



United States of America
Department of Homeland Security
United States Coast Guard

Certification Date: 09 Oct 2025
Expiration Date: 09 Oct 2030

Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

Vessel Name	Official Number	IMO Number	Call Sign	Service		
CCL 404	1231312			Tank Barge		
Hailing Port	Hull Material	Horsepower	Propulsion			
NEW ORLEANS, LA	Steel					
UNITED STATES						
Place Built	Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
ASHLAND CITY, TN	25Feb2011	10Jan2011	R-1619	R-1619		R-297.5
UNITED STATES			1	1		10
Owner	Operator					
CHEM CARRIERS LLC 1237 HIGHWAY 75 SUNSHINE, LA 70780 UNITED STATES	CHEM CARRIERS LLC 1237 HIGHWAY 75 SUNSHINE, LA 70780 UNITED STATES					

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

0 Masters	0 Licensed Mates	0 Chief Engineers	0 Oilers
0 Chief Mates	0 First Class Pilots	0 First Assistant Engineers	
0 Second Mates	0 Radio Officers	0 Second Assistant Engineers	
0 Third Mates	0 Able Seamen	0 Third Assistant Engineers	
0 Master First Class Pilot	0 Ordinary Seamen	0 Licensed Engineers	
0 Mate First Class Pilots	0 Deckhands	0 Qualified Member Engineer	

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 0

Route Permitted And Conditions Of Operation:

---Lakes, Bays, and Sounds plus Limited Coastwise---

Also, in fair weather only, not more than twelve (12) miles from shore between St. Marks and Carrabelle, Florida.

This vessel has been granted fresh water hull examination intervals in accordance with 46 CFR 31.10-21(a)(2). If this vessel has been operated in salt water more than 6 months in any 12 month period, the vessel must be examined using salt water intervals and the cognizant OCMI notified in writing as soon as this change occurs.

*****SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION*****

With this Inspection for Certification having been completed at Port Arthur, TX, UNITED STATES, the Officer in Charge, Marine Inspection, Marine Safety Unit Port Arthur certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

Annual/Periodic/Re-Inspection				This certificate issued by: <i>L. L. Woodman</i> L. L. WOODMAN, CDR, USCG, By direction Officer in Charge, Marine Inspection Marine Safety Unit Port Arthur Inspection Zone
Date	Zone	A/P/R	Signature	
13 OCT 2016	BATU	A	<i>[Signature]</i>	



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Date	Zone	A/P/R	Signature	Officer in Charge, Marine Inspection		
				Marine Safety Unit Port Arthur		
				Inspection Zone		



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Certificate of Inspection

Vessel Name: CCL 404

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
DryDock	31Aug2030	07Aug2020	25Feb2011
Internal Structure	31Oct2030	09Oct2025	07Aug2020

--- Liquid/Gas/Solid Cargo Authority/Conditions ---

Authorization: FLAMMABLE/COMBUSTIBLE LIQUIDS AND SPECIFIED HAZARDOUS CARGOES

Total Capacity	Units	Highest Grade Type	Part151 Regulated	Part153 Regulated	Part154 Regulated
29700	Barrels	A	Yes	No	No

Hazardous Bulk Solids Authority

Not Authorized

Loading Constraints - Structural

Tank Number	Max Cargo Weight per Tank (short tons)	Maximum Density (lbs/gal)
1 P/S	816	13.60
2 P/S	828	13.60
3 P/S	764	13.60

Loading Constraints - Stability

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
III	4588	11ft 9in	13.60	R, LBS
II	3840	10ft 3in	13.60	R, LBS

Conditions Of Carriage

Only those cargoes named in the vessel's Cargo Authority Attachment (CAA), serial #C1-1100183, dated January 21, 2011, may be carried and then only in the tanks indicated.

Per 46 CFR 150.130, the Person In Charge of the vessel is responsible for ensuring that the compatibility requirements of 46 CFR 150 are met. Cargoes must be checked for compatibility using the figures, tables, and appendices of 46 CFR 150 in conjunction with the reactive group numbers from the "Compat Group No" column listed in the vessel's CAA.

When the vessel is carrying cargoes containing 0.5% or more benzene by volume, the person in charge is responsible for ensuring the provisions of 46 CFR 197, Subpart C, are applied.

Vapor Control Authorization

In accordance with 46 CFR 39, excluding part 39.4000, this vessel's vapor control system (VCS) has been inspected to the plans approved by marine safety center letter serial #C1-1100183, dated January 21, 2011, and found acceptable for collection of bulk liquid cargo vapors annotated with "yes" in the VCS column of the vessel's CAA.

In accordance with 46 CFR 39.5000, this vessel's VCS has been evaluated and approved for multi-breasted tandem loading with other vessels specifically approved by Marine Safety Center letter Serial No. C1-1904184 dated December 20, 2019.

Stability and Trim

The maximum design density of cargo which may be filled to the tank top is 8.74 lbs/gal. Cargoes with higher densities, up to 13.60 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.



Certificate of Inspection

Vessel Name: CCL 404

Per 46 CFR 151.10-15(c)(2), the maximum tank weights listed below reflect uniform (within 5%) loading at the deepest draft allowed. When carrying Subchapter O cargoes at shallower drafts, the barge should always be loaded uniformly.

--- Inspection Status ---

Fuel Tanks

Tank ID	Internal Examinations		
	Previous	Last	Next
Aft Main Deck	-	25Feb2011	-

Cargo Tanks

Tank Id	Internal Exam			External Exam		
	Previous	Last	Next	Previous	Last	Next
1 P/S	25Feb2011	07Aug2020	31Aug2030	-	-	-
2 P/S	25Feb2011	07Aug2020	31Aug2030	-	-	-
3 P/S	25Feb2011	07Aug2020	31Aug2030	-	-	-

Hydro Test

Tank Id	Safety Valves	Previous		Last		Next
		Previous	Last	Previous	Last	
1 P/S	-	-	-	25Feb2011	-	-
2 P/S	-	-	-	25Feb2011	-	-
3 P/S	-	-	-	25Feb2011	-	-

---Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

--- Fire Fighting Equipment ---

Number of Fireman Outfits - 0

Fire Extinguishers - Hand portable and semi-portable

Quantity	Class Type
2	40-B

END



Department of Homeland Security
United States Coast Guard

Serial #: C1-1100183

Dated: 21-Jan-11

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CCL 404

Official #: 1231312

Shipyard: Trinity Ashland City

Hull #: 4773

46 CFR 151 Tank Group Characteristics

Tank Group Information		Cargo Identification			Hull Type	Tanks			Cargo Transfer		Environmental Control		Fire Protection Provided	Special Requirements			
Tnk Grp	Tanks in Group	Density	Press.	Temp.		Type	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space		General	Materials of Construction	Elec Haz	Temp Cont
A	#1P/S, #2P/S, #3P/S	13.6	Atmos.	Elev	II	Integral Gravity	PV	Closed	II	G-1	NR	NA	Portable	40-1(f)(1), .50-60, .50-70(a), .50-70(b), .50-73, .50-81(a), .50-81(b),	55-1(b), (c), (e), (f), (j), 56-1(a), (b), (c), (d), (e), (f), (g),	NR	Yes

- Notes: 1. Under Environmental Control, Tanks, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo tanks.
2. Under Environmental Control, Handling Space, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo handling space. NA means that the vessel does not have a cargo control space, and this requirement is not applied.
3. Under Electrical Hazard Class, NA means that the tank group is suitable only for those cargoes which have no electrical hazard class requirement. NR means that the vessel has no electrical equipment located in a hazardous location.

List of Authorized Cargoes

Cargo Identification							Conditions of Carriage				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Recovery		Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period	
							App'd (Y or N)	VCS Category			

Authorized Subchapter O Cargoes

Acetonitrile	ATN	37	O	C	III	A	Yes	3	No		G
Acrylonitrile	ACN	15 ²	O	C	II	A	Yes	4	.50-70(a), .55-1(e)		G
Adiponitrile	ADN	37	O	E	II	A	Yes	1	No		G
Alkyl(C7-C9) nitrates	AKN	34 ²	O	NA	III	A	No	N/A	.50-81, .50-85		G
Aminoethylethanolamine	AEE	8	O	E	III	A	Yes	1	.55-1(b)		G
Ammonium bisulfite solution (70% or less)	ABX	43 ²	O	NA	III	A	No	N/A	.50-73, .56-1(a), (b), (c)		G
Ammonium hydroxide (28% or less NH3)	AMH	6	O	NA	III	A	No	N/A	.56-1(a), (b), (c), (f), (g)		G
Anthracene oil (Coal tar fraction)	AHO	33	O	NA	II	A	No	N/A	No		G
Benzene	BNZ	32	O	C	III	A	Yes	1	.50-60		G
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	BHB	32 ²	O	C	III	A	Yes	1	.50-60		G
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	BHA	32 ²	O	C	III	A	Yes	1	.50-60, .56-1(b), (d), (f), (g)		G
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	BTX	32	O	B/C	III	A	Yes	1	.50-60		G
Butyl acrylate (all isomers)	BAR	14	O	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)		G
Butyl methacrylate	BMH	14	O	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)		G
Butyraldehyde (all isomers)	BAE	19	O	C	III	A	Yes	1	.55-1(h)		G
Camphor oil (light)	CPO	18	O	D	II	A	No	N/A	No		G
Carbon tetrachloride	CBT	36	O	NA	III	A	No	N/A	No		G
Caustic potash solution	CPS	5 ²	O	NA	III	A	No	N/A	.50-73, .55-1(j)		G
Caustic soda solution	CSS	5 ²	O	NA	III	A	No	N/A	.50-73, .55-1(j)		G
Chemical Oil (refined, containing phenolics)	COD	21	O	E	II	A	No	N/A	.50-73		G
Chlorobenzene	CRB	36	O	D	III	A	Yes	1	No		G
Chloroform	CRF	36	O	NA	III	A	Yes	3	No		G
Coal tar naphtha solvent	NCT	33	O	D	III	A	Yes	1	.50-73		G
Coal tar pitch (mollen)	CTP	33	O	E	III	A	No	N/A	.50-73		G
Creosote	CCW	21 ²	O	E	III	A	Yes	1	No		G
Cresols (all isomers)	CRS	21	O	E	III	A	Yes	1	No		G
Cresylate spent caustic	CSC	5	O	NA	III	A	No	N/A	.50-73, .55-1(b)		G
Cresylic acid tar	CRX		O	E	III	A	Yes	1	.55-1(f)		G
Crotonaldehyde	CTA	19 ²	O	C	II	A	Yes	4	.55-1(h)		G
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		O	C	III	A	No	N/A	No		G
Cyclohexanone	CCH	18	O	D	III	A	Yes	1	.56-1(a), (b)		G
Cyclohexanone, Cyclohexanol mixture	CYX	18 ²	O	E	III	A	Yes	1	.56-1 (b)		G

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Shipyard: Trinity Ashland City

Hull #: 4773

Cargo Identification						Conditions of Carriage				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Recovery		Special Requirements in 46 CFR 151 General and Mat's of	Insp. Period
							App'd (Y or N)	VCS Category		
Cyclohexylamine	CHA	7	O	D	III	A	Yes	1	56-1(a), (b), (c), (g)	G
Cyclopentadiene, Styrene, Benzene mixture	CSB	30	O	D	III	A	Yes	1	50-60, 56-1(b)	G
iso-Decyl acrylate	IAI	14	O	E	III	A	Yes	2	50-70(a), 50-81(a), (b), 55-1(c)	G
Dichlorobenzene (all isomers)	DBX	36	O	E	III	A	Yes	3	56-1(a), (b)	G
1,1-Dichloroethane	DCH	36	O	C	III	A	Yes	1	No	G
2,2'-Dichloroethyl ether	DEE	41	O	D	II	A	Yes	1	55-1(f)	G
Dichloromethane	DCM	36	O	NA	III	A	Yes	5	No	G
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	43	O	E	III	A	No	N/A	56-1(a), (b), (c), (g)	G
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 ^{1,2}	O	A	III	A	No	N/A	56-1(a), (b), (c), (g)	G
2,4-Dichlorophenoxyacetic acid, trisopropanolamine salt solution	DTI	43 ²	O	E	III	A	No	N/A	56-1(a), (b), (c), (g)	G
1,1-Dichloropropane	DPB	36	O	C	III	A	Yes	3	No	G
1,2-Dichloropropane	DPP	36	O	C	III	A	Yes	3	No	G
1,3-Dichloropropane	DPC	36	O	C	III	A	Yes	3	No	G
1,3-Dichloropropene	DPU	15	O	D	II	A	Yes	4	No	G
Dichloropropene, Dichloropropane mixtures	DMX	15	O	C	II	A	Yes	1	No	G
Diethanolamine	DEA	8	O	E	III	A	Yes	1	55-1(c)	G
Diethylamine	DEN	7	O	C	III	A	Yes	3	55-1(c)	G
Diethylenetriamine	DET	7 ²	O	E	III	A	Yes	1	55-1(c)	G
Diisobutylamine	DBU	7	O	D	III	A	Yes	3	55-1(c)	G
Diisopropanolamine	DIP	8	O	E	III	A	Yes	1	55-1(c)	G
Diisopropylamine	DIA	7	O	C	II	A	Yes	3	55-1(c)	G
N,N-Dimethylacetamide	DAC	10	O	E	III	A	Yes	3	56-1(b)	G
Dimethylethanolamine	DMB	8	O	D	III	A	Yes	1	56-1(b), (c)	G
Dimethylformamide	DMF	10	O	D	III	A	Yes	1	55-1(e)	G
Di-n-propylamine	DNA	7	O	C	II	A	Yes	3	55-1(c)	G
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	O	E	III	A	No	N/A	56-1(b)	G
Dodecyl diphenyl ether disulfonate solution	DOS	43	O	#	II	A	No	N/A	No	G
EE Glycol Ether Mixture	EEG	40	O	D	III	A	No	N/A	No	G
Ethanolamine	MEA	8	O	E	III	A	Yes	1	55-1(c)	G
Ethyl acrylate	EAC	14	O	C	III	A	Yes	2	50-70(a), 50-81(a), (b)	G
Ethylamine solution (72% or less)	EAN	7	O	A	II	A	Yes	6	55-1(b)	G
N-Ethylbutylamine	EBA	7	O	D	III	A	Yes	3	55-1(b)	G
N-Ethylcyclohexylamine	ECC	7	O	D	III	A	Yes	1	55-1(b)	G
Ethylene cyanohydrin	ETC	20	O	E	III	A	Yes	1	No	G
Ethylenediamine	EDA	7 ²	O	D	III	A	Yes	1	55-1(c)	G
Ethylene dichloride	EDC	36 ²	O	C	III	A	Yes	1	No	G
Ethylene glycol hexyl ether	EGH	40	O	E	III	A	No	N/A	No	G
Ethylene glycol monoalkyl ethers	EGC	40	O	D/E	III	A	Yes	1	No	G
Ethylene glycol propyl ether	EGP	40	O	E	III	A	Yes	1	No	G
2-Ethylhexyl acrylate	EAI	14	O	E	III	A	Yes	2	50-70(a), 50-81(a), (b)	G
Ethyl methacrylate	ETM	14	O	D/E	III	A	Yes	2	50-70(a)	G
2-Ethyl-3-propylacrolein	EPA	19 ²	O	E	III	A	Yes	1	No	G
Formaldehyde solution (37% to 50%)	FMS	19 ²	O	D/E	III	A	Yes	1	55-1(h)	G
Furfural	FFA	19	O	D	III	A	Yes	1	55-1(h)	G
Glutaraldehyde solution (50% or less)	GTA	19	O	NA	III	A	No	N/A	No	G
Hexamethylenediamine solution	HMC	7	O	E	III	A	Yes	1	55-1(c)	G
Hexamethylenimine	HMI	7	O	C	II	A	Yes	1	56-1(b), (c)	G
Hydrocarbon 5-9	HFN		O	C	III	A	Yes	1	50-70(a), 50-81(a), (b)	G

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Shipyard: Trinity Ashland City

Hull #: 4773

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Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Recovery App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat's of	Insp. Period
Isoprene	IPR	30	O	A	III	A	Yes	7	.50-70(a), .50-81(a), (b)	G
Isoprene, Pentadiene mixture	IPN		O	B	III	A	No	N/A	.50-70(a), .55-1(c)	G
Kraft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor)	KPL	5	O	NA	III	A	No	N/A	.50-73, .56-1(a), (c), (g)	G
Mesityl oxide	MSO	18 ²	O	D	III	A	Yes	1	No	G
Methyl acrylate	MAM	14	O	C	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Methycyclopentadiene dimer	MCK	30	O	C	III	A	Yes	1	No	G
Methyl diethanolamine	MDE	8	O	E	III	A	Yes	1	.56-1(b), (c)	G
2-Methyl-5-ethylpyridine	MEP	9	O	E	III	A	Yes	1	.55-1(e)	G
Methyl methacrylate	MMM	14	O	C	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
2-Methylpyridine	MPR	9	O	D	III	A	Yes	3	.55-1(c)	G
alpha-Methylstyrene	MSR	30	O	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Morpholine	MPL	7 ²	O	D	III	A	Yes	1	.55-1(c)	G
Nitroethane	NTE	42	O	D	II	A	No	N/A	.50-81, .56-1(b)	G
1- or 2-Nitropropane	NPM	42	O	D	III	A	Yes	1	.50-81	G
1,3-Pentadiene	PDE	30	O	A	III	A	Yes	7	.50-70(a), .50-81	G
Perchloroethylene	PER	36	O	NA	III	A	No	N/A	No	G
Phthalic anhydride (molten)	PAN	11	O	E	III	A	Yes	1	No	G
Polyethylene polyamines	PEB	7 ²	O	E	III	A	Yes	1	.55-1(e)	G
iso-Propanolamine	MPA	8	O	E	III	A	Yes	1	.55-1(c)	G
Propanolamine (iso-, n-)	PAX	8	O	E	III	A	Yes	1	.56-1(b), (c)	G
Iso-Propylamine	IPP	7	O	A	II	A	Yes	5	.55-1(c)	G
Pyridine	PRD	9	O	C	III	A	Yes	1	.55-1(e)	G
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide)	SAP		O		III	A	No	N/A	.50-73, .55-1(j)	G
Sodium aluminate solution (45% or less)	SAU	5	O	NA	III	A	No	N/A	.50-73, .56-1(a), (b), (c)	G
Sodium chlorate solution (50% or less)	SDD	0 ^{1,2}	O	NA	III	A	No	N/A	.50-73	G
Sodium hypochlorite solution (20% or less)	SHQ	5	O	NA	III	A	No	N/A	.50-73, .56-1(a), (b)	G
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less)	SSH	0 ^{1,2}	O	NA	III	A	Yes	1	.50-73, .55-1(b)	G
Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm)	SSI	0 ^{1,2}	O	NA	III	A	No	N/A	.50-73, .55-1(b)	G
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 ^{1,2}	O	NA	II	A	No	N/A	.50-73, .55-1(b)	G
Styrene (crude)	STX		O	D	III	A	Yes	2	No	G
Styrene monomer	STY	30	O	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
1,1,2,2-Tetrachloroethane	TEC	36	O	NA	III	A	No	N/A	No	G
Tetraethylenepentamine	TTP	7	O	E	III	A	Yes	1	.55-1(c)	G
Tetrahydrofuran	THF	41	O	C	III	A	Yes	1	.50-70(b)	G
Toluenediamine	TDA	9	O	E	II	A	No	N/A	.50-73, .56-1(a), (b), (c), (g)	G
1,2,4-Trichlorobenzene	TCB	36	O	E	III	A	Yes	1	No	G
1,1,2-Trichloroethane	TCM	36	O	NA	III	A	Yes	1	.50-73, .56-1(a)	G
Trichloroethylene	TCL	36 ²	O	NA	III	A	Yes	1	No	G
1,2,3-Trichloropropane	TCN	36	O	E	II	A	Yes	3	.50-73, .56-1(a)	G
Triethanolamine	TEA	8 ²	O	E	III	A	Yes	1	.55-1(b)	G
Triethylamine	TEN	7	O	C	II	A	Yes	3	.55-1(e)	G
Triethylenetetramine	TET	7 ²	O	E	III	A	Yes	1	.55-1(b)	G
Triphenylborane (10% or less), caustic soda solution	TPB	5	O	NA	III	A	No	N/A	.56-1(a), (b), (c)	G
Trisodium phosphate solution	TSP	5	O	NA	III	A	No	N/A	.50-73, .56-1(a), (c)	G
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	O	NA	III	A	No	N/A	.56-1(b)	G
Vanillin black liquor (free alkali content, 3% or more).	VBL	5	O	NA	III	A	No	N/A	.50-73, .56-1(a), (c), (g)	G

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Department of Homeland Security
United States Coast Guard

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Cargo Authority Attachment

Vessel Name: CCL 404

Official #: 1231312

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Shipyards: Trinity Ashland City

Hull #: 4773

Cargo Identification						Conditions of Carriage				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Recovery		Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
							App'd (Y or N)	VCS Category		
Vinyl acetate	VAM	13	O	C	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Vinyl neodecanate	VND	13	O	E	III	A	No	N/A	.50-70(a), .50-81(a), (b)	G
Vinyltoluene	VNT	13	O	D	III	A	Yes	2	.50-70(a), .50-81, .56-1(a), (b), (c), (	G

