

**American Society of Sanitary Engineering  
Seal (Certification) Program**

**Laboratory Evaluation Report for:  
Laboratory Faucet Backflow Preventer**

**Tested under ASSE Standard 1035 • Revised: April, 2008**

**Laboratory File Number \_\_\_\_\_**

**Manufacturer** \_\_\_\_\_

**Model No.** \_\_\_\_\_

**Address** \_\_\_\_\_

**Serial No.** \_\_\_\_\_

**Other Identification Markings** \_\_\_\_\_

**Size** \_\_\_\_\_

General information and instructions for the testing engineer:

Within the text there may be items which are only advisory to conditions which experience indicates could be troublesome. It is not for evaluation related to acceptance of the product.

There may be other items for which the judgment of the test engineer will be involved. Should there be a question of compliance with that provision of the standard, a conference with the manufacturer should be arranged to enable a satisfactory solution of the question.

Should disagreement persist and compliance remain in question by the test agency, the agency shall, if the product is in compliance with all other requirements of the standard, file a complete report on the questionable items together with the test report, for evaluation by the ASSE Seal Control Board. The Seal Control Board will then review and rule on the question of compliance with the intent of the standard item involved.

Documentation of material compliance must be furnished by the manufacturer. He shall furnish to the testing agency, a bill of material which clearly identifies the material of each part included in the product construction. This identification must include any standards which relate thereto.

Product Name \_\_\_\_\_

Model Number \_\_\_\_\_ Size(s) \_\_\_\_\_

Date Submitted for Review \_\_\_\_\_ Date Review Complete \_\_\_\_\_

Were the test units production models  Yes  No

Or prototypes?  Yes  No

## Section I

### 1.0 General

1.1 Application. Is the purpose of the device, as stated by the manufacturer, as stated in this section?  Yes

No

Questionable

If questionable, explain: \_\_\_\_\_

1.2.1 Description. Does the device conform to the product classified as Backflow Preventers for installation on laboratory faucet?  Yes

No

Questionable

If questionable, explain: \_\_\_\_\_

1.2.2 Working Pressure: What is the maximum working pressure as noted by the manufacturer? \_\_\_\_\_ psi (\_\_\_\_\_ kPa)

In compliance?

Yes

No

1.2.3 Temperature Range.

What is the temperature range as noted by the manufacturer? \_\_\_\_\_ °F to \_\_\_\_\_ °F  
(\_\_\_\_\_ °C to \_\_\_\_\_ °C)

1.2.6 Flow Way Open Area.

Were the flow way cross-sectional areas verified by the testing agency?

Yes

No

Were the minimum cross-sectional dimensions of the airport or flow way greater than 3/32 inches (2.4 mm)?

Yes

No

In compliance?

Yes

No

- 1.2.7 Atmospheric Vent. In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

- 1.2.8 Repairability. Is the device repairable?  Yes  
 No

Are internal parts accessible for inspecting, repairing or replacing?

- Yes  
 No

## Section II

### 2.0 Test Specimens

- 2.1 How many devices of each size and model were submitted by the manufacturer to the testing agency? \_\_\_\_\_
- 2.2 How many units were utilized during the laboratory evaluation? \_\_\_\_\_
- 2.3 Drawings. Were assembly drawings and other technical data provided?  Yes  No
- Were these reviewed by the testing agency?  Yes  No

## Section III

### 3.0 Performance Requirements and Compliance Testing

#### 3.1 Hydrostatic Testing of Complete Device

What was the supply pressure used for this test? \_\_\_\_\_ psi (\_\_\_\_\_ kPa)

The test period was for \_\_\_\_\_ minutes.

In compliance?

- Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

#### 3.2 Deterioration at Extremes of Manufacturer's Rated Temperature and Pressure Range

What was the supply pressure used for this test? \_\_\_\_\_ psi (\_\_\_\_\_ kPa)

What was the temperature of the hot water used for this test? \_\_\_\_\_ °F (\_\_\_\_\_ °C)

What was the flow rate? \_\_\_\_\_ GPM (\_\_\_\_\_ L/m)

Test period was for \_\_\_\_\_ hours/day for \_\_\_\_\_ days.

Was cold water between 33.0°F and 40.0°F (0.6°C and 4.4°C) run through the device at the manufacturer's maximum rated pressure for one (1) hour following the 80 hour test?

- Yes  
 No

Were there any observable changes in the physical characteristics of the device in which would prevent full compliance with the remaining tests of this standard?

- Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

### 3.3 Back Pressure of Downstream Check

Was the inlet check held open and the air vent sealed closed?  Yes  
 No

What was the initial height of water in the sight glass? \_\_\_\_\_ inches (\_\_\_\_\_ mm)

What was the backpressure used for this test? \_\_\_\_\_ psi (\_\_\_\_\_ kPa)

The test period was for \_\_\_\_\_ minutes.

Were there any leaks in the downstream check as indicated by a rise in the water level of the sight glass?

- Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

### 3.4 Tightness of Checks

On testing the upstream check, what was the initial height of water in the sight glass column? \_\_\_\_\_ inches (\_\_\_\_\_ mm)

Was the pressure on the downstream side atmospheric?  Yes  
 No

The test period was for \_\_\_\_\_ minutes.

What was the final sight glass reading? \_\_\_\_\_ inches (\_\_\_\_\_ mm)

On testing the downstream check, what was the initial height of water in the sight glass column? \_\_\_\_\_ inches (\_\_\_\_\_ mm)

Was the pressure on the downstream side atmospheric?  Yes  
 No

The test period was for \_\_\_\_\_ minutes.

