

Gallows



### BARGE "HFL 100" 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 CENTER | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-1/8     | - 00-1/8     | 00-1/8     | - 00-1/8     |
| 2 CENTER | 00-1/8     | - 00-1/8     | 00-1/8     | - 00-1/8     | 00-1/4     | - 00-1/4     | 00-3/8     | - 00-3/8     | 00-3/8     | - 00-3/8     | 00-1/2     | - 00-1/2     |
| 3 CENTER | 00-1/8     | - 00-1/8     | 00-1/4     | - 00-1/4     | 00-1/4     | - 00-1/4     | 00-3/8     | - 00-3/8     | 00-1/2     | - 00-1/2     | 00-5/8     | - 00-5/8     |

(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 2 CENTER IS - 00-1/8"  
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 2 CENTER, THE TRIM CORRECTED ULLAGE IS 3'-11 7/8"

LENGTH BETWEEN DRAFT MARKS: 176'-09"

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# BARGE "HFL 100"

## 1 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-04 3/4"

| 0 FT. |     | 1 FT. |         | 2 FT. |         | 3 FT. |         | 4 FT. |         | 5 FT. |         | 6 FT. |         | 7 FT. |         | 8 FT. |        | 9 FT. |        |
|-------|-----|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|--------|-------|--------|
| IN    | OUT | IN    | OUT     | IN    | OUT     | IN    | OUT     | IN    | OUT     | IN    | OUT     | IN    | OUT     | IN    | OUT     | IN    | OUT    | IN    | OUT    |
| 0     |     | 0     |         | 0     | 154,730 | 0     | 146,360 | 0     | 137,989 | 0     | 129,618 | 0     | 119,635 | 0     | 108,697 | 0     | 93,784 | 0     | 80,826 |
| 1/4   |     | 1/4   | 161,171 | 1/4   | 154,556 | 1/4   | 146,185 | 1/4   | 137,815 | 1/4   | 129,444 | 1/4   | 119,365 | 1/4   | 108,427 | 1/4   | 93,495 | 1/4   | 80,556 |
| 1/2   |     | 1/2   | 161,148 | 1/2   | 153,884 | 1/2   | 145,313 | 1/2   | 136,943 | 1/2   | 128,572 | 1/2   | 118,017 | 1/2   | 105,080 | 1/2   | 92,147 | 1/2   | 79,209 |
| 3/4   |     | 3/4   | 161,126 | 3/4   | 153,510 | 3/4   | 145,139 | 3/4   | 136,768 | 3/4   | 128,398 | 3/4   | 117,748 | 3/4   | 104,811 | 3/4   | 91,877 | 3/4   | 78,939 |
| 1     |     | 1     | 161,036 | 2     | 153,335 | 2     | 144,965 | 2     | 136,594 | 2     | 128,223 | 2     | 117,478 | 2     | 104,542 | 2     | 91,608 | 2     | 78,670 |
| 1 1/4 |     | 1 1/4 | 160,946 | 1 1/4 | 153,161 | 1 1/4 | 144,790 | 1 1/4 | 136,420 | 1 1/4 | 128,049 | 1 1/4 | 117,209 | 1 1/4 | 104,272 | 1 1/4 | 91,338 | 1 1/4 | 78,400 |
