



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

<http://www.pmacorp.net>



BARGE "EMS 504"

1 PORT

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 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.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY

**PRECISION MEASUREMENT
& ANALYSIS, INC.**

P.O. Box 2092
Pearland, Texas 77588
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SHEET NO. 1 OF 12

R. Hansen



BARGE "EMS 504"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 18'-00"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,584.33	0	2,242.68	0	1,901.02	0	1,559.35	0	1,217.68	0	877.48	0	536.28	0	263.68	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	529.90	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	1,203.45	1/2	863.59	1/2	523.53	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	517.15	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	510.77	1	240.62	1		1	
1 1/4	2,548.75	1 1/4	2,207.09	1 1/4	1,865.43	1 1/4	1,523.76	1 1/4	1,182.09	1 1/4	842.80	1 1/4	504.45	1 1/4	234.91	1 1/4		1 1/4	
1 1/2	2,541.63	1 1/2	2,199.97	1 1/2	1,858.31	1 1/2	1,516.64	1 1/2	1,174.97	1 1/2	835.91	1 1/2	518.12	1 1/2	229.20	1 1/2		1 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	511.80	3/4	223.49	3/4		3/4	
2	2,527.39	2	2,185.74	2	1,844.07	2	1,502.41	2	1,160.74	2	822.11	2	505.47	2	217.78	2		2	
1 1/4	2,520.27	1 1/4	2,178.62	1 1/4	1,836.96	1 1/4	1,495.29	1 1/4	1,153.62	1 1/4	815.27	1 1/4	499.20	1 1/4	212.11	1 1/4		1 1/4	
1 1/2	2,513.16	1 1/2	2,171.50	1 1/2	1,829.84	1 1/2	1,488.17	1 1/2	1,146.50	1 1/2	808.42	1 1/2	492.92	1 1/2	206.45	1 1/2		1 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	486.65	3/4	200.79	3/4		3/4	
3	2,498.92	3	2,157.27	3	1,815.60	3	1,473.93	3	1,132.26	3	794.72	3	480.37	3	195.13	3		3	
1 1/4	2,491.80	1 1/4	2,150.15	1 1/4	1,808.48	1 1/4	1,466.81	1 1/4	1,125.15	1 1/4	787.92	1 1/4	474.15	1 1/4	189.52	1 1/4		1 1/4	
1 1/2	2,484.69	1 1/2	2,143.03	1 1/2	1,801.37	1 1/2	1,459.70	1 1/2	1,118.03	1 1/2	781.12	1 1/2	467.92	1 1/2	183.91	1 1/2		1 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	774.32	3/4	461.70	3/4	178.30	3/4		3/4	
4	2,470.45	4	2,128.80	4	1,787.13	4	1,445.46	4	1,103.79	4	767.51	4	455.48	4	172.69	4		4	
1 1/4	2,463.33	1 1/4	2,121.68	1 1/4	1,780.01	1 1/4	1,438.34	1 1/4	1,096.67	1 1/4	760.76	1 1/4	449.30	1 1/4	167.13	1 1/4		1 1/4	
1 1/2	2,456.21	1 1/2	2,114.56	1 1/2	1,772.89	1 1/2	1,431.22	1 1/2	1,089.56	1 1/2	754.00	1 1/2	443.13	1 1/2	161.57	1 1/2		1 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	747.25	3/4	436.96	3/4	156.01	3/4		3/4	
5	2,441.98	5	2,100.33	5	1,758.66	5	1,416.99	5	1,075.32	5	740.49	5	430.79	5	150.45	5		5	
1 1/4	2,434.86	1 1/4	2,093.21	1 1/4	1,751.54	1 1/4	1,409.87	1 1/4	1,068.21	1 1/4	733.78	1 1/4	424.67	1 1/4	144.94	1 1/4		1 1/4	
1 1/2	2,427.74	1 1/2	2,086.09	1 1/2	1,744.42	1 1/2	1,402.75	1 1/2	1,061.11	1 1/2	727.06	1 1/2	418.54	1 1/2	139.43	1 1/2		1 1/2	
3/4	2,420.63	3/4	2,078.97	3/4	1,737.30	3/4	1,395.69	3/4	1,054.04	3/4	720.34	3/4	412.42	3/4	133.93	3/4		3/4	
6	2,413.51	6	2,071.85	6	1,730.18	6	1,388.52	6	1,046.90	6	713.62	6	406.30	6	128.42	6		6	
1 1/4	2,406.39	1 1/4	2,064.73	1 1/4	1,723.07	1 1/4	1,381.40	1 1/4	1,039.81	1 1/4	706.94	1 1/4	400.23	1 1/4	122.96	1 1/4		1 1/4	
1 1/2	2,399.27	1 1/2	2,057.62	1 1/2	1,715.95	1 1/2	1,374.28	1 1/2	1,032.72	1 1/2	700.25	1 1/2	394.16	1 1/2	117.50	1 1/2		1 1/2	
3/4	2,392.15	3/4	2,050.50	3/4	1,708.83	3/4	1,367.16	3/4	1,025.63	3/4	693.57	3/4	388.09	3/4	112.05	3/4		3/4	
7	2,385.04	7	2,043.38	7	1,701.71	7	1,360.04	7	1,018.54	7	686.89	7	382.02	7	106.59	7		7	
1 1/4	2,377.92	1 1/4	2,036.26	1 1/4	1,694.59	1 1/4	1,352.93	1 1/4	1,011.46	1 1/4	680.25	1 1/4	376.00	1 1/4	101.18	1 1/4		1 1/4	
1 1/2	2,370.80	1 1/2	2,029.14	1 1/2	1,687.48	1 1/2	1,345.81	1 1/2	1,004.38	1 1/2	673.62	1 1/2	369.98	1 1/2	95.78	1 1/2		1 1/2	
3/4	2,363.68	3/4	2,022.03	3/4	1,680.36	3/4	1,338.69	3/4	997.30	3/4	666.99	3/4	363.96	3/4	90.37	3/4		3/4	
8	2,356.56	8	2,014.91	8	1,673.24	8	1,331.57	8	990.22	8	660.36	8	357.94	8	84.96	8		8	
1 1/4	2,349.45	1 1/4	2,007.79	1 1/4	1,666.12	1 1/4	1,324.45	1 1/4	983.14	1 1/4	653.77	1 1/4	351.98	1 1/4	79.61	1 1/4		1 1/4	
1 1/2	2,342.33	1 1/2	2,000.67	1 1/2	1,659.00	1 1/2	1,317.33	1 1/2	976.07	1 1/2	647.19	1 1/2	346.01	1 1/2	74.26	1 1/2		1 1/2	
3/4	2,335.21	3/4	1,993.55	3/4	1,651.89	3/4	1,310.22	3/4	968.99	3/4	640.61	3/4	340.04	3/4	68.90	3/4		3/4	
9	2,328.09	9	1,986.44	9	1,644.77	9	1,303.10	9	961.92	9	634.03	9	334.07	9	63.55	9		9	
1 1/4	2,320.98	1 1/4	1,979.32	1 1/4	1,637.65	1 1/4	1,295.98	1 1/4	954.85	1 1/4	627.50	1 1/4	328.15	1 1/4	58.24	1 1/4		1 1/4	
1 1/2	2,313.86	1 1/2	1,972.20	1 1/2	1,630.53	1 1/2	1,288.86	1 1/2	947.78	1 1/2	620.97	1 1/2	322.24	1 1/2	52.94	1 1/2		1 1/2	
3/4	2,306.74	3/4	1,965.08	3/4	1,623.41	3/4	1,281.74	3/4	940.72	3/4	614.44	3/4	316.32	3/4	47.63	3/4		3/4	
10	2,299.62	10	1,957.96	10	1,616.29	10	1,274.63	10	933.65	10	607.91	10	310.40	10	42.33	10		10	
1 1/4	2,292.50	1 1/4	1,950.85	1 1/4	1,609.18	1 1/4	1,267.51	1 1/4	926.60	1 1/4	601.43	1 1/4	304.54	1 1/4	37.67	1 1/4		1 1/4	
1 1/2	2,285.39	1 1/2	1,943.73	1 1/2	1,602.06	1 1/2	1,260.39	1 1/2	919.56	1 1/2	594.95	1 1/2	298.67	1 1/2	33.01	1 1/2		1 1/2	
3/4	2,278.27	3/4	1,936.61	3/4	1,594.94	3/4	1,253.27	3/4	912.52	3/4	588.47	3/4	292.81	3/4	28.35	3/4		3/4	
11	2,271.15	11	1,929.49	11	1,587.82	11	1,246.15	11	905.48	11	581.99	11	286.94	11	23.69	11		11	
1 1/4	2,264.03	1 1/4	1,922.37	1 1/4	1,580.70	1 1/4	1,239.04	1 1/4	898.48	1 1/4	575.57	1 1/4	281.12	1 1/4	20.37	1 1/4		1 1/4	
1 1/2	2,256.92	1 1/2	1,915.25	1 1/2	1,573.59	1 1/2	1,231.92	1 1/2	891.48	1 1/2	569.14	1 1/2	275.31	1 1/2	17.05	1 1/2		1 1/2	
3/4	2,249.80	3/4	1,908.14	3/4	1,566.47	3/4	1,224.80	3/4	884.48	3/4	562.71	3/4	269.49	3/4	13.73	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pasland, Texas 77588
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ULLAGE TABLE

GAUGE HEIGHT 17'-11 3/4"

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY

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.



