

Case No.

1005

Application, Transcript,
Small Exhibits, Etc.

CASE 1005: Blackwood & Nichols Co.,
Application for 259.82 acre non-standard
gas unit, San Juan County

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION FOR APPROVAL OF NON-STANDARD
GAS PRORATION UNIT CONSISTING OF LOTS 5,
6, 7 and 8 and $E\frac{1}{2}W\frac{1}{2}$, SECTION 19, TOWNSHIP
31 NORTH, RANGE 7 WEST; ALSO LOT 5 and
 $NE\frac{1}{4}NW\frac{1}{4}$, SECTION 30, TOWNSHIP 31 NORTH,
RANGE 7 WEST, IN THE NORTHEAST BLANCO
UNIT AREA, BLANCO-MESA VERDE GAS POOL,
SAN JUAN and RIO ARriba COUNTIES, NEW
MEXICO.

CASE NO. 1005

A P P L I C A T I O N

Comes now Blackwood & Nichols Company and respectfully sub-
mits this application for a non-standard gas proration unit con-
sisting of Lots 5, 6, 7 and 8 and $E\frac{1}{2}W\frac{1}{2}$, Section 19; also Lot 5
and $NE\frac{1}{4}NW\frac{1}{4}$, Section 30, all in Township 31 North, Range 7 West,
San Juan ~~and Rio Arriba Counties~~, New Mexico. Said tract contains
259.82 acres and applicant proposes to drill a well in the
 $SW\frac{1}{4}$ of Section 19, Township 31 North, Range 7 West.

The applicant states that the acreage contained within the
proposed non-standard proration unit lies wholly within the
Northeast Blanco Unit, San Juan ~~and Rio Arriba Counties~~, New
Mexico and is within the Blanco-Mesa Verde Gas Pool in said
counties.

The applicant proposes the above described acreage be estab-
lished as a non-standard unit in exception to Rule 1 of Order
R-128-D, heretofore entered by the Commission.

Applicant further shows that the $W\frac{1}{2}$ of Section 19 and the $W\frac{1}{2}$
of Section 30, in Township 31 North, Range 7 West, are smaller
than the normal half sections, according to governmental surveys;
consequently, the applicant is prevented from forming standard
proration units.

Applicant requests that if it is in conformance with the rules of the Commission, that this matter be set down for a hearing before an examiner following the regular hearing of the Commission scheduled for January 19, 1956.

Respectfully submitted,

SETH & MONTGOMERY

By *Allen Seth*

Attorneys for Blackwood
& Nichols Company

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 24, 1956

Mr. Oliver Seth
Seth & Montgomery
111 E. San Francisco
Santa Fe, New Mexico

Dear Sir:

In behalf of your client, Blackwood & Nichols Company, we enclose two copies of each of the following orders issued February 20, 1956, by the Oil Conservation Commission:

Order R-749 in Case 1005
Order R-750 in Case 1006
Order R-751 in Case 1007
Order R-752 in Case 1008
Order R-753 in Case 1009

These cases were all heard on January 24th.

Very truly yours,

W. B. Macey
Secretary - Director

WBM:brp
Encls.

C
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Y

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 1005
Order No. R-749

THE APPLICATION OF BLACKWOOD AND
NICHOLS COMPANY FOR AN ORDER
GRANTING AN EXCEPTION TO RULE 1,
OF THE SPECIAL RULES AND REGULATIONS
OF THE BLANCO-MESAVERDE GAS POOL AS
SET FORTH IN ORDER NO. R-128-D, IN
ESTABLISHMENT OF A NON-STANDARD GAS
PRORATION UNIT OF 259.82 CONTIGUOUS
ACRES CONSISTING OF LOTS 5, 6, 7 AND 8
AND E/2 W/2 SECTION 19, LOT 5 AND THE
NE/4 NW/4 SECTION 30, TOWNSHIP 31 NORTH,
RANGE 7 WEST, NMPM, SAN JUAN COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 24, 1956, at Santa Fe, New Mexico, before Warren W. Mankin, Examiner, duly appointed by the Oil Conservation Commission of New Mexico in accordance with Rule 1214 of Order No. R-681.

NOW, on this 20th day of February 1956, the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission", a quorum being present, having considered said transcript of testimony and record and the recommendations of the Examiner, Warren W. Mankin, and being fully advised in the premises,

FINDS:

1. That due notice of the time and place of hearing and the purpose thereof having been given as required by law, the Commission has jurisdiction of this case and the subject matter thereof.

2. That applicant, Blackwood and Nichols Company, is the owner of an oil and gas lease in San Juan County, New Mexico, the land consisting of other than a legal standard half section, a part of which is described as follows, to-wit:

TOWNSHIP 31 NORTH, RANGE 7 WEST, NMPM
Section 19: Lots 5, 6, 7 and 8, E/2 W/2
Section 30: Lots 5, NE/4 NW/4

containing 259.82 acres, more or less.

3. That applicant, Blackwood and Nichols Company, proposes to drill a well in the SW/4 of Section 19, Township 31 North, Range 7 West, within the horizontal limits of the Blanco-Mesaverde Gas Pool.

4. That it is impractical to pool applicant's above described acreage with adjoining acreage in the Blanco-Mesaverde Gas Pool, and that the owners of adjoining acreage in said area have not objected to the formation of the proposed proration unit of 259.82 acres.

5. That the acreage contained within the proposed unit lies wholly within the Northeast Blanco Unit, San Juan and Rio Arriba Counties, New Mexico, and is within the Blanco-Mesaverde Gas Pool.

6. That unless a proration unit consisting of applicant's aforesaid acreage is permitted, applicant will be deprived of the opportunity to recover its just and equitable share of the natural gas in the Blanco-Mesaverde Gas Pool.

7. That creation of a proration unit consisting of the aforesaid acreage will not cause but will prevent waste, and will protect correlative rights.

IT IS THEREFORE ORDERED:

1. That the application of Blackwood and Nichols Company, for approval of a non-standard gas proration unit in the Blanco Mesaverde Gas Pool consisting of the following described acreage in San Juan County, New Mexico:

TOWNSHIP 31 NORTH, RANGE 7 WEST, NMPM

Section 19: Lots 5, 6, 7 and 8, E/2 W/2

Section 30: Lot 5, NE/4 NW/4

be and the same is hereby approved, and a proration unit consisting of aforesaid 259.82 acres is hereby created.

2. That applicant's proposed well to be located in the SW/4 Section 19, Township 31 North, Range 7 West, NMPM, San Juan County, New Mexico, upon completion shall be granted an allowable in the proportion that the above described 259.82 acre unit bears to the standard or orthodox proration unit for said pool, all until further order of the Commission.

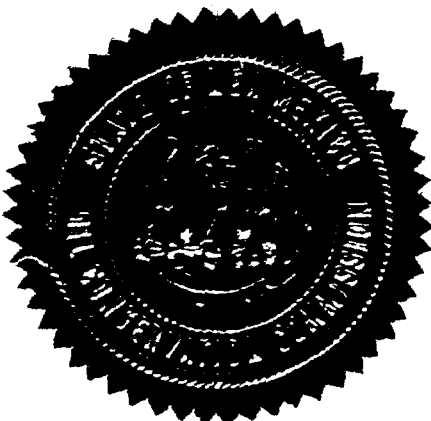
DONE at Santa Fe, New Mexico on the day and year hereinabove designated,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

John F. Simms
JOHN F. SIMMS, Chairman

E. S. Walker
E. S. WALKER, Member

W. B. Mackey
W. B. MACEY, Member and Secretary



OK WWP 1/24/56
Memo

From

To Jack Purley *Sam Miller* 1/24/56

Re Cases 1005, 1006, 1007, 1008 & 1009

Recommend orders be
written granting approval
of applicant's non-
standard gas poration
units in each of the
subject cases.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 24, 1956

IN THE MATTER OF:

CASES 1005, 1006, 1007,
1008 & 1009

TRANSCRIPT OF PROCEEDINGS

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 24, 1956

.....
IN THE MATTER OF:

CASE 1005:

Application of Blackwood and Nichols Company for an order approving a non-standard gas proration unit in exception to Rule 1 of the Special Rules and Regulations for the Blanco Mesaverde Gas Pool, San Juan and Rio Arriba Counties, New Mexico, as set forth in Order R-128-D. Applicant, in the above-styled cause, seeks an order establishing a 259.82 acre non-standard gas proration unit consisting of Lots 5, 6, 7 and 8, and the E/2 W/2 Section 19, Lot 5 and the NE/4 NW/4 Section 30, Township 31 North, Range 7 West, San Juan County, New Mexico; said acreage to be dedicated to applicant's proposed well to be drilled in the SW/4 of said Section 19.

CASE 1006:

Application of Blackwood and Nichols Company for an order approving a non-standard gas proration unit in exception to Rule 1 of the Special Rules and Regulations for the Blanco Mesaverde Gas Pool, San Juan and Rio Arriba Counties, New Mexico, as set forth in Order R-128-D. Applicant, in the above-styled cause, seeks an order establishing a 250.65 acre non-standard gas proration unit consisting of Lots 6, 9 and 10, E/2 SW/4, SE/4 NW/4 Section 30, Lots 7 and 8, E/2 NW/4 Section 31, Township 31 North, Range 7 West, San Juan County, New Mexico; said acreage to be dedicated to applicant's proposed well to be drilled in the SW/4 of said Section 30.

CASE 1007:

Application of Blackwood and Nichols Company for an order approving a non-standard gas proration unit in exception to Rule 1 of the Special Rules and Regulations for the Blanco Mesaverde Gas Pool, San Juan and Rio Arriba Counties, New Mexico, as set forth in Order R-128-D. Applicant, in the above-styled cause, seeks an order establishing a 296.02 acre non-standard gas proration unit consisting of Lots 11 and 12, E/2 SW/4 Section 31, Township 31 North, Range 7 West; Lots 11, 12, 17 and 18, E/2 W/2 Section 6, Township 30 North, Range 7 West, San Juan County, New Mexico; said acreage to be dedicated to applicant's Northeast Blanco Unit Well No. 23-6 located in the SW/4 of said Section 6.

