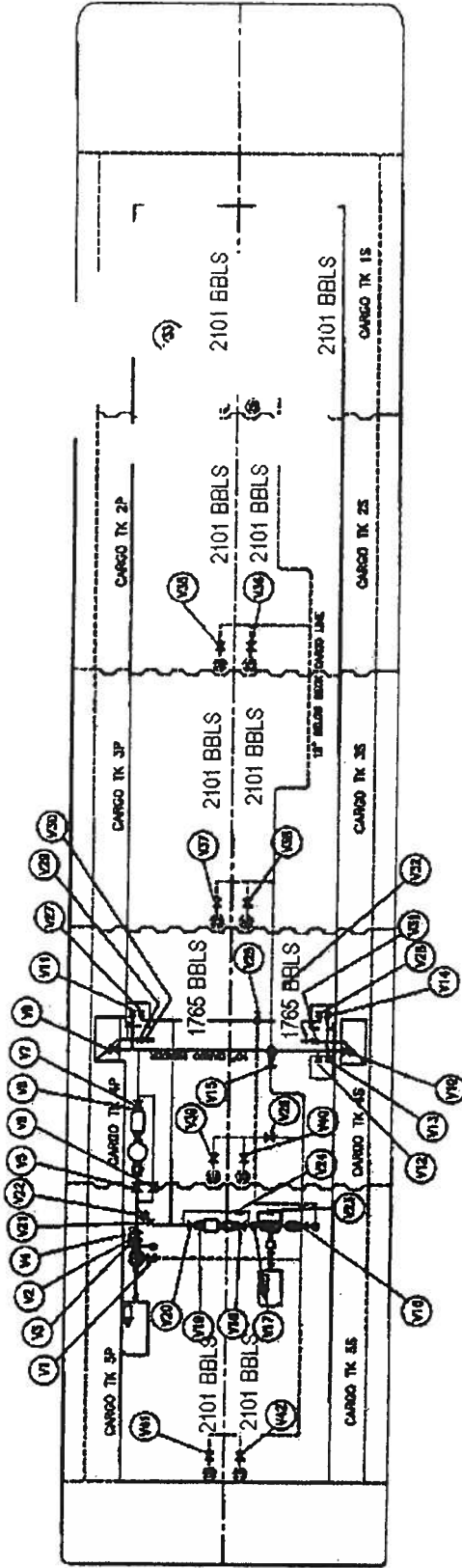


# Barge Name: 401



## BARGE 401 PIPING DIAGRAM & VALVE LABELING

- |     |  |     |   |
|-----|--|-----|---|
| V1  | PORT PUMP SUCTION VALVE                | V21 | STBD. PUMP DISCHARGE VALVE              |
| V2  | PORT PUMP CHECK VALVE                  | V22 | STBD. PUMP DISCHARGE CHECK VALVE        |
| V3  | PORT PUMP BYPASS VALVE                 | V23 | STBD. PUMP BYPASS VALVE                 |
| V4  | PORT PUMP METER BYPASS VALVE           | V24 | STBD. PUMP METER BYPASS VALVE           |
| V5  | PORT PUMP METER VALVE-IN               | V25 | PMD. TRANSFER. HOR. CARGO LOADING VALVE |
| V6  | PORT PUMP METER CHECK VALVE            | V26 | BELOW DECK HEADER BLOCK VALVE           |
| V7  | PORT PUMP METER VALVE-OUT              | V27 | PMD. TRANSFER. HOR. VALVE-PORT          |
| V8  | PORT PUMP METER BYPASS VALVE           | V28 | PMD. TRANSFER. HOR. VALVE-STBD.         |
| V9  | AFT TRANSFER. HOR. VALVE-STBD.         | V29 | PORT DRIP PAN VALVE                     |
| V10 | AFT TRANSFER. HOR. VALVE-PORT          | V30 | PORT DRIP PAN CHECK VALVE               |
| V11 | AFT TRANSFER. HOR. BRANCH VALVE-PORT   | V31 | STBD. DRIP PAN VALVE                    |
| V12 | AFT TRANSFER. HOR. BRANCH VALVE-AFTRD. | V32 | STBD. DRIP PAN CHECK VALVE              |
| V13 | AFT TRANSFER. HOR. BRANCH VALVE-OUTRD. | V33 | PORT CARGO SUCTION VALVE TK1            |
| V14 | AFT TRANSFER. HOR. BRANCH VALVE-PRD.   | V34 | STBD. CARGO SUCTION VALVE TK1           |
| V15 | PORT PUMP DISCHARGE CHECK VALVE        | V35 | PORT CARGO SUCTION VALVE TK2            |
| V16 | PORT PUMP METER VALVE-IN               | V36 | STBD. CARGO SUCTION VALVE TK2           |
| V17 | PORT PUMP METER CHECK VALVE            | V37 | PORT CARGO SUCTION VALVE TK3            |
| V18 | PORT PUMP METER VALVE-OUT              | V38 | STBD. CARGO SUCTION VALVE TK3           |
| V19 | PORT PUMP METER BYPASS VALVE           | V39 | PORT CARGO SUCTION VALVE TK4            |
| V20 | STBD. PUMP DISCHARGE CHECK VALVE       | V40 | STBD. CARGO SUCTION VALVE TK4           |
- DIESEL CARGO LOADING AND UNLOADING**
- TO LOAD DIESEL TO DK4 P/S @ END. HEADER:  
 OPEN VALVES - V27 OR V28, V25, V39 & V40  
 CLOSE VALVES - V10 & V26
- TO UNLOAD DIESEL DK4 P/S FROM STBD. PUMP:  
 OPEN VALVES - V27 OR V28, V16, V18, V20.  
 CLOSE VALVES - V39 & V40
- CARGO LOADING AND UNLOADING**
- TO LOAD (STANDARD) CARGO @ AFT HEADER:  
 OPEN VALVES - V9 OR V10 AND V16, V33 THRU V34  
 V41 & V42  
 CLOSE VALVES - V1, V7, V8, V16, V25, V26, V39 & V40
- TO UNLOAD (STANDARD) CARGO FROM STBD. PUMP:  
 OPEN VALVES - V9 OR V10 AND V5, V7, V16, V18, V20.  
 V21, V28, V33 THRU V36, V41 & V42  
 CLOSE VALVES - V1, V2, V18, V25, V39 & V40
- TO UNLOAD (STANDARD) CARGO FROM PORT PUMP:  
 OPEN VALVES - V9 OR V10 AND V1, V2, V5, V7,  
 V33 THRU V36, V41 & V42  
 CLOSE VALVES - V15, V16, V21, V25, V28, V39 & V40