What was the final sight glass reading? \_\_\_\_\_ inches (\_\_\_\_\_ mm)

In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

**3.5 Atmospheric Vent Valve Leakage**

At 10.0 psi (68.9 kPa), was there any leakage from the vent port when the inlet valve was opened either slowly or rapidly?

Yes

No

At the manufacturer's maximum rated pressure was there any leakage from the vent port when the inlet valve was opened either slowly or rapidly?

Yes

No

In Compliance?

Yes

No

Questionable

If questionable, explain: \_\_\_\_\_

**3.6 Backflow Through the Inlet Check**

Was the outlet check valve held open and the vent and drain outlet sealed closed?

Yes

No

What was the pressure applied to the outlet of the device? \_\_\_\_\_ inches of water column (\_\_\_\_\_ mm)

The test period was for \_\_\_\_\_ minutes.

Was there any leakage through the inlet check?

Yes

No

At a pressure of 4 psi (27.6 kPa) applied to the outlet of the device was there any leakage through the inlet check?

Yes

No

In compliance?

Yes

No

Questionable

If questionable, explain: \_\_\_\_\_

**3.7 Backflow Through Outlet Check**

Was the inlet check valve held open and the vent and drain outlet sealed closed?

Yes

No

When a pressure of 6.0 inches (152.4 mm) water column was applied to the outlet of the device, was there any leakage through the outlet check?

Yes

No

The test period was for \_\_\_\_\_ minutes.

At a pressure of 4.0 psi (27.6 kPa) applied to the outlet of the device, was there any leakage through the outlet check?

Yes

No

The test period was for \_\_\_\_\_ minutes.

In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

**3.8 Back Siphonage**

Was the inlet check valve fouled with a 0.032 inch (0.8 mm) fouling wire and the outlet check valve held open?  Yes  
 No

Were vacuums applied to the device per a and b respectively?  Yes  
 No

The test period for each vacuum test was \_\_\_\_\_ minutes.

Was there a rise in the sight glass for any of these vacuum tests?  Yes  
 No

In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

**3.9 Back Siphonage Back Pressure T**

When the inlet check valve was fouled and a 4.0 psi (27.6 kPa) back pressure applied, were vacuums applied to the device per a and b respectively?  Yes  
 No

When the outlet check valve was fouled and a 4.0 psi (27.6 kPa) backpressure applied, were vacuums applied to the device per a and b respectively?  Yes  
 No

Was there indication of flow of colored water into the inlet piping during either test?  Yes  
 No

In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

**3.10 Flow and Pressure Loss**

What was the supply pressure used for this test? \_\_\_\_\_ psi  
(\_\_\_\_\_ kPa)

At a flow rate of 4.0 GPM (15.0 L/min) what was the pressure loss across the device? \_\_\_\_\_ psi (\_\_\_\_\_ kPa)

In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

## Section IV

### 4.0 Detailed Requirements

- 4.1.1 Allowable Materials. In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

- 4.1.2.1 Contaminated Materials. In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

- 4.1.2.2 Compliance and Certification. In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

- 4.1.3 Corrosion Resistance of Interior Parts. In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

- 4.1.4 Springs. In compliance?  Yes  
 No  
 Questionable

If questionable, explain: \_\_\_\_\_

- 4.1.5 Diaphragms. In compliance?  Yes  
 No

Questionable

If questionable, explain: \_\_\_\_\_

4.1.6 Metal to Metal. In compliance?

Yes

No

Questionable

If questionable, explain: \_\_\_\_\_

Indicate material metal seat and valve disc. \_\_\_\_\_

4.1.7.1 Taper Pipe Threads. In compliance?

Yes

No

Questionable

If questionable, explain: \_\_\_\_\_

4.1.7.2 Dryseal. In compliance?

Yes

No

Questionable

If questionable, explain: \_\_\_\_\_

4.2.1 Identify the markings found on the test unit:

a) \_\_\_\_\_

b) \_\_\_\_\_

c) \_\_\_\_\_

d) \_\_\_\_\_

e) \_\_\_\_\_

Would these markings be visible in the installed position?

Yes

No

4.2.1.2 Describe how these markings were applied to the device: \_\_\_\_\_

4.3.1 Were instructions for installation submitted with the device?

Yes

No

Were maintenance and repair instructions furnished by the manufacturer?

Yes

No

Was the device in full compliance with all sections of this standard?

Yes

No



TESTING AGENCY \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

TEST ENGINEER(S) \_\_\_\_\_

We certify that the evaluations are based on our best judgments and that the test data recorded is an accurate record of the performance of the device on test.

Signature of the official of the agency:

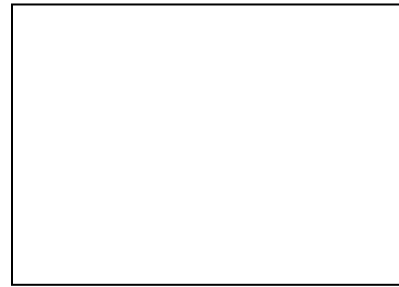
\_\_\_\_\_

Title of the official: \_\_\_\_\_ Date: \_\_\_\_\_

Signature and seal of the Registered Professional Engineer  
supervising the laboratory evaluation:

\_\_\_\_\_

Signature



Seal