CASE 1008:

Application of Blackwood and Nichols Company for an order approving a non-standard gas proration unit in exception to Rule 1 of the Special Rules and Regulations for the Blanco Mesaverde Gas Pool, San Juan and Rio Arriba Counties, New Mexico, as set forth in Order R-128-D. Applicant, in the above-styled cause, seeks an order establishing a 298.90 acre non-standard gas proration unit consisting of Lots 7, 8, 13 and 14, E/2 W/2 Section 7, Lots 7 and 8, E/2 NW/4 Section 18, Township 30 North, Range 7 West, San Juan County, New Mexico; said acreage to be dedicated to applicant's Northeast Blanco Unit Well No. 31-7 located in the SW/4 of said Section 7.

CASE 1009:

Application of Blackwood and Nichols Company for an order approving a non-standard gas proration unit in exception to Rule 1 of the Special Rules and Regulations for the Blanco Mesaverde Gas Pool, San Juan and Rio Arriba Counties, New Mexico, as set forth in Order R-128-D. Applicant, in the above-styled cause, seeks an order establishing a 307.44 acre non-standard gas proration unit consisting of Lots 12 and 13, E/2 SW/4 Section 18, Lots 6, 7, 12 and 13, and the E/2 W/2 Section 19, Township 30 North, Range 7 West, San Juan and Rio Arriba Counties, New Mexico; said acreage to be dedicated to applicant's proposed well to be located in the SW/4 of said Section 19.

.....
BEFORE:

Warren W. Mankin, Examiner

TRANSCRIPT OF HEARING

HEARING EXAMINER MANKIN: Next case is Case 1005 and I presume 1006, 1007, 1008 and 1009. I presume that you would want to consolidate those for the purposes of testimony.

MR. SETH: Yes. Seth & Montgomery appearing for Blackwood and Nichols. I believe they contain common questions of fact and regulations, and I would like to consolidate those for hearing.

MR. MANKIN: Is there objection to consolidating these five cases for purposes of testimony? If not, we will so hear them together for the purposes of testimony. Proceed Mr. Seth.

MR. SETH: I would like to call as a witness Mr. Loos.

MR. MANKIN: Just this one witness, Mr. Seth.

MR. SETH: Yes.

DE LASO LOOS

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

DIRECT EXAMINATION

BY MR. SETH:

Q Would you state your name please for the record?

A De Laso Loos.

Q And by whom are you employed and in what capacity?

A Blackwood and Nichols Company, employed as District Manager for the Rocky Mountain District.

Q Would you please state your education, training and experience?

A I am a graduate of the University of Oklahoma with a Bachelor of Science Degree in Petroleum Engineering. Immediately after graduation I was employed by Cool and Stilley Engineering Company in Midland, Texas, and in November of 1950 I was employed by Blackwood and Nichols Company as a petroleum engineer.

Q What has been your experience with Blackwood and Nichols in this Northeast Blanco Unit Area?

A In May of 1952 we took over the Northeast Blanco Unit and I was moved to Durango to be in charge of the operation of the Northeast Blanco Unit.

MR. SETH: Are his qualifications acceptable?

MR. MANKIN: They are.

Q Mr. Loos, have you prepared a plat of the area that is covered by the applications in Cases 1005 - 1009?

A Yes, sir. I have some extra copies of this plat.

MR. SETH: We would like to have that marked as applicant's Exhibit one in each of these cases.

MR. GURLEY: You have the one plat for all the cases.

MR. SETH: I think the record will be consolidated.

MR. MANKIN: For the purposes of testimony.

Q Referring to this exhibit one, did you prepare this exhibit?

A I did.

Q Was it prepared under your direction?

A It was prepared under the direction of the General Manager in Oklahoma City with suggestions from me.

Q You are familiar with it?

A Yes, sir.

Q This exhibit indicates a row of sections along the west side of Townships 30 and 31 North, 7 West.

A That is correct.

Q These sections shown on this plat are narrow sections east and west, is that right?

A Yes, sir.

Q Do they contain the full half section on the eastern side . . . on the east side?

A Yes, sir.

Q And they contain a full E/2 of the W/2 in each instance.

A Yes, sir.

Q They are all full 80 acre tracts on the E/2 of the W/2 of these sections.

A Yes, sir.

Q Then the balance of the section is made up of lots of varying size.

A Yes, sir.

Q Now, are all of these sections within the Northeast Blanco Unit?

A Yes, sir.

Q Now, your application, referring to Case 1005, your application . . . will you state to the Commission what area the application covers. Start at the top of these exhibits.

A Case 1005 consisting of Lots 5, 6, 7 and 8, and the E/2 W/2 of Section 19, Lot 5 and NE/4 NW/4 of Section 30, Township 31 North, Range 7 West, San Juan County.

Q Is that tract outlined in red on the exhibit?

A Yes, sir.

Q Is the acreage figure indicated?

A Yes, sir.

Q What is the acreage?

A 259.82 acres.

Q Now, referring to Case 1006, would you describe please the carrying color of the application 1006?

A 1006 consists of Lots 6, 9 and 10, and E/2 SE/4, SE/4 NW/4 of Section 30.

Q SE/4 NW/4?

A SE/4 NW/4. Lots 7 and 8, and the E/2 NW/4 Section 31, Township 31 North, Range 7 West, San Juan County.

Q Now, is this area also outlined in red on exhibit one?

A Yes, sir.

Q What is the acreage indicated?

A It consists of 250.65 acres.

Q Now, referring to Case 1007.

A Case 1007 consists of Lots 11 and 12, E/2 SW/4 Section 31, Township 31 North, Range 7 West, Lots 11, 12, 17 and 18, E/2 W/2 Section 6, Township 30 North, Range 7 West, San Juan County, New Mexico.

MR. GURLEY: That is Township 30 North, Range 7 West, sir.

A Yes, sir.

MR. GURLEY: Thank you.

A Which consists of 296.02 acres.

Q Now Case 1008.

A Case 1008 consisting of Lots 7, 8, 13 and 14, E/2 W/2 of Section 7. Also Lots 7 and 8, E/2 NW/4 of Section 18, Township 30 North, Range 7 West, San Juan County, New Mexico, which consists of 298.90 acres.

Q Now Case 1009.

A Case 1009 consisting of Lots 12 and 13, E/2 SW/4 Section 18, and Lots 6, 7, 12 and 13, and the E/2 W/2 of Section 19, Township 30 North, Range 7 West, San Juan and Rio Arriba Counties, New Mexico, which consists of 307.44 acres.

Q Now, our application as originally submitted, as the Commission pointed out, omitted the E/2 NW/4 Section 19, that was later amended.

MR. MANKIN: We have a letter amending that.

Q Now, Mr. Loos, would you again start with Case 1005 and indicate the proposed well locations on the unorthodox proration units?

A In Case 1005 we propose to drill a well in the SW/4 of Section 19, Township 31 North, Range 7 West.

Q Is that location indicated on Exhibit One?

A Yes, sir.

Q Are there offsetting wells to this proposed non-standard unit?

A Well there . . . I don't recall which section it is, but there is an offset well.

Q Do you have some information on that?

A In Section 24, 31 North, 8 West, in the NE/4 there is a completed well drilled by Pacific Northwest.

Q Is that completed in the Blanco Mesaverde?

A Yes, sir.

Q Are there any other offsets outside the area of this 1005?

A No, sir.

MR. NUTTER: What was the location of that well again, please?

MR. LOOS: NE/4 of Section 24, 31 North, 8 West.

MR. MANKIN: Do you have the particular quarter-quarter section?

MR. LOOS: No, sir, I don't have the exact location.

Q Would you also indicate the proposed location of the well in the standard unit in Case 1005?

A There is a proposed well in the NE/4 of Section 19.

Q Now, for 1006. Indicate if you would please, first, the proposed well location.

A In 1006, the proposed well will also be in the SE/4 of Section 30, 31 North, 7 West.

Q Is the location in the SE/4 of the SW/4?

A Yes, sir.

Q Is that well offset by unit acreage on the west?

A Yes, sir.

Q Now, referring again to Case 1007.

A 1007 - the well in 1007 has been completed which is in the SW/4, SE/4 of the SW/4 of Section 6, 30 North, 31 North, 7 West.

MR. MANKIN: That well has been designated as 23-6.

Q Can you describe them?

A I think that is El Paso Natural Gas Company's acreage or unit south of the Northeast Blanco Unit. The wells in there have been drilled by Pacific Northwest Pipeline Corporation, in Section . . . I believe the Northeast of 25, 30 North, 8 West. I don't know if that well in Section 30, 31 North, 7 West, would apply in this case as an offset well to the SE/4 of the SW/4 of Section 19.

Q Is there a . . . did you mention the well in Section 30?

A Yes, sir. Up there in the Northeast.

MR. NUTTER: I believe you meant 30 North. You said 31 North.

MR. LOOS: Yes, sir.

Q Now, considering all the cases together, has this arrangement of acreage and proposed locations - does that correspond as nearly as possible to the existing rules in this particular pool insofar as possible?

A Well, I believe so. We tried to work out different acreage allocations to a different number of wells in this strip. If you say, for instance, have four wells in there, then and try and divide the acreage equally among four wells, then you would have to cross an arbitrary line and then the E/2 of these sections, which is I believe, impossible under the rules.

Q I didn't ask you about the acreage offsetting on the west and in Sections 30 & 31, 6, 7 & 18, is that within the Northeast Blanco Unit?

