

Case Number

60004

Application

Transcripts.

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 3, 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of El Paso Natural Gas) CASE
Company for downhole commingling, Rio) 6004
Arriba County, New Mexico.)

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: Lynn Teschendorf, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant: Rand C. Schmidt, Esq.
Counsel, El Paso Natural Gas Co.
P. O. Box 1492
El Paso, Texas

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1 MR. NUTTER: Call the next Case Number 6004.

2 MS. TESCHENDORF: Case 6004 application of El Paso
3 Natural Gas Company for downhole commingling, Rio Arriba
4 County, New Mexico.

5 MR. SCHMIDT: My name is Rand C. Schmidt and I am
6 an attorney for the Office of General Counsel for El Paso
7 Natural Gas Company and for the purposes of representing El
8 Paso here today I am associated with the local Montgomery
9 law firm.

10 MR. NUTTER: We have a letter of appearance in the
11 file.

12 MR. SCHMIDT: I have one witness to be sworn in.

13 (THEREUPON, the witness was sworn.)
14

15 PAUL W. BURCHELL

16 was called as a witness and having been first duly sworn,
17 testified upon his oath as follows, to-wit:
18

19 DIRECT EXAMINATION

20 BY MR. SCHMIDT:

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

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

24 Q By whom are you employed and in what capacity?

25 A I am employed by the El Paso Natural Gas Company as

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1 a Senior Proation Engineer.

2 Q Mr. Burchell, are you familiar with Case Number 6004
3 involving El Paso?

4 A Yes, sir.

5 Q As a Proration Engineer, have you previously been
6 qualified as a witness before this Commission or one of its
7 Examiners?

8 A Yes, several times.

9 Q And your qualifications were accepted?

10 A Yes, they were.

11 Q Are the witness' qualifications acceptable to the
12 Commission?

13 MR. NUTTER: Yes, they are.

14 Q (Mr. Schmidt continuing.) Mr. Burchell, what is
15 El Paso seeking in this case, 6004?

16 A El Paso seeks permission to downhole commingle gas
17 of the South Blanco Pictured Cliffs pool with gas of the
18 Blanco Mesaverde pool and to produce this gas through one
19 meter at its San Juan 2807 Unit, Well Number 76. This well
20 is located in Unit Letter A of Section 22, Township 28N, Range
21 7W, Rio Arriba County, New Mexico.

22 El Paso proposes that the allocation of gas to each
23 formation be divided in such a manner that a certain percentage
24 of the gas would be considered Pictured Cliffs gas and the
25 remaining portion of the gas, as well as all liquids would be

1 considered Mesaverde.

2 Q Why is El Paso asking permission to downhole commingle
3 this well?

4 A Downhole commingling is considered by El Paso to
5 be the most economic and efficient method to undertake in
6 order to produce additional liquid hydrocarbons that will
7 otherwise not be recovered from a conventional dual
8 completion.

9 Q Do you have an exhibit which shows the present
10 equipment in this well?

11 A Yes, I have.

12 Q Would you please explain this exhibit?

13 A I have a diagrammatic sketch of the equipment which
14 has been marked as El Paso's Exhibit Number One. The exhibit
15 shows that there are two strings of tubing installed in the
16 San Juan Number 76 well. It also shows that a Baker Model
17 EGJ Production Packer is set at three thousand six hundred
18 and sixty-six feet. The well is perforated from three thousand
19 four hundred and ninety-two feet to three thousand five
20 hundred fifty feet in the Pictured Cliffs Pool above the
21 packer, and the Mesaverde is perforated from five thousand one
22 hundred and forty feet to five thousand seven hundred and
23 ninety feet below the packer. The Pictured Cliffs side of the
24 well produces through a one and a quarter inch tubing landed
25 at three thousand five hundred and fifty feet while the

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1 Mesaverde is produced through a two and three-eighths inch
2 tubing set at five thousand seven hundred and fifty feet.

3 Q Have you had any operating problems with this well?

4 A Yes, because the Mesaverde logged off with oil
5 during shut-in periods, and would barely unload, the well
6 was selected for a pumping piston installation. While the
7 two and three-eighths tubing was being tested for a suspected
8 leak prior to running a piston, a plug choke became stuck
9 and would not come free. The choke was knocked loose with
10 sandline sinkerbars but the sinkerbars were blown at the
11 hole and hung up at five thousand two hundred and thirty
12 feet. The sandline parted several feet above the sinkerbars.
13 The sinkerbars appeared to be lodged against some of the
14 sandline and would not come loose using an overshot and jars.

15 Q Does the well produce any gas from the Mesaverde
16 Pool at this time?

17 A Yes, the well still produces a small volume of gas
18 but the main problem is that the well has become very
19 difficult to clean up.

20 Q Do you have an exhibit that shows the gas production
21 history of this well?

22 A Yes, I have.

23 Q Would you please explain what this exhibit shows?

24 A This Exhibit is marked as El Paso's Number Two.

25 It is broken up into two parts, the upper part is part one

1 and the lower part is part two.

