

assigned to its Glenn Callow #11 to
its Glenn Callow Well No. 9.



Case No.

2046

Application, Transcript,
Small Exhibits, Etc.

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

(copy 2 of 4)

July 18, 1960

Tennessee Gas and Oil Company
P. O. Box 1714
Durango, Colorado

Attention: Mr. L. B. Plumb

Gentlemen:

Reference is made to your request for administrative approval to transfer oil allowables for the purpose of taking pressure interference tests.

As a matter of policy, the Commission is, of course, desirous of encouraging the gathering of reservoir data. However, we have no procedure for approving the transfer of allowables except after notice and hearing.

Unless I hear from you to the contrary this week, I will docket your application for the August 10th examiner hearing.

Very truly yours,

OLIVER E. PAYNE
General Counsel

OMP/esr

cc: Mr. Emory Arnold
Oil Conservation Commission
1000 Rio Brazos Road
Aztec, New Mexico

C
O
P
Y

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
AUGUST 10, 1960

EXAMINER HEARING

PHONE CH 3-6691

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, NEW MEXICO

IN THE MATTER OF:

CASE 2046 Application of Tennessee Gas and Oil Company for :
permission to transfer oil well allowables. Ap- :
plicant, in the above-styled cause, seeks an :
order authorizing it to transfer, for a period of :
60 days, the allowable assigned to its Glenn Cal- :
low Well No. 11 to its Glenn Callow Well No. 9, :
both in Section 28, Township 29 North, Range 13 :
West, San Juan County, New Mexico, in order to :
conduct pressure interference tests. :

BEFORE:

Elvis A. Utz, Examiner

T R A N S C R I P T O F P R O C E E D I N G S

MR. UTZ: Case 2046.

MR. PAYNE: Case 2046. Application of Tennessee Gas
and Oil Company for permission to transfer oil well allowables.

MR. SETH: Oliver Seth and Mr. Federici and Mr. Sanders
for the applicant. We have one witness.

(Witness sworn)

JOHN J. LACEY,

called as a witness, having been first duly sworn on oath, testi-
fied as follows:

DIRECT EXAMINATION



PHONE CH 3-6691

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, NEW MEXICO

BY MR. SETH:

Q Will you state your full name, please?

A John J. Lacey.

Q By whom are you employed, Mr. Lacey?

A I am employed by Tennessee Gas and Oil Company, division of Tennessee Gas Transmission Company.

Q How do you spell your last name? A L-a-c-e-y.

Q What are your duties?

A Employed by an operating division of Tennessee Gas Transmission as district engineer in this district office in Durango, Colorado.

Q Have you testified previously before the Commission?

A Yes.

MR. SETH: Will you accept his qualifications?

MR. UTZ: Yes.

Q (By Mr. Seth) Will you state briefly the purpose of the application?

A Tennessee wants to conduct a bottom hole pressure interference test between the two wells in the Totah-Gallup oil field. In order to do this, we will have to shut in a well for a prolonged period of time, which has an allowable assigned to it, and in order not to lose that allowable production, we are requesting that the allowable from this shut-in observation well be transferred to the interference well.

Q Do you have a plat showing the location of these wells?

A Yes, I do.



(Whereupon, Applicant's Exhibits 1 and 2 marked for identification.)

Q Now, referring to the plat, will you tell the Commission, please, what it shows?

A The plat shows the location of Tennessee's acreage and the producing wells in the Totah-Gallup field, and shows the location of the two wells we plan to use for the interference test.

Q Would you give us the description of each well, the location by survey description?

A Do you mean the exact footages?

Q No, the quarter section.

A The shut-in observation well is a Gallup Glenn H. Callow 11, an upper producing zone in a dual completion; is located in the northwest quarter of Section 28, 29 North, 13 West. The interference well, the well to which we want the allowable transferred, is the Callow 9, which is a Gallup, an upper producing interval in a dual completion; is located in the southeast quarter of Section 28, 29 North, 13 West.

Q State briefly how the test will be conducted and the duration of it.

A Briefly, the test, we will shut the two wells in and conduct a bottom hole pressure buildup test until the two wells have reached a stabilized bottom hole pressure, at which time we will open up the Callow 9 and produce it at its allowable rate and at periodic intervals will run bottom hole pressures in the 9 and in the 11.

