

CASE 7386: EL PASO NATURAL GAS COMPANY,
FOR DOWNHOLE COMMINGLING, RIO ARRIBA
COUNTY, NEW MEXICO

Company

DOCKET MAILED

~~DATE~~ 10/9/81

Case No

7386

Application

Transcripts

Small Exhibits

ETC



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
 OIL CONSERVATION DIVISION

BRUCE KING
 GOVERNOR
 LARRY KEHOE
 SECRETARY

November 25, 1981

POST OFFICE BOX 2088
 STATE LAND OFFICE BUILDING
 SANTA FE, NEW MEXICO 87501
 (505) 827-2434

Mr. David Burleson, Attorney
 El Paso Natural Gas Company
 P. O. Box 1492
 El Paso, Texas 79978

Re: CASE NO. 7386
 ORDER NO. R-6831

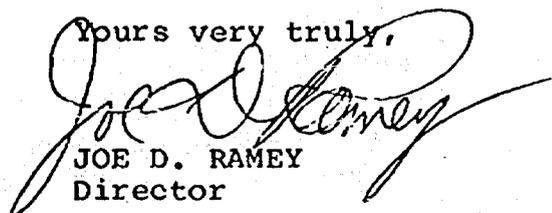
Applicant:

El Paso Natural Gas Company

Dear Sir:

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

Yours very truly,


 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. 7386
Order No. R-6831

APPLICATION OF EL PASO NATURAL GAS
COMPANY FOR DOWNHOLE COMMINGLING,
RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 21, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets..

NOW, on this 24th day of November, 1981, 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, El Paso Natural Gas Company, is the owner and operator of the San Juan 27-5 Unit Well No. 54, located in Unit L of Section 31, Township 27 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle South Blanco-Pictured Cliffs and Blanco-Mesaverde production within the wellbore of the above-described well.
- (4) That from the South Blanco-Pictured Cliffs zone, the subject well is capable of low marginal production only.
- (5) That from the Blanco-Mesaverde zone, the subject well is 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.

-2-

Case No. 7386
Order No. R-6831

(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 well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, 31 percent of the commingled gas production should be allocated to the South Blanco-Pictured Cliffs zone, and 69 percent of the commingled gas production and all of the condensate production to the Blanco-Mesaverde zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle South Blanco-Pictured Cliffs and Blanco-Mesaverde production within the wellbore of the San Juan 27-5 Unit Well No. 54, located in Unit L of Section 31, Township 27 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.

(2) That 31 percent of the commingled gas production shall be allocated to the South Blanco-Pictured Cliffs zone and 69 percent of the commingled gas production and all of the condensate production shall be allocated to the Blanco-Mesaverde zone.

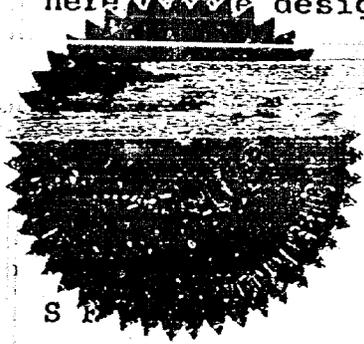
(3) That the operator of the subject well shall immediately notify the Division's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

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

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-3-
Case No. 7386
Order No. R-6831

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



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY,
Director

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
21 October 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of El Paso Natural
Gas Company for downhole com-
mingling, Rio Arriba County, New
Mexico.

CASE
7385
and
7386

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

W. Perry Pearce, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

David T. Burleson, Esq.
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

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I N D E X

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EXHIBITS

CASE 7385

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CASE 7386

Applicant Exhibit One, Sketch	20
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2 MR. STAMETS: We'll call next Case 7385.

3 MR. PEARCE: Application of El Paso
4 Natural Gas Company for downhole commingling, Rio Arriba
5 County, New Mexico.

6 MR. BURLESON: David T. Burleson, in
7 association with Montgomery and Andrews, and we'll have two
8 witnesses.

9
10 (Witnesses sworn.)

11
12 MR. STAMETS: Do you want these two cases
13 consolidated for hearing?

14 MR. BURLESON: Yeah, you can consolidate
15 them for hearing, although we will discuss them separately.

16 MR. STAMETS: Okay, let's call Case 7386
17 then, and consolidate both of these cases for purposes of
18 testimony only.

19 MR. PEARCE: Application of El Paso
20 Natural Gas Company for downhole commingling, Rio Arriba
21 County, New Mexico.
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DONALD C. WALKER

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

DIRECT EXAMINATION

BY MR. BURLESON:

Q Please state your name for the record.

A Donald C. Walker.

Q By whom are you employed and where do
you reside?

A I reside in Farmington, New Mexico; em-
ployed by El Paso Exploration Company.

Q In what capacity are you employed?

A I'm Assistant Regional Drilling Manager.

Q Have you previously testified before
this Division or one of its Examiners?

A Yes, I have.

Q Were your qualifications accepted by the
Division at that time?

A Yes, they were.

Q Mr. Walker, are you familiar with Cases
7385 and 7386?

A Yes, I am.

MR. BURLESON: Are the witness' qualifi-

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2 cations acceptable?

3 MR. STAMETS: I assume he will be testi-
4 fying as to the completion of this well and equipment, and so
5 on, or what -- Assistant Regional Drilling Manager doesn't
6 tell me if we're talking about a petroleum engineer, or --

7 MR. BURLESON: Yes, okay.

8 Q You are by education a petroleum engineer,
9 are you not? Or you are working as a petroleum engineer, are
10 you not?

11 A Yes, I do.

12 Q With relationship to production and
13 drilling matters?

14 A Both production and drilling.

15 MR. STAMETS: Thank you. The witness is
16 considered qualified.

17 Q Who is the operator of the well in this
18 case, Mr. Walker?

19 A This well is operated by El Paso Natural
20 Gas Company in both cases.

21 Q Okay. Let's just confine ourselves to
22 the well which is the subject of Case Number 7385 at the
23 moment.

24 A Okay.

25 Q And the questions I'll ask until I indi-

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cate something to the contrary will be relating to that case.

Would you tell us what El Paso is seeking with respect to Case 7385?

A We are seeking permission to downhole commingle production in the Blanco Mesaverde Gas Pool with the production from the Basin Dakota Gas Pool, and produce this gas through one meter in the San Juan 27-5 Unit No. 59.

This well is located in Unit A of Section 6, Township 27 North, Range 5 West, in Rio Arriba County, New Mexico. This well presently produces from these two formations as a dual completion.

El Paso proposes to allocate the gas from each formation as we'll explain later.

Q Has a leak been determined to exist in the equipment in this well that's necessitated some action with respect to this well?

A Yes, sir. The 1980 annual packer leakage test in August of 1980 indicated communication between the two producing zones.

Q Have you been able to determine where the leak may exist, where the hole may be?

A A temperature survey was run and it showed a leak at the production packer in the well.

Q Why is El Paso seeking permission to

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2 downhole commingle rather than some other method of dealing
3 with this problem?

4 A Downhole commingling is considered by
5 El Paso to be the most conservative and economic method to
6 undertake, due to the low productivity of both the zones in
7 the well, and due to the high cost of repairing the communi-
8 cation in the well.

