

STATE OIL AND GAS BOARD OF ALABAMA
GOVERNING ONSHORE LAND OPERATIONS
ADMINISTRATIVE CODE

CHAPTER 400-1-5
TESTING AND ALLOWABLE

TABLE OF CONTENTS

400-1-5-.01	Daylight Hours
400-1-5-.02	Swabbing And Cleaning Wells
400-1-5-.03	Production Tests
400-1-5-.04	Production Allowable
400-1-5-.05	Oil Measurements
400-1-5-.06	Oil And Condensate To Be Measured
400-1-5-.07	Gas To Be Metered
400-1-5-.08	Gas-Oil Ratio
400-1-5-.09	Permissible Tolerance In Production Volumes Allowed For Oil Wells
400-1-5-.10	Permissible Tolerance In Production Volumes Allowed For Gas Wells

400-1-5-.01 Daylight Hours.

All open hole drillstem tests shall be completed in daylight hours before sunset and shall not be considered as a production test. Copies of all drillstem test results shall be submitted to the Board pursuant to Rule 400-1-4-.03(2). For purposes of this rule, the word completed shall mean the closing of the drillstem test tool valve. No well shall be swabbed into production except during daylight hours before sunset. No well which contains or which is reasonably expected to contain hydrogen sulfide shall be brought into production except during daylight hours before sunset, unless otherwise approved by the Supervisor.

Author: State Oil and Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: Filed September 30, 1982. **Amended:** Filed October 2, 1990. **Repealed and New Rule:** Filed April 11, 2000; effective May 16, 2000.

400-1-5-.02 Swabbing And Cleaning Wells.

Flow tests of less than four (4) hours, including swabbing and cleaning a well, shall not be considered as a production test. A record of the daily operation of well cleaning shall be reported on the reverseside of Form OGB-9, First Production or Retest Report, giving pressure data and the volumes of water, fracture

fluid, oil or condensate, and gas recovered. Unless otherwise approved by the Supervisor, all wells shall be cleaned into a tank prior to production. The tank shall be of sufficient size to contain all fluids.

Author: State Oil and Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: Rule entitled "Hydrogen Sulfide Gas" filed September 30, 1982. **Repealed and new rule entitled "Operations Involving Hydrogen Sulfide" adopted in lieu thereof:** Filed April 24, 1984.

Amended: Filed January 17, 1989. **Repealed and New Rule:** Filed April 11, 2000; effective May 16, 2000.

400-1-5-.03 Production Tests.

(1) All production tests shall be made only after approval by the Supervisor. An operator completing a new well or recompleting an old well shall test the well to determine if the well is capable of producing and the amount it can produce up to and including any allowable if assigned. Such test shall be at stabilized rates for a minimum of four (4) hours' duration, shall not exceed seventy two (72) hours, and shall be taken in a manner prescribed by the Board in its rules and regulations. An operator shall submit a request in writing to, and receive approval from, the Supervisor or Board pursuant to Rule 400-1-5-.04 for extended testing beyond seventy-two (72) hours. The results thereof shall be verbally reported to the Supervisor immediately and filed with the Board on Form OGB-9, First Production or Retest Report, within fifteen (15) days after such test is completed. When more than one test is made, the reverse side of Form OGB-9 may be used to give complete test data. The test shown on the front side shall be considered the official test results for such well.

(2) **Gas Well Capacity Tests.** The capacity of a producing gas well shall be determined at the time the well goes on production and on an annual basis thereafter, as follows:

(a) **Initial Capacity Test.** Capacity flow shall be determined by the stabilized multipoint back-pressure method in accordance with the procedures set out in the Interstate Oil and Gas Compact Commission (IOGCC) "Manual of back-pressure testing of gas wells." The capacity shall be the calculated bottom-hole absolute open-flow potential of the well and shall indicate the capacity of the well to produce against zero pounds per square inch absolute (psia) at the formation. The results of capacity tests shall be reported to the Board on Form OGB-10 within fifteen (15) days after such tests have been completed. All field data, calculation, and a plot of the backpressure curve shall be submitted with this form.

(b) **Annual Capacity Tests.** Capacity flow shall be determined by the stabilized one-point back-pressure method in accordance

with the procedure set out in the Interstate Oil and Gas Compact Commission (IOGCC) "Manual of back-pressure testing of gas wells." The most recently determined exponent "n" established by a stabilized multipoint-back pressure test shall be used with this stabilized one-point test to determine the absolute open flow. The results of this capacity test shall be reported to the Board within fifteen (15) days of its completion on Form OGB-10A. All field data calculations and a plot of the backpressure curve shall be submitted with this form. The Board may approve some other method of testing, but under no circumstances shall the open-flow method be used.

(3) Measurements shall be taken under the following requirements:

(a) All pressures used in test calculations shall be corrected to pounds per square inch absolute (psia), using 14.65 psia as the average barometric pressure.

