



# BARGE "EMS 310"

## ULLAGE TRIM TABLE

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

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

**EXAMPLE FOR ABOVE TRIM CORRECTIONS:**

FWD. DRAFT = 2'-00"  
 AFT DRAFT = 4'-00"  
 DIFF. = 2'-00" (DOWN BY STERN)

THE CORRECTION FOR 2'-00" TRIM DOWN BY STERN FOR 1 PORT IS - 00-1/8"  
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED ULLAGE IS 3'-11 7/8"

LENGTH BETWEEN DRAFT MARKS: 263'-03"

March 18, 2012

**PRECISION MEASUREMENT  
& ANALYSIS, INC.**

P.O. Box 2092  
 Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "EMS 310"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-06 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4		1/4		1/4		1/4	4,940.24	1/4	4,581.69	1/4	4,215.00	1/4	3,847.61	1/4	3,480.21	1/4	3,112.82	1/4	2,745.43		
1/2		1/2		1/2		1/2	4,933.73	1/2	4,574.08	1/2	4,207.34	1/2	3,839.95	1/2	3,472.56	1/2	3,105.17	1/2	2,737.78		
3/4		3/4		3/4		3/4	4,927.22	3/4	4,566.46	3/4	4,199.69	3/4	3,832.30	3/4	3,464.91	3/4	3,097.51	3/4	2,730.12		
1	1	1	1	1	1	1	4,920.71	1	4,558.84	1	4,192.04	1	3,824.64	1	3,457.25	1	3,089.86	1	2,722.47		
1/4		1/4		1/4		1/4	4,914.20	1/4	4,551.22	1/4	4,184.38	1/4	3,816.99	1/4	3,449.60	1/4	3,082.21	1/4	2,714.81		
1/2		1/2		1/2		1/2	4,906.95	1/2	4,543.60	1/2	4,176.73	1/2	3,809.34	1/2	3,441.94	1/2	3,074.55	1/2	2,707.16		
3/4		3/4		3/4		3/4	4,899.69	3/4	4,535.99	3/4	4,169.07	3/4	3,801.68	3/4	3,434.29	3/4	3,066.90	3/4	2,699.51		
2	2	2	2	2	2	2	4,892.44	2	4,528.37	2	4,161.42	2	3,794.03	2	3,426.64	2	3,059.24	2	2,691.85		
1/4		1/4		1/4		1/4	4,885.18	1/4	4,520.75	1/4	4,153.77	1/4	3,786.37	1/4	3,418.98	1/4	3,051.59	1/4	2,684.20		
1/2		1/2		1/2		1/2	4,877.61	1/2	4,513.13	1/2	4,146.11	1/2	3,778.72	1/2	3,411.33	1/2	3,043.94	1/2	2,676.54		
3/4		3/4		3/4		3/4	4,870.04	3/4	4,505.51	3/4	4,138.46	3/4	3,771.07	3/4	3,403.67	3/4	3,036.28	3/4	2,668.89		
3	3	3	3	3	3	3	4,862.46	3	4,497.89	3	4,130.80	3	3,763.41	3	3,396.02	3	3,028.63	3	2,661.24		
1/4		1/4		1/4		1/4	4,854.89	1/4	4,490.28	1/4	4,123.15	1/4	3,755.76	1/4	3,388.37	1/4	3,020.97	1/4	2,653.58		
1/2		1/2		1/2		1/2	4,847.32	1/2	4,482.66	1/2	4,115.50	1/2	3,748.10	1/2	3,380.71	1/2	3,013.32	1/2	2,645.93		
3/4		3/4		3/4		3/4	4,839.74	3/4	4,475.04	3/4	4,107.84	3/4	3,740.45	3/4	3,373.06	3/4	3,005.67	3/4	2,638.27		
4	4	4	4	4	4	4	4,832.17	4	4,467.42	4	4,100.19	4	3,732.80	4	3,365.40	4	2,998.01	4	2,630.62		
1/4		1/4		1/4		1/4	4,824.60	1/4	4,459.80	1/4	4,092.53	1/4	3,725.14	1/4	3,357.75	1/4	2,990.36	1/4	2,622.97		
1/2		1/2		1/2		1/2	4,817.02	1/2	4,452.18	1/2	4,084.88	1/2	3,717.49	1/2	3,350.10	1/2	2,982.70	1/2	2,615.31		
3/4		3/4		3/4		3/4	4,809.45	3/4	4,444.56	3/4	4,077.23	3/4	3,709.83	3/4	3,342.44	3/4	2,975.05	3/4	2,607.66		
5	5	5	5	5	5	5	4,801.88	5	4,436.93	5	4,069.57	5	3,702.18	5	3,334.79	5	2,967.40	5	2,600.00		
1/4		1/4		1/4		1/4	4,794.31	1/4	4,429.31	1/4	4,061.92	1/4	3,694.53	1/4	3,327.13	1/4	2,959.74	1/4	2,592.35		
1/2		1/2		1/2		1/2	4,786.74	1/2	4,421.66	1/2	4,054.26	1/2	3,686.87	1/2	3,319.48	1/2	2,952.09	1/2	2,584.70		
3/4		3/4		3/4		3/4	4,779.17	3/4	4,414.00	3/4	4,046.61	3/4	3,679.22	3/4	3,311.83	3/4	2,944.43	3/4	2,577.04		
6	6	6	6	6	6	6	4,771.59	6	4,406.35	6	4,038.96	6	3,671.56	6	3,304.17	6	2,936.78	6	2,569.39		
1/4		1/4		1/4		1/4	4,764.02	1/4	4,398.69	1/4	4,031.30	1/4	3,663.91	1/4	3,296.52	1/4	2,929.13	1/4	2,561.73		
1/2		1/2		1/2		1/2	4,756.45	1/2	4,391.04	1/2	4,023.65	1/2	3,656.26	1/2	3,288.86	1/2	2,921.47	1/2	2,554.08		
3/4		3/4		3/4		3/4	4,748.88	3/4	4,383.39	3/4	4,015.99	3/4	3,648.60	3/4	3,281.21	3/4	2,913.82	3/4	2,546.43		
7	7	7	7	7	7	7	4,741.31	7	4,375.73	7	4,008.34	7	3,640.95	7	3,273.56	7	2,906.16	7	2,538.77		
1/4		1/4		1/4		1/4	4,733.74	1/4	4,368.08	1/4	4,000.69	1/4	3,633.29	1/4	3,265.90	1/4	2,898.51	1/4	2,531.12		
1/2		1/2		1/2		1/2	4,726.16	1/2	4,360.42	1/2	3,993.03	1/2	3,625.64	1/2	3,258.25	1/2	2,890.86	1/2	2,523.46		
3/4		3/4		3/4		3/4	4,718.59	3/4	4,352.77	3/4	3,985.38	3/4	3,617.99	3/4	3,250.59	3/4	2,883.20	3/4	2,515.81		
8	8	8	8	8	8	8	4,711.02	8	4,345.12	8	3,977.72	8	3,610.33	8	3,242.94	8	2,875.55	8	2,508.16		
1/4		1/4		1/4		1/4	4,703.45	1/4	4,337.46	1/4	3,970.07	1/4	3,602.68	1/4	3,235.29	1/4	2,867.89	1/4	2,500.50		
1/2		1/2		1/2		1/2	4,695.87	1/2	4,329.81	1/2	3,962.42	1/2	3,595.02	1/2	3,227.63	1/2	2,860.24	1/2	2,492.85		
3/4		3/4		3/4		3/4	4,688.28	3/4	4,322.15	3/4	3,954.76	3/4	3,587.37	3/4	3,219.98	3/4	2,852.59	3/4	2,485.19		
9	9	9	9	9	9	9	4,680.70	9	4,314.50	9	3,947.11	9	3,579.72	9	3,212.32	9	2,844.93	9	2,477.54		
1/4		1/4		1/4	4,997.95	1/4	4,673.12	1/4	4,306.85	1/4	3,939.45	1/4	3,572.06	1/4	3,204.67	1/4	2,837.28	1/4	2,469.89		
1/2		1/2		1/2	4,993.99	1/2	4,665.50	1/2	4,299.19	1/2	3,931.80	1/2	3,564.41	1/2	3,197.02	1/2	2,829.62	1/2	2,462.23		
3/4		3/4		3/4	4,990.03	3/4	4,657.88	3/4	4,291.54	3/4	3,924.15	3/4	3,556.75	3/4	3,189.36	3/4	2,821.97	3/4	2,454.58		
10	10	10	10	10	4,986.07	10	4,650.26	10	4,283.88	10	3,916.49	10	3,549.10	10	3,181.71	10	2,814.32	10	2,446.92		
1/4		1/4		1/4	4,982.12	1/4	4,642.64	1/4	4,276.23	1/4	3,908.84	1/4	3,541.45	1/4	3,174.05	1/4	2,806.66	1/4	2,439.27		
1/2		1/2		1/2	4,977.31	1/2	4,635.02	1/2	4,268.58	1/2	3,901.18	1/2	3,533.79	1/2	3,166.40	1/2	2,799.01	1/2	2,431.62		
3/4		3/4		3/4	4,972.50	3/4	4,627.40	3/4	4,260.92	3/4	3,893.53	3/4	3,526.14	3/4	3,158.75	3/4	2,791.35	3/4	2,423.96		
11	11	11	11	11	4,967.69	11	4,619.79	11	4,253.27	11	3,885.88	11	3,518.48	11	3,151.09	11	2,783.70	11	2,416.31		
1/4		1/4		1/4	4,962.88	1/4	4,612.17	1/4	4,245.61	1/4	3,878.22	1/4	3,510.83	1/4	3,143.44	1/4	2,776.05	1/4	2,408.65		
1/2		1/2		1/2	4,957.22	1/2	4,604.55	1/2	4,237.96	1/2	3,870.57	1/2	3,503.18	1/2	3,135.78	1/2	2,768.39	1/2	2,401.00		
3/4		3/4		3/4	4,951.56	3/4	4,596.93	3/4	4,230.31	3/4	3,862.91	3/4	3,495.52	3/4	3,128.13	3/4	2,760.74	3/4	2,393.35		

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.  
 GAUGE POINT: (HERMETIC) LOCATED 10'-06" OFF CENTERLINE AND 45'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
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<http://www.pmacorp.net>