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Q Are both of these wells dual completions?

A Yes, they are.

Q Which zones?

A They're dually completed in the Gallup oil zone and the Dakota gas condensate zone. The legend in the lower left hand corner of the plat shows what wells are completed in what zones.

Q What will be the duration of the test?

A We're requesting that the allowable transfer be for a period of sixty days.

Q If the petition is granted, you will advise the Commission when the test commences?

A Yes. When the test commences and when we have completed the test.

Q What is the purpose of the test?

A The purpose of the test is to obtain reservoir data on the Gallup zone; well, primarily that.

Q You think some significant data will be obtained?

A Yes, I do.

Q Are both these wells full allowable wells?

A Yes, at the present time both of these wells are top allowable wells, flowing.

Q On the same lease?

A On the same basic lease, the same royalty owner.

Q The same field?

A The same field, yes.



MR. SETH: That's all the direct examination, Mr. Utz.

CROSS-EXAMINATION

BY MR. UTZ:

Q What was the potential of the No. 9?

A It was around a hundred barrels or slightly more. The well is capable of producing considerably more, but we potentialized the wells approximately for top allowable and 25 percent.

Q What will the allowable be?

A The allowable for these two wells is 94 barrels a day.

Q For both wells?

A For both wells.

MR. PAYNE: 94 or 92?

A Well, its basic unit allowable times 133.

MR. SETH: Each well is the same, each is 94?

A Right. Both have the same top allowable.

Q (By Mr. Utz) Will the No. 9 produce a hundred eighty-eight barrels a day?

A We have never produced the well at its maximum capacity. However, we believe that it will be capable of producing a double allowable.

Q The purpose of this test is to determine the drainage radius, reserves or what?

A The data obtained from this test could have several applications. One would be in determining recoverable reserves

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from the wells; drainage radius could be another; permeability; the inner well reservoir could be another.

Q You must have something specific in mind. What is your purpose in running this test?

A Well, for reserves, I would say would be one of the basic considerations. Actually, a test of this type at some future date could be applicable for any number of purposes.

Q Primarily, right now, you are interested in evaluating your reserves?

A Right.

MR. UTZ: Any other questions of the witness?

MR. PAYNE: Yes.

BY MR. PAYNE:

Q Mr. Lacey, are there any Gallup completions in Section 34?

A No, sir, there are not. The wells in that section are completed in the Pictured Cliffs and in the Dakota formations.

Q And production of this transfer well at 184 to 190 barrels a day you don't feel will in any way damage the reservoir?

A No, sir, I do not.

MR. PAYNE: Thank you.

BY MR. UTZ:

Q Any Gallup completions in 27 or 33?

A Yes, sir. On the bottom of the plat I have circled all of the producing Gallup wells in the vicinity. The ones circled in

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blue are the wells producing from the Gallup which will not be used in the test, and the orange triangle shows the two Gallup wells we propose to use for the test.

Q But you do own the mineral interest in those two sections?

A Yes, sir. The acreage colored in red and in yellow is acreage in which we have the working interest.

MR. UTZ: Any other questions?

REDIRECT EXAMINATION

BY MR. SETH:

Q Do you have some gas-oil ratio data that you want to present?

A Yes, sir. The second attached Exhibit shows the most recent test available on the two wells, and shows their current producing GOR is considerably less than the field limit of 2000 cubic feet per barrel, so that we feel that in producing this well at a high rate we will not be exceeding, we don't believe we'll be exceeding 2000 cubic feet per barrel ratio.

MR. SETH: We would like to offer Exhibits 1 and 2.

MR. UTZ: Exhibits 1 and 2 will be entered into the record without objection.

(Whereupon, Applicant's Exhibits 1 and 2 received in evidence.)

MR. UTZ: Any other questions? The witness may be excused.

