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

Certification Date:	04 Sep 2025
Expiration Date:	04 Sep 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 421-T	1352615			Tank Barge

Hailing Port	Hull Material	Horsepower	Propulsion
NEW ORLEANS, LA UNITED STATES	Steel		

Place Built	Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
GALVESTON		04Nov2024	R-1616 I-	R-1616 I-		R-297.0 I-0

Owner
D. Stephen LaPlace, Trustee of the Frank W. Banta
1237 Highway 75
Sunshine, LA 70780
UNITED STATES

Operator
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---

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

This vessel has been granted a freshwater service examination interval in accordance with 46 CFR 31.10-21(a)(2). If this vessel is operated in salt water more than six (6) months in any twelve (12) month period, the vessel must be inspected using saltwater intervals per 46 CFR 31.10-21(a)(1) and the cognizant OCMI must be notified in writing as soon as this change in status occurs.

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at Galveston, TX, UNITED STATES, the Officer in Charge, Marine Inspection, Houston-Galveston 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

Date	Zone	A/P/R	Signature

This certificate issued by: B.P. Bergan
B.P. BERGAN CDR, USCG, BY DIRECTION
Officer in Charge, Marine Inspection
Houston-Galveston
Inspection Zone

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

Certification Date:	04 Sep 2025
Expiration Date:	04 Sep 2030

Certificate of Inspection

Vessel Name: CCL 421-T

---Hull Exams---

Exam Type	Next Exam	Last Exam	Prior Exam
DryDock	30Sep2035	04Sep2025	
Internal Structure	30Sep2030	04Sep2025	

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

Authorization: GRADE A AND LOWER AND SPECIFIED HAZARDOUS CARGOES

Total Capacity	Units	Highest Grade Type	Part151 Regulated	Part153 Regulated	Part154 Regulated
29442	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	780	13.57
2 P/S	850	13.57
3 P/S	712	13.57

Loading Constraints - Stability

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
II	4034	10ft 1in	13.57	R, LBS
III	4461	11ft 0in	13.57	R, LBS

Conditions Of Carriage

Only those cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial # C1-2500897 dated March 18, 2025 may be carried, and then only in the tanks indicated. When the vessel is carrying cargoes containing greater than 0.5% benzene, the person in charge is responsible for ensuring the provisions of 46 CFR 197, Subpart C are applied.

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 compatibility group numbers from the "Compat Group No" column listed in the vessel's CAA.

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 13.57 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

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

Vapor Control Authorization

In accordance with 46 CFR Part 39, excluding part 39.4000, this vessel's vapor collection system (VCS) has been inspected to the plans approved by MSC Letter# C1-2403300 dated September 3, 2024 and has been found acceptable for the collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column. The VCS system has been approved with a pressure side of 2 psig P/V valve with Coast Guard Approval 162.017/167/4. The cargo tank top is suitable for a maximum allowable working pressure (MAWP) of 3.50 psig.

In accordance with 46 CFR Part 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. C1-2403300 dated September 3, 2024.

--- Inspection Status ---

Cargo Tanks

	Internal Exam			External Exam		
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	-	04Sep2025	30Sep2035	-	04Sep2025	30Sep2030
2 P/S	-	04Sep2025	30Sep2035	-	04Sep2025	30Sep2030
3 P/S	-	04Sep2025	30Sep2035	-	04Sep2025	30Sep2030

		Hydro Test		
Tank Id	Safety Valves	Previous	Last	Next
1 P/S	-	-	-	-
2 P/S	-	-	-	-
3 P/S	-	-	-	-

---Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

--- Fire Fighting Equipment ---

Fire Extinguishers - Hand portable and semi-portable

Quantity	Class Type
2	40-B

END

Department of Homeland Security
United States Coast Guard

Serial #: C1-2500897
Dated: 18-Mar-25

Certificate of Inspection

Cargo Authority Attachment

Official #: 1352615 Shipyard: Kennedy Construction Hull #: 179

46 CFR 151 Tank Group Characteristics

Tank Group Information		Cargo Identification			Hull Typ	Cargo Seg Tank	Tanks			Cargo Transfer		Environmental Control		Fire Protection Provided	Special Requirements		Elec Haz	Temp Cont
Tnk Grp	Tanks in Group	Density	Press.	Temp.			Type	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space		General	Materials of Construction		
A	#1-3 P/S	13.6	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	II	G-1	NR	NA	Portable	.50-60, .50-70(a), .50-70(b), .50-73,	55-1(b), (c), (e), (f), (j), 56-1(a), (b), (c), (d), (e), (f), (g),	I-D	No

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				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Authorized Subchapter O Cargoes											
Bis(2-ethylhexyl) terephthalate	N/A	PEC	34	D/O	E	II	A	No	N/A	No	G
Olefins (C13+, all isomers)	85535-87-1	OFZ	30	D/O	E	III	A	Yes	1		G
Acetonitrile	75-05-8	ATN	37	O	C	III	A	Yes	3	No	G
Acrylonitrile	N/A	ACN	15 [2]	O	C	II	A	Yes	4	.50-70(a), .55-1(e)	G
Adiponitrile	111-69-3	ADN	37	O	E	II	A	Yes	1	No	G
Alkyl (C7-C9) nitrates	20633-12-9*	AKN	34 [2]	O	NA	III	A	Yes	1	.50-81, .50-86	G
Aminoethyl ethanolamine	111-41-1	AEE	8	O	E	III	A	Yes	1	.55-1(b)	G
Ammonium bisulfite solution (70% or less)	10192-30-0	ABX	43 [2]	O	NA	III	A	No	N/A	.50-73, .56-1(a), (b), (c)	G
Ammonium hydroxide (28% or less NH3)	1336-21-6	AMH	6	O	NA	III	A	No	N/A	.56-1(a), (b), (c), (f), (g)	G
Anthracene oil (Coal tar fraction)	65996-91-0	AHO	33	O	NA	II	A	No	N/A	No	G
Benzene	71-43-2	BNZ	32	O	C	III	A	Yes	1	.50-60	G
Benzene, C10-16 alkyl derivatives	N/A	BEN	32	O	D	III	A	No	N/A		G
Benzene and mixtures having 10% Benzene or more	N/A	BHB	32 [2]	O	C	III	A	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	N/A	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)	N/A	BTX	32	O	B/C	III	A	Yes	1	.50-60	G
Butyl acrylate (all isomers)	141-32-2	BAR	14	O	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyl methacrylate	97-88-1	BMH	14	O	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Camphor oil (light)	8008-51-3	CPO	18	O	D	II	A	No	N/A	No	G
Carbon tetrachloride	56-23-5	CBT	36	O	NA	III	A	Yes	3	No	G
Caustic potash solution	1310-58-3	CPS	5 [2]	O	NA	III	A	No	N/A	.50-73, .55-1(j)	G
Caustic soda solution	1310-73-2	CSS	5 [2]	O	NA	III	A	No	N/A	.50-73, .55-1(j)	G

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615 *Page 2 of 11* Hull #: 179

Cargo Identification							Conditions of Carriage				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
Chemical Oil (refined, containing phenolics)	N/A	COD	21	O	E	II	A	No	N/A	.50-73	G
Chlorobenzene	108-90-7	CRB	36	O	D	III	A	Yes	1	No	G
Chloroform	67-66-3	CRF	36	O	NA	III	A	Yes	3	No	G
Coal tar naphtha solvent	8030-30-6	NCT	33	O	D	III	A	Yes	1	.50-73	G
Creosote	N/A	CCW	21 [2]	O	E	III	A	Yes	1	No	G
Cresols (all isomers)	1319-77-3	CRS	21	O	E	III	A	Yes	1	No	G
Cresylate spent caustic	N/A	CSC	5	O	NA	III	A	No	N/A	.50-73, .55-1(b)	G
Cresylic acid tar	N/A	CRX	21	O	E	III	A	Yes	1	.55-1(f)	G
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	N/A	CHG	19 [2]	O	C	III	A	Yes	1	No	G
Cyclohexanone	108-94-1	CCH	18	O	D	III	A	Yes	1	.56-1(a), (b)	G
Cyclohexanone, Cyclohexanol mixture	N/A	CYX	18 [2]	O	E	III	A	Yes	1	.56-1 (b)	G
Cyclohexylamine	N/A	CHA	7	O	D	III	A	Yes	1	.56-1(a), (b), (c), (g)	G
Cyclopentadiene, Styrene, Benzene mixture	N/A	CSB	30	O	D	III	A	Yes	1	.50-60, .56-1(b)	G
iso-Decyl acrylate	N/A	IAI	14	O	E	III	A	Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)	G
Dichlorobenzene (all isomers)	25321-22-6	DBX	36	O	E	III	A	Yes	3	.56-1(a), (b)	G
1,1-Dichloroethane	75-34-3	DCH	36	O	C	III	A	Yes	1	No	G
Dichloromethane	75-09-2	DCM	36	O	NA	III	A	Yes	5	No	G
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	5742-19-8	DDE	43	O	E	III	A	No	N/A	.56-1(a), (b), (c), (g)	G
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	2008-39-1	DAD	0 [1,2]	O	A	III	A	No	N/A	.56-1(a), (b), (c), (g)	G
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	34075-45-1	DTI	43 [2]	O	E	III	A	No	N/A	.56-1(a), (b), (c), (g)	G
1,1-Dichloropropane	78-99-9	DPB	36	O	C	III	A	Yes	3	No	G
1,2-Dichloropropane	78-87-5	DPP	36	O	C	III	A	Yes	3	No	G
1,3-Dichloropropane	142-28-9	DPC	36	O	C	III	A	Yes	3	No	G
1,3-Dichloropropene	N/A	DPU	15	O	D	II	A	Yes	4	No	G
Dichloropropene, Dichloropropane mixtures	8003-19-8	DMX	15	O	C	II	A	Yes	1	No	G
Diethanolamine	111-42-2	DEA	8	O	E	III	A	Yes	1	.55-1(c)	G
Diethylenetriamine	111-40-0	DET	7 [2]	O	E	III	A	Yes	1	.55-1(c)	G
Diisopropanolamine	110-97-4	DIP	8	O	E	III	A	Yes	1	.55-1(c)	G
N,N-Dimethylacetamide	127-19-5	DAC	10	O	E	III	A	Yes	3	.56-1(b)	G
Dimethylformamide	68-12-2	DMF	10	O	D	III	A	Yes	1	.55-1(e)	G

Department of Homeland Security
United States Coast Guard

Serial #: C1-2500897
Dated: 18-Mar-25

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615 *Page 3 of 11* Hull #: 179

Cargo Identification							Conditions of Carriage				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
1-Dodecene	N/A	DDC	30	O	E	II	A	No	N/A	No	G
Dodecyldimethylamine, Tetradecyldimethylamine mixture	112-18-5*	DOT	7	O	E	III	A	No	N/A	.56-1(b)	G
Dodecyl diphenyl ether disulfonate solution	N/A	DOS	43	O	#	II	A	No	N/A	No	G
Ethanolamine	141-43-5	MEA	8	O	E	III	A	Yes	1	.55-1(c)	G
Ethyl acrylate	140-88-5	EAC	14	O	C	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Ethylamine solutions (72% or less)	75-04-7	EAN	7	O	A	II	A	Yes	6	.55-1(b)	G
Ethylene cyanohydrin	109-78-4	ETC	20	O	E	III	A	Yes	1	No	G
Ethylenediamine	107-15-3	EDA	7 [2]	O	D	III	A	Yes	1	.55-1(c)	G
Ethylene dichloride	107-06-2	EDC	36 [2]	O	C	III	A	Yes	1	No	G
Ethylene glycol hexyl ether	112-25-4	EGH	40	O	E	III	A	No	N/A	No	G
Ethylene glycol propyl ether	2807-30-9	EGP	40	O	E	III	A	Yes	1	No	G
2-Ethylhexyl acrylate	103-11-7	EAI	14	O	E	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Ethyl methacrylate	97-63-2	ETM	14	O	D/E	III	A	Yes	2	.50-70(a)	G
Glutaraldehyde solutions (50% or less)	111-30-8	GTA	19	O	NA	III	A	No	N/A	No	G
Hexamethylenediamine solution	124-09-4	HMC	7	O	E	III	A	Yes	1	.55-1(c)	G
Hydrocarbon 5-9	N/A	HFN	31	O	C	III	A	Yes	1	.50-70(a), .50-81(a), (b)	G
Isoprene	78-79-5	IPR	30	O	A	III	A	Yes	7	.50-70(a), .50-81(a), (b)	G
Isoprene, Pentadiene mixture	N/A	IPN	30	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)	68131-33-9	KPL	5	O	NA	III	A	No	N/A	.50-73, .56-1(a), (c), (g)	G
Mesityl oxide	141-79-7	MSO	18 [2]	O	D	III	A	Yes	1	No	G
Methyl acrylate	96-33-3	MAM	14	O	C	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
2-Methyl-5-ethyl pyridine	104-90-5	MEP	9	O	E	III	A	Yes	1	.55-1(e)	G
Methyl methacrylate	80-62-6	MMM	14	O	C	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
2-Methylpyridine	109-06-8	MPR	9	O	D	III	A	Yes	3	.55-1(c)	G
alpha-Methylstyrene	98-83-9	MSR	30	O	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Corn oil	8001-30-7	OCO	34	O	E	II	A	No	N/A	.50-73	G
1,3-Pentadiene	1574-41-0	PDE	30	O	A	III	A	Yes	7	.50-70(a), .50-81	G
Perchloroethylene	127-18-4	PER	36	O	NA	III	A	No	N/A	No	G
Polyethylene polyamines	109-89-7	PEB	7 [2]	O	E	III	A	Yes	1	.55-1(e)	G
Potassium chloride solution (brine)	N/A	PCSB	0	O	NA	III	A	No	N/A		G
iso-Propanolamine	78-96-6	MPA	8	O	E	III	A	Yes	1	.55-1(c)	G

Department of Homeland Security
United States Coast Guard

Serial #: C1-2500897
Dated: 18-Mar-25

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615

Hull #: 179

Cargo Identification							Conditions of Carriage				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
Propanolamine (iso-, n-)	N/A	PAX	8	O	E	III	A	Yes	1	.56-1(b), (c)	G
Isopropylamine	75-31-0	IPP	7	O	A	II	A	Yes	5	.55-1(c)	G
Pyridine	110-86-1	PRD	9	O	C	III	A	Yes	1	.55-1(e)	G
Solution containing ammonium thiosulfate (≤60%), ammonium sulfate (≤6%) and ammonium sulfite (≤5%) (≤6%) and ammonium sulfite (≤5%)		ATAS	0	O	NA	III	A	No	N/A		G
Sodium aluminate solution (45% or less)	11138-49-1	SAU	5	O	NA	III	A	No	N/A	.50-73, .56-1(a), (b), (c)	G
Sodium chlorate solution (50% or less)	7775-09	SDD	0 [1,2]	O	NA	III	A	No	N/A	.50-73	G
Sodium hypochlorite solution (20% or less)	7681-52-9	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)	N/A	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)	N/A	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)	N/A	SSJ	0 [1,2]	O	NA	II	A	No	N/A	.50-73, .55-1(b)	G
Spent Caustic Soda Solution (containing up to 0.1% Benzene)	N/A	SCSS	5	O	NA	III	A	No	N/A	.50-60, .50-73, .55-1(j)	G
Styrene (crude)	N/A	STX	30	O	D	III	A	Yes	2	No	G
Styrene monomer	100-42-5	STY	30	O	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Tetrachloroethane	79-34-5	TEC	36	O	NA	III	A	No	N/A	No	G
1,2,4-Trichlorobenzene	120-82-1	TCB	36	O	E	III	A	Yes	1	No	G
1,1,2-Trichloroethane	79-00-5	TCM	36	O	NA	III	A	Yes	1	.50-73, .56-1(a)	G
Trichloroethylene	79-01-6	TCL	36 [2]	O	NA	III	A	Yes	1	No	G
1,2,3-Trichloropropane	96-18-4	TCN	36	O	E	II	A	Yes	3	.50-73, .56-1(a)	G
Triphenylborane (10% or less), caustic soda solution	960-71-4	TPB	5	O	NA	III	A	No	N/A	.56-1(a), (b), (c)	G
Trisodium phosphate solution	10101-89-0	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)	N/A	UAS	6	O	NA	III	A	No	N/A	.56-1(b)	G
Vanillin black liquor (free alkali content, 3% or more).	68514-06-7	VBL	5	O	NA	III	A	No	N/A	.50-73, .56-1(a), (c), (g)	G
Vinyl acetate	108-05-4	VAM	13	O	C	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Vinyl neodecanoate	51000-52-3	VND	13	O	E	III	A	No	N/A	.50-70(a), .50-81(a), (b)	G
Vinyltoluene	25013-15-4	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	67-64-1	ACT	18 [2]	D	C		A	Yes	1		

**** This document is only valid when attached to, and referenced by a current, valid Certificate of Inspection. ****

Department of Homeland Security
United States Coast Guard

Serial #: C1-2500897
Dated: 18-Mar-25

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615

Hull #: 179

Cargo Identification							Conditions of Carriage				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
Acetophenone	98-86-2	ACP	18	D	E		A	Yes	1		
Alcohol (C12-C16) poly(20+) ethoxylates	68551-12-2*	APW	20	D	E		A	Yes	1		
Alcohol (C6-C17) (secondary) poly(3-6) ethoxylates	84133-50-6*	AEA	20	D	E		A	Yes	1		
Alcohol (C6-C17) (secondary) poly(7-12) ethoxylates	84133-50-6*	AEB	20	D	E		A	Yes	1		
Alcohols (C13+)	112-70-9*	ALY	20	D	E		A	Yes	1		
Amyl acetate (all isomers)	628-63-7	AEC	34	D	D		A	Yes	1		
Amyl alcohol (iso-, n-, sec-, primary)	N/A	AAI	20	D	D		A	Yes	1		
Benzyl acetate	140-11-4	BZE	34	D	E		A	Yes	1		
Benzyl alcohol	100-51-6	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)	N/A	BFY	20	D	E		A	Yes	1		
Butyl acetate (all isomers)	123-86-4	BAX	34	D	D		A	Yes	1		
Isobutyl alcohol	78-83-1	IAL	20 [2]	D	D		A	Yes	1		
Butyl alcohol (n-)	N/A	BAN	20 [2]	D	D		A	Yes	1		
Butyl alcohol (sec-)	N/A	BAS	20 [2]	D	C		A	Yes	1		
tert-Butyl Alcohol	N/A	BAT	20 [2]	D	C		A	Yes	1		
Butyl benzyl phthalate	85-68-7	BPH	34	D	E		A	Yes	1		
Butyl toluene	1595-05-7	BUE	32	D	D		A	Yes	1		
Caprolactam solutions	105-60-2	CLS	22	D	E		A	Yes	1		
Cycloheptane	291-64-5	CYE	31	D	C		A	Yes	1		
Cyclohexane	110-82-7	CHX	31	D	C		A	Yes	1		
Cyclohexanol	108-93-0	CHN	20	D	E		A	Yes	1		
Cyclohexyl acetate	622-45-7	CYC	34	D	D		A	Yes	1		
1,3-Cyclopentadiene dimer (molten)	7313-32-8	CPD	30	D	D/E		A	Yes	2		
Cyclopentane	287-92-3	CYP	31	D	B		A	Yes	1		
p-Cymene	99-87-6	CMP	32	D	D		A	Yes	1		
iso-Decaldehyde	N/A	IDA	19	D	E		A	Yes	1		
n-Decaldehyde	N/A	DAL	19	D	E		A	Yes	1		
Decanoic acid	334-48-5	DCO	4	D	#		A	Yes	1		
Decene	872-05-9	DCE	30	D	D		A	Yes	1		
Decyl alcohol (all isomers)	85566-12-7	DAX	20 [2]	D	E		A	Yes	1		
n-Decylbenzene, see Alkyl(C9+)benzenes	104-72-3	DBZ	32	D	E		A	Yes	1		

Department of Homeland Security
United States Coast Guard

Serial #: C1-2500897
Dated: 18-Mar-25

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615

Hull #: 179

Cargo Identification							Conditions of Carriage				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
Diacetone alcohol	123-42-2	DAA	20 [2]	D	D		A	Yes	1		
Dibutyl phthalate	84-74-2	DPA	34	D	E		A	Yes	1		
Diethylbenzene	25340-17-4	DEB	32	D	D		A	Yes	1		
Diethylene glycol	111-46-6	DEG	40 [2]	D	E		A	Yes	1		
Diisobutylene	25167-70-8	DBL	30	D	C		A	Yes	1		
Diisobutyl ketone	108-83-8	DIK	18	D	D		A	Yes	1		
Diisopropylbenzene (all isomers)	25321-09-9	DIX	32	D	E		A	Yes	1		
Dimethyl phthalate	131-11-3	DTL	34	D	E		A	Yes	1		
Dioctyl phthalate	117-84-0	DOP	34	D	E		A	Yes	1		
Dipentene	138-86-3	DPN	30	D	D		A	Yes	1		
Diphenyl	92-52-4	DIL	32	D	D/E		A	Yes	1		
Diphenyl, Diphenyl ether mixtures	8004-13-5	DDO	33	D	E		A	Yes	1		
Diphenyl ether	101-84-8	DPE	41	D	{E}		A	Yes	1		
Dipropylene glycol	25265-71-8	DPG	40	D	E		A	Yes	1		
Distillates: Flashed feed stocks	8002-05-9	DFF	33	D	E		A	Yes	1		
Distillates: Straight run	68814-87-9	DSR	33	D	E		A	Yes	1		
Dodecene (all isomers)	25378-22-7	DOZ	30	D	D		A	Yes	1		
Dodecylbenzene	123-01-3	DDB	32	D	E		A	Yes	1		
2-Ethoxyethyl acetate	111-15-9	EEA	34	D	D		A	Yes	1		
Ethoxy triglycol (crude)	112-50-5	ETG	40	D	E		A	Yes	1		
Ethyl acetate	141-78-6	ETA	34	D	C		A	Yes	1		
Ethyl acetoacetate	141-97-9	EAA	34	D	E		A	Yes	1		
Ethyl alcohol	64-17-5	EAL	20 [2]	D	C		A	Yes	1		
Ethylbenzene	100-41-4	ETB	32	D	C		A	Yes	1		
Ethyl butanol	97-95-0	EBT	20	D	D		A	Yes	1		
Ethyl tert-butyl ether	637-92-3	EBE	41	D	C		A	Yes	1		
Ethyl butyrate	105-54-4	EBR	34	D	D		A	Yes	1		
Ethyl cyclohexane	1678-91-7	ECY	31	D	D		A	Yes	1		
Ethylene glycol	107-21-1	EGL	20 [2]	D	E		A	Yes	1		
Ethylene glycol butyl ether acetate	112-07-2	EMA	34	D	E		A	Yes	1		
Ethylene glycol diacetate	111-55-7	EGY	34	D	E		A	Yes	1		
Ethylene glycol phenyl ether	122-99-6	EPE	40	D	E		A	Yes	1		
Ethyl-3-ethoxypropionate	763-69-9	EEP	34	D	D		A	Yes	1		

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615

Hull #: 179

Cargo Identification							Conditions of Carriage				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
2-Ethylhexanol	104-76-7	EHX	20	D	E		A	Yes	1		
Ethyl propionate	105-37-3	EPR	34	D	C		A	Yes	1		
Ethyl toluene	25550-14-5	ETE	32	D	D		A	Yes	1		
Formamide	75-12-7	FAM	10	D	E		A	Yes	1		
Furfuryl alcohol	98-00-0	FAL	20 [2]	D	E		A	Yes	1		
Gasoline blending stocks: Alkylates	64741-64-6	GAK	33	D	C		A	Yes	1		
Gasoline blending stocks: Reformates	8006-61-9	GRF	33	D	C		A	Yes	1		
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	86290-81-5	GAT	33	D	A/C		A	Yes	1		
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	N/A	GAV	33	D	C		A	Yes	1		
Gasolines: Casinghead (natural)	68425-31-0	GCS	33	D	A/C		A	Yes	1		
Gasolines: Polymer	8006-61-9	GPL	33	D	C		A	Yes	1		
Gasolines: Straight run	68606-11-1	GSR	33	D	A/C		A	Yes	1		
Glycerine	56-81-5	GCR	20 [2]	D	E		A	Yes	1		
Heptane (all isomers)	142-82-5	HMX	31	D	C		A	Yes	1		
n-Heptanoic acid	111-14-8	HEN	4	D	E		A	Yes	1		
Heptanol (all isomers)	111-70-6	HTX	20	D	D/E		A	Yes	1		
Heptene (all isomers)	592-76-7	HPX	30	D	C		A	Yes	2		
Heptyl acetate	112-06-1	HPE	34	D	E		A	Yes	1		
Hexane (all isomers)	110-54-3	HXS	31 [2]	D	B/C		A	Yes	1		
Hexanoic acid	142-62-1	HXO	4	D	E		A	Yes	1		
Hexanol	N/A	HXN	20	D	D		A	Yes	1		
Hexene (all isomers)	592-41-6	HEX	30	D	C		A	Yes	2		
Hexylene glycol	107-41-5	HXG	20	D	E		A	Yes	1		
Isophorone	78-59-1	IPH	18 [2]	D	E		A	Yes	1		
Jet fuel: JP-4	50815-00-4	JPF	33	D	E		A	Yes	1		
Jet fuel: JP-5 (kerosene, heavy)	8008-20-6	JPV	33	D	D		A	Yes	1		
Kerosene	8008-20-6	KRS	33	D	D		A	Yes	1		
Lauric acid	143-07-7	LRA	34	D	#		A	Yes	1		
Methyl acetate	79-20-9	MTT	34	D	D		A	Yes	1		
Methyl alcohol	67-56-1	MAL	20 [2]	D	C		A	Yes	1		
Methylamyl acetate	7789-99-3	MAC	34	D	D		A	Yes	1		
Methylamyl alcohol	108-11-2	MAA	20	D	D		A	Yes	1		

Department of Homeland Security
United States Coast Guard

Serial #: C1-2500897
Dated: 18-Mar-25

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615

Hull #: 179

Cargo Identification							Conditions of Carriage			
								Vapor Recovery		
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
Methyl amyl ketone	110-43-0	MAK	18	D	D		A	Yes	1		
Methyl tert-butyl ether	1634-04-4	MBE	41 [2]	D	C		A	Yes	1		
Methyl butyl ketone	N/A	MBK	18	D	C		A	Yes	1		
Methyl butyrate	623-42-7	MBU	34	D	C		A	Yes	1		
Methylcyclohexane	591-47-9	MCY	31	D	C		A	Yes	1		
Methyl ethyl ketone	78-93-3	MEK	18 [2]	D	C		A	Yes	1		
Methyl formate	107-31-3	MFM	34	D	A		A	Yes	6		
Methyl heptyl ketone	821-55-6	MHK	18	D	D		A	Yes	1		
2-Methyl-2-hydroxy-3-butyne	115-19-5	MHB	20	D	C		A	Yes	1		
Methyl isobutyl ketone	108-10-1	MIK	18 [2]	D	C		A	Yes	1		
Mineral spirits	64475-85-0	MNS	33	D	D		A	Yes	1		
Myrcene	123-35-3	MRE	30	D	D		A	Yes	1		
Naphtha: Heavy	64742-94-5	NAG	33	D	#		A	Yes	1		
Naphtha: Petroleum	64742-94-5	PTN	33	D	#		A	Yes	1		
Naphtha: Solvent	64742-94-5	NSV	33	D	D		A	Yes	1		
Naphtha: Stoddard solvent	8052-41-3	NSS	33	D	D		A	Yes	1		
Naphtha: Varnish makers and painters (75%)	8032-32-4	NVM	33	D	C		A	Yes	1		
Neodecanoic acid	26896-20-8	NEA	4	D	E		A	Yes	1		
Nonane (all isomers)	111-84-2	NAX	31	D	D		A	Yes	1		
Nonene (all isomers)	N/A	NON	30	D	D		A	Yes	2		
Nonyl alcohol (all isomers)	143-08-8	NNS	20 [2]	D	E		A	Yes	1		
Nonyl phenol	25154-52-3	NNP	21	D	E		A	Yes	1		
Nonyl phenol poly(4+)ethoxylates	9016-45-9	NPE	40	D	E		A	Yes	1		
Octane (all isomers)	111-65-9	OAX	31	D	C		A	Yes	1		
Octanoic acid (all isomers)	124-07-2	OAY	4	D	E		A	Yes	1		
Octanol (all isomers)	111-87-5	OCX	20 [2]	D	E		A	Yes	1		
Octene (all isomers)	111-66-0	OTX	30	D	C		A	Yes	2		
Oil, fuel: No. 2	68476-30-2	OTW	33	D	D/E		A	Yes	1		
Oil, fuel: No. 2-D	N/A	OTD	33	D	D		A	Yes	1		
Oil, fuel: No. 4	68553-00-4	OFR	33	D	D/E		A	Yes	1		
Oil, fuel: No. 5	70892-11-4	OFV	33	D	D/E		A	Yes	1		
Oil, fuel: No. 6	68553-00-4	OSX	33	D	E		A	Yes	1		
Oil, misc: Crude	N/A	OIL	33	D	A/D		A	Yes	1		

Department of Homeland Security
United States Coast Guard

Serial #: C1-2500897
Dated: 18-Mar-25

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615 *Page 9 of 11* Hull #: 179

Cargo Identification							Conditions of Carriage				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
Oil, misc: Diesel	68334-30-5	ODS	33	D	D/E		A	Yes	1		
Oil, misc: Gas, high pour	8006-61-9	OGP	33	D	E		A	Yes	1		
Oil, misc: Lubricating	93572-43-1	OLB	33	D	E		A	Yes	1		
Oil, misc: Residual	68476-33-5	ORL	33	D	E		A	Yes	1		
Oil, misc: Turbine	N/A	OTB	33	D	E		A	Yes	1		
alpha-Olefins (C6-C18) mixtures	592-41-6	OAM	30	D	E		A	Yes	1		
Pentane (all isomers)	109-66-0	PTY	31	D	A		A	Yes	5		
Pentene (all isomers)	109-67-1	PTX	30	D	A		A	Yes	5		
n-Pentyl propionate	624-54-4	PPE	34	D	D		A	Yes	1		
alpha-Pinene	7785-26-4	PIO	30	D	D		A	Yes	1		
beta-Pinene	127-91	PIP	30	D	D		A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether	N/A	PAG	40	D	E		A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate	N/A	PAF	34	D	E		A	Yes	1		
Polybutene	9003-29-6	PLB	30	D	E		A	Yes	1		
Polypropylene glycol	25322-69-4	PGC	40	D	E		A	Yes	1		
Proplonaldehyde	123-38-6	PAD	19	D	C		A	Yes	2		
Isopropyl acetate	108-21-4	IAC	34	D	C		A	Yes	1		
n-Propyl acetate	109-60-4	PAT	34	D	C		A	Yes	1		
Isopropyl alcohol	67-63-0	IPA	20 [2,3]	D	C		A	Yes	1		
n-Propyl alcohol	71-23-8	PAL	20 [2]	D	C		A	Yes	1		
Propylbenzene (all isomers)	103-65-1	PBY	32	D	D		A	Yes	1		
Isopropylcyclohexane	696-29-7	IPX	31	D	D		A	Yes	1		
Propylene glycol	57-55-6	PPG	20 [2]	D	E		A	Yes	1		
Propylene glycol methyl ether acetate	108-65-6	PGN	34	D	D		A	Yes	1		
Propylene tetramer	6842-15-5	PTT	30	D	D		A	Yes	1		
Sulfolane	126-33-0	SFL	39	D	E		A	Yes	1		
Tetraethylene glycol	112-60-7	TTG	40	D	E		A	Yes	1		
Tetrahydronaphthalene	119-64-2	THN	32	D	E		A	Yes	1		
Tetramethylbenzene (all isomers)	527-53-7	TTC	32	D	#		A	Yes	1		
Toluene	108-88-3	TOL	32	D	C		A	Yes	1		
Tricresyl phosphate (containing less than 1% ortho isomer)	1330-78-5	TCP	34	D	E		A	Yes	1		
Triethylbenzene	102-25-0 (1,3,5)	TEB	32	D	E		A	Yes	1		

Certificate of Inspection

Cargo Authority Attachment

Shipyard: Kennedy Construction

Official #: 1352615

Hull #: 179

Cargo Identification							Conditions of Carriage				
								Vapor Recovery			
Name	CAS Number	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of Construction	Insp. Period
Triethylene glycol	112-27-6	TEG	40	D	E		A	Yes	1		
Triethyl phosphate	78-40-0	TPS	34	D	E		A	Yes	1		
Trimethylbenzene (all isomers)	95-63-6 (1,2,4)	TRE	32	D	{D}		A	Yes	1		
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate	18491-15-1	TMP	34	D	E		A	Yes	1		
Trixylyl phosphate	N/A	TRP	34	D	E		A	Yes	1		
1-Undecene	821-95-4	UDC	30	D	D/E		A	Yes	1		
Undecyl alcohol	112-42-5	UND	20	D	E		A	Yes	1		
Xylenes	106-42-3	XLX	32	D	D		A	Yes	1		

Certificate of Inspection

Cargo Authority Attachment

Explanation of terms & symbols used in the Table:

Cargo Identification

Name	The propper 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.
Compatability 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-ENG-5), 2703 Martin Luther King Jr. Ave SE Stop 7509, Washington DC 20593-7509. Email:
Note 2	hazmatstandards@uscg.mil.
	See Appendix I to 46 CFR Part 150 - exceptions to the compatability 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 sufficeint 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 156.170, 46 CFR 35.35 and 46 CFR 39. The cargo tank venting system calculations (46 CFR 39.2011) and the pressure drop calculations (46 CFR 39.3001) 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 componenets 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 39.2009. 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 1cargoes. 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.