# BARGE "EMS 310"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-06 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	2,385.69	0	2,018.27	0	1,650.85	0	1,283.42	0	916.00	0	550.13	0	183.22	0		0		0	
1/4	2,378.04	1/4	2,010.62	1/4	1,643.19	1/4	1,275.77	1/4	908.34	1/4	542.52	1/4	175.58	1/4	1/4	1/4		1/4	1/4
1/2	2,370.38	1/2	2,002.96	1/2	1,635.54	1/2	1,268.11	1/2	900.69	1/2	534.91	1/2	167.94	1/2	1/2	1/2		1/2	1/2
3/4	2,362.73	3/4	1,995.31	3/4	1,627.88	3/4	1,260.46	3/4	893.03	3/4	527.30	3/4	160.30	3/4	3/4	3/4		3/4	3/4
1	2,355.08	1	1,987.65	1	1,620.23	1	1,252.80	1	885.38	1	519.70	1	152.67	1	1	1		1	1
1/4	2,347.42	1/4	1,980.00	1/4	1,612.57	1/4	1,245.15	1/4	877.72	1/4	512.09	1/4	145.03	1/4	1/4	1/4		1/4	1/4
1/2	2,339.77	1/2	1,972.34	1/2	1,604.92	1/2	1,237.49	1/2	870.07	1/2	504.47	1/2	137.41	1/2	1/2	1/2		1/2	1/2
3/4	2,332.11	3/4	1,964.69	3/4	1,597.26	3/4	1,229.84	3/4	862.42	3/4	496.86	3/4	129.79	3/4	3/4	3/4		3/4	3/4
2	2,324.46	2	1,957.04	2	1,589.61	2	1,222.18	2	854.77	2	489.25	2	122.17	2	2	2		2	2
1/4	2,316.81	1/4	1,949.38	1/4	1,581.96	1/4	1,214.53	1/4	847.12	1/4	481.64	1/4	114.55	1/4	1/4	1/4		1/4	1/4
1/2	2,309.15	1/2	1,941.73	1/2	1,574.30	1/2	1,206.87	1/2	839.48	1/2	474.00	1/2	106.96	1/2	1/2	1/2		1/2	1/2
3/4	2,301.50	3/4	1,934.07	3/4	1,566.65	3/4	1,199.22	3/4	831.84	3/4	466.37	3/4	99.37	3/4	3/4	3/4		3/4	3/4
3	2,293.84	3	1,926.42	3	1,558.99	3	1,191.57	3	824.20	3	458.74	3	91.78	3	3	3		3	3
1/4	2,286.19	1/4	1,918.76	1/4	1,551.34	1/4	1,183.91	1/4	816.56	1/4	451.10	1/4	84.19	1/4	1/4	1/4		1/4	1/4
1/2	2,278.53	1/2	1,911.11	1/2	1,543.68	1/2	1,176.26	1/2	808.93	1/2	443.45	1/2	76.85	1/2	1/2	1/2		1/2	1/2
3/4	2,270.88	3/4	1,903.45	3/4	1,536.03	3/4	1,168.60	3/4	801.30	3/4	435.79	3/4	69.51	3/4	3/4	3/4		3/4	3/4
4	2,263.22	4	1,895.80	4	1,528.37	4	1,160.95	4	793.67	4	428.14	4	62.17	4	4	4		4	4
1/4	2,255.57	1/4	1,888.14	1/4	1,520.72	1/4	1,153.29	1/4	786.04	1/4	420.48	1/4	54.82	1/4	1/4	1/4		1/4	1/4
1/2	2,247.91	1/2	1,880.49	1/2	1,513.06	1/2	1,145.64	1/2	778.42	1/2	412.83	1/2	48.61	1/2	1/2	1/2		1/2	1/2
3/4	2,240.26	3/4	1,872.83	3/4	1,505.41	3/4	1,137.98	3/4	770.80	3/4	405.18	3/4	42.39	3/4	3/4	3/4		3/4	3/4
5	2,232.60	5	1,865.18	5	1,497.75	5	1,130.33	5	763.17	5	397.52	5	36.18	5	5	5		5	5
1/4	2,224.95	1/4	1,857.52	1/4	1,490.10	1/4	1,122.67	1/4	755.55	1/4	389.87	1/4	29.97	1/4	1/4	1/4		1/4	1/4
1/2	2,217.30	1/2	1,849.87	1/2	1,482.44	1/2	1,115.02	1/2	747.94	1/2	382.21	1/2	25.66	1/2	1/2	1/2		1/2	1/2
3/4	2,209.64	3/4	1,842.21	3/4	1,474.79	3/4	1,107.36	3/4	740.33	3/4	374.56	3/4	21.36	3/4	3/4	3/4		3/4	3/4
6	2,201.99	6	1,834.56	6	1,467.13	6	1,099.71	6	732.71	6	366.90	6	17.05	6	6	6		6	6
1/4	2,194.33	1/4	1,826.91	1/4	1,459.48	1/4	1,092.05	1/4	725.10	1/4	359.25	1/4	12.75	1/4	1/4	1/4		1/4	1/4
1/2	2,186.68	1/2	1,819.25	1/2	1,451.83	1/2	1,084.40	1/2	717.49	1/2	351.59	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,179.02	3/4	1,811.60	3/4	1,444.17	3/4	1,076.74	3/4	709.87	3/4	343.94	3/4		3/4	3/4	3/4		3/4	3/4
7	2,171.37	7	1,803.94	7	1,436.52	7	1,069.09	7	702.26	7	336.29	7		7	7	7		7	7
1/4	2,163.71	1/4	1,796.29	1/4	1,428.86	1/4	1,061.44	1/4	694.65	1/4	328.63	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,156.06	1/2	1,788.63	1/2	1,421.21	1/2	1,053.78	1/2	687.04	1/2	320.98	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,148.40	3/4	1,780.98	3/4	1,413.55	3/4	1,046.13	3/4	679.43	3/4	313.32	3/4		3/4	3/4	3/4		3/4	3/4
8	2,140.75	8	1,773.32	8	1,405.90	8	1,038.47	8	671.82	8	305.67	8		8	8	8		8	8
1/4	2,133.09	1/4	1,765.67	1/4	1,398.24	1/4	1,030.82	1/4	664.22	1/4	298.01	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,125.44	1/2	1,758.01	1/2	1,390.59	1/2	1,023.16	1/2	656.61	1/2	290.36	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,117.78	3/4	1,750.36	3/4	1,382.93	3/4	1,015.51	3/4	649.00	3/4	282.70	3/4		3/4	3/4	3/4		3/4	3/4
9	2,110.13	9	1,742.70	9	1,375.28	9	1,007.85	9	641.39	9	275.05	9		9	9	9		9	9
1/4	2,102.47	1/4	1,735.05	1/4	1,367.62	1/4	1,000.20	1/4	633.78	1/4	267.39	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,094.82	1/2	1,727.39	1/2	1,359.97	1/2	992.54	1/2	626.18	1/2	259.74	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,087.17	3/4	1,719.74	3/4	1,352.31	3/4	984.89	3/4	618.57	3/4	252.09	3/4		3/4	3/4	3/4		3/4	3/4
10	2,079.51	10	1,712.09	10	1,344.66	10	977.23	10	610.96	10	244.43	10		10	10	10		10	10
1/4	2,071.86	1/4	1,704.43	1/4	1,337.00	1/4	969.58	1/4	603.36	1/4	236.78	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,064.20	1/2	1,696.78	1/2	1,329.35	1/2	961.92	1/2	595.75	1/2	229.12	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,056.55	3/4	1,689.12	3/4	1,321.70	3/4	954.27	3/4	588.15	3/4	221.47	3/4		3/4	3/4	3/4		3/4	3/4
11	2,048.89	11	1,681.47	11	1,314.04	11	946.62	11	580.54	11	213.82	11		11	11	11		11	11
1/4	2,041.24	1/4	1,673.81	1/4	1,306.39	1/4	938.96	1/4	572.94	1/4	206.17	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,033.58	1/2	1,666.16	1/2	1,298.73	1/2	931.31	1/2	565.34	1/2	198.52	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,025.93	3/4	1,658.50	3/4	1,291.08	3/4	923.65	3/4	557.73	3/4	190.87	3/4		3/4	3/4	3/4		3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/16/2012 CL - SW  
CALCULATED: 03/18/2012 CL  
PRINTED: 03/18/2012 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2012

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
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# BARGE "EMS 310"

## 1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-06"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0		0	4,944.01	0	4,585.29	0	4,218.41	0	3,850.85	0	3,483.28	0	3,115.72	0	2,748.15
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,937.49	1/4	4,577.67	1/4	4,210.76	1/4	3,843.19	1/4	3,475.63	1/4	3,108.06	1/4	2,740.50
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,930.98	1/2	4,570.05	1/2	4,203.10	1/2	3,835.53	1/2	3,467.97	1/2	3,100.40	1/2	2,732.84
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,924.47	3/4	4,562.42	3/4	4,195.44	3/4	3,827.88	3/4	3,460.31	3/4	3,092.75	3/4	2,725.18
1		1		1		1	4,917.95	1	4,554.80	1	4,187.78	1	3,820.22	1	3,452.65	1	3,085.09	1	2,717.52
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,910.70	1/4	4,547.18	1/4	4,180.13	1/4	3,812.56	1/4	3,445.00	1/4	3,077.43	1/4	2,709.87
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,903.44	1/2	4,539.56	1/2	4,172.47	1/2	3,804.90	1/2	3,437.34	1/2	3,069.77	1/2	2,702.21
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,896.18	3/4	4,531.94	3/4	4,164.81	3/4	3,797.25	3/4	3,429.68	3/4	3,062.12	3/4	2,694.55
2		2		2		2	4,888.92	2	4,524.32	2	4,157.15	2	3,789.59	2	3,422.02	2	3,054.46	2	2,686.89
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,881.35	1/4	4,516.69	1/4	4,149.49	1/4	3,781.93	1/4	3,414.37	1/4	3,046.80	1/4	2,679.24
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,873.77	1/2	4,509.07	1/2	4,141.84	1/2	3,774.27	1/2	3,406.71	1/2	3,039.14	1/2	2,671.58
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,866.19	3/4	4,501.45	3/4	4,134.18	3/4	3,766.61	3/4	3,399.05	3/4	3,031.49	3/4	2,663.92
3		3		3		3	4,858.61	3	4,493.83	3	4,126.52	3	3,758.96	3	3,391.39	3	3,023.83	3	2,656.26
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,851.04	1/4	4,486.21	1/4	4,118.86	1/4	3,751.30	1/4	3,383.73	1/4	3,016.17	1/4	2,648.61
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,843.46	1/2	4,478.59	1/2	4,111.21	1/2	3,743.64	1/2	3,376.08	1/2	3,008.51	1/2	2,640.95
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,835.88	3/4	4,470.96	3/4	4,103.55	3/4	3,735.98	3/4	3,368.42	3/4	3,000.85	3/4	2,633.29
4		4		4		4	4,828.31	4	4,463.34	4	4,095.89	4	3,728.33	4	3,360.76	4	2,993.20	4	2,625.63
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,820.73	1/4	4,455.71	1/4	4,088.23	1/4	3,720.67	1/4	3,353.10	1/4	2,985.54	1/4	2,617.97
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,813.16	1/2	4,448.08	1/2	4,080.58	1/2	3,713.01	1/2	3,345.45	1/2	2,977.88	1/2	2,610.32
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,805.58	3/4	4,440.46	3/4	4,072.92	3/4	3,705.35	3/4	3,337.79	3/4	2,970.22	3/4	2,602.66
5		5		5		5	4,798.01	5	4,432.83	5	4,065.26	5	3,697.70	5	3,330.13	5	2,962.57	5	2,595.00
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,790.43	1/4	4,425.17	1/4	4,057.60	1/4	3,690.04	1/4	3,322.47	1/4	2,954.91	1/4	2,587.34
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,782.86	1/2	4,417.51	1/2	4,049.95	1/2	3,682.38	1/2	3,314.82	1/2	2,947.25	1/2	2,579.69
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,775.28	3/4	4,409.85	3/4	4,042.29	3/4	3,674.72	3/4	3,307.16	3/4	2,939.59	3/4	2,572.03
6		6		6		6	4,767.71	6	4,402.20	6	4,034.63	6	3,667.07	6	3,299.50	6	2,931.94	6	2,564.37
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,760.13	1/4	4,394.54	1/4	4,026.97	1/4	3,659.41	1/4	3,291.84	1/4	2,924.28	1/4	2,556.71
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,752.55	1/2	4,386.88	1/2	4,019.32	1/2	3,651.75	1/2	3,284.19	1/2	2,916.62	1/2	2,549.06
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,744.98	3/4	4,379.22	3/4	4,011.66	3/4	3,644.09	3/4	3,276.53	3/4	2,908.96	3/4	2,541.40
7		7		7		7	4,737.40	7	4,371.57	7	4,004.00	7	3,636.44	7	3,268.87	7	2,901.31	7	2,533.74
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,729.83	1/4	4,363.91	1/4	3,996.34	1/4	3,628.78	1/4	3,261.21	1/4	2,893.65	1/4	2,526.08
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,722.25	1/2	4,356.25	1/2	3,988.69	1/2	3,621.12	1/2	3,253.56	1/2	2,885.99	1/2	2,518.43
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,714.68	3/4	4,348.59	3/4	3,981.03	3/4	3,613.46	3/4	3,245.90	3/4	2,878.33	3/4	2,510.77
8		8		8		8	4,707.10	8	4,340.93	8	3,973.37	8	3,605.81	8	3,238.24	8	2,870.68	8	2,503.11
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,699.52	1/4	4,333.28	1/4	3,965.71	1/4	3,598.15	1/4	3,230.58	1/4	2,863.02	1/4	2,495.45
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,691.93	1/2	4,325.62	1/2	3,958.05	1/2	3,590.49	1/2	3,222.93	1/2	2,855.36	1/2	2,487.80
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,684.34	3/4	4,317.96	3/4	3,950.40	3/4	3,582.83	3/4	3,215.27	3/4	2,847.70	3/4	2,480.14
9		9	5,001.74	9	4,676.76	9	4,310.30	9	3,942.74	9	3,575.17	9	3,207.61	9	2,840.05	9	2,472.48		
1/4	1/4	1/4	4,997.78	1/4	4,669.13	1/4	4,302.65	1/4	3,935.08	1/4	3,567.52	1/4	3,199.95	1/4	2,832.39	1/4	2,464.82		
1/2	1/2	1/2	4,993.82	1/2	4,661.51	1/2	4,294.99	1/2	3,927.42	1/2	3,559.86	1/2	3,192.29	1/2	2,824.73	1/2	2,457.17		
3/4	3/4	3/4	4,989.86	3/4	4,653.89	3/4	4,287.33	3/4	3,919.77	3/4	3,552.20	3/4	3,184.64	3/4	2,817.07	3/4	2,449.51		
10		10	4,985.90	10	4,646.27	10	4,279.67	10	3,912.11	10	3,544.54	10	3,176.98	10	2,809.41	10	2,441.85		
1/4	1/4	1/4	4,981.09	1/4	4,638.64	1/4	4,272.02	1/4	3,904.45	1/4	3,536.89	1/4	3,169.32	1/4	2,801.76	1/4	2,434.19		
1/2	1/2	1/2	4,976.28	1/2	4,631.02	1/2	4,264.36	1/2	3,896.79	1/2	3,529.23	1/2	3,161.66	1/2	2,794.10	1/2	2,426.53		
3/4	3/4	3/4	4,971.47	3/4	4,623.40	3/4	4,256.70	3/4	3,889.14	3/4	3,521.57	3/4	3,154.01	3/4	2,786.44	3/4	2,418.88		
11		11	4,966.66	11	4,615.78	11	4,249.04	11	3,881.48	11	3,513.91	11	3,146.35	11	2,778.78	11	2,411.22		
1/4	1/4	1/4	4,960.99	1/4	4,608.15	1/4	4,241.39	1/4	3,873.82	1/4	3,506.26	1/4	3,138.69	1/4	2,771.13	1/4	2,403.56		
1/2	1/2	1/2	4,955.33	1/2	4,600.53	1/2	4,233.73	1/2	3,866.16	1/2	3,498.60	1/2	3,131.03	1/2	2,763.47	1/2	2,395.90		
3/4	3/4	3/4	4,949.67	3/4	4,592.91	3/4	4,226.07	3/4	3,858.51	3/4	3,490.94	3/4	3,123.38	3/4	2,755.81	3/4	2,388.25		

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.  
GAUGE POINT: (HERMETIC) LOCATED 10'-06" OFF CENTERLINE AND 45'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>



