

CASE #062: EL PASO NATURAL GAS COMPANY 0  
FOR DOWNHOLE COMMINGLING, LEA COUNTY, 0.  
NEW MEXICO

CASE NO.

7062

APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,

ETC.



BRUCE KING  
GOVERNOR

LARRY KEHOE  
SECRETARY

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

November 26, 1980

POST OFFICE BOX 2000  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-8434

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

Re: CASE NO. 7062  
ORDER NO. R-6527

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   

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. 7062  
Order No. R-6527

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 29, 1980,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 25th day of November, 1980, the Division  
Director, having considered the testimony, the record, and the  
recommendations of the Examiner, and being fully advised in the  
premises,

FINDS:

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

(2) That the applicant, El Paso Natural Gas Company, is  
the owner and operator of the Carlson Federal Well No. 2, located  
in Unit N of Section 23, Township 23 South, Range 37 East, NMPN,  
Lea County, New Mexico.

(3) That the applicant seeks authority to commingle Jalnet  
and Langlie-Mattix production within the wellbore of the above-  
described well.

(4) That the vertical limits of the Jalnet Pool as defined  
by Order No. R-520, dated August 12, 1954, include the Fencill  
and Yates formations and all but the lowermost 100 feet of the  
Seven Rivers formation.

(5) That the vertical limits of the Langlie-Mattix Pool,  
as defined by said Order No. R-520, include the lowermost 100  
feet of the Seven Rivers formation and all of the Queen formation.

-2-

Case No. 7062  
Order No. R-6527

(6) That there has been some disparity among some geologists as to the actual base of the Seven Rivers formation and the top of the Queen formation and hence as to the location of the 100-foot marker separating the Jalmat and Langlie-Mattix Pools.

(7) That as a result of this disparity, the subject well and certain other wells in the general area which are classified as Jalmat wells have perforations extending across the aforesaid 100-foot marker in the Seven Rivers formation into the upper portion of the Langlie-Mattix Pool.

(8) That such crossing over from one pool into the other in this case appears to be an unintentional error.

(9) That to rectify the aforesaid error would require workover operations on the subject well which would be expensive and might endanger the productivity of the subject well, and would actually serve no beneficial purpose, inasmuch as the production and reservoir characteristics of the perforations immediately above and below the 100-foot marker are quite similar.

(10) That a reasonable solution to the problem in this case is to authorize the commingling of Jalmat production with the production from the upper portion of the Langlie-Mattix Pool in the subject well.

(11) That such commingling will prevent waste and should not impair correlative rights and should be approved.

(12) That in order to allocate the commingled production to each of the commingled zones in the subject well, 86 percent of the commingled production should be allocated to the Jalmat zone, and 14 percent of the commingled production to the Langlie-Mattix zone.

**IT IS THEREFORE ORDERED:**

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Jalmat and Upper Langlie-Mattix production within the wellbore of the Carlson Federal Well No. 2, located in Unit N of Section 23, Township 23 South, Range 37 East, NMPH, Lea County, New Mexico.

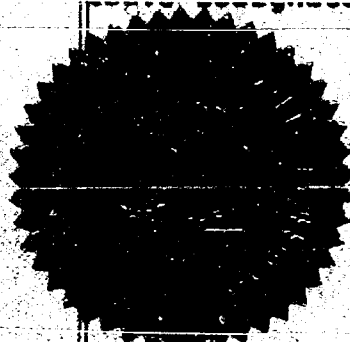
(2) That 86 percent of the commingled production shall be allocated to the Jalmat zone and 14 percent of the commingled production shall be allocated to the Langlie-Mattix zone.

-3-  
Case No. 7062  
Order No. R-6527

(3) That the effective date of the aforesaid commingling authority shall be the date the Carlson Federal Well No. 2 was perforated between 2948 feet and 3174 feet.

(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 herein-  
above designated.



SEAL

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

*Joe D. Ramey*  
JOE D. RAMEY  
Director

rd/

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

1

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

EXAMINER HEARING

-----

IN THE MATTER OF:

Application of El Paso Natural Gas  
Company for downhole commingling, Lea ) CASE  
County, New Mexico. ) 7062

-----

BEFORE: Daniel S. Nutter

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  
El Paso, Texas

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

2  
3  
9

I N D E X

PAUL W. BURCHELL

Direct Examination by Mr. Burleson

Cross Examination by Mr. Nutter

MR. NUTTER: Call Case Number 7062.

