

**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
- CV12 #2 PORT CARGO FILL/SUCTION VALVE
- CV13 #2 STBD CARGO FILL/SUCTION VALVE
- CV16 #3 PORT CARGO FILL/SUCTION VALVE
- CV17 #3 STBD CARGO FILL/SUCTION 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

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

**TO LOAD:**  
OPEN  
CV6 OR CV7, CV5, CV8, CV9, CV12, CV13, CV16, CV17, CV20.

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

**TO DISCHARGE:**  
OPEN  
CV6 OR CV7, CV1, CV2, CV8, CV9, CV12, CV13, CV16, CV17, 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.	2213-1	2213-2	2213-3	2213-4
NAME:	CBC 317	CBC 318	CBC 319	CBC 320
OFF. #	1249403	1249404	1249405	1249406

YEAR BUILT: 2013  
HULL TYPE: III  
CARGO GRADE: A & CERTAIN  
SUBCHAPTER "O" PRODUCTS

**FOR LEVEL LOADING OF A SINGLE PRODUCT**

DRAFT (FT)	TOTAL (S.T.)	TANK NUMBER		
		3 P/S	2 P/S	1 P/S
2.5	330.36	61.51	51.20	52.47
3.0	566.37	97.91	91.50	93.78
3.5	803.29	134.06	132.15	135.44
4.0	1041.10	169.81	173.21	177.52
4.5	1279.80	205.20	214.68	220.02
5.0	1519.38	240.33	256.49	262.87
5.5	1759.81	275.12	298.67	306.11
6.0	2000.98	309.61	341.19	349.68
6.5	2243.07	343.74	384.12	393.68
7.0	2486.02	377.59	427.39	438.03
7.5	2729.85	411.08	471.06	482.78
8.0	2974.54	444.20	515.12	527.95
8.5	3220.08	476.94	559.58	573.51
9.0	3466.35	509.44	604.35	619.39
9.5	3713.55	541.59	649.51	665.68
10.0	3961.61	573.19	695.15	712.46
10.5	4210.52	604.57	741.12	759.57
11.0	4460.30	635.60	787.47	807.08
11.5	4710.93	666.07	834.31	855.08

\*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		
	1 P/S	2 P/S	3 P/S
30544	10482	10240	9822

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

**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

REV	ITEM	DESCRIPTION	DATE	BY
AB		AS-BUILT	1/31/14	MD
1		REVISED BARGE INFORMATION	9/20/13	GG

REVISIONS

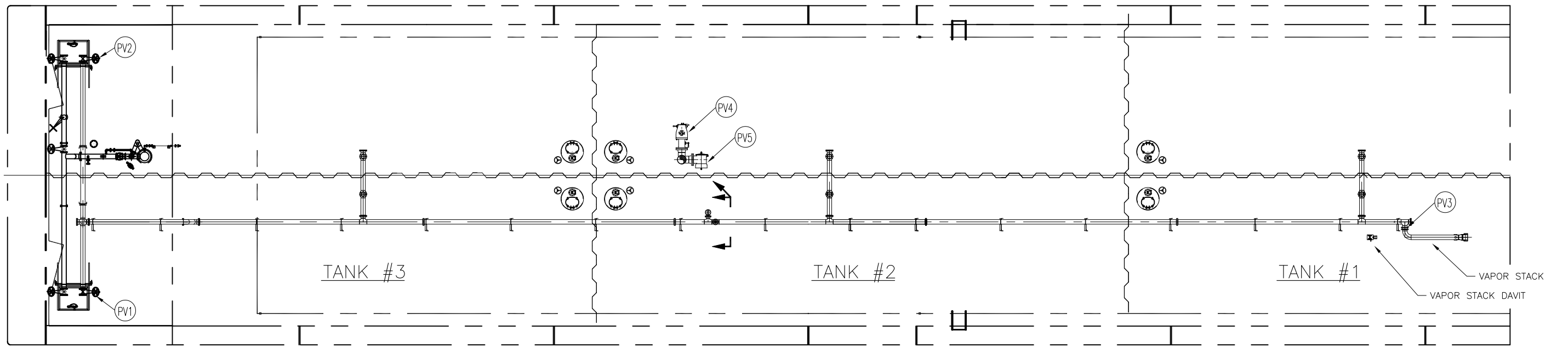
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**TRINITY MARINE PRODUCTS, INC.**  
TANK BARGE DIVISION  
1050 Trinity Road - Ashland City, TN 37015

**CANAL BARGE COMPANY, INC.**  
297'-6" X 54'-0" X 12'-0" DOUBLE SKIN TANK BARGE  
CARGO PIPING  
DIAGRAM


SCALE: N/A	DATE: 9/11/13	DWG NO. P-01C
DRAWN BY: JF	CK'D BY: APPR BY:	SHT 1 OF 1
YARD: MADISONVILLE	TAG NO. 38207	REV. AB
HULL NO. 2213-1 THRU 4	SHOP ORDER:	

BARGE NAMES - CBC 317-320



VAPOR SYSTEM:

- PV1 STBD TRANSVERSE HEADER VALVE
- PV2 PORT TRANSVERSE HEADER VALVE
- PV3 VENT STACK BLOCK VALVE
- PV4 PRESSURE RELIEF VALVE
- PV5 VACUUM RELIEF VALVE

AB	AS-BUILT	1/31/14	MD	
REV	ITEM	DESCRIPTION	DATE	BY
REVISIONS				
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 <b>TRINITY MARINE PRODUCTS, INC.</b> TANK BARGE DIVISION 1050 Trinity Road - Ashland City, TN, 37015				
<b>CANAL BARGE COMPANY, INC.</b> 297'-6" X 54'-0" X 12'-0" DOUBLE SKIN TANK BARGE VAPOR PIPING DIAGRAM				
SCALE:	N/A	DATE:	9/11/13	DWG NO.
DRAWN BY:	JF	CK'D BY:	APPR BY:	P-01V
YARD:	MADISONVILLE	TAG NO.	38207	SHT 1 OF 1
HULL NO. 2213-1 THRU 4	SHOP ORDER:		REV. AB	

BARGE NAMES - CBC 317-320