

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

24 April 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-
pany for NGPA Wellhead Price Ceiling
Category Determination, San Juan
County, New Mexico.

CASE
8471
8566

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Maryann Lunderman
Attorney at Law
Energy and Minerals Department
Energy and Minerals Division
Santa Fe, New Mexico 87501

For the Applicant:

Stephen D. Ring
Attorney at Law
Amoco Production Company
P. O. Box 800
Denver, Colorado 80201

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I N D E X

CHARLES J. BOYCE

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E X H I B I T S

CASE 8471

Amoco Exhibit One-A, Cover Letter	
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Amoco Exhibit Three-A, Form 121	
Amoco Exhibit Four-A, Form C-101	
Amoco Exhibit Five-A, Form C-102	
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CASE 8566

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Amoco Exhibit Twelve-B, Sworn Statement	
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Amoco Exhibit Fourteen Cross Section	14
Amoco Exhibit Fifteen-B, Gas Analysis	
Amoco Exhibit Sixteen, Gas Analysis	11

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E X H I B I T S CONT'D

Amoco Exhibit Seventeen, Gas Analysis	11
Amoco Exhibit Eighteen, Gas Analysis	11
Amoco Exhibit Nineteen, Gas Analysis	11

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3 MR. STOGNER: We'll call next
4 Case 8471, which is the application of Amoco Production Com-
5 pany for NGPA Wellhead Price Ceiling Category Determination,
6 San Juan County, New Mexico.

7 Call for appearances.

8 MR. RING: Stephen Ring, R-I-N-
9 G, for Amoco Production Company in this case and in the fol-
10 lowing case.

11 I am associated with Mr. Wil-
12 liam Carr of the Santa Fe Law Firm Campbell and Black.

13 Mr. Examiner, Amoco would re-
14 quest consolidation of this case and the following one,
15 8566.

16 The exhibits in the two cases
17 are largely identical and the matter to be shown in each
18 case is the same.

19 MR. STOGNER: Are there any ob-
20 jections to continuing Case 8471 and 8566?

21 There being none, I will now
22 call for Case 8566, which is the application of Amoco Pro-
23 duction Company for NGPA Wellhead Wellhead Price Ceiling
24 Category Determination, San Juan County, New Mexico.

25 Mr. Ring, do you --

MR. RING: I appear for Amoco
in this case, as well.

MR. STOGNER: Okay. Are there

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any other appearances in either one of these cases?

These cases will be so consolidated for purposes of testimony.

MR. RING: Thank you.

Amoco will offer one witness in these consolidated cases and I ask that he be sworn now.

(Witness sworn.)

MR. RING: Mr. Examiner, in Case No. 8471 Amoco presents an application requesting a determination that gas produced from Amoco's Wood Gas Com "A" No. 1 is occluded natural gas produced from coal seams for purposes of Section 107 of the Natural Gas Policy Act of 1978.

Case No. 8566, Amoco presents an application requesting a determination that gas produced from its Leeper Gas Com "D" No. 1-R Well is occluded natural gas produced from coal seams for purposes of NGPA Section 107.

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CHARLES J. BOYCE,

being called as a witness in each of these cases and being
duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. RING:

Q Mr. Boyce, at this time would you state
your full name for the record, indicate by whom you are em-
ployed and in what capacity?

A My name is Charles Boyce, B-O-Y-C-E, and
I'm employed by Amoco Production Company in Denver as a
Senior Petroleum Engineering Associate.

Q Have you previously testified before this
Commission or its Examiners in applications of Amoco for de-
terminations that gas qualifies as occluded natural gas pro-
duced from coal seams?

A Yes, I have.

Q All right. Have you reviewed or super-
vised the preparation of the exhibits which Amoco offers to-
day?

A Yes.

MR. RING: Mr. Examiner, I
would ask Mr. Boyce's acceptance as a witness in this mat-
ter.

MR. STOGNER: Mr. Boyce is so
qualified.

MR. RING: Thank you, sir.

At this time I'm going to give you all our exhibits at once.

In making applications under the Natural Gas Policy Act, Amoco is required to mail in an application and we did that for the Wood Well under letter dated August 30, 1984.

Materials submitted with that letter have been identified in this proceeding as Exhibits One-A through Twelve-A. Many of the materials are necessary to meet procedural requirements and do not contain evidence which is necessary to our discussion this morning and therefore many of those Exhibits One-A through Twelve-A will not be discussed.

Under cover of letter dated March 18, 1985, Amoco submitted its application for the Leeper Gas Com "D" No. 1-R.

The materials submitted with that application are identified as Exhibits One-B through Twelve-B.

Amoco bring additional exhibits today and as you can see from the list numbers, Fifteen-A and Twenty-A are concerned with the Wood Gas Com "A" No. 1 Well.

Exhibit Fifteen-B is concerned with the Leeper Well and Exhibits Thirteen, Fourteen, Sixteen, Seventeen, Eighteen, and Nineteen are identical to the proceedings brought on both of these wells. Therefore those

1
2 exhibits do not contain in their number a suffix letter A or
3 B.

4 With that little preview of exhibits,
5 let's turn to the examination of Amoco's witness.

6 Q Mr. Boyce, for the record would you state
7 the full name and the location of the two wells for which
8 Amoco has submitted applications?

9 A The first well is the Wood Gas Com "A"
10 No. 1. It's located 1155 feet from the north line, 1745
11 feet from the east line of Section 4, 31 North, Range 10
12 West.

13 The second well is the Leeper Gas Com "D"
14 1-R. It's located 1500 feet from the south line, 840 feet
15 from the west line, Section 34, Township 32 North, Range 10
16 West.

17 Q All right, and could you indicate what
18 acreage is attributed to each of these two wells for spacing
19 purposes?

20 A I think it might be better right now if
21 we'd refer to Exhibit Number Thirteen, which is a map of the
22 entire area in the pool and the two wells, and covers most
23 of what we will discuss.

24 In Section 34 of 32 North, 10 West, the
25 Leeper "D" 1-R is on a 320-acre unit consisting of the west
half of section 34.

The Wood Gas Com "A" No. 1 in the lower
township, 31 North, Range 10 West, is located in a 320 unit

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consisting of the north half of Section 4.

Q All right. Mr. Boyce, you'll notice that on Exhibit Seven-A, which was submitted with the original application for the Wood Gas Com "A" No. 1 Well, Amoco has shown acreage of only 160 acres attributed to that well.

Was that an inadvertent mistake?

A No, at the time the well was completed the well had been issued for the pool. Prior to that time Fruitland-Pictured Cliffs spacing area was 160. The pool that was formed and spaced on 320 for the coal zone was not in effect at that time.

Q All right. Has Amoco submitted a revised plat which shows the present spacing for that well?

A That's right. On that group of files, on Exhibit Twenty-A there is a revised plat showing the dedication of 320 acres for that well, which is the north half of Section 4.

Q All right. Mr. Boyce, has evidence previously been presented to the Oil Conservation Division that the acreage attributed to these two wells is underlain by a gas-bearing coal?

A That's correct.

Q I wonder if you could discuss that more at length, turning to your Exhibits Eight-A and Eight-B.

A Exhibit Eight-A in both cases is a copy of Order R-7588, which was issued in July of 1984. Based on testimony presented in January, 1984, evidence showed that

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2 within the area outlined on Exhibit Thirteen the lower
3 Fruitland coal zone did exist and it was determined at that
4 time that within that area this would be designated as a
5 producing pool.