9 Q And when you use the word "conservative"
10 I suppose you probably mean it in the sense that it would
11 conserve the oil and gas that might be producible from the
12 well, in that sense, as well as possibly in an economic sense,
13 too.

14 A That's correct. It would delay plugging
15 and abandonment of the well due to a low productivity, and
16 also would conserve money.

17 Q You have prepared an exhibit which indi-
18 cates the material and equipment in this well, have you not?

19 A Yes, I have.

20 Q Would you please turn to that exhibit,
21 which I believe is marked Exhibit Number One with respect to
22 this case, and describe what it indicates?

23 A This is a diagrammatic sketch of the
24 equipment in this well, labeled Exhibit Number One. It shows
25 a Baker Model D production packer at 5713 feet. It shows

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2 1-1/4 tubing for the production string to the Mesaverde. It
3 shows 2-1/16 tubing production string for the Dakota. It
4 shows Mesaverde perforations above the packer from 5092 to
5 5596 feet, being produced in the 1-1/4 tubing. It shows
6 Dakota perforations below the packer from 7500 feet to 7716
7 feet, being produced in the 2-1/16 tubing.

8 Q Have you also prepared an exhibit indi-
9 cating the production history of this well from both of the
10 formations involved here?

11 A Yes, I have.

12 Q Would you please turn to that exhibit,
13 which I believe has been marked El Paso Exhibit Number Two,
14 and describe what that exhibit indicates?

15 A Exhibit Number Two shows the Blanco-
16 Mesaverde formation and the Basin-Dakota formation's gas
17 production performance from the San Juan 27-5 Unit No. 59
18 since 1970.

19 The solid line on the exhibit is the
20 Mesaverde production; the dashed line is the Dakota formation
21 production; and this is annual daily average production in
22 Mcf plotted versus time in years.

23 It can be seen that both formations were
24 declining normally. A packer leak was taken in August of
25 1979, which showed no communication between the two zones.

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2 It appears from monthly production
3 history that a leak developed some time in April of 1980.
4 For twelve months prior to the apparent leak the Mesaverde
5 and Dakota were producing at an average rate of 231 Mcf per
6 day and 119 Mcf per day, respectively.

7 This represents a total of 350 Mcf per
8 day with 66 percent coming from the Mesaverde and 34 percent
9 coming from the Dakota.

10 Q What conclusions might be drawn from an
11 examination of this Exhibit Number Two?

12 A In my opinion the flow rates from the --
13 both the Mesaverde and the Dakota are very small.

14 Q Do you have any information regarding
15 pressure of the two formations that are opened in this well
16 and any fluid characteristics of the respective two zones?

17 A In the past the Mesaverde zone has
18 produced water at the rate of about 1/10th barrel per day
19 and condensate at the rate of about 5/10ths barrels per day.

20 The Dakota zone has produced water at a
21 rate of 1/10th barrel per day and no condensate.

22 With regard to pressures, based on ex-
23 trapolation of State tests prior to the leak, the Mesaverde
24 had a shut-in tubing pressure of 350 psia as of July, 1981.

25 The corresponding bottom hole pressure is estimated to be

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2 397 psia.

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3 The Dakota's extrapolated shut-in tubing
4 pressure was 575 psia with a corresponding bottom hole pressure
5 estimated at 687 psia.

6 Q Do you believe these fluid and pressure
7 characteristics will be compatible, should the well be com-
8 mingled?

9 A Yes, sir, because of the small pressure
10 differential and the presence of a small amount of liquids,
11 I wouldn't expect migration of gas or liquids from one zone
12 to the other, particularly if the well is continuously pro-
13 duced. The ratio of bottom hole pressures is 1.7-to-1.

14 Q Are there any -- would there be any
15 advantages in commingling these two zones in this well?

16 A Well, really two main advantages.
17 First, it is believed by commingling the
18 gas production it will aid in lifting liquids, and neither
19 formation would have to be prematurely abandoned.

20 As of July the 1st, 1981, it is estimated
21 that the Mesaverde has approximately 1360-million cubic feet
22 of gas reserves remaining, and the Dakota has around 707-million
23 cubic feet of gas reserves remaining.

24 And these reserves can be recovered
25 through commingling.

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Besides efficiency of production, the second advantage, of course, is the savings in not repairing the indicated leak. To repair the leak would cost about \$37,770. To commingle the well would cost about \$31,020.

Also, it can be noted that even if we repair the leak there's no guarantee that another leak wouldn't occur in the near future.

Q If Division were granted to commingle these two zones, do you have a recommendation as to how the production might be apportioned to each of the zones?

A. There are two methods we could apportion the production and both methods would provide about the same results.

One method would be to allocate production based on production history prior to communication. We showed earlier in the testimony 66 percent of the well's production could be attributed to the Blanco Mesaverde and 34 percent to the Basin Dakota. All condensate production should be attributed to the Blanco Mesaverde Pool.

The other method would be to allocate production based on reserves, remaining reserves. As stated earlier, the Mesaverde has approximately 1360-million cubic feet of gas remaining and the Dakota has about 707-million cubic feet of gas remaining, for a total of 2067-million.

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2 cubic feet. Based on reserves this would be 66 percent of
3 the well's production could be attributed to the Blanco Mesa-
4 verde, 34 percent to the Basin Dakota. All condensate pro-
5 duction should be attributed to the Blanco Mesaverde.

6 Q In your opinion will the granting of this
7 application protect correlative rights and prevent waste?

8 A Yes, it would.

9 Q Do you have anything further to offer in
10 this case?

11 A No, I do not.

12 Q Were Exhibits One and Two prepared by
13 you or under your supervision?

14 A Yes, they were.

15 MR. BURLESON: Mr. Examiner, we ask ad-
16 mission of the exhibits that we've heretofore presented with
17 this witness.

18 MR. STAMETS: These exhibits may be ad-
19 mitted.

20 MR. BURLESON: Would you like to move to
21 the ownership now with respect to this well and then we'll
22 have to bring Mr. Walker back for his testimony --

23 MR. STAMETS: As far as the reading of
24 the record it would go a little bit better, but before we
25 pass to the next witness, let me ask what work will be done

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to achieve commingling in this well?

A Our plans are to commingle this well, go in and pull both strings of tubing, retrieve the packer, build it up, whatever we'd have to do, and run one string of 2-1/16th inch tubing that's in there now to the Dakota, and produce both zones through the 2-1/16th inch tubing.

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

TOM F. HAWKINS,

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

DIRECT EXAMINATION

BY MR. BURLESON:

Q Please state your name and where you reside.

A My name is Tom F. Hawkins and I reside in El Paso, Texas.

Q By whom are you employed and in what capacity?

A I'm employed by El Paso Exploration Company as a landman in the Land Department. El Paso Exploration Company administers and performs all land work for El Paso

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1
2 Natural Gas Company.

3 Q As a landman have you previously testi-
4 fied before this Division?

5 A Yes.

6 Q Were your qualifications accepted on those
7 occasions?

8 A Yes.

9 Q Are you familiar with Case 7385? We'll
10 deal with it first, Tom, and then we'll later bring you back
11 and you can pick up on Case 7386.

