



# BARGE "EMS 503"

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"

October 23, 2018

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

<http://www.pmacorp.net>



# BARGE "EMS 503"

## 1 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

| GAUGE HEIGHT 16'-05 1/2" |        |     |        |     |        |       |          |     |          |     |          |       |          |     |          |     |          |       |          |     |          |     |          |       |          |     |          |     |          |     |          |
|--------------------------|--------|-----|--------|-----|--------|-------|----------|-----|----------|-----|----------|-------|----------|-----|----------|-----|----------|-------|----------|-----|----------|-----|----------|-------|----------|-----|----------|-----|----------|-----|----------|
| 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  | 7 FT.    | IN  | 8 FT.    | IN    | 9 FT.    | IN  | 7 FT.    | IN  | 8 FT.    | IN  |          |
| 0                        | 10.39  | 0   | 263.24 | 0   | 555.36 | 0     | 876.03   | 0   | 1,215.66 | 0   | 1,556.76 | 0     | 1,897.87 | 0   | 2,238.97 | 0   | 2,580.05 | 0     | 2,921.14 | 0   | 2,238.97 | 0   | 2,580.05 | 0     | 2,921.14 | 0   | 2,238.97 | 0   | 2,580.05 | 0   | 2,921.14 |
| 1/4                      | 13.70  | 1/4 | 269.04 | 1/4 | 561.77 | 1/4   | 883.02   | 1/4 | 1,222.77 | 1/4 | 1,562.87 | 1/4   | 1,904.98 | 1/4 | 2,246.07 | 1/4 | 2,587.16 | 1/4   | 2,928.25 | 1/4 | 2,246.07 | 1/4 | 2,587.16 | 1/4   | 2,928.25 | 1/4 | 2,246.07 | 1/4 | 2,587.16 | 1/4 | 2,928.25 |
| 1/2                      | 17.02  | 1/2 | 274.86 | 1/2 | 568.19 | 1/2   | 890.00   | 1/2 | 1,229.87 | 1/2 | 1,570.98 | 1/2   | 1,912.08 | 1/2 | 2,253.18 | 1/2 | 2,594.27 | 1/2   | 2,935.35 | 1/2 | 2,253.18 | 1/2 | 2,594.27 | 1/2   | 2,935.35 | 1/2 | 2,253.18 | 1/2 | 2,594.27 | 1/2 | 2,935.35 |
| 3/4                      | 20.33  | 3/4 | 280.66 | 3/4 | 574.61 | 3/4   | 896.99   | 3/4 | 1,236.98 | 3/4 | 1,578.08 | 3/4   | 1,919.19 | 3/4 | 2,260.28 | 3/4 | 2,601.37 | 3/4   | 2,942.46 | 3/4 | 2,260.28 | 3/4 | 2,601.37 | 3/4   | 2,942.46 | 3/4 | 2,260.28 | 3/4 | 2,601.37 | 3/4 | 2,942.46 |
| 1                        | 23.65  | 1   | 286.46 | 1   | 581.03 | 1     | 903.97   | 1   | 1,244.09 | 1   | 1,585.19 | 1     | 1,926.29 | 1   | 2,267.39 | 1   | 2,608.48 | 1     | 2,949.57 | 1   | 2,267.39 | 1   | 2,608.48 | 1     | 2,949.57 | 1   | 2,267.39 | 1   | 2,608.48 | 1   | 2,949.57 |
| 1/4                      | 28.30  | 1/4 | 292.32 | 1/4 | 587.49 | 1/4   | 911.01   | 1/4 | 1,251.19 | 1/4 | 1,592.30 | 1/4   | 1,933.40 | 1/4 | 2,274.50 | 1/4 | 2,615.58 | 1/4   | 2,956.67 | 1/4 | 2,274.50 | 1/4 | 2,615.58 | 1/4   | 2,956.67 | 1/4 | 2,274.50 | 1/4 | 2,615.58 | 1/4 | 2,956.67 |
| 1/2                      | 32.85  | 1/2 | 298.17 | 1/2 | 593.86 | 1/2   | 918.04   | 1/2 | 1,258.30 | 1/2 | 1,599.40 | 1/2   | 1,940.51 | 1/2 | 2,281.60 | 1/2 | 2,622.69 | 1/2   | 2,963.78 | 1/2 | 2,281.60 | 1/2 | 2,622.69 | 1/2   | 2,963.78 | 1/2 | 2,281.60 | 1/2 | 2,622.69 | 1/2 | 2,963.78 |
| 3/4                      | 37.60  | 3/4 | 304.03 | 3/4 | 600.43 | 3/4   | 925.07   | 3/4 | 1,265.41 | 3/4 | 1,606.51 | 3/4   | 1,947.61 | 3/4 | 2,288.71 | 3/4 | 2,629.80 | 3/4   | 2,970.88 | 3/4 | 2,288.71 | 3/4 | 2,629.80 | 3/4   | 2,970.88 | 3/4 | 2,288.71 | 3/4 | 2,629.80 | 3/4 | 2,970.88 |
| 1                        | 42.26  | 1   | 309.89 | 1   | 606.90 | 1     | 932.10   | 1   | 1,272.51 | 1   | 1,613.62 | 1     | 1,954.72 | 1   | 2,295.81 | 1   | 2,636.90 | 1     | 2,977.99 | 1   | 2,295.81 | 1   | 2,636.90 | 1     | 2,977.99 | 1   | 2,295.81 | 1   | 2,636.90 | 1   | 2,977.99 |
| 1/4                      | 47.56  | 1/4 | 315.79 | 1/4 | 613.42 | 1/4   | 939.15   | 1/4 | 1,279.62 | 1/4 | 1,620.72 | 1/4   | 1,961.83 | 1/4 | 2,302.92 | 1/4 | 2,644.01 | 1/4   | 2,985.10 | 1/4 | 2,302.92 | 1/4 | 2,644.01 | 1/4   | 2,985.10 | 1/4 | 2,302.92 | 1/4 | 2,644.01 | 1/4 | 2,985.10 |
| 1/2                      | 52.85  | 1/2 | 321.70 | 1/2 | 619.94 | 1/2   | 946.21   | 1/2 | 1,286.73 | 1/2 | 1,627.83 | 1/2   | 1,968.93 | 1/2 | 2,310.03 | 1/2 | 2,651.11 | 1/2   | 2,992.20 | 1/2 | 2,310.03 | 1/2 | 2,651.11 | 1/2   | 2,992.20 | 1/2 | 2,310.03 | 1/2 | 2,651.11 | 1/2 | 2,992.20 |
| 3/4                      | 58.14  | 3/4 | 327.61 | 3/4 | 626.46 | 3/4   | 953.27   | 3/4 | 1,293.83 | 3/4 | 1,634.93 | 3/4   | 1,976.04 | 3/4 | 2,317.13 | 3/4 | 2,658.22 | 3/4   | 2,993.31 | 3/4 | 2,317.13 | 3/4 | 2,658.22 | 3/4   | 2,993.31 | 3/4 | 2,317.13 | 3/4 | 2,658.22 | 3/4 | 2,993.31 |
| 1                        | 63.44  | 1   | 333.51 | 1   | 632.98 | 1     | 960.32   | 1   | 1,300.94 | 1   | 1,642.04 | 1     | 1,983.15 | 1   | 2,324.24 | 1   | 2,665.33 | 1     | 3,006.41 | 1   | 2,324.24 | 1   | 2,665.33 | 1     | 3,006.41 | 1   | 2,324.24 | 1   | 2,665.33 | 1   | 3,006.41 |
| 1/4                      | 68.78  | 1/4 | 339.47 | 1/4 | 639.55 | 1/4   | 967.39   | 1/4 | 1,308.04 | 1/4 | 1,649.15 | 1/4   | 1,980.25 | 1/4 | 2,331.34 | 1/4 | 2,672.43 | 1/4   | 3,013.52 | 1/4 | 2,331.34 | 1/4 | 2,672.43 | 1/4   | 3,013.52 | 1/4 | 2,331.34 | 1/4 | 2,672.43 | 1/4 | 3,013.52 |
| 1/2                      | 74.13  | 1/2 | 345.43 | 1/2 | 645.12 | 1/2   | 974.45   | 1/2 | 1,315.15 | 1/2 | 1,656.26 | 1/2   | 1,997.36 | 1/2 | 2,338.45 | 1/2 | 2,679.54 | 1/2   | 3,020.52 | 1/2 | 2,338.45 | 1/2 | 2,679.54 | 1/2   | 3,020.52 | 1/2 | 2,338.45 | 1/2 | 2,679.54 | 1/2 | 3,020.52 |
| 3/4                      | 79.47  | 3/4 | 351.39 | 3/4 | 652.69 | 3/4   | 981.51   | 3/4 | 1,322.26 | 3/4 | 1,663.36 | 3/4   | 2,004.46 | 3/4 | 2,345.56 | 3/4 | 2,686.64 | 3/4   | 3,027.73 | 3/4 | 2,345.56 | 3/4 | 2,686.64 | 3/4   | 3,027.73 | 3/4 | 2,345.56 | 3/4 | 2,686.64 | 3/4 | 3,027.73 |
| 1                        | 84.82  | 1   | 357.35 | 1   | 659.26 | 1     | 988.58   | 1   | 1,329.36 | 1   | 1,670.47 | 1     | 2,011.57 | 1   | 2,352.56 | 1   | 2,693.75 | 1     | 3,034.83 | 1   | 2,352.56 | 1   | 2,693.75 | 1     | 3,034.83 | 1   | 2,352.56 | 1   | 2,693.75 | 1   | 3,034.83 |
| 1/4                      | 90.22  | 1/4 | 363.36 | 1/4 | 665.88 | 1/4   | 995.64   | 1/4 | 1,336.47 | 1/4 | 1,677.57 | 1/4   | 2,018.68 | 1/4 | 2,359.77 | 1/4 | 2,700.86 | 1/4   | 3,041.94 | 1/4 | 2,359.77 | 1/4 | 2,700.86 | 1/4   | 3,041.94 | 1/4 | 2,359.77 | 1/4 | 2,700.86 | 1/4 | 3,041.94 |
| 1/2                      | 95.61  | 1/2 | 369.37 | 1/2 | 672.50 | 1/2   | 1,002.71 | 1/2 | 1,343.58 | 1/2 | 1,684.68 | 1/2   | 2,025.78 | 1/2 | 2,366.87 | 1/2 | 2,707.96 | 1/2   | 3,049.04 | 1/2 | 2,366.87 | 1/2 | 2,707.96 | 1/2   | 3,049.04 | 1/2 | 2,366.87 | 1/2 | 2,707.96 | 1/2 | 3,049.04 |
| 3/4                      | 101.01 | 3/4 | 375.37 | 3/4 | 679.12 | 3/4   | 1,009.78 | 3/4 | 1,350.68 | 3/4 | 1,691.78 | 3/4   | 2,032.89 | 3/4 | 2,373.98 | 3/4 | 2,715.07 | 3/4   | 3,056.15 | 3/4 | 2,373.98 | 3/4 | 2,715.07 | 3/4   | 3,056.15 | 3/4 | 2,373.98 | 3/4 | 2,715.07 | 3/4 | 3,056.15 |
| 1                        | 106.41 | 1   | 381.38 | 1   | 685.74 | 1     | 1,016.85 | 1   | 1,357.79 | 1   | 1,698.89 | 1     | 2,040.00 | 1   | 2,381.09 | 1   | 2,722.17 | 1     | 3,063.26 | 1   | 2,381.09 | 1   | 2,722.17 | 1     | 3,063.26 | 1   | 2,381.09 | 1   | 2,722.17 | 1   | 3,063.26 |
| 1/4                      | 111.86 | 1/4 | 387.44 | 1/4 | 692.42 | 1/4   | 1,023.83 | 1/4 | 1,364.89 | 1/4 | 1,706.00 | 1/4   | 2,047.10 | 1/4 | 2,388.19 | 1/4 | 2,729.28 | 1/4   | 3,070.36 | 1/4 | 2,388.19 | 1/4 | 2,729.28 | 1/4   | 3,070.36 | 1/4 | 2,388.19 | 1/4 | 2,729.28 | 1/4 | 3,070.36 |
| 1/2                      | 117.30 | 1/2 | 393.50 | 1/2 | 699.09 | 1/2   | 1,031.01 | 1/2 | 1,372.00 | 1/2 | 1,713.10 | 1/2   | 2,054.21 | 1/2 | 2,395.30 | 1/2 | 2,736.39 | 1/2   | 3,077.47 | 1/2 | 2,395.30 | 1/2 | 2,736.39 | 1/2   | 3,077.47 | 1/2 | 2,395.30 | 1/2 | 2,736.39 | 1/2 | 3,077.47 |
| 3/4                      | 122.75 | 3/4 | 399.56 | 3/4 | 705.76 | 3/4   | 1,038.08 | 3/4 | 1,379.11 | 3/4 | 1,720.21 | 3/4   | 2,061.31 | 3/4 | 2,402.40 | 3/4 | 2,743.49 | 3/4   | 3,084.58 | 3/4 | 2,402.40 | 3/4 | 2,743.49 | 3/4   | 3,084.58 | 3/4 | 2,402.40 | 3/4 | 2,743.49 | 3/4 | 3,084.58 |
| 1                        | 128.20 | 1   | 405.63 | 1   | 712.43 | 1     | 1,045.16 | 1   | 1,386.21 | 1   | 1,727.32 | 1     | 2,068.42 | 1   | 2,409.51 | 1   | 2,750.60 | 1     | 3,091.68 | 1   | 2,409.51 | 1   | 2,750.60 | 1     | 3,091.68 | 1   | 2,409.51 | 1   | 2,750.60 | 1   | 3,091.68 |
| 1/4                      | 133.70 | 1/4 | 411.74 | 1/4 | 718.14 | 1/4   | 1,052.25 | 1/4 | 1,393.32 | 1/4 | 1,734.42 | 1/4   | 2,075.53 | 1/4 | 2,416.62 | 1/4 | 2,757.70 | 1/4   | 3,098.79 | 1/4 | 2,416.62 | 1/4 | 2,757.70 | 1/4   | 3,098.79 | 1/4 | 2,416.62 | 1/4 | 2,757.70 | 1/4 | 3,098.79 |
| 1/2                      | 139.20 | 1/2 | 417.85 | 1/2 | 725.85 | 1/2   | 1,059.35 | 1/2 | 1,400.43 | 1/2 | 1,741.53 | 1/2   | 2,082.63 | 1/2 | 2,423.72 | 1/2 | 2,764.81 | 1/2   | 3,105.89 | 1/2 | 2,423.72 | 1/2 | 2,764.81 | 1/2   | 3,105.89 | 1/2 | 2,423.72 | 1/2 | 2,764.81 | 1/2 | 3,105.89 |
| 3/4                      | 144.70 | 3/4 | 423.96 | 3/4 | 732.56 | 3/4   | 1,066.44 | 3/4 | 1,407.53 | 3/4 | 1,748.63 | 3/4   | 2,089.74 | 3/4 | 2,430.83 | 3/4 | 2,771.92 | 3/4   | 3,113.00 | 3/4 | 2,430.83 | 3/4 | 2,771.92 | 3/4   | 3,113.00 | 3/4 | 2,430.83 | 3/4 | 2,771.92 | 3/4 | 3,113.00 |
| 1                        | 150.20 | 1   | 430.07 | 1   | 739.27 | 1     | 1,073.54 | 1   | 1,414.64 | 1   | 1,755.74 | 1     | 2,096.85 | 1   | 2,437.93 | 1   | 2,779.02 | 1     | 3,120.11 | 1   | 2,437.93 | 1   | 2,779.02 | 1     | 3,120.11 | 1   | 2,437.93 | 1   | 2,779.02 | 1   | 3,120.11 |
| 1/4                      | 155.75 | 1/4 | 436.23 | 1/4 | 746.01 | 1/4   | 1,080.64 | 1/4 | 1,421.75 | 1/4 | 1,762.85 | 1/4   | 2,103.95 | 1/4 | 2,445.04 | 1/4 | 2,786.13 | 1/4   | 3,127.21 | 1/4 | 2,445.04 | 1/4 | 2,786.13 | 1/4   | 3,127.21 | 1/4 | 2,445.04 | 1/4 | 2,786.13 | 1/4 | 3,127.21 |
| 1/2                      | 161.30 | 1/2 | 442.39 | 1/2 | 752.76 | 1/2   | 1,087.75 | 1/2 | 1,428.85 | 1/2 | 1,769.95 | 1/2   | 2,111.06 | 1/2 | 2,452.15 | 1/2 | 2,793.23 | 1/2   | 3,134.32 | 1/2 | 2,452.15 | 1/2 | 2,793.23 | 1/2   | 3,134.32 | 1/2 | 2,452.15 | 1/2 | 2,793.23 | 1/2 | 3,134.32 |
| 3/4                      | 166.85 | 3/4 | 448.56 | 3/4 | 759.50 | 3/4   | 1,094.86 | 3/4 | 1,435.96 | 3/4 | 1,777.06 | 3/4   | 2,118.16 | 3/4 | 2,459.25 | 3/4 | 2,800.34 | 3/4   | 3,141.43 | 3/4 | 2,459.25 | 3/4 | 2,800.34 | 3/4   | 3,141.43 | 3/4 | 2,459.25 | 3/4 | 2,800.34 | 3/4 | 3,141.43 |
| 1                        | 172.40 | 1   | 454.72 | 1   | 766.24 | 1     | 1,101.96 | 1   | 1,443.06 | 1   | 1,784.17 | 1     | 2,125.27 | 1   | 2,466.36 | 1   | 2,807.45 | 1     | 3,148.53 | 1   | 2,466.36 | 1</ |          |       |          |     |          |     |          |     |          |



# BARGE "EMS 503"

## 1 PORT 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   | 3,262.23 | 0   | 3,603.34 | 0   | 3,939.86 | 0   | 4,254.46 | 0   | 4,546.09 | 0   | 4,812.39 | 0   |        | 0   |        | 0   |        | 0   |        |
| 1/4 | 3,269.34 | 1/4 | 3,610.44 | 1/4 | 3,946.64 | 1/4 | 4,260.74 | 1/4 | 4,550.88 | 1/4 | 4,817.70 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,276.45 | 1/2 | 3,617.55 | 1/2 | 3,953.43 | 1/2 | 4,267.01 | 1/2 | 4,556.67 | 1/2 | 4,823.00 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,283.55 | 3/4 | 3,624.65 | 3/4 | 3,960.21 | 3/4 | 4,273.29 | 3/4 | 4,562.46 | 3/4 | 4,828.31 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 1   | 3,290.66 | 1   | 3,631.76 | 1   | 3,966.89 | 1   | 4,279.57 | 1   | 4,568.25 | 1   | 4,833.52 | 1   |        | 1   |        | 1   |        | 1   |        |
| 1/4 | 3,297.77 | 1/4 | 3,638.87 | 1/4 | 3,973.73 | 1/4 | 4,285.81 | 1/4 | 4,574.00 | 1/4 | 4,839.80 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,304.87 | 1/2 | 3,645.97 | 1/2 | 3,980.47 | 1/2 | 4,292.04 | 1/2 | 4,579.75 | 1/2 | 4,845.99 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,311.98 | 3/4 | 3,653.08 | 3/4 | 3,987.22 | 3/4 | 4,298.28 | 3/4 | 4,585.50 | 3/4 | 4,852.17 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 2   | 3,319.08 | 2   | 3,660.19 | 2   | 3,993.96 | 2   | 4,304.52 | 2   | 4,591.26 | 2   | 4,858.36 | 2   |        | 2   |        | 2   |        | 2   |        |
| 1/4 | 3,326.19 | 1/4 | 3,667.29 | 1/4 | 4,000.66 | 1/4 | 4,310.71 | 1/4 | 4,596.87 | 1/4 | 4,865.45 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,333.30 | 1/2 | 3,674.40 | 1/2 | 4,007.36 | 1/2 | 4,316.91 | 1/2 | 4,602.68 | 1/2 | 4,872.54 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,340.40 | 3/4 | 3,681.51 | 3/4 | 4,014.06 | 3/4 | 4,323.11 | 3/4 | 4,608.39 | 3/4 | 4,879.62 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 3   | 3,347.51 | 3   | 3,688.61 | 3   | 4,020.76 | 3   | 4,329.30 | 3   | 4,614.10 | 3   | 4,886.71 | 3   |        | 3   |        | 3   |        | 3   |        |
| 1/4 | 3,354.62 | 1/4 | 3,695.72 | 1/4 | 4,027.43 | 1/4 | 4,335.46 | 1/4 | 4,619.77 | 1/4 | 4,893.80 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,361.72 | 1/2 | 3,702.82 | 1/2 | 4,034.09 | 1/2 | 4,341.61 | 1/2 | 4,625.44 | 1/2 | 4,900.88 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,368.83 | 3/4 | 3,709.93 | 3/4 | 4,040.75 | 3/4 | 4,347.77 | 3/4 | 4,631.11 | 3/4 | 4,907.97 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 4   | 3,375.93 | 4   | 3,717.04 | 4   | 4,047.41 | 4   | 4,353.93 | 4   | 4,636.78 | 4   | 4,915.06 | 4   |        | 4   |        | 4   |        | 4   |        |
| 1/4 | 3,383.04 | 1/4 | 3,724.13 | 1/4 | 4,054.03 | 1/4 | 4,360.04 | 1/4 | 4,642.41 | 1/4 | 4,921.70 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,390.15 | 1/2 | 3,731.23 | 1/2 | 4,060.65 | 1/2 | 4,366.16 | 1/2 | 4,648.04 | 1/2 | 4,928.34 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,397.25 | 3/4 | 3,738.32 | 3/4 | 4,067.27 | 3/4 | 4,372.27 | 3/4 | 4,653.67 | 3/4 | 4,934.99 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 5   | 3,404.36 | 5   | 3,745.42 | 5   | 4,073.89 | 5   | 4,378.39 | 5   | 4,659.30 | 5   | 4,941.63 | 5   |        | 5   |        | 5   |        | 5   |        |
| 1/4 | 3,411.47 | 1/4 | 3,752.48 | 1/4 | 4,080.47 | 1/4 | 4,384.46 | 1/4 | 4,664.89 | 1/4 | 4,947.70 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,418.57 | 1/2 | 3,759.55 | 1/2 | 4,087.05 | 1/2 | 4,390.54 | 1/2 | 4,670.48 | 1/2 | 4,953.84 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,425.68 | 3/4 | 3,766.62 | 3/4 | 4,093.63 | 3/4 | 4,396.61 | 3/4 | 4,676.06 | 3/4 | 4,959.97 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 6   | 3,432.78 | 6   | 3,773.68 | 6   | 4,100.21 | 6   | 4,402.69 | 6   | 4,681.65 | 6   | 4,966.06 | 6   |        | 6   |        | 6   |        | 6   |        |
| 1/4 | 3,439.89 | 1/4 | 3,780.71 | 1/4 | 4,106.75 | 1/4 | 4,408.72 | 1/4 | 4,687.20 | 1/4 | 4,972.17 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,447.00 | 1/2 | 3,787.73 | 1/2 | 4,113.29 | 1/2 | 4,414.76 | 1/2 | 4,692.75 | 1/2 | 4,978.28 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,454.10 | 3/4 | 3,794.76 | 3/4 | 4,119.83 | 3/4 | 4,420.79 | 3/4 | 4,698.30 | 3/4 | 4,984.39 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 7   | 3,461.21 | 7   | 3,801.78 | 7   | 4,126.37 | 7   | 4,426.82 | 7   | 4,703.85 | 7   | 4,990.48 | 7   |        | 7   |        | 7   |        | 7   |        |
| 1/4 | 3,468.32 | 1/4 | 3,808.77 | 1/4 | 4,132.87 | 1/4 | 4,432.82 | 1/4 | 4,709.36 | 1/4 | 4,996.57 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,475.42 | 1/2 | 3,815.75 | 1/2 | 4,139.37 | 1/2 | 4,438.81 | 1/2 | 4,714.86 | 1/2 | 5,002.66 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,482.53 | 3/4 | 3,822.74 | 3/4 | 4,145.87 | 3/4 | 4,444.81 | 3/4 | 4,720.37 | 3/4 | 5,008.75 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 8   | 3,489.64 | 8   | 3,829.72 | 8   | 4,152.36 | 8   | 4,450.80 | 8   | 4,725.88 | 8   | 5,014.84 | 8   |        | 8   |        | 8   |        | 8   |        |
| 1/4 | 3,496.74 | 1/4 | 3,836.67 | 1/4 | 4,158.81 | 1/4 | 4,456.75 | 1/4 | 4,731.35 | 1/4 | 5,020.93 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,503.85 | 1/2 | 3,843.61 | 1/2 | 4,165.26 | 1/2 | 4,462.71 | 1/2 | 4,736.82 | 1/2 | 5,027.02 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,510.95 | 3/4 | 3,850.56 | 3/4 | 4,171.71 | 3/4 | 4,468.66 | 3/4 | 4,742.28 | 3/4 | 5,033.11 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 9   | 3,518.06 | 9   | 3,857.50 | 9   | 4,178.16 | 9   | 4,474.61 | 9   | 4,747.75 | 9   | 5,039.20 | 9   |        | 9   |        | 9   |        | 9   |        |
| 1/4 | 3,525.17 | 1/4 | 3,864.40 | 1/4 | 4,184.56 | 1/4 | 4,480.53 | 1/4 | 4,753.18 | 1/4 | 5,045.29 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,532.27 | 1/2 | 3,871.31 | 1/2 | 4,190.96 | 1/2 | 4,486.44 | 1/2 | 4,758.61 | 1/2 | 5,051.38 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,539.38 | 3/4 | 3,878.21 | 3/4 | 4,197.35 | 3/4 | 4,492.35 | 3/4 | 4,764.03 | 3/4 | 5,057.47 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 10  | 3,546.49 | 10  | 3,885.12 | 10  | 4,203.76 | 10  | 4,498.27 | 10  | 4,769.46 | 10  | 5,063.56 | 10  |        | 10  |        | 10  |        | 10  |        |
| 1/4 | 3,553.59 | 1/4 | 3,891.98 | 1/4 | 4,210.11 | 1/4 | 4,504.14 | 1/4 | 4,774.85 | 1/4 | 5,069.65 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,560.70 | 1/2 | 3,898.84 | 1/2 | 4,216.47 | 1/2 | 4,510.01 | 1/2 | 4,780.23 | 1/2 | 5,075.74 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,567.80 | 3/4 | 3,905.71 | 3/4 | 4,222.83 | 3/4 | 4,515.88 | 3/4 | 4,785.62 | 3/4 | 5,081.83 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 11  | 3,574.91 | 11  | 3,912.57 | 11  | 4,229.19 | 11  | 4,521.76 | 11  | 4,791.01 | 11  | 5,087.92 | 11  |        | 11  |        | 11  |        | 11  |        |
| 1/4 | 3,582.02 | 1/4 | 3,919.39 | 1/4 | 4,235.51 | 1/4 | 4,527.59 | 1/4 | 4,796.35 | 1/4 | 5,094.01 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 3,589.12 | 1/2 | 3,926.22 | 1/2 | 4,241.82 | 1/2 | 4,533.42 | 1/2 | 4,801.70 | 1/2 | 5,099.10 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 3,596.23 | 3/4 | 3,933.04 | 3/4 | 4,248.14 | 3/4 | 4,539.25 | 3/4 | 4,807.05 | 3/4 | 5,105.19 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2892  
Pearland, Texas 77588  
<http://www.pmacorp.net>