List of Authorized Cargoes (LOAC)

for: CCL 420-T, CCL 421-T, O.N. 1348560, CG1843359, Kennedy Construction, 178, 179

Revised: 9/3/2024

Cargo Identification							Tanks			Cargo Transfer		Environmental Control							
Name	CAS Number	Chem Code	Press.	Temp.	Hull Type	Cargo Seg Tank	Type	Vent	Gauge	Pipe Clas	Cont	Tanks	Handling Space	Fire Prot Req	Special Requirements	Elec Haz	Temp Cont	Tank Intnl Insp Period	Tank Group
Acetonitrile	75-05-8	ATN	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
Acrylonitrile	N/A	ACN	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	Yes	.50-70(a), .55-1(e)	I-D	NA	G	A
Adiponitrile	111-69-3	ADN	Atmos.	Amb.	II	1ii 2i	Integral Gravity	PV	Open	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
Alkyl (C7-C9) nitrates	20633-12-9*	AKN	Atmos.	Amb.	III	1i 2ii	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.50-81, .50-86	NA	NA	G	A
Aminoethyl ethanolamine	111-41-1	AEE	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(b)	NA	NA	G	A
Ammonium bisulfite solution (70% or less)	10192-30-0	ABX	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No	.50-73, .56-1(a), (b), (c)	NA	NA	G	A
Ammonium hydroxide (28% or less NH3)	1336-21-6	AMH	Atmos.	Amb.	III	1i 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	.56-1(a), (b), (c), (f), (g)	I-D	NA	G	A
Anthracene oil (Coal tar fraction)	65996-91-0	AHO	Atmos.	Amb/Elev	II	1ii 2ii	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	No	I-D	NA	G	A
Benzene	71-43-2	BNZ	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	Yes	.50-60	I-D	NA	G	A
Benzene, C10-16 alkyl derivatives	N/A	BEND	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes		1-D	No	G	A
Benzene and mixtures having 10% Benzene or more	N/A	BHB	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	Yes	.50-60	I-D	NA	G	A
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	N/A	BHA	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	Yes	.50-60, .56-1(b), (d), (f), (g)	I-D	NA	G	A
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	N/A	BTX	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	Yes	.50-60	I-D	NA	G	A
Bis(2-ethylhexyl) terephthalate	N/A	PEC	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Open	II	G-1	NR	Vent N	No	No	NA	NA	G	A
Butyl acrylate (all isomers)	141-32-2	BAR	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent N	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Butyl methacrylate	97-88-1	BMH	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Camphor oil (light)	8008-51-3	CPO	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	No	I-D	NA	G	A
Carbon tetrachloride	56-23-5	CBT	Atmos.	Amb.	III	1i 2i	Integral Gravity	PV	Open	II	G-1	NR	Vent N	No	No	NA	NA	G	A

Cargo Identification							Tanks			Cargo Transfer		Environmental Control							
Name	CAS Number	Chem Code	Press.	Temp.	Hull Type	Cargo Seg Tank	Type	Vent	Gauge	Pipe Clas	Cont	Tanks	Handling Space	Fire Prot Req	Special Requirements	Elec Haz	Temp Cont	Tank Intnl Insp Period	Tank Group
Caustic potash solution	1310-58-3	CPS	Atmos.	Amb/Elev	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	NR	No	.50-73, .55-1(j)	NA	NA	G	A
Caustic soda solution	1310-73-2	CSS	Atmos.	Amb/Elev	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	NR	No	.50-73, .55-1(j)	NA	NA	G	A
Chlorobenzene	108-90-7	CRB	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Open	II	G-1	NR	Vent N	Yes	No	I-D	NA	G	A
Chloroform	67-66-3	CRF	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent F	No	No	NA	NA	G	A
Coal tar naphtha solvent	8030-30-6	NCT	Atmos.	Amb.	III	1i 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-73	I-D	NA	G	A
Creosote	N/A	CCW	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	No	NA	NA	G	A
Cresols (all isomers)	1319-77-3	CRS	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	No	NA	NA	G	A
Cresylate spent caustic	N/A	CSC	Atmos.	Amb.	III	1ii 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No	.50-73, .55-1(b)	NA	NA	G	A
Cresylic acid tar	N/A	CRX	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(f)	NA	NA	G	A
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	N/A	CHG	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	NR	Yes	No	I-D	NA	G	A
Cyclohexanone	108-94-1	CCH	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.56-1(a), (b)	I-D	NA	G	A
Cyclohexanone, Cyclohexanol mixture	N/A	CYX	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.56-1 (b)	I-D	NA	G	A
Cyclohexylamine	N/A	CHA	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.56-1(a), (b), (c), (g)	I-D	NA	G	A
Cyclopentadiene, Styrene, Benzene mixture	N/A	CSB	Atmos.	Amb.	III	1i 2ii	Integral Gravity	Open	Open	II	G-1	NR	Vent F	Yes	.50-60, .56-1(b)	I-D	NA	G	A
iso-Decyl acrylate	N/A	IAI	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.50-70(a), .50-81(a), (b), .55-1(c)	NA	NA	G	A
Dichlorobenzene (all isomers)	25321-22-6	DBX	Atmos.	Amb.	III	1ii 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.56-1(a), (b)	I-D	NA	G	A
1,1-Dichloroethane	75-34-3	DCH	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
Dichloromethane	75-09-2	DCM	Atmos.	Amb.	III	1i 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	No	I-D	NA	G	A
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	5742-19-8	DDE	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No	.56-1(a), (b), (c), (g)	NA	NA	G	A
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	2008-39-1	DAD	Atmos.	Amb/Elev	III	1i 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	.56-1(a), (b), (c), (g)	NA	NA	G	A
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	34075-45-1	DTI	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No	.56-1(a), (b), (c), (g)	NA	NA	G	A

Cargo Identification							Tanks			Cargo Transfer		Environmental Control							
Name	CAS Number	Chem Code	Press.	Temp.	Hull Type	Cargo Seg Tank	Type	Vent	Gauge	Pipe Clas	Cont	Tanks	Handling Space	Fire Prot Req	Special Requirements	Elec Haz	Temp Cont	Tank Intnl Insp Period	Tank Group
1,1-Dichloropropane	78-99-9	DPB	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
1,2-Dichloropropane	78-87-5	DPP	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
1,3-Dichloropropane	142-28-9	DPC	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
1,3-Dichloropropene	N/A	DPU	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
Dichloropropene, Dichloropropane mixtures	8003-19-8	DMX	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
Diethanolamine	111-42-2	DEA	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(c)	NA	NA	G	A
Diethylenetriamine	111-40-0	DET	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(c)	NA	NA	G	A
Diisopropanolamine	110-97-4	DIP	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(c)	NA	NA	G	A
N,N-Dimethylacetamide	127-19-5	DAC	Atmos.	Amb.	III	1ii 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.56-1(b)	I-D	NA	G	A
Dimethylformamide	68-12-2	DMF	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.55-1(e)	I-D	NA	G	A
1-Dodecene	N/A	DDC	Atmos.	Amb.	II	1i 2ii	Integral Gravity	Open	Open	II	G-1	NR	NR	Yes	No	I-D	NA	G	A
Dodecyldimethylamine, Tetradecyldimethylamine mixture	112-18-5*	DOT	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.56-1(b)	NA	NA	G	A
Dodecyl diphenyl ether disulfonate solution	N/A	DOS	Atoms.	Amb.	II	1ii 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No	No	NA	NA	G	A
Ethanolamine	141-43-5	MEA	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(c)	I-D	NA	G	A
Ethyl acrylate	140-88-5	EAC	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Ethylamine solutions (72% or less)	75-04-7	EAN	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	Yes	.55-1(b)	I-D	NA	G	A
Ethylene cyanohydrin	109-78-4	ETC	Atmos.	Amb.	III	1i 2ii	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	No	NA	NA	G	A
Ethylenediamine	107-15-3	EDA	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.55-1(c)	I-D	NA	G	A
Ethylene dichloride	107-06-2	EDC	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
Ethylene glycol hexyl ether	112-25-4	EGH	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	No	NA	NA	G	A
Ethylene glycol propyl ether	2807-30-9	EGP	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	No	NA	NA	G	A

Cargo Identification							Tanks			Cargo Transfer		Environmental Control							
Name	CAS Number	Chem Code	Press.	Temp.	Hull Type	Cargo Seg Tank	Type	Vent	Gauge	Pipe Clas	Cont	Tanks	Handling Space	Fire Prot Req	Special Requirements	Elec Haz	Temp Cont	Tank Intnl Insp Period	Tank Group
2-Ethylhexyl acrylate	103-11-7	EAI	Atmos.	Amb.	III	1i 2ii	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Ethyl methacrylate	97-63-2	ETM	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a)	I-D	NA	G	A
Glutaraldehyde solutions (50% or less)	111-30-8	GTA	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No	No	NA	NA	G	A
Hexamethylenediamine solution	124-09-4	HMC	Atmos.	Amb.	III	1i 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.55-1(c)	I-D	NA	G	A
Isoprene	78-79-5	IPR	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Open	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Isoprene, Pentadiene mixture	N/A	IPN	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a), .55-1(c)	I-D	NA	G	A
Kraft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor)	68131-33-9	KPL	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	NR	No	.50-73, .56-1(a), (c), (g)	NA	NA	G	A
Mesityl oxide	141-79-7	MSO	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
Methyl acrylate	96-33-3	MAM	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
2-Methyl-5-ethyl pyridine	104-90-5	MEP	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(e)	I-D	NA	G	A
Methyl methacrylate	80-62-6	MMM	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
2-Methylpyridine	109-06-8	MPR	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.55-1(c)	I-D	NA	G	A
alpha-Methylstyrene	98-83-9	MSR	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Corn oil	8001-30-7	OCO	Atmos.	Amb.	II	1ii 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.50-73	NA	NA	G	A
Olefins (C13+, all isomers)	85535-87-1	OFZ	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes		NA	No	G	A
1,3-Pentadiene	1574-41-0	PDE	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81	I-D	NA	G	A
Perchloroethylene	127-18-4	PER	Atmos.	Amb.	III	1i 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	No	NA	NA	G	A
Polyethylene polyamines	109-89-7	PEB	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(e)	NA	NA	G	A
Potassium chloride solution (brine)	N/A	PCSB	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No		NA	No	G	A
iso-Propanolamine	78-96-6	MPA	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.55-1(c)	I-D	NA	G	A
Propanolamine (iso-, n-)	N/A	PAX	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.56-1(b), (c)	I-D	NA	G	A

Cargo Identification							Tanks			Cargo Transfer		Environmental Control						
Name	CAS Number	Chem Code	Press.	Temp.	Hull Type	Cargo Seg Tank	Type	Vent	Gauge	Pipe Clas	Cont	Tanks	Handling Space	Fire Prot Req	Special Requirements	Elec Haz	Temp Cont	Tank Intnl Insp Period	Tank Group
Isopropylamine	75-31-0	IPP	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	Yes	.55-1(c)	I-D	NA	G	A
Pyridine	110-86-1	PRD	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.55-1(e)	I-D	NA	G	A
Solution containing ammonium thiosulfate (≤60%), ammonium sulfate (≤6%) and ammonium sulfite (≤5%) (≤6%) and ammonium sulfite (≤5%)		ATAS	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No		NA	No	G	A
Sodium aluminate solution (45% or less)	11138-49-1	SAU	Atmos.	Amb/Elev	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	NR	No	.50-73, .56-1(a), (b), (c)	NA	NA	G	A
Sodium chlorate solution (50% or less)	7775-09	SDD	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No	.50-73	NA	NA	G	A
Sodium hypochlorite solution (20% or less)	7681-52-9	SHQ	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	.50-73, .56-1(a), (b)	NA	NA	G	A
Sodium Methylate (30% or less) in Methyl Alcohol Mixture	N/A	SMS	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	4 yr	A
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less)	N/A	SSH	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	Vent N	No	.50-73, .55-1(b)	NA	NA	G	A
Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm)	N/A	SSI	Atmos.	Amb.	III	1ii 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	.50-73, .55-1(b)	NA	NA	G	A
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	N/A	SSJ	Atmos.	Amb.	II	1ii 2i	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	No	.50-73, .55-1(b)	NA	NA	G	A
Spent Caustic Soda Solution (containing up to 0.1% Benzene)	N/A	SCSS	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Closed	II	G-1	NR	Vent F	No	.50-60, .50-73, .55-1(j)	NA	No	G	A
Styrene monomer	100-42-5	STY	Atmos.	Amb.	III	1i 2ii	Integral Gravity	Open	Open	II	G-1	NR	Vent N	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Tetrachloroethane	79-34-5	TEC	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	No	NA	NA	G	A
1,2,4-Trichlorobenzene	120-82-1	TCB	Atmos.	Amb.	III	1ii 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	No	I-D	NA	G	A
1,1,2-Trichloroethane	79-00-5	TCM	Atmos.	Amb.	III	1ii 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	.50-73, .56-1(a)	I-D	NA	G	A
Trichloroethylene	79-01-6	TCL	Atmos.	Amb.	III	1i 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	No	I-D	NA	G	A
1,2,3-Trichloropropane	96-18-4	TCN	Atmos.	Amb.	II	1ii 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-73, .56-1(a)	I-D	NA	G	A
Triphenylborane (10% or less), caustic soda solution	960-71-4	TPB	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	NR	No	.56-1(a), (b), (c)	NA	NA	G	A

Cargo Identification							Tanks			Cargo Transfer		Environmental Control							
Name	CAS Number	Chem Code	Press.	Temp.	Hull Type	Cargo Seg Tank	Type	Vent	Gauge	Pipe Clas	Cont	Tanks	Handling Space	Fire Prot Req	Special Requirements	Elec Haz	Temp Cont	Tank Intnl Insp Period	Tank Group
Trisodium phosphate solution	10101-89-0	TSP	Atmos.	Amb/Elev	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	NR	No	.50-73, .56-1(a), (c).	NA	NA	G	A
Urea, Ammonium nitrate solution (containing more than 2% NH3)	N/A	UAS	Atmos.	Amb.	III	1i 2i	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	No	.56-1(b)	I-D	NA	G	A
Vanillin black liquor (free alkali content, 3% or more).	68514-06-7	VBL	Atmos.	Amb.	III	1i 2i	Integral Gravity	Open	Open	II	G-1	NR	NR	No	.50-73, .56-1(a), (c), (g)	NA	NA	G	A
Vinyl acetate	108-05-4	VAM	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Open	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Vinyl neodecanoate	51000-52-3	VND	Atmos.	Amb.	III	1i 2ii	Integral Gravity	Open	Open	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81(a), (b)	I-D	NA	G	A
Vinyltoluene	25013-15-4	VNT	Atmos.	Amb.	III	1i 2ii	Integral Gravity	PV	Restr.	II	G-1	NR	Vent F	Yes	.50-70(a), .50-81, .56-1(a), (b), (c), (g)	I-D	NA	G	A

DHS, USCG, CG-1270 (REV. 01-23)

OMB APPROVED
1625-0027

UNITED STATES OF AMERICA

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

NATIONAL VESSEL DOCUMENTATION CENTER

CERTIFICATE OF DOCUMENTATION

VESSEL NAME	OFFICIAL NUMBER	IMO OR OTHER NUMBER	YEAR COMPLETED
CCL 421-T	1352615	KNDY179	2025

HAILING PORT	HULL MATERIAL	MECHANICAL PROPULSION
NEW ORLEANS LA	STEEL	NO

GROSS TONNAGE	NET TONNAGE	LENGTH	BREADTH	DEPTH
1616 GRT	1616 NRT	297.0	54.0	12.0

PLACE BUILT

GALVESTON TX

OWNERS	OPERATIONAL ENDORSEMENTS
D STEPHEN LAPLACE TRUSTEE OF THE FRANK BANTA JR 2012 GRANTOR TRUST	COASTWISE

MANAGING OWNER

D STEPHEN LAPLACE
1237 HWY 75
SUNSHINE LA 70780

RESTRICTIONS

NO RECREATION - BARGE, 79 FEET OR MORE IN LENGTH, MEASURED UNDER SIMPLIFIED SYSTEM

ENTITLEMENTS

NONE

REMARKS

None

ISSUE DATE

JULY 09, 2025

THIS CERTIFICATE EXPIRES

JULY 31, 2026

Christopher G. Washburn

DIRECTOR, NATIONAL VESSEL DOCUMENTATION CENTER

COPYBAN CAPTURE® ANTI-FRAUD PROTECTION

PREVIOUS EDITION OBSOLETE, THIS CERTIFICATE MAY NOT BE ALTERED

Certificate of Financial Responsibility (COFR)

https://www.uscg.mil/Mariners/National-Pollution-Funds-Center/COFRs/ECOFR-Active-Vessel-Status/

Updated: 09/09/2025 15:45

Vessel Name	Vin	Vessel Type Code	Vsl Vessel Type Desc	Gross Tonnage	Case Control Id	Case- Examiner Id	Case- Operator Name	Effective Date	Expiration Date	Insurance Cancel Flag
CCL 1	D518612	50	TANKBARGE	812	841310	22	CHEM CARRIERS, L.L.C	9/2/2025 4:00:00 AM	9/2/2028 12:00:00 AM	
CCL 2	D510107	50	TANKBARGE	855	841310	22	CHEM CARRIERS, L.L.C	6/23/2023 12:00:00 AM	6/23/2026 12:00:00 AM	
CCL 3	D296363	50	TANKBARGE	822	841310	22	CHEM CARRIERS, L.L.C	10/3/2023 12:00:00 AM	10/3/2026 12:00:00 AM	
CCL 4	D512519	50	TANKBARGE	860	841310	22	CHEM CARRIERS, L.L.C	4/7/2025 4:00:00 AM	4/7/2028 12:00:00 AM	
CCL 5	D512520	50	TANKBARGE	860	841310	22	CHEM CARRIERS, L.L.C	12/6/2022 12:00:00 AM	12/6/2025 12:00:00 AM	
CCL 6	D530996	50	TANKBARGE	798	841310	22	CHEM CARRIERS, L.L.C	1/26/2025 5:00:00 AM	1/26/2028 12:00:00 AM	
CCL 7	D551980	50	TANKBARGE	773	841310	22	CHEM CARRIERS, L.L.C	11/27/2023 12:00:00 AM	11/27/2026 12:00:00 AM	
CCL 8	D551982	50	TANKBARGE	773	841310	22	CHEM CARRIERS, L.L.C	9/27/2022 12:00:00 AM	9/27/2025 12:00:00 AM	
CCL 9	D551983	50	TANKBARGE	773	841310	22	CHEM CARRIERS, L.L.C	2/19/2023 12:00:00 AM	2/19/2026 12:00:00 AM	
CCL 10	D551979	50	TANKBARGE	773	841310	22	CHEM CARRIERS, L.L.C	12/12/2023 12:00:00 AM	12/12/2026 12:00:00 AM	
CCL 11	D551976	50	TANKBARGE	773	841310	22	CHEM CARRIERS, L.L.C	9/29/2022 12:00:00 AM	9/29/2025 12:00:00 AM	
CCL 14	D4497784	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	9/22/2022 12:00:00 AM	9/22/2025 12:00:00 AM	
CCL 15	D1164452	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	3/1/2024 12:00:00 AM	3/1/2027 12:00:00 AM	
CCL 16	D1164666	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	9/14/2024 12:00:00 AM	9/14/2027 12:00:00 AM	
CCL 17	D1166179	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	1/31/2023 12:00:00 AM	1/31/2026 12:00:00 AM	
CCL 18	D1168981	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	7/1/2023 12:00:00 AM	7/1/2026 12:00:00 AM	
CCL 19	D1168980	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	8/24/2023 12:00:00 AM	8/24/2026 12:00:00 AM	
CCL 20	D1191598	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	2/27/2025 5:00:00 AM	2/27/2028 12:00:00 AM	
CCL 21	D1191599	50	TANKBARGE	793	841310	22	CHEM CARRIERS, L.L.C	2/26/2025 5:00:00 AM	2/26/2028 12:00:00 AM	
CCL 22	D1191600	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	1/13/2025 5:00:00 AM	1/13/2028 12:00:00 AM	
CCL 23	D1191601	50	TANKBARGE	793	841310	22	CHEM CARRIERS, L.L.C	4/20/2025 4:00:00 AM	4/20/2028 12:00:00 AM	
CCL 24	D1196547	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	8/11/2023 12:00:00 AM	8/11/2026 12:00:00 AM	
CCL 25	D1196548	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	8/11/2023 12:00:00 AM	8/11/2026 12:00:00 AM	
CCL 26	D1203816	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	2/11/2025 5:00:00 AM	2/11/2028 12:00:00 AM	
CCL 27	D1203817	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	5/3/2024 12:00:00 AM	5/3/2027 12:00:00 AM	
CCL 28	D1212828	50	TANKBARGE	793	841310	22	CHEM CARRIERS, L.L.C	9/9/2023 12:00:00 AM	9/9/2026 12:00:00 AM	
CCL 29	D1212829	50	TANKBARGE	793	841310	22	CHEM CARRIERS, L.L.C	9/22/2023 12:00:00 AM	9/22/2026 12:00:00 AM	
CCL 30	D1305871	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	10/1/2023 12:00:00 AM	10/1/2026 12:00:00 AM	
CCL 31	D1305870	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	10/1/2023 12:00:00 AM	10/1/2026 12:00:00 AM	
CCL 32	D1305869	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	11/13/2023 12:00:00 AM	11/13/2026 12:00:00 AM	
CCL 33	D1305868	50	TANKBARGE	735	841310	22	CHEM CARRIERS, L.L.C	11/13/2023 12:00:00 AM	11/13/2026 12:00:00 AM	
CCL 401	D1216671	50	TANKBARGE	2001	841310	22	CHEM CARRIERS, L.L.C	4/13/2024 12:00:00 AM	4/13/2027 12:00:00 AM	
CCL 402	D1219910	50	TANKBARGE	1754	841310	22	CHEM CARRIERS, L.L.C	4/29/2024 12:00:00 AM	4/29/2027 12:00:00 AM	
CCL 403	D1231311	50	TANKBARGE	1691	841310	22	CHEM CARRIERS, L.L.C	2/8/2023 12:00:00 AM	2/8/2026 12:00:00 AM	
CCL 404	D1231312	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	2/23/2023 12:00:00 AM	2/23/2026 12:00:00 AM	
CCL 405	D1236867	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	1/1/2024 12:00:00 AM	1/1/2027 12:00:00 AM	
CCL 406	D1236866	50	TANKBARGE	1691	841310	22	CHEM CARRIERS, L.L.C	1/27/2024 12:00:00 AM	1/27/2027 12:00:00 AM	
CCL 407	D1246320	50	TANKBARGE	1754	841310	22	CHEM CARRIERS, L.L.C	8/22/2025 4:00:00 AM	8/22/2028 12:00:00 AM	
CCL 408	D1246097	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	8/7/2025 4:00:00 AM	8/7/2028 12:00:00 AM	
CCL 409	D1246098	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	10/2/2022 12:00:00 AM	10/2/2025 12:00:00 AM	
CCL 410	D1255906	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	9/3/2023 12:00:00 AM	9/3/2026 12:00:00 AM	
CCL 411	D1255907	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	9/25/2023 12:00:00 AM	9/25/2026 12:00:00 AM	
CCL 414-L	D1262941	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	9/23/2024 4:00:00 AM	9/23/2027 12:00:00 AM	
CCL 415-T	D1262942	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	9/28/2024 4:00:00 AM	9/28/2027 12:00:00 AM	
CCL 416-T	D1264691	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	1/20/2025 5:00:00 AM	1/20/2028 12:00:00 AM	
CCL 417-T	D1298307	50	TANKBARGE	1769	841310	22	CHEM CARRIERS, L.L.C	1/27/2023 12:00:00 AM	1/27/2026 12:00:00 AM	
CCL 418-L	D1306896	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	11/13/2023 12:00:00 AM	11/13/2026 12:00:00 AM	
CCL 419-L	D1306897	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	1/5/2024 12:00:00 AM	1/5/2027 12:00:00 AM	
CCL 420-T	D1348560	50	TANKBARGE	1619	841310	22	CHEM CARRIERS, L.L.C	2/12/2025 5:00:00 AM	2/12/2028 12:00:00 AM	
CCL 421-T	D1352615	50	TANKBARGE	1616	841310	22	CHEM CARRIERS, L.L.C	8/28/2025 4:00:00 AM	8/28/2028 12:00:00 AM	
AX 3202	D1089031	50	TANKBARGE	1754	841310	22	CHEM CARRIERS, L.L.C	6/11/2024 4:00:00 AM	6/11/2027 12:00:00 AM	

Ksolv

BARGE VAPOR TIGHTNESS LETTER

NOTE: Test results are valid for (1) one year from date of test

- Test date: 09-08-25
- Barge owner: ChemCarriers
- Barge Name/Official Number: CCL 421T / 1352615
- Maximum load rate (BPH): 5,500 (BPH)

→ Pressure cargo tanks and vapor system to (28) twenty-eight inches of water using a Manometer to record the time and pressure. Close all valves and allow the vessel to Remain pressure for (30) thirty minutes. Use soap to test and inspect for leaks. After (30) thirty minutes, record pressure and times.

→ Test cargo tanks and Vapor System to 28" inches of water.

→ Start Time: 14:00 Beginning Pressure: 28"

→ End Time: 14:30 Ending Pressure: 27.8"

✓ **This vessel has been tested in accordance with Section 61.304f and has been found to to be vapor tight.**

Company of Tester:	Location:
K-Solv Maritime	Channel view TX
Name of Tester (Print):	Signature of Tester:
Alejandro Vargas	Alejandro V.
Name of Witness (Print):	Signature of Witness:
Edgar Quiroz	Edgar Quiroz
Affiliation/Company of Witness (Print)	
K-Solv / supervisor	

1015 Lakeside Dr, Channelview, TX 77530
Phone: 281-452-4000 Fax: 281-452-5523
Revised 10/03/2019

Ksolv

BARGE PIPING LETTER

INSTURCTIONS: ALL FIELDS ARE REQUIRED. USE N/A ON ANY NON-APPLICABLE LINE.

BARGE OWNER/BARGE NAME: ChemCarriers / CCL421T

Letter expiration date (one year from test date): 09-08-26

NOTE: Test results are valid for (1) year from the date of test.

1. Cargo Piping and Valves (actual date of test): 09-08-25

   Test Pressure (188 psi): 188 psi

2. Cargo Relief Valve (actual date of test): 09-08-25

   Test Pressure (125 psi): 125 psi

3. Cargo Pressure Gauge (actual date of test): 09-08-25

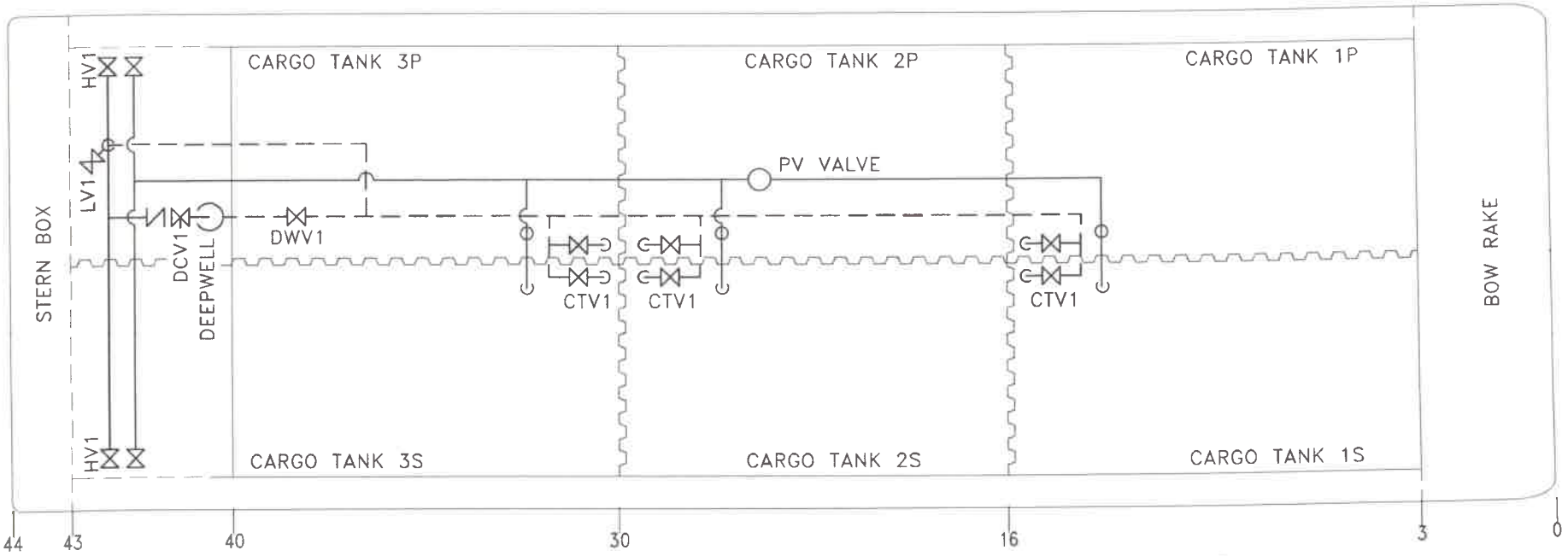
   Percent of Accuracy (%): 99 %

4. Steam Piping and Relief Valves (actual date of test): N/A

   Test Pressure (125 psi): N/A

Signature of Tester:	Alejandro V
Printed Name of Tester:	Alejandro Vargas
Company/Location of Tester:	K-Solv Maritime / Channelview TX.

1015 Lakeside Dr, Channelview, TX 77530
Phone: 281-452-4000 Fax: 281-452-5523
Revised 10/03/2019



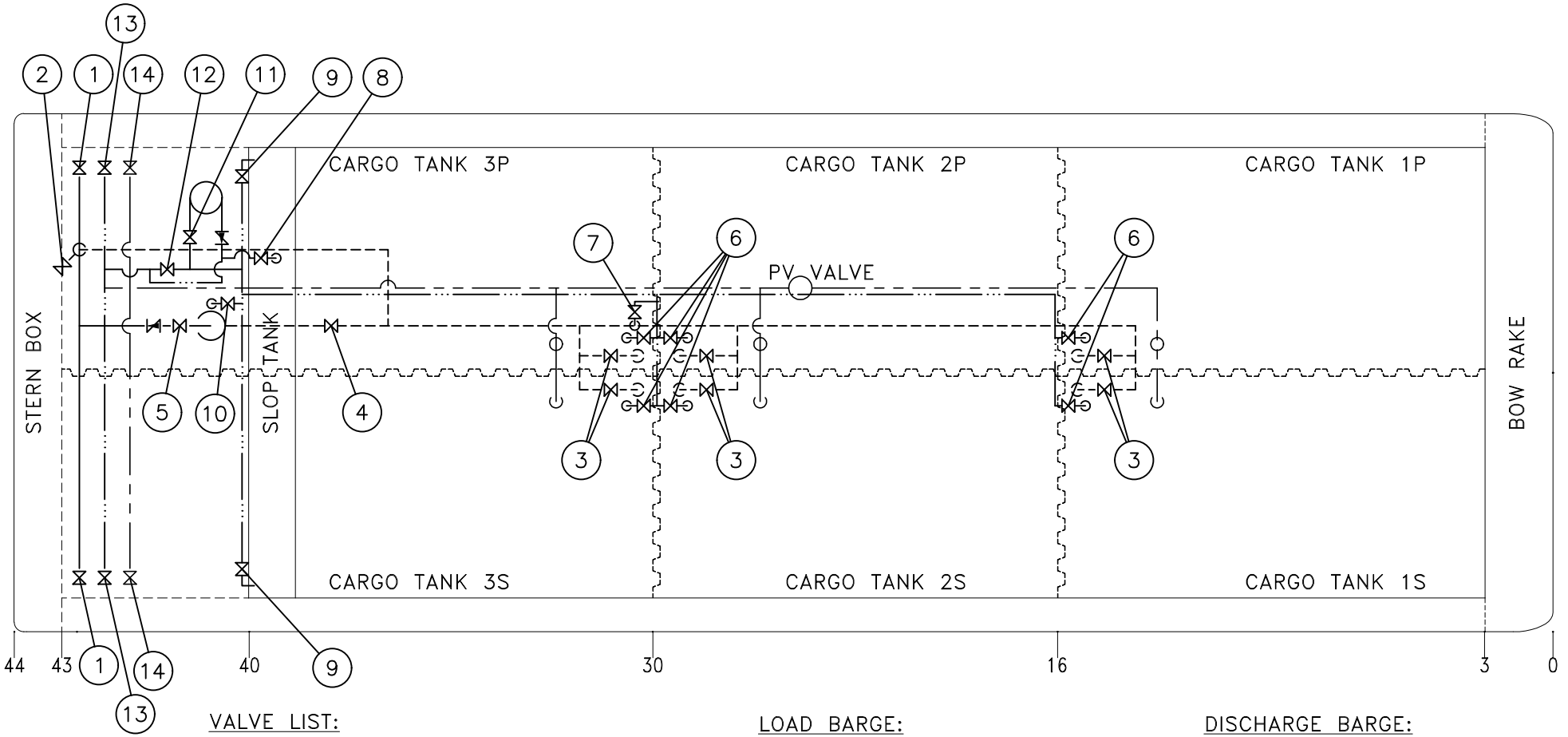
HV1 – CARGO HEADER VALVE
LV1 – CARGO LOAD VALVE
CTV1 – CARGO TANK LOAD/DISCHARGE VALVE
DWV1 – DEEPWELL BLOCK VALVE
DCV1 – CARGO PUMP DISCHARGE VALVE

LOAD BARGE:
OPEN: HV1, LV1, CTV1, SV1
CLOSE: DWV1, DCV1

DISCHARGE BARGE:
OPEN: DWV1, DCV1, HV1, CTV1
CLOSE: LV1

CARGO AND VAPOR PIPING

CHEM CARRIERS	297'-6"X54'X12' TANK BARGE – CCL 420-T & 421-T	TANKERMAN'S PLAN	DATE 11/24	DR. SRM



VALVE LIST:

1. CARGO HEADER VALVE
2. CARGO LOAD VALVE
3. CARGO TANK LOAD/DISCHARGE VALVE
4. DEEPWELL BLOCK VALVE
5. CARGO PUMP DISCHARGE
6. SUMP STRIPPING
7. HOLD CARGO HEADER STRIPPING
8. SLOP TANK BLOCK VALVE
9. SLOP TANK STRIPPING
10. DEEPWELL CAN STRIPPING
11. STRIPPING PUMP INTAKE
12. STRIPPING BLOCK VALVE
13. STRIPPING HEADER VALVE
14. VAPOR HEADER VALVE

LOAD BARGE:
OPEN: 1, 2, 3
CLOSE: 4 & 5

DISCHARGE BARGE:
OPEN: 1, 3, 4, 5
CLOSE: 2

STRIP BARGE TO SHORE:
OPEN: 6, 7, 9, 10, 11, 13
CLOSE: 8, 12

STRIP CARGO TO SLOP:
OPEN: 6, 7, 8, 10, 11
CLOSE: 9, 12, 13

VAPOR PIPE

STRIPPING PIPE

CHEM CARRIERS	297'-6"X54'X12' TANK BARGE – CCL 420-T & 421-T	TANKERMAN'S PLAN	DATE 04/25	DR. SRM

Plan Review Information Sheet (PRIS) for Unmanned Inland Tank Barge

1. Vessel Identification	Hull Type	Service	ABS classed?
CCL 420-T, O.N. 1348560, Kennedy Construction Hull No. 178	II/III	O/D	No
CCL 421-T, O.N. 1352615, Kennedy Construction Hull No. 179	II/III	O/D	No

2. Route Permitted - Routes and Conditions

R	Rivers
LBS	Lakes, Bays, and Sounds

3. Cargo Authority - "Authorization" Tab in "Cargo" Window

Authorization:

46 CFR Sub. D Authority:	Highest Grade	A	Capacity (bbls)	29,442			
46 CFR Sub. O Authority:	Part 151	Yes	Part 153	No	Part 154	No	
33 CFR Sub. O Authority:	Part 151.47	No	Part 151.49a	No	Part 151.49b	No	

4. "Conditions of Carriage" Tab in "Cargo" Window

a. The following statement should appear at the beginning of the COI's "Conditions of Carriage" section:

Only those cargoes named in the vessel's Cargo Authority Attachment may be carried, and then only in the tanks indicated. When the vessel is carrying cargoes containing greater than 0.5% benzene, the person in charge is responsible for ensuring the provisions of 46 US Code of Federal Regulations Part 197, Subpart C are applied.

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 Cargo Authority Attachment.

b. 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 13.57 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed below.

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

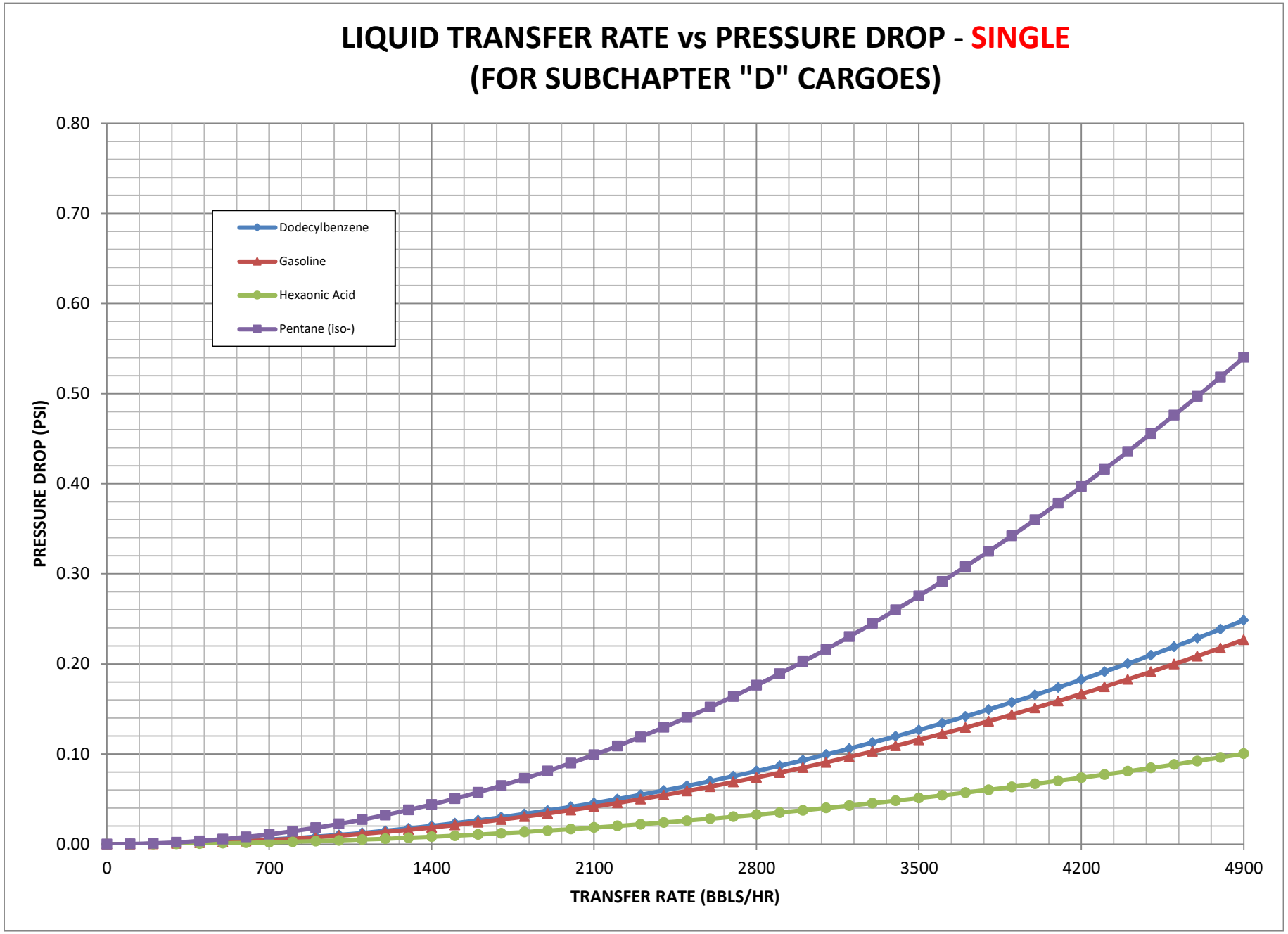
5. Loading Constraints

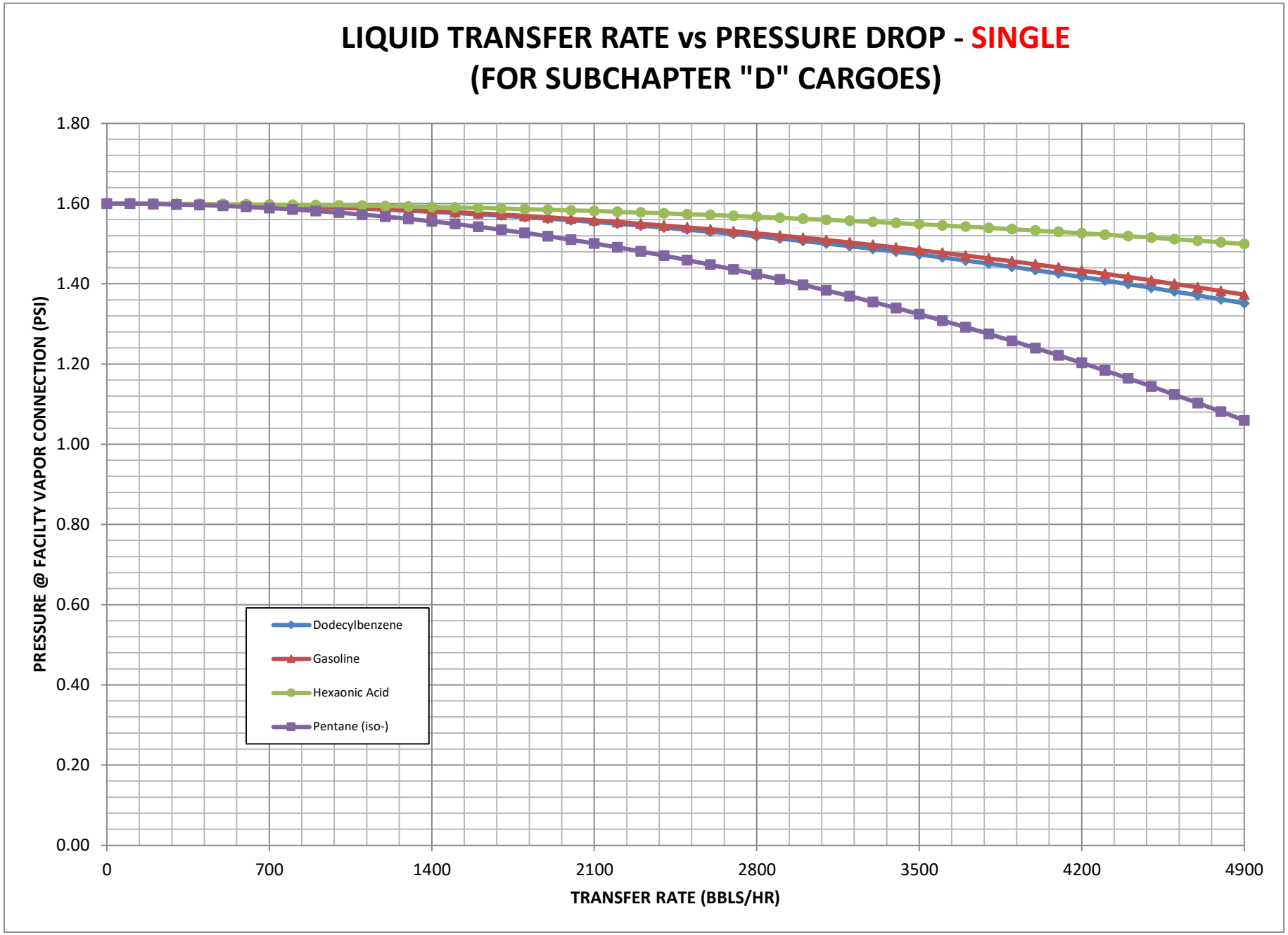
Loading Constraints - Structural

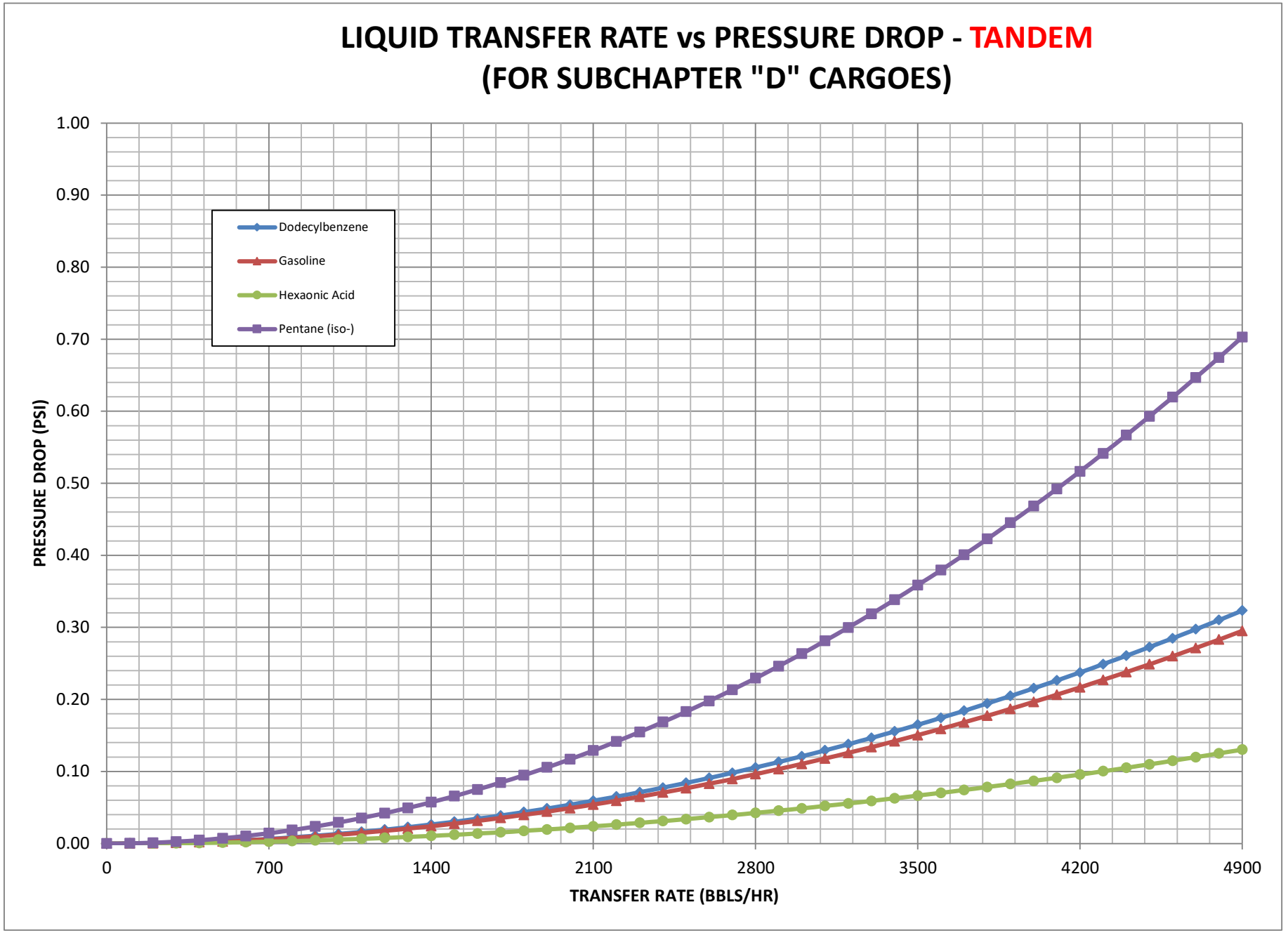
Tank	Max Cargo Wgt/Each Tank (ST)	Max Density (lbs/gal)
1 P/S	780	13.57
2 P/S	850	13.57
3 P/S	712	13.57

