CASE 2539: Application of PAN AM.
for an exception to ORDER NO.
[redacted] - San Juan County.

Case No.

2539

Petition, Transcript,
All Exhibits, Etc.

GOVERNOR
EDWIN L. MECHEM
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

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

P. O. BOX 871
SANTA FE

May 9, 1962

Mr. Guy Buell
Pan American Petroleum Corporation
Box 1410
Fort Worth, Texas

Re: Case No. 2539
Order No. R-2238
Applicant:
Pan American Petroleum Corp.

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.

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC x
OTHER

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. 2539
Order No. R-2238

APPLICATION OF PAN AMERICAN PETROLEUM
CORPORATION FOR AN EXCEPTION TO ORDER
NO. R-333-E, 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 April 25, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, 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 9th day of May, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, Pan American Petroleum Corporation, is the operator of 10 wells in the Basin-Dakota Gas Pool, located in Townships 27 and 28 North, Ranges 10 and 11 West, NMPM, San Juan County, New Mexico, upon which wells annual deliverability tests for the year 1961 were not conducted within the time period prescribed by Order No. R-333-E.

(3) That the applicant seeks an exception to Order No. R-333-E to provide for the extension of the terminal date for the 1961 deliverability test period with respect to said 10 Dakota wells, from December 15, 1961, to March 1, 1962.

(4) That inasmuch as the applicant made reasonable efforts, in cooperation with Southern Union Gas Company, to schedule the subject wells for testing within the prescribed period for taking 1961 deliverability tests, the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That Pan American Petroleum Corporation is hereby granted an exception to Order No. R-333-E, extending the terminal date for the 1961 Deliverability test period from December 15, 1961, to March 1, 1962, with respect to the following-described wells in the Basin-Dakota Gas Pool, San Juan County, New Mexico:

Johnson Gas Unit "B" Well No. 1, Unit H, Section 21, Township 27 North, Range 10 West;

Fred Feasel "G" Well No. 1, Unit K, Section 2, Township 27 North, Range 10 West;

Fred Feasel "H" Well No. 1, Unit H, Section 33, Township 28 North, Range 10 West;

J. F. Dey "E" Well No. 1, Unit L, Section 17, Township 28 North, Range 10 West;

R. P. Hargrave "H" Well No. 1, Unit B, Section 9, Township 27 North, Range 10 West;

E. H. Pipkin Well No. 5, Unit B, Section 36, Township 28 North, Range 11 West;

Davidson Gas Unit "F" Well No. 1, Unit M, Section 28, Township 28 North, Range 10 West;

Davidson Gas Unit "G" Well No. 1, Unit H, Section 21, Township 28 North, Range 10 West;

Fred Feasel "J" Well No. 1, Unit G, Section 34, Township 28 North, Range 10 West; and

M. N. Galt "H" Well No. 1, Unit L. Section 1, Township 27 North, Range 10 West.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

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

esr

FORM 470 3-57

Set for hearing

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 480, Farmington, New Mexico
April 3, 1962

Case 2539

File: N-302-986.510.1

Subject: Reapplication for Administrative Approval for Extension of Time to File 1961 Deliverability Tests on 10 Basin Dakota Pool Wells Operated By Pan American Petroleum Corporation Under Provisions of Order R-2183

Mr. A. L. Porter, Jr. (3)
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Sir:

Your letter of March 2, 1962, denied an exception for 10 wells operated by Pan American Petroleum Corporation to permit the extension of the terminal date for the 1961 deliverability test period under the Administrative Provisions of Order R-2183. The group of Pan American wells so denied are all located in the Basin Dakota Gas Pool of San Juan County, New Mexico, and are further identified in your referenced letter. Pan American hereby respectfully requests that you reconsider its application for Administrative Exception for this group of wells on the basis of additional information being furnished herewith.

Attached is a letter from Southern Union Gas Company, the purchaser to whom this group of wells is connected, which explains their inability to schedule deliverability tests on these wells during 1961 even though Southern Union diligently tried to schedule all wells for test. It is stated that the various factors of pipeline pressures, weather conditions, pipeline capacity, and market demand limit the number of tests that can be conducted at a time and that the number of wells connected to Southern Union has increased to the extent that scheduling tests on all wells has become next to impossible. Further, Southern Union gives priority to the testing of new wells connected to their system which in effect places a lower priority on the older wells such as the ten Pan American wells in question. In light of the above, it is evident that the conditions which prevented the scheduling of tests on the ten Pan American wells were beyond the control of either Pan American or Southern Union. We believe that these conditions constitute a good and valid cause under the spirit of Order R-2183 for administrative relief and ask that you reconsider our application in light of these additional facts.

Docket Mailed 4/12/62

If after reconsideration of these additional data you do not feel that an exception can be granted under the Administrative Provisions of Order R-2183, Pan American respectfully requests that this matter be set for hearing.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

T. M. Curtis
District Superintendent

GWE:en
Attach.

cc: Mr. Emory C. Arnold
New Mexico Oil Conservation Commission
Aztec, New Mexico

SOUTHERN UNION GAS COMPANY
FIDELITY UNION TOWER · DALLAS 1, TEXAS

March 28, 1962

Mr. T. M. Curtis, District Superintendent
Pan American Petroleum Corporation
P. O. Box 480
Farmington, New Mexico

Dear Mr. Curtis:

In response to your letter of March 13, we believe that the best way to explain our inability to accommodate 1961 deliverability tests for ten (10) of your wells connected to our pipelines in Northwest New Mexico, is to summarize the precarious circumstance that prevented us from doing so. The referenced wells are identified on the separate sheet attached.

First of all, the number of wells connected to our lines has increased to the extent that the amount of annual well testing to be accomplished within the period prescribed for the area has become next to impossible. In a fluctuating market such as ours, the various factors of pipeline pressures, pipeline capacity, weather conditions, and market demand have a decided influence on the number of tests that can be handled at a time and, of course, testing procedures are governed accordingly. The principle difficulity is in pre-scheduling of testing operations so that all conditions of production, facilities, and market demand will be compatible at the appointed time.

During peak load periods, when under appropriate conditions large scale testing might be performed, only token testing can be consumated because most of the wells must be kept in service to satisfy the prevailing high market demand. Also, tests in process at such times often must be interrupted in order to meet the existing high consumer demand for gas, leaving the tests for rescheduling as and when conditions warrant. Conversely, during those periods when consumer demand is low, production requirements are insufficient to accommodate deliveries from the large number of wells still to be tested, thereby giving rise to additional rescheduling and programming to afford as much testing as possible within the limits of market demand and within the remaining time available for completing the tremendous task.

The situation has been further strained by the increasing amount of unscheduled testing that arises from new well completions requiring deliverability tests before they can be legally produced. This in effect, gives testing priorities to new completions which we are obliged to accommodate within a nominal period after notice of completion and clearance for connection to our line. Thus, by reason of such priorities, together with the other factors we have mentioned, we have not been able to complete some of the annual deliverability tests scheduled for the year 1961.

The above explanation particularly applies in connection with those of your wells that did not get tested during the year. Our field office reports that an all out effort was made throughout the last few months of the year to accommodate the scheduled and rescheduled tests, but for one or more of the reasons above enumerated and in spite of the determined consideration given to satisfying the tests, they could not do so.

Therefore, realizing that our inability to consummate these tests may result in curtailment of production allowables during the ensuing year, we wish to lend whatever assistance we can to help you get current allowables re-established for the wells. If you desire to use this letter in connection with this cause, please feel free to do so, and if further confirmation is needed, we will be happy to oblige.

Trusting we have clarified the matter to your entire satisfaction, we are

Yours very truly,

J R Bynum

J. R. Bynum, Manager
Gas Contracts & Prorations

JRB:pem

Enclosure

SOUTHERN UNION GAS COMPANY

Schedule of wells operated by Pan American Petroleum Corporation for which 1961 deliverability tests could not be accommodated.