*Signature*



# BARGE "EMS 503"

## 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      | IN    | 0      | IN    | 0      | IN    | 0        | IN    | 0        | IN    | 0        | IN    | 0        | IN    | 0        | IN    | 0        | IN    | 0        |
| 0     | 10.39  | 0     | 263.42 | 0     | 565.68 | 0     | 876.48   | 0     | 1,216.22 | 0     | 1,567.41 | 0     | 1,988.60 | 0     | 2,239.78 | 0     | 2,580.95 | 0     | 2,922.12 |
| 1/4   | 13.71  | 1/4   | 269.23 | 1/4   | 562.10 | 1/4   | 883.47   | 1/4   | 1,223.33 | 1/4   | 1,564.52 | 1/4   | 1,905.71 | 1/4   | 2,246.89 | 1/4   | 2,588.06 | 1/4   | 2,929.23 |
| 1/2   | 17.03  | 1/2   | 275.04 | 1/2   | 568.52 | 1/2   | 890.46   | 1/2   | 1,230.43 | 1/2   | 1,571.63 | 1/2   | 1,912.82 | 1/2   | 2,254.00 | 1/2   | 2,595.16 | 1/2   | 2,936.33 |
| 3/4   | 20.35  | 3/4   | 280.85 | 3/4   | 574.94 | 3/4   | 897.45   | 3/4   | 1,237.54 | 3/4   | 1,578.74 | 3/4   | 1,919.92 | 3/4   | 2,261.10 | 3/4   | 2,602.27 | 3/4   | 2,943.44 |
| 1     | 23.67  | 1     | 286.66 | 1     | 581.36 | 1     | 904.43   | 1     | 1,244.65 | 1     | 1,585.84 | 1     | 1,927.03 | 1     | 2,268.21 | 1     | 2,609.38 | 1     | 2,950.55 |
| 1/4   | 26.32  | 1/4   | 292.51 | 1/4   | 587.84 | 1/4   | 911.47   | 1/4   | 1,251.76 | 1/4   | 1,592.95 | 1/4   | 1,934.14 | 1/4   | 2,275.32 | 1/4   | 2,616.49 | 1/4   | 2,957.66 |
| 1/2   | 32.98  | 1/2   | 298.37 | 1/2   | 594.31 | 1/2   | 918.50   | 1/2   | 1,258.87 | 1/2   | 1,600.06 | 1/2   | 1,941.25 | 1/2   | 2,282.43 | 1/2   | 2,623.60 | 1/2   | 2,964.77 |
| 3/4   | 37.63  | 3/4   | 304.23 | 3/4   | 600.78 | 3/4   | 925.54   | 3/4   | 1,265.97 | 3/4   | 1,607.17 | 3/4   | 1,948.36 | 3/4   | 2,289.53 | 3/4   | 2,630.70 | 3/4   | 2,971.87 |
| 1     | 42.29  | 1     | 310.09 | 1     | 607.25 | 1     | 932.57   | 1     | 1,273.08 | 1     | 1,614.28 | 1     | 1,955.46 | 1     | 2,296.64 | 1     | 2,637.81 | 1     | 2,978.98 |
| 1/4   | 47.59  | 1/4   | 316.00 | 1/4   | 613.77 | 1/4   | 939.53   | 1/4   | 1,280.19 | 1/4   | 1,621.38 | 1/4   | 1,962.57 | 1/4   | 2,303.75 | 1/4   | 2,644.92 | 1/4   | 2,986.09 |
| 1/2   | 52.89  | 1/2   | 321.91 | 1/2   | 620.28 | 1/2   | 946.69   | 1/2   | 1,287.30 | 1/2   | 1,628.49 | 1/2   | 1,969.68 | 1/2   | 2,310.86 | 1/2   | 2,652.03 | 1/2   | 2,993.20 |
| 3/4   | 58.19  | 3/4   | 327.82 | 3/4   | 626.81 | 3/4   | 953.75   | 3/4   | 1,294.41 | 3/4   | 1,635.60 | 3/4   | 1,976.79 | 3/4   | 2,317.96 | 3/4   | 2,659.13 | 3/4   | 2,999.30 |
| 1     | 63.48  | 1     | 333.74 | 1     | 633.34 | 1     | 960.81   | 1     | 1,301.52 | 1     | 1,642.71 | 1     | 1,983.90 | 1     | 2,325.07 | 1     | 2,666.24 | 1     | 3,000.30 |
| 1/4   | 68.83  | 1/4   | 339.70 | 1/4   | 639.91 | 1/4   | 967.87   | 1/4   | 1,308.82 | 1/4   | 1,649.82 | 1/4   | 1,991.00 | 1/4   | 2,332.18 | 1/4   | 2,673.35 | 1/4   | 3,007.41 |
| 1/2   | 74.18  | 1/2   | 345.66 | 1/2   | 646.48 | 1/2   | 974.94   | 1/2   | 1,315.73 | 1/2   | 1,656.93 | 1/2   | 1,998.11 | 1/2   | 2,339.29 | 1/2   | 2,680.46 | 1/2   | 3,014.52 |
| 3/4   | 79.53  | 3/4   | 351.62 | 3/4   | 653.06 | 3/4   | 982.00   | 3/4   | 1,322.84 | 3/4   | 1,664.03 | 3/4   | 2,005.22 | 3/4   | 2,346.40 | 3/4   | 2,687.56 | 3/4   | 3,021.63 |
| 1     | 84.88  | 1     | 357.58 | 1     | 659.63 | 1     | 989.07   | 1     | 1,329.95 | 1     | 1,671.14 | 1     | 2,012.33 | 1     | 2,353.50 | 1     | 2,694.67 | 1     | 3,028.74 |
| 1/4   | 90.29  | 1/4   | 363.59 | 1/4   | 666.25 | 1/4   | 996.14   | 1/4   | 1,337.06 | 1/4   | 1,678.25 | 1/4   | 2,019.44 | 1/4   | 2,360.61 | 1/4   | 2,701.78 | 1/4   | 3,035.85 |
| 1/2   | 95.69  | 1/2   | 369.61 | 1/2   | 672.88 | 1/2   | 1,003.21 | 1/2   | 1,344.16 | 1/2   | 1,685.36 | 1/2   | 2,026.55 | 1/2   | 2,367.72 | 1/2   | 2,708.89 | 1/2   | 3,042.96 |
| 3/4   | 101.09 | 3/4   | 375.62 | 3/4   | 679.50 | 3/4   | 1,010.28 | 3/4   | 1,351.27 | 3/4   | 1,692.47 | 3/4   | 2,033.65 | 3/4   | 2,374.83 | 3/4   | 2,716.00 | 3/4   | 3,050.07 |
| 1     | 106.49 | 1     | 381.63 | 1     | 686.12 | 1     | 1,017.36 | 1     | 1,358.38 | 1     | 1,699.57 | 1     | 2,040.76 | 1     | 2,381.93 | 1     | 2,723.10 | 1     | 3,057.18 |
| 1/4   | 111.94 | 1/4   | 387.69 | 1/4   | 692.80 | 1/4   | 1,024.43 | 1/4   | 1,365.49 | 1/4   | 1,706.68 | 1/4   | 2,047.87 | 1/4   | 2,389.04 | 1/4   | 2,730.21 | 1/4   | 3,064.28 |
| 1/2   | 117.39 | 1/2   | 393.76 | 1/2   | 699.47 | 1/2   | 1,031.51 | 1/2   | 1,372.60 | 1/2   | 1,713.79 | 1/2   | 2,054.98 | 1/2   | 2,396.15 | 1/2   | 2,737.32 | 1/2   | 3,071.39 |
| 3/4   | 122.84 | 3/4   | 399.82 | 3/4   | 705.15 | 3/4   | 1,038.59 | 3/4   | 1,379.71 | 3/4   | 1,720.90 | 3/4   | 2,062.09 | 3/4   | 2,403.26 | 3/4   | 2,744.43 | 3/4   | 3,078.50 |
| 1     | 128.30 | 1     | 405.88 | 1     | 711.82 | 1     | 1,045.67 | 1     | 1,386.81 | 1     | 1,728.01 | 1     | 2,069.20 | 1     | 2,410.35 | 1     | 2,751.53 | 1     | 3,085.61 |
| 1/4   | 133.80 | 1/4   | 412.00 | 1/4   | 719.53 | 1/4   | 1,052.77 | 1/4   | 1,393.92 | 1/4   | 1,735.12 | 1/4   | 2,076.30 | 1/4   | 2,417.47 | 1/4   | 2,758.64 | 1/4   | 3,092.72 |
| 1/2   | 139.30 | 1/2   | 418.11 | 1/2   | 726.24 | 1/2   | 1,059.86 | 1/2   | 1,401.03 | 1/2   | 1,742.22 | 1/2   | 2,083.41 | 1/2   | 2,424.58 | 1/2   | 2,765.75 | 1/2   | 3,099.82 |
| 3/4   | 144.80 | 3/4   | 424.23 | 3/4   | 732.95 | 3/4   | 1,066.96 | 3/4   | 1,408.14 | 3/4   | 1,749.33 | 3/4   | 2,090.52 | 3/4   | 2,431.69 | 3/4   | 2,772.86 | 3/4   | 3,106.93 |
| 1     | 150.31 | 1     | 430.34 | 1     | 739.66 | 1     | 1,074.05 | 1     | 1,415.25 | 1     | 1,756.44 | 1     | 2,097.63 | 1     | 2,438.80 | 1     | 2,779.97 | 1     | 3,114.04 |
| 1/4   | 155.86 | 1/4   | 436.51 | 1/4   | 746.41 | 1/4   | 1,081.16 | 1/4   | 1,422.35 | 1/4   | 1,763.55 | 1/4   | 2,104.74 | 1/4   | 2,445.90 | 1/4   | 2,787.07 | 1/4   | 3,121.15 |
| 1/2   | 161.41 | 1/2   | 442.67 | 1/2   | 753.15 | 1/2   | 1,088.27 | 1/2   | 1,429.46 | 1/2   | 1,770.68 | 1/2   | 2,111.84 | 1/2   | 2,453.01 | 1/2   | 2,794.18 | 1/2   | 3,128.26 |
| 3/4   | 166.97 | 3/4   | 448.84 | 3/4   | 759.90 | 3/4   | 1,095.38 | 3/4   | 1,436.57 | 3/4   | 1,777.76 | 3/4   | 2,118.95 | 3/4   | 2,460.12 | 3/4   | 2,801.29 | 3/4   | 3,135.36 |
| 1     | 172.52 | 1     | 455.00 | 1     | 766.65 | 1     | 1,102.49 | 1     | 1,443.68 | 1     | 1,784.87 | 1     | 2,126.06 | 1     | 2,467.23 | 1     | 2,808.40 | 1     | 3,142.47 |
| 1/4   | 178.13 | 1/4   | 461.22 | 1/4   | 773.44 | 1/4   | 1,109.59 | 1/4   | 1,450.79 | 1/4   | 1,791.98 | 1/4   | 2,133.16 | 1/4   | 2,474.33 | 1/4   | 2,815.50 | 1/4   | 3,149.58 |
| 1/2   | 183.73 | 1/2   | 467.43 | 1/2   | 780.23 | 1/2   | 1,116.70 | 1/2   | 1,457.90 | 1/2   | 1,799.09 | 1/2   | 2,140.27 | 1/2   | 2,481.44 | 1/2   | 2,822.61 | 1/2   | 3,156.69 |
| 3/4   | 189.34 | 3/4   | 473.65 | 3/4   | 787.03 | 3/4   | 1,123.81 | 3/4   | 1,465.00 | 3/4   | 1,806.20 | 3/4   | 2,147.38 | 3/4   | 2,488.55 | 3/4   | 2,829.72 | 3/4   | 3,163.80 |
| 1     | 194.94 | 1     | 479.87 | 1     | 793.82 | 1     | 1,130.92 | 1     | 1,472.11 | 1     | 1,813.31 | 1     | 2,154.49 | 1     | 2,495.66 | 1     | 2,836.83 | 1     | 3,170.90 |
| 1/4   | 200.60 | 1/4   | 486.13 | 1/4   | 800.66 | 1/4   | 1,138.03 | 1/4   | 1,479.22 | 1/4   | 1,820.41 | 1/4   | 2,161.60 | 1/4   | 2,502.76 | 1/4   | 2,843.93 | 1/4   | 3,178.01 |
| 1/2   | 206.25 | 1/2   | 492.40 | 1/2   | 807.50 | 1/2   | 1,145.14 | 1/2   | 1,486.33 | 1/2   | 1,827.52 | 1/2   | 2,168.70 | 1/2   | 2,509.87 | 1/2   | 2,851.04 | 1/2   | 3,185.12 |
| 3/4   | 211.91 | 3/4   | 498.67 | 3/4   | 814.34 | 3/4   | 1,152.24 | 3/4   | 1,493.44 | 3/4   | 1,834.63 | 3/4   | 2,175.81 | 3/4   | 2,516.98 | 3/4   | 2,858.15 | 3/4   | 3,192.23 |
| 1     | 217.56 | 1     | 504.94 | 1     | 821.18 | 1     | 1,159.35 | 1     | 1,500.55 | 1     | 1,841.74 | 1     | 2,182.92 | 1     | 2,524.09 | 1     | 2,865.28 | 1     | 3,199.34 |
| 1/4   | 223.27 | 1/4   | 511.25 | 1/4   | 828.06 | 1/4   | 1,166.46 | 1/4   | 1,507.65 | 1/4   | 1,848.85 | 1/4   | 2,190.03 | 1/4   | 2,531.20 | 1/4   | 2,872.37 | 1/4   | 3,206.44 |
| 1/2   | 228.98 | 1/2   | 517.57 | 1/2   | 834.95 | 1/2   | 1,173.57 | 1/2   | 1,514.76 | 1/2   | 1,855.95 | 1/2   | 2,197.13 | 1/2   | 2,538.30 | 1/2   | 2,879.47 | 1/2   | 3,213.55 |
| 3/4   | 234.68 | 3/4   | 523.89 | 3/4   | 841.84 | 3/4   | 1,180.68 | 3/4   | 1,521.87 | 3/4   | 1,868.06 | 3/4   | 2,204.24 | 3/4   | 2,545.41 | 3/4   | 2,886.58 | 3/4   | 3,220.66 |
| 1     | 240.39 | 1     | 530.21 | 1     | 848.73 | 1     | 1,187.78 | 1     | 1,528.98 | 1     | 1,870.17 | 1     | 2,211.35 | 1     | 2,552.52 | 1     | 2,893.69 | 1     | 3,227.77 |
| 1/4   | 246.15 | 1/4   | 536.58 | 1/4   | 855.66 | 1/4   | 1,194.88 | 1/4   | 1,536.09 | 1/4   | 1,877.27 | 1/4   | 2,218.46 | 1/4   | 2,559.63 | 1/4   | 2,900.80 | 1/4   | 3,234.88 |
| 1/2   | 251.91 | 1/2   | 542.85 | 1/2   | 862.60 | 1/2   | 1,202.00 | 1/2   | 1,543.19 | 1/2   | 1,884.38 | 1/2   | 2,225.56 | 1/2   | 2,566.73 | 1/2   | 2,907.90 | 1/2   | 3,241.98 |
| 3/4   | 257.66 | 3/4   | 549.32 | 3/4   | 869.54 | 3/4   | 1,209.11 | 3/4   | 1,550.30 | 3/4   | 1,891.49 | 3/4   | 2,232.67 | 3/4   | 2,573.84 | 3/4   | 2,915.01 | 3/4   | 3,249.09 |

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN TANK.

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'-48" 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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# BARGE "EMS 503"

## 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     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      |
| 0      | 3,263.31 | 0      | 3,604.49 | 0      | 3,941.12 | 0      | 4,255.84 | 0      | 4,546.61 | 0      | 4,814.10 | 0      | 5,064.39 | 0      | 5,298.18 | 0      | 5,504.49 | 0      | 5,688.31 |
| 1/4    | 3,270.42 | 1/4    | 3,611.60 | 1/4    | 3,947.91 | 1/4    | 4,262.12 | 1/4    | 4,552.41 | 1/4    | 4,819.41 | 1/4    | 5,069.70 | 1/4    | 5,303.49 | 1/4    | 5,510.00 | 1/4    | 5,693.82 |
| 1/2    | 3,277.52 | 1/2    | 3,618.71 | 1/2    | 3,954.89 | 1/2    | 4,268.40 | 1/2    | 4,558.20 | 1/2    | 4,824.72 | 1/2    | 5,075.01 | 1/2    | 5,308.80 | 1/2    | 5,515.31 | 1/2    | 5,698.93 |
| 3/4    | 3,284.53 | 3/4    | 3,625.82 | 3/4    | 3,961.47 | 3/4    | 4,274.68 | 3/4    | 4,564.00 | 3/4    | 4,830.03 | 3/4    | 5,080.32 | 3/4    | 5,314.11 | 3/4    | 5,520.62 | 3/4    | 5,703.75 |
| 1      | 3,291.74 | 1      | 3,632.92 | 1      | 3,968.26 | 1      | 4,280.96 | 1      | 4,569.79 | 1      | 4,835.34 | 1      | 5,091.63 | 1      | 5,325.42 | 1      | 5,532.13 | 1      | 5,715.26 |
| 1/4    | 3,298.85 | 1/4    | 3,640.03 | 1/4    | 3,975.00 | 1/4    | 4,287.20 | 1/4    | 4,575.55 | 1/4    | 4,841.53 | 1/4    | 5,097.87 | 1/4    | 5,332.95 | 1/4    | 5,539.66 | 1/4    | 5,719.79 |
| 1/2    | 3,305.96 | 1/2    | 3,647.14 | 1/2    | 3,981.75 | 1/2    | 4,293.44 | 1/2    | 4,581.30 | 1/2    | 4,847.71 | 1/2    | 5,104.03 | 1/2    | 5,340.11 | 1/2    | 5,546.82 | 1/2    | 5,725.90 |
| 3/4    | 3,313.06 | 3/4    | 3,654.25 | 3/4    | 3,988.49 | 3/4    | 4,299.68 | 3/4    | 4,587.06 | 3/4    | 4,853.90 | 3/4    | 5,110.22 | 3/4    | 5,345.19 | 3/4    | 5,551.93 | 3/4    | 5,731.03 |
| 1      | 3,320.17 | 1      | 3,661.36 | 1      | 3,995.24 | 1      | 4,305.92 | 1      | 4,592.81 | 1      | 4,859.09 | 1      | 5,116.41 | 1      | 5,350.28 | 1      | 5,558.04 | 1      | 5,736.14 |
| 1/4    | 3,327.28 | 1/4    | 3,668.46 | 1/4    | 4,001.94 | 1/4    | 4,312.12 | 1/4    | 4,598.52 | 1/4    | 4,864.78 | 1/4    | 5,122.60 | 1/4    | 5,355.37 | 1/4    | 5,563.15 | 1/4    | 5,741.25 |
| 1/2    | 3,334.39 | 1/2    | 3,675.57 | 1/2    | 4,008.64 | 1/2    | 4,318.32 | 1/2    | 4,604.24 | 1/2    | 4,870.47 | 1/2    | 5,128.75 | 1/2    | 5,360.46 | 1/2    | 5,568.26 | 1/2    | 5,746.35 |
| 3/4    | 3,341.50 | 3/4    | 3,682.68 | 3/4    | 4,015.35 | 3/4    | 4,324.52 | 3/4    | 4,609.95 | 3/4    | 4,881.36 | 3/4    | 5,134.83 | 3/4    | 5,365.55 | 3/4    | 5,573.36 | 3/4    | 5,751.45 |
| 1      | 3,348.60 | 1      | 3,689.79 | 1      | 4,022.05 | 1      | 4,330.72 | 1      | 4,616.67 | 1      | 4,888.45 | 1      | 5,140.92 | 1      | 5,370.64 | 1      | 5,579.47 | 1      | 5,756.55 |
| 1/4    | 3,355.71 | 1/4    | 3,696.90 | 1/4    | 4,028.71 | 1/4    | 4,336.87 | 1/4    | 4,621.34 | 1/4    | 4,895.54 | 1/4    | 5,146.01 | 1/4    | 5,375.73 | 1/4    | 5,584.58 | 1/4    | 5,761.66 |
| 1/2    | 3,362.82 | 1/2    | 3,704.00 | 1/2    | 4,035.38 | 1/2    | 4,343.03 | 1/2    | 4,627.01 | 1/2    | 4,902.63 | 1/2    | 5,151.10 | 1/2    | 5,380.82 | 1/2    | 5,589.69 | 1/2    | 5,766.75 |
| 3/4    | 3,369.93 | 3/4    | 3,711.11 | 3/4    | 4,042.04 | 3/4    | 4,349.19 | 3/4    | 4,633.69 | 3/4    | 4,909.71 | 3/4    | 5,156.19 | 3/4    | 5,385.91 | 3/4    | 5,594.79 | 3/4    | 5,771.86 |
| 1      | 3,377.04 | 1      | 3,718.22 | 1      | 4,048.70 | 1      | 4,355.35 | 1      | 4,638.36 | 1      | 4,916.80 | 1      | 5,161.28 | 1      | 5,391.00 | 1      | 5,600.00 | 1      | 5,776.95 |
| 1/4    | 3,384.14 | 1/4    | 3,725.32 | 1/4    | 4,055.33 | 1/4    | 4,361.47 | 1/4    | 4,643.98 | 1/4    | 4,923.45 | 1/4    | 5,166.37 | 1/4    | 5,396.11 | 1/4    | 5,605.09 | 1/4    | 5,782.04 |
| 1/2    | 3,391.25 | 1/2    | 3,732.42 | 1/2    | 4,061.95 | 1/2    | 4,367.59 | 1/2    | 4,649.53 | 1/2    | 4,929.09 | 1/2    | 5,171.46 | 1/2    | 5,401.20 | 1/2    | 5,610.18 | 1/2    | 5,787.13 |
| 3/4    | 3,398.36 | 3/4    | 3,739.52 | 3/4    | 4,068.57 | 3/4    | 4,373.71 | 3/4    | 4,655.26 | 3/4    | 4,936.74 | 3/4    | 5,176.55 | 3/4    | 5,406.31 | 3/4    | 5,615.27 | 3/4    | 5,792.22 |
| 1      | 3,405.47 | 1      | 3,746.62 | 1      | 4,075.20 | 1      | 4,379.82 | 1      | 4,660.99 | 1      | 4,943.38 | 1      | 5,181.64 | 1      | 5,411.42 | 1      | 5,620.36 | 1      | 5,797.31 |
| 1/4    | 3,412.58 | 1/4    | 3,753.69 | 1/4    | 4,081.78 | 1/4    | 4,385.90 | 1/4    | 4,666.49 | 1/4    | 4,948.47 | 1/4    | 5,186.73 | 1/4    | 5,416.53 | 1/4    | 5,625.45 | 1/4    | 5,802.40 |
| 1/2    | 3,419.68 | 1/2    | 3,760.76 | 1/2    | 4,088.36 | 1/2    | 4,391.98 | 1/2    | 4,672.08 | 1/2    | 4,953.56 | 1/2    | 5,191.82 | 1/2    | 5,421.64 | 1/2    | 5,630.56 | 1/2    | 5,807.50 |
| 3/4    | 3,426.79 | 3/4    | 3,767.83 | 3/4    | 4,094.94 | 3/4    | 4,398.06 | 3/4    | 4,677.57 | 3/4    | 4,958.65 | 3/4    | 5,196.91 | 3/4    | 5,426.75 | 3/4    | 5,635.67 | 3/4    | 5,812.61 |
| 1      | 3,433.90 | 1      | 3,774.89 | 1      | 4,101.53 | 1      | 4,404.14 | 1      | 4,683.27 | 1      | 4,963.74 | 1      | 5,202.00 | 1      | 5,431.86 | 1      | 5,640.78 | 1      | 5,817.66 |
| 1/4    | 3,441.01 | 1/4    | 3,781.92 | 1/4    | 4,108.07 | 1/4    | 4,410.17 | 1/4    | 4,688.82 | 1/4    | 4,968.82 | 1/4    | 5,207.09 | 1/4    | 5,436.97 | 1/4    | 5,645.89 | 1/4    | 5,822.71 |
| 1/2    | 3,448.12 | 1/2    | 3,788.95 | 1/2    | 4,114.61 | 1/2    | 4,416.21 | 1/2    | 4,694.37 | 1/2    | 4,973.91 | 1/2    | 5,212.18 | 1/2    | 5,442.08 | 1/2    | 5,651.00 | 1/2    | 5,827.76 |
| 3/4    | 3,455.22 | 3/4    | 3,795.97 | 3/4    | 4,121.15 | 3/4    | 4,422.25 | 3/4    | 4,699.92 | 3/4    | 4,979.00 | 3/4    | 5,217.27 | 3/4    | 5,447.19 | 3/4    | 5,656.11 | 3/4    | 5,832.81 |
| 1      | 3,462.33 | 1      | 3,803.00 | 1      | 4,127.69 | 1      | 4,428.29 | 1      | 4,705.47 | 1      | 4,984.19 | 1      | 5,222.36 | 1      | 5,452.30 | 1      | 5,661.22 | 1      | 5,837.86 |
| 1/4    | 3,469.44 | 1/4    | 3,809.99 | 1/4    | 4,134.20 | 1/4    | 4,434.28 | 1/4    | 4,710.99 | 1/4    | 4,989.28 | 1/4    | 5,227.45 | 1/4    | 5,457.41 | 1/4    | 5,666.34 | 1/4    | 5,842.91 |
| 1/2    | 3,476.55 | 1/2    | 3,816.98 | 1/2    | 4,140.70 | 1/2    | 4,440.28 | 1/2    | 4,716.50 | 1/2    | 4,994.37 | 1/2    | 5,232.54 | 1/2    | 5,462.52 | 1/2    | 5,671.46 | 1/2    | 5,848.00 |
| 3/4    | 3,483.66 | 3/4    | 3,823.96 | 3/4    | 4,147.20 | 3/4    | 4,446.28 | 3/4    | 4,722.01 | 3/4    | 4,999.46 | 3/4    | 5,237.63 | 3/4    | 5,467.63 | 3/4    | 5,676.59 | 3/4    | 5,853.05 |
| 1      | 3,490.76 | 1      | 3,830.95 | 1      | 4,153.70 | 1      | 4,452.28 | 1      | 4,727.52 | 1      | 5,004.55 | 1      | 5,242.72 | 1      | 5,472.74 | 1      | 5,681.66 | 1      | 5,858.11 |
| 1/4    | 3,497.87 | 1/4    | 3,837.90 | 1/4    | 4,160.15 | 1/4    | 4,458.23 | 1/4    | 4,732.99 | 1/4    | 5,009.64 | 1/4    | 5,247.81 | 1/4    | 5,477.85 | 1/4    | 5,686.78 | 1/4    | 5,863.17 |
| 1/2    | 3,504.98 | 1/2    | 3,844.84 | 1/2    | 4,166.60 | 1/2    | 4,464.19 | 1/2    | 4,738.47 | 1/2    | 5,014.75 | 1/2    | 5,252.90 | 1/2    | 5,482.97 | 1/2    | 5,691.89 | 1/2    | 5,868.22 |
| 3/4    | 3,512.09 | 3/4    | 3,851.79 | 3/4    | 4,173.06 | 3/4    | 4,470.15 | 3/4    | 4,743.94 | 3/4    | 5,019.84 | 3/4    | 5,258.00 | 3/4    | 5,488.06 | 3/4    | 5,696.99 | 3/4    | 5,873.27 |
| 1      | 3,519.20 | 1      | 3,858.73 | 1      | 4,179.51 | 1      | 4,476.10 | 1      | 4,749.41 | 1      | 5,024.93 | 1      | 5,263.09 | 1      | 5,493.17 | 1      | 5,702.09 | 1      | 5,878.32 |
| 1/4    | 3,526.30 | 1/4    | 3,865.64 | 1/4    | 4,185.91 | 1/4    | 4,482.02 | 1/4    | 4,754.84 | 1/4    | 5,030.06 | 1/4    | 5,268.18 | 1/4    | 5,498.26 | 1/4    | 5,707.19 | 1/4    | 5,883.37 |
| 1/2    | 3,533.41 | 1/2    | 3,872.55 | 1/2    | 4,192.31 | 1/2    | 4,487.93 | 1/2    | 4,760.27 | 1/2    | 5,035.19 | 1/2    | 5,273.27 | 1/2    | 5,503.35 | 1/2    | 5,712.29 | 1/2    | 5,888.42 |
| 3/4    | 3,540.52 | 3/4    | 3,879.45 | 3/4    | 4,198.71 | 3/4    | 4,493.85 | 3/4    | 4,765.70 | 3/4    | 5,040.30 | 3/4    | 5,278.36 | 3/4    | 5,508.44 | 3/4    | 5,717.39 | 3/4    | 5,893.47 |
| 1      | 3,547.63 | 1      | 3,886.36 | 1      | 4,205.11 | 1      | 4,499.77 | 1      | 4,771.13 | 1      | 5,045.42 | 1      | 5,283.44 | 1      | 5,513.52 | 1      | 5,722.41 | 1      | 5,898.52 |
| 1/4    | 3,554.74 | 1/4    | 3,893.22 | 1/4    | 4,211.47 | 1/4    | 4,505.64 | 1/4    | 4,776.52 | 1/4    | 5,050.56 | 1/4    | 5,288.55 | 1/4    | 5,518.60 | 1/4    | 5,727.53 | 1/4    | 5,903.57 |
| 1/2    | 3,561.84 | 1/2    | 3,900.09 | 1/2    | 4,217.83 | 1/2    | 4,511.52 | 1/2    | 4,781.91 | 1/2    | 5,055.67 | 1/2    | 5,293.63 | 1/2    | 5,523.69 | 1/2    | 5,732.61 | 1/2    | 5,908.62 |
| 3/4    | 3,568.95 | 3/4    | 3,906.96 | 3/4    | 4,224.20 | 3/4    | 4,517.39 | 3/4    | 4,787.30 | 3/4    | 5,060.78 | 3/4    | 5,298.70 | 3/4    | 5,528.76 | 3/4    | 5,737.73 | 3/4    | 5,913.67 |
| 1      | 3,576.06 | 1      | 3,913.82 | 1      | 4,230.56 | 1      | 4,523.27 | 1      | 4,792.70 | 1      | 5,065.89 | 1      | 5,303.81 | 1      | 5,533.86 | 1      | 5,742.78 | 1      | 5,918.72 |
| 1/4    | 3,583.17 | 1/4    | 3,920.65 | 1/4    | 4,236.88 | 1/4    | 4,529.11 | 1/4    | 4,798.05 | 1/4    | 5,071.00 | 1/4    | 5,308.90 | 1/4    | 5,538.91 | 1/4    | 5,747.83 | 1/4    | 5,923.77 |
| 1/2    | 3,590.28 | 1/2    | 3,927.47 | 1/2    | 4,243.20 | 1/2    | 4,534.94 | 1/2    | 4,803.40 | 1/2    | 5,076.11 | 1/2    | 5,314.02 | 1/2    | 5,544.03 | 1/2    | 5,752.89 | 1/2    | 5,928.82 |
| 3/4    | 3,597.38 | 3/4    | 3,934.30 | 3/4    | 4,249.52 | 3/4    | 4,540.78 | 3/4    | 4,808.75 | 3/4    | 5,081.22 | 3/4    | 5,319.14 | 3/4    | 5,549.14 | 3/4    | 5,757.91 | 3/4    | 5,933.87 |

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

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PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2082  
Pearland, Texas 77588  
http://www.pmaacorp.net

