

CARGO SYSTEM

- CV1 PUMP SUCTION VALVE
- CV2 PUMP DISCHARGE VALVE
- CV3 PUMP DISCHARGE CHECK VALVE
- CV4 PRESSURE RELIEF VALVE
- CV5 CARGO FILL/LOAD VALVE
- CV6 STBD HEADER VALVE
- CV7 PORT HEADER VALVE
- CV8 #1 PORT CARGO FILL/SUCTION VALVE
- CV9 #1 STBD CARGO FILL/SUCTION VALVE
- CV10 #1 PORT CARGO FILL/SUCTION BLK VALVE
- CV11 #1 STBD CARGO FILL/SUCTION BLK VALVE
- CV12 #2 PORT CARGO FILL/SUCTION VALVE
- CV13 #2 STBD CARGO FILL/SUCTION VALVE
- CV14 #2 PORT CARGO FILL/SUCTION BLK VALVE
- CV15 #2 STBD CARGO FILL/SUCTION BLK VALVE
- CV16 #3 PORT CARGO FILL/SUCTION VALVE
- CV17 #3 STBD CARGO FILL/SUCTION VALVE
- CV18 #3 PORT CARGO FILL/SUCTION BLK VALVE
- CV19 #3 STBD CARGO FILL/SUCTION BLK VALVE
- CV20 TRANSVERSE HEADER BLOCK VALVE
- CV21 PUMP DISCHARGE BYPASS
- CV22 PUMP DISCHARGE HEADER DRAIN
- CV23 PUMP BURP LINE VALVE
- CV24 PUMP BURP LINE CHECK VALVE
- CV25 PORT DRIP TRAY WATER DRAIN
- CV26 STBD DRIP TRAY WATER DRAIN

STRIPPING SYSTEM

- STV1 STRIPPING VALVE PUMPWELL
- STV2 STRIPPING VALVE TANK #1P
- STV3 STRIPPING VALVE TANK #1S
- STV4 STRIPPING VALVE TANK #2P
- STV5 STRIPPING VALVE TANK #2S
- STV6 STRIPPING VALVE TANK #3P
- STV7 STRIPPING VALVE TANK #3S

**LOADING/UNLOADING PROCEDURE
(FOR LEVEL LOADING/UNLOADING OF A SINGLE PRODUCT)**

TO LOAD:
OPEN
 CV6 OR CV7, CV5, CV8, CV9, CV10, CV11,
 CV12, CV13, CV14, CV15, CV16, CV17, CV18,
 CV19, CV20.

CLOSE
 CV1, CV2, CV21, CV22, CV23, CV24, CV25,
 CV26.

TO DISCHARGE:
OPEN
 CV6 OR CV7, CV1, CV2, CV8, CV9, CV10,
 CV11, CV12, CV13, CV14, CV15, CV16, CV17,
 CV18, CV19, CV20.

CLOSE
 CV5, CV21, CV22, CV23, CV24, CV25, CV26.

SPECIAL FEATURES

1. CARGO PUMP: BYRON JACKSON
 MODEL 11LS14GH-3
 AMARILLO S200A GEAR 1:1 RATIO
 2200 GPM, 250' TDH
 @ 180 H.P.
2. CARGO PUMP ENGINE: CUMMINS
 6 CTA 8.3 ENGINE

BARGE INFORMATION

HULL NO.	2205-1	2205-2	2205-3	2205-4
NAME:	CBC 305	CBC 306	CBC 307	CBC 308
OFF. #	1242030	1242023	1242024	1242025
HULL NO.	2205-5	2205-6	2205-7	2205-8
NAME:	CBC 309	CBC 310	CBC 311	CBC 312
OFF. #	1242026	1242027	1242028	1242029

YEAR BUILT: 2012
 HULL TYPE: III
 CARGO GRADE: A & CERTAIN
 SUBCHAPTER "O" PRODUCTS

FOR LEVEL LOADING OF A SINGLE PRODUCT

DRAFT (FT)	TOTAL (S.T.)	CAPACITIES—SHORT TONS AT VARIOUS DRAFTS*		
		TANK NUMBER		
		3 P/S	2 P/S	1 P/S
2.5	197.58	61.98	18.19	18.62
3.0	426.84	98.42	56.83	58.17
3.5	657.79	135.33	95.66	97.90
4.0	890.33	172.21	134.89	138.06
4.5	1124.32	208.73	174.66	178.77
5.0	1359.70	244.63	215.08	220.14
5.5	1596.37	280.14	256.01	262.03
6.0	1834.29	315.08	297.54	304.53
6.5	2073.36	349.68	339.51	347.49
7.0	2313.58	383.92	381.95	390.92
7.5	2554.86	417.57	424.94	434.92
8.0	2797.19	450.72	468.43	479.44
8.5	3040.52	483.55	512.33	524.37
9.0	3284.81	516.15	556.59	569.67
9.5	3530.04	548.14	601.38	615.51
10.0	3776.16	579.90	646.49	661.69
10.5	4023.16	611.14	692.09	708.35
11.0	4270.99	642.00	738.08	755.42
11.5	4519.65	672.55	784.42	802.85

