

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

1820' FNL and 900' FEL, Section 31, T30N, R9W

At proposed prod. zone

Same

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

3.5 miles South of Blanco

15. DISTANCE FROM PROPOSED*

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

900'

16. NO. OF ACRES IN LEASE

2444.40

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

2600'

19. PROPOSED DEPTH

7040'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

E 320 346.5

20. ROTARY OR CABLE TOOLS

Rotary

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

5854' 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'	300 sx Class "B" x 2% CaCl2-circ
8-3/4"	7" (New)	20# K-55	2808'	410 sx (Same as below-circ)
6-1/4"	4-1/2" (New)	10.5# K-55	7040'	To 2650' w/390 sx Class "B" 50: 50 POZ, .8% FLA, 2# med tuf plug, 6% gel. Tail in w/100 sx Class "B" Neat.

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 103 of the Natural Gas Policy Act under Order No. R-1670-V.

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

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. Fickel

TITLE

District Engineer

DATE

May 16, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

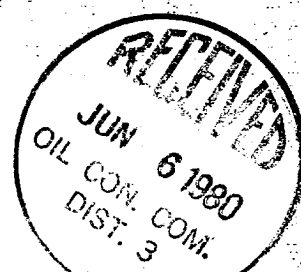
APPROVED

AS AMENDED

DATE

James J. Linn
DISTRICT ENGINEER

NMOCDC



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

P. O. BOX 2088

Form C-107

Revised 10-1-78

SANTA FE, NEW MEXICO 87501

All distances must be from the outer boundaries of the Section

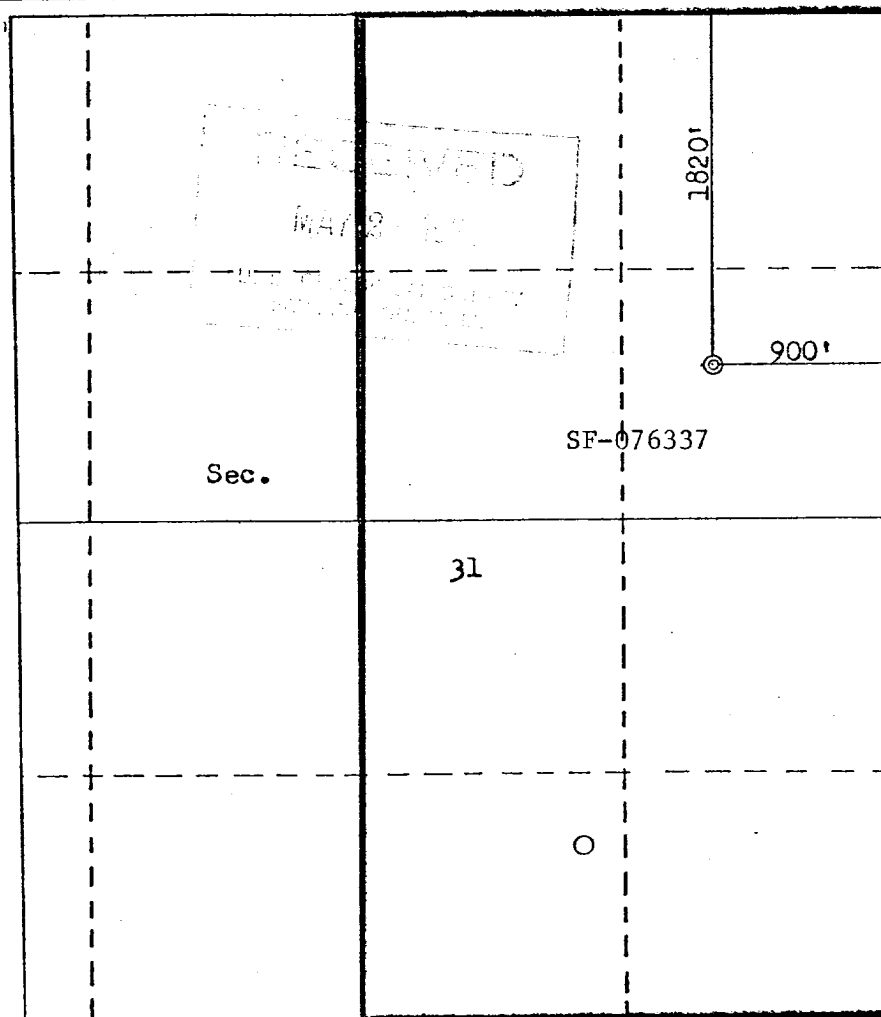
Operator AMOCO PRODUCTION COMPANY			Lease W. D. HEATH "B"		Well No. 3-E
Unit Letter H	Section 31	Township 30N	Range 9W	County San Juan	
Actual Footage Location of Well: 1820 feet from the North line and 900 feet from the East line					
Ground Level Elev. 5854	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: E 320 316.5 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.