2 Part one shows the gas production of the Mesaverde
3 and Pictured Cliffs formations from 1973 to May of 1977.
4 The YAO values, they are in parenthesis, indicate that
5 year's daily average. Presently, the Mesaverde is making
6 about one hundred and two MC of gas per day and is prorated
7 marginal while the Pictured Cliffs formation is producing
8 nine MC of gas per day and is prorated exempt marginal.

9 Now, in the lower half of the exhibit, part two,
10 it shows the corresponding year's of production on a
11 percentage basis. The data shows the Mesaverde to range from
12 eight-six point four percent in 1977 to a high of ninety-
13 three point one percent back in 1974, and of importance, I
14 would like to call the Examiner's attention to the all
15 high cumulative value of ninety-one point five percent.

16 Q Does this well have an oil production history?

17 A Yes, the well has produced a total of seven thousand
18 three hundred and sixteen barrels of oil from 1957 to 1977.

19 Q When El Paso attempted to install a free running
20 piston did you expect to increase oil production?

21 A Yes, we did.

22 Q Do you have an exhibit showing what effect commingling
23 and a piston has on another well in this area?

24 A Yes, sir.

25 Q Would you please explain what this exhibit shows?

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1 A. El Paso's exhibit marked number three shows the
2 comparison of Mesaverde oil and gas production from the San
3 Juan 28-7 Unit Wells Numbers 75 and 76. The plat on the
4 exhibit illustrates that the Number 75 well is located about
5 three-fourths of a mile northwest of the subject well.

6 Now, the New Mexico Oil and Gas Conservation
7 Commission by Order Number R-5324, dated November 30, 1976,
8 authorized El Paso Natural Gas Company to commingle Pictured
9 Cliffs and Mesaverde production within the wellbore of its
10 Number 75 well.

11 It can be observed that the No. 75 well increased
12 from thirty-eight MC of gas per day and very little oil to
13 around fifty-five MC of gas per day and over ten barrels of
14 oil per day by installing a piston and commingling production.

15 MR. NUTTER: Mr. Burchell, let's back up -- where
16 are those production figures there?

17 A. Sir, I broke them down into daily rates.

18 MR. NUTTER: What are these figures, monthly
19 figures?

20 A. Right. From 1957, Mr. Examiner, to 1976, the --
21 both the oil and the gas columns represent that full year's
22 production.

23 MR. NUTTER: That's the total annual production?

24 A. Yes, sir. And then for 1977, I thought it would be
25 better to show each particular month's production since that

1 is the time we commingled that Number 75 well.

2 MR. NUTTER: Now, you mentioned that our order
3 Number R-5324 was dated in October of '76, but the
4 commingling didn't actually take place until in January?

5 A. That's right.

6 MR. NUTTER: Okay.

7 MR. SCHMIDT: Mr. Examiner, I believe he said the
8 order was dated November 30, 1976.

9 A. It was November 30th when the order was dated and
10 it was in January when the actual commingling work was done.

11 Does that help you, Mr. Examiner?

12 MR. NUTTER: Yes, that clarifies it.

13 A. Since the San Juan well, Number 76, has a production
14 history and producing characteristics very similar to the
15 Number 75 well, it appeared to be a real ideal candidate for
16 a pumping piston installation.

17 But, Mr. Examiner, as I have already mentioned we
18 ran into trouble when we started that work and the plug
19 choke became stuck in the tubing.

20 Q. (Mr. Schmidt continuing.) Mr. Burchell, what method
21 would you now recommend to undertake to correct and improve
22 the San Juan 28-7 Unit Number 76 well's performance?

23 A. Well, first of all, if authority is obtained from
24 the New Mexico Oil Conservation Commission, I recommend
25 that we pull and retire the one and a quarter inch tubing

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1 and we release and pull the packer and two and three-
2 eighths tubing and remove the locked tools and the
3 perforated joints and the packer. Then, rerun the two and
4 three-eighths tubing string with a pumping piston installed
5 hopefully to improve the performance of the well by commingling
6 the Mesaverde and Pictured Cliffs zones.

7 It is expected that this method would increase the
8 oil recovery from the Mesaverde by using Pictured Cliffs gas
9 to help lift the Mesaverde oil.

10 Q What would be the cost of reworking the well in the
11 manner in which you have just described?

12 A The estimated cost to commingle this well is four
13 thousand seven hundred dollars.

14 Q Mr. Burchell, is this considerably less than the
15 cost of repairing it as a dual completion?

16 A Yes, it is.

17 Q Mr. Burchell, with regard to commingling, what is the
18 compatibility of pressures and liquids between the two zones?

19 A I believe both zones are compatible. The shut-in
20 tubing pressures recorded during 1977, showed three hundred
21 and one pounds per square inch for the Pictured Cliffs
22 formation and six hundred and ten pounds per square inch on
23 the Mesaverde side of the well.