6 Q All right. Does Order No. 7588 give a
7 clear indication of the horizontal limit of the pool?

8 A That's correct.

9 Q And do those limits include the 320-acre
10 units attributed to the two wells that we're discussing here
11 today?

12 A Yes.

13 Q All right. What are the vertical limits
14 of the Cedar Hill Fruitland Basal Coal Pool as designated by
15 Order R-7588?

16 A They were determined and shown on the log
17 of the Schneider Gas Com "B" No. 1, which is in Section 28
18 of 32 North, 10 West, and at the hearing it was determined
19 that between the interval of 2795 and 2878 on the type log
20 of that well would be the vertical limits of the pool.

21 Q All right. Is the Wood Gas Com "A" No. 1
22 Well completed within those vertical limits of the pool we
23 are discussing?

24 A Yes, it is.

25 Q Is the Leeper Gas Com "D" No. 1-R com-
pleted within the vertical limits of the pool we are discus-
sing?

A Yes.

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2 Q All right. Mr. Boyce, what measures did
3 Amoco take to assure that the completion locations in each
4 of these two wells, and let's call those the the coal seam
5 completion locations, what measures did Amoco take to assure
6 that those completion locations are not in communication
7 with any zones other than the coal zone?

8 A In both cases casing was set through the
9 Basal Coal Zone, properly cemented, and only the coal seams
10 were perforated and in both cases very minimal stimulation
11 was utilized, so in my opinion with accepted oil field prac-
12 tices the coal is isolated for production in both these
13 wells.

14 Q All right. Does the gas which Amoco is
15 producing from the Cedar Hills Fruitland Basal Coal Pool
16 from each of these two wells have any unique characteristic
17 which differentiates it from gas found in the neighboring
18 formations?

19 A That's correct. In fact, in addition to
20 the mechanical isolation of the coal zone, which is critical
21 to separating that production from the overlying Fruitland
22 and the underlying Pictured Cliffs, the gas-producing coal
23 was rather unique, and I think a look at Exhibits Sixteen,
24 Seventeen, Eighteen, and Nineteen, which were actually a
25 part of the original presentation for the pool designation,
show that the gas produced from the coal zone is unique and
the analyses that we've presented with the Woods "A" No. 1
and the Leeper Gas Com "D" No. 1 compare with the gas that

1 was shown to be produced from the coal zone and signifi-
2 cantly different than the gas that has been produced in the
3 past from the overlying Fruitland formation and the under-
4 lying Pictured Cliffs formation.

5 The main differences are a fairly high
6 level of carbon dioxide in the coal seam gas compared a low
7 CO2 content in the -- in the sand type production. Fairly
8 low ethane plus in the coal gas resulting in a fairly low
9 BTU content. At the same time relatively higher ethane plus
10 values and BTU's in those other formations.

11 So based on the gas analyses we've pre-
12 sented and the comparison with previous data which supported
13 the coal seam as being unique, the coal is productive of gas
14 in these wells and that is the source of the gas.

15 Q All right. Thank you.

16 In your opinion after your study of this
17 matter and preparation of a number of these exhibits, does
18 the gas produced from the Wood Gas Com "A" No. 1 Well qual-
19 ify as occluded natural gas produced from coal seams for
20 purposes of Section 107 of the Natural Gas Policy Act.

21 A Yes, it does.

22 Q All right, and in your opinion does the
23 gas produced from the Leeper Gas Com "D" No. 1-R qualify as
24 occluded natural gas produced from a coal seam for purposes
25 of Section 107 of the Natural Gas Policy Act?

A Yes, it does also.

Q All right. Do you have anything further

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to testify?

A No. I might point out Exhibit Fourteen just for the record. It -- it does show the logs of the two wells on a section including the reference well for the pool, the Schneider "B" 1, and does show that the coal seam produced in the Leeper and the Wood is within the boundary set in the original order for which the Schneider was the type log.

Q All right, thank you.

MR. RING: Mr. Examiner, that concludes Amoco's testimony.

We would ask at this time that Exhibits Nos. One-A through Twelve-A, One-B through Twelve-B, Number Fifteen-A, Number 20-A and Nos. Thirteen, Fourteen, Sixteen, Seventeen, and Eighteen and Nineteen be admitted into evidence.

MR. STOGNER: All those exhibits that you just mentioned will be admitted into evidence at this time.

MR. RING: Thank you.

CROSS EXAMINATION

BY MR. STOGNER:

Q Mr. Boyce, Exhibit Number Thirteen, your plat.

A Yes.

Q Okay, let's refer now to the west half of

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Section 34, which is the proration unit dedicated to the Leeper Well, I believe.

A Yes.

Q Okay. You show some other wells within that proration unit. Would you briefly go over those and where they're producing, if they're producing?

A The two wells, of course, in the north half, the Leeper "B" No. 1 is an abandoned well. The Leeper 1-A is, to my best knowledge, a location which Amoco has staked, which will be drilled to the Pictured Cliffs and has not yet been drilled, and the Leeper "B" No. 1 in the southwest of the southeast, in that south half of that 320, is an older Pictured Cliffs producing well.

Q Okay, by the designation of the Gas Com "D", in the OCD files we call it the 1-Y, however, I notice that --

A On which well was that, Mr. Stogner?

Q The subject well, the Leeper "D" No. 1-R.

A The Leeper "D" No. 1-R?

Q Yes.

A I think -- let me look at the -- at the original filing. I believe that the original name for that well probably was the -- you indicated the Leeper Y?

Q Yes, sir.

A I believe what happened, and I stand corrected, the Leeper "B" No. 1, or pardon me, Leeper "D" No. 1 I pointed out as being a Pictured Cliffs well?

1
2 Q Uh-huh.

3 A That well in the past year and since this
4 original filing was prepared, has been abandoned and this
5 well was renamed the "D" 1-R, which meant a replacement
6 well.

7 So that's why it originally was permitted
8 as a Y well, being a lease name, and before it was drilled
9 we abandoned the "D" No. 1 and called this a "D" 1-R, which
10 would be a replacement for that well, since at the time --
11 time it was drilled we hadn't designated this pool a coal
12 zone.

13 Q The original lease for "D" Well No. 1,
14 what was its production horizon?

15 A I would really have to check the records
16 here in the Commission file. It was either the Fruitland or
17 the Pictured Cliffs.

18 Since this well was designated the 1-R, I
19 would assume it was probably a Fruitland well, but I can't
20 be certain.

21 Q And you wouldn't know off your head if it
22 was a Fruitland well if it would have been completed through
23 the Basal Coal Seam?

24 A I can be -- I can be really assured that
25 it was not. The Fruitland production in this area has his-
torically been from the upper portion of the Fruitland where
the sand zones develop and this lower coal zone, as shown
very clearly on Exhibit Number Fourteen, as right at the

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2 base of the Fruitland formation and there really are no sand
3 lenses within perhaps 50 or 100 feet of it up the hole which
4 would be produced, so, no, I'm fairly certain that this well
5 was - that was abandoned never did produce from this coal
6 zone.

7 Q In the naming of the Leeper "D" 1-R our
8 Aztec District Office has been changing your form reflecting
9 it's the 1-Y. I will be getting in touch with Mr. Chavez
10 and -- and your office about getting the right name on this
11 particular well.

12 A All right.

13 Q It's not that big of a deal, but anyway
14 -- okay, let's now refer to the north half of Section 4,
15 which is dedicated to your Wood Gas Com 1-A, and you show
16 three well site locations on this, also. Would you please
17 go over those?

18 A That's correct. In the north half of
19 Section 4 there is an Usselman "D" No. 1, an Usselman "C"
20 No. 1, that are shown as gas wells and I cannot tell you
21 which horizon they produce from.