B.E. Fackrell

Name
B.E. FACKRELL

Position
DISTRICT ENGINEER

Company
AMOCO PRODUCTION COMPANY

Date
FEBRUARY 26, 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
February 19, 1980

Registered Professional Engineer
and/or Land Surveyor
Fred B. Kern
Fred B. Kern

Certificate No. **FRED B. KERN, INC.**
3950

330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

SUPPLEMENTAL INFORMATION TO FORM 9-331C

W. D. HEATH "B" NO. 3E
1820' FNL & 900' FEL, SECTION 31, T30N, R9W
SAN JUAN COUNTY, NEW MEXICO

The geologic name of the surface formation is the Tertiary Nacimiento.

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	1171'	+4698'
Kirtland	1408'	+4459'
Fruitland	2110'	+3759'
Pictured Cliffs	2410'	+3459'
Chacra (if present)	'	'
Mesaverde [Cliff House	4039'	+1830'
[Point Lookout	4661'	+1208'
Gallup	5832'	+ 37'
Dakota	6712'	- 843'
TD	7040'	-1173'

Estimated KB elevation: 5867'

Drilling fluid to intermediate TD will be a fresh water, low solids non-dispersed mud system and then to TD with air. Open hole logging program will include logs from TD to below surface casing:

Induction-SP-GR
Formation Density-Sidewall Neutron-GR

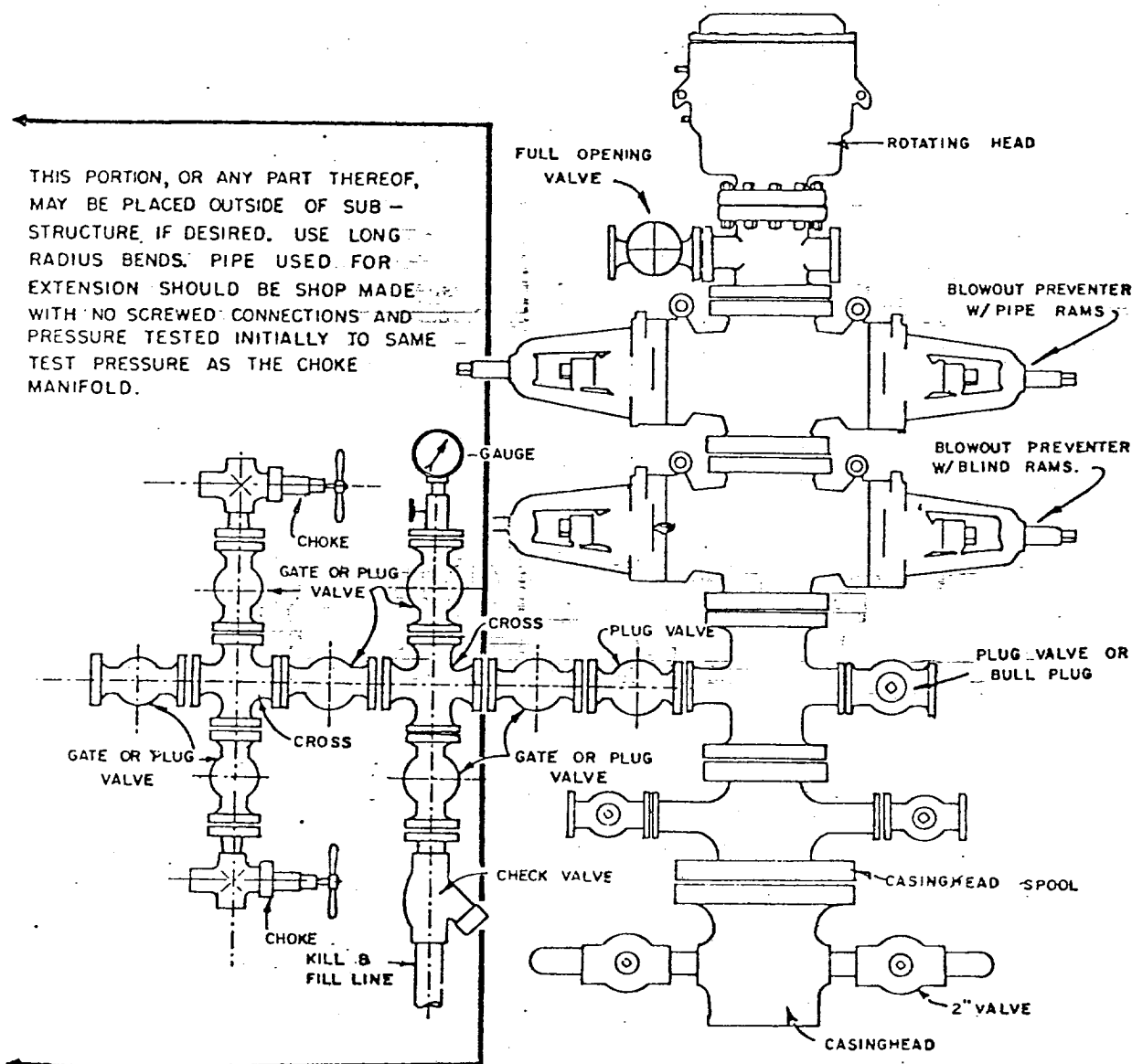
Completion design will be based on these logs. No cores or drill stem tests will be taken.