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(Witness excused)

MR. UTZ: Any other statements? If not, the case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in machine shorthand and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 18th day of August 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Ada Dearnley
NOTARY PUBLIC

My Commission expires:

June 19, 1963

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2046 heard by me on Aug 10 1960.
Musta G. [Signature] Examiner
New Mexico Oil Conservation Commission

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



TENNESSEE GAS AND OIL COMPANY
MAIN OFFICE 806

P. O. BOX 1714 - DURANGO, COLORADO

1000 JUL 10 AM 8:25

July 12, 1960



[Handwritten signature]
7-15-60

[Handwritten: Case 2646]

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Sir:

Subject: Pressure Interference Test and Transfer of Oil
Well Allowables
(USA) Glenn H. Callow No. 9 and No. 11, Totah Gallup Field,
Sec. 28, T29N, R13W, San Juan County, New Mexico ✓

We propose to conduct a bottom hole pressure interference test between the two subject wells in order that we might acquire additional data on the reservoir. To conduct this test, it will be necessary to shut-in the Glenn H. Callow No. 11 for a prolonged period of time for use as an observation well. The general procedure for conducting this test is shown on Attachment I. The shutting-in of the Callow No. 11 will result in the loss of the allowable oil production unless we can obtain an administrative approval from the New Mexico Oil Conservation Commission to transfer the Callow No. 11's oil allowable to another well on the lease. ✓

In order to obtain conclusive results from the interference test in a minimum amount of time, it would be advantageous to produce the Callow No. 9 at a maximum permissible rate. We request that the present oil allowable from the Callow No. 11 be transferred to the Callow No. 9 (for a period of 60 days) and that we be permitted to produce the Callow No. 9 at a maximum daily rate not to exceed the total of the combined oil allowables from the Callow No. 9 and No. 11.

The enclosed plat (Attachment II) shows the location of these two wells on Tennessee's Callow Lease and the location of the other producing wells in the field. The current oil allowables and producing gas-oil ratios for the Callow No. 9 and No. 11 are shown on

[Handwritten: R. Porter, Milled]

[Handwritten: July 26, 1960 gr]

TENNESSEE GAS AND OIL COMPANY
DIVISION OF TENNESSEE GAS TRANSMISSION COMPANY

Mr. A. L. Porter, Jr., July 12, 1960


Page 2

Attachment III.

We would appreciate the administrative approval of this proposal
or your comments at an early date.

Very truly yours,

TENNESSEE GAS AND OIL COMPANY



L. B. Plumb
District Production Superintendent

JJL:ljr

Attachments

cc: R. M. Stephens
Emery Arnold, New Mexico Oil
Conservation Commission Supervisor,
1000 Rio Brazos Road
Aztec, New Mexico

BHP INTERFERENCE TESTS, TOTAH GALLUP FIELD

(USA) Glenn H. Callow No. 9 and No. 11

PROCEDURE

1. Recover free piston plungers from Callow No. 9 and No. 11.
2. Run sinker bar and check Gallup tubing for paraffin in both wells to insure that BHP bombs will reach maximum depth.
3. (a) Run BHP bomb and obtain flowing BHP in Callow No. 9 and No. 11.
(b) Shut-in both wells and obtain stabilized BHP and BHP build-up curves. (Obtain fluid gradients on all BHP measurements in order to extrapolate BHP to midpoint of perforations.)
4. Open up Callow No. 9 and produce well at maximum allowable rate permitted by NMOCC.
5. Obtain shut-in BHP on Callow No. 11 and Flowing BHP on Callow No. 9 at intervals specified by Engineering Dept.

(Note: Gas-Oil ratio tests will be taken weekly on the Callow No. 9 during the duration of interference test.)

R-13-W

R-12-W

T 29 N

R-12-W

T 28 N

R-13-W

WELL LEGEND

PRIMARY RELATING TO SAN JUAN BASIN

- Location any depth
- ◇ Pictured Cliffs or above completion
- ◇ Mesa Verde completion
- ◇ Gallup completion
- ◇ Pecos completion
- ◇ Mesozoic completion
- ◇ Devonian completion
- ◇ Cambrian completion

EXAMPLES

- ◇ Pictured Cliffs, completed in Pictured Cliffs
- ◇ Pictured Cliffs, completed in Gallup
- ◇ Dakota and Gallup dual completion
- ◇ Pecos, Devonian, Dakota, Gallup & Mesa Verde multiple completion

SYMBOL GUIDE



NOTE

Any well shown on this map is shown as a well on the basis of the information received from the owner of the well.