A Yes, sir. The exception is the south of 19.

Q It is offset by all unit acreage. Mr. Loos, in your opinion, is this arrangement of acreage in the shape of these non-standard units - will that permit the best possible development in your opinion and prevent the drilling of unnecessary wells?

A I think that this arrangement is about as near as we can arrange the thing to properly drain our own acreage and protect ourselves against the offset wells in two particular cases - Case 1005 and Case 1009.

Q And will permit you to recover your fair share of the oil and gas in place.

A Yes, sir.

Q And in your opinion, will it permit waste?

A I don't think so.

Q Will it prevent waste?

A Yes, sir.

MR. SETH: I believe that is all.

MR. MANKIN: Mr. Loos, in most cases these five non-standard units you are asking for are offset either by unit acreage to the west and, therefore, protected within the unit. Except possibly to the north of the unit.

MR. LOOS: Yes, sir.

MR. MANKIN: In Section 19, 31 North, 7 West, which is offset by acreage other than the unit.

MR. LOOS: And also to the North - 19.

MR. MANKIN: That is the one I am speaking of.

MR. LOOS: And South also.

MR. MANKIN: And South also. This application, of course, requests a non-standard or unorthodox unit. It isn't in the call of this hearing to approve the non-standard locations. I presume that you will make a separate administrative request of the Director of this Commission - request because of of surface conditions and the dam and the back waters of the dam, you will request a separate permission for the non-standard location of the wells.

A Yes, sir. Before we submit our notice of intention to drill, we

will secure authority from the Secretary - Director for an unorthodox location.

MR. MANKIN: I believe you will find it can be done as an exception to Order R-110 which states that the well should be 990 from the outer boundaries. Of course, that is not possible in these cases and that can be done administratively. Do you have anything further?

MR. SETH: No, we haven't.

MR. NUTTER: Mr. Loos, with respect to the proration units on the east side of this row of partial sections, are all of those original units standard in size?

MR. LOOS: The E/2 of these sections are 320 acres.

MR. NUTTER: They are all standard proration units.

MR. LOOS: Yes, sir.

MR. NUTTER: Now, with respect to the location of wells that are proposed, all of the locations are standard with respect to the location except the one that is located in Section 19, of Township 30 North, Range 7 West.

MR. LOOS: Yes, sir.

MR. SETH: The reason the existing well in the E/2 of 18 -

MR. NUTTER: I said with respect to the proposed well. The well that has been drilled in Section 18 is non-standard but approval has already been obtained for that one.

MR. LOOS: It is an unorthodox location. The reason that we propose this well in the SE/4 of 19 is due to the reservations of the N/2 of Section 19 for the proposed dam site.

MR. NUTTER: Have you been out there yet and made a survey of the proposed location of that well in the SE/4 of Section 19, 30 and 7?

MR. LOOS: Not actually on the grounds, just visually.

MR. NUTTER: You don't have the footage location as yet?

MR. LOOS: No, sir.

MR. NUTTER: Now, the well will be located in the W/2 of Section 19, 30 and 7, will be a standard location won't it? It will be down in the SW/4.

MR. LOOS: Well, it will be SE/4 of the SW/4 which . . .

MR. MANKIN: Which would be non-standard.

MR. LOOS: It would be non-standard.

MR. MANKIN: Because it is closer than 990 to the outer boundary or the east.

MR. LOOS: From the east.

MR. MANKIN: From the center of the section. From the line through the center of the section running north and south.

MR. NUTTER: It will be impossible to get a standard location in either half then of 19, Mr. De Loos. One more question - what do you propose the allowable should be on the wells to be located in the W/2 of this partial row of sections.

MR. LOOS: Well, I on the standard 320 which is, gives a acreage factor of one, these wells would have 250 to 307. I think that the regular acreage factor of this acreage assigned to each well would be sufficient.

MR. NUTTER: In other words, the proportion that the acreage in each one of these proration units bears to 320 acres.

MR. LOOS: Yes, sir.

MR. NUTTER: That is all.

MR. MANKIN: Did you have anything further Mr. Nutter?

MR. NUTTER: No, I have nothing further.

MR. MANKIN: Mr. Utz.

MR. UTZ: Elvis Utz. In regard to the 12-18 in the . . . The well that has already been drilled in the E/2 of Section 18, 30 North and 7 West, is this well completed above the high water mark?

MR. LOOS: Yes, sir. It is a non-standard location if I remember correctly. It is 2500 from the north and 2500 from the east which . . . I forgot the elevation. We made sure that it was above the water level of the lake.

MR. UTZ: According to our contour map it is in the water.

MR. LOOS: The Federal Government, the Oil Conservation Commission, I mean the Bureau of Reclamation informed us, I believe, two years ago that we were not to have locations below 6139. They say that their lake level would be 6100 feet, and, therefore, when we stake a location we obtain the elevation at the same time and if it is below 6100, well then, we change our location and we have a great number of wells within the Northeast Blanco Unit that are non-standard locations due to that one fact.

MR. SETH: Are some of those on pilings?

MR. LOOS: We will have one that will be on pilings.

MR. UTZ: That is all I have.

MR. GURLEY: No questions.

MR. MANKIN: Do you have anything else? Is there any further questions of the witness? If not the witness may be excused. Do you wish

to enter this as an exhibit?

MR. SETH: We would like to offer Exhibit One.

MR. MANKIN: Is there objection to the entering of Exhibit One in the combined cases for the purpose of testimony in these cases? If not, it will be so entered. We will take the cases under advisement and the hearing is adjourned.

STATE OF NEW MEXICO)
 : ss
COUNTY OF SANTA FE)

I, Bobby Postlewaite, do hereby certify that the foregoing
and attached transcript of proceedings before the New Mexico Oil
Commission Examiner at Santa Fe, New Mexico, is a true and correct
record, to the best of my knowledge, skill and ability.

Dated at Santa Fe, New Mexico this 15th day of February, 1956.

Bobby Postlewaite

Antenna Reminders of tests.

12th. 10/10/11 - 1000. 10/10/11.

290 8W23 - 25 - 11 960 M.D.

78

48

12000
2.22
2.22

TAPICITO PICTURED CLIFFS #80320 ACRE
INTERFERENCE TEST DATA Case #1005

SOUTHERN UNION GAS COMPANY
EXPLORATION DEPARTMENT BURT BUILDING
A.M. WIEDERKEHR DALLAS 1, TEXAS
MANAGER

February 6, 1958

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
February 3	1056	1054

Production from the offset wells has been:

	<u>January</u>
Jicarilla 2-D	12,000
Jicarilla 5-D	32,781

Yours very truly,

SOUTHERN UNION GAS COMPANY

A.M. Wiederkehr

AMW:t

2-10-58
4-D @ 3786' - 1173.0th
5-D @ 3857' - 673.0th (flowing)
2-D @ 3290' - 753.0th (flowing)

MAIN OFFICE **Southern Union Gas**
Company

RECEIVED FEB 10 AM 10:19

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

February 4, 1958

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on February 3, 1958, the following shut-in pressures were taken with a dead weight gauge on Southern Union Gas Company's Jicarilla No. 2-D well, located in the Southwest quarter (SW/4) Section 29, Township 26 North, Range 3 West, Rio Arriba County, New Mexico; Jicarilla No. 4-D well, located in the Southeast quarter (SE/4) Northeast quarter (NE/4) Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico; and Jicarilla No. 5-D well, located in the Southwest quarter (SW/4) Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

Southern Union Gas Company, Jicarilla No. 2-D
FTP 467 psi
FCP 613 psi

Southern Union Gas Company, Jicarilla No. 4-D
STTP 1054 psi
SICP 1056 psi

Southern Union Gas Company, Jicarilla No. 5-D
FTP 596 psi
FCP 619 psi

WITNESS:

A. R. Kendrick

Very truly yours,

Thomas E. Fenno
Thomas E. Fenno
Jr. Engineer

TEF:mbw

cc: Oil Conservation Commission - Aztec, N.M.
Mr. A. M. Wiederkehr - Dallas
Mr. Paul J. Clote - Farmington
File

EXPLORATION DEPARTMENT

A. M. WIEDERKEHR
MANAGER

0:29

SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS

January 16, 1958

406-1-19-58

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
<u>January 3</u>	1057½	1055

Production from the offset wells has been:

	<u>December</u>
Jicarilla 2-D	11,944
Jicarilla 5-D	28,483

Yours very truly,

SOUTHERN UNION GAS COMPANY



AMW:t

FIELD OFFICE OCC **Southern Union Gas**
Company

1958 JAN 6 AM 3:18

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

January 6, 1958

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on January 3, 1958, the following shut-in pressures were taken with a dead weight gauge on Southern Union Gas Company's Jicarilla No. 2-D well, located in the Southwest quarter (SW/4), Section 29, Township 26 North, Range 3 West, Rio Arriba County, New Mexico; Jicarilla No. 4-D well, located in the Southeast quarter (SE/4), Northeast quarter (NE/4), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico; and Jicarilla No. 5-D well, located in the Southwest quarter (SW/4), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

Southern Union Gas Company, Jicarilla No. 2-D ✓
FTP 631 psi
FCP 655 psi

Southern Union Gas Company, Jicarilla No. 4-D ✓
SITP 1055 psi
SICP 1057½ psi

Southern Union Gas Company, Jicarilla No. 5-D ✓
FTP 610 psi
FCP 625 psi

Very truly yours,

Thomas E. Fenno
Thomas E. Fenno
Jr. Engineer

TEF:pss

cc: Oil Conservation Commission - Aztec, New Mexico
Mr. A. M. Wiederkehr - Dallas
Mr. Paul J. Clote - Farmington
File

RECEIVED
OCT 11 1957

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

December 9, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on December 6, 1957, the following shut-in pressures were taken with a dead weight gauge on Southern Union Gas Company's Jicarilla No. 2-D well, located in the Southwest quarter (SW/4), Section 29, Township 26 North, Range 3 West, Rio Arriba County, New Mexico. Jicarilla No. 4-D well, located in the Southeast quarter (SE/4), Northeast quarter (NE/4), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico. Jicarilla No. 5-D well, located in the Southwest quarter (SW/4), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

Southern Union Gas Company, Jicarilla No. 2-D.