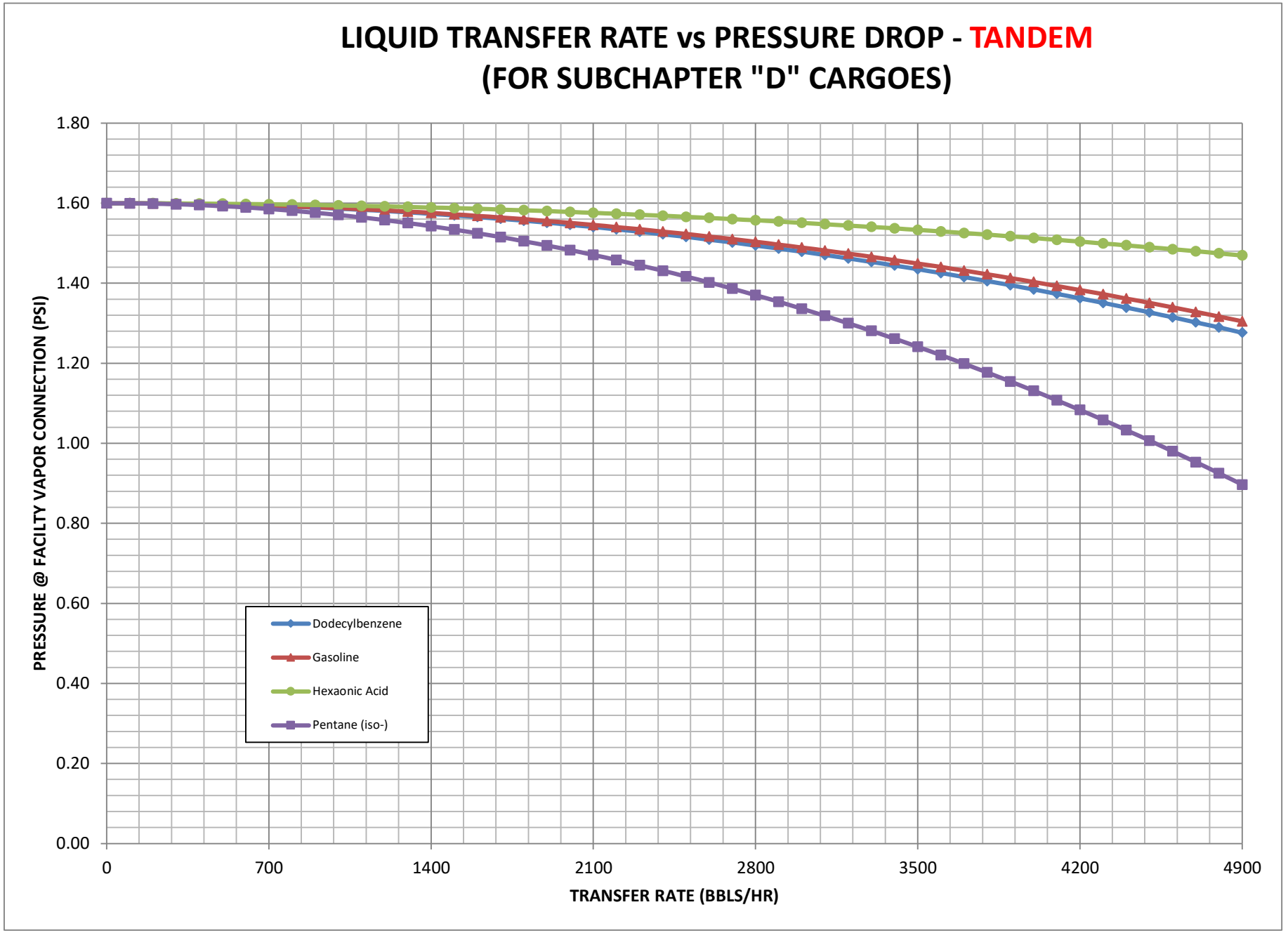
Loading Constraints - Stability

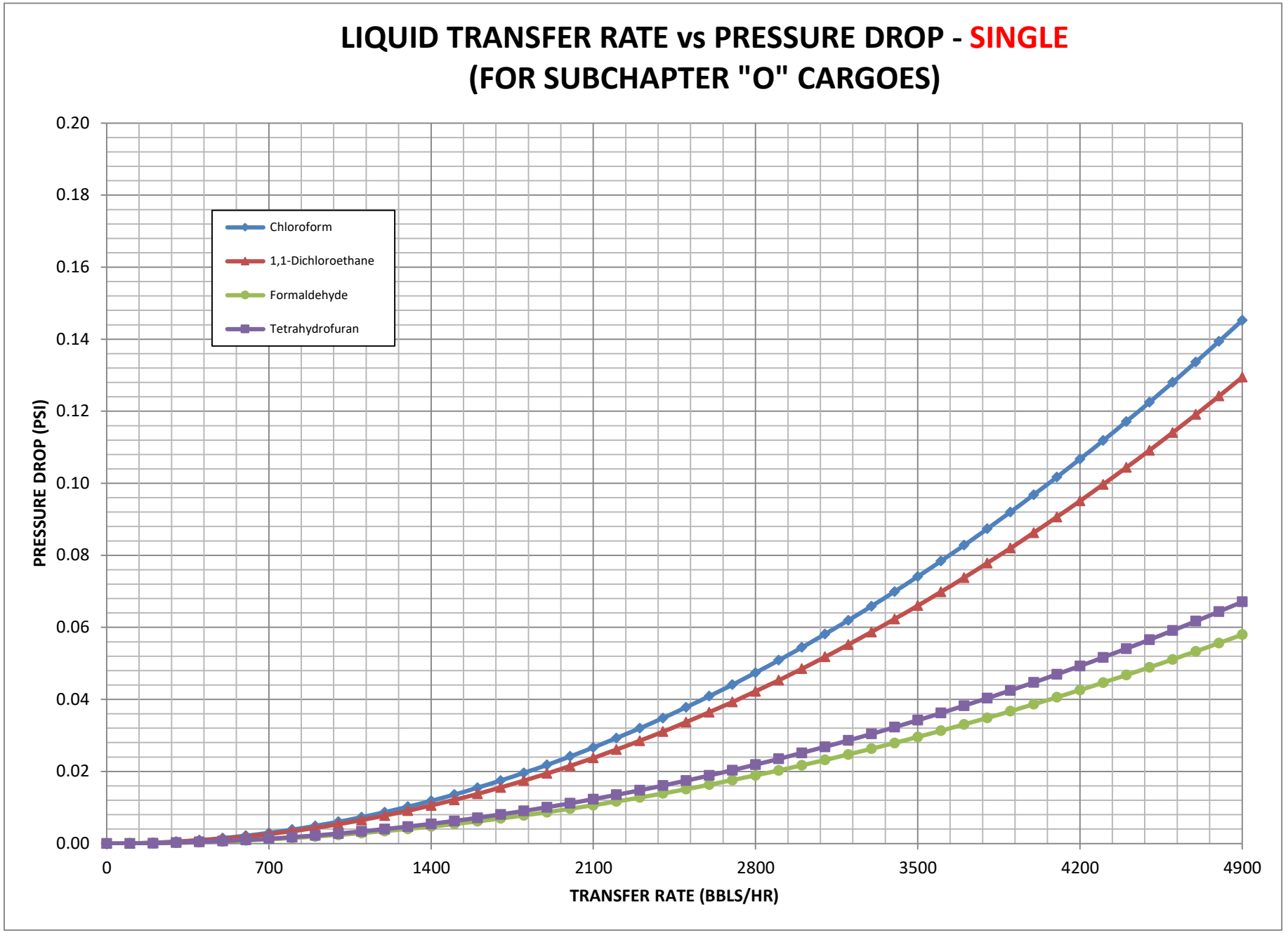
Hull Type	Route	Max. Load (ST)	Max Draft (ft, in)	Max Density (lbs/gal)
II	R, LBS	4034	10'-1 3/4"	13.57
III	R, LBS	4461	11'-0"	13.57

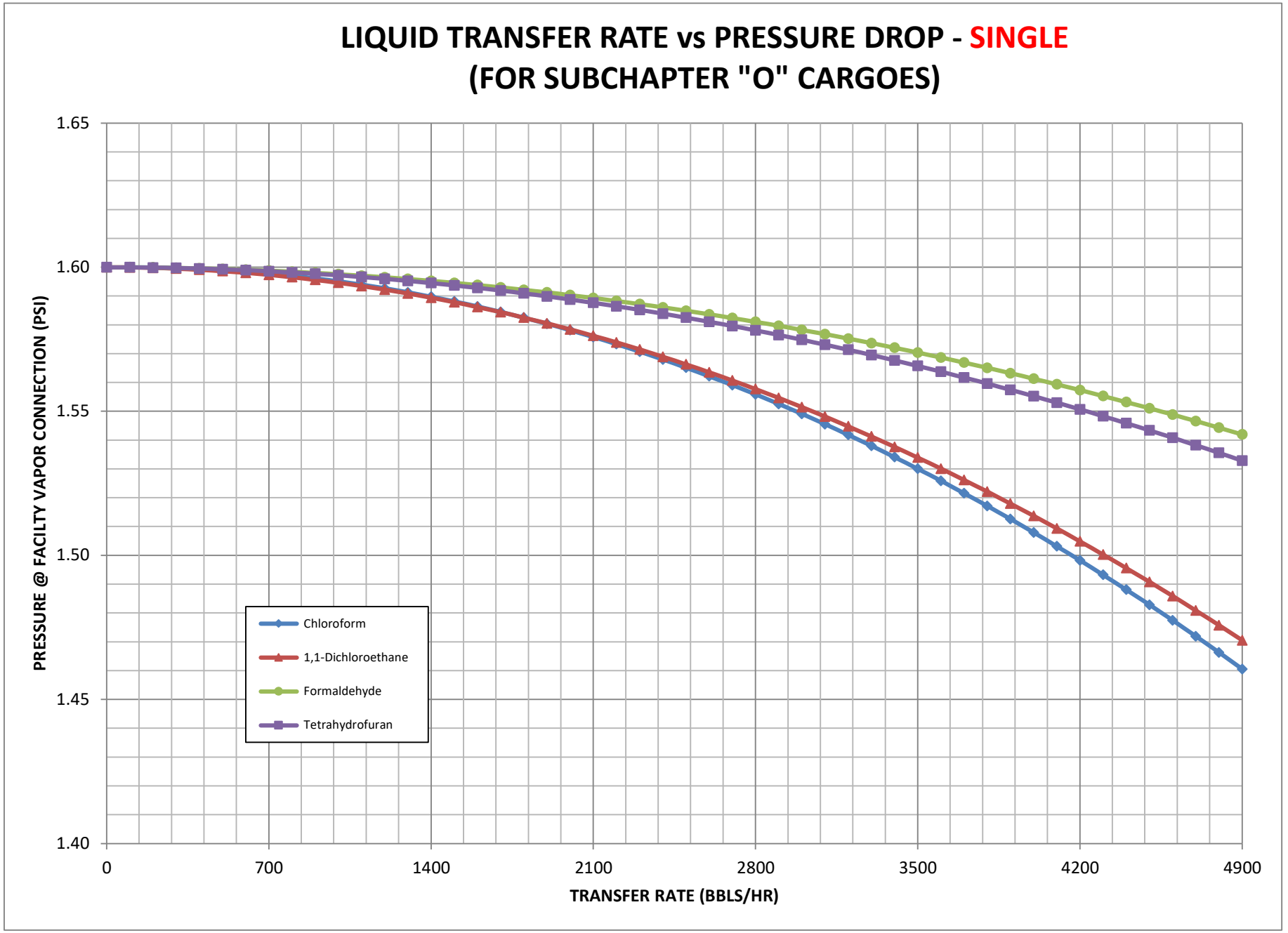

LIQUID TRANSFER RATE vs PRESSURE DROP - SINGLE
(FOR SUBCHAPTER "D" CARGOES)
PRESSURE DROP (PSI)
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Dodecylbenzene
Gasoline
Hexaonic Acid
Pentane (iso-)
0
700
1400
2100
2800
3500
4200
4900
TRANSFER RATE (BBLS/HR)

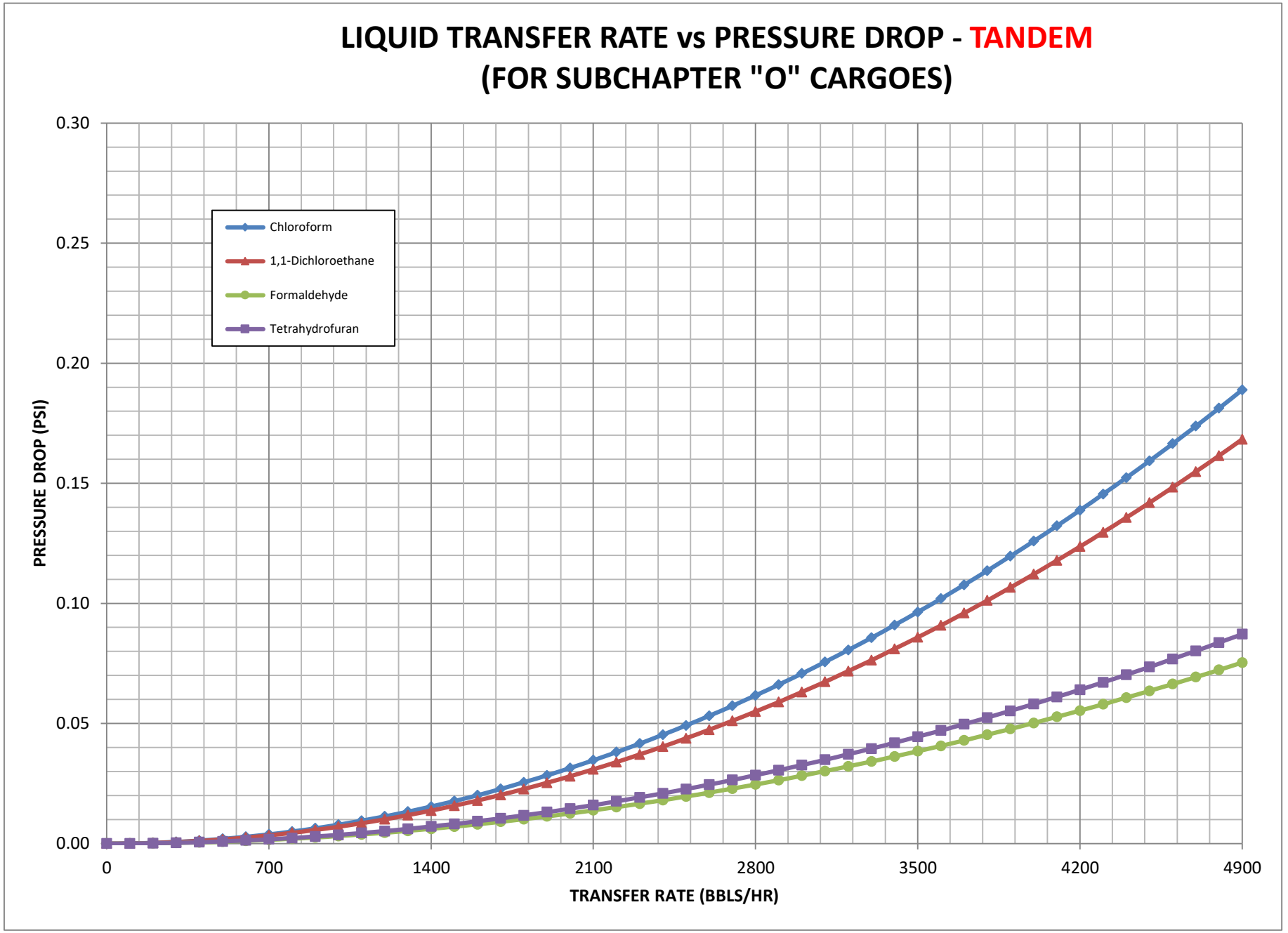

LIQUID TRANSFER RATE vs PRESSURE DROP - SINGLE
(FOR SUBCHAPTER "D" CARGOES)
PRESSURE @ FACILTY VAPOR CONNECTION (PSI)
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
700
1400
2100
2800
3500
4200
4900
TRANSFER RATE (BBLS/HR)
Dodecylbenzene
Gasoline
Hexaonic Acid
Pentane (iso-)

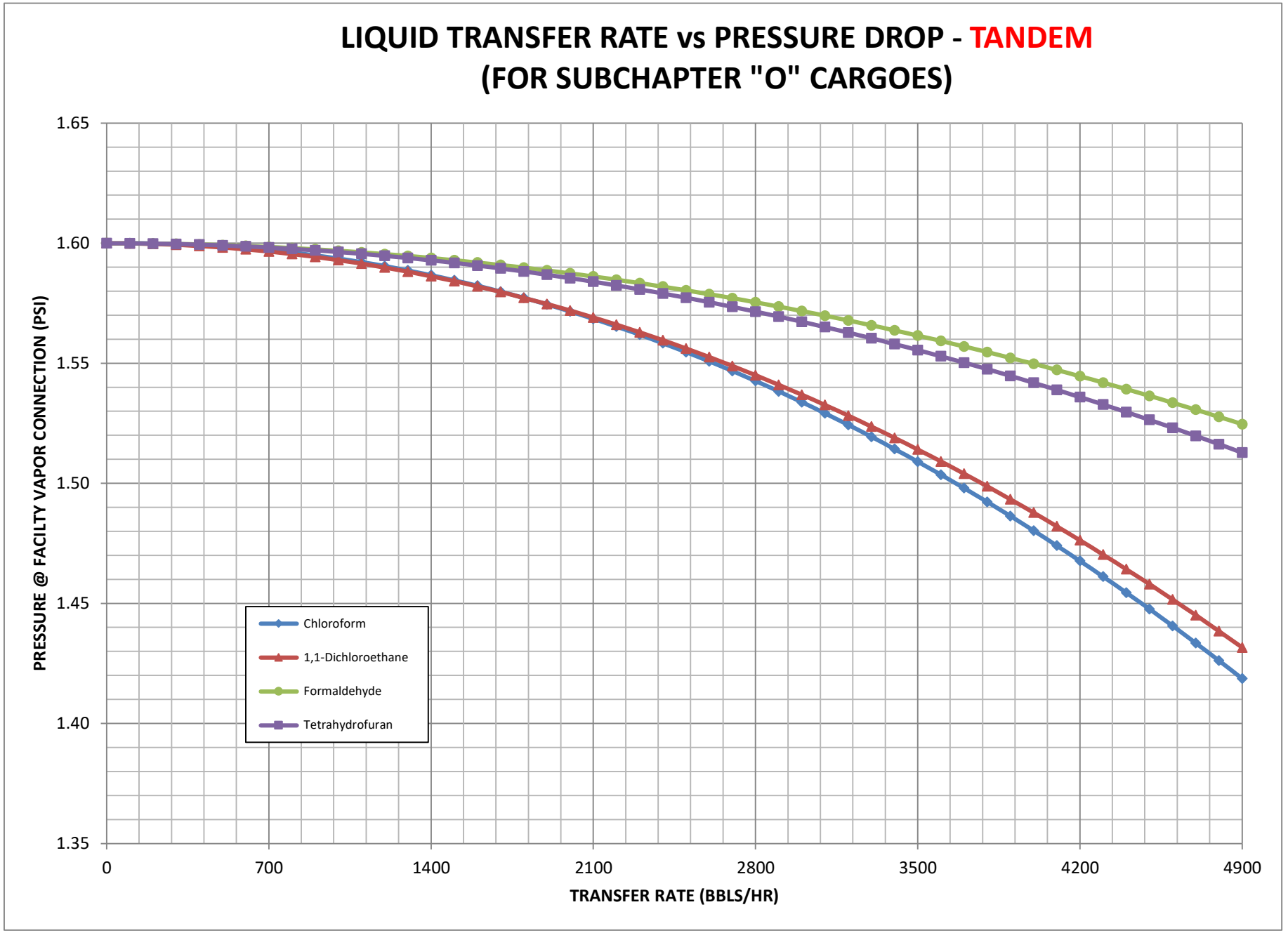

LIQUID TRANSFER RATE vs PRESSURE DROP - TANDEM
(FOR SUBCHAPTER "D" CARGOES)
PRESSURE DROP (PSI)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
700
1400
2100
2800
3500
4200
4900
TRANSFER RATE (BBLS/HR)
Dodecylbenzene
Gasoline
Hexaonic Acid
Pentane (iso-)


LIQUID TRANSFER RATE vs PRESSURE DROP - TANDEM
(FOR SUBCHAPTER "D" CARGOES)
PRESSURE @ FACILTY VAPOR CONNECTION (PSI)
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
700
1400
2100
2800
3500
4200
4900
TRANSFER RATE (BBLS/HR)
Dodecylbenzene
Gasoline
Hexaonic Acid
Pentane (iso-)


LIQUID TRANSFER RATE vs PRESSURE DROP - SINGLE
(FOR SUBCHAPTER "O" CARGOES)
PRESSURE DROP (PSI)
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
Chloroform
1,1-Dichloroethane
Formaldehyde
Tetrahydrofuran
0
700
1400
2100
2800
3500
4200
4900
TRANSFER RATE (BBLS/HR)


LIQUID TRANSFER RATE vs PRESSURE DROP - SINGLE
(FOR SUBCHAPTER "O" CARGOES)
PRESSURE @ FACILTY VAPOR CONNECTION (PSI)
1.65
1.60
1.55
1.50
1.45
1.40
0
700
1400
2100
2800
3500
4200
4900
TRANSFER RATE (BBLS/HR)
Chloroform
1,1-Dichloroethane
Formaldehyde
Tetrahydrofuran


LIQUID TRANSFER RATE vs PRESSURE DROP - TANDEM
(FOR SUBCHAPTER "O" CARGOES)
Chloroform
1,1-Dichloroethane
Formaldehyde
Tetrahydrofuran
PRESSURE DROP (PSI)
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
700
1400
2100
2800
3500
4200
4900
TRANSFER RATE (BBLS/HR)


LIQUID TRANSFER RATE vs PRESSURE DROP - TANDEM
(FOR SUBCHAPTER "O" CARGOES)
PRESSURE @ FACILTY VAPOR CONNECTION (PSI)
1.65
1.60
1.55
1.50
1.45
1.40
1.35
0
700
1400
2100
2800
3500
4200
4900
TRANSFER RATE (BBLS/HR)
Chloroform
1,1-Dichloroethane
Formaldehyde
Tetrahydrofuran

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 421-T

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 421-T 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 tanker man assigned shall be in charge and responsible for the safe transfer of cargo.

PARTS 4. PERSONS IN CHARGE

The tanker man (person in charge) is responsible for transferring cargo and carrying out related operations on board in an efficient, safe, and pollution free manner. The tanker man whether employed by the towboat, owner, operator, a shore tanker man service, or Chem Carriers L.L.C., shall comply with all Coast Guard, State and local regulations. Tanker man'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 tanker man, 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 etc.
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 418-L. 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 tanker man 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 5000 BBLS/HR for

subchapter "D" Cargoes and 5000 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.

VESSEL INCIDENT / ACCIDENT NOTIFICATION CHART

Incidents that involve injury or illness, spill / pollution or a probable discharge, significant equipment failure, property damage, cargo related issues, service delays or any accident involving a Chem Carriers Towing, LLC vessel or crewmember shall be immediately called into the Chem Carriers Towing, LLC 24-hour Emergency Hotline at 225-642-0060

Master Standing the Watch

Once the situation has been stabilized and all safety issues have been addressed, immediately contact the Chem Carriers Towing, LLC Emergency Hotline (225-642-0060)

Any serious marine incident, or any incident that has the potential to become a serious marine incident, alcohol testing shall be conducted on all involved crewmembers within 2 hours, whether onboard the vessel or at a testing facility.

NATIONAL Response Center

1-800-424-8802
or
1-202-267-2675

MADANTORY for all pollution incidents on CCT equipment

Chem Carriers Towing, LLC Emergency Hotline

Qualified Individual (QI)

225-642-0060

State Notifications

Louisiana 225-925-6595
Mississippi 601-987-1212
Texas 409-924-5400

USCG COTP ZONES

Baton Rouge 225-298-5400
New Orleans 504-365-2200
Morgan City 985-380-5320
Lake Charles 337-721-5741

Oil Spill Removal Organization
Customer
Internal

Reference Emergency Response Guidelines for a Complete List of Required Notifications

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
April 15, 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 Shipboard Oil Pollution Emergency Plan (SOPEP), Control Number 56041, for CCL 421-T (1352615), has been reviewed and found to be in compliance with the requirements of Regulation 37 of Annex I of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78).

This approval will remain valid until **March 21, 2030**. You must review your plan annually within one (1) month of the anniversary date of the plan's expiration date and submit a letter to this office certifying that the review has been completed. Any alteration or revision made to the plan, with the exception of those made to the appendices and non-mandatory provisions, must be submitted to this office for review and approval prior to the implementation of the revision. Further, the entire plan must be resubmitted to the Coast Guard for reapproval six (6) months before the end of the approval period of the plan.

I remind you that your plan is a vital working document and that implementing the plan will help ensure effective response and mitigation in the event of an oil pollution incident. Please be sure that all parties with responsibilities under the plan are familiar with the plan's procedures and requirements.

This letter shall be maintained onboard the vessel and placed in the front of the plan.

Sincerely,

CHARRON MCCOMBS
Lieutenant Commander
Acting Chief, Domestic Preparedness & Planning Division
U.S. Coast Guard
By direction

The action has been thoroughly reviewed by the USCG, and determined to be categorically excluded under current USCG CE(s) # 31 from further environmental documentation, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1D, as authorized by DHS MD 5100.1.

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
October 16, 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

Ref: (a) Your correspondence dated September 18, 2024
(b) Title 33 Code of Federal Regulations (CFR) Part 104

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**." The list of vessels covered by this letter is attached as enclosure (1).

Your vessels 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 this letter unless rescinded in writing by the local COTP/OCMI. You must review your plans annually and submit any amendments to this office for approval. Please ensure that a copy of the VSP is maintained on board the vessels 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,

Kathryn C. Williams

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

Enclosure: (1) List of Vessels Covered

List of Vessels Covered

Vessel Name	Official Number (O.N.)
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

Vessel Name	Official Number (O.N.)
CCL 415-T	1262942
CCL 416-T	1264691
CCL 417 T	1298307
CCL 418-L	1306896
CCL 419-L	1306897
CCL 420-T	1348560
CCL 421-T	CG1843359
HFL 413	1237482
HFL 415	1237483
HFL 435	1236563
HFL 605	1237484

BARGE "CCL 421T"

ULLAGE TRIM TABLE

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN
1 PORT	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 01-1/8	01-1/8	- 01-3/8	01-3/8	- 01-5/8	01-5/8
1 STBD	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 01-1/8	01-1/8	- 01-3/8	01-3/8	- 01-5/8	01-5/8
2 PORT	- 00-1/8	00-1/8	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-5/8	00-5/8	- 00-3/4	00-3/4	- 00-7/8	00-7/8
2 STBD	- 00-1/8	00-1/8	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-5/8	00-5/8	- 00-3/4	00-3/4	- 00-7/8	00-7/8
3 PORT	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-3/4	- 00-3/4	01-1/8	- 01-1/8	01-3/8	- 01-3/8	01-5/8	- 01-5/8
3 STBD	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-3/4	- 00-3/4	01-0/8	- 01-0/8	01-3/8	- 01-3/8	01-5/8	- 01-5/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 1'-00"
AFT DRAFT = 4'-00"
DIFF. = 3'-00" (DOWN BY STERN)

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

LENGTH BETWEEN DRAFT MARKS: 245'-03"

July 14, 2025

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

http://www.pmacorp.net

BARGE "CCL 421-T"

1 PORT

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	4,805.01	0	4,492.27	0	4,155.38	0	3,800.74	0	3,443.60	0	3,086.46	0	2,729.33	0	2,372.19	0	2,015.00
1/4		1/4	4,800.43	1/4	4,485.46	1/4	4,148.16	1/4	3,793.30	1/4	3,436.16	1/4	3,079.02	1/4	2,721.88	1/4	2,364.75	1/4	2,007.56
1/2		1/2	4,794.62	1/2	4,478.62	1/2	4,140.92	1/2	3,785.86	1/2	3,428.72	1/2	3,071.58	1/2	2,714.44	1/2	2,357.31	1/2	2,000.12
3/4		3/4	4,788.80	3/4	4,471.78	3/4	4,133.67	3/4	3,778.42	3/4	3,421.28	3/4	3,064.14	3/4	2,707.00	3/4	2,349.86	3/4	1,992.68
1		1	4,782.98	1	4,464.93	1	4,126.42	1	3,770.98	1	3,413.84	1	3,056.70	1	2,699.56	1	2,342.42	1	1,985.24
1/4		1/4	4,777.17	1/4	4,458.09	1/4	4,119.18	1/4	3,763.54	1/4	3,406.40	1/4	3,049.26	1/4	2,692.12	1/4	2,334.98	1/4	1,977.80
1/2		1/2	4,770.62	1/2	4,451.22	1/2	4,111.89	1/2	3,756.10	1/2	3,398.96	1/2	3,041.82	1/2	2,684.68	1/2	2,327.54	1/2	1,970.36
3/4		3/4	4,764.06	3/4	4,444.34	3/4	4,104.60	3/4	3,748.66	3/4	3,391.52	3/4	3,034.38	3/4	2,677.24	3/4	2,320.10	3/4	1,962.91
2		2	4,757.51	2	4,437.46	2	4,097.31	2	3,741.22	2	3,384.08	2	3,026.94	2	2,669.80	2	2,312.66	2	1,955.47
1/4		1/4	4,750.96	1/4	4,430.59	1/4	4,090.02	1/4	3,733.78	1/4	3,376.64	1/4	3,019.50	1/4	2,662.36	1/4	2,305.22	1/4	1,948.03
1/2		1/2	4,744.40	1/2	4,423.68	1/2	4,082.69	1/2	3,726.34	1/2	3,369.20	1/2	3,012.06	1/2	2,654.92	1/2	2,297.78	1/2	1,940.59
3/4		3/4	4,737.84	3/4	4,416.77	3/4	4,075.35	3/4	3,718.90	3/4	3,361.76	3/4	3,004.62	3/4	2,647.48	3/4	2,290.34	3/4	1,933.15
3		3	4,731.27	3	4,409.86	3	4,068.02	3	3,711.46	3	3,354.32	3	2,997.18	3	2,640.04	3	2,282.90	3	1,925.70
1/4		1/4	4,724.71	1/4	4,402.95	1/4	4,060.68	1/4	3,704.02	1/4	3,346.88	1/4	2,989.74	1/4	2,632.60	1/4	2,275.46	1/4	1,918.26
1/2		1/2	4,718.24	1/2	4,396.01	1/2	4,053.31	1/2	3,696.58	1/2	3,339.44	1/2	2,982.30	1/2	2,625.16	1/2	2,268.02	1/2	1,910.82
3/4		3/4	4,711.76	3/4	4,389.07	3/4	4,045.94	3/4	3,689.14	3/4	3,332.00	3/4	2,974.86	3/4	2,617.72	3/4	2,260.57	3/4	1,903.38
4		4	4,705.29	4	4,382.12	4	4,038.57	4	3,681.70	4	3,324.56	4	2,967.42	4	2,610.28	4	2,253.13	4	1,895.94
1/4		1/4	4,698.81	1/4	4,375.18	1/4	4,031.20	1/4	3,674.26	1/4	3,317.12	1/4	2,959.98	1/4	2,602.84	1/4	2,245.69	1/4	1,888.50
1/2		1/2	4,692.30	1/2	4,368.21	1/2	4,023.80	1/2	3,666.82	1/2	3,309.68	1/2	2,952.54	1/2	2,595.40	1/2	2,238.25	1/2	1,881.05
3/4		3/4	4,685.79	3/4	4,361.23	3/4	4,016.39	3/4	3,659.38	3/4	3,302.24	3/4	2,945.10	3/4	2,587.96	3/4	2,230.81	3/4	1,873.61
5		5	4,679.28	5	4,354.26	5	4,008.99	5	3,651.93	5	3,294.80	5	2,937.66	5	2,580.52	5	2,223.37	5	1,866.17
1/4		1/4	4,672.77	1/4	4,347.28	1/4	4,001.59	1/4	3,644.49	1/4	3,287.36	1/4	2,930.22	1/4	2,573.08	1/4	2,215.92	1/4	1,858.73
1/2		1/2	4,666.22	1/2	4,340.28	1/2	3,994.16	1/2	3,637.05	1/2	3,279.91	1/2	2,922.78	1/2	2,565.64	1/2	2,208.48	1/2	1,851.29
3/4		3/4	4,659.68	3/4	4,333.27	3/4	3,986.73	3/4	3,629.61	3/4	3,272.47	3/4	2,915.34	3/4	2,558.20	3/4	2,201.04	3/4	1,843.85
6		6	4,653.13	6	4,326.26	6	3,979.30	6	3,622.17	6	3,265.03	6	2,907.89	6	2,550.76	6	2,193.60	6	1,836.40
1/4		1/4	4,646.58	1/4	4,319.25	1/4	3,971.87	1/4	3,614.73	1/4	3,257.59	1/4	2,900.45	1/4	2,543.32	1/4	2,186.16	1/4	1,828.96
1/2		1/2	4,639.98	1/2	4,312.21	1/2	3,964.43	1/2	3,607.29	1/2	3,250.15	1/2	2,893.01	1/2	2,535.87	1/2	2,178.72	1/2	1,821.52
3/4		3/4	4,633.38	3/4	4,305.17	3/4	3,956.99	3/4	3,599.85	3/4	3,242.71	3/4	2,885.57	3/4	2,528.43	3/4	2,171.28	3/4	1,814.08
7		7	4,626.77	7	4,298.13	7	3,949.55	7	3,592.41	7	3,235.27	7	2,878.13	7	2,520.99	7	2,163.83	7	1,806.64
1/4		1/4	4,620.17	1/4	4,291.09	1/4	3,942.11	1/4	3,584.97	1/4	3,227.83	1/4	2,870.69	1/4	2,513.55	1/4	2,156.39	1/4	1,799.20
1/2		1/2	4,613.51	1/2	4,284.01	1/2	3,934.67	1/2	3,577.53	1/2	3,220.39	1/2	2,863.25	1/2	2,506.11	1/2	2,148.95	1/2	1,791.75
3/4		3/4	4,606.84	3/4	4,276.94	3/4	3,927.23	3/4	3,570.09	3/4	3,212.95	3/4	2,855.81	3/4	2,498.67	3/4	2,141.51	3/4	1,784.31
8		8	4,600.18	8	4,269.86	8	3,919.79	8	3,562.65	8	3,205.51	8	2,848.37	8	2,491.23	8	2,134.07	8	1,776.87
1/4		1/4	4,593.52	1/4	4,262.78	1/4	3,912.35	1/4	3,555.21	1/4	3,198.07	1/4	2,840.93	1/4	2,483.79	1/4	2,126.63	1/4	1,769.43
1/2		1/2	4,586.81	1/2	4,255.67	1/2	3,904.91	1/2	3,547.77	1/2	3,190.63	1/2	2,833.49	1/2	2,476.35	1/2	2,119.19	1/2	1,761.99
3/4		3/4	4,580.11	3/4	4,248.55	3/4	3,897.47	3/4	3,540.33	3/4	3,183.19	3/4	2,826.05	3/4	2,468.91	3/4	2,111.74	3/4	1,754.55
9		9	4,573.41	9	4,241.44	9	3,890.03	9	3,532.89	9	3,175.75	9	2,818.61	9	2,461.47	9	2,104.30	9	1,747.10
1/4		1/4	4,566.70	1/4	4,234.33	1/4	3,882.59	1/4	3,525.45	1/4	3,168.31	1/4	2,811.17	1/4	2,454.03	1/4	2,096.86	1/4	1,739.66
1/2		1/2	4,559.97	1/2	4,227.18	1/2	3,875.15	1/2	3,518.01	1/2	3,160.87	1/2	2,803.73	1/2	2,446.59	1/2	2,089.42	1/2	1,732.22
3/4		3/4	4,553.23	3/4	4,220.03	3/4	3,867.71	3/4	3,510.57	3/4	3,153.43	3/4	2,796.29	3/4	2,439.15	3/4	2,081.98	3/4	1,724.78
10		10	4,546.49	10	4,212.88	10	3,860.27	10	3,503.13	10	3,145.99	10	2,788.85	10	2,431.71	10	2,074.54	10	1,717.34
1/4		1/4	4,539.76	1/4	4,205.74	1/4	3,852.83	1/4	3,495.69	1/4	3,138.55	1/4	2,781.41	1/4	2,424.27	1/4	2,067.09	1/4	1,709.90
1/2		1/2	4,532.99	1/2	4,198.56	1/2	3,845.39	1/2	3,488.25	1/2	3,131.11	1/2	2,773.97	1/2	2,416.83	1/2	2,059.65	1/2	1,702.45
3/4		3/4	4,526.22	3/4	4,191.38	3/4	3,837.94	3/4	3,480.81	3/4	3,123.67	3/4	2,766.53	3/4	2,409.39	3/4	2,052.21	3/4	1,695.01
11		11	4,519.45	11	4,184.20	11	3,830.50	11	3,473.37	11	3,116.23	11	2,759.09	11	2,401.95	11	2,044.77	11	1,687.57
1/4	4,818.74	1/4	4,512.68	1/4	4,177.02	1/4	3,823.06	1/4	3,465.92	1/4	3,108.79	1/4	2,751.65	1/4	2,394.51	1/4	2,037.33	1/4	1,680.13
1/2	4,814.16	1/2	4,505.88	1/2	4,169.80	1/2	3,815.62	1/2	3,458.48	1/2	3,101.35	1/2	2,744.21	1/2	2,387.07	1/2	2,029.89	1/2	1,672.69
3/4	4,809.59	3/4	4,499.07	3/4	4,162.59	3/4	3,808.18	3/4	3,451.04	3/4	3,093.90	3/4	2,736.77	3/4	2,379.63	3/4	2,022.45	3/4	1,665.25

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 ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 37'-03" FORWARD OF AFT BULKHEAD.