24 The Pictured Cliffs is presently making nine MC
25 of gas per day and because it is such a poor producer, it has

1 a very poor reservoir characteristic, it is my opinion that
2 no long term problem with cross flow should occur.

3 When blowing down the Pictured Cliffs zone a
4 very fine spray of condensate and an amount of water to
5 small to measure was observed.

6 Whereas on the Mesaverde side it will make an
7 estimated ten barrels of oil per day and the water was also
8 too small to measure.

9 Q By increasing the Mesaverde oil production do you
10 foresee an increase in the recoverable gas reserves?

11 A No, as stated at the prior hearing with regard to
12 the similar commingling an increase in oil production does
13 not necessarily cause a long term increase in gas production
14 in this particular oil productive trend, in the Blanco
15 Mesaverde pool.

16 Now, there should be an increase in the daily
17 gas flow volume immediately following the re-work. But
18 this should stabilize and resume its expected rate of decline.
19 Now, reserve studies indicate about ninety-four percent of
20 the total reserves left in both sides of the well remain in
21 the Mesaverde pool. No additional ultimate recovery in
22 gas reserves is expected.

23 Q Mr. Burchell, does El Paso propose a formula by which
24 gas and liquid production can be apportioned between the two
25 producing zones?

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1 A. Yes, based on data related to Exhibit Number Two,
2 ninety-one and a half percent of the San Juan 28-7 Unit
3 Number 76 well's cumulative all time gas production came
4 from the Mesaverde side of the well.

5 Based on my prior testimony that remaining
6 Mesaverde reserves are estimated around ninety-four percent.
7 It is recommended that ninety-two percent of the gas
8 production should be attributed to the Blanco Mesaverde
9 pool and eight percent to the South Blanco Pictured Cliffs
10 pool.

11 It is further recommended that one hundred percent
12 of the well's liquids be attributed to the Mesaverde
13 formation.

14 Q. What is the nature of the ownership involved in
15 this well?

16 A. El Paso Natural Gas Company is a working interest
17 owner and we are the operator of the unit. In addition to
18 El Paso there are six other working interest owners
19 committed to the Pictured Cliffs and Mesaverde participating
20 areas of the 28-7 unit.

21 Q. Can you describe the nature of the royalty and
22 overriding royalty interests sharing in production from this
23 well?

24 A. Yes, sir. The royalty and overriding royalty
25 interests which are involved here arise under the 28-7 unit

1 agreement.

2 Although there are no overriding royalty interest
3 owners and only one royalty owner having an interest in the
4 specific tract on which this well is located, the unit
5 agreement provides that all royalty and overriding royalty
6 interest owners participating in the unit will have at least
7 some interest in the production from this well and all other
8 wells on tracts within the participating area.

9 Q Are these royalty and overriding royalty interests
10 identical as between the Pictured Cliffs and Mesaverde
11 producing zones?

12 A. No, sir, they are not. Now, although all royalty
13 and most overriding royalty interest owners have an an
14 interest in production from both zones, these interests
15 are not necessarily identical.

16 Q What effect would an allocation of production from
17 this well have on these royalty and overriding royalty
18 interest owners?

19 A. In my opinion, the effect would be negligible.
20 First and foremost, Mr. Examiner, we are confident that the
21 allocation formula which we propose for the two producing
22 zones is correct and will allocate production such that
23 each zone will receive its proper share.

24 Secondly, there is no difference between the interests
25 which the royalty interest owners have in Pictured Cliffs

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1 production and the interests which they have in production
2 from the Mesaverde zone.

3 The twelve and one half percent royalty interests
4 which the U.S.G.S. and the State of New Mexico have in the
5 various tracts of the Pictured Cliffs and the Mesaverde
6 participating areas remain identical between the two
7 formations.

8 Therefore, whatever allocation is made between the
9 two zones will have no effect on the royalties received by
10 the U.S.G.S. and the State of New Mexico.

11 Now, the situation with regard to the overriding
12 royalty interest owners is somewhat more complicated because
13 there are so many tracts making up the participating areas,
14 the interest of each individual in relation to the entire
15 participating area is quite small.

16 Although there are variations in the interests of
17 these overriding royalty owners as between the two zones, any
18 error in the allocation formula would have to be quite large
19 in order for it to have any effect on those individuals with
20 varying interests.

21 Q Has El Paso approached the other working interest
22 owners regarding commingling of gas from this well?

23 A Yes, sir, we have. El Paso has obtained written
24 letters of consent from all working interest owners agreeing
25 to a division of gas based on the formula which I previously

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1 mentioned -- that was ninety-two percent Mesaverde and
2 eight percent Pictured Cliffs.

3 Q In your opinion would such an agreement and the
4 granting of this application protect correlative rights and
5 prevent waste?

