

Mr. Shane Kelley
Director, Standards and Rulemaking Division
U.S. DOT/PHMSA (PHH-10)
1200 New Jersey Avenue, SE East Building, 2nd Floor
Washington, DC 20590

Brick Keltner
Corporate Shop Trainer
Koorsen Fire & Security
2820 N. Webster
Indianapolis, In 46219
Telephone 317-225-4785
Email: brick.keltner@koorsen.com

Mr. Kelley, I would like a Formal Interpretation of 49 CFR 180.215(b)(1). Reporting & record retention for Calibration test records.

The question that I have relates to the Calibrated Cylinder serial number. In the above standard it states that the serial number of the Calibrated Cylinder must be on the calibration / test records. Is that for Water Jacket testing as well as Proof Pressure testing?

I have always taken the standards to mean for both methods unless it is otherwise stated. 49 CFR references CGA C-1 in multiple instances.

CGA C-1 - 5.4 states – A calibrated cylinder is required when performing the verification procedure for test methods where volumetric expansion determinations are required.

CGA C-1 - 7.3.2(b) states – Attach a suitable liquid-filled pressure vessel to the test system (i.e., a cylinder with a rated working pressure covering the highest proof test pressure to be encountered). This vessel provides a “volume” against which to pump.

The question is – Does the cylinder used to calibrate a Proof Pressure system need to have a serial number that is recorded on the calibration / test records? Or is that only required for Water Jacket & Direct Expansion testing?

Thank you for any information that you can give me. Brick Keltner, Koorsen Fire & Security



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

July 27, 2026

Brick Keltner
Corporate Shop Trainer
Koorsen Fire & Security
2820 N. Webster
Indianapolis, IN 46219

Reference No. 26-0052

Dear Mr. Keltner:

This letter is in response to your April 27, 2026 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the recordkeeping requirements for cylinder requalification. Specifically, you ask whether the requirement in § 180.215(b)(1) to record the serial number of the cylinder used to calibrate a proof pressure system applies to proof pressure testing, or only to volumetric expansion testing.

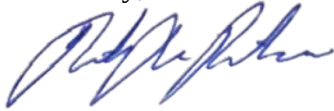
No. A “calibrated cylinder” (see CGA Pamphlet C-1 2016, *Methods for Pressure Testing Compressed Gas Cylinders*, Sections 3.2.7 and 5.4) is a specially designed cylinder with known expansion values. A “calibrated cylinder” is used to demonstrate integrity of test systems used to determine volumetric expansion (*e.g.*, the water jacket method). As defined in § 180.203, a “proof pressure test” is performed by interior pressurization without the determination of a cylinder’s expansion, and thus, there is no need for a “calibrated cylinder.”

Therefore, recording a calibrated cylinder’s serial number is not required for proof pressure test records. According to CGA C-1, Section 7.3.2, a liquid-based proof pressure test system is verified by attaching a standard cylinder with a rated working pressure that covers the highest proof test pressure expected during the day’s testing. The cylinder used in the system verification is not required to be a calibrated cylinder. However, to demonstrate compliance with the verification requirement in CGA C-1, Section 7.3.2, a facility must document the standard cylinder used during the daily system check. Maintaining a record of the standard cylinder’s serial number and rated working pressure is necessary to verify that the cylinder meets the minimum pressure requirements for that day’s testing.

The system verification includes the use of a reference gauge or a master gauge. Calibration requirements for all components of the system (pressure indicating device, master gauge, reference gauge) must be periodically calibrated in accordance with Appendix B of CGA Pamphlet C-1. For all calibrated devices, the certificate of calibration shall be maintained on file at the facility.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dirk Der Kinderen", written in a cursive style.

Dirk Der Kinderen
Chief, Standards Development Branch
Standards and Rulemaking Division