Form 9-331 C
(May 1963)

(Other instructions on reverse side)

Budget Bureau No. 42-R1425.

30-045-25534

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: SF-077972

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Richardson Gas Com "B"

2. NAME OF OPERATOR: Amoco Production Company

9. WELL NO.: No. 1E

3. ADDRESS OF OPERATOR: 501 Airport Drive, Farmington, NM 87401

10. FIELD AND POOL, OR WILDCAT: Basin Dakota

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface: 1625' FNL x 1575' FWL
At proposed prod. zone: Same

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FARMINGTON, N. M.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: SE/4, NW/4, Section 11, T27N, R13W

12. COUNTY OR PARISH: San Juan — 13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 8 miles south of Farmington, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1575'	2278.20	N320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
2909'	6100'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5936' 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"	24# K-55	300'	372 cu. ft. Class "B" neat - circ.
7-7/8"	4-1/2"	10.5# K-55	6200'	Stage 1 - 547 cu. ft. Class "B" 50:5 POZ, 6% gel, 2# med tuf plug/sx, an 0.8% FLA. Tail in with 118 cu. ft. Class "B" neat - circ. Stage 2 - 1359 cu. ft. Class "B" 65:35 POZ, 6% gel, 2# med tuf plug/ sx and 0.8% FLA. Tail in w/118 cu. ft. Class "B" neat - circ.

Amoco proposes to drill the above well to further develop the Basin Dakota reservoirs. The well will be drilled to the surface casing point using native mud. The well will then be drilled to TD with a low solids non-dispersed mud system. Completion design will be based on open hole logs. Copy of all logs will be filed upon completion. Amoco's standard blowout prevention will be employed; see attached drawing for blowout preventer design.

Upon completion, the well location will be cleaned and the reserve pit filled and leveled.

The gas produced from this well is dedicated to El Paso Natural Gas under Contract No. 56742.

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: Original Signed By D. H. SHOEMAKER — TITLE: District Engineer — DATE: 10/26/82

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

DEC 1 3 1982
OIL CON. DIV.
DIST. 3

APPROVED AS AMENDED
DEC 09 1982
/s/ JAMES F. SIMS
DISTRICT ENGINEER

NMOCC

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

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

Operator	Lease	Well No.
AMOCO PRODUCTION COMPANY	RICHARDSON GAS COM "B"	1E

Unit Letter	Section	Township	Range	County
F	11	27N	13W	San Juan

Actual Footage Location of Well:
1625 feet from the North line and 1575 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5936	Dakota	Basin Dakota	N 320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

