

CASE NO. 5375: Appli. of EL PASO
NATURAL GAS CO. for DOWNHOLE
COMMINGLING, San Juan County

CASE No.

5375

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 26, 1974

EXAMINER HEARING

IN THE MATTER OF:)

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

CASE 5375

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

For the Applicant: Randy Waldman, Esq.
Associate Counsel
El Paso Natural Gas Company
El Paso, Texas

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I N D E X

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HAROLD L. KENDRICK

Direct Examination by Ms. Waldman

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Cross Examination by Mr. Nutter

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E X H I B I T S

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Applicant's Exhibit No. 1

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MR. NUTTER: We will call Case 5375.

MR. DERRYBERRY: Case 5375, application of El Paso Natural Gas Company for downhole commingling, San Juan County, New Mexico.

MS. WALDMAN: Mr. Examiner, I'm Randy Waldman, Associate Counsel for El Paso Natural Gas, I'm representing the Applicant and I have one witness at this time.

(Whereupon, the witness was sworn.)

HAROLD L. KENDRICK

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

DIRECT EXAMINATION

BY MS. WALDMAN:

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

A Harold L. Kendrick and I reside in El Paso, Texas.

Q By whom are you employed and in what capacity?

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

Q Have you previously testified before this Commission before one of its examiners?

A Yes, I have.

Q Mr. Kendrick, are you familiar with Case 5375

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involving El Paso Natural Gas Company?

A Yes, I am.

MS. WALDMAN: Are the Witness's qualifications acceptable?

MR. NUTTER: Yes, they are.

BY MS. WALDMAN:

Q Mr. Kendrick, what is El Paso Natural Gas seeking in Case 5375?

A El Paso seeks permission to downhole commingle the South Blanco-Pictured Cliffs gas Blanco-Mesaverde gas in the well bore of the Storey No. 4, located in Unit, letter B of Section 34, Township 28 North, Range 8 West, San Juan County, New Mexico.

Q Why is El Paso asking for this permission to downhole commingle this gas?

A El Paso wishes to utilize downhole commingling in this well due to the productivity of both zones in the well, and because of the high cost involved in repairing a suspected packer leak in this well.

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

A We have that marked as El Paso's Exhibit No. 1.

Q Would you please explain what Exhibit No. 1 shows?

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A It is a diagrammatic sketch of the equipment in the Storey No. 4 well. It shows among other things, two strings of tubing. A Baker Model EGJ Packer is set at 2848. Pictured Cliffs perforations from 2640 to 2678 are separated from the Mesaverde perforations from 4308 to 5009 feet by this Baker packer.

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

A From the pressure data on the last packer-leakage test conducted in July of 1974 indicates that communication does exist within the well bore.

Q In your opinion, what is causing that leak?

A The leak is occurring somewhere near the Baker EGJ Packer. On September the ninth of 1974 a temperature survey was conducted in the well trying to define the leak and a cooling anomaly did occur at 2850 feet. This depth should be the approximate depth of the packer.

MR. NUTTER: Was it 2850?

MR. KENDRICK: Yes, sir.

BY MS. WALDMAN:

Q Prior to the time that communication was noted, what was the normal producing rate from each of the zones in this well?

A In 1972 the actual flow rate measured during the

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deliverability test indicated that the Pictured Cliffs zone at a flow rate of 127 MCF per day. The Mesaverde zone during the same period had an actual test flow rate of 182 MCF per day.

Q What is the combined ability of the Storey No. 4 Well to produce at the present time?

A For the October 1974 production data we show that the Pictured Cliffs-Mesaverde total is 160 MCF per day.

Q Are these considered to be small flow rates?

A Yes, these would be small flow rates.

Q What is the estimated total cost of repairing the leak in this well?

A We have a well-cost-data sheet showing a total cost of repairing this well at \$9,750. Arriving at this figure we assumed that we would replace approximately 500 feet of 2 and 3/8 OD tubing; replace 2661 feet of inch and a quarter of Grade B line pipe which was used as tubing in the Pictured Cliffs zone; and replace the Baker EGJ Packer with the Model G packer; and then hydro test the long string of tubing above the packer to four thousand pounds pressure.

