

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 37401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1840' FNL and 1520' FEL, Section 30, T26N, R5W

At proposed prod. zone

Same

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

17.5 miles North of Counselors, New Mexico

15. DISTANCE FROM PROPOSED*

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

1520'

18. DISTANCE FROM PROPOSED LOCATION*

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

1950'

16. NO. OF ACRES IN LEASE

2477.56

19. PROPOSED DEPTH

7575'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

N 319.57 320

20. ROTARY OR CABLE TOOLS

Rotary

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

6680' 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"	4-1/2" (New)	11.6# K-55	7575'	Stage 1- 415 sx Class "B" 50:50 POZ, 6% gel, 0.8% FLA, and 2# med tuf plug/sx. Tail in w/ 180 sx Class "B" Neat-circulate. Stage 2-DV tool set at 5532' - 1330 sx Class "B" 65:35 POZ, 6% gel, 0.8% FLA, and 2# med tuf plug/sx. Tail in w/ 100 sx Class "B" Neat-circulate.

This application to drill an Infill Basin Dakota well is pursuant to Order No. R-1670-V approved by the NMOCD on May 22, 1979. This well will qualify under Section 103 of the Natural Gas Policy Act under Order No. R-1670-V.

The gas from this well is dedicated to Northwest Pipeline Corporation.

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. Fachell

TITLE

District Engineer

DATE April 7, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

APPROVED
AS AMENDED

DATE

CONDITIONS OF APPROVAL, IF ANY, ARE
FOLLOWING: (If none, write NONE)
SPECIAL CONDITIONS, IF ANY, ATTACHED
"SEE" AND "SEE" ARE NOTED

