JB&B
Jaros Baum & Bolles
Consulting Engineers

Robert V. Benazzi
Partner
212.530.9303

Automatic Breech Control Valves
7 World Trade Center
New York, New York
Project No. 12244.0.000

Copy to Donald G. original Back to me

March 28, 2005

Ms. Fatma Amer
Acting Deputy Commissioner for Technical Affairs
New York City Building Department
280 Broadway
New York, New York 10007

Dear Ms. Amer:

We are enclosing the U.L. Test Report on the test conducted by U.L. at the Singer Valve Inc. test facility in Surrey, BC Canada, on January 24, 2005. This confirms the results of the testing as reported in our letter of January 27, 2005. Per your suggestion, we have notified G.A. Fleet Co. (the New York Singer Valve representatives) to procure the necessary paperwork to formally submit the information for this valve for MEA approval. We will notify you as soon as the paperwork is submitted so that the approval may proceed expeditiously.

Thank you for your aid in this matter. We believe the installation of this valve in the fire standpipe system of this building will enhance the system operation and reliability.

Very truly yours,

JAROS, BAUM & BOLLES

RVB:mjc
cc: (1) Chief H. Hill
(1) Mr. A. P. Pankovcin
(1) Mr. J. Klein
(1) Mr. N. Holt
(1) Mr. A. A. DiGiacomo
(1) Mr. R. V. Benazzi
(1) Mr. J. K. McGarity
(1) File
Enc. (All Listed)
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File Ex5409
Project 04CA54467

2005-03-18

REPORT

on

SPECIAL SERVICES INVESTIGATION OF SINGER VALVE INC MODEL 106-EF EXCESS FLOW CONTROL VALVE

Singer Valve Inc.
Surrey, BC Canada

GENERAL

INTRODUCTION:

This Report describes a Special Services Investigation of the Model 106-EF Excess Flow Control Valve for Singer Valve Inc concerning the valve's operating characteristics.

In no event shall UL be responsible to anyone for whatever use or nonuse is made of the information contained in this Report, and in no event shall UL, its employees, or its agent incur any obligation or liability for damages, including, but not limited to, consequential damage arising out of or in connection with the use, or inability to use, the information contained in this Report.

Information conveyed by this Report applies only to the specimens actually involved in these tests. UL has not established a factory Follow-Up Service Program to determine conformance of subsequently produced material not bearing the UL Listing Mark nor has any provision been established to apply any registered Mark of Underwriters Laboratories Inc. to such material.

The issuance of this Report in no way implies Listing, Classification or Recognition by UL and does not authorize the use of the UL Listing or Classification Marks or any other reference to Underwriters Laboratories Inc. on or in connection with the products not bearing the UL Listing or Classification Marks.

OBJECT:

The object of the investigation was to provide test data to Singer Valve for their submittal to NYC Department of Buildings and Fire Department. The testing was conducted at the Singer Valve Inc. manufacturing facility in Surrey, B.C, Canada.

PLAN:

This investigation provides data on the Singer Valve Inc. Model 106-EF Excess Flow Control Valve's operating characteristics.