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

W. D. HEATH "B" NO. 3E
1820' FNL & 900' FEL, SECTION 31, T30N, R9W
SAN JUAN 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 W. D. Heath "B" Well No. 3, approximately one-half mile south.
5. Water will be hauled from the San Juan River.
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 west 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 Land Management.
11. The general topography is a flat area, on edge of wash, with sandy loam soil; vegetation consists of native grasses and junipers.

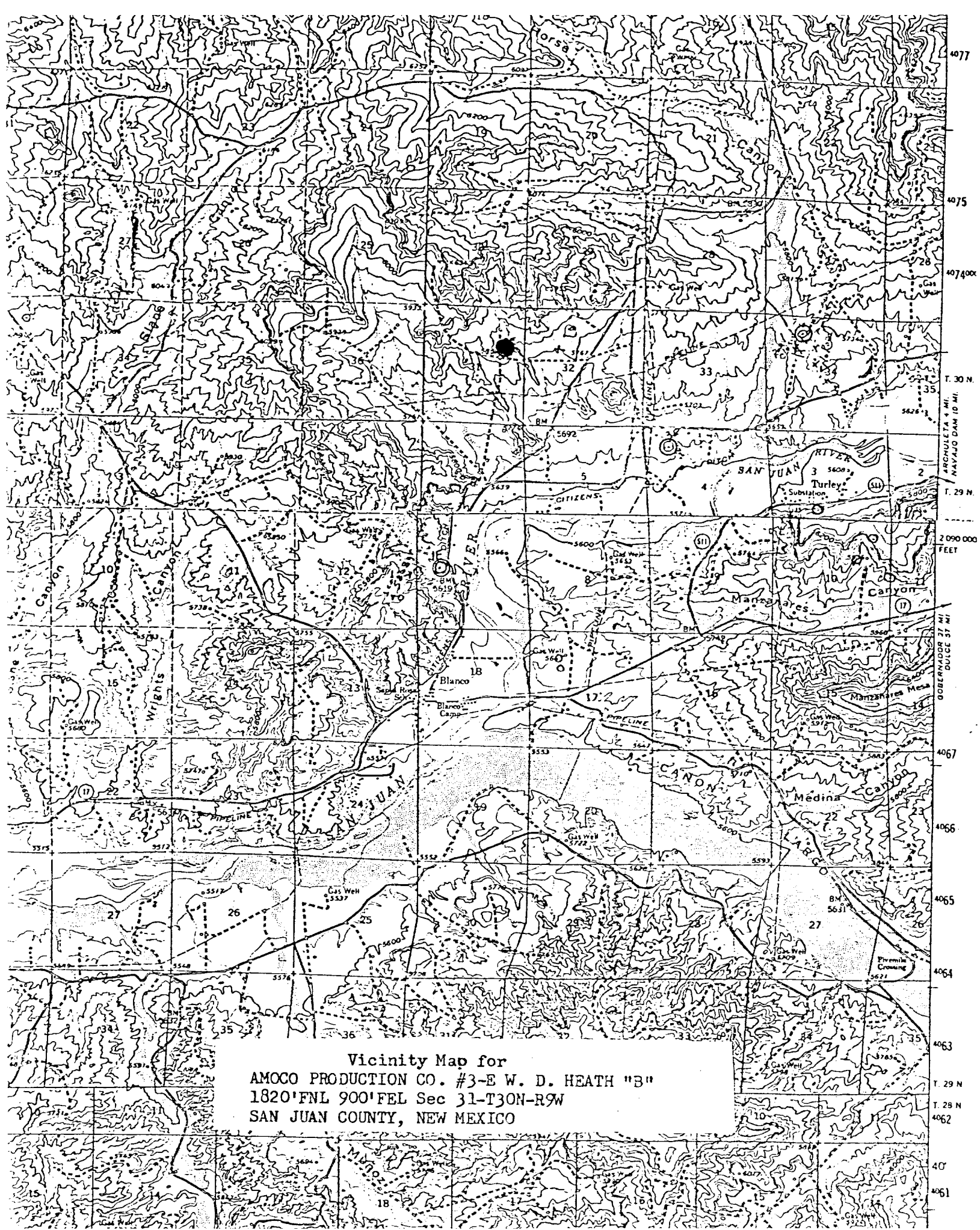
Representatives of the U. S. Geological Survey's Farmington Office and the Bureau of Land Management inspected the site with Amoco personnel. Cultural resources inspection was conducted by an archaeologist from Salmon Ruins.

