



## STAGE 1 VAPOR RECOVERY TEST REPORT

Facility ID #:

Air Station ID #: \_\_\_\_\_

Test Date: :

Start Time:

### Station Information

Name of Facility:

### Owner Information

Name of Owner:

Address of Facility:

Address of Owner:

City:

City:

State: Georgia

State: \_\_\_\_\_

Zip Code:

Zip Code: \_\_\_\_\_

Testing Company:

Phone Number: \_\_\_\_\_

Testing Technician:

Technician's Phone Number:

### Type of Test:

Re-Certification       Retest after Repairs *(Please attach initial test with failing components)*

Initial Certification       Re-Certification After Major Construction

### Test Result

Pass

Fail

Date of Installation: \_\_\_\_\_

### Stage I Tank Pit

Please Check the System Installed:

VR - 101 Phil-Tite Phase 1

VR - 104 CNI Phase 1

VR - 102 OPW Phase 1

VR - 105 Emco Wheaton

VR - 103 EBW Phase 1

Other Approved System

Please include the Facility ID # or tank registration number on every page of this report.

## Tank Product and Size

Facility ID #: \_\_\_\_\_

### Type of Stage I System

EVR

Non-EVR:

Two-Point

Coaxial Poppetted

	Tank #1	Tank #2
Product in Each Tank		
Actual Capacity (gal.)		
Material (Steel or Fiber)		
Depth of Gas (in.)		
Amount of Gas (gal.)		
Product Dust Cap		
Vapor Dust Cap		
Length of Drop Tube (in.)		
ATG Dust Cap		
ATG Adaptor		
Other ATG Adaptor, if applicable		
Depth to Tank Bottom (in.)		
Type & Model of Drop Tube		

	Tank #3	Tank #4
Product in Each Tank		
Actual Capacity (gal.)		
Material (Steel or Fiber)		
Depth of Gas (in.)		
Amount of Gas (gal.)		
Product Dust Cap		
Vapor Dust Cap		
Length of Drop Tube (in.)		
ATG Dust Cap		
ATG Adaptor		
Other ATG Adaptor, if applicable		
Depth to Tank Bottom (in.)		
Type & Model of Drop Tube		

## Manufacturer Information

Facility ID #: \_\_\_\_\_

Total Tank Capacity (gal.):

Total Gasoline Volume (gal.):

Total Ullage Volume (gal.)

Are the tanks Manifolderd?  Yes  No

Location of Manifolder:  Above Ground  Below Ground  N/A

Number of P/V Vent Valves for Gasoline: \_\_\_\_\_

Height of Gasoline P/V Vent Valves: \_\_\_\_\_

### Manufacturer Model # (Non-EVR)

- OPW 523LP, 523LPS
- OPW 523 V
- Hazlett-PVB-1 Gold Label
- Husky 4620
- Husky 4885
- Morrison Brothers 749CRB0600 AV
- EBW Model 802-309, 802-308
- PW 623 V
- Any CARB-certified valve with the following Pressure and Vacuum settings:

**Vacuum:** 8.0" ± 2.0" WC

**Pressure:** 3.0" ± 0.5 " WC

Specify Valve Model: \_\_\_\_\_

### EVR

- Franklin PV-0
- Husky 5885
- OPW 723 V

### P/V setting:

\_\_\_\_\_

# Static Torque Test (TP 201.1B)

Facility ID #: \_\_\_\_\_

Check one of the following adaptors below:

**Vapor**

- OPW 61 VSA
- EBW SWV-101B
- Emco Wheaton A0076-124
- Phil-Tite SW-101
- Other \_\_\_\_\_

**Products**

- OPW 61 SALP
- EBW SMW - 100
- Emco Wheaton A0030 -124
- Phil Tite SW - 100
- Other \_\_\_\_\_

Does Dust Cap seal show excessive wear or damage?

Yes / No

Is the surface of the rotatable adaptor and dust cap dry, and free of lubricant?