12 A Yes, I'm familiar with 7385.

13 MR. BURLINSON: Are the witness' qualifi-
14 cations acceptable?

15 MR. STAMETS: Are you also familiar with
16 7386?

17 A Yes, sir.

18 MR. STAMETS: Okay, we'll qualify him on
19 both cases.

20 Q With respect to the ownership of pro-
21 duction from the San Juan 27-5 Unit No. 59 Well, which is
22 the subject of this hearing in Case 7385, is the ownership
23 in production from the Mesaverde and the Dakota formations
24 common or not?

25 A No, the ownership is not common.

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2 Q Would you describe how the ownership
3 is with respect to these two zones?

4 A The Mesaverde formation is owned in ac-
5 cordance with the ownership in the 28,003-acre Mesaverde parti-
6 cipating area and the Dakota formation is owned in accordance
7 with the ownership in the 23,003-acre participating area in
8 the San Juan 27-5 Unit.

9 In both participating areas there are
10 42 working interest owners, 26 royalty owners, and 48 over-
11 riding royalty owners.

12 Said owners and percentage of interest
13 owned are set out on Schedule 3. The same parties showing
14 the production from the Mesaverde formation also own the
15 production from the Dakota formation; however, the interest
16 of each party in the two formations is slightly different.

17 Q And by Schedule 3, you're referring to
18 Exhibit Three, is that right --

19 A Right.

20 Q -- in this case?

21 A Yes, sir, Exhibit Three.

22 Q And that was prepared by you, of course,
23 was it not or --

24 A Yes.

25 Q -- you had it prepared?

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A Yes, it was prepared by me.

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Q Have you contacted all the San Juan 27-5 Unit owners of the Mesaverde and Dakota formations to obtain their approval for this --

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A Yes.

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Q -- commingling?

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A Yes.

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Q How did you contact them, Tom?

10

A By letter dated May 8th, 1981, and follow-

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up letters dated August 7th, 1981, and October 7th, 1981.

12

Q What responses have you received to those

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letters?

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A Of the 42 working interest owners 28,

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who together own more than 98 percent of the Mesaverde and

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Dakota participating areas have approved. 8 of the 26 royalty

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owners and 29 of the 48 overriding royalty owners have ap-

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proved.

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Exhibit Three shows those approved marked

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with an asterisk. The rest have not responded to my letters;

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however, they were advised of the time and place of the

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hearing and that they have the right to appear.

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Q To the best of your knowledge have you

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attempted to obtain the approval of all of the interest owners

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in these two formations in this well?

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A Yes.

Q Do you have anything further to offer at this time?

A No.

MR. BURLESON: At this time we ask that Exhibit Number Three be admitted.

MR. STAMETS: Exhibit Number Three will be admitted.

Are there any questions of this witness? He may be excused in this case.

MR. BURLESON: We'll recall Mr. Walker.

DONALD C. WALKER

being recalled as a witness, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. BURLESON:

Q Don, you've already been qualified, I believe, for this case as well as the previous case, and so would you tell us what El Paso is seeking in Case 7386?

A We are seeking permission to downhole commingle the production from the South Blanco-Pictured Cliffs Gas Pool with production from the Blanco Mesaverde Gas Pool and produce this gas through one meter in the San

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Juan 27-5 Unit No. 54.

This well is located in Unit L of Section 31, Township 27 North, Range 5 West, in Rio Arriba County, New Mexico.

This well presently produces from both these formations as a dual completion. El Paso proposes to allocate the production from these two zones in a manner which will be explained in more detail later.

Q Now, you've determined that a leak exists in this well, too, is that correct?

A That's correct. In 1980 the packer leakage test indicated communication between the two producing zones.

Q Do you know where the leak may exist, at what depth it may be found?

A It is believed that we have a hole across from the Pictured Cliffs perforations in the Mesaverde 2-3/8ths inch tubing. We have --- there are rubber blast joints in the 2-3/8ths inch tubing and we found rubber inside the 2-3/8ths inch tubing indicating that there's a hole in that tubing string.

Q Why is El Paso seeking permission to downhole commingle in this case?

A We consider it to be the most economical

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and conservative method to undertake due to the low productivity of the well and due to the high cost of repairing the well.

Q And again you believe that additional reserves will be recovered if this is -- application is granted, and that it will be at a lesser expenditure of money?

A Yes, I do.

Q Do you have an exhibit showing the equipment in the well?

A Yes, I have.

Q And that's Exhibit Number One, is that correct?

A That is correct. Exhibit Number One.

Q You might explain that exhibit, if you would, please.

A Exhibit Number One for the 27-5 Unit No. 54, shows a Baker Model M production packer set at 42 -- 4,242 feet. It shows also perforations in the Pictured Cliff from 3,160 feet to 3,256 feet above the packer.

It shows Mesaverde perforations from 4,886 feet to 5,490 feet below the packer.

It also shows that the Pictured Cliff produces through 1-1/4 tubing set at 3,205 feet and that the Mesaverde produces through 2-3/8ths tubing set at 5,415 feet.

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Q. Do you have an exhibit showing the production history of the two zones in this well?

A. Yes, I have.

Q. That would be Exhibit Number Two, would it not?

A. Yes. El Paso Natural Gas Company's Exhibit marked Number Two shows the South Blanco Pictured Cliffs and the Blanco Mesaverde formations gas production for this well since 1970.

On this exhibit the dashed line is the Mesaverde formation production; the solid line is the Pictured Cliffs formation production. This is production, daily average annually versus time.

It can be seen from the exhibit that both formations were declining under normal conditions until a packer leak occurred in October of 1979. We had a successful packer leakage test in July of 1979 and the production history indicates that our leak occurred in October of '79.

For the nine months prior to the leak the Pictured Cliffs and Mesaverde were producing on an average rate of 61 Mcf per day and 112 Mcf per day, respectively. This represents a total of 173 Mcf per day with 65 percent of the gas coming from the Mesaverde and 35 percent from the Pictured Cliffs.

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Q What conclusions may be reached from examination of this exhibit?

A In my opinion, the flow rates from the Pictured Cliffs and the Mesaverde are very small.

Q Do you have any information regarding the pressures that exist with respect to these two zones and any fluid characteristics with respect to both of these zones?

A The Pictured Cliffs zone produces water and condensate in amount too small to measure.

The Mesaverde has produced condensate in the past at a rate of 1/10th barrel per day and water in amount too small to measure.

With regard to pressures, based on extrapolation of State tests prior to the leak, Pictured Cliffs side had a shut-in tubing pressure of 286 psia as of July, 1981. The corresponding bottom hole pressure is estimated to be 307 psia.

The Mesaverde extrapolated shut-in tubing pressure was 430 psia with a corresponding bottom hole pressure estimated at 483 psia.

Q Do you believe these fluid and pressure characteristics would be compatible should the well be commingled?

A Yes, sir. Because of the very small

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2 amount of -- the very small pressure differential and the
3 very small amount of fluids produced, I would not expect any
4 migration of gas from one formation to the other, particularly
5 if the well is continuously produced.

