

PLAN

TANK VOL. 100% FULL

TANK	GAL.	BBL.	CU. FT.
1	147677	3516.12	19741.59
2	170868	4068.29	22841.78
3	151853	3615.54	20299.84
TOTAL	470398	11199.95	62883.21
		98% FULL	
		10975.95	

CAPACITIES—SHORT TONS AT VARIOUS DRAFTS				
TANK NUMBER				
DRAFT (FT)	TOTAL (S.T.)	1 (S.T.)	2 (S.T.)	3 (S.T.)
6.00	804.40	259.40	291.50	253.40
6.25	857.30	278.00	312.20	267.10
6.50	910.30	296.60	332.90	280.70
6.75	963.50	315.40	353.80	294.40
7.00	1016.50	334.10	374.70	307.80
7.25	1069.70	352.90	395.60	321.10
7.50	1123.00	371.90	416.70	334.50
7.75	1176.40	390.90	437.90	347.70
8.00	1229.90	410.00	459.10	360.90
8.25	1283.40	429.10	480.40	374.00
8.50	1337.10	448.30	501.70	387.00
8.75	1390.80	467.60	523.20	400.00
9.00	1444.50	486.70	544.40	413.50
9.25	1498.40	506.40	566.30	425.70
9.4167	1534.20	519.30	580.60	434.20
9.50	1552.30	525.90	587.90	438.50
9.75	1606.30	545.50	609.60	451.20
10.00	1660.30	565.10	631.40	463.90
10.25	1714.40	584.70	653.20	476.50
10.50	1768.50	604.50	675.10	489.00

SPECIAL FEATURES

- CARGO PUMP: BYRON JACKSON MODEL 11LS14GH-3 AMARILLO GEAR S300 2100 GPM, 253' TDH @ 192 H.P.
- CARGO PUMP ENGINE: IVECO/FPT DIESEL MODEL PU-1173

BARGE INFORMATION

YEAR BUILT: 2020
 HULL TYPE: I
 CARGO GRADE: A & LOWER PRODUCTS PER SUBCHAPTER "D" AND LIMITED SUBCHAPTER "O" PRODUCTS.

CANAL BARGE COMPANY

NAME	HULL #
CBC 1010	9830
CBC 1011	9831
CBC 1012	9832
CBC 1013	9834
CBC 1014	9836

CARGO LOADING:

- A OPEN VALVES NO.:5,6,7,8 & 9
- B CLOSE VALVES NO.:1,2
- C VENT TANKS

CARGO DISCHARGE:

- A OPEN VALVES NO.:1,2,6,7,8 & 9
- B CLOSE VALVES NO.: 5
- C VENT TANKS

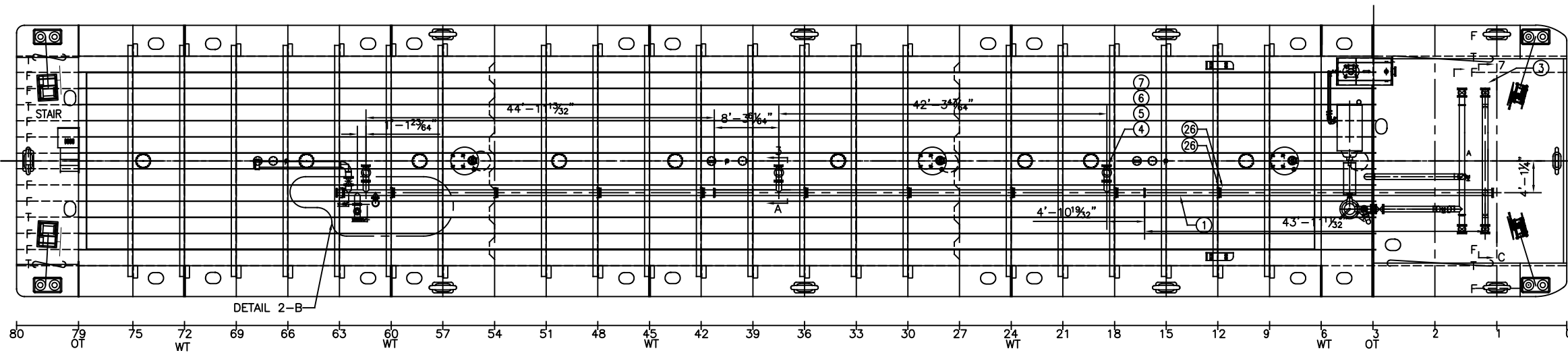
CARGO SYSTEM VALVES

- 1 PUMP SUCTION VALVE
- 2 PUMP DISCHARGE VALVE
- 3 PUMP DISCHARGE CHECK VALVE
- 4 PRESSURE RELIEF VALVE
- 5 CARGO FILL VALVE
- 6 PORT & STBD HEADER VALVES
- 7 TK 1 FILL / SUCTION VALVE
- 8 TK 2 FILL / SUCTION VALVE
- 9 TK 3 FILL / SUCTION VALVE
- 10 #1 STRIPPING VALVE
- 11 #2 STRIPPING VALVE
- 12 #3 STRIPPING VALVE
- 13 DW STRIPPING VALVE
- PU PUMP