FTP 660 psi
FCP 683 psi

Southern Union Gas Company, Jicarilla No. 4-D

SITP 1057 psi
SICP ✓ 1058½ psi

Southern Union Gas Company, Jicarilla No. 5-D

FTP 643 psi
FCP 656 psi

1058
653
- 375 diff.

1058
656
- 402

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Very truly yours,

Thomas E. Fenno

Thomas E. Fenno
Jr. Engineer

Witness:

A. R. Kendrick

TEF:ps

cc: Oil Conservation Commission - Aztec, New Mexico
Mr. A. M. Wiederkehr - Dallas
Mr. Paul J. Clote - Farmington
File

MAIL ROOM 000
EXPLORATION DEPARTMENT
A.M. WIEDERKEHR
MANAGER

SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS

December 9, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
November 8	1058 $\frac{1}{2}$	1057

Production from the offset wells has been:

	<u>November</u>
Jicarilla 2-D	1987
Jicarilla 5-D	23328

Yours very truly,

SOUTHERN UNION GAS COMPANY

A.M. Wiederkehr

AMW:t

MAIN OFFICE CCC
EXPLORATION DEPARTMENT

SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS

A.M. WEDERKAMP
MANAGER

November 8, 1957

CR-11-12-57

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
October 8, 1957	1061 $\frac{1}{2}$	1060

Production from the offset wells has been:

	<u>October</u>
Jicarilla 2-D	14380
Jicarilla 5-D	26496

Yours very truly,

SOUTHERN UNION GAS COMPANY

A.M. Wederkamp

AMW:t

MAIN OFFICE **Southern Union Gas**

Company

1957 OCT 11 AM 8:11

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO
October 9, 1957

New Mexico Oil Conservation Commission
P. O. Box 371
Santa Fe, New Mexico

Gentlemen:

This is to certify that on October 8, 1957, the following shut-in pressures were taken with added weight gauge on Southern Union Gas Company's Jicarilla #4-D well, located in the south-east quarter, (SE/4), north-east quarter (NE/4), Section 30, Township 26 north, Range 3 west, Rio Arriba County, New Mexico.

STOP	1861 psig.
OPEN	1860 psig.

The following flowing pressures were taken on the Jicarilla 2-D and the Jicarilla #5-D wells. These two wells are off-sets to the Jicarilla #4-D.

WELL	LOCATION	FLOWING PRESSURE
Jicarilla #2-D	SE/4, SW/4, Sec. 29, T-26N, R-3W, Rio Arriba County, New Mexico	Tubing - 511 psig. Casing - 535 psig.
Jicarilla #5-D	SW/4, SE/4, Sec. 30, T-26N, R-3W, Rio Arriba County, New Mexico	Tubing - 512 psig. Casing - 536 psig.

The above tests were witnessed by Mr. Tom Fermo of Southern Union Gas Co.

Very truly yours,

Gilbert Roland Jr.
Gilbert Roland, Jr.

TESTED:
Tom Fermo
Tom Fermo

cc: Oil Conservation Commission - Santa Fe, N.M.
Mr. A. W. McFarland - Dallas
Mr. Paul E. Glaze - Farmington
File

MAIN OFFICE OCC
EXPLORATION DEPARTMENT

1957 OCT 11 11 09 AM
A.M. WIEDERKEHR
MANAGER

SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS

October 9, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
September 17, 1957	1063½	1061½

Production from the offset wells has been:

	<u>September</u>
Jicarilla 2-D	22132
Jicarilla 5-D	40439
	<u>62571</u>

Yours very truly,

SOUTHERN UNION GAS COMPANY

A.M. Wiederkehr

AMW:t

MAIN OFFICE OCC
1957 SEP 23 AM 8.33

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

September 20, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on September 17, 1957, the following shut-in pressures were taken with a dead weight gauge on Southern Union Gas Company's Jicarilla #4-D Well, located in the South-East quarter (SE/4), North-East quarter (NE/4), Section 30, Township 26 north, Range 3 west, Rio Arriba County, New Mexico.

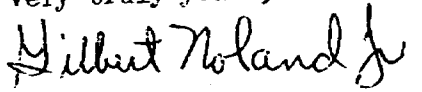
Southern Union Gas, Jicarilla #4-D
T.P. 1061 $\frac{1}{2}$ C.P. 1063 $\frac{1}{2}$

The above test was witnessed by Mr. Vernon J. Lowe of the Southern Union Gas Company.

WITNESS:


VERNON J. LOWE

Very truly yours,


Gilbert Noland, Jr.

GN/mbw

cc: Oil Conservation Commission - Aztec, N.M.
Mr. A. M. Wiederkehr - Dallas
Mr. Paul J. Clote - Farmington
File

MAIN OFFICE SOUTHERN UNION GAS COMPANY
EXPLORATION DEPARTMENT BURT BUILDING
A. M. WIEDERKEHR 9 AM 8:09 September 6, 1957
MANAGER DALLAS 1, TEXAS

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
August 13, 1957	1064 $\frac{1}{2}$	1062 $\frac{1}{2}$

Production from the offset wells has been:

	<u>July</u>	<u>August</u>
Jicarilla 2-D	235	9244
Jicarilla 5-D	51531	46151

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

AMW:t

MAIN OFFICE OCC



1957 AUG 23 AM 8:22

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

August 19, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on August 13, 1957, the following shut-in pressures were taken with a dead weight gauge on the Southern Union Gas Company's Jicarilla #4-D well, located in the Southesat Quarter (SE/4), Northeast Quarter (NE/4), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

Southern Union Gas Company Jicarilla #4-D SICP 1064 1/2 - SITP 1062 1/2

The above test was witnessed by Mr. Patrick J. Eldredge of the Southern Union Gas Company.

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.

Patrick J. Eldredge

Patrick J. Eldredge
GN:pss

cc: Oil Conservation Commission
Mr. A. M. Wiederkehr
Mr. Paul J. Clote
Mr. Vars Bates
File

SOUTHERN UNION GAS COMPANY
EXPLORATION DEPARTMENT
BURT BUILDING
DALLAS, TEXAS
A.M. WIEDERKEHR
MANAGER

July 16, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
July 1, 1957	1065	1063

Production from the offset wells has been:

	<u>June</u>
Jicarilla 2-D	3,181
Jicarilla 5-D	34,638

Yours very truly,

SOUTHERN UNION GAS COMPANY

A.M. Wiederkehr

AMW:t

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

July 8, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on July 1, 1957 the following shut-in pressures were taken with a Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #4-D Well, located in the Southeast Quarter (SE 1/4), Northeast Quarter (NE 1/4), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

Southern Union Gas Company Jicarilla #4-D SICP 1065 1/2
SITP 1063 1/2

The above test was witnessed by Mr. Fred Cook of the Aztec office of the Oil Conservation Commission.

Very truly yours,

Gilbert Noland, Jr.
Gilbert Noland, Jr.

GM:pss

Witness:

Mr. Fred Cook

Fred Cook
cc: Oil Conservation Commission
Mr. A. M. Wiederkehr
Mr. Paul Clote
Mr. Vars Bates
File

EXPLORATION DEPARTMENT
A. M. WIEDERKEHR
MANAGER

SOUTHERN UNION GAS COMPANY
EURT BUILDING
DALLAS 1, TEXAS

June 6, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
May 6, 1957	1066	1064½

Production from the offset wells has been:

	<u>MAY</u>
Jicarilla 2-D	3,492
Jicarilla 5-D	43,655

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

AMW:t

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

May 17, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on May 6, 1957 the following shut-in pressures were taken with a Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #4-D Well, located in the Southeast Quarter (SE $\frac{1}{4}$), Northeast Quarter (NE $\frac{1}{4}$), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

Southern Union Gas Co. Jicarilla #4-D SICP 1066 psig
SITP 1064 $\frac{1}{2}$ psig

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.
Jr. Engineer

Witness:

A. R. Kendrick
Mr. A. R. Kendrick

cc: Oil Conservation Commission
120 E. Chaco, Aztec, New Mexico
cc: Mr. A. M. Wiederkehr - Dallas
cc: Mr. Paul J. Clote - Farmington
cc: Mr. Vars Bates - Farmington
cc: File

EXPLORATION DEPARTMENT
A. M. WIEDERKEHR
MANAGER

SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS

May 20, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
April 8, 1957	1066	1064 $\frac{1}{2}$

Production from the offset wells has been:

	<u>APRIL</u>
Jicarilla 2-D	1,315
Jicarilla 5-D	36,586

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

AMW:t

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

April 9, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on April 8, 1957 the following shut-in pressures were taken with a dead weight gauge on the Southern Union Gas Company's Jicarilla #4-D well, located in the Southeast Quarter (SE $\frac{1}{4}$), Northeast Quarter (NE $\frac{1}{4}$), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

Southern Union Gas Company Jicarilla #4-D SICP 1066 psig
STTP 1064 $\frac{1}{2}$ psig

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Very truly yours,

Gilbert Noland Jr.