BARGE "EMS 504"

1 STBD
ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-11 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,583.18	0	2,240.77	0	1,898.35	0	1,555.93	0	1,213.49	0	872.69	0	551.30	0	256.59	0		0	
1/4	2,576.05	1/4	2,233.64	1/4	1,891.22	1/4	1,548.80	1/4	1,206.36	1/4	865.73	1/4	544.91	1/4	252.82	1/4		1/4	
1/2	2,568.91	1/2	2,226.50	1/2	1,884.08	1/2	1,541.66	1/2	1,199.23	1/2	858.76	1/2	538.52	1/2	247.04	1/2		1/2	
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	532.13	3/4	241.26	3/4		3/4	
1	2,554.65	1	2,212.24	1	1,869.82	1	1,527.39	1	1,184.89	1	844.89	1	525.79	1	235.53	1		1	
1/4	2,547.51	1/4	2,205.10	1/4	1,862.68	1/4	1,520.26	1/4	1,177.82	1/4	837.98	1/4	519.45	1/4	229.80	1/4		1/4	
1/2	2,540.38	1/2	2,197.97	1/2	1,855.55	1/2	1,513.12	1/2	1,170.69	1/2	831.06	1/2	513.11	1/2	224.08	1/2		1/2	
3/4	2,533.25	3/4	2,190.84	3/4	1,848.42	3/4	1,505.99	3/4	1,163.56	3/4	824.15	3/4	506.76	3/4	218.35	3/4		3/4	
2	2,526.11	2	2,183.70	2	1,841.29	2	1,498.85	2	1,156.42	2	817.29	2	500.47	2	212.67	2		2	
1/4	2,518.98	1/4	2,176.57	1/4	1,834.15	1/4	1,491.72	1/4	1,149.29	1/4	810.43	1/4	494.18	1/4	207.00	1/4		1/4	
1/2	2,511.84	1/2	2,169.44	1/2	1,827.02	1/2	1,484.59	1/2	1,142.15	1/2	803.56	1/2	487.89	1/2	201.32	1/2		1/2	
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	481.60	3/4	195.64	3/4		3/4	
3	2,497.58	3	2,155.17	3	1,812.75	3	1,470.32	3	1,127.89	3	789.88	3	475.37	3	190.02	3		3	
1/4	2,490.44	1/4	2,148.04	1/4	1,805.62	1/4	1,463.18	1/4	1,120.75	1/4	783.06	1/4	469.13	1/4	184.39	1/4		1/4	
1/2	2,483.31	1/2	2,140.90	1/2	1,798.48	1/2	1,456.05	1/2	1,113.62	1/2	776.24	1/2	462.89	1/2	178.77	1/2		1/2	
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	456.65	3/4	173.14	3/4		3/4	
4	2,469.04	4	2,126.64	4	1,784.21	4	1,441.78	4	1,099.35	4	762.65	4	450.46	4	167.57	4		4	
1/4	2,461.91	1/4	2,119.50	1/4	1,777.08	1/4	1,434.65	1/4	1,092.22	1/4	755.88	1/4	444.27	1/4	162.00	1/4		1/4	
1/2	2,454.78	1/2	2,112.37	1/2	1,769.95	1/2	1,427.51	1/2	1,085.08	1/2	749.11	1/2	438.09	1/2	156.42	1/2		1/2	
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	431.90	3/4	150.85	3/4		3/4	
5	2,440.51	5	2,098.10	5	1,755.68	5	1,413.25	5	1,070.83	5	735.61	5	425.76	5	145.33	5		5	
1/4	2,433.38	1/4	2,090.97	1/4	1,748.54	1/4	1,406.11	1/4	1,063.70	1/4	728.87	1/4	419.63	1/4	139.80	1/4		1/4	
1/2	2,426.24	1/2	2,083.84	1/2	1,741.41	1/2	1,398.98	1/2	1,056.58	1/2	722.14	1/2	413.49	1/2	134.28	1/2		1/2	
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	407.35	3/4	128.76	3/4		3/4	
6	2,411.98	6	2,069.57	6	1,727.14	6	1,384.71	6	1,042.36	6	708.71	6	401.27	6	123.29	6		6	
1/4	2,404.84	1/4	2,062.43	1/4	1,720.01	1/4	1,377.58	1/4	1,035.25	1/4	702.01	1/4	395.18	1/4	117.81	1/4		1/4	
1/2	2,397.71	1/2	2,055.30	1/2	1,712.87	1/2	1,370.44	1/2	1,028.15	1/2	695.31	1/2	389.10	1/2	112.34	1/2		1/2	
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	383.01	3/4	106.87	3/4		3/4	
7	2,383.44	7	2,041.03	7	1,698.61	7	1,356.17	7	1,013.94	7	681.96	7	376.98	7	101.45	7		7	
1/4	2,376.31	1/4	2,033.90	1/4	1,691.47	1/4	1,349.04	1/4	1,006.85	1/4	675.31	1/4	370.94	1/4	96.03	1/4		1/4	
1/2	2,369.17	1/2	2,026.76	1/2	1,684.34	1/2	1,341.91	1/2	999.75	1/2	668.67	1/2	364.91	1/2	90.61	1/2		1/2	
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	358.87	3/4	85.19	3/4		3/4	
8	2,354.91	8	2,012.50	8	1,670.07	8	1,327.64	8	985.56	8	655.42	8	352.89	8	79.82	8		8	
1/4	2,347.77	1/4	2,005.36	1/4	1,662.94	1/4	1,320.50	1/4	978.47	1/4	648.82	1/4	346.91	1/4	74.45	1/4		1/4	
1/2	2,340.64	1/2	1,998.23	1/2	1,655.80	1/2	1,313.37	1/2	971.38	1/2	642.23	1/2	340.92	1/2	69.08	1/2		1/2	
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	334.94	3/4	63.71	3/4		3/4	
9	2,326.37	9	1,983.96	9	1,641.53	9	1,299.10	9	957.20	9	629.09	9	329.01	9	58.39	9		9	
1/4	2,319.24	1/4	1,976.83	1/4	1,634.40	1/4	1,291.97	1/4	950.12	1/4	622.54	1/4	323.08	1/4	53.07	1/4		1/4	
1/2	2,312.11	1/2	1,969.69	1/2	1,627.27	1/2	1,284.83	1/2	943.03	1/2	615.99	1/2	317.15	1/2	47.76	1/2		1/2	
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	311.21	3/4	42.44	3/4		3/4	
10	2,297.84	10	1,955.42	10	1,613.00	10	1,270.57	10	928.89	10	602.95	10	305.33	10	37.76	10		10	
1/4	2,290.71	1/4	1,948.29	1/4	1,605.86	1/4	1,263.43	1/4	921.83	1/4	596.46	1/4	299.45	1/4	33.09	1/4		1/4	
1/2	2,283.57	1/2	1,941.16	1/2	1,598.73	1/2	1,256.30	1/2	914.71	1/2	589.96	1/2	293.57	1/2	28.42	1/2		1/2	
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	287.69	3/4	23.75	3/4		3/4	
11	2,269.31	11	1,926.89	11	1,584.46	11	1,242.03	11	900.70	11	577.03	11	281.86	11	20.42	11		11	
1/4	2,262.17	1/4	1,919.75	1/4	1,577.33	1/4	1,234.90	1/4	893.67	1/4	570.58	1/4	276.03	1/4	17.09	1/4		1/4	
1/2	2,255.04	1/2	1,912.62	1/2	1,570.19	1/2	1,227.76	1/2	886.67	1/2	564.14	1/2	270.20	1/2	13.76	1/2		1/2	
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	264.37	3/4	10.43	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

