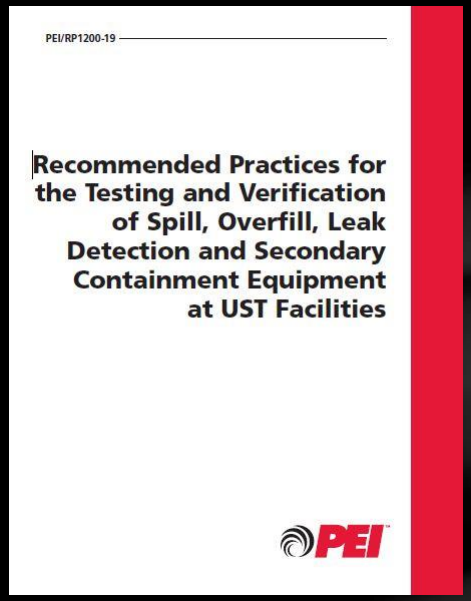
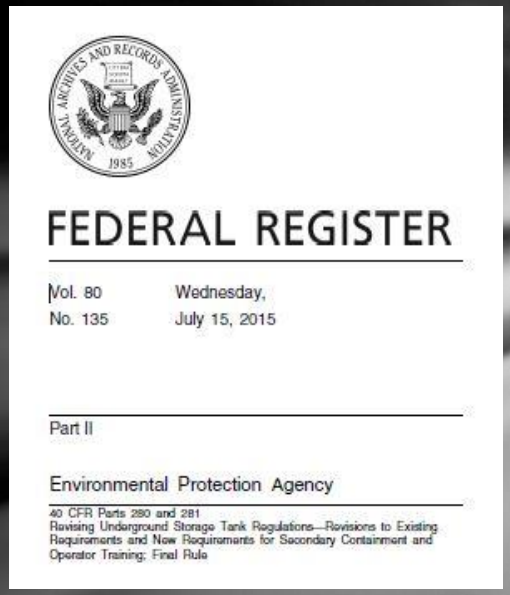
How the UST testing requirements of PEI RP1200 are (1) properly performed and (2) how to interpret the final test data to determine if the testing has been performed thoroughly and to the standards set forth in PEI RP1200."





National Tanks Conference

Tuesday September 13th, 2022

Edward S. Kubinsky Jr.

Director of Regulatory Affairs, Training and Certification

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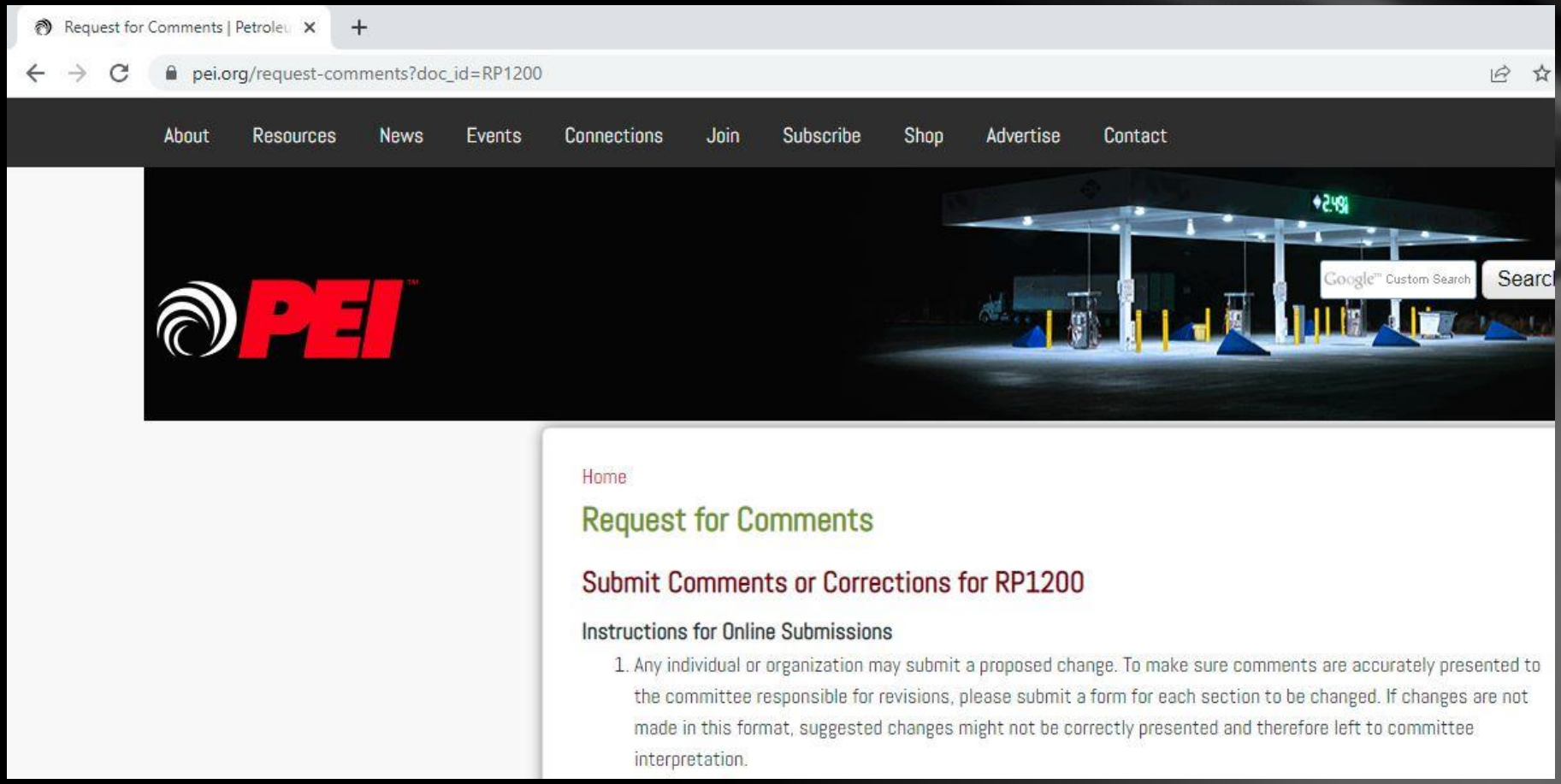
To submit a comment:

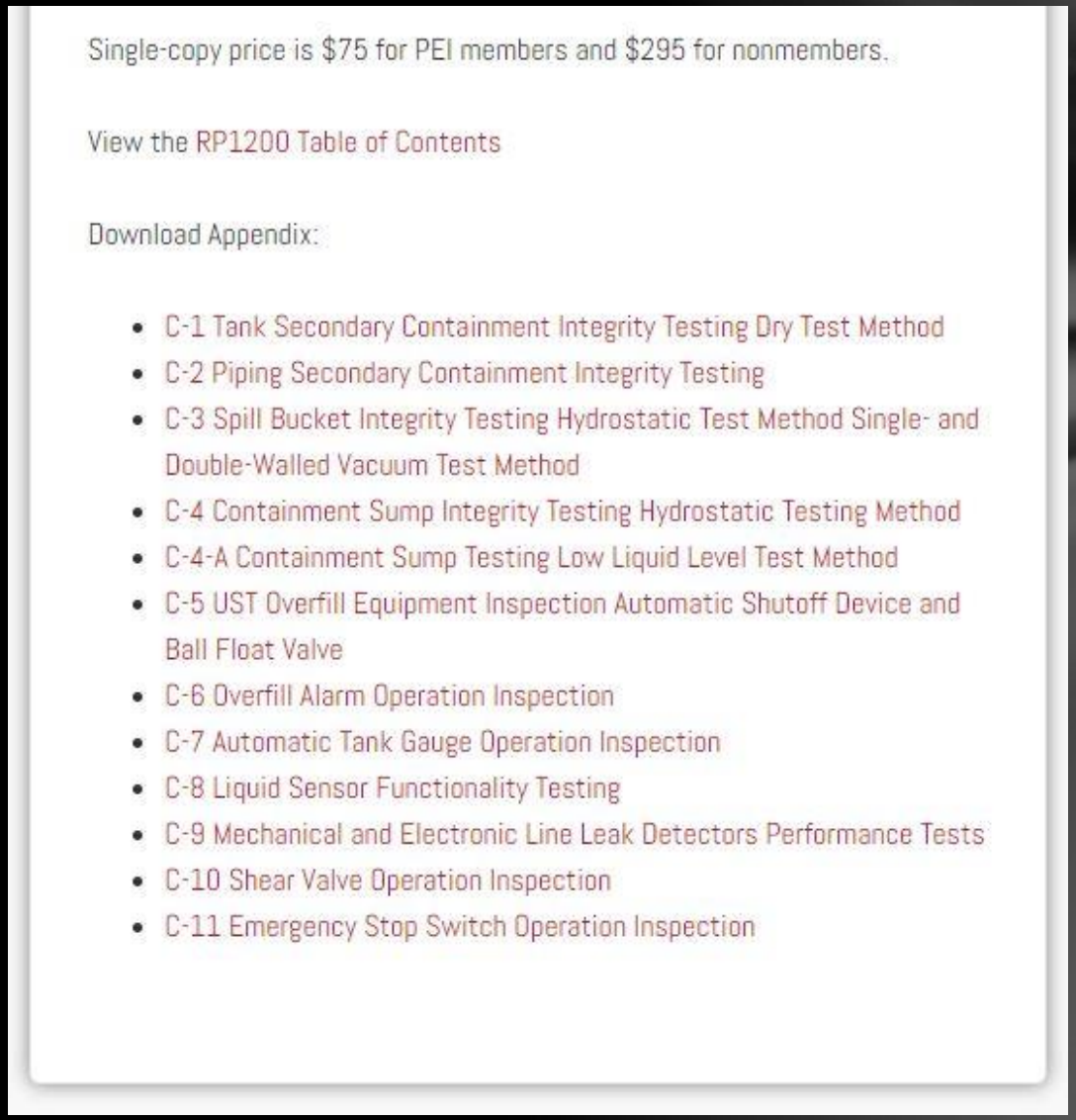
https://www.pei.org/request-comments?doc_id=RP1200



Next committee review will be in 2024

To download all PEI RP 1200 Test Forms (free):

https://www.pei.org/rp1200



Single-copy price is $75 for PEI members and $295 for nonmembers.

