ASSE International

PRODUCT (SEAL) LISTING PROGRAM

ASSE 1048-2021

Double Check Detector Backflow Prevention Assemblies

Separate, complete laboratory evaluation report forms for each alternate orientation must be submitted to ASSE for review.

Manufacturer: _____

Contact Person: _____ **E-mail:** _____

Address: _____

Laboratory: _____ **Laboratory File Number:** _____

Model # Tested: _____

Model Size: _____

Additional models report applies to: _____

Additional Model Information (i.e. orientation, series, end connections, shut-off valves)

_____

Date models received by laboratory: _____ **Date testing began:** _____

Date testing was completed _____

If models were damaged during shipment, describe damages:

_____

Prototype or production sample? _____

Were all tests performed at the selected laboratory? ❍ **Yes** ❍ **No**

If offsite, identify location: _____

General information and instructions for the testing engineer:

The results within this report apply only to the models listed above.

There may be 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 then involved.

Documentation of material compliance must be furnished by the manufacturer. The manufacturer 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.

SECTION 1

1.0 General

1.1 Does the purpose of this device agree with that of the standard? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

1.2.1 Description

Does the device conform to the product described in the standard? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

1.2.2 Size _____ inches (_____ mm)

Is the pipe size in accordance with Table 1? ○ Yes _____ ○ No ○ Questionable

If questionable, explain: _____

1.2.3 Rated Pressure

What is the maximum working pressure as noted by the manufacturer?

_____ psi (_____ kPa)

minimum of 175 psi (1206.6 kPa)

1.2.4 Temperature range as noted by the manufacturer:

Assemblies for cold water applications

_____ °F to _____ °F (_____ °C to _____ °C)

Assemblies for hot water applications

_____ °F to _____ °F (_____ °C to _____ °C)

1.3.2.1 Were female pipe threaded connections so constructed that it would not be possible to run a pipe into them far enough to restrict the flow through the assembly or interfere with working parts? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

1.3.2.2 Is the assembly repairable and seats replaceable without removing the assembly from the line? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

1.3.2.3 Was the assembly delivered with the shut-off valves attached? ○ Yes ○ No

1.3.2.4 Were test cocks properly located? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

1.3.2.5 List the inlet and outlet thread size(s) for the test cocks.

Inlet thread size: _____ inches (_____ mm)

Outlet thread size: _____ inches (_____ mm)

Do these sizes meet the minimum per Table 2? ○ Yes _____ ○ No ○ Questionable

If questionable, explain: _____

1.3.2.6 State the manufacturer size and model number of all shut-off valves tested with the device:

_____

1.3.3 Does the DCDA Bypass line include a water meter or alarm signaling device or both, and a listed ASSE 1015 DC Assembly? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

Does the DCDA-II Bypass line include a water meter or alarm signaling device or both, a check and two (2) test cocks located between two (2) shut-off valves?? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

State the manufacturer's size and model numbers of all meters used:

_____

SECTION II

2.0 Test Specimens

State the quantity of units provided for the evaluation of the orientation requested. _____

How many units were utilized during the laboratory evaluation? _____

Drawings

Were assembly drawings, installation drawings and other technical data which are needed to enable a testing agency to determine compliance with this standard submitted with the assembly? ○ Yes ○ No

Were these drawings reviewed in the laboratory? ○ Yes ○ No

Alternate Orientation:

Has an alternate orientation, other than that marked on page 1 of this laboratory evaluation report form been requested? ○ Yes ○ No

If yes, were the required additional samples submitted per Section 2.1? ○ Yes ○ No

NOTE: Separate, complete laboratory evaluation report forms must be submitted for each alternate orientation. The correct number of devices specified in the standard for each intended orientation must be submitted to the testing facility for evaluation to this standard.

SECTION III

3.0 Performance Requirements and Compliance Testing

3.1 Independence of Components

How was the independence of components verified? ○ Drawing Review ○ Physical cycling of components ○ Other_____

In Compliance? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

3.2 Hydrostatic Test of Complete Device

What is the maximum working pressure from section 1.2.3? _____

The assembly was pressurized to: _____ psi (_____ kPa)

The test period was for:_____ minutes

Were there any external leaks from the assembly? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

3.3 Seat Leakage Test for Shut-Off Valves

Was the check valve removed? ○ Yes ○ No

What was the pressure applied to the inlet side of the #1 shut-off valve?

