



Rhode Island Department of Environmental Management
Office of Land Revitalization and Sustainable Materials Management
Underground Storage Tank (UST) Division

Standardized Annual Testing Form for UST Systems

Facility Profile

Facility Name:		RI DEM UST Facility ID#	
Physical Address:		City/Town:	
Primary Contact Name:		Contact Phone #:	

UST System Use:

UST Construction Type: Piping Construction Type:

UST System Contents: ☐ Gasoline - All Grades ☐ Diesel ☐ Heating Fuel (all grades) ☐ Waste Oil ☐ Kerosene
(check all that apply) ☐ Mixture ☐ Jet Fuel/Av Gas ☐ Lube/Motor Oils ☐ Other Hazardous Substance:

Tester Information

Company Name:		Company Phone #:	
Mailing Address:			
Tester Name:		Tester Phone #:	

Test Summary

Date of Test/Inspection:		Tester Signature:	
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|---|--|
| <input type="checkbox"/> This is a routine annual test | <input type="checkbox"/> This is a re-submittal due to DEM request |
| <input type="checkbox"/> This is a re-test due to a failed test | <input type="checkbox"/> This is a post-construction/modification test |

General Comments about this test:

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NOTE: This form is for annual tests only. Forms for other tests are available on our website at: <http://www.dem.ri.gov/UST>
Tests should be performed using methods described in PEI/RP1200.

All test results are required to be submitted to DEM within 30 days for passing tests and 7 days for failed tests.
All results must be mailed - we are unable to accept electronic, e-mail, or faxed test results.

Results should be mailed to:

RI DEM - UST Program
235 Promenade
Providence, RI 02908

Automatic Tank Gauge Operation and Inspection

Facility Address: City/Town: Facility ID # Test Date:

This procedure is to determine whether the automatic tank gauge (ATG) is adjusted, set-up, and operating properly.
For proper inspection procedure, see PEI/RP1200 Section 8.2 or equivalent.

DEM Tank ID #	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Product Stored	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
ATG Brand and Model	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tank Volume (Gallons)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tank Diameter (inches)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Was the ATG removed from the UST for inspection?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Do the floats move freely on the stem without binding?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Does the fuel float level agree with the value displayed on the ATG console or CMS?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Does the water float level agree with the value displayed on the ATG console or CMS?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
What is the distance (inches) from the bottom of the ATG stem to the point the water float triggers a water alarm on the CMS or ATG console?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Will the installed ATG alert the operator when 1" of water is present in the tank?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

If any answers above are "No" or were not able to be answered, the ATG has failed

FINAL RESULT:	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail
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Were repairs required to achieve a passing result? Yes No

Comments or Description of Repairs Performed:

Mechanical and Electronic Line Leak Detectors

Facility Address: City/Town: Facility ID # Test Date:

This data sheet should be used to test mechanical line leak detectors (MLLD) and electronic line leak detectors (ELLD) with submersible turbine pumps (STP) systems. See PEI/RP1200 Sections 9.1 and 9.2 for test procedures

Which UST(s) does this LLD service?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Leak Detector Manufacturer	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Leak Detector Model	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
What type of Line Leak Detector is present?	MLLD ELLD	MLLD ELLD	MLLD ELLD	MLLD ELLD	MLLD ELLD

Mechanical Line Leak Detectors	All Pressure Measurements are made in PSIG									
STP Full Operating Pressure	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Check Valve Holding Pressure	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Line Resiliency (mL) <i>Line Bleedback volume as measured from check valve holding pressure to 0 psig</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Step Through time in Seconds <i>Time the MLLD hesitates at metering pressure before going to full operating pressure as measured from 0 psig with no leak induced on the line</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Metering Pressure <i>STP Pressure when simulated leak rate of 3 GPH at 10 psig</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Opening Time in Seconds <i>The time the MLLD opens to allow full pressure after simulated leak is stopped</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Does the STP pressure remain at or below the metering pressure for at least 60 seconds when the simulated leak is induced?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Does the leak detector reset (trip) when the line pressure is bled off to zero psig?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Does the STP properly cycle on/off under normal fuel system operation conditions?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Electronic Line Leak Detectors	All Pressure Measurements are made in PSIG									
STP Full Operating Pressure	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
How many test cycles are observed before alarm and/or shutdown occurs?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Does the simulated leak cause an alarm?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Does a simulated leak trigger a STP shutdown?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
If the simulated leak does not trigger an alarm on the CMS console, the ELLD has failed										
FINAL RESULT:	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail	Pass	Fail

Were repairs required to achieve a passing result? Yes No

Comments or
Description of
Repairs
Performed:

Shear/Crash Valve Operation

Facility Address: City/Town: Facility ID # Test Date:

What Type of piping system does this UST Facility Use? Pressurized Suction No Piping

This datasheet should only be used for inspecting shear/crash valves located inside dispensers of pressurized piping systems. This datasheet is not required to be completed for systems with suction piping or those that do not having piping. For inspection and testing procedures of shear/crash valve on pressurized piping systems, see PEI/RP1200 Section 10.