6 The ratio of bottom hole pressures is
7 1.6-to-1.

8 Q Would there be any advantage in commingling
9 the two zones in this well?

10 A. There are two main advantages. First,
11 it is believed that by commingling this small volume of gas
12 neither formation would be prematurely abandoned. As of
13 July the 1st, 1981, it is estimated that the Pictured Cliffs
14 has approximately 558-million cubic feet remaining gas re-
15 serves and the Mesaverde has around 1,229-million cubic feet
16 of remaining reserves, and these reserves can be recovered
17 through commingling.

18 Besides efficiency in production the
19 second advantage is savings in not repairing the indicated
20 leak. To repair and dually complete the existing leak in
21 this well would cost \$24,490. To commingle the well would
22 cost about \$12,770.

23 This well previously had a leak and has
24 been repaired once and there's no guarantee that if we re-
25 paired it at this time we wouldn't have to repair it again

1
2 at some future time.

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3 Q Do you propose a formula by which the
4 gas and condensate production from these -- each of these
5 zones would be apportioned to such zones?

6 A Well, there are two methods that could
7 be used for allocation. Either method would be suitable.

8 One method would be to allocate production
9 based on production history prior to communication. As shown
10 previously, 65 percent of the gas -- of the well's gas pro-
11 duction could be attributed to the Blanco Mesaverde and 35
12 percent to the Blanco Pictured Cliffs. All condensate pro-
13 duction should be attributed to the Blanco Mesaverde Pool.

14 The other method would be to allocate
15 production based on calculated remaining reserves. It is
16 estimated, as stated earlier, that the Pictured Cliffs has
17 approximately 558-million cubic feet of remaining reserves
18 and the Mesaverde has about 1,229-million cubic feet of re-
19 maining reserves, for a total of 1,787-million cubic feet.

20 Based on the remaining reserves, 31
21 percent of the well's gas production could be attributed to
22 the South Blanco-Pictured Cliffs Pool and 69 percent to the
23 Blanco Mesaverde Pool. All condensate production should be
24 attributed to the Blanco Mesaverde Pool.

25 Q In your opinion would the granting of

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this application protect correlative rights and prevent waste?

A. Yes, it would.

Q Do you have anything further to present in this case?

A. No, I do not.

Q Were Exhibits One and Two prepared by you or under your supervision?

A. Yes, they were.

MR. BURLESON: Mr. Examiner, we ask that these two exhibits be admitted into evidence at this time and we tender the witness for any questions.

MR. STAMETS: Exhibits One and Two will be admitted.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Walker, will you be achieving commingling in the same manner that you did in the previous well, pulling the tubing packer and rerunning the same string?

A. We are not intending to pull the packer in this particular well. We would remove the seal assembly and rerun the 2-3/8ths tubing and produce both zones through the 2-3/8ths tubing.

Q When you say remove the seal assembly,

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in that event where -- what's the path the Pictured Cliffs production would follow?

A. It would go around inside the packer, around the outside of the tubing to the base of the 2-3/8ths tubing which would be landed near the Mesaverde formation.

Q. How much space have you got for the gas to flow in through that area? What's the -- what's the OD of your tubing and ID of the hole there to go through?

A. 2-3/8ths tubing has 3-1/16th collars. You could have a collar in there and I do not know what that packer bore is.

Q. Can you supply that information subsequent to the hearing?

A. Yes, sir.

MR. STAMETS: I would appreciate that. Any other questions of this witness? He may be excused.

TOM F. HAWKINS

being recalled as a witness, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. BURLESON:

Q. Mr. Hawkins, you've already been qualified, so in this case as well as the previous case, so we'll

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just turn to the ownership of production from this San Juan 27-5 Unit No. 54 Well.

In this well is the ownership of production from the Pictured Cliffs and Mesaverde formations common or not?

A. No, the ownership is not common.

Q. How can you describe the ownership of production with respect to these two zones?

A. The Pictured Cliffs formation is owned in accordance with the ownership in the 18,563-acre Pictured Cliffs participating area and the Mesaverde formation is owned in accordance with the ownership in the 20,803-acre Mesaverde participating area of the San Juan 27-5 Unit, and both such participating areas there are 42 working interest owners, 26 royalty owners, and 48 overriding royalty owners.

Said owners and the percentage of interest owned are set out on Exhibit Three, which was prepared by me.

Except for the case which I will later mention, the same parties who own the production from the Pictured Cliffs formation also own the production from the Mesaverde formation; however, the interest of each party in the two formations is slightly different.

The only exception to my statement that the same parties who own interest in the production from the

1 EAST AVALANCH COPY
2 Pictured Cliffs formation also own interest in the production
3 from the Mesaverde formation is that there are six royalty
4 owners who own a .03 percent royalty on production from the
5 Mesaverde and no royalty on production from the Pictured
6 Cliffs.

7 However, if the east half of Section 3
8 is brought into the participating area by completion of the
9 unit Well No. 21-A as a well capable of producing gas in com-
10 mercial quantities from the Pictured Cliffs formation, and
11 since parties will have an interest in production from the
12 Pictured Cliffs formation participating area as well.

13 The 21-A Well, located in the southeast
14 quarter of Section 3 has been completed and determined commer-
15 cial but the expansion has not yet been approved.

16 Q Has the operator admitted to bringing
17 in of that acreage into the participating area?

18 A Yes.

19 Q And of course the operator is El Paso?

20 A Right.

21 Q Have you contacted all the San Juan 27-5
22 Unit owners having an interest in the Pictured Cliffs and
23 the Mesaverde formations for their approval of this proposed
24 commingling?

25 A Yes.

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Q How did you contact them?

A By letter dated May 8th, 1981, and follow-up letters dated August 7th, 1981, and October 7th, 1981.

Q What has been the response to those letters?

A Out of the 42 working interest owners 28, who together own more than 98 percent of the Pictured Cliffs and Mesaverde participating areas have approved. 8 of the 26 royalty owners and 29 of the 49 overriding royalty owners have approved.

Exhibit Three shows those that approved marked with an asterisk. The rest have not responded to my letters; however, they were advised of the time and place of the hearing and that they have the right to appear.

Q To the best of your knowledge have you communicated with and sought the approval of all interest owners owning an interest in either zone completed in this well?

A Yes.

Q And I think you mentioned that Exhibit Number Three was prepared by you or under your supervision, did you not?

A Yes, it was prepared by me.

Q One other thing that I don't think we

1
2 covered. The entire spacing unit for both the Pictured
3 Cliffs formation and Mesaverde formation is within the re-
4 spective participating area for each of those two zones, is
5 it not?

6 A. Yes, that is correct.

7 Q. And the same thing applies to the former
8 case, also, both -- all of the acreage, all of the spacing
9 unit was within the Mesaverde and the Dakota participating
10 area in the previous case?

11 A. Yes, that is also correct.

12 MR. BURLESON: At this time we ask that
13 Exhibit Three be accepted into evidence.

14 MR. STAMETS: Exhibit Three will be ad-
15 mitted.

16 Any questions of this witness? He may
17 be excused.

18 Anything further in either of these cases?

19 MR. WALKER: Can I go ahead and re-
20 appear and --

21 MR. BURLESON: Mr. Examiner, we'd like
22 to put Mr. Walker on again. He wants to change some aspect
23 of his testimony.

24 MR. STAMETS: All right, we'll --

25 MR. WALKER: I see what the problem is

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that you brought up, and we will remove the packer from the well.

