

CASE 5573: EL PASO NATURAL GAS  
COMPANY FOR DOWNHOLE COMMINGLING,  
SAN JUAN COUNTY, NEW MEXICO

CASE NO.

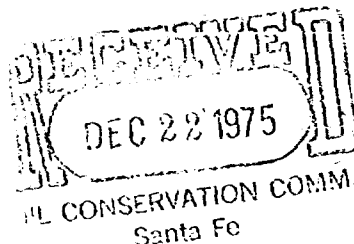
5573

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APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,

ETC.

**El Paso** NATURAL GAS  
COMPANY



P.O. BOX 1492  
EL PASO, TEXAS 79978  
PHONE: 915-543-2600

December 18, 1975

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

Attention: Mr. Dan Nutter, Chief Engineer

Re: Mudge #11 Well  
Case No. 5573

Dear Mr. Nutter:

Enclosed is a copy of a fully executed agreement by Crown Central Petroleum Corporation to allocate the production between the Mesaverde and Dakota formations as requested in the hearing.

If there is anything further you need in this case, please so advise.

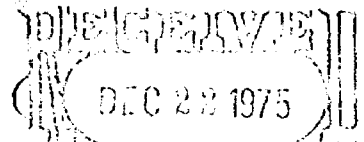
Very truly yours,

A handwritten signature in cursive script, appearing to read "H. L. Kendrick".

H. L. Kendrick

HLK:eh  
Encl.

**El Paso** NATURAL GAS  
COMPANY



OIL CONSERVATION COMM.

Santa Fe  
P.O. BOX 1402  
EL PASO, TEXAS 79903

PHONE: 515-513-2400

October 7, 1975

**RECEIVED**  
OCT 29 1975

General American Oil Company  
Meadows Building  
Dallas, Texas 75206

CROWN CENTRAL PET. CORP.  
Midland Office

Crown Central Petroleum Corporation  
ATTN: Mr. I. O. Halbert, III  
Suite 1002, Wilco Building  
Midland, Texas 79701

Republic National Bank of Dallas for Account of  
William J. Carey - Account No. 006-325-8  
P. O. Box 2823  
Dallas, Texas 75221

Frank A. Schultz  
730 Fidelity Union Tower Building  
Akard Street and Pacific Avenue  
Dallas, Texas 75201

Re: Mudge #11 Well (MV-DK)  
SW/4 Section 10, T-31-N,  
R-11-W, San Juan County,  
New Mexico

Gentlemen:

The 1975 Annual Packer Leakage Test indicated communication between producing zones in the subject dually completed well in which you own an overriding royalty. The New Mexico Oil Conservation Commission directed on August 14, 1975 that immediate action be taken to separate the zones. Results from a temperature survey located a definite tubing leak at approximately 2260'.

The well is producing at a rate of about 300 MCF/D with 80 MCF/D from the Dakota and 220 MCF/D from the Mesaverde. Over the past year and a half, the Mesaverde has averaged 244 MCF/D and the Dakota 95 MCF/D, with the Mesaverde averaging less than a barrel of liquid a day.

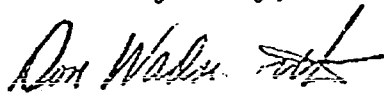
Mudge #11 Well (MV )  
October 7, 1975  
Page Two

The estimated cost to perform the remedial work is \$11,530. Rather than repair the leak, El Paso as owner of 100% of the working interest would like to make application for down hole commingling. It is felt that commingling would not result in a loss of production and would save the cost of repairing the well. Based on the stable production history, it is El Paso's recommendation that the gas allocation would be 72% to the Mesaverde and 28% to the Dakota for overriding royalty purposes.

Attached for your information is our pertinent data sheet on the well.

If you agree with our proposal to apply for permission to commingle production from the well and allocate said production 72% to the Mesaverde and 28% to the Dakota, please evidence your approval thereto by signing and returning to this office, one copy of this letter. Your prompt reply will be appreciated.

Yours very truly,



Don Wadsworth  
Landman  
Land Department  
Energy Resource Development

DW:nm  
Attachment  
NM-1071

AGREED TO AND ACCEPTED

this 24 day of October, 1975.

BY: N.E. Norris  
*Mgr. Drilling and Production*  
*Crown Central Petroleum Corporation*



DIRECTOR  
JOE D. RAMEY

## OIL CONSERVATION COMMISSION

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

LAND COMMISSIONER  
PHIL R. LUCERO



STATE GEOLOGIST  
EMERY C. ARNOLD

January 20, 1976

Mr. Sumner Buell  
Montgomery, Andrews,  
Hannahs & Buell  
Box 2307  
Santa Fe, New Mexico

Re: CASE NO. 5573  
ORDER NO. R-5155

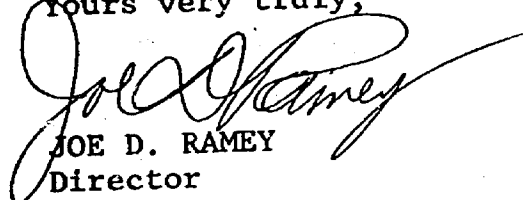
Dear Mr. Buell:

Applicant: El Paso Natural Gas Co.