22 They are either Pictured Cliffs or Fruit-
23 land wells and in either case, referring again to Exhibit
24 Number Fourteen, neither of those formations in the past
25 have ever been opened in the coal zone, specifically since
it was never known to be productive until our pool was
formed and quite the contrary, was something that was
avoided due to the fact it was coal.

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Q How about the Usselman No. 1?

A That is a location which to my knowledge has not yet been developed. Since we are on 320-acre spacing (not understood).

MR STOGNER: I have no further questions of Mr. Boyce.

Does anybody else have any questions of this witness?

If not, he may be excused.

Anything further in either one of these cases this morning?

MR. RING: We have nothing further.

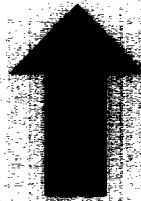
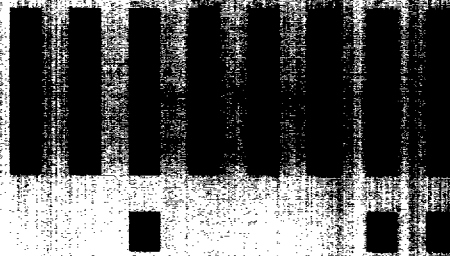
MR. STOGNER: There being nothing further in these two cases, Cases 8477 and 8566 will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY
CERTIFY that the foregoing Transcript of Hearing before the
Oil Conservation Division was reported by me; that the said
transcript is a full, true, and correct record of the
hearing, prepared by me to the best of my ability.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case Nos. 847 and 8566
heard by me on 24 April 19 85
Michael E. Hagan Examiner
Oil Conservation Division



LTR



Job separation sheet

NEW MEXICO O.C.D.: 4-24-85:

AMOCO'S EXHIBITS TO
QUALIFY CERTAIN GAS
AS "COAL SEAM" GAS

WOOD GAS Com "A" #1 (CASE NO. 8471)			LEEPER GAS Com "D" #1R (CASE NO. 8566)		
EXH. #	EXHIBIT NAME		EXH. #	EXHIBIT NAME	
1A	8-30-84 Cover Letter		1B	3-18-85 Cover Letter	
2A	FORM C-132		2B	FORM C-132	
3A	FERC FORM 121		3B	FERC FORM 121	
4A	FORM C-101		4B	FORM C-101	
5A	FORM C-102		5B	FORM C-102	
6A	FORM C-105		6B	FORM C-105	
7A	NGPA Location Plat		7B	NGPA Location Plat	
8A	NMOLD ORDER R-7588		8B	NMOLD ORDER R-7588	
9A	LOG: Compensated Neutron		9B	LOG: Compensated Density	
10A	AREA PLAT				
11A	Certificate of mailing		11B	Certificate of mailing	
12A	Sworn Statement		12B	SWORN STATEMENT	
13A	Field Map		13B	Field Map	
14A	Stratigraphic Cross Section		14B	Stratigraphic Cross Section	
15A	Produced Gas Analysis		15B	Produced Gas Analysis	
16A	Cahn Desorbed Gas Analysis		16B	Cahn Desorbed Gas Analysis	
17A	State "BW" Gas Analysis		17B	State "BW" Gas Analysis	
18A	Fruitland Gas Analysis		18B	Fruitland Gas Analysis	
19A	Pictured Cliffs Gas Analysis		19B	Pictured Cliffs Gas Analysis	
20A	Revised NGPA Location Plat				



Stephen D. Ring
Attorney

Amoco Production Company

Denver Region
1670 Broadway
P.O. Box 800
Denver, Colorado 80201
303-830-4040

March 18, 1985

Re: Leeper Gas Com. "D" No. 1R
Application for Natural Gas
Category Determination, NGPA of
1978 Section 107

Department of Energy and Minerals
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

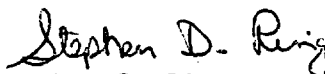
Dear Sir:

Amoco Production Company (Amoco) submits herewith for filing its Application for Natural Gas Category Determination under the Natural Gas Policy Act of 1978 for the above referenced well.

Amoco requests that all inquiries and correspondence regarding this filing be addressed to J.E. Ford, Amoco Production Company, Amoco Building, P.O. Box 800, Denver, Colorado 80201.

Please accept this Application for filing and acknowledge its receipt by stamping the enclosed copy of this letter and returning it in the envelope provided. Thank you.

Yours very truly,


Stephen D. Ring

SDR/mat
Encls.

cc w/att: El Paso Natural Gas Company (Purchaser)
W. P. Carr

SANTA FE, NEW MEXICO 87501
APPLICATION FOR WELLHEAD
PRICE CEILING CATEGORY DETERMINATION

1. FOR DIVISION USE ONLY:
DATE COMPLETE APPLICATION FILED _____
DATE DETERMINATION MADE _____
WAS APPLICATION CONTESTED? YES _____ NO _____
NAME(S) OF INTERVENOR(S), IF ANY: _____

3A. Indicate Type of Lease
STATE ☐ FEDERAL ☒
3. State Oil & Gas Lease No. _____
7. Unit Agreement Name _____
8. Farm or Lease Name
Leeper Gas Com "D"
9. Well No.
1R
10. Field and Pool, or Wildcat
Mt. Nebo Fruitland
12. County
San Juan

2. Name of Operator
Amoco Production Company
3. Address of Operator
Amoco Building, 1670 Broadway, Denver, CO 80201
4. Location of Well
UNIT LETTER L LOCATED 1500 FEET FROM THE South LINE
AND 840 FEET FROM THE West LINE OF SEC. 34 TWP. 32N RGE. 10W
11. Name and Address of Purchaser(s)
El Paso Natural Gas Company, P. O. Box 1492, El Paso, TX 79978

WELL CATEGORY INFORMATION

Check appropriate box for category sought and information submitted.

1. Category(ies) Sought (By NGPA Section No.) 107
2. All Applications must contain:
☒ a. C-101 APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK
☒ b. C-105 WELL COMPLETION OR RECOMPLETION REPORT
☐ c. DIRECTIONAL DRILLING SURVEY, IF REQUIRED UNDER RULE 111
☒ d. AFFIDAVITS OF MAILING OR DELIVERY
3. In addition to the above, all applications must contain the items required by the applicable rule of the Division's "Special Rules for Applications For Wellhead Price Ceiling Category Determinations" as follows:
A. NEW NATURAL GAS UNDER SEC. 102(c)(1)(B) (using 2.5 Mile or 1000 Feet Deeper Test)
☐ All items required by Rule 14(1) and/or Rule 14(2)
B. NEW NATURAL GAS UNDER SEC. 102(c)(1)(C) (new onshore reservoir)
☐ All items required by Rule 15
C. NEW ONSHORE PRODUCTION WELL
☐ All items required by Rule 16A or Rule 16B
D. DEEP, HIGH-COST NATURAL GAS and TIGHT FORMATION NATURAL GAS (Coal Seam Gas)
☒ All items required by Rule 17(1) or Rule 17(2)
E. STRIPPER WELL NATURAL GAS
☐ All items required by Rule 18

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED
HEREIN IS TRUE AND COMPLETE TO THE BEST OF MY
KNOWLEDGE AND BELIEF.

J. H. Goble

NAME OF APPLICANT (Type or Print)

J. H. Goble

SIGNATURE OF APPLICANT

Title Regional Natural Gas Mktg. Mgr.

Date 3-12-85

FOR DIVISION USE ONLY

- ☐ Approved
☐ Disapproved

The information contained herein includes all
of the information required to be filed by the
applicant under Subpart B of Part 274 of the
FERC regulations.