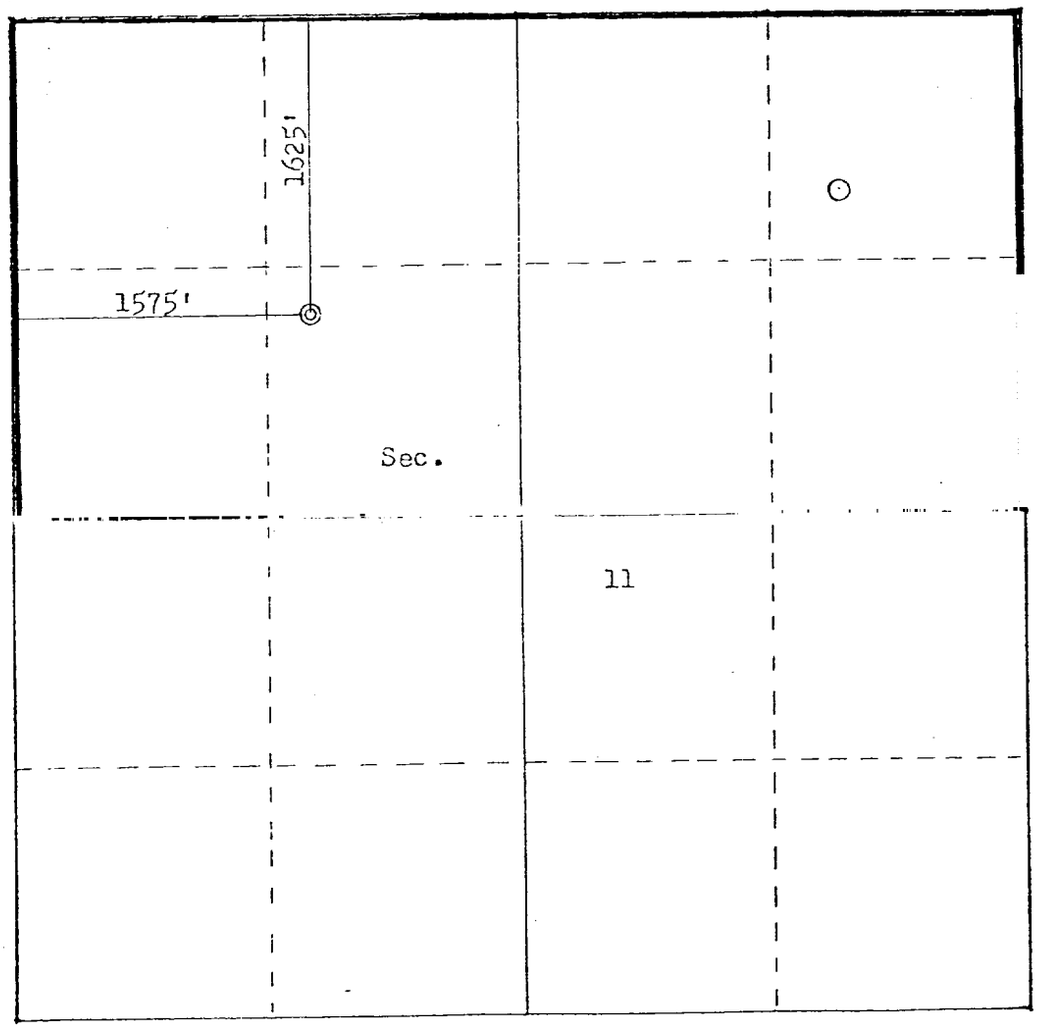
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

[X] Yes [ ] No If answer is "yes," type of consolidation Communitization

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.



Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Dale H. Shoemaker

Name: Dale H. Shoemaker

Position: District Engineer

Company: Amoco Production Company

Date: October 21, 1982

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: September 13, 1982

Registered Professional Engineer and Land Surveyor:

Fred B. Kerr Jr.

Certificate No. 3950

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [X] Special					Test Date: 1-28-83			
Company: Amoco Production Company				Connection: El Paso Natural Gas Company				
Pool: Basin				Formation: Dakota			Unit:	
Completion Date: 1-8-83		Total Depth: 6204		Plug Back TD: 6168		Elevation: 5936	Farm or Lease Name: Richardson Gas Com "B"	
Csg. Size: 4.500	Wt.: 11.6	d: 4.000	Set At: 6204	Perforations: From 6014 To 6126			Well No.: 1E	
Tbg. Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 6118	Perforations: From open To ended			Unit: F Sec.: 11 Twp.: 27 Rge.: 13	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single				Packer Set At: None			County: San Juan	
Producing Thru: Tubing	Reservoir Temp. °F:		Mean Annual Temp. °F:	Baro. Press. – P_a:			State: New Mexico	
L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps

	FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI	12 Days					1432		1435		
1.	2.375	.750				268		694		3 hrs
2.										
3.										
4.										
5.										

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	12.365		280	1.000	.9258	1.033	3311
2.							
3.							
4.							
5.							

NO.	P_r	Temp. °R	T_r	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 1447 P_c^2 2093809

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		706	498436	1595373
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ 1.3124

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 1.2262

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 4060

Absolute Open Flow 4060 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n .75

Remarks: _____

Approved By Division | Conducted By: | Calculated By: | Checked By:

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DIST. 3