



BARGE "EMS 504"

INNAGE TRIM TABLE

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

(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: 236'-06"

December 17, 2018

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

<http://www.pmacorp.net>



BARGE "EMS 504"

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 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.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	
0	10.41	0	263.68	0	566.28	0	877.48	0	1,217.68	0	1,559.35	0	1,901.01	0	2,242.68	0	2,584.33	0	2,925.98	0	3,267.63	0	3,609.28	0	3,950.93	0	4,292.58	0	4,634.23
1/4	13.73	1/4	269.49	1/4	562.70	1/4	884.48	1/4	1,224.80	1/4	1,566.46	1/4	1,908.13	1/4	2,249.79	1/4	2,591.45	1/4	2,933.10	1/4	3,274.76	1/4	3,616.41	1/4	3,958.07	1/4	4,299.72	1/4	4,641.38
1/2	17.05	1/2	275.31	1/2	569.13	1/2	891.48	1/2	1,231.91	1/2	1,573.58	1/2	1,915.25	1/2	2,256.91	1/2	2,598.57	1/2	2,940.22	1/2	3,281.88	1/2	3,623.53	1/2	3,965.19	1/2	4,306.84	1/2	4,648.50
3/4	20.37	3/4	281.12	3/4	575.56	3/4	898.47	3/4	1,239.03	3/4	1,580.70	3/4	1,922.37	3/4	2,264.03	3/4	2,605.68	3/4	2,947.34	3/4	3,288.99	3/4	3,630.64	3/4	3,972.30	3/4	4,313.95	3/4	4,655.60
1	23.69	1	286.94	1	581.99	1	905.47	1	1,246.15	1	1,587.82	1	1,929.49	1	2,271.15	1	2,612.80	1	2,954.46	1	3,296.11	1	3,637.77	1	3,979.42	1	4,321.08	1	4,662.73
1/4	26.35	1/4	292.80	1/4	588.47	1/4	912.52	1/4	1,253.27	1/4	1,594.94	1/4	1,936.60	1/4	2,278.26	1/4	2,619.92	1/4	2,961.57	1/4	3,303.22	1/4	3,644.88	1/4	3,986.53	1/4	4,328.19	1/4	4,669.84
1/2	33.01	1/2	298.67	1/2	594.95	1/2	919.56	1/2	1,260.39	1/2	1,602.05	1/2	1,943.72	1/2	2,285.38	1/2	2,627.04	1/2	2,968.69	1/2	3,310.34	1/2	3,652.00	1/2	3,994.65	1/2	4,337.30	1/2	4,680.00
3/4	37.57	3/4	304.53	3/4	601.43	3/4	926.60	3/4	1,267.50	3/4	1,609.17	3/4	1,950.84	3/4	2,292.50	3/4	2,634.15	3/4	2,975.81	3/4	3,316.46	3/4	3,659.11	3/4	4,001.76	3/4	4,343.41	3/4	4,685.06
1	42.33	1	310.40	1	607.91	1	933.64	1	1,274.62	1	1,616.29	1	1,957.96	1	2,299.62	1	2,641.27	1	2,982.93	1	3,322.58	1	3,665.23	1	4,006.88	1	4,348.53	1	4,691.18
1/4	47.63	1/4	316.32	1/4	614.44	1/4	940.71	1/4	1,281.74	1/4	1,623.41	1/4	1,965.08	1/4	2,306.74	1/4	2,648.39	1/4	2,990.04	1/4	3,333.69	1/4	3,676.34	1/4	4,017.99	1/4	4,360.64	1/4	4,703.29
1/2	52.93	1/2	322.23	1/2	620.97	1/2	947.78	1/2	1,288.86	1/2	1,630.53	1/2	1,972.20	1/2	2,313.85	1/2	2,655.51	1/2	2,997.16	1/2	3,344.80	1/2	3,688.45	1/2	4,029.10	1/2	4,371.75	1/2	4,717.00
3/4	58.24	3/4	328.15	3/4	627.50	3/4	954.85	3/4	1,295.98	3/4	1,637.64	3/4	1,979.31	3/4	2,320.97	3/4	2,662.63	3/4	3,004.28	3/4	3,350.93	3/4	3,693.58	3/4	4,039.82	3/4	4,383.47	3/4	4,728.72
1	63.54	1	334.07	1	634.03	1	961.92	1	1,303.08	1	1,644.76	1	1,986.43	1	2,328.09	1	2,669.74	1	3,011.40	1	3,358.05	1	3,700.70	1	4,043.35	1	4,385.00	1	4,726.65
1/4	68.90	1/4	340.03	1/4	640.61	1/4	968.99	1/4	1,310.21	1/4	1,651.88	1/4	1,993.55	1/4	2,335.21	1/4	2,676.86	1/4	3,018.51	1/4	3,365.16	1/4	3,707.81	1/4	4,051.46	1/4	4,393.11	1/4	4,734.76
1/2	74.25	1/2	346.00	1/2	647.19	1/2	976.06	1/2	1,317.33	1/2	1,658.90	1/2	2,000.67	1/2	2,342.33	1/2	2,683.98	1/2	3,026.63	1/2	3,373.28	1/2	3,715.93	1/2	4,062.58	1/2	4,404.23	1/2	4,745.98
3/4	79.61	3/4	351.97	3/4	653.77	3/4	983.14	3/4	1,324.45	3/4	1,666.12	3/4	2,007.79	3/4	2,349.44	3/4	2,691.10	3/4	3,034.74	3/4	3,381.39	3/4	3,724.04	3/4	4,073.69	3/4	4,415.34	3/4	4,757.09
1	84.96	1	357.94	1	660.35	1	990.21	1	1,331.57	1	1,673.24	1	2,014.90	1	2,356.56	1	2,698.22	1	3,041.87	1	3,388.42	1	3,731.07	1	4,079.72	1	4,421.37	1	4,763.02
1/4	90.37	1/4	363.96	1/4	666.98	1/4	997.29	1/4	1,338.68	1/4	1,680.35	1/4	2,022.02	1/4	2,363.68	1/4	2,705.33	1/4	3,048.98	1/4	3,395.53	1/4	3,738.18	1/4	4,085.83	1/4	4,427.48	1/4	4,769.13
1/2	95.77	1/2	369.98	1/2	673.62	1/2	1,004.37	1/2	1,345.80	1/2	1,687.47	1/2	2,029.14	1/2	2,370.80	1/2	2,712.45	1/2	3,059.10	1/2	3,405.65	1/2	3,748.30	1/2	4,091.95	1/2	4,433.60	1/2	4,775.25
3/4	101.18	3/4	376.00	3/4	680.25	3/4	1,011.46	3/4	1,352.92	3/4	1,694.59	3/4	2,036.26	3/4	2,377.91	3/4	2,719.57	3/4	3,062.22	3/4	3,408.77	3/4	3,751.42	3/4	4,097.97	3/4	4,439.62	3/4	4,781.27
1	106.59	1	382.02	1	686.88	1	1,018.54	1	1,360.04	1	1,701.71	1	2,043.38	1	2,385.03	1	2,727.69	1	3,070.34	1	3,416.89	1	3,763.44	1	4,109.99	1	4,451.54	1	4,793.09
1/4	112.04	1/4	388.09	1/4	693.56	1/4	1,025.63	1/4	1,367.16	1/4	1,708.83	1/4	2,050.49	1/4	2,394.15	1/4	2,736.80	1/4	3,082.35	1/4	3,428.90	1/4	3,775.45	1/4	4,116.55	1/4	4,458.10	1/4	4,799.65
1/2	117.50	1/2	394.16	1/2	700.25	1/2	1,032.71	1/2	1,374.28	1/2	1,715.94	1/2	2,057.61	1/2	2,401.27	1/2	2,747.92	1/2	3,094.47	1/2	3,441.02	1/2	3,788.57	1/2	4,131.12	1/2	4,473.67	1/2	4,816.22
3/4	122.96	3/4	400.23	3/4	706.93	3/4	1,039.80	3/4	1,381.39	3/4	1,723.06	3/4	2,064.73	3/4	2,408.39	3/4	2,754.04	3/4	3,100.59	3/4	3,447.14	3/4	3,794.69	3/4	4,137.24	3/4	4,479.74	3/4	4,822.29
1	128.41	1	406.30	1	713.62	1	1,046.89	1	1,388.51	1	1,730.18	1	2,071.85	1	2,415.50	1	2,761.15	1	3,107.70	1	3,454.25	1	3,800.80	1	4,146.35	1	4,491.90	1	4,837.57
1/4	133.92	1/4	412.42	1/4	720.33	1/4	1,054.00	1/4	1,395.63	1/4	1,737.30	1/4	2,078.97	1/4	2,423.62	1/4	2,769.27	1/4	3,115.82	1/4	3,462.37	1/4	3,808.92	1/4	4,154.47	1/4	4,496.02	1/4	4,837.57
1/2	139.43	1/2	418.54	1/2	727.05	1/2	1,061.10	1/2	1,402.76	1/2	1,744.42	1/2	2,086.08	1/2	2,431.74	1/2	2,782.39	1/2	3,128.94	1/2	3,475.49	1/2	3,821.04	1/2	4,166.59	1/2	4,508.14	1/2	4,849.69
3/4	144.94	3/4	424.66	3/4	733.77	3/4	1,068.21	3/4	1,409.87	3/4	1,751.53	3/4	2,093.20	3/4	2,438.86	3/4	2,789.51	3/4	3,136.06	3/4	3,482.61	3/4	3,828.16	3/4	4,173.71	3/4	4,515.26	3/4	4,856.81
1	150.45	1	430.78	1	740.49	1	1,075.32	1	1,416.98	1	1,758.65	1	2,100.32	1	2,447.97	1	2,798.62	1	3,145.17	1	3,491.72	1	3,838.27	1	4,183.82	1	4,525.37	1	4,867.92
1/4	156.01	1/4	436.96	1/4	747.25	1/4	1,082.43	1/4	1,424.10	1/4	1,765.77	1/4	2,107.44	1/4	2,455.09	1/4	2,799.75	1/4	3,146.30	1/4	3,492.85	1/4	3,839.40	1/4	4,184.95	1/4	4,527.50	1/4	4,870.05
1/2	161.56	1/2	443.13	1/2	754.00	1/2	1,089.55	1/2	1,431.22	1/2	1,772.89	1/2	2,114.56	1/2	2,463.91	1/2	2,807.56	1/2	3,153.11	1/2	3,498.66	1/2	3,841.21	1/2	4,186.76	1/2	4,529.31	1/2	4,871.86
3/4	167.12	3/4	449.30	3/4	760.76	3/4	1,096.67	3/4	1,438.34	3/4	1,780.01	3/4	2,121.87	3/4	2,473.22	3/4	2,816.87	3/4	3,162.42	3/4	3,507.97	3/4	3,850.52	3/4	4,196.07	3/4	4,541.62	3/4	4,882.17
1	172.68	1	455.47	1	767.51	1	1,103.79	1	1,445.46	1	1,787.13	1	2,128.79	1	2,480.14	1	2,824.79	1	3,170.34	1	3,515.89	1	3,861.44	1	4,206.99	1	4,552.54	1	4,898.09
1/4	178.29	1/4	461.70	1/4	774.31	1/4	1,110.91	1/4	1,452.57	1/4	1,794.24	1/4	2,135.91	1/4	2,487.26	1/4	2,831.91	1/4	3,177.46	1/4	3,523.01	1/4	3,868.56	1/4	4,214.11	1/4	4,559.66	1/4	4,905.21
1/2	183.90	1/2	467.92	1/2	781.11	1/2	1,118.02	1/2	1,459.69	1/2	1,801.36	1/2	2,143.03	1/2	2,496.38	1/2	2,841.93	1/2	3,187.48	1/2	3,533.03	1/2	3,878.58	1/2	4,224.68	1/2	4,569.78	1/2	4,



BARGE "EMS 504"

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	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	3,267.64	0	3,609.31	0	3,946.39	0	4,261.51	0	4,552.62	0	4,820.37	0	5,075.00	0	5,317.19	0	5,547.44	0	5,756.36
1/4	3,274.76	1/4	3,616.43	1/4	3,953.18	1/4	4,267.80	1/4	4,558.42	1/4	4,826.17	1/4	5,080.80	1/4	5,322.99	1/4	5,553.24	1/4	5,762.16
1/2	3,281.88	1/2	3,623.54	1/2	3,959.98	1/2	4,274.08	1/2	4,564.22	1/2	4,831.97	1/2	5,086.60	1/2	5,328.79	1/2	5,559.04	1/2	5,767.96
3/4	3,288.99	3/4	3,630.66	3/4	3,966.77	3/4	4,280.37	3/4	4,570.02	3/4	4,837.91	3/4	5,092.54	3/4	5,334.73	3/4	5,565.00	3/4	5,773.92
1	3,296.11	1	3,637.78	1	3,973.56	1	4,286.66	1	4,575.82	1	4,843.71	1	5,098.34	1	5,340.33	1	5,570.60	1	5,779.52
1/4	3,303.23	1/4	3,644.90	1/4	3,980.32	1/4	4,292.91	1/4	4,581.58	1/4	4,849.67	1/4	5,103.30	1/4	5,349.89	1/4	5,580.16	1/4	5,789.08
1/2	3,310.35	1/2	3,652.02	1/2	3,987.07	1/2	4,299.15	1/2	4,587.34	1/2	4,855.43	1/2	5,109.06	1/2	5,357.67	1/2	5,587.94	1/2	5,796.86
3/4	3,317.47	3/4	3,659.14	3/4	3,993.82	3/4	4,305.40	3/4	4,593.10	3/4	4,861.19	3/4	5,115.10	3/4	5,365.71	3/4	5,596.00	3/4	5,805.92
2	3,324.58	2	3,666.25	2	4,000.58	2	4,311.55	2	4,598.86	2	4,866.95	2	5,123.00	2	5,373.81	2	5,604.10	2	5,813.02
1/4	3,331.70	1/4	3,673.37	1/4	4,007.29	1/4	4,317.86	1/4	4,604.58	1/4	4,872.67	1/4	5,129.91	1/4	5,381.02	1/4	5,611.30	1/4	5,820.22
1/2	3,338.82	1/2	3,680.49	1/2	4,014.00	1/2	4,324.06	1/2	4,610.30	1/2	4,880.61	1/2	5,136.51	1/2	5,388.62	1/2	5,618.90	1/2	5,827.82
3/4	3,345.94	3/4	3,687.61	3/4	4,020.71	3/4	4,330.27	3/4	4,616.02	3/4	4,887.71	3/4	5,144.22	3/4	5,396.73	3/4	5,627.00	3/4	5,836.92
3	3,353.06	3	3,694.73	3	4,027.43	3	4,336.48	3	4,621.74	3	4,894.81	3	5,151.91	3	5,404.02	3	5,634.30	3	5,843.22
1/4	3,360.17	1/4	3,701.84	1/4	4,034.10	1/4	4,342.64	1/4	4,627.42	1/4	4,901.91	1/4	5,159.02	1/4	5,411.13	1/4	5,641.40	1/4	5,850.32
1/2	3,367.29	1/2	3,708.96	1/2	4,040.77	1/2	4,348.81	1/2	4,633.10	1/2	4,909.00	1/2	5,166.11	1/2	5,418.22	1/2	5,648.50	1/2	5,857.42
3/4	3,374.41	3/4	3,716.08	3/4	4,047.44	3/4	4,354.97	3/4	4,638.78	3/4	4,916.10	3/4	5,173.21	3/4	5,425.33	3/4	5,655.60	3/4	5,864.52
4	3,381.53	4	3,723.20	4	4,054.11	4	4,361.14	4	4,644.46	4	4,923.20	4	5,180.31	4	5,432.44	4	5,662.70	4	5,871.62
1/4	3,388.65	1/4	3,730.30	1/4	4,060.75	1/4	4,367.27	1/4	4,650.10	1/4	4,929.86	1/4	5,187.42	1/4	5,439.55	1/4	5,669.80	1/4	5,878.92
1/2	3,395.77	1/2	3,737.41	1/2	4,067.38	1/2	4,373.39	1/2	4,655.74	1/2	4,936.51	1/2	5,194.53	1/2	5,446.66	1/2	5,676.90	1/2	5,886.02
3/4	3,402.88	3/4	3,744.62	3/4	4,074.01	3/4	4,379.52	3/4	4,661.38	3/4	4,943.16	3/4	5,201.64	3/4	5,453.77	3/4	5,684.00	3/4	5,893.08
5	3,410.00	5	3,751.63	5	4,080.64	5	4,385.64	5	4,667.02	5	4,949.82	5	5,208.75	5	5,460.86	5	5,691.00	5	5,900.12
1/4	3,417.12	1/4	3,758.70	1/4	4,087.23	1/4	4,391.73	1/4	4,672.62	1/4	4,956.91	1/4	5,215.86	1/4	5,467.97	1/4	5,708.10	1/4	5,917.22
1/2	3,424.24	1/2	3,765.78	1/2	4,093.82	1/2	4,397.81	1/2	4,678.21	1/2	4,963.00	1/2	5,222.97	1/2	5,475.08	1/2	5,715.20	1/2	5,924.32
3/4	3,431.36	3/4	3,772.86	3/4	4,100.41	3/4	4,403.90	3/4	4,683.81	3/4	4,969.91	3/4	5,230.08	3/4	5,482.19	3/4	5,722.30	3/4	5,931.42
6	3,438.47	6	3,779.94	6	4,107.00	6	4,409.98	6	4,689.41	6	4,975.51	6	5,237.19	6	5,489.30	6	5,731.50	6	5,940.62
1/4	3,445.59	1/4	3,786.97	1/4	4,113.55	1/4	4,416.03	1/4	4,694.97	1/4	4,981.08	1/4	5,244.30	1/4	5,496.41	1/4	5,738.60	1/4	5,949.72
1/2	3,452.71	1/2	3,794.01	1/2	4,120.11	1/2	4,422.07	1/2	4,700.53	1/2	4,988.12	1/2	5,251.41	1/2	5,503.52	1/2	5,745.70	1/2	5,956.82
3/4	3,459.83	3/4	3,801.05	3/4	4,126.66	3/4	4,428.12	3/4	4,706.08	3/4	4,994.23	3/4	5,258.52	3/4	5,510.63	3/4	5,752.80	3/4	5,963.92
7	3,466.95	7	3,808.08	7	4,133.21	7	4,434.15	7	4,711.64	7	4,999.75	7	5,265.63	7	5,517.74	7	5,759.90	7	5,970.02
1/4	3,474.06	1/4	3,815.08	1/4	4,139.72	1/4	4,440.16	1/4	4,717.16	1/4	5,006.86	1/4	5,272.74	1/4	5,524.85	1/4	5,767.00	1/4	5,978.12
1/2	3,481.18	1/2	3,822.08	1/2	4,146.23	1/2	4,446.17	1/2	4,722.68	1/2	5,013.97	1/2	5,279.85	1/2	5,532.00	1/2	5,774.10	1/2	5,985.22
3/4	3,488.30	3/4	3,829.07	3/4	4,152.74	3/4	4,452.17	3/4	4,728.19	3/4	5,021.08	3/4	5,286.96	3/4	5,539.10	3/4	5,781.20	3/4	5,992.32
8	3,495.42	8	3,836.07	8	4,159.25	8	4,458.18	8	4,733.71	8	5,028.19	8	5,294.07	8	5,546.20	8	5,787.30	8	5,998.42
1/4	3,502.54	1/4	3,843.02	1/4	4,165.70	1/4	4,464.14	1/4	4,739.19	1/4	5,035.29	1/4	5,301.17	1/4	5,553.30	1/4	5,794.40	1/4	6,005.52
1/2	3,509.65	1/2	3,849.98	1/2	4,172.16	1/2	4,470.10	1/2	4,744.66	1/2	5,042.39	1/2	5,308.27	1/2	5,560.40	1/2	5,801.50	1/2	6,012.62
3/4	3,516.77	3/4	3,856.94	3/4	4,178.62	3/4	4,476.07	3/4	4,750.14	3/4	5,049.48	3/4	5,315.57	3/4	5,567.70	3/4	5,808.80	3/4	6,019.72
9	3,523.89	9	3,863.89	9	4,185.08	9	4,482.03	9	4,755.62	9	5,056.59	9	5,322.67	9	5,574.80	9	5,815.90	9	6,026.82
1/4	3,531.01	1/4	3,870.81	1/4	4,191.49	1/4	4,487.95	1/4	4,761.05	1/4	5,063.69	1/4	5,329.77	1/4	5,581.90	1/4	5,823.00	1/4	6,033.92
1/2	3,538.13	1/2	3,877.72	1/2	4,197.90	1/2	4,493.87	1/2	4,766.49	1/2	5,070.10	1/2	5,336.87	1/2	5,589.00	1/2	5,830.10	1/2	6,041.02
3/4	3,545.25	3/4	3,884.64	3/4	4,204.31	3/4	4,499.80	3/4	4,771.83	3/4	5,077.21	3/4	5,343.30	3/4	5,595.40	3/4	5,836.50	3/4	6,048.12
10	3,552.36	10	3,891.55	10	4,210.72	10	4,505.72	10	4,777.36	10	5,084.60	10	5,350.69	10	5,602.80	10	5,843.90	10	6,055.22
1/4	3,559.48	1/4	3,898.43	1/4	4,217.09	1/4	4,511.60	1/4	4,782.76	1/4	5,091.70	1/4	5,357.79	1/4	5,609.90	1/4	5,851.00	1/4	6,062.32
1/2	3,566.60	1/2	3,905.30	1/2	4,223.46	1/2	4,517.48	1/2	4,788.15	1/2	5,100.79	1/2	5,364.89	1/2	5,617.00	1/2	5,858.10	1/2	6,069.42
3/4	3,573.72	3/4	3,912.18	3/4	4,229.83	3/4	4,523.37	3/4	4,793.55	3/4	5,107.91	3/4	5,371.99	3/4	5,624.10	3/4	5,865.20	3/4	6,076.52
11	3,580.84	11	3,919.05	11	4,236.20	11	4,529.25	11	4,798.95	11	5,115.00	11	5,379.09	11	5,631.20	11	5,872.30	11	6,083.62
1/4	3,587.95	1/4	3,925.89	1/4	4,242.52	1/4	4,535.09	1/4	4,804.30	1/4	5,122.11	1/4	5,386.19	1/4	5,638.30	1/4	5,879.40	1/4	6,090.72
1/2	3,595.07	1/2	3,932.72	1/2	4,248.85	1/2	4,540.93	1/2	4,809.66	1/2	5,129.22	1/2	5,393.30	1/2	5,645.40	1/2	5,886.50	1/2	6,097.82
3/4	3,602.19	3/4	3,939.55	3/4	4,255.18	3/4	4,546.77	3/4	4,815.01	3/4	5,136.33	3/4	5,400.39	3/4	5,652.50	3/4	5,893.60	3/4	6,104.92

