

CASE 6617: EL PASO NATURAL GAS COMPANY
FOR DOWNHOLE COMMINGLING, RIO ARRIBA
COUNTY, NEW MEXICO.

CASE NO.

6617

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.



BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

July 8, 1981

Mr. Ed Mabe
El Paso Natural Gas Co.
Farmington, New Mexico

Re: Jicarilla 67 #10
M-30-25N-5W



*For file
Case 661
RPL*

Dear Ed:

As per Order R-6096 the production allocation to the commingled zones in the referenced well are as follows:

Gallup	0% Gas	100% Oil
Dakota	100% Gas	0% Oil

If you have any questions please contact this office.

Yours truly,

Frank T. Chavez
Supervisor, District #3

XC: OCD, Santa Fe

FTC/bk



BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

September 12, 1979

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

Re: CASE NO. 6617
ORDER NO. R-6096
Mr. David T. Burleson, Attorney
El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas 79978

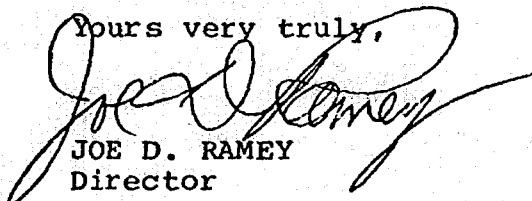
Applicant:

El Paso Natural Gas Company

Dear Sir:

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

Yours very truly,


JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD x

Other _____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6617
Order No. R-6096

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 8, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 10th day of September, 1979, 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 Jicarilla 67 Well No. 10, located in Unit M of Section 30, Township 25 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Basin-Dakota and Otero-Gallup production within the wellbore of the above-described well.
- (4) That from the Basin-Dakota zone, the subject well is capable of low rates of production only.
- (5) That from the Otero-Gallup zone, the subject well is expected to be capable of low rates of 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. 6617
Order No. R-6096

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.

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

IT IS THEREFORE ORDERED:

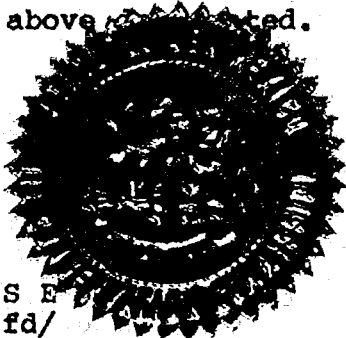
(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Basin-Dakota and Otero-Gallup production within the wellbore of the Jicarilla 67 Well No. 10, located in Unit M of Section 30, Township 25 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in the subject well.

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

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

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



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

S E
fd/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico
8 August 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of El Paso Natural Gas)
Company for downhole commingling,) CASE
Rio Arriba County, New Mexico.) 6617

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant:

David T. Burleson, Esq.
El Paso Natural Gas Company
El Paso, Texas

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I N D E X

PAUL W. BURCHELL

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1 MR. STAMETS: We'll call next Case 6617.

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

5 MR. BURLESON: I'm David Burleson with
6 El Paso Natural Gas Company and I'm associating with
7 Montgomery, Andrews, and Hannahs for presentation of this
8 case, and we will have one witness for sure and possibly
9 three, so perhaps you should swear all three.

10 MR. STAMETS: Let's have them all stand
11 and be sworn at this time, please.

12
13 (Witnesses sworn.)
14

15 PAUL W. BURCHELL
16 being called as a witness and having been duly sworn upon
17 his oath, testified as follows, to-wit:

18
19 DIRECT EXAMINATION

20 BY MR. BURLESON:

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

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

25 Q By whom are you employed and in what capa-

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1 city?

2 A I'm employed by the El Paso Natural Gas
3 Company as a Senior Proration Engineer.

4 Q In that capacity have you testified pre-
5 viously before this Commission or one of its Examiners?

6 A Yes, I have.

7 Q And were your qualifications accepted on
8 those occasions?

9 A Yes, sir.

10 Q Mr. Burchell, are you familiar with what
11 El Paso is seeking in this case, Number 6617?

12 A Yes, I am.

13 MR. BURLESON: Mr. Examiner, are the
14 witness' qualifications accepted?

15 MR. STAMETS: Yes.

16 Q (Mr. Burleson continuing.) Who is the
17 operator of the well in this case, Mr. Burchell?

18 A The El Paso Natural Gas Company is the
19 operator of this well.

20 Q Would you explain specifically what El
21 Paso is seeking in this case?

22 A We are seeking permission to downhole com-
23 mingle gas and condensate of the Basin Dakota Pool with
24 gas and oil of the Otero Gallup Pool and produce this gas
25 through one meter in the Jicarilla 67 No. 10 Well. This

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1 well is located in Unit "N" of Section 30, Township 25 North,
2 Range 5 West, Rio Arriba County, New Mexico, and it pre-
3 sently produces from the Basin Dakota Pool.

4 El Paso proposes that the allocation of
5 gas and fluids to each formation be divided in such a
6 manner that a certain percentage of the production will be
7 considered Dakota and the remaining portion will be con-
8 sidered Gallup.

9 The method of allocating production will
10 be explained in more detail later on in my testimony, Mr.
11 Examiner.

12 Q Why is El Paso seeking permission to
13 downhole commingle in this instance?

14 A Well, basically the Jicarilla 67 No. 10
15 Well is completed in the Dakota formation only while cer-
16 tain offset wells are producing from both the Dakota and
17 Gallup formations.

18 The offsetting Gallup wells that will be
19 involved in this case will be shown on an exhibit which I
20 will also show at a later time.

21 Because of these offset Gallup producing
22 wells the United States Geological Survey, in behalf of
23 the lessor, has requested that El Paso protect the Gallup
24 formation from any possible drainage. So, accordingly,
25 downhole commingling is considered by El Paso to be the most

1 economic and efficient method to undertake, particularly
2 because of the low productivity of both these zones.

3 Q Do you have, or have you had prepared, an
4 exhibit indicating the equipment that is present in this
5 well?

6 A Yes, I do.

7 Q And that exhibit has been marked as what,
8 how, please?

9 A As Exhibit Number One.

10 Q Would you please explain what the exhibit
11 indicates?

12 A Exhibit Number One is a diagrammatic
13 sketch of the equipment, which has been marked as El Paso
14 Natural Gas Company's Exhibit One. The exhibit shows a
15 string of 2-3/8ths inch tubing which is installed in the
16 Jicarilla No. 10 Well. Tubing is set at 7015 feet.

17 The sketch also shows a Baker Model "N"
18 production packer presently set at 6712 feet.

19 This well is presently perforated from
20 5846 feet to 7004 feet in the Basin Dakota Gas Pool, and
21 El Paso proposes to remove the tubing and the packer, run
22 a cement bond log, perforate and frac the Gallup Pool from
23 5962 feet to 6064 feet, and then replace the tubing.

24 A temperature survey has been run on this
25 well and it shows sufficient cement is behind the 5-1/2

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1 inch casing, which would prevent any gas migration within
2 the casing hole annulus.

3 Q Do you have an exhibit or exhibits showing
4 the production characteristics of the wells in this imme-
5 diate area?

6 A Yes, I do, I have two exhibits, Exhibit
7 Number Two and Exhibit Number Three.

8 Q Would you please explain what those ex-
9 hibits show?

10 A Yes, sir. Exhibit Number Two is the El
11 Paso Natural Gas Company, basically a location map, a nine
12 section location map, and it shows the well location of the
13 Jicarilla 67 No. 10 Well in the southwest quarter of Sec-
14 tion 30, Township 25 North, Range 5 West.

15 The map also shows the location of offset-
16 ting wells which produce, or have produced, from the Otero
17 Gallup Pool.

18 Now those wells on the plat which have a
19 slash through them and an "NA" by its side, these wells
20 did not produce during the year of 1978, either because
21 they were temporarily abandoned or converted to water in-
22 jection.

