



BARGE "EMS 409"

PORT HORIZONTAL INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0.17	0	187.71	0	525.55	0	950.89	0	1,438.60	0	1,972.26	0	2,539.22	0	3,128.86	0	3,731.67	0	4,338.69
1/4	1.31	1/4	193.67	1/4	533.69	1/4	960.52	1/4	1,449.33	1/4	1,983.79	1/4	2,551.32	1/4	3,141.33	1/4	3,744.31	1/4	4,351.32
1/2	2.45	1/2	199.64	1/2	541.83	1/2	970.15	1/2	1,460.06	1/2	1,995.32	1/2	2,563.42	1/2	3,153.79	1/2	3,756.95	1/2	4,363.94
3/4	3.60	3/4	205.60	3/4	549.96	3/4	979.78	3/4	1,470.79	3/4	2,006.86	3/4	2,575.53	3/4	3,166.26	3/4	3,769.58	3/4	4,376.56
1	4.74	1	211.57	1	558.10	1	989.41	1	1,481.51	1	2,018.39	1	2,587.63	1	3,178.72	1	3,782.22	1	4,389.19
1/4	6.84	1/4	217.76	1/4	566.38	1/4	999.15	1/4	1,492.32	1/4	2,029.98	1/4	2,599.77	1/4	3,191.21	1/4	3,794.86	1/4	4,401.81
1/2	8.93	1/2	223.95	1/2	574.66	1/2	1,008.88	1/2	1,503.12	1/2	2,041.57	1/2	2,611.91	1/2	3,203.69	1/2	3,807.50	1/2	4,414.42
3/4	11.02	3/4	230.14	3/4	582.94	3/4	1,018.62	3/4	1,513.93	3/4	2,053.15	3/4	2,624.05	3/4	3,216.18	3/4	3,820.15	3/4	4,427.04
2	13.11	2	236.32	2	591.22	2	1,028.36	2	1,524.73	2	2,064.74	2	2,636.19	2	3,228.67	2	3,832.79	2	4,439.65
1/4	15.82	1/4	242.72	1/4	599.64	1/4	1,038.19	1/4	1,535.61	1/4	2,076.39	1/4	2,648.36	1/4	3,241.17	1/4	3,845.44	1/4	4,452.26
1/2	18.53	1/2	249.13	1/2	608.06	1/2	1,048.03	1/2	1,546.49	1/2	2,088.03	1/2	2,660.54	1/2	3,253.68	1/2	3,858.08	1/2	4,464.86
3/4	21.24	3/4	255.53	3/4	616.48	3/4	1,057.87	3/4	1,557.37	3/4	2,099.67	3/4	2,672.71	3/4	3,266.18	3/4	3,870.73	3/4	4,477.47
3	23.94	3	261.93	3	624.90	3	1,067.70	3	1,568.25	3	2,111.32	3	2,684.89	3	3,278.69	3	3,883.38	3	4,490.07
1/4	27.15	1/4	268.53	1/4	633.46	1/4	1,077.64	1/4	1,579.20	1/4	2,123.01	1/4	2,697.10	1/4	3,291.21	1/4	3,896.03	1/4	4,502.67
1/2	30.35	1/2	275.13	1/2	642.01	1/2	1,087.58	1/2	1,590.16	1/2	2,134.71	1/2	2,709.31	1/2	3,303.74	1/2	3,908.68	1/2	4,515.26
3/4	33.55	3/4	281.74	3/4	650.57	3/4	1,097.51	3/4	1,601.11	3/4	2,146.40	3/4	2,721.52	3/4	3,316.26	3/4	3,921.33	3/4	4,527.85
4	36.76	4	288.34	4	659.13	4	1,107.45	4	1,612.06	4	2,158.10	4	2,733.73	4	3,328.79	4	3,933.98	4	4,540.45
1/4	40.39	1/4	295.14	1/4	667.82	1/4	1,117.49	1/4	1,623.09	1/4	2,169.85	1/4	2,745.98	1/4	3,341.33	1/4	3,946.63	1/4	4,553.03
1/2	44.01	1/2	301.94	1/2	676.51	1/2	1,127.52	1/2	1,634.11	1/2	2,181.59	1/2	2,758.22	1/2	3,353.87	1/2	3,959.28	1/2	4,565.61
3/4	47.64	3/4	308.74	3/4	685.20	3/4	1,137.55	3/4	1,645.14	3/4	2,193.34	3/4	2,770.47	3/4	3,366.42	3/4	3,971.94	3/4	4,578.19
5	51.27	5	315.54	5	693.88	5	1,147.59	5	1,656.16	5	2,205.09	5	2,782.71	5	3,378.96	5	3,984.59	5	4,590.77
1/4	55.28	1/4	322.52	1/4	702.70	1/4	1,157.71	1/4	1,667.26	1/4	2,216.88	1/4	2,794.99	1/4	3,391.52	1/4	3,997.24	1/4	4,603.34
1/2	59.28	1/2	329.51	1/2	711.52	1/2	1,167.84	1/2	1,678.35	1/2	2,228.68	1/2	2,807.27	1/2	3,404.07	1/2	4,009.90	1/2	4,615.90
