

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

32-039-25045

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 Coal Seam

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Amoco Production Company

ATTN: J. L. Hampton

3. ADDRESS OF OPERATOR

P. O. Box 800 Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

2310' FNL, 1620' FEL, SW/NE

At proposed prod. zone

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

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drg. unit line, if any) 1620'

18. DISTANCE FROM PROPOSED LOCATION*

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

16. NO. OF ACRES IN LEASE

320.00

19. PROPOSED DEPTH

3141' TD

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320 acres E/2

20. ROTARY OR CABLE TOOLS

Rotary

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

6218' GR

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4
PROPOSED CASING AND CEMENTING PROGRAM

22. APPROX. DATE WORK WILL START*

23.

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	250'	250 cf (cement to surface)
7 7/8"	5 1/2"	17#	3141' (TD)	879 cf (cement to surface)

Notice of Staking was submitted: 10/24/90

Lease Description:

T28N-R7W:

Sec. 25: N/2

RECEIVED
JAN 8 1991
OIL CON. DIV
DIST. 3

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.

J. L. Hampton

SIGNED

J. L. Hampton

TITLE Sr. Staff Admin. Supv.

DATE

10/30/90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

NMOOD

AS AMENDED

JAN 11 1991

AREA MANAGER

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Amoco proposes to drill the well to further develop the Fruitland Coal reservoir. The well will be drilled to the surface casing point using native mud. The well will then be drilled to the total depth with a non-dispersed mud system. The attached modified 12" 3000 psi blowout preventer will be used (please see attached BOP information). The well will be completed in the Fruitland Coal with a fracture stimulation.

<u>Quantity</u>	<u>Size</u>	<u>Weight</u>	<u>Description</u>	<u>Cementing Program</u>
<u>SURFACE CASING</u>				
250'	8-5/8"	24#	K55 ST&C	250 cf Class B, 2% CaCl ₂ 15.6 ppg
<u>INTERMEDIATE STRING</u>				
314'	5.5"	17#	K55 ST&C	674 cf Class B, 65:35:6 10% salt, .25% dispersant 13.1 ppg 118 cf Class B, 2% CaCl ₂ 15.6 ppg

The above casing design is based upon a 11.0#/gal mud weight.

EVALUATION

The log surveys (FDC/GR/CAL, Microlog) will be run per attached drilling and completion program.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