EXAMINER

APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL
PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA)
(Sections 102, 103, 107 and 108)

GENERAL INSTRUCTIONS

Complete this form if you are applying for price classification under sections 102, 103, 107 or 108 of the NGPA.

Complete each appropriate item on the reverse side of this page. The code numbers used in items 4 and 6 can be obtained from the Buyer/Seller Code Book. If there is more than one purchaser or contract, identify the additional information in the space below. Also enter any additional remarks in the space below. The data reported on this form are not considered to be confidential and will not be treated as such.

Submit the completed application to the appropriate Jurisdictional Agency as listed in title 18 of the CFR, part 274.501. If there are any questions, call (202) 357-8585.

SPECIFIC INSTRUCTIONS

Use the codes in the table below for type of determination in item 2.

Section of NGPA (a)	Category Code (b)	Description (c)
102	1	New OCS lease
102	2	New onshore well (2.5 mile test)
102	3	New onshore well (1000 feet deeper test)
102	4	New onshore reservoir
102	5	New reservoir on old OCS lease
103	-	New onshore production well
107	0	Deep (more than 15,000 feet) high-cost gas
107	1	Gas produced from geopressured brine
107	2	Gas produced from coal seams
107	3	Gas produced from Devonian shale
107	5	Production enhancement gas
107	6	New tight formation gas
107	7	Recompletion tight formation gas
108	0	Stripper well
108	1	Stripper well - seasonally affected
108	2	Stripper well - enhanced recovery
108	3	Stripper well - temporary pressure buildup
108	4	Stripper well - protest procedure

Enter the appropriate information regarding other Purchasers/Contracts.

Line No.	Contract Date (Mo, Da, Yr) (a)	Purchaser (b)	Buyer Code (c)
1			
2			
3			
4			
5			
6			

Remarks: The natural gas was (X) was not () committed and dedicated to interstate commerce on November 8, 1978. The maximum lawful price applicable to such gas on November 8, 1978 was \$ 1.51 (\$/MMBtu). Rate Schedules (s) 768 .

Amoco Contract No. 96,176 Spud Date 8-8-84

**APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL
PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA)**

1.0 API well number: (If not assigned, leave blank. 14 digits.)	30 - 045 - 26013 -				
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	107 Section of NGPA		Category Code		
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	2640 feet				
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	<u>Amoco Production Company</u> Name <u>1670 Broadway, P.O. Box 800</u> Street <u>Denver</u> <u>CO</u> <u>80201</u> City State Zip Code				<u>000569</u> Seller Code
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	<u>Mt. Nebo Fruitland</u> Field Name <u>San Juan</u> <u>NM</u> County State				
(b) For OCS wells:	Area Name Block Number Date of Lease: <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border-bottom: 1px solid black; width: 20px;"></div> <div style="border-bottom: 1px solid black; width: 20px;"></div> <div style="border-bottom: 1px solid black; width: 20px;"></div> <div style="border-bottom: 1px solid black; width: 20px;"></div> <div style="border-bottom: 1px solid black; width: 20px;"></div> </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div>Mo.</div> <div>Day</div> <div>Yr.</div> <div style="border-bottom: 1px solid black; width: 100px;"></div> </div> OCS Lease Number				
(c) Name and identification number of this well: (35 letters and digits maximum.)	<u>Leeper Gas Com. "D" No. 1R</u>				
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)					
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	<u>El Paso Natural Gas Company</u> Name				<u>005708</u> Buyer Code
(b) Date of the contract:	<u>0</u> <u>1</u> <u>0</u> <u>6</u> <u>7</u> <u>8</u> Mo. Day Yr.				
(c) Estimated total annual production from the well:	<u>182</u> Million Cubic Feet				
		(a) Base Price March '85	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	<u>5</u> <u>9</u> <u>4</u> <u>4</u>	<u> </u> <u> </u> <u>3</u> <u>8</u> <u>2</u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u>6</u> <u> </u> <u>3</u> <u>2</u> <u>6</u>
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	<u>5</u> <u>9</u> <u>4</u> <u>4</u>	<u> </u> <u> </u> <u>3</u> <u>8</u> <u>2</u>	<u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u>	<u>6</u> <u> </u> <u>3</u> <u>2</u> <u>6</u>
9.0 Person responsible for this application:	<u>J. H. Goble</u> Regional Natural Gas Marketing Manager Name Title <u>[Signature]</u> Signature <u>5-12-85</u> Date Application is Completed <u>(303) 830-4311</u> Phone Number				

NO. OF COPIES RECEIVED		
DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-4-85

5A. Indicate Type of Lease	
STATE <input type="checkbox"/>	REC <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.	
7. Unit Agreement Name	
9. Well No. 1R	
10. Field and Pool, or Wildcat Mt. Nebo Fruitland	
12. County San Juan	
19. Proposed Depth 2650'	19A. Formation Fruitland
20. Rotary or C.T. Rotary	
1. Elevations (Show whether D.F., K.T., etc.) 5838'GR	21A. Kind & Status Plug. Bond Statewide
21B. Drilling Contractor Unknown	
22. Approx. Date Work will start As soon as permitted	

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 ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. Name of Operator
Amoco Production Company

3. Address of Operator
501 Airport Drive, Farmington, NM 87401

4. Location of Well
UNIT LETTER L LOCATED 1500 FEET FROM THE South LINE
840 FEET FROM THE West LINE OF SEC. 34 TWP. 32N REC. 10W MPM

1. Elevations (Show whether D.F., K.T., etc.)
5838'GR

21A. Kind & Status Plug. Bond
Statewide

21B. Drilling Contractor
Unknown

22. Approx. Date Work will start
As soon as permitted

PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17-1/2"	13-3/8"	48#, 11-40	300'	360 cu. ft. Class B X 2% CaCl ₂	Surface
12-1/4"	9-5/8"	32.3#, H-40	1150'	552 cu.-ft. Class B X 2% CaCl ₂	Surface
8-3/4"	7"	20#, K-55 LT & C	2650'	229 cu. ft Class B W/ 35.35 lb/sk of B-37 Bubbles, Yield=3.56' 3/sk	Surface

CONFIDENTIAL

Amoco proposes to drill the above well to further develop the Mt. Nebo Fruitland reservoir. 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 nondispersed 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 site will be cleaned and the reserve pit filled and leveled. The gas from this well is dedicated to El Paso Natural Gas Co. under contract No. 96176.

ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTION. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Original Signed By D.D. Lawson Title Dist. Adm. Supervisor Date June 28, 1984

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

REVISIONS OF APPROVAL, IF ANY:

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

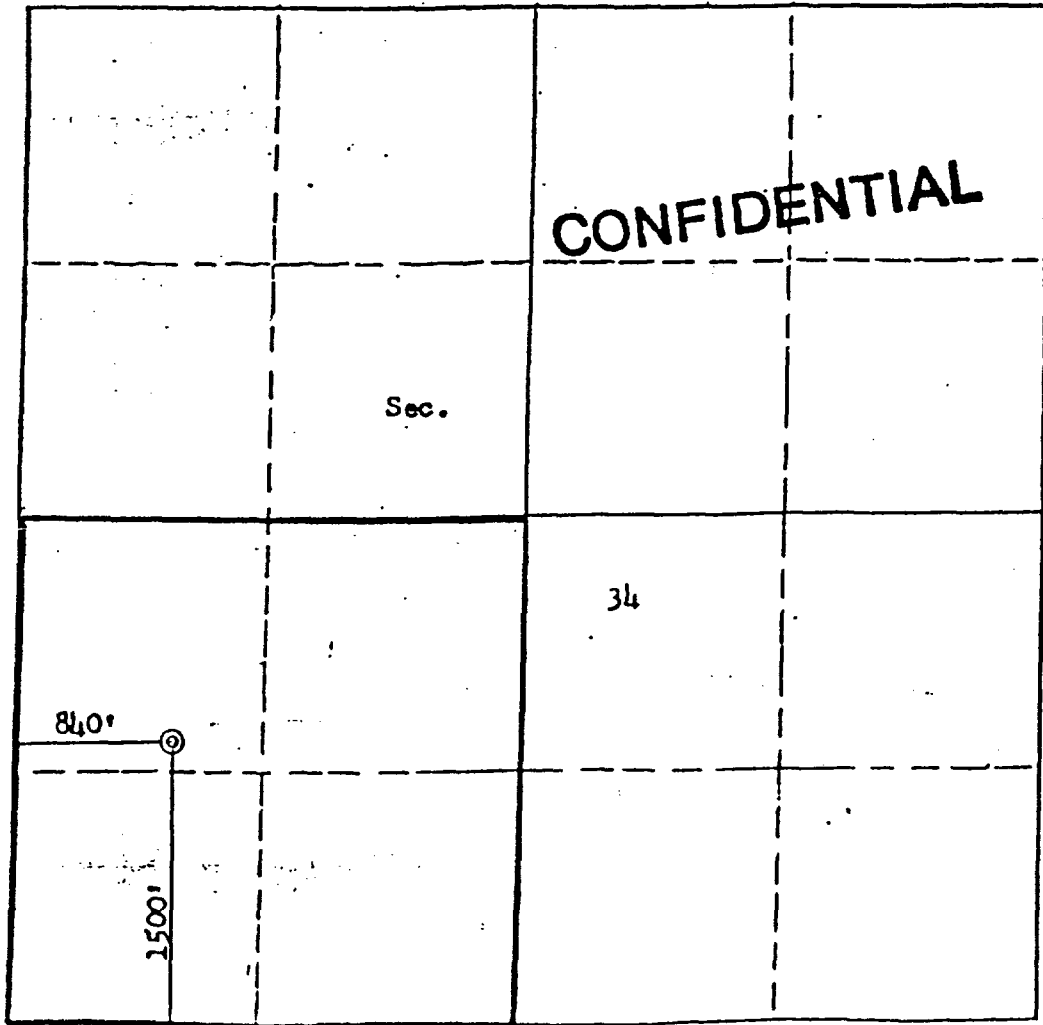
Operator AMOCO PRODUCTION COMPANY			Lease LEPPER GAS COM "D"		Well No. 1R
Unit Letter L	Section 34	Township 32N	Range 10W	County San Juan	
Actual Footage Location of Well: 1500 feet from the South line and 840 feet from the West line					
Ground Level Elev 5838	Producing Formation Fruitland		Pool Mt. Nebo Fruitland		Dedicated Acreage 152.36 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 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.



CERTIFICATION

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

Name D.D. Lawson
Position Dist. Adm. Supervisor
Company Amoco Production Co.
Date 6-27-84

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 June 26, 1984
Registered Professional Engineer and Land Surveyor Fred J. Kerr Jr.
Certificate No. 4222

5B

OIL CONSERVATION DIVISION

P.O. BOX 2088

SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

NO. OF COPIES REQUIRED	
1. DISTRICT OFFICE	
2. COUNTY OFFICE	
3. FIELD OFFICE	
4. OPERATOR	

5. Indicate Type of Lease
Sole ☐ Joint ☒
6. Lease Unit & Unit Lease No.

1. TYPE OF WELL

OIL WELL ☐ GAS WELL ☒ HOT ☐ OTHER ☐
2. TYPE OF COMPLETION
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. SECT. ☐ OTHER ☐

3. Name of Operator

Amoco Production Company

4. Address of Operator

501 Airport Drive, Farmington, NM 87401

5. Location of Well

NE 1/4 Sec. 10, T. 34N, R. 10W, S. 4E, LOCATED 1500 FEET FROM THE South LINE AND 840 FEET FROM

West line of sec. 34 Twp. 32N sec. 10W

12. County

San Juan

6. Date Spudded 8/8/84 16. Date T.D. Reached 8/19/84 17. Date Compl. (Ready to Prod.) 10/12/84 18. Elevations (L.F., H.H., RT, GK, etc.) 5851' KB 19. Elev. Casinghead 5838' GR

7. Total Depth 2685' 21. Plug Back T.D. 2670' 22. If Multiple Compl., How Many single 23. Intervals Drilled By Rotary Tools Cable Tools 0-TD

8. Producing Interval(s), of this completion - Top, Bottom, Name

2608'-2640' Fruitland

25. Was Directional Survey Made

Yes

9. Type Electric and Other Logs Run

IL-SP-GR-DC-GR- w/caliper - HC - Sonic - GR

27. Was Well Cored

No

10. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#, K-55	265'	17-1/2"	496 c.f. class B Ideal	
9-5/8"	32.3#, H-40	1142'	12-1/4"	530 c.f. class H Ideal	
7"	23#, K-S	2685'	8-3/4"	289 c.f. Class B Portland	

11. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2-7/8"	2540'	

12. Perforation Record (Interval, size and number)

2640'-2608', 12 jsfpf, .75"
total of 384 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
2608'-2640'	Stress frac w/3"x 12' guns

PRODUCTION

13. First Production 11/29/84 Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing Well Status (Prod. or Shut-in) Shut-in

14. Date of Test 11/30/84 Hours Tested 3 Casing Size .50" Prod'n. for Test Period Oil - bbl. Gas - MCF Water - libl. Gas - Oil Ratio 60

15. Tubing Press. 79 psig Casing Pressure 150 psig Calculated 24-Hour Rate Oil - libl. Gas - MCF Water - libl. Oil Gravity - API (Corr.) 479

16. Disposition of Gas (Sold, used for fuel, vented, etc.) To be sold Test Witnessed By J.J. Barnett

17. List of Attachments

None

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Original Signed By

D.D. Lawson

District

Title Admin. Supervisor

DATE 12/12/84

GB

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or reopened well. It shall be accompanied by one copy of all observations and data that the driller has on the well and a summary of all reported bottom hole depths. In listing drill stem tests, all depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depth shall also be reported. For multiple completion wells, the depth of each zone, if known, shall be reported for each zone. This form is to be filed by independent completion state land where all copies are requested. See Rule 1165.

Southeastern New Mexico

Northwestern New Mexico

T. Ojo Alamo <u>1247</u>	T. Penn. "B" _____
T. Kirtland-Fruitland <u>1807</u>	T. Penn. "C" _____
T. Pictured Cliffs _____	T. Penn. "D" _____
T. Cliff House _____	T. Leadville _____
T. Menefee _____	T. Madison _____
T. Point Lookout _____	T. Elbert _____
T. Mancos _____	T. McCracken _____
T. Gallup _____	T. Ignacio Quizte _____
T. Base Greenhorn _____	T. Granite _____
T. Dakota _____	T. _____
T. Morrison _____	T. _____
T. Todilto _____	T. _____
T. Entrada _____	T. _____
T. Wingate _____	T. _____
T. Chinle _____	T. _____
T. Permian _____	T. _____
T. Penn. "A" _____	T. _____

No. 1, from.....to.....

No. 2, from.....to.....

No. 3, from.....to.....

No. 4, from.....to.....

No. 5, from.....to.....