3/4	63.29	3/4	336.50	3/4	720.34	3/4	1,177.97	3/4	1,689.44	3/4	2,240.48	3/4	2,819.54	3/4	3,416.63	3/4	4,022.55	3/4	4,628.47
6	67.30	6	343.48	6	729.16	6	1,188.10	6	1,700.54	6	2,252.27	6	2,831.82	6	3,429.19	6	4,035.20	6	4,641.03
1/4	71.59	1/4	350.65	1/4	738.10	1/4	1,198.32	1/4	1,711.70	1/4	2,264.12	1/4	2,844.13	1/4	3,441.77	1/4	4,047.86	1/4	4,653.59
1/2	75.89	1/2	357.82	1/2	747.05	1/2	1,208.54	1/2	1,722.86	1/2	2,275.96	1/2	2,856.44	1/2	3,454.34	1/2	4,060.51	1/2	4,666.14
3/4	80.18	3/4	364.99	3/4	755.99	3/4	1,218.76	3/4	1,734.03	3/4	2,287.81	3/4	2,868.74	3/4	3,466.91	3/4	4,073.16	3/4	4,678.69
7	84.48	7	372.15	7	764.93	7	1,228.98	7	1,745.19	7	2,299.65	7	2,881.05	7	3,479.49	7	4,085.82	7	4,691.24
1/4	89.09	1/4	379.50	1/4	774.00	1/4	1,239.29	1/4	1,756.42	1/4	2,311.54	1/4	2,893.39	1/4	3,492.07	1/4	4,098.47	1/4	4,703.77
1/2	93.70	1/2	386.84	1/2	783.07	1/2	1,249.60	1/2	1,767.64	1/2	2,323.43	1/2	2,905.73	1/2	3,504.66	1/2	4,111.12	1/2	4,716.30
3/4	98.31	3/4	394.18	3/4	792.13	3/4	1,259.91	3/4	1,778.87	3/4	2,335.33	3/4	2,918.06	3/4	3,517.25	3/4	4,123.77	3/4	4,728.84
8	102.92	8	401.53	8	801.20	8	1,270.22	8	1,790.10	8	2,347.22	8	2,930.40	8	3,529.83	8	4,136.43	8	4,741.37
1/4	107.82	1/4	409.04	1/4	810.38	1/4	1,280.62	1/4	1,801.39	1/4	2,359.15	1/4	2,942.77	1/4	3,542.43	1/4	4,149.07	1/4	4,753.89
1/2	112.73	1/2	416.55	1/2	819.57	1/2	1,291.02	1/2	1,812.69	1/2	2,371.09	1/2	2,955.13	1/2	3,555.03	1/2	4,161.72	1/2	4,766.40
3/4	117.63	3/4	424.06	3/4	828.75	3/4	1,301.41	3/4	1,823.98	3/4	2,383.03	3/4	2,967.50	3/4	3,567.63	3/4	4,174.37	3/4	4,778.92
9	122.53	9	431.57	9	837.94	9	1,311.81	9	1,835.27	9	2,394.96	9	2,979.86	9	3,580.23	9	4,187.02	9	4,791.43
1/4	127.71	1/4	439.25	1/4	847.24	1/4	1,322.30	1/4	1,846.63	1/4	2,406.94	1/4	2,992.25	1/4	3,592.84	1/4	4,199.67	1/4	4,803.93
1/2	132.89	1/2	446.92	1/2	856.54	1/2	1,332.78	1/2	1,857.98	1/2	2,418.92	1/2	3,004.64	1/2	3,605.45	1/2	4,212.31	1/2	4,816.43
3/4	138.06	3/4	454.60	3/4	865.84	3/4	1,343.26	3/4	1,869.34	3/4	2,430.90	3/4	3,017.04	3/4	3,618.06	3/4	4,224.96	3/4	4,828.92
10	143.24	10	462.27	10	875.14	10	1,353.75	10	1,880.69	10	2,442.88	10	3,029.43	10	3,630.68	10	4,237.60	10	4,841.42
1/4	148.68	1/4	470.11	1/4	884.55	1/4	1,364.31	1/4	1,892.11	1/4	2,454.90	1/4	3,041.85	1/4	3,643.30	1/4	4,250.24	1/4	4,853.89
1/2	154.11	1/2	477.94	1/2	893.97	1/2	1,374.88	1/2	1,903.52	1/2	2,466.92	1/2	3,054.26	1/2	3,655.92	1/2	4,262.88	1/2	4,866.37
3/4	159.55	3/4	485.77	3/4	903.38	3/4	1,385.45	3/4	1,914.94	3/4	2,478.95	3/4	3,066.68	3/4	3,668.54	3/4	4,275.52	3/4	4,878.84
11	164.98	11	493.61	11	912.79	11	1,396.01	11	1,926.36	11	2,490.97	11	3,079.10	11	3,681.16	11	4,288.16	11	4,891.32
1/4	170.66	1/4	501.59	1/4	922.32	1/4	1,406.66	1/4	1,937.83	1/4	2,503.03	1/4	3,091.54	1/4	3,693.79	1/4	4,300.79	1/4	4,903.77
1/2	176.34	1/2	509.58	1/2	931.84	1/2	1,417.31	1/2	1,949.31	1/2	2,515.09	1/2	3,103.98	1/2	3,706.42	1/2	4,313.42	1/2	4,916.23