# BARGE "EMS 310"

1 STBD  
ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-06"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
0	2,380.59	0	2,013.01	0	1,645.40	0	1,277.80	0	910.20	0	543.05	0	175.66	0		0		0	
1/4	2,372.93	1/4	2,005.35	1/4	1,637.75	1/4	1,270.14	1/4	902.54	1/4	535.41	1/4	168.02	1/4	1/4	1/4		1/4	
1/2	2,365.27	1/2	1,997.69	1/2	1,630.09	1/2	1,262.48	1/2	894.88	1/2	527.77	1/2	160.38	1/2	1/2	1/2		1/2	
3/4	2,357.62	3/4	1,990.03	3/4	1,622.43	3/4	1,254.83	3/4	887.22	3/4	520.13	3/4	152.74	3/4	3/4	3/4		3/4	
1	2,349.96	1	1,982.37	1	1,614.77	1	1,247.17	1	879.56	1	512.48	1	145.10	1	1	1		1	
1/4	2,342.30	1/4	1,974.72	1/4	1,607.11	1/4	1,239.51	1/4	871.91	1/4	504.84	1/4	137.48	1/4	1/4	1/4		1/4	
1/2	2,334.64	1/2	1,967.06	1/2	1,599.45	1/2	1,231.85	1/2	864.25	1/2	497.20	1/2	129.85	1/2	1/2	1/2		1/2	
3/4	2,326.99	3/4	1,959.40	3/4	1,591.80	3/4	1,224.19	3/4	856.59	3/4	489.55	3/4	122.23	3/4	3/4	3/4		3/4	
2	2,319.33	2	1,951.74	2	1,584.14	2	1,216.53	2	848.93	2	481.91	2	114.61	2	2	2		2	
1/4	2,311.67	1/4	1,944.08	1/4	1,576.48	1/4	1,208.88	1/4	841.27	1/4	474.26	1/4	107.01	1/4	1/4	1/4		1/4	
1/2	2,304.01	1/2	1,936.42	1/2	1,568.82	1/2	1,201.22	1/2	833.61	1/2	466.61	1/2	99.42	1/2	1/2	1/2		1/2	
3/4	2,296.36	3/4	1,928.77	3/4	1,561.16	3/4	1,193.56	3/4	825.96	3/4	458.96	3/4	91.83	3/4	3/4	3/4		3/4	
3	2,288.70	3	1,921.11	3	1,553.50	3	1,185.90	3	818.30	3	451.32	3	84.23	3	3	3		3	
1/4	2,281.04	1/4	1,913.45	1/4	1,545.85	1/4	1,178.24	1/4	810.64	1/4	443.66	1/4	76.89	1/4	1/4	1/4		1/4	
1/2	2,273.39	1/2	1,905.79	1/2	1,538.19	1/2	1,170.58	1/2	802.98	1/2	436.00	1/2	69.50	1/2	1/2	1/2		1/2	
3/4	2,265.73	3/4	1,898.13	3/4	1,530.53	3/4	1,162.93	3/4	795.32	3/4	428.34	3/4	62.20	3/4	3/4	3/4		3/4	
4	2,258.08	4	1,890.47	4	1,522.87	4	1,155.27	4	787.67	4	420.68	4	54.85	4	4	4		4	
1/4	2,250.42	1/4	1,882.81	1/4	1,515.21	1/4	1,147.61	1/4	780.01	1/4	413.03	1/4	48.63	1/4	1/4	1/4		1/4	
1/2	2,242.76	1/2	1,875.16	1/2	1,507.55	1/2	1,139.95	1/2	772.36	1/2	405.37	1/2	42.41	1/2	1/2	1/2		1/2	
3/4	2,235.10	3/4	1,867.50	3/4	1,499.89	3/4	1,132.29	3/4	764.71	3/4	397.71	3/4	36.20	3/4	3/4	3/4		3/4	
5	2,227.44	5	1,859.84	5	1,492.24	5	1,124.63	5	757.05	5	390.05	5	29.98	5	5	5		5	
1/4	2,219.78	1/4	1,852.18	1/4	1,484.58	1/4	1,116.97	1/4	749.40	1/4	382.39	1/4	25.67	1/4	1/4	1/4		1/4	
1/2	2,212.13	1/2	1,844.52	1/2	1,476.92	1/2	1,109.32	1/2	741.76	1/2	374.73	1/2	21.37	1/2	1/2	1/2		1/2	
3/4	2,204.47	3/4	1,836.86	3/4	1,469.26	3/4	1,101.66	3/4	734.11	3/4	367.08	3/4	17.06	3/4	3/4	3/4		3/4	
6	2,196.81	6	1,829.21	6	1,461.60	6	1,094.00	6	726.46	6	359.42	6	12.75	6	6	6		6	
1/4	2,189.15	1/4	1,821.55	1/4	1,453.94	1/4	1,086.34	1/4	718.81	1/4	351.76	1/4		1/4	1/4	1/4		1/4	
1/2	2,181.49	1/2	1,813.89	1/2	1,446.29	1/2	1,078.68	1/2	711.17	1/2	344.10	1/2		1/2	1/2	1/2		1/2	
3/4	2,173.83	3/4	1,806.23	3/4	1,438.63	3/4	1,071.02	3/4	703.52	3/4	336.44	3/4		3/4	3/4	3/4		3/4	
7	2,166.18	7	1,798.57	7	1,430.97	7	1,063.37	7	695.87	7	328.79	7		7	7	7		7	
1/4	2,158.52	1/4	1,790.91	1/4	1,423.31	1/4	1,055.71	1/4	688.23	1/4	321.13	1/4		1/4	1/4	1/4		1/4	
1/2	2,150.86	1/2	1,783.26	1/2	1,415.65	1/2	1,048.05	1/2	680.59	1/2	313.47	1/2		1/2	1/2	1/2		1/2	
3/4	2,143.20	3/4	1,775.60	3/4	1,407.99	3/4	1,040.39	3/4	672.95	3/4	305.81	3/4		3/4	3/4	3/4		3/4	
8	2,135.54	8	1,767.94	8	1,400.34	8	1,032.73	8	665.30	8	298.15	8		8	8	8		8	
1/4	2,127.88	1/4	1,760.28	1/4	1,392.68	1/4	1,025.07	1/4	657.66	1/4	290.50	1/4		1/4	1/4	1/4		1/4	
1/2	2,120.23	1/2	1,752.62	1/2	1,385.02	1/2	1,017.42	1/2	650.02	1/2	282.84	1/2		1/2	1/2	1/2		1/2	
3/4	2,112.57	3/4	1,744.96	3/4	1,377.36	3/4	1,009.76	3/4	642.37	3/4	275.18	3/4		3/4	3/4	3/4		3/4	
9	2,104.91	9	1,737.31	9	1,369.70	9	1,002.10	9	634.73	9	267.52	9		9	9	9		9	
1/4	2,097.25	1/4	1,729.65	1/4	1,362.04	1/4	994.44	1/4	627.09	1/4	259.86	1/4		1/4	1/4	1/4		1/4	
1/2	2,089.59	1/2	1,721.99	1/2	1,354.39	1/2	986.78	1/2	619.45	1/2	252.21	1/2		1/2	1/2	1/2		1/2	
3/4	2,081.93	3/4	1,714.33	3/4	1,346.73	3/4	979.12	3/4	611.81	3/4	244.55	3/4		3/4	3/4	3/4		3/4	
10	2,074.27	10	1,706.67	10	1,339.07	10	971.47	10	604.17	10	236.89	10		10	10	10		10	
1/4	2,066.62	1/4	1,699.01	1/4	1,331.41	1/4	963.81	1/4	596.53	1/4	229.23	1/4		1/4	1/4	1/4		1/4	
1/2	2,058.96	1/2	1,691.35	1/2	1,323.75	1/2	956.15	1/2	588.89	1/2	221.58	1/2		1/2	1/2	1/2		1/2	
3/4	2,051.30	3/4	1,683.70	3/4	1,316.09	3/4	948.49	3/4	581.25	3/4	213.92	3/4		3/4	3/4	3/4		3/4	
11	2,043.64	11	1,676.04	11	1,308.43	11	940.83	11	573.61	11	206.26	11		11	11	11		11	
1/4	2,035.98	1/4	1,668.38	1/4	1,300.78	1/4	933.17	1/4	565.97	1/4	198.61	1/4		1/4	1/4	1/4		1/4	
1/2	2,028.32	1/2	1,660.72	1/2	1,293.12	1/2	925.51	1/2	558.33	1/2	190.96	1/2		1/2	1/2	1/2		1/2	
3/4	2,020.67	3/4	1,653.06	3/4	1,285.46	3/4	917.86	3/4	550.69	3/4	183.31	3/4		3/4	3/4	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/16/2012 CL - SW  
CALCULATED: 03/18/2012 CL  
PRINTED: 03/18/2012 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2012

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



# BARGE "EMS 310"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-06"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0		0	4,948.40	0	4,593.44	0	4,230.87	0	3,864.67	0	3,494.15	0	3,123.64	0	2,753.25
1/4		1/4		1/4		1/4	4,941.97	1/4	4,585.91	1/4	4,223.29	1/4	3,856.95	1/4	3,486.44	1/4	3,115.92	1/4	2,745.53
1/2		1/2		1/2		1/2	4,935.55	1/2	4,578.39	1/2	4,215.71	1/2	3,849.23	1/2	3,478.72	1/2	3,108.20	1/2	2,737.81
3/4		3/4		3/4		3/4	4,929.12	3/4	4,570.86	3/4	4,208.13	3/4	3,841.51	3/4	3,471.00	3/4	3,100.49	3/4	2,730.09
1		1		1		1	4,922.69	1	4,563.33	1	4,200.55	1	3,833.79	1	3,463.28	1	3,092.77	1	2,722.37
1/4		1/4		1/4		1/4	4,915.51	1/4	4,555.80	1/4	4,192.97	1/4	3,826.07	1/4	3,455.56	1/4	3,085.05	1/4	2,714.65
1/2		1/2		1/2		1/2	4,908.33	1/2	4,548.28	1/2	4,185.39	1/2	3,818.35	1/2	3,447.84	1/2	3,077.33	1/2	2,706.93
3/4		3/4		3/4		3/4	4,901.15	3/4	4,540.75	3/4	4,177.81	3/4	3,810.63	3/4	3,440.12	3/4	3,069.61	3/4	2,699.21
2		2		2		2	4,893.97	2	4,533.22	2	4,170.23	2	3,802.91	2	3,432.40	2	3,061.89	2	2,691.49
1/4		1/4		1/4		1/4	4,886.47	1/4	4,525.69	1/4	4,162.65	1/4	3,795.20	1/4	3,424.68	1/4	3,054.17	1/4	2,683.76
1/2		1/2		1/2		1/2	4,878.97	1/2	4,518.17	1/2	4,155.07	1/2	3,787.48	1/2	3,416.96	1/2	3,046.45	1/2	2,676.04
3/4		3/4		3/4		3/4	4,871.46	3/4	4,510.64	3/4	4,147.49	3/4	3,779.76	3/4	3,409.25	3/4	3,038.73	3/4	2,668.32
3		3		3		3	4,863.96	3	4,503.11	3	4,139.91	3	3,772.04	3	3,401.53	3	3,031.01	3	2,660.60
1/4		1/4		1/4		1/4	4,856.46	1/4	4,495.58	1/4	4,132.33	1/4	3,764.32	1/4	3,393.81	1/4	3,023.30	1/4	2,652.88
1/2		1/2		1/2		1/2	4,848.96	1/2	4,488.06	1/2	4,124.75	1/2	3,756.60	1/2	3,386.09	1/2	3,015.58	1/2	2,645.16
3/4		3/4		3/4		3/4	4,841.46	3/4	4,480.53	3/4	4,117.17	3/4	3,748.88	3/4	3,378.37	3/4	3,007.86	3/4	2,637.44
4		4		4		4	4,833.96	4	4,473.00	4	4,109.59	4	3,741.16	4	3,370.65	4	3,000.14	4	2,629.72
1/4		1/4		1/4		1/4	4,826.46	1/4	4,465.47	1/4	4,102.01	1/4	3,733.44	1/4	3,362.93	1/4	2,992.43	1/4	2,622.00
1/2		1/2		1/2		1/2	4,818.96	1/2	4,457.93	1/2	4,094.43	1/2	3,725.72	1/2	3,355.21	1/2	2,984.71	1/2	2,614.28
3/4		3/4		3/4		3/4	4,811.46	3/4	4,450.39	3/4	4,086.85	3/4	3,718.01	3/4	3,347.49	3/4	2,977.00	3/4	2,606.56
5		5		5		5	4,803.96	5	4,442.86	5	4,079.27	5	3,710.29	5	3,339.77	5	2,969.28	5	2,598.84
1/4		1/4		1/4		1/4	4,796.46	1/4	4,435.29	1/4	4,071.69	1/4	3,702.57	1/4	3,332.06	1/4	2,961.57	1/4	2,591.12
1/2		1/2		1/2		1/2	4,788.96	1/2	4,427.73	1/2	4,064.11	1/2	3,694.85	1/2	3,324.34	1/2	2,953.85	1/2	2,583.40
3/4		3/4		3/4		3/4	4,781.46	3/4	4,420.17	3/4	4,056.53	3/4	3,687.13	3/4	3,316.62	3/4	2,946.13	3/4	2,575.68
6		6		6		6	4,773.96	6	4,412.61	6	4,048.95	6	3,679.41	6	3,308.90	6	2,938.42	6	2,567.96
1/4		1/4		1/4		1/4	4,766.46	1/4	4,405.04	1/4	4,041.37	1/4	3,671.69	1/4	3,301.18	1/4	2,930.70	1/4	2,560.24
1/2		1/2		1/2		1/2	4,758.96	1/2	4,397.48	1/2	4,033.79	1/2	3,663.97	1/2	3,293.46	1/2	2,922.99	1/2	2,552.52
3/4		3/4		3/4		3/4	4,751.46	3/4	4,389.92	3/4	4,026.21	3/4	3,656.25	3/4	3,285.74	3/4	2,915.27	3/4	2,544.80
7		7		7		7	4,743.96	7	4,382.35	7	4,018.63	7	3,648.53	7	3,278.02	7	2,907.56	7	2,537.08
1/4		1/4		1/4		1/4	4,736.46	1/4	4,374.79	1/4	4,011.01	1/4	3,640.82	1/4	3,270.30	1/4	2,899.84	1/4	2,529.35
1/2		1/2		1/2		1/2	4,728.96	1/2	4,367.23	1/2	4,003.40	1/2	3,633.10	1/2	3,262.58	1/2	2,892.13	1/2	2,521.63
3/4		3/4		3/4		3/4	4,721.46	3/4	4,359.66	3/4	3,995.78	3/4	3,625.38	3/4	3,254.87	3/4	2,884.41	3/4	2,513.91
8		8		8		8	4,713.96	8	4,352.10	8	3,988.17	8	3,617.66	8	3,247.15	8	2,876.70	8	2,506.19
1/4		1/4		1/4		1/4	4,706.44	1/4	4,344.53	1/4	3,980.45	1/4	3,609.94	1/4	3,239.43	1/4	2,868.98	1/4	2,498.47
1/2		1/2		1/2		1/2	4,698.93	1/2	4,336.96	1/2	3,972.73	1/2	3,602.22	1/2	3,231.71	1/2	2,861.27	1/2	2,490.75
3/4		3/4		3/4		3/4	4,691.42	3/4	4,329.40	3/4	3,965.01	3/4	3,594.50	3/4	3,223.99	3/4	2,853.55	3/4	2,483.03
9		9		9	5,005.96	9	4,683.91	9	4,321.83	9	3,957.29	9	3,586.78	9	3,216.27	9	2,845.84	9	2,475.31
1/4		1/4		1/4	5,001.96	1/4	4,676.36	1/4	4,314.25	1/4	3,949.58	1/4	3,579.06	1/4	3,208.55	1/4	2,838.12	1/4	2,467.59
1/2		1/2		1/2	4,997.96	1/2	4,668.81	1/2	4,306.67	1/2	3,941.86	1/2	3,571.34	1/2	3,200.83	1/2	2,830.41	1/2	2,459.88
3/4		3/4		3/4	4,993.96	3/4	4,661.27	3/4	4,299.09	3/4	3,934.14	3/4	3,563.63	3/4	3,193.11	3/4	2,822.69	3/4	2,452.16
10		10		10	4,989.96	10	4,653.72	10	4,291.51	10	3,926.42	10	3,555.91	10	3,185.39	10	2,814.98	10	2,444.44
1/4		1/4		1/4	4,985.14	1/4	4,646.18	1/4	4,283.93	1/4	3,918.70	1/4	3,548.19	1/4	3,177.68	1/4	2,807.26	1/4	2,436.73
1/2		1/2		1/2	4,980.32	1/2	4,638.63	1/2	4,276.35	1/2	3,910.98	1/2	3,540.47	1/2	3,169.96	1/2	2,799.55	1/2	2,429.02
3/4		3/4		3/4	4,975.50	3/4	4,631.09	3/4	4,268.77	3/4	3,903.26	3/4	3,532.75	3/4	3,162.24	3/4	2,791.83	3/4	2,421.31
11		11		11	4,970.67	11	4,623.55	11	4,261.19	11	3,895.54	11	3,525.03	11	3,154.52	11	2,784.12	11	2,413.61
1/4		1/4		1/4	4,965.10	1/4	4,616.02	1/4	4,253.61	1/4	3,887.82	1/4	3,517.31	1/4	3,146.80	1/4	2,776.40	1/4	2,405.91
1/2		1/2		1/2	4,959.54	1/2	4,608.49	1/2	4,246.03	1/2	3,880.10	1/2	3,509.59	1/2	3,139.08	1/2	2,768.68	1/2	2,398.20
3/4		3/4		3/4	4,953.97	3/4	4,600.97	3/4	4,238.45	3/4	3,872.39	3/4	3,501.87	3/4	3,131.36	3/4	2,760.97	3/4	2,390.50