Dear Sir:

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

Yours very truly,

  
JOE D. RAMEY  
Director

JDR/fd

Copy of order also sent to:

Hobbs OCC X  
Artesia OCC         
Aztec OCC X

Other Mr. Neil Beck, El Paso

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 5573  
Order No. R-5155

APPLICATION OF EL PASO NATURAL GAS  
COMPANY FOR DOWNHOLE COMMINGLING,  
SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 22, 1975,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 20th day of January, 1976, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

- (1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
matter thereof.
- (2) That the applicant, El Paso Natural Gas Company, is the  
owner and operator of the Mudge Well No. 11, located in Unit M  
of Section 10, Township 31 North, Range 11 West, NMPM, San Juan  
County, New Mexico.
- (3) That the applicant seeks authority to commingle Blanco-  
Mesaverde and Basin-Dakota production within the wellbore of the  
above-described well.
- (4) That from the Blanco-Mesaverde zone, the subject well  
is capable of low marginal production only.
- (5) That from the Basin-Dakota 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. 5573  
Order No. R-5155

(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 Commission 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 Commission 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, 72 percent of the commingled gas production and all of the condensate production should be allocated to the Blanco-Mesaverde zone, and 28 percent of the commingled gas production and none of the condensate production to the Basin-Dakota zone.

IT IS THEREFORE ORDERED:

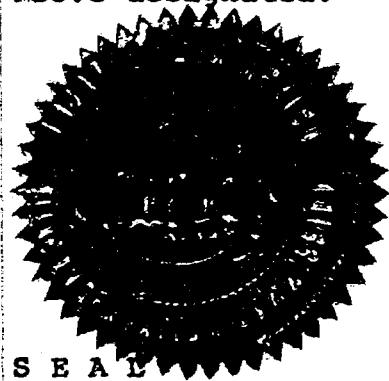
(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Blanco-Mesaverde and Basin-Dakota production within the wellbore of the Mudge Well No. 11, located in Unit M of Section 10, Township 31 North, Range 11 West, NMPM, San Juan County, New Mexico.

(2) That 72 percent of the commingled gas production and all of the condensate production shall be allocated to the Blanco-Mesaverde zone and 28 percent of the commingled gas production and none of the condensate production shall be allocated to the Basin-Dakota zone.

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

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

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



STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Phil R. Lucero*  
PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

*Joe D. Ramey*  
JOE D. RAMEY, Secretary & Member

S E A L

dr/



BEFORE THE OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE  
APPLICATION OF EL PASO  
NATURAL GAS COMPANY FOR  
DOWNHOLE COMMINGLING OF  
ITS MUDGE WELL NO. 11,  
SAN JUAN COUNTY, NEW MEXICO.


No. 5573

ENTRY OF APPEARANCE

COMES NOW MONTGOMERY, FEDERICI, ANDREWS, HANNAHS &  
BUELL, and enters its appearance in the above-styled matter  
on behalf of EL PASO NATURAL GAS COMPANY.

MONTGOMERY, FEDERICI, ANDREWS,  
HANNAHS & BUELL

By

  
Attorneys for Applicant  
Post Office Box 2307  
Santa Fe, New Mexico 87501

dr/

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 5573

Order No. R- 5155

APPLICATION OF EL PASO NATURAL GAS COMPANY  
FOR DOWNHOLE COMMINGLING, SAN JUAN  
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 22,  
19 75, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this January day of 1976, the Commission,  
a quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

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

(2) That the applicant, El Paso Natural Gas Company, is the  
owner and operator of the Mudge Well No. 11, located  
in Unit M of Section 10, Township 31 North, Range  
11 West, NMPM, San Juan County, New Mexico.

(3) That the applicant seeks authority to commingle Blanco-  
Mesaverde and Basin-Dakota production  
within the wellbore of the above-described well.

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

(5) That from the Basin-Dakota 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.

Case No. \_\_\_\_\_

Order No. R- \_\_\_\_\_

(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 Commission 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 Commission 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, 72 percent of the commingled gas <sup>and all of the condensate production</sup> production should be allocated to the Blanco-Mesaverde zone, and 28 percent of the commingled gas <sup>and none of the condensate production</sup> production to the Basin-Dakota zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Blanco-Mesaverde and Basin-Dakota production within the wellbore of the Mudge Well No. 11, located in Unit M of Section 10, Township 51 North, Range 11 West, NMPM, San Juan County, New Mexico.

(2) That 72 percent of the commingled gas <sup>and all of the condensate production</sup> production shall be allocated to the Blanco-Mesaverde zone and 28 percent of the commingled gas <sup>and none of the condensate production</sup> production shall be allocated to the Basin-Dakota zone.