_____ psi (_____ kPa)

How long was the pressure held?_____ minutes

What was the pressure applied to the outlet side of the #1 shut-off valve?

_____ psi (_____ kPa)

How long was the pressure held?_____ minutes

Did you observe leakage into the assembly from the #1 shut-off valve sealing member?

○ Yes ○ No

What was the pressure applied to the inlet side of the #2 shut-off valve?

_____ psi (_____ kPa)

How long was the pressure held?_____ minutes

What was the pressure applied to the outlet side of the #2 shut-off valve?

_____ psi (_____ kPa)

How long was the pressure held?_____ minutes

Did you observe leakage into the assembly from the #2 shut-off valve sealing member?

○ Yes ○ No

3.4 Hydrostatic Backpressure Test of Bypass Check (For DCDA-II only)
(for assemblies with a bypass check around the 2nd check only)

What was the backpressure applied to the bypass check: _____ psi (_____ kPa)

The test period was for _____ minutes

Were there any leaks or indications of damage to the assemly?

○ Yes ○ No ○ Questionable

If questionable, explain: _____

3.5 Hydrostatic Backpressure Test of Checks

What was the pressure applied to the downstream side of the first check valve?

_____ psi (_____ kPa)

What was the pressure on the upstream side? _____ psi (_____ kPa)

The test period was for _____ minutes

What was the initial height of water in the sight glass in test cock #2?

_____ inches (_____ mm)

What was the final height of water in the sight glass in test cock #2?

_____ inches (_____ mm)

What was the pressure applied to the downstream side of the second check valve?

_____ psi (_____ kPa)

What was the pressure on the upstream side? _____ psi (_____ kPa)

The test period was for _____ minutes

What was the initial height of water in the sight glass in test cock #3?

_____ inches (_____ mm)

What was the final height of water in the sight glass in test cock #3?
_____ inches (_____ mm)

3.6 Allowable Pressure Loss For DC Assemblies

Was the assembly installed per Figure 1? ○ Yes ○ No
If no, explain:_____

What was the rated water flow for the assembly per Table 1? _____ GPM (_____L/s)
What was the supply pressure used for this test? _____ psi (_____kPa)
What pressure loss through the piping system (if any) was deducted?
_____ psi (_____kPa)

3.7 Bypass Flow Detection

When V2 was opened and the flow regulated, record the flow on flow meter 1.
Was a measuring tank used? ○ Yes ○ No
If yes, record the flow:

Regulated flow rate (GPM) as indicated on water meter	Flow rate – flow meter 1		Flow rate – using measuring tank	
	GPM	L/s	GPM	L/s
0.5	_____	_____	_____	_____
1.0	_____	_____	_____	_____
1.5	_____	_____	_____	_____
2.0	_____	_____	_____	_____
2.5	_____	_____	_____	_____
3.0	_____	_____	_____	_____
3.5	_____	_____	_____	_____
4.0	_____	_____	_____	_____
4.5	_____	_____	_____	_____
5.0	_____	_____	_____	_____

At what GPM (L/s) did the reading on the flow meter/collection tank exceed the reading on the meter in the bypass line? _____ GPM (_____L/s)

Did the water meter or alarm device indicate flow at or before 2.0 GPM (0.13 L/s)?
○ Yes ○ No ○ Questionable
If questionable, explain: _____

○ Yes ○ No

3.8 Drip Tightness of First Check

What was the initial height of water in the sight glass at test cock #2: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #2 and #3? _____ inches (_____ mm)

3.9 Drip Tightness of the Second Check

What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #4: _____ inches (_____ mm)

What was the final height difference in the water levels between the sight glasses at test cocks #3 and #4? _____ inches (_____ mm)

3.10 Drip Tightness of Bypass Check (For DCDA-II Assemblies)

What was the initial height difference between the two sight glasses: _____ inches (_____ mm)
What was the final height difference between the two sight glasses: _____ inches (_____ mm)

The test period was for _____ minutes?

