

Results of U.S. EPA Modified Evaluation Volumetric Tank Tightness Testing Method

This form tells whether the tank tightness testing method described below complies with the performance requirements of the federal underground storage tank regulation. The evaluation was conducted by the equipment manufacturer or a consultant to the manufacturer according to the U.S. EPA's "Standard Test Procedure for Evaluating Leak Detection Methods: Volumetric Tank Tightness Testing Methods." The full evaluation report also includes a form describing the method and a form summarizing the test data.

Tank owners using this leak detection system should keep this form on file to provide compliance with the federal regulations. Tank owners should check with State and local agencies to make sure this form satisfies their requirements.

Method Description

Name: Alert Technologies Tank Test System

Version Number: Model 2000-XB Precision Tank Test System – 4 Hour Test

Vendor: Alert Technologies, Inc.
636 East 11th Street
Indianapolis, IN 46202
(317)631-5580

Evaluation Results

This method which declares a tank to be leaking when the measured leak rate exceeds the threshold of 0.05 gallon per hour, has a probability of false alarms [P(FA)] of 2.2 %.

The corresponding probability of detection [P(D)] of a 0.10 gallon per hour leak is 97.8 %.

Therefore, this method (X) does () does not meet the federal performance standards established by the U.S. Environmental Protection Agency (0.10 gallon per hour at P(D) of 95% and P(FA) of 5%).

Test Conditions During Evaluation

The evaluation testing was conducted in a 48,632 gallon (X) steel () fiberglass tank that was 126 inches in diameter and 901 inches long.

The tests were conducted with the tank product levels at 95 % and 50 % full.

The temperature difference between product added to fill the tank and product already in the tank ranged from +5.0 deg F to 0.0 deg F, with a standard deviation of 1.73 deg .F.

The product used in the evaluation was Jet-A fuel.

Limitations on the Results

The performance estimates above are on only valid when:

1. The method has not been substantially changed.
2. The vendor's instructions for using the method are followed.
3. The tank is no larger than **72,948** gallons.
4. The tank contains a product identified on the method description form.
5. The tank is at least **50** percent full.
6. The waiting time after adding any substantial amount of product to the tank is at least **10** Hours.
7. The temperature of the added product does not differ more than **2.6** degrees Fahrenheit From that already in the tank
8. The waiting time between the end of "topping off," if any, and the start of the test data Collection is at least **N/A** hours. (underfill method)
9. The total data collection time for the test is at least **4** hours.
10. Large vapor pockets are identified and removed (for methods that overflow the tank).
11. The method (X) can () cannot be used if the ground-water level is above the bottom of the tank.
12. Other limitations specified by the vendor or determined during testing: **None**

Safety disclaimer: This test procedure only addresses the issue of the method's ability to detect leaks. It does not test the equipment for safety hazards.

Certification of Results

I certify that the volumetric tank tightness testing method was operated according to the vendor's instructions. I also certify that the evaluation was performed according to the standard EPA test procedures for volumetric tank tightness testing methods and that the results presented above are those obtained during the evaluation.

H. Kendall Wilcox, President
(printed name)

Ken Wilcox Associates, Inc.
(organization performing evaluation)

(signature)

Grain Valley, MO 64029
(city, state, zip)

June 22, 1994
(date)

(816)229-0860
(phone number)