3/4	182.03	3/4	517.57	3/4	941.37	3/4	1,427.96	3/4	1,960.78	3/4	2,527.16	3/4	3,116.42	3/4	3,719.04	3/4	4,326.06	3/4	4,928.68

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.2E
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL
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BARGE "EMS 409"

PORT HORIZONTAL INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	4,941.13	0	5,530.03	0	6,095.82	0	6,627.83	0	7,113.31	0	7,535.60	0	7,866.68	0		0		0	
1/4	4,953.56	1/4	5,542.07	1/4	6,107.27	1/4	6,638.44	1/4	7,122.78	1/4	7,543.51	1/4	7,872.29	1/4		1/4		1/4	
1/2	4,965.99	1/2	5,554.11	1/2	6,118.72	1/2	6,649.05	1/2	7,132.25	1/2	7,551.42	1/2	7,877.91	1/2		1/2		1/2	
3/4	4,978.42	3/4	5,566.15	3/4	6,130.16	3/4	6,659.66	3/4	7,141.72	3/4	7,559.33	3/4	7,883.52	3/4		3/4		3/4	
1	4,990.85	1	5,578.20	1	6,141.61	1	6,670.26	1	7,151.19	1	7,567.24	1	7,889.13	1		1		1	
1/4	5,003.25	1/4	5,590.20	1/4	6,152.99	1/4	6,680.79	1/4	7,160.55	1/4	7,574.99	1/4	7,894.50	1/4		1/4		1/4	
1/2	5,015.66	1/2	5,602.20	1/2	6,164.38	1/2	6,691.31	1/2	7,169.90	1/2	7,582.75	1/2	7,899.86	1/2		1/2		1/2	
3/4	5,028.06	3/4	5,614.20	3/4	6,175.76	3/4	6,701.84	3/4	7,179.26	3/4	7,590.50	3/4	7,905.22	3/4		3/4		3/4	
2	5,040.47	2	5,626.20	2	6,187.15	2	6,712.36	2	7,188.62	2	7,598.26	2	7,910.58	2		2		2	
1/4	5,052.85	1/4	5,638.16	1/4	6,198.47	1/4	6,722.81	1/4	7,197.86	1/4	7,605.85	1/4	7,915.68	1/4		1/4		1/4	
1/2	5,065.23	1/2	5,650.12	1/2	6,209.80	1/2	6,733.25	1/2	7,207.11	1/2	7,613.45	1/2	7,920.77	1/2		1/2		1/2	
3/4	5,077.61	3/4	5,662.08	3/4	6,221.12	3/4	6,743.69	3/4	7,216.35	3/4	7,621.04	3/4	7,925.87	3/4		3/4		3/4	
3	5,089.98	3	5,674.03	3	6,232.45	3	6,754.13	3	7,225.59	3	7,628.64	3	7,930.97	3		3		3	
1/4	5,102.34	1/4	5,685.95	1/4	6,243.71	1/4	6,764.48	1/4	7,234.72	1/4	7,636.06	1/4	7,935.78	1/4		1/4		1/4	
1/2	5,114.69	1/2	5,697.86	1/2	6,254.97	1/2	6,774.84	1/2	7,243.84	1/2	7,643.49	1/2	7,940.59	1/2		1/2		1/2	
3/4	5,127.04	3/4	5,709.78	3/4	6,266.23	3/4	6,785.19	3/4	7,252.97	3/4	7,650.92	3/4	7,945.41	3/4		3/4		3/4	
4	5,139.39	4	5,721.69	4	6,277.49	4	6,795.55	4	7,262.10	4	7,658.35	4	7,950.22	4		4		4	
1/4	5,151.71	1/4	5,733.56	1/4	6,288.68	1/4	6,805.81	1/4	7,271.10	1/4	7,665.41	1/4	7,954.73	1/4		1/4		1/4	
1/2	5,164.04	1/2	5,745.43	1/2	6,299.88	1/2	6,816.08	1/2	7,280.11	1/2	7,672.48	1/2	7,959.24	1/2		1/2		1/2	
3/4	5,176.36	3/4	5,757.29	3/4	6,311.08	3/4	6,826.34	3/4	7,289.11	3/4	7,679.54	3/4	7,963.75	3/4		3/4		3/4	
5	5,188.68	5	5,769.16	5	6,322.27	5	6,836.61	5	7,298.12	5	7,686.60	5	7,968.26	5		5		5	
1/4	5,200.97	1/4	5,780.98	1/4	6,333.40	1/4	6,846.78	1/4	7,307.00	1/4	7,693.49	1/4	7,972.44	1/4		1/4		1/4	
1/2	5,213.27	1/2	5,792.80	1/2	6,344.53	1/2	6,856.96	1/2	7,315.88	1/2	7,700.38	1/2	7,976.62	1/2		1/2		1/2	
3/4	5,225.56	3/4	5,804.63	3/4	6,355.66	3/4	6,867.13	3/4	7,324.76	3/4	7,707.26	3/4	7,980.80	3/4		3/4		3/4	
