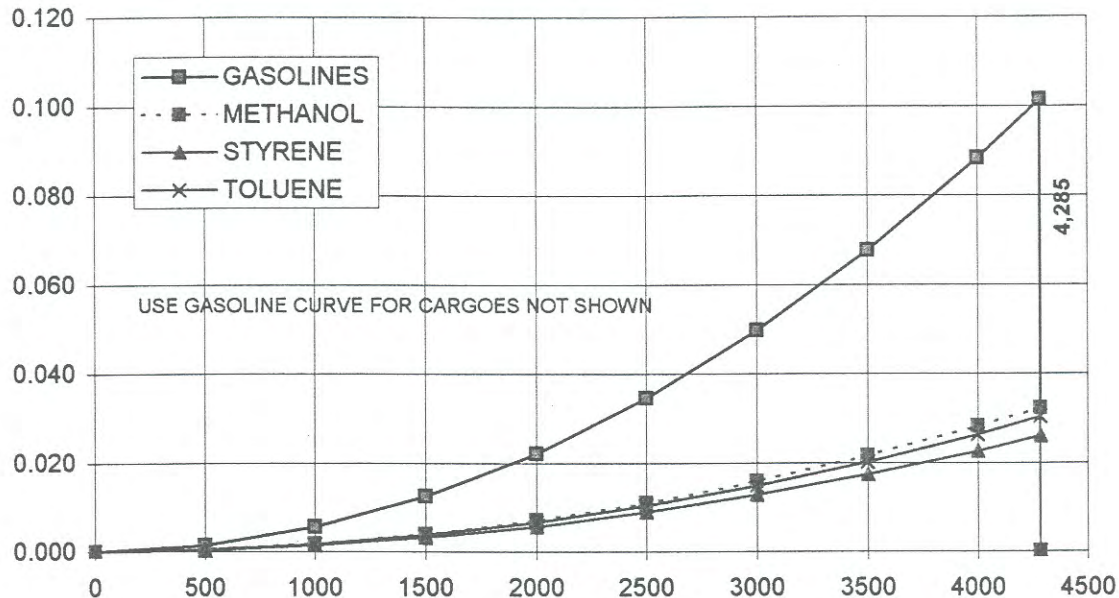
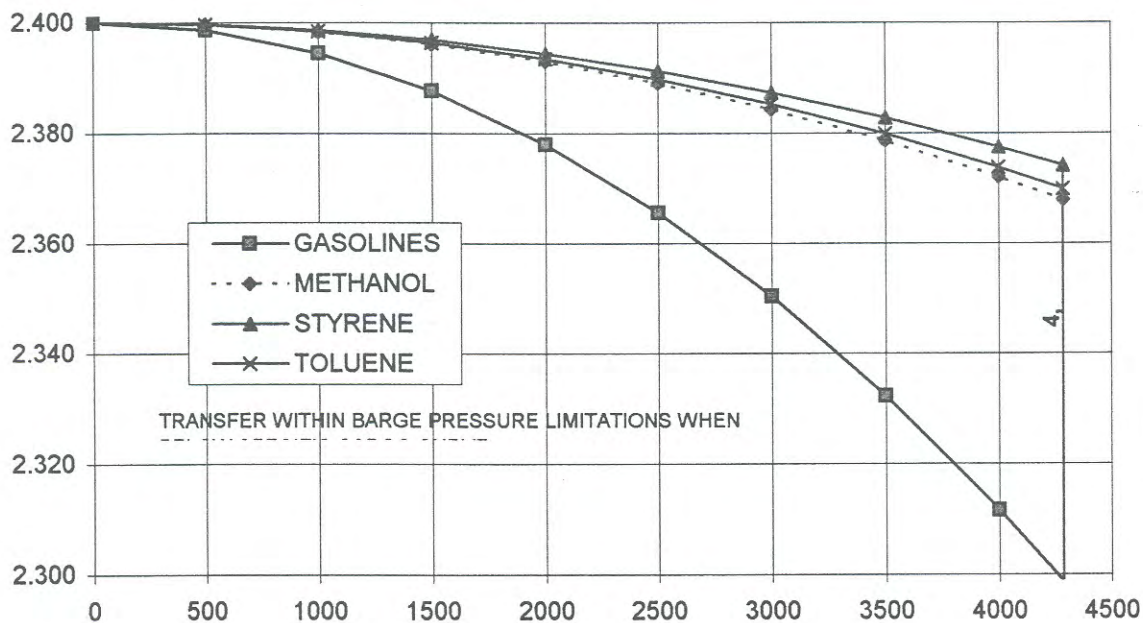


