CASE 7011: AMOCO PRODUCTION COMPANY FOR CHOMBER'S COMMINGLING, SAN JUAN COUNTY, NEW MEXICO

CONTINUED

SEPTEMBER 1>

# CASE NO.

7011

APPlication, Transcripts, Small Exhibits,

ETC.



R. W. Schroeder District Superintendent

October 21, 1982

Mr. Joe D. Ramey Department of Energy and Minerals Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

File: DDL-129-986.511

Downhole Commingle Gas Production from Fruitlan' and Pictured Cliffs Formations Dear Mr. Ramey:

Pursuant to Division Order No. R-6/31, gas production from the Fruitland and Pictured Cliffs Formations was commingled and assigned gas allocations

and Pictured Cliffs Formats on the following wells:	Fruitland Pictured Cli	
	63%	37%
A. L. Elliott "B" No. 8 NE/4, Section 10, T29N, R9W	62%	38%
A. L. Elliott "D" No. 7 SW/4, Section 11, T29N, R9W	72%	28%
A. L. Elliott "E" No. 1 NW/4, Section 14, T29N, R9W	1 mlating percent	ages on the above well

The following procedure is used in calculating percentages on the above wells:

Avg. production before commingling for 5 months -Avg. production after commingling for 2 months

= % of Fruitland

Very truly yours,

R.W. Schwed X

BTR/mp

New Mexico Oil Conservation Division cc: Frank Chavez 1000 Rio Brazos Road Aztec, New Mexico 87410

Re:



Amoco Production Company (USA)



Amoco Production Company (USA) 501 Airport Drive Farmington, NM 87401

October 27, 1982

Mr. Joe D. Ramey
Department of Energy and Minerals
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

File: DDL-139-986.511

Dear Mr. Ramey:

Downhole Commingle Gas Production from Fruitland and Pictured Cliffs Formations

Reference our letter dated October 21, 1982, File: DDL-129-986.511, the following production figures were used in calculating gas allocations on the following wells:

A. L. Elliott "B" No. 8 NE/4, Section 10, T29N, R9W

This well was a dual before commingling, so production figures before commingling are:

	P/C	Fruitland	% P/C
March 1981	88 MCF	140 MCF	39%
April 1981	67 MCF	119 MCF	36%
May 1981	81 MCF	136 MCF	37%
June 1981	61 MCF	116 MCF	35%

Average % is 37% P/C; 63% Fruitland.

Joe D. Ramey
Page 2
October 27, 1982
File: DDL-139-986.511

# A. L. Elliott "D" No. 7 SW/4, Section 11, T29N, R9W

	P/C	P/C & Fruitland	
September 1981 August 1981 July 1981 June 1981 May 1981	37 MCF 45 MCF 46 MCF 51 MCF 54 MCF	October 1981 - 153 MC November 1981 - 97 MC	
Average P/C = 47 MCF Average P/C and Fruitland = 1	.25 MCF	125 - 47 = 78 Fruitland	
$\frac{78}{125} = 62\% \text{ Fruitland}$			
$\frac{47}{125}$ = 38% P/C		A Section 1985	

# A. L. Elliott "E" No. 1 NW/4, Section 14, T29N, R9W

	P/C	Days
January 1981	1762 MCF	31
February 1981	1565 MCF	28
March 1981	1891 MCF	31
April 1981	1662 MCF	30
May 1981	1523 MCF	31
June 1981	1464 MCF	30
July 1981	1393 MCF	31
August 1981	1483 MCF	31
September 1981	1126 MCF	30
	13,869 MCF	273

 $13,869 \div 273 = 50.8 \text{ MCFD for Pictured Cliffs}$ 

Joe D. Ramey Page 3 October 27, 1982 File: DDL-139-986.511

Conducted a deliverability test after commingling for 43.4 days. It produced 7726 MCF gas and averaged 178 MCFD for Fruitland and Pictured Cliffs formations.

178 MCFD -- 50.8 MCFD = 127.2 MCFD for Fruitland

127.2 + 178 = 72% - Fruitland 50.8 + 178 = 28% - P/C

Very truly yours,

S. D. Blossom

District Superintendent

BTR/mp

cc: Frank Chavez New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87410



# STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

October 23, 1980

POST OFFICE BOX 2086 STATE LAND OFFICE BUILDING SANTA PE, NEW MEXICO 8750 85051 827-2434

Mr. Gordon Ryan, Attorney Amoco Production Company	Re: CASE NO. 7011 ORDER NO. R-6481
Security Building Denver, Colorado 80202	Applicant:
	Amaca Production Company
Dear Sir:	
Enclosed herewith are two co Division order recently enter	pies of the above-referenced red in the subject case.
JOE D. RAMEY Director	
JDR/fd	
Copy of order also sent to:	
Hobbs OCD X Artesia OCD X Aztec OCD X	
Other	

#### STATE OF NEW MEXICO 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. 7011 Order No. R-6481

APPLICATION OF AMOCO PRODUCTION COMPANY FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 17, 1980, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this  $20 \, \mathrm{th}$  day of October, 1980, 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, is the owner and operator of six wells described as follows: Ellictt "C" No. 1, SE/4 of Section 9, Township 30 North, Range 9 West; Ellictt "B" No. 8, NE/4 of Section 10; Ellictt "A" Nos. 3 and 2; NE/4 and NW/4, Section 11; Ellictt "D" No. 7, SW/4 of Section 11; and Ellictt "E" No. 1, NW/4 of Section 14, all in Township 29 North, Range 9 West, NMPM, San Juan County, New Hexico.
- (3) That the applicant seeks authority to commingle Fruitland and Blanco-Pictured Cliffs production within the wellbores of the above-described wells.
- (4) That from the Fruitland zone, the subject wells are or are expected to be capable of low marginal production only.
- (5) That from the Blanco-Pictured Cliffs zone, the subject wells are or are expected to be capable of low marginal production only.

-2-Case No. 7011 Order No. R-6481

- (6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be saused by the proposed commingling provided that the well is not shut-in for an extended period.
- (8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject wells are shut-in for 7 consecutive days.
- (9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones in each well.

#### IT IS THEREFORE ORDERED:

- (1) That the applicant, Amoco Production Company, is hereby authorized to commingle Fruitland and Blanco-Pictured Cliffs production within the wellbores of the following six wells: Elliott "C" No. 1, SE/4 of Section 9, Township 30 North, Range 9 West; Elliott "B" No. 8, NE/4 of Section 10; Elliott "A" Nos. 3 and 2, NE/4 and NH/4, Section 11; Elliott "D" No. 7, SW/4 of Section 11; and Elliott "E" No. 1, NW/4 of Section 14, all in Township 29 North: Range 9 West, NMPM, San Juan County, New Mexico.
- (2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells.
- (3) That the operator of the subject wells shall immediately notify the Division's Aztec district office any time any of the wells have been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-3-Case No. 7011 Order No. R-6481

DONE at Santa Fe, New Mexico, on the day and year herein-

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY Director

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ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
17 September 1980

STATE OF NEW MEXICO

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-)
pany for downhole commingling, San )
Juan County, New Mexico.

CASE 7011

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel to the Division State Land Office Bldg. Santa Fe, New Mexico 87501

For the Applicant:

Gordon D. Ryan, Esq.
Amoco Production Company
Danver, Colorado

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INDEX

BART GILES

Direct Examination by Mr. Tyan

Cross Examination by Mr. Stamets

Cross Examination by Mr. Padilla

EXHIBITS

Applicant Exhibit One, Plat

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MR. PADILLA: Application of Amoco Production Company for downhole commingling, San Juan County,

New Mexico.

MR. STAMETS: Call for appearances in

this case.

MR. RYAN: Gordon D. Ryan, Denver, Colorado,

appearing on behalf of the applicant, Amoco Production Company, and the file should also reflect that a letter from

Mr. Paul Cooter of Roswell should appear in this file.

# BART GILES

(Witness sworm.)

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

MR. STAMETS: We'll call next Case 7011.

# DIRECT EXAMINATION

BY MR. RYAN:

g. I have one witness and I'll ask that he state his name, by whom he's employed and in what capacity.