STRAPPED: 12/17/2018 SW
CALCULATED: 12/20/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/20/18

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2392
Pearland, Texas 77588
http://www.pmacorp.net

P. J. Mac



BARGE "EMS 504"

1 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 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	10.43	0	264.38	0	557.70	0	879.66	0	1,220.53	0	1,563.06	0	1,905.49	0	2,247.91	0	2,590.32	0	2,932.73
1/4	13.76	1/4	270.21	1/4	564.14	1/4	886.67	1/4	1,221.77	1/4	1,570.20	1/4	1,912.62	1/4	2,255.04	1/4	2,597.45	1/4	2,939.86
1/2	17.09	1/2	276.04	1/2	570.59	1/2	893.69	1/2	1,234.90	1/2	1,577.33	1/2	1,919.75	1/2	2,262.18	1/2	2,604.58	1/2	2,946.99
3/4	20.42	3/4	281.87	3/4	577.03	3/4	900.70	3/4	1,242.03	3/4	1,584.47	3/4	1,926.89	3/4	2,269.31	3/4	2,611.72	3/4	2,954.13
1	23.75	1	287.70	1	583.47	1	907.72	1	1,248.17	1	1,591.60	1	1,934.03	1	2,276.44	1	2,618.85	1	2,961.26
1/4	26.42	1/4	293.58	1/4	589.97	1/4	914.78	1/4	1,256.30	1/4	1,598.73	1/4	1,941.16	1/4	2,283.58	1/4	2,625.99	1/4	2,968.39
1/2	33.10	1/2	299.46	1/2	596.46	1/2	921.84	1/2	1,263.44	1/2	1,605.87	1/2	1,948.29	1/2	2,290.71	1/2	2,633.12	1/2	2,975.53
3/4	37.77	3/4	305.34	3/4	602.96	3/4	928.89	3/4	1,270.57	3/4	1,613.00	3/4	1,955.43	3/4	2,297.84	3/4	2,640.25	3/4	2,982.66
2	42.44	2	311.22	2	609.45	2	935.95	2	1,277.70	2	1,620.14	2	1,962.56	2	2,304.98	2	2,647.39	2	2,989.79
1/4	47.76	1/4	317.15	1/4	616.00	1/4	943.04	1/4	1,284.84	1/4	1,627.27	1/4	1,969.70	1/4	2,312.11	1/4	2,654.52	1/4	2,996.93
1/2	53.08	1/2	323.08	1/2	622.50	1/2	950.12	1/2	1,291.97	1/2	1,634.40	1/2	1,976.83	1/2	2,319.24	1/2	2,661.65	1/2	3,004.06
3/4	58.40	3/4	329.01	3/4	629.09	3/4	957.21	3/4	1,299.11	3/4	1,641.54	3/4	1,983.98	3/4	2,326.38	3/4	2,668.79	3/4	3,011.19
3	63.71	3	334.95	3	635.64	3	964.29	3	1,306.24	3	1,648.67	3	1,991.10	3	2,333.51	3	2,675.92	3	3,018.33
1/4	69.08	1/4	340.93	1/4	642.23	1/4	971.38	1/4	1,313.37	1/4	1,655.81	1/4	1,998.23	1/4	2,340.65	1/4	2,683.05	1/4	3,025.46
1/2	74.45	1/2	346.91	1/2	648.83	1/2	978.48	1/2	1,320.51	1/2	1,662.94	1/2	2,005.37	1/2	2,347.78	1/2	2,690.19	1/2	3,032.60
3/4	79.82	3/4	352.90	3/4	655.43	3/4	985.57	3/4	1,327.64	3/4	1,670.07	3/4	2,012.50	3/4	2,354.91	3/4	2,697.32	3/4	3,039.74
4	85.19	4	358.88	4	662.02	4	992.66	4	1,334.78	4	1,677.21	4	2,019.63	4	2,362.05	4	2,704.45	4	3,046.87
1/4	90.61	1/4	364.91	1/4	668.67	1/4	999.75	1/4	1,341.91	1/4	1,684.34	1/4	2,026.77	1/4	2,369.18	1/4	2,711.59	1/4	3,054.01
1/2	96.03	1/2	370.95	1/2	675.32	1/2	1,006.85	1/2	1,349.04	1/2	1,691.48	1/2	2,033.90	1/2	2,376.31	1/2	2,718.72	1/2	3,061.14
3/4	101.45	3/4	376.98	3/4	681.97	3/4	1,013.95	3/4	1,356.18	3/4	1,698.61	3/4	2,041.04	3/4	2,383.45	3/4	2,725.85	3/4	3,068.27
5	106.87	5	383.02	5	688.61	5	1,021.04	5	1,363.31	5	1,705.74	5	2,048.17	5	2,390.58	5	2,732.99	5	3,075.41
1/4	112.35	1/4	389.10	1/4	695.31	1/4	1,028.15	1/4	1,370.45	1/4	1,712.88	1/4	2,055.30	1/4	2,397.71	1/4	2,740.12	1/4	3,082.54
1/2	117.82	1/2	395.19	1/2	702.01	1/2	1,035.26	1/2	1,377.58	1/2	1,720.01	1/2	2,062.44	1/2	2,404.85	1/2	2,747.25	1/2	3,089.67
3/4	123.29	3/4	401.27	3/4	708.71	3/4	1,042.36	3/4	1,384.71	3/4	1,727.15	3/4	2,069.57	3/4	2,411.98	3/4	2,754.39	3/4	3,096.81
6	128.76	6	407.36	6	715.41	6	1,049.47	6	1,391.85	6	1,734.28	6	2,076.71	6	2,419.11	6	2,761.52	6	3,103.94
1/4	134.28	1/4	413.49	1/4	722.14	1/4	1,056.59	1/4	1,398.98	1/4	1,741.41	1/4	2,083.84	1/4	2,426.25	1/4	2,768.66	1/4	3,111.08
1/2	139.81	1/2	419.63	1/2	728.88	1/2	1,063.71	1/2	1,406.12	1/2	1,748.55	1/2	2,090.97	1/2	2,433.38	1/2	2,775.79	1/2	3,118.21
3/4	145.33	3/4	425.77	3/4	735.61	3/4	1,070.83	3/4	1,413.25	3/4	1,755.68	3/4	2,098.11	3/4	2,440.51	3/4	2,782.92	3/4	3,125.34
7	150.85	7	431.90	7	742.35	7	1,077.95	7	1,420.38	7	1,762.82	7	2,105.24	7	2,447.65	7	2,790.06	7	3,132.48
1/4	156.43	1/4	438.09	1/4	749.12	1/4	1,085.09	1/4	1,427.52	1/4	1,769.95	1/4	2,112.37	1/4	2,454.78	1/4	2,797.19	1/4	3,139.61
1/2	162.00	1/2	444.28	1/2	755.89	1/2	1,092.22	1/2	1,434.65	1/2	1,777.08	1/2	2,119.51	1/2	2,461.91	1/2	2,804.32	1/2	3,146.74
3/4	167.57	3/4	450.47	3/4	762.66	3/4	1,099.35	3/4	1,441.79	3/4	1,784.22	3/4	2,126.64	3/4	2,469.05	3/4	2,811.46	3/4	3,153.88
8	173.15	8	456.65	8	769.43	8	1,106.49	8	1,448.92	8	1,791.35	8	2,133.77	8	2,476.18	8	2,818.59	8	3,161.01
1/4	178.77	1/4	462.89	1/4	776.25	1/4	1,113.62	1/4	1,456.05	1/4	1,798.49	1/4	2,140.91	1/4	2,483.32	1/4	2,825.72	1/4	3,168.15
1/2	184.40	1/2	469.13	1/2	783.07	1/2	1,120.76	1/2	1,463.19	1/2	1,805.62	1/2	2,148.04	1/2	2,490.45	1/2	2,832.86	1/2	3,175.28
3/4	190.02	3/4	475.37	3/4	789.88	3/4	1,127.89	3/4	1,470.32	3/4	1,812.75	3/4	2,155.17	3/4	2,497.58	3/4	2,839.99	3/4	3,182.41
9	195.65	9	481.61	9	796.70	9	1,135.02	9	1,477.46	9	1,819.89	9	2,162.31	9	2,504.72	9	2,847.12	9	3,189.55
1/4	201.33	1/4	487.90	1/4	803.67	1/4	1,142.16	1/4	1,484.59	1/4	1,827.02	1/4	2,169.44	1/4	2,511.85	1/4	2,854.26	1/4	3,196.68
1/2	207.00	1/2	494.19	1/2	810.43	1/2	1,149.29	1/2	1,491.72	1/2	1,834.16	1/2	2,176.57	1/2	2,518.98	1/2	2,861.39	1/2	3,203.82
3/4	212.68	3/4	500.48	3/4	817.29	3/4	1,156.43	3/4	1,498.86	3/4	1,841.29	3/4	2,183.71	3/4	2,526.12	3/4	2,868.52	3/4	3,210.95
10	218.35	10	506.77	10	824.16	10	1,163.56	10	1,506.99	10	1,848.42	10	2,190.84	10	2,533.25	10	2,875.66	10	3,218.08
1/4	224.08	1/4	513.11	1/4	831.07	1/4	1,170.69	1/4	1,513.13	1/4	1,855.56	1/4	2,197.98	1/4	2,540.38	1/4	2,882.79	1/4	3,225.22
1/2	229.81	1/2	519.45	1/2	837.98	1/2	1,177.83	1/2	1,520.26	1/2	1,862.69	1/2	2,205.11	1/2	2,547.52	1/2	2,889.92	1/2	3,232.35
3/4	235.54	3/4	525.79	3/4	844.89	3/4	1,184.96	3/4	1,527.39	3/4	1,869.82	3/4	2,212.24	3/4	2,554.65	3/4	2,897.06	3/4	3,239.48
11	241.26	11	532.13	11	851.81	11	1,192.10	11	1,534.53	11	1,876.95	11	2,219.38	11	2,561.78	11	2,904.19	11	3,246.62
1/4	247.04	1/4	538.52	1/4	858.77	1/4	1,199.23	1/4	1,541.66	1/4	1,884.09	1/4	2,226.51	1/4	2,568.92	1/4	2,911.33	1/4	3,253.75
1/2	252.82	1/2	544.92	1/2	865.73	1/2	1,206.36	1/2	1,548.80	1/2	1,891.22	1/2	2,233.64	1/2	2,576.05	1/2	2,918.46	1/2	3,260.89
3/4	258.60	3/4	551.31	3/4	872.70	3/4	1,213.50	3/4	1,555.93	3/4	1,898.36	3/4	2,240.78	3/4	2,583.18	3/4	2,925.59	3/4	3,268.02

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 ONLY APPLIES TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.

GAUGE POINT: (HERMETIC) LOCATED 12-06" OFF CENTERLINE AND 37'-03" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77584
http://www.pmscorp.net



BARGE "EMS 504"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

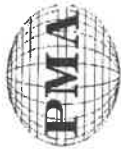
10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	3,275.15	0	3,617.58	0	3,955.43	0	4,271.29	0	4,563.11	0	4,831.57	0		0		0		0	
1/4	3,282.29	1/4	3,624.71	1/4	3,962.23	1/4	4,277.59	1/4	4,568.93	1/4	4,836.90	1/4		1/4		1/4		1/4	
1/2	3,289.42	1/2	3,631.84	1/2	3,969.04	1/2	4,283.89	1/2	4,574.75	1/2	4,842.23	1/2		1/2		1/2		1/2	
3/4	3,296.55	3/4	3,638.98	3/4	3,975.85	3/4	4,290.20	3/4	4,580.56	3/4	4,847.56	3/4		3/4		3/4		3/4	
1	3,303.69	1	3,646.11	1	3,982.66	1	4,296.76	1	4,586.38	1	4,852.89	1		1		1		1	
1/4	3,310.82	1/4	3,653.24	1/4	3,989.43	1/4	4,302.76	1/4	4,592.15	1/4	4,859.10	1/4		1/4		1/4		1/4	
1/2	3,317.95	1/2	3,660.38	1/2	3,996.20	1/2	4,309.02	1/2	4,597.83	1/2	4,865.31	1/2		1/2		1/2		1/2	
3/4	3,325.09	3/4	3,667.51	3/4	4,002.97	3/4	4,315.29	3/4	4,603.71	3/4	4,871.52	3/4		3/4		3/4		3/4	
2	3,332.22	2	3,674.65	2	4,009.74	2	4,321.55	2	4,609.48	2	4,877.73	2		2		2		2	
1/4	3,339.36	1/4	3,681.78	1/4	4,016.46	1/4	4,327.77	1/4	4,615.22	1/4	4,884.85	1/4		1/4		1/4		1/4	
1/2	3,346.49	1/2	3,688.91	1/2	4,023.19	1/2	4,333.99	1/2	4,620.95	1/2	4,891.96	1/2		1/2		1/2		1/2	
3/4	3,353.62	3/4	3,696.05	3/4	4,029.92	3/4	4,340.21	3/4	4,626.68	3/4	4,899.08	3/4		3/4		3/4		3/4	
3	3,360.76	3	3,703.18	3	4,036.65	3	4,346.43	3	4,632.42	3	4,906.19	3		3		3		3	
1/4	3,367.89	1/4	3,710.32	1/4	4,043.34	1/4	4,352.62	1/4	4,638.11	1/4	4,913.31	1/4		1/4		1/4		1/4	
1/2	3,375.03	1/2	3,717.45	1/2	4,050.02	1/2	4,358.80	1/2	4,643.81	1/2	4,920.42	1/2		1/2		1/2		1/2	
3/4	3,382.16	3/4	3,724.58	3/4	4,056.71	3/4	4,364.98	3/4	4,649.50	3/4	4,927.54	3/4		3/4		3/4		3/4	
4	3,389.29	4	3,731.72	4	4,063.40	4	4,371.16	4	4,655.20	4	4,934.66	4		4		4		4	
1/4	3,396.43	1/4	3,738.84	1/4	4,070.05	1/4	4,377.30	1/4	4,660.85	1/4	4,941.32	1/4		1/4		1/4		1/4	
1/2	3,403.56	1/2	3,745.97	1/2	4,076.69	1/2	4,383.44	1/2	4,666.50	1/2	4,947.99	1/2		1/2		1/2		1/2	
3/4	3,410.70	3/4	3,753.09	3/4	4,083.34	3/4	4,389.58	3/4	4,672.16	3/4	4,954.66	3/4		3/4		3/4		3/4	
5	3,417.83	5	3,760.22	5	4,089.99	5	4,395.72	5	4,677.81	5	4,961.32	5		5		5		5	
1/4	3,424.96	1/4	3,767.31	1/4	4,096.59	1/4	4,401.82	1/4	4,683.42	1/4				1/4		1/4		1/4	
1/2	3,432.10	1/2	3,774.41	1/2	4,103.20	1/2	4,407.92	1/2	4,689.04	1/2				1/2		1/2		1/2	
3/4	3,439.23	3/4	3,781.50	3/4	4,109.81	3/4	4,414.02	3/4	4,694.65	3/4				3/4		3/4		3/4	
6	3,446.36	6	3,788.59	6	4,116.41	6	4,420.12	6	4,700.26	6				6		6		6	
1/4	3,453.50	1/4	3,795.65	1/4	4,122.98	1/4	4,426.18	1/4	4,705.84	1/4				1/4		1/4		1/4	
1/2	3,460.63	1/2	3,802.70	1/2	4,129.54	1/2	4,432.24	1/2	4,711.41	1/2				1/2		1/2		1/2	
3/4	3,467.77	3/4	3,809.75	3/4	4,136.11	3/4	4,438.30	3/4	4,716.98	3/4				3/4		3/4		3/4	
7	3,474.90	7	3,816.81	7	4,142.68	7	4,444.36	7	4,722.55	7				7		7		7	
1/4	3,482.03	1/4	3,823.82	1/4	4,149.20	1/4	4,450.38	1/4	4,728.09	1/4				1/4		1/4		1/4	
1/2	3,489.17	1/2	3,830.83	1/2	4,155.73	1/2	4,456.40	1/2	4,733.62	1/2				1/2		1/2		1/2	
3/4	3,496.30	3/4	3,837.84	3/4	4,162.25	3/4	4,462.42	3/4	4,739.15	3/4				3/4		3/4		3/4	
8	3,503.43	8	3,844.85	8	4,168.78	8	4,468.44	8	4,744.68	8				8		8		8	
1/4	3,510.57	1/4	3,851.83	1/4	4,175.25	1/4	4,474.41	1/4	4,750.17	1/4				1/4		1/4		1/4	
1/2	3,517.70	1/2	3,858.80	1/2	4,181.73	1/2	4,480.39	1/2	4,755.66	1/2				1/2		1/2		1/2	
3/4	3,524.84	3/4	3,865.77	3/4	4,188.20	3/4	4,486.37	3/4	4,761.16	3/4				3/4		3/4		3/4	
9	3,531.97	9	3,872.74	9	4,194.68	9	4,492.35	9	4,766.65	9				9		9		9	
1/4	3,539.10	1/4	3,879.67	1/4	4,201.10	1/4	4,498.29	1/4	4,772.10	1/4				1/4		1/4		1/4	
1/2	3,546.24	1/2	3,886.60	1/2	4,207.53	1/2	4,504.22	1/2	4,777.55	1/2				1/2		1/2		1/2	
3/4	3,553.37	3/4	3,893.53	3/4	4,213.95	3/4	4,510.16	3/4	4,783.00	3/4				3/4		3/4		3/4	
10	3,560.51	10	3,900.46	10	4,220.38	10	4,516.10	10	4,788.45	10				10		10		10	
1/4	3,567.64	1/4	3,907.35	1/4	4,226.76	1/4	4,522.00	1/4	4,793.86	1/4				1/4		1/4		1/4	
1/2	3,574.77	1/2	3,914.25	1/2	4,233.14	1/2	4,527.89	1/2	4,799.27	1/2				1/2		1/2		1/2	
3/4	3,581.91	3/4	3,921.14	3/4	4,239.53	3/4	4,533.79	3/4	4,804.68	3/4				3/4		3/4		3/4	
11	3,589.04	11	3,928.03	11	4,245.91	11	4,539.69	11	4,810.09	11				11		11		11	
1/4	3,596.17	1/4	3,934.88	1/4	4,252.26	1/4	4,545.55	1/4	4,815.46	1/4				1/4		1/4		1/4	
1/2	3,603.31	1/2	3,941.73	1/2	4,258.60	1/2	4,551.40	1/2	4,820.83	1/2				1/2		1/2		1/2	
3/4	3,610.44	3/4	3,948.58	3/4	4,264.94	3/4	4,557.26	3/4	4,826.20	3/4				3/4		3/4		3/4	

STRAPPED: 12/17/2018 SW
CALCULATED: 12/20/2018 CL

PRECISION MEASUREMENT
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CANCELS AND SUPERCEDES
ALL PRIOR TO 12/20/18

R. J. Jones



BARGE "EMS 504"