View the RP1200 Table of Contents

Download Appendix:

- C-1 Tank Secondary Containment Integrity Testing Dry Test Method
- C-2 Piping Secondary Containment Integrity Testing
- C-3 Spill Bucket Integrity Testing Hydrostatic Test Method Single- and Double-Walled Vacuum Test Method
- C-4 Containment Sump Integrity Testing Hydrostatic Testing Method
- C-4-A Containment Sump Testing Low Liquid Level Test Method
- C-5 UST Overfill Equipment Inspection Automatic Shutoff Device and Ball Float Valve
- C-6 Overfill Alarm Operation Inspection
- C-7 Automatic Tank Gauge Operation Inspection
- C-8 Liquid Sensor Functionality Testing
- C-9 Mechanical and Electronic Line Leak Detectors Performance Tests
- C-10 Shear Valve Operation Inspection
- C-11 Emergency Stop Switch Operation Inspection

Chapter 4: Secondary Containment Integrity Testing (Dry Tank Interstitials)

- Check interstice for liquid
- Pull 10" Hg vacuum (Steel or FRP tanks)
- Wait appropriate time based on tank volume
- Pass = no vacuum loss and no additional liquid pulled in to interstitial space

FIGURE 4-4. *The plumber's plug provides a leak-tight connection to draw a vacuum on the tank interstitial space.*

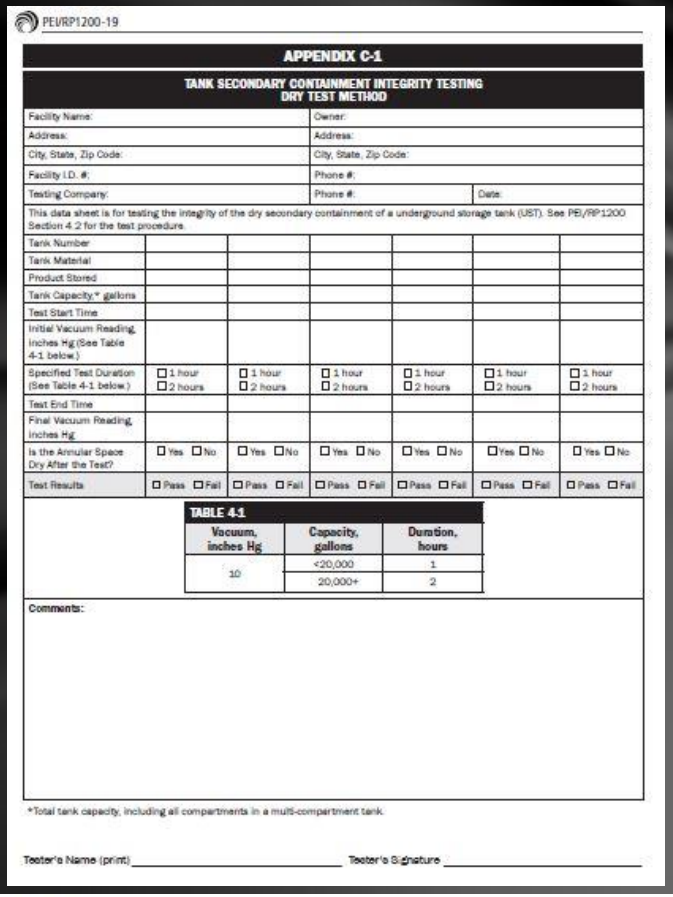
Photo Courtesy of PEI

Chapter 4: Secondary Containment Integrity Testing (Dry Tank Interstitials)

Tanks under 20,000 capacity = 1-hour test

Tanks 20,000 or greater = 2-hour test

No vacuum loss allowed, no additional liquid drawn into the interstice during the test (if liquid was present at the start)



PEI/RP1200-19

APPENDIX C-1

TANK SECONDARY CONTAINMENT INTEGRITY TESTING DRY TEST METHOD

Facility Name:			Owner:			
Address:			Address:			
City, State, Zip Code:			City, State, Zip Code:			
Facility I.D. #:			Phone #:			
Testing Company:			Phone #:		Date:	
This data sheet is for testing the integrity of the dry secondary containment of a underground storage tank (UST). See PEI/RP1200 Section 4.2 for the test procedure.						
Tank Number						
Tank Material						
Product Stored						
Tank Capacity,* gallons						
Test Start Time						
Initial Vacuum Reading, Inches Hg (See Table 4-1 below.)						
Specified Test Duration (See Table 4-1 below.)	☐ 1 hour ☐ 2 hours	☐ 1 hour ☐ 2 hours	☐ 1 hour ☐ 2 hours	☐ 1 hour ☐ 2 hours	☐ 1 hour ☐ 2 hours	☐ 1 hour ☐ 2 hours
Test End Time						
Final Vacuum Reading, Inches Hg						
Is the Annular Space Dry After the Test?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail

TABLE 4-1

Vacuum, inches Hg	Capacity, gallons	Duration, hours
10	<20,000	1
	20,000+	2

Comments:

*Total tank capacity, including all compartments in a multi-compartment tank.

Tester's Name (print) _____ Tester's Signature _____

TABLE 4-1

Vacuum, inches Hg	Capacity, gallons	Duration, hours
10	<20,000	1
	20,000+	2

Chapter 4: Secondary Containment Integrity Testing (Wet Tank Interstitials)

APPENDIX A-1

CONTAINMENT SOLUTIONS

HYDROSTATIC STAND PIPE TANK TEST CHECKLIST

Job Name: _____

Address: _____ City: _____ State: _____

_____ / _____ Record date / time when tank was last filled (wait 24 hours from last delivery)
_____ / _____ Record today's date / time

Time	Testing Procedures	Groundwater Level	Tank #1	Tank #2
	Record tank U.L. number (if known)		_____	_____
	Product stored		_____	_____
	Tank nominal capacity (gallons)*		_____	_____
	Preparation:			
	1. Measure and record groundwater table level.	_____		
	2. Fill reservoir riser pipe approximately 12" over reservoir top. The level in the riser pipe must be at least 12" higher than the groundwater table.			
	3. Diameter of reservoir riser pipe.		_____	_____
	4. Inspect all exposed monitoring fitting plugs for leaks.		_____	_____
	Begin test:			
_____	5. Record time (wait 3 hours after step #2).			
	6. Measure and record liquid level in reservoir riser pipe.		_____	_____
	7A. Measure and record groundwater table level.	_____		
	7B. Record dispenser meter readings.		_____	_____
_____	8. Record time (after steps #6 and #7, wait 4 hrs for 4',6',8' tanks or 6 hrs for 10' dia. tanks).			
	9. Measure and record liquid level in reservoir riser pipe.		_____	_____
	10A. Measure and record groundwater table level.	_____		
	10B. Record dispenser meter reading.		_____	_____
	End test:			
	Calculate changes:			
	11A. Reservoir riser pipe level (step#6 minus step #9).		_____	_____
	11B. Groundwater level (step #7 minus step #10A).	_____		
	11C. Dispensed product (step #7 minus step #10B).		_____	_____

Results Interpretation - The calculated changes (lines 11A, 11B, and 11C) must meet all of the criteria in column "B" below to pass the tightness test of .05 gallons per hour with a 95% probability of detection and a 5% probability of false alarm:

(A) Criteria	(B) Tank passes test if. . .	(C) Tank test is inconclusive if. . .
Line #11A	Less than 1"	More than 1"***
Line #11B	and less than 10"	or more than 10"**
Line #11C	and less than 600 gallons	or more than 600 gallons ***

You can use a tape measure and water/brine finding paste to determine accurate liquid levels in site wells and the reservoir.

_____ / _____ / _____
Date

_____
Technician's Name

* Max tank diameter 10', Max capacity 30,000 gallons
** Repeat test steps 6-11
*** To improve test accuracy, discontinue dispensing, then repeat test steps 6-11
Note: A 99.9% PD and 1.2% PFA tightness test without dispensing is available by contacting CSI Field Service

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APPENDIX A-2

ZCL® | XERXES®
making a lasting difference®

TRUCHEK®
DATA LOG

Fill out the site location, tank information and test boxes below. Be sure to choose the correct test box according to the diameter of the tank being tested. Follow the test procedures on the other side of this form. A separate test form is needed for every tank. For additional copies of the form, contact the Customer Service Representative at the Xerxes manufacturing facility nearest you. (See back cover for information.)

SITE LOCATION AND TANK INFORMATION

Site Location:
Address: _____
_____
Phone: _____
Contact Name: _____

Tank Information:
Nominal Gallons: _____
Diameter: _____
Approximate Standpipe Length: _____
Product Type: _____

Test Date: _____ Person Performing Test: _____

4-FOOT-, 6-FOOT- AND 8-FOOT-DIAMETER DOUBLE-WALL TANKS

95% - 5% TEST

1a. Start level (inches in standpipe)		
2a. End level after 4 hours	-	
3. Difference (subtract 2a from 1a)	=	
4. Calibration factor	x	.20
5. Volume change	=	
6. Test hours	÷	4
7. Gallons-per-hour loss	=	

(If 0.05 gallons/hour or less, tank passed.)
Note: maximum allowable dispensing volume during test:
8-foot-diameter tank – 1,200 gallons maximum
6-foot-diameter tank – 500 gallons maximum
4-foot-diameter tank – 300 gallons maximum

99% - 1% TEST

1b. Start level (inches in standpipe)		
2b. End level after 10 hours	-	
3. Difference (subtract 2b from 1b)	=	
4. Calibration factor	x	.20
5. Volume change	=	
6. Test hours	÷	10
7. Gallons-per-hour loss	=	

(If 0.05 gallons/hour or less, tank passed.)
Note: No product dispensing allowed.

10-FOOT-DIAMETER DOUBLE-WALL TANKS

95% - 5% TEST

1a. Start level (inches in standpipe)		
2a. End level after 6 hours	-	
3. Difference (subtract 2a from 1a)	=	
4. Calibration factor	x	.30
5. Volume change	=	
6. Test hours	÷	6
7. Gallons-per-hour loss	=	

(If 0.05 gallons/hour or less, tank passed.)
Note: Maximum allowable dispensing volume during test:
10-foot-diameter tank – 750 gallons maximum

99% - 1% TEST

1b. Start level (inches in standpipe)		
2b. End level after 10 hours	-	
3. Difference (subtract 2b from 1b)	=	
4. Calibration factor	x	.30
5. Volume change	=	
6. Test hours	÷	10
7. Gallons-per-hour loss	=	

(If 0.05 gallons/hour or less, tank passed.)
Note: No product dispensing allowed.

