

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY30-045-24662
5. LEASE DESIGNATION AND SERIAL NO.

SF-077382

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

R. P. Hargrave "J"

9. WELL NO.

IE

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

SE/4, NW/4, Section 3

T27N, R10W

12. COUNTY OR PARISH

13. STATE

San Juan

New Mexico

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✓ 1540' FNL and 1520' FWL, Section 3, T27N, R10W
At proposed prod. zone

Same

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

8 miles Southeast of Bloomfield, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drg. unit line, if any)

1520'

16. NO. OF ACRES IN LEASE

2523.52

17. NO. OF ACRES ASSIGNED
TO THIS WELL

✓ 320.96

18. DISTANCE FROM PROPOSED LOCATION*

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

2929'

19. PROPOSED DEPTH

6587'

20. ROTARY OR CABLE TOOLS

Rotary

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

6060' GL

22. APPROX. DATE WORK WILL START*

As soon as permitted

23.

PROPOSED CASING AND CEMENTING PROGRAM

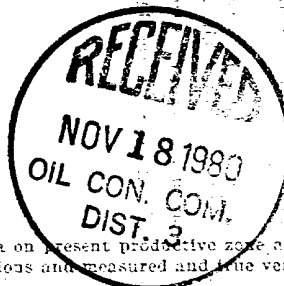
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" (New)	24# K-55	300'	300 sx Class B x 2 1/2" CaCl2-circ
7-7/8"	4-1/2" (New)	10.5# K-55	6587'	1st Stage- 371 sx CI B 50:50 POZ
DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO NEW LAW WITH ATTACHED "FARMING AND MINING"				2nd Stage- 1064 sx (x 6 1/2" gel, 2# med tuf plug/sx, .8% FLA x 100 sx CI B Neat (Tail in) circ

This application to drill an Infill Basin Dakota well is pursuant to Order No. R-1670-V approved by the NMOCB 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 Southern Union Gas Co.

RECEIVED

OCT 1980

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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 W. L. Peterson TITLE District Engineer DATE October 3, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NMOCB

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

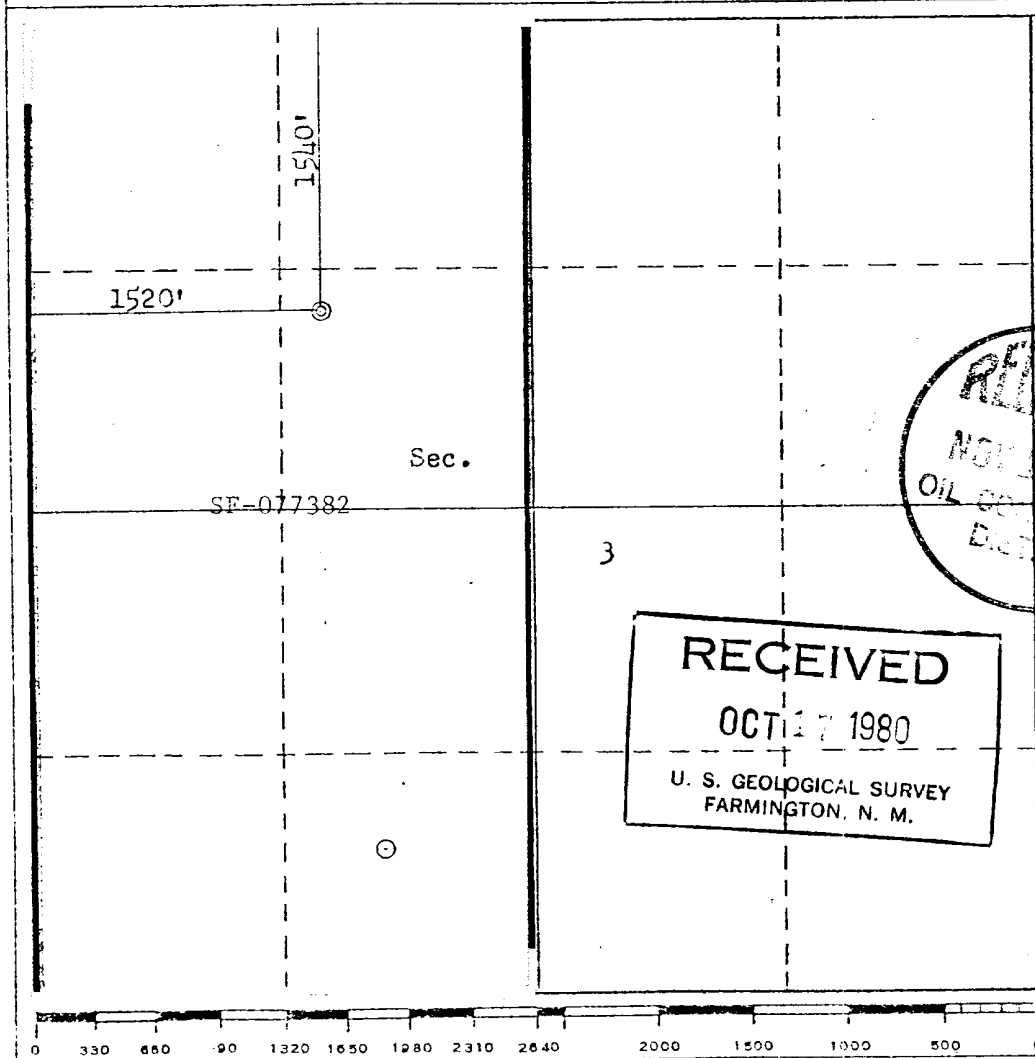
Operator AMOCO PRODUCTION COMPANY			Lease R. P. HARGRAVE "J"		Well No. 1E
Unit Letter F	Section 3	Township 27N	Range 10W	County San Juan	
Actual Footage Location of Well: 1540 feet from the North line and 1520 feet from the West line					
Ground Level Elev. 6060	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: W/320.96 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 Operating Agreements