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 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	13.94	0	388.67	0	776.77	0	1,164.76	0	1,552.97	0	1,941.19	0	2,329.40	0	2,717.62	0	3,105.82	0	3,494.02
1/4	19.33	1/4	396.75	1/4	784.85	1/4	1,172.85	1/4	1,561.06	1/4	1,949.27	1/4	2,337.49	1/4	2,725.71	1/4	3,113.91	1/4	3,502.11
1/2	24.72	1/2	404.84	1/2	792.93	1/2	1,180.93	1/2	1,569.15	1/2	1,957.36	1/2	2,345.58	1/2	2,733.80	1/2	3,122.00	1/2	3,510.20
3/4	30.11	3/4	412.93	3/4	801.00	3/4	1,189.02	3/4	1,577.24	3/4	1,965.45	3/4	2,353.66	3/4	2,741.89	3/4	3,130.09	3/4	3,518.29
1	35.50	1	421.02	1	809.08	1	1,197.11	1	1,585.32	1	1,973.54	1	2,361.75	1	2,749.97	1	3,138.17	1	3,526.37
1/4	42.92	1/4	429.11	1/4	817.16	1/4	1,205.20	1/4	1,593.41	1/4	1,981.63	1/4	2,369.84	1/4	2,758.06	1/4	3,146.26	1/4	3,534.46
1/2	50.33	1/2	437.19	1/2	825.24	1/2	1,213.28	1/2	1,601.50	1/2	1,989.71	1/2	2,377.93	1/2	2,766.15	1/2	3,154.35	1/2	3,542.55
3/4	57.75	3/4	445.28	3/4	833.31	3/4	1,221.37	3/4	1,609.59	3/4	1,997.80	3/4	2,386.01	3/4	2,774.24	3/4	3,162.44	3/4	3,550.64
2	65.16	2	453.37	2	841.39	2	1,229.46	2	1,617.57	2	2,005.89	2	2,394.10	2	2,782.32	2	3,170.52	2	3,558.72
1/4	73.25	1/4	461.46	1/4	849.47	1/4	1,237.55	1/4	1,625.76	1/4	2,013.98	1/4	2,402.19	1/4	2,790.41	1/4	3,178.61	1/4	3,566.81
1/2	81.33	1/2	469.54	1/2	857.55	1/2	1,245.64	1/2	1,633.85	1/2	2,022.06	1/2	2,410.28	1/2	2,798.50	1/2	3,186.70	1/2	3,574.90
3/4	89.42	3/4	477.63	3/4	865.62	3/4	1,253.72	3/4	1,641.94	3/4	2,030.15	3/4	2,418.37	3/4	2,806.59	3/4	3,194.79	3/4	3,582.99
3	97.51	3	485.72	3	873.70	3	1,261.81	3	1,650.03	3	2,038.24	3	2,426.45	3	2,814.67	3	3,202.87	3	3,591.07
1/4	105.60	1/4	493.81	1/4	881.78	1/4	1,269.90	1/4	1,658.11	1/4	2,046.33	1/4	2,434.54	1/4	2,822.76	1/4	3,210.96	1/4	3,599.16
1/2	113.69	1/2	501.89	1/2	889.86	1/2	1,277.99	1/2	1,666.20	1/2	2,054.42	1/2	2,442.63	1/2	2,830.85	1/2	3,219.05	1/2	3,607.25
3/4	121.77	3/4	509.98	3/4	897.93	3/4	1,286.07	3/4	1,674.29	3/4	2,062.50	3/4	2,450.72	3/4	2,838.94	3/4	3,227.14	3/4	3,615.33
4	129.86	4	518.07	4	906.01	4	1,294.16	4	1,682.38	4	2,070.59	4	2,458.81	4	2,847.02	4	3,235.22	4	3,623.42
1/4	137.95	1/4	526.16	1/4	914.09	1/4	1,302.25	1/4	1,690.46	1/4	2,078.68	1/4	2,466.89	1/4	2,855.11	1/4	3,243.31	1/4	3,631.51
1/2	146.04	1/2	534.25	1/2	922.17	1/2	1,310.34	1/2	1,698.55	1/2	2,086.77	1/2	2,474.98	1/2	2,863.20	1/2	3,251.40	1/2	3,639.59
3/4	154.12	3/4	542.33	3/4	930.24	3/4	1,318.43	3/4	1,706.64	3/4	2,094.85	3/4	2,483.07	3/4	2,871.29	3/4	3,259.49	3/4	3,647.68
5	162.21	5	550.42	5	938.32	5	1,326.51	5	1,714.73	5	2,102.94	5	2,491.16	5	2,879.37	5	3,267.57	5	3,655.77
1/4	170.30	1/4	558.51	1/4	946.40	1/4	1,334.60	1/4	1,722.82	1/4	2,111.03	1/4	2,499.24	1/4	2,887.46	1/4	3,275.66	1/4	3,663.86
1/2	178.39	1/2	566.60	1/2	954.49	1/2	1,342.69	1/2	1,730.90	1/2	2,119.12	1/2	2,507.33	1/2	2,895.55	1/2	3,283.75	1/2	3,671.95
3/4	186.47	3/4	574.68	3/4	962.57	3/4	1,350.78	3/4	1,738.99	3/4	2,127.21	3/4	2,515.42	3/4	2,903.64	3/4	3,291.84	3/4	3,680.03
6	194.56	6	582.77	6	970.65	6	1,358.86	6	1,747.08	6	2,135.29	6	2,523.51	6	2,911.72	6	3,299.92	6	3,688.12
1/4	202.65	1/4	590.86	1/4	978.74	1/4	1,366.95	1/4	1,755.17	1/4	2,143.38	1/4	2,531.60	1/4	2,918.81	1/4	3,308.01	1/4	3,696.21
1/2	210.74	1/2	598.95	1/2	986.83	1/2	1,375.04	1/2	1,763.25	1/2	2,151.47	1/2	2,539.68	1/2	2,927.90	1/2	3,316.10	1/2	3,704.30
3/4	218.83	3/4	607.03	3/4	994.91	3/4	1,383.13	3/4	1,771.34	3/4	2,159.56	3/4	2,547.77	3/4	2,935.99	3/4	3,324.19	3/4	3,712.38
7	226.91	7	615.12	7	1,003.00	7	1,391.22	7	1,779.43	7	2,167.64	7	2,555.86	7	2,944.07	7	3,332.27	7	3,720.47
1/4	235.00	1/4	623.21	1/4	1,011.09	1/4	1,399.30	1/4	1,787.52	1/4	2,175.73	1/4	2,563.95	1/4	2,952.16	1/4	3,340.36	1/4	3,728.56
1/2	243.09	1/2	631.30	1/2	1,019.18	1/2	1,407.39	1/2	1,795.61	1/2	2,183.82	1/2	2,572.04	1/2	2,960.25	1/2	3,348.45	1/2	3,736.65
3/4	251.18	3/4	639.39	3/4	1,027.28	3/4	1,415.48	3/4	1,803.69	3/4	2,191.91	3/4	2,580.13	3/4	2,968.34	3/4	3,356.54	3/4	3,744.74
8	259.26	8	647.47	8	1,035.35	8	1,423.57	8	1,811.78	8	2,200.00	8	2,588.22	8	2,976.42	8	3,364.62	8	3,752.82
1/4	267.35	1/4	655.56	1/4	1,043.44	1/4	1,431.66	1/4	1,819.87	1/4	2,208.08	1/4	2,596.31	1/4	2,984.51	1/4	3,372.71	1/4	3,760.91
1/2	275.44	1/2	663.65	1/2	1,051.53	1/2	1,439.74	1/2	1,827.96	1/2	2,216.17	1/2	2,604.40	1/2	2,992.60	1/2	3,380.80	1/2	3,769.00
3/4	283.53	3/4	671.74	3/4	1,059.62	3/4	1,447.83	3/4	1,836.04	3/4	2,224.26	3/4	2,612.49	3/4	3,000.69	3/4	3,388.89	3/4	3,777.09
9	291.61	9	679.82	9	1,067.70	9	1,455.92	9	1,844.13	9	2,232.35	9	2,620.57	9	3,008.77	9	3,396.97	9	3,785.18
1/4	299.70	1/4	687.91	1/4	1,075.79	1/4	1,464.01	1/4	1,852.22	1/4	2,240.43	1/4	2,628.66	1/4	3,016.86	1/4	3,405.06	1/4	3,793.26
1/2	307.79	1/2	695.99	1/2	1,083.88	1/2	1,472.09	1/2	1,860.31	1/2	2,248.52	1/2	2,636.75	1/2	3,024.95	1/2	3,413.15	1/2	3,801.35
3/4	315.88	3/4	704.07	3/4	1,091.97	3/4	1,480.18	3/4	1,868.40	3/4	2,256.61	3/4	2,644.84	3/4	3,033.04	3/4	3,421.24	3/4	3,809.44
10	323.97	10	712.15	10	1,100.05	10	1,488.27	10	1,876.48	10	2,264.70	10	2,652.92	10	3,041.12	10	3,429.32	10	3,817.53
1/4	332.05	1/4	720.23	1/4	1,108.14	1/4	1,496.36	1/4	1,884.57	1/4	2,272.79	1/4	2,661.01	1/4	3,049.21	1/4	3,437.41	1/4	3,825.62
1/2	340.14	1/2	728.31	1/2	1,116.23	1/2	1,504.44	1/2	1,892.66	1/2	2,280.87	1/2	2,669.10	1/2	3,057.30	1/2	3,445.50	1/2	3,833.70
3/4	348.23	3/4	736.38	3/4	1,124.32	3/4	1,512.53	3/4	1,900.75	3/4	2,288.96	3/4	2,677.19	3/4	3,065.39	3/4	3,453.59	3/4	3,841.79
11	356.32	11	744.46	11	1,132.41	11	1,520.62	11	1,908.83	11	2,297.05	11	2,685.27	11	3,073.47	11	3,461.67	11	3,849.88
1/4	364.40	1/4	752.54	1/4	1,140.49	1/4	1,528.71	1/4	1,916.92	1/4	2,305.14	1/4	2,693.36	1/4	3,081.56	1/4	3,469.76	1/4	3,857.97
1/2	372.49	1/2	760.62	1/2	1,148.58	1/2	1,536.80	1/2	1,925.01	1/2	2,313.22	1/2	2,701.45	1/2	3,089.65	1/2	3,477.85	1/2	3,866.06
3/4	380.58	3/4	768.69	3/4	1,156.67	3/4	1,544.88	3/4	1,933.10	3/4	2,321.31	3/4	2,709.54	3/4	3,097.74	3/4	3,485.94	3/4	3,874.14

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 ONLY APPLIES TO EXTERIOR HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.

GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 44'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

http://www.pmacorp.net



BARGE "EMS 504"

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	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	3,882.23	0	4,270.45	0	4,653.46	0	5,011.51	0	5,342.31	0	5,645.87	0	5,911.51	0	6,145.87	0	6,342.31	0	6,501.51
1/4	3,890.32	1/4	4,278.54	1/4	4,661.18	1/4	5,018.66	1/4	5,348.90	1/4	5,651.80	1/4	5,917.80	1/4	6,151.80	1/4	6,348.90	1/4	6,507.80
1/2	3,898.41	1/2	4,286.63	1/2	4,669.27	1/2	5,026.30	1/2	5,356.99	1/2	5,659.89	1/2	5,925.89	1/2	6,160.89	1/2	6,357.99	1/2	6,516.89
3/4	3,906.49	3/4	4,294.71	3/4	4,676.81	3/4	5,034.38	3/4	5,365.08	3/4	5,667.98	3/4	5,934.98	3/4	6,168.98	3/4	6,366.08	3/4	6,525.98
1	3,914.58	1	4,302.80	1	4,684.33	1	5,042.09	1	5,373.68	1	5,675.57	1	5,946.57	1	6,180.57	1	6,377.68	1	6,536.57
1/4	3,922.67	1/4	4,310.89	1/4	4,692.01	1/4	5,049.19	1/4	5,380.77	1/4	5,682.66	1/4	5,955.66	1/4	6,190.66	1/4	6,387.77	1/4	6,546.66
1/2	3,930.76	1/2	4,318.98	1/2	4,699.68	1/2	5,056.28	1/2	5,387.86	1/2	5,689.75	1/2	5,964.75	1/2	6,201.75	1/2	6,397.86	1/2	6,554.75
3/4	3,938.85	3/4	4,327.07	3/4	4,707.35	3/4	5,063.39	3/4	5,394.95	3/4	5,696.84	3/4	5,971.84	3/4	6,209.84	3/4	6,404.95	3/4	6,562.84
2	3,946.93	2	4,335.15	2	4,715.03	2	5,069.49	2	5,402.06	2	5,704.91	2	5,980.81	2	6,217.91	2	6,413.06	2	6,570.91
1/4	3,955.02	1/4	4,343.24	1/4	4,722.65	1/4	5,075.54	1/4	5,409.16	1/4	5,714.02	1/4	5,989.92	1/4	6,225.92	1/4	6,421.16	1/4	6,579.02
1/2	3,963.11	1/2	4,351.33	1/2	4,730.28	1/2	5,082.60	1/2	5,416.31	1/2	5,721.17	1/2	5,997.07	1/2	6,233.07	1/2	6,429.31	1/2	6,587.17
3/4	3,971.20	3/4	4,359.42	3/4	4,737.91	3/4	5,089.65	3/4	5,423.46	3/4	5,728.30	3/4	6,003.20	3/4	6,241.30	3/4	6,437.42	3/4	6,595.30
3	3,979.29	3	4,367.50	3	4,745.53	3	5,096.70	3	5,430.55	3	5,735.45	3	6,010.35	3	6,249.45	3	6,445.55	3	6,603.45
1/4	3,987.37	1/4	4,375.59	1/4	4,753.12	1/4	5,103.71	1/4	5,437.64	1/4	5,742.54	1/4	6,018.44	1/4	6,257.54	1/4	6,453.64	1/4	6,611.54
1/2	3,995.46	1/2	4,383.68	1/2	4,760.70	1/2	5,110.72	1/2	5,444.72	1/2	5,749.62	1/2	6,025.52	1/2	6,265.62	1/2	6,461.72	1/2	6,619.62
3/4	4,003.55	3/4	4,391.77	3/4	4,768.28	3/4	5,117.72	3/4	5,451.80	3/4	5,756.70	3/4	6,032.60	3/4	6,273.70	3/4	6,469.80	3/4	6,627.70
4	4,011.64	4	4,399.86	4	4,775.86	4	5,124.73	4	5,458.89	4	5,763.79	4	6,039.79	4	6,281.89	4	6,477.89	4	6,635.89
1/4	4,019.73	1/4	4,407.93	1/4	4,783.39	1/4	5,131.69	1/4	5,465.97	1/4	5,770.87	1/4	6,046.87	1/4	6,289.87	1/4	6,485.97	1/4	6,643.87
1/2	4,027.81	1/2	4,416.01	1/2	4,790.93	1/2	5,138.65	1/2	5,473.05	1/2	5,777.95	1/2	6,053.95	1/2	6,297.95	1/2	6,493.95	1/2	6,651.95
3/4	4,035.90	3/4	4,424.08	3/4	4,798.46	3/4	5,145.61	3/4	5,480.12	3/4	5,785.02	3/4	6,060.02	3/4	6,305.02	3/4	6,501.02	3/4	6,659.02
5	4,043.99	5	4,432.16	5	4,806.00	5	5,152.57	5	5,487.19	5	5,792.09	5	6,072.09	5	6,312.09	5	6,508.09	5	6,666.09
1/4	4,052.08	1/4	4,440.24	1/4	4,813.49	1/4	5,159.49	1/4	5,494.26	1/4	5,799.16	1/4	6,082.16	1/4	6,322.16	1/4	6,518.16	1/4	6,676.16
1/2	4,060.16	1/2	4,448.32	1/2	4,820.87	1/2	5,166.40	1/2	5,501.24	1/2	5,806.12	1/2	6,090.12	1/2	6,330.12	1/2	6,526.12	1/2	6,684.12
3/4	4,068.25	3/4	4,456.39	3/4	4,828.46	3/4	5,173.32	3/4	5,508.16	3/4	5,813.08	3/4	6,102.08	3/4	6,342.08	3/4	6,538.08	3/4	6,692.08
6	4,076.34	6	4,464.43	6	4,835.95	6	5,180.23	6	5,515.07	6	5,820.00	6	6,109.00	6	6,349.00	6	6,545.00	6	6,703.00
1/4	4,084.43	1/4	4,472.52	1/4	4,843.39	1/4	5,187.10	1/4	5,522.04	1/4	5,827.00	1/4	6,116.00	1/4	6,356.00	1/4	6,552.00	1/4	6,710.00
1/2	4,092.52	1/2	4,480.60	1/2	4,850.84	1/2	5,193.97	1/2	5,529.91	1/2	5,834.88	1/2	6,124.88	1/2	6,364.88	1/2	6,560.88	1/2	6,714.88
3/4	4,100.60	3/4	4,488.68	3/4	4,858.28	3/4	5,200.84	3/4	5,536.78	3/4	5,841.75	3/4	6,131.75	3/4	6,371.75	3/4	6,567.75	3/4	6,721.75
7	4,108.69	7	4,496.77	7	4,865.72	7	5,207.70	7	5,542.64	7	5,847.61	7	6,137.61	7	6,377.61	7	6,573.61	7	6,727.61
1/4	4,116.78	1/4	4,504.86	1/4	4,873.12	1/4	5,214.63	1/4	5,549.57	1/4	5,854.54	1/4	6,144.54	1/4	6,384.54	1/4	6,580.54	1/4	6,734.54
1/2	4,124.87	1/2	4,512.91	1/2	4,881.51	1/2	5,221.35	1/2	5,556.29	1/2	5,861.26	1/2	6,151.26	1/2	6,391.26	1/2	6,587.26	1/2	6,741.26
3/4	4,132.96	3/4	4,520.99	3/4	4,889.51	3/4	5,228.17	3/4	5,563.11	3/4	5,868.08	3/4	6,158.08	3/4	6,398.08	3/4	6,594.08	3/4	6,748.08
8	4,141.04	8	4,529.07	8	4,897.61	8	5,234.99	8	5,568.93	8	5,873.90	8	6,163.90	8	6,403.90	8	6,600.90	8	6,754.90
1/4	4,149.13	1/4	4,537.16	1/4	4,905.65	1/4	5,241.77	1/4	5,576.71	1/4	5,881.68	1/4	6,171.68	1/4	6,411.68	1/4	6,608.68	1/4	6,762.68
1/2	4,157.22	1/2	4,545.24	1/2	4,913.74	1/2	5,248.55	1/2	5,583.49	1/2	5,888.46	1/2	6,178.46	1/2	6,418.46	1/2	6,615.46	1/2	6,769.46
3/4	4,165.31	3/4	4,553.32	3/4	4,921.83	3/4	5,255.32	3/4	5,590.26	3/4	5,895.23	3/4	6,185.23	3/4	6,425.23	3/4	6,622.23	3/4	6,776.23
9	4,173.40	9	4,561.41	9	4,929.87	9	5,262.10	9	5,597.04	9	5,902.01	9	6,197.01	9	6,437.01	9	6,634.01	9	6,788.01
1/4	4,181.48	1/4	4,569.49	1/4	4,937.95	1/4	5,268.83	1/4	5,604.77	1/4	5,909.74	1/4	6,204.74	1/4	6,444.74	1/4	6,641.74	1/4	6,795.74
1/2	4,189.57	1/2	4,577.58	1/2	4,946.04	1/2	5,275.56	1/2	5,612.50	1/2	5,917.47	1/2	6,212.47	1/2	6,452.47	1/2	6,649.47	1/2	6,804.47
3/4	4,197.66	3/4	4,585.67	3/4	4,954.12	3/4	5,282.29	3/4	5,619.23	3/4	5,924.20	3/4	6,219.20	3/4	6,459.20	3/4	6,656.20	3/4	6,811.20
10	4,205.75	10	4,593.76	10	4,962.21	10	5,289.02	10	5,626.96	10	5,931.93	10	6,226.93	10	6,466.93	10	6,663.93	10	6,819.93
1/4	4,213.83	1/4	4,601.85	1/4	4,970.28	1/4	5,295.70	1/4	5,632.64	1/4	5,937.61	1/4	6,232.61	1/4	6,472.61	1/4	6,669.61	1/4	6,825.61
1/2	4,221.92	1/2	4,609.94	1/2	4,978.37	1/2	5,302.39	1/2	5,639.33	1/2	5,944.30	1/2	6,239.30	1/2	6,479.30	1/2	6,676.30	1/2	6,832.30
3/4	4,230.01	3/4	4,617.99	3/4	4,986.46	3/4	5,309.07	3/4	5,646.01	3/4	5,951.98	3/4	6,246.98	3/4	6,486.98	3/4	6,683.98	3/4	6,839.98
11	4,238.10	11	4,626.08	11	4,994.55	11	5,316.76	11	5,653.70	11	5,959.67	11	6,254.67	11	6,494.67	11	6,691.67	11	6,847.67
1/4	4,246.19	1/4	4,634.16	1/4	4,999.94	1/4	5,323.93	1/4	5,661.87	1/4	5,967.84	1/4	6,262.84	1/4	6,502.84	1/4	6,699.84	1/4	6,855.84
1/2	4,254.27	1/2	4,642.25	1/2	5,004.32	1/2	5,331.02	1/2	5,669.96	1/2	5,975.93	1/2	6,270.93	1/2	6,510.93	1/2	6,707.93	1/2	6,863.93
3/4	4,262.36	3/4	4,650.34	3/4	5,012.41	3/4	5,339.11	3/4	5,678.05	3/4	5,984.02	3/4	6,279.02	3/4	6,519.02	3/4	6,716.02	3/4	6,872.02

STRAPPED: 12/17/2018 SW
CALCULATED: 12/20/2018 CL

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Paul J. Jones



BARGE "EMS 504"