Chapter 4: Secondary Containment Integrity Testing (Wet Tank Interstitials)

Follow tank manufacturer's written procedures:

Containment Solutions:

- Fill reservoir 12" over reservoir top and 12" above groundwater level and wait 3 hours
- Measure level in reservoir and water table and record dispenser meter readings
- Wait another 4 hours for 4', 6' and 8' diameter tanks or 6 hours for 10' diameter tanks
- Measure level in reservoir and water table and record dispenser meter readings
- Calculate changes to determine if test is a "pass"
  - Reservoir change is less than 1"
  - Groundwater change is less than 10"
  - Dispensed product is less than 600 gallons (best to shut down tank for the test to be sure product dispensed is less than 600)

Chapter 4: Secondary Containment Integrity Testing (Wet Tank Interstitials)

Follow tank manufacturer's written procedures:

ZCL/Xerxes:

- Determine if you are performing a 95% - 5% test or a 99% - 1% test and tank diameter to determine test parameters (from owner or regulatory agency)
  - 95/5 test on 4', 6' and 8' tanks is 4 hours with dispensing limits for each (suggest tank shutdown)
  - 99/1 test on 4', 6' and 8' diameter tanks is 10 hours with no dispensing allowed
  - 95/5 test on 10' diameter tanks is 6 hours with 750 gallon dispensing limit (suggest tank shutdown)
  - 99/1 test on 10' diameter tanks is 10 hours with no dispensing allowed
- Fill reservoir 6" – 12" above reservoir into the riser
- Wait appropriate time
- Perform gallon-per-hour calculation on form. If calculation is 0.05 or less, the tank has passed the test.

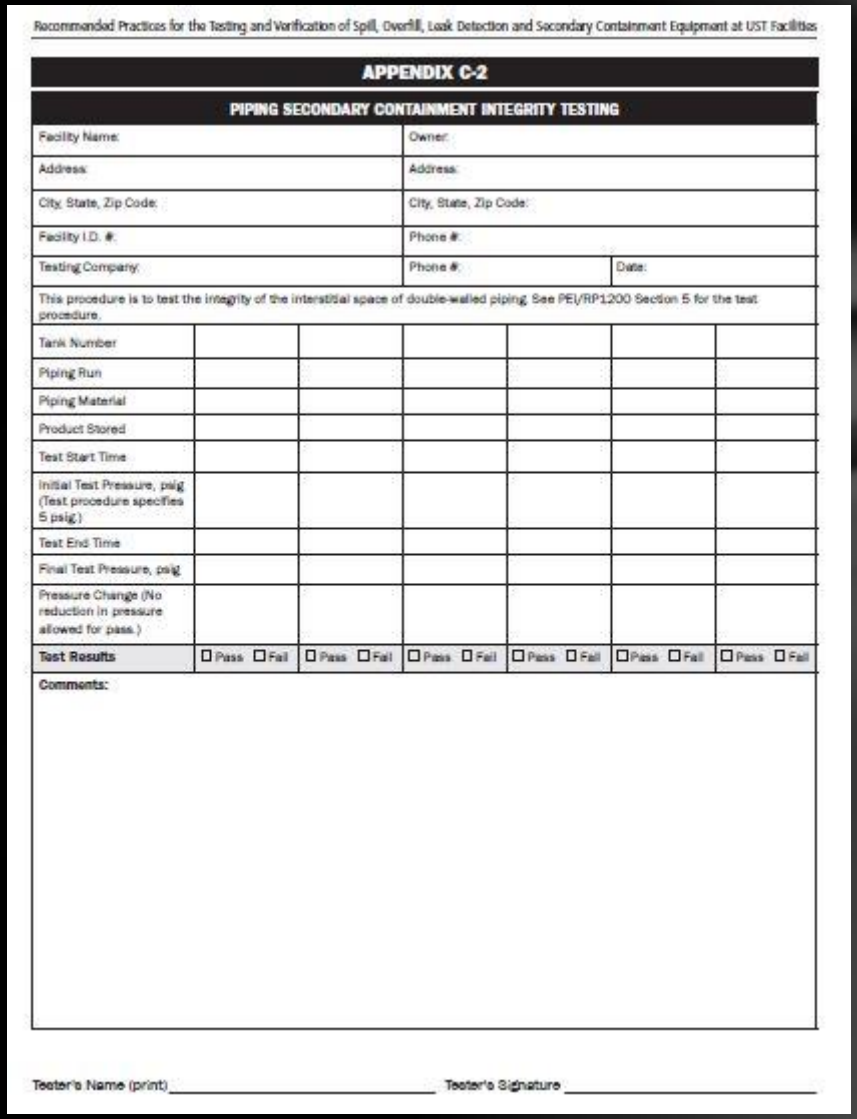
Chapter 5: Secondary Containment Integrity Testing (Piping Interstitials)

- Install test boots/test equipment (ensure testing all sections of piping)
- Pressurize interstitial to 5 psig
- Pass = no pressure loss over test period of 1 hour
- Be sure interstitial is open to allow for proper interstitial monitoring after the test

FIGURE 5-1. *Boots on piping transitions and through sump walls must be leak-tight when piping secondary containment integrity testing is performed.*

Photo Courtesy of PEI

Chapter 5: Secondary Containment Integrity Testing (Piping Interstitials)



Recommended Practices for the Testing and Verification of Spill, Overfill, Leak Detection and Secondary Containment Equipment at UST Facilities

APPENDIX C-2

PIPING SECONDARY CONTAINMENT INTEGRITY TESTING

Facility Name:			Owner:			
Address:			Address:			
City, State, Zip Code:			City, State, Zip Code:			
Facility I.D. #:			Phone #:			
Testing Company:			Phone #:		Date:	
This procedure is to test the integrity of the interstitial space of double-walled piping. See PEI/RP1200 Section 5 for the test procedure.						
Tank Number						
Piping Run						
Piping Material						
Product Stored						
Test Start Time						
Initial Test Pressure, psig (Test procedure specifies 5 psig.)						
Test End Time						
Final Test Pressure, psig						
Pressure Change (No reduction in pressure allowed for pass.)						
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Comments:						

Tester's Name (print)_____ Tester's Signature _____

Chapter 6: Spill Bucket and Containment Sump Testing (Spill Bucket Hydrostatic)

- Visually inspect spill bucket, drain valve (if present, cap & adapter)
- Fill spill bucket with water to within 1.5" of the top of the bucket, wait 5 minutes and measure
- Wait 1 hour
- Measure water level again
- Pass = visual inspection is good and water level loss is less than 1/8"

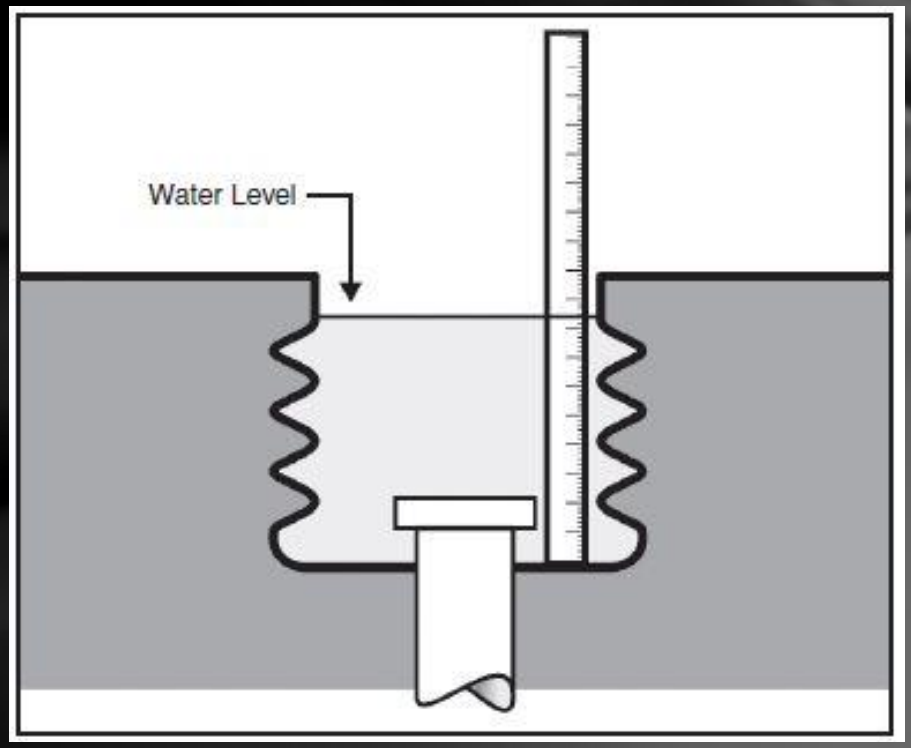


Photo Courtesy of PEI

Chapter 6: Spill Bucket and Containment Sump Testing (Spill Bucket Vacuum Primary)

- Visually inspect spill bucket, drain valve (if present, cap & adapter)
- Attach to top of bucket and pull 30" water column vacuum
- Wait 1 minute
- Observe vacuum level
- Pass = visual inspection is good and vacuum level is 26" water column or greater

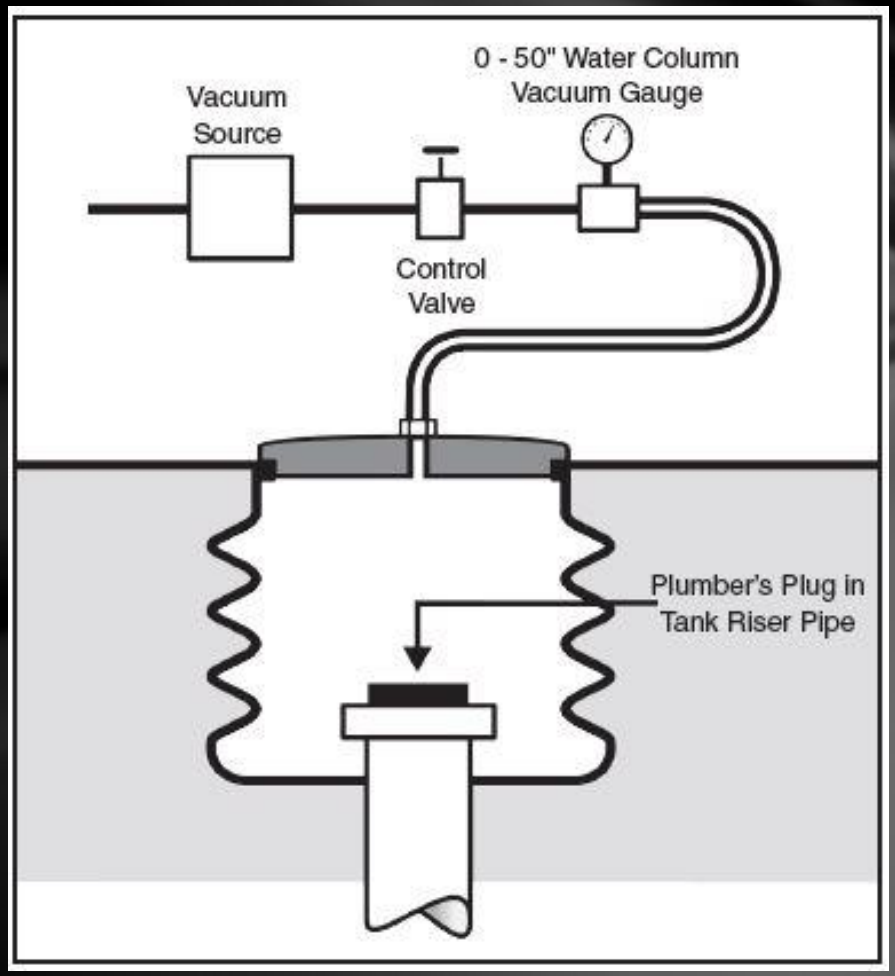


Photo Courtesy of PEI

Chapter 6: Spill Bucket and Containment Sump Testing (Spill Bucket Vacuum Interstitial)