Gilbert Noland, Jr.
Jr. Engineer

Witness:

A. R. Kendrick
Mr. A. R. Kendrick

cc: Oil Conservation Commission
120 E. Chaco, Aztec, New Mexico
cc: Mr. A. M. Wiederkehr - Dallas
cc: Mr. Paul J. Clote - Farmington
cc: Mr. Vars Bates - Farmington
cc: File

SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS
EXPLORATION DEPARTMENT
A. M. WIEDERKEHR
MANAGER
April 8, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

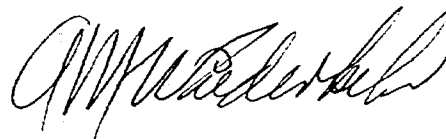
<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
March 11	1065 $\frac{1}{2}$	1064 $\frac{1}{2}$

Production from the offset wells has been:

	<u>March</u>
Jicarilla 2-D	2,093
Jicarilla 5-D	45,478

Yours very truly,

SOUTHERN UNION GAS COMPANY



AMW:t

*RECEIVED
MARCH 12 1957*

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

March 12, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on March 11, 1957 the following shut-in pressures were taken with a Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #4-D well located in the Southeast Quarter (SE $\frac{1}{4}$), Northeast Quarter (NE $\frac{1}{4}$), Section 30, Township 20 North, Range 3 West, Rio Arriba County, New Mexico.

Southern Union Gas Co. Jicarilla #4-D SICP 1065 $\frac{1}{2}$
SIIP 1064 $\frac{1}{2}$

Well Head Temp.
55°F

The above test was witnessed by Mr. E. C. Arnold of the Aztec Office of the Oil Conservation Commission.

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.
Jr. Engineer

Witness:

E. C. Arnold
E. C. Arnold

cc: Oil Conservation Commission
120 E. Chaco, Aztec, New Mexico
cc: Mr. A. M. Wiederkehr
cc: Mr. Paul Clote
cc: Mr. Vars Bates
cc: File

EXPLORATION DEPARTMENT

A. M. WIEDERKEHR
MANAGER

SOUTHERN UNION GAS COMPANY

BURT BUILDING

DALLAS 1, TEXAS

March 7, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
February 11 4-D	1065	1064

Production from the offset wells has been:

	<u>February</u>
Jicarilla 2-D	2,840
Jicarilla 5-D	44,904

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

AMW:t

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

February 12, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on February 11, 1957 the following shut-in pressures were taken with a Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #4-D well located in the Southeast Quarter (SE $\frac{1}{4}$), Northeast Quarter (NE $\frac{1}{4}$), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

Well Head Temp.

Southern Union Gas Co. Jicarilla #4-D	SICP 1065	50°F
	SITP 1064	

Very truly yours,

Gilbert Noland, Jr.

Gilbert Noland, Jr.

cc: Oil Conservation Commission
120 E. Chaco, Aztec, New Mexico
cc: Mr. A. M. Wiederkehr
cc: Mr. Vars Bates

RECEIVED
FEB 13 1957
SOUTHERN UNION GAS COMPANY
EXPLORATION DEPARTMENT
BURT BUILDING
DALLAS 1, TEXAS
A.M. WIEDERKEHR
MANAGER
February 12, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>		<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
January 14, 1957	4-D	1065	1064

Production from the offset wells has been:

	<u>January</u>
Jicarilla 2-D	4,019
Jicarilla 5-D	54,536

Yours very truly,

SOUTHERN UNION GAS COMPANY

A.M. Wiederkehr

AMW:t

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

January 16, 1957

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on January 14, 1957 the following shut-in pressures were taken with Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #4-D well located in the Southeast Quarter (SE $\frac{1}{4}$), Northeast Quarter (NE $\frac{1}{4}$), Section 30, Township 26 North, Range 3 West, Rio Arriba County, New Mexico.

S. U. G. Jicarilla #4-D SICP 1065
SITP 1064

Well Head Temp.
55°F

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Very truly yours,

Gilbert Noland, Jr.

Gilbert Noland, Jr.
Jr. Engineer

Witness:

A. R. Kendrick
A. R. Kendrick

cc: Oil Conservation Commission
120 E. Chaco, Aztec, N. Mex.
cc: Mr. A. N. Wiederkehr
cc: Mr. Vars Bates

EXPLORATION DEPARTMENT

A. M. WIEDERKEHR
MANAGER

SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS

January 7, 1957

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
Jicarilla 2-E December 2	1068	1066
Jicarilla 4-D December 17	1065 ✓	1064 ✓

Production from the offset wells has been:

	<u>December</u>
Jicarilla 1-E	45504
Jicarilla 3-E	17022
Jicarilla 4-E	36730
Jicarilla 2-D	4728
Jicarilla 5-D	51550

Yours very truly,

SOUTHERN UNION GAS COMPANY

AMW:t

1056.5
1068.8
21.5

1079.5
1066.8
12.5

Southern Union Gas Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

December 27, 1956

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

I have been informed by Mr. A. M. Wiederkehr that the interference tests on Southern Union Gas Company's Jicarilla #2-E well have been completed and that Southern Union is to conduct a similar test on their Jicarilla #4-D well located $SE\frac{1}{4}$, $NE\frac{1}{4}$, Sec. 30, T-26N, R-3W.

Southern Union's Jicarilla #5-D well; located $NE\frac{1}{4}$, $SW\frac{1}{4}$, Sec. 30, T-26N, R-3W, and Jicarilla #2-D well; located $NE\frac{1}{4}$, $SW\frac{1}{4}$, Sec. 29, T-26N, R-3W; are to be produced unrestricted into the line as offset wells.

The first shut-in pressures were taken on the Jicarilla #4-D well on December 17, 1956 with the following results:

S.U.G. Jicarilla #4-D SICP 1065
SITP 1064

Well head Temp.
55°F

All pressures will be taken with a dead weight pressure gauge every two weeks.

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Witness:

A. R. Kendrick
A. R. Kendrick

Very truly yours,

Gilbert Noland, Jr.
Gilbert Noland, Jr.
Jr. Engineer

cc: Oil Conservation Commission
120 E. Chaco, Aztec, N. Mex.
cc: Mr. Foster Morrell
P.O. Box 933, Roswell, N. Mex.
cc: Mr. A. M. Wiederkehr
cc: Mr. H. C. Montgomery
cc: Mr. Vars Bates

EXPLORATION DEPARTMENT

A. M. WIEDERKEHR
MANAGER

SOUTHERN UNION GAS COMPANY
BURT BUILDING

DALLAS 1, TEXAS

RECEIVED 11 AM 11:20
December 10, 1956

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
November 5	1072	1070
November 19	1070	1068

Production from the offset wells has been:

	<u>November</u>
Jicarilla 1-E	42,833
Jicarilla 3-E	8,747
Jicarilla 4-E	28,250

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

ASW:t



DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

November 20, 1956

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on November 19, 1956 the following shut-in pressures were taken with a Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #2-E well located in the Northeast Quarter (NE $\frac{1}{4}$), Southwest Quarter (SW $\frac{1}{4}$), Section 15, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

This test is in accordance with the Oil Conservation Commission Case No. 977, Order No. R-794.

	Well Head Temp.
Southern Union Gas Co. Jicarilla #2-E SICP 1070 psig	50°F
SITP 1068 psig	50°F

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.
Jr. Engineer

Witness:

A. R. Kendrick
A. R. Kendrick

cc: Oil Conservation Commission
P.O. Box 697
Aztec, New Mexico
cc: Mr. A. M. Wiederkehr
cc: Mr. H. C. Montgomery
cc: Mr. Vars Bates

1259.5
1070
19.5

MAIN OFFICE 000 SOUTHERN UNION GAS COMPANY
EXPLORATION DEPARTMENT BURT BUILDING
DALLAS 1, TEXAS
A.M. WIEDERKEHR, JR. 11 AM 9:50
MANAGER November 8, 1956

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
October 8	1077	1075
October 22	1072.5	1074.5

Production from the offset wells has been:

	<u>October</u>
Jicarilla 1-E	56342
Jicarilla 3-E	21235
Jicarilla 4-E	43817

Reference our letter of October 9th giving the pressures and production for the month of September. We inadvertently showed the month as August and this should have read September as the production shown was for the month of September.

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr
T.

AMW:t

MAIN OFFICE 602
TELEPHONE 21-1113

Southern Union Gas Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

October 23, 1956

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on October 22, 1956 the following shut-in pressures were taken with a Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #2-E well located in the Northeast Quarter (NE $\frac{1}{4}$) Southeast Quarter SE $\frac{1}{4}$), Section 15, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

This test is in accordance with the Oil Conservation Commission Case No. 977, Order No. R-794.

S.U.G. Jicarilla #2-E	SHUT IN PRESSURE	Well Head Temp.
	SITP 1072.5	70°F
	SICP 1074.5	70°F

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Witness:

A. R. Kendrick
A. R. Kendrick

Very truly yours,

Gilbert Noland, Jr.
Gilbert Noland, Jr.
Jr. Engineer

cc: Oil Conservation Commission
P. O. Box 697
Aztec, New Mexico
cc: Mr. A. M. Wiederkehr
cc: Mr. H. C. Montgomery
cc: Mr. Vars Bates

MAIN OFFICE 000
EXPLORATION DEPARTMENT
A. M. WIEDERKEHR
MANAGER
SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS
October 9, 1956

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
September 11	1081 ✓	1078 ✓
September 25	1079 ✓	1077 ✓

Production from the offset wells has been:

Jicarilla 1-E
Jicarilla 3-E
Jicarilla 4-E

August

60171
25812
48306

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

AMW:t

MAIN OFFICE 4800

11007 11 3100

Southern Union Gas
Company

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

September 25, 1956

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on September 24, 1956 the following shut-in pressures were taken with a Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #2-E well located in the Northeast Quarter (NE $\frac{1}{4}$), Southwest Quarter (SW $\frac{1}{4}$), Section 15, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

This test is in accordance with the Oil Conservation Commission Case No. 977, Order No. R-794.

S.U.G. Jicarilla #2-E SICP 1079 PSIG ✓
SITP 1077 PSIG ✓

Well Head Temp.