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

BARGE "CCL 421-T"

1 PORT
ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	1,657.80	0	1,300.60	0	944.70	0	587.98	0	251.77	0		0		0		0		0	
1/4	1,650.36	1/4	1,293.16	1/4	937.30	1/4	580.56	1/4	245.17	1/4		1/4		1/4		1/4		1/4	
1/2	1,642.92	1/2	1,285.72	1/2	929.89	1/2	573.18	1/2	238.64	1/2		1/2		1/2		1/2		1/2	
3/4	1,635.48	3/4	1,278.28	3/4	922.48	3/4	565.81	3/4	232.10	3/4		3/4		3/4		3/4		3/4	
1	1,628.04	1	1,270.84	1	915.07	1	558.44	1	225.57	1		1		1		1		1	
1/4	1,620.60	1/4	1,263.39	1/4	907.66	1/4	551.07	1/4	219.04	1/4		1/4		1/4		1/4		1/4	
1/2	1,613.15	1/2	1,255.95	1/2	900.25	1/2	543.77	1/2	212.57	1/2		1/2		1/2		1/2		1/2	
3/4	1,605.71	3/4	1,248.51	3/4	892.83	3/4	536.47	3/4	206.11	3/4		3/4		3/4		3/4		3/4	
2	1,598.27	2	1,241.07	2	885.41	2	529.16	2	199.65	2		2		2		2		2	
1/4	1,590.83	1/4	1,233.63	1/4	878.00	1/4	521.86	1/4	193.18	1/4		1/4		1/4		1/4		1/4	
1/2	1,583.39	1/2	1,226.19	1/2	870.58	1/2	514.63	1/2	186.79	1/2		1/2		1/2		1/2		1/2	
3/4	1,575.95	3/4	1,218.74	3/4	863.16	3/4	507.40	3/4	180.40	3/4		3/4		3/4		3/4		3/4	
3	1,568.50	3	1,211.30	3	855.75	3	500.17	3	174.01	3		3		3		3		3	
1/4	1,561.06	1/4	1,203.86	1/4	848.33	1/4	492.94	1/4	167.61	1/4		1/4		1/4		1/4		1/4	
1/2	1,553.62	1/2	1,196.43	1/2	840.90	1/2	485.77	1/2	161.29	1/2		1/2		1/2		1/2		1/2	
3/4	1,546.18	3/4	1,189.00	3/4	833.47	3/4	478.61	3/4	154.97	3/4		3/4		3/4		3/4		3/4	
4	1,538.74	4	1,181.57	4	826.04	4	471.45	4	148.65	4		4		4		4		4	
1/4	1,531.29	1/4	1,174.14	1/4	818.61	1/4	464.29	1/4	142.33	1/4		1/4		1/4		1/4		1/4	
1/2	1,523.85	1/2	1,166.73	1/2	811.17	1/2	457.20	1/2	136.08	1/2		1/2		1/2		1/2		1/2	
3/4	1,516.41	3/4	1,159.33	3/4	803.73	3/4	450.10	3/4	129.84	3/4		3/4		3/4		3/4		3/4	
5	1,508.97	5	1,151.92	5	796.29	5	443.01	5	123.60	5		5		5		5		5	
1/4	1,501.53	1/4	1,144.51	1/4	788.85	1/4	435.92	1/4	117.35	1/4		1/4		1/4		1/4		1/4	
1/2	1,494.09	1/2	1,137.11	1/2	781.41	1/2	428.90	1/2	111.19	1/2		1/2		1/2		1/2		1/2	
3/4	1,486.64	3/4	1,129.71	3/4	773.96	3/4	421.88	3/4	105.03	3/4		3/4		3/4		3/4		3/4	
6	1,479.20	6	1,122.31	6	766.52	6	414.85	6	98.86	6		6		6		6		6	
1/4	1,471.76	1/4	1,114.91	1/4	759.08	1/4	407.83	1/4	92.70	1/4		1/4		1/4		1/4		1/4	
1/2	1,464.32	1/2	1,107.51	1/2	751.64	1/2	400.88	1/2	86.63	1/2		1/2		1/2		1/2		1/2	
3/4	1,456.88	3/4	1,100.11	3/4	744.20	3/4	393.93	3/4	80.56	3/4		3/4		3/4		3/4		3/4	
7	1,449.44	7	1,092.71	7	736.76	7	386.97	7	74.48	7		7		7		7		7	
1/4	1,441.99	1/4	1,085.30	1/4	729.32	1/4	380.02	1/4	68.41	1/4		1/4		1/4		1/4		1/4	
1/2	1,434.55	1/2	1,077.90	1/2	721.87	1/2	373.14	1/2	62.44	1/2		1/2		1/2		1/2		1/2	
3/4	1,427.11	3/4	1,070.50	3/4	714.43	3/4	366.26	3/4	56.47	3/4		3/4		3/4		3/4		3/4	
8	1,419.67	8	1,063.10	8	706.99	8	359.37	8	50.50	8		8		8		8		8	
1/4	1,412.23	1/4	1,055.70	1/4	699.55	1/4	352.49	1/4	44.53	1/4		1/4		1/4		1/4		1/4	
1/2	1,404.79	1/2	1,048.30	1/2	692.11	1/2	345.68	1/2	39.22	1/2		1/2		1/2		1/2		1/2	
3/4	1,397.34	3/4	1,040.90	3/4	684.67	3/4	338.87	3/4	33.92	3/4		3/4		3/4		3/4		3/4	
9	1,389.90	9	1,033.50	9	677.23	9	332.05	9	28.61	9		9		9		9		9	
1/4	1,382.46	1/4	1,026.10	1/4	669.78	1/4	325.24	1/4	23.31	1/4		1/4		1/4		1/4		1/4	
1/2	1,375.02	1/2	1,018.70	1/2	662.34	1/2	318.50	1/2	19.89	1/2		1/2		1/2		1/2		1/2	
3/4	1,367.58	3/4	1,011.30	3/4	654.90	3/4	311.76	3/4	16.46	3/4		3/4		3/4		3/4		3/4	
10	1,360.14	10	1,003.90	10	647.46	10	305.01	10	13.04	10		10		10		10		10	
1/4	1,352.69	1/4	996.50	1/4	640.02	1/4	298.27	1/4	9.63	1/4		1/4		1/4		1/4		1/4	
1/2	1,345.25	1/2	989.10	1/2	632.58	1/2	291.60	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,337.81	3/4	981.70	3/4	625.13	3/4	284.93	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,330.37	11	974.30	11	617.69	11	278.25	11		11		11		11		11		11	
1/4	1,322.93	1/4	966.90	1/4	610.25	1/4	271.58	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,315.49	1/2	959.50	1/2	602.83	1/2	264.98	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,308.04	3/4	952.10	3/4	595.40	3/4	258.37	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

1 STBD

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10"

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	4,785.77	0	4,471.83	0	4,135.66	0	3,781.99	0	3,426.05	0	3,070.10	0	2,714.16	0	2,358.22	0	2,002.22
1/4		1/4	4,779.97	1/4	4,465.01	1/4	4,128.44	1/4	3,774.58	1/4	3,418.63	1/4	3,062.69	1/4	2,706.74	1/4	2,350.80	1/4	1,994.81
1/2		1/2	4,774.17	1/2	4,458.20	1/2	4,121.21	1/2	3,767.16	1/2	3,411.22	1/2	3,055.27	1/2	2,699.33	1/2	2,343.39	1/2	1,987.39
3/4		3/4	4,768.37	3/4	4,451.38	3/4	4,113.99	3/4	3,759.75	3/4	3,403.80	3/4	3,047.86	3/4	2,691.91	3/4	2,335.97	3/4	1,979.97
1		1	4,762.58	1	4,444.56	1	4,106.77	1	3,752.33	1	3,396.39	1	3,040.44	1	2,684.50	1	2,328.55	1	1,972.56
1/4		1/4	4,756.05	1/4	4,437.70	1/4	4,099.51	1/4	3,744.91	1/4	3,388.97	1/4	3,033.03	1/4	2,677.08	1/4	2,321.14	1/4	1,965.14
1/2		1/2	4,749.52	1/2	4,430.85	1/2	4,092.24	1/2	3,737.50	1/2	3,381.56	1/2	3,025.61	1/2	2,669.67	1/2	2,313.72	1/2	1,957.72
3/4		3/4	4,742.99	3/4	4,424.00	3/4	4,084.98	3/4	3,730.08	3/4	3,374.14	3/4	3,018.20	3/4	2,662.25	3/4	2,306.31	3/4	1,950.31
2		2	4,736.46	2	4,417.14	2	4,077.71	2	3,722.67	2	3,366.72	2	3,010.78	2	2,654.84	2	2,298.89	2	1,942.89
1/4		1/4	4,729.92	1/4	4,410.26	1/4	4,070.40	1/4	3,715.25	1/4	3,359.31	1/4	3,003.36	1/4	2,647.42	1/4	2,291.48	1/4	1,935.47
1/2		1/2	4,723.38	1/2	4,403.37	1/2	4,063.09	1/2	3,707.84	1/2	3,351.89	1/2	2,995.95	1/2	2,640.01	1/2	2,284.06	1/2	1,928.06
3/4		3/4	4,716.84	3/4	4,396.48	3/4	4,055.78	3/4	3,700.42	3/4	3,344.48	3/4	2,988.53	3/4	2,632.59	3/4	2,276.64	3/4	1,920.64
3		3	4,710.29	3	4,389.60	3	4,048.47	3	3,693.01	3	3,337.06	3	2,981.12	3	2,625.17	3	2,269.23	3	1,913.22
1/4		1/4	4,703.84	1/4	4,382.68	1/4	4,041.13	1/4	3,685.59	1/4	3,329.65	1/4	2,973.70	1/4	2,617.76	1/4	2,261.81	1/4	1,905.81
1/2		1/2	4,697.39	1/2	4,375.76	1/2	4,033.78	1/2	3,678.18	1/2	3,322.23	1/2	2,966.29	1/2	2,610.34	1/2	2,254.39	1/2	1,898.39
3/4		3/4	4,690.93	3/4	4,368.84	3/4	4,026.43	3/4	3,670.76	3/4	3,314.82	3/4	2,958.87	3/4	2,602.93	3/4	2,246.98	3/4	1,890.97
4		4	4,684.48	4	4,361.92	4	4,019.09	4	3,663.34	4	3,307.40	4	2,951.46	4	2,595.51	4	2,239.56	4	1,883.56
1/4		1/4	4,677.99	1/4	4,354.97	1/4	4,011.71	1/4	3,655.93	1/4	3,299.98	1/4	2,944.04	1/4	2,588.10	1/4	2,232.14	1/4	1,876.14
1/2		1/2	4,671.50	1/2	4,348.02	1/2	4,004.33	1/2	3,648.51	1/2	3,292.57	1/2	2,936.63	1/2	2,580.68	1/2	2,224.73	1/2	1,868.72
3/4		3/4	4,665.01	3/4	4,341.07	3/4	3,996.95	3/4	3,641.10	3/4	3,285.15	3/4	2,929.21	3/4	2,573.27	3/4	2,217.31	3/4	1,861.31
5		5	4,658.53	5	4,334.12	5	3,989.57	5	3,633.68	5	3,277.74	5	2,921.79	5	2,565.85	5	2,209.89	5	1,853.89
1/4		1/4	4,652.00	1/4	4,327.13	1/4	3,982.17	1/4	3,626.27	1/4	3,270.32	1/4	2,914.38	1/4	2,558.43	1/4	2,202.48	1/4	1,846.47
1/2		1/2	4,645.47	1/2	4,320.15	1/2	3,974.77	1/2	3,618.85	1/2	3,262.91	1/2	2,906.96	1/2	2,551.02	1/2	2,195.06	1/2	1,839.06
3/4		3/4	4,638.95	3/4	4,313.16	3/4	3,967.36	3/4	3,611.44	3/4	3,255.49	3/4	2,899.55	3/4	2,543.60	3/4	2,187.64	3/4	1,831.64
6		6	4,632.42	6	4,306.18	6	3,959.96	6	3,604.02	6	3,248.08	6	2,892.13	6	2,536.19	6	2,180.23	6	1,824.22
1/4		1/4	4,625.84	1/4	4,299.16	1/4	3,952.54	1/4	3,596.60	1/4	3,240.66	1/4	2,884.72	1/4	2,528.77	1/4	2,172.81	1/4	1,816.81
1/2		1/2	4,619.26	1/2	4,292.14	1/2	3,945.13	1/2	3,589.19	1/2	3,233.25	1/2	2,877.30	1/2	2,521.36	1/2	2,165.39	1/2	1,809.39
3/4		3/4	4,612.68	3/4	4,285.13	3/4	3,937.72	3/4	3,581.77	3/4	3,225.83	3/4	2,869.89	3/4	2,513.94	3/4	2,157.98	3/4	1,801.97
7		7	4,606.10	7	4,278.11	7	3,930.30	7	3,574.36	7	3,218.41	7	2,862.47	7	2,506.53	7	2,150.56	7	1,794.56
1/4		1/4	4,599.46	1/4	4,271.06	1/4	3,922.89	1/4	3,566.94	1/4	3,211.00	1/4	2,855.05	1/4	2,499.11	1/4	2,143.14	1/4	1,787.14
1/2		1/2	4,592.82	1/2	4,264.00	1/2	3,915.47	1/2	3,559.53	1/2	3,203.58	1/2	2,847.64	1/2	2,491.70	1/2	2,135.73	1/2	1,779.72
3/4		3/4	4,586.17	3/4	4,256.95	3/4	3,908.06	3/4	3,552.11	3/4	3,196.17	3/4	2,840.22	3/4	2,484.28	3/4	2,128.31	3/4	1,772.31
8		8	4,579.53	8	4,249.90	8	3,900.64	8	3,544.70	8	3,188.75	8	2,832.81	8	2,476.86	8	2,120.89	8	1,764.89
1/4		1/4	4,572.85	1/4	4,242.81	1/4	3,893.22	1/4	3,537.28	1/4	3,181.34	1/4	2,825.39	1/4	2,469.45	1/4	2,113.48	1/4	1,757.47
1/2		1/2	4,566.17	1/2	4,235.72	1/2	3,885.81	1/2	3,529.87	1/2	3,173.92	1/2	2,817.98	1/2	2,462.03	1/2	2,106.06	1/2	1,750.06
3/4		3/4	4,559.49	3/4	4,228.63	3/4	3,878.39	3/4	3,522.45	3/4	3,166.51	3/4	2,810.56	3/4	2,454.62	3/4	2,098.64	3/4	1,742.64
9		9	4,552.81	9	4,221.54	9	3,870.98	9	3,515.03	9	3,159.09	9	2,803.15	9	2,447.20	9	2,091.22	9	1,735.22
1/4		1/4	4,546.09	1/4	4,214.41	1/4	3,863.56	1/4	3,507.62	1/4	3,151.67	1/4	2,795.73	1/4	2,439.79	1/4	2,083.81	1/4	1,727.81
1/2		1/2	4,539.38	1/2	4,207.29	1/2	3,856.15	1/2	3,500.20	1/2	3,144.26	1/2	2,788.32	1/2	2,432.37	1/2	2,076.39	1/2	1,720.39
3/4		3/4	4,532.67	3/4	4,200.17	3/4	3,848.73	3/4	3,492.79	3/4	3,136.84	3/4	2,780.90	3/4	2,424.96	3/4	2,068.97	3/4	1,712.97
10		10	4,525.95	10	4,193.04	10	3,841.32	10	3,485.37	10	3,129.43	10	2,773.48	10	2,417.54	10	2,061.56	10	1,705.56
1/4		1/4	4,519.21	1/4	4,185.89	1/4	3,833.90	1/4	3,477.96	1/4	3,122.01	1/4	2,766.07	1/4	2,410.12	1/4	2,054.14	1/4	1,698.14
1/2		1/2	4,512.46	1/2	4,178.73	1/2	3,826.49	1/2	3,470.54	1/2	3,114.60	1/2	2,758.65	1/2	2,402.71	1/2	2,046.72	1/2	1,690.72
3/4		3/4	4,505.71	3/4	4,171.57	3/4	3,819.07	3/4	3,463.13	3/4	3,107.18	3/4	2,751.24	3/4	2,395.29	3/4	2,039.31	3/4	1,683.31
11	4,804.01	11	4,498.97	11	4,164.42	11	3,811.65	11	3,455.71	11	3,099.77	11	2,743.82	11	2,387.88	11	2,031.89	11	1,675.89
1/4	4,799.45	1/4	4,492.18	1/4	4,157.23	1/4	3,804.24	1/4	3,448.29	1/4	3,092.35	1/4	2,736.41	1/4	2,380.46	1/4	2,024.47	1/4	1,668.47
1/2	4,794.89	1/2	4,485.40	1/2	4,150.04	1/2	3,796.82	1/2	3,440.88	1/2	3,084.94	1/2	2,728.99	1/2	2,373.05	1/2	2,017.06	1/2	1,661.05
3/4	4,790.33	3/4	4,478.62	3/4	4,142.85	3/4	3,789.41	3/4	3,433.46	3/4	3,077.52	3/4	2,721.58	3/4	2,365.63	3/4	2,009.64	3/4	1,653.64

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 ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 37'-03" FORWARD OF AFT BULKHEAD.

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

BARGE "CCL 421-T"

1 STBD

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10"

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	1,646.22	0	1,290.22	0	934.55	0	578.64	0	244.37	0		0		0		0		0	
1/4	1,638.80	1/4	1,282.80	1/4	927.13	1/4	571.30	1/4	237.86	1/4		1/4		1/4		1/4		1/4	
1/2	1,631.39	1/2	1,275.39	1/2	919.72	1/2	563.95	1/2	231.35	1/2		1/2		1/2		1/2		1/2	
3/4	1,623.97	3/4	1,267.97	3/4	912.31	3/4	556.60	3/4	224.84	3/4		3/4		3/4		3/4		3/4	
1	1,616.55	1	1,260.55	1	904.90	1	549.26	1	218.33	1		1		1		1		1	
1/4	1,609.14	1/4	1,253.14	1/4	897.48	1/4	541.98	1/4	211.88	1/4		1/4		1/4		1/4		1/4	
1/2	1,601.72	1/2	1,245.72	1/2	890.07	1/2	534.70	1/2	205.44	1/2		1/2		1/2		1/2		1/2	
3/4	1,594.30	3/4	1,238.30	3/4	882.65	3/4	527.42	3/4	199.00	3/4		3/4		3/4		3/4		3/4	
2	1,586.89	2	1,230.89	2	875.23	2	520.15	2	192.56	2		2		2		2		2	
1/4	1,579.47	1/4	1,223.47	1/4	867.82	1/4	512.94	1/4	186.19	1/4		1/4		1/4		1/4		1/4	
1/2	1,572.05	1/2	1,216.05	1/2	860.40	1/2	505.73	1/2	179.81	1/2		1/2		1/2		1/2		1/2	
3/4	1,564.64	3/4	1,208.64	3/4	852.98	3/4	498.52	3/4	173.44	3/4		3/4		3/4		3/4		3/4	
3	1,557.22	3	1,201.22	3	845.57	3	491.32	3	167.07	3		3		3		3		3	
1/4	1,549.80	1/4	1,193.80	1/4	838.15	1/4	484.18	1/4	160.77	1/4		1/4		1/4		1/4		1/4	
1/2	1,542.39	1/2	1,186.39	1/2	830.73	1/2	477.04	1/2	154.47	1/2		1/2		1/2		1/2		1/2	
3/4	1,534.97	3/4	1,178.97	3/4	823.32	3/4	469.90	3/4	148.17	3/4		3/4		3/4		3/4		3/4	
4	1,527.55	4	1,171.55	4	815.90	4	462.76	4	141.87	4		4		4		4		4	
1/4	1,520.14	1/4	1,164.14	1/4	808.49	1/4	455.70	1/4	135.65	1/4		1/4		1/4		1/4		1/4	
1/2	1,512.72	1/2	1,156.73	1/2	801.07	1/2	448.63	1/2	129.42	1/2		1/2		1/2		1/2		1/2	
3/4	1,505.30	3/4	1,149.32	3/4	793.65	3/4	441.56	3/4	123.20	3/4		3/4		3/4		3/4		3/4	
5	1,497.89	5	1,141.91	5	786.24	5	434.49	5	116.97	5		5		5		5		5	
1/4	1,490.47	1/4	1,134.50	1/4	778.82	1/4	427.49	1/4	110.83	1/4		1/4		1/4		1/4		1/4	
1/2	1,483.05	1/2	1,127.10	1/2	771.40	1/2	420.49	1/2	104.69	1/2		1/2		1/2		1/2		1/2	
3/4	1,475.64	3/4	1,119.69	3/4	763.99	3/4	413.49	3/4	98.55	3/4		3/4		3/4		3/4		3/4	
6	1,468.22	6	1,112.28	6	756.57	6	406.49	6	92.41	6		6		6		6		6	
1/4	1,460.80	1/4	1,104.88	1/4	749.15	1/4	399.57	1/4	86.35	1/4		1/4		1/4		1/4		1/4	
1/2	1,453.39	1/2	1,097.47	1/2	741.74	1/2	392.64	1/2	80.30	1/2		1/2		1/2		1/2		1/2	
3/4	1,445.97	3/4	1,090.07	3/4	734.32	3/4	385.71	3/4	74.25	3/4		3/4		3/4		3/4		3/4	
7	1,438.55	7	1,082.66	7	726.90	7	378.78	7	68.19	7		7		7		7		7	
1/4	1,431.14	1/4	1,075.26	1/4	719.49	1/4	371.92	1/4	62.24	1/4		1/4		1/4		1/4		1/4	
1/2	1,423.72	1/2	1,067.85	1/2	712.07	1/2	365.06	1/2	56.29	1/2		1/2		1/2		1/2		1/2	
3/4	1,416.30	3/4	1,060.44	3/4	704.65	3/4	358.20	3/4	50.34	3/4		3/4		3/4		3/4		3/4	
8	1,408.89	8	1,053.04	8	697.24	8	351.34	8	44.39	8		8		8		8		8	
1/4	1,401.47	1/4	1,045.63	1/4	689.82	1/4	344.55	1/4	39.10	1/4		1/4		1/4		1/4		1/4	
1/2	1,394.05	1/2	1,038.23	1/2	682.40	1/2	337.76	1/2	33.81	1/2		1/2		1/2		1/2		1/2	
3/4	1,386.64	3/4	1,030.82	3/4	674.99	3/4	330.97	3/4	28.53	3/4		3/4		3/4		3/4		3/4	
9	1,379.22	9	1,023.42	9	667.57	9	324.18	9	23.24	9		9		9		9		9	
1/4	1,371.80	1/4	1,016.01	1/4	660.16	1/4	317.46	1/4	19.83	1/4		1/4		1/4		1/4		1/4	
1/2	1,364.39	1/2	1,008.60	1/2	652.74	1/2	310.74	1/2	16.42	1/2		1/2		1/2		1/2		1/2	
3/4	1,356.97	3/4	1,001.20	3/4	645.32	3/4	304.02	3/4	13.01	3/4		3/4		3/4		3/4		3/4	
10	1,349.55	10	993.79	10	637.91	10	297.30	10	9.59	10		10		10		10		10	
1/4	1,342.14	1/4	986.39	1/4	630.49	1/4	290.65	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,334.72	1/2	978.98	1/2	623.07	1/2	284.00	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,327.30	3/4	971.57	3/4	615.66	3/4	277.35	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,319.89	11	964.17	11	608.24	11	270.70	11		11		11		11		11		11	
1/4	1,312.47	1/4	956.76	1/4	600.84	1/4	264.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,305.05	1/2	949.36	1/2	593.44	1/2	257.53	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,297.64	3/4	941.95	3/4	586.04	3/4	250.95	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

2 PORT

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 3/4"

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	5,288.64	0	4,954.17	0	4,589.60	0	4,205.43	0	3,818.06	0	3,430.69	0	3,043.32	0	2,655.95	0	2,268.54
1/4		1/4	5,283.67	1/4	4,946.79	1/4	4,581.77	1/4	4,197.36	1/4	3,809.99	1/4	3,422.62	1/4	3,035.25	1/4	2,647.88	1/4	2,260.47
1/2		1/2	5,278.71	1/2	4,939.41	1/2	4,573.95	1/2	4,189.29	1/2	3,801.92	1/2	3,414.55	1/2	3,027.18	1/2	2,639.81	1/2	2,252.39
3/4		3/4	5,273.74	3/4	4,932.02	3/4	4,566.12	3/4	4,181.22	3/4	3,793.85	3/4	3,406.48	3/4	3,019.11	3/4	2,631.74	3/4	2,244.32
1		1	5,267.43	1	4,924.60	1	4,558.26	1	4,173.15	1	3,785.78	1	3,398.41	1	3,011.04	1	2,623.67	1	2,236.25
1/4		1/4	5,261.12	1/4	4,917.18	1/4	4,550.40	1/4	4,165.08	1/4	3,777.71	1/4	3,390.34	1/4	3,002.97	1/4	2,615.60	1/4	2,228.18
1/2		1/2	5,254.82	1/2	4,909.75	1/2	4,542.54	1/2	4,157.01	1/2	3,769.64	1/2	3,382.27	1/2	2,994.90	1/2	2,607.53	1/2	2,220.11
3/4		3/4	5,248.51	3/4	4,902.33	3/4	4,534.68	3/4	4,148.94	3/4	3,761.57	3/4	3,374.20	3/4	2,986.83	3/4	2,599.46	3/4	2,212.04
2		2	5,241.40	2	4,894.87	2	4,526.78	2	4,140.87	2	3,753.50	2	3,366.13	2	2,978.76	2	2,591.39	2	2,203.96
1/4		1/4	5,234.29	1/4	4,887.41	1/4	4,518.87	1/4	4,132.80	1/4	3,745.43	1/4	3,358.06	1/4	2,970.69	1/4	2,583.32	1/4	2,195.89
1/2		1/2	5,227.18	1/2	4,879.95	1/2	4,510.96	1/2	4,124.73	1/2	3,737.36	1/2	3,349.99	1/2	2,962.62	1/2	2,575.25	1/2	2,187.82
3/4		3/4	5,220.08	3/4	4,872.49	3/4	4,503.06	3/4	4,116.66	3/4	3,729.29	3/4	3,341.92	3/4	2,954.55	3/4	2,567.18	3/4	2,179.75
3		3	5,212.96	3	4,865.00	3	4,495.10	3	4,108.58	3	3,721.22	3	3,333.85	3	2,946.48	3	2,559.11	3	2,171.68
1/4		1/4	5,205.84	1/4	4,857.50	1/4	4,487.15	1/4	4,100.51	1/4	3,713.15	1/4	3,325.78	1/4	2,938.41	1/4	2,551.04	1/4	2,163.61
1/2		1/2	5,198.72	1/2	4,850.01	1/2	4,479.19	1/2	4,092.44	1/2	3,705.07	1/2	3,317.71	1/2	2,930.34	1/2	2,542.97	1/2	2,155.54
3/4		3/4	5,191.60	3/4	4,842.51	3/4	4,471.23	3/4	4,084.37	3/4	3,697.00	3/4	3,309.64	3/4	2,922.27	3/4	2,534.90	3/4	2,147.46
4		4	5,184.57	4	4,834.98	4	4,463.24	4	4,076.30	4	3,688.93	4	3,301.56	4	2,914.20	4	2,526.82	4	2,139.39
1/4		1/4	5,177.55	1/4	4,827.45	1/4	4,455.24	1/4	4,068.23	1/4	3,680.86	1/4	3,293.49	1/4	2,906.13	1/4	2,518.75	1/4	2,131.32
1/2		1/2	5,170.52	1/2	4,819.92	1/2	4,447.25	1/2	4,060.16	1/2	3,672.79	1/2	3,285.42	1/2	2,898.05	1/2	2,510.68	1/2	2,123.25
3/4		3/4	5,163.50	3/4	4,812.39	3/4	4,439.26	3/4	4,052.09	3/4	3,664.72	3/4	3,277.35	3/4	2,889.98	3/4	2,502.61	3/4	2,115.18
5		5	5,156.43	5	4,804.82	5	4,431.22	5	4,044.02	5	3,656.65	5	3,269.28	5	2,881.91	5	2,494.54	5	2,107.11
1/4		1/4	5,149.37	1/4	4,797.26	1/4	4,423.19	1/4	4,035.95	1/4	3,648.58	1/4	3,261.21	1/4	2,873.84	1/4	2,486.47	1/4	2,099.04
1/2		1/2	5,142.30	1/2	4,789.69	1/2	4,415.16	1/2	4,027.88	1/2	3,640.51	1/2	3,253.14	1/2	2,865.77	1/2	2,478.40	1/2	2,090.96
3/4		3/4	5,135.24	3/4	4,782.12	3/4	4,407.13	3/4	4,019.81	3/4	3,632.44	3/4	3,245.07	3/4	2,857.70	3/4	2,470.32	3/4	2,082.89
6		6	5,128.14	6	4,774.52	6	4,399.08	6	4,011.74	6	3,624.37	6	3,237.00	6	2,849.63	6	2,462.25	6	2,074.82
1/4		1/4	5,121.03	1/4	4,766.92	1/4	4,391.02	1/4	4,003.67	1/4	3,616.30	1/4	3,228.93	1/4	2,841.56	1/4	2,454.18	1/4	2,066.75
1/2		1/2	5,113.93	1/2	4,759.32	1/2	4,382.96	1/2	3,995.60	1/2	3,608.23	1/2	3,220.86	1/2	2,833.49	1/2	2,446.11	1/2	2,058.68
3/4		3/4	5,106.82	3/4	4,751.72	3/4	4,374.90	3/4	3,987.53	3/4	3,600.16	3/4	3,212.79	3/4	2,825.42	3/4	2,438.04	3/4	2,050.61
7		7	5,099.66	7	4,744.08	7	4,366.83	7	3,979.46	7	3,592.09	7	3,204.72	7	2,817.35	7	2,429.97	7	2,042.53
1/4		1/4	5,092.50	1/4	4,736.44	1/4	4,358.76	1/4	3,971.39	1/4	3,584.02	1/4	3,196.65	1/4	2,809.28	1/4	2,421.90	1/4	2,034.46
1/2		1/2	5,085.33	1/2	4,728.80	1/2	4,350.69	1/2	3,963.32	1/2	3,575.95	1/2	3,188.58	1/2	2,801.21	1/2	2,413.82	1/2	2,026.39
3/4		3/4	5,078.17	3/4	4,721.16	3/4	4,342.62	3/4	3,955.25	3/4	3,567.88	3/4	3,180.51	3/4	2,793.14	3/4	2,405.75	3/4	2,018.32
8		8	5,070.94	8	4,713.49	8	4,334.55	8	3,947.18	8	3,559.81	8	3,172.44	8	2,785.07	8	2,397.68	8	2,010.25
1/4		1/4	5,063.71	1/4	4,705.81	1/4	4,326.48	1/4	3,939.11	1/4	3,551.74	1/4	3,164.37	1/4	2,777.00	1/4	2,389.61	1/4	2,002.18
1/2		1/2	5,056.48	1/2	4,698.13	1/2	4,318.41	1/2	3,931.04	1/2	3,543.67	1/2	3,156.30	1/2	2,768.93	1/2	2,381.54	1/2	1,994.11
3/4		3/4	5,049.25	3/4	4,690.46	3/4	4,310.34	3/4	3,922.97	3/4	3,535.60	3/4	3,148.23	3/4	2,760.86	3/4	2,373.47	3/4	1,986.03
9		9	5,041.98	9	4,682.74	9	4,302.27	9	3,914.90	9	3,527.53	9	3,140.16	9	2,752.79	9	2,365.39	9	1,977.96
1/4		1/4	5,034.71	1/4	4,675.02	1/4	4,294.20	1/4	3,906.83	1/4	3,519.46	1/4	3,132.09	1/4	2,744.72	1/4	2,357.32	1/4	1,969.89
1/2		1/2	5,027.43	1/2	4,667.31	1/2	4,286.13	1/2	3,898.76	1/2	3,511.39	1/2	3,124.02	1/2	2,736.65	1/2	2,349.25	1/2	1,961.82
3/4		3/4	5,020.16	3/4	4,659.59	3/4	4,278.06	3/4	3,890.69	3/4	3,503.32	3/4	3,115.95	3/4	2,728.58	3/4	2,341.18	3/4	1,953.75
10		10	5,012.85	10	4,651.84	10	4,269.99	10	3,882.62	10	3,495.25	10	3,107.88	10	2,720.51	10	2,333.11	10	1,945.68
1/4		1/4	5,005.55	1/4	4,644.08	1/4	4,261.92	1/4	3,874.55	1/4	3,487.18	1/4	3,099.81	1/4	2,712.44	1/4	2,325.04	1/4	1,937.61
1/2		1/2	4,998.24	1/2	4,636.33	1/2	4,253.85	1/2	3,866.48	1/2	3,479.11	1/2	3,091.74	1/2	2,704.37	1/2	2,316.97	1/2	1,929.53
3/4		3/4	4,990.93	3/4	4,628.58	3/4	4,245.78	3/4	3,858.41	3/4	3,471.04	3/4	3,083.67	3/4	2,696.30	3/4	2,308.89	3/4	1,921.46
11		11	4,983.59	11	4,620.79	11	4,237.71	11	3,850.34	11	3,462.97	11	3,075.60	11	2,688.23	11	2,300.82	11	1,913.39
1/4		1/4	4,976.24	1/4	4,613.00	1/4	4,229.64	1/4	3,842.27	1/4	3,454.90	1/4	3,067.53	1/4	2,680.16	1/4	2,292.75	1/4	1,905.32
1/2		1/2	4,968.90	1/2	4,605.21	1/2	4,221.57	1/2	3,834.20	1/2	3,446.83	1/2	3,059.46	1/2	2,672.09	1/2	2,284.68	1/2	1,897.25
3/4	5,293.60	3/4	4,961.55	3/4	4,597.42	3/4	4,213.50	3/4	3,826.13	3/4	3,438.76	3/4	3,051.39	3/4	2,664.02	3/4	2,276.61	3/4	1,889.18

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 ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
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
http://www.pmacorp.net

BARGE "CCL 421-T"

