• CASE 5882: AMOCO PRODUCTION COMPANY FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO

المراجع والمراجع المراجع المراجع

جار جدد مع

Associated in the second state of the second s



NEW MEXICO OIL CONSERVATION COMMISSION EXAMINER HEARING SANTA FE NEW MEXICO MARCH 23, 1977 TIME: 9:00 A.M. Hearing Date NAME REPRESENTING aktendick OPP agter MMOCC n. E Majwell, Sente Dielain & Carr Am - Bett Oil Co. Amora Production James E. Pease Houston ANTONE L. PETERSON HOUSTON AMORU PRODUCTION Row Atty Myb Unisty y Carlsback Ideal Zosie Ind. Ew Renshaw Socorro NM Bareau of Mines Kay vooter Mex E. Curry Saturnail Co. Roswell. J.m. Midland, Tex Saturn Oil Co. Continental Oil 6 140653 Victor T. Lyon HOBES DON BOLT, JR. CONTINERITAL OIL 40 RES DWDUPLCKSON Commission or Hobbo -Kerem Gee Dan maldonado Albuguerge 0.5.6.5. El Poro E.R. Manning E.A. Ullrich El Varo Matural Gran Formington El Poro Nat Goi

Before the Applicant: For the Applicant: For the Applicant: For the Applicant: For the Applicant: Before: Before: Richard L. Stamets, Examiner Before: Richard L. Stamets, Examin			Dura	1		
2       NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico March 23, 1977         3       EXAMINER HEARING         4	1	BEF				
3       EXAMINER HEARING         4	2	NEW MEXICO OIL CON Santa Fe	NSERVATION COMMISSI , New Mexico	ON		
4	3	March	23, 1977			
IN THE MATTER OF:       }         Application of Amoco Production Company       CASE         for special pool rules, Eddy County,       582         New Mexico.       }         BEFORE: Richard L. Stamets, Examiner         BEFORE: Richard L. Stamets, Examiner         Conservation Commission:         Legal Counsel for the Commission:         State Land Office Building         Santa Fe, New Mexico         For the Applicant:         Antone L. Peterson III, Esq.         Legal Counsel         Amoco Production Company         P. O. Box 3092         Houston, Texas         ATWOOD, MALONE, MANN & COOTER         Attorneys at Law         P. O. Drawer 700         Roswell, New Mexico	4	EXAMINI	ER HEARING			
Application of Amoco Production Company) CASE for special pool rules, Eddy County, 5882 New Mexico. BEFORE: Richard L. Stamets, Examiner BEFORE: Richard L. Stamets, Examiner State Land Office Building Santa Fe, New Mexico BEFORE: Richard L. Beterson III, Esq. Legal Counsel Amoco Production Company P. O. Box 3092 Houston, Texas ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico	5	IN THE MATTER OF:	) )			
BEFORE: Richard L. Stamets, Examiner TRANSCRIPT OF HEARING A P P E A R A N C E S For the New Mexico Oil Lynn Teschendorf, Esq. Conservation Commission: Legal Counsel for the Commissi State Land Office Building Santa Fe, New Mexico For the Applicant: Antone L. Peterson III, Esq. Legal Counsel Amoco Production Company P. O. Box 3092 Houston, Texas ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico	7	for special pool rules, Eddy County, ) 5882				
A P P E A R A N C E S For the New Mexico Oil Lynn Teschendorf, Esq. Conservation Commission: Legal Counsel for the Commissi State Land Office Building Santa Fe, New Mexico For the Applicant: Antone L. Peterson III, Esq. Legal Counsel Amoco Production Company P. O. Box 3092 Houston, Texas ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico	9 10	BEFORE: Richard L. Stamets, H	Examiner			
A P P E A R A N C E S For the New Mexico Oil Conservation Commission: For the Applicant: For the Applicant: Antone L. Peterson III, Esq. Legal Counsel Amoco Production Company P. O. Box 3092 Houston, Texas ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico	11	TRANSCRIPT OF HEARING				
For the New Mexico Oil Conservation Commission: For the Applicant: For the Applicant: Antone L. Peterson III, Esq. Legal Counsel Amoco Production Company P. O. Box 3092 Houston, Texas ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico	12	APPEA	ARANCES			
For the Applicant: Antone L. Peterson III, Esq. Legal Counsel Amoco Production Company P. O. Box 3092 Houston, Texas ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico	14		Legal Counsel for State Land Office	the Commission Building		
Legal Counsel Amoco Production Company P. O. Box 3092 Houston, Texas ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico	15		Santa re, New Mex	100		
Amoco Production Company P. O. Box 3092 Houston, Texas ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico	6	For the Applicant:		n III, Esq.		
