

VALVE IDENTIFICATION CHART

- V1 HIGH LOADING VALVE
 - V2 PUMP DISCHARGE CHECK VALVE
 - V3 PUMP DISCHARGE VALVE
 - V4 CARGO HEADER VALVE
 - V5 PUMPELL INLET VALVE
 - V6 DRAIN VALVE CHECK
 - V7 DRAIN VALVE
 - V8 CARGO HDR BLOCK VALVE
 - V9 CARGO TANK SUCTON VALVE
 - V10 CARGO PRESS. RELIEF VALVE
 - V11 CARGO HDR LOADING VALVE
 - V12 PUMPELL DRAIN VALVE
 - P3 PRESS GAUGE
- TO LOAD**
- OPEN: V1, V8, V11
 - CLOSE: V5, V3 & V7
 - OPEN: V4 TO DOCK
 - OPEN: V8 IF NECESSARY
- TO PUMP**
- OPEN: V5, V8 AND V3
 - CLOSE: V11 & V1
 - OPEN: V4 TO DOCK
 - OPEN: V8 IF NECESSARY

HOT OIL SYSTEM:

- H1 #1 PORT HOT OIL SUPPLY VALVE - LOWER
- H2 #1 PORT HOT OIL SUPPLY VALVE - UPPER
- H3 #1 STBD HOT OIL SUPPLY VALVE - LOWER
- H4 #1 STBD 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 - LOWER
- H20 #3 PORT HOT OIL SUPPLY VALVE - UPPER
- H21 #3 PORT HOT OIL RETURN VALVE - UPPER
- H22 #3 PORT HOT OIL RETURN VALVE - LOWER
- H23 #3 STBD HOT OIL RETURN VALVE - LOWER
- H24 #3 STBD HOT OIL RETURN VALVE - UPPER
- H25 HOT OIL SUPPLY CONNECTION
- H26 HOT OIL RETURN CONNECTION
- H27 HOT OIL BY-PASS
- H28 HOT OIL STRAINER ISOLATION VALVES
- H29 HOT OIL STRAINER VALVE
- H30 HOT OIL RETURN BLOCK VALVE
- H31 HOT OIL SUPPLY/RETURN BYPASS VALVE

1/8" = 1'-0"

PLAN

FWD

△ TANK VOL. 100% FULL

TANK	GNL.	BBL.	CU. FT.
1P	181,893	4,589	25,622
1S	191,893	4,589	26,622
2P	107,448	2,686	15,658
2S	177,412	4,224	23,717
TOTAL	1,113,508	26,512	148,854
		95% FULL	
		25,982	

△ CAPACITIES - SHORT TONS AT VARIOUS DRAUGHTS

DRAUGHT (FT)	TOTAL (S.T.)	P/S 1	P/S 2	P/S 3
2.0	42.80	13.60	13.30	15.70
2.5	277.10	94.70	92.50	89.90
3.0	512.70	176.60	173.50	162.60
3.5	749.10	258.60	254.60	235.90
4.0	986.90	343.20	336.60	306.70
4.5	1224.80	427.50	419.30	377.80
5.0	1463.90	512.50	502.70	448.30
5.5	1703.20	598.30	586.90	518.00
6.0	1943.80	684.50	671.60	597.10
6.5	2184.30	772.20	757.60	655.50
7.0	2427.90	860.20	844.00	723.30
7.5	2670.60	948.10	931.20	790.30
8.0	2914.50	1038.70	1019.20	855.60
8.5	3159.20	1128.90	1107.30	922.50
9.0	3404.70	1220.10	1197.50	997.30
9.5	3651.00	1311.80	1287.50	1051.60
10.0	3898.10	1404.50	1378.40	1115.20
10.5	4146.10	1497.90	1470.10	1178.10
11.0	4395.00	1592.10	1562.70	1240.20
11.5	4644.70	1687.10	1656.00	1301.60
	MAX CAPACITY - BBL. (100%)			
	29514.581	9630.821	9453.381	7430.26
	MAX CAPACITY - CU. FT. (100%)			
	148,868.581	54073.741	53076.624	41717.80

△ SPECIAL FEATURES

- 1. CARGO PUMP - BRONX JACKSON MODEL 12S160HC
- MANUEL LO GEAR 1:1 RATIO
- ② 207 HP DIESEL ENGINE
- 2. CARGO PUMP ENGINE - DETROIT DIESEL MODEL 6V-71 NA