MR. STAMETS: Very good.

MR. WALKER: It will be a neater completion that way.

MR. STAMETS: All right, very good.

MR. BURLESON: IN that event, I suppose no additional data would be required?

MR. STAMETS: No additional data will be required in that case.

MR. BURLESON: Okay.

MR. WALKER: Thank you.

MR. STAMETS: If there is nothing further, then, these cases will be taken under advisement.

(Hearing concluded.)

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C E R T I F I C A T E

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

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examinatory hearing of Case No. 1385 7386 heard by me on 10-21, 1981.

[Signature]
Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.
Rt. 1 Box 195-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

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SCHEMATIC DIAGRAM OF DUALY - COMPLETED

EL PASC NATURAL GAS CO., SAN JUAN 27-5 UNIT NO. 54 (PM)
UNIT L OF SECTION 31, T-27-N, R-5-W
RIO ARriba COUNTY, NEW MEXICO

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION

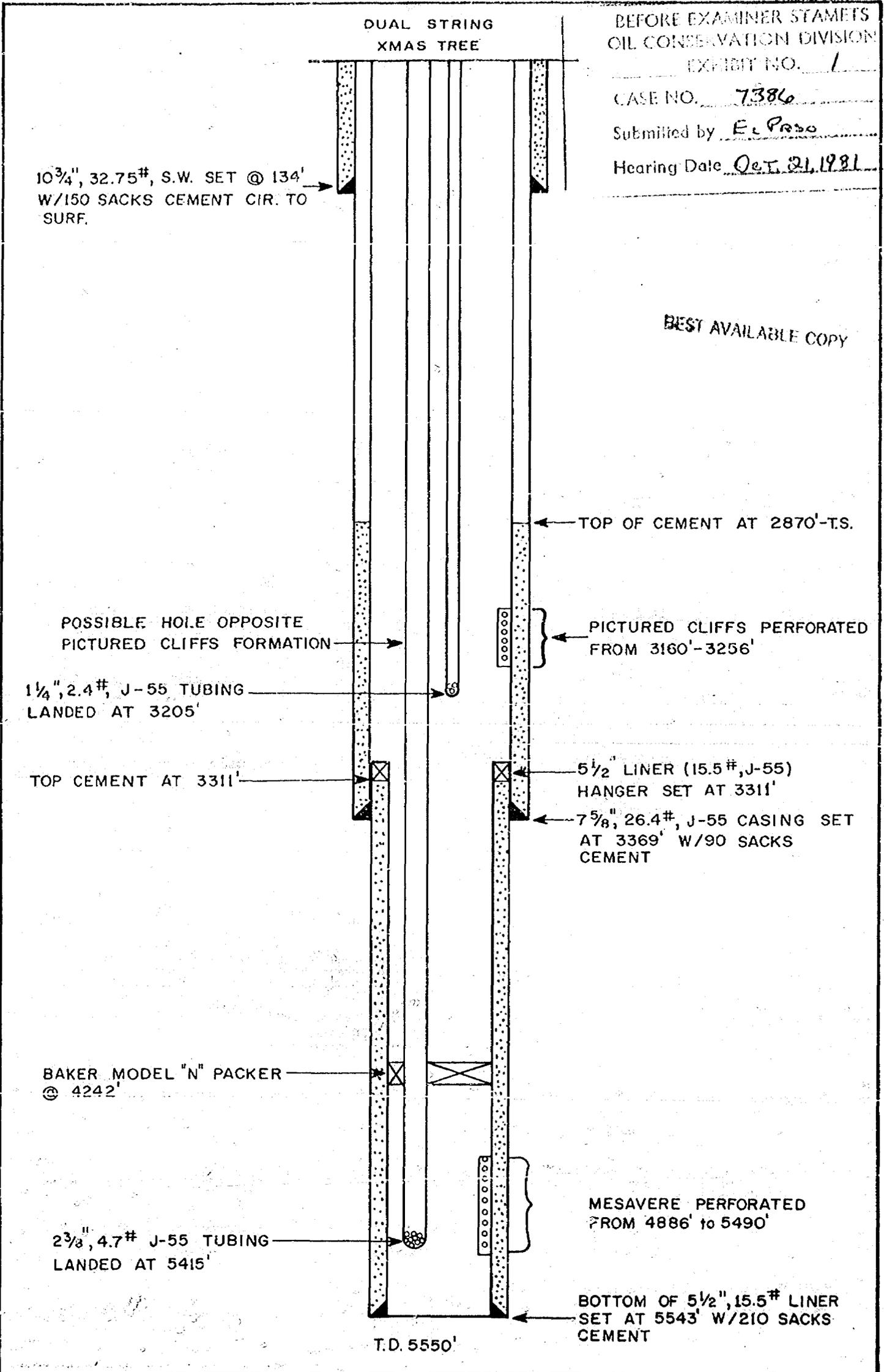
EXHIBIT NO. 1

CASE NO. 7386

Submitted by El Paso

Hearing Date Oct. 21, 1981

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10 3/4", 32.75#, S.W. SET @ 134'
W/150 SACKS CEMENT CIR. TO
SURF.

POSSIBLE HOLE OPPOSITE
PICTURED CLIFFS FORMATION

1 1/4", 2.4#, J-55 TUBING
LANDED AT 3205'

TOP CEMENT AT 3311'

BAKER MODEL "N" PACKER
@ 4242'

2 3/8", 4.7# J-55 TUBING
LANDED AT 5415'

T.D. 5550'

TOP OF CEMENT AT 2870'-T.S.

PICTURED CLIFFS PERFORATED
FROM 3160'-3256'

5 1/2" LINER (15.5#, J-55)
HANGER SET AT 3311'

7 5/8", 26.4#, J-55 CASING SET
AT 3369' W/90 SACKS
CEMENT

MESAVERE PERFORATED
FROM 4886' to 5490'

BOTTOM OF 5 1/2", 15.5# LINER
SET AT 5543' W/210 SACKS
CEMENT

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION
OIL CONSERVATION DIVISION