6	5,237.85	6	5,816.45	6	6,366.79	6	6,877.31	6	7,333.64	6	7,714.15	6	7,984.98	6		6		6	
1/4	5,250.11	1/4	5,828.22	1/4	6,377.85	1/4	6,887.39	1/4	7,342.40	1/4	7,720.85	1/4	7,988.81	1/4		1/4		1/4	
1/2	5,262.37	1/2	5,839.99	1/2	6,388.90	1/2	6,897.47	1/2	7,351.15	1/2	7,727.55	1/2	7,992.63	1/2		1/2		1/2	
3/4	5,274.63	3/4	5,851.76	3/4	6,399.96	3/4	6,907.55	3/4	7,359.91	3/4	7,734.25	3/4	7,996.45	3/4		3/4		3/4	
7	5,286.89	7	5,863.53	7	6,411.02	7	6,917.63	7	7,368.66	7	7,740.96	7	8,000.27	7		7		7	
1/4	5,299.12	1/4	5,875.26	1/4	6,422.01	1/4	6,927.62	1/4	7,377.28	1/4	7,747.66	1/4	8,003.70	1/4		1/4		1/4	
1/2	5,311.35	1/2	5,886.98	1/2	6,433.00	1/2	6,937.60	1/2	7,385.91	1/2	7,754.36	1/2	8,007.12	1/2		1/2		1/2	
3/4	5,323.58	3/4	5,898.70	3/4	6,443.99	3/4	6,947.59	3/4	7,394.53	3/4	7,761.06	3/4	8,010.54	3/4		3/4		3/4	
8	5,335.81	8	5,910.42	8	6,454.98	8	6,957.57	8	7,403.16	8	7,767.76	8	8,013.96	8		8		8	
1/4	5,348.00	1/4	5,922.09	1/4	6,465.90	1/4	6,967.46	1/4	7,411.64	1/4	7,774.27	1/4	8,016.93	1/4		1/4		1/4	
1/2	5,360.19	1/2	5,933.76	1/2	6,476.81	1/2	6,977.35	1/2	7,420.13	1/2	7,780.77	1/2	8,019.90	1/2		1/2		1/2	
3/4	5,372.39	3/4	5,945.43	3/4	6,487.73	3/4	6,987.23	3/4	7,428.62	3/4	7,787.27	3/4	8,022.86	3/4		3/4		3/4	
9	5,384.58	9	5,957.10	9	6,498.65	9	6,997.12	9	7,437.11	9	7,793.78	9	8,025.83	9		9		9	
1/4	5,396.74	1/4	5,968.71	1/4	6,509.49	1/4	7,006.91	1/4	7,445.46	1/4	7,800.07	1/4	8,028.25	1/4		1/4		1/4	
1/2	5,408.90	1/2	5,980.33	1/2	6,520.33	1/2	7,016.70	1/2	7,453.81	1/2	7,806.37	1/2	8,030.67	1/2		1/2		1/2	
3/4	5,421.06	3/4	5,991.95	3/4	6,531.17	3/4	7,026.48	3/4	7,462.16	3/4	7,812.66	3/4	8,033.09	3/4		3/4		3/4	
10	5,433.21	10	6,003.56	10	6,542.02	10	7,036.27	10	7,470.51	10	7,818.96	10	8,035.51	10		10		10	
1/4	5,445.33	1/4	6,015.12	1/4	6,552.78	1/4	7,045.95	1/4	7,478.72	1/4	7,825.04	1/4	8,037.21	1/4		1/4		1/4	
1/2	5,457.46	1/2	6,026.69	1/2	6,563.55	1/2	7,055.64	1/2	7,486.93	1/2	7,831.12	1/2	8,038.91	1/2		1/2		1/2	
3/4	5,469.58	3/4	6,038.25	3/4	6,574.32	3/4	7,065.32	3/4	7,495.14	3/4	7,837.19	3/4	8,040.60	3/4		3/4		3/4	
11	5,481.70	11	6,049.81	11	6,585.08	11	7,075.00	11	7,503.35	11	7,843.27	11	8,042.30	11		11		11	
1/4	5,493.78	1/4	6,061.31	1/4	6,595.77	1/4	7,084.58	1/4	7,511.41	1/4	7,849.12	1/4	8,043.11	1/4		1/4		1/4	
1/2	5,505.86	1/2	6,072.82	1/2	6,606.46	1/2	7,094.16	1/2	7,519.47	1/2	7,854.98	1/2	8,043.92	1/2		1/2		1/2	
3/4	5,517.94	3/4	6,084.32	3/4	6,617.15	3/4	7,103.74	3/4	7,527.53	3/4	7,860.83	3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/12/2018 SW
CALCULATED: 12/12/2018 CL
PRINTED: 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 409"

STBD HORIZONTAL INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0.17	0	188.08	0	526.63	0	952.86	0	1,441.64	0	1,976.51	0	2,544.82	0	3,135.96	0	3,740.38	0	4,349.15
1/4	1.31	1/4	194.06	1/4	534.78	1/4	962.51	1/4	1,452.39	1/4	1,988.07	1/4	2,556.96	1/4	3,148.45	1/4	3,753.05	1/4	4,361.81
