

### **302 SUBSURFACE PRESSURE TESTS**

The operator shall make a subsurface pressure test on the discovery well of any new pool hereafter discovered, and shall report the results thereof to the Division within 30 days after the completion of such discovery well. On or before December 1 of each calendar year the Division shall designate the months in which subsurface pressure tests shall be taken in designated pools. Included in the designated list shall be listed the required shut-in pressure time and datum of tests to be taken in each pool. In the event a newly discovered pool is not included in the Division's list, the Division shall issue a supplementary Bottom Hole Pressure Schedule. Tests as designated by the Division shall only apply to flowing wells in each pool. This test shall be made by a person qualified by both training and experience to make such test, and with an approved subsurface pressure instrument which shall be calibrated against an approved dead-weight tester at intervals frequent enough to ensure its accuracy within one percent. Unless otherwise designated by the Division all wells shall remain completely shut in for at least 24 hours prior to the test. In the event a definite datum is not established by the Division the subsurface determination shall be obtained as close as possible to the mid-point of the productive sand of the reservoir. The report shall be on Form C-124 and shall state the name of the pool, the pool datum (if established), the name of the operator and lease, the well number, the wellhead elevation above sea level, the date of the test, the total time the well was shut in prior to the test, the subsurface temperature in degrees Fahrenheit at the test depth, the depth in feet at which the subsurface pressure test was made, the observed pressure in pounds per square inch gauge (corrected for calibration and temperature), the corrected pressure computed from applying to the observed pressure the appropriate correction for difference in test depth and reservoir datum plane and any other information as required by Form C-124. [1-1-50...2-1-96]

### **303 SEGREGATION OF PRODUCTION FROM POOLS**

#### **303.A. SEGREGATION REQUIRED**

(1) Each pool shall be produced as a single common source of supply and wells therein shall be completed, cased, maintained, and operated so as to prevent communication, within the wellbore, with any other specific pool or horizon, and the production therefrom shall at all times be actually segregated, and the commingling or confusion of such production, before marketing, with the production from any other pool or pools is strictly prohibited. [1-1-50...2-1-96]

#### **303.B. SURFACE COMMINGLING**

(1) The Division Director shall have the authority to grant an exception to Rule 303-A to permit the commingling in common facilities of the commonly owned production from two or more common sources of supply, without notice and hearing, provided that the liquid hydrocarbon production from each common source of supply is to be accurately measured or determined prior to such commingling in accordance with the applicable provisions of the Division's "Manual for the Installation and Operation of Commingling Facilities," then current. [1-1-69...2-1-96]

(2) Application for administrative approval to commingle the production from two or more common sources of supply shall be filed in TRIPLICATE with the Santa Fe Office of the Division. The application must contain detailed data as to the gravities of the liquid hydrocarbons, the values thereof, and the volumes of the liquid hydrocarbons production from each pool, as well as the expected gravity and value of the commingled liquid hydrocarbons production; a schematic diagram of the proposed installation; a plat showing the location of all wells on the applicant's lease and the pool from which each well is producing. The application shall also state specifically whether the actual commercial value of such commingled production will be less than the sum of the values of the production from each common source of supply and, if so, how much less. [1-1-69...2-1-96]

(3) Where State and Federal lands are involved, applicant shall furnish evidence that the Commissioner of Public Lands for the State of New Mexico or the Regional Supervisor of the United States Bureau of Land Management has consented to the proposed commingling. [1-1-69...2-1-96]

### 303.C. DOWNHOLE COMMINGLING

(1) The Director of the Division shall have the authority to grant an exception to Rule 303-A to permit the downhole commingling of multiple producing zones in existing or proposed wells when the following facts exist and the following conditions are met:

(a) For Wells Involving Oil Zones:

- (i) The total combined daily oil or casinghead gas production from the zones before commingling does not exceed the top allowable rate for the shallowest producing horizon;
- (ii) The operator utilizes a method of production which results in the efficient recovery of oil and gas reserves from the respective producing formations;
- (iii) Total water production from all commingled zones does not exceed twice the oil limit as described in (i) above;
- (iv) The fluids from each zone are compatible with the fluids from the other(s), and combining the fluids will not result in the formation of precipitates which might damage any of the reservoirs;
- (v) The commingling will not jeopardize the efficiency of present or future secondary recovery operations in any of the zones to be commingled.