- Visually inspect spill bucket, drain valve (if present, cap & adapter)
- Attach to interstitial space and pull 15" water column vacuum
- Wait 1 minute
- Observe vacuum level
- Pass = visual inspection is good and vacuum level is 12" water column or greater

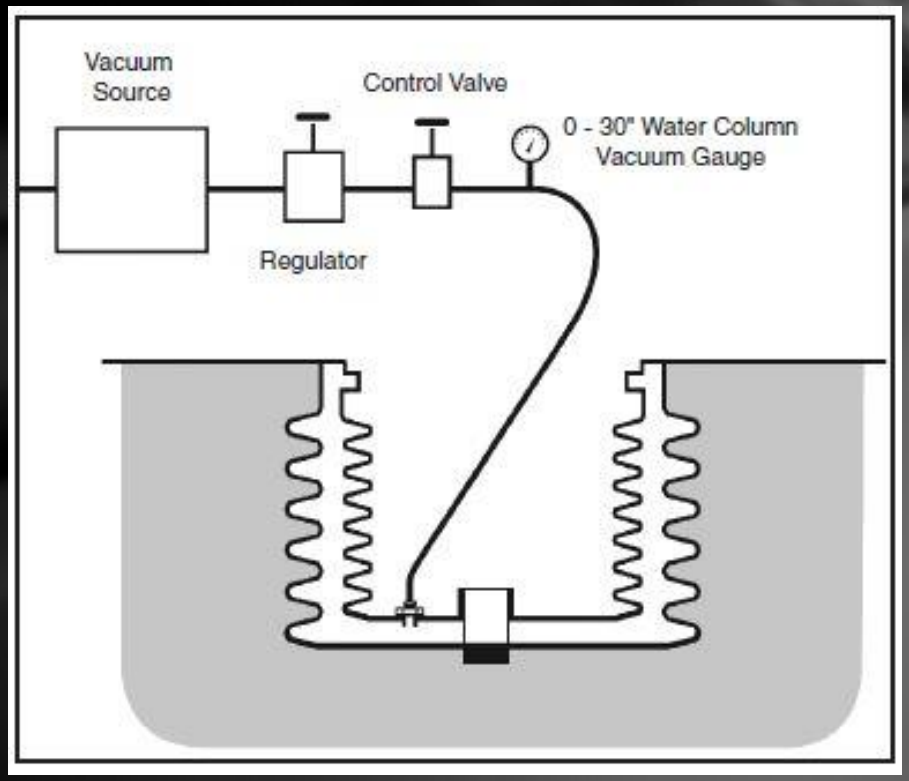


Photo Courtesy of PEI

Chapter 6: Spill Bucket and Containment Sump Testing

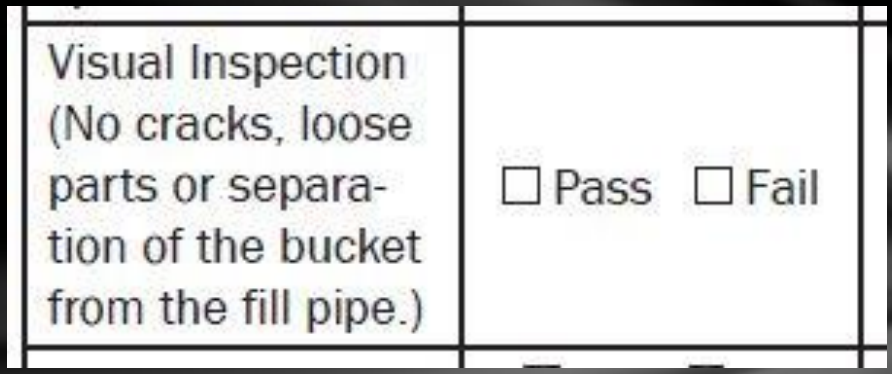
APPENDIX C-3

SPILL BUCKET INTEGRITY TESTING HYDROSTATIC TEST METHOD
SINGLE- AND DOUBLE-WALLED VACUUM TEST METHOD

Facility Name:			Owner:			
Address:			Address:			
City, State, Zip Code:			City, State, Zip Code:			
Facility I.D. #:			Phone #:			
Testing Company:			Phone #:		Date:	
This procedure is to test the leak integrity of single- and double-walled spill buckets. See PEI/RP1200 Section 6.2 for hydrostatic test method, Section 6.3 for single-walled vacuum test method and Section 6.4 for double-walled vacuum test method.						
Tank Number						
Product Stored						
Spill Bucket Capacity						
Manufacturer						
Construction	☐ Single-walled ☐ Double-walled	☐ Single-walled ☐ Double-walled	☐ Single-walled ☐ Double-walled	☐ Single-walled ☐ Double-walled	☐ Single-walled ☐ Double-walled	☐ Single-walled ☐ Double-walled
Test Type	☐ Hydrostatic ☐ Vacuum ☐ Single-walled ☐ Double-walled	☐ Hydrostatic ☐ Vacuum ☐ Single-walled ☐ Double-walled	☐ Hydrostatic ☐ Vacuum ☐ Single-walled ☐ Double-walled	☐ Hydrostatic ☐ Vacuum ☐ Single-walled ☐ Double-walled	☐ Hydrostatic ☐ Vacuum ☐ Single-walled ☐ Double-walled	☐ Hydrostatic ☐ Vacuum ☐ Single-walled ☐ Double-walled
Spill Bucket Type	☐ Product ☐ Vapor	☐ Product ☐ Vapor	☐ Product ☐ Vapor	☐ Product ☐ Vapor	☐ Product ☐ Vapor	☐ Product ☐ Vapor
Liquid and debris removed from spill bucket?*	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Visual Inspection (No cracks, loose parts or separation of the bucket from the fill pipe.)	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Tank riser cap included in test?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Drain valve included in test?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Starting Level						
Test Start Time						
Ending Level						
Test End Time						
Test Period						
Level Change						
Pass/fail criteria: Must pass visual inspection. Hydrostatic: Water level drop of less than 1/8 inch; Vacuum single-walled only: Maintain at least 26 inches water column; Vacuum double-walled: maintain at least 12 inches water column.						
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Comments:						

*All liquids and debris must be disposed of properly.

Tester's Name (print) _____ Tester's Signature _____

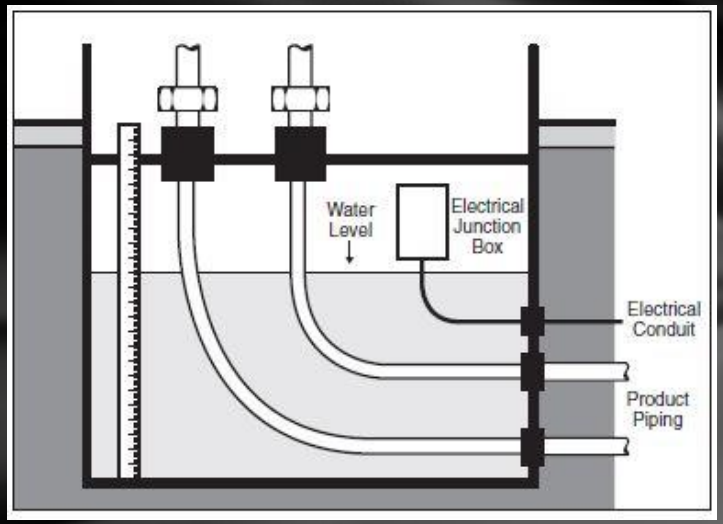


Visual Inspection (No cracks, loose parts or separation of the bucket from the fill pipe.)	☐ Pass ☐ Fail

NOTE: Consult AHJ about testing double-wall buckets and what is allowed for testing. Some require the interstitial tested, some will accept a test of the primary or interstitial of the spill bucket.

Chapter 6: Spill Bucket and Containment Sump Testing (High-Level Hydrostatic)

- Visually inspect the **entire** containment sump
- Add water to 4" above the highest penetration or sidewall seam or within 1" of the top of the sump
- Wait 15 minutes (deflection)
- Measure water level and begin test
- Wait 1 hour
- Pass = visual inspection is good and water level loss is less than 1/8"



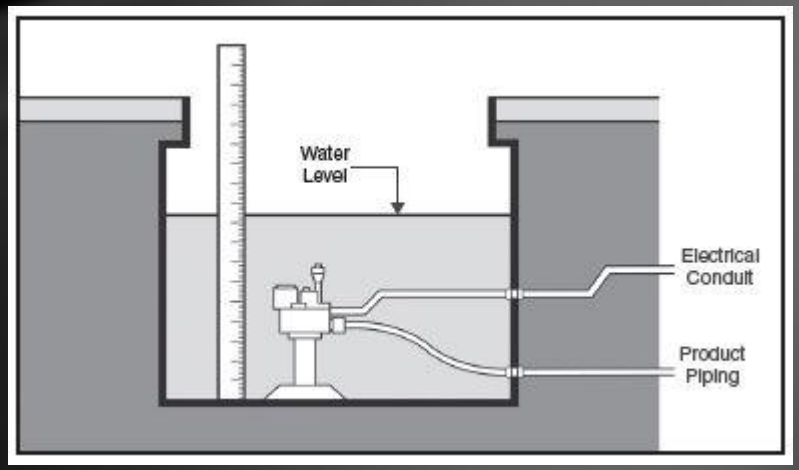


Photo Courtesy of PEI

Chapter 6: Spill Bucket and Containment Sump Testing (High-Level Hydrostatic)