1/2	2.46	1/2	200.04	1/2	542.93	1/2	972.16	1/2	1,463.14	1/2	1,999.63	1/2	2,569.09	1/2	3,160.95	1/2	3,765.73	1/2	4,374.48
3/4	3.61	3/4	206.02	3/4	551.08	3/4	981.81	3/4	1,473.89	3/4	2,011.19	3/4	2,581.22	3/4	3,173.45	3/4	3,778.40	3/4	4,387.14
1	4.75	1	212.00	1	559.24	1	991.46	1	1,484.64	1	2,022.75	1	2,593.35	1	3,185.94	1	3,791.07	1	4,399.80
1/4	6.85	1/4	218.20	1/4	567.53	1/4	1,001.22	1/4	1,495.47	1/4	2,034.36	1/4	2,605.52	1/4	3,198.46	1/4	3,803.75	1/4	4,412.46
1/2	8.95	1/2	224.40	1/2	575.83	1/2	1,010.98	1/2	1,506.30	1/2	2,045.98	1/2	2,617.69	1/2	3,210.98	1/2	3,816.42	1/2	4,425.11
3/4	11.04	3/4	230.60	3/4	584.13	3/4	1,020.73	3/4	1,517.13	3/4	2,057.59	3/4	2,629.86	3/4	3,223.50	3/4	3,829.10	3/4	4,437.77
2	13.14	2	236.80	2	592.43	2	1,030.49	2	1,527.96	2	2,069.21	2	2,642.03	2	3,236.02	2	3,841.78	2	4,450.42
1/4	15.85	1/4	243.21	1/4	600.86	1/4	1,040.35	1/4	1,538.86	1/4	2,080.88	1/4	2,654.24	1/4	3,248.56	1/4	3,854.46	1/4	4,463.06
1/2	18.57	1/2	249.63	1/2	609.30	1/2	1,050.21	1/2	1,549.77	1/2	2,092.55	1/2	2,666.44	1/2	3,261.10	1/2	3,867.15	1/2	4,475.71
3/4	21.28	3/4	256.04	3/4	617.74	3/4	1,060.07	3/4	1,560.67	3/4	2,104.22	3/4	2,678.65	3/4	3,273.63	3/4	3,879.83	3/4	4,488.35
3	23.99	3	262.45	3	626.18	3	1,069.92	3	1,571.58	3	2,115.89	3	2,690.85	3	3,286.17	3	3,892.51	3	4,500.99
1/4	27.20	1/4	269.07	1/4	634.75	1/4	1,079.88	1/4	1,582.55	1/4	2,127.62	1/4	2,703.10	1/4	3,298.73	1/4	3,905.20	1/4	4,513.63
1/2	30.41	1/2	275.69	1/2	643.33	1/2	1,089.84	1/2	1,593.53	1/2	2,139.34	1/2	2,715.34	1/2	3,311.29	1/2	3,917.88	1/2	4,526.26
3/4	33.62	3/4	282.31	3/4	651.90	3/4	1,099.80	3/4	1,604.51	3/4	2,151.06	3/4	2,727.58	3/4	3,323.85	3/4	3,930.57	3/4	4,538.89
4	36.83	4	288.92	4	660.48	4	1,109.76	4	1,615.49	4	2,162.79	4	2,739.82	4	3,336.40	4	3,943.26	4	4,551.52
1/4	40.47	1/4	295.74	1/4	669.18	1/4	1,119.81	1/4	1,626.54	1/4	2,174.56	1/4	2,752.10	1/4	3,348.98	1/4	3,955.95	1/4	4,564.14
1/2	44.10	1/2	302.55	1/2	677.89	1/2	1,129.87	1/2	1,637.59	1/2	2,186.34	1/2	2,764.37	1/2	3,361.56	1/2	3,968.63	1/2	4,576.76
3/4	47.74	3/4	309.36	3/4	686.60	3/4	1,139.92	3/4	1,648.64	3/4	2,198.11	3/4	2,776.65	3/4	3,374.13	3/4	3,981.32	3/4	4,589.38
5	51.37	5	316.17	5	695.31	5	1,149.98	5	1,659.69	5	2,209.89	5	2,788.92	5	3,386.71	5	3,994.01	5	4,602.00
1/4	55.39	1/4	323.17	1/4	704.14	1/4	1,160.13	1/4	1,670.81	1/4	2,221.71	1/4	2,801.23	1/4	3,399.30	1/4	4,006.70	1/4	4,614.61
1/2	59.40	1/2	330.18	1/2	712.98	1/2	1,170.28	1/2	1,681.92	1/2	2,233.53	1/2	2,813.54	1/2	3,411.89	1/2	4,019.39	1/2	4,627.21
3/4	63.42	3/4	337.18	3/4	721.82	3/4	1,180.43	3/4	1,693.04	3/4	2,245.36	3/4	2,825.84	3/4	3,424.48	3/4	4,032.08	3/4	4,639.82
6	67.43	6	344.18	6	730.65	6	1,190.58	6	1,704.16	6	2,257.18	6	2,838.15	6	3,437.08	6	4,044.77	6	4,652.42
1/4	71.73	1/4	351.36	1/4	739.62	1/4	1,200.82	1/4	1,715.35	1/4	2,269.06	1/4	2,850.49	1/4	3,449.68	1/4	4,057.46	1/4	4,665.01