3.11 Deterioration at Manufacturer's Extremes of Temperature and Pressure Ranges

Temperature range as noted by the manufacturer:
_____ °F to _____ °F (_____ °C to _____ °C)
Maximum rated pressure as noted by the manufacturer: _____ psi (_____ kPa)

Water at: _____°F (_____ °C)
was circulated through the assembly at: _____ psi (_____ kPa)
at a flow rate of: _____ GPM (_____L/s)
Start date and time _____
End date and time _____
for:_____ hours

While still at temperature, the assembly shall be retested to Sections 3.8, 3.9, and 3.10 (For DCDA-II only):

Retest Section 3.8

What was the initial height of water in the sight glass at test cock #2: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #2 and #3? _____ inches (_____ mm)

Retest Section 3.9

What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #4: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #3 and #4? _____ inches (_____ mm)

Retest Section 3.10

What was the initial height difference between the two sight glasses: _____ inches (_____ mm)
What was the final height difference between the two sight glasses: _____ inches (_____ mm)

The test period was for _____ minutes?

3.11 continued

Upon completion of the 100 hours and the retesting of Sections 3.8 and 3.9, water at:
_____ °F (_____ °C) was circulated through the assembly.

Once the assembly reaches ambient temperature, the assembly shall be retested to Sections 3.2, 3.5 and 3.4 (DCDA-II only) as shown below:

Retest Section 3.2

What is the maximum working pressure from section 1.2.3? _____
The assembly was pressurized to: _____ psi (_____ kPa)
The test period was for:_____ minutes

Were there any external leaks from the assembly? ○ Yes ○ No ○ Questionable
If questionable, explain: _____

Retest Section 3.5

What was the pressure applied to the downstream side of the first check valve?
_____ psi (_____ kPa)
What was the pressure on the upstream side? _____ psi (_____ kPa)
The test period was for _____ minutes

What was the initial height of water in the sight glass in test cock #2?
_____ inches (_____ mm)
What was the final height of water in the sight glass in test cock #2?
_____ inches (_____ mm)

What was the pressure applied to the downstream side of the second check valve?
_____ psi (_____ kPa)
What was the pressure on the upstream side? _____ psi (_____ kPa)
The test period was for _____ minutes

What was the initial height of water in the sight glass in test cock #3?
_____ inches (_____ mm)
What was the final height of water in the sight glass in test cock #3?
_____ inches (_____ mm)

Retest Section 3.4

What was the backpressure applied to the bypass check: _____ psi (_____ kPa)
The test period was for _____ minutes
Were there any leaks or indications of damage to the assemly?
○ Yes ○ No ○ Questionable
If questionable, explain: _____

3.11 continued

Upon completion of testing at ambient water temperature,
water at: _____°F (_____ °C)
was circulated through the assembly for: _____ hours
and then the assembly was retested to Sections 3.8, 3.9, and 3.10 (For DCDA-II only):

Retest Section 3.8

What was the initial height of water in the sight glass at test cock #2: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #2 and #3? _____ inches (_____ mm)

Retest Section 3.9

What was the initial height of water in the sight glass at test cock #3: _____ inches(_____ mm)
What was the initial height of water in the sight glass at test cock #4: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #3 and #4? _____ inches (_____ mm)

Retest Section 3.10

What was the initial height difference between the two sight glasses: _____ inches (_____ mm)
What was the final height difference between the two sight glasses: _____ inches (_____ mm)

The test period was for _____ minutes?

3.11 continued

Was the assembly on test in complete compliance with the criteria of Section 3.11?

○ Yes ○ No

3.12 Cycle Test

(1) Flow water at 25% of the rated flow (see Table 1)
What was the flow rate? _____ GPM (_____L/s)
What was the supply pressure? _____ psi (_____ kPa)
The test period was for _____seconds

(2) What was the static pressure? _____ psi (_____ kPa)
The test period was for _____seconds

(3) The pressure was decreased to: _____ psi (_____ kPa)
The test period was for _____seconds

(4) Backpressure was increased to: _____ psi (_____ kPa)
The test period was for _____seconds

(5) Remove backpressure
What was the supply pressure? _____ psi (_____ kPa)

(6) Steps (1) through (5) were repeated for _____cycles.