APPENDIX C-4

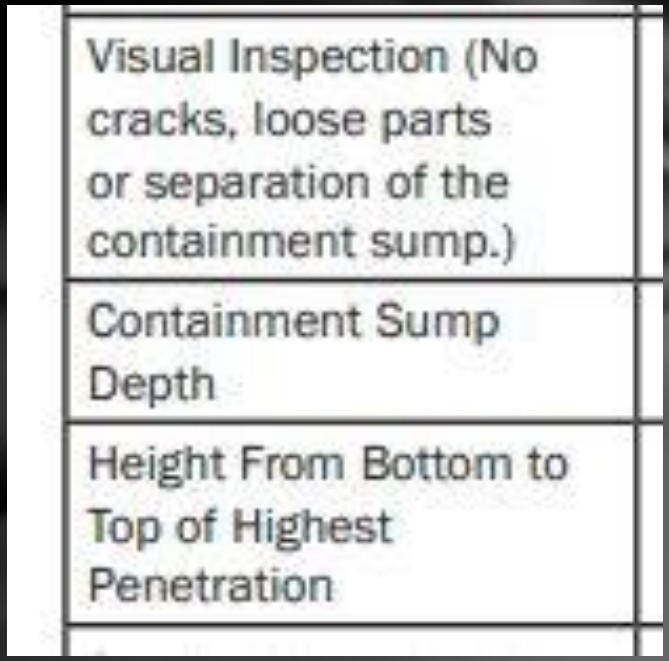
CONTAINMENT SUMP INTEGRITY TESTING
HYDROSTATIC TESTING METHOD

Facility Name:			Owner:			
Address:			Address:			
City, State, Zip Code:			City, State, Zip Code:			
Facility I.D. #:			Phone #:			
Testing Company:			Phone #:		Date:	
This procedure is to test the leak integrity of containment sumps. See PEI/RP1200 Section 6.5 for the test method.						
Containment Sump ID						
Containment Sump Material						
Liquid and debris removed from sump?*	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Visual Inspection (No cracks, loose parts or separation of the containment sump.)	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Containment Sump Depth						
Height From Bottom to Top of Highest Penetration						
Starting Water Level						
Test Start Time						
Ending Water Level						
Test End Time						
Test Period (Minimum test time: 1 hour)						
Water Level Change						
Pass/fail criteria: Must pass visual inspection. Water level drop of less than 1/8 inch.						
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail

Comments:

*All liquids and debris must be disposed of properly.

Tester's Name (print) _____ Tester's Signature _____



Ensure piping interstitials are isolated!

Chapter 6: Spill Bucket and Containment Sump Testing (Low-Level Hydrostatic)

- Visually inspect entire containment sump
- Test functionality of sensor or UDC mechanical float device
  - Sensor connected to ATG = must shut down STP(s) associated w/ sump
  - Sensor is "stand-alone" = must shut down dispenser or STP
- Add water to 4" above the sensor activation level

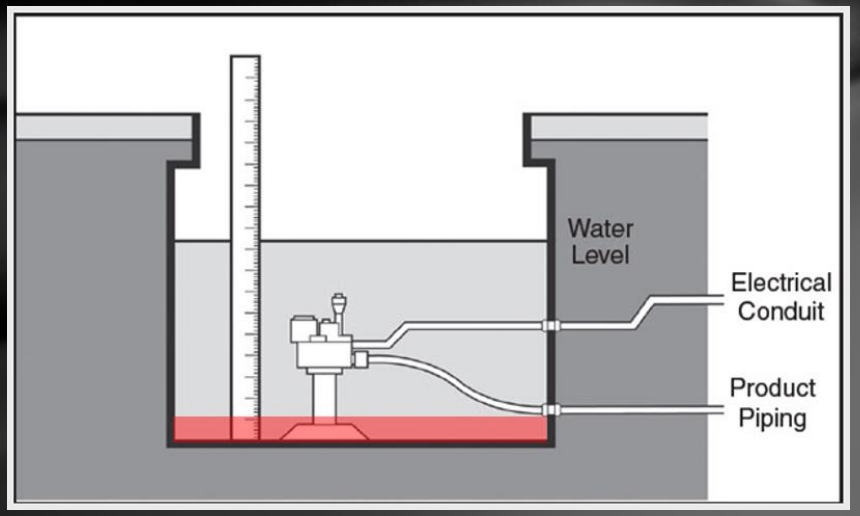


Photo Courtesy of PEI

Chapter 6: Spill Bucket and Containment Sump Testing (Low-Level Hydrostatic)

- Wait 15 minutes (deflection)
- Measure water level and begin test
- Wait 1 hour
- Pass = visual inspection is good, sensor or mechanical float device function properly and provide appropriate shut down and water level loss is less than 1/8”

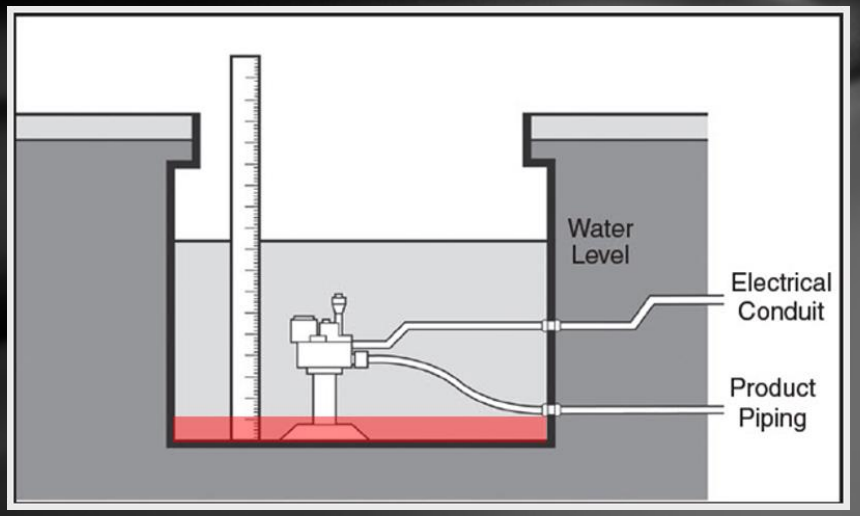


Photo Courtesy of PEI

Chapter 6: Spill Bucket and Containment Sump Testing (Low-Level Hydrostatic)

APPENDIX C-4-A

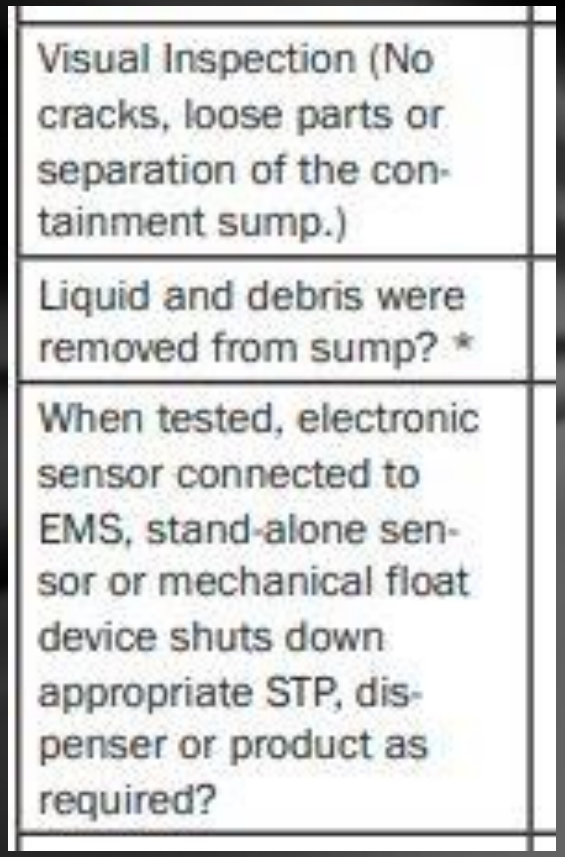
CONTAINMENT SUMP TESTING
LOW LIQUID LEVEL TEST METHOD

Facility Name:			Owner:			
Address:			Address:			
City, State, Zip Code:			City, State, Zip Code:			
Facility I.D. #:			Phone #:			
Testing Company:			Phone #:		Date:	
This procedure is to test containment sumps using the low liquid level method. See PEI/RP1200 Section 6.6 for the test method.						
Containment Sump ID						
Containment Sump Material						
Visual Inspection (No cracks, loose parts or separation of the containment sump.)	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Liquid and debris were removed from sump? *	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
When tested, electronic sensor connected to EMS, stand-alone sensor or mechanical float device shuts down appropriate STP, dispenser or product as required?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Starting Water Level						
Test Start Time						
Ending Water Level						
Test End Time						
Test Period (Minimum test time: 1 hour)						
Water Level Change						
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail

Comments:

*All liquids and debris must be disposed of properly.

Tester's Name (print) _____ Tester's Signature _____



Ensure piping interstitials are isolated if water level reaches the piping!

Chapter 7: UST Overfill Equipment Verification, Inspection and Testing (Automatic Shutoff Devices)

- Remove from tank
- Visually inspect
- Manually move
- If it has a bypass valve, make sure it's open and free of blockage
- Measure to make sure shutoff occurs at no higher than 95% tank capacity
- Pass = ASO functions as designed and shuts off flow into the tank at no higher than 95% tank capacity

FIGURE 7-1. *Check the drop tube and flapper for damage. Make sure that the flapper moves freely and will move into the product flow path.*

Photo Courtesy of PEI

Chapter 7: UST Overfill Equipment Verification, Inspection and Testing (Ball Float)

- Remove from tank
- Visually inspect
- Check ball & vent orifice
- Measure to make sure restriction occurs at no higher than 90% tank capacity
- Pass = ball float functions as designed and restricts flow at no more than 90% tank capacity

Chapter 7: UST Overfill Equipment Verification, Inspection and Testing (Ball Float)

- **Note: The PEI committee recognizes that there are alternative methods in the federal regulations for overfill (restrict 30 minutes before overfilling, alerting the operator 1 minute before overfilling or shutting off flow before wetting the top of the tank) however, from a practical standpoint, these were not included in the document and only restricting delivery at 90% was used for ball floats as a conservative approach.**

Chapter 7: UST Overfill Equipment Verification, Inspection and Testing (Automatic Shut Off & Ball Float)

APPENDIX C-5

UST OVERFILL EQUIPMENT INSPECTION
AUTOMATIC SHUTOFF DEVICE AND BALL FLOAT VALVE

Facility Name:			Owner:			
Address:			Address:			
City, State, Zip Code:			City, State, Zip Code:			
Facility I.D. #:			Phone #:			
Testing Company:			Phone #:		Date:	
This data sheet is for inspecting automatic shutoff devices and ball float valves. See PEI/RP1200 Section 7 for inspection procedures.						
Product Grade						
Tank Number						
Tank Volume, gallons						
Tank Diameter, inches						
Overfill Prevention Device Brand						
Type	☐ Automatic Shutoff Device ☐ Ball Float Valve	☐ Automatic Shutoff Device ☐ Ball Float Valve	☐ Automatic Shutoff Device ☐ Ball Float Valve	☐ Automatic Shutoff Device ☐ Ball Float Valve	☐ Automatic Shutoff Device ☐ Ball Float Valve	☐ Automatic Shutoff Device ☐ Ball Float Valve
AUTOMATIC SHUTOFF DEVICE INSPECTION						
1. Drop tube removed from tank?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
2. Drop tube and float mechanisms free of debris?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3. Float moves freely without binding and poppet moves into flow path?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
4. Bypass valve in the drop tube open and free of blockage (if present)?	☐ Yes ☐ No ☐ Not Present	☐ Yes ☐ No ☐ Not Present	☐ Yes ☐ No ☐ Not Present	☐ Yes ☐ No ☐ Not Present	☐ Yes ☐ No ☐ Not Present	☐ Yes ☐ No ☐ Not Present
5. Flapper adjusted to shut off flow at 95% capacity?*	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
A "No" to any item in Lines 1-5 indicates a test failure.						
BALL FLOAT VALVE INSPECTION**						
1. Tank top fittings vapor- tight and leak-free?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
2. Ball float cage free of debris?		☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3. Ball free of holes and cracks and moves freely in cage?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
4. Vent hole in pipe open and near top of tank?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
5. Ball float pipe proper length to restrict flow at 90% capacity?***	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
A "No" to any item in Lines 1-5 indicates a test failure.						
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Comments:						

* Use manufacturer's suggested procedure for determining if automatic shutoff device will shut off flow at 95% capacity.
** If a ball float is found to fail the inspection, another method of overfill must be used.
*** Use manufacturer's suggested procedure for determining if flow restriction device will restrict flow at 90% capacity.

