



**United States of America
Department of Homeland Security
United States Coast Guard**

Certification Date: 16 Dec 2021

Expiration Date: 16 Dec 2022

Temporary Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

This Temporary Certificate of Inspection is issued under the provision of Title 46 United States Code, Section 399, in lieu of the regular certificate of inspection, and shall be in force only until the receipt on board said vessel of the original certificate of inspection, this certificate in no case to be valid after one year from the date of inspection.

Vessel Name	Official Number	IMO Number	Call Sign	Service
KIRBY 14827	591528			Tank Barge

Hailing Port	Hull Material	Horsepower	Propulsion
	Steel		Unknown

Place Built	Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
TELL CITY, INDIANA	01Jan1978		R-908	R-908		R-192.8
			I-	I-		I-0

Owner	Operator
KIRBY INLAND MARINE, LP 55 WAUGH DRIVESUITE 1000 HOUSTON, TX 77007 UNITED STATES	KIRBY INLAND MARINE LP 16402 1/2 DE ZAVALA CHANNELVIEW, TX 77530 UNITED STATES

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

0 Masters	0 Licensed Mates	0 Chief Engineers	0 Oilers
0 Chief Mates	0 First Class Pilots	0 First Assistant Engineers	
0 Second Mates	0 Radio Officers	0 Second Assistant Engineers	
0 Third Mates	0 Able Seamen	0 Third Assistant Engineers	
0 Master First Class Pilot	0 Ordinary Seamen	0 Licensed Engineers	
0 Mate First Class Pilots	0 Deckhands	0 Qualified Member Engineer	

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 0

Route Permitted And Conditions Of Operation:
---Lakes, Bays, and Sounds plus Limited Coastwise---

Also, in fair weather only, not more than twelve (12) miles from shore between St. Marks and Carrabelle, Florida.

This vessel has been granted a fresh water service examination interval per 46 CFR 31.10-21(a)(2). If this vessel is operated in salt water more than 6 months in any 12 month period, the vessel must be inspected using salt water intervals per 46 CFR 31.10-21(a)(1) and the cognizant OCMI notified in writing as soon as this change in status occurs.

This tank barge is participating in the Eighth and Ninth Coast Guard District's Tank Barge Streamlined

*****SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION*****

With this Inspection for Certification having been completed at Port Arthur, TX, UNITED STATES, the Officer in Charge, Marine Inspection, Marine Safety Unit Port Arthur certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Re-Inspection				This certificate issued by: K. A. Hantal, CDR, USCG, By direction Officer in Charge, Marine Inspection Marine Safety Unit Port Arthur Inspection Zone
Date	Zone	A/P/R	Signature	



Temporary Certificate of Inspection

Vessel Name: KIRBY 14827

Inspection Program (TBSIP). Inspection activities aboard this barge shall be conducted per its Tank Barge Action Plan (TAP). Inspection issues concerning this barge should be directed to OCMI Houston-Galveston.

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
DryDock	30Sep2026	13Sep2016	28Jul2011
Internal Structure	30Sep2026	16Dec2021	13Sep2016

--- Liquid/Gas/Solid Cargo Authority/Conditions ---

Authorization: LIQUEFIED FLAMMABLE GAS AND SPECIFIED HAZARDOUS CARGOES

Total Capacity	Units	Highest Grade Type	Part151 Regulated	Part153 Regulated	Part154 Regulated
14324	Barrels	LFG	Yes	No	No

Hazardous Bulk Solids Authority

Not Authorized

Loading Constraints - Structural

Tank Location Description	Max Cargo Weight per Tank (short tons)	Maximum Density (lbs/gal)
1 P/S (AMA)	712	5.100
1 P/S (BDI, BBM)	712	5.200
1 P/S (PRP, PPM)	562	4.200
1 P/S (PPL)	587	4.300
1 P/S (BUT)	675	4.800

Conditions Of Carriage

Loading Constraints - Stability

Hull Type	Max Load (S/T)	Max Draft (ft/in)	Max Density (lbs/gal)	Route
II (AMA)	1425	8'6"	5.1	Lake, Bays and Sounds
II (BDI, BBM)	1425	8'6"	5.2	Lake, Bays and Sounds
II (BUT)	1350	8'6"	4.8	Lake, Bays and Sounds
II (PRP, PPM)	1125	8'6"	4.2	Lake, Bays and Sounds
II (PPL)	1175	8'6"	4.3	Lake, Bays and Sounds

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), serial #VN80013466, dated 20FEB01, may be carried. The specified hazardous cargoes may be carried only in the tanks indicated.

Inspected and approved for the carriage of specified liquefied flammable gases at a pressure not to exceed 260 PSIG and at temperatures not less than ambient.

Mixtures of the subchapter "D" liquefied flammable gas cargoes Butane (BUT), Propane (PRP), and Propylene (PPL) are also authorized for carriage subject to the loading and stability constraints of the least dense gas cargo in the mixtures specified above. Mixtures of subchapter "O" and "D" liquefied gas cargoes not specified above must be approved by Commandant (CG-ENG-5) prior to being authorized for carriage.

BBM and PPM are the only subchapter "O" and "D" LFG mixtures presently authorized. No other cargoes may be carried when PPM is carried unless the PPM piping system is separated from other cargo piping systems.



Temporary Certificate of Inspection

Vessel Name: KIRBY 14827

STABILITY & TRIM

Cargo tanks must be loaded uniformly whenever a 46 CFR Subchapter "O" cargo is carried; for trim purposes, the weight of cargo in each tank may exceed the uniformly loaded tank cargo weight by at most 5 percent.

--- Inspection Status ---

Cargo Tanks

Tank Id	Internal Exam			External Exam		
	Previous	Last	Next	Previous	Last	Next
1 P/S (AMA)	24May2006	14Sep2016	30Sep2026	14Sep2016	16Dec2021	30Sep2026
1 P/S (BDI, BBM)	24May2006	14Sep2016	30Sep2026	14Sep2016	16Dec2021	30Sep2026
1 P/S (PRP, PPM)	24May2006	14Sep2016	30Sep2026	14Sep2016	16Dec2021	30Sep2026
1 P/S (PPL)	24May2006	14Sep2016	30Sep2026	14Sep2016	16Dec2021	30Sep2026
1 P/S (BUT)	24May2006	14Sep2016	30Sep2026	14Sep2016	16Dec2021	30Sep2026

Hydro Test

Tank Id	Safety Valves	Previous	Last	Next
1 P/S (AMA)	14Sep2016	-	01Mar1978	-
1 P/S (BDI, BBM)	14Sep2016	-	01Mar1978	-
1 P/S (PRP, PPM)	14Sep2016	-	01Mar1978	-
1 P/S (PPL)	14Sep2016	-	01Mar1978	-
1 P/S (BUT)	14Sep2016	-	01Mar1978	-

---Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

--- Fire Fighting Equipment ---

Fire Extinguishers - Hand portable and semi-portable

Quantity	Class Type
1	B-II

END



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 14827 (EX: USL-149)**

Shipyard:

Official #: D591528

Page 1 of 1

Hull #:

List of Authorized Cargoes

Cargo Identification						Conditions of Carriage	
Name	Chem Code	Compat		Grade	Hull Type	Note	Special Requirements in 46 CFR 151 General and Mat'ls of Construction
		Group No	Exc				
Authorized Subchapter O Cargoes							
Ammonia, anhydrous	AMA	6	N	LCG	II		.50-30, .50-32
Butadiene, Butylene mixtures (containing Acetylenes)	BBM	30	N		II		.50-30, .50-70(a), .50-73, .56-1(b), (d), (f), (g)
Butadiene	BDI	30	N	LFG	II		.50-70(a), .50-73
Butane	BUT	31	N	LFG			
Propylene	PPL	30	N	LFG			
Propylene, Propane, MAPP gas mixture (containing 12% orless MAPP gas)	PPM	30	Y	LFG	III		.50-79 'c' only
Propane	PRP	31	N	LFG			

Explanation of terms & symbols used in the Table:

Cargo Identification

Name	The proper shipping name as listed in 46 CFR Table 151.05.
Chem Code	The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual.
Compatibility Group No.	The cargo reactive group number assigned for compatibility determinations in 46 CFR Part 150 Tables I and II. In accordance with 46 CFR 150.130, the Person-in-Charge of the barge is responsible for ensuring that the compatibility requirements of 46 CFR Part 150 are met. Cargoes must be checked for compatibility using the figures, tables, and appendices of 46 CFR 150 in conjunction with the assigned reactive group number.
Exceptions (Exc)	Indication of whether or not there are exceptions to the compatibility chart for the given cargo. See Appendix I to 46 CFR Part 150.
Grade	The cargo classification assigned to each flammable or combustible liquid. Grades inside of "{ }" indicate a provisional assignment based upon literature sources which were not verified by manufacturers data. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo.
A, B, C	Flammable liquid cargoes, as defined in 46 CFR 30-10.22.
D, E	Combustible liquid cargoes, as defined in 46 CFR 30-10.15.
NA, NF	Those subchapter O cargoes which are not classified as a flammable or combustible liquid.
#	No flammability/combustibility grade has been assigned yet, as the necessary flash point/vapor pressure data for such assignments are presently not available.
Hull Type	The required barge hull classification for carriage of the specified Subchapter O hazardous material cargo, see 46 CFR 151.10-1.
I	Designed to carry products which require the maximum preventive measures to preclude the uncontrolled release of the cargo. See 46 CFR 151.10-1(b)(1).
II	Designed to carry products which require significant preventive measures to preclude the uncontrolled release of cargo. See 46 CFR 151.10-1(b)(3).
III	Designed to carry products of sufficient hazard to require a moderate degree of control. See 46 CFR 151.10-1(b)(4).

