

YARMOUTH RESEARCH AND TECHNOLOGY, LLC

January 8, 2021

Please find attached summary list of all Firesafe certificates performed by Yarmouth Research and Technology, LLC from 2006 to 2021. We hereby testify this is a true and correct summary record of all the certification tests performed and passed to the indicated standards.



Matthew J Wasielewski, PE
President and General Manager
Yarmouth Research and Technology, LLC

FireSafe Test Certification Summary

Performed for

Australian Pipeline Valve

www.australianpipelinevalve.com.au/

←—————→
Performed by

YARMOUTH RESEARCH AND TECHNOLOGY, LLC

434 Walnut Hill Road
North Yarmouth, ME 04097 USA
(207) 829-5359

info@yarmouthresearch.com
www.yarmouthresearch.com

Yarmouth Research and Technology, LLC

Ref. Item	Product Description	Test Date	Size - NPS	Pressure Rating - ANSI Class	Body Material	Seat Material	Seal Material	Other Sizes Qualified	Certificate Number	Firesafe Test Standard
3.3	1.5" CLASS 800 3-PIECE BOLTED BALL VALVE, BV100	6/15/2006	1.5	800	CARBON STEEL	RPTFE	GRAPHITE	1/2" - 3" CLASS 800-2500 AND PN100 TO PN260	PN204114-112-800BALL	API 607 5TH EDITION ISO 10497-2004
3.3	1.5" CLASS 800 3-PIECE BOLTED BALL VALVE, BV100	6/15/2006	1.5	800	CARBON STEEL	RPTFE	GRAPHITE	1-1/2" - 3" CLASS 800-1500 AND PN100 TO PN260	PN204114-112-800BALL	API 6FA 3RD EDITION 1999
1.1A	2" CLASS 1500 3-PIECE BOLTED BALL VALVE BV100	7/7/2015	2	1500	STAINLESS* STEEL	RPTFE	PTFE/ GRAPHITE/ VITON	4" AND BELOW CLASS 1500-2500 AND PN260 TO PN420 * AND ALSO SAME OVERAGE RANGE FOR FERRITIC COVERS AUSTENITIC	215067 - 1.1A	API 607 6TH EDITION ISO 10497-2010
1	2" CLASS 150 RF BALL VALVE, SIDE ENTRY, TRUNNION MOUNTED API6D, MODEL BVF100 - FTAC2223AADD	2/2/2018	2	150	STAINLESS* STEEL 316SS	RPTFE	GRAPHITE/ VITON	1/2" TO 4" 150 TO 300 CLASS * AND ALSO SAME COVERAGE RANGE FOR FERRITIC COVERS AUSTENITIC	217213A	"API 607 7TH EDITION ISO 10497-2010"
1.5	2" CLASS 600 RF BALL VALVE 3 PCE TRUNNION MOUNTED API6D BVF100	15/1/2014	2	600	LF2 - Carbon Steel	RPTFE	GRAPHITE/ VITON	1/2 -4" CLASS 600-900	213099 - 1.5	API 607 6TH EDITION ISO 10497-2010
3.6	3" CLASS 1500 FULL PORT BALL VALVE, BVF100	9/28/2005	3	1500	LF2	NYLON	GRAPHITE/ VITON	3"-6" CLASS 1500-2500	PN204114C	API 607 5TH EDITION ISO 10497-2004
3.6	3" CLASS 1500 FULL PORT BALL VALVE, BVF100	9/28/2005	3	1500	LF2	NYLON	GRAPHITE/ VITON	3"-6" CLASS 1500-2500 AND API6A 3 1/8" TO 7 1/16" 5000PSI	PN204114C	API 6FA 3RD EDITION 1999

* AS PER API 607 7TH EDITION CLAUSE 7.2.2 AND ISO 10497-2010 TESTING A MID RANGE OR LARGER AUSTENITIC IN THE SAME MODEL AS FERRITIC VALVES COVERED, ALSO COVERS AUSTENITIC VALVES IN THE SAME COVERAGE RANGE AS TESTED & COVERED FOR FERRITIC.