T 27 N, R 10 W

WELL NAME	LOCATION
Johnson Gas Unit "B" # 1, Unit H, Section 21	H-21-27-10
Fred Feasel "G" # 1	K- 2-27-10
Fred Feasel "H" # 1	H-33-28-10
J. F. Day "E" # 1	L-17-28-10
R. P. Hargrave "H" # 1	B- 9-27-10
E. H. Pipkin # 5	B-36-28-11
Davidson Gas Unit "F" # 1	M-28-28-10
Davidson Gas Unit "G" # 1	H-21-28-10
Fred Feasel "J" # 1	G-34-28-10
M. N. Galt "H" # 1	L- 1-27-10

Case 2536
Heard 4/25/62
Rec. 5-1-62

1. Grant Hudson & Hudson request for water flood in the Maljamar Oil pool ~~into~~ Injection to be into the Grayburg & San Andres formation.
2. The water source will be the ogallala formation on the caprock area.
3. The injection wells which should be approved a listed on page 1 of their application
~~4. The project area shall be:~~
~~17S - 21E.~~
~~sec. 13 - SE/4 SW/4, S/2 SE/4~~
~~" 24 - N/2, N/2 SW/4, SE/4 SW/4, SE/4.~~
~~" 25 - N/2 NE/4, NE/4 NW/4.~~

NOTE: 4 ~~Hold~~ this order until ~~production~~ a test is report on the Puckett "A" #5 S-24-17S-21E by Ralph Gray.

5. Use the usual water flood order.

[signature]

No. 13-62

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 25, 1962

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

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, as alternate Examiner:

CASE 2532: Application of Zapata Petroleum Corporation for two additional injection wells, Maljamar Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to convert its Phillips 8-B Wells No. 3 and 5 located respectively in Units H and B, Section 19, Township 17 South, Range 33 East, Lea County, New Mexico, to water injection wells in its pilot waterflood project in the Maljamar (Grayburg-San Andres) Pool authorized by Order No. R-2157.

CASE 2533: Application of Amerada Petroleum Corporation for a pressure maintenance project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to institute a pressure maintenance project in that portion of the Saunders Permo-Pennsylvanian Pool underlying the S/2 S/2 of Section 3 and N/2 of Section 10, Township 15 South, Range 33 East, Lea County, New Mexico, with the injection of water into the Pennsylvanian formation initially to be through one well located in the NE/4 NW/4 of said Section 10.

CASE 2534: Application of Amerada Petroleum Corporation for a quadruple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its State NJ "A" Well No. 3 located in Unit A of Section 2, Township 25 South, Range 37 East, Lea County, New Mexico, as a quadruple completion (combination) in the San Andres, Blinebry, Drinkard and Devonian formations in the North Justis Field with the production of oil from the Devonian and Drinkard formations to be through separate strings of 1 ½-inch tubing set within parallel strings of 3 ½-inch casing, and the production of oil from the Blinebry formation through a parallel string of 2 7/8-inch casing; applicant proposes to dispose of salt water into the San Andres formation through a parallel string of 2 3/8-inch casing.

CASE 2535: Application of Amerada Petroleum Corporation for a quadruple completion and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its L. G. Warlick "A" Well No. 1, located in Unit I of Section 19, Township 21 South, Range 37 East, Lea County, New Mexico, as a quadruple completion

(combination) in the Eumont Gas, Blinebry Oil, Penrose-Skelly Oil and Drinkard Oil Pools with the production of oil from the Drinkard and Penrose-Skelly formations to be through parallel strings of 2 7/8-inch casing, the production of oil from the Blinebry formation through a string of 1 1/4-inch tubing set within another parallel string of 2 7/8-inch casing and the production of gas from the Eumont formation through the casing-tubing annulus. Applicant further seeks the establishment of a 160-acre non-standard gas proration unit in the Eumont Gas Pool comprising the S/2 NE/4 and the N/2 SE/4 of said Section 19, said unit to be dedicated to said L. G. Warlick "A" Well No. 1.

CASE 2536: Application of William A. & Edward R. Hudson for a secondary recovery project, Maljamar Pool, Eddy County, New Mexico. Applicants, in the above-styled cause, seek permission to institute a secondary recovery project in the Maljamar Pool in an area underlying their Puckett "A" and "B" Leases located in Section 24, Township 17 South, Range 31 East, Eddy County, New Mexico, with the injection of water into the Grayburg-San Andres formation initially to be through six wells, said project to be governed by the provisions of Rule 701.

CASE 2537: Application of J. C. Williamson for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Westates-Federal Well No. 8 located in Unit E of Section 1, Township 25 South, Range 37 East, Lea County, New Mexico, as a dual completion (conven tional) in the North Justis-McKee Pool and an undesignated Montoya pool with the production of oil from both zones to be through parallel strings of tubing.

CASE 2538: Application of Southwest Production Company for a non-stand-ard oil proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a 73.89-acre non-standard oil proration unit in the Cha Cha-Gallup Oil Pool comprising the NE/4 SE/4 and that portion of the NW/4 SE/4 lying North of the mid-channel of the San Juan River, of Section 16, Township 29 North, Range 14 West, San Juan County, New Mexico, said unit to be dedicated to the Foutz-State Well No. 1, located 1912 feet from the South line and 2310 feet from the East line of said Section 16.

CASE 2539: Application of Pan American Petroleum Corporation for an exception to Order No. R-333-E, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-333-E to permit the extension of the terminal date for the 1961 deliverability test period from December 15, 1961, to March 1, 1962, for ten wells located in Townships 27 and 28 North, Ranges 10 and 11 West, San Juan County, New Mexico.

CASE 2540: Application of Pan American Petroleum Corporation for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its State "CK" Well No. 2, located in the NE/4 SW/4 of Section 19, Township 21 South, Range 37 East, Lea County, New Mexico, as a triple completion in the Drinkard, Blinebry and Paddock Oil Pools with the production of oil from the Blinebry and Drinkard formations and the production of undetermined hydrocarbons from the Paddock formation.

CASE 2541: Application of J. Glenn Turner for a dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Ballard Well No. 11-15 located in Unit D of Section 15, Township 26 North, Range 9 West, San Juan County, New Mexico, as a dual completion (conventional) in the Basin-Dakota Gas Pool and an undesignated Gallup oil pool with the production of gas from the Dakota formation and the production of oil from the Gallup formation to be through parallel strings of 2 1/16-inch tubing.

CASE 2542: Application of La Plata Gathering System, Inc. for a dual completion, a non-standard gas proration unit, and an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete a gas well to be located at an unorthodox gas well location 1980 feet from the South line and 734 feet from the East and West lines of Section 19, Township 32 North, Range 5 West, Rio Arriba County, as a dual completion (conventional) in the Blanco-Mesaverde and Basin-Dakota Gas Pools with the production of gas from the Dakota formation to be through a string of 2 1/16-inch tubing and the production of gas from the Mesaverde fromation to be through a parallel string of 1 ½-inch tubing. Applicant further seeks the establishment of a 355.25-acre non-standard gas proration unit in the aforesaid pools comprising all of Sections 18 and 19, in said township to be dedicated to the above-described well.

CASE 2543: Application of G. W. Strake for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its LeBow-Federal Well No. 6 located in Unit I of Section 25, Township 19 South, Range 30 East, Eddy County, New Mexico, as a dual completion (conventional) in the North Hackberry-Yates and Hackberry-Seven Rivers Pools with the production of oil from both formations to be through parallel strings of 2 1/16-inch tubing.

CASE 2544: Application of Perry R. Bass for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Plains Unit Agreement embracing 7,198.01 acres, more or less, of federal lands in Township 19 South, Range 32 East, Lea County, New Mexico.

CASE 2545: Application of The British American Oil Producing Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Jalmat Field-Yates Sand Unit Agreement embracing 2,760 acres, more or less, of State and fee lands in Township 22 South, Range 35 East, Lea County, New Mexico.