23 Now the figures or values shown at each
24 producing wellsite represent that particular well's gas and
25 oil production from the Gallup formation.

The top value is gas in Mcf and is that well's gas and oil production from the Gallup, and it's also that well's 1978 average daily gas production.

While the lower value is oil in barrels and is the well's 1978 average daily oil production.

Now as can be observed, the wells' production range on this graph, or map, with a low value of 15 Mcf of gas per day to the highest value of 59 Mcf of gas per day, and the oil ranges from 1.1 to a high of 6.6 barrels of oil per day.

The average for all the wells on the map is 29 Mcf of gas and 2-1/2 barrels of oil per day from the Gallup formation.

Q Upon looking at the exhibit it's evident that there's no figure shown beside this well because there is no production currently from this well.

A That is correct.

Q From this formation.

A The Gallup has not been perforated nor never was.

Q Okay, would you please explain what Exhibit Three shows?

A Yes, sir. El Paso's exhibit marked Number Three is also a well location map only it shows the production from the deeper Basin Dakota wells.

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1 Again, the figures shown at each producing
2 wellsite represents the well's gas and condensate production
3 from the Dakota.

4 The top value is gas in Mcf and the bottom
5 value is condensate in barrels. Both values represent
6 1978 average daily production rate.

7 The wells range from a low of 24 to a high
8 of 93 Mcf of gas per day, and from zero to .78 barrels of
9 condensate per day.

10 The wells all, the wells on the map, aver-
11 age 52 Mcf of gas and less than .2 of a barrel of condensate
12 per day from the Dakota formation.

13 Now shown on the map, but the Jicarilla
14 No. 10 Well in the southwest quarter of Section 30 has pro-
15 duced a cumulative figure of 2893 barrels of condensate
16 since it's been on production.

17 Q Paul, what was the average production
18 during 1978 for the Dakota well in terms of gas and conden-
19 sate?

20 A For the Jicarilla 10 Well?

21 Q Yes, for the Jicarilla 10 Well.

22 A Okay, the top figure for gas was -- aver-
23 aged 28 Mcf of gas per day for 1978.

24 Q What conclusions have you arrived at based
25 on the data contained on these two exhibits, Two and Three?

1 A. In my opinion, the flow rates for both the
2 Gallup and Dakota are very small. The Dakota zone in the
3 Jicarilla 67 Well No. 10 is classified as exempt marginal,
4 and as of June of this year, the Basin Dakota production
5 was averaging 23 Mcf of gas per day.

6 Q. Do you have any information regarding the
7 pressures and water characteristics that would be present
8 in this well?

9 A. Right, I do. At the present time the
10 Gallup wells shown on Exhibit Two are producing anywhere
11 from 28 to 476 barrels of water per year. This averages
12 1/2 barrel of water per day per well for all the wells that
13 are producing on Exhibit Two.

14 Now the two nearest producing wells to the
15 Jicarilla 67 No. 10 Well, which is the Amerada McKensie No.
16 3 Well, located in the southeast Section 25, 25 North, 6
17 West, and the El Paso Natural Gas Well Canyon Largo No. 95
18 Well, in the northeast of Section 36, 25 North, 6 West.
19 These two closest wells are averaging only 1/4 of a barrel
20 of water per well per day.

21 The Dakota wells shown on Exhibit Three
22 range from zero to 135 barrels of water per year.

23 The Jicarilla 67 Well No. 10 produces
24 water too small to measure.

25 Now, with regard to the pressures, based

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1 on extrapolation of state tests, the Dakota formation in
2 this well has a shutin tubing pressure of about 410 pounds
3 per square inch at absolute as of April the 1st, 1979.
4 This corresponding bottom hole pressure is estimated to be
5 485 psia.

6 Now, the Gallup shut-in pressure is esti-
7 mated from production histories of offsetting wells to be
8 approximately 400 psia with a corresponding bottom hole
9 pressure estimated at 468 pounds per square inch.

10 Q Do you believe these fluid and pressure
11 characteristics will be compatible should commingling be
12 approved?

13 A Yes, sir, because of the small pressure
14 differential and the small volume of liquids, I would not
15 expect any migration of gas or fluids from one formation
16 to the other, and particularly while the well is contin-
17 uously producing.

18 Q What advantage would there be in com-
19 mingling the two zones?

20 A There are really two main advantages.
21 First, it is believed that a certain amount of additional
22 gas and oil could be obtained from both the Dakota and the
23 Gallup formations in this well that otherwise would not be
24 produced. It is estimated that the Gallup produced 50 Mcf
25 of gas per day and in addition to the Dakota's 23 Mcf of

1 gas per day, this will add a greater volume of gas to help
2 lift both the Dakota and the Gallup liquids.

3 It is further estimated that the Dakota
4 has around 280,000 Mcf of remaining gas reserves and the
5 Gallup formation has about 150,000 Mcf of original reserves
6 which can be recovered through commingling.

7 Now besides efficiency in production, the
8 second advantage of commingling, of course, is economic.
9 To drill and complete a new Gallup well would cost appro-
10 ximately \$246,550, and to dually complete the existing well
11 would cost \$127,540.

12 However, it will only cost about \$93,170
13 to complete the Gallup and downhole commingle with the
14 Dakota.

15 Commingling, therefore, represents a sub-
16 stantial savings in monies.

17 Q If Division approval is granted, do you
18 propose a formula by which the gas and liquid production
19 can be apportioned to these two zones?

20 A No, I do not have a formula at this time;
21 however, if approval is granted it is recommended that the
22 production from the well be allocated in the following
23 manner: First, establish an oil/gas and water producing
24 rate for the Dakota just prior to the workover involving
25 approximately a one week continuous test.

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1 After the workover and downhole commingling
2 is completed, establish the total oil, water, and gas pro-
3 ducing rate involving an equal producing interval prior to
4 the workover.

5 Three, we would then subtract the Dakota
6 oil, gas, and water rates established prior to the workover
7 to obtain the Gallup production. The percentages for allo-
8 cations will be calculated from these results.

9 Q What is the nature of ownership in the
10 well? In the two zones involved?

11 A Under the Jicarilla contract royalty
12 ownership in the two zones are identical. El Paso does
13 share a working interest owner with the Superior Oil Com-
14 pany.

15 Q Do you have a letter which you denominated,
16 I believe, Exhibit Number Four, which shows Superior Oil
17 Company's agreement to our proposal in this case?

18 A Yes. The Exhibit Four contains correspond-
19 ence between El Paso and the Superior Oil Company, which
20 shows that the Superior Oil Company has agreed to our com-
21 mingling procedure.

22 Q In your opinion would the granting of
23 this application protect correlative rights and prevent
24 waste?

25 A Yes.

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

3 A No, I do not.

4 Q Were Exhibits One through Three prepared
5 by you or under your supervision?

6 A Yes, they were.

7 Q Was Exhibit Four provided to you by El
8 Paso's land department?

9 A Yes. Yes, it was.

10 MR. BURLESON: Mr. Examiner, I move that
11 Exhibits One through Four be accepted in evidence, at this
12 time.

13 MR. STAMETS: These exhibits will be ad-
14 mitted.

15 MR. BURLESON: And subject to the ques-
16 tions you might ask, we may or may not wish to put on two
17 additional witnesses, one or two additional witnesses.

18
19 CROSS EXAMINATION

20 BY MR. STAMETS:

21 Q Mr. Burchell, did you say that the owner-
22 ship in these two formations is identical?

23 A The royalty with the -- under the Jicarilla
24 contract with the Indians, 12-1/2 percent.

25 Q Okay, and the working interest is not?

1 A. The working interest we share with Superior
2 Oil Company.

3 Q. Okay, then I'm not clear on that.

4 A. Oh.

5 Q. Does each working interest -- is each
6 working interest the same in each pool?

7 A. I'll have to explain that to you in detail.

8 Q. Okay.

9 A. It's a carried working interest ownership
10 in both zones. The amount is identical. But what it is,
11 it's 11.48 percent until payout. Then after payout it's
12 40 percent for Superior Oil Company.