R. B. Giles, with Amoco Production Com-

pany in an engineering capacity in its Denver Region Office.

Q. Have you previously testified before this Commission and had your qualifications admitted?

		A.	Yes, on both counts.
		Q	And are you familiar with this application?
		A.	I am.  MR. RYAN: Any question about Mr. Giles
5	qu	alification?	
6			MR. STAMETS: None.
7		Q	In preparation for this hearing have you
8	pı	repared an exhib:	Yes, a lone exhibit that we have labeled
10	E	xhibit Number On	e.
11		Q	Would you briefly state what Amoco seeks
12	j	in this applicat:	Amoco seeks permission to downhole com-
13		Α.	Amoco seeks permitted
14	;     ·	mingle gas produ	ffs formation in six wells in the Blanco Field
1(	6	in San Juan Cour	· · · · · · · · · · · · · · · · · · ·
	7		the area and under each well is a box
	19	_	in the legend down at the bottom
	20		the completion date.
	21		to the right of dia
	22		a tion to 1-1-80. And the outside
	23	dentally, woul	d be the average from Dwight's curves of the
	24	last half of	1070
	25		Finally the box at the bottom shows on

the left remaining reserves and to the right, the current 7-day shut-in pressure test for the well.

All of the boxes that are open, and this applies to most of the boxes on Exhibit One, show Pictured Cliffs data.

To distinguish the Fruitland from it, we have italicized the Fruitland box and also put a dark band around the box, and you'll see that there are far fewer boxes for Fruitland formation test data than for the Pictured Cliffs.

We show on Exhibit One with arrows six wells that Amoco wishes permission to downhole commingle Fruit land and Pictured Cliffs gas production. Starting at the top of Exhibit One it's the E. E. Elliott "C" No. 1 in the south
ast quarter of Section 9, 30 North, 9 West; currently a Fruitland well; been producing for eight years, eight-and-ahalf years; presently producing only 27 Mcfd.

Further towards the bottom of the map, we have the A. L. Elliott "A" No. 3 in the northeast quarter of Section 11, 29 North, 9 West; has been producing a little over two years from the Pictured Cliffs; currently producing 189 MCFD.

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47 MCFD.

In the southwest quarter of Section 11 is the A. L. Elliott "D" No. 7, a Pictured Cliffs well for a little over two years; currently producing 71 MCFD.

In the northwest quarter of Section 14 is the A. L. Elliott "E" No. 1, a Pictured Cliffs well; has been on-stream for almost two-and-a-half years; currently producing 69 MCFD.

Now, in Section 10 we have the -- in the northeast quarter of that section, the A. L. Elliott "B" No. 8. The box under it is not the box for that well but it is for the well in the southeast quarter of Section 10. We simply did not have enough room to put it under the Well No. 4 in the southeast quarter.

I mention this specifically because the "B" No. 8 in the northeast quarter of 10 has not yet been put on line. It is one of the six proposed downhole commingling wells, however.

MR. STAMETS: What formation is it currently completed in?

A. Pictured Cliffs.

MR. STAMETS: Thank you.

Mr. Giles, would you state why Amoco seeks to commingle these wells, on what basis?

A. Yes. The wells, obviously, are already

ALLY W. BOYD, C.S.

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drilled. Each has been equipped with 4-1/2 inch production casing. We would prefer not to dual with a packer in the hole because we cannot effectively remove fluids that might log off the flow of gas.

We would also have to produce the shallower formation, the Fruitland, up the annulus and in case it logged off it would mean we would have to bring in a service unit to restore production from the well, and just a few gallons of water can log off the flow of gas in this area, and we sincerely believe that we can improve ultimate gas recovery from both the Fruitland and PC formations by downhole commingling in order to use the full downhole pressure to sustain flow and keep any fluids from building up at the bottom of the hole.

I think you'll notice from the resume I gave of the production currently at each well, the production is a low rate of magnitude, whether it be from the Fruitland or the Pictured Cliffs. We will frac the newly opened zone in each well and it will cost \$65,000 to prepare the well for commingled production. Most of that cost, of course, is for the frac.

Does it appear from the wells producing in the area that the -- that nonproducing zone at this time is also present or would be present in the wells?

Yes. Our analysis of the -- and inspection

of the logs of the Fruitland and the Pictured Cliffs in the area give us a reasonable expectation that each would be productive in each of these six wells.

- Q In your opinion will the granting of this application be in the best interest of conservation?
  - A. Yes, we think so.
- Q And in your opinion can these wells be commingled and the wells be produced from both zones without causing underground waste?
  - A. Definitely.
- And in your opinion will there be some economic waste prevented if this application is granted?
- A. Yes, it will certainly minimize repair costs in case wells should happen to build up with fluid and we need to restore productivity.

There is precendent in the area for downhole commingling. The legend at the bottom left of Exhibit

One shows with the heavy cogwheel-type symbol that just to
the northeast of the five locations we propose to downhole
commingle in Township 29 North is the Tenneco Florance No. 609
in the southwest quarter of Section 1, 29 North, 9 West, and
also just to the east near the top of the Exhibit One in the
southwest quarter of Section 10 is the Tenneco Florance No.
115, which is presently commingled by authority of the Oil
Conservation Division. That particular well lies immediately

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downhole commingles. These are those wells that were completed about a year ago, were they not? Yes. And they currently are averaging more than most of the wells that we're proposing to commingle?

Correct.

east of the E. E. Elliott "C" No. 1, one of our proposed six

Was Exhibit One prepared by you or under your supervision?

It was.

MR. RYAN: I'd offer the Exhibit into evidence and that's all the questions I have on direct.

MR. STAMETS: The Exhibit One will be

admitted.

# CROSS EXAMINATION

BY MR. STAMETS:

Mr. Giles, do you know what the line pressure is in the area?

I do not, sir.

Do either of these zones produce liquids?

The Pictured Cliffs in particular -- no,

I should take that back. The Fruitland probably has a history of producing a few gallons of water as opposed to the Picture

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Cliffs. But you can get some water, like a few gallons, from each formation.

For example, right between the base of the Fruitland best pay interval and the top of the Pictured Cliffs, is a coal zone. If there happened to be communication from the coal zone, you could expect some water in the Fruitland.

So that's a little bit of a touchy situation. You have to perforate the Fruitland as high as possible in its pay zone and hope you don't communicate into the coal zone through a frac job.

Do you have any pressure information on any of these wells?

Well, we have shown at the bottom, the A. lower righthand corner of the boxes, the shut-in 7-day pressure tests.

All right.

The pressures are in the, generally in the 350 to 515 range in the two formations. They're reasonable comparable.

Oh, I would like to add something. the northeast quarter of Section 11, the A. L. Elliott "A" No. 3, we show in the left bottom box a question mark.

We do the same in the northwest quarter of Section 14, the A. L. Elliott "E" No. 1. We have a guestion

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mark, and this pertains to remaining reserves.

The reason for the question mark is that there is not enough decline curve trend for those wells to be able to extrapolate the trend and estimate remaining reserves.

The only other way we could do this would be to make pore volume estimates of reserves and we do not feel that's as strong a method as decline curve analysis.

Both wells, obviously, from their cumulative production, are rather weak producers.

Q It would appear, looking at your Exhibit Number One, that we would not anticipate pressure differentials between the two zones exceeding 50 percent, the lower zone being not less than 50 percent of the pressure in the higher zone.

A That's correct.

Q This has been the general well that the Division has followed in authorizing downhole commingling.

In each of these wells I presume you plan to run the tubing as close to the Pictured Cliffs perforations as possible?

Yes.

Q. What sort of vertical distance do we have

between these zones?

A. The base of the last pay zone in the

ALLY W. BOYD, C.S.F Rt. 1 Box 193-B Santa Fe, New Merico 87501 Phone (305) 455-7469

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Pictured Cliffs would be about 40 feet from the top of the first pay zone in the Pictured Cliffs.

Q So they're very close.

A Very close; one lies right on top of another. There is that coal stringer right between, however.

Okay. How would you propose to develop an allocation for the production of these two zones?

A. We've talked about that at great length.

Could I ask -- maybe I want to go off the record.

Ω Okay.

(There followed a discussion off the record.)