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

MAY 20, 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

May 13, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kern Jr.
Fred B. Kern Jr.

Certificate No.

3950

SUPPLEMENTAL INFORMATION TO FORM 9-331C

R. P. HARGRAVE "J" NO. 1E
1540' FNL & 1520' FWL, SECTION 3, T27N, R10W
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	979'	+5094'
Kirtland	1134'	+4939'
Fruitland	1709'	+4364'
Pictured Cliffs	1966'	+4107'
Chacra (if present)	3056'	+3017'
Mesaverde	Cliff House 3536'	+2537'
	Point Lookout 4371'	+1702'
Gallup	5511'	+ 562'
Dakota	6387'	- 314'
TD	6587'	- 514'

Estimated KB elevation: 6073 '

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:

SP-Induction-GR	BSC-TD
FDC-CNL-GR	BSC-TD

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.

MULTI-POINT SURFACE USE PLAN

R. P. HARGRAVE "J" NO. 1E
1540' FNL & 1520' FWL, SECTION 3, T27N, R10W
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 an 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 R. P. Hargrave "J" Well No. 1, approximately two-thirds mile south.
5. Water will be hauled from Kutz Wash water holes.
6. No construction materials will be hauled in for this location.
7. A 150' by 150' 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 10-foot cut will be made on north/northeast corner.
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 according to Bureau of Land Management specifications.
11. The general topography is a terrain sloping to the northeast, with a sandy clayey soil; vegetation consists of juniper, sagebrush and native grasses.

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 San Juan College.