Subchapter D Cargoes Authorized for Vapor Control

Acetone	ACT	18 ²	D	C		A	Yes	1
Acetophenone	ACP	18	D	E		A	Yes	1
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	E		A	Yes	1
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	E		A	Yes	1
Amyl acetate (all isomers)	AEC	34	D	D		A	Yes	1
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		A	Yes	1
Benzyl alcohol	BAL	21	D	E		A	Yes	1
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	BFX	20	D	E		A	Yes	1
Butyl acetate (all isomers)	BAX	34	D	D		A	Yes	1
Butyl alcohol (iso-)	IAL	20 ²	D	D		A	Yes	1
Butyl alcohol (n-)	BAN	20 ²	D	D		A	Yes	1
Butyl alcohol (sec-)	BAS	20 ²	D	C		A	Yes	1
Butyl alcohol (tert-)	BAT		D	C		A	Yes	1
Butyl benzyl phthalate	BPH	34	D	E		A	Yes	1
Butyl toluene	BUE	32	D	D		A	Yes	1
Caprolactam solutions	CLS	22	D	E		A	Yes	1
Cyclohexane	CHX	31	D	C		A	Yes	1
Cyclohexanol	CHN	20	D	E		A	Yes	1
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		A	Yes	2
p-Cymene	CMP	32	D	D		A	Yes	1
iso-Decaldehyde	IDA	19	D	E		A	Yes	1
n-Decaldehyde	DAL	19	D	E		A	Yes	1
Decene	DCE	30	D	D		A	Yes	1
Decyl alcohol (all isomers)	DAX	20 ²	D	E		A	Yes	1
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	E		A	Yes	1
Diacetone alcohol	DAA	20 ²	D	D		A	Yes	1
ortho-Dibutyl phthalate	DPA	34	D	E		A	Yes	1
Diethylbenzene	DEB	32	D	D		A	Yes	1
Diethylene glycol	DEG	40 ²	D	E		A	Yes	1
Diisobutylene	DBL	30	D	C		A	Yes	1
Diisobutyl ketone	DIK	18	D	D		A	Yes	1
Diisopropylbenzene (all isomers)	DIX	32	D	E		A	Yes	1
Dimethyl phthalate	DTL	34	D	E		A	Yes	1
Diocetyl phthalate	DOP	34	D	E		A	Yes	1
Dipentene	DPN	30	D	D		A	Yes	1
Diphenyl	DIL	32	D	D/E		A	Yes	1
Diphenyl, Diphenyl ether mixtures	DDO	33	D	E		A	Yes	1
Diphenyl ether	DPE	41	D	{E}		A	Yes	1
Dipropylene glycol	DPG	40	D	E		A	Yes	1
Distillates: Flashed feed stocks	DFF	33	D	E		A	Yes	1
Distillates: Straight run	DSR	33	D	E		A	Yes	1
Dodecene (all isomers)	DOZ	30	D	D		A	Yes	1

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Vessel Name: CCL 404

Official #: 1231312

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Shipyard: Trinity Ashland City

Hull #: 4773

Cargo Identification						Conditions of Carriage				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Recovery App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat's of	Insp. Period
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	D	E		A	Yes	1		
2-Ethoxyethyl acetate	EEA	34	D	D		A	Yes	1		
Ethoxy triglycol (crude)	ETG	40	D	E		A	Yes	1		
Ethyl acetate	ETA	34	D	C		A	Yes	1		
Ethyl acetoacetate	EAA	34	D	E		A	Yes	1		
Ethyl alcohol	EAL	20 ²	D	C		A	Yes	1		
Ethylbenzene	ETB	32	D	C		A	Yes	1		
Ethyl butanol	EBT	20	D	D		A	Yes	1		
Ethyl tert-butyl ether	EBE	41	D	C		A	Yes	1		
Ethyl butyrate	EBR	34	D	D		A	Yes	1		
Ethyl cyclohexane	ECY	31	D	D		A	Yes	1		
Ethylene glycol	EGL	20 ²	D	E		A	Yes	1		
Ethylene glycol butyl ether acetate	EMA	34	D	E		A	Yes	1		
Ethylene glycol diacetate	EGY	34	D	E		A	Yes	1		
Ethylene glycol phenyl ether	EPE	40	D	E		A	Yes	1		
Ethyl-3-ethoxypropionate	EEP	34	D	D		A	Yes	1		
2-Ethylhexanol	EHX	20	D	E		A	Yes	1		
Ethyl propionate	EPR	34	D	C		A	Yes	1		
Ethyl toluene	ETE	32	D	D		A	Yes	1		
Formamide	FAM	10	D	E		A	Yes	1		
Furfuryl alcohol	FAL	20 ²	D	E		A	Yes	1		
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		A	Yes	1		
Gasoline blending stocks: Reformates	GRF	33	D	A/C		A	Yes	1		
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	C		A	Yes	1		
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	GAV	33	D	C		A	Yes	1		
Gasolines: Casinghead (natural)	GCS	33	D	A/C		A	Yes	1		
Gasolines: Polymer	GPL	33	D	A/C		A	Yes	1		
Gasolines: Straight run	GSR	33	D	A/C		A	Yes	1		
Glycerine	GCR	20 ²	D	E		A	Yes	1		
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	C		A	Yes	1		
Heptanoic acid	HEP	4	D	E		A	Yes	1		
Heptanol (all isomers)	HTX	20	D	D/E		A	Yes	1		
Heptene (all isomers)	HPX	30	D	C		A	Yes	2		
Heptyl acetate	HPE	34	D	E		A	Yes	1		
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 ²	D	B/C		A	Yes	1		
Hexanoic acid	HXO	4	D	E		A	Yes	1		
Hexanol	HXN	20	D	D		A	Yes	1		
Hexene (all isomers)	HEX	30	D	C		A	Yes	2		
Hexylene glycol	HXG	20	D	E		A	Yes	1		
Isophorone	IPH	18 ²	D	E		A	Yes	1		
Jet fuel: JP-4	JPF	33	D	E		A	Yes	1		
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		A	Yes	1		
Kerosene	KRS	33	D	D		A	Yes	1		
Methyl acetate	MTT	34	D	D		A	Yes	1		
Methyl alcohol	MAL	20 ²	D	C		A	Yes	1		
Methylamyl acetate	MAC	34	D	D		A	Yes	1		
Methylamyl alcohol	MAA	20	D	D		A	Yes	1		

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Shipyard: Trinity Ashland City

Hull #: 4773

Cargo Identification						Conditions of Carriage				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Recovery App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Matis of	Insp. Period
Methyl amyl ketone	MAK	18	D	D		A	Yes	1		
Methyl tert-butyl ether	MBE	41 ²	D	C		A	Yes	1		
Methyl butyl ketone	MBK	18	D	C		A	Yes	1		
Methyl butyrate	MBU	34	D	C		A	Yes	1		
Methyl ethyl ketone	MEK	18 ²	D	C		A	Yes	1		
Methyl heptyl ketone	MHK	18	D	D		A	Yes	1		
Methyl isobutyl ketone	MIK	18 ²	D	C		A	Yes	1		
Methyl naphthalene (molten)	MNA	32	D	E		A	Yes	1		
Mineral spirits	MNS	33	D	D		A	Yes	1		
Myrcene	MRE	30	D	D		A	Yes	1		
Naphtha: Heavy	NAG	33	D	#		A	Yes	1		
Naphtha: Petroleum	PTN	33	D	#		A	Yes	1		
Naphtha: Solvent	NSV	33	D	D		A	Yes	1		
Naphtha: Stoddard solvent	NSS	33	D	D		A	Yes	1		
Naphtha: Varnish makers and painters (75%)	NVM	33	D	C		A	Yes	1		
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		A	Yes	1		
Nonene (all isomers)	NON	30	D	D		A	Yes	2		
Nonyl alcohol (all isomers)	NNS	20 ²	D	E		A	Yes	1		
Nonyl phenol	NNP	21	D	E		A	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	E		A	Yes	1		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	C		A	Yes	1		
Octanoic acid (all isomers)	OAY	4	D	E		A	Yes	1		
Octanol (all isomers)	OCX	20 ²	D	E		A	Yes	1		
Octene (all isomers)	OTX	30	D	C		A	Yes	2		
Oil, fuel: No. 2	OTW	33	D	D/E		A	Yes	1		
Oil, fuel: No. 2-D	OTD	33	D	D		A	Yes	1		
Oil, fuel: No. 4	OFR	33	D	D/E		A	Yes	1		
Oil, fuel: No. 5	OFV	33	D	D/E		A	Yes	1		
Oil, fuel: No. 6	OSX	33	D	E		A	Yes	1		
Oil, misc: Crude	OIL	33	D	C/D		A	Yes	1		
Oil, misc: Diesel	ODS	33	D	D/E		A	Yes	1		
Oil, misc: Gas, high pour	OGP	33	D	E		A	Yes	1		
Oil, misc: Lubricating	OLB	33	D	E		A	Yes	1		
Oil, misc: Residual	ORL	33	D	E		A	Yes	1		
Oil, misc: Turbine	OTB	33	D	E		A	Yes	1		
Pentane (all isomers)	PTY	31	D	A		A	Yes	5		
Pentene (all isomers)	PTX	30	D	A		A	Yes	5		
n-Pentyl propionate	PPE	34	D	D		A	Yes	1		
alpha-Pinene	PIO	30	D	D		A	Yes	1		
beta-Pinene	PIP	30	D	D		A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	E		A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	E		A	Yes	1		
Polybutene	PLB	30	D	E		A	Yes	1		
Polypropylene glycol	PGC	40	D	E		A	Yes	1		
iso-Propyl acetate	IAC	34	D	C		A	Yes	1		
n-Propyl acetate	PAT	34	D	C		A	Yes	1		
iso-Propyl alcohol	IPA	20 ²	D	C		A	Yes	1		
n-Propyl alcohol	PAL	20 ²	D	C		A	Yes	1		

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Vessel Name: CCL 404

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Shipyard: Trinity Ashland City

Hull #: 4773

Cargo Identification						Conditions of Carriage				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Recovery		Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
							App'd (Y or N)	VCS Category		
Propylbenzene (all isomers)	PBY	32	D	D		A	Yes	1		
iso-Propylcyclohexane	IPX	31	D	D		A	Yes	1		
Propylene glycol	PPG	20 ²	D	E		A	Yes	1		
Propylene glycol methyl ether acetate	PGN	34	D	D		A	Yes	1		
Propylene tetramer	PTT	30	D	D		A	Yes	1		
Sulfolane	SFL	39	D	E		A	Yes	1		
Tetraethylene glycol	TTG	40	D	E		A	Yes	1		
Tetrahydronaphthalene	THN	32	D	E		A	Yes	1		
Toluene	TOL	32	D	C		A	Yes	1		
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	E		A	Yes	1		
Triethylbenzene	TEB	32	D	E		A	Yes	1		
Triethylene glycol	TEG	40	D	E		A	Yes	1		
Triethyl phosphate	TPS	34	D	E		A	Yes	1		
Trimethylbenzene (all isomers)	TRE	32	D	{D}		A	Yes	1		
Trixylenyl phosphate	TRP	34	D	E		A	Yes	1		
Undecene	UDC	30	D	D/E		A	Yes	1		
1-Undecyl alcohol	UND	20	D	E		A	Yes	1		
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		A	Yes	1		

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Vessel Name: CCL 404

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Shipyard: Trinity Ashland

Hull #: 4773

Explanation of terms & symbols used in the Table:

Cargo Identification

Name	The proper shipping name as listed in 46 CFR Table 30.25-1, 46 CFR Table 151.05, and 46 CFR Part 153 Table 2.
Chem Code	The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual.
none	Certain mixtures of cargoes may not have a CHRIS Code assigned.
Compatibility Group No.	The cargo reactive group number assigned for compatibility determinations in 46 CFR Part 150 Tables I and II. In accordance with 46 CFR 150.130, the Person-in-Charge of the barge is responsible for ensuring that the compatibility requirements of 46 CFR Part 150 are met. Cargoes must be checked for compatibility using the figures, tables, and appendices of 46 CFR 150 in conjunction with the assigned reactive group number.
Note 1	Because of the very high reactivity or unusual conditions of carriage or potential compatibility problems, this product is not assigned to a specific group in the Compatibility Chart. For additional compatibility information, contact Commandant (CG-3PSO-3), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593-0001. Telephone (202) 372-1425.
Note 2	See Appendix I to 46 CFR Part 150 - exceptions to the compatibility chart.
Subchapter	The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified.
Subchapter D	Those flammable and combustible liquids listed in 46 CFR Table 30.25-1.
Subchapter O	Those hazardous cargoes listed in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2.
Note 3	Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges.
Grade	The cargo classification assigned to each flammable or combustible liquid. Grades inside of "}" indicate a provisional assignment based upon literature sources which were not verified by manufacturers data. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo.
A, B, C	Flammable liquid cargoes, as defined in 46 CFR 30-10.22.
D, E	Combustible liquid cargoes, as defined in 46 CFR 30-10.15.
Note 4	The flammability/combustibility grade of these cargoes may vary depending upon the flashpoint and Reid vapor pressure. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo.
NA	Those subchapter O cargoes which are not classified as a flammable or combustible liquid.
#	No flammability/combustibility grade has been assigned yet, as the necessary flash point/vapor pressure data for such assignments are presently not available.
Hull Type	The required barge hull classification for carriage of the specified Subchapter O hazardous material cargo, see 46 CFR 151.10-1.
I	Designed to carry products which require the maximum preventive measures to preclude the uncontrolled release of the cargo. See 46 CFR 151.10-1(b)(1).
II	Designed to carry products which require significant preventive measures to preclude the uncontrolled release of cargo. See 46 CFR 151.10-1(b)(3).
III	Designed to carry products of sufficient hazard to require a moderate degree of control. See 46 CFR 151.10-1(b)(4).
NA	Not applicable to barges certificated under Subchapter D.

Conditions of Carriage

Tank Group	The vessel's tank group (as defined in Section 4) which is authorized for carriage of the named cargo.
Vapor Recovery	
Approved (Y or N)	Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo. No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo.

Conditions of Carriage

Tank Group	The vessel's tank group (as defined under the "46 CFR Tank Group Characteristics" listed on page 1) which is authorized for carriage of the named cargo.
Vapor Recovery	
Approved (Y or N)	Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo. No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo.
VCS Category:	The specified cargo's provisional classification for vapor control systems.
Category 1	(No additional VCS requirements above those for benzene, gasolines and crude oil) All requirements applying to the handling of oil and hazardous materials in Titles 33 and 46 Code of Federal Regulations (CFR) apply to these cargoes. Those specifically dealing with vapor control systems are in 33 CFR 155.750, 33 CFR 156.120, 33 CFR 158.170, 46 CFR 35.35 and 46 CFR 39. The cargo tank venting system calculations (46 CFR 39.20-1 f) and the pressure drop calculations (46 CFR 39.30-1(b)) must use appropriate friction factors, vapor densities and vapor growth rates.
Category 2	(Polymerizes) Polymerization and residue build-up of these cargoes can adversely affect the vessel by fouling safety components and restricting vapor flow which could lead to cargo tank overpressurization. The vessel's owner must develop a method of ensuring all VCS safety components are functional and polymer build-up is not causing an unsafe condition due to increased pressure in the vapor control piping and cargo tanks. The method shall be acceptable to the local Officer in Charge, Marine Inspection. This is in addition to the requirements of Category 1. Please note that a material not normally considered a monomer can be a problem in detonation arrester.
Category 3	(Highly toxic) VCSs for these toxic cargoes cannot use a spill valve or rupture disk as the primary means to meet the overfill protection requirement of 46 CFR 39.20-9. This requirement is in addition to the requirements of Category 1.
Category 4	(Polymerizes and highly toxic) Must comply with requirements of Categories 1, 2 and 3.
Category 5	(High vapor pressure) VCS pressure drop calculations for cargoes with a vapor pressure greater than 14.7 psia at 115 F must take into account increased vapor-air mixture densities and vapor growth rates as compared to Category 1 cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. This requirement is in addition to the requirements of Category 1.
Category 6	(High vapor pressure and highly toxic) Must comply with requirements of Categories 1, 3 and 5.
Category 7	(High vapor pressure and polymerizes) Must comply with requirements of Categories 1, 2 and 5.
none	The cargo has not been evaluated/classified for use in vapor control systems.

HYDROSTATIC CARGO PIPING TEST

BARGE NAME / NUMBER	CCL404	DATE OF TEST:	9/16/26
BARGE OWNER:	Chem Carriers	M.A.W.P.:	125
BARGE OFFICIAL NUMBER:	1231312	TESTING LOCATION :	CMS

TRANSFER SYSTEM TESTING DATA

Write N/A if non-applicable to barge

DATE	TESTED EQUIPMENT	RESULTS	
9/16/26	Cargo Piping & Valves	PSI	125
9/16/26	Cargo Pressure Gauges	(%)Accuracy	98
	Cargo Tank Relief Valves	PSI	

Each pressure gauge accurate with 10%. Each remote-controlled operating or indicating equipment such as remotely operated valve, tank alarm and emergency shutdown device are operating properly. Section 33 CFR 156.170 & 46 CFR 35.35-70(b)

CHANNEL MARINE SERVICES

SIGNATURES

I CREDIT THAT THE TESTS CONTAINED HEREIN WERE CONDUCTED IN COMPLIANCE WITH 46 CFR 35.35-70 & 33 CFR 156.170

TESTER NAME (PRINT)	Nate David
TESTER SIGNATURE :	

VAPOR TIGHTNESS CERTIFICATE

BARGE NAME / NUMBER : <i>CCL 404</i>	PRESSURE INDICATOR : <i>Manometer</i>
BARGE OWNER : <i>Chen Carriers</i>	MAXIMUM LOAD RATE (BPH) : <i>5,000</i>
BARGE OFFICIAL NUMBER : <i>1231312</i>	
DATE OF TEST : <i>9/16/26</i>	

TEST RESULTS

BARGE IS VAPOR TIGHT IF " TOTAL PRESSURE LOSS " IS LESS THAN ALLOWABLE PRESSURE LOSS "

TEST DURATION : <i>1hr</i>	BEGINNING PRESSURE <i>28 in H₂O</i>
ALLOWABLE PRESSURE LOSS : <i>2.6</i>	ENDING PRESSURE : <i>28 in H₂O</i>
	TOTAL PRESSURE LOSS : <i>0</i>

THE FOLLOWING BARGE WAS TESTED IN ACCORDANCE WITH THE NATIONAL EMISSION STANDARD FOR BENZENE EMISSIONS FROM BENZENE TRANSFER OPERATIONS, SECTION 40 CFR 61.304(F) AND SECTION 40 CFR 63.565 (C)

SIGNATURES:

TESTER NAME : <i>Nate David</i>
TESTER SIGNATURE: <i>[Signature]</i>
WITNESS INSPECTOR NAME : <i>Yanick James</i>
WITNESS SIGNATURE : <i>[Signature]</i>
WITNESS AFFILIATION : <i>CMS</i>

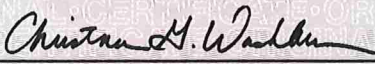


UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME CCL 404		OFFICIAL NUMBER 1231312	IMO OR OTHER NUMBER 4773	YEAR COMPLETED 2011	
HAILING PORT NEW ORLEANS LA		HULL MATERIAL STEEL		MECHANICAL PROPULSION NO	
GROSS TONNAGE 1619 GRT	NET TONNAGE 1619 NRT	LENGTH 297.5	BREADTH 54.0	DEPTH 12.0	
PLACE BUILT ASHLAND CITY TN					
OWNERS CHEM CARRIERS LLC COMPRISED OF ONE MEMBER		OPERATIONAL ENDORSEMENTS COASTWISE			
MANAGING OWNER CHEM CARRIERS LLC 1237 HIGHWAY 75 SUNSHINE LA 70780					
RESTRICTIONS NONE					
ENTITLEMENTS NONE					
REMARKS NONE					
ISSUE DATE NOVEMBER 18, 2025		 DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER			
THIS CERTIFICATE EXPIRES DECEMBER 31, 2026					





National Pollution Funds Center

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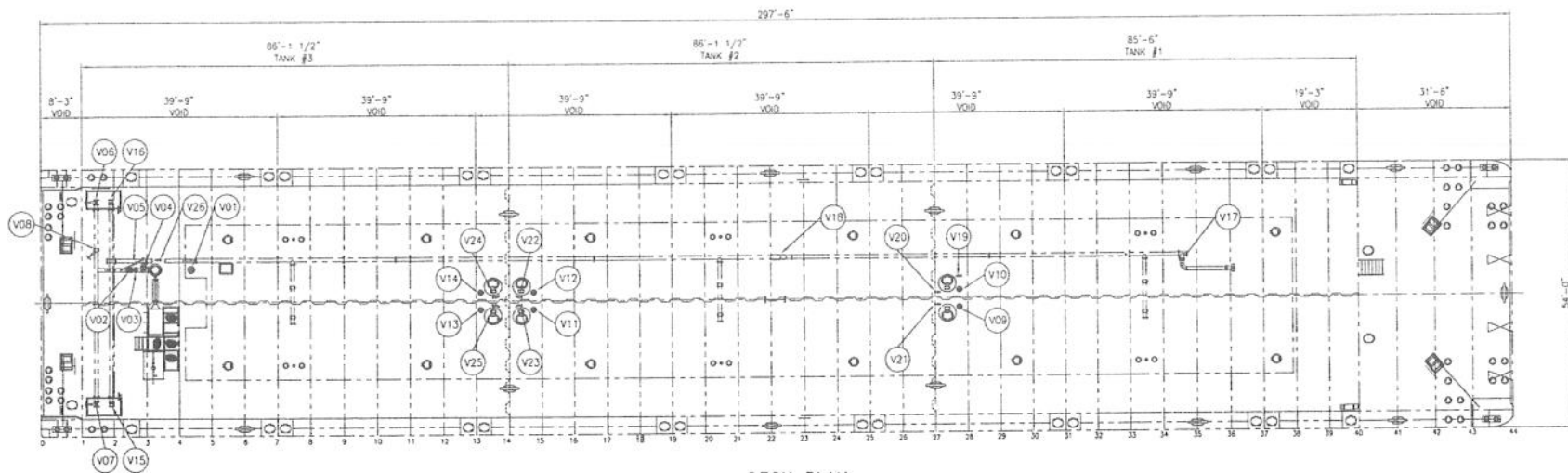
VESSEL NAME	VESSEL TYPE	HULL TYPE	GROSS TONNAGE	COFR NUMBER	EFFECTIVE DATE	EXPIRATION DATE	COFR APPLICANT	VIN	INSURANCE CANCEL FLAG
 CCL 404	TANKBARGE D		1619	841310 - 21	2/23/2023	2/23/2026	CHEM CARRIERS, L.L.C	D1231312	

< Prev Next >

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Version 3.7 -- This version is designed for Internet Explorer; Edge, Chrome, Firefox and Safari.