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

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

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

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General Court Reporting Service  
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501  
Phone (505) 982-9212

Page 1

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
October 22, 1975

EXAMINER HEARING

IN THE MATTER OF:

Application of El Paso Natural Gas  
Company for downhole commingling,  
San Juan County, New Mexico.

CASE  
5573

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil  
Conservation Commission:

Thomas Derryberry, Esq.  
Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

For the Applicant:

Neil J. Beck, Esq.  
Senior Counsel  
El Paso Natural Gas Company  
Post Office Box 1492  
El Paso, Texas

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General Court Reporting Service  
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501  
Phone (505) 982-9212

Page 2

I N D E X

	<u>Page</u>
<u>PAUL W. BURCHELL</u>	
Direct Examination by Mr. Beck	3
Cross Examination by Mr. Nutter	9
Redirect Examination by Mr. Beck	11
Further Cross Examination by Mr. Nutter	12

EXHIBIT INDEX

	<u>Page</u>
El Paso's Exhibit Number One, Diagrammatic Sketch	9

1 MR. NUTTER: We will call Case 5573.

2 MR. DERRYBERRY: Case 5573, application of El Paso  
3 Natural Gas Company for downhole commingling, San Juan County,  
4 New Mexico.

5 MR. BECK: Mr. Examiner, I'm Neil Beck, Senior  
6 Counsel for El Paso Natural Gas Company, appearing for El Paso  
7 in this Case through my association with the firm of  
8 Montgomery, Federici, Andrews, Hannahs and Buell. I have one  
9 witness to be sworn.

10 (THEREUPON, the witness was duly sworn.)

11 PAUL W. BURCHELL

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

14  
15 DIRECT EXAMINATION

16 BY MR. BECK:

17 Q What is your name and where do you reside?

18 A My name is Paul W. Burchell and I reside in  
19 El Paso, Texas.

20 Q Mr. Burchell, by whom are you employed and in  
21 what capacity?

22 A I'm employed by El Paso Natural Gas Company as  
23 Senior Proration Engineer.

24 Q As a proration engineer, Mr. Burchell, have you  
25 previously testified before this Commission or one of its

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Page 4

1 examiners?

2 A. Yes, I have.

3 Q. Mr. Burchell, are you familiar with El Paso's  
4 application in this Case?

5 A. Yes, I am familiar with Case 5573 before us.

6 MR. BECK: Mr. Examiner, are the witness's  
7 qualifications acceptable?

8 MR. NUTTER: Yes, they are.

9 Q. (Mr. Beck continuing.) Mr. Burchell, would you  
10 please describe what El Paso is seeking in Case 5573?

11 A. Mr. Examiner, El Paso seeks permission to downhole  
12 commingle gas from the Blanco-Mesaverde pool with gas from  
13 the Dakota pool, Basin-Dakota, and to produce this gas through  
14 a common meter at its Mudge Number 11 Well located in Unit M,  
15 Section 10, Township 31 North, Range 11 West, San Juan County,  
16 New Mexico.

17 El Paso proposes that the allocation of gas from  
18 these zones be divided in such a manner that a percentage of  
19 gas produced be considered from the Mesaverde and a percentage  
20 of the gas be considered that from the Dakota.

21 Q. Mr. Burchell, why is El Paso asking for permission  
22 to downhole commingle?

23 A. Downhole commingling is considered by El Paso to  
24 be the most economic and conservative method to undertake,  
25 mainly because of the low permeability or productivity,

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Page 5

1 excuse me, of both zones and due to the high cost of repairing  
2 a suspected tubing leak in the well.

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

5 A Yes, I do.

6 Q Would you please explain what the exhibit shows?

7 A I have a diagrammatic sketch of the equipment which  
8 has been marked as El Paso's Exhibit Number One. This exhibit  
9 shows several things, but in particular I would like to call  
10 the Examiner's attention to the fact that there are two strings  
11 of tubing installed in the Mudge Number 11 Well. It also shows  
12 that a Baker Model D production packer is set at five  
13 thousand and ninety-six feet. The well is perforated from  
14 four thousand nine hundred and seventy-two feet to five  
15 thousand and sixty-four feet in the Mesaverde pool above  
16 the packer and the Dakota is perforated from seven thousand  
17 two hundred and twenty-one feet to seven thousand three  
18 hundred and sixty-two feet below the packer.

19 Q Has a leak been determined to exist in this well?

20 A Yes, the 1975 packer leakage test indicated  
21 communications between these producing zones in the subject  
22 dually completed well.

23 Q Where in your opinion is the leak occurring?

24 A A temperature survey was run in the Dakota tubing  
25 string and located a definite tubing leak at two thousand



1 two hundred and sixty-feet which is illustrated by an  
2 arrow on Exhibit Number One.

3 Q Prior to 1975, the time that communication was  
4 noted, what was the normal producing rate from each zone in  
5 this well?

6 A For the previous two years, 1973 and 1974, the  
7 average yearly flow rate was around eighty-four thousand MCF  
8 from the Mesaverde and thirty-two thousand MCF from the Dakota.  
9 This amounts to seventy-two percent Mesaverde gas and twenty-  
10 eight percent Dakota. And I would like to point out that  
11 the combined daily rate averaged three hundred and seventeen  
12 MCF for these same two zones.

