

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
I 1520' FSL and 1120' FEL, 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) 1120'

16. NO. OF ACRES IN LEASE 2567.94

17. NO. OF ACRES ASSIGNED
TO THIS WELL E/320

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 3122'

19. PROPOSED DEPTH 7914'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6801'

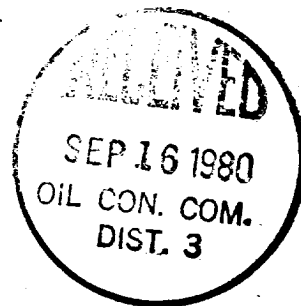
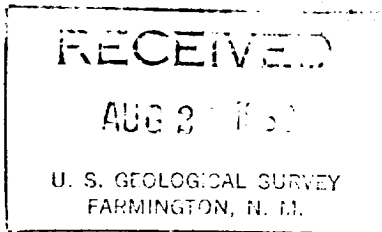
22. APPROX. DATE WORK WILL START*
As soon as permitted

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'	315 sx Class B w/2% CaCl2-circ
8-3/4"	7" (New)	20# K-55	3820'	650 sx Cl B 50:50 POZ. 6% gel, 2#
6-1/4"	4-1/2" (New)	10.5# K-55	7914'	tuf plug/sx w/0.8% FLA. Tail in 100 sx Cl B Neat-circ. 4-1/2" csg-450 sx Cl B 50:50 POZ, 2% gel, 2# tuf plug/sx with 0.8% FLA. Tail in 200 sx Class B Neat.

This application to drill an Infill Basin Dakota well is pursuant to Order No. R-1670-V approved by the NMOCOD 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 R. A. Dawney TITLE District Engineer DATE August 25, 1980
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY James L. Hamdy TITLE _____ DATE _____
CONDITIONS for

