Issue Date: August 23, 1999
Revision Date: November 5, 2026

Vista Precision Solutions, Inc.
(originally listed as Vista Research, Inc.)

Model HT-100 Monitoring Method and Line Tightness Test Method Version 1.0

Line Leak Detection Method for Airport Hydrant and Field Constructed Systems

Certification	Leak rate of 0.004% of line capacity (0.04 gph per 1000 gallons of product) with PD = 95% and PFA =1.25% (smallest detectable leak rate for Version 1.0 evaluation, which was conducted on a 306,477 gallon line at 160 psi, was 12.3 gph). **The USEPA has not set a minimum detectable leak rate for large diameter pipeline systems (airport hydrant systems) at the time of this evaluation.**
Leak Threshold	0.00282% of line volume in gph for Version 1.0. A pipeline system should not be declared tight if the test result indicates a loss that equals or exceeds the threshold.
Applicability	Gasoline, diesel, aviation fuel, fuel oil #4, solvent, waste oil, biodiesel B6-B20 meeting ASTM D7467, biodiesel B100 meeting ASTM D6751 or other liquids after consulting the manufacturer.
Specification	System tests single or double-walled fiberglass or steel piping. Tests are conducted at operating pressure to a maximum of 200 psi. Specialized systems can be provided for higher test pressures.
Pipeline Capacity	Maximum of 612,954 gallons. Minimum of 3,000 gallons.
Waiting Time	None between delivery and testing. None between dispensing and testing.
Test Period	Minimum of 3 hours after setup and after pipeline is fully isolated.
System Features	System may be permanently installed on pipeline to perform monitoring or may be transported and set up to perform line tightness testing. A single 3-hour test is required consisting of a 1-hour monitoring period at operating pressure, and a 2-hour monitoring period at atmospheric pressure. System measures change in volume and reports output quantity in gph, while compensating for thermal effects. Test data are acquired and recorded by a microprocessor. Calculations are automatically performed by the microprocessor. Printed message and alarm activation if a leak is declared.
Calibration	System must be calibrated in accordance with manufacturer's instructions.
Comments	System is to be used only on large bulk pipelines and airport hydrant fueling systems. This leak detection system is intended to test pipeline systems that are associated with underground storage tank facilities that contain petroleum or other chemical products, that are typically constructed of fiberglass or steel, between 3,000 and 612,954 gallons. The size of the detectable leak scales upward with the

size of the piping system.
This evaluation utilized a total of 87 tests, one with induced leak rate of 13.1 gph.

Vista Precision Solutions, Inc.
2350 Lindberg Loop
Richland, WA 99354
Tel: (509) 943-2484

Evaluator: Ken Wilcox Associates
Tel: (816) 443-2494
Date of Evaluation: 11/06/98

