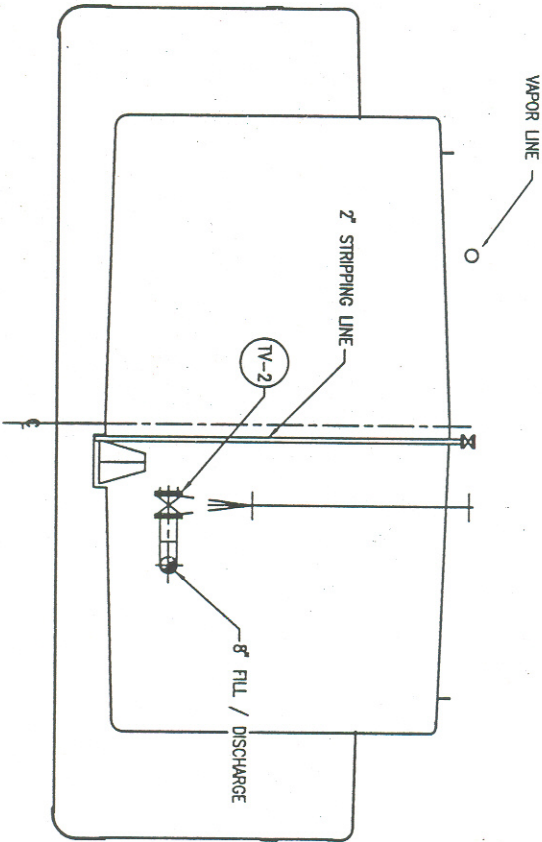


CARGO PIPING



BELOW DECK PIPING

CAPACITIES - SHORT TONS @ VARIOUS DRAUGHTS

DRAUGHT	TOTAL	TANK-1	TANK-2	TANK-3
F.T.	S.T.	S.T.	S.T.	S.T.
2'-6"	77.86	23.73	23.73	28.51
3'-0"	178.94	58.02	58.02	60.81
3'-6"	280.25	92.48	92.48	95.28
4'-0"	382.17	126.11	126.11	129.94
4'-6"	484.60	159.92	159.92	164.76
5'-0"	587.58	193.90	193.90	199.77
5'-6"	691.05	228.05	228.05	234.96
6'-0"	795.04	262.36	262.36	270.31
6'-6"	899.56	296.88	296.88	305.85
7'-0"	1,004.81	331.52	331.52	341.77
7'-6"	1,109.83	366.24	366.24	377.34
8'-0"	1,215.58	401.14	401.14	413.30
8'-6"	1,321.90	436.19	436.19	449.41
9'-0"	1,428.89	471.40	471.40	485.89
9'-6"	1,535.67	506.77	506.77	522.13
10'-0"	1,643.31	542.28	542.28	558.72
10'-6"	1,751.43	577.97	577.97	595.49
11'-0"	1,860.03	613.81	613.81	632.41

MAX. CAPACITY - BBL (FULL)  
 10,892.41 3,528.5 3,528.5 3,835.4  
 MAX. CAPACITY - CU. FT. (95%)  
 57,035.91 18,821.9 18,821.9 19,392.1

- SPECIAL FEATURES
- 1) COMMON VAPOR HEADER
  - 2) CARGO PUMP: 11" BRONN JACKSON
  - 3) PUMP ENGINE: GM 6-71
  - 4) TANKS HAVE STEAM HEATING COILS
  - 5) COMMON CARGO HEADER
- VALVE IDENTIFICATION
- TV - TANK VALVES (NUMBERED PER TX)
  - DV - DISCHARGE VALVE
  - RV - RELIEF VALVE
  - LV - LOAD VALVE
  - PHV - PORT HEADER VALVE
  - SHV - SHED HEADER VALVE
  - SV - SUCTION VALVE

OPERATING INSTRUCTIONS

TO LOAD:

- OPEN: TV-1, TV-2, TV-3
- OPEN: LV
- OPEN: SHV OR PHV TO DOCK
- CLOSE: DV
- CLOSE: SV

TO DISCHARGE:

- OPEN: TV-1, TV-2, TV-3
- OPEN: SV
- OPEN: DV
- OPEN: SHV OR PHV TO DOCK
- CLOSE: LV

**FirstWave**  
 NEWPARK SHIPBUILDING  
 200' x 35' x 12'-6"  
 CSC 113, 114, 118 & 119  
 PIPING DIAGRAM

**Schuller & Dixon, Inc.**  
 MODERN, TEXAS

BARGE INFO.

HULL NO.: 120, 121, 125 & 128  
 NAME: CSC 113, 114, 118 & 119  
 YEAR BUILT: 1989-2000  
 HULL TYPE: DOUBLE BOTTOM  
 CARGO GRADE: A & LOWER