Q Is it possible that the cost of repairing a well as a dual completion would be considered unprofitable to El Paso?

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A Yes, and in that case we might not repair the well, and one zone would necessitate the need to be plugged, so that the gas that was left in that pool would be abandoned.

Q In your opinion, would granting this application for downhole commingling prevent waste?

A Yes, it would.

Q What is nature of the ownership in the two producing intervals?

A Ownership is common.

Q Identical in both sides?

A Right, it is.

Q In your opinion, would the granting of this application protect correlative rights?

A Yes, it would.

Q What does El Paso propose to do in order to produce gas from the Storey No. 4 Well?

A Actually there would be no workover required on this to produce this as commingled gas. We would merely retie the well at the surface, produce the gas through one meter and allocate the production on the two zones.

Q Do you propose an allocation formula?

A Yes, I do.

Q Would you explain what that formula is?

A At looking at the production from this well of both zones, we have covered production entry from December 1956 until 1974. That has the two zones produced there have been periods when the Mesaverde zone produced as much as approximately 67 percent of the total production from the well; while at other times it contributed 54 percent of the production. Also in reviewing the records I find that the year to date average producing rate of Mesaverde is 100 MCF per day in '73, 128 MCF per day in '72, and 94 MCF per day in '71. The Pictured Cliffs year to date average producing rate was 72 MCF per day in '73, 100 MCF per day in '72, and 58 MCF per day in '71. This would yield an average producing rate of approximately 107 MCF per day for the Mesaverde and 77 MCF per day for the Pictured Cliffs. This indicates that 58.3 percent of the gas was from the Mesaverde while 41.7 percent was from the Pictured Cliffs. Also for the years 1969 through 1973 the Mesaverde zone contributed 62.9 percent of the produced volume; the Pictured Cliffs produced 37.1. And for this reason, I recommend that if we are granted permission to downhole commingle the gas in this well bore, we should allocate 63 percent of the total production to the Blanco-Mesaverde gas pool and 37 percent of the production to the South Blanco-Pictured Cliffs.

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Q Do you have anything further in this Case?

A No, I do not.

Q Was this Exhibit 1 prepared by you or under your supervision?

A Yes, it was.

MS. WALDMAN: Mr. Examiner, we ask that Exhibit 1 be accepted into evidence.

MR. NUTTER: Exhibit 1 will be admitted into evidence.

(Whereupon, Exhibit 1 was admitted into evidence.)

MS. WALDMAN: That completes our direct testimony.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Kendrick, is the Pictured Cliffs classified marginal?

A Yes, it is.

Q Is the Mesaverde classified marginal?

A Yes, it is.

Q Both zones are?

A Right. In the testimony of the producing abilities from deliverability tests, I had to use 1972 because this was the last date that annual tests were run on both zones

because in '73 the Mesaverde was actually exempt marginal, and we did not have a test then. In '74 there was communication indicated so we did not choose to use that data.

Q Now let's see, I missed one figure. You said that the Mesaverde averaged 173, 128, in '72; what was that figure in '71?

A Fifty-eight, I'm sorry, that's Pictured Cliffs. Ninety-four in '71.

MR. NUTTER: Are there any further questions of Mr. Kendrick? You may be excused.

Is there anything further Ms. Waldman?

MS. WALDMAN: No, there isn't.

MR. NUTTER: Does anyone have anything they wish to offer in Case 5375? We will take the case under advisement.

STATE OF NEW MEXICO)

122

COUNTY OF SANTA FE)

I, SIDNEY F. MORRISH, Court Reporter, do hereby

certify that the foregoing and attached Transcript of

was reported by me, and the same is a true and correct

record of the said proceedings, to the best of my knowledge.


skill and ability.

SIDNEY F. MORRISH, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in

the Examiner hearing of Case No. 5376,
heard by me on 11/26, 19 24.

heard by me on 11/26, 1974.