MR. PEARCE: Application of El Paso Natural Gas Company for downhole commingling, Lea County, New Mexico.

MR. BURLESON: David T. Burleson, in association with the law firm of Montgomery and Andrews.

(Witness sworn.)

PAUL W. BURCHELL

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

DIRECT EXAMINATION

BY MR. BURLESON:

Q Will you please state your name and where you reside?

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

Q By whom are you employed and in what capacity?

A I am employed by the El Paso Natural Gas Company and in the capacity of Senior Proration Engineer.

Q As a proration engineer have you pre-

1  
2 viously testified before this Division or one of its examiners.

3 A Yes, I have.

4 Q And your qualifications were accepted  
5 by the Division at those times?  
6

7 A Yes, they were.

8 Q Are you familiar with the application  
9 in this case?

10 A Yes, I am.

11 MR. BURLESON: Are the witness' quali-  
12 fications acceptable to the Division?

13 MR. NUTTER: Yes, they are.

14 Q Mr. Burchell, who is the operator of  
15 the well which is the subject of this case?  
16

17 A El Paso Natural Gas is the operator.

18 Q What is El Paso seeking in this case?

19 A El Paso is seeking to downhole commingle  
20 production of the Jalmat Gas Pool with production from the  
21 Langlie Mattix Pool and produce this gas through one meter  
22 in its Carlson Federal No. 2 Well.  
23

24 This well is located in Unit N of Section  
25 23, Township 25 South, Range 37 East, Lea County, New Mexico.

26 This well presently produces from both  
27 these formations as a single completion. El Paso proposes  
28 that the allocation of gas and fluid to each of these forma-

1  
2 tions, and it will be explained to you in such a manner later  
3 on in my testimony.

4 Q How long has this well been producing  
5 from what is now found to be two separate formations?  
6

7 A This well was originally perforated, I  
8 believe, back around 1954 or 55, in a gross interval in 2350  
9 feet to 2406 feet, which was entirely in the Jalmat Gas Pool.

10 Then, in 1976 El Paso Natural Gas re-  
11 worked the well and additional perforations were made from  
12 a gross interval of 3098 feet to 3174 feet, which overlapped  
13 into the Langlie Mattix Pool.

14 Therefore, this well has been producing  
15 commingled gas and liquids from both of these pools since  
16 1976.  
17

18 MR. NUTTER: Do you have exhibits which  
19 show these perforation intervals, and so forth, Mr. Burchell?

20 A No, I did not prepare an exhibit.

21 MR. NUTTER: Okay, I'm going to have to  
22 take some notes, then.  
23

24 A Okay.

25 MR. NUTTER: You'll have to repeat some  
26 of that. You don't have to take all of this, Sally.

27 (Thereupon the following  
28 was off the record.)

MR. NUTTER: Back on the record.

A Then, of course, the New Mexico Oil Conservation Division recently reviewed the wells in these pools and found approximately fifty wells crossing the vertical pool boundaries, and the Carlson Federal No. 2, of course, was one of them.

Q Mr. Burchell, would you want to deal with the Examiner's question with respect to the producing characteristics of both zones prior to the time that the well was reworked at this time?

A I think when we get to the question of discussing production here, then I can go into that.

Q Okay. Why is El Paso asking for this permission to continue to downhole commingle?

A Downhole commingling is considered by El Paso the most economic and conservative method to undertake due to the very low productivity of both zones and due to the high cost of dualing the well.

Q How much would you estimate it would cost to re-enter the well and to complete it as a dual well?

A It would cost approximately \$35,465, and this would include a necessary pump and associated equipment.

Q What are the producing characteristics

1  
2 of the -- of this well at the present time?

3 A At the present time, Mr. Examiner, let's  
4 say as of September, 1980, the combined production from the  
5 well from both zones was 20 Mcf per day and it's making about  
6 1/2 barrel of oil per day and around 2 barrels of water per  
7 day.  
8

9 The well averaged for the year of 1980  
10 up to September, it was averaging around 27 Mcf per day, and  
11 it is classified as marginal.