MAX CAPACITY - BBL (100%)			
TOTAL	CT1	CT2	CT3
11199.95	3516.12	4068.29	3615.54

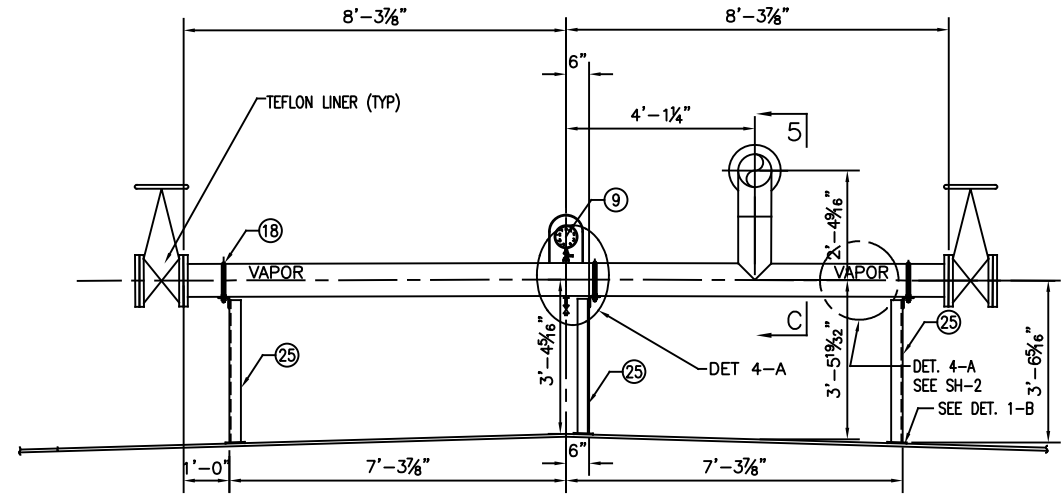
MAX CAPACITY - CU. FT. (100%)			
TOTAL	CT1	CT2	CT3
62883.21	19741.59	22841.78	20299.84

REV	ITEM	DESCRIPTION	DATE	BY
REVISIONS				
MARINE SOLUTIONS, INC.				
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MARINE SOLUTIONS, INC. CELL: 615-364-9598 TEL: 615-662-9608 P.O. BOX 218197 NASHVILLE 37221 E-MAIL: MARINESOLINC@AOL.COM HOUSTON P.O. BOX 19878 SUGARLAND, TX 77406				
CANAL BARGE COMPANY, INC.				
200'-0" X 35'-0" X 12'-6" DOUBLE SKIN TANK BARGE				
CARGO PIPING DIAGRAM				
(SOUTHWEST SHIPYARD)				
SCALE: 3/16" = 1'-0"	DATE: 07/02/20	DWG NO. 101907CPLM-1		REV. 0
DRAWN BY: MSI	CK'D BY:	APPR. BY:	SHT 1 OF 1	
HULL NO. SEE LIST	CONTRACT NO. 0		REV. 0	

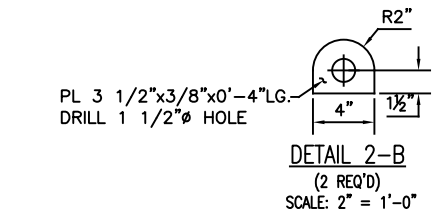


DETAIL 2-B

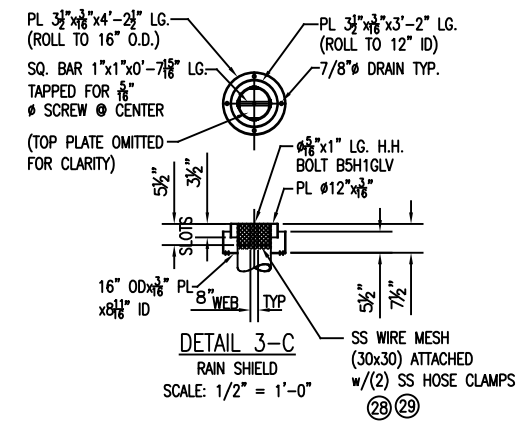
PLAN



SECTION 7-C
SCALE: 1/2" = 1'-0"