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.

GAUGE POINT: (HERMETIC) LOCATED 10'-06" OFF CENTERLINE AND 46'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "EMS 310"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-06"

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	2,382.80	0	2,013.01	0	1,642.54	0	1,272.07	0	901.59	0	545.70	0	177.42	0		0		0	
1/4	2,375.10	1/4	2,005.30	1/4	1,634.82	1/4	1,264.35	1/4	893.88	1/4	538.29	1/4	169.70	1/4	1/4	1/4		1/4	
1/2	2,367.40	1/2	1,997.58	1/2	1,627.10	1/2	1,256.63	1/2	886.16	1/2	530.89	1/2	161.99	1/2	1/2	1/2		1/2	
3/4	2,359.70	3/4	1,989.86	3/4	1,619.39	3/4	1,248.91	3/4	878.44	3/4	523.48	3/4	154.27	3/4	3/4	3/4		3/4	
1	2,352.00	1	1,982.14	1	1,611.67	1	1,241.19	1	870.72	1	516.08	1	146.55	1	1	1		1	
1/4	2,344.30	1/4	1,974.42	1/4	1,603.95	1/4	1,233.48	1/4	863.05	1/4	508.63	1/4	138.85	1/4	1/4	1/4		1/4	
1/2	2,336.60	1/2	1,966.71	1/2	1,596.23	1/2	1,225.76	1/2	855.39	1/2	501.19	1/2	131.15	1/2	1/2	1/2		1/2	
3/4	2,328.90	3/4	1,958.99	3/4	1,588.51	3/4	1,218.04	3/4	847.72	3/4	493.74	3/4	123.46	3/4	3/4	3/4		3/4	
2	2,321.19	2	1,951.27	2	1,580.80	2	1,210.32	2	840.06	2	486.29	2	115.76	2	2	2		2	
1/4	2,313.49	1/4	1,943.55	1/4	1,573.08	1/4	1,202.60	1/4	832.58	1/4	478.68	1/4	108.09	1/4	1/4	1/4		1/4	
1/2	2,305.79	1/2	1,935.83	1/2	1,565.36	1/2	1,194.89	1/2	825.11	1/2	471.07	1/2	100.42	1/2	1/2	1/2		1/2	
3/4	2,298.09	3/4	1,928.11	3/4	1,557.64	3/4	1,187.17	3/4	817.64	3/4	463.46	3/4	92.75	3/4	3/4	3/4		3/4	
3	2,290.39	3	1,920.40	3	1,549.92	3	1,179.45	3	810.16	3	455.85	3	85.07	3	3	3		3	
1/4	2,282.69	1/4	1,912.68	1/4	1,542.20	1/4	1,171.73	1/4	802.80	1/4	448.11	1/4	77.66	1/4	1/4	1/4		1/4	
1/2	2,274.99	1/2	1,904.96	1/2	1,534.49	1/2	1,164.01	1/2	795.44	1/2	440.38	1/2	70.24	1/2	1/2	1/2		1/2	
3/4	2,267.29	3/4	1,897.24	3/4	1,526.77	3/4	1,156.29	3/4	788.08	3/4	432.64	3/4	62.82	3/4	3/4	3/4		3/4	
4	2,259.58	4	1,889.52	4	1,519.05	4	1,148.58	4	780.71	4	424.91	4	55.40	4	4	4		4	
1/4	2,251.88	1/4	1,881.81	1/4	1,511.33	1/4	1,140.86	1/4	773.36	1/4	417.17	1/4	49.12	1/4	1/4	1/4		1/4	
1/2	2,244.18	1/2	1,874.09	1/2	1,503.61	1/2	1,133.14	1/2	766.01	1/2	409.44	1/2	42.84	1/2	1/2	1/2		1/2	
3/4	2,236.48	3/4	1,866.37	3/4	1,495.90	3/4	1,125.42	3/4	758.65	3/4	401.70	3/4	36.56	3/4	3/4	3/4		3/4	
5	2,228.78	5	1,858.65	5	1,488.18	5	1,117.70	5	751.30	5	393.97	5	30.28	5	5	5		5	
1/4	2,221.08	1/4	1,850.93	1/4	1,480.46	1/4	1,109.99	1/4	743.95	1/4	386.23	1/4	25.93	1/4	1/4	1/4		1/4	
1/2	2,213.37	1/2	1,843.21	1/2	1,472.74	1/2	1,102.27	1/2	736.61	1/2	378.50	1/2	21.58	1/2	1/2	1/2		1/2	
3/4	2,205.67	3/4	1,835.50	3/4	1,465.02	3/4	1,094.55	3/4	729.26	3/4	370.76	3/4	17.23	3/4	3/4	3/4		3/4	
6	2,197.97	6	1,827.78	6	1,457.30	6	1,086.83	6	721.91	6	363.03	6	12.88	6	6	6		6	
1/4	2,190.27	1/4	1,820.06	1/4	1,449.59	1/4	1,079.11	1/4	714.57	1/4	355.29	1/4		1/4	1/4	1/4		1/4	
1/2	2,182.57	1/2	1,812.34	1/2	1,441.87	1/2	1,071.39	1/2	707.22	1/2	347.56	1/2		1/2	1/2	1/2		1/2	
3/4	2,174.87	3/4	1,804.62	3/4	1,434.15	3/4	1,063.68	3/4	699.88	3/4	339.82	3/4		3/4	3/4	3/4		3/4	
7	2,167.16	7	1,796.90	7	1,426.43	7	1,055.96	7	692.54	7	332.09	7		7	7	7		7	
1/4	2,159.46	1/4	1,789.19	1/4	1,418.71	1/4	1,048.24	1/4	685.20	1/4	324.35	1/4		1/4	1/4	1/4		1/4	
1/2	2,151.76	1/2	1,781.47	1/2	1,410.99	1/2	1,040.52	1/2	677.86	1/2	316.62	1/2		1/2	1/2	1/2		1/2	
3/4	2,144.06	3/4	1,773.75	3/4	1,403.28	3/4	1,032.80	3/4	670.51	3/4	308.88	3/4		3/4	3/4	3/4		3/4	
8	2,136.36	8	1,766.03	8	1,395.56	8	1,025.08	8	663.17	8	301.15	8		8	8	8		8	
1/4	2,128.66	1/4	1,758.31	1/4	1,387.84	1/4	1,017.37	1/4	655.83	1/4	293.41	1/4		1/4	1/4	1/4		1/4	
1/2	2,120.95	1/2	1,750.60	1/2	1,380.12	1/2	1,009.65	1/2	648.49	1/2	285.68	1/2		1/2	1/2	1/2		1/2	
3/4	2,113.25	3/4	1,742.88	3/4	1,372.40	3/4	1,001.93	3/4	641.15	3/4	277.94	3/4		3/4	3/4	3/4		3/4	
9	2,105.55	9	1,735.16	9	1,364.69	9	994.21	9	633.81	9	270.21	9		9	9	9		9	
1/4	2,097.85	1/4	1,727.44	1/4	1,356.97	1/4	986.49	1/4	986.49	1/4	262.47	1/4		1/4	1/4	1/4		1/4	
1/2	2,090.14	1/2	1,719.72	1/2	1,349.25	1/2	978.78	1/2	978.78	1/2	254.74	1/2		1/2	1/2	1/2		1/2	
3/4	2,082.44	3/4	1,712.00	3/4	1,341.53	3/4	971.06	3/4	971.06	3/4	247.00	3/4		3/4	3/4	3/4		3/4	
10	2,074.74	10	1,704.29	10	1,333.81	10	963.34	10	963.34	10	239.27	10		10	10	10		10	
1/4	2,067.02	1/4	1,696.57	1/4	1,326.09	1/4	955.62	1/4	955.62	1/4	231.53	1/4		1/4	1/4	1/4		1/4	
1/2	2,059.31	1/2	1,688.85	1/2	1,318.38	1/2	947.90	1/2	947.90	1/2	223.80	1/2		1/2	1/2	1/2		1/2	
3/4	2,051.60	3/4	1,681.13	3/4	1,310.66	3/4	940.18	3/4	940.18	3/4	216.07	3/4		3/4	3/4	3/4		3/4	
11	2,043.89	11	1,673.41	11	1,302.94	11	932.47	11	932.47	11	208.33	11		11	11	11		11	
1/4	2,036.17	1/4	1,665.70	1/4	1,295.22	1/4	924.75	1/4	924.75	1/4	200.60	1/4		1/4	1/4	1/4		1/4	
1/2	2,028.45	1/2	1,657.98	1/2	1,287.50	1/2	917.03	1/2	917.03	1/2	192.88	1/2		1/2	1/2	1/2		1/2	
3/4	2,020.73	3/4	1,650.26	3/4	1,279.79	3/4	909.31	3/4	909.31	3/4	185.15	3/4		3/4	3/4	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/16/2012 CL - SW  
CALCULATED: 03/18/2012 CL  
PRINTED: 03/18/2012 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2012