CASE 2546: Application of The British American Oil Producing Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to institute a waterflood project in the Yates formation in the Jalmat Pool in an area underlying its proposed Jalmat Field-Yates Sand Unit Area, comprising 2,760 acres, more or less, in Township 22 South, Range 35 East, Lea County, New Mexico, with injection of water initially to be through 16 wells located within said unit area, the project to be governed by the provisions of Rule 701.

iqg/

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. 1378
Order No. R-333-E
Amends R-333-C & D

APPLICATION OF EL PASO NATURAL GAS
COMPANY FOR AN ORDER REVISING,
AMENDING OR DELETING CERTAIN PORTIONS
OF ORDER R-333-C & D PERTAINING TO GAS
WELL TESTING PROCEDURE APPLICABLE TO
GAS WELLS COMPLETED IN SAN JUAN, RIO
ARRIBA AND McKINLEY COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 13, 1958, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 28th day of February, 1958, the Commission, a quorum being present, having considered the evidence adduced 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 there is need for a number of amendments to Order R-333-C & D, heretofore entered by the Commission, said order outlining the gas testing procedure of gas wells completed in San Juan, McKinley and Rio Arriba Counties, New Mexico.

(3) That the following amendments should be adopted, in the interests of conservation.

IT IS THEREFORE ORDERED:

(1) That the gas well testing period of April 1 through October 31 as established by Order No. R-333-C & D be and the same is hereby amended to read "February 1 through December 15."

(2) That Sub-Sections II and III of Section A of Order R-333-C & D be and the same are hereby amended to read as follows:

II. ANNUAL DELIVERABILITY AND SHUT-IN PRESSURE TESTS:

Annual Deliverability and Shut-In Pressure Tests of all producing gas wells are required to be made during the period from February 1 through December 15 of each year.

All wells making connection to a gas transportation facility between October 31 and December 31 of any calendar year shall be tested during the following annual testing period. All wells making connection to a gas transportation facility between January 1 and February 1 of any calendar year shall be tested during the testing period of that year.

An Initial Deliverability Test accomplished in accordance with Section B, Sub-paragraph 1, Paragraph (A), Subparagraph 1, may be used as an annual test when the initial connection to a gas transportation facility is made between February 1 and October 31 of the test year.

All Annual Deliverability and Shut-in Pressure Tests required by this order shall be filed with the Commission and with the gas transportation facility to which the well is connected within thirty (30) days after the end of the month during which the test is completed; provided however, that all tests completed during the period from December 1 through December 15 shall be reported not later than January 10 of the following year. Failure to file the required tests within the time prescribed above will subject the delinquent wells to cancellation of allowable.

III. SCHEDULE OF TESTS:

(A) ANNUAL DELIVERABILITY TESTS

At least thirty days (30) days prior to the beginning of the test period each gas transportation facility shall to the Commission's Aztec Office (1000 Rio Brazos Road) submit a complete list of wells connected to its system, said wells to be grouped according to the pools in which they are located. All undesignated wells shall be listed separately.

At least 30 days prior to the beginning of the test period the gas transportation facilities receiving gas from wells to be tested shall, in cooperation with respective operators, submit to the Commission's Aztec office a testing schedule for the Annual Deliverability and Shut-in Pressure Tests for all wells connected to their respective pipeline systems which are to be tested during the succeeding two months. Five copies of the schedule shall be furnished to the Commission and one copy shall be furnished to each operator concerned. A similar schedule shall be submitted at least 30 days prior to the beginning of each two-month testing interval. Each schedule shall indicate the pool, operator, lease, well number and location of each well. The gas transportation facility making the schedule of tests shall be notified immediately by any operator unable to take such tests as scheduled.

When an Initial Deliverability Test accomplished in accordance with Section B, Sub-section 1, Paragraph (A), Sub-paragraph 1 is to be used as an annual test for a well connected to a gas transportation facility

during the period between February 1, and October 31, then the operator shall notify the Commission in writing during the fourteen day conditioning period for said test,

In the event a well is not tested in accordance with the test schedule, the well shall be re-scheduled for testing, and the Commission shall be notified of such fact in writing during the fourteen day conditioning period for said test.

(3) That the sixth sub-paragraph of Paragraph (B) of Sub-Section I of Section B of Order No. R-333-C & D be and the same is hereby amended to read as follows:

Orifice meter charts shall be changed and so arranged as to reflect upon a single chart the flow data for the gas from each well for the full seven-day deliverability test period; except that no tests shall be voided if satisfactory explanation is made as to the necessity for using test volumes through two chart periods. Corrections shall be made for pressure base, measured flowing temperature, specific gravity, and supercompressibility, provided however, that if the specific gravity of the gas from any well under test is not available, then and in that event an estimated specific gravity may be assumed therefor, based upon that of gas from nearby wells, the specific gravity of which has been actually determined by measurement.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

MURRAY E. MORGAN, Member

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

S E A L

ir/r

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:

CASES NO. 882) Consolidated
941)
Order No. R-333-C and D
(Supersedes R-333-B)

THE APPLICATION OF THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION FOR AN ORDER REVISING, AMENDING OR DELETING CERTAIN PORTIONS OF ORDER R-333-B PERTAINING TO GAS WELL TESTING PROCEDURE APPLICABLE TO GAS WELLS COMPLETED IN SAN JUAN, RIO ARRIBA AND McKINLEY COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause having come on for hearing at 9 o'clock a. m. on August 17, 1955, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 13th., day of October, 1955, the Commission, a quorum being present, having considered the records and testimony adduced 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 there is need for a number of additions to and revisions of Order R-333-B, heretofore entered by the Commission, said order outlining a gas testing procedure of gas wells completed in San Juan, McKinley and Rio Arriba Counties, New Mexico.

(3) That the following rules and regulations should be adopted, and that said rules and regulations are in the interests of conservation.

IT IS THEREFORE ORDERED:

That the following Special Rules and Regulations governing gas well testing in the San Juan Basin (Counties of San Juan, Rio Arriba and McKinley, New Mexico,)

superseding the rules and regulations contained in Order No. R-333-B, be and the same hereby are promulgated and adopted as an exception to the general statewide rules and regulations of this Commission relating to gas well testing procedures, Rules (401 et seq.):

GAS WELL TESTING RULES AND PROCEDURES FOR SAN JUAN BASIN AREA

SECTION A. TYPE OF GAS WELL TESTS REQUIRED:

I. THE INITIAL DELIVERABILITY AND SHUT-IN PRESSURE TESTS FOR NEWLY COMPLETED GAS WELLS.

(A) Immediately upon completion of each gas well in San Juan Basin, a shut-in pressure test of at least 7-days duration shall be made.

(B) Within 45 days after a well is connected to a gas transportation facility the well shall be tested in accordance with Section B, Subsection I, Paragraph (A) of this order, and the results of the test reported to the Commission. An operator may request an extension of time in which to accomplish this test provided such request is made in writing to the Commission's Aztec Office before the expiration of the 45 day period following connection of the well to a gas transportation facility. Such request for extension must be for substantial reason and approved by the Commission, or its duly authorized representative. Said extension shall not be for more than fifteen days.

(C) Any tests accomplished for information purposes prior to pipeline connection shall not be recognized as an official test for the establishment of allowables.

II. ANNUAL DELIVERABILITY AND SHUT-IN PRESSURE TESTS:

Annual deliverability and shut in pressure tests of all producing gas wells are required to be made during the period from April 1 through October 31 of each year.

All wells connected to a pipeline system between November 1 and December 31, of any calendar year shall be tested during the following annual testing period. All wells connected to a pipeline system between January 1 and April 1 of any calendar year shall be tested during the testing period of that calendar year.

An Initial Deliverability Test accomplished in accordance with Section B, Subsection I, Paragraph (A), Subparagraph 1, may be used as an annual test when the test is taken on wells connected to a transportation facility during the regular annual testing season from April 1, to October 31.

