

BARGE "EMS 3049" INNAGE TRIM TABLE 10" HATCH

	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	00-3/8	- 00-3/8	00-1/2	- 00-1/2	00-3/4	- 00-3/4	00-7/8	- 00-7/8	01-1/8	- 01-1/8
1 STBD	00-1/8	- 00-1/8	00-3/8	- 00-3/8	00-1/2	- 00-1/2	00-3/4	- 00-3/4	00-7/8	- 00-7/8	01-1/8	- 01-1/8
2 PORT	00-1/8	- 00-1/8	00-3/8	- 00-3/8	00-1/2	- 00-1/2	00-3/4	- 00-3/4	00-7/8	- 00-7/8	01-1/8	- 01-1/8
2 STBD	00-1/8	- 00-1/8	00-3/8	- 00-3/8	00-1/2	- 00-1/2	00-3/4	- 00-3/4	00-7/8	- 00-7/8	01-1/8	- 01-1/8
3 PORT	- 00-1/2	00-1/2	- 00-7/8	00-7/8	- 01-3/8	01-3/8	- 01-3/4	01-3/4	- 02-1/4	02-1/4	- 02-5/8	02-5/8
3 STBD	- 00-1/2	00-1/2	- 00-7/8	00-7/8	- 01-3/8	01-3/8	- 01-3/4	01-3/4	- 02-1/4	02-1/4	- 02-5/8	02-5/8

(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 - 00-3/8"
 FOR A MEASURED INNAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED INNAGE IS 3'-11 5/8"

LENGTH BETWEEN DRAFT MARKS: 253'-09"

December 12, 2018

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

<http://www.pmacorp.net>



BARGE "EMS 3049"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	0	IN	1	IN	2	IN	3	IN	4	IN	5	IN	6	IN	7	IN	8	IN	9
0	25.75	0	359.89	0	718.43	0	1,076.76	0	1,438.85	0	1,800.55	0	2,162.76	0	2,524.98	0	2,887.19	0	3,249.40
1/4	30.10	1/4	367.44	1/4	725.76	1/4	1,084.29	1/4	1,446.36	1/4	1,808.10	1/4	2,170.31	1/4	2,532.52	1/4	2,894.74	1/4	3,256.95
1/2	34.46	1/2	374.99	1/2	733.09	1/2	1,091.81	1/2	1,453.88	1/2	1,815.64	1/2	2,177.86	1/2	2,540.07	1/2	2,902.28	1/2	3,264.49
3/4	38.81	3/4	382.53	3/4	740.42	3/4	1,098.34	3/4	1,461.39	3/4	1,823.19	3/4	2,185.40	3/4	2,547.61	3/4	2,908.83	3/4	3,272.04
1	43.16	1	390.08	1	747.75	1	1,106.87	1	1,468.90	1	1,830.74	1	2,192.95	1	2,555.16	1	2,917.37	1	3,279.58
1/4	48.77	1/4	397.63	1/4	755.09	1/4	1,114.40	1/4	1,476.42	1/4	1,838.28	1/4	2,200.49	1/4	2,562.71	1/4	2,924.92	1/4	3,287.13
1/2	54.38	1/2	405.17	1/2	762.43	1/2	1,121.93	1/2	1,483.33	1/2	1,845.83	1/2	2,208.04	1/2	2,570.25	1/2	2,932.47	1/2	3,294.68
3/4	59.99	3/4	412.72	3/4	769.77	3/4	1,129.46	3/4	1,491.44	3/4	1,853.37	3/4	2,215.59	3/4	2,577.80	3/4	2,940.01	3/4	3,302.22
2	65.60	2	420.27	2	777.11	2	1,136.99	2	1,498.96	2	1,860.92	2	2,223.13	2	2,585.35	2	2,947.56	2	3,309.77
1/4	72.37	1/4	427.82	1/4	784.45	1/4	1,144.54	1/4	1,506.47	1/4	1,868.47	1/4	2,230.68	1/4	2,592.89	1/4	2,954.56	1/4	3,317.32
1/2	79.14	1/2	435.36	1/2	791.80	1/2	1,152.08	1/2	1,513.98	1/2	1,876.01	1/2	2,238.22	1/2	2,600.44	1/2	2,962.65	1/2	3,324.86
3/4	85.92	3/4	442.91	3/4	799.14	3/4	1,159.63	3/4	1,521.49	3/4	1,883.56	3/4	2,245.77	3/4	2,607.96	3/4	2,970.20	3/4	3,332.41
3	92.69	3	450.46	3	806.48	3	1,167.18	3	1,529.01	3	1,891.10	3	2,253.32	3	2,615.53	3	2,977.74	3	3,339.96
1/4	99.99	1/4	458.00	1/4	813.84	1/4	1,174.72	1/4	1,536.52	1/4	1,898.65	1/4	2,260.86	1/4	2,623.08	1/4	2,985.29	1/4	3,347.50
1/2	107.28	1/2	465.55	1/2	821.20	1/2	1,182.27	1/2	1,544.04	1/2	1,906.20	1/2	2,268.41	1/2	2,630.62	1/2	2,992.83	1/2	3,355.05
3/4	114.58	3/4	473.10	3/4	828.57	3/4	1,189.82	3/4	1,551.56	3/4	1,913.74	3/4	2,275.96	3/4	2,638.17	3/4	2,999.38	3/4	3,362.59
4	121.88	4	480.65	4	835.93	4	1,197.37	4	1,559.08	4	1,921.29	4	2,283.50	4	2,645.71	4	3,007.93	4	3,370.14
1/4	129.20	1/4	488.19	1/4	843.46	1/4	1,204.91	1/4	1,566.62	1/4	1,928.83	1/4	2,291.05	1/4	2,653.26	1/4	3,015.47	1/4	3,377.69
1/2	136.52	1/2	495.74	1/2	850.99	1/2	1,212.46	1/2	1,574.17	1/2	1,936.38	1/2	2,298.59	1/2	2,660.81	1/2	3,023.02	1/2	3,385.23
3/4	143.84	3/4	503.28	3/4	858.51	3/4	1,220.01	3/4	1,581.71	3/4	1,943.93	3/4	2,306.14	3/4	2,668.35	3/4	3,030.57	3/4	3,392.78
5	151.16	5	510.53	5	866.04	5	1,227.55	5	1,589.26	5	1,951.47	5	2,313.69	5	2,675.90	5	3,038.11	5	3,400.32
1/4	158.49	1/4	518.36	1/4	873.57	1/4	1,235.10	1/4	1,596.81	1/4	1,959.02	1/4	2,321.23	1/4	2,683.44	1/4	3,045.66	1/4	3,407.87
1/2	165.82	1/2	525.90	1/2	881.09	1/2	1,242.65	1/2	1,604.35	1/2	1,966.56	1/2	2,328.78	1/2	2,690.99	1/2	3,053.20	1/2	3,415.42
3/4	173.15	3/4	533.44	3/4	888.62	3/4	1,250.19	3/4	1,611.90	3/4	1,974.11	3/4	2,336.32	3/4	2,698.54	3/4	3,060.75	3/4	3,422.96
6	180.48	6	540.97	6	896.14	6	1,257.74	6	1,619.44	6	1,981.66	6	2,343.87	6	2,706.08	6	3,068.30	6	3,430.51
1/4	187.81	1/4	548.51	1/4	903.67	1/4	1,265.29	1/4	1,626.99	1/4	1,989.20	1/4	2,351.42	1/4	2,713.63	1/4	3,075.84	1/4	3,438.05
1/2	195.14	1/2	556.05	1/2	911.19	1/2	1,272.84	1/2	1,634.54	1/2	1,996.75	1/2	2,358.96	1/2	2,721.17	1/2	3,083.39	1/2	3,445.60
3/4	202.47	3/4	563.58	3/4	918.72	3/4	1,280.38	3/4	1,642.08	3/4	2,004.30	3/4	2,366.51	3/4	2,728.72	3/4	3,090.93	3/4	3,453.15
1/4	209.80	1/4	571.12	1/4	926.24	1/4	1,287.93	1/4	1,649.63	1/4	2,019.39	1/4	2,374.05	1/4	2,736.27	1/4	3,098.48	1/4	3,460.69
1/2	217.15	1/2	578.63	1/2	933.77	1/2	1,295.48	1/2	1,657.17	1/2	2,026.93	1/2	2,381.60	1/2	2,743.81	1/2	3,106.03	1/2	3,468.24
3/4	224.51	3/4	586.14	3/4	941.29	3/4	1,303.02	3/4	1,664.72	3/4	2,034.48	3/4	2,389.15	3/4	2,751.36	3/4	3,113.57	3/4	3,475.78
8	231.86	8	593.65	8	948.82	8	1,310.57	8	1,672.27	8	2,042.03	8	2,396.69	8	2,758.91	8	3,121.12	8	3,483.33
1/4	239.22	1/4	601.16	1/4	956.34	1/4	1,318.12	1/4	1,679.81	1/4	2,049.57	1/4	2,404.24	1/4	2,766.45	1/4	3,128.66	1/4	3,490.88
1/2	246.76	1/2	608.49	1/2	963.87	1/2	1,325.66	1/2	1,687.36	1/2	2,057.12	1/2	2,411.78	1/2	2,774.00	1/2	3,136.21	1/2	3,498.42
3/4	254.29	3/4	615.82	3/4	971.39	3/4	1,333.21	3/4	1,694.91	3/4	2,064.66	3/4	2,419.33	3/4	2,781.54	3/4	3,143.76	3/4	3,505.97
9	261.83	9	623.15	9	978.92	9	1,340.76	9	1,702.45	9	2,072.21	9	2,426.88	9	2,789.09	9	3,151.30	9	3,513.52
1/4	269.36	1/4	630.48	1/4	986.44	1/4	1,348.31	1/4	1,710.00	1/4	2,079.76	1/4	2,434.42	1/4	2,796.64	1/4	3,158.85	1/4	3,521.06
1/2	276.90	1/2	637.81	1/2	993.97	1/2	1,355.85	1/2	1,717.54	1/2	2,087.30	1/2	2,441.97	1/2	2,804.18	1/2	3,166.39	1/2	3,528.61
3/4	284.44	3/4	645.14	3/4	1,001.49	3/4	1,363.40	3/4	1,725.09	3/4	2,094.85	3/4	2,449.52	3/4	2,811.73	3/4	3,173.94	3/4	3,536.15
10	291.98	10	652.47	10	1,009.02	10	1,370.95	10	1,732.64	10	2,102.39	10	2,457.06	10	2,819.27	10	3,181.48	10	3,543.70
1/4	299.51	1/4	659.80	1/4	1,016.54	1/4	1,386.44	1/4	1,740.18	1/4	2,109.94	1/4	2,464.61	1/4	2,826.82	1/4	3,189.03	1/4	3,551.25
1/2	307.06	1/2	667.12	1/2	1,024.07	1/2	1,393.98	1/2	1,747.73	1/2	2,117.49	1/2	2,472.15	1/2	2,834.37	1/2	3,196.58	1/2	3,558.79
3/4	314.61	3/4	674.45	3/4	1,031.60	3/4	1,401.13	3/4	1,755.27	3/4	2,125.03	3/4	2,479.70	3/4	2,841.91	3/4	3,204.13	3/4	3,566.34
11	322.16	11	681.78	11	1,039.12	11	1,408.65	11	1,762.82	11	2,132.58	11	2,487.25	11	2,849.46	11	3,211.67	11	3,573.88
1/4	329.70	1/4	689.11	1/4	1,046.65	1/4	1,416.22	1/4	1,770.91	1/4	2,140.13	1/4	2,494.79	1/4	2,857.00	1/4	3,219.22	1/4	3,581.43
1/2	337.25	1/2	696.44	1/2	1,054.17	1/2	1,423.77	1/2	1,777.37	1/2	2,147.67	1/2	2,502.34	1/2	2,864.55	1/2	3,226.76	1/2	3,588.98
3/4	344.80	3/4	703.77	3/4	1,061.70	3/4	1,431.31	3/4	1,785.46	3/4	2,155.22	3/4	2,509.88	3/4	2,872.10	3/4	3,234.31	3/4	3,596.52
12	352.34	12	711.10	12	1,069.23	12	1,438.85	12	1,793.00	12	2,162.76	12	2,517.43	12	2,879.64	12	3,241.86	12	3,604.07

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT

& ANALYSIS, INC.

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BARGE "EMS 3049"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	3,611.61	0	3,973.83	0	4,335.87	0	4,695.62	0		0		0		0		0		0	
1/4	3,619.16	1/4	3,981.37	1/4	4,343.37	1/4	4,699.23	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,626.71	1/2	3,988.92	1/2	4,350.88	1/2	4,694.83	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,634.25	3/4	3,996.47	3/4	4,358.38	3/4	4,699.43	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,641.80	1	4,004.01	1	4,365.89	1	4,704.04	1		1		1		1		1		1	
1/4	3,649.35	1/4	4,011.56	1/4	4,373.39	1/4	4,707.56	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,656.89	1/2	4,019.10	1/2	4,380.90	1/2	4,711.09	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,664.44	3/4	4,026.65	3/4	4,388.40	3/4	4,714.62	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,671.98	2	4,034.20	2	4,395.91	2		2		2		2		2		2		2	
1/4	3,679.53	1/4	4,041.74	1/4	4,403.41	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,687.08	1/2	4,049.29	1/2	4,410.91	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,694.62	3/4	4,056.83	3/4	4,418.42	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
3	3,702.17	3	4,064.38	3	4,425.92	3		3		3		3		3		3		3	
1/4	3,709.71	1/4	4,071.93	1/4	4,433.43	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,717.26	1/2	4,079.47	1/2	4,440.93	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,724.81	3/4	4,087.02	3/4	4,448.44	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
4	3,732.35	4	4,094.57	4	4,455.94	4		4		4		4		4		4		4	
1/4	3,739.90	1/4	4,102.11	1/4	4,463.45	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,747.44	1/2	4,109.66	1/2	4,470.95	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,754.99	3/4	4,117.20	3/4	4,478.46	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
5	3,762.54	5	4,124.75	5	4,485.96	5		5		5		5		5		5		5	
1/4	3,770.08	1/4	4,132.30	1/4	4,493.47	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,777.63	1/2	4,139.84	1/2	4,500.97	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,785.18	3/4	4,147.39	3/4	4,508.48	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
6	3,792.72	6	4,154.93	6	4,515.98	6		6		6		6		6		6		6	
1/4	3,800.27	1/4	4,162.48	1/4	4,523.49	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,807.81	1/2	4,170.03	1/2	4,530.99	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,815.36	3/4	4,177.57	3/4	4,538.50	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
7	3,822.91	7	4,185.12	7	4,546.00	7		7		7		7		7		7		7	
1/4	3,830.45	1/4	4,192.66	1/4	4,553.51	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,838.00	1/2	4,200.21	1/2	4,561.01	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,845.54	3/4	4,207.76	3/4	4,568.51	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
8	3,853.09	8	4,215.30	8	4,576.02	8		8		8		8		8		8		8	
1/4	3,860.64	1/4	4,222.85	1/4	4,583.51	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,868.18	1/2	4,230.39	1/2	4,591.00	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,875.73	3/4	4,237.94	3/4	4,598.49	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	3,883.27	9	4,245.49	9	4,605.98	9		9		9		9		9		9		9	
1/4	3,890.82	1/4	4,253.03	1/4	4,613.39	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,898.37	1/2	4,260.58	1/2	4,620.80	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,905.91	3/4	4,268.13	3/4	4,628.20	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	3,913.46	10	4,275.67	10	4,635.61	10		10		10		10		10		10		10	
1/4	3,921.00	1/4	4,283.22	1/4	4,642.43	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,928.55	1/2	4,290.76	1/2	4,649.25	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,936.10	3/4	4,298.30	3/4	4,656.07	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,943.64	11	4,305.85	11	4,662.89	11		11		11		11		11		11		11	
1/4	3,951.19	1/4	4,313.35	1/4	4,668.57	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,958.74	1/2	4,320.86	1/2	4,674.26	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,966.28	3/4	4,328.36	3/4	4,679.94	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
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BARGE "EMS 3049"

1 STBD INNAGE TABLE

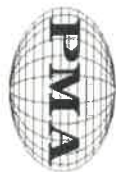
CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS												GAUGE HEIGHT 13'-08"									
IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.	IN	10 FT.
0	25.73	0	359.52	0	717.69	0	1,073.66	0	1,435.02	0	1,796.35	0	2,158.20	0	2,520.05	0	2,881.89	0	3,243.74	0	3,605.59
1/4	30.07	1/4	367.06	1/4	725.02	1/4	1,081.13	1/4	1,442.52	1/4	1,803.89	1/4	2,165.74	1/4	2,527.58	1/4	2,889.43	1/4	3,251.28	1/4	3,613.13
1/2	34.42	1/2	374.60	1/2	732.34	1/2	1,086.60	1/2	1,450.53	1/2	1,811.43	1/2	2,173.27	1/2	2,535.12	1/2	2,896.97	1/2	3,258.82	1/2	3,620.67
3/4	38.77	3/4	382.14	3/4	738.66	3/4	1,096.07	3/4	1,457.03	3/4	1,818.96	3/4	2,180.81	3/4	2,542.66	3/4	2,904.51	3/4	3,266.36	3/4	3,628.21
1	43.12	1	389.68	1	746.99	1	1,103.54	1	1,465.04	1	1,826.50	1	2,188.35	1	2,550.20	1	2,912.05	1	3,273.90	1	3,635.75
1/4	48.72	1/4	397.22	1/4	754.31	1/4	1,111.02	1/4	1,472.54	1/4	1,834.04	1/4	2,195.89	1/4	2,557.74	1/4	2,919.59	1/4	3,281.43	1/4	3,643.28
1/2	54.32	1/2	404.76	1/2	761.64	1/2	1,118.50	1/2	1,480.05	1/2	1,841.58	1/2	2,203.43	1/2	2,565.28	1/2	2,927.12	1/2	3,288.97	1/2	3,650.82
3/4	59.93	3/4	412.30	3/4	768.96	3/4	1,125.98	3/4	1,487.55	3/4	1,849.12	3/4	2,210.97	3/4	2,572.81	3/4	2,934.66	3/4	3,296.51	3/4	3,662.36
2	65.53	2	419.84	2	776.29	2	1,133.46	2	1,495.06	2	1,856.66	2	2,216.51	2	2,580.35	2	2,942.20	2	3,304.05	2	3,669.90
1/4	72.30	1/4	427.38	1/4	783.57	1/4	1,141.00	1/4	1,502.56	1/4	1,864.20	1/4	2,226.04	1/4	2,587.89	1/4	2,949.74	1/4	3,311.59	1/4	3,676.44
1/2	79.06	1/2	434.92	1/2	790.86	1/2	1,148.54	1/2	1,510.07	1/2	1,871.73	1/2	2,233.58	1/2	2,595.43	1/2	2,962.28	1/2	3,319.13	1/2	3,683.98
3/4	85.83	3/4	442.45	3/4	798.14	3/4	1,156.08	3/4	1,517.57	3/4	1,879.27	3/4	2,241.12	3/4	2,602.97	3/4	2,964.82	3/4	3,326.66	3/4	3,690.13
3	92.59	3	449.99	3	805.42	3	1,163.62	3	1,525.08	3	1,886.81	3	2,248.66	3	2,610.51	3	2,972.36	3	3,334.20	3	3,700.05
1/4	99.88	1/4	457.53	1/4	812.73	1/4	1,171.16	1/4	1,532.59	1/4	1,894.35	1/4	2,256.20	1/4	2,618.05	1/4	2,979.89	1/4	3,341.74	1/4	3,707.59
1/2	107.17	1/2	465.07	1/2	820.04	1/2	1,178.70	1/2	1,540.10	1/2	1,901.89	1/2	2,263.74	1/2	2,625.58	1/2	2,987.43	1/2	3,349.28	1/2	3,715.13
3/4	114.46	3/4	472.61	3/4	827.34	3/4	1,186.23	3/4	1,547.61	3/4	1,909.43	3/4	2,271.27	3/4	2,633.12	3/4	2,994.97	3/4	3,356.82	3/4	3,721.98
4	121.75	4	480.15	4	834.65	4	1,193.77	4	1,555.12	4	1,916.97	4	2,278.81	4	2,640.66	4	3,002.51	4	3,364.36	4	3,729.42
1/4	129.07	1/4	487.69	1/4	842.12	1/4	1,201.31	1/4	1,562.66	1/4	1,924.50	1/4	2,286.35	1/4	2,648.20	1/4	3,010.05	1/4	3,371.90	1/4	3,736.36
1/2	136.38	1/2	495.23	1/2	849.59	1/2	1,208.85	1/2	1,570.19	1/2	1,932.04	1/2	2,293.89	1/2	2,655.74	1/2	3,017.59	1/2	3,379.43	1/2	3,743.36
3/4	143.69	3/4	502.77	3/4	857.06	3/4	1,216.39	3/4	1,577.73	3/4	1,939.58	3/4	2,301.43	3/4	2,663.28	3/4	3,025.12	3/4	3,386.97	3/4	3,750.36
5	151.00	5	510.30	5	864.53	5	1,223.93	5	1,585.27	5	1,947.12	5	2,308.97	5	2,670.82	5	3,032.66	5	3,394.54	5	3,757.99
1/4	158.33	1/4	517.83	1/4	872.00	1/4	1,231.47	1/4	1,592.81	1/4	1,954.66	1/4	2,316.51	1/4	2,678.35	1/4	3,040.20	1/4	3,402.05	1/4	3,764.44
1/2	165.65	1/2	525.36	1/2	879.47	1/2	1,239.01	1/2	1,600.35	1/2	1,962.20	1/2	2,324.04	1/2	2,685.89	1/2	3,047.74	1/2	3,409.59	1/2	3,771.44
3/4	172.97	3/4	532.89	3/4	886.94	3/4	1,246.55	3/4	1,607.89	3/4	1,969.73	3/4	2,331.58	3/4	2,693.43	3/4	3,055.28	3/4	3,417.13	3/4	3,778.88
6	180.29	6	540.42	6	894.41	6	1,254.09	6	1,615.43	6	1,977.27	6	2,339.12	6	2,700.97	6	3,062.82	6	3,424.67	6	3,785.33
1/4	187.61	1/4	547.95	1/4	901.87	1/4	1,261.63	1/4	1,622.86	1/4	1,984.81	1/4	2,346.66	1/4	2,708.51	1/4	3,070.36	1/4	3,432.20	1/4	3,791.88
1/2	194.93	1/2	555.48	1/2	909.34	1/2	1,269.17	1/2	1,630.50	1/2	1,992.35	1/2	2,354.20	1/2	2,716.05	1/2	3,077.89	1/2	3,439.74	1/2	3,800.33
3/4	202.26	3/4	563.01	3/4	916.81	3/4	1,276.71	3/4	1,638.04	3/4	1,999.89	3/4	2,361.74	3/4	2,723.58	3/4	3,085.43	3/4	3,447.28	3/4	3,807.88
7	209.58	7	570.53	7	924.28	7	1,284.25	7	1,645.58	7	2,007.43	7	2,369.28	7	2,731.12	7	3,092.97	7	3,454.82	7	3,814.44
1/4	216.93	1/4	578.04	1/4	931.75	1/4	1,291.79	1/4	1,653.12	1/4	2,014.97	1/4	2,376.81	1/4	2,738.66	1/4	3,100.51	1/4	3,462.36	1/4	3,821.44
1/2	224.27	1/2	585.54	1/2	939.22	1/2	1,299.33	1/2	1,660.66	1/2	2,022.50	1/2	2,384.35	1/2	2,746.20	1/2	3,108.05	1/2	3,469.90	1/2	3,828.88
3/4	231.62	3/4	593.04	3/4	946.68	3/4	1,306.87	3/4	1,668.19	3/4	2,030.04	3/4	2,391.89	3/4	2,753.74	3/4	3,115.59	3/4	3,477.43	3/4	3,835.44
8	238.97	8	600.54	8	954.15	8	1,314.40	8	1,675.73	8	2,037.58	8	2,398.43	8	2,761.28	8	3,123.13	8	3,484.97	8	3,842.00
1/4	246.50	1/4	607.87	1/4	961.62	1/4	1,321.94	1/4	1,683.27	1/4	2,045.12	1/4	2,406.97	1/4	2,768.82	1/4	3,130.66	1/4	3,492.51	1/4	3,849.54
1/2	254.03	1/2	615.19	1/2	969.09	1/2	1,329.48	1/2	1,690.81	1/2	2,052.66	1/2	2,414.51	1/2	2,776.35	1/2	3,138.20	1/2	3,500.05	1/2	3,856.08
3/4	261.56	3/4	622.51	3/4	976.56	3/4	1,337.02	3/4	1,698.35	3/4	2,060.20	3/4	2,422.04	3/4	2,783.89	3/4	3,145.74	3/4	3,507.59	3/4	3,862.66
9	269.08	9	629.83	9	984.03	9	1,344.56	9	1,705.89	9	2,067.74	9	2,429.58	9	2,791.43	9	3,153.28	9	3,515.13	9	3,869.22
1/4	276.61	1/4	637.15	1/4	991.49	1/4	1,352.10	1/4	1,713.43	1/4	2,075.27	1/4	2,437.12	1/4	2,798.97	1/4	3,160.82	1/4	3,522.67	1/4	3,875.79
1/2	284.14	1/2	644.48	1/2	998.96	1/2	1,359.84	1/2	1,720.96	1/2	2,082.81	1/2	2,444.66	1/2	2,806.51	1/2	3,168.36	1/2	3,530.20	1/2	3,882.36
3/4	291.67	3/4	651.80	3/4	1,006.43	3/4	1,367.18	3/4	1,728.50	3/4	2,090.35	3/4	2,452.20	3/4	2,814.05	3/4	3,175.89	3/4	3,537.74	3/4	3,889.90
10	299.20	10	659.12	10	1,013.90	10	1,374.72	10	1,736.04	10	2,097.89	10	2,459.74	10	2,821.59	10	3,183.43	10	3,545.28	10	3,896.44
1/4	306.74	1/4	666.44	1/4	1,021.37	1/4	1,382.26	1/4	1,743.58	1/4	2,105.43	1/4	2,467.28	1/4	2,829.12	1/4	3,190.97	1/4	3,552.82	1/4	3,903.00
1/2	314.28	1/2	673.76	1/2	1,028.84	1/2	1,389.80	1/2	1,751.12	1/2	2,112.97	1/2	2,474.81	1/2	2,836.66	1/2	3,198.51	1/2	3,560.36	1/2	3,909.56
3/4	321.82	3/4	681.08	3/4	1,036.30	3/4	1,397.34	3/4	1,758.66	3/4	2,120.50	3/4	2,482.35	3/4	2,844.20	3/4	3,206.05	3/4	3,567.90	3/4	3,916.12
11	329.36	11	688.41	11	1,043.77	11	1,404.88	11	1,766.20	11	2,128.04	11	2,489.89	11	2,851.74	11	3,213.59	11	3,575.44	11	3,922.68
1/4	336.90	1/4	695.73	1/4	1,051.24	1/4	1,412.41	1/4	1,773.73	1/4	2,135.58	1/4	2,497.43	1/4	2,859.28	1/4	3,221.13	1/4	3,582.97	1/4	3,929.24
1/2	344.44	1/2	703.05	1/2	1,058.72	1/2	1,419.95	1/2	1,781.27	1/2	2,143.12	1/2	2,504.97	1/2	2,866.82	1/2	3,228.66	1/2	3,590.51	1/2	3,935.80
3/4	351.98	3/4	710.37	3/4	1,066.19	3/4	1,427.48	3/4	1,788.81	3/4	2,150.66	3/4	2,512.51	3/4	2,874.35	3/4	3,236.20	3/4	3,598.05	3/4	3,942.36