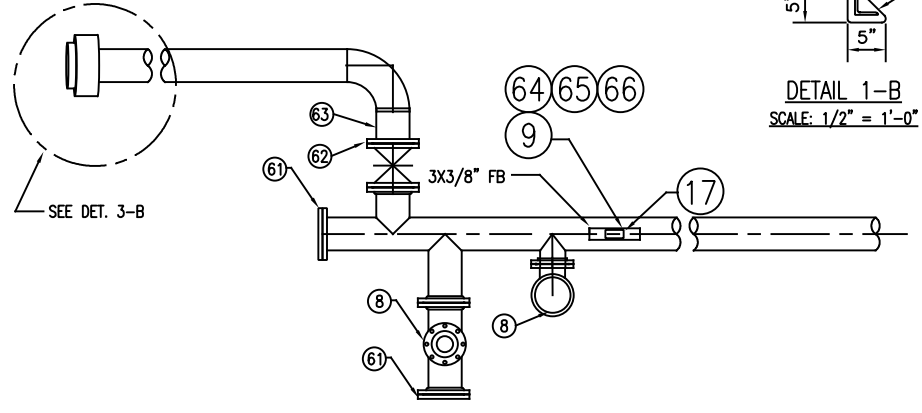
DETAIL 2-B
(2 REQ'D)
SCALE: 2" = 1'-0"



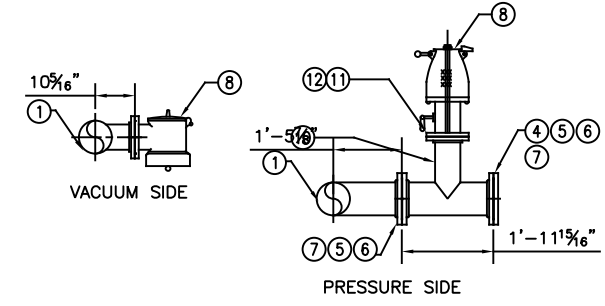
DETAIL 3-C
SCALE: 1/2" = 1'-0"

- GENERAL NOTES:
1. ALL PIPING TO MEET USCG AND ABS CLASS 11 REGULATIONS.
 2. MATERIAL TO BE AS SPECIFIED OR EQUAL.
 3. MAXIMUM ALLOWABLE WORKING PRESSURE (RELIEF VALVE SETTING) OF PIPING SYSTEM SHALL NOT EXCEED 1 1/2 PSI.
 4. TEST PIPING SYSTEM TO 3 PSI WITH CARGO TANK TESTING.
 5. 8" FLANGED JOINTS AND 4" PORT HAVE BEEN PROVIDED FOR INSPECTION.

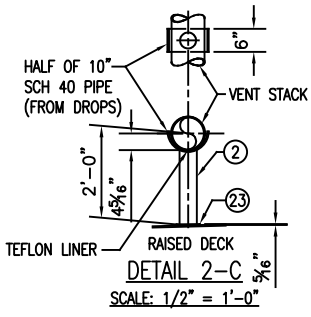
CANAL BARGE COMPANY	
NAME	HULL #
CBC XXX	9830
CBC XXX	9831
CBC XXX	9832
CBC XXX	9834
CBC XXX	9836



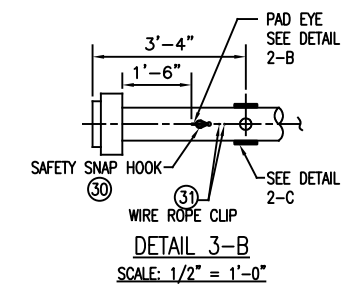
DETAIL 1-B
SCALE: 1/2" = 1'-0"



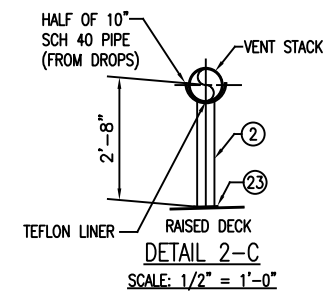
PV VALVE INSTALLATION
SCALE: 1/2" = 1'-0"



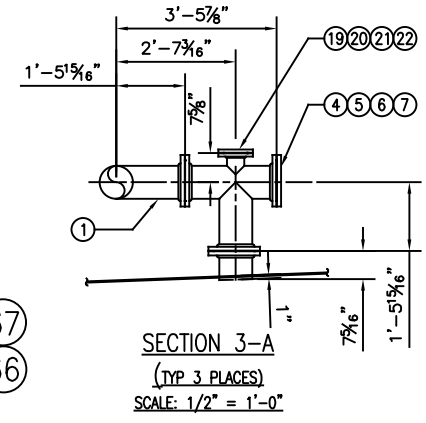
DETAIL 2-C
SCALE: 1/2" = 1'-0"



DETAIL 3-B
SCALE: 1/2" = 1'-0"



