



# BARGE "KIRBY 28164"

## ULLAGE TRIM TABLE

|        | 1 FT.      |              | 2 FT.      |              | 3 FT.      |              | 4 FT.      |              | 5 FT.      |              | 6 FT.      |              |
|--------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|------------|--------------|
|        | <u>BOW</u> | <u>STERN</u> | <u>BOW</u> | <u>STERN</u> | <u>BOW</u> | <u>STERN</u> | <u>BOW</u> | <u>STERN</u> | <u>BOW</u> | <u>STERN</u> | <u>BOW</u> | <u>STERN</u> |
| 1 PORT | 00-3/8     | - 00-3/8     | 00-7/8     | - 00-7/8     | 01-1/4     | - 01-1/4     | 01-3/4     | - 01-3/4     | 02-1/8     | - 02-1/8     | 02-5/8     | - 02-5/8     |
| 1 STBD | 00-3/8     | - 00-3/8     | 00-7/8     | - 00-7/8     | 01-1/4     | - 01-1/4     | 01-3/4     | - 01-3/4     | 02-1/8     | - 02-1/8     | 02-1/2     | - 02-1/2     |
| 2 PORT | 00-3/8     | - 00-3/8     | 00-7/8     | - 00-7/8     | 01-1/4     | - 01-1/4     | 01-3/4     | - 01-3/4     | 02-1/8     | - 02-1/8     | 02-5/8     | - 02-5/8     |
| 2 STBD | 00-3/8     | - 00-3/8     | 00-7/8     | - 00-7/8     | 01-1/4     | - 01-1/4     | 01-3/4     | - 01-3/4     | 02-1/8     | - 02-1/8     | 02-5/8     | - 02-5/8     |
| 3 PORT | 00-1/2     | - 00-1/2     | 00-7/8     | - 00-7/8     | 01-3/8     | - 01-3/8     | 01-3/4     | - 01-3/4     | 02-1/4     | - 02-1/4     | 02-3/4     | - 02-3/4     |
| 3 STBD | 00-1/2     | - 00-1/2     | 00-7/8     | - 00-7/8     | 01-3/8     | - 01-3/8     | 01-3/4     | - 01-3/4     | 02-1/4     | - 02-1/4     | 02-3/4     | - 02-3/4     |

(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 - 00-7/8"  
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED ULLAGE IS 3'-11 1/8"

LENGTH BETWEEN DRAFT MARKS: 241'-06"

March 23, 2011

**PRECISION MEASUREMENT  
& ANALYSIS, INC.**

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# BARGE "KIRBY 28164"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-07 3/4"

| IN  | 0 FT. | IN  | 1 FT. | IN  | 2 FT. | IN  | 3 FT.    | IN  | 4 FT.    | IN  | 5 FT.    | IN  | 6 FT.    | IN  | 7 FT.    | IN  | 8 FT.    | IN  | 9 FT.    |
|-----|-------|-----|-------|-----|-------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 0   |       | 0   |       | 0   |       | 0   | 4,519.18 | 0   | 4,186.53 | 0   | 3,830.09 | 0   | 3,463.63 | 0   | 3,097.18 | 0   | 2,730.73 |     |          |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,838.04 | 1/4 | 4,512.49 | 1/4 | 4,179.31 | 1/4 | 3,822.45 | 1/4 | 3,456.00 | 1/4 | 3,089.55 | 1/4 | 2,723.10 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,832.40 | 1/2 | 4,505.80 | 1/2 | 4,172.10 | 1/2 | 3,814.82 | 1/2 | 3,448.37 | 1/2 | 3,081.91 | 1/2 | 2,715.46 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,826.76 | 3/4 | 4,499.11 | 3/4 | 4,164.88 | 3/4 | 3,807.18 | 3/4 | 3,440.73 | 3/4 | 3,074.28 | 3/4 | 2,707.83 |
| 1   | 1     | 1   | 1     | 1   | 1     | 1   | 4,819.93 | 1   | 4,492.38 | 1   | 4,157.62 | 1   | 3,799.55 | 1   | 3,433.10 | 1   | 3,066.65 | 1   | 2,700.19 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,813.09 | 1/4 | 4,485.66 | 1/4 | 4,150.37 | 1/4 | 3,791.91 | 1/4 | 3,425.46 | 1/4 | 3,059.01 | 1/4 | 2,692.56 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,806.26 | 1/2 | 4,478.94 | 1/2 | 4,143.11 | 1/2 | 3,784.28 | 1/2 | 3,417.83 | 1/2 | 3,051.38 | 1/2 | 2,684.93 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,799.43 | 3/4 | 4,472.21 | 3/4 | 4,135.86 | 3/4 | 3,776.65 | 3/4 | 3,410.19 | 3/4 | 3,043.74 | 3/4 | 2,677.29 |
| 2   | 2     | 2   | 2     | 2   | 2     | 2   | 4,791.96 | 2   | 4,465.45 | 2   | 4,128.56 | 2   | 3,769.01 | 2   | 3,402.56 | 2   | 3,036.11 | 2   | 2,669.66 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,784.49 | 1/4 | 4,458.69 | 1/4 | 4,121.27 | 1/4 | 3,761.38 | 1/4 | 3,394.93 | 1/4 | 3,028.47 | 1/4 | 2,662.02 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,777.02 | 1/2 | 4,451.93 | 1/2 | 4,113.98 | 1/2 | 3,753.74 | 1/2 | 3,387.29 | 1/2 | 3,020.84 | 1/2 | 2,654.39 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,769.55 | 3/4 | 4,445.17 | 3/4 | 4,106.68 | 3/4 | 3,746.11 | 3/4 | 3,379.66 | 3/4 | 3,013.21 | 3/4 | 2,646.75 |
| 3   | 3     | 3   | 3     | 3   | 3     | 3   | 4,762.00 | 3   | 4,438.38 | 3   | 4,099.36 | 3   | 3,738.47 | 3   | 3,372.02 | 3   | 3,005.57 | 3   | 2,639.12 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,754.45 | 1/4 | 4,431.58 | 1/4 | 4,092.03 | 1/4 | 3,730.84 | 1/4 | 3,364.39 | 1/4 | 2,997.94 | 1/4 | 2,631.49 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,746.90 | 1/2 | 4,424.78 | 1/2 | 4,084.70 | 1/2 | 3,723.20 | 1/2 | 3,356.75 | 1/2 | 2,990.30 | 1/2 | 2,623.85 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,739.35 | 3/4 | 4,417.99 | 3/4 | 4,077.37 | 3/4 | 3,715.57 | 3/4 | 3,349.12 | 3/4 | 2,982.67 | 3/4 | 2,616.22 |
| 4   | 4     | 4   | 4     | 4   | 4     | 4   | 4,732.08 | 4   | 4,411.15 | 4   | 4,070.01 | 4   | 3,707.94 | 4   | 3,341.48 | 4   | 2,975.03 | 4   | 2,608.58 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,724.81 | 1/4 | 4,404.32 | 1/4 | 4,062.65 | 1/4 | 3,700.30 | 1/4 | 3,333.85 | 1/4 | 2,967.40 | 1/4 | 2,600.95 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,717.54 | 1/2 | 4,397.48 | 1/2 | 4,055.29 | 1/2 | 3,692.67 | 1/2 | 3,326.22 | 1/2 | 2,959.76 | 1/2 | 2,593.31 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,710.27 | 3/4 | 4,390.65 | 3/4 | 4,047.93 | 3/4 | 3,685.03 | 3/4 | 3,318.58 | 3/4 | 2,952.13 | 3/4 | 2,585.68 |
| 5   | 5     | 5   | 5     | 5   | 5     | 5   | 4,703.55 | 5   | 4,383.78 | 5   | 4,040.53 | 5   | 3,677.40 | 5   | 3,310.95 | 5   | 2,944.50 | 5   | 2,578.04 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,696.82 | 1/4 | 4,376.91 | 1/4 | 4,033.14 | 1/4 | 3,669.76 | 1/4 | 3,303.31 | 1/4 | 2,936.86 | 1/4 | 2,570.41 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,690.10 | 1/2 | 4,370.04 | 1/2 | 4,025.74 | 1/2 | 3,662.13 | 1/2 | 3,295.68 | 1/2 | 2,929.23 | 1/2 | 2,562.78 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,683.38 | 3/4 | 4,363.16 | 3/4 | 4,018.34 | 3/4 | 3,654.49 | 3/4 | 3,288.04 | 3/4 | 2,921.59 | 3/4 | 2,555.14 |
| 6   | 6     | 6   | 6     | 6   | 6     | 6   | 4,676.91 | 6   | 4,356.26 | 6   | 4,010.91 | 6   | 3,646.86 | 6   | 3,280.41 | 6   | 2,913.96 | 6   | 2,547.51 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,670.44 | 1/4 | 4,349.35 | 1/4 | 4,003.48 | 1/4 | 3,639.23 | 1/4 | 3,272.77 | 1/4 | 2,906.32 | 1/4 | 2,539.87 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,663.98 | 1/2 | 4,342.44 | 1/2 | 3,996.04 | 1/2 | 3,631.59 | 1/2 | 3,265.14 | 1/2 | 2,898.69 | 1/2 | 2,532.24 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,657.51 | 3/4 | 4,335.53 | 3/4 | 3,988.61 | 3/4 | 3,623.96 | 3/4 | 3,257.51 | 3/4 | 2,891.05 | 3/4 | 2,524.60 |
| 7   | 7     | 7   | 7     | 7   | 7     | 7   | 4,651.00 | 7   | 4,328.56 | 7   | 3,981.14 | 7   | 3,616.32 | 7   | 3,249.87 | 7   | 2,883.42 | 7   | 2,516.97 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,644.49 | 1/4 | 4,321.59 | 1/4 | 3,973.67 | 1/4 | 3,608.69 | 1/4 | 3,242.24 | 1/4 | 2,875.79 | 1/4 | 2,509.33 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,637.99 | 1/2 | 4,314.63 | 1/2 | 3,966.20 | 1/2 | 3,601.05 | 1/2 | 3,234.60 | 1/2 | 2,868.15 | 1/2 | 2,501.70 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,631.48 | 3/4 | 4,307.66 | 3/4 | 3,958.73 | 3/4 | 3,593.42 | 3/4 | 3,226.97 | 3/4 | 2,860.52 | 3/4 | 2,494.07 |
| 8   | 8     | 8   | 8     | 8   | 8     | 8   | 4,624.93 | 8   | 4,300.61 | 8   | 3,951.22 | 8   | 3,585.79 | 8   | 3,219.33 | 8   | 2,852.88 | 8   | 2,486.43 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,618.39 | 1/4 | 4,293.56 | 1/4 | 3,943.71 | 1/4 | 3,578.15 | 1/4 | 3,211.70 | 1/4 | 2,845.25 | 1/4 | 2,478.80 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,611.85 | 1/2 | 4,286.52 | 1/2 | 3,936.20 | 1/2 | 3,570.52 | 1/2 | 3,204.07 | 1/2 | 2,837.61 | 1/2 | 2,471.16 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,605.30 | 3/4 | 4,279.47 | 3/4 | 3,928.70 | 3/4 | 3,562.88 | 3/4 | 3,196.43 | 3/4 | 2,829.98 | 3/4 | 2,463.53 |
| 9   | 9     | 9   | 9     | 9   | 9     | 9   | 4,598.72 | 9   | 4,272.36 | 9   | 3,921.15 | 9   | 3,555.25 | 9   | 3,188.80 | 9   | 2,822.35 | 9   | 2,455.89 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,592.14 | 1/4 | 4,265.26 | 1/4 | 3,913.60 | 1/4 | 3,547.61 | 1/4 | 3,181.16 | 1/4 | 2,814.71 | 1/4 | 2,448.26 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,585.56 | 1/2 | 4,258.15 | 1/2 | 3,906.06 | 1/2 | 3,539.98 | 1/2 | 3,173.53 | 1/2 | 2,807.08 | 1/2 | 2,440.63 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,578.98 | 3/4 | 4,251.05 | 3/4 | 3,898.51 | 3/4 | 3,532.34 | 3/4 | 3,165.89 | 3/4 | 2,799.44 | 3/4 | 2,432.99 |
| 10  | 10    | 10  | 10    | 10  | 10    | 10  | 4,572.36 | 10  | 4,243.90 | 10  | 3,890.93 | 10  | 3,524.71 | 10  | 3,158.26 | 10  | 2,791.81 | 10  | 2,425.36 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,565.74 | 1/4 | 4,236.76 | 1/4 | 3,883.35 | 1/4 | 3,517.08 | 1/4 | 3,150.62 | 1/4 | 2,784.17 | 1/4 | 2,417.72 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,559.12 | 1/2 | 4,229.62 | 1/2 | 3,875.76 | 1/2 | 3,509.44 | 1/2 | 3,142.99 | 1/2 | 2,776.54 | 1/2 | 2,410.09 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,552.50 | 3/4 | 4,222.47 | 3/4 | 3,868.18 | 3/4 | 3,501.81 | 3/4 | 3,135.36 | 3/4 | 2,768.90 | 3/4 | 2,402.45 |
| 11  | 11    | 11  | 11    | 11  | 11    | 11  | 4,545.84 | 11  | 4,215.29 | 11  | 3,860.57 | 11  | 3,494.17 | 11  | 3,127.72 | 11  | 2,761.27 | 11  | 2,394.82 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,539.19 | 1/4 | 4,208.11 | 1/4 | 3,852.95 | 1/4 | 3,486.54 | 1/4 | 3,120.09 | 1/4 | 2,753.64 | 1/4 | 2,387.18 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,532.53 | 1/2 | 4,200.93 | 1/2 | 3,845.34 | 1/2 | 3,478.90 | 1/2 | 3,112.45 | 1/2 | 2,746.00 | 1/2 | 2,379.55 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,525.88 | 3/4 | 4,193.75 | 3/4 | 3,837.72 | 3/4 | 3,471.27 | 3/4 | 3,104.82 | 3/4 | 2,738.37 | 3/4 | 2,371.92 |

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'-09" OFF CENTERLINE AND 52'-06" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
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# BARGE "KIRBY 28164"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-07 3/4"