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 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	13.94	0	388.79	0	777.05	0	1,154.81	0	1,535.91	0	1,925.25	0	2,313.59	0	2,701.93	0	3,090.25	0	3,478.57
1/4	19.33	1/4	396.88	1/4	793.13	1/4	1,162.55	1/4	1,545.00	1/4	1,933.34	1/4	2,321.69	1/4	2,710.02	1/4	3,098.34	1/4	3,486.66
1/2	24.73	1/2	404.97	1/2	799.22	1/2	1,170.30	1/2	1,553.09	1/2	1,941.43	1/2	2,329.78	1/2	2,718.11	1/2	3,106.43	1/2	3,494.75
3/4	30.12	3/4	413.06	3/4	801.30	3/4	1,176.04	3/4	1,561.18	3/4	1,949.52	3/4	2,337.87	3/4	2,726.20	3/4	3,114.52	3/4	3,502.84
1	35.52	1	421.15	1	809.38	1	1,185.78	1	1,568.27	1	1,957.61	1	2,345.96	1	2,734.29	1	3,122.61	1	3,510.93
1/4	42.93	1/4	429.24	1/4	817.46	1/4	1,193.53	1/4	1,577.36	1/4	1,965.70	1/4	2,354.05	1/4	2,742.38	1/4	3,130.70	1/4	3,519.02
1/2	50.35	1/2	437.33	1/2	825.56	1/2	1,201.27	1/2	1,585.45	1/2	1,973.79	1/2	2,362.14	1/2	2,750.47	1/2	3,138.79	1/2	3,527.11
3/4	57.76	3/4	445.42	3/4	833.63	3/4	1,209.01	3/4	1,593.54	3/4	1,981.88	3/4	2,370.23	3/4	2,758.56	3/4	3,146.88	3/4	3,535.20
1	65.18	1	453.51	1	841.71	1	1,216.76	1	1,601.63	1	1,989.97	1	2,378.32	1	2,766.65	1	3,154.97	1	3,543.29
1/4	73.27	1/4	461.60	1/4	849.80	1/4	1,224.50	1/4	1,609.72	1/4	1,998.07	1/4	2,386.41	1/4	2,774.74	1/4	3,163.06	1/4	3,551.38
1/2	81.36	1/2	469.69	1/2	857.88	1/2	1,232.24	1/2	1,617.81	1/2	2,006.16	1/2	2,394.50	1/2	2,782.83	1/2	3,171.15	1/2	3,559.47
3/4	89.45	3/4	477.78	3/4	865.96	3/4	1,239.99	3/4	1,625.90	3/4	2,014.25	3/4	2,402.59	3/4	2,790.92	3/4	3,179.24	3/4	3,567.56
1	97.54	1	485.87	1	874.04	1	1,247.73	1	1,633.99	1	2,022.34	1	2,410.68	1	2,799.01	1	3,187.33	1	3,575.65
1/4	105.63	1/4	493.96	1/4	882.13	1/4	1,255.47	1/4	1,642.08	1/4	2,030.43	1/4	2,418.77	1/4	2,807.10	1/4	3,195.42	1/4	3,583.75
1/2	113.72	1/2	502.05	1/2	890.21	1/2	1,263.22	1/2	1,650.17	1/2	2,038.52	1/2	2,426.86	1/2	2,815.19	1/2	3,203.51	1/2	3,591.84
3/4	121.81	3/4	510.14	3/4	898.29	3/4	1,270.96	3/4	1,658.26	3/4	2,046.61	3/4	2,434.95	3/4	2,823.28	3/4	3,211.60	3/4	3,599.93
1	129.90	1	518.23	1	906.38	1	1,278.70	1	1,666.35	1	2,054.70	1	2,443.04	1	2,831.37	1	3,219.69	1	3,608.03
1/4	137.99	1/4	526.32	1/4	914.29	1/4	1,286.62	1/4	1,674.45	1/4	2,062.79	1/4	2,451.13	1/4	2,839.46	1/4	3,227.78	1/4	3,616.12
1/2	146.08	1/2	534.41	1/2	922.19	1/2	1,294.54	1/2	1,682.54	1/2	2,070.88	1/2	2,459.22	1/2	2,847.55	1/2	3,235.87	1/2	3,624.21
3/4	154.17	3/4	542.50	3/4	930.10	3/4	1,302.46	3/4	1,690.63	3/4	2,078.97	3/4	2,467.31	3/4	2,855.64	3/4	3,243.96	3/4	3,632.30
1	162.26	1	550.59	1	938.01	1	1,310.37	1	1,698.72	1	2,087.06	1	2,475.40	1	2,863.73	1	3,252.05	1	3,640.39
1/4	170.35	1/4	558.68	1/4	945.75	1/4	1,318.46	1/4	1,706.81	1/4	2,095.15	1/4	2,483.50	1/4	2,871.82	1/4	3,260.14	1/4	3,648.48
1/2	178.44	1/2	566.77	1/2	953.49	1/2	1,326.55	1/2	1,714.90	1/2	2,103.24	1/2	2,491.59	1/2	2,879.91	1/2	3,268.23	1/2	3,656.57
3/4	186.53	3/4	574.86	3/4	961.23	3/4	1,334.64	3/4	1,722.99	3/4	2,111.33	3/4	2,499.68	3/4	2,888.00	3/4	3,276.32	3/4	3,664.66
1	194.62	1	582.95	1	968.97	1	1,342.73	1	1,731.08	1	2,119.42	1	2,507.77	1	2,896.09	1	3,284.41	1	3,672.75
1/4	202.71	1/4	591.04	1/4	976.72	1/4	1,350.83	1/4	1,739.17	1/4	2,127.51	1/4	2,515.86	1/4	2,904.18	1/4	3,292.50	1/4	3,680.84
1/2	210.80	1/2	599.13	1/2	984.46	1/2	1,358.92	1/2	1,747.26	1/2	2,135.60	1/2	2,523.95	1/2	2,912.27	1/2	3,300.59	1/2	3,688.93
3/4	218.89	3/4	607.22	3/4	992.20	3/4	1,367.01	3/4	1,755.35	3/4	2,143.69	3/4	2,532.04	3/4	2,920.36	3/4	3,308.68	3/4	3,697.02
1	226.98	1	615.31	1	999.95	1	1,375.10	1	1,763.44	1	2,151.78	1	2,540.13	1	2,928.45	1	3,316.77	1	3,705.11
1/4	235.07	1/4	623.40	1/4	1,007.69	1/4	1,383.19	1/4	1,771.53	1/4	2,159.88	1/4	2,548.22	1/4	2,936.54	1/4	3,324.86	1/4	3,713.20
1/2	243.16	1/2	631.49	1/2	1,015.43	1/2	1,391.28	1/2	1,779.62	1/2	2,167.97	1/2	2,556.31	1/2	2,944.63	1/2	3,332.95	1/2	3,721.29
3/4	251.25	3/4	639.58	3/4	1,023.18	3/4	1,399.37	3/4	1,787.71	3/4	2,176.06	3/4	2,564.40	3/4	2,952.72	3/4	3,341.04	3/4	3,729.38
1	259.34	1	647.67	1	1,030.92	1	1,407.46	1	1,795.80	1	2,184.15	1	2,572.49	1	2,960.81	1	3,349.13	1	3,737.46
1/4	267.43	1/4	655.76	1/4	1,038.66	1/4	1,415.56	1/4	1,803.89	1/4	2,192.24	1/4	2,580.58	1/4	2,968.90	1/4	3,357.22	1/4	3,745.57
1/2	275.52	1/2	663.85	1/2	1,046.41	1/2	1,423.64	1/2	1,811.98	1/2	2,200.33	1/2	2,588.67	1/2	2,976.99	1/2	3,365.31	1/2	3,753.66
3/4	283.61	3/4	671.94	3/4	1,054.15	3/4	1,431.73	3/4	1,820.07	3/4	2,208.42	3/4	2,596.76	3/4	2,985.08	3/4	3,373.40	3/4	3,761.75
1	291.71	1	680.03	1	1,061.89	1	1,439.82	1	1,828.16	1	2,216.51	1	2,604.85	1	2,993.17	1	3,381.49	1	3,769.84
1/4	299.80	1/4	688.12	1/4	1,069.64	1/4	1,447.91	1/4	1,836.26	1/4	2,224.60	1/4	2,612.94	1/4	3,001.26	1/4	3,389.58	1/4	3,777.93
1/2	307.89	1/2	696.21	1/2	1,077.38	1/2	1,456.00	1/2	1,844.35	1/2	2,232.69	1/2	2,621.03	1/2	3,009.35	1/2	3,397.67	1/2	3,786.02
3/4	315.98	3/4	704.30	3/4	1,085.12	3/4	1,464.08	3/4	1,852.44	3/4	2,240.78	3/4	2,629.12	3/4	3,017.44	3/4	3,405.76	3/4	3,794.11
1	324.07	1	712.39	1	1,092.87	1	1,472.18	1	1,860.53	1	2,248.87	1	2,637.21	1	3,025.53	1	3,413.85	1	3,802.20
1/4	332.16	1/4	720.47	1/4	1,100.61	1/4	1,480.27	1/4	1,868.62	1/4	2,256.96	1/4	2,645.30	1/4	3,033.62	1/4	3,421.94	1/4	3,810.29
1/2	340.25	1/2	728.55	1/2	1,108.35	1/2	1,488.36	1/2	1,876.71	1/2	2,265.05	1/2	2,653.39	1/2	3,041.71	1/2	3,430.03	1/2	3,818.38
3/4	348.34	3/4	736.64	3/4	1,116.09	3/4	1,496.45	3/4	1,884.80	3/4	2,273.14	3/4	2,661.48	3/4	3,049.80	3/4	3,438.12	3/4	3,826.47
1	356.43	1	744.72	1	1,123.84	1	1,504.54	1	1,892.89	1	2,281.23	1	2,669.57	1	3,057.89	1	3,446.21	1	3,834.56
1/4	364.52	1/4	752.80	1/4	1,131.58	1/4	1,512.64	1/4	1,900.98	1/4	2,289.32	1/4	2,677.66	1/4	3,065.98	1/4	3,454.30	1/4	3,842.65
1/2	372.61	1/2	760.88	1/2	1,139.32	1/2	1,520.73	1/2	1,909.07	1/2	2,297.41	1/2	2,685.75	1/2	3,074.07	1/2	3,462.39	1/2	3,850.74
3/4	380.70	3/4	768.97	3/4	1,147.07	3/4	1,528.82	3/4	1,917.16	3/4	2,305.50	3/4	2,693.84	3/4	3,082.16	3/4	3,470.48	3/4	3,858.83

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.

GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 44'-00" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pasadena, Texas 77588

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BARGE "EMS 504"

2 STBD 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	3,866.92	0	4,255.27	0	4,638.41	0	4,996.64	0	5,327.64	0	5,631.46	0	5,907.39	0	6,156.84	0	6,381.46	0	6,582.84
1/4	3,876.01	1/4	4,263.36	1/4	4,646.14	1/4	5,003.79	1/4	5,334.24	1/4	5,637.39	1/4	5,912.84	1/4	6,157.39	1/4	6,381.46	1/4	6,582.84
1/2	3,883.10	1/2	4,271.45	1/2	4,653.86	1/2	5,010.94	1/2	5,341.39	1/2	5,644.54	1/2	5,919.99	1/2	6,164.54	1/2	6,385.54	1/2	6,585.94
3/4	3,891.19	3/4	4,279.54	3/4	4,661.95	3/4	5,018.08	3/4	5,349.44	3/4	5,652.59	3/4	5,927.04	3/4	6,171.59	3/4	6,389.04	3/4	6,590.44
1	3,899.29	1	4,287.63	1	4,669.30	1	5,025.24	1	5,357.53	1	5,660.68	1	5,938.13	1	6,179.68	1	6,392.14	1	6,592.54
1/4	3,907.38	1/4	4,295.72	1/4	4,676.98	1/4	5,032.34	1/4	5,365.62	1/4	5,669.77	1/4	5,945.22	1/4	6,187.77	1/4	6,395.24	1/4	6,595.64
1/2	3,915.47	1/2	4,303.81	1/2	4,684.66	1/2	5,039.44	1/2	5,373.71	1/2	5,677.86	1/2	5,952.31	1/2	6,195.86	1/2	6,398.34	1/2	6,598.74
3/4	3,923.56	3/4	4,311.90	3/4	4,692.33	3/4	5,046.55	3/4	5,381.80	3/4	5,686.91	3/4	5,960.46	3/4	6,203.91	3/4	6,401.44	3/4	6,600.84
1	3,931.66	1	4,319.99	1	4,700.01	1	5,053.65	1	5,390.90	1	5,695.06	1	5,968.61	1	6,211.01	1	6,404.54	1	6,603.94
1/4	3,939.74	1/4	4,328.08	1/4	4,707.64	1/4	5,060.71	1/4	5,398.04	1/4	5,702.16	1/4	5,976.71	1/4	6,218.11	1/4	6,407.64	1/4	6,607.04
1/2	3,947.83	1/2	4,336.17	1/2	4,715.27	1/2	5,067.86	1/2	5,406.19	1/2	5,710.31	1/2	5,984.86	1/2	6,225.21	1/2	6,410.74	1/2	6,610.14
3/4	3,955.92	3/4	4,344.26	3/4	4,722.90	3/4	5,074.91	3/4	5,414.28	3/4	5,718.36	3/4	5,992.96	3/4	6,232.31	3/4	6,413.84	3/4	6,613.24
1	3,964.01	1	4,352.35	1	4,730.53	1	5,082.06	1	5,422.37	1	5,726.41	1	6,001.06	1	6,239.41	1	6,416.94	1	6,616.34
1/4	3,972.10	1/4	4,360.44	1/4	4,738.11	1/4	5,089.16	1/4	5,430.46	1/4	5,734.51	1/4	6,009.16	1/4	6,246.51	1/4	6,420.04	1/4	6,619.44
1/2	3,980.19	1/2	4,368.53	1/2	4,745.70	1/2	5,096.26	1/2	5,438.56	1/2	5,742.61	1/2	6,017.26	1/2	6,253.61	1/2	6,423.14	1/2	6,622.54
3/4	3,988.28	3/4	4,376.62	3/4	4,753.28	3/4	5,103.36	3/4	5,446.66	3/4	5,750.71	3/4	6,025.36	3/4	6,260.71	3/4	6,426.24	3/4	6,625.64
1	3,996.37	1	4,384.72	1	4,760.87	1	5,110.46	1	5,454.76	1	5,758.81	1	6,033.46	1	6,267.81	1	6,429.34	1	6,628.74
1/4	4,004.46	1/4	4,392.79	1/4	4,768.40	1/4	5,117.56	1/4	5,462.86	1/4	5,766.91	1/4	6,041.56	1/4	6,274.91	1/4	6,432.44	1/4	6,631.84
1/2	4,012.55	1/2	4,400.87	1/2	4,775.94	1/2	5,124.66	1/2	5,470.96	1/2	5,775.01	1/2	6,049.66	1/2	6,282.01	1/2	6,435.54	1/2	6,634.94
3/4	4,020.64	3/4	4,408.95	3/4	4,783.48	3/4	5,131.76	3/4	5,479.06	3/4	5,783.11	3/4	6,057.76	3/4	6,289.11	3/4	6,438.64	3/4	6,638.04
1	4,028.73	1	4,417.03	1	4,791.02	1	5,138.86	1	5,487.16	1	5,791.21	1	6,065.86	1	6,296.21	1	6,441.74	1	6,641.14
1/4	4,036.82	1/4	4,425.08	1/4	4,798.51	1/4	5,145.96	1/4	5,495.26	1/4	5,800.31	1/4	6,073.96	1/4	6,303.31	1/4	6,444.84	1/4	6,644.24
1/2	4,044.91	1/2	4,433.12	1/2	4,806.00	1/2	5,153.06	1/2	5,503.36	1/2	5,808.41	1/2	6,082.06	1/2	6,310.41	1/2	6,447.94	1/2	6,647.34
3/4	4,053.00	3/4	4,441.17	3/4	4,813.50	3/4	5,160.16	3/4	5,511.46	3/4	5,816.51	3/4	6,090.16	3/4	6,317.51	3/4	6,451.04	3/4	6,650.44
1	4,061.10	1	4,449.21	1	4,820.99	1	5,167.26	1	5,519.56	1	5,824.61	1	6,098.26	1	6,324.61	1	6,454.14	1	6,653.54
1/4	4,069.19	1/4	4,457.21	1/4	4,828.43	1/4	5,174.36	1/4	5,527.66	1/4	5,832.71	1/4	6,106.36	1/4	6,331.71	1/4	6,457.24	1/4	6,656.64
1/2	4,077.28	1/2	4,465.21	1/2	4,835.88	1/2	5,181.46	1/2	5,535.76	1/2	5,840.81	1/2	6,114.46	1/2	6,338.81	1/2	6,460.34	1/2	6,659.74
3/4	4,085.37	3/4	4,473.21	3/4	4,843.33	3/4	5,188.56	3/4	5,543.86	3/4	5,848.91	3/4	6,122.56	3/4	6,345.91	3/4	6,463.44	3/4	6,662.84
1	4,093.46	1	4,481.21	1	4,850.77	1	5,195.66	1	5,551.96	1	5,857.01	1	6,130.66	1	6,353.01	1	6,466.54	1	6,665.94
1/4	4,101.55	1/4	4,489.16	1/4	4,858.17	1/4	5,202.76	1/4	5,559.06	1/4	5,864.11	1/4	6,138.76	1/4	6,360.11	1/4	6,469.64	1/4	6,669.04
1/2	4,109.64	1/2	4,497.11	1/2	4,865.57	1/2	5,209.86	1/2	5,567.16	1/2	5,871.21	1/2	6,146.86	1/2	6,367.21	1/2	6,472.74	1/2	6,672.14
3/4	4,117.73	3/4	4,505.06	3/4	4,872.97	3/4	5,216.96	3/4	5,575.26	3/4	5,878.31	3/4	6,154.96	3/4	6,374.31	3/4	6,475.84	3/4	6,675.24
1	4,125.82	1	4,513.02	1	4,880.37	1	5,224.06	1	5,583.36	1	5,885.41	1	6,163.06	1	6,381.41	1	6,478.94	1	6,678.34
1/4	4,133.91	1/4	4,520.92	1/4	4,887.72	1/4	5,231.16	1/4	5,591.46	1/4	5,892.51	1/4	6,171.16	1/4	6,388.51	1/4	6,482.04	1/4	6,681.44
1/2	4,142.00	1/2	4,528.83	1/2	4,895.06	1/2	5,238.26	1/2	5,600.56	1/2	5,901.61	1/2	6,179.26	1/2	6,395.61	1/2	6,485.14	1/2	6,684.54
3/4	4,150.09	3/4	4,536.73	3/4	4,902.40	3/4	5,245.36	3/4	5,607.66	3/4	5,908.71	3/4	6,187.36	3/4	6,402.71	3/4	6,488.24	3/4	6,687.64
1	4,158.18	1	4,544.64	1	4,909.75	1	5,252.46	1	5,615.76	1	5,916.81	1	6,195.46	1	6,409.81	1	6,491.34	1	6,690.74
1/4	4,166.27	1/4	4,552.50	1/4	4,917.03	1/4	5,259.56	1/4	5,623.86	1/4	5,923.91	1/4	6,203.56	1/4	6,416.91	1/4	6,494.44	1/4	6,693.84
1/2	4,174.36	1/2	4,560.36	1/2	4,924.32	1/2	5,266.66	1/2	5,631.96	1/2	5,931.01	1/2	6,211.66	1/2	6,424.01	1/2	6,497.54	1/2	6,696.94
3/4	4,182.45	3/4	4,568.22	3/4	4,931.61	3/4	5,273.76	3/4	5,639.06	3/4	5,938.11	3/4	6,219.76	3/4	6,431.11	3/4	6,500.64	3/4	6,699.04
1	4,190.54	1	4,576.08	1	4,938.90	1	5,280.86	1	5,647.21	1	5,946.21	1	6,227.86	1	6,438.21	1	6,503.74	1	6,702.14
1/4	4,198.63	1/4	4,583.90	1/4	4,946.14	1/4	5,287.96	1/4	5,655.31	1/4	5,954.31	1/4	6,235.96	1/4	6,445.31	1/4	6,506.84	1/4	6,705.24
1/2	4,206.72	1/2	4,591.71	1/2	4,953.38	1/2	5,295.06	1/2	5,663.41	1/2	5,962.41	1/2	6,243.06	1/2	6,452.41	1/2	6,509.94	1/2	6,708.34
3/4	4,214.81	3/4	4,599.53	3/4	4,960.82	3/4	5,302.16	3/4	5,671.56	3/4	5,970.56	3/4	6,250.16	3/4	6,459.56	3/4	6,513.04	3/4	6,711.44
1	4,222.91	1	4,607.34	1	4,967.66	1	5,309.31	1	5,679.71	1	5,979.71	1	6,257.31	1	6,466.71	1	6,516.14	1	6,714.54
1/4	4,231.00	1/4	4,615.11	1/4	4,975.06	1/4	5,316.46	1/4	5,687.86	1/4	5,987.86	1/4	6,264.46	1/4	6,473.86	1/4	6,519.24	1/4	6,717.64
1/2	4,239.09	1/2	4,622.88	1/2	4,982.25	1/2	5,323.61	1/2	5,695.01	1/2	5,995.01	1/2	6,271.61	1/2	6,481.01	1/2	6,522.34	1/2	6,720.74
3/4	4,247.18	3/4	4,630.65	3/4	4,989.45	3/4	5,330.76	3/4	5,702.16	3/4	6,002.16	3/4	6,278.76	3/4	6,488.16	3/4	6,525.44	3/4	6,723.84

STRAPPED: 12/17/2018, SW
CALCULATED: 12/20/2018 CL

CANCEL S AND SUPERCEDES
ALL PRIOR TO 12/2018

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
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P.O. Box 2092
Pearland, Texas 77588
http://www.pmaacorp.net

P. J. Adams



BARGE "EMS 504"