III. SCHEDULE OF TESTS

(A) ANNUAL DELIVERABILITY TESTS

On or before February 15 of each year, the pipeline companies receiving gas from wells to be tested shall, in cooperation with respective operators, submit a

testing schedule for the annual deliverability and shut-in pressure tests for all wells connected to their respective pipeline systems as of February 1 of the year for which the schedule is applicable; such test schedules shall be filed promptly with the Commission for approval, and if approved, the Commission shall furnish each operator, as identified by lists of names and addresses furnished by the respective pipeline companies, with a copy of such schedule as approved by the Commission, or a part thereof pertinent to such operator's wells, on or before March 15, of each year.

Such schedules shall be filed with the Commission for each Gas Pool as designated by the New Mexico Oil Conservation Commission listing under the heading of each pool the operator, lease, well number and location of each well. Should the pipeline company elect to file schedules by areas then the above listed informatibn shall be listed under the heading of each area in the order listed above.

All wells connected to a pipeline system during the period of February 1 to October 31, both inclusive, of any year shall be scheduled for testing during the testing period for that particular year. Then and in that event the pipeline in cooperation with the operator shall notify the Commission in writing at least (10) ten days before the Commencement of the conditioning period for any tests.

Provided however, that when an Initial Deliverability Test accomplished in accordance with Section B, Subsection I, Paragraph (A), Subparagraph 1 is to be used as an annual test for wells connected to a gas transportation facility during the period between April 1 and October 31, then the operator shall notify the Commission in writing at any time during the fourteen day conditioning period.

In event changes for substantial reasons are necessary in the annual test schedule, the Commission shall be notified (10) ten days before tests are scheduled to commence.

(B) DELIVERABILITY RETESTS.

An operator may retest the deliverability of a well at any time for substantial reason by the notification to the Commission (10) ten days before the retest is scheduled to commence. Such notification shall consist of scheduling the well as required for the annual deliverability test in subsection III, Paragraph A, above. Such retest shall be subject to the approval of the Commission, and conducted in conformance with Section B, Subsection I, Paragraph (B) of this order. The Commission may require the retesting of any well at its discretion by the notification of the operator to schedule such retest.

The requirements for Initial and Annual Deliverability Tests and the notification and scheduling of such tests which apply to newly completed wells shall also apply to reworked or recompleted wells.

IV. WHO MAY WITNESS TESTS:

Any initial or annual deliverability and shut-in pressure test may be witnessed by any or all of the following: an agent of the Commission, an offset operator, a representative of the pipeline company taking gas from an offset operator, or a representative of a pipeline company taking gas from the well under test.

Deliverability tests required hereinabove in Subsection I and II of this section shall determine the calculated deliverability of each gas well, which shall be reported to the Commission by converting actual deliverability against existing line pressures to the calculated deliverability at a pressure equal to fifty (50) percent of the shut-in pressure of each well in the manner hereinafter specified below. Such calculated deliverability so determined, and hereinafter so referred to, shall not be considered as the actual deliverability of any well into a gas transportation facility, but shall be used by the Commission as an index to determine the well's ability to produce at assumed static wellhead working pressures, as compared to other wells in the pool under like conditions.

SECTION B. PROCEDURE FOR TESTS:

The several known gas producing formations of the San Juan Basin represent a variety of testing situations, and each is treated separately.

I. MESAVERDE FORMATION:

(A) INITIAL DELIVERABILITY AND SHUT-IN PRESSURE TEST.

1. Within (45) forty-five days after a newly completed well is connected to a gas transportation facility the operator shall accomplish a deliverability and shut-in pressure test in conformance with Section B, sub-section I, paragraph (B) of this order.

2. In the event that testing a newly completed well in accordance with paragraph 1 above, is impractical, the operator may accomplish a deliverability and shut-in pressure test in the following manner:

   a. A seven or eight day production chart may be used as a basis for determining the wells deliverability providing the chart so used is preceded by at least (14) fourteen days continuous production. The well shall produce unrestricted through either the casing or tubing, but not both, into a pipeline during these periods.

   b. A shut-in pressure of at least seven days duration shall be taken. This shall be the shut-in test required in Section A, subsection I, Paragraph (A).

   c. The average daily static meter pressure shall be determined in accordance with Section B, subsection I, Paragraph (B). This pressure shall be used as P_t in calculating P_w for the Deliverability Calculation.

d. The daily average rate of flow shall be determined in accordance with Section B, Subsection I, Paragraph (B), of this order.

e. The static wellhead working pressure (P_w) shall be determined in accordance with Section B, subsection I, paragraph (B), of this order.

f. The deliverability of the well shall be determined by using the data determined in paragraphs a through f, above, in the deliverability formula in accordance with Section B, subsection I, paragraph (B), of this order.

g. The data and calculations for the above paragraphs a through f shall be reported to the Commission upon the blue colored Form C-122-A and filed in triplicate with the Commission within the forty-five day period after connection of the well. Form C-122-A shall be signed by the operator or an agent designated by the operator.

(B) THE ANNUAL DELIVERABILITY AND SHUT-IN PRESSURE TESTS.

These tests shall be taken by unrestrictedly producing the well into the pipeline through either the casing or tubing, but not both. The daily flowing rate shall be determined from an average of seven (7) consecutive producing days, following a minimum conditioning period of fourteen (14) consecutive days production. The first seven (7) days of said conditioning period shall have not more than one (1) interruption, which interruption shall be no longer than 36 hours continuous duration. The eighth to fourteenth days, inclusive, of said conditioning period shall have no interruptions whatsoever. All such production during the fourteen (14) day conditioning period plus the seven (7) day deliverability test period shall be a static wellhead working pressures not in excess of seventy-five (75) per cent of the previous annual seven (7) day shut-in pressure of such well if such previous annual shut-in pressure information is available; otherwise, the seven (7) day initial deliverability shut-in pressure of such well shall be used.

In the event that existing line pressure does not permit a drawdown as specified above, with the well producing unrestrictedly into the pipeline, the operator shall request an exception to this requirement on the Form C-122-A. The request shall state the reasons for the necessity for the exception.

The static wellhead working pressure (P_w) of any well under test shall be the calculated seven (7) day average static tubing pressure if the well is flowing through the casing; or the calculated seven (7) day average static casing pressure if the well is flowing through the tubing. The static wellhead working pressure (P_w) shall be calculated by applying the tables and procedures as set out in New Mexico Oil Conservation Commission manual entitled "Method of Calculating Pressure Loss Due to Friction in Gas Well Flow Strings". This manual is more specifically known as release 4-G-9-FLT-NW, a copy of which is attached hereto and made a part hereof.

To obtain the shut-in pressure of a well under test the well shall be shut-in immediately after the seven (7) day deliverability test for the full period of seven (7) consecutive days. Such shut-in pressure shall be measured within the next succeeding twenty-four (24) hours following the seven (7) day shut-in period aforesaid. The seven (7) day shut-in pressure shall be measured on the string through which the well flowed during the conditioning and seven (7) day flow period.

All wellhead pressures as well as the flowing meter pressure tests which are to be taken during the seven (7) day deliverability test period, as required hereinabove, shall be taken with a dead-weight gauge. The dead-weight readings taken shall be recorded on the flow chart in psia. The time and point on chart flowing pressure curve at which these readings are taken shall be indicated with an arrow.

Orifice meter charts shall be changed, and so arranged as to reflect upon a single chart the flow data for the gas from each well for the full seven day deliverability test period. Corrections shall be made for pressure base, measured flowing temperature, specific gravity and supercompressibility (superexpansibility), provided however, that if the specific gravity of gas from any well under test is not available, then and in that event an estimated specific gravity may be assumed therefor, based upon that of gas from nearby wells, the specific gravity of which has been actually determined by measurement.

The seven (7) day average flowing meter pressure shall be calculated by taking the average of all consecutive 2-hour flowing meter pressure readings as recorded on the seven (7) day flow period chart (test chart #3). The wellhead working pressure, determining calculated shall be used in calculating the wellhead working pressure, determining supercompressibility factors and calculating flow volumes.