6 A Yes, sir, it would.

7 Q Would you be recovering oil that would otherwise
8 not be produced?

9 A Yes, we would be recovering additional oil and,
10 that, in one sense is conservation.

11 Q Do you have anything further that you would like
12 to present in this case, Mr. Burchell?

13 A No, nothing further.

14 Q Were Exhibits Numbers One, Two, and Three prepared
15 by you or under your supervision?

16 A Yes, they were.

17 MR. SCHMIDT: Mr. Examiner, I would like to ask
18 that Exhibits One, Two, and Three be admitted into evidence
19 at this time.

20 MR. NUTTER: El Paso's Exhibits One, Two, and
21 Three will be admitted into evidence.

22 MR. SCHMIDT: This completes our direct testimony
23 in this case.

24

25

CROSS EXAMINATION

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1 BY MR. NUTTER:

2 Q Mr. Burchell, you mentioned that you had six
3 working interest owners in there?

4 A Yes, sir.

5 Q Would you name those, please?

6 A Yes, sir, Mr. Examiner, the San Juan 28-7 Pictured
7 Cliffs, Mesaverde, working interest owners are as follows:
8 the Mesa Petroleum Company, Thelma F. Simmons, individual,
9 and as independent executrix, Tenneco Oil Company, the Wiser
10 Oil Company, Mesaverde only, Margaret Hotchkiss, and W. F.
11 Peavy.

12 Q And, of course, El paso?

13 A Yes.

14 Q And all of these working interest owners have
15 consented to these proposals?

16 A Yes, sir, they have, ninety-two percent for the
17 Mesaverde for all of the liquids and eight percent of the
18 Pictured Cliffs.

19 Q Now, you mentioned that it would cost forty-seven
20 hundred dollars to make this commingled installation and that
21 it would be considerably more to restore it as a dual
22 completion. Why would it be so much more expensive to
23 restore it as a dual completion -- it is just simply a matter
24 of running the tubing back in, isn't it?

25 A In one sense you have a salvage value for the one

1 and a quarter inch and taking that salvage value into
2 consideration there would be about two thousand two hundred
3 dollars right there that you would have to add on.

4 Q That's what I thought you were really going to
5 say -- it is really not that much more expensive but you
6 are counting on getting some material that you can put in
7 your yard and that's what is going to make it less
8 expensive?

9 A Right. This has been our experience, Mr.
10 Examiner.

11 MR. NUTTER: Are there any further questions from
12 the witness? He may be excused. Do you have anything
13 further, Mr. Schmidt?

14 MR. SCHMIDT: No, I do not.

15 MR. NUTTER: Does anyone have anything they wish
16 to offer in Case 6004? We will take the case under advisement.

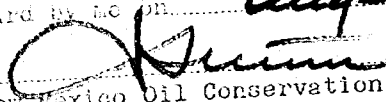
17 (THEREUPON, the witness was excused.)
18
19
20
21
22
23
24
25

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand 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, C.S.R.

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I do hereby certify that the foregoing is
a complete and correct transcript of the proceedings in
the Mattheus Hearing Case No. 6004
heard by me on Aug 3, 1977
 Examiner
New Mexico Oil Conservation Commission

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. 6004
Order No. R-5510

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 3, 1977,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 9th day of August, 1977, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

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

(2) That the applicant, El Paso Natural Gas Company, is the
owner and operator of the San Juan 28-7 Unit Well No. 76, located
in Unit A of Section 22, Township 28 North, Range 7 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.

(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.

-2-

Case No. 6004
Order No. R-5510

(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, eight percent of the commingled gas production should be allocated to the South Blanco-Pictured Cliffs zone, and 92 percent of the commingled gas production and all of the oil production to the Blanco Mesaverde zone.

IT IS THEREFORE ORDERED:

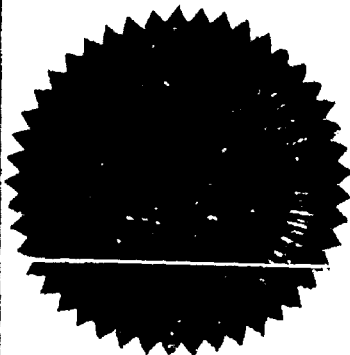
(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle South Blanco-Pictured Cliffs and Blanco Mesaverde production within the wellbore of the San Juan 28-7 Unit Well No. 76, located in Unit A of Section 22, Township 28 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.

(2) That eight percent of the commingled gas production shall be allocated to the South Blanco-Pictured Cliffs zone and 92 percent of the commingled gas production and all of the oil production shall be allocated to the Blanco Mesaverde 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 B. LUCERO, Chairman

Emery C. Arnold
EMERY C. ARNOLD, Member

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

S E A L

jr/

J. O. SETH (1883-1963)

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FRANK ANDREWS
FRED C. HANNAHS
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FRANK ANDREWS III
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July 26, 1977

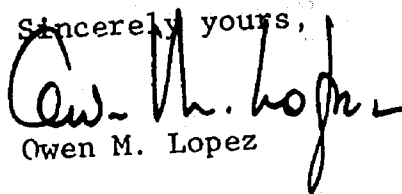
New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico 87503