ATWOOD, MALONE, MANN & COOTER Attorneys at Law P. O. Drawer 700 Roswell, New Mexico			Amoco Production P. O. Box 3092	Company		
Attorneys at Law P. O. Drawer 700 Roswell, New Mexico			Houston, Texas			
Roswell, New Mexico			Attorneys at Law	ANN & COOTER		
				.co		
	7					
	2					
	5					
1						

**sid morrish reporting service** General Court Reporting Service 825 Calle Mejia, No. 122, Saata Fa, New Mexico 87501 Phone (505) 982-9212

1

· · · · · ·

-

	1	Pag <u>INDEX</u>	·	
	2			Page
-	3	JAMES E. PEASE		
	4	Direct Examination by Mr. Peterson		3
	5	Cross Examination by Mr. Stamets		1).
~~~	8			
• ••••¶	7			
	8			
rvice xico 87501	9	EXHIBIT INDEX		
L Mervice Merico 8	10		Offered	Admit
New Sec		Amoco's Exhibit One, Map	4	13
reportin resorting 2, Santa Fe, (505) 982-92	12	Amoco's Exhibit Two, Cross Section	5	13
1 34.0	13	Amoco's Exhibit Three, Performance Curve	9	13
Inorrish General Co Majia, No. 1	14			
sid 825 Calle h	15			•
۲ ۲	16			
	17			
	18			
	19			
4	20			
	21			
	22 23			
	23			
	25			
	20			
-	#E			

. Æ MR. STAMETS: The hearing will please come to order.
We will call at this time Case 5882.

Page

MS. TESCHENDORF: Case 5882, application of Amoco
Production Company for special pool rules, Eddy County,
New Mexico.

MR. PETERSON: My name is Antone Peterson. I'm an
attorney representing Amoco Production Company and the file
should reflect an appearance on Amoco's behalf by New Mexico
counsel, Atwood, Malone, Mann and Cooter.

10Amoco has one witness today, Mr. Jim Pease. I would11like to have him sworn at this time.

(THEREUPON, the witness was duly sworn.)

## JAMES E. PEASE

15 called as a witness, having been first duly sworn, was examined 16 and testified as follows:

18

17

25

12

13

14

\$7501

reporting

morrish

sid

Calle

3

1 ···· 7

## DIRECT EXAMINATION

19 BY MR. PETERSON:

20 A. Yes, sir.
21 A. Yes, sir.
22 A. Yes, sir.
23 A. A. Yes, and your qualifications were found

24 acceptable?

A. Yes, sir.

I would like for you to turn your attention to 1 Q. Amoco's Exhibit One, please. 2 MR. STAMETS: For the record, how was Mr. Pease 3 qualified in earlier hearings? MR. PETERSON: He is a Reservoir Engineer. б MR. STAMETS: Thank you. (Mr. Peterson continuing.) Amoco's Exhibit One which 0. 7 is a map, could you explain what that map shows, please? 8 This is a structure map on a radioactive marker A. 9 within the Wolfcamp section. 10 I notice hachured or dashed lines on the map, could Q. 11 you explain what those lines denote? 12 Yes, sir, in the center of the map the large dashed A. 13 lines represent the boundary of the Empire South Deep Unit. 14 The small dashed lines within this boundary is the presently 15 recognized pool limits for the Empire South Wolfcamp Pool. 3 16 You have several wells, three marked with red 0. 17 triangles, could you explain the significance of those markings, 18 please? 19 These represent the present Wolfcamp completions Α. 20 in the field. 21 You said this is a structure map, could you explain Q. 22 what this shows with regard to the structure, please? 23 Well, basically the structure in the area of the A. 24 Empire South Wolfcamp Pool reflects regional dip. This indicates 25

bid

that the trapping mechanism is stratigraphic in nature.
Q. You also have green lines drawn which are between
several of the wells shown on the map. What does that green
line show?

A. This green line represents the line of section of
the log structure section that is our Exhibit Number Two.
7 Q. Could you please look at that exhibit at this time?
8 Oh, yes, pardon me, back to Exhibit One, the other
9 wells marked on the map, why were they marked on the map and
10 are there any other wells not included on the map?