EXHIBIT NO. 2

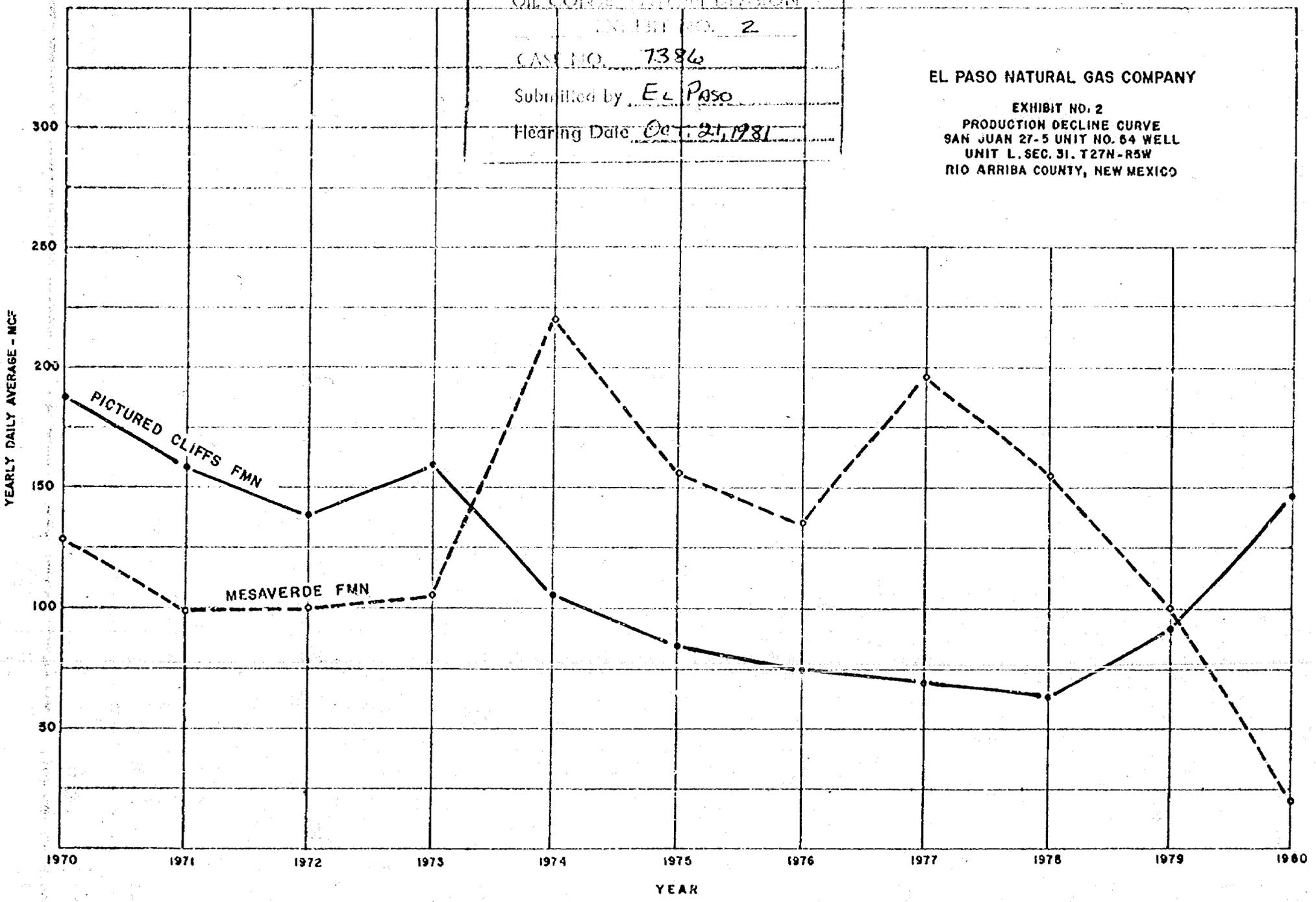
CASE NO. 7386

Submitted by EL PASO

Hearing Date Oct. 21, 1981

EL PASO NATURAL GAS COMPANY

EXHIBIT NO. 2
PRODUCTION DECLINE CURVE
SAN JUAN 27-5 UNIT NO. 64 WELL
UNIT L, SEC. 31, T27N-R5W
RIO ARriba COUNTY, NEW MEXICO



71-0-10

EL PASO NATURAL GAS COMPANY

Schedule showing the interests owned in gas rights in the 18,563.98 acre Pictured Cliffs and the 20,803.91 acre Mesaverde Participating Areas of the San Juan 27-5 Unit by the parties listed.

BEFORE EXAMINER STAFFETS
OIL CONSERVATION DIVISION
EL PASO EXHIBIT NO. 3
CASE NO. 7356
Submitted by El Paso
Hearing Date Oct. 31, 1981

Owner Working Interest	Percent of PC/PA	Percent of MV/PA
*El Paso Natural Gas Co.	42.07%	39.45%
*Amoco Production Co.	2.59%	.77%
*El Paso Exploration Co.	1.24%	2.30%
*Northwest Pipeline Corp.	9.70%	15.76%
*PWG Partnership	23.35%	21.54%
*The Wiser Oil Company	3.45%	4.61%
J. R. Abercrombie	.11%	.10%
R. H. McCullough	.21%	.19%
Estate of J. L. Abercrombie	.10%	.09%
*Iela L. Barkley	.10%	.09%
*Langdon D. Harrison, Trustee	.17%	.21%
*Robert Tinnin	.06%	.07%
*H. O. Pool Trust	.63%	.56%
*Evenly E. Wallace, James A. Brown, Trustees u/w of W. Brown	.63%	.56%
*Catherine B. McElvain	.15%	.13%
*T. H. McElvain Oil & Gas Properties	1.46%	.93%
*Catherine M. Harvey	.06%	.05%
*T. H. McElvain, Jr.	.06%	.05%
*W. E. Alsup Estate	.22%	.20%
*T. A. Dugan and Wife	.13%	.12%
*Flag-Redfern Oil Company	.13%	.12%
*Mabelle M. Miller & James Raymond	.11%	.10%
*Joe and Kathleen Quinn	.13%	.12%
M. A. Romero	.32%	.28%
Eulogia C. Candelaria	.45%	.36%
Nickie Candelaria	.05%	.04%
Cruzelia C. Montoya	.05%	.04%
Donald R. Candelaria	.05%	.04%
Paul M. Candelaria	.05%	.04%
Pablo L. Candelaria	.05%	.04%
J. Fidel Candelaria	.05%	.04%
Ophelia C. Montoya	.05%	.04%
Orlando Candelaria	.05%	.04%
Mercedes C. Skidmore	.05%	.04%
*G. F. Harrington Estate	5.84%	5.39%
*T. H. and Nancy Lee Harrington	5.53%	4.95%
*T. H. Harrington	.09%	.09%
*Gerald E. Harrington	.09%	.09%
*F. Eugene Harrington	.09%	.09%
*James V. Harrington	.09%	.09%
*Mary Jone Chappell	.09%	.09%
*Max Rotholz	.10%	.09%
	<u>100.00%</u>	<u>100.00%</u>

Royalty Interest

United States	10.10%	10.00%
State of New Mexico	1.29%	1.54%
First 6 parties listed on attached Schedule I	.00%	.03%
Last 18 parties listed on attached Schedule I	1.11%	.93%

Overriding Royalty Interest

48 parties listed on attached Schedule II	5.00%	5.00%
--	-------	-------

*Approval given for commingling proposed project. Other parties did not respond.

SCHEDULE I
SAN JUAN 27-5 UNIT
ROYALTY INTEREST OWNERS

- 1) Freddy Arnold
- 2) Richard Arnold
- 3) Stanley Arnold
- 4) Verda L. Boccacio
- *5) Freida Holt
- *6) Iris A. Wood

-
- *1) Bishop of Gallup
 - 2) Jose Perfect Esquibel
 - 3) Maxmilliano Esquibel
 - 4) The First National Bank of Santa Fe,
Trustee of Manuel A. Sanchez
 - *5) Lucas Martinez
 - *6) Elmyra K. McKay
 - *7) Horace F. McKay, Jr.
 - *8) Edith H. Payne
 - *9) Amalia S. Sanchez
 - 10) Donald R. Candelaria
 - 11) Eulogia C. Candelaria
 - 12) J. Fidel Candelaria
 - 13) Orlando Candelaria
 - 14) Paul M. Candelaria
 - 15) Pablo L Candelaria
 - 16) Cruzelia C. Montoya
 - 17) Ophelia C. Montoya
 - 18) Mercedes Skidmore

* Approval given for commingling proposed project. Other parties did not respond.