2 PORT
ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 3/4"

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	1,881.10	0	1,493.67	0	1,116.15	0	734.00	0	346.58	0		0		0		0		0	
1/4	1,873.03	1/4	1,485.60	1/4	1,108.40	1/4	725.93	1/4	338.50	1/4		1/4		1/4		1/4		1/4	
1/2	1,864.96	1/2	1,477.53	1/2	1,100.65	1/2	717.85	1/2	330.43	1/2		1/2		1/2		1/2		1/2	
3/4	1,856.89	3/4	1,469.46	3/4	1,092.90	3/4	709.78	3/4	322.36	3/4		3/4		3/4		3/4		3/4	
1	1,848.82	1	1,461.39	1	1,085.14	1	701.71	1	314.29	1		1		1		1		1	
1/4	1,840.75	1/4	1,453.32	1/4	1,077.38	1/4	693.64	1/4	306.22	1/4		1/4		1/4		1/4		1/4	
1/2	1,832.68	1/2	1,445.24	1/2	1,069.62	1/2	685.57	1/2	298.15	1/2		1/2		1/2		1/2		1/2	
3/4	1,824.60	3/4	1,437.17	3/4	1,061.86	3/4	677.50	3/4	290.08	3/4		3/4		3/4		3/4		3/4	
2	1,816.53	2	1,429.10	2	1,054.10	2	669.43	2	282.00	2		2		2		2		2	
1/4	1,808.46	1/4	1,421.03	1/4	1,046.33	1/4	661.36	1/4	273.93	1/4		1/4		1/4		1/4		1/4	
1/2	1,800.39	1/2	1,412.96	1/2	1,038.57	1/2	653.28	1/2	265.86	1/2		1/2		1/2		1/2		1/2	
3/4	1,792.32	3/4	1,404.89	3/4	1,030.80	3/4	645.21	3/4	257.79	3/4		3/4		3/4		3/4		3/4	
3	1,784.25	3	1,396.81	3	1,023.03	3	637.14	3	249.72	3		3		3		3		3	
1/4	1,776.18	1/4	1,388.74	1/4	1,015.27	1/4	629.07	1/4	241.65	1/4		1/4		1/4		1/4		1/4	
1/2	1,768.10	1/2	1,380.67	1/2	1,007.50	1/2	621.00	1/2	233.58	1/2		1/2		1/2		1/2		1/2	
3/4	1,760.03	3/4	1,372.60	3/4	999.74	3/4	612.93	3/4	225.51	3/4		3/4		3/4		3/4		3/4	
4	1,751.96	4	1,364.68	4	991.82	4	604.86	4	217.44	4		4		4		4		4	
1/4	1,743.89	1/4	1,356.76	1/4	983.90	1/4	596.79	1/4	209.37	1/4		1/4		1/4		1/4		1/4	
1/2	1,735.82	1/2	1,348.84	1/2	975.98	1/2	588.71	1/2	201.30	1/2		1/2		1/2		1/2		1/2	
3/4	1,727.75	3/4	1,340.92	3/4	968.07	3/4	580.64	3/4	193.23	3/4		3/4		3/4		3/4		3/4	
5	1,719.67	5	1,333.17	5	959.99	5	572.57	5	185.17	5		5		5		5		5	
1/4	1,711.60	1/4	1,325.41	1/4	951.92	1/4	564.50	1/4	177.11	1/4		1/4		1/4		1/4		1/4	
1/2	1,703.53	1/2	1,317.65	1/2	943.85	1/2	556.43	1/2	169.05	1/2		1/2		1/2		1/2		1/2	
3/4	1,695.46	3/4	1,309.89	3/4	935.78	3/4	548.36	3/4	160.99	3/4		3/4		3/4		3/4		3/4	
6	1,687.39	6	1,302.14	6	927.71	6	540.29	6	152.94	6		6		6		6		6	
1/4	1,679.32	1/4	1,294.39	1/4	919.64	1/4	532.21	1/4	144.89	1/4		1/4		1/4		1/4		1/4	
1/2	1,671.25	1/2	1,286.64	1/2	911.57	1/2	524.14	1/2	136.84	1/2		1/2		1/2		1/2		1/2	
3/4	1,663.17	3/4	1,278.89	3/4	903.49	3/4	516.07	3/4	128.79	3/4		3/4		3/4		3/4		3/4	
7	1,655.10	7	1,271.14	7	895.42	7	508.00	7	120.77	7		7		7		7		7	
1/4	1,647.03	1/4	1,263.39	1/4	887.35	1/4	499.93	1/4	112.74	1/4		1/4		1/4		1/4		1/4	
1/2	1,638.96	1/2	1,255.64	1/2	879.28	1/2	491.86	1/2	104.71	1/2		1/2		1/2		1/2		1/2	
3/4	1,630.89	3/4	1,247.89	3/4	871.21	3/4	483.79	3/4	96.68	3/4		3/4		3/4		3/4		3/4	
8	1,622.82	8	1,240.14	8	863.14	8	475.72	8	88.69	8		8		8		8		8	
1/4	1,614.75	1/4	1,232.39	1/4	855.07	1/4	467.64	1/4	80.70	1/4		1/4		1/4		1/4		1/4	
1/2	1,606.67	1/2	1,224.64	1/2	847.00	1/2	459.57	1/2	72.71	1/2		1/2		1/2		1/2		1/2	
3/4	1,598.60	3/4	1,216.89	3/4	838.92	3/4	451.50	3/4	64.72	3/4		3/4		3/4		3/4		3/4	
9	1,590.53	9	1,209.14	9	830.85	9	443.43	9	57.37	9		9		9		9		9	
1/4	1,582.46	1/4	1,201.39	1/4	822.78	1/4	435.36	1/4	50.03	1/4		1/4		1/4		1/4		1/4	
1/2	1,574.39	1/2	1,193.65	1/2	814.71	1/2	427.29	1/2	42.68	1/2		1/2		1/2		1/2		1/2	
3/4	1,566.32	3/4	1,185.90	3/4	806.64	3/4	419.22	3/4	35.34	3/4		3/4		3/4		3/4		3/4	
10	1,558.24	10	1,178.15	10	798.57	10	411.15	10	29.96	10		10		10		10		10	
1/4	1,550.17	1/4	1,170.40	1/4	790.50	1/4	403.07	1/4	24.58	1/4		1/4		1/4		1/4		1/4	
1/2	1,542.10	1/2	1,162.65	1/2	782.43	1/2	395.00	1/2	19.20	1/2		1/2		1/2		1/2		1/2	
3/4	1,534.03	3/4	1,154.90	3/4	774.35	3/4	386.93	3/4	13.82	3/4		3/4		3/4		3/4		3/4	
11	1,525.96	11	1,147.15	11	766.28	11	378.86	11		11		11		11		11		11	
1/4	1,517.89	1/4	1,139.40	1/4	758.21	1/4	370.79	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,509.82	1/2	1,131.65	1/2	750.14	1/2	362.72	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,501.74	3/4	1,123.90	3/4	742.07	3/4	354.65	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

2 STBD

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 3/4"

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	5,314.42	0	4,979.29	0	4,613.99	0	4,229.07	0	3,840.92	0	3,452.76	0	3,064.61	0	2,676.46	0	2,288.27
1/4		1/4	5,309.44	1/4	4,971.89	1/4	4,606.15	1/4	4,220.98	1/4	3,832.83	1/4	3,444.68	1/4	3,056.53	1/4	2,668.37	1/4	2,280.18
1/2		1/2	5,304.47	1/2	4,964.49	1/2	4,598.31	1/2	4,212.90	1/2	3,824.74	1/2	3,436.59	1/2	3,048.44	1/2	2,660.29	1/2	2,272.09
3/4		3/4	5,299.49	3/4	4,957.10	3/4	4,590.47	3/4	4,204.81	3/4	3,816.66	3/4	3,428.51	3/4	3,040.35	3/4	2,652.20	3/4	2,264.01
1		1	5,293.17	1	4,949.66	1	4,582.59	1	4,196.72	1	3,808.57	1	3,420.42	1	3,032.27	1	2,644.11	1	2,255.92
1/4		1/4	5,286.85	1/4	4,942.22	1/4	4,574.71	1/4	4,188.64	1/4	3,800.48	1/4	3,412.33	1/4	3,024.18	1/4	2,636.03	1/4	2,247.83
1/2		1/2	5,280.53	1/2	4,934.78	1/2	4,566.84	1/2	4,180.55	1/2	3,792.40	1/2	3,404.25	1/2	3,016.09	1/2	2,627.94	1/2	2,239.74
3/4		3/4	5,274.21	3/4	4,927.35	3/4	4,558.96	3/4	4,172.46	3/4	3,784.31	3/4	3,396.16	3/4	3,008.01	3/4	2,619.86	3/4	2,231.66
2		2	5,267.08	2	4,919.87	2	4,551.04	2	4,164.38	2	3,776.22	2	3,388.07	2	2,999.92	2	2,611.77	2	2,223.57
1/4		1/4	5,259.96	1/4	4,912.40	1/4	4,543.12	1/4	4,156.29	1/4	3,768.14	1/4	3,379.99	1/4	2,991.83	1/4	2,603.68	1/4	2,215.48
1/2		1/2	5,252.84	1/2	4,904.92	1/2	4,535.20	1/2	4,148.20	1/2	3,760.05	1/2	3,371.90	1/2	2,983.75	1/2	2,595.60	1/2	2,207.39
3/4		3/4	5,245.72	3/4	4,897.45	3/4	4,527.27	3/4	4,140.12	3/4	3,751.97	3/4	3,363.81	3/4	2,975.66	3/4	2,587.51	3/4	2,199.31
3		3	5,238.58	3	4,889.94	3	4,519.30	3	4,132.03	3	3,743.88	3	3,355.73	3	2,967.57	3	2,579.42	3	2,191.22
1/4		1/4	5,231.45	1/4	4,882.43	1/4	4,511.33	1/4	4,123.94	1/4	3,735.79	1/4	3,347.64	1/4	2,959.49	1/4	2,571.34	1/4	2,183.13
1/2		1/2	5,224.32	1/2	4,874.92	1/2	4,503.36	1/2	4,115.86	1/2	3,727.71	1/2	3,339.55	1/2	2,951.40	1/2	2,563.25	1/2	2,175.04
3/4		3/4	5,217.18	3/4	4,867.41	3/4	4,495.39	3/4	4,107.77	3/4	3,719.62	3/4	3,331.47	3/4	2,943.32	3/4	2,555.16	3/4	2,166.95
4		4	5,210.14	4	4,859.86	4	4,487.38	4	4,099.68	4	3,711.53	4	3,323.38	4	2,935.23	4	2,547.08	4	2,158.87
1/4		1/4	5,203.10	1/4	4,852.32	1/4	4,479.37	1/4	4,091.60	1/4	3,703.45	1/4	3,315.29	1/4	2,927.14	1/4	2,538.99	1/4	2,150.78
1/2		1/2	5,196.07	1/2	4,844.77	1/2	4,471.36	1/2	4,083.51	1/2	3,695.36	1/2	3,307.21	1/2	2,919.06	1/2	2,530.90	1/2	2,142.69
3/4		3/4	5,189.03	3/4	4,837.22	3/4	4,463.34	3/4	4,075.43	3/4	3,687.27	3/4	3,299.12	3/4	2,910.97	3/4	2,522.81	3/4	2,134.60
5		5	5,181.95	5	4,829.64	5	4,455.30	5	4,067.34	5	3,679.19	5	3,291.03	5	2,902.88	5	2,514.73	5	2,126.52
1/4		1/4	5,174.87	1/4	4,822.06	1/4	4,447.25	1/4	4,059.25	1/4	3,671.10	1/4	3,282.95	1/4	2,894.80	1/4	2,506.64	1/4	2,118.43
1/2		1/2	5,167.79	1/2	4,814.48	1/2	4,439.21	1/2	4,051.17	1/2	3,663.01	1/2	3,274.86	1/2	2,886.71	1/2	2,498.55	1/2	2,110.34
3/4		3/4	5,160.72	3/4	4,806.90	3/4	4,431.16	3/4	4,043.08	3/4	3,654.93	3/4	3,266.78	3/4	2,878.62	3/4	2,490.46	3/4	2,102.25
6		6	5,153.60	6	4,799.28	6	4,423.09	6	4,034.99	6	3,646.84	6	3,258.69	6	2,870.54	6	2,482.38	6	2,094.17
1/4		1/4	5,146.48	1/4	4,791.66	1/4	4,415.01	1/4	4,026.91	1/4	3,638.75	1/4	3,250.60	1/4	2,862.45	1/4	2,474.29	1/4	2,086.08
1/2		1/2	5,139.36	1/2	4,784.05	1/2	4,406.94	1/2	4,018.82	1/2	3,630.67	1/2	3,242.52	1/2	2,854.36	1/2	2,466.20	1/2	2,077.99
3/4		3/4	5,132.24	3/4	4,776.43	3/4	4,398.86	3/4	4,010.73	3/4	3,622.58	3/4	3,234.43	3/4	2,846.28	3/4	2,458.11	3/4	2,069.90
7		7	5,125.07	7	4,768.78	7	4,390.78	7	4,002.65	7	3,614.49	7	3,226.34	7	2,838.19	7	2,450.02	7	2,061.81
1/4		1/4	5,117.89	1/4	4,761.12	1/4	4,382.70	1/4	3,994.56	1/4	3,606.41	1/4	3,218.26	1/4	2,830.10	1/4	2,441.94	1/4	2,053.73
1/2		1/2	5,110.71	1/2	4,753.47	1/2	4,374.62	1/2	3,986.47	1/2	3,598.32	1/2	3,210.17	1/2	2,822.02	1/2	2,433.85	1/2	2,045.64
3/4		3/4	5,103.53	3/4	4,745.82	3/4	4,366.54	3/4	3,978.39	3/4	3,590.24	3/4	3,202.08	3/4	2,813.93	3/4	2,425.76	3/4	2,037.55
8		8	5,096.29	8	4,738.13	8	4,358.45	8	3,970.30	8	3,582.15	8	3,194.00	8	2,805.84	8	2,417.67	8	2,029.46
1/4		1/4	5,089.05	1/4	4,730.43	1/4	4,350.37	1/4	3,962.21	1/4	3,574.06	1/4	3,185.91	1/4	2,797.76	1/4	2,409.59	1/4	2,021.38
1/2		1/2	5,081.80	1/2	4,722.74	1/2	4,342.28	1/2	3,954.13	1/2	3,565.98	1/2	3,177.82	1/2	2,789.67	1/2	2,401.50	1/2	2,013.29
3/4		3/4	5,074.56	3/4	4,715.05	3/4	4,334.19	3/4	3,946.04	3/4	3,557.89	3/4	3,169.74	3/4	2,781.59	3/4	2,393.41	3/4	2,005.20
9		9	5,067.27	9	4,707.32	9	4,326.11	9	3,937.95	9	3,549.80	9	3,161.65	9	2,773.50	9	2,385.32	9	1,997.11
1/4		1/4	5,059.98	1/4	4,699.58	1/4	4,318.02	1/4	3,929.87	1/4	3,541.72	1/4	3,153.56	1/4	2,765.41	1/4	2,377.23	1/4	1,989.03
1/2		1/2	5,052.70	1/2	4,691.85	1/2	4,309.93	1/2	3,921.78	1/2	3,533.63	1/2	3,145.48	1/2	2,757.33	1/2	2,369.15	1/2	1,980.94
3/4		3/4	5,045.41	3/4	4,684.12	3/4	4,301.85	3/4	3,913.70	3/4	3,525.54	3/4	3,137.39	3/4	2,749.24	3/4	2,361.06	3/4	1,972.85
10		10	5,038.09	10	4,676.35	10	4,293.76	10	3,905.61	10	3,517.46	10	3,129.30	10	2,741.15	10	2,352.97	10	1,964.76
1/4		1/4	5,030.76	1/4	4,668.58	1/4	4,285.67	1/4	3,897.52	1/4	3,509.37	1/4	3,121.22	1/4	2,733.07	1/4	2,344.88	1/4	1,956.67
1/2		1/2	5,023.44	1/2	4,660.81	1/2	4,277.59	1/2	3,889.44	1/2	3,501.28	1/2	3,113.13	1/2	2,724.98	1/2	2,336.80	1/2	1,948.59
3/4		3/4	5,016.12	3/4	4,653.04	3/4	4,269.50	3/4	3,881.35	3/4	3,493.20	3/4	3,105.05	3/4	2,716.89	3/4	2,328.71	3/4	1,940.50
11		11	5,008.76	11	4,645.24	11	4,261.41	11	3,873.26	11	3,485.11	11	3,096.96	11	2,708.81	11	2,320.62	11	1,932.41
1/4		1/4	5,001.40	1/4	4,637.44	1/4	4,253.33	1/4	3,865.18	1/4	3,477.02	1/4	3,088.87	1/4	2,700.72	1/4	2,312.53	1/4	1,924.32
1/2		1/2	4,994.04	1/2	4,629.63	1/2	4,245.24	1/2	3,857.09	1/2	3,468.94	1/2	3,080.79	1/2	2,692.63	1/2	2,304.45	1/2	1,916.24
3/4	5,319.39	3/4	4,986.69	3/4	4,621.83	3/4	4,237.16	3/4	3,849.00	3/4	3,460.85	3/4	3,072.70	3/4	2,684.55	3/4	2,296.36	3/4	1,908.15

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 ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
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
http://www.pmacorp.net

BARGE "CCL 421-T"

2 STBD

ULLAGE TABLE

GAUGE HEIGHT 14'-10 3/4"

CAPACITIES GIVEN IN BARRELS OF 42 U.S. 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	1,900.06	0	1,511.85	0	1,123.66	0	735.47	0	347.27	0		0		0		0		0	
1/4	1,891.97	1/4	1,503.76	1/4	1,115.58	1/4	727.38	1/4	339.18	1/4		1/4		1/4		1/4		1/4	
1/2	1,883.89	1/2	1,495.68	1/2	1,107.49	1/2	719.30	1/2	331.10	1/2		1/2		1/2		1/2		1/2	
3/4	1,875.80	3/4	1,487.59	3/4	1,099.40	3/4	711.21	3/4	323.01	3/4		3/4		3/4		3/4		3/4	
1	1,867.71	1	1,479.50	1	1,091.32	1	703.12	1	314.92	1		1		1		1		1	
1/4	1,859.62	1/4	1,471.41	1/4	1,083.23	1/4	695.03	1/4	306.83	1/4		1/4		1/4		1/4		1/4	
1/2	1,851.53	1/2	1,463.32	1/2	1,075.14	1/2	686.95	1/2	298.75	1/2		1/2		1/2		1/2		1/2	
3/4	1,843.45	3/4	1,455.24	3/4	1,067.06	3/4	678.86	3/4	290.66	3/4		3/4		3/4		3/4		3/4	
2	1,835.36	2	1,447.15	2	1,058.97	2	670.77	2	282.57	2		2		2		2		2	
1/4	1,827.27	1/4	1,439.06	1/4	1,050.88	1/4	662.68	1/4	274.48	1/4		1/4		1/4		1/4		1/4	
1/2	1,819.18	1/2	1,430.97	1/2	1,042.80	1/2	654.60	1/2	266.40	1/2		1/2		1/2		1/2		1/2	
3/4	1,811.10	3/4	1,422.89	3/4	1,034.71	3/4	646.51	3/4	258.31	3/4		3/4		3/4		3/4		3/4	
3	1,803.01	3	1,414.80	3	1,026.62	3	638.42	3	250.22	3		3		3		3		3	
1/4	1,794.92	1/4	1,406.71	1/4	1,018.53	1/4	630.33	1/4	242.13	1/4		1/4		1/4		1/4		1/4	
1/2	1,786.83	1/2	1,398.62	1/2	1,010.45	1/2	622.25	1/2	234.05	1/2		1/2		1/2		1/2		1/2	
3/4	1,778.75	3/4	1,390.54	3/4	1,002.36	3/4	614.16	3/4	225.96	3/4		3/4		3/4		3/4		3/4	
4	1,770.66	4	1,382.45	4	994.27	4	606.07	4	217.88	4		4		4		4		4	
1/4	1,762.57	1/4	1,374.36	1/4	986.18	1/4	597.98	1/4	209.79	1/4		1/4		1/4		1/4		1/4	
1/2	1,754.48	1/2	1,366.27	1/2	978.10	1/2	589.90	1/2	201.71	1/2		1/2		1/2		1/2		1/2	
3/4	1,746.39	3/4	1,358.18	3/4	970.01	3/4	581.81	3/4	193.62	3/4		3/4		3/4		3/4		3/4	
5	1,738.31	5	1,350.10	5	961.92	5	573.72	5	185.54	5		5		5		5		5	
1/4	1,730.22	1/4	1,342.01	1/4	953.83	1/4	565.63	1/4	177.47	1/4		1/4		1/4		1/4		1/4	
1/2	1,722.13	1/2	1,333.92	1/2	945.75	1/2	557.55	1/2	169.39	1/2		1/2		1/2		1/2		1/2	
3/4	1,714.04	3/4	1,325.84	3/4	937.66	3/4	549.46	3/4	161.31	3/4		3/4		3/4		3/4		3/4	
6	1,705.96	6	1,317.75	6	929.57	6	541.37	6	153.25	6		6		6		6		6	
1/4	1,697.87	1/4	1,309.66	1/4	921.48	1/4	533.28	1/4	145.18	1/4		1/4		1/4		1/4		1/4	
1/2	1,689.78	1/2	1,301.58	1/2	913.40	1/2	525.20	1/2	137.12	1/2		1/2		1/2		1/2		1/2	
3/4	1,681.69	3/4	1,293.49	3/4	905.31	3/4	517.11	3/4	129.05	3/4		3/4		3/4		3/4		3/4	
7	1,673.61	7	1,285.40	7	897.22	7	509.02	7	121.01	7		7		7		7		7	
1/4	1,665.52	1/4	1,277.32	1/4	889.13	1/4	500.93	1/4	112.97	1/4		1/4		1/4		1/4		1/4	
1/2	1,657.43	1/2	1,269.23	1/2	881.05	1/2	492.85	1/2	104.92	1/2		1/2		1/2		1/2		1/2	
3/4	1,649.34	3/4	1,261.14	3/4	872.96	3/4	484.76	3/4	96.88	3/4		3/4		3/4		3/4		3/4	
8	1,641.25	8	1,253.05	8	864.87	8	476.67	8	88.87	8		8		8		8		8	
1/4	1,633.17	1/4	1,244.97	1/4	856.78	1/4	468.58	1/4	80.86	1/4		1/4		1/4		1/4		1/4	
1/2	1,625.08	1/2	1,236.88	1/2	848.70	1/2	460.50	1/2	72.86	1/2		1/2		1/2		1/2		1/2	
3/4	1,616.99	3/4	1,228.79	3/4	840.61	3/4	452.41	3/4	64.85	3/4		3/4		3/4		3/4		3/4	
9	1,608.90	9	1,220.71	9	832.52	9	444.32	9	57.49	9		9		9		9		9	
1/4	1,600.82	1/4	1,212.62	1/4	824.43	1/4	436.23	1/4	50.13	1/4		1/4		1/4		1/4		1/4	
1/2	1,592.73	1/2	1,204.53	1/2	816.35	1/2	428.15	1/2	42.77	1/2		1/2		1/2		1/2		1/2	
3/4	1,584.64	3/4	1,196.45	3/4	808.26	3/4	420.06	3/4	35.41	3/4		3/4		3/4		3/4		3/4	
10	1,576.55	10	1,188.36	10	800.17	10	411.97	10	30.02	10		10		10		10		10	
1/4	1,568.46	1/4	1,180.27	1/4	792.08	1/4	403.88	1/4	24.63	1/4		1/4		1/4		1/4		1/4	
1/2	1,560.38	1/2	1,172.19	1/2	784.00	1/2	395.80	1/2	19.24	1/2		1/2		1/2		1/2		1/2	
3/4	1,552.29	3/4	1,164.10	3/4	775.91	3/4	387.71	3/4	13.85	3/4		3/4		3/4		3/4		3/4	
11	1,544.20	11	1,156.01	11	767.82	11	379.62	11		11		11		11		11		11	
1/4	1,536.11	1/4	1,147.92	1/4	759.73	1/4	371.53	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,528.03	1/2	1,139.84	1/2	751.65	1/2	363.45	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,519.94	3/4	1,131.75	3/4	743.56	3/4	355.36	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

3 PORT
ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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		0	4,450.78	0	4,246.73	0	4,016.45	0	3,768.33	0	3,517.49	0	3,177.82	0	2,818.31	0	2,458.71	0	2,099.04
1/4		1/4	4,448.44	1/4	4,242.14	1/4	4,011.45	1/4	3,763.10	1/4	3,512.27	1/4	3,170.33	1/4	2,810.82	1/4	2,451.22	1/4	2,091.54
1/2		1/2	4,446.11	1/2	4,237.55	1/2	4,006.45	1/2	3,757.88	1/2	3,507.04	1/2	3,162.84	1/2	2,803.33	1/2	2,443.73	1/2	2,084.05
3/4		3/4	4,442.52	3/4	4,232.92	3/4	4,001.41	3/4	3,752.65	3/4	3,501.82	3/4	3,155.35	3/4	2,795.84	3/4	2,436.23	3/4	2,076.58
1		1	4,438.93	1	4,228.29	1	3,996.38	1	3,747.43	1	3,496.59	1	3,147.86	1	2,788.35	1	2,428.74	1	2,069.11
1/4		1/4	4,435.34	1/4	4,223.67	1/4	3,991.34	1/4	3,742.20	1/4	3,491.37	1/4	3,140.37	1/4	2,780.86	1/4	2,421.25	1/4	2,061.64
1/2		1/2	4,431.75	1/2	4,219.04	1/2	3,986.30	1/2	3,736.97	1/2	3,486.14	1/2	3,132.88	1/2	2,773.37	1/2	2,413.75	1/2	2,054.17
3/4		3/4	4,427.42	3/4	4,214.38	3/4	3,981.23	3/4	3,731.75	3/4	3,480.05	3/4	3,125.39	3/4	2,765.88	3/4	2,406.26	3/4	2,046.73
2		2	4,423.08	2	4,209.71	2	3,976.15	2	3,726.52	2	3,473.96	2	3,117.90	2	2,758.39	2	2,398.77	2	2,039.29
1/4		1/4	4,418.75	1/4	4,205.05	1/4	3,971.07	1/4	3,721.30	1/4	3,467.88	1/4	3,110.41	1/4	2,750.90	1/4	2,391.27	1/4	2,031.84
1/2		1/2	4,414.41	1/2	4,200.39	1/2	3,966.00	1/2	3,716.07	1/2	3,461.79	1/2	3,102.92	1/2	2,743.41	1/2	2,383.78	1/2	2,024.40
3/4		3/4	4,410.07	3/4	4,195.69	3/4	3,960.88	3/4	3,710.85	3/4	3,454.55	3/4	3,095.43	3/4	2,735.92	3/4	2,376.29	3/4	2,016.96
3		3	4,405.72	3	4,191.00	3	3,955.76	3	3,705.62	3	3,447.31	3	3,087.94	3	2,728.43	3	2,368.80	3	2,009.52
1/4		1/4	4,401.38	1/4	4,186.30	1/4	3,950.64	1/4	3,700.39	1/4	3,440.07	1/4	3,080.45	1/4	2,720.94	1/4	2,361.31	1/4	2,002.07
1/2		1/2	4,397.03	1/2	4,181.61	1/2	3,945.52	1/2	3,695.17	1/2	3,432.83	1/2	3,072.96	1/2	2,713.45	1/2	2,353.81	1/2	1,994.63
3/4		3/4	4,392.77	3/4	4,176.88	3/4	3,940.36	3/4	3,689.94	3/4	3,425.31	3/4	3,065.47	3/4	2,705.96	3/4	2,346.32	3/4	1,987.19
4		4	4,388.52	4	4,172.15	4	3,935.21	4	3,684.72	4	3,417.78	4	3,057.98	4	2,698.47	4	2,338.83	4	1,979.74
1/4		1/4	4,384.26	1/4	4,167.42	1/4	3,930.05	1/4	3,679.49	1/4	3,410.26	1/4	3,050.49	1/4	2,690.98	1/4	2,331.34	1/4	1,972.30
1/2		1/2	4,380.00	1/2	4,162.69	1/2	3,924.90	1/2	3,674.27	1/2	3,402.73	1/2	3,043.00	1/2	2,683.49	1/2	2,323.84	1/2	1,964.86
3/4		3/4	4,375.71	3/4	4,157.93	3/4	3,919.71	3/4	3,669.04	3/4	3,395.21	3/4	3,035.51	3/4	2,676.00	3/4	2,316.35	3/4	1,957.41
5		5	4,371.42	5	4,153.17	5	3,914.52	5	3,663.81	5	3,387.68	5	3,028.02	5	2,668.51	5	2,308.86	5	1,949.97
1/4		1/4	4,367.12	1/4	4,148.41	1/4	3,909.33	1/4	3,658.59	1/4	3,380.15	1/4	3,020.54	1/4	2,661.02	1/4	2,301.36	1/4	1,942.53
1/2		1/2	4,362.83	1/2	4,143.64	1/2	3,904.14	1/2	3,653.36	1/2	3,372.63	1/2	3,013.05	1/2	2,653.53	1/2	2,293.87	1/2	1,935.09
3/4		3/4	4,358.50	3/4	4,138.85	3/4	3,898.93	3/4	3,648.14	3/4	3,365.12	3/4	3,005.56	3/4	2,646.04	3/4	2,286.38	3/4	1,927.64
6		6	4,354.17	6	4,134.05	6	3,893.72	6	3,642.91	6	3,357.61	6	2,998.07	6	2,638.55	6	2,278.89	6	1,920.20
1/4		1/4	4,349.84	1/4	4,129.26	1/4	3,888.50	1/4	3,637.69	1/4	3,350.10	1/4	2,990.58	1/4	2,631.06	1/4	2,271.39	1/4	1,912.76
1/2		1/2	4,345.51	1/2	4,124.46	1/2	3,883.29	1/2	3,632.46	1/2	3,342.60	1/2	2,983.09	1/2	2,623.57	1/2	2,263.90	1/2	1,905.31
3/4		3/4	4,341.12	3/4	4,119.63	3/4	3,878.06	3/4	3,627.23	3/4	3,335.11	3/4	2,975.60	3/4	2,616.07	3/4	2,256.41	3/4	1,897.87
7		7	4,336.73	7	4,114.81	7	3,872.84	7	3,622.01	7	3,327.62	7	2,968.11	7	2,608.58	7	2,248.92	7	1,890.43
1/4		1/4	4,332.35	1/4	4,109.98	1/4	3,867.61	1/4	3,616.78	1/4	3,320.13	1/4	2,960.62	1/4	2,601.09	1/4	2,241.42	1/4	1,882.99
1/2		1/2	4,327.96	1/2	4,105.15	1/2	3,862.39	1/2	3,611.56	1/2	3,312.64	1/2	2,953.13	1/2	2,593.59	1/2	2,233.93	1/2	1,875.54
3/4		3/4	4,323.51	3/4	4,100.28	3/4	3,857.16	3/4	3,606.33	3/4	3,305.15	3/4	2,945.64	3/4	2,586.10	3/4	2,226.44	3/4	1,868.10
8		8	4,319.06	8	4,095.42	8	3,851.94	8	3,601.11	8	3,297.66	8	2,938.15	8	2,578.61	8	2,218.95	8	1,860.66
1/4		1/4	4,314.62	1/4	4,090.55	1/4	3,846.71	1/4	3,595.88	1/4	3,290.17	1/4	2,930.66	1/4	2,571.11	1/4	2,211.45	1/4	1,853.21
1/2		1/2	4,310.17	1/2	4,085.69	1/2	3,841.49	1/2	3,590.65	1/2	3,282.68	1/2	2,923.17	1/2	2,563.62	1/2	2,203.96	1/2	1,845.77
3/4		3/4	4,305.68	3/4	4,080.79	3/4	3,836.26	3/4	3,585.43	3/4	3,275.19	3/4	2,915.68	3/4	2,556.13	3/4	2,196.47	3/4	1,838.33
9		9	4,301.19	9	4,075.89	9	3,831.04	9	3,580.20	9	3,267.70	9	2,908.19	9	2,548.63	9	2,188.97	9	1,830.89
1/4		1/4	4,296.70	1/4	4,070.98	1/4	3,825.81	1/4	3,574.98	1/4	3,260.21	1/4	2,900.70	1/4	2,541.14	1/4	2,181.48	1/4	1,823.44
1/2		1/2	4,292.22	1/2	4,066.08	1/2	3,820.58	1/2	3,569.75	1/2	3,252.72	1/2	2,893.21	1/2	2,533.65	1/2	2,173.99	1/2	1,816.00
3/4		3/4	4,287.69	3/4	4,061.14	3/4	3,815.36	3/4	3,564.53	3/4	3,245.23	3/4	2,885.72	3/4	2,526.15	3/4	2,166.49	3/4	1,808.56
10		10	4,283.17	10	4,056.21	10	3,810.13	10	3,559.30	10	3,237.74	10	2,878.23	10	2,518.66	10	2,159.00	10	1,801.11
1/4		1/4	4,278.65	1/4	4,051.27	1/4	3,804.91	1/4	3,554.07	1/4	3,230.25	1/4	2,870.74	1/4	2,511.17	1/4	2,151.51	1/4	1,793.67
1/2		1/2	4,274.13	1/2	4,046.34	1/2	3,799.68	1/2	3,548.85	1/2	3,222.76	1/2	2,863.25	1/2	2,503.67	1/2	2,144.01	1/2	1,786.23
3/4		3/4	4,269.58	3/4	4,041.37	3/4	3,794.46	3/4	3,543.62	3/4	3,215.27	3/4	2,855.76	3/4	2,496.18	3/4	2,136.52	3/4	1,778.79
11		11	4,265.02	11	4,036.40	11	3,789.23	11	3,538.40	11	3,207.78	11	2,848.27	11	2,488.69	11	2,129.02	11	1,771.34
1/4		1/4	4,260.47	1/4	4,031.43	1/4	3,784.00	1/4	3,533.17	1/4	3,200.29	1/4	2,840.78	1/4	2,481.19	1/4	2,121.52	1/4	1,763.90
1/2	4,455.45	1/2	4,255.91	1/2	4,026.46	1/2	3,778.78	1/2	3,527.95	1/2	3,192.80	1/2	2,833.29	1/2	2,473.70	1/2	2,114.03	1/2	1,756.46
3/4	4,453.11	3/4	4,251.32	3/4	4,021.46	3/4	3,773.55	3/4	3,522.72	3/4	3,185.31	3/4	2,825.80	3/4	2,466.21	3/4	2,106.53	3/4	1,749.01

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 ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 48'-09" FORWARD OF AFT BULKHEAD.

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

BARGE "CCL 421-T"

3 PORT
ULLAGE TABLE

GAUGE HEIGHT 14'-10 1/2"

CAPACITIES GIVEN IN BARRELS OF 42 U.S. 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	1,741.57	0	1,382.13	0	1,030.72	0	674.66	0	314.80	0		0		0		0		0	
1/4	1,734.13	1/4	1,374.64	1/4	1,023.50	1/4	667.16	1/4	307.31	1/4		1/4		1/4		1/4		1/4	
1/2	1,726.68	1/2	1,367.15	1/2	1,016.28	1/2	659.67	1/2	299.81	1/2		1/2		1/2		1/2		1/2	
3/4	1,719.22	3/4	1,359.66	3/4	1,009.05	3/4	652.17	3/4	292.31	3/4		3/4		3/4		3/4		3/4	
1	1,711.75	1	1,352.16	1	1,001.82	1	644.67	1	284.82	1		1		1		1		1	
1/4	1,704.28	1/4	1,344.67	1/4	994.59	1/4	637.17	1/4	277.32	1/4		1/4		1/4		1/4		1/4	
1/2	1,696.81	1/2	1,337.18	1/2	987.36	1/2	629.68	1/2	269.82	1/2		1/2		1/2		1/2		1/2	
3/4	1,689.32	3/4	1,329.69	3/4	980.10	3/4	622.18	3/4	262.32	3/4		3/4		3/4		3/4		3/4	
2	1,681.83	2	1,322.19	2	972.83	2	614.68	2	254.83	2		2		2		2		2	
1/4	1,674.34	1/4	1,314.70	1/4	965.57	1/4	607.19	1/4	247.33	1/4		1/4		1/4		1/4		1/4	
1/2	1,666.85	1/2	1,307.21	1/2	958.31	1/2	599.69	1/2	239.83	1/2		1/2		1/2		1/2		1/2	
3/4	1,659.35	3/4	1,299.72	3/4	951.02	3/4	592.19	3/4	232.34	3/4		3/4		3/4		3/4		3/4	
3	1,651.86	3	1,292.23	3	943.72	3	584.70	3	224.84	3		3		3		3		3	
1/4	1,644.37	1/4	1,284.73	1/4	936.43	1/4	577.20	1/4	217.34	1/4		1/4		1/4		1/4		1/4	
1/2	1,636.88	1/2	1,277.24	1/2	929.14	1/2	569.70	1/2	209.85	1/2		1/2		1/2		1/2		1/2	
3/4	1,629.38	3/4	1,269.85	3/4	921.75	3/4	562.20	3/4	202.35	3/4		3/4		3/4		3/4		3/4	
4	1,621.89	4	1,262.46	4	914.36	4	554.71	4	194.86	4		4		4		4		4	
1/4	1,614.40	1/4	1,255.07	1/4	906.96	1/4	547.21	1/4	187.36	1/4		1/4		1/4		1/4		1/4	
1/2	1,606.91	1/2	1,247.68	1/2	899.57	1/2	539.71	1/2	179.87	1/2		1/2		1/2		1/2		1/2	
3/4	1,599.41	3/4	1,240.39	3/4	892.07	3/4	532.22	3/4	172.38	3/4		3/4		3/4		3/4		3/4	
5	1,591.92	5	1,233.11	5	884.58	5	524.72	5	164.89	5		5		5		5		5	
1/4	1,584.43	1/4	1,225.83	1/4	877.08	1/4	517.22	1/4	157.40	1/4		1/4		1/4		1/4		1/4	
1/2	1,576.94	1/2	1,218.55	1/2	869.58	1/2	509.73	1/2	149.92	1/2		1/2		1/2		1/2		1/2	
3/4	1,569.44	3/4	1,211.30	3/4	862.08	3/4	502.23	3/4	142.44	3/4		3/4		3/4		3/4		3/4	
6	1,561.95	6	1,204.06	6	854.59	6	494.73	6	134.97	6		6		6		6		6	
1/4	1,554.46	1/4	1,196.81	1/4	847.09	1/4	487.23	1/4	127.49	1/4		1/4		1/4		1/4		1/4	
1/2	1,546.97	1/2	1,189.56	1/2	839.59	1/2	479.74	1/2	120.01	1/2		1/2		1/2		1/2		1/2	
3/4	1,539.47	3/4	1,182.34	3/4	832.10	3/4	472.24	3/4	112.55	3/4		3/4		3/4		3/4		3/4	
7	1,531.98	7	1,175.12	7	824.60	7	464.74	7	105.09	7		7		7		7		7	
1/4	1,524.49	1/4	1,167.90	1/4	817.10	1/4	457.25	1/4	97.62	1/4		1/4		1/4		1/4		1/4	
1/2	1,517.00	1/2	1,160.68	1/2	809.61	1/2	449.75	1/2	90.16	1/2		1/2		1/2		1/2		1/2	
3/4	1,509.50	3/4	1,153.46	3/4	802.11	3/4	442.25	3/4	82.71	3/4		3/4		3/4		3/4		3/4	
8	1,502.01	8	1,146.24	8	794.61	8	434.76	8	75.26	8		8		8		8		8	
1/4	1,494.52	1/4	1,139.02	1/4	787.11	1/4	427.26	1/4	67.82	1/4		1/4		1/4		1/4		1/4	
1/2	1,487.03	1/2	1,131.80	1/2	779.62	1/2	419.76	1/2	60.37	1/2		1/2		1/2		1/2		1/2	
3/4	1,479.54	3/4	1,124.58	3/4	772.12	3/4	412.26	3/4	53.52	3/4		3/4		3/4		3/4		3/4	
9	1,472.04	9	1,117.36	9	764.62	9	404.77	9	46.67	9		9		9		9		9	
1/4	1,464.55	1/4	1,110.14	1/4	757.13	1/4	397.27	1/4	39.82	1/4		1/4		1/4		1/4		1/4	
1/2	1,457.06	1/2	1,102.92	1/2	749.63	1/2	389.77	1/2	32.97	1/2		1/2		1/2		1/2		1/2	
3/4	1,449.57	3/4	1,095.70	3/4	742.13	3/4	382.28	3/4	27.96	3/4		3/4		3/4		3/4		3/4	
10	1,442.07	10	1,088.48	10	734.64	10	374.78	10	22.94	10		10		10		10		10	
1/4	1,434.58	1/4	1,081.26	1/4	727.14	1/4	367.28	1/4	17.92	1/4		1/4		1/4		1/4		1/4	
1/2	1,427.09	1/2	1,074.04	1/2	719.64	1/2	359.79	1/2	12.91	1/2		1/2		1/2		1/2		1/2	
3/4	1,419.60	3/4	1,066.82	3/4	712.14	3/4	352.29	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,412.10	11	1,059.60	11	704.65	11	344.79	11		11		11		11		11		11	
1/4	1,404.61	1/4	1,052.38	1/4	697.15	1/4	337.29	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,397.12	1/2	1,045.16	1/2	689.65	1/2	329.80	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,389.63	3/4	1,037.94	3/4	682.16	3/4	322.30	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

3 STBD

ULLAGE TABLE

GAUGE HEIGHT 14'-10 1/4"

