

VALVE IDENTIFICATION CHART

- V1 HIGH LOADING VALVE
- V2 PUMP DISCHARGE CHECK VALVE
- V3 PUMP DISCHARGE VALVE
- V4 CARGO HEADER VALVE
- V5 PUMPWELL INLET VALVE
- V6 DRAIN VALVE CHECK
- V7 DRAIN VALVE
- V8 CARGO HRR BLOCK VALVE
- V9 CARGO TANK SUCCTION VALVE
- V10 CARGO PRESS. RELIEF VALVE
- V12 PUMPWELL DRAIN VALVE

HOT OIL SYSTEM:

- H1 #1 PORT HOT OIL SUPPLY VALVE - LOWER
- H2 #1 STBD HOT OIL SUPPLY VALVE - UPPER
- H3 #1 STBD HOT OIL SUPPLY VALVE - LOWER
- H4 #1 PORT HOT OIL SUPPLY VALVE - UPPER
- H5 #1 PORT HOT OIL RETURN VALVE - LOWER
- H6 #1 PORT HOT OIL RETURN VALVE - UPPER
- H7 #1 STBD HOT OIL RETURN VALVE - LOWER
- H8 #1 STBD HOT OIL RETURN VALVE - UPPER
- H9 #2 PORT HOT OIL SUPPLY VALVE - LOWER
- H10 #2 PORT HOT OIL SUPPLY VALVE - UPPER
- H11 #2 STBD HOT OIL SUPPLY VALVE - LOWER
- H12 #2 STBD HOT OIL SUPPLY VALVE - UPPER
- H13 #2 PORT HOT OIL RETURN VALVE - LOWER
- H14 #2 PORT HOT OIL RETURN VALVE - UPPER
- H15 #2 STBD HOT OIL RETURN VALVE - LOWER
- H16 #2 STBD HOT OIL RETURN VALVE - UPPER
- H17 #3 STBD HOT OIL SUPPLY VALVE - UPPER
- H18 #3 STBD HOT OIL SUPPLY VALVE - LOWER
- H19 #3 PORT HOT OIL SUPPLY VALVE - UPPER
- H20 #3 PORT HOT OIL SUPPLY VALVE - LOWER
- H21 #3 PORT HOT OIL RETURN VALVE - UPPER
- H22 #3 STBD HOT OIL RETURN VALVE - UPPER
- H23 #3 STBD HOT OIL RETURN VALVE - LOWER
- H24 #3 STBD HOT OIL RETURN VALVE - LOWER
- H25 HOT OIL RETURN CONNECTION
- H26 HOT OIL RETURN CONNECTION
- H27 HOT OIL BY-PASS
- H28 HOT OIL SUPPLY VALVE
- H29 HOT OIL STRAINER ISOLATION VALVES
- H30 HOT OIL RETURN BLOCK VALVE
- H31 HOT OIL SUPPLY/RETURN BYPASS VALVE

PLAN

1/8" = 1'-0"

△ TANK VOL. 100% FULL

TANK	QAL.	BBL.	CU FT.
1P	181,893	4,599	25,692
2P	181,893	4,599	25,692
2S	187,449	4,463	26,068
3S	177,412	4,324	23,717
TOTAL	1,113,508	26,512	146,854
		98% FULL	25,992

△ CAPACITIES—SHORT TONS AT VARIOUS DRAUGHTS

DRAUGHT (FT)	TOTAL TANK NUMBER	2	3
2.0	42.60	13.60	15.70
2.5	277.10	94.70	92.80
3.0	512.70	176.80	173.30
3.5	748.10	259.60	254.60
4.0	966.50	343.20	336.80
4.5	1224.60	427.50	419.30
5.0	1463.50	512.50	502.70
5.5	1703.20	598.30	596.80
6.0	1843.80	684.90	677.80
6.5	2165.30	772.20	757.60
7.0	2427.60	860.20	844.00
7.5	2670.60	948.10	931.20
8.0	2914.50	1036.70	1019.20
8.5	3158.20	1126.00	1107.80
9.0	3404.70	1220.10	1197.30
9.5	3651.00	1311.90	1287.40
10.0	3898.10	1404.50	1378.40
10.5	4146.10	1497.90	1470.10
11.0	4395.00	1592.10	1562.70
11.5	4644.70	1687.10	1656.00