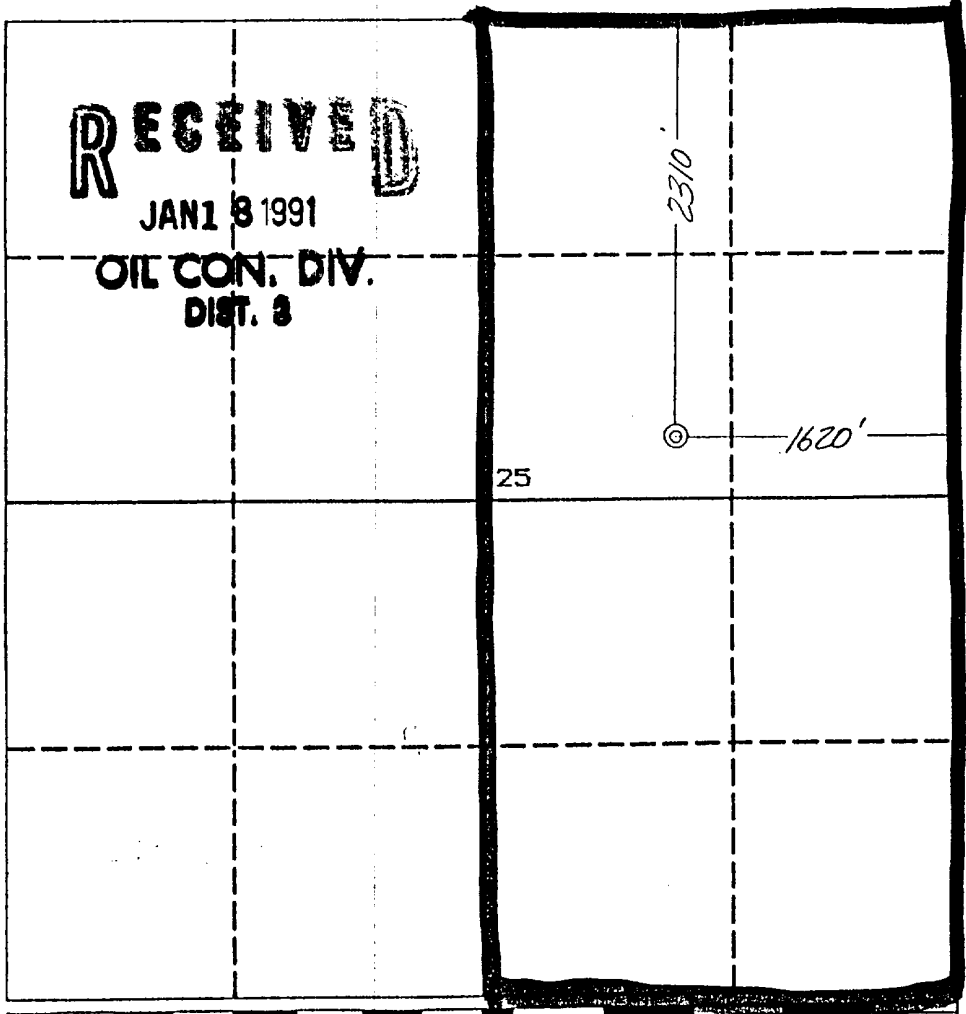
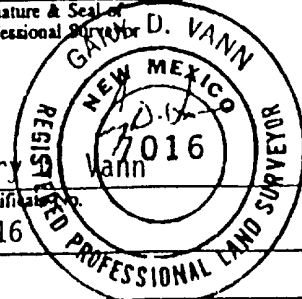
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator AMOCO PRODUCTION COMPANY			Lease SAN JUAN 28-7 UNIT		Well No. # 412
Unit Letter G	Section 25	Township 28 NORTH	Range 7 WEST	County RIO ARRIBA	
Actual Footage Location of Well: 2310 feet from the NORTH line and 1620 feet from the EAST line					
Ground level Elev. 6218	Producing Formation Fruitland Coal		Pool Basin Fruitland Coal Gas		Dedicated Acreage: E/2 320.0 Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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 interest, has been approved by the Division.</p>					
<div style="text-align: center;">RECEIVED JAN 18 1991 OIL CON. DIV. DIST. 3</div> 			OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.		
			Signature <i>[Signature]</i>		
			Printed Name DL Hampton		
			Position Sr Staff Admin Supr		
			Company Amoco Prod		
Date 10-24-90					
SURVEYOR CERTIFICATION 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 October 3, 1990					
Signature & Seal of Professional Surveyor 					
Gary Certification No. 7016					

AMOCO PRODUCTION COMPANY DRILLING AND COMPLETION PROGRAM

Lease & Well # San Juan 287 # 412 City/St LaPlata/Colo Date: _____
 Field Ignacio Blanco Fruitland Operation Center Durango/San Juan FLAG NO. _____
 Surf. Loc. 2310 FNL 1620 FEL / 3 1/2 Mc / Sec. 25 T26N R70W BHLOC same
 Coal Degas # 311 Area _____

CRITICAL WELL _____ NON-CRITICAL WELL _____

ORIGINAL _____ REVISION # _____

SPECIAL SURVEYS

TYPE DEPTH INTERVAL
 FDC/GR/CAL (TD+1000')-TD
 Microlog (TD+1000')-TD

REMARKS Run FDC at slow speed high sample rate through bottom 1000' of hole. Bulk Density presentation as per standard coal log format. Customer edit 9 track LIS tape to R. G. Kemp in Denver - ASAP

SPECIAL TESTS

None

REMARKS

APPROXIMATE DEPTHS OF GEOLOGICAL MARKERS

ESTIMATED ELEVATION 6231 KB

MARKER	TVD ELEV	MEAS DEPTH
Ojo Alamo	+4110	2121
Fruitland #	+3535	2676
Pictured Cliffs	+3290	2941

TOTAL DEPTH +3090 3141

*POSSIBLE PAY #PROBABLE COMPLETION INTERVAL

DRILL CUTTING SAMPLES	DRILLING TIME
FREQUENCY DEPTH INTERVAL	FREQUENCY DEPTH INTERVAL
None	Geograph BSC-TD

REMARKS Correct for actual elevation if necessary. The actual total depth will be 200' below the last coal.