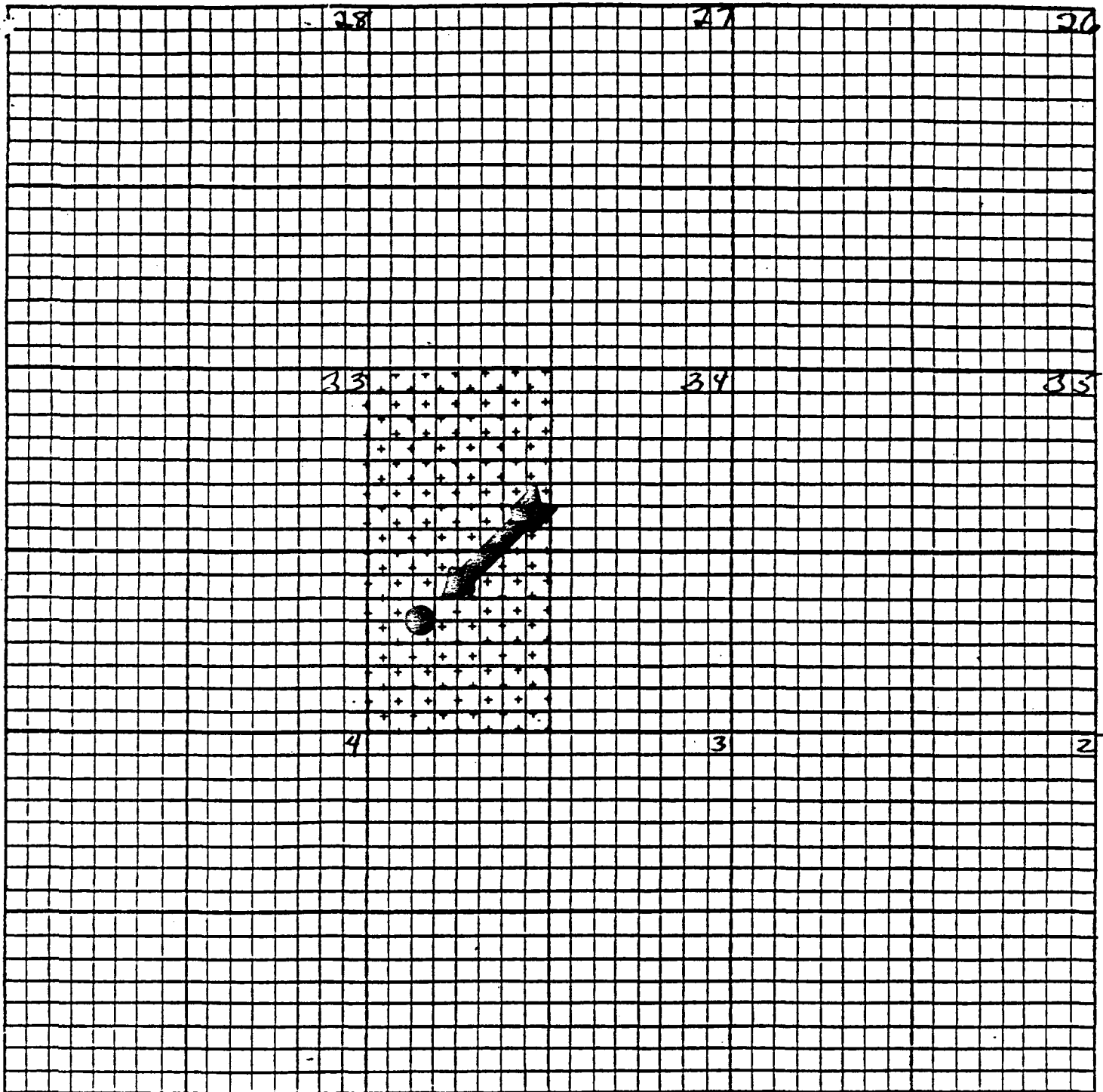
No. 6, from.....to.....

~~Include data on rate of water inflow and elevation to which water rose in hole.~~

No. 1, from to feet
 No. 2, from to feet
 No. 3, from to feet
 No. 4, from to feet

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
1247	1280	33'	Ojo Alamo				
1280	1807	527'	Farmington SS				
1807	TD	2843'	Kirtland-Fruitland				

R.10W



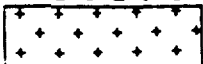
LOCATION PLAT IDENTIFYING WELL FOR WHICH DETERMINATION IS SOUGHT UNDER THE NGPA, AS FOLLOWS:

API WELL NO.: 30-045-26013 APPLICANT: Amoco Production Company

WELL NAME AND NO.: Keeper Gas Com D#1R

LOCATION OF WELL: Mt Ocho Fld. Sanyuan, Nm
Field County State

LEGEND



Area Attributable To Well For
Which Determination Is Sought

Amoco Contract No.: 96,176
Rate Schedule No.: 765

ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 8014
Order No. R-7588

APPLICATION OF AMOCO PRODUCTION
COMPANY FOR POOL CREATION AND
SPECIAL POOL RULES, SAN JUAN
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on January 18, 1984, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 9th day of July, 1984, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Amoco Production Company, seeks an order creating a new gas pool, the vertical limits to be the Basal Coal Zone of the Fruitland formation, with special pool rules including a provision for well location and a provision for 320-acre spacing, San Juan County, New Mexico.

(3) That the applicant is the owner and operator of the Cahn Gas Com Well No. 1, located 1030 feet from the North line and 1600 feet from the West line of Section 33, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.

(4) That although said Cahn Gas Com Well No. 1 is located within the Mount Nebo-Fruitland Pool (created by Division Order No. R-4690, dated December 6, 1973, as amended by Division Order Nos. R-5843 and R-7046, dated November 2, 1978, and August 6, 1982, respectively), the

geological evidence presented at the hearing demonstrates that said well, which is producing from an open hole interval from 2795 feet to 2812 feet, has discovered a separate common source of supply within the Basal Coal member of the Fruitland formation and should be designated the Cedar Hill-Fruitland Basal Coal Pool.

(5) That the well log for the discovery well, as described above, does not fully penetrate the Basal Coal member of the Fruitland formation and as such should not be used as the type log for the proposed pool.

(6) That the vertical limits of said proposed pool should then be based upon the Basal Coal member of the Fruitland formation from approximately 2838 feet to 2878 feet as found on the type log from the applicant's Schneider Gas Com "B" Well No. 1 located 1110 feet from the South line and 1185 feet from the West line of Section 28, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.

(7) That the well log from said Schneider Gas Com "B" Well No. 1 penetrates the entire Basal Coal member of the Fruitland formation and said well is approximately 2200 feet north of the discovery well, as described in Finding Paragraph No. (3) above.

(8) That the horizontal limits of said proposed pool should be as follows:

TOWNSHIP 31 NORTH, RANGE 10 WEST, NMPM
Sections 3 through 6: All

TOWNSHIP 32 NORTH, RANGE 10 WEST, NMPM
Sections 19 through 22: All
Sections 27 through 34: All

comprising 10,240 acres, more or less, all in San Juan County; New Mexico.

(9) That the currently available information indicates that one well in the proposed pool should be capable of effectively and efficiently draining 320 acres.

(10) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to encourage the orderly development of the proposed pool, and to otherwise prevent waste and protect correlative rights, the Cedar Hill-Fruitland Basal Coal Pool should be created with Temporary Special Rules

and Regulations providing for 320-acre spacing units comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the United States Public Land Surveys.

(11) That the Temporary Special Rules and Regulations should provide for limited well locations in order to assure orderly development of the pool and to protect correlative rights.