13 Q Instead of zones did you mean to say the same two  
14 years?

15 A The same two years, yes, for both zones.

16 Q What is the ability of the Mudge Number 11 Well to  
17 produce gas at the present time?

18 A The well is producing at a combined rate of about  
19 three hundred and nine MCF of gas per day with two hundred  
20 and twenty-four MCF per day from the Mesaverde and eighty-  
21 five MCF per day from the Dakota. The well is still making  
22 seventy-two percent Mesaverde gas. There has been no loss  
23 of production due to the communication between zones.

24 Q Do you consider these flow rates to be on the small  
25 side?

1 A. Yes, in my opinion these flow rates are small. It  
2 should be noted that both formations are classified as marginal.

3 Q Does the well produce any liquids?

4 A. Yes, the Mesaverde makes about one barrel of liquid  
5 hydrocarbon per day.

6 Q What would you say would be the estimated total  
7 cost of repairing this leak?

8 A. Mr. Examiner, the estimated cost for working the  
9 well over, pulling both strings, replacing the corroded  
10 tubing and redressing the Model D packer seal assembly is  
11 estimated to be around eleven thousand five hundred and  
12 thirty dollars.

13 Q Is it possible that the cost of repair might be  
14 greater?

15 A. Yes, it very well could be. It may be necessary  
16 to replace more tubing than is estimated or the condition of  
17 the packer may be such that a new one will be required.

18 Q Mr. Burchell, is it likely that repairing the well  
19 as a dual completion would not be economically feasible for  
20 El Paso?

21 A. Yes, in which case we might not repair the well  
22 in the Dakota. Out of necessity it would have to be  
23 plugged and the gas in the pool abandoned.

24 Q In your opinion would granting of this application  
25 for the downhole commingling of the gas prevent waste?

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1 A. Yes, it would.

2 Q. Do you propose a formula by which the gas production  
3 can be reasonably apportioned to the two producing zones?

4 A. Yes, based on my prior testimony related to the  
5 stable production history, it is recommended that seventy-two  
6 percent of the well's production be attributed to the Blanco  
7 Mesaverde pool and the remaining twenty-eight percent to the  
8 Basin-Dakota pool.

9 Q. What is the nature of the ownership in the producing  
10 well?

11 A. El Paso Natural Gas is the sole working and  
12 gatherer of the well, the one hundred percent working interest  
13 owner. The well has an overriding royalty with four different  
14 owners in production from Mesaverde and the Dakota sides  
15 of the Mudge Number 11 Well. We have obtained written consent  
16 from three of the four overriding royalty owners for a  
17 division of ownership based on the previously mentioned  
18 formula, seventy-two percent Mesaverde and twenty-eight  
19 percent Dakota and we, EPNG, are in the process of obtaining  
20 a similar contract from the fourth overriding royalty owner.

21 Q. In your opinion would consent of the overriding  
22 royalty owners and the granting of this application protect  
23 correlative rights?

24 A. Yes, sir, it would.

25 Q. Do you have anything further to say in this Case?

1 A. No, I don't.

2 Q. Was Exhibit Number One prepared by you or under  
3 your supervision?

4 A. Yes, it was.

5 MR. BECK: Mr. Examiner, we offer Exhibit Number One  
6 into evidence at this time.

7 MR. NUTTER: El Paso's Exhibit Number One will be  
8 admitted into evidence.

9 MR. BECK: This concludes our direct testimony.

10

11

CROSS EXAMINATION

12

BY MR. NUTTER:

13

Q. Mr. Burchell, what is this cost of eleven thousand  
14 dollars for repairing this well involve?

15

A. I have that cost breakdown if you would like to  
16 have it.

17

Q. I would like to have it, yes.

18

A. Mr. Examiner, under the heading of Tubular Goods  
19 it is estimated that approximately three hundred feet of  
20 two and three-eighths inch tubing will have to be replaced  
21 at one point eight ninety-nine dollars per foot. This gives  
22 a total amount for the goods, five hundred and eighty dollars.

23

The other equipment, in particular to redress the  
24 Model D packer seal assembly is estimated to cost three  
25 hundred and fifty dollars. The drilling cost for a service

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Page 10

1 unit for three days at one thousand eight hundred dollars  
2 per day is estimated to cost five thousand four hundred  
3 dollars and the rig moving costs approximately a thousand  
4 dollars. This has a total under drilling costs of six  
5 thousand four hundred dollars.

6 The special services that we anticipate would be  
7 hydro-testing the tubing, which would be five hundred dollars;  
8 set plug chokes, approximately four hundred dollars; and  
9 the total for special services would amount to nine hundred  
10 dollars.

11 The materials that are anticipated to rework the  
12 well would be drilling mud and chemicals, in particular  
13 corrosion inhibitor, two hundred dollars; drilling gas or  
14 air two hundred dollars; and water two hundred dollars. The  
15 fuel anticipated will be approximately two hundred dollars;  
16 tubular inspection four hundred dollars; and that includes  
17 miscellaneous for a total of one thousand two hundred  
18 dollars under materials.