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





# BARGE "EMS 310"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-06"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
					4,990.51				4,628.37				3,886.98				3,144.90		2,773.86
1/4	1/4	1/4	1/4	1/4	4,983.94	1/4	1/4	1/4	4,620.67	1/4	1/4	1/4	3,879.25	1/4	1/4	1/4	3,137.17	1/4	2,766.13
1/2	1/2	1/2	1/2	1/2	4,977.36	1/2	1/2	1/2	4,612.98	1/2	1/2	1/2	3,871.52	1/2	1/2	1/2	3,129.44	1/2	2,758.40
3/4	3/4	3/4	3/4	3/4	4,970.79	3/4	3/4	3/4	4,605.29	3/4	3/4	3/4	3,863.79	3/4	3/4	3/4	3,121.71	3/4	2,750.67
1	1	1	1	1	4,964.21	1	1	1	4,597.59	1	1	1	3,856.06	1	1	1	3,113.98	1	2,742.94
1/4	1/4	1/4	1/4	1/4	4,956.88	1/4	1/4	1/4	4,589.90	1/4	1/4	1/4	3,848.33	1/4	1/4	1/4	3,106.25	1/4	2,735.21
1/2	1/2	1/2	1/2	1/2	4,949.56	1/2	1/2	1/2	4,582.20	1/2	1/2	1/2	3,840.60	1/2	1/2	1/2	3,098.52	1/2	2,727.48
3/4	3/4	3/4	3/4	3/4	4,942.23	3/4	3/4	3/4	4,574.51	3/4	3/4	3/4	3,832.87	3/4	3/4	3/4	3,090.79	3/4	2,719.75
2	2	2	2	2	4,934.90	2	2	2	4,566.81	2	2	2	3,825.14	2	2	2	3,083.06	2	2,712.02
1/4	1/4	1/4	1/4	1/4	4,927.25	1/4	1/4	1/4	4,559.12	1/4	1/4	1/4	3,817.41	1/4	1/4	1/4	3,075.33	1/4	2,704.29
1/2	1/2	1/2	1/2	1/2	4,919.60	1/2	1/2	1/2	4,551.43	1/2	1/2	1/2	3,809.68	1/2	1/2	1/2	3,067.60	1/2	2,696.56
3/4	3/4	3/4	3/4	3/4	4,911.95	3/4	3/4	3/4	4,543.73	3/4	3/4	3/4	3,801.95	3/4	3/4	3/4	3,059.87	3/4	2,688.83
3	3	3	3	3	4,904.30	3	3	3	4,536.04	3	3	3	3,794.22	3	3	3	3,052.14	3	2,681.10
1/4	1/4	1/4	1/4	1/4	4,896.65	1/4	1/4	1/4	4,528.34	1/4	1/4	1/4	3,786.49	1/4	1/4	1/4	3,044.41	1/4	2,673.37
1/2	1/2	1/2	1/2	1/2	4,889.00	1/2	1/2	1/2	4,520.65	1/2	1/2	1/2	3,778.76	1/2	1/2	1/2	3,036.68	1/2	2,665.64
3/4	3/4	3/4	3/4	3/4	4,881.35	3/4	3/4	3/4	4,512.96	3/4	3/4	3/4	3,771.03	3/4	3/4	3/4	3,028.95	3/4	2,657.91
4	4	4	4	4	4,873.70	4	4	4	4,505.26	4	4	4	3,763.30	4	4	4	3,021.22	4	2,650.18
1/4	1/4	1/4	1/4	1/4	4,866.05	1/4	1/4	1/4	4,497.56	1/4	1/4	1/4	3,755.57	1/4	1/4	1/4	3,013.49	1/4	2,642.45
1/2	1/2	1/2	1/2	1/2	4,858.41	1/2	1/2	1/2	4,489.86	1/2	1/2	1/2	3,747.84	1/2	1/2	1/2	3,005.76	1/2	2,634.72
3/4	3/4	3/4	3/4	3/4	4,850.76	3/4	3/4	3/4	4,482.16	3/4	3/4	3/4	3,740.11	3/4	3/4	3/4	2,998.03	3/4	2,626.99
5	5	5	5	5	4,843.11	5	5	5	4,474.46	5	5	5	3,732.38	5	5	5	2,990.30	5	2,619.26
1/4	1/4	1/4	1/4	1/4	4,835.46	1/4	1/4	1/4	4,466.73	1/4	1/4	1/4	3,724.65	1/4	1/4	1/4	2,982.57	1/4	2,611.53
1/2	1/2	1/2	1/2	1/2	4,827.82	1/2	1/2	1/2	4,459.00	1/2	1/2	1/2	3,716.92	1/2	1/2	1/2	2,974.84	1/2	2,603.80
3/4	3/4	3/4	3/4	3/4	4,820.17	3/4	3/4	3/4	4,451.27	3/4	3/4	3/4	3,709.19	3/4	3/4	3/4	2,967.11	3/4	2,596.07
6	6	6	6	6	4,812.52	6	6	6	4,443.54	6	6	6	3,701.46	6	6	6	2,959.38	6	2,588.34
1/4	1/4	1/4	1/4	1/4	4,804.87	1/4	1/4	1/4	4,435.81	1/4	1/4	1/4	3,693.73	1/4	1/4	1/4	2,951.65	1/4	2,580.61
1/2	1/2	1/2	1/2	1/2	4,797.23	1/2	1/2	1/2	4,428.08	1/2	1/2	1/2	3,686.00	1/2	1/2	1/2	2,943.92	1/2	2,572.88
3/4	3/4	3/4	3/4	3/4	4,789.58	3/4	3/4	3/4	4,420.35	3/4	3/4	3/4	3,678.27	3/4	3/4	3/4	2,936.19	3/4	2,565.15
7	7	7	7	7	4,781.93	7	7	7	4,412.62	7	7	7	3,670.54	7	7	7	2,928.46	7	2,557.42
1/4	1/4	1/4	1/4	1/4	4,774.28	1/4	1/4	1/4	4,404.89	1/4	1/4	1/4	3,662.81	1/4	1/4	1/4	2,920.73	1/4	2,549.69
1/2	1/2	1/2	1/2	1/2	4,766.64	1/2	1/2	1/2	4,397.16	1/2	1/2	1/2	3,655.08	1/2	1/2	1/2	2,913.00	1/2	2,541.96
3/4	3/4	3/4	3/4	3/4	4,758.99	3/4	3/4	3/4	4,389.43	3/4	3/4	3/4	3,647.35	3/4	3/4	3/4	2,905.27	3/4	2,534.23
8	8	8	8	8	4,751.34	8	8	8	4,381.70	8	8	8	3,639.62	8	8	8	2,897.54	8	2,526.50
1/4	1/4	1/4	1/4	1/4	4,743.68	1/4	1/4	1/4	4,373.97	1/4	1/4	1/4	3,631.89	1/4	1/4	1/4	2,889.81	1/4	2,518.77
1/2	1/2	1/2	1/2	1/2	4,736.02	1/2	1/2	1/2	4,366.24	1/2	1/2	1/2	3,624.16	1/2	1/2	1/2	2,882.08	1/2	2,511.04
3/4	3/4	3/4	3/4	3/4	4,728.36	3/4	3/4	3/4	4,358.51	3/4	3/4	3/4	3,616.43	3/4	3/4	3/4	2,874.35	3/4	2,503.31
9	9	9	9	5,048.81	4,720.70	9	9	9	4,350.78	9	9	9	3,608.70	9	9	9	2,866.62	9	2,495.58
1/4	1/4	1/4	1/4	5,044.81	4,713.01	1/4	1/4	1/4	4,343.05	1/4	1/4	1/4	3,600.97	1/4	1/4	1/4	2,858.89	1/4	2,487.85
1/2	1/2	1/2	1/2	5,040.81	4,705.31	1/2	1/2	1/2	4,335.32	1/2	1/2	1/2	3,593.24	1/2	1/2	1/2	2,851.16	1/2	2,480.12
3/4	3/4	3/4	3/4	5,036.81	4,697.62	3/4	3/4	3/4	4,327.59	3/4	3/4	3/4	3,585.51	3/4	3/4	3/4	2,843.43	3/4	2,472.39
10	10	10	10	5,032.82	4,689.92	10	10	10	4,319.86	10	10	10	3,577.78	10	10	10	2,835.70	10	2,464.66
1/4	1/4	1/4	1/4	5,027.96	4,682.23	1/4	1/4	1/4	4,312.13	1/4	1/4	1/4	3,570.05	1/4	1/4	1/4	2,827.97	1/4	2,456.93
1/2	1/2	1/2	1/2	5,023.10	4,674.53	1/2	1/2	1/2	4,304.40	1/2	1/2	1/2	3,562.32	1/2	1/2	1/2	2,820.24	1/2	2,449.20
3/4	3/4	3/4	3/4	5,018.24	4,666.84	3/4	3/4	3/4	4,296.67	3/4	3/4	3/4	3,554.59	3/4	3/4	3/4	2,812.51	3/4	2,441.47
11	11	11	11	5,013.38	4,659.14	11	11	11	4,288.94	11	11	11	3,546.86	11	11	11	2,804.78	11	2,433.74
1/4	1/4	1/4	1/4	5,007.67	4,651.45	1/4	1/4	1/4	4,281.21	1/4	1/4	1/4	3,539.13	1/4	1/4	1/4	2,797.05	1/4	2,426.01
1/2	1/2	1/2	1/2	5,001.95	4,643.76	1/2	1/2	1/2	4,273.48	1/2	1/2	1/2	3,531.40	1/2	1/2	1/2	2,789.32	1/2	2,418.28
3/4	3/4	3/4	3/4	4,996.23	4,636.06	3/4	3/4	3/4	4,265.75	3/4	3/4	3/4	3,523.67	3/4	3/4	3/4	2,781.59	3/4	2,410.55

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.  
 GAUGE POINT: (HERMETIC) LOCATED 10'-06" OFF CENTERLINE AND 46'-00" FORWARD OF AFT BULKHEAD.

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





# BARGE "EMS 310"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-06"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
	2,402.82		2,031.76		1,660.68		1,289.60		918.52		548.18		177.34								
1/4	2,395.09	1/4	2,024.03	1/4	1,652.95	1/4	1,281.87	1/4	910.79	1/4	540.47	1/4	169.62	1/4		1/4		1/4		1/4	
1/2	2,387.36	1/2	2,016.30	1/2	1,645.22	1/2	1,274.14	1/2	903.06	1/2	532.77	1/2	161.91	1/2		1/2		1/2		1/2	
3/4	2,379.63	3/4	2,008.57	3/4	1,637.49	3/4	1,266.41	3/4	895.33	3/4	525.07	3/4	154.20	3/4		3/4		3/4		3/4	
1	2,371.90	1	2,000.84	1	1,629.76	1	1,258.68	1	887.60	1	517.37	1	146.49	1		1		1		1	
1/4	2,364.17	1/4	1,993.11	1/4	1,622.03	1/4	1,250.95	1/4	879.87	1/4	509.65	1/4	138.79	1/4		1/4		1/4		1/4	
1/2	2,356.44	1/2	1,985.37	1/2	1,614.30	1/2	1,243.22	1/2	872.14	1/2	501.94	1/2	131.09	1/2		1/2		1/2		1/2	
3/4	2,348.71	3/4	1,977.64	3/4	1,606.57	3/4	1,235.49	3/4	864.41	3/4	494.23	3/4	123.40	3/4		3/4		3/4		3/4	
2	2,340.98	2	1,969.91	2	1,598.83	2	1,227.76	2	856.68	2	486.52	2	115.70	2		2		2		2	
1/4	2,333.25	1/4	1,962.18	1/4	1,591.10	1/4	1,220.03	1/4	848.95	1/4	478.80	1/4	108.04	1/4		1/4		1/4		1/4	
1/2	2,325.52	1/2	1,954.45	1/2	1,583.37	1/2	1,212.29	1/2	841.22	1/2	471.08	1/2	100.37	1/2		1/2		1/2		1/2	
3/4	2,317.79	3/4	1,946.72	3/4	1,575.64	3/4	1,204.56	3/4	833.49	3/4	463.36	3/4	92.70	3/4		3/4		3/4		3/4	
3	2,310.06	3	1,938.99	3	1,567.91	3	1,196.83	3	825.75	3	455.63	3	85.04	3		3		3		3	
1/4	2,302.33	1/4	1,931.26	1/4	1,560.18	1/4	1,189.10	1/4	818.02	1/4	447.90	1/4	77.62	1/4		1/4		1/4		1/4	
1/2	2,294.60	1/2	1,923.53	1/2	1,552.45	1/2	1,181.37	1/2	810.29	1/2	440.17	1/2	70.20	1/2		1/2		1/2		1/2	
3/4	2,286.87	3/4	1,915.80	3/4	1,544.72	3/4	1,173.64	3/4	802.56	3/4	432.44	3/4	62.79	3/4		3/4		3/4		3/4	
4	2,279.15	4	1,908.07	4	1,536.99	4	1,165.91	4	794.83	4	424.71	4	55.37	4		4		4		4	
1/4	2,271.41	1/4	1,900.34	1/4	1,529.26	1/4	1,158.18	1/4	787.11	1/4	416.98	1/4	49.10	1/4		1/4		1/4		1/4	
1/2	2,263.68	1/2	1,892.61	1/2	1,521.53	1/2	1,150.45	1/2	779.38	1/2	409.24	1/2	42.82	1/2		1/2		1/2		1/2	
3/4	2,255.95	3/4	1,884.87	3/4	1,513.80	3/4	1,142.72	3/4	771.66	3/4	401.51	3/4	36.54	3/4		3/4		3/4		3/4	
5	2,248.22	5	1,877.14	5	1,506.07	5	1,134.99	5	763.93	5	393.78	5	30.26	5		5		5		5	
1/4	2,240.49	1/4	1,869.41	1/4	1,498.33	1/4	1,127.26	1/4	756.21	1/4	386.05	1/4	25.92	1/4		1/4		1/4		1/4	
1/2	2,232.76	1/2	1,861.68	1/2	1,490.60	1/2	1,119.53	1/2	748.49	1/2	378.32	1/2	21.57	1/2		1/2		1/2		1/2	
3/4	2,225.03	3/4	1,853.95	3/4	1,482.87	3/4	1,111.79	3/4	740.77	3/4	370.59	3/4	17.22	3/4		3/4		3/4		3/4	
6	2,217.30	6	1,846.22	6	1,475.14	6	1,104.06	6	733.05	6	362.86	6	12.87	6		6		6		6	
1/4	2,209.57	1/4	1,838.49	1/4	1,467.41	1/4	1,096.33	1/4	725.33	1/4	355.12	1/4		1/4		1/4		1/4		1/4	
1/2	2,201.84	1/2	1,830.76	1/2	1,459.68	1/2	1,088.60	1/2	717.61	1/2	347.39	1/2		1/2		1/2		1/2		1/2	
3/4	2,194.11	3/4	1,823.03	3/4	1,451.95	3/4	1,080.87	3/4	709.90	3/4	339.66	3/4		3/4		3/4		3/4		3/4	
7	2,186.38	7	1,815.30	7	1,444.22	7	1,073.14	7	702.18	7	331.93	7		7		7		7		7	
1/4	2,178.64	1/4	1,807.57	1/4	1,436.49	1/4	1,065.41	1/4	694.47	1/4	324.20	1/4		1/4		1/4		1/4		1/4	
1/2	2,170.91	1/2	1,799.84	1/2	1,428.76	1/2	1,057.68	1/2	686.77	1/2	316.47	1/2		1/2		1/2		1/2		1/2	
3/4	2,163.18	3/4	1,792.10	3/4	1,421.03	3/4	1,049.95	3/4	679.06	3/4	308.74	3/4		3/4		3/4		3/4		3/4	
8	2,155.45	8	1,784.37	8	1,413.30	8	1,042.22	8	671.35	8	301.01	8		8		8		8		8	
1/4	2,147.72	1/4	1,776.64	1/4	1,405.56	1/4	1,034.49	1/4	663.65	1/4	293.27	1/4		1/4		1/4		1/4		1/4	
1/2	2,139.99	1/2	1,768.91	1/2	1,397.83	1/2	1,026.76	1/2	655.95	1/2	285.54	1/2		1/2		1/2		1/2		1/2	
3/4	2,132.26	3/4	1,761.18	3/4	1,390.10	3/4	1,019.02	3/4	648.25	3/4	277.81	3/4		3/4		3/4		3/4		3/4	
9	2,124.53	9	1,753.45	9	1,382.37	9	1,011.29	9	640.55	9	270.08	9		9		9		9		9	
1/4	2,116.80	1/4	1,745.72	1/4	1,374.64	1/4	1,003.56	1/4	632.85	1/4	262.35	1/4		1/4		1/4		1/4		1/4	
1/2	2,109.07	1/2	1,737.99	1/2	1,366.91	1/2	995.83	1/2	625.15	1/2	254.62	1/2		1/2		1/2		1/2		1/2	
3/4	2,101.34	3/4	1,730.26	3/4	1,359.18	3/4	988.10	3/4	617.45	3/4	246.89	3/4		3/4		3/4		3/4		3/4	
10	2,093.61	10	1,722.53	10	1,351.45	10	980.37	10	609.75	10	239.15	10		10		10		10		10	
1/4	2,085.88	1/4	1,714.80	1/4	1,343.72	1/4	972.64	1/4	602.06	1/4	231.42	1/4		1/4		1/4		1/4		1/4	
1/2	2,078.14	1/2	1,707.07	1/2	1,335.99	1/2	964.91	1/2	594.36	1/2	223.69	1/2		1/2		1/2		1/2		1/2	
3/4	2,070.41	3/4	1,699.34	3/4	1,328.26	3/4	957.18	3/4	586.66	3/4	215.97	3/4		3/4		3/4		3/4		3/4	
11	2,062.68	11	1,691.60	11	1,320.53	11	949.45	11	578.97	11	208.24	11		11		11		11		11	
1/4	2,054.95	1/4	1,683.87	1/4	1,312.80	1/4	941.72	1/4	571.27	1/4	200.51	1/4		1/4		1/4		1/4		1/4	
1/2	2,047.22	1/2	1,676.14	1/2	1,305.06	1/2	933.99	1/2	563.57	1/2	192.79	1/2		1/2		1/2		1/2		1/2	
3/4	2,039.49	3/4	1,668.41	3/4	1,297.33	3/4	926.26	3/4	555.87	3/4	185.06	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/16/2012 CL - SW  
CALCULATED: 03/18/2012 CL  
PRINTED: 03/18/2012 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2012