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH NIPMS 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 OF 10" DIAMETER ULLAGE HATCH-
GAUGE POINT: (10" HATCH) LOCATED 10'-06" OFF CENTERLINE AND 39'-06" FORWARD OF AFT BULKHEAD

PRECISION MEASUREMENT
& ANALYSIS, INC.

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



BARGE "EMS 3049"

1 STBD
INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 13'-08"

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	3,605.59	0	3,967.44	0	4,329.10	0	4,678.50	0		0		0		0		0		0	
1/4	3,613.13	1/4	3,974.98	1/4	4,336.60	1/4	4,683.10	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,620.67	1/2	3,982.51	1/2	4,344.14	1/2	4,687.70	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,628.20	3/4	3,990.05	3/4	4,351.59	3/4	4,692.30	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,635.74	1	3,997.59	1	4,359.09	1	4,696.90	1		1		1		1		1		1	
1/4	3,643.28	1/4	4,005.13	1/4	4,366.59	1/4	4,700.42	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,650.82	1/2	4,012.67	1/2	4,374.09	1/2	4,703.94	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,658.36	3/4	4,020.21	3/4	4,381.58	3/4	4,707.47	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,665.90	2	4,027.75	2	4,389.08	2		2		2		2		2		2		2	
1/4	3,673.44	1/4	4,035.28	1/4	4,396.58	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,680.97	1/2	4,042.82	1/2	4,404.07	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,688.51	3/4	4,050.36	3/4	4,411.57	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
3	3,696.05	3	4,057.90	3	4,419.07	3		3		3		3		3		3		3	
1/4	3,703.59	1/4	4,065.44	1/4	4,426.57	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,711.13	1/2	4,072.98	1/2	4,434.06	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,718.67	3/4	4,080.51	3/4	4,441.56	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
4	3,726.21	4	4,088.05	4	4,449.06	4		4		4		4		4		4		4	
1/4	3,733.74	1/4	4,095.59	1/4	4,456.56	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,741.28	1/2	4,103.13	1/2	4,464.05	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,748.82	3/4	4,110.67	3/4	4,471.55	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
5	3,756.36	5	4,118.21	5	4,479.05	5		5		5		5		5		5		5	
1/4	3,763.90	1/4	4,125.75	1/4	4,486.55	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,771.44	1/2	4,133.28	1/2	4,494.04	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,778.97	3/4	4,140.82	3/4	4,501.54	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
6	3,786.51	6	4,148.36	6	4,509.04	6		6		6		6		6		6		6	
1/4	3,794.05	1/4	4,155.90	1/4	4,516.53	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,801.59	1/2	4,163.44	1/2	4,524.03	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,809.13	3/4	4,170.98	3/4	4,531.53	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
7	3,816.67	7	4,178.52	7	4,539.03	7		7		7		7		7		7		7	
1/4	3,824.21	1/4	4,186.05	1/4	4,546.52	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,831.74	1/2	4,193.59	1/2	4,554.02	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,839.28	3/4	4,201.13	3/4	4,561.51	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
8	3,846.82	8	4,208.67	8	4,569.01	8		8		8		8		8		8		8	
1/4	3,854.36	1/4	4,216.21	1/4	4,576.49	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,861.90	1/2	4,223.75	1/2	4,583.98	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,869.44	3/4	4,231.28	3/4	4,591.46	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	3,876.98	9	4,238.82	9	4,598.95	9		9		9		9		9		9		9	
1/4	3,884.51	1/4	4,246.36	1/4	4,606.34	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,892.05	1/2	4,253.90	1/2	4,613.74	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,899.59	3/4	4,261.44	3/4	4,621.14	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	3,907.13	10	4,268.98	10	4,628.54	10		10		10		10		10		10		10	
1/4	3,914.67	1/4	4,276.51	1/4	4,635.35	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,922.21	1/2	4,284.05	1/2	4,642.17	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,929.74	3/4	4,291.58	3/4	4,648.98	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,937.28	11	4,299.11	11	4,655.79	11		11		11		11		11		11		11	
1/4	3,944.82	1/4	4,306.61	1/4	4,661.47	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,952.36	1/2	4,314.11	1/2	4,667.15	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,959.90	3/4	4,321.60	3/4	4,672.82	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL
CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pearland, Texas 77586
<http://www.pmacorp.net>

PMA



BARGE "EMS 3049"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	25.69	0	358.96	0	716.58	0	1,073.99	0	1,435.12	0	1,793.43	0	2,154.77	0	2,516.12	0	2,877.46	0	3,238.81
1/4	30.03	1/4	366.49	1/4	723.90	1/4	1,081.50	1/4	1,442.50	1/4	1,800.96	1/4	2,162.30	1/4	2,523.65	1/4	2,884.99	1/4	3,246.33
1/2	34.37	1/2	374.02	1/2	731.21	1/2	1,089.01	1/2	1,449.88	1/2	1,808.49	1/2	2,169.83	1/2	2,531.17	1/2	2,892.52	1/2	3,253.86
3/4	38.71	3/4	381.55	3/4	738.52	3/4	1,096.52	3/4	1,457.26	3/4	1,816.01	3/4	2,177.36	3/4	2,538.70	3/4	2,900.05	3/4	3,261.39
1	43.05	1	389.07	1	745.83	1	1,104.03	1	1,464.64	1	1,823.54	1	2,184.89	1	2,546.23	1	2,907.57	1	3,268.92
1/4	48.65	1/4	396.60	1/4	753.15	1/4	1,111.54	1/4	1,472.02	1/4	1,831.07	1/4	2,192.41	1/4	2,553.76	1/4	2,915.10	1/4	3,276.45
1/2	54.24	1/2	404.13	1/2	760.47	1/2	1,119.05	1/2	1,479.40	1/2	1,838.60	1/2	2,199.94	1/2	2,561.29	1/2	2,922.63	1/2	3,283.97
3/4	59.83	3/4	411.66	3/4	767.79	3/4	1,126.56	3/4	1,486.78	3/4	1,846.13	3/4	2,207.47	3/4	2,568.81	3/4	2,930.16	3/4	3,291.50
2	65.43	2	419.19	2	775.11	2	1,134.07	2	1,494.17	2	1,853.65	2	2,215.00	2	2,576.34	2	2,937.69	2	3,298.03
1/4	72.18	1/4	426.71	1/4	782.43	1/4	1,141.60	1/4	1,501.55	1/4	1,861.18	1/4	2,222.53	1/4	2,583.87	1/4	2,945.21	1/4	3,306.56
1/2	78.94	1/2	434.24	1/2	789.76	1/2	1,149.13	1/2	1,508.93	1/2	1,868.71	1/2	2,230.05	1/2	2,591.40	1/2	2,952.74	1/2	3,314.09
3/4	85.70	3/4	441.77	3/4	797.08	3/4	1,156.66	3/4	1,516.31	3/4	1,876.24	3/4	2,237.58	3/4	2,598.93	3/4	2,960.27	3/4	3,321.61
3	92.45	3	449.30	3	804.40	3	1,164.19	3	1,523.69	3	1,883.77	3	2,245.11	3	2,606.45	3	2,967.80	3	3,329.14
1/4	99.73	1/4	456.83	1/4	811.74	1/4	1,171.71	1/4	1,531.08	1/4	1,891.29	1/4	2,252.64	1/4	2,613.98	1/4	2,975.33	1/4	3,336.67
1/2	107.01	1/2	464.35	1/2	819.09	1/2	1,179.24	1/2	1,538.46	1/2	1,898.82	1/2	2,260.17	1/2	2,621.51	1/2	2,982.85	1/2	3,344.20
3/4	114.28	3/4	471.88	3/4	826.43	3/4	1,186.77	3/4	1,545.85	3/4	1,906.35	3/4	2,267.69	3/4	2,629.04	3/4	2,990.38	3/4	3,351.73
4	121.56	4	479.41	4	833.78	4	1,194.30	4	1,553.24	4	1,913.86	4	2,275.22	4	2,636.57	4	2,997.91	4	3,359.25
1/4	128.86	1/4	486.94	1/4	841.28	1/4	1,201.83	1/4	1,560.67	1/4	1,921.41	1/4	2,282.75	1/4	2,644.09	1/4	2,644.09	1/4	3,366.78
1/2	136.17	1/2	494.46	1/2	848.79	1/2	1,209.35	1/2	1,568.11	1/2	1,928.93	1/2	2,290.28	1/2	2,651.62	1/2	2,651.62	1/2	3,374.31
3/4	143.47	3/4	501.99	3/4	856.30	3/4	1,216.88	3/4	1,575.54	3/4	1,936.46	3/4	2,297.81	3/4	2,659.15	3/4	2,659.15	3/4	3,381.84
5	150.77	5	509.52	5	863.81	5	1,224.41	5	1,582.98	5	1,943.99	5	2,305.33	5	2,666.68	5	3,028.02	5	3,389.37
1/4	158.08	1/4	517.04	1/4	871.32	1/4	1,231.94	1/4	1,590.42	1/4	1,951.52	1/4	2,312.86	1/4	2,674.21	1/4	3,035.55	1/4	3,396.89
1/2	165.39	1/2	524.55	1/2	878.82	1/2	1,239.47	1/2	1,597.87	1/2	1,959.05	1/2	2,320.39	1/2	2,681.73	1/2	3,043.08	1/2	3,404.42
3/4	172.70	3/4	532.07	3/4	886.33	3/4	1,246.99	3/4	1,605.31	3/4	1,966.57	3/4	2,327.92	3/4	2,689.26	3/4	3,050.61	3/4	3,411.95
6	180.01	6	539.59	6	893.83	6	1,254.52	6	1,612.76	6	1,974.10	6	2,335.45	6	2,696.79	6	3,058.13	6	3,419.48
1/4	187.32	1/4	547.10	1/4	901.34	1/4	1,262.05	1/4	1,620.29	1/4	1,981.63	1/4	2,342.97	1/4	2,704.32	1/4	3,065.66	1/4	3,427.01
1/2	194.63	1/2	554.62	1/2	908.85	1/2	1,269.58	1/2	1,627.81	1/2	1,989.16	1/2	2,350.50	1/2	2,711.85	1/2	3,073.19	1/2	3,434.53
3/4	201.94	3/4	562.14	3/4	916.35	3/4	1,277.11	3/4	1,635.34	3/4	1,996.69	3/4	2,358.03	3/4	2,719.37	3/4	3,080.72	3/4	3,442.06
7	209.25	7	569.66	7	923.86	7	1,284.63	7	1,642.87	7	2,004.21	7	2,365.56	7	2,726.90	7	3,088.25	7	3,449.59
1/4	216.59	1/4	577.15	1/4	931.37	1/4	1,292.16	1/4	1,650.40	1/4	2,011.74	1/4	2,373.09	1/4	2,734.43	1/4	3,095.77	1/4	3,457.12
1/2	223.92	1/2	584.64	1/2	938.87	1/2	1,299.69	1/2	1,657.93	1/2	2,019.27	1/2	2,380.61	1/2	2,741.96	1/2	3,103.30	1/2	3,464.65
3/4	231.26	3/4	592.13	3/4	946.38	3/4	1,307.22	3/4	1,665.45	3/4	2,026.80	3/4	2,388.14	3/4	2,749.49	3/4	3,110.83	3/4	3,472.17
8	238.59	8	599.62	8	953.88	8	1,314.75	8	1,672.98	8	2,034.33	8	2,395.67	8	2,757.01	8	3,118.36	8	3,479.70
1/4	246.11	1/4	606.93	1/4	961.39	1/4	1,322.27	1/4	1,680.51	1/4	2,041.85	1/4	2,403.20	1/4	2,764.54	1/4	3,125.89	1/4	3,487.23
1/2	253.63	1/2	614.24	1/2	968.90	1/2	1,329.80	1/2	1,688.04	1/2	2,049.38	1/2	2,410.73	1/2	2,772.07	1/2	3,133.41	1/2	3,494.76
3/4	261.15	3/4	621.55	3/4	976.40	3/4	1,337.33	3/4	1,695.57	3/4	2,056.91	3/4	2,418.25	3/4	2,779.60	3/4	3,140.94	3/4	3,502.29
9	268.66	9	628.86	9	983.91	9	1,344.86	9	1,703.09	9	2,064.44	9	2,425.78	9	2,787.13	9	3,148.47	9	3,509.81
1/4	276.18	1/4	636.17	1/4	991.41	1/4	1,352.39	1/4	1,710.62	1/4	2,071.97	1/4	2,433.31	1/4	2,794.65	1/4	3,156.00	1/4	3,517.34
1/2	283.70	1/2	643.48	1/2	998.92	1/2	1,359.92	1/2	1,718.15	1/2	2,079.49	1/2	2,440.84	1/2	2,802.18	1/2	3,163.53	1/2	3,524.87
3/4	291.22	3/4	650.79	3/4	1,006.43	3/4	1,367.44	3/4	1,725.68	3/4	2,087.02	3/4	2,448.37	3/4	2,809.71	3/4	3,171.05	3/4	3,532.40
10	298.74	10	658.10	10	1,013.93	10	1,374.97	10	1,733.21	10	2,094.55	10	2,455.89	10	2,817.24	10	3,178.58	10	3,539.93
1/4	306.27	1/4	665.41	1/4	1,021.44	1/4	1,382.50	1/4	1,740.73	1/4	2,102.08	1/4	2,463.42	1/4	2,824.77	1/4	3,186.11	1/4	3,547.45
1/2	313.79	1/2	672.72	1/2	1,028.95	1/2	1,390.03	1/2	1,748.26	1/2	2,109.61	1/2	2,470.95	1/2	2,832.29	1/2	3,193.64	1/2	3,554.98
3/4	321.32	3/4	680.03	3/4	1,036.45	3/4	1,397.55	3/4	1,755.79	3/4	2,117.13	3/4	2,478.48	3/4	2,839.82	3/4	3,201.17	3/4	3,562.51
11	328.85	11	687.34	11	1,043.96	11	1,403.08	11	1,763.32	11	2,124.66	11	2,486.01	11	2,847.35	11	3,208.69	11	3,570.04
1/4	336.38	1/4	694.65	1/4	1,051.47	1/4	1,412.59	1/4	1,770.85	1/4	2,132.19	1/4	2,493.53	1/4	2,854.88	1/4	3,216.22	1/4	3,577.57
1/2	343.91	1/2	701.96	1/2	1,058.98	1/2	1,420.10	1/2	1,778.37	1/2	2,139.72	1/2	2,501.06	1/2	2,862.41	1/2	3,223.75	1/2	3,585.09
3/4	351.43	3/4	709.27	3/4	1,066.49	3/4	1,427.61	3/4	1,785.90	3/4	2,147.25	3/4	2,508.59	3/4	2,869.93	3/4	3,231.28	3/4	3,592.62

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 3049"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	3,600.15	0	3,961.49	0	4,322.63	0	4,671.52	0		0		0		0		0		0	
1/4	3,607.68	1/4	3,969.02	1/4	4,330.11	1/4	4,676.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,615.21	1/2	3,976.55	1/2	4,337.60	1/2	4,680.71	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,622.73	3/4	3,984.08	3/4	4,345.09	3/4	4,685.30	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,630.26	1	3,991.61	1	4,352.57	1	4,689.89	1		1		1		1		1		1	
1/4	3,637.79	1/4	3,999.13	1/4	4,360.06	1/4	4,693.41	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,645.32	1/2	4,006.66	1/2	4,367.55	1/2	4,696.93	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,652.85	3/4	4,014.19	3/4	4,375.03	3/4	4,700.44	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,660.37	2	4,021.72	2	4,382.52	2		2		2		2		2		2		2	
1/4	3,667.90	1/4	4,029.25	1/4	4,390.01	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,675.43	1/2	4,036.77	1/2	4,397.49	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,682.96	3/4	4,044.30	3/4	4,404.98	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
3	3,690.49	3	4,051.83	3	4,412.47	3		3		3		3		3		3		3	
1/4	3,698.01	1/4	4,059.36	1/4	4,419.95	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,705.54	1/2	4,066.89	1/2	4,427.44	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,713.07	3/4	4,074.41	3/4	4,434.93	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
4	3,720.60	4	4,081.94	4	4,442.41	4		4		4		4		4		4		4	
1/4	3,728.13	1/4	4,089.47	1/4	4,449.90	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,735.65	1/2	4,097.00	1/2	4,457.39	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,743.18	3/4	4,104.53	3/4	4,464.87	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
5	3,750.71	5	4,112.05	5	4,472.36	5		5		5		5		5		5		5	
1/4	3,758.24	1/4	4,119.58	1/4	4,479.85	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,765.77	1/2	4,127.11	1/2	4,487.33	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,773.29	3/4	4,134.64	3/4	4,494.82	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
6	3,780.82	6	4,142.17	6	4,502.31	6		6		6		6		6		6		6	
1/4	3,788.35	1/4	4,149.69	1/4	4,509.79	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,795.88	1/2	4,157.22	1/2	4,517.28	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,803.41	3/4	4,164.75	3/4	4,524.76	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
7	3,810.93	7	4,172.28	7	4,532.25	7		7		7		7		7		7		7	
1/4	3,818.46	1/4	4,179.81	1/4	4,539.73	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,825.99	1/2	4,187.33	1/2	4,547.22	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,833.52	3/4	4,194.86	3/4	4,554.70	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
8	3,841.05	8	4,202.39	8	4,562.18	8		8		8		8		8		8		8	
1/4	3,848.57	1/4	4,209.92	1/4	4,569.66	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,856.10	1/2	4,217.45	1/2	4,577.13	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,863.63	3/4	4,224.97	3/4	4,584.60	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	3,871.16	9	4,232.50	9	4,592.08	9		9		9		9		9		9		9	
1/4	3,878.69	1/4	4,240.03	1/4	4,599.47	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,886.21	1/2	4,247.56	1/2	4,606.85	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,893.74	3/4	4,255.09	3/4	4,614.24	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	3,901.27	10	4,262.61	10	4,621.63	10		10		10		10		10		10		10	
1/4	3,908.80	1/4	4,270.13	1/4	4,628.43	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,916.33	1/2	4,277.65	1/2	4,635.24	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,923.85	3/4	4,285.16	3/4	4,642.04	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,931.38	11	4,292.68	11	4,648.85	11		11		11		11		11		11		11	
1/4	3,938.91	1/4	4,300.17	1/4	4,654.52	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,946.44	1/2	4,307.65	1/2	4,660.18	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,953.97	3/4	4,315.14	3/4	4,665.85	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL
CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pearland, Texas 77586
<http://www.pmaacorp.net>