3 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	1/2	3/4	IN	1/2	3/4	IN	1/2	3/4	IN	1/2	3/4	IN	1/2	3/4	IN	1/2	3/4	IN	1/2	3/4	IN	1/2	3/4	IN	1/2	3/4			
0	13.02	0	362.36	0	724.05	0	1,085.49	0	1,447.41	0	1,809.32	0	2,171.24	0	2,533.10	0	2,894.82	0	3,256.54	0	3,618.26	0	3,979.98	0	4,341.70	0	4,703.42		
1/4	18.06	1/4	369.90	1/4	731.57	1/4	1,093.03	1/4	1,454.95	1/4	1,816.86	1/4	2,178.78	1/4	2,540.69	1/4	2,902.61	1/4	3,264.53	1/4	3,626.44	1/4	3,988.36	1/4	4,350.28	1/4	4,712.19		
1/2	23.08	1/2	377.44	1/2	739.09	1/2	1,100.57	1/2	1,462.49	1/2	1,824.40	1/2	2,186.32	1/2	2,548.23	1/2	2,910.15	1/2	3,272.07	1/2	3,633.99	1/2	3,995.91	1/2	4,357.83	1/2	4,719.75		
3/4	28.10	3/4	384.98	3/4	746.60	3/4	1,108.11	3/4	1,470.03	3/4	1,831.94	3/4	2,193.86	3/4	2,555.77	3/4	2,917.69	3/4	3,279.61	3/4	3,641.53	3/4	3,999.45	3/4	4,361.37	3/4	4,723.29		
1	33.13	1	392.52	1	754.12	1	1,115.65	1	1,477.57	1	1,839.48	1	2,201.40	1	2,563.31	1	2,925.23	1	3,287.15	1	3,649.07	1	3,999.99	1	4,361.91	1	4,723.83		
1/4	40.04	1/4	400.06	1/4	761.64	1/4	1,123.19	1/4	1,485.11	1/4	1,847.02	1/4	2,208.94	1/4	2,570.86	1/4	2,932.78	1/4	3,294.70	1/4	3,656.62	1/4	3,999.54	1/4	4,361.46	1/4	4,723.38		
1/2	45.95	1/2	407.60	1/2	769.16	1/2	1,130.73	1/2	1,492.65	1/2	1,854.56	1/2	2,216.48	1/2	2,578.40	1/2	2,940.32	1/2	3,302.24	1/2	3,664.16	1/2	3,999.48	1/2	4,361.42	1/2	4,723.34		
3/4	51.86	3/4	415.14	3/4	776.68	3/4	1,138.27	3/4	1,500.19	3/4	1,862.10	3/4	2,228.02	3/4	2,589.94	3/4	2,951.86	3/4	3,313.78	3/4	3,675.70	3/4	3,999.56	3/4	4,361.48	3/4	4,723.36		
1	57.77	1	422.68	1	784.20	1	1,145.81	1	1,507.73	1	1,869.64	1	2,231.56	1	2,593.48	1	2,955.40	1	3,317.32	1	3,679.24	1	3,999.60	1	4,361.52	1	4,723.38		
1/4	63.68	1/4	430.22	1/4	791.72	1/4	1,153.35	1/4	1,515.27	1/4	1,877.18	1/4	2,239.10	1/4	2,601.02	1/4	2,962.94	1/4	3,324.86	1/4	3,686.78	1/4	3,999.64	1/4	4,361.56	1/4	4,723.40		
1/2	69.59	1/2	437.76	1/2	799.23	1/2	1,160.89	1/2	1,522.81	1/2	1,884.72	1/2	2,246.64	1/2	2,608.56	1/2	2,970.48	1/2	3,331.40	1/2	3,693.32	1/2	3,999.68	1/2	4,361.60	1/2	4,723.42		
3/4	75.50	3/4	445.29	3/4	806.75	3/4	1,168.43	3/4	1,530.35	3/4	1,892.26	3/4	2,254.18	3/4	2,616.10	3/4	2,982.02	3/4	3,338.94	3/4	3,700.86	3/4	3,999.72	3/4	4,361.64	3/4	4,723.44		
1	81.41	1	452.83	1	814.27	1	1,175.97	1	1,537.89	1	1,899.80	1	2,261.72	1	2,623.64	1	2,985.56	1	3,343.48	1	3,705.40	1	3,999.76	1	4,361.68	1	4,723.46		
1/4	87.32	1/4	460.37	1/4	821.79	1/4	1,183.51	1/4	1,545.43	1/4	1,907.34	1/4	2,269.26	1/4	2,631.18	1/4	2,992.10	1/4	3,349.02	1/4	3,711.94	1/4	3,999.80	1/4	4,361.72	1/4	4,723.48		
1/2	93.23	1/2	467.91	1/2	829.31	1/2	1,191.05	1/2	1,552.97	1/2	1,914.88	1/2	2,276.80	1/2	2,638.72	1/2	2,999.64	1/2	3,354.56	1/2	3,716.48	1/2	3,999.84	1/2	4,361.76	1/2	4,723.50		
3/4	99.14	3/4	475.45	3/4	836.83	3/4	1,198.59	3/4	1,560.51	3/4	1,922.42	3/4	2,284.34	3/4	2,646.26	3/4	3,007.86	3/4	3,360.38	3/4	3,722.00	3/4	3,999.88	3/4	4,361.80	3/4	4,723.52		
1	105.05	1	482.99	1	844.35	1	1,206.13	1	1,568.05	1	1,929.96	1	2,291.88	1	2,653.80	1	3,015.38	1	3,369.90	1	3,727.52	1	3,999.92	1	4,361.84	1	4,723.54		
1/4	110.96	1/4	490.53	1/4	851.86	1/4	1,213.67	1/4	1,575.59	1/4	1,937.50	1/4	2,299.42	1/4	2,661.34	1/4	3,022.92	1/4	3,375.44	1/4	3,733.04	1/4	3,999.96	1/4	4,361.88	1/4	4,723.56		
1/2	116.87	1/2	498.07	1/2	859.38	1/2	1,221.21	1/2	1,583.13	1/2	1,945.04	1/2	2,306.96	1/2	2,668.75	1/2	3,030.47	1/2	3,381.96	1/2	3,738.56	1/2	3,999.98	1/2	4,361.92	1/2	4,723.58		
3/4	122.78	3/4	505.61	3/4	866.90	3/4	1,228.75	3/4	1,590.67	3/4	1,952.58	3/4	2,314.50	3/4	2,676.28	3/4	3,038.00	3/4	3,387.48	3/4	3,744.08	3/4	3,999.99	3/4	4,361.94	3/4	4,723.60		
1	128.69	1	513.15	1	874.42	1	1,236.29	1	1,598.21	1	1,960.12	1	2,322.04	1	2,683.92	1	3,045.54	1	3,393.00	1	3,750.60	1	3,999.99	1	4,361.96	1	4,723.62		
1/4	134.60	1/4	520.69	1/4	881.95	1/4	1,243.83	1/4	1,605.75	1/4	1,967.66	1/4	2,329.58	1/4	2,691.35	1/4	3,053.07	1/4	3,400.56	1/4	3,756.12	1/4	3,999.99	1/4	4,361.98	1/4	4,723.64		
1/2	140.51	1/2	528.23	1/2	889.48	1/2	1,251.37	1/2	1,613.29	1/2	1,975.20	1/2	2,337.12	1/2	2,703.12	1/2	3,060.61	1/2	3,407.56	1/2	3,761.60	1/2	3,999.99	1/2	4,362.00	1/2	4,723.66		
3/4	146.42	3/4	535.77	3/4	897.01	3/4	1,258.91	3/4	1,620.82	3/4	1,982.74	3/4	2,344.66	3/4	2,709.66	3/4	3,068.14	3/4	3,413.00	3/4	3,767.64	3/4	3,999.99	3/4	4,362.02	3/4	4,723.68		
1	152.33	1	543.31	1	904.53	1	1,266.45	1	1,628.36	1	1,990.28	1	2,352.20	1	2,715.36	1	3,075.68	1	3,418.00	1	3,772.68	1	3,999.99	1	4,362.04	1	4,723.70		
1/4	158.24	1/4	550.85	1/4	912.07	1/4	1,273.99	1/4	1,635.90	1/4	1,997.82	1/4	2,359.74	1/4	2,721.50	1/4	3,083.22	1/4	3,423.00	1/4	3,777.72	1/4	3,999.99	1/4	4,362.06	1/4	4,723.72		
1/2	164.15	1/2	558.39	1/2	919.61	1/2	1,281.53	1/2	1,643.44	1/2	2,005.36	1/2	2,367.28	1/2	2,728.03	1/2	3,090.75	1/2	3,428.00	1/2	3,782.76	1/2	3,999.99	1/2	4,362.08	1/2	4,723.74		
3/4	170.06	3/4	565.93	3/4	927.15	3/4	1,289.07	3/4	1,650.98	3/4	2,012.90	3/4	2,374.81	3/4	2,736.57	3/4	3,096.29	3/4	3,433.00	3/4	3,787.80	3/4	3,999.99	3/4	4,362.10	3/4	4,723.76		
1	175.97	1	573.47	1	934.69	1	1,296.61	1	1,658.52	1	2,020.44	1	2,382.35	1	2,744.11	1	3,103.82	1	3,438.00	1	3,792.84	1	3,999.99	1	4,362.12	1	4,723.78		
1/4	181.88	1/4	581.01	1/4	942.23	1/4	1,304.15	1/4	1,666.06	1/4	2,027.98	1/4	2,389.89	1/4	2,751.64	1/4	3,113.36	1/4	3,443.00	1/4	3,797.88	1/4	3,999.99	1/4	4,362.14	1/4	4,723.80		
1/2	187.79	1/2	588.55	1/2	949.77	1/2	1,311.69	1/2	1,673.60	1/2	2,035.52	1/2	2,397.42	1/2	2,758.18	1/2	3,123.90	1/2	3,448.00	1/2	3,802.92	1/2	3,999.99	1/2	4,362.16	1/2	4,723.82		
3/4	193.70	3/4	596.08	3/4	957.31	3/4	1,319.23	3/4	1,681.14	3/4	2,043.06	3/4	2,404.96	3/4	2,766.71	3/4	3,129.42	3/4	3,453.00	3/4	3,807.96	3/4	3,999.99	3/4	4,362.18	3/4	4,723.84		
1	199.61	1	603.63	1	964.85	1	1,326.77	1	1,688.68	1	2,050.60	1	2,412.48	1	2,774.25	1	3,135.97	1	3,458.00	1	3,812.92	1	3,999.99	1	4,362.20	1	4,723.86		
1/4	205.52	1/4	611.17	1/4	972.39	1/4	1,334.31	1/4	1,696.22	1/4	2,058.14	1/4	2,420.03	1/4	2,781.78	1/4	3,141.50	1/4	3,463.00	1/4	3,817.96	1/4	3,999.99	1/4	4,362.22	1/4	4,723.88		
1/2	211.43	1/2	618.71	1/2	979.93	1/2	1,341.85	1/2	1,703.76	1/2	2,065.68	1/2	2,427.57	1/2	2,789.32	1/2	3,147.04	1/2	3,468.00	1/2	3,822.92	1/2	3,999.99	1/2	4,362.24	1/2	4,723.90		
3/4	217.34	3/4	626.25	3/4	987.47	3/4	1,349.39	3/4	1,711.30	3/4	2,073.22	3/4	2,435.11	3/4	2,795.86	3/4	3,152.58	3/4	3,473.00	3/4	3,827.96	3/4	3,999.99	3/4	4,362.26	3/4	4,723.92		
1	223.25	1	633.78	1	995.01	1	1,356.93	1	1,718.84	1	2,080.76	1	2,442.65	1	2,804.39	1	3,158.11	1	3,478.00	1	3,832.92	1	3,999.99	1	4,362.28	1	4,723.94		
1/4	229.16	1/4	641.31	1/4	1,002.55	1/4	1,364.47	1/4	1,726.38	</																			



BARGE "EMS 504"

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.		GAUGE HEIGHT 16'-04 3/4"	
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
0	3,617.47	0	3,915.11	0	4,205.17	0	4,471.95	0	4,713.37	0	4,919.33	0	5,092.23	0	5,241.27	0	5,366.48	0	5,468.18
1/4	3,624.29	1/4	3,921.25	1/4	4,210.97	1/4	4,477.22	1/4	4,718.12	1/4	4,933.46	1/4	5,119.82	1/4	5,274.48	1/4	5,406.48	1/4	5,514.27
1/2	3,631.12	1/2	3,927.40	1/2	4,216.77	1/2	4,482.48	1/2	4,722.87	1/2	4,947.59	1/2	5,139.82	1/2	5,299.48	1/2	5,436.48	1/2	5,549.27
3/4	3,637.94	3/4	3,933.54	3/4	4,222.57	3/4	4,487.76	3/4	4,728.62	3/4	4,953.84	3/4	5,145.84	3/4	5,309.48	3/4	5,449.48	3/4	5,564.27
1	3,644.77	1	3,939.69	1	4,228.37	1	4,493.02	1	4,733.37	1	4,959.40	1	5,157.84	1	5,325.48	1	5,470.48	1	5,586.27
1 1/4	3,650.91	1 1/4	3,945.83	1 1/4	4,234.13	1 1/4	4,498.24	1 1/4	4,737.07	1 1/4	4,964.40	1 1/4	5,167.84	1 1/4	5,339.48	1 1/4	5,484.48	1 1/4	5,600.27
1 1/2	3,657.05	1 1/2	3,951.98	1 1/2	4,239.88	1 1/2	4,503.46	1 1/2	4,741.78	1 1/2	4,968.90	1 1/2	5,175.84	1 1/2	5,351.48	1 1/2	5,496.48	1 1/2	5,612.27
3/4	3,663.20	3/4	3,958.12	3/4	4,245.64	3/4	4,509.69	3/4	4,746.49	3/4	4,974.49	3/4	5,187.84	3/4	5,363.48	3/4	5,508.48	3/4	5,624.27
2	3,669.34	2	3,964.26	2	4,251.40	2	4,513.91	2	4,751.19	2	4,976.09	2	5,193.84	2	5,375.48	2	5,520.48	2	5,636.27
1 1/4	3,675.48	1 1/4	3,970.41	1 1/4	4,257.11	1 1/4	4,519.09	1 1/4	4,756.86	1 1/4	4,981.84	1 1/4	5,201.84	1 1/4	5,387.48	1 1/4	5,532.48	1 1/4	5,648.27
1 1/2	3,681.63	1 1/2	3,976.55	1 1/2	4,262.82	1 1/2	4,524.27	1 1/2	4,762.52	1 1/2	4,987.52	1 1/2	5,207.52	1 1/2	5,393.48	1 1/2	5,538.48	1 1/2	5,654.27
3/4	3,687.78	3/4	3,982.70	3/4	4,268.54	3/4	4,529.45	3/4	4,768.14	3/4	4,993.14	3/4	5,213.14	3/4	5,403.48	3/4	5,548.48	3/4	5,664.27
3	3,693.92	3	3,988.84	3	4,274.25	3	4,534.63	3	4,773.85	3	4,998.85	3	5,219.85	3	5,413.48	3	5,558.48	3	5,674.27
1 1/4	3,700.06	1 1/4	3,994.99	1 1/4	4,279.92	1 1/4	4,539.77	1 1/4	4,779.09	1 1/4	4,999.09	1 1/4	5,225.09	1 1/4	5,423.48	1 1/4	5,568.48	1 1/4	5,684.27
1 1/2	3,706.21	1 1/2	4,001.13	1 1/2	4,285.59	1 1/2	4,544.91	1 1/2	4,784.47	1 1/2	5,004.47	1 1/2	5,230.47	1 1/2	5,433.48	1 1/2	5,578.48	1 1/2	5,694.27
3/4	3,712.35	3/4	4,007.27	3/4	4,291.26	3/4	4,550.04	3/4	4,790.71	3/4	5,010.71	3/4	5,236.71	3/4	5,443.48	3/4	5,588.48	3/4	5,704.27
4	3,718.50	4	4,013.42	4	4,296.93	4	4,555.18	4	4,795.33	4	5,015.33	4	5,241.33	4	5,453.48	4	5,598.48	4	5,714.27
1 1/4	3,724.64	1 1/4	4,019.55	1 1/4	4,302.56	1 1/4	4,560.28	1 1/4	4,800.28	1 1/4	5,020.28	1 1/4	5,246.28	1 1/4	5,458.48	1 1/4	5,603.48	1 1/4	5,719.27
1 1/2	3,730.78	1 1/2	4,025.69	1 1/2	4,308.19	1 1/2	4,565.37	1 1/2	4,805.37	1 1/2	5,025.37	1 1/2	5,251.37	1 1/2	5,463.48	1 1/2	5,608.48	1 1/2	5,724.27
3/4	3,736.93	3/4	4,031.82	3/4	4,313.81	3/4	4,570.46	3/4	4,807.46	3/4	5,027.46	3/4	5,253.46	3/4	5,465.48	3/4	5,610.48	3/4	5,729.27
5	3,743.07	5	4,037.96	5	4,319.44	5	4,575.56	5	4,812.56	5	5,032.56	5	5,258.56	5	5,470.48	5	5,615.48	5	5,734.27
1 1/4	3,749.22	1 1/4	4,044.06	1 1/4	4,325.02	1 1/4	4,580.61	1 1/4	4,813.61	1 1/4	5,039.61	1 1/4	5,265.61	1 1/4	5,477.48	1 1/4	5,622.48	1 1/4	5,737.27
1 1/2	3,755.36	1 1/2	4,050.16	1 1/2	4,330.61	1 1/2	4,585.66	1 1/2	4,818.66	1 1/2	5,044.66	1 1/2	5,270.66	1 1/2	5,478.48	1 1/2	5,623.48	1 1/2	5,738.27
3/4	3,761.51	3/4	4,056.26	3/4	4,336.19	3/4	4,590.71	3/4	4,823.71	3/4	5,049.71	3/4	5,275.71	3/4	5,483.48	3/4	5,628.48	3/4	5,743.27
6	3,767.65	6	4,062.36	6	4,341.78	6	4,595.76	6	4,832.76	6	5,058.76	6	5,284.76	6	5,497.48	6	5,642.48	6	5,754.27
1 1/4	3,773.79	1 1/4	4,068.42	1 1/4	4,347.32	1 1/4	4,600.77	1 1/4	4,839.77	1 1/4	5,065.77	1 1/4	5,291.77	1 1/4	5,504.48	1 1/4	5,649.48	1 1/4	5,764.27
1 1/2	3,779.94	1 1/2	4,074.48	1 1/2	4,352.86	1 1/2	4,605.78	1 1/2	4,844.78	1 1/2	5,070.78	1 1/2	5,296.78	1 1/2	5,509.48	1 1/2	5,654.48	1 1/2	5,769.27
3/4	3,786.08	3/4	4,080.54	3/4	4,358.40	3/4	4,610.79	3/4	4,849.79	3/4	5,075.79	3/4	5,301.79	3/4	5,514.48	3/4	5,659.48	3/4	5,774.27
7	3,792.23	7	4,086.59	7	4,363.94	7	4,615.79	7	4,854.79	7	5,080.79	7	5,306.79	7	5,519.48	7	5,664.48	7	5,779.27
1 1/4	3,798.37	1 1/4	4,092.61	1 1/4	4,369.44	1 1/4	4,620.76	1 1/4	4,859.76	1 1/4	5,085.76	1 1/4	5,311.76	1 1/4	5,524.48	1 1/4	5,669.48	1 1/4	5,784.27
1 1/2	3,804.51	1 1/2	4,098.62	1 1/2	4,374.94	1 1/2	4,625.72	1 1/2	4,864.72	1 1/2	5,090.72	1 1/2	5,316.72	1 1/2	5,529.48	1 1/2	5,674.48	1 1/2	5,789.27
3/4	3,810.66	3/4	4,104.64	3/4	4,380.43	3/4	4,630.69	3/4	4,869.69	3/4	5,095.69	3/4	5,321.69	3/4	5,534.48	3/4	5,679.48	3/4	5,794.27
8	3,816.80	8	4,110.65	8	4,385.93	8	4,635.65	8	4,874.65	8	5,100.65	8	5,326.65	8	5,539.48	8	5,684.48	8	5,799.27
1 1/4	3,822.95	1 1/4	4,116.63	1 1/4	4,391.38	1 1/4	4,640.58	1 1/4	4,879.58	1 1/4	5,105.58	1 1/4	5,331.58	1 1/4	5,544.48	1 1/4	5,689.48	1 1/4	5,804.27
1 1/2	3,829.09	1 1/2	4,122.60	1 1/2	4,396.83	1 1/2	4,645.50	1 1/2	4,884.50	1 1/2	5,110.50	1 1/2	5,336.50	1 1/2	5,549.48	1 1/2	5,694.48	1 1/2	5,809.27
3/4	3,835.24	3/4	4,128.57	3/4	4,402.27	3/4	4,650.42	3/4	4,889.42	3/4	5,115.42	3/4	5,341.42	3/4	5,554.48	3/4	5,699.48	3/4	5,814.27
9	3,841.38	9	4,134.54	9	4,407.72	9	4,655.34	9	4,894.34	9	5,119.34	9	5,345.34	9	5,558.48	9	5,703.48	9	5,818.27
1 1/4	3,847.52	1 1/4	4,140.47	1 1/4	4,413.12	1 1/4	4,660.22	1 1/4	4,899.22	1 1/4	5,124.22	1 1/4	5,350.22	1 1/4	5,563.48	1 1/4	5,708.48	1 1/4	5,823.27
1 1/2	3,853.67	1 1/2	4,146.40	1 1/2	4,418.51	1 1/2	4,665.10	1 1/2	4,904.10	1 1/2	5,129.10	1 1/2	5,355.10	1 1/2	5,568.48	1 1/2	5,713.48	1 1/2	5,828.27
3/4	3,859.81	3/4	4,152.33	3/4	4,423.91	3/4	4,669.98	3/4	4,909.98	3/4	5,134.98	3/4	5,360.98	3/4	5,573.48	3/4	5,718.48	3/4	5,833.27
10	3,865.96	10	4,158.26	10	4,429.30	10	4,674.88	10	4,910.88	10	5,135.88	10	5,361.88	10	5,574.48	10	5,719.48	10	5,834.27
1 1/4	3,872.10	1 1/4	4,164.14	1 1/4	4,434.66	1 1/4	4,679.89	1 1/4	4,910.89	1 1/4	5,135.89	1 1/4	5,361.89	1 1/4	5,574.48	1 1/4	5,719.48	1 1/4	5,834.27
1 1/2	3,878.25	1 1/2	4,170.03	1 1/2	4,440.01	1 1/2	4,684.53	1 1/2	4,915.53	1 1/2	5,140.53	1 1/2	5,366.53	1 1/2	5,579.48	1 1/2	5,724.48	1 1/2	5,839.27
3/4	3,884.39	3/4	4,175.91	3/4	4,445.36	3/4	4,689.36	3/4	4,920.36	3/4	5,145.36	3/4	5,371.36	3/4	5,584.48	3/4	5,729.48	3/4	5,844.27
11	3,890.53	11	4,181.80	11	4,450.71	11	4,694.20	11	4,925.20	11	5,150.20	11	5,376.20	11	5,589.48	11	5,734.48	11	5,849.27
1 1/4	3,896.68	1 1/4	4,187.64	1 1/4	4,456.02	1 1/4	4,699.89	1 1/4	4,930.89	1 1/4	5,155.89	1 1/4	5,381.89	1 1/4	5,594.48	1 1/4	5,739.48	1 1/4	5,854.27
1 1/2	3,902.82	1 1/2	4,193.48	1 1/2	4,461.33	1 1/2	4,703.78	1 1/2	4,934.78	1 1/2	5,159.78	1 1/2	5,385.78	1 1/2	5,598.48	1 1/2	5,743.48	1 1/2	5,859.27
3/4	3,908.97	3/4	4,199.33	3/4	4,466.64	3/4	4,708.58	3/4	4,939.58	3/4	5,164.58	3/4	5,390.58	3/4	5,603.48	3/4	5,748.48	3/4	5,864.27

STRAPPED: 12/17/2018 SW
CALCULATED: 12/20/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/20/18

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77581
<http://www.pmacorp.net>

The Jones



BARGE "EMS 504"