DECK PLAN

CARGO SYSTEM

- V01 CARGO PUMP SUCTION VALVE
- V02 CARGO PUMP DISCHARGE VALVE
- V03 CARGO PUMP DISCHARGE CHECK VALVE
- V04 CARGO PUMP RELIEF VALVE
- V05 CARGO PUMP BYPASS VALVE
- V06 PORT TRANS CARGO HDR BLOCK VALVE
- V07 STBD TRANS CARGO HDR BLOCK VALVE
- V08 CARGO LOADING VALVE
- V09 CARGO SUCTION VALVE-TANK #1S
- V10 CARGO SUCTION VALVE-TANK #1P
- V11 CARGO SUCTION VALVE-TANK #2S
- V12 CARGO SUCTION VALVE-TANK #2P
- V13 CARGO SUCTION VALVE-TANK #3S
- V14 CARGO SUCTION VALVE-TANK #3P

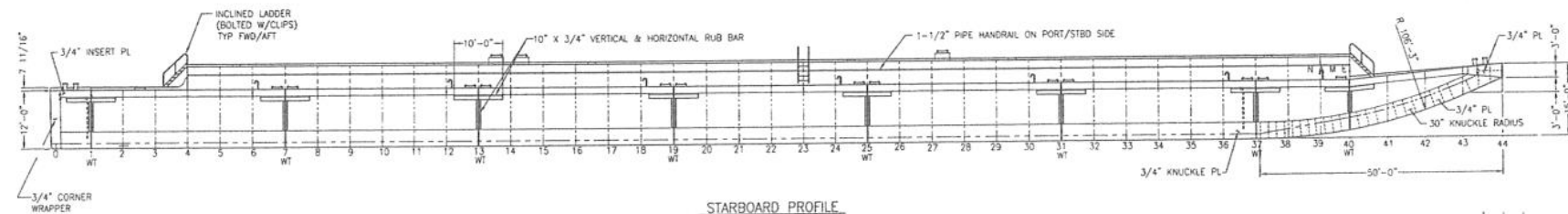
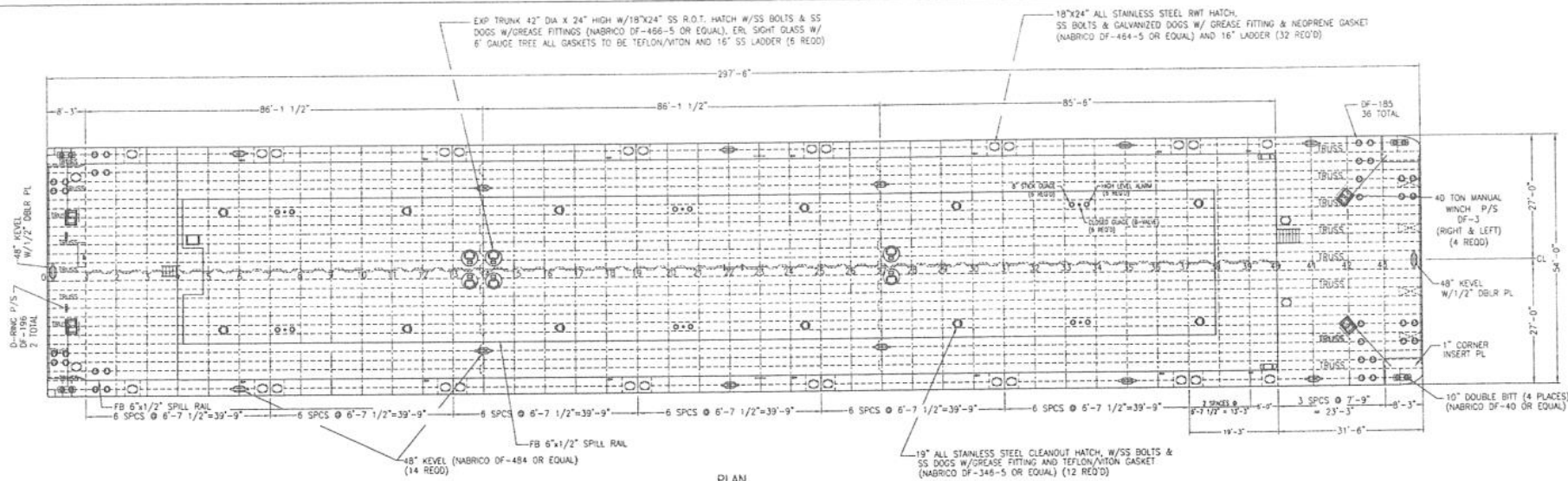
VAPOR SYSTEM

- V15 STBD TRANS VAPOR HDR BLOCK VALVE
- V16 PORT TRANS VAPOR HDR BLOCK VALVE
- V17 VAPOR STACK BLOCK VALVE
- V18 VAPOR P/V VALVE

STRIPPING SYSTEM

- V19 STRIPPING VALVE-CARGO HEADER
- V20 STRIPPING VALVE-TANK #1P
- V21 STRIPPING VALVE-TANK #1S
- V22 STRIPPING VALVE-TANK #2P
- V23 STRIPPING VALVE-TANK #2S
- V24 STRIPPING VALVE-TANK #3P
- V25 STRIPPING VALVE-TANK #3S
- V26 STRIPPING VALVE-CARGO PUMPWELL

AB	AS-BUILT	1/13/11	MD
REV	ITEM	DESCRIPTION	DATE BY
REVISIONS			
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 TRINITY MARINE PRODUCTS, INC. P.O. BOX 760 - Indianapolis, IN 46217			
CHEM CARRIERS, LLC.			
297'-6" X 54'-0" X 12'-0" DOUBLE SKIN TANK BARGE			
VALVE LABEL PLATE DIAGRAM			
SCALE:	3/32" = 1'-0"	DATE:	10/21/10
DRAWN BY:	SDR	CHK'D BY:	GG
YARD:	ASHLAND CITY	TAG NO.:	96180
HULL NO.:	4772-4773	SHOP ORDER	
			DWG NO. P-01 Sht 1 of 1 REV AB



NOTE

- SCANTLINGS BASED ON BUILDERS INTERPRETATION OF 2007 AMERICAN BUREAU OF SHIPPING "RULES FOR BUILDING AND CLASSING STEEL VESSELS FOR SERVICE ON RIVERS AND INTRACASTAL WATERWAYS". CARGO TANK SCANTLINGS ARE BUILT TO TANK BOUNDARY (DEEP TANK) BULKHEAD RULES FOR SPECIFIC GRAVITY OF 1.05.
- ALL MATERIALS, WELDING PROCEDURES AND TESTING SHALL MEET THE REQUIREMENTS OF THE U.S.C.G.
- ALL DETAILS OF CONSTRUCTION AND WORKMANSHIP SHALL BE DONE TO THE STANDARDS SET FOR INLAND BARGES.
- CARGO TANK STRUCTURE BUILT FOR MAWP OF 6.5 PSIG PRESSURE SETTING 6.0PSI, VACUUM SETTING 3.0PSI.
- ALL INNER BOTTOM, WING AND END COMPARTMENTS ARE DRY VOIDS.

1	UP-DATED PER PRE-ENG MEETING	B3010 KA
REV	ITEM	DESCRIPTION
REVISIONS		
TRINITY MARINE PRODUCTS, INC.		
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TRINITY MARINE PRODUCTS, INC.		
CHEM CARRIERS, LLC		
297'-6" X 54'-0" X 12'-0" DOUBLE SKIN RAKE TANK BARGE, 6.5PSI		
GENERAL ARRANGEMENT		
SCALE: 3/32" = 1'	DATE: 07-21-10	DWG NO.
DRAWN BY: KA	CHK'D BY: UEC	S-01
YARD: ASHLAND CITY	TAG NO: 96180	SHT. 1 OF 2
HULL NO. 4772 - 4773	SHOP ORDER	REV. 1

CARGO TRANSFER PROCEDURES

CHEM CARRIERS L.L.C.

TRANSFER FROM BARGE TO DOCK

PARTS

1. **PRODUCTS TRANSFERRED**
2. **DESCRIPTION OF SYSTEM**
3. **PERSONS ON DUTY**
4. **PERSONS IN CHARGE**
5. **EMERGENCY SHUTDOWN**
6. **TOPPING OFF PROCEDURE**
7. **COMPLETION OF TRANSFER**
8. **REPORTING CARGO SPILLS**
9. **VESSEL CLOSURES**
10. **PRODUCT DATA**
11. **Vapor Control Procedures**

Barge CCL 404

PARTS 1. PRODUCTS TRANSFERRED

33 CFR 155.750 (a) (1) (i)

This vessel is certificated for the carriage of grades "A" and lower Sub-Chapter (D) and (O) Products. It has also been certified to carry vapor products. Reference Certificate of Inspection.

PARTS 2. DESCRIPTION OF CARGO TRANSFER SYSTEM

33 CFR 155.750 (a) (2) (i) (ii)

The cargo transfer procedures apply to all Chem Carrier L.L.C. owned or leased tank barges. In most cases other than series built barges, the cargo piping arrangement is usually slightly different on every barge, and for this reason, the piping diagram must be studied before loading or discharging a barge. The basic concept for loading and discharging is fairly standard depending on the location of the pump.

A. (Reference the piping diagram for transfer system arrangement.)

B. PROCEDURES FOR THE CONTAINMENT SYSTEM

33 CFR 155.310 (a) (1) (iv)

33 CFR 155.750 (a) (2) (iii)

- 1). The containment pans are equipped with a drain for the removal of slops to shore facilities:
 NEVER DRAIN THE CONTAINMENT TANKS ONTO THE DECK.
- 2). CCL 404 is equipped with a separate containment area for

the cargo trunk top and the aft deck area. Each containment area is equipped with drains and scupper plugs. Plugs should be installed prior to cargo transfer and removed after the cargo transfer is complete. PIC should notify Chem Carriers when containment areas need cleaning or if scupper plugs need replacing. **Never Drain Product captured in containment area overboard.**

PARTS 3. PERSONS ON DUTY DURING TRANSFER

33 CFR 155.750 (a) (3)

Number of persons required on duty during transfer operations:

- A. At no time during the transfer operation will be less than one responsible person on duty. The certified tankerman assigned shall be in charge and responsible for the safe transfer of cargo.

PARTS 4. PERSONS IN CHARGE

The tankerman (person in charge) is responsible for transferring cargo and carrying out related operations on board in an efficient, safe, and pollution free manner. The tankerman whether employed by the towboat, owner, operator, a shore tankerman service, or Chem Carriers L.L.C., shall comply with all Coast Guard, State and local regulations. Tankerman's responsibility shall include but not be limited to the following:

- A. To have on his/her person a valid merchant marine document endorsed as tankerman, certified to handle the grade of cargo to be transferred.
- B. Make a thorough inspection of the barge prior to the start of transfer operation.
- C. To have proper connection of the grounding cable.
- D. The vessel's moorings are adequate to hold during all expected conditions of surge, current, wind, tide, ect., and lines are long enough to allow for surge, tide, wind, changes in draft ect.
- E. Proper hose sizes, lengths, support, and connections.
- F. The condition of fire extinguishers and required number.
- G. The person in charge of transfer operations on the transferring vessel or facility and the person in charge of transferring operations on the receiving vessel or facility agree to begin the transfer operations.
- H. The transfer operation between tank barges and dock facilities should be lighted between sunset and sunrise to comply with the U. S. Coast Guard regulation pertaining to the displaying of lights on barges as required by Title 33.
- I. The PIC (PERSON IN CHARGE) will be responsible for the DOI (declaration of inspection) and DOS (declaration of security).
- J. Always maintain communications with dock or shore personnel with an agreed upon approved system.

PARTS 5: EMERGENCY SHUTDOWN

33 CFR 155.750 (a) (6)

THE EMERGENCY SHUTDOWN IS LOCATED NEAR THE CENTER OF THE BARGE.

- A. In the event of an emergency, transfer operations can be stopped by pulling the remote shutdown cable.
- B. Familiarize yourself with its location and operation prior to transfer.

PARTS 6; TOPPING OFF PROCEDURES

33 CFR 155.750 (a) (7)

In the process of topping off, tanks should be loaded at different levels to top off one at a time. Extra care should be taken to avoid over pressuring the connections, and hoses by closing valves against the receiving line. Since barges and facilities vary in their systems, no standard for topping off exist, but the following should be considered:

- A. The closing of one tank increases the rate of flow to other tanks on the same line.
- B. Always consider temperature and cargo in accordance with the amount of expansion that should be allowed.
- C. Always maintain communications with dock or shore personnel.
- D. A set of dipstick overfill devices have been installed on the CCL 404. Dipsticks can be made operational by releasing the covers or caps. Dipsticks should be used as a visual aid for overfill protection.

PARTS 7: COMPLETION OF TRANSFER

33 CFR 155.750 (a) (8)

Upon the completion of the transfer all pipelines should be drained into cargo tanks. The header valve used during the operation should then be closed, sealed off with a blind flange and shore personnel should seal lines and hatches on vessel.

PARTS 8: REPORTING CARGO SPILLS

33 CFR 155.750 (a) (9)

Should an accidental discharge of product occur, you should consider the following:

- A. Locate the source of the spill and try to stop it, if possible, and safe to do so.

- B. Make an attempt to contain the product if possible.
- C. Notify the Coast Guard. The national Response Center at 1-800-424-8802.
- E. Notify Chem Carriers L.L.C. at (225) 642-0060
- F. If loading, transfer the cargo from the leaking tank to an adjacent tank or back to the dock if safe to do so.
- G. If discharging, pump the product from the leaking tank as quickly as possible if safe to do so.

***When reporting a spill, the tankerman should provide the following information:**

- A. Name (his or her)
- B. Name of Company: (employed by; (contracted by;
- C. Name of Barge.
- D. Spill Location
- E. Specify Product.
- F. Estimate Quantity of Spill
- G. Weather, Tide, Sea and Current Conditions.
- H. Cause of Spill.
- I. Action Being Taken to Contain and Stop Spill

PART 9

CLOSURES ON VESSELS

Upon completion of cargo transfer operations, all tank hatch covers, ullage covers, and gauging device covers shall be dogged down and secured. In addition, the vent drain valves, if installed, should be secured and left in the proper position. All drain valves should be closed, and drip pan covers, if installed, should be made up tight. Covers for void spaces, bow and stern compartments shall be secured at all times and checked for tightness. Closing devices on clean-out hatches and clean-out opening should be checked, especially when the barge is loaded.

PART 10

PRODUCT DATA

See specific MSDS sheets provided with these procedures.

In case of any other emergency, immediately shut down and notify the transferring facility, and Chem Carriers L.L.C. (225) 642-0060 24 Hour Line.

PART 11

VAPOR CONTROL PROCEDURES

This is a guide only and is not intended to replace experience, sound judgment, and a proper assessment of the task at hand.

The tankerman on duty is the acting Designated Person In Charge (PIC) and is responsible for cargo transfer operations and carrying out related operations on barges.

1. Vapor Recovery Transfer Maximum Rate is 4000 BBLS/HR for

subchapter "D" Cargoes and 4000 BBLS/Hr for subchapter "O" Cargoes.

- 1.1 Transfer rates, which exceed these maximums, must be approved by Chem Carriers.
- 1.2 Transfer rates for each cargo tank should not exceed the maximum transfer rate.

2. Pre-transfer Inspection For Vapor Recovery Operations

2.1 Follow the procedures outlined below in addition to the procedures utilized during normal transfers:

2.1.1 Wear personal protective equipment (PPE) as needed for the cargo in the barge when testing P/V and, hooking up hoses, or draining low points.

2.1.2 Ensure that a Certificate of Vapor Tightness is onboard and valid.

2.1.3 Close the low point drain on the port/starboard vapor header, if applicable.

2.1.4 Close the low point drain near the vent stack, if applicable.

2.1.5 Close valve to the vent riser if applicable.

2.1.7 Blinds used for the vapor control manifold should have a hole to accommodate the ½" stud located in the vapor header.

2.1.8 Each cargo tank is fitted with a liquid level gauge stick. Remove the cap, raise the stick, This stick can be monitored visually to avoid overfilling.

2.1.9 Ensure that the last one meter (3.3 feet) of vapor piping before the vapor connection is painted red/yellow/red.

2.1.10 The cross-header should be stenciled with the word "VAPOR" in black letters at least 2" high.

2.1.11 The vapor connection flange should be fixed with a 1" long by 1/2" diameter stud projecting outward from the face of the flange, midway between bolt holes.

2.1.12 The high level alarms/shutdowns are installed near the center of each cargo tank. Dock alarm/shutdown should be connected prior to loading, and plugs located near the forward end of the barge Port and Starboard should be labeled "ALARM/SHUTDOWN SENSOR." High level alarms are set to alarm at 90% of the cargo tanks capacity and Shut downs are set to shut transfer down at 95% of each tanks capacity.

2.1.13 Ensure that the P/V relief valve flame screen, if required, is in place and in good condition prior to testing.

2.1.14 Ensure that the facility has a Letter of Adequacy endorsed as meeting the requirements of 33 CFR Subpart E.

3. Vapor Piping

3.1 The PIC checks the vapor piping diagram.

3.2 Characteristics of a vapor header:

3.2.1 The vapor collection piping system on tank barges is permanently installed and located as close as practical to the loading manifold. The piping system is electrically bonded to the hull and electrically continuous.

3.2.2 The last one meter (3.3 feet) of vapor piping prior to the valve before the vapor connection is painted red/yellow/red. The red bands are 4" wide and the yellow band is 32" wide.

3.2.3 The vapor header is stenciled with the word "VAPOR" in black letters at least 2" high.

3.2.4 The vapor connection flange is to be fixed with a 1" by 1/2" diameter stud projecting outward from the face of the flange. This stud is located at the top of the flange, midway between bolt holes.

3.2.5 When not in use, blank off the vapor headers using a blind flange with a bolt in every hole. Each blind flange used on the vapor piping has a hole drilled to accommodate the pin.

4. Inspection And Verification Of Vent Lines

4.1 The Person in Charge performs the following steps:

4.1.1 Checks the Certificate of Inspection on board the barge;

4.1.2 Locates polymerizing or inhibited cargoes in the section of the COI marked *Specific Hazardous Cargo Authority*;

4.1.3 Refers to the MSDS or Chemical Data Guide on board the vessel to determine what cargoes are subject to polymerization, or what cargoes are inhibited;

4.1.4 Locates the MSDS for the cargo and determines its toxicity and whether or not it is a polymerizing or inhibited cargo; and,

4.1.5 Notifies the Dispatcher and Field Supervisor when polymerization is suspected.

5. Any problems with the Vapor Control system must be reported immediately to the person in charge and Chem Carriers.

U.S. Department of
Homeland Security

United States
Coast Guard



Commandant
United States Coast Guard

2703 Martin Luther King Jr. Ave SE
Stop 7516
Washington, DC 20593-7516
Staff Symbol: CG-MER-4 (VRP)
Phone: (202) 372-1005
Fax: (202) 372-8376
Email: vrp@uscg.mil

16460
March 12, 2025

Chem Carriers, L.L.C.
C/O: FOREFRONT EMERGENCY MANAGEMENT, LP
ATTN: ALLIE MARTIN
1730 COTEAU ROAD
HOUMA, LA 70364

Dear Sir or Madam:

Your Vessel Response Plan (Control Number 56041), submitted to meet the requirements of Title 33, Code of Federal Regulations (CFR), Part 155, Subparts D and I, is **approved**. Approval will remain valid until **March 21, 2030**.

The CCL 404 (1231312) is authorized to operate only in the ports or geographic areas indicated in the Captain of the Port zones listed below. If carrying oil as cargo, the vessel is prohibited from handling, storing, transporting, transferring, or lightering oil unless it is operating in full compliance with this plan. Compliance includes ensuring that required resources have been identified and planned for or are in place and available through contract or other approved means. If applicable to your routes, this includes the dispersant and aerial observation requirements of 33 CFR 155.1050.