13 Now when this well is first completed un-
14 til the monies are recaptured, the \$93,000, in one zone,
15 the Dakota, whatever we allocate to it, the Superior Oil
16 Company is getting 40 percent now. But in the upper zone,
17 the Gallup, they'll only -- until it is paid out, will only
18 receive 11.48 percent. After it's paid out, then their
19 40 percent is identical to both zones.

20 So there is a time interval there where
21 it is not identical, until payout.

22 MR. BURLESON: I might add just a little
23 summation of what I think to be the circumstance.

24 Superior Oil Company has one interest un-
25 til payout. They have a carried interest and they have

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1 one interest until payout has been reached in a zone.

2 That payout has been reached in the Dakota
3 formation, so their interest is the larger interest which
4 they have after payout.

5 As to the Gallup, they will have the
6 smaller interest which they have until payout occurs, at
7 which time their interest then would be exactly the same
8 and the working interest would be common in both zones.

9 But as of some point in time there will be
10 a difference, but the point of our Exhibit Four is that
11 Superior is agreeing with this proposed allocation and
12 have no problem with this.

13 Q (Mr. Stamets continuing.) Mr. Burchell,
14 are you apt to get a true indication of the Dakota -- or
15 the Gallup producing capability in your short period of
16 time following workover, or do you really need somewhat
17 more extended tests to see if you can establish some sort
18 of a stabilized rate of production or decline in the Gallup?

19 A I believe what we would do there, Mr.
20 Examiner, of course we'd have -- immediately determine the
21 well's producing characteristics after we commingle, and if
22 it's erratic, we may allow for more time, but certainly not
23 less than week, and we would advise the Commission at which
24 time these tests are being taken so that they may witness
25 them if they like.

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1 Q Normally our orders in these cases say
2 that you'll work out the method with the supervisor at the
3 appropriate District Office.

4 A Fine.

5 Q Would that cause any problem?

6 A Oh, no, fine; fine.

7 MR. BURLESON: We have no objection to

8 that.

9 MR. STAMETS: Okay. Any other questions

10 of this witness? He may be excused.

11 Anything further in this case?

12 Take the case under advisement.

13
14 (Hearing concluded.)
15
16
17
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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico
8 August 1979

EXAMINER HEARING

IN THE MATTER OF:

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

CASE
6617

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant:

David T. Burleson, Esq.
El Paso Natural Gas Company
El Paso, Texas

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I N D E X

PAUL W. BURCHELL

Direct Examination by Mr. Burleson 3

Cross Examination by Mr. Stamets 14

E X H I B I T S

Applicant Exhibit One, Diagram 6

Applicant Exhibit Two, Plat 7

Applicant Exhibit Three, Plat 7

Applicant Exhibit Four, Letter 13

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Page 3

1 MR. STAMETS: We'll call next Case 6617.

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

5 MR. BURLESON: I'm David Burleson with
6 El Paso Natural Gas Company and I'm associating with
7 Montgomery, Andrews, and Hannahs for presentation of this
8 case, and we will have one witness for sure and possibly
9 three, so perhaps you should swear all three.

10 MR. STAMETS: Let's have them all stand
11 and be sworn at this time, please.

12
13 (Witnesses sworn.)
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15 PAUL W. BURCHELL
16 being called as a witness and having been duly sworn upon
17 his oath, testified as follows, to-wit:
18

19 DIRECT EXAMINATION

20 BY MR. BURLESON:

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

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

25 Q By whom are you employed and in what capa--

1 city?

2 A I'm employed by the El Paso Natural Gas
3 Company as a Senior Proration Engineer.

4 Q In that capacity have you testified pre-
5 viously before this Commission or one of its Examiners?

6 A Yes, I have.

7 Q And were your qualifications accepted on
8 those occasions?

9 A Yes, sir.

10 Q Mr. Burchell, are you familiar with what
11 El Paso is seeking in this case, Number 6617?

12 A Yes, I am.

13 MR. BURLESON: Mr. Examiner, are the
14 witness' qualifications accepted?

15 MR. STAMETS: Yes.

16 Q (Mr. Burleson continuing.) Who is the
17 operator of the well in this case, Mr. Burchell?

18 A The El Paso Natural Gas Company is the
19 operator of this well.

20 Q Would you explain specifically what El
21 Paso is seeking in this case?

22 A We are seeking permission to downhole com-
23 mingle gas and condensate of the Basin Dakota Pool with
24 gas and oil of the Otero Gallup Pool and produce this gas
25 through one meter in the Jicarilla 67 No. 10 Well. This

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
2020 Plaza Blanca (S&S) 471-3483
Santa Fe, New Mexico 87501

1 well is located in Unit "N" of Section 30, Township 25 North,
2 Range 5 West, Rio Arriba County, New Mexico, and it pre-
3 sently produces from the Basin Dakota Pool.

4 El Paso proposes that the allocation of
5 gas and fluids to each formation be divided in such a
6 manner that a certain percentage of the production will be
7 considered Dakota and the remaining portion will be con-
8 sidered Gallup.

9 The method of allocating production will
10 be explained in more detail later on in my testimony, Mr.
11 Examiner.

12 Q Why is El Paso seeking permission to
13 downhole commingle in this instance?

14 A Well, basically the Jicarilla 67 No. 10
15 Well is completed in the Dakota formation only while cer-
16 tain offset wells are producing from both the Dakota and
17 Gallup formations.

18 The offsetting Gallup wells that will be
19 involved in this case will be shown on an exhibit which I
20 will also show at a later time.

21 Because of these offset Gallup producing
22 wells the United States Geological Survey, in behalf of
23 the lessor, has requested that El Paso protect the Gallup
24 formation from any possible drainage. So, accordingly,
25 downhole commingling is considered by El Paso to be the most

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1 economic and efficient method to undertake, particularly
2 because of the low productivity of both these zones.

3 Q Do you have, or have you had prepared, an
4 exhibit indicating the equipment that is present in this
5 well?

6 A Yes, I do.

7 Q And that exhibit has been marked as what,
8 how, please?

9 A As Exhibit Number One.

10 Q Would you please explain what the exhibit
11 indicates?

12 A Exhibit Number One is a diagrammatic
13 sketch of the equipment, which has been marked as El Paso
14 Natural Gas Company's Exhibit One. The exhibit shows a
15 string of 2-3/8ths inch tubing which is installed in the
16 Jicarilla No. 10 Well. Tubing is set at 7015 feet.

17 The sketch also shows a Baker Model "N"
18 production packer presently set at 6712 feet.

19 This well is presently perforated from
20 5846 feet to 7004 feet in the Basin Dakota Gas Pool, and
21 El Paso proposes to remove the tubing and the packer, run
22 a cement bond log, perforate and frac the Gallup Pool from
23 5962 feet to 6064 feet, and then replace the tubing.

24 A temperature survey has been run on this
25 well and it shows sufficient cement is behind the 5-1/2

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Page 7

1 inch casing, which would prevent any gas migration within
2 the casing hole annulus.

3 Q Do you have an exhibit or exhibits showing
4 the production characteristics of the wells in this imme-
5 diate area?

6 A Yes, I do, I have two exhibits, Exhibit
7 Number Two and Exhibit Number Three.

8 Q Would you please explain what those ex-
9 hibits show?

10 A Yes, sir. Exhibit Number Two is the El
11 Paso Natural Gas Company, basically a location map, a nine
12 section location map, and it shows the well location of the
13 Jicarilla 67 No. 10 Well in the southwest quarter of Sec-
14 tion 30, Township 25 North, Range 5 West.

15 The map also shows the location of offset-
16 ting wells which produce, or have produced, from the Otero
17 Gallup Pool.