19 The access of location and cleanup, supervision,  
20 legal, et cetera, amounts to seven hundred and fifty and  
21 three hundred, for a total of one thousand, fifty dollars.

22 The total direct cost adds up to be ten thousand  
23 four hundred and eighty dollars, plus a ten percent contingency,  
24 one thousand and fifty dollars for a total cost as presented in  
25 evidence in today's testimony, eleven thousand five hundred

1 and thirty dollars.

2 Q Thank you. Now did the production change at any  
3 point along here that would have indicated when the leak  
4 occurred or is there no change in production characteristics,  
5 it was just discovered on a packer leakage survey?

6 A On the packer leakage test it was discovered that  
7 pressure differential there. The actual production from the  
8 well remained constant for many years past 1973 at seventy-two  
9 percent.

10 Q What is the total production from the well; how  
11 about the production from each zone?

12 A Each zone remained about the same, particularly for  
13 about the last year and a half.

14 Q Seventy-two percent Mesaverde and twenty-eight  
15 percent Dakota?

16 A Yes, sir.

17 MR. NUTTER: Are there further questions of this  
18 witness?

19 MR. BECK: I would like to make one clarifying  
20

21 REDIRECT EXAMINATION

22 BY MR. BECK:

23 Q Mr. Burchell, you checked previous production  
24 records, haven't you, going back as far as 1962?

25 A Yes, I have.

1 Q And has that borne out your conclusion that there  
2 is a seventy-two and twenty-eight percent allocation to the  
3 two zones?

4 A If you go back that far it remains approximately  
5 seventy-two to seventy-three percent.

6 Q Is it true over the entire time span as well as  
7 the individual years in question?

8 A Yes, sir, and as a matter of coincidence so does  
9 the deliverability rates average out since 1962, between  
10 seventy-two and seventy-three percent.

11 MR. BECK: That's all, Mr. Examiner.

12

13 FURTHER CROSS EXAMINATION

14 BY MR. NUTTER:

15 Q How long have the wells been classified marginal,  
16 a good long while?

17 A Let's see, Mr. Examiner. It looks like the  
18 Mesaverde pool was classified marginal at the end of June  
19 1974 and the Basin-Dakota pool was classified as marginal --  
20 my records only go back to January of 1970, but as far back  
21 as that the Dakota was also classified as marginal.

22 Q So it was marginal before '70 then?

23 A Yes, sir.

24 Q Okay. Now you say you have the consents to this  
25 downhole commingling from three of the four overriding

1 royalty interest owners?

2 A. Yes, sir.

3 Q. You are attempting to obtain the fourth one, when  
4 will you have that?

5 A. We thought about nine o'clock this morning.

6 Q. But you don't?

7 MR. BECK: Identical requests were sent out to  
8 all four overriding royalty owners at the same time and three  
9 of them got them back to us several days ago, but the fourth  
10 one has apparently had some intra-office communication problem.  
11 We haven't been able to get ahold of them, frankly, in the  
12 last day or so to find out what the status of it is, but we  
13 have no indication at this time that they would be adverse  
14 to consenting as the other three have already done.

15 MR. NUTTER: Are there further questions of Mr.  
16 Burchell? He may be excused.

17 (THEREUPON, the witness was excused.)

18 MR. NUTTER: Do you have anything further, Mr.  
19 Beck?

20 MR. BECK: No, I don't.

21 MR. NUTTER: Does anyone have anything they wish  
22 to offer in Case 5573? We will take the Case under advise-  
23 ment.


24

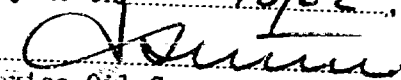
25



REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a court reporter, do hereby  
 certify that the foregoing and attached Transcript of Hearing  
 before the New Mexico Oil Conservation Commission was reported  
 by me, and the same is a true and correct record of the said  
 proceedings to the best of my knowledge, skill and ability.