A. Let's go back on the record. Let me answer Mr. Stamet's question as to allocation.

We would suggest on the older wells with a stabilized rate that if commingling is approved, why, just subtract the old rate from the new combined stream.

Q It sounds as though what you'd like to do is just simply work this out with the District Supervisor during the process of completion of the wells, at that time.

A I think that would be excellent.

Okay.

MR. STAMETS: Are there any other ques-

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tions of the witness? Mr. Padilla?

## CROSS EXAMINATION

BY MR. PADILLA:

Mr. Giles, is the ownership in both for-Q. mations, or both zones, common?

Yes, it is. The minerals, I am told, are A. owned by the Federal government. The names by the wells represent the surface owners.

MR. STAMETS: And Amoco is the working interest owner?

Yes. All the stipled acreage on Exhibit One is Amoco's full leasehold.

MR. STAMETS: Any other questions of the witness? He may be excused.

> Anything further in this case? The case will be taken under advisement.

(Hearing concluded.)

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I, SALLY W. BOYD, C.S.R., DO HEREPY 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 carlify that the foregoing is a complete record of the proceedings in the Examiner housing of Case sto. heard by me on\_\_\_\_

Oil Conservation Division

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
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# INDEX

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EXHIBITS

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BART GILES

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24 25 MR. STAMETS: We'll call next Case 7011.

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# (Witness sworn,)

# BART GILES

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I have one witness and I'll ask that he state his name, by whom he's employed and in what capacity.

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Q. Have you previously testified before this Commission and had your qualifications admitted?

LLY W. BOYD, C.S.R Rt. 1 Box 193-B Santa Fe, New Mexico 87501 Phone (505) 455-7409

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Yes, on both counts.

And are you familiar with this application?

I am,

MR. RYAN: Any question about Mr. Giles

qualification?

MR. STAMETS: None.

In preparation for this hearing have you prepared an exhibit?

Yes, a lone exhibit that we have labeled Exhibit Number One.

Would you briefly state what Amoco seeks in this application?

Amoco seeks permission to downhole commingle gas production from the Fruitland formation and from the Pictured Cliffs formation in six wells in the Blanco Field, in San Juan County.

Exhibit One shows several things. It shows the wells in the area and under each well is a box tabulation, shown in the legend down at the bottom of the exhibit, IP of the well, the completion date. Under those two figures, the current rate; to the right of that would be the cumulative production to 1-1-80. And the current rate, incidentally, would be the average from Dwight's curves of the last half of 1979.

Finally the box at the bottom shows on

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of the logs of the Fruitland and the Pictured Cliffs in the area give us a reasonable expectation that each would be productive in each of these six wells.

In your opinion will the granting of this application be in the best interest of conservation?

Yes, we think so.

And in your opinion can these wells be commingled and the wells be produced from both zones without causing underground waste?

Definitely.

And in your opinion will there be some economic waste prevented if this application is granted?

Yes, it will certainly minimize repair costs in case wells should happen to build up with fluid and we need to restore productivity.

There is precendent in the area for downhole commingling. The legend at the bottom left of Exhibit One shows with the heavy cogwheel-type symbol that just to the northeast of the five locations we propose to downhole commingle in Township 29 North is the Tenneco Florance No. 60\$ in the southwest quarter of Section 1, 29 North, 9 West, and also just to the east near the top of the Exhibit One in the southwest quarter of Section 10 is the Tenneco Florance No. 115, which is presently commingled by authority of the Oil Conservation Division. That particular well lies immediately

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east of the E. E. Elliott "C" No. 1, one of our proposed six downhole commingles. These are those wells that were completed about a year ago, were they not? Yes. And they currently are averaging more than Correct, your supervision? It was, admitted. BY MR. STAMETS: pressure is in the area? I do not, sir.

most of the wells that we're proposing to commingle? Was Exhibit One prepared by you or under MR. RYAN: I'd offer the Exhibit into evidence and that's all the questions I have on direct. MR. STAMETS: The Exhibit One will be

## CROSS EXAMINATION

Mr. Giles, do you know what the line

Do either of these zones produce liquids?

The Pictured Cliffs in particular -- no,

I should take that back. The Fruitland probably has a history of producing a few gallons of water as opposed to the Pictured

Cliffs. But you can get some water, like a few gallons, from each formation.

For example, right between the base of the Fruitland best pay interval and the top of the Pictured Cliffs, is a coal zone. If there happened to be communication from the coal zone, you could expect some water in the Fruitland.

So that's a little bit of a touchy situation. You have to perforate the Fruitland as high as possible in its pay zone and hope you don't communicate into the coal zone through a frac job.

Q. Do you have any pressure information on any of these wells?

A. Well, we have shown at the bottom, the lower righthand corner of the boxes, the shut-in 7-day pressure tests.

All right,

A. The pressures are in the, generally in the 350 to 515 range in the two formations. They're reasonable comparable.

Oh, I would like to add something. In the northeast quarter of Section 11, the A. L. Elliott "A" No. 3, we show in the left bottom box a question mark.

We do the same in the northwest quarter of Section 14, the A. L. Elliott "E" No. 1. We have a question

mark, and this pertains to remaining reserves. The reason for the question mark is that there is not enough decline curve trend for those wells to be able to extrapolate the trend and estimate remaining re-2 3 The only other way we could do this would 4 be to make pore volume estimates of reserves and we do not serves. 5 feel that's as strong a method as decline curve analysis. ĥ Both wells, obviously, from their cumula-7 8 tive production, are rather weak producers. It would appear, looking at your Exhibit 9 Number One, that we would not anticipate pressure differen-10 tials between the two zones exceeding 50 percent, the lower 11 zone being not less than 50 percent of the pressure in the 12 13 14 This has been the general well that the higher zone. That's correct. 15 Division has followed in authorizing downhole commingling. 16 In each of these wells I presume you plan 17 to run the tubing as close to the Pictured Cliffs perforations 18 19 20 What sort of vertical distance do we have as possible? 21 yes. 22 The base of the last pay zone in the Õ. 23 between these zones? 24 A. 25

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Pictured Cliffs would be about 40 feet from the top of the first pay zone in the Pictured Cliffs.

Q So they're very close.

A. Very close; one lies right on top of another. There is that coal stringer right between, however.

Q Okay. How would you propose to develop an allocation for the production of these two zones?

A. We've talked about that at great length.

Could I ask -- maybe I want to go off the record.

Q Okay.

(There followed a discussion off the record.)

A. Let's go back on the record. Let me answer Mr. Stamet's question as to allocation.

We would suggest on the older wells with a stabilized rate that if commingling is approved, why, just subtract the old rate from the new combined stream.

Q. It sounds as though what you'd like to do is just simply work this out with the District Supervisor during the process of completion of the wells, at that time.

A. I think that would be excellent.

), Okay.

MR. STAMETS: Are there any other ques-

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CROSS EXAMINATION

tions of the witness? Mr. Padilla?

BY MR. PADILLA:

Q. Mr. Giles, is the ownership in both formations, or both zones, common?

A. Yes, it is. The minerals, I am told, are owned by the Federal government. The names by the wells represent the surface owners.

MR, STAMETS: And Amoco is the working interest owner?

A. Yes. All the stipled acreage on Exhibit
One is Amoco's full leasehold.

MR. STAMETS: Any other questions of the witness? He may be excused.

Anything further in this case?

The case will be taken under advisement.

(Hearing concluded.)

SALLY W. BOYD, C.S.R Rt. i Box 193-8 Santa Fe, New Mexico 87501 Phone (1937) 444,7446

Page14
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#### CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREPY 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.

Sarry W. Boyd C.S.R.

lam Examiner

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hanring of Case No. 70//

Oll Conservation Division

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#### ATWOOD, MALONE, MANN & COOTER A PROFESSIONAL ASSOCIATION LAWYERS

JEFF D. ATWOOD [1883-1960] ROSS L. MALONE [1910-1974]

P. O. DRAWER 700 SECURITY NATIONAL BANK BUILDING ROSWELL, NEW MEXICO 88201

RANDAL W. ROBERTS STEVEN L. EELL WILLIAM P. LYNCH

September 9, 1980

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

> Examiner Hearing - Wednesday, September 15, 1980 Cause No. 7011

Dear Mr. Ramey:

We would appreciate your filing the enclosed Entry of Appearance for Amoco Production Company in Cause No. 7011.