| 1 1/2 |     | 1 1/2 | 160,856 | 1 1/2 | 152,987 | 1 1/2 | 144,616 | 1 1/2 | 136,245 | 1 1/2 | 127,874 | 1 1/2 | 116,939 | 1 1/2 | 104,003 | 1 1/2 | 91,069 | 1 1/2 | 78,131 |
| 3/4   |     | 3/4   | 160,766 | 3/4   | 152,812 | 3/4   | 144,441 | 3/4   | 136,071 | 3/4   | 127,700 | 3/4   | 116,670 | 3/4   | 103,734 | 3/4   | 90,799 | 3/4   | 77,861 |
| 3     |     | 3     | 160,681 | 3     | 152,638 | 3     | 144,267 | 3     | 135,886 | 3     | 127,526 | 3     | 116,400 | 3     | 103,464 | 3     | 90,530 | 3     | 77,591 |
| 1 3/4 |     | 1 3/4 | 160,597 | 1 3/4 | 152,463 | 1 3/4 | 144,093 | 1 3/4 | 135,722 | 1 3/4 | 127,351 | 1 3/4 | 116,131 | 1 3/4 | 103,195 | 1 3/4 | 90,260 | 1 3/4 | 77,322 |
| 1 1/2 |     | 1 1/2 | 160,513 | 1 1/2 | 152,289 | 1 1/2 | 143,918 | 1 1/2 | 135,548 | 1 1/2 | 127,177 | 1 1/2 | 115,861 | 1 1/2 | 102,926 | 1 1/2 | 89,991 | 1 1/2 | 77,052 |
| 3/4   |     | 3/4   | 160,428 | 3/4   | 152,115 | 3/4   | 143,744 | 3/4   | 135,373 | 3/4   | 127,003 | 3/4   | 115,591 | 3/4   | 102,656 | 3/4   | 89,721 | 3/4   | 76,783 |
| 4     |     | 4     | 160,287 | 4     | 151,940 | 4     | 143,570 | 4     | 135,199 | 4     | 126,828 | 4     | 115,322 | 4     | 102,387 | 4     | 89,452 | 4     | 76,513 |
| 1 1/4 |     | 1 1/4 | 160,195 | 1 1/4 | 151,766 | 1 1/4 | 143,395 | 1 1/4 | 135,024 | 1 1/4 | 126,654 | 1 1/4 | 115,052 | 1 1/4 | 102,118 | 1 1/4 | 89,182 | 1 1/4 | 76,244 |
| 1 1/2 |     | 1 1/2 | 159,944 | 1 1/2 | 151,591 | 1 1/2 | 143,221 | 1 1/2 | 134,850 | 1 1/2 | 126,479 | 1 1/2 | 114,783 | 1 1/2 | 101,848 | 1 1/2 | 88,912 | 1 1/2 | 75,974 |
| 3/4   |     | 3/4   | 159,782 | 3/4   | 151,417 | 3/4   | 143,046 | 3/4   | 134,676 | 3/4   | 126,305 | 3/4   | 114,513 | 3/4   | 101,579 | 3/4   | 88,643 | 3/4   | 75,705 |
| 6     |     | 6     | 159,609 | 6     | 151,243 | 6     | 142,872 | 6     | 134,501 | 6     | 126,131 | 6     | 114,244 | 6     | 101,309 | 6     | 88,373 | 6     | 75,435 |
| 1 3/4 |     | 1 3/4 | 159,436 | 1 3/4 | 151,068 | 1 3/4 | 142,698 | 1 3/4 | 134,327 | 1 3/4 | 125,956 | 1 3/4 | 113,974 | 1 3/4 | 101,040 | 1 3/4 | 88,104 | 1 3/4 | 75,166 |
| 1 1/2 |     | 1 1/2 | 159,262 | 1 1/2 | 150,894 | 1 1/2 | 142,523 | 1 1/2 | 134,152 | 1 1/2 | 125,782 | 1 1/2 | 113,705 | 1 1/2 | 100,771 | 1 1/2 | 87,834 | 1 1/2 | 74,896 |