ak 3-2

OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-107
Revised 10-1-78

STATE OF NEW MEXICO

SANTA FE, NEW MEXICO 87501

ENERGY AND MINERALS DEPARTMENT

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

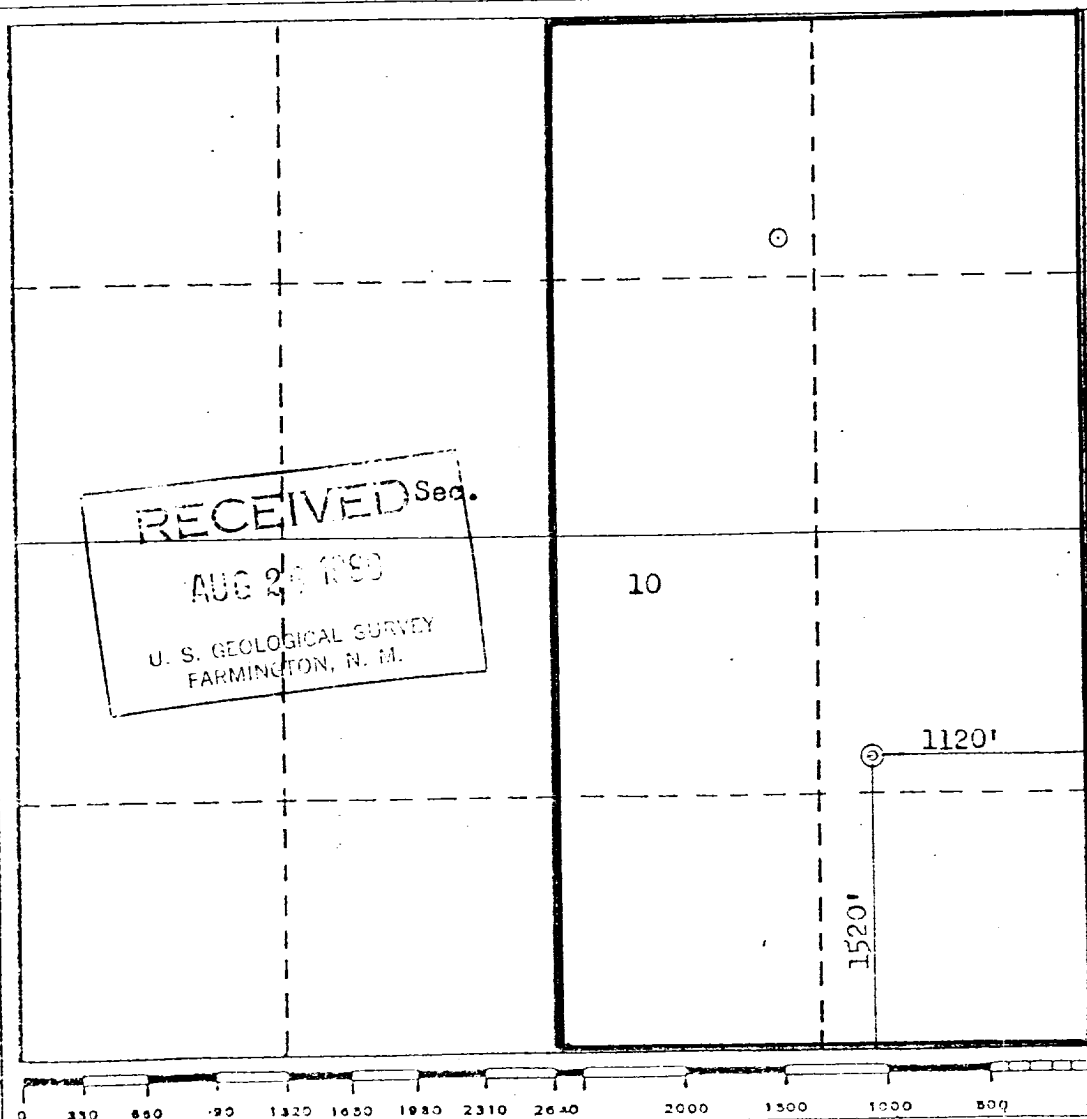
Operator AMOCO PRODUCTION COMPANY		Lease JICARILLA APACHE 102		Well No. 13E
Unit Letter I	Section 10	Township 26N	Range 1W	County Rio Arriba
Actual Footage Location of Well: 1520 feet from the South line and 1120 feet from the East line				
Ground Level Elev. 6301	Producing Formation Dakota	Pool Basin 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.

R. A. Downey
Name
R. A. DOWNEY

Position
DISTRICT ENGINEER

Company
AMOCO PRODUCTION COMPANY

Date
AUGUST 22, 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
August 19, 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 APACHE 102 NO. 13E
1520' FSL & 1120' FEL, 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	1900'	4914'
Kirtland	2314'	4500'
Fruitland	3189'	3625'
Pictured Cliffs	3514'	3300'
Chacra (if present)	'	'
Mesaverde	Cliff House 4484'	2330'
	Point Lookout 5714'	1100'
Gallup	6844'	- 30'
Dakota	7667'	- 853'
TD	7914'	-1100'

Estimated KB elevation: 6814'

Drilling fluid to intermediate will be a fresh water, low solids non-dispersed mud system. Well will be gas drilled from setting of intermediate casing to TD. Open hole logging will include logs from TD to base of intermediate casing.