You are reminded that your chosen salvage and marine firefighting resource provider may have submitted waivers from meeting one or more of the specified response times in accordance with 33 CFR 155.4055. If so, this may be rescinded by the U.S. Coast Guard if the appropriate response resources are not available when the approved waiver expires. You shall continue to assess the adequacy of your chosen salvors and firefighters as required by 33 CFR 155.4050.

The vessel must keep a copy of this approval letter onboard in addition to the minimum sections of the plan as required by 33 CFR 155.1030. In accordance with 33 CFR 155.1070, you are required to review your plan annually and submit plan amendments for approval. As per 33 CFR 155.1070(b), the entire plan must be resubmitted for a comprehensive review and approval six (6) months prior to the expiration date.

APPROVED CAPTAIN OF THE PORT ZONES

CORPUS CHRISTI
HOUMA
HOUSTON-GALVESTON

LOWER MISSISSIPPI RIVER OHIO VALLEY
(MEMPHIS) PORT ARTHUR AND LAKE
MOBILE CHARLES
NEW ORLEANS

UPPER MISSISSIPPI RIVER
(ST. LOUIS)

Sincerely,



CHARRON MCCOMBS

Lieutenant Commander

Acting Chief, Domestic Preparedness & Planning Division

U.S. Coast Guard

By direction

U.S. Department of
Homeland Security

United States
Coast Guard



Commanding Officer
United States Coast Guard
Marine Safety Center

US Coast Guard Stop 7430
2703 Martin Luther King Jr. Ave. SE
Washington, DC 20593-7430
Staff Symbol: MSC-5
Phone: (202) 795-6729
Email: securityplaninfo@uscg.mil

16710
VS-326893
December 3, 2024

Chem Carriers, LLC
Attn: Robert Banta
1237 Hwy 75
Sunshine, LA 70780
robert@chemcarriers.com

Subj: CHEM CARRIERS, LLC VESSELS
VESSEL SECURITY PLAN APPROVAL WITH AMENDMENTS

Ref: (a) Your correspondence dated November 6, 2024
(b) Title 33 Code of Federal Regulations (CFR) Part 104
(c) MSC Vessel Security Plan Approval letter dated October 16, 2024

Dear Mr. Banta:

We have conducted a review of the Vessel Security Plan (VSP) submitted with reference (a) in accordance with reference (b) and it is **"Approved."**

Your vessel must operate in compliance with this approved VSP and the requirements contained in reference (b). You are reminded to immediately report any deviation from this approved plan to the local Captain of the Port (COTP)/Officer in Charge, Marine Inspection (OCMI).

This approval will remain valid until five years from the date of reference (c) unless rescinded in writing by the local COTP/OCMI. You must review your plan annually and submit any amendments to this office for approval. Please ensure that a copy of the VSP is maintained on board the vessel if manned, or, if unmanned, at a suitable secure location so that it is readily available during an emergency or security incident. You shall make available to the Coast Guard, upon request, this letter, the VSP and any information related to the implementation of the VSP. Our Case Number for this plan is 326893. Please ensure that all future correspondence includes this Case Number.

Sincerely,

K. C. WILLIAMS
Lieutenant Commander, U.S. Coast Guard
Chief, Vessel Security Division
By direction

Enclosures: (1) List of Vessel Security Plan Amendments
(2) List of Vessels Covered

List of Vessels Covered

<u>Vessel Name</u>	<u>Official Number (O.N.)</u>
CCL-1	518612
CCL 2	510107
CCL-3	296363
CCL 4	512519
CCL-5	512520
CCL-6	530996
CCL7	551980
CCL 8	551982
CCL 9	551983
CCL 10	551979
CCL 11	551976
CCL 14	1164451
CCL 15	1164452
CCL 16	1164666
CCL 17	1166179
CCL 18	1168981
CCL 19	1168980
CCL 20	1191598
CCL 21	1191599
CCL 22	1191600
CCL 23	1191601
CCL 24	1196547
CCL 25	1196548
CCL 26	1203816
CCL 27	1203817
CCL 28	1212828
CCL 29	1212829
CCL 30	1305871
CCL 31	1305870
CCL 32	1305869
CCL 33	1305868
CCL 401	1216671
CCL 402	1219910
CCL 403	1231311
CCL 404	1231312
CCL 405	1236867
CCL 406	1236866
CCL 407	1246320
CCL 408	1246097
CCL 409	1246098
CCL 410	1255906
CCL 411	1255907
CCL 414-L	1262941
CCL 415-T	1262942

<u>Vessel Name</u>	<u>Official Number (O.N.)</u>
CCL 416-T	1264691
CCL 417 T	1298307
CCL 418-L	1306896
CCL 419-L	1306897
CCL 420-T	1348560
CCL 421-T	CG1843359
CCL 3202	1089031
HFL 413	1237482
HFL 415	1237483
HFL 435	1236563
HFL 605	1237484



BARGE "CCL 404"

INNAGE TRIM TABLE

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>
1 PORT	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
1 STBD	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
2 PORT	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
2 STBD	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
3 PORT	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8
3 STBD	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 2'-00"
 AFT DRAFT = 5'-00"
 DIFF. = 3'-00" (DOWN BY STERN)

THE CORRECTION FOR 3'-00" TRIM DOWN BY STERN FOR 1 PORT IS 00-1/8"
 FOR A MEASURED INNAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED INNAGE IS 4'-00 1/8"

LENGTH BETWEEN DRAFT MARKS: 237'-06"

January 19, 2011

PRECISION MEASUREMENT
 & ANALYSIS, INC.
 P.O. Box 2092
 Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "CCL 404"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	789	0	13,134	0	27,891	0	42,851	0	57,863	0	72,902	0	87,941	0	102,980	0	118,019	0	133,052
1/4	950	1/4	13,426	1/4	28,204	1/4	43,162	1/4	58,177	1/4	73,216	1/4	88,255	1/4	103,293	1/4	118,332	1/4	133,365
1/2	1,111	1/2	13,718	1/2	28,518	1/2	43,473	1/2	58,490	1/2	73,529	1/2	88,568	1/2	103,607	1/2	118,646	1/2	133,678
3/4	1,272	3/4	14,010	3/4	28,831	3/4	43,784	3/4	58,803	3/4	73,842	3/4	88,881	3/4	103,920	3/4	118,959	3/4	133,991
1	1,433	1	14,302	1	29,144	1	44,096	1	59,117	1	74,155	1	89,194	1	104,233	1	119,272	1	134,304
1/4	1,653	1/4	14,598	1/4	29,457	1/4	44,407	1/4	59,430	1/4	74,469	1/4	89,508	1/4	104,547	1/4	119,586	1/4	134,617
1/2	1,872	1/2	14,894	1/2	29,771	1/2	44,718	1/2	59,743	1/2	74,782	1/2	89,821	1/2	104,860	1/2	119,899	1/2	134,931
3/4	2,092	3/4	15,190	3/4	30,084	3/4	45,029	3/4	60,056	3/4	75,095	3/4	90,134	3/4	105,173	3/4	120,212	3/4	135,244
2	2,312	2	15,486	2	30,397	2	45,341	2	60,370	2	75,409	2	90,448	2	105,487	2	120,525	2	135,557
1/4	2,564	1/4	15,785	1/4	30,711	1/4	45,653	1/4	60,683	1/4	75,722	1/4	90,761	1/4	105,800	1/4	120,839	1/4	135,870
1/2	2,816	1/2	16,085	1/2	31,024	1/2	45,965	1/2	60,996	1/2	76,035	1/2	91,074	1/2	106,113	1/2	121,152	1/2	136,183
3/4	3,068	3/4	16,385	3/4	31,337	3/4	46,276	3/4	61,310	3/4	76,349	3/4	91,388	3/4	106,427	3/4	121,465	3/4	136,496
3	3,320	3	16,685	3	31,651	3	46,588	3	61,623	3	76,662	3	91,701	3	106,740	3	121,778	3	136,810
1/4	3,577	1/4	16,988	1/4	31,963	1/4	46,901	1/4	61,936	1/4	76,975	1/4	92,014	1/4	107,053	1/4	122,091	1/4	137,123
1/2	3,834	1/2	17,292	1/2	32,276	1/2	47,213	1/2	62,250	1/2	77,289	1/2	92,328	1/2	107,367	1/2	122,404	1/2	137,436
3/4	4,090	3/4	17,596	3/4	32,589	3/4	47,525	3/4	62,563	3/4	77,602	3/4	92,641	3/4	107,680	3/4	122,718	3/4	137,749
4	4,347	4	17,899	4	32,901	4	47,837	4	62,876	4	77,915	4	92,954	4	107,993	4	123,031	4	138,062
1/4	4,608	1/4	18,207	1/4	33,212	1/4	48,151	1/4	63,190	1/4	78,229	1/4	93,267	1/4	108,306	1/4	123,344	1/4	138,375
1/2	4,869	1/2	18,514	1/2	33,523	1/2	48,464	1/2	63,503	1/2	78,542	1/2	93,581	1/2	108,620	1/2	123,657	1/2	138,689
3/4	5,130	3/4	18,822	3/4	33,834	3/4	48,777	3/4	63,816	3/4	78,855	3/4	93,894	3/4	108,933	3/4	123,970	3/4	139,002
5	5,391	5	19,129	5	34,145	5	49,091	5	64,130	5	79,168	5	94,207	5	109,246	5	124,283	5	139,315
1/4	5,656	1/4	19,440	1/4	34,456	1/4	49,404	1/4	64,443	1/4	79,482	1/4	94,521	1/4	109,560	1/4	124,596	1/4	139,628
1/2	5,921	1/2	19,751	1/2	34,767	1/2	49,717	1/2	64,756	1/2	79,795	1/2	94,834	1/2	109,873	1/2	124,910	1/2	139,941
3/4	6,186	3/4	20,062	3/4	35,078	3/4	50,030	3/4	65,069	3/4	80,108	3/4	95,147	3/4	110,186	3/4	125,223	3/4	140,254
6	6,451	6	20,373	6	35,389	6	50,344	6	65,383	6	80,422	6	95,461	6	110,500	6	125,536	6	140,567
1/4	6,720	1/4	20,686	1/4	35,700	1/4	50,657	1/4	65,696	1/4	80,735	1/4	95,774	1/4	110,813	1/4	125,849	1/4	140,881
1/2	6,988	1/2	20,999	1/2	36,011	1/2	50,970	1/2	66,009	1/2	81,048	1/2	96,087	1/2	111,126	1/2	126,162	1/2	141,194
3/4	7,257	3/4	21,312	3/4	36,321	3/4	51,284	3/4	66,323	3/4	81,362	3/4	96,401	3/4	111,440	3/4	126,475	3/4	141,507
7	7,526	7	21,625	7	36,632	7	51,597	7	66,636	7	81,675	7	96,714	7	111,753	7	126,789	7	141,820
1/4	7,799	1/4	21,938	1/4	36,943	1/4	51,910	1/4	66,949	1/4	81,988	1/4	97,027	1/4	112,066	1/4	127,102	1/4	142,133
1/2	8,071	1/2	22,252	1/2	37,254	1/2	52,224	1/2	67,263	1/2	82,302	1/2	97,341	1/2	112,380	1/2	127,415	1/2	142,446
3/4	8,344	3/4	22,565	3/4	37,565	3/4	52,537	3/4	67,576	3/4	82,615	3/4	97,654	3/4	112,693	3/4	127,728	3/4	142,760
8	8,617	8	22,878	8	37,876	8	52,850	8	67,889	8	82,928	8	97,967	8	113,006	8	128,041	8	143,073
1/4	8,893	1/4	23,191	1/4	38,187	1/4	53,164	1/4	68,203	1/4	83,242	1/4	98,280	1/4	113,319	1/4	128,354	1/4	143,386
1/2	9,170	1/2	23,505	1/2	38,498	1/2	53,477	1/2	68,516	1/2	83,555	1/2	98,594	1/2	113,633	1/2	128,668	1/2	143,699
3/4	9,446	3/4	23,818	3/4	38,809	3/4	53,790	3/4	68,829	3/4	83,868	3/4	98,907	3/4	113,946	3/4	128,981	3/4	144,012
9	9,723	9	24,131	9	39,120	9	54,104	9	69,143	9	84,181	9	99,220	9	114,259	9	129,294	9	144,325
1/4	10,003	1/4	24,445	1/4	39,431	1/4	54,417	1/4	69,456	1/4	84,495	1/4	99,534	1/4	114,573	1/4	129,607	1/4	144,638
1/2	10,284	1/2	24,758	1/2	39,742	1/2	54,730	1/2	69,769	1/2	84,808	1/2	99,847	1/2	114,886	1/2	129,920	1/2	144,952
3/4	10,564	3/4	25,071	3/4	40,053	3/4	55,043	3/4	70,082	3/4	85,121	3/4	100,160	3/4	115,199	3/4	130,233	3/4	145,265
10	10,844	10	25,385	10	40,363	10	55,357	10	70,396	10	85,435	10	100,474	10	115,513	10	130,546	10	145,578
1/4	11,129	1/4	25,698	1/4	40,674	1/4	55,670	1/4	70,709	1/4	85,748	1/4	100,787	1/4	115,826	1/4	130,860	1/4	145,891
1/2	11,413	1/2	26,011	1/2	40,985	1/2	55,983	1/2	71,022	1/2	86,061	1/2	101,100	1/2	116,139	1/2	131,173	1/2	146,204
3/4	11,697	3/4	26,324	3/4	41,296	3/4	56,297	3/4	71,336	3/4	86,375	3/4	101,414	3/4	116,453	3/4	131,486	3/4	146,517
11	11,981	11	26,638	11	41,607	11	56,610	11	71,649	11	86,688	11	101,727	11	116,766	11	131,799	11	146,831
1/4	12,270	1/4	26,951	1/4	41,918	1/4	56,923	1/4	71,962	1/4	87,001	1/4	102,040	1/4	117,079	1/4	132,112	1/4	147,144
1/2	12,558	1/2	27,264	1/2	42,229	1/2	57,237	1/2	72,276	1/2	87,315	1/2	102,354	1/2	117,392	1/2	132,425	1/2	147,457
3/4	12,846	3/4	27,578	3/4	42,540	3/4	57,550	3/4	72,589	3/4	87,628	3/4	102,667	3/4	117,706	3/4	132,739	3/4	147,770

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN WITH "HERMETIC" CLOSED GAUGING DEVICE.

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.
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Pearland, Texas 77588
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BARGE "CCL 404"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	148,083	0	163,115	0	178,079	0	193,022	0	207,901	0		0		0		0		0	
1/4	148,396	1/4	163,428	1/4	178,390	1/4	193,334	1/4	208,193	1/4		1/4		1/4		1/4		1/4	
1/2	148,710	1/2	163,741	1/2	178,701	1/2	193,645	1/2	208,484	1/2		1/2		1/2		1/2		1/2	
3/4	149,023	3/4	164,054	3/4	179,013	3/4	193,956	3/4	208,775	3/4		3/4		3/4		3/4		3/4	
1	149,336	1	164,367	1	179,324	1	194,268	1	209,067	1		1		1		1		1	
1/4	149,649	1/4	164,680	1/4	179,635	1/4	194,579	1/4	209,326	1/4		1/4		1/4		1/4		1/4	
1/2	149,962	1/2	164,994	1/2	179,947	1/2	194,890	1/2	209,586	1/2		1/2		1/2		1/2		1/2	
3/4	150,275	3/4	165,307	3/4	180,258	3/4	195,202	3/4	209,846	3/4		3/4		3/4		3/4		3/4	
2	150,588	2	165,620	2	180,569	2	195,513	2	210,106	2		2		2		2		2	
1/4	150,902	1/4	165,933	1/4	180,881	1/4	195,824	1/4	210,314	1/4		1/4		1/4		1/4		1/4	
1/2	151,215	1/2	166,245	1/2	181,192	1/2	196,136	1/2	210,521	1/2		1/2		1/2		1/2		1/2	
3/4	151,528	3/4	166,558	3/4	181,503	3/4	196,447	3/4	210,729	3/4		3/4		3/4		3/4		3/4	
3	151,841	3	166,871	3	181,815	3	196,758	3	210,937	3		3		3		3		3	
1/4	152,154	1/4	167,182	1/4	182,126	1/4	197,070	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	152,467	1/2	167,493	1/2	182,437	1/2	197,381	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	152,781	3/4	167,805	3/4	182,749	3/4	197,692	3/4		3/4		3/4		3/4		3/4		3/4	
4	153,094	4	168,116	4	183,060	4	198,004	4		4		4		4		4		4	
1/4	153,407	1/4	168,427	1/4	183,371	1/4	198,315	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	153,720	1/2	168,739	1/2	183,683	1/2	198,626	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	154,033	3/4	169,050	3/4	183,994	3/4	198,938	3/4		3/4		3/4		3/4		3/4		3/4	
5	154,346	5	169,361	5	184,305	5	199,249	5		5		5		5		5		5	
1/4	154,659	1/4	169,673	1/4	184,617	1/4	199,560	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	154,973	1/2	169,984	1/2	184,928	1/2	199,872	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,286	3/4	170,295	3/4	185,239	3/4	200,183	3/4		3/4		3/4		3/4		3/4		3/4	
6	155,599	6	170,607	6	185,551	6	200,494	6		6		6		6		6		6	
1/4	155,912	1/4	170,918	1/4	185,862	1/4	200,806	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,225	1/2	171,229	1/2	186,173	1/2	201,117	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,538	3/4	171,541	3/4	186,485	3/4	201,428	3/4		3/4		3/4		3/4		3/4		3/4	
7	156,852	7	171,852	7	186,796	7	201,740	7		7		7		7		7		7	
1/4	157,165	1/4	172,163	1/4	187,107	1/4	202,051	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	157,478	1/2	172,475	1/2	187,419	1/2	202,362	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	157,791	3/4	172,786	3/4	187,730	3/4	202,674	3/4		3/4		3/4		3/4		3/4		3/4	
8	158,104	8	173,097	8	188,041	8	202,985	8		8		8		8		8		8	
1/4	158,417	1/4	173,409	1/4	188,353	1/4	203,296	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	158,730	1/2	173,720	1/2	188,664	1/2	203,608	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	159,044	3/4	174,031	3/4	188,975	3/4	203,919	3/4		3/4		3/4		3/4		3/4		3/4	
9	159,357	9	174,343	9	189,287	9	204,230	9		9		9		9		9		9	
1/4	159,670	1/4	174,654	1/4	189,598	1/4	204,542	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	159,983	1/2	174,965	1/2	189,909	1/2	204,853	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	160,296	3/4	175,277	3/4	190,221	3/4	205,164	3/4		3/4		3/4		3/4		3/4		3/4	
10	160,609	10	175,588	10	190,532	10	205,476	10		10		10		10		10		10	
1/4	160,923	1/4	175,899	1/4	190,843	1/4	205,784	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	161,236	1/2	176,211	1/2	191,155	1/2	206,092	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	161,549	3/4	176,522	3/4	191,466	3/4	206,400	3/4		3/4		3/4		3/4		3/4		3/4	
11	161,862	11	176,833	11	191,777	11	206,708	11		11		11		11		11		11	
1/4	162,175	1/4	177,145	1/4	192,089	1/4	207,006	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	162,488	1/2	177,456	1/2	192,400	1/2	207,304	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	162,802	3/4	177,767	3/4	192,711	3/4	207,603	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/19/2011 CL - SW
CALCULATED: 01/19/2011 CL
PRINTED: 01/19/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2011