(b) Basic orifice coefficients used in the calculation of gas flow shall be those contained in the American Gas Association's Gas Measurement Committee Report No. 3, or some other basic orifice coefficients generally accepted in the industry and approved by the Board.

(c) Gas measurements with pitot tubes shall be based on Reid's formula and shall follow recommendations similar to those set forth in Appendix 4 of the U.S. Bureau of Mines Monograph 7. Corrections for base pressure and base temperature shall be made as in orifice measurements.

(d) Gas measurements with orifice well testers shall follow recommendations similar to that set forth in Bulletin No. E-7 of the American Meter Company. Corrections for base pressure and base temperature and gravity shall be made as in orifice measurements.

Author: State Oil and Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: Filed September 30, 1982. **Amended:** Filed January 6, 1988. **Repealed and New Rule:** Filed April 11, 2000; effective May 16, 2000.

400-1-5-.04 Production Allowable.

Until special field rules are adopted, an operator shall submit a request in writing to, and receive approval from, the Supervisor for extended testing under a temporary test allowable. This request shall be accompanied by Form OGB-9, First Production and Retest Report and Form OGB-12, Operator's Certificate of Compliance and Authorization to Transport Oil, Gas or Condensate from Well. The duration of such temporary test allowable shall be

as specified by the Supervisor. Permanent production allowables shall be established by the Board after notice and hearing.

Author: State Oil and Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: Filed September 30, 1982. **Amended:** Filed April 2, 1985.

Repealed and New Rule: Filed April 11, 2000; effective May 16, 2000.

400-1-5-.05 Oil Measurements.

(1) Quantities of oil shall be computed from tank tables correctly compiled in accordance with American Petroleum Institute (API) standard 2501, "Crude oil tank measurement and calibration," second edition, July 1961 or subsequent revisions thereof.

(2) The American Petroleum Institute (API) gravity of crude oil shall be determined in accordance with API standard 2500, "Measuring, sampling, and testing crude oil," second edition, March 1961 and subsequent revisions thereof. API standard 2500 restates the standards of the American Society for Testing Materials (ASTM), viz., ASTM designation D287-39; "Standard method of test for gravity of petroleum and petroleum products by means of the hydrometer," Observed gravity at the observed temperature be corrected to (API) gravity and volume at sixty degrees Fahrenheit (60(cid:176)F) by the use of tables of the American Society for Testing Materials and the Institute of Petroleum, "ASTM-IP petroleum measurement tables" (ASTM designation No. 1250; IP designation 200).

(3) Correction for Basic Sediment and Water (BS & W) shall be made in accordance with the methods specified in the joint ASTM-API method, "Standard method of test for water and sediment in crude oils," ASTM designation: D96-63, API standard: 2542.

(4) The standards cited above shall be superseded by future revisions of such standards. However, the Board shall, if a characteristic of crude oil makes it necessary, after notice and hearing, issue field rules, special rules or regulations and orders prescribing a specific method of measuring, sampling, and testing crude oil.

Author: State Oil and Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: Filed September 30, 1982. **Amended:** Filed October 12, 1989.

Repealed and New Rule: Filed April 11, 2000; effective May 16, 2000.

400-1-5-.06 Oil And Condensate To Be Measured.

All oil produced shall be accurately measured and reported to the Board by the operator on Form OGB-14, Operator's Monthly Report from Oil Wells. All condensate produced shall be accurately measured and reported to the Board by the operator on Form OGB-15, Operator's Monthly Report from Gas Wells. Sufficient capacity shall be provided by the operator to take accurate measurements of all oil and condensate produced, provided exceptions may be granted by the Supervisor or the Board when physical conditions make an exception necessary.

Author: State Oil and Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: Filed September 30, 1982. **Repealed and New Rule:** Filed April 11, 2000; effective May 16, 2000.

400-1-5-.07 Gas To Be Metered.

All gas produced shall be accurately metered in accordance with standards set by the American Gas Association (AGA) and reported to the Board by the operator on Form OGB-15, Operator's Monthly Report from Gas Wells.

Author: State Oil and Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: Filed September 30, 1982. **Amended:** Filed January 6, 1988. **Repealed and New Rule:** Filed April 11, 2000; effective May 16, 2000.

400-1-5-.08 Gas-Oil Ratio.