PRECISION MEASUREMENT

8 ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>

CANCELS AND SUPERCEDES

ALL PRIOR TO 12/20/18



BARGE "EMS 504"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-11 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	0	0	5,635.90	0	5,335.67	0	5,004.32	0	4,646.69	0	4,262.36	0	3,874.14	0	3,485.94	0	3,085.94
1/4	1/4	1/4	1/4	1/4	5,633.93	1/4	5,329.03	1/4	4,997.13	1/4	4,637.93	1/4	4,254.27	1/4	3,866.05	1/4	3,477.85	1/4	3,077.85
1/2	1/2	1/2	1/2	1/2	5,627.96	1/2	5,322.39	1/2	4,989.94	1/2	4,630.16	1/2	4,246.19	1/2	3,857.97	1/2	3,469.76	1/2	3,069.76
3/4	3/4	3/4	3/4	3/4	5,621.99	3/4	5,315.76	3/4	4,982.75	3/4	4,623.10	3/4	4,238.10	3/4	3,849.88	3/4	3,461.67	3/4	3,061.67
1	1	1	1	1	5,615.91	1	5,309.07	1	4,975.51	1	4,615.59	1	4,230.01	1	3,841.79	1	3,453.59	1	3,053.59
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,609.84	1 1/4	5,302.39	1 1/4	4,968.27	1 1/4	4,608.77	1 1/4	4,221.92	1 1/4	3,833.70	1 1/4	3,445.50	1 1/4	3,045.50
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,603.76	1 1/2	5,295.70	1 1/2	4,961.04	1 1/2	4,598.96	1 1/2	4,213.83	1 1/2	3,825.62	1 1/2	3,437.41	1 1/2	3,037.41
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,597.69	3 1/4	5,289.02	3 1/4	4,953.80	3 1/4	4,591.15	3 1/4	4,205.75	3 1/4	3,817.53	3 1/4	3,429.32	3 1/4	3,029.32
2	2	2	2	2	5,591.51	2	5,282.29	2	4,946.52	2	4,583.29	2	4,197.66	2	3,809.44	2	3,421.24	2	3,021.24
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,585.33	1 1/4	5,275.56	1 1/4	4,939.23	1 1/4	4,575.44	1 1/4	4,189.57	1 1/4	3,801.35	1 1/4	3,413.15	1 1/4	3,013.15
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,579.16	1 1/2	5,268.83	1 1/2	4,931.95	1 1/2	4,567.58	1 1/2	4,181.48	1 1/2	3,793.26	1 1/2	3,405.06	1 1/2	3,005.06
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,572.98	3 1/4	5,262.10	3 1/4	4,924.67	3 1/4	4,559.72	3 1/4	4,173.40	3 1/4	3,785.18	3 1/4	3,396.97	3 1/4	2,996.97
3	3	3	3	3	5,566.76	3	5,255.32	3	4,917.33	3	4,551.82	3	4,165.31	3	3,777.09	3	3,388.89	3	2,988.89
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,560.53	1 1/4	5,248.55	1 1/4	4,909.99	1 1/4	4,543.91	1 1/4	4,157.22	1 1/4	3,769.00	1 1/4	3,380.80	1 1/4	2,980.80
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,554.31	1 1/2	5,241.77	1 1/2	4,902.65	1 1/2	4,536.01	1 1/2	4,149.13	1 1/2	3,760.91	1 1/2	3,372.71	1 1/2	2,972.71
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,548.09	3 1/4	5,234.99	3 1/4	4,895.31	3 1/4	4,528.11	3 1/4	4,141.04	3 1/4	3,752.82	3 1/4	3,364.62	3 1/4	2,964.62
4	4	4	4	4	5,541.82	4	5,228.17	4	4,887.91	4	4,520.16	4	4,132.96	4	3,744.74	4	3,356.54	4	2,956.54
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,535.55	1 1/4	5,221.35	1 1/4	4,880.51	1 1/4	4,512.21	1 1/4	4,124.87	1 1/4	3,736.65	1 1/4	3,348.45	1 1/4	2,948.45
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,529.28	1 1/2	5,214.53	1 1/2	4,873.12	1 1/2	4,504.26	1 1/2	4,116.78	1 1/2	3,728.56	1 1/2	3,340.36	1 1/2	2,940.36
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,523.01	3 1/4	5,207.70	3 1/4	4,865.72	3 1/4	4,496.31	3 1/4	4,108.69	3 1/4	3,720.47	3 1/4	3,332.27	3 1/4	2,932.27
5	5	5	5	5	5,516.69	5	5,200.84	5	4,858.28	5	4,488.31	5	4,100.60	5	3,712.91	5	3,324.71	5	2,936.71
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,510.38	1 1/4	5,193.97	1 1/4	4,850.84	1 1/4	4,480.32	1 1/4	4,092.52	1 1/4	3,704.30	1 1/4	3,316.10	1 1/4	2,928.10
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,504.06	1 1/2	5,187.10	1 1/2	4,843.39	1 1/2	4,472.32	1 1/2	4,084.43	1 1/2	3,696.21	1 1/2	3,308.01	1 1/2	2,920.01
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,497.75	3 1/4	5,180.23	3 1/4	4,835.95	3 1/4	4,465.33	3 1/4	4,076.34	3 1/4	3,688.12	3 1/4	3,299.92	3 1/4	2,919.92
6	6	6	6	6	5,491.39	6	5,173.32	6	4,828.46	6	4,458.29	6	4,068.25	6	3,680.03	6	3,291.84	6	2,911.84
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,485.03	1 1/4	5,166.40	1 1/4	4,820.97	1 1/4	4,448.24	1 1/4	4,060.16	1 1/4	3,671.95	1 1/4	3,283.75	1 1/4	2,903.75
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,478.66	1 1/2	5,159.49	1 1/2	4,813.43	1 1/2	4,440.20	1 1/2	4,052.08	1 1/2	3,663.86	1 1/2	3,275.66	1 1/2	2,905.66
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,472.30	3 1/4	5,152.57	3 1/4	4,806.00	3 1/4	4,432.16	3 1/4	4,043.99	3 1/4	3,655.77	3 1/4	3,267.57	3 1/4	2,907.57
7	7	7	7	7	5,465.90	7	5,145.61	7	4,798.46	7	4,424.08	7	4,035.90	7	3,647.68	7	3,259.49	7	2,909.49
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,459.49	1 1/4	5,138.65	1 1/4	4,790.93	1 1/4	4,416.01	1 1/4	4,027.81	1 1/4	3,639.59	1 1/4	3,251.40	1 1/4	2,901.40
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,453.08	1 1/2	5,131.69	1 1/2	4,783.39	1 1/2	4,407.93	1 1/2	4,019.73	1 1/2	3,631.51	1 1/2	3,243.31	1 1/2	2,903.31
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,446.67	3 1/4	5,124.73	3 1/4	4,775.86	3 1/4	4,399.86	3 1/4	4,011.64	3 1/4	3,623.42	3 1/4	3,235.22	3 1/4	2,905.22
8	8	8	8	8	5,440.22	8	5,117.72	8	4,768.28	8	4,391.77	8	4,003.55	8	3,615.33	8	3,227.14	8	2,907.14
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,433.77	1 1/4	5,110.72	1 1/4	4,760.70	1 1/4	4,383.68	1 1/4	3,995.46	1 1/4	3,607.25	1 1/4	3,219.05	1 1/4	2,909.05
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,427.31	1 1/2	5,103.71	1 1/2	4,753.12	1 1/2	4,375.59	1 1/2	3,987.37	1 1/2	3,599.16	1 1/2	3,210.96	1 1/2	2,911.96
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,420.86	3 1/4	5,096.70	3 1/4	4,745.53	3 1/4	4,367.50	3 1/4	3,979.29	3 1/4	3,591.07	3 1/4	3,202.87	3 1/4	2,913.87
9	9	9	9	9	5,414.36	9	5,089.65	9	4,737.91	9	4,359.42	9	3,971.20	9	3,582.99	9	3,194.79	9	2,915.79
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,407.86	1 1/4	5,082.60	1 1/4	4,730.28	1 1/4	4,351.33	1 1/4	3,963.11	1 1/4	3,574.90	1 1/4	3,186.70	1 1/4	2,917.70
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,401.36	1 1/2	5,075.54	1 1/2	4,722.65	1 1/2	4,343.24	1 1/2	3,955.02	1 1/2	3,566.81	1 1/2	3,178.61	1 1/2	2,919.61
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,394.86	3 1/4	5,068.49	3 1/4	4,715.03	3 1/4	4,335.15	3 1/4	3,946.93	3 1/4	3,558.72	3 1/4	3,170.52	3 1/4	2,921.52
10	10	10	10	10	5,388.31	10	5,061.39	10	4,707.35	10	4,327.07	10	3,938.85	10	3,550.64	10	3,162.44	10	2,923.44
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,381.77	1 1/4	5,054.29	1 1/4	4,699.68	1 1/4	4,318.98	1 1/4	3,930.76	1 1/4	3,542.55	1 1/4	3,154.35	1 1/4	2,925.35
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,375.22	1 1/2	5,047.19	1 1/2	4,692.01	1 1/2	4,312.89	1 1/2	3,924.67	1 1/2	3,536.46	1 1/2	3,148.26	1 1/2	2,927.26
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,368.68	3 1/4	5,040.09	3 1/4	4,684.33	3 1/4	4,302.80	3 1/4	3,914.58	3 1/4	3,526.37	3 1/4	3,138.17	3 1/4	2,929.17
11	11	11	11	11	5,362.08	11	5,032.95	11	4,676.61	11	4,294.71	11	3,906.49	11	3,518.29	11	3,130.09	11	2,931.09
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	5,355.49	1 1/4	5,025.80	1 1/4	4,668.90	1 1/4	4,286.63	1 1/4	3,898.41	1 1/4	3,510.20	1 1/4	3,122.00	1 1/4	2,933.00
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	5,348.90	1 1/2	5,018.66	1 1/2	4,661.18	1 1/2	4,278.54	1 1/2	3,890.32	1 1/2	3,502.11	1 1/2	3,113.91	1 1/2	2,934.91
3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	5,342.31	3 1/4	5,011.51	3 1/4	4,653.46	3 1/4	4,270.45	3 1/4	3,882.23	3 1/4	3,494.02	3 1/4	3,105.82	3 1/4	2,936.82

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.

"HERMETIC CLOSED GAUGING DEVICE"
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.