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



# BARGE "EMS 310"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 3/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0		
1/4		1/4		1/4		1/4	4,348.13	1/4	4,124.20	1/4	3,896.64	1/4	3,669.08	1/4	3,441.53	1/4	3,125.11	1/4	2,755.31		
1/2		1/2		1/2		1/2	4,344.08	1/2	4,119.46	1/2	3,891.90	1/2	3,664.34	1/2	3,436.79	1/2	3,117.42	1/2	2,747.57		
3/4		3/4		3/4		3/4	4,340.02	3/4	4,114.72	3/4	3,887.16	3/4	3,659.60	3/4	3,432.04	3/4	3,109.72	3/4	2,739.84		
1		1		1		1	4,335.96	1	4,109.98	1	3,882.42	1	3,654.86	1	3,427.30	1	3,102.03	1	2,732.10		
1/4		1/4		1/4		1/4	4,331.44	1/4	4,105.24	1/4	3,877.68	1/4	3,650.12	1/4	3,422.50	1/4	3,094.33	1/4	2,724.37		
1/2		1/2		1/2		1/2	4,326.92	1/2	4,100.50	1/2	3,872.94	1/2	3,645.38	1/2	3,417.71	1/2	3,086.64	1/2	2,716.63		
3/4		3/4		3/4		3/4	4,322.40	3/4	4,095.76	3/4	3,868.20	3/4	3,640.64	3/4	3,412.91	3/4	3,078.94	3/4	2,708.90		
2		2		2		2	4,317.89	2	4,091.02	2	3,863.46	2	3,635.90	2	3,408.11	2	3,071.25	2	2,701.16		
1/4		1/4		1/4		1/4	4,313.17	1/4	4,086.27	1/4	3,858.72	1/4	3,631.16	1/4	3,403.01	1/4	3,063.56	1/4	2,693.43		
1/2		1/2		1/2		1/2	4,308.45	1/2	4,081.53	1/2	3,853.98	1/2	3,626.42	1/2	3,397.91	1/2	3,055.86	1/2	2,685.69		
3/4		3/4		3/4		3/4	4,303.74	3/4	4,076.79	3/4	3,849.23	3/4	3,621.68	3/4	3,392.81	3/4	3,048.17	3/4	2,677.96		
3		3		3		3	4,299.02	3	4,072.05	3	3,844.49	3	3,616.94	3	3,387.71	3	3,040.47	3	2,670.22		
1/4		1/4		1/4		1/4	4,294.31	1/4	4,067.31	1/4	3,839.75	1/4	3,612.19	1/4	3,382.11	1/4	3,032.78	1/4	2,662.49		
1/2		1/2		1/2		1/2	4,289.59	1/2	4,062.57	1/2	3,835.01	1/2	3,607.45	1/2	3,376.52	1/2	3,025.08	1/2	2,654.75		
3/4		3/4		3/4		3/4	4,284.87	3/4	4,057.83	3/4	3,830.27	3/4	3,602.71	3/4	3,370.92	3/4	3,017.39	3/4	2,647.02		
4		4		4		4	4,280.16	4	4,053.09	4	3,825.53	4	3,597.97	4	3,365.32	4	3,009.70	4	2,639.28		
1/4		1/4		1/4		1/4	4,275.44	1/4	4,048.35	1/4	3,820.79	1/4	3,593.23	1/4	3,359.22	1/4	3,002.00	1/4	2,631.55		
1/2		1/2		1/2		1/2	4,270.73	1/2	4,043.61	1/2	3,816.05	1/2	3,588.49	1/2	3,353.12	1/2	2,994.31	1/2	2,623.81		
3/4		3/4		3/4		3/4	4,266.02	3/4	4,038.87	3/4	3,811.31	3/4	3,583.75	3/4	3,347.03	3/4	2,986.61	3/4	2,616.08		
5		5		5		5	4,261.30	5	4,034.13	5	3,806.57	5	3,579.01	5	3,340.93	5	2,978.92	5	2,608.34		
1/4		1/4		1/4		1/4	4,256.59	1/4	4,029.39	1/4	3,801.83	1/4	3,574.27	1/4	3,334.33	1/4	2,971.22	1/4	2,600.61		
1/2		1/2		1/2		1/2	4,251.87	1/2	4,024.64	1/2	3,797.09	1/2	3,569.53	1/2	3,327.73	1/2	2,963.52	1/2	2,592.87		
3/4		3/4		3/4		3/4	4,247.16	3/4	4,019.90	3/4	3,792.35	3/4	3,564.79	3/4	3,321.14	3/4	2,955.82	3/4	2,585.14		
6		6		6		6	4,242.44	6	4,015.16	6	3,787.60	6	3,560.05	6	3,314.54	6	2,948.12	6	2,577.40		
1/4		1/4		1/4		1/4	4,237.73	1/4	4,010.42	1/4	3,782.86	1/4	3,555.31	1/4	3,307.44	1/4	2,940.41	1/4	2,569.67		
1/2		1/2		1/2		1/2	4,233.01	1/2	4,005.68	1/2	3,778.12	1/2	3,550.56	1/2	3,300.34	1/2	2,932.70	1/2	2,561.93		
3/4		3/4		3/4		3/4	4,228.30	3/4	4,000.94	3/4	3,773.38	3/4	3,545.82	3/4	3,293.25	3/4	2,924.99	3/4	2,554.20		
7		7		7		7	4,223.59	7	3,996.20	7	3,768.64	7	3,541.08	7	3,286.15	7	2,917.28	7	2,546.46		
1/4		1/4		1/4		1/4	4,218.87	1/4	3,991.46	1/4	3,763.90	1/4	3,536.34	1/4	3,278.62	1/4	2,909.57	1/4	2,538.73		
1/2		1/2		1/2		1/2	4,214.16	1/2	3,986.72	1/2	3,759.16	1/2	3,531.60	1/2	3,271.08	1/2	2,901.86	1/2	2,530.99		
3/4		3/4		3/4		3/4	4,209.44	3/4	3,981.98	3/4	3,754.42	3/4	3,526.86	3/4	3,263.55	3/4	2,894.15	3/4	2,523.26		
8		8		8		8	4,204.73	8	3,977.24	8	3,749.68	8	3,522.12	8	3,256.01	8	2,886.44	8	2,515.52		
1/4		1/4		1/4		1/4	4,200.01	1/4	3,972.50	1/4	3,744.94	1/4	3,517.38	1/4	3,248.30	1/4	2,878.73	1/4	2,507.79		
1/2		1/2		1/2		1/2	4,195.29	1/2	3,967.75	1/2	3,740.20	1/2	3,512.64	1/2	3,240.58	1/2	2,871.02	1/2	2,500.05		
3/4		3/4		3/4		3/4	4,190.56	3/4	3,963.01	3/4	3,735.46	3/4	3,507.90	3/4	3,232.87	3/4	2,863.30	3/4	2,492.32		
9		9		9		9	4,388.23	9	4,185.84	9	3,958.27	9	3,730.71	9	3,503.16	9	3,225.15	9	2,855.59	9	2,484.59
1/4		1/4		1/4		1/4	4,385.75	1/4	4,181.10	1/4	3,953.53	1/4	3,725.97	1/4	3,498.42	1/4	3,217.46	1/4	2,847.88	1/4	2,476.85
1/2		1/2		1/2		1/2	4,383.28	1/2	4,176.36	1/2	3,948.79	1/2	3,721.23	1/2	3,493.67	1/2	3,209.76	1/2	2,840.17	1/2	2,469.12
3/4		3/4		3/4		3/4	4,380.80	3/4	4,171.62	3/4	3,944.05	3/4	3,716.49	3/4	3,488.93	3/4	3,202.07	3/4	2,832.46	3/4	2,461.38
10		10		10		10	4,378.33	10	4,166.88	10	3,939.31	10	3,711.75	10	3,484.19	10	3,194.37	10	2,824.75	10	2,453.65
1/4		1/4		1/4		1/4	4,375.32	1/4	4,162.13	1/4	3,934.57	1/4	3,707.01	1/4	3,479.45	1/4	3,186.67	1/4	2,817.04	1/4	2,445.91
1/2		1/2		1/2		1/2	4,372.32	1/2	4,157.39	1/2	3,929.83	1/2	3,702.27	1/2	3,474.71	1/2	3,178.98	1/2	2,809.33	1/2	2,438.18
3/4		3/4		3/4		3/4	4,369.32	3/4	4,152.65	3/4	3,925.09	3/4	3,697.53	3/4	3,469.97	3/4	3,171.28	3/4	2,801.62	3/4	2,430.44
11		11		11		11	4,366.31	11	4,147.91	11	3,920.35	11	3,692.79	11	3,465.23	11	3,163.59	11	2,793.91	11	2,422.71
1/4		1/4		1/4		1/4	4,362.78	1/4	4,143.16	1/4	3,915.61	1/4	3,688.05	1/4	3,460.49	1/4	3,155.89	1/4	2,786.19	1/4	2,414.97
1/2		1/2		1/2		1/2	4,359.25	1/2	4,138.42	1/2	3,910.87	1/2	3,683.31	1/2	3,455.75	1/2	3,148.20	1/2	2,778.47	1/2	2,407.24
3/4		3/4		3/4		3/4	4,355.72	3/4	4,133.68	3/4	3,906.12	3/4	3,678.57	3/4	3,451.01	3/4	3,140.50	3/4	2,770.76	3/4	2,399.50
							4,352.19		4,128.94		3,901.38		3,673.83		3,446.27		3,132.81		2,763.04		2,391.77

