NEW MEXICO OIL CONSERVATION COMMISSION
P. O. BOX 871
Santa Fe, New Mexico

PROPOSED REVISIONS TO ORDER R-333-A



Section B, Subsection I, Part (2) Subpart (a) second paragraph

Delete and add the following paragraph.

The static wellhead working pressure ($P_w$) of any well under test shall be determined to be the calculated seven (7) day average tubing pressure if the well is flowing through the casing; or the calculated seven (7) day average 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 procedure 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-9FLT-NW, a copy of which is attached hereto and made a part hereof.

Third Paragraph

Add the following at end of third paragraph.

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.

Fourth Paragraph

At the end of paragraph add the following:

The deadweight 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.

Fifth Paragraph

Delete first part of paragraph from words "Orifice Meter" to and including the basic orifice meter formula and add the following:

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 pressure so calculated shall be used in calculating the wellhead working pressure, determining supercompressability factors and calculating flow volumes.

The seven (7) day flow period volume shall be calculated from the integrated reading as determined from the flow period orifice meter chart. (Chart #3). The volume so calculated shall be divided by the number of flowing 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) or eight (8) 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 of a correction factor determined by dividing the square root of the chart flowing meter pressure psia into the square root of the deadweight 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

$$Q = C' \quad h_w \; P_f$$

where:

$Q$ = Metered volume of flow MCFD @ 15.025, $60^{\circ}$ 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 supercompressability.

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

$P_f$ = Daily average flowing meter pressure from flow period chart.

Sixth Paragraph

Delete entirely and add the following:

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 use of tables for calculating rates of flow from integrator readings, which do not specifically conform to New Mexico Oil Conservation Commission release "4G-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.

Seventh Paragraph

Delete from words "Dallas, Texas" and after same words add

"The seven (7) day average corrected flowing meter pressure, psig, shall be used to determine the supercompressability factor.

Ninth Paragraph

In first sentence delete word arbitrary and add defined in its place.

Delete words "but in no case to exceed a maximum of 500 psia."

Tenth Paragraph

In explanation of $P_d$ of Back Pressure Formula.
Delete words "not to exceed 500 psia"
In explanation of $P_w$ of Back Pressure Formula.
Add after abreviation "psia" the words "and calculated from New Mexico Oil Conservation Commission Pressure Loss Due to Friction Tables".

Eleventh Paragraph

Delete entirely

Twelfth Paragraph

In phrase "of the preceding three weeks" change word "three" to "two" Section B, subsection II, part (2)

Delete words "but not in excess of 250 psia" at end of paragraph. End of Order under "IT IS FURTHER ORDERED" add paragraph (5).

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 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 data 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.

4-20-55
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