P.O. Box 2092

Portland, Texas 77588

<http://www.pmaacorp.net>



BARGE "EMS 504"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-11 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	3,097.74	0	2,709.54	0	2,321.31	0	1,933.10	0	1,544.88	0	1,156.67	0	768.69	0	380.58	0		0	
1/4	3,089.65	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 1/4	3,057.30	1 1/4	2,669.10	1 1/4	2,280.87	1 1/4	1,892.66	1 1/4	1,504.44	1 1/4	1,116.23	1 1/4	728.30	1 1/4	340.14	1 1/4		1 1/4	
1 1/2	3,049.21	1 1/2	2,661.01	1 1/2	2,272.79	1 1/2	1,884.57	1 1/2	1,496.36	1 1/2	1,108.14	1 1/2	720.23	1 1/2	332.05	1 1/2		1 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 3/4	3,024.95	1 3/4	2,636.75	1 3/4	2,248.52	1 3/4	1,860.31	1 3/4	1,472.09	1 3/4	1,083.88	1 3/4	695.99	1 3/4	307.79	1 3/4		1 3/4	
1 1/2	3,016.86	1 1/2	2,628.66	1 1/2	2,240.43	1 1/2	1,852.22	1 1/2	1,464.01	1 1/2	1,075.79	1 1/2	687.91	1 1/2	299.70	1 1/2		1 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 1/4	2,992.60	1 1/4	2,604.40	1 1/4	2,216.17	1 1/4	1,827.96	1 1/4	1,439.74	1 1/4	1,051.53	1 1/4	663.65	1 1/4	275.44	1 1/4		1 1/4	
1 1/2	2,984.51	1 1/2	2,596.31	1 1/2	2,208.08	1 1/2	1,819.87	1 1/2	1,431.65	1 1/2	1,043.44	1 1/2	655.56	1 1/2	267.35	1 1/2		1 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 1/4	2,960.25	1 1/4	2,572.04	1 1/4	2,183.82	1 1/4	1,795.61	1 1/4	1,407.39	1 1/4	1,019.18	1 1/4	631.30	1 1/4	243.09	1 1/4		1 1/4	
1 1/2	2,952.16	1 1/2	2,563.95	1 1/2	2,175.73	1 1/2	1,787.52	1 1/2	1,399.30	1 1/2	1,011.09	1 1/2	623.21	1 1/2	235.00	1 1/2		1 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 1/4	2,927.90	1 1/4	2,539.68	1 1/4	2,151.47	1 1/4	1,763.25	1 1/4	1,375.04	1 1/4	986.83	1 1/4	598.95	1 1/4	210.74	1 1/4		1 1/4	
1 1/2	2,919.81	1 1/2	2,531.60	1 1/2	2,143.38	1 1/2	1,755.17	1 1/2	1,366.95	1 1/2	978.74	1 1/2	590.86	1 1/2	202.65	1 1/2		1 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 1/4	2,895.55	1 1/4	2,507.33	1 1/4	2,119.12	1 1/4	1,730.90	1 1/4	1,342.69	1 1/4	954.48	1 1/4	566.60	1 1/4	178.39	1 1/4		1 1/4	
1 1/2	2,887.46	1 1/2	2,499.24	1 1/2	2,111.03	1 1/2	1,722.82	1 1/2	1,334.60	1 1/2	946.40	1 1/2	558.51	1 1/2	170.30	1 1/2		1 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 1/4	2,863.20	1 1/4	2,474.98	1 1/4	2,086.77	1 1/4	1,698.55	1 1/4	1,310.34	1 1/4	922.16	1 1/4	534.25	1 1/4	146.04	1 1/4		1 1/4	
1 1/2	2,855.11	1 1/2	2,466.89	1 1/2	2,078.68	1 1/2	1,690.46	1 1/2	1,302.25	1 1/2	914.09	1 1/2	526.16	1 1/2	137.95	1 1/2		1 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 1/4	2,830.85	1 1/4	2,442.63	1 1/4	2,054.42	1 1/4	1,666.20	1 1/4	1,277.99	1 1/4	889.85	1 1/4	501.89	1 1/4	113.68	1 1/4		1 1/4	
1 1/2	2,822.76	1 1/2	2,434.54	1 1/2	2,046.33	1 1/2	1,658.11	1 1/2	1,269.90	1 1/2	881.78	1 1/2	493.81	1 1/2	105.60	1 1/2		1 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	97.51	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 1/4	2,798.50	1 1/4	2,410.28	1 1/4	2,022.06	1 1/4	1,633.85	1 1/4	1,245.64	1 1/4	857.54	1 1/4	469.54	1 1/4	81.33	1 1/4		1 1/4	
1 1/2	2,790.41	1 1/2	2,402.19	1 1/2	2,013.98	1 1/2	1,625.76	1 1/2	1,237.55	1 1/2	849.47	1 1/2	461.46	1 1/2	73.25	1 1/2		1 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 1/4	2,766.15	1 1/4	2,377.93	1 1/4	1,989.71	1 1/4	1,601.50	1 1/4	1,213.28	1 1/4	825.23	1 1/4	437.19	1 1/4	48.98	1 1/4		1 1/4	
1 1/2	2,758.06	1 1/2	2,369.84	1 1/2	1,981.62	1 1/2	1,593.41	1 1/2	1,205.20	1 1/2	817.16	1 1/2	429.11	1 1/2	40.89	1 1/2		1 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	32.80	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	24.71	11		11	
1 1/4	2,733.80	1 1/4	2,345.58	1 1/4	1,957.36	1 1/4	1,569.15	1 1/4	1,180.93	1 1/4	792.92	1 1/4	404.84	1 1/4	16.62	1 1/4		1 1/4	
1 1/2	2,725.71	1 1/2	2,337.49	1 1/2	1,949.27	1 1/2	1,561.06	1 1/2	1,172.84	1 1/2	784.85	1 1/2	396.75	1 1/2	8.53	1 1/2		1 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	0.44	3/4		3/4	

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

& ANALYSIS, INC.

