

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

05 Aug 2021 Certification Date: **Expiration Date:** 05 Aug 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.

Call Sign IMO Number Vessel Name Tank Barge 1231719 KIRBY 28172 Hailing Port Propulsion Hull Material Horsepower WILMINGTON, DE Steel UNITED STATES Length DWT Net Tons **Gross Tons** Place Built **Delivery Date** Keel Laid Date R-300.0 R-1632 R-1632 ASHLAND CITY, TN 20May2011 26Apr2011 1-0 UNITED STATES KIRBY INLAND MARINE, LP KIRBY INLAND MARINE LP 18350 MARKET ST 55 WAUGH DR STE 1000 CHANNELVIEW, TX 77530 HOUSTON, TX 77007 UNITED STATES 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 Oilers 0 Chief Engineers 0 Licensed Mates 0 Masters 0 First Class Pilots 0 First Assistant Engineers 0 Chief Mates 0 Second Assistant Engineers

0 Second Mates

0 Radio Officers

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 & Ninth Coast Guard District's Tank Barge Streamlined Inspection

## \*\*\*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

This ce	tion	odic/Re-Inspec	Annual/Perio	
	Signature	A/P/R	Zone	Date
Officer in C				
Inspection 2				

This certificate issued b CDR. USCG, By direction A. Harital.

Charge, Marine Inspection

Marine Safety Unit Port Arthur

Zone



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Vessel Name: KIRBY 28172

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

31May2031

12Jul2021

20May2011

Internal Structure

31May2026

12Jul2021

26May2016

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

Authorization:

FLAMMABLE, COMBUSTIBLE AND SPECIFIED HAZARDOUS CARGOES

**Total Capacity** 

Units

Highest Grade Type Part151 Regulated Part153 Regulated Part154 Regulated

28500

Barrels

Yes

No

\*Hazardous Bulk Solids Authority\*

Not Authorized

### \*Loading Constraints - Structural\*

Louding		Maximum Density (lbs/gal)
Tank Number	Max Cargo Weight per Tank (short tons)	Maximum Density (156/gail)
1 P/S	838	8.74
2 P/S	843	8.74
3 P/S	777	8.74

### \*Loading Constraints - Stability\*

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
n.	3804	10ft 0in	13.6	R, LBS, LC 0-12
III	4680	11ft 9in	13.6	R, LBS, LC 0-12

### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), serial # C1-1100494, dated 23FEB2011, may be carried. The specified hazardous cargoes may be carried only in the tanks indicated.

Per 46 CFR 150.130, the person in charge of the vessel is responsible for ensuring the compatibility requirements of 46 CFR 150 are met. Cargoes must be checked for compatibility using figures, tables, and appendices of 46 CFR 150 in conjunction with the reactive group number from the "Compat Group No" column is listed in the vessel's CAA.

When the vessel is carrying cargoes containing 0.5% or greater benzene by volume, the person in charge is responsible for ensuring the provisions of 46 CFR Part 197, subpart C are applied.

### \*Vapor Control Authorization\*

Per 46 CFR 39, excluding Part 39.4000, this vessel's vapor control system (VCS) has been inspected to the plans approved by Marine Safety Center letter serial # C1-1100494, dated 23FEB2011, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

Per 46 CFR Part 39.1017 and 39.5000(e) this vessel's VCS has been evaluated and approved for multi-breasted tandem loading with other vessels specifically approved to tandem load with this vessel.

\*Stability and Trim\*

The maximum design density of cargo which may be filled to the tank top is 8.74 lbs/gal. Cargoes with higher densities, up to



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13.6 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

Per 46 CFR 151.10-15(c)(2) the maximum tank weights listed above reflect uniform (within 5%) loading at the deepest draft allowed. When carrying subchapter "O" cargoes at shallower drafts, the barge should always be loaded uniformly.

### --- Inspection Status ---

\*Fuel Tanks\*

Internal Examinations

Tank ID

Previous

Last

Next

Machinery deck

20May2011

Internal Exam			External Exan	n	
Previous	Last	Next	Previous	Last	Next
20May2011	12Jul2021	31May2031	26May2016	12Jul2021	31May2026
	12Jul2021	31May2031	26May2016	12Jul2021	31May2026
		31May2031	26May2016	12Jul2021	31May2026
Zolviayzo i i	120012021	Hydro Test			
Safety Valves	5	Previous	Last	Next	
-		;-	÷	-	
-		-	-	=	
, <del>e</del>		5	#1	*	
	Previous 20May2011 20May2011 20May2011 Safety Valves	Previous Last 20May2011 12Jul2021 20May2011 12Jul2021 20May2011 12Jul2021  Safety Valves -	Previous         Last         Next           20May2011         12Jul2021         31May2031           20May2011         12Jul2021         31May2031           20May2011         12Jul2021         31May2031           Hydro Test         Previous           -         -           -         -           -         -	Previous         Last         Next         Previous           20May2011         12Jul2021         31May2031         26May2016           20May2011         12Jul2021         31May2031         26May2016           20May2011         12Jul2021         31May2031         26May2016           Hydro Test         Hydro Test           Safety Valves         Previous         Last           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         - <tr< td=""><td>Previous         Last         Next         Previous         Last           20May2011         12Jul2021         31May2031         26May2016         12Jul2021           20May2011         12Jul2021         31May2031         26May2016         12Jul2021           20May2011         12Jul2021         31May2031         26May2016         12Jul2021           Hydro Test           Safety Valves         Previous         Last         Next           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -</td></tr<>	Previous         Last         Next         Previous         Last           20May2011         12Jul2021         31May2031         26May2016         12Jul2021           20May2011         12Jul2021         31May2031         26May2016         12Jul2021           20May2011         12Jul2021         31May2031         26May2016         12Jul2021           Hydro Test           Safety Valves         Previous         Last         Next           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -

# ---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

40-B

\*\*\*END\*\*\*





Certificate of Inspection

# Cargo Authority Attachment

Vessel Name: KIRBY 28172

Official #: 1231719

Shipyard: Trinity Ashland City

Serial #: C1-1100494

23-Feb-11

Hull #: 4776

46 CFR 151 Tank (	Group Characterist  Cargo Identification			ics	Cargo	1	Tanks		Carg		Enviror	nmental	Fire	Special Require	ments	T	T
Tnk Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Seg Tank	_	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Temp Cont
A #1P/S, #2P/S, #3P/S	13.6	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	II	G-1	NR	NA	Portable	.50-60, .50-70(a), .50-70(b), .50-73, .50-81(a), .50- 81(b),	55-1(b), (c), (e), (f), (h), (j), 56-1(a), (b), (c), (d), (e), (f), (g),	NR	No

Notes: 1. Under Environmental Control, Tanks, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo tanks.

List of Authorized Cargoes

Cargo Identificatio	Conditions of Carriage									
							Vapor R	ecovery		
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Authorized Subchapter O Cargoes										
Acetonitrile	ATN	37	0	С	Ш	Α	Yes	3	No	G
Acrylonitrile	ACN	15 <sup>2</sup>	0	С	Ш	Α	Yes	4	.50-70(a), .55-1(e)	G
Adiponitrile	ADN	37	0	E	Ш	Α	Yes	1	No	G
Alkyl(C7-C9) nitrates	AKN	34 2	0	NA	Ш	Α	No	N/A	.50-81, .50-86	G
Aminoethylethanolamine	AEE	8	0	Ε	Ш	Α	Yes	1	.55-1(b)	G
Ammonium bisulfite solution (70% or less)	ABX	43 2	0	NA	Ш	Α	· No	N/A	.50-73, .56-1(a), (b), (c)	G
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	111	Α	No	N/A	.56-1(a), (b), (c), (f), (g)	G
Anthracene oil (Coal tar fraction)	АНО	33	0	NA	11	Α	No	N/A	No	G
Benzene	BNZ	32	0	С	Ш	Α	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	ВНВ	32 <sup>2</sup>	0	С	Ш	Α	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 <sup>2</sup>	0	С	Ш	Α	Yes	1	.50-60, .56-1(b), (d), (f), (g)	G
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	BTX	32	0	B/C	Ш	Α	Yes	1	.50-60	G
Butyl acrylate (all isomers)	BAR	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyl methacrylate	ВМН	14	0	D	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyraldehyde (all isomers)	BAE	19	0	С	111	Α	Yes	1	.55-1(h)	G
Camphor oil (light)	CPO	18	0	D	11	Α	No	N/A	No	G
Carbon tetrachloride	CBT	36	0	NA	111	Α	No	N/A	No	G
Caustic potash solution	CPS	5 <sup>2</sup>	0	NA	111	Α	No	N/A	.50-73, .55-1(j)	G
Caustic soda solution	CSS	5 <sup>2</sup>	0	NA	Ш	А	No	N/A	.50-73, .55-1(j)	G
Chemical Oil (refined, containing phenolics)	COD	21	0	E	11	А	No	N/A	.50-73	G
Chlorobenzene	CRB	36	0	D	III	А	Yes	1	No	G
Chloroform	CRF	36	0	NA	Ш	Α	Yes	3	No	G
Coal tar naphtha solvent	NCT	33	0	D	111	А	Yes	1	.50-73	G
Creosote	CCW	21 <sup>2</sup>	0	E	111	Α	Yes	1	No	G
Cresols (all isomers)	CRS	21	0	Е	111	А	Yes	1	No	G
Cresylate spent caustic	CSC	5	0	NA	111	Α	No	N/A	.50-73, .55-1(b)	G
Cresylic acid tar	CRX		0	Ε	III	Α	Yes	1	.55-1(f)	G
Crotonaldehyde	CTA	19 <sup>2</sup>	0	С	11	Α	Yes	4	.55-1(h)	G
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	С	ill	А	No	N/A	No	G
Cyclohexanone	ССН	18	0	D	Ш	Α	Yes	1	.56-1(a), (b)	G
Outliberrance Outliberrand minimum										G
Cyclohexanone, Cyclohexanol mixture	CYX	18 <sup>2</sup>	0	E	111	Α	Yes	1	.56-1 (b)	G

<sup>2.</sup> Under Environmental Control, Handling Space, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo handling space. NA means that the vessel does not have a cargo control space, and this requirement is not applied.

<sup>3.</sup> Under Electrical Hazard Class, NA means that the tank group is suitable only for those cargoes which have no electrical hazard class requirement. NR means that the vessel has no electrical equipment located in a hazardous location.