12 On July the 15th, 1980, the well was  
13 approved as a stripper well by the USGS for NGPA purposes.  
14

15 Now, to go back to the -- to the time  
16 when the workover was completed, if my memory is correct, I  
17 think the well was making somewhere around 60 Mcf of gas per  
18 day from the upper set of perfs and there was no surface separ-  
19 ation for fluids, so I cannot tell you what the well was making  
20 in oil or water prior to the workover.  
21

22 Then after the workover the well was  
23 making something slightly increased, around 80 Mcf of gas per  
24 day, and it's been decreasing down to the present time of 20.

25 Q Mr. Burchell, what advantage would there  
26 be in continuing to commingle the well in both zones?

27 A Well, really, there are three main ad-  
28 vantages with this well.

1  
2 First, it is believed by commingling  
3 the small volume of gas, neither formation would have to be  
4 prematurely abandoned. Based upon the extrapolation of State  
5 tests, it is estimated that the Jalmat has around 219.7 million  
6 cubic feet of remaining gas reserves, and the Langlie Mattix  
7 has about 35.1 million cubic feet, and both of these figures  
8 are based on a January 1, 1980, date.  
9

10 It is believed that these reserves can  
11 be recovered through commingling.

12 Now the second advantage, of course, is  
13 saving the \$35,000+ by not dually completing the existing  
14 wells, and besides the better economics, the third advantage  
15 would be the efficiency in production whereby a large volume  
16 of gas is -- a larger volume of gas will be available to  
17 help lift the liquids.  
18

19 Q If Division approval is granted, do  
20 you propose a formula by which the gas and liquid production  
21 can be apportioned as between the two pools?  
22

23 A Yes. What I would like to do is base  
24 it on my prior testimony related to the remaining reserves  
25 in each pool.

26 It is recommended that 86 percent of  
27 the well's gas and liquid production be attributed to the  
28 Jalmat Pool, and 14 percent to the Langlie Mattix Pool.

1  
2 Q Mr. Burchell, is the nature of owner-  
3 ship common as between the two zones which would be commingled?

4 A Yes, they are.

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

8 A Yes, it would.

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

11 A No, I do not.

12 MR. BURLESON: Mr. Examiner, this com-  
13 pletes our direct examination.  
14

15 CROSS EXAMINATION

16 BY MR. NUTTER:

17 Q Mr. Burchell, how did you calculate the  
18 219 million cubic feet of remaining reserves in the Jalmat  
19 and 35.1 million in the Langlie Mattix?  
20

21 A The -- it is on the extrapolation of  
22 all the State tests prior to the workover, gave me the first  
23 figure, and then the -- after the well was completed it in-  
24 creased from 219 to 254-something, so the difference I attri-  
25 buted to the lower perforations.  
26

27 Q Now you said before the workover it  
28 apparently wasn't making any liquids because you didn't have

1  
2 any surface --

3 A Right.

4 Q -- separation facilities out there.

5 A Right.

6 Q When were those surface separation  
7 facilities installed, then?

8 A Apparently right after it was worked  
9 over.  
10

11 Q So you got down into the Langlie Mattix  
12 and started making oil, then.

13 A Yes, and whether it made oil and water  
14 prior to that, I just can't answer that.

15 Q Well, if the -- I think the answer it-  
16 self is obvious, it didn't, or you'd have had surface separa-  
17 tion facilities, wouldn't you?  
18

19 A Yes, if it was a lot, yes.

20 Q Almost any you'd have to separate it  
21 out. What kind of a gas pipeline did it go into?

22 A I'm not sure about that, Mr. Examiner.

23 Q You don't know how much liquid it made,  
24 though, on recompletion?  
25

26 A It was more than a half barrel a day  
27 at first.

28 Q Do you know what the cumulative liquid

1  
2 production or hydrocarbon production has been from the well?

3 A. Let's see, I think I did have that down  
4 somewhere. On, yes, as of January the 1st, 1980, the oil had  
5 a cumulative production of 2185 barrels, and for the year of  
6 1979 it made 68 barrels of oil and 720 barrels of water.  
7

8 Q. So its cumulative oil is only 200 bar-  
9 rels and presumably that would have all been made since the  
10 new perforations were opened in 1976.

