

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

F 1540' FNL and 1570' FWL, Section 3, T25N, R5W

At proposed prod. zone

Same

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

16 miles northeast of Counselors, New Mexico

15. DISTANCE FROM PROPOSED*

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

1540'

16. NO. OF ACRES IN LEASE

2557

17. NO. OF ACRES ASSIGNED

TO THIS WELL
W 319.3518. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1850'

19. PROPOSED DEPTH

7375'

20. ROTARY OR CABLE TOOLS

Rotary

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

6605'

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" Neat
7-7/8"	4-1/2" (NEW)	11.6# N-80	7375'	1700 sx. Class "B" 50:50 Poz

This application to drill an Infill Basin Dakota well is pursuant to Order No. R-1670-V approved by the NMOCC on May 22, 1979. This well will qualify under Section 103 of the Natural Gas Policy Act under Order No. R-1670-V. Attached is one copy of subject order and the U. S. Department of Interior Ratification letter of June 8, 1979. Gas from this acreage 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. Fackrell

TITLE

District Engineer

DATE

September 17, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

SEP 21 1979

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

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

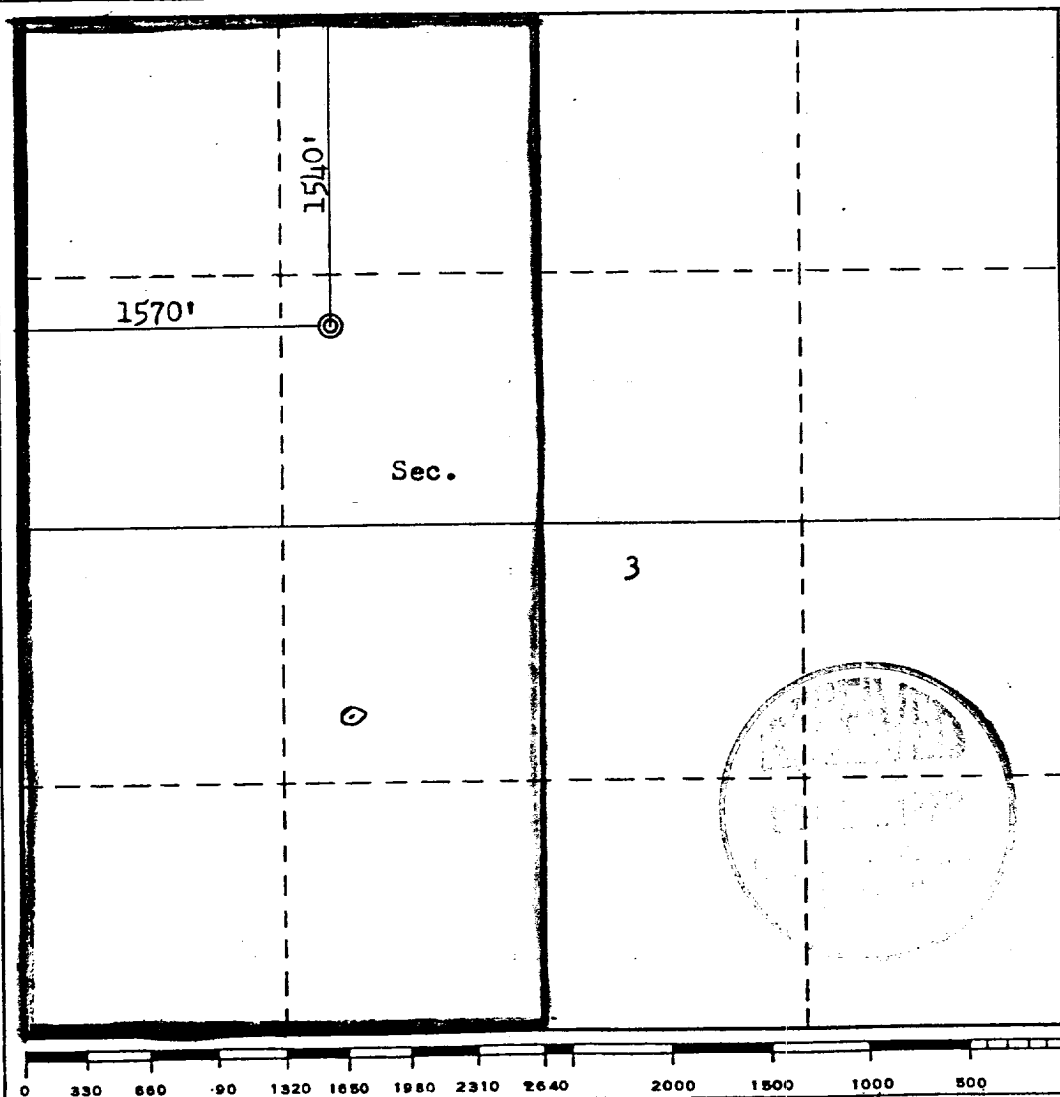
Operator AMOCO PRODUCTION COMPANY			Lease JICARILLA CONTRACT 146		Well No. 21-E
Unit Letter F	Section 3	Township 25N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1540 feet from the North line and 1570 feet from the West line					
Ground Level Elev. 6605	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 319.35 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 CO.

Date

August 27, 1979

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

August 27, 1979

Registered Professional Engineer
and/or Land Surveyor*Fred B. Kerr, Jr.*

Certificate No.

B. KERR, JR.
3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C
JICARILLA CONTRACT 146 NO. 21E
1540' FNL & 1570' FWL, SECTION 3, T25N, R5W
RIO ARriba COUNTY, NEW MEXICO

The geologic name of the surface formation is the Tertiary San Jose.

Estimated tops of important potential hydrocarbon bearing formations:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Dakota	6955'	- 337'
Gallup	6280'	+ 338'
Mesaverde	4480'	+ 2138'
Chacra	3705'	+ 2913'
Pictured Cliffs	2825'	+ 3793'
TD	7375'	- 757'

Estimated KB elevation: 6618'.

Drilling fluid to TD will be a low solids non-dispersed mud system. Open hole logging program will include logs from TD to below surface casing:

Induction Electric - SP

Compensated Density \emptyset - Gamma Ray

Compensated Neutron \emptyset - Gamma Ray

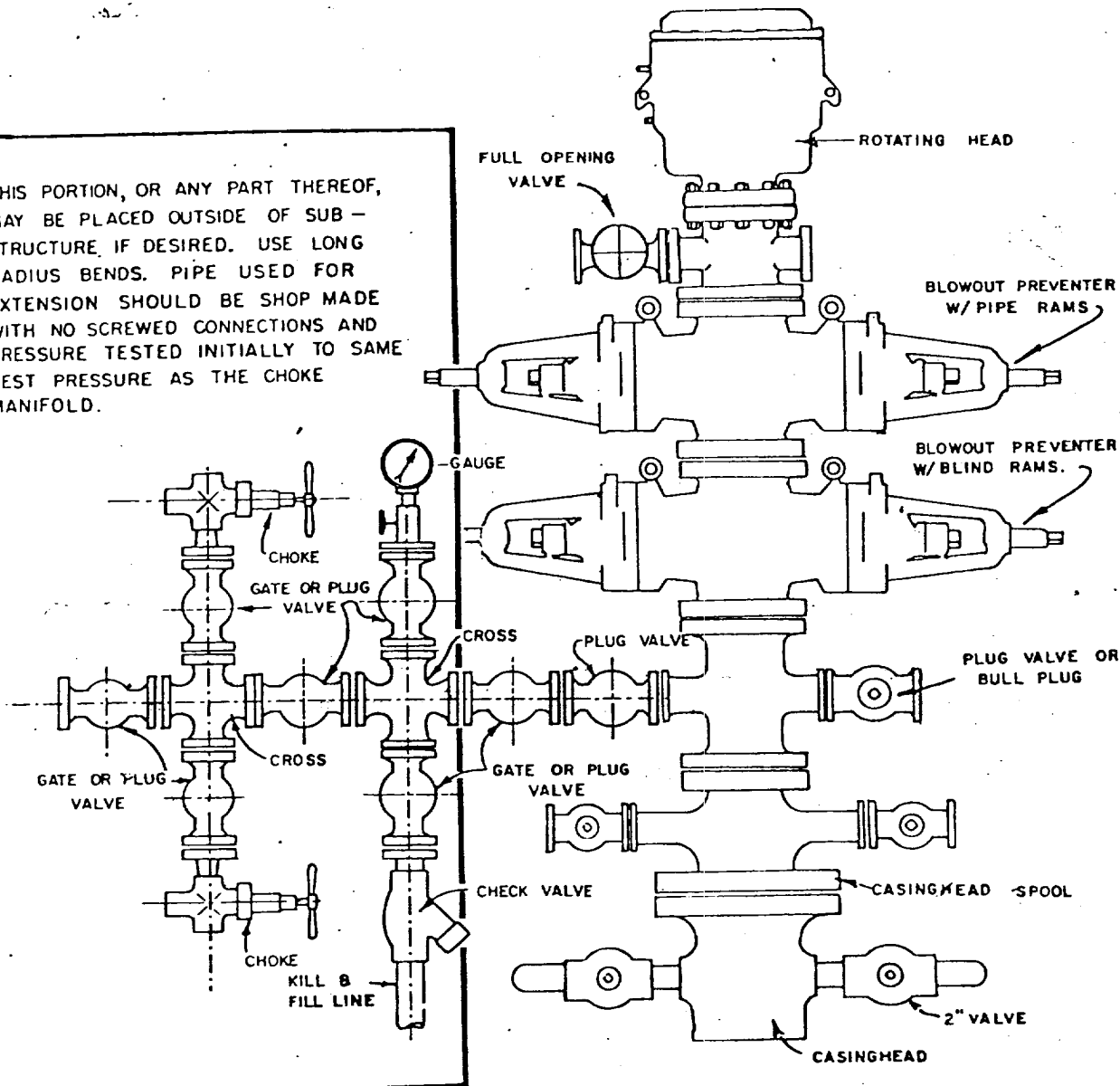
Gamma Ray (Separate Log) 5" Scale 2000' - Surface

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 three weeks.

Amoco's standard blowout prevention will be employed (see attached drawing).

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

MULTI-POINT SURFACE USE PLAN

JICARILLA CONTRACT 146 NO. 21E
1540' FNL & 1570' FWL, SECTION 3, 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 approximately two tenths mile of new road 20 feet wide and bar ditched on one side.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the vicinity map.
4. There is a 380-barrel tank and facilities located at well indicated on the topo map.
5. Water will be hauled from water hole on 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.
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 12-foot cut will be made on southeast side.
10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well. Drilling mud will be hauled away and the reserve pit back filled. Reseeding of the site will be carried out as instructed by the Bureau of Indian Affairs.
11. The general topography is a sandy clay-type soil with vegetation of sage and native grasses.

