Document No.:
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DNV

DET NORSKE VERITAS

SURVEY REPORT

P.O. Number:	024865-00	**Date:**	12 October 2005
Main Vendor:	Valve Technologies	**Location:**	San Antonio, TX
Sub Vendor:	Southwest Research Institute	**Vendor Contact:**	Robert Hart
Vendor Ref:	S.O. 051483	**Vendor Phone:**	210-522-2350
Req. No:	P.O. T014500589643 Fire 7	**Quantity:**	1
Part No:	Model B8C1-BW-FP-BS-2	**Serial No.:**	05016208

Equipment Description

2" 1500 Class, Full Port Floating Ball Valve

Purpose of Survey: Witness Fire Test

Acceptance Criteria:
- API Standard 607 Fourth Edition, May 1993

Reference Documents:
- Same as Acceptance Above

DET NORSKE VERITAS HOUSTON

Surveyor / date: Gary D. Rektorik / 2005-10-12

Distribution:		**Attn:**	**E-Mail Address:**
Original to Client:	Valve Technologies	Jim Baca	JBaca@valv.com
Copy to File:	410-1-8269		

Scope of Activity:

A. Attending surveyor witnessed a fire test of the referenced Ball Valve in accordance with API Standard 607 with the following results:

Set-Up

- Test set-up of thermocouples and calorimeter blocks were in accordance with Figure 1 of Standard 607
- Test medium was water

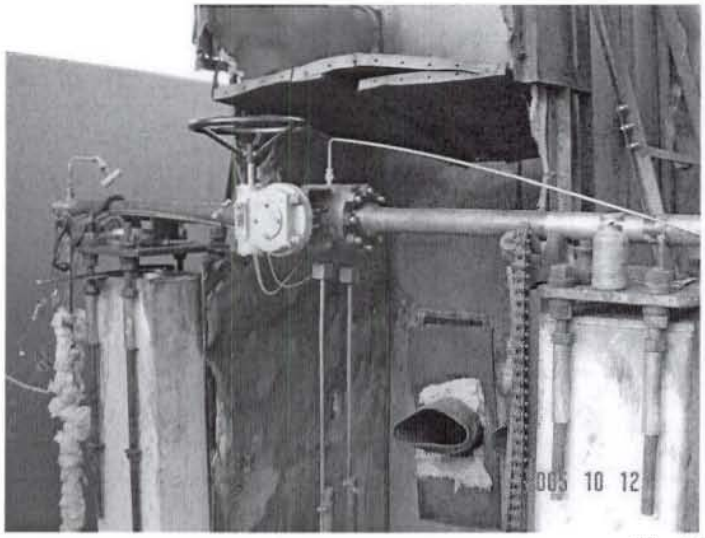
Fire Test

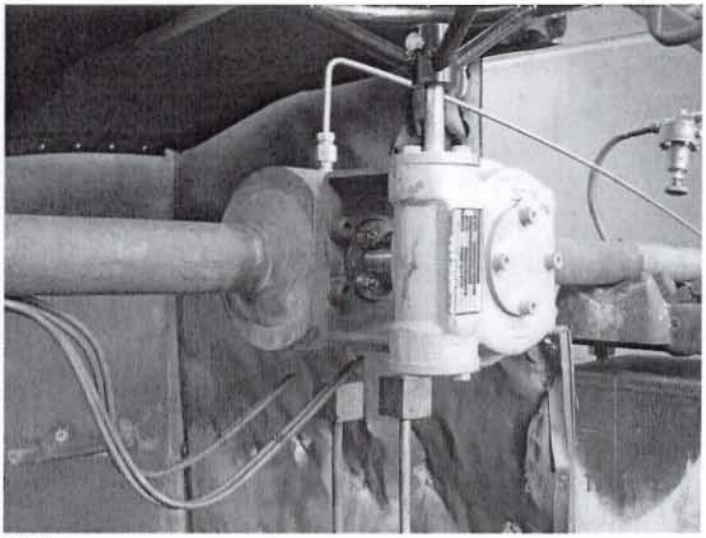
- Test valve was filled with water and tested in the closed position. Valve stem and bore were in the horizontal position.
- Valve was pressurized to 2780 minimum (75% of the cold working pressure) prior to the start of the test. No visible leaks were noted. (**Note:** this pressure was maintained throughout the burn test)
- Four propane fed burners were used to envelope valve in flame throughout the test.
- Once ignited the flame temperature indicating thermocouples reached 1400°F prior to lapse of 2 minutes.
- Temperature readings of thermocouples were maintained between 1400-1800°F for the duration of the 30 minute burn.
- The water tank level at start of test was measured to be 96 ¼". At the conclusion of the test the tank level was measured to be 94 ½".
- **No measurable through leakage was noted upon completion of the burn.**
- After completion of the 30 minute burn test, valve was sprayed with water to achieve a rapid cool down. Valve reached temperatures below 212°F within the 10 minute requirement.

Operation Test

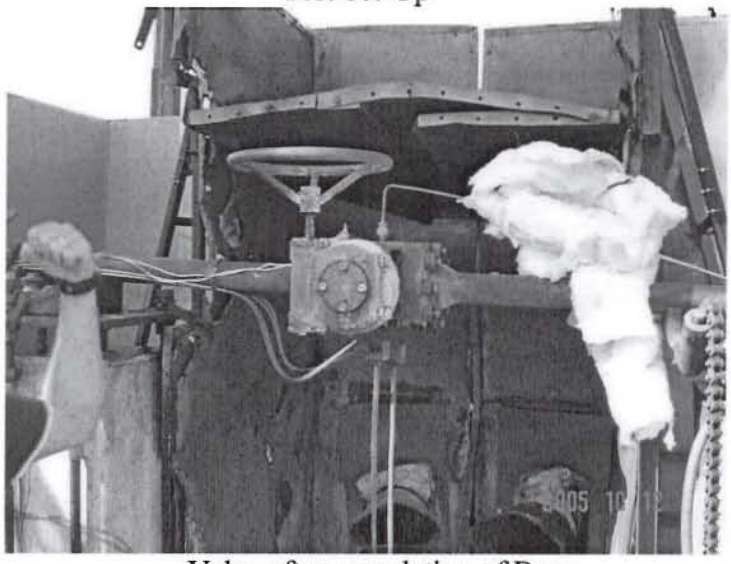
- After cool down, the valve was operated full open and then full closed against the test pressure.
- The downstream drain valve was opened and the system was allowed to stabilize for 5 minutes.
- Through leakage and external leakage at the stem, bonnet joint and body joint were collected for the next 5 minutes.
- **No measureable leakage was collected.**

Based upon the above witnessed tests the referenced 2" 1500 Class Valve has passed the requirements established in API Standard 607. Official results will be generated by Southwest Research Institute.





Test Set-Up



Valve after completion of Burn