# Certificate of Inspection

# Cargo Authority Attachment

Vessel Name: KIRBY 28172 Official #: 1231719

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Shipyard: Trinity Ashland City

Serial #: C1-1100494

23-Feb-11

Cargo Identification	n					Conditions of Carriage							
								Recovery					
Name	Chem	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period			
Cyclopentadiene, Styrene, Benzene mixture	CSB	30	0	D	111	Α	Yes	1	.50-60, .56-1(b)	G			
iso-Decyl acrylate	IAI	14	0	E	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)	G			
Dichlorobenzene (all isomers)	DBX	36	0	Е	Ш	Α	Yes	3	.56-1(a), (b)	G			
1,1-Dichloroethane	DCH	36	0	С	Ш	Α	Yes	1	No	G			
2,2'-Dichloroethyl ether	DEE	41	0	D	11	Α	Yes	1	.55-1(f)	G			
Dichloromethane	DCM	36	0	NA	Ш	Α	Yes	5	No	G			
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	43	0	Ε	Ш	Α	No	N/A	.56-1(a), (b), (c), (g)	G			
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 1,2	0	Α	Ш	Α	No	N/A	.56-1(a), (b), (c), (g)	G			
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 <sup>2</sup>	0	Е	111	Α	No	N/A	.56-1(a), (b), (c), (g)	G			
1,1-Dichloropropane	DPB	36	0	С	111	Α	Yes	3	No	G			
1,2-Dichloropropane	DPP	36	0	С	Ш	Α	Yes	3	No	G			
1,3-Dichloropropane	DPC	36	0	С	Ш	Α	Yes	3	No	G			
1,3-Dichloropropene	DPU	15	0	D	11	Α	Yes	4	No	G			
Dichloropropene, Dichloropropane mixtures	DMX	15	0	С	П	Α	Yes	1	No	G			
Diethanolamine	DEA	8	0	E	111	Α	Yes	1	.55-1(c)	G			
Diethylamine	DEN	7	0	С	Ш	Α	Yes	3	.55-1(c)	G			
Diethylenetriamine	DET	7 2	0	E	111	Α	Yes	1	.55-1(c)	G			
Diisobutylamine	DBU	7	0	D	Ш	Α	Yes	3	.55-1(c)	G			
Diisopropanolamine	DIP	8	0	E	111	Α	Yes	1	.55-1(c)	G			
Diisopropylamine	DIA	7	0	С	11	Α	Yes	3	.55-1(c)	G			
N,N-Dimethylacetamide	DAC	10	0	E	111	Α	Yes	3	.56-1(b)	G			
Dimethylethanolamine	DMB	8	0	D	Ш	Α	Yes	1	.56-1(b), (c)	G			
Dimethylformamide	DMF	10	0	D	Ш	Α	Yes	1	.55-1(e)	G			
Di-n-propylamine	DNA	7	0	С	11	Α	Yes	3	.55-1(c)	G			
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	0	E	Ш	Α	No	N/A	.56-1(b)	G			
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	11	Α	No	N/A	No	G			
EE Glycol Ether Mixture	EEG	40	0	D	Ш	Α	No	N/A	No	G			
Ethanolamine	MEA	8	0	E	III	Α	Yes	1	.55-1(c)	G			
Ethyl acrylate	EAC	14	0	С	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Ethylamine solution (72% or less)	EAN	7	0	Α	11	Α	Yes	6	.55-1(b)	G			
N-Ethylbutylamine	EBA	7	0	D	III	A	Yes	3	.55-1(b)	G			
N-Ethylcyclohexylamine	ECC	7	0	D	Ш	Α	Yes	1	.55-1(b)	G			
Ethylene cyanohydrin	ETC	20	0	E	III	A	Yes	1	No	G			
Ethylenediamine	EDA	7 2	0		III	Α	Yes	1	.55-1(c)	G			
Ethylene dichloride	EDC	36 <sup>2</sup>	0	C	111	Α	Yes	1	No	G			
Ethylene glycol hexyl ether	EGH	40		E	III	Α	No	N/A	No	G			
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E	III	A	Yes	1	No	G			
Ethylene glycol propyl ether	EGP	40	0	E	111	A	Yes	1	No	G			
2-Ethylhexyl acrylate	EA!	14	0	 E	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Ethyl methacrylate	ETM	14	0	D/E		A	Yes		50-70(a)	G			
	EPA	19 <sup>2</sup>	0	E	<u>:::</u> _	Α	Yes	1	No	G			
2-Ethyl-3-propylacrolein	FMS	19 <sup>2</sup>		D/E	111	A	Yes		.55-1(h)	G			
Formaldehyde solution (37% to 50%)	FFA	19	0	D/E	111	A	Yes		.55-1(h)	G			
	GTA		0	NA NA	111	A	No	N/A		G			
Glutaraldehyde solution (50% or less)	HMC		0	E		A	Yes		.55-1(c)	G			
Hexamethylenediamine solution				C		A	Yes		.56-1(b), (c)	G			
Hexamethyleneimine	HMI	7	0		111				.50-70(a), .50-81(a), (b)	G			
Hydrocarbon 5-9	HFN		0		111	A	Yes		.50-70(a), .50-81(a), (b)	G			
Isoprene	IPR	30	0	Α		Α	Yes		.55 / 5(6), .55 5 .(6), (5)				