11 A. Yes, sir. Yes, that is from 1976.

12 Q. So I suppose it would be reasonable on  
13 the allocation, if your figures are correct of 86 percent of  
14 the gas to the Jalmat and 14 percent to the Langlie Mattix,  
15 to attribute all of the liquid production to the Langlie  
16 Mattix.  
17

18 A. It would seem to be most reasonable.

19 MR. NUTTER: Are there any other ques-  
20 tions of Mr. Burchell? He may be excused.

21 Do you have anything further, Mr. Burle-  
22 son?

23 MR. BURLESON: No, sir.

24 MR. NUTTER: Does anyone have anything  
25 they wish to offer in Case Number 7062?  
26

27 We'll take the case under advisement.

28 (Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that  
the foregoing Transcript of Hearing before the Oil Conserva-  
tion 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 C.S.R.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 455-7409

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 7042  
heard by me on 10/29 1960.  
[Signature], Examiner,  
Oil Conservation Division

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

EXAMINER HEARING

IN THE MATTER OF:

Application of El Paso Natural Gas  
Company for downhole commingling, Lea ) CASE  
County, New Mexico. ) 1004

BEFORE: Daniel S. Nutter

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  
El Paso, Texas

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

2

I N D E X

PAUL W. BURCHELL

Direct Examination by Mr. Burleson

3

Cross Examination by Mr. Nutter

9

MR. NUTTER: Call Case Number 7062.

MR. PEARCE: Application of El Paso  
Natural Gas Company for downhole commingling, Lea County, New  
Mexico.

MR. BURLESON: David T. Burleson, in  
association with the law firm of Montgomery and Andrews.

(Witness sworn.)

PAUL W. BURCHELL

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

DIRECT EXAMINATION

BY MR. BURLESON:

Q Will you please state your name and  
where you reside?

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

Q By whom are you employed and in what  
capacity?

A I am employed by the El Paso Natural  
Gas Company and in the capacity of Senior Proration Engineer.

Q As a proration engineer have you pre-

1  
2 viously testified before this Division or one of its Examiners?

3 A Yes, I have.

4 Q And your qualifications were accepted  
5 by the Division at those times?  
6

7 A Yes, they were.

8 Q Are you familiar with the application  
9 in this case?

10 A Yes, I am.

11 MR. BURLESON: Are the witness' quali-  
12 fications acceptable to the Division?  
13

14 MR. NUTTER: Yes, they are.

15 Q Mr. Burchell, who is the operator of  
16 the well which is the subject of this case?

17 A El Paso Natural Gas is the operator.

18 Q What is El Paso seeking in this case?

19 A El Paso is seeking to downhole commingling  
20 production of the Jalmat Gas Pool with production from the  
21 Langlie Mattix Pool and produce this gas through one meter  
22 in its Carlson Federal No. 2 Well.

23 This well is located in Unit N of Section  
24 23, Township 25 South, Range 37 East, Lea County, New Mexico.

25 This well presently produces from both  
26 these formations as a single completion. El Paso proposes  
27 that the allocation of gas and fluid to each of these forma-  
28

tions, and it will be explained to you in such a manner later on in my testimony.

Q How long has this well been producing from what is now found to be two separate formations?

A This well was originally perforated, I believe, back around 1954 or 55, in a gross interval in 2350 feet to 2406 feet, which was entirely in the Jalmat Gas Pool.

Then, in 1976 El Paso Natural Gas reworked the well and additional perforations were made from a gross interval of 3098 feet to 3174 feet, which overlapped into the Langlie Mattix Pool.

Therefor, this well has been producing commingled gas and liquids from both of these pools since 1976.

MR. NUTTER: Do you have exhibits which show these perforation intervals, and so forth, Mr. Burchell?

A No, I did not prepare an exhibit.

MR. NUTTER: Okay, I'm going to have to take some notes, then.

A Okay.

MR. NUTTER: You'll have to repeat some of that. You don't have to take all of this, Sally.

(Thereupon the following was off the record.)

MR. NUTTER: Back on the record.

A. Then, of course, the New Mexico Oil Conservation Division recently reviewed the wells in these pools and found approximately fifty wells crossing the vertical pool boundaries, and the Carlson Federal No. 2, of course, was one of them.

Q Mr. Burchell, would you want to deal with the Examiner's question with respect to the producing characteristics of both zones prior to the time that the well was reworked at this time?