Conditions of Carriage

Note	See Certificate of Inspection for explanation of symbols used in this column.
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Safety valve inspection report

Certificate nr 1280
Date 11-02-2021

Job no. LV-9253-SO
Client Kirby Inland Marine
Barge # KIRBY 14827

Set pressure (cold) 480 psi
Manufacturer Aquatrol
Type / Model 742DG1V2K1
Serial No. L211029-3

Valve data

Size 1"x1"
Rating
Nozzle / Orifice D

Set pressure test

Found set pressure 470 psi
Reseat pressure (indication) 355 psi
Result Passed
Test method Air

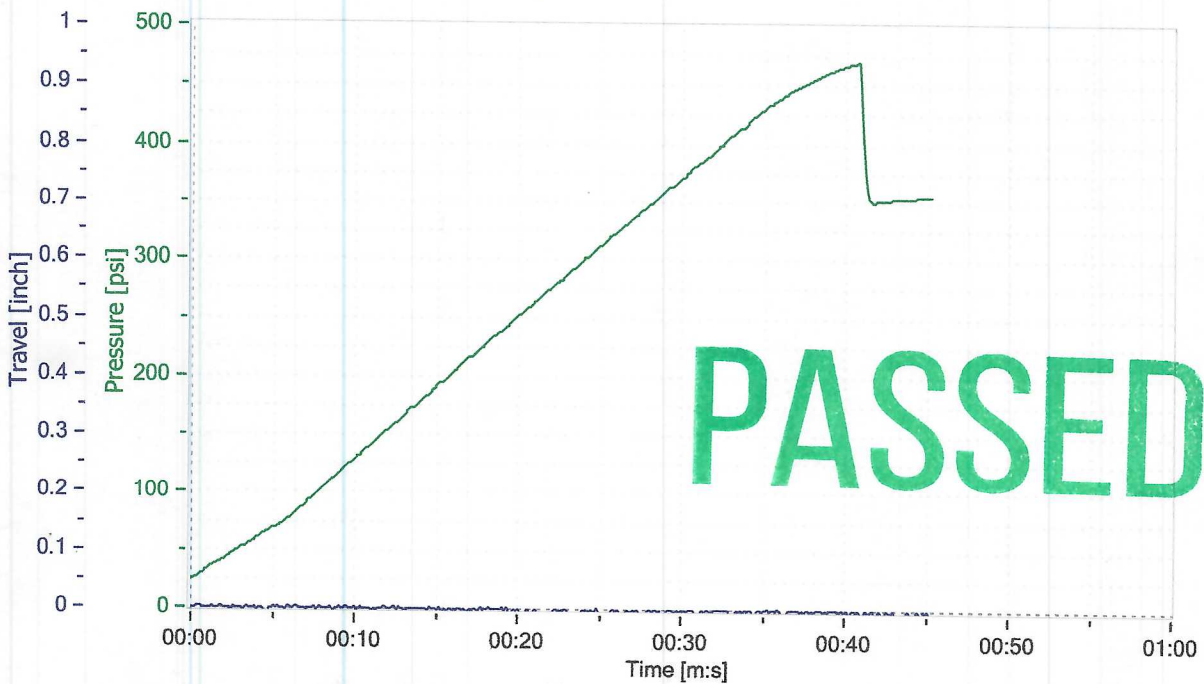
Test data

Seat tightness test

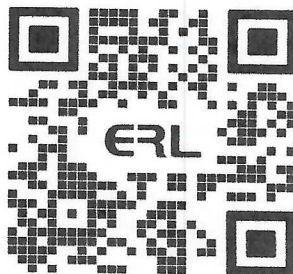
Leakage 0 bubbles/min.
Test pressure 435 psi
Result Passed

Backpressure test

Pressure 30 psi
Result Passed



INTERLINK



Tested by

Name

David Theiler

Date

11-2-21

Signature

Inspected by

Name

Hope Borders

Date

11-2-2021

Signature

Safety valve inspection report

Certificate nr 1281
Date 11-02-2021

Job no. LV-9253-SO
Client Kirby Inland Marine
Barge # KIRBY 14827

Set pressure (cold) 480 psi
Manufacturer Aquatrol
Type / Model 742DG1V2K1
Serial No. 91128-1

Valve data

Size 1"x1"
Rating
Nozzle / Orifice D

Set pressure test

Found set pressure 491 psi
Reseat pressure (indication) 405 psi
Result Passed
Test method Air

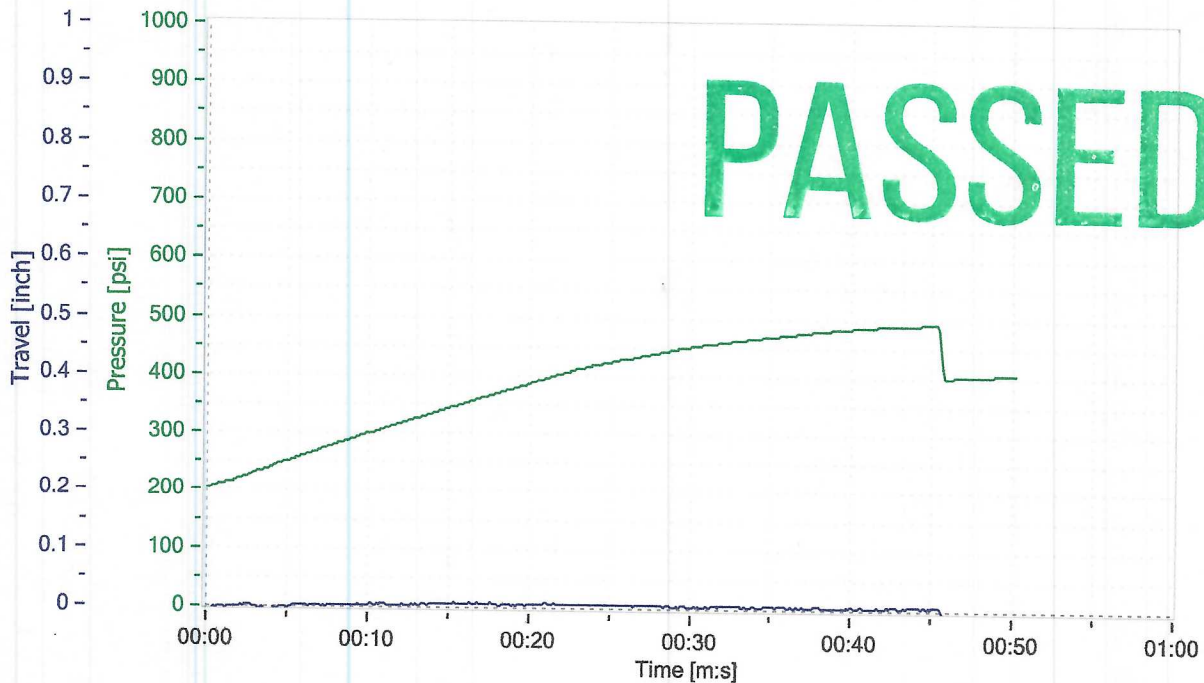
Test data

Seat tightness test

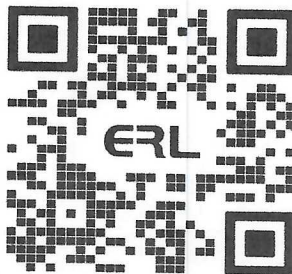
Leakage 0 bubbles/min.
Test pressure 434 psi
Result Passed

Backpressure test

Pressure 30 psi
Result Passed



INTERLINK



Tested by

Name

David Theiler

Date

11-2-21

Signature

Inspected by

Name

Hope Borders

Date

11-2-21

Signature

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1295
Date 11-03-2021
Tested to API 598 Standard

Job no. LV-9159-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 2014-2

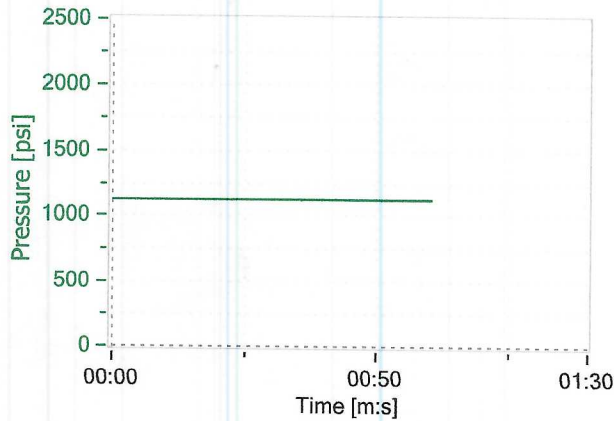
Size 6"
Rating 300
Fluid Liquid

Test results

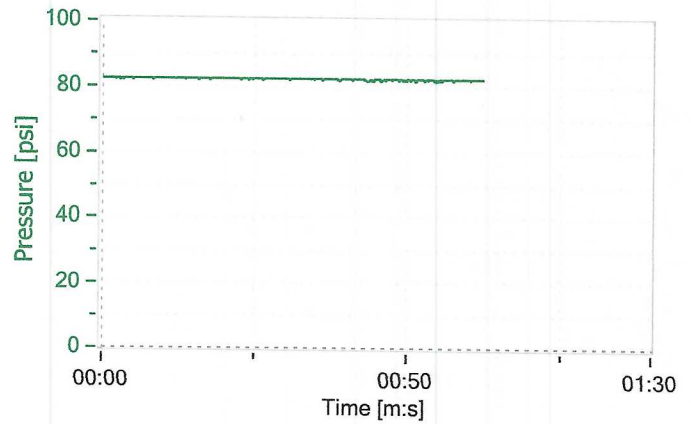
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	82 psi	85 psi
Time	1:03	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

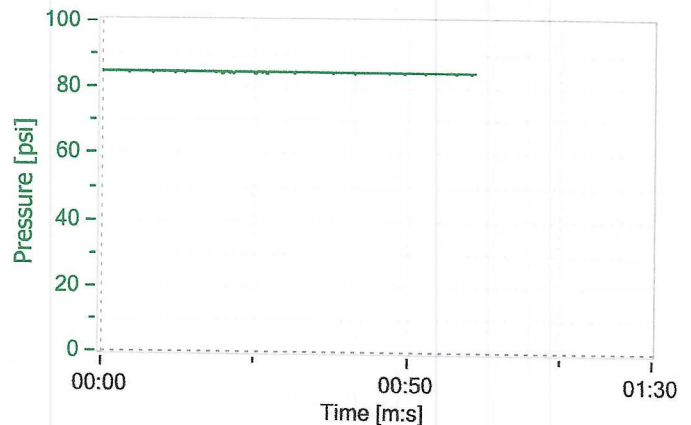
BODY TEST GRAPH



SEAT TEST GRAPH AB



SEAT TEST GRAPH BA



Tested by

Name David Theiler

Date 11-3-21

Signature *[Handwritten Signature]*

Inspected by

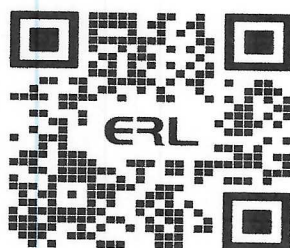
Name Javier Gutierrez

Date 11-3-21

Signature *[Handwritten Signature]*



INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1296
Date 11-03-2021
Tested to API 598 Standard