A. These wells that are shown are wells that have
penetrated the Wolfcamp. Wells that did not penetrate the
Wolfcamp have not been shown.

14 Q. All right, thank you. Now, looking at Exhibit Two
15 could you explain generally what that exhibit shows?

16 A. This is what we term a structural cross section. It
17 consists of formation density compensated neutron logs on five
18 of the Empire South Deep Unit wells.

19 Q You have several horizons marked it appears. Could
 20 you explain why those are marked?

A At the top of the section we have marked three
thousand feet below sea level, we've marked across the top of
the Wolfcamp zone, we've marked several relative markers across
the section. We've shown the datum for the structure map which
is Exhibit Number One and at the bottom we have shown the top of

sid morrisla reporting servi General Court Reporting Service Calle Mejia, No. 122, Santa Fe. New Mexico Phone (505) 982-9212 the Cisco formation.

1

2

3

4

5

6

7

8

9

10

11

12

13

15

17

18

19

20

21

22

23

24

25

<u>Bid</u>

SS Cel

0. What do the log cross sections show about the Wolfcamp?

Well, it shows that there are several porosity A. intervals within the Wolfcamp. Well No. 7, the log on the left, is completed at seven thousand, eight hundred and sixtythree to seventy-three feet and as can be seen, this is higher in the Wolfcamp than the completion intervals in the Wells 11 and 4 which are the two logs on the right. Well No. 11 is perforated from eight thousand, four hundred and four to eight thousand, four hundred and thirty-six feet and Well No. 4 is perforated from eight thousand, four hundred and forty-nine feet to eight thousand, five hundred and twenty-two feet.

I think you have a core section taken from one of the Q. 14 wells. Could you give that to me and I'll let the Examiner see it and explain where it came from, which well, and give a 16 description of it, if you would?

Empire South Deep Unit No. 11 was cored from eight A. thousand, three hundred and ninety-two feet to eight thousand, five hundred and five feet. That particular core sample is at eight thousand, four hundred and twenty-two to twenty-three feet. The depth is shown there on the sample itself. This is within the perforated interval of Well No. 11.

Was there a core analysis made of that core? Q. A. Yes, the entire core was analyzed by Core Laboratorie and it was based on a whole section. That particular sample had a porosity of two, point, one percent and the maximum permeability was one, point, nine millidarcies.

1

2

3

Б

8

9

10

morrish

sid

825 Call

Q How does the porosity and permeability in that well compare to the other Wolfcamp wells?

A. Well, based on the logs the porosity in Number 11 is
7 lower than the porosity in Number 4.

Q. You have all three Wolfcamp wells on the cross section, do you have any data with regard to productivity or productive capability of those wells?

The current producing ability of the wells is No. 7 11 is on pump and during the month of February it produced sixty-12 13 six barrels of oil, it's a very weak well. No. 11 is in the process of being potentialed. The potential test will be file 14 in the near future. It perhaps has been filed as of today. 15 A test that I have on it which may not be the potential test 16 is eighty barrels of oil per day, no water, a thousand and 17 twenty-four MCF a day of gas. This is flowing on a three-fourths 18 inch choke and the flowing tubing pressure was two hundred and 19 fifty pounds. The GOR on this calculates to be twelve thousand, 20 eight hundred to one. 21

No. 4 is capable of producing three hundred and ten
barrels of oil per day, no water, a thousand, nine hundred
and seventy MCF a day of gas. It's flowing and the flowing
tubing pressure is seven hundred and fifty pounds. This calculate

1 lates to be a gas-oil ratio of six thousand, three hundred and 2 fifty to one.

Page

3 I think in earlier exhibits submitted to the Commission Q. that the datum -- you've used a different datum point on this 5 cross section than on earlier cross sections presented. Is that correct and why?

That is correct. At the last hearing which was held A. about a year ago the datum point was eight thousand, four hundred and twenty-nine feet in the No. 4 Well and that was based on this clean lime section right above the perforations 10 11 and if you carry the line above that across you will see that 12 by the time you reach Well No. 3 in the center you are within a lime interval. So it was found that this was not a very 13 14 good marker and a new marker has been chosen which is a radioactive zone up at about eighty-two, twenty in the No. 4 Well.