△ BARGE INFORMATION

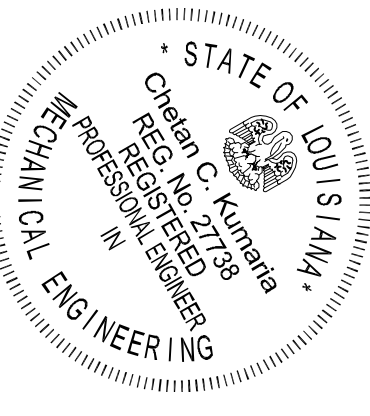
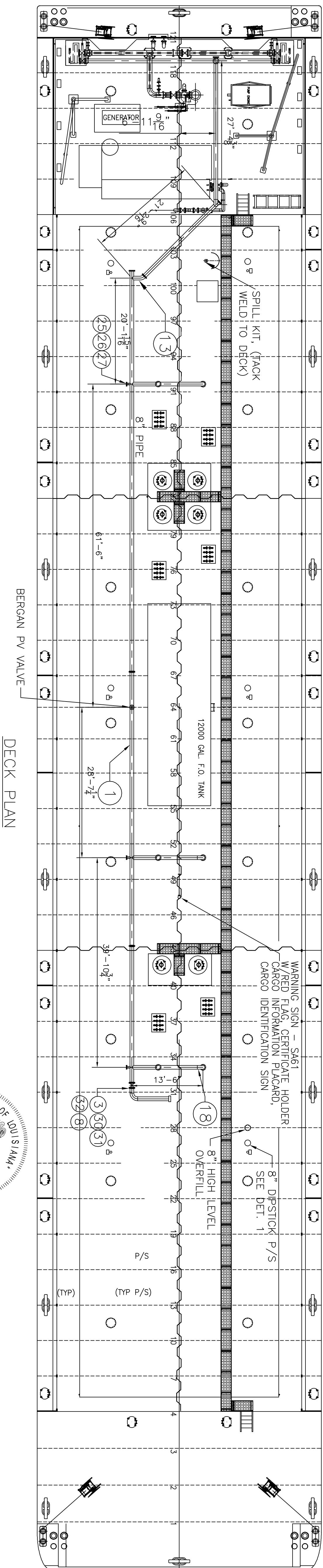
HULL NO.	4402	4403
NAME	TRINITY	TRINITY
REG. NO.	13198851	13198852
REG. STATE	LA	LA
REG. DATE	11/19/89	11/19/89
HULL TYPE	III	
HULL YEAR	2001	
CARGO GRADE	B & LOWER	
CARGO PRODUCTS	DIPRODUCTS	