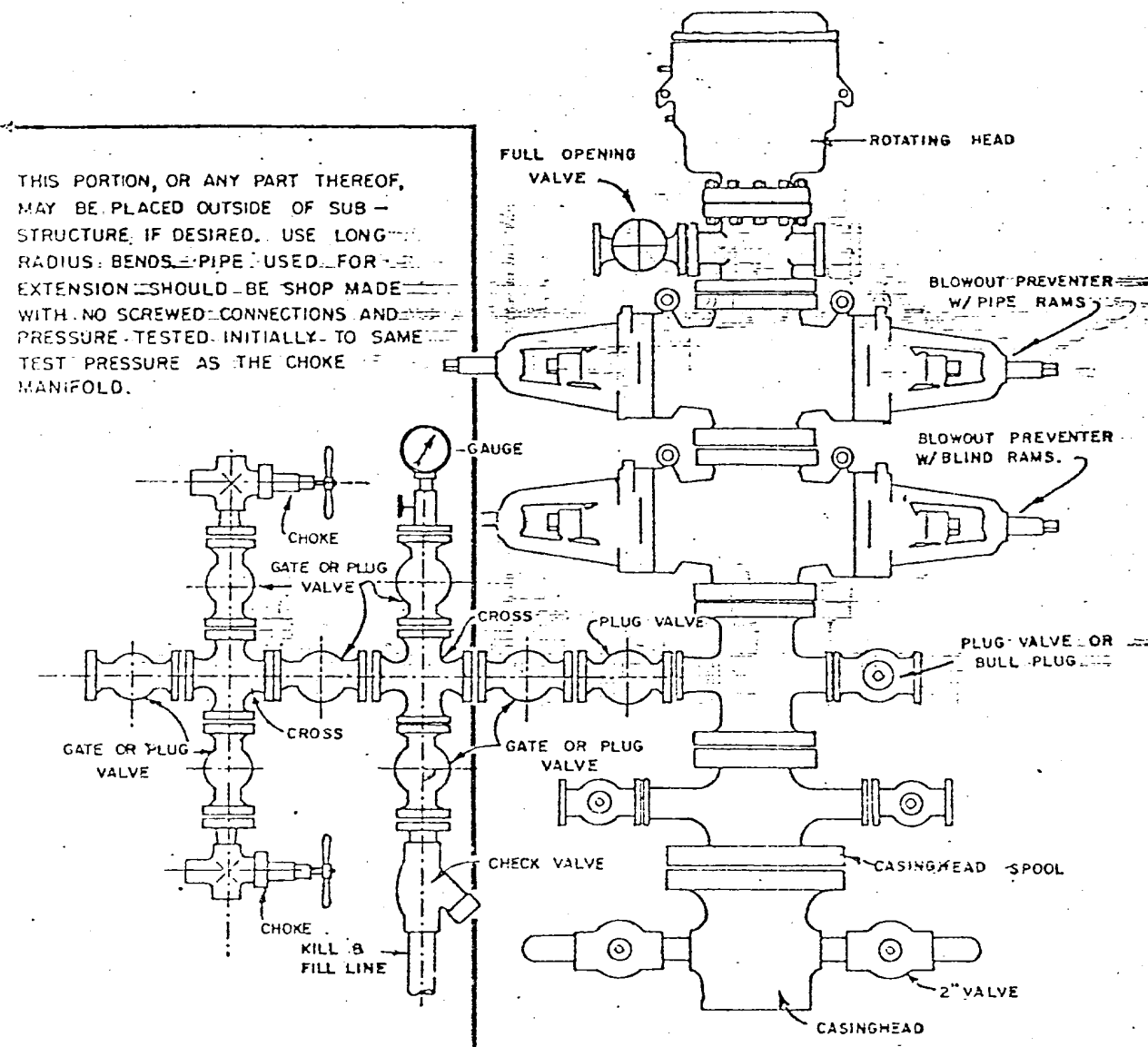
12. Operator's Representative: R. W. Schroeder
Phone: Office: 505-325-8841; Home: 505-325-6164
Address: 501 Airport Drive, Farmington, NM 87401

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 29, 1980


R. W. Schroeder, District Superintendent

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.



