



Quality Petroleum Equipment Solutions for Over 20 Years

March 23, 2010 (Addendum to Aug 23, 2007)

From: Gabe Messerly

Subject: VMI Approved Catastrophic Testing Guidelines

Under EPA CFR § 280.44(a) of the UST rules, Vaporless Manufacturing, Inc. is required to inform the owners and operators of mechanical line leak detectors of annual test requirements. This document will update company information regarding catastrophic testing of VMI MLLDs and ELLDs, approved catastrophic leak testing equipment and certification guidelines. While this guideline is specifically for VMI MLLD and ELLD equipment, it is also applicable to any mechanical or electronic catastrophic line leak detection equipment insofar as manufacturer guidelines do not exclude this method or equipment for generating catastrophic leaks. From the introduction of the LDT-890 equipment and protocol in 1989, up to and including the present (03/2010), there have been and are no known exclusions by manufacturers of line leak detection equipment for this method and equipment.

Leak test threshold for catastrophic testing: 3 gallons per hour @ 10 pounds per square inch.

VMI testing requirements are met using the LDT-890 & LDT-890\AF Leak Detector Tester and protocol as posted on our web site at www.vaporless.com.

- Testers must pass the certification test for the VMI LDT-890(\AF) Leak Detector Tester and recertify every two years.
- Certification for Operation of VMI LDT-890(\AF) is dependent upon testing with an LDT-890(\AF).
- VMI requires factory recalibration of VMI LDT-890(\AF) every two years.

Other Equipment Recognized by VMI for Catastrophic Line Leak Testing

As of May 2006, VMI and Tanknology have jointly established a training and certification program. The Tanknology Leak Detector Tester Model 5000 (TLDT – 5000) is recognized as authorized equipment for Catastrophic Testing of VMI MLLDs and ELLDs and other equipment as described above.

- Testers must pass the Tanknology – Vaporless Certification Exam for the TLDT - 5000 Tester and recertify every two years.
- Certification for Operation of the TLDT - 5000 Tester is dependent upon use of that equipment only.
- VMI - Tanknology requires use of redundant pressure gauges.
 - Gauges must be within +/- ½ psi of each other at 10 psi. If gauges do not track within 5% of each other, one or both gauges must be replaced.

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- If a local jurisdiction requires calibration of the TLDT-5000, the following protocol shall be followed (can be performed by any technician certified in the use of the TLDT-5000). Following calibration, a decal with an expiration date of two years may be placed on the equipment.
 - Apply pressure and verify no leaks exist from any part of equipment. This may be done by applying product pressure at full STP operating pressure or with nitrogen or water at 50psi. If any leaks exist repair prior to proceeding with test.
 - Adjust the pressure regulator to limit the pressure to 10psi. Verify that both pressure gauges read the correct pressure within 5% (+/- 1/2 psi). If pressure readings are not within 5% replace pressure gauge(s) and retest.
 - Adjust the needle valve and measure discharge until a 3gph leak rate is measured. Use graduated cylinder to measure 189 ml/minute flow rate. If proper leak rate can't be established then clean filter, install new O-ring in the needle valve, and retest.
 - Relieve pressure and verify that both pressure gauges return to zero psi. If both gauges don't return to zero then replace gauge(s) and retest.

Please contact me if you have any questions.

Sincerely,

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