PRECISION MEASUREMENT
& ANALYSIS, INC.
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BARGE "CCL 404"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	789	0	13,132	0	27,888	0	42,881	0	57,911	0	72,948	0	87,985	0	103,022	0	118,059	0	133,090
1/4	950	1/4	13,424	1/4	28,201	1/4	43,193	1/4	58,224	1/4	73,261	1/4	88,298	1/4	103,335	1/4	118,373	1/4	133,403
1/2	1,111	1/2	13,716	1/2	28,514	1/2	43,506	1/2	58,537	1/2	73,574	1/2	88,612	1/2	103,649	1/2	118,686	1/2	133,716
3/4	1,272	3/4	14,008	3/4	28,827	3/4	43,818	3/4	58,851	3/4	73,888	3/4	88,925	3/4	103,962	3/4	118,999	3/4	134,029
1	1,433	1	14,300	1	29,141	1	44,130	1	59,164	1	74,201	1	89,238	1	104,275	1	119,312	1	134,343
1/4	1,653	1/4	14,596	1/4	29,454	1/4	44,442	1/4	59,477	1/4	74,514	1/4	89,551	1/4	104,589	1/4	119,626	1/4	134,656
1/2	1,872	1/2	14,892	1/2	29,767	1/2	44,755	1/2	59,790	1/2	74,827	1/2	89,865	1/2	104,902	1/2	119,939	1/2	134,969
3/4	2,092	3/4	15,188	3/4	30,080	3/4	45,067	3/4	60,104	3/4	75,141	3/4	90,178	3/4	105,215	3/4	120,252	3/4	135,282
2	2,311	2	15,484	2	30,394	2	45,380	2	60,417	2	75,454	2	90,491	2	105,528	2	120,565	2	135,595
1/4	2,563	1/4	15,783	1/4	30,707	1/4	45,693	1/4	60,730	1/4	75,767	1/4	90,804	1/4	105,842	1/4	120,878	1/4	135,908
1/2	2,815	1/2	16,083	1/2	31,020	1/2	46,006	1/2	61,043	1/2	76,081	1/2	91,118	1/2	106,155	1/2	121,192	1/2	136,221
3/4	3,067	3/4	16,383	3/4	31,334	3/4	46,320	3/4	61,357	3/4	76,394	3/4	91,431	3/4	106,468	3/4	121,505	3/4	136,534
3	3,320	3	16,683	3	31,647	3	46,633	3	61,670	3	76,707	3	91,744	3	106,781	3	121,818	3	136,847
1/4	3,576	1/4	16,986	1/4	31,960	1/4	46,946	1/4	61,983	1/4	77,020	1/4	92,058	1/4	107,095	1/4	122,131	1/4	137,161
1/2	3,833	1/2	17,290	1/2	32,273	1/2	47,259	1/2	62,297	1/2	77,334	1/2	92,371	1/2	107,408	1/2	122,444	1/2	137,474
3/4	4,090	3/4	17,593	3/4	32,586	3/4	47,573	3/4	62,610	3/4	77,647	3/4	92,684	3/4	107,721	3/4	122,757	3/4	137,787
4	4,347	4	17,897	4	32,899	4	47,886	4	62,923	4	77,960	4	92,997	4	108,035	4	123,070	4	138,100
1/4	4,608	1/4	18,204	1/4	33,210	1/4	48,199	1/4	63,236	1/4	78,274	1/4	93,311	1/4	108,348	1/4	123,383	1/4	138,413
1/2	4,869	1/2	18,512	1/2	33,522	1/2	48,512	1/2	63,550	1/2	78,587	1/2	93,624	1/2	108,661	1/2	123,697	1/2	138,726
3/4	5,130	3/4	18,819	3/4	33,834	3/4	48,826	3/4	63,863	3/4	78,900	3/4	93,937	3/4	108,974	3/4	124,010	3/4	139,039
5	5,391	5	19,127	5	34,146	5	49,139	5	64,176	5	79,213	5	94,250	5	109,288	5	124,323	5	139,352
1/4	5,655	1/4	19,438	1/4	34,458	1/4	49,452	1/4	64,489	1/4	79,527	1/4	94,564	1/4	109,601	1/4	124,636	1/4	139,666
1/2	5,920	1/2	19,749	1/2	34,770	1/2	49,766	1/2	64,803	1/2	79,840	1/2	94,877	1/2	109,914	1/2	124,949	1/2	139,979
3/4	6,185	3/4	20,060	3/4	35,082	3/4	50,079	3/4	65,116	3/4	80,153	3/4	95,190	3/4	110,227	3/4	125,262	3/4	140,292
6	6,450	6	20,371	6	35,394	6	50,392	6	65,429	6	80,466	6	95,504	6	110,541	6	125,575	6	140,605
1/4	6,719	1/4	20,684	1/4	35,706	1/4	50,705	1/4	65,743	1/4	80,780	1/4	95,817	1/4	110,854	1/4	125,888	1/4	140,918
1/2	6,988	1/2	20,997	1/2	36,018	1/2	51,019	1/2	66,056	1/2	81,093	1/2	96,130	1/2	111,167	1/2	126,201	1/2	141,231
3/4	7,256	3/4	21,309	3/4	36,330	3/4	51,332	3/4	66,369	3/4	81,406	3/4	96,443	3/4	111,481	3/4	126,515	3/4	141,544
7	7,525	7	21,622	7	36,642	7	51,645	7	66,682	7	81,720	7	96,757	7	111,794	7	126,828	7	141,857
1/4	7,798	1/4	21,936	1/4	36,954	1/4	51,959	1/4	66,996	1/4	82,033	1/4	97,070	1/4	112,107	1/4	127,141	1/4	142,170
1/2	8,070	1/2	22,249	1/2	37,266	1/2	52,272	1/2	67,309	1/2	82,346	1/2	97,383	1/2	112,420	1/2	127,454	1/2	142,484
3/4	8,343	3/4	22,562	3/4	37,578	3/4	52,585	3/4	67,622	3/4	82,659	3/4	97,696	3/4	112,734	3/4	127,767	3/4	142,797
8	8,616	8	22,875	8	37,890	8	52,898	8	67,935	8	82,973	8	98,010	8	113,047	8	128,080	8	143,110
1/4	8,892	1/4	23,189	1/4	38,202	1/4	53,212	1/4	68,249	1/4	83,286	1/4	98,323	1/4	113,360	1/4	128,393	1/4	143,423
1/2	9,169	1/2	23,502	1/2	38,514	1/2	53,525	1/2	68,562	1/2	83,599	1/2	98,636	1/2	113,673	1/2	128,706	1/2	143,736
3/4	9,445	3/4	23,815	3/4	38,826	3/4	53,838	3/4	68,875	3/4	83,912	3/4	98,950	3/4	113,987	3/4	129,020	3/4	144,049
9	9,722	9	24,128	9	39,138	9	54,151	9	69,189	9	84,226	9	99,263	9	114,300	9	129,333	9	144,362
1/4	10,002	1/4	24,442	1/4	39,450	1/4	54,465	1/4	69,502	1/4	84,539	1/4	99,576	1/4	114,613	1/4	129,646	1/4	144,675
1/2	10,282	1/2	24,755	1/2	39,762	1/2	54,778	1/2	69,815	1/2	84,852	1/2	99,889	1/2	114,927	1/2	129,959	1/2	144,989
3/4	10,563	3/4	25,068	3/4	40,073	3/4	55,091	3/4	70,128	3/4	85,166	3/4	100,203	3/4	115,240	3/4	130,272	3/4	145,302
10	10,843	10	25,381	10	40,385	10	55,405	10	70,442	10	85,479	10	100,516	10	115,553	10	130,585	10	145,615
1/4	11,127	1/4	25,695	1/4	40,697	1/4	55,718	1/4	70,755	1/4	85,792	1/4	100,829	1/4	115,866	1/4	130,898	1/4	145,928
1/2	11,412	1/2	26,008	1/2	41,009	1/2	56,031	1/2	71,068	1/2	86,105	1/2	101,142	1/2	116,180	1/2	131,211	1/2	146,241
3/4	11,696	3/4	26,321	3/4	41,321	3/4	56,344	3/4	71,381	3/4	86,419	3/4	101,456	3/4	116,493	3/4	131,524	3/4	146,554
11	11,980	11	26,635	11	41,633	11	56,658	11	71,695	11	86,732	11	101,769	11	116,806	11	131,838	11	146,867
1/4	12,268	1/4	26,948	1/4	41,945	1/4	56,971	1/4	72,008	1/4	87,045	1/4	102,082	1/4	117,119	1/4	132,151	1/4	147,180
1/2	12,556	1/2	27,261	1/2	42,257	1/2	57,284	1/2	72,321	1/2	87,358	1/2	102,396	1/2	117,433	1/2	132,464	1/2	147,494
3/4	12,844	3/4	27,574	3/4	42,569	3/4	57,597	3/4	72,635	3/4	87,672	3/4	102,709	3/4	117,746	3/4	132,777	3/4	147,807

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN WITH "HERMETIC" CLOSED GAUGING DEVICE.

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "CCL 404"

1 STBD
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	148,120	0	163,149	0	178,112	0	193,054	0	207,930	0		0		0		0		0	
1/4	148,433	1/4	163,463	1/4	178,423	1/4	193,365	1/4	208,222	1/4		1/4		1/4		1/4		1/4	
1/2	148,746	1/2	163,776	1/2	178,734	1/2	193,676	1/2	208,513	1/2		1/2		1/2		1/2		1/2	
3/4	149,059	3/4	164,089	3/4	179,045	3/4	193,987	3/4	208,804	3/4		3/4		3/4		3/4		3/4	
1	149,372	1	164,402	1	179,357	1	194,299	1	209,096	1		1		1		1		1	
1/4	149,685	1/4	164,715	1/4	179,668	1/4	194,610	1/4	209,356	1/4		1/4		1/4		1/4		1/4	
1/2	149,998	1/2	165,028	1/2	179,979	1/2	194,921	1/2	209,615	1/2		1/2		1/2		1/2		1/2	
3/4	150,312	3/4	165,341	3/4	180,291	3/4	195,233	3/4	209,875	3/4		3/4		3/4		3/4		3/4	
2	150,625	2	165,654	2	180,602	2	195,544	2	210,135	2		2		2		2		2	
1/4	150,938	1/4	165,967	1/4	180,913	1/4	195,855	1/4	210,343	1/4		1/4		1/4		1/4		1/4	
1/2	151,251	1/2	166,280	1/2	181,224	1/2	196,167	1/2	210,550	1/2		1/2		1/2		1/2		1/2	
3/4	151,564	3/4	166,592	3/4	181,536	3/4	196,478	3/4	210,758	3/4		3/4		3/4		3/4		3/4	
3	151,877	3	166,905	3	181,847	3	196,789	3	210,965	3		3		3		3		3	
1/4	152,190	1/4	167,216	1/4	182,158	1/4	197,100	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	152,503	1/2	167,528	1/2	182,470	1/2	197,412	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	152,817	3/4	167,839	3/4	182,781	3/4	197,723	3/4		3/4		3/4		3/4		3/4		3/4	
4	153,130	4	168,150	4	183,092	4	198,034	4		4		4		4		4		4	
1/4	153,443	1/4	168,461	1/4	183,404	1/4	198,346	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	153,756	1/2	168,773	1/2	183,715	1/2	198,657	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	154,069	3/4	169,084	3/4	184,026	3/4	198,968	3/4		3/4		3/4		3/4		3/4		3/4	
5	154,382	5	169,395	5	184,337	5	199,279	5		5		5		5		5		5	
1/4	154,695	1/4	169,707	1/4	184,649	1/4	199,591	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	155,008	1/2	170,018	1/2	184,960	1/2	199,902	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,321	3/4	170,329	3/4	185,271	3/4	200,213	3/4		3/4		3/4		3/4		3/4		3/4	
6	155,635	6	170,641	6	185,583	6	200,525	6		6		6		6		6		6	
1/4	155,948	1/4	170,952	1/4	185,894	1/4	200,836	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,261	1/2	171,263	1/2	186,205	1/2	201,147	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,574	3/4	171,574	3/4	186,516	3/4	201,459	3/4		3/4		3/4		3/4		3/4		3/4	
7	156,887	7	171,886	7	186,828	7	201,770	7		7		7		7		7		7	
1/4	157,200	1/4	172,197	1/4	187,139	1/4	202,081	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	157,513	1/2	172,508	1/2	187,450	1/2	202,392	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	157,826	3/4	172,820	3/4	187,762	3/4	202,704	3/4		3/4		3/4		3/4		3/4		3/4	
8	158,140	8	173,131	8	188,073	8	203,015	8		8		8		8		8		8	
1/4	158,453	1/4	173,442	1/4	188,384	1/4	203,326	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	158,766	1/2	173,753	1/2	188,696	1/2	203,638	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	159,079	3/4	174,065	3/4	189,007	3/4	203,949	3/4		3/4		3/4		3/4		3/4		3/4	
9	159,392	9	174,376	9	189,318	9	204,260	9		9		9		9		9		9	
1/4	159,705	1/4	174,687	1/4	189,629	1/4	204,571	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	160,018	1/2	174,999	1/2	189,941	1/2	204,883	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	160,331	3/4	175,310	3/4	190,252	3/4	205,194	3/4		3/4		3/4		3/4		3/4		3/4	
10	160,644	10	175,621	10	190,563	10	205,505	10		10		10		10		10		10	
1/4	160,958	1/4	175,933	1/4	190,875	1/4	205,813	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	161,271	1/2	176,244	1/2	191,186	1/2	206,121	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	161,584	3/4	176,555	3/4	191,497	3/4	206,429	3/4		3/4		3/4		3/4		3/4		3/4	
11	161,897	11	176,866	11	191,808	11	206,737	11		11		11		11		11		11	
1/4	162,210	1/4	177,178	1/4	192,120	1/4	207,036	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	162,523	1/2	177,489	1/2	192,431	1/2	207,334	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	162,836	3/4	177,800	3/4	192,742	3/4	207,632	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/19/2011 CL - SW
CALCULATED: 01/19/2011 CL
PRINTED: 01/19/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2011

PRECISION MEASUREMENT
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BARGE "CCL 404"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	841	0	15,391	0	30,458	0	45,103	0	59,987	0	75,056	0	90,124	0	105,192	0	120,260	0	135,322
1/4	1,057	1/4	15,704	1/4	30,772	1/4	45,404	1/4	60,301	1/4	75,370	1/4	90,438	1/4	105,506	1/4	120,574	1/4	135,636
1/2	1,273	1/2	16,018	1/2	31,086	1/2	45,705	1/2	60,615	1/2	75,683	1/2	90,752	1/2	105,820	1/2	120,888	1/2	135,950
3/4	1,489	3/4	16,332	3/4	31,400	3/4	46,007	3/4	60,929	3/4	75,997	3/4	91,066	3/4	106,134	3/4	121,202	3/4	136,263
1	1,705	1	16,646	1	31,714	1	46,308	1	61,243	1	76,311	1	91,379	1	106,448	1	121,516	1	136,577
1/4	1,989	1/4	16,960	1/4	32,028	1/4	46,609	1/4	61,557	1/4	76,625	1/4	91,693	1/4	106,762	1/4	121,830	1/4	136,891
1/2	2,273	1/2	17,274	1/2	32,342	1/2	46,911	1/2	61,871	1/2	76,939	1/2	92,007	1/2	107,076	1/2	122,144	1/2	137,205
3/4	2,557	3/4	17,588	3/4	32,656	3/4	47,212	3/4	62,185	3/4	77,253	3/4	92,321	3/4	107,389	3/4	122,458	3/4	137,518
2	2,841	2	17,902	2	32,970	2	47,514	2	62,499	2	77,567	2	92,635	2	107,703	2	122,771	2	137,832
1/4	3,153	1/4	18,216	1/4	33,284	1/4	47,816	1/4	62,813	1/4	77,881	1/4	92,949	1/4	108,017	1/4	123,085	1/4	138,146
1/2	3,466	1/2	18,530	1/2	33,597	1/2	48,118	1/2	63,127	1/2	78,195	1/2	93,263	1/2	108,331	1/2	123,399	1/2	138,460
3/4	3,779	3/4	18,844	3/4	33,911	3/4	48,420	3/4	63,441	3/4	78,509	3/4	93,577	3/4	108,645	3/4	123,713	3/4	138,773
3	4,091	3	19,158	3	34,225	3	48,722	3	63,754	3	78,823	3	93,891	3	108,959	3	124,026	3	139,087
1/4	4,405	1/4	19,471	1/4	34,536	1/4	49,027	1/4	64,068	1/4	79,137	1/4	94,205	1/4	109,273	1/4	124,340	1/4	139,401
1/2	4,718	1/2	19,785	1/2	34,847	1/2	49,332	1/2	64,382	1/2	79,450	1/2	94,519	1/2	109,587	1/2	124,654	1/2	139,715
3/4	5,032	3/4	20,099	3/4	35,157	3/4	49,637	3/4	64,696	3/4	79,764	3/4	94,833	3/4	109,901	3/4	124,968	3/4	140,028
4	5,346	4	20,413	4	35,468	4	49,942	4	65,010	4	80,078	4	95,147	4	110,215	4	125,282	4	140,342
1/4	5,659	1/4	20,727	1/4	35,769	1/4	50,256	1/4	65,324	1/4	80,392	1/4	95,460	1/4	110,529	1/4	125,595	1/4	140,656
1/2	5,973	1/2	21,041	1/2	36,070	1/2	50,570	1/2	65,638	1/2	80,706	1/2	95,774	1/2	110,843	1/2	125,909	1/2	140,970
3/4	6,287	3/4	21,355	3/4	36,371	3/4	50,884	3/4	65,952	3/4	81,020	3/4	96,088	3/4	111,156	3/4	126,223	3/4	141,284
5	6,601	5	21,669	5	36,672	5	51,198	5	66,266	5	81,334	5	96,402	5	111,470	5	126,537	5	141,597
1/4	6,915	1/4	21,983	1/4	36,973	1/4	51,512	1/4	66,580	1/4	81,648	1/4	96,716	1/4	111,784	1/4	126,850	1/4	141,911
1/2	7,229	1/2	22,297	1/2	37,275	1/2	51,825	1/2	66,894	1/2	81,962	1/2	97,030	1/2	112,098	1/2	127,164	1/2	142,225
3/4	7,543	3/4	22,611	3/4	37,576	3/4	52,139	3/4	67,208	3/4	82,276	3/4	97,344	3/4	112,412	3/4	127,478	3/4	142,539
6	7,857	6	22,924	6	37,877	6	52,453	6	67,522	6	82,590	6	97,658	6	112,726	6	127,792	6	142,852
1/4	8,171	1/4	23,238	1/4	38,178	1/4	52,767	1/4	67,835	1/4	82,904	1/4	97,972	1/4	113,040	1/4	128,105	1/4	143,166
1/2	8,485	1/2	23,552	1/2	38,479	1/2	53,081	1/2	68,149	1/2	83,218	1/2	98,286	1/2	113,354	1/2	128,419	1/2	143,480
3/4	8,798	3/4	23,866	3/4	38,780	3/4	53,395	3/4	68,463	3/4	83,531	3/4	98,600	3/4	113,668	3/4	128,733	3/4	143,794
7	9,112	7	24,180	7	39,081	7	53,709	7	68,777	7	83,845	7	98,914	7	113,982	7	129,047	7	144,107
1/4	9,426	1/4	24,494	1/4	39,382	1/4	54,023	1/4	69,091	1/4	84,159	1/4	99,227	1/4	114,296	1/4	129,360	1/4	144,421
1/2	9,740	1/2	24,808	1/2	39,683	1/2	54,337	1/2	69,405	1/2	84,473	1/2	99,541	1/2	114,610	1/2	129,674	1/2	144,735
3/4	10,054	3/4	25,122	3/4	39,984	3/4	54,651	3/4	69,719	3/4	84,787	3/4	99,855	3/4	114,924	3/4	129,988	3/4	145,049
8	10,368	8	25,436	8	40,285	8	54,965	8	70,033	8	85,101	8	100,169	8	115,237	8	130,302	8	145,362
1/4	10,682	1/4	25,750	1/4	40,586	1/4	55,279	1/4	70,347	1/4	85,415	1/4	100,483	1/4	115,551	1/4	130,616	1/4	145,676
1/2	10,996	1/2	26,064	1/2	40,887	1/2	55,593	1/2	70,661	1/2	85,729	1/2	100,797	1/2	115,865	1/2	130,929	1/2	145,990
3/4	11,310	3/4	26,377	3/4	41,188	3/4	55,906	3/4	70,975	3/4	86,043	3/4	101,111	3/4	116,179	3/4	131,243	3/4	146,304
9	11,624	9	26,691	9	41,490	9	56,220	9	71,289	9	86,357	9	101,425	9	116,493	9	131,557	9	146,618
1/4	11,938	1/4	27,005	1/4	41,791	1/4	56,534	1/4	71,602	1/4	86,671	1/4	101,739	1/4	116,807	1/4	131,871	1/4	146,931
1/2	12,251	1/2	27,319	1/2	42,092	1/2	56,848	1/2	71,916	1/2	86,985	1/2	102,053	1/2	117,121	1/2	132,184	1/2	147,245
3/4	12,565	3/4	27,633	3/4	42,393	3/4	57,162	3/4	72,230	3/4	87,299	3/4	102,367	3/4	117,435	3/4	132,498	3/4	147,559
10	12,879	10	27,947	10	42,694	10	57,476	10	72,544	10	87,612	10	102,681	10	117,749	10	132,812	10	147,873
1/4	13,193	1/4	28,261	1/4	42,995	1/4	57,790	1/4	72,858	1/4	87,926	1/4	102,995	1/4	118,063	1/4	133,126	1/4	148,186
1/2	13,507	1/2	28,575	1/2	43,296	1/2	58,104	1/2	73,172	1/2	88,240	1/2	103,308	1/2	118,377	1/2	133,439	1/2	148,500
3/4	13,821	3/4	28,889	3/4	43,597	3/4	58,418	3/4	73,486	3/4	88,554	3/4	103,622	3/4	118,691	3/4	133,753	3/4	148,814
11	14,135	11	29,203	11	43,898	11	58,732	11	73,800	11	88,868	11	103,936	11	119,004	11	134,067	11	149,128
1/4	14,449	1/4	29,517	1/4	44,199	1/4	59,046	1/4	74,114	1/4	89,182	1/4	104,250	1/4	119,318	1/4	134,381	1/4	149,441
1/2	14,763	1/2	29,831	1/2	44,500	1/2	59,360	1/2	74,428	1/2	89,496	1/2	104,564	1/2	119,632	1/2	134,694	1/2	149,755
3/4	15,077	3/4	30,144	3/4	44,802	3/4	59,674	3/4	74,742	3/4	89,810	3/4	104,878	3/4	119,946	3/4	135,008	3/4	150,069

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN WITH "HERMETIC" CLOSED GAUGING DEVICE.