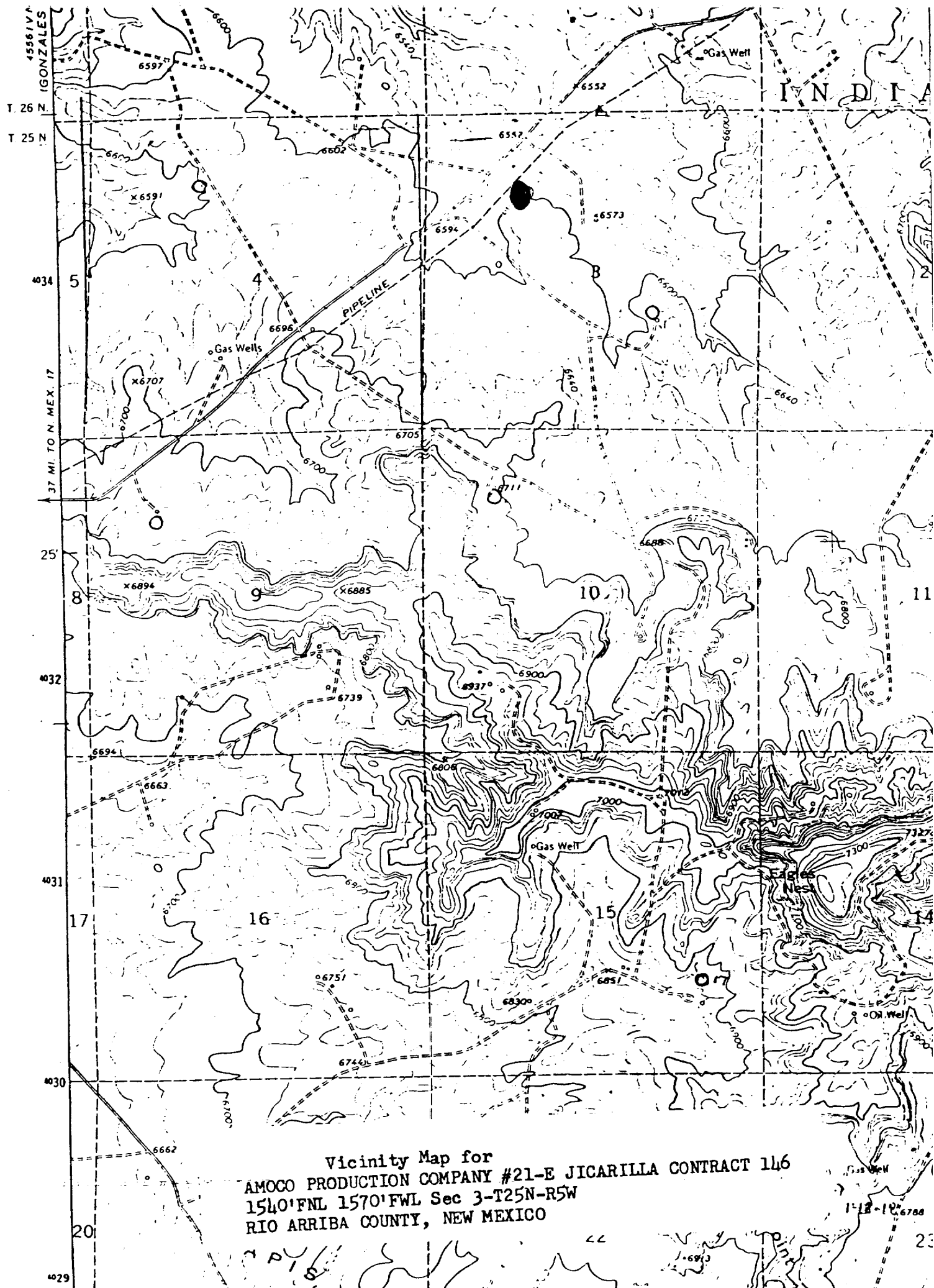
Representatives of the U. S. Geological Survey's Durango Office and the Jicarilla Tribe's Dulce Office will inspect the site with Amoco personnel. Cultural resources inspection will be conducted by an archaeologist from San Juan College.