(b) For Wells Involving A Gas Zone:

- (i) That the commingling is necessary in order to allow the recovery of gas reserves from marginal producing zones. (In determining whether a zone or zones should be classified as marginal for the purpose of this rule, the Division may consider economic factors such as drilling and operating costs, and engineering and geologic factors such as producing rates, reserve calculations, decline rates, proration status, geologic data, etc.);
- (ii) The bottomhole pressure of the highest pressured commingled zone does not exceed the original reservoir pressure of any other commingled zone in the wellbore, adjusted to a common datum. Such bottomhole pressure shall be determined by downhole measurement for each zone capable of flowing;
- (iii) The commingling will not result in the permanent loss of reserves due to cross-flow in the wellbore;

### **307 USE OF VACUUM PUMPS**

Vacuum pumps or other devices shall not be used for the purpose of creating a partial vacuum in any stratum containing oil or gas. [1-1-50...2-1-96]

### **308 SALT OR SULPHUR WATER**

Operators shall report monthly on Form C-115 the amount of water produced with the oil and gas from each well. [1-1-50...2-1-96]

### **309-A CENTRAL TANK BATTERIES - AUTOMATIC CUSTODY TRANSFER EQUIPMENT**

309-A.A. Oil shall not be transported from a lease until it has been received and measured in a facility of an approved design located on the lease. Such facilities shall permit the testing of each well at reasonable intervals and may be comprised of manually gauged closed stock tanks for which proper strapping tables have been prepared, with a maximum of sixteen proration units producing into said tanks, or of automatic custody transfer (ACT) equipment. The use of such automatic custody transfer equipment shall be permitted only after compliance with the following:

(1) The operator shall file with the Division Form C-106, Notice of Intention to Utilize Automatic Custody Transfer Equipment, and shall receive approval thereof prior to transferring oil through the ACT system. The carrier shall not accept delivery of oil through the ACT system until Form C-106 has been approved. [5-1-61...2-1-96]

309-A.B. Form C-106 shall be submitted in QUADRUPLICATE to the appropriate District Office of the Division and shall be accompanied (in QUADRUPLICATE) by the following:

(2) Plat of the lease showing thereon all wells which will be produced into the ACT system. [5-1-61...2-1-96]

(3) Schematic diagram of the ACT equipment, showing thereon all major components such as surge tanks and their capacity, extra storage tanks and their capacity, transfer pumps, monitors, reroute valves, treaters, samplers, strainers, air and gas eliminators, back pressure valves, metering devices, (indicating type and capacity, i.e. whether automatic measuring tank, positive volume metering chamber, weir-type measuring vessel, or positive displacement meter). Schematic diagram shall also show means employed to prove accuracy of measuring device. [5-1-61...2-1-96]

(4) Letter from transporter agreeing to utilization of ACT system as shown on schematic diagram. [5-1-61...2-1-96]

309-A.C. Form C-106 will not be approved by the Division unless the ACT system is to be installed and operated in compliance with the following:

(5) Provision must be made for accurate determination and recording of uncorrected volume and applicable temperature, or of temperature corrected volume. The overall accuracy of the system shall equal or surpass manual methods. [5-1-61...2-1-96]

(6) Provision must be made for representative sampling of the oil transferred for determination of API gravity and BS&W content. [5-1-61...2-1-96]

(7) Provision must be made if required by either the producer or the transporter of the oil to give adequate assurance that only merchantable oil is run by the ACT system. [5-1-61...2-1-96]

(8) Provision must be made for set-stop counters to stop the flow of oil through the ACT system at or prior to the time the allowable has been run. All counters shall provide non-reset totalizers which shall be visible for inspection at all times. [5-1-61...2-1-96]

(9) All necessary controls and equipment must be enclosed and sealed, or otherwise be so arranged as to provide assurance against, or evidence of, accidental or purposeful mismeasurement resulting from tampering. [5-1-61...2-1-96]

(10) All components of the ACT system shall be properly sized to ensure operation within the range of their established ratings. All components of the system which require periodic calibration and/or inspection for proof of continued accuracy must be readily accessible. The frequency and methods of such calibration and/or inspection shall be set forth in Rule 309-A, D (3). [5-1-61...2-1-96]

(11) The control and recording system must include adequate fail-safe features which will provide assurance against mismeasurement in the event of power failure, or the failure of the ACT system's component parts. [5-1-61...2-1-96]

(12) (a) The ACT system and allied facilities shall include such fail-safe equipment as may be necessary, including high level switches in the surge tank or overflow storage tank which, in the event of power failure or malfunction of the ACT or other equipment, will shut down all artificially lifted wells connected to the ACT system and will shut in all flowing wells at the well-head or at the header manifold, in which latter case all flowlines shall be pressure-tested to at least 1 ½ times the maximum well-head shut-in pressure prior to initial use of the ACT system and each two years thereafter. [5-1-61...2-1-96]

(b) As an alternative to the requirements of paragraph (8) (a) above, the producer shall provide and shall at all times maintain a minimum of available storage capacity above the normal high working level of the surge tank to receive and hold the amount of oil which may be produced during maximum unattended time of lease operation. [5-1-61...2-1-96]

309-A.D. (c) In all ACT systems employing automatic measuring tanks, weir-type measuring vessels, positive volume metering chambers, or any other volume measuring container, the container and allied components shall be properly calibrated prior to initial use and shall be operated, maintained, and inspected as necessary to ensure against incrustation, changes in clingage factors, valve leakage or other leakage, and improper action of floats, level detectors, etc. [5-1-61...2-1-96]