Yes / No

**Measurement Units:**     Pound - Inches     Pound - feet

Vapor Adaptor 1	Vapor Adaptor 2	Vapor Adaptor 3	Vapor Adaptor 4
Brand:	Brand:	Brand:	Brand:
Model:	Model:	Model:	Model:
Grade:	Grade:	Grade:	Grade:
Torque 1:	Torque 1:	Torque 1:	Torque 1:
Torque 2:	Torque 2:	Torque 2:	Torque 2:
Torque 3:	Torque 3:	Torque 3:	Torque 3:
<b>Average:</b>	<b>Average:</b>	<b>Average:</b>	<b>Average:</b>
360 Rotation:	360 Rotation:	360 Rotation:	360 Rotation:
Product Adaptor 1	Product Adaptor 2	Product Adaptor 3	Product Adaptor 4
Brand:	Brand:	Brand:	Brand:
Model:	Model:	Model:	Model:
Grade:	Grade:	Grade:	Grade:
Torque 1:	Torque 1:	Torque 1:	Torque 1:
Torque 2:	Torque 2:	Torque 2:	Torque 2:
Torque 3:	Torque 3:	Torque 3:	Torque 3:
<b>Average:</b>	<b>Average:</b>	<b>Average:</b>	<b>Average:</b>
360 Rotation:	360 Rotation:	360 Rotation:	360 Rotation:

If average static torque less or equal to 108 lb-in (9 lb-ft)?

If Yes, Pass

If No, Fail

## Drop Tube-Drain Valve Assembly (TP 201.1C) / Overfill Protection and Spill Container Drain Valves (TP 201.1D)

Facility ID #: \_\_\_\_\_

### Test of Drop Tube/Drain Valve Assembly (TP 201.1C)

Device Type & Product Grade	Time to Pressurize	30 sec Flow Rate (CFH)	30 sec Pressure (inch WC)

*Verify that the liquid in the storage tanks is at least 4 inches above the highest opening at the bottom of the submerged drop tube.*

Does the pressure gauge indicate the 2 inches within 5 minutes? If no, replace or repair component. If yes, mark one of the following:

Pass if the flow rate is  $\leq 0.17$  CFH at  $2.0'' \pm 0.05''$  WC.

Fail if the flow rate  $> 0.17$  CFH and the measured pressure never reached 2" WC.

### Test of Leak Rate of Overfill Protection Devices and Drain Valves (TP 201.1D)

Device Type & Product Grade	Time to Pressurize	30 sec Flow Rate (CFH)	30 sec Pressure (inch WC)	Leak Rate for Overfill Device Only (CFH)

*Leak rate of overfill device (Q) = Q<sub>Drop tube Assembly</sub> - Q<sub>Drain Valve</sub>*

*1 ml/min = 0.00212 CFH\**

*\*If the flowmeter is in MM unit, use the test device flow chart.*

Does the pressure gauge indicate the 2 inches within 5 minutes? If no, replace or repair component. If yes, mark one of the following:

\_\_\_\_\_ Pass if the flow rate is  $\leq 0.17$  CFH at  $2.0'' \pm 0.05''$  WC.

Fail if the flow rate  $> 0.17$  CFH and the measured pressure never reached 2" WC.

To test the entire drop tube assembly

Pass if the flow rate is  $\leq 0.34$  CFH at  $2.0'' \pm 0.05''$  WC.

\_\_\_\_\_ Fail if the flow rate  $> 0.34$  CFH and the measured pressure never reached 2" WC

## Pressure Vacuum Valve Test (TP 201.1E)

Facility ID #: \_\_\_\_\_

Pressure / Vacuum Vent Valve Data Sheet TP 201.1E	
Facility Name:	Test Date:
Address:	Test Company:
City:	Technician:

P/V Valve Manufacturer	Model #:	PASS	FAIL
<b>Specified Positive Leak Rate:</b>	<b>Specified Negative Leak Rate:</b>		
Measured Positive Leak Rate (CFH):	Measured Negative Leak Rate (CFH):		
Positive Cracking Rate (inch WC):	Positive Leak Rate (inch WC):		