P.O. Box 2052

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BARGE "EMS 504"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-11 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	0	0	5,625.48	0	5,321.00	0	4,989.44	0	4,630.64	0	4,247.17	0	3,856.83	0	3,470.48		
1/4	1/4	1/4	1/4	1/4	5,619.50	1/4	5,314.36	1/4	4,982.25	1/4	4,622.87	1/4	4,239.08	1/4	3,850.74	1/4	3,462.39		
1/2	1/2	1/2	1/2	1/2	5,613.53	1/2	5,307.71	1/2	4,975.05	1/2	4,617.11	1/2	4,230.99	1/2	3,842.65	1/2	3,454.30		
3/4	3/4	3/4	3/4	3/4	5,607.55	3/4	4,967.86	3/4	4,907.85	3/4	4,548.64	3/4	4,186.27	3/4	3,826.47	3/4	3,438.12		
1	1	1	1	1	5,601.47	1	5,294.38	1	4,900.62	1	4,599.52	1	4,214.81	1	3,826.47	1	3,438.12		
1/4	1/4	1/4	1/4	1/4	5,595.39	1/4	5,287.69	1/4	4,933.38	1/4	4,591.71	1/4	4,206.72	1/4	3,818.38	1/4	3,430.03		
1/2	1/2	1/2	1/2	1/2	5,589.31	1/2	5,281.01	1/2	4,946.14	1/2	4,583.89	1/2	4,198.63	1/2	3,810.29	1/2	3,421.94		
3/4	3/4	3/4	3/4	3/4	5,583.23	3/4	5,274.32	3/4	4,938.89	3/4	4,576.08	3/4	4,190.54	3/4	3,802.20	3/4	3,413.85		
2	2	2	2	2	5,577.05	2	5,267.58	2	4,931.61	2	4,566.22	2	4,182.45	2	3,794.11	2	3,405.76		
1/4	1/4	1/4	1/4	1/4	5,570.86	1/4	5,260.85	1/4	4,924.32	1/4	4,560.36	1/4	4,174.36	1/4	3,786.02	1/4	3,397.67		
1/2	1/2	1/2	1/2	1/2	5,564.68	1/2	5,254.11	1/2	4,917.03	1/2	4,552.50	1/2	4,166.27	1/2	3,777.93	1/2	3,389.58		
3/4	3/4	3/4	3/4	3/4	5,558.50	3/4	5,247.38	3/4	4,909.75	3/4	4,544.64	3/4	4,158.18	3/4	3,769.84	3/4	3,381.49		
3	3	3	3	3	5,552.27	3	5,240.60	3	4,902.40	3	4,538.73	3	4,150.09	3	3,761.74	3	3,373.40		
1/4	1/4	1/4	1/4	1/4	5,546.04	1/4	5,233.82	1/4	4,895.06	1/4	4,528.83	1/4	4,142.00	1/4	3,753.65	1/4	3,365.31		
1/2	1/2	1/2	1/2	1/2	5,539.81	1/2	5,227.03	1/2	4,887.71	1/2	4,520.92	1/2	4,133.91	1/2	3,745.56	1/2	3,357.22		
3/4	3/4	3/4	3/4	3/4	5,533.58	3/4	5,220.25	3/4	4,880.37	3/4	4,513.01	3/4	4,125.82	3/4	3,737.47	3/4	3,349.13		
4	4	4	4	4	5,527.31	4	5,213.43	4	4,872.97	4	4,505.06	4	4,117.73	4	3,729.38	4	3,341.04		
1/4	1/4	1/4	1/4	1/4	5,521.04	1/4	5,206.60	1/4	4,865.57	1/4	4,497.11	1/4	4,109.64	1/4	3,721.29	1/4	3,332.95		
1/2	1/2	1/2	1/2	1/2	5,514.76	1/2	5,199.77	1/2	4,858.17	1/2	4,489.16	1/2	4,101.55	1/2	3,713.20	1/2	3,324.86		
3/4	3/4	3/4	3/4	3/4	5,508.49	3/4	5,192.95	3/4	4,850.77	3/4	4,481.20	3/4	4,093.46	3/4	3,705.11	3/4	3,316.77		
5	5	5	5	5	5,502.17	5	5,186.07	5	4,843.32	5	4,473.21	5	4,085.36	5	3,697.02	5	3,308.68		
1/4	1/4	1/4	1/4	1/4	5,495.84	1/4	5,179.20	1/4	4,835.88	1/4	4,465.21	1/4	4,077.27	1/4	3,688.93	1/4	3,300.59		
1/2	1/2	1/2	1/2	1/2	5,489.52	1/2	5,172.33	1/2	4,828.43	1/2	4,457.21	1/2	4,069.18	1/2	3,680.84	1/2	3,292.50		
3/4	3/4	3/4	3/4	3/4	5,483.20	3/4	5,165.45	3/4	4,820.99	3/4	4,449.21	3/4	4,061.09	3/4	3,672.75	3/4	3,284.41		
6	6	6	6	6	5,476.84	6	5,158.54	6	4,813.49	6	4,441.17	6	4,053.00	6	3,664.66	6	3,276.32		
1/4	1/4	1/4	1/4	1/4	5,470.47	1/4	5,151.62	1/4	4,806.00	1/4	4,433.12	1/4	4,044.91	1/4	3,656.57	1/4	3,268.23		
1/2	1/2	1/2	1/2	1/2	5,464.10	1/2	5,144.70	1/2	4,798.51	1/2	4,425.08	1/2	4,036.82	1/2	3,648.48	1/2	3,260.14		
3/4	3/4	3/4	3/4	3/4	5,457.74	3/4	5,137.78	3/4	4,791.02	3/4	4,417.03	3/4	4,028.73	3/4	3,640.39	3/4	3,252.05		
7	7	7	7	7	5,451.32	7	5,130.81	7	4,783.48	7	4,408.95	7	4,020.64	7	3,632.30	7	3,243.96		
1/4	1/4	1/4	1/4	1/4	5,444.91	1/4	5,123.85	1/4	4,775.94	1/4	4,400.87	1/4	4,012.55	1/4	3,624.21	1/4	3,235.87		
1/2	1/2	1/2	1/2	1/2	5,438.50	1/2	5,116.88	1/2	4,768.40	1/2	4,392.79	1/2	4,004.46	1/2	3,616.12	1/2	3,227.78		
3/4	3/4	3/4	3/4	3/4	5,432.09	3/4	5,109.92	3/4	4,760.86	3/4	4,384.71	3/4	3,996.37	3/4	3,608.03	3/4	3,219.69		
8	8	8	8	8	5,425.63	8	5,102.91	8	4,753.28	8	4,376.62	8	3,988.28	8	3,599.93	8	3,211.60		
1/4	1/4	1/4	1/4	1/4	5,419.17	1/4	5,095.90	1/4	4,745.70	1/4	4,368.53	1/4	3,980.19	1/4	3,591.84	1/4	3,203.51		
1/2	1/2	1/2	1/2	1/2	5,412.71	1/2	5,088.89	1/2	4,738.11	1/2	4,360.44	1/2	3,972.10	1/2	3,583.75	1/2	3,195.42		
3/4	3/4	3/4	3/4	3/4	5,406.25	3/4	5,081.88	3/4	4,730.53	3/4	4,352.35	3/4	3,964.01	3/4	3,575.65	3/4	3,187.33		
9	9	9	9	9	5,399.75	9	5,074.82	9	4,722.90	9	4,344.26	9	3,955.92	9	3,567.56	9	3,179.24		
1/4	1/4	1/4	1/4	1/4	5,393.24	1/4	5,067.76	1/4	4,715.27	1/4	4,336.17	1/4	3,947.83	1/4	3,559.47	1/4	3,171.15		
1/2	1/2	1/2	1/2	1/2	5,386.74	1/2	5,060.70	1/2	4,707.64	1/2	4,328.08	1/2	3,939.74	1/2	3,551.38	1/2	3,163.06		
3/4	3/4	3/4	3/4	3/4	5,380.23	3/4	5,053.65	3/4	4,700.01	3/4	4,319.99	3/4	3,931.65	3/4	3,543.29	3/4	3,154.97		
10	10	10	10	10	5,373.68	10	5,046.54	10	4,692.33	10	4,311.90	10	3,923.55	10	3,535.20	10	3,146.88		
1/4	1/4	1/4	1/4	1/4	5,367.13	1/4	5,039.44	1/4	4,684.65	1/4	4,303.81	1/4	3,915.46	1/4	3,527.11	1/4	3,138.79		
1/2	1/2	1/2	1/2	1/2	5,360.58	1/2	5,032.34	1/2	4,676.98	1/2	4,295.72	1/2	3,907.37	1/2	3,518.92	1/2	3,130.70		
3/4	3/4	3/4	3/4	3/4	5,354.03	3/4	5,025.24	3/4	4,669.30	3/4	4,287.63	3/4	3,899.28	3/4	3,510.93	3/4	3,122.61		
11	11	11	11	11	5,347.43	11	5,018.09	11	4,661.58	11	4,279.54	11	3,891.19	11	3,502.84	11	3,114.52		
1/4	1/4	1/4	1/4	1/4	5,340.84	1/4	5,010.94	1/4	4,653.86	1/4	4,271.45	1/4	3,883.10	1/4	3,494.75	1/4	3,106.43		
1/2	1/2	1/2	1/2	1/2	5,334.24	1/2	5,003.79	1/2	4,646.13	1/2	4,263.36	1/2	3,875.01	1/2	3,486.66	1/2	3,098.34		
3/4	3/4	3/4	3/4	3/4	5,327.64	3/4	4,996.64	3/4	4,638.41	3/4	4,255.27	3/4	3,866.92	3/4	3,478.57	3/4	3,090.25		

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN WITH "HERMETIC CLOSED GAUGING DEVICE"
GAUGE POINT: (HERMETIC) LOCATED 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

Pearland, Texas 77568

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CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

BARGE "EMS 504"