1/2	76.04	1/2	358.54	1/2	748.58	1/2	1,211.07	1/2	1,726.54	1/2	2,280.93	1/2	2,862.83	1/2	3,462.29	1/2	4,070.15	1/2	4,677.60
3/4	80.34	3/4	365.73	3/4	757.54	3/4	1,221.31	3/4	1,737.73	3/4	2,292.80	3/4	2,875.17	3/4	3,474.90	3/4	4,082.84	3/4	4,690.19
7	84.65	7	372.91	7	766.51	7	1,231.55	7	1,748.91	7	2,304.68	7	2,887.51	7	3,487.50	7	4,095.53	7	4,702.78
1/4	89.27	1/4	380.27	1/4	775.59	1/4	1,241.88	1/4	1,760.17	1/4	2,316.60	1/4	2,899.88	1/4	3,500.13	1/4	4,108.22	1/4	4,715.36
1/2	93.89	1/2	387.62	1/2	784.68	1/2	1,252.22	1/2	1,771.42	1/2	2,328.52	1/2	2,912.24	1/2	3,512.75	1/2	4,120.91	1/2	4,727.93
3/4	98.51	3/4	394.98	3/4	793.76	3/4	1,262.55	3/4	1,782.68	3/4	2,340.43	3/4	2,924.61	3/4	3,525.37	3/4	4,133.60	3/4	4,740.50
8	103.13	8	402.34	8	802.85	8	1,272.88	8	1,793.93	8	2,352.35	8	2,936.98	8	3,537.99	8	4,146.29	8	4,753.08
1/4	108.04	1/4	409.87	1/4	812.05	1/4	1,283.30	1/4	1,805.25	1/4	2,364.32	1/4	2,949.38	1/4	3,550.62	1/4	4,158.97	1/4	4,765.63
1/2	112.95	1/2	417.39	1/2	821.26	1/2	1,293.72	1/2	1,816.57	1/2	2,376.28	1/2	2,961.77	1/2	3,563.26	1/2	4,171.66	1/2	4,778.19
3/4	117.86	3/4	424.92	3/4	830.46	3/4	1,304.15	3/4	1,827.89	3/4	2,388.25	3/4	2,974.17	3/4	3,575.89	3/4	4,184.35	3/4	4,790.75
9	122.78	9	432.45	9	839.66	9	1,314.57	9	1,839.20	9	2,400.22	9	2,986.57	9	3,588.53	9	4,197.03	9	4,803.30
1/4	127.97	1/4	440.14	1/4	848.98	1/4	1,325.07	1/4	1,850.59	1/4	2,412.22	1/4	2,998.99	1/4	3,601.17	1/4	4,209.71	1/4	4,815.84
1/2	133.15	1/2	447.83	1/2	858.31	1/2	1,335.58	1/2	1,861.97	1/2	2,424.23	1/2	3,011.42	1/2	3,613.82	1/2	4,222.40	1/2	4,828.37
3/4	138.34	3/4	455.52	3/4	867.63	3/4	1,346.09	3/4	1,873.35	3/4	2,436.24	3/4	3,023.84	3/4	3,626.46	3/4	4,235.08	3/4	4,840.91
10	143.53	10	463.21	10	876.95	10	1,356.59	10	1,884.73	10	2,448.25	10	3,036.26	10	3,639.11	10	4,247.76	10	4,853.45
1/4	148.98	1/4	471.06	1/4	886.38	1/4	1,367.18	1/4	1,896.17	1/4	2,460.30	1/4	3,048.71	1/4	3,651.76	1/4	4,260.44	1/4	4,865.96
1/2	154.42	1/2	478.91	1/2	895.81	1/2	1,377.77	1/2	1,907.62	1/2	2,472.35	1/2	3,061.16	1/2	3,664.42	1/2	4,273.11	1/2	4,878.48
3/4	159.87	3/4	486.76	3/4	905.25	3/4	1,388.36	3/4	1,919.06	3/4	2,484.40	3/4	3,073.61	3/4	3,677.07	3/4	4,285.79	3/4	4,890.99
11	165.32	11	494.61	11	914.68	11	1,398.95	11	1,930.50	11	2,496.46	11	3,086.06	11	3,689.73	11	4,298.47	11	4,903.51
1/4	171.01	1/4	502.61	1/4	924.23	1/4	1,409.62	1/4	1,942.00	1/4	2,508.55	1/4	3,098.53	1/4	3,702.39	1/4	4,311.14	1/4	4,916.00
1/2	176.70	1/2	510.62	1/2	933.77	1/2	1,420.30	1/2	1,953.50	1/2	2,520.64	1/2	3,111.01	1/2	3,715.05	1/2	4,323.81	1/2	4,928.50
3/4	182.39	3/4	518.62	3/4	943.31	3/4	1,430.97	3/4	1,965.01	3/4	2,532.73	3/4	3,123.48	3/4	3,727.72	3/4	4,336.48	3/4	4,940.99

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.2E
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

PRECISION MEASUREMENT
& ANALYSIS, INC.