SCHEDULE II
SAN JOSE 27-5 UNIT
OVERRIDING ROYALTY INTEREST OWNERS

J. R. Abercrombie	Donald R. Candelaria
William E. Alsup, Jr. Ancillary Executor of the Estate of William E. Alsup, Deceased	Eulogia C. Candelaria
*Lela L. Barkley	Nickie G. Candelaria
*Thomas Dugan, et ux	Paul M. Candelaria
*Flag-Redfern Oil Company	J. Fidel Candelaria
*Col. Langdon Dewey Harrison	Orlando Candelaria
*Catherine M. Harvey	Pablo Leopoldo Candelaria
Ralph H. McCullough	Cruzelia C. Montoya
*Catherine B. McElvain	Ophelia C. Montoya
*T. H. McElvain, Jr.	Mercedes C. Skidmore
*T. H. McElvain Oil & Gas Prop.	*Central National Bank & Trust Co. of Des Moines, Trustee under the Will of Gerald F. Harrington, Deceased
*Mabelle M. Miller	*Mary Jone Chappel
H. O. Pool, Trustee of The H. O. Pool Trust	*F. Eugene Harrington
*Joe Quinn	*Gerald E. Harrington
*James M. Raymond, Individually and as Trustee	*James V. Harrington
M. A. Romero	*T. H. Harrington
Texas National Bank of Commerce, Ancillary Guardian of J. L. Abercrombie	*Thomas H. Harrington
*Robert P. Tinnin	*Amoco Production Company
*Evelyn Ellen Wallace & James A. Brown, Trustees under the Will of A. W. Brown	*J. R. Abraham
*Robert P. Earnest	*Lear Petroleum Exploration, Inc.
Charles C. Harlan, Jr.	Waymon Peavy
*Hondo Oil and Gas Co.	*PWG Partnership
*John C. Meadows	*Union Oil Co. of California
Helen Kerr Chsner	*William G. Webb

*Approval given for commingling proposed project. Other parties did not respond.

Docket Nos. 34-81 and 35-81 are tentatively set for October 21 and November 4, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - WEDNESDAY - OCTOBER 14, 1981

9 A.M. - OIL CONSERVATION COMMISSION - ROOM 205
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

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(The following cases are continued from the October 14, 1981, Commission hearing to October 16, 1981.)
CASE 7245: (Continued and Readvertised)

Application of Bass Enterprises Production Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres, Bone Springs and Pennsylvanian formations, Lovington Field, underlying the N/2 NE/4 of Section 13, Township 15 South, Range 36 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 7223: (DE NOVO)

Application of Clements Energy, Inc., for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the E/2 of Section 32, Township 15 South, Range 27 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. 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.

Upon application of Southland Royalty Company, this case will be heard DE NOVO pursuant to the provisions of Rule 1220.

Docket No. 34-81

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 21, 1981

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 November, 1981, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for November, 1981, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 7373: Application of J. C. Williamson for Amendment of Division Order No. R-6738, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the Amendment of Division Order No. R-6738, which approved an unorthodox location for a well 1560 feet from the North line and 1830 feet from the West line of Section 10, Township 23 South, Range 34 East. Applicant seeks the Amendment of said order to reflect the corrected location of said well at a point 1580 feet from the North line and 2614 feet from the West line of said Section 10.

CASE 7374: Application of Dugan Production Corporation for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Farmington formation well located 330 feet from the South line and 990 feet from the East line of Section 9, Township 28 North, Range 11 West, the E/2 of said Section 9 to be dedicated to the well.

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- CASE 7375: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Angel Peak Gallup-Basin Dakota production in the wellbore of its McAdams Well No. 2 located in Unit P of Section 34, Township 27 North, Range 10 West.
- CASE 7376: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Basin-Dakota and Bisti-Lower Gallup production in the wellbore of its Big 8 Well No. 1-E, located in Unit O of Section 8, Township 24 North, Range 9 West.
- CASE 7377: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated Gallup and Basin-Dakota production in the wellbore of its July Jubilee Well No. 1 located in Unit G of Section 30, Township 24 North, Range 9 West.
- CASE 7378: Application of Jerome F. McHugh for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Wildhorse-Gallup and Basin-Dakota production in the wellbore of his Apache E Well No. 1, located in Unit A of Section 18, Township 26 North, Range 3 West.
- CASE 7356: (Continued from September 23, 1981, Examiner Hearing)
- Application of S & I Oil Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the W/2 SW/4 of Section 12, Township 29 North, Range 15 West, Cha Cha-Gallup Oil Pool, 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 7379: Application of JEM Resources, Inc., for vertical pool extension and special GOR limit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the vertical extension of the Cave-Grayburg Pool to include the San Andres formation, and the establishment of a special gas-oil ratio limit for said pool to 6000 to one or, in the alternative, the abolishment of the gas-oil ratio limit in said pool, all to be effective October 1, 1981.
- CASE 7380: Application of Bird Oil Corporation for an unorthodox location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox Entrada location of a well to be drilled 2310 feet from the North line and 1325 feet from the East line of Section 10, Township 22 North, Range 9 West, the SW/4 NE/4 of said Section 10 to be dedicated to the well.
- CASE 7381: Application of H. L. Brown, Jr., for an unorthodox gas well location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 330 feet from the South line and 2310 feet from the East line of Section 34, Township 7 South, Range 37 East, Bluit-Wolfcamp Gas Pool, the E/2 of said Section 34 to be dedicated to the well.
- CASE 7382: Application of TXO Production Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow well to be drilled 660 feet from the South and West lines of Section 20, Township 17 South, Range 28 East, the W/2 of said Section 20 to be dedicated to the well.
- CASE 7383: 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 Upper Pennsylvanian formation underlying the NW/4 of Section 19, 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 7384: Application of Morris R. Antwell for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Abo formation underlying the NE/4 SW/4 of Section 5, Township 20 South, Range 18 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 7385: Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blanco-Mesaverde and Basin-Dakota production in the wellbore of its San Juan 27-5 Unit Well No. 59, located in Unit A of Section 6, Township 27 North, Range 5 West.
- CASE 7386: Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of South Blanco-Pictured Cliffs and Blanco-Mesaverde production in the wellbore of its San Juan 27-5 Unit Well No. 54, located in Unit L of Section 31, Township 27 North, Range 5 West.
- CASE 7387: Application of Sun Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 660 feet from the North and East lines of Section 32, Township 9 South, Range 37 East, West Sawyer-San Andres Pool, the N/2 NE/4 of said Section 32 to be dedicated to the well.
- CASE 7388: Application of Sun Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled in the Northeast Lusk Yates Pool, 2500 feet from the North line and 1880 feet from the East line of Section 15, Township 19 South, Range 32 East the SW/4 NE/4 of said Section 15 to be dedicated to the well.
- CASE 7389: Application of Yates Petroleum Corporation for an Amendment to Division Order No. R-4365, Eddy County, New Mexico. Applicant, in the above-styled cause seeks the amendment of Division Order No. R-4365, which promulgated special rules and regulations for the Penasco Draw San Andres-Yeso Pool, by amending Rule 5 to permit the simultaneous dedication of gas wells and oil wells and amending Rule 9 to provide for annual gas-liquid ratio tests in lieu of semi-annual tests.
- CASE 7365: (Continued from October 7, 1981, Examiner Hearing)
- Application of Yates Petroleum Corporation for the amendment of Order No. R-6406, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-6406, to permit recompletion of its State "JM" No. 2 Well, drilled at an unorthodox Morrow location 660 feet from the South line and 660 feet from the East line of said Section 25, Township 18 South, Range 24 East, in any and all Wolfcamp and Pennsylvanian pays in said well.
- CASE 7390: Application of Harvey E. Yates Company for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mississippian formation underlying the W/2 of Section 18, Township 9 South, Range 27 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 7391: Application of Harvey E. Yates Company for statutory unitization, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order unitizing, for the purposes of a secondary recovery project, all mineral interests in the Travis Penn Unit encompassing 480 acres, more or less, underlying all or portions of Sections 12 and 13, Township 18 South, Range 28 East, Eddy County, New Mexico.