Job no. LV-9159-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 9159-1

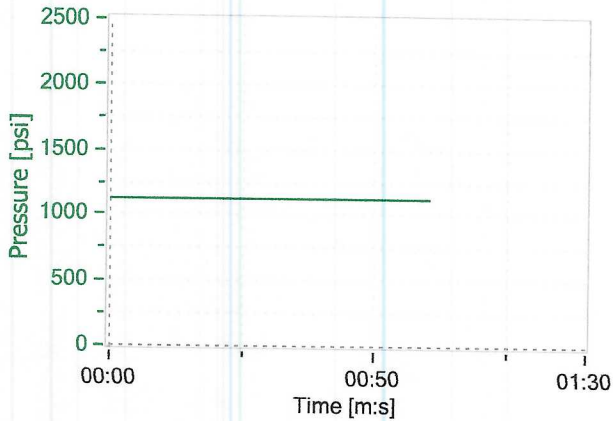
Size 6"
Rating 300
Fluid Liquid

Test results

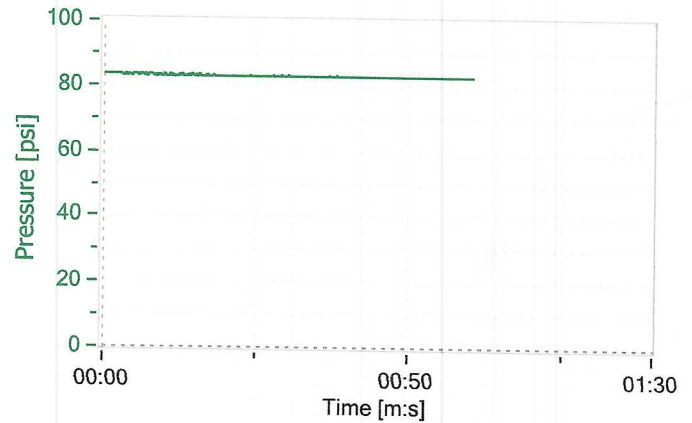
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	83 psi	84 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

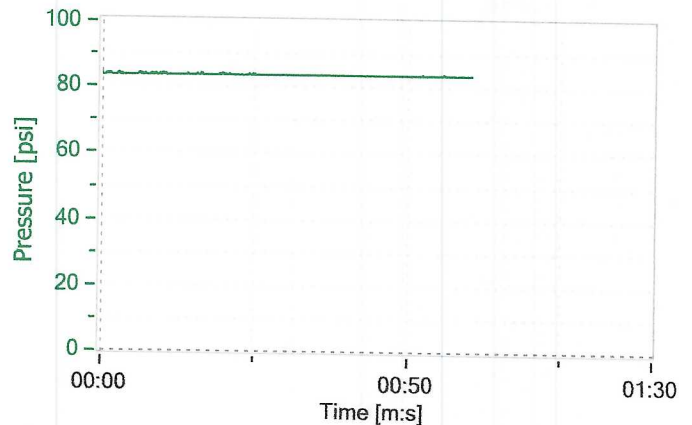
BODY TEST GRAPH



SEAT TEST GRAPH AB



SEAT TEST GRAPH BA



Tested by
Name David Theiler
Date 11-3-21
Signature *[Signature]*

Inspected by
Name Javier Gutierrez
Date 11-3-21
Signature *[Signature]*

INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1278
Date 11-02-2021
Tested to API 598 Standard

Job no. LV-9159-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 1769-1

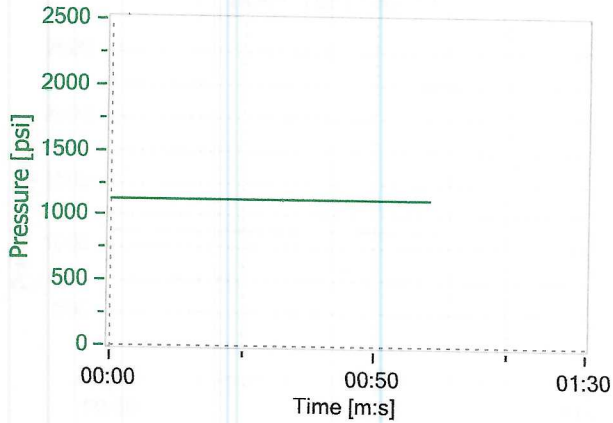
Size 6"
Rating 300
Fluid Liquid

Test results

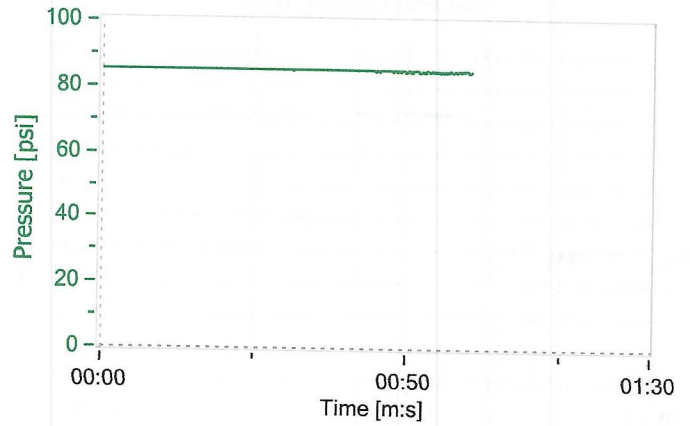
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	85 psi	83 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

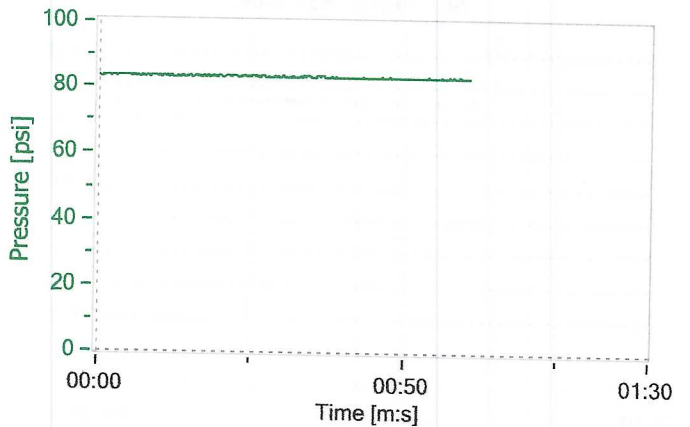
BODY TEST GRAPH



SEAT TEST GRAPH AB



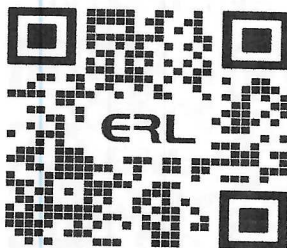
SEAT TEST GRAPH BA



Tested by
Name David Theiler
Date 11-2-21
Signature

Inspected by
Name Javier Gutierrez
Date 11-2-21
Signature

INTERLINK



PASSED



SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1283
Date 11-02-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 2500-1

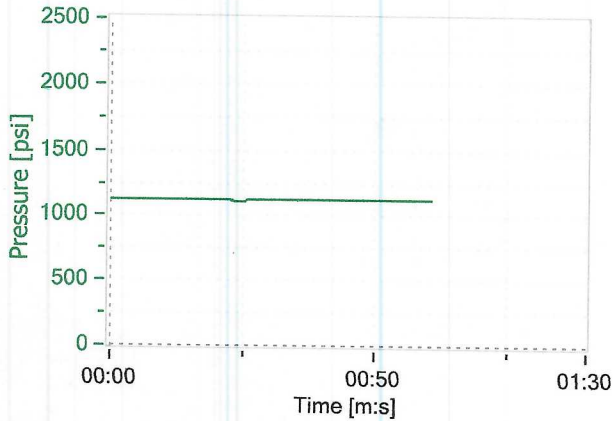
Size 4"
Rating 300
Fluid Liquid

Test results

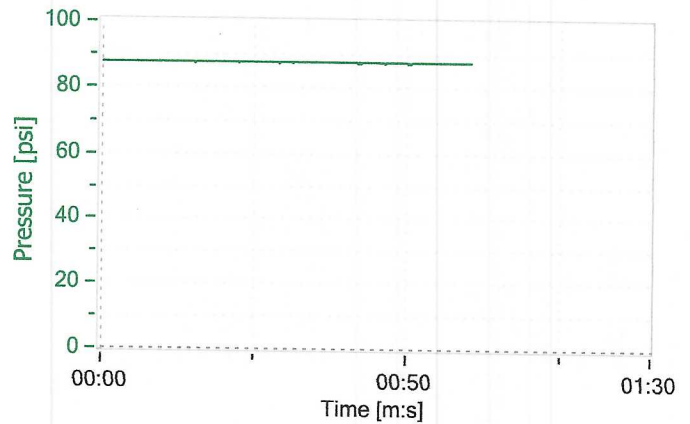
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	87 psi	84 psi
Time	1:01	1:02
Leakage	0 bubbles/min.	0 bubbles/min.

BODY TEST GRAPH



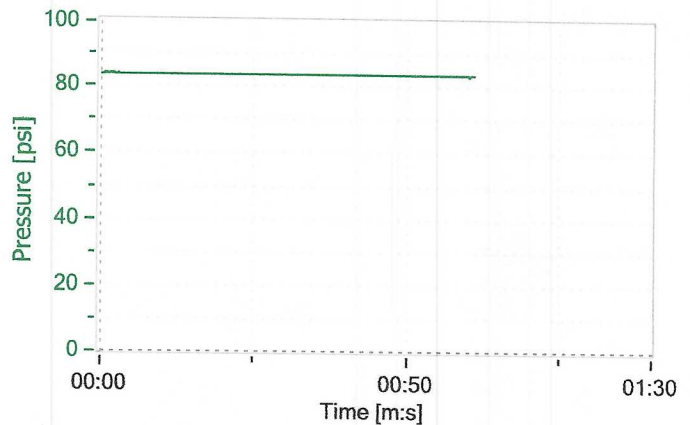
SEAT TEST GRAPH AB



Tested by

Name David Theiler
Date 11-2-21
Signature *[Signature]*

SEAT TEST GRAPH BA

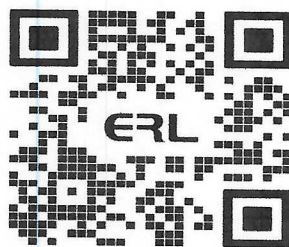


Inspected by

Name Javier Gutierrez
Date 11-2-21
Signature *[Signature]*



INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1284
Date 11-02-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 73113-2