Re: NMOCC Case No. 6004 - Application of El Paso Natural
Gas Company for downhole commingling, Rio Arriba
County, New Mexico

Gentlemen:

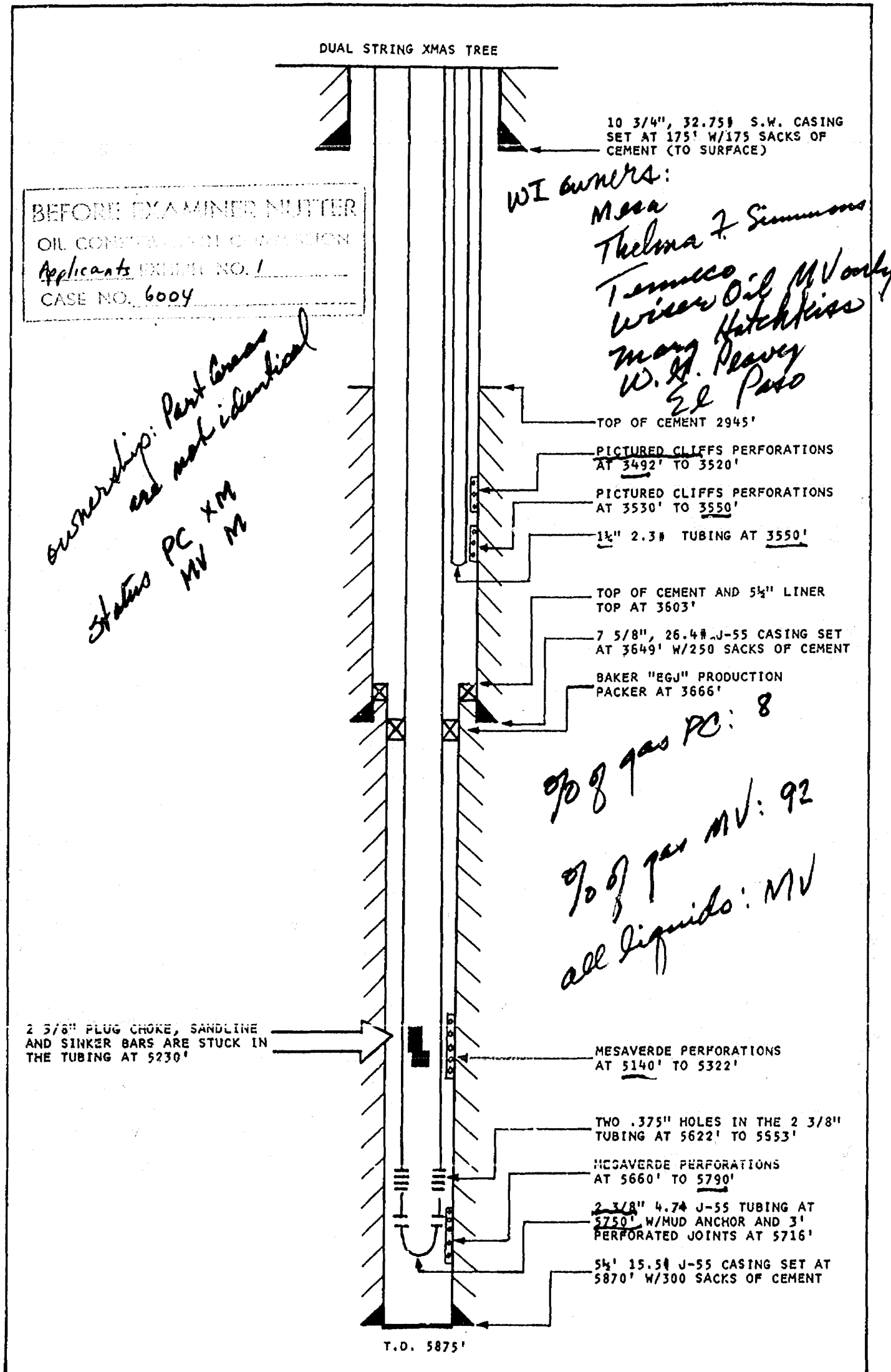
Please be advised that Rand C. Schmidt of the office of
General Counsel of El Paso Natural Gas Company, El Paso,
Texas, is associated with our firm for the presentation
of evidence and argument in the above-referenced case.