| 3/4   |     | 3/4   | 159,089 | 3/4   | 150,720 | 3/4   | 142,349 | 3/4   | 133,978 | 3/4   | 125,608 | 3/4   | 113,435 | 3/4   | 100,501 | 3/4   | 87,565 | 3/4   | 74,626 |
| 8     |     | 8     | 158,915 | 8     | 150,545 | 8     | 142,174 | 8     | 133,804 | 8     | 125,434 | 8     | 113,166 | 8     | 100,232 | 8     | 87,295 | 8     | 74,357 |
| 1 1/4 |     | 1 1/4 | 158,741 | 1 1/4 | 150,371 | 1 1/4 | 142,000 | 1 1/4 | 133,629 | 1 1/4 | 125,260 | 1 1/4 | 112,896 | 1 1/4 | 99,963  | 1 1/4 | 87,026 | 1 1/4 | 74,087 |
| 1 1/2 |     | 1 1/2 | 158,567 | 1 1/2 | 150,196 | 1 1/2 | 141,826 | 1 1/2 | 133,455 | 1 1/2 | 125,086 | 1 1/2 | 112,626 | 1 1/2 | 99,693  | 1 1/2 | 86,756 | 1 1/2 | 73,818 |
| 3/4   |     | 3/4   | 158,393 | 3/4   | 150,022 | 3/4   | 141,651 | 3/4   | 133,281 | 3/4   | 124,912 | 3/4   | 112,357 | 3/4   | 99,424  | 3/4   | 86,487 | 3/4   | 73,548 |
| 7     |     | 7     | 158,218 | 7     | 149,848 | 7     | 141,477 | 7     | 133,106 | 7     | 124,738 | 7     | 112,087 | 7     | 99,155  | 7     | 86,217 | 7     | 73,279 |
| 1 3/4 |     | 1 3/4 | 158,044 | 1 3/4 | 149,673 | 1 3/4 | 141,302 | 1 3/4 | 132,932 | 1 3/4 | 124,565 | 1 3/4 | 111,818 | 1 3/4 | 98,885  | 1 3/4 | 85,947 | 1 3/4 | 73,010 |
| 1 1/2 |     | 1 1/2 | 157,870 | 1 1/2 | 149,499 | 1 1/2 | 141,128 | 1 1/2 | 132,767 | 1 1/2 | 124,391 | 1 1/2 | 111,548 | 1 1/2 | 98,616  | 1 1/2 | 85,678 | 1 1/2 | 72,741 |
| 3/4   |     | 3/4   | 157,695 | 3/4   | 149,324 | 3/4   | 140,954 | 3/4   | 132,583 | 3/4   | 124,217 | 3/4   | 111,279 | 3/4   | 98,347  | 3/4   | 85,408 | 3/4   | 72,472 |
| 8     |     | 8     | 157,521 | 8     | 149,150 | 8     | 140,779 | 8     | 132,409 | 8     | 123,947 | 8     | 111,009 | 8     | 98,077  | 8     | 85,139 | 8     | 72,203 |
| 1 1/4 |     | 1 1/4 | 157,346 | 1 1/4 | 148,976 | 1 1/4 | 140,605 | 1 1/4 | 132,234 | 1 1/4 | 123,678 | 1 1/4 | 110,740 | 1 1/4 | 97,807  | 1 1/4 | 84,869 | 1 1/4 | 71,935 |
| 1 1/2 |     | 1 1/2 | 157,172 | 1 1/2 | 148,801 | 1 1/2 | 140,431 | 1 1/2 | 132,060 | 1 1/2 | 123,408 | 1 1/2 | 110,470 | 1 1/2 | 97,538  | 1 1/2 | 84,600 | 1 1/2 | 71,666 |
| 3/4   |     | 3/4   | 156,998 | 3/4   | 148,627 | 3/4   | 140,256 | 3/4   | 131,885 | 3/4   | 123,139 | 3/4   | 110,201 | 3/4   | 97,268  | 3/4   | 84,330 | 3/4   | 71,397 |
| 9     |     | 9     | 156,823 | 9     | 148,452 | 9     | 140,082 | 9     | 131,711 | 9     | 122,869 | 9     | 109,931 | 9     | 96,999  | 9     | 84,061 | 9     | 71,128 |