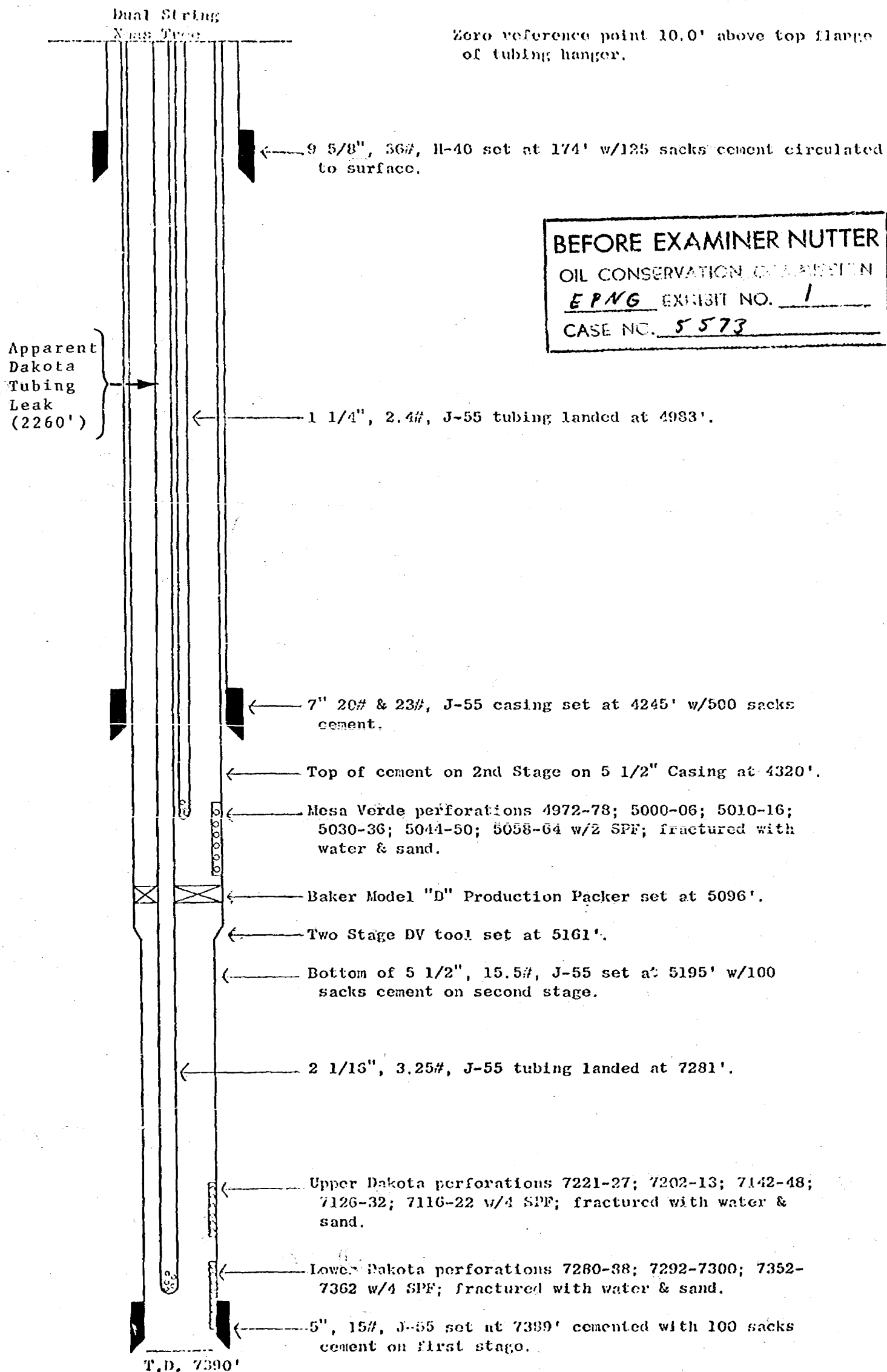
  
 Sidney F. Morrish, Court Reporter

I do hereby certify that the foregoing is  
 a complete record of the proceedings in  
 the Examiner hearing of Case No. 5573  
 heard by me on 10/22, 1975  
  
 Examiner  
 New Mexico Oil Conservation Commission

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

EXHIBIT No. 1

SCHEMATIC DIAGRAM OF DUALY COMPLETED  
El Paso Natural Gas Co. Mudge No. 11 (BD)  
Section 10, T-31-N, R-11-W



BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
EPNG EXHIBIT NO. 1  
CASE NO. 5573

**El Paso** NATURAL GAS  
COMPANY

*file - Case 5573*

P.O. BOX 1492  
EL PASO, TEXAS 79978  
PHONE: 915-513-2600

Office of General Counsel

December 4, 1975



Thomas W. Derryberry, Esq.  
Assistant Attorney General  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

Re: Case No. 5573 in the Matter of Application  
of El Paso Natural Gas Company for Downhole  
Commingling, San Juan County, San Juan,  
New Mexico

Dear Tom:

We have finally received from Crown Central Petroleum Corporation a letter of consent to the allocation proposed in the referenced case, and I am enclosing a copy of it for your information. As I earlier indicated to you, Crown had previously furnished us an initialled copy but I had wanted to receive the fully-executed copy before informing you officially that Crown's consent had been given. The other three overriding royalty interest owners, General American Oil Company, Republic National Bank (for W. J. Carey), and Frank Schultz, have previously given their consent by execution of letters identical to the one enclosed.

If I may be of further assistance to you in this matter, please let me know.

Very truly yours,

A handwritten signature in dark ink, appearing to be "Neil J. Beck".