Sincerely yours,


Owen M. Lopez

OML:RB
5086-76-12

SCHEMATIC DIAGRAM OF DUALY COMPLETED
EL PASO NATURAL GAS CO. "SAN JUAN 28-7 NO. 76" (PM)
NE/4 SECTION 22, T-28-N, R-7-W
RIO ARriba COUNTY, NEW MEXICO



Applicants

6004

NO. 2

GAS PRODUCTION (MCF), BY ZONE
EL PASO NATURAL GAS CO. "SAN JUAN 28-7 UNIT NO. 76 (PM)
NE, NE SECTION 22, T-28-N R-7-W
RIO ARriba COUNTY, NEW MEXICO

Exhibit No. 2

PART I--PRODUCTION & "YAG" (IN MCF)

	1973	1974	1975	1976	1977 (THRU MAY) PROD. (YAG)	ALL TIME (THRU MAY, 1977)
PROD. (YAG)						
MV	43,797 (121)	41,773 (120)	41,205 (113)	39,095 (109)	8,121 (102)	1,007,262
PC	3,319 (9)	3,104 (9)	3,272 (9)	3,156 (9)	1,282 (9)	94,041
TOTALS (MV & PC)	47,116	44,877	44,477	42,251	9,403	1,101,303

PART II -- PERCENTAGES OF PRODUCTION

	1973	1974	1975	1976	1977 (THRU MAY)	ALL TIME (THRU MAY, 1977)
MV%	93.0	93.1	92.6	92.5	86.4	91.5%
PC%	7.0	6.9	7.4	7.5	13.6	8.5%

oil prod:
73 1/2 BO 57' thru '77

Applicants: UNIT NO. 2

6004

GAS PRODUCTION (MCF), BY ZONE
EL PASO NATURAL GAS CO. "SAN JUAN 28-7 UNIT NO.76 (PM)
NE, NE SECTION 22, T-28-N R-7-W
RIO ARriba COUNTY, NEW MEXICO

Exhibit No. 2

PART I--PRODUCTION & "YAG" (IN MCF)

	1973 PROD. (YAG)	1974 PROD. (YAG)	1975 PROD. (YAG)	1976 PROD. (YAG)	1977 (THRU MAY) PROD. (YAG)	ALL TIME (THRU MAY, 1977)
MV	43,797 (121)	41,773 (120)	41,205 (113)	39,095 (109)	8,121 (102)	1,007,262
PC	3,319 (9)	3,104 (9)	3,272 (9)	3,156 (9)	1,282 (9)	94,041
TOTALS (MV & PC)	47,116	44,877	44,477	42,251	9,403	1,101,303

PART II -- PERCENTAGES OF PRODUCTION

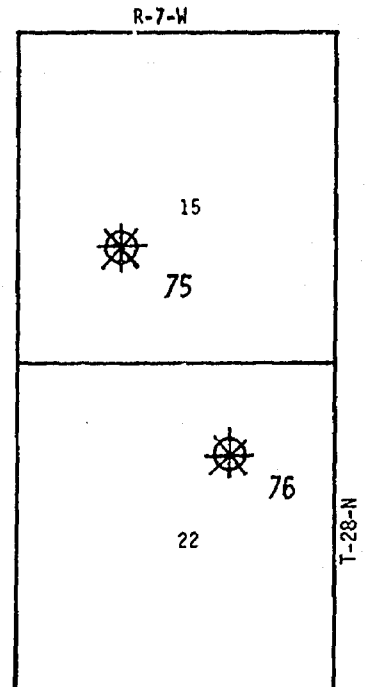
	1973	1974	1975	1976	1977 (THRU MAY)	ALL TIME (THRU MAY, 1977)
MV%	93.0	93.1	92.6	92.5	86.4	91.5%
PC%	7.0	6.9	7.4	7.5	13.6	8.5%

oil prod:
7316 BO 57' thru '77

EL PASO NATURAL GAS CO.
 MESAVERDE OIL AND GAS PRODUCTION HISTORY FOR THE
 SAN JUAN 28-7 UNITS #76 and #75 WELLS
 (WITH PLAT)

Applicants
 6004

YEAR	SAN JUAN 28-7 UNIT #76		SAN JUAN 28-7 UNIT #75	
	OIL (bbls)	GAS (mcf)	OIL (bbls)	GAS (mcf)
1957	0	26,017	356	28,573
1958	1,290 ^①	103,514 ^①	1,521	44,835
1959	645	84,766	1,161	26,004
1960	377	61,180	1,069	32,565
1961	321	53,583	248	25,291
1962	274	43,229	145	23,579
1963	136	47,287	146	21,015
1964	326	51,537	192	19,528
1965	283	46,693	1,939	24,838
1966	254	44,958	905	23,420
1967	369	49,343	890 ^①	21,946 ^①
1968	407	46,445	638	21,339
1969	361	42,530	717	21,201
1970	447	43,817	757	23,279
1971	363	45,191	128 ^①	24,998 ^①
1972	31 ^①	43,181 ^①	62	22,183
1973	327	54,797	125	18,673
1974	276	41,773	118	19,015
1975	223	41,205	167	16,887
1976	276	39,095	122	13,428
1977			8/4	
JAN	0	3,149	50 ^①	①
FEB	0	2,295	343	378
MAR	0	416	556	1,535
APR	0	0	357	1,720
MAY	0	2,261	298	1,682
CUMULATIVE	7,316	1,007,262	12,972 ^①	480,436



- ① INSTALLED INTERMITTER
- ② CHANGED INTERMITTER TO STOP-COCK
- ③ INSTALLED PISTON & COMMINGLED PRODUCTION

R5324
 auth comm
 in #75
 now ~~not~~ comm
 in Jan

Dockets Nos. 26-77 and 27-77 are tentatively set for hearing on August 17 and 31, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 3, 1977

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 4962: (Reopened) (Continued from July 6, 1977 Examiner Hearing)

In the matter of Case 4962 being reopened pursuant to the provisions of Order No. R-4538 which order established temporary special pool rules for the Peterson-Pennsylvanian Associated Pool, Roosevelt County, New Mexico. All interested parties may appear and show cause why said temporary special pool rules should not be rescinded.