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "CCL 404"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03 1/2"

CAPACITIES GIVEN IN WHOLE GALLONS																			
IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	150,383	0	165,443	0	180,437	0	195,410	0	210,318	0		0		0		0		0	
1/4	150,696	1/4	165,757	1/4	180,749	1/4	195,722	1/4	210,610	1/4		1/4		1/4		1/4		1/4	
1/2	151,010	1/2	166,071	1/2	181,061	1/2	196,034	1/2	210,902	1/2		1/2		1/2		1/2		1/2	
3/4	151,324	3/4	166,385	3/4	181,373	3/4	196,346	3/4	211,194	3/4		3/4		3/4		3/4		3/4	
1	151,638	1	166,699	1	181,684	1	196,658	1	211,486	1		1		1		1		1	
1/4	151,952	1/4	167,012	1/4	181,996	1/4	196,970	1/4	211,746	1/4		1/4		1/4		1/4		1/4	
1/2	152,265	1/2	167,326	1/2	182,308	1/2	197,281	1/2	212,007	1/2		1/2		1/2		1/2		1/2	
3/4	152,579	3/4	167,640	3/4	182,620	3/4	197,593	3/4	212,267	3/4		3/4		3/4		3/4		3/4	
2	152,893	2	167,954	2	182,932	2	197,905	2	212,528	2		2		2		2		2	
1/4	153,207	1/4	168,267	1/4	183,244	1/4	198,217	1/4	212,736	1/4		1/4		1/4		1/4		1/4	
1/2	153,520	1/2	168,580	1/2	183,556	1/2	198,529	1/2	212,944	1/2		1/2		1/2		1/2		1/2	
3/4	153,834	3/4	168,894	3/4	183,868	3/4	198,841	3/4	213,152	3/4		3/4		3/4		3/4		3/4	
3	154,148	3	169,207	3	184,180	3	199,153	3	213,360	3		3		3		3		3	
1/4	154,462	1/4	169,519	1/4	184,492	1/4	199,465	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	154,775	1/2	169,831	1/2	184,804	1/2	199,777	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,089	3/4	170,143	3/4	185,116	3/4	200,089	3/4		3/4		3/4		3/4		3/4		3/4	
4	155,403	4	170,455	4	185,428	4	200,401	4		4		4		4		4		4	
1/4	155,717	1/4	170,767	1/4	185,740	1/4	200,713	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,030	1/2	171,078	1/2	186,052	1/2	201,025	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,344	3/4	171,390	3/4	186,364	3/4	201,337	3/4		3/4		3/4		3/4		3/4		3/4	
5	156,658	5	171,702	5	186,675	5	201,649	5		5		5		5		5		5	
1/4	156,972	1/4	172,014	1/4	186,987	1/4	201,961	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	157,286	1/2	172,326	1/2	187,299	1/2	202,273	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	157,599	3/4	172,638	3/4	187,611	3/4	202,584	3/4		3/4		3/4		3/4		3/4		3/4	
6	157,913	6	172,950	6	187,923	6	202,896	6		6		6		6		6		6	
1/4	158,227	1/4	173,262	1/4	188,235	1/4	203,208	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	158,541	1/2	173,574	1/2	188,547	1/2	203,520	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	158,854	3/4	173,886	3/4	188,859	3/4	203,832	3/4		3/4		3/4		3/4		3/4		3/4	
7	159,168	7	174,198	7	189,171	7	204,144	7		7		7		7		7		7	
1/4	159,482	1/4	174,510	1/4	189,483	1/4	204,456	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	159,796	1/2	174,822	1/2	189,795	1/2	204,768	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	160,109	3/4	175,134	3/4	190,107	3/4	205,080	3/4		3/4		3/4		3/4		3/4		3/4	
8	160,423	8	175,446	8	190,419	8	205,392	8		8		8		8		8		8	
1/4	160,737	1/4	175,758	1/4	190,731	1/4	205,704	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	161,051	1/2	176,070	1/2	191,043	1/2	206,016	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	161,365	3/4	176,381	3/4	191,355	3/4	206,328	3/4		3/4		3/4		3/4		3/4		3/4	
9	161,678	9	176,693	9	191,667	9	206,640	9		9		9		9		9		9	
1/4	161,992	1/4	177,005	1/4	191,978	1/4	206,952	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	162,306	1/2	177,317	1/2	192,290	1/2	207,264	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	162,620	3/4	177,629	3/4	192,602	3/4	207,575	3/4		3/4		3/4		3/4		3/4		3/4	
10	162,933	10	177,941	10	192,914	10	207,887	10		10		10		10		10		10	
1/4	163,247	1/4	178,253	1/4	193,226	1/4	208,196	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	163,561	1/2	178,565	1/2	193,538	1/2	208,505	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	163,875	3/4	178,877	3/4	193,850	3/4	208,814	3/4		3/4		3/4		3/4		3/4		3/4	
11	164,188	11	179,189	11	194,162	11	209,122	11		11		11		11		11		11	
1/4	164,502	1/4	179,501	1/4	194,474	1/4	209,421	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	164,816	1/2	179,813	1/2	194,786	1/2	209,720	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	165,130	3/4	180,125	3/4	195,098	3/4	210,019	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/19/2011 CL - SW
CALCULATED: 01/19/2011 CL
PRINTED: 01/19/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2011

PRECISION MEASUREMENT
& ANALYSIS, INC.
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BARGE "CCL 404"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	841	0	15,391	0	30,458	0	45,483	0	60,544	0	75,612	0	90,680	0	105,748	0	120,816	0	135,878
1/4	1,057	1/4	15,704	1/4	30,772	1/4	45,796	1/4	60,857	1/4	75,926	1/4	90,994	1/4	106,062	1/4	121,130	1/4	136,192
1/2	1,273	1/2	16,018	1/2	31,086	1/2	46,109	1/2	61,171	1/2	76,240	1/2	91,308	1/2	106,376	1/2	121,444	1/2	136,506
3/4	1,489	3/4	16,332	3/4	31,400	3/4	46,422	3/4	61,485	3/4	76,554	3/4	91,622	3/4	106,690	3/4	121,758	3/4	136,819
1	1,705	1	16,646	1	31,714	1	46,734	1	61,799	1	76,867	1	91,936	1	107,004	1	122,072	1	137,133
1/4	1,989	1/4	16,960	1/4	32,028	1/4	47,047	1/4	62,113	1/4	77,181	1/4	92,250	1/4	107,318	1/4	122,386	1/4	137,447
1/2	2,273	1/2	17,274	1/2	32,342	1/2	47,361	1/2	62,427	1/2	77,495	1/2	92,563	1/2	107,632	1/2	122,700	1/2	137,761
3/4	2,557	3/4	17,588	3/4	32,656	3/4	47,674	3/4	62,741	3/4	77,809	3/4	92,877	3/4	107,946	3/4	123,014	3/4	138,074
2	2,841	2	17,902	2	32,970	2	47,987	2	63,055	2	78,123	2	93,191	2	108,259	2	123,328	2	138,388
1/4	3,153	1/4	18,216	1/4	33,284	1/4	48,301	1/4	63,369	1/4	78,437	1/4	93,505	1/4	108,573	1/4	123,641	1/4	138,702
1/2	3,466	1/2	18,530	1/2	33,597	1/2	48,615	1/2	63,683	1/2	78,751	1/2	93,819	1/2	108,887	1/2	123,955	1/2	139,016
3/4	3,779	3/4	18,844	3/4	33,911	3/4	48,929	3/4	63,997	3/4	79,065	3/4	94,133	3/4	109,201	3/4	124,269	3/4	139,330
3	4,091	3	19,158	3	34,225	3	49,242	3	64,311	3	79,379	3	94,447	3	109,515	3	124,583	3	139,643
1/4	4,405	1/4	19,471	1/4	34,539	1/4	49,556	1/4	64,625	1/4	79,693	1/4	94,761	1/4	109,829	1/4	124,896	1/4	139,957
1/2	4,718	1/2	19,785	1/2	34,852	1/2	49,870	1/2	64,938	1/2	80,007	1/2	95,075	1/2	110,143	1/2	125,210	1/2	140,271
3/4	5,032	3/4	20,099	3/4	35,166	3/4	50,184	3/4	65,252	3/4	80,321	3/4	95,389	3/4	110,457	3/4	125,524	3/4	140,585
4	5,346	4	20,413	4	35,480	4	50,498	4	65,566	4	80,634	4	95,703	4	110,771	4	125,838	4	140,898
1/4	5,659	1/4	20,727	1/4	35,792	1/4	50,812	1/4	65,880	1/4	80,948	1/4	96,017	1/4	111,085	1/4	126,151	1/4	141,212
1/2	5,973	1/2	21,041	1/2	36,105	1/2	51,126	1/2	66,194	1/2	81,262	1/2	96,331	1/2	111,399	1/2	126,465	1/2	141,526
3/4	6,287	3/4	21,355	3/4	36,417	3/4	51,440	3/4	66,508	3/4	81,576	3/4	96,644	3/4	111,713	3/4	126,779	3/4	141,840
5	6,601	5	21,669	5	36,730	5	51,754	5	66,822	5	81,890	5	96,958	5	112,027	5	127,093	5	142,153
1/4	6,915	1/4	21,983	1/4	37,043	1/4	52,068	1/4	67,136	1/4	82,204	1/4	97,272	1/4	112,340	1/4	127,406	1/4	142,467
1/2	7,229	1/2	22,297	1/2	37,355	1/2	52,382	1/2	67,450	1/2	82,518	1/2	97,586	1/2	112,654	1/2	127,720	1/2	142,781
3/4	7,543	3/4	22,611	3/4	37,668	3/4	52,696	3/4	67,764	3/4	82,832	3/4	97,900	3/4	112,968	3/4	128,034	3/4	143,095
6	7,857	6	22,924	6	37,980	6	53,009	6	68,078	6	83,146	6	98,214	6	113,282	6	128,348	6	143,408
1/4	8,171	1/4	23,238	1/4	38,293	1/4	53,323	1/4	68,392	1/4	83,460	1/4	98,528	1/4	113,596	1/4	128,662	1/4	143,722
1/2	8,485	1/2	23,552	1/2	38,606	1/2	53,637	1/2	68,705	1/2	83,774	1/2	98,842	1/2	113,910	1/2	128,975	1/2	144,036
3/4	8,798	3/4	23,866	3/4	38,918	3/4	53,951	3/4	69,019	3/4	84,088	3/4	99,156	3/4	114,224	3/4	129,289	3/4	144,350
7	9,112	7	24,180	7	39,231	7	54,265	7	69,333	7	84,402	7	99,470	7	114,538	7	129,603	7	144,664
1/4	9,426	1/4	24,494	1/4	39,543	1/4	54,579	1/4	69,647	1/4	84,715	1/4	99,784	1/4	114,852	1/4	129,917	1/4	144,977
1/2	9,740	1/2	24,808	1/2	39,856	1/2	54,893	1/2	69,961	1/2	85,029	1/2	100,098	1/2	115,166	1/2	130,230	1/2	145,291
3/4	10,054	3/4	25,122	3/4	40,169	3/4	55,207	3/4	70,275	3/4	85,343	3/4	100,411	3/4	115,480	3/4	130,544	3/4	145,605
8	10,368	8	25,436	8	40,481	8	55,521	8	70,589	8	85,657	8	100,725	8	115,794	8	130,858	8	145,919
1/4	10,682	1/4	25,750	1/4	40,794	1/4	55,835	1/4	70,903	1/4	85,971	1/4	101,039	1/4	116,108	1/4	131,172	1/4	146,232
1/2	10,996	1/2	26,064	1/2	41,106	1/2	56,149	1/2	71,217	1/2	86,285	1/2	101,353	1/2	116,421	1/2	131,485	1/2	146,546
3/4	11,310	3/4	26,377	3/4	41,419	3/4	56,463	3/4	71,531	3/4	86,599	3/4	101,667	3/4	116,735	3/4	131,799	3/4	146,860
9	11,624	9	26,691	9	41,732	9	56,777	9	71,845	9	86,913	9	101,981	9	117,049	9	132,113	9	147,174
1/4	11,938	1/4	27,005	1/4	42,044	1/4	57,090	1/4	72,159	1/4	87,227	1/4	102,295	1/4	117,363	1/4	132,427	1/4	147,487
1/2	12,251	1/2	27,319	1/2	42,357	1/2	57,404	1/2	72,473	1/2	87,541	1/2	102,609	1/2	117,677	1/2	132,740	1/2	147,801
3/4	12,565	3/4	27,633	3/4	42,669	3/4	57,718	3/4	72,786	3/4	87,855	3/4	102,923	3/4	117,991	3/4	133,054	3/4	148,115
10	12,879	10	27,947	10	42,982	10	58,032	10	73,100	10	88,169	10	103,237	10	118,305	10	133,368	10	148,429
1/4	13,193	1/4	28,261	1/4	43,295	1/4	58,346	1/4	73,414	1/4	88,482	1/4	103,551	1/4	118,619	1/4	133,682	1/4	148,743
1/2	13,507	1/2	28,575	1/2	43,607	1/2	58,660	1/2	73,728	1/2	88,796	1/2	103,865	1/2	118,933	1/2	133,996	1/2	149,056
3/4	13,821	3/4	28,889	3/4	43,920	3/4	58,974	3/4	74,042	3/4	89,110	3/4	104,179	3/4	119,247	3/4	134,309	3/4	149,370
11	14,135	11	29,203	11	44,232	11	59,288	11	74,356	11	89,424	11	104,492	11	119,561	11	134,623	11	149,684
1/4	14,449	1/4	29,517	1/4	44,545	1/4	59,602	1/4	74,670	1/4	89,738	1/4	104,806	1/4	119,875	1/4	134,937	1/4	149,998
1/2	14,763	1/2	29,831	1/2	44,858	1/2	59,916	1/2	74,984	1/2	90,052	1/2	105,120	1/2	120,188	1/2	135,251	1/2	150,311
3/4	15,077	3/4	30,144	3/4	45,170	3/4	60,230	3/4	75,298	3/4	90,366	3/4	105,434	3/4	120,502	3/4	135,564	3/4	150,625

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN WITH "HERMETIC" CLOSED GAUGING DEVICE.

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "CCL 404"

2 STBD
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03 1/2"

CAPACITIES GIVEN IN WHOLE GALLONS																			
IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	150,939	0	166,000	0	180,993	0	195,966	0	210,874	0		0		0		0		0	
1/4	151,253	1/4	166,313	1/4	181,305	1/4	196,278	1/4	211,166	1/4		1/4		1/4		1/4		1/4	
1/2	151,566	1/2	166,627	1/2	181,617	1/2	196,590	1/2	211,458	1/2		1/2		1/2		1/2		1/2	
3/4	151,880	3/4	166,941	3/4	181,929	3/4	196,902	3/4	211,750	3/4		3/4		3/4		3/4		3/4	
1	152,194	1	167,255	1	182,241	1	197,214	1	212,042	1		1		1		1		1	
1/4	152,508	1/4	167,568	1/4	182,553	1/4	197,526	1/4	212,303	1/4		1/4		1/4		1/4		1/4	
1/2	152,821	1/2	167,882	1/2	182,864	1/2	197,838	1/2	212,563	1/2		1/2		1/2		1/2		1/2	
3/4	153,135	3/4	168,196	3/4	183,176	3/4	198,150	3/4	212,823	3/4		3/4		3/4		3/4		3/4	
2	153,449	2	168,510	2	183,488	2	198,462	2	213,084	2		2		2		2		2	
1/4	153,763	1/4	168,823	1/4	183,800	1/4	198,773	1/4	213,292	1/4		1/4		1/4		1/4		1/4	
1/2	154,077	1/2	169,136	1/2	184,112	1/2	199,085	1/2	213,500	1/2		1/2		1/2		1/2		1/2	
3/4	154,390	3/4	169,450	3/4	184,424	3/4	199,397	3/4	213,708	3/4		3/4		3/4		3/4		3/4	
3	154,704	3	169,763	3	184,736	3	199,709	3	213,916	3		3		3		3		3	
1/4	155,018	1/4	170,075	1/4	185,048	1/4	200,021	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	155,332	1/2	170,387	1/2	185,360	1/2	200,333	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,645	3/4	170,699	3/4	185,672	3/4	200,645	3/4		3/4		3/4		3/4		3/4		3/4	
4	155,959	4	171,011	4	185,984	4	200,957	4		4		4		4		4		4	
1/4	156,273	1/4	171,323	1/4	186,296	1/4	201,269	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,587	1/2	171,635	1/2	186,608	1/2	201,581	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,900	3/4	171,947	3/4	186,920	3/4	201,893	3/4		3/4		3/4		3/4		3/4		3/4	
5	157,214	5	172,258	5	187,232	5	202,205	5		5		5		5		5		5	
1/4	157,528	1/4	172,570	1/4	187,544	1/4	202,517	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	157,842	1/2	172,882	1/2	187,856	1/2	202,829	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	158,155	3/4	173,194	3/4	188,167	3/4	203,141	3/4		3/4		3/4		3/4		3/4		3/4	
6	158,469	6	173,506	6	188,479	6	203,453	6		6		6		6		6		6	
1/4	158,783	1/4	173,818	1/4	188,791	1/4	203,764	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	159,097	1/2	174,130	1/2	189,103	1/2	204,076	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	159,411	3/4	174,442	3/4	189,415	3/4	204,388	3/4		3/4		3/4		3/4		3/4		3/4	
7	159,724	7	174,754	7	189,727	7	204,700	7		7		7		7		7		7	
1/4	160,038	1/4	175,066	1/4	190,039	1/4	205,012	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	160,352	1/2	175,378	1/2	190,351	1/2	205,324	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	160,666	3/4	175,690	3/4	190,663	3/4	205,636	3/4		3/4		3/4		3/4		3/4		3/4	
8	160,979	8	176,002	8	190,975	8	205,948	8		8		8		8		8		8	
1/4	161,293	1/4	176,314	1/4	191,287	1/4	206,260	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	161,607	1/2	176,626	1/2	191,599	1/2	206,572	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	161,921	3/4	176,938	3/4	191,911	3/4	206,884	3/4		3/4		3/4		3/4		3/4		3/4	
9	162,234	9	177,250	9	192,223	9	207,196	9		9		9		9		9		9	
1/4	162,548	1/4	177,561	1/4	192,535	1/4	207,508	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	162,862	1/2	177,873	1/2	192,847	1/2	207,820	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	163,176	3/4	178,185	3/4	193,159	3/4	208,132	3/4		3/4		3/4		3/4		3/4		3/4	
10	163,489	10	178,497	10	193,470	10	208,444	10		10		10		10		10		10	
1/4	163,803	1/4	178,809	1/4	193,782	1/4	208,752	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	164,117	1/2	179,121	1/2	194,094	1/2	209,061	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	164,431	3/4	179,433	3/4	194,406	3/4	209,370	3/4		3/4		3/4		3/4		3/4		3/4	
11	164,745	11	179,745	11	194,718	11	209,678	11		11		11		11		11		11	
1/4	165,058	1/4	180,057	1/4	195,030	1/4	209,977	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	165,372	1/2	180,369	1/2	195,342	1/2	210,276	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	165,686	3/4	180,681	3/4	195,654	3/4	210,575	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/19/2011 CL - SW
CALCULATED: 01/19/2011 CL
PRINTED: 01/19/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2011