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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	4,474.46	0	4,268.31	0	4,037.77	0	3,789.57	0	3,538.89	0	3,196.64	0	2,835.73	0	2,474.72	0	2,113.60
1/4		1/4	4,472.13	1/4	4,263.72	1/4	4,032.77	1/4	3,784.35	1/4	3,533.67	1/4	3,189.12	1/4	2,828.21	1/4	2,467.20	1/4	2,106.08
1/2		1/2	4,468.54	1/2	4,259.09	1/2	4,027.73	1/2	3,779.13	1/2	3,528.44	1/2	3,181.60	1/2	2,820.69	1/2	2,459.68	1/2	2,098.55
3/4		3/4	4,464.95	3/4	4,254.47	3/4	4,022.70	3/4	3,773.91	3/4	3,523.22	3/4	3,174.08	3/4	2,813.17	3/4	2,452.15	3/4	2,091.03
1		1	4,461.37	1	4,249.84	1	4,017.67	1	3,768.68	1	3,518.00	1	3,166.56	1	2,805.65	1	2,444.63	1	2,083.51
1/4		1/4	4,457.78	1/4	4,245.22	1/4	4,012.64	1/4	3,763.46	1/4	3,512.78	1/4	3,159.04	1/4	2,798.13	1/4	2,437.11	1/4	2,075.98
1/2		1/2	4,453.45	1/2	4,240.56	1/2	4,007.56	1/2	3,758.24	1/2	3,506.69	1/2	3,151.53	1/2	2,790.61	1/2	2,429.59	1/2	2,068.46
3/4		3/4	4,449.12	3/4	4,235.90	3/4	4,002.49	3/4	3,753.02	3/4	3,500.61	3/4	3,144.01	3/4	2,783.09	3/4	2,422.06	3/4	2,060.94
2		2	4,444.78	2	4,231.24	2	3,997.42	2	3,747.79	2	3,494.52	2	3,136.49	2	2,775.58	2	2,414.54	2	2,053.41
1/4		1/4	4,440.45	1/4	4,226.58	1/4	3,992.34	1/4	3,742.57	1/4	3,488.44	1/4	3,128.97	1/4	2,768.06	1/4	2,407.02	1/4	2,045.89
1/2		1/2	4,436.11	1/2	4,221.89	1/2	3,987.23	1/2	3,737.35	1/2	3,481.20	1/2	3,121.45	1/2	2,760.54	1/2	2,399.49	1/2	2,038.37
3/4		3/4	4,431.77	3/4	4,217.20	3/4	3,982.11	3/4	3,732.12	3/4	3,473.96	3/4	3,113.93	3/4	2,753.02	3/4	2,391.97	3/4	2,030.84
3		3	4,427.43	3	4,212.50	3	3,976.99	3	3,726.90	3	3,466.73	3	3,106.41	3	2,745.50	3	2,384.44	3	2,023.32
1/4		1/4	4,423.08	1/4	4,207.81	1/4	3,971.88	1/4	3,721.68	1/4	3,459.49	1/4	3,098.89	1/4	2,737.98	1/4	2,376.92	1/4	2,015.79
1/2		1/2	4,418.83	1/2	4,203.09	1/2	3,966.73	1/2	3,716.46	1/2	3,451.97	1/2	3,091.37	1/2	2,730.46	1/2	2,369.39	1/2	2,008.27
3/4		3/4	4,414.58	3/4	4,198.36	3/4	3,961.57	3/4	3,711.23	3/4	3,444.45	3/4	3,083.85	3/4	2,722.94	3/4	2,361.87	3/4	2,000.75
4		4	4,410.32	4	4,193.63	4	3,956.42	4	3,706.01	4	3,436.93	4	3,076.34	4	2,715.42	4	2,354.35	4	1,993.22
1/4		1/4	4,406.07	1/4	4,188.91	1/4	3,951.27	1/4	3,700.79	1/4	3,429.40	1/4	3,068.82	1/4	2,707.90	1/4	2,346.82	1/4	1,985.70
1/2		1/2	4,401.78	1/2	4,184.15	1/2	3,946.08	1/2	3,695.57	1/2	3,421.88	1/2	3,061.30	1/2	2,700.39	1/2	2,339.30	1/2	1,978.18
3/4		3/4	4,397.49	3/4	4,179.39	3/4	3,940.90	3/4	3,690.34	3/4	3,414.36	3/4	3,053.78	3/4	2,692.87	3/4	2,331.78	3/4	1,970.65
5		5	4,393.20	5	4,174.63	5	3,935.71	5	3,685.12	5	3,406.84	5	3,046.26	5	2,685.35	5	2,324.25	5	1,963.13
1/4		1/4	4,388.91	1/4	4,169.87	1/4	3,930.53	1/4	3,679.90	1/4	3,399.31	1/4	3,038.74	1/4	2,677.83	1/4	2,316.73	1/4	1,955.61
1/2		1/2	4,384.58	1/2	4,165.08	1/2	3,925.32	1/2	3,674.68	1/2	3,391.80	1/2	3,031.22	1/2	2,670.31	1/2	2,309.21	1/2	1,948.08
3/4		3/4	4,380.25	3/4	4,160.29	3/4	3,920.11	3/4	3,669.45	3/4	3,384.29	3/4	3,023.70	3/4	2,662.79	3/4	2,301.68	3/4	1,940.56
6		6	4,375.92	6	4,155.50	6	3,914.89	6	3,664.23	6	3,376.78	6	3,016.18	6	2,655.27	6	2,294.16	6	1,933.04
1/4		1/4	4,371.60	1/4	4,150.71	1/4	3,909.68	1/4	3,659.01	1/4	3,369.27	1/4	3,008.66	1/4	2,647.74	1/4	2,286.64	1/4	1,925.51
1/2		1/2	4,367.21	1/2	4,145.88	1/2	3,904.46	1/2	3,653.79	1/2	3,361.76	1/2	3,001.15	1/2	2,640.22	1/2	2,279.11	1/2	1,917.99
3/4		3/4	4,362.83	3/4	4,141.06	3/4	3,899.24	3/4	3,648.56	3/4	3,354.26	3/4	2,993.63	3/4	2,632.70	3/4	2,271.59	3/4	1,910.47
7		7	4,358.45	7	4,136.23	7	3,894.02	7	3,643.34	7	3,346.76	7	2,986.11	7	2,625.18	7	2,264.07	7	1,902.94
1/4		1/4	4,354.06	1/4	4,131.41	1/4	3,888.80	1/4	3,638.12	1/4	3,339.26	1/4	2,978.59	1/4	2,617.65	1/4	2,256.54	1/4	1,895.42
1/2		1/2	4,349.62	1/2	4,126.54	1/2	3,883.58	1/2	3,632.90	1/2	3,331.76	1/2	2,971.07	1/2	2,610.13	1/2	2,249.02	1/2	1,887.90
3/4		3/4	4,345.17	3/4	4,121.68	3/4	3,878.36	3/4	3,627.67	3/4	3,324.26	3/4	2,963.55	3/4	2,602.61	3/4	2,241.50	3/4	1,880.37
8		8	4,340.73	8	4,116.82	8	3,873.14	8	3,622.45	8	3,316.76	8	2,956.03	8	2,595.09	8	2,233.97	8	1,872.85
1/4		1/4	4,336.28	1/4	4,111.96	1/4	3,867.91	1/4	3,617.23	1/4	3,309.25	1/4	2,948.51	1/4	2,587.56	1/4	2,226.45	1/4	1,865.33
1/2		1/2	4,331.80	1/2	4,107.06	1/2	3,862.69	1/2	3,612.00	1/2	3,301.75	1/2	2,940.99	1/2	2,580.04	1/2	2,218.93	1/2	1,857.80
3/4		3/4	4,327.31	3/4	4,102.16	3/4	3,857.47	3/4	3,606.78	3/4	3,294.25	3/4	2,933.47	3/4	2,572.52	3/4	2,211.40	3/4	1,850.28
9		9	4,322.83	9	4,097.26	9	3,852.24	9	3,601.56	9	3,286.75	9	2,925.96	9	2,565.00	9	2,203.88	9	1,842.76
1/4		1/4	4,318.34	1/4	4,092.36	1/4	3,847.02	1/4	3,596.34	1/4	3,279.25	1/4	2,918.44	1/4	2,557.47	1/4	2,196.36	1/4	1,835.23
1/2		1/2	4,313.83	1/2	4,087.43	1/2	3,841.80	1/2	3,591.11	1/2	3,271.75	1/2	2,910.92	1/2	2,549.95	1/2	2,188.83	1/2	1,827.71
3/4		3/4	4,309.31	3/4	4,082.50	3/4	3,836.58	3/4	3,585.89	3/4	3,264.25	3/4	2,903.40	3/4	2,542.43	3/4	2,181.31	3/4	1,820.19
10		10	4,304.79	10	4,077.56	10	3,831.35	10	3,580.67	10	3,256.74	10	2,895.88	10	2,534.90	10	2,173.79	10	1,812.66
1/4		1/4	4,300.27	1/4	4,072.63	1/4	3,826.13	1/4	3,575.45	1/4	3,249.24	1/4	2,888.36	1/4	2,527.38	1/4	2,166.26	1/4	1,805.14
1/2		1/2	4,295.72	1/2	4,067.66	1/2	3,820.91	1/2	3,570.22	1/2	3,241.73	1/2	2,880.84	1/2	2,519.86	1/2	2,158.74	1/2	1,797.62
3/4		3/4	4,291.17	3/4	4,062.70	3/4	3,815.69	3/4	3,565.00	3/4	3,234.22	3/4	2,873.32	3/4	2,512.34	3/4	2,151.22	3/4	1,790.09
11		11	4,286.62	11	4,057.73	11	3,810.46	11	3,559.78	11	3,226.71	11	2,865.80	11	2,504.81	11	2,143.69	11	1,782.57
1/4	4,481.46	1/4	4,282.07	1/4	4,052.76	1/4	3,805.24	1/4	3,554.56	1/4	3,219.20	1/4	2,858.28	1/4	2,497.29	1/4	2,136.17	1/4	1,775.05
1/2	4,479.13	1/2	4,277.48	1/2	4,047.77	1/2	3,800.02	1/2	3,549.33	1/2	3,211.68	1/2	2,850.77	1/2	2,489.77	1/2	2,128.65	1/2	1,767.52
3/4	4,476.79	3/4	4,272.89	3/4	4,042.77	3/4	3,794.80	3/4	3,544.11	3/4	3,204.16	3/4	2,843.25	3/4	2,482.25	3/4	2,121.12	3/4	1,760.00

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 ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 48'-09" FORWARD OF AFT BULKHEAD.

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

BARGE "CCL 421-T"

3 STBD

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	1,752.48	0	1,391.35	0	1,030.25	0	669.14	0	308.02	0		0		0		0		0	
1/4	1,744.95	1/4	1,383.83	1/4	1,022.73	1/4	661.61	1/4	300.50	1/4		1/4		1/4		1/4		1/4	
1/2	1,737.43	1/2	1,376.31	1/2	1,015.20	1/2	654.09	1/2	292.98	1/2		1/2		1/2		1/2		1/2	
3/4	1,729.91	3/4	1,368.78	3/4	1,007.68	3/4	646.57	3/4	285.45	3/4		3/4		3/4		3/4		3/4	
1	1,722.38	1	1,361.26	1	1,000.16	1	639.04	1	277.93	1		1		1		1		1	
1/4	1,714.86	1/4	1,353.74	1/4	992.63	1/4	631.52	1/4	270.41	1/4		1/4		1/4		1/4		1/4	
1/2	1,707.34	1/2	1,346.21	1/2	985.11	1/2	624.00	1/2	262.88	1/2		1/2		1/2		1/2		1/2	
3/4	1,699.81	3/4	1,338.69	3/4	977.59	3/4	616.47	3/4	255.36	3/4		3/4		3/4		3/4		3/4	
2	1,692.29	2	1,331.17	2	970.06	2	608.95	2	247.84	2		2		2		2		2	
1/4	1,684.77	1/4	1,323.64	1/4	962.54	1/4	601.43	1/4	240.31	1/4		1/4		1/4		1/4		1/4	
1/2	1,677.24	1/2	1,316.12	1/2	955.02	1/2	593.90	1/2	232.79	1/2		1/2		1/2		1/2		1/2	
3/4	1,669.72	3/4	1,308.60	3/4	947.49	3/4	586.38	3/4	225.27	3/4		3/4		3/4		3/4		3/4	
3	1,662.20	3	1,301.07	3	939.97	3	578.86	3	217.74	3		3		3		3		3	
1/4	1,654.67	1/4	1,293.55	1/4	932.45	1/4	571.33	1/4	210.22	1/4		1/4		1/4		1/4		1/4	
1/2	1,647.15	1/2	1,286.03	1/2	924.92	1/2	563.81	1/2	202.70	1/2		1/2		1/2		1/2		1/2	
3/4	1,639.62	3/4	1,278.50	3/4	917.40	3/4	556.29	3/4	195.18	3/4		3/4		3/4		3/4		3/4	
4	1,632.10	4	1,270.98	4	909.88	4	548.76	4	187.66	4		4		4		4		4	
1/4	1,624.58	1/4	1,263.45	1/4	902.35	1/4	541.24	1/4	180.14	1/4		1/4		1/4		1/4		1/4	
1/2	1,617.05	1/2	1,255.93	1/2	894.83	1/2	533.72	1/2	172.62	1/2		1/2		1/2		1/2		1/2	
3/4	1,609.53	3/4	1,248.41	3/4	887.31	3/4	526.19	3/4	165.11	3/4		3/4		3/4		3/4		3/4	
5	1,602.01	5	1,240.88	5	879.79	5	518.67	5	157.60	5		5		5		5		5	
1/4	1,594.48	1/4	1,233.36	1/4	872.26	1/4	511.15	1/4	150.08	1/4		1/4		1/4		1/4		1/4	
1/2	1,586.96	1/2	1,225.84	1/2	864.74	1/2	503.63	1/2	142.58	1/2		1/2		1/2		1/2		1/2	
3/4	1,579.44	3/4	1,218.32	3/4	857.22	3/4	496.10	3/4	135.08	3/4		3/4		3/4		3/4		3/4	
6	1,571.91	6	1,210.79	6	849.69	6	488.58	6	127.58	6		6		6		6		6	
1/4	1,564.39	1/4	1,203.27	1/4	842.17	1/4	481.06	1/4	120.07	1/4		1/4		1/4		1/4		1/4	
1/2	1,556.87	1/2	1,195.75	1/2	834.65	1/2	473.53	1/2	112.59	1/2		1/2		1/2		1/2		1/2	
3/4	1,549.34	3/4	1,188.23	3/4	827.12	3/4	466.01	3/4	105.11	3/4		3/4		3/4		3/4		3/4	
7	1,541.82	7	1,180.70	7	819.60	7	458.49	7	97.63	7		7		7		7		7	
1/4	1,534.30	1/4	1,173.18	1/4	812.08	1/4	450.96	1/4	90.15	1/4		1/4		1/4		1/4		1/4	
1/2	1,526.77	1/2	1,165.66	1/2	804.55	1/2	443.44	1/2	82.70	1/2		1/2		1/2		1/2		1/2	
3/4	1,519.25	3/4	1,158.14	3/4	797.03	3/4	435.92	3/4	75.25	3/4		3/4		3/4		3/4		3/4	
8	1,511.73	8	1,150.61	8	789.51	8	428.39	8	67.80	8		8		8		8		8	
1/4	1,504.20	1/4	1,143.09	1/4	781.98	1/4	420.87	1/4	60.35	1/4		1/4		1/4		1/4		1/4	
1/2	1,496.68	1/2	1,135.57	1/2	774.46	1/2	413.35	1/2	53.50	1/2		1/2		1/2		1/2		1/2	
3/4	1,489.16	3/4	1,128.05	3/4	766.94	3/4	405.82	3/4	46.66	3/4		3/4		3/4		3/4		3/4	
9	1,481.63	9	1,120.52	9	759.41	9	398.30	9	39.81	9		9		9		9		9	
1/4	1,474.11	1/4	1,113.00	1/4	751.89	1/4	390.78	1/4	32.96	1/4		1/4		1/4		1/4		1/4	
1/2	1,466.59	1/2	1,105.48	1/2	744.37	1/2	383.25	1/2	27.95	1/2		1/2		1/2		1/2		1/2	
3/4	1,459.06	3/4	1,097.95	3/4	736.84	3/4	375.73	3/4	22.93	3/4		3/4		3/4		3/4		3/4	
10	1,451.54	10	1,090.43	10	729.32	10	368.21	10	17.92	10		10		10		10		10	
1/4	1,444.02	1/4	1,082.91	1/4	721.80	1/4	360.68	1/4	12.90	1/4		1/4		1/4		1/4		1/4	
1/2	1,436.49	1/2	1,075.39	1/2	714.27	1/2	353.16	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,428.97	3/4	1,067.86	3/4	706.75	3/4	345.64	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,421.45	11	1,060.34	11	699.23	11	338.11	11		11		11		11		11		11	
1/4	1,413.92	1/4	1,052.82	1/4	691.71	1/4	330.59	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,406.40	1/2	1,045.30	1/2	684.18	1/2	323.07	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,398.88	3/4	1,037.77	3/4	676.66	3/4	315.55	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

SLOP TANK

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

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	2,175	0	4,470	0	6,721	0	8,846	0		0		0		0		0	
1/4	19	1/4	2,223	1/4	4,518	1/4	6,766	1/4	8,889	1/4		1/4		1/4		1/4		1/4	
1/2	38	1/2	2,271	1/2	4,566	1/2	6,812	1/2	8,932	1/2		1/2		1/2		1/2		1/2	
3/4	57	3/4	2,319	3/4	4,614	3/4	6,857	3/4	8,975	3/4		3/4		3/4		3/4		3/4	
1	76	1	2,367	1	4,662	1	6,903	1	9,018	1		1		1		1		1	
1/4	123	1/4	2,415	1/4	4,710	1/4	6,948	1/4	9,060	1/4		1/4		1/4		1/4		1/4	
1/2	170	1/2	2,462	1/2	4,757	1/2	6,993	1/2	9,103	1/2		1/2		1/2		1/2		1/2	
3/4	216	3/4	2,510	3/4	4,805	3/4	7,038	3/4	9,146	3/4		3/4		3/4		3/4		3/4	
2	263	2	2,558	2	4,853	2	7,084	2	9,188	2		2		2		2		2	
1/4	311	1/4	2,606	1/4	4,901	1/4	7,129	1/4	9,231	1/4		1/4		1/4		1/4		1/4	
1/2	359	1/2	2,654	1/2	4,948	1/2	7,174	1/2	9,273	1/2		1/2		1/2		1/2		1/2	
3/4	406	3/4	2,701	3/4	4,996	3/4	7,219	3/4	9,316	3/4		3/4		3/4		3/4		3/4	
3	454	3	2,749	3	5,044	3	7,264	3	9,358	3		3		3		3		3	
1/4	502	1/4	2,797	1/4	5,091	1/4	7,309	1/4	9,400	1/4		1/4		1/4		1/4		1/4	
1/2	550	1/2	2,845	1/2	5,139	1/2	7,353	1/2	9,443	1/2		1/2		1/2		1/2		1/2	
3/4	598	3/4	2,893	3/4	5,186	3/4	7,398	3/4	9,485	3/4		3/4		3/4		3/4		3/4	
4	645	4	2,940	4	5,233	4	7,443	4	9,527	4		4		4		4		4	
1/4	693	1/4	2,988	1/4	5,281	1/4	7,488	1/4	9,569	1/4		1/4		1/4		1/4		1/4	
1/2	741	1/2	3,036	1/2	5,328	1/2	7,532	1/2	9,611	1/2		1/2		1/2		1/2		1/2	
3/4	789	3/4	3,084	3/4	5,375	3/4	7,577	3/4	9,653	3/4		3/4		3/4		3/4		3/4	
5	837	5	3,132	5	5,423	5	7,622	5	9,695	5		5		5		5		5	
1/4	885	1/4	3,180	1/4	5,470	1/4	7,666	1/4	9,737	1/4		1/4		1/4		1/4		1/4	
1/2	932	1/2	3,227	1/2	5,517	1/2	7,710	1/2	9,778	1/2		1/2		1/2		1/2		1/2	
3/4	980	3/4	3,275	3/4	5,564	3/4	7,755	3/4	9,820	3/4		3/4		3/4		3/4		3/4	
6	1,028	6	3,323	6	5,611	6	7,799	6		6		6		6		6		6	
1/4	1,076	1/4	3,371	1/4	5,657	1/4	7,843	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,124	1/2	3,419	1/2	5,704	1/2	7,888	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,171	3/4	3,466	3/4	5,751	3/4	7,932	3/4		3/4		3/4		3/4		3/4		3/4	
7	1,219	7	3,514	7	5,798	7	7,976	7		7		7		7		7		7	
1/4	1,267	1/4	3,562	1/4	5,844	1/4	8,020	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,315	1/2	3,610	1/2	5,891	1/2	8,064	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,363	3/4	3,658	3/4	5,938	3/4	8,108	3/4		3/4		3/4		3/4		3/4		3/4	
8	1,410	8	3,705	8	5,984	8	8,152	8		8		8		8		8		8	
1/4	1,458	1/4	3,753	1/4	6,030	1/4	8,196	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,506	1/2	3,801	1/2	6,077	1/2	8,239	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,554	3/4	3,849	3/4	6,123	3/4	8,283	3/4		3/4		3/4		3/4		3/4		3/4	
9	1,602	9	3,897	9	6,170	9	8,327	9		9		9		9		9		9	
1/4	1,650	1/4	3,945	1/4	6,216	1/4	8,370	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,697	1/2	3,992	1/2	6,262	1/2	8,414	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,745	3/4	4,040	3/4	6,308	3/4	8,457	3/4		3/4		3/4		3/4		3/4		3/4	
10	1,793	10	4,088	10	6,354	10	8,501	10		10		10		10		10		10	
1/4	1,841	1/4	4,136	1/4	6,400	1/4	8,544	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,889	1/2	4,184	1/2	6,446	1/2	8,587	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,936	3/4	4,231	3/4	6,492	3/4	8,631	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,984	11	4,279	11	6,538	11	8,674	11		11		11		11		11		11	
1/4	2,032	1/4	4,327	1/4	6,584	1/4	8,717	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	2,080	1/2	4,375	1/2	6,629	1/2	8,760	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	2,128	3/4	4,423	3/4	6,675	3/4	8,803	3/4		3/4		3/4		3/4		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 AT GAUGE POINT.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

FUEL TANK
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-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	0	0	110	0	282	0	454	0	564	0		0		0		0		0	
1/4	1	1/4	114	1/4	286	1/4	457	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1	1/2	117	1/2	289	1/2	460	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	2	3/4	120	3/4	293	3/4	463	3/4		3/4		3/4		3/4		3/4		3/4	
1	3	1	123	1	297	1	467	1		1		1		1		1		1	
1/4	4	1/4	127	1/4	301	1/4	470	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	5	1/2	130	1/2	304	1/2	473	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	7	3/4	133	3/4	308	3/4	476	3/4		3/4		3/4		3/4		3/4		3/4	
2	8	2	137	2	312	2	479	2		2		2		2		2		2	
1/4	10	1/4	140	1/4	316	1/4	482	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	11	1/2	144	1/2	319	1/2	485	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	13	3/4	147	3/4	323	3/4	488	3/4		3/4		3/4		3/4		3/4		3/4	
3	15	3	151	3	327	3	491	3		3		3		3		3		3	
1/4	17	1/4	154	1/4	330	1/4	494	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	19	1/2	158	1/2	334	1/2	497	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	21	3/4	161	3/4	338	3/4	499	3/4		3/4		3/4		3/4		3/4		3/4	
4	22	4	165	4	342	4	502	4		4		4		4		4		4	
1/4	25	1/4	168	1/4	345	1/4	505	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	27	1/2	172	1/2	349	1/2	508	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	29	3/4	175	3/4	353	3/4	510	3/4		3/4		3/4		3/4		3/4		3/4	
5	31	5	179	5	356	5	513	5		5		5		5		5		5	
1/4	34	1/4	182	1/4	360	1/4	516	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	36	1/2	186	1/2	364	1/2	518	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	38	3/4	190	3/4	367	3/4	521	3/4		3/4		3/4		3/4		3/4		3/4	
6	41	6	193	6	371	6	523	6		6		6		6		6		6	
1/4	43	1/4	197	1/4	374	1/4	526	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	46	1/2	200	1/2	378	1/2	528	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	48	3/4	204	3/4	382	3/4	530	3/4		3/4		3/4		3/4		3/4		3/4	
7	51	7	208	7	385	7	533	7		7		7		7		7		7	
1/4	54	1/4	211	1/4	389	1/4	535	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	56	1/2	215	1/2	392	1/2	537	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	59	3/4	219	3/4	396	3/4	539	3/4		3/4		3/4		3/4		3/4		3/4	
8	62	8	222	8	399	8	542	8		8		8		8		8		8	
1/4	65	1/4	226	1/4	403	1/4	544	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	67	1/2	230	1/2	406	1/2	545	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	70	3/4	234	3/4	410	3/4	547	3/4		3/4		3/4		3/4		3/4		3/4	
9	73	9	237	9	413	9	549	9		9		9		9		9		9	
1/4	76	1/4	241	1/4	417	1/4	551	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	79	1/2	245	1/2	420	1/2	553	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	82	3/4	248	3/4	424	3/4	554	3/4		3/4		3/4		3/4		3/4		3/4	
10	85	10	252	10	427	10	556	10		10		10		10		10		10	
1/4	88	1/4	256	1/4	431	1/4	557	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	91	1/2	260	1/2	434	1/2	559	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	94	3/4	263	3/4	437	3/4	560	3/4		3/4		3/4		3/4		3/4		3/4	
11	97	11	267	11	441	11	561	11		11		11		11		11		11	
1/4	101	1/4	271	1/4	444	1/4	562	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	104	1/2	275	1/2	447	1/2	563	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	107	3/4	278	3/4	450	3/4	563	3/4		3/4		3/4		3/4		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 AT GAUGE POINT.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421T"

INNAGE TRIM TABLE

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN
1 PORT	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-3/4	- 00-3/4	01-1/8	- 01-1/8	01-3/8	- 01-3/8	01-5/8	- 01-5/8
1 STBD	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-3/4	- 00-3/4	01-1/8	- 01-1/8	01-3/8	- 01-3/8	01-5/8	- 01-5/8
2 PORT	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-5/8	- 00-5/8	00-3/4	- 00-3/4	00-7/8	- 00-7/8
2 STBD	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-5/8	- 00-5/8	00-3/4	- 00-3/4	00-7/8	- 00-7/8
3 PORT	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 01-1/8	01-1/8	- 01-3/8	01-3/8	- 01-5/8	01-5/8
3 STBD	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 01-0/8	01-0/8	- 01-3/8	01-3/8	- 01-5/8	01-5/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 1'-00"
AFT DRAFT = 4'-00"
DIFF. = 3'-00" (DOWN BY STERN)

THE CORRECTION FOR 3'-00" TRIM DOWN BY STERN FOR 1 PORT IS - 00-3/4"
FOR A MEASURED INNAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED INNAGE IS 3'-11 1/4"

LENGTH BETWEEN DRAFT MARKS: 245'-03"

July 14, 2025

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

http://www.pmacorp.net

BARGE "CCL 421-T"

1 PORT

INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	9.63	0	298.28	0	640.02	0	996.50	0	1,352.70	0	1,709.90	0	2,067.10	0	2,424.27	0	2,781.41	0	3,138.55
1/4	13.05	1/4	305.02	1/4	647.46	1/4	1,003.90	1/4	1,360.14	1/4	1,717.34	1/4	2,074.54	1/4	2,431.71	1/4	2,788.85	1/4	3,145.99
1/2	16.47	1/2	311.76	1/2	654.90	1/2	1,011.31	1/2	1,367.58	1/2	1,724.78	1/2	2,081.98	1/2	2,439.15	1/2	2,796.29	1/2	3,153.43
3/4	19.89	3/4	318.50	3/4	662.35	3/4	1,018.71	3/4	1,375.02	3/4	1,732.22	3/4	2,089.42	3/4	2,446.59	3/4	2,803.73	3/4	3,160.87
1	23.31	1	325.25	1	669.79	1	1,026.11	1	1,382.47	1	1,739.67	1	2,096.87	1	2,454.03	1	2,811.17	1	3,168.31
1/4	28.62	1/4	332.06	1/4	677.23	1/4	1,033.51	1/4	1,389.91	1/4	1,747.11	1/4	2,104.31	1/4	2,461.48	1/4	2,818.61	1/4	3,175.75
1/2	33.92	1/2	338.87	1/2	684.67	1/2	1,040.91	1/2	1,397.35	1/2	1,754.55	1/2	2,111.75	1/2	2,468.92	1/2	2,826.05	1/2	3,183.19
3/4	39.23	3/4	345.68	3/4	692.11	3/4	1,048.31	3/4	1,404.79	3/4	1,761.99	3/4	2,119.19	3/4	2,476.36	3/4	2,833.50	3/4	3,190.63
2	44.53	2	352.50	2	699.55	2	1,055.71	2	1,412.23	2	1,769.43	2	2,126.63	2	2,483.80	2	2,840.94	2	3,198.07
1/4	50.50	1/4	359.38	1/4	707.00	1/4	1,063.11	1/4	1,419.67	1/4	1,776.88	1/4	2,134.07	1/4	2,491.24	1/4	2,848.38	1/4	3,205.52
1/2	56.47	1/2	366.26	1/2	714.44	1/2	1,070.51	1/2	1,427.12	1/2	1,784.32	1/2	2,141.51	1/2	2,498.68	1/2	2,855.82	1/2	3,212.96
3/4	62.44	3/4	373.14	3/4	721.88	3/4	1,077.91	3/4	1,434.56	3/4	1,791.76	3/4	2,148.96	3/4	2,506.12	3/4	2,863.26	3/4	3,220.40
3	68.41	3	380.03	3	729.32	3	1,085.31	3	1,442.00	3	1,799.20	3	2,156.40	3	2,513.56	3	2,870.70	3	3,227.84
1/4	74.49	1/4	386.98	1/4	736.76	1/4	1,092.71	1/4	1,449.44	1/4	1,806.64	1/4	2,163.84	1/4	2,521.00	1/4	2,878.14	1/4	3,235.28
1/2	80.56	1/2	393.93	1/2	744.20	1/2	1,100.11	1/2	1,456.88	1/2	1,814.08	1/2	2,171.28	1/2	2,528.44	1/2	2,885.58	1/2	3,242.72
3/4	86.63	3/4	400.88	3/4	751.64	3/4	1,107.51	3/4	1,464.32	3/4	1,821.53	3/4	2,178.72	3/4	2,535.88	3/4	2,893.02	3/4	3,250.16
4	92.71	4	407.84	4	759.09	4	1,114.91	4	1,471.77	4	1,828.97	4	2,186.16	4	2,543.32	4	2,900.46	4	3,257.60
1/4	98.87	1/4	414.86	1/4	766.53	1/4	1,122.31	1/4	1,479.21	1/4	1,836.41	1/4	2,193.60	1/4	2,550.76	1/4	2,907.90	1/4	3,265.04
1/2	105.03	1/2	421.88	1/2	773.97	1/2	1,129.71	1/2	1,486.65	1/2	1,843.85	1/2	2,201.05	1/2	2,558.20	1/2	2,915.34	1/2	3,272.48
3/4	111.19	3/4	428.90	3/4	781.41	3/4	1,137.11	3/4	1,494.09	3/4	1,851.29	3/4	2,208.49	3/4	2,565.64	3/4	2,922.78	3/4	3,279.92
5	117.36	5	435.92	5	788.85	5	1,144.51	5	1,501.53	5	1,858.73	5	2,215.93	5	2,573.08	5	2,930.22	5	3,287.36
1/4	123.60	1/4	443.02	1/4	796.29	1/4	1,151.92	1/4	1,508.97	1/4	1,866.18	1/4	2,223.37	1/4	2,580.52	1/4	2,937.66	1/4	3,294.80
1/2	129.84	1/2	450.11	1/2	803.73	1/2	1,159.33	1/2	1,516.42	1/2	1,873.62	1/2	2,230.81	1/2	2,587.96	1/2	2,945.10	1/2	3,302.24
3/4	136.09	3/4	457.20	3/4	811.18	3/4	1,166.74	3/4	1,523.86	3/4	1,881.06	3/4	2,238.25	3/4	2,595.40	3/4	2,952.54	3/4	3,309.68
6	142.33	6	464.29	6	818.62	6	1,174.15	6	1,531.30	6	1,888.50	6	2,245.70	6	2,602.84	6	2,959.98	6	3,317.12
1/4	148.65	1/4	471.45	1/4	826.05	1/4	1,181.58	1/4	1,538.74	1/4	1,895.94	1/4	2,253.14	1/4	2,610.28	1/4	2,967.42	1/4	3,324.56
1/2	154.97	1/2	478.62	1/2	833.48	1/2	1,189.01	1/2	1,546.18	1/2	1,903.38	1/2	2,260.58	1/2	2,617.72	1/2	2,974.86	1/2	3,332.00
3/4	161.30	3/4	485.78	3/4	840.90	3/4	1,196.43	3/4	1,553.62	3/4	1,910.83	3/4	2,268.02	3/4	2,625.16	3/4	2,982.30	3/4	3,339.44
7	167.62	7	492.94	7	848.33	7	1,203.86	7	1,561.07	7	1,918.27	7	2,275.46	7	2,632.60	7	2,989.74	7	3,346.88
1/4	174.01	1/4	500.17	1/4	855.75	1/4	1,211.31	1/4	1,568.51	1/4	1,925.71	1/4	2,282.90	1/4	2,640.04	1/4	2,997.18	1/4	3,354.32
1/2	180.40	1/2	507.40	1/2	863.17	1/2	1,218.75	1/2	1,575.95	1/2	1,933.15	1/2	2,290.34	1/2	2,647.49	1/2	3,004.62	1/2	3,361.76
3/4	186.80	3/4	514.64	3/4	870.58	3/4	1,226.19	3/4	1,583.39	3/4	1,940.59	3/4	2,297.79	3/4	2,654.93	3/4	3,012.06	3/4	3,369.20
8	193.19	8	521.87	8	878.00	8	1,233.63	8	1,590.83	8	1,948.03	8	2,305.23	8	2,662.37	8	3,019.51	8	3,376.64
1/4	199.65	1/4	529.17	1/4	885.42	1/4	1,241.07	1/4	1,598.27	1/4	1,955.48	1/4	2,312.67	1/4	2,669.81	1/4	3,026.95	1/4	3,384.08
1/2	206.11	1/2	536.47	1/2	892.83	1/2	1,248.51	1/2	1,605.72	1/2	1,962.92	1/2	2,320.11	1/2	2,677.25	1/2	3,034.39	1/2	3,391.53
3/4	212.58	3/4	543.77	3/4	900.25	3/4	1,255.96	3/4	1,613.16	3/4	1,970.36	3/4	2,327.55	3/4	2,684.69	3/4	3,041.83	3/4	3,398.97
9	219.04	9	551.07	9	907.67	9	1,263.40	9	1,620.60	9	1,977.80	9	2,334.99	9	2,692.13	9	3,049.27	9	3,406.41
1/4	225.57	1/4	558.45	1/4	915.08	1/4	1,270.84	1/4	1,628.04	1/4	1,985.24	1/4	2,342.43	1/4	2,699.57	1/4	3,056.71	1/4	3,413.85
1/2	232.11	1/2	565.82	1/2	922.48	1/2	1,278.28	1/2	1,635.48	1/2	1,992.68	1/2	2,349.87	1/2	2,707.01	1/2	3,064.15	1/2	3,421.29
3/4	238.64	3/4	573.19	3/4	929.89	3/4	1,285.72	3/4	1,642.92	3/4	2,000.13	3/4	2,357.31	3/4	2,714.45	3/4	3,071.59	3/4	3,428.73
10	245.17	10	580.56	10	937.30	10	1,293.16	10	1,650.37	10	2,007.57	10	2,364.75	10	2,721.89	10	3,079.03	10	3,436.17
1/4	251.78	1/4	587.98	1/4	944.70	1/4	1,300.61	1/4	1,657.81	1/4	2,015.01	1/4	2,372.19	1/4	2,729.33	1/4	3,086.47	1/4	3,443.61
1/2	258.38	1/2	595.41	1/2	952.10	1/2	1,308.05	1/2	1,665.25	1/2	2,022.45	1/2	2,379.63	1/2	2,736.77	1/2	3,093.91	1/2	3,451.05
3/4	264.98	3/4	602.83	3/4	959.50	3/4	1,315.49	3/4	1,672.69	3/4	2,029.89	3/4	2,387.07	3/4	2,744.21	3/4	3,101.35	3/4	3,458.49
11	271.58	11	610.26	11	966.90	11	1,322.93	11	1,680.13	11	2,037.33	11	2,394.51	11	2,751.65	11	3,108.79	11	3,465.93
1/4	278.26	1/4	617.70	1/4	974.30	1/4	1,330.37	1/4	1,687.57	1/4	2,044.77	1/4	2,401.95	1/4	2,759.09	1/4	3,116.23	1/4	3,473.37
1/2	284.93	1/2	625.14	1/2	981.70	1/2	1,337.81	1/2	1,695.02	1/2	2,052.22	1/2	2,409.39	1/2	2,766.53	1/2	3,123.67	1/2	3,480.81
3/4	291.60	3/4	632.58	3/4	989.10	3/4	1,345.26	3/4	1,702.46	3/4	2,059.66	3/4	2,416.83	3/4	2,773.97	3/4	3,131.11	3/4	3,488.25

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 TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 37'-03" FORWARD OF AFT BULKHEAD.