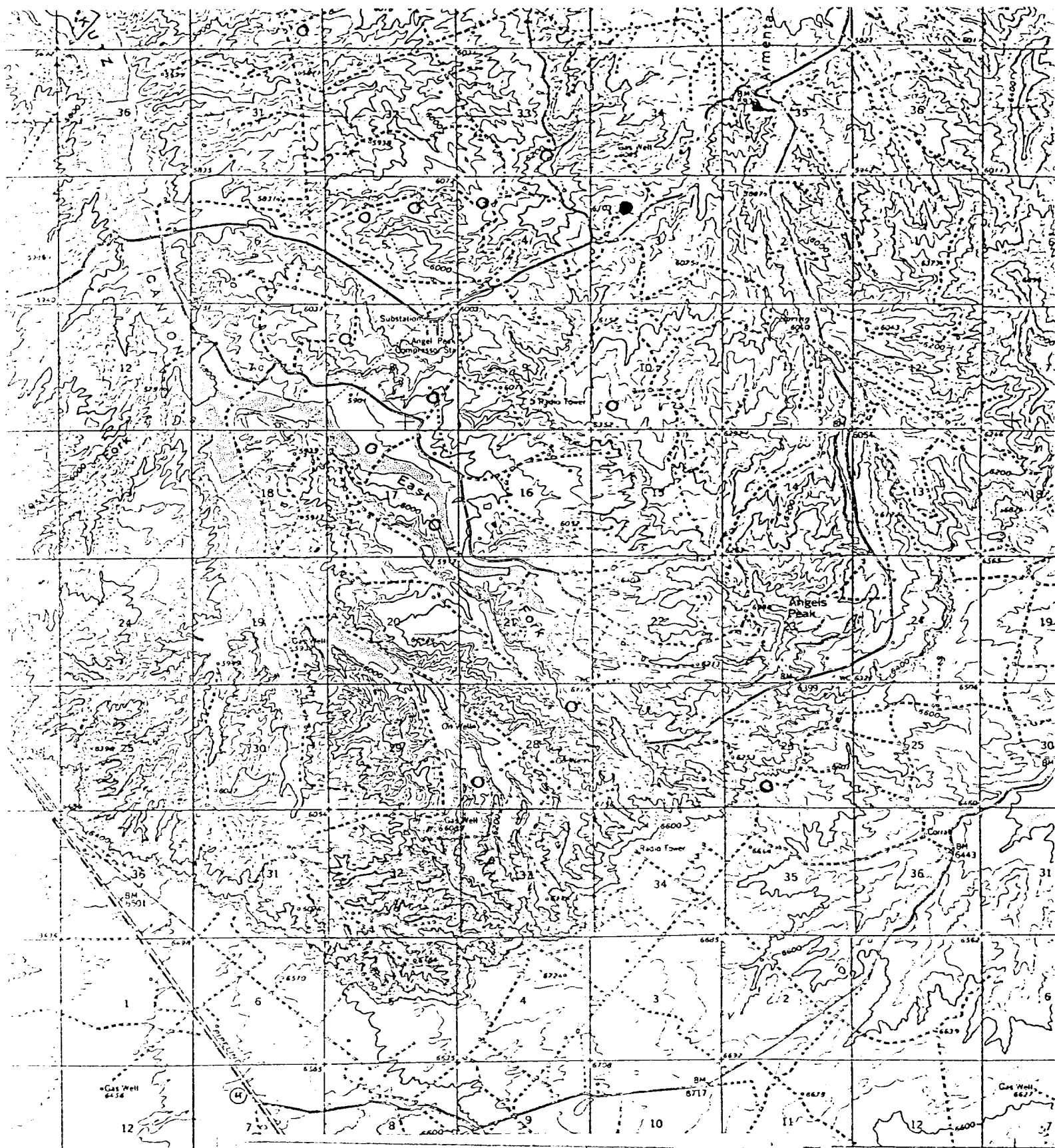
BLOWOUT PREVENTER HOOKUP

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.