GALLUP OIL WELL TO BE USED FOR TEST



GALLUP OIL WELLS

TENNESSEE GAS AND OIL COMPANY
DIVISION OF TENNESSEE GAS TRANSMISSION COMPANY

TOTAH GALLUP-WEST KUTZ DAKOTA FIELDS
SAN JUAN CO., NEW MEXICO

SCALE IN FEET
4000 2000 0 4000 8000

DURANGO, COLORADO

7-1-60

Attachment II

TOTAH GALLUP FIELD

Operator	Well	July, 1960, Allowable	Producing GOR & Date of Test
Tennessee	Callow No. 9	90 BOPD	923 ft ³ /Bbl 2/24/60
Tennessee	Callow No. 11	94 BOPD	539 ft ³ /Bbl 2/27/60

**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. 2046
Order No. R-1751**

**APPLICATION OF TENNESSEE GAS
TRANSMISSION COMPANY FOR
PERMISSION TO TRANSFER OIL
WELL ALLOWABLES, TOTAH-GALLUP
OIL POOL, 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 August 10, 1960, at Santa Fe, New Mexico, before Elvis A. Uts, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

Now, on this 18th day of August, 1960, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Uts, 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, Tennessee Gas Transmission Company, proposes to shut-in its Glenn Callow Well No. 11, located in the SE/4 NW/4 of Section 28, Township 29 North, Range 13 West, Totah-Gallup Oil Pool, San Juan County, New Mexico, for the purpose of conducting pressure interference tests to evaluate the reservoir, and to transfer, for a period of sixty days, the allowable from the said Glenn Callow Well No. 11 to its Glenn Callow Well No. 9, located in the NE/4 SE/4 of said Section 28.

(3) That inasmuch as all offset wells producing from the same common source of supply belong to the applicant, approval of the subject application will neither impair correlative rights nor cause waste.

-2-
CASE No. 2046
Order No. N-1751

IT IS THEREFORE ORDERED:

(1) That the applicant, Tennessee Gas Transmission Company, be and the same is hereby authorized to shut-in its Glenn Callow Well No. 11, located in the SE/4 NW/4 of Section 28, Township 29 North, Range 13 West, Totah-Gallup Oil Pool, San Juan County, New Mexico, for the purpose of conducting pressure interference tests, and to transfer, for a period of sixty days commencing September 1, 1960, the allowable from the said Glenn Callow Well No. 11 to its Glenn Callow Well No. 9, located in the NE/4 SE/4 of said Section 28.

(2) That the transfer authorization granted by this order shall terminate automatically on November 1, 1960.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


John Burroughs
JOHN BURROUGHS, Chairman

Murray E. Morgan
MURRAY E. MORGAN, Member

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

esr/

GOVERNOR
JOHN BURROUGHS
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
MURRAY E. MORGAN
MEMBER



STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY DIRECTOR

P. O. BOX 871
SANTA FE

August 18, 1960

Mr. Oliver Seth
301 Don Gaspar Avenue
Santa Fe, New Mexico

Re: Case No. 2046
Order No. R-1751
Applicant:

Tennessee Gas Transmission Co.

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.,
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC X
Artesia OCC
Aztec OCC Y

Other

CASE 2045: Application of The Ohio Oil Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Lea Unit Federal Well No. 1, located in unit L, Section 12, Township 20 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from an undesignated Bone Springs Pool and the production of oil from an undesignated Devonian Pool through parallel strings of 2 3/8-inch tubing.

CASE 2046: Application of Tennessee Gas and Oil Company for permission to transfer oil well allowables. Applicant, in the above-styled cause, seeks an order authorizing it to transfer, for a period of 60 days, the allowable assigned to its Glenn Callow Well No. 11 to its Glenn Callow Well No. 9, both in Section 28, Township 29 North, Range 13 West, San Juan County, New Mexico, in order to conduct pressure interference tests.

CASE 2047: Application of Tennessee Gas Transmission Company for an order force-pooling all mineral interests in a 320-acre gas unit in the West Kutz-Dakota Pool. Applicant, in the above-styled cause, seeks an order force-pooling all Dakota Producing Interval mineral interests in the 320 acres comprising the W/2 of Section 27, Township 29 North, Range 13 West, West Kutz-Dakota Pool, San Juan County, New Mexico. The mineral interest owners in the said 320-acre tract include Hugh J. Mitchell, Raimonda Mitchell, Barbara Head Couturi, Robert H. Clifton, Mildred C. Foutz, Dorothy C. Malloy, Martha Head, Lucy M. Marcelino, Battie M. McClure, Willard H. Head, George J. Head, Helen C. Hayes, Harry T. Head, Mary E. Hodgson, Dorothy G. Head, Gladys Slaughter Smith, Frederick J. Head, Pan American Petroleum Corporation, H. K. Riddle, Glenn H. Callow, Arnold E. Carle, Ivan Otstot and Mabel Otstot.