2 STBD ULLAGE TABLE

GAUGE HEIGHT 17'-11 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	3,082.16	0	2,893.84	0	2,305.50	0	1,917.16	0	1,528.81	0	1,147.07	0	768.97	0	380.70	0		0	
1/4	3,074.07	1/4	2,685.75	1/4	2,297.41	1/4	1,909.07	1/4	1,520.72	1/4	1,139.32	1/4	760.88	1/4	372.61	1/4		1/4	
1/2	3,066.98	1/2	2,677.66	1/2	2,289.32	1/2	1,900.98	1/2	1,512.63	1/2	1,131.58	1/2	752.80	1/2	364.51	1/2		1/2	
3/4	3,057.89	3/4	2,669.57	3/4	2,281.23	3/4	1,892.89	3/4	1,504.54	3/4	1,123.84	3/4	744.72	3/4	356.42	3/4		3/4	
1	3,049.80	1	2,661.48	1	2,273.14	1	1,884.80	1	1,496.45	1	1,116.09	1	736.63	1	348.33	1		1	
1 1/4	3,041.71	1 1/4	2,653.39	1 1/4	2,265.05	1 1/4	1,876.71	1 1/4	1,488.36	1 1/4	1,108.35	1 1/4	728.55	1 1/4	340.24	1 1/4		1 1/4	
1 1/2	3,033.62	1 1/2	2,645.30	1 1/2	2,256.96	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	332.15	1 1/2		1 1/2	
1 3/4	3,025.53	1 3/4	2,637.21	1 3/4	2,248.87	1 3/4	1,860.52	1 3/4	1,472.18	1 3/4	1,092.86	1 3/4	712.39	1 3/4	324.06	1 3/4		1 3/4	
2	3,017.44	2	2,629.12	2	2,240.78	2	1,852.43	2	1,464.09	2	1,085.12	2	704.30	2	315.97	2		2	
2 1/4	3,009.35	2 1/4	2,621.03	2 1/4	2,232.69	2 1/4	1,844.34	2 1/4	1,456.00	2 1/4	1,077.38	2 1/4	696.21	2 1/4	307.88	2 1/4		2 1/4	
2 1/2	3,001.26	2 1/2	2,612.94	2 1/2	2,224.60	2 1/2	1,836.25	2 1/2	1,447.91	2 1/2	1,069.63	2 1/2	688.12	2 1/2	299.79	2 1/2		2 1/2	
2 3/4	2,993.17	2 3/4	2,604.85	2 3/4	2,216.51	2 3/4	1,828.16	2 3/4	1,439.82	2 3/4	1,061.89	2 3/4	680.03	2 3/4	291.70	2 3/4		2 3/4	
3	2,985.08	3	2,596.76	3	2,208.42	3	1,820.07	3	1,431.73	3	1,054.15	3	671.94	3	283.61	3		3	
3 1/4	2,976.99	3 1/4	2,588.67	3 1/4	2,200.33	3 1/4	1,811.98	3 1/4	1,423.64	3 1/4	1,046.40	3 1/4	663.85	3 1/4	275.52	3 1/4		3 1/4	
3 1/2	2,968.90	3 1/2	2,580.58	3 1/2	2,192.24	3 1/2	1,803.89	3 1/2	1,415.55	3 1/2	1,038.66	3 1/2	655.76	3 1/2	267.43	3 1/2		3 1/2	
3 3/4	2,960.81	3 3/4	2,572.49	3 3/4	2,184.14	3 3/4	1,795.80	3 3/4	1,407.46	3 3/4	1,030.92	3 3/4	647.67	3 3/4	259.34	3 3/4		3 3/4	
4	2,952.72	4	2,564.40	4	2,176.05	4	1,787.71	4	1,399.37	4	1,023.17	4	639.58	4	251.25	4		4	
4 1/4	2,944.63	4 1/4	2,556.31	4 1/4	2,167.96	4 1/4	1,779.62	4 1/4	1,391.28	4 1/4	1,015.43	4 1/4	631.49	4 1/4	243.16	4 1/4		4 1/4	
4 1/2	2,936.54	4 1/2	2,548.22	4 1/2	2,159.87	4 1/2	1,771.53	4 1/2	1,383.19	4 1/2	1,007.69	4 1/2	623.40	4 1/2	235.07	4 1/2		4 1/2	
4 3/4	2,928.45	4 3/4	2,540.13	4 3/4	2,151.78	4 3/4	1,763.44	4 3/4	1,375.09	4 3/4	999.94	4 3/4	615.31	4 3/4	226.98	4 3/4		4 3/4	
5	2,920.36	5	2,532.04	5	2,143.69	5	1,755.35	5	1,367.00	5	992.20	5	607.22	5	218.89	5		5	
5 1/4	2,912.27	5 1/4	2,523.95	5 1/4	2,135.60	5 1/4	1,747.26	5 1/4	1,358.91	5 1/4	984.46	5 1/4	599.13	5 1/4	210.80	5 1/4		5 1/4	
5 1/2	2,904.18	5 1/2	2,515.86	5 1/2	2,127.51	5 1/2	1,739.17	5 1/2	1,350.82	5 1/2	976.71	5 1/2	591.04	5 1/2	202.71	5 1/2		5 1/2	
5 3/4	2,896.09	5 3/4	2,507.76	5 3/4	2,119.42	5 3/4	1,731.08	5 3/4	1,342.64	5 3/4	968.97	5 3/4	582.95	5 3/4	194.62	5 3/4		5 3/4	
6	2,888.00	6	2,499.67	6	2,111.33	6	1,722.99	6	1,334.54	6	961.23	6	574.86	6	186.53	6		6	
6 1/4	2,879.91	6 1/4	2,491.58	6 1/4	2,103.24	6 1/4	1,714.90	6 1/4	1,326.55	6 1/4	953.49	6 1/4	566.77	6 1/4	178.44	6 1/4		6 1/4	
6 1/2	2,871.82	6 1/2	2,483.49	6 1/2	2,095.15	6 1/2	1,706.81	6 1/2	1,318.46	6 1/2	945.75	6 1/2	558.68	6 1/2	170.35	6 1/2		6 1/2	
6 3/4	2,863.73	6 3/4	2,475.40	6 3/4	2,087.06	6 3/4	1,698.71	6 3/4	1,310.37	6 3/4	938.01	6 3/4	550.59	6 3/4	162.26	6 3/4		6 3/4	
7	2,855.64	7	2,467.31	7	2,078.97	7	1,690.62	7	1,302.28	7	930.10	7	542.50	7	154.17	7		7	
7 1/4	2,847.55	7 1/4	2,459.22	7 1/4	2,070.88	7 1/4	1,682.53	7 1/4	1,294.19	7 1/4	922.19	7 1/4	534.41	7 1/4	146.08	7 1/4		7 1/4	
7 1/2	2,839.46	7 1/2	2,451.13	7 1/2	2,062.79	7 1/2	1,674.44	7 1/2	1,286.10	7 1/2	914.28	7 1/2	526.32	7 1/2	137.99	7 1/2		7 1/2	
7 3/4	2,831.37	7 3/4	2,443.04	7 3/4	2,054.70	7 3/4	1,666.35	7 3/4	1,278.01	7 3/4	906.37	7 3/4	518.23	7 3/4	129.90	7 3/4		7 3/4	
8	2,823.28	8	2,434.95	8	2,046.61	8	1,658.26	8	1,270.92	8	898.29	8	510.14	8	121.81	8		8	
8 1/4	2,815.19	8 1/4	2,426.86	8 1/4	2,038.52	8 1/4	1,650.17	8 1/4	1,262.83	8 1/4	890.21	8 1/4	502.05	8 1/4	113.72	8 1/4		8 1/4	
8 1/2	2,807.10	8 1/2	2,418.77	8 1/2	2,030.43	8 1/2	1,642.08	8 1/2	1,254.74	8 1/2	882.13	8 1/2	493.96	8 1/2	105.63	8 1/2		8 1/2	
8 3/4	2,799.01	8 3/4	2,410.68	8 3/4	2,022.33	8 3/4	1,633.99	8 3/4	1,247.65	8 3/4	874.04	8 3/4	485.87	8 3/4	97.54	8 3/4		8 3/4	
9	2,790.92	9	2,402.59	9	2,014.24	9	1,625.90	9	1,239.56	9	865.96	9	477.78	9	89.45	9		9	
9 1/4	2,782.83	9 1/4	2,394.50	9 1/4	2,006.15	9 1/4	1,617.81	9 1/4	1,231.47	9 1/4	857.88	9 1/4	469.69	9 1/4	81.36	9 1/4		9 1/4	
9 1/2	2,774.74	9 1/2	2,386.41	9 1/2	1,998.06	9 1/2	1,609.72	9 1/2	1,223.38	9 1/2	849.79	9 1/2	461.60	9 1/2	73.27	9 1/2		9 1/2	
9 3/4	2,766.65	9 3/4	2,378.32	9 3/4	1,989.97	9 3/4	1,601.63	9 3/4	1,215.29	9 3/4	841.71	9 3/4	453.51	9 3/4	65.18	9 3/4		9 3/4	
10	2,758.56	10	2,370.23	10	1,981.88	10	1,593.54	10	1,207.20	10	833.63	10	445.42	10	57.09	10		10	
10 1/4	2,750.47	10 1/4	2,362.14	10 1/4	1,973.79	10 1/4	1,585.45	10 1/4	1,200.11	10 1/4	825.55	10 1/4	437.33	10 1/4	49.00	10 1/4		10 1/4	
10 1/2	2,742.38	10 1/2	2,354.05	10 1/2	1,965.70	10 1/2	1,577.36	10 1/2	1,192.02	10 1/2	817.46	10 1/2	429.24	10 1/2	40.91	10 1/2		10 1/2	
10 3/4	2,734.29	10 3/4	2,345.96	10 3/4	1,957.61	10 3/4	1,569.27	10 3/4	1,183.93	10 3/4	809.38	10 3/4	421.15	10 3/4	32.82	10 3/4		10 3/4	
11	2,726.20	11	2,337.86	11	1,949.52	11	1,561.18	11	1,178.04	11	801.30	11	413.06	11	24.73	11		11	
11 1/4	2,718.11	11 1/4	2,329.77	11 1/4	1,941.43	11 1/4	1,553.09	11 1/4	1,170.95	11 1/4	793.21	11 1/4	404.97	11 1/4	16.64	11 1/4		11 1/4	
11 1/2	2,710.02	11 1/2	2,321.68	11 1/2	1,933.34	11 1/2	1,545.00	11 1/2	1,162.85	11 1/2	785.13	11 1/2	396.88	11 1/2	8.55	11 1/2		11 1/2	
11 3/4	2,701.93	11 3/4	2,313.59	11 3/4	1,925.25	11 3/4	1,536.90	11 3/4	1,154.76	11 3/4	777.05	11 3/4	388.79	11 3/4	0.46	11 3/4		11 3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/2018

PRECISION MEASUREMENT

& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

http://www.pmacorp.net

Eric J. Brown

3 PORT

VILLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GALLIE HEIGHT 17.11 1/4"

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CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO III-1 AGE GAUGES TAKEN WITH "HERMETIC CI USED GAUGING DEVICE"

GAUGE POINT: (HERMETIC) LOCATED 12'-6" OFF CENTERLINE AND 14'-00" FORWARD OF AFT RUL KIEP

200001 0111: (1514MILITARY) COCKLEB 12 00 OFF CENTERLINE AND 41 00 FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT

PRECISION MICROBOOKS
P. AMAT YERLE INC

© ANIMAL FEEDS, INC.