PMA



BARGE "EMS 3049"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	25.67	0	358.63	0	715.93	0	1,059.48	0	1,417.77	0	1,775.76	0	2,136.78	0	2,497.79	0	2,858.81	0	3,219.83
1/4	30.01	1/4	366.16	1/4	723.24	1/4	1,066.65	1/4	1,425.15	1/4	1,783.28	1/4	2,144.30	1/4	2,505.32	1/4	2,866.33	1/4	3,227.35
1/2	34.34	1/2	373.68	1/2	730.54	1/2	1,073.81	1/2	1,432.52	1/2	1,790.80	1/2	2,151.82	1/2	2,512.84	1/2	2,873.85	1/2	3,234.87
3/4	38.68	3/4	381.20	3/4	737.84	3/4	1,080.98	3/4	1,439.90	3/4	1,798.32	3/4	2,158.34	3/4	2,520.36	3/4	2,881.38	3/4	3,242.39
1	43.01	1	388.72	1	745.15	1	1,088.15	1	1,447.27	1	1,805.84	1	2,166.86	1	2,527.88	1	2,888.90	1	3,249.91
1/4	48.60	1/4	386.24	1/4	752.42	1/4	1,095.36	1/4	1,454.65	1/4	1,813.37	1/4	2,174.38	1/4	2,535.40	1/4	2,896.42	1/4	3,257.44
1/2	54.19	1/2	403.76	1/2	759.69	1/2	1,102.57	1/2	1,462.02	1/2	1,820.89	1/2	2,181.90	1/2	2,542.92	1/2	2,903.94	1/2	3,264.96
3/4	59.78	3/4	411.28	3/4	766.97	3/4	1,109.79	3/4	1,469.39	3/4	1,828.41	3/4	2,189.43	3/4	2,550.44	3/4	2,911.46	3/4	3,272.48
2	65.37	2	418.80	2	774.24	2	1,117.00	2	1,476.77	2	1,835.93	2	2,196.95	2	2,557.96	2	2,918.98	2	3,280.00
1/4	72.12	1/4	426.33	1/4	781.22	1/4	1,124.52	1/4	1,484.14	1/4	1,843.45	1/4	2,204.47	1/4	2,565.49	1/4	2,926.50	1/4	3,287.52
1/2	78.87	1/2	433.85	1/2	788.20	1/2	1,132.04	1/2	1,491.52	1/2	1,850.97	1/2	2,211.99	1/2	2,573.01	1/2	2,934.02	1/2	3,295.04
3/4	85.62	3/4	441.37	3/4	795.18	3/4	1,139.56	3/4	1,498.89	3/4	1,858.49	3/4	2,219.51	3/4	2,580.53	3/4	2,941.55	3/4	3,302.56
3	92.37	3	448.89	3	802.16	3	1,147.08	3	1,506.26	3	1,866.01	3	2,227.03	3	2,588.05	3	2,949.07	3	3,310.08
1/4	99.64	1/4	456.41	1/4	809.16	1/4	1,154.60	1/4	1,513.65	1/4	1,873.54	1/4	2,234.55	1/4	2,596.57	1/4	2,956.59	1/4	3,317.61
1/2	106.91	1/2	463.93	1/2	816.17	1/2	1,162.13	1/2	1,521.03	1/2	1,881.06	1/2	2,242.07	1/2	2,603.09	1/2	2,964.11	1/2	3,325.13
3/4	114.18	3/4	471.45	3/4	823.17	3/4	1,169.65	3/4	1,528.41	3/4	1,888.58	3/4	2,249.60	3/4	2,610.61	3/4	2,971.63	3/4	3,332.65
4	121.45	4	478.98	4	830.17	4	1,177.17	4	1,535.79	4	1,896.10	4	2,257.12	4	2,618.13	4	2,978.15	4	3,340.17
1/4	128.74	1/4	486.50	1/4	837.34	1/4	1,184.69	1/4	1,543.21	1/4	1,903.62	1/4	2,264.64	1/4	2,625.66	1/4	2,986.67	1/4	3,347.69
1/2	136.04	1/2	494.02	1/2	844.51	1/2	1,192.21	1/2	1,550.64	1/2	1,911.14	1/2	2,272.16	1/2	2,633.18	1/2	2,994.19	1/2	3,355.21
3/4	143.33	3/4	501.54	3/4	851.67	3/4	1,199.73	3/4	1,558.07	3/4	1,918.66	3/4	2,279.68	3/4	2,640.70	3/4	3,001.72	3/4	3,362.73
5	150.63	5	509.06	5	858.84	5	1,207.25	5	1,565.50	5	1,926.18	5	2,287.20	5	2,648.22	5	3,009.24	5	3,370.25
1/4	157.93	1/4	516.57	1/4	866.01	1/4	1,214.77	1/4	1,572.93	1/4	1,933.70	1/4	2,294.72	1/4	2,655.74	1/4	3,016.76	1/4	3,377.78
1/2	165.23	1/2	524.08	1/2	873.17	1/2	1,222.30	1/2	1,580.37	1/2	1,941.23	1/2	2,302.24	1/2	2,663.26	1/2	3,024.28	1/2	3,385.30
3/4	172.54	3/4	531.59	3/4	880.34	3/4	1,229.82	3/4	1,587.81	3/4	1,948.75	3/4	2,309.76	3/4	2,670.78	3/4	3,031.80	3/4	3,392.82
6	179.84	6	539.10	6	887.50	6	1,237.34	6	1,595.25	6	1,956.27	6	2,317.29	6	2,678.30	6	3,039.32	6	3,400.34
1/4	187.14	1/4	546.61	1/4	894.67	1/4	1,244.86	1/4	1,602.77	1/4	1,963.79	1/4	2,324.81	1/4	2,685.82	1/4	3,046.84	1/4	3,407.86
1/2	194.45	1/2	554.12	1/2	901.83	1/2	1,252.38	1/2	1,610.29	1/2	1,971.31	1/2	2,332.33	1/2	2,693.35	1/2	3,054.36	1/2	3,415.38
3/4	201.75	3/4	561.63	3/4	909.00	3/4	1,259.90	3/4	1,617.81	3/4	1,978.83	3/4	2,339.85	3/4	2,700.87	3/4	3,061.88	3/4	3,422.90
7	209.05	7	569.14	7	916.16	7	1,267.42	7	1,625.34	7	1,986.35	7	2,347.37	7	2,708.39	7	3,069.41	7	3,430.42
1/4	216.38	1/4	576.62	1/4	923.33	1/4	1,274.94	1/4	1,632.86	1/4	1,993.87	1/4	2,354.89	1/4	2,715.91	1/4	3,076.93	1/4	3,437.94
1/2	223.71	1/2	584.11	1/2	930.49	1/2	1,282.46	1/2	1,640.38	1/2	2,001.40	1/2	2,362.41	1/2	2,723.43	1/2	3,084.45	1/2	3,445.47
3/4	231.04	3/4	591.59	3/4	937.66	3/4	1,289.99	3/4	1,647.90	3/4	2,008.92	3/4	2,369.93	3/4	2,730.95	3/4	3,091.97	3/4	3,452.99
8	238.37	8	599.08	8	944.82	8	1,297.51	8	1,655.42	8	2,016.44	8	2,377.46	8	2,738.47	8	3,099.49	8	3,460.51
1/4	245.88	1/4	606.38	1/4	951.99	1/4	1,305.03	1/4	1,662.94	1/4	2,023.96	1/4	2,384.98	1/4	2,745.99	1/4	3,107.01	1/4	3,468.03
1/2	253.39	1/2	613.68	1/2	959.15	1/2	1,312.55	1/2	1,670.46	1/2	2,031.48	1/2	2,392.50	1/2	2,753.52	1/2	3,114.53	1/2	3,475.55
3/4	260.90	3/4	620.99	3/4	966.32	3/4	1,320.07	3/4	1,677.98	3/4	2,039.00	3/4	2,400.02	3/4	2,761.04	3/4	3,122.05	3/4	3,483.07
9	268.41	9	628.29	9	973.49	9	1,327.59	9	1,685.51	9	2,046.52	9	2,407.54	9	2,768.56	9	3,129.58	9	3,490.59
1/4	275.93	1/4	635.59	1/4	980.65	1/4	1,335.11	1/4	1,693.03	1/4	2,054.04	1/4	2,415.06	1/4	2,776.08	1/4	3,137.10	1/4	3,498.11
1/2	283.44	1/2	642.90	1/2	987.82	1/2	1,342.63	1/2	1,700.55	1/2	2,061.57	1/2	2,422.58	1/2	2,783.60	1/2	3,144.62	1/2	3,505.64
3/4	290.95	3/4	650.20	3/4	994.98	3/4	1,350.16	3/4	1,708.07	3/4	2,069.09	3/4	2,430.10	3/4	2,791.12	3/4	3,152.14	3/4	3,513.16
10	298.46	10	657.50	10	1,002.15	10	1,357.68	10	1,715.59	10	2,076.61	10	2,437.63	10	2,798.64	10	3,159.66	10	3,520.68
1/4	305.98	1/4	664.81	1/4	1,009.31	1/4	1,365.20	1/4	1,723.11	1/4	2,084.13	1/4	2,445.15	1/4	2,806.16	1/4	3,167.18	1/4	3,528.20
1/2	313.51	1/2	672.11	1/2	1,016.48	1/2	1,372.72	1/2	1,730.63	1/2	2,091.65	1/2	2,452.67	1/2	2,813.69	1/2	3,174.70	1/2	3,535.72
3/4	321.03	3/4	679.41	3/4	1,023.64	3/4	1,380.24	3/4	1,738.15	3/4	2,099.17	3/4	2,460.19	3/4	2,821.21	3/4	3,182.22	3/4	3,543.24
11	328.55	11	686.72	11	1,030.81	11	1,387.76	11	1,745.67	11	2,106.69	11	2,467.71	11	2,828.73	11	3,189.75	11	3,550.76
1/4	336.07	1/4	694.02	1/4	1,037.98	1/4	1,395.26	1/4	1,753.20	1/4	2,114.21	1/4	2,475.23	1/4	2,836.25	1/4	3,197.27	1/4	3,558.28
1/2	343.59	1/2	701.32	1/2	1,045.14	1/2	1,402.77	1/2	1,760.72	1/2	2,121.73	1/2	2,482.75	1/2	2,843.77	1/2	3,204.79	1/2	3,565.81
3/4	351.11	3/4	708.63	3/4	1,052.31	3/4	1,410.27	3/4	1,768.24	3/4	2,129.26	3/4	2,490.27	3/4	2,851.29	3/4	3,212.31	3/4	3,573.33

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 3049"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	3,589.85	0	3,941.87	0	4,302.71	0	4,651.29	0		0		0		0		0		0	
1/4	3,588.37	1/4	3,940.39	1/4	4,301.19	1/4	4,650.88	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,585.89	1/2	3,956.91	1/2	4,317.67	1/2	4,660.46	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,603.41	3/4	3,984.43	3/4	4,325.15	3/4	4,665.05	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	3,610.93	1	3,971.95	1	4,332.63	1	4,669.64	1	1	1	1	1	1	1	1	1	1	1	1
1/4	3,618.45	1/4	3,979.47	1/4	4,340.11	1/4	4,673.16	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,625.97	1/2	3,986.99	1/2	4,347.59	1/2	4,676.67	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,633.50	3/4	3,994.51	3/4	4,355.07	3/4	4,680.18	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	3,641.02	2	4,002.03	2	4,362.55	2		2		2		2		2		2		2	
1/4	3,648.54	1/4	4,009.56	1/4	4,370.03	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,656.06	1/2	4,017.08	1/2	4,377.51	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,663.58	3/4	4,024.60	3/4	4,384.99	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
3	3,671.10	3	4,032.12	3	4,392.47	3		3		3		3		3		3		3	
1/4	3,678.62	1/4	4,039.64	1/4	4,399.95	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,686.14	1/2	4,047.16	1/2	4,407.43	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,693.67	3/4	4,054.68	3/4	4,414.91	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
4	3,701.19	4	4,062.20	4	4,422.39	4		4		4		4		4		4		4	
1/4	3,708.71	1/4	4,069.73	1/4	4,429.87	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,716.23	1/2	4,077.25	1/2	4,437.35	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,723.75	3/4	4,084.77	3/4	4,444.83	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
5	3,731.27	5	4,092.29	5	4,452.31	5		5		5		5		5		5		5	
1/4	3,738.79	1/4	4,099.81	1/4	4,459.79	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,746.31	1/2	4,107.33	1/2	4,467.27	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,753.84	3/4	4,114.85	3/4	4,474.75	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
6	3,761.36	6	4,122.37	6	4,482.23	6		6		6		6		6		6		6	
1/4	3,768.88	1/4	4,129.90	1/4	4,489.71	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,776.40	1/2	4,137.42	1/2	4,497.19	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,783.92	3/4	4,144.94	3/4	4,504.66	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
7	3,791.44	7	4,152.46	7	4,512.14	7		7		7		7		7		7		7	
1/4	3,798.96	1/4	4,159.98	1/4	4,519.62	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,806.48	1/2	4,167.50	1/2	4,527.10	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,814.00	3/4	4,175.02	3/4	4,534.57	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
8	3,821.53	8	4,182.54	8	4,542.05	8		8		8		8		8		8		8	
1/4	3,829.05	1/4	4,190.06	1/4	4,549.52	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,836.57	1/2	4,197.59	1/2	4,556.98	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,844.09	3/4	4,205.11	3/4	4,564.45	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	3,851.61	9	4,212.63	9	4,571.92	9		9		9		9		9		9		9	
1/4	3,859.13	1/4	4,220.15	1/4	4,579.30	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,866.65	1/2	4,227.67	1/2	4,586.68	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,874.17	3/4	4,235.19	3/4	4,594.06	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	3,881.70	10	4,242.71	10	4,601.44	10		10		10		10		10		10		10	
1/4	3,889.22	1/4	4,250.23	1/4	4,608.24	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,896.74	1/2	4,257.75	1/2	4,615.04	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,904.26	3/4	4,265.27	3/4	4,621.84	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,911.78	11	4,272.79	11	4,628.63	11		11		11		11		11		11		11	
1/4	3,919.30	1/4	4,280.27	1/4	4,634.30	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,926.82	1/2	4,287.75	1/2	4,639.96	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,934.34	3/4	4,295.23	3/4	4,645.62	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

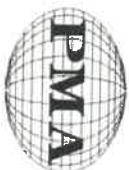
CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.

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



BARGE "EMS 3049"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 13'-07 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	25.58	0	357.38	0	713.43	0	1,069.27	0	1,428.81	0	1,784.34	0	2,143.79	0	2,502.69	0	2,804.07	0	3,029.56	0	3,234.33	0	3,438.86	0	3,643.39	0	3,847.92	0	4,052.45	0	4,256.98	0	4,461.51	0	4,666.04	0	4,870.57	0	5,075.10
1/4	29.90	1/4	364.87	1/4	720.71	1/4	1,076.75	1/4	1,436.13	1/4	1,791.83	1/4	2,151.28	1/4	2,510.17	1/4	2,808.77	1/4	3,034.26	1/4	3,222.27	1/4	3,409.78	1/4	3,595.29	1/4	3,780.80	1/4	3,966.31	1/4	4,151.82	1/4	4,337.33	1/4	4,522.84	1/4	4,708.35	1/4	4,893.86
1/2	34.23	1/2	372.37	1/2	727.99	1/2	1,084.22	1/2	1,443.44	1/2	1,799.33	1/2	2,158.77	1/2	2,517.64	1/2	2,813.47	1/2	3,038.96	1/2	3,226.29	1/2	3,411.81	1/2	3,596.32	1/2	3,781.83	1/2	3,967.34	1/2	4,152.85	1/2	4,338.36	1/2	4,523.87	1/2	4,709.38	1/2	4,894.89
3/4	38.55	3/4	379.86	3/4	735.27	3/4	1,091.70	3/4	1,450.76	3/4	1,806.82	3/4	2,166.26	3/4	2,525.11	3/4	2,821.87	3/4	3,043.65	3/4	3,230.31	3/4	3,413.86	3/4	3,598.37	3/4	3,783.88	3/4	3,969.39	3/4	4,154.90	3/4	4,340.41	3/4	4,525.92	3/4	4,711.43	3/4	4,896.94
1	42.87	1	387.36	1	742.54	1	1,099.17	1	1,458.07	1	1,814.32	1	2,173.75	1	2,532.59	1	2,832.87	1	3,048.35	1	3,239.86	1	3,421.37	1	3,602.88	1	3,784.39	1	3,965.90	1	4,147.41	1	4,328.92	1	4,510.43	1	4,691.94	1	4,873.45
1/4	48.44	1/4	394.85	1/4	749.83	1/4	1,106.65	1/4	1,465.38	1/4	1,821.81	1/4	2,181.23	1/4	2,540.04	1/4	2,827.57	1/4	3,053.05	1/4	3,242.25	1/4	3,421.45	1/4	3,600.65	1/4	3,779.85	1/4	3,959.05	1/4	4,138.25	1/4	4,317.45	1/4	4,496.65	1/4	4,675.85	1/4	4,855.05
1/2	54.00	1/2	402.35	1/2	757.12	1/2	1,114.13	1/2	1,472.70	1/2	1,829.31	1/2	2,188.71	1/2	2,547.49	1/2	2,832.27	1/2	3,057.74	1/2	3,246.94	1/2	3,426.14	1/2	3,605.34	1/2	3,784.54	1/2	3,963.74	1/2	4,142.94	1/2	4,322.14	1/2	4,501.34	1/2	4,680.54	1/2	4,859.74
3/4	59.57	3/4	409.84	3/4	764.41	3/4	1,121.61	3/4	1,480.01	3/4	1,836.80	3/4	2,196.18	3/4	2,554.94	3/4	2,836.97	3/4	3,062.44	3/4	3,251.64	3/4	3,430.84	3/4	3,610.04	3/4	3,789.24	3/4	3,968.44	3/4	4,147.64	3/4	4,326.84	3/4	4,506.04	3/4	4,685.24	3/4	4,864.44
2	65.14	2	417.34	2	771.70	2	1,129.09	2	1,487.33	2	1,844.30	2	2,203.66	2	2,562.40	2	2,841.67	2	3,067.14	2	3,256.34	2	3,435.54	2	3,614.74	2	3,793.94	2	3,973.14	2	4,152.34	2	4,331.54	2	4,510.74	2	4,689.94	2	4,869.14
1/4	71.87	1/4	424.83	1/4	778.98	1/4	1,136.58	1/4	1,494.64	1/4	1,851.79	1/4	2,211.13	1/4	2,569.85	1/4	2,846.37	1/4	3,071.83	1/4	3,260.03	1/4	3,439.23	1/4	3,618.43	1/4	3,797.63	1/4	3,976.83	1/4	4,156.03	1/4	4,335.23	1/4	4,514.43	1/4	4,693.63	1/4	4,872.83
1/2	78.59	1/2	432.33	1/2	786.27	1/2	1,144.08	1/2	1,501.96	1/2	1,859.29	1/2	2,218.61	1/2	2,577.30	1/2	2,851.07	1/2	3,076.53	1/2	3,265.73	1/2	3,444.93	1/2	3,624.13	1/2	3,803.33	1/2	3,982.53	1/2	4,161.73	1/2	4,340.93	1/2	4,520.13	1/2	4,699.33	1/2	4,878.53
3/4	85.32	3/4	439.83	3/4	793.56	3/4	1,151.57	3/4	1,509.27	3/4	1,868.78	3/4	2,226.09	3/4	2,584.75	3/4	2,855.77	3/4	3,081.22	3/4	3,270.42	3/4	3,449.62	3/4	3,628.82	3/4	3,808.02	3/4	3,987.22	3/4	4,166.42	3/4	4,345.62	3/4	4,524.82	3/4	4,704.02	3/4	4,883.22
3	92.04	3	447.32	3	800.85	3	1,159.07	3	1,516.59	3	1,874.28	3	2,233.56	3	2,592.20	3	2,860.47	3	3,085.92	3	3,275.12	3	3,454.32	3	3,633.52	3	3,812.72	3	3,991.92	3	4,171.12	3	4,350.32	3	4,529.52	3	4,708.72	3	4,887.92
1/4	99.29	1/4	454.82	1/4	808.16	1/4	1,166.56	1/4	1,523.90	1/4	1,881.77	1/4	2,241.04	1/4	2,599.66	1/4	2,865.17	1/4	3,090.61	1/4	3,280.81	1/4	3,460.01	1/4	3,639.21	1/4	3,818.41	1/4	3,997.61	1/4	4,176.81	1/4	4,356.01	1/4	4,535.21	1/4	4,714.41	1/4	4,893.61
1/2	106.53	1/2	462.31	1/2	815.47	1/2	1,174.06	1/2	1,531.22	1/2	1,889.27	1/2	2,248.51	1/2	2,607.11	1/2	2,869.86	1/2	3,095.30	1/2	3,285.50	1/2	3,464.70	1/2	3,643.90	1/2	3,823.10	1/2	3,999.30	1/2	4,178.50	1/2	4,357.70	1/2	4,536.90	1/2	4,716.10	1/2	4,895.30
3/4	113.78	3/4	469.81	3/4	822.78	3/4	1,181.56	3/4	1,538.53	3/4	1,896.76	3/4	2,255.99	3/4	2,614.56	3/4	2,874.56	3/4	3,099.99	3/4	3,289.19	3/4	3,468.39	3/4	3,647.59	3/4	3,826.79	3/4	3,999.99	3/4	4,179.19	3/4	4,358.39	3/4	4,537.59	3/4	4,716.79	3/4	4,895.99
4	121.02	4	477.30	4	830.10	4	1,189.05	4	1,545.85	4	1,904.25	4	2,263.47	4	2,622.01	4	2,879.26	4	3,104.68	4	3,294.88	4	3,474.08	4	3,653.28	4	3,832.48	4	3,999.99	4	4,179.19	4	4,358.39	4	4,537.59	4	4,716.79	4	4,895.99
1/4	128.29	1/4	484.80	1/4	837.57	1/4	1,196.55	1/4	1,553.16	1/4	1,911.75	1/4	2,270.94	1/4	2,629.46	1/4	2,883.95	1/4	3,108.37	1/4	3,298.57	1/4	3,477.77	1/4	3,656.97	1/4	3,836.17	1/4	3,999.99	1/4	4,179.19	1/4	4,358.39	1/4	4,537.59	1/4	4,716.79	1/4	4,895.99
1/2	135.56	1/2	492.29	1/2	845.05	1/2	1,204.04	1/2	1,560.48	1/2	1,919.24	1/2	2,278.42	1/2	2,636.92	1/2	2,888.65	1/2	3,114.06	1/2	3,304.26	1/2	3,483.46	1/2	3,662.66	1/2	3,841.86	1/2	3,999.99	1/2	4,179.19	1/2	4,358.39	1/2	4,537.59	1/2	4,716.79	1/2	4,895.99
3/4	142.83	3/4	499.79	3/4	852.52	3/4	1,211.54	3/4	1,567.79	3/4	1,926.74	3/4	2,285.89	3/4	2,644.37	3/4	2,893.35	3/4	3,118.75	3/4	3,308.95	3/4	3,488.15	3/4	3,667.35	3/4	3,846.55	3/4	3,999.99	3/4	4,179.19	3/4	4,358.39	3/4	4,537.59	3/4	4,716.79	3/4	4,895.99
5	150.10	5	507.28	5	860.00	5	1,219.03	5	1,575.11	5	1,934.23	5	2,293.37	5	2,651.82	5	2,898.05	5	3,123.44	5	3,313.64	5	3,492.84	5	3,672.04	5	3,851.24	5	3,999.99	5	4,179.19	5	4,358.39	5	4,537.59	5	4,716.79	5	4,895.99
1/4	157.37	1/4	514.76	1/4	867.47	1/4	1,226.53	1/4	1,582.45	1/4	1,941.73	1/4	2,300.85	1/4	2,659.27	1/4	2,907.74	1/4	3,132.82	1/4	3,323.02	1/4	3,502.22	1/4	3,681.42	1/4	3,860.62	1/4	3,999.99	1/4	4,179.19	1/4	4,358.39	1/4	4,537.59	1/4	4,716.79	1/4	4,895.99
1/2	164.65	1/2	522.25	1/2	874.95	1/2	1,234.02	1/2	1,589.78	1/2	1,949.22	1/2	2,308.32	1/2	2,666.72	1/2	2,907.44	1/2	3,128.82	1/2	3,319.02	1/2	3,498.22	1/2	3,677.42	1/2	3,856.62	1/2	3,999.99	1/2	4,179.19	1/2	4,358.39	1/2	4,537.59	1/2	4,716.79	1/2	4,895.99
3/4	171.93	3/4	529.73	3/4	882.42	3/4	1,241.52	3/4	1,597.12	3/4	1,956.72	3/4	2,315.80	3/4	2,674.18	3/4	2,912.14	3/4	3,137.51	3/4	3,327.71	3/4	3,506.91	3/4	3,686.11	3/4	3,865.31	3/4	3,999.99	3/4	4,179.19	3/4	4,358.39	3/4	4,537.59	3/4	4,716.79	3/4	4,895.99
6	179.20	6	537.22	6	889.89	6	1,249.01	6	1,604.46	6	1,964.21	6	2,323.27	6	2,681.63	6	2,921.63	6	3,146.89	6	3,337.09	6	3,516.29	6	3,695.49	6	3,874.69	6	3,999.99	6	4,179.19	6	4,358.39	6	4,537.59	6	4,716.79	6	4,895.99
1/4	186.48	1/4	544.70	1/4	897.37	1/4	1,256.51	1/4	1,611.95	1/4	1,971.71	1/4	2,330.75	1/4	2,688.74	1/4	2,921.53	1/4	3,146.89	1/4	3,337.09	1/4	3,516.29	1/4	3,695.49	1/4	3,874.69	1/4	3,999.99	1/4	4,179.19	1/4	4,358.39	1/4	4,537.59	1/4	4,716.79	1/4	4,895.99
1/2	193.76	1/2	552.19	1/2	904.84	1/2	1,264.00	1/2	1,619.45	1/2	1,979.20	1/2	2,338.22	1/2	2,695.84	1/2	2,926.23	1/2	3,151.58	1/2	3,341.78	1/2	3,520.98	1/2	3,699.18	1/2	3,878.38	1/2	3,999.99	1/2	4,179.19	1/2	4,358.39	1/2	4,537.59	1/2	4,716.79	1/2	4,895.99
3/4	201.04	3/4	559.67	3/4	912.31	3/4	1,271.50	3/4	1,626.94	3/4	1,986.70	3/4	2,345.70	3/4	2,702.95	3/4	2,930.92	3/4	3,156.27	3/4	3,346.47	3/4	3,525.67	3/4	3,704.87	3/4	3,884.07	3/4	3,999.99	3/4	4,179.19	3/4	4,358.39	3/4	4,537.59	3/4	4,716.79	3/4	4,895.99
7	208.32	7	567.16	7	919.79	7	1,278.99	7	1,634.44	7	1,994.19	7	2,353.18	7	2,710.06	7	2,935.62	7	3,160.97	7	3,351.17	7	3,530.37	7	3,709.57	7	3,888.77	7	3,999.99	7	4,179.19	7	4,358.39	7	4,537.59	7	4,716.79	7	4,895.99
1/4	215.62	1/4	574.62	1/4	927.26	1/4	1,286.49	1/4	1,641.93	1/4	2,001.69	1/4	2,360.65	1/4	2,717.46	1/4	2,940.32	1/4	3,165.66	1/4	3,355.86	1/4	3,535.06	1/4	3,714.26	1/4	3,893.46	1/4	3,999.99	1/4	4,179.19	1/4	4,358.39	1/4	4,5				