A I think when we get to the question of discussing production here, then I can go into that.

Q Okay. Why is El Paso asking for this permission to continue to downhole commingle?

A Downhole commingling is considered by El Paso the most economic and conservative method to undertake, due to the very low productivity of both zones and due to the high cost of dualing the well.

Q How much would you estimate it would cost to re-enter the well and to complete it as a dual well?

A It would cost approximately \$35,465, and this would include a necessary pump and associated equipment.

Q What are the producing characteristics

1  
2 of the -- of this well at the present time?

3 A At the present time, Mr. Examiner, let's  
4 say as of September, 1980, the combined production from the  
5 well from both zones was 20 Mcf per day and it's making about  
6 1/2 barrel of oil per day and around 2 barrels of water per  
7 day.  
8

9 The well averaged for the year of 1980  
10 up to September, it was averaging around 27 Mcf per day, and  
11 it is classified as marginal.

12 On July the 15th, 1980, the well was  
13 approved as a stripper well by the USGS for NGPA purposes.

14 Now, to go back to the -- to the time  
15 when the workover was completed, if my memory is correct, I  
16 think the well was making somewhere around 60 Mcf of gas per  
17 day from the upper set of perfs and there was no surface separ-  
18 ation for fluids, so I cannot tell you what the well was making  
19 in oil or water prior to the workover.  
20

21 Then after the workover the well was  
22 making something slightly increased, around 80 Mcf of gas per  
23 day, and it's been decreasing down to the present time of 20.  
24

25 Q Mr. Burchell, what advantage would there  
26 be in continuing to commingle the well in both zones?

27 A Well, really, there are three main ad-  
28 vantages with this well.

1  
2 First, it is believed by commingling  
3 the small volume of gas, neither formation would have to be  
4 prematurely abandoned. Based upon the extrapolation of Stato  
5 tests, it is estimated that the Jalmat has around 219.7 million  
6 cubic feet of remaining gas reserves, and the Langlie Mattix  
7 has about 35.1 million cubic feet, and both of these figures  
8 are based on a January 1, 1980, date.  
9

10 It is believed that these reserves can  
11 be recovered through commingling.

12 Now the second advantage, of course, is  
13 saving the \$35,000+ by not dually completing the existing  
14 wells, and besides the better economics, the third advantage  
15 would be the efficiency in production whereby a large volume  
16 of gas is -- a larger volume of gas will be available to  
17 help lift the liquids.  
18

19 Q If Division approval is granted, do  
20 you propose a formula by which the gas and liquid production  
21 can be apportioned as between the two pools?  
22

23 A Yes. What I would like to do is base  
24 it on my prior testimony related to the remaining reserves  
25 in each pool.

26 It is recommended that 86 percent of  
27 the well's gas and liquid production be attributed to the  
28 Jalmat Pool, and 14 percent to the Langlie Mattix Pool.

Q Mr. Burchell, is the nature of ownership common as between the two zones which would be commingled?

A Yes, they are.

Q In your opinion would the granting of 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.

MR. BURLESON: Mr. Examiner, this completes our direct examination.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Burchell, how did you calculate the 219 million cubic feet of remaining reserves in the Jalmat and 35.1 million in the Langlie Mattix?

A The -- it is on the extrapolation of all the State tests prior to the workover, gave me the first figure, and then the -- after the well was completed it increased from 219 to 254-something, so the difference I attributed to the lower perforations.

Q Now you said before the workover it apparently wasn't making any liquids because you didn't have

1  
2 any surface --

3 A Right.

4 Q -- separation facilities out there.

5 A Right.

6 Q When were those surface separation  
7 facilities installed, then?

8 A Apparently right after it was worked  
9 over.

10 Q So you got down into the Langlie Mattix  
11 and started making oil, then.

12 A Yes, and whether it made oil and water  
13 prior to that, I just can't answer that.

14 Q Well, if the -- I think the answer it-  
15 self is obvious, it didn't, or you'd have had surface separa-  
16 tion facilities, wouldn't you?

17 A Yes, if it was a lot, yes.

18 Q Almost any you'd have to separate it  
19 out. What kind of a gas pipeline did it go into?

20 A I'm not sure about that, Mr. Examiner.

21 Q You don't know how much liquid it made,  
22 though, on recompletion?

23 A It was more than a half barrel a day  
24 at first.

25 Q Do you know what the cumulative liquid

production or hydrocarbon production has been from the well?