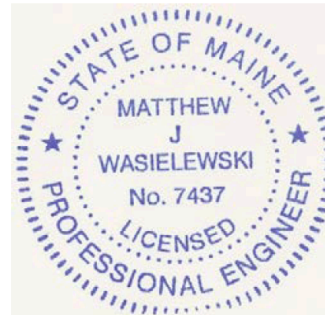
Certified By



Matthew J. Wasielewski, PE

President and Manager

Yarmouth Research and Technology, LLC



Yarmouth Research and Technology, LLC

Ref. Item	Product Description	Test Date	Size - NPS	Pressure Rating - ANSI Class	Body Material	Seat Material	Seal Material	Other Sizes Qualified	Certificate Number	Firesafe Test Standard
3	6" CLASS 150 RF BALL VALVE 3 PIECE TRUNNION MOUNTED API6D, MODEL BVF100-FTAA2223AAADB	14/2/2018	6	150	A105N CARBON STEEL	RPTFE	GRAPHITE/VITON	6" TO 12" 150 TO 300 CLASS	217213B	API 607 7TH EDITION ISO 10497-2010
4	6" CLASS 600 RF BALL VALVE 3 PIECE TRUNNION MOUNTED API6D, MODEL BVF100-FTCA2223CACEB	14/2/2018	6	600	A105N CARBON STEEL	DEVLON	GRAPHITE/VITON	6" TO 12" 600 TO 900 CLASS	217213C	API 607 7TH EDITION ISO 10497-2010
1.8	8" CLASS 150 RF BALL VALVE 3 PCE TRUNNION MOUNTED API6D, SOFT SEAT BVF100	21/7/2015	8	150	CARBON STEEL	RPTFE	GRAPHITE/VITON	8" AND LARGER CLASS 150-300 AND PN10 TO PN40	215067 - 1.8	API 607 6TH EDITION ISO 10497-2010
5	8" CLASS 150 RF BALL VALVE 3 PIECE TRUNNION MOUNTED API6D, MODEL BVF100-FTAC2223AAAED	13/2/2018	8	150	STAINLESS STEEL 316SS	RPTFE	GRAPHITE/VITON	8" & ABOVE 150 TO 300 CLASS * AND ALSO SAME OVERAGE RANGE FOR FERRITIC COVERS AUSTENITIC	217213D	API 607 7TH EDITION ISO 10497-2010
1.9	8" CLASS 600 RF BALL VALVE 3 PCE TRUNNION MOUNTED API6D, SOFT SEAT BVF100	23/7/2015	8	600	CARBON STEEL	DEVLON	GRAPHITE/VITON	8" AND LARGER CLASS 600-900	215067 - 1.9	API 607 6TH EDITION ISO 10497-2010
6	8" CLASS 600 RF BALL VALVE 3 PIECE TRUNNION MOUNTED API6D, MODEL BVF100-FTCC2523AAAEDC	15/2/2018	8	600	STAINLESS STEEL 316SS	DEVLON	GRAPHITE/VITON	8" & ABOVE 600 TO 900 CLASS * AND ALSO SAME OVERAGE RANGE FOR FERRITIC COVERS AUSTENITIC	217213E	API 607 7TH EDITION ISO 10497-2010
7	8" CLASS 900 RF BALL VALVE 3 PIECE TRUNNION MOUNTED API6D, MODEL BVF100-FTEA2523AAAED	13/2/2018	8	900	A105 CARBON STEEL	DEVLON	GRAPHITE/VITON	8" & ABOVE 900 TO 1500 CLASS AND API 3000 TO 5000 PSI AUSTENITIC & CARBON STEEL *	213213F	API 607 7TH EDITION ISO 10497-2010

* AS PER API 607 7TH EDITION CLAUSE 7.2.2 AND ISO 10497-2010 TESTING A MID RANGE AUSTENITIC SAMPLE IN THE SAME MODEL OF FERRITIC VALVES COVERED, ALSO COVERS DUPLEX & AUSTENITIC VALVES IN THE SAME COVERAGE RANGE AS FERRITIC FOR EXAMPLE IN THIS CASE AS FOLLOWS:- ALL SIZES 1/2" & ABOVE 150 TO 1500 CLASS AND 2500 CLASS 1/2" TO 6" CLASS 2500 AS PER CERTIFICATE 213099-1.5 & PN204114C.

