



AIUT Ltd.

FuelPrime IRC Version 3.2
Continual Reconciliation System for CITLDS Using Multiple ATG System
with Magnetostrictive Tank Probes for Tanks and Associated Pipelines

CONTINUOUS IN-TANK LEAK DETECTION METHOD
(Continual Reconciliation)

Certification	Leak rate of 10 liters/24h (0.11 gph) for tanks and associated pipelines with PD > 99% and PFA < 1%.
Leak Threshold	5 liters/24h (0.055 gph) for single and manifolded tank systems including associated pipelines. A tank system should not be declared tight if the test results indicate a loss or gain that equals or exceeds this threshold.
Applicability	Gasoline, diesel. Other liquids may be tested after consultation with the vendor.
Tank Capacity	100,000 liters maximum observed (26,500 gallons) [45,000 L (12,000 gal) recommended.]
Throughput	156,433 liters per month (41,325 gallons per month) maximum observed [26,000L/mo. (7,000 gal/mo.) recommended.].
Waiting Time	None.
Test Period	Data collection time: 14 days. Data sampling frequency: at least four (4) per hour. System collects data (sales and levels) without interfering with normal site operation.
Temperature	Input data must be provided after excluding temperature effect.
Water Sensor	Must be used in Automatic Tank Gauge system to detect water ingress.
Calibration	The Automatic Tank Gauge used must have thermistors and probe checked and, if necessary, calibrated in accordance with manufacturer's instructions. Dispenser meter calibrations must be known.
Comments	<p>Leak detection method is software based and independent from any specific hardware at site, but appropriate frequency and accuracy of input data is needed.</p> <p>Automatic Tank Gauges used with this method must employ a magnetostrictive probe and be on the NWGLDE List or be approved by vendor after consultation.</p> <p>Method reports a calculated leak rate and "Pass", "Fail" or "Inconclusive" for each tank system.</p> <p>Method was evaluated for tanks and associated pipelines for both single and manifolded tank systems with probes in each tank.</p> <p>The maximum size tank system in the evaluation was 100 000 liters (~26 417 gallons). The 80th percentile of tank sizes was 25,000 L (6,604 gallons).</p> <p>The maximum throughput in the evaluation was 156,433 liters/month (41,325 gal/mo). The 80th percentile of throughputs was 17,325 L/mo (4,431 gal/mo).</p>

Craig Wilcox, President, KWA, Inc.

Evaluator: Ken Wilcox Associates, Inc.
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AIUT, Ltd.
Wyczółkowskiego 113,
44-109 Gliwice, Poland
Phone No. +48 32 775 40 00