REV	DESCRIPTION	DATE	BY
1	ADD DIMENSIONS, SPECIAL FEATURES, & BARGE INFO		
2	ADD VALVE DRS FOR V12, V28, H28, H29, & H31		
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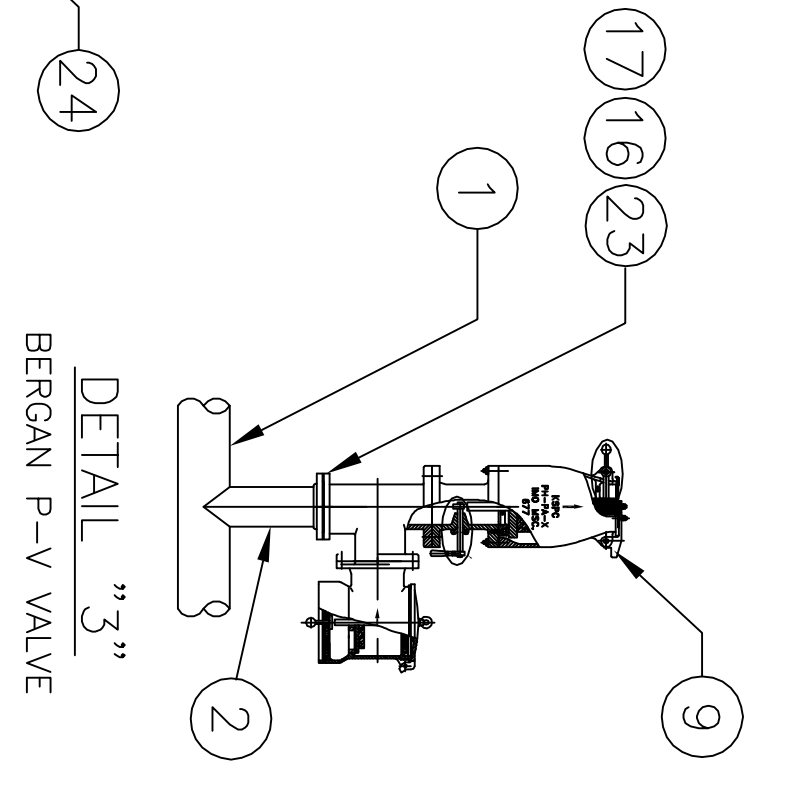
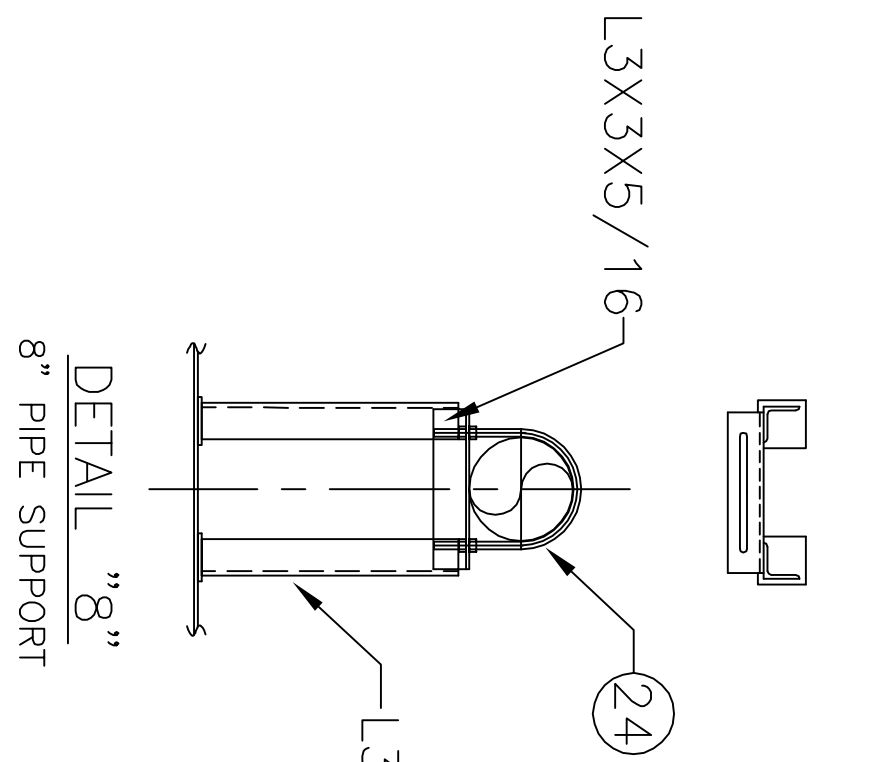
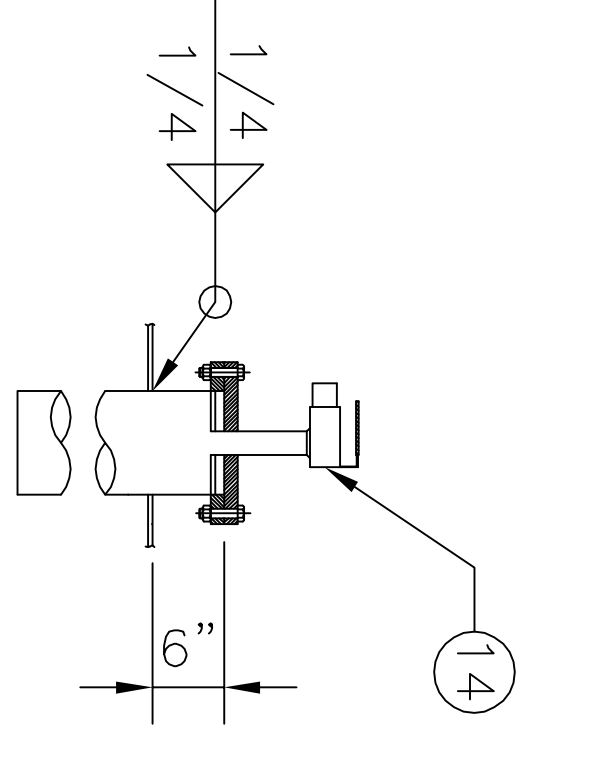
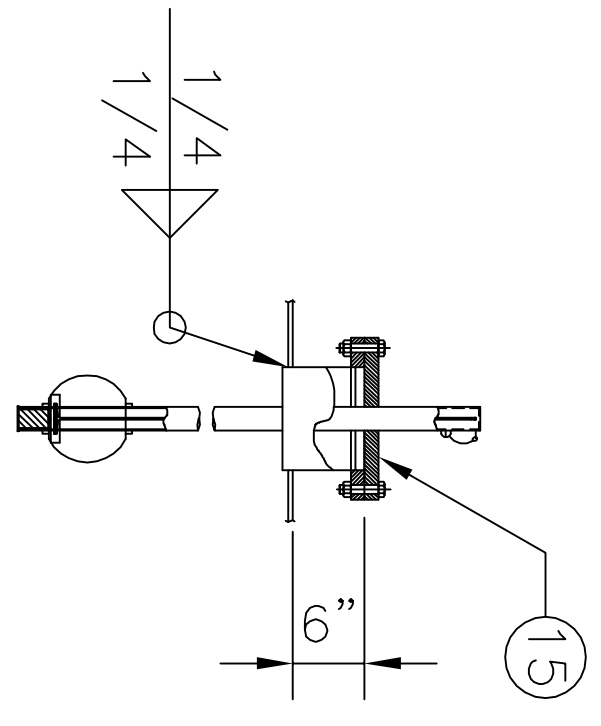