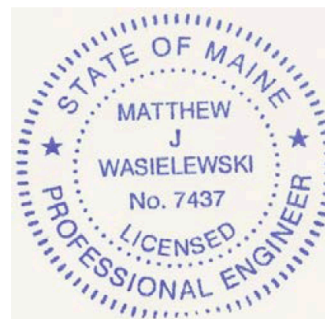
Certified By



Matthew J. Wasielewski, PE

President and Manager

Yarmouth Research and Technology, LLC



Yarmouth Research and Technology, LLC

Ref. Item	Product Description	Test Date	Size - NPS	Pressure Rating - ANSI Class	Body Material	Seat Material	Seal Material	Other Sizes Qualified	Certificate Number	Firesafe Test Standard
3.2	1" CLASS 1500 REDUCED PORT BALL VALVE, FS660	9/28/2005	1	1500	A105	NYLON	GRAPHITE/VITON	1/2" - 2" CLASS 1500-2500 AND PN260 TO PN420	PN204114A	API 607 5TH EDITION ISO 10497-2004
3.2	1" CLASS 1500 REDUCED PORT BALL VALVE, FS660	6/15/2006	1	1500	A105	NYLON	GRAPHITE/VITON	1" - 2" CLASS 1500-2500 AND PN260 TO PN420	PN204114A	API 6FA 3RD EDITION 1999
3.4	2" CLASS 800 2-PIECE FLOATING BALL VALVE, FS660	6/15/2006	2	800	A216-WCB	RPTFE	GRAPHITE	1/2"-4" CLASS 800-1500 AND PN100 TO PN260	PN204114-2-800BALL	API 607 5TH EDITION ISO 10497-2004
3.4	2" CLASS 800 2-PIECE FLOATING BALL VALVE, FS660	6/15/2006	2	800	A216-WCB	RPTFE	GRAPHITE	2"-4" CLASS 800-1500 AND PN100 TO PN260	PN204114-2-800BALL	API 6FA 3RD EDITION 1999
3.1	1" CLASS 800 1-PIECE FLOATING BALL VALVE, FS900	6/14/2006	1	800	A216-WCB	RPTFE	GRAPHITE	1/2" - 2" CLASS 800-1500 AND PN100 TO PN260	PN204114-1-800BALL	API 607 5TH EDITION ISO 10497-2004
3.1	1" CLASS 800 1-PIECE FLOATING BALL VALVE, FS900	6/14/2006	1	800	A216-WCB	RPTFE	GRAPHITE	1" - 2" CLASS 800-1500 AND PN100 TO PN260	PN204114-1-800BALL	API 6FA 3RD EDITION 1999
1.6.1	2" CLASS 600 RF BALL VALVE 2 PCE TRUNNION MOUNTED API6D, SOFT SEAT FS9000	6/7/2015	2	600	CARBON STEEL	A182 F316/RPTFE	GRAPHITE/VITON	4" AND BELOW CLASS 600-900	215067 - 1.6.1	API 607 6TH EDITION ISO 10497-2010
1.6	3" CLASS 150 RF BALL VALVE 2 PIECE TRUNNION MOUNTED API6D FS9000	9/1/2014	3	150	A216-WCB	RPTFE	GRAPHITE/VITON	3"-6" CLASS 150-300 AND PN10 TO PN40	213099 - 1.6	API 607 6TH EDITION ISO 10497-2010
3.7	6" CLASS 600 REDUCED PORT BALL VALVE, FS9000	9/28/2005	6	600	A216-WCB	NYLON	GRAPHITE/VITON	6"-12" CLASS 600-900	PN204114B	API 607 5TH EDITION ISO 10497-2004
3.7	6" CLASS 600 REDUCED PORT BALL VALVE, FS9000	9/28/2005	6	600	A216-WCB	NYLON	GRAPHITE/VITON	6"-12" CLASS 600-900 AND API6A 2000 TO 3000PSI 7 1/16" TO 11"	PN204114B	API 6FA 3RD EDITION 1999