MAX CAPACITY - BBL (100%)
2651.458 9850.921 9453.381 7430.26

MAX CAPACITY - CU FT. (100%)
148,888.581 540733.74 530783.824 417177.80

△ SPECIAL FEATURES

- 1. CARGO PUMP: BRONX JACKSON MODEL 12S168HC 1" P/110 2800 GPM, 237' TDH
- 2. CARGO PUMP ENGINE: DETROIT DIESEL MODEL 6V-91A

△ BARGE INFORMATION

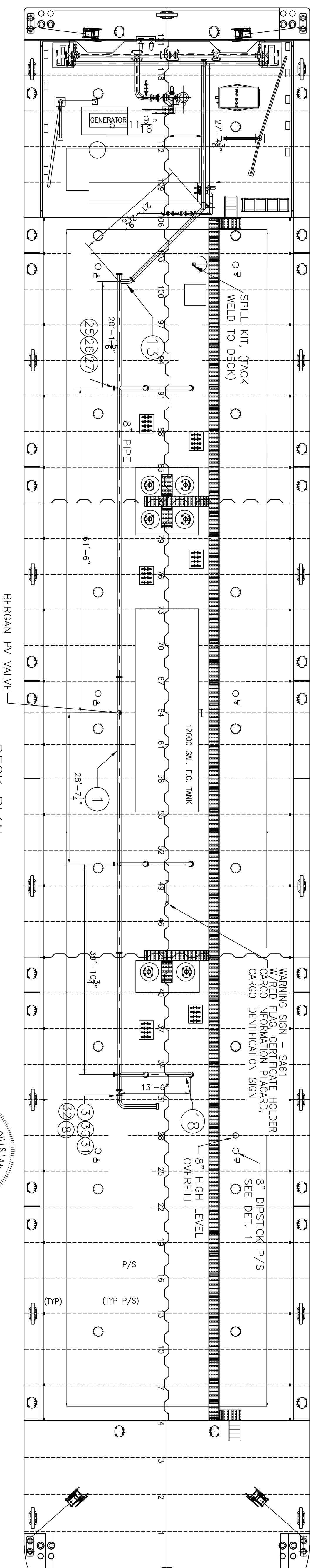
HULL NO.	4402	4403
NAME	CBC 336	CBC 337
OFF. #	1119885	1119888
YEAR BUILT:	2001	
HULL TYPE:	B & LOWER	
CARGO GRADE:	B & LOWER	
STRUCTURE:	B & LOWER	

CARGO PIPING DIAGRAM

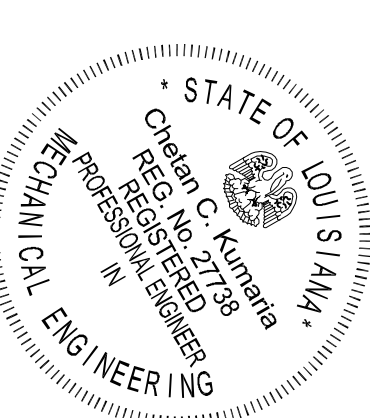
SCALE	1/8" = 1'-0"	DATE	1/28/02
DRAWN BY	CHP/BRP	APPROV BY	
DATE	ASB/AND CRY	DATE	9/6/05
HULL NO.	4402-4403	SHIP ORDER	
REV. NO.		REV. NO.	