NMOCC

MAY 1980
James F. Shas
JAMES F. SHAS
DISTRICT ENGINEER

ok 3-2-1

All distances must be from the outer boundaries of the Section

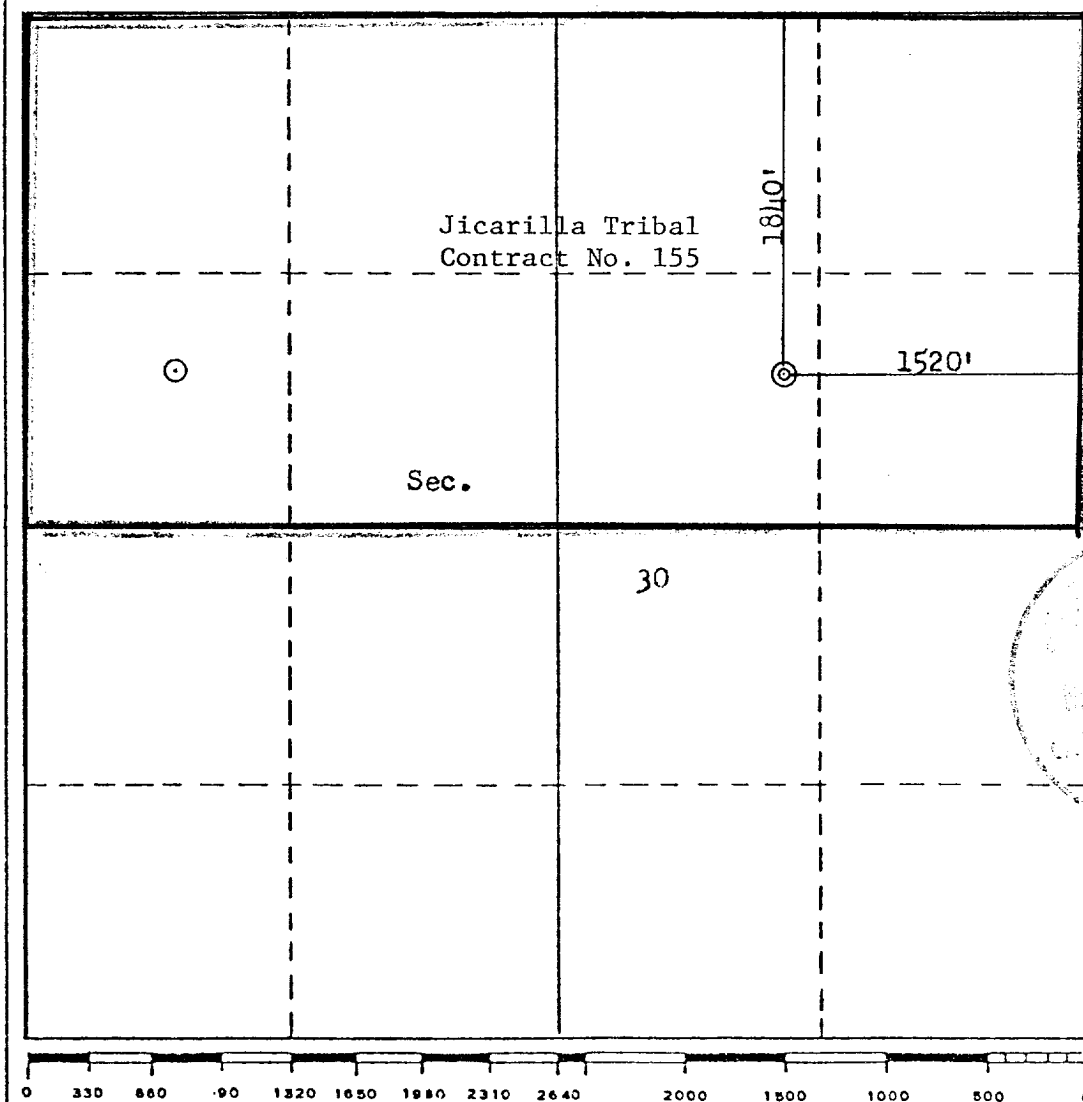
Operator AMOCO PRODUCTION COMPANY			Lease JICAPILLA CONTRACT 155		Well No. 16-E
Unit Letter G	Section 30	Township 26N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1840 feet from the North line and 1520 feet from the East line					
Ground Level Elev. 6680	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 320 N 319.57 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
FEBRUARY 1, 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
January 23, 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 155 NO. 16E
1840' FNL & 1520' FEL, SECTION 30, 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	2513 '	4180 '
Kirtland	2648 '	4045 '
Fruitland	2904 '	3789 '
Pictured Cliffs	3006 '	3687 '
Chacra (if present)	3921 '	2772 '
Mesaverde	Cliff House 4712 '	1981 '
	Point Lookout 5292 '	1401 '
Gallup	6416 '	277 '
Dakota	7237 '	-544 '
TD	7575 '	-882 '

Estimated KB elevation: 6693 '

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:

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

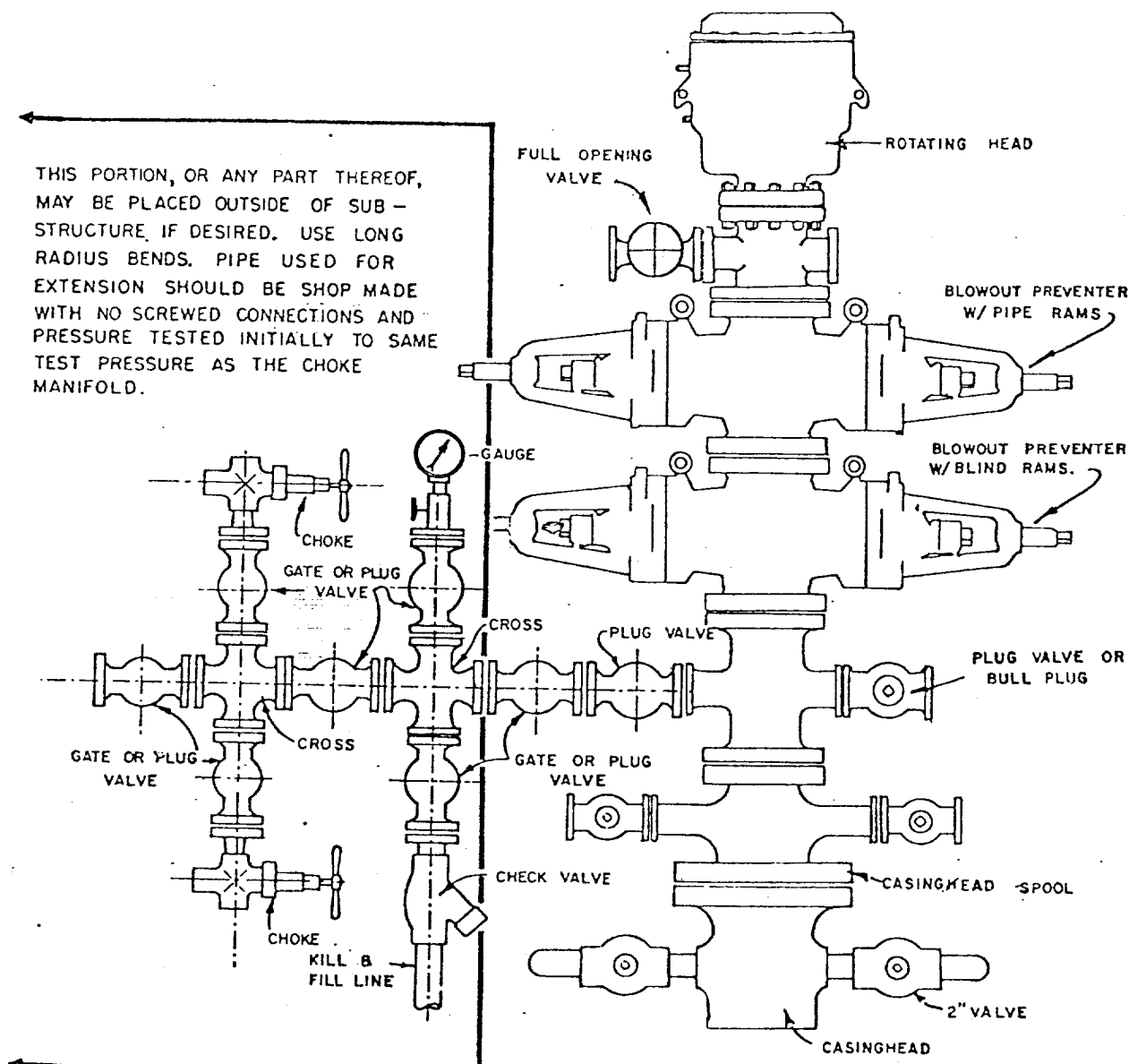
Completion design will be based on these logs. No cores or drill stem tests will be taken.