*VALUES FOR LEVEL TRIM WITH FUEL TANK AT 98% FULL

TANK VOL. 100% FULL

TANK	GAL.	BBL.	CU. FT.
1P	220110	5241	29426
1S	220110	5241	29426
2P	215040	5120	28747
2S	215040	5120	28747
3P	206262	4911	27573
3S	206262	4911	27573
TOTAL	1282824	30,544	171492
		98% FULL	29,933

MAX CAPACITY - BBL (100%)				
TOTAL	TANK NUMBER			TOTAL
	1 P/S	2 P/S	3 P/S	
30544	10482	10240	9822	

MAX CAPACITY - CU. FT. (100%)				
TOTAL	TANK NUMBER			TOTAL
	1 P/S	2 P/S	3 P/S	
171492	58852	57494	55146	

REV	ITEM	DESCRIPTION	DATE	BY
REVISIONS				

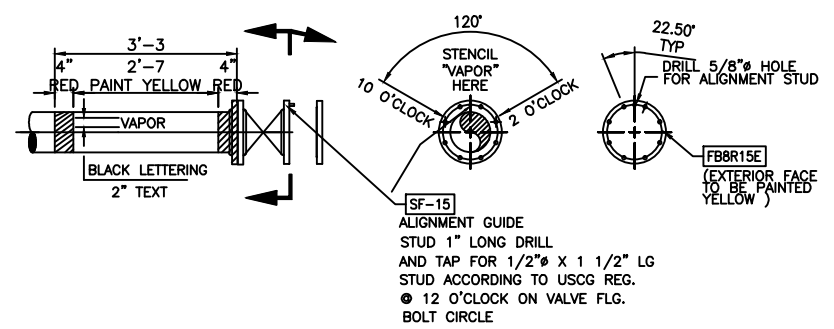
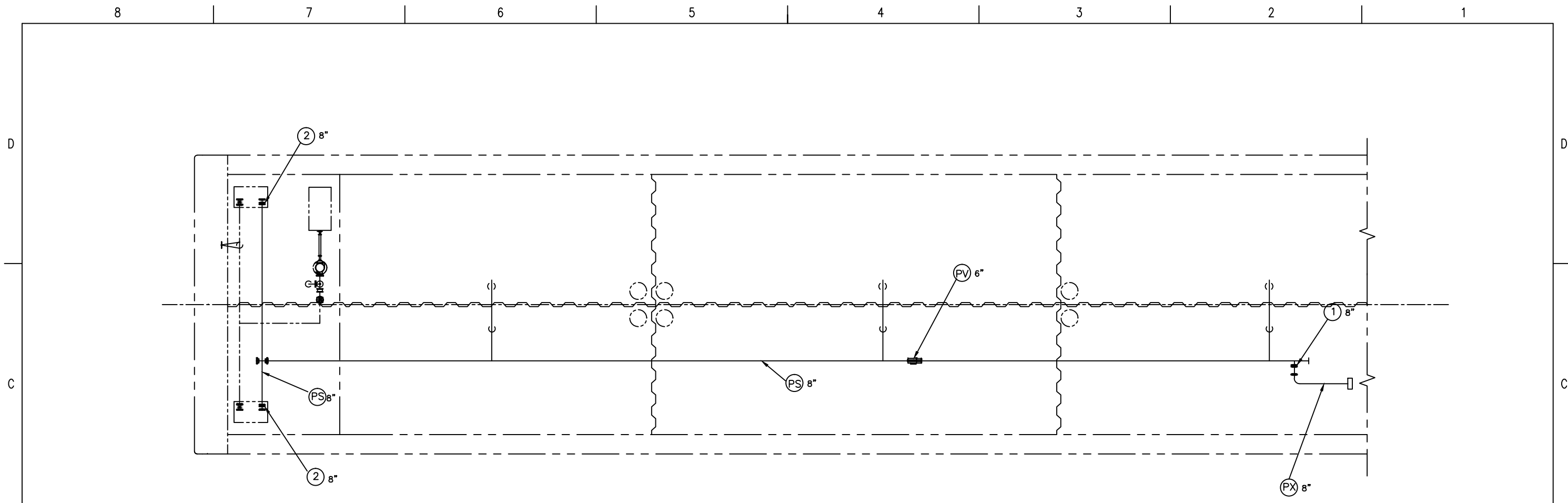
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TRINITY MARINE PRODUCTS, INC.
 TANK BARGE DIVISION
 1050 Trinity Road - Atchafalaya, La. 70715

CANAL BARGE COMPANY, INC.
 297'-0" X 54'-0" X 12'-0" DOUBLE SKIN TANK BARGE

**CARGO PIPING
 DIAGRAM**

SCALE: N/A	DATE: 6/18/12	DWG NO.
DRAWN BY: SDB	CK'D BY: PGC	APPR BY: P-01C
YARD: MADISONVILLE	TAG NO. 38199	SHT 1 OF 1
HULL NO. 2205-1 THRU 8	SHOP ORDER:	REV. 2



DETAIL
VAPOR HEADER MARKING (P/S)
N.T.S.