Certificate of Inspection

# Cargo Authority Attachment

Vessel Name: KIRBY 28172
Official #: 1231719

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Shipyard: Trinity Ashland City

Serial #: C1-1100494

23-Feb-11

Cargo Identification	1					Conditions of Carriage						
	T						I	Recovery				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period		
Isoprene, Pentadiene mixture	IPN		0	В	Ш	Α	No	N/A	.50-70(a), .55-1(c)	G		
Kraft pulping liquors (free alkali content 3% or more)(including: Black Green, or White liquor)	, KPL	5	0	NA	Ш	Α	No	N/A	.50-73, .56-1(a), (c), (g)	G		
Mesityl oxide	MSO	18 <sup>2</sup>	0	D	111	Α	Yes	1	No	G		
Methyl acrylate	MAM	14	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Methylcyclopentadiene dimer	MCK	30	0	С	111	Α	Yes	1	No	G		
Methyl diethanolamine	MDE	8	0	E	111	Α	Yes	1	.56-1(b), (c)	G		
2-Methyl-5-ethylpyridine	MEP	9	0	Е	Ш	Α	Yes	1	.55-1(e)	G		
Methyl methacrylate	MMN	1 14	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
2-Methylpyridine	MPR	9	0	D	111	Α	Yes	3	.55-1(c)	G		
alpha-Methylstyrene	MSR	30	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Morpholine	MPL	7 2	0	D	111	Α	Yes	1	.55-1(c)	G		
Nitroethane	NTE	42	0	D	11	Α	No	N/A	.50-81, .56-1(b)	G		
1- or 2-Nitropropane	NPM	42	0	D	Ш	Α	Yes	1	.50-81	G		
1,3-Pentadiene	PDE	30	0	Α	111	Α	Yes	7	.50-70(a), .50-81	G		
Perchloroethylene	PER	36	0	NA	III	Α	No	N/A	No	G		
Polyethylene polyamines	PEB	7 2	0	E	111	А	Yes	1	.55-1(e)	G		
iso-Propanolamine	MPA	8	0	E	111	Α	Yes	1	.55-1(c)	G		
Propanolamine (iso-, n-)	PAX	8	0	Е	111	Α	Yes	1	.56-1(b), (c)	G		
iso-Propylamine	IPP	7	0	Α	П	Α	Yes	5	.55-1(c)	G		
Pyridine	PRD	9	0	С	111	Α	Yes	1	.55-1(e)	G		
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxic	le) SAP		0		III	Α	No	N/A	.50-73, .55-1(j)	G		
Sodium aluminate solution (45% or less)	SAU	5	0	NA	111	А	No	N/A	.50-73, .56-1(a), (b), (c)	G		
Sodium chlorate solution (50% or less)	SDD	0 1,2		NA	Ш	Α	No	N/A	.50-73	G		
Sodium hypochlorite solution (20% or less)	SHQ	5	0	NA	111	A	No	N/A	.50-73, .56-1(a), (b)	G		
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less)	SSH	0 1,2	0	NA		Α	Yes	1	.50-73, .55-1(b)	G		
Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm)	SSI	0 1,2	0	NA	III	А	No	N/A	.50-73, .55-1(b)	G		
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1,2	0	NA	11	Α	No	N/A	.50-73, .55-1(b)	G		
Styrene (crude)	STX		0	D	III	Α	Yes	2	No	G		
Styrene monomer	STY	30	0	D	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	III	A	No	N/A	No	G		
Tetraethylenepentamine	TTP	7	0	E	III	Α	Yes	1	.55-1(c)	G		
Tetrahydrofuran	THF	41	0	С	111	Α	Yes	1	.50-70(b)	G		
Toluenediamine	TDA	9	0	E	11	Α	No	N/A	.50-73, .56-1(a), (b), (c), (g)	G		
1.2.4-Trichlorobenzene	TCB	36	0	Е	Ш	Α	Yes	1	No	G		
1.1.2-Trichloroethane	TCM	36	0	NA	III	Α	Yes	1	.50-73, .56-1(a)	G		
Trichloroethylene	TCL	36 <sup>2</sup>	0	NA		Α	Yes	1	No	G		
1,2,3-Trichloropropane	TCN	36	0	E		Α	Yes	3	.50-73, .56-1(a)	G		
Triethanolamine	TEA	8 2	0	E		Α	Yes	1	.55-1(b)	G		
Triethylamine	TEN	7	0	С		Α	Yes	3	.55-1(e)	G		
Triethylenetetramine	TET	7 2		E		Α	Yes	1	.55-1(b)	G		
Triphenylborane (10% or less), caustic soda solution	TPB	5		NA NA	111	A	No	N/A	.56-1(a), (b), (c)	G		
Trisodium phosphate solution	TSP	5	0	NA	 III	A	No	N/A	.50-73, .56-1(a), (c).	G		
	UAS	6	0	NA	 	A	No	N/A	.56-1(b)	G		
Urea, Ammonium nitrate solution (containing more than 2% NH3)	VBL	5	0	NA	111	A	No	N/A	.50-73, .56-1(a), (c), (g)	G		
Vanillin black liquor (free alkali content, 3% or more).	VAM		0	C	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G		
Vinyl peodecanate	VAIVI	13	0	E	111	Ā	No	N/A	.50-70(a), .50-81(a), (b)	G		
Vinyl neodecanate	VNT	13	0	D	111		Yes	2	.50-70(a), .50-81, .56-1(a), (b), (c), (	G		
Vinyltoluene	VINI	13			111		165		7 E 7 E 7 E 7 E 7 E 7 E 7 E 7 E 7 E 7 E			