18 Now those wells on the plat which have a
19 slash through them and an "NA" by its side, these wells
20 did not produce during the year of 1978, either because
21 they were temporarily abandoned or converted to water in-
22 jection.

23 Now the figures or values shown at each
24 producing wellsite represent that particular well's gas and
25 oil production from the Gallup formation.

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1 The top value is gas in Mcf and is that
2 well's gas and oil production from the Gallup, and it's
3 also that well's 1978 average daily gas production.

4 While the lower value is oil in barrels
5 and is the well's 1978 average daily oil production.

6 Now as can be observed, the wells' pro-
7 duction range on this graph, or map, with a low value of
8 15 Mcf of gas per day to the highest value of 59 Mcf of
9 gas per day, and the oil ranges from 1.1 to a high of 6.6
10 barrels of oil per day.

11 The average for all the wells on the map
12 is 29 Mcf of gas and 2-1/2 barrels of oil per day from the
13 Gallup formation.

14 Q Upon looking at the exhibit it's evident
15 that there's no figure shown beside this well because there
16 is no production currently from this well.

17 A That is correct.

18 Q From this formation.

19 A The Gallup has not been perforated nor
20 never was.

21 Q Okay, would you please explain what Exhibit
22 Three shows?

23 A Yes, sir. El Paso's exhibit marked Number
24 Three is also a well location map only it shows the pro-
25 duction from the deeper Basin Dakota wells.

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1 Again, the figures shown at each producing
2 wellsite represents the well's gas and condensate production
3 from the Dakota.

4 The top value is gas in Mcf and the bottom
5 value is condensate in barrels. Both values represent
6 1978 average daily production rate.

7 The wells range from a low of 24 to a high
8 of 93 Mcf of gas per day, and from zero to .78 barrels of
9 condensate per day.

10 The wells all, the wells on the map, aver-
11 age 52 Mcf of gas and less than .2 of a barrel of condensate
12 per day from the Dakota formation.

13 Now shown on the map, but the Jicarilla
14 No. 10 Well in the southwest quarter of Section 30 has pro-
15 duced a cumulative figure of 2893 barrels of condensate
16 since it's been on production.

17 Q Paul, what was the average production
18 during 1978 for the Dakota well in terms of gas and conden-
19 sate?

20 A For the Jicarilla 10 Well?

21 Q Yes, for the Jicarilla 10 Well.

22 A Okay, the top figure for gas was -- aver-
23 aged 28 Mcf of gas per day for 1978.

24 Q What conclusions have you arrived at based
25 on the data contained on these two exhibits, Two and Three?

A In my opinion, the flow rates for both the Gallup and Dakota are very small. The Dakota zone in the Jicarilla 67 Well No. 10 is classified as exempt marginal, and as of June of this year, the Basin Dakota production was averaging 23 Mcf of gas per day.

Q Do you have any information regarding the pressures and water characteristics that would be present in this well?

A. Right, I do. At the present time the Gallup wells shown on Exhibit Two are producing anywhere from 28 to 476 barrels of water per year. This averages 1/2 barrel of water per day per well for all the wells that are producing on Exhibit Two.

Now the two nearest producing wells to the Jicarilla 67 No. 10 Well, which is the Amerada McKensie No. 3 Well, located in the southeast Section 25, 25 North, 6 West, and the El Paso Natural Gas Well Canyon Largo No. 95 Well, in the northeast of Section 36, 25 North, 6 West. These two closest wells are averaging only 1/4 of a barrel of water per well per day.

The Dakota wells shown on Exhibit Three range from zero to 135 barrels of water per year.

The Jicarilla 67 Well No. 10 produces water too small to measure.

Now, with regard to the pressures, based

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1 on extrapolation of state tests, the Dakota formation in
2 this well has a shutin tubing pressure of about 410 pounds
3 per square inch at absolute as of April the 1st, 1979.
4 This corresponding bottom hole pressure is estimated to be
5 485 psia.

6 Now, the Gallup shut-in pressure is esti-
7 mated from production histories of offsetting wells to be
8 approximately 400 psia with a corresponding bottom hole
9 pressure estimated at 468 pounds per square inch.

10 Q Do you believe these fluid and pressure
11 characteristics will be compatible should commingling be
12 approved?

13 A Yes, sir, because of the small pressure
14 differential and the small volume of liquids, I would not
15 expect any migration of gas or fluids from one formation
16 to the other, and particularly while the well is contin-
17 uously producing.

18 Q What advantage would there be in com-
19 mingling the two zones?

20 A There are really two main advantages.
21 First, it is believed that a certain amount of additional
22 gas and oil could be obtained from both the Dakota and the
23 Gallup formations in this well that otherwise would not be
24 produced. It is estimated that the Gallup produced 50 Mcf
25 of gas per day and in addition to the Dakota's 23 Mcf of

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1 gas per day, this will add a greater volume of gas to help
2 lift both the Dakota and the Gallup liquids.

3 It is further estimated that the Dakota
4 has around 280,000 Mcf of remaining gas reserves and the
5 Gallup formation has about 150,000 Mcf of original reserves
6 which can be recovered through commingling.

7 Now besides efficiency in production, the
8 second advantage of commingling, of course, is economic.
9 To drill and complete a new Gallup well would cost appro-
10 ximately \$246,550, and to dually complete the existing well
11 would cost \$127,540.

12 However, it will only cost about \$93,170
13 to complete the Gallup and downhole commingle with the
14 Dakota.

15 Commingling, therefore, represents a sub-
16 stantial savings in monies.

17 Q If Division approval is granted, do you
18 propose a formula by which the gas and liquid production
19 can be apportioned to these two zones?

20 A No, I do not have a formula at this time;
21 however, if approval is granted it is recommended that the
22 production from the well be allocated in the following
23 manner: First, establish an oil/gas and water producing
24 rate for the Dakota just prior to the workover involving
25 approximately a one week continuous test.

1 After the workover and downhole commingling
2 is completed, establish the total oil, water, and gas pro-
3 ducing rate involving an equal producing interval prior to
4 the workover.

5 Three, we would then subtract the Dakota
6 oil, gas, and water rates established prior to the workover
7 to obtain the Gallup production. The percentages for allo-
8 cations will be calculated from these results.

9 Q What is the nature of ownership in the
10 well? In the two zones involved?

11 A Under the Jicarilla contract royalty
12 ownership in the two zones are identical. El Paso does
13 share a working interest owner with the Superior Oil Com-
14 pany.

15 Q Do you have a letter which you denominated
16 I believe, Exhibit Number Four, which shows Superior Oil
17 Company's agreement to our proposal in this case?

18 A Yes. The Exhibit Four contains correspond-
19 ence between El Paso and the Superior Oil Company, which
20 shows that the Superior Oil Company has agreed to our com-
21 mingling procedure.

22 Q In your opinion would the granting of
23 this application protect correlative rights and prevent
24 waste?

25 A Yes.

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

3 A No, I do not.

4 Q Were Exhibits One through Three prepared
5 by you or under your supervision?

6 A Yes, they were.

7 Q Was Exhibit Four provided to you by El
8 Paso's land department?

9 A Yes. Yes, it was.

10 MR. BURLESON: Mr. Examiner, I move that
11 Exhibits One through Four be accepted in evidence, at this
12 time.

13 MR. STAMETS: These exhibits will be ad-
14 mitted.

15 MR. BURLESON: And subject to the ques-
16 tions you might ask, we may or may not wish to put on two
17 additional witnesses, one or two additional witnesses.