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.

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



BARGE "EMS 3049"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	3,246.39	0	3,439.34	0	3,632.20	0	3,813.89	0		0		0		0		0		0	
1/4	3,250.41	1/4	3,443.36	1/4	3,636.20	1/4	3,815.04	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,254.43	1/2	3,447.38	1/2	3,640.20	1/2	3,816.18	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,258.45	3/4	3,451.40	3/4	3,644.20	3/4	3,817.33	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	3,262.47	1	3,455.42	1	3,648.20	1	3,818.48	1	1	1	1	1	1	1	1	1	1	1	1
1/4	3,266.49	1/4	3,459.44	1/4	3,652.20	1/4	3,818.56	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,270.51	1/2	3,463.46	1/2	3,656.19	1/2	3,818.64	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,274.53	3/4	3,467.48	3/4	3,660.19	3/4	3,818.71	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	3,278.55	2	3,471.50	2	3,664.19	2		2	2	2	2	2	2	2	2	2	2	2	2
1/4	3,282.57	1/4	3,475.52	1/4	3,668.19	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,286.59	1/2	3,479.54	1/2	3,672.19	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,290.61	3/4	3,483.56	3/4	3,676.19	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	3,294.63	3	3,487.58	3	3,680.19	3		3	3	3	3	3	3	3	3	3	3	3	3
1/4	3,298.65	1/4	3,491.60	1/4	3,684.19	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,302.67	1/2	3,495.62	1/2	3,688.19	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,306.69	3/4	3,499.64	3/4	3,692.19	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	3,310.71	4	3,503.66	4	3,696.19	4		4	4	4	4	4	4	4	4	4	4	4	4
1/4	3,314.73	1/4	3,507.68	1/4	3,700.19	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,318.75	1/2	3,511.70	1/2	3,704.18	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,322.77	3/4	3,515.72	3/4	3,708.18	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	3,326.79	5	3,519.74	5	3,712.18	5		5	5	5	5	5	5	5	5	5	5	5	5
1/4	3,330.81	1/4	3,523.76	1/4	3,716.18	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,334.82	1/2	3,527.78	1/2	3,720.18	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,338.84	3/4	3,531.80	3/4	3,724.18	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	3,342.86	6	3,535.81	6	3,728.18	6		6	6	6	6	6	6	6	6	6	6	6	6
1/4	3,346.88	1/4	3,539.83	1/4	3,732.18	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,350.90	1/2	3,543.85	1/2	3,736.18	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,354.92	3/4	3,547.87	3/4	3,740.18	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	3,358.94	7	3,551.89	7	3,744.18	7		7	7	7	7	7	7	7	7	7	7	7	7
1/4	3,362.96	1/4	3,555.91	1/4	3,748.17	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,366.98	1/2	3,559.93	1/2	3,752.17	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,371.00	3/4	3,563.95	3/4	3,756.17	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	3,375.02	8	3,567.97	8	3,760.17	8		8	8	8	8	8	8	8	8	8	8	8	8
1/4	3,379.04	1/4	3,571.99	1/4	3,764.15	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,383.06	1/2	3,576.01	1/2	3,768.14	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,387.08	3/4	3,580.03	3/4	3,772.12	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	3,391.10	9	3,584.05	9	3,776.11	9		9	9	9	9	9	9	9	9	9	9	9	9
1/4	3,395.12	1/4	3,588.07	1/4	3,780.01	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,399.14	1/2	3,592.09	1/2	3,783.91	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,403.16	3/4	3,596.11	3/4	3,787.81	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	3,407.18	10	3,600.13	10	3,791.72	10		10	10	10	10	10	10	10	10	10	10	10	10
1/4	3,411.20	1/4	3,604.15	1/4	3,795.04	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,415.22	1/2	3,608.17	1/2	3,798.36	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,419.24	3/4	3,612.18	3/4	3,801.68	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	3,423.26	11	3,616.20	11	3,805.01	11		11	11	11	11	11	11	11	11	11	11	11	11
1/4	3,427.28	1/4	3,620.20	1/4	3,807.23	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	3,431.30	1/2	3,624.20	1/2	3,809.45	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3,435.32	3/4	3,628.20	3/4	3,811.67	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2082
Pearland, Texas 77588
<http://www.pmacorp.net>



BARGE "EMS 3049"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	25.58	0	356.53	0	711.46	0	1,049.59	0	1,405.00	0	1,759.29	0	2,117.52	0	2,474.74	0	2,779.54	0	3,001.10
1/4	29.90	1/4	364.00	1/4	718.72	1/4	1,056.64	1/4	1,412.29	1/4	1,766.76	1/4	2,124.98	1/4	2,482.19	1/4	2,780.34	1/4	3,005.80
1/2	34.22	1/2	371.47	1/2	725.98	1/2	1,063.68	1/2	1,419.58	1/2	1,774.23	1/2	2,132.45	1/2	2,489.63	1/2	2,785.04	1/2	3,010.49
3/4	38.55	3/4	378.94	3/4	733.23	3/4	1,070.73	3/4	1,426.87	3/4	1,781.70	3/4	2,139.91	3/4	2,497.08	3/4	2,788.74	3/4	3,015.19
1	42.87	1	386.42	1	740.49	1	1,077.77	1	1,434.16	1	1,789.17	1	2,147.38	1	2,504.52	1	2,794.44	1	3,019.89
1/4	48.44	1/4	393.89	1/4	747.71	1/4	1,084.90	1/4	1,441.45	1/4	1,796.64	1/4	2,154.53	1/4	2,511.95	1/4	2,799.14	1/4	3,024.58
1/2	54.00	1/2	401.36	1/2	754.93	1/2	1,092.04	1/2	1,448.73	1/2	1,804.11	1/2	2,162.28	1/2	2,519.37	1/2	2,803.84	1/2	3,029.28
3/4	59.57	3/4	408.83	3/4	762.14	3/4	1,099.17	3/4	1,456.02	3/4	1,811.58	3/4	2,169.73	3/4	2,526.80	3/4	2,808.54	3/4	3,033.98
2	65.14	2	416.31	2	769.36	2	1,106.30	2	1,463.31	2	1,819.05	2	2,177.18	2	2,534.22	2	2,813.24	2	3,038.67
1/4	71.86	1/4	423.78	1/4	776.26	1/4	1,113.77	1/4	1,470.60	1/4	1,826.52	1/4	2,184.63	1/4	2,541.65	1/4	2,817.94	1/4	3,043.37
1/2	78.59	1/2	431.25	1/2	783.15	1/2	1,121.24	1/2	1,477.89	1/2	1,833.99	1/2	2,192.08	1/2	2,549.07	1/2	2,822.64	1/2	3,048.06
3/4	85.31	3/4	438.72	3/4	790.05	3/4	1,128.71	3/4	1,485.18	3/4	1,841.46	3/4	2,199.52	3/4	2,556.50	3/4	2,827.34	3/4	3,052.76
3	92.03	3	446.19	3	796.94	3	1,136.18	3	1,492.47	3	1,848.92	3	2,206.97	3	2,563.92	3	2,832.04	3	3,057.45
1/4	99.25	1/4	453.67	1/4	803.81	1/4	1,143.65	1/4	1,499.76	1/4	1,856.39	1/4	2,214.41	1/4	2,571.35	1/4	2,836.74	1/4	3,062.14
1/2	106.48	1/2	461.14	1/2	810.69	1/2	1,151.12	1/2	1,507.05	1/2	1,863.86	1/2	2,221.84	1/2	2,578.78	1/2	2,841.43	1/2	3,066.83
3/4	113.70	3/4	468.61	3/4	817.56	3/4	1,158.59	3/4	1,514.34	3/4	1,871.33	3/4	2,229.27	3/4	2,586.20	3/4	2,846.13	3/4	3,071.52
4	120.92	4	476.08	4	824.43	4	1,166.06	4	1,521.63	4	1,878.80	4	2,236.70	4	2,593.63	4	2,850.82	4	3,076.21
1/4	128.16	1/4	483.55	1/4	831.47	1/4	1,173.53	1/4	1,528.92	1/4	1,886.27	1/4	2,244.14	1/4	2,601.08	1/4	2,855.52	1/4	3,080.90
1/2	135.41	1/2	491.02	1/2	838.51	1/2	1,181.00	1/2	1,536.21	1/2	1,893.74	1/2	2,251.57	1/2	2,608.53	1/2	2,860.22	1/2	3,085.59
3/4	142.66	3/4	498.50	3/4	845.55	3/4	1,188.47	3/4	1,543.50	3/4	1,901.21	3/4	2,259.00	3/4	2,615.98	3/4	2,864.91	3/4	3,090.28
5	149.90	5	505.97	5	852.59	5	1,195.94	5	1,550.78	5	1,908.68	5	2,266.43	5	2,623.43	5	2,869.61	5	3,094.97
1/4	157.16	1/4	513.43	1/4	859.62	1/4	1,203.41	1/4	1,555.10	1/4	1,916.15	1/4	2,273.87	1/4	2,630.88	1/4	2,874.30	1/4	3,099.66
1/2	164.41	1/2	520.85	1/2	866.66	1/2	1,210.88	1/2	1,565.41	1/2	1,923.62	1/2	2,281.30	1/2	2,638.33	1/2	2,879.00	1/2	3,104.35
3/4	171.66	3/4	528.39	3/4	873.69	3/4	1,218.35	3/4	1,572.72	3/4	1,931.09	3/4	2,288.73	3/4	2,645.78	3/4	2,883.70	3/4	3,109.04
6	178.92	6	535.81	6	880.73	6	1,225.82	6	1,580.03	6	1,938.56	6	2,296.16	6	2,653.23	6	2,888.39	6	3,113.73
1/4	186.17	1/4	543.27	1/4	887.76	1/4	1,233.29	1/4	1,587.50	1/4	1,946.02	1/4	2,303.60	1/4	2,660.34	1/4	2,893.09	1/4	3,118.42
1/2	193.42	1/2	550.73	1/2	894.84	1/2	1,240.76	1/2	1,594.97	1/2	1,953.49	1/2	2,311.03	1/2	2,667.44	1/2	2,897.79	1/2	3,123.11
3/4	200.68	3/4	558.20	3/4	901.83	3/4	1,248.23	3/4	1,602.44	3/4	1,960.96	3/4	2,318.46	3/4	2,674.55	3/4	2,902.48	3/4	3,127.80
7	207.93	7	565.66	7	908.87	7	1,255.70	7	1,609.91	7	1,968.43	7	2,325.89	7	2,681.65	7	2,907.18	7	3,132.49
1/4	215.21	1/4	573.09	1/4	915.91	1/4	1,263.17	1/4	1,617.38	1/4	1,975.90	1/4	2,333.33	1/4	2,686.35	1/4	2,911.87	1/4	3,137.18
1/2	222.49	1/2	580.53	1/2	922.94	1/2	1,270.63	1/2	1,624.85	1/2	1,983.37	1/2	2,340.76	1/2	2,691.05	1/2	2,916.57	1/2	3,141.86
3/4	229.78	3/4	587.96	3/4	929.98	3/4	1,278.10	3/4	1,633.32	3/4	1,990.84	3/4	2,348.19	3/4	2,695.75	3/4	2,921.27	3/4	3,146.55
8	237.06	8	595.40	8	937.01	8	1,285.57	8	1,639.79	8	1,998.31	8	2,355.62	8	2,700.45	8	2,925.96	8	3,151.24
1/4	244.52	1/4	602.65	1/4	944.05	1/4	1,293.04	1/4	1,647.26	1/4	2,005.78	1/4	2,363.06	1/4	2,705.15	1/4	2,930.66	1/4	3,155.85
1/2	251.98	1/2	609.91	1/2	951.08	1/2	1,300.51	1/2	1,654.73	1/2	2,013.25	1/2	2,370.49	1/2	2,709.86	1/2	2,935.36	1/2	3,160.46
3/4	259.44	3/4	617.16	3/4	958.12	3/4	1,307.98	3/4	1,662.19	3/4	2,020.72	3/4	2,377.93	3/4	2,714.55	3/4	2,940.05	3/4	3,165.07
9	266.90	9	624.41	9	965.15	9	1,315.45	9	1,669.66	9	2,028.19	9	2,385.36	9	2,719.25	9	2,944.75	9	3,169.67
1/4	274.36	1/4	631.67	1/4	972.19	1/4	1,322.92	1/4	1,677.13	1/4	2,035.65	1/4	2,392.81	1/4	2,723.95	1/4	2,949.44	1/4	3,173.69
1/2	281.83	1/2	638.92	1/2	979.22	1/2	1,330.39	1/2	1,684.60	1/2	2,043.12	1/2	2,400.26	1/2	2,728.65	1/2	2,954.14	1/2	3,177.71
3/4	289.29	3/4	646.18	3/4	986.26	3/4	1,337.86	3/4	1,692.07	3/4	2,050.58	3/4	2,407.69	3/4	2,733.35	3/4	2,958.84	3/4	3,181.73
10	296.75	10	653.43	10	993.30	10	1,345.33	10	1,699.54	10	2,058.05	10	2,415.15	10	2,738.05	10	2,963.53	10	3,185.75
1/4	304.22	1/4	660.69	1/4	1,000.33	1/4	1,352.80	1/4	1,707.01	1/4	2,065.48	1/4	2,422.60	1/4	2,742.75	1/4	2,968.23	1/4	3,189.78
1/2	311.70	1/2	667.94	1/2	1,007.37	1/2	1,360.27	1/2	1,714.48	1/2	2,072.92	1/2	2,430.05	1/2	2,747.45	1/2	2,972.92	1/2	3,193.80
3/4	319.17	3/4	675.19	3/4	1,014.40	3/4	1,367.74	3/4	1,721.95	3/4	2,080.36	3/4	2,437.50	3/4	2,752.15	3/4	2,977.62	3/4	3,197.82
11	326.64	11	682.45	11	1,021.44	11	1,375.21	11	1,728.42	11	2,087.80	11	2,444.95	11	2,756.85	11	2,982.32	11	3,201.84
1/4	334.11	1/4	689.70	1/4	1,028.48	1/4	1,382.66	1/4	1,736.89	1/4	2,095.23	1/4	2,452.40	1/4	2,761.55	1/4	2,987.01	1/4	3,205.86
1/2	341.58	1/2	696.96	1/2	1,035.52	1/2	1,390.10	1/2	1,744.36	1/2	2,102.66	1/2	2,459.85	1/2	2,766.25	1/2	2,991.71	1/2	3,209.89
3/4	349.06	3/4	704.21	3/4	1,042.55	3/4	1,397.55	3/4	1,751.83	3/4	2,110.09	3/4	2,467.29	3/4	2,770.95	3/4	2,996.41	3/4	3,213.91

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 OF 10" DIAMETER ULLAGE HATCH
GAUGE POINT: (10" HATCH) LOCATED 10'-06" OFF CENTERLINE AND 52'-06" FORWARD OF AFT BULKHEAD

PRECISION MEASUREMENT

& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "EMS 3049"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	3,217.93	0	3,410.98	0	3,603.93	0	3,785.70	0		0		0		0		0		0	
1/4	3,221.95	1/4	3,415.00	1/4	3,607.93	1/4	3,786.86	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,225.97	1/2	3,419.02	1/2	3,611.93	1/2	3,788.01	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,229.99	3/4	3,423.04	3/4	3,615.93	3/4	3,789.16	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,234.02	1	3,427.06	1	3,619.93	1	3,790.31	1		1		1		1		1		1	
1/4	3,238.04	1/4	3,431.08	1/4	3,623.93	1/4	3,790.39	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,242.06	1/2	3,435.11	1/2	3,627.93	1/2	3,790.47	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,246.08	3/4	3,439.13	3/4	3,631.94	3/4	3,790.55	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,250.10	2	3,443.15	2	3,635.94	2		2		2		2		2		2		2	
1/4	3,254.13	1/4	3,447.17	1/4	3,639.94	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,258.15	1/2	3,451.19	1/2	3,643.94	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,262.17	3/4	3,455.22	3/4	3,647.94	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
3	3,266.19	3	3,459.24	3	3,651.94	3		3		3		3		3		3		3	
1/4	3,270.21	1/4	3,463.26	1/4	3,655.94	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,274.23	1/2	3,467.28	1/2	3,659.94	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,278.26	3/4	3,471.30	3/4	3,663.94	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
4	3,282.28	4	3,475.32	4	3,667.95	4		4		4		4		4		4		4	
1/4	3,286.30	1/4	3,479.35	1/4	3,671.95	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,290.32	1/2	3,483.37	1/2	3,675.95	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,294.34	3/4	3,487.39	3/4	3,679.95	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
5	3,298.37	5	3,491.41	5	3,683.95	5		5		5		5		5		5		5	
1/4	3,302.39	1/4	3,495.43	1/4	3,687.95	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,306.41	1/2	3,499.46	1/2	3,691.95	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,310.43	3/4	3,503.48	3/4	3,695.95	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
6	3,314.45	6	3,507.50	6	3,699.95	6		6		6		6		6		6		6	
1/4	3,318.47	1/4	3,511.52	1/4	3,703.96	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,322.50	1/2	3,515.54	1/2	3,707.96	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,326.52	3/4	3,519.56	3/4	3,711.96	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
7	3,330.54	7	3,523.59	7	3,715.96	7		7		7		7		7		7		7	
1/4	3,334.56	1/4	3,527.61	1/4	3,719.96	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,338.58	1/2	3,531.63	1/2	3,723.96	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,342.61	3/4	3,535.65	3/4	3,727.95	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
8	3,346.63	8	3,539.67	8	3,731.95	8		8		8		8		8		8		8	
1/4	3,350.65	1/4	3,543.70	1/4	3,735.94	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,354.67	1/2	3,547.72	1/2	3,739.93	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,358.69	3/4	3,551.74	3/4	3,743.92	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	3,362.71	9	3,555.76	9	3,747.90	9		9		9		9		9		9		9	
1/4	3,366.74	1/4	3,559.78	1/4	3,751.81	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,370.76	1/2	3,563.80	1/2	3,755.71	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,374.78	3/4	3,567.83	3/4	3,759.61	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	3,378.80	10	3,571.85	10	3,763.52	10		10		10		10		10		10		10	
1/4	3,382.82	1/4	3,575.87	1/4	3,767.54	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,386.84	1/2	3,579.89	1/2	3,770.17	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,390.87	3/4	3,583.90	3/4	3,773.49	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,394.89	11	3,587.92	11	3,776.82	11		11		11		11		11		11		11	
1/4	3,398.91	1/4	3,591.92	1/4	3,779.04	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,402.93	1/2	3,595.93	1/2	3,781.26	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,406.95	3/4	3,599.93	3/4	3,783.48	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2082
Pearland, Texas 77586
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BARGE "EMS 3049" ULLAGE TRIM TABLE 10" HATCH