| 1 3/4 |     | 1 3/4 | 156,649 | 1 3/4 | 148,278 | 1 3/4 | 139,907 | 1 3/4 | 131,537 | 1 3/4 | 122,600 | 1 3/4 | 109,661 | 1 3/4 | 96,729  | 1 3/4 | 83,791 | 1 3/4 | 70,859 |
| 1 1/2 |     | 1 1/2 | 156,474 | 1 1/2 | 148,104 | 1 1/2 | 139,733 | 1 1/2 | 131,362 | 1 1/2 | 122,330 | 1 1/2 | 109,392 | 1 1/2 | 96,460  | 1 1/2 | 83,521 | 1 1/2 | 70,590 |
| 3/4   |     | 3/4   | 156,300 | 3/4   | 147,929 | 3/4   | 139,559 | 3/4   | 131,188 | 3/4   | 122,061 | 3/4   | 109,122 | 3/4   | 96,190  | 3/4   | 83,252 | 3/4   | 70,321 |
| 10    |     | 10    | 156,126 | 10    | 147,755 | 10    | 139,384 | 10    | 131,013 | 10    | 121,791 | 10    | 108,853 | 10    | 95,921  | 10    | 82,982 | 10    | 70,052 |
| 1 1/4 |     | 1 1/4 | 155,951 | 1 1/4 | 147,581 | 1 1/4 | 139,210 | 1 1/4 | 130,839 | 1 1/4 | 121,521 | 1 1/4 | 108,583 | 1 1/4 | 95,651  | 1 1/4 | 82,713 | 1 1/4 | 69,783 |
| 1 1/2 |     | 1 1/2 | 155,777 | 1 1/2 | 147,406 | 1 1/2 | 139,035 | 1 1/2 | 130,665 | 1 1/2 | 121,252 | 1 1/2 | 108,314 | 1 1/2 | 95,382  | 1 1/2 | 82,443 | 1 1/2 | 69,514 |
| 3/4   |     | 3/4   | 155,602 | 3/4   | 147,232 | 3/4   | 138,861 | 3/4   | 130,490 | 3/4   | 120,982 | 3/4   | 108,044 | 3/4   | 95,112  | 3/4   | 82,174 | 3/4   | 69,245 |
| 11    |     | 11    | 155,428 | 11    | 147,057 | 11    | 138,687 | 11    | 130,316 | 11    | 120,713 | 11    | 107,775 | 11    | 94,842  | 11    | 81,904 | 11    | 68,976 |
| 1 1/4 |     | 1 1/4 | 155,254 | 1 1/4 | 146,883 | 1 1/4 | 138,512 | 1 1/4 | 130,142 | 1 1/4 | 120,443 | 1 1/4 | 107,505 | 1 1/4 | 94,573  | 1 1/4 | 81,635 | 1 1/4 | 68,707 |
| 1 1/2 |     | 1 1/2 | 155,079 | 1 1/2 | 146,709 | 1 1/2 | 138,338 | 1 1/2 | 129,967 | 1 1/2 | 120,174 | 1 1/2 | 107,236 | 1 1/2 | 94,303  | 1 1/2 | 81,365 | 1 1/2 | 68,438 |
| 3/4   |     | 3/4   | 154,905 | 3/4   | 146,534 | 3/4   | 138,163 | 3/4   | 129,793 | 3/4   | 119,904 | 3/4   | 106,966 | 3/4   | 94,034  | 3/4   | 81,096 | 3/4   | 68,169 |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.  
 CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.  
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.  
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF 2" DIAMETER "HERMETIC" VALVE.  
 GAUGE POINT: (HERMETIC) LOCATED ON CENTERLINE AND 31'-03" FORWARD OF AFT BULKHEAD.