A. Let's see, I think I did have that down somewhere. Oh, yes, as of January the 1st, 1980, the oil had a cumulative production of 2185 barrels, and for the year of 1979 it made 68 barrels of oil and 720 barrels of water.

Q. So its cumulative oil is only 200 barrels and presumably that would have all been made since the new perforations were opened in 1976.

A. Yes, sir. Yes, that is from 1976.

Q. So I suppose it would be reasonable on the allocation, if your figures are correct of 86 percent of the gas to the Jalmat and 14 percent to the Langlie Mattix, to attribute all of the liquid production to the Langlie Mattix.

A. It would seem to be most reasonable.

MR. NUTTER: Are there any other questions of Mr. Burchnell? He may be excused.

Do you have anything further, Mr. Burleson?

MR. BURLESON: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 7062?

We'll take the case under advisement.

(Hearing concluded.)

## C E R T I F I C A T E

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

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B  
Santa Fe, New Mexico 87501  
Phone (505) 435-7409

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7062 heard by me on 10/29 1980.

[Signature] Examiner  
Oil Conservation Division

EP Carlson Feb #2

1954 Orig 2350 to 2406' galveston only  
pori boundary

'76 new perms 3098' to 3174' into Langhite  
mattis

cost 35 Y65 to dually comp

current 20 MCF/day  $\rightarrow$  BOPD  $\rightarrow$  BOPD

1980 20 MCF/day

fully approved as NGPA stripper

60 MCF/day from upper perms prior to  
workover - no surf sep facilities

made about 80 after W.O.

Decreased down to present 20

not remaining  
reserves: 219 MM remaining gas galveston  
351 MM left Langhite mattis

suggested flr for allocation  
based on remaining reserves  
86% to galveston  
14% to Langhite mattis

as of 1-1-80 cum oil 2,185 barrels  
gr 79: 68 barrels 220 bbls oil

alloc all hydrocarbon liquids to oil

J. O. SETH (1883-1983)

A. K. MONTGOMERY  
FRANK ANDREWS  
SETH D. MONTGOMERY  
FRANK ANDREWS III  
OWEN M. LOPEZ  
VICTOR R. ORTEGA  
JOHN D. SUNDY  
JEFFREY R. BRENNAN  
JOHN D. FOUNO  
GARY R. KILPATRICK  
THOMAS W. OLSON  
WALTER G. MCLENDRES  
BRUCE L. HERR  
MICHAEL W. BRENNAN  
ROBERT R. WORCESTER  
JOHN B. DRAPER  
NANCY M. ANDERSON  
RUDOLPH B. SACKS, JR.  
W. CLINT PARSLEY  
JANET MCL. MCKAY  
EDWARD F. MITCHELL III

# MONTGOMERY & ANDREWS

PROFESSIONAL ASSOCIATION  
ATTORNEYS AND COUNSELORS AT LAW

325 PASEO DE PERALTA

POST OFFICE BOX 2307

SANTA FE, NEW MEXICO 87501

TELEPHONE 505-982-3673

TELECOPY 505-982-4289

ALBUQUERQUE OFFICE

SUITE 916

BANK OF NEW MEXICO BUILDING

4TH AND GOLD AVENUE, S.W.

POST OFFICE BOX 1396

ALBUQUERQUE, NEW MEXICO 87102

TELEPHONE 505-243-3733

October 28, 1980

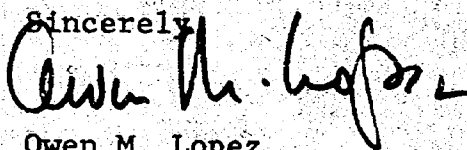
New Mexico Energy and  
Minerals Department  
Oil Conservation Division  
Land Office Building  
Santa Fe, New Mexico 87503

Re: NMOCD Case No. 7062 - Application of El Paso  
Natural Gas Company for Downhole Commingling,  
Lea County, New Mexico

Gentlemen:

Please be advised that David T. Burleson of the office  
of General Counsel of El Paso Natural Gas Company, El Paso,  
Texas, is associated with our firm for the presentation of  
evidence and argument in the above-referenced case.