PRECISION MEASUREMENT
& ANALYSIS, INC.
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BARGE "CCL 404"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	837	0	15,301	0	30,274	0	44,857	0	59,691	0	74,652	0	89,582	0	104,518	0	119,467	0	134,385
1/4	1,052	1/4	15,613	1/4	30,586	1/4	45,160	1/4	60,003	1/4	74,963	1/4	89,892	1/4	104,830	1/4	119,779	1/4	134,694
1/2	1,267	1/2	15,925	1/2	30,898	1/2	45,463	1/2	60,316	1/2	75,275	1/2	90,203	1/2	105,141	1/2	120,090	1/2	135,002
3/4	1,482	3/4	16,237	3/4	31,210	3/4	45,766	3/4	60,626	3/4	75,587	3/4	90,514	3/4	105,453	3/4	120,401	3/4	135,311
1	1,697	1	16,549	1	31,522	1	46,069	1	60,938	1	75,898	1	90,825	1	105,764	1	120,713	1	135,619
1/4	1,979	1/4	16,861	1/4	31,834	1/4	46,372	1/4	61,250	1/4	76,210	1/4	91,135	1/4	106,076	1/4	121,024	1/4	135,928
1/2	2,262	1/2	17,172	1/2	32,146	1/2	46,675	1/2	61,561	1/2	76,522	1/2	91,446	1/2	106,387	1/2	121,336	1/2	136,236
3/4	2,545	3/4	17,484	3/4	32,458	3/4	46,978	3/4	61,873	3/4	76,833	3/4	91,756	3/4	106,698	3/4	121,647	3/4	136,545
2	2,827	2	17,796	2	32,769	2	47,281	2	62,185	2	77,145	2	92,067	2	107,010	2	121,958	2	136,853
1/4	3,139	1/4	18,108	1/4	33,081	1/4	47,584	1/4	62,496	1/4	77,457	1/4	92,377	1/4	107,321	1/4	122,270	1/4	137,162
1/2	3,450	1/2	18,420	1/2	33,393	1/2	47,888	1/2	62,808	1/2	77,768	1/2	92,688	1/2	107,633	1/2	122,581	1/2	137,470
3/4	3,761	3/4	18,732	3/4	33,704	3/4	48,192	3/4	63,120	3/4	78,080	3/4	92,998	3/4	107,944	3/4	122,892	3/4	137,779
3	4,072	3	19,044	3	34,016	3	48,495	3	63,431	3	78,391	3	93,309	3	108,256	3	123,204	3	138,087
1/4	4,384	1/4	19,356	1/4	34,324	1/4	48,801	1/4	63,743	1/4	78,703	1/4	93,620	1/4	108,567	1/4	123,515	1/4	138,396
1/2	4,695	1/2	19,668	1/2	34,632	1/2	49,106	1/2	64,055	1/2	79,014	1/2	93,931	1/2	108,879	1/2	123,826	1/2	138,704
3/4	5,007	3/4	19,980	3/4	34,940	3/4	49,412	3/4	64,366	3/4	79,325	3/4	94,242	3/4	109,190	3/4	124,138	3/4	139,013
4	5,319	4	20,292	4	35,248	4	49,718	4	64,678	4	79,636	4	94,553	4	109,501	4	124,449	4	139,321
1/4	5,631	1/4	20,604	1/4	35,548	1/4	50,029	1/4	64,990	1/4	79,947	1/4	94,864	1/4	109,813	1/4	124,760	1/4	139,629
1/2	5,943	1/2	20,916	1/2	35,848	1/2	50,341	1/2	65,301	1/2	80,258	1/2	95,176	1/2	110,124	1/2	125,072	1/2	139,938
3/4	6,255	3/4	21,228	3/4	36,148	3/4	50,653	3/4	65,613	3/4	80,568	3/4	95,487	3/4	110,436	3/4	125,383	3/4	140,246
5	6,567	5	21,540	5	36,448	5	50,964	5	65,925	5	80,879	5	95,798	5	110,747	5	125,694	5	140,555
1/4	6,878	1/4	21,852	1/4	36,748	1/4	51,276	1/4	66,236	1/4	81,190	1/4	96,110	1/4	111,059	1/4	126,006	1/4	140,864
1/2	7,190	1/2	22,164	1/2	37,048	1/2	51,588	1/2	66,548	1/2	81,501	1/2	96,421	1/2	111,370	1/2	126,317	1/2	141,174
3/4	7,502	3/4	22,475	3/4	37,348	3/4	51,899	3/4	66,860	3/4	81,812	3/4	96,733	3/4	111,681	3/4	126,628	3/4	141,483
6	7,814	6	22,787	6	37,648	6	52,211	6	67,171	6	82,122	6	97,044	6	111,993	6	126,940	6	141,793
1/4	8,126	1/4	23,099	1/4	37,948	1/4	52,523	1/4	67,483	1/4	82,433	1/4	97,356	1/4	112,304	1/4	127,251	1/4	142,105
1/2	8,438	1/2	23,411	1/2	38,248	1/2	52,834	1/2	67,795	1/2	82,744	1/2	97,667	1/2	112,616	1/2	127,562	1/2	142,417
3/4	8,750	3/4	23,723	3/4	38,548	3/4	53,146	3/4	68,106	3/4	83,055	3/4	97,978	3/4	112,927	3/4	127,873	3/4	142,730
7	9,062	7	24,035	7	38,848	7	53,458	7	68,418	7	83,366	7	98,290	7	113,239	7	128,185	7	143,042
1/4	9,374	1/4	24,347	1/4	39,149	1/4	53,769	1/4	68,730	1/4	83,676	1/4	98,601	1/4	113,550	1/4	128,496	1/4	143,354
1/2	9,686	1/2	24,659	1/2	39,449	1/2	54,081	1/2	69,042	1/2	83,987	1/2	98,913	1/2	113,861	1/2	128,807	1/2	143,667
3/4	9,998	3/4	24,971	3/4	39,749	3/4	54,393	3/4	69,353	3/4	84,298	3/4	99,224	3/4	114,173	3/4	129,119	3/4	143,979
8	10,310	8	25,283	8	40,049	8	54,704	8	69,665	8	84,609	8	99,536	8	114,484	8	129,430	8	144,291
1/4	10,622	1/4	25,595	1/4	40,349	1/4	55,016	1/4	69,977	1/4	84,920	1/4	99,847	1/4	114,796	1/4	129,741	1/4	144,603
1/2	10,934	1/2	25,907	1/2	40,649	1/2	55,328	1/2	70,288	1/2	85,230	1/2	100,158	1/2	115,107	1/2	130,053	1/2	144,916
3/4	11,246	3/4	26,219	3/4	40,949	3/4	55,639	3/4	70,600	3/4	85,541	3/4	100,470	3/4	115,419	3/4	130,364	3/4	145,228
9	11,558	9	26,531	9	41,249	9	55,951	9	70,912	9	85,852	9	100,781	9	115,730	9	130,675	9	145,540
1/4	11,870	1/4	26,843	1/4	41,549	1/4	56,263	1/4	71,223	1/4	86,163	1/4	101,093	1/4	116,041	1/4	130,986	1/4	145,853
1/2	12,181	1/2	27,155	1/2	41,849	1/2	56,574	1/2	71,535	1/2	86,474	1/2	101,404	1/2	116,353	1/2	131,296	1/2	146,165
3/4	12,493	3/4	27,466	3/4	42,149	3/4	56,886	3/4	71,847	3/4	86,784	3/4	101,716	3/4	116,664	3/4	131,607	3/4	146,477
10	12,805	10	27,778	10	42,449	10	57,198	10	72,158	10	87,095	10	102,027	10	116,976	10	131,918	10	146,790
1/4	13,117	1/4	28,090	1/4	42,749	1/4	57,509	1/4	72,470	1/4	87,406	1/4	102,338	1/4	117,287	1/4	132,226	1/4	147,102
1/2	13,429	1/2	28,402	1/2	43,050	1/2	57,821	1/2	72,782	1/2	87,717	1/2	102,650	1/2	117,599	1/2	132,535	1/2	147,414
3/4	13,741	3/4	28,714	3/4	43,350	3/4	58,133	3/4	73,093	3/4	88,028	3/4	102,961	3/4	117,910	3/4	132,843	3/4	147,727
11	14,053	11	29,026	11	43,651	11	58,444	11	73,405	11	88,338	11	103,273	11	118,221	11	133,152	11	148,039
1/4	14,365	1/4	29,338	1/4	43,952	1/4	58,756	1/4	73,717	1/4	88,649	1/4	103,584	1/4	118,533	1/4	133,460	1/4	148,351
1/2	14,677	1/2	29,650	1/2	44,254	1/2	59,068	1/2	74,028	1/2	88,960	1/2	103,896	1/2	118,844	1/2	133,769	1/2	148,664
3/4	14,989	3/4	29,962	3/4	44,556	3/4	59,380	3/4	74,340	3/4	89,271	3/4	104,207	3/4	119,156	3/4	134,077	3/4	148,976

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN WITH "HERMETIC" CLOSED GAUGING DEVICE.

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PRECISION MEASUREMENT
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BARGE "CCL 404"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	149,288	0	161,011	0	172,465	0	183,904	0	195,293	0		0		0		0		0	
1/4	149,582	1/4	161,251	1/4	172,703	1/4	184,143	1/4	195,514	1/4		1/4		1/4		1/4		1/4	
1/2	149,877	1/2	161,490	1/2	172,942	1/2	184,381	1/2	195,735	1/2		1/2		1/2		1/2		1/2	
3/4	150,171	3/4	161,730	3/4	173,180	3/4	184,619	3/4	195,957	3/4		3/4		3/4		3/4		3/4	
1	150,465	1	161,970	1	173,418	1	184,858	1	196,178	1		1		1		1		1	
1/4	150,705	1/4	162,209	1/4	173,657	1/4	185,096	1/4	196,368	1/4		1/4		1/4		1/4		1/4	
1/2	150,944	1/2	162,449	1/2	173,895	1/2	185,334	1/2	196,558	1/2		1/2		1/2		1/2		1/2	
3/4	151,184	3/4	162,689	3/4	174,133	3/4	185,573	3/4	196,747	3/4		3/4		3/4		3/4		3/4	
2	151,424	2	162,928	2	174,372	2	185,811	2	196,937	2		2		2		2		2	
1/4	151,663	1/4	163,168	1/4	174,610	1/4	186,049	1/4	197,075	1/4		1/4		1/4		1/4		1/4	
1/2	151,903	1/2	163,407	1/2	174,848	1/2	186,287	1/2	197,213	1/2		1/2		1/2		1/2		1/2	
3/4	152,143	3/4	163,646	3/4	175,087	3/4	186,526	3/4	197,351	3/4		3/4		3/4		3/4		3/4	
3	152,382	3	163,886	3	175,325	3	186,764	3	197,488	3		3		3		3		3	
1/4	152,622	1/4	164,124	1/4	175,563	1/4	187,002	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	152,862	1/2	164,362	1/2	175,802	1/2	187,241	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	153,101	3/4	164,601	3/4	176,040	3/4	187,479	3/4		3/4		3/4		3/4		3/4		3/4	
4	153,341	4	164,839	4	176,278	4	187,717	4		4		4		4		4		4	
1/4	153,581	1/4	165,077	1/4	176,517	1/4	187,956	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	153,821	1/2	165,316	1/2	176,755	1/2	188,194	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	154,060	3/4	165,554	3/4	176,993	3/4	188,432	3/4		3/4		3/4		3/4		3/4		3/4	
5	154,300	5	165,792	5	177,231	5	188,671	5		5		5		5		5		5	
1/4	154,540	1/4	166,031	1/4	177,470	1/4	188,909	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	154,779	1/2	166,269	1/2	177,708	1/2	189,147	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,019	3/4	166,507	3/4	177,946	3/4	189,386	3/4		3/4		3/4		3/4		3/4		3/4	
6	155,259	6	166,746	6	178,185	6	189,624	6		6		6		6		6		6	
1/4	155,498	1/4	166,984	1/4	178,423	1/4	189,862	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	155,738	1/2	167,222	1/2	178,661	1/2	190,100	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,978	3/4	167,461	3/4	178,900	3/4	190,339	3/4		3/4		3/4		3/4		3/4		3/4	
7	156,217	7	167,699	7	179,138	7	190,577	7		7		7		7		7		7	
1/4	156,457	1/4	167,937	1/4	179,376	1/4	190,815	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,697	1/2	168,175	1/2	179,615	1/2	191,054	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,936	3/4	168,414	3/4	179,853	3/4	191,292	3/4		3/4		3/4		3/4		3/4		3/4	
8	157,176	8	168,652	8	180,091	8	191,530	8		8		8		8		8		8	
1/4	157,416	1/4	168,890	1/4	180,330	1/4	191,769	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	157,655	1/2	169,129	1/2	180,568	1/2	192,007	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	157,895	3/4	169,367	3/4	180,806	3/4	192,245	3/4		3/4		3/4		3/4		3/4		3/4	
9	158,135	9	169,605	9	181,045	9	192,484	9		9		9		9		9		9	
1/4	158,374	1/4	169,844	1/4	181,283	1/4	192,722	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	158,614	1/2	170,082	1/2	181,521	1/2	192,960	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	158,854	3/4	170,320	3/4	181,759	3/4	193,199	3/4		3/4		3/4		3/4		3/4		3/4	
10	159,094	10	170,559	10	181,998	10	193,437	10		10		10		10		10		10	
1/4	159,333	1/4	170,797	1/4	182,236	1/4	193,673	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	159,573	1/2	171,035	1/2	182,474	1/2	193,908	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	159,813	3/4	171,274	3/4	182,713	3/4	194,144	3/4		3/4		3/4		3/4		3/4		3/4	
11	160,052	11	171,512	11	182,951	11	194,380	11		11		11		11		11		11	
1/4	160,292	1/4	171,750	1/4	183,189	1/4	194,608	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	160,532	1/2	171,989	1/2	183,428	1/2	194,836	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	160,771	3/4	172,227	3/4	183,666	3/4	195,065	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/19/2011 CL - SW
CALCULATED: 01/19/2011 CL
PRINTED: 01/19/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2011

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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BARGE "CCL 404"

3 STBD
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	838	0	15,320	0	30,318	0	45,274	0	60,265	0	75,264	0	90,262	0	105,261	0	120,260	0	135,259
1/4	1,052	1/4	15,632	1/4	30,631	1/4	45,585	1/4	60,577	1/4	75,576	1/4	90,575	1/4	105,574	1/4	120,573	1/4	135,571
1/2	1,267	1/2	15,945	1/2	30,943	1/2	45,896	1/2	60,890	1/2	75,889	1/2	90,887	1/2	105,886	1/2	120,885	1/2	135,884
3/4	1,482	3/4	16,257	3/4	31,256	3/4	46,208	3/4	61,202	3/4	76,201	3/4	91,200	3/4	106,199	3/4	121,198	3/4	136,196
1	1,697	1	16,570	1	31,568	1	46,519	1	61,515	1	76,514	1	91,512	1	106,511	1	121,510	1	136,509
1/4	1,979	1/4	16,882	1/4	31,881	1/4	46,831	1/4	61,827	1/4	76,826	1/4	91,825	1/4	106,824	1/4	121,822	1/4	136,821
1/2	2,262	1/2	17,195	1/2	32,193	1/2	47,142	1/2	62,140	1/2	77,138	1/2	92,137	1/2	107,136	1/2	122,135	1/2	137,134
3/4	2,545	3/4	17,507	3/4	32,505	3/4	47,454	3/4	62,452	3/4	77,451	3/4	92,450	3/4	107,449	3/4	122,447	3/4	137,446
2	2,828	2	17,820	2	32,818	2	47,766	2	62,765	2	77,763	2	92,762	2	107,761	2	122,760	2	137,759
1/4	3,139	1/4	18,132	1/4	33,130	1/4	48,078	1/4	63,077	1/4	78,076	1/4	93,075	1/4	108,074	1/4	123,072	1/4	138,071
1/2	3,450	1/2	18,444	1/2	33,443	1/2	48,391	1/2	63,390	1/2	78,388	1/2	93,387	1/2	108,386	1/2	123,385	1/2	138,384
3/4	3,761	3/4	18,757	3/4	33,755	3/4	48,703	3/4	63,702	3/4	78,701	3/4	93,700	3/4	108,699	3/4	123,697	3/4	138,696
3	4,073	3	19,069	3	34,068	3	49,016	3	64,014	3	79,013	3	94,012	3	109,011	3	124,010	3	139,009
1/4	4,385	1/4	19,382	1/4	34,380	1/4	49,328	1/4	64,327	1/4	79,326	1/4	94,325	1/4	109,323	1/4	124,322	1/4	139,321
1/2	4,697	1/2	19,694	1/2	34,692	1/2	49,641	1/2	64,639	1/2	79,638	1/2	94,637	1/2	109,636	1/2	124,635	1/2	139,634
3/4	5,009	3/4	20,007	3/4	35,004	3/4	49,953	3/4	64,952	3/4	79,951	3/4	94,950	3/4	109,948	3/4	124,947	3/4	139,946
4	5,321	4	20,319	4	35,316	4	50,266	4	65,264	4	80,263	4	95,262	4	110,261	4	125,260	4	140,259
1/4	5,633	1/4	20,632	1/4	35,628	1/4	50,578	1/4	65,577	1/4	80,576	1/4	95,575	1/4	110,573	1/4	125,572	1/4	140,571
1/2	5,946	1/2	20,944	1/2	35,939	1/2	50,890	1/2	65,889	1/2	80,888	1/2	95,887	1/2	110,886	1/2	125,885	1/2	140,884
3/4	6,258	3/4	21,257	3/4	36,250	3/4	51,203	3/4	66,202	3/4	81,201	3/4	96,199	3/4	111,198	3/4	126,197	3/4	141,196
5	6,571	5	21,569	5	36,561	5	51,515	5	66,514	5	81,513	5	96,512	5	111,511	5	126,510	5	141,508
1/4	6,883	1/4	21,882	1/4	36,872	1/4	51,828	1/4	66,827	1/4	81,826	1/4	96,824	1/4	111,823	1/4	126,822	1/4	141,821
1/2	7,196	1/2	22,194	1/2	37,183	1/2	52,140	1/2	67,139	1/2	82,138	1/2	97,137	1/2	112,136	1/2	127,135	1/2	142,133
3/4	7,508	3/4	22,507	3/4	37,494	3/4	52,453	3/4	67,452	3/4	82,451	3/4	97,449	3/4	112,448	3/4	127,447	3/4	142,446
6	7,821	6	22,819	6	37,806	6	52,765	6	67,764	6	82,763	6	97,762	6	112,761	6	127,760	6	142,758
1/4	8,133	1/4	23,131	1/4	38,117	1/4	53,078	1/4	68,077	1/4	83,075	1/4	98,074	1/4	113,073	1/4	128,072	1/4	143,071
1/2	8,446	1/2	23,444	1/2	38,428	1/2	53,390	1/2	68,389	1/2	83,388	1/2	98,387	1/2	113,386	1/2	128,384	1/2	143,383
3/4	8,758	3/4	23,756	3/4	38,739	3/4	53,703	3/4	68,702	3/4	83,700	3/4	98,699	3/4	113,698	3/4	128,697	3/4	143,696
7	9,070	7	24,069	7	39,060	7	54,015	7	69,014	7	84,013	7	99,012	7	114,011	7	129,009	7	144,008
1/4	9,383	1/4	24,381	1/4	39,361	1/4	54,328	1/4	69,327	1/4	84,325	1/4	99,324	1/4	114,323	1/4	129,322	1/4	144,321
1/2	9,695	1/2	24,694	1/2	39,673	1/2	54,640	1/2	69,639	1/2	84,638	1/2	99,637	1/2	114,636	1/2	129,634	1/2	144,633
3/4	10,008	3/4	25,006	3/4	39,984	3/4	54,953	3/4	69,952	3/4	84,950	3/4	99,949	3/4	114,948	3/4	129,947	3/4	144,946
8	10,320	8	25,319	8	40,295	8	55,265	8	70,264	8	85,263	8	100,262	8	115,261	8	130,259	8	145,258
1/4	10,633	1/4	25,631	1/4	40,606	1/4	55,578	1/4	70,576	1/4	85,575	1/4	100,574	1/4	115,573	1/4	130,572	1/4	145,571
1/2	10,945	1/2	25,944	1/2	40,917	1/2	55,890	1/2	70,889	1/2	85,888	1/2	100,887	1/2	115,885	1/2	130,884	1/2	145,883
3/4	11,258	3/4	26,256	3/4	41,228	3/4	56,203	3/4	71,201	3/4	86,200	3/4	101,199	3/4	116,198	3/4	131,197	3/4	146,196
9	11,570	9	26,569	9	41,540	9	56,515	9	71,514	9	86,513	9	101,512	9	116,510	9	131,509	9	146,508
1/4	11,883	1/4	26,881	1/4	41,851	1/4	56,828	1/4	71,826	1/4	86,825	1/4	101,824	1/4	116,823	1/4	131,822	1/4	146,821
1/2	12,195	1/2	27,194	1/2	42,162	1/2	57,140	1/2	72,139	1/2	87,138	1/2	102,137	1/2	117,135	1/2	132,134	1/2	147,133
3/4	12,508	3/4	27,506	3/4	42,473	3/4	57,452	3/4	72,451	3/4	87,450	3/4	102,449	3/4	117,448	3/4	132,447	3/4	147,446
10	12,820	10	27,818	10	42,784	10	57,765	10	72,764	10	87,763	10	102,761	10	117,760	10	132,759	10	147,758
1/4	13,133	1/4	28,131	1/4	43,095	1/4	58,077	1/4	73,076	1/4	88,075	1/4	103,074	1/4	118,073	1/4	133,072	1/4	148,070
1/2	13,445	1/2	28,443	1/2	43,406	1/2	58,390	1/2	73,389	1/2	88,388	1/2	103,386	1/2	118,385	1/2	133,384	1/2	148,383
3/4	13,757	3/4	28,756	3/4	43,718	3/4	58,702	3/4	73,701	3/4	88,700	3/4	103,699	3/4	118,698	3/4	133,697	3/4	148,695
11	14,070	11	29,068	11	44,029	11	59,015	11	74,014	11	89,013	11	104,011	11	119,010	11	134,009	11	149,008
1/4	14,382	1/4	29,381	1/4	44,340	1/4	59,327	1/4	74,326	1/4	89,325	1/4	104,324	1/4	119,323	1/4	134,322	1/4	149,320
1/2	14,695	1/2	29,693	1/2	44,651	1/2	59,640	1/2	74,639	1/2	89,637	1/2	104,636	1/2	119,635	1/2	134,634	1/2	149,633
3/4	15,007	3/4	30,006	3/4	44,962	3/4	59,952	3/4	74,951	3/4	89,950	3/4	104,949	3/4	119,948	3/4	134,946	3/4	149,945

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN WITH "HERMETIC" CLOSED GAUGING DEVICE.