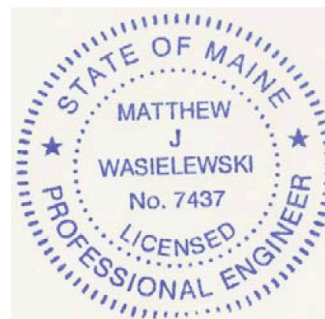
Certified By



Matthew J. Wasielewski, PE

President and Manager

Yarmouth Research and Technology, LLC



Yarmouth Research and Technology, LLC

Ref. Item	Product Description	Test Date	Size - NPS	Pressure Rating - ANSI Class	Body Material	Seat Material	Seal Material	Other Sizes Qualified	Certificate Number	Firesafe Test Standard
1.7	8" CLASS 150 RF BALL VALVE 2 PCE TRUNNION MOUNTED API6D, SOFT SEAT FS9000	21/7/2015	8	150	CARBON STEEL	A182 F316/ RPTFE	GRAPHITE/ VITON	8" AND LARGER CLASS 150-300 AND PN10 TO PN40	215067 - 1.7	API 607 6TH EDITION ISO 10497-2010
1.17	8" CLASS 600 BALL VALVE 2 PCE TRUNNION MOUNTED FS9000	20/5/2016	8	600	CARBON STEEL	DEVLON	VITON/ GRAPHITE	8" AND LARGER CLASS 600-900	216067 - 1.17	API 607 6TH EDITION ISO 10497-2010
1.18	2" CLASS 150 WCB FLOATING BALL VALVE SLFSBV01	6/4/2017	2	150	A216-WCB	PTFE	GRAPHITE	1/2" TO 4" 150 & 300 CLASS	217131-1.18	API 607 6TH EDITION ISO 10497-2010
1.2	2" CLASS 300 RF BALL VALVE 2 PCE FLOATING BALL API608, API6D, ANSI B16 SLFSBV01	11/1/2014	2	300	A216-WCB	PTFE	GRAPHITE	1/2" - 4" CLASS 300-600 AND PN40 TO PN100	213099 - 1.2	API 607 6TH EDITION ISO 10497-2010
3.5	4" CLASS 150 FULL PORT BALL VALVE, SLFSBV01	6/16/2006	4	150	A216-WCB	PTFE	GRAPHITE	4"-8" CLASS 150-300 AND PN10 TO PN40	PN204114-4-150BALL	API 607 5TH EDITION ISO 10497-2004
3.5	4" CLASS 150 FULL PORT BALL VALVE, SLFSBV01	6/16/2006	4	150	A216-WCB	PTFE	GRAPHITE	4"-8" CLASS 150-300 AND PN10 TO PN40	PN204114-4-150BALL	API 6FA 3RD EDITION 1999
1.4	8" CLASS 150 RF BALL VALVE 2 PCE FLOATING BALL API608, API6D, ANSI B16 SLFSBV01	20/1/2014	8	150	A216-WCB	PTFE	GRAPHITE	8" AND LARGER CLASS 150-300 AND PN10 TO PN40	213099- 1.4	API 607 6TH EDITION ISO 10497-2010
1.1	2" CLASS 150 BALL VALVE 1 PCE END ENTRY FLOATING BALL API608, API6D, ANSI B16 SLFSBV02	8/1/2014	2	150	A216-WCB	PTFE	GRAPHITE	1/2" - 4" CLASS 150-300 AND PN10 TO PN40	213099 - 1.1	API 607 6TH EDITION ISO 10497-2010
1.3	6" CLASS 150 BALL VALVE 1 PIECE END ENTRY FLOATING BALL API608, API6D, ANSI B16 SLFSBV02	15/5/2017	6	150	A216-WCB	PTFE	GRPAHITE	6" TO 12" 150 & 300 CLASS	217131-1.3	API 607 6TH EDITION ISO 10497-2010