Serial #: C1-1100494

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28172

Official #: 1231719 Page 4 of 8 Shipyard: Trinity Ashland City

Cargo Identificatio	n	,				Conditions of Carriage						
	Chem	Compat	Sub		Hull	Tank	Vapor F App'd	Recovery VCS	Special Requirements in 46 CFR			
Name	Code	Group No		Grade	Туре	Group	(Y or N)	Category	151 General and Mat'ls of	Insp. Period		
Subchapter D Cargoes Authorized for Vapor Contr	ol											
Acetone	ACT	18 <sup>2</sup>	D	С		Α	Yes	1				
Acetophenone	ACP	18	D	E		Α	Yes	1				
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	E		Α	Yes	1				
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	E		Α	Yes	1				
Amyl acetate (all isomers)	AEC	34	D	D		Α	Yes	1				
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		Α	Yes	1				
Benzyl alcohol	BAL	21	D	E		Α	Yes	1				
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	BFX	20	D	E		Α	Yes	1				
Butyl acetate (all isomers)	BAX	34	D	D		Α	Yes	1				
Butyl alcohol (iso-)	IAL	20 <sup>2</sup>	D	D		Α	Yes	1				
Butyl alcohol (n-)	BAN	20 <sup>2</sup>	D	D		Α	Yes	1				
Butyl alcohol (sec-)	BAS	20 2	D	С		Α	Yes	1				
Butyl alcohol (tert-)	BAT		D	С		Α	Yes	1				
Butyl benzyl phthalate	ВРН	34	D	E		Α	Yes	1				
Butyl toluene	BUE	32	D	D		Α	Yes	1				
Caprolactam solutions	CLS	22	D	E		А	Yes	1				
Cyclohexane	CHX	31	D	С		Α	Yes	1				
Cyclohexanol	CHN	20	D	E		Α	Yes	1				
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		Α	Yes	2				
p-Cymene	CMP	32	D	D		Α	Yes	1				
iso-Decaldehyde	IDA	19	D	E		Α	Yes	1				
n-Decaldehyde	DAL	19	D	Е		Α	Yes	1				
Decene	DCE	30	D	D		Α	Yes	1				
Decyl alcohol (all isomers)	DAX	20 <sup>2</sup>	D	E		Α	Yes	1				
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	E		Α	Yes	1				
Diacetone alcohol	DAA	20 <sup>2</sup>	D	D		Α	Yes	1				
ortho-Dibutyl phthalate	DPA	34	D	E		Α	Yes	1				
Diethylbenzene	DEB	32	D	D		Α	Yes	1				
Diethylene glycol	DEG	40 <sup>2</sup>	D	E		Α	Yes	1				
Diisobutylene	DBL	30	D	С		Α	Yes	1				
Diisobutyl ketone	DIK	18	D	D		Α	Yes	1				
Diisopropylbenzene (all isomers)	DIX	32	D	E		Α	Yes	1				
Dimethyl phthalate	DTL	34	D	E		Α	Yes	1				
Dioctyl phthalate	DOP	34	D	E		Α	Yes	1				
Dipentene	DPN	30	D	D		Α	Yes	1				
Diphenyl	DIL	32	D	D/E		Α	Yes	1				
Diphenyl, Diphenyl ether mixtures	DDO	33	D	E		Α	Yes	1				
Diphenyl ether	DPE	41	D	{E}		Α	Yes	1				
Dipropylene glycol	DPG	40	 D	E		A	Yes	1				
Distillates: Flashed feed stocks	DFF	33	D	E		Α	Yes	1				
Distillates: Straight run	DSR	33		 E		Α	Yes	<u>·</u>				
Dodecene (all isomers)	DOZ	30	D	D		A	Yes	1				
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	D	 E		A	Yes	1		-		
2-Ethoxyethyl acetate	EEA	34	D			A	Yes	<u>-</u>				
Ethoxy triglycol (crude)	ETG	40	D	E		A	Yes	1				
Lilioxy trigrycor (crude)		70										



Serial #: C1-1100494

Dated: 23-Feb-11

# Certificate of Inspection

# Cargo Authority Attachment

Vessel Name: KIRBY 28172 Official #: 1231719

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Shipyard: Trinity Ashland City