287'-0" X 54'-0" X 12'-0" DOUBLE SKIN TANK BARGE
CANAL BARGE COMPANY
TRENITY MARINE PRODUCTS, INC.
2800 GPM, 237' TDH

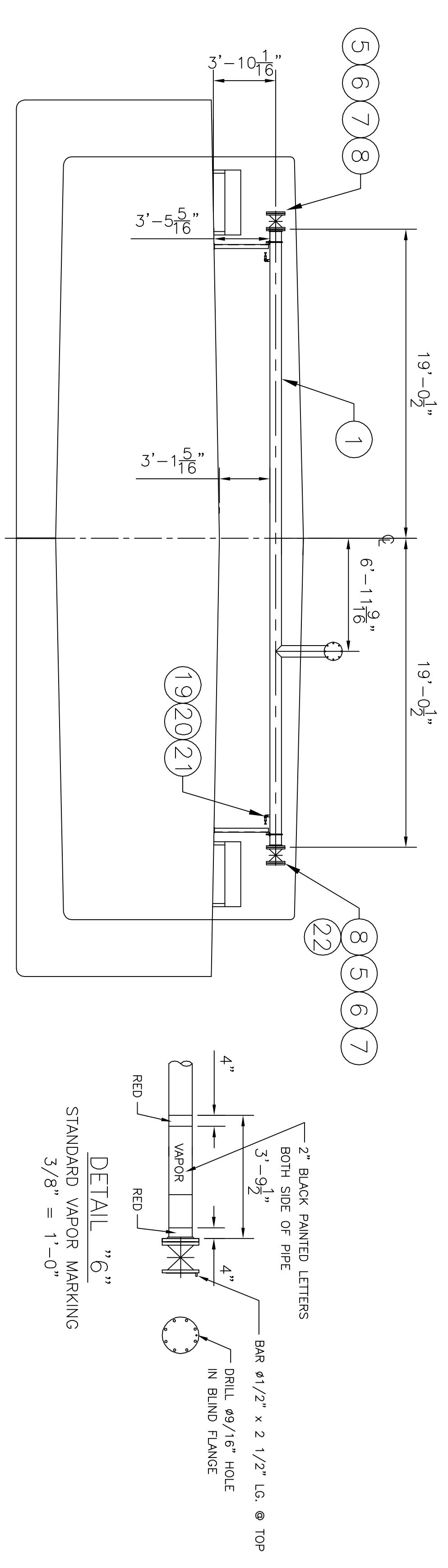
TRIP NO. P-1
SHEET 1 OF 1
REV. 3



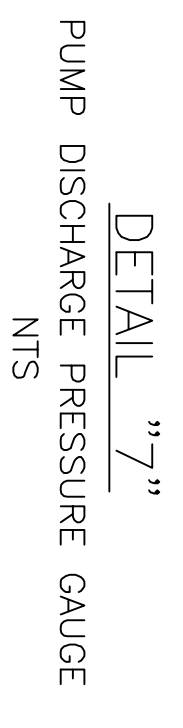
DECK PLAN



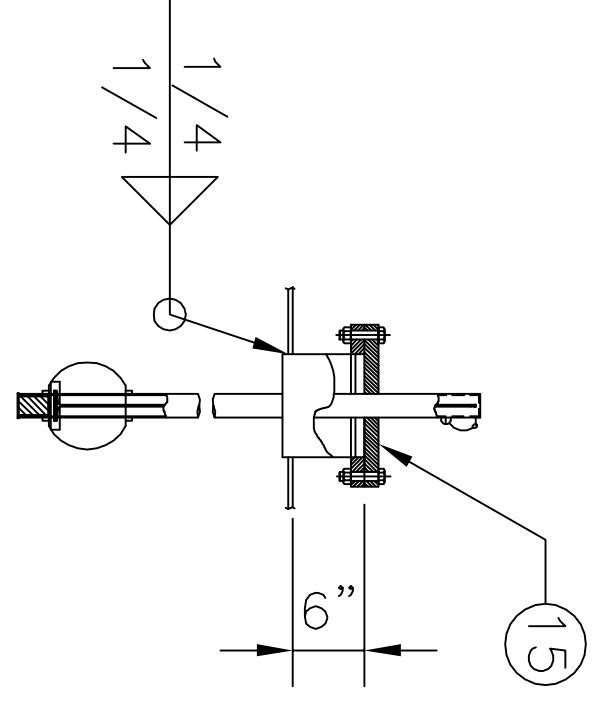
SIGNED ON: 04/10/2012
EXPIRY DATE: 08/30/2012



