



KIRBY INLAND MARINE, LP  
 MAINTENANCE DEPARTMENT  
 18350 MARKET ST.  
 CHANNELVIEW, TX 77530

OFFICE (713) 435-1730

FAX (713) 435-1714

**VAPOR TIGHTNESS TEST**

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

Vessel Name: 407 Test Date: 7/10/2018  
 Testing Location: I.S.R Maximum Load Rate: (BPH) 5,000  
 Tanks Tested: All Pressure Indicator: Manometer

**TEST RESULTS**

Test Duration: 30 Minutes Beginning Pressure: 28" Inches H2O  
 Ending Pressure: 27.5" Inches H2O  
 Total Pressure Loss: .5 Inches H2O  
 Allowable Pressure Loss: 2.95 Inches H2O

**Barge is Vapor Tight if "Total Pressure Loss" is LESS than "Allowable Pressure Loss"**  
 This vessel has been tested in accordance with Section 61.304F and has been found to be vapor tight.

Kevin Williams  
 Tester: (Print)

[Signature]  
 Tester: (Signature)

Bandy Jones  
 Witness: (Print)

[Signature]  
 Witness: (Signature)

Kirby Rep  
 Affiliation of Witness:

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

$$.861 \times \frac{15.7}{(TP)} \times \left( \frac{5,000}{(L)} \div \frac{22,892}{(V)} \right) = \frac{2.95}{(Delta PM)}$$