 , Examiner
New Mexico Oil Conservation Commission

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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. 5375
Order No. R-4928

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 26, 1974,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 3rd day of December, 1974, 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 Storey Well No. 4, located in
Unit B of Section 34, Township 28 North, Range 8 West, NMPM,
San Juan County, New Mexico.
- (3) That applicant seeks authority to commingle South
Blanco-Pictured Cliffs and Blanco-Mesaverde production in the
wellbore of the above-described well.
- (4) That from the Pictured Cliffs formation the subject
well is capable of very low marginal production only.
- (5) That from the Mesaverde formation the subject well is
capable of very low marginal production only.
- (6) That the subject well is presently completed as a
dual completion but that there is communication between the
zones due to a leaking packer.

-2-
Case No. 5375
Order No. R-4928

(7) That repairing the packer would not be economical in view of the low productive capacity of the well.

(8) 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.

(9) 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 subject well is not shut-in for an extended period.

(10) That in order to properly allocate the commingled production to each of the commingled zones in the subject well, 37 percent of the commingled production should be allocated to the South Blanco-Pictured Cliffs zone and 63 percent should be allocated 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 in its Storey Well No. 4, located in Unit B of Section 34, Township 28 North, Range 8 West, NMPM, San Juan County, New Mexico, in such a manner as to permit production of commingled gas through two strings of tubing.

(2) That 37 percent of the commingled production shall be allocated to the South Blanco-Pictured Cliffs zone and 63 percent of the commingled production shall be allocated to the Blanco-Mesaverde zone.

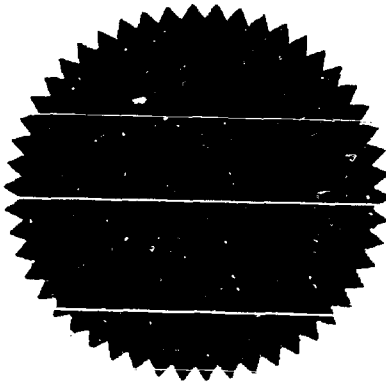
(3) That the operator of the subject well shall immediately notify the Commission's Aztec District Office any time the subject well has been shut-in for 7 consecutive days.

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

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Case No. 5375
Order No. R-4928