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.  
 GAUGE POINT: (HERMETIC) LOCATED 10'-06" OFF CENTERLINE AND 46'-03" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "EMS 310"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 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	2,384.03	0	2,012.84	0	1,643.66	0	1,272.41	0	901.15	0	539.65	0	169.76	0		0		0	
1/4	2,376.30	1/4	2,005.15	1/4	1,635.93	1/4	1,264.67	1/4	893.41	1/4	532.15	1/4	162.04	1/4	1/4		1/4		1/4
1/2	2,368.56	1/2	1,997.46	1/2	1,628.19	1/2	1,256.94	1/2	885.68	1/2	524.65	1/2	154.32	1/2	1/2		1/2		1/2
3/4	2,360.83	3/4	1,989.77	3/4	1,620.46	3/4	1,249.20	3/4	877.95	3/4	517.15	3/4	146.60	3/4	3/4		3/4		3/4
1	2,353.09	1	1,982.08	1	1,612.72	1	1,241.47	1	870.27	1	509.60	1	138.90	1	1		1		1
1/4	2,345.36	1/4	1,974.39	1/4	1,604.99	1/4	1,233.73	1/4	862.59	1/4	502.04	1/4	131.20	1/4	1/4		1/4		1/4
1/2	2,337.62	1/2	1,966.70	1/2	1,597.25	1/2	1,226.00	1/2	854.91	1/2	494.48	1/2	123.50	1/2	1/2		1/2		1/2
3/4	2,329.89	3/4	1,959.01	3/4	1,589.52	3/4	1,218.26	3/4	847.23	3/4	486.93	3/4	115.80	3/4	3/4		3/4		3/4
2	2,322.15	2	1,951.32	2	1,581.79	2	1,210.53	2	839.72	2	479.20	2	108.12	2	2		2		2
1/4	2,314.42	1/4	1,943.63	1/4	1,574.05	1/4	1,202.79	1/4	832.21	1/4	471.47	1/4	100.45	1/4	1/4		1/4		1/4
1/2	2,306.68	1/2	1,935.94	1/2	1,566.32	1/2	1,195.06	1/2	824.71	1/2	463.74	1/2	92.78	1/2	1/2		1/2		1/2
3/4	2,298.95	3/4	1,928.26	3/4	1,558.58	3/4	1,187.33	3/4	817.20	3/4	456.01	3/4	85.10	3/4	3/4		3/4		3/4
3	2,291.21	3	1,920.57	3	1,550.85	3	1,179.59	3	809.69	3	448.27	3	77.68	3	3		3		3
1/4	2,283.48	1/4	1,912.88	1/4	1,543.11	1/4	1,171.86	1/4	802.18	1/4	440.53	1/4	70.26	1/4	1/4		1/4		1/4
1/2	2,275.74	1/2	1,905.19	1/2	1,535.38	1/2	1,164.12	1/2	794.67	1/2	432.79	1/2	62.84	1/2	1/2		1/2		1/2
3/4	2,268.01	3/4	1,897.50	3/4	1,527.64	3/4	1,156.39	3/4	787.16	3/4	425.05	3/4	55.42	3/4	3/4		3/4		3/4
4	2,260.27	4	1,889.81	4	1,519.91	4	1,148.65	4	779.65	4	417.32	4	49.14	4	4		4		4
1/4	2,252.54	1/4	1,882.12	1/4	1,512.17	1/4	1,140.92	1/4	772.14	1/4	409.58	1/4	42.85	1/4	1/4		1/4		1/4
1/2	2,244.80	1/2	1,874.43	1/2	1,504.44	1/2	1,133.18	1/2	764.64	1/2	401.84	1/2	36.57	1/2	1/2		1/2		1/2
3/4	2,237.07	3/4	1,866.74	3/4	1,496.71	3/4	1,125.45	3/4	757.13	3/4	394.10	3/4	30.29	3/4	3/4		3/4		3/4
5	2,229.33	5	1,859.05	5	1,488.97	5	1,117.72	5	749.62	5	386.37	5	25.94	5	5		5		5
1/4	2,221.60	1/4	1,851.36	1/4	1,481.24	1/4	1,109.98	1/4	742.12	1/4	378.63	1/4	21.59	1/4	1/4		1/4		1/4
1/2	2,213.86	1/2	1,843.67	1/2	1,473.50	1/2	1,102.25	1/2	734.61	1/2	370.89	1/2	17.28	1/2	1/2		1/2		1/2
3/4	2,206.13	3/4	1,835.99	3/4	1,465.77	3/4	1,094.51	3/4	727.11	3/4	363.15	3/4	12.88	3/4	3/4		3/4		3/4
6	2,198.39	6	1,828.30	6	1,458.03	6	1,086.78	6	719.61	6	355.42	6		6	6		6		6
1/4	2,190.65	1/4	1,820.61	1/4	1,450.30	1/4	1,079.04	1/4	712.10	1/4	347.68	1/4		1/4	1/4		1/4		1/4
1/2	2,182.92	1/2	1,812.92	1/2	1,442.56	1/2	1,071.31	1/2	704.60	1/2	339.94	1/2		1/2	1/2		1/2		1/2
3/4	2,175.18	3/4	1,805.23	3/4	1,434.83	3/4	1,063.57	3/4	697.10	3/4	332.20	3/4		3/4	3/4		3/4		3/4
7	2,167.45	7	1,797.54	7	1,427.10	7	1,055.84	7	689.60	7	324.46	7		7	7		7		7
1/4	2,159.71	1/4	1,789.85	1/4	1,419.36	1/4	1,048.10	1/4	682.10	1/4	316.73	1/4		1/4	1/4		1/4		1/4
1/2	2,151.98	1/2	1,782.16	1/2	1,411.63	1/2	1,040.37	1/2	674.60	1/2	308.99	1/2		1/2	1/2		1/2		1/2
3/4	2,144.24	3/4	1,774.47	3/4	1,403.89	3/4	1,032.64	3/4	667.10	3/4	301.25	3/4		3/4	3/4		3/4		3/4
8	2,136.51	8	1,766.78	8	1,396.16	8	1,024.90	8	659.60	8	293.51	8		8	8		8		8
1/4	2,128.77	1/4	1,759.09	1/4	1,388.42	1/4	1,017.17	1/4	652.10	1/4	285.78	1/4		1/4	1/4		1/4		1/4
1/2	2,121.04	1/2	1,751.41	1/2	1,380.69	1/2	1,009.43	1/2	644.60	1/2	278.04	1/2		1/2	1/2		1/2		1/2
3/4	2,113.30	3/4	1,743.72	3/4	1,372.95	3/4	1,001.70	3/4	637.10	3/4	270.30	3/4		3/4	3/4		3/4		3/4
9	2,105.57	9	1,736.03	9	1,365.22	9	993.96	9	629.61	9	262.56	9		9	9		9		9
1/4	2,097.83	1/4	1,728.34	1/4	1,357.48	1/4	986.23	1/4	622.11	1/4	254.83	1/4		1/4	1/4		1/4		1/4
1/2	2,090.10	1/2	1,720.65	1/2	1,349.75	1/2	978.49	1/2	614.61	1/2	247.09	1/2		1/2	1/2		1/2		1/2
3/4	2,082.36	3/4	1,712.96	3/4	1,342.02	3/4	970.76	3/4	607.11	3/4	239.35	3/4		3/4	3/4		3/4		3/4
10	2,074.62	10	1,705.27	10	1,334.28	10	963.03	10	599.62	10	231.61	10		10	10		10		10
1/4	2,066.89	1/4	1,697.58	1/4	1,326.55	1/4	955.29	1/4	592.12	1/4	223.88	1/4		1/4	1/4		1/4		1/4
1/2	2,059.15	1/2	1,689.89	1/2	1,318.81	1/2	947.56	1/2	584.63	1/2	216.14	1/2		1/2	1/2		1/2		1/2
3/4	2,051.42	3/4	1,682.20	3/4	1,311.08	3/4	939.82	3/4	577.13	3/4	208.41	3/4		3/4	3/4		3/4		3/4
11	2,043.70	11	1,674.50	11	1,303.34	11	932.09	11	569.64	11	200.68	11		11	11		11		11
1/4	2,035.97	1/4	1,666.80	1/4	1,295.61	1/4	924.35	1/4	562.14	1/4	192.94	1/4		1/4	1/4		1/4		1/4
1/2	2,028.25	1/2	1,659.10	1/2	1,287.87	1/2	916.62	1/2	554.65	1/2	185.21	1/2		1/2	1/2		1/2		1/2
3/4	2,020.52	3/4	1,651.40	3/4	1,280.14	3/4	908.88	3/4	547.15	3/4	177.48	3/4		3/4	3/4		3/4		3/4

STRAPPED: 03/16/2012 CL - SW  
CALCULATED: 03/18/2012 CL  
PRINTED: 03/18/2012 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2012