The seven (7) day flow period volume shall be calculated from the integrated readings as determined from the flow period orifice meter chart, (Chart #3). The volume so calculated shall be divided by the number of testing days on the chart to determine the average daily flow period rate of flow. The flow chart shall have legibly recorded a minimum of seven (7) days and a maximum of eight (8) flowing days to be acceptable for test purposes. The volume used in this calculation shall be corrected to New Mexico Oil Conservation Commission standard conditions.

The average flowing meter pressure for the seven (7) day or eight (8) day flow period and the corrected integrated volume shall be determined by the purchasing company that integrates the flow charts and furnished to the operator or testing agency when such operator or testing agency requests such information.

The daily average integrated flow period rate of flow shall be corrected for meter error by the multiplication by a correction factor determined by dividing

the square root of the chart flowing meter pressure psia into the square root of the dead-weight flowing meter pressure psia,

The daily volume of flow as determined from the flow period chart (Test Chart #3) integrator readings shall be calculated by applying the Basic Orifice meter formula.

$$Q = C' \sqrt{h_w \, p_f}$$

Where:

Q = Metered volume of flow MCFD @ 15.025, 60°F. and .60 specific gravity.

C' = The 24 hour basic orifice meter flow factor as taken from New Mexico Oil Conservation Commission release "4G-12-BPT State" and corrected for flowing temperature, gravity and supercompressibility.

h_w = Daily average differential meter pressure from flow period chart.

p_f = Daily average flowing meter pressure from flow period chart.

The basic orifice meter flow factors, flowing temperature factor and specific gravity factor shall be determined from New Mexico Oil Conservation Commission release No. "4G-12-BPT-State". The four tables in said release are based on "gas measurement committee report No. 2" (Revised 1948) of the American Gas Association, New York 17, New York. A copy of said New Mexico Oil Conservation Commission release is attached hereto and made a part hereof.

The daily flow period average corrected flowing meter pressure, psig, shall be used to determine the supercompressibility factor. Correction shall be made for supercompressibility (deviation from Boyle's law) for flowing meter pressures in excess of 100 psig by the use of Simplified Supercompressibility Tables, compiled from C. N. G. A. Bulletins TS-402 and TS-461, published by John P. Squier Company, Dallas, Texas. These tables have been reproduced by specific permission from John P. Squier Company a copy of which is attached hereto and made a part hereof.

When supercompressibility (superexpansibility) correction is made for a gas containing either nitrogen or carbon dioxide in excess of 2 per cent, the supercompressibility factors of such gas shall be determined by the use of Table V of the above mentioned TS-402 for pressure 100-500 psig or Table II, TS-461 for pressures in excess of 500 psig.

The use of tables for calculating rates of flow from integrator readings, which do not specifically conform to New Mexico Oil Conservation Commission release "4-G-12-BPT-State", may be approved for determining the daily flow period rates of flow upon a showing that such tables are appropriate and necessary.

Deliverability pressure, as used herein for Mesaverde production, is a defined pressure applied to each well and used in the process of comparing the abilities of wells in this formation to produce at static wellhead working pressures equal to fifty (50) per cent, of the seven (7) day shut-in pressure of the respective individual wells.

The deliverability of gas at the "deliverability pressure" of any well under test shall be calculated from the test data derived from the tests hereinabove required by use of the following deliverability formula:

$$D = Q \left[\frac{\left(P^2_c - P^2_d \right)}{\left(P^2_c - P^2_w \right)} \right]^n$$

WHERE:

D	=	Deliverability at the deliverability pressure, (P_d) MCF/da, (at Standard Condition of 15.025 psia and 60 °F).
Q	=	Daily flow rate in MCF/da, at wellhead pressure (P_w)
P_c	=	7-day shut-in casing (or tubing) wellhead pressure, psia.
P_d	=	Deliverability pressure; half of the individual well 7-day shut-in pressure, P_c, psia.
P_w	=	Average static wellhead working pressure, as determined from 7-day flow period, psia and calculated from New Mexico Oil Conservation Commission Pressure Loss Due to Friction Tables. (Casing pressure if flowing through the tubing, or tubing pressure if flowing through the casing).
n	=	Average pool slope of back pressure curve (.75) for Mesaverde wells).

Any test hereinabove provided for will be considered unacceptable if the average flow rate for the final 7 day deliverability test is 25 per cent in excess of any consecutive 7-day average of the preceding two weeks. "A deliverability test" not meeting this requirement shall be retested.

The annual deliverability and shut-in pressure tests as required hereinabove shall be reported upon Commission Form C-122-A and filed in triplicate, with the Commission within the month next after completion of such tests. Form C-122-A shall be signed by the operator or agent designated as the operator.

All charts relative to annual deliverability tests shall be identified by the words "Test Chart No. 1" (2, 3, 4, etc.), and any or all charts or photostats thereof shall be made available to the Commission upon its request.

II. PICTURED CLIFFS FORMATION:

(A) INITIAL DELIVERABILITY AND SHUT-IN PRESSURE TEST:

Same as prescribed for Mesaverde formation; see Section B, subsection I, Paragraph (A).

(B) ANNUAL DELIVERABILITY AND SHUT-IN PRESSURE TESTS:

In all respects the deliverability and shut-in pressure tests of wells in the Pictured Cliffs formation shall be made in conformity with the procedures set out in Section B, Subsection I, paragraph (B) of the Mesaverde formation procedures, except that in the back pressure formula, the exponent "n" shall have the value of point eighty-five (.85).

III. FRUITLAND FORMATION:

(A) All initial and annual deliverability and shut-in pressure tests of gas wells producing from the Fruitland formation shall be identical in all respects to those requirements and procedures hereinabove set out and required for the Pictured Cliffs formation in Section B, Subsection II, paragraphs (A) and (B).

IV. THE DAKOTA FORMATION:

All tests of Dakota wells shall be in conformity with requirements and procedures provided hereinabove for the Mesaverde formation, except as follows:

(A) BARKER DOME - DAKOTA: (Storage Area)

1. INITIAL OPEN FLOW POTENTIAL TEST:

An average "pool slope", based upon bottom-hole conditions, shall be established by the Commission after consideration of data to be provided by the

operators; these data shall be based upon tests taken in conformity with the conventional back pressure method, indicated in Commission Rule 401. This "slope" shall be applied to each well in the Barker-Dome Dakota Area, as if such slope were the actual performance back pressure slope of each such well, in the following manner:

This back pressure slope so established shall be plotted through a point predetermined by one stabilized flow rate at a static wellhead working pressure not in excess of seventy-five (75) per cent of the seven (7) day shut-in pressure of such well.

The flowing rates (Q) shall be corrected for pressure base, measured flowing temperature, specific gravity and supercompressibility, by the use of methods of calculation and tables hereinabove referred to and approved in Section B, Subsection I, paragraph (B), of the Mesaverde procedures.

A seven (7) day shut-in pressure test shall be made for each well in the Barker Dome-Dakota Area, provided however, that where the shut-in period exceeds seven days such fact shall be reported to the Commission.

The values of the seven (7) day shut-in pressure (P_c) and the working wellhead pressure (P_w) shall be corrected to bottom hole conditions.

A schedule of tests shall be prepared by the transporter and approved by the Commission, and reports of such tests shall be signed by the operator or his designated agent and duly filed with the Commission, on Form C-122, the regular state-wide form.

2. ANNUAL OPEN FLOW POTENTIAL TEST:

This test shall be made of all wells producing from the Barker Dome-Dakota Storage Area by obtaining seven (7) day shut-in pressures of all Dakota wells, converting the same to bottom hole pressures (P_f) computing the squares of such bottom hole pressures, (P_f^2) and applying the same to the original average "pool slope" to obtain an adjusted open flow. If so desired as an alternate method an adjusted open flow may be computed from the following equation:

$$O_{f_2} = O_{f_1} \left[\frac{\left(P_{f_2}\right)^2}{\left(P_{f_1}\right)^2} \right]^n$$

WHERE:

O_{f_2} = Adjusted absolute open flow,

O_{f_2} = Original absolute open flow,

P_{f_2} = New bottom hole shut-in (psia.)