82°F
82°F

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Witness:

A. R. Kendrick
A. R. Kendrick

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.
Jr. Engineer

cc: Oil Conservation Commission
P.O. Box 697
Aztec, New Mexico
cc: Mr. A. M. Wiederkehr
cc: Mr. H. C. Montgomery
cc: Mr. Vars Bates

MAIN OFFICE 000
EXPLORATION DEPARTMENT
A. M. WIEDERKEHR
MANAGER
SEP 11 1956
SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS
September 6, 1956

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapacito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
August 15	1084	1082
August 28	1083	1080

Production from the offset wells has been:

	<u>August</u>
Jicarilla 1-E	62549
Jicarilla 3-E	31388
Jicarilla 4-E	51845

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

AMW:t

MAIN OFFICE 633



RECEIVED 4 31 23

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

August 28, 1956

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on August 27, 1956 the following shut-in pressures were taken with a Dead Weight Gauge on the Southern Union Gas Company's Jicarilla #2-E well located in the Northeast Quarter (NE $\frac{1}{4}$), Southwest Quarter (SW $\frac{1}{4}$), Section 15, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

This test is in accordance with the Oil Conservation Commissions Case No. 977, Order No. R-794.

S.U.G. Jicarilla #2-E - SICP 1083 psig	Well Head Temp.
SITP 1080 psig	75°F
	75°F

The above test was witnessed by Mr. A. R. Kendrick of the Aztec Office of the Oil Conservation Commission.

Witness:

A. R. Kendrick
A. R. Kendrick

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.
Jr. Engineer

cc: Oil Conservation Commission
P.O. Box 697
Aztec, New Mexico
cc: Mr. A. M. Wiederkehr
cc: Mr. H. C. Montgomery
cc: Mr. Vars Bates

EXPLORATION DEPARTMENT

A. M. WIEDERKEHR
MANAGER

RECEIVED
JUL 10 1956
SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS
August 7, 1956

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapicito Field:

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
July 17	1086.5 ✓	1084.5 ✓
July 31	1086 ✓	1083 ✓

Production from the offset wells has been:

	<u>July</u>
Jicarilla 1-E	62859
Jicarilla 3-E	20869
Jicarilla 4-E	51467

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

AMW:t

MAIN OFFICE OCC

Southern Union Gas
Company

1956 AUG 6 AM 8:21

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

July 31, 1956.

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on July 30, 1956, the following shut-in pressures were taken, with a Dead Weight Gauge, on the Southern Union Gas Company's Jicarilla #2-E well located in the NE $\frac{1}{4}$, SW $\frac{1}{4}$, Section 15, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

This test is in accordance with the Oil Conservation Commission's Case No. 977, Order No. R-794.

S.U.G. Jicarilla #2-E: SICP 1086 psig
SITP 1083 psig

Well Head Temperature
75° F.
75° F.

The above test was witnessed by Mr. Fred Cook of the Aztec Office of the Oil Conservation Commission.

Witness:

Fred Cook
Fred Cook

Very truly yours,

Gilbert Noland Jr.

Gilbert Noland, Jr.
Jr. Engineer

GN:ml

cc: Oil Conservation Commission
P. O. Box 697
Aztec, New Mexico

cc: Mr. A. M. Wiederkehr
cc: Mr. H. C. Montgomery
cc: Mr. Vars Bates

MAIN OFFICE 000 SOUTHERN UNION GAS COMPANY
EXPLORATION DEPARTMENT BURT BUILDING
DALLAS 1, TEXAS
A. M. WIEDERKEHR 9 PM 1:17
MANAGER
July 6, 1956

Mr. Elvis A. Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Mr. Utz:

Reference is made to Order No. R-794, we have tabulated below information regarding interference tests now being conducted in the Tapicito Field:

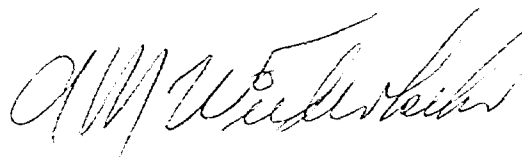
<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
June 19	1088.5	1085.5
July 3	1088	1085

Production from the offset wells has been:

	<u>May</u>	<u>June</u>
Jicarilla 1-E	70263	64229
Jicarilla 3-E	38681	28063
Jicarilla 4-E	61937	52806

Yours very truly,

SOUTHERN UNION GAS COMPANY



AMW:t

MAIN OFFICE OCC



1956 JUL 6 AM 8:04

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

July 3, 1956

New Mexico Oil Conservation Commission
P.O. Box 872
Santa Fe, New Mexico

Gentlemen:

This to certify that on July 2, 1956, the following shut-in pressures were taken, with a Dead Weight Gauge, on the Southern Union Gas Company's Jicarilla #2-E well located in the NE 1/4, SW 1/4, Section 15, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

This test is in accordance with the Oil Conservation Commission's Case No. 977, Order No. R-794.

July 2, 1956 S.U.G. Jicarilla #2-E:	SICP 1088 psig	<u>Well Head Temperature</u>
	SITP 1085 psig	800 F.
		800 F.

The above test was witnessed by Mr. Fred Cook of the Aztec Office of the Oil Conservation Commission.

Witness:

Fred Cook
Fred Cook

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.
Jr. Engineer

GDN:mg

cc: Oil Conservation Commission
P.O. Box 697
Aztec, New Mexico

Mr. A. M. Wiederkehr
Mr. H. C. Montgomery
Mr. Vars Bates

MAIN OFFICE OCC
1956 JUN 7 AM 8:12

**Southern Union Gas
Company**

DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

June 5, 1956

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

This is to certify that on June 4, 1956 the following shut-in pressures were taken, with a Dead Weight Gauge, on the Southern Union Gas Company's Jicarilla #2-E well located in the NE $\frac{1}{4}$, SW $\frac{1}{4}$, Section 15, Township 26 North, Range 4 West, Rio Arriba County, New Mexico.

This test is in accordance with the Oil Conservation Commissions Case No. 977, Order No. R-794.

S.U.G. Jicarilla #2-E - SICP 1089 PSIG 85° F —
STTP 1086 PSIG 85° F —
June 4, 1956

The above test was witnessed by Mr. Fred Cook of the Aztec Office of the Oil Conservation Commission.

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.
Jr. Engineer

cc: Oil Conservation Comm.
Box 697
Aztec, New Mexico
cc: Mr. A. M. Wiederkehr
cc: Mr. H. C. Montgomery
cc: Mr. Vars Bates

Witness

Fred Cook
Fred Cook

MAIN OFFICE 000 SOUTHERN UNION GAS COMPANY
 BURT BUILDING
 DALLAS 1, TEXAS
 EXPLORATION DEPARTMENT
 JUN 7 AM 8:11 June 4, 1956
 A. M. WIEDERKEHR
 MANAGER

C-977
 P-794

re-considered

Mr. Elvis A. Utz
 New Mexico Oil Conservation Commission
 P. O. Box 871
 Santa Fe, New Mexico

Dear Mr. Utz:

I have a note from Art Grenier requesting that you be furnished with information with regard to the interference tests now being conducted in the Tapicito Field.

I had thought that your men in Aztec would give you the pressures but apparently they have not so I am tabulating below the information accumulated to date.

<u>Date</u>	<u>Csg. Pressure</u>	<u>Tbg. Pressure</u>
Jan. 26	1090	1087.5
Feb. 9	1088	1086
April 19	1089.5	1086.5
May 7	1089.5	1087.5
May 22	1089	1086

Production from the offset wells has been:

	<u>Feb.</u>	<u>March</u>	<u>April</u>
Jicarilla 1-E	32,225	45,676	50,867
Jicarilla 3-E		6,047	34,920
Jicarilla 4-E	40,562	43,566	54,861

We shall forward the monthly production figures as they are available and if there is other information which you need, please let us hear from you.

Yours very truly,

SOUTHERN UNION GAS COMPANY

A. M. Wiederkehr

AMW:t

EXPLORATION DEPARTMENT
A. M. WIEDERKEHR
MANAGER

SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS

April 27, 1956

MAIN OFFICE 000
APR 27 AM 8:25

Mr. Elvis Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Elvis:

I am sending you a copy of the work done by Phillips Petroleum Company on our 1-E Jicarilla as per your request of several weeks ago.

I think we discussed my sending you a copy of the Four Point Test we ran on our Jicarilla 2-K but in checking the files, we note that Santa Fe has already received a copy of this Test as submitted through the district office. In the event you are unable to find this Test, please let me know and I will have a copy forwarded to you.

Yours very truly,

SOUTHERN UNION GAS COMPANY



AMW:t
Encls.

PHILLIPS PETROLEUM COMPANY
NATURAL GAS DIVISION
BACK-PRESSURE TEST SHEET

Southern Union 126 Gas (2/15/51)
LEASE Jicarilla Well No. 1-E
DATE 7-27 1954

FIELD 16 TWP. 26 COUNTY Rio Arriba STATE New Mexico
SEC. 16 RGE. 4 BLK. 4 SURVEY
CASING SIZE 7 TO 3437 SET AT 3197 PERF. TO
GAS PAY FROM 3416 L. 3423 PERF. TO
TUBING SIZE 2 3/8 WT. 4.7 SET AT 3423 TYPE CORR. TO
SIZE PROVER METER RUN BAROMETER 12
es Fd X Initial Test Retest Official PPCo. Only

NO.	ORIFICE SIZE	OBSERVED DATA			WELLHEAD		DURATION OF FLOW (Hrs.)
		Static Psig	P _m Psia	Diff. h _w	(P ₁) Psig	(P _w) Psia	
1.	1/8"				1052.5	1064.5	3
2.	5/32"				1029	1041	3
3.	7/32"				975	987	3
4.	5/16"				875	887	3

Date 7-27-54 1.
7-28-54 2.
7-29-54 3.
7-30-54 4.
5.