| IN  | 10 FT.   | IN  | 11 FT.   | IN  | 12 FT.   | IN  | 13 FT.   | IN  | 14 FT. | IN  | 15 FT. | IN  | 16 FT. | IN  | 17 FT. | IN  | 18 FT. | IN | 19 FT. |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|----|--------|
| 0   | 2,364.28 | 0   | 1,997.83 | 0   | 1,631.37 | 0   | 1,265.55 | 0   | 901.20 | 0   | 535.10 | 0   | 188.29 | 0   |        | 0   |        |    |        |
| 1/4 | 2,356.65 | 1/4 | 1,990.20 | 1/4 | 1,623.73 | 1/4 | 1,257.92 | 1/4 | 893.62 | 1/4 | 527.47 | 1/4 | 181.59 | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,349.01 | 1/2 | 1,982.57 | 1/2 | 1,616.10 | 1/2 | 1,250.28 | 1/2 | 886.04 | 1/2 | 519.83 | 1/2 | 174.89 | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,341.38 | 3/4 | 1,974.93 | 3/4 | 1,608.46 | 3/4 | 1,242.65 | 3/4 | 878.46 | 3/4 | 512.20 | 3/4 | 168.19 | 3/4 |        | 3/4 |        |    |        |
| 1   | 2,333.74 | 1   | 1,967.30 | 1   | 1,600.83 | 1   | 1,235.01 | 1   | 870.86 | 1   | 504.58 | 1   | 161.57 | 1   |        | 1   |        |    |        |
| 1/4 | 2,326.11 | 1/4 | 1,959.66 | 1/4 | 1,593.19 | 1/4 | 1,227.37 | 1/4 | 863.27 | 1/4 | 496.97 | 1/4 | 154.96 | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,318.47 | 1/2 | 1,952.03 | 1/2 | 1,585.56 | 1/2 | 1,219.74 | 1/2 | 855.68 | 1/2 | 489.35 | 1/2 | 148.35 | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,310.84 | 3/4 | 1,944.39 | 3/4 | 1,577.92 | 3/4 | 1,212.10 | 3/4 | 848.08 | 3/4 | 481.74 | 3/4 | 141.73 | 3/4 |        | 3/4 |        |    |        |
| 2   | 2,303.21 | 2   | 1,936.76 | 2   | 1,570.29 | 2   | 1,204.48 | 2   | 840.46 | 2   | 474.19 | 2   | 135.21 | 2   |        | 2   |        |    |        |
| 1/4 | 2,295.57 | 1/4 | 1,929.12 | 1/4 | 1,562.65 | 1/4 | 1,196.86 | 1/4 | 832.84 | 1/4 | 466.64 | 1/4 | 128.69 | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,287.94 | 1/2 | 1,921.49 | 1/2 | 1,555.02 | 1/2 | 1,189.24 | 1/2 | 825.22 | 1/2 | 459.09 | 1/2 | 122.16 | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,280.30 | 3/4 | 1,913.85 | 3/4 | 1,547.38 | 3/4 | 1,181.62 | 3/4 | 817.60 | 3/4 | 451.54 | 3/4 | 115.64 | 3/4 |        | 3/4 |        |    |        |
| 3   | 2,272.67 | 3   | 1,906.22 | 3   | 1,539.75 | 3   | 1,174.03 | 3   | 809.97 | 3   | 444.07 | 3   | 109.22 | 3   |        | 3   |        |    |        |
| 1/4 | 2,265.03 | 1/4 | 1,898.58 | 1/4 | 1,532.11 | 1/4 | 1,166.43 | 1/4 | 802.33 | 1/4 | 436.60 | 1/4 | 102.79 | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,257.40 | 1/2 | 1,890.95 | 1/2 | 1,524.48 | 1/2 | 1,158.84 | 1/2 | 794.70 | 1/2 | 429.14 | 1/2 | 96.37  | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,249.77 | 3/4 | 1,883.31 | 3/4 | 1,516.84 | 3/4 | 1,151.25 | 3/4 | 787.06 | 3/4 | 421.67 | 3/4 | 89.94  | 3/4 |        | 3/4 |        |    |        |
| 4   | 2,242.13 | 4   | 1,875.68 | 4   | 1,509.21 | 4   | 1,143.67 | 4   | 779.43 | 4   | 414.29 | 4   | 83.62  | 4   |        | 4   |        |    |        |
| 1/4 | 2,234.50 | 1/4 | 1,868.04 | 1/4 | 1,501.57 | 1/4 | 1,136.09 | 1/4 | 771.79 | 1/4 | 406.91 | 1/4 | 77.30  | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,226.86 | 1/2 | 1,860.41 | 1/2 | 1,493.94 | 1/2 | 1,128.51 | 1/2 | 764.16 | 1/2 | 399.53 | 1/2 | 70.98  | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,219.23 | 3/4 | 1,852.78 | 3/4 | 1,486.30 | 3/4 | 1,120.93 | 3/4 | 756.52 | 3/4 | 392.15 | 3/4 | 64.66  | 3/4 |        | 3/4 |        |    |        |
| 5   | 2,211.59 | 5   | 1,845.14 | 5   | 1,478.68 | 5   | 1,113.35 | 5   | 748.89 | 5   | 384.85 | 5   | 58.46  | 5   |        | 5   |        |    |        |
| 1/4 | 2,203.96 | 1/4 | 1,837.51 | 1/4 | 1,471.06 | 1/4 | 1,105.78 | 1/4 | 741.25 | 1/4 | 377.56 | 1/4 | 52.26  | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,196.32 | 1/2 | 1,829.87 | 1/2 | 1,463.44 | 1/2 | 1,098.20 | 1/2 | 733.62 | 1/2 | 370.26 | 1/2 | 46.05  | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,188.69 | 3/4 | 1,822.24 | 3/4 | 1,455.82 | 3/4 | 1,090.62 | 3/4 | 725.98 | 3/4 | 362.97 | 3/4 | 39.85  | 3/4 |        | 3/4 |        |    |        |
| 6   | 2,181.06 | 6   | 1,814.60 | 6   | 1,448.21 | 6   | 1,083.04 | 6   | 718.35 | 6   | 355.75 | 6   | 34.35  | 6   |        | 6   |        |    |        |
| 1/4 | 2,173.42 | 1/4 | 1,806.97 | 1/4 | 1,440.61 | 1/4 | 1,075.47 | 1/4 | 710.71 | 1/4 | 348.54 | 1/4 | 28.84  | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,165.79 | 1/2 | 1,799.33 | 1/2 | 1,433.00 | 1/2 | 1,067.89 | 1/2 | 703.08 | 1/2 | 341.33 | 1/2 | 23.33  | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,158.15 | 3/4 | 1,791.70 | 3/4 | 1,425.39 | 3/4 | 1,060.31 | 3/4 | 695.44 | 3/4 | 334.12 | 3/4 | 17.83  | 3/4 |        | 3/4 |        |    |        |
| 7   | 2,150.52 | 7   | 1,784.06 | 7   | 1,417.79 | 7   | 1,052.74 | 7   | 687.81 | 7   | 327.00 | 7   | 14.27  | 7   |        | 7   |        |    |        |
| 1/4 | 2,142.88 | 1/4 | 1,776.43 | 1/4 | 1,410.18 | 1/4 | 1,045.16 | 1/4 | 680.17 | 1/4 | 319.87 | 1/4 | 10.71  | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,135.25 | 1/2 | 1,768.79 | 1/2 | 1,402.57 | 1/2 | 1,037.58 | 1/2 | 672.54 | 1/2 | 312.74 | 1/2 | 7.15   | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,127.61 | 3/4 | 1,761.16 | 3/4 | 1,394.96 | 3/4 | 1,030.01 | 3/4 | 664.90 | 3/4 | 305.62 | 3/4 | 3.59   | 3/4 |        | 3/4 |        |    |        |
| 8   | 2,119.98 | 8   | 1,753.52 | 8   | 1,387.36 | 8   | 1,022.43 | 8   | 657.27 | 8   | 298.58 | 8   |        | 8   |        | 8   |        |    |        |
| 1/4 | 2,112.35 | 1/4 | 1,745.89 | 1/4 | 1,379.75 | 1/4 | 1,014.85 | 1/4 | 649.63 | 1/4 | 291.53 | 1/4 |        | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,104.71 | 1/2 | 1,738.25 | 1/2 | 1,372.14 | 1/2 | 1,007.27 | 1/2 | 642.00 | 1/2 | 284.49 | 1/2 |        | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,097.08 | 3/4 | 1,730.62 | 3/4 | 1,364.53 | 3/4 | 999.70   | 3/4 | 634.36 | 3/4 | 277.45 | 3/4 |        | 3/4 |        | 3/4 |        |    |        |
| 9   | 2,089.44 | 9   | 1,722.98 | 9   | 1,356.93 | 9   | 992.12   | 9   | 626.73 | 9   | 270.50 | 9   |        | 9   |        | 9   |        |    |        |
| 1/4 | 2,081.81 | 1/4 | 1,715.35 | 1/4 | 1,349.32 | 1/4 | 984.54   | 1/4 | 619.09 | 1/4 | 263.54 | 1/4 |        | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,074.17 | 1/2 | 1,707.71 | 1/2 | 1,341.71 | 1/2 | 976.97   | 1/2 | 611.46 | 1/2 | 256.58 | 1/2 |        | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,066.54 | 3/4 | 1,700.08 | 3/4 | 1,334.10 | 3/4 | 969.39   | 3/4 | 603.82 | 3/4 | 249.63 | 3/4 |        | 3/4 |        | 3/4 |        |    |        |
| 10  | 2,058.91 | 10  | 1,692.44 | 10  | 1,326.50 | 10  | 961.81   | 10  | 596.19 | 10  | 242.75 | 10  |        | 10  |        | 10  |        |    |        |
| 1/4 | 2,051.27 | 1/4 | 1,684.81 | 1/4 | 1,318.89 | 1/4 | 954.24   | 1/4 | 588.55 | 1/4 | 235.88 | 1/4 |        | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,043.64 | 1/2 | 1,677.17 | 1/2 | 1,311.28 | 1/2 | 946.66   | 1/2 | 580.91 | 1/2 | 229.01 | 1/2 |        | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,036.00 | 3/4 | 1,669.54 | 3/4 | 1,303.67 | 3/4 | 939.08   | 3/4 | 573.28 | 3/4 | 222.14 | 3/4 |        | 3/4 |        | 3/4 |        |    |        |
| 11  | 2,028.37 | 11  | 1,661.91 | 11  | 1,296.05 | 11  | 931.50   | 11  | 565.64 | 11  | 215.35 | 11  |        | 11  |        | 11  |        |    |        |
| 1/4 | 2,020.73 | 1/4 | 1,654.27 | 1/4 | 1,288.43 | 1/4 | 923.93   | 1/4 | 558.01 | 1/4 | 208.57 | 1/4 |        | 1/4 |        | 1/4 |        |    |        |
| 1/2 | 2,013.10 | 1/2 | 1,646.64 | 1/2 | 1,280.81 | 1/2 | 916.35   | 1/2 | 550.37 | 1/2 | 201.78 | 1/2 |        | 1/2 |        | 1/2 |        |    |        |
| 3/4 | 2,005.46 | 3/4 | 1,639.00 | 3/4 | 1,273.19 | 3/4 | 908.77   | 3/4 | 542.74 | 3/4 | 194.99 | 3/4 |        | 3/4 |        | 3/4 |        |    |        |

STRAPPED: 03/22/2011 CL - SW  
CALCULATED: 03/23/2011 CL  
PRINTED: 03/23/2011 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
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P.O. Box 2092  
Pearland, Texas 77588  
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# BARGE "KIRBY 28164"

## 1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-07 3/4"

| IN  | 0 FT. | IN  | 1 FT. | IN  | 2 FT. | IN  | 3 FT. | IN  | 4 FT.    | IN  | 5 FT.    | IN  | 6 FT.    | IN  | 7 FT.    | IN  | 8 FT.    | IN  | 9 FT.    |
|-----|-------|-----|-------|-----|-------|-----|-------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 0   | 0     | 0   | 0     | 0   | 0     | 0   | 0     | 0   | 4,522.18 | 0   | 4,189.41 | 0   | 3,832.85 | 0   | 3,466.27 | 0   | 3,099.69 | 0   | 2,733.10 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,515.49 | 1/4 | 4,182.19 | 1/4 | 3,825.21 | 1/4 | 3,458.64 | 1/4 | 3,092.05 | 1/4 | 2,725.46 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,508.79 | 1/2 | 4,174.97 | 1/2 | 3,817.58 | 1/2 | 3,451.00 | 1/2 | 3,084.41 | 1/2 | 2,717.83 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,829.86 | 3/4 | 4,502.10 | 3/4 | 4,167.75 | 3/4 | 3,809.95 | 3/4 | 3,443.36 | 3/4 | 3,076.78 |
| 1   | 1     | 1   | 1     | 1   | 1     | 1   | 1     | 1   | 4,823.02 | 1   | 4,495.37 | 1   | 4,160.49 | 1   | 3,802.31 | 1   | 3,435.72 | 1   | 3,069.14 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,816.19 | 1/4 | 4,488.64 | 1/4 | 4,153.23 | 1/4 | 3,794.67 | 1/4 | 3,428.09 | 1/4 | 3,061.50 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,809.35 | 1/2 | 4,481.92 | 1/2 | 4,145.98 | 1/2 | 3,787.04 | 1/2 | 3,420.45 | 1/2 | 3,053.86 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,802.52 | 3/4 | 4,475.19 | 3/4 | 4,138.72 | 3/4 | 3,779.40 | 3/4 | 3,412.81 | 3/4 | 3,046.23 |
| 2   | 2     | 2   | 2     | 2   | 2     | 2   | 2     | 2   | 4,795.04 | 2   | 4,468.43 | 2   | 4,131.42 | 2   | 3,771.76 | 2   | 3,405.18 | 2   | 3,038.59 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,787.57 | 1/4 | 4,461.67 | 1/4 | 4,124.13 | 1/4 | 3,764.12 | 1/4 | 3,397.54 | 1/4 | 3,030.95 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,780.10 | 1/2 | 4,454.91 | 1/2 | 4,116.83 | 1/2 | 3,756.49 | 1/2 | 3,389.90 | 1/2 | 3,023.32 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,772.63 | 3/4 | 4,448.15 | 3/4 | 4,109.54 | 3/4 | 3,748.85 | 3/4 | 3,382.26 | 3/4 | 3,015.68 |
| 3   | 3     | 3   | 3     | 3   | 3     | 3   | 3     | 3   | 4,765.08 | 3   | 4,441.35 | 3   | 4,102.21 | 3   | 3,741.21 | 3   | 3,374.63 | 3   | 3,008.04 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,757.52 | 1/4 | 4,434.55 | 1/4 | 4,094.88 | 1/4 | 3,733.58 | 1/4 | 3,366.99 | 1/4 | 3,000.40 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,749.97 | 1/2 | 4,427.75 | 1/2 | 4,087.54 | 1/2 | 3,725.94 | 1/2 | 3,359.35 | 1/2 | 2,992.77 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,742.42 | 3/4 | 4,420.95 | 3/4 | 4,080.21 | 3/4 | 3,718.30 | 3/4 | 3,351.72 | 3/4 | 2,985.13 |
| 4   | 4     | 4   | 4     | 4   | 4     | 4   | 4     | 4   | 4,735.14 | 4   | 4,414.11 | 4   | 4,072.85 | 4   | 3,710.66 | 4   | 3,344.08 | 4   | 2,977.49 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,727.87 | 1/4 | 4,407.28 | 1/4 | 4,065.49 | 1/4 | 3,703.03 | 1/4 | 3,336.44 | 1/4 | 2,969.85 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,720.60 | 1/2 | 4,400.44 | 1/2 | 4,058.12 | 1/2 | 3,695.39 | 1/2 | 3,328.80 | 1/2 | 2,962.22 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,713.33 | 3/4 | 4,393.60 | 3/4 | 4,050.76 | 3/4 | 3,687.75 | 3/4 | 3,321.17 | 3/4 | 2,954.58 |
| 5   | 5     | 5   | 5     | 5   | 5     | 5   | 5     | 5   | 4,706.60 | 5   | 4,386.73 | 5   | 4,043.36 | 5   | 3,680.11 | 5   | 3,313.53 | 5   | 2,946.94 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,699.88 | 1/4 | 4,379.85 | 1/4 | 4,035.96 | 1/4 | 3,672.48 | 1/4 | 3,305.89 | 1/4 | 2,939.31 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,693.16 | 1/2 | 4,372.98 | 1/2 | 4,028.56 | 1/2 | 3,664.84 | 1/2 | 3,298.25 | 1/2 | 2,931.67 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,686.43 | 3/4 | 4,366.11 | 3/4 | 4,021.17 | 3/4 | 3,657.20 | 3/4 | 3,290.62 | 3/4 | 2,924.03 |
| 6   | 6     | 6   | 6     | 6   | 6     | 6   | 6     | 6   | 4,679.96 | 6   | 4,359.20 | 6   | 4,013.73 | 6   | 3,649.57 | 6   | 3,282.98 | 6   | 2,916.39 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,673.49 | 1/4 | 4,352.28 | 1/4 | 4,006.29 | 1/4 | 3,641.93 | 1/4 | 3,275.34 | 1/4 | 2,908.76 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,667.02 | 1/2 | 4,345.37 | 1/2 | 3,998.86 | 1/2 | 3,634.29 | 1/2 | 3,267.71 | 1/2 | 2,901.12 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,660.55 | 3/4 | 4,338.46 | 3/4 | 3,991.42 | 3/4 | 3,626.65 | 3/4 | 3,260.07 | 3/4 | 2,893.48 |
| 7   | 7     | 7   | 7     | 7   | 7     | 7   | 7     | 7   | 4,654.04 | 7   | 4,331.49 | 7   | 3,983.95 | 7   | 3,619.02 | 7   | 3,252.43 | 7   | 2,885.85 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,647.53 | 1/4 | 4,324.52 | 1/4 | 3,976.48 | 1/4 | 3,611.38 | 1/4 | 3,244.79 | 1/4 | 2,878.21 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,641.02 | 1/2 | 4,317.55 | 1/2 | 3,969.00 | 1/2 | 3,603.74 | 1/2 | 3,237.16 | 1/2 | 2,870.57 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,634.51 | 3/4 | 4,310.58 | 3/4 | 3,961.53 | 3/4 | 3,596.11 | 3/4 | 3,229.52 | 3/4 | 2,862.93 |
| 8   | 8     | 8   | 8     | 8   | 8     | 8   | 8     | 8   | 4,627.97 | 8   | 4,303.53 | 8   | 3,954.02 | 8   | 3,588.47 | 8   | 3,221.88 | 8   | 2,855.30 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,621.42 | 1/4 | 4,296.48 | 1/4 | 3,946.51 | 1/4 | 3,580.83 | 1/4 | 3,214.25 | 1/4 | 2,847.66 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,614.87 | 1/2 | 4,289.43 | 1/2 | 3,939.00 | 1/2 | 3,573.19 | 1/2 | 3,206.61 | 1/2 | 2,840.02 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,608.33 | 3/4 | 4,282.38 | 3/4 | 3,931.49 | 3/4 | 3,565.56 | 3/4 | 3,198.97 | 3/4 | 2,832.39 |
| 9   | 9     | 9   | 9     | 9   | 9     | 9   | 9     | 9   | 4,601.74 | 9   | 4,275.27 | 9   | 3,923.94 | 9   | 3,557.92 | 9   | 3,191.33 | 9   | 2,824.75 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,595.16 | 1/4 | 4,268.17 | 1/4 | 3,916.39 | 1/4 | 3,550.28 | 1/4 | 3,183.70 | 1/4 | 2,817.11 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,588.58 | 1/2 | 4,261.06 | 1/2 | 3,908.84 | 1/2 | 3,542.65 | 1/2 | 3,176.06 | 1/2 | 2,809.47 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,581.99 | 3/4 | 4,253.95 | 3/4 | 3,901.29 | 3/4 | 3,535.01 | 3/4 | 3,168.42 | 3/4 | 2,801.84 |
| 10  | 10    | 10  | 10    | 10  | 10    | 10  | 10    | 10  | 4,575.37 | 10  | 4,246.80 | 10  | 3,893.71 | 10  | 3,527.37 | 10  | 3,160.78 | 10  | 2,794.20 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,568.75 | 1/4 | 4,239.66 | 1/4 | 3,886.12 | 1/4 | 3,519.73 | 1/4 | 3,153.15 | 1/4 | 2,786.56 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,562.13 | 1/2 | 4,232.51 | 1/2 | 3,878.54 | 1/2 | 3,512.10 | 1/2 | 3,145.51 | 1/2 | 2,778.92 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,555.51 | 3/4 | 4,225.37 | 3/4 | 3,870.95 | 3/4 | 3,504.46 | 3/4 | 3,137.87 | 3/4 | 2,771.29 |
| 11  | 11    | 11  | 11    | 11  | 11    | 11  | 11    | 11  | 4,548.85 | 11  | 4,218.18 | 11  | 3,863.33 | 11  | 3,496.82 | 11  | 3,130.24 | 11  | 2,763.65 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,542.19 | 1/4 | 4,211.00 | 1/4 | 3,855.72 | 1/4 | 3,489.18 | 1/4 | 3,122.60 | 1/4 | 2,756.01 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,535.53 | 1/2 | 4,203.82 | 1/2 | 3,848.10 | 1/2 | 3,481.55 | 1/2 | 3,114.96 | 1/2 | 2,748.38 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,528.87 | 3/4 | 4,196.63 | 3/4 | 3,840.48 | 3/4 | 3,473.91 | 3/4 | 3,107.32 | 3/4 | 2,740.74 |

