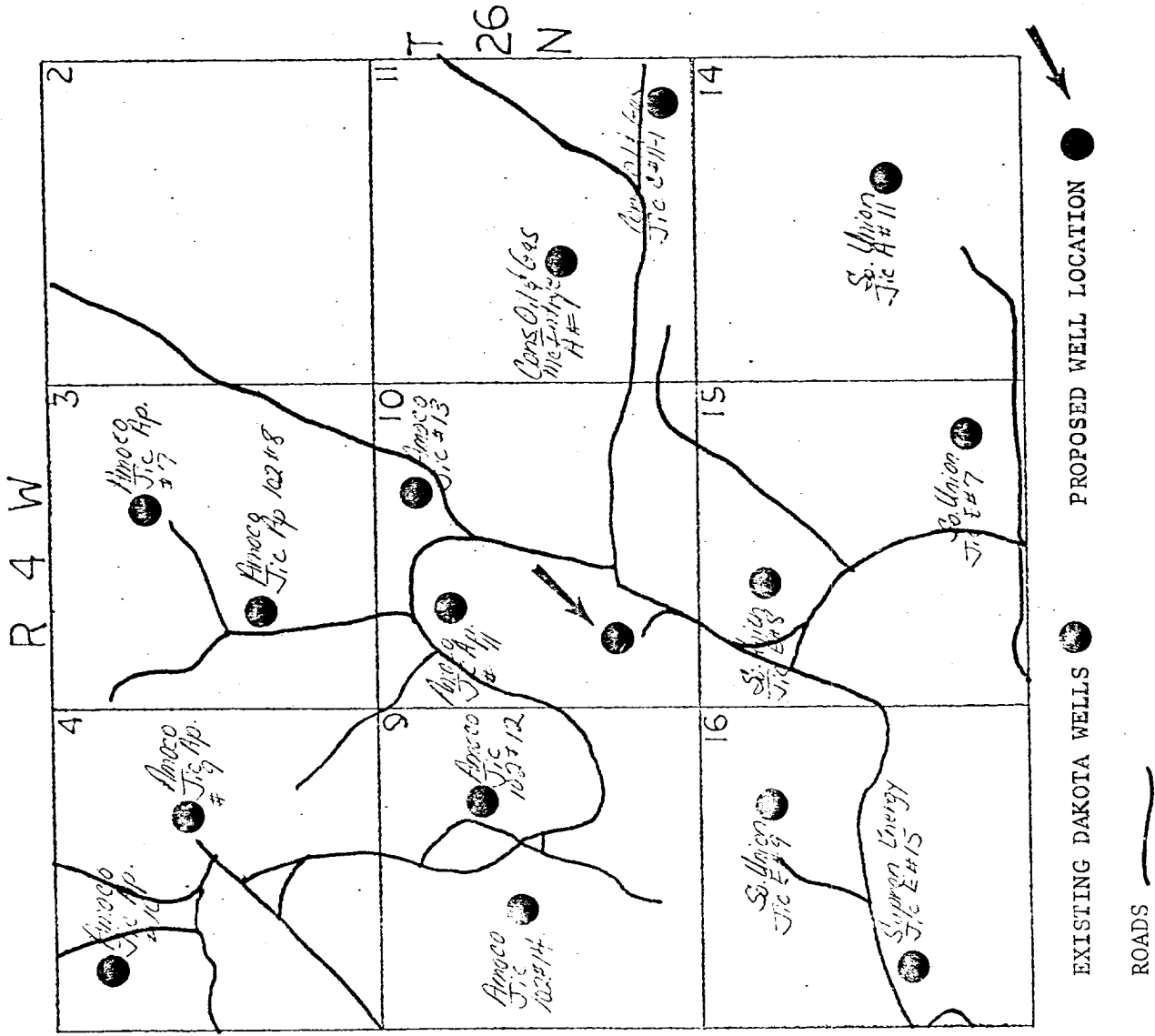
Representatives of the U. S. Geological Survey's Farmington Office and the Jicarilla Tribe's Dulce Office inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from Salmon Ruins.