	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	- 00-3/8	00-3/8	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 00-7/8	00-7/8	- 01-1/8	01-1/8
1 STBD	- 00-1/8	00-1/8	- 00-3/8	00-3/8	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 00-7/8	00-7/8	- 01-1/8	01-1/8
2 PORT	- 00-1/8	00-1/8	- 00-3/8	00-3/8	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 00-7/8	00-7/8	- 01-1/8	01-1/8
2 STBD	- 00-1/8	00-1/8	- 00-3/8	00-3/8	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 00-7/8	00-7/8	- 01-1/8	01-1/8
3 PORT	00-1/2	- 00-1/2	00-7/8	- 00-7/8	01-3/8	- 01-3/8	01-3/4	- 01-3/4	02-1/4	- 02-1/4	02-5/8	- 02-5/8
3 STBD	00-1/2	- 00-1/2	00-7/8	- 00-7/8	01-3/8	- 01-3/8	01-3/4	- 01-3/4	02-1/4	- 02-1/4	02-5/8	- 02-5/8

(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 00-3/8"
FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED ULLAGE IS 4'-00 3/8"

LENGTH BETWEEN DRAFT MARKS: 253'-09"

December 12, 2018

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77568

<http://www.pmacorp.net>



BARGE "EMS 3049"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS																		GAUGE HEIGHT 13'-07 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	4,561.01	0	4,200.21	0	3,838.00	0	3,475.78	0	3,113.57	0	2,751.36	0	2,389.15	0	2,026.93	0	1,664.72								
1/4		1/4	4,553.51	1/4	4,192.66	1/4	3,830.45	1/4	3,468.24	1/4	3,106.03	1/4	2,743.81	1/4	2,381.60	1/4	2,019.39	1/4	1,657.17								
1/2		1/2	4,546.00	1/2	4,185.12	1/2	3,822.91	1/2	3,460.69	1/2	3,098.48	1/2	2,736.27	1/2	2,374.05	1/2	2,011.84	1/2	1,649.63								
3/4		3/4	4,538.50	3/4	4,177.57	3/4	3,815.36	3/4	3,453.15	3/4	3,090.93	3/4	2,728.72	3/4	2,366.51	3/4	2,004.30	3/4	1,642.08								
1		1	4,530.99	1	4,170.03	1	3,807.81	1	3,445.60	1	3,083.39	1	2,721.17	1	2,358.96	1	1,996.75	1	1,634.54								
1/4		1/4	4,523.49	1/4	4,162.48	1/4	3,800.27	1/4	3,438.05	1/4	3,075.84	1/4	2,713.63	1/4	2,351.42	1/4	1,989.20	1/4	1,626.99								
1/2		1/2	4,515.98	1/2	4,154.93	1/2	3,792.72	1/2	3,430.51	1/2	3,068.30	1/2	2,708.08	1/2	2,343.87	1/2	1,981.66	1/2	1,619.44								
3/4		3/4	4,508.48	3/4	4,147.39	3/4	3,785.18	3/4	3,422.96	3/4	3,060.75	3/4	2,696.54	3/4	2,336.32	3/4	1,974.11	3/4	1,611.90								
2		2	4,500.97	2	4,139.84	2	3,777.63	2	3,415.42	2	3,053.20	2	2,690.99	2	2,328.78	2	1,966.56	2	1,604.35								
1/4		1/4	4,493.47	1/4	4,132.30	1/4	3,770.08	1/4	3,407.87	1/4	3,045.66	1/4	2,683.44	1/4	2,321.23	1/4	1,959.02	1/4	1,596.81								
1/2		1/2	4,485.96	1/2	4,124.75	1/2	3,762.54	1/2	3,400.32	1/2	3,038.11	1/2	2,675.90	1/2	2,313.69	1/2	1,951.47	1/2	1,589.26								
3/4		3/4	4,478.46	3/4	4,117.20	3/4	3,754.99	3/4	3,392.78	3/4	3,030.57	3/4	2,668.35	3/4	2,306.14	3/4	1,943.93	3/4	1,581.71								
3		3	4,470.95	3	4,109.66	3	3,747.44	3	3,385.23	3	3,023.02	3	2,660.81	3	2,298.59	3	1,936.38	3	1,574.17								
1/4		1/4	4,463.45	1/4	4,102.11	1/4	3,739.90	1/4	3,377.69	1/4	3,015.47	1/4	2,653.26	1/4	2,291.05	1/4	1,928.83	1/4	1,566.62								
1/2		1/2	4,455.94	1/2	4,094.57	1/2	3,732.35	1/2	3,370.14	1/2	3,007.93	1/2	2,645.71	1/2	2,283.50	1/2	1,921.29	1/2	1,559.08								
3/4		3/4	4,448.44	3/4	4,087.02	3/4	3,724.81	3/4	3,362.59	3/4	3,000.38	3/4	2,638.17	3/4	2,275.96	3/4	1,913.74	3/4	1,551.56								
4		4	4,440.93	4	4,079.47	4	3,717.26	4	3,355.05	4	2,992.83	4	2,630.62	4	2,268.41	4	1,906.20	4	1,544.04								
1/4		1/4	4,433.43	1/4	4,071.93	1/4	3,709.71	1/4	3,347.50	1/4	2,985.29	1/4	2,623.08	1/4	2,260.86	1/4	1,898.65	1/4	1,536.52								
1/2		1/2	4,425.92	1/2	4,064.38	1/2	3,702.17	1/2	3,339.96	1/2	2,977.74	1/2	2,615.53	1/2	2,253.32	1/2	1,891.10	1/2	1,529.01								
3/4		3/4	4,418.42	3/4	4,056.83	3/4	3,694.62	3/4	3,332.41	3/4	2,970.20	3/4	2,607.98	3/4	2,245.77	3/4	1,883.56	3/4	1,521.49								
5		5	4,410.91	5	4,049.29	5	3,687.08	5	3,324.86	5	2,962.65	5	2,600.44	5	2,238.22	5	1,876.07	5	1,513.98								
1/4		1/4	4,403.41	1/4	4,041.74	1/4	3,679.53	1/4	3,317.32	1/4	2,955.10	1/4	2,592.89	1/4	2,230.66	1/4	1,868.47	1/4	1,506.47								
1/2		1/2	4,395.91	1/2	4,034.20	1/2	3,671.98	1/2	3,309.77	1/2	2,947.56	1/2	2,585.35	1/2	2,223.13	1/2	1,860.92	1/2	1,498.96								
3/4		3/4	4,388.40	3/4	4,026.65	3/4	3,664.44	3/4	3,302.22	3/4	2,940.01	3/4	2,577.80	3/4	2,215.59	3/4	1,853.37	3/4	1,491.44								
6		6	4,380.90	6	4,019.10	6	3,656.89	6	3,294.68	6	2,932.47	6	2,570.25	6	2,208.04	6	1,845.83	6	1,483.93								
1/4		1/4	4,373.39	1/4	4,011.56	1/4	3,649.35	1/4	3,287.13	1/4	2,924.92	1/4	2,562.71	1/4	2,200.49	1/4	1,838.28	1/4	1,476.42								
1/2		1/2	4,365.88	1/2	4,004.01	1/2	3,641.80	1/2	3,279.59	1/2	2,917.37	1/2	2,555.16	1/2	2,192.95	1/2	1,830.74	1/2	1,468.90								
3/4		3/4	4,358.37	3/4	3,996.47	3/4	3,634.25	3/4	3,272.04	3/4	2,909.83	3/4	2,547.61	3/4	2,185.40	3/4	1,823.19	3/4	1,461.39								
7		7	4,350.88	7	3,988.92	7	3,626.71	7	3,264.49	7	2,902.28	7	2,540.07	7	2,177.86	7	1,815.64	7	1,453.88								
1/4		1/4	4,343.37	1/4	3,981.37	1/4	3,619.16	1/4	3,256.95	1/4	2,894.74	1/4	2,532.52	1/4	2,170.31	1/4	1,808.10	1/4	1,446.36								
1/2		1/2	4,335.87	1/2	3,973.83	1/2	3,611.61	1/2	3,249.40	1/2	2,887.19	1/2	2,524.98	1/2	2,162.76	1/2	1,800.55	1/2	1,438.85								
3/4		3/4	4,328.36	3/4	3,966.28	3/4	3,604.07	3/4	3,241.86	3/4	2,879.64	3/4	2,517.43	3/4	2,155.22	3/4	1,793.00	3/4	1,431.31								
8		8	4,320.86	8	3,958.74	8	3,596.52	8	3,234.31	8	2,872.10	8	2,509.88	8	2,147.67	8	1,785.46	8	1,423.77								
1/4		1/4	4,313.35	1/4	3,951.19	1/4	3,588.98	1/4	3,226.76	1/4	2,864.55	1/4	2,502.34	1/4	2,140.13	1/4	1,777.91	1/4	1,416.22								
1/2		1/2	4,305.85	1/2	3,943.64	1/2	3,581.43	1/2	3,219.22	1/2	2,857.00	1/2	2,494.79	1/2	2,132.58	1/2	1,770.37	1/2	1,408.68								
3/4		3/4	4,298.30	3/4	3,936.10	3/4	3,573.88	3/4	3,211.67	3/4	2,849.46	3/4	2,487.25	3/4	2,125.03	3/4	1,762.82	3/4	1,401.13								
9		9	4,290.76	9	3,928.55	9	3,566.34	9	3,204.13	9	2,841.91	9	2,479.70	9	2,117.49	9	1,755.27	9	1,393.59								
1/4		1/4	4,283.22	1/4	3,921.66	1/4	3,558.78	1/4	3,196.58	1/4	2,834.37	1/4	2,472.15	1/4	2,109.94	1/4	1,747.73	1/4	1,386.04								
1/2		1/2	4,275.67	1/2	3,913.46	1/2	3,551.25	1/2	3,189.03	1/2	2,826.82	1/2	2,464.61	1/2	2,102.39	1/2	1,740.18	1/2	1,378.49								
3/4		3/4	4,268.20	3/4	3,905.91	3/4	3,543.70	3/4	3,181.49	3/4	2,819.27	3/4	2,457.06	3/4	2,094.85	3/4	1,732.64	3/4	1,370.95								
10		10	4,260.58	10	3,898.37	10	3,536.15	10	3,173.94	10	2,811.73	10	2,449.52	10	2,087.30	10	1,725.09	10	1,363.40								
1/4		1/4	4,253.03	1/4	3,890.82	1/4	3,528.61	1/4	3,166.39	1/4	2,804.18	1/4	2,441.97	1/4	2,079.76	1/4	1,717.54	1/4	1,355.85								
1/2		1/2	4,245.49	1/2	3,883.27	1/2	3,521.06	1/2	3,158.85	1/2	2,796.64	1/2	2,434.42	1/2	2,072.21	1/2	1,710.00	1/2	1,348.31								
3/4		3/4	4,237.94	3/4	3,875.73	3/4	3,513.52	3/4	3,151.30	3/4	2,789.09	3/4	2,426.88	3/4	2,064.66	3/4	1,702.45	3/4	1,340.76								
11		11	4,230.39	11	3,868.18	11	3,505.97	11	3,143.76	11	2,781.54	11	2,419.33	11	2,057.12	11	1,694.91	11	1,333.21								
1/4		1/4	4,222.85	1/4	3,860.64	1/4	3,498.42	1/4	3,136.21	1/4	2,774.00	1/4	2,411.78	1/4	2,049.57	1/4	1,687.36	1/4	1,325.66								
1/2		1/2	4,215.30	1/2	3,853.09	1/2	3,490.88	1/2	3,128.66	1/2	2,766.45	1/2	2,404.24	1/2	2,042.03	1/2	1,679.81	1/2	1,318.12								
3/4		3/4	4,207.76	3/4	3,845.54	3/4	3,483.33	3/4	3,121.12	3/4	2,758.91	3/4	2,396.69	3/4	2,034.48	3/4	1,672.27	3/4	1,310.57								

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BARGE "EMS 3049"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 13'-07 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	1,303.02	0	941.29	0	586.14	0	224.51	0		0		0		0		0		0	
1/4	1,295.48	1/4	933.77	1/4	578.63	1/4	217.15	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,287.93	1/2	926.24	1/2	571.12	1/2	209.80	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,280.38	3/4	918.72	3/4	563.58	3/4	202.47	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,272.84	1	911.19	1	556.05	1	195.14	1		1		1		1		1		1	
1/4	1,265.29	1/4	903.67	1/4	548.51	1/4	187.81	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,257.74	1/2	896.14	1/2	540.97	1/2	180.48	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,250.19	3/4	888.62	3/4	533.44	3/4	173.15	3/4		3/4		3/4		3/4		3/4		3/4	
2	1,242.65	2	881.09	2	525.90	2	165.82	2		2		2		2		2		2	
1/4	1,235.10	1/4	873.57	1/4	518.36	1/4	158.49	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,227.55	1/2	866.04	1/2	510.83	1/2	151.16	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,220.01	3/4	858.51	3/4	503.28	3/4	143.84	3/4		3/4		3/4		3/4		3/4		3/4	
3	1,212.46	3	850.99	3	495.74	3	136.52	3		3		3		3		3		3	
1/4	1,204.91	1/4	843.46	1/4	488.19	1/4	129.20	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,197.37	1/2	835.93	1/2	480.65	1/2	121.88	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,189.82	3/4	828.57	3/4	473.10	3/4	114.58	3/4		3/4		3/4		3/4		3/4		3/4	
4	1,182.27	4	821.20	4	465.55	4	107.28	4		4		4		4		4		4	
1/4	1,174.72	1/4	813.84	1/4	458.00	1/4	99.99	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,167.18	1/2	806.48	1/2	450.46	1/2	92.69	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,159.63	3/4	799.14	3/4	442.91	3/4	85.92	3/4		3/4		3/4		3/4		3/4		3/4	
5	1,152.08	5	791.80	5	435.36	5	79.14	5		5		5		5		5		5	
1/4	1,144.54	1/4	784.46	1/4	427.82	1/4	72.37	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,136.99	1/2	777.11	1/2	420.27	1/2	65.60	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,129.46	3/4	769.77	3/4	412.72	3/4	58.99	3/4		3/4		3/4		3/4		3/4		3/4	
6	1,121.93	6	762.43	6	405.17	6	54.38	6		6		6		6		6		6	
1/4	1,114.40	1/4	755.09	1/4	397.63	1/4	48.77	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,106.87	1/2	747.75	1/2	390.08	1/2	43.16	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,099.34	3/4	740.42	3/4	382.53	3/4	38.81	3/4		3/4		3/4		3/4		3/4		3/4	
7	1,091.81	7	733.09	7	374.99	7	34.46	7		7		7		7		7		7	
1/4	1,084.29	1/4	725.76	1/4	367.44	1/4	30.10	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,076.76	1/2	718.43	1/2	359.89	1/2	25.75	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,069.23	3/4	711.10	3/4	352.34	3/4	21.11	3/4		3/4		3/4		3/4		3/4		3/4	
8	1,061.70	8	703.77	8	344.80	8	17.11	8		8		8		8		8		8	
1/4	1,054.17	1/4	696.44	1/4	337.25	1/4	13.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,046.65	1/2	689.11	1/2	329.70	1/2	9.11	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,039.12	3/4	681.78	3/4	322.16	3/4	5.11	3/4		3/4		3/4		3/4		3/4		3/4	
9	1,031.60	9	674.45	9	314.61	9	1.11	9		9		9		9		9		9	
1/4	1,024.07	1/4	667.12	1/4	307.06	1/4	0.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,016.54	1/2	659.80	1/2	299.51	1/2	0.11	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,009.02	3/4	652.47	3/4	291.98	3/4	0.11	3/4		3/4		3/4		3/4		3/4		3/4	
10	1,001.49	10	645.14	10	284.44	10	0.11	10		10		10		10		10		10	
1/4	993.97	1/4	637.81	1/4	276.90	1/4	0.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	986.44	1/2	630.48	1/2	269.36	1/2	0.11	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	978.92	3/4	623.15	3/4	261.83	3/4	0.11	3/4		3/4		3/4		3/4		3/4		3/4	
11	971.39	11	615.82	11	254.29	11	0.11	11		11		11		11		11		11	
1/4	963.87	1/4	608.49	1/4	246.76	1/4	0.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	956.34	1/2	601.16	1/2	239.22	1/2	0.11	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	948.82	3/4	593.65	3/4	231.66	3/4	0.11	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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ALL PRIOR TO 12/2018

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Paul Pearson



BARGE "EMS 3049"

1 STBD ULLAGE TABLE

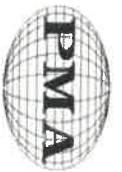
CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS											GAUGE HEIGHT 13'-08"								
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	4,569.01	0	4,208.67	0	3,846.82	0	3,484.97	0	3,123.13	0	2,761.28	0	2,398.43	0	2,037.58	0	1,675.73
1/4	1/4	1/4	4,561.51	1/4	4,201.13	1/4	3,839.28	1/4	3,477.43	1/4	3,115.59	1/4	2,753.74	1/4	2,391.89	1/4	2,030.04	1/4	1,668.19
1/2	1/2	1/2	4,554.02	1/2	4,193.59	1/2	3,831.74	1/2	3,469.90	1/2	3,108.05	1/2	2,746.20	1/2	2,384.35	1/2	2,022.50	1/2	1,660.66
3/4	3/4	3/4	4,546.52	3/4	4,186.05	3/4	3,824.21	3/4	3,462.36	3/4	3,100.51	3/4	2,738.66	3/4	2,376.81	3/4	2,014.97	3/4	1,653.12
1	1	1	4,539.03	1	4,178.52	1	3,816.67	1	3,454.82	1	3,092.97	1	2,731.12	1	2,369.28	1	2,007.43	1	1,645.58
1/4	1/4	1/4	4,531.53	1/4	4,170.98	1/4	3,809.13	1/4	3,447.28	1/4	3,085.43	1/4	2,723.58	1/4	2,361.74	1/4	1,999.89	1/4	1,638.04
1/2	1/2	1/2	4,524.03	1/2	4,163.44	1/2	3,801.59	1/2	3,439.74	1/2	3,077.89	1/2	2,716.05	1/2	2,354.20	1/2	1,992.35	1/2	1,630.50
3/4	3/4	3/4	4,516.53	3/4	4,155.90	3/4	3,794.05	3/4	3,432.20	3/4	3,070.36	3/4	2,708.51	3/4	2,346.66	3/4	1,984.81	3/4	1,622.96
2	2	2	4,509.04	2	4,148.36	2	3,786.51	2	3,424.67	2	3,062.82	2	2,700.97	2	2,339.12	2	1,977.27	2	1,615.43
1/4	1/4	1/4	4,501.54	1/4	4,140.82	1/4	3,778.97	1/4	3,417.13	1/4	3,055.28	1/4	2,693.43	1/4	2,289.43	1/4	1,969.73	1/4	1,607.89
1/2	1/2	1/2	4,494.04	1/2	4,133.28	1/2	3,771.44	1/2	3,409.59	1/2	3,047.74	1/2	2,685.89	1/2	2,324.04	1/2	1,962.20	1/2	1,600.35
3/4	3/4	3/4	4,486.55	3/4	4,125.75	3/4	3,763.90	3/4	3,402.05	3/4	3,040.20	3/4	2,678.35	3/4	2,316.51	3/4	1,954.66	3/4	1,592.81
3	3	3	4,479.05	3	4,118.21	3	3,756.36	3	3,394.51	3	3,032.66	3	2,670.82	3	2,308.97	3	1,947.12	3	1,585.27
1/4	1/4	1/4	4,471.55	1/4	4,110.67	1/4	3,748.82	1/4	3,386.97	1/4	3,025.12	1/4	2,663.28	1/4	2,301.43	1/4	1,939.58	1/4	1,577.73
1/2	1/2	1/2	4,464.05	1/2	4,103.13	1/2	3,741.28	1/2	3,379.43	1/2	3,017.59	1/2	2,655.74	1/2	2,293.89	1/2	1,932.04	1/2	1,570.19
3/4	3/4	3/4	4,456.56	3/4	4,095.59	3/4	3,733.74	3/4	3,371.90	3/4	3,010.05	3/4	2,648.20	3/4	2,286.35	3/4	1,924.50	3/4	1,562.66
4	4	4	4,449.06	4	4,088.05	4	3,726.21	4	3,364.36	4	3,002.51	4	2,640.66	4	2,278.81	4	1,916.97	4	1,555.12
1/4	1/4	1/4	4,441.56	1/4	4,080.51	1/4	3,718.67	1/4	3,356.82	1/4	2,994.97	1/4	2,633.12	1/4	2,271.27	1/4	1,909.43	1/4	1,547.61
1/2	1/2	1/2	4,434.06	1/2	4,072.98	1/2	3,711.13	1/2	3,349.28	1/2	2,987.43	1/2	2,625.58	1/2	2,263.74	1/2	1,901.89	1/2	1,540.10
3/4	3/4	3/4	4,426.57	3/4	4,065.44	3/4	3,703.59	3/4	3,341.74	3/4	2,979.89	3/4	2,618.05	3/4	2,256.20	3/4	1,894.35	3/4	1,532.59
5	5	5	4,419.07	5	4,057.90	5	3,696.05	5	3,334.20	5	2,972.36	5	2,610.51	5	2,248.66	5	1,886.81	5	1,525.08
1/4	1/4	1/4	4,411.57	1/4	4,050.36	1/4	3,688.51	1/4	3,326.66	1/4	2,964.82	1/4	2,602.97	1/4	2,241.12	1/4	1,879.27	1/4	1,517.57
1/2	1/2	1/2	4,404.07	1/2	4,042.82	1/2	3,680.97	1/2	3,319.13	1/2	2,957.28	1/2	2,595.43	1/2	2,233.58	1/2	1,871.73	1/2	1,510.07
3/4	3/4	3/4	4,396.58	3/4	4,035.28	3/4	3,673.44	3/4	3,311.59	3/4	2,949.74	3/4	2,587.89	3/4	2,226.04	3/4	1,864.20	3/4	1,502.56
6	6	6	4,389.08	6	4,027.75	6	3,665.90	6	3,304.05	6	2,942.20	6	2,580.35	6	2,218.51	6	1,856.66	6	1,495.06
1/4	1/4	1/4	4,381.58	1/4	4,020.21	1/4	3,658.36	1/4	3,296.51	1/4	2,934.66	1/4	2,572.81	1/4	2,210.97	1/4	1,849.12	1/4	1,487.55
1/2	1/2	1/2	4,374.09	1/2	4,012.67	1/2	3,650.82	1/2	3,288.97	1/2	2,927.12	1/2	2,565.28	1/2	2,203.43	1/2	1,841.58	1/2	1,480.05
3/4	3/4	3/4	4,366.59	3/4	4,005.13	3/4	3,643.28	3/4	3,281.43	3/4	2,919.59	3/4	2,557.74	3/4	2,195.89	3/4	1,834.04	3/4	1,472.54
7	7	7	4,359.09	7	3,997.59	7	3,635.74	7	3,273.90	7	2,912.05	7	2,550.20	7	2,188.35	7	1,826.50	7	1,465.04
1/4	1/4	1/4	4,351.59	1/4	3,990.05	1/4	3,628.20	1/4	3,266.36	1/4	2,904.51	1/4	2,542.66	1/4	2,180.81	1/4	1,818.96	1/4	1,457.53
1/2	1/2	1/2	4,344.10	1/2	3,982.51	1/2	3,620.67	1/2	3,258.82	1/2	2,896.97	1/2	2,535.12	1/2	2,173.27	1/2	1,811.43	1/2	1,450.03
3/4	3/4	3/4	4,336.60	3/4	3,974.98	3/4	3,613.13	3/4	3,251.28	3/4	2,889.43	3/4	2,527.58	3/4	2,165.74	3/4	1,803.89	3/4	1,442.52
8	8	8	4,329.10	8	3,967.44	8	3,605.59	8	3,243.74	8	2,881.89	8	2,520.05	8	2,158.20	8	1,796.35	8	1,435.01
1/4	1/4	1/4	4,321.60	1/4	3,959.90	1/4	3,598.05	1/4	3,236.20	1/4	2,874.35	1/4	2,512.51	1/4	2,150.66	1/4	1,788.81	1/4	1,427.48
1/2	1/2	1/2	4,314.11	1/2	3,952.36	1/2	3,590.51	1/2	3,228.66	1/2	2,866.82	1/2	2,504.97	1/2	2,143.12	1/2	1,781.27	1/2	1,419.95
3/4	3/4	3/4	4,306.61	3/4	3,944.82	3/4	3,582.97	3/4	3,221.13	3/4	2,859.28	3/4	2,497.43	3/4	2,135.58	3/4	1,773.73	3/4	1,412.41
9	9	9	4,299.11	9	3,937.28	9	3,575.44	9	3,213.59	9	2,851.74	9	2,489.89	9	2,128.04	9	1,766.20	9	1,404.88
1/4	1/4	1/4	4,291.58	1/4	3,929.74	1/4	3,567.90	1/4	3,206.05	1/4	2,844.20	1/4	2,482.35	1/4	2,120.50	1/4	1,758.66	1/4	1,397.34
1/2	1/2	1/2	4,284.05	1/2	3,922.21	1/2	3,560.36	1/2	3,198.51	1/2	2,836.66	1/2	2,474.81	1/2	2,112.97	1/2	1,751.12	1/2	1,389.80
3/4	3/4	3/4	4,276.51	3/4	3,914.67	3/4	3,552.82	3/4	3,190.97	3/4	2,829.12	3/4	2,467.28	3/4	2,105.43	3/4	1,743.58	3/4	1,382.26
10	10	10	4,269.02	10	3,907.13	10	3,545.28	10	3,183.43	10	2,821.59	10	2,459.74	10	2,097.89	10	1,736.04	10	1,374.72
1/4	1/4	1/4	4,261.44	1/4	3,899.59	1/4	3,537.74	1/4	3,175.89	1/4	2,814.05	1/4	2,452.20	1/4	2,090.81	1/4	1,728.50	1/4	1,367.18
1/2	1/2	1/2	4,253.90	1/2	3,892.05	1/2	3,530.20	1/2	3,168.36	1/2	2,806.51	1/2	2,444.66	1/2	2,082.35	1/2	1,720.96	1/2	1,359.64
3/4	3/4	3/4	4,246.36	3/4	3,884.51	3/4	3,522.67	3/4	3,160.82	3/4	2,798.97	3/4	2,437.12	3/4	2,075.27	3/4	1,713.43	3/4	1,352.10
11	11	11	4,238.82	11	3,876.98	11	3,515.13	11	3,153.28	11	2,791.43	11	2,429.58	11	2,067.74	11	1,705.89	11	1,344.56
1/4	1/4	1/4	4,231.28	1/4	3,869.44	1/4	3,507.59	1/4	3,145.74	1/4	2,783.89	1/4	2,422.04	1/4	2,060.20	1/4	1,698.35	1/4	1,337.02
1/2	1/2	1/2	4,223.75	1/2	3,861.90	1/2	3,500.05	1/2	3,138.20	1/2	2,776.35	1/2	2,414.51	1/2	2,052.66	1/2	1,690.81	1/2	1,329.48
3/4	3/4	3/4	4,216.21	3/4	3,854.36	3/4	3,492.51	3/4	3,130.66	3/4	2,768.82	3/4	2,408.97	3/4	2,045.12	3/4	1,683.27	3/4	1,321.94