Induction-GR, SNP, FDC

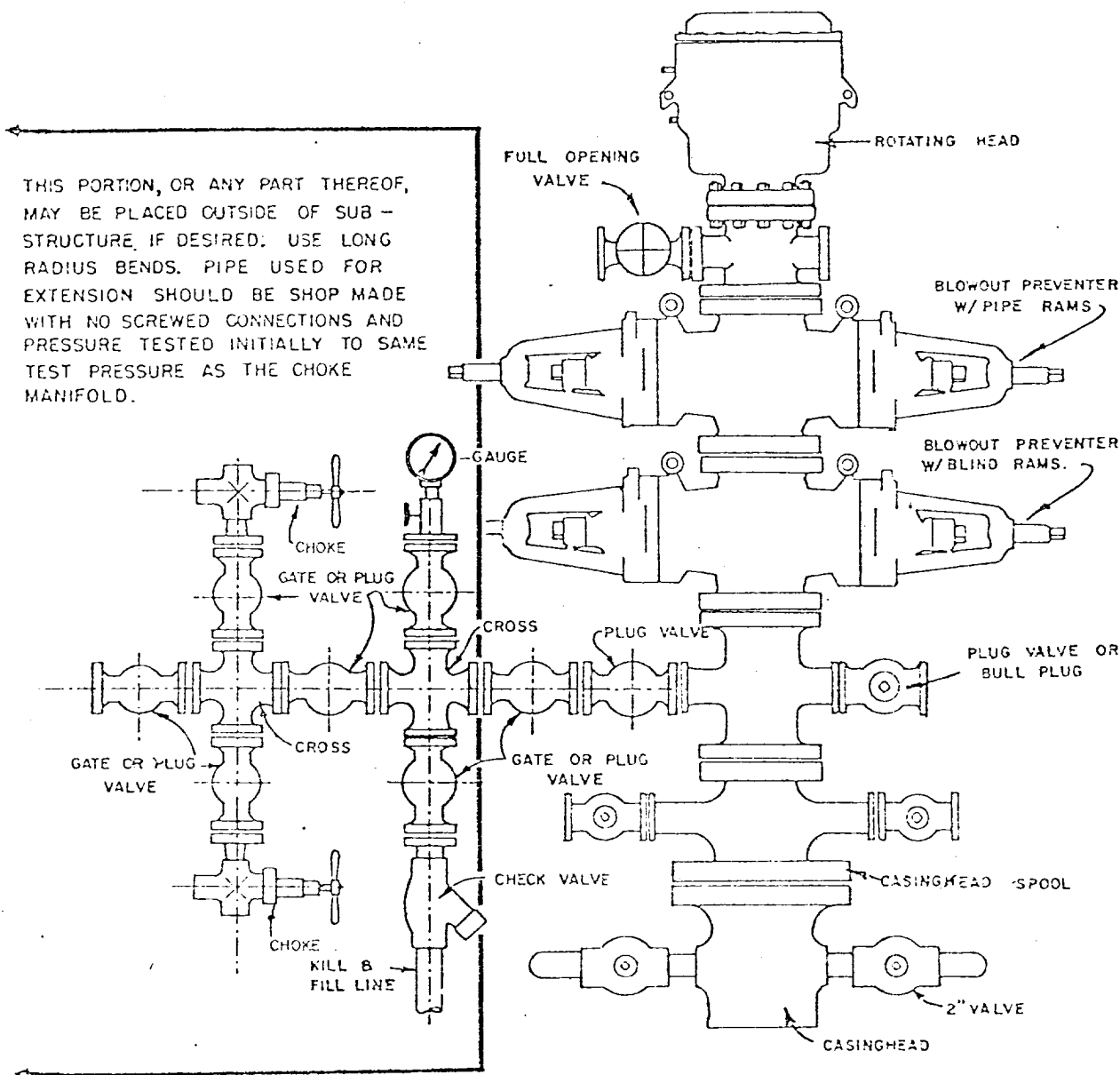
Completion design will be based on these logs. No cores or drill stem tests will be taken.

Operations will commence when permitted and last approximately 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 APACHE 102 NO. 13E
1520' FSL & 1120' FEL, 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. 16, approximately 500 feet south.
5. Water will be hauled from Lindrith 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 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 flat area, with sandy-loam type soil. Vegetation consists of sagebrush and native grasses.

