



ELECTRONIC LINE LEAK DETECTORS

NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY

Division of Waste Management – Underground Storage Tank Program

Telephone: 701-328-5166 • Fax: 701-328-5200 • Email: ndust@nd.gov

Website: <https://deq.nd.gov/wm>

Rev: 11/2020

An electronic line leak detector is an electronic device whose basic function is to monitor for leaks in the piping system and shut down the pump when a leak is detected. Electronic line leak detectors use a special sensor that monitors the pressure inside the piping system and can detect a leak as small as or smaller than .2 gallons per hour. Electronic line leak detectors are usually connected to an alarm at an automatic tank gauging console.

Electronic line leak detector tests may be used to meet the 30-day leak detection requirements for your piping system. In order to meet the leak detection requirements, a .2 gallon per hour test must be performed every 30 days. A copy of the printout or log showing the results of the test must be kept at the facility for 12 months. You must have a qualified service technician conduct an annual test that demonstrates proper functioning of each line leak detector.

Below are examples of electronic line leak test printouts from an automatic tank gauging system. The printout on the left is an example of a line leak test using an electronic line leak detector. The printout on the right shows how much product is in the tanks. If you use electronic equipment to monitor for leaks, you must know how to use the equipment.

```

MMM DD, YYYY   HH:MM XM
PRESSURE LINE LEAK TEST
RESULTS
Q 1:UNLEADED REG LINE
3.0 GAL/HR RESULTS:
LAST TEST:
MMM DD,YYYY HH:MM XM PASS
NUMBER OF TESTS PASSED
PREV 24 HOURS   : 123
SINCE MIDNIGHT  : 81
0.20 GAL/HR RESULTS:
MMM DD,YYYY HH:MM XM PASS
MMM DD,YYYY HH:MM XM PASS
0.10 GAL/HR RESULTS:
MMM DD,YYYY HH:MM XM PASS
MMM DD,YYYY HH:MM XM PASS

```

A line leak test report that was printed from a tank monitoring system.

```

MMM DD, YYYY HH:MM XM
INVENTORY REPORT
T 1:UNLEADED GASOLINE
VOLUME      = 8518 GALS
ULLAGE      = 1482 GALS
90% ULLAGE= 482 GALS
TC VOLUME   = 8492 GALS
HEIGHT      =76.26 INCHES
WATER VOL   = 0 GALS
WATER       = 0.00 INCHES
TEMP        = 64.6 DEG F
T 2:SUPER UNLEADED
VOLUME      = 7545 GALS
ULLAGE      = 2455 GALS
90% ULLAGE= 1455 GALS
TC VOLUME   = 7569 GALS
HEIGHT      =67.76 INCHES
WATER VOL   = 0 GALS
WATER       = 0.00 INCHES

```

A report printed by the same system showing how much fuel is in each tank. **This is not a printout of a line leak test.**