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 3049"

1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	1,314.40	0	954.15	0	600.54	0	238.97	0		0		0		0		0		0	
1/4	1,306.87	1/4	946.68	1/4	593.04	1/4	231.62	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,299.33	1/2	939.22	1/2	585.54	1/2	224.27	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,291.79	3/4	931.75	3/4	578.04	3/4	216.93	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,284.25	1	924.28	1	570.53	1	209.58	1		1		1		1		1		1	
1/4	1,276.71	1/4	916.81	1/4	563.01	1/4	202.26	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,269.17	1/2	909.34	1/2	555.48	1/2	194.93	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,261.63	3/4	901.87	3/4	547.95	3/4	187.61	3/4		3/4		3/4		3/4		3/4		3/4	
2	1,254.09	2	894.41	2	540.42	2	180.29	2		2		2		2		2		2	
1/4	1,246.55	1/4	886.94	1/4	532.89	1/4	172.97	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,239.01	1/2	879.47	1/2	525.36	1/2	165.65	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,231.47	3/4	872.00	3/4	517.83	3/4	158.33	3/4		3/4		3/4		3/4		3/4		3/4	
3	1,223.93	3	864.53	3	510.30	3	151.00	3		3		3		3		3		3	
1/4	1,216.39	1/4	857.06	1/4	502.77	1/4	143.69	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,208.85	1/2	849.59	1/2	495.23	1/2	136.38	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,201.31	3/4	842.12	3/4	487.69	3/4	129.07	3/4		3/4		3/4		3/4		3/4		3/4	
4	1,193.77	4	834.65	4	480.15	4	121.75	4		4		4		4		4		4	
1/4	1,186.23	1/4	827.34	1/4	472.61	1/4	114.46	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,178.70	1/2	820.04	1/2	465.07	1/2	107.17	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,171.16	3/4	812.73	3/4	457.53	3/4	99.88	3/4		3/4		3/4		3/4		3/4		3/4	
5	1,163.62	5	805.42	5	449.99	5	92.59	5		5		5		5		5		5	
1/4	1,156.08	1/4	798.14	1/4	442.45	1/4	85.83	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,148.54	1/2	790.86	1/2	434.92	1/2	79.06	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,141.00	3/4	783.57	3/4	427.38	3/4	72.30	3/4		3/4		3/4		3/4		3/4		3/4	
6	1,133.46	6	776.29	6	419.84	6	65.53	6		6		6		6		6		6	
1/4	1,125.98	1/4	768.96	1/4	412.30	1/4	59.93	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,118.50	1/2	761.64	1/2	404.76	1/2	54.32	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,111.02	3/4	754.31	3/4	397.22	3/4	48.72	3/4		3/4		3/4		3/4		3/4		3/4	
7	1,103.54	7	746.98	7	389.68	7	43.12	7		7		7		7		7		7	
1/4	1,096.07	1/4	739.66	1/4	382.14	1/4	38.77	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,088.60	1/2	732.34	1/2	374.60	1/2	34.42	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,081.13	3/4	725.02	3/4	367.06	3/4	30.07	3/4		3/4		3/4		3/4		3/4		3/4	
8	1,073.66	8	717.69	8	359.52	8	25.73	8		8		8		8		8		8	
1/4	1,066.19	1/4	710.37	1/4	351.98	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,058.72	1/2	703.05	1/2	344.44	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,051.24	3/4	695.73	3/4	336.90	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	1,043.77	9	688.41	9	329.36	9		9		9		9		9		9		9	
1/4	1,036.30	1/4	681.08	1/4	321.82	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,028.84	1/2	673.76	1/2	314.28	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,021.37	3/4	666.44	3/4	306.74	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	1,013.90	10	659.12	10	299.20	10		10		10		10		10		10		10	
1/4	1,006.43	1/4	651.80	1/4	291.67	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	998.96	1/2	644.48	1/2	284.14	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	991.49	3/4	637.15	3/4	276.61	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	984.03	11	629.83	11	269.08	11		11		11		11		11		11		11	
1/4	976.56	1/4	622.51	1/4	261.56	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	969.09	1/2	615.19	1/2	254.03	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	961.62	3/4	607.87	3/4	246.50	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.

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





BARGE "EMS 3049"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	0	0	4,538.73	0	4,179.81	0	3,818.46	0	3,457.12	0	3,095.77	0	2,734.43	0	2,373.09	0	2,011.74	0	1,650.40
1/4	1/4	1/4	4,532.25	1/4	4,172.28	1/4	3,810.93	1/4	3,449.58	1/4	3,088.25	1/4	2,726.90	1/4	2,365.56	1/4	2,004.21	1/4	1,642.87
1/2	1/2	1/2	4,524.76	1/2	4,164.77	1/2	3,803.41	1/2	3,442.06	1/2	3,080.72	1/2	2,719.37	1/2	2,358.03	1/2	1,996.69	1/2	1,635.34
3/4	3/4	3/4	4,517.28	3/4	4,157.22	3/4	3,795.88	3/4	3,434.53	3/4	3,073.19	3/4	2,711.85	3/4	2,350.50	3/4	1,989.16	3/4	1,627.81
1	1	1	4,509.79	1	4,149.69	1	3,788.35	1	3,427.01	1	3,065.66	1	2,704.32	1	2,342.97	1	1,981.63	1	1,620.29
1/4	1/4	1/4	4,502.31	1/4	4,142.17	1/4	3,780.82	1/4	3,419.48	1/4	3,058.61	1/4	2,696.79	1/4	2,335.45	1/4	1,974.10	1/4	1,612.76
1/2	1/2	1/2	4,494.82	1/2	4,134.64	1/2	3,773.29	1/2	3,411.95	1/2	3,050.61	1/2	2,689.26	1/2	2,327.92	1/2	1,966.57	1/2	1,605.31
3/4	3/4	3/4	4,487.33	3/4	4,127.11	3/4	3,765.77	3/4	3,404.42	3/4	3,043.08	3/4	2,681.73	3/4	2,320.39	3/4	1,959.05	3/4	1,597.87
2	2	2	4,479.85	2	4,119.58	2	3,758.24	2	3,396.89	2	3,035.55	2	2,674.21	2	2,312.86	2	1,951.52	2	1,590.42
1/4	1/4	1/4	4,472.36	1/4	4,112.05	1/4	3,750.71	1/4	3,389.37	1/4	3,028.02	1/4	2,666.68	1/4	2,305.33	1/4	1,943.89	1/4	1,582.98
1/2	1/2	1/2	4,464.87	1/2	4,104.53	1/2	3,743.18	1/2	3,381.84	1/2	3,020.49	1/2	2,659.15	1/2	2,297.81	1/2	1,936.46	1/2	1,575.54
3/4	3/4	3/4	4,457.39	3/4	4,097.00	3/4	3,735.65	3/4	3,374.31	3/4	3,012.97	3/4	2,651.62	3/4	2,290.28	3/4	1,928.93	3/4	1,568.11
3	3	3	4,449.90	3	4,089.47	3	3,728.13	3	3,366.78	3	3,005.44	3	2,644.09	3	2,282.75	3	1,921.41	3	1,560.67
1/4	1/4	1/4	4,442.41	1/4	4,081.94	1/4	3,720.60	1/4	3,359.25	1/4	2,997.91	1/4	2,636.57	1/4	2,275.22	1/4	1,913.88	1/4	1,553.24
1/2	1/2	1/2	4,434.93	1/2	4,074.41	1/2	3,713.07	1/2	3,351.73	1/2	2,990.38	1/2	2,629.04	1/2	2,267.69	1/2	1,906.35	1/2	1,545.85
3/4	3/4	3/4	4,427.44	3/4	4,066.89	3/4	3,705.54	3/4	3,344.20	3/4	2,982.85	3/4	2,621.51	3/4	2,260.17	3/4	1,898.82	3/4	1,538.46
4	4	4	4,419.95	4	4,059.36	4	3,698.01	4	3,336.67	4	2,975.33	4	2,613.98	4	2,252.64	4	1,891.29	4	1,531.08
1/4	1/4	1/4	4,412.47	1/4	4,051.83	1/4	3,690.49	1/4	3,329.14	1/4	2,967.80	1/4	2,606.45	1/4	2,245.11	1/4	1,883.77	1/4	1,523.69
1/2	1/2	1/2	4,404.98	1/2	4,044.30	1/2	3,682.96	1/2	3,321.61	1/2	2,960.27	1/2	2,598.93	1/2	2,237.58	1/2	1,876.24	1/2	1,516.31
3/4	3/4	3/4	4,397.49	3/4	4,036.77	3/4	3,675.43	3/4	3,314.09	3/4	2,952.74	3/4	2,591.40	3/4	2,230.05	3/4	1,868.71	3/4	1,508.93
5	5	5	4,390.01	5	4,029.25	5	3,667.90	5	3,306.56	5	2,945.21	5	2,583.87	5	2,222.53	5	1,861.18	5	1,501.55
1/4	1/4	1/4	4,382.52	1/4	4,021.72	1/4	3,660.37	1/4	3,299.03	1/4	2,937.69	1/4	2,576.34	1/4	2,215.00	1/4	1,853.65	1/4	1,494.17
1/2	1/2	1/2	4,375.03	1/2	4,014.19	1/2	3,652.85	1/2	3,291.50	1/2	2,930.16	1/2	2,568.81	1/2	2,207.47	1/2	1,846.13	1/2	1,486.78
3/4	3/4	3/4	4,367.55	3/4	4,006.66	3/4	3,645.32	3/4	3,283.97	3/4	2,922.63	3/4	2,561.76	3/4	2,199.94	3/4	1,838.60	3/4	1,479.40
6	6	6	4,360.06	6	3,999.13	6	3,637.79	6	3,276.45	6	2,915.10	6	2,553.29	6	2,192.41	6	1,831.07	6	1,472.02
1/4	1/4	1/4	4,352.57	1/4	3,991.61	1/4	3,630.26	1/4	3,268.92	1/4	2,907.57	1/4	2,546.23	1/4	2,184.89	1/4	1,823.54	1/4	1,464.64
1/2	1/2	1/2	4,345.09	1/2	3,984.08	1/2	3,622.73	1/2	3,261.39	1/2	2,900.05	1/2	2,538.70	1/2	2,177.36	1/2	1,816.01	1/2	1,457.26
3/4	3/4	3/4	4,337.60	3/4	3,976.55	3/4	3,615.21	3/4	3,253.86	3/4	2,892.52	3/4	2,531.17	3/4	2,169.83	3/4	1,808.49	3/4	1,449.88
7	7	7	4,330.11	7	3,969.02	7	3,607.68	7	3,246.33	7	2,884.99	7	2,523.65	7	2,162.30	7	1,800.96	7	1,442.50
1/4	1/4	1/4	4,322.63	1/4	3,961.49	1/4	3,600.15	1/4	3,238.81	1/4	2,877.46	1/4	2,516.12	1/4	2,154.77	1/4	1,793.43	1/4	1,435.12
1/2	1/2	1/2	4,315.14	1/2	3,953.97	1/2	3,592.62	1/2	3,231.28	1/2	2,869.93	1/2	2,508.59	1/2	2,147.25	1/2	1,785.90	1/2	1,427.61
3/4	3/4	3/4	4,307.65	3/4	3,946.44	3/4	3,585.09	3/4	3,223.75	3/4	2,862.41	3/4	2,501.06	3/4	2,139.72	3/4	1,778.37	3/4	1,420.10
8	8	8	4,300.17	8	3,938.91	8	3,577.57	8	3,216.22	8	2,854.88	8	2,493.53	8	2,132.19	8	1,770.85	8	1,412.59
1/4	1/4	1/4	4,292.68	1/4	3,931.38	1/4	3,570.04	1/4	3,208.69	1/4	2,847.35	1/4	2,486.01	1/4	2,124.66	1/4	1,763.32	1/4	1,405.08
1/2	1/2	1/2	4,285.16	1/2	3,923.85	1/2	3,562.51	1/2	3,201.17	1/2	2,839.82	1/2	2,478.48	1/2	2,117.13	1/2	1,755.79	1/2	1,397.55
3/4	3/4	3/4	4,277.65	3/4	3,916.33	3/4	3,554.98	3/4	3,193.64	3/4	2,832.29	3/4	2,470.95	3/4	2,109.61	3/4	1,748.26	3/4	1,390.03
9	9	9	4,270.13	9	3,908.80	9	3,547.45	9	3,186.11	9	2,824.77	9	2,463.42	9	2,102.08	9	1,740.73	9	1,382.50
1/4	1/4	1/4	4,262.61	1/4	3,901.27	1/4	3,539.93	1/4	3,178.58	1/4	2,817.24	1/4	2,456.89	1/4	2,094.55	1/4	1,733.21	1/4	1,374.97
1/2	1/2	1/2	4,255.09	1/2	3,893.74	1/2	3,532.40	1/2	3,171.05	1/2	2,809.71	1/2	2,448.37	1/2	2,087.02	1/2	1,725.68	1/2	1,367.44
3/4	3/4	3/4	4,247.56	3/4	3,886.21	3/4	3,524.87	3/4	3,163.53	3/4	2,802.18	3/4	2,440.84	3/4	2,079.49	3/4	1,718.15	3/4	1,359.91
10	10	10	4,240.03	10	3,878.69	10	3,517.34	10	3,156.00	10	2,794.65	10	2,433.31	10	2,071.97	10	1,710.62	10	1,352.39
1/4	1/4	1/4	4,232.50	1/4	3,871.16	1/4	3,509.81	1/4	3,148.47	1/4	2,787.13	1/4	2,425.78	1/4	2,064.44	1/4	1,703.09	1/4	1,344.86
1/2	1/2	1/2	4,224.97	1/2	3,863.63	1/2	3,502.29	1/2	3,140.94	1/2	2,779.60	1/2	2,418.25	1/2	2,056.91	1/2	1,695.57	1/2	1,337.33
3/4	3/4	3/4	4,217.45	3/4	3,856.10	3/4	3,494.76	3/4	3,133.41	3/4	2,772.07	3/4	2,410.73	3/4	2,049.38	3/4	1,688.04	3/4	1,329.80
11	11	11	4,209.92	11	3,848.57	11	3,487.23	11	3,125.86	11	2,764.54	11	2,403.20	11	2,041.85	11	1,680.51	11	1,322.27
1/4	1/4	1/4	4,202.39	1/4	3,841.05	1/4	3,479.70	1/4	3,118.39	1/4	2,757.01	1/4	2,395.67	1/4	2,034.33	1/4	1,672.98	1/4	1,314.75
1/2	1/2	1/2	4,194.86	1/2	3,833.52	1/2	3,472.17	1/2	3,110.83	1/2	2,749.49	1/2	2,388.14	1/2	2,026.80	1/2	1,665.45	1/2	1,307.22
3/4	3/4	3/4	4,187.33	3/4	3,825.99	3/4	3,464.65	3/4	3,103.30	3/4	2,741.96	3/4	2,380.61	3/4	2,019.27	3/4	1,657.93	3/4	1,299.69

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

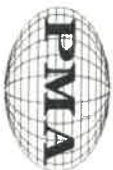
PRECISION MEASUREMENT

& ANALYSIS, INC.

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Pearland, Texas 77588

http://www.pmacorp.net



BARGE "EMS 3049"

2 PORT

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	1,292.16	0	931.37	0	577.15	0	216.59	0		0		0		0		0		0	
1/4	1,284.63	1/4	923.86	1/4	569.66	1/4	209.25	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,277.11	1/2	916.35	1/2	562.14	1/2	201.94	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,269.58	3/4	908.85	3/4	554.62	3/4	194.63	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,262.05	1	901.34	1	547.10	1	187.32	1		1		1		1		1		1	
1/4	1,254.52	1/4	893.83	1/4	539.59	1/4	180.01	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,246.99	1/2	886.33	1/2	532.07	1/2	172.70	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,239.47	3/4	878.82	3/4	524.55	3/4	165.39	3/4		3/4		3/4		3/4		3/4		3/4	
2	1,231.94	2	871.32	2	517.04	2	158.08	2		2		2		2		2		2	
1/4	1,224.41	1/4	863.81	1/4	509.52	1/4	150.77	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,216.88	1/2	856.30	1/2	501.99	1/2	143.47	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,209.35	3/4	848.79	3/4	494.46	3/4	136.17	3/4		3/4		3/4		3/4		3/4		3/4	
3	1,201.83	3	841.28	3	486.94	3	128.86	3		3		3		3		3		3	
1/4	1,194.30	1/4	833.78	1/4	479.41	1/4	121.56	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,186.77	1/2	826.43	1/2	471.88	1/2	114.28	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,179.24	3/4	819.09	3/4	464.35	3/4	107.01	3/4		3/4		3/4		3/4		3/4		3/4	
4	1,171.71	4	811.74	4	456.83	4	99.73	4		4		4		4		4		4	
1/4	1,164.19	1/4	804.40	1/4	449.30	1/4	92.45	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,156.66	1/2	797.08	1/2	441.77	1/2	85.70	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,149.13	3/4	789.76	3/4	434.24	3/4	78.94	3/4		3/4		3/4		3/4		3/4		3/4	
5	1,141.60	5	782.43	5	426.71	5	72.18	5		5		5		5		5		5	
1/4	1,134.07	1/4	775.11	1/4	419.19	1/4	65.43	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,126.56	1/2	767.79	1/2	411.66	1/2	59.83	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,119.05	3/4	760.47	3/4	404.13	3/4	54.24	3/4		3/4		3/4		3/4		3/4		3/4	
6	1,111.54	6	753.15	6	396.60	6	48.65	6		6		6		6		6		6	
1/4	1,104.03	1/4	745.83	1/4	389.07	1/4	43.05	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,096.52	1/2	738.52	1/2	381.55	1/2	38.71	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,089.01	3/4	731.21	3/4	374.02	3/4	34.37	3/4		3/4		3/4		3/4		3/4		3/4	
7	1,081.50	7	723.90	7	366.49	7	30.03	7		7		7		7		7		7	
1/4	1,073.99	1/4	716.58	1/4	358.96	1/4	25.69	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,066.49	1/2	709.27	1/2	351.43	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,058.98	3/4	701.96	3/4	343.91	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
8	1,051.47	8	694.65	8	336.38	8		8		8		8		8		8		8	
1/4	1,043.96	1/4	687.34	1/4	328.85	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,036.45	1/2	680.03	1/2	321.32	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,028.95	3/4	672.72	3/4	313.79	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	1,021.44	9	665.41	9	306.27	9		9		9		9		9		9		9	
1/4	1,013.93	1/4	658.10	1/4	298.74	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,006.43	1/2	650.79	1/2	291.22	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	998.92	3/4	643.48	3/4	283.70	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	991.41	10	636.17	10	276.18	10		10		10		10		10		10		10	
1/4	983.91	1/4	628.86	1/4	268.66	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	976.40	1/2	621.55	1/2	261.15	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	968.90	3/4	614.24	3/4	253.63	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	961.39	11	606.93	11	246.11	11		11		11		11		11		11		11	
1/4	953.88	1/4	599.62	1/4	238.59	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	946.38	1/2	592.13	1/2	231.26	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	938.87	3/4	584.64	3/4	223.92	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.