1:50,000 FEET 235 BLANCO 7

Geological Survey

from aerial
(1950)

datum
ordinate system,

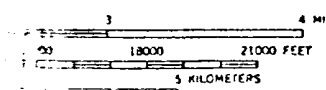
grid ticks,

31°

UTM GRID AND 1960 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

Vicinity Map for
AMOCO PRODUCTION CO. #1E R. P. HARGRAVE "J"
1540'FNL 1520'FWL Sec. 3-T27N-R10W
SAN JUAN COUNTY, NEW MEXICO

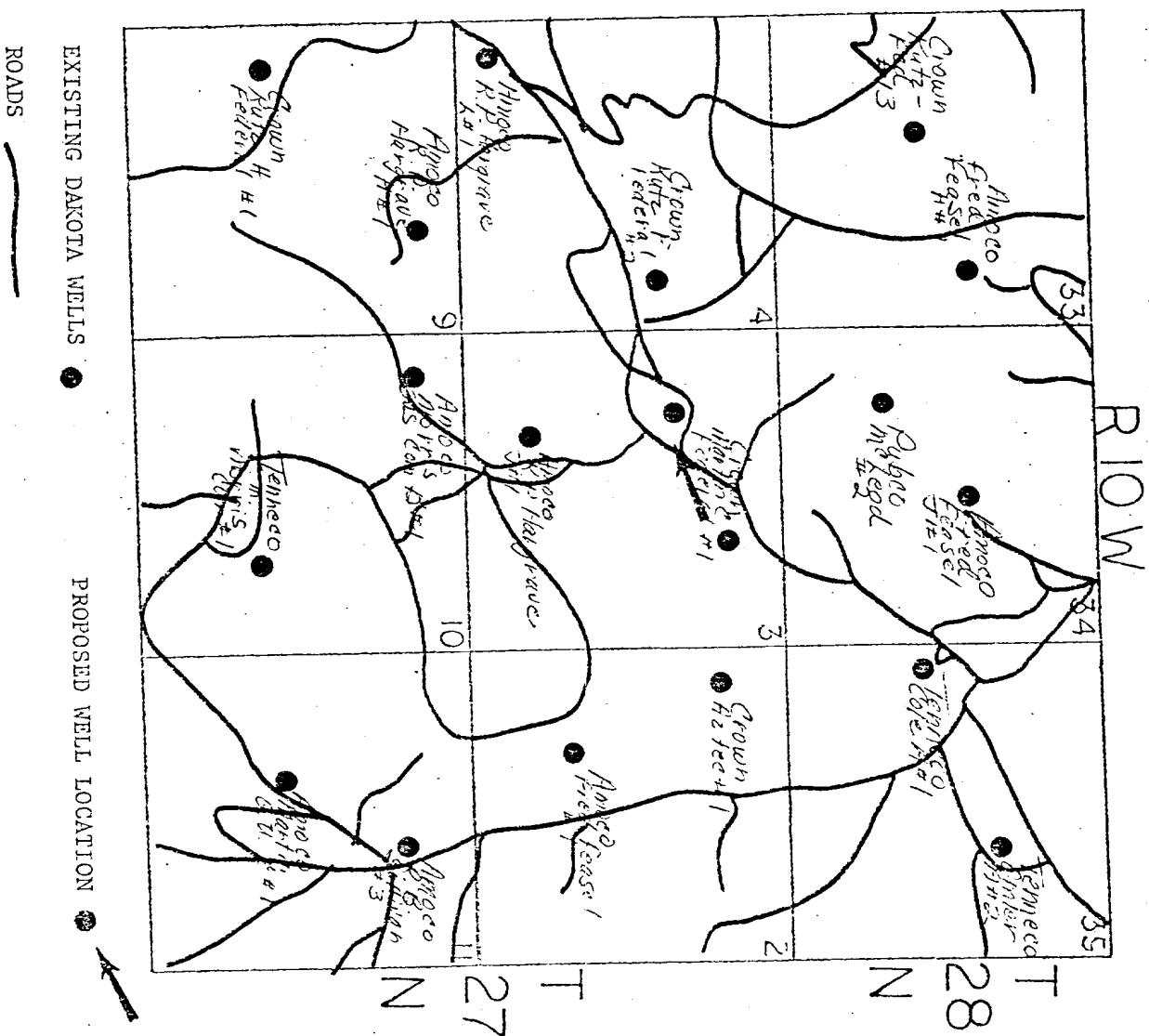
DATUM IS MEAN SEA LEVEL

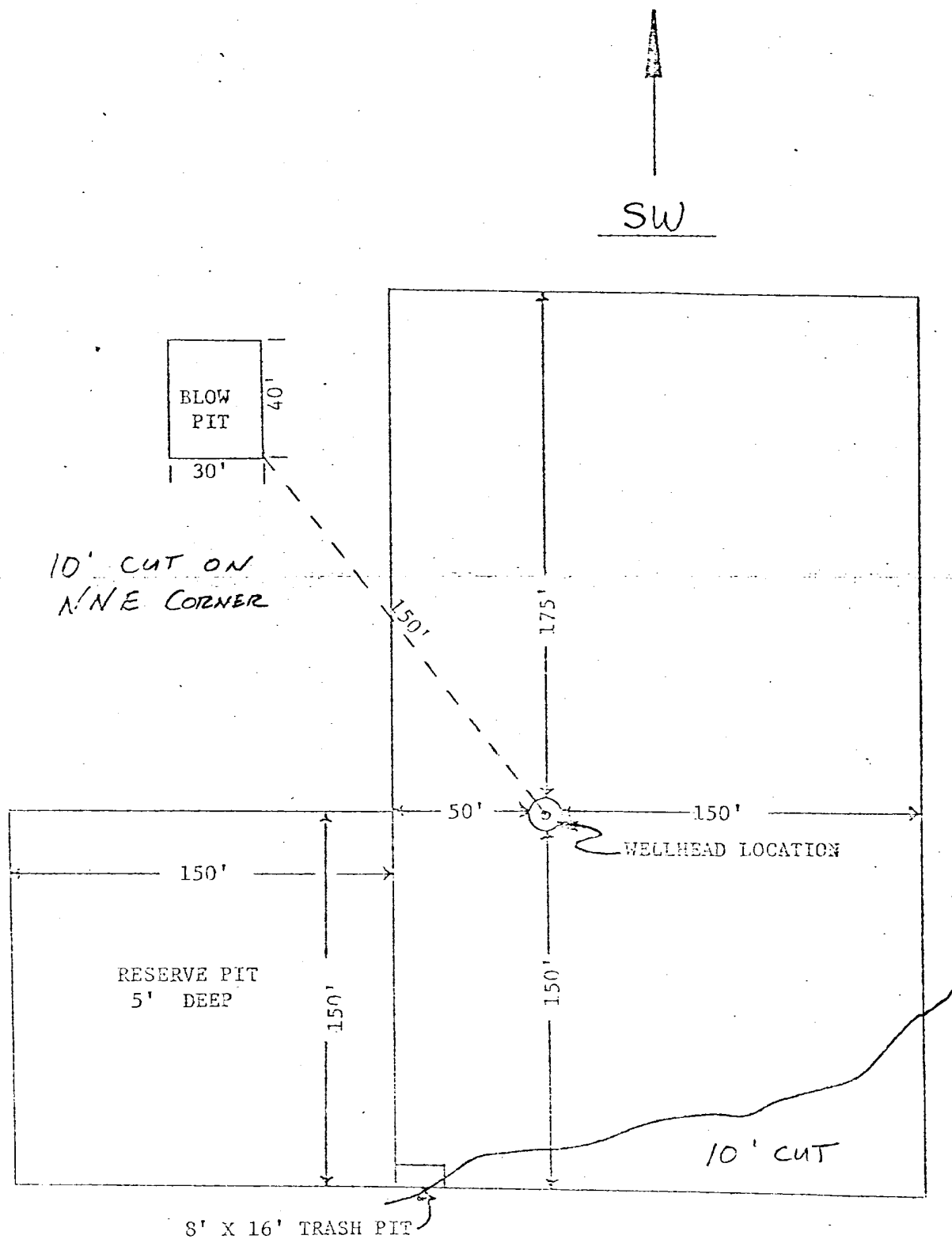


THIS MAP COMPLEIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80226 OR WASHINGTON, D. C. 20512

R. P. HARGRAVE J #1E





APPROXIMATELY 1.2 ACRES

Amoco Production Company	SCALE: 1"=50'
DRILLING LOCATION SPECIFICATIONS	
R.P. Hargrave "J" No. 12	DWG. NO.