(13) In all ACT systems employing positive displacement meters, the meter(s) and allied components shall be properly calibrated prior to initial use and shall be operated, maintained, and inspected as necessary to ensure against mismeasurement of oil. [5-1-61...2-1-96]

(14) The measuring and recording devices of all ACT systems shall be checked for accuracy at least once each month unless exception to such determination has been obtained from the Division Director. API Standard 1101, "Measurement of Petroleum Liquid Hydrocarbons by Positive Displacement Meter," shall be used where applicable. Meters may be proved against Master Meters, Portable Prover Tanks, or Prover Tanks permanently installed on the lease. If permanently installed Prover Tanks are used, the distance between the opening and closing levels and the provision for determining the opening and closing readings shall be sufficient to detect variations of 5/100 of one percent. Reports of determination shall be filed on the Division Form entitled "Meter Test Report," or on another acceptable form and shall be submitted in DUPLICATE to the appropriate District office of the Division. [5-1-61...2-1-96]

(15) To obtain exception to the requirement of Paragraph (3) above that all measuring and recording devices be checked for accuracy once each month, either the producer or transporter may file such a request with the Division Director setting forth all facts pertinent to such exception. The application shall include a history of the average factors previously obtained, both tabulated and plotted on a graph of factors versus time, showing that the particular installation has experienced no erratic drift. The applicant shall also furnish evidence that the other interested party has agreed to such exception. The Division Director may then set the frequency for determination of the system's accuracy at the interval which he deems prudent. [5-1-61...2-1-96]

309-A.E. Failure to operate an automatic custody transfer system in compliance with this rule shall subject the approval thereof to revocation by the Division. [5-1-61...2-1-96]

### **309-B ADMINISTRATIVE APPROVAL, LEASE COMMINGLING**

309-B.A. The Division Director shall have authority to grant exceptions to Rule 309-A to permit the commingling of production from two or more separate leases in a common tank battery without notice and hearing, provided application has been filed in TRIPLICATE with the Division and is accompanied by plats of the leases showing thereon the wells on the leases and the formations in which they are completed, and schematic diagrams of the commingling facility, showing it to be of an acceptable design in accordance with the Division "Manual for the Installation and Operation of Commingling Facilities," then current, and provided further that:

(1) All production is from the same common source of supply or an exception to Rule 303 A. (1) has been obtained. [9-13-61...2-1-96]

(2) Adequate facilities will be provided for accurately determining production from each well at reasonable intervals. [9-13-61...2-1-96]

(3) All parties owning an interest in the leases and the purchaser of the commingled production therefrom have consented in writing to the commingling of production from the separate leases. [9-13-61...2-1-96]

(4) In lieu of paragraph (3) of this rule, the applicant may furnish proof of the fact that said parties were notified by registered or certified mail of his intent to commingle production from the separate leases. The Division Director may approve the application if, after a period of 20 days following receipt of the application, no party has made objection to the application. [9-13-61...2-1-96]

(5) In addition to the foregoing requirements for administrative approval to commingle production from two or more separate leases, the following requirements shall also apply:

- (a) To commingle production from two or more separate leases in a common tank battery without first separately measuring the production from each such lease, the ownership of the leases must be common throughout. This shall include working interest ownership, royalty ownership, and overriding royalty ownership. [9-13-61...2-1-96]
- (b) To commingle production from two or more separate leases in a common tank battery where there is a diversity of ownership (whether in working interest, royalty interest, or overriding royalty interest) the hydrocarbon production from each lease shall be accurately measured and determined in accordance with the applicable provisions of the Division "Manual for the Installation and Operation of Commingling Facilities," then current. [9-13-61...2-1-96]

### **309-C ADMINISTRATIVE APPROVAL, OFF-LEASE STORAGE**

309-C.A. For good cause shown, the Division Director shall have authority to grant an exception to Rule 309-A to permit the production from one lease to be transported prior to measurement to another lease for storage thereon, provided an application reflecting ownership of the lease has been filed in TRIPLICATE with the Division and is accompanied by plats of the leases showing thereon the wells on the leases and the formations in which they are completed and the proposed location of the tank battery, and provided further that:

- (1) All production is from the same common source of supply.  
[1-22-62...2-1-96]
- (2) Commingling of production from the two leases will not result. [1-22-62]
- (3) There will be no intercommunication of the handling, separating, treating or storage facilities designated to each lease. [1-22-62...2-1-96]
- (4) All parties owning an interest in the leases have consented in writing to the off-lease storage.  
[1-22-62...2-1-96]
- (5) In lieu of paragraph (4) of this rule, the applicant may furnish proof of the fact that said parties were notified by registered or certified mail of his intent to transport prior to measurement the production from one lease to another lease for storage. The Division Director may approve the application if, after a period of 20 days following receipt of the application, no party has made objection to the application. [1-22-62...2-1-96]
- (6) Where State or Federal lands are involved, the applicant shall furnish evidence that the Commissioner of Public Lands for the State of New Mexico or the Regional Supervisor of the United States Bureau of Land Management has consented to the proposed off-lease storage. [1-22-62...2-1-96]