P.O. Box 2092

Portland, Texas 7758

<http://www.pmacorp.>

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9



CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

BARGE "EMS 504"

3 PORT ULLAGE TABLE

GAUGE HEIGHT 17'-11 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,872.22	0	2,510.50	0	2,148.62	0	1,788.71	0	1,424.79	0	1,062.88	0	701.50	0	339.74	0			
1/4	2,864.68	1/4	2,502.96	1/4	2,141.08	1/4	1,779.17	1/4	1,417.25	1/4	1,055.34	1/4	693.98	1/4	332.20	1/4			
1/2	2,857.15	1/2	2,495.43	1/2	2,133.54	1/2	1,771.63	1/2	1,409.71	1/2	1,047.80	1/2	686.46	1/2	324.66	1/2			
3/4	2,849.61	3/4	2,487.89	3/4	2,126.00	3/4	1,764.09	3/4	1,402.17	3/4	1,040.26	3/4	678.94	3/4	317.13	3/4			
1	2,842.07	1	2,480.35	1	2,118.46	1	1,756.55	1	1,394.72	1	1,032.72	1	671.42	1	309.59	1			
1/4	2,834.54	1/4	2,472.81	1/4	2,110.92	1/4	1,748.01	1/4	1,387.09	1/4	1,025.18	1/4	663.90	1/4	302.05	1/4			
1/2	2,827.00	1/2	2,465.27	1/2	2,103.38	1/2	1,741.47	1/2	1,379.55	1/2	1,017.64	1/2	656.37	1/2	294.51	1/2			
3/4	2,819.47	3/4	2,457.73	3/4	2,095.84	3/4	1,733.93	3/4	1,372.01	3/4	1,010.10	3/4	648.85	3/4	286.97	3/4			
2	2,811.93	2	2,450.19	2	2,088.30	2	1,726.39	2	1,364.47	2	1,002.56	2	641.32	2	279.43	2			
1/4	2,804.40	1/4	2,442.65	1/4	2,080.76	1/4	1,718.85	1/4	1,356.93	1/4	995.02	1/4	633.79	1/4	271.89	1/4			
1/2	2,796.86	1/2	2,435.12	1/2	2,073.22	1/2	1,711.31	1/2	1,349.39	1/2	987.48	1/2	626.25	1/2	264.35	1/2			
3/4	2,789.32	3/4	2,427.58	3/4	2,065.68	3/4	1,703.77	3/4	1,341.85	3/4	979.94	3/4	618.71	3/4	256.81	3/4			
3	2,781.79	3	2,420.04	3	2,058.14	3	1,696.23	3	1,334.31	3	972.40	3	611.17	3	249.27	3			
1/4	2,774.25	1/4	2,412.50	1/4	2,050.60	1/4	1,688.69	1/4	1,326.77	1/4	964.86	1/4	603.63	1/4	241.73	1/4			
1/2	2,766.72	1/2	2,404.96	1/2	2,043.06	1/2	1,681.15	1/2	1,319.23	1/2	957.32	1/2	596.09	1/2	234.19	1/2			
3/4	2,759.18	3/4	2,397.43	3/4	2,035.52	3/4	1,673.61	3/4	1,311.69	3/4	949.78	3/4	588.55	3/4	226.65	3/4			
4	2,751.64	4	2,389.89	4	2,027.98	4	1,666.07	4	1,304.15	4	942.24	4	581.01	4	219.11	4			
1/4	2,744.11	1/4	2,382.36	1/4	2,020.44	1/4	1,658.53	1/4	1,296.61	1/4	934.70	1/4	573.47	1/4	211.57	1/4			
1/2	2,736.57	1/2	2,374.82	1/2	2,012.90	1/2	1,650.99	1/2	1,289.07	1/2	927.16	1/2	565.93	1/2	204.03	1/2			
3/4	2,729.04	3/4	2,367.28	3/4	2,005.36	3/4	1,643.45	3/4	1,281.53	3/4	919.62	3/4	558.39	3/4	196.49	3/4			
5	2,721.50	5	2,359.74	5	1,997.82	5	1,635.91	5	1,273.99	5	912.08	5	550.85	5	188.95	5			
1/4	2,713.97	1/4	2,352.20	1/4	1,990.28	1/4	1,628.37	1/4	1,266.45	1/4	904.54	1/4	543.31	1/4	181.41	1/4			
1/2	2,706.43	1/2	2,344.66	1/2	1,982.74	1/2	1,620.83	1/2	1,258.91	1/2	897.01	1/2	535.77	1/2	173.87	1/2			
3/4	2,698.89	3/4	2,337.12	3/4	1,975.20	3/4	1,613.29	3/4	1,251.37	3/4	889.48	3/4	528.23	3/4	166.33	3/4			
6	2,691.36	6	2,329.58	6	1,967.66	6	1,605.75	6	1,243.83	6	881.95	6	520.69	6	158.79	6			
1/4	2,683.82	1/4	2,322.04	1/4	1,960.12	1/4	1,598.21	1/4	1,236.29	1/4	874.42	1/4	513.15	1/4	151.25	1/4			
1/2	2,676.29	1/2	2,314.50	1/2	1,952.58	1/2	1,590.67	1/2	1,228.75	1/2	866.90	1/2	505.62	1/2	143.71	1/2			
3/4	2,668.75	3/4	2,306.96	3/4	1,945.04	3/4	1,583.13	3/4	1,221.21	3/4	859.39	3/4	498.08	3/4	136.17	3/4			
7	2,661.21	7	2,299.42	7	1,937.50	7	1,575.59	7	1,213.67	7	851.87	7	490.54	7	128.64	7			
1/4	2,653.68	1/4	2,291.88	1/4	1,929.96	1/4	1,568.05	1/4	1,206.13	1/4	844.35	1/4	483.00	1/4	121.10	1/4			
1/2	2,646.14	1/2	2,284.34	1/2	1,922.42	1/2	1,560.51	1/2	1,198.59	1/2	836.83	1/2	475.46	1/2	113.56	1/2			
3/4	2,638.61	3/4	2,276.80	3/4	1,914.88	3/4	1,552.97	3/4	1,191.05	3/4	829.31	3/4	467.92	3/4	106.02	3/4			
8	2,631.07	8	2,269.26	8	1,907.34	8	1,545.43	8	1,183.51	8	821.79	8	460.38	8	98.48	8			
1/4	2,623.54	1/4	2,261.72	1/4	1,899.80	1/4	1,537.89	1/4	1,175.97	1/4	814.27	1/4	452.84	1/4	90.94	1/4			
1/2	2,616.00	1/2	2,254.18	1/2	1,892.26	1/2	1,530.35	1/2	1,168.43	1/2	806.76	1/2	445.30	1/2	83.40	1/2			
3/4	2,608.46	3/4	2,246.64	3/4	1,884.72	3/4	1,522.81	3/4	1,160.89	3/4	799.24	3/4	437.76	3/4	75.86	3/4			
9	2,600.93	9	2,239.10	9	1,877.19	9	1,515.27	9	1,153.35	9	791.72	9	430.22	9	68.32	9			
1/4	2,593.39	1/4	2,231.56	1/4	1,869.65	1/4	1,507.73	1/4	1,145.81	1/4	784.20	1/4	422.68	1/4	60.78	1/4			
1/2	2,585.86	1/2	2,224.02	1/2	1,862.11	1/2	1,500.19	1/2	1,138.27	1/2	776.68	1/2	415.14	1/2	53.24	1/2			
3/4	2,578.32	3/4	2,216.48	3/4	1,854.57	3/4	1,492.65	3/4	1,130.73	3/4	769.16	3/4	407.60	3/4	45.70	3/4			
10	2,570.79	10	2,208.94	10	1,847.03	10	1,485.11	10	1,123.20	10	761.64	10	400.06	10	38.16	10			
1/4	2,563.25	1/4	2,201.40	1/4	1,839.49	1/4	1,477.57	1/4	1,115.66	1/4	754.13	1/4	392.52	1/4	30.62	1/4			
1/2	2,555.71	1/2	2,193.86	1/2	1,831.95	1/2	1,470.03	1/2	1,108.12	1/2	746.61	1/2	384.98	1/2	23.08	1/2			
3/4	2,548.18	3/4	2,186.32	3/4	1,824.41	3/4	1,462.49	3/4	1,100.58	3/4	739.09	3/4	377.44	3/4	15.54	3/4			
11	2,540.64	11	2,178.78	11	1,816.87	11	1,454.95	11	1,093.04	11	731.57	11	369.90	11	8.00	11			
1/4	2,533.11	1/4	2,171.24	1/4	1,809.33	1/4	1,447.41	1/4	1,085.50	1/4	724.05	1/4	362.36	1/4	0.46	1/4			
1/2	2,525.57	1/2	2,163.70	1/2	1,801.79	1/2	1,439.87	1/2	1,077.96	1/2	716.53	1/2	354.82	1/2		1/2			
3/4	2,518.03	3/4	2,156.16	3/4	1,794.25	3/4	1,432.33	3/4	1,070.42	3/4	709.01	3/4	347.28	3/4		1/2			