*Paul J. Glavin*



# BARGE "EMS 503"

## 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     | 13.98  | 0     | 389.75 | 0     | 778.94   | 0     | 1,168.01 | 0     | 1,557.30 | 0     | 1,946.60 | 0     | 2,335.90 | 0     | 2,725.20 | 0     | 3,114.48 | 0     | 3,503.76 |
| 1/4   | 19.38  | 1/4   | 397.86 | 1/4   | 787.04   | 1/4   | 1,176.12 | 1/4   | 1,565.42 | 1/4   | 1,954.71 | 1/4   | 2,344.01 | 1/4   | 2,733.31 | 1/4   | 3,122.59 | 1/4   | 3,511.87 |
| 1/2   | 24.79  | 1/2   | 405.97 | 1/2   | 795.14   | 1/2   | 1,184.23 | 1/2   | 1,573.53 | 1/2   | 1,962.82 | 1/2   | 2,352.12 | 1/2   | 2,741.42 | 1/2   | 3,130.70 | 1/2   | 3,519.98 |
| 3/4   | 30.20  | 3/4   | 414.08 | 3/4   | 803.24   | 3/4   | 1,192.34 | 3/4   | 1,581.64 | 3/4   | 1,970.94 | 3/4   | 2,360.23 | 3/4   | 2,749.53 | 3/4   | 3,138.81 | 3/4   | 3,528.09 |
| 1     | 35.60  | 1     | 422.19 | 1     | 811.34   | 1     | 1,200.45 | 1     | 1,589.75 | 1     | 1,978.05 | 1     | 2,367.34 | 1     | 2,756.64 | 1     | 3,145.92 | 1     | 3,535.20 |
| 1/4   | 43.04  | 1/4   | 430.30 | 1/4   | 819.44   | 1/4   | 1,208.56 | 1/4   | 1,597.86 | 1/4   | 1,987.16 | 1/4   | 2,376.46 | 1/4   | 2,765.75 | 1/4   | 3,155.03 | 1/4   | 3,544.31 |
| 1/2   | 50.47  | 1/2   | 438.41 | 1/2   | 827.54   | 1/2   | 1,216.67 | 1/2   | 1,605.97 | 1/2   | 1,995.27 | 1/2   | 2,384.57 | 1/2   | 2,773.86 | 1/2   | 3,163.14 | 1/2   | 3,552.42 |
| 3/4   | 57.91  | 3/4   | 446.52 | 3/4   | 835.64   | 3/4   | 1,224.78 | 3/4   | 1,614.08 | 3/4   | 2,003.38 | 3/4   | 2,392.68 | 3/4   | 2,781.97 | 3/4   | 3,171.25 | 3/4   | 3,560.53 |
| 2     | 65.34  | 2     | 454.63 | 2     | 843.74   | 2     | 1,232.89 | 2     | 1,622.19 | 2     | 2,011.49 | 2     | 2,400.79 | 2     | 2,790.08 | 2     | 3,179.36 | 2     | 3,568.84 |
| 1/4   | 73.45  | 1/4   | 462.74 | 1/4   | 851.84   | 1/4   | 1,240.91 | 1/4   | 1,630.30 | 1/4   | 2,018.60 | 1/4   | 2,407.90 | 1/4   | 2,797.19 | 1/4   | 3,187.47 | 1/4   | 3,576.75 |
| 1/2   | 81.56  | 1/2   | 470.85 | 1/2   | 859.94   | 1/2   | 1,249.11 | 1/2   | 1,638.41 | 1/2   | 2,027.71 | 1/2   | 2,417.01 | 1/2   | 2,806.30 | 1/2   | 3,195.58 | 1/2   | 3,584.88 |
| 3/4   | 89.67  | 3/4   | 478.96 | 3/4   | 868.04   | 3/4   | 1,257.22 | 3/4   | 1,646.52 | 3/4   | 2,035.82 | 3/4   | 2,425.12 | 3/4   | 2,814.41 | 3/4   | 3,203.69 | 3/4   | 3,592.97 |
| 3     | 97.78  | 3     | 487.07 | 3     | 876.14   | 3     | 1,265.33 | 3     | 1,654.63 | 3     | 2,043.93 | 3     | 2,433.23 | 3     | 2,822.52 | 3     | 3,211.80 | 3     | 3,601.08 |
| 1/4   | 105.89 | 1/4   | 495.18 | 1/4   | 884.24   | 1/4   | 1,273.44 | 1/4   | 1,662.74 | 1/4   | 2,052.04 | 1/4   | 2,441.34 | 1/4   | 2,830.63 | 1/4   | 3,219.91 | 1/4   | 3,609.19 |
| 1/2   | 114.00 | 1/2   | 503.29 | 1/2   | 892.34   | 1/2   | 1,281.55 | 1/2   | 1,670.85 | 1/2   | 2,060.15 | 1/2   | 2,450.00 | 1/2   | 2,839.29 | 1/2   | 3,228.02 | 1/2   | 3,617.30 |
| 3/4   | 122.11 | 3/4   | 511.40 | 3/4   | 900.44   | 3/4   | 1,289.66 | 3/4   | 1,678.96 | 3/4   | 2,068.26 | 3/4   | 2,457.56 | 3/4   | 2,846.85 | 3/4   | 3,236.13 | 3/4   | 3,625.41 |
| 4     | 130.22 | 4     | 519.51 | 4     | 908.54   | 4     | 1,297.77 | 4     | 1,687.07 | 4     | 2,076.37 | 4     | 2,465.67 | 4     | 2,854.96 | 4     | 3,244.24 | 4     | 3,633.52 |
| 1/4   | 138.33 | 1/4   | 527.62 | 1/4   | 916.64   | 1/4   | 1,305.88 | 1/4   | 1,695.18 | 1/4   | 2,084.48 | 1/4   | 2,473.78 | 1/4   | 2,863.07 | 1/4   | 3,252.35 | 1/4   | 3,641.53 |
| 1/2   | 146.44 | 1/2   | 535.73 | 1/2   | 924.74   | 1/2   | 1,313.99 | 1/2   | 1,703.29 | 1/2   | 2,092.59 | 1/2   | 2,481.89 | 1/2   | 2,871.18 | 1/2   | 3,260.46 | 1/2   | 3,649.74 |
| 3/4   | 154.55 | 3/4   | 543.84 | 3/4   | 932.84   | 3/4   | 1,322.10 | 3/4   | 1,711.40 | 3/4   | 2,100.70 | 3/4   | 2,490.00 | 3/4   | 2,879.29 | 3/4   | 3,268.57 | 3/4   | 3,657.85 |
| 5     | 162.66 | 5     | 551.95 | 5     | 940.94   | 5     | 1,330.21 | 5     | 1,719.51 | 5     | 2,108.81 | 5     | 2,498.11 | 5     | 2,887.40 | 5     | 3,276.68 | 5     | 3,665.96 |
| 1/4   | 170.77 | 1/4   | 560.06 | 1/4   | 949.04   | 1/4   | 1,338.32 | 1/4   | 1,727.62 | 1/4   | 2,116.92 | 1/4   | 2,506.22 | 1/4   | 2,895.51 | 1/4   | 3,284.79 | 1/4   | 3,674.07 |
| 1/2   | 178.88 | 1/2   | 568.17 | 1/2   | 957.15   | 1/2   | 1,346.43 | 1/2   | 1,735.73 | 1/2   | 2,125.03 | 1/2   | 2,514.33 | 1/2   | 2,903.62 | 1/2   | 3,292.90 | 1/2   | 3,682.18 |
| 3/4   | 186.99 | 3/4   | 576.28 | 3/4   | 965.25   | 3/4   | 1,354.54 | 3/4   | 1,743.84 | 3/4   | 2,133.14 | 3/4   | 2,522.44 | 3/4   | 2,911.73 | 3/4   | 3,301.01 | 3/4   | 3,690.29 |
| 6     | 195.10 | 6     | 584.39 | 6     | 973.36   | 6     | 1,362.66 | 6     | 1,751.95 | 6     | 2,141.25 | 6     | 2,530.55 | 6     | 2,919.84 | 6     | 3,309.12 | 6     | 3,698.40 |
| 1/4   | 203.21 | 1/4   | 592.50 | 1/4   | 981.47   | 1/4   | 1,370.77 | 1/4   | 1,760.06 | 1/4   | 2,149.36 | 1/4   | 2,538.66 | 1/4   | 2,927.95 | 1/4   | 3,317.23 | 1/4   | 3,706.51 |
| 1/2   | 211.32 | 1/2   | 600.61 | 1/2   | 989.58   | 1/2   | 1,378.88 | 1/2   | 1,768.18 | 1/2   | 2,157.47 | 1/2   | 2,546.77 | 1/2   | 2,936.06 | 1/2   | 3,325.34 | 1/2   | 3,714.62 |
| 3/4   | 219.43 | 3/4   | 608.72 | 3/4   | 997.69   | 3/4   | 1,386.99 | 3/4   | 1,776.29 | 3/4   | 2,165.58 | 3/4   | 2,554.88 | 3/4   | 2,944.17 | 3/4   | 3,333.45 | 3/4   | 3,722.73 |
| 7     | 227.54 | 7     | 616.83 | 7     | 1,005.80 | 7     | 1,395.10 | 7     | 1,784.40 | 7     | 2,173.70 | 7     | 2,562.99 | 7     | 2,952.28 | 7     | 3,341.56 | 7     | 3,730.85 |
| 1/4   | 235.65 | 1/4   | 624.94 | 1/4   | 1,013.91 | 1/4   | 1,403.21 | 1/4   | 1,792.51 | 1/4   | 2,181.81 | 1/4   | 2,571.11 | 1/4   | 2,960.39 | 1/4   | 3,349.67 | 1/4   | 3,738.96 |
| 1/2   | 243.76 | 1/2   | 633.05 | 1/2   | 1,022.02 | 1/2   | 1,411.32 | 1/2   | 1,800.62 | 1/2   | 2,189.92 | 1/2   | 2,579.22 | 1/2   | 2,968.50 | 1/2   | 3,357.78 | 1/2   | 3,747.07 |
| 3/4   | 251.87 | 3/4   | 641.16 | 3/4   | 1,030.13 | 3/4   | 1,419.43 | 3/4   | 1,808.73 | 3/4   | 2,198.03 | 3/4   | 2,587.33 | 3/4   | 2,976.61 | 3/4   | 3,365.89 | 3/4   | 3,755.18 |
| 8     | 259.99 | 8     | 649.27 | 8     | 1,038.24 | 8     | 1,427.54 | 8     | 1,816.84 | 8     | 2,206.14 | 8     | 2,595.44 | 8     | 2,984.72 | 8     | 3,374.00 | 8     | 3,763.29 |
| 1/4   | 268.10 | 1/4   | 657.39 | 1/4   | 1,046.35 | 1/4   | 1,435.65 | 1/4   | 1,824.95 | 1/4   | 2,214.25 | 1/4   | 2,603.55 | 1/4   | 2,992.83 | 1/4   | 3,382.11 | 1/4   | 3,771.40 |
| 1/2   | 276.21 | 1/2   | 665.50 | 1/2   | 1,054.46 | 1/2   | 1,443.76 | 1/2   | 1,833.06 | 1/2   | 2,222.36 | 1/2   | 2,611.66 | 1/2   | 3,000.94 | 1/2   | 3,390.22 | 1/2   | 3,779.51 |
| 3/4   | 284.32 | 3/4   | 673.61 | 3/4   | 1,062.57 | 3/4   | 1,451.87 | 3/4   | 1,841.17 | 3/4   | 2,230.47 | 3/4   | 2,619.77 | 3/4   | 3,009.05 | 3/4   | 3,398.33 | 3/4   | 3,787.62 |
| 9     | 292.43 | 9     | 681.72 | 9     | 1,070.68 | 9     | 1,459.98 | 9     | 1,849.28 | 9     | 2,238.58 | 9     | 2,627.88 | 9     | 3,017.16 | 9     | 3,406.44 | 9     | 3,795.73 |
| 1/4   | 300.54 | 1/4   | 689.82 | 1/4   | 1,078.79 | 1/4   | 1,468.09 | 1/4   | 1,857.39 | 1/4   | 2,246.69 | 1/4   | 2,635.99 | 1/4   | 3,025.27 | 1/4   | 3,414.55 | 1/4   | 3,803.84 |
| 1/2   | 308.65 | 1/2   | 697.93 | 1/2   | 1,086.90 | 1/2   | 1,476.20 | 1/2   | 1,865.50 | 1/2   | 2,254.80 | 1/2   | 2,644.10 | 1/2   | 3,033.38 | 1/2   | 3,422.66 | 1/2   | 3,811.95 |
| 3/4   | 316.76 | 3/4   | 706.03 | 3/4   | 1,095.01 | 3/4   | 1,484.31 | 3/4   | 1,873.61 | 3/4   | 2,262.91 | 3/4   | 2,652.21 | 3/4   | 3,041.49 | 3/4   | 3,430.77 | 3/4   | 3,820.06 |
| 10    | 324.87 | 10    | 714.14 | 10    | 1,103.12 | 10    | 1,492.42 | 10    | 1,881.72 | 10    | 2,271.02 | 10    | 2,660.32 | 10    | 3,049.60 | 10    | 3,438.88 | 10    | 3,828.17 |
| 1/4   | 332.98 | 1/4   | 722.24 | 1/4   | 1,111.23 | 1/4   | 1,500.53 | 1/4   | 1,889.83 | 1/4   | 2,279.13 | 1/4   | 2,668.43 | 1/4   | 3,057.71 | 1/4   | 3,446.99 | 1/4   | 3,836.28 |
| 1/2   | 341.09 | 1/2   | 730.34 | 1/2   | 1,119.34 | 1/2   | 1,508.64 | 1/2   | 1,897.94 | 1/2   | 2,287.24 | 1/2   | 2,676.54 | 1/2   | 3,065.82 | 1/2   | 3,455.10 | 1/2   | 3,844.39 |
| 3/4   | 349.20 | 3/4   | 738.44 | 3/4   | 1,127.45 | 3/4   | 1,516.75 | 3/4   | 1,906.05 | 3/4   | 2,295.35 | 3/4   | 2,684.65 | 3/4   | 3,074.93 | 3/4   | 3,463.21 | 3/4   | 3,852.50 |
| 11    | 357.31 | 11    | 746.54 | 11    | 1,135.56 | 11    | 1,524.86 | 11    | 1,914.16 | 11    | 2,303.46 | 11    | 2,692.76 | 11    | 3,082.04 | 11    | 3,471.32 | 11    | 3,860.61 |
| 1/4   | 365.42 | 1/4   | 754.64 | 1/4   | 1,143.67 | 1/4   | 1,532.97 | 1/4   | 1,922.27 | 1/4   | 2,311.57 | 1/4   | 2,700.87 | 1/4   | 3,090.15 | 1/4   | 3,479.43 | 1/4   | 3,868.72 |
| 1/2   | 373.53 | 1/2   | 762.74 | 1/2   | 1,151.78 | 1/2   | 1,541.08 | 1/2   | 1,930.38 | 1/2   | 2,319.68 | 1/2   | 2,709.98 | 1/2   | 3,098.26 | 1/2   | 3,487.54 | 1/2   | 3,876.83 |
| 3/4   | 381.64 | 3/4   | 770.84 | 3/4   | 1,159.90 | 3/4   | 1,549.19 | 3/4   | 1,938.49 | 3/4   | 2,327.79 | 3/4   | 2,717.09 | 3/4   | 3,106.37 | 3/4   | 3,495.65 | 3/4   | 3,884.94 |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPWS 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 INNAE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.

GAUGE POINT: (HERMETIC) LOCATED 12'-08" OFF CENTERLINE AND 44'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77589

http://www.pma-inc.net





# BARGE "EMS 503"

## 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      | 3,893.05 | 0      | 4,292.35 | 0      | 4,686.43 | 0      | 5,075.49 | 0      | 5,467.20 | 0      | 5,851.51 | 0      |     | 0      |     | 0      |     | 0      |     |
| 1/4    | 3,901.16 | 1/4    | 4,290.46 | 1/4    | 4,674.17 | 1/4    | 5,032.65 | 1/4    | 5,363.81 | 1/4    | 5,687.55 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,909.27 | 1/2    | 4,288.57 | 1/2    | 4,661.91 | 1/2    | 5,039.82 | 1/2    | 5,370.42 | 1/2    | 5,673.50 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,917.38 | 3/4    | 4,286.68 | 3/4    | 4,649.65 | 3/4    | 5,046.98 | 3/4    | 5,377.03 | 3/4    | 5,679.44 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 1      | 3,925.49 | 1      | 4,314.79 | 1      | 4,637.39 | 1      | 5,054.15 | 1      | 5,383.64 | 1      | 5,685.38 | 1      |     | 1      |     | 1      |     | 1      |     |
| 1/4    | 3,933.61 | 1/4    | 4,322.90 | 1/4    | 4,705.09 | 1/4    | 5,061.27 | 1/4    | 5,390.21 | 1/4    | 5,692.33 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,941.72 | 1/2    | 4,331.01 | 1/2    | 4,712.78 | 1/2    | 5,068.38 | 1/2    | 5,396.77 | 1/2    | 5,698.27 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,949.83 | 3/4    | 4,339.13 | 3/4    | 4,720.48 | 3/4    | 5,075.50 | 3/4    | 5,403.34 | 3/4    | 5,706.22 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 2      | 3,957.94 | 2      | 4,347.24 | 2      | 4,728.17 | 2      | 5,082.62 | 2      | 5,409.90 | 2      | 5,713.17 | 2      |     | 2      |     | 2      |     | 2      |     |
| 1/4    | 3,966.05 | 1/4    | 4,355.35 | 1/4    | 4,735.82 | 1/4    | 5,089.69 | 1/4    | 5,416.42 | 1/4    | 5,721.14 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,974.16 | 1/2    | 4,363.46 | 1/2    | 4,743.47 | 1/2    | 5,096.77 | 1/2    | 5,422.94 | 1/2    | 5,729.12 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,982.27 | 3/4    | 4,371.57 | 3/4    | 4,751.12 | 3/4    | 5,103.84 | 3/4    | 5,429.45 | 3/4    | 5,737.10 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 3      | 3,990.38 | 3      | 4,379.68 | 3      | 4,758.77 | 3      | 5,110.91 | 3      | 5,435.97 | 3      | 5,745.07 | 3      |     | 3      |     | 3      |     | 3      |     |
| 1/4    | 3,998.49 | 1/4    | 4,387.79 | 1/4    | 4,766.37 | 1/4    | 5,117.94 | 1/4    | 5,442.44 | 1/4    | 5,753.05 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,006.60 | 1/2    | 4,395.90 | 1/2    | 4,773.97 | 1/2    | 5,124.96 | 1/2    | 5,448.92 | 1/2    | 5,761.02 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,014.71 | 3/4    | 4,404.01 | 3/4    | 4,781.57 | 3/4    | 5,131.99 | 3/4    | 5,455.39 | 3/4    | 5,769.00 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 4      | 4,022.82 | 4      | 4,412.12 | 4      | 4,789.17 | 4      | 5,139.02 | 4      | 5,461.86 | 4      | 5,776.97 | 4      |     | 4      |     | 4      |     | 4      |     |
| 1/4    | 4,030.93 | 1/4    | 4,420.22 | 1/4    | 4,796.73 | 1/4    | 5,146.00 | 1/4    | 5,468.28 | 1/4    | 5,784.44 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,039.04 | 1/2    | 4,428.32 | 1/2    | 4,804.28 | 1/2    | 5,152.98 | 1/2    | 5,474.71 | 1/2    | 5,791.91 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,047.15 | 3/4    | 4,436.42 | 3/4    | 4,811.84 | 3/4    | 5,159.96 | 3/4    | 5,481.13 | 3/4    | 5,799.38 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 5      | 4,055.26 | 5      | 4,444.52 | 5      | 4,819.40 | 5      | 5,166.94 | 5      | 5,487.56 | 5      | 5,806.84 | 5      |     | 5      |     | 5      |     | 5      |     |
| 1/4    | 4,063.37 | 1/4    | 4,452.58 | 1/4    | 4,826.91 | 1/4    | 5,173.87 | 1/4    | 5,493.94 | 1/4    |          | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,071.48 | 1/2    | 4,460.65 | 1/2    | 4,834.42 | 1/2    | 5,180.80 | 1/2    | 5,500.32 | 1/2    |          | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,079.59 | 3/4    | 4,468.71 | 3/4    | 4,841.92 | 3/4    | 5,187.74 | 3/4    | 5,506.70 | 3/4    |          | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 6      | 4,087.70 | 6      | 4,476.77 | 6      | 4,849.43 | 6      | 5,194.67 | 6      | 5,513.08 | 6      |          | 6      |     | 6      |     | 6      |     | 6      |     |
| 1/4    | 4,095.81 | 1/4    | 4,484.79 | 1/4    | 4,856.90 | 1/4    | 5,201.56 | 1/4    | 5,519.41 | 1/4    |          | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,103.92 | 1/2    | 4,492.81 | 1/2    | 4,864.36 | 1/2    | 5,208.45 | 1/2    | 5,525.74 | 1/2    |          | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,112.03 | 3/4    | 4,500.83 | 3/4    | 4,871.82 | 3/4    | 5,215.34 | 3/4    | 5,532.08 | 3/4    |          | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 7      | 4,120.14 | 7      | 4,508.85 | 7      | 4,879.29 | 7      | 5,222.22 | 7      | 5,538.41 | 7      |          | 7      |     | 7      |     | 7      |     | 7      |     |
| 1/4    | 4,128.25 | 1/4    | 4,516.82 | 1/4    | 4,886.70 | 1/4    | 5,229.06 | 1/4    | 5,544.70 | 1/4    |          | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,136.37 | 1/2    | 4,524.79 | 1/2    | 4,894.12 | 1/2    | 5,235.91 | 1/2    | 5,550.98 | 1/2    |          | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,144.48 | 3/4    | 4,532.76 | 3/4    | 4,901.54 | 3/4    | 5,242.75 | 3/4    | 5,557.27 | 3/4    |          | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 8      | 4,152.59 | 8      | 4,540.73 | 8      | 4,908.96 | 8      | 5,249.59 | 8      | 5,563.56 | 8      |          | 8      |     | 8      |     | 8      |     | 8      |     |
| 1/4    | 4,160.70 | 1/4    | 4,548.66 | 1/4    | 4,916.32 | 1/4    | 5,256.38 | 1/4    | 5,569.80 | 1/4    |          | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,168.81 | 1/2    | 4,556.58 | 1/2    | 4,923.68 | 1/2    | 5,263.18 | 1/2    | 5,576.04 | 1/2    |          | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,176.92 | 3/4    | 4,564.51 | 3/4    | 4,931.04 | 3/4    | 5,269.97 | 3/4    | 5,582.28 | 3/4    |          | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 9      | 4,185.03 | 9      | 4,572.43 | 9      | 4,938.40 | 9      | 5,276.77 | 9      | 5,588.52 | 9      |          | 9      |     | 9      |     | 9      |     | 9      |     |
| 1/4    | 4,193.14 | 1/4    | 4,580.31 | 1/4    | 4,945.70 | 1/4    | 5,283.52 | 1/4    | 5,594.71 | 1/4    |          | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,201.25 | 1/2    | 4,588.19 | 1/2    | 4,953.00 | 1/2    | 5,290.27 | 1/2    | 5,600.91 | 1/2    |          | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,209.36 | 3/4    | 4,596.07 | 3/4    | 4,960.31 | 3/4    | 5,297.02 | 3/4    | 5,607.10 | 3/4    |          | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 10     | 4,217.47 | 10     | 4,603.95 | 10     | 4,967.51 | 10     | 5,303.77 | 10     | 5,613.30 | 10     |          | 10     |     | 10     |     | 10     |     | 10     |     |
| 1/4    | 4,225.58 | 1/4    | 4,611.79 | 1/4    | 4,974.87 | 1/4    | 5,310.47 | 1/4    | 5,619.39 | 1/4    |          | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,233.69 | 1/2    | 4,619.62 | 1/2    | 4,982.13 | 1/2    | 5,317.17 | 1/2    | 5,625.48 | 1/2    |          | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,241.80 | 3/4    | 4,627.45 | 3/4    | 4,989.38 | 3/4    | 5,323.87 | 3/4    | 5,631.57 | 3/4    |          | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 11     | 4,249.91 | 11     | 4,635.28 | 11     | 4,996.64 | 11     | 5,330.58 | 11     | 5,637.66 | 11     |          | 11     |     | 11     |     | 11     |     | 11     |     |
| 1/4    | 4,258.02 | 1/4    | 4,643.07 | 1/4    | 5,003.85 | 1/4    | 5,337.23 | 1/4    | 5,643.65 | 1/4    |          | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 4,266.13 | 1/2    | 4,650.86 | 1/2    | 5,011.06 | 1/2    | 5,343.89 | 1/2    | 5,649.64 | 1/2    |          | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 4,274.24 | 3/4    | 4,658.65 | 3/4    | 5,018.28 | 3/4    | 5,350.55 | 3/4    | 5,655.62 | 3/4    |          | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2882  
Pearland, Texas 77588  
http://www.pmacorp.net

*Paul J. Mac*



# BARGE "EMS 503"

## 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 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9     | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8     | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7     | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6     | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5     | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4     | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3     | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2     | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | IN | 0 | 1 | 2 | 3 | 4 |