(7) Retest assembly to Sections 3.8, 3.9, and 3.10 (For DCDA-II only):

Retest Section 3.8

What was the initial height of water in the sight glass at test cock #2: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #2 and #3? _____ inches (_____ mm)

Retest Section 3.9

What was the initial height of water in the sight glass at test cock #3: _____ inches(____ mm)
What was the initial height of water in the sight glass at test cock #4: _____ inches (_____ mm)
The test period was for:_____ minutes.
What was the final height difference in the water levels between the sight glasses at test cocks #3 and #4? _____ inches (_____ mm)

Retest Section 3.10

What was the initial height difference between the two sight glasses: _____ inches (_____ mm)
What was the final height difference between the two sight glasses: _____ inches (_____ mm)

The test period was for _____ minutes?

3.12 continued

(8) Flow water at 50% of the rated flow (see Table 1)
What was the flow rate? _____ GPM (_____L/s)
What was the supply pressure? _____ psi (_____ kPa)
The test period was for _____seconds

What was the static pressure? _____ psi (_____ kPa)
The test period was for _____seconds

The pressure was decreased to: _____ psi (_____ kPa)
The test period was for _____ seconds

Backpressure was increased to: _____ psi (_____ kPa)
The test period was for _____ seconds

Remove backpressure
What was the supply pressure? _____ psi (_____ kPa)

Steps (1) through (5) were repeated for _____ cycles.

(9) Retest assembly to Sections 3.8, 3.9, and 3.10 (For DCDA-II only):

Retest Section 3.8

What was the initial height of water in the sight glass at test cock #2: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #2 and #3? _____ inches (_____ mm)

Retest Section 3.9

What was the initial height of water in the sight glass at test cock #3: _____ inches(____ mm)
What was the initial height of water in the sight glass at test cock #4: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #3 and #4? _____ inches (_____ mm)

Retest Section 3.10

What was the initial height difference between the two sight glasses: _____ inches (_____ mm)
What was the final height difference between the two sight glasses: _____ inches (_____ mm)

The test period was for _____ minutes?

3.12 continued

(10) A back pressure of: _____ psi (_____ kPa)
was applied for: _____ minutes
Record the leakage at test cock #3: _____ GPM (_____L/s)

(11) A back pressure of: _____ psi (_____ kPa)
was applied for: _____ minutes
Record the leakage at test cock #3: _____ GPM (_____L/s)

(12) A back pressure of: _____ psi (_____ kPa)
was applied for: _____ minutes at test cock #3
Record the leakage at test cock #2: _____ GPM (_____L/s)

(13) The backpressure at test cock #3 was raised to: _____ psi (_____ kPa)
for: _____ minutes
Record the leakage at test cock #2: _____ GPM (_____L/s)

(14) Flow water at 75% of the rated flow (see Table 1)
What was the flow rate? _____ GPM (_____L/s)
What was the supply pressure? _____ psi (_____ kPa)
The test period was for _____ seconds

What was the static pressure? _____ psi (_____ kPa)
The test period was for _____ seconds

The pressure was decreased to: _____ psi (_____ kPa)
The test period was for _____ seconds

Backpressure was increased to: _____ psi (_____ kPa)
The test period was for _____ seconds

Remove backpressure
What was the supply pressure? _____ psi (_____ kPa)

Steps (1) through (5) were repeated for _____ cycles.

(15) Retest assembly to Sections 3.8, 3.9, and 3.10 (For DCDA-II only):

Retest Section 3.8

What was the initial height of water in the sight glass at test cock #2: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #2 and #3? _____ inches (_____ mm)

Retest Section 3.9

What was the initial height of water in the sight glass at test cock #3: _____ inches(____ mm)
What was the initial height of water in the sight glass at test cock #4: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #3 and #4? _____ inches (_____ mm)

Retest Section 3.10

What was the initial height difference between the two sight glasses: _____ inches (_____ mm)
What was the final height difference between the two sight glasses: _____ inches (_____ mm)

The test period was for _____ minutes?