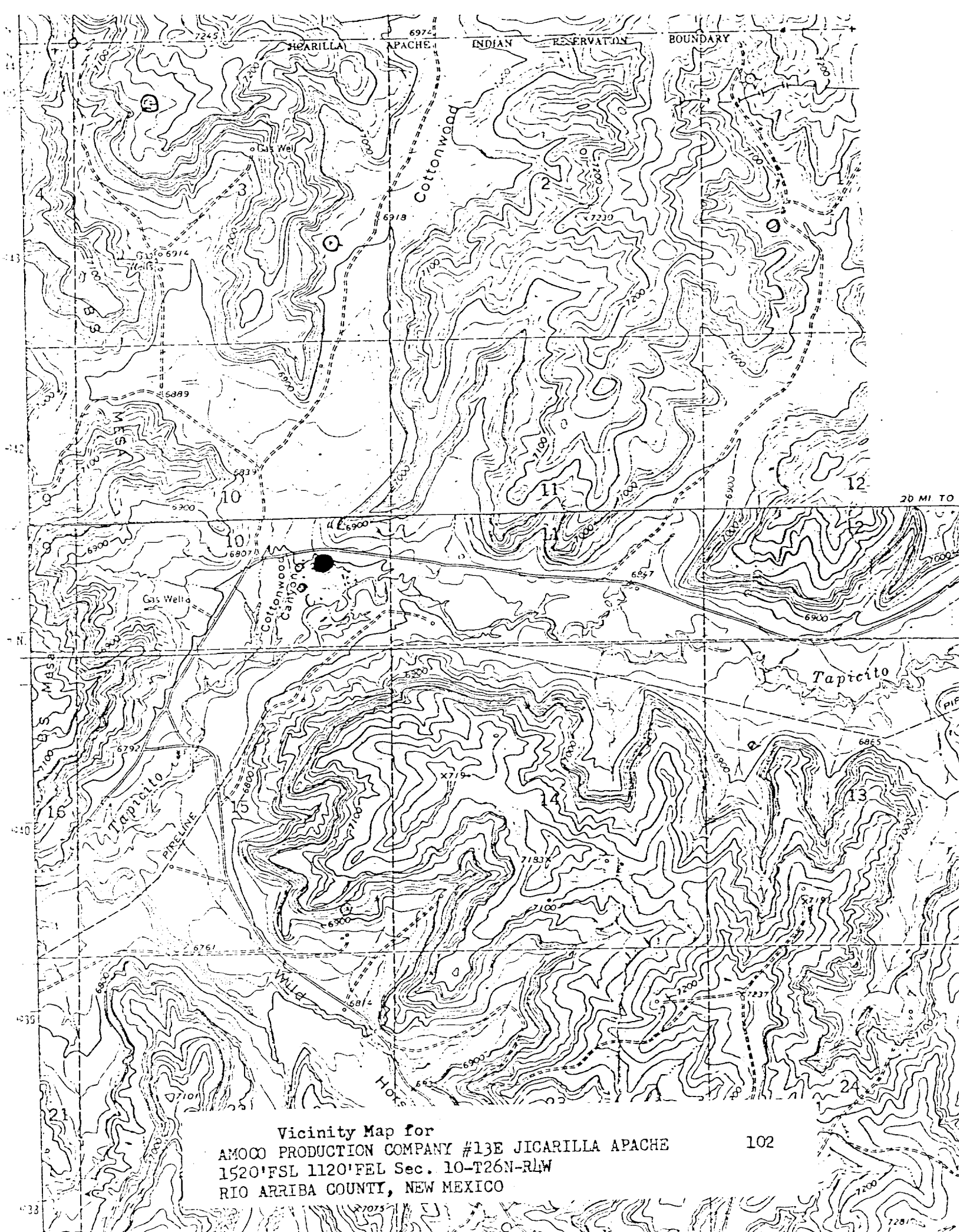
Representatives of the U. S. Geological Survey's Farmington Office and the Jicarilla Tribe's Dulce Office inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from San Juan College.