18
19 CROSS EXAMINATION

20 BY MR. STAMETS:

21 Q Mr. Burchell, did you say that the owner-
22 ship in these two formations is identical?

23 A The royalty with the -- under the Jicarilla
24 contract with the Indians, 12-1/2 percent.

25 Q Okay, and the working interest is not?

1 A The working interest we share with Superior
2 Oil Company.

3 Q Okay, then I'm not clear on that.

4 A Oh.

5 Q Does each working interest -- is each
6 working interest the same in each pool?

7 A I'll have to explain that to you in detail.

8 Q Okay.

9 A It's a carried working interest ownership
10 in both zones. The amount is identical. But what it is,
11 it's 11.48 percent until payout. Then after payout it's
12 40 percent for Superior Oil Company.

13 Now when this well is first completed un-
14 til the monies are recaptured, the \$93,000, in one zone,
15 the Dakota, whatever we allocate to it, the Superior Oil
16 Company is getting 40 percent now. But in the upper zone,
17 the Gallup, they'll only -- until it is paid out, will only
18 receive 11.48 percent. After it's paid out, then their
19 40 percent is identical to both zones.

20 So there is a time interval there where
21 it is not identical, until payout.

22 MR. BURLESON: I might add just a little
23 summation of what I think to be the circumstance.

24 Superior Oil Company has one interest un-
25 til payout. They have a carried interest and they have

1 one interest until payout has been reached in a zone.

2 That payout has been reached in the Dakota
3 formation, so their interest is the larger interest which
4 they have after payout.

5 As to the Gallup, they will have the
6 smaller interest which they have until payout occurs, at
7 which time their interest then would be exactly the same
8 and the working interest would be common in both zones.

9 But as of some point in time there will be
10 a difference, but the point of our Exhibit Four is that
11 Superior is agreeing with this proposed allocation and
12 have no problem with this.

13 Q (Mr. Stamets continuing.) Mr. Burchell,
14 are you apt to get a true indication of the Dakota -- or
15 the Gallup producing capability in your short period of
16 time following workover, or do you really need somewhat
17 more extended tests to see if you can establish some sort
18 of a stabilized rate of production or decline in the Gallup?

19 A I believe what we would do there, Mr.
20 Examiner, of course we'd have -- immediately determine the
21 well's producing characteristics after we commingle, and if
22 it's erratic, we may allow for more time, but certainly not
23 less than week, and we would advise the Commission at which
24 time these tests are being taken so that they may witness
25 them if they like.

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Santa Fe, New Mexico 87301

1 Q Normally our orders in these cases say
2 that you'll work out the method with the supervisor at the
3 appropriate District Office.

4 A Fine.

5 Q Would that cause any problem?

6 A Oh, no, fine; fine.

7 MR. BURLESON: We have no objection to
8 that.

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

11 Anything further in this case?

12 Take the case under advisement.

13
14 (Hearing concluded.)
15
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SALLY WALTON BOYD
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Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a court reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. _____, heard by me on _____ 19____.

_____, Examiner
Oil Conservation Division

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
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Santa Fe, New Mexico 87501

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REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a court reporter, DO HEREBY
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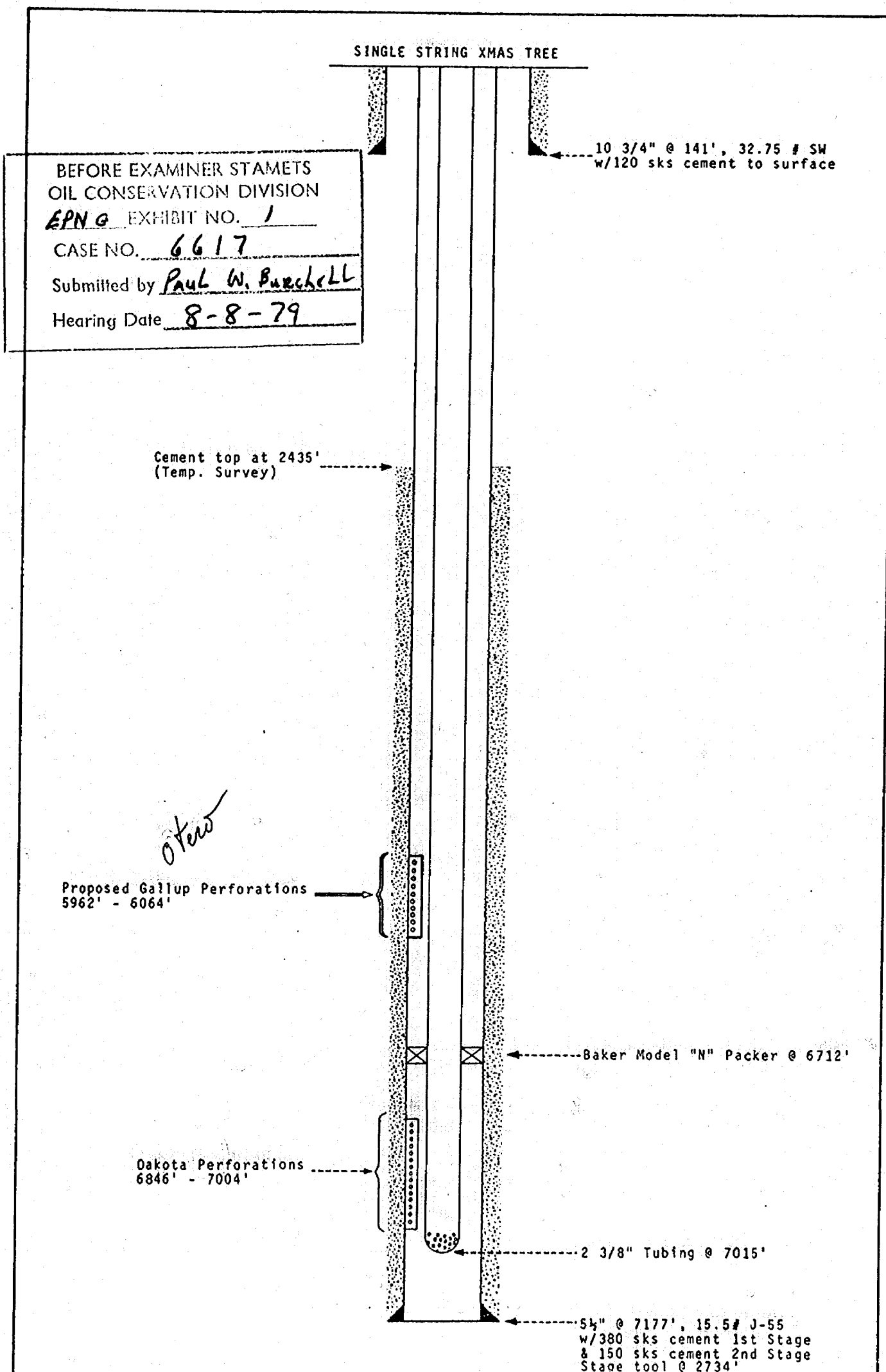
Sally W. Boyd C.S.R.
 Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 6617
 heard by me on 8-8 19 77.