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 42'-09" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.
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Pearland, Texas 77588
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BARGE "CCL 404"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-03 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	150,258	0	161,987	0	173,499	0	185,011	0	196,519	0		0		0		0		0	
1/4	150,552	1/4	162,227	1/4	173,739	1/4	185,251	1/4	196,751	1/4		1/4		1/4		1/4		1/4	
1/2	150,846	1/2	162,467	1/2	173,979	1/2	185,491	1/2	196,983	1/2		1/2		1/2		1/2		1/2	
3/4	151,141	3/4	162,707	3/4	174,219	3/4	185,730	3/4	197,216	3/4		3/4		3/4		3/4		3/4	
1	151,435	1	162,947	1	174,459	1	185,970	1	197,448	1		1		1		1		1	
1/4	151,675	1/4	163,187	1/4	174,698	1/4	186,210	1/4	197,649	1/4		1/4		1/4		1/4		1/4	
1/2	151,915	1/2	163,426	1/2	174,938	1/2	186,450	1/2	197,849	1/2		1/2		1/2		1/2		1/2	
3/4	152,155	3/4	163,666	3/4	175,178	3/4	186,690	3/4	198,050	3/4		3/4		3/4		3/4		3/4	
2	152,394	2	163,906	2	175,418	2	186,930	2	198,251	2		2		2		2		2	
1/4	152,634	1/4	164,146	1/4	175,658	1/4	187,169	1/4	198,399	1/4		1/4		1/4		1/4		1/4	
1/2	152,874	1/2	164,386	1/2	175,898	1/2	187,409	1/2	198,548	1/2		1/2		1/2		1/2		1/2	
3/4	153,114	3/4	164,626	3/4	176,137	3/4	187,649	3/4	198,697	3/4		3/4		3/4		3/4		3/4	
3	153,354	3	164,865	3	176,377	3	187,889	3	198,845	3		3		3		3		3	
1/4	153,594	1/4	165,105	1/4	176,617	1/4	188,129	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	153,833	1/2	165,345	1/2	176,857	1/2	188,369	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	154,073	3/4	165,585	3/4	177,097	3/4	188,608	3/4		3/4		3/4		3/4		3/4		3/4	
4	154,313	4	165,825	4	177,336	4	188,848	4		4		4		4		4		4	
1/4	154,553	1/4	166,065	1/4	177,576	1/4	189,088	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	154,793	1/2	166,304	1/2	177,816	1/2	189,328	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,032	3/4	166,544	3/4	178,056	3/4	189,568	3/4		3/4		3/4		3/4		3/4		3/4	
5	155,272	5	166,784	5	178,296	5	189,808	5		5		5		5		5		5	
1/4	155,512	1/4	167,024	1/4	178,536	1/4	190,047	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	155,752	1/2	167,264	1/2	178,775	1/2	190,287	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,992	3/4	167,504	3/4	179,015	3/4	190,527	3/4		3/4		3/4		3/4		3/4		3/4	
6	156,232	6	167,743	6	179,255	6	190,767	6		6		6		6		6		6	
1/4	156,471	1/4	167,983	1/4	179,495	1/4	191,007	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,711	1/2	168,223	1/2	179,735	1/2	191,247	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,951	3/4	168,463	3/4	179,975	3/4	191,486	3/4		3/4		3/4		3/4		3/4		3/4	
7	157,191	7	168,703	7	180,214	7	191,726	7		7		7		7		7		7	
1/4	157,431	1/4	168,942	1/4	180,454	1/4	191,966	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	157,671	1/2	169,182	1/2	180,694	1/2	192,206	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	157,910	3/4	169,422	3/4	180,934	3/4	192,446	3/4		3/4		3/4		3/4		3/4		3/4	
8	158,150	8	169,662	8	181,174	8	192,685	8		8		8		8		8		8	
1/4	158,390	1/4	169,902	1/4	181,414	1/4	192,925	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	158,630	1/2	170,142	1/2	181,653	1/2	193,165	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	158,870	3/4	170,381	3/4	181,893	3/4	193,405	3/4		3/4		3/4		3/4		3/4		3/4	
9	159,110	9	170,621	9	182,133	9	193,645	9		9		9		9		9		9	
1/4	159,349	1/4	170,861	1/4	182,373	1/4	193,885	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	159,589	1/2	171,101	1/2	182,613	1/2	194,124	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	159,829	3/4	171,341	3/4	182,853	3/4	194,364	3/4		3/4		3/4		3/4		3/4		3/4	
10	160,069	10	171,581	10	183,092	10	194,604	10		10		10		10		10		10	
1/4	160,309	1/4	171,820	1/4	183,332	1/4	194,844	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	160,549	1/2	172,060	1/2	183,572	1/2	195,083	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	160,788	3/4	172,300	3/4	183,812	3/4	195,323	3/4		3/4		3/4		3/4		3/4		3/4	
11	161,028	11	172,540	11	184,052	11	195,563	11		11		11		11		11		11	
1/4	161,268	1/4	172,780	1/4	184,291	1/4	195,802	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	161,508	1/2	173,020	1/2	184,531	1/2	196,041	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	161,748	3/4	173,259	3/4	184,771	3/4	196,280	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/19/2011 CL - SW
CALCULATED: 01/19/2011 CL
PRINTED: 01/19/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2011

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>



BARGE "CCL 404"

FUEL TANK

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-05 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	101	0	259	0	416	0	517	0									
1/4	1	1/4	104	1/4	262	1/4	419	1/4		1/4									
1/2	1	1/2	107	1/2	265	1/2	422	1/2		1/2									
3/4	2	3/4	110	3/4	269	3/4	425	3/4		3/4									
1	3	1	113	1	272	1	428	1		1									
1/4	4	1/4	116	1/4	276	1/4	430	1/4		1/4									
1/2	5	1/2	119	1/2	279	1/2	433	1/2		1/2									
3/4	6	3/4	122	3/4	282	3/4	436	3/4		3/4									
2	7	2	125	2	286	2	439	2		2									
1/4	9	1/4	129	1/4	289	1/4	442	1/4		1/4									
1/2	10	1/2	132	1/2	293	1/2	444	1/2		1/2									
3/4	12	3/4	135	3/4	296	3/4	447	3/4		3/4									
3	13	3	138	3	300	3	450	3		3									
1/4	15	1/4	141	1/4	303	1/4	453	1/4		1/4									
1/2	17	1/2	144	1/2	306	1/2	455	1/2		1/2									
3/4	19	3/4	148	3/4	310	3/4	458	3/4		3/4									
4	21	4	151	4	313	4	460	4		4									
1/4	23	1/4	154	1/4	316	1/4	463	1/4		1/4									
1/2	25	1/2	157	1/2	320	1/2	465	1/2		1/2									
3/4	27	3/4	161	3/4	323	3/4	468	3/4		3/4									
5	29	5	164	5	327	5	470	5		5									
1/4	31	1/4	167	1/4	330	1/4	473	1/4		1/4									
1/2	33	1/2	170	1/2	333	1/2	475	1/2		1/2									
3/4	35	3/4	174	3/4	337	3/4	477	3/4		3/4									
6	37	6	177	6	340	6	480	6		6									
1/4	40	1/4	180	1/4	343	1/4	482	1/4		1/4									
1/2	42	1/2	184	1/2	347	1/2	484	1/2		1/2									
3/4	44	3/4	187	3/4	350	3/4	486	3/4		3/4									
7	47	7	190	7	353	7	488	7		7									
1/4	49	1/4	194	1/4	356	1/4	490	1/4		1/4									
1/2	52	1/2	197	1/2	360	1/2	492	1/2		1/2									
3/4	54	3/4	201	3/4	363	3/4	494	3/4		3/4									
8	57	8	204	8	366	8	496	8		8									
1/4	59	1/4	207	1/4	369	1/4	498	1/4		1/4									
1/2	62	1/2	211	1/2	373	1/2	500	1/2		1/2									
3/4	64	3/4	214	3/4	376	3/4	502	3/4		3/4									
9	67	9	217	9	379	9	504	9		9									
1/4	70	1/4	221	1/4	382	1/4	505	1/4		1/4									
1/2	73	1/2	224	1/2	385	1/2	507	1/2		1/2									
3/4	75	3/4	228	3/4	388	3/4	508	3/4		3/4									
10	78	10	231	10	392	10	510	10		10									
1/4	81	1/4	235	1/4	395	1/4	511	1/4		1/4									
1/2	84	1/2	238	1/2	398	1/2	512	1/2		1/2									
3/4	87	3/4	241	3/4	401	3/4	513	3/4		3/4									
11	89	11	245	11	404	11	514	11		11									
1/4	92	1/4	248	1/4	407	1/4	515	1/4		1/4									
1/2	95	1/2	252	1/2	410	1/2	516	1/2		1/2									
3/4	98	3/4	255	3/4	413	3/4	516	3/4		3/4									

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN AT 2" DIAMETER PIPE.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>

OWNER: CHEM CARRIERS
 DESCRIPTION: DOUBLE SKIN, RAKE TANK BARGE
 SIZE: 297'-6"x54'-0"x12'-0"

CONTRACT: 96180
 HULL: 4773
 NAME: CCL 404
 DATE: 3-Feb-11

VESSEL DISPLACEMENT AND CARGO DEADWEIGHT TABLE (FRESH WATER)

	DRAFT	2 FT	3 FT	4 FT	5 FT	6 FT	7 FT	8 FT	9 FT	10 FT	11 FT
DISPLACEMENT	0 IN		1370	1833	2303	2778	3259	3743	4232	4725	5222
DEADWEIGHT			372	836	1306	1781	2261	2746	3234	3727	4224
DISPLACEMENT	1 IN		1408	1872	2343	2818	3299	3784	4273	4766	5263
DEADWEIGHT			410	875	1345	1821	2301	2786	3275	3768	4266
DISPLACEMENT	2 IN		1446	1911	2382	2858	3339	3824	4314	4807	5305
DEADWEIGHT			449	914	1384	1861	2341	2827	3316	3810	4307
DISPLACEMENT	3 IN	1026	1485	1950	2422	2898	3379	3865	4355	4849	5346
DEADWEIGHT		29	487	953	1424	1900	2382	2867	3357	3851	4349
DISPLACEMENT	4 IN	1064	1523	1989	2461	2938	3420	3906	4396	4890	5388
DEADWEIGHT		67	526	992	1463	1940	2422	2908	3398	3892	4390
DISPLACEMENT	5 IN	1102	1562	2028	2501	2978	3460	3946	4437	4931	5430
DEADWEIGHT		105	564	1031	1503	1980	2462	2949	3439	3934	4432
DISPLACEMENT	6 IN	1140	1601	2068	2540	3018	3500	3987	4478	4973	5471
DEADWEIGHT		143	603	1070	1543	2020	2503	2989	3480	3975	4474
DISPLACEMENT	7 IN	1178	1639	2107	2580	3058	3541	4028	4519	5014	5513
DEADWEIGHT		181	642	1109	1582	2060	2543	3030	3521	4017	4516
DISPLACEMENT	8 IN	1216	1678	2146	2619	3098	3581	4069	4560	5056	5555
DEADWEIGHT		219	680	1148	1622	2100	2584	3071	3562	4058	4557
DISPLACEMENT	9 IN	1255	1717	2185	2659	3138	3622	4109	4601	5097	5597
DEADWEIGHT		257	719	1188	1662	2141	2624	3112	3604	4099	4599
DISPLACEMENT	10 IN	1293	1756	2225	2699	3178	3662	4150	4642	5139	
DEADWEIGHT		295	758	1227	1701	2181	2665	3153	3645	4141	
DISPLACEMENT	11 IN	1331	1794	2264	2739	3218	3703	4191	4684	5180	
DEADWEIGHT		334	797	1266	1741	2221	2705	3193	3686	4182	

DISPLACEMENT & DEADWEIGHT ARE IN SHORT TONS. ONE SHORT TON (S.TON) = 2000 POUNDS
 LIGHTSHIP WEIGHT (LWT) IS DERIVED FROM FREEBOARD READINGS LWT = 998 S.TON

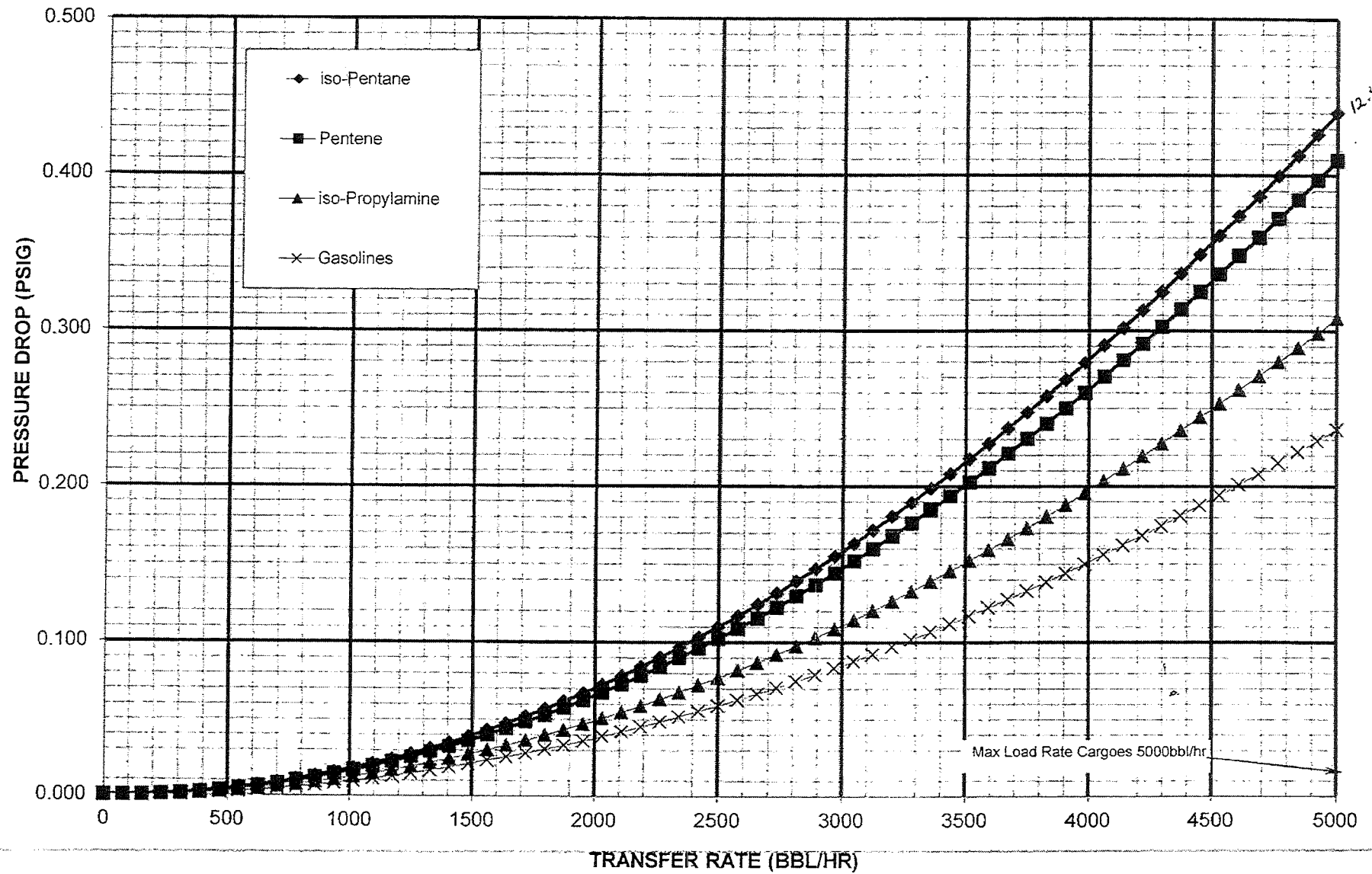
NOTES:

- TABLE DATA IS BASED ON DRAFTS IN FRESH WATER AT 32.05 (CU. FT. PER S. TON) OR 62.4 (LBS PER CU. FT.).
- TO OBTAIN DISPLACEMENT IN SEA WATER AT 31.25 (CU. FT. PER S. TON) OR 64.0 (LBS PER CU. FT.), MULTIPLY THE TABLE DISPLACEMENT BY 1.025, TO OBTAIN THE CORRESPONDING CARGO DEADWEIGHT, SUBTRACT THE LIGHTSHIP WEIGHT (LWT) FROM THE CALCULATED DISPLACEMENT IN SEA WATER.
- ACTUAL DISPLACEMENTS AND DEADWEIGHTS MAY VARY DUE TO ACCURACY OF DRAFT READINGS, WEATHER CONDITIONS, SPECIFIC GRAVITY OF WATER, DECK LOADS, RESIDUE IN BILGES ALTERATIONS OR CHANGES TO THE VESSEL SINCE REFERENCE FREEBOARD READINGS WERE TAKEN, etc.
- ALL DATA IS BASED ON ZERO TRIM.

BY 1.025,
IN SEA

WITY
:

CCL 403 & CCL 404
LIQUID TRANSFER RATE vs PRESSURE DROP
BASED ON PRESSURE DROP FROM
CARGO TANK #1 TO FACILITY CONNECTION



Shell Deer Park Refinery Company

A Division of Shell Oil Products Company

Vessel Marine Vapor Recovery System Checklist

Richard.arnold@shell.com

E-mail To

gxsdprlogisticscargoinspectors@shell.com

Note: Vessels MUST arrive with tank IG pressure of LESS than 300 mm WG/

0.4 psi or vessel will not be accepted.

1. Name of Vessel: CCL 464
a. Vessel Flag/Registry United States
b. Vessel Owner/Operator Chem Carriers LLC
2. Is Certificate of Inspection or Certificate of Compliance on board? Yes No
3. Is vessel Marine Vapor Recovery System USCG approved? Yes No
4. Is Certificate of Tightness on board?
(Photocopy must be faxed prior to arrival at SDPRC) Yes No
5. What is vessel Vapor header flange size? 8" inches
(Facility has capability to connect to either 6", 8" or 12" flange size)
6. What is vessel liquid header flange size? 8" inches
7. Regulated products minimum loading rate?
1. Product N/A bbls / hour
2. Product _____ bbls / hour
3. Product _____ bbls / hour
8. Regulated products maximum loading rate?
1. Product 4,000 bbls / hour
2. Product _____ bbls / hour
3. Product _____ bbls / hour
9. Vessel pressure safety valve setting – high? 6 LB. psig
10. Vessel pressure safety valve setting – low? 3 LB. psig
11. Vessel manifold pressure drop at vessel maximum loading rate? 1 LB. psig
12. Type of vessel overfill protection?
a. Overfill connection (5 pin plug cable connection) YES
b. Spill Valve _____
c. Independent alarm _____
13. Prior Cargo ? NAPHTHA
14. Condition of cargo tanks prior to being loaded (i.e. cleaned, washed, gas freed, etc.)?
Cargo Tanks have NOT been cleaned or Stripped Liquid Free

John Williams 2/2/2013
Chem Carriers



16710/P016203
Serial: C1-1303247
September 23, 2013

M. Dan Jones & Associates
Attn: Mr. M. Dan Jones
7519 Old Bridge Court
Sugar Land, TX 77479
Email: matdjones@aol.com

Subj: CCL 403, O.N. 1231311, Trinity Ashland City Hull 4772
CCL 404, O.N. 1231312, Trinity Ashland City Hull 4773
CCL 405, O.N. 1236867, Trinity Ashland City Hull 2196-1
CCL 406, O.N. 1236866, Trinity Ashland City Hull 2199-1
297' x 54' x 12' Unmanned Double Hull Type II/III Tank Barges (O/D)
Grade A (max. 25 psia Reid) and Lower Flammable or Combustible Liquids Identified in
46 CFR Table 30.25-1 or 46 CFR Part 153 Table 2 and Specified Hazardous Cargoes
Design Density 8.7 lbs/gal; Maximum Density (slack load) 13.6 lbs/gal
Rivers; Lakes, Bays, and Sounds; Limited Coastwise on unmanned fair weather voyages
only, not more than 12 miles offshore between St. Marks and Carrabelle, Florida
Multi-breasted Tandem Loading

Ref: (a) M. Dan Jones & Associates Doc. 13-36-2, "Vapor Collection Calculation on the Dual
Loading of Trinity Marine Products, Inc. Hulls 2196 & 2199" dated September 16,
2013
(b) Marine Safety Center Letter Serial: C1-1100183, dated January 21, 2011
(c) Marine Safety Center Letter Serial: C1-1103805, dated November 14, 2011
(d) Marine Safety Center Letter Serial: C1-1103914, dated November 22, 2011

Dear Mr. Jones:

In response to your electronic submission dated September 16, 2013, we have reviewed the pressure drop calculations for multi-breasted tandem loading. Reference (a) is "**Examined**". Calculations such as these are not normally marked approved, but are used to verify that the system meets the applicable regulations.

These barges have vapor control systems previously approved by references (b) through (d), and are acceptable for dual loading operations. Based on the calculations in reference (a), tandem loading is limited to simultaneous collection of those cargoes listed in the vessels' CAA at a maximum transfer rate of **5000 bbl/hr** per barge.

For final approval you must submit your request to Commandant (CG-ENG-5) with the name of the facility where the vessels will be conducting dual loading operations. For more information, please email the Coast Guard Hazardous Materials Standards division at HazmatStandards@uscg.mil.

16710/P016203
Serial: C1-1303247
September 23, 2013

Subj: CCL 403, O.N. 1231311, Trinity Ashland City Hull 4772
CCL 404, O.N. 1231312, Trinity Ashland City Hull 4773
CCL 405, O.N. 1236867, Trinity Ashland City Hull 2196-1
CCL 406, O.N. 1236866, Trinity Ashland City Hull 2199-1
Multi-breasted Tandem Loading

If you have any questions concerning our review, please contact Lieutenant Ryan Mowbray at the number listed above.

Sincerely,

M. J. SEXTON
Lieutenant, U. S. Coast Guard
Assistant Chief, Tank Vessel and Offshore Division
By direction

Copy: Supervisor, Coast Guard Marine Safety Detachment Nashville
Commandant, U. S. Coast Guard (CG-ENG-5)