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	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	13.02	0	362.04	0	723.20	0	1074.36	0	1429.85	0	1790.99	0	2149.42	0	2510.42	0	2871.23	0	3232.28
1/4	18.05	1/4	369.57	1/4	730.71	1/4	1081.56	1/4	1437.37	1/4	1798.49	1/4	2156.92	1/4	2517.93	1/4	2878.76	1/4	3239.80
1/2	23.08	1/2	377.10	1/2	738.22	1/2	1088.76	1/2	1444.90	1/2	1805.98	1/2	2164.41	1/2	2525.44	1/2	2886.28	1/2	3247.32
3/4	28.10	3/4	384.63	3/4	745.72	3/4	1095.97	3/4	1452.42	3/4	1813.48	3/4	2171.91	3/4	2532.95	3/4	2893.80	3/4	3254.84
1	33.13	1	392.16	1	753.23	1	1103.17	1	1459.94	1	1820.97	1	2179.41	1	2540.46	1	2901.32	1	3262.36
1 1/4	40.04	1 1/4	399.68	1 1/4	760.74	1 1/4	1110.38	1 1/4	1467.47	1 1/4	1828.93	1 1/4	2189.93	1 1/4	2550.93	1 1/4	2911.84	1 1/4	3273.38
1 1/2	46.95	1 1/2	407.21	1 1/2	768.25	1 1/2	1117.58	1 1/2	1474.99	1 1/2	1835.90	1 1/2	2196.90	1 1/2	2561.90	1 1/2	2922.81	1 1/2	3284.33
3/4	53.87	3/4	414.74	3/4	775.75	3/4	1124.78	3/4	1482.37	3/4	1843.37	3/4	2204.37	3/4	2572.37	3/4	2933.37	3/4	3295.33
2	60.78	2	422.27	2	783.26	2	1132.00	2	1490.04	2	1850.83	2	2210.83	2	2580.83	2	2940.83	2	3306.33
1 1/4	68.32	1 1/4	429.80	1 1/4	790.77	1 1/4	1139.21	1 1/4	1497.56	1 1/4	1858.29	1 1/4	2219.29	1 1/4	2590.29	1 1/4	2950.29	1 1/4	3316.33
1 1/2	75.86	1 1/2	437.33	1 1/2	798.28	1 1/2	1146.42	1 1/2	1505.09	1 1/2	1867.76	1 1/2	2229.76	1 1/2	2600.76	1 1/2	2960.76	1 1/2	3327.33
3/4	83.40	3/4	444.85	3/4	805.78	3/4	1153.64	3/4	1512.61	3/4	1878.85	3/4	2239.85	3/4	2610.85	3/4	2970.85	3/4	3338.33
3	90.94	3	452.38	3	813.29	3	1160.85	3	1520.13	3	1888.85	3	2249.85	3	2620.85	3	2980.85	3	3349.33
1 1/4	98.48	1 1/4	459.91	1 1/4	820.80	1 1/4	1168.06	1 1/4	1527.66	1 1/4	1896.85	1 1/4	2259.85	1 1/4	2630.85	1 1/4	2990.85	1 1/4	3360.33
1 1/2	106.02	1 1/2	467.44	1 1/2	828.31	1 1/2	1175.28	1 1/2	1535.18	1 1/2	1905.81	1 1/2	2269.81	1 1/2	2640.81	1 1/2	3000.81	1 1/2	3371.33
3/4	113.56	3/4	474.97	3/4	835.81	3/4	1182.49	3/4	1542.71	3/4	1915.05	3/4	2279.81	3/4	2650.81	3/4	3010.81	3/4	3382.33
4	121.10	4	482.50	4	843.32	4	1189.70	4	1550.23	4	1925.48	4	2289.81	4	2660.81	4	3020.81	4	3393.33
1 1/4	128.64	1 1/4	490.02	1 1/4	850.87	1 1/4	1197.07	1 1/4	1557.55	1 1/4	1935.81	1 1/4	2299.81	1 1/4	2670.81	1 1/4	3030.81	1 1/4	3404.33
1 1/2	136.17	1 1/2	497.55	1 1/2	858.02	1 1/2	1204.44	1 1/2	1565.28	1 1/2	1945.81	1 1/2	2309.81	1 1/2	2680.81	1 1/2	3040.81	1 1/2	3415.33
3/4	143.71	3/4	505.08	3/4	865.37	3/4	1211.81	3/4	1572.80	3/4	1955.81	3/4	2319.81	3/4	2690.81	3/4	3050.81	3/4	3426.33
5	151.25	5	512.61	5	872.72	5	1219.18	5	1580.33	5	1965.81	5	2329.81	5	2700.81	5	3060.81	5	3437.33
1 1/4	158.78	1 1/4	520.14	1 1/4	879.92	1 1/4	1226.70	1 1/4	1587.85	1 1/4	1975.81	1 1/4	2339.81	1 1/4	2710.81	1 1/4	3070.81	1 1/4	3448.33
1 1/2	166.31	1 1/2	527.67	1 1/2	887.12	1 1/2	1234.23	1 1/2	1595.37	1 1/2	1985.81	1 1/2	2349.81	1 1/2	2720.81	1 1/2	3080.81	1 1/2	3459.33
3/4	173.84	3/4	535.19	3/4	894.31	3/4	1241.76	3/4	1602.90	3/4	1995.81	3/4	2359.81	3/4	2730.81	3/4	3090.81	3/4	3470.33
6	181.37	6	542.72	6	901.51	6	1249.27	6	1610.42	6	2005.81	6	2369.81	6	2740.81	6	3100.81	6	3481.33
1 1/4	188.90	1 1/4	550.25	1 1/4	908.71	1 1/4	1256.80	1 1/4	1617.94	1 1/4	2015.81	1 1/4	2379.81	1 1/4	2750.81	1 1/4	3110.81	1 1/4	3492.33
1 1/2	196.43	1 1/2	557.78	1 1/2	915.92	1 1/2	1264.32	1 1/2	1625.47	1 1/2	2025.81	1 1/2	2389.81	1 1/2	2760.81	1 1/2	3120.81	1 1/2	3503.33
3/4	203.95	3/4	565.31	3/4	923.12	3/4	1271.85	3/4	1632.99	3/4	2035.81	3/4	2399.81	3/4	2770.81	3/4	3130.81	3/4	3514.33
7	211.48	7	572.84	7	930.32	7	1279.37	7	1640.52	7	2045.81	7	2409.81	7	2780.81	7	3140.81	7	3525.33
1 1/4	219.01	1 1/4	580.36	1 1/4	937.52	1 1/4	1286.89	1 1/4	1648.04	1 1/4	2055.81	1 1/4	2419.81	1 1/4	2790.81	1 1/4	3150.81	1 1/4	3536.33
1 1/2	226.53	1 1/2	587.89	1 1/2	944.72	1 1/2	1294.42	1 1/2	1655.56	1 1/2	2065.81	1 1/2	2429.81	1 1/2	2800.81	1 1/2	3160.81	1 1/2	3547.33
3/4	234.06	3/4	595.42	3/4	951.93	3/4	1301.94	3/4	1663.08	3/4	2075.81	3/4	2439.81	3/4	2810.81	3/4	3170.81	3/4	3558.33
8	241.59	8	602.95	8	959.13	8	1309.47	8	1670.61	8	2085.81	8	2449.81	8	2820.81	8	3180.81	8	3569.33
1 1/4	249.12	1 1/4	610.48	1 1/4	966.33	1 1/4	1316.99	1 1/4	1678.14	1 1/4	2095.81	1 1/4	2459.81	1 1/4	2830.81	1 1/4	3190.81	1 1/4	3580.33
1 1/2	256.64	1 1/2	618.01	1 1/2	973.53	1 1/2	1324.51	1 1/2	1685.66	1 1/2	2105.81	1 1/2	2469.81	1 1/2	2840.81	1 1/2	3200.81	1 1/2	3591.33
3/4	264.17	3/4	625.54	3/4	980.73	3/4	1332.04	3/4	1693.18	3/4	2115.81	3/4	2479.81	3/4	2850.81	3/4	3210.81	3/4	3602.33
9	271.70	9	633.06	9	987.94	9	1339.56	9	1700.71	9	2125.81	9	2489.81	9	2860.81	9	3220.81	9	3613.33
1 1/4	279.23	1 1/4	640.58	1 1/4	995.14	1 1/4	1347.08	1 1/4	1708.23	1 1/4	2135.81	1 1/4	2499.81	1 1/4	2870.81	1 1/4	3230.81	1 1/4	3624.33
1 1/2	286.76	1 1/2	648.10	1 1/2	1002.34	1 1/2	1354.61	1 1/2	1715.76	1 1/2	2145.81	1 1/2	2509.81	1 1/2	2880.81	1 1/2	3240.81	1 1/2	3635.33
3/4	294.29	3/4	655.62	3/4	1009.54	3/4	1362.13	3/4	1723.28	3/4	2155.81	3/4	2519.81	3/4	2890.81	3/4	3250.81	3/4	3646.33
10	301.81	10	663.14	10	1016.74	10	1369.66	10	1730.80	10	2165.81	10	2529.81	10	2900.81	10	3260.81	10	3657.33
1 1/4	309.34	1 1/4	670.65	1 1/4	1023.95	1 1/4	1377.18	1 1/4	1738.33	1 1/4	2175.81	1 1/4	2539.81	1 1/4	2910.81	1 1/4	3270.81	1 1/4	3668.33
1 1/2	316.87	1 1/2	678.15	1 1/2	1031.15	1 1/2	1384.70	1 1/2	1745.85	1 1/2	2185.81	1 1/2	2549.81	1 1/2	2920.81	1 1/2	3280.81	1 1/2	3679.33
3/4	324.40	3/4	685.66	3/4	1038.35	3/4	1392.23	3/4	1753.38	3/4	2195.81	3/4	2559.81	3/4	2930.81	3/4	3290.81	3/4	3690.33
11	331.93	11	693.17	11	1045.55	11	1399.75	11	1760.90	11	2205.81	11	2569.81	11	2940.81	11	3300.81	11	3701.33
1 1/4	339.46	1 1/4	700.68	1 1/4	1052.75	1 1/4	1407.28	1 1/4	1768.42	1 1/4	2215.81	1 1/4	2579.81	1 1/4	2950.81	1 1/4	3310.81	1 1/4	3712.33
1 1/2	346.98	1 1/2	708.18	1 1/2	1059.95	1 1/2	1414.80	1 1/2	1775.95	1 1/2	2225.81	1 1/2	2589.81	1 1/2	2960.81	1 1/2	3320.81	1 1/2	3723.33
3/4	354.51	3/4	715.69	3/4	1067.16	3/4	1422.32	3/4	1783.47	3/4	2235.81	3/4	2599.81	3/4	2970.81	3/4	3330.81	3/4	3734.33

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 2" HERMETIC VALVE.

GAUGE POINT: (HERMETIC) LOCATED 12'-00" OFF CENTERLINE AND 41'-00" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.

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



BARGE "EMS 504"

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.		GAUGE HEIGHT 16'-05"	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	3,592.62	0	3,890.70	0	4,181.24	0	4,448.66	0	4,690.86	0	4,907.78	0	5,097.81	0	5,264.00	0	5,407.14	0	5,528.00
1/4	3,599.45	1/4	3,897.53	1/4	4,187.05	1/4	4,455.94	1/4	4,698.14	1/4	4,915.06	1/4	5,105.09	1/4	5,271.21	1/4	5,414.35	1/4	5,535.21
1/2	3,606.28	1/2	3,904.31	1/2	4,192.87	1/2	4,462.52	1/2	4,704.72	1/2	4,921.64	1/2	5,111.67	1/2	5,277.79	1/2	5,420.93	1/2	5,541.79
3/4	3,613.11	3/4	3,911.14	3/4	4,199.70	3/4	4,469.35	3/4	4,711.50	3/4	4,928.42	3/4	5,118.45	3/4	5,284.57	3/4	5,427.72	3/4	5,548.58
1	3,619.94	1	3,917.97	1	4,204.48	1	4,476.18	1	4,718.03	1	4,935.10	1	5,125.05	1	5,291.17	1	5,434.32	1	5,555.41
1/4	3,626.09	1/4	3,924.12	1/4	4,210.36	1/4	4,482.33	1/4	4,724.18	1/4	4,941.25	1/4	5,131.20	1/4	5,297.32	1/4	5,440.47	1/4	5,561.32
1/2	3,632.25	1/2	3,930.28	1/2	4,216.03	1/2	4,488.49	1/2	4,730.03	1/2	4,947.40	1/2	5,138.35	1/2	5,304.47	1/2	5,447.62	1/2	5,568.47
3/4	3,638.40	3/4	3,936.43	3/4	4,221.79	3/4	4,494.64	3/4	4,736.14	3/4	4,953.55	3/4	5,145.50	3/4	5,311.57	3/4	5,454.77	3/4	5,575.62
1	3,644.55	1	3,942.58	1	4,227.86	1	4,500.79	1	4,742.21	1	4,959.70	1	5,151.75	1	5,317.82	1	5,460.92	1	5,581.77
1/4	3,650.71	1/4	3,948.74	1/4	4,233.93	1/4	4,506.95	1/4	4,748.33	1/4	4,965.86	1/4	5,157.90	1/4	5,324.00	1/4	5,467.08	1/4	5,587.92
1/2	3,656.86	1/2	3,954.89	1/2	4,239.01	1/2	4,513.01	1/2	4,753.41	1/2	4,971.97	1/2	5,164.05	1/2	5,330.15	1/2	5,473.23	1/2	5,594.07
3/4	3,663.02	3/4	3,961.05	3/4	4,244.74	3/4	4,519.16	3/4	4,759.56	3/4	4,978.08	3/4	5,170.20	3/4	5,336.27	3/4	5,479.38	3/4	5,600.22
1	3,669.17	1	3,967.20	1	4,250.46	1	4,525.31	1	4,765.67	1	4,984.19	1	5,181.35	1	5,342.42	1	5,485.53	1	5,606.37
1/4	3,675.32	1/4	3,973.35	1/4	4,256.15	1/4	4,531.50	1/4	4,771.86	1/4	4,990.34	1/4	5,192.49	1/4	5,348.63	1/4	5,491.68	1/4	5,612.52
1/2	3,681.48	1/2	3,979.51	1/2	4,261.83	1/2	4,537.65	1/2	4,777.91	1/2	4,996.49	1/2	5,203.64	1/2	5,354.83	1/2	5,497.83	1/2	5,618.67
3/4	3,687.63	3/4	3,985.66	3/4	4,267.51	3/4	4,543.81	3/4	4,784.03	3/4	5,002.67	3/4	5,214.88	3/4	5,361.07	3/4	5,504.02	3/4	5,624.81
1	3,693.78	1	3,991.81	1	4,273.20	1	4,549.96	1	4,789.72	1	5,008.81	1	5,221.03	1	5,367.22	1	5,510.21	1	5,630.96
1/4	3,699.94	1/4	3,997.97	1/4	4,278.84	1/4	4,556.11	1/4	4,795.36	1/4	5,014.96	1/4	5,227.18	1/4	5,373.41	1/4	5,516.40	1/4	5,637.10
1/2	3,706.09	1/2	4,004.12	1/2	4,284.48	1/2	4,562.26	1/2	4,801.01	1/2	5,021.11	1/2	5,233.29	1/2	5,379.58	1/2	5,522.65	1/2	5,643.25
3/4	3,712.24	3/4	4,010.27	3/4	4,290.12	3/4	4,568.41	3/4	4,806.65	3/4	5,027.25	3/4	5,239.43	3/4	5,385.72	3/4	5,528.80	3/4	5,649.40
1	3,718.40	1	4,016.42	1	4,295.76	1	4,574.56	1	4,812.79	1	5,033.39	1	5,245.57	1	5,393.86	1	5,535.00	1	5,655.59
1/4	3,724.55	1/4	4,022.57	1/4	4,301.35	1/4	4,580.71	1/4	4,818.93	1/4	5,039.58	1/4	5,251.76	1/4	5,400.15	1/4	5,546.29	1/4	5,661.73
1/2	3,730.71	1/2	4,028.73	1/2	4,307.51	1/2	4,586.87	1/2	4,825.09	1/2	5,045.74	1/2	5,257.92	1/2	5,406.39	1/2	5,552.53	1/2	5,667.88
3/4	3,736.86	3/4	4,034.88	3/4	4,313.66	3/4	4,593.02	3/4	4,831.25	3/4	5,051.89	3/4	5,264.07	3/4	5,412.54	3/4	5,558.68	3/4	5,674.02
1	3,743.01	1	4,041.03	1	4,319.81	1	4,599.17	1	4,837.40	1	5,058.04	1	5,270.22	1	5,418.69	1	5,564.83	1	5,680.17
1/4	3,749.17	1/4	4,047.18	1/4	4,325.96	1/4	4,605.32	1/4	4,843.55	1/4	5,064.21	1/4	5,276.37	1/4	5,424.84	1/4	5,571.00	1/4	5,686.31
1/2	3,755.32	1/2	4,053.33	1/2	4,332.11	1/2	4,611.47	1/2	4,850.70	1/2	5,070.30	1/2	5,282.52	1/2	5,431.00	1/2	5,577.15	1/2	5,692.46
3/4	3,761.47	3/4	4,059.48	3/4	4,338.26	3/4	4,617.62	3/4	4,856.85	3/4	5,076.45	3/4	5,288.67	3/4	5,437.15	3/4	5,583.30	3/4	5,698.61
1	3,767.63	1	4,065.63	1	4,344.41	1	4,623.77	1	4,863.00	1	5,082.60	1	5,294.80	1	5,443.30	1	5,589.45	1	5,704.76
1/4	3,773.78	1/4	4,071.78	1/4	4,350.56	1/4	4,629.92	1/4	4,869.15	1/4	5,088.75	1/4	5,300.95	1/4	5,449.45	1/4	5,595.60	1/4	5,710.91
1/2	3,779.94	1/2	4,077.94	1/2	4,356.71	1/2	4,636.07	1/2	4,875.30	1/2	5,094.90	1/2	5,307.00	1/2	5,455.60	1/2	5,601.75	1/2	5,717.06
3/4	3,786.09	3/4	4,084.09	3/4	4,362.86	3/4	4,642.22	3/4	4,881.45	3/4	5,101.05	3/4	5,313.10	3/4	5,461.75	3/4	5,607.90	3/4	5,723.21
1	3,792.24	1	4,090.24	1	4,369.01	1	4,648.37	1	4,887.60	1	5,107.20	1	5,319.25	1	5,467.90	1	5,614.05	1	5,729.36
1/4	3,798.40	1/4	4,096.40	1/4	4,375.16	1/4	4,654.52	1/4	4,893.75	1/4	5,113.35	1/4	5,325.40	1/4	5,474.05	1/4	5,620.20	1/4	5,735.51
1/2	3,804.55	1/2	4,102.55	1/2	4,381.31	1/2	4,660.67	1/2	4,900.90	1/2	5,119.50	1/2	5,331.55	1/2	5,480.20	1/2	5,626.35	1/2	5,741.66
3/4	3,810.70	3/4	4,108.70	3/4	4,387.46	3/4	4,666.82	3/4	4,907.05	3/4	5,125.65	3/4	5,337.70	3/4	5,486.35	3/4	5,632.50	3/4	5,747.81
1	3,816.86	1	4,114.86	1	4,393.61	1	4,672.97	1	4,913.20	1	5,131.80	1	5,343.85	1	5,492.50	1	5,638.65	1	5,753.96
1/4	3,823.01	1/4	4,121.01	1/4	4,399.76	1/4	4,679.12	1/4	4,919.35	1/4	5,137.95	1/4	5,349.95	1/4	5,498.65	1/4	5,644.80	1/4	5,760.11
1/2	3,829.17	1/2	4,127.17	1/2	4,405.91	1/2	4,685.27	1/2	4,925.50	1/2	5,144.10	1/2	5,356.10	1/2	5,504.80	1/2	5,650.95	1/2	5,766.26
3/4	3,835.32	3/4	4,133.32	3/4	4,412.06	3/4	4,691.42	3/4	4,931.65	3/4	5,150.25	3/4	5,362.25	3/4	5,511.00	3/4	5,657.15	3/4	5,772.41
1	3,841.47	1	4,139.47	1	4,418.21	1	4,697.57	1	4,937.80	1	5,156.40	1	5,368.40	1	5,517.15	1	5,663.30	1	5,778.56
1/4	3,847.63	1/4	4,145.63	1/4	4,424.36	1/4	4,703.72	1/4	4,943.95	1/4	5,162.55	1/4	5,374.55	1/4	5,523.30	1/4	5,669.45	1/4	5,784.71
1/2	3,853.78	1/2	4,151.78	1/2	4,430.51	1/2	4,709.87	1/2	4,950.10	1/2	5,168.70	1/2	5,380.70	1/2	5,529.45	1/2	5,675.60	1/2	5,790.86
3/4	3,859.93	3/4	4,157.93	3/4	4,436.66	3/4	4,716.02	3/4	4,956.25	3/4	5,174.85	3/4	5,386.85	3/4	5,535.60	3/4	5,681.75	3/4	5,797.01
1	3,866.09	1	4,164.09	1	4,442.81	1	4,722.17	1	4,962.40	1	5,181.00	1	5,392.95	1	5,541.75	1	5,687.90	1	5,803.16
1/4	3,872.24	1/4	4,170.24	1/4	4,448.96	1/4	4,728.32	1/4	4,968.55	1/4	5,187.15	1/4	5,399.10	1/4	5,547.90	1/4	5,694.05	1/4	5,809.31
1/2	3,878.39	1/2	4,176.39	1/2	4,455.11	1/2	4,734.47	1/2	4,974.70	1/2	5,193.30	1/2	5,405.25	1/2	5,554.05	1/2	5,700.20	1/2	5,815.46
3/4	3,884.55	3/4	4,182.55	3/4	4,461.26	3/4	4,740.62	3/4	4,980.85	3/4	5,199.45	3/4	5,411.40	3/4	5,560.40	3/4	5,706.55	3/4	5,821.61

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/17/2018, SW
CALCULATED: 12/20/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/20/18

PRECISION MEASUREMENT
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Pearland, Texas 77588
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BARGE "EMS 504"

ULLAGE TRIM TABLE

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

(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: 236'-06"

December 17, 2018

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

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1 PORT
VILLAGE TAB

[illegible]

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN WITH "HERMETIC CLOSED GAUGING DEVICE" GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 37'-03" FORWARD OF AFT BULKHEAD.