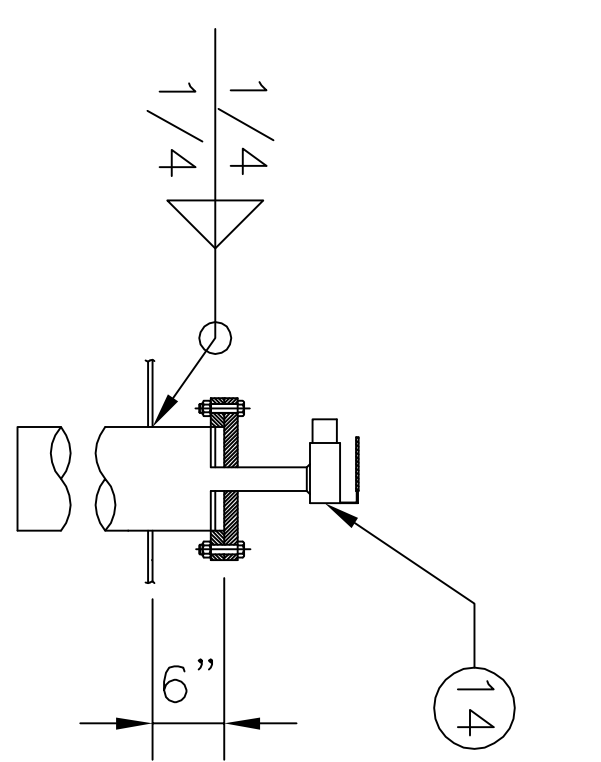
SECTION "A-A"
LOOKING AFT
3/16" = 1'-0"



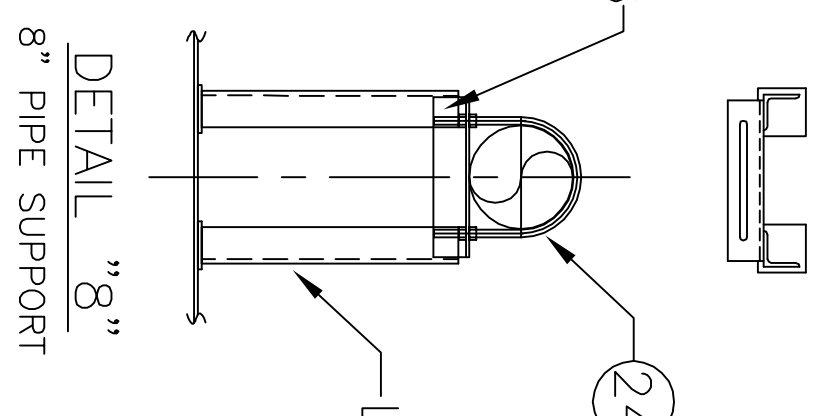
DETAIL "7"
PUMP DISCHARGE PRESSURE GAUGE
NTS



