



TRINITY INDUSTRIES, INC.
BUSINESS UNIT # 296

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Revised By: **Howard Abell**

Approved By: **Howard Abell**

DOCUMENT TYPE: Controlled Form List

TITLE: Piping Test Report

PIPING TEST REPORT

Customer / Contract E Squared Marine Service / 96274
 Vessel Name E2MS 307
 Hull Number 5270
 Official Number 1277192
 KEEL Date / COI Year 4/14/2017 / 2017

TESTING INFO

System	Method of Test	PSI or OK	Date	Witness By
Cargo Pipe	Hydro	200 PSI	5/18/2017	USCG
Pump Well	Air	20PSI	5/18/2017	USCG
Fuel Oil Piping	Air	90PSI	5/18/2017	USCG
Hot Oil Piping				
Steam Piping				
Air Piping	Air	200 PSI	5/18/2017	USCG
Stripping Piping	Air	200 PSI	5/18/2017	USCG
Hydraulic Piping				
Cargo Piping Relief Valve	Hydro	125 PSI	3/30/2017	USCG
Vapor Piping Relief Valve	Air	1.5 PSI	5/10/2017	GB
Steam Piping Relief Valve				
Air Piping Relief Valve	Hydro	125 PSI	5/10/2017	GB
Fuel Tank	Hydro	11'-6"	4/13/2017	USCG
Slop Tank	Hydro	11'-6"	4/21/2017	USCG
Cargo Pressure Gauge	Air	OK	6/5/2017	T T
Vapor Pressure Gauge	Air	OK	6/5/2017	T T
Air Pressure Gauge				
Hydraulic Pressure Gauge				
Emergency Shutdown	Operational	OK	6/12/2017	USCG
Pump Operational Test	Hydro	OK	6/6/2017	T T
Heater Operational Test				
Stripping Operational Test	Hydro	OK	5/18/2017	USCG
Hydraulic Operational Test				

If a system is not applicable, leave that line blank

	Initial	Print	Signature
QA WITNESS	<u>T T</u>	<u>Travis Taylor</u>	
QA WITNESS		<u>Rickey Calhoun II</u>	6/12/17



TRINITY INDUSTRIES, INC.
BUSINESS UNIT # 296

Document No.: QAF-904-296

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Revision Date: 4/5/2017

Revised By: Howard Abell

Approved By: Howard Abell

DOCUMENT TYPE: Controlled Form List

TITLE: Vapor Tightness Test Report

VAPOR TIGHTNESS TEST REPORT

Note: Test Results are Valid for (1) One Year from Date of Test!

Vessel Name:	<u>E2MS 307</u>	Test Date:	<u>6/12/2017</u>
Testing Location:	<u>Ashland City, TN #296</u>	Maximum Load Rate: (BPH)	<u>6500</u>
Tanks Tested:	<u>All Cargo Tanks</u>	Pressure Indicator	<u></u>

TEST RESULTS

Test Duration: 30 Minutes	Beginning Pressure	<u>43"</u>	Inches H2O
	Ending Pressure	<u>43"</u>	Inches H2O
	Total Pressure Loss	<u>Ø</u>	Inches H2O
	Allowable Pressure Loss	<u>3.1108</u>	Inches H2O

Barge is Vapor Tight if "Total Pressure Loss" is LESS than "Allowable Pressure Loss"

- | | | | |
|-----------|--|------------|----------------------------|
| (P1) | - Beginning Pressure | (P2) | - Ending Pressure |
| (Delta P) | - Total Pressure Loss | (Delta PM) | - Allowable Pressure Loss |
| (TP) | - 14.7 plus Barge Test Pressure in PSI | (L) | - Maximum Load Rate in BPH |
| (V) | - Volumn of Tank (s) | (Delta T) | = Test Duration |
| .861 | - PIA @ (P1) | | |

$$.861 \times \frac{16.2}{(TP)} \times \frac{6500}{(L)} / \frac{29144.68}{(V)} = \frac{3.1108}{(Delta PM)}$$

This vessel has been tested in accordance with Section 61.304F and has been found to be vapor tight.

Alexander Gales 6-12-17
 Signature of Trinity Marine Tester DATE
Belor Gonzalez
 PRINT Name of Trinity Marine Tester

Travis Taylor 6-12-17
 Signature of Trinity Marine Witness DATE
Travis Taylor
 PRINT Name of Trinity Marine Witness