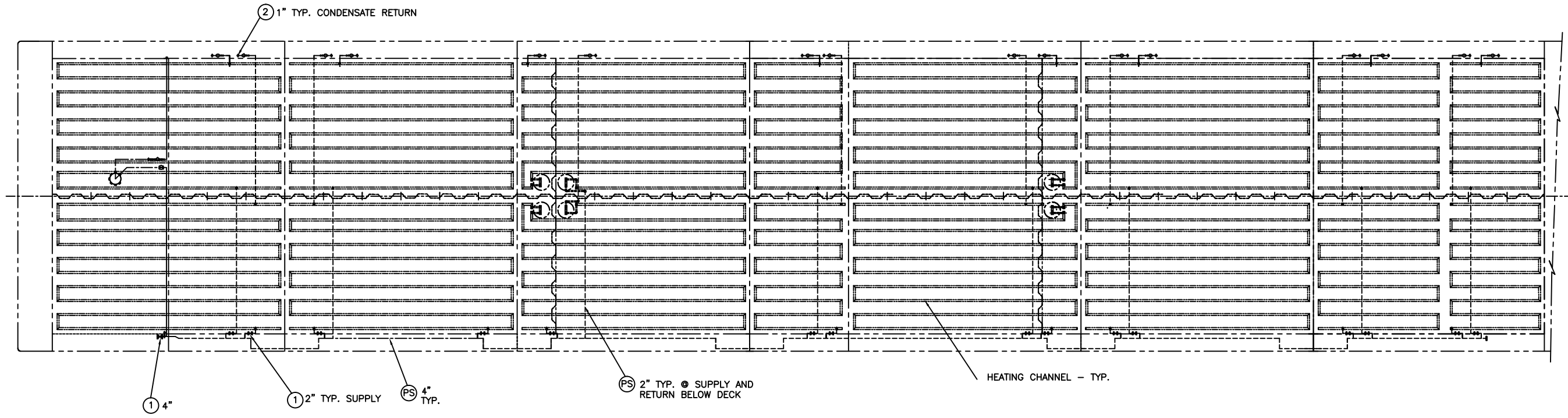
LIST OF MATERIALS

PC. NO.	PART	DESCRIPTION	MFG	NOMINAL SIZE	MATERIAL	RATING	ASTM NO.	ANSI NO.	COMMENT
1	BUTTERFLY VALVE	GEAR OPERATED WAFER TYPE	APOLLO	8"	C.S. STN. STL. TRIM	150#	A-216 WCB	B16.34	
2	GATE VALVE	FLANGED O.S. & Y	SPACE	8"	C.S. STN. STL. TRIM	150#	A-216 WCB	B16.34	
PV	PRESSURE-VAC. VALVE	SET @ 1.5 PSI PRESSURE, 0.5 PSI VAC.,	BERGAN	6"	S.S. BODY, STN. STL. TRIM				
PS	PIPE	STD. WT. ERW		8"	STEEL		A-53	B36.10	
PX	PIPE	SCHEDULE 10		8"	STAINLESS		A-312	B36.10	
	PIPE FLANGE	W.N., S.O., BLIND		8"	STEEL	150#	A-181	B16.5	
	PIPE FLANGE	LAP JOINT FLANGE (SWIVEL FLANGE)		8"	STEEL	150#	A-105	B16.5	
	JOINT STUB	LAP JOINT STUB END, SCHEDULE 10,		8"	STAINLESS STEEL	150#	A-304	B36.10	
	JOINTS	UNION, CPLG, S.W.		6" & 8"	STEEL	3000#	A-105	B16.11	
	PIPE FITTINGS	BUTT WELD, STD. WT.		6" & 8"	STEEL	SCH. 40	A-234	B16.9	
	PIPE FITTINGS	BUTT WELD, SCHEDULE 10		8"	STAINLESS STEEL	SCH. 10	A-182-F304L	B16.9	
	GASKET	RING TYPE, X 1/8" THICK FOR 150# FLG.	TEFLON	6" & 8"		150#			

GENERAL NOTES

- 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:
 PRESSURE, WORKING 100 PSI
 DESIGN 125 PSI
 TEST 187.5 PSI
 RELIEF VALVE 1.5 PSI
- MATERIAL TO BE AS SPECIFIED OR EQUAL.
- LABELS TO BE INSTALLED ON ALL VALVES WHERE REQUIRED TO IDENTIFY SERVICE.