17 0. Do you have any further comments regarding Amoco's Exhibit Two? 18

I would like to comment a little bit more on the A, 19 core. As can be seen in that sample the only porosity that 20 is evident is that that was created by the leaching of the 21 fractures, samples of fractured limestone rock. 22

All right, if you will turn your attention to 23 Q. what has been labeled as Amoco's Exhibit Three and tell us 24 25 what the graphs or curves on that exhibit show, please?

**ser**vice reporting morriah **bid** 

22

4

6

7

8

9

15

16

A. This is a performance curve for the Empire South Wolfcamp Pool. The top line represents the number of wells in 2 the pool. Of course, the period for the curve is from '74 to 3 1976. The next line is the composite gas-oil ratio for the pool. Then we have the bottom-hole pressure of the pool. Then we have the computed monthly average daily oil rate and we have 8 a curve representing the cumulative oil and gas production.

Page

Could you explain please, there are noticeable lows Q. 8 in the monthly oil production curve, could you explain why 9 those occurred? 10

Well, in the latter part of '74 and January of '75 A. 11 the oil production decline was a result of paraffin deposits 12 in the tubing. The ones in 1976 were a result of trying to 13 balance out the gas production. 14

In relation to the production curve, when did the 0. 15 hearing for field rules take place so we can relate it to the 16 production curve? 17

The pool went on production in March of '74. The A. 18 first field rule hearing was held in April of '74, the temporar 19 field rules were issued in May of '74, a subsequent hearing 20 was held in April of '75 at which time it was asked that the 21 temporary rules be made permanent. 22

And the gas-oil ratio at that time was less than a 23 two thousand to one? 24

25

À.

1

5

7

87501

bid

ង្គ

That is correct. The performance curve indicates that

the bubble point of the reservoir was about twenty-seven
hundred and fifty pounds and this was reached in April of 1975,
about the time of the second hearing.

Any further comments regarding Exhibit Three?A. No, sir.

4

5

8750

Pie

ង្គ

6 Q. In your opinion, Mr. Pease, will an increase in the
7 GOR limit to six thousand to one cause any physical waste of
8 oil and gas?

A I don't believe that it will. The performance curve indicates that we have a depletion drive type reservoir. The log sections and the structure map indicate that we have a stratigraphic type of trap and as such I don't believe that this reservoir's ultimate oil recovery would be sensitive to the producing rate.

15 Q All right, also in your opinion will an increase in
16 GOR affect anyone's correlative rights?

A. No, I believe the entire pool is under the Empire
South Deep Unit.

19 Q Have you consulted with the gas purchaser to ascertain
20 whether you can dispose of this gas or not?

A. Yes, sir, we have contacted Phillip Petroleum who is
the gas purchaser and they have indicated that they could take
additional gas that might be produced.

24 Q. Thank you, Mr. Pease. Do you have any further25 comments?

A. No, sir.

MR. PETERSON: No further questions, Mr. Examiner.

# CROSS EXAMINATION

5 BY MR. STAMETS:

1

2

6

7

8

9

10

11

12

13

20

21

22

23

24

25

# Q Mr. Pease, when you get outside of the South Empire Deep Unit there are a number of wells which run off to the north and east and then some over to the south and west, since the top of the Wolfcamp is marked on here I would presume that all of those wells penetrated the Wolfcamp?

A. That is correct.

Q. Do you know whether the Wolfcamp was non-productive in those wells?

A As far as I know the only well to the northeast that
tested it was the El Paso well up in Section 22 of Township 17
South, Range 29 East and it was noncommercial there. The Empire
South Deep Unit No. 1 had a drill stem test performed on it in
the Wolfcamp. It's presently a Morrow completion. It did show
some oil production through it.

Q What is the location of that well?
A. It's in Section 6 of Township 18 South, Range 29
East.
Q. How much Wolfcamp production did that have?

A The tool was open, it's a drill stem test, eight thousand, seven hundred and twelve, forty-three feet. The tool

I INGENIIA REPORTING GERVI General Court Reporting Jervice Meth. No. 123, Sents Fo, New Merice Phone (505) 092-0212

was open two hours and ten minutes, gas was to the surface in 1 twelve and a half minutes at the initial rate of five hundred MCF a day. It decreased to a hundred and ninety-five MCF a day. The recovery was sixteen barrels of oil. The one-hour initial shut-in pressure was three thousand, six hundred and 5 twelve pounds. The flowing bottom-hole pressure was a hundred 6 and twenty-four to four hundred and forty-five pounds. The 7 two-hour final shut-in pressure was three thousand, one hundred 8 and seventy-six pounds. So we saw some pressure decline as 9 a result of that production. 10

Page

Q. Is that indicative of a limited reservoir?A. Yes, sir.

Q. Have you made any calculations as to the reservoir
size for the reservoir that the No. 11 and the No. 4 wells are
completed in?