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 August 25, 1980

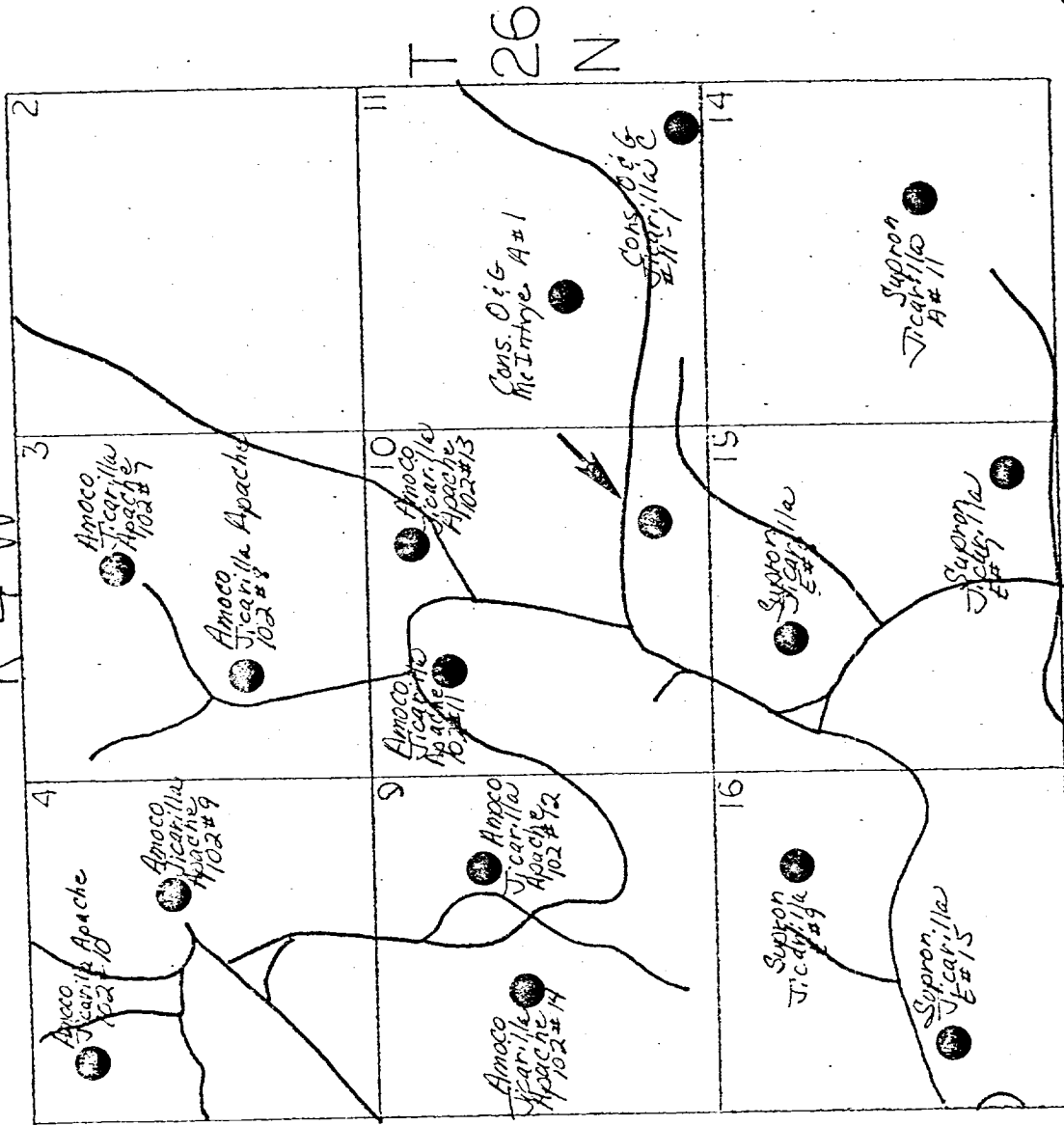

R. W. Schroeder, District Superintendent



Vicinity Map for
AMOCO PRODUCTION COMPANY #13E JICARILLA APACHE
1520'FSL 1120'FEL Sec. 10-T26N-RLW
RIO ARRIBA COUNTY, NEW MEXICO