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

BARGE "CCL 421-T"

1 PORT

INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	3,495.69	0	3,852.83	0	4,205.74	0	4,539.76	0		0		0		0		0		0	
1/4	3,503.13	1/4	3,860.27	1/4	4,212.89	1/4	4,546.50	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,510.57	1/2	3,867.71	1/2	4,220.04	1/2	4,553.23	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,518.01	3/4	3,875.15	3/4	4,227.18	3/4	4,559.97	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,525.45	1	3,882.59	1	4,234.33	1	4,566.71	1		1		1		1		1		1	
1/4	3,532.89	1/4	3,890.03	1/4	4,241.45	1/4	4,573.41	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,540.33	1/2	3,897.47	1/2	4,248.56	1/2	4,580.11	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,547.77	3/4	3,904.91	3/4	4,255.67	3/4	4,586.82	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,555.21	2	3,912.35	2	4,262.79	2	4,593.52	2		2		2		2		2		2	
1/4	3,562.65	1/4	3,919.79	1/4	4,269.86	1/4	4,600.18	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,570.09	1/2	3,927.23	1/2	4,276.94	1/2	4,606.85	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,577.54	3/4	3,934.67	3/4	4,284.02	3/4	4,613.51	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,584.98	3	3,942.11	3	4,291.09	3	4,620.17	3		3		3		3		3		3	
1/4	3,592.42	1/4	3,949.55	1/4	4,298.13	1/4	4,626.78	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,599.86	1/2	3,957.00	1/2	4,305.18	1/2	4,633.38	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,607.30	3/4	3,964.44	3/4	4,312.22	3/4	4,639.98	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,614.74	4	3,971.88	4	4,319.26	4	4,646.59	4		4		4		4		4		4	
1/4	3,622.18	1/4	3,979.30	1/4	4,326.26	1/4	4,653.13	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,629.62	1/2	3,986.73	1/2	4,333.27	1/2	4,659.68	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,637.06	3/4	3,994.16	3/4	4,340.28	3/4	4,666.23	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,644.50	5	4,001.59	5	4,347.29	5	4,672.78	5		5		5		5		5		5	
1/4	3,651.94	1/4	4,008.99	1/4	4,354.26	1/4	4,679.29	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,659.38	1/2	4,016.40	1/2	4,361.24	1/2	4,685.80	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,666.82	3/4	4,023.80	3/4	4,368.21	3/4	4,692.31	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,674.26	6	4,031.21	6	4,375.19	6	4,698.82	6		6		6		6		6		6	
1/4	3,681.70	1/4	4,038.58	1/4	4,382.13	1/4	4,705.29	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,689.14	1/2	4,045.95	1/2	4,389.07	1/2	4,711.77	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,696.58	3/4	4,053.32	3/4	4,396.01	3/4	4,718.24	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,704.02	7	4,060.69	7	4,402.95	7	4,724.72	7		7		7		7		7		7	
1/4	3,711.46	1/4	4,068.02	1/4	4,409.86	1/4	4,731.28	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,718.90	1/2	4,075.36	1/2	4,416.77	1/2	4,737.84	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,726.34	3/4	4,082.69	3/4	4,423.68	3/4	4,744.40	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,733.78	8	4,090.03	8	4,430.59	8	4,750.96	8		8		8		8		8		8	
1/4	3,741.22	1/4	4,097.31	1/4	4,437.47	1/4	4,757.52	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,748.66	1/2	4,104.60	1/2	4,444.34	1/2	4,764.07	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,756.10	3/4	4,111.89	3/4	4,451.22	3/4	4,770.62	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,763.55	9	4,119.18	9	4,458.10	9	4,777.17	9		9		9		9		9		9	
1/4	3,770.99	1/4	4,126.43	1/4	4,464.94	1/4	4,782.99	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,778.43	1/2	4,133.67	1/2	4,471.78	1/2	4,788.81	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,785.87	3/4	4,140.92	3/4	4,478.62	3/4	4,794.62	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,793.31	10	4,148.17	10	4,485.46	10	4,800.44	10		10		10		10		10		10	
1/4	3,800.75	1/4	4,155.38	1/4	4,492.27	1/4	4,805.01	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,808.19	1/2	4,162.59	1/2	4,499.08	1/2	4,809.59	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,815.63	3/4	4,169.81	3/4	4,505.88	3/4	4,814.17	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,823.07	11	4,177.02	11	4,512.69	11	4,818.74	11		11		11		11		11		11	
1/4	3,830.51	1/4	4,184.20	1/4	4,519.45	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,837.95	1/2	4,191.38	1/2	4,526.22	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,845.39	3/4	4,198.56	3/4	4,532.99	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

1 STBD

INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10"

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	9.59	0	297.30	0	637.90	0	993.79	0	1,349.55	0	1,705.55	0	2,061.56	0	2,417.54	0	2,773.48	0	3,129.43
1/4	13.01	1/4	304.02	1/4	645.32	1/4	1,001.20	1/4	1,356.97	1/4	1,712.97	1/4	2,068.97	1/4	2,424.95	1/4	2,780.90	1/4	3,136.84
1/2	16.42	1/2	310.74	1/2	652.74	1/2	1,008.60	1/2	1,364.39	1/2	1,720.39	1/2	2,076.39	1/2	2,432.37	1/2	2,788.31	1/2	3,144.26
3/4	19.83	3/4	317.46	3/4	660.15	3/4	1,016.01	3/4	1,371.80	3/4	1,727.80	3/4	2,083.81	3/4	2,439.79	3/4	2,795.73	3/4	3,151.67
1	23.24	1	324.18	1	667.57	1	1,023.41	1	1,379.22	1	1,735.22	1	2,091.22	1	2,447.20	1	2,803.14	1	3,159.09
1/4	28.53	1/4	330.97	1/4	674.99	1/4	1,030.82	1/4	1,386.64	1/4	1,742.64	1/4	2,098.64	1/4	2,454.62	1/4	2,810.56	1/4	3,166.50
1/2	33.81	1/2	337.76	1/2	682.40	1/2	1,038.23	1/2	1,394.05	1/2	1,750.05	1/2	2,106.06	1/2	2,462.03	1/2	2,817.98	1/2	3,173.92
3/4	39.10	3/4	344.55	3/4	689.82	3/4	1,045.63	3/4	1,401.47	3/4	1,757.47	3/4	2,113.47	3/4	2,469.45	3/4	2,825.39	3/4	3,181.34
2	44.39	2	351.34	2	697.24	2	1,053.04	2	1,408.89	2	1,764.89	2	2,120.89	2	2,476.86	2	2,832.81	2	3,188.75
1/4	50.34	1/4	358.20	1/4	704.65	1/4	1,060.44	1/4	1,416.30	1/4	1,772.30	1/4	2,128.31	1/4	2,484.28	1/4	2,840.22	1/4	3,196.17
1/2	56.29	1/2	365.06	1/2	712.07	1/2	1,067.85	1/2	1,423.72	1/2	1,779.72	1/2	2,135.72	1/2	2,491.69	1/2	2,847.64	1/2	3,203.58
3/4	62.24	3/4	371.92	3/4	719.49	3/4	1,075.25	3/4	1,431.14	3/4	1,787.14	3/4	2,143.14	3/4	2,499.11	3/4	2,855.05	3/4	3,211.00
3	68.19	3	378.78	3	726.90	3	1,082.66	3	1,438.55	3	1,794.55	3	2,150.56	3	2,506.52	3	2,862.47	3	3,218.41
1/4	74.24	1/4	385.71	1/4	734.32	1/4	1,090.07	1/4	1,445.97	1/4	1,801.97	1/4	2,157.97	1/4	2,513.94	1/4	2,869.88	1/4	3,225.83
1/2	80.30	1/2	392.63	1/2	741.73	1/2	1,097.47	1/2	1,453.39	1/2	1,809.39	1/2	2,165.39	1/2	2,521.36	1/2	2,877.30	1/2	3,233.24
3/4	86.35	3/4	399.56	3/4	749.15	3/4	1,104.88	3/4	1,460.80	3/4	1,816.80	3/4	2,172.81	3/4	2,528.77	3/4	2,884.72	3/4	3,240.66
4	92.40	4	406.49	4	756.57	4	1,112.28	4	1,468.22	4	1,824.22	4	2,180.22	4	2,536.19	4	2,892.13	4	3,248.07
1/4	98.55	1/4	413.49	1/4	763.98	1/4	1,119.69	1/4	1,475.64	1/4	1,831.64	1/4	2,187.64	1/4	2,543.60	1/4	2,899.55	1/4	3,255.49
1/2	104.69	1/2	420.49	1/2	771.40	1/2	1,127.09	1/2	1,483.05	1/2	1,839.05	1/2	2,195.06	1/2	2,551.02	1/2	2,906.96	1/2	3,262.91
3/4	110.83	3/4	427.49	3/4	778.82	3/4	1,134.50	3/4	1,490.47	3/4	1,846.47	3/4	2,202.48	3/4	2,558.43	3/4	2,914.38	3/4	3,270.32
5	116.97	5	434.49	5	786.23	5	1,141.91	5	1,497.89	5	1,853.89	5	2,209.89	5	2,565.85	5	2,921.79	5	3,277.74
1/4	123.20	1/4	441.56	1/4	793.65	1/4	1,149.32	1/4	1,505.30	1/4	1,861.30	1/4	2,217.31	1/4	2,573.26	1/4	2,929.21	1/4	3,285.15
1/2	129.42	1/2	448.62	1/2	801.07	1/2	1,156.73	1/2	1,512.72	1/2	1,868.72	1/2	2,224.73	1/2	2,580.68	1/2	2,936.62	1/2	3,292.57
3/4	135.64	3/4	455.69	3/4	808.48	3/4	1,164.14	3/4	1,520.14	3/4	1,876.14	3/4	2,232.14	3/4	2,588.10	3/4	2,944.04	3/4	3,299.98
6	141.87	6	462.76	6	815.90	6	1,171.55	6	1,527.55	6	1,883.55	6	2,239.56	6	2,595.51	6	2,951.45	6	3,307.40
1/4	148.17	1/4	469.90	1/4	823.32	1/4	1,178.97	1/4	1,534.97	1/4	1,890.97	1/4	2,246.98	1/4	2,602.93	1/4	2,958.87	1/4	3,314.81
1/2	154.47	1/2	477.04	1/2	830.73	1/2	1,186.38	1/2	1,542.39	1/2	1,898.39	1/2	2,254.39	1/2	2,610.34	1/2	2,966.29	1/2	3,322.23
3/4	160.77	3/4	484.18	3/4	838.15	3/4	1,193.80	3/4	1,549.80	3/4	1,905.80	3/4	2,261.81	3/4	2,617.76	3/4	2,973.70	3/4	3,329.65
7	167.07	7	491.31	7	845.57	7	1,201.22	7	1,557.22	7	1,913.22	7	2,269.23	7	2,625.17	7	2,981.12	7	3,337.06
1/4	173.44	1/4	498.52	1/4	852.98	1/4	1,208.63	1/4	1,564.64	1/4	1,920.64	1/4	2,276.64	1/4	2,632.59	1/4	2,988.53	1/4	3,344.48
1/2	179.81	1/2	505.73	1/2	860.40	1/2	1,216.05	1/2	1,572.05	1/2	1,928.05	1/2	2,284.06	1/2	2,640.00	1/2	2,995.95	1/2	3,351.89
3/4	186.18	3/4	512.94	3/4	867.82	3/4	1,223.47	3/4	1,579.47	3/4	1,935.47	3/4	2,291.47	3/4	2,647.42	3/4	3,003.36	3/4	3,359.31
8	192.56	8	520.14	8	875.23	8	1,230.88	8	1,586.89	8	1,942.89	8	2,298.89	8	2,654.83	8	3,010.78	8	3,366.72
1/4	199.00	1/4	527.42	1/4	882.65	1/4	1,238.30	1/4	1,594.30	1/4	1,950.30	1/4	2,306.31	1/4	2,662.25	1/4	3,018.19	1/4	3,374.14
1/2	205.44	1/2	534.70	1/2	890.06	1/2	1,245.72	1/2	1,601.72	1/2	1,957.72	1/2	2,313.72	1/2	2,669.67	1/2	3,025.61	1/2	3,381.55
3/4	211.88	3/4	541.98	3/4	897.48	3/4	1,253.13	3/4	1,609.14	3/4	1,965.14	3/4	2,321.14	3/4	2,677.08	3/4	3,033.03	3/4	3,388.97
9	218.32	9	549.25	9	904.90	9	1,260.55	9	1,616.55	9	1,972.55	9	2,328.55	9	2,684.50	9	3,040.44	9	3,396.38
1/4	224.84	1/4	556.60	1/4	912.31	1/4	1,267.97	1/4	1,623.97	1/4	1,979.97	1/4	2,335.97	1/4	2,691.91	1/4	3,047.86	1/4	3,403.80
1/2	231.35	1/2	563.95	1/2	919.72	1/2	1,275.38	1/2	1,631.39	1/2	1,987.39	1/2	2,343.38	1/2	2,699.33	1/2	3,055.27	1/2	3,411.22
3/4	237.86	3/4	571.29	3/4	927.13	3/4	1,282.80	3/4	1,638.80	3/4	1,994.80	3/4	2,350.80	3/4	2,706.74	3/4	3,062.69	3/4	3,418.63
10	244.37	10	578.64	10	934.54	10	1,290.22	10	1,646.22	10	2,002.22	10	2,358.21	10	2,714.16	10	3,070.10	10	3,426.05
1/4	250.95	1/4	586.04	1/4	941.95	1/4	1,297.63	1/4	1,653.64	1/4	2,009.64	1/4	2,365.63	1/4	2,721.57	1/4	3,077.52	1/4	3,433.46
1/2	257.53	1/2	593.44	1/2	949.36	1/2	1,305.05	1/2	1,661.05	1/2	2,017.06	1/2	2,373.05	1/2	2,728.99	1/2	3,084.93	1/2	3,440.88
3/4	264.11	3/4	600.84	3/4	956.76	3/4	1,312.47	3/4	1,668.47	3/4	2,024.47	3/4	2,380.46	3/4	2,736.41	3/4	3,092.35	3/4	3,448.29
11	270.69	11	608.24	11	964.17	11	1,319.89	11	1,675.89	11	2,031.89	11	2,387.88	11	2,743.82	11	3,099.76	11	3,455.71
1/4	277.34	1/4	615.65	1/4	971.57	1/4	1,327.30	1/4	1,683.30	1/4	2,039.31	1/4	2,395.29	1/4	2,751.24	1/4	3,107.18	1/4	3,463.12
1/2	284.00	1/2	623.07	1/2	978.98	1/2	1,334.72	1/2	1,690.72	1/2	2,046.72	1/2	2,402.71	1/2	2,758.65	1/2	3,114.60	1/2	3,470.54
3/4	290.65	3/4	630.49	3/4	986.38	3/4	1,342.14	3/4	1,698.14	3/4	2,054.14	3/4	2,410.12	3/4	2,766.07	3/4	3,122.01	3/4	3,477.96

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 TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 37'-03" FORWARD OF AFT BULKHEAD.

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

BARGE "CCL 421-T"

1 STBD

INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10"

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	3,485.37	0	3,841.31	0	4,193.04	0	4,525.95	0		0		0		0		0		0	
1/4	3,492.79	1/4	3,848.73	1/4	4,200.16	1/4	4,532.66	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,500.20	1/2	3,856.15	1/2	4,207.29	1/2	4,539.38	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,507.62	3/4	3,863.56	3/4	4,214.41	3/4	4,546.09	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,515.03	1	3,870.98	1	4,221.53	1	4,552.81	1		1		1		1		1		1	
1/4	3,522.45	1/4	3,878.39	1/4	4,228.62	1/4	4,559.49	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,529.86	1/2	3,885.81	1/2	4,235.71	1/2	4,566.17	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,537.28	3/4	3,893.22	3/4	4,242.80	3/4	4,572.85	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,544.69	2	3,900.64	2	4,249.90	2	4,579.53	2		2		2		2		2		2	
1/4	3,552.11	1/4	3,908.05	1/4	4,256.95	1/4	4,586.17	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,559.53	1/2	3,915.47	1/2	4,264.00	1/2	4,592.81	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,566.94	3/4	3,922.89	3/4	4,271.05	3/4	4,599.46	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,574.36	3	3,930.30	3	4,278.11	3	4,606.10	3		3		3		3		3		3	
1/4	3,581.77	1/4	3,937.71	1/4	4,285.13	1/4	4,612.68	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,589.19	1/2	3,945.13	1/2	4,292.14	1/2	4,619.26	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,596.60	3/4	3,952.54	3/4	4,299.16	3/4	4,625.84	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,604.02	4	3,959.96	4	4,306.18	4	4,632.42	4		4		4		4		4		4	
1/4	3,611.43	1/4	3,967.36	1/4	4,313.16	1/4	4,638.95	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,618.85	1/2	3,974.76	1/2	4,320.15	1/2	4,645.47	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,626.27	3/4	3,982.17	3/4	4,327.13	3/4	4,652.00	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,633.68	5	3,989.57	5	4,334.11	5	4,658.52	5		5		5		5		5		5	
1/4	3,641.10	1/4	3,996.95	1/4	4,341.07	1/4	4,665.01	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,648.51	1/2	4,004.33	1/2	4,348.02	1/2	4,671.50	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,655.93	3/4	4,011.71	3/4	4,354.97	3/4	4,677.99	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,663.34	6	4,019.09	6	4,361.92	6	4,684.48	6		6		6		6		6		6	
1/4	3,670.76	1/4	4,026.43	1/4	4,368.84	1/4	4,690.93	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,678.17	1/2	4,033.78	1/2	4,375.76	1/2	4,697.39	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,685.59	3/4	4,041.12	3/4	4,382.68	3/4	4,703.84	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,693.00	7	4,048.47	7	4,389.60	7	4,710.29	7		7		7		7		7		7	
1/4	3,700.42	1/4	4,055.78	1/4	4,396.48	1/4	4,716.83	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,707.84	1/2	4,063.09	1/2	4,403.37	1/2	4,723.37	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,715.25	3/4	4,070.40	3/4	4,410.25	3/4	4,729.91	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,722.67	8	4,077.71	8	4,417.14	8	4,736.46	8		8		8		8		8		8	
1/4	3,730.08	1/4	4,084.98	1/4	4,423.99	1/4	4,742.99	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,737.50	1/2	4,092.24	1/2	4,430.85	1/2	4,749.52	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,744.91	3/4	4,099.50	3/4	4,437.70	3/4	4,756.05	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,752.33	9	4,106.77	9	4,444.55	9	4,762.58	9		9		9		9		9		9	
1/4	3,759.74	1/4	4,113.99	1/4	4,451.37	1/4	4,768.37	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,767.16	1/2	4,121.21	1/2	4,458.19	1/2	4,774.17	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,774.58	3/4	4,128.43	3/4	4,465.01	3/4	4,779.97	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,781.99	10	4,135.66	10	4,471.83	10	4,785.76	10		10		10		10		10		10	
1/4	3,789.41	1/4	4,142.85	1/4	4,478.62	1/4	4,790.33	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,796.82	1/2	4,150.04	1/2	4,485.40	1/2	4,794.89	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,804.24	3/4	4,157.22	3/4	4,492.18	3/4	4,799.45	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,811.65	11	4,164.41	11	4,498.96	11	4,804.01	11		11		11		11		11		11	
1/4	3,819.07	1/4	4,171.57	1/4	4,505.71	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,826.48	1/2	4,178.73	1/2	4,512.46	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,833.90	3/4	4,185.88	3/4	4,519.20	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

2 PORT
INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 3/4"

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	13.82	0	386.93	0	774.35	0	1,154.89	0	1,534.03	0	1,921.46	0	2,308.89	0	2,696.30	0	3,083.67	0	3,471.04
1/4	19.20	1/4	395.00	1/4	782.42	1/4	1,162.64	1/4	1,542.10	1/4	1,929.53	1/4	2,316.96	1/4	2,704.37	1/4	3,091.74	1/4	3,479.11
1/2	24.58	1/2	403.07	1/2	790.49	1/2	1,170.39	1/2	1,550.17	1/2	1,937.60	1/2	2,325.03	1/2	2,712.44	1/2	3,099.81	1/2	3,487.18
3/4	29.95	3/4	411.14	3/4	798.57	3/4	1,178.14	3/4	1,558.24	3/4	1,945.67	3/4	2,333.11	3/4	2,720.51	3/4	3,107.88	3/4	3,495.25
1	35.33	1	419.21	1	806.64	1	1,185.89	1	1,566.31	1	1,953.75	1	2,341.18	1	2,728.58	1	3,115.95	1	3,503.32
1/4	42.68	1/4	427.29	1/4	814.71	1/4	1,193.64	1/4	1,574.39	1/4	1,961.82	1/4	2,349.25	1/4	2,736.65	1/4	3,124.02	1/4	3,511.39
1/2	50.02	1/2	435.36	1/2	822.78	1/2	1,201.39	1/2	1,582.46	1/2	1,969.89	1/2	2,357.32	1/2	2,744.72	1/2	3,132.09	1/2	3,519.46
3/4	57.37	3/4	443.43	3/4	830.85	3/4	1,209.14	3/4	1,590.53	3/4	1,977.96	3/4	2,365.39	3/4	2,752.79	3/4	3,140.16	3/4	3,527.53
2	64.71	2	451.50	2	838.92	2	1,216.89	2	1,598.60	2	1,986.03	2	2,373.46	2	2,760.86	2	3,148.23	2	3,535.60
1/4	72.71	1/4	459.57	1/4	846.99	1/4	1,224.64	1/4	1,606.67	1/4	1,994.10	1/4	2,381.54	1/4	2,768.93	1/4	3,156.30	1/4	3,543.67
1/2	80.70	1/2	467.64	1/2	855.06	1/2	1,232.39	1/2	1,614.74	1/2	2,002.17	1/2	2,389.61	1/2	2,777.00	1/2	3,164.37	1/2	3,551.74
3/4	88.69	3/4	475.71	3/4	863.14	3/4	1,240.14	3/4	1,622.81	3/4	2,010.25	3/4	2,397.68	3/4	2,785.07	3/4	3,172.44	3/4	3,559.81
3	96.68	3	483.78	3	871.21	3	1,247.89	3	1,630.89	3	2,018.32	3	2,405.75	3	2,793.14	3	3,180.51	3	3,567.88
1/4	104.71	1/4	491.86	1/4	879.28	1/4	1,255.64	1/4	1,638.96	1/4	2,026.39	1/4	2,413.82	1/4	2,801.21	1/4	3,188.58	1/4	3,575.95
1/2	112.74	1/2	499.93	1/2	887.36	1/2	1,263.39	1/2	1,647.03	1/2	2,034.46	1/2	2,421.89	1/2	2,809.28	1/2	3,196.65	1/2	3,584.02
3/4	120.76	3/4	508.00	3/4	895.42	3/4	1,271.14	3/4	1,655.10	3/4	2,042.53	3/4	2,429.96	3/4	2,817.35	3/4	3,204.72	3/4	3,592.09
4	128.79	4	516.07	4	903.49	4	1,278.89	4	1,663.17	4	2,050.60	4	2,438.04	4	2,825.42	4	3,212.79	4	3,600.16
1/4	136.84	1/4	524.14	1/4	911.56	1/4	1,286.64	1/4	1,671.24	1/4	2,058.68	1/4	2,446.11	1/4	2,833.49	1/4	3,220.86	1/4	3,608.23
1/2	144.89	1/2	532.21	1/2	919.63	1/2	1,294.39	1/2	1,679.31	1/2	2,066.75	1/2	2,454.18	1/2	2,841.56	1/2	3,228.93	1/2	3,616.30
3/4	152.94	3/4	540.28	3/4	927.71	3/4	1,302.14	3/4	1,687.39	3/4	2,074.82	3/4	2,462.25	3/4	2,849.63	3/4	3,237.00	3/4	3,624.37
5	160.98	5	548.35	5	935.78	5	1,309.89	5	1,695.46	5	2,082.89	5	2,470.32	5	2,857.70	5	3,245.07	5	3,632.44
1/4	169.05	1/4	556.43	1/4	943.85	1/4	1,317.65	1/4	1,703.53	1/4	2,090.96	1/4	2,478.39	1/4	2,865.77	1/4	3,253.14	1/4	3,640.51
1/2	177.11	1/2	564.50	1/2	951.92	1/2	1,325.41	1/2	1,711.60	1/2	2,099.03	1/2	2,486.46	1/2	2,873.84	1/2	3,261.21	1/2	3,648.58
3/4	185.17	3/4	572.57	3/4	959.99	3/4	1,333.16	3/4	1,719.67	3/4	2,107.10	3/4	2,494.54	3/4	2,881.91	3/4	3,269.28	3/4	3,656.65
6	193.23	6	580.64	6	968.06	6	1,340.92	6	1,727.74	6	2,115.18	6	2,502.61	6	2,889.98	6	3,277.35	6	3,664.72
1/4	201.30	1/4	588.71	1/4	975.98	1/4	1,348.84	1/4	1,735.82	1/4	2,123.25	1/4	2,510.68	1/4	2,898.05	1/4	3,285.42	1/4	3,672.79
1/2	209.37	1/2	596.78	1/2	983.90	1/2	1,356.76	1/2	1,743.89	1/2	2,131.32	1/2	2,518.75	1/2	2,906.12	1/2	3,293.49	1/2	3,680.86
3/4	217.44	3/4	604.85	3/4	991.82	3/4	1,364.68	3/4	1,751.96	3/4	2,139.39	3/4	2,526.82	3/4	2,914.19	3/4	3,301.56	3/4	3,688.93
7	225.50	7	612.93	7	999.73	7	1,372.60	7	1,760.03	7	2,147.46	7	2,534.89	7	2,922.26	7	3,309.63	7	3,697.00
1/4	233.57	1/4	621.00	1/4	1,007.50	1/4	1,380.67	1/4	1,768.10	1/4	2,155.53	1/4	2,542.96	1/4	2,930.33	1/4	3,317.70	1/4	3,705.07
1/2	241.65	1/2	629.07	1/2	1,015.27	1/2	1,388.74	1/2	1,776.17	1/2	2,163.60	1/2	2,551.03	1/2	2,938.40	1/2	3,325.77	1/2	3,713.14
3/4	249.72	3/4	637.14	3/4	1,023.03	3/4	1,396.81	3/4	1,784.24	3/4	2,171.68	3/4	2,559.10	3/4	2,946.47	3/4	3,333.84	3/4	3,721.21
8	257.79	8	645.21	8	1,030.80	8	1,404.88	8	1,792.32	8	2,179.75	8	2,567.17	8	2,954.54	8	3,341.91	8	3,729.28
1/4	265.86	1/4	653.28	1/4	1,038.56	1/4	1,412.96	1/4	1,800.39	1/4	2,187.82	1/4	2,575.24	1/4	2,962.61	1/4	3,349.98	1/4	3,737.35
1/2	273.93	1/2	661.35	1/2	1,046.33	1/2	1,421.03	1/2	1,808.46	1/2	2,195.89	1/2	2,583.31	1/2	2,970.68	1/2	3,358.05	1/2	3,745.42
3/4	282.00	3/4	669.42	3/4	1,054.10	3/4	1,429.10	3/4	1,816.53	3/4	2,203.96	3/4	2,591.38	3/4	2,978.75	3/4	3,366.12	3/4	3,753.49
9	290.07	9	677.50	9	1,061.86	9	1,437.17	9	1,824.60	9	2,212.03	9	2,599.45	9	2,986.82	9	3,374.19	9	3,761.56
1/4	298.14	1/4	685.57	1/4	1,069.62	1/4	1,445.24	1/4	1,832.67	1/4	2,220.11	1/4	2,607.53	1/4	2,994.89	1/4	3,382.26	1/4	3,769.63
1/2	306.22	1/2	693.64	1/2	1,077.38	1/2	1,453.31	1/2	1,840.74	1/2	2,228.18	1/2	2,615.60	1/2	3,002.96	1/2	3,390.33	1/2	3,777.70
3/4	314.29	3/4	701.71	3/4	1,085.14	3/4	1,461.38	3/4	1,848.82	3/4	2,236.25	3/4	2,623.67	3/4	3,011.04	3/4	3,398.40	3/4	3,785.77
10	322.36	10	709.78	10	1,092.89	10	1,469.46	10	1,856.89	10	2,244.32	10	2,631.74	10	3,019.11	10	3,406.47	10	3,793.84
1/4	330.43	1/4	717.85	1/4	1,100.64	1/4	1,477.53	1/4	1,864.96	1/4	2,252.39	1/4	2,639.81	1/4	3,027.18	1/4	3,414.55	1/4	3,801.91
1/2	338.50	1/2	725.92	1/2	1,108.39	1/2	1,485.60	1/2	1,873.03	1/2	2,260.46	1/2	2,647.88	1/2	3,035.25	1/2	3,422.62	1/2	3,809.98
3/4	346.57	3/4	733.99	3/4	1,116.14	3/4	1,493.67	3/4	1,881.10	3/4	2,268.53	3/4	2,655.95	3/4	3,043.32	3/4	3,430.69	3/4	3,818.06
11	354.64	11	742.07	11	1,123.89	11	1,501.74	11	1,889.17	11	2,276.61	11	2,664.02	11	3,051.39	11	3,438.76	11	3,826.13
1/4	362.72	1/4	750.14	1/4	1,131.64	1/4	1,509.81	1/4	1,897.25	1/4	2,284.68	1/4	2,672.09	1/4	3,059.46	1/4	3,446.83	1/4	3,834.20
1/2	370.79	1/2	758.21	1/2	1,139.39	1/2	1,517.88	1/2	1,905.32	1/2	2,292.75	1/2	2,680.16	1/2	3,067.53	1/2	3,454.90	1/2	3,842.27
3/4	378.86	3/4	766.28	3/4	1,147.14	3/4	1,525.96	3/4	1,913.39	3/4	2,300.82	3/4	2,688.23	3/4	3,075.60	3/4	3,462.97	3/4	3,850.34

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 TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
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
http://www.pmacorp.net

BARGE "CCL 421-T"

2 PORT
INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 3/4"

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	3,858.41	0	4,245.78	0	4,628.57	0	4,990.93	0		0		0		0		0		0	
1/4	3,866.48	1/4	4,253.85	1/4	4,636.33	1/4	4,998.23	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,874.55	1/2	4,261.92	1/2	4,644.08	1/2	5,005.54	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,882.62	3/4	4,269.99	3/4	4,651.83	3/4	5,012.85	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,890.69	1	4,278.06	1	4,659.59	1	5,020.16	1		1		1		1		1		1	
1/4	3,898.76	1/4	4,286.13	1/4	4,667.30	1/4	5,027.43	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,906.83	1/2	4,294.20	1/2	4,675.02	1/2	5,034.70	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,914.90	3/4	4,302.27	3/4	4,682.74	3/4	5,041.98	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,922.97	2	4,310.34	2	4,690.45	2	5,049.25	2		2		2		2		2		2	
1/4	3,931.04	1/4	4,318.41	1/4	4,698.13	1/4	5,056.48	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,939.11	1/2	4,326.48	1/2	4,705.81	1/2	5,063.71	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,947.18	3/4	4,334.55	3/4	4,713.48	3/4	5,070.94	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,955.25	3	4,342.62	3	4,721.16	3	5,078.17	3		3		3		3		3		3	
1/4	3,963.32	1/4	4,350.69	1/4	4,728.80	1/4	5,085.33	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,971.39	1/2	4,358.76	1/2	4,736.44	1/2	5,092.49	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,979.46	3/4	4,366.83	3/4	4,744.08	3/4	5,099.66	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,987.53	4	4,374.90	4	4,751.71	4	5,106.82	4		4		4		4		4		4	
1/4	3,995.60	1/4	4,382.96	1/4	4,759.31	1/4	5,113.93	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,003.67	1/2	4,391.02	1/2	4,766.92	1/2	5,121.03	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,011.74	3/4	4,399.07	3/4	4,774.52	3/4	5,128.13	3/4		3/4		3/4		3/4		3/4		3/4	
5	4,019.81	5	4,407.13	5	4,782.12	5	5,135.24	5		5		5		5		5		5	
1/4	4,027.88	1/4	4,415.16	1/4	4,789.69	1/4	5,142.30	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,035.95	1/2	4,423.19	1/2	4,797.25	1/2	5,149.37	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,044.02	3/4	4,431.22	3/4	4,804.82	3/4	5,156.43	3/4		3/4		3/4		3/4		3/4		3/4	
6	4,052.09	6	4,439.25	6	4,812.39	6	5,163.49	6		6		6		6		6		6	
1/4	4,060.16	1/4	4,447.25	1/4	4,819.92	1/4	5,170.52	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,068.23	1/2	4,455.24	1/2	4,827.45	1/2	5,177.54	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,076.30	3/4	4,463.24	3/4	4,834.98	3/4	5,184.57	3/4		3/4		3/4		3/4		3/4		3/4	
7	4,084.37	7	4,471.23	7	4,842.51	7	5,191.59	7		7		7		7		7		7	
1/4	4,092.44	1/4	4,479.19	1/4	4,850.00	1/4	5,198.71	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,100.51	1/2	4,487.14	1/2	4,857.50	1/2	5,205.83	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,108.58	3/4	4,495.10	3/4	4,864.99	3/4	5,212.95	3/4		3/4		3/4		3/4		3/4		3/4	
8	4,116.65	8	4,503.05	8	4,872.49	8	5,220.07	8		8		8		8		8		8	
1/4	4,124.72	1/4	4,510.96	1/4	4,879.96	1/4	5,227.18	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,132.79	1/2	4,518.87	1/2	4,887.41	1/2	5,234.29	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,140.86	3/4	4,526.77	3/4	4,894.87	3/4	5,241.40	3/4		3/4		3/4		3/4		3/4		3/4	
9	4,148.93	9	4,534.68	9	4,902.33	9	5,248.50	9		9		9		9		9		9	
1/4	4,157.00	1/4	4,542.54	1/4	4,909.75	1/4	5,254.81	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,165.07	1/2	4,550.40	1/2	4,917.17	1/2	5,261.12	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,173.14	3/4	4,558.26	3/4	4,924.60	3/4	5,267.43	3/4		3/4		3/4		3/4		3/4		3/4	
10	4,181.21	10	4,566.12	10	4,932.02	10	5,273.74	10		10		10		10		10		10	
1/4	4,189.28	1/4	4,573.94	1/4	4,939.40	1/4	5,278.71	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,197.35	1/2	4,581.77	1/2	4,946.79	1/2	5,283.67	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,205.42	3/4	4,589.59	3/4	4,954.17	3/4	5,288.63	3/4		3/4		3/4		3/4		3/4		3/4	
11	4,213.49	11	4,597.42	11	4,961.55	11	5,293.60	11		11		11		11		11		11	
1/4	4,221.57	1/4	4,605.21	1/4	4,968.90	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,229.64	1/2	4,613.00	1/2	4,976.24	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,237.71	3/4	4,620.79	3/4	4,983.58	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

2 STBD

INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 3/4"

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	13.85	0	387.71	0	775.91	0	1,164.10	0	1,552.29	0	1,940.50	0	2,328.71	0	2,716.89	0	3,105.04	0	3,493.19
1/4	19.24	1/4	395.79	1/4	783.99	1/4	1,172.18	1/4	1,560.37	1/4	1,948.58	1/4	2,336.79	1/4	2,724.98	1/4	3,113.13	1/4	3,501.28
1/2	24.62	1/2	403.88	1/2	792.08	1/2	1,180.27	1/2	1,568.46	1/2	1,956.67	1/2	2,344.88	1/2	2,733.06	1/2	3,121.22	1/2	3,509.37
3/4	30.01	3/4	411.97	3/4	800.17	3/4	1,188.36	3/4	1,576.55	3/4	1,964.76	3/4	2,352.97	3/4	2,741.15	3/4	3,129.30	3/4	3,517.45
1	35.40	1	420.06	1	808.26	1	1,196.44	1	1,584.64	1	1,972.85	1	2,361.06	1	2,749.24	1	3,137.39	1	3,525.54
1/4	42.76	1/4	428.14	1/4	816.34	1/4	1,204.53	1/4	1,592.73	1/4	1,980.93	1/4	2,369.14	1/4	2,757.32	1/4	3,145.47	1/4	3,533.63
1/2	50.12	1/2	436.23	1/2	824.43	1/2	1,212.62	1/2	1,600.81	1/2	1,989.02	1/2	2,377.23	1/2	2,765.41	1/2	3,153.56	1/2	3,541.71
3/4	57.48	3/4	444.32	3/4	832.52	3/4	1,220.70	3/4	1,608.90	3/4	1,997.11	3/4	2,385.32	3/4	2,773.50	3/4	3,161.65	3/4	3,549.80
2	64.84	2	452.41	2	840.61	2	1,228.79	2	1,616.99	2	2,005.20	2	2,393.41	2	2,781.58	2	3,169.73	2	3,557.89
1/4	72.85	1/4	460.49	1/4	848.69	1/4	1,236.88	1/4	1,625.08	1/4	2,013.29	1/4	2,401.50	1/4	2,789.67	1/4	3,177.82	1/4	3,565.97
1/2	80.86	1/2	468.58	1/2	856.78	1/2	1,244.96	1/2	1,633.16	1/2	2,021.37	1/2	2,409.58	1/2	2,797.76	1/2	3,185.91	1/2	3,574.06
3/4	88.87	3/4	476.67	3/4	864.87	3/4	1,253.05	3/4	1,641.25	3/4	2,029.46	3/4	2,417.67	3/4	2,805.84	3/4	3,193.99	3/4	3,582.15
3	96.88	3	484.76	3	872.96	3	1,261.14	3	1,649.34	3	2,037.55	3	2,425.76	3	2,813.93	3	3,202.08	3	3,590.23
1/4	104.92	1/4	492.84	1/4	881.04	1/4	1,269.23	1/4	1,657.43	1/4	2,045.64	1/4	2,433.85	1/4	2,822.01	1/4	3,210.17	1/4	3,598.32
1/2	112.96	1/2	500.93	1/2	889.13	1/2	1,277.31	1/2	1,665.51	1/2	2,053.72	1/2	2,441.93	1/2	2,830.10	1/2	3,218.25	1/2	3,606.41
3/4	121.01	3/4	509.02	3/4	897.22	3/4	1,285.40	3/4	1,673.60	3/4	2,061.81	3/4	2,450.02	3/4	2,838.19	3/4	3,226.34	3/4	3,614.49
4	129.05	4	517.11	4	905.31	4	1,293.49	4	1,681.69	4	2,069.90	4	2,458.11	4	2,846.27	4	3,234.43	4	3,622.58
1/4	137.11	1/4	525.19	1/4	913.39	1/4	1,301.57	1/4	1,689.78	1/4	2,077.99	1/4	2,466.20	1/4	2,854.36	1/4	3,242.51	1/4	3,630.66
1/2	145.18	1/2	533.28	1/2	921.48	1/2	1,309.66	1/2	1,697.87	1/2	2,086.07	1/2	2,474.28	1/2	2,862.45	1/2	3,250.60	1/2	3,638.75
3/4	153.24	3/4	541.37	3/4	929.57	3/4	1,317.75	3/4	1,705.95	3/4	2,094.16	3/4	2,482.37	3/4	2,870.53	3/4	3,258.69	3/4	3,646.84
5	161.31	5	549.46	5	937.66	5	1,325.83	5	1,714.04	5	2,102.25	5	2,490.46	5	2,878.62	5	3,266.77	5	3,654.92
1/4	169.39	1/4	557.54	1/4	945.74	1/4	1,333.92	1/4	1,722.13	1/4	2,110.34	1/4	2,498.55	1/4	2,886.71	1/4	3,274.86	1/4	3,663.01
1/2	177.46	1/2	565.63	1/2	953.83	1/2	1,342.01	1/2	1,730.22	1/2	2,118.43	1/2	2,506.64	1/2	2,894.79	1/2	3,282.95	1/2	3,671.10
3/4	185.54	3/4	573.72	3/4	961.92	3/4	1,350.09	3/4	1,738.30	3/4	2,126.51	3/4	2,514.72	3/4	2,902.88	3/4	3,291.03	3/4	3,679.18
6	193.62	6	581.81	6	970.01	6	1,358.18	6	1,746.39	6	2,134.60	6	2,522.81	6	2,910.97	6	3,299.12	6	3,687.27
1/4	201.70	1/4	589.89	1/4	978.09	1/4	1,366.27	1/4	1,754.48	1/4	2,142.69	1/4	2,530.90	1/4	2,919.05	1/4	3,307.20	1/4	3,695.36
1/2	209.79	1/2	597.98	1/2	986.18	1/2	1,374.36	1/2	1,762.57	1/2	2,150.78	1/2	2,538.99	1/2	2,927.14	1/2	3,315.29	1/2	3,703.44
3/4	217.87	3/4	606.07	3/4	994.27	3/4	1,382.45	3/4	1,770.65	3/4	2,158.86	3/4	2,547.07	3/4	2,935.23	3/4	3,323.38	3/4	3,711.53
7	225.96	7	614.16	7	1,002.36	7	1,390.53	7	1,778.74	7	2,166.95	7	2,555.16	7	2,943.31	7	3,331.46	7	3,719.62
1/4	234.04	1/4	622.24	1/4	1,010.44	1/4	1,398.62	1/4	1,786.83	1/4	2,175.04	1/4	2,563.25	1/4	2,951.40	1/4	3,339.55	1/4	3,727.70
1/2	242.13	1/2	630.33	1/2	1,018.53	1/2	1,406.71	1/2	1,794.92	1/2	2,183.13	1/2	2,571.33	1/2	2,959.49	1/2	3,347.64	1/2	3,735.79
3/4	250.22	3/4	638.42	3/4	1,026.62	3/4	1,414.80	3/4	1,803.01	3/4	2,191.22	3/4	2,579.42	3/4	2,967.57	3/4	3,355.72	3/4	3,743.88
8	258.31	8	646.51	8	1,034.71	8	1,422.88	8	1,811.09	8	2,199.30	8	2,587.51	8	2,975.66	8	3,363.81	8	3,751.96
1/4	266.39	1/4	654.59	1/4	1,042.79	1/4	1,430.97	1/4	1,819.18	1/4	2,207.39	1/4	2,595.59	1/4	2,983.74	1/4	3,371.90	1/4	3,760.05
1/2	274.48	1/2	662.68	1/2	1,050.88	1/2	1,439.06	1/2	1,827.27	1/2	2,215.48	1/2	2,603.68	1/2	2,991.83	1/2	3,379.98	1/2	3,768.14
3/4	282.57	3/4	670.77	3/4	1,058.97	3/4	1,447.15	3/4	1,835.36	3/4	2,223.57	3/4	2,611.77	3/4	2,999.92	3/4	3,388.07	3/4	3,776.22
9	290.66	9	678.86	9	1,067.06	9	1,455.23	9	1,843.44	9	2,231.65	9	2,619.85	9	3,008.00	9	3,396.16	9	3,784.31
1/4	298.74	1/4	686.94	1/4	1,075.14	1/4	1,463.32	1/4	1,851.53	1/4	2,239.74	1/4	2,627.94	1/4	3,016.09	1/4	3,404.24	1/4	3,792.39
1/2	306.83	1/2	695.03	1/2	1,083.23	1/2	1,471.41	1/2	1,859.62	1/2	2,247.83	1/2	2,636.03	1/2	3,024.18	1/2	3,412.33	1/2	3,800.48
3/4	314.92	3/4	703.12	3/4	1,091.31	3/4	1,479.50	3/4	1,867.71	3/4	2,255.92	3/4	2,644.11	3/4	3,032.26	3/4	3,420.42	3/4	3,808.57
10	323.01	10	711.21	10	1,099.40	10	1,487.59	10	1,875.79	10	2,264.00	10	2,652.20	10	3,040.35	10	3,428.50	10	3,816.65
1/4	331.09	1/4	719.29	1/4	1,107.49	1/4	1,495.67	1/4	1,883.88	1/4	2,272.09	1/4	2,660.28	1/4	3,048.44	1/4	3,436.59	1/4	3,824.74
1/2	339.18	1/2	727.38	1/2	1,115.57	1/2	1,503.76	1/2	1,891.97	1/2	2,280.18	1/2	2,668.37	1/2	3,056.52	1/2	3,444.68	1/2	3,832.83
3/4	347.27	3/4	735.47	3/4	1,123.66	3/4	1,511.85	3/4	1,900.06	3/4	2,288.27	3/4	2,676.46	3/4	3,064.61	3/4	3,452.76	3/4	3,840.91
11	355.36	11	743.56	11	1,131.75	11	1,519.94	11	1,908.15	11	2,296.36	11	2,684.54	11	3,072.70	11	3,460.85	11	3,849.00
1/4	363.44	1/4	751.64	1/4	1,139.84	1/4	1,528.02	1/4	1,916.23	1/4	2,304.44	1/4	2,692.63	1/4	3,080.78	1/4	3,468.93	1/4	3,857.09
1/2	371.53	1/2	759.73	1/2	1,147.92	1/2	1,536.11	1/2	1,924.32	1/2	2,312.53	1/2	2,700.72	1/2	3,088.87	1/2	3,477.02	1/2	3,865.17
3/4	379.62	3/4	767.82	3/4	1,156.01	3/4	1,544.20	3/4	1,932.41	3/4	2,320.62	3/4	2,708.80	3/4	3,096.96	3/4	3,485.11	3/4	3,873.26