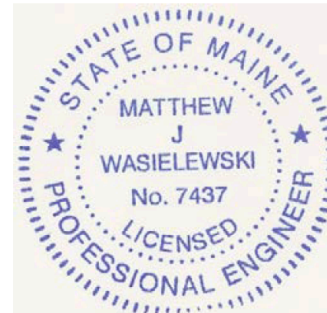
Certified By



Matthew J. Wasielewski, PE

President and Manager

Yarmouth Research and Technology, LLC



Yarmouth Research and Technology, LLC

Ref. Item	Product Description	Test Date	Size - NPS	Pressure Rating - ANSI Class	Body Material	Seat Material	Seal Material	Other Sizes Qualified	Certificate Number	Firesafe Test Standard
1.10	2" CLASS 300 RF HIGH PERFORMANCE BUTTERFLY VALVE DOUBLE OFFSET DISC API609-A, SOFT SEAT SLHBFFS	9/7/2015	2	300	STAINLESS STEEL	RPTFE	GRAPHITE	4" AND BELOW CLASS 300-600 AND PN40 TO PN100	215067 - 1.10	API 607 6TH EDITION ISO 10497-2010
1.11	6" CLASS 150 RF HIGH PERFORMANCE BUTTERFLY VALVE DOUBLE OFFSET DISC API609-A, SOFT SEAT SLHBFFS	21/7/2015	6	150	CARBON STEEL	PTFE	GRAPHITE	6" TO 12" CLASS 150-300 AND PN10 TO PN40	215067 - 1.11	API 607 6TH EDITION ISO 10497-2010
9a	2" CLASS 150 RF HIGH PERFORMANCE BUTTERFLY VALVE DOUBLE OFFSET DISC API609-A, SOFT SEAT SLHBFFS	9/12/2020	2	150	CARBON STEEL	PTFE	GRAPHITE	2" AND BELOW, UP TO 4" CLASS 150 & 300	220382 - 9a	API 607 7TH EDITION ISO 10497-2010
10a	8" CLASS 150 RF HIGH PERFORMANCE BUTTERFLY VALVE DOUBLE OFFSET DISC API609-A, SOFT SEAT SLHBFFS	17/12/2020	8	150	CARBON STEEL	PTFE	GRAPHITE	8" AND ABOVE CLASS 150 & 300	220382 - 10a	API 607 7TH EDITION ISO 10497-2010
14	8" CLASS 600 RF HIGH PERFORMANCE BUTTERFLY VALVE TRIPLE OFFSET DISC API609-A, LAMINATED SEAT SLHBFFS-T	8/1/2021	8	600	CARBON STEEL	SS316+ GRAPHITE	GRAPHITE	8" AND ABOVE CLASS 600 AND 900	220382 - 14	API 607 7TH EDITION ISO 10497-2010
17	12" CLASS 600 RF HIGH PERFORMANCE BUTTERFLY VALVE TRIPLE OFFSET DISC API609-A, LAMINATED SEAT SLHBFFS-T	6/1/2021	12	600	CARBON STEEL	SS316+ GRAPHITE	GRAPHITE	COVERS 12" AND ABOVE CLASS 600 AND 900	22382-17	API 607 7TH EDITION ISO 10497-2010
8	"3" CLASS 300 GATE VALVE API600, MODEL AP33XUF	2/2/2018	3	300	A216 CARBON STEEL	410/F6 +ST#6	GRAPHITE	2" TO 6" 150 TO 600 LB	217313A	API 607 7TH EDITION ISO 10497-2010

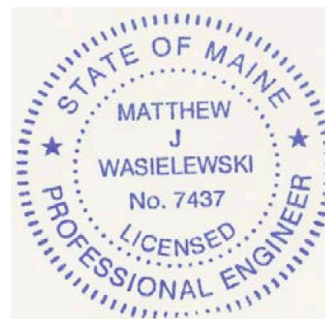
Certified By



Matthew J. Wasielewski, PE

President and Manager

Yarmouth Research and Technology, LLC



Yarmouth Research and Technology, LLC

Ref. Item	Product Description	Test Date	Size - NPS	Pressure Rating - ANSI Class	Body Material	Seat Material	Seal Material	Other Sizes Qualified	Certificate Number	Firesafe Test Standard
1.12	8" CLASS 150 RF FLANGED GATE VALVE BBO5Y API600 P47XUF-2B	22/1/2014	8	150	A216-WCB	PTFE	GRAPHITE	8" -16" CLASS 150-300 AND PN10 TO PN40	213099 - 1.12	API 6FA 3RD EDITION 1999
1.14	2" CLASS 150 LUBRICATED PLUG VALVE API6D PRESSURE BALANCED INVERTED PLUG MODEL SSCR	6/7/2016	2	150	CARBON STEEL	LUBRICATED / METAL	GRAPHITE	4" AND BELOW CLASS 150-300 AND PN10 TO PN40"	215067-1.14	API 607 6TH EDITION ISO 10497-2010
3.8	2" CLASS 600 CAST LUBRICATED PLUG VALVE, MODEL SSCR	6/14/2006	2	600	A216-WCB	METAL / LUBRICATED	GRAPHITE	2"-4" CLASS 600-900	204114-2-600PLUG	API 607 5TH EDITION ISO 10497-2004
3.8	2" CLASS 600 CAST LUBRICATED PLUG VALVE, MODEL SSCR	6/14/2006	2	600	A216-WCB	LUBRICATED/ METAL	GRAPHITE	2"-4" CLASS 600-900 AND API6A 2 1/16" TO 4 1/16" 2000PSI TO 3000PSI	204114-2-600PLUG	API 6FA 3RD EDITION 1999
1.16	APV 2" CLASS 1500 LUBRICATED PLUG VALVE API6D PRESSURE BALANCED INVERTED PLUG MODEL SSCR	10/7/2015	2	1500	CARBON STEEL	LUBRICATED/ METAL	GRAPHITE	4" AND BELOW CLASS 1500-2500	215067 - 1.16	API 607 6TH EDITION ISO 10497-2010
15	APV 3" CLASS 150 LUBRICATED PLUG VALVE API6D PRESSURE BALANCED INVERTED PLUG MODEL SSCR	3/2/2020	3	150	WCB	LUBRICATED/ METAL	GRAPHITE	3"~6" CLASS 150-300	220065A	API 607 7TH EDITION ISO 10497-2010
16	APV 4" CLASS 150 LUBRICATED PLUG VALVE API6D PRESSURE BALANCED INVERTED PLUG MODEL SSCR	3/2/2020	4	150	WCB	LUBRICATED/ METAL	GRAPHITE	4"~8" CLASS 150-300	220065B	API 607 7TH EDITION ISO 10497-2010
1.15	APV 6" CLASS 600 LUBRICATED PLUG VALVE API6D PRESSURE BALANCED INVERTED PLUG MODEL SSCR	22/7/2015	6	600	CARBON STEEL	LUBRICATED/ METAL	GRAPHITE	6" TO 12" CLASS 600-900	215067 - 1.15	API 607 6TH EDITION ISO 10497-2010
1.13	8" CLASS 150 RF LUBRICATED PLUG VALVE API6D PRESSURE BALANCED INVERTED PLUG MODEL SSCR	20/3/2014	8	150	A216-WCB	LUBRICATED/ METAL	GRAPHITE	8" AND LARGER CLASS 150-300 AND PN10 TO PN40	213099 - 1.13	API 607 6TH EDITION ISO 10497-2010