P_{f_2} = Old bottom hole shut-in (psia.)

n = Slope of back pressure curve.

Tests of all wells in the Barker Dome-Dakota storage area shall be made during the period of April 1 through October 31 of each year and reports made to the Commission within the next succeeding month after test is made.

V. PENNSYLVANIAN FORMATION:

All tests of wells producing from the Pennsylvanian formation of the San Juan Basin Area shall be as follows:

(A) INITIAL OPEN FLOW POTENTIAL TEST:

Immediately after completion of each new well an absolute open flow shall be determined by the conventional back-pressure method indicated by Rule 401 of the Commission's Rules and Regulations.

Seven day shut-in pressures will be used in all cases, and, if for any reason the shut-in period exceeds seven days, then, the actual shut-in time shall be reported.

(B) ANNUAL OPEN FLOW POTENTIAL TEST:

This test shall be made of all wells producing from the Pennsylvanian formation of the San Juan Basin Area, and such tests shall conform in all respects with the procedure set out next above under initial open flow potential test or in the alternative, by obtaining a seven day shut-in pressure of each well and converting the same to bottom hole pressure (P_f). The square of the bottom hole pressure (P_f^2) will be computed and applied to the original back pressure curve and an adjusted absolute open flow will be obtained.

If shut-in pressure time is in excess of seven (7) days, then the actual shut-in time shall be reported.

There is no objection to the use of an adjusted absolute open flow calculated from the equation as set out hereinabove under Dakota formation, Section B, Subsection IV, paragraph (A) - subparagraph 2.

All tests hereunder shall be made during the period from April 1 through October 31 of each year, and reported to the Commission upon regular Form C-122 during the month succeeding the month in which the tests are made.

SECTION C. INFORMATION TEST FOR ALL FORMATIONS.

I. TYPE OF TEST:

(A) A pitot potential test may be taken on newly completed wells before their connection to a gas transportation facility. This test shall not be a required official test but may be taken for information purposes at the option of the operator. When taken, this test shall be made and reported as prescribed in paragraph (B) following.

(B) PITOT POTENTIAL TEST:

The pitot potential test shall be made after a minimum shut-in time of seven (7) days. The shut-in pressure shall be measured by the use of a dead-weight gauge. The rate of flow shall be determined by a pitot tube measurement after unrestricted flowing of gas to the air for a period of three (3) hours; the flow nipple shall be at least eight (8) diameters long. The pitot tube shall be constructed of one-eight (1/8) inch pipe (nominal diameter). Standard tables (Reids) will be provided by the Commission on request.

Any well completed with two-inch nominal size tubing (1.995 inside diameter) or larger shall be tested through the tubing. Any well completed with tubing smaller than two-inch nominal shall be tested through the casing.

(C) REPORTING OF TEST.

When the pitot potential test is taken the results shall be calculated as prescribed in the Commission's Manual of Tables and Procedure and reported to the Commission on Form C-122-B.

IT IS FURTHER ORDERED:

(1) That Form C-122-A entitled "Gas Well Test Data Sheet, San Juan Basin", a copy of which is attached hereto and made a part hereof, be, and the same hereby is approved in open form subject to minor modifications as experience may indicate and the same shall be used only for the area heretofore indicated, excepting therefrom only the Barker Dome-Dakota storage area, and the Pennsylvanian formation, all within the said San Juan Basin.

(2) That this order shall modify Rule 1121 of the Rules and Regulations of the Commission only to the extent of requiring reports upon Form C-122, a copy of which is attached hereto and made a part hereof. Such Form C-122 is hereby approved in open form subject to minor changes and additions as experience may indicate necessary.

(3) All forms heretofore mentioned, are hereby adopted for the use in the San Juan Basin Area.

(4) All testing agencies whether individuals, companies, pipeline companies or operators shall maintain a log of all tests accomplished by them. This log shall show the operator, lease, well number, section unit letter, section, township, range and pool as defined by New Mexico Oil Conservation Commission, for each well tested. The log shall further show the date the flow period pressures (psia.) and shut-in pressures are measured and the values thereof. A copy of this log shall be made available to the Commission or a Commission representative at any time during any testing season. A copy of this log shall be filed with supervisor of District III, Box 697, Aztec, New Mexico, by the 10th of December following each testing season. A log form setting out the date required shall be furnished by the New Mexico Oil Conservation Commission to all testers, a copy of this form is attached hereto and made a part hereof.

IT IS FURTHER ORDERED:

That other formations in the San Juan Basin Area which may in the future be found to be productive will be provided with testing programs on the basis of formation characteristics.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JOHN F. SIMMS, Chairman

E. S. WALKER, Member

W. B. MACEY, Member and Secretary

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BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 2539

CASE NO. 2482
Order No. R-2183

APPLICATION OF EL PASO NATURAL GAS COMPANY FOR AN EXCEPTION TO ORDER NO. R-333-E.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 24, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, 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 12th., day of February, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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 for many causes, including unusual severity of weather, deliverability tests required by Order No. R-333-E have not been timely conducted on numerous gas wells in the San Juan Basin.

(3) That in order to protect correlative rights an administrative procedure should be established whereby all operators, for good cause shown, may obtain an exception to Order No. R-333-E to permit the extension of the terminal date for the 1961 deliverability test period from December 15, 1961, to March 1, 1962.

(4) That the calculation and assignment of allowables, based on the new deliverability tests, should be made retroactive to February 1, 1962, provided the new tests are filed by April 1, 1962.

IT IS THEREFORE ORDERED:

(1) That for good cause shown, the Secretary-Director of the Commission may grant an exception to Order No. R-333-E to permit the extension of the terminal date for the 1961 deliverability test period from December 15, 1961, to March 1, 1962.

Upon an exception being granted by the Secretary-Director, the calculation and assignment of allowables, based on the new deliverability tests, shall be made retroactive to February 1, 1962, provided the new tests are filed by April 1, 1962.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

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

S E A L

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SOUTHERN UNION GAS COMPANY

[illegible]

MAR 29 196[illegible]

[illegible], 19[illegible]

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
App EXHIBIT NO. 2
CASE NO. 2539

Mr. [illegible], District [illegible]
Pan American Petroleum Corporation
P. O. Box [illegible]
Farmington, New Mexico

Dear Mr. [illegible]:

In response to your letter of March [illegible], we believe that the best way to explain our inability to conduct the [illegible] deliverability tests for [illegible] (1[illegible]) of your wells connected to our pipelines in northwest New Mexico, is to outline the [illegible] circumstances that prevented us from doing so. The [illegible] wells are identified on the [illegible] sheet attached.

First of all, the number of wells connected to our lines has increased to the extent that the amount of annual well testing to be accomplished within the [illegible] for the area has become next to impossible. In a [illegible] such as ours, the various factors of pipeline pressures, pipeline capacity, weather conditions, [illegible] have a [illegible] influence on the number of tests [illegible], of course, testing [illegible] [illegible] in re-scheduling of testing [illegible] of [illegible], [illegible] will be [illegible] to the [illegible].

During [illegible] periods, when [illegible] appropriate conditions large scale testing [illegible] performed, only [illegible] testing can be conducted because most of the wells [illegible] in service to satisfy the prevailing high market demand. Also, tests in [illegible] must be interrupted in order to meet the [illegible] consumer demand for gas, leaving the tests for rescheduling, as and when conditions warrant. Conversely, during those periods when consumer demand is low, production requirements are insufficient to accommodate deliveries from the large number of wells still to be tested, thereby giving rise to additional rescheduling and programming to afford as much testing as possible within the limits of market demand and within the remaining time available for completing the [illegible] tests.