# BARGE "EMS 503"

## 2 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

| 10 FT. |          | 11 FT. |          | 12 FT. |          | 13 FT. |          | 14 FT. |          | 15 FT. |          | 16 FT. |          | 17 FT. |          | 18 FT. |          | 19 FT. |          |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|
| IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      |
| 0      | 3,862.23 | 0      | 4,250.10 | 0      | 4,632.78 | 0      | 4,990.57 | 0      | 5,321.17 | 0      | 5,624.62 | 0      | 5,900.00 | 0      | 6,150.00 | 0      | 6,360.00 | 0      | 6,530.00 |
| 1/4    | 3,870.31 | 1/4    | 4,258.18 | 1/4    | 4,640.49 | 1/4    | 4,997.71 | 1/4    | 5,327.78 | 1/4    | 5,630.54 | 1/4    | 5,905.92 | 1/4    | 6,155.92 | 1/4    | 6,365.92 | 1/4    | 6,535.92 |
| 1/2    | 3,878.39 | 1/2    | 4,266.26 | 1/2    | 4,648.21 | 1/2    | 5,004.85 | 1/2    | 5,334.35 | 1/2    | 5,636.47 | 1/2    | 5,911.85 | 1/2    | 6,161.85 | 1/2    | 6,371.85 | 1/2    | 6,541.85 |
| 3/4    | 3,886.47 | 3/4    | 4,274.34 | 3/4    | 4,655.92 | 3/4    | 5,011.99 | 3/4    | 5,340.94 | 3/4    | 5,642.39 | 3/4    | 5,917.39 | 3/4    | 6,167.39 | 3/4    | 6,377.39 | 3/4    | 6,547.39 |
| 1      | 3,894.55 | 1      | 4,282.42 | 1      | 4,663.63 | 1      | 5,019.13 | 1      | 5,347.53 | 1      | 5,648.32 | 1      | 5,923.72 | 1      | 6,173.72 | 1      | 6,383.72 | 1      | 6,553.72 |
| 1 1/4  | 3,902.63 | 1 1/4  | 4,290.51 | 1 1/4  | 4,671.30 | 1 1/4  | 5,026.23 | 1 1/4  | 5,354.07 | 1 1/4  | 5,655.24 | 1 1/4  | 5,930.64 | 1 1/4  | 6,180.64 | 1 1/4  | 6,390.64 | 1 1/4  | 6,560.64 |
| 1 1/2  | 3,910.71 | 1 1/2  | 4,298.59 | 1 1/2  | 4,678.97 | 1 1/2  | 5,033.32 | 1 1/2  | 5,360.62 | 1 1/2  | 5,662.16 | 1 1/2  | 5,937.55 | 1 1/2  | 6,187.55 | 1 1/2  | 6,397.55 | 1 1/2  | 6,567.55 |
| 3/4    | 3,918.78 | 3/4    | 4,306.67 | 3/4    | 4,686.63 | 3/4    | 5,040.42 | 3/4    | 5,367.16 | 3/4    | 5,669.09 | 3/4    | 5,944.48 | 3/4    | 6,197.48 | 3/4    | 6,407.48 | 3/4    | 6,577.48 |
| 2      | 3,926.87 | 2      | 4,314.75 | 2      | 4,694.30 | 2      | 5,047.51 | 2      | 5,373.70 | 2      | 5,676.01 | 2      | 5,951.40 | 2      | 6,204.40 | 2      | 6,414.40 | 2      | 6,584.40 |
| 1 1/4  | 3,934.95 | 1 1/4  | 4,322.83 | 1 1/4  | 4,701.92 | 1 1/4  | 5,054.56 | 1 1/4  | 5,380.20 | 1 1/4  | 5,683.96 | 1 1/4  | 5,958.35 | 1 1/4  | 6,211.35 | 1 1/4  | 6,421.35 | 1 1/4  | 6,591.35 |
| 1 1/2  | 3,943.04 | 1 1/2  | 4,330.91 | 1 1/2  | 4,709.54 | 1 1/2  | 5,061.61 | 1 1/2  | 5,386.69 | 1 1/2  | 5,691.90 | 1 1/2  | 5,966.29 | 1 1/2  | 6,218.29 | 1 1/2  | 6,428.29 | 1 1/2  | 6,600.29 |
| 3/4    | 3,951.12 | 3/4    | 4,338.99 | 3/4    | 4,717.16 | 3/4    | 5,068.66 | 3/4    | 5,393.19 | 3/4    | 5,699.85 | 3/4    | 5,974.24 | 3/4    | 6,225.24 | 3/4    | 6,435.24 | 3/4    | 6,607.24 |
| 3      | 3,959.20 | 3      | 4,347.07 | 3      | 4,724.78 | 3      | 5,076.71 | 3      | 5,399.69 | 3      | 5,707.80 | 3      | 5,982.14 | 3      | 6,232.14 | 3      | 6,442.14 | 3      | 6,614.14 |
| 1 1/4  | 3,967.28 | 1 1/4  | 4,355.15 | 1 1/4  | 4,732.36 | 1 1/4  | 5,083.71 | 1 1/4  | 5,406.14 | 1 1/4  | 5,715.74 | 1 1/4  | 6,000.19 | 1 1/4  | 6,249.19 | 1 1/4  | 6,459.19 | 1 1/4  | 6,629.19 |
| 1 1/2  | 3,975.36 | 1 1/2  | 4,363.23 | 1 1/2  | 4,739.93 | 1 1/2  | 5,089.71 | 1 1/2  | 5,412.59 | 1 1/2  | 5,723.69 | 1 1/2  | 6,008.14 | 1 1/2  | 6,257.14 | 1 1/2  | 6,467.14 | 1 1/2  | 6,637.14 |
| 3/4    | 3,983.44 | 3/4    | 4,371.31 | 3/4    | 4,747.51 | 3/4    | 5,096.71 | 3/4    | 5,419.04 | 3/4    | 5,731.64 | 3/4    | 6,015.09 | 3/4    | 6,264.09 | 3/4    | 6,474.09 | 3/4    | 6,644.09 |
| 4      | 3,991.52 | 4      | 4,379.39 | 4      | 4,755.08 | 4      | 5,103.72 | 4      | 5,425.49 | 4      | 5,739.58 | 4      | 6,024.03 | 4      | 6,273.03 | 4      | 6,483.03 | 4      | 6,653.03 |
| 1 1/4  | 3,999.60 | 1 1/4  | 4,387.46 | 1 1/4  | 4,762.61 | 1 1/4  | 5,110.67 | 1 1/4  | 5,431.90 | 1 1/4  | 5,747.02 | 1 1/4  | 6,036.47 | 1 1/4  | 6,285.47 | 1 1/4  | 6,495.47 | 1 1/4  | 6,665.47 |
| 1 1/2  | 4,007.68 | 1 1/2  | 4,395.53 | 1 1/2  | 4,770.14 | 1 1/2  | 5,117.53 | 1 1/2  | 5,438.30 | 1 1/2  | 5,754.47 | 1 1/2  | 6,048.94 | 1 1/2  | 6,297.94 | 1 1/2  | 6,507.94 | 1 1/2  | 6,677.94 |
| 3/4    | 4,015.76 | 3/4    | 4,403.60 | 3/4    | 4,777.87 | 3/4    | 5,124.58 | 3/4    | 5,444.71 | 3/4    | 5,761.91 | 3/4    | 6,052.49 | 3/4    | 6,301.49 | 3/4    | 6,511.49 | 3/4    | 6,681.49 |
| 5      | 4,023.84 | 5      | 4,411.67 | 5      | 4,785.20 | 5      | 5,131.54 | 5      | 5,451.11 | 5      | 5,769.35 | 5      | 6,067.94 | 5      | 6,316.94 | 5      | 6,526.94 | 5      | 6,696.94 |
| 1 1/4  | 4,031.92 | 1 1/4  | 4,419.70 | 1 1/4  | 4,792.68 | 1 1/4  | 5,138.45 | 1 1/4  | 5,457.47 | 1 1/4  | 5,775.71 | 1 1/4  | 6,082.30 | 1 1/4  | 6,331.30 | 1 1/4  | 6,541.30 | 1 1/4  | 6,711.30 |
| 1 1/2  | 4,040.00 | 1 1/2  | 4,427.74 | 1 1/2  | 4,800.17 | 1 1/2  | 5,145.36 | 1 1/2  | 5,463.83 | 1 1/2  | 5,782.86 | 1 1/2  | 6,089.40 | 1 1/2  | 6,338.40 | 1 1/2  | 6,548.40 | 1 1/2  | 6,718.40 |
| 3/4    | 4,048.08 | 3/4    | 4,435.77 | 3/4    | 4,807.65 | 3/4    | 5,152.27 | 3/4    | 5,470.19 | 3/4    | 5,788.14 | 3/4    | 6,093.68 | 3/4    | 6,342.68 | 3/4    | 6,552.68 | 3/4    | 6,722.68 |
| 6      | 4,056.16 | 6      | 4,443.81 | 6      | 4,815.13 | 6      | 5,159.18 | 6      | 5,476.55 | 6      | 5,794.58 | 6      | 6,100.12 | 6      | 6,349.12 | 6      | 6,559.12 | 6      | 6,729.12 |
| 1 1/4  | 4,064.25 | 1 1/4  | 4,451.80 | 1 1/4  | 4,822.57 | 1 1/4  | 5,166.05 | 1 1/4  | 5,482.86 | 1 1/4  | 5,800.89 | 1 1/4  | 6,105.43 | 1 1/4  | 6,354.43 | 1 1/4  | 6,564.43 | 1 1/4  | 6,734.43 |
| 1 1/2  | 4,072.33 | 1 1/2  | 4,459.79 | 1 1/2  | 4,830.01 | 1 1/2  | 5,172.91 | 1 1/2  | 5,489.17 | 1 1/2  | 5,807.20 | 1 1/2  | 6,111.74 | 1 1/2  | 6,360.74 | 1 1/2  | 6,570.74 | 1 1/2  | 6,740.74 |
| 3/4    | 4,080.41 | 3/4    | 4,467.77 | 3/4    | 4,837.44 | 3/4    | 5,179.78 | 3/4    | 5,495.49 | 3/4    | 5,813.52 | 3/4    | 6,116.06 | 3/4    | 6,365.06 | 3/4    | 6,575.06 | 3/4    | 6,745.06 |
| 7      | 4,088.49 | 7      | 4,475.76 | 7      | 4,844.88 | 7      | 5,186.64 | 7      | 5,501.80 | 7      | 5,815.93 | 7      | 6,118.40 | 7      | 6,367.40 | 7      | 6,577.40 | 7      | 6,747.40 |
| 1 1/4  | 4,096.57 | 1 1/4  | 4,483.71 | 1 1/4  | 4,852.27 | 1 1/4  | 5,193.46 | 1 1/4  | 5,508.07 | 1 1/4  | 5,822.10 | 1 1/4  | 6,123.64 | 1 1/4  | 6,372.64 | 1 1/4  | 6,582.64 | 1 1/4  | 6,752.64 |
| 1 1/2  | 4,104.65 | 1 1/2  | 4,491.65 | 1 1/2  | 4,859.66 | 1 1/2  | 5,200.28 | 1 1/2  | 5,514.33 | 1 1/2  | 5,833.36 | 1 1/2  | 6,128.90 | 1 1/2  | 6,377.90 | 1 1/2  | 6,587.90 | 1 1/2  | 6,757.90 |
| 3/4    | 4,112.73 | 3/4    | 4,499.58 | 3/4    | 4,867.05 | 3/4    | 5,207.10 | 3/4    | 5,520.60 | 3/4    | 5,839.63 | 3/4    | 6,134.17 | 3/4    | 6,383.17 | 3/4    | 6,593.17 | 3/4    | 6,763.17 |
| 8      | 4,120.81 | 8      | 4,507.53 | 8      | 4,874.45 | 8      | 5,213.92 | 8      | 5,526.87 | 8      | 5,845.90 | 8      | 6,141.44 | 8      | 6,390.44 | 8      | 6,600.44 | 8      | 6,770.44 |
| 1 1/4  | 4,128.89 | 1 1/4  | 4,515.43 | 1 1/4  | 4,881.78 | 1 1/4  | 5,220.69 | 1 1/4  | 5,533.09 | 1 1/4  | 5,852.12 | 1 1/4  | 6,146.66 | 1 1/4  | 6,395.66 | 1 1/4  | 6,605.66 | 1 1/4  | 6,775.66 |
| 1 1/2  | 4,136.97 | 1 1/2  | 4,523.33 | 1 1/2  | 4,889.12 | 1 1/2  | 5,227.46 | 1 1/2  | 5,539.31 | 1 1/2  | 5,857.74 | 1 1/2  | 6,151.28 | 1 1/2  | 6,400.28 | 1 1/2  | 6,610.28 | 1 1/2  | 6,780.28 |
| 3/4    | 4,145.05 | 3/4    | 4,531.23 | 3/4    | 4,896.45 | 3/4    | 5,234.23 | 3/4    | 5,545.53 | 3/4    | 5,863.96 | 3/4    | 6,157.00 | 3/4    | 6,406.00 | 3/4    | 6,616.00 | 3/4    | 6,786.00 |
| 9      | 4,153.13 | 9      | 4,539.12 | 9      | 4,903.78 | 9      | 5,241.01 | 9      | 5,551.75 | 9      | 5,870.18 | 9      | 6,162.62 | 9      | 6,411.62 | 9      | 6,621.62 | 9      | 6,791.62 |
| 1 1/4  | 4,161.21 | 1 1/4  | 4,546.97 | 1 1/4  | 4,911.06 | 1 1/4  | 5,247.73 | 1 1/4  | 5,557.93 | 1 1/4  | 5,876.36 | 1 1/4  | 6,167.80 | 1 1/4  | 6,416.80 | 1 1/4  | 6,626.80 | 1 1/4  | 6,796.80 |
| 1 1/2  | 4,169.29 | 1 1/2  | 4,554.82 | 1 1/2  | 4,918.34 | 1 1/2  | 5,254.46 | 1 1/2  | 5,564.10 | 1 1/2  | 5,882.53 | 1 1/2  | 6,172.47 | 1 1/2  | 6,421.47 | 1 1/2  | 6,631.47 | 1 1/2  | 6,801.47 |
| 3/4    | 4,177.38 | 3/4    | 4,562.67 | 3/4    | 4,925.62 | 3/4    | 5,261.19 | 3/4    | 5,570.28 | 3/4    | 5,888.71 | 3/4    | 6,178.64 | 3/4    | 6,427.64 | 3/4    | 6,637.64 | 3/4    | 6,807.64 |
| 10     | 4,185.46 | 10     | 4,570.53 | 10     | 4,932.90 | 10     | 5,267.91 | 10     | 5,576.45 | 10     | 5,894.88 | 10     | 6,184.32 | 10     | 6,433.32 | 10     | 6,643.32 | 10     | 6,813.32 |
| 1 1/4  | 4,193.54 | 1 1/4  | 4,578.33 | 1 1/4  | 4,940.13 | 1 1/4  | 5,274.59 | 1 1/4  | 5,582.52 | 1 1/4  | 5,900.95 | 1 1/4  | 6,189.39 | 1 1/4  | 6,438.39 | 1 1/4  | 6,648.39 | 1 1/4  | 6,818.39 |
| 1 1/2  | 4,201.62 | 1 1/2  | 4,586.14 | 1 1/2  | 4,947.36 | 1 1/2  | 5,281.27 | 1 1/2  | 5,589.50 | 1 1/2  | 5,907.93 | 1 1/2  | 6,196.37 | 1 1/2  | 6,445.37 | 1 1/2  | 6,655.37 | 1 1/2  | 6,825.37 |
| 3/4    | 4,209.70 | 3/4    | 4,593.94 | 3/4    | 4,954.60 | 3/4    | 5,287.96 | 3/4    | 5,595.67 | 3/4    | 5,914.10 | 3/4    | 6,202.04 | 3/4    | 6,451.04 | 3/4    | 6,661.04 | 3/4    | 6,831.04 |
| 11     | 4,217.78 | 11     | 4,601.74 | 11     | 4,961.83 | 11     | 5,294.64 | 11     | 5,606.71 | 11     | 5,925.14 | 11     | 6,210.18 | 11     | 6,459.18 | 11     | 6,669.18 | 11     | 6,839.18 |
| 1 1/4  | 4,225.86 | 1 1/4  | 4,609.50 | 1 1/4  | 4,969.01 | 1 1/4  | 5,301.27 | 1 1/4  | 5,616.34 | 1 1/4  | 5,936.87 | 1 1/4  | 6,221.41 | 1 1/4  | 6,464.41 | 1 1/4  | 6,674.41 | 1 1/4  | 6,844.41 |
| 1 1/2  | 4,233.94 | 1 1/2  | 4,617.26 | 1 1/2  | 4,976.20 | 1 1/2  | 5,307.91 | 1 1/2  | 5,622.98 | 1 1/2  | 5,948.51 | 1 1/2  | 6,233.64 | 1 1/2  | 6,476.64 | 1 1/2  | 6,686.64 | 1 1/2  | 6,856.64 |
| 3/4    | 4,242.02 | 3/4    | 4,625.02 | 3/4    | 4,983.38 | 3/4    | 5,314.54 | 3/4    | 5,629.61 | 3/4    | 5,950.14 | 3/4    | 6,244.71 | 3/4    | 6,487.71 | 3/4    | 6,697.71 | 3/4    | 6,867.71 |

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

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*P. J. Jones*



# BARGE "EMS 503"

## 3 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

|     |       | GAUGE HEIGHT 16'-05 1/4" |        |     |        |       |          |    |          |       |          |    |          |       |          |    |          |       |          |    |          |       |          |    |          |       |          |    |          |       |          |    |          |       |          |    |          |       |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |     |
|-----|-------|--------------------------|--------|-----|--------|-------|----------|----|----------|-------|----------|----|----------|-------|----------|----|----------|-------|----------|----|----------|-------|----------|----|----------|-------|----------|----|----------|-------|----------|----|----------|-------|----------|----|----------|-------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|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|     |       | 0 FT.                    |        |     |        | 1 FT. |          |    |          | 2 FT. |          |    |          | 3 FT. |          |    |          | 4 FT. |          |    |          | 5 FT. |          |    |          | 6 FT. |          |    |          | 7 FT. |          |    |          | 8 FT. |          |    |          | 9 FT. |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |     |
| IN  | 0     | 1                        | 2      | IN  | 0      | 1     | 2        | IN | 0        | 1     | 2        | IN | 0        | 1     | 2        | IN | 0        | 1     | 2        | IN | 0        | 1     | 2        | IN | 0        | 1     | 2        | IN | 0        | 1     | 2        | IN | 0        | 1     | 2        | IN | 0        | 1     | 2        |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |          |   |     |
| 1/4 | 13.03 | 0                        | 362.53 | 1/4 | 724.40 | 0     | 1,086.01 | 0  | 1,448.10 | 0     | 1,810.19 | 0  | 2,172.28 | 0     | 2,534.32 | 0  | 2,896.21 | 0     | 3,258.10 | 0  | 2,896.21 | 0     | 3,258.10 | 0  | 2,896.21 | 0     | 3,258.10 | 0  | 2,896.21 | 0     | 3,258.10 | 0  | 2,896.21 | 0     | 3,258.10 | 0  | 2,896.21 | 0     | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,896.21 | 0 | 3,258.10 | 0 | 2,8 |



# BARGE "EMS 503"

## 3 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

| 10 FT. |          | 11 FT. |          | 12 FT. |          | 13 FT. |          | 14 FT. |          | 15 FT. |          | 16 FT. |     | 17 FT. |     | 18 FT. |     | 19 FT. |     |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|-----|--------|-----|--------|-----|--------|-----|
| IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT | IN     | OUT | IN     | OUT | IN     | OUT |
| 0      | 3,619.21 | 0      | 3,916.99 | 0      | 4,207.19 | 0      | 4,474.10 | 0      | 4,715.63 | 0      | 4,931.70 | 0      |     | 0      |     | 0      |     | 0      |     |
| 1/4    | 3,626.03 | 1/4    | 3,923.14 | 1/4    | 4,212.99 | 1/4    | 4,479.37 | 1/4    | 4,720.39 | 1/4    | 4,936.83 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,632.86 | 1/2    | 3,929.29 | 1/2    | 4,218.80 | 1/2    | 4,484.64 | 1/2    | 4,725.14 | 1/2    | 4,939.96 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,639.69 | 3/4    | 3,935.44 | 3/4    | 4,224.60 | 3/4    | 4,489.91 | 3/4    | 4,729.89 | 3/4    | 4,944.09 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 1      | 3,646.52 | 1      | 3,941.58 | 1      | 4,230.40 | 1      | 4,495.18 | 1      | 4,734.64 | 1      | 4,948.22 | 1      |     | 1      |     | 1      |     | 1      |     |
| 1/4    | 3,652.67 | 1/4    | 3,947.73 | 1/4    | 4,236.16 | 1/4    | 4,500.40 | 1/4    | 4,739.35 | 1/4    | 4,953.28 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,658.81 | 1/2    | 3,953.88 | 1/2    | 4,241.92 | 1/2    | 4,505.63 | 1/2    | 4,744.06 | 1/2    | 4,958.35 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,664.96 | 3/4    | 3,960.03 | 3/4    | 4,247.68 | 3/4    | 4,510.86 | 3/4    | 4,748.77 | 3/4    | 4,963.41 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 2      | 3,671.11 | 2      | 3,966.17 | 2      | 4,253.44 | 2      | 4,516.08 | 2      | 4,753.48 | 2      | 4,968.48 | 2      |     | 2      |     | 2      |     | 2      |     |
| 1/4    | 3,677.25 | 1/4    | 3,972.32 | 1/4    | 4,259.16 | 1/4    | 4,521.26 | 1/4    | 4,758.14 | 1/4    | 4,974.51 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,683.40 | 1/2    | 3,978.47 | 1/2    | 4,264.87 | 1/2    | 4,526.45 | 1/2    | 4,762.81 | 1/2    | 4,980.53 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,689.55 | 3/4    | 3,984.61 | 3/4    | 4,270.59 | 3/4    | 4,531.63 | 3/4    | 4,767.47 | 3/4    | 4,986.56 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 3      | 3,695.70 | 3      | 3,990.76 | 3      | 4,276.30 | 3      | 4,536.81 | 3      | 4,772.14 | 3      | 4,992.58 | 3      |     | 3      |     | 3      |     | 3      |     |
| 1/4    | 3,701.84 | 1/4    | 3,996.91 | 1/4    | 4,281.98 | 1/4    | 4,541.95 | 1/4    | 4,776.76 | 1/4    | 4,998.61 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,707.99 | 1/2    | 4,003.06 | 1/2    | 4,287.65 | 1/2    | 4,547.09 | 1/2    | 4,781.38 | 1/2    | 5,004.63 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,714.14 | 3/4    | 4,009.20 | 3/4    | 4,293.32 | 3/4    | 4,552.23 | 3/4    | 4,786.01 | 3/4    | 5,010.66 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 4      | 3,720.28 | 4      | 4,015.35 | 4      | 4,299.00 | 4      | 4,557.37 | 4      | 4,790.63 | 4      | 5,016.68 | 4      |     | 4      |     | 4      |     | 4      |     |
| 1/4    | 3,726.43 | 1/4    | 4,021.49 | 1/4    | 4,304.63 | 1/4    | 4,562.47 | 1/4    | 4,795.21 | 1/4    | 5,022.23 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,732.58 | 1/2    | 4,027.62 | 1/2    | 4,310.26 | 1/2    | 4,567.56 | 1/2    | 4,799.79 | 1/2    | 5,027.79 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,738.73 | 3/4    | 4,033.76 | 3/4    | 4,315.89 | 3/4    | 4,572.66 | 3/4    | 4,804.37 | 3/4    | 5,033.34 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 5      | 3,744.87 | 5      | 4,039.90 | 5      | 4,321.52 | 5      | 4,577.76 | 5      | 4,808.95 | 5      | 5,038.90 | 5      |     | 5      |     | 5      |     | 5      |     |
| 1/4    | 3,751.02 | 1/4    | 4,046.00 | 1/4    | 4,327.10 | 1/4    | 4,582.81 | 1/4    | 4,813.48 | 1/4    | 5,044.44 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,757.17 | 1/2    | 4,052.11 | 1/2    | 4,332.69 | 1/2    | 4,587.86 | 1/2    | 4,818.02 | 1/2    | 5,049.98 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,763.31 | 3/4    | 4,058.21 | 3/4    | 4,338.28 | 3/4    | 4,592.92 | 3/4    | 4,822.55 | 3/4    | 5,055.52 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 6      | 3,769.46 | 6      | 4,064.31 | 6      | 4,343.86 | 6      | 4,597.97 | 6      | 4,827.08 | 6      | 5,061.06 | 6      |     | 6      |     | 6      |     | 6      |     |
| 1/4    | 3,775.61 | 1/4    | 4,070.37 | 1/4    | 4,349.41 | 1/4    | 4,602.98 | 1/4    | 4,831.58 | 1/4    | 5,066.60 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,781.76 | 1/2    | 4,076.44 | 1/2    | 4,354.95 | 1/2    | 4,607.99 | 1/2    | 4,836.08 | 1/2    | 5,072.14 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,787.90 | 3/4    | 4,082.50 | 3/4    | 4,360.50 | 3/4    | 4,613.00 | 3/4    | 4,840.57 | 3/4    | 5,077.68 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 7      | 3,794.05 | 7      | 4,088.56 | 7      | 4,366.04 | 7      | 4,618.01 | 7      | 4,845.06 | 7      | 5,083.22 | 7      |     | 7      |     | 7      |     | 7      |     |
| 1/4    | 3,800.20 | 1/4    | 4,094.58 | 1/4    | 4,371.54 | 1/4    | 4,622.98 | 1/4    | 4,849.51 | 1/4    | 5,088.76 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,806.35 | 1/2    | 4,100.59 | 1/2    | 4,377.04 | 1/2    | 4,627.95 | 1/2    | 4,853.96 | 1/2    | 5,094.30 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,812.49 | 3/4    | 4,106.61 | 3/4    | 4,382.54 | 3/4    | 4,632.92 | 3/4    | 4,858.41 | 3/4    | 5,099.84 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 8      | 3,818.64 | 8      | 4,112.63 | 8      | 4,388.04 | 8      | 4,637.88 | 8      | 4,862.86 | 8      | 5,105.38 | 8      |     | 8      |     | 8      |     | 8      |     |
| 1/4    | 3,824.79 | 1/4    | 4,118.60 | 1/4    | 4,393.49 | 1/4    | 4,642.81 | 1/4    | 4,867.27 | 1/4    | 5,110.92 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,830.93 | 1/2    | 4,124.58 | 1/2    | 4,398.94 | 1/2    | 4,647.73 | 1/2    | 4,871.68 | 1/2    | 5,116.46 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,837.08 | 3/4    | 4,130.55 | 3/4    | 4,404.39 | 3/4    | 4,652.66 | 3/4    | 4,876.08 | 3/4    | 5,122.00 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 9      | 3,843.23 | 9      | 4,136.53 | 9      | 4,409.84 | 9      | 4,657.58 | 9      | 4,880.49 | 9      | 5,127.54 | 9      |     | 9      |     | 9      |     | 9      |     |
| 1/4    | 3,849.38 | 1/4    | 4,142.46 | 1/4    | 4,415.24 | 1/4    | 4,662.46 | 1/4    | 4,884.85 | 1/4    | 5,133.08 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,855.52 | 1/2    | 4,148.39 | 1/2    | 4,420.64 | 1/2    | 4,667.34 | 1/2    | 4,889.22 | 1/2    | 5,138.62 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,861.67 | 3/4    | 4,154.32 | 3/4    | 4,426.03 | 3/4    | 4,672.22 | 3/4    | 4,893.58 | 3/4    | 5,144.16 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 10     | 3,867.82 | 10     | 4,160.26 | 10     | 4,431.43 | 10     | 4,677.10 | 10     | 4,897.95 | 10     | 5,149.70 | 10     |     | 10     |     | 10     |     | 10     |     |
| 1/4    | 3,873.96 | 1/4    | 4,166.14 | 1/4    | 4,436.79 | 1/4    | 4,681.94 | 1/4    | 4,902.21 | 1/4    | 5,155.24 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,880.11 | 1/2    | 4,172.03 | 1/2    | 4,442.14 | 1/2    | 4,686.78 | 1/2    | 4,906.48 | 1/2    | 5,160.78 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,886.26 | 3/4    | 4,177.92 | 3/4    | 4,447.50 | 3/4    | 4,691.62 | 3/4    | 4,910.75 | 3/4    | 5,166.32 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |
| 11     | 3,892.41 | 11     | 4,183.81 | 11     | 4,452.85 | 11     | 4,696.46 | 11     | 4,915.02 | 11     | 5,171.86 | 11     |     | 11     |     | 11     |     | 11     |     |
| 1/4    | 3,898.55 | 1/4    | 4,189.66 | 1/4    | 4,458.17 | 1/4    | 4,701.25 | 1/4    | 4,919.19 | 1/4    | 5,177.40 | 1/4    |     | 1/4    |     | 1/4    |     | 1/4    |     |
| 1/2    | 3,904.70 | 1/2    | 4,195.50 | 1/2    | 4,463.48 | 1/2    | 4,706.05 | 1/2    | 4,923.36 | 1/2    | 5,182.94 | 1/2    |     | 1/2    |     | 1/2    |     | 1/2    |     |
| 3/4    | 3,910.85 | 3/4    | 4,201.35 | 3/4    | 4,468.79 | 3/4    | 4,710.84 | 3/4    | 4,927.53 | 3/4    | 5,188.48 | 3/4    |     | 3/4    |     | 3/4    |     | 3/4    |     |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

PRECISION MEASUREMENT  
& ANALYSIS, INC.

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Pearland, Texas 77588  
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*P. J. Glavin*



# BARGE "EMS 503"

## 3 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

| IN |    | 0 FT.  |        | 1 FT.  |          | 2 FT.  |          | 3 FT.    |          | 4 FT.    |          | 5 FT.    |          | 6 FT.    |          | 7 FT.    |          | 8 FT.    |          | 9 FT.    |          |
|----|----|--------|--------|--------|----------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|    |    | IN     | 0      | IN     | 1        | IN     | 0        | IN       | 1        | IN       | 0        | IN       | 1        | IN       | 0        | IN       | 1        | IN       | 0        | IN       | 1        |
| 1  | 14 | 13.01  | 0      | 361.65 | 0        | 722.41 | 0        | 1,073.19 | 0        | 1,428.29 | 0        | 1,789.04 | 0        | 2,147.08 | 0        | 2,507.68 | 0        | 2,868.10 | 0        | 3,228.76 | 0        |
| 1  | 14 | 18.03  | 369.17 | 14     | 729.91   | 14     | 737.91   | 14       | 1,090.38 | 14       | 1,436.80 | 14       | 1,796.53 | 14       | 2,154.56 | 14       | 2,515.18 | 14       | 2,876.52 | 14       | 3,238.76 |
| 1  | 12 | 23.05  | 376.69 | 12     | 737.41   | 12     | 737.41   | 12       | 1,087.56 | 12       | 1,443.32 | 12       | 1,804.01 | 12       | 2,162.06 | 12       | 2,522.69 | 12       | 2,883.13 | 12       | 3,243.78 |
| 3  | 34 | 28.07  | 384.21 | 34     | 744.91   | 34     | 744.91   | 34       | 1,094.77 | 34       | 1,450.84 | 34       | 1,811.50 | 34       | 2,169.54 | 34       | 2,530.19 | 34       | 2,890.64 | 34       | 3,251.28 |
| 1  | 14 | 33.09  | 391.73 | 1      | 752.41   | 1      | 752.41   | 1        | 1,101.96 | 1        | 1,458.35 | 1        | 1,818.99 | 1        | 2,177.03 | 1        | 2,537.69 | 1        | 2,898.16 | 1        | 3,258.80 |
| 1  | 14 | 40.00  | 399.25 | 14     | 759.91   | 14     | 759.91   | 14       | 1,109.16 | 14       | 1,465.87 | 14       | 1,826.44 | 14       | 2,184.55 | 14       | 2,545.19 | 14       | 2,905.67 | 14       | 3,266.32 |
| 1  | 12 | 46.90  | 406.77 | 12     | 767.41   | 12     | 767.41   | 12       | 1,116.36 | 12       | 1,473.38 | 12       | 1,833.90 | 12       | 2,192.07 | 12       | 2,552.69 | 12       | 2,913.16 | 12       | 3,273.83 |
| 3  | 34 | 53.81  | 414.29 | 34     | 774.91   | 34     | 774.91   | 34       | 1,123.56 | 34       | 1,480.90 | 34       | 1,841.36 | 34       | 2,199.59 | 34       | 2,560.20 | 34       | 2,920.70 | 34       | 3,281.34 |
| 1  | 14 | 60.71  | 421.81 | 1      | 782.41   | 1      | 782.41   | 1        | 1,130.76 | 1        | 1,488.41 | 1        | 1,848.81 | 1        | 2,207.11 | 1        | 2,567.70 | 1        | 2,928.21 | 1        | 3,288.86 |
| 1  | 14 | 68.24  | 429.33 | 14     | 789.91   | 14     | 789.91   | 14       | 1,137.97 | 14       | 1,495.93 | 14       | 1,856.27 | 14       | 2,214.62 | 14       | 2,575.20 | 14       | 2,935.72 | 14       | 3,296.37 |
| 1  | 12 | 75.77  | 436.85 | 12     | 797.40   | 12     | 797.40   | 12       | 1,145.17 | 12       | 1,503.45 | 12       | 1,863.72 | 12       | 2,222.14 | 12       | 2,582.70 | 12       | 2,943.24 | 12       | 3,303.89 |
| 3  | 34 | 83.31  | 444.37 | 34     | 804.90   | 34     | 804.90   | 34       | 1,152.38 | 34       | 1,510.96 | 34       | 1,871.18 | 34       | 2,229.68 | 34       | 2,590.21 | 34       | 2,950.76 | 34       | 3,311.40 |
| 1  | 14 | 90.84  | 451.89 | 1      | 812.40   | 1      | 812.40   | 1        | 1,159.58 | 1        | 1,518.48 | 1        | 1,878.64 | 1        | 2,237.18 | 1        | 2,597.71 | 1        | 2,958.26 | 1        | 3,318.91 |
| 1  | 14 | 98.37  | 459.41 | 14     | 819.90   | 14     | 819.90   | 14       | 1,166.79 | 14       | 1,525.99 | 14       | 1,886.09 | 14       | 2,244.70 | 14       | 2,605.21 | 14       | 2,965.78 | 14       | 3,326.43 |
| 1  | 12 | 105.90 | 466.93 | 12     | 827.40   | 12     | 827.40   | 12       | 1,174.00 | 12       | 1,533.51 | 12       | 1,893.55 | 12       | 2,252.22 | 12       | 2,612.71 | 12       | 2,973.29 | 12       | 3,333.94 |
| 3  | 34 | 113.43 | 474.45 | 34     | 834.90   | 34     | 834.90   | 34       | 1,181.20 | 34       | 1,541.02 | 34       | 1,901.01 | 34       | 2,259.74 | 34       | 2,620.21 | 34       | 2,980.89 | 34       | 3,341.46 |
| 1  | 14 | 120.97 | 481.97 | 1      | 842.40   | 1      | 842.40   | 1        | 1,188.41 | 1        | 1,548.54 | 1        | 1,908.46 | 1        | 2,267.26 | 1        | 2,627.72 | 1        | 2,987.82 | 1        | 3,348.97 |
| 1  | 14 | 128.50 | 489.49 | 14     | 849.74   | 14     | 849.74   | 14       | 1,195.77 | 14       | 1,556.05 | 14       | 1,915.92 | 14       | 2,274.78 | 14       | 2,636.22 | 14       | 2,995.63 | 14       | 3,356.48 |
| 1  | 12 | 136.02 | 497.01 | 12     | 857.09   | 12     | 857.09   | 12       | 1,203.13 | 12       | 1,563.57 | 12       | 1,923.38 | 12       | 2,282.30 | 12       | 2,642.73 | 12       | 3,003.35 | 12       | 3,364.00 |
| 3  | 34 | 143.55 | 504.53 | 34     | 864.43   | 34     | 864.43   | 34       | 1,210.49 | 34       | 1,571.09 | 34       | 1,930.83 | 34       | 2,289.81 | 34       | 2,650.33 | 34       | 3,010.86 | 34       | 3,371.51 |
| 1  | 14 | 151.08 | 512.05 | 1      | 871.77   | 1      | 871.77   | 1        | 1,217.85 | 1        | 1,578.60 | 1        | 1,938.26 | 1        | 2,297.33 | 1        | 2,657.74 | 1        | 3,018.37 | 1        | 3,378.03 |
| 1  | 14 | 158.61 | 519.57 | 14     | 878.96   | 14     | 878.96   | 14       | 1,225.36 | 14       | 1,586.12 | 14       | 1,945.76 | 14       | 2,304.85 | 14       | 2,665.25 | 14       | 3,025.89 | 14       | 3,386.52 |
| 1  | 12 | 166.13 | 527.09 | 12     | 886.15   | 12     | 886.15   | 12       | 1,232.98 | 12       | 1,593.83 | 12       | 1,953.20 | 12       | 2,312.37 | 12       | 2,672.76 | 12       | 3,033.40 | 12       | 3,394.02 |
| 3  | 34 | 173.65 | 534.61 | 34     | 893.34   | 34     | 893.34   | 34       | 1,240.40 | 34       | 1,601.15 | 34       | 1,960.66 | 34       | 2,319.89 | 34       | 2,680.27 | 34       | 3,040.91 | 34       | 3,401.52 |
| 1  | 14 | 181.17 | 542.13 | 1      | 900.53   | 1      | 900.53   | 1        | 1,247.91 | 1        | 1,608.66 | 1        | 1,968.12 | 1        | 2,327.41 | 1        | 2,687.78 | 1        | 3,048.43 | 1        | 3,409.02 |
| 1  | 14 | 188.69 | 549.65 | 14     | 907.72   | 14     | 907.72   | 14       | 1,255.43 | 14       | 1,616.18 | 14       | 1,976.57 | 14       | 2,334.63 | 14       | 2,695.29 | 14       | 3,055.94 | 14       | 3,416.50 |
| 1  | 12 | 196.21 | 557.17 | 12     | 914.92   | 12     | 914.92   | 12       | 1,263.70 | 12       | 1,623.70 | 12       | 1,983.03 | 12       | 2,342.45 | 12       | 2,702.81 | 12       | 3,063.45 | 12       | 3,423.99 |
| 3  | 34 | 203.73 | 564.69 | 34     | 922.11   | 34     | 922.11   | 34       | 1,270.46 | 34       | 1,631.21 | 34       | 1,990.48 | 34       | 2,349.37 | 34       | 2,710.32 | 34       | 3,070.37 | 34       | 3,431.47 |
| 1  | 14 | 211.25 | 572.21 | 1      | 929.31   | 1      | 929.31   | 1        | 1,277.97 | 1        | 1,638.73 | 1        | 1,997.94 | 1        | 2,357.49 | 1        | 2,717.83 | 1        | 3,077.88 | 1        | 3,438.95 |
| 1  | 14 | 218.77 | 579.73 | 14     | 936.50   | 14     | 936.50   | 14       | 1,285.49 | 14       | 1,646.24 | 14       | 2,005.40 | 14       | 2,365.00 | 14       | 2,725.35 | 14       | 3,085.99 | 14       | 3,446.43 |
| 1  | 12 | 226.29 | 587.25 | 12     | 943.69   | 12     | 943.69   | 12       | 1,293.01 | 12       | 1,653.76 | 12       | 2,012.86 | 12       | 2,372.52 | 12       | 2,732.86 | 12       | 3,093.51 | 12       | 3,453.92 |
| 3  | 34 | 233.81 | 594.77 | 34     | 950.89   | 34     | 950.89   | 34       | 1,300.52 | 34       | 1,661.27 | 34       | 2,020.31 | 34       | 2,380.04 | 34       | 2,740.37 | 34       | 3,101.02 | 34       | 3,461.40 |
| 1  | 14 | 241.33 | 602.29 | 1      | 958.08   | 1      | 958.08   | 1        | 1,308.04 | 1        | 1,668.79 | 1        | 2,027.77 | 1        | 2,387.56 | 1        | 2,747.89 | 1        | 3,108.53 | 1        | 3,468.88 |
| 1  | 14 | 248.85 | 609.81 | 14     | 965.28   | 14     | 965.28   | 14       | 1,315.55 | 14       | 1,676.31 | 14       | 2,035.23 | 14       | 2,395.08 | 14       | 2,755.40 | 14       | 3,116.05 | 14       | 3,476.37 |
| 1  | 12 | 256.36 | 617.33 | 12     | 972.47   | 12     | 972.47   | 12       | 1,323.07 | 12       | 1,683.82 | 12       | 2,042.88 | 12       | 2,402.99 | 12       | 2,762.91 | 12       | 3,123.56 | 12       | 3,483.85 |
| 3  | 34 | 263.88 | 624.85 | 34     | 979.66   | 34     | 979.66   | 34       | 1,330.58 | 34       | 1,691.34 | 34       | 2,050.14 | 34       | 2,410.11 | 34       | 2,770.43 | 34       | 3,131.07 | 34       | 3,491.33 |
| 1  | 14 | 271.40 | 632.37 | 1      | 986.86   | 1      | 986.86   | 1        | 1,338.10 | 1        | 1,698.85 | 1        | 2,057.68 | 1        | 2,417.62 | 1        | 2,777.94 | 1        | 3,138.59 | 1        | 3,498.82 |
| 1  | 14 | 278.92 | 639.88 | 14     | 994.05   | 14     | 994.05   | 14       | 1,345.62 | 14       | 1,706.37 | 14       | 2,065.05 | 14       | 2,425.13 | 14       | 2,785.45 | 14       | 3,146.10 | 14       | 3,506.30 |
| 1  | 12 | 286.44 | 647.39 | 12     | 1,001.25 | 12     | 1,001.25 | 12       | 1,353.13 | 12       | 1,713.88 | 12       | 2,072.51 | 12       | 2,432.64 | 12       | 2,792.97 | 12       | 3,153.62 | 12       | 3,513.78 |
| 3  | 34 | 293.97 | 654.91 | 34     | 1,008.44 | 34     | 1,008.44 | 34       | 1,360.65 | 34       | 1,721.40 | 34       | 2,079.97 | 34       | 2,440.15 | 34       | 2,800.48 | 34       | 3,161.13 | 34       | 3,521.27 |
| 1  | 14 | 301.48 | 662.42 | 14     | 1,015.63 | 14     | 1,015.63 | 14       | 1,368.16 | 14       | 1,729.92 | 14       | 2,087.42 | 14       | 2,447.66 | 14       | 2,807.99 | 14       | 3,168.84 | 14       | 3,528.76 |
| 1  | 12 | 309.01 | 669.92 | 12     | 1,022.83 | 12     | 1,022.83 | 12       | 1,376.68 | 12       | 1,738.43 | 12       | 2,094.88 | 12       | 2,455.16 | 12       | 2,815.61 | 12       | 3,176.16 | 12       | 3,536.24 |
| 1  | 14 | 316.53 | 677.44 | 14     | 1,030.02 | 14     | 1,030.02 | 14       | 1,383.19 | 14       | 1,743.95 | 14       | 2,102.34 | 14       | 2,462.67 | 14       | 2,823.02 | 14       | 3,183.67 | 14       | 3,543.73 |
| 3  | 34 | 324.05 | 684.91 | 34     | 1,037.22 | 34     | 1,037.22 | 34       | 1,390.71 | 34       | 1,751.46 | 34       | 2,109.79 | 34       | 2,470.17 | 34       | 2,830.53 | 34       | 3,191.18 | 34       | 3,551.22 |
| 1  | 14 | 331.57 | 692.41 | 1      | 1,044.41 | 1      | 1,044.41 | 1        | 1,398.23 | 1        | 1,759.98 | 1        | 2,117.25 | 1        | 2,477.67 | 1        | 2,838.05 | 1        | 3,198.70 | 1        | 3,558.71 |
| 1  | 12 | 339.09 | 699.91 | 12     | 1,051.61 | 12     | 1,051.61 | 12       | 1,405.74 | 12       | 1,766.49 | 12       | 2,124.71 | 12       | 2,485.18 | 12       | 2,845.58 | 12       | 3,206.21 | 12       | 3,566.21 |
| 1  | 14 | 346.61 | 707.41 | 14     | 1,058.80 | 14     | 1,058.80 | 14       | 1,413.26 | 14       | 1,774.01 | 14       | 2,132.16 | 14       | 2,492.68 | 14       | 2,853.08 | 14       | 3,213.72 | 14       | 3,573.71 |
| 1  | 12 | 354.13 | 714.91 | 12     | 1,065.99 | 12     | 1,065.99 | 12       | 1,420.77 | 12       | 1,781.53 | 12       | 2,139.62 | 12       | 2,500.58 | 12       | 2,860.59 | 12       | 3,221.24 | 12       | 3,581.24 |