Cargo Identification	า					Conditions of Carriage							
								Recovery					
Name	Chem	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period			
Ethyl acetate	ETA	34	D	С		Α	Yes	1					
Ethyl acetoacetate	EAA	34	D	E		Α	Yes	11					
Ethyl alcohol	EAL	20 2	D	С		A	Yes	1					
Ethylbenzene	ETB	32	D	С		Α	Yes	1					
Ethyl butanol	EBT	20	D	D		Α	Yes	1					
Ethyl tert-butyl ether	EBE	41	D	С		Α	Yes	1					
Ethyl butyrate	EBR	34	D	D		Α	Yes	1					
Ethyl cyclohexane	ECY	31	D	D		Α	Yes	1					
Ethylene glycol	EGL	20 2	D	E		Α	Yes	1					
Ethylene glycol butyl ether acetate	EMA	34	D	E		Α	Yes	1					
Ethylene glycol diacetate	EGY	34	D	E		Α	Yes	11					
Ethylene glycol phenyl ether	EPE	40	D	E		Α	Yes	1					
Ethyl-3-ethoxypropionate	EEP	34	D	D		Α	Yes	1					
2-Ethylhexanol	EHX	20	D	E		Α	Yes	1					
Ethyl propionate	EPR	34	D	С		Α	Yes	1					
Ethyl toluene	ETE	32	D	D		Α	Yes	1					
Formamide	FAM	10	D	E		Α	Yes	1					
Furfuryl alcohol	FAL	20 2	D	E		Α	Yes	11					
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		Α	Yes	1					
Gasoline blending stocks: Reformates	GRF	33	D	A/C		Α	Yes	1					
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	C		Α	Yes	1					
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	GAV	33	D	С		Α	Yes	1					
Gasolines: Casinghead (natural)	GCS	33	D	A/C		Α	Yes	1					
Gasolines: Polymer	GPL	33	D	A/C		Α	Yes	1					
Gasolines: Straight run	GSR	33	D	A/C		Α	Yes	1					
Glycerine	GCR	20 <sup>2</sup>	D	E		Α	Yes	1	1				
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		Α	Yes	1					
Heptanoic acid	HEP	4	D	E		Α	Yes	1					
Heptanol (all isomers)	HTX	20	D	D/E		Α	Yes	1					
Heptene (all isomers)	HPX	30	D	С		Α	Yes	2					
Heptyl acetate	HPE	34	D	E		Α	Yes	1					
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 <sup>2</sup>	D	B/C		Α	Yes	1					
Hexanoic acid	НХО	4	D	E		Α	Yes	1					
Hexanol	HXN	20	D	D		Α	Yes	1					
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2					
Hexylene glycol	HXG	20	D	E		Α	Yes	1					
Isophorone	IPH	18 <sup>2</sup>	D	E		Α	Yes	1					
Jet fuel: JP-4	JPF	33	D	E		Α	Yes	1					
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		Α	Yes	1					
Kerosene	KRS	33	D	D		Α	Yes	1					
Methyl acetate	MTT	34	D	D		Α	Yes	1					
Methyl alcohol	MAL	20 <sup>2</sup>	D	С		Α	Yes	1					
Methylamyl acetate	MAC	34	 D	D		Α	Yes	1					
Methylamyl alcohol	MAA	20	D	D		A	Yes	1					
Methyl amyl ketone	MAK	18	D	D		Α	Yes	1					
	MBE	41 2	D	С		Α	Yes	1					
Methyl tert-butyl ether	IVIDE												



Serial #: C1-1100494

Dated: 23-Feb-11

# Certificate of Inspection

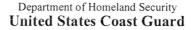
# Cargo Authority Attachment

Vessel Name: KIRBY 28172 Official #: 1231719

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Shipyard: Trinity Ashland City

Cargo Identification	n					Conditions of Carriage							
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period			
Methyl butyrate	MBU	34	D	С		Α	Yes	1					
Methyl ethyl ketone	MEK	18 <sup>2</sup>	D	С		Α	Yes	1					
Methyl heptyl ketone	MHK	18	D	D		Α	Yes	1					
Methyl isobutyl ketone	MIK	18 <sup>2</sup>	D	С		Α	Yes	1					
Methyl naphthalene (molten)	MNA	32	D	E		Α	Yes	1					
Mineral spirits	MNS	33	D	D		Α	Yes	1					
Myrcene	MRE	30	D	D		Α	Yes	1					
Naphtha: Heavy	NAG	33	D	#		Α	Yes	1					
Naphtha: Petroleum	PTN	33	D	#		Α	Yes	1					
Naphtha: Solvent	NSV	33	D	D		A	Yes	1					
Naphtha: Stoddard solvent	NSS	33	D	D		Α	Yes	1					
Naphtha: Varnish makers and painters (75%)	NVM	33	D	С		Α	Yes	1					
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		Α	Yes	1					
Nonene (all isomers)	NON	30	D	D		Α	Yes	2					
Nonyl alcohol (all isomers)	NNS	20 <sup>2</sup>	D	E		Α	Yes	1					
Nonyl phenol	NNP	21	D	E		A	Yes	1					
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	E		A	Yes	1					
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	C		A	Yes	1					
Octanoic acid (all isomers)	OAY	4	D	E		A	Yes	1					
Octanol (all isomers)	OCX	20 <sup>2</sup>	D	 E		A	Yes	1					
Octene (all isomers)	OTX	30		C		A	Yes	2					
Oil, fuel: No. 2	OTW	33	D	D/E		A	Yes	1					
Oil, fuel: No. 2-D	OTD	33		D		A	Yes	1					
Oil, fuel: No. 4	OFR	33	D	D/E		A	Yes	1					
Oil, fuel: No. 5	OFV	33	D	D/E		Α	Yes	1					
Oil, fuel: No. 6	OSX	33	D	E		A	Yes	1					
Oil, misc: Crude	OIL	33		C/D		A	Yes	<u>·</u>					
Oil, misc: Diesel	ODS	33		D/E		A	Yes	1					
Oil, misc: Gas, high pour	OGP	33	D	E		A	Yes	1					
	OLB	33	D	E		A	Yes	1					
Oil, misc: Lubricating Oil, misc: Residual	ORL	33	D	 E		A	Yes	1					
Oil, misc. Residual Oil, misc. Turbine	OTB	33	D	E		A	Yes	1					
	PTY	31		Α		A	Yes	<u>'</u> 5	A CONTRACTOR OF THE CONTRACTOR				
Pentane (all isomers)	PTX	30	D			A	Yes	<u>5</u>					
Pentene (all isomers)	PPE	34	D				Yes	1					
n-Pentyl propionate	PIO	30	D	D		A	Yes	1					
alpha-Pinene	PIP	30	D	D			Yes	1					
beta-Pinene	PAG	40	D	E		A	Yes	1					
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAF	34	D	E		A	Yes	1					
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PLB	30	D				Yes	1					
Polybutene				E		A		1					
Polypropylene glycol	PGC	34	D D	C		A	Yes	1					
iso-Propyl acetate			D	C		A A	Yes	1					
n-Propyl acetate	PAT	34 20 <sup>2</sup>		C				1					
iso-Propyl alcohol	IPA	20 2	D	С		A	Yes	1					
n-Propyl alcohol	PAL		D			A	Yes						
Propylbenzene (all isomers)	PBY	32	D	D		A	Yes	1					
iso-Propylcyclohexane	IPX	31	D	D		A	Yes						
Propylene glycol	PPG	20 2	D	E		A	Yes	1					