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# BARGE "HFL 100"

## 1 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-04 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      | 87,900 | 0      | 54,977 | 0      | 42,045 | 0      | 29,380 | 0      | 16,459 | 0      | 3,504  | 0      |        | 0      |        | 0      |        | 0      |        |
| 1/4    | 87,631 | 1/4    | 54,798 | 1/4    | 41,778 | 1/4    | 29,111 | 1/4    | 16,170 | 1/4    | 3,237  | 1/4    |        | 1/4    |        | 1/4    |        | 1/4    |        |
| 1/2    | 87,363 | 1/2    | 54,439 | 1/2    | 41,506 | 1/2    | 28,841 | 1/2    | 15,900 | 1/2    | 2,970  | 1/2    |        | 1/2    |        | 1/2    |        | 1/2    |        |
| 3/4    | 87,094 | 3/4    | 54,169 | 3/4    | 41,237 | 3/4    | 28,572 | 3/4    | 15,630 | 3/4    | 2,703  | 3/4    |        | 3/4    |        | 3/4    |        | 3/4    |        |
| 1      | 86,825 | 1      | 53,900 | 1      | 40,973 | 1      | 28,302 | 1      | 15,361 | 1      | 2,439  | 1      |        | 1      |        | 1      |        | 1      |        |
| 1 1/4  | 86,556 | 1 1/4  | 53,630 | 1 1/4  | 40,709 | 1 1/4  | 28,032 | 1 1/4  | 15,091 | 1 1/4  | 2,174  | 1 1/4  |        | 1 1/4  |        | 1 1/4  |        | 1 1/4  |        |
| 1 1/2  | 86,287 | 1 1/2  | 53,361 | 1 1/2  | 40,444 | 1 1/2  | 27,763 | 1 1/2  | 14,822 | 1 1/2  | 1,910  | 1 1/2  |        | 1 1/2  |        | 1 1/2  |        | 1 1/2  |        |
| 1 3/4  | 86,018 | 1 3/4  | 53,091 | 1 3/4  | 40,180 | 1 3/4  | 27,493 | 1 3/4  | 14,552 | 1 3/4  | 1,645  | 1 3/4  |        | 1 3/4  |        | 1 3/4  |        | 1 3/4  |        |
| 2      | 85,749 | 2      | 52,822 | 2      | 39,916 | 2      | 27,224 | 2      | 14,282 | 2      | 1,421  | 2      |        | 2      |        | 2      |        | 2      |        |
| 2 1/4  | 85,480 | 2 1/4  | 52,553 | 2 1/4  | 39,652 | 2 1/4  | 26,954 | 2 1/4  | 14,013 | 2 1/4  | 1,196  | 2 1/4  |        | 2 1/4  |        | 2 1/4  |        | 2 1/4  |        |
| 2 1/2  | 85,211 | 2 1/2  | 52,283 | 2 1/2  | 39,388 | 2 1/2  | 26,684 | 2 1/2  | 13,743 | 2 1/2  | 971    | 2 1/2  |        | 2 1/2  |        | 2 1/2  |        | 2 1/2  |        |
| 2 3/4  | 84,942 | 2 3/4  | 52,014 | 2 3/4  | 39,123 | 2 3/4  | 26,415 | 2 3/4  | 13,473 | 2 3/4  | 747    | 2 3/4  |        | 2 3/4  |        | 2 3/4  |        | 2 3/4  |        |
| 3      | 84,673 | 3      | 51,744 | 3      | 38,861 | 3      | 26,145 | 3      | 13,204 | 3      | 612    | 3      |        | 3      |        | 3      |        | 3      |        |
| 3 1/4  | 84,404 | 3 1/4  | 51,475 | 3 1/4  | 38,599 | 3 1/4  | 25,876 | 3 1/4  | 12,934 | 3 1/4  | 477    | 3 1/4  |        | 3 1/4  |        | 3 1/4  |        | 3 1/4  |        |