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BARGE "EMS 409"

STBD HORIZONTAL INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	4,953.49	0	5,544.43	0	6,112.46	0	6,646.91	0	7,135.14	0	7,560.61	0	7,895.74	0		0		0	
1/4	4,965.96	1/4	5,556.52	1/4	6,123.95	1/4	6,657.58	1/4	7,144.67	1/4	7,568.59	1/4	7,901.45	1/4		1/4		1/4	
1/2	4,978.43	1/2	5,568.60	1/2	6,135.44	1/2	6,668.24	1/2	7,154.20	1/2	7,576.58	1/2	7,907.17	1/2		1/2		1/2	
3/4	4,990.90	3/4	5,580.69	3/4	6,146.94	3/4	6,678.90	3/4	7,163.73	3/4	7,584.56	3/4	7,912.88	3/4		3/4		3/4	
1	5,003.37	1	5,592.78	1	6,158.43	1	6,689.56	1	7,173.26	1	7,592.55	1	7,918.60	1		1		1	
1/4	5,015.81	1/4	5,604.82	1/4	6,169.87	1/4	6,700.14	1/4	7,182.68	1/4	7,600.38	1/4	7,924.07	1/4		1/4		1/4	
1/2	5,028.26	1/2	5,616.87	1/2	6,181.30	1/2	6,710.72	1/2	7,192.10	1/2	7,608.21	1/2	7,929.54	1/2		1/2		1/2	
3/4	5,040.71	3/4	5,628.92	3/4	6,192.74	3/4	6,721.30	3/4	7,201.52	3/4	7,616.04	3/4	7,935.01	3/4		3/4		3/4	
2	5,053.15	2	5,640.96	2	6,204.17	2	6,731.88	2	7,210.94	2	7,623.87	2	7,940.48	2		2		2	
1/4	5,065.57	1/4	5,652.97	1/4	6,215.55	1/4	6,742.38	1/4	7,220.24	1/4	7,631.54	1/4	7,945.68	1/4		1/4		1/4	
1/2	5,077.99	1/2	5,664.97	1/2	6,226.92	1/2	6,752.87	1/2	7,229.55	1/2	7,639.21	1/2	7,950.89	1/2		1/2		1/2	
3/4	5,090.42	3/4	5,676.97	3/4	6,238.29	3/4	6,763.37	3/4	7,238.86	3/4	7,646.88	3/4	7,956.10	3/4		3/4		3/4	
3	5,102.84	3	5,688.98	3	6,249.67	3	6,773.86	3	7,248.16	3	7,654.55	3	7,961.31	3		3		3	
1/4	5,115.23	1/4	5,700.94	1/4	6,260.98	1/4	6,784.27	1/4	7,257.35	1/4	7,662.06	1/4	7,966.24	1/4		1/4		1/4	
1/2	5,127.62	1/2	5,712.90	1/2	6,272.29	1/2	6,794.68	1/2	7,266.54	1/2	7,669.56	1/2	7,971.17	1/2		1/2		1/2	
3/4	5,140.02	3/4	5,724.86	3/4	6,283.60	3/4	6,805.09	3/4	7,275.73	3/4	7,677.07	3/4	7,976.10	3/4		3/4		3/4	
4	5,152.41	4	5,736.81	4	6,294.91	4	6,815.50	4	7,284.92	4	7,684.58	4	7,981.03	4		4		4	
1/4	5,164.77	1/4	5,748.73	1/4	6,306.16	1/4	6,825.82	1/4	7,293.99	1/4	7,691.72	1/4	7,985.67	1/4		1/4		1/4	
1/2	5,177.14	1/2	5,760.64	1/2	6,317.40	1/2	6,836.15	1/2	7,303.06	1/2	7,698.86	1/2	7,990.30	1/2		1/2		1/2	
3/4	5,189.50	3/4	5,772.56	3/4	6,328.65	3/4	6,846.47	3/4	7,312.13	3/4	7,706.01	3/4	7,994.94	3/4		3/4		3/4	
5	5,201.87	5	5,784.47	5	6,339.89	5	6,856.79	5	7,321.20	5	7,713.15	5	7,999.57	5		5		5	
1/4	5,214.20	1/4	5,796.34	1/4	6,351.07	1/4	6,867.02	1/4	7,330.15	1/4	7,720.12	1/4	8,003.89	1/4		1/4		1/4	
1/2	5,226.54	1/2	5,808.20	1/2	6,362.25	1/2	6,877.25	1/2	7,339.10	1/2	7,727.09	1/2	8,008.21	1/2		1/2		1/2	
3/4	5,238.87	3/4	5,820.07	3/4	6,373.43	3/4	6,887.48	3/4	7,348.04	3/4	7,734.06	3/4	8,012.52	3/4		3/4		3/4	
6	5,251.21	6	5,831.94	6	6,384.61	6	6,897.71	6	7,356.99	6	7,741.03	6	8,016.84	6		6		6	