Dated: 23-Feb-11

# Certificate of Inspection

# Cargo Authority Attachment

Vessel Name: KIRBY 28172

Official #: 1231719

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Shipyard: Trinity Ashland City

Cargo Identifica	tion					Conditions of Carriage					
							Vapor F	Recovery		T	
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period	
Propylene glycol methyl ether acetate	PGN	34	D	D		Α	Yes	1	•		
Propylene tetramer	PTT	30	D	D		Α	Yes	1			
Sulfolane	SFL	39	D	E		Α	Yes	1			
Tetraethylene glycol	TTG	40	D	E		Α	Yes	1			
Tetrahydronaphthalene	THN	32	D	Е		Α	Yes	1			
Toluene	TOL	32	D	С		Α	Yes	1			
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	E		Α	Yes	1			
Triethylbenzene	TEB	32	D	E		Α	Yes	1			
Triethylene glycol	TEG	40	D	E		Α	Yes	1			
Triethyl phosphate	TPS	34	D	E		Α	Yes	1			
Trimethylbenzene (all isomers)	TRE	32	D	{D}		Α	Yes	1			
Trixylenyl phosphate	TRP	34	D	E		Α	Yes	1			
Undecene	UDC	30	D	D/E		Α	Yes	1			
1-Undecyl alcohol	UND	20	D	E		Α	Yes	1			
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		Α	Yes	1			



### Department of Homeland Security United States Coast Guard

Serial #: C1-1100494

Dated:

23-Feb-11

# Certificate of Inspection

# Cargo Authority Attachment

Vessel Name: KIRBY 28172

Official #: 1231719

Page 8 of 8

Shipyard: Trinity Ashland

Hull #: 4776

### Explanation of terms & symbols used in the Table:

Cargo Identification

Chem Code

The proper shipping name as listed in 46 CFR Table 30.25-1, 46 CFR Table 151.05, and 46 CFR Part 153 Table 2 The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual

Certain mixtures of cargoes may not have a CHRIS Code assigned

Compatability 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.

Note 1 Note 2

Because of the very high reactivity or unusual conditions of carriage or potential compatibility problems, this product is not assigned to a specific group in the ampatibility Chart. For additional compatibility information, contact Commandant (CG-3PSO-3), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593-0001. Telephone (202) 372-1425

See Appendix I to 46 CFR Part 150 - exceptions to the compatability chart.

Subchapter Subchapter D Subchapter O

The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified

Those flammable and combustible liquids listed in 46 CFR Table 30.25-1 Those hazardous cargoes listed in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2.

Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges

Grade

The cargo classification assigned to each flammable or combustible liquid. Grades inside of "U" 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.

D, E Note 4 Flammable liquid cargoes, as defined in 46 CFR 30-10.22

Combustible liquid cargoes, as defined in 46 CFR 30-10.15.

The flammability/combustibility grade of these cargoes may vary depending upon the flashpoint and Reid vapor pressure. 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

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

NA

NA

The required barge hull classification for carriage of the specified Subchapter O hazardous material cargo, see 46 CFR 151,10-1,

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). Designed to carry products which require significant preventive measures to preclude the uncontrolled release of cargo. See 46 CFR 151.10-1(b)(3) Designed to carry products of sufficient hazard to require a moderate degree of control. See 46 CFR 151.10-1(b)(4).

Not applicable to barges certificated under Subchapter D.

### Conditions of Carriage

Tank Group Vapor Recovery Approved (Y or N) The vessel's tank group (as defined in Section 4) which is authorized for carriage of the named cargo

Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo.

Conditions of Carriage

Tank Group Vapor Recovery Approved (Y or N) The vessel's tank group (as defined under the "46 CFR Tank Group Characteristics" listed on page 1) which is authorized for carriage of the named cargo.

Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo

VCS Category:

The specified cargo's provisional classification for vapor control systems.

This requirement is in addition to the requirements of Category 1.

Category 1

(No additional VCS requirements above those for benzene, gasolines and crude oil) All requirements applying to the handling of oil and hazardous materials in Titles 33 and 46 Code of Federal Regulations (CFR) apply to these cargoes. Those specifically dealing with vapor control systems are in 33 CFR 155.750, 33 CFR 156.120, 33 CFR 156.170, 46 CFR 35.35 and 46 CFR 39. The cargo tank venting system calculations (46 CFR 39.20-11) and the pressure drop calculations (46 CFR 39.30-1(b)) must use appropriate friction factors, vapor densities and vapor growth rates.

Category 2

(Polymerizas) Polymerization and residue build-up of these cargoes can adversely affect the vessel by fouling safety componenets and restricting vapor flow which could lead to cargo tank overpressurization. The vessel's owner must develop a method of ensuring all VCS safety components are functional and polymer build-up is not read to length talk overpressurization. The vesser's owner must develop a method of ensuring all VCS safety components are functional and polynter build-up is not causing an unsafe condition due to increased pressure in the vapor control piping and cargo tanks. The method shall be acceptable to the local Officer in Charge, Marine Inspection. This is in addition to the requirements of Category 1. Please note that a material not normally considered a monomer can be a problem in detonation

Category 3

(Highly toxic) VCSs for these toxic cargoes cannot use a spill valve or rupture disk as the primary means to meet the overfill protection requirement of 46 CFR 39.20-9

Category 4

(Polymerizes and highly toxic) Must comply with requirements of Categories 1, 2 and 3.

Category 5

(High vapor pressure) VCS pressure drop calculations for cargoes with a vapor pressure greater than 14.7 psia at 115 F must take into account increased vapor-air mixture densities and vapor growth rates as compared to Category 1 cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. This requirement is in addition to the requirements of Category 1.

Category 6

(High vapor pressure and highly toxic) Must comply with requirements of Categories 1. 3 and 5 (High vapor pressure and polymerizes) Must comply with requirements of Categories 1, 2 and 5

Category 7

The cargo has not been evaluated/classified for use in vapor control systems.

# Safety valve inspection report

Certificate nr

Date

744

06-02-2021

Job no.

LV-8343-WO

Client

Kirby Inland Marine Kirby 28172

Barge #

Valve data

Set pressure (cold)

125 psi

Size

6XQx8

Manufacturer

Farris

Rating

Type / Model Serial No.

26QA10L-120 497809-2-A14

300x150

Nozzle / Orifice

Q

### Test data

Set pressure test

Found set pressure

Reseat pressure (indication)

125 psi 122 psi

Result

Passed

Test method

Air

Seat tightness test

Leakage

0 bubbles/min.

Test pressure

117 psi

Result

Passed

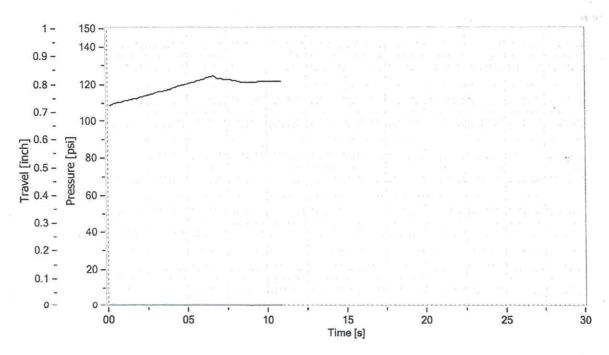
Backpressure test

Pressure Result

31 psi

Passed





Tested by

Name Date

Javier Gutierrez

Signature

6-2-21

Inspected by Name Educido A Perez Date (-2.21 Signature

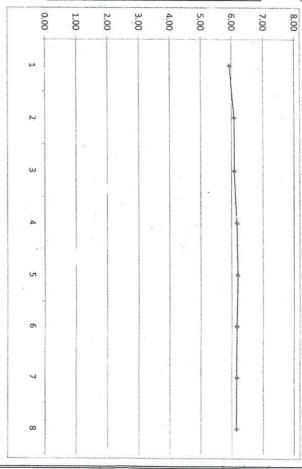
# TEST RESULTS FOR ERL 6" PV VALVE

**Pressure Curve** 

customer	Kirby inland Marine
Barge Number	KIRBY 28172
Work Order	LV-8344-WO
Test date:	5/28/2021
Serial Number	2900K-2021

SEAL SELLINGS	VI VE SETTINGS
6.0	PRESSURE
2.0	VACUUM

Delta	Average	5	4	ω	2	1	Test Number	Opening P
0.138	5.93	5.97	5.97	5.97	5.93	5.83	Valve Opening Pressure (PSI)	Opening Pressure Test



# **Airflow PRESSURE Test**

_				100
	Differential from Opening Point	Pressure	AIRFLOW (CFM)	
		5.93 ·	0	
	0.15	6.08	40	
	0.15	6.08	60	
	0.23	6.16	80	
	0.26	6.19	100	
	0.23	6.16	120	
	0.22	6.16	140	
	0.21	6.15	. 160	
	NO DATA	NO DATA	180	
	NO DATA	NO DATA	200	

Inspected By

Christopher Salazar