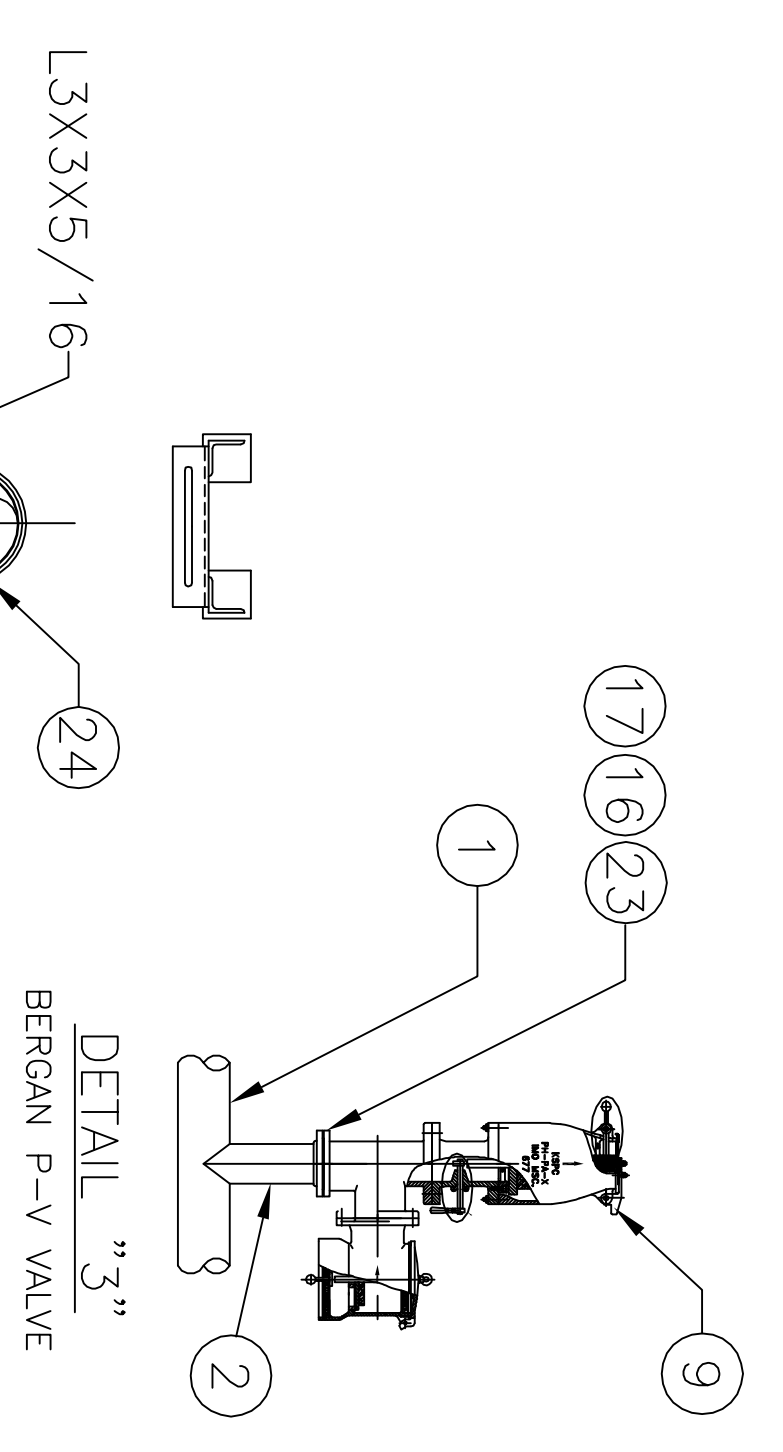
DETAIL "1"
BERGAN FULL DEPTH LIQUID GAUGE
3/4" = 1'-0"



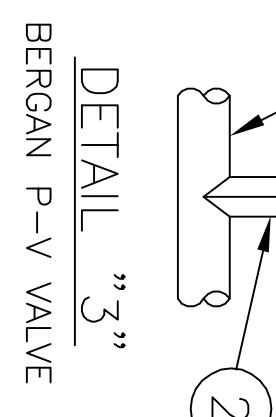
DETAIL "2"
BERGAN HIGH LEVEL/ALARM SHUTDOWN
3/4" = 1'-0"



DETAIL "8"
8" PIPE SUPPORT



DETAIL "6"
STANDARD VAPOR MARKING
3/8" = 1'-0"