Size 4"
Rating 300
Fluid Liquid

Test results

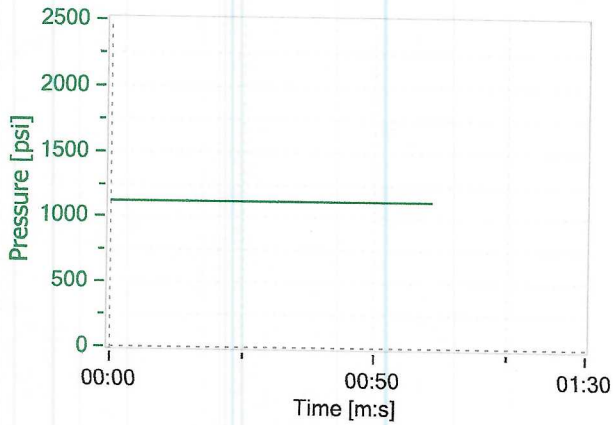
Body test

Pressure 1125 psi
Time 1:00

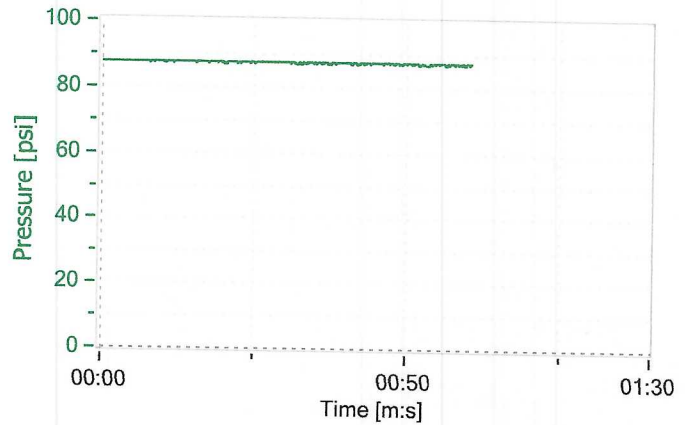
Seat tests

	AB	BA
Pressure	87 psi	84 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

BODY TEST GRAPH



SEAT TEST GRAPH AB



Tested by

Name David Theiler

Date 11-2-21

Signature *[Signature]*

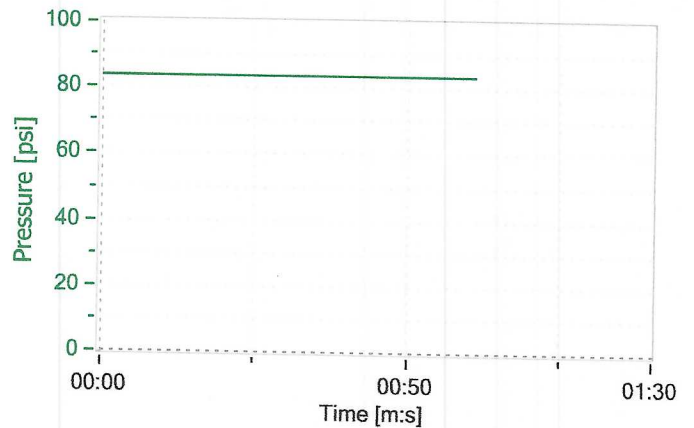
Inspected by

Name Javier Gutierrez

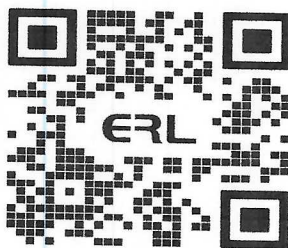
Date 11-2-21

Signature *[Signature]*

SEAT TEST GRAPH BA



INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1285
Date 11-02-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 3006-1

Size 4"
Rating 300
Fluid Liquid

Test results

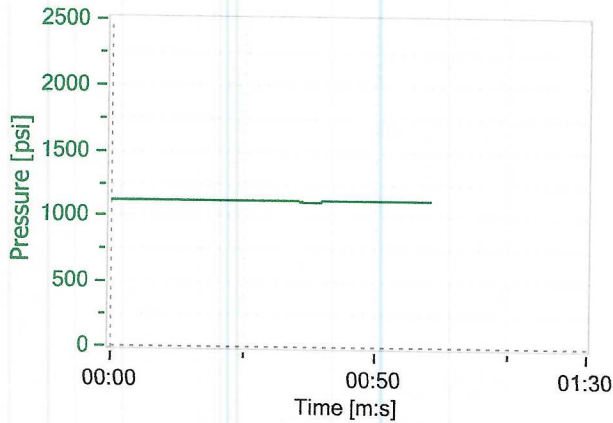
Body test

Pressure 1125 psi
Time 1:00

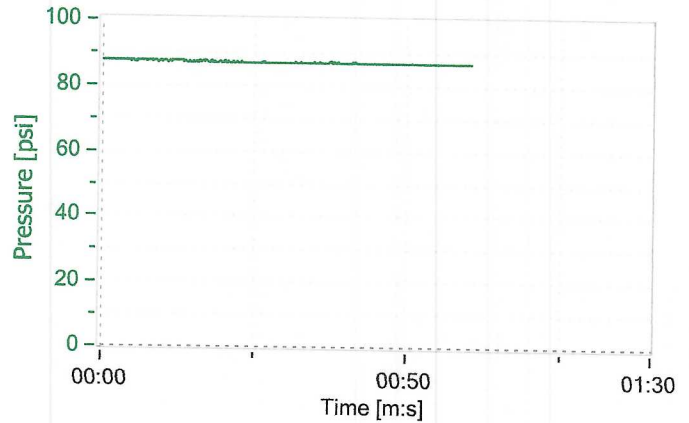
Seat tests

AB	BA
Pressure 87 psi	87 psi
Time 1:01	1:01
Leakage 0 bubbles/min.	0 bubbles/min.

BODY TEST GRAPH



SEAT TEST GRAPH AB



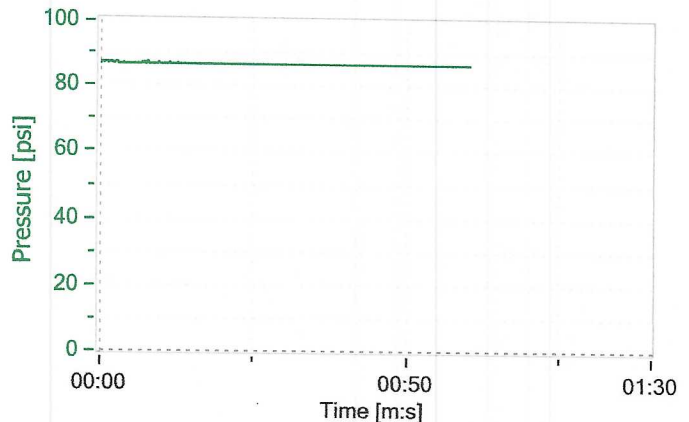
Tested by

Name David Theiler
Date 11-2-21
Signature

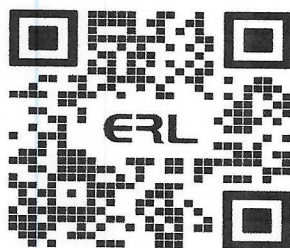
Inspected by

Name Javier Gutierrez
Date 11-2-21
Signature

SEAT TEST GRAPH BA



INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1286
Date 11-02-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 2477-1

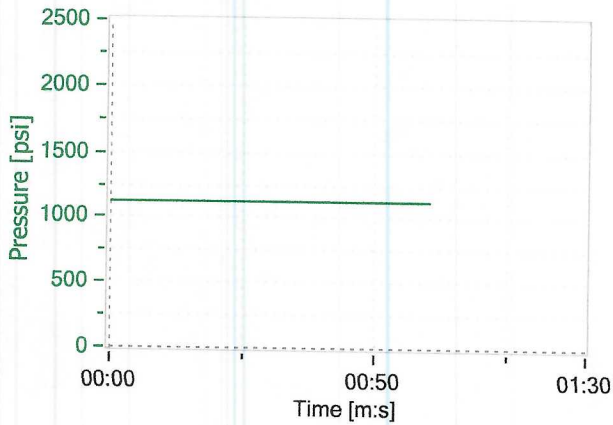
Size 4"
Rating 300
Fluid Liquid

Test results

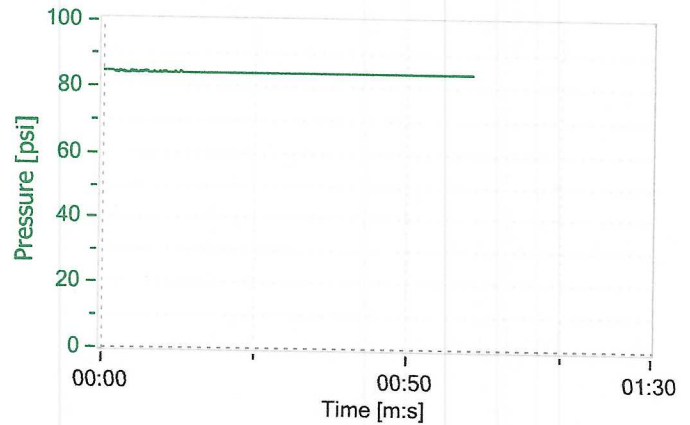
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	84 psi	85 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

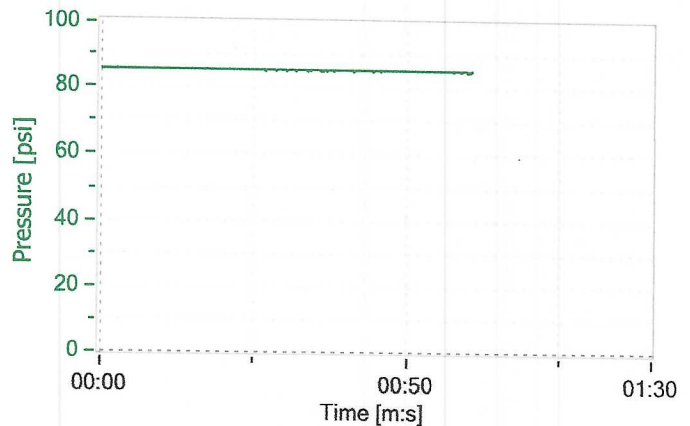
BODY TEST GRAPH



SEAT TEST GRAPH AB



SEAT TEST GRAPH BA

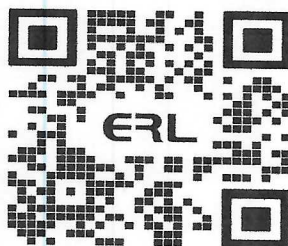


Tested by
Name David Theiler
Date 11-2-21
Signature *[Signature]*

Inspected by
Name Javier Gutierrez
Date 11-2-21
Signature *[Signature]*



INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1287
Date 11-02-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 9158-2