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'-09" OFF CENTERLINE AND 52'-06" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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# BARGE "KIRBY 28164"

## 1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-07 3/4"

| IN  | 10 FT.   | IN  | 11 FT.   | IN  | 12 FT.   | IN  | 13 FT.   | IN  | 14 FT. | IN  | 15 FT. | IN  | 16 FT. | IN  | 17 FT. | IN  | 18 FT. | IN | 19 FT. |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|----|--------|
| 0   | 2,366.52 | 0   | 1,999.93 | 0   | 1,633.34 | 0   | 1,267.39 | 0   | 901.77 | 0   | 535.28 | 0   | 188.35 | 0   |        | 0   |        |    |        |
| 1/4 | 2,358.88 | 1/4 | 1,992.30 | 1/4 | 1,625.70 | 1/4 | 1,259.75 | 1/4 | 894.16 | 1/4 | 527.65 | 1/4 | 181.65 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,351.24 | 1/2 | 1,984.66 | 1/2 | 1,618.06 | 1/2 | 1,252.12 | 1/2 | 886.55 | 1/2 | 520.01 | 1/2 | 174.95 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,343.60 | 3/4 | 1,977.02 | 3/4 | 1,610.42 | 3/4 | 1,244.48 | 3/4 | 878.94 | 3/4 | 512.37 | 3/4 | 168.24 | 3/4 |        | 3/4 |        |    | 3/4    |
| 1   | 2,335.97 | 1   | 1,969.39 | 1   | 1,602.79 | 1   | 1,236.84 | 1   | 871.31 | 1   | 504.75 | 1   | 161.63 | 1   |        | 1   |        |    | 1      |
| 1/4 | 2,328.33 | 1/4 | 1,961.75 | 1/4 | 1,595.15 | 1/4 | 1,229.20 | 1/4 | 863.69 | 1/4 | 497.14 | 1/4 | 155.01 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,320.69 | 1/2 | 1,954.11 | 1/2 | 1,587.51 | 1/2 | 1,221.56 | 1/2 | 856.06 | 1/2 | 489.52 | 1/2 | 148.39 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,313.06 | 3/4 | 1,946.47 | 3/4 | 1,579.87 | 3/4 | 1,213.92 | 3/4 | 848.44 | 3/4 | 481.90 | 3/4 | 141.78 | 3/4 |        | 3/4 |        |    | 3/4    |
| 2   | 2,305.42 | 2   | 1,938.84 | 2   | 1,572.24 | 2   | 1,206.29 | 2   | 840.80 | 2   | 474.35 | 2   | 135.25 | 2   |        | 2   |        |    | 2      |
| 1/4 | 2,297.78 | 1/4 | 1,931.20 | 1/4 | 1,564.60 | 1/4 | 1,198.65 | 1/4 | 833.16 | 1/4 | 466.80 | 1/4 | 128.73 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,290.14 | 1/2 | 1,923.56 | 1/2 | 1,556.96 | 1/2 | 1,191.01 | 1/2 | 825.53 | 1/2 | 459.24 | 1/2 | 122.20 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,282.51 | 3/4 | 1,915.92 | 3/4 | 1,549.32 | 3/4 | 1,183.37 | 3/4 | 817.89 | 3/4 | 451.69 | 3/4 | 115.68 | 3/4 |        | 3/4 |        |    | 3/4    |
| 3   | 2,274.87 | 3   | 1,908.29 | 3   | 1,541.69 | 3   | 1,175.75 | 3   | 810.25 | 3   | 444.22 | 3   | 109.25 | 3   |        | 3   |        |    | 3      |
| 1/4 | 2,267.23 | 1/4 | 1,900.65 | 1/4 | 1,534.05 | 1/4 | 1,168.12 | 1/4 | 802.61 | 1/4 | 436.75 | 1/4 | 102.82 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,259.60 | 1/2 | 1,893.01 | 1/2 | 1,526.41 | 1/2 | 1,160.50 | 1/2 | 794.97 | 1/2 | 429.28 | 1/2 | 96.40  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,251.96 | 3/4 | 1,885.37 | 3/4 | 1,518.77 | 3/4 | 1,152.87 | 3/4 | 787.34 | 3/4 | 421.82 | 3/4 | 89.97  | 3/4 |        | 3/4 |        |    | 3/4    |
| 4   | 2,244.32 | 4   | 1,877.74 | 4   | 1,511.14 | 4   | 1,145.26 | 4   | 779.70 | 4   | 414.43 | 4   | 83.65  | 4   |        | 4   |        |    | 4      |
| 1/4 | 2,236.68 | 1/4 | 1,870.10 | 1/4 | 1,503.50 | 1/4 | 1,137.65 | 1/4 | 772.06 | 1/4 | 407.05 | 1/4 | 77.32  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,229.05 | 1/2 | 1,862.46 | 1/2 | 1,495.86 | 1/2 | 1,130.04 | 1/2 | 764.42 | 1/2 | 399.67 | 1/2 | 71.00  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,221.41 | 3/4 | 1,854.82 | 3/4 | 1,488.22 | 3/4 | 1,122.43 | 3/4 | 756.78 | 3/4 | 392.28 | 3/4 | 64.68  | 3/4 |        | 3/4 |        |    | 3/4    |
| 5   | 2,213.77 | 5   | 1,847.19 | 5   | 1,480.60 | 5   | 1,114.82 | 5   | 749.15 | 5   | 384.98 | 5   | 58.48  | 5   |        | 5   |        |    | 5      |
| 1/4 | 2,206.13 | 1/4 | 1,839.55 | 1/4 | 1,472.98 | 1/4 | 1,107.21 | 1/4 | 741.51 | 1/4 | 377.68 | 1/4 | 52.27  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,198.50 | 1/2 | 1,831.91 | 1/2 | 1,465.35 | 1/2 | 1,099.60 | 1/2 | 733.87 | 1/2 | 370.39 | 1/2 | 46.07  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,190.86 | 3/4 | 1,824.27 | 3/4 | 1,457.73 | 3/4 | 1,091.99 | 3/4 | 726.23 | 3/4 | 363.09 | 3/4 | 39.86  | 3/4 |        | 3/4 |        |    | 3/4    |
| 6   | 2,183.22 | 6   | 1,816.64 | 6   | 1,450.12 | 6   | 1,084.38 | 6   | 718.60 | 6   | 355.87 | 6   | 34.36  | 6   |        | 6   |        |    | 6      |
| 1/4 | 2,175.59 | 1/4 | 1,809.00 | 1/4 | 1,442.51 | 1/4 | 1,076.77 | 1/4 | 710.96 | 1/4 | 348.66 | 1/4 | 28.85  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,167.95 | 1/2 | 1,801.36 | 1/2 | 1,434.90 | 1/2 | 1,069.17 | 1/2 | 703.32 | 1/2 | 341.45 | 1/2 | 23.34  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,160.31 | 3/4 | 1,793.72 | 3/4 | 1,427.29 | 3/4 | 1,061.56 | 3/4 | 695.68 | 3/4 | 334.23 | 3/4 | 17.83  | 3/4 |        | 3/4 |        |    | 3/4    |
| 7   | 2,152.67 | 7   | 1,786.09 | 7   | 1,419.68 | 7   | 1,053.95 | 7   | 688.04 | 7   | 327.10 | 7   | 14.27  | 7   |        | 7   |        |    | 7      |
| 1/4 | 2,145.04 | 1/4 | 1,778.45 | 1/4 | 1,412.07 | 1/4 | 1,046.34 | 1/4 | 680.41 | 1/4 | 319.98 | 1/4 | 10.71  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,137.40 | 1/2 | 1,770.81 | 1/2 | 1,404.46 | 1/2 | 1,038.73 | 1/2 | 672.77 | 1/2 | 312.85 | 1/2 | 7.15   | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,129.76 | 3/4 | 1,763.17 | 3/4 | 1,396.85 | 3/4 | 1,031.12 | 3/4 | 665.13 | 3/4 | 305.72 | 3/4 | 3.59   | 3/4 |        | 3/4 |        |    | 3/4    |
| 8   | 2,122.13 | 8   | 1,755.54 | 8   | 1,389.24 | 8   | 1,023.51 | 8   | 657.49 | 8   | 298.67 | 8   |        | 8   |        | 8   |        |    | 8      |
| 1/4 | 2,114.49 | 1/4 | 1,747.90 | 1/4 | 1,381.63 | 1/4 | 1,015.90 | 1/4 | 649.86 | 1/4 | 291.63 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,106.85 | 1/2 | 1,740.26 | 1/2 | 1,374.02 | 1/2 | 1,008.30 | 1/2 | 642.22 | 1/2 | 284.59 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,099.21 | 3/4 | 1,732.62 | 3/4 | 1,366.41 | 3/4 | 1,000.69 | 3/4 | 634.58 | 3/4 | 277.54 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 9   | 2,091.58 | 9   | 1,724.99 | 9   | 1,358.80 | 9   | 993.08   | 9   | 626.94 | 9   | 270.58 | 9   |        | 9   |        | 9   |        |    | 9      |
| 1/4 | 2,083.94 | 1/4 | 1,717.35 | 1/4 | 1,351.19 | 1/4 | 985.47   | 1/4 | 619.30 | 1/4 | 263.63 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,076.30 | 1/2 | 1,709.71 | 1/2 | 1,343.58 | 1/2 | 977.86   | 1/2 | 611.67 | 1/2 | 256.67 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,068.67 | 3/4 | 1,702.07 | 3/4 | 1,335.97 | 3/4 | 970.25   | 3/4 | 604.03 | 3/4 | 249.71 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 10  | 2,061.03 | 10  | 1,694.44 | 10  | 1,328.36 | 10  | 962.64   | 10  | 596.39 | 10  | 242.83 | 10  |        | 10  |        | 10  |        |    | 10     |
| 1/4 | 2,053.39 | 1/4 | 1,686.80 | 1/4 | 1,320.75 | 1/4 | 955.03   | 1/4 | 588.75 | 1/4 | 235.96 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,045.75 | 1/2 | 1,679.16 | 1/2 | 1,313.14 | 1/2 | 947.43   | 1/2 | 581.11 | 1/2 | 229.09 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,038.12 | 3/4 | 1,671.52 | 3/4 | 1,305.53 | 3/4 | 939.82   | 3/4 | 573.48 | 3/4 | 222.21 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 11  | 2,030.48 | 11  | 1,663.89 | 11  | 1,297.90 | 11  | 932.21   | 11  | 565.84 | 11  | 215.42 | 11  |        | 11  |        | 11  |        |    | 11     |
| 1/4 | 2,022.84 | 1/4 | 1,656.25 | 1/4 | 1,290.28 | 1/4 | 924.60   | 1/4 | 558.20 | 1/4 | 208.63 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,015.20 | 1/2 | 1,648.61 | 1/2 | 1,282.65 | 1/2 | 916.99   | 1/2 | 550.56 | 1/2 | 201.85 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,007.57 | 3/4 | 1,640.97 | 3/4 | 1,275.03 | 3/4 | 909.38   | 3/4 | 542.92 | 3/4 | 195.06 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |

STRAPPED: 03/22/2011 CL - SW  
CALCULATED: 03/23/2011 CL  
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P.O. Box 2092  
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# BARGE "KIRBY 28164"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08 1/4"