The situation has been further complicated by the increasing amount of unscheduled testing that arises from new well completions requiring deliverability tests before they can be legally produced. This in effect, gives testing priorities to new completions which we are obliged to accommodate within a nominal period after notice of completion and clearance for connection to our line. Thus, by reason of such priorities, together with the other factors we have mentioned, we have not been able to complete some of the annual deliverability tests scheduled for the year [illegible].

The above explanation for inability applies in connection with those of your wells that [illegible] not [illegible] standing [illegible] period. Our field office reports that on all [illegible] there was [illegible] the last few months of the year to [illegible] schedule [illegible], but for one or more of the reasons above [illegible] the [illegible] of the [illegible] to [illegible] the [illegible], they could not do so.

Therefore, realizing that our inability to construct these [illegible] may result in a [illegible] of production allowables [illegible], we wish to lend whatever assistance we can to help you get [illegible] has [illegible] established for the wells. If you desire to use this letter in connection with this cause, please feel free to do so, and if further confirmation is needed, we will be happy to [illegible].

Trusting we have clarified the matter to your entire satisfaction, we are

Yours very truly,

J. K. Bynum

J. K. Bynum, Manager
Gas Contracts & Operations

JKB:[illegible]

Enclosure

[illegible]

[illegible] Formation [illegible]

W[illegible]	[illegible]
Johnson Gas Unit "[illegible]" # 1	[illegible]-21-27-10
Fred Pascal "[illegible]" # 1 — [illegible]	[illegible]-[illegible]-10
Fred Pascal "[illegible]" # 1	[illegible]-26-10
J. P. [illegible] "[illegible]" # 1	[illegible]-10
11 P. P. [illegible]grove "[illegible]" # 1 — 194	[illegible]-10
[illegible] # [illegible]	[illegible]-26-11
Davidson Gas Unit "1" # 1 — [illegible]	[illegible]-10
Davidson Gas Unit "G" # 1 — [illegible]	[illegible]-21-26-10
Fred Pascal "J" # 1	[illegible]-26-10
L. H. Gale "[illegible]" # 1	[illegible]-1-[illegible]-10

[illegible] Gross

[illegible] — 180, [illegible]

$ [illegible],750.

	Jan	Feb	Mar	April	May	June	July	Aug.	Sept	Oct	Nov	Dec.	
-B #1	4-13534	3-4048	10-23007	2-4157		1-3191	2-4031	5-12104	10-22193	2-4775	2-7376		✓
#1	10-4321	4-3547	10-10472	3-3319		1-1476	P-10307	5-5747	4-4868	2-2663	1-2581		✓
#1	2-6330	10-17139	10-24236	18-25524		1-2524	1-3278	2-6121	6-14178	2-4069	2-3754		
#1	12-24840	2-9631	10-27965	18-38406		1-3440	2-6383	1-1886	5-14066	1-3602	2-6776		
H #1	4-10169	11-11982	10-15482	18-22021		1-2497	2-3184	2-2873	4-5985	2-2866	4-7500		
#5	8-9897	3-11491	7-13215	9-16777		1-3620	1-3040	2-6229	1-1079	2-7102	22-36719		
F #1	12-19254	2-6684	10-24931	18-24065		1-2782	3-8939	3-7232	3-8647	1-3490	1-4055		
#1	18-76796	15-53988	2-5566	11-43477		16-59352	7-26266	12-44451	7-43917	2-8332	8-32243		
#1	9-28362	17-34860	5-15553	18-36922		1-3027	5-13780	2-6814	1-4706	2-7494	1-4377		
H #1	19-8935	5-3932	18-11941	19-20211		2-1152	3-2357	3-2405	2-945	2-1465	2-2052		

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
April 25, 1962

IN THE MATTER OF:

Application of Pan American Petroleum Corporation for an exception to Order No. R-333-E, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-333-E to permit the extension of the terminal date for the 1961 deliverability test period from December 15, 1961, to March 1, 1962, for ten wells located in Townships 27 and 28 North, Ranges 10 and 11 West, San Juan County, New Mexico.

CASE 2539

BEFORE:

Elivs A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 2539.

MR. MORRIS: Application of Pan American Petroleum Corporation for an exception to Order No. R-333-E, San Juan County, New Mexico.

MR. COOTER: Paul Cooter or Atwood, Maline, Roswell, appearing for the applicant.

(Witness sworn)

MR. UTZ: Are there any other appearances in this case? You may proceed.

GEORGE T. EATON, JR., called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. COOTER:

Q State your name for the record.

A George T. Eaton, Junior.

Q By whom are you employed and in what capacity?

A I am employed by Pan American Petroleum Corporation as senior petroleum engineer in Farmington, New Mexico.

Q Have you previously testified before this Commission?

A I have.

MR. COOTER: Are his qualifications acceptable?

MR. UTZ: Yes, sir.

Q (By Mr. Cooter) Mr. Eaton, first may I invite your attention to the Order of the Commission R-2183 relating to the exception to Order R Number 333-F which has been marked for this hearing as Exhibit Number 1. Pursuant to the provisions of that Order, did Pan American Petroleum Corporation submit to the Commission an application for an exception to its Order R-333-F?

A Yes, sir, it did.

Q Did that Order or that application of Pan American cover the two wells which are the subject matter of this case?

A [illegible]

Q [illegible] as it relates to those ten wells?

A In our original administrative application for an extension of time for wells not completing their 1961 deliverability test by the December 15, 1961 terminal date, we applied for administrative relief for a total of 16 wells. Among those 16 wells are the ten wells which are the subject of this hearing today. In regard to those ten wells, I would like to read a portion of that administrative application dated February 1[illegible], 1962. In that application the ten wells are listed together with their location. Regarding those wells this statement is made: "These ten wells are completed in the Basin-Dakota Pool and are connected to the Southern Union Gas Company system. All of them are located in the Angels Peak area of the Basin-Dakota Pool and were simply never scheduled for tests by the purchaser." I believe that's sufficient.

Q Was the requested relief as to the ten wells granted or denied?

A With regard to those ten wells the requested relief was denied. With regard to the other six, which were listed in that same application, the exception was granted.

Q Did Pan American thereafter file its application, which is the application I believe in the instant case as it relates to those ten wells?

A Yes, sir. That re-application for administrative approval for the extension of this is dated April 3, 1962.

Q What reasons were made a part of the application for the reason that the requested relief should be granted?

A As a portion of that application a letter from Southern Union Gas Company itemized a number of reasons that may have entered into one or more of the inability to schedule tests on any particular well of this group.

Q What were those reasons that were given by Southern Union?

A I believe that the best way to give those reasons is to read a portion of that letter from Southern Union. In this letter Southern Union states, and I quote, directly, "First of all, the number of wells connected to our lines has increased to the extent that the amount of annual well testing to be accomplished within the time prescribed for the area has become next to impossible. In a fluctuating market such as ours, the various factors of pipe line pressures, pipe line capacity, weather conditions, and market demand have a decided influence on the number of tests that can be handled at that time, and, of course, testing procedures are governed accordingly. The principal difficulty is in preshceduling of testing operations so that all conditions of production facilities and market demand will be campatible at the appointed time. During peak

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load periods, when under appropriate conditions large scale testing might be performed, only token testing can be consummated because most of the wells must be kept in service to satisfy the prevailing high market demand. Also, tests in process at such times often must be interrupted in order to meet the high consumer demand for gas, leaving the test for rescheduling as and when conditions warrent. Conversely, during those periods when consumer demand is low, production requirements are insufficient to accommodate deliveries from the large number of wells still to be tested, thereby giving rise to an additional reschedule and programming to afford as much tests as possible within the limits of market demand and within the remaining time available for completing the tremendous task. The situation has been further strained by the increasing amount of unscheduled testing that arises from new well completions requiring deliverability tests before they can be legally produced. This is effect gives testing priorities to new completions which we are obliged to accommodate within a nominal period after notice of completions and clearance for connections to our line. Thus, by reason of such priorities, together with the other factors we have mentioned, we have not been able to complete some of the annual deliverability tests scheduled for the year 1961. The above explanation particularly applies in connection with those of our wells that did not get tested during the year. Our field

getting started that an all out effort was made throughout the last few months of the year to accommodate the scheduled and unscheduled tests, but for one or more of the reasons above enumerated and in spite of the intensified consideration given to satisfying the test, they could not do so. Therefore, realizing our inability to consummate these tests may result in curtailment of production allowables during the ensuing year, we wish to lend whatever assistance we can to help you get current allowables re-established for the wells. If you desire to use this letter in connection with this cause, please feel free to do so and if further confirmation is needed, we will be happy to oblige."