Tester's Name (print)_____ Tester's Signature _____

BALL FLOAT VALVE INSPECTION**	
1. Tank top fittings vapor- tight and leak-free?	☐ Yes ☐ No

Visually inspect all tank-top fittings to determine if they are vapor-tight.

Chapter 7: UST Overfill Equipment Verification, Inspection and Testing (High-Level Alarm)

- Measure and compare fuel level in tank with ATG reading
- Verify programming is set to alarm at no more than 90% tank capacity
- Verify the circuit is operational and activate the alarm

Chapter 7: UST Overfill Equipment Verification, Inspection and Testing (High-Level Alarm)

- Remove probe from tank, visually inspect and reconnect
- Set fuel float in middle of probe and measure
- Slide float up until alarm is triggered
- Measure to make sure alarm occurs at no higher than 90% tank capacity
- Pass = alarm activates at no more than 90% tank capacity

Chapter 7: UST Overfill equipment Verification, Inspection and Testing (High-Level Alarm)

APPENDIX C-6

OVERFILL ALARM OPERATION INSPECTION

Facility Name:		Owner:		
Address:		Address:		
City, State, Zip Code:		City, State, Zip Code:		
Facility I.D. #:		Phone #:		
Testing Company:		Phone #:	Date:	
This procedure is to determine whether the high level alarm is operational and will trigger when the tank is no more than 90% full. See PEI/RP1200 Section 7.3 for the inspection procedure. This procedure is applicable to tank level monitor stems that touch the bottom of the tank when in place.				
Tank Number				
Product Stored				
Tank Level Monitor Brand and Model				
1. Tank Volume, gallons				
2. Tank Diameter, inches				
3. Overfill alarm activates in the test mode at the console?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
4. When activated, overfill alarm can be heard or seen while delivering to the tank?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
5. After removing the probe from the tank, it has been inspected and any damaged or missing parts replaced?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
6. Float moves freely on the stem without binding?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
7. Moving product level float up the stem trigger alarm?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
8. Inch level from bottom of stem when 90% alarm is triggered.				
9. Tank volume at inch level in Line 8.				
10. Calculate (Line 9 / Line 1) x 100				
11. Is Line 10 less than 90%?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
12. Fuel float level on the console agrees with the gauge stick reading?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes No
13. Overfill alarm activates at any product level above 90% tank capacity?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If any answers in Lines 3, 4, 5, 6, 7 or 11 are "No," or Line 13 is "Yes," the system has failed the test.				
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Comments:				

Tester's Name (print)_____ Tester's Signature _____

4. When activated, overfill alarm can be heard or seen while delivering to the tank?	☐ Yes ☐ No

Chapter 8: Electronic Monitoring System Inspection and Testing (Probe & Console)

Probes & Console:

- When possible, print out and review the system setup on the ATG.
- Manually measure product and water levels in tanks and compare to console
- Remove & inspect probe

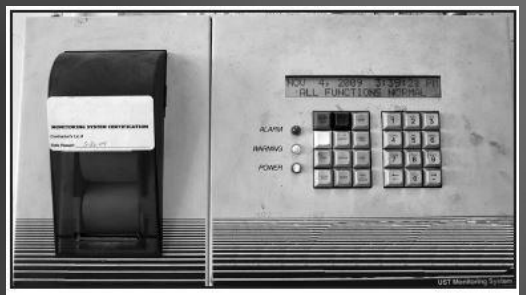


FIGURE 8-1. *The indicator lights and the LCD display on the monitoring console show the status of the UST system.*

Photo Courtesy of PEI

Chapter 8: Electronic Monitoring System Inspection and Testing (Probe & Console)

Probes & Console:

- Slide product float up and check high-product alarm functionality
- Slide water float up and check water alarm functionality
- Pass = all measurements agree with programming and console acknowledges product and water alarms

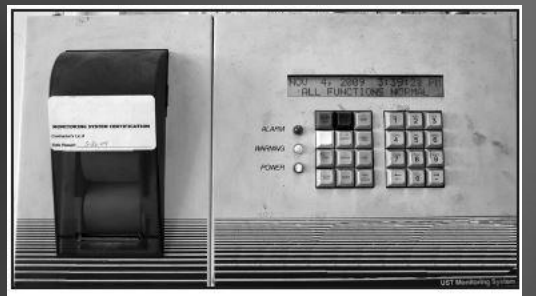


FIGURE 8-1. *The indicator lights and the LCD display on the monitoring console show the status of the UST system.*

Photo Courtesy of PEI

Chapter 8: Electronic Monitoring System Inspection and Testing

APPENDIX C-7

AUTOMATIC TANK GAUGE OPERATION INSPECTION

Facility Name:		Owner:		
Address:		Address:		
City, State, Zip Code:		City, State, Zip Code:		
Facility I.D. #:		Phone #:		
Testing Company:		Phone #:	Date:	
This procedure is to determine whether the automatic tank guage (ATG) is operating properly. See PEI/RP1200 Section 8.2 for the inspection procedure. This procedure is applicable to tank level monitor stems that touch the bottom of the tank when in place.				
Tank Number				
Product Stored				
ATG Brand and Model				
1. Tank Volume, gallons				
2. Tank Diameter, inches				
3. After removing the ATG from the tank, it has been inspected and any damaged or missing parts replaced?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
4. Float moves freely on the stem without binding?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
5. Fuel float level agrees with the value programmed into the console?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
6. Water float level agrees with the value programmed into the console?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
7. Inch level from bottom of stem when 90% alarm is triggered.				
8. Inch level at which the overfill alarm activates corresponds with value programmed in the gauge?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
9. Inch level from the bottom when the water float first triggers an alarm.				
10. Inch level at which the water float alarm activates corresponds with value programmed in the gauge?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If any answers in Lines 3, 4, 5, or 6 are "No," the system has failed the test.				
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Comments:				

Tester's Name (print) _____ Tester's Signature _____

Chapter 8: Electronic Monitoring System Inspection and Testing (Sensors)

Sensors:

- Fill test container with appropriate liquid
- Place sensor in liquid
- Verify alarm condition and sensor labeling on tank gauge
- Pass = sensor properly triggers alarm and is correctly identified on the console

FIGURE 8-1. *The indicator lights and the LCD display on the monitoring console show the status of the UST system.*

Photo Courtesy of PEI

Chapter 8: Electronic Monitoring System Inspection and Testing (Sensors)

Sensors:

NOTE: consult manufacturer's procedures for other types of sensors (optical, pressure/vacuum, electrical resistance, etc.). If manufacturer's procedures differ from RP 1200, use manufacturer's procedures.

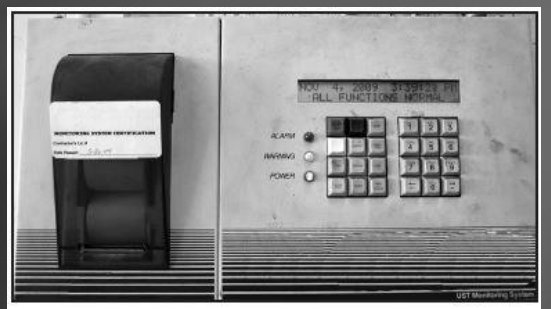


FIGURE 8-1. *The indicator lights and the LCD display on the monitoring console show the status of the UST system.*

Photo Courtesy of PEI

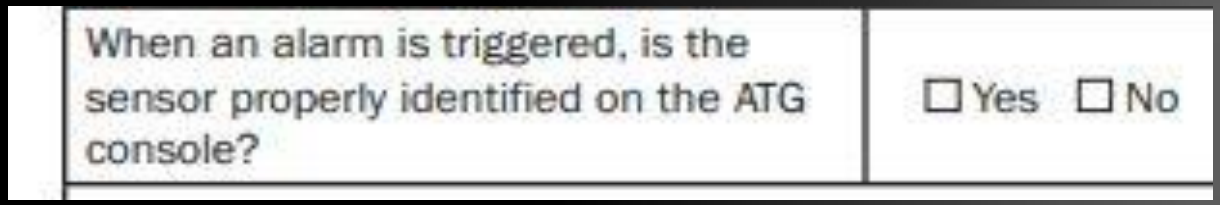
Chapter 8: Electronic Monitoring System Inspection and Testing

LIQUID SENSOR FUNCTIONALITY TESTING

APPENDIX C-8

Facility Name:			Owner:				
Address:			Address:				
City, State, Zip Code:			City, State, Zip Code:				
Facility I.D. #:			Phone #:				
Testing Company:			Phone #:		Date:		
This procedure is to determine whether liquid sensors located in the interstitial space of UST systems are able to detect the presence of water and fuel. See PEI/RP1200 Section 8.3 for the test procedure.							
Sensor Location							
Product Stored							
Type of Sensor	☐ Discriminating ☐ Non-discriminating	☐ Discriminating ☐ Non-discriminating	☐ Discriminating ☐ Non-discriminating	☐ Discriminating ☐ Non-discriminating	☐ Discriminating ☐ Non-discriminating	☐ Discriminating ☐ Non-discriminating	☐ Discriminating ☐ Non-discriminating
Test Liquid	☐ Water ☐ Product	☐ Water ☐ Product	☐ Water ☐ Product	☐ Water ☐ Product	☐ Water ☐ Product	☐ Water ☐ Product	☐ Water ☐ Product
Is the ATG console clear of any active or recurring warnings or alarms regarding the leak sensor? If the sensor is in alarm and functioning, indicate why.	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Is the sensor alarm circuit operational?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Has sensor been inspected and in good operating condition?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
When placed in the test liquid, does the sensor trigger an alarm?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
When an alarm is triggered, is the sensor properly identified on the ATG console?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Any "No" answers indicates the sensor fails the test.							
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Comments:							