DOCKET: EXAMINER HEARING AUGUST 10, 1960

Oil Conservation Commission - 9 a.m. - Mabry Hall, State Capitol, Santa Fe

The following cases will be heard before ELVIS A. UTZ, Examiner, or OLIVER E. PAYNE, Attorney, as alternate examiner:

- CASE 2041: Application of Amerada Petroleum Corporation for permission to commingle the production from several separate leases. Applicant, in the above-styled cause, seeks permission to commingle the production from the Saunders (Permo-Pennsylvanian) Pool from three State leases in Sections 3 and 4, Township 15, Range 33 East, Lea County, New Mexico.
- CASE 2048: Application of Rice Engineering & Operating, Inc. for an order authorizing a salt water disposal well. Applicant, in the above-styled cause, seeks an order authorizing the disposal of produced salt water through its Gladiola SWD Well No. H-5, formerly known as the Sinclair Kendrick Estate Well No. 5, located 1980 feet from the North line and 660 feet from the East line of Section 5, Township 12 South, Range 38 East, Gladiola Pool, Lea County, New Mexico, with injection to be in the Devonian formation in the interval from 12,223 feet to 12,500 feet.
- CASE 2042: Application of Texaco Inc. for permission to commingle the production from two separate pools and for an amendment of Order No. R-1608. Applicant, in the above-styled cause, seeks permission to commingle the production from the Crossroads-Devonian Pool and from an undesignated Mississippian Pool from all wells on its U. D. Sawyer lease comprising the E/2 of Section 34, Township 9 South, Range 36 East, Lea County, New Mexico. Applicant further seeks an amendment of Order No. R-1608 to provide that the automatic custody transfer system therein authorized can be utilized to handle said commingled production.
- CASE 2043: Application of Texaco Inc. for an oil-oil-oil triple completion. Applicant, in the above-styled cause, seeks an order authorizing the triple completion of its C. P. Falby "B" Well No. 4, located in unit L, Section 8, Township 22 South, Range 37 East, Lea County, New Mexico, in such a manner as to produce oil from the Eumont Gas Pool, oil from the Penrose-Skelly Pool, and oil from the Drinkard Pool through 3 parallel strings of 2 3/8-inch tubing.
- CASE 2044: Application of Gulf Oil Corporation for an amendment of Order No. R-1605. Applicant, in the above-styled cause, seeks an amendment of Order No. R-1605 to permit the inclusion of the Lea State "AR" Lease, consisting of the S/2 of Section 33 and the SW/4 of Section 34, Township 19 South, Range 35 East, Pearl-Queen Pool, Lea County, New Mexico, in the commingling authorization granted by said order. Applicant further seeks an amendment of said order to provide that the automatic custody transfer system therein authorized be permitted to handle said commingled production.

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 8-10-60

CASE 8-10-2046 Hearing Date 8-10-60

My recommendations for an order in the above numbered cases are as follows:

1. Grant Drennance permission to transfer ^{Oil} allowable from there Glenn H. Callow No 11, SE NW 26-29 N-13 W. to there Glenn H. Callow #9, NE SE 26-29-13 W. for the purpose of running an interference test in this area to evaluate the Reservoir (Hallups.)
2. Term of this order ~~shall be~~ end. November, 1, 1960.

Thos. H. H.

Total Gallup Field
Recent Production Data
On Tennessee Gas & Oil Company
Glenn H. Callow No. 9 and No. 11

	<u>Date of Test</u>	<u>Length of Test</u>	<u>Choke Size</u>	<u>BOFD</u>	<u>GCR</u>
No. 9	7/10/60	15 Hrs	Flow 16/64"	110	701 Ft ³ /Mbl
No. 11	7/23/60	18 Hrs	Flow 16/64"	106	824 Ft ³ /Mbl

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
App EXHIBIT NO. 2
CASE NO. 2046