| 3 1/2  | 84,135 | 3 1/2  | 51,206 | 3 1/2  | 38,336 | 3 1/2  | 25,606 | 3 1/2  | 12,665 | 3 1/2  | 341    | 3 1/2  |        | 3 1/2  |        | 3 1/2  |        | 3 1/2  |        |
| 3 3/4  | 83,866 | 3 3/4  | 50,936 | 3 3/4  | 38,074 | 3 3/4  | 25,336 | 3 3/4  | 12,395 | 3 3/4  | 206    | 3 3/4  |        | 3 3/4  |        | 3 3/4  |        | 3 3/4  |        |
| 4      | 83,597 | 4      | 50,667 | 4      | 37,812 | 4      | 25,067 | 4      | 12,125 | 4      | 161    | 4      |        | 4      |        | 4      |        | 4      |        |
| 4 1/4  | 83,328 | 4 1/4  | 50,397 | 4 1/4  | 37,549 | 4 1/4  | 24,797 | 4 1/4  | 11,856 | 4 1/4  | 116    | 4 1/4  |        | 4 1/4  |        | 4 1/4  |        | 4 1/4  |        |
| 4 1/2  | 83,059 | 4 1/2  | 50,128 | 4 1/2  | 37,287 | 4 1/2  | 24,528 | 4 1/2  | 11,586 | 4 1/2  | 71     | 4 1/2  |        | 4 1/2  |        | 4 1/2  |        | 4 1/2  |        |
| 4 3/4  | 82,790 | 4 3/4  | 49,858 | 4 3/4  | 37,025 | 4 3/4  | 24,258 | 4 3/4  | 11,317 | 4 3/4  | 26     | 4 3/4  |        | 4 3/4  |        | 4 3/4  |        | 4 3/4  |        |
| 5      | 82,521 | 5      | 49,589 | 5      | 36,762 | 5      | 23,988 | 5      | 11,047 | 5      |        | 5      |        | 5      |        | 5      |        | 5      |        |
| 5 1/4  | 82,252 | 5 1/4  | 49,320 | 5 1/4  | 36,500 | 5 1/4  | 23,719 | 5 1/4  | 10,777 | 5 1/4  |        | 5 1/4  |        | 5 1/4  |        | 5 1/4  |        | 5 1/4  |        |
| 5 1/2  | 81,982 | 5 1/2  | 49,050 | 5 1/2  | 36,238 | 5 1/2  | 23,449 | 5 1/2  | 10,508 | 5 1/2  |        | 5 1/2  |        | 5 1/2  |        | 5 1/2  |        | 5 1/2  |        |
| 5 3/4  | 81,713 | 5 3/4  | 48,781 | 5 3/4  | 35,975 | 5 3/4  | 23,179 | 5 3/4  | 10,239 | 5 3/4  |        | 5 3/4  |        | 5 3/4  |        | 5 3/4  |        | 5 3/4  |        |
| 6      | 81,443 | 6      | 48,511 | 6      | 35,713 | 6      | 22,910 | 6      | 9,968  | 6      |        | 6      |        | 6      |        | 6      |        | 6      |        |
| 6 1/4  | 81,174 | 6 1/4  | 48,242 | 6 1/4  | 35,451 | 6 1/4  | 22,640 | 6 1/4  | 9,698  | 6 1/4  |        | 6 1/4  |        | 6 1/4  |        | 6 1/4  |        | 6 1/4  |        |
| 6 1/2  | 80,905 | 6 1/2  | 47,972 | 6 1/2  | 35,188 | 6 1/2  | 22,371 | 6 1/2  | 9,429  | 6 1/2  |        | 6 1/2  |        | 6 1/2  |        | 6 1/2  |        | 6 1/2  |        |
| 6 3/4  | 80,635 | 6 3/4  | 47,703 | 6 3/4  | 34,926 | 6 3/4  | 22,101 | 6 3/4  | 9,159  | 6 3/4  |        | 6 3/4  |        | 6 3/4  |        | 6 3/4  |        | 6 3/4  |        |