NO.	COEFF. "C" (24 Hr.)	P _m h _w	FLOW CALCULATIONS		FLOW TEMP. FACTOR F _t	GRAVITY FACTOR F _g	RATE OF FLOW Q-M ³ cfcd @ 14.65 Psia
			WORKING PRESS. ON PROVER Psig	Psia			
1.	3499	1.112	1050.5	1062.5	.9952	.9608	395
2.	5452	1.108	1020	1032	.9962	.9608	507
3.	1.109	1.104	963	975	.9952	.9608	1141
4.	2.208	1.089	854	866	.9943	.9608	1989

Well Shut-in before or after test. Days hrs.

1089 1088 1087 1086

SIP	1089	1088	1087	1086
Bar	1112	12	12	1098
P _{c2}	1101	1100	1099	1205.60
P _{es}	1212.20	1210.00	1207.8	

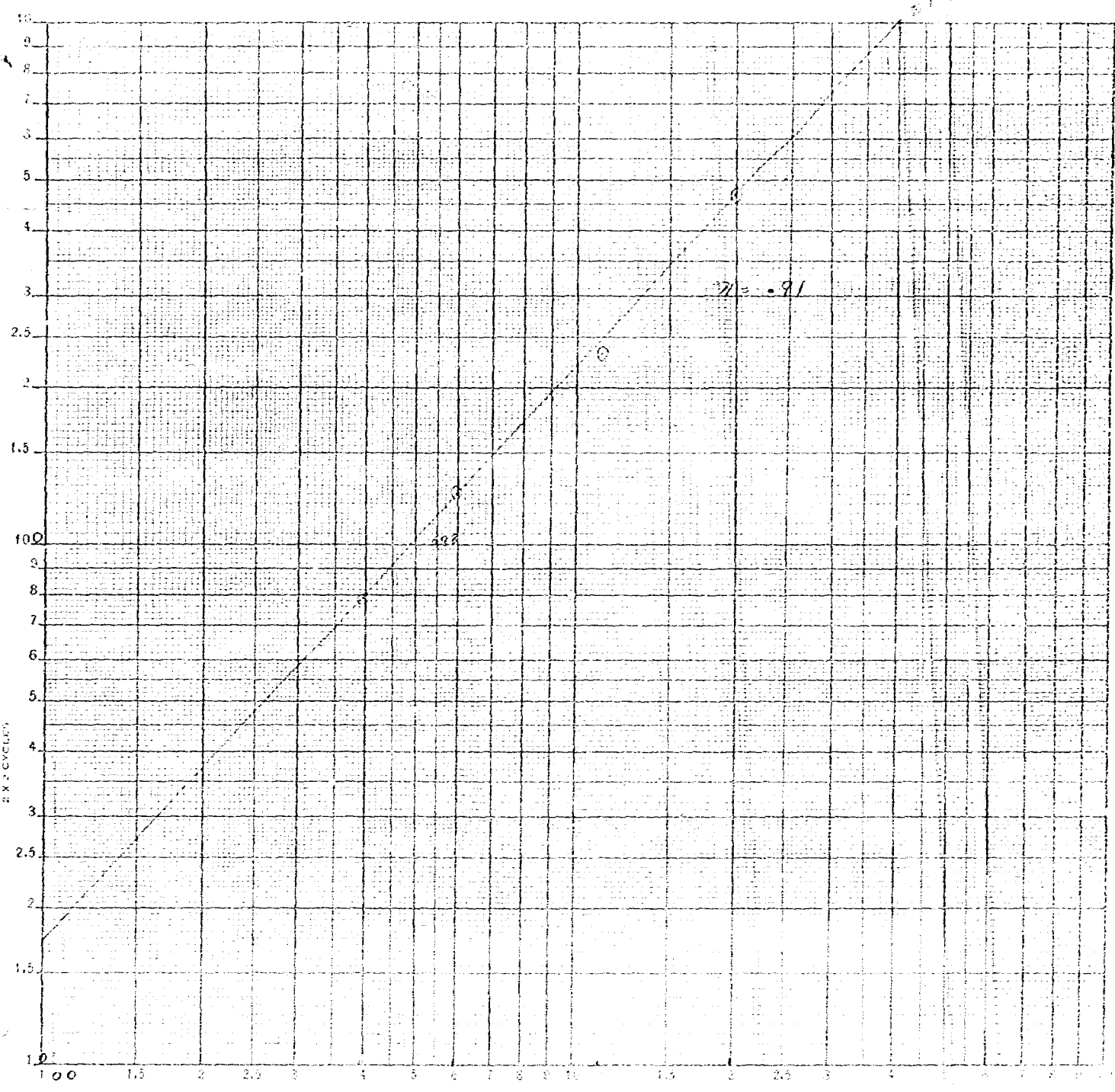
NO.	P _w ²	es _w ²	F _d Q	P ²	R ²	P _s ²	P _{c2} ² - P _{w2} ²
	(1)	(2)	(3)	(4)	(5)		
1.	1133.16						79.04
2.	1083.68						126.32
3.	974.17						233.63
4.	786.77						418.83

Mcfd Per Day @ 14.65 Psia
Mcfd Per Day @ Psia
FAG 71.91

ABSOLUTE POTENTIAL
ABSOLUTE POTENTIAL
SHUT-IN WELLHEAD PRESSURE
Commission
Company W. B. Smith
Pipeline G. R. Varner
Others

Computed by W. B. Smith
Checked by
Date 8-4-54
Date

LOGARITHMIC 359-110
 REUTELN ESEDER CO. MADE IN U.S.A.
 2 X 3 CYCLES



2.2
 2.91

Form 116-Gas (Rev.)

7-22-52.

Page _____ of _____

GAS WELL E.P. TEST PRESSURE DR/DOWN DATA

Company Southern Union Lease Vicarilla Well No. 1-E

Date: By: **Wagner**

Date	Hrs.	Time of Day	Working Pressure Data			Crit. Flow Prover		Remarks
			W.P. Psig	(ΔP)	ΔP/Hr.	Psig	Orifice	
7-27-54		11:20A	1089		1089		1/8	2" Prover
		11:25	Opened Well					
		11:45	1060	29		1058	65	Dry
		12:05P	1056	4		1054	65	Freezing off slightly
		12:25	1054	2		1053	65	
		12:40	1053.5	5		1052 1/2	65	Ice on plate
		12:55	1053.5	0		1052	65	
		1:25P	1053	5		1051	64	
		1:55	1052.5	5		1051	65	Dry
		2:25	1052.5	0		1050.5		
		3 1/2	1056					
		4 1/2	1055	1				
		50	1054.5	5				
	1	0	1054	5				
		12	1053.5	5				
		26 1/2	1053.5	0				
		44	1053	5				
	2	5	1052.5	5				
		30	1052.5	0				
	3	0	1052.5	0				

Form 116-Gas (Rev.)
7-22-52

Page _____ of _____

GAS WELL B.P. TEST PRESSURE DR/DOWN DATA

Company Southern Union Lease Jicarilla Well No. 1-E

Date By: **Wagner**

Date	Hrs.	Time of Day	Working Pressure Data			Crit. Psig	Flow OF	Prover Orifice	Remarks
			W.P. Psig	(ΔP)	ΔP/Hr.				
7-28-54			CSG		Tub.				
		11:05A	1088		1087			5/32	2 nd Prover
		11:10	Opened Wall						
		11:30A	1043	.45		1039	63		Dry
		11:50A	1036	.7		1032	64		Ice on plate
		12:10P	1033	.3		1029	64		
		12:25	1031.5	1.5		1027	64		Freezing off
		12:40	1031	.5		1026	64		
		1:10	1030.5	.5		1024	64		
		1:40	1029.5	1.0		1022	64		
		2:10	1029	.5		1020	64		Ice on bottom of plate
		3 1/2	1037						
		4 1/2	1035	.2					
		50	1033	.2					
	1	0	1033	0					
		12	1032	.1					
		26 1/2	1031	.1					
		44	1030.5	.5					
	2	5	1030	.5					
		30	1029.5	.5					
	3	0	1029	.5					
			S P C R .647 @ 1:15P						

Form 116-Gas (Rev.)

7-22-52

Page _____ of _____

GAS WELL E.P. TEST PRESSURE DR/DOWN DATA

Company Southern Union Lease Jicarilla Well No. 1-E

Date By: **Wagner**

[illegible]

Form 116-Gas (Rev.)

Page 1 of 1

GAS WELL E.P. TEST PRESSURE DRA/DOWN DATA

Company Southern Union Lease Jicarilla Well No. 1-E

Date By: **Wagner**

Date	Hrs.	Time of Day	Working Pressure Data			Crit. Psig	Flow OF	Prover Orifice	Remarks
			W.P. Psig	(ΔP)	ΔP/Hr.				
			CSG		TUB.				
7-30-54		10:55A	1086		1085	SIP			
		11:00A	Opened Well					5/16	2" Prover
		11:20	914	172		898	61		Ice on plate
		11:40	907	7		883	64		Freezing-off
		12:00N	897	10		871	64		Sl. wet H ₂ O & Dist.
		12:15	890	7		865	64		"
		12:30P	887	3		860	64		"
		1:00P	878	9		852	64		"
		1:30P	872	6		846	65		"
		2:00	875	13		854	66		Freezing-off
		34 1/2	907						
		41 1/2	905.5	1.5					
		50	903.5	2					
	1	0	897	6.5					
		12	891	6					
		26 1/2	887.5	3.5					
		44	880.5	7					
	2	5	878	2.5					
	2	30	872	6					
	3	0	875	13					

Case 977

In view of the fact that the well (Vicarsilla 1-A) which was originally specified to be shut-in, ^{for interference} has been produced (86,163 MCF) unknown to us until now; I am suggesting a new interference test to conform with one which at Wierleske has already begun.