14.70	34	2,933.11	34	2,591.45
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**PRECISION MEASUREMENT
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SHEET NO. 1 OF 12



BARGE "EMS 504"

1 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	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	2,584.33	0	2,242.68	0	1,901.02	0	1,559.35	0	1,217.68	0	877.48	0	535.28	0	257.92	0	10.41	0	
1/4	2,577.22	1/4	2,235.56	1/4	1,893.90	1/4	1,552.23	1/4	1,210.56	1/4	870.54	1/4	528.50	1/4	257.92	1/4		1/4	
1/2	2,570.10	1/2	2,228.44	1/2	1,886.78	1/2	1,545.11	1/2	1,203.43	1/2	863.59	1/2	521.53	1/2	252.15	1/2		1/2	
3/4	2,562.98	3/4	2,221.33	3/4	1,879.66	3/4	1,538.00	3/4	1,196.33	3/4	856.64	3/4	514.57	3/4	246.39	3/4		3/4	
1	2,555.86	1	2,214.21	1	1,872.55	1	1,530.88	1	1,189.21	1	849.70	1	507.61	1	240.62	1		1	
1/4	2,548.75	1/4	2,207.09	1/4	1,865.43	1/4	1,523.76	1/4	1,182.09	1/4	842.80	1/4	500.54	1/4	234.91	1/4		1/4	
1/2	2,541.63	1/2	2,199.97	1/2	1,858.31	1/2	1,516.64	1/2	1,174.97	1/2	835.91	1/2	493.42	1/2	229.20	1/2		1/2	
3/4	2,534.51	3/4	2,192.86	3/4	1,851.19	3/4	1,509.52	3/4	1,167.85	3/4	829.01	3/4	486.45	3/4	223.49	3/4		3/4	
1	2,527.39	1	2,185.74	1	1,844.07	1	1,502.41	1	1,160.74	1	822.11	1	479.48	1	217.78	1		1	
1/4	2,520.27	1/4	2,178.62	1/4	1,836.96	1/4	1,495.29	1/4	1,153.62	1/4	815.27	1/4	472.51	1/4	212.11	1/4		1/4	
1/2	2,513.16	1/2	2,171.50	1/2	1,829.84	1/2	1,488.17	1/2	1,146.50	1/2	808.42	1/2	465.54	1/2	206.45	1/2		1/2	
3/4	2,506.04	3/4	2,164.38	3/4	1,822.72	3/4	1,481.05	3/4	1,139.38	3/4	801.57	3/4	458.57	3/4	200.79	3/4		3/4	
1	2,498.92	1	2,157.27	1	1,815.60	1	1,473.93	1	1,132.26	1	794.72	1	451.60	1	195.13	1		1	
1/4	2,491.80	1/4	2,150.15	1/4	1,808.48	1/4	1,466.81	1/4	1,125.15	1/4	787.82	1/4	444.63	1/4	189.52	1/4		1/4	
1/2	2,484.69	1/2	2,143.03	1/2	1,801.37	1/2	1,459.70	1/2	1,118.03	1/2	780.91	1/2	437.66	1/2	183.91	1/2		1/2	
3/4	2,477.57	3/4	2,135.91	3/4	1,794.25	3/4	1,452.58	3/4	1,110.91	3/4	774.00	3/4	430.69	3/4	178.30	3/4		3/4	
1	2,470.45	1	2,128.80	1	1,787.13	1	1,445.46	1	1,103.79	1	767.09	1	423.72	1	172.69	1		1	
1/4	2,463.33	1/4	2,121.68	1/4	1,780.01	1/4	1,438.34	1/4	1,096.67	1/4	760.18	1/4	416.75	1/4	167.13	1/4		1/4	
1/2	2,456.21	1/2	2,114.56	1/2	1,772.89	1/2	1,431.22	1/2	1,089.56	1/2	753.27	1/2	409.78	1/2	161.57	1/2		1/2	
3/4	2,449.10	3/4	2,107.44	3/4	1,765.77	3/4	1,424.11	3/4	1,082.44	3/4	746.36	3/4	402.81	3/4	155.96	3/4		3/4	
1	2,441.98	1	2,100.33	1	1,758.66	1	1,416.99	1	1,075.32	1	739.45	1	395.84	1	150.35	1		1	
1/4	2,434.86	1/4	2,093.21	1/4	1,751.54	1/4	1,409.87	1/4	1,068.21	1/4	732.54	1/4	388.93	1/4	144.74	1/4		1/4	
1/2	2,427.74	1/2	2,086.09	1/2	1,744.42	1/2	1,402.75	1/2	1,061.11	1/2	725.63	1/2	382.02	1/2	139.13	1/2		1/2	
3/4	2,420.63	3/4	2,078.97	3/4	1,737.30	3/4	1,395.63	3/4	1,054.00	3/4	718.72	3/4	375.11	3/4	133.53	3/4		3/4	
1	2,413.51	1	2,071.85	1	1,730.18	1	1,388.52	1	1,046.90	1	711.81	1	368.20	1	127.92	1		1	
1/4	2,406.39	1/4	2,064.73	1/4	1,723.07	1/4	1,381.40	1/4	1,039.78	1/4	704.90	1/4	361.29	1/4	122.32	1/4		1/4	
1/2	2,399.27	1/2	2,057.62	1/2	1,715.95	1/2	1,374.28	1/2	1,032.66	1/2	697.99	1/2	354.38	1/2	116.72	1/2		1/2	
3/4	2,392.15	3/4	2,050.50	3/4	1,708.83	3/4	1,367.16	3/4	1,025.53	3/4	691.08	3/4	347.47	3/4	111.12	3/4		3/4	
1	2,385.04	1	2,043.38	1	1,701.71	1	1,360.04	1	1,018.41	1	684.17	1	340.56	1	105.52	1		1	
1/4	2,377.92	1/4	2,036.26	1/4	1,694.59	1/4	1,352.93	1/4	1,011.29	1/4	677.26	1/4	333.65	1/4	100.00	1/4		1/4	
1/2	2,370.80	1/2	2,029.14	1/2	1,687.48	1/2	1,345.81	1/2	1,004.17	1/2	670.35	1/2	326.74	1/2	94.48	1/2		1/2	
3/4	2,363.68	3/4	2,022.03	3/4	1,680.36	3/4	1,338.69	3/4	997.05	3/4	663.44	3/4	319.83	3/4	88.96	3/4		3/4	
1	2,356.56	1	2,014.91	1	1,673.24	1	1,331.57	1	990.22	1	656.53	1	312.92	1	83.44	1		1	
1/4	2,349.45	1/4	2,007.79	1/4	1,666.12	1/4	1,324.45	1/4	983.11	1/4	649.62	1/4	306.01	1/4	77.92	1/4		1/4	
1/2	2,342.33	1/2	2,000.67	1/2	1,659.00	1/2	1,317.33	1/2	976.07	1/2	642.71	1/2	299.10	1/2	72.40	1/2		1/2	
3/4	2,335.21	3/4	1,993.55	3/4	1,651.88	3/4	1,310.22	3/4	969.00	3/4	635.80	3/4	292.19	3/4	66.88	3/4		3/4	
1	2,328.09	1	1,986.44	1	1,644.77	1	1,303.10	1	961.89	1	628.89	1	285.28	1	61.36	1		1	
1/4	2,320.98	1/4	1,979.32	1/4	1,637.65	1/4	1,295.98	1/4	954.78	1/4	621.98	1/4	278.37	1/4	55.84	1/4		1/4	
1/2	2,313.86	1/2	1,972.20	1/2	1,630.53	1/2	1,288.86	1/2	947.67	1/2	615.07	1/2	271.46	1/2	50.32	1/2		1/2	
3/4	2,306.74	3/4	1,965.08	3/4	1,623.41	3/4	1,281.74	3/4	940.56	3/4	608.16	3/4	264.55	3/4	44.80	3/4		3/4	
1	2,299.62	1	1,957.96	1	1,616.29	1	1,274.63	1	933.45	1	601.25	1	257.64	1	39.28	1		1	
1/4	2,292.50	1/4	1,950.85	1/4	1,609.18	1/4	1,267.51	1/4	926.34	1/4	594.34	1/4	250.73	1/4	33.76	1/4		1/4	
1/2	2,285.39	1/2	1,943.73	1/2	1,602.06	1/2	1,260.39	1/2	919.23	1/2	587.43	1/2	243.82	1/2	28.24	1/2		1/2	
3/4	2,278.27	3/4	1,936.61	3/4	1,594.94	3/4	1,253.27	3/4	912.12	3/4	580.52	3/4	236.91	3/4	22.72	3/4		3/4	
1	2,271.15	1	1,929.49	1	1,587.82	1	1,246.15	1	905.01	1	573.61	1	230.00	1	17.20	1		1	
1/4	2,264.03	1/4	1,922.37	1/4	1,580.70	1/4	1,239.04	1/4	898.48	1/4	566.70	1/4	223.09	1/4	11.68	1/4		1/4	
1/2	2,256.92	1/2	1,915.25	1/2	1,573.59	1/2	1,231.92	1/2	891.37	1/2	559.79	1/2	216.18	1/2	6.16	1/2		1/2	
3/4	2,249.80	3/4	1,908.14	3/4	1,566.47	3/4	1,224.80	3/4	884.26	3/4	552.88	3/4	209.27	3/4	0.64	3/4		3/4	

STRAPPED: 12/17/2018 SW
CALCULATED: 12/20/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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Tom Glavin



1 STBD
ULLAGE TABLE

INCHES										FEET										GAUGE HEIGHT 17'-11 3/4"																													
0 FT.					1 FT.					2 FT.					3 FT.					4 FT.					5 FT.					6 FT.					7 FT.					8 FT.					9 FT.				
IN	IN	0 FT.	IN	0	IN	0	IN	0	4,826.20	0	4,557.25	0	4,264.94	0	3,940.57	0	3,610.44	0	3,268.01	0	2,925.59	0	2,583.17	0	2,240.74	0	1,898.32	0	1,555.90	0	1,213.47	0	871.04	0	528.62	0	186.19	0	14.76	0									
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,820.83	1/4	4,551.40	1/4	4,258.59	1/4	3,941.72	1/4	3,603.30	1/4	3,260.86	1/4	2,918.45	1/4	2,576.03	1/4	2,233.61	1/4	1,891.19	1/4	1,548.77	1/4	1,206.34	1/4	863.92	1/4	521.50	1/4	179.07	1/4	13.33	1/4									
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,815.46	1/2	4,545.54	1/2	4,252.25	1/2	3,938.87	1/2	3,596.17	1/2	3,253.75	1/2	2,911.32	1/2	2,568.90	1/2	2,226.48	1/2	1,884.06	1/2	1,541.64	1/2	1,199.22	1/2	856.80	1/2	514.38	1/2	171.95	1/2	12.89	1/2									
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,810.09	3/4	4,539.68	3/4	4,245.81	3/4	3,932.02	3/4	3,589.04	3/4	3,246.61	3/4	2,904.19	3/4	2,561.77	3/4	2,219.34	3/4	1,876.92	3/4	1,534.50	3/4	1,192.08	3/4	849.65	3/4	507.23	3/4	169.80	3/4	12.45	3/4									
1	1	1	1	1	1	1	1	1	4,804.68	1	4,533.79	1	4,239.52	1	3,921.13	1	3,581.90	1	3,239.48	1	2,897.05	1	2,554.63	1	2,212.20	1	1,869.78	1	1,527.36	1	1,184.94	1	842.51	1	500.09	1	167.66	1	12.01	1									
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	4,799.27	1 1/4	4,527.89	1 1/4	4,233.14	1 1/4	3,914.24	1 1/4	3,574.77	1 1/4	3,232.35	1 1/4	2,889.92	1 1/4	2,547.50	1 1/4	2,205.07	1 1/4	1,862.65	1 1/4	1,520.23	1 1/4	1,177.80	1 1/4	835.37	1 1/4	492.94	1 1/4	163.22	1 1/4	11.57	1 1/4									
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	4,793.86	1 1/2	4,521.98	1 1/2	4,226.75	1 1/2	3,907.35	1 1/2	3,567.63	1 1/2	3,225.21	1 1/2	2,882.79	1 1/2	2,540.37	1 1/2	2,197.94	1 1/2	1,855.52	1 1/2	1,513.10	1 1/2	1,170.68	1 1/2	827.95	1 1/2	488.51	1 1/2	161.79	1 1/2	11.13	1 1/2									
1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	4,788.45	1 3/4	4,516.10	1 3/4	4,220.37	1 3/4	3,900.46	1 3/4	3,560.50	1 3/4	3,218.08	1 3/4	2,875.66	1 3/4	2,533.24	1 3/4	2,190.81	1 3/4	1,848.39	1 3/4	1,505.97	1 3/4	1,163.54	1 3/4	821.12	1 3/4	484.69	1 3/4	158.35	1 3/4	10.73	1 3/4									
2	2	2	2	2	2	2	2	2	4,783.00	2	4,510.16	2	4,213.95	2	3,893.53	2	3,553.37	2	3,210.94	2	2,868.52	2	2,526.10	2	2,183.67	2	1,841.25	2	1,498.83	2	1,156.40	2	813.98	2	479.26	2	154.93	2	10.29	2									
2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	4,777.54	2 1/4	4,504.22	2 1/4	4,207.52	2 1/4	3,886.50	2 1/4	3,546.23	2 1/4	3,203.81	2 1/4	2,861.39	2 1/4	2,518.97	2 1/4	2,176.54	2 1/4	1,834.12																						

27	2,594.16	Y4	2,590.31
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CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN WITH "HERMETIC CLOSED GAUGING DEVICE"
GAUGE POINT; (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 37'-03" FORWARD OF AFT BUL HEAD.

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

SHEET NO. 3 OF 12



BARGE "EMS 504"

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	2,563.18	0	2,240.77	0	1,898.36	0	1,555.93	0	1,213.49	0	872.69	0	531.30	0	258.59	0	117.81	0	0
1/4	2,576.06	1/4	2,253.64	1/4	1,891.22	1/4	1,548.79	1/4	1,206.36	1/4	865.73	1/4	524.91	1/4	252.82	1/4	114	1/4	0
1/2	2,588.91	1/2	2,266.50	1/2	1,884.08	1/2	1,541.66	1/2	1,199.23	1/2	858.76	1/2	518.03	1/2	247.04	1/2	112	1/2	1/4
3/4	2,561.78	3/4	2,219.37	3/4	1,876.95	3/4	1,534.52	3/4	1,192.09	3/4	851.80	3/4	512.13	3/4	241.56	3/4	110	3/4	1/2
1	2,554.65	1	2,212.24	1	1,869.82	1	1,527.39	1	1,184.96	1	844.89	1	505.79	1	235.53	1	108	1	3/4
1 1/4	2,547.51	1 1/4	2,205.10	1 1/4	1,862.68	1 1/4	1,520.26	1 1/4	1,177.82	1 1/4	837.98	1 1/4	499.48	1 1/4	229.80	1 1/4	106	1 1/4	1
1 1/2	2,540.38	1 1/2	2,197.97	1 1/2	1,855.55	1 1/2	1,513.12	1 1/2	1,170.69	1 1/2	831.06	1 1/2	492.34	1 1/2	224.08	1 1/2	104	1 1/2	1/4
3/4	2,533.25	3/4	2,190.84	3/4	1,848.42	3/4	1,506.99	3/4	1,163.56	3/4	824.16	3/4	485.19	3/4	218.35	3/4	102	3/4	1/2
2	2,526.11	2	2,183.70	2	1,841.29	2	1,499.85	2	1,156.42	2	817.29	2	478.04	2	212.67	2	100	2	3/4
1 1/4	2,518.98	1 1/4	2,176.57	1 1/4	1,834.15	1 1/4	1,491.72	1 1/4	1,149.29	1 1/4	810.43	1 1/4	470.89	1 1/4	207.00	1 1/4	98	1 1/4	1
1 1/2	2,511.84	1 1/2	2,169.44	1 1/2	1,827.02	1 1/2	1,484.59	1 1/2	1,142.15	1 1/2	803.56	1 1/2	463.74	1 1/2	201.32	1 1/2	96	1 1/2	1/4
3/4	2,504.71	3/4	2,162.30	3/4	1,819.88	3/4	1,477.45	3/4	1,135.02	3/4	796.70	3/4	456.59	3/4	195.64	3/4	94	3/4	1/2
3	2,497.58	3	2,155.17	3	1,812.75	3	1,470.32	3	1,127.89	3	789.88	3	449.44	3	190.02	3	92	3	3/4
1 1/4	2,490.44	1 1/4	2,148.04	1 1/4	1,805.62	1 1/4	1,463.18	1 1/4	1,120.76	1 1/4	783.06	1 1/4	442.29	1 1/4	184.39	1 1/4	90	1 1/4	1
1 1/2	2,483.31	1 1/2	2,140.90	1 1/2	1,798.48	1 1/2	1,456.05	1 1/2	1,113.62	1 1/2	776.24	1 1/2	435.14	1 1/2	178.77	1 1/2	88	1 1/2	1/4
3/4	2,476.18	3/4	2,133.77	3/4	1,791.35	3/4	1,448.92	3/4	1,106.48	3/4	769.42	3/4	428.00	3/4	173.14	3/4	86	3/4	1/2
4	2,469.04	4	2,126.64	4	1,784.21	4	1,441.78	4	1,099.35	4	762.65	4	420.85	4	167.57	4	84	4	3/4
1 1/4	2,461.91	1 1/4	2,119.50	1 1/4	1,777.08	1 1/4	1,434.65	1 1/4	1,092.22	1 1/4	755.88	1 1/4	413.70	1 1/4	162.00	1 1/4	82	1 1/4	1
1 1/2	2,454.78	1 1/2	2,112.37	1 1/2	1,769.95	1 1/2	1,427.51	1 1/2	1,085.08	1 1/2	749.11	1 1/2	406.55	1 1/2	156.42	1 1/2	80	1 1/2	1/4
3/4	2,447.64	3/4	2,105.24	3/4	1,762.81	3/4	1,420.38	3/4	1,077.95	3/4	742.34	3/4	399.40	3/4	150.85	3/4	78	3/4	1/2
5	2,440.51	5	2,098.10	5	1,755.68	5	1,413.25	5	1,070.83	5	735.61	5	392.25	5	145.33	5	76	5	3/4
1 1/4	2,433.38	1 1/4	2,090.97	1 1/4	1,748.54	1 1/4	1,406.11	1 1/4	1,063.70	1 1/4	728.87	1 1/4	385.10	1 1/4	139.80	1 1/4	74	1 1/4	1
1 1/2	2,426.24	1 1/2	2,083.84	1 1/2	1,741.41	1 1/2	1,398.98	1 1/2	1,056.58	1 1/2	722.14	1 1/2	378.00	1 1/2	134.28	1 1/2	72	1 1/2	1/4
3/4	2,419.11	3/4	2,076.70	3/4	1,734.28	3/4	1,391.84	3/4	1,049.46	3/4	715.41	3/4	370.84	3/4	128.76	3/4	70	3/4	1/2
6	2,411.98	6	2,069.57	6	1,727.14	6	1,384.71	6	1,042.36	6	708.71	6	363.69	6	123.29	6	68	6	3/4
1 1/4	2,404.84	1 1/4	2,062.43	1 1/4	1,720.01	1 1/4	1,377.58	1 1/4	1,035.25	1 1/4	702.01	1 1/4	356.57	1 1/4	117.81	1 1/4	66	1 1/4	1
1 1/2	2,397.71	1 1/2	2,055.30	1 1/2	1,712.87	1 1/2	1,370.44	1 1/2	1,028.15	1 1/2	695.31	1 1/2	349.45	1 1/2	112.34	1 1/2	64	1 1/2	1/4
3/4	2,390.58	3/4	2,048.17	3/4	1,705.74	3/4	1,363.31	3/4	1,021.04	3/4	688.61	3/4	342.30	3/4	106.87	3/4	62	3/4	1/2
7	2,383.44	7	2,041.03	7	1,698.61	7	1,356.17	7	1,013.94	7	681.96	7	335.15	7	101.45	7	60	7	3/4
1 1/4	2,376.31	1 1/4	2,033.90	1 1/4	1,691.47	1 1/4	1,349.04	1 1/4	1,006.85	1 1/4	675.31	1 1/4	328.00	1 1/4	96.03	1 1/4	58	1 1/4	1
1 1/2	2,369.17	1 1/2	2,026.76	1 1/2	1,684.34	1 1/2	1,341.91	1 1/2	999.75	1 1/2	668.67	1 1/2	320.85	1 1/2	90.61	1 1/2	56	1 1/2	1/4
3/4	2,362.04	3/4	2,019.63	3/4	1,677.20	3/4	1,334.77	3/4	992.65	3/4	662.02	3/4	313.70	3/4	85.19	3/4	54	3/4	1/2
8	2,354.91	8	2,012.50	8	1,670.07	8	1,327.64	8	985.56	8	655.42	8	306.55	8	79.82	8	52	8	3/4
1 1/4	2,347.77	1 1/4	2,005.36	1 1/4	1,662.94	1 1/4	1,320.50	1 1/4	978.47	1 1/4	648.82	1 1/4	299.40	1 1/4	74.45	1 1/4	50	1 1/4	1
1 1/2	2,340.64	1 1/2	1,998.23	1 1/2	1,655.80	1 1/2	1,313.37	1 1/2	971.38	1 1/2	642.23	1 1/2	292.25	1 1/2	69.08	1 1/2	48	1 1/2	1/4
3/4	2,333.51	3/4	1,991.09	3/4	1,648.67	3/4	1,306.24	3/4	964.29	3/4	635.63	3/4	285.10	3/4	63.71	3/4	46	3/4	1/2
9	2,326.37	9	1,983.96	9	1,641.53	9	1,299.10	9	957.20	9	628.09	9	278.00	9	58.39	9	44	9	3/4
1 1/4	2,319.24	1 1/4	1,976.83	1 1/4	1,634.40	1 1/4	1,291.97	1 1/4	950.12	1 1/4	622.54	1 1/4	270.85	1 1/4	53.07	1 1/4	42	1 1/4	1
1 1/2	2,312.11	1 1/2	1,969.69	1 1/2	1,627.27	1 1/2	1,284.83	1 1/2	943.03	1 1/2	615.89	1 1/2	263.70	1 1/2	47.76	1 1/2	40	1 1/2	1/4
3/4	2,304.97	3/4	1,962.56	3/4	1,620.13	3/4	1,277.70	3/4	935.95	3/4	609.45	3/4	256.55	3/4	42.44	3/4	38	3/4	1/2
10	2,297.84	10	1,955.42	10	1,613.00	10	1,270.57	10	928.89	10	602.95	10	249.40	10	37.76	10	36	10	3/4
1 1/4	2,290.71	1 1/4	1,948.29	1 1/4	1,605.86	1 1/4	1,263.43	1 1/4	921.83	1 1/4	596.46	1 1/4	242.25	1 1/4	33.09	1 1/4	34	1 1/4	1
1 1/2	2,283.57	1 1/2	1,941.16	1 1/2	1,598.73	1 1/2	1,256.30	1 1/2	914.77	1 1/2	589.96	1 1/2	235.10	1 1/2	28.42	1 1/2	32	1 1/2	1/4
3/4	2,276.44	3/4	1,934.02	3/4	1,591.60	3/4	1,249.16	3/4	907.71	3/4	583.47	3/4	228.00	3/4	23.75	3/4	30	3/4	1/2
11	2,269.31	11	1,926.89	11	1,584.46	11	1,242.03	11	900.70	11	577.03	11	220.85	11	20.42	11	28	11	3/4
1 1/4	2,262.17	1 1/4	1,919.76	1 1/4	1,577.33	1 1/4	1,234.90	1 1/4	893.68	1 1/4	570.58	1 1/4	213.70	1 1/4	17.09	1 1/4	26	1 1/4	1
1 1/2	2,255.04	1 1/2	1,912.62	1 1/2	1,570.19	1 1/2	1,227.76	1 1/2	886.67	1 1/2	564.14	1 1/2	206.55	1 1/2	13.76	1 1/2	24	1 1/2	1/4
3/4	2,247.91	3/4	1,905.49	3/4	1,563.06	3/4	1,220.63	3/4	879.66	3/4	557.70	3/4	199.40	3/4	10.43	3/4	22	3/4	1/2