Your assistance in this matter is appreciated.

Very truly-yours,

Paul Cooter

PC/le

cc: Gordon Doll than CONS. RVATION DIVISION

## BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF AMOCO PRODUCTION COMPANY FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO. NO. 7011

#### ENTRY OF APPEARANCE

The undersigned hereby enter their appearance on behalf of Amoco Production Company with Gordon D. Ryan of Denver, Colorado.

ATWOOD, MALONE, MANN & COOTER,

P. O. Drawer

Roswell, New Mexico 88201

Dockets Nos. 30-80 and 31-80 are tentatively set for October 1 and 15, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 17, 1980

9 A.M. - OIL CONSERVATION DIVISION 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:

- ALLOWABLE: (1) Consideration of the allowable production of gas for October, 1980, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
  - (2) Consideration of the allowable production of gas for October, 1980, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- CASE 7021: Application of Gulf Oil Corporation for simultaneous dedication, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a previously approved 477-acre non-standard gas proration unit comprising the N/2 and SE/4 of Section 19, Township 19 South, Range 37 East, Eumont Gas Pool, to its B. V. Culp (NGT-A) Wells Nos. 3 and 9 located in Units F and J, respectively, of said Section 19.
- CASE 6961: (Continued from August 20, 1980, Examiner Rearing)

Application of Conoco Inc. for a dual completion and unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Meyer A-29 Well No. Il to be drilled at an unorthodox location 990 feet from the North line and 660 feet from the East line of Section 29, Township 22 South, Range 36 East, to produce gas from the Langley-Devonian and -Ellenburger Pools thru parallel strings of tubing, the E/2 of said Section 29 to be dedicated to the well.

- CASE 7022: Application of Texas Pacific Oil Company, Inc. for a non-standard proration unit and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a 320-acre non-standard proration unit comprising the N/2 of Section 9, Township 22 South, Range 36 East, Jalmat Gas Pool, to its Wells Nos. 40 and 63 located in Units A and C, respectively, of said Section 9. Applicant further seeks approval to simultaneously dedicate its Wells Nos. 14, 36, 42, and 62 located in Units B, M, E, and K, respectively, of Section 11, Township 22 South, Range 36 East, to a standard proration unit to be comprised of all of said Section 11.
- CASE 7008: (Continued from August 20, 1980, Examiner Hearing)

Application of Coronado Exploration Corp. for eight compulsory poolings, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying eight 40-acre proration units, being the NE/4 NE/4 of Section 4 and the NW/4 NE/4 of Section 5, both in Township 12 South, Range 28 East, and the NW/4 SE/4 of Section 6, the NE/4 NW/4 of Section 23, the NE/4 SE/4 of Section 28, the SE/4 SE/4 of Section 29, the NE/4 NW/4 of Section 32, and the SE/4 NW/4 of Section 33, all in Township 11 South, Range 28 East, each 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 wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells, and a charge for risk involved in drilling said wells.

CASE 7004: (Continued from August 20, 1980, Examiner Hearing)

Application of Anadarko Production Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Morrow formations underlying the N/2 of Section 12, Township 19 South, Range 25 East, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7023: Application of Shell Oil Company for pool creation and temporary special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian oil pool for its Askew Well No. 1 located in Unit L of Section 2, Township 5 South, Range 33 East, and the promulgation of special pool rules therefor, including a provision for 80-acre spacing.

CASE 7011: (Continued from August 20, 1980, Examiner Hearing)

Application of Amoco Production Company for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seaks approval for the downhole commingling of Fruitland and Blanco-Pictured Cliffs production in the wellbores of the following circular Elliott "C" No. 1, SE/4 of Section 9, Township 30 North, Range 9 West; Elliott "B" No. 8, NE/4 of Section 10; "A" Nos. 3 and 2, NE/4 and NW/4, Section 11; "D" No. 7, SW/4 of Section 11; and "E" No. 1, NW/4 of Section 14, all in Township 29 North, Range 9 West.

CASE 7019: (Continued from September 3, 1980, Examiner Hearing)

Application of Amoco Production Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 30, Township 23 South, Range 25 East, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 6991: (Continued from September 3, 1980, Examiner Hearing)

Application of Amoco Production Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in a 100 foot perforated interval between 4400 feet and 4800 feet in its South Hobbs Unit Well No. 103 in Unit B of Section 15, Township 19 South, Range 38 East, Hobbs Grayburg-San Andres Pool.

Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico CASE 7024: Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 35, Township 18 South, Range 29 East, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7025: Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 35, Township 18 South, Range 29 East, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7005: (Continued from August 20, 1980, Examiner Hearing)

Application of Sol West III for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for his Turkey Track-Morrow Sand Well No. 1 in Unit I of Section 26, Township 18 South, Range 28 East.

CASE 6822: (Continued from September 3, 1980, Examiner Hearing)

In the matter of Case 6822 being reopened pursuant to the provisions of Order No. R-6293 which order created the West Double X-Wolfcamp Gas Pool as a retrograde gas condensate pool and set special production limitations therein. Operator(s) may appear and present evidence to establish the true nature of the reservoir and proper rates of withdrawal therefrom.

CASE 7026: Application of Bass Enterprises Production Company for pool creation, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Bone Spring oil pool for its Big Eddy Unit Well No. 60 located in Unit J of Section 20, Township 21 South, Range 28 East, and the promulgation of special rules therefor including a gas-oil ratio limitation of 10,000 to one.

CASE 7027: Application of W. A. Moncrief, Jr. for an NCPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for his Marathon State Com. Well No. 1 in Unit J of Section 11, Township 24 South, Range 24 East.

Docket No. 29-80

CASE 7028: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, deleting, and extending certain pools in Chaves, Eddy, and Lea Counties, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the North Bell Lake-Wolfcamp Pool. The discovery well is Amoco Production Company State HL Well No. 1 located in Unit L of Section 2, Township 23 South, Range 33 East, NMPM. Said pool would comprise:

# TOWNSHIP 23 SOUTH, RANGE 33 EAST, NMPM Section 2: W/2

(b) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware production and designated as the Golden Lane-Delaware Pool. The discovery well is Meadco Properties, Ltd. Hudson Federal Well No. 1 located in Unit C of Section 4, Township 21 South, Range 29 East, NNPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM Section 4: Lots 3, 4, 5, 6, 11, and 12

(c) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the McDonald-Atoka Gas Pool. The discovery well is Harvey E. Yates Company Heyco Betenbough Well No. 1 located in Unit C of Section 32, Township 13 South, Range 36 East, NMPM. Said pool would comprise:

## TOWNSHIP 13 SOUTH, RANGE 36 EAST, NMPM Section 32: N/2

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Seven Rivers production and designated as the Pearsall-Seven Rivers Pool. The discovery well is Arrowhead Oil Corporation Hover Well No. 3 located in Unit D of Section 32, Township 17 South, Range 32 East, NMPM. Said pool would comprise:

# TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM Section 32: NW/4

(e) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the West Tonto-Wolfcamp Pool. The discovery well is Inexco Oil Company Federal Com 7 Well No. 2 located in Unit E of Section 7, Township 19 South, Range 33 East, NMPM. Said pool would comprise:

## TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM Section 7: NW/4

(f) CREATE a new pool in Eddy County, New Mexico, classified as an oil pool for Bone Spring production and designated as the Winchester-Bone Spring Pool. Further to assign approximately 38,955 barrels of discovery allowable to the discovery well, Marathon Oil Company Martinez "31" Federal Well No. 1 located in Unit F of Section 31, Township 19 South, Range 29 East, NMPM. Said pool would comprise:

## TOWNSHIP 19 SOUTH, PANGE 29 EAST, NMPM Section 31: NW/4

(g) CONTRACT the horizontal limits of the Mid Bell Lake-Devonian Gas Poo! in Lea County, New Mexico, by the deletion of the following described area:

# TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM Section 18: N/2 and SW/4

(h) CONTRACT the horizontal limits of the La Rica-Morrow Gas Pool in Lea County, New Mexico, by the deletion of the following described area:

## TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM Section 2: All

(i) EXTEND the Airstrip-Upper Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM Section 35: NE/4
Section 36: NE/4

TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM Section 31: NW/4

(j) EXTEND the Airstrip-Lower Bone Spring Pool in Lea County, New Mexico, to include therein:

(k) EXTEND the Artesia Queen-Grayburg-San Andres Pool in addy County, New Mexico, to include

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM Section 22: E/2 NE/4

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM Section 35: W/2 NW/4

TOWNSHIP 19 SOUTH, RANGE 27 EAST, NMPM Section 2: NW/4 and N/2 SW/4

EXTEND the Bough-San Andres Gas Pool in Lea County, New Mexico, to include therein: TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM Section 14: NE/4

(m) EXTEND the Buffalo-Pennsylvanian Gas Pool in Lea County, New Mexico, to include therein:

(n) EXTEND the North Burton Flat-Wolfcamp Gas Pool in Eddy County, New Mexico, to include therein:

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

TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM Section 16: W/2

(p) EXTEND the Chaveroo~San Andres Pool in Chaves County, New Mexico, to include therein: TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM Section 4: E/2 E/2

(q) EXTEND the South Culebra Bluff-Bone Spring Pool in Eddy County, New Mexico, to include

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM Section 24: S/2 NW/4 and N/2 S/2

(r) EXTEND the Eagle Creek Permo-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM Section 31: All

(8) EXTEND the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPH
Section 12: All

(t) EXTEND the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, to include therein: TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM Section 28: N/2 N/2

(u) EXTEND the East Grama Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

Page 5 of 6 Examiner Hearing - Wednesday - September 17, 1980

Docket No. 29-80

(v) EXTEND the West Indian Basin-Morrow Cas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 22 EAST, NMPH Section 24: N/2

(w) EXTEND the Langley-Devonian Gas Pool in Les County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM Section 28: S/2

(x) EXTEND the Langley-Ellenburger Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM Section 28: S/2

(y) EXTEND the Los Medanos-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM Section 1: S/2

(2) EXTEND the North Loving-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM Section 17: S/2 Section 19: E/2 Section 20: W/2

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

TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM Section 13: All

(bb) EXTEND the West Malaga-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 28 EAST, NMPM Section 8: E/2 Section 9: S/2

(cc) EXTEND the Mesa-Queen Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 31 EAST, NMPM Section 1: SW/4

(dd) EXTEND the Midway-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NIMPH Section 8: SE/4

(ee) EXTEND the Nash Draw-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 30 EAST, NMPM Section 7: S/2

(ff) EXTEND the North Osudo-Morrow Gas Pool in Les County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM Section 29: S/2

(gg) EXTEND the East Red Lake Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 28 EAST, NMPM Section 25: NW/4 and N/2 SW/4

(hh) EXTEND the Sand Point-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 28 EAST, NMPM Section 3: Lots 1, 2, 7, 8, 9, 10, 15 and 16

(ii) EXTEND the Shoebar-Atoka Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM Section 28: N/2 and SW/4

(jj) EXTEND the Shugart-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 31 EAST, MMPM

Section 1: W/2 Section 2: N/2

(kk) EXTEND the Sioux Tansill-Yates-Seven Rivers Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 26 SOUTH, RANGE 36 EAST, NMPM Section 9: SE/4

(11) EXTEND the Teas Yates-Seven Rivers Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NHPM Section 19: SE/4

EXTEND the Tom-Tom San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 31 EAST, NMPM

Section 24: SW/4 Section 35: NW/4

(nn) EXTEND the Turkey Track-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM

Section 1: S/2

Section 2: S/2 Section 11: N/2

Section 14: All

(00) EXTEND the Turkey Track-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 29 EAST, NMPM Section 7: S/2

Section 18: All

(pp) EXTEND the Winchester-Wolfcamp Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM

Section 34: SE/4

(qq) EXTEND the Yarrow-Delaware Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 26 EAST, NMPM Section 22: NE/4

(rr) EXTEND the Young-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM Section 4: S/2

Section 9: E/2

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
20 August 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Com-)
pany for downhole commingling, San )
Juan County, New Mexico.

CASE 7011

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel to the Division State Land Office Bldg. Santa Fe, New Mexico 87501

For the Applicant:

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MR. STAMETS: We'll call next Case 7011.

MR, PADILLA: Application of Amoco Pro-

duction Company for downhole commingling, San Juan County,
New Mexico.

MR. STAMETS: As noted on the docket, this case will be continued to the September 17th Examiner Hearing.

(Hearing concluded.)

SALLY W. BOYD, C.S.R. Rt. 1 Box 193-B Santa Fc. New Mexico 87501 Phone (305) 455-7409

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#### CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREPY 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.

Solly W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete resord of the proceedings in the Examiner hearing of Case No. 701/.

Examiner

Oil Conservation Division

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO 20 August 1980 EXAMINER HEARING IN THE MATTER OF: Application of Amoco Production Com-) pany for downhole commingling, San ) Juan County, New Mexico. CASE 10 7011 BEFORE: Richard L. Stamets 11 12 13 TRANSCRIPT OF HEARING 14 15 APPEARANCES 16 For the Oil Conservation 17 Division: Ernest L. Padilla, Esq. Legal Counsel to the Division 18 State Land Office Bldg. Santa Fe, New Mexico 87501 19 20 For the Applicant: 21 22 23 24 25

MR. STAMETS: We'll call next Case 7011.

MR. PADILLA: Application of Amoco Pro-

duction Company for downhole commingling, San Juan County, New Mexico.

MR. STAMETS: As noted on the docket, this case will be continued to the September 17th Examiner Hearing.

(Hearing concluded.)

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Page	3

#### CERTIFICATE

I, SALLY W. BOYD, C.S.R. DO HEREPY 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.

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I do hereby certify that the foregoing is  $\alpha$  complete reserve of the proceedings in the Examiner licering of Case 40.

heard by me on 19.

Examiner

Oil Conservation Division

25



August 4, 1980.

Joe D. Ramey, Director (3) Department of Energy and Minerals Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

File: HAS-249-986.511

Dear Mr. Ramey:

Application to Downhole Commingle Gas Production from the Fuitland and Pictured Cliffs Formation in Six Wells in the Blanco Pictured Cliffs Field, San Juan County, New Mexico

Due to a conflict in hearing dates, we respectfully ask that the captioned July 24, 1980, application we had requested you set for hearing on August 20, now be continued and reset for examiner hearing on September 17, 1980.

Very truly yours,

RBG/lkh

Frank Chavez, Supervisor District III New Mexico Oil Conservation Commission 1000 Rio Brazos Axtec, NM 87410

James Simms United States Geological Survey

P. O. Box 965
ECEIRAEnington, NM 87401

OIL CONSTRUCTION DIVISION

SANTA FE

CASE 60 7011



August 4, 1980

Joe D. Ramey, Director (3)
Department of Energy and Minerals
Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

File: HAS-249-986.511

Dear Mr. Ramey:

Application to Downhole Commingle Gas Production Application to Downtole Committingle das Flocustion in from the Fuitland and Pictured Cliffs Formation in Six Wells in the Blanco Pictured Cliffs Field,
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very truly yours,

B. Giles

RBG/1kh

Frank Chavez, Supervisor District III New Mexico Oil Conservation Commission 1000 Rio Brazos Axtec, NM 87410

United States Geological Survey James Simms P. O. Box 965 Farmington, NM 87401

0891 8 ODUA OIL CONS RVATION DIVISION SANTA FE



August 4, 1980

Joe D. Ramey, Director (3)
Department of Energy and Minerals
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

File: HAS-249-986.511

Dear Mr. Ramey:

Application to Downhole Commingle Gas Production from the Fuitland and Pictured Cliffs Formation in Six Wells in the Blanco Pictured Cliffs Field, San Juan County, New Mexico

Due to a conflict in hearing dates, we respectfully ask that the captioned July 24, 1980, application we had requested you set for hearing on August 20, now be continued and reset for examiner hearing on September 17, 1980.