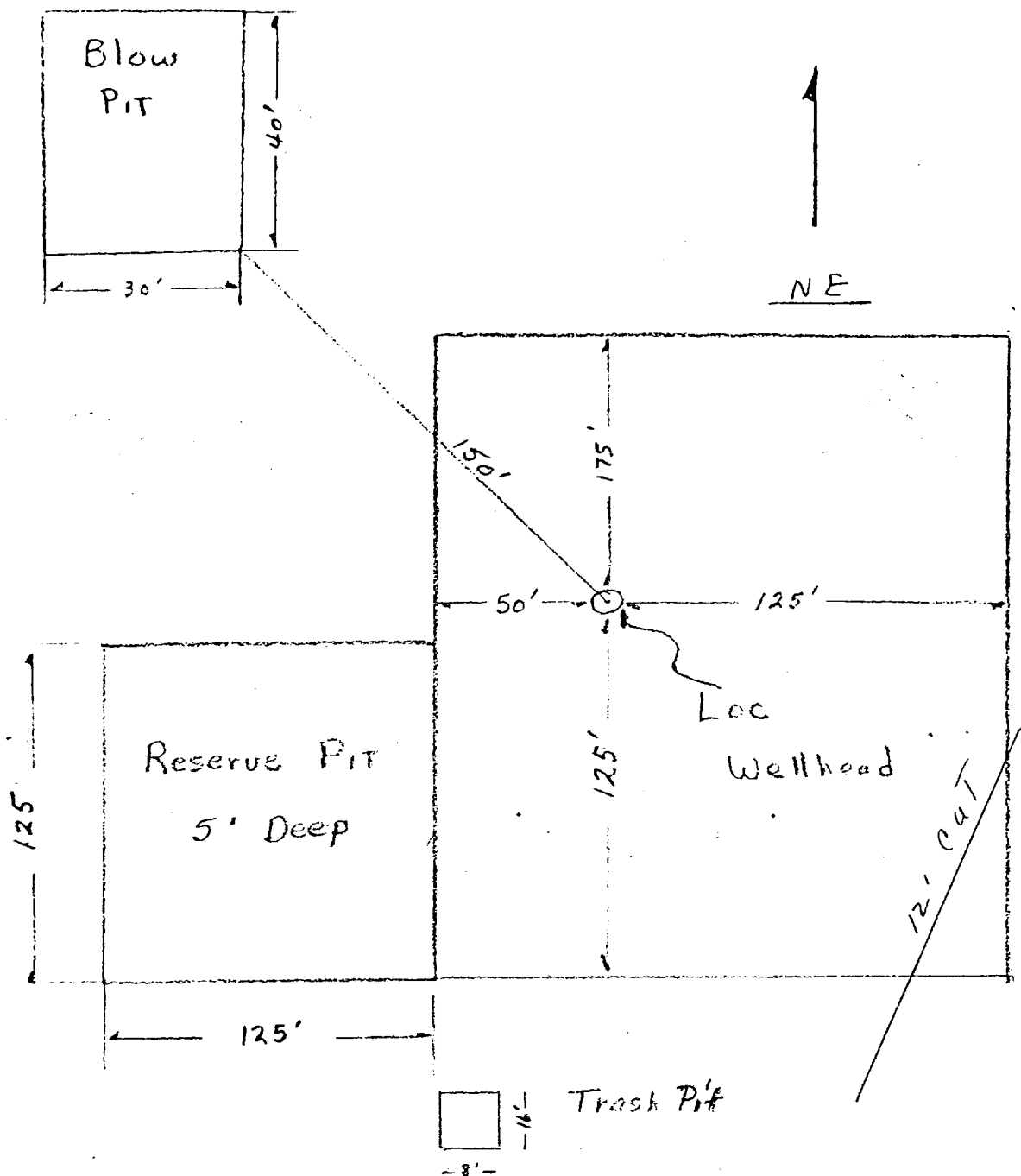
12. Operator's Representative: R. W. Schroeder
Phone: Office: 505-325-8841; Home: 505-325-6164
Address: 501 Airport Drive, Farmington, NM 87401

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 September 17, 1979

R. W. Schroeder
R. W. Schroeder, District Superintendent





Approximately 1.2 Acres

Amoco Production Company		SCALE: NONE
Drilling LOCATION Specs.		DRG. NO.
JICARILLA CONTRACT 146 NO. 21E		