



### PIPING TEST REPORT

Customer / Contract E SQUARED / 96274  
 Vessel Name S2MS 306  
 Hull Number 5269  
 Official Number 1277193  
 KEEL Date / COI Year 3/31/2017 / 5-30-17

#### TESTING INFO

System	Method of Test	PSI or OK	Date	Witness By
Cargo Pipe	HYDRO	187.5	5-30-17	Travis Taylor
Pump Well	PSI	15	5-30-17	Travis Taylor
Fuel Oil Piping	PSI	90	5-30-17	Travis Taylor
Hot Oil Piping				
Steam Piping				
Air Piping	HYDRO	187.5	5-30-17	Travis Taylor
Stripping Piping	HYDRO	187.5	5-30-17	Travis Taylor
Hydraulic Piping				
Cargo Piping Relief Valve	HYDRO	125	5-30-17	Travis Taylor
Vapor Piping Relief Valve	PSI	1.5	5-30-17	Travis Taylor
Steam Piping Relief Valve				
Air Piping Relief Valve	HYDRO	187.5	5-30-17	Travis Taylor
Fuel Tank	HYDRO	5	5-30-17	Travis Taylor
Slop Tank	HYDRO	5	5-30-17	Travis Taylor
Cargo Pressure Gauge	PSI	100	5-30-17	Travis Taylor
Vapor Pressure Gauge	PSI	3	5-30-17	Travis Taylor
Air Pressure Gauge				
Hydraulic Pressure Gauge				
Emergency Shutdown	OPERATIONAL	OK	5-30-17	Travis Taylor
Pump Operational Test	OPERATIONAL	OK	5-30-17	Travis Taylor
Heater Operational Test				
Stripping Operational Test	OPERATIONAL		5-30-17	TT
Hydraulic Operational Test				

If a system is not applicable, leave that line blank

	Initial	Print	Signature
QA WITNESS	<u>TT</u>	<u>Travis Taylor</u>	<u>Travis Taylor</u>
QA WITNESS	<u>          </u>	<u>          </u>	<u>          </u>



**TRINITY INDUSTRIES, INC.**  
**BUSINESS UNIT # 296**

Document No.: QAF-904-296

Revision #: 00

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: E2MS 306  
 Testing Location: Ashland City, TN #296  
 Tanks Tested: All Cargo Tanks

Test Date: 5-30-17  
 Maximum Load Rate: (BPH) 6,500  
 Pressure Indicator MANOMETER

**TEST RESULTS**

Test Duration: 30 Minutes

Beginning Pressure	<u>42"</u>	Inches H2O
Ending Pressure	<u>42"</u>	Inches H2O
Total Pressure Loss	<u>0</u>	Inches H2O
Allowable Pressure Loss	<u>3.1095</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)                           |                                      |

$$.861 \times \frac{16.2}{(TP)} \times \frac{6,500}{(L)} / \frac{29,157.34}{(V)} = \frac{3.1095}{(Delta PM)}$$

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

[Signature] 5/30/17  
 Signature of Trinity Marine Tester DATE  
DIEGO CRUZ  
 PRINT Name of Trinity Marine Tester

[Signature] 5-30-17  
 Signature of Trinity Marine Witness DATE  
Travis Taylor  
 PRINT Name of Trinity Marine Witness