P/V Valve Manufacturer	Model #:	PASS	FAIL
<b>Specified Positive Leak Rate:</b>	<b>Specified Negative Leak Rate:</b>		
Measured Positive Leak Rate (CFH):	Measured Negative Leak Rate (CFH):		
Positive Cracking Rate (inch WC):	Positive Leak Rate (inch WC):		

P/V Valve Manufacturer	Model #:	PASS	FAIL
<b>Specified Positive Leak Rate:</b>	<b>Specified Negative Leak Rate:</b>		
Measured Positive Leak Rate (CFH):	Measured Negative Leak Rate (CFH):		
Positive Cracking Rate (inch WC):	Positive Leak Rate (inch WC):		

*Recall 1 ml/min = 0.00212 CFH*

### Please process and answer the following:

Pre-test Leak Check of Test Stand Result (prior to installing P/V vent valve):

Calibration date of the Flow Metering Device (every six months):

Calibration date of the Pressure Metering Device (every six months):

## Test Procedure

### For Positive Leak Rate:

1. Slowly open the control valve on the flow meter until the pressure stabilizes at  $2.0'' \pm 0.5''$  WC.
2. Start the stop watch and maintain steady state pressure by using the control valve for at least ten (10) seconds.
3. If the pressure gauge changes for not more than  $0.05''$  WC, then the flow is steady.
4. Record the final flow rate on the data sheet and close the control valve.

### For Positive Cracking pressure:

1. Open the bypass valve to route the flow outside of the test assembly.
2. Open the control Valve on the positive Flow Metering device to establish a flow rate of 120 ml/min.
3. Once flow is stabilized, close the bypass valve to route the flow into the test assembly.
4. Observe the pressure. The P/V valve should crack within  $2.5'' - 6.0''$  WC (this is marked by a sudden drop in pressure).
5. Record the cracking pressure (highest pressure achieved) on the data sheet and close the control valve.

### For Negative Leak Rate and Cracking Pressure:

For negative leakrate follow same steps, but instead use vacuum flow metering device and pressure should stabilize at  $- 4.0'' \pm 0.5''$  WC.

For negative cracking pressure, follow the same steps except use flow rate of 200 ml/min and P/V valve should crack within a negative pressure of  $6.0'' - 10''$  WC.

## Pressure Decay Test (TP 201.3)

Facility ID # :

Have dust caps been removed from the vapor recovery return and the fill tubes?

Yes  No

Check the point where nitrogen is introduced into the vapor recovery system.

Vent for Plus Tank  Vapor return poppet for: \_\_\_\_\_

Types of Vapor & Product Adaptor:

- Fix
- Non-Loosening or Over Tightening (Swivel)
- Locking Clamp
- CNI Part # 611DB4AC & 613BC
- OPW 633LC accommodate with OPW 633T

Allowable Final Pressure (inch WC): \_\_\_\_\_

Nitrogen Flow Rate into V R System (Cubic Feet per Minute (CFM): \_\_\_\_\_

### Initial Pressurization:

Length of time allowed for initial pressurization as determined by the equation: \_\_\_\_\_

$$\text{Time} = 2(U/(1522 * F))$$

Where U = Total Ullage of the system

F = The Nitrogen Flow Rate into the system in Cubic feet per minute (CFM)

Starting at 0" of pressure, the actual time taken to reach 2" WC is: \_\_\_\_\_

Are tanks pressurized to 2 inches?  Yes  No

	Minute 1	Minute 2	Minute 3	Minute 4	Minute 5
Pressure (inch WC)					
Time					

Pass  Fail

Did the vapor return poppet seat evenly with the adaptor after complete testing?

Yes  No

Note: If time to initially pressurize is greater than that allowed by the equation, make sure to list what repairs were necessary to allow the system to pass.

Date of repairs:

List of repairs made: