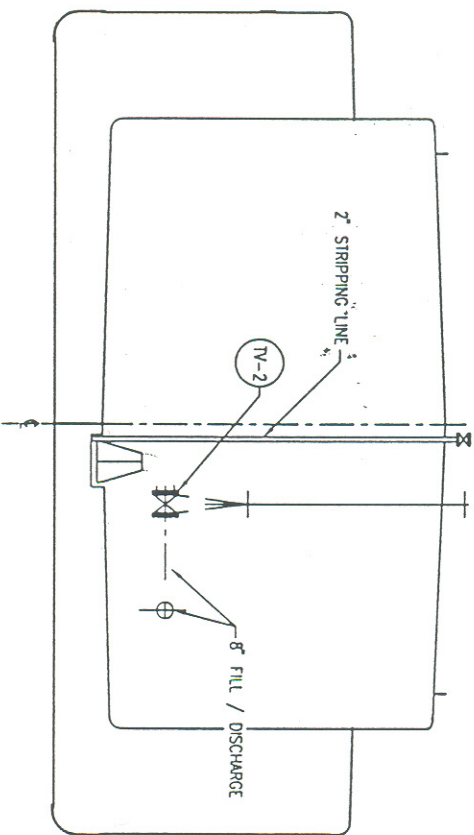


CARGO PIPING



BELOW DECK PIPING

CAPACITIES - SHORT TONS @ VARIOUS DEPTHS

DEPTH	TOTAL	TANK-1	TANK-2	TANK-3
FT.	S.T.	S.T.	S.T.	S.T.
2'-6"	77.96	25.73	25.73	26.51
3'-0"	178.84	59.07	59.07	60.81
3'-6"	280.75	92.48	92.48	95.79
4'-0"	382.17	126.11	126.11	129.94
4'-6"	484.60	159.92	159.92	164.76
5'-0"	587.56	193.90	193.90	199.77
5'-6"	691.05	228.09	228.09	234.96
6'-0"	795.04	262.36	262.36	270.31
6'-6"	899.56	296.86	296.86	305.85
7'-0"	1,004.61	331.52	331.52	341.57
7'-6"	1,109.83	366.24	366.24	377.34
8'-0"	1,215.58	401.14	401.14	413.30
8'-6"	1,321.80	436.19	436.19	449.41
9'-0"	1,428.49	471.40	471.40	485.69
9'-6"	1,535.67	506.77	506.77	522.13
10'-0"	1,643.31	542.29	542.29	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 - BRK (TALL)
 10,692.1 3,528.5 3,528.5 3,635.4
 MAX. CAPACITY - CU. FT. (358)
 570,559 18,871.9 18,871.9 19,392.1

SPECIAL FEATURES

- 1) CARGO PUMP: 11" BRONN JACKSON
- 2) PUMP ENGINE: CM 6-71
- 3) TANKS HAVE HEATING COILS
- 4) SEGREGATED CARGO PIPING

VALVE IDENTIFICATION

- TV - TANK VALVES (NUMBERED PER TK)
- DV - DISCHARGE VALVE
- TSBV - TANK SUCTON BLOCK VALVES
- PV - PILOT VALVE
- LV - LOAD VALVE (1/D PER TANK)
- CSV - CARGO SIGNEICATION VALVE
- PHV - PORT HEADER VALVE
- SHV - SHED HEADER VALVE

OPERATING INSTRUCTIONS

TO LOAD:
 OPER: TV-1, TV-2, TV-3
 OPER: 1-LV, 2-LV, 3-LV
 OPER: SHV OR PHV TO DOCK
 OPER: CSV
 CLOSE: DV
 TO DISCHARGE:
 OPER: TV-1, TV-2, TV-3
 OPER: TSBV-1, TSBV-2, TSBV-3
 OPER: DV OR PHV TO DOCK
 OPER: CSV
 CLOSE: 1-LV, 2-LV, 3-LV



FirstWave
 schuller & ollen, Inc.
 HOUSTON, TEXAS
 NEWARK SHIPBUILDING
 CHINA SHIP COMPANY, INC.
 200' x 33' x 17'-6"

PLATE NO.:
 WARE: CBC 112
 YEAR BUILT: 1999
 HULL TYPE: DOUBLE BOTTOM
 CARGO GRADE: A & LOWER

DATE	BY	DESCRIPTION
2001-09-04	0	PIPING DIAGRAM