Tester's Name (print)_____ Tester's Signature _____



Chapter 9: Automatic Line Leak Detector Testing (Mechanical)

- Bleed line pressure to zero psig, turn on pump and observe leak detector performance with no leak on line
- With pump on, calibrate 3 GPH @ 10 PSIG leak on the piping then turn pump off and drain all pressure

FIGURE 9-1. *The MLLD mounted on the submersible turbine pump will restrict flow when a leak is detected.*

Photo Courtesy of PEI

Chapter 9: Automatic Line Leak Detector Testing (Mechanical)

- Turn pump on with 3 GPH @ 10 PSIG leak induced on the piping and observe leak detector performance for a minimum of 60 seconds
- Pass = line pressure does not increase above "metering" pressure for at least 60 seconds

FIGURE 9-1. *The MLLD mounted on the submersible turbine pump will restrict flow when a leak is detected.*

Photo Courtesy of PEI

Chapter 9: Automatic Line Leak Detector Testing (Electronic)

- With pump on, calibrate 3 GPH @ 10 PSIG leak on the piping
- Leave calibrated leak open to test can and hang up nozzle to allow pump to turn off

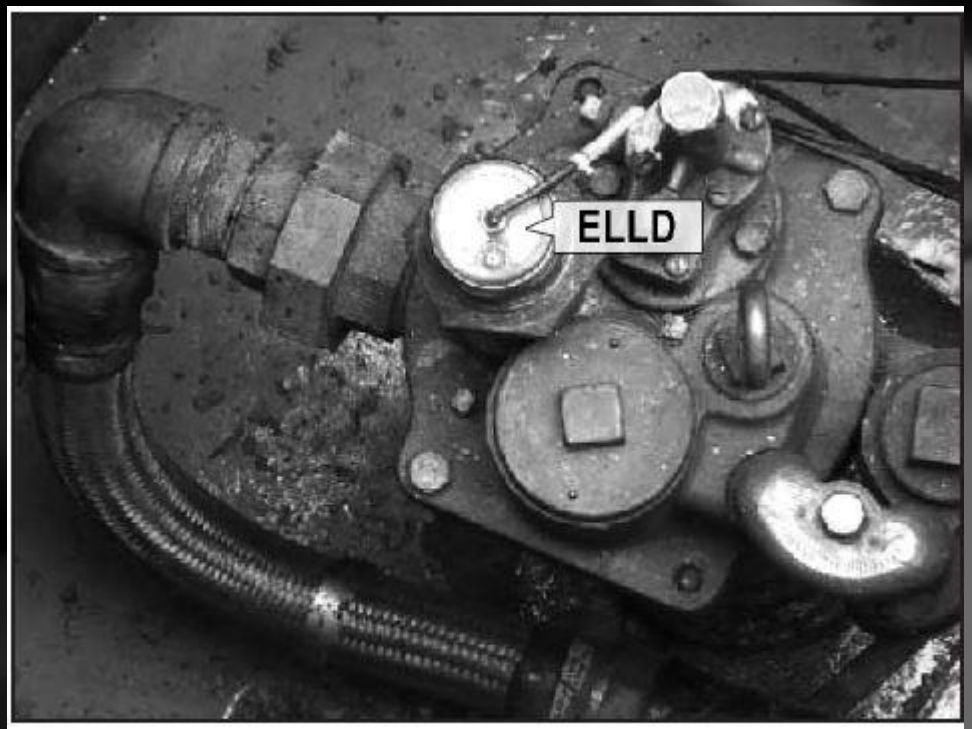


FIGURE 9-2. *The ELLD mounted in the submersible turbine pump will alarm on the console when a leak is detected.*

Photo Courtesy of PEI

Chapter 9: Automatic Line Leak Detector Testing (Electronic)

- Observe ELLD turn on pump and pressurize piping with leak on the piping (ELLD may cycle the pump several times)
- Pass = ELLD generates a 3 GPH leak alarm on console (required) and shuts down the STP (may be required – check with AHJ)

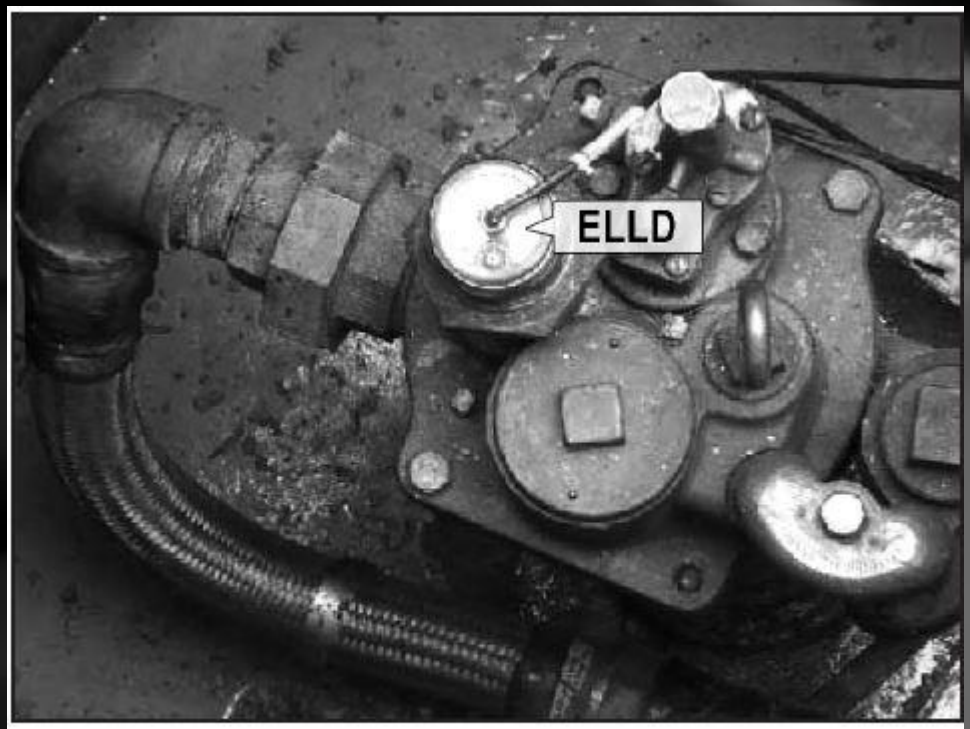


FIGURE 9-2. *The ELLD mounted in the submersible turbine pump will alarm on the console when a leak is detected.*

Photo Courtesy of PEI

Chapter 9: Automatic Line Leak Detector Testing

APPENDIX C-9

MECHANICAL AND ELECTRONIC LINE LEAK DETECTORS PERFORMANCE TESTS

Facility Name:			Owner:			
Address:			Address:			
City, State, Zip Code:			City, State, Zip Code:			
Facility I.D. #:			Phone #:			
Testing Company:			Phone #:		Date:	
This data sheet can be used to test mechanical line leak detectors (MLLD) and electronic line leak detectors (ELLD) with submersible turbine pump (STP) systems. See PEI/RP1200 Sections 9.1 and 9.2 for test procedures.						
Line Number						
Product Stored						
Leak Detector Manufacturer						
Leak Detector Model						
Type of Leak Detector	☐ MLLD ☐ ELLD	☐ MLLD ☐ ELLD	☐ MLLD ☐ ELLD	☐ MLLD ☐ ELLD	☐ MLLD ☐ ELLD	☐ MLLD ☐ ELLD
MLLD (ALL PRESSURE MEASUREMENTS ARE MADE IN PSIG)						
STP Full Operating Pressure						
Check Valve Holding Pressure						
Line Resiliency (ml) (line bleed back volume as measured from check valve holding pressure to 0 psig)						
Step Through Time in Seconds (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)						
Metering Pressure (STP pressure when simulated leak rate 3 gph at 10 psig)						
Opening Time in Seconds (the time the MLLD opens to allow full pressure after simulated leak is stopped)						
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	☐ 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	☐ 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	☐ Yes ☐ No
A "No" answer to either of the above questions indicates the MLLD fails the test.						
ELLD (ALL PRESSURE MEASUREMENTS ARE MADE IN PSIG)						
STP Full Operating Pressure						
How many test cycles are observed before alarm/shutdown occurs?						
Does the simulated leak cause an alarm?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
A "No" answer to the above question indicates the ELLD fails the test.						
Does the simulated leak cause an STP shutdown?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail
Comments:						

Tester's Name (print)_____ Tester's Signature _____

VERY IMPORTANT:

Does the STP properly cycle on/off under normal fuel system operation conditions?	☐ Yes ☐ No

Chapter 10: Shear Valve Inspection and Testing

- Visually inspect shear valve for proper installation, height, anchoring
- Trip shear valve and attempt to pump fuel through the nozzle
- Pass = valve is properly anchored, shear section + or – ½" from level of top surface of dispenser island, lever arm free to rotate, proper plug in test port (no test setups), no fuel flow through nozzle with valve in tripped position

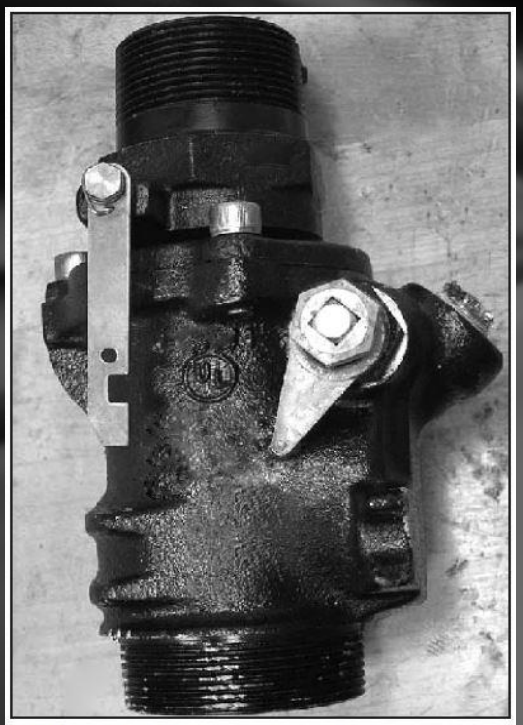


FIGURE 10-1. *When activated by fire or impact, the shear valve closes and blocks fuel flow from the dispenser supply lines. The shear valve shown is in the closed position.*

Photo Courtesy of PEI

Chapter 10: Shear Valve Inspection and Testing

NOTE: Shear valves may not be regulated by the UST agency but may be regulated by Fire Marshal or other AHJ

