

Test Report

Purpose: Fire test qualification for 3" Thru 6" Class 150 and 300 Western Valve
Figure 271A Expanding Seal Valve

Test Set Up: 3" class 150 valve was fire tested in accordance with ISO 10497:2004(E).

Testing:

Testing- 3" Class 150: Tests were performed on 07/30/2009

All tests conformed to the temperature, duration, and pressure requirements of the specification.

Results:

3" Class 150

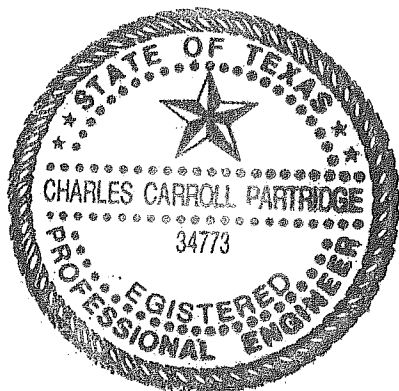
Description	Actual (ml/min.)	Allowable (ml/min.)
Through Seat Leakage during Burn	1.27	320
Through Seat Leakage after Cool down	0	128
External Leakage During Flame & Cool down	18.78	80
External Leakage after Operational Test	75	80

Refer to attached FIRE TEST DATA SHEET dated 7/30/09.

Conclusions: Test results meet or exceed (comply) with ISO 10497/ API 607 fire test requirements. These tests qualify 3" thru 6" Class 150 and Class 300 WESTERN VALVE Figure 27X as a Fire Tested Design.

Witnessed By _____

Charles C. Partridge - PERDIX Engineering LLC



PRODUCT: 3" 150 WESTERN VALVE Fig 271A DIRECTION: STD

FLAME ON: 10:47 AM / PM

FLAME TEMP. 750°C WITHIN 2 MINUTES YES NO

750°C AVERAGE - NEITHER LESS THAN 700°C YES NO

FLAME OFF: 11:17 AM / PM

COOLDOWN < 100°C: 11:27 AM / PM

FLAME DURATION: 30 MINUTES

COOLDOWN DURATION: 10 MINUTES

DOWNSTREAM LEAKAGE COLLECTED AT FLAME OFF: 38 ML

DOWNSTREAM LEAKAGE DURING COOLDOWN: 9 ML

DOWNSTREAM LEAKAGE DURING BURN: 1.27 ML/MIN

ALLOWABLE D/S LEAKAGE DURING BURN: 320 ML/MIN

DOWNSTREAM LEAKAGE - ^{AFTER} COOLDOWN: 0 ML/MIN

ALLOWABLE D/S LEAKAGE - ^{AFTER} COOLDOWN: 128 ML/MIN

^{UPSTREAM} DOWNSTREAM BODY CAVITY: 1380 ML

TOTAL WATER LOST: 798 ML

EXTERNAL LEAKAGE DURING BURN/COOLDOWN: 751 ML

EXTERNAL LEAKAGE RATE: 18.78 ML/MIN

ALLOWABLE EXTERNAL LEAKAGE RATE: 80 ML/MIN

EXTERNAL LEAKAGE RATE: 75 ML/MIN ALLOWABLE: 80 ML/MIN
(AFTER OPERATION @ TEST PRESSURE)

BY: Chel Ray

TEST RESULTS: PASS FAIL