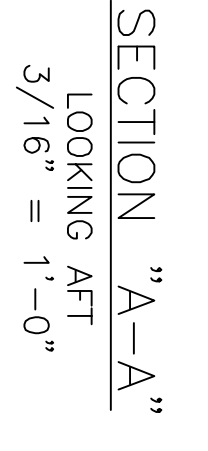
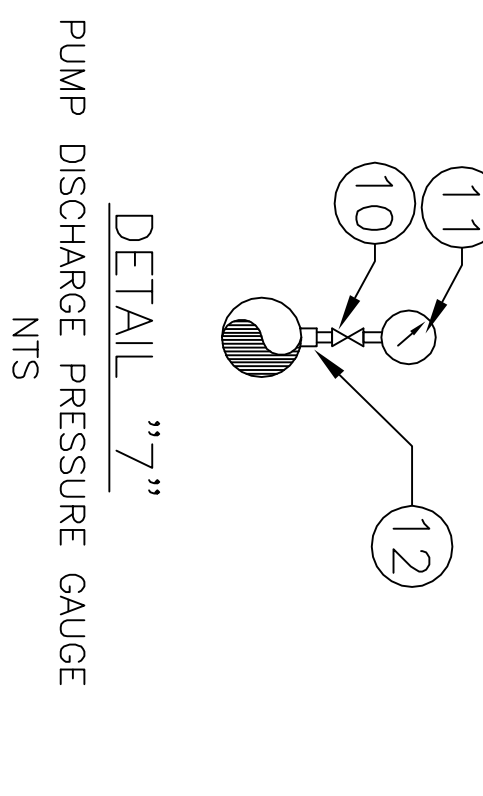
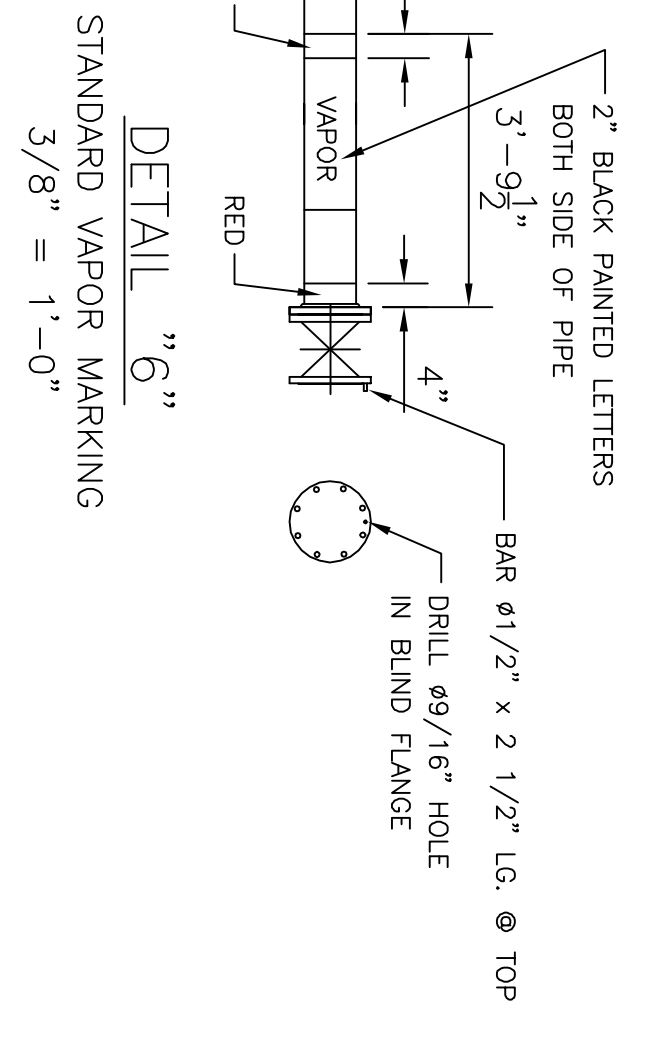
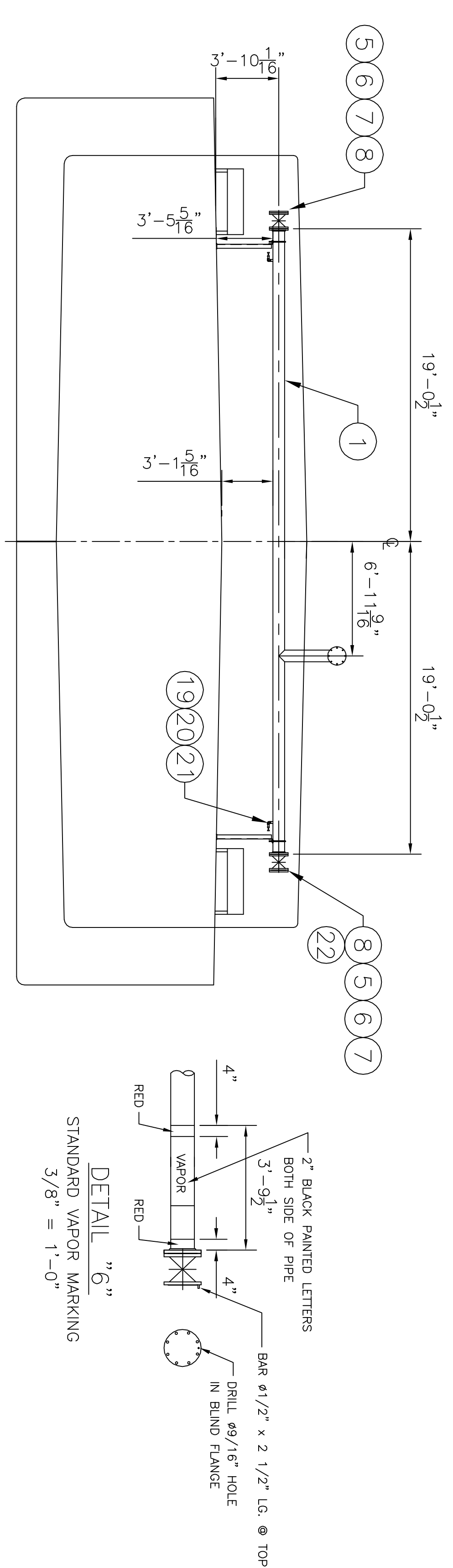
TRINITY MARINE PRODUCTS, INC.
 1400 W. 10th Street, Suite 100
 Metairie, LA 70002
 (504) 885-1111
 FAX (504) 885-1112
 WWW.TRINITYMARINE.COM