The unitized interval would be the Cisco-Canyon formation between the depths of 9815 feet and 9935 feet in Harvey E. Yates Company's Travis Deep Unit No. 2 Well. Among the matters to be considered at the hearing will be the necessity of unit operations; the designation of a unit operator; the determination of the horizontal and vertical limits of the unit area; the determination of the fair, reasonable, and equitable allocation of production and costs of production, including capital investment, to each of the various tracts in the unit area; the determination of credits and charges to be made among the various owners in the unit area for their investment in well and equipment; and such other matters as may be necessary and appropriate for carrying on efficient unit operations, including, but not necessarily limited to, unit voting procedures, selection, removal, or substitution of unit operator, and time of commencement and termination of unit operations.

- NOT AVAILABLE COPY
- CASE 7392: Application of Sam H. Snoddy, for an unorthodox gas well location in the Oil-Potash Area, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the location of a Pennsylvanian well to be drilled 660 feet from the North and East lines of Section 26, Township 20 South, Range 32 East, Oil-Potash Area, the N/2 of said Section 26 to be dedicated to the well.
- CASE 7393: Application of Uriah Exploration Incorporated for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Cisco, Canyon and Morrow formations underlying the W/2 of Section 13, Township 22 South, Range 24 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 7394: Application of Supron Energy Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Pennsylvanian well to be drilled 467 feet from the North line and 1650 feet from the West line of Section 13, Township 22 South, Range 24 East, the N/2 of said Section 13 to be dedicated to the well.
- CASE 7395: Application of Curtis J. Little for Designation of a Tight formation, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the designation of the Pictured Cliffs formation underlying portions of Townships 25 and 26 North, Ranges 6 and 7 West containing a total of 14,400 acres, more or less, as a tight formation pursuant to Section 107 of the Natural Gas Policy Act and 18 CFR Section 271. 701-705.
- CASE 7300: (Reopened and Readvertised)
- Application of Dome Petroleum Corporation for designation of a tight formation, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the designation of the Chacra formation underlying portions of Townships 21 and 22 North, Ranges 5, 6, and 7 West, containing 73,018 acres, more or less, as a tight formation pursuant to Section 107 of the Natural Gas Policy Act and 18 CFR Section 271. 701-705.
- CASE 7352: (Continued from September 23, 1981, Examiner Hearing)
- Application of Yates Petroleum Corporation for designation of a tight formation, Eddy County, New Mexico. Applicant, in the above-styled cause, pursuant to Section 107 of the Natural Gas Policy Act 18-CFR Section 271. 701-705, seeks the designation as a tight formation of the Permian formation underlying all of the following townships:

Township 17 South, Ranges 24 thru
26 East;

18 South, 24 and 25 East.

19 South, 23 thru 25 East;

20 South, 21 thru 24 East;

20 1/2 South, 21 and 22 East;

21 South, 21 and 22 East;

Also Sections 1 thru 12 in

22 South, 21 and 22 East,

All of the above containing a total of 315,000 acres more or less.

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SEP 23 1981

OIL CONSERVATION DIVISION
SANTA FE

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. 7386

APPLICATION OF EL PASO NATURAL)
GAS COMPANY FOR DOWNHOLE)
COMMINGLING OF SOUTH BLANCO-)
PICTURED CLIFFS AND BLANCO-)
MESAVERDE PRODUCTION IN THE)
WELLBORE OF ITS SAN JUAN 27-5)
UNIT NO. 54 WELL LOCATED IN UNIT)
L OF SECTION 31, T-27N, R-5W,)
RIO ARRIBA COUNTY, NEW MEXICO)

APPLICATION FOR APPROVAL TO
DOWNHOLE COMMINGLING

El Paso Natural Gas Company respectfully requests the Division to call a hearing before the Division or its designated Examiner and, based upon the record made at such hearing, to issue an Order granting approval of the downhole commingling of production from the Pictured Cliffs Formation, within the South Blanco-Pictured Cliffs Gas Pool, with production from the Mesaverde Formation, within the Blanco-Mesaverde Gas Pool, within the wellbore of its San Juan 27-5 Unit No. 54 Well located in Unit L of Section 31, T-27N, R-5W, Rio Arriba County, New Mexico.

EL PASO NATURAL GAS COMPANY

By David J. Burlew
Attorney

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:

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CASE NO. 7386

Order No. A-6831

APPLICATION OF EL PASO NATURAL GAS COMPANY
FOR DOWNHOLE COMMINGLING, RIO ARRIBA
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 21
19 81, at Santa Fe, New Mexico, before Examiner Richard L.
Stamets.

NOW, on this _____ day of October, 19 81, 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, El Paso Natural Gas Company, is
the owner and operator of the San Juan 27-5 Unit Well No. 54,
located in Unit L of Section 31, Township 27 North
Range 5 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle
South Blanco-Pictured/Cliffs and Blanco-Mesaverde production
within the wellbore of the above-described well.

BEST AVAILABLE COPY Cliffs

(4) That from the South Blanco-Pictured/Cliffs zone, the subject well is capable of low marginal production only.

(5) That from the Blanco-Mesaverde zone, the subject well is 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 well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, 31

percent of the commingled gas production should be allocated to the South Blanco-Pictured/Cliffs zone, and 69

percent of the commingled gas production and all of the condensate to the Blanco-Mesaverde zone. *production*

(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 Aztec district office of the Division and determine an allocation formula for each of the production zones.

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle South Blanco-Pictured Cliffs and Blanco-Mesaverde production within the wellbore of the San Juan 27-5 Unit Well No. 54, located in Unit 1 of Section 31, Township 27 North, Range 5 West, NMPM, Rio Arriba 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.

(ALTERNATE) →

(2) That ~~33~~ 31 percent of the commingled gas production shall be allocated to the South Blanco-Pictured Cliffs zone and ~~31~~ 69 percent of the commingled gas production and all of the condensate production shall be allocated to the Blanco-Mesaverde zone.

(3) That the operator of the subject well 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.

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

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

*35-45-?
or should
this be 31-69?*