Richard R. Hunt Examiner
 Oil Conservation Division

SALLY WALTON BOYD
 CERTIFIED SHORTHAND REPORTER
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 Santa Fe, New Mexico 87501

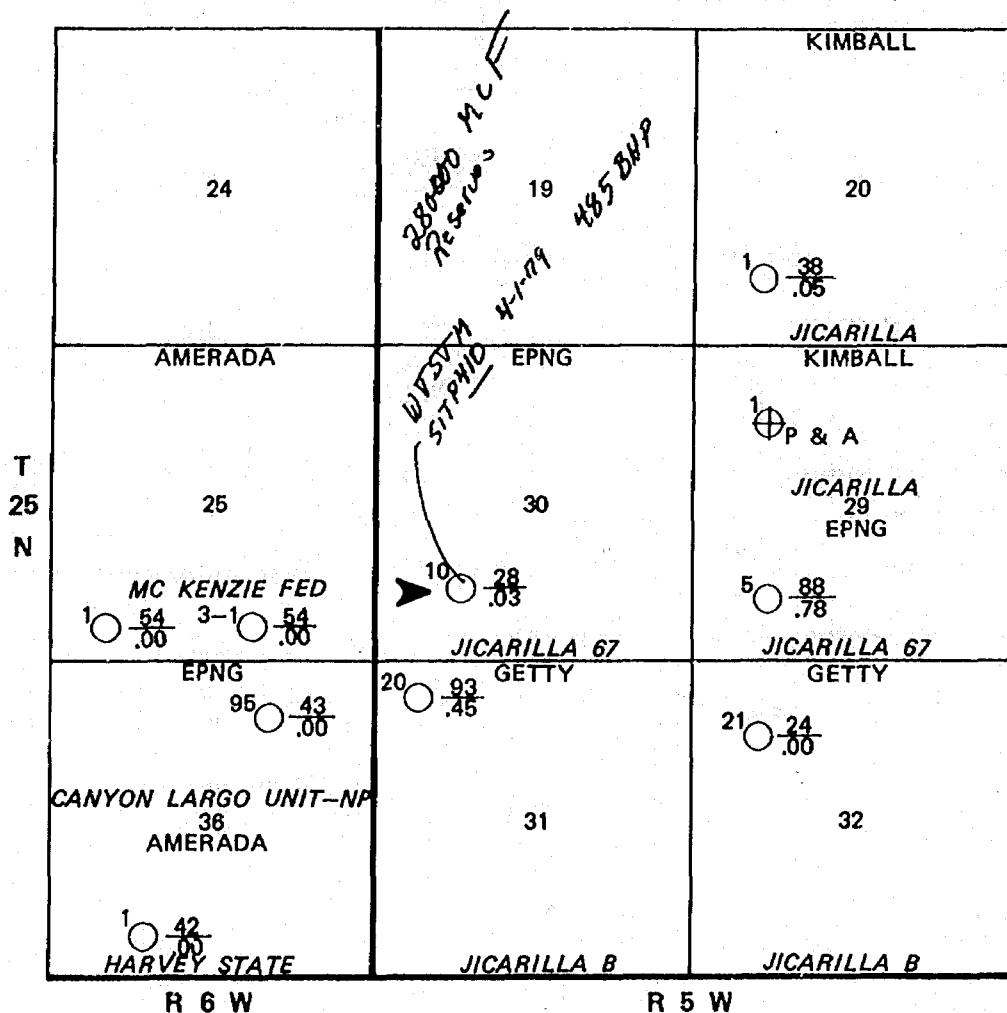
SCHEMATIC DIAGRAM of
EL PASO NATURAL GAS COMPANY'S
"JICARILLA 67 WELL No. 10"
Unit M of Sec. 30, T25N, R5W



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BEFORE EXAMINER STATE CONSERVATION DIVISION EPNG EXHIBIT NO. <u>3</u> CASE NO. <u>6617</u> Submitted by <u>Paul W. Burchell</u> Hearing Date <u>8/8/79</u>	EL PASO NATURAL GAS COMPANY WELL LOCATION MAP BASIN-DAKOTA GAS POOL RIO ARriba COUNTY, NEW MEXICO EXHIBIT NO. 3
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○ MCF - 1978 AVERAGE DAILY GAS PRODUCTION
 ○ BARRELS - 1978 AVERAGE DAILY OIL PRODUCTION

SCALE: 1 INCH = 3000 FEET

EXHIBIT No. 4

El Paso NATURAL GAS
COMPANY

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

June 29, 1979

The Superior Oil Company
P. O. Box 71
Conroe, Texas 77301

Re: Jicarilla 67-10
Basin Dakota Well
SW/4 of Section 30, T-25-N, R-5-W
Rio Arriba County, New Mexico

Gentlemen:

We recommend that the subject well be completed in the Gallup formation and returned to production by downhole commingling the Gallup and Dakota. We recommend that the percentage of production to be assigned to each zone upon commingling shall be determined, subject to the approval of the Oil Conservation Division, in the following manner:

- (A) Establish an oil and gas producing rate for the Dakota just prior to the workover involving approximately a one-week producing interval.
- (B) After the workover and downhole commingling, establish the total oil and gas producing rate involving an equal producing time interval.
- (C) Subtract the Dakota oil and gas rates in (A) from the total in (B) to obtain the Gallup production. The percentages will then be calculated from these results.

If you agree with the above recommendation, please sign and return one copy of this letter.

Very truly yours,

RH Nordhausen
R. H. Nordhausen
Senior Landman
Land Department
Exploration

BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION <i>EPNG</i> EXHIBIT NO. <u>4-</u> CASE NO. <u>6617</u> Submitted by <u>B. W. Burchel</u> Hearing Date <u>8/8/79</u>
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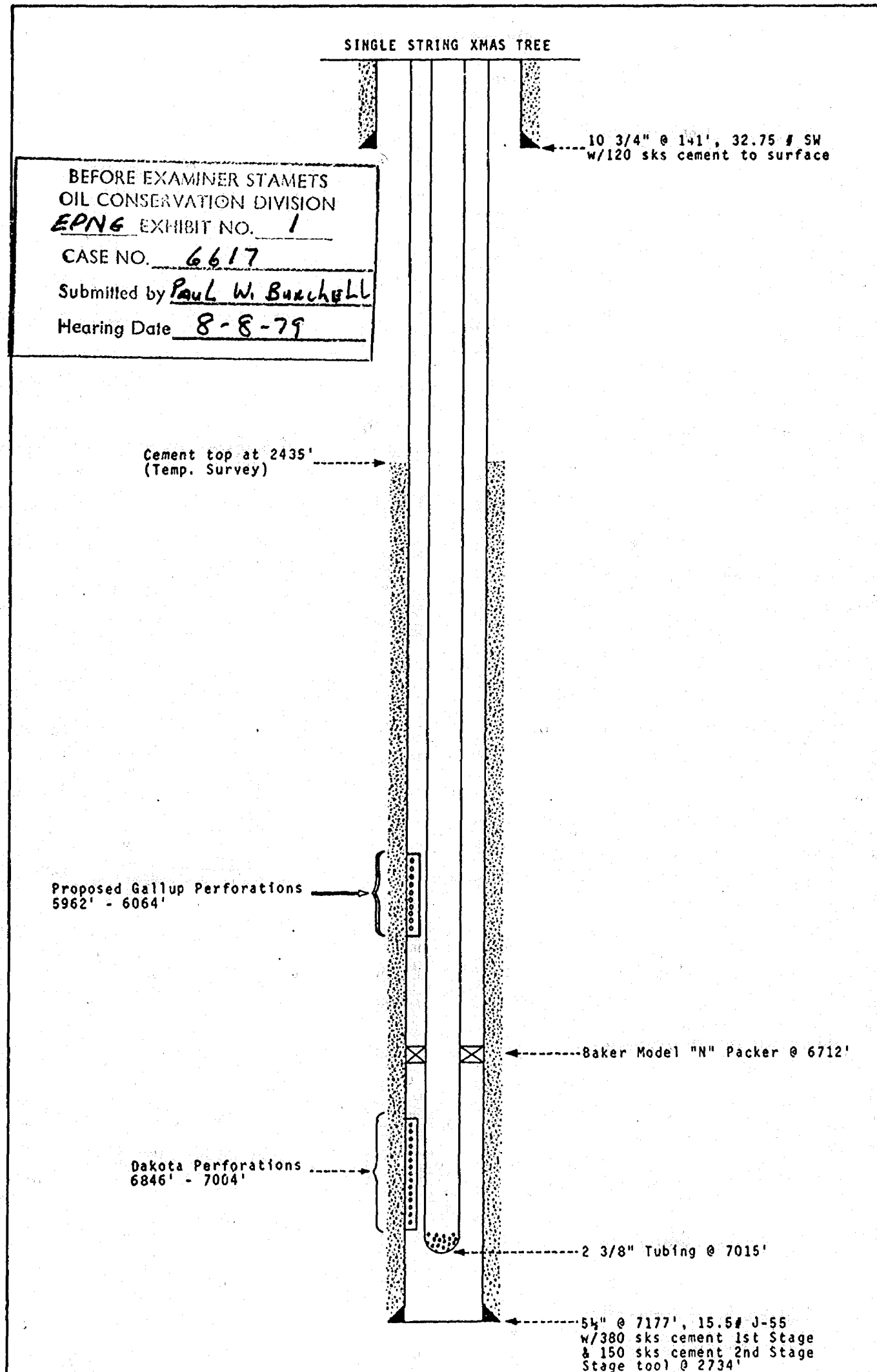
RHN:jm

Accepted and Agreed to this 6
day of JULY, 1979.