# BARGE "EMS 503"

## 3 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

| 10 FT. |          | 11 FT. |          | 12 FT. |          | 13 FT. |          | 14 FT. |          | 15 FT. |          | 16 FT. |          | 17 FT. |          | 18 FT. |          | 19 FT. |          |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|
| IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      |
| 0      | 3,586.70 | 0      | 3,886.46 | 0      | 4,176.68 | 0      | 4,443.80 | 0      | 4,685.75 | 0      | 4,902.43 | 0      | 5,100.00 | 0      | 5,288.00 | 0      | 5,466.00 | 0      | 5,634.00 |
| 1/4    | 3,595.52 | 1/4    | 3,895.28 | 1/4    | 4,185.49 | 1/4    | 4,452.61 | 1/4    | 4,694.56 | 1/4    | 4,911.24 | 1/4    | 5,108.81 | 1/4    | 5,296.81 | 1/4    | 5,474.81 | 1/4    | 5,652.81 |
| 1/2    | 3,602.35 | 1/2    | 3,902.11 | 1/2    | 4,192.32 | 1/2    | 4,459.44 | 1/2    | 4,701.39 | 1/2    | 4,918.07 | 1/2    | 5,115.64 | 1/2    | 5,303.64 | 1/2    | 5,481.64 | 1/2    | 5,659.64 |
| 3/4    | 3,609.17 | 3/4    | 3,908.93 | 3/4    | 4,199.20 | 3/4    | 4,466.32 | 3/4    | 4,706.39 | 3/4    | 4,923.07 | 3/4    | 5,120.34 | 3/4    | 5,305.34 | 3/4    | 5,483.34 | 3/4    | 5,661.34 |
| 1      | 3,615.99 | 1      | 3,915.75 | 1      | 4,205.66 | 1      | 4,473.14 | 1      | 4,713.21 | 1      | 4,929.89 | 1      | 5,127.16 | 1      | 5,312.16 | 1      | 5,490.16 | 1      | 5,668.16 |
| 1/4    | 3,622.14 | 1/4    | 3,921.91 | 1/4    | 4,211.43 | 1/4    | 4,479.37 | 1/4    | 4,719.44 | 1/4    | 4,936.19 | 1/4    | 5,132.31 | 1/4    | 5,317.31 | 1/4    | 5,495.31 | 1/4    | 5,673.31 |
| 1/2    | 3,628.28 | 1/2    | 3,928.04 | 1/2    | 4,217.57 | 1/2    | 4,485.51 | 1/2    | 4,725.58 | 1/2    | 4,942.43 | 1/2    | 5,138.54 | 1/2    | 5,323.54 | 1/2    | 5,501.54 | 1/2    | 5,679.54 |
| 3/4    | 3,634.43 | 3/4    | 3,934.19 | 3/4    | 4,223.71 | 3/4    | 4,491.64 | 3/4    | 4,731.71 | 3/4    | 4,948.56 | 3/4    | 5,144.67 | 3/4    | 5,329.67 | 3/4    | 5,507.67 | 3/4    | 5,685.67 |
| 1      | 3,640.58 | 1      | 3,940.34 | 1      | 4,229.85 | 1      | 4,497.78 | 1      | 4,737.85 | 1      | 4,954.69 | 1      | 5,150.80 | 1      | 5,335.80 | 1      | 5,513.80 | 1      | 5,691.80 |
| 1/4    | 3,646.73 | 1/4    | 3,946.49 | 1/4    | 4,235.99 | 1/4    | 4,503.91 | 1/4    | 4,743.96 | 1/4    | 4,960.82 | 1/4    | 5,156.91 | 1/4    | 5,341.91 | 1/4    | 5,519.91 | 1/4    | 5,697.91 |
| 1/2    | 3,652.87 | 1/2    | 3,952.63 | 1/2    | 4,242.13 | 1/2    | 4,510.04 | 1/2    | 4,750.09 | 1/2    | 4,967.01 | 1/2    | 5,163.02 | 1/2    | 5,348.02 | 1/2    | 5,526.02 | 1/2    | 5,704.02 |
| 3/4    | 3,659.02 | 3/4    | 3,958.78 | 3/4    | 4,248.27 | 3/4    | 4,516.16 | 3/4    | 4,756.23 | 3/4    | 4,973.14 | 3/4    | 5,169.15 | 3/4    | 5,354.15 | 3/4    | 5,532.15 | 3/4    | 5,710.15 |
| 1      | 3,665.17 | 1      | 3,964.93 | 1      | 4,254.40 | 1      | 4,522.29 | 1      | 4,762.30 | 1      | 4,979.21 | 1      | 5,175.26 | 1      | 5,360.26 | 1      | 5,538.26 | 1      | 5,716.26 |
| 1/4    | 3,671.31 | 1/4    | 3,971.07 | 1/4    | 4,260.54 | 1/4    | 4,528.43 | 1/4    | 4,768.44 | 1/4    | 4,985.35 | 1/4    | 5,181.37 | 1/4    | 5,366.37 | 1/4    | 5,544.37 | 1/4    | 5,722.37 |
| 1/2    | 3,677.46 | 1/2    | 3,977.22 | 1/2    | 4,266.68 | 1/2    | 4,534.57 | 1/2    | 4,774.58 | 1/2    | 4,991.49 | 1/2    | 5,187.50 | 1/2    | 5,372.50 | 1/2    | 5,550.50 | 1/2    | 5,728.50 |
| 3/4    | 3,683.61 | 3/4    | 3,983.37 | 3/4    | 4,272.82 | 3/4    | 4,540.71 | 3/4    | 4,780.72 | 3/4    | 5,007.63 | 3/4    | 5,193.64 | 3/4    | 5,378.64 | 3/4    | 5,556.64 | 3/4    | 5,734.64 |
| 1      | 3,689.75 | 1      | 3,989.51 | 1      | 4,278.96 | 1      | 4,546.85 | 1      | 4,786.86 | 1      | 5,013.77 | 1      | 5,200.78 | 1      | 5,385.78 | 1      | 5,563.78 | 1      | 5,741.78 |
| 1/4    | 3,695.90 | 1/4    | 3,995.66 | 1/4    | 4,285.10 | 1/4    | 4,552.99 | 1/4    | 4,793.00 | 1/4    | 5,020.01 | 1/4    | 5,207.02 | 1/4    | 5,392.02 | 1/4    | 5,570.02 | 1/4    | 5,748.02 |
| 1/2    | 3,702.05 | 1/2    | 3,997.08 | 1/2    | 4,291.24 | 1/2    | 4,559.13 | 1/2    | 4,799.14 | 1/2    | 5,026.15 | 1/2    | 5,213.16 | 1/2    | 5,398.16 | 1/2    | 5,576.16 | 1/2    | 5,754.16 |
| 3/4    | 3,708.20 | 3/4    | 4,003.22 | 3/4    | 4,297.38 | 3/4    | 4,565.27 | 3/4    | 4,805.28 | 3/4    | 5,032.29 | 3/4    | 5,219.30 | 3/4    | 5,404.30 | 3/4    | 5,582.30 | 3/4    | 5,760.30 |
| 1      | 3,714.34 | 1      | 4,009.36 | 1      | 4,303.52 | 1      | 4,571.41 | 1      | 4,811.42 | 1      | 5,038.43 | 1      | 5,225.44 | 1      | 5,410.44 | 1      | 5,588.44 | 1      | 5,766.44 |
| 1/4    | 3,720.49 | 1/4    | 4,015.50 | 1/4    | 4,309.66 | 1/4    | 4,577.55 | 1/4    | 4,817.56 | 1/4    | 5,044.57 | 1/4    | 5,231.58 | 1/4    | 5,416.58 | 1/4    | 5,594.58 | 1/4    | 5,772.58 |
| 1/2    | 3,726.64 | 1/2    | 4,021.64 | 1/2    | 4,315.80 | 1/2    | 4,583.69 | 1/2    | 4,823.70 | 1/2    | 5,050.71 | 1/2    | 5,237.72 | 1/2    | 5,422.72 | 1/2    | 5,600.72 | 1/2    | 5,778.72 |
| 3/4    | 3,732.78 | 3/4    | 4,027.78 | 3/4    | 4,321.94 | 3/4    | 4,589.83 | 3/4    | 4,829.84 | 3/4    | 5,056.85 | 3/4    | 5,243.86 | 3/4    | 5,428.86 | 3/4    | 5,606.86 | 3/4    | 5,784.86 |
| 1      | 3,738.93 | 1      | 4,033.93 | 1      | 4,328.08 | 1      | 4,595.97 | 1      | 4,835.98 | 1      | 5,062.99 | 1      | 5,249.00 | 1      | 5,434.00 | 1      | 5,612.00 | 1      | 5,790.00 |
| 1/4    | 3,745.08 | 1/4    | 4,040.08 | 1/4    | 4,334.22 | 1/4    | 4,602.11 | 1/4    | 4,842.12 | 1/4    | 5,069.13 | 1/4    | 5,255.14 | 1/4    | 5,440.14 | 1/4    | 5,618.14 | 1/4    | 5,796.14 |
| 1/2    | 3,751.22 | 1/2    | 4,046.22 | 1/2    | 4,340.36 | 1/2    | 4,608.25 | 1/2    | 4,848.26 | 1/2    | 5,075.27 | 1/2    | 5,261.28 | 1/2    | 5,446.28 | 1/2    | 5,624.28 | 1/2    | 5,802.28 |
| 3/4    | 3,757.37 | 3/4    | 4,052.37 | 3/4    | 4,346.50 | 3/4    | 4,614.39 | 3/4    | 4,854.40 | 3/4    | 5,081.41 | 3/4    | 5,267.42 | 3/4    | 5,452.42 | 3/4    | 5,630.42 | 3/4    | 5,808.42 |
| 1      | 3,763.52 | 1      | 4,058.52 | 1      | 4,352.64 | 1      | 4,620.53 | 1      | 4,860.54 | 1      | 5,087.55 | 1      | 5,273.56 | 1      | 5,458.56 | 1      | 5,636.56 | 1      | 5,814.56 |
| 1/4    | 3,769.67 | 1/4    | 4,064.67 | 1/4    | 4,358.78 | 1/4    | 4,626.67 | 1/4    | 4,866.68 | 1/4    | 5,093.69 | 1/4    | 5,279.70 | 1/4    | 5,464.70 | 1/4    | 5,642.70 | 1/4    | 5,820.70 |
| 1/2    | 3,775.81 | 1/2    | 4,070.81 | 1/2    | 4,364.92 | 1/2    | 4,632.81 | 1/2    | 4,872.82 | 1/2    | 5,100.83 | 1/2    | 5,285.84 | 1/2    | 5,470.84 | 1/2    | 5,648.84 | 1/2    | 5,826.84 |
| 3/4    | 3,781.96 | 3/4    | 4,076.96 | 3/4    | 4,371.06 | 3/4    | 4,638.95 | 3/4    | 4,879.96 | 3/4    | 5,107.97 | 3/4    | 5,292.98 | 3/4    | 5,478.98 | 3/4    | 5,656.98 | 3/4    | 5,834.98 |
| 1      | 3,788.11 | 1      | 4,083.11 | 1      | 4,377.20 | 1      | 4,645.09 | 1      | 4,886.10 | 1      | 5,114.11 | 1      | 5,299.12 | 1      | 5,484.12 | 1      | 5,662.12 | 1      | 5,840.12 |
| 1/4    | 3,794.25 | 1/4    | 4,089.25 | 1/4    | 4,383.34 | 1/4    | 4,651.23 | 1/4    | 4,892.24 | 1/4    | 5,120.25 | 1/4    | 5,305.26 | 1/4    | 5,490.26 | 1/4    | 5,668.26 | 1/4    | 5,846.26 |
| 1/2    | 3,800.40 | 1/2    | 4,095.40 | 1/2    | 4,389.48 | 1/2    | 4,657.37 | 1/2    | 4,898.38 | 1/2    | 5,126.39 | 1/2    | 5,311.40 | 1/2    | 5,496.40 | 1/2    | 5,674.40 | 1/2    | 5,852.40 |
| 3/4    | 3,806.55 | 3/4    | 4,101.55 | 3/4    | 4,395.62 | 3/4    | 4,663.51 | 3/4    | 4,904.52 | 3/4    | 5,132.53 | 3/4    | 5,317.54 | 3/4    | 5,502.54 | 3/4    | 5,680.54 | 3/4    | 5,858.54 |
| 1      | 3,812.69 | 1      | 4,107.69 | 1      | 4,401.76 | 1      | 4,669.65 | 1      | 4,909.66 | 1      | 5,138.67 | 1      | 5,323.68 | 1      | 5,508.68 | 1      | 5,686.68 | 1      | 5,864.68 |
| 1/4    | 3,818.84 | 1/4    | 4,113.84 | 1/4    | 4,407.90 | 1/4    | 4,675.79 | 1/4    | 4,915.80 | 1/4    | 5,144.81 | 1/4    | 5,329.82 | 1/4    | 5,514.82 | 1/4    | 5,692.82 | 1/4    | 5,870.82 |
| 1/2    | 3,824.99 | 1/2    | 4,119.99 | 1/2    | 4,414.04 | 1/2    | 4,681.93 | 1/2    | 4,921.94 | 1/2    | 5,150.95 | 1/2    | 5,335.96 | 1/2    | 5,520.96 | 1/2    | 5,698.96 | 1/2    | 5,876.96 |
| 3/4    | 3,831.14 | 3/4    | 4,126.14 | 3/4    | 4,420.18 | 3/4    | 4,688.07 | 3/4    | 4,928.08 | 3/4    | 5,157.09 | 3/4    | 5,342.10 | 3/4    | 5,527.10 | 3/4    | 5,705.10 | 3/4    | 5,883.10 |
| 1      | 3,837.28 | 1      | 4,132.28 | 1      | 4,426.32 | 1      | 4,694.21 | 1      | 4,934.22 | 1      | 5,163.23 | 1      | 5,348.24 | 1      | 5,533.24 | 1      | 5,711.24 | 1      | 5,889.24 |
| 1/4    | 3,843.43 | 1/4    | 4,138.43 | 1/4    | 4,432.46 | 1/4    | 4,699.35 | 1/4    | 4,940.36 | 1/4    | 5,169.37 | 1/4    | 5,354.38 | 1/4    | 5,539.38 | 1/4    | 5,717.38 | 1/4    | 5,895.38 |
| 1/2    | 3,849.58 | 1/2    | 4,144.58 | 1/2    | 4,438.60 | 1/2    | 4,705.49 | 1/2    | 4,946.50 | 1/2    | 5,175.51 | 1/2    | 5,360.52 | 1/2    | 5,545.52 | 1/2    | 5,723.52 | 1/2    | 5,901.52 |
| 3/4    | 3,855.72 | 3/4    | 4,150.72 | 3/4    | 4,444.74 | 3/4    | 4,711.63 | 3/4    | 4,952.64 | 3/4    | 5,181.65 | 3/4    | 5,366.66 | 3/4    | 5,551.66 | 3/4    | 5,729.66 | 3/4    | 5,907.66 |
| 1      | 3,861.87 | 1      | 4,156.87 | 1      | 4,450.88 | 1      | 4,717.77 | 1      | 4,958.78 | 1      | 5,187.79 | 1      | 5,372.80 | 1      | 5,557.80 | 1      | 5,735.80 | 1      | 5,913.80 |
| 1/4    | 3,868.02 | 1/4    | 4,163.02 | 1/4    | 4,457.02 | 1/4    | 4,723.91 | 1/4    | 4,964.92 | 1/4    | 5,193.93 | 1/4    | 5,378.94 | 1/4    | 5,563.94 | 1/4    | 5,741.94 | 1/4    | 5,919.94 |
| 1/2    | 3,874.16 | 1/2    | 4,169.16 | 1/2    | 4,463.16 | 1/2    | 4,730.05 | 1/2    | 4,971.06 | 1/2    | 5,200.07 | 1/2    | 5,385.08 | 1/2    | 5,570.08 | 1/2    | 5,748.08 | 1/2    | 5,926.08 |
| 3/4    | 3,880.31 | 3/4    | 4,175.31 | 3/4    | 4,469.30 | 3/4    | 4,736.19 | 3/4    | 4,977.20 | 3/4    | 5,206.21 | 3/4    | 5,391.22 | 3/4    | 5,576.22 | 3/4    | 5,754.22 | 3/4    | 5,932.22 |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

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

*P. J. Mac*



# BARGE "EMS 503"

ULLAGE TRIM TABLE

|        | 1 FT.    |        | 2 FT.    |        | 3 FT.    |        | 4 FT.    |        | 5 FT.    |        | 6 FT.    |        |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|
|        | BOW      | STERN  | BOW      | STERN  | BOW      | STERN  | BOW      | STERN  | BOW      | STERN  | BOW      | STERN  |
| 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"

October 23, 2018

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

<http://www.pmacorp.net>





1 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 37'-03" FORWARD OF AFT BULKHEAD.

|     |          |     |          |
|-----|----------|-----|----------|
| 3/4 | 2,340.25 | 3/4 | 2,587.16 |
|-----|----------|-----|----------|