Neil J. Beck  
Senior Counsel

NJB:1a

Enclosure

**El Paso** NATURAL GAS  
COMPANY

RECEIVED  
DEC 3 1975

OIL CONSERVATION COMMISSION

P.O. BOX 1432  
EL PASO, TEXAS 79973  
PHONE: 915-543-2400

October 7, 1975

RECEIVED  
OCT 29 1975

CROWN CENTRAL PET. CORP.  
Midland Office

General American Oil Company  
Meadows Building  
Dallas, Texas 75206

Crown Central Petroleum Corporation  
ATTN: Mr. I. O. Halbert, III  
Suite 1002, Wilco Building  
Midland, Texas 79701

Republic National Bank of Dallas for Account of  
William J. Carey - Account No. 006-325-8  
P. O. Box 2823  
Dallas, Texas 75221

Frank A. Schultz  
730 Fidelity Union Tower Building  
Akard Street and Pacific Avenue  
Dallas, Texas 75201

Re: Mudge #11 Well (MV-DK)  
SW/4 Section 10, T-31-N,  
R-11-W, San Juan County,  
New Mexico

Gentlemen:

The 1975 Annual Packer Leakage Test indicated communication between producing zones in the subject dually completed well in which you own an overriding royalty. The New Mexico Oil Conservation Commission directed on August 14, 1975 that immediate action be taken to separate the zones. Results from a temperature survey located a definite tubing leak at approximately 2260'.

The well is producing at a rate of about 300 MCF/D with 80 MCF/D from the Dakota and 220 MCF/D from the Mesaverde. Over the past year and a half, the Mesaverde has averaged 244 MCF/D and the Dakota 95 MCF/D, with the Mesaverde averaging less than a barrel of liquid a day.

Hudge #11 Well (MV) ( )  
October 7, 1975  
Page Two

The estimated cost to perform the remedial work is \$11,530. Rather than repair the leak, El Paso as owner of 100% of the working interest would like to make application for down hole commingling. It is felt that commingling would not result in a loss of production and would save the cost of repairing the well. Based on the stable production history, it is El Paso's recommendation that the gas allocation would be 72% to the Mesaverde and 28% to the Dakota for overriding royalty purposes.

Attached for your information is our pertinent data sheet on the well.

If you agree with our proposal to apply for permission to commingle production from the well and allocate said production 72% to the Mesaverde and 28% to the Dakota, please evidence your approval thereto by signing and returning to this office, one copy of this letter. Your prompt reply will be appreciated.

Yours very truly,

*Don Wadsworth*

Don Wadsworth  
Landman  
Land Department  
Energy Resource Development

DW:nm  
Attachment  
NM-1071

AGREED TO AND ACCEPTED

this 24 day of October, 1975.

BY: N.E. Norris

*Mgr. Drilling and Production*  
*Conoco Petroleum Corporation*

*El Paso Natural Gas Company*

*El Paso, Texas* 79978

October 29, 1975

OCT 31 1975

CONSERVATION COMM.  
Santa Fe

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

Attention: Mr. Dan Nutter

Re: Mudge No. 11 Well  
Unit M, Sec. 10, T31N, R11W  
San Juan County, New Mexico

Dear Mr. Nutter:

In accordance with our conversation of October 27, 1975, enclosed please find a copy of the agreement with Crown Central Petroleum Corporation. All of the divided overriding royalty owners have signed said agreement whereby the gas allocation would be 72% to the Mesaverde Pool and 28% to the Dakota Pool should the NMOCC approve the commingling application in Case No. 5573.

If any further information is needed, please do not hesitate to contact.

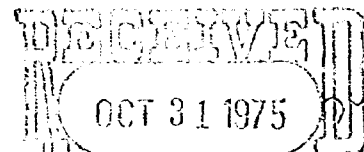
Very truly yours,

*Paul W. Burchell*

Paul W. Burchell

PWB:eh  
Encl.

**El Paso** NATURAL GAS  
COMPANY



OIL CONSERVATION COMM.

Santa Fe  
P.O. BOX 1392  
EL PASO, TEXAS 79978  
PHONE: 915-543-2633

October 7, 1975

General American Oil Company  
Meadows Building  
Dallas, Texas 75206

Crown Central Petroleum Corporation  
ATTN: Mr. I. O. Halbert, III  
Suite 1002, Wilco Building  
Midland, Texas 79701

Republic National Bank of Dallas for Account of  
William J. Carey - Account No. 006-325-8  
P. O. Box 2823  
Dallas, Texas 75221

Frank A. Schultz  
730 Fidelity Union Tower Building  
Akard Street and Pacific Avenue  
Dallas, Texas 75201

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SW/4 Section 10, T-31-N,  
R-11-W, San Juan County,  
New Mexico

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Mudge #11 Well (MV-DK)  
October 7, 1975  
Page Two

The estimated cost to perform the remedial work is \$11,530. Rather than repair the leak, El Paso as owner of 100% of the working interest would like to make application for down hole commingling. It is felt that commingling would not result in a loss of production and would save the cost of repairing the well. Based on the stable production history, it is El Paso's recommendation that the gas allocation would be 72% to the Mesaverde and 28% to the Dakota for overriding royalty purposes.

Attached for your information is our pertinent data sheet on the well.