| IN  | 0 FT. | IN  | 1 FT. | IN  | 2 FT. | IN  | 3 FT.    | IN  | 4 FT.    | IN  | 5 FT.    | IN  | 6 FT.    | IN  | 7 FT.    | IN  | 8 FT.    | IN  | 9 FT.    |
|-----|-------|-----|-------|-----|-------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 0   |       | 0   |       | 0   |       | 0   |          | 0   | 4,549.61 | 0   | 4,220.42 | 0   | 3,867.40 | 0   | 3,503.62 | 0   | 3,139.82 | 0   | 2,776.02 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |          | 1/4 | 4,543.01 | 1/4 | 4,213.29 | 1/4 | 3,859.84 | 1/4 | 3,496.04 | 1/4 | 3,132.24 | 1/4 | 2,768.44 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |          | 1/2 | 4,536.36 | 1/2 | 4,206.12 | 1/2 | 3,852.26 | 1/2 | 3,488.46 | 1/2 | 3,124.66 | 1/2 | 2,760.86 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |          | 3/4 | 4,529.72 | 3/4 | 4,198.96 | 3/4 | 3,844.68 | 3/4 | 3,480.89 | 3/4 | 3,117.08 | 3/4 | 2,753.28 |
| 1   |       | 1   |       | 1   |       | 1   | 4,847.30 | 1   | 4,523.08 | 1   | 4,191.79 | 1   | 3,837.11 | 1   | 3,473.31 | 1   | 3,109.50 | 1   | 2,745.70 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,841.70 | 1/4 | 4,516.43 | 1/4 | 4,184.63 | 1/4 | 3,829.53 | 1/4 | 3,465.73 | 1/4 | 3,101.93 | 1/4 | 2,738.12 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,834.92 | 1/2 | 4,509.76 | 1/2 | 4,177.42 | 1/2 | 3,821.95 | 1/2 | 3,458.15 | 1/2 | 3,094.35 | 1/2 | 2,730.54 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,828.14 | 3/4 | 4,503.08 | 3/4 | 4,170.22 | 3/4 | 3,814.37 | 3/4 | 3,450.57 | 3/4 | 3,086.77 | 3/4 | 2,722.97 |
| 2   |       | 2   |       | 2   |       | 2   | 4,821.35 | 2   | 4,496.41 | 2   | 4,163.02 | 2   | 3,806.79 | 2   | 3,442.99 | 2   | 3,079.19 | 2   | 2,715.39 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,814.57 | 1/4 | 4,489.73 | 1/4 | 4,155.81 | 1/4 | 3,799.21 | 1/4 | 3,435.41 | 1/4 | 3,071.61 | 1/4 | 2,707.81 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,807.15 | 1/2 | 4,483.02 | 1/2 | 4,148.57 | 1/2 | 3,791.63 | 1/2 | 3,427.83 | 1/2 | 3,064.03 | 1/2 | 2,700.23 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,799.74 | 3/4 | 4,476.31 | 3/4 | 4,141.33 | 3/4 | 3,784.05 | 3/4 | 3,420.25 | 3/4 | 3,056.45 | 3/4 | 2,692.65 |
| 3   |       | 3   |       | 3   |       | 3   | 4,792.32 | 3   | 4,469.60 | 3   | 4,134.09 | 3   | 3,776.47 | 3   | 3,412.67 | 3   | 3,048.87 | 3   | 2,685.07 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,784.90 | 1/4 | 4,462.89 | 1/4 | 4,126.85 | 1/4 | 3,768.90 | 1/4 | 3,405.09 | 1/4 | 3,041.29 | 1/4 | 2,677.49 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,777.41 | 1/2 | 4,456.15 | 1/2 | 4,119.58 | 1/2 | 3,761.32 | 1/2 | 3,397.51 | 1/2 | 3,033.71 | 1/2 | 2,669.91 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,769.92 | 3/4 | 4,449.40 | 3/4 | 4,112.30 | 3/4 | 3,753.74 | 3/4 | 3,389.94 | 3/4 | 3,026.13 | 3/4 | 2,662.33 |
| 4   |       | 4   |       | 4   |       | 4   | 4,762.42 | 4   | 4,442.65 | 4   | 4,105.03 | 4   | 3,746.16 | 4   | 3,382.36 | 4   | 3,018.55 | 4   | 2,654.75 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,754.93 | 1/4 | 4,435.90 | 1/4 | 4,097.75 | 1/4 | 3,738.58 | 1/4 | 3,374.78 | 1/4 | 3,010.98 | 1/4 | 2,647.17 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,747.71 | 1/2 | 4,429.12 | 1/2 | 4,090.45 | 1/2 | 3,731.00 | 1/2 | 3,367.20 | 1/2 | 3,003.40 | 1/2 | 2,639.59 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,740.49 | 3/4 | 4,422.33 | 3/4 | 4,083.14 | 3/4 | 3,723.42 | 3/4 | 3,359.62 | 3/4 | 2,995.82 | 3/4 | 2,632.02 |
| 5   |       | 5   |       | 5   |       | 5   | 4,733.27 | 5   | 4,415.55 | 5   | 4,075.83 | 5   | 3,715.84 | 5   | 3,352.04 | 5   | 2,988.24 | 5   | 2,624.44 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,726.06 | 1/4 | 4,408.77 | 1/4 | 4,068.52 | 1/4 | 3,708.26 | 1/4 | 3,344.46 | 1/4 | 2,980.66 | 1/4 | 2,616.86 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,719.38 | 1/2 | 4,401.94 | 1/2 | 4,061.18 | 1/2 | 3,700.68 | 1/2 | 3,336.88 | 1/2 | 2,973.08 | 1/2 | 2,609.28 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,712.71 | 3/4 | 4,395.12 | 3/4 | 4,053.84 | 3/4 | 3,693.10 | 3/4 | 3,329.30 | 3/4 | 2,965.50 | 3/4 | 2,601.70 |
| 6   |       | 6   |       | 6   |       | 6   | 4,706.04 | 6   | 4,388.30 | 6   | 4,046.49 | 6   | 3,685.52 | 6   | 3,321.72 | 6   | 2,957.92 | 6   | 2,594.12 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,699.37 | 1/4 | 4,381.48 | 1/4 | 4,039.15 | 1/4 | 3,677.94 | 1/4 | 3,314.14 | 1/4 | 2,950.34 | 1/4 | 2,586.54 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,692.95 | 1/2 | 4,374.62 | 1/2 | 4,031.77 | 1/2 | 3,670.37 | 1/2 | 3,306.56 | 1/2 | 2,942.76 | 1/2 | 2,578.96 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,686.52 | 3/4 | 4,367.76 | 3/4 | 4,024.39 | 3/4 | 3,662.79 | 3/4 | 3,298.98 | 3/4 | 2,935.18 | 3/4 | 2,571.38 |
| 7   |       | 7   |       | 7   |       | 7   | 4,680.10 | 7   | 4,360.90 | 7   | 4,017.01 | 7   | 3,655.21 | 7   | 3,291.41 | 7   | 2,927.60 | 7   | 2,563.80 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,673.68 | 1/4 | 4,354.04 | 1/4 | 4,009.63 | 1/4 | 3,647.63 | 1/4 | 3,283.83 | 1/4 | 2,920.02 | 1/4 | 2,556.22 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,667.22 | 1/2 | 4,347.13 | 1/2 | 4,002.22 | 1/2 | 3,640.05 | 1/2 | 3,276.25 | 1/2 | 2,912.45 | 1/2 | 2,548.64 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,660.76 | 3/4 | 4,340.21 | 3/4 | 3,994.80 | 3/4 | 3,632.47 | 3/4 | 3,268.67 | 3/4 | 2,904.87 | 3/4 | 2,541.06 |
| 8   |       | 8   |       | 8   |       | 8   | 4,654.30 | 8   | 4,333.29 | 8   | 3,987.38 | 8   | 3,624.89 | 8   | 3,261.09 | 8   | 2,897.29 | 8   | 2,533.49 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,647.84 | 1/4 | 4,326.38 | 1/4 | 3,979.97 | 1/4 | 3,617.31 | 1/4 | 3,253.51 | 1/4 | 2,889.71 | 1/4 | 2,525.91 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,641.35 | 1/2 | 4,319.38 | 1/2 | 3,972.51 | 1/2 | 3,609.73 | 1/2 | 3,245.93 | 1/2 | 2,882.13 | 1/2 | 2,518.33 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,634.85 | 3/4 | 4,312.38 | 3/4 | 3,965.06 | 3/4 | 3,602.15 | 3/4 | 3,238.35 | 3/4 | 2,874.55 | 3/4 | 2,510.75 |
| 9   |       | 9   |       | 9   |       | 9   | 4,628.35 | 9   | 4,305.39 | 9   | 3,957.61 | 9   | 3,594.57 | 9   | 3,230.77 | 9   | 2,866.97 | 9   | 2,503.17 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,621.86 | 1/4 | 4,298.39 | 1/4 | 3,950.15 | 1/4 | 3,586.99 | 1/4 | 3,223.19 | 1/4 | 2,859.39 | 1/4 | 2,495.59 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,615.32 | 1/2 | 4,291.34 | 1/2 | 3,942.66 | 1/2 | 3,579.42 | 1/2 | 3,215.61 | 1/2 | 2,851.81 | 1/2 | 2,488.01 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,608.79 | 3/4 | 4,284.28 | 3/4 | 3,935.17 | 3/4 | 3,571.84 | 3/4 | 3,208.03 | 3/4 | 2,844.23 | 3/4 | 2,480.43 |
| 10  |       | 10  |       | 10  |       | 10  | 4,602.26 | 10  | 4,277.23 | 10  | 3,927.68 | 10  | 3,564.26 | 10  | 3,200.46 | 10  | 2,836.65 | 10  | 2,472.85 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,595.72 | 1/4 | 4,270.17 | 1/4 | 3,920.19 | 1/4 | 3,556.68 | 1/4 | 3,192.88 | 1/4 | 2,829.07 | 1/4 | 2,465.27 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,589.15 | 1/2 | 4,263.08 | 1/2 | 3,912.66 | 1/2 | 3,549.10 | 1/2 | 3,185.30 | 1/2 | 2,821.50 | 1/2 | 2,457.69 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,582.58 | 3/4 | 4,255.99 | 3/4 | 3,905.13 | 3/4 | 3,541.52 | 3/4 | 3,177.72 | 3/4 | 2,813.92 | 3/4 | 2,450.11 |
| 11  |       | 11  |       | 11  |       | 11  | 4,576.01 | 11  | 4,248.90 | 11  | 3,897.60 | 11  | 3,533.94 | 11  | 3,170.14 | 11  | 2,806.34 | 11  | 2,442.54 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,569.44 | 1/4 | 4,241.81 | 1/4 | 3,890.07 | 1/4 | 3,526.36 | 1/4 | 3,162.56 | 1/4 | 2,798.76 | 1/4 | 2,434.96 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,562.83 | 1/2 | 4,234.68 | 1/2 | 3,882.52 | 1/2 | 3,518.78 | 1/2 | 3,154.98 | 1/2 | 2,791.18 | 1/2 | 2,427.38 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,556.22 | 3/4 | 4,227.55 | 3/4 | 3,874.96 | 3/4 | 3,511.20 | 3/4 | 3,147.40 | 3/4 | 2,783.60 | 3/4 | 2,419.80 |

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'-09" OFF CENTERLINE AND 52'-03" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
 & ANALYSIS, INC.  
 P.O. Box 2092  
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# BARGE "KIRBY 28164"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08 1/4"

| IN  | 10 FT.   | IN  | 11 FT.   | IN  | 12 FT.   | IN  | 13 FT.   | IN  | 14 FT. | IN  | 15 FT. | IN  | 16 FT. | IN  | 17 FT. | IN  | 18 FT. | IN | 19 FT. |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|----|--------|
| 0   | 2,412.22 | 0   | 2,048.42 | 0   | 1,684.60 | 0   | 1,324.67 | 0   | 972.93 | 0   | 613.81 | 0   | 249.96 | 0   |        | 0   |        |    |        |
| 1/4 | 2,404.64 | 1/4 | 2,040.84 | 1/4 | 1,677.02 | 1/4 | 1,317.09 | 1/4 | 965.68 | 1/4 | 606.23 | 1/4 | 242.38 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,397.06 | 1/2 | 2,033.26 | 1/2 | 1,669.44 | 1/2 | 1,309.51 | 1/2 | 958.43 | 1/2 | 598.65 | 1/2 | 234.80 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,389.48 | 3/4 | 2,025.68 | 3/4 | 1,661.86 | 3/4 | 1,301.93 | 3/4 | 951.18 | 3/4 | 591.07 | 3/4 | 227.22 | 3/4 |        | 3/4 |        |    | 3/4    |
| 1   | 2,381.90 | 1   | 2,018.10 | 1   | 1,654.29 | 1   | 1,294.35 | 1   | 943.93 | 1   | 583.49 | 1   | 219.64 | 1   |        | 1   |        |    | 1      |
| 1/4 | 2,374.32 | 1/4 | 2,010.52 | 1/4 | 1,646.71 | 1/4 | 1,286.77 | 1/4 | 936.68 | 1/4 | 575.91 | 1/4 | 212.06 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,366.74 | 1/2 | 2,002.94 | 1/2 | 1,639.13 | 1/2 | 1,279.19 | 1/2 | 929.41 | 1/2 | 568.33 | 1/2 | 204.48 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,359.16 | 3/4 | 1,995.36 | 3/4 | 1,631.55 | 3/4 | 1,271.61 | 3/4 | 922.15 | 3/4 | 560.75 | 3/4 | 196.90 | 3/4 |        | 3/4 |        |    | 3/4    |
| 2   | 2,351.58 | 2   | 1,987.78 | 2   | 1,623.97 | 2   | 1,264.03 | 2   | 914.88 | 2   | 553.17 | 2   | 189.33 | 2   |        | 2   |        |    | 2      |
| 1/4 | 2,344.01 | 1/4 | 1,980.20 | 1/4 | 1,616.39 | 1/4 | 1,256.45 | 1/4 | 907.62 | 1/4 | 545.59 | 1/4 | 181.75 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,336.43 | 1/2 | 1,972.62 | 1/2 | 1,608.81 | 1/2 | 1,249.02 | 1/2 | 900.34 | 1/2 | 538.01 | 1/2 | 174.18 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,328.85 | 3/4 | 1,965.04 | 3/4 | 1,601.23 | 3/4 | 1,241.59 | 3/4 | 893.06 | 3/4 | 530.43 | 3/4 | 166.61 | 3/4 |        | 3/4 |        |    | 3/4    |
| 3   | 2,321.27 | 3   | 1,957.46 | 3   | 1,593.65 | 3   | 1,234.17 | 3   | 885.78 | 3   | 522.85 | 3   | 159.04 | 3   |        | 3   |        |    | 3      |
| 1/4 | 2,313.69 | 1/4 | 1,949.88 | 1/4 | 1,586.07 | 1/4 | 1,226.74 | 1/4 | 878.50 | 1/4 | 515.27 | 1/4 | 151.47 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,306.11 | 1/2 | 1,942.30 | 1/2 | 1,578.49 | 1/2 | 1,219.47 | 1/2 | 871.07 | 1/2 | 507.69 | 1/2 | 143.91 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,298.53 | 3/4 | 1,934.72 | 3/4 | 1,570.91 | 3/4 | 1,212.20 | 3/4 | 863.64 | 3/4 | 500.11 | 3/4 | 136.35 | 3/4 |        | 3/4 |        |    | 3/4    |
| 4   | 2,290.95 | 4   | 1,927.14 | 4   | 1,563.33 | 4   | 1,204.94 | 4   | 856.22 | 4   | 492.53 | 4   | 128.79 | 4   |        | 4   |        |    | 4      |
| 1/4 | 2,283.37 | 1/4 | 1,919.56 | 1/4 | 1,555.75 | 1/4 | 1,197.67 | 1/4 | 848.79 | 1/4 | 484.94 | 1/4 | 121.23 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,275.79 | 1/2 | 1,911.99 | 1/2 | 1,548.25 | 1/2 | 1,190.42 | 1/2 | 841.21 | 1/2 | 477.36 | 1/2 | 113.69 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,268.21 | 3/4 | 1,904.41 | 3/4 | 1,540.76 | 3/4 | 1,183.17 | 3/4 | 833.63 | 3/4 | 469.78 | 3/4 | 106.15 | 3/4 |        | 3/4 |        |    | 3/4    |
| 5   | 2,260.63 | 5   | 1,896.83 | 5   | 1,533.26 | 5   | 1,175.92 | 5   | 826.05 | 5   | 462.20 | 5   | 98.62  | 5   |        | 5   |        |    | 5      |
| 1/4 | 2,253.06 | 1/4 | 1,889.25 | 1/4 | 1,525.76 | 1/4 | 1,168.66 | 1/4 | 818.47 | 1/4 | 454.62 | 1/4 | 91.08  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,245.48 | 1/2 | 1,881.67 | 1/2 | 1,518.34 | 1/2 | 1,161.42 | 1/2 | 810.89 | 1/2 | 447.04 | 1/2 | 83.57  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,237.90 | 3/4 | 1,874.09 | 3/4 | 1,510.92 | 3/4 | 1,154.17 | 3/4 | 803.31 | 3/4 | 439.46 | 3/4 | 76.07  | 3/4 |        | 3/4 |        |    | 3/4    |
| 6   | 2,230.32 | 6   | 1,866.51 | 6   | 1,503.51 | 6   | 1,146.92 | 6   | 795.73 | 6   | 431.88 | 6   | 68.56  | 6   |        | 6   |        |    | 6      |
| 1/4 | 2,222.74 | 1/4 | 1,858.93 | 1/4 | 1,496.09 | 1/4 | 1,139.67 | 1/4 | 788.15 | 1/4 | 424.30 | 1/4 | 61.06  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,215.16 | 1/2 | 1,851.35 | 1/2 | 1,488.67 | 1/2 | 1,132.42 | 1/2 | 780.57 | 1/2 | 416.72 | 1/2 | 54.16  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,207.58 | 3/4 | 1,843.77 | 3/4 | 1,481.26 | 3/4 | 1,125.17 | 3/4 | 772.99 | 3/4 | 409.14 | 3/4 | 47.26  | 3/4 |        | 3/4 |        |    | 3/4    |
| 7   | 2,200.00 | 7   | 1,836.19 | 7   | 1,473.84 | 7   | 1,117.92 | 7   | 765.41 | 7   | 401.56 | 7   | 40.36  | 7   |        | 7   |        |    | 7      |
| 1/4 | 2,192.42 | 1/4 | 1,828.61 | 1/4 | 1,466.42 | 1/4 | 1,110.67 | 1/4 | 757.83 | 1/4 | 393.98 | 1/4 | 33.46  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,184.84 | 1/2 | 1,821.03 | 1/2 | 1,459.00 | 1/2 | 1,103.42 | 1/2 | 750.25 | 1/2 | 386.40 | 1/2 | 28.41  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,177.26 | 3/4 | 1,813.45 | 3/4 | 1,451.59 | 3/4 | 1,096.17 | 3/4 | 742.67 | 3/4 | 378.82 | 3/4 | 23.36  | 3/4 |        | 3/4 |        |    | 3/4    |
| 8   | 2,169.68 | 8   | 1,805.87 | 8   | 1,444.17 | 8   | 1,088.92 | 8   | 735.09 | 8   | 371.24 | 8   | 18.31  | 8   |        | 8   |        |    | 8      |
| 1/4 | 2,162.10 | 1/4 | 1,798.29 | 1/4 | 1,436.75 | 1/4 | 1,081.67 | 1/4 | 727.51 | 1/4 | 363.66 | 1/4 | 13.26  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,154.53 | 1/2 | 1,790.71 | 1/2 | 1,429.33 | 1/2 | 1,074.42 | 1/2 | 719.93 | 1/2 | 356.08 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,146.95 | 3/4 | 1,783.14 | 3/4 | 1,421.92 | 3/4 | 1,067.17 | 3/4 | 712.35 | 3/4 | 348.50 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 9   | 2,139.37 | 9   | 1,775.56 | 9   | 1,414.50 | 9   | 1,059.93 | 9   | 704.77 | 9   | 340.92 | 9   |        | 9   |        | 9   |        |    | 9      |
| 1/4 | 2,131.79 | 1/4 | 1,767.98 | 1/4 | 1,407.08 | 1/4 | 1,052.68 | 1/4 | 697.19 | 1/4 | 333.34 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,124.21 | 1/2 | 1,760.40 | 1/2 | 1,399.66 | 1/2 | 1,045.43 | 1/2 | 689.61 | 1/2 | 325.76 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,116.63 | 3/4 | 1,752.82 | 3/4 | 1,392.25 | 3/4 | 1,038.18 | 3/4 | 682.03 | 3/4 | 318.18 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 10  | 2,109.05 | 10  | 1,745.24 | 10  | 1,384.83 | 10  | 1,030.93 | 10  | 674.45 | 10  | 310.60 | 10  |        | 10  |        | 10  |        |    | 10     |
| 1/4 | 2,101.47 | 1/4 | 1,737.66 | 1/4 | 1,377.41 | 1/4 | 1,023.68 | 1/4 | 666.87 | 1/4 | 303.02 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,093.89 | 1/2 | 1,730.08 | 1/2 | 1,369.91 | 1/2 | 1,016.43 | 1/2 | 659.29 | 1/2 | 295.44 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,086.31 | 3/4 | 1,722.50 | 3/4 | 1,362.41 | 3/4 | 1,009.18 | 3/4 | 651.71 | 3/4 | 287.86 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 11  | 2,078.73 | 11  | 1,714.92 | 11  | 1,354.91 | 11  | 1,001.93 | 11  | 644.13 | 11  | 280.28 | 11  |        | 11  |        | 11  |        |    | 11     |
| 1/4 | 2,071.15 | 1/4 | 1,707.34 | 1/4 | 1,347.41 | 1/4 | 994.68   | 1/4 | 636.55 | 1/4 | 272.70 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,063.58 | 1/2 | 1,699.76 | 1/2 | 1,339.83 | 1/2 | 987.43   | 1/2 | 628.97 | 1/2 | 265.12 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,056.00 | 3/4 | 1,692.18 | 3/4 | 1,332.25 | 3/4 | 980.18   | 3/4 | 621.39 | 3/4 | 257.54 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |

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PRINTED: 03/23/2011 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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# BARGE "KIRBY 28164"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-07 1/2"

| IN  | 0 FT. | IN  | 1 FT. | IN  | 2 FT. | IN  | 3 FT. | IN  | 4 FT.    | IN  | 5 FT.    | IN  | 6 FT.    | IN  | 7 FT.    | IN  | 8 FT.    | IN  | 9 FT.    |
|-----|-------|-----|-------|-----|-------|-----|-------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 0   |       | 0   |       | 0   |       | 0   |       | 0   | 4,545.40 | 0   | 4,214.64 | 0   | 3,860.36 | 0   | 3,496.56 | 0   | 3,132.76 | 0   | 2,768.96 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,538.76 | 1/4 | 4,207.47 | 1/4 | 3,852.78 | 1/4 | 3,488.98 | 1/4 | 3,125.18 | 1/4 | 2,761.38 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,857.40 | 1/2 | 4,532.12 | 1/2 | 4,200.31 | 1/2 | 3,845.21 | 1/2 | 3,481.41 | 1/2 | 3,117.60 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,850.61 | 3/4 | 4,525.44 | 3/4 | 4,193.10 | 3/4 | 3,837.63 | 3/4 | 3,473.83 | 3/4 | 3,110.02 |
| 1   | 1     | 1   | 1     | 1   | 1     | 1   | 1     | 1   | 4,843.83 | 1   | 4,518.77 | 1   | 4,185.90 | 1   | 3,830.05 | 1   | 3,466.25 | 1   | 3,102.45 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,837.04 | 1/4 | 4,512.09 | 1/4 | 4,178.70 | 1/4 | 3,822.47 | 1/4 | 3,458.67 | 1/4 | 3,094.87 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,830.26 | 1/2 | 4,505.42 | 1/2 | 4,171.49 | 1/2 | 3,814.89 | 1/2 | 3,451.09 | 1/2 | 3,087.29 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,822.84 | 3/4 | 4,498.71 | 3/4 | 4,164.25 | 3/4 | 3,807.31 | 3/4 | 3,443.51 | 3/4 | 3,079.71 |
| 2   | 2     | 2   | 2     | 2   | 2     | 2   | 2     | 2   | 4,815.42 | 2   | 4,492.00 | 2   | 4,157.01 | 2   | 3,799.73 | 2   | 3,435.93 | 2   | 3,072.13 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,808.01 | 1/4 | 4,485.29 | 1/4 | 4,149.77 | 1/4 | 3,792.15 | 1/4 | 3,428.35 | 1/4 | 3,064.55 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,800.59 | 1/2 | 4,478.57 | 1/2 | 4,142.53 | 1/2 | 3,784.57 | 1/2 | 3,420.77 | 1/2 | 3,056.97 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,793.10 | 3/4 | 4,471.83 | 3/4 | 4,135.26 | 3/4 | 3,776.99 | 3/4 | 3,413.19 | 3/4 | 3,049.39 |
| 3   | 3     | 3   | 3     | 3   | 3     | 3   | 3     | 3   | 4,785.60 | 3   | 4,465.08 | 3   | 4,127.98 | 3   | 3,769.42 | 3   | 3,405.61 | 3   | 3,041.81 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,778.11 | 1/4 | 4,458.33 | 1/4 | 4,120.71 | 1/4 | 3,761.84 | 1/4 | 3,398.03 | 1/4 | 3,034.23 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,770.61 | 1/2 | 4,451.58 | 1/2 | 4,113.43 | 1/2 | 3,754.26 | 1/2 | 3,390.46 | 1/2 | 3,026.65 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,763.40 | 3/4 | 4,444.80 | 3/4 | 4,106.12 | 3/4 | 3,746.68 | 3/4 | 3,382.88 | 3/4 | 3,019.07 |
| 4   | 4     | 4   | 4     | 4   | 4     | 4   | 4     | 4   | 4,756.18 | 4   | 4,438.02 | 4   | 4,098.82 | 4   | 3,739.10 | 4   | 3,375.30 | 4   | 3,011.50 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,748.96 | 1/4 | 4,431.23 | 1/4 | 4,091.51 | 1/4 | 3,731.52 | 1/4 | 3,367.72 | 1/4 | 3,003.92 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,741.74 | 1/2 | 4,424.45 | 1/2 | 4,084.20 | 1/2 | 3,723.94 | 1/2 | 3,360.14 | 1/2 | 2,996.34 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,735.07 | 3/4 | 4,417.63 | 3/4 | 4,076.86 | 3/4 | 3,716.36 | 3/4 | 3,352.56 | 3/4 | 2,988.76 |
| 5   | 5     | 5   | 5     | 5   | 5     | 5   | 5     | 5   | 4,728.40 | 5   | 4,410.80 | 5   | 4,069.52 | 5   | 3,708.78 | 5   | 3,344.98 | 5   | 2,981.18 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,721.73 | 1/4 | 4,403.98 | 1/4 | 4,062.17 | 1/4 | 3,701.20 | 1/4 | 3,337.40 | 1/4 | 2,973.60 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,715.06 | 1/2 | 4,397.16 | 1/2 | 4,054.83 | 1/2 | 3,693.62 | 1/2 | 3,329.82 | 1/2 | 2,966.02 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,708.63 | 3/4 | 4,390.30 | 3/4 | 4,047.45 | 3/4 | 3,686.04 | 3/4 | 3,322.24 | 3/4 | 2,958.44 |
| 6   | 6     | 6   | 6     | 6   | 6     | 6   | 6     | 6   | 4,702.21 | 6   | 4,383.44 | 6   | 4,040.07 | 6   | 3,678.46 | 6   | 3,314.66 | 6   | 2,950.86 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,695.79 | 1/4 | 4,376.58 | 1/4 | 4,032.69 | 1/4 | 3,670.89 | 1/4 | 3,307.08 | 1/4 | 2,943.28 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,689.37 | 1/2 | 4,369.73 | 1/2 | 4,025.31 | 1/2 | 3,663.31 | 1/2 | 3,299.50 | 1/2 | 2,935.70 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,682.91 | 3/4 | 4,362.81 | 3/4 | 4,017.90 | 3/4 | 3,655.73 | 3/4 | 3,291.93 | 3/4 | 2,928.12 |
| 7   | 7     | 7   | 7     | 7   | 7     | 7   | 7     | 7   | 4,676.45 | 7   | 4,355.89 | 7   | 4,010.48 | 7   | 3,648.15 | 7   | 3,284.35 | 7   | 2,920.54 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,669.99 | 1/4 | 4,348.97 | 1/4 | 4,003.06 | 1/4 | 3,640.57 | 1/4 | 3,276.77 | 1/4 | 2,912.97 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,663.53 | 1/2 | 4,342.06 | 1/2 | 3,995.65 | 1/2 | 3,632.99 | 1/2 | 3,269.19 | 1/2 | 2,905.39 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,657.03 | 3/4 | 4,335.06 | 3/4 | 3,988.19 | 3/4 | 3,625.41 | 3/4 | 3,261.61 | 3/4 | 2,897.81 |
| 8   | 8     | 8   | 8     | 8   | 8     | 8   | 8     | 8   | 4,650.53 | 8   | 4,328.06 | 8   | 3,980.74 | 8   | 3,617.83 | 8   | 3,254.03 | 8   | 2,890.23 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,644.04 | 1/4 | 4,321.07 | 1/4 | 3,973.28 | 1/4 | 3,610.25 | 1/4 | 3,246.45 | 1/4 | 2,882.65 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,637.54 | 1/2 | 4,314.07 | 1/2 | 3,965.83 | 1/2 | 3,602.67 | 1/2 | 3,238.87 | 1/2 | 2,875.07 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,631.01 | 3/4 | 4,307.02 | 3/4 | 3,958.34 | 3/4 | 3,595.09 | 3/4 | 3,231.29 | 3/4 | 2,867.49 |
| 9   | 9     | 9   | 9     | 9   | 9     | 9   | 9     | 9   | 4,624.47 | 9   | 4,299.96 | 9   | 3,950.85 | 9   | 3,587.51 | 9   | 3,223.71 | 9   | 2,859.91 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,617.94 | 1/4 | 4,292.91 | 1/4 | 3,943.36 | 1/4 | 3,579.94 | 1/4 | 3,216.13 | 1/4 | 2,852.33 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,611.41 | 1/2 | 4,285.85 | 1/2 | 3,935.87 | 1/2 | 3,572.36 | 1/2 | 3,208.55 | 1/2 | 2,844.75 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,604.84 | 3/4 | 4,278.76 | 3/4 | 3,928.34 | 3/4 | 3,564.78 | 3/4 | 3,200.98 | 3/4 | 2,837.17 |
| 10  | 10    | 10  | 10    | 10  | 10    | 10  | 10    | 10  | 4,598.26 | 10  | 4,271.67 | 10  | 3,920.81 | 10  | 3,557.20 | 10  | 3,193.40 | 10  | 2,829.59 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,591.69 | 1/4 | 4,264.58 | 1/4 | 3,913.28 | 1/4 | 3,549.62 | 1/4 | 3,185.82 | 1/4 | 2,822.02 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,585.12 | 1/2 | 4,257.49 | 1/2 | 3,905.75 | 1/2 | 3,542.04 | 1/2 | 3,178.24 | 1/2 | 2,814.44 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,578.51 | 3/4 | 4,250.36 | 3/4 | 3,898.19 | 3/4 | 3,534.46 | 3/4 | 3,170.66 | 3/4 | 2,806.86 |
| 11  | 11    | 11  | 11    | 11  | 11    | 11  | 11    | 11  | 4,571.91 | 11  | 4,243.23 | 11  | 3,890.63 | 11  | 3,526.88 | 11  | 3,163.08 | 11  | 2,799.28 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,565.30 | 1/4 | 4,236.10 | 1/4 | 3,883.08 | 1/4 | 3,519.30 | 1/4 | 3,155.50 | 1/4 | 2,791.70 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,558.69 | 1/2 | 4,228.97 | 1/2 | 3,875.52 | 1/2 | 3,511.72 | 1/2 | 3,147.92 | 1/2 | 2,784.12 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,552.05 | 3/4 | 4,221.80 | 3/4 | 3,867.94 | 3/4 | 3,504.14 | 3/4 | 3,140.34 | 3/4 | 2,776.54 |

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'-09" OFF CENTERLINE AND 52'-03" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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