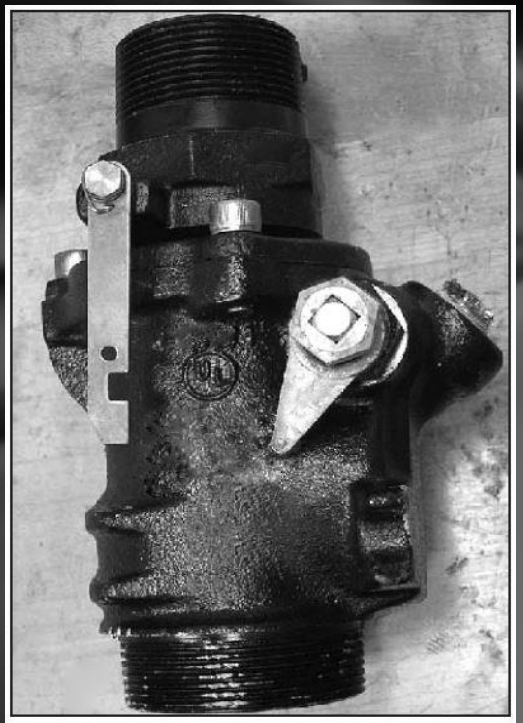


FIGURE 10-1. *When activated by fire or impact, the shear valve closes and blocks fuel flow from the dispenser supply lines. The shear valve shown is in the closed position.*

Photo Courtesy of PEI

Chapter 10: Shear Valve Inspection and Testing

SHEAR VALVE OPERATION INSPECTION

Facility Name:	Owner
Address:	Address
City, State, Zip Code:	City, State, Zip Code:
Facility I.D. #:	Phone #:
Testing Company:	Phone #:

This data sheet is for inspecting shear valves located inside dispensers. See PEI/RP1200 Section 10 for the inspection procedure.

Product Grade									
Dispenser ID#									
Shear ValveType (Product/Vapor)									
1. Is the shear 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	☐ Yes ☐ No	☐ Yes ☐ No
2. Is the shear section positioned between ½ inch above or below the top surface of the dispenser island?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3. Is the lever arm free to move?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
4. Does the lever arm snap shut the poppet valve?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
5. Can any product be dispensed when the product shear valve is closed?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
A "No" to Lines 1-4 or a "Yes" for Line 5 indicates a test failure.									
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail

Comments:

Tester's Name (print)_____ Tester's Signature _____

APPENDIX C-10

Chapter 11: Emergency Stop Testing

- Ensure system is fully powered and normally operating
- Press E-STOP switch (test all switches separately)
- Ensure power is disconnected from:
  - All dispensers
  - All STP's
  - All power, control & signal circuits associated with dispensers and STP's
  - All NON-INTRINSICSALLY SAFE electrical equipment
- Pass = Power has been disconnected to everything listed above

FIGURE 11-1. *The E-stop should be clearly labeled and located where it is easily accessible.*

Photo Courtesy of PEI

Chapter 11: Emergency Stop Testing

APPENDIX C-11

EMERGENCY STOP SWITCH OPERATION INSPECTION

Facility Name:	Owner:	
Address:	Address:	
City, State, Zip Code:	City, State, Zip Code:	
Facility I.D. #:	Phone #:	
Testing Company:	Phone #:	Date:

This procedure is to verify the operation of all emergency stop switches/buttons (E-stops). Each E-stop must disconnect power to dispensers, submersible turbine pumps (STPs) and all non-intrinsically safe electrical equipment in classified areas. Test each E-stop separately. See PEI/RP1200 Section 11 for the inspection procedure.

E-stop Number or ID						
Location						
1. E-stops labeled and located where easily accessible?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
2. System fully powered and in normal operating condition?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3. After activating E-stop, power disconnected from:						
3a. All dispensing devices on all islands?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3b. All STPs for all fuel grades?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3c. All power, control and signal circuits associated with the dispensing devices and the STPs?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
3d. All other non-intrinsically safe electrical equipment in classified areas surrounding fuel dispensing devices?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
4. All intrinsically safe electrical equipment remains energized after E-stop activation?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
5. After testing, E-stop has been reset and power reestablished to normal operating condition?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
A "No" to lines 3a-3d indicates a test failure.						
Test Results	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail	☐ Pass ☐ Fail

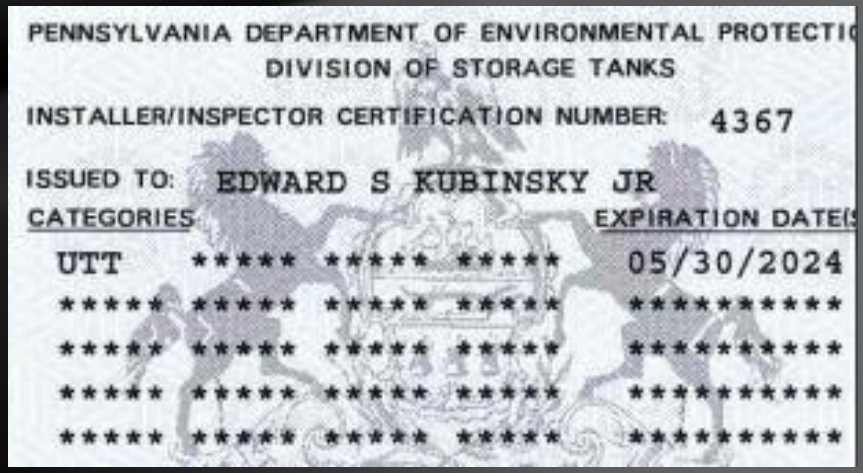
Comments:

Tester's Name (print) _____ Tester's Signature _____

State-Specific Required Paperwork

Keep in mind, that **many states** have developed their own state-specific paperwork to document RP 1200 testing. Be sure that if you are performing this type of work that:

- Technicians are properly licensed to do the work
- Technicians are aware of any state-required paperwork to document their work



2630-FM-BECB0028 3/2022

Form

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS

UNDERGROUND STORAGE TANK TESTING CERTIFICATION FORM

I. FACILITY INFORMATION – Type or print (in ink) all items.			Test Date
Facility ID #:	Facility Name:		
Facility Street Address:			
Facility Telephone:	County:	Municipality:	

II. TESTER INFORMATION		
Tester Name:	Tester Cert. #:	Tester Telephone: 610-278-7203
Company Name: Crompco, LLC	Company Cert. #: 124	Tester Email: @crompco.com

III. ATTACHED TESTING FORMS			
☐ All Passing	☐ Fail	Automatic Line Leak Detector Functionality Testing Form 2630-FM-BECB0021	☐ Not Applicable
☐ All Passing	☐ Fail	Automatic Tank Gauge Functionality Testing Form 2630-FM-BECB0015	☐ Not Applicable
☐ All Passing	☐ Fail	Sensor Functionality Testing Form 2630-FM-BECB0020	☐ Not Applicable
☐ All Passing	☐ Fail	Overfill Prevention Evaluation Form 2630-FM-BECB0018	☐ Not Applicable
☐ All Passing	☐ Fail	Spill Prevention Equipment/Containment Sump Integrity Testing Form 2630-FM-BECB0016	☐ Not Applicable
☐ All Passing	☐ Fail	Pressure/Vacuum Monitoring Functionality Testing Form 2630-FM-BECB0017	☐ Not Applicable
☐ All Passing	☐ Fail	Groundwater/Vapor Monitoring System Functionality Testing Form 2630-FM-BECB0019	☐ Not Applicable
Total Page Count – list the total count of pages for this testing package including the site drawing and cover page			

IV. SITE DRAWING ☑ Site Drawing Attached

Provide a detailed site drawing of the applicable UST(s), product piping, containment structures, and other layout details on 2630-FM-BECB0027. Clearly indicate all ancillary equipment which has been tested. Label each component with a unique number or code. Use that code to identify the component in the appropriate section on the appropriate testing form. Any other pertinent information should also be included.

V. OWNER'S REPRESENTATIVE CERTIFICATION

I have reviewed all attached reports. I certify under penalty of law as provided in 18 PA C.S.A. Section 4904(relating to unsworn falsification to authorities), that the information provided by me is true, accurate, and complete to the best of my knowledge and belief.

Signature: Date Signed:

☐ By selecting this box, I, the undersigned tester, am acknowledging the owners' representative certification is unable to be obtained within the 48-hour timeframe required for notification to the Pennsylvania Department of Environmental Protection of test failures. I have provided a copy of an email sent to the owner showing proof of notification of test failure.

VI. TESTER CERTIFICATION

By signing this document as the Tester, I certify under penalty of law as provided in 18 PA C.S.A. Section 4904(relating to unsworn falsification to authorities), that the information provided by me in all attached reports is true, accurate, and complete to the best of my knowledge and belief.

Signature: Date Signed:

GA EPD UST
LINE LEAK DETECTOR TEST FORM

Questions on how to complete this form should be directed to the USTMP (404) 362-2687

Facility Name:	Owner:
Address:	Address:
City, County, Zip:	City, State, Zip:
Facility I.D. #:	Phone #:
Tester Name:	Tester Company:
Tester Certification #:	Tester Phone #:

Instructions

1. Complete portion of form pertaining to type of equipment inspected for each tank.
2. Inspection must be performed in accordance with a nationally recognized code of practice (such as PEI RP-900, or equivalent), manufacturer's instructions, or GA EPD requirements.
3. Keep a record copy of this inspection for 3 years.

GA EPD Piping ID #					
Product Stored					
LLD Manufacturer					
LLD Model Number					
LLD Serial Number					
ATG Model					
Mechanical Leak Detector Test Data					
Full Pump Pressure (psi)					
Holding Pressure (psi)					
Metering Pressure (psi)					
Bleed Back (ml)					
Opening Time (seconds)					
Leak Test Pressure (psi)					
Leak Test Volume (ml)					
Test Leak Rate (gph)					
Electronic Leak Detector Test Data					
Location of Simulated 3 gph leak					
Number of Cycles Before Shutdown					
Test Leak Rate (gph)					
Positive Shutdown	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
Audible Alarm	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
Visual Alarm	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
Is alarm printout attached?	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no	☐ yes ☐ no
Inspector's Initials					
Date					
Test Results	☐ pass ☐ fail	☐ pass ☐ fail	☐ pass ☐ fail	☐ pass ☐ fail	☐ pass ☐ fail

I certify that testing was conducted in full compliance with legal requirements and the information in this report is true and accurate.

Tester Signature Date

Repairs Needed	Date of Repair	Description of any Repairs

Thank you!

Edward S. Kubinsky Jr.

Director of Regulatory Affairs, Training and Certification

CROMPCO, LLC / OWL

O: (610) 276-5914 C: (610) 633-9732

ed.kubinsky@crompco.com