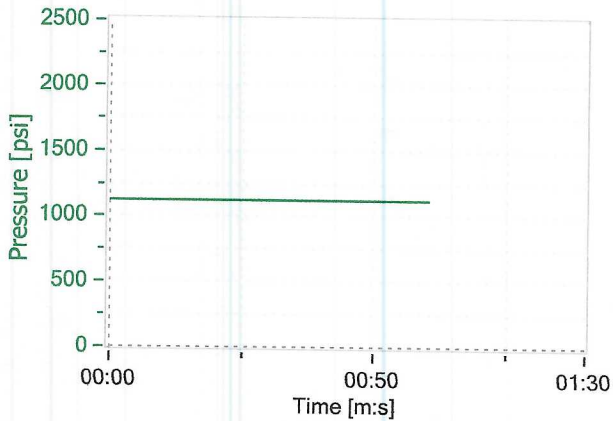
Size 4"
Rating 300
Fluid Liquid

Test results

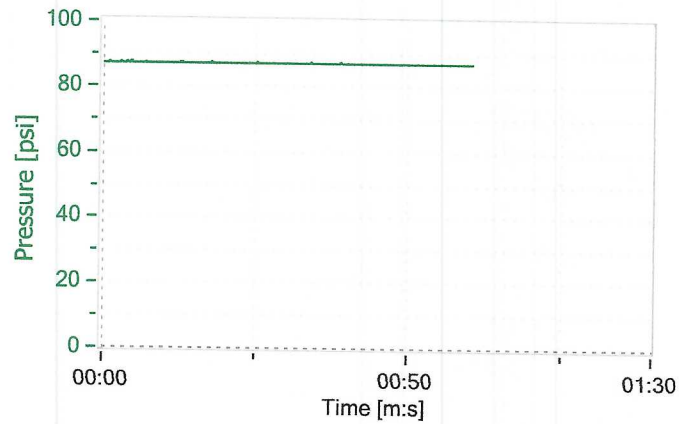
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	87 psi	86 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

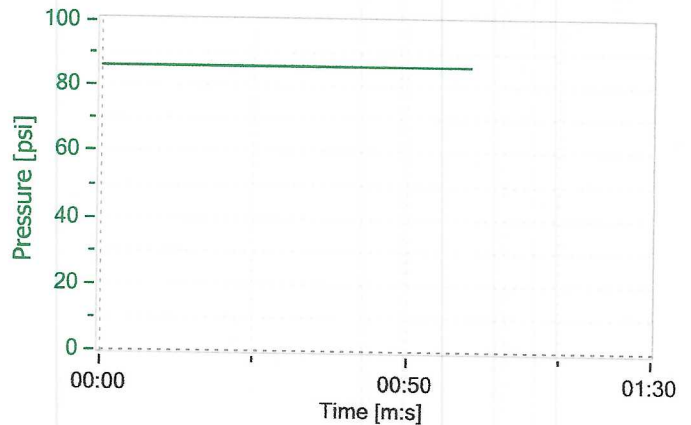
BODY TEST GRAPH



SEAT TEST GRAPH AB



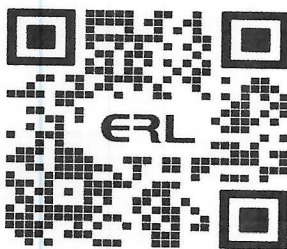
SEAT TEST GRAPH BA



Tested by
Name David Theiler
Date 11-2-21
Signature

Inspected by
Name Javier Gutierrez
Date 11-2-21
Signature

INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1288
Date 11-02-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 9158-5

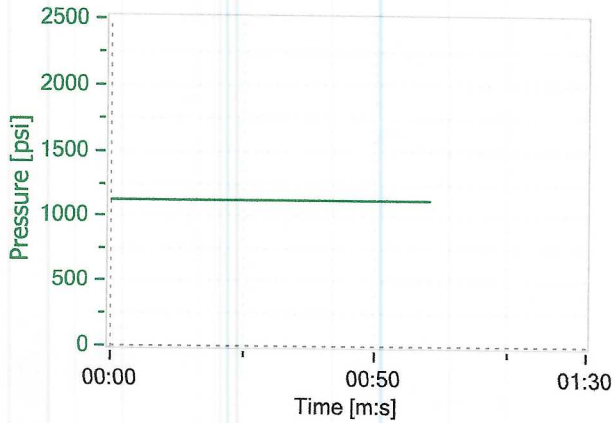
Size 4"
Rating 300
Fluid Liquid

Test results

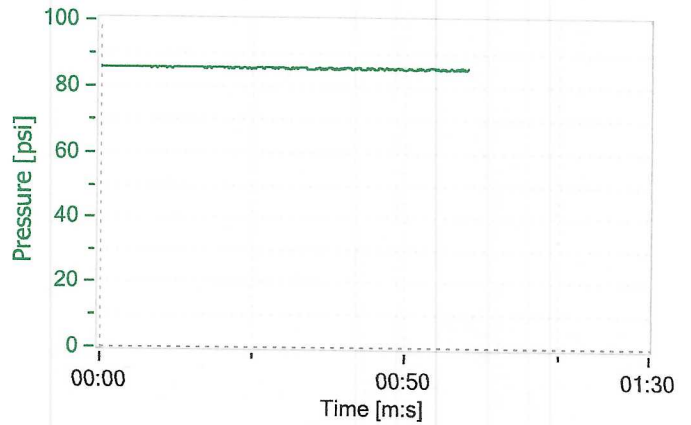
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	86 psi	84 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

BODY TEST GRAPH



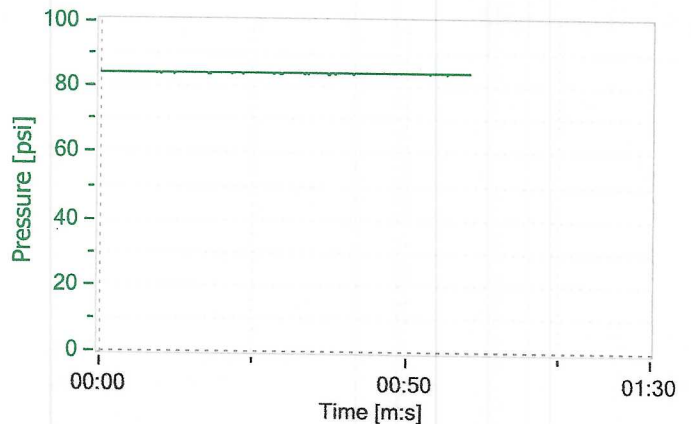
SEAT TEST GRAPH AB



Tested by

Name David Theiler
Date 11-2-21
Signature *[Signature]*

SEAT TEST GRAPH BA

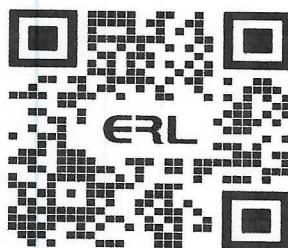


Inspected by

Name Javier Gutierrez
Date 11-2-21
Signature *[Signature]*



INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1289
Date 11-02-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 3008-1

Size 4"
Rating 300
Fluid Liquid

Test results

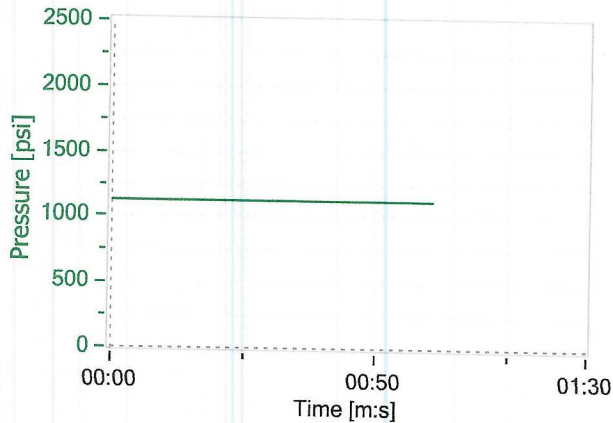
Body test

Pressure 1125 psi
Time 1:00

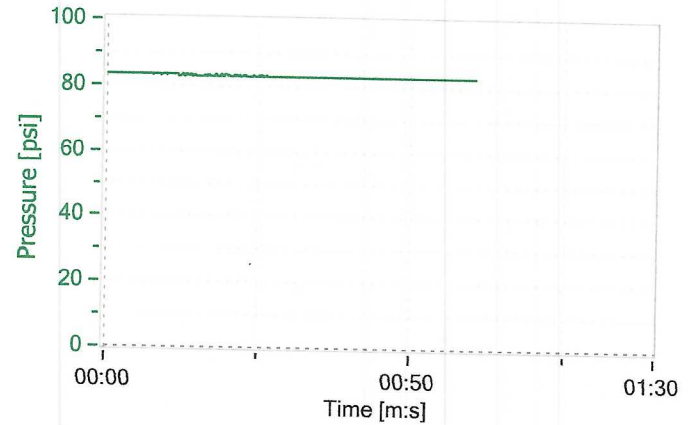
Seat tests

AB	BA
Pressure 83 psi	87 psi
Time 1:01	1:01
Leakage 0 bubbles/min.	0 bubbles/min.

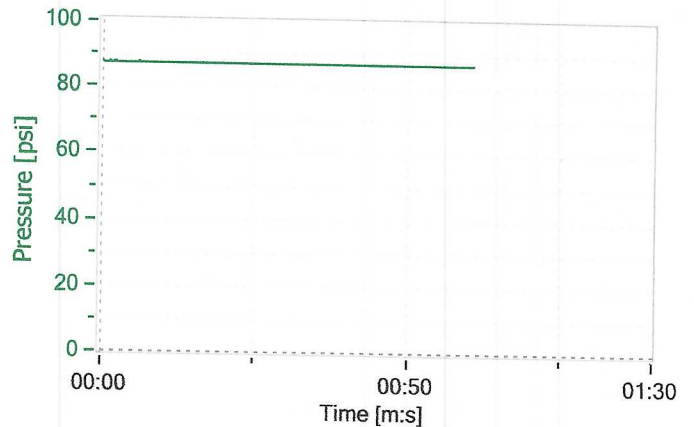
BODY TEST GRAPH



SEAT TEST GRAPH AB



SEAT TEST GRAPH BA



Tested by

Name David Theiler

Date 11-2-21

Signature

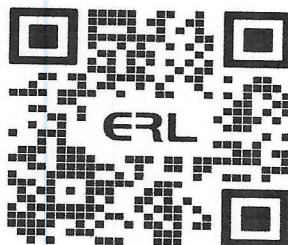
Inspected by

Name Javier Gutierrez

Date 11-2-21

Signature

INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1290
Date 11-03-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 9158-1