STRAPPED: 12/17/2018 SW
CALCULATED: 12/20/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/20/18

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

Paul J. Grooms



2 PORT

VILLAGE TABLE

[illegible]

06-1-89	3/4	3,494.0Z	3/4	3,105.8Z
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CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

**PRECISION MEASUREMENT
& ANALYSIS, INC.**

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

SHEET NO. 5 OF 12



BARGE "EMS 504"

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	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	3,097.74	0	2,709.54	0	2,321.31	0	1,933.10	0	1,544.88	0	1,156.67	0	768.69	0	380.56	0		0	
1/4	3,089.66	1/4	2,701.45	1/4	2,313.22	1/4	1,925.01	1/4	1,536.80	1/4	1,148.58	1/4	760.61	1/4	372.49	1/4		1/4	
1/2	3,081.56	1/2	2,693.36	1/2	2,305.14	1/2	1,916.92	1/2	1,528.71	1/2	1,140.49	1/2	752.54	1/2	364.40	1/2		1/2	
3/4	3,073.47	3/4	2,685.27	3/4	2,297.05	3/4	1,908.83	3/4	1,520.62	3/4	1,132.41	3/4	744.46	3/4	356.32	3/4		3/4	
1	3,065.39	1	2,677.19	1	2,288.96	1	1,900.75	1	1,512.53	1	1,124.32	1	736.38	1	348.23	1		1	
1/4	3,057.30	1/4	2,669.10	1/4	2,280.87	1/4	1,892.66	1/4	1,504.44	1/4	1,116.23	1/4	728.30	1/4	340.14	1/4		1/4	
1/2	3,049.21	1/2	2,661.01	1/2	2,272.79	1/2	1,884.57	1/2	1,496.36	1/2	1,108.14	1/2	720.23	1/2	332.05	1/2		1/2	
3/4	3,041.12	3/4	2,652.92	3/4	2,264.70	3/4	1,876.48	3/4	1,488.27	3/4	1,100.05	3/4	712.15	3/4	323.97	3/4		3/4	
2	3,033.04	2	2,644.84	2	2,256.61	2	1,868.40	2	1,480.18	2	1,091.97	2	704.07	2	315.88	2		2	
1/4	3,024.95	1/4	2,636.75	1/4	2,248.52	1/4	1,860.31	1/4	1,472.09	1/4	1,083.88	1/4	695.99	1/4	307.79	1/4		1/4	
1/2	3,016.86	1/2	2,628.66	1/2	2,240.43	1/2	1,852.22	1/2	1,464.01	1/2	1,075.79	1/2	687.91	1/2	299.70	1/2		1/2	
3/4	3,008.77	3/4	2,620.57	3/4	2,232.35	3/4	1,844.13	3/4	1,455.92	3/4	1,067.70	3/4	679.82	3/4	291.61	3/4		3/4	
3	3,000.69	3	2,612.49	3	2,224.26	3	1,836.04	3	1,447.83	3	1,059.62	3	671.74	3	283.53	3		3	
1/4	2,992.60	1/4	2,604.40	1/4	2,216.17	1/4	1,827.96	1/4	1,439.74	1/4	1,051.53	1/4	663.65	1/4	275.44	1/4		1/4	
1/2	2,984.51	1/2	2,596.31	1/2	2,208.08	1/2	1,819.87	1/2	1,431.65	1/2	1,043.44	1/2	655.56	1/2	267.35	1/2		1/2	
3/4	2,976.42	3/4	2,588.22	3/4	2,200.00	3/4	1,811.78	3/4	1,423.57	3/4	1,035.35	3/4	647.47	3/4	259.26	3/4		3/4	
4	2,968.34	4	2,580.13	4	2,191.91	4	1,803.69	4	1,415.48	4	1,027.26	4	639.39	4	251.18	4		4	
1/4	2,960.25	1/4	2,572.04	1/4	2,183.82	1/4	1,795.61	1/4	1,407.39	1/4	1,019.18	1/4	631.30	1/4	243.09	1/4		1/4	
1/2	2,952.16	1/2	2,563.95	1/2	2,175.73	1/2	1,787.52	1/2	1,399.30	1/2	1,011.09	1/2	623.21	1/2	235.00	1/2		1/2	
3/4	2,944.07	3/4	2,555.86	3/4	2,167.64	3/4	1,779.43	3/4	1,391.22	3/4	1,003.00	3/4	615.12	3/4	226.91	3/4		3/4	
5	2,935.99	5	2,547.77	5	2,159.56	5	1,771.34	5	1,383.13	5	994.91	5	607.03	5	218.83	5		5	
1/4	2,927.90	1/4	2,539.68	1/4	2,151.47	1/4	1,763.25	1/4	1,375.04	1/4	986.83	1/4	598.95	1/4	210.74	1/4		1/4	
1/2	2,919.81	1/2	2,531.60	1/2	2,143.38	1/2	1,755.17	1/2	1,366.95	1/2	978.74	1/2	590.86	1/2	202.65	1/2		1/2	
3/4	2,911.72	3/4	2,523.51	3/4	2,135.29	3/4	1,747.08	3/4	1,358.86	3/4	970.65	3/4	582.77	3/4	194.56	3/4		3/4	
6	2,903.64	6	2,515.42	6	2,127.21	6	1,738.99	6	1,350.78	6	962.57	6	574.68	6	186.47	6		6	
1/4	2,895.55	1/4	2,507.33	1/4	2,119.12	1/4	1,730.90	1/4	1,342.69	1/4	954.48	1/4	566.60	1/4	178.39	1/4		1/4	
1/2	2,887.46	1/2	2,499.24	1/2	2,111.03	1/2	1,722.82	1/2	1,334.60	1/2	946.40	1/2	558.51	1/2	170.30	1/2		1/2	
3/4	2,879.37	3/4	2,491.16	3/4	2,102.94	3/4	1,714.73	3/4	1,326.51	3/4	938.32	3/4	550.42	3/4	162.21	3/4		3/4	
7	2,871.29	7	2,483.07	7	2,094.85	7	1,706.64	7	1,318.43	7	930.24	7	542.33	7	154.12	7		7	
1/4	2,863.20	1/4	2,474.98	1/4	2,086.77	1/4	1,698.55	1/4	1,310.34	1/4	922.16	1/4	534.25	1/4	146.04	1/4		1/4	
1/2	2,855.11	1/2	2,466.89	1/2	2,078.68	1/2	1,690.46	1/2	1,302.25	1/2	914.09	1/2	526.16	1/2	137.95	1/2		1/2	
3/4	2,847.02	3/4	2,458.81	3/4	2,070.59	3/4	1,682.38	3/4	1,294.16	3/4	906.01	3/4	518.07	3/4	129.86	3/4		3/4	
8	2,838.94	8	2,450.72	8	2,062.50	8	1,674.29	8	1,286.07	8	897.93	8	509.98	8	121.77	8		8	
1/4	2,830.85	1/4	2,442.63	1/4	2,054.42	1/4	1,666.20	1/4	1,277.99	1/4	889.85	1/4	501.89	1/4	113.68	1/4		1/4	
1/2	2,822.76	1/2	2,434.54	1/2	2,046.33	1/2	1,658.11	1/2	1,269.90	1/2	881.78	1/2	493.81	1/2	105.50	1/2		1/2	
3/4	2,814.67	3/4	2,426.45	3/4	2,038.24	3/4	1,650.03	3/4	1,261.81	3/4	873.70	3/4	485.72	3/4	97.61	3/4		3/4	
9	2,806.59	9	2,418.37	9	2,030.15	9	1,641.94	9	1,253.72	9	865.62	9	477.63	9	89.42	9		9	
1/4	2,798.50	1/4	2,410.28	1/4	2,022.06	1/4	1,633.85	1/4	1,245.64	1/4	857.54	1/4	469.54	1/4	81.33	1/4		1/4	
1/2	2,790.41	1/2	2,402.19	1/2	2,013.98	1/2	1,625.76	1/2	1,237.55	1/2	849.47	1/2	461.46	1/2	73.25	1/2		1/2	
3/4	2,782.32	3/4	2,394.10	3/4	2,005.89	3/4	1,617.67	3/4	1,229.46	3/4	841.39	3/4	453.37	3/4	65.16	3/4		3/4	
10	2,774.24	10	2,386.01	10	1,997.80	10	1,609.59	10	1,221.37	10	833.31	10	445.28	10	57.07	10		10	
1/4	2,766.15	1/4	2,377.93	1/4	1,989.71	1/4	1,601.50	1/4	1,213.28	1/4	825.23	1/4	437.19	1/4	50.33	1/4		1/4	
1/2	2,758.06	1/2	2,369.84	1/2	1,981.62	1/2	1,593.41	1/2	1,205.20	1/2	817.16	1/2	429.11	1/2	42.92	1/2		1/2	
3/4	2,749.97	3/4	2,361.75	3/4	1,973.54	3/4	1,585.32	3/4	1,197.11	3/4	809.08	3/4	421.02	3/4	35.50	3/4		3/4	
11	2,741.89	11	2,353.66	11	1,965.45	11	1,577.23	11	1,189.02	11	801.00	11	412.93	11	30.11	11		11	
1/4	2,733.80	1/4	2,345.58	1/4	1,957.36	1/4	1,569.15	1/4	1,180.93	1/4	792.92	1/4	404.84	1/4	24.72	1/4		1/4	
1/2	2,725.71	1/2	2,337.49	1/2	1,949.27	1/2	1,561.06	1/2	1,172.84	1/2	784.85	1/2	396.75	1/2	19.33	1/2		1/2	
3/4	2,717.62	3/4	2,329.40	3/4	1,941.19	3/4	1,552.97	3/4	1,164.76	3/4	776.77	3/4	388.67	3/4	13.94	3/4		3/4	

STRAPPED: 12/17/2018 SW
CALCULATED: 12/20/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/20/18

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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Pearland, Texas 77588
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VILLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

[illegible]

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 27.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN WITH "HERMETIC CLOSED GAUGING DEVICE"
GAUGE POINT: (HERMETIC) LOCATED 12"-06" OFF CENTERLINE AND 44'-00" FORWARD OF AFT BULKHEAD.

**PRECISION MEASUREMENT
& ANALYSIS, INC.**

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Pearland, Texas 77588
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SHEET NO. 7 OF 12



BARGE "EMS 504"

2 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	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	3,082.16	0	2,893.84	0	2,505.50	0	1,917.16	0	1,528.81	0	1,147.07	0	768.97	0	390.70	0	---	0	---
1/4	3,074.07	1/4	2,885.75	1/4	2,497.41	1/4	1,909.07	1/4	1,520.72	1/4	1,139.32	1/4	760.88	1/4	382.61	1/4	---	1/4	---
1/2	3,065.98	1/2	2,877.66	1/2	2,489.32	1/2	1,900.98	1/2	1,512.63	1/2	1,131.58	1/2	752.80	1/2	374.51	1/2	---	1/2	---
3/4	3,057.89	3/4	2,869.57	3/4	2,481.23	3/4	1,892.89	3/4	1,504.54	3/4	1,123.84	3/4	744.72	3/4	366.42	3/4	---	3/4	---
1	3,049.80	1	2,861.48	1	2,473.14	1	1,884.80	1	1,496.45	1	1,115.09	1	736.63	1	358.33	1	---	1	---
1 1/4	3,041.71	1 1/4	2,853.39	1 1/4	2,465.05	1 1/4	1,876.71	1 1/4	1,488.36	1 1/4	1,106.35	1 1/4	728.55	1 1/4	350.24	1 1/4	---	1 1/4	---
1 1/2	3,033.62	1 1/2	2,845.30	1 1/2	2,456.96	1 1/2	1,868.62	1 1/2	1,480.27	1 1/2	1,100.61	1 1/2	720.47	1 1/2	342.15	1 1/2	---	1 1/2	---
3/4	3,025.53	3/4	2,837.21	3/4	2,448.87	3/4	1,860.52	3/4	1,472.18	3/4	1,092.86	3/4	712.39	3/4	334.06	3/4	---	3/4	---
2	3,017.44	2	2,829.12	2	2,440.78	2	1,852.43	2	1,464.09	2	1,084.12	2	704.30	2	325.97	2	---	2	---
1 1/4	3,009.35	1 1/4	2,821.03	1 1/4	2,432.69	1 1/4	1,844.34	1 1/4	1,455.00	1 1/4	1,077.38	1 1/4	696.21	1 1/4	317.88	1 1/4	---	1 1/4	---
1 1/2	3,001.26	1 1/2	2,812.94	1 1/2	2,424.60	1 1/2	1,836.25	1 1/2	1,447.91	1 1/2	1,069.63	1 1/2	688.12	1 1/2	309.79	1 1/2	---	1 1/2	---
3/4	2,993.17	3/4	2,804.85	3/4	2,416.51	3/4	1,828.16	3/4	1,439.82	3/4	1,061.89	3/4	680.03	3/4	301.70	3/4	---	3/4	---
3	2,985.08	3	2,796.76	3	2,408.42	3	1,820.07	3	1,431.73	3	1,054.15	3	671.94	3	293.61	3	---	3	---
1 1/4	2,976.99	1 1/4	2,788.67	1 1/4	2,400.33	1 1/4	1,811.98	1 1/4	1,423.64	1 1/4	1,046.40	1 1/4	663.85	1 1/4	285.52	1 1/4	---	1 1/4	---
1 1/2	2,968.90	1 1/2	2,780.58	1 1/2	2,392.24	1 1/2	1,803.89	1 1/2	1,415.55	1 1/2	1,038.66	1 1/2	655.76	1 1/2	277.43	1 1/2	---	1 1/2	---
3/4	2,960.81	3/4	2,772.49	3/4	2,384.14	3/4	1,795.80	3/4	1,407.46	3/4	1,030.92	3/4	647.67	3/4	269.34	3/4	---	3/4	---
4	2,952.72	4	2,764.40	4	2,376.05	4	1,787.71	4	1,399.37	4	1,023.17	4	639.58	4	261.25	4	---	4	---
1 1/4	2,944.63	1 1/4	2,756.31	1 1/4	2,367.96	1 1/4	1,779.62	1 1/4	1,391.28	1 1/4	1,015.43	1 1/4	631.49	1 1/4	253.16	1 1/4	---	1 1/4	---
1 1/2	2,936.54	1 1/2	2,748.22	1 1/2	2,359.87	1 1/2	1,771.53	1 1/2	1,383.19	1 1/2	1,007.69	1 1/2	623.40	1 1/2	245.07	1 1/2	---	1 1/2	---
3/4	2,928.45	3/4	2,740.13	3/4	2,351.78	3/4	1,763.44	3/4	1,375.09	3/4	999.94	3/4	615.31	3/4	236.98	3/4	---	3/4	---
5	2,920.36	5	2,732.04	5	2,343.69	5	1,755.35	5	1,367.00	5	992.20	5	607.22	5	228.89	5	---	5	---
1 1/4	2,912.27	1 1/4	2,723.95	1 1/4	2,335.60	1 1/4	1,747.26	1 1/4	1,358.91	1 1/4	984.46	1 1/4	599.13	1 1/4	220.80	1 1/4	---	1 1/4	---
1 1/2	2,904.18	1 1/2	2,715.86	1 1/2	2,327.51	1 1/2	1,739.17	1 1/2	1,350.82	1 1/2	976.71	1 1/2	591.04	1 1/2	212.71	1 1/2	---	1 1/2	---
3/4	2,896.09	3/4	2,707.77	3/4	2,319.42	3/4	1,731.08	3/4	1,342.73	3/4	968.87	3/4	582.95	3/4	204.62	3/4	---	3/4	---
6	2,888.00	6	2,699.67	6	2,311.33	6	1,722.99	6	1,334.64	6	961.23	6	574.86	6	196.53	6	---	6	---
1 1/4	2,879.91	1 1/4	2,691.58	1 1/4	2,303.24	1 1/4	1,714.90	1 1/4	1,326.55	1 1/4	953.49	1 1/4	566.77	1 1/4	188.44	1 1/4	---	1 1/4	---
1 1/2	2,871.82	1 1/2	2,683.49	1 1/2	2,295.15	1 1/2	1,706.81	1 1/2	1,318.46	1 1/2	945.75	1 1/2	558.68	1 1/2	180.35	1 1/2	---	1 1/2	---
3/4	2,863.73	3/4	2,675.40	3/4	2,287.06	3/4	1,698.71	3/4	1,310.37	3/4	938.01	3/4	550.59	3/4	172.26	3/4	---	3/4	---
7	2,855.64	7	2,667.31	7	2,278.97	7	1,690.62	7	1,302.45	7	930.10	7	542.50	7	164.17	7	---	7	---
1 1/4	2,847.55	1 1/4	2,659.22	1 1/4	2,270.88	1 1/4	1,682.53	1 1/4	1,294.54	1 1/4	922.19	1 1/4	534.41	1 1/4	156.08	1 1/4	---	1 1/4	---
1 1/2	2,839.46	1 1/2	2,651.13	1 1/2	2,262.79	1 1/2	1,674.44	1 1/2	1,286.62	1 1/2	914.28	1 1/2	526.32	1 1/2	147.99	1 1/2	---	1 1/2	---
3/4	2,831.37	3/4	2,643.04	3/4	2,254.70	3/4	1,666.35	3/4	1,278.70	3/4	906.37	3/4	518.23	3/4	139.90	3/4	---	3/4	---
8	2,823.28	8	2,634.95	8	2,246.61	8	1,658.26	8	1,270.66	8	898.29	8	510.14	8	131.81	8	---	8	---
1 1/4	2,815.19	1 1/4	2,626.86	1 1/4	2,238.52	1 1/4	1,650.17	1 1/4	1,263.22	1 1/4	890.21	1 1/4	502.05	1 1/4	123.72	1 1/4	---	1 1/4	---
1 1/2	2,807.10	1 1/2	2,618.77	1 1/2	2,230.43	1 1/2	1,642.08	1 1/2	1,255.47	1 1/2	882.13	1 1/2	493.96	1 1/2	115.63	1 1/2	---	1 1/2	---
3/4	2,799.01	3/4	2,610.68	3/4	2,222.33	3/4	1,633.99	3/4	1,247.73	3/4	874.04	3/4	485.87	3/4	107.54	3/4	---	3/4	---
9	2,790.92	9	2,602.59	9	2,214.24	9	1,625.90	9	1,239.99	9	865.96	9	477.78	9	99.45	9	---	9	---
1 1/4	2,782.83	1 1/4	2,594.50	1 1/4	2,206.15	1 1/4	1,617.81	1 1/4	1,232.24	1 1/4	857.88	1 1/4	469.69	1 1/4	91.36	1 1/4	---	1 1/4	---
1 1/2	2,774.74	1 1/2	2,586.41	1 1/2	2,198.06	1 1/2	1,609.72	1 1/2	1,224.50	1 1/2	849.79	1 1/2	461.60	1 1/2	83.27	1 1/2	---	1 1/2	---
3/4	2,766.65	3/4	2,578.32	3/4	2,189.97	3/4	1,601.63	3/4	1,216.76	3/4	841.71	3/4	453.51	3/4	75.18	3/4	---	3/4	---
10	2,758.56	10	2,570.23	10	2,181.88	10	1,593.54	10	1,209.01	10	833.63	10	445.42	10	67.09	10	---	10	---
1 1/4	2,750.47	1 1/4	2,562.14	1 1/4	2,173.79	1 1/4	1,585.45	1 1/4	1,201.27	1 1/4	825.55	1 1/4	437.33	1 1/4	59.00	1 1/4	---	1 1/4	---
1 1/2	2,742.38	1 1/2	2,554.05	1 1/2	2,165.70	1 1/2	1,577.36	1 1/2	1,193.53	1 1/2	817.46	1 1/2	429.24	1 1/2	50.91	1 1/2	---	1 1/2	---
3/4	2,734.29	3/4	2,545.96	3/4	2,157.61	3/4	1,569.27	3/4	1,185.78	3/4	809.38	3/4	421.15	3/4	42.82	3/4	---	3/4	---
11	2,726.20	11	2,537.86	11	2,149.52	11	1,561.18	11	1,178.04	11	801.30	11	413.06	11	34.73	11	---	11	---
1 1/4	2,718.11	1 1/4	2,529.77	1 1/4	2,141.43	1 1/4	1,553.09	1 1/4	1,170.30	1 1/4	793.21	1 1/4	404.97	1 1/4	26.64	1 1/4	---	1 1/4	---
1 1/2	2,710.02	1 1/2	2,521.68	1 1/2	2,133.34	1 1/2	1,545.00	1 1/2	1,162.55	1 1/2	785.13	1 1/2	396.88	1 1/2	18.55	1 1/2	---	1 1/2	---
3/4	2,701.93	3/4	2,513.59	3/4	2,125.25	3/4	1,536.90	3/4	1,154.81	3/4	777.05	3/4	388.79	3/4	10.46	3/4	---	3/4	---

STRAPPED: 12/17/2018 SW
CALCULATED: 12/20/2018 CL

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

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

P. J. Mac



**3 PORT
VILLAGE TABLE**

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

[illegible]

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN WITH "HERMETIC CLOSED GAUGING DEVICE" GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 4'-00" FORWARD OF AFT BULKHEAD.

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