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CALCULATED: 12/20/2018 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 12/20/18

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



BARGE "EMS 504"

3 STBD ULLAGE 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"-08" 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 7758

<http://www.pmacorp.com>

SHEET NO. 11 OF 12



BARGE "EMS 504"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-11 1/2"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,856.19	0	2,495.40	0	2,134.49	0	1,775.95	0	1,414.80	0	1,059.96	0	708.19	0	346.99	0			
1/4	2,848.67	1/4	2,487.89	1/4	2,127.03	1/4	1,768.43	1/4	1,407.28	1/4	1,052.76	1/4	700.68	1/4	339.46	1/4			
1/2	2,841.15	1/2	2,480.38	1/2	2,119.56	1/2	1,760.90	1/2	1,399.75	1/2	1,045.55	1/2	693.17	1/2	331.93	1/2			
3/4	2,833.63	3/4	2,472.87	3/4	2,112.10	3/4	1,753.38	3/4	1,392.23	3/4	1,038.35	3/4	685.66	3/4	324.40	3/4			
1	2,826.11	1	2,465.36	1	2,104.63	1	1,745.85	1	1,384.71	1	1,031.15	1	678.16	1	316.87	1			
1/4	2,818.58	1/4	2,457.84	1/4	2,097.17	1/4	1,738.33	1/4	1,377.18	1/4	1,023.95	1/4	670.65	1/4	309.34	1/4			
1/2	2,811.06	1/2	2,450.33	1/2	2,089.70	1/2	1,730.81	1/2	1,369.66	1/2	1,016.75	1/2	663.14	1/2	301.82	1/2			
3/4	2,803.54	3/4	2,442.82	3/4	2,082.24	3/4	1,723.28	3/4	1,362.13	3/4	1,009.54	3/4	655.62	3/4	294.29	3/4			
2	2,796.02	2	2,435.30	2	2,074.77	2	1,715.76	2	1,354.61	2	1,002.34	2	648.10	2	286.76	2			
1/4	2,788.50	1/4	2,427.78	1/4	2,067.31	1/4	1,708.23	1/4	1,347.09	1/4	995.14	1/4	640.58	1/4	279.23	1/4			
1/2	2,780.98	1/2	2,420.26	1/2	2,059.84	1/2	1,700.71	1/2	1,339.56	1/2	987.94	1/2	633.07	1/2	271.70	1/2			
3/4	2,773.45	3/4	2,412.74	3/4	2,052.38	3/4	1,693.19	3/4	1,332.04	3/4	980.74	3/4	625.54	3/4	264.17	3/4			
3	2,765.93	3	2,405.22	3	2,044.91	3	1,685.66	3	1,324.52	3	973.53	3	618.01	3	256.65	3			
1/4	2,758.41	1/4	2,397.69	1/4	2,037.45	1/4	1,678.14	1/4	1,316.99	1/4	966.33	1/4	610.48	1/4	248.12	1/4			
1/2	2,750.89	1/2	2,390.17	1/2	2,029.99	1/2	1,670.61	1/2	1,309.47	1/2	959.13	1/2	602.95	1/2	241.59	1/2			
3/4	2,743.37	3/4	2,382.64	3/4	2,022.52	3/4	1,663.09	3/4	1,301.94	3/4	951.93	3/4	595.42	3/4	234.06	3/4			
4	2,735.85	4	2,375.12	4	2,015.06	4	1,655.57	4	1,294.42	4	944.73	4	587.90	4	226.54	4			
1/4	2,728.32	1/4	2,367.59	1/4	2,007.59	1/4	1,648.04	1/4	1,286.90	1/4	937.52	1/4	580.37	1/4	219.01	1/4			
1/2	2,720.80	1/2	2,360.06	1/2	2,000.13	1/2	1,640.52	1/2	1,279.37	1/2	930.32	1/2	572.84	1/2	211.48	1/2			
3/4	2,713.28	3/4	2,352.54	3/4	1,992.66	3/4	1,632.99	3/4	1,271.85	3/4	923.12	3/4	565.31	3/4	203.96	3/4			
5	2,705.76	5	2,345.01	5	1,985.20	5	1,625.47	5	1,264.32	5	915.92	5	557.78	5	196.43	5			
1/4	2,698.24	1/4	2,337.48	1/4	1,977.73	1/4	1,617.95	1/4	1,256.80	1/4	908.72	1/4	550.25	1/4	188.90	1/4			
1/2	2,690.72	1/2	2,329.95	1/2	1,970.27	1/2	1,610.42	1/2	1,249.28	1/2	901.51	1/2	542.73	1/2	181.37	1/2			
3/4	2,683.20	3/4	2,322.43	3/4	1,962.80	3/4	1,602.90	3/4	1,241.75	3/4	894.32	3/4	535.20	3/4	173.84	3/4			
6	2,675.68	6	2,314.90	6	1,955.34	6	1,595.38	6	1,234.20	6	887.12	6	527.67	6	166.31	6			
1/4	2,668.16	1/4	2,307.37	1/4	1,947.87	1/4	1,587.85	1/4	1,226.70	1/4	879.92	1/4	520.14	1/4	158.78	1/4			
1/2	2,660.64	1/2	2,299.84	1/2	1,940.41	1/2	1,580.33	1/2	1,219.18	1/2	872.72	1/2	512.61	1/2	151.25	1/2			
3/4	2,653.13	3/4	2,292.32	3/4	1,932.94	3/4	1,572.80	3/4	1,211.81	3/4	865.57	3/4	505.08	3/4	143.71	3/4			
7	2,645.61	7	2,284.79	7	1,925.48	7	1,565.28	7	1,204.44	7	858.02	7	497.55	7	136.18	7			
1/4	2,638.10	1/4	2,277.26	1/4	1,918.01	1/4	1,557.76	1/4	1,197.07	1/4	850.67	1/4	490.03	1/4	128.64	1/4			
1/2	2,630.59	1/2	2,269.74	1/2	1,910.55	1/2	1,550.23	1/2	1,189.71	1/2	843.32	1/2	482.50	1/2	121.10	1/2			
3/4	2,623.08	3/4	2,262.21	3/4	1,903.09	3/4	1,542.71	3/4	1,182.49	3/4	835.82	3/4	474.97	3/4	113.56	3/4			
8	2,615.57	8	2,254.68	8	1,895.62	8	1,535.18	8	1,175.28	8	828.31	8	467.44	8	106.02	8			
1/4	2,608.06	1/4	2,247.15	1/4	1,888.16	1/4	1,527.66	1/4	1,168.07	1/4	820.80	1/4	459.91	1/4	98.48	1/4			
1/2	2,600.55	1/2	2,239.63	1/2	1,880.69	1/2	1,520.14	1/2	1,160.85	1/2	813.29	1/2	452.38	1/2	90.94	1/2			
3/4	2,593.04	3/4	2,232.10	3/4	1,873.23	3/4	1,512.61	3/4	1,153.64	3/4	805.79	3/4	444.86	3/4	83.40	3/4			
9	2,585.53	9	2,224.57	9	1,865.76	9	1,505.09	9	1,146.43	9	798.28	9	437.33	9	75.86	9			
1/4	2,578.02	1/4	2,217.05	1/4	1,858.30	1/4	1,497.56	1/4	1,139.21	1/4	790.77	1/4	429.80	1/4	68.32	1/4			
1/2	2,570.50	1/2	2,209.52	1/2	1,850.83	1/2	1,490.04	1/2	1,132.00	1/2	783.26	1/2	422.27	1/2	60.78	1/2			
3/4	2,562.99	3/4	2,201.99	3/4	1,843.37	3/4	1,482.52	3/4	1,124.79	3/4	775.75	3/4	414.74	3/4	53.87	3/4			
10	2,555.48	10	2,194.46	10	1,835.90	10	1,474.99	10	1,117.59	10	768.25	10	407.21	10	46.96	10			
1/4	2,547.97	1/4	2,186.94	1/4	1,828.44	1/4	1,467.47	1/4	1,110.38	1/4	760.74	1/4	399.69	1/4	40.04	1/4			
1/2	2,540.46	1/2	2,179.41	1/2	1,820.97	1/2	1,459.95	1/2	1,103.17	1/2	753.23	1/2	392.16	1/2	33.13	1/2			
3/4	2,532.95	3/4	2,171.91	3/4	1,813.48	3/4	1,452.42	3/4	1,095.97	3/4	745.72	3/4	384.63	3/4	28.11	3/4			
11	2,525.44	11	2,164.42	11	1,805.99	11	1,444.90	11	1,088.77	11	738.22	11	377.10	11	23.08	11			
1/4	2,517.93	1/4	2,156.92	1/4	1,798.49	1/4	1,437.37	1/4	1,081.56	1/4	730.71	1/4	369.57	1/4	18.05	1/4			
1/2	2,510.42	1/2	2,149.42	1/2	1,791.00	1/2	1,429.85	1/2	1,074.36	1/2	723.20	1/2	362.04	1/2	13.02	1/2			
3/4	2,502.91	3/4	2,141.96	3/4	1,783.47	3/4	1,422.33	3/4	1,067.16	3/4	715.69	3/4	354.52	3/4		3/4			

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