CASE 5974: (Continued from July 6, 1977 Examiner Hearing)

Application of Maddox Energy Corporation 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 9, Township 18 South, Range 26 East, Atoka-Pennsylvanian Pool, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5981: (Continued from July 6, 1977 Examiner Hearing)

Application of W. A. Moncrief, Jr., for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of an oil pool for Upper-Pennsylvanian production for his State Well No. 1 located in Unit E of Section 26, Township 16 South, Range 33 East, Lea County, New Mexico, and the promulgation of special rules therefor, including a provision for 80-acre spacing.

CASE 6001: Application of Mesa Petroleum Co. for an exception to Order No. R-5459, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the provisions of Order No. R-5459 to exclude its Primo Well No. 1-A located in Unit D of Section 6, Township 31 North, Range 10 West, San Juan County, New Mexico, from the vertical limits of the Blanco-Mesaverde Pool as defined by said order.

CASE 6002: Application of New Mexico Salt Water Disposal Company, Inc., for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Bough formation in its Read & Stevens Skelly State Well No. 1 located in Unit H of Section 10, Township 10 South, Range 33 East, Lea County, New Mexico.

CASE 6003: Application of Aztec Oil & Gas Company for an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Arizona Jicarilla B Well No. 8 to be located in the NW/4 of Section 9, Township 26 North, Range 5 West, Blanco Mesaverde Pool, Rio Arriba County, New Mexico, this being the first Mesaverde well on its proration unit, the W/2 of said Section 9.

CASE 6004: 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 28-7 Unit Well No. 76 located in Unit A of Section 22, Township 28 North, Range 7 West, Rio Arriba County, New Mexico.

CASE 6005: Application of J. M. Huber Corporation for a non-standard unit or compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, proposes to drill its Parr Well No. 1 to the Delaware formation at a point 990 feet from the South and East lines of Section 15, Township 23 South, Range 26 East, Eddy County, New Mexico, and for said well, seeks approval for a 39-acre non-standard oil proration unit comprising all of the SE/4, SE/4 of said Section, except that tract of land owned by Mr. Monk Lofton and described as being one acre, more or less, lying immediately North of the South line of said Section 15 and immediately East of the Eastern boundary of the right of way of U. S. Highways Nos. 62 and 180; in the alternative, applicant seeks an order pooling all mineral interests in the Delaware formation underlying the SE/4, SE/4 of said Section 15 to form a standard 40-acre unit to be dedicated to the aforesaid well. If said well is classified as a gas well, applicant seeks approval for a 159-acre non-standard gas

proration unit comprising all of the SE/4 of said Section 15 except the above-described one-acre tract, or in the alternative, an order pooling all mineral interests in the Delaware formation underlying the SE/4 of said Section 15 to form a standard 160-acre unit to be dedicated to the aforesaid well. If either of the above-described pooling orders is entered, also to be considered will be the cost of drilling and completing the unit well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6006: In the matter of the application of the Oil Conservation Commission of New Mexico upon its own motion for the creation, contraction, and extension of certain pools in Chaves, Eddy, Lea, and Roosevelt Counties, New Mexico.

(a) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Delaware production and designated as the Brynes Tank-Middle Delaware Gas Pool. The discovery well is the Hanagan Petroleum Corporation Newman Well No. 1 located in Unit O of Section 7, Township 23 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 26 EAST, NMPM
Section 7: SE/4

(b) CREATE a new pool in Chaves County, New Mexico, classified as an oil pool for San Andres production and designated as the Calumet-San Andres Pool. The discovery well is the Elk Oil Company Dexter State Well No. 1 located in Unit D of Section 36, Township 12 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 12 SOUTH, RANGE 26 EAST, NMPM
Section 36: NW/4

(c) CREATE a new pool in Chaves County, New Mexico, classified as a gas pool for Morrow production and designated as the Carson-Morrow Gas Pool. The discovery well is Maralo, Inc. Chavelea-Carson Well No. 1 located in Unit F of Section 10, Township 9 South, Range 31 East, NMPM. Said pool would comprise:

TOWNSHIP 9 SOUTH, RANGE 31 EAST, NMPM
Section 10: N/2

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Cisco production and designated as the South Kemnitz-Cisco Pool. The discovery well is the W. A. Moncrief, Jr., State Well No. 1 located in Unit E of Section 26, Township 16 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 33 EAST, NMPM
Section 26: W/2
Section 27: S/2