(12) That said Temporary Special Rules and Regulations should be effective February 1, 1984, and should also be established for a two-year period in order to allow the operators in the Cedar Hill-Fruitland Basal Coal Pool to gather reservoir information to establish whether the temporary rules should be made permanent.

(13) That special provisions for a non-standard gas well location should be made for any well drilling to or completed in the Basal Coal member of the Fruitland formation within the proposed Cedar Hill-Fruitland Basal Coal Pool or within one mile of said pool on or before February 1, 1984, that does not comply with any special well location requirements promulgated in this order.

(14) That the vertical limits of the Mount Nebo-Fruitland Pool should be redefined to include the Fruitland formation with the exception of the Basal Coal member as designated on the type log of said Amoco Production Company's Schneider Gas Com "B" Well No. 1, as described in Finding Paragraph No. (6) above.

(15) That this case should be reopened at an examiner hearing in February, 1986, at which time the operators in the subject pool should be prepared to appear and show cause why the Cedar Hill-Fruitland Basal Coal Pool should not be developed on 160-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That effective February 1, 1984, a new pool in San Juan County, New Mexico, classified as a gas pool for production from the Basal Coal member of the Fruitland formation, is hereby created and designated the Cedar Hill-Fruitland Basal Coal Pool, with the vertical limits comprising the Basal Coal member of the Fruitland formation as found from approximately 2795 feet to 2878 feet on the type log of the Amoco Production Company Schneider Gas Com "B" Well No. 1,

located 1110 feet from the South line and 1185 feet from the West line of Section 28, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico; and horizontal limits consisting of the following described area:

TOWNSHIP 31 NORTH, RANGE 10 WEST, NMPM
Sections 3 through 6: All

TOWNSHIP 32 NORTH, RANGE 10 WEST, NMPM
Sections 19 through 22: All
Sections 27 through 34: All

comprised of 10,240 acres, more or less, all in San Juan County, New Mexico.

(2) That Temporary Special Rules and Regulations for the Cedar Hill-Fruitland Basal Coal Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE
CEDAR HILL-FRUITLAND BASAL COAL POOL
SAN JUAN COUNTY, NEW MEXICO

RULE 1. Each well completed or recompleted in the Cedar Hill-Fruitland Basal Coal Pool or in the Basal Coal member of the Fruitland formation within one mile of the Cedar Hill-Fruitland Basal Coal Pool, and not nearer to or within the limits of another designated Fruitland Basal Coal Pool shall be spaced, drilled, operated, and prorated in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 320 acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the United States Public Land Surveys.

RULE 3. Non-standard spacing or proration units shall be authorized only after notice and hearing.

RULE 4. The first well drilled or recompleted on every standard or non-standard unit in the Cedar Hill-Fruitland Basal Coal Pool shall be located in the NE/4 or SW/4 of a single governmental section and shall be located not closer than 790 feet to any outer boundary of the tract nor closer than 130 feet to any quarter-quarter section or subdivision inner boundary.

RULE 5. The Division Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proration unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proration unit or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

RULE 6. That any subsequent well drilled or recompleted in an existing Cedar Hill-Fruitland Basal Coal standard or non-standard unit shall be authorized only after notice and hearing.

IT IS FURTHER ORDERED:

(3) That an exception is hereby granted to the Special Rules and Regulations for the Cedar Hill-Fruitland Basal Coal Pool to permit Amoco Production Company to locate its Cahn Gas Com Well No. 1, located 1030 feet from the North line and 1600 feet from the West line of Section 33, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico, at an unorthodox gas well location in the NW/4 of said Section 33.

(4) That any well drilling to or completed in the Basal Coal member of the Fruitland formation within the Cedar Hill-Fruitland Basal Coal Pool or within one mile of said pool either on or before August 1, 1984, that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator of any such well shall notify the Aztec District Office of the Division, in writing, of the name and location of any such well on or before November 1, 1984.

(5) That the vertical limits of the Mount Nebo-Fruitland Pool (created by Division Order No. R-4690, dated December 6, 1973, as amended by Division Order Nos. R-5843 and R-7046, dated November 2, 1978, and August 6, 1982, respectively) are hereby redefined to include the Fruitland formation with the exception of the Basal Coal member as designated on the type log of the Amoco Production Company Schneider Gas Com "B" Well No. 1, as described in Ordering Paragraph No. (1) above.

Order No. R-7588

(6) That this case shall be reopened at an examiner hearing in February, 1986, at which time the operators in the subject pool may appear and show cause why the Cedar Hill-Fruitland Basal Coal Pool should not be developed on 160-acre spacing and proration units.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