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 TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
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
http://www.pmacorp.net

BARGE "CCL 421-T"

2 STBD

INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 3/4"

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	3,881.35	0	4,269.50	0	4,653.04	0	5,016.12	0		0		0		0		0		0	
1/4	3,889.43	1/4	4,277.58	1/4	4,660.81	1/4	5,023.44	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,897.52	1/2	4,285.67	1/2	4,668.58	1/2	5,030.76	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,905.61	3/4	4,293.76	3/4	4,676.35	3/4	5,038.08	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,913.69	1	4,301.84	1	4,684.12	1	5,045.41	1		1		1		1		1		1	
1/4	3,921.78	1/4	4,309.93	1/4	4,691.85	1/4	5,052.69	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,929.87	1/2	4,318.02	1/2	4,699.58	1/2	5,059.98	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,937.95	3/4	4,326.10	3/4	4,707.31	3/4	5,067.27	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,946.04	2	4,334.19	2	4,715.05	2	5,074.56	2		2		2		2		2		2	
1/4	3,954.12	1/4	4,342.28	1/4	4,722.74	1/4	5,081.80	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,962.21	1/2	4,350.36	1/2	4,730.43	1/2	5,089.04	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,970.30	3/4	4,358.45	3/4	4,738.12	3/4	5,096.29	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,978.38	3	4,366.54	3	4,745.82	3	5,103.53	3		3		3		3		3		3	
1/4	3,986.47	1/4	4,374.62	1/4	4,753.47	1/4	5,110.71	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,994.56	1/2	4,382.70	1/2	4,761.12	1/2	5,117.89	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,002.64	3/4	4,390.78	3/4	4,768.77	3/4	5,125.06	3/4		3/4		3/4		3/4		3/4		3/4	
4	4,010.73	4	4,398.86	4	4,776.43	4	5,132.24	4		4		4		4		4		4	
1/4	4,018.82	1/4	4,406.93	1/4	4,784.04	1/4	5,139.36	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,026.90	1/2	4,415.01	1/2	4,791.66	1/2	5,146.48	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,034.99	3/4	4,423.08	3/4	4,799.28	3/4	5,153.60	3/4		3/4		3/4		3/4		3/4		3/4	
5	4,043.08	5	4,431.16	5	4,806.90	5	5,160.71	5		5		5		5		5		5	
1/4	4,051.16	1/4	4,439.20	1/4	4,814.48	1/4	5,167.79	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,059.25	1/2	4,447.25	1/2	4,822.06	1/2	5,174.87	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,067.34	3/4	4,455.30	3/4	4,829.64	3/4	5,181.95	3/4		3/4		3/4		3/4		3/4		3/4	
6	4,075.42	6	4,463.34	6	4,837.22	6	5,189.02	6		6		6		6		6		6	
1/4	4,083.51	1/4	4,471.35	1/4	4,844.77	1/4	5,196.06	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,091.60	1/2	4,479.36	1/2	4,852.31	1/2	5,203.10	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,099.68	3/4	4,487.37	3/4	4,859.86	3/4	5,210.14	3/4		3/4		3/4		3/4		3/4		3/4	
7	4,107.77	7	4,495.39	7	4,867.40	7	5,217.18	7		7		7		7		7		7	
1/4	4,115.85	1/4	4,503.36	1/4	4,874.91	1/4	5,224.31	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,123.94	1/2	4,511.33	1/2	4,882.42	1/2	5,231.45	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,132.03	3/4	4,519.30	3/4	4,889.93	3/4	5,238.58	3/4		3/4		3/4		3/4		3/4		3/4	
8	4,140.11	8	4,527.27	8	4,897.44	8	5,245.72	8		8		8		8		8		8	
1/4	4,148.20	1/4	4,535.19	1/4	4,904.92	1/4	5,252.84	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,156.29	1/2	4,543.12	1/2	4,912.39	1/2	5,259.96	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,164.37	3/4	4,551.04	3/4	4,919.87	3/4	5,267.08	3/4		3/4		3/4		3/4		3/4		3/4	
9	4,172.46	9	4,558.96	9	4,927.34	9	5,274.20	9		9		9		9		9		9	
1/4	4,180.55	1/4	4,566.84	1/4	4,934.78	1/4	5,280.52	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,188.63	1/2	4,574.71	1/2	4,942.22	1/2	5,286.85	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,196.72	3/4	4,582.59	3/4	4,949.66	3/4	5,293.17	3/4		3/4		3/4		3/4		3/4		3/4	
10	4,204.81	10	4,590.46	10	4,957.09	10	5,299.49	10		10		10		10		10		10	
1/4	4,212.89	1/4	4,598.30	1/4	4,964.49	1/4	5,304.46	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,220.98	1/2	4,606.14	1/2	4,971.89	1/2	5,309.44	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,229.07	3/4	4,613.98	3/4	4,979.29	3/4	5,314.41	3/4		3/4		3/4		3/4		3/4		3/4	
11	4,237.15	11	4,621.82	11	4,986.68	11	5,319.39	11		11		11		11		11		11	
1/4	4,245.24	1/4	4,629.63	1/4	4,994.04	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,253.33	1/2	4,637.43	1/2	5,001.40	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,261.41	3/4	4,645.24	3/4	5,008.76	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

3 PORT
INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	12.91	0	359.79	0	719.64	0	1,074.04	0	1,427.09	0	1,786.23	0	2,144.01	0	2,503.67	0	2,863.25	0	3,222.76
1/4	17.93	1/4	367.28	1/4	727.14	1/4	1,081.26	1/4	1,434.58	1/4	1,793.67	1/4	2,151.51	1/4	2,511.17	1/4	2,870.74	1/4	3,230.25
1/2	22.94	1/2	374.78	1/2	734.64	1/2	1,088.48	1/2	1,442.07	1/2	1,801.11	1/2	2,159.00	1/2	2,518.66	1/2	2,878.23	1/2	3,237.74
3/4	27.96	3/4	382.28	3/4	742.13	3/4	1,095.70	3/4	1,449.57	3/4	1,808.56	3/4	2,166.50	3/4	2,526.15	3/4	2,885.72	3/4	3,245.23
1	32.97	1	389.77	1	749.63	1	1,102.92	1	1,457.06	1	1,816.00	1	2,173.99	1	2,533.65	1	2,893.21	1	3,252.72
1/4	39.82	1/4	397.27	1/4	757.13	1/4	1,110.14	1/4	1,464.55	1/4	1,823.44	1/4	2,181.48	1/4	2,541.14	1/4	2,900.70	1/4	3,260.21
1/2	46.67	1/2	404.77	1/2	764.62	1/2	1,117.36	1/2	1,472.04	1/2	1,830.89	1/2	2,188.97	1/2	2,548.63	1/2	2,908.19	1/2	3,267.70
3/4	53.52	3/4	412.26	3/4	772.12	3/4	1,124.58	3/4	1,479.54	3/4	1,838.33	3/4	2,196.47	3/4	2,556.13	3/4	2,915.68	3/4	3,275.19
2	60.37	2	419.76	2	779.62	2	1,131.80	2	1,487.03	2	1,845.77	2	2,203.96	2	2,563.62	2	2,923.17	2	3,282.68
1/4	67.82	1/4	427.26	1/4	787.11	1/4	1,139.02	1/4	1,494.52	1/4	1,853.21	1/4	2,211.45	1/4	2,571.11	1/4	2,930.66	1/4	3,290.17
1/2	75.26	1/2	434.76	1/2	794.61	1/2	1,146.24	1/2	1,502.01	1/2	1,860.66	1/2	2,218.95	1/2	2,578.61	1/2	2,938.15	1/2	3,297.66
3/4	82.71	3/4	442.25	3/4	802.11	3/4	1,153.46	3/4	1,509.51	3/4	1,868.10	3/4	2,226.44	3/4	2,586.10	3/4	2,945.64	3/4	3,305.15
3	90.16	3	449.75	3	809.61	3	1,160.68	3	1,517.00	3	1,875.54	3	2,233.93	3	2,593.59	3	2,953.13	3	3,312.64
1/4	97.62	1/4	457.25	1/4	817.10	1/4	1,167.90	1/4	1,524.49	1/4	1,882.99	1/4	2,241.42	1/4	2,601.09	1/4	2,960.62	1/4	3,320.13
1/2	105.09	1/2	464.74	1/2	824.60	1/2	1,175.12	1/2	1,531.98	1/2	1,890.43	1/2	2,248.92	1/2	2,608.58	1/2	2,968.11	1/2	3,327.62
3/4	112.55	3/4	472.24	3/4	832.10	3/4	1,182.34	3/4	1,539.48	3/4	1,897.87	3/4	2,256.41	3/4	2,616.07	3/4	2,975.60	3/4	3,335.11
4	120.02	4	479.74	4	839.59	4	1,189.56	4	1,546.97	4	1,905.32	4	2,263.90	4	2,623.57	4	2,983.09	4	3,342.60
1/4	127.49	1/4	487.23	1/4	847.09	1/4	1,196.81	1/4	1,554.46	1/4	1,912.76	1/4	2,271.39	1/4	2,631.06	1/4	2,990.58	1/4	3,350.10
1/2	134.97	1/2	494.73	1/2	854.59	1/2	1,204.06	1/2	1,561.95	1/2	1,920.20	1/2	2,278.89	1/2	2,638.55	1/2	2,998.07	1/2	3,357.61
3/4	142.44	3/4	502.23	3/4	862.08	3/4	1,211.30	3/4	1,569.44	3/4	1,927.64	3/4	2,286.38	3/4	2,646.04	3/4	3,005.56	3/4	3,365.12
5	149.92	5	509.73	5	869.58	5	1,218.55	5	1,576.94	5	1,935.09	5	2,293.87	5	2,653.54	5	3,013.05	5	3,372.63
1/4	157.41	1/4	517.22	1/4	877.08	1/4	1,225.83	1/4	1,584.43	1/4	1,942.53	1/4	2,301.37	1/4	2,661.03	1/4	3,020.54	1/4	3,380.15
1/2	164.89	1/2	524.72	1/2	884.58	1/2	1,233.11	1/2	1,591.92	1/2	1,949.97	1/2	2,308.86	1/2	2,668.52	1/2	3,028.03	1/2	3,387.68
3/4	172.38	3/4	532.22	3/4	892.07	3/4	1,240.40	3/4	1,599.41	3/4	1,957.42	3/4	2,316.35	3/4	2,676.00	3/4	3,035.52	3/4	3,395.21
6	179.87	6	539.71	6	899.57	6	1,247.68	6	1,606.91	6	1,964.86	6	2,323.84	6	2,683.49	6	3,043.01	6	3,402.73
1/4	187.36	1/4	547.21	1/4	906.96	1/4	1,255.07	1/4	1,614.40	1/4	1,972.30	1/4	2,331.34	1/4	2,690.98	1/4	3,050.49	1/4	3,410.26
1/2	194.86	1/2	554.71	1/2	914.36	1/2	1,262.46	1/2	1,621.89	1/2	1,979.74	1/2	2,338.83	1/2	2,698.47	1/2	3,057.98	1/2	3,417.78
3/4	202.35	3/4	562.20	3/4	921.75	3/4	1,269.85	3/4	1,629.38	3/4	1,987.19	3/4	2,346.32	3/4	2,705.96	3/4	3,065.47	3/4	3,425.31
7	209.85	7	569.70	7	929.14	7	1,277.24	7	1,636.88	7	1,994.63	7	2,353.81	7	2,713.45	7	3,072.96	7	3,432.83
1/4	217.34	1/4	577.20	1/4	936.43	1/4	1,284.73	1/4	1,644.37	1/4	2,002.07	1/4	2,361.31	1/4	2,720.94	1/4	3,080.45	1/4	3,440.07
1/2	224.84	1/2	584.70	1/2	943.73	1/2	1,292.23	1/2	1,651.86	1/2	2,009.52	1/2	2,368.80	1/2	2,728.43	1/2	3,087.94	1/2	3,447.31
3/4	232.34	3/4	592.19	3/4	951.02	3/4	1,299.72	3/4	1,659.35	3/4	2,016.96	3/4	2,376.29	3/4	2,735.92	3/4	3,095.43	3/4	3,454.55
8	239.83	8	599.69	8	958.31	8	1,307.21	8	1,666.85	8	2,024.40	8	2,383.78	8	2,743.41	8	3,102.92	8	3,461.79
1/4	247.33	1/4	607.19	1/4	965.57	1/4	1,314.70	1/4	1,674.34	1/4	2,031.84	1/4	2,391.28	1/4	2,750.90	1/4	3,110.41	1/4	3,467.88
1/2	254.83	1/2	614.68	1/2	972.83	1/2	1,322.20	1/2	1,681.83	1/2	2,039.29	1/2	2,398.77	1/2	2,758.39	1/2	3,117.90	1/2	3,473.96
3/4	262.32	3/4	622.18	3/4	980.10	3/4	1,329.69	3/4	1,689.32	3/4	2,046.73	3/4	2,406.26	3/4	2,765.88	3/4	3,125.39	3/4	3,480.05
9	269.82	9	629.68	9	987.36	9	1,337.18	9	1,696.82	9	2,054.17	9	2,413.75	9	2,773.37	9	3,132.88	9	3,486.14
1/4	277.32	1/4	637.17	1/4	994.59	1/4	1,344.67	1/4	1,704.28	1/4	2,061.64	1/4	2,421.25	1/4	2,780.86	1/4	3,140.37	1/4	3,491.37
1/2	284.82	1/2	644.67	1/2	1,001.82	1/2	1,352.17	1/2	1,711.75	1/2	2,069.11	1/2	2,428.74	1/2	2,788.35	1/2	3,147.86	1/2	3,496.59
3/4	292.31	3/4	652.17	3/4	1,009.05	3/4	1,359.66	3/4	1,719.22	3/4	2,076.58	3/4	2,436.23	3/4	2,795.84	3/4	3,155.35	3/4	3,501.82
10	299.81	10	659.67	10	1,016.28	10	1,367.15	10	1,726.69	10	2,084.05	10	2,443.73	10	2,803.33	10	3,162.84	10	3,507.04
1/4	307.31	1/4	667.16	1/4	1,023.50	1/4	1,374.64	1/4	1,734.13	1/4	2,091.54	1/4	2,451.22	1/4	2,810.82	1/4	3,170.33	1/4	3,512.27
1/2	314.80	1/2	674.66	1/2	1,030.72	1/2	1,382.13	1/2	1,741.57	1/2	2,099.04	1/2	2,458.71	1/2	2,818.31	1/2	3,177.82	1/2	3,517.49
3/4	322.30	3/4	682.16	3/4	1,037.94	3/4	1,389.63	3/4	1,749.01	3/4	2,106.53	3/4	2,466.21	3/4	2,825.80	3/4	3,185.31	3/4	3,522.72
11	329.80	11	689.65	11	1,045.16	11	1,397.12	11	1,756.46	11	2,114.03	11	2,473.70	11	2,833.29	11	3,192.80	11	3,527.95
1/4	337.29	1/4	697.15	1/4	1,052.38	1/4	1,404.61	1/4	1,763.90	1/4	2,121.53	1/4	2,481.19	1/4	2,840.78	1/4	3,200.29	1/4	3,533.17
1/2	344.79	1/2	704.65	1/2	1,059.60	1/2	1,412.10	1/2	1,771.34	1/2	2,129.02	1/2	2,488.69	1/2	2,848.27	1/2	3,207.78	1/2	3,538.40
3/4	352.29	3/4	712.14	3/4	1,066.82	3/4	1,419.60	3/4	1,778.79	3/4	2,136.52	3/4	2,496.18	3/4	2,855.76	3/4	3,215.27	3/4	3,543.62

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 TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 48'-09" FORWARD OF AFT BULKHEAD.

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

BARGE "CCL 421-T"

3 PORT
INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 1/2"

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	3,548.85	0	3,799.68	0	4,046.34	0	4,274.13	0		0		0		0		0		0	
1/4	3,554.07	1/4	3,804.91	1/4	4,051.27	1/4	4,278.65	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,559.30	1/2	3,810.13	1/2	4,056.21	1/2	4,283.17	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,564.53	3/4	3,815.36	3/4	4,061.15	3/4	4,287.70	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,569.75	1	3,820.59	1	4,066.08	1	4,292.22	1		1		1		1		1		1	
1/4	3,574.98	1/4	3,825.81	1/4	4,070.98	1/4	4,296.70	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,580.20	1/2	3,831.04	1/2	4,075.89	1/2	4,301.19	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,585.43	3/4	3,836.26	3/4	4,080.79	3/4	4,305.68	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,590.65	2	3,841.49	2	4,085.69	2	4,310.17	2		2		2		2		2		2	
1/4	3,595.88	1/4	3,846.71	1/4	4,090.55	1/4	4,314.62	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,601.11	1/2	3,851.94	1/2	4,095.42	1/2	4,319.06	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,606.33	3/4	3,857.17	3/4	4,100.28	3/4	4,323.51	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,611.56	3	3,862.39	3	4,105.15	3	4,327.96	3		3		3		3		3		3	
1/4	3,616.78	1/4	3,867.62	1/4	4,109.98	1/4	4,332.35	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,622.01	1/2	3,872.84	1/2	4,114.81	1/2	4,336.73	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,627.23	3/4	3,878.06	3/4	4,119.63	3/4	4,341.12	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,632.46	4	3,883.29	4	4,124.46	4	4,345.51	4		4		4		4		4		4	
1/4	3,637.69	1/4	3,888.50	1/4	4,129.26	1/4	4,349.84	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,642.91	1/2	3,893.72	1/2	4,134.05	1/2	4,354.17	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,648.14	3/4	3,898.93	3/4	4,138.85	3/4	4,358.50	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,653.36	5	3,904.14	5	4,143.64	5	4,362.83	5		5		5		5		5		5	
1/4	3,658.59	1/4	3,909.33	1/4	4,148.41	1/4	4,367.12	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,663.81	1/2	3,914.52	1/2	4,153.17	1/2	4,371.42	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,669.04	3/4	3,919.71	3/4	4,157.93	3/4	4,375.71	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,674.27	6	3,924.90	6	4,162.69	6	4,380.00	6		6		6		6		6		6	
1/4	3,679.49	1/4	3,930.05	1/4	4,167.42	1/4	4,384.26	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,684.72	1/2	3,935.21	1/2	4,172.15	1/2	4,388.52	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,689.94	3/4	3,940.36	3/4	4,176.88	3/4	4,392.77	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,695.17	7	3,945.52	7	4,181.61	7	4,397.03	7		7		7		7		7		7	
1/4	3,700.39	1/4	3,950.64	1/4	4,186.30	1/4	4,401.38	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,705.62	1/2	3,955.76	1/2	4,191.00	1/2	4,405.72	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,710.85	3/4	3,960.88	3/4	4,195.69	3/4	4,410.07	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,716.07	8	3,966.00	8	4,200.39	8	4,414.41	8		8		8		8		8		8	
1/4	3,721.30	1/4	3,971.08	1/4	4,205.05	1/4	4,418.75	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,726.52	1/2	3,976.15	1/2	4,209.71	1/2	4,423.08	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,731.75	3/4	3,981.23	3/4	4,214.38	3/4	4,427.42	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,736.97	9	3,986.31	9	4,219.04	9	4,431.75	9		9		9		9		9		9	
1/4	3,742.20	1/4	3,991.34	1/4	4,223.67	1/4	4,435.34	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,747.43	1/2	3,996.38	1/2	4,228.29	1/2	4,438.93	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,752.65	3/4	4,001.41	3/4	4,232.92	3/4	4,442.52	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,757.88	10	4,006.45	10	4,237.55	10	4,446.11	10		10		10		10		10		10	
1/4	3,763.10	1/4	4,011.45	1/4	4,242.14	1/4	4,448.44	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,768.33	1/2	4,016.45	1/2	4,246.73	1/2	4,450.78	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,773.55	3/4	4,021.46	3/4	4,251.32	3/4	4,453.12	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,778.78	11	4,026.46	11	4,255.91	11	4,455.45	11		11		11		11		11		11	
1/4	3,784.01	1/4	4,031.43	1/4	4,260.47	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,789.23	1/2	4,036.40	1/2	4,265.02	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,794.46	3/4	4,041.37	3/4	4,269.58	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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

BARGE "CCL 421-T"

3 STBD

INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	12.90	0	360.68	0	721.80	0	1,082.91	0	1,444.01	0	1,805.14	0	2,166.26	0	2,527.38	0	2,888.36	0	3,249.24
1/4	17.92	1/4	368.20	1/4	729.32	1/4	1,090.43	1/4	1,451.54	1/4	1,812.66	1/4	2,173.78	1/4	2,534.90	1/4	2,895.88	1/4	3,256.74
1/2	22.93	1/2	375.73	1/2	736.84	1/2	1,097.95	1/2	1,459.06	1/2	1,820.18	1/2	2,181.31	1/2	2,542.42	1/2	2,903.40	1/2	3,264.24
3/4	27.95	3/4	383.25	3/4	744.36	3/4	1,105.47	3/4	1,466.58	3/4	1,827.71	3/4	2,188.83	3/4	2,549.95	3/4	2,910.91	3/4	3,271.74
1	32.96	1	390.77	1	751.89	1	1,113.00	1	1,474.11	1	1,835.23	1	2,196.35	1	2,557.47	1	2,918.43	1	3,279.25
1/4	39.81	1/4	398.30	1/4	759.41	1/4	1,120.52	1/4	1,481.63	1/4	1,842.75	1/4	2,203.88	1/4	2,564.99	1/4	2,925.95	1/4	3,286.75
1/2	46.65	1/2	405.82	1/2	766.93	1/2	1,128.04	1/2	1,489.15	1/2	1,850.28	1/2	2,211.40	1/2	2,572.51	1/2	2,933.47	1/2	3,294.25
3/4	53.50	3/4	413.34	3/4	774.46	3/4	1,135.56	3/4	1,496.68	3/4	1,857.80	3/4	2,218.92	3/4	2,580.04	3/4	2,940.99	3/4	3,301.75
2	60.35	2	420.87	2	781.98	2	1,143.09	2	1,504.20	2	1,865.32	2	2,226.45	2	2,587.56	2	2,948.51	2	3,309.25
1/4	67.80	1/4	428.39	1/4	789.50	1/4	1,150.61	1/4	1,511.72	1/4	1,872.85	1/4	2,233.97	1/4	2,595.08	1/4	2,956.03	1/4	3,316.75
1/2	75.24	1/2	435.91	1/2	797.03	1/2	1,158.13	1/2	1,519.25	1/2	1,880.37	1/2	2,241.49	1/2	2,602.61	1/2	2,963.55	1/2	3,324.25
3/4	82.69	3/4	443.44	3/4	804.55	3/4	1,165.66	3/4	1,526.77	3/4	1,887.89	3/4	2,249.02	3/4	2,610.13	3/4	2,971.07	3/4	3,331.76
3	90.14	3	450.96	3	812.07	3	1,173.18	3	1,534.29	3	1,895.42	3	2,256.54	3	2,617.65	3	2,978.59	3	3,339.26
1/4	97.62	1/4	458.48	1/4	819.60	1/4	1,180.70	1/4	1,541.82	1/4	1,902.94	1/4	2,264.06	1/4	2,625.17	1/4	2,986.10	1/4	3,346.76
1/2	105.11	1/2	466.01	1/2	827.12	1/2	1,188.22	1/2	1,549.34	1/2	1,910.46	1/2	2,271.59	1/2	2,632.70	1/2	2,993.62	1/2	3,354.26
3/4	112.59	3/4	473.53	3/4	834.64	3/4	1,195.75	3/4	1,556.86	3/4	1,917.99	3/4	2,279.11	3/4	2,640.22	3/4	3,001.14	3/4	3,361.76
4	120.07	4	481.05	4	842.17	4	1,203.27	4	1,564.39	4	1,925.51	4	2,286.63	4	2,647.74	4	3,008.66	4	3,369.26
1/4	127.57	1/4	488.58	1/4	849.69	1/4	1,210.79	1/4	1,571.91	1/4	1,933.03	1/4	2,294.16	1/4	2,655.26	1/4	3,016.18	1/4	3,376.77
1/2	135.08	1/2	496.10	1/2	857.21	1/2	1,218.31	1/2	1,579.43	1/2	1,940.56	1/2	2,301.68	1/2	2,662.78	1/2	3,023.70	1/2	3,384.29
3/4	142.58	3/4	503.62	3/4	864.74	3/4	1,225.84	3/4	1,586.96	3/4	1,948.08	3/4	2,309.20	3/4	2,670.30	3/4	3,031.22	3/4	3,391.80
5	150.08	5	511.15	5	872.26	5	1,233.36	5	1,594.48	5	1,955.60	5	2,316.73	5	2,677.83	5	3,038.74	5	3,399.31
1/4	157.59	1/4	518.67	1/4	879.78	1/4	1,240.88	1/4	1,602.00	1/4	1,963.13	1/4	2,324.25	1/4	2,685.34	1/4	3,046.26	1/4	3,406.83
1/2	165.11	1/2	526.19	1/2	887.31	1/2	1,248.41	1/2	1,609.53	1/2	1,970.65	1/2	2,331.77	1/2	2,692.86	1/2	3,053.78	1/2	3,414.36
3/4	172.62	3/4	533.72	3/4	894.83	3/4	1,255.93	3/4	1,617.05	3/4	1,978.17	3/4	2,339.30	3/4	2,700.38	3/4	3,061.29	3/4	3,421.88
6	180.13	6	541.24	6	902.35	6	1,263.45	6	1,624.58	6	1,985.70	6	2,346.82	6	2,707.90	6	3,068.81	6	3,429.40
1/4	187.66	1/4	548.76	1/4	909.88	1/4	1,270.98	1/4	1,632.10	1/4	1,993.22	1/4	2,354.34	1/4	2,715.42	1/4	3,076.33	1/4	3,436.92
1/2	195.18	1/2	556.28	1/2	917.40	1/2	1,278.50	1/2	1,639.62	1/2	2,000.75	1/2	2,361.87	1/2	2,722.94	1/2	3,083.85	1/2	3,444.45
3/4	202.70	3/4	563.81	3/4	924.92	3/4	1,286.02	3/4	1,647.15	3/4	2,008.27	3/4	2,369.39	3/4	2,730.46	3/4	3,091.37	3/4	3,451.97
7	210.22	7	571.33	7	932.44	7	1,293.55	7	1,654.67	7	2,015.79	7	2,376.92	7	2,737.98	7	3,098.89	7	3,459.49
1/4	217.74	1/4	578.85	1/4	939.97	1/4	1,301.07	1/4	1,662.19	1/4	2,023.32	1/4	2,384.44	1/4	2,745.50	1/4	3,106.41	1/4	3,466.73
1/2	225.26	1/2	586.38	1/2	947.49	1/2	1,308.59	1/2	1,669.72	1/2	2,030.84	1/2	2,391.97	1/2	2,753.02	1/2	3,113.93	1/2	3,473.96
3/4	232.79	3/4	593.90	3/4	955.01	3/4	1,316.12	3/4	1,677.24	3/4	2,038.36	3/4	2,399.49	3/4	2,760.53	3/4	3,121.45	3/4	3,481.20
8	240.31	8	601.42	8	962.54	8	1,323.64	8	1,684.76	8	2,045.89	8	2,407.02	8	2,768.05	8	3,128.97	8	3,488.43
1/4	247.83	1/4	608.95	1/4	970.06	1/4	1,331.16	1/4	1,692.29	1/4	2,053.41	1/4	2,414.54	1/4	2,775.57	1/4	3,136.48	1/4	3,494.52
1/2	255.36	1/2	616.47	1/2	977.58	1/2	1,338.69	1/2	1,699.81	1/2	2,060.93	1/2	2,422.06	1/2	2,783.09	1/2	3,144.00	1/2	3,500.60
3/4	262.88	3/4	623.99	3/4	985.11	3/4	1,346.21	3/4	1,707.33	3/4	2,068.46	3/4	2,429.58	3/4	2,790.61	3/4	3,151.52	3/4	3,506.69
9	270.40	9	631.52	9	992.63	9	1,353.73	9	1,714.86	9	2,075.98	9	2,437.11	9	2,798.13	9	3,159.04	9	3,512.77
1/4	277.93	1/4	639.04	1/4	1,000.15	1/4	1,361.26	1/4	1,722.38	1/4	2,083.50	1/4	2,444.63	1/4	2,805.65	1/4	3,166.56	1/4	3,518.00
1/2	285.45	1/2	646.56	1/2	1,007.68	1/2	1,368.78	1/2	1,729.90	1/2	2,091.03	1/2	2,452.15	1/2	2,813.17	1/2	3,174.08	1/2	3,523.22
3/4	292.97	3/4	654.09	3/4	1,015.20	3/4	1,376.30	3/4	1,737.43	3/4	2,098.55	3/4	2,459.67	3/4	2,820.69	3/4	3,181.60	3/4	3,528.44
10	300.50	10	661.61	10	1,022.73	10	1,383.83	10	1,744.95	10	2,106.07	10	2,467.20	10	2,828.21	10	3,189.12	10	3,533.66
1/4	308.02	1/4	669.13	1/4	1,030.25	1/4	1,391.35	1/4	1,752.47	1/4	2,113.60	1/4	2,474.72	1/4	2,835.72	1/4	3,196.64	1/4	3,538.89
1/2	315.54	1/2	676.66	1/2	1,037.77	1/2	1,398.87	1/2	1,760.00	1/2	2,121.12	1/2	2,482.24	1/2	2,843.24	1/2	3,204.16	1/2	3,544.11
3/4	323.07	3/4	684.18	3/4	1,045.29	3/4	1,406.40	3/4	1,767.52	3/4	2,128.64	3/4	2,489.77	3/4	2,850.76	3/4	3,211.67	3/4	3,549.33
11	330.59	11	691.70	11	1,052.82	11	1,413.92	11	1,775.04	11	2,136.17	11	2,497.29	11	2,858.28	11	3,219.19	11	3,554.55
1/4	338.11	1/4	699.23	1/4	1,060.34	1/4	1,421.44	1/4	1,782.57	1/4	2,143.69	1/4	2,504.81	1/4	2,865.80	1/4	3,226.71	1/4	3,559.78
1/2	345.64	1/2	706.75	1/2	1,067.86	1/2	1,428.97	1/2	1,790.09	1/2	2,151.21	1/2	2,512.33	1/2	2,873.32	1/2	3,234.22	1/2	3,565.00
3/4	353.16	3/4	714.27	3/4	1,075.38	3/4	1,436.49	3/4	1,797.61	3/4	2,158.74	3/4	2,519.86	3/4	2,880.84	3/4	3,241.73	3/4	3,570.22

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 TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE.
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 48'-09" FORWARD OF AFT BULKHEAD.

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

BARGE "CCL 421-T"

3 STBD

INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	3,575.44	0	3,826.13	0	4,072.63	0	4,300.27	0		0		0		0		0		0	
1/4	3,580.67	1/4	3,831.35	1/4	4,077.56	1/4	4,304.79	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,585.89	1/2	3,836.57	1/2	4,082.49	1/2	4,309.31	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,591.11	3/4	3,841.80	3/4	4,087.43	3/4	4,313.82	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,596.33	1	3,847.02	1	4,092.36	1	4,318.34	1		1		1		1		1		1	
1/4	3,601.56	1/4	3,852.24	1/4	4,097.26	1/4	4,322.83	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,606.78	1/2	3,857.46	1/2	4,102.16	1/2	4,327.31	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,612.00	3/4	3,862.69	3/4	4,107.06	3/4	4,331.80	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,617.22	2	3,867.91	2	4,111.96	2	4,336.28	2		2		2		2		2		2	
1/4	3,622.45	1/4	3,873.13	1/4	4,116.82	1/4	4,340.73	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,627.67	1/2	3,878.35	1/2	4,121.68	1/2	4,345.17	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,632.89	3/4	3,883.58	3/4	4,126.54	3/4	4,349.62	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,638.12	3	3,888.80	3	4,131.40	3	4,354.06	3		3		3		3		3		3	
1/4	3,643.34	1/4	3,894.02	1/4	4,136.23	1/4	4,358.44	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,648.56	1/2	3,899.24	1/2	4,141.05	1/2	4,362.83	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,653.78	3/4	3,904.46	3/4	4,145.88	3/4	4,367.21	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,659.01	4	3,909.68	4	4,150.70	4	4,371.59	4		4		4		4		4		4	
1/4	3,664.23	1/4	3,914.89	1/4	4,155.49	1/4	4,375.92	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,669.45	1/2	3,920.10	1/2	4,160.29	1/2	4,380.25	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,674.67	3/4	3,925.31	3/4	4,165.08	3/4	4,384.58	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,679.90	5	3,930.52	5	4,169.87	5	4,388.90	5		5		5		5		5		5	
1/4	3,685.12	1/4	3,935.71	1/4	4,174.63	1/4	4,393.19	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,690.34	1/2	3,940.89	1/2	4,179.39	1/2	4,397.48	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,695.56	3/4	3,946.08	3/4	4,184.15	3/4	4,401.77	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,700.79	6	3,951.27	6	4,188.91	6	4,406.06	6		6		6		6		6		6	
1/4	3,706.01	1/4	3,956.42	1/4	4,193.63	1/4	4,410.32	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,711.23	1/2	3,961.57	1/2	4,198.36	1/2	4,414.57	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,716.45	3/4	3,966.72	3/4	4,203.08	3/4	4,418.83	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,721.68	7	3,971.87	7	4,207.81	7	4,423.08	7		7		7		7		7		7	
1/4	3,726.90	1/4	3,976.99	1/4	4,212.50	1/4	4,427.42	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,732.12	1/2	3,982.11	1/2	4,217.19	1/2	4,431.77	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,737.34	3/4	3,987.22	3/4	4,221.89	3/4	4,436.11	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,742.57	8	3,992.34	8	4,226.58	8	4,440.45	8		8		8		8		8		8	
1/4	3,747.79	1/4	3,997.41	1/4	4,231.24	1/4	4,444.78	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,753.01	1/2	4,002.49	1/2	4,235.90	1/2	4,449.11	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,758.23	3/4	4,007.56	3/4	4,240.56	3/4	4,453.44	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,763.46	9	4,012.63	9	4,245.21	9	4,457.78	9		9		9		9		9		9	
1/4	3,768.68	1/4	4,017.67	1/4	4,249.84	1/4	4,461.36	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,773.90	1/2	4,022.70	1/2	4,254.46	1/2	4,464.95	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,779.13	3/4	4,027.73	3/4	4,259.09	3/4	4,468.54	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,784.35	10	4,032.76	10	4,263.71	10	4,472.12	10		10		10		10		10		10	
1/4	3,789.57	1/4	4,037.76	1/4	4,268.30	1/4	4,474.46	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,794.79	1/2	4,042.76	1/2	4,272.89	1/2	4,476.79	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,800.02	3/4	4,047.76	3/4	4,277.48	3/4	4,479.12	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,805.24	11	4,052.76	11	4,282.07	11	4,481.46	11		11		11		11		11		11	
1/4	3,810.46	1/4	4,057.73	1/4	4,286.62	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,815.68	1/2	4,062.69	1/2	4,291.17	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,820.91	3/4	4,067.66	3/4	4,295.72	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 07/14/2025 JS
CALCULATED: 07/14/2025 CL
PRINTED: 07/15/2025 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 07/2025

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