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



R. Trujillo
I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

BEFORE EXAMINER NUTTER

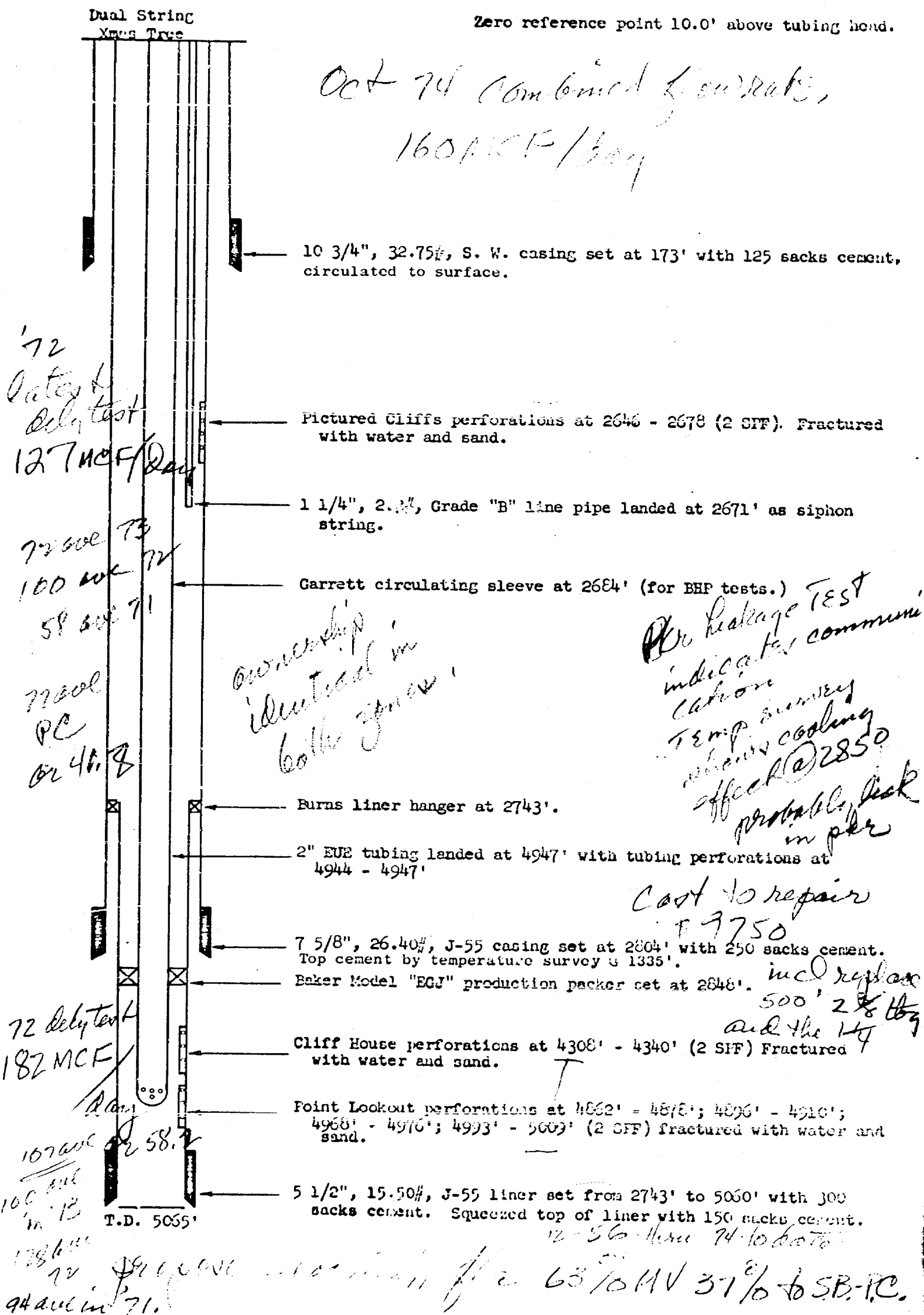
OIL CONSERVATION COMMISSION

2PUG EXHIBIT NO. 1

CASE NO. 5375

SCHEMATIC DIAGRAM OF DUAL COMPLETION

El Paso Natural Gas Co. Storey No. 4 (III)
(NE/4 Section 34, T24N, R2W)



J. O. SETH (1883-1963)

A. K. MONTGOMERY
WM. R. FEDERICI
FRANK ANDREWS
FRED C. HANNAHS
SUMNER G. BUELL
SETH D. MONTGOMERY
FRANK ANDREWS III
OWEN M. LOPEZ

JEFFREY R. BRANNEN
JOHN BENNETT POUND

MONTGOMERY, FEDERICI, ANDREWS, HANNAHS & BUELL

ATTORNEYS AND COUNSELORS AT LAW

350 EAST PALACE AVENUE
SANTA FE, NEW MEXICO 87501

November 22, 1974

POST OFFICE BOX 2307
AREA CODE 505
TELEPHONE 982-3876

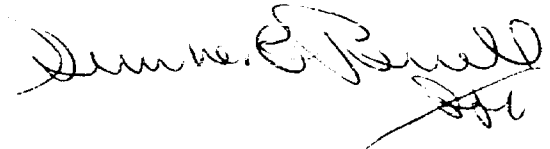
New Mexico Oil Conservation Commission
State Land Office Building
Post Office Box 2088
Santa Fe, New Mexico 87501

Attention: William F. Carr

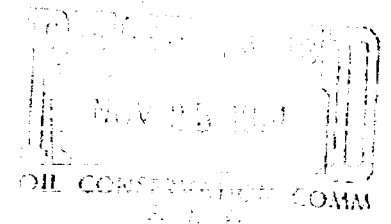
Gentlemen:

Enclosed please find an Entry of Appearance which
we would like filed on behalf of El Paso Natural
Gas Company.