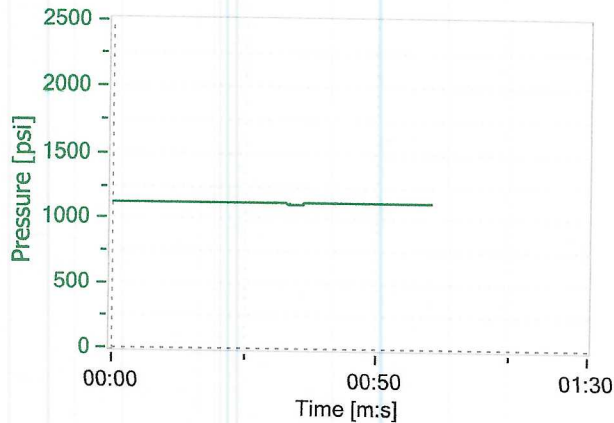
Size 4"
Rating 300
Fluid Liquid

Test results

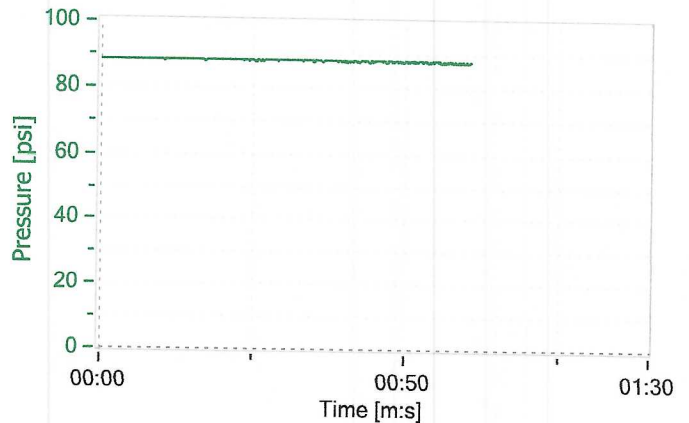
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	88 psi	83 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

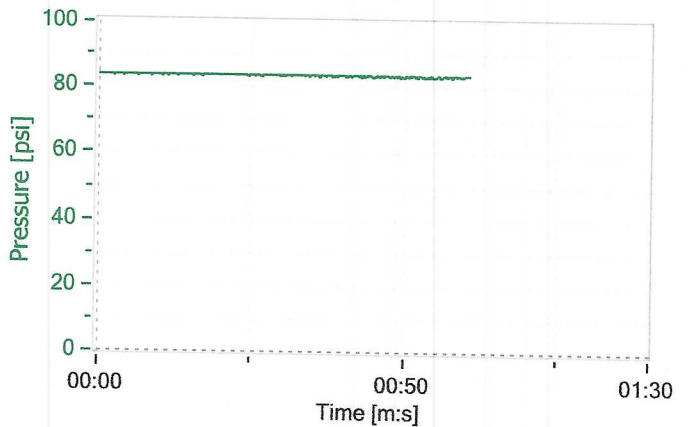
BODY TEST GRAPH



SEAT TEST GRAPH AB



SEAT TEST GRAPH BA

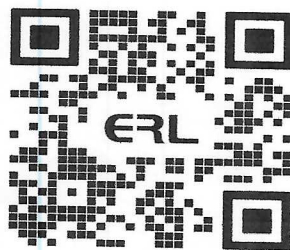


Tested by
Name David Theiler
Date 11-3-21
Signature *[Signature]*

Inspected by
Name Javier Gutierrez
Date 11-3-21
Signature *[Signature]*



INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1291
Date 11-03-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 73113-1

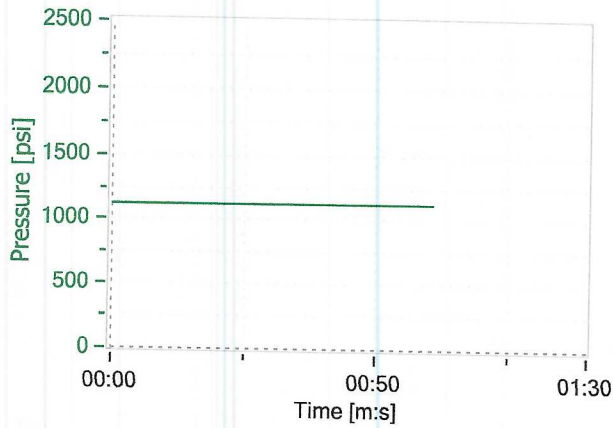
Size 4"
Rating 300
Fluid Liquid

Test results

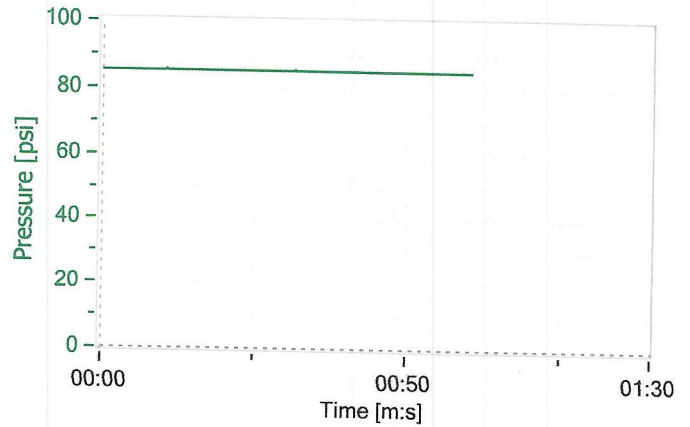
Body test
Pressure 1125 psi
Time 1:00

Seat tests	AB	BA
Pressure	85 psi	85 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

BODY TEST GRAPH

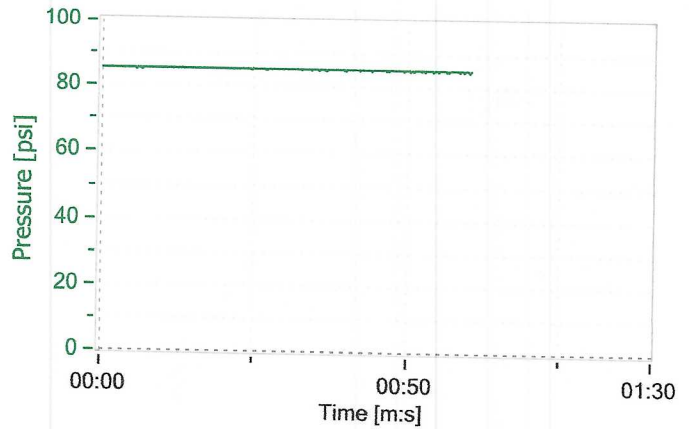


SEAT TEST GRAPH AB



Tested by
Name David Theiler
Date 11-3-21
Signature *[Signature]*

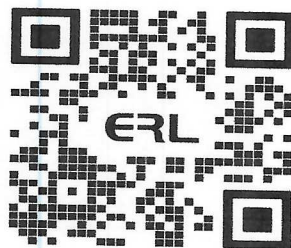
SEAT TEST GRAPH BA



Inspected by
Name Javier Gutierrez
Date 11-3-21
Signature *[Signature]*



INTERLINK



PASSED

SHUT-OFF VALVE INSPECTION REPORT

Certificate nr 1292
Date 11-03-2021
Tested to API 598 Standard

Job no. LV-9158-WO
Client Kirby Inland Marine
Barge # KIRBY 14827

Valve data

Manufacturer Warren
Type / Model 6305FS
Serial No. 9158-4

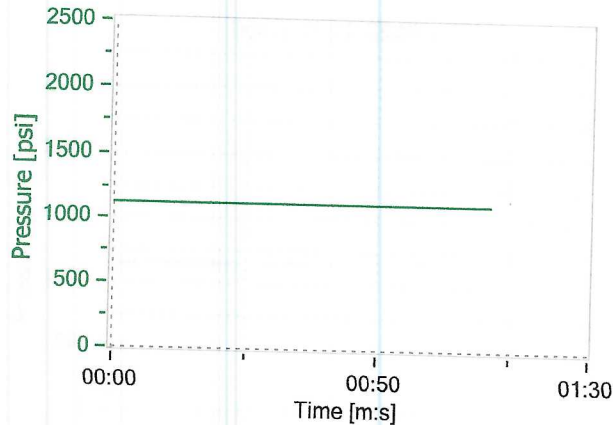
Size 4"
Rating 300
Fluid Liquid

Test results

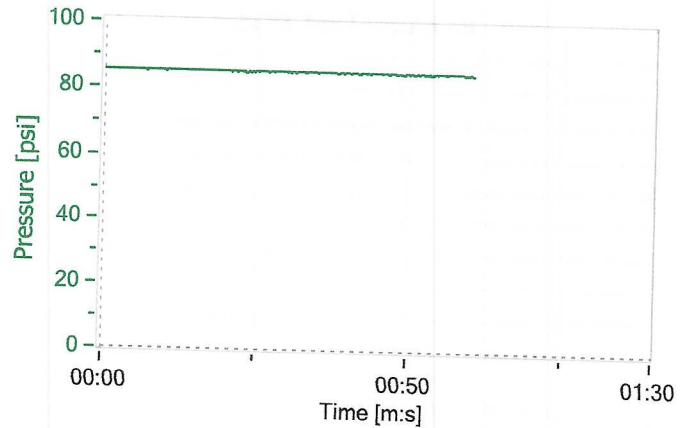
Body test
Pressure 1125 psi
Time 1:11

Seat tests	AB	BA
Pressure	85 psi	85 psi
Time	1:01	1:01
Leakage	0 bubbles/min.	0 bubbles/min.

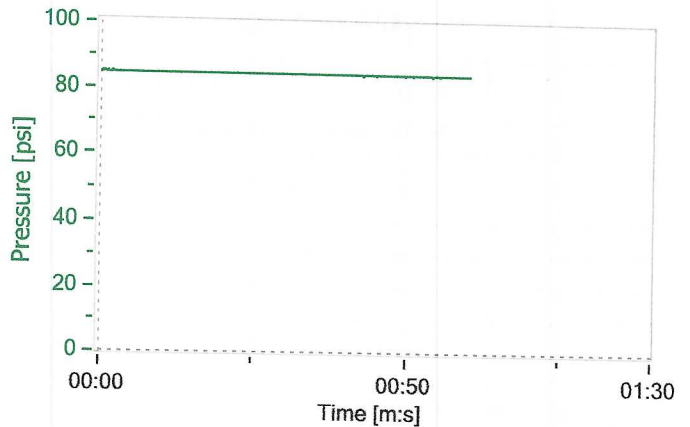
BODY TEST GRAPH



SEAT TEST GRAPH AB



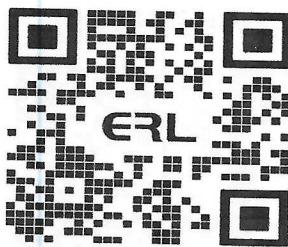
SEAT TEST GRAPH BA



Tested by
Name David Theiler
Date 11-3-21
Signature *[Signature]*

Inspected by
Name Javier Gutierrez
Date 11-3-21
Signature *[Signature]*

INTERLINK



PASSED

Warren Ball Valve Rebuild Measurement Log

Job # LV-9158-WO
 Barge # KIRBY 14827
 Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
 Pressure: 150 300 Serial # 9158-4 Match Mark # 9158-4