DETAIL 2-C
SCALE: 1/2" = 1'-0"



SECTION 3-A
(TYP. 3 PLACES)
SCALE: 1/2" = 1'-0"

ITEM NO.	QTY	DESCRIPTION	ASTM NO.	ANSI NO.
1	202'	8" PIPE, SCH. 40, ERW, STEEL	A-53 GR B	B36.10
2	20'	4" PIPE, SCH. 40, ERW, STEEL	A-53 GR B	B36.10
3	3	GATE VALVE, 8", 150#, CS BODY/CR 13 TRIM, SPACE GR EQ	A-105	B16.5
4	9	8" BLIND FLANGE, 150#, R.F., FS	A-105	B16.5
5	21	RING GASKET, 1/8" THK., NON-ASBESTOSS, 150# 8" FLG., TEFLON		
6	168	BOLTS, 3/4" x 3 1/2" LG. FOR 8" FLG.	BOLT: 304 NUT: 316	B18.2.1 B18.2.2
7	21	8" FLANGE, 150#, SUP ON, R.F., FS	A-105	B16.5
8	1	PV VALVE, 6", BERGAN KLPH, SET AT 1 1/2 PSI PRESS/0.5 PSI VACUUM	304SS	B16.5
9	1	PRESSURE VACUUM GAUGE, 4 PSI VAC. TO 4 PSI PRESS., 1/4" CONN.		
10	4'	6" PIPE, SCH. 40, ERW, STEEL	A-53 GR B	B36.10
11	2	6" FLANGE, 150#, SUP ON, R.F., FS	A-105	B16.5
12	2	RING GASKET, 1/8" THK., NON-ASBESTOSS, 150# 6" FLG., TEFLON		
13	1	COUPLING, 3/4", 3000#, SCR'D, FS	A-105	B16.11
14	1	ELBOW, 90°, 3/4", 3000#, SCR'D, FS	A-105	B16.11
15	1	PLUG, 3/4", 3000#, SCR'D	A-182-304	B16.11
16	10"	3/4" PIPE, SCH. 40, ERW, STEEL	A-106	B36.10
17	1	VALVE, 3/4", THD.	304SS	B16.5
18	13	U-BOLT FOR 8" PIPE	BOLT: 304 NUT: 316	B18.2.1 B18.2.2
19	24	BOLTS, 5/8" x 3" LG. FOR 4" FLG.	BOLT: 304 NUT: 316	B18.2.1 B18.2.2
20	3	4" FLANGE, 150#, SUP ON, R.F., FS	A-105	B16.5
21	3	RING GASKET, 1/8" THK., NON-ASBESTOSS, 150# 4" FLG., TEFLON		
22	3	4" BLIND FLANGE, 150#, R.F., FS	A-105	B16.5
23	1	PL 3/4" x 3'-2" LG.	STEEL	
24	6	PL 5/8" x 0'-5"	STEEL	
25	6	L 3"x3"x3/8"x3'-2" LG., (TRIM AT ASS'Y)	STEEL	
26	10	L 3"x3"x3/8"x1'-2" LG.	STEEL	
27	20	L 3"x3"x3/8"x1'-0" LG.(TRIM AT ASS'Y)	STEEL	
28	1	WIRE CLOTH, 30X30 MESH, 6"x30" LG.	304SS	
29	2	WORM DRIVE CLAMP, 8 1/4" TO 9 1/8" DIA.	304SS	
30	1	SAFETY SNAP, RIGID EYE, ZINC PLATED, 750# RATED, 3/4" SNAP OPENING, 3/4" EYE DIA, 4" OVERALL LENGTH.		
31	4	1/4", WIRE ROPE CLIP, GALV. STL.		
32	16	BOLTS, 3/4" x 3 1/4" LG. FOR 6" FLG.	BOLT: 304 NUT: 316	B18.2.1 B18.2.2
33	4'-2"	2 1/2" PIPE, SCH. 40, ERW (4'-2 3/16" LG.)	A-53 GR B	B36.10
34	18 3/4"	2" PIPE, SCH. 40, ERW	A-53 GR B	B36.10
35	1	HALF OF 4" SCH40 PIPE (CUT FROM CROPS)		
36	2	PL 3 1/2"x3/8"x0'-4" LG.	STEEL	

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CANAL BARGE COMPANY 200'-0"x35'-0"x12'-6" DOUBLE-SKIN TANK BARGE VAPOR PIPING (SOUTHWEST SHIPYARD, L.P.)				
SCALE: 1/8"=1'-0"		DATE: 12/23/19		DWG NO.
DRAWN BY: ck		CK'D BY:		101907P-1
HULL NO. SEE LIST		CONTRACT NO. 0		SHT 1 OF 2
				REV. 0