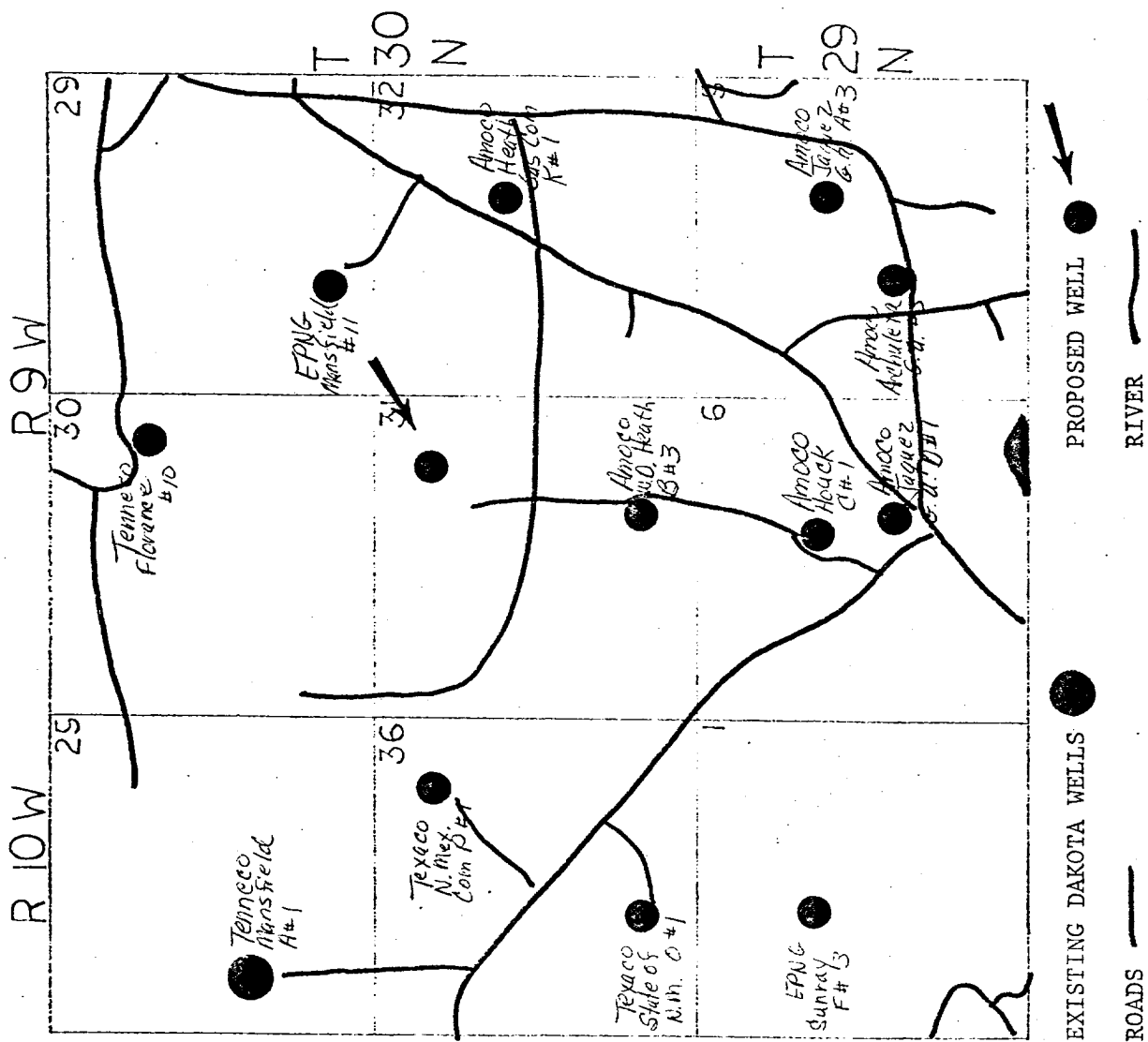
12. Operator's Representative: R. W. Schroeder
Phone: Office: 505-325-8841; Home: 505-325-6164
Address: 501 Airport Drive, Farmington, NM 87401