Body seat pocket ACTUAL Minor I.D. 4.161 Major I.D. 5.395 OAL 3.183

Cap seat pocket ACTUAL Minor I.D. 4.169 Major I.D. 5.396 OAL 1.376

Body packing pocket ACTUAL I.D. 1.693 Depth .715

Stem sleeve I.D. 1.374
 Stem ACTUAL O.D. 1.375 Length 4.542

Collar teflon PFTE sleeve O.D. 1.378 Thickness .041

Ball ACTUAL O.D. 6.416
 Ball MFG O.D. 6.421"

Teflon PFTE thrust washer:
 ACTUAL I.D. 1.411 O.D. 1.654 Thickness .052
 MFG I.D. 1.378" O.D. 1.653" Thickness 0.039"

New seat ACTUAL I.D. 4.183 O.D. 5.391 Thickness .555
 I.D. 4.188 O.D. 5.392 Thickness .555

New seat MFG I.D. 4.172" O.D. 5.391" Thickness 0.547"

New packing ACTUAL I.D. 1.378 O.D. 1.695 Height .641
 New packing MFG I.D. 1.375" O.D. 1.685" Height 0.781"

Body gasket ACTUAL I.D. 6.536 O.D. 7.044 Thickness .131
 Body gasket MFG I.D. 6.535" O.D. 7.046" Thickness 0.125"

Body gasket pocket:
 CAP Minor O.D. 6.497 Major O.D. 7.056 Depth .223
 BODY Minor I.D. 6.491 Major I.D. 7.042 Depth .16

Torque: 1 _____ 2 _____ 3 _____

Warren Ball Valve Rebuild Condition Report

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8
Pressure: 150 300
Material: CS SS
Serial # 9158-5 Match Mark # 9158-5

Type Gear Operated Air Operated

Body match mark # _____
Body condition Good Pitted Other

Cap match mark # _____
Cap condition Good Pitted Other

Ball match mark # _____
Ball condition Good Pitted Other

Stem match mark # _____
Stem condition Good Pitted Other Renew

Stem bolting Reuse Replace

Testing Personnel Only						
Test	Low	High	SS Shell		CS Shell	
PSI	<input type="checkbox"/> 10	<input checked="" type="checkbox"/> 80	<input type="checkbox"/> 425	<input type="checkbox"/> 1100	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 1125
<input checked="" type="checkbox"/> Visually checked body bolts for 2 or more threads						
<input checked="" type="checkbox"/> Verified all body bolts are torqued						

Test Date: 11-2-21

Technician: [Signature]

Witness: [Signature]

Warren Ball Valve Rebuild Measurement Log

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 9158-5 Match Mark # 9158-5

Body seat pocket ACTUAL Minor I.D. 4.157 Major I.D. 5.399 OAL 3.821

Cap seat pocket ACTUAL Minor I.D. 4.157 Major I.D. 5.401 OAL 1.987

Body packing pocket ACTUAL I.D. 1.694 Depth .715

Stem sleeve I.D. 1.391
Stem ACTUAL O.D. 1.375 Length 4.557

Collar teflon PFTE sleeve O.D. 1.379 Thickness .04

Ball ACTUAL O.D. 6.416
Ball MFG O.D. 6.421"

Teflon PFTE thrust washer:
ACTUAL I.D. 1.410" O.D. 1.653" Thickness 0.056"
MFG I.D. 1.378" O.D. 1.653" Thickness 0.039"

New seat ACTUAL I.D. 4.167 O.D. 5.385 Thickness .551
I.D. 4.169 O.D. 5.372 Thickness .552

New seat MFG I.D. 4.172" O.D. 5.391" Thickness 0.547"

New packing ACTUAL I.D. 1.382 O.D. 1.687 Height .639
New packing MFG I.D. 1.375" O.D. 1.685" Height 0.781"

Body gasket ACTUAL I.D. 6.523 O.D. 7.041 Thickness 0.130"
Body gasket MFG I.D. 6.535" O.D. 7.046" Thickness 0.125"

Body gasket pocket:
CAP Minor O.D. 6.488 Major O.D. 7.038 Depth .217
BODY Minor I.D. 6.493 Major I.D. 7.04 Depth .157

Torque: 1 _____ 2 _____ 3 _____

Warren Ball Valve Rebuild Condition Report

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8
Pressure: 150 300
Material: CS SS
Serial # 9158-6
Match Mark # 9158-6

Type Gear Operated Air Operated

Body match mark #
Body condition Good Pitted Other

Cap match mark #
Cap condition Good Pitted Other

Ball match mark #
Ball condition Good Pitted Other

Stem match mark #
Stem condition Good Pitted Other Renew

Stem bolting Reuse Replace

Testing Personnel Only						
Test	Low	High	SS Shell		CS Shell	
PSI	<input type="checkbox"/> 10	<input checked="" type="checkbox"/> 80	<input type="checkbox"/> 425	<input type="checkbox"/> 1100	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 1125
<input checked="" type="checkbox"/> Visually checked body bolts for 2 or more threads						
<input checked="" type="checkbox"/> Verified all body bolts are torqued						

Test Date: 11-3-21 Technician: [Signature] Witness: [Signature]

Warren Ball Valve Rebuild Measurement Log

Job # LV-9158-WO
 Barge # KIRBY 14827
 Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
 Pressure: 150 300 Serial # 9158-6 Match Mark # 9158-6

Body seat pocket ACTUAL Minor I.D. 4.155 Major I.D. 5.399 OAL 3.819

Cap seat pocket ACTUAL Minor I.D. 4.154 Major I.D. 5.398 OAL 1.39

Body packing pocket ACTUAL I.D. ~~1.683~~ Depth .706

Stem sleeve I.D. 1.373
 Stem ACTUAL O.D. 1.375 Length 4.545

Collar teflon PFTE sleeve O.D. 1.377 Thickness .041

Ball ACTUAL O.D. 6.414
 Ball MFG O.D. 6.421"

Teflon PFTE thrust washer:
 ACTUAL I.D. 1.41 O.D. 1.665 Thickness .056
 MFG I.D. 1.378" O.D. 1.653" Thickness 0.039"

New seat ACTUAL I.D. 4.19 O.D. 5.396 Thickness .554
 I.D. 4.18 O.D. 5.383 Thickness .552

New seat MFG I.D. 4.172" O.D. 5.391" Thickness 0.547"

New packing ACTUAL I.D. 1.368 O.D. 1.693 Height .659
 New packing MFG I.D. 1.375" O.D. 1.685" Height 0.781"

Body gasket ACTUAL I.D. 6.535 O.D. 7.043 Thickness .13
 Body gasket MFG I.D. 6.535" O.D. 7.046" Thickness 0.125"

Body gasket pocket:
 CAP Minor O.D. 6.491 Major O.D. 7.056 Depth .211
 BODY Minor I.D. 6.489 Major I.D. 7.043 Depth .155

Torque: 1 _____ 2 _____ 3 _____

Warren Ball Valve Rebuild Condition Report

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 73113-1 Match Mark # 73113-1

Type Gear Operated Air Operated

Body match mark # _____
Body condition Good Pitted Other

Cap match mark # _____
Cap condition Good Pitted Other

Ball match mark # _____
Ball condition Good Pitted Other

Stem match mark # _____
Stem condition Good Pitted Other Renew

Stem bolting Reuse Replace

Testing Personnel Only						
Test	Low	High	SS Shell		CS Shell	
PSI	<input type="checkbox"/> 10	<input checked="" type="checkbox"/> 80	<input type="checkbox"/> 425	<input type="checkbox"/> 1100	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 1125
<input checked="" type="checkbox"/> Visually checked body bolts for 2 or more threads						
<input checked="" type="checkbox"/> Verified all body bolts are torqued						

Test Date: 11-3-21

Technician: [Signature]

Witness: [Signature]

Warren Ball Valve Rebuild Measurement Log

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 73113-1 Match Mark # 73113-1

Body seat pocket ACTUAL Minor I.D. 4.16 Major I.D. 5.396 OAL 3.826

Cap seat pocket ACTUAL Minor I.D. 4.162 Major I.D. 5.397 OAL 1.378

Body packing pocket ACTUAL I.D. 1.693 Depth 0.707

Stem sleeve I.D. 1.39
Stem ACTUAL O.D. 1.375 Length 4.545

Collar teflon PFTE sleeve O.D. 1.38 Thickness .041

Ball ACTUAL O.D. 6.415
Ball MFG O.D. 6.421"

Teflon PFTE thrust washer:
ACTUAL I.D. 1.406 O.D. 1.643 Thickness .05
MFG I.D. 1.378" O.D. 1.653" Thickness 0.039"

New seat ACTUAL I.D. 4.182 O.D. 5.385 Thickness .552
I.D. 4.179 O.D. 5.381 Thickness .552

New seat MFG I.D. 4.172" O.D. 5.391" Thickness 0.547"

New packing ACTUAL I.D. 1.379 O.D. 1.694 Height .652
New packing MFG I.D. 1.375" O.D. 1.685" Height 0.781"

Body gasket ACTUAL I.D. 6.537 O.D. 7.045 Thickness .132
Body gasket MFG I.D. 6.535" O.D. 7.046" Thickness 0.125"

Body gasket pocket:
CAP Minor O.D. 6.497 Major O.D. 7.052 Depth .222
BODY Minor I.D. 6.493 Major I.D. 7.044 Depth .153

Torque: 1 _____ 2 _____ 3 _____

Warren Ball Valve Rebuild Condition Report

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8
Pressure: 150 300
Material: CS SS
Serial # 3008-1
Match Mark # 3008-1

Type Gear Operated Air Operated

Body match mark #
Body condition Good Pitted Other

Cap match mark #
Cap condition Good Pitted Other

Ball match mark #
Ball condition Good Pitted Other

Stem match mark #
Stem condition Good Pitted Other Renew

Stem bolting Reuse Replace

Testing Personnel Only						
Test	Low	High	SS Shell		CS Shell	
PSI	<input type="checkbox"/> 10	<input checked="" type="checkbox"/> 80	<input type="checkbox"/> 425	<input type="checkbox"/> 1100	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 1125
<input checked="" type="checkbox"/> Visually checked body bolts for 2 or more threads						
<input checked="" type="checkbox"/> Verified all body bolts are torqued						

Test Date: 11-2-21 Technician: [Signature] Witness: [Signature]