Dispenser #	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Is the valve rigidly anchored to the dispenser box frame or dispenser island?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Is the shear section positioned between 1/2" above or below the top surface of the dispenser island?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Is the lever arm free to move?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Does the poppet valve automatically snap shut?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
When the poppet valve is closed is the flow of product fully stopped?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Have all test or quick disconnect fittings that reach above the shear point of the valve been removed?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No

If the answers to any of the above are "No", the valve has failed and the dispense must immediately be taken out of service

FINAL RESULT:	Pass Fail	Pass Fail	Pass Fail	Pass Fail	Pass Fail	Pass Fail	Pass Fail
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Were repairs required to achieve a passing result? Yes No

Comments or Description of Repairs Performed:

Overfill Prevention Device

Facility Address: City/Town: Facility ID # Test Date:

What is the primary overfill protection device at this site? Ball Float Overfill Alarm Automatic Shutoff Valve (Flapper)

This datasheet is for inspecting automatic shutoff devices, ball floats, and overfill alarms. See PEI/RP1200 Section 7 for inspection procedures.

Ball Float Valve

DEM Tank ID #	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ball float removed for inspection?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Ball float cage free of debris?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Ball free of holes, cracks, or other damage?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Ball present and moves freely in cage?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Vent hole in pipe open and near top of tank?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Measured depth at which the installed ball float would begin to restrict flow (inches)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Depth at which UST is 90% full according to manufacturers tank charts (inches)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Will ball float restrict flow at 90% capacity?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No


Automatic Shutoff Device (Flapper Valve)

DEM Tank ID #	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Was the drop tube removed from the tank?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Drop tube free of debris or obstructions?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Float moves freely without binding and poppet moves into flow path?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Flapper set to shutoff at 95% capacity?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Drop tube free of corrosion or other damage?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No

Remote Overfill Alarm

DEM Tank ID #:	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Does overfill alarm activate in the test mode at the console?	Yes No	Yes No	Yes No	Yes No
When activated, can the overfill alarm be heard and seen from the fill point?	Yes No	Yes No	Yes No	Yes No
Does manually moving the product float(s) to the 90% level trigger the alarm?	Yes No	Yes No	Yes No	Yes No
Was the ATG removed, inspected, and found to be fully operational?	Yes No	Yes No	Yes No	Yes No
Measured product depth at which the installed alarm would activate (inch)	A <input type="text"/>	A <input type="text"/>	A <input type="text"/>	A <input type="text"/>
Depth at which UST is 90% full according to manufacturers tank charts (inch)	B <input type="text"/>	B <input type="text"/>	B <input type="text"/>	B <input type="text"/>
Is A ≤ B?	Yes No	Yes No	Yes No	Yes No

Comments or Descriptions on Test or Repairs Performed:

 If any of the above are "No", the overfill device is considered failed.

Overfill Prevention Device Component Final Result: Pass Fail

Continuous Monitoring System, Liquid Level Sensors, and Interstitial Space Sensor

Facility Address: City/Town: Facility ID #: Test Date:

Continuous Monitoring System

Is the CMS operational and indicating "normal" conditions with no alarms, warnings, malfunctions, or test failures indicated?	Yes	No
When the "TEST" button is pressed, does the CMS make an audible sound and all lights on the console illuminate?	Yes	No
Do the programmed tank parameters (tank size, component type) match what is installed on-site?	Yes	No



All sensors must be removed for inspection



If any are "No", the device is considered failed

Piping, STP, and Transition Sump and Under-Dispenser Containment Liquid Level Sensor

Sensor Location																		
Which UST or dispenser is this sensor associated with?																		
Is this sensor connected to the CMS or a standalone positive shutdown?																		
When the sensor is immersed in liquid is an alarm triggered on the CMS?	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
Is the sensor upright, within 1" of the lowest point of sump, and secured?	Yes	No		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No	
Is the Sensor free of debris, damage, obstructions, surface films or coatings?	Yes	No		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No	
When the sensor triggers an alarm, does the CMS show the correct location of the sensor?	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A
Is the sensor wire free from cracks, splits, or other damage, and connected with waterproof connectors?	Yes	No		Yes	No		Yes	No		Yes	No		Yes	No		Yes	No	
If equipped, does activation of the liquid level sensor shut down the associated component?	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A	Yes	No	N/A

UST Interstitial Space Sensor

UST # or Contents	<div></div>		<div></div>		<div></div>		<div></div>		<div></div>		<div></div>	
Is sensor free of damage, obstructions, surface films, and coatings?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Is the sensor wire free from cracks, splits and other damage?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Does the sensor float move freely and trigger an alarm?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Comments on Test or Repairs Performed:												

CMS, Liquid Level Sensors and UST Interstitial Space Sensor Test Result: Pass Fail