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

**PRECISION MEASUREMENT  
& ANALYSIS, INC.**

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SHEET NO. 1 OF 12



# BARGE "EMS 503"

## 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      | 2,580.06 | 0      | 2,236.97 | 0      | 1,897.87 | 0      | 1,556.77 | 0      | 1,215.66 | 0      | 876.03 | 0      | 535.36 | 0      | 263.24 | 0      | 10.39 | 0      |     |
| 1/4    | 2,572.95 | 1/4    | 2,231.86 | 1/4    | 1,890.77 | 1/4    | 1,549.66 | 1/4    | 1,208.55 | 1/4    | 869.10 | 1/4    | 528.25 | 1/4    | 257.49 | 1/4    |       | 1/4    |     |
| 1/2    | 2,565.84 | 1/2    | 2,224.76 | 1/2    | 1,883.66 | 1/2    | 1,542.55 | 1/2    | 1,201.45 | 1/2    | 862.22 | 1/2    | 521.14 | 1/2    | 251.73 | 1/2    |       | 1/2    |     |
| 3/4    | 2,558.74 | 3/4    | 2,217.65 | 3/4    | 1,876.55 | 3/4    | 1,535.45 | 3/4    | 1,194.35 | 3/4    | 855.10 | 3/4    | 514.03 | 3/4    | 246.02 | 3/4    |       | 3/4    |     |
| 1      | 2,551.63 | 1      | 2,210.54 | 1      | 1,869.45 | 1      | 1,528.34 | 1      | 1,187.24 | 1      | 848.29 | 1      | 506.92 | 1      | 240.31 | 1      |       | 1      |     |
| 1/4    | 2,544.53 | 1/4    | 2,203.44 | 1/4    | 1,862.34 | 1/4    | 1,521.24 | 1/4    | 1,180.13 | 1/4    | 841.18 | 1/4    | 500.81 | 1/4    | 234.60 | 1/4    |       | 1/4    |     |
| 1/2    | 2,537.42 | 1/2    | 2,196.33 | 1/2    | 1,855.23 | 1/2    | 1,514.13 | 1/2    | 1,173.03 | 1/2    | 834.07 | 1/2    | 494.70 | 1/2    | 228.89 | 1/2    |       | 1/2    |     |
| 3/4    | 2,530.31 | 3/4    | 2,189.23 | 3/4    | 1,848.13 | 3/4    | 1,507.02 | 3/4    | 1,165.92 | 3/4    | 826.96 | 3/4    | 488.59 | 3/4    | 223.18 | 3/4    |       | 3/4    |     |
| 1      | 2,523.21 | 1      | 2,182.12 | 1      | 1,841.02 | 1      | 1,499.92 | 1      | 1,158.81 | 1      | 820.85 | 1      | 482.48 | 1      | 217.47 | 1      |       | 1      |     |
| 1/4    | 2,516.10 | 1/4    | 2,175.01 | 1/4    | 1,833.91 | 1/4    | 1,492.81 | 1/4    | 1,151.71 | 1/4    | 813.74 | 1/4    | 476.37 | 1/4    | 211.76 | 1/4    |       | 1/4    |     |
| 1/2    | 2,509.00 | 1/2    | 2,167.91 | 1/2    | 1,826.81 | 1/2    | 1,485.70 | 1/2    | 1,144.60 | 1/2    | 806.63 | 1/2    | 470.26 | 1/2    | 206.05 | 1/2    |       | 1/2    |     |
| 3/4    | 2,501.89 | 3/4    | 2,160.80 | 3/4    | 1,819.70 | 3/4    | 1,478.60 | 3/4    | 1,137.50 | 3/4    | 800.52 | 3/4    | 464.15 | 3/4    | 200.34 | 3/4    |       | 3/4    |     |
| 1      | 2,494.78 | 1      | 2,153.70 | 1      | 1,812.59 | 1      | 1,471.49 | 1      | 1,130.39 | 1      | 793.41 | 1      | 458.04 | 1      | 194.63 | 1      |       | 1      |     |
| 1/4    | 2,487.68 | 1/4    | 2,146.59 | 1/4    | 1,805.49 | 1/4    | 1,464.38 | 1/4    | 1,123.28 | 1/4    | 786.30 | 1/4    | 451.93 | 1/4    | 188.92 | 1/4    |       | 1/4    |     |
| 1/2    | 2,480.57 | 1/2    | 2,139.48 | 1/2    | 1,798.38 | 1/2    | 1,457.28 | 1/2    | 1,116.18 | 1/2    | 779.20 | 1/2    | 445.82 | 1/2    | 183.21 | 1/2    |       | 1/2    |     |
| 3/4    | 2,473.47 | 3/4    | 2,132.38 | 3/4    | 1,791.27 | 3/4    | 1,450.17 | 3/4    | 1,109.07 | 3/4    | 772.09 | 3/4    | 439.71 | 3/4    | 177.50 | 3/4    |       | 3/4    |     |
| 1      | 2,466.36 | 1      | 2,125.27 | 1      | 1,784.17 | 1      | 1,443.07 | 1      | 1,101.96 | 1      | 764.99 | 1      | 433.60 | 1      | 171.79 | 1      |       | 1      |     |
| 1/4    | 2,459.25 | 1/4    | 2,118.17 | 1/4    | 1,777.06 | 1/4    | 1,435.96 | 1/4    | 1,094.86 | 1/4    | 757.88 | 1/4    | 427.49 | 1/4    | 166.08 | 1/4    |       | 1/4    |     |
| 1/2    | 2,452.15 | 1/2    | 2,111.06 | 1/2    | 1,769.96 | 1/2    | 1,428.85 | 1/2    | 1,087.75 | 1/2    | 750.77 | 1/2    | 421.38 | 1/2    | 160.37 | 1/2    |       | 1/2    |     |
| 3/4    | 2,445.04 | 3/4    | 2,103.95 | 3/4    | 1,762.85 | 3/4    | 1,421.75 | 3/4    | 1,080.64 | 3/4    | 743.66 | 3/4    | 415.27 | 3/4    | 154.66 | 3/4    |       | 3/4    |     |
| 1      | 2,437.94 | 1      | 2,096.85 | 1      | 1,755.74 | 1      | 1,414.64 | 1      | 1,073.54 | 1      | 736.55 | 1      | 409.16 | 1      | 148.95 | 1      |       | 1      |     |
| 1/4    | 2,430.83 | 1/4    | 2,089.74 | 1/4    | 1,748.64 | 1/4    | 1,407.53 | 1/4    | 1,066.44 | 1/4    | 729.44 | 1/4    | 403.05 | 1/4    | 143.24 | 1/4    |       | 1/4    |     |
| 1/2    | 2,423.72 | 1/2    | 2,082.64 | 1/2    | 1,741.53 | 1/2    | 1,400.43 | 1/2    | 1,059.33 | 1/2    | 722.33 | 1/2    | 396.94 | 1/2    | 137.53 | 1/2    |       | 1/2    |     |
| 3/4    | 2,416.62 | 3/4    | 2,075.53 | 3/4    | 1,734.42 | 3/4    | 1,393.32 | 3/4    | 1,052.23 | 3/4    | 715.22 | 3/4    | 390.83 | 3/4    | 131.82 | 3/4    |       | 3/4    |     |
| 1      | 2,409.51 | 1      | 2,068.42 | 1      | 1,727.32 | 1      | 1,386.22 | 1      | 1,045.12 | 1      | 708.11 | 1      | 384.72 | 1      | 126.11 | 1      |       | 1      |     |
| 1/4    | 2,402.41 | 1/4    | 2,061.32 | 1/4    | 1,720.21 | 1/4    | 1,379.11 | 1/4    | 1,038.01 | 1/4    | 701.00 | 1/4    | 378.61 | 1/4    | 120.40 | 1/4    |       | 1/4    |     |
| 1/2    | 2,395.30 | 1/2    | 2,054.21 | 1/2    | 1,713.11 | 1/2    | 1,372.00 | 1/2    | 1,030.91 | 1/2    | 693.90 | 1/2    | 372.50 | 1/2    | 114.69 | 1/2    |       | 1/2    |     |
| 3/4    | 2,388.19 | 3/4    | 2,047.10 | 3/4    | 1,706.00 | 3/4    | 1,364.90 | 3/4    | 1,023.81 | 3/4    | 686.80 | 3/4    | 366.39 | 3/4    | 108.98 | 3/4    |       | 3/4    |     |
| 1      | 2,381.09 | 1      | 2,040.00 | 1      | 1,698.89 | 1      | 1,357.79 | 1      | 1,016.70 | 1      | 679.69 | 1      | 360.28 | 1      | 103.27 | 1      |       | 1      |     |
| 1/4    | 2,373.98 | 1/4    | 2,032.89 | 1/4    | 1,691.79 | 1/4    | 1,350.68 | 1/4    | 1,009.60 | 1/4    | 672.58 | 1/4    | 354.17 | 1/4    | 97.56  | 1/4    |       | 1/4    |     |
| 1/2    | 2,366.88 | 1/2    | 2,025.78 | 1/2    | 1,684.68 | 1/2    | 1,343.58 | 1/2    | 1,002.50 | 1/2    | 665.47 | 1/2    | 348.06 | 1/2    | 91.85  | 1/2    |       | 1/2    |     |
| 3/4    | 2,359.77 | 3/4    | 2,018.68 | 3/4    | 1,677.57 | 3/4    | 1,336.47 | 3/4    | 995.40   | 3/4    | 658.36 | 3/4    | 341.95 | 3/4    | 86.14  | 3/4    |       | 3/4    |     |
| 1      | 2,352.66 | 1      | 2,011.57 | 1      | 1,670.47 | 1      | 1,329.37 | 1      | 988.30   | 1      | 651.25 | 1      | 335.84 | 1      | 80.43  | 1      |       | 1      |     |
| 1/4    | 2,345.56 | 1/4    | 2,004.47 | 1/4    | 1,663.36 | 1/4    | 1,322.26 | 1/4    | 981.19   | 1/4    | 644.14 | 1/4    | 329.73 | 1/4    | 74.72  | 1/4    |       | 1/4    |     |
| 1/2    | 2,338.45 | 1/2    | 1,997.36 | 1/2    | 1,656.25 | 1/2    | 1,315.15 | 1/2    | 974.08   | 1/2    | 637.03 | 1/2    | 323.62 | 1/2    | 69.01  | 1/2    |       | 1/2    |     |
| 3/4    | 2,331.35 | 3/4    | 1,990.25 | 3/4    | 1,649.15 | 3/4    | 1,308.05 | 3/4    | 966.97   | 3/4    | 629.92 | 3/4    | 317.51 | 3/4    | 63.30  | 3/4    |       | 3/4    |     |
| 1      | 2,324.24 | 1      | 1,983.15 | 1      | 1,642.04 | 1      | 1,300.94 | 1      | 960.86   | 1      | 622.81 | 1      | 311.40 | 1      | 57.59  | 1      |       | 1      |     |
| 1/4    | 2,317.13 | 1/4    | 1,976.04 | 1/4    | 1,634.94 | 1/4    | 1,293.83 | 1/4    | 953.75   | 1/4    | 615.70 | 1/4    | 305.29 | 1/4    | 51.88  | 1/4    |       | 1/4    |     |
| 1/2    | 2,310.03 | 1/2    | 1,968.93 | 1/2    | 1,627.83 | 1/2    | 1,286.73 | 1/2    | 946.64   | 1/2    | 608.60 | 1/2    | 299.18 | 1/2    | 46.17  | 1/2    |       | 1/2    |     |
| 3/4    | 2,302.92 | 3/4    | 1,961.83 | 3/4    | 1,620.72 | 3/4    | 1,279.62 | 3/4    | 939.53   | 3/4    | 601.50 | 3/4    | 293.07 | 3/4    | 40.46  | 3/4    |       | 3/4    |     |
| 1      | 2,295.82 | 1      | 1,954.72 | 1      | 1,613.62 | 1      | 1,272.51 | 1      | 932.42   | 1      | 594.39 | 1      | 286.96 | 1      | 34.75  | 1      |       | 1      |     |
| 1/4    | 2,288.71 | 1/4    | 1,947.62 | 1/4    | 1,606.51 | 1/4    | 1,265.41 | 1/4    | 925.31   | 1/4    | 587.28 | 1/4    | 280.85 | 1/4    | 29.04  | 1/4    |       | 1/4    |     |
| 1/2    | 2,281.60 | 1/2    | 1,940.51 | 1/2    | 1,599.40 | 1/2    | 1,258.30 | 1/2    | 918.20   | 1/2    | 580.17 | 1/2    | 274.74 | 1/2    | 23.33  | 1/2    |       | 1/2    |     |
| 3/4    | 2,274.50 | 3/4    | 1,933.40 | 3/4    | 1,592.30 | 3/4    | 1,251.20 | 3/4    | 911.10   | 3/4    | 573.06 | 3/4    | 268.63 | 3/4    | 17.62  | 3/4    |       | 3/4    |     |
| 1      | 2,267.39 | 1      | 1,926.30 | 1      | 1,585.19 | 1      | 1,244.09 | 1      | 904.00   | 1      | 565.95 | 1      | 262.52 | 1      | 11.91  | 1      |       | 1      |     |
| 1/4    | 2,260.29 | 1/4    | 1,919.19 | 1/4    | 1,578.09 | 1/4    | 1,236.98 | 1/4    | 896.89   | 1/4    | 558.84 | 1/4    | 256.41 | 1/4    | 6.20   | 1/4    |       | 1/4    |     |
| 1/2    | 2,253.18 | 1/2    | 1,912.08 | 1/2    | 1,570.98 | 1/2    | 1,229.88 | 1/2    | 889.78   | 1/2    | 551.73 | 1/2    | 250.30 | 1/2    | 0.50   | 1/2    |       | 1/2    |     |
| 3/4    | 2,246.07 | 3/4    | 1,904.98 | 3/4    | 1,563.87 | 3/4    | 1,222.77 | 3/4    | 882.67   | 3/4    | 544.62 | 3/4    | 244.19 | 3/4    | -0.21  | 3/4    |       | 3/4    |     |

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/20/18

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2992  
Pasland, Texas 77588  
<http://www.pmscorp.net>

**1STBD**

## ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

| 0 FT. |       |       | 1 FT. |          |       | 2 FT.    |       |          | 3 FT. |          |       | 4 FT.    |       |          | 5 FT. |          |       | 6 FT.    |       |          | 7 FT. |          |       | 8 FT.    |       |          | GAUGE HEIGHT '18-'20" |          |  |
|-------|-------|-------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-----------------------|----------|--|
| IN    | OUT   | IN    | IN    | OUT      | IN    | IN       | OUT   | IN       | IN    | OUT      | IN    | OUT      | IN    | IN       | OUT   | IN       | OUT   | IN       | IN    | OUT      | IN    | OUT      | IN    | OUT      | IN    | OUT      | IN                    | OUT      |  |
| 0     | 0     | 0     | 0     | 4,814.09 | 0     | 4,546.61 | 0     | 4,255.84 | 0     | 3,941.12 | 0     | 3,604.49 | 0     | 3,283.31 | 0     | 2,922.12 | 0     | 2,622.12 | 0     | 2,322.12 | 0     | 2,022.12 | 0     | 1,722.12 | 0     | 1,422.12 | 0                     | 1,122.12 |  |
| 1/4   | 1/4   | 1/4   | 1/4   | 4,808.74 | 1/4   | 4,540.78 | 1/4   | 4,249.52 | 1/4   | 3,934.29 | 1/4   | 3,597.38 | 1/4   | 3,276.20 | 1/4   | 2,915.01 | 1/4   | 2,615.01 | 1/4   | 2,315.01 | 1/4   | 2,015.01 | 1/4   | 1,715.01 | 1/4   | 1,415.01 | 1/4                   | 1,115.01 |  |
| 1/2   | 1/2   | 1/2   | 1/2   | 4,803.39 | 1/2   | 4,534.94 | 1/2   | 4,243.20 | 1/2   | 3,927.47 | 1/2   | 3,590.27 | 1/2   | 3,269.09 | 1/2   | 2,907.90 | 1/2   | 2,607.90 | 1/2   | 2,307.90 | 1/2   | 2,007.90 | 1/2   | 1,707.90 | 1/2   | 1,407.90 | 1/2                   | 1,107.90 |  |
| 3/4   | 3/4   | 3/4   | 3/4   | 4,798.04 | 3/4   | 4,529.10 | 3/4   | 4,238.68 | 3/4   | 3,923.64 | 3/4   | 3,586.17 | 3/4   | 3,264.99 | 3/4   | 2,903.80 | 3/4   | 2,603.80 | 3/4   | 2,303.80 | 3/4   | 2,003.80 | 3/4   | 1,703.80 | 3/4   | 1,403.80 | 3/4                   | 1,103.80 |  |
| 1     | 1     | 1     | 1     | 4,792.69 | 1     | 4,523.27 | 1     | 4,230.55 | 1     | 3,913.82 | 1     | 3,576.06 | 1     | 3,254.87 | 1     | 2,893.69 | 1     | 2,593.69 | 1     | 2,293.69 | 1     | 1,993.69 | 1     | 1,693.69 | 1     | 1,393.69 | 1                     | 1,093.69 |  |
| 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 4,787.30 | 1 1/4 | 4,517.39 | 1 1/4 | 4,224.19 | 1 1/4 | 3,906.85 | 1 1/4 | 3,569.95 | 1 1/4 | 3,247.77 | 1 1/4 | 2,886.58 | 1 1/4 | 2,586.58 | 1 1/4 | 2,286.58 | 1 1/4 | 1,986.58 | 1 1/4 | 1,686.58 | 1 1/4 | 1,386.58 | 1 1/4                 | 1,086.58 |  |
| 1 1/2 | 1 1/2 | 1 1/2 | 1 1/2 | 4,781.91 | 1 1/2 | 4,511.52 | 1 1/2 | 4,217.83 | 1 1/2 | 3,900.09 | 1 1/2 | 3,563.84 | 1 1/2 | 3,242.66 | 1 1/2 | 2,881.47 | 1 1/2 | 2,581.47 | 1 1/2 | 2,281.47 | 1 1/2 | 1,981.47 | 1 1/2 | 1,681.47 | 1 1/2 | 1,381.47 | 1 1/2                 | 1,081.47 |  |
| 3/4   | 3/4   | 3/4   | 3/4   | 4,776.52 | 3/4   | 4,505.64 | 3/4   | 4,211.47 | 3/4   | 3,893.22 | 3/4   | 3,556.73 | 3/4   | 3,235.56 | 3/4   | 2,874.37 | 3/4   | 2,574.37 | 3/4   | 2,274.37 | 3/4   | 1,974.37 | 3/4   | 1,674.37 | 3/4   | 1,374.37 | 3/4                   | 1,074.37 |  |
| 2     | 2     | 2     | 2     | 4,771.13 | 2     | 4,499.77 | 2     | 4,205.11 | 2     | 3,886.36 | 2     | 3,549.63 | 2     | 3,228.45 | 2     | 2,867.26 | 2     | 2,567.26 | 2     | 2,267.26 | 2     | 1,967.26 | 2     | 1,667.26 | 2     | 1,367.26 | 2                     | 1,067.26 |  |
| 1 1/4 | 1 1/4 | 1 1/4 | 1 1/4 | 4,765.70 | 1 1/4 | 4,493.85 | 1 1/4 | 4,198.71 | 1 1/4 | 3,879.45 | 1 1/4 | 3,542.52 | 1 1/4 | 3,221.34 | 1 1/4 | 2,860.15 | 1 1/4 | 2,560.15 | 1 1/4 | 2,260.15 | 1 1/4 | 1,960.15 | 1 1/4 | 1,660.15 | 1 1/4 | 1,360.15 | 1 1/4                 | 1,060.15 |  |
| 1 1/2 | 1 1/2 | 1 1/2 | 1 1/2 | 4,760.27 | 1 1/2 | 4,487.93 | 1 1/2 | 4,192.31 | 1 1/2 | 3,872.54 | 1 1/2 | 3,535.41 | 1 1/2 | 3,214.23 | 1 1/2 | 2,853.04 | 1 1/2 | 2,553.04 | 1 1/2 | 2,253.04 | 1 1/2 | 1,953.04 | 1 1/2 | 1,653.04 | 1 1/2 | 1,353.04 | 1 1/2                 | 1,053.04 |  |
| 3/4   | 3/4   | 3/4   | 3/4   | 4,754.84 | 3/4   | 4,482.02 | 3/4   | 4,185.91 | 3/4   | 3,865.64 | 3/4   | 3,528.30 | 3/4   | 3,207.12 | 3/4   | 2,845.93 | 3/4   | 2,545.93 | 3/4   | 2,245.93 | 3/4   | 1,945.93 | 3/4   | 1,645.93 | 3/4   | 1,345.93 | 3/4                   | 1,045.93 |  |
| 3     | 3     | 3     | 3     | 4,749.41 | 3     | 4,476.10 | 3     | 4,179.60 | 3     | 3,859.73 | 3     | 3,522.40 | 3     | 3,201.22 | 3     | 2,840.03 | 3     |          |       |          |       |          |       |          |       |          |                       |          |  |

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 42" OS" OFF CENTERLINE AND ONE INCH FROM BOTTOM OF TANK.

ENGINEERING LOCATED 12-08 OFF CENTERLINE AND 37'-03" FORWARD OF AFT BULKHEAD.

3 OF 13 PAGES

CERTIFIED CHART FOR THE ABOVE NAMED TANK ON J Y

### PRECISION MEASUREMENT

**ANALYSIS, INC.**  
P.O. Box 2002

P.O. BOX 2758  
Pearland, Texas 77588

<http://www.pmacorp.net>

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*[Signature]*



# BARGE "EMS 503"

## 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     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT    | IN     | OUT    | IN     | OUT    | IN     | OUT   | IN     | OUT |
| 0      | 2,580.95 | 0      | 2,239.76 | 0      | 1,886.60 | 0      | 1,537.41 | 0      | 1,216.22 | 0      | 876.48 | 0      | 555.68 | 0      | 263.42 | 0      | 10.39 | 0      |     |
| 1/2    | 2,573.84 | 1/4    | 2,232.67 | 1/4    | 1,881.49 | 1/4    | 1,530.30 | 1/4    | 1,209.11 | 1/4    | 869.54 | 1/4    | 549.31 | 1/4    | 257.66 | 1/4    |       | 1/4    |     |
| 1      | 2,566.73 | 1/2    | 2,225.56 | 1/2    | 1,874.38 | 1/2    | 1,523.19 | 1/2    | 1,202.00 | 1/2    | 862.60 | 1/2    | 542.42 | 1/2    | 251.90 | 1/2    |       | 1/2    |     |
| 3/4    | 2,559.62 | 3/4    | 2,218.45 | 3/4    | 1,867.27 | 3/4    | 1,516.08 | 3/4    | 1,194.89 | 3/4    | 855.66 | 3/4    | 535.58 | 3/4    | 246.15 | 3/4    |       | 3/4    |     |
| 1      | 2,552.52 | 1      | 2,211.35 | 1      | 1,860.16 | 1      | 1,509.98 | 1      | 1,187.78 | 1      | 848.72 | 1      | 530.21 | 1      | 240.39 | 1      |       | 1      |     |
| 1 1/4  | 2,545.41 | 1 1/4  | 2,204.24 | 1 1/4  | 1,853.06 | 1 1/4  | 1,502.87 | 1 1/4  | 1,180.67 | 1 1/4  | 841.84 | 1 1/4  | 523.89 | 1 1/4  | 234.68 | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,538.30 | 1 1/2  | 2,197.13 | 1 1/2  | 1,845.95 | 1 1/2  | 1,495.76 | 1 1/2  | 1,173.57 | 1 1/2  | 834.95 | 1 1/2  | 517.57 | 1 1/2  | 228.98 | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,531.19 | 1 3/4  | 2,190.02 | 1 3/4  | 1,838.84 | 1 3/4  | 1,488.63 | 1 3/4  | 1,166.46 | 1 3/4  | 828.06 | 1 3/4  | 511.25 | 1 3/4  | 223.27 | 1 3/4  |       | 1 3/4  |     |
| 2      | 2,524.09 | 2      | 2,182.92 | 2      | 1,831.74 | 2      | 1,481.54 | 2      | 1,159.35 | 2      | 821.17 | 2      | 504.93 | 2      | 217.56 | 2      |       | 2      |     |
| 1 1/4  | 2,516.98 | 1 1/4  | 2,175.81 | 1 1/4  | 1,824.63 | 1 1/4  | 1,474.44 | 1 1/4  | 1,152.24 | 1 1/4  | 814.34 | 1 1/4  | 498.67 | 1 1/4  | 211.91 | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,509.87 | 1 1/2  | 2,168.70 | 1 1/2  | 1,817.52 | 1 1/2  | 1,467.33 | 1 1/2  | 1,145.13 | 1 1/2  | 807.50 | 1 1/2  | 492.40 | 1 1/2  | 206.25 | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,502.76 | 1 3/4  | 2,161.59 | 1 3/4  | 1,810.41 | 1 3/4  | 1,460.22 | 1 3/4  | 1,138.03 | 1 3/4  | 800.56 | 1 3/4  | 486.13 | 1 3/4  | 200.59 | 1 3/4  |       | 1 3/4  |     |
| 3      | 2,495.66 | 3      | 2,154.48 | 3      | 1,803.30 | 3      | 1,453.11 | 3      | 1,130.92 | 3      | 793.82 | 3      | 479.86 | 3      | 194.94 | 3      |       | 3      |     |
| 1 1/4  | 2,488.55 | 1 1/4  | 2,147.38 | 1 1/4  | 1,796.20 | 1 1/4  | 1,446.00 | 1 1/4  | 1,123.81 | 1 1/4  | 787.03 | 1 1/4  | 473.65 | 1 1/4  | 189.33 | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,481.44 | 1 1/2  | 2,140.27 | 1 1/2  | 1,789.09 | 1 1/2  | 1,438.89 | 1 1/2  | 1,116.70 | 1 1/2  | 780.23 | 1 1/2  | 467.43 | 1 1/2  | 183.73 | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,474.33 | 1 3/4  | 2,133.16 | 1 3/4  | 1,781.98 | 1 3/4  | 1,431.78 | 1 3/4  | 1,109.59 | 1 3/4  | 773.44 | 1 3/4  | 461.22 | 1 3/4  | 178.13 | 1 3/4  |       | 1 3/4  |     |
| 4      | 2,467.22 | 4      | 2,126.05 | 4      | 1,774.87 | 4      | 1,424.67 | 4      | 1,102.48 | 4      | 766.64 | 4      | 455.00 | 4      | 172.52 | 4      |       | 4      |     |
| 1 1/4  | 2,460.12 | 1 1/4  | 2,118.95 | 1 1/4  | 1,767.76 | 1 1/4  | 1,417.56 | 1 1/4  | 1,095.38 | 1 1/4  | 759.90 | 1 1/4  | 448.83 | 1 1/4  | 166.97 | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,453.01 | 1 1/2  | 2,111.84 | 1 1/2  | 1,760.65 | 1 1/2  | 1,410.45 | 1 1/2  | 1,088.27 | 1 1/2  | 753.15 | 1 1/2  | 442.67 | 1 1/2  | 161.41 | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,445.90 | 1 3/4  | 2,104.73 | 1 3/4  | 1,753.55 | 1 3/4  | 1,403.34 | 1 3/4  | 1,081.16 | 1 3/4  | 746.41 | 1 3/4  | 436.50 | 1 3/4  | 155.86 | 1 3/4  |       | 1 3/4  |     |
| 5      | 2,438.79 | 5      | 2,097.63 | 5      | 1,746.44 | 5      | 1,396.23 | 5      | 1,074.05 | 5      | 739.66 | 5      | 430.34 | 5      | 150.30 | 5      |       | 5      |     |
| 1 1/4  | 2,431.69 | 1 1/4  | 2,090.52 | 1 1/4  | 1,739.33 | 1 1/4  | 1,389.12 | 1 1/4  | 1,066.98 | 1 1/4  | 732.95 | 1 1/4  | 424.22 | 1 1/4  | 144.80 | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,424.58 | 1 1/2  | 2,083.41 | 1 1/2  | 1,732.22 | 1 1/2  | 1,382.01 | 1 1/2  | 1,059.86 | 1 1/2  | 726.24 | 1 1/2  | 418.11 | 1 1/2  | 139.30 | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,417.47 | 1 3/4  | 2,076.30 | 1 3/4  | 1,725.11 | 1 3/4  | 1,374.90 | 1 3/4  | 1,052.75 | 1 3/4  | 719.53 | 1 3/4  | 412.00 | 1 3/4  | 133.80 | 1 3/4  |       | 1 3/4  |     |
| 6      | 2,410.36 | 6      | 2,069.19 | 6      | 1,718.00 | 6      | 1,367.79 | 6      | 1,045.64 | 6      | 712.82 | 6      | 405.88 | 6      | 128.29 | 6      |       | 6      |     |
| 1 1/4  | 2,403.26 | 1 1/4  | 2,062.08 | 1 1/4  | 1,710.89 | 1 1/4  | 1,360.68 | 1 1/4  | 1,038.53 | 1 1/4  | 706.15 | 1 1/4  | 399.82 | 1 1/4  | 122.84 | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,396.15 | 1 1/2  | 2,054.98 | 1 1/2  | 1,703.78 | 1 1/2  | 1,353.57 | 1 1/2  | 1,031.42 | 1 1/2  | 699.47 | 1 1/2  | 393.76 | 1 1/2  | 117.39 | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,389.04 | 1 3/4  | 2,047.87 | 1 3/4  | 1,696.68 | 1 3/4  | 1,346.46 | 1 3/4  | 1,024.31 | 1 3/4  | 692.80 | 1 3/4  | 387.69 | 1 3/4  | 111.94 | 1 3/4  |       | 1 3/4  |     |
| 7      | 2,381.93 | 7      | 2,040.76 | 7      | 1,689.57 | 7      | 1,339.35 | 7      | 1,017.20 | 7      | 686.12 | 7      | 381.63 | 7      | 106.49 | 7      |       | 7      |     |
| 1 1/4  | 2,374.82 | 1 1/4  | 2,033.65 | 1 1/4  | 1,682.46 | 1 1/4  | 1,332.24 | 1 1/4  | 1,010.09 | 1 1/4  | 679.50 | 1 1/4  | 375.62 | 1 1/4  | 101.09 | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,367.72 | 1 1/2  | 2,026.54 | 1 1/2  | 1,675.35 | 1 1/2  | 1,325.13 | 1 1/2  | 1,002.98 | 1 1/2  | 672.87 | 1 1/2  | 369.80 | 1 1/2  | 95.68  | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,360.61 | 1 3/4  | 2,019.44 | 1 3/4  | 1,668.24 | 1 3/4  | 1,318.02 | 1 3/4  | 995.86   | 1 3/4  | 666.25 | 1 3/4  | 363.59 | 1 3/4  | 90.28  | 1 3/4  |       | 1 3/4  |     |
| 8      | 2,353.50 | 8      | 2,012.33 | 8      | 1,661.13 | 8      | 1,310.91 | 8      | 988.75   | 8      | 659.63 | 8      | 357.58 | 8      | 84.88  | 8      |       | 8      |     |
| 1 1/4  | 2,346.39 | 1 1/4  | 2,005.22 | 1 1/4  | 1,654.02 | 1 1/4  | 1,303.80 | 1 1/4  | 981.64   | 1 1/4  | 653.05 | 1 1/4  | 351.82 | 1 1/4  | 79.53  | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,339.28 | 1 1/2  | 1,998.11 | 1 1/2  | 1,646.91 | 1 1/2  | 1,296.69 | 1 1/2  | 974.53   | 1 1/2  | 646.48 | 1 1/2  | 345.66 | 1 1/2  | 74.18  | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,332.18 | 1 3/4  | 1,991.00 | 1 3/4  | 1,639.80 | 1 3/4  | 1,289.58 | 1 3/4  | 967.42   | 1 3/4  | 639.91 | 1 3/4  | 339.69 | 1 3/4  | 68.83  | 1 3/4  |       | 1 3/4  |     |
| 9      | 2,325.07 | 9      | 1,983.89 | 9      | 1,632.69 | 9      | 1,282.47 | 9      | 960.31   | 9      | 633.33 | 9      | 333.73 | 9      | 63.48  | 9      |       | 9      |     |
| 1 1/4  | 2,317.96 | 1 1/4  | 1,976.78 | 1 1/4  | 1,625.58 | 1 1/4  | 1,275.36 | 1 1/4  | 953.20   | 1 1/4  | 626.81 | 1 1/4  | 327.82 | 1 1/4  | 58.18  | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,310.85 | 1 1/2  | 1,969.68 | 1 1/2  | 1,618.47 | 1 1/2  | 1,268.25 | 1 1/2  | 946.09   | 1 1/2  | 620.29 | 1 1/2  | 321.91 | 1 1/2  | 52.88  | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,303.75 | 1 3/4  | 1,962.57 | 1 3/4  | 1,611.36 | 1 3/4  | 1,261.14 | 1 3/4  | 938.98   | 1 3/4  | 613.77 | 1 3/4  | 316.00 | 1 3/4  | 47.59  | 1 3/4  |       | 1 3/4  |     |
| 10     | 2,296.64 | 10     | 1,955.46 | 10     | 1,604.25 | 10     | 1,254.03 | 10     | 931.87   | 10     | 607.25 | 10     | 310.09 | 10     | 42.29  | 10     |       | 10     |     |
| 1 1/4  | 2,289.53 | 1 1/4  | 1,948.35 | 1 1/4  | 1,600.06 | 1 1/4  | 1,246.92 | 1 1/4  | 924.76   | 1 1/4  | 600.78 | 1 1/4  | 304.23 | 1 1/4  | 37.63  | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,282.42 | 1 1/2  | 1,941.24 | 1 1/2  | 1,592.95 | 1 1/2  | 1,239.81 | 1 1/2  | 917.65   | 1 1/2  | 594.30 | 1 1/2  | 298.37 | 1 1/2  | 32.98  | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,275.32 | 1 3/4  | 1,934.14 | 1 3/4  | 1,585.84 | 1 3/4  | 1,232.70 | 1 3/4  | 910.54   | 1 3/4  | 587.83 | 1 3/4  | 292.51 | 1 3/4  | 28.32  | 1 3/4  |       | 1 3/4  |     |
| 11     | 2,268.21 | 11     | 1,927.03 | 11     | 1,578.73 | 11     | 1,225.59 | 11     | 903.43   | 11     | 581.36 | 11     | 286.65 | 11     | 23.66  | 11     |       | 11     |     |
| 1 1/4  | 2,261.10 | 1 1/4  | 1,919.92 | 1 1/4  | 1,571.62 | 1 1/4  | 1,218.48 | 1 1/4  | 896.32   | 1 1/4  | 574.94 | 1 1/4  | 280.84 | 1 1/4  | 20.35  | 1 1/4  |       | 1 1/4  |     |
| 1 1/2  | 2,253.99 | 1 1/2  | 1,912.81 | 1 1/2  | 1,564.52 | 1 1/2  | 1,211.37 | 1 1/2  | 889.21   | 1 1/2  | 568.52 | 1 1/2  | 276.04 | 1 1/2  | 17.03  | 1 1/2  |       | 1 1/2  |     |
| 1 3/4  | 2,246.89 | 1 3/4  | 1,905.70 | 1 3/4  | 1,557.41 | 1 3/4  | 1,204.26 | 1 3/4  | 882.10   | 1 3/4  | 562.10 | 1 3/4  | 269.23 | 1 3/4  | 13.71  | 1 3/4  |       | 1 3/4  |     |

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2002  
Pearland, Texas 77588  
http://www.pmacorp.net

*[Signature]*

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.