# BARGE "KIRBY 28164"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-07 1/2"

| IN  | 10 FT.   | IN  | 11 FT.   | IN  | 12 FT.   | IN  | 13 FT.   | IN  | 14 FT. | IN  | 15 FT. | IN  | 16 FT. | IN  | 17 FT. | IN  | 18 FT. | IN | 19 FT. |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|----|--------|
| 0   | 2,405.16 | 0   | 2,041.36 | 0   | 1,677.54 | 0   | 1,317.61 | 0   | 954.80 | 0   | 591.07 | 0   | 227.22 | 0   |        | 0   |        |    |        |
| 1/4 | 2,397.58 | 1/4 | 2,033.78 | 1/4 | 1,669.96 | 1/4 | 1,310.03 | 1/4 | 947.25 | 1/4 | 583.49 | 1/4 | 219.64 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,390.00 | 1/2 | 2,026.20 | 1/2 | 1,662.38 | 1/2 | 1,302.45 | 1/2 | 939.69 | 1/2 | 575.91 | 1/2 | 212.06 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,382.42 | 3/4 | 2,018.62 | 3/4 | 1,654.81 | 3/4 | 1,294.87 | 3/4 | 932.13 | 3/4 | 568.33 | 3/4 | 204.48 | 3/4 |        | 3/4 |        |    | 3/4    |
| 1   | 2,374.84 | 1   | 2,011.04 | 1   | 1,647.23 | 1   | 1,287.29 | 1   | 924.56 | 1   | 560.75 | 1   | 196.90 | 1   |        | 1   |        |    | 1      |
| 1/4 | 2,367.26 | 1/4 | 2,003.46 | 1/4 | 1,639.65 | 1/4 | 1,279.71 | 1/4 | 916.99 | 1/4 | 553.17 | 1/4 | 189.33 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,359.68 | 1/2 | 1,995.88 | 1/2 | 1,632.07 | 1/2 | 1,272.13 | 1/2 | 909.42 | 1/2 | 545.59 | 1/2 | 181.75 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,352.10 | 3/4 | 1,988.30 | 3/4 | 1,624.49 | 3/4 | 1,264.55 | 3/4 | 901.84 | 3/4 | 538.01 | 3/4 | 174.18 | 3/4 |        | 3/4 |        |    | 3/4    |
| 2   | 2,344.53 | 2   | 1,980.72 | 2   | 1,616.91 | 2   | 1,256.97 | 2   | 894.26 | 2   | 530.43 | 2   | 166.61 | 2   |        | 2   |        |    | 2      |
| 1/4 | 2,336.95 | 1/4 | 1,973.14 | 1/4 | 1,609.33 | 1/4 | 1,249.39 | 1/4 | 886.68 | 1/4 | 522.85 | 1/4 | 159.04 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,329.37 | 1/2 | 1,965.56 | 1/2 | 1,601.75 | 1/2 | 1,241.81 | 1/2 | 879.10 | 1/2 | 515.27 | 1/2 | 151.47 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,321.79 | 3/4 | 1,957.98 | 3/4 | 1,594.17 | 3/4 | 1,234.24 | 3/4 | 871.52 | 3/4 | 507.69 | 3/4 | 143.91 | 3/4 |        | 3/4 |        |    | 3/4    |
| 3   | 2,314.21 | 3   | 1,950.40 | 3   | 1,586.59 | 3   | 1,226.68 | 3   | 863.94 | 3   | 500.11 | 3   | 136.35 | 3   |        | 3   |        |    | 3      |
| 1/4 | 2,306.63 | 1/4 | 1,942.82 | 1/4 | 1,579.01 | 1/4 | 1,219.11 | 1/4 | 856.36 | 1/4 | 492.53 | 1/4 | 128.79 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,299.05 | 1/2 | 1,935.24 | 1/2 | 1,571.43 | 1/2 | 1,211.54 | 1/2 | 848.78 | 1/2 | 484.94 | 1/2 | 121.23 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,291.47 | 3/4 | 1,927.66 | 3/4 | 1,563.85 | 3/4 | 1,203.99 | 3/4 | 841.21 | 3/4 | 477.36 | 3/4 | 113.69 | 3/4 |        | 3/4 |        |    | 3/4    |
| 4   | 2,283.89 | 4   | 1,920.08 | 4   | 1,556.27 | 4   | 1,196.44 | 4   | 833.63 | 4   | 469.78 | 4   | 106.15 | 4   |        | 4   |        |    | 4      |
| 1/4 | 2,276.31 | 1/4 | 1,912.51 | 1/4 | 1,548.69 | 1/4 | 1,188.88 | 1/4 | 826.05 | 1/4 | 462.20 | 1/4 | 98.62  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,268.73 | 1/2 | 1,904.93 | 1/2 | 1,541.11 | 1/2 | 1,181.33 | 1/2 | 818.47 | 1/2 | 454.62 | 1/2 | 91.08  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,261.15 | 3/4 | 1,897.35 | 3/4 | 1,533.54 | 3/4 | 1,173.78 | 3/4 | 810.89 | 3/4 | 447.04 | 3/4 | 83.57  | 3/4 |        | 3/4 |        |    | 3/4    |
| 5   | 2,253.58 | 5   | 1,889.77 | 5   | 1,526.00 | 5   | 1,166.23 | 5   | 803.31 | 5   | 439.46 | 5   | 76.07  | 5   |        | 5   |        |    | 5      |
| 1/4 | 2,246.00 | 1/4 | 1,882.19 | 1/4 | 1,518.41 | 1/4 | 1,158.68 | 1/4 | 795.73 | 1/4 | 431.88 | 1/4 | 68.56  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,238.42 | 1/2 | 1,874.61 | 1/2 | 1,510.83 | 1/2 | 1,151.13 | 1/2 | 788.15 | 1/2 | 424.30 | 1/2 | 61.06  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,230.84 | 3/4 | 1,867.03 | 3/4 | 1,503.25 | 3/4 | 1,143.58 | 3/4 | 780.57 | 3/4 | 416.72 | 3/4 | 54.16  | 3/4 |        | 3/4 |        |    | 3/4    |
| 6   | 2,223.26 | 6   | 1,859.45 | 6   | 1,495.67 | 6   | 1,136.03 | 6   | 772.99 | 6   | 409.14 | 6   | 47.26  | 6   |        | 6   |        |    | 6      |
| 1/4 | 2,215.68 | 1/4 | 1,851.87 | 1/4 | 1,488.09 | 1/4 | 1,128.47 | 1/4 | 765.41 | 1/4 | 401.56 | 1/4 | 40.36  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,208.10 | 1/2 | 1,844.29 | 1/2 | 1,480.51 | 1/2 | 1,120.92 | 1/2 | 757.83 | 1/2 | 393.98 | 1/2 | 33.46  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,200.52 | 3/4 | 1,836.71 | 3/4 | 1,472.93 | 3/4 | 1,113.37 | 3/4 | 750.25 | 3/4 | 386.40 | 3/4 | 28.41  | 3/4 |        | 3/4 |        |    | 3/4    |
| 7   | 2,192.94 | 7   | 1,829.13 | 7   | 1,465.35 | 7   | 1,105.82 | 7   | 742.67 | 7   | 378.82 | 7   | 23.36  | 7   |        | 7   |        |    | 7      |
| 1/4 | 2,185.36 | 1/4 | 1,821.55 | 1/4 | 1,457.77 | 1/4 | 1,098.27 | 1/4 | 735.09 | 1/4 | 371.24 | 1/4 | 18.31  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,177.78 | 1/2 | 1,813.97 | 1/2 | 1,450.19 | 1/2 | 1,090.72 | 1/2 | 727.51 | 1/2 | 363.66 | 1/2 | 13.26  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,170.20 | 3/4 | 1,806.39 | 3/4 | 1,442.61 | 3/4 | 1,083.17 | 3/4 | 719.93 | 3/4 | 356.08 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 8   | 2,162.62 | 8   | 1,798.81 | 8   | 1,435.03 | 8   | 1,075.62 | 8   | 712.35 | 8   | 348.50 | 8   |        | 8   |        | 8   |        |    | 8      |
| 1/4 | 2,155.05 | 1/4 | 1,791.23 | 1/4 | 1,427.45 | 1/4 | 1,068.07 | 1/4 | 704.77 | 1/4 | 340.92 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,147.47 | 1/2 | 1,783.66 | 1/2 | 1,419.87 | 1/2 | 1,060.52 | 1/2 | 697.19 | 1/2 | 333.34 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,139.89 | 3/4 | 1,776.08 | 3/4 | 1,412.29 | 3/4 | 1,052.97 | 3/4 | 689.61 | 3/4 | 325.76 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 9   | 2,132.31 | 9   | 1,768.50 | 9   | 1,404.71 | 9   | 1,045.41 | 9   | 682.03 | 9   | 318.18 | 9   |        | 9   |        | 9   |        |    | 9      |
| 1/4 | 2,124.73 | 1/4 | 1,760.92 | 1/4 | 1,400.51 | 1/4 | 1,037.86 | 1/4 | 674.45 | 1/4 | 310.60 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,117.15 | 1/2 | 1,753.34 | 1/2 | 1,393.09 | 1/2 | 1,030.31 | 1/2 | 666.87 | 1/2 | 303.02 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,109.57 | 3/4 | 1,745.76 | 3/4 | 1,385.59 | 3/4 | 1,022.76 | 3/4 | 659.29 | 3/4 | 295.44 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 10  | 2,101.99 | 10  | 1,738.18 | 10  | 1,378.09 | 10  | 1,015.21 | 10  | 651.71 | 10  | 287.86 | 10  |        | 10  |        | 10  |        |    | 10     |
| 1/4 | 2,094.41 | 1/4 | 1,730.60 | 1/4 | 1,370.59 | 1/4 | 1,007.66 | 1/4 | 644.13 | 1/4 | 280.28 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,086.83 | 1/2 | 1,723.02 | 1/2 | 1,363.09 | 1/2 | 1,000.11 | 1/2 | 636.55 | 1/2 | 272.70 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,079.25 | 3/4 | 1,715.44 | 3/4 | 1,355.51 | 3/4 | 992.56   | 3/4 | 628.97 | 3/4 | 265.12 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 11  | 2,071.67 | 11  | 1,707.86 | 11  | 1,347.93 | 11  | 985.01   | 11  | 621.39 | 11  | 257.54 | 11  |        | 11  |        | 11  |        |    | 11     |
| 1/4 | 2,064.10 | 1/4 | 1,700.28 | 1/4 | 1,340.35 | 1/4 | 977.46   | 1/4 | 613.81 | 1/4 | 249.96 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,056.52 | 1/2 | 1,692.70 | 1/2 | 1,332.77 | 1/2 | 969.91   | 1/2 | 606.23 | 1/2 | 242.38 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,048.94 | 3/4 | 1,685.12 | 3/4 | 1,325.19 | 3/4 | 962.35   | 3/4 | 598.65 | 3/4 | 234.80 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |

STRAPPED: 03/22/2011 CL - SW  
CALCULATED: 03/23/2011 CL  
PRINTED: 03/23/2011 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



# BARGE "KIRBY 28164"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 1/4"

| IN  | 0 FT. | IN  | 1 FT. | IN  | 2 FT. | IN  | 3 FT.    | IN  | 4 FT.    | IN  | 5 FT.    | IN  | 6 FT.    | IN  | 7 FT.    | IN  | 8 FT.    | IN  | 9 FT.    |
|-----|-------|-----|-------|-----|-------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 0   |       | 0   |       | 0   |       | 0   | 4,458.65 | 0   | 4,203.05 | 0   | 3,941.46 | 0   | 3,666.15 | 0   | 3,383.30 | 0   | 3,019.92 | 0   | 2,656.12 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,453.91 | 1/4 | 4,197.76 | 1/4 | 3,935.84 | 1/4 | 3,660.32 | 1/4 | 3,376.58 | 1/4 | 3,012.34 | 1/4 | 2,648.55 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,448.87 | 1/2 | 4,192.45 | 1/2 | 3,930.20 | 1/2 | 3,654.48 | 1/2 | 3,368.98 | 1/2 | 3,004.76 | 1/2 | 2,640.97 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,443.83 | 3/4 | 4,187.13 | 3/4 | 3,924.57 | 3/4 | 3,648.64 | 3/4 | 3,361.38 | 3/4 | 2,997.18 | 3/4 | 2,633.39 |
| 1   |       | 1   |       | 1   |       | 1   | 4,438.79 | 1   | 4,181.82 | 1   | 3,918.93 | 1   | 3,642.80 | 1   | 3,353.79 | 1   | 2,989.60 | 1   | 2,625.81 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,433.75 | 1/4 | 4,176.51 | 1/4 | 3,913.30 | 1/4 | 3,636.96 | 1/4 | 3,346.19 | 1/4 | 2,982.03 | 1/4 | 2,618.23 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,428.08 | 1/2 | 4,171.18 | 1/2 | 3,907.64 | 1/2 | 3,631.13 | 1/2 | 3,338.59 | 1/2 | 2,974.45 | 1/2 | 2,610.65 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,422.40 | 3/4 | 4,165.84 | 3/4 | 3,901.99 | 3/4 | 3,625.29 | 3/4 | 3,330.99 | 3/4 | 2,966.87 | 3/4 | 2,603.07 |
| 2   |       | 2   |       | 2   |       | 2   | 4,416.73 | 2   | 4,160.51 | 2   | 3,896.33 | 2   | 3,619.45 | 2   | 3,323.39 | 2   | 2,959.29 | 2   | 2,595.49 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,411.05 | 1/4 | 4,155.18 | 1/4 | 3,890.68 | 1/4 | 3,613.61 | 1/4 | 3,315.79 | 1/4 | 2,951.71 | 1/4 | 2,587.91 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,405.30 | 1/2 | 4,149.83 | 1/2 | 3,885.00 | 1/2 | 3,607.78 | 1/2 | 3,308.19 | 1/2 | 2,944.13 | 1/2 | 2,580.33 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,399.55 | 3/4 | 4,144.48 | 3/4 | 3,879.33 | 3/4 | 3,601.94 | 3/4 | 3,300.59 | 3/4 | 2,936.55 | 3/4 | 2,572.75 |
| 3   |       | 3   |       | 3   |       | 3   | 4,393.79 | 3   | 4,139.13 | 3   | 3,873.65 | 3   | 3,596.10 | 3   | 3,292.99 | 3   | 2,928.97 | 3   | 2,565.18 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,388.04 | 1/4 | 4,133.78 | 1/4 | 3,867.98 | 1/4 | 3,590.26 | 1/4 | 3,285.39 | 1/4 | 2,921.39 | 1/4 | 2,557.60 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,382.44 | 1/2 | 4,128.40 | 1/2 | 3,862.29 | 1/2 | 3,584.43 | 1/2 | 3,277.79 | 1/2 | 2,913.81 | 1/2 | 2,550.02 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,376.83 | 3/4 | 4,123.03 | 3/4 | 3,856.60 | 3/4 | 3,578.59 | 3/4 | 3,270.20 | 3/4 | 2,906.23 | 3/4 | 2,542.44 |
| 4   |       | 4   |       | 4   |       | 4   | 4,371.23 | 4   | 4,117.66 | 4   | 3,850.90 | 4   | 3,572.75 | 4   | 3,262.60 | 4   | 2,898.66 | 4   | 2,534.86 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,365.62 | 1/4 | 4,112.29 | 1/4 | 3,845.21 | 1/4 | 3,566.91 | 1/4 | 3,255.00 | 1/4 | 2,891.08 | 1/4 | 2,527.28 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,360.31 | 1/2 | 4,106.90 | 1/2 | 3,839.50 | 1/2 | 3,561.07 | 1/2 | 3,247.40 | 1/2 | 2,883.50 | 1/2 | 2,519.70 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,355.00 | 3/4 | 4,101.51 | 3/4 | 3,833.79 | 3/4 | 3,555.24 | 3/4 | 3,239.80 | 3/4 | 2,875.92 | 3/4 | 2,512.12 |
| 5   |       | 5   |       | 5   |       | 5   | 4,349.69 | 5   | 4,096.12 | 5   | 3,828.08 | 5   | 3,549.40 | 5   | 3,232.20 | 5   | 2,868.34 | 5   | 2,504.54 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,344.38 | 1/4 | 4,090.72 | 1/4 | 3,822.37 | 1/4 | 3,543.56 | 1/4 | 3,224.60 | 1/4 | 2,860.76 | 1/4 | 2,496.96 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,339.20 | 1/2 | 4,085.31 | 1/2 | 3,816.64 | 1/2 | 3,537.72 | 1/2 | 3,217.01 | 1/2 | 2,853.18 | 1/2 | 2,489.38 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,334.03 | 3/4 | 4,079.90 | 3/4 | 3,810.91 | 3/4 | 3,531.89 | 3/4 | 3,209.42 | 3/4 | 2,845.60 | 3/4 | 2,481.81 |
| 6   |       | 6   |       | 6   |       | 6   | 4,328.85 | 6   | 4,074.49 | 6   | 3,805.18 | 6   | 3,526.05 | 6   | 3,201.83 | 6   | 2,838.02 | 6   | 2,474.23 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,323.67 | 1/4 | 4,069.08 | 1/4 | 3,799.45 | 1/4 | 3,520.21 | 1/4 | 3,194.24 | 1/4 | 2,830.44 | 1/4 | 2,466.65 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,318.48 | 1/2 | 4,063.63 | 1/2 | 3,793.70 | 1/2 | 3,514.37 | 1/2 | 3,186.66 | 1/2 | 2,822.86 | 1/2 | 2,459.07 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,313.28 | 3/4 | 4,058.17 | 3/4 | 3,787.95 | 3/4 | 3,508.54 | 3/4 | 3,179.08 | 3/4 | 2,815.29 | 3/4 | 2,451.49 |
| 7   |       | 7   |       | 7   |       | 7   | 4,308.08 | 7   | 4,052.72 | 7   | 3,782.20 | 7   | 3,502.70 | 7   | 3,171.50 | 7   | 2,807.71 | 7   | 2,443.91 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,302.89 | 1/4 | 4,047.27 | 1/4 | 3,776.45 | 1/4 | 3,496.86 | 1/4 | 3,163.92 | 1/4 | 2,800.13 | 1/4 | 2,436.33 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,297.67 | 1/2 | 4,041.75 | 1/2 | 3,770.68 | 1/2 | 3,491.02 | 1/2 | 3,156.35 | 1/2 | 2,792.55 | 1/2 | 2,428.75 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,292.45 | 3/4 | 4,036.24 | 3/4 | 3,764.91 | 3/4 | 3,485.18 | 3/4 | 3,148.77 | 3/4 | 2,784.97 | 3/4 | 2,421.17 |
| 8   |       | 8   |       | 8   |       | 8   | 4,287.24 | 8   | 4,030.73 | 8   | 3,759.14 | 8   | 3,479.35 | 8   | 3,141.19 | 8   | 2,777.39 | 8   | 2,413.59 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,282.02 | 1/4 | 4,025.21 | 1/4 | 3,753.37 | 1/4 | 3,473.51 | 1/4 | 3,133.61 | 1/4 | 2,769.81 | 1/4 | 2,406.01 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,276.78 | 1/2 | 4,019.65 | 1/2 | 3,747.58 | 1/2 | 3,467.67 | 1/2 | 3,126.03 | 1/2 | 2,762.23 | 1/2 | 2,398.44 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,271.55 | 3/4 | 4,014.10 | 3/4 | 3,741.79 | 3/4 | 3,461.83 | 3/4 | 3,118.45 | 3/4 | 2,754.65 | 3/4 | 2,390.86 |
| 9   |       | 9   |       | 9   |       | 9   | 4,266.31 | 9   | 4,008.54 | 9   | 3,736.00 | 9   | 3,456.00 | 9   | 3,110.87 | 9   | 2,747.07 | 9   | 2,383.28 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,261.07 | 1/4 | 4,002.99 | 1/4 | 3,730.21 | 1/4 | 3,450.16 | 1/4 | 3,103.29 | 1/4 | 2,739.49 | 1/4 | 2,375.70 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,255.82 | 1/2 | 3,997.41 | 1/2 | 3,724.40 | 1/2 | 3,444.32 | 1/2 | 3,095.71 | 1/2 | 2,731.92 | 1/2 | 2,368.12 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,250.56 | 3/4 | 3,991.84 | 3/4 | 3,718.59 | 3/4 | 3,438.48 | 3/4 | 3,088.13 | 3/4 | 2,724.34 | 3/4 | 2,360.54 |
| 10  |       | 10  |       | 10  |       | 10  | 4,245.30 | 10  | 3,986.26 | 10  | 3,712.78 | 10  | 3,432.65 | 10  | 3,080.55 | 10  | 2,716.76 | 10  | 2,352.96 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,240.05 | 1/4 | 3,980.68 | 1/4 | 3,706.97 | 1/4 | 3,426.81 | 1/4 | 3,072.97 | 1/4 | 2,709.18 | 1/4 | 2,345.38 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,234.77 | 1/2 | 3,975.09 | 1/2 | 3,701.14 | 1/2 | 3,420.97 | 1/2 | 3,065.40 | 1/2 | 2,701.60 | 1/2 | 2,337.80 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,229.49 | 3/4 | 3,969.49 | 3/4 | 3,695.31 | 3/4 | 3,415.13 | 3/4 | 3,057.82 | 3/4 | 2,694.02 | 3/4 | 2,330.22 |
| 11  |       | 11  |       | 11  |       | 11  | 4,224.22 | 11  | 3,963.90 | 11  | 3,689.48 | 11  | 3,409.29 | 11  | 3,050.24 | 11  | 2,686.44 | 11  | 2,322.64 |
| 1/4 |       | 1/4 |       | 1/4 |       | 1/4 | 4,218.94 | 1/4 | 3,958.30 | 1/4 | 3,683.66 | 1/4 | 3,403.46 | 1/4 | 3,042.66 | 1/4 | 2,678.86 | 1/4 | 2,315.07 |
| 1/2 |       | 1/2 |       | 1/2 |       | 1/2 | 4,213.64 | 1/2 | 3,952.69 | 1/2 | 3,677.82 | 1/2 | 3,397.64 | 1/2 | 3,035.08 | 1/2 | 2,671.28 | 1/2 | 2,307.49 |
| 3/4 |       | 3/4 |       | 3/4 |       | 3/4 | 4,463.38 | 3/4 | 4,208.35 | 3/4 | 3,947.07 | 3/4 | 3,671.99 | 3/4 | 3,390.02 | 3/4 | 3,027.50 | 3/4 | 2,663.70 |