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

Pearland



BARGE "EMS 3049"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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	4,512.14	1/4	4,512.14	1/4	4,152.46	1/4	3,791.44	1/4	3,430.42	1/4	3,069.41	1/4	2,708.39	1/4	2,347.37	1/4	1,986.35	1/4	1,625.34
1/2	4,504.66	1/2	4,497.19	1/2	4,144.94	1/2	3,783.92	1/2	3,422.90	1/2	3,061.88	1/2	2,700.87	1/2	2,339.85	1/2	1,978.83	1/2	1,617.81
3/4	4,489.71	3/4	4,482.23	3/4	4,129.90	3/4	3,768.88	3/4	3,407.86	3/4	3,046.84	3/4	2,685.82	3/4	2,324.81	3/4	1,963.79	3/4	1,602.77
1	4,474.75	1	4,467.27	1	4,114.85	1	3,753.94	1	3,392.82	1	3,031.80	1	2,678.30	1	2,317.29	1	1,956.27	1	1,595.25
1 1/4	4,459.79	1 1/4	4,452.31	1 1/4	4,107.33	1 1/4	3,746.31	1 1/4	3,385.30	1 1/4	3,024.28	1 1/4	2,663.26	1 1/4	2,308.76	1 1/4	1,944.75	1 1/4	1,587.81
2	4,444.83	2	4,437.35	2	4,089.81	2	3,738.79	2	3,377.78	2	3,016.76	2	2,655.74	2	2,294.72	2	1,933.70	2	1,572.93
2 1/4	4,429.87	2 1/4	4,422.39	2 1/4	4,082.20	2 1/4	3,731.27	2 1/4	3,370.25	2 1/4	3,009.24	2 1/4	2,648.22	2 1/4	2,287.20	2 1/4	1,926.18	2 1/4	1,565.50
3	4,414.91	3	4,407.43	3	4,074.75	3	3,723.75	3	3,362.73	3	3,001.72	3	2,640.70	3	2,279.68	3	1,918.66	3	1,558.07
3 1/4	4,402.39	3 1/4	4,394.91	3 1/4	4,069.73	3 1/4	3,716.23	3 1/4	3,355.21	3 1/4	2,994.19	3 1/4	2,633.18	3 1/4	2,272.16	3 1/4	1,911.14	3 1/4	1,550.64
4	4,384.99	4	4,377.51	4	4,054.68	4	3,708.71	4	3,347.69	4	2,986.67	4	2,625.66	4	2,264.64	4	1,903.62	4	1,543.21
4 1/4	4,369.95	4 1/4	4,362.47	4 1/4	4,047.16	4 1/4	3,693.67	4 1/4	3,340.17	4 1/4	2,979.15	4 1/4	2,618.13	4 1/4	2,257.12	4 1/4	1,896.10	4 1/4	1,535.79
5	4,355.07	5	4,347.59	5	4,032.12	5	3,686.14	5	3,332.65	5	2,971.63	5	2,610.61	5	2,249.60	5	1,888.58	5	1,528.41
5 1/4	4,340.11	5 1/4	4,332.63	5 1/4	4,024.60	5 1/4	3,678.62	5 1/4	3,325.13	5 1/4	2,964.11	5 1/4	2,603.09	5 1/4	2,242.07	5 1/4	1,881.06	5 1/4	1,521.03
6	4,325.15	6	4,317.67	6	4,009.56	6	3,671.10	6	3,317.61	6	2,956.59	6	2,595.57	6	2,234.55	6	1,873.54	6	1,513.65
6 1/4	4,310.19	6 1/4	4,302.71	6 1/4	4,002.03	6 1/4	3,663.58	6 1/4	3,310.08	6 1/4	2,949.07	6 1/4	2,588.05	6 1/4	2,227.03	6 1/4	1,866.01	6 1/4	1,506.26
7	4,295.23	7	4,287.75	7	3,994.51	7	3,655.06	7	3,302.56	7	2,941.55	7	2,580.53	7	2,219.51	7	1,858.49	7	1,498.89
7 1/4	4,280.27	7 1/4	4,272.79	7 1/4	3,986.99	7 1/4	3,648.54	7 1/4	3,295.04	7 1/4	2,934.02	7 1/4	2,573.01	7 1/4	2,211.99	7 1/4	1,850.97	7 1/4	1,491.52
8	4,265.62	8	4,258.14	8	3,979.47	8	3,641.02	8	3,287.52	8	2,926.50	8	2,565.49	8	2,204.47	8	1,843.45	8	1,484.14
8 1/4	4,250.21	8 1/4	4,242.73	8 1/4	3,971.95	8 1/4	3,633.52	8 1/4	3,280.00	8 1/4	2,918.98	8 1/4	2,559.96	8 1/4	2,196.95	8 1/4	1,835.93	8 1/4	1,476.77
9	4,235.19	9	4,227.71	9	3,964.43	9	3,625.97	9	3,272.48	9	2,911.46	9	2,550.44	9	2,189.43	9	1,828.41	9	1,469.39
9 1/4	4,220.15	9 1/4	4,212.67	9 1/4	3,956.91	9 1/4	3,618.45	9 1/4	3,264.96	9 1/4	2,903.94	9 1/4	2,542.92	9 1/4	2,181.90	9 1/4	1,820.89	9 1/4	1,462.02
10	4,205.11	10	4,197.63	10	3,949.39	10	3,610.93	10	3,257.44	10	2,896.42	10	2,535.40	10	2,174.38	10	1,813.37	10	1,454.64
10 1/4	4,190.06	10 1/4	4,182.58	10 1/4	3,941.87	10 1/4	3,603.41	10 1/4	3,249.91	10 1/4	2,888.90	10 1/4	2,527.88	10 1/4	2,166.86	10 1/4	1,805.84	10 1/4	1,447.27
11	4,175.02	11	4,167.54	11	3,934.34	11	3,595.89	11	3,242.39	11	2,881.38	11	2,520.36	11	2,159.34	11	1,798.32	11	1,439.90
11 1/4	4,160.24	11 1/4	4,152.76	11 1/4	3,926.82	11 1/4	3,588.37	11 1/4	3,234.87	11 1/4	2,873.85	11 1/4	2,512.84	11 1/4	2,151.82	11 1/4	1,790.80	11 1/4	1,432.52
12	4,145.62	12	4,138.14	12	3,919.30	12	3,580.85	12	3,227.35	12	2,866.33	12	2,505.32	12	2,144.30	12	1,783.28	12	1,425.15
12 1/4	4,130.19	12 1/4	4,122.71	12 1/4	3,911.78	12 1/4	3,573.33	12 1/4	3,219.83	12 1/4	2,858.81	12 1/4	2,497.79	12 1/4	2,136.78	12 1/4	1,775.76	12 1/4	1,417.77
13	4,115.62	13	4,108.14	13	3,904.26	13	3,565.81	13	3,212.31	13	2,851.29	13	2,490.27	13	2,129.26	13	1,768.24	13	1,410.27
13 1/4	4,100.66	13 1/4	4,093.18	13 1/4	3,896.74	13 1/4	3,555.72	13 1/4	3,204.79	13 1/4	2,843.77	13 1/4	2,482.75	13 1/4	2,121.73	13 1/4	1,760.72	13 1/4	1,402.77
14	4,085.62	14	4,078.14	14	3,888.22	14	3,550.76	14	3,197.27	14	2,836.25	14	2,475.23	14	2,114.21	14	1,753.20	14	1,395.26
14 1/4	4,070.66	14 1/4	4,063.18	14 1/4	3,881.70	14 1/4	3,543.24	14 1/4	3,188.75	14 1/4	2,828.73	14 1/4	2,467.71	14 1/4	2,106.69	14 1/4	1,745.67	14 1/4	1,387.76
15	4,055.62	15	4,048.14	15	3,874.17	15	3,535.72	15	3,182.22	15	2,821.21	15	2,460.19	15	2,099.17	15	1,738.15	15	1,380.24
15 1/4	4,040.66	15 1/4	4,033.18	15 1/4	3,866.55	15 1/4	3,530.64	15 1/4	3,174.70	15 1/4	2,813.69	15 1/4	2,452.67	15 1/4	2,091.65	15 1/4	1,730.63	15 1/4	1,372.72
16	4,025.62	16	4,018.14	16	3,859.03	16	3,528.20	16	3,167.18	16	2,806.16	16	2,445.15	16	2,084.13	16	1,723.11	16	1,365.20
16 1/4	4,010.66	16 1/4	4,003.18	16 1/4	3,851.61	16 1/4	3,520.68	16 1/4	3,159.66	16 1/4	2,798.64	16 1/4	2,437.63	16 1/4	2,076.61	16 1/4	1,715.59	16 1/4	1,357.68
17	4,000.66	17	3,993.18	17	3,844.09	17	3,513.16	17	3,152.14	17	2,791.12	17	2,430.10	17	2,069.09	17	1,708.07	17	1,350.16
17 1/4	3,985.62	17 1/4	3,978.14	17 1/4	3,836.55	17 1/4	3,505.64	17 1/4	3,144.62	17 1/4	2,783.60	17 1/4	2,422.58	17 1/4	2,061.57	17 1/4	1,700.55	17 1/4	1,342.63
18	4,000.66	18	3,993.18	18	3,829.05	18	3,490.59	18	3,137.10	18	2,776.08	18	2,415.06	18	2,054.04	18	1,693.03	18	1,335.11
18 1/4	3,985.62	18 1/4	3,978.14	18 1/4	3,821.53	18 1/4	3,483.07	18 1/4	3,128.58	18 1/4	2,768.56	18 1/4	2,407.54	18 1/4	2,046.52	18 1/4	1,685.51	18 1/4	1,327.59
19	4,000.66	19	3,993.18	19	3,813.51	19	3,475.55	19	3,114.53	19	2,753.52	19	2,392.50	19	2,039.00	19	1,677.98	19	1,320.07
19 1/4	3,985.62	19 1/4	3,978.14	19 1/4	3,806.03	19 1/4	3,468.03	19 1/4	3,107.01	19 1/4	2,743.49	19 1/4	2,382.46	19 1/4	2,023.96	19 1/4	1,668.94	19 1/4	1,312.55
20	4,000.66	20	3,993.18	20	3,798.48	20	3,460.51	20	3,099.49	20	2,738.47	20	2,377.46	20	2,018.44	20	1,660.94	20	1,305.03
20 1/4	3,985.62	20 1/4	3,978.14	20 1/4	3,791.97	20 1/4	3,452.99	20 1/4	3,091.97	20 1/4	2,730.95	20 1/4	2,369.93	20 1/4	2,016.92	20 1/4	1,657.90	20 1/4	1,297.51
21	4,000.66	21	3,993.18	21	3,784.45	21	3,445.47	21	3,084.45	21	2,723.43	21	2,362.41	21	2,014.40	21	1,650.38	21	1,292.46

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 3049"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 13-07 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	1,274.94	0	923.33	0	576.62	0	216.38	0		0		0		0		0		0	
1/4	1,287.42	1/4	916.16	1/4	569.14	1/4	209.05	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,299.90	1/2	909.00	1/2	561.63	1/2	201.75	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,252.38	3/4	901.83	3/4	554.12	3/4	194.45	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,244.86	1	894.67	1	546.61	1	187.14	1		1		1		1		1		1	
1/4	1,237.34	1/4	887.50	1/4	539.10	1/4	179.84	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,229.82	1/2	880.34	1/2	531.59	1/2	172.54	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,222.30	3/4	873.17	3/4	524.08	3/4	165.23	3/4		3/4		3/4		3/4		3/4		3/4	
2	1,214.77	2	866.01	2	516.57	2	157.93	2		2		2		2		2		2	
1/4	1,207.25	1/4	858.84	1/4	509.06	1/4	150.63	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,199.73	1/2	851.67	1/2	501.54	1/2	143.33	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,192.21	3/4	844.51	3/4	494.02	3/4	136.04	3/4		3/4		3/4		3/4		3/4		3/4	
3	1,184.69	3	837.34	3	486.50	3	128.74	3		3		3		3		3		3	
1/4	1,177.17	1/4	830.17	1/4	478.98	1/4	121.45	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,169.65	1/2	823.17	1/2	471.45	1/2	114.18	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,162.13	3/4	816.17	3/4	463.93	3/4	106.91	3/4		3/4		3/4		3/4		3/4		3/4	
4	1,154.60	4	809.16	4	456.41	4	99.64	4		4		4		4		4		4	
1/4	1,147.08	1/4	802.16	1/4	448.89	1/4	92.37	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,139.56	1/2	795.18	1/2	441.37	1/2	85.62	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,132.04	3/4	788.20	3/4	433.85	3/4	78.87	3/4		3/4		3/4		3/4		3/4		3/4	
5	1,124.52	5	781.22	5	426.33	5	72.12	5		5		5		5		5		5	
1/4	1,117.00	1/4	774.24	1/4	418.80	1/4	65.37	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,109.79	1/2	766.97	1/2	411.28	1/2	59.78	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,102.57	3/4	759.69	3/4	403.76	3/4	54.19	3/4		3/4		3/4		3/4		3/4		3/4	
6	1,095.36	6	752.42	6	396.24	6	48.60	6		6		6		6		6		6	
1/4	1,088.15	1/4	745.15	1/4	388.72	1/4	43.01	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,080.98	1/2	737.84	1/2	381.20	1/2	38.68	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,073.81	3/4	730.54	3/4	373.68	3/4	34.34	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	1,066.65	1/4	723.24	1/4	366.15	1/4	30.01	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,059.48	1/2	715.93	1/2	358.63	1/2	25.67	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,052.31	3/4	708.63	3/4	351.11	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
8	1,045.14	8	701.32	8	343.59	8		8		8		8		8		8		8	
1/4	1,037.98	1/4	694.02	1/4	336.07	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,030.81	1/2	686.72	1/2	328.55	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,023.64	3/4	679.41	3/4	321.03	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	1,016.48	9	672.11	9	313.51	9		9		9		9		9		9		9	
1/4	1,009.31	1/4	664.81	1/4	305.98	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,002.15	1/2	657.50	1/2	298.46	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	994.98	3/4	650.20	3/4	290.95	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	987.82	10	642.90	10	283.44	10		10		10		10		10		10		10	
1/4	980.65	1/4	635.59	1/4	275.93	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	973.49	1/2	628.29	1/2	268.41	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	966.32	3/4	620.99	3/4	260.90	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	959.15	11	613.68	11	253.39	11		11		11		11		11		11		11	
1/4	951.99	1/4	606.38	1/4	245.88	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	944.82	1/2	599.08	1/2	238.37	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	937.66	3/4	591.59	3/4	231.04	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
12	930.49	12	584.11	12	223.71	12		12		12		12		12		12		12	

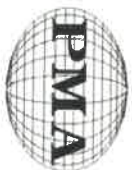
CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.

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Paul J. Mac

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REPRINTED: 12/12/2018 CL
CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018



BARGE "EMS 3049"

3 PORT ULLAGE TABLE

CAPACITIES IN BARRELS OF 42 U.S. GALLONS

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
0	0	0	3,756.17	0	3,563.95	0	3,371.00	0	3,175.04	0	2,949.71	0	2,724.16	0	2,375.60	0	2,016.68	0	1,556.92
1/4	1/4	1/4	3,752.17	1/4	3,559.93	1/4	3,366.98	1/4	3,170.35	1/4	2,945.02	1/4	2,719.46	1/4	2,368.13	1/4	2,009.18	1/4	1,549.43
1/2	1/2	1/2	3,748.17	1/2	3,555.93	1/2	3,362.96	1/2	3,165.66	1/2	2,940.32	1/2	2,714.72	1/2	2,360.65	1/2	2,001.69	1/2	1,541.93
3/4	3/4	3/4	3,744.18	3/4	3,551.89	3/4	3,358.94	3/4	3,160.97	3/4	2,935.62	3/4	2,710.06	3/4	2,353.18	3/4	1,994.19	3/4	1,534.44
1	1	1	3,740.18	1	3,547.87	1	3,354.92	1	3,156.27	1	2,930.92	1	2,702.95	1	2,345.70	1	1,986.70	1	1,526.94
1/4	1/4	1/4	3,736.18	1/4	3,543.85	1/4	3,350.90	1/4	3,151.58	1/4	2,926.23	1/4	2,695.44	1/4	2,338.22	1/4	1,978.20	1/4	1,519.45
1/2	1/2	1/2	3,732.18	1/2	3,539.83	1/2	3,346.88	1/2	3,146.89	1/2	2,921.53	1/2	2,688.74	1/2	2,330.77	1/2	1,971.71	1/2	1,511.95
3/4	3/4	3/4	3,728.18	3/4	3,535.81	3/4	3,342.86	3/4	3,142.20	3/4	2,916.83	3/4	2,681.63	3/4	2,323.27	3/4	1,964.21	3/4	1,504.46
2	2	2	3,724.18	2	3,531.79	2	3,338.84	2	3,137.51	2	2,912.14	2	2,674.18	2	2,315.80	2	1,956.72	2	1,507.12
1/4	1/4	1/4	3,720.18	1/4	3,527.78	1/4	3,334.82	1/4	3,132.82	1/4	2,907.44	1/4	2,666.72	1/4	2,308.32	1/4	1,949.22	1/4	1,589.78
1/2	1/2	1/2	3,716.18	1/2	3,523.76	1/2	3,330.80	1/2	3,128.13	1/2	2,902.74	1/2	2,659.27	1/2	2,300.85	1/2	1,941.73	1/2	1,582.45
3/4	3/4	3/4	3,712.18	3/4	3,519.74	3/4	3,326.79	3/4	3,123.44	3/4	2,898.05	3/4	2,651.82	3/4	2,293.37	3/4	1,934.23	3/4	1,575.11
3	3	3	3,708.18	3	3,515.72	3	3,322.77	3	3,118.75	3	2,893.35	3	2,644.37	3	2,285.89	3	1,926.74	3	1,567.79
1/4	1/4	1/4	3,704.18	1/4	3,511.70	1/4	3,318.75	1/4	3,114.06	1/4	2,888.65	1/4	2,636.92	1/4	2,278.42	1/4	1,919.24	1/4	1,560.48
1/2	1/2	1/2	3,700.19	1/2	3,507.68	1/2	3,314.73	1/2	3,109.37	1/2	2,883.95	1/2	2,628.96	1/2	2,270.94	1/2	1,911.75	1/2	1,553.16
3/4	3/4	3/4	3,696.19	3/4	3,503.66	3/4	3,310.71	3/4	3,104.68	3/4	2,879.26	3/4	2,622.01	3/4	2,263.47	3/4	1,904.25	3/4	1,545.85
4	4	4	3,692.19	4	3,499.64	4	3,306.69	4	3,099.99	4	2,874.56	4	2,614.56	4	2,255.99	4	1,896.76	4	1,538.53
1/4	1/4	1/4	3,688.19	1/4	3,495.62	1/4	3,302.67	1/4	3,095.30	1/4	2,869.86	1/4	2,607.11	1/4	2,248.51	1/4	1,889.26	1/4	1,531.22
1/2	1/2	1/2	3,684.19	1/2	3,491.60	1/2	3,298.65	1/2	3,090.61	1/2	2,865.17	1/2	2,599.66	1/2	2,241.04	1/2	1,881.77	1/2	1,523.90
3/4	3/4	3/4	3,680.19	3/4	3,487.58	3/4	3,294.63	3/4	3,085.92	3/4	2,860.47	3/4	2,592.20	3/4	2,233.56	3/4	1,874.28	3/4	1,516.59
5	5	5	3,676.19	5	3,483.56	5	3,290.61	5	3,081.22	5	2,855.77	5	2,584.75	5	2,226.09	5	1,866.78	5	1,509.27
1/4	1/4	1/4	3,672.19	1/4	3,479.54	1/4	3,286.59	1/4	3,076.53	1/4	2,851.07	1/4	2,577.30	1/4	2,218.61	1/4	1,859.29	1/4	1,501.96
1/2	1/2	1/2	3,668.19	1/2	3,475.52	1/2	3,282.57	1/2	3,071.83	1/2	2,846.37	1/2	2,568.85	1/2	2,211.13	1/2	1,851.79	1/2	1,494.84
3/4	3/4	3/4	3,664.19	3/4	3,471.50	3/4	3,278.55	3/4	3,067.14	3/4	2,841.67	3/4	2,562.40	3/4	2,203.66	3/4	1,844.30	3/4	1,487.33
1/4	1/4	1/4	3,660.19	1/4	3,467.48	1/4	3,274.53	1/4	3,062.44	1/4	2,836.97	1/4	2,554.94	1/4	2,196.18	1/4	1,836.80	1/4	1,480.01
1/2	1/2	1/2	3,656.19	1/2	3,463.46	1/2	3,270.51	1/2	3,057.74	1/2	2,832.27	1/2	2,547.49	1/2	2,188.71	1/2	1,828.31	1/2	1,472.70
3/4	3/4	3/4	3,652.20	3/4	3,459.44	3/4	3,266.47	3/4	3,053.05	3/4	2,827.57	3/4	2,532.59	3/4	2,173.75	3/4	1,814.32	3/4	1,465.38
7	7	7	3,644.20	7	3,451.40	7	3,258.45	7	3,043.65	7	2,818.17	7	2,525.11	7	2,166.26	7	1,806.82	7	1,450.76
1/4	1/4	1/4	3,640.20	1/4	3,447.38	1/4	3,254.43	1/4	3,038.96	1/4	2,813.47	1/4	2,517.64	1/4	2,158.77	1/4	1,799.33	1/4	1,443.44
1/2	1/2	1/2	3,636.20	1/2	3,443.36	1/2	3,250.41	1/2	3,034.26	1/2	2,808.77	1/2	2,510.17	1/2	2,151.28	1/2	1,791.83	1/2	1,436.13
3/4	3/4	3/4	3,632.20	3/4	3,439.34	3/4	3,246.39	3/4	3,028.56	3/4	2,804.07	3/4	2,502.69	3/4	2,143.79	3/4	1,784.34	3/4	1,428.81
8	8	8	3,628.20	8	3,435.32	8	3,242.37	8	3,024.86	8	2,799.37	8	2,495.22	8	2,136.34	8	1,776.84	8	1,421.34
1/4	1/4	1/4	3,624.20	1/4	3,431.30	1/4	3,238.35	1/4	3,020.17	1/4	2,794.67	1/4	2,487.74	1/4	2,128.88	1/4	1,769.35	1/4	1,413.86
1/2	1/2	1/2	3,620.20	1/2	3,427.28	1/2	3,234.33	1/2	3,015.47	1/2	2,789.97	1/2	2,480.27	1/2	2,121.42	1/2	1,761.85	1/2	1,406.39
3/4	3/4	3/4	3,616.20	3/4	3,423.26	3/4	3,230.31	3/4	3,010.77	3/4	2,785.27	3/4	2,472.79	3/4	2,113.97	3/4	1,754.36	3/4	1,398.92
9	9	9	3,612.18	9	3,419.24	9	3,226.29	9	3,006.08	9	2,780.57	9	2,465.31	9	2,106.51	9	1,746.86	9	1,391.42
1/4	1/4	1/4	3,608.17	1/4	3,415.22	1/4	3,222.27	1/4	3,001.38	1/4	2,775.86	1/4	2,457.84	1/4	2,099.04	1/4	1,739.37	1/4	1,383.83
1/2	1/2	1/2	3,604.15	1/2	3,411.20	1/2	3,218.25	1/2	2,996.68	1/2	2,771.16	1/2	2,450.36	1/2	2,091.58	1/2	1,731.87	1/2	1,376.33
3/4	3/4	3/4	3,600.13	3/4	3,407.18	3/4	3,214.23	3/4	2,991.99	3/4	2,766.46	3/4	2,442.89	3/4	2,084.12	3/4	1,724.38	3/4	1,368.94
10	10	10	3,596.11	10	3,403.16	10	3,210.21	10	2,987.29	10	2,761.76	10	2,435.41	10	2,076.63	10	1,716.88	10	1,361.44
1/4	1/4	1/4	3,592.09	1/4	3,399.14	1/4	3,206.19	1/4	2,982.59	1/4	2,757.06	1/4	2,427.94	1/4	2,069.13	1/4	1,709.39	1/4	1,353.95
1/2	1/2	1/2	3,588.07	1/2	3,395.12	1/2	3,202.17	1/2	2,977.89	1/2	2,752.36	1/2	2,420.46	1/2	2,061.64	1/2	1,701.89	1/2	1,346.45
3/4	3/4	3/4	3,584.05	3/4	3,391.10	3/4	3,198.15	3/4	2,973.20	3/4	2,747.66	3/4	2,412.98	3/4	2,054.15	3/4	1,694.40	3/4	1,338.96
11	11	11	3,580.03	11	3,387.08	11	3,193.55	11	2,968.50	11	2,743.26	11	2,405.51	11	2,046.66	11	1,686.90	11	1,331.46
1/4	1/4	1/4	3,576.01	1/4	3,383.06	1/4	3,188.94	1/4	2,963.80	1/4	2,738.26	1/4	2,398.03	1/4	2,039.16	1/4	1,679.91	1/4	1,323.97
1/2	1/2	1/2	3,571.99	1/2	3,379.04	1/2	3,184.33	1/2	2,959.11	1/2	2,733.56	1/2	2,390.56	1/2	2,031.67	1/2	1,671.91	1/2	1,316.47
3/4	3/4	3/4	3,567.97	3/4	3,375.02	3/4	3,179.73	3/4	2,954.41	3/4	2,728.86	3/4	2,383.08	3/4	2,024.17	3/4	1,664.42	3/4	1,308.98