See attached Plot for details.

The radius of drainage between the 2E (shut-in) well and its three offsets are:

1-E to 2E	3300 ft. = 785 Ac.
BE to "	3470 ft. = 868 Ac.
4E to "	3650 ft. = 960 Ac.

The maximum possible radius of drainage under the spacing schedule would be 2625 ft or 497 acres.

This test will therefore adequately prove ^{or disprove} a 520 acre spacing.

Wells connected in the area and their prod. into April 1st:

1-A	connected	1-25-56	86163	MCF
1-E	"	2-16-56	7790	"
2-A	"	2-16-56	5700	"
3-E	"	3-24-56	6047	"
4-A	"	3-30-56	2386	"
4-E	"	2-16-56	8912	"
5-A	"	3-30	3915	"

Memo

From:
ELVIS A. UTZ
Gas Engineer

To

Please copy these
sheets and send copies

to:

Bill Johnson
Northwest Blvd.
Albuquerque, N.M.

OK
Ola

520 Jensen Dr.

MAIN OFFICE OCC
OCT 21 11:37



DRILLING AND GEOLOGICAL
P. O. BOX 815
FARMINGTON, NEW MEXICO

October 21, 1957

10-22-57

Mr. Elvis Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

Please find enclosed Bottom Hole Pressure Data on the following Southern Union Gas Company's wells.

WELL	LOCATION
Southern Union Gas Co. Jicarilla #4-D	1650' from North line and 990' from the East line (SE/4, NE/4) Sec. 30, T-26N, R-3W N.M.P.M. Rio Arriba County, New Mexico.
Southern Union Gas Co. Jicarilla #2-D	1650' from South line and 1650' from West line (NE/4, SW/4) Sec. 29, T-26N, R-3W, N.M.P.M. Rio Arriba County, New Mexico.
Southern Union Gas Co. Jicarilla #5-D	1470' from South line and 1600' from West line (NE/4, SW $\frac{1}{4}$) Sec. 30, T-26N, R-3W N.M.P.M. Rio Arriba County, New Mexico.

These bottom hole pressure tests were run in conjunction with the interference pressure tests currently being conducted on

Southern Union Gas Company's Jicarilla #4-D well.

Very truly yours,

Gilbert Noland Jr.
Gilbert Noland, Jr.

GN:pss

cc: Oil Conservation Commission
120 East Chaco, Aztec, New Mexico Encl.
Mr. A. M. Wiederkehr - Dallas, Encl.
Mr. Paul J. Clote - Farmington
File

OTIS PRESSURE CONTROL, INC.

BOTTOM HOLE PRESSURE REPORT

MAIN OFFICE OCC
Work Order No. 40803

COMPANY Southern Union Gas Co. 1957 FIELD Jicarilla
 LEASE Jicarilla SW¹/₄ Sec. 29, T-26N, R-3W WELL NO. 2-D
 DATE 10/8/57 TIME 1600 STATUS OF WELL Flowing
 PAY TOP 3790 BOTTOM 3821 T.D. 3821 DATUM Pin
 TUBING 3800 DEPTH B.H.C. Plug PACKER
 CASING 5¹/₂" DEPTH 3790 PERFS. Open Hole LINER TREE TOP

Depth Feet	Deflection Pressure-PSIG	Pressure	Gradient LBS./FT.	Casing Pressure	#DWT
Lube	.353	513		Tubing Pressure	513 #DWT
1000	.366	530	.017	Oil Level	FT.
2000	.379	549	.019	Water Level	FT.
3000	.394	569	.020	Hours - Shut In	Flow
3500	.402	581	.024	Temp. @ 3800	F. 112° F.
3600	.406	586	.050	Elev.-D.F.	Ground
3700	.409	592	.060	Last Test Date	
3800	.412	599	.070	Press. Last Test	PSIG
				B.H.P. Change	#s/ DAYS
				Loss	#s/DAY
				Choke Size	
				Oil Bbls./Day	
Last Cumulative Production		Present Cumulative Production		Water Bbls./Day	
Production Between Tests		Recovery Factor Bbls./Pound Loss		Total Bbls./Day	
Instrument 13030		Calculated by		Orifice Line	
				Static # Diff.	
Remarks:				Gas Sp. Gr. TF. F	
				Cu. Ft./Day	
				GOR Cu. Ft./Bbl.	
				GFR Cu. Ft./Bbl.	
				P.I. Bbls./Day# Drop	

OTIS PRESSURE CONTROL, INC.

BOTTOM HOLE PRESSURE REPORT Work Order No. 40663

COMPANY Southern Union Gas Co. FIELD Jicarilla
 LEASE Jicarilla NE/4, Sec. 30 T-26N R-3W WELL NO. 4-D
 DATE 10/8/57 TIME 1200 STATUS OF WELL Shut-in
 PAY TOP 3786 BOTTOM 3814 T.D. 3849 DATUM Pin
 TUBING 3750 DEPTH B.H.C. Plug PACKER
 CASING 4 1/2" DEPTH 3849 PERFS. 3786-3814 LINER TREE TOP

Depth Feet	Deflection Pressure PSIG	Pressure	Gradient LBS./FT.	Casing Pressure	#DWT
Lube	.735	1061		Tubing Pressure 1061	#DWT
1000	.755	1094	.033	Oil Level	FT.
2000	.780	1128	.034	Water Level	FT.
3000	.805	1162	.034	Hours - Shut In	Flow
3500	.818	1180	.036	Temp. @ 3750	F. 113° F.
3600	.821	1185	.050	Elev.-D.F.	Ground
3700	.825	1190	.050	Last Test Date	
3750	.830	1199	.180	Press. Last Test	PSIG
				B.H.P. Change	#s/ DAYS
				Loss	#s/DAY
				Choke Size	
				Oil Bbls./Day	
Last Cumulative Production		Present Cumulative Production		Water Bbls./Day	
Production Between Tests		Recovery Factor Bbls./Pound Loss		Total Bbls./Day	
Instrument 13030		Calculated by		Orifice	Line
				Static	# Diff.
Remarks:				Gas Sp. Gr.	TF. F
				Cu. Ft./Day	
				GOR	Cu. Ft./Bbl.
				GFR	Cu. Ft./Bbl.
				P.I.	Bbls./In. # Drop

OTIS PRESSURE CONTROL, INC.

BOTTOM HOLE PRESSURE REPORT

Work Order No. 40664

COMPANY Southern Union Gas Co.

FIELD Jicarilla

LEASE Jicarilla SW¹/₄ Sec.30, T-26N, R-3W

WELL NO. 5-D

DATE 10/8/57

TIME 1400

STATUS OF WELL _____Flowing

PAY _____ TOP 3860 _____ BOTTOM 3916 _____ T.D. ~~3867~~ 3934 DATUM

Pin

TUBING 2" DEPTH 3867 B.H.C.

Plug

PACKER

CASING 4 1/2" DEPTH 3934 PERFS. 3860 - 3916 LINER _____ TREE TOP _____

TREE TOP

Depth Feet	Deflection Pressure PSIG	Pressure	Gradient LBS./FT.	Casing Pressure	#DWT
Lube	.352	512		Tubing Pressure 512	#DWT
1000	.372	540	.028	Oil Level	FT.
2000	.391	567	.027	Water Level	FT.
3000	.405	585	.018	Hours - Shut In	Flow
3500	.412	598	.026	Temp. @ 3867	F. 112° F.
3600	.414	600	.020	Elev.-D.F.	Ground
3700	.416	602	.020	Last Test Date	
3800	.419	606	.040	Press. Last Test	PSIG
3867	.422	610	.040	B.H.P. Change	#s/ DAYS
				Loss	#s/DAY
				Choke Size	
				Oil Bbls./Day	
Last Cumulative Production		Present Cumulative Production		Water Bbls./Day	
Production Between Tests		Recovery Factor Bbls./Pound Loss		Total Bbls./Day	
Instrument # 13030		Calculated by		Orifice Line	
Remarks:				Static # Diff.	
				Gas Sp. Gr. TF. F	
				Cu. Ft./Day	
				GOR Cu. Ft./Bbl.	
				GFR Cu. Ft./Bbl.	
				P.I. Bbls./Day## Drop	

2nd.

Leek started

Date	510. Caring	Dubing		2-D	5-D
12-17-56	1065	1064	12-57	4728	51,550
1-14-57	1065	1069	1-57	9019	54,536
2-11-57	1065	1069	2-57	2890	44,909
3-11-57	1065½	1069½	3-57	2093	45,438
4-8-57	1066	1061½	4-57	3315	36,586
5-6-57	1066	1069½	5-57	3492	43,656
8-1-57	1065	1063	6-57	3181	34,638
			7-57	235	51,531
8-13-57	1069½	1062½	8-57	9244	46,151
9-17-57	1063½	1061½	9-57	22132	40,439
10-8-57	1061½	1060	10-57	14380	26,496
				Caring 535	512
				Dubing 511	538
11-8-57	1059½	1059	11-57	1987	23328
12-6-57	1058½	1057	12-57	11974	28183
				Caring 660	643
				Dubing 693	656
				91,590	527,775
1-3-58	1057½	1055	1-58	12,000	32,781
2-3-58	1056	1054		Caring 631	610
				Dubing 655	625
				93,590	560,556
difference	8½	10			

Case 797 R-274 Production on Offset Wells To Sub-lease

	①	②	③	④	⑤	⑥	⑦	⑧
	1-E	Cum.	2-E	Cum.	3-E	Cum.	Total	Sub-lease
1	77901		6097		84128		168076	168076
2	50867	23768	34920	40967	54861	128927	140648	308724
3	70265	199031	36681	79648	61937	206926	170881	479655
4	64229	263260	28063	107711	52806	253732	145098	624703
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