Sincerely,



Owen M. Lopez

OML:to

Dockets Nos. 36-80 and 37-80 are tentatively set for November 12 and 25, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

**DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 29, 1980**

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

The following cases will be heard before Daniel N. Murray, Examiner, or Richard L. Seabate, Alternate Examiner:

**CASE 7055:** (This case will be continued to the November 25 hearing.)

Application of Union Oil Company of California for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Eaves-Lea Unit Area, comprising 2209 acres, more or less, of State and Federal lands in Township 21 South, Ranges 32 and 33 East.

**CASE 7056:** Application of Getty Oil Company for the extension of vertical limits of the Langlie Mattix Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the vertical limits of the Jalmat Pool and the upward extension of the vertical limits of the Langlie Mattix Pool to a depth of 3540 feet, subsurface, under the NW/4 SW/4 of Section 3, Township 24 South, Range 36 East.

**CASE 7057:** Application of Doyle Hartman for the extension of vertical limits of the Langlie Mattix Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the vertical limits of the Jalmat Pool and the upward extension of the vertical limits of the Langlie Mattix Pool to the following depths underlying the following 40-acre tracts in Township 24 South, Range 37 East: SE/4 SE/4 of Section 30: 3364 feet; NE/4 SE/4 of Section 30: 3389 feet; and SE/4 SW/4 of Section 20: 3390 feet.

**CASE 7058:** Application of Union Oil & Gas Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat and Langlie Mattix production in the wellbores of its Harrison Wells Nos. 1 and 2 located in Units A and H, respectively, and its Judy Well No. 1 located in Unit C, all in Section 7, Township 25 South, Range 37 East.

**CASE 7059:** Application of Gulf Oil Corporation for the extension of vertical limits of the Langlie Mattix Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the vertical limits of the Jalmat Pool and the upward extension of the vertical limits of the Langlie Mattix Pool to a depth of 3406 feet under the W/2 SW/4 of Section 30, Township 24 South, Range 37 East.

**CASE 7060:** Application of Mobil Producing Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat and Langlie Mattix production in the wellbores of its Humphrey Queen Unit Wells Nos. 13 in Unit I of Section 4 and 16 in Unit K of Section 3 and its Langlie Mattix Queen Unit Well No. 10 in Unit C of Section 15, all in Township 25 South, Range 37 East.

**CASE 7061:** Application of Bettis, Boyle & Stovall for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat and Langlie Mattix production in the wellbore of its Justis B Well No. 8 located in Unit G of Section 20, Township 25 South, Range 37 East.

**CASE 7062:** Application of El Paso Natural Gas Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat and Langlie Mattix production in the wellbore of its Carlson Federal Well No. 2 located in Unit N of Section 23, Township 25 South, Range 37 East.

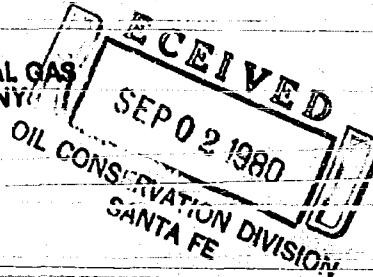
**CASE 7063:** Application of Lewis Burleson for the extension of vertical limits of the Langlie Mattix Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the vertical limits of the Jalmat Pool and the upward extension of the vertical limits of the Langlie Mattix Pool to a depth of 3150 feet under the SE/4 NW/4 of Section 22, Township 25 South, Range 37 East.

**CASE 7041:** (Continued from October 8, 1980, Commission Hearing)

Application of John Yuronka for the extension of vertical limits of the Langlie Mattix Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the vertical limits of the Jalmat Pool and the upward extension of the vertical limits of the Langlie Mattix Pool to a depth of 3,408 feet, subsurface, under the NW/4 SW/4 of Section 17, Township 24 South, Range 37 East.

**CASE 7064:** Application of El Paso Natural Gas Company for an unorthodox location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of a previously approved 440-acre proration unit comprising the S/2, S/2 NW/4, and NW/4 NW/4 of Section 33, Township 25 South, Range 37 East, Jalmat Gas Pool, to its Gregory Fed. Well No. 1 located in Unit J and its Gregory Fed. A Well No. 2, at an unorthodox location in the center of Unit L of said Section 33.