CANAL BARGE COMPANY
 297'-0" X 54'-0" X 12'-0" DOUBLE SKIN HARK BARGE

CARGO PIPING DIAGRAM
 SCALE: 1/8" = 1'-0"
 DATE: 1/29/02
 DRAWN BY: JCD/ERB
 CHECKED BY: JCD/ERB
 APPROVED BY: JCD/ERB
 HULL NO.: 4402-4403
 SHEET NO.: 1 OF 1
 REV. 3



SIGNED ON: 04/11/2012
EXPIRY DATE: 08/30/2012



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-ASBESTOS, 150# 8" FLG., KLINGERSIL 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-ASBESTOS, 150# 6" FLG., KLINGERSIL 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 REOD	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-ASBESTOS, 150# 4" FLG., KLINGERSIL 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 336, O.N. D1119685.
- 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: 1.0 PSI DESIGN 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: 615.548.9898 FAX: 615.548.9888 EMAIL: MARINE@MARINEBARGE.COM

CANAL BARGE COMPANY, INC.
297'-6" x 54'-0" x 12'-0" DOUBLE SKIN TANK BARGE
VAPOR PIPING ADDITION

SCALE: 3/32"=1'-0"	DATE: 03/16/12	DWG NO.: 031202P-1
DRAWN BY: NSI	CHK'D BY:	APP'R. BY:
HULL NO. 0	CONTRACT NO. 0	REV. 0