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

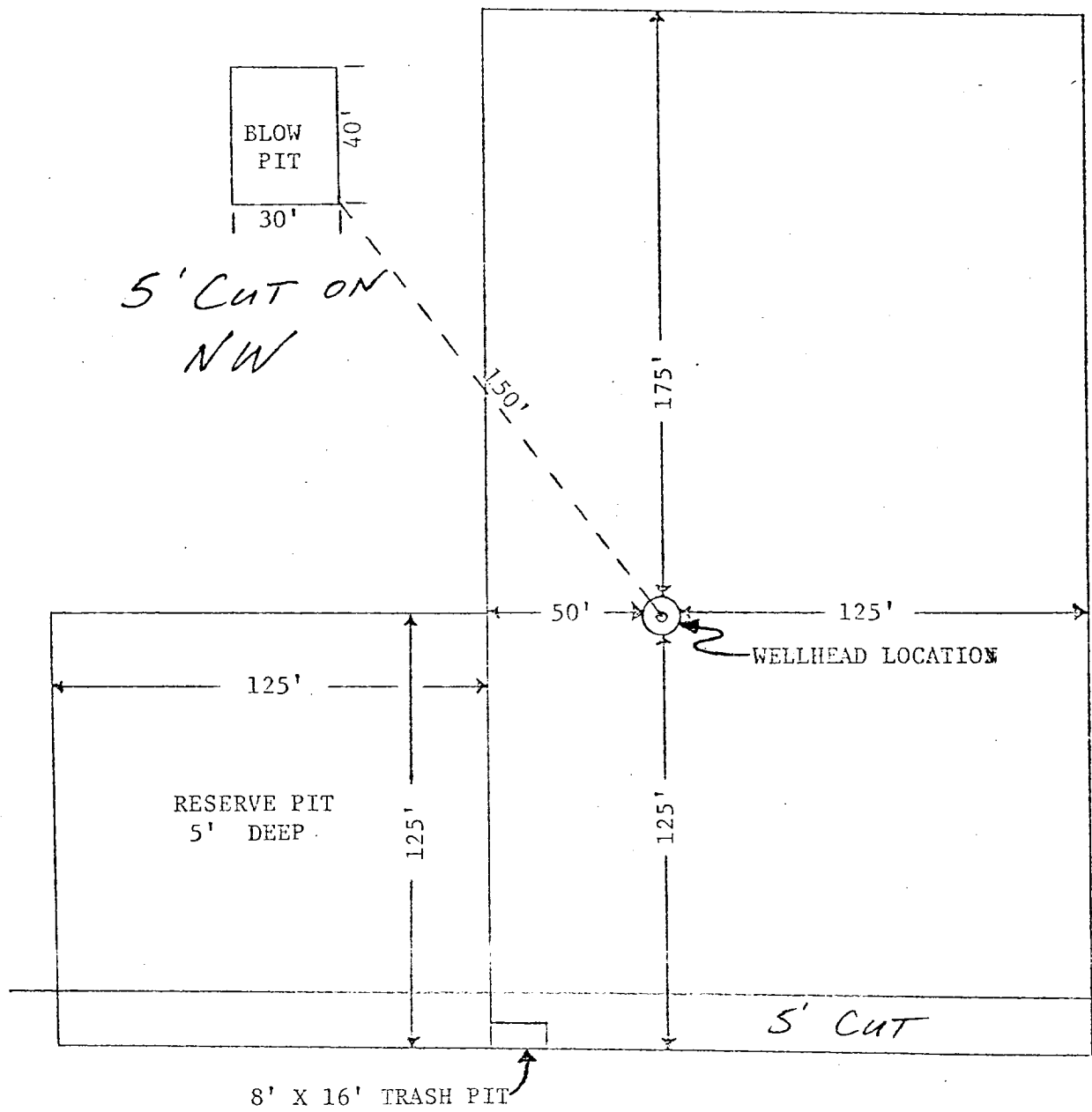
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the 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 May 13, 1980


R. W. Schroeder, District Superintendent



SE



APPROXIMATELY 1.2 ACRES

Amoco Production Company	SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS	
JILARILLA APACHE 102 #1/E	DRG. NO.