102

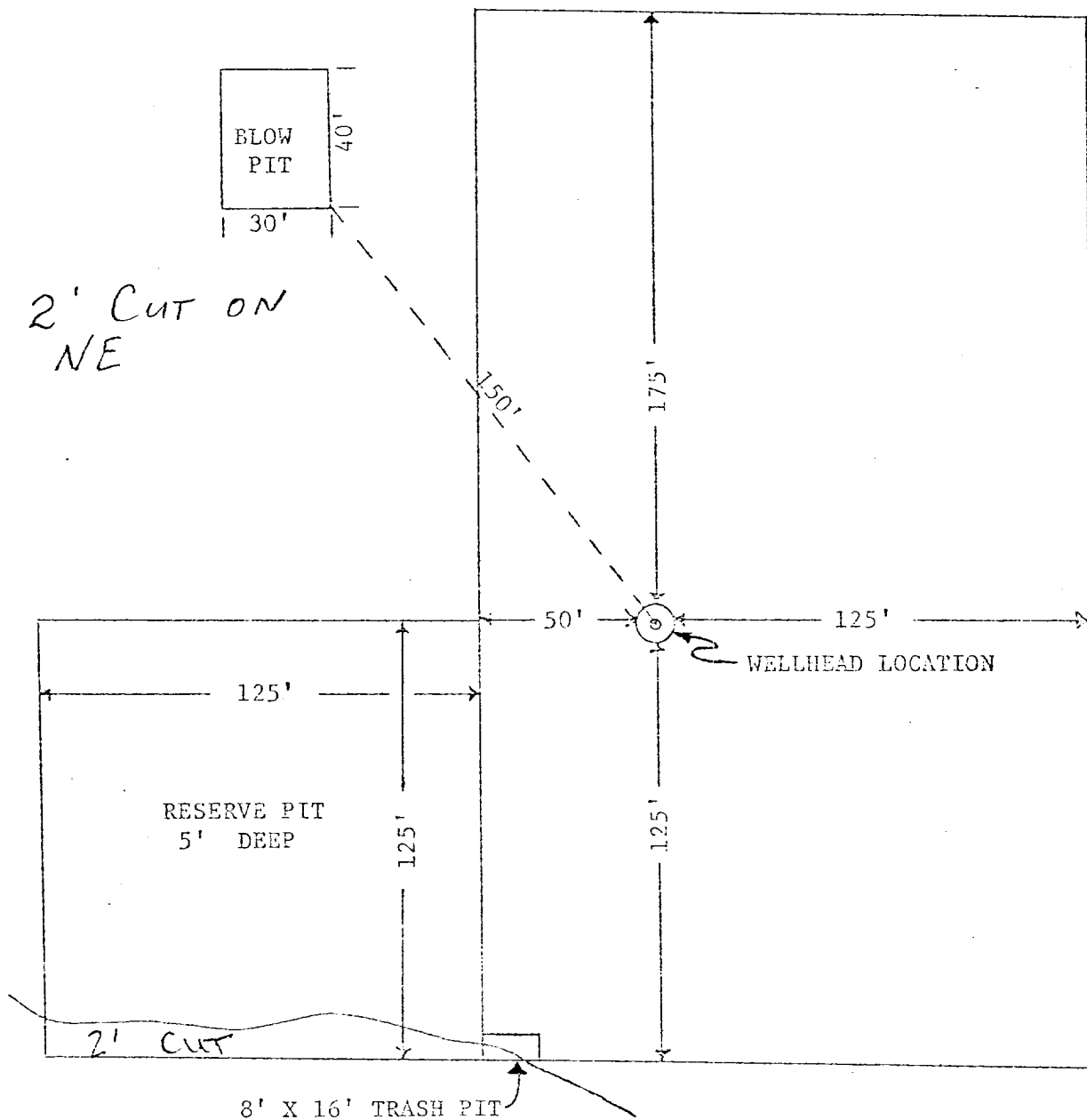
R 4 W



EXISTING BASIN DAKOTA WELLS ● PROPOSED WELL LOCATION ●

ROADS —

SSW



APPROXIMATELY 1.2 ACRES

Amoco Production Company	SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS	
JICARILLA APACHE 102 No. 13E	DRG. NO.