(e) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the South Paduca-Wolfcamp Gas Pool. The discovery well is the Texaco Inc. Cotton Draw Unit Well No. 68 located in Unit F of Section 12, Township 25 South, Range 31 East, NMPM. Said pool would comprise:

TOWNSHIP 25 SOUTH, RANGE 31 EAST, NMPM
Section 12: W/2

(f) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Queen production and designated as the Reeves-Queen Pool. The discovery well is the Honeysuckle Exploration Corporation State 22 Well No. 1 located in Unit P of Section 22, Township 18 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM
Section 22: SE/4

(g) CREATE a new pool in Roosevelt County, New Mexico, classified as an oil pool for San Andres production and designated as the Tomahawk-San Andres Pool. The discovery well is the Sundance Oil Company Cone "31" Federal Well No. 1 located in Unit A of Section 31, Township 7 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 7 SOUTH, RANGE 32 EAST, NMPM
Section 31: NE/4

- (h) EXTEND the North Bagley-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 12 SOUTH, RANGE 33 EAST, NMPM
Section 5: SW/4
Section 8: W/2

- (i) EXTEND the Baish-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM
Section 15: SE/4

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

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 28: S/2 NW/4

- (k) EXTEND the Buffalo Valley-Pennsylvanian Gas Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 2 EAST, NMPM
Section 36: N/2

TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM
Section 7: N/2

- (l) EXTEND the East Burton Flat-Strawn Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM
Section 4: W/2
Section 9: W/2

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

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM
Section 9: All

- (n) EXTEND the North Cemetery-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM
Section 34: N/2

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

TOWNSHIP 24 SOUTH, RANGE 24 EAST, NMPM
Section 9: N/2

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

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM
Section 25: W/2 NE/4

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 18: NW/4

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

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
Section 33: SE/4

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

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM
Section 30: S/2

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

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM
Section 27: N/2

- (t) EXTEND the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM
Section 12: W/2

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

TOWNSHIP 6 SOUTH, RANGE 26 EAST, NMPM
Section 31: NE/4 NE/4

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

TOWNSHIP 21 SOUTH, RANGE 35 EAST, NMPM
Section 18: E/2
Section 19: N/2

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

TOWNSHIP 16 SOUTH, RANGE 26 EAST, NMPM
Section 32: S/2
Section 33: S/2

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

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

- (y) CONTRACT the vertical limits of the Sams Ranch Grayburg-San Andres Gas Pool in Chaves County, New Mexico, to the Grayburg formation only, redesignate said pool as the Sams Ranch-Grayburg Gas Pool, and extend horizontal limits of said pool to include therein:

TOWNSHIP 14 SOUTH, RANGE 28 EAST, NMPM
Section 8: S/2
Section 9: S/2
Section 17: N/2
Section 18: E/2

- (z) EXTEND the Sanmal-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM
Section 2: NW/4
Section 3: NE/4

- (aa) EXTEND the North Vacuum Atoka-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM
Section 8: NE/4
Section 17: W/2

- (bb) EXTEND the Wantz-Granite Wash Pool in Lea County, New Mexico, to include therein:

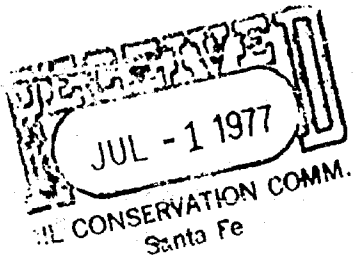
TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 2: NW/4

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

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM
Section 12: E/2

El Paso NATURAL GAS
COMPANY

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



June 29, 1977

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 South Blanco Pictured Cliffs Pool with gas from the Blanco Mesaverde Pool in its San Juan 28-7 Unit No. 76 Well. This Well is located in Unit Letter A of Section 22, T28N-R7W, Rio Arriba County, New Mexico.

Very truly yours,

E. R. Manning
E. R. Manning

ERM:je

cc: Messrs.

John F. Eichelman, Jr.
David T. Burleson
L. G. Truby
Carl E. Matthews
D. S. Dreesen

dr /
h

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:

LS
Mc
CASE NO. 6004

Order No. R- 5510

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 3,
19 77, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of August, 19 77, 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 San Juan 28-7 Unit Well No. 76, located
in Unit A of Section 22, Township 28 North, Range
7 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle
Cliffs
South Blanco-Pictured / 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. _____

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, eight percent of the commingled gas production should be allocated to the South Blanco-Pictured/Cliffs zone, and 92 percent of the commingled gas production ^{and all of the oil 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 28-7 Unit Well No. 76, located in Unit A of Section 22, Township 28 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.

(2) That eight percent of the commingled gas production shall be allocated to the South Blanco-Pictured Cliffs zone and 92 percent of the commingled gas production ^{and all of the oil production} shall be allocated to the Blanco Mesaverde 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.