**2 PORT  
CULLAGE TABLE**

| INCHES GIVEN IN BARRELS OF 42.05 GALLONS |       |       |       |       |       |       |       |       |       | GAUGE HEIGHT 17'-11 1/4" |       |       |       |       |       |       |       |       |       |
|------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0 FT.                                    |       | 1 FT. |       | 2 FT. |       | 3 FT. |       | 4 FT. |       | 5 FT.                    |       | 6 FT. |       | 7 FT. |       | 8 FT. |       | 9 FT. |       |
| IN                                       | OUT   | IN    | OUT   | IN    | OUT   | IN    | OUT   | IN    | OUT   | IN                       | OUT   | IN    | OUT   | IN    | OUT   | IN    | OUT   | IN    | OUT   |
| 0                                        | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0                        | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |
| 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   | 1     | 1/4   |
| 2                                        | 1/2   | 2     | 1/2   | 2     | 1/2   | 2     | 1/2   | 2     | 1/2   | 2                        | 1/2   | 2     | 1/2   | 2     | 1/2   | 2     | 1/2   | 2     | 1/2   |
| 3                                        | 3/4   | 3     | 3/4   | 3     | 3/4   | 3     | 3/4   | 3     | 3/4   | 3                        | 3/4   | 3     | 3/4   | 3     | 3/4   | 3     | 3/4   | 3     | 3/4   |
| 4                                        | 1     | 4     | 1     | 4     | 1     | 4     | 1     | 4     | 1     | 4                        | 1     | 4     | 1     | 4     | 1     | 4     | 1     | 4     | 1     |
| 5                                        | 1 1/4 | 5     | 1 1/4 | 5     | 1 1/4 | 5     | 1 1/4 | 5     | 1 1/4 | 5                        | 1 1/4 | 5     | 1 1/4 | 5     | 1 1/4 | 5     | 1 1/4 | 5     | 1 1/4 |
| 6                                        | 1 1/2 | 6     | 1 1/2 | 6     | 1 1/2 | 6     | 1 1/2 | 6     | 1 1/2 | 6                        | 1 1/2 | 6     | 1 1/2 | 6     | 1 1/2 | 6     | 1 1/2 | 6     | 1 1/2 |
| 7                                        | 1 3/4 | 7     | 1 3/4 | 7     | 1 3/4 | 7     | 1 3/4 | 7     | 1 3/4 | 7                        | 1 3/4 | 7     | 1 3/4 | 7     | 1 3/4 | 7     | 1 3/4 | 7     | 1 3/4 |
| 8                                        | 2     | 8     | 2     | 8     | 2     | 8     | 2     | 8     | 2     | 8                        | 2     | 8     | 2     | 8     | 2     | 8     | 2     | 8     | 2     |
| 9                                        | 2 1/4 | 9     | 2 1/4 | 9     | 2 1/4 | 9     | 2 1/4 | 9     | 2 1/4 | 9                        | 2 1/4 | 9     | 2 1/4 | 9     | 2 1/4 | 9     | 2 1/4 | 9     | 2 1/4 |
| 10                                       | 2 1/2 | 10    | 2 1/2 | 10    | 2 1/2 | 10    | 2 1/2 | 10    | 2 1/2 | 10                       | 2 1/2 | 10    | 2 1/2 | 10    | 2 1/2 | 10    | 2 1/2 | 10    | 2 1/2 |
| 11                                       | 2 3/4 | 11    | 2 3/4 | 11    | 2 3/4 | 11    | 2 3/4 | 11    | 2 3/4 | 11                       | 2 3/4 | 11    | 2 3/4 | 11    | 2 3/4 | 11    | 2 3/4 | 11    | 2 3/4 |
| 12                                       | 3     | 12    | 3     | 12    | 3     | 12    | 3     | 12    | 3     | 12                       | 3     | 12    | 3     | 12    | 3     | 12    | 3     | 12    | 3     |
| 13                                       | 3 1/4 | 13    | 3 1/4 | 13    | 3 1/4 | 13    | 3 1/4 | 13    | 3 1/4 | 13                       | 3 1/4 | 13    | 3 1/4 | 13    | 3 1/4 | 13    | 3 1/4 | 13    | 3 1/4 |
| 14                                       | 3 1/2 | 14    | 3 1/2 | 14    | 3 1/2 | 14    | 3 1/2 | 14    | 3 1/2 | 14                       | 3 1/2 | 14    | 3 1/2 | 14    | 3 1/2 | 14    | 3 1/2 | 14    | 3 1/2 |
| 15                                       | 3 3/4 | 15    | 3 3/4 | 15    | 3 3/4 | 15    | 3 3/4 | 15    | 3 3/4 | 15                       | 3 3/4 | 15    | 3 3/4 | 15    | 3 3/4 | 15    | 3 3/4 | 15    | 3 3/4 |
| 16                                       | 4     | 16    | 4     | 16    | 4     | 16    | 4     | 16    | 4     | 16                       | 4     | 16    | 4     | 16    | 4     | 16    | 4     | 16    | 4     |
| 17                                       | 4 1/4 | 17    | 4 1/4 | 17    | 4 1/4 | 17    | 4 1/4 | 17    | 4 1/4 | 17                       | 4 1/4 | 17    | 4 1/4 | 17    | 4 1/4 | 17    | 4 1/4 | 17    | 4 1/4 |
| 18                                       | 4 1/2 | 18    | 4 1/2 | 18    | 4 1/2 | 18    | 4 1/2 | 18    | 4 1/2 | 18                       | 4 1/2 | 18    | 4 1/2 | 18    | 4 1/2 | 18    | 4 1/2 | 18    | 4 1/2 |
| 19                                       | 4 3/4 | 19    | 4 3/4 | 19    | 4 3/4 | 19    | 4 3/4 | 19    | 4 3/4 | 19                       | 4 3/4 | 19    | 4 3/4 | 19    | 4 3/4 | 19    | 4 3/4 | 19    | 4 3/4 |
| 20                                       | 5     | 20    | 5     | 20    | 5     | 20    | 5     | 20    | 5     | 20                       | 5     | 20    | 5     | 20    | 5     | 20    | 5     | 20    | 5     |
| 21                                       | 5 1/4 | 21    | 5 1/4 | 21    | 5 1/4 | 21    | 5 1/4 | 21    | 5 1/4 | 21                       | 5 1/4 | 21    | 5 1/4 | 21    | 5 1/4 | 21    | 5 1/4 | 21    | 5 1/4 |
| 22                                       | 5 1/2 | 22    | 5 1/2 | 22    | 5 1/2 | 22    | 5 1/2 | 22    | 5 1/2 | 22                       | 5 1/2 | 22    | 5 1/2 | 22    | 5 1/2 | 22    | 5 1/2 | 22    | 5 1/2 |
| 23                                       | 5 3/4 | 23    | 5 3/4 | 23    | 5 3/4 | 23    | 5 3/4 | 23    | 5 3/4 | 23                       | 5 3/4 | 23    | 5 3/4 | 23    | 5 3/4 | 23    | 5 3/4 | 23    | 5 3/4 |
| 24                                       | 6     | 24    | 6     | 24    |       |       |       |       |       |                          |       |       |       |       |       |       |       |       |       |

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

**CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.**

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

SHEET NO. 5 OF 12





# BARGE "EMS 503"

## 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      | 3,090.15 | 0      | 2,700.87 | 0      | 2,311.57 | 0      | 1,922.27 | 0      | 1,532.97 | 0      | 1,143.67 | 0      | 754.33 | 0      | 365.41 | 0      |     |        |     |
| 1/4    | 3,082.04 | 1/4    | 2,692.76 | 1/4    | 2,303.46 | 1/4    | 1,914.16 | 1/4    | 1,524.86 | 1/4    | 1,135.56 | 1/4    | 746.53 | 1/4    | 357.30 | 1/4    |     |        |     |
| 1/2    | 3,073.93 | 1/2    | 2,684.65 | 1/2    | 2,295.35 | 1/2    | 1,906.05 | 1/2    | 1,516.75 | 1/2    | 1,127.45 | 1/2    | 738.43 | 1/2    | 349.19 | 1/2    |     |        |     |
| 3/4    | 3,065.82 | 3/4    | 2,676.54 | 3/4    | 2,287.24 | 3/4    | 1,897.94 | 3/4    | 1,508.64 | 3/4    | 1,119.34 | 3/4    | 730.33 | 3/4    | 341.08 | 3/4    |     |        |     |
| 1      | 3,057.71 | 1      | 2,668.43 | 1      | 2,279.13 | 1      | 1,889.83 | 1      | 1,500.53 | 1      | 1,111.23 | 1      | 722.23 | 1      | 332.97 | 1      |     |        |     |
| 1/4    | 3,049.60 | 1/4    | 2,660.32 | 1/4    | 2,271.02 | 1/4    | 1,881.72 | 1/4    | 1,492.42 | 1/4    | 1,103.12 | 1/4    | 714.13 | 1/4    | 324.86 | 1/4    |     |        |     |
| 1/2    | 3,041.49 | 1/2    | 2,652.21 | 1/2    | 2,262.90 | 1/2    | 1,873.61 | 1/2    | 1,484.31 | 1/2    | 1,095.01 | 1/2    | 706.03 | 1/2    | 316.75 | 1/2    |     |        |     |
| 3/4    | 3,033.38 | 3/4    | 2,644.10 | 3/4    | 2,254.79 | 3/4    | 1,865.50 | 3/4    | 1,476.20 | 3/4    | 1,086.90 | 3/4    | 697.92 | 3/4    | 308.64 | 3/4    |     |        |     |
| 2      | 3,025.27 | 2      | 2,635.99 | 2      | 2,246.68 | 2      | 1,857.38 | 2      | 1,468.09 | 2      | 1,078.79 | 2      | 689.82 | 2      | 300.53 | 2      |     |        |     |
| 1/4    | 3,017.16 | 1/4    | 2,627.88 | 1/4    | 2,238.57 | 1/4    | 1,849.27 | 1/4    | 1,459.98 | 1/4    | 1,070.68 | 1/4    | 681.71 | 1/4    | 292.42 | 1/4    |     |        |     |
| 1/2    | 3,009.05 | 1/2    | 2,619.77 | 1/2    | 2,230.46 | 1/2    | 1,841.16 | 1/2    | 1,451.86 | 1/2    | 1,062.57 | 1/2    | 673.60 | 1/2    | 284.31 | 1/2    |     |        |     |
| 3/4    | 3,000.94 | 3/4    | 2,611.66 | 3/4    | 2,222.35 | 3/4    | 1,833.05 | 3/4    | 1,443.75 | 3/4    | 1,054.46 | 3/4    | 665.49 | 3/4    | 276.20 | 3/4    |     |        |     |
| 3      | 2,992.83 | 3      | 2,603.55 | 3      | 2,214.24 | 3      | 1,824.94 | 3      | 1,435.64 | 3      | 1,046.34 | 3      | 657.38 | 3      | 268.09 | 3      |     |        |     |
| 1/4    | 2,984.72 | 1/4    | 2,595.44 | 1/4    | 2,206.13 | 1/4    | 1,816.83 | 1/4    | 1,427.53 | 1/4    | 1,038.23 | 1/4    | 649.27 | 1/4    | 259.98 | 1/4    |     |        |     |
| 1/2    | 2,976.61 | 1/2    | 2,587.32 | 1/2    | 2,198.02 | 1/2    | 1,808.72 | 1/2    | 1,419.42 | 1/2    | 1,030.12 | 1/2    | 641.16 | 1/2    | 251.87 | 1/2    |     |        |     |
| 3/4    | 2,968.50 | 3/4    | 2,579.21 | 3/4    | 2,189.91 | 3/4    | 1,800.61 | 3/4    | 1,411.31 | 3/4    | 1,022.01 | 3/4    | 633.05 | 3/4    | 243.78 | 3/4    |     |        |     |
| 4      | 2,960.39 | 4      | 2,571.10 | 4      | 2,181.80 | 4      | 1,792.50 | 4      | 1,403.20 | 4      | 1,013.90 | 4      | 624.94 | 4      | 235.65 | 4      |     |        |     |
| 1/4    | 2,952.28 | 1/4    | 2,562.99 | 1/4    | 2,173.69 | 1/4    | 1,784.39 | 1/4    | 1,395.09 | 1/4    | 1,005.79 | 1/4    | 616.83 | 1/4    | 227.54 | 1/4    |     |        |     |
| 1/2    | 2,944.17 | 1/2    | 2,554.88 | 1/2    | 2,165.58 | 1/2    | 1,776.28 | 1/2    | 1,386.98 | 1/2    | 997.68   | 1/2    | 608.72 | 1/2    | 219.43 | 1/2    |     |        |     |
| 3/4    | 2,936.06 | 3/4    | 2,546.77 | 3/4    | 2,157.47 | 3/4    | 1,768.17 | 3/4    | 1,378.87 | 3/4    | 989.57   | 3/4    | 600.61 | 3/4    | 211.32 | 3/4    |     |        |     |
| 5      | 2,927.95 | 5      | 2,538.66 | 5      | 2,149.36 | 5      | 1,760.06 | 5      | 1,370.76 | 5      | 981.46   | 5      | 592.50 | 5      | 203.21 | 5      |     |        |     |
| 1/4    | 2,919.84 | 1/4    | 2,530.55 | 1/4    | 2,141.25 | 1/4    | 1,751.95 | 1/4    | 1,362.65 | 1/4    | 973.35   | 1/4    | 584.39 | 1/4    | 195.10 | 1/4    |     |        |     |
| 1/2    | 2,911.73 | 1/2    | 2,522.44 | 1/2    | 2,133.14 | 1/2    | 1,743.84 | 1/2    | 1,354.54 | 1/2    | 965.25   | 1/2    | 576.28 | 1/2    | 186.99 | 1/2    |     |        |     |
| 3/4    | 2,903.62 | 3/4    | 2,514.33 | 3/4    | 2,125.03 | 3/4    | 1,735.73 | 3/4    | 1,346.43 | 3/4    | 957.14   | 3/4    | 568.17 | 3/4    | 178.88 | 3/4    |     |        |     |
| 6      | 2,895.51 | 6      | 2,506.22 | 6      | 2,116.92 | 6      | 1,727.62 | 6      | 1,338.32 | 6      | 949.04   | 6      | 560.06 | 6      | 170.77 | 6      |     |        |     |
| 1/4    | 2,887.40 | 1/4    | 2,498.11 | 1/4    | 2,108.81 | 1/4    | 1,719.51 | 1/4    | 1,330.21 | 1/4    | 940.93   | 1/4    | 551.95 | 1/4    | 162.66 | 1/4    |     |        |     |
| 1/2    | 2,879.29 | 1/2    | 2,490.00 | 1/2    | 2,100.70 | 1/2    | 1,711.40 | 1/2    | 1,322.10 | 1/2    | 932.83   | 1/2    | 543.84 | 1/2    | 154.55 | 1/2    |     |        |     |
| 3/4    | 2,871.18 | 3/4    | 2,481.89 | 3/4    | 2,092.59 | 3/4    | 1,703.29 | 3/4    | 1,313.99 | 3/4    | 924.73   | 3/4    | 535.73 | 3/4    | 146.44 | 3/4    |     |        |     |
| 7      | 2,863.07 | 7      | 2,473.78 | 7      | 2,084.48 | 7      | 1,695.18 | 7      | 1,305.88 | 7      | 916.63   | 7      | 527.62 | 7      | 138.33 | 7      |     |        |     |
| 1/4    | 2,854.96 | 1/4    | 2,465.66 | 1/4    | 2,076.37 | 1/4    | 1,687.07 | 1/4    | 1,297.77 | 1/4    | 908.53   | 1/4    | 519.51 | 1/4    | 130.22 | 1/4    |     |        |     |
| 1/2    | 2,846.85 | 1/2    | 2,457.55 | 1/2    | 2,068.26 | 1/2    | 1,678.96 | 1/2    | 1,289.66 | 1/2    | 900.43   | 1/2    | 511.40 | 1/2    | 122.11 | 1/2    |     |        |     |
| 3/4    | 2,838.74 | 3/4    | 2,449.44 | 3/4    | 2,060.14 | 3/4    | 1,670.85 | 3/4    | 1,281.55 | 3/4    | 892.33   | 3/4    | 503.29 | 3/4    | 114.00 | 3/4    |     |        |     |
| 8      | 2,830.63 | 8      | 2,441.33 | 8      | 2,052.03 | 8      | 1,662.74 | 8      | 1,273.44 | 8      | 884.23   | 8      | 495.18 | 8      | 105.89 | 8      |     |        |     |
| 1/4    | 2,822.52 | 1/4    | 2,433.22 | 1/4    | 2,043.92 | 1/4    | 1,654.62 | 1/4    | 1,265.33 | 1/4    | 876.13   | 1/4    | 487.07 | 1/4    | 97.78  | 1/4    |     |        |     |
| 1/2    | 2,814.41 | 1/2    | 2,425.11 | 1/2    | 2,035.81 | 1/2    | 1,646.51 | 1/2    | 1,257.22 | 1/2    | 868.03   | 1/2    | 478.96 | 1/2    | 89.67  | 1/2    |     |        |     |
| 3/4    | 2,806.30 | 3/4    | 2,417.00 | 3/4    | 2,027.70 | 3/4    | 1,638.40 | 3/4    | 1,249.10 | 3/4    | 859.93   | 3/4    | 470.85 | 3/4    | 81.56  | 3/4    |     |        |     |
| 9      | 2,798.19 | 9      | 2,408.89 | 9      | 2,019.59 | 9      | 1,630.29 | 9      | 1,240.99 | 9      | 851.83   | 9      | 462.74 | 9      | 73.45  | 9      |     |        |     |
| 1/4    | 2,790.08 | 1/4    | 2,400.78 | 1/4    | 2,011.48 | 1/4    | 1,622.18 | 1/4    | 1,232.88 | 1/4    | 843.73   | 1/4    | 454.63 | 1/4    | 65.34  | 1/4    |     |        |     |
| 1/2    | 2,781.97 | 1/2    | 2,392.67 | 1/2    | 2,003.37 | 1/2    | 1,614.07 | 1/2    | 1,224.77 | 1/2    | 835.63   | 1/2    | 446.52 | 1/2    | 57.23  | 1/2    |     |        |     |
| 3/4    | 2,773.86 | 3/4    | 2,384.56 | 3/4    | 1,995.26 | 3/4    | 1,605.96 | 3/4    | 1,216.66 | 3/4    | 827.53   | 3/4    | 438.40 | 3/4    | 49.12  | 3/4    |     |        |     |
| 10     | 2,765.75 | 10     | 2,376.45 | 10     | 1,987.15 | 10     | 1,597.85 | 10     | 1,208.55 | 10     | 819.43   | 10     | 430.29 | 10     | 41.01  | 10     |     |        |     |
| 1/4    | 2,757.64 | 1/4    | 2,368.34 | 1/4    | 1,979.04 | 1/4    | 1,589.74 | 1/4    | 1,200.44 | 1/4    | 811.33   | 1/4    | 422.18 | 1/4    | 32.90  | 1/4    |     |        |     |
| 1/2    | 2,749.53 | 1/2    | 2,360.23 | 1/2    | 1,970.93 | 1/2    | 1,581.63 | 1/2    | 1,192.33 | 1/2    | 803.23   | 1/2    | 414.07 | 1/2    | 24.79  | 1/2    |     |        |     |
| 3/4    | 2,741.42 | 3/4    | 2,352.12 | 3/4    | 1,962.82 | 3/4    | 1,573.52 | 3/4    | 1,184.22 | 3/4    | 795.13   | 3/4    | 405.96 | 3/4    | 16.68  | 3/4    |     |        |     |
| 11     | 2,733.31 | 11     | 2,344.01 | 11     | 1,954.71 | 11     | 1,565.41 | 11     | 1,176.11 | 11     | 787.03   | 11     | 397.85 | 11     | 8.57   | 11     |     |        |     |
| 1/4    | 2,725.20 | 1/4    | 2,335.90 | 1/4    | 1,946.60 | 1/4    | 1,557.30 | 1/4    | 1,168.00 | 1/4    | 778.93   | 1/4    | 389.74 | 1/4    | 0.46   | 1/4    |     |        |     |
| 1/2    | 2,717.09 | 1/2    | 2,327.79 | 1/2    | 1,938.49 | 1/2    | 1,549.19 | 1/2    | 1,159.89 | 1/2    | 770.83   | 1/2    | 381.63 | 1/2    | 13.35  | 1/2    |     |        |     |
| 3/4    | 2,708.98 | 3/4    | 2,319.68 | 3/4    | 1,930.38 | 3/4    | 1,541.08 | 3/4    | 1,151.78 | 3/4    | 762.73   | 3/4    | 373.52 | 3/4    | 15.24  | 3/4    |     |        |     |

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2902  
Pearland, Texas 77588  
<http://www.pma-inc.net>

*[Signature]*

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.





## ULLAGE TABLE

[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 ACT BULKHEAD.

**PRECISION MEASUREMENT  
& ANALYSIS, INC.**

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

*James*



# BARGE "EMS 503"

## 2 STBD 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. |
| D                                              | 3,085.51 | 0     | 2,698.68 | 0     | 2,310.79 | 0     | 1,922.92 | 0     | 1,535.04 | 0                    | 1,153.41 | 0     | 776.11 | 0     | 388.32 | 0     | 13.92  | 0     |        |
| 1/4                                            | 3,078.42 | 1/4   | 2,690.58 | 1/4   | 2,302.71 | 1/4   | 1,914.84 | 1/4   | 1,526.96 | 1/4                  | 1,145.68 | 1/4   | 768.04 | 1/4   | 380.24 | 1/4   |        | 1/4   |        |
| 1/2                                            | 3,070.34 | 1/2   | 2,682.50 | 1/2   | 2,294.63 | 1/2   | 1,906.76 | 1/2   | 1,518.88 | 1/2                  | 1,137.94 | 1/2   | 759.96 | 1/2   | 372.16 | 1/2   |        | 1/2   |        |
| 3/4                                            | 3,062.26 | 3/4   | 2,674.42 | 3/4   | 2,286.55 | 3/4   | 1,898.68 | 3/4   | 1,510.80 | 3/4                  | 1,130.21 | 3/4   | 751.89 | 3/4   | 364.08 | 3/4   |        | 3/4   |        |
| 1                                              | 3,054.18 | 1     | 2,666.33 | 1     | 2,278.47 | 1     | 1,890.59 | 1     | 1,502.72 | 1                    | 1,122.48 | 1     | 743.82 | 1     | 356.00 | 1     |        | 1     |        |
| 1 1/4                                          | 3,046.10 | 1 1/4 | 2,658.25 | 1 1/4 | 2,270.39 | 1 1/4 | 1,882.51 | 1 1/4 | 1,494.64 | 1 1/4                | 1,114.74 | 1 1/4 | 735.75 | 1 1/4 | 347.92 | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 3,038.02 | 1 1/2 | 2,650.17 | 1 1/2 | 2,262.31 | 1 1/2 | 1,874.43 | 1 1/2 | 1,486.56 | 1 1/2                | 1,107.01 | 1 1/2 | 727.67 | 1 1/2 | 339.84 | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 3,029.94 | 3/4   | 2,642.09 | 3/4   | 2,254.23 | 3/4   | 1,866.35 | 3/4   | 1,478.48 | 3/4                  | 1,095.27 | 3/4   | 719.60 | 3/4   | 331.76 | 3/4   |        | 3/4   |        |
| 2                                              | 3,021.86 | 2     | 2,634.01 | 2     | 2,246.15 | 2     | 1,858.27 | 2     | 1,470.40 | 2                    | 1,091.54 | 2     | 711.53 | 2     | 323.68 | 2     |        | 2     |        |
| 1 1/4                                          | 3,013.78 | 1 1/4 | 2,625.93 | 1 1/4 | 2,238.06 | 1 1/4 | 1,850.19 | 1 1/4 | 1,462.32 | 1 1/4                | 1,083.81 | 1 1/4 | 703.45 | 1 1/4 | 315.60 | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 3,005.70 | 1 1/2 | 2,617.85 | 1 1/2 | 2,229.98 | 1 1/2 | 1,842.11 | 1 1/2 | 1,454.24 | 1 1/2                | 1,076.07 | 1 1/2 | 695.37 | 1 1/2 | 307.51 | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,997.62 | 3/4   | 2,609.77 | 3/4   | 2,221.90 | 3/4   | 1,834.03 | 3/4   | 1,446.16 | 3/4                  | 1,068.34 | 3/4   | 687.29 | 3/4   | 299.43 | 3/4   |        | 3/4   |        |
| 3                                              | 2,989.54 | 3     | 2,601.69 | 3     | 2,213.82 | 3     | 1,825.95 | 3     | 1,438.08 | 3                    | 1,060.61 | 3     | 679.21 | 3     | 291.35 | 3     |        | 3     |        |
| 1 1/4                                          | 2,981.46 | 1 1/4 | 2,593.61 | 1 1/4 | 2,205.74 | 1 1/4 | 1,817.87 | 1 1/4 | 1,429.99 | 1 1/4                | 1,052.87 | 1 1/4 | 671.13 | 1 1/4 | 283.27 | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,973.38 | 1 1/2 | 2,585.53 | 1 1/2 | 2,197.66 | 1 1/2 | 1,809.79 | 1 1/2 | 1,421.91 | 1 1/2                | 1,045.14 | 1 1/2 | 663.05 | 1 1/2 | 275.19 | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,965.30 | 3/4   | 2,577.45 | 3/4   | 2,189.58 | 3/4   | 1,801.71 | 3/4   | 1,413.83 | 3/4                  | 1,037.40 | 3/4   | 654.97 | 3/4   | 267.11 | 3/4   |        | 3/4   |        |
| 4                                              | 2,957.22 | 4     | 2,569.37 | 4     | 2,181.50 | 4     | 1,793.63 | 4     | 1,405.75 | 4                    | 1,029.67 | 4     | 646.89 | 4     | 259.03 | 4     |        | 4     |        |
| 1 1/4                                          | 2,949.14 | 1 1/4 | 2,561.29 | 1 1/4 | 2,173.42 | 1 1/4 | 1,785.55 | 1 1/4 | 1,397.67 | 1 1/4                | 1,021.94 | 1 1/4 | 638.81 | 1 1/4 | 250.95 | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,941.06 | 1 1/2 | 2,553.21 | 1 1/2 | 2,165.34 | 1 1/2 | 1,777.46 | 1 1/2 | 1,389.59 | 1 1/2                | 1,014.20 | 1 1/2 | 630.73 | 1 1/2 | 242.87 | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,932.98 | 3/4   | 2,545.13 | 3/4   | 2,157.26 | 3/4   | 1,769.38 | 3/4   | 1,381.51 | 3/4                  | 1,006.47 | 3/4   | 622.65 | 3/4   | 234.79 | 3/4   |        | 3/4   |        |
| 5                                              | 2,924.90 | 5     | 2,537.05 | 5     | 2,149.18 | 5     | 1,761.30 | 5     | 1,373.43 | 5                    | 998.73   | 5     | 614.57 | 5     | 226.71 | 5     |        | 5     |        |
| 1 1/4                                          | 2,916.82 | 1 1/4 | 2,528.97 | 1 1/4 | 2,141.10 | 1 1/4 | 1,753.22 | 1 1/4 | 1,365.35 | 1 1/4                | 991.00   | 1 1/4 | 606.49 | 1 1/4 | 218.63 | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,908.74 | 1 1/2 | 2,520.88 | 1 1/2 | 2,133.02 | 1 1/2 | 1,745.14 | 1 1/2 | 1,357.27 | 1 1/2                | 983.27   | 1 1/2 | 598.41 | 1 1/2 | 210.55 | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,900.66 | 3/4   | 2,512.81 | 3/4   | 2,124.93 | 3/4   | 1,737.06 | 3/4   | 1,349.19 | 3/4                  | 975.53   | 3/4   | 590.33 | 3/4   | 202.47 | 3/4   |        | 3/4   |        |
| 6                                              | 2,892.58 | 6     | 2,504.73 | 6     | 2,116.85 | 6     | 1,728.98 | 6     | 1,341.11 | 6                    | 967.80   | 6     | 582.25 | 6     | 194.39 | 6     |        | 6     |        |
| 1 1/4                                          | 2,884.50 | 1 1/4 | 2,496.65 | 1 1/4 | 2,108.77 | 1 1/4 | 1,720.90 | 1 1/4 | 1,333.03 | 1 1/4                | 960.07   | 1 1/4 | 574.17 | 1 1/4 | 186.31 | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,876.42 | 1 1/2 | 2,488.57 | 1 1/2 | 2,100.69 | 1 1/2 | 1,712.82 | 1 1/2 | 1,324.95 | 1 1/2                | 952.34   | 1 1/2 | 566.09 | 1 1/2 | 178.23 | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,868.34 | 3/4   | 2,480.49 | 3/4   | 2,092.61 | 3/4   | 1,704.74 | 3/4   | 1,316.86 | 3/4                  | 944.61   | 3/4   | 558.01 | 3/4   | 170.15 | 3/4   |        | 3/4   |        |
| 7                                              | 2,860.26 | 7     | 2,472.40 | 7     | 2,084.53 | 7     | 1,696.66 | 7     | 1,308.78 | 7                    | 936.88   | 7     | 549.93 | 7     | 162.07 | 7     |        | 7     |        |
| 1 1/4                                          | 2,852.18 | 1 1/4 | 2,464.32 | 1 1/4 | 2,076.45 | 1 1/4 | 1,688.58 | 1 1/4 | 1,300.88 | 1 1/4                | 928.98   | 1 1/4 | 541.85 | 1 1/4 | 153.99 | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,844.10 | 1 1/2 | 2,456.24 | 1 1/2 | 2,068.37 | 1 1/2 | 1,680.50 | 1 1/2 | 1,292.97 | 1 1/2                | 921.08   | 1 1/2 | 533.77 | 1 1/2 | 145.91 | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,836.02 | 3/4   | 2,448.16 | 3/4   | 2,060.28 | 3/4   | 1,672.42 | 3/4   | 1,285.06 | 3/4                  | 913.18   | 3/4   | 525.69 | 3/4   | 137.83 | 3/4   |        | 3/4   |        |
| 8                                              | 2,827.94 | 8     | 2,440.08 | 8     | 2,052.21 | 8     | 1,664.33 | 8     | 1,277.15 | 8                    | 905.28   | 8     | 517.61 | 8     | 129.75 | 8     |        | 8     |        |
| 1 1/4                                          | 2,819.86 | 1 1/4 | 2,432.00 | 1 1/4 | 2,044.13 | 1 1/4 | 1,656.25 | 1 1/4 | 1,269.42 | 1 1/4                | 897.21   | 1 1/4 | 509.52 | 1 1/4 | 121.67 | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,811.78 | 1 1/2 | 2,423.92 | 1 1/2 | 2,036.05 | 1 1/2 | 1,648.17 | 1 1/2 | 1,261.69 | 1 1/2                | 889.13   | 1 1/2 | 501.44 | 1 1/2 | 113.59 | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,803.70 | 3/4   | 2,415.84 | 3/4   | 2,027.97 | 3/4   | 1,640.09 | 3/4   | 1,253.95 | 3/4                  | 881.06   | 3/4   | 493.36 | 3/4   | 105.50 | 3/4   |        | 3/4   |        |
| 9                                              | 2,795.62 | 9     | 2,407.76 | 9     | 2,019.89 | 9     | 1,632.01 | 9     | 1,246.22 | 9                    | 872.99   | 9     | 485.28 | 9     | 97.42  | 9     |        | 9     |        |
| 1 1/4                                          | 2,787.54 | 1 1/4 | 2,399.68 | 1 1/4 | 2,011.80 | 1 1/4 | 1,623.93 | 1 1/4 | 1,238.48 | 1 1/4                | 864.91   | 1 1/4 | 477.20 | 1 1/4 | 89.34  | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,779.46 | 1 1/2 | 2,391.60 | 1 1/2 | 2,003.72 | 1 1/2 | 1,615.85 | 1 1/2 | 1,230.75 | 1 1/2                | 856.84   | 1 1/2 | 469.12 | 1 1/2 | 81.26  | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,771.38 | 3/4   | 2,383.52 | 3/4   | 1,995.64 | 3/4   | 1,607.77 | 3/4   | 1,223.02 | 3/4                  | 848.77   | 3/4   | 461.04 | 3/4   | 73.18  | 3/4   |        | 3/4   |        |
| 10                                             | 2,763.30 | 10    | 2,375.44 | 10    | 1,987.56 | 10    | 1,599.69 | 10    | 1,215.28 | 10                   | 840.69   | 10    | 452.96 | 10    | 65.10  | 10    |        | 10    |        |
| 1 1/4                                          | 2,755.22 | 1 1/4 | 2,367.36 | 1 1/4 | 1,979.48 | 1 1/4 | 1,591.61 | 1 1/4 | 1,207.55 | 1 1/4                | 832.62   | 1 1/4 | 444.88 | 1 1/4 | 57.07  | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,747.14 | 1 1/2 | 2,359.28 | 1 1/2 | 1,971.40 | 1 1/2 | 1,583.53 | 1 1/2 | 1,199.82 | 1 1/2                | 824.55   | 1 1/2 | 436.80 | 1 1/2 | 50.29  | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,739.06 | 3/4   | 2,351.19 | 3/4   | 1,963.32 | 3/4   | 1,575.45 | 3/4   | 1,192.08 | 3/4                  | 816.48   | 3/4   | 428.72 | 3/4   | 42.88  | 3/4   |        | 3/4   |        |
| 11                                             | 2,730.98 | 11    | 2,343.11 | 11    | 1,955.24 | 11    | 1,567.37 | 11    | 1,184.35 | 11                   | 808.40   | 11    | 420.84 | 11    | 35.47  | 11    |        | 11    |        |
| 1 1/4                                          | 2,722.90 | 1 1/4 | 2,335.03 | 1 1/4 | 1,947.16 | 1 1/4 | 1,559.29 | 1 1/4 | 1,176.61 | 1 1/4                | 800.33   | 1 1/4 | 412.56 | 1 1/4 | 30.09  | 1 1/4 |        | 1 1/4 |        |
| 1 1/2                                          | 2,714.82 | 1 1/2 | 2,326.95 | 1 1/2 | 1,939.08 | 1 1/2 | 1,551.21 | 1 1/2 | 1,168.88 | 1 1/2                | 792.26   | 1 1/2 | 404.48 | 1 1/2 | 24.70  | 1 1/2 |        | 1 1/2 |        |
| 3/4                                            | 2,706.74 | 3/4   | 2,318.87 | 3/4   | 1,931.00 | 3/4   | 1,543.12 | 3/4   | 1,161.15 | 3/4                  | 784.18   | 3/4   | 396.40 | 3/4   | 18.31  | 3/4   |        | 3/4   |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

PRECISION MEASUREMENT  
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P.O. Box 2093  
Pasadena, Texas 77588  
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**3 PORT  
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'-06" OFF CENTERLINE AND 41'-00" FORWARD OF AFT BUL KHEAD.