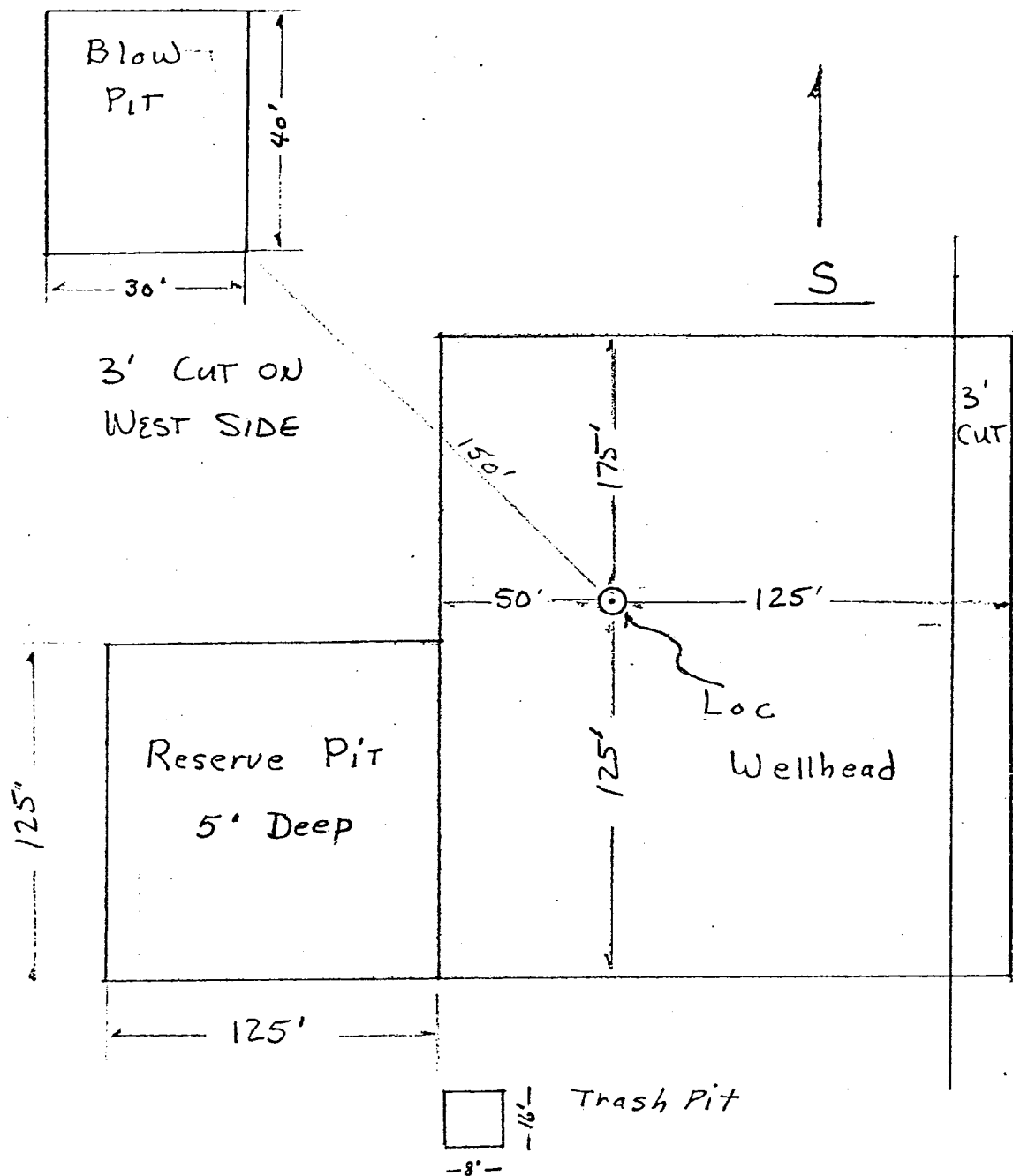
Certification: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the 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 April 30, 1980


R. W. Schroeder, District Superintendent







Approximately 1.2 Acres

Amoco Production Company	SCALE: None
Drilling Location Specs W.D. HEATH "B" #3E	DRG. NO.