Very truly yours,

R. R. Giles

RBG/1kh

cc: Frank Chavez, Supervisor District III
New Mexico Oil Conservation Commission
1000 Rio Brazos
Axtec, NM 87410

James Simms
United States Geological Survey
P. O. Box 965
Farmington, NM 87401

AUGO 9 1980

OIL CONS EVATION DIVISION
SANTA FE

Docket No. 26-80

Dockets Nos. 27-60 and 28-86 are tentatively set for September 3 and 17, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 20, 1980

9 A.M. - OIL CONSERVATION DIVISION 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:

- ALLOWABLE: (1) Consideration of the allowable production of gas for September, 1980, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
  - (2) Consideration of the allowable production of gas for September, 1980, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- CASE 6998: Application of Monsanto Company for a unit agreement, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the Back Basin Unit Area, comprising 1,920 acres, more or less, of State and Federal lands in Township 23 South, Range 34 East.
- CASE 6999: Application of Gulf Oil Corporation for an unorthodox location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a previously approved 320-acre non-standard proration unit comprising the N/2 of Section 36, Township 21 South, Range 36 East, Eumont Gas Pool, to its Marry Leonard NCT-C Well No. 9 located in Unit B, and its No. 8, at an unorthodox location 1980 feet from the North line and 660 feet from the East line of Section 36.
- CASE 7000: Application of Cavalcade Oil Corporation for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its McClay Well No. 11 2385 feet from the South line and 1834 feet from the West line of Section 33, Township 18 South, Range 30 East, the NE/4 SW/4 of said Section 33 to be dedicated to the well.
- CASE 7001: Application of McClellan Oil Corporation for three unorthodox oil well locations, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for three following unorthodox locations for wells to be drilled in Section 24, Township 14 South, Range 29 East, Double 1. Queen Associated Pool: 1155 feet from the North line and 2145 feet from the East line; 1155 feet from the North and East lines; and 1650 feet from the North line and 1155 feet from the East line; the respective 40-acre tract would be dedicated to each well.
- CASE 7002: Application of Orville Slaughter for the amendment of Order No. R-5947, San Juan County, New Mexico.

  Applicant, in the above-styled cause, seeks the amendment of Order No. R-5947 to provide for the commingling of Oswell-Farmington production from his Saugre de Cristo Well No. 1 with undesignated Fruitland production from Wells Nos. 2 and 2S, all in Section 34, Township 30 North, Range 11 West.
- CASE 7003: Application of El Paso Natural Gas Company for directional drilling, San Juan County, New Mexico.

  Applicant, in the above-styled cause, seeks authority to directionally drill a well, the surface location of which is 590 feet from the South line and 2400 feet from the East line of Section 1, Township 29 North, Range 13 West, in such a manner as to bottom it within 175 feet of a point 990 feet from the South line and 1650 feet from the West line of said Section 1.
- CASE 7004: Application of Anadarko Production Company for compulsory pooling, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the WolfcampMorrow formations underlying the N/2 of Section 12, Township 19 South, Range 25 East, 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, designation of applicant as operator of the well, and
  a charge for risk involved in drilling said well.
- CASE 6938: (Continued from June 25, 1980, Examiner Hearing)

Application of Anadarko Production Company for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Dalport Federal Well No. 1 660 feet from the South and West lines of Section 20, Township 13 South, Range 31 East, Southeast Chaves Queen Gas Area, the W/2 of said Section 20 to be dedicated to the well.

CASE 6939: (Continued from June 25, 1980, Examiner Hearing)

Application of Anadarko Production Company for compulsory pooling, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks an order pooling all mineral interests at a depth from 2400 feet to 5000 feet below the surface, Turkey Track Field, underlying the NE/4 SE/4 of Section 10, Township 19 South, Range 29 East, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 6940: (Continued from July 23, 1980, Examiner Hearing)

Application of Adobe Oil Company for compulsory pooling, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks an order pooling all mineral interests down through the Wolfcamp formation underlying the NW/4 SE/4 for oil and the SE/4 for gas, Section 23, Tourship 20 South, Range 38 East, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 6961: (Continued from July 23, 1980, Examiner Hearing) (This case will be continued to September 17.)

Application of Conoco Inc. for a dual completion and unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Meyer A-29 Well No. 11 to be drilled at an unorthodox location 990 feet from the North line and 660 feet from the East line of Section 29, Township 22 South, Range 36 East, to produce gas from the Langley-Devonian and -Ellenburger Pools thru parallel strings of tubing, the E/2 of said Section 29 to be dedicated to the well.

CASE 7005: Application of Sol West III for an NGPA determination, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Morrow formation for his Turkey Track-Morrow Sand Well No. 1 in Unit I of Section 26, Township 18 South, Range 28 East.

CASE 7006: Application of Harvey E. Yate's Company for a unit agreement, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks approval for the Northwest Gladiola Unit Area, comprising 1,280 acres, more or less, of State and fee lands in Townships 11 and 12 South, Range 37 East.

CASE 7007: Application of Harvey E. Yates Company for downhole commingling, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks approval for the downhole commingling of Morrow and Atoka production in the wellbore of its North Travis 12 Deep Well No. 1 located in Unit O of Section 12, Township 18 South, Range 28 East.

CASE 7008: Application of Coronado Exploration Corp. for eight compulsory poolings, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying eight 40-acre proration units, being the NE/4 NE/4 of Section 4 and the NN/4 NE/4 of Section 5, both in Township 12 South, Range 28 East, and the NN/4 SE/4 of Section 6, the NE/4 NN/4 of Section 23, the NE/4 SE/4 of Section 28, the SE/4 SE/4 of Section 29, the NE/4 NN/4 of Section 32, and the SE/4 NN/4 of Section 33, all in Township 11 South, Range 28 East, each 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 wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the wells, and a charge for risk involved in drilling said wells.

CASE 6994: (Continued from August 6, 1980, Examiner Hearing)

Application of Enserch Exploration, Inc. for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Siluro-Devonian formations underlying the N/2 of Section 14, Township 25 South, Range 34 East, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 6996: (Continued from August 6, 1980, Examiner Hearing)

Application of John E. Schalk for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Blanco Mesaverde Pool underlying the NE/4 of Section 8, Township 25 North, Range 3 West, 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7009: Application of Amoco Production Company for salt water disposal, Lea County, New Nexico.

Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the interval from 8330 feet to 9000 feet in its State "E" Tract 18 Well No. 22 in Unit G of Section 2, Township 17 South, Range 36 East, Lovington-Abo Pool.

Page 3 of 5 Examiner Hearing - Wednesday - August 20, 1980

Docket No. 26-80

CASE 1010: Application of Amoro Production Company for a dual completion, unorthodox well location, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Myers "B" Federal Well No. 28 at an unorthodox location 330 feet from the South line and 420 feet from the West line of Section 9, Township 24 South, Range 37 East, to produce gas from the Jalmat Cas Pool and oil from the Langlie Mattix Pool, to be simultaneously dedicated in the gas zone with its No. 13 located in Unit L of Section 9.

CASE 7011: (This case will be continued to the September 17, 1980, hearing.)

Application of Amoco Production Company for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Blanco-Pictured Cliffs production in the wellbores of the following six wells: Elliott "C" No. 1, SE/4 of Section 9, Township 30 North, Range 9 West; Elliott "B" No. 8, NE/4 of Section 10; "A" Nos. 3 and 2, NE/4 and NW/4, Section 11; "B" No. 7, SW/4 of Section 11; and "E" No. 1, NW/4 of Section 14, all in Township 29 North, Range 9 West.

CASE 6981: (Continued from July 23, 1980, Examiner Hearing)

Application of Bass Enterprises Production Company for a special gas-oil ratio limitation, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a special gas-oil ratio limitation of 8000 to one for the Palmillo-Bone Springs Pool.

CASE 7012: Application of Amoco Production Company for an NGPA determination, Eddy County, New Nexico.

Applicant, in the above-styled cause, seeks a new onshore reservoir determination in the Atoka formation for its Pardue Farms Cas Com Well No. 1 in Unit G of Section 26, Township 23 South, Range 28 East.