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'-09" OFF CENTERLINE AND 52'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



# BARGE "KIRBY 28164"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 1/4"

| IN  | 10 FT.   | IN  | 11 FT.   | IN  | 12 FT.   | IN  | 13 FT.   | IN  | 14 FT. | IN  | 15 FT. | IN  | 16 FT. | IN  | 17 FT. | IN  | 18 FT. | IN  | 19 FT. |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 0   | 2,292.33 | 0   | 1,928.53 | 0   | 1,564.84 | 0   | 1,205.55 | 0   | 851.27 | 0   | 493.92 | 0   | 130.07 | 0   |        | 0   |        |     |        |
| 1/4 | 2,284.75 | 1/4 | 1,920.95 | 1/4 | 1,557.28 | 1/4 | 1,197.99 | 1/4 | 843.91 | 1/4 | 486.32 | 1/4 | 122.78 | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,277.17 | 1/2 | 1,913.37 | 1/2 | 1,549.73 | 1/2 | 1,190.42 | 1/2 | 836.53 | 1/2 | 478.72 | 1/2 | 116.45 | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,269.59 | 3/4 | 1,905.79 | 3/4 | 1,542.17 | 3/4 | 1,182.86 | 3/4 | 829.16 | 3/4 | 471.12 | 3/4 | 110.12 | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 1   | 2,262.01 | 1   | 1,898.21 | 1   | 1,534.62 | 1   | 1,175.30 | 1   | 821.78 | 1   | 463.52 | 1   | 103.79 | 1   | 1      | 1   | 1      | 1   | 1      |
| 1/4 | 2,254.43 | 1/4 | 1,890.63 | 1/4 | 1,527.06 | 1/4 | 1,167.73 | 1/4 | 814.40 | 1/4 | 455.92 | 1/4 | 97.45  | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,246.85 | 1/2 | 1,883.05 | 1/2 | 1,519.51 | 1/2 | 1,160.27 | 1/2 | 807.01 | 1/2 | 448.32 | 1/2 | 92.39  | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,239.27 | 3/4 | 1,875.47 | 3/4 | 1,511.95 | 3/4 | 1,152.82 | 3/4 | 799.63 | 3/4 | 440.72 | 3/4 | 87.33  | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 2   | 2,231.69 | 2   | 1,867.89 | 2   | 1,504.39 | 2   | 1,145.36 | 2   | 792.24 | 2   | 433.12 | 2   | 82.27  | 2   | 2      | 2   | 2      | 2   | 2      |
| 1/4 | 2,224.12 | 1/4 | 1,860.32 | 1/4 | 1,496.84 | 1/4 | 1,137.90 | 1/4 | 784.85 | 1/4 | 425.52 | 1/4 | 77.21  | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,216.54 | 1/2 | 1,852.74 | 1/2 | 1,489.28 | 1/2 | 1,130.55 | 1/2 | 777.46 | 1/2 | 417.92 | 1/2 | 73.43  | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,208.96 | 3/4 | 1,845.16 | 3/4 | 1,481.73 | 3/4 | 1,123.20 | 3/4 | 770.07 | 3/4 | 410.32 | 3/4 | 69.65  | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 3   | 2,201.38 | 3   | 1,837.58 | 3   | 1,474.17 | 3   | 1,115.85 | 3   | 762.68 | 3   | 402.72 | 3   | 65.87  | 3   | 3      | 3   | 3      | 3   | 3      |
| 1/4 | 2,193.80 | 1/4 | 1,830.00 | 1/4 | 1,466.61 | 1/4 | 1,108.50 | 1/4 | 755.29 | 1/4 | 395.12 | 1/4 | 62.08  | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,186.22 | 1/2 | 1,822.42 | 1/2 | 1,459.14 | 1/2 | 1,101.15 | 1/2 | 747.90 | 1/2 | 387.52 | 1/2 | 59.59  | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,178.64 | 3/4 | 1,814.84 | 3/4 | 1,451.67 | 3/4 | 1,093.81 | 3/4 | 740.51 | 3/4 | 379.92 | 3/4 | 57.09  | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 4   | 2,171.06 | 4   | 1,807.26 | 4   | 1,444.19 | 4   | 1,086.47 | 4   | 733.12 | 4   | 372.32 | 4   | 54.59  | 4   | 4      | 4   | 4      | 4   | 4      |
| 1/4 | 2,163.48 | 1/4 | 1,799.68 | 1/4 | 1,436.72 | 1/4 | 1,079.12 | 1/4 | 725.73 | 1/4 | 364.72 | 1/4 | 52.09  | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,155.90 | 1/2 | 1,792.10 | 1/2 | 1,429.31 | 1/2 | 1,071.78 | 1/2 | 718.34 | 1/2 | 357.12 | 1/2 | 50.89  | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,148.32 | 3/4 | 1,784.52 | 3/4 | 1,421.90 | 3/4 | 1,064.44 | 3/4 | 710.95 | 3/4 | 349.52 | 3/4 | 49.69  | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 5   | 2,140.75 | 5   | 1,776.94 | 5   | 1,414.50 | 5   | 1,057.10 | 5   | 703.56 | 5   | 341.92 | 5   | 48.50  | 5   | 5      | 5   | 5      | 5   | 5      |
| 1/4 | 2,133.17 | 1/4 | 1,769.36 | 1/4 | 1,407.09 | 1/4 | 1,049.75 | 1/4 | 696.17 | 1/4 | 334.32 | 1/4 | 47.30  | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,125.59 | 1/2 | 1,761.78 | 1/2 | 1,399.67 | 1/2 | 1,042.41 | 1/2 | 688.79 | 1/2 | 326.72 | 1/2 |        | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,118.01 | 3/4 | 1,754.21 | 3/4 | 1,392.26 | 3/4 | 1,035.07 | 3/4 | 681.40 | 3/4 | 319.12 | 3/4 |        | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 6   | 2,110.43 | 6   | 1,746.63 | 6   | 1,384.84 | 6   | 1,027.73 | 6   | 674.01 | 6   | 311.52 | 6   | 6      | 6   | 6      | 6   | 6      | 6   | 6      |
| 1/4 | 2,102.85 | 1/4 | 1,739.05 | 1/4 | 1,377.42 | 1/4 | 1,020.39 | 1/4 | 666.62 | 1/4 | 303.92 | 1/4 |        | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,095.27 | 1/2 | 1,731.47 | 1/2 | 1,370.00 | 1/2 | 1,013.04 | 1/2 | 659.23 | 1/2 | 296.32 | 1/2 |        | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,087.69 | 3/4 | 1,723.89 | 3/4 | 1,362.58 | 3/4 | 1,005.70 | 3/4 | 651.84 | 3/4 | 288.72 | 3/4 |        | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 7   | 2,080.11 | 7   | 1,716.31 | 7   | 1,355.17 | 7   | 998.36   | 7   | 644.45 | 7   | 281.12 | 7   | 7      | 7   | 7      | 7   | 7      | 7   | 7      |
| 1/4 | 2,072.53 | 1/4 | 1,708.73 | 1/4 | 1,347.75 | 1/4 | 991.02   | 1/4 | 637.06 | 1/4 | 273.52 | 1/4 |        | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,064.95 | 1/2 | 1,701.15 | 1/2 | 1,340.33 | 1/2 | 983.67   | 1/2 | 629.67 | 1/2 | 265.92 | 1/2 |        | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,057.38 | 3/4 | 1,693.57 | 3/4 | 1,332.91 | 3/4 | 976.33   | 3/4 | 622.28 | 3/4 | 258.32 | 3/4 |        | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 8   | 2,049.80 | 8   | 1,685.99 | 8   | 1,325.49 | 8   | 968.99   | 8   | 614.89 | 8   | 250.72 | 8   | 8      | 8   | 8      | 8   | 8      | 8   | 8      |
| 1/4 | 2,042.22 | 1/4 | 1,678.41 | 1/4 | 1,318.07 | 1/4 | 961.65   | 1/4 | 607.50 | 1/4 | 243.12 | 1/4 |        | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,034.64 | 1/2 | 1,670.83 | 1/2 | 1,310.66 | 1/2 | 954.30   | 1/2 | 600.01 | 1/2 | 235.52 | 1/2 |        | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 2,027.06 | 3/4 | 1,663.25 | 3/4 | 1,303.25 | 3/4 | 946.94   | 3/4 | 592.51 | 3/4 | 227.92 | 3/4 |        | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 9   | 2,019.48 | 9   | 1,655.67 | 9   | 1,295.84 | 9   | 939.59   | 9   | 585.02 | 9   | 220.32 | 9   | 9      | 9   | 9      | 9   | 9      | 9   | 9      |
| 1/4 | 2,011.90 | 1/4 | 1,648.10 | 1/4 | 1,288.43 | 1/4 | 932.24   | 1/4 | 577.52 | 1/4 | 212.72 | 1/4 |        | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 2,004.32 | 1/2 | 1,640.52 | 1/2 | 1,280.95 | 1/2 | 924.88   | 1/2 | 569.92 | 1/2 | 205.12 | 1/2 |        | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 1,996.74 | 3/4 | 1,632.94 | 3/4 | 1,273.47 | 3/4 | 917.52   | 3/4 | 562.32 | 3/4 | 197.52 | 3/4 |        | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 10  | 1,989.16 | 10  | 1,625.36 | 10  | 1,265.98 | 10  | 910.16   | 10  | 554.72 | 10  | 189.92 | 10  | 10     | 10  | 10     | 10  | 10     | 10  | 10     |
| 1/4 | 1,981.58 | 1/4 | 1,617.78 | 1/4 | 1,258.50 | 1/4 | 902.80   | 1/4 | 547.12 | 1/4 | 182.32 | 1/4 |        | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 1,974.01 | 1/2 | 1,610.21 | 1/2 | 1,250.94 | 1/2 | 895.44   | 1/2 | 539.52 | 1/2 | 174.72 | 1/2 |        | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 1,966.43 | 3/4 | 1,602.64 | 3/4 | 1,243.37 | 3/4 | 888.08   | 3/4 | 531.92 | 3/4 | 167.12 | 3/4 |        | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |
| 11  | 1,958.85 | 11  | 1,595.08 | 11  | 1,235.81 | 11  | 880.72   | 11  | 524.32 | 11  | 159.52 | 11  | 11     | 11  | 11     | 11  | 11     | 11  | 11     |
| 1/4 | 1,951.27 | 1/4 | 1,587.51 | 1/4 | 1,228.24 | 1/4 | 873.36   | 1/4 | 516.72 | 1/4 | 151.92 | 1/4 |        | 1/4 | 1/4    | 1/4 | 1/4    | 1/4 | 1/4    |
| 1/2 | 1,943.69 | 1/2 | 1,579.95 | 1/2 | 1,220.68 | 1/2 | 866.00   | 1/2 | 509.12 | 1/2 | 144.63 | 1/2 |        | 1/2 | 1/2    | 1/2 | 1/2    | 1/2 | 1/2    |
| 3/4 | 1,936.11 | 3/4 | 1,572.40 | 3/4 | 1,213.12 | 3/4 | 858.63   | 3/4 | 501.52 | 3/4 | 137.35 | 3/4 |        | 3/4 | 3/4    | 3/4 | 3/4    | 3/4 | 3/4    |

STRAPPED: 03/22/2011 CL - SW  
CALCULATED: 03/23/2011 CL  
PRINTED: 03/23/2011 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