16 A. No, sir. We do not have any good property data and
17 we do not have any relative permeability data.

18 Q. Are there any plans for additional drilling in the19 Wolfcamp in this area?

A. Not at this time. Normally here the Wolfcamp has
been a plug-back zone for wells drilled in the Morrow. No. 11
is the only well we have drilled since we have operated the
property that actually was drilled just to the Wolfcamp.
Q. Does it look like it is going to be a commercial
success?

id morrish reporting so General Courr Reporting Savie Lie Mejia, No. 122, Santa Fe, New M Phone (505) 982-9212

11

12

.

Page Yes, although it found the pressure of eighteen A. 1 hundred and thirty-nine pounds which is the No. 4. We ran a 2 pressure in it and the pressure was eighteen hundred and eight 3 pounds, I believe. It indicates that the No. 4, the production 4 from it has been draining the area of the No. 11 Well. б MR. STAMETS: Any other questions of the witness? He 6 may be excused. 7 (THEREUPON, the witness was excused.) 8 MR. STAMETS: Anything further in this case? 9 ico 8750 **ernice** MR. PETERSON: I would like to offer Amoco's Exhibits 10 One, Two and Three into evidence. 11 MR. STAMETS: These exhibits will be admitted. 12 (THEREUPON, Amoco's Exhibits One through 13 Three were admitted into evidence.) 14 MR. STAMETS: Anything further in this case? We will 15 Calle take the case under advisement. S 16 17 18 19 20 21 22 23 24 25

morrish Bid

Ряп REPORTER'S CERTIFICATE 1 2 I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript 3 of Hearing before the New Mexico Oil Conservation Commission 4 was reported by me, and the same is a true and correct record 5 of the said proceedings to the best of my knowledge, skill and 6 ability. 7 8 9 Mexico 8750) Sidney 10 forrish 11 12 13 14 i do hereby certify that the foregoing is 15 a complete record of the proceedings in the Examiner hearing of Case No. 5882. 528 16 , Examiner 17 New Nexico Oil Conservation Commission 18 19 20 21 22 23 24 25

reporting service

morrish

Ę



# **OIL CONSERVATION COMMISSION**

STATE OF NEW MEXICO P.O. BOX 2088 - SANTA FE 87501

LAND COMMISSIONER

PHIL R. LUCERO

March 30, 1977



STATE GEOLOGIST **EMERY C. ARNOLD** 

DIRECTOR JOE D. RAMEY

> Re: CASE NO. ORDER NO. R-5405

Mr. Antone Peterson Attorney Amoco Production Company Box 3092 Houston, Texas 77001

Applicant:

# Amoco Production Company

5882

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Yours very truly, JOE D. RAMEY Director

JDR/fd

Copy of order also sent to:

Hobbs OCC	x	
Artesia OCC	x	
Aztec OCC		

1

Other

## BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE NATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 5882 Order No. R-5405

APPLICATION OF AMOCO PRODUCTION COMPANY FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.

# ORDER OF THE COMMISSION

## BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 23, 1977, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>29th</u> day of March, 1977, the Commission, a quroum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Amoco Production Company, seeks, as an exception to Rule 506 of the Commission Rules and Regulations, a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil for the South Empire Wolfcamp Pool, Eddy County, New Mexico.

(3) That the reservoir characteristics of the subject pool justify the establishment of a gas-oil limitation of 6,000 cubic feet of gas per barrel of liquid hydrocarbons.

(4) That in order to afford to the owner of each property in the South Empire Wolfcamp Pool the opportunity to produce his just and equitable share of the oil and gas in the subject pool and for this purpose to use his just and equitable share of the reservoir energy, a limiting gas-oil Fatio of 6,000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the pool.

-2-Case No. 5882 Order No. R-5405

IT IS THEREFORE ORDERED:

(1) That effective April 1, 1977, the limiting gas-oil ratio in the South Empire Wolfcamp Pool, Eddy County, New Mexico, shall be 6,000 cubic feet of gas for each barrel of liquid hydrocarbons produced; that, effective April 1, 1977, each proration unit in the South Empire Wolfcamp Pool shall produce only that volume of gas equivalent to 6,000 multiplied by the top unit allowable for the pool.