DETAIL "3"
BERGAN P-V VALVE

MARK	QTY	DESCRIPTION	ASTM NO.	ANSI NO.
1	283	8" PIPE, SCH. 40, ERW, BLK. STEEL	A-53	B36.10
2	4	6" PIPE, SCH. 20, ERW, BLK. STL.	A-53	B36.10
3	10	8" PIPE, SCH. 10, 304 SS.	A-312	B36.10
5	5	8" BLIND FLANGE, 150#, R.F., F.S.	A-105	B16.5
6	19	RING GASKET, 1/8" THK., NON-ASBESTOSS, 150# 8" FLG., KLINGER SIL OR EQ.		
7	152	BOLTS, 3/4" x 3 1/2" LG. FOR 8" FLG.	A-307	B18.2.1
8	3	GATE VALVE, 8", 150# C.S. BODY/CR13 TRIM, SPACE#15011C OR EQ.	A-216	B16.5
9	1	PV VALVE, 6", BERGAN KIPH-6, SET @ 1.0 PSI PRESS & 0.5 PSI VACUUM	A-216	B16.5
10	1	VALVE GLOBE, 1/2", SOR'D., FORGED STEEL BODY/CR13 TRIM, VOGT TPE 600 #10103	A-105	B16.11
11	1	PRESSURE VACUUM GAUGE, 4 PSI VAC. TO 4 PSI PRESS., ASHEROFT OR EQ.	A-105	B16.11
12	1	COUPLING, 1/2", 3000#, SOR'D	A-105	B16.11
13	1	ELBOW, 45°, 8", SCH. 40, L.R., B.W., STEEL	A-234	B16.9
14	6	HIGH LEVEL ALARM/SHUT DOWN SYSTEM, BERGAN GUARD LEVEL 07324TWIN-2A		
15	6	HIGH LEVEL INDICATING DEVICE, BERGAN GUARD LEVEL 07324AUNDS		
16	1	RING GASKET, 1/8" THK., NON-ASBESTOSS, 150# 6" FLG., KLINGER SIL OR EQ.		
17	8	BOLTS, 3/4" x 3 1/4" LG. FOR 6" FLG.	A-307	B18.2.1
18	1	ELBOW, 90°, 8", SCH. 40, B.W.	A-234	B16.9
19	2	VALVE, GATE, 3/4", SOR'D., FORGED STEEL BODY/CR13 TRIM, FARBANK FIG#0418	A-105	B16.11
20	2	ELBOW, 90°, 3/4", 3000#, SOR'D, F.S.	A-105	B16.11
21	2	HALF COUPLING, 3/4", 3000#, SOR'D.	A-105	B16.11
22	24	8" FLANGE, 150#, SLIP ON, R.F., F.S.	A-105	B16.5
23	1	6" FLANGE, SLIP-ON, 150#, R.F., F.S.	A-105	B16.5
24	AS REQ'D	U-BOLT FOR 8" PIPE	A-307	B18.2.1
25	10	4" PIPE, SCH. 40, ERW, BLK. STEEL	A-53	B36.10
26	6	4" BLIND FLANGE, 150#, R.F., F.S.	A-105	B16.5
27	6	4" FLANGE, 150#, SLIP ON, R.F., F.S.	A-105	B16.5
28	6	RING GASKET, 1/8" THK., NON-ASBESTOSS, 150# 4" FLG., KLINGER SIL OR EQ.		
29	48	BOLTS, 5/8" x 3" LG. FOR 4" FLG.	A-307	B18.2.1
30	1	LAP JOINT, 8" SCH. 10, WELDED, 304SS	A-312	B36.10
31	1	STUB FOR 8" LAP JOINT, SCH. 10, WELDED, 304SS	A-312	B36.10
32	1	ELBOW, 90°, 8", SCH. 10, B.W., 304SS	A-182	B16.9

GENERAL NOTES

- BERGE IS CBC 337, O.N. D1119686.
- ALL PIPING TO MEET USCG II REGULATIONS.
- BACKING RINGS SHALL BE USED AT BUTT WELD JOINTS 2" AND LARGER.
- PIPES PASSING THROUGH WATER/OIL TIGHT BOUNDARIES TO BE WELDED BOTH SIDES.
- VAPOR SYSTEM:
DESIGN 1.0 PSI
TEST 2.0 PSI
RELIEF VALVE 1.0 PSI
- LABELS TO BE INSTALLED ON ALL VALVES WHERE REQUIRED TO IDENTIFY SERVICE.
- ENDS OF VAPOR MANIFOLD SHOULD BE PAINTED AS SHOWN IN DETAIL "6" IN ACCORDANCE WITH CFR 46 PART 39.20-D-(d).
- THE VAPOR PIPING MUST BE ELECTRICALLY CONTINUOUS AND BONDED TO HULL.

REVISIONS

REV	ITEM	DESCRIPTION	DATE	BY

MARINE SOLUTIONS, INC.
7985 BOONETRACE
NASHVILLE, TN 37221
TEL: 615-586-9898 FAX: 615-586-9888
EMAIL: MARINE@MARINESOL.COM

CANAL BARGE COMPANY, INC.
VAPOR PIPING ADDITION

297'-6" x 54'-0" x 12'-0" DOUBLE SKIN TANK BARGE

SCALE: 3/32"=1'-0"	DATE: 04/10/12	DWG NO.:
DRAWN BY: MSI	CHK'D BY:	041201P-1
DESIGNER BY: MSI	APPR. BY:	SHT 1 OF 1
HULL NO. 0	CONTRACT NO. 0	REV. 0