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH NIPMS 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 OF 10" DIAMETER ULLAGE HATCH
GAUGE POINT: (10" HATCH) LOCATED 10'-06" OFF CENTERLINE AND 52'-06" FORWARD OF AFT BULKHEAD

PRECISION MEASUREMENT
& ANALYSIS, INC.

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



BARGE "EMS 3049"

3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
1/4	1,301.48	1/4	942.21	1/4	589.53	1/4	230.23	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,293.98	1/2	934.73	1/2	582.07	1/2	222.92	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,286.49	3/4	927.26	3/4	574.62	3/4	215.62	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,278.99	1	919.79	1	567.16	1	208.32	1		1		1		1		1		1	
1/4	1,271.50	1/4	912.31	1/4	559.67	1/4	201.04	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,264.00	1/2	904.84	1/2	552.19	1/2	193.76	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,256.51	3/4	897.37	3/4	544.70	3/4	186.48	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,249.01	1	889.89	1	537.22	1	179.20	1		1		1		1		1		1	
1/4	1,241.52	1/4	882.42	1/4	529.73	1/4	171.93	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,234.02	1/2	874.95	1/2	522.25	1/2	164.65	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,226.53	3/4	867.47	3/4	514.78	3/4	157.37	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,219.03	1	860.00	1	507.28	1	150.10	1		1		1		1		1		1	
1/4	1,211.54	1/4	852.52	1/4	499.79	1/4	142.83	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,204.04	1/2	845.05	1/2	492.29	1/2	135.56	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,196.55	3/4	837.57	3/4	484.80	3/4	128.29	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,189.05	1	830.10	1	477.30	1	121.02	1		1		1		1		1		1	
1/4	1,181.56	1/4	822.78	1/4	469.81	1/4	113.78	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,174.06	1/2	815.47	1/2	462.31	1/2	106.53	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,166.56	3/4	808.16	3/4	454.82	3/4	99.29	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,159.07	1	800.85	1	447.32	1	92.04	1		1		1		1		1		1	
1/4	1,151.57	1/4	793.56	1/4	439.83	1/4	85.32	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,144.08	1/2	786.27	1/2	432.33	1/2	78.59	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,136.58	3/4	778.98	3/4	424.83	3/4	71.87	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,129.09	1	771.70	1	417.34	1	65.14	1		1		1		1		1		1	
1/4	1,121.61	1/4	764.41	1/4	409.84	1/4	59.57	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,114.13	1/2	757.12	1/2	402.35	1/2	54.00	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,106.65	3/4	749.83	3/4	394.85	3/4	48.44	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,099.17	1	742.54	1	387.36	1	42.87	1		1		1		1		1		1	
1/4	1,091.70	1/4	735.27	1/4	379.86	1/4	38.55	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,084.22	1/2	727.99	1/2	372.37	1/2	34.23	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,076.75	3/4	720.71	3/4	364.87	3/4	29.90	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,069.27	1	713.43	1	357.38	1	25.58	1		1		1		1		1		1	
1/4	1,061.79	1/4	706.15	1/4	349.88	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,054.32	1/2	698.88	1/2	342.39	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,046.84	3/4	691.60	3/4	334.89	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
1	1,039.36	1	684.32	1	327.39	1		1		1		1		1		1		1	
1/4	1,031.89	1/4	677.04	1/4	319.90	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,024.42	1/2	669.77	1/2	312.40	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,016.94	3/4	662.49	3/4	304.91	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
1	1,009.47	1	655.21	1	297.41	1		1		1		1		1		1		1	
1/4	1,002.00	1/4	647.93	1/4	289.93	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	994.52	1/2	640.66	1/2	282.44	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	987.05	3/4	633.38	3/4	274.95	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
1	979.58	1	626.10	1	267.47	1		1		1		1		1		1		1	
1/4	972.10	1/4	618.82	1/4	259.98	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	964.63	1/2	611.55	1/2	252.50	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	957.16	3/4	604.27	3/4	245.02	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
1	949.68	1	596.99	1	237.53	1		1		1		1		1		1		1	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL
CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT

& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmaacorp.net>



BARGE "EMS 3049"

3 STBD

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 13'-08"																			
0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	0	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			3,731.95	0	3,539.67	0	3,346.63	0	3,151.24	0	2,925.96	0	2,700.45	0	2,355.62	0	1,998.31	0	1,639.79
1/4		1/4	3,727.95	1/4	3,535.55	1/4	3,342.61	1/4	3,148.55	1/4	2,921.27	1/4	2,695.75	1/4	2,348.19	1/4	1,990.84	1/4	1,633.32
1/2		1/2	3,723.96	1/2	3,531.63	1/2	3,338.58	1/2	3,141.87	1/2	2,916.57	1/2	2,691.05	1/2	2,340.76	1/2	1,983.37	1/2	1,624.85
3/4		3/4	3,719.96	3/4	3,527.61	3/4	3,334.56	3/4	3,137.18	3/4	2,911.87	3/4	2,686.35	3/4	2,333.33	3/4	1,975.90	3/4	1,617.38
1		1	3,715.96	1	3,523.59	1	3,330.54	1	3,132.49	1	2,907.18	1	2,681.65	1	2,325.89	1	1,968.43	1	1,609.91
1/4		1/4	3,711.96	1/4	3,519.56	1/4	3,326.52	1/4	3,127.80	1/4	2,902.48	1/4	2,674.55	1/4	2,318.46	1/4	1,960.96	1/4	1,602.44
1/2		1/2	3,707.96	1/2	3,515.54	1/2	3,322.50	1/2	3,123.11	1/2	2,897.78	1/2	2,667.44	1/2	2,311.03	1/2	1,953.49	1/2	1,594.97
3/4		3/4	3,703.96	3/4	3,511.52	3/4	3,318.47	3/4	3,118.42	3/4	2,893.09	3/4	2,660.34	3/4	2,303.60	3/4	1,946.02	3/4	1,587.50
1		1	3,699.95	1	3,507.50	1	3,314.45	1	3,113.73	1	2,888.39	1	2,653.23	1	2,296.16	1	1,938.56	1	1,580.03
1/4		1/4	3,695.95	1/4	3,503.48	1/4	3,309.43	1/4	3,109.04	1/4	2,883.70	1/4	2,645.78	1/4	2,288.73	1/4	1,931.09	1/4	1,572.72
1/2		1/2	3,691.95	1/2	3,499.46	1/2	3,306.41	1/2	3,104.35	1/2	2,879.00	1/2	2,638.33	1/2	2,281.30	1/2	1,923.62	1/2	1,565.41
3/4		3/4	3,687.95	3/4	3,495.43	3/4	3,302.39	3/4	3,099.66	3/4	2,874.30	3/4	2,630.88	3/4	2,273.87	3/4	1,916.15	3/4	1,558.10
1		1	3,683.95	1	3,491.41	1	3,298.37	1	3,094.97	1	2,869.61	1	2,623.43	1	2,266.43	1	1,908.68	1	1,550.79
1/4		1/4	3,679.95	1/4	3,487.39	1/4	3,294.34	1/4	3,090.28	1/4	2,864.91	1/4	2,615.98	1/4	2,259.00	1/4	1,901.21	1/4	1,543.50
1/2		1/2	3,675.95	1/2	3,483.37	1/2	3,280.32	1/2	3,085.59	1/2	2,860.22	1/2	2,608.53	1/2	2,251.57	1/2	1,893.27	1/2	1,536.21
3/4		3/4	3,671.95	3/4	3,479.35	3/4	3,276.30	3/4	3,080.90	3/4	2,855.52	3/4	2,601.08	3/4	2,244.14	3/4	1,886.27	3/4	1,528.92
1		1	3,667.95	1	3,475.32	1	3,272.28	1	3,076.21	1	2,850.82	1	2,593.63	1	2,236.70	1	1,878.80	1	1,521.63
1/4		1/4	3,663.94	1/4	3,471.30	1/4	3,268.26	1/4	3,071.52	1/4	2,846.13	1/4	2,586.20	1/4	2,229.27	1/4	1,871.33	1/4	1,514.34
1/2		1/2	3,659.94	1/2	3,467.28	1/2	3,264.23	1/2	3,066.83	1/2	2,841.43	1/2	2,578.78	1/2	2,221.84	1/2	1,863.66	1/2	1,507.05
3/4		3/4	3,655.94	3/4	3,463.26	3/4	3,260.21	3/4	3,062.14	3/4	2,836.74	3/4	2,571.35	3/4	2,214.41	3/4	1,856.39	3/4	1,499.76
1		1	3,651.94	1	3,459.24	1	3,256.19	1	3,057.45	1	2,832.04	1	2,565.92	1	2,206.97	1	1,848.93	1	1,492.47
1/4		1/4	3,647.94	1/4	3,455.22	1/4	3,252.17	1/4	3,052.76	1/4	2,827.34	1/4	2,560.50	1/4	2,199.52	1/4	1,841.46	1/4	1,485.18
1/2		1/2	3,643.94	1/2	3,451.19	1/2	3,248.15	1/2	3,048.06	1/2	2,822.64	1/2	2,549.07	1/2	2,192.08	1/2	1,833.99	1/2	1,477.89
3/4		3/4	3,639.94	3/4	3,447.17	3/4	3,244.13	3/4	3,043.37	3/4	2,817.94	3/4	2,541.65	3/4	2,184.63	3/4	1,826.52	3/4	1,470.60
1		1	3,635.94	1	3,443.15	1	3,240.08	1	3,038.87	1	2,813.24	1	2,534.22	1	2,177.18	1	1,819.05	1	1,463.31
1/4		1/4	3,631.94	1/4	3,439.13	1/4	3,236.08	1/4	3,033.98	1/4	2,808.54	1/4	2,526.80	1/4	2,169.73	1/4	1,811.58	1/4	1,456.02
1/2		1/2	3,627.93	1/2	3,435.11	1/2	3,232.06	1/2	3,029.28	1/2	2,803.84	1/2	2,519.37	1/2	2,162.28	1/2	1,804.11	1/2	1,448.73
3/4		3/4	3,623.93	3/4	3,431.08	3/4	3,228.04	3/4	3,024.58	3/4	2,799.14	3/4	2,511.95	3/4	2,154.83	3/4	1,796.64	3/4	1,441.45
1		1	3,619.93	1	3,427.06	1	3,224.02	1	3,019.89	1	2,794.44	1	2,504.52	1	2,147.38	1	1,789.17	1	1,434.16
1/4		1/4	3,615.93	1/4	3,423.04	1/4	3,220.99	1/4	3,015.19	1/4	2,789.74	1/4	2,497.08	1/4	2,139.91	1/4	1,781.70	1/4	1,426.87
1/2		1/2	3,611.93	1/2	3,419.02	1/2	3,225.97	1/2	3,010.49	1/2	2,785.04	1/2	2,489.63	1/2	2,132.45	1/2	1,774.23	1/2	1,419.58
3/4		3/4	3,607.93	3/4	3,415.00	3/4	3,221.95	3/4	3,005.80	3/4	2,780.34	3/4	2,481.19	3/4	2,124.98	3/4	1,766.76	3/4	1,412.29
1		1	3,603.93	1	3,410.98	1	3,217.93	1	3,001.10	1	2,775.65	1	2,474.74	1	2,117.52	1	1,759.29	1	1,405.00
1/4		1/4	3,599.93	1/4	3,406.95	1/4	3,213.91	1/4	2,996.41	1/4	2,770.95	1/4	2,467.29	1/4	2,110.09	1/4	1,751.83	1/4	1,397.55
1/2		1/2	3,595.93	1/2	3,402.93	1/2	3,209.89	1/2	2,991.71	1/2	2,766.25	1/2	2,459.85	1/2	2,102.66	1/2	1,744.36	1/2	1,390.10
3/4		3/4	3,591.92	3/4	3,398.91	3/4	3,205.86	3/4	2,987.01	3/4	2,761.55	3/4	2,452.40	3/4	2,095.23	3/4	1,736.89	3/4	1,382.66
1		1	3,587.92	1	3,394.89	1	3,201.84	1	2,982.32	1	2,756.85	1	2,444.95	1	2,087.80	1	1,729.42	1	1,375.21
1/4		1/4	3,583.90	1/4	3,390.87	1/4	3,197.82	1/4	2,977.62	1/4	2,752.15	1/4	2,437.50	1/4	2,080.36	1/4	1,721.95	1/4	1,367.74
1/2		1/2	3,579.89	1/2	3,386.85	1/2	3,193.80	1/2	2,972.93	1/2	2,747.45	1/2	2,430.05	1/2	2,072.92	1/2	1,714.48	1/2	1,360.27
3/4		3/4	3,575.87	3/4	3,382.82	3/4	3,189.78	3/4	2,968.23	3/4	2,742.75	3/4	2,422.60	3/4	2,065.49	3/4	1,707.01	3/4	1,352.80
1		1	3,571.85	1	3,378.80	1	3,185.73	1	2,963.53	1	2,738.05	1	2,415.15	1	2,058.05	1	1,699.54	1	1,345.33
1/4		1/4	3,567.83	1/4	3,374.78	1/4	3,181.73	1/4	2,958.84	1/4	2,733.35	1/4	2,407.71	1/4	2,050.58	1/4	1,692.07	1/4	1,337.86
1/2		1/2	3,563.80	1/2	3,370.76	1/2	3,177.71	1/2	2,954.14	1/2	2,728.65	1/2	2,400.26	1/2	2,043.12	1/2	1,684.60	1/2	1,330.39
3/4		3/4	3,559.78	3/4	3,366.74	3/4	3,173.69	3/4	2,949.44	3/4	2,723.95	3/4	2,392.81	3/4	2,036.65	3/4	1,677.13	3/4	1,322.92
1		1	3,555.76	1	3,362.71	1	3,169.67	1	2,944.75	1	2,719.25	1	2,385.36	1	2,028.19	1	1,669.66	1	1,315.45
1/4		1/4	3,551.74	1/4	3,358.69	1/4	3,165.06	1/4	2,940.05	1/4	2,714.55	1/4	2,377.93	1/4	2,020.72	1/4	1,662.20	1/4	1,307.98
1/2		1/2	3,547.72	1/2	3,354.67	1/2	3,160.46	1/2	2,935.36	1/2	2,709.85	1/2	2,370.49	1/2	2,013.25	1/2	1,654.73	1/2	1,300.51
3/4		3/4	3,543.70	3/4	3,350.65	3/4	3,155.85	3/4	2,930.66	3/4	2,705.15	3/4	2,363.06	3/4	2,005.78	3/4	1,647.26	3/4	1,293.04

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 OF 10" DIAMETER ULLAGE HATCH
GAUGE POINT: (10" HATCH) LOCATED 10'-06" OFF CENTERLINE AND 52'-06" 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.pma.net>



BARGE "EMS 3049"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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
0	1,285.57	0	937.01	0	595.40	0	237.06	0		0		0		0		0		0	
1/4	1,278.10	1/4	929.98	1/4	587.96	1/4	229.78	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,270.63	1/2	922.94	1/2	580.53	1/2	222.49	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,263.17	3/4	915.91	3/4	573.09	3/4	215.21	3/4		3/4		3/4		3/4		3/4		3/4	
1	1,255.70	1	908.87	1	565.66	1	207.93	1		1		1		1		1		1	
1/4	1,248.23	1/4	901.83	1/4	558.20	1/4	200.68	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,240.76	1/2	894.80	1/2	550.73	1/2	193.42	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,233.29	3/4	887.76	3/4	543.27	3/4	186.17	3/4		3/4		3/4		3/4		3/4		3/4	
2	1,225.82	2	880.73	2	535.81	2	178.92	2		2		2		2		2		2	
1/4	1,218.35	1/4	873.69	1/4	528.35	1/4	171.66	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,210.88	1/2	866.66	1/2	520.89	1/2	164.41	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,203.41	3/4	859.62	3/4	513.43	3/4	157.16	3/4		3/4		3/4		3/4		3/4		3/4	
3	1,195.94	3	852.59	3	505.97	3	149.90	3		3		3		3		3		3	
1/4	1,188.47	1/4	845.55	1/4	498.50	1/4	142.66	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,181.00	1/2	838.51	1/2	491.02	1/2	135.41	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,173.53	3/4	831.47	3/4	483.55	3/4	128.16	3/4		3/4		3/4		3/4		3/4		3/4	
4	1,166.06	4	824.43	4	476.08	4	120.92	4		4		4		4		4		4	
1/4	1,158.59	1/4	817.56	1/4	468.61	1/4	113.70	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,151.12	1/2	810.69	1/2	461.14	1/2	106.48	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,143.65	3/4	803.81	3/4	453.67	3/4	99.25	3/4		3/4		3/4		3/4		3/4		3/4	
5	1,136.18	5	796.94	5	446.19	5	92.03	5		5		5		5		5		5	
1/4	1,128.71	1/4	790.05	1/4	438.72	1/4	85.31	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,121.24	1/2	783.15	1/2	431.25	1/2	78.59	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,113.77	3/4	776.26	3/4	423.78	3/4	71.86	3/4		3/4		3/4		3/4		3/4		3/4	
6	1,106.30	6	769.36	6	416.31	6	65.14	6		6		6		6		6		6	
1/4	1,098.17	1/4	762.14	1/4	408.83	1/4	59.57	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,092.04	1/2	754.93	1/2	401.36	1/2	54.00	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,084.90	3/4	747.71	3/4	393.89	3/4	48.44	3/4		3/4		3/4		3/4		3/4		3/4	
7	1,077.77	7	740.49	7	386.42	7	42.87	7		7		7		7		7		7	
1/4	1,070.73	1/4	733.23	1/4	378.94	1/4	38.55	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,063.68	1/2	725.98	1/2	371.47	1/2	34.22	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,056.64	3/4	718.72	3/4	364.00	3/4	29.90	3/4		3/4		3/4		3/4		3/4		3/4	
8	1,049.59	8	711.46	8	356.53	8	25.58	8		8		8		8		8		8	
1/4	1,042.55	1/4	704.21	1/4	349.06	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,035.52	1/2	696.96	1/2	341.58	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,028.48	3/4	689.70	3/4	334.11	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	1,021.44	9	682.45	9	326.64	9		9		9		9		9		9		9	
1/4	1,014.40	1/4	675.19	1/4	319.17	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,007.37	1/2	667.94	1/2	311.70	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,000.33	3/4	660.69	3/4	304.22	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	993.30	10	653.43	10	296.75	10		10		10		10		10		10		10	
1/4	986.26	1/4	646.18	1/4	289.29	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	979.22	1/2	638.92	1/2	281.83	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	972.19	3/4	631.67	3/4	274.36	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	965.15	11	624.41	11	266.90	11		11		11		11		11		11		11	
1/4	958.12	1/4	617.16	1/4	259.44	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	951.08	1/2	609.91	1/2	251.98	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	944.05	3/4	602.65	3/4	244.52	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/22/2018 CL
RECALCULATED: 12/12/2018 CL
REPRINTED: 12/12/2018 CL
CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT

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