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

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

MERY & ARNOLD, Me

SMERY



JOE D. RAMEY, Member & Secretary

Mémber

SEAL

₫r/

Docket No. 9-77

Dockets Nos. 11-77 and 12-77 are tentatively set for hearing on April 6 and April 20, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 23, 1977

### 9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- CASE 5882: Application of Amoco Production Company for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of a special gas-oil ratio limit of 6000 cubic feet of gas per barrel of oil for the South Empire Wolfcamp Pool, Eddy County, New Mexico.
- <u>CASE 5883</u>: Application of Am-Bett Oil Company, Inc. for an oil treating plant permit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purposes of treating and reclaiming sediment oil at a site in the SE/4 NW/4 of Section 3, Township 21 South, Range 37 East, Lea County, New Mexico.
- CASE 5984: Application of BCO, Inc., for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Greenhorn, Graneros, and Dekota production in the wellbore of its Dunn Well No. 1 located in Unit M of Section 10, Township 23 North, Range 7 West, Rio Arriba County, New Mexico.
- CASE 5885: Application of Continental Oil Company for amendment of Order No. R-5315, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-5315 to permit the dedication of a previously approved 320-acre proration unit comprising the W/2 of Section 31, Township 22 South, Range 31 East, Los Medanos Field, Eddy County, New Mexico, to a well to be drilled at a standard location in Unit E of said Section 31, rather than in Unit L as previously approved.
- CASE 5886: Application of Continental Oil Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled at a point 1980 feet from the North line and 660 feet from the West line of Section 31, Township 22 South, Range 31 East, Los Medanos Field, Fddy County, New Mexico, the N/2 of said Section 31 to be dedicated to the well.
- CASE 5887: Application of Gas Company of New Mexico for suspension of Rules 14(a) and 15(a) of the gas proration rules, Catclaw Draw-Morrow Gas Pool, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks suspension for a period of one year from April 1, 1977, of those provisions of Rules 14(a) and 15(a) of the General Rules and Regulations for the prorated gas pools of Southeastern New Mexico promulgated by Order No. R-1670, as amended, that provide for the cancellation of underproduction and the shutting-in of overproduced wells, as applied to the Catclaw Draw-Morrow Gas Pool, Eddy County, New Mexico.
- <u>CASE 5888:</u> Application of Dalport Oil Corporation for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its A. L. Christmas Well No. 3 to be drilled 330 feet from the South line and 2310 feet from the East line of Section 25, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico.
- CASE 5889: Application of Saturn Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down to and including the Blinebry formation underlying the NE/4 SE/4 of Section 11, Township 23 South, Range 37 East, Lea County, New Mexico, to be dedicated to its Lineberry Well No. 1 located in Unit I of said Section; and underlying the NW/4 SE/4 of said Section 11 to be dedicated to its Lineberry Well No. 2 located in Unit J of said Section. In the event re-entry into either well is unsuccessful, applicant proposes to drill a replacement well at a standard location on its tracts. Also to be considered will be the costs of recompletion or drilling and completing said wells and the allocation of the costs thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in recompletion or drilling of said wells.
- <u>CASE 5890</u>: Application of James C. Whitten for an unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the re-entry of a well at an unorthodox location 1980 feet from the South line and 660 feet from the East line of Section 14, Township 20 South, Range 34 East, Lea Devonian Pool, Lea County, New Mexico. If said re-entry if unsuccessful, applicant proposes to drill a new well at an unorthodox location 2030 feet from the South line and 660 feet from the East line of said Section 14.

Examiner Hearing - Wednesday - March 23, 1977 -2Docket No. 9-77

CASE 5891: Application of Sam H. Snoddy for directional drilling and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the directional drilling County, New Mexico. Applicant, in the above-styled cause, seeks approval for the directional drilling of two 13,500 foot Morrow test wells from a single drilling site in the extreme Northwest five acres of the NW/4 SE/4 of Section 25, Township 20 South, Range 32 East, Potash-Oil Area, Lea County, New Mexico. Applicant proposes to vertically drill each of said wells to a depth of approximately 3000 feet and to then directionally drill one well in a Northeasterly direction bottoming said well in the approximate center of the NE/4 of said Section 25, and to then directionally drill the other well in a Southwesterly direction, bottoming said well in the approximate center of the SW/4 of said Section 25. Applicant would dedicate the N/2 to the first of the aforesaid wells, and would dedicate a non-standard 160-acre unit comprising the SW/4 of said Section 25 to the second.