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

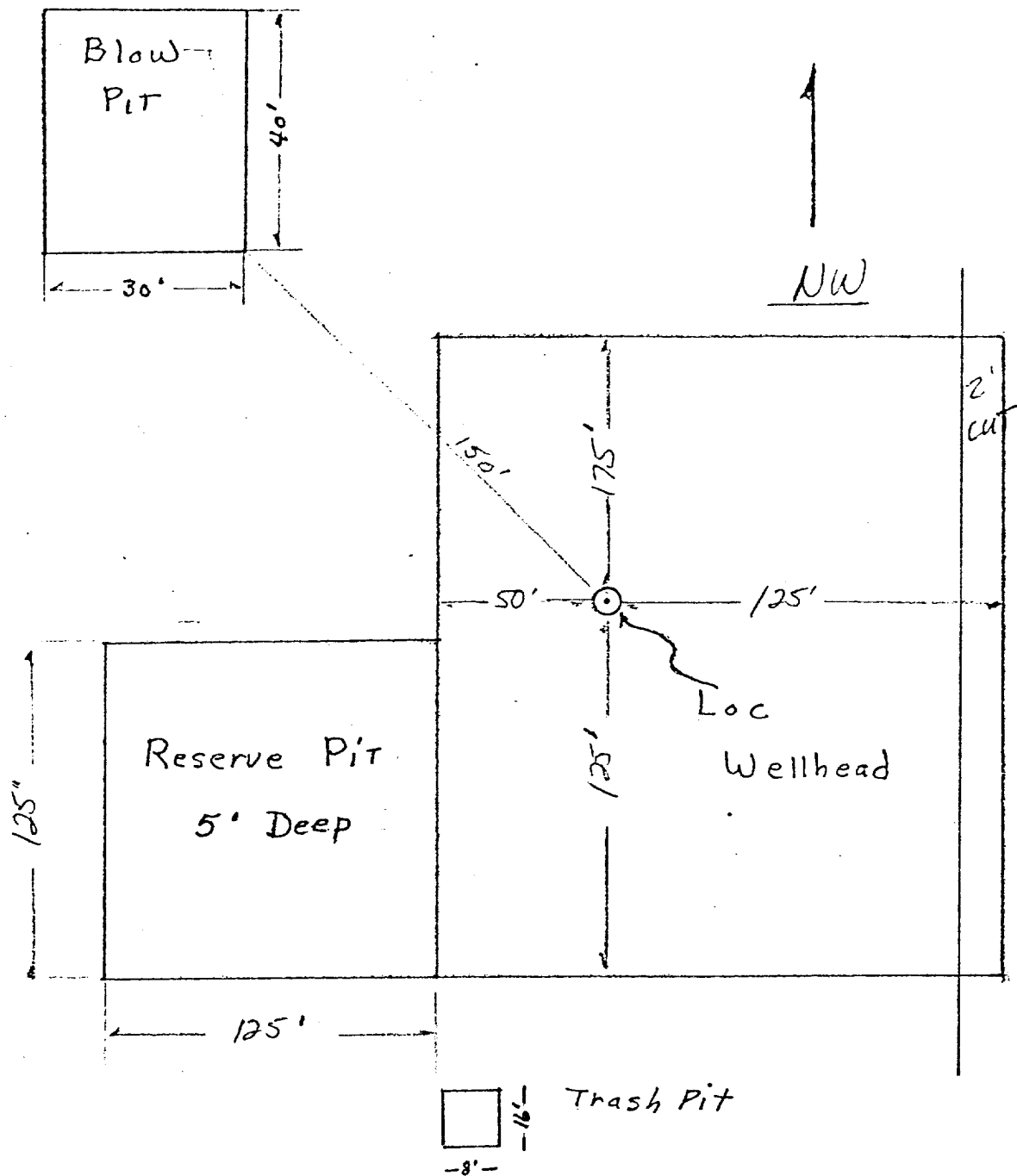
JICARILLA CONTRACT 155 NO. 16E
1840' FNL & 1520' FEL, SECTION 30, T26N, R5W
RIO ARriba COUNTY, NEW MEXICO

1. The attached topographic map shows the proposed route to the location.
 2. It will not be necessary to build any access road. Location is 200 feet southeast of Amoco's Jicarilla Contract 155 No. 9.
 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. 16, approximately one-half mile west.
 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 2-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 rolling mesa top with southerly drainage, alluvial surface deposits, and exposed sandstone bedrock. The soil is a sandy, clayey loam, and vegetation consists of sagebrush, snakeweed, prickly pear, pinon, juniper, and native grasses.
- Representatives of the U. S. Geological Survey's Durango 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 April 2, 1980


R. W. Schroeder, District Superintendent



Approximately 1.2 Acres

Amoco Production Company		SCALE: <i>NONE</i>
Drilling Location Specs		
JICARILLA CONTRACT 155 No. 16E		DRG. NO.