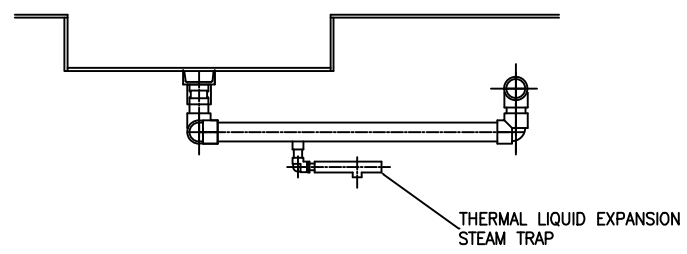
1	REVISED TO UPDATE TO SPECS	4/29/12	BP	
REV	ITEM	DESCRIPTION	DATE	BY
REVISIONS				
TRINITY MARINE PRODUCTS, INC.				
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TRINITY MARINE PRODUCTS, INC. TANK BARGE DIVISION 1050 Tully Road - Ashland City, TN 37015				
CANAL BARGE COMPANY, INC. 297'-6 X 54' X 12'-0 DOUBLE-SKIN TANK BARGE				
VAPOR PIPING DIAGRAM				
SCALE:	NTS	DATE:	5/21/12	DWG NO.
DRAWN BY:	BP	CK'D BY:	APPR BY:	CP-06
YARD:	MADISONVILLE	TAG NO.	38199	SHT 1 OF 1
HULL NO.	2205-1 THRU 8	SHOP ORDER:		REV. 1



PIPING LIST OF MATERIALS

PC. NO.	PART	DESCRIPTION	MFG	NOMINAL SIZE	MATERIAL	RATING	ASTM NO.	ANSI NO.
1	GATE VALVE	FIG. 15011C, FLG'D OS&Y	SPACE	ALL	CAST STL/SS TRM	150#	A-216 WCB	B16.34
2	GATE VALVE	#1155, FLG'D	WARREN	1"	CAST STL/SS TRM	150#	A-216 WCB	B16.34
3	RELIEF VALVE	FIG. 6283ED01, SET @ 125 PSI	KUNKLE	3/4"	BRONZE	125#	B-62	B16.34
PS	PIPE	STD. WT., SEAMLESS		ALL	STL		A-53	B36.10
	PIPE FLANGE	WN, SO, BLIND & SW		ALL	STL	150#	A-181	B16.5
	JOINTS	UNION, COUPLING		2" & BLW	F.S.	3000#	A-105	B16.11
	PIPE FITTINGS	BUTT WELD		ABV 2"	STL	STD.WT.	A-234	B16.9
	PIPE FITTINGS	SCRD, SW		2" & BLW	F.S.	3000#	A-105	B16.11
PSS	PIPE	STD. WT., SEAMLESS		ALL	STN. STL		A-312	B36.19
	PIPE FLANGE	WN, SO, BLIND & SW		ALL	STN. STL	150#	A-182	B16.5
	JOINTS	UNION, COUPLING		2" & BLW	STN. STL	3000#	A-182	B16.11
	PIPE FITTINGS	SCRD, SW		2" & BLW	STN. STL	3000#	A-182	B16.11
	GASKETS	NON-ASBESTOS		ALL	TEFLON			
	EXPANSION TRAP	FREETON LIQUID EXPANSION STEAM TRAP, MODEL 74140	SPIRAX SARCO	ALL	CAST IRON		A-126 CL. B	

- GENERAL NOTES
- 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.
 - CARGO SYSTEM:
 PRESSURE, WORKING 100 PSI
 DESIGN 125 PSI
 TEST 187.5 PSI
 RELIEF VALVE 125 PSI
 MAXIMUM TEMPERATURE 375
 - MATERIAL TO BE AS SPECIFIED OR EQUAL



TYPICAL DETAIL @ EXPANSION STEAM TRAP ON CONDENSATE

REV	ITEM	DESCRIPTION	DATE	BY
1		REVISED TO UPDATE TO SPECS	5/29/12	BP

REVISIONS

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TRINITY MARINE PRODUCTS, INC.
 P.O. BOX 790 - Madisonville, LA 70447

CANAL BARGE COMPANY, INC.
 297'-6 X 54' X 12'-0 DOUBLE SKIN TANK BARGE

STEAM PIPING DIAGRAM

SCALE: NTS	DATE: 5/22/12	DWG NO.
DRAWN BY: BP	CK'D BY:	CP-23
YARD: MADISONVILLE	TAG NO. 38199	SHT 1 OF 1
HULL NO.2205-1 THRU 8	SHOP ORDER:	REV. 1