CASE 5820: (Continued from March 9, 1977, Examiner Hearing)

Application of Texas Oil & Gas Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the W/2 of Section 4, Township 22 South, Range 26 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5892:

2.4

Southeastern New Mexico nomenclature case calling for the creation and extension of certain pools in Eddy and Les Counties, New Mexico.

(a) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the East Burton Flat-Atoka Gas Pool. The discovery well is the J. C. Williamson & D. W. Underwood et al Williamson Federal Well No. 1 located in Unit J of Section 9, Township 20 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM Section 9: E/2

(b) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the North Eidson-Morrow Gas Pool. The discovery well is the Sabine Production Company North Eidson Fee Well No. 1 located in Unit M of Section 34, Township 15 South, Range 34 East, NMPM. Said pool would comprise:

### TOWNSHIP 15 SOUTH, RANGE 34 EAST, NMPM Section 34: W/2

(c) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware production and designated as the Forehand Ranch Delaware Pool. The discovery well is the Husky Oil Company of Delaware Forehand Well No. 2 located in Unit K of Section 15, Township 23 South, Range 27 East, NMIM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 27 EAST, NMPM Section 15: SW/4

(d) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Grayburg-Strawn Gas Pool. The discovery well is the Amoco Production Company Empire South Deep Unit Gas Com Well No. 8 located in Unit L of Section 33, Township 17 South, Range 29 East, NAPM. Said pool would comprise:

### TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM Section 33: S/2

(e) CREATE a new pool in Eddy County, New Merico, classified as a gas pool for Morrow production and designated as the Indian Flats-Morrow Gas Pool. The discovery well is the Perry R. Bass Big Seid Eddy Unit Well No. 41 located in Unit J of Section 35, Township 21 South, Range 28 East, NEM. pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 28 FAST, NAIPM Section 35: E/2

(f) CREATE a new pool in Eddy County, New Morico, classified as a gas pool for Morrow production and designated as the South Marcon Cliffs-Morrow Gas Pool. The discovery well is the Perry R. Base Big Eddy Unit Well No. 44 located in Unit H of Section 16, Township 21 South, Range 30 East, NMPM. Said pool would comprise:

> TOWNSHIP 21 SOUTH, RANGE 30 EAST, NMPM Section 16: E/2

Examiner Hearing - Wednesday - March 23, 1977

### Docket No. 9-77

(g) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Quahada Ridge-Atoka Gas Pool. The discovery well is the Perry R. Bass Big Eddy Unit Well No. 40 located in Unit G of Section 22, Township 21 South, Range 29 East, NAPM. Said pool would comprise:

# TOWNSHIP 21 SOUTH, RANGE 29 EAST, NAPM Section 22: N/2

(h) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the East Red Tank-Morrow Gas Pool. The discovery well is the Gulf Oil Corporation Covington "A" Federal Well No. 1 located in Unit C of Section 25, Township 22 South, Range 32 East, NATEM. Said pool would comprise:

# TOWNSHIP 22 SOUTH, RANGE 32 EAST, NMPM Section 25: N/2

(1) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the South Rock Tank-Morrow Gas Pool. The discovery well is the Amoco Production Company South Rock Tank Well No. 1 located in Unit H of Section 2, Township 24 South, Range 24 East, NMPM. Said pool would comprise:

TOWNSHIP 24 SOUTH, RANGE 24 EAST, MAPM Section 2: N/2

(j) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the Trinity-Wolfcamp Pool. The discovery well is the Wainoco, Inc. Hodge et al Well No. 1 located in Unit P of Section 28, Township 12 South, Range 38 East, NAPM. Said pool would comprise:

> TOWNSHIP 12 SOUTH, RANGE 38 EAST, NMPM Section 28: SE/4

(k) EXTEND the Baum-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM Section 30: NE/4

(1) EXTEND the South Bell Lake-Atoka Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM Section 31: S/2 Section 32: W/2

(m) EXTEND the South Bell Lake-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 33 EAST, NMPM Section 36: NE/4