**El Paso** NATURAL GAS  
COMPANY



P. O. BOX 1492  
EL PASO, TEXAS 79978  
PHONE: 915-543-2800

August 26, 1980

*Case 7062*

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

Gentlemen:

El Paso Natural Gas Company respectfully requests a hearing to set before the Division or its designated examiner on September 17, 1980, if possible. El Paso seeks approval to downhole commingle production from the Jalmat Gas Pool with production from the Langlie-Mattix Pool in its Carlson Federal No. 2 Well. This well is located in Unit Letter N of Section 23, T25S-R37E, Lea County, New Mexico.

Very truly yours,

*E. R. Manning*  
E. R. Manning

ERM/rv

cc: John F. Eichelmann, Jr.  
David T. Burleson  
L. G. Truby  
Carl E. Matthews  
W. D. Dawson  
D. N. Canfield  
R. H. Nordhausen  
Dayne Adams

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. 7062

Order No. R-6527

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 29  
19 80, at Santa Fe, New Mexico, before Examiner Daniel S.  
Nutter.

NOW, on this \_\_\_\_\_ day of \_\_\_\_\_, 19 80, 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 Carlson Federal Well No. 2,  
located in Unit N of Section 23, Township 25 South,  
Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to commingle  
Jalmat and Langlie Mattix production  
within the wellbore of the above-described well.

(4) That the vertical limits of the Jalmat Pool as defined by Order No. R-520, dated August 12, 1954, include the Tansill and Yates formations and all but the lowermost 100 feet of the Seven Rivers formation.

(5) That the vertical limits of the Langlie-Mattix Pool, as defined by said Order No. R-520, include the lowermost 100 feet of the Seven Rivers formation and all of the Queen formation.

(6) That there has been some disparity among some geologists <sup>actual</sup> as to the base of the Seven Rivers formation and the top of the Queen formation and hence as to the location of the 100-foot marker separating the Jalmat and Langlie Mattix pools.

(7) That as a result of this disparity, the subject well <sup>certain</sup> and other wells in the general area which are classified as ~~Jalmat~~ <sup>Langlie-Mattix</sup> wells have perforations extending across the aforesaid 100-foot marker in the Seven Rivers formation <sup>into the upper portion of the Langlie-Mattix Pool.</sup>

(8) That such crossing over from one pool into the other in this case appears to be an unintentional error.

(9) That to rectify the aforesaid error would require workover operations on the subject well, which would be expensive and might endanger the productivity of the subject well, and would actually serve no beneficial purpose, inasmuch as the production and reservoir characteristics of the perforations immediately above and below the 100-foot marker are quite similar.

(10) That a reasonable <sup>in this case is to authorize the commingling</sup> solution to the problem ~~is to adjust~~ <sup>of Jalmat production with the production from the upper portion</sup> ~~the vertical limits of the Langlie-Mattix Pool upward to~~ <sup>in the subject well.</sup> ~~accommodate the present perforations in the lower Seven Rivers formation which are actually within the present Jalmat vertical limits.~~

(11) That such <sup>commingling</sup> ~~adjustment~~ will prevent waste and should not impair correlative rights and should be approved.

(12) That in order to allocate the commingled production to each of the commingled zones in the subject well, 86 percent of the commingled            production should be allocated to the Jalmat zone, and 14 percent of the commingled            production to the Langlie Mattix zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Jalmat and Langlie Mattix production within the wellbore of the Carlson Federal Well No. 2, located in Unit N of Section 23, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

~~(2) That the applicant shall consult with the Supervisor of the Hobbs 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 86 percent of the commingled production shall be allocated to the Jalmat zone and 14 percent of the commingled production shall be allocated to the Langlie Mattix zone.

*Commencing authority*  
(2) That the effective date of the aforesaid ~~revision~~ of the vertical limits of said pools shall be the date the Carlson Federal Well No. 2 was perforated between 2948 feet and 3174 feet.

~~(3) Jurisdiction.~~  
~~Done at Santa Fe, New Mexico, on the day and year hereinabove designated.~~

~~(4) That the original of this order is retained for the purpose of reference in the event any deviation may become necessary.~~  
~~Done at Santa Fe, New Mexico, on the day and year hereinabove designated.~~