Any oil well producing with a gas-oil ratio in excess of two thousand (2,000) cubic feet of gas per barrel of oil produced shall be allowed to produce daily only that volume of gas obtained by multiplying its daily oil allowable by two thousand (2,000) cubic feet. The gas volume thus obtained shall be known as the daily gas allowable of such well. The daily oil allowable of such well in barrels shall then be determined by dividing its daily gas allowable, obtained as herein provided, by its producing gas-oil ratio in cubic feet per barrel of oil produced. A well producing from the gas cap of an oil reservoir in which an oil well or wells are completed and producing shall, to the extent that it can produce without waste, be allowed to produce daily only that volume of gas and other hydrocarbons that under conditions of pressure and temperature existing in the reservoir from which produced is the equivalent in volume, under like pressure and temperature, to the oil and gas that would be produced daily from

that oil well in the same reservoir producing the highest daily oil allowable if its gas-oil ratio were two thousand (2,000) cubic feet of gas per barrel of oil.

Author: State Oil and Gas Board

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: Filed October 21, 1986. **Repealed and New Rule:** Filed April 11, 2000; effective May 16, 2000.

400-1-5-.09**Permissible Tolerance In Production Volumes
Allowed For Oil Wells.**

(1) **Daily Tolerance.** It is recognized that oil wells located on units capable of producing their daily allowable may overproduce one day and underproduce another. No unit, except for the purpose of testing in the process of completing or recompleting a well and for tests made for the purpose of obtaining scientific data, shall produce during any day more than one hundred twenty-five percent (125%) of the daily allowable assigned the unit, or ten (10) barrels above the daily unit allowable, whichever is greater. Subject to the foregoing, any underproduction may be made up by production from the same unit within the same month and overproduction shall be adjusted by underproduction.

(2) **Monthly Tolerance.** No unit shall produce in any one (1) month more than its monthly allowable plus a tolerance equal to three

(3) days' allowable production. The allowed monthly tolerance of overproduction shall be adjusted during the following month by underproduction. Overproduction within the permitted tolerance shall be considered as oil produced against the allowable assigned to the unit for the following month.

(3) **Production in Excess of Monthly Allowable Plus Tolerance.** In instances where production in excess of the monthly allowable plus tolerance occurs from error, mechanical failure, testing, or other cause reasonably beyond the control of the operator, a report of such excess production shall be filed in writing with the Board and the transporter within fifteen (15) days after occurrence. Such report shall contain the number of barrels of excess production and the plan of adjustment. Such excess production shall be considered as oil produced against the allowable assigned to the unit for the following month and such may be transported from the tanks only as the unit accrues daily allowable to offset such excess production.

(4) **General.** The tolerance permitted on a daily or monthly basis shall not be construed to increase the allowable of a unit or to grant authority to any operator to market or to any transporter to transport any quantity of oil in excess of the unit's allowable. The possession of a quantity of oil in storage at the end of any month in excess of three (3) days' allowable plus any

untransported allowable oil shall be construed as a violation of this rule unless reported as provided in (3) above.

Author: Marvin Rogers

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: New Rule: Filed April 11, 2000; effective May 16, 2000.

Amended: Filed July 6, 2010; effective August 10, 2010.

400-1-5-.10**Permissible Tolerance In Production Volumes
Allowed For Gas Wells.**

(1) **Daily tolerance.** Although gas wells may overproduce their daily allowable one day and underproduce another, no unit, other than for the purpose of testing in the process of completing or recompleting a well and for the purpose of testing to obtain scientific data, shall produce, during any one day, more than two hundred percent (200%) of the daily allowable assigned for the unit. Subject to the foregoing, any underproduction may be made up by production from the same unit within the same month and overproduction shall be adjusted by underproduction.

(2) **Monthly tolerance.** No unit shall be allowed to produce, in any one (1) month, more than the monthly allowable for such unit plus a tolerance equal to five (5) days' allowable production. The allowed monthly tolerance of overproduction shall be adjusted during the following month by underproduction. Overproduction within the permitted tolerance shall be considered as gas produced against the allowable assigned to the unit for the following month.

(3) **Production in Excess of Monthly Allowable Plus Tolerance.** In instances where production in excess of the monthly allowable plus tolerance occurs from error, mechanical failure, testing, or other cause reasonably beyond the control of the operator, a report of such excess production shall be filed in writing with the Board and the transporter within fifteen (15) days after occurrence. Such report shall contain the number of cubic feet of excess production and the plan of adjustment. Such excess production shall be considered as gas produced against the allowable assigned to the unit for the following month.

(4) **General.** The tolerance permitted on a daily or monthly basis shall not be construed to increase the allowable of a unit or to grant authority to any operator to market or to any transporter to transport any quantity of gas in excess of the unit's allowable.

Author: Marvin Rogers

Statutory Authority: Code of Ala. 1975, §§9-17-1, et seq.

History: New Rule: Filed April 11, 2000; effective May 16, 2000.

Amended: Filed July 6, 2010; effective August 10, 2010.

Ed. Note: Previous Chapter 400-1-5 (Rules 400-1-5-.01 through 400-1-5-.08) Repealed and New Chapter (Rules 400-1-5-.01 through 400-1-5-.10) adopted in lieu thereof: Filed April 11, 2000.