1/4	5,263.51	1/4	5,843.76	1/4	6,395.72	1/4	6,907.85	1/4	7,365.81	1/4	7,747.81	1/4	8,020.81	1/4		1/4		1/4	
1/2	5,275.82	1/2	5,855.58	1/2	6,406.83	1/2	6,917.99	1/2	7,374.63	1/2	7,754.60	1/2	8,024.78	1/2		1/2		1/2	
3/4	5,288.12	3/4	5,867.39	3/4	6,417.94	3/4	6,928.13	3/4	7,383.45	3/4	7,761.38	3/4	8,028.75	3/4		3/4		3/4	
7	5,300.42	7	5,879.21	7	6,429.05	7	6,938.27	7	7,392.27	7	7,768.17	7	8,032.72	7		7		7	
1/4	5,312.69	1/4	5,890.98	1/4	6,440.09	1/4	6,948.31	1/4	7,400.97	1/4	7,774.96	1/4	8,036.30	1/4		1/4		1/4	
1/2	5,324.97	1/2	5,902.75	1/2	6,451.14	1/2	6,958.36	1/2	7,409.66	1/2	7,781.75	1/2	8,039.89	1/2		1/2		1/2	
3/4	5,337.24	3/4	5,914.52	3/4	6,462.18	3/4	6,968.40	3/4	7,418.35	3/4	7,788.54	3/4	8,043.47	3/4		3/4		3/4	
8	5,349.51	8	5,926.29	8	6,473.22	8	6,978.44	8	7,427.04	8	7,795.32	8	8,047.06	8		8		8	
1/4	5,361.74	1/4	5,938.00	1/4	6,484.19	1/4	6,988.39	1/4	7,435.60	1/4	7,801.92	1/4	8,050.21	1/4		1/4		1/4	
1/2	5,373.98	1/2	5,949.72	1/2	6,495.15	1/2	6,998.33	1/2	7,444.16	1/2	7,808.51	1/2	8,053.36	1/2		1/2		1/2	
3/4	5,386.22	3/4	5,961.44	3/4	6,506.12	3/4	7,008.28	3/4	7,452.71	3/4	7,815.10	3/4	8,056.51	3/4		3/4		3/4	
9	5,398.46	9	5,973.15	9	6,517.09	9	7,018.23	9	7,461.27	9	7,821.69	9	8,059.66	9		9		9	
1/4	5,410.66	1/4	5,984.82	1/4	6,527.99	1/4	7,028.07	1/4	7,469.69	1/4	7,828.08	1/4	8,062.31	1/4		1/4		1/4	
1/2	5,422.86	1/2	5,996.48	1/2	6,538.88	1/2	7,037.92	1/2	7,478.11	1/2	7,834.47	1/2	8,064.95	1/2		1/2		1/2	
3/4	5,435.06	3/4	6,008.15	3/4	6,549.78	3/4	7,047.76	3/4	7,486.53	3/4	7,840.85	3/4	8,067.60	3/4		3/4		3/4	
10	5,447.26	10	6,019.81	10	6,560.67	10	7,057.61	10	7,494.95	10	7,847.24	10	8,070.24	10		10		10	
1/4	5,459.43	1/4	6,031.42	1/4	6,571.49	1/4	7,067.35	1/4	7,503.23	1/4	7,853.42	1/4	8,072.25	1/4		1/4		1/4	
1/2	5,471.59	1/2	6,043.03	1/2	6,582.31	1/2	7,077.10	1/2	7,511.51	1/2	7,859.59	1/2	8,074.25	1/2		1/2		1/2	
3/4	5,483.76	3/4	6,054.64	3/4	6,593.13	3/4	7,086.84	3/4	7,519.79	3/4	7,865.76	3/4	8,076.26	3/4		3/4		3/4	
11	5,495.92	11	6,066.25	11	6,603.95	11	7,096.58	11	7,528.07	11	7,871.94	11	8,078.26	11		11		11	
1/4	5,508.05	1/4	6,077.80	1/4	6,614.69	1/4	7,106.22	1/4	7,536.21	1/4	7,877.89	1/4	8,079.34	1/4		1/4		1/4	
1/2	5,520.18	1/2	6,089.35	1/2	6,625.43	1/2	7,115.86	1/2	7,544.34	1/2	7,883.84	1/2	8,080.41	1/2		1/2		1/2	
3/4	5,532.30	3/4	6,100.90	3/4	6,636.17	3/4	7,125.50	3/4	7,552.48	3/4	7,889.79	3/4	8,081.48	3/4		3/4		3/4	

7/8 8,082.02

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/12/2018 SW
CALCULATED: 12/12/2018 CL
PRINTED: 12/12/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.
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