# BARGE "KIRBY 28164"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 1/4"

| IN  | 0 FT. | IN  | 1 FT. | IN  | 2 FT. | IN  | 3 FT.    | IN  | 4 FT.    | IN  | 5 FT.    | IN  | 6 FT.    | IN  | 7 FT.    | IN  | 8 FT.    | IN  | 9 FT.    |
|-----|-------|-----|-------|-----|-------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 0   |       | 0   |       | 0   |       | 0   | 4,479.93 | 0   | 4,224.43 | 0   | 3,962.93 | 0   | 3,687.72 | 0   | 3,404.97 | 0   | 3,041.22 | 0   | 2,676.59 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,475.20 | 1/4 | 4,219.14 | 1/4 | 3,957.31 | 1/4 | 3,681.89 | 1/4 | 3,398.25 | 1/4 | 3,033.62 | 1/4 | 2,669.00 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,470.16 | 1/2 | 4,213.83 | 1/2 | 3,951.68 | 1/2 | 3,676.05 | 1/2 | 3,390.66 | 1/2 | 3,026.03 | 1/2 | 2,661.40 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,465.12 | 3/4 | 4,208.52 | 3/4 | 3,946.05 | 3/4 | 3,670.22 | 3/4 | 3,383.06 | 3/4 | 3,018.43 | 3/4 | 2,653.80 |
| 1   | 1     | 1   | 1     | 1   | 1     | 1   | 4,460.08 | 1   | 4,203.20 | 1   | 3,940.41 | 1   | 3,664.38 | 1   | 3,375.46 | 1   | 3,010.84 | 1   | 2,646.21 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,455.04 | 1/4 | 4,197.89 | 1/4 | 3,934.78 | 1/4 | 3,658.54 | 1/4 | 3,367.87 | 1/4 | 3,003.24 | 1/4 | 2,638.61 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,449.37 | 1/2 | 4,192.56 | 1/2 | 3,929.13 | 1/2 | 3,652.71 | 1/2 | 3,360.27 | 1/2 | 2,995.64 | 1/2 | 2,631.02 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,443.70 | 3/4 | 4,187.23 | 3/4 | 3,923.47 | 3/4 | 3,646.87 | 3/4 | 3,352.67 | 3/4 | 2,988.05 | 3/4 | 2,623.42 |
| 2   | 2     | 2   | 2     | 2   | 2     | 2   | 4,438.03 | 2   | 4,181.90 | 2   | 3,917.82 | 2   | 3,641.04 | 2   | 3,345.08 | 2   | 2,980.45 | 2   | 2,615.82 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,432.35 | 1/4 | 4,176.58 | 1/4 | 3,912.16 | 1/4 | 3,635.20 | 1/4 | 3,337.48 | 1/4 | 2,972.85 | 1/4 | 2,608.23 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,426.60 | 1/2 | 4,171.23 | 1/2 | 3,906.49 | 1/2 | 3,629.37 | 1/2 | 3,329.88 | 1/2 | 2,965.26 | 1/2 | 2,600.63 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,420.85 | 3/4 | 4,165.88 | 3/4 | 3,900.82 | 3/4 | 3,623.53 | 3/4 | 3,322.29 | 3/4 | 2,957.66 | 3/4 | 2,593.03 |
| 3   | 3     | 3   | 3     | 3   | 3     | 3   | 4,415.10 | 3   | 4,160.53 | 3   | 3,895.15 | 3   | 3,617.70 | 3   | 3,314.69 | 3   | 2,950.06 | 3   | 2,585.44 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,409.35 | 1/4 | 4,155.18 | 1/4 | 3,889.48 | 1/4 | 3,611.86 | 1/4 | 3,307.10 | 1/4 | 2,942.47 | 1/4 | 2,577.84 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,403.75 | 1/2 | 4,149.81 | 1/2 | 3,883.79 | 1/2 | 3,606.02 | 1/2 | 3,299.50 | 1/2 | 2,934.87 | 1/2 | 2,570.24 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,398.15 | 3/4 | 4,144.44 | 3/4 | 3,878.10 | 3/4 | 3,600.19 | 3/4 | 3,291.90 | 3/4 | 2,927.28 | 3/4 | 2,562.65 |
| 4   | 4     | 4   | 4     | 4   | 4     | 4   | 4,392.54 | 4   | 4,139.07 | 4   | 3,872.41 | 4   | 3,594.35 | 4   | 3,284.31 | 4   | 2,919.68 | 4   | 2,555.05 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,386.94 | 1/4 | 4,133.70 | 1/4 | 3,866.72 | 1/4 | 3,588.52 | 1/4 | 3,276.71 | 1/4 | 2,912.08 | 1/4 | 2,547.46 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,381.63 | 1/2 | 4,128.31 | 1/2 | 3,861.01 | 1/2 | 3,582.68 | 1/2 | 3,269.11 | 1/2 | 2,904.49 | 1/2 | 2,539.86 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,376.32 | 3/4 | 4,122.92 | 3/4 | 3,855.30 | 3/4 | 3,576.85 | 3/4 | 3,261.52 | 3/4 | 2,896.89 | 3/4 | 2,532.26 |
| 5   | 5     | 5   | 5     | 5   | 5     | 5   | 4,371.02 | 5   | 4,117.53 | 5   | 3,849.59 | 5   | 3,571.01 | 5   | 3,253.92 | 5   | 2,889.29 | 5   | 2,524.67 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,365.71 | 1/4 | 4,112.14 | 1/4 | 3,843.88 | 1/4 | 3,565.18 | 1/4 | 3,246.32 | 1/4 | 2,881.70 | 1/4 | 2,517.07 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,360.53 | 1/2 | 4,106.73 | 1/2 | 3,838.16 | 1/2 | 3,559.34 | 1/2 | 3,238.73 | 1/2 | 2,874.10 | 1/2 | 2,509.47 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,355.36 | 3/4 | 4,101.32 | 3/4 | 3,832.43 | 3/4 | 3,553.50 | 3/4 | 3,231.13 | 3/4 | 2,866.50 | 3/4 | 2,501.88 |
| 6   | 6     | 6   | 6     | 6   | 6     | 6   | 4,350.18 | 6   | 4,095.91 | 6   | 3,826.70 | 6   | 3,547.67 | 6   | 3,223.53 | 6   | 2,858.91 | 6   | 2,494.28 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,345.01 | 1/4 | 4,090.50 | 1/4 | 3,820.97 | 1/4 | 3,541.83 | 1/4 | 3,215.94 | 1/4 | 2,851.31 | 1/4 | 2,486.68 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,339.81 | 1/2 | 4,085.05 | 1/2 | 3,815.22 | 1/2 | 3,536.00 | 1/2 | 3,208.34 | 1/2 | 2,843.71 | 1/2 | 2,479.09 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,334.62 | 3/4 | 4,079.60 | 3/4 | 3,809.47 | 3/4 | 3,530.16 | 3/4 | 3,200.75 | 3/4 | 2,836.12 | 3/4 | 2,471.49 |
| 7   | 7     | 7   | 7     | 7   | 7     | 7   | 4,329.42 | 7   | 4,074.15 | 7   | 3,803.73 | 7   | 3,524.33 | 7   | 3,193.15 | 7   | 2,828.52 | 7   | 2,463.89 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,324.23 | 1/4 | 4,068.70 | 1/4 | 3,797.98 | 1/4 | 3,518.49 | 1/4 | 3,185.55 | 1/4 | 2,820.93 | 1/4 | 2,456.30 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,319.01 | 1/2 | 4,063.19 | 1/2 | 3,792.21 | 1/2 | 3,512.65 | 1/2 | 3,177.96 | 1/2 | 2,813.33 | 1/2 | 2,448.70 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,313.80 | 3/4 | 4,057.68 | 3/4 | 3,786.44 | 3/4 | 3,506.82 | 3/4 | 3,170.36 | 3/4 | 2,805.73 | 3/4 | 2,441.11 |
| 8   | 8     | 8   | 8     | 8   | 8     | 8   | 4,308.58 | 8   | 4,052.16 | 8   | 3,780.67 | 8   | 3,500.98 | 8   | 3,162.76 | 8   | 2,798.14 | 8   | 2,433.51 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,303.37 | 1/4 | 4,046.65 | 1/4 | 3,774.90 | 1/4 | 3,495.15 | 1/4 | 3,155.17 | 1/4 | 2,790.54 | 1/4 | 2,425.91 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,298.13 | 1/2 | 4,041.10 | 1/2 | 3,769.12 | 1/2 | 3,489.31 | 1/2 | 3,147.57 | 1/2 | 2,782.94 | 1/2 | 2,418.32 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,292.90 | 3/4 | 4,035.54 | 3/4 | 3,763.33 | 3/4 | 3,483.48 | 3/4 | 3,139.97 | 3/4 | 2,775.35 | 3/4 | 2,410.72 |
| 9   | 9     | 9   | 9     | 9   | 9     | 9   | 4,287.66 | 9   | 4,029.99 | 9   | 3,757.54 | 9   | 3,477.64 | 9   | 3,132.38 | 9   | 2,767.75 | 9   | 2,403.12 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,282.43 | 1/4 | 4,024.44 | 1/4 | 3,751.75 | 1/4 | 3,471.81 | 1/4 | 3,124.78 | 1/4 | 2,760.15 | 1/4 | 2,395.53 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,277.17 | 1/2 | 4,018.86 | 1/2 | 3,745.94 | 1/2 | 3,465.97 | 1/2 | 3,117.19 | 1/2 | 2,752.56 | 1/2 | 2,387.93 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,271.92 | 3/4 | 4,013.29 | 3/4 | 3,740.14 | 3/4 | 3,460.13 | 3/4 | 3,109.59 | 3/4 | 2,744.96 | 3/4 | 2,380.33 |
| 10  | 10    | 10  | 10    | 10  | 10    | 10  | 4,266.66 | 10  | 4,007.72 | 10  | 3,734.33 | 10  | 3,454.30 | 10  | 3,101.99 | 10  | 2,737.37 | 10  | 2,372.74 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,261.41 | 1/4 | 4,002.14 | 1/4 | 3,728.52 | 1/4 | 3,448.46 | 1/4 | 3,094.40 | 1/4 | 2,729.77 | 1/4 | 2,365.14 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,256.13 | 1/2 | 3,996.55 | 1/2 | 3,722.70 | 1/2 | 3,442.63 | 1/2 | 3,086.80 | 1/2 | 2,722.17 | 1/2 | 2,357.55 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,250.86 | 3/4 | 3,990.95 | 3/4 | 3,716.87 | 3/4 | 3,436.79 | 3/4 | 3,079.20 | 3/4 | 2,714.58 | 3/4 | 2,349.95 |
| 11  | 11    | 11  | 11    | 11  | 11    | 11  | 4,245.59 | 11  | 3,985.36 | 11  | 3,711.05 | 11  | 3,430.96 | 11  | 3,071.61 | 11  | 2,706.98 | 11  | 2,342.35 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 4,494.13 | 1/4 | 4,240.31 | 1/4 | 3,979.77 | 1/4 | 3,705.22 | 1/4 | 3,425.12 | 1/4 | 3,064.01 | 1/4 | 2,699.38 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 4,489.40 | 1/2 | 4,235.02 | 1/2 | 3,974.15 | 1/2 | 3,699.39 | 1/2 | 3,418.40 | 1/2 | 3,056.41 | 1/2 | 2,691.79 |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 4,484.67 | 3/4 | 4,229.72 | 3/4 | 3,968.54 | 3/4 | 3,693.55 | 3/4 | 3,411.69 | 3/4 | 3,048.82 | 3/4 | 2,684.19 |

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'-09" OFF CENTERLINE AND 52'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



# BARGE "KIRBY 28164"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 1/4"

| IN  | 10 FT.   | IN  | 11 FT.   | IN  | 12 FT.   | IN  | 13 FT.   | IN  | 14 FT. | IN  | 15 FT. | IN  | 16 FT. | IN  | 17 FT. | IN  | 18 FT. | IN | 19 FT. |
|-----|----------|-----|----------|-----|----------|-----|----------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|----|--------|
| 0   | 2,311.97 | 0   | 1,947.34 | 0   | 1,582.70 | 0   | 1,221.94 | 0   | 858.33 | 0   | 493.74 | 0   | 130.02 | 0   |        | 0   |        |    |        |
| 1/4 | 2,304.37 | 1/4 | 1,939.74 | 1/4 | 1,575.10 | 1/4 | 1,214.34 | 1/4 | 850.76 | 1/4 | 486.15 | 1/4 | 122.74 | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,296.77 | 1/2 | 1,932.14 | 1/2 | 1,567.51 | 1/2 | 1,206.75 | 1/2 | 843.18 | 1/2 | 478.55 | 1/2 | 116.41 | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,289.18 | 3/4 | 1,924.55 | 3/4 | 1,559.91 | 3/4 | 1,199.15 | 3/4 | 835.59 | 3/4 | 470.95 | 3/4 | 110.08 | 3/4 |        | 3/4 |        |    | 3/4    |
| 1   | 2,281.58 | 1   | 1,916.95 | 1   | 1,552.31 | 1   | 1,191.55 | 1   | 828.01 | 1   | 463.36 | 1   | 103.75 | 1   |        | 1   |        |    | 1      |
| 1/4 | 2,273.98 | 1/4 | 1,909.35 | 1/4 | 1,544.72 | 1/4 | 1,183.95 | 1/4 | 820.42 | 1/4 | 455.76 | 1/4 | 97.42  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,266.39 | 1/2 | 1,901.76 | 1/2 | 1,537.12 | 1/2 | 1,176.36 | 1/2 | 812.83 | 1/2 | 448.16 | 1/2 | 92.36  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,258.79 | 3/4 | 1,894.16 | 3/4 | 1,529.52 | 3/4 | 1,168.76 | 3/4 | 805.23 | 3/4 | 440.56 | 3/4 | 87.30  | 3/4 |        | 3/4 |        |    | 3/4    |
| 2   | 2,251.20 | 2   | 1,886.56 | 2   | 1,521.93 | 2   | 1,161.16 | 2   | 797.63 | 2   | 432.97 | 2   | 82.24  | 2   |        | 2   |        |    | 2      |
| 1/4 | 2,243.60 | 1/4 | 1,878.97 | 1/4 | 1,514.33 | 1/4 | 1,153.56 | 1/4 | 790.03 | 1/4 | 425.37 | 1/4 | 77.19  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,236.00 | 1/2 | 1,871.37 | 1/2 | 1,506.73 | 1/2 | 1,145.98 | 1/2 | 782.44 | 1/2 | 417.77 | 1/2 | 73.40  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,228.41 | 3/4 | 1,863.77 | 3/4 | 1,499.14 | 3/4 | 1,138.40 | 3/4 | 774.84 | 3/4 | 410.17 | 3/4 | 69.62  | 3/4 |        | 3/4 |        |    | 3/4    |
| 3   | 2,220.81 | 3   | 1,856.18 | 3   | 1,491.54 | 3   | 1,130.81 | 3   | 767.24 | 3   | 402.58 | 3   | 65.84  | 3   |        | 3   |        |    | 3      |
| 1/4 | 2,213.21 | 1/4 | 1,848.58 | 1/4 | 1,483.94 | 1/4 | 1,123.23 | 1/4 | 759.65 | 1/4 | 394.98 | 1/4 | 62.06  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,205.62 | 1/2 | 1,840.98 | 1/2 | 1,476.43 | 1/2 | 1,115.66 | 1/2 | 752.05 | 1/2 | 387.38 | 1/2 | 59.56  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,198.02 | 3/4 | 1,833.39 | 3/4 | 1,468.91 | 3/4 | 1,108.09 | 3/4 | 744.45 | 3/4 | 379.78 | 3/4 | 57.07  | 3/4 |        | 3/4 |        |    | 3/4    |
| 4   | 2,190.42 | 4   | 1,825.79 | 4   | 1,461.40 | 4   | 1,100.52 | 4   | 736.86 | 4   | 372.19 | 4   | 54.57  | 4   |        | 4   |        |    | 4      |
| 1/4 | 2,182.83 | 1/4 | 1,818.19 | 1/4 | 1,453.88 | 1/4 | 1,092.95 | 1/4 | 729.26 | 1/4 | 364.59 | 1/4 | 52.07  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,175.23 | 1/2 | 1,810.60 | 1/2 | 1,446.45 | 1/2 | 1,085.38 | 1/2 | 721.66 | 1/2 | 356.99 | 1/2 | 50.88  | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,167.64 | 3/4 | 1,803.00 | 3/4 | 1,439.01 | 3/4 | 1,077.81 | 3/4 | 714.06 | 3/4 | 349.39 | 3/4 | 49.68  | 3/4 |        | 3/4 |        |    | 3/4    |
| 5   | 2,160.04 | 5   | 1,795.40 | 5   | 1,431.58 | 5   | 1,070.24 | 5   | 706.47 | 5   | 341.80 | 5   | 48.48  | 5   |        | 5   |        |    | 5      |
| 1/4 | 2,152.44 | 1/4 | 1,787.81 | 1/4 | 1,424.14 | 1/4 | 1,062.67 | 1/4 | 698.87 | 1/4 | 334.20 | 1/4 | 47.28  | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,144.85 | 1/2 | 1,780.21 | 1/2 | 1,416.71 | 1/2 | 1,055.11 | 1/2 | 691.27 | 1/2 | 326.60 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,137.25 | 3/4 | 1,772.61 | 3/4 | 1,409.27 | 3/4 | 1,047.54 | 3/4 | 683.68 | 3/4 | 319.00 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 6   | 2,129.65 | 6   | 1,765.02 | 6   | 1,401.84 | 6   | 1,039.97 | 6   | 676.08 | 6   | 311.41 | 6   |        | 6   |        | 6   |        |    | 6      |
| 1/4 | 2,122.06 | 1/4 | 1,757.42 | 1/4 | 1,394.40 | 1/4 | 1,032.40 | 1/4 | 668.48 | 1/4 | 303.81 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,114.46 | 1/2 | 1,749.82 | 1/2 | 1,386.97 | 1/2 | 1,024.83 | 1/2 | 660.89 | 1/2 | 296.21 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,106.86 | 3/4 | 1,742.23 | 3/4 | 1,379.54 | 3/4 | 1,017.27 | 3/4 | 653.29 | 3/4 | 288.61 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 7   | 2,099.27 | 7   | 1,734.63 | 7   | 1,372.10 | 7   | 1,009.70 | 7   | 645.69 | 7   | 281.02 | 7   |        | 7   |        | 7   |        |    | 7      |
| 1/4 | 2,091.67 | 1/4 | 1,727.03 | 1/4 | 1,364.67 | 1/4 | 1,002.13 | 1/4 | 638.09 | 1/4 | 273.42 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,084.07 | 1/2 | 1,719.44 | 1/2 | 1,357.23 | 1/2 | 994.56   | 1/2 | 630.50 | 1/2 | 265.82 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,076.48 | 3/4 | 1,711.84 | 3/4 | 1,349.80 | 3/4 | 986.99   | 3/4 | 622.90 | 3/4 | 258.23 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 8   | 2,068.88 | 8   | 1,704.25 | 8   | 1,342.36 | 8   | 979.43   | 8   | 615.30 | 8   | 250.63 | 8   |        | 8   |        | 8   |        |    | 8      |
| 1/4 | 2,061.29 | 1/4 | 1,696.65 | 1/4 | 1,334.93 | 1/4 | 971.86   | 1/4 | 607.71 | 1/4 | 243.03 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,053.69 | 1/2 | 1,689.05 | 1/2 | 1,327.49 | 1/2 | 964.29   | 1/2 | 600.11 | 1/2 | 235.43 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,046.09 | 3/4 | 1,681.46 | 3/4 | 1,320.06 | 3/4 | 956.72   | 3/4 | 592.51 | 3/4 | 227.84 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 9   | 2,038.50 | 9   | 1,673.86 | 9   | 1,312.62 | 9   | 949.15   | 9   | 584.91 | 9   | 220.24 | 9   |        | 9   |        | 9   |        |    | 9      |
| 1/4 | 2,030.90 | 1/4 | 1,666.26 | 1/4 | 1,305.19 | 1/4 | 941.58   | 1/4 | 577.32 | 1/4 | 212.64 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 2,023.30 | 1/2 | 1,658.67 | 1/2 | 1,297.67 | 1/2 | 934.02   | 1/2 | 569.72 | 1/2 | 205.04 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 2,015.71 | 3/4 | 1,651.07 | 3/4 | 1,290.15 | 3/4 | 926.45   | 3/4 | 562.12 | 3/4 | 197.45 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 10  | 2,008.11 | 10  | 1,643.47 | 10  | 1,282.64 | 10  | 918.88   | 10  | 554.52 | 10  | 189.85 | 10  |        | 10  |        | 10  |        |    | 10     |
| 1/4 | 2,000.51 | 1/4 | 1,635.88 | 1/4 | 1,275.12 | 1/4 | 911.31   | 1/4 | 546.93 | 1/4 | 182.25 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 1,992.92 | 1/2 | 1,628.28 | 1/2 | 1,267.52 | 1/2 | 903.74   | 1/2 | 539.33 | 1/2 | 174.65 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 1,985.32 | 3/4 | 1,620.68 | 3/4 | 1,259.93 | 3/4 | 896.18   | 3/4 | 531.73 | 3/4 | 167.06 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |
| 11  | 1,977.73 | 11  | 1,613.09 | 11  | 1,252.33 | 11  | 888.61   | 11  | 524.13 | 11  | 159.46 | 11  |        | 11  |        | 11  |        |    | 11     |
| 1/4 | 1,970.13 | 1/4 | 1,605.49 | 1/4 | 1,244.73 | 1/4 | 881.04   | 1/4 | 516.54 | 1/4 | 151.86 | 1/4 |        | 1/4 |        | 1/4 |        |    | 1/4    |
| 1/2 | 1,962.53 | 1/2 | 1,597.89 | 1/2 | 1,237.14 | 1/2 | 873.47   | 1/2 | 508.94 | 1/2 | 144.58 | 1/2 |        | 1/2 |        | 1/2 |        |    | 1/2    |
| 3/4 | 1,954.93 | 3/4 | 1,590.30 | 3/4 | 1,229.54 | 3/4 | 865.90   | 3/4 | 501.34 | 3/4 | 137.30 | 3/4 |        | 3/4 |        | 3/4 |        |    | 3/4    |

STRAPPED: 03/22/2011 CL - SW  
CALCULATED: 03/23/2011 CL  
PRINTED: 03/23/2011 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 03/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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