Q Was a list of the wells attached to that letter?

A Yes, sir, that list of wells is attached.

Q Those are the same ten wells which are the subject matter of this hearing?

A Yes, sir, they are.

Q Was a copy of Southern Union's letter, dated March 28, 1962, attached to your application of April 3?

A Yes, sir, it was.

Q On the ten wells which are enumerated, were the tests thereon completed by March 1?

A Yes, sir, they were all completed by March 1 and were all filed prior to March 1.

Mr. Eaton, pursuant to the Rule R-333-A of the Commission and the practices in the area, whose responsibility is between the operator and the purchaser in it to schedule the tests?

A In the normal course of practice within the area, the purchaser normally assumes the responsibility for the scheduling of deliverability tests. In the normal course of operation, the operator normally assumes the responsibility for conducting those tests once scheduled.

Q In your opinion, what effect would there be or what would the result be if the responsibility of scheduling the tests was placed upon the operator?

A In my opinion utter chaos would result. The operator is not in a position to know when a purchaser is in a position to accept gas into a system. That applies not only to the pool as a whole, but also to the various segments of his system. For that reason, it's almost imperative, in my opinion, that the purchaser continue to schedule these tests.

Q Are these wells in an area of high allowables?

A These wells are located in an area of generally above average allowables for the Basin-Dakota Pool.

Q Did any of the wells, ten wells, the subject matter of this case, have their allowables cancelled on the February 1st balancing date?

A Yes, sir, there were four of this group which had some allowable cancelled on the February 1st balancing date. Two of those wells had very minor amounts cancelled. One of them was a substantial amount, one of them also not very big.

Q Based on the flow rate during the deliverability test, would the amount of production during the 21-day flow period exceed the amount of the allowable that was cancelled?

A Yes, sir, in each case the flow rate through a 21-day period would have exceeded the amount of allowable that was cancelled.

Q With regard to the four wells that you have just testified about, have they already suffered or sustained a penalty by not having the deliverability test timely run?

A These four wells have already had one penalty assessed against them, as I mentioned, two not very much, but still it was a small penalty.

MR. VERITY: We offer Exhibit 1 and 2 into evidence together, of course, with the application of Pan American in this case.

Q Do you have anything further to add?

A No, sir, I don't believe so.

MR. UTZ: Without objection Exhibits 1 and 2 will be entered into the record of this case. Any questions of the witness?

MR. MORRIS: Yes, sir, I do on occasion.

MR. WEST: Mr. Morris.

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Elton, you have testified that in the normal course of operations as between purchaser and the operator, the purchaser must bear the responsibility of scheduling the deliverability tests. If the purchaser fails to run the deliverability test, would it not become the duty then of the operator, knowing that the test had not been run on the well, to at least point out to the purchaser that the situation was and remind the purchaser to schedule the tests?

A Yes, sir, I think that if an operator realizes that a purchaser appears to be falling behind in the number of tests that he is conducting, that should be pointed out to him.

Q Was that done in this case?

A In this case, it became apparent to Pan American somewhere around September 1st that the purchaser was in fact falling behind. The matter was brought to his attention at that time and periodically, I'm told, at approximately two week intervals thereafter. Now, I believe that the purchaser in this case made an all out honest effort to conduct as many of these tests as he could for the remaining months following September 1st and prior to the terminal date of December 31.

[illegible]

[illegible].

Q Do you feel that with respect to the wells, the subject of this hearing, that Pan American gave adequate notice within time that Southern Union should have been able to schedule and test the wells?

A Yes, sir, I believe so, although I will point out this, too, that you don't call attention to somebody the fact that he's falling behind until he is already behind. If we had known that he would be behind as far as he was on September 1st, if we had known that fact in June, well, perhaps more tests could have been conducted than were actually done. It's a critical point there as to at what point do you call the fact to somebody's attention that he is falling behind. You have really got to be obviously behind before you call it to his attention.

Q And is it the normal course of operation throughout the Basin, not only with Southern Union, but with those connected to El Paso's system, to let the purchaser schedule the test?

A Yes, sir.

MR. MORRIS: Thank you. That's all.

MR. UTZ: Any other questions?

BY MR. UTZ:

Q Mr. Eaton, were all of these wells completed early

in 1951 or were some of them late completions?

A No, sir. I'm almost certain that every one of those wells was completed in the year 1959. There may be a 1960 completion among them, I'm fairly certain none were completed in 1951.

Q Is it not true the testing season runs from February 1 through December 15th of each year?

A That is correct.

Q Was any attempt made to test those wells, schedule and test these wells earlier in the season?

A Earlier than --

Q Than 9-1-61?

A No, sir.

Q Do you know whether or not Southern Union tested wells earlier in the season?

A I'm confident that they did, yes, sir.

Q But not yours?

A But not ours, not these then, not that 34 that I spoke of. They tested some Pan American wells earlier in the year, they lacked some.

Q I believe you stated that not all of these wells lost February allowable?

A That is correct, no, sir. All of these wells lost current allowable during the month of February, not all of them

also had allowable cancelled on the February 1st balancing date. Only four of this group of ten had allowables cancelled because of underproduction on the February balancing date. None of the wells had February current allowable.

Q Do you have a record of those four wells which had underage cancelled?

A Yes, sir, a partial record. Here are the group of wells that had allowable cancelled, together with the amount of allowable that was cancelled. The Fred Weasel G Number 1 had 212 MCF cancelled, a very minor amount. The R. P. Hargrave H Number 1 had 195 MCF cancelled. The Davidson Gas Unit F Number 1 had 9412 MCF cancelled. The Davidson Gas Unit C Number 1 had 59,457 MCF cancelled. As you can see with respect to two of those four wells, cancellation was almost insignificant.

Q So actually the amount of allowable you lost was the current allowable for all ten wells for the month of February?

A Yes, sir. Would you like to have my estimate of the amount involved on these, for those ten wells?

Q If you have it there.

A It has been estimated, not by me I might mention, that the total allowable for these ten wells for the month of February, 1962 would be 180,300 MCF. There's also an estimated value here on this page too.

Q Would it be in the neighborhood of twenty-one or

[illegible]

A The [illegible],[illegible].

Q I believe you [illegible] of those ten wells were scheduled for a test attempt [illegible] the 19[illegible] testing season?

A That is correct.

Q Now, you, I believe, testified to the effect that there were six other wells on this application that were granted exceptions?

A Yes, sir.

Q Were all of those wells scheduled and tests attempted during the regular testing season 19[illegible]?

A Yes, sir, some of them more than once; but all of them had had tests attempted on them during the regular testing period and for some reason or other the test had either failed or a new test needed to be run after repair operation or something like that.

Q But an attempt was made?

A Yes, sir.

MR. UTZ: Are there any other questions of the witness? The witness may be excused.

(Witness excused)

MR. UTZ: Any other statements in this case?

MR. COOTER: May I state just briefly that it is

the condition of Van American that the denial of the exception requested for these two wells results in a penalty being imposed upon Van American for which, rightly or wrongly, under the practices in the area and pursuant to the understanding of all the operators and the purchasers in the area in an action solely within the control of the purchaser and not within the control of the operator. The effect is to penalize the operator in this case.

MR. UTZ: Any other statements? The case will be taken under advisement.

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STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in Stenotype and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

DATED this 25th day of April, 1962, 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. 2589, heard by me on Apr. 25, 1962.

....., Examiner
New Mexico Oil Conservation Commission