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Yours very truly,



Don Wadsworth  
Landman  
Land Department  
Energy Resource Development

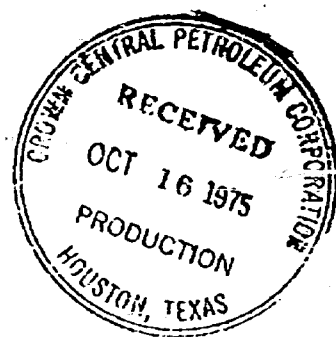
DW:nm  
Attachment  
NM-1071

AGREED TO AND ACCEPTED

this 21 day of October, 1975.

BY: UCW  
Crown Central Petroleum Corporation





Docket No. 26-75

Dockets Nos. 28-75 and 29-75 are tentatively set for hearing on November 9 and November 19, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 22, 1975

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

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

CASE 5572: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Blinebry and Drinkard production in the wellbore of its H. T. Mattern Wells Nos. 4 and 8, and its Harry Leonard Well No. 17, located, respectively, in Unit B of Section 1, Township 22 South, Range 36 East, Unit E of Section 6, Township 22 South, Range 37 East, and Unit C of Section 36, Township 21 South, Range 36 East, all in Lea County, New Mexico.

CASE 5573: Application of El Paso Natural Gas Company for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Blanco-Mesa-verde and Basin-Dakota production in the wellbore of its Mudge Well No. 11, located in Unit M of Section 10, Township 31 North, Range 11 West, San Juan County, New Mexico.

CASE 5574: Application of Filon Exploration Corporation for pool creation, assignment of a discovery allowable, and special pool rules, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Entrada formation for its Federal 12 Well No. 1 located in Unit M of Section 12, Township 19 North, Range 4 West, Sandoval County, New Mexico, and the assignment of a discovery allowable to said well; applicant further seeks the promulgation of special pool rules for said pool, including a provision for a special depth bracket allowable.

CASE 5575: Application of Morris R. Antweil 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 E/2 of Section 20, Township 22 South, Range 27 East, South Carlsbad Field, Eddy County, New Mexico, to be dedicated to a well to be drilled 2030 feet from the North line and 1980 feet from the East line of said Section 20. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

Examiner Hearing - Wednesday - October 22, 1975

Docket No. 26-75

-2-

CASE 5576: Application of George D. Riggs for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Saladar-Yates Pool by the injection of water through his Hughes-Federal No. 4, Malco Well No. 2, and Mayfield-Federal No. 4 Wells located, respectively, in Units F, I, and O of Section 33, Township 20 South, Range 28 East, Eddy County, New Mexico.

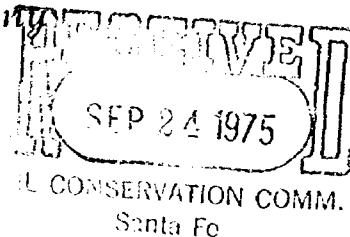
CASE 5577: Application of Atlantic Richfield Company for amendment of Order No. R-4549, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4549, as amended, which order approved the institution of the Empire-Abo Pressure Maintenance Project in the Empire-Abo Unit Area, Eddy County, New Mexico, and established rules for the operation of said project. Applicant seeks the amendment of said rules to permit the injection of non-Abo gas and to establish a separate non-Abo gas bank for said project.

Case 5573

El Paso Natural Gas Company

El Paso, Texas 79978

September 17, 1975



The New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Gentlemen:

El Paso Natural Gas Company respectfully requests a hearing be set before the Commission or its designated examiner at your convenience. El Paso seeks approval to downhole commingle gas from the Basin Dakota Pool with gas from the Blanco Mesaverde in its Mudge No. 11 well. El Paso's Mudge No. 11 well is located in the SW/4 Section 10, T-31-N, R-11-W, San Juan County, New Mexico.

*m*

Very truly yours,

*E. R. Manning*  
E. R. Manning  
Chief Proration Engineer

ERM:eh

DOCKET MAILED

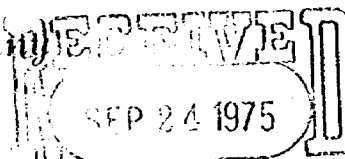
Date 10/14/75

Case 5573

El Paso Natural Gas Company

El Paso, Texas 79978

September 17, 1975



OIL CONSERVATION COMM.  
Santa Fe

The New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Gentlemen:

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Very truly yours,

*E. R. Manning*  
E. R. Manning  
Chief Proration Engineer

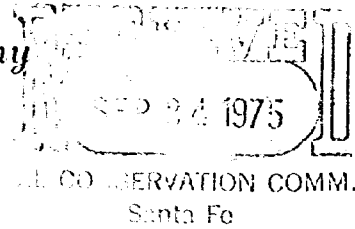
ERM:eh

Case 5573

El Paso Natural Gas Company

El Paso, Texas 79978

September 17, 1975



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P. O. Box 2088  
Santa Fe, New Mexico 87501

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Very truly yours,

*E. R. Manning*  
E. R. Manning  
Chief Proration Engineer

ERM:eh