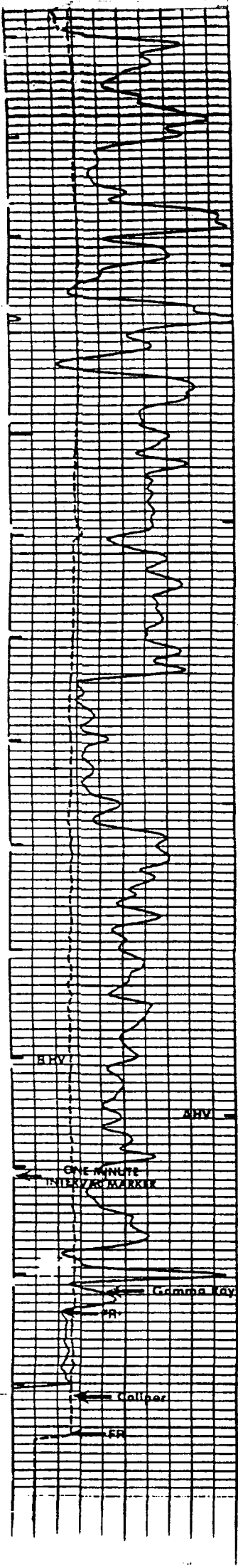
S E A L

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COMPENSATED DENSITY DUAL SPACED NEUTRON LOG

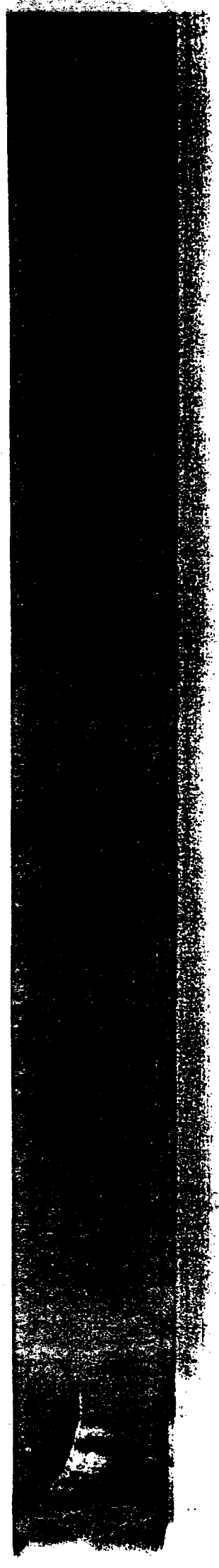
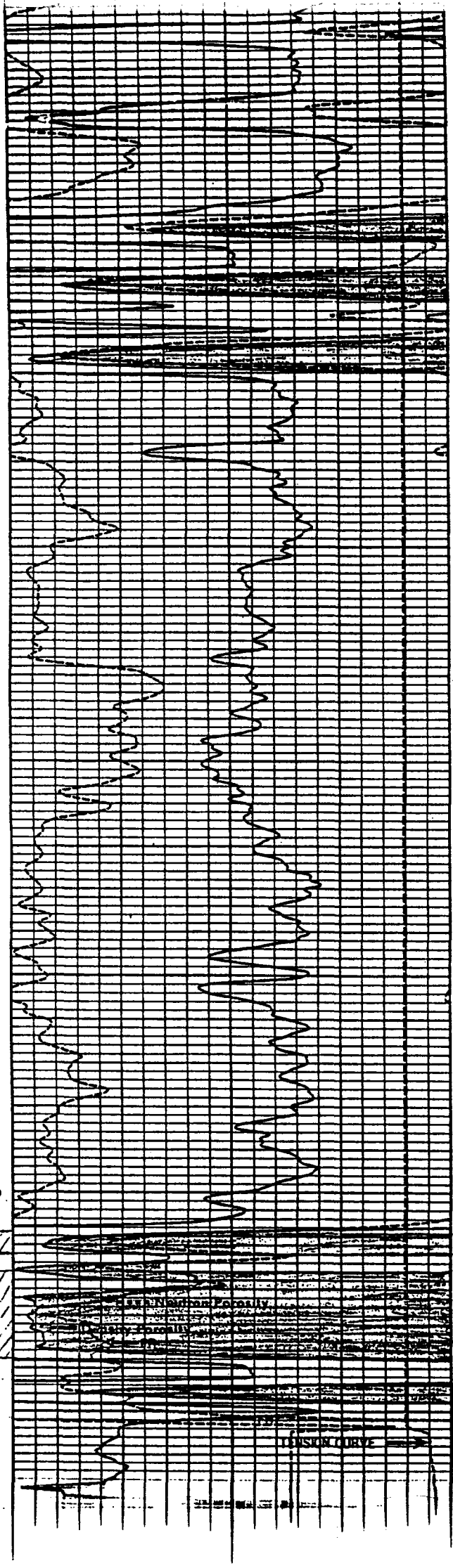
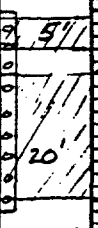
COMP. AMOCO PRODUCTION COMPANY WELL LEEPER GAS COM. "D" NO. 1 FIELD MT. NEBO FRUITLAND COUNTY SAN JUAN ST. N. MEX.	COMPANY AMOCO PRODUCTION COMPANY			
	WELL LEEPER GAS COM. D NO. 1R			
	FIELD MT. NEBO FRUITLAND			
	COUNTY SAN JUAN	STATE N. MEX.		
	API NO. LOCATION 1500 FSL/840 FHL			OTHER SERVICES DIGL-CR AVL-CR
SEC. 34 TWP. 32N RGE. 10W				
PERMANENT DATUM		GROUND LEVEL		ELEV. 5838
LOG MEASURED FROM		KELLY BUSHING		12.5 FT. ABOVE PERM. DATUM
DRILLING MEASURED FROM		KELLY BUSHING		ELEV.: K.B. 5850.5 D.F. 5849.5 G.L. 5838
DATE	8/18/84			
RUN NO.	ONE			
DEPTH-DRILLER	2650			
DEPTH-WELEX	2654			
BTH. LOG INTER.	2652			
TOP LOG INTER.	1143			
CASING-DRILLER	9 5/8 @ 1150			
CASING-WELEX	1143			
BIT SIZE	8 3/4			
TYPE FLUID IN HOLE	LSND			
DENS. : VISC.	10.6 : 42			
PH : FLUID LOSS	8.0 : 6.5 ML			
SOURCE OF SAMPLE	MUD TANKS			
RM @ MEAS. TEMP.	5.0 @ 70 F			
RMF @ MEAS. TEMP.	5.5 @ 65 F			
RMC @ MEAS. TEMP.	5.0 @ 68 F			
SOURCE RMF RMC	MEAS. : MEAS.			
RM @ BHT	2.17 @ 170 F			
TIME SINCE CIRC.	1 HOUR			
TIME ON BOTTOM	9:15			
MAX. REC. TEMP.	170 F @ T. D.			
EQUIP. : LOCATION	51311 : FARM.			
RECORDED BY	D. GURULE			
WITNESSED BY	D. SCHOTT			



2400

2500

2600



CERTIFICATE OF MAILING

I hereby certify that a true and correct copy of the New Mexico Oil Conservation Division's Form C-132 and the Form FERC-121 for the Leeper Gas Com. "D" No. 1R well was mailed, postage prepaid, to each working interest owner and each party to the gas purchase contract, as listed below.

PURCHASER: El Paso Natural Gas Company
P. O. Box 1492
El Paso, TX 79978

WORKING INTEREST OWNER: W. P. Carr
6700 Forest Lane
Dallas, TX 75230

AMOCO PRODUCTION COMPANY

BY: Stephen D. Ring
Stephen D. Ring, Attorney
Amoco Building
Denver, Colorado 80202

APPLICANT'S SWORN STATEMENT

STATE OF COLORADO)
) ss
 COUNTY OF DENVER)

R. J. Criswell, having first been duly sworn,
 states that he is a responsible official of the Applicant, Amoco Production
 Company, and further states:

1. That the surface drilling of Leeper Gas Com. "D" No. 1R for
 which Applicant seeks a determination, was commenced on or after July 16,
 1979;

2. That the gas is being produced from a Coal Seam.

3. That there is no further information of which Applicant has
 knowledge inconsistent with the conclusions stated herein.

DATED this 12th day of March, 1985.

AMOCO PRODUCTION COMPANY, Applicant

BY: R. J. Criswell

TITLE: Division Production Manager

ADDRESS: Amoco Production Company

Amoco Building

Denver, CO 80202

SUBSCRIBED, SWORN TO, AND ACKNOWLEDGED before me this 12th day of

March, 1985.

Mary Ann Rau
 Notary Public

My Commission expires:

8-23-88

**AMOCO BUILDING
 1670 BROADWAY
 DENVER, CO 80202**

12 B

CORE LABORATORIES, INC.
ANALYTICAL REPORT

PAGE 1 OF 1

1-2-85

ANALYSIS #:

AMOCO PRODUCTION CO.

JOB: A40289-6
TECH: RAC
LOCATION: CASPER, WYO.

SAMPLING POINT: MTN NEBO FRUITLAND
SAMPLE TEMP: DEG. F.
SAMPLE PRESSURE: 68 PSIA
REMARKS: #RC1034

WELL: 1 R
FIELD: LEEPER GAS COM. 'D'
COUNTY: SAN JUAN
STATE: NEW MEXICO
DATE SAMPLED: 11-30-84

CHROMATOGRAPHIC ANALYSIS

	HOL	PERCENT	GPH *
CARBON DIOXIDE	6.55		
NITROGEN	0.04		
METHANE	92.83		
ETHANE	0.58		
PROpane	0.00		
ISO-BUTANE	0.00		0.155
NORMAL BUTANE	0.00		0.000
ISO-PENTANE	0.00		0.000
NORMAL PENTANE	0.00		0.000
HEXANES	0.00		0.000
HEPTANES PLUS	0.00		0.000
TOTAL	100.00		0.155

CALCULATED BTU/CU.FT. @ 14.730 PSIA
DRY BASIS: 950
WET BASIS: 933

CALCULATED BTU/CU.FT. @ 14.696 PSIA
DRY BASIS: 948
WET BASIS: 931

CALCULATED SPECIFIC GRAVITY: 0.6201
(AIR = 1.00)

COMPRESSIBILITY FACTOR: .997948

* GPH CALCULATED AT 14.696 PSIA

Exhibit 15B

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees assume no liability for any errors or omissions in this report.