Very truly yours,



SGB:st
Enclosure as indicated



BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 5375

ENTRY OF APPEARANCE

Comes now Montgomery, Federici, Andrews, Hannahs and
Buell and enters its appearance on behalf of the the
applicant, El Paso Natural Gas Company.

MONTGOMERY, FEDERICI, ANDREWS,
HANNAHS & BUELL

By: 

Post Office Box 2307
Santa Fe, New Mexico 87501

CASE 5375: Application of El Paso Natural Gas Company for downhole commingling, San Juan 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 Storey Well No. 4, located in Unit B of Section 34, Township 28 North, Range 8 West, San Juan County, New Mexico.

CASE 5376: Application of McClellan Oil Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Ishle Lake Unit Area comprising 3,404 acres, more or less, of Federal, State, and fee lands in Township 16 South, Ranges 28 and 29 East, Eddy County, New Mexico.

Docket No. 33-74

DOCKET: EXAMINER HEARING - THURSDAY - DECEMBER 12, 1974

1:30 P.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

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

- ALLOWABLE: (1) Consideration of the allowable production of gas from seventeen prorated pools in Lea, Eddy, Roosevelt, and Chaves Counties, New Mexico, for January, 1975;
- (2) Consideration of the allowable production of gas from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for January, 1975.

El Paso Natural Gas Company

El Paso, Texas 79901

October 31, 1974

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

Gentlemen:

El Paso Natural Gas Company respectfully requests a hearing be set before the New Mexico Oil Conservation Commission or its designated examiner for November 26, 1974.

El Paso seeks approval to downhole commingle gas from the South Blanco Pictured Cliffs Pool with gas from the Blanco Mesaverde Pool in its Storey #4 (PM). El Paso's Storey #4 Well is located in Unit B, Section 34, T28N, R8W, San Juan County, New Mexico.

Very truly yours,

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

ERM:eh

DOCKET MAILED

Date 11-15-74

DRAFT
jr/

(Handwritten initials)

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. 5375

Order No. R- 4928

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

(Handwritten signatures)

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 26, 1974
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of December, 1974, 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 Storey Well No. 4, located in Unit
B of Section 34, Township 28 North, Range 8 West, NMPM, San Juan
County, New Mexico.

1 -2-

2 CASE NO. 5375
3 Order No. R-

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

7 (4) That from the ~~Blanco-Pictured~~ Pictured Cliffs formation
8 the subject well is capable of very low marginal production only.

9 (5) That from the Mesaverde formation the subject well is
10 capable of very low marginal production only.

11 (6) That the subject well is presently completed as a dual
12 completion but that there is communication between the zones due
13 to a leaking packer.

14 (7) That repairing the packer would not be economical in
15 view of the low productive capacity of the well.

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

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

23 (10) That in order to properly allocate the commingled produc-
24 tion to each of the commingled zones in the subject well, 55 percent
25 of the commingled production should be allocated to the South
26 Blanco-Pictured Cliffs zone and 45 percent should be allocated to
27 the Blanco-Mesaverde zone.

28 IT IS THEREFORE ORDERED:

29 (1) That the applicant, El Paso Natural Gas Company, is hereby
30 authorized to commingle South Blanco-Pictured Cliffs and Blanco-
31 Mesaverde production in its Storey Well No. 4, located in Unit B
32 of Section 34, Township 28 North, Range 8 West, NMPM, San Juan
County, New Mexico, in such a manner as to permit production of

leave
numbers
out -
to be
filled
in
later

-3-

CASE NO. 5375
Order No. R-

commingled gas through two strings of tubing.

(2) That 55 percent of the commingled production shall be allocated to the South Blanco-Pictured Cliffs zone and 45 percent of the commingled 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 subject well has been shut-in for 7 consecutive days.

(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

*Same
as
above*