Warren Ball Valve Rebuild Measurement Log

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 3008-1 Match Mark # 3008-1

Body seat pocket ACTUAL Minor I.D. 4.163 Major I.D. 5.396 OAL 3.817

Cap seat pocket ACTUAL Minor I.D. 4.161 Major I.D. 5.396 OAL 1.377

Body packing pocket ACTUAL I.D. 1.689 Depth .713

Stem sleeve I.D. 1.385
Stem ACTUAL O.D. 1.375 Length 4.535

Collar teflon PFTE sleeve O.D. 1.38 Thickness .044

Ball ACTUAL O.D. 6.415
Ball MFG O.D. 6.421"

Teflon PFTE thrust washer:

ACTUAL	I.D. <u>1.396</u>	O.D. <u>1.649</u>	Thickness <u>.062</u>
MFG	I.D. <u>1.378"</u>	O.D. <u>1.653"</u>	Thickness <u>0.039"</u>

New seat ACTUAL	I.D. <u>4.184</u>	O.D. <u>5.379</u>	Thickness <u>.554</u>
	I.D. <u>4.178</u>	O.D. <u>5.39</u>	Thickness _____

New seat MFG	I.D. <u>4.172"</u>	O.D. <u>5.391"</u>	Thickness <u>0.547"</u>
--------------	--------------------	--------------------	-------------------------

New packing ACTUAL	I.D. <u>1.371</u>	O.D. <u>1.693</u>	Height <u>.656</u>
New packing MFG	I.D. <u>1.375"</u>	O.D. <u>1.685"</u>	Height <u>0.781"</u>

Body gasket ACTUAL	I.D. <u>6.537</u>	O.D. <u>7.046</u>	Thickness <u>.131</u>
Body gasket MFG	I.D. <u>6.535"</u>	O.D. <u>7.046"</u>	Thickness <u>0.125"</u>

Body gasket pocket:

CAP	Minor O.D. <u>6.499</u>	Major O.D. <u>7.047</u>	Depth <u>.217</u>
BODY	Minor I.D. <u>6.496</u>	Major I.D. <u>7.051</u>	Depth <u>.162</u>

Torque: 1 _____ 2 _____ 3 _____

Warren Ball Valve Rebuild Condition Report

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 2477-1 Match Mark # 2477-1

Type Gear Operated Air Operated

Body match mark # _____
Body condition Good Pitted Other

Cap match mark # _____
Cap condition Good Pitted Other

Ball match mark # _____
Ball condition Good Pitted Other

Stem match mark # _____
Stem condition Good Pitted Other Renew

Stem bolting Reuse Replace

Testing Personnel Only						
Test	Low	High	SS Shell		CS Shell	
PSI	<input type="checkbox"/> 10	<input checked="" type="checkbox"/> 80	<input type="checkbox"/> 425	<input type="checkbox"/> 1100	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 1125
<input checked="" type="checkbox"/> Visually checked body bolts for 2 or more threads						
<input checked="" type="checkbox"/> Verified all body bolts are torqued						

Test Date: 11-2-21 Technician: [Signature] Witness: [Signature]

Warren Ball Valve Rebuild Measurement Log

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 2477-1 Match Mark # 2477-1

Body seat pocket ACTUAL Minor I.D. 4.17 Major I.D. 5.4 OAL 3.816

Cap seat pocket ACTUAL Minor I.D. 4.158 Major I.D. 5.397 OAL 1.374

Body packing pocket ACTUAL I.D. 1.687 Depth .712

Stem sleeve I.D. 1.382
Stem ACTUAL O.D. 1.378 Length 4.541

Collar teflon PFTE sleeve O.D. 1.38 Thickness .041

Ball ACTUAL O.D. 6.415
Ball MFG O.D. 6.421"

Teflon PFTE thrust washer:
ACTUAL I.D. 1.405 O.D. 1.665 Thickness .052
MFG I.D. 1.378" O.D. 1.653" Thickness 0.039"

New seat ACTUAL I.D. 4.191 O.D. 5.39 Thickness .554
I.D. 4.186 O.D. 5.396 Thickness .555

New seat MFG I.D. 4.172" O.D. 5.391" Thickness 0.547"

New packing ACTUAL I.D. 1.384 O.D. 1.688 Height .647
New packing MFG I.D. 1.375" O.D. 1.685" Height 0.781"

Body gasket ACTUAL I.D. 6.537 O.D. 7.044 Thickness .131
Body gasket MFG I.D. 6.535" O.D. 7.046" Thickness 0.125"

Body gasket pocket:
CAP Minor O.D. 6.489 Major O.D. 7.049 Depth .232
BODY Minor I.D. 6.496 Major I.D. 7.046 Depth .163

Torque: 1 _____ 2 _____ 3 _____

Warren Ball Valve Rebuild Condition Report

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8
Pressure: 150 300
Serial # 73113-2

Material: CS SS
Match Mark # 73113-2

Type Gear Operated Air Operated

Body match mark #
Body condition Good Pitted Other

Cap match mark #
Cap condition Good Pitted Other

Ball match mark #
Ball condition Good Pitted Other

Stem match mark #
Stem condition Good Pitted Other Renew

Stem bolting Reuse Replace

Testing Personnel Only						
Test	Low	High	SS Shell		CS Shell	
PSI	<input type="checkbox"/> 10	<input checked="" type="checkbox"/> 80	<input type="checkbox"/> 425	<input type="checkbox"/> 1100	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 1125
<input checked="" type="checkbox"/> Visually checked body bolts for 2 or more threads						
<input checked="" type="checkbox"/> Verified all body bolts are torqued						

Test Date: 11-2-21

Technician: [Signature]

Witness: [Signature]

Warren Ball Valve Rebuild Measurement Log

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 73113-2 Match Mark # 73113-2

Body seat pocket ACTUAL Minor I.D. 4.157 Major I.D. 5.395 OAL 3.815

Cap seat pocket ACTUAL Minor I.D. 4.164 Major I.D. 5.395 OAL 1.384

Body packing pocket ACTUAL I.D. 1.695 Depth .72

Stem sleeve I.D. 1.389
Stem ACTUAL O.D. 1.375 Length 4.541

Collar teflon PTFE sleeve O.D. 1.379 Thickness .039

Ball ACTUAL O.D. 6.416
Ball MFG O.D. 6.421"

Teflon PTFE thrust washer:
ACTUAL I.D. 1.405 O.D. 1.667 Thickness .052
MFG I.D. 1.378" O.D. 1.653" Thickness 0.039"

New seat ACTUAL I.D. 4.176 O.D. 5.386 Thickness .552
I.D. 4.192 O.D. 5.395 Thickness .552

New seat MFG I.D. 4.172" O.D. 5.391" Thickness 0.547"

New packing ACTUAL I.D. 1.374 O.D. 1.69 Height .648
New packing MFG I.D. 1.375" O.D. 1.685" Height 0.781"

Body gasket ACTUAL I.D. 6.533 O.D. 7.042 Thickness .13
Body gasket MFG I.D. 6.535" O.D. 7.046" Thickness 0.125"

Body gasket pocket:
CAP Minor O.D. 6.49 Major O.D. 7.05 Depth .217
BODY Minor I.D. 6.493 Major I.D. 7.051 Depth .16

Torque: 1 _____ 2 _____ 3 _____

Warren Ball Valve Rebuild Condition Report

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8
Pressure: 150 300
Material: CS SS
Serial # 3006-1
Match Mark # 3006-1

Type Gear Operated Air Operated

Body match mark # _____
Body condition Good Pitted Other

Cap match mark # _____
Cap condition Good Pitted Other

Ball match mark # _____
Ball condition Good Pitted Other

Stem match mark # _____
Stem condition Good Pitted Other Renew

Stem bolting Reuse Replace

Testing Personnel Only							
Test	Low	High	SS Shell		CS Shell		
PSI	<input type="checkbox"/> 10	<input checked="" type="checkbox"/> 80	<input type="checkbox"/> 425	<input type="checkbox"/> 1100	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 1125	
	<input checked="" type="checkbox"/> Visually checked body bolts for 2 or more threads						
	<input checked="" type="checkbox"/> Verified all body bolts are torqued						

Test Date: 11-2-21 Technician: [Signature] Witness: [Signature]

Warren Ball Valve Rebuild Measurement Log

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 3006-1 Match Mark # 3006-1

Body seat pocket ACTUAL Minor I.D. 4.163 Major I.D. 5.397 OAL 3.815

Cap seat pocket ACTUAL Minor I.D. 4.159 Major I.D. 5.397 OAL 1.382

Body packing pocket ACTUAL I.D. 1.689 Depth .689

Stem sleeve I.D. 1.391
Stem ACTUAL O.D. 1.375 Length 4.541

Collar teflon PTFE sleeve O.D. 1.38 Thickness .041

Ball ACTUAL O.D. 6.416
Ball MFG O.D. 6.421"

Teflon PTFE thrust washer:
ACTUAL I.D. 1.413 O.D. 1.665 Thickness .052
MFG I.D. 1.378" O.D. 1.653" Thickness 0.039"

New seat ACTUAL I.D. 4.189 O.D. 5.39 Thickness .554
I.D. 4.181 O.D. 5.381 Thickness .553

New seat MFG I.D. 4.172" O.D. 5.391" Thickness 0.547"

New packing ACTUAL I.D. 1.37 O.D. 1.688 Height .636
New packing MFG I.D. 1.375" O.D. 1.685" Height 0.781"

Body gasket ACTUAL I.D. 6.532 O.D. 7.045 Thickness .131
Body gasket MFG I.D. 6.535" O.D. 7.046" Thickness 0.125"

Body gasket pocket:
CAP Minor O.D. 6.499 Major O.D. 7.04⁵⁷ Depth .213
BODY Minor I.D. 6.493 Major I.D. 7.041 Depth .163

Torque: 1 _____ 2 _____ 3 _____

Warren Ball Valve Rebuild Condition Report

Job # LV-9158-WO
Barge # KIRBY 14827
Date: 10-26-21

Size: 2 3 4 6 8 Material: CS SS
Pressure: 150 300 Serial # 2500-1 Match Mark # 2500-1

Type Gear Operated Air Operated

Body match mark #
Body condition Good Pitted Other

Cap match mark #
Cap condition Good Pitted Other

Ball match mark #
Ball condition Good Pitted Other

Stem match mark #
Stem condition Good Pitted Other Renew

Stem bolting Reuse Replace

Testing Personnel Only						
Test	Low	High	SS Shell		CS Shell	
PSI	<input type="checkbox"/> 10	<input checked="" type="checkbox"/> 80	<input type="checkbox"/> 425	<input checked="" type="checkbox"/> 1100	<input type="checkbox"/> 450	<input checked="" type="checkbox"/> 1125
<input checked="" type="checkbox"/> Visually checked body bolts for 2 or more threads						
<input checked="" type="checkbox"/> Verified all body bolts are torqued						

Test Date: 11-2-21 Technician: [Signature] Witness: [Signature]