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
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P.O. Box 2092  
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# BARGE "EMS 310"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 3/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0		
1/4		1/4		1/4		1/4	4,338.19	1/4	4,113.63	1/4	3,886.12	1/4	3,658.61	1/4	3,431.09	1/4	3,112.12	1/4	2,743.11		
1/2		1/2		1/2		1/2	4,334.13	1/2	4,108.89	1/2	3,881.38	1/2	3,653.87	1/2	3,426.35	1/2	3,104.44	1/2	2,735.41		
3/4		3/4		3/4		3/4	4,330.08	3/4	4,104.15	3/4	3,876.64	3/4	3,649.13	3/4	3,421.62	3/4	3,096.76	3/4	2,727.70		
1	1	1	1	1	1	1	4,099.41	1	4,099.41	1	3,871.90	1	3,644.39	1	3,416.82	1	3,089.08	1	2,719.99		
1/4		1/4		1/4		1/4	4,321.04	1/4	4,094.67	1/4	3,867.16	1/4	3,639.65	1/4	3,412.02	1/4	3,081.40	1/4	2,712.29		
1/2		1/2		1/2		1/2	4,316.52	1/2	4,089.93	1/2	3,862.42	1/2	3,634.91	1/2	3,407.22	1/2	3,073.72	1/2	2,704.58		
3/4		3/4		3/4		3/4	4,312.00	3/4	4,085.19	3/4	3,857.68	3/4	3,630.17	3/4	3,402.42	3/4	3,066.04	3/4	2,696.87		
2	2	2	2	2	2	2	4,307.29	2	4,080.45	2	3,852.94	2	3,625.43	2	3,397.33	2	3,058.36	2	2,689.17		
1/4		1/4		1/4		1/4	4,302.57	1/4	4,075.71	1/4	3,848.20	1/4	3,620.69	1/4	3,392.23	1/4	3,050.69	1/4	2,681.46		
1/2		1/2		1/2		1/2	4,297.86	1/2	4,070.97	1/2	3,843.46	1/2	3,615.95	1/2	3,387.13	1/2	3,043.01	1/2	2,673.76		
3/4		3/4		3/4		3/4	4,293.14	3/4	4,066.23	3/4	3,838.72	3/4	3,611.21	3/4	3,382.03	3/4	3,035.33	3/4	2,666.05		
3	3	3	3	3	3	3	4,288.43	3	4,061.49	3	3,833.98	3	3,606.47	3	3,376.44	3	3,027.65	3	2,658.34		
1/4		1/4		1/4		1/4	4,283.72	1/4	4,056.75	1/4	3,829.24	1/4	3,601.73	1/4	3,370.84	1/4	3,019.97	1/4	2,650.64		
1/2		1/2		1/2		1/2	4,279.00	1/2	4,052.01	1/2	3,824.50	1/2	3,596.99	1/2	3,365.24	1/2	3,012.29	1/2	2,642.93		
3/4		3/4		3/4		3/4	4,274.29	3/4	4,047.27	3/4	3,819.76	3/4	3,592.25	3/4	3,359.64	3/4	3,004.61	3/4	2,635.22		
4	4	4	4	4	4	4	4,269.57	4	4,042.53	4	3,815.02	4	3,587.51	4	3,353.55	4	2,996.93	4	2,627.52		
1/4		1/4		1/4		1/4	4,264.86	1/4	4,037.79	1/4	3,810.28	1/4	3,582.77	1/4	3,347.45	1/4	2,989.25	1/4	2,619.81		
1/2		1/2		1/2		1/2	4,260.15	1/2	4,033.05	1/2	3,805.54	1/2	3,578.03	1/2	3,341.35	1/2	2,981.57	1/2	2,612.10		
3/4		3/4		3/4		3/4	4,255.43	3/4	4,028.31	3/4	3,800.80	3/4	3,573.29	3/4	3,335.26	3/4	2,973.89	3/4	2,604.40		
5	5	5	5	5	5	5	4,250.72	5	4,023.57	5	3,796.06	5	3,568.55	5	3,328.66	5	2,966.21	5	2,596.69		
1/4		1/4		1/4		1/4	4,246.01	1/4	4,018.83	1/4	3,791.32	1/4	3,563.81	1/4	3,322.06	1/4	2,958.53	1/4	2,588.98		
1/2		1/2		1/2		1/2	4,241.29	1/2	4,014.09	1/2	3,786.58	1/2	3,559.07	1/2	3,315.47	1/2	2,950.84	1/2	2,581.27		
3/4		3/4		3/4		3/4	4,236.58	3/4	4,009.35	3/4	3,781.84	3/4	3,554.33	3/4	3,308.87	3/4	2,943.16	3/4	2,573.56		
6	6	6	6	6	6	6	4,231.87	6	4,004.61	6	3,777.10	6	3,549.59	6	3,301.78	6	2,935.46	6	2,565.85		
1/4		1/4		1/4		1/4	4,227.15	1/4	3,999.87	1/4	3,772.36	1/4	3,544.85	1/4	3,294.69	1/4	2,927.77	1/4	2,558.13		
1/2		1/2		1/2		1/2	4,222.44	1/2	3,995.13	1/2	3,767.62	1/2	3,540.11	1/2	3,287.60	1/2	2,920.07	1/2	2,550.41		
3/4		3/4		3/4		3/4	4,217.73	3/4	3,990.39	3/4	3,762.88	3/4	3,535.37	3/4	3,280.51	3/4	2,912.37	3/4	2,542.70		
7	7	7	7	7	7	7	4,213.01	7	3,985.65	7	3,758.14	7	3,530.63	7	3,272.99	7	2,904.68	7	2,534.97		
1/4		1/4		1/4		1/4	4,208.30	1/4	3,980.91	1/4	3,753.40	1/4	3,525.89	1/4	3,265.47	1/4	2,896.98	1/4	2,527.25		
1/2		1/2		1/2		1/2	4,203.58	1/2	3,976.17	1/2	3,748.66	1/2	3,521.15	1/2	3,257.96	1/2	2,889.29	1/2	2,519.53		
3/4		3/4		3/4		3/4	4,198.87	3/4	3,971.43	3/4	3,743.92	3/4	3,516.41	3/4	3,250.44	3/4	2,881.59	3/4	2,511.81		
8	8	8	8	8	8	8	4,194.15	8	3,966.69	8	3,739.18	8	3,511.67	8	3,242.74	8	2,873.89	8	2,504.08		
1/4		1/4		1/4		1/4	4,189.43	1/4	3,961.95	1/4	3,734.44	1/4	3,506.93	1/4	3,235.04	1/4	2,866.20	1/4	2,496.36		
1/2		1/2		1/2		1/2	4,184.71	1/2	3,957.21	1/2	3,729.70	1/2	3,502.19	1/2	3,227.34	1/2	2,858.50	1/2	2,488.64		
3/4		3/4		3/4		3/4	4,179.99	3/4	3,952.47	3/4	3,724.96	3/4	3,497.45	3/4	3,219.65	3/4	2,850.81	3/4	2,480.91		
9	9	9	9	9	9	9	4,379.85	9	4,175.25	9	3,947.73	9	3,720.22	9	3,492.71	9	3,211.97	9	2,843.11	9	2,473.19
1/4		1/4		1/4		1/4	4,377.38	1/4	4,170.51	1/4	3,942.99	1/4	3,715.48	1/4	3,487.97	1/4	3,204.29	1/4	2,835.42	1/4	2,465.47
1/2		1/2		1/2		1/2	4,374.90	1/2	4,165.77	1/2	3,938.25	1/2	3,710.74	1/2	3,483.23	1/2	3,196.61	1/2	2,827.72	1/2	2,457.75
3/4		3/4		3/4		3/4	4,372.43	3/4	4,161.03	3/4	3,933.51	3/4	3,706.00	3/4	3,478.49	3/4	3,188.93	3/4	2,820.03	3/4	2,450.02
10	10	10	10	10	10	10	4,369.43	10	4,156.29	10	3,928.77	10	3,701.26	10	3,473.75	10	3,181.24	10	2,812.34	10	2,442.30
1/4		1/4		1/4		1/4	4,366.42	1/4	4,151.55	1/4	3,924.03	1/4	3,696.52	1/4	3,469.01	1/4	3,173.56	1/4	2,804.65	1/4	2,434.58
1/2		1/2		1/2		1/2	4,363.42	1/2	4,146.81	1/2	3,919.29	1/2	3,691.78	1/2	3,464.27	1/2	3,165.88	1/2	2,796.97	1/2	2,426.85
3/4		3/4		3/4		3/4	4,360.42	3/4	4,142.06	3/4	3,914.55	3/4	3,687.04	3/4	3,459.53	3/4	3,158.20	3/4	2,789.28	3/4	2,419.13
11	11	11	11	11	11	11	4,356.89	11	4,137.32	11	3,909.81	11	3,682.30	11	3,454.79	11	3,150.52	11	2,781.59	11	2,411.41
1/4		1/4		1/4		1/4	4,353.36	1/4	4,132.59	1/4	3,905.07	1/4	3,677.56	1/4	3,450.05	1/4	3,142.84	1/4	2,773.90	1/4	2,403.69
1/2		1/2		1/2		1/2	4,349.83	1/2	4,127.85	1/2	3,900.33	1/2	3,672.82	1/2	3,445.31	1/2	3,135.16	1/2	2,766.21	1/2	2,395.96
3/4		3/4		3/4		3/4	4,346.30	3/4	4,123.11	3/4	3,895.60	3/4	3,668.08	3/4	3,440.57	3/4	3,127.48	3/4	2,758.52	3/4	2,388.24

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.  
 GAUGE POINT: (HERMETIC) LOCATED 10'-06" OFF CENTERLINE AND 46'-03" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



# BARGE "EMS 310"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 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	2,380.52	0	2,009.80	0	1,640.90	0	1,270.53	0	899.90	0	538.96	0	169.62	0		0		0	
1/4	2,372.79	1/4	2,002.08	1/4	1,633.21	1/4	1,262.81	1/4	892.18	1/4	531.47	1/4	161.91	1/4	1/4		1/4		1/4
1/2	2,365.07	1/2	1,994.36	1/2	1,625.52	1/2	1,255.09	1/2	884.46	1/2	523.98	1/2	154.20	1/2	1/2		1/2		1/2
3/4	2,357.35	3/4	1,986.63	3/4	1,617.83	3/4	1,247.37	3/4	876.74	3/4	516.49	3/4	146.49	3/4	3/4		3/4		3/4
1	2,349.63	1	1,978.91	1	1,610.14	1	1,239.65	1	869.07	1	508.94	1	138.80	1	1		1		1
1/4	2,341.90	1/4	1,971.20	1/4	1,602.45	1/4	1,231.93	1/4	861.40	1/4	501.39	1/4	131.12	1/4	1/4		1/4		1/4
1/2	2,334.18	1/2	1,963.48	1/2	1,594.75	1/2	1,224.20	1/2	853.73	1/2	493.85	1/2	123.43	1/2	1/2		1/2		1/2
3/4	2,326.46	3/4	1,955.76	3/4	1,587.06	3/4	1,216.48	3/4	846.06	3/4	486.30	3/4	115.74	3/4	3/4		3/4		3/4
2	2,318.73	2	1,948.06	2	1,579.35	2	1,208.76	2	838.55	2	478.58	2	108.07	2	2		2		2
1/4	2,311.01	1/4	1,940.36	1/4	1,571.64	1/4	1,201.04	1/4	831.03	1/4	470.86	1/4	100.41	1/4	1/4		1/4		1/4
1/2	2,303.29	1/2	1,932.66	1/2	1,563.93	1/2	1,193.32	1/2	823.52	1/2	463.14	1/2	92.75	1/2	1/2		1/2		1/2
3/4	2,295.57	3/4	1,924.97	3/4	1,556.22	3/4	1,185.60	3/4	816.01	3/4	455.43	3/4	85.09	3/4	3/4		3/4		3/4
3	2,287.84	3	1,917.29	3	1,548.50	3	1,177.88	3	808.49	3	447.70	3	77.67	3	3		3		3
1/4	2,280.12	1/4	1,909.62	1/4	1,540.78	1/4	1,170.15	1/4	800.98	1/4	439.97	1/4	70.25	1/4	1/4		1/4		1/4
1/2	2,272.39	1/2	1,901.94	1/2	1,533.06	1/2	1,162.43	1/2	793.47	1/2	432.25	1/2	62.83	1/2	1/2		1/2		1/2
3/4	2,264.67	3/4	1,894.27	3/4	1,525.34	3/4	1,154.71	3/4	785.96	3/4	424.52	3/4	55.42	3/4	3/4		3/4		3/4
4	2,256.95	4	1,886.59	4	1,517.62	4	1,146.99	4	778.46	4	416.80	4	49.14	4	4		4		4
1/4	2,249.22	1/4	1,878.91	1/4	1,509.90	1/4	1,139.27	1/4	770.97	1/4	409.07	1/4	42.85	1/4	1/4		1/4		1/4
1/2	2,241.50	1/2	1,871.24	1/2	1,502.17	1/2	1,131.55	1/2	763.47	1/2	401.34	1/2	36.57	1/2	1/2		1/2		1/2
3/4	2,233.78	3/4	1,863.56	3/4	1,494.45	3/4	1,123.83	3/4	755.97	3/4	393.62	3/4	30.29	3/4	3/4		3/4		3/4
5	2,226.05	5	1,855.89	5	1,486.73	5	1,116.10	5	748.47	5	385.89	5	25.94	5	5		5		5
1/4	2,218.33	1/4	1,848.21	1/4	1,479.01	1/4	1,108.38	1/4	740.98	1/4	378.17	1/4	21.59	1/4	1/4		1/4		1/4
1/2	2,210.61	1/2	1,840.54	1/2	1,471.29	1/2	1,100.66	1/2	733.49	1/2	370.44	1/2	17.22	1/2	1/2		1/2		1/2
3/4	2,202.89	3/4	1,832.86	3/4	1,463.57	3/4	1,092.94	3/4	725.99	3/4	362.71	3/4	12.88	3/4	3/4		3/4		3/4
6	2,195.16	6	1,825.19	6	1,455.85	6	1,085.22	6	718.51	6	354.99	6		6	6		6		6
1/4	2,187.44	1/4	1,817.51	1/4	1,448.12	1/4	1,077.50	1/4	711.02	1/4	347.26	1/4		1/4	1/4		1/4		1/4
1/2	2,179.72	1/2	1,809.84	1/2	1,440.40	1/2	1,069.78	1/2	703.54	1/2	339.54	1/2		1/2	1/2		1/2		1/2
3/4	2,171.99	3/4	1,802.16	3/4	1,432.68	3/4	1,062.05	3/4	696.05	3/4	331.81	3/4		3/4	3/4		3/4		3/4
7	2,164.27	7	1,794.49	7	1,424.96	7	1,054.33	7	688.57	7	324.08	7		7	7		7		7
1/4	2,156.55	1/4	1,786.81	1/4	1,417.24	1/4	1,046.61	1/4	681.09	1/4	316.36	1/4		1/4	1/4		1/4		1/4
1/2	2,148.82	1/2	1,779.13	1/2	1,409.52	1/2	1,038.89	1/2	673.61	1/2	308.63	1/2		1/2	1/2		1/2		1/2
3/4	2,141.10	3/4	1,771.46	3/4	1,401.80	3/4	1,031.17	3/4	666.12	3/4	300.91	3/4		3/4	3/4		3/4		3/4
8	2,133.38	8	1,763.78	8	1,394.07	8	1,023.45	8	658.64	8	293.18	8		8	8		8		8
1/4	2,125.65	1/4	1,756.11	1/4	1,386.35	1/4	1,015.73	1/4	651.16	1/4	285.45	1/4		1/4	1/4		1/4		1/4
1/2	2,117.93	1/2	1,748.43	1/2	1,378.63	1/2	1,008.00	1/2	643.68	1/2	277.73	1/2		1/2	1/2		1/2		1/2
3/4	2,110.21	3/4	1,740.76	3/4	1,370.91	3/4	1,000.28	3/4	636.20	3/4	270.00	3/4		3/4	3/4		3/4		3/4
9	2,102.48	9	1,733.08	9	1,363.19	9	992.56	9	628.72	9	262.28	9		9	9		9		9
1/4	2,094.76	1/4	1,725.41	1/4	1,355.47	1/4	984.84	1/4	621.24	1/4	254.55	1/4		1/4	1/4		1/4		1/4
1/2	2,087.04	1/2	1,717.73	1/2	1,347.75	1/2	977.12	1/2	613.76	1/2	246.82	1/2		1/2	1/2		1/2		1/2
3/4	2,079.31	3/4	1,710.06	3/4	1,340.02	3/4	969.40	3/4	606.28	3/4	239.10	3/4		3/4	3/4		3/4		3/4
10	2,071.59	10	1,702.38	10	1,332.30	10	961.68	10	598.80	10	231.37	10		10	10		10		10
1/4	2,063.87	1/4	1,694.70	1/4	1,324.58	1/4	953.95	1/4	591.32	1/4	223.65	1/4		1/4	1/4		1/4		1/4
1/2	2,056.14	1/2	1,687.02	1/2	1,316.86	1/2	946.23	1/2	583.85	1/2	215.92	1/2		1/2	1/2		1/2		1/2
3/4	2,048.42	3/4	1,679.34	3/4	1,309.14	3/4	938.51	3/4	576.37	3/4	208.20	3/4		3/4	3/4		3/4		3/4
11	2,040.70	11	1,671.65	11	1,301.42	11	930.79	11	568.89	11	200.48	11		11	11		11		11
1/4	2,032.97	1/4	1,663.96	1/4	1,293.70	1/4	923.07	1/4	561.41	1/4	192.76	1/4		1/4	1/4		1/4		1/4
1/2	2,025.25	1/2	1,656.28	1/2	1,285.97	1/2	915.35	1/2	553.93	1/2	185.04	1/2		1/2	1/2		1/2		1/2
3/4	2,017.53	3/4	1,648.59	3/4	1,278.25	3/4	907.63	3/4	546.45	3/4	177.33	3/4		3/4	3/4		3/4		3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/16/2012 CL - SW  
CALCULATED: 03/18/2012 CL  
PRINTED: 03/18/2012 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2012

PRECISION MEASUREMENT  
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