CASE 7013: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, abolishing, contracting vertical limits, and extending certain pools in Chaves, Lea, and Roosevelt Counties, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Yates production and designated as the Byers-Yates Gas Pool. The discovery well is Exxon Corporation Bewers A Federal Well No. 37 located in Unit P of Section 30, Township 18 South, Range 38 East, NNPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM Section 30: SE/4

(b) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the West Jal-Atoka Gas Pool. The discovery well is Getty Oil Company West Jal B Deep Well No. 1 located in Unit N of Section 17, Township 25 South, Range 36 East, NMPM. Said pool would comprise:

TOWNSHIP 25 SOUTH, RANGE 36 EAST, NMPM Section 17: E/2

(c) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Saunders-Morrow Gas Pool with special vertical limits defined as being from the top of the Morrow formation at 12,150 feet to the top of the Mississippian at 12,465 feet, as found on the log of the discovery well, the Adobe Oil and Gas Corporation Gray 35 Well No. 1 located in Unit N of Section 35, Township 14 South, Range 33 East, NNPM. Said pool would comprise:

TOWNSHIP 14 SOUTH, RANGE 33 EAST, EMPM Section 35: All

(d) ABOLISH the North Baut-Upper Pennsylvanian Pool in Lea County, New Mexico, described as:

TOERISHIP 13 SOUTH, RANGE 32 FAST, PERM Section 13: SE/4 Section 23: SE/4 Section 24: S/2 and HE/4 Section 25: H/2 and SE/4 Section 26: H/2

TOUSISHIP 13 SOUTH, RANGE 31 CAST, SSIEN

Section 18: 8/2 Section 19: 8/2 and 5:/4

Section 20: All

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

TOWNSHIP 13 SOUTH, RANGE 32 EAST, 1919H

Section 12: SE/4 Section 23: SE/4

Section 24: S/2 and NE/4 Section 25: All Section 26: N/2

TOWNSHIP 13 SOUTH, PANCE 33 EAST, NMPN

Section 18: S/2

Section 19: N/2 and SE/4

Section 20: All

(f) ABOLISH the Gallina-San Andres Pool in Chaves County, New Mexico, described as:

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM Section 6: NW/4 Section 6:

(g) EXTEND the Tomahawk-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM Section 6: NW/4

(h) ABOLISH the West Tonto-Pennsylvanian Gas Pool in Lea County, New Mexico, described as:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM Section 12: S/2

TOWNSHIP 19 SOUTH, RANCE 33 EAST, NMFM

Section 7: All

Section 8: W/2

Section 18: N/2

(i) EXTEND the Buffalo-Pennsylvanian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM

Section 1: S/2

Section 12: S/2

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM

Section 6: SW/4

Section 7: **A11** 

Section 8:

Section 18: N/2

- (j) CONTEMET the vertical limits of the Saunders-Permo Pennsylvanian Pool with special vertical limits defined as being from the top of the Wolfcamp formation at 9,195 feet to 10,705 feet into Pennsylvanian formation, as found on log of Adobe Oil and Cas Corporation Gray 35 Well No. 1 located in Unit N of Section 35, Township 14 South, Range 33 East, NMPM, and redesignate said Saunders-Perno Pennsylvanian Fool to Saunders Perno-Upper Pennsylvanian Pool.
- (k) EXTEND the Airstrip-Upper Bone Springs Pool in Lea County, New Mexico, to include therein:

TOMESHIP 18 SOUTH, RANGE 34 EAST, HMPM

Section 25: NE/4

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

TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM

Section 18: S/2

(n) EXTEND the Chaveroo-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NYPM

Section 13: SW/4

(n) EXTERD the Custer-Devonian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 36 EAST, HMPM Section 36: \$/2

TOWNSHIP 25 SOUTH, PANCE 36 EAST, MAPM

Section 1: E/2 (o) EXTEND the Custer-Ellenburger Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 36 EAST, NAPM Section 36: 8/2

TOWNSHIP 25 SOPTH, RANGE 36 EAST, EMPM Section 1: E/2

(p) EXTEND the Flying "M"-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM Section 19: NE/4

(q) EXTEND the Mardy-Blinebry Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM Section 12: NW/4

(r) EXTEND the Hardy-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM Section 12: NW/4

(s) EXTEND the Hobbs-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 38 EAST, NMPM Section 3: SW/4

(t) EXTEND the South Kemnitz-Cisco Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 33 EAST, IMPM Section 22: SE/4
Section 27: NE/4

(u) EXTEND the North Lusk-Norrow Cas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, RMPM Section 32: N/2 Section 33: W/2

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM Section 4: W/2

(v) EXTEND the Querecho Plains-Yates Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, MAPM Section 35: NW/4

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

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPH Section 6: Lots 9, 10, 15, 16, and SE/4

(x) EXTEND the Northwest Todd-San Andres Gas Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 35 EAST, MMPM Section 7: NE/4

(y) EXTEND the Tom-Tom San Andres Pool in Chaves County, New Mexico, to include therein:

 $\frac{\text{TOWNSHIP 7 SOUTH, RANGE 31 EAST, NMPM}}{\text{Section 32: } \text{SE}/4 \text{SM}/4}$ 

(z) EXTEND the Warren-Tubb Gos Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NEPN Section 35: NZ/4



July 24, 1980



Joe D. Ramey, Director (3) Department of Energy and Minerals Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

Case 7011

File: HAS-235-986.511

Dear Mr. Ramey:

Application to Downhole Commingle Gas Production from the Fruitland and Pictured Cliffs Formations in 6 Wells in the Blanco Pictured Cliffs Field, San Juan County, New Mexico

Amoco Production Company requests approval to downhole commingle gas production from the Fruitland and Pictured Cliffs formations in the Blanco Pictured Cliffs Field, in the following 6 wells:

SE/4 Section 9-T30N-R9W

E. E. Elliott "C" No. 1 A. L. Elliott "B" No. 8 NE/4 Section 10-T29N-R9W

A. L. Elliott "A" No. 3 NE/4 Section 11-T29N-R9W

A. L. Elliott "A" No. 2 NW/4 Section 11-T29N-R9W

A. L. Elliott "D" No. 7 SW/4 Section 11-T29N-R9W

A. L. Elliott "E" No. 1 NW/4 Section 14-T29N-R9W

We respectfully ask that this application be placed on the docket of your August 20, 1980, examiner hearing.

Respectfully submitted,

∖B. Gil∕es

RBG/mlm

Enclosure

QI055

Joe D. Ramey, Director July 24, 1980 Page Two

cc:

Frank Chavez, Supervisor District III New Mexico Oil Conservation Commission 1000 Rio Brazos Road Axtec, NM 87410

James Simms
United States Geological Survey
P. O. Box 965
Farmington, NM 87401

DD241

# VERIFICATION AND AFFIDAVIT

STATE OF COLORADO

COUNTY OF DENVER

R. B. Giles, of lawful age, being first duly sworn on his oath, deposes and save:

That he is employed in an engineering capacity by Amoco That he is employed in an engineering capacity by Amoco that he production Company in its Denver, Colorado, office; by the production Company in its Denver engineering witness by the has been qualified as an expert engineering witness has been qualified as an expert engineering witness by the has been qualified as an expert engineering capacity by Amoco production Conservation Division and his qualifications oath, deposes and says: nas peen qualified as an expert engineering witness by the New Mexico Oil Conservation Division and his qualifications have been made of record. That he had beetified numerous New Mexico UIL Conservation Division and his qualifications have been made of record; that he has testified numerous have before the New Mexico Oil Conservation Division on times before the New Mexico Oil Conservation for annous application for annous operational matters: that Amocols application times perore the New Mexico UIL Conservation Division on We operational matters; that Amoco's application for approval to downhole commingle gas production in the K wells describ operational matters; that Amoco's application for approval to downhole commingle gas production in the 6 wells described to downhole commingle gas production and pictured Cliffs in the application from the Fruitland and Pictured in San Juan formations in the Rianco Pictured Cliffs Field. formations in the Blanco Pictured Cliffs Field, in San Juan County, New Mexico, was prepared under his direction and county, New Mexico, was prepared under his direction and cupervision. that the matters and things therein set fort County, New Mexico, was prepared under his direction and therein set forth supervision; that the matters and things knowledge and beliefs. are true and correct to the best of his knowledge and correct to the best of his knowledge.

Subscribed and sworn to before me this 24th day of July, 1980.