MUD PROGRAM	Approximate Interval	Type Mud	Weight #/Gal.	Viscosity Sec. API	W.I. CC/30M	Other Specifications
0-250'	spud					
250-TD	LSND		8.6-11.0	Sufficient to clean hole and maintain hole conditions for logs.		

Remarks:

CASING PROGRAM (Normally, tubular goods allocation letter specifies casing sizes to be used. Hole sizes will be governed by Contract)

CASING STRING CONDUCTOR	EST. DEPTH	CASING SIZE	HOLE SIZE	SX CEMENT	TYPE CEMENT	DESCRIP. OF LANDING PT
SURFACE	250'	8 5/8"	12 1/4"	to sfc.	**	
INTERMEDIATE						
OIL STRING	TD	5 1/2"	7 7/8"	to sfc.	**	
LINER CASING						

Remarks: ** Operation Center Drilling Engineer to design.

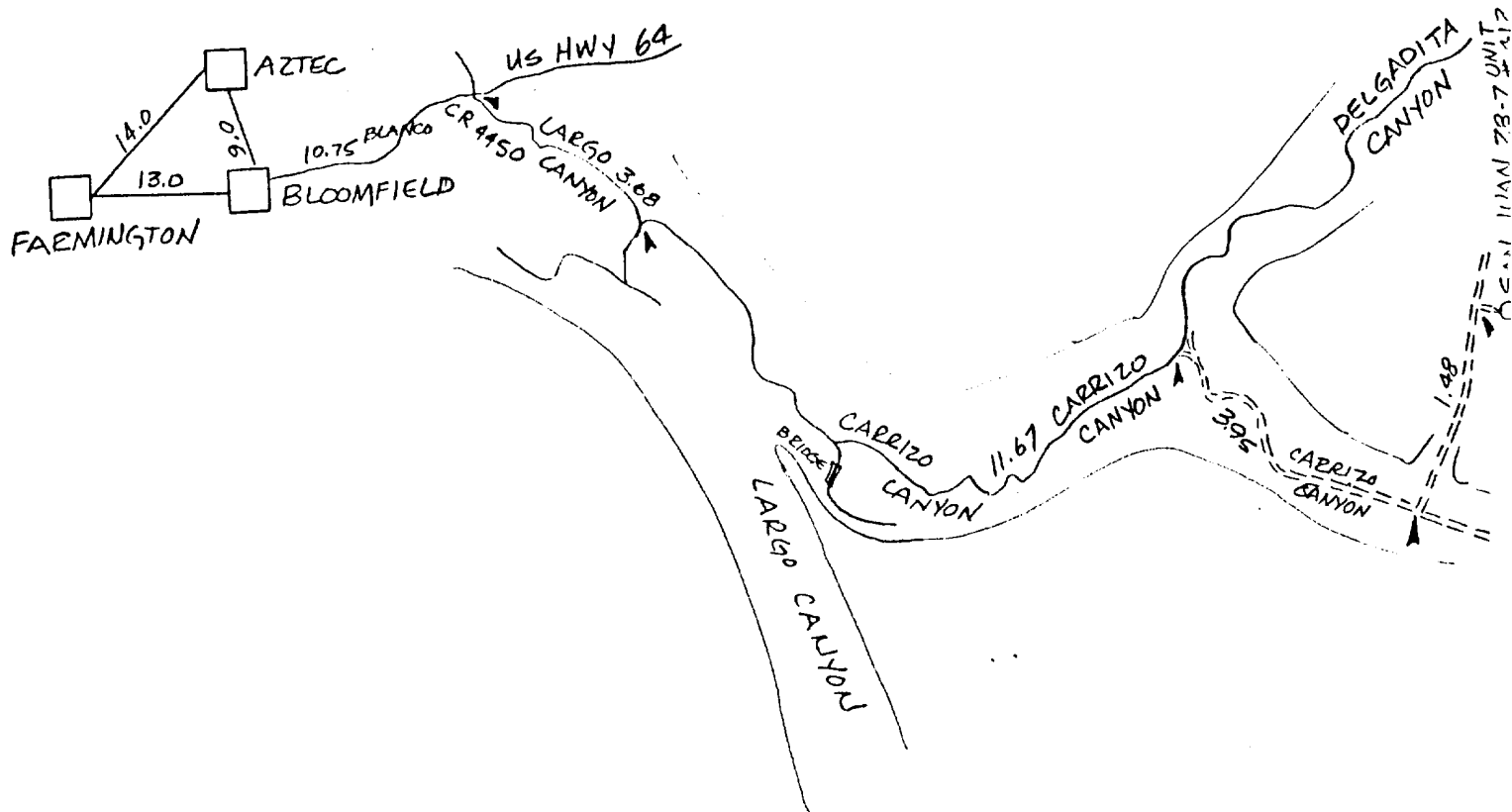
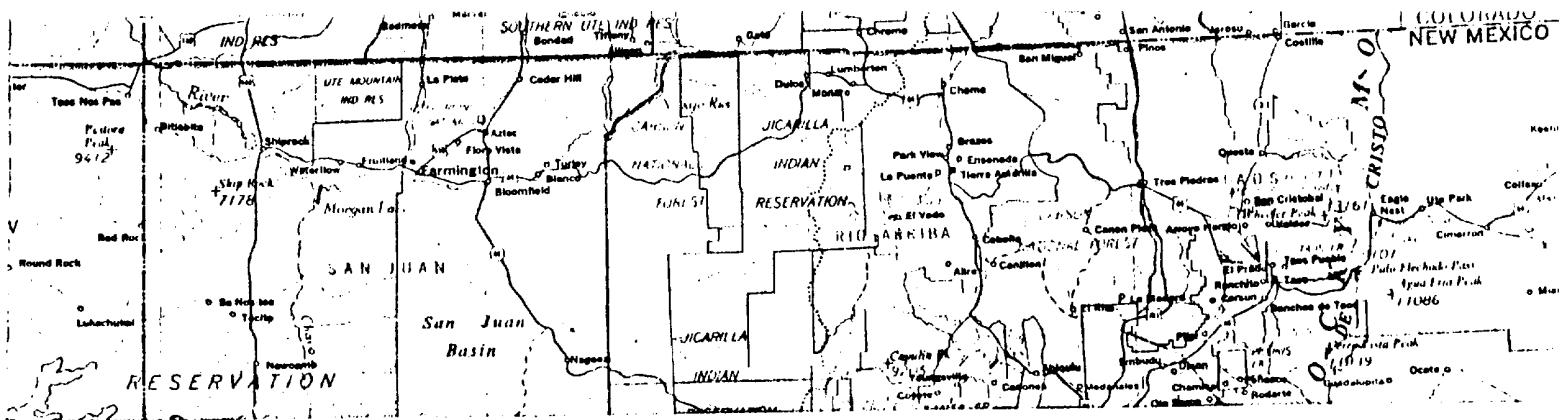
WELLHEAD: 2,000 psi threaded equipment

COMPLETION PROGRAM: Southern Division Coal Degas Group to design

GENERAL REMARKS: This well to be maintained in confidential status.

Prepared by: R. G. Kemp, T. R. Enterline, R. A. Ross, G. E. Gray

Approvals: _____
 PRODUCTION DEPARTMENT DATE EXPLORATION DEPARTMENT DATE
 C:CODEGAS3.SHL



SAN JUAN 28-7 UNIT # 412
 2310' F/NL 1620' F/EL
 SEC. 25, T28N, R7W, NMMP
 RAIL POINT: 173 mi - Montrose, Co.
 MUD POINT: 41 mi - Aztec, NM
 CEMENT POINT: 45 mi - Farmington, NM