PRESSURE DROP IN VCS PIPING



LIQUID TRANSFER RATE VS FACILITY VAPOR CONNECTION PRESSURE





Marine Safety Center Vapor Control System (VCS) Plan Review Information Sheet (PRIS)



Vessel Name **CBC 39 thru 49**
Official Number **165010 thru 165023**

Shipyard **Jeffboat**
Hull Number **04-2217 thru 04-2228**

1. This sheet consolidates critical VCS parameters for MSC Staff Engineers and CG Field Inspectors dealing with Vapor Control Systems. CG Inspectors should verify the vessel's VCS design is consistent with the information listed in boxes 2, 6, 7 & 8 prior to updating the vapor control endorsement on the vessel's Certificate of Inspection. For cases where the information in the VCS PRIS does not reflect the vessel's design the CG Inspector should contact the MSC's Cargo Authority branch.

2. Tank Maximum Design Working Pressure **3.20** psig **Raised Trunk** ☒
Flush Deck ☐

3. Authorized Maximum Cargo Transfer Rate **4285** bbl/hr

4. Authorized Maximum Cargo Density **0.247** lbm/ft³

5. Authorized VCS Categories **1 thru 4**

6. Cargoes with the highest vapor density and/or pressure drop:

a. Cargo Name **Dodecylbenzene**

b. Cargo Name **Gasoline**

7. Pressure Vacuum Valve:

Manufacturer **TANKTECH**
Size **KLPH-6**
CG Approval **162.017/144**

Settings in psig:
Pressure-side **3**
Vacuum-side **0.5**

8. VCS Pipe Sizes:

Approx. Inside Diameter
Longitudinal Header (inches) **8**
Transverse Header (Inches) **8**

Required Venting Capacity of Pressure-Side of P/V valve **9191** bbl/hr (air)

Required Venting Capacity of Vacuum-Side of P/V valve **4285** bbl/hr (air)

9. Tank Overfill Protection System (check appropriate box or boxes)

a. High Level/Tank Overfill Alarm ☒ Type **0**
b. Overfill Control Shutdown ☒ Type **0**
c. Spill Valve ☐ Type **0**
d. Rupture Disk ☐ Type **0**

Meets ASTM F1271 **Setting in psig**
N/A

10. Closed Gauging Verify the vessel has closed gauging that satisfies 46 CFR 39.20-3 and 151.15-10(c).

11. Instructions/Guidelines for the OCMI:

11a. The following is the Marine Safety Center's recommended COI endorsement

"Only those cargoes named in the vessel's Cargo Authority Attachment, Serial #C2-0403195, dated 15Dec2004, may be carried and then only in the tanks indicated. In accordance with 46 CFR Part 39, excluding part 39.40, this vessel's vapor control system has been inspected to the plans approved by Marine Safety Center letter Serial #: C2-0403195 dated 15Dec2004, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column."

11b. The Marine Safety Center approval letter/s must be available at the OCMI's request.

11c. Verify isolation valve at the vapor connection flange is manually operable and designed in a way it is "clearly" open or closed.

11d. Previous applicable VCS approval letters:

None

VCS Approval Letter **C2-0403195, December 15, 2004**

MSC Plan Reviewer **LT Brandi Baldwin**