The Superior Oil Company

By: *J. Sannentine*

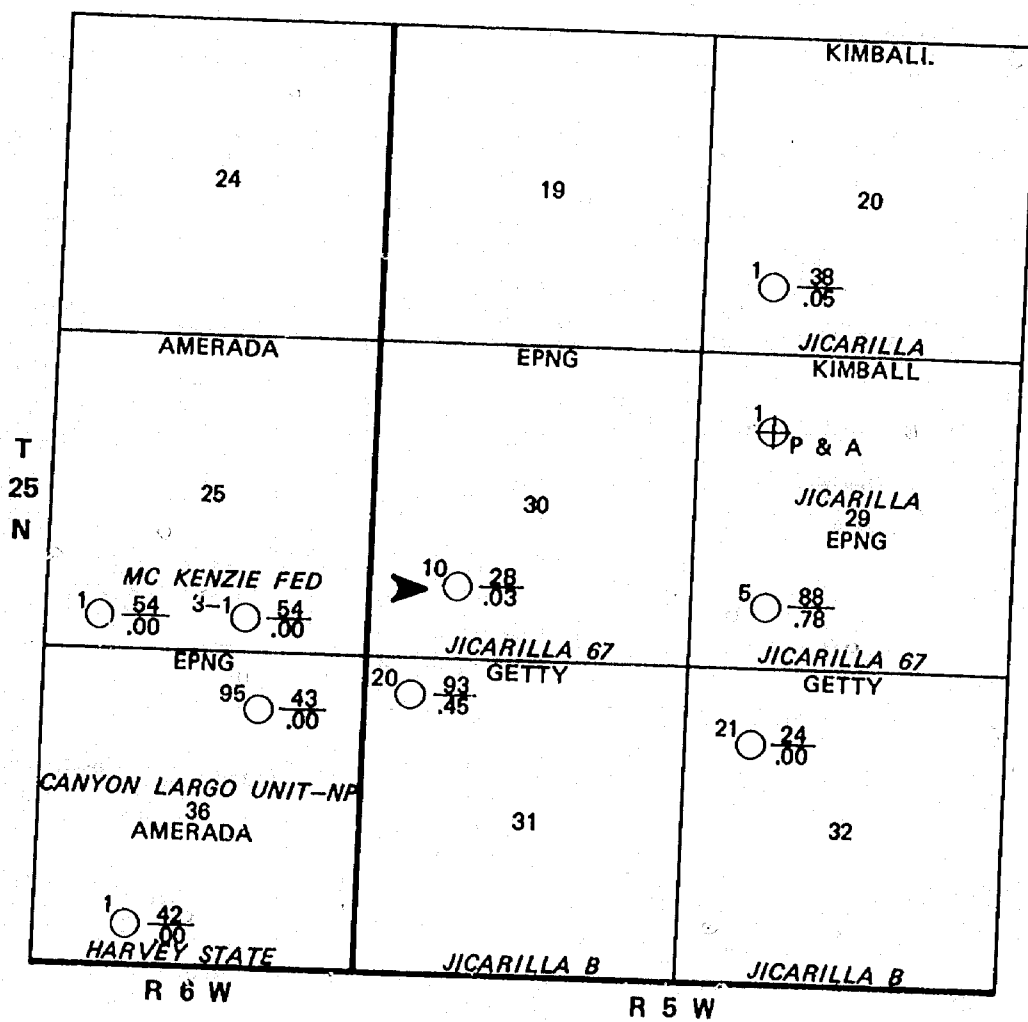
SCHEMATIC DIAGRAM of
EL PASO NATURAL GAS COMPANY'S
"JICARILLA 67 WELL No. 10"
Unit M of Sec. 30, T25N, R5W



BEFORE EXAMINER STATE OF TEXAS
 CONSERVATION DIVISION
 EPNG EXHIBIT NO. 3
 CASE NO. 6617
 Submitted by Paul W. Burckell
 Hearing Date 8/8/79

EL PASO NATURAL GAS COMPANY
 WELL LOCATION MAP
 BASIN-DAKOTA GAS POOL
 RIO ARriba COUNTY, NEW MEXICO

EXHIBIT NO. 3



○ MCF — 1978 AVERAGE DAILY GAS PRODUCTION
 BARRELS — 1978 AVERAGE DAILY OIL PRODUCTION

SCALE: 1 INCH = 3000 FEET

EXHIBIT No. 4

El Paso NATURAL GAS
COMPANY

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

June 29, 1979

The Superior Oil Company
P. O. Box 71
Conroe, Texas 77301

Re: Jicarilla 67-10
Basin Dakota Well
SW/4 of Section 30, T-25-N, R-5-W
Rio Arriba County, New Mexico

Gentlemen:

We recommend that the subject well be completed in the Gallup formation and returned to production by downhole commingling the Gallup and Dakota. We recommend that the percentage of production to be assigned to each zone upon commingling shall be determined, subject to the approval of the Oil Conservation Division, in the following manner:

- (A) Establish an oil and gas producing rate for the Dakota just prior to the workover involving approximately a one-week producing interval.
- (B) After the workover and downhole commingling, establish the total oil and gas producing rate involving an equal producing time interval.
- (C) Subtract the Dakota oil and gas rates in (A) from the total in (B) to obtain the Gallup production. The percentages will then be calculated from these results.

If you agree with the above recommendation, please sign and return one copy of this letter.

Very truly yours,

RH Nordhausen
R. H. Nordhausen
Senior Landman
Land Department
Exploration

RHN:jm

Accepted and Agreed to this 6
day of JULY, 1979.

The Superior Oil Company

By: G. Sannautine

BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION EPNG EXHIBIT NO. <u>4-</u> CASE NO. <u>6617</u> Submitted by <u>Paul W. Burchel</u> Hearing Date <u>8/8/79</u>

IT IS THEREFORE ORDERED:

(1) That the applicant, El Paso Natural Gas Company, is hereby authorized to commingle Basin-Dakota and Otero-Gallup production within the wellbore of the Jicarilla 67 Well No. 10, located in Unit M of Section 30, Township 25 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in ~~each~~ of the subject wells.

(ALTERNATE)

(2) That _____ percent of the commingled _____ production shall be allocated to the Basin-Dakota zone and _____ percent of the commingled _____ production shall be allocated to the Otero-Gallup zone.

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

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

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

(4) That from the Basin-Dakota zone, the subject well is capable of low ^{rate of} ~~marginal~~ production only.

(5) That from the Otero-Gallup zone, the subject well is ^{expected to be} capable of low ^{rate of} ~~marginal~~ production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, _____ percent of the commingled _____ production should be allocated to the Basin-Dakota zone, and _____ percent of the commingled _____ production to the Otero-Gallup zone.

(ALTERNATE)

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

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

dr/

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6617

Order No. R-6096

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 8,
19 79, at Santa Fe, New Mexico, before Examiner Richard L.
Stamets.