3.12 continued

(16) Flow water at 100% of the rated flow (see Table 1)
What was the flow rate? _____ GPM (_____L/s)
What was the supply pressure? _____ psi (_____ kPa)
The test period was for _____ seconds

What was the static pressure? _____ psi (_____ kPa)
The test period was for _____ seconds

The pressure was decreased to: _____ psi (_____ kPa)
The test period was for _____ seconds

Backpressure was increased to: _____ psi (_____ kPa)
The test period was for _____ seconds

Remove backpressure
What was the supply pressure? _____ psi (_____ kPa)

Steps (1) through (5) were repeated for _____ cycles.

(17) Retest assembly to Sections 3.8, 3.9, and 3.10 (For DCDA-II only):

Retest Section 3.8

What was the initial height of water in the sight glass at test cock #2: _____ inches (_____ mm)
What was the initial height of water in the sight glass at test cock #3: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #2 and #3? _____ inches (_____ mm)

Retest Section 3.9

What was the initial height of water in the sight glass at test cock #3: _____ inches(____ mm)
What was the initial height of water in the sight glass at test cock #4: _____ inches (_____ mm)
What was the final height difference in the water levels between the sight glasses at test cocks #3 and #4? _____ inches (_____ mm)

Retest Section 3.10

What was the initial height difference between the two sight glasses: _____ inches (_____ mm)
What was the final height difference between the two sight glasses: _____ inches (_____ mm)

The test period was for _____ minutes?

3.12 continued

(18) A back pressure of: _____ psi (_____ kPa)
was applied for: _____ minutes
Record the leakage at test cock #3: _____ GPM (_____L/s)

(19) A back pressure of: _____ psi (_____ kPa)
was applied for: _____ minutes
Record the leakage at test cock #3: _____ GPM (_____L/s)

(20) A back pressure of: _____ psi (_____ kPa)
was applied for: _____ minutes at test cock #3
Record the leakage at test cock #2: _____ GPM (_____L/s)

(21) The backpressure at test cock #3 was raised to: _____ psi (_____ kPa)
for: _____ minutes
Record the leakage at test cock #2: _____ GPM (_____L/s)

3.12 continued

Was the USC Life Cycle test protocol used? ○ Yes ○ No
If yes, attach these test results.

Was the assembly on test in complete compliance with the criteria for DC or with the USC Test Protocol?
○ Yes ○ No
○ Yes ○ No

3.13 Body Strength Test

What was the pressure used for this test? _____ psi (_____ kPa)
The pressure was held for _____ minutes

Was there any structural failure that would cause leakage? ○ Yes ○ No ○ Questionable
If questionable, explain: _____

3.14 Seat Adhesion Test

Did the adhesion test meet all of the requirements of Section 18 of the UL Standard 312?
○ Yes ○ No ○ Questionable

If questionable, explain: _____

Attach those test results.

3.15 High Velocity Test

What was the flow velocity used for this test? _____ ft/sec (_____ m/sec)

This velocity was maintained for _____ minutes

Was there any damage or permanent deformation to any of the internal components of the assembly? ○ Yes ○ No

Did any portion of the assembly become dislodged or restrict flow during this velocity test? ○ Yes ○ No

Was the assembly (or assemblies) used for testing of Sections 3.1 through 3.22 in complete compliance with the criteria of this standard? ○ Yes ○ No

SECTION IV

4.0 Detailed Results

4.1 Materials

Did the manufacturer provide evidence that the materials make-up of the device has been used successfully in similar applications for at least one (1) year? ○ Yes ○ No

4.1.1 Did any solder and fluxes in contact with the potable water supply exceed 0.2% lead content?
○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.1.2 Did all of the elastomers and polymers in contact with the water comply with the requirements of the U.S. Code of Federal Regulations (CFR) Title 21, Section 177?
○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.1.3 Did all ferrous cast parts conform to ASTM A126 for gray iron or ASTM A536 Grade 65-45-12 for ductile iron? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.1.4 Were all ferrous cast parts in contact with the water flowing through the assembly protected against corrosion by epoxy coating or other equivalent methods? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.1.5 Were all stainless steel components in contact with water of Series 300 s/s? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.1.6 Were all non-ferrous wetted parts of a corrosion resistance of at least equal to an alloy of 79% copper?
○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.1.7 Were all internal non-cast parts of a corrosion resistance of at least equal to an alloy of 79% copper?
○ Yes ○ No ○ Questionable
If questionable, explain: _____