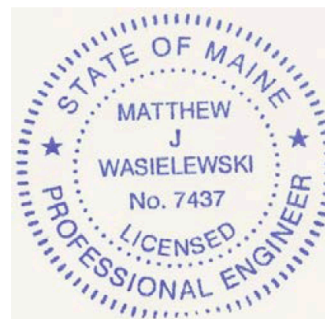
Certified By



Matthew J. Wasielewski, PE

President and Manager

Yarmouth Research and Technology, LLC



CERTIFICATE OF CONFORMITY

Certificate No.: SHA/873979/1604-1570, 1571, 1572, 1573

Initial date:
Feb 05, 2015

This is to certify that the fire test of

AUSTRALIAN PIPELINE VALVE

69-71 Barndioota Road, Salisbury Plain (Adelaide) South Australia 5109

has been carried out at the laboratory designated by the manufacturer and witnessed by DNV GL-BA inspector. The test results of valve meet the requirement of

API STD 607, SIXTH EDITION, SEPTEMBER 2010

Type of Test **Fire test**

Product Name **Valve**

Further details are given overleaf

Place and date:
Shanghai

**DNV GL Business Assurance (China)
Co., Ltd.**

Winston Wang

Feng Wang
Inspector



Chung Yuan Lee

Chung Yuan Lee
Technical Reviewer

Annex I. FIRESAFE TESTS-001

ITEM	MANUFACTURER	VALVE TYPE	MODEL RANGE TESTED	SEAT/SEALS	PRODUCT DESCRIPTION	STANDARD	CERTIFICATE NUMBER	DATE OF TEST/ WITNESS	COVERAGE RANGE
4.2	AUSTRALIAN PIPELINE VALVE (APV)	BALL - FLOATING	MODEL SLFSBV01	PTFE/ GRAPHITE	BALL VALVE 2 PIECE FLOATING BALL API608, API6D, ANSI B16	API 607 6TH EDITION ISO 10497-2010	SHA/873979/1604-1570, 1572	5/2/2015	1/2"-2" 150 TO 600 CLASS AND 6" - 12" 150-300 CLASS † Covers Austentic & Ferritic
4.1	AUSTRALIAN PIPELINE VALVE (APV)	BALL - FLOATING	MODEL SLFSBV01	PTFE/ GRAPHITE/ VITON	BALL VALVE 2 PIECE FLOATING BALL API608, API6D, ANSI B16	"API 607 6TH EDITION ISO 10497-2010"	SHA/873979/1604-1573, 1571	5/2/2015	6" TO 12" 150 & 300 CLASS

† API607 paragraph 7.2.2 states that if a range of valves is covered by testing ferritic valves then the same entire size and class range will be covered for duplex and austentic material by testing one mid range valve in austentic material

WE HEREBY CERTIFY THAT DNV WITNESSED ALL CERTIFICATES AND VALVES PASSED TEST IN ACCORDANCE WITH TEST STANDARDS SHOWN