SUMMARY

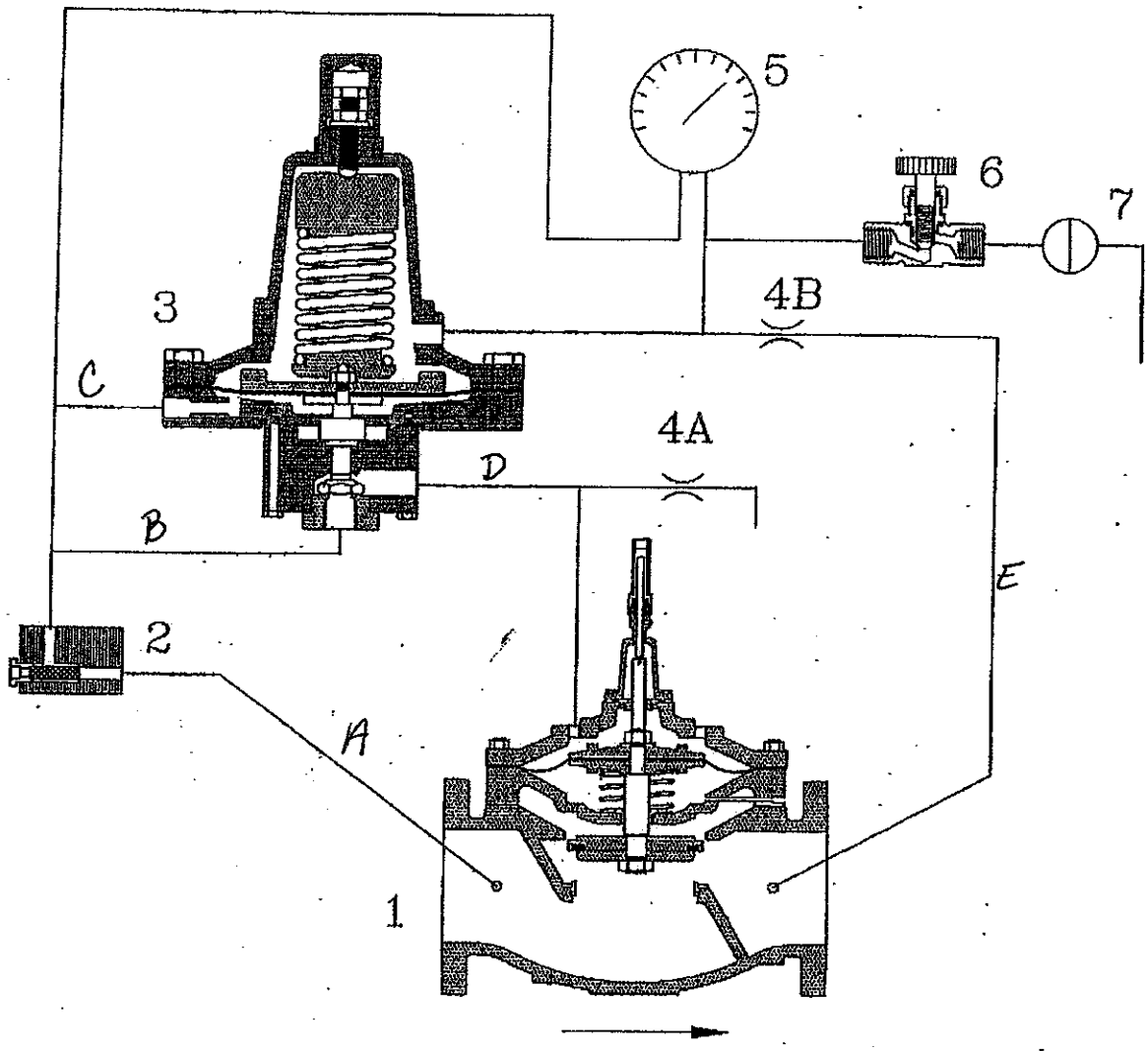
This Report provides test data which was obtained under a Special Services Investigation of the Singer Valve Inc. Model 106-EF Excess Flow Control Valve conducted for Singer Valve Inc. concerning operating characteristics tests.

Report by:

JERRY KIRKPATRICK
Sr. Engineering Associate

Reviewed by:

EMIL W. MISICHKO
Mgr CAS III



1. Model 106-PT Main Valve.
2. Strainer.
3. Model 625-RPD Normally Closed Pilot.
4. Fixed Restriction - 1/16".
5. Differential Pressure Gauge.
6. Test Valve.
7. Lockable Isolating Valve.

Model 106-EF-8837C

Excess Flow Valve

SINGER VALVE INC
12850-87th Avenue
Surrey, BC
Canada. V3W-3H9

Date: November 2, 2004	Appd. By:
Drawn By: Karl Oksanen	Drawing A-8837C

Please note: This is the full report that goes along with the letter from Mr. Robert Benazzi on March 28, 2005. The report you received was missing a couple of pages.

Sorry for any inconvenience this has caused you.

File Ex5409
Project 04CA54467

2005-03-18

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on

SPECIAL SERVICES INVESTIGATION OF SINGER VALVE INC MODEL 106-EF EXCESS FLOW CONTROL VALVE

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This investigation provides data on the Singer Valve Inc. Model 106-EF Excess Flow Control Valve's operating characteristics.

TEST RECORD

SAMPLES:

A sample of the Singer Valve Inc. Model 106-EF Excess Flow Control Valve in the 6 In. size was used in this investigation.

Operation Tests:

Method

The Singer Valve Inc. Model 106-EF Excess Flow Valve was installed in the Singer Valve hydraulics laboratory. The water supply to the Excess flow Valve was increased and the water flow rate required to operate (close) the Model 106-EF valve was recorded. In addition, the pressure differential when the Model 106-EF Valve operated was also recorded.

Results

See Table 1.

Table 1
Model 106-EF Excess Flow Valve Operation Tests

Test #	Model 106-EF Design Flow rate, gpm	Model 106-EF Inlet pressure, psi	Flow rate at operation of Model 106-EF, gpm	Pressure differential at operation of Model 106-EF, psi
1	500	12	680	5
2	500	12	680	5
3	500	12	680	5
4	500	12	680	5
5	500	12	680	5
6	500	15	680	5
7	500	15	680	5
8	500	15	680	5
9	500	15	680	5
10	500	15	680	5
11	750	12	1000	5
12	750	12	1000	5
13	750	12	1000	5
14	750	12	1000	5
15	750	12	1000	5
16	750	15	1000	5
17	750	15	1000	5

Test #	Model 106-EF Design Flow rate, gpm	Model 106-EF Inlet pressure, psi	Flow rate at operation of Model 106-EF, gpm	Pressure differential at operation of Model 106-EF, psi
18	1000	12	1212	8.5
19	1000	12	1217	8.5
20	1000	12	1212	8.5
21	1000	12	1212	8.5
22	1000	12	1210	8.5
23	1000	15	1212	8.5
24	1000	15	1210	8.5

Notes:

1. The Model 106-EF closed to zero flow rate upon operation
2. The water flow through the Model 106-EF was observed to be unobstructed up to the noted flow rate recorded when the valve operated.