4.1.8 Were all springs in contact with the water flowing through the assembly of a corrosion resistance of at least equal to stainless steel series 300? ○ Yes ○ No ○ Questionable
If questionable, explain: _____

4.1.9 Were all flexible non-metallic parts of a design to withstand all the criteria of this standard without change in their physical characteristics? ○ Yes ○ No ○ Questionable
If questionable, explain: _____

4.1.10 List the seating materials of:
Disc Seats: _____
Valve Disc Seats: _____

4.1.11 Were the seat rings of a corrosion resistance of at least equal to an alloy of 79% copper?
○ Yes ○ No ○ Questionable
If questionable, explain: _____

4.1.12 Were the test cocks of a corrosion resistance of at least equal to an alloy of 79% copper.
○ Yes ○ No ○ Questionable
If questionable, explain: _____

4.1.13 Do all pipe flanges conform to ASME B16.24 for bronze flanges and ASTM A126 for cast iron flanges?
○ Yes ○ No ○ Questionable
If questionable, explain: _____

4.1.14 Do all pipe threads conform to ASME B1.20.1 for taper pipe threads and ASME B1.20.3 for dryseal? ○ Yes ○ No ○ Questionable
If questionable, explain: _____

4.1.15 Grooved Connections
Do inlet and outlet grooved connections comply with AWWA C606? ○ Yes ○ No ○ Questionable
If questionable, explain: _____

4.2 Marking Instructions

4.2.1 Marking of Mainline Assembly
Identify the markings found on the test assembly/manifold assemblies:
(a) Manufacturer's name or trademark: _____
(b) Type (DCDA or DCDA-II) and model number of the assembly: _____
(c) Model designation of the assembly: _____
(d) Model designation of the bypass check valve or bypass assembly: _____
(e) Maximum working pressure: _____
(f) Maximum working temperature: _____
(g) Serial number consistent with the manufacturer's standard practice: _____
(h) Nominal valve size: _____
(i) Direction of water flow: _____
(j) Each shut-off valve shall be marked with the manufacturer's name or trademark and model number: _____

4.2.2 Marking of DCDA Bypass Assembly

The DCDA Bypass assembly shall have the following information marked on it where it will be visible after it has been installed:

(a) Manufacturer's name or trademark: _____
(b) Model designation of the assembly: _____
(c) Maximum working pressure: _____
(d) Maximum working temperature: _____
(e) Serial number consistent with the manufacturer's standard practice: _____
(f) Nominal valve size: _____
(g) Direction of water flow: _____

4.2.3 Marking of DCDA-II Bypass Check Valve

The DCDA-II bypass check shall have the following information marked on it where it will be visible after it has been installed:

(a) Manufacturer's name or trademark: _____
(b) Model designation of the bypass check valve: _____
(c) Serial number consistent with the manufacturer's standard practice: _____
(d) Nominal valve size: _____
(e) Direction of water flow: _____
(f) Each shut-off valve shall be marked with the manufacturer's name or trademark and model number: _____

4.2.4 Describe how these markings were made: _____

4.3 Installation and Maintenance Instructions

4.3.1 Were instructions for installation and maintenance submitted with the device? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.3.2 Did the installation instructions indicate the tested and approved installation orientation of the assembly? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.3.3 Was the test assembly capable of being maintained or repaired while in-line? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

4.3.4 Were field testing instructions furnished? ○ Yes ○ No ○ Questionable

If questionable, explain: _____

LISTED LABORATORY:_____

ADDRESS:_____

PHONE:_____

FAX _____

TEST ENGINEER(S):_____

If applicable:

OUTSOURCED LABORATORY:_____

ADDRESS:_____

PHONE:_____

FAX:_____

TEST ENGINEER(S):_____

Scope of outsourced testing:_____

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 listed laboratory:_____
Signature

Title of the official:_____Date:_____