NOW, on this _____ day of August, 19 79, the
Division Director, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully
advised in the premises,

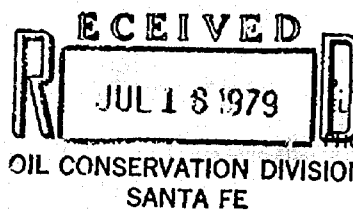
FINDS:

(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 Jicarilla 67 Well No. 10,
located in Unit M of Section 30, Township 25 North,
Range 5 West, NMPM, Rio Arriba County, New Mexico.

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

El Paso NATURAL GAS
COMPANY



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

July 13, 1979

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

Case 6617

Re: Commingling Request
EPNG - Jicarilla 67
No. 10 Well

Gentlemen:

El Paso Natural Gas Company respectfully request a hearing be set before the Commission or its designated examiner at your convenience.

El Paso seeks approval to downhole commingle gas and condensate from the Basin-Dakota Gas Pool with gas and oil from the Otero-Callup Pool in its Jicarilla 67 No. 10 Well. This well is located in Unit M of Section 30, T 25N-R5W, Rio Arriba County, New Mexico.

Very truly yours,

E. R. Manning
E. R. Manning

ERM:blb

cc: Messrs: D. E. Adams
David T. Burleson
D. N. Canfield
John F. Eichelmann, Jr.
Carl E. Matthews
NMOCD - District 3
L. G. Truby
U.S.G.S.

CASE 6601: (Continued from July 25, 1979, Examiner Hearing)

Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Mississippian formations underlying the E/2 of Section 8, Township 14 South, Range 36 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. 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 6622: Application of Adams Exploration Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Penn formations underlying the N/2 of Section 15, Township 24 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6623: Application of Penroc Oil Corporation for approval of infill drilling and simultaneous dedication, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well spacing requirements and a finding that the recompletion in the Morrow formation of its Dero "A" Federal Well No. 1 located in Unit N of Section 35, Township 19 South, Range 28 East, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6624: Application of Belco Petroleum Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well spacing requirements and a finding that the drilling of a well to be located in Unit K of Section 31, Township 9 South, Range 33 East, Flying "M"-San Andres Pool, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6625: Application of Mewbourne Oil Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow test well to be located 660 feet from the North line and 1315 feet from the East line of Section 30, Township 20 South, Range 27 East, the E/2 of said Section 30 to be dedicated to the well.

CASE 6603: (Continued from July 25, 1979, Examiner Hearing)

Application of Conoco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Penrose Skelly and Eumont production in the wellbore of its Hawk B-1 Well No. 12 located in Unit O of Section 8, Township 21 South, Range 37 East.

CASE 6587: (Continued and Readvertised)

Application of Caribou Four Corners, Inc., for an unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Kirtland Well No. 4 located 1450 feet from the North line and 595 feet from the West line of Section 18, Township 29 North, Range 14 West.

Docket No. 31-79

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 15, 1979

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

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

- ALLOWABLE:
- (1) Consideration of the allowable production of gas for September, 1979, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for September, 1979, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

Dockets Nos. 32-79 and 33-79 are tentatively set for hearing on August 22 and September 5, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - TUESDAY - AUGUST 7, 1979

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

CASE 6590: (Continued from July 25, 1979, Examiner Hearing)

Application of Grace Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Lots 9, 10, 15, and 16 and the SE/4 of Section 6, Township 21 South, Range 32 East, to be dedicated to a well to be drilled at an unorthodox location 4650 feet from the South line and 660 feet from the East line of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the costs 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 6612: Application of Gulf Oil Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Lots 9 thru 16 of Section 6, Township 21 South, Range 32 East, to be dedicated to a well to be drilled at an unorthodox location 4650 feet from the South line and 660 feet from the East line of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the costs 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 6555: (DE NOVO)

Application of Jake L. Hamon for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox location 660 feet from the North line and 560 feet from the East line of Section 30, Township 20 South, Range 36 East, North Osudo-Morrow Gas Pool, all of said Section 30 to be dedicated to the well.

Upon application of Texas Oil & Gas Corp. this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 6596: (Continued from July 24, 1979, Commission Hearing)

Application of Harvey E. Yates Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Upper Pennsylvanian gas pool to be designated as the Southeast Indian Basin-Upper Pennsylvanian Gas Pool for its Southeast Indian Basin Well No. 1 located in Unit A of Section 23, Township 22 South, Range 23 East, and special pool rules therefor including 320-acre gas well spacing.

CASE 6597: (Continued from July 24, 1979, Commission Hearing)

Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Southeast Indian Basin Well No. 2, an Upper Pennsylvanian well to be drilled 660 feet from the North and West lines of Section 24, Township 22 South, Range 23 East, with the N/2 or all of said Section 24 to be dedicated to the well, depending on the outcome of Case No. 6596.

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 8, 1979

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

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

- CASE 6613: Application of Grace Petroleum Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Smith Ranch Unit Area, comprising 1,600 acres, more or less, of State and federal lands in Township 20 South, Range 33 East.
- CASE 6602: (Continued from July 25, 1979, Examiner Hearing)
Application of Tenneco Oil Company for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 33 C No. 2 Well 1010 feet from the North line and 1710 feet from the West line of Section 33, Township 17 South, Range 29 East, South Empire-Wolfcamp Pool, the E/2 NW/4 of said Section 33 to be dedicated to the well.
- CASE 6611: (Continued from July 25, 1979, Examiner Hearing)
Application of Cabot Corp. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the disposal of produced salt water in the Devonian formation through the perforated interval from 12,156 feet to 12,574 feet in its Reed Well No. 1 located in Unit H of Section 35, Township 13 South, Range 37 East, King Field.
- CASE 6614: Application of Texaco Inc. for the amendment of Order No. R-4442, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4442 to remove the top unit allowable restriction from producing wells in the Vacuum Grayburg San Andres Unit which are offset by "lease line" injection wells.
- CASE 6615: Application of Southland Royalty Company for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Kutz-Gallup and Basin-Dakota production in the wellbore of its Frontier "E" Well No. 1 located in Unit O of Section 4, Township 27 North, Range 11 West.
- CASE 6616: Application of Watson Treating Plant for an oil treating plant permit, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at a site in the SE/4 NW/4 of Section 34, Township 8 South, Range 35 East.
- CASE 6617: 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 Basin-Dakota and Otero-Gallup production in the wellbore of its Jicarilla 67 Well No. 10 located in Unit M of Section 30, Township 25 North, Range 5 West.
- CASE 6618: Application of Harvey E. Yates Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Yates gas pool for its DEPCO Federal Well No. 1 located in Unit D of Section 19, Township 18 South, Range 29 East, and special rules therefor, including 80-acre gas well spacing.
- CASE 6619: Application of Harvey E. Yates Company for an unorthodox well location and a non-standard proration unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 62.75-acre non-standard Yates gas proration unit comprising Lots 1 and 2 of Section 19, Township 18 South, Range 29 East, to be dedicated to its DEPCO Federal Well No. 1 drilled 330 feet from the North line and 660 feet from the West line of said Section 19.
- CASE 6620: Application of Harvey E. Yates Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination for its Austin Monteith Well No. 1 located in Unit K of Section 8, Township 14 South, Range 36 East.
- CASE 6621: Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Penn formations underlying the S/2 of Section 4, Township 18 South, Range 29 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. 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. (This case will be dismissed.)

J. O. SETH (1883-1963)

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FRED C. HANNAHS
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August 3, 1979

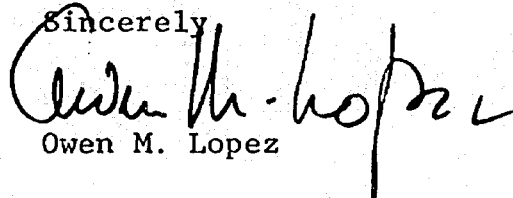
New Mexico Energy and
Minerals Department
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico 87503

Re: NMOCC Case No. 6617 - Application of El Paso
Natural Gas Company for Downhole Commingling,
Rio Arriba 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