Failure Test:

Method

To simulate a failure, each pressure sensing line from the Model 625-RPD pilot to the Model 106-EF was individually disconnected. Observations were made for operation (closing)of the Model 106-EF.

Results

Test #	Model 106-EF Flow rate, gpm	Sensing Line Disconnected (1)	Observations
1	500	A	(2)
2	500	B	(2)
3	500	C	(2)
4	500	D	(2)
5	500	E	(3)

Notes:

(1) - See Fig. 1
(2) - Model 106-EF did not operate.
(3) - Model 106-EF operated.

SUMMARY

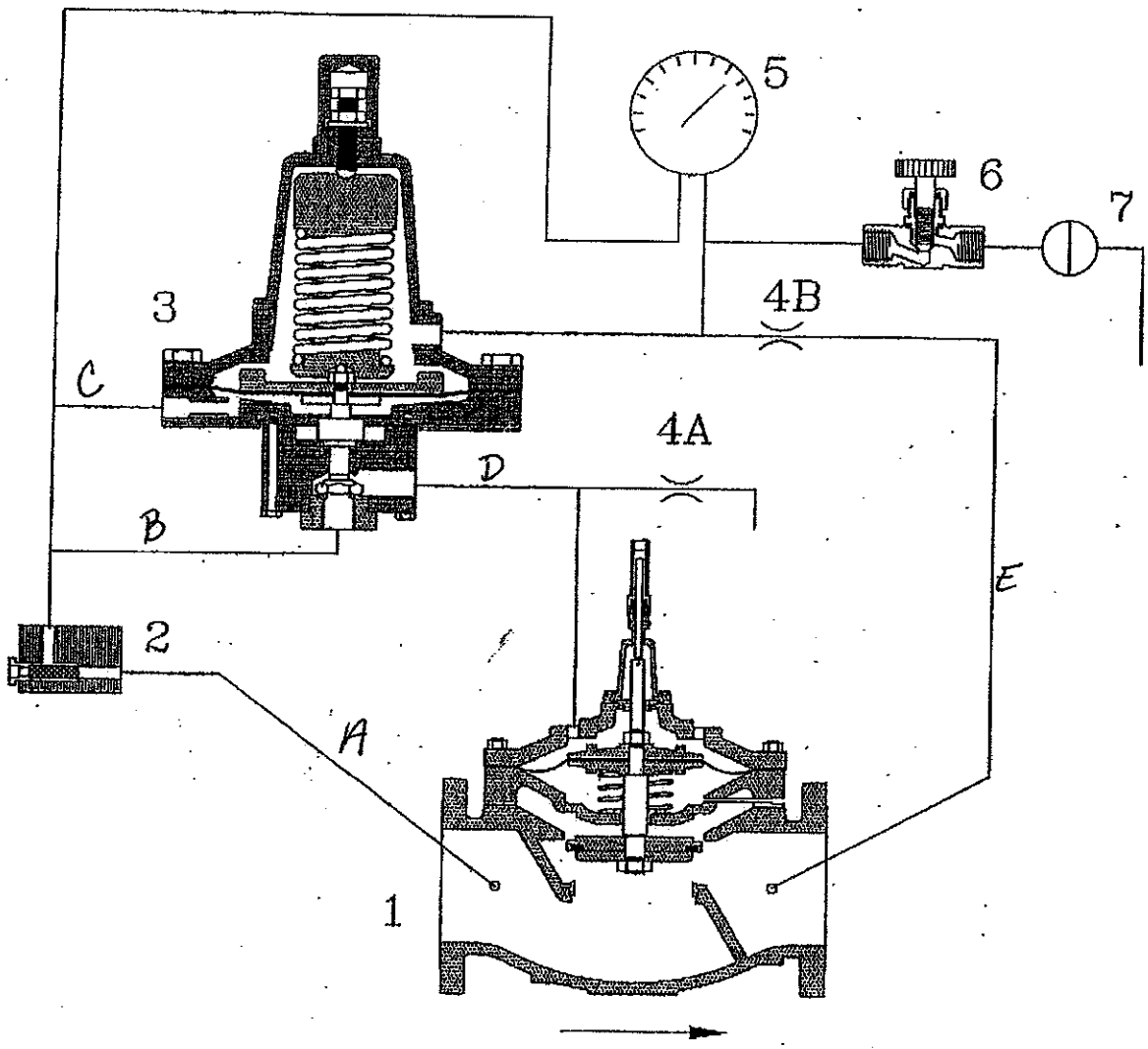
This Report provides test data which was obtained under a Special Services Investigation of the Singer Valve Inc. Model 106-EF Excess Flow Control Valve conducted for Singer Valve Inc. concerning operating characteristics tests.

Report by:

JERRY KIRKPATRICK
Sr. Engineering Associate

Reviewed by:

EMIL W. MISICHKO
Mgr CAS III



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