## PRECISION MEASUREMENT

ANALYSIS, INC.

P.O. Box 2092

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9

SHEET NO. 9 OF 12



# BARGE "EMS 503"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

| 10 FT. |          | 11 FT. |          | 12 FT. |          | 13 FT. |          | 14 FT. |          | 15 FT. |          | 16 FT. |          | 17 FT. |          | 18 FT. |          | 19 FT. |          |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|
| IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      | IN     | OUT      |
| 0      | 2,888.67 | 0      | 2,826.78 | 0      | 2,764.74 | 0      | 2,702.65 | 0      | 2,640.56 | 0      | 2,578.47 | 0      | 2,516.38 | 0      | 2,454.29 | 0      | 2,392.20 | 0      | 2,330.11 |
| 1/4    | 2,881.14 | 1/4    | 2,819.24 | 1/4    | 2,757.19 | 1/4    | 2,695.10 | 1/4    | 2,633.02 | 1/4    | 2,570.93 | 1/4    | 2,508.84 | 1/4    | 2,446.75 | 1/4    | 2,384.66 | 1/4    | 2,322.57 |
| 1/2    | 2,873.60 | 1/2    | 2,811.70 | 1/2    | 2,749.65 | 1/2    | 2,687.56 | 1/2    | 2,625.47 | 1/2    | 2,563.38 | 1/2    | 2,501.29 | 1/2    | 2,439.20 | 1/2    | 2,377.11 | 1/2    | 2,315.02 |
| 3/4    | 2,866.06 | 3/4    | 2,804.17 | 3/4    | 2,742.11 | 3/4    | 2,680.02 | 3/4    | 2,617.93 | 3/4    | 2,555.84 | 3/4    | 2,493.75 | 3/4    | 2,431.66 | 3/4    | 2,369.57 | 3/4    | 2,307.48 |
| 1      | 2,858.52 | 1      | 2,496.62 | 1      | 2,434.56 | 1      | 2,372.47 | 1      | 2,310.39 | 1      | 2,248.30 | 1      | 2,186.21 | 1      | 2,124.12 | 1      | 2,062.03 | 1      | 2,000.00 |
| 1/4    | 2,850.98 | 1/4    | 2,489.08 | 1/4    | 2,427.02 | 1/4    | 2,364.93 | 1/4    | 2,302.84 | 1/4    | 2,240.75 | 1/4    | 2,178.66 | 1/4    | 2,116.57 | 1/4    | 2,054.48 | 1/4    | 1,992.39 |
| 1/2    | 2,843.44 | 1/2    | 2,481.54 | 1/2    | 2,419.48 | 1/2    | 2,357.39 | 1/2    | 2,295.30 | 1/2    | 2,233.21 | 1/2    | 2,171.12 | 1/2    | 2,109.03 | 1/2    | 2,046.94 | 1/2    | 1,984.85 |
| 3/4    | 2,835.90 | 3/4    | 2,474.00 | 3/4    | 2,411.93 | 3/4    | 2,349.84 | 3/4    | 2,287.75 | 3/4    | 2,225.66 | 3/4    | 2,163.57 | 3/4    | 2,101.48 | 3/4    | 2,039.39 | 3/4    | 1,977.30 |
| 2      | 2,828.36 | 2      | 2,466.46 | 2      | 2,404.39 | 2      | 2,342.30 | 2      | 2,280.21 | 2      | 2,218.12 | 2      | 2,156.03 | 2      | 2,093.94 | 2      | 2,031.85 | 2      | 1,969.76 |
| 1/4    | 2,820.82 | 1/4    | 2,458.91 | 1/4    | 2,396.84 | 1/4    | 2,334.75 | 1/4    | 2,272.66 | 1/4    | 2,210.57 | 1/4    | 2,148.48 | 1/4    | 2,086.39 | 1/4    | 2,024.30 | 1/4    | 1,962.21 |
| 1/2    | 2,813.28 | 1/2    | 2,451.37 | 1/2    | 2,389.30 | 1/2    | 2,327.21 | 1/2    | 2,265.12 | 1/2    | 2,203.03 | 1/2    | 2,140.94 | 1/2    | 2,078.85 | 1/2    | 2,016.76 | 1/2    | 1,954.67 |
| 3/4    | 2,805.74 | 3/4    | 2,443.83 | 3/4    | 2,381.76 | 3/4    | 2,319.67 | 3/4    | 2,257.58 | 3/4    | 2,195.49 | 3/4    | 2,133.40 | 3/4    | 2,071.31 | 3/4    | 2,009.22 | 3/4    | 1,947.13 |
| 3      | 2,798.20 | 3      | 2,436.28 | 3      | 2,374.21 | 3      | 2,312.13 | 3      | 2,250.04 | 3      | 2,187.95 | 3      | 2,125.86 | 3      | 2,063.77 | 3      | 2,001.68 | 3      | 1,939.59 |
| 1/4    | 2,790.66 | 1/4    | 2,428.74 | 1/4    | 2,366.67 | 1/4    | 2,304.58 | 1/4    | 2,242.49 | 1/4    | 2,180.40 | 1/4    | 2,118.31 | 1/4    | 2,056.22 | 1/4    | 1,994.13 | 1/4    | 1,932.04 |
| 1/2    | 2,783.12 | 1/2    | 2,421.20 | 1/2    | 2,359.13 | 1/2    | 2,297.04 | 1/2    | 2,234.95 | 1/2    | 2,172.86 | 1/2    | 2,110.77 | 1/2    | 2,048.68 | 1/2    | 1,986.59 | 1/2    | 1,924.50 |
| 3/4    | 2,775.58 | 3/4    | 2,413.66 | 3/4    | 2,351.58 | 3/4    | 2,289.49 | 3/4    | 2,227.40 | 3/4    | 2,165.31 | 3/4    | 2,103.22 | 3/4    | 2,041.13 | 3/4    | 1,979.04 | 3/4    | 1,916.95 |
| 4      | 2,768.04 | 4      | 2,406.12 | 4      | 2,344.04 | 4      | 2,281.95 | 4      | 2,219.86 | 4      | 2,157.77 | 4      | 2,095.68 | 4      | 2,033.59 | 4      | 1,971.50 | 4      | 1,909.41 |
| 1/4    | 2,760.50 | 1/4    | 2,398.58 | 1/4    | 2,336.50 | 1/4    | 2,274.41 | 1/4    | 2,212.32 | 1/4    | 2,150.23 | 1/4    | 2,088.14 | 1/4    | 2,026.05 | 1/4    | 1,963.96 | 1/4    | 1,901.87 |
| 1/2    | 2,752.97 | 1/2    | 2,391.04 | 1/2    | 2,328.95 | 1/2    | 2,266.86 | 1/2    | 2,204.77 | 1/2    | 2,142.68 | 1/2    | 2,080.59 | 1/2    | 2,018.50 | 1/2    | 1,956.41 | 1/2    | 1,894.32 |
| 3/4    | 2,745.43 | 3/4    | 2,383.50 | 3/4    | 2,321.41 | 3/4    | 2,259.32 | 3/4    | 2,197.23 | 3/4    | 2,135.14 | 3/4    | 2,073.05 | 3/4    | 2,010.96 | 3/4    | 1,948.87 | 3/4    | 1,886.78 |
| 5      | 2,737.89 | 5      | 2,375.95 | 5      | 2,313.87 | 5      | 2,251.78 | 5      | 2,189.69 | 5      | 2,127.60 | 5      | 2,065.51 | 5      | 2,003.42 | 5      | 1,941.33 | 5      | 1,879.24 |
| 1/4    | 2,730.35 | 1/4    | 2,368.41 | 1/4    | 2,306.32 | 1/4    | 2,244.23 | 1/4    | 2,182.14 | 1/4    | 2,120.05 | 1/4    | 2,057.96 | 1/4    | 1,995.87 | 1/4    | 1,933.78 | 1/4    | 1,871.69 |
| 1/2    | 2,722.81 | 1/2    | 2,360.87 | 1/2    | 2,298.78 | 1/2    | 2,236.69 | 1/2    | 2,174.60 | 1/2    | 2,112.51 | 1/2    | 2,050.42 | 1/2    | 1,988.33 | 1/2    | 1,926.24 | 1/2    | 1,864.15 |
| 3/4    | 2,715.27 | 3/4    | 2,353.32 | 3/4    | 2,291.24 | 3/4    | 2,229.15 | 3/4    | 2,167.06 | 3/4    | 2,104.97 | 3/4    | 2,042.88 | 3/4    | 1,980.79 | 3/4    | 1,918.70 | 3/4    | 1,856.61 |
| 6      | 2,707.73 | 6      | 2,345.78 | 6      | 2,283.69 | 6      | 2,221.60 | 6      | 2,159.51 | 6      | 2,097.42 | 6      | 2,035.33 | 6      | 1,973.24 | 6      | 1,911.15 | 6      | 1,849.06 |
| 1/4    | 2,700.19 | 1/4    | 2,338.24 | 1/4    | 2,276.15 | 1/4    | 2,214.06 | 1/4    | 2,151.97 | 1/4    | 2,089.88 | 1/4    | 2,027.79 | 1/4    | 1,965.70 | 1/4    | 1,903.61 | 1/4    | 1,841.52 |
| 1/2    | 2,692.65 | 1/2    | 2,330.69 | 1/2    | 2,268.60 | 1/2    | 2,206.51 | 1/2    | 2,144.42 | 1/2    | 2,082.33 | 1/2    | 2,020.24 | 1/2    | 1,958.15 | 1/2    | 1,896.06 | 1/2    | 1,833.97 |
| 3/4    | 2,685.11 | 3/4    | 2,323.15 | 3/4    | 2,261.06 | 3/4    | 2,198.97 | 3/4    | 2,136.88 | 3/4    | 2,074.79 | 3/4    | 2,012.70 | 3/4    | 1,950.61 | 3/4    | 1,888.52 | 3/4    | 1,826.43 |
| 7      | 2,677.57 | 7      | 2,315.61 | 7      | 2,253.52 | 7      | 2,191.43 | 7      | 2,129.34 | 7      | 2,067.25 | 7      | 2,005.16 | 7      | 1,943.07 | 7      | 1,880.98 | 7      | 1,818.89 |
| 1/4    | 2,670.03 | 1/4    | 2,308.06 | 1/4    | 2,245.97 | 1/4    | 2,183.88 | 1/4    | 2,121.79 | 1/4    | 2,059.70 | 1/4    | 1,997.61 | 1/4    | 1,935.52 | 1/4    | 1,873.43 | 1/4    | 1,811.34 |
| 1/2    | 2,662.49 | 1/2    | 2,300.52 | 1/2    | 2,238.43 | 1/2    | 2,176.34 | 1/2    | 2,114.25 | 1/2    | 2,052.16 | 1/2    | 1,990.07 | 1/2    | 1,927.98 | 1/2    | 1,865.89 | 1/2    | 1,803.80 |
| 3/4    | 2,654.95 | 3/4    | 2,292.98 | 3/4    | 2,230.89 | 3/4    | 2,168.80 | 3/4    | 2,106.71 | 3/4    | 2,044.62 | 3/4    | 1,982.53 | 3/4    | 1,920.44 | 3/4    | 1,858.35 | 3/4    | 1,796.26 |
| 8      | 2,647.41 | 8      | 2,285.43 | 8      | 2,223.34 | 8      | 2,161.25 | 8      | 2,099.16 | 8      | 2,037.07 | 8      | 1,974.98 | 8      | 1,912.89 | 8      | 1,850.80 | 8      | 1,788.71 |
| 1/4    | 2,639.87 | 1/4    | 2,277.89 | 1/4    | 2,215.80 | 1/4    | 2,153.71 | 1/4    | 2,091.62 | 1/4    | 2,029.53 | 1/4    | 1,967.44 | 1/4    | 1,905.35 | 1/4    | 1,843.26 | 1/4    | 1,781.17 |
| 1/2    | 2,632.34 | 1/2    | 2,270.34 | 1/2    | 2,208.25 | 1/2    | 2,146.16 | 1/2    | 2,084.07 | 1/2    | 2,021.98 | 1/2    | 1,959.89 | 1/2    | 1,897.80 | 1/2    | 1,835.71 | 1/2    | 1,773.62 |
| 3/4    | 2,624.80 | 3/4    | 2,262.80 | 3/4    | 2,200.71 | 3/4    | 2,138.62 | 3/4    | 2,076.53 | 3/4    | 2,014.44 | 3/4    | 1,952.35 | 3/4    | 1,890.26 | 3/4    | 1,828.17 | 3/4    | 1,766.08 |
| 9      | 2,617.26 | 9      | 2,255.26 | 9      | 2,193.17 | 9      | 2,131.08 | 9      | 2,068.99 | 9      | 2,006.90 | 9      | 1,944.81 | 9      | 1,882.72 | 9      | 1,820.63 | 9      | 1,758.54 |
| 1/4    | 2,609.72 | 1/4    | 2,247.71 | 1/4    | 2,185.63 | 1/4    | 2,123.54 | 1/4    | 2,061.45 | 1/4    | 1,999.36 | 1/4    | 1,937.27 | 1/4    | 1,875.18 | 1/4    | 1,813.09 | 1/4    | 1,750.99 |
| 1/2    | 2,602.18 | 1/2    | 2,240.17 | 1/2    | 2,178.08 | 1/2    | 2,115.99 | 1/2    | 2,053.90 | 1/2    | 1,991.81 | 1/2    | 1,929.72 | 1/2    | 1,867.63 | 1/2    | 1,805.54 | 1/2    | 1,743.45 |
| 3/4    | 2,594.64 | 3/4    | 2,232.63 | 3/4    | 2,170.54 | 3/4    | 2,108.45 | 3/4    | 2,046.36 | 3/4    | 1,984.27 | 3/4    | 1,922.18 | 3/4    | 1,860.09 | 3/4    | 1,797.99 | 3/4    | 1,735.90 |
| 10     | 2,587.10 | 10     | 2,225.08 | 10     | 2,163.00 | 10     | 2,100.91 | 10     | 2,038.82 | 10     | 1,976.73 | 10     | 1,914.64 | 10     | 1,852.55 | 10     | 1,790.46 | 10     | 1,728.37 |
| 1/4    | 2,579.56 | 1/4    | 2,217.54 | 1/4    | 2,155.45 | 1/4    | 2,093.36 | 1/4    | 2,031.27 | 1/4    | 1,969.18 | 1/4    | 1,907.09 | 1/4    | 1,845.00 | 1/4    | 1,782.91 | 1/4    | 1,720.82 |
| 1/2    | 2,572.02 | 1/2    | 2,210.00 | 1/2    | 2,147.91 | 1/2    | 2,085.82 | 1/2    | 2,023.73 | 1/2    | 1,961.64 | 1/2    | 1,899.55 | 1/2    | 1,837.46 | 1/2    | 1,775.37 | 1/2    | 1,713.28 |
| 3/4    | 2,564.48 | 3/4    | 2,202.45 | 3/4    | 2,140.37 | 3/4    | 2,078.28 | 3/4    | 2,016.19 | 3/4    | 1,954.10 | 3/4    | 1,892.01 | 3/4    | 1,829.92 | 3/4    | 1,767.83 | 3/4    | 1,705.74 |
| 11     | 2,556.94 | 11     | 2,194.91 | 11     | 2,132.82 | 11     | 2,070.73 | 11     | 2,008.64 | 11     | 1,946.55 | 11     | 1,884.46 | 11     | 1,822.37 | 11     | 1,760.28 | 11     | 1,698.19 |
| 1/4    | 2,549.40 | 1/4    | 2,187.37 | 1/4    | 2,125.28 | 1/4    | 2,063.19 | 1/4    | 2,001.10 | 1/4    | 1,939.01 | 1/4    | 1,876.92 | 1/4    | 1,814.83 | 1/4    | 1,752.74 | 1/4    | 1,690.65 |
| 1/2    | 2,541.86 | 1/2    | 2,179.82 | 1/2    | 2,117.73 | 1/2    | 2,055.64 | 1/2    | 1,993.55 | 1/2    | 1,931.46 | 1/2    | 1,869.37 | 1/2    | 1,807.28 | 1/2    | 1,745.19 | 1/2    | 1,683.10 |
| 3/4    | 2,534.32 | 3/4    | 2,172.28 | 3/4    | 2,110.19 | 3/4    | 2,048.10 | 3/4    | 1,986.01 | 3/4    | 1,923.92 | 3/4    | 1,861.83 | 3/4    | 1,799.74 | 3/4    | 1,737.65 | 3/4    | 1,675.56 |

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
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3 STBD  
ULLAGE TABLE

[illegible]

|          |    |  |
|----------|----|--|
| 2,000.35 | 34 |  |
|----------|----|--|

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

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*James*





# BARGE "EMS 503"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

| 10 FT. |          | 11 FT. |          | 12 FT. |          | 13 FT. |          | 14 FT. |          | 15 FT. |        | 16 FT. |        | 17 FT. |   | 18 FT. |   | 19 FT. |   |
|--------|----------|--------|----------|--------|----------|--------|----------|--------|----------|--------|--------|--------|--------|--------|---|--------|---|--------|---|
| IN     | 0        | IN     | 0        | IN     | 0        | IN     | 0        | IN     | 0        | IN     | 0      | IN     | 0      | IN     | 0 | IN     | 0 | IN     | 0 |
| 0      | 2,853.08 | 0      | 2,132.17 | 0      | 1,774.01 | 0      | 1,413.26 | 0      | 1,053.80 | 0      | 707.41 | 0      | 346.61 | 0      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,845.56 | 1/4    | 2,124.71 | 1/4    | 1,766.50 | 1/4    | 1,405.74 | 1/4    | 1,045.16 | 1/4    | 699.92 | 1/4    | 339.09 | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,838.05 | 1/2    | 2,117.25 | 1/2    | 1,759.98 | 1/2    | 1,398.23 | 1/2    | 1,037.22 | 1/2    | 692.42 | 1/2    | 331.57 | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,830.54 | 3/4    | 2,109.80 | 3/4    | 1,751.47 | 3/4    | 1,390.71 | 3/4    | 1,030.03 | 3/4    | 684.92 | 3/4    | 324.05 | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,823.02 | 1      | 2,102.34 | 1      | 1,743.95 | 1      | 1,383.20 | 1      | 1,022.83 | 1      | 677.42 | 1      | 316.53 | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,815.51 | 1/4    | 2,094.88 | 1/4    | 1,736.43 | 1/4    | 1,375.68 | 1/4    | 1,015.64 | 1/4    | 669.92 | 1/4    | 309.01 | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,808.00 | 1/2    | 2,087.43 | 1/2    | 1,728.92 | 1/2    | 1,368.17 | 1/2    | 1,008.44 | 1/2    | 662.42 | 1/2    | 301.49 | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,800.48 | 3/4    | 2,079.97 | 3/4    | 1,721.40 | 3/4    | 1,360.65 | 3/4    | 1,000.26 | 3/4    | 654.91 | 3/4    | 293.97 | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,792.97 | 1      | 2,072.51 | 1      | 1,713.89 | 1      | 1,353.13 | 1      | 994.06   | 1      | 647.40 | 1      | 286.45 | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,785.46 | 1/4    | 2,065.06 | 1/4    | 1,706.37 | 1/4    | 1,345.62 | 1/4    | 986.86   | 1/4    | 639.89 | 1/4    | 278.93 | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,777.94 | 1/2    | 2,057.60 | 1/2    | 1,698.86 | 1/2    | 1,338.10 | 1/2    | 979.67   | 1/2    | 632.38 | 1/2    | 271.41 | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,770.43 | 3/4    | 2,050.14 | 3/4    | 1,691.34 | 3/4    | 1,330.59 | 3/4    | 972.47   | 3/4    | 624.86 | 3/4    | 263.89 | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,762.92 | 1      | 2,042.69 | 1      | 1,683.82 | 1      | 1,323.07 | 1      | 965.28   | 1      | 617.34 | 1      | 256.37 | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,755.40 | 1/4    | 2,035.23 | 1/4    | 1,676.31 | 1/4    | 1,315.56 | 1/4    | 958.08   | 1/4    | 609.82 | 1/4    | 248.85 | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,747.89 | 1/2    | 2,027.77 | 1/2    | 1,668.79 | 1/2    | 1,308.04 | 1/2    | 950.89   | 1/2    | 602.30 | 1/2    | 241.33 | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,740.38 | 3/4    | 2,020.32 | 3/4    | 1,661.28 | 3/4    | 1,300.52 | 3/4    | 943.70   | 3/4    | 594.78 | 3/4    | 233.81 | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,732.86 | 1      | 2,012.86 | 1      | 1,653.76 | 1      | 1,293.01 | 1      | 936.50   | 1      | 587.26 | 1      | 226.29 | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,725.35 | 1/4    | 2,005.40 | 1/4    | 1,646.25 | 1/4    | 1,285.49 | 1/4    | 929.31   | 1/4    | 579.74 | 1/4    | 218.77 | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,717.84 | 1/2    | 1,997.95 | 1/2    | 1,638.73 | 1/2    | 1,277.98 | 1/2    | 922.11   | 1/2    | 572.22 | 1/2    | 211.25 | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,710.32 | 3/4    | 1,990.49 | 3/4    | 1,631.21 | 3/4    | 1,270.46 | 3/4    | 914.92   | 3/4    | 564.70 | 3/4    | 203.73 | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,702.81 | 1      | 1,983.03 | 1      | 1,623.70 | 1      | 1,262.95 | 1      | 907.73   | 1      | 557.17 | 1      | 196.21 | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,695.29 | 1/4    | 1,975.58 | 1/4    | 1,616.18 | 1/4    | 1,255.43 | 1/4    | 899.66   | 1/4    | 549.65 | 1/4    | 188.70 | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,687.78 | 1/2    | 1,968.12 | 1/2    | 1,608.67 | 1/2    | 1,247.91 | 1/2    | 892.11   | 1/2    | 542.13 | 1/2    | 181.18 | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,680.27 | 3/4    | 1,960.66 | 3/4    | 1,601.15 | 3/4    | 1,240.40 | 3/4    | 884.63   | 3/4    | 534.61 | 3/4    | 173.65 | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,672.76 | 1      | 1,953.21 | 1      | 1,593.64 | 1      | 1,232.88 | 1      | 877.09   | 1      | 527.09 | 1      | 166.13 | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,665.25 | 1/4    | 1,945.75 | 1/4    | 1,586.12 | 1/4    | 1,225.37 | 1/4    | 870.57   | 1/4    | 519.57 | 1/4    | 158.61 | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,657.74 | 1/2    | 1,938.29 | 1/2    | 1,578.60 | 1/2    | 1,217.85 | 1/2    | 863.05   | 1/2    | 512.05 | 1/2    | 151.09 | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,650.23 | 3/4    | 1,930.84 | 3/4    | 1,571.09 | 3/4    | 1,210.49 | 3/4    | 855.54   | 3/4    | 504.53 | 3/4    | 143.56 | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,642.73 | 1      | 1,923.38 | 1      | 1,563.57 | 1      | 1,203.13 | 1      | 848.02   | 1      | 497.01 | 1      | 136.03 | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,635.22 | 1/4    | 1,915.92 | 1/4    | 1,556.06 | 1/4    | 1,195.77 | 1/4    | 840.50   | 1/4    | 489.49 | 1/4    | 128.50 | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,627.72 | 1/2    | 1,908.47 | 1/2    | 1,548.54 | 1/2    | 1,188.41 | 1/2    | 833.00   | 1/2    | 481.97 | 1/2    | 120.97 | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,620.22 | 3/4    | 1,901.01 | 3/4    | 1,541.03 | 3/4    | 1,181.20 | 3/4    | 825.49   | 3/4    | 474.45 | 3/4    | 113.44 | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,612.71 | 1      | 1,893.55 | 1      | 1,533.51 | 1      | 1,174.00 | 1      | 817.97   | 1      | 466.93 | 1      | 105.91 | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,605.21 | 1/4    | 1,886.04 | 1/4    | 1,526.00 | 1/4    | 1,166.79 | 1/4    | 810.45   | 1/4    | 459.41 | 1/4    | 98.37  | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,597.71 | 1/2    | 1,878.58 | 1/2    | 1,518.48 | 1/2    | 1,159.59 | 1/2    | 802.91   | 1/2    | 451.89 | 1/2    | 90.84  | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,590.21 | 3/4    | 1,871.18 | 3/4    | 1,510.96 | 3/4    | 1,152.38 | 3/4    | 800.41   | 3/4    | 444.37 | 3/4    | 83.31  | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,582.71 | 1      | 1,863.73 | 1      | 1,503.45 | 1      | 1,145.18 | 1      | 792.91   | 1      | 436.85 | 1      | 75.78  | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,575.20 | 1/4    | 1,856.27 | 1/4    | 1,495.93 | 1/4    | 1,137.97 | 1/4    | 785.40   | 1/4    | 429.33 | 1/4    | 68.25  | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,567.70 | 1/2    | 1,848.81 | 1/2    | 1,488.42 | 1/2    | 1,130.77 | 1/2    | 777.91   | 1/2    | 421.81 | 1/2    | 60.71  | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,560.20 | 3/4    | 1,841.36 | 3/4    | 1,480.90 | 3/4    | 1,123.57 | 3/4    | 770.41   | 3/4    | 414.29 | 3/4    | 53.81  | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,552.70 | 1      | 1,833.90 | 1      | 1,473.39 | 1      | 1,116.37 | 1      | 762.91   | 1      | 406.77 | 1      | 46.91  | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,545.20 | 1/4    | 1,826.44 | 1/4    | 1,465.87 | 1/4    | 1,109.17 | 1/4    | 755.40   | 1/4    | 399.25 | 1/4    | 40.00  | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,537.69 | 1/2    | 1,818.99 | 1/2    | 1,458.35 | 1/2    | 1,101.97 | 1/2    | 747.91   | 1/2    | 391.73 | 1/2    | 33.10  | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,530.19 | 3/4    | 1,811.50 | 3/4    | 1,450.84 | 3/4    | 1,094.77 | 3/4    | 740.41   | 3/4    | 384.21 | 3/4    | 26.08  | 3/4    | 0 | 0      | 0 | 0      | 0 |
| 1      | 2,522.69 | 1      | 1,804.02 | 1      | 1,443.32 | 1      | 1,087.58 | 1      | 732.91   | 1      | 376.69 | 1      | 23.05  | 1      | 0 | 0      | 0 | 0      | 0 |
| 1/4    | 2,515.19 | 1/4    | 1,796.53 | 1/4    | 1,435.81 | 1/4    | 1,080.38 | 1/4    | 725.41   | 1/4    | 369.17 | 1/4    | 18.03  | 1/4    | 0 | 0      | 0 | 0      | 0 |
| 1/2    | 2,507.68 | 1/2    | 1,789.04 | 1/2    | 1,428.29 | 1/2    | 1,073.19 | 1/2    | 717.91   | 1/2    | 361.65 | 1/2    | 13.01  | 1/2    | 0 | 0      | 0 | 0      | 0 |
| 3/4    | 2,500.18 | 3/4    | 1,781.53 | 3/4    | 1,420.78 | 3/4    | 1,066.00 | 3/4    | 710.41   | 3/4    | 354.13 | 3/4    | 0      | 3/4    | 0 | 0      | 0 | 0      | 0 |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/23/2018 SW  
CALCULATED: 10/24/2018 CL  
PRINTED: 10/25/2018

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2018

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Pearland, Texas 77588  
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*Paul J. Gamm*