LE Saurland
ARY (FUBLIC

My Commission expires:

CE284





July 24, 1980

Joe D. Ramey, Director (3) Department of Energy and Minerals Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

Case 7011

File: HAS-235-986.511

Dear Mr. Ramey:

Application to Downhole Commingle Gas Production from the Fruitland and Pictured Cliffs Formations in 6 Wells in the Blanco Pictured Cliffs Field, San Juan County, New Mexico

Amoco Production Company requests approval to downhole commingle gas production from the Fruitland and Pictured Cliffs formations in the Blanco Pictured Cliffs Field, in the following 6 wells:

E. E. Elliott "C" No. 1

SE/4 Section 9-T30N-R9W NE/4 Section 10-T29N-R9W A. L. Elliott "B" No. 8

A. L. Elliott "A" No. 3 NE/4 Section 11-T29N-R9W

A. L. Elliott "A" No. 2 NW/4 Section 11-T29N-R9W

SW/4 Section 11-T29N-R9W

A. L. Elliott "D" No. 7 A. L. Elliott "E" No. 1 NW/4 Section 14-T29N-R9W

We respectfully ask that this application be placed on the docket of your August 20, 1980, examiner hearing.

Respectfully Submitted,

R. B. Giles

RBG/mlm

Enclosure

QI055

Joe D. Ramey, Director July 24, 1980 Page Two

cc:

Frank Chavez, Supervisor District III New Mexico Oil Conservation Commission 1000 Rio Brazos Road Axtec, NM 87410

James Simms
United States Geological Survey
P. O. Box 965
Farmington, NM 87401

DD241

#### VERIFICATION AND AFFIDAVIT

STATE OF COLORADO ) : ss.
COUNTY OF DENVER )

R. B. Giles, of lawful age, being first duly sworn on his oath, deposes and says:

That he is employed in an engineering capacity by Amoco Production Company in its Denver, Colorado, office; that he has been qualified as an expert engineering witness by the New Mexico Oil Conservation Division and his qualifications have been made of record; that he has testified numerous times before the New Mexico Oil Conservation Division on well operational matters; that Amoco's application for approval to downhole commingle gas production in the 6 wells described in the application from the Fruitland and Pictured Cliffs formations in the Blanco Pictured Cliffs Field, in San Juan County, New Mexico, was prepared under his direction and supervision; that the matters and things therein set forth are true and correct to the best of his knowledge and beliefs.

R. B. GILES

Subscribed and sworn to before me this 24th day of July, 1980.

Alouis J. Sawuland NOTARY BUBLIC

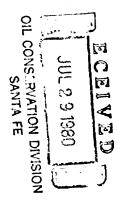
My Commission expires:

8-1-82

CE284



July 24, 1980



Joe D. Ramey, Director (3) Department of Energy and Minerals Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

File: HAS-235-986.511

Cuse 7011

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Amoco Production Company requests approval to downhole commingle gas production from the Fruitland and Pictured Cliffs formations in the Blanco Pictured Cliffs Field, in the following 6 wells:

E. E. Elliott "C" No. 1 SE/4 Section 9-T30N-R9W

A. L. Elliott "B" No. 8 NE/4 Section 10-T29N-R9W

A. L. Elliott "A" No. 3 NE/4 Section 11-T29N-R9W

NW/4 Section 11-T29N-R9W SW/4 Section 11-T29N-R9W

A. L. Elliott "A" No. 2 A. L. Elliott "D" No. 7 A. L. Elliott "E" No. 1 NW/4 Section 14-T29N-R9W

We respectfully ask that this application be placed on the docket of your August 20, 1980, examiner hearing.

Respectfully submitted,

Giles

RBG/mlm

Enclosure

QI055

Joe D. Ramey, Director July 24, 1980 Page Two

cc:

Frank Chavez, Supervisor District III New Mexico Oil Conservation Commission 1000 Rio Brazos Road Axtec, NM 87410

James Simms United States Geological Survey P. O. Box 965 Farmington, NM 87401

DD241 ·

## VERIFICATION AND AFFIDAVIT

STATE OF COLORADO )
COUNTY OF DENVER )

R. B. Giles, of lawful age, being first duly sworn on his oath, deposes and says:

That he is employed in an engineering capacity by Amoco Production Company in its Denver, Colorado, office; that he has been qualified as an expert engineering witness by the New Mexico Oil Conservation Division and his qualifications have been made of record; that he has testified numerous times before the New Mexico Oil Conservation Division on well operational matters; that Amoco's application for approval to downhole commingle gas production in the 6 wells described in the application from the Fruitland and Pictured Cliffs formations in the Blanco Pictured Cliffs Field, in San Juan County, New Mexico, was prepared under his direction and supervision; that the matters and things therein set forth are true and correct to the best of his knowledge and beliefs.

R. B. GILES

Subscribed and sworn to before me this 24th day of July, 1980.

Alous & Samuland NOTARY QUBLIC

My Commission expires:

8-1-82

CE284

dr/:

### STATE OF NEW MEXICO 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.	70
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Order No.

APPLICATION OF AMOCO PRODUCTION COMPANY FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

# ORDER OF THE DIVISION

# BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 19\_\_\_\_\_, at Santa Fe, New Mexico, before Examiner Richard L. Stamet's \_day of \_September Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised

#### 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, is the owner and operator of six wells pas follows: Elliott "C" No. 1, SE/4 of Section 9, Township 30 North, Range 9 West; Elliott "B" No. 8, NE/4 of Section 10; \( \begin{aligned} \text{Nes. 3 and 2, NE/4 and NW/4, Section 11;} \\ \text{Section 10;} \( \begin{aligned} \text{Ne/4 and NW/4, Section 11;} \\ \text{Section 11;} \\ \text{Section 11;} \end{aligned} \) "D" No. 7, SW/4 of Section 11; and/"E" No. 1, NW/4 of Section 14, all in Township 29 North, Range 9 West, NMPM, San Juan County, New Mexico.
- (3) That the applicant seeks authority to commingle Fruitland and Blanco-Pictured Cliffs production within the wellbores of the above-described wells.

E//:#

- (4) That from the Fruitland zone, the are or are experied to 22 subject wells to capable of low marginal production only.
- (5) That from the Blanco-Pictured Cliffs zone, the an oran expected to be subject wells a capable of low marginal production only.
- (6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.
- (8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject wells are shut-in for 7 consecutive days.
- (9) That in order to allocate the commingled production to each of the commingled zones in the subject wells, percent of the commingled production should be allocated to the Fruitland zone, and percent of the commingled production to the Blanco-Pictured Cliffs zone.

#### (ALTERNATE)

(9) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the <u>Aztec</u> district office of the Division and determine an allocation formula for each of the production zones in each well.

#### IT IS THEREFORE ORDERED:

	IT IS THEREFORE UNDERED:
-	(1) That the applicant, Amoco Production Company , is
-	hereby authorized to commingle Fruitland and
	Blanco-Pictured Cliffs production within the wellbores of the following six wells: Elliott "C" No. 1, SE/4 of Section 9,
	Township 30 North, Range 9 West; Elliott "B" No. 8, NE/4 of Section 10
E 1/10	"A" Nos. 3 and 2, NE/4 and NW/4, Section 11:/"D" No. 7, SW/4 of
S	ection ll; and "E" No. 1, NW/4 of Section 14, all in Township 29 North, (2) That the applicant shall consult with the Supervisor
;	of the Aztec district office of the Division and
	determine an allocation formula for the allocation of production
·	to each zone in each of the subject wells.
	(ALTERNATE)
:	(2) That percent of the commingled
	production shall be allocated to the Fruitland
į	zone and percent of the commingled
, t 2	production shall be allocated to the Blanco-Pictured Cliffs
**************************************	zone.
4	
	(3) That the operator of the subject wells shall immediately
	notify the Division's Aztec district office any time/ the
	well has been shut-in for 7 consecutive days and shall concurrently
	present, to the Division, a plan for remedial action.
1	(4) That jurisdiction of this cause is retained for the
1	. It important to the court of account and account to the

entry of such further orders as the Division may deem necessary.

🕱 Range 9 West, NMPM, San Juan County, New Mexico.

designated.

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