Issue Date: August 28, 2019

Titan Cloud

Dry Test (0.025 gph)

NON-VOLUMETRIC TANK TIGNTNESS TEST METHOD (ULLAGE)

Certification Leak rate of 0.025 gph with PD = 100% and PFA = 0%.

Leak Threshold Tank ullage should not be declared tight when the pressure decay trend results in an indication of a 0.025 gph or greater loss on the test apparatus screen. A 1.25 ullage fail is the nitrogen decay equivalent to a liquid leak under 10 kPa at 0.025 gal/hr threshold. A 6.5 ullage fail is the nitrogen decay equivalent to a liquid leak under 10 kPa at 0.1 gal/hr threshold.

Applicability Gasoline, diesel, aviation fuel, fuel oil #4, fuel oil #6, solvents, and waste oil.

Tank Capacity Maximum of 30,000 gallons.

Waiting Time No wait time between delivery and testing. Static test required to determine static ullage warming rate. Length of static test varies and may be shortened by the technician once static ullage warming rate is recorded.

Test Period A minimum of 10 minutes of data collection after stabilization occurs at test pressure.
Test period increases depending on ullage size. Gasoline may take 1 – 2.5 hours to stabilize prior to data collection during pressure test. There must be no dispensing or delivery during testing. Average test times for 90% and 50% capacity during evaluation were:

Percentage of Tank Capacity	Average Test Times
90%	10 minutes
50%	64 minutes

Test Pressure Under typical test conditions, a pressure of 10 kpa is used.

Temperature Method is sensitive to temperature, atmospheric pressure and other environmental fluctuations. These are accounted for by acquiring static warming rate.

Groundwater Groundwater level in tank excavation backfill must be below the leak. If groundwater is very high, the test pressure may be increased with approval from Leighton O'Brien staff. Leaks below the water table are detected using the Leighton O'Brien Wet Test.

Comments Test data is acquired by computer and forwarded electronically to an analysis center where Leighton O'Brien staff assist in the determination of the tank condition.
Evaluated using 20,000 gallon Diesel tank at 90%, 50%, and 5% capacities. PD may decrease and PFA may increase with testing of higher ullage volumes. Manifolded tank systems must be isolated. Double walled tanks tested with interstice open to atmosphere OR with pressure device installed in interstitial space.
Equipment calibration is performed yearly.
Leighton O'Brien audits the onsite operator annually.
More than 4 psi (27.6 kPa) pressure differential across the tank wall at any location in the tank could damage the tank.

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Appearance on this list is not to be construed as an endorsement by any regulatory agency nor is it any guarantee of the performance of the method or equipment.
Equipment should be installed and operated in accordance with all applicable laws and regulations. For full details, please refer to our expanded "DISCLAIMER" page.