(n) EXTEND the Blinebry Oil and Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM Section 21: SW/4 Section 28: NW/4

(o) EXTEND the Cemetery-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19		RANGE	24	EAST,	MPM
Section 36:	S/2				
TOWNSHIP 19	SOUTH,	RANCE	25	EAST,	NMPM
Section 28:	S/2				
Section 31:	S/2				
Scotion 32:	S/2				
Section 33:	A11				
Section 34:	N/2				
Section 35:	N/2				-
TOWNSHIP 20	SOUTH.	RANGE	21	-	18/13/

TOWNSHIP 20 SOUTH, RANGE 24 EAST, NMPM Section 1: All

 TOWNSHIP 21
 SOUTH, RANGE 24
 EAST, NMPM

 Section 6:
 Lots 1, 2, 7, 8, 9, 10, 15 & 16

ATWOOD, MALONE, MANN & COOTERAR 21 197 LAWYERS

JEFF D. ATWCOD [1983-1980] ROSS L.MALONE [1910-1974]



P. O. DRAWER 700 SECURITY NATIONAL BANK BUILDING ROSWELL, NEW MEXICO 88201 (505) 822-8221

March 18, 1977

CHARLES F. MALONE RUSSELL D. MANN PAUL A. COOTER BOB F. TURNER ROBERT A.JOHNSON JOHN W. BASSETT ROBERT E. SABIN R. E. THOMPSON RALPH D. SHAMAS RANDAL W. ROBERTS

Mr. Joe D. Ramey, Director Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Re: Case No. 5882, Examiner Hearing March 23, 1977

Dear Mr. Ramey:

Enclosed is our Entry of Apperance in Case No. 5882.

With best regards, I am,

Very truly yours,

Paul Cooter

PC:bc Enc. cc: Antone Peterson, Esq. (w/Enc.)



# BEFORE THE OIL CONSERVATION COMMISSION

# STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF AMOCO PRODUCTION COMPANY FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.

\* \* a #

Case No. 5882

# ENTRY OF APPEARANCE

3

The undersigned hereby enter their appearance herein for the Applicant, Amoco Production Company, with Antone Peterson of Houston, Texas.

ATWOOD, MALONE, MANN & COOTER, P.A. By

P. O. Drawer 700 Roswell, New Mexico 88201

Attorneys for Amoco Production Company

Case 5882

**Amoco Production Company** 

500 Jellerson Building P.O. Box 3092 Houston, Texas 77001

1

T. Don Stacy Division Engineering Manager

February 21, 1977

TBM-986.51NM-1283 File:

Application for Hearing Re: Empire Wolfcamp, South Pool Eddy County, New Mexico

New Mexico Oil Conservation Commission (3) P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey

Gentlemen:

Amoco Production Company respectfully requests a hearing for the purpose of establishing a Special Gas-Oil Ratio Limit Rule for the Empire Wolfcamp, South Pool, Eddy County, New Mexico.

Attached is a map showing the area of the Empire Wolfcamp, South Pool.

It is respectfully requested that this matter be included on the Docket of the Hearing to be held March 23, 1977.

6,000

Yours very truly,

I Don Stacyon Dut, Attachment

JEP:as

# BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

ASE	NO.	5882

Order No. R- 5405

APPLICATION OF AMOCO PRODUCTION COMPANY FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.

# ORDER OF THE COMMISSION

# BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on <u>March 23</u>, 19 77, at Santa Fe, New Mexico, before Examiner <u>Richard L. Stamets</u>

NOW, on this <u>day of</u>, 1977, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Amoco Production Company, seeks, as an exception to Rule 506 of the Commission Rules and Regulations, a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil for the South Empire Wolfcamp Pool, Eddy County, New Mexico.

(3) That the reservoir characteristics of the subject pool justify the establishment of a gas-oil limitation of 6,000 cubic feet of gas per barrel of liquid hydrocarbons.

dr/

DRAFT

-2-Case No. 5882 Order No. R-

(4) That in order to afford to the owner of each property in the South Empire Wolfcamp Pool the opportunity to produce his just and equitable share of the oil and gas in the subject pool and for this purpose to use his just and equitable share of the reservoir energy, a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of liquid hydrocarbons should be established for the pool.

IT IS THEREFORE ORDERED:

(1) That effective **April**, 1977, the limiting gas-oil ratio in the South Empire Wolfcamp Pool, Eddy County, New Mexico, shall be 6,000 cubic feet of gas for each barrel of liquid hydrocarbons produced; that, effective

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary. DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.