| 7      | 80,366 | 7      | 47,434 | 7      | 34,664 | 7      | 21,831 | 7      | 8,889  | 7      |        | 7      |        | 7      |        | 7      |        | 7      |        |
| 7 1/4  | 80,096 | 7 1/4  | 47,164 | 7 1/4  | 34,401 | 7 1/4  | 21,562 | 7 1/4  | 8,619  | 7 1/4  |        | 7 1/4  |        | 7 1/4  |        | 7 1/4  |        | 7 1/4  |        |
| 7 1/2  | 79,827 | 7 1/2  | 46,895 | 7 1/2  | 34,139 | 7 1/2  | 21,292 | 7 1/2  | 8,349  | 7 1/2  |        | 7 1/2  |        | 7 1/2  |        | 7 1/2  |        | 7 1/2  |        |
| 7 3/4  | 79,557 | 7 3/4  | 46,625 | 7 3/4  | 33,877 | 7 3/4  | 21,023 | 7 3/4  | 8,079  | 7 3/4  |        | 7 3/4  |        | 7 3/4  |        | 7 3/4  |        | 7 3/4  |        |
| 8      | 79,288 | 8      | 46,356 | 8      | 33,614 | 8      | 20,753 | 8      | 7,809  | 8      |        | 8      |        | 8      |        | 8      |        | 8      |        |
| 8 1/4  | 79,019 | 8 1/4  | 46,087 | 8 1/4  | 33,352 | 8 1/4  | 20,483 | 8 1/4  | 7,540  | 8 1/4  |        | 8 1/4  |        | 8 1/4  |        | 8 1/4  |        | 8 1/4  |        |
| 8 1/2  | 78,749 | 8 1/2  | 45,817 | 8 1/2  | 33,090 | 8 1/2  | 20,214 | 8 1/2  | 7,270  | 8 1/2  |        | 8 1/2  |        | 8 1/2  |        | 8 1/2  |        | 8 1/2  |        |
| 8 3/4  | 78,480 | 8 3/4  | 45,548 | 8 3/4  | 32,827 | 8 3/4  | 19,944 | 8 3/4  | 7,001  | 8 3/4  |        | 8 3/4  |        | 8 3/4  |        | 8 3/4  |        | 8 3/4  |        |
| 9      | 78,210 | 9      | 45,278 | 9      | 32,565 | 9      | 19,675 | 9      | 6,731  | 9      |        | 9      |        | 9      |        | 9      |        | 9      |        |
| 9 1/4  | 77,941 | 9 1/4  | 45,009 | 9 1/4  | 32,303 | 9 1/4  | 19,405 | 9 1/4  | 6,461  | 9 1/4  |        | 9 1/4  |        | 9 1/4  |        | 9 1/4  |        | 9 1/4  |        |
| 9 1/2  | 77,672 | 9 1/2  | 44,739 | 9 1/2  | 32,040 | 9 1/2  | 19,135 | 9 1/2  | 6,192  | 9 1/2  |        | 9 1/2  |        | 9 1/2  |        | 9 1/2  |        | 9 1/2  |        |
| 9 3/4  | 77,402 | 9 3/4  | 44,470 | 9 3/4  | 31,778 | 9 3/4  | 18,866 | 9 3/4  | 5,922  | 9 3/4  |        | 9 3/4  |        | 9 3/4  |        | 9 3/4  |        | 9 3/4  |        |
| 10     | 77,133 | 10     | 44,201 | 10     | 31,516 | 10     | 18,596 | 10     | 5,653  | 10     |        | 10     |        | 10     |        | 10     |        | 10     |        |
| 10 1/4 | 76,863 | 10 1/4 | 43,931 | 10 1/4 | 31,253 | 10 1/4 | 18,326 | 10 1/4 | 5,383  | 10 1/4 |        | 10 1/4 |        | 10 1/4 |        | 10 1/4 |        | 10 1/4 |        |
| 10 1/2 | 76,594 | 10 1/2 | 43,662 | 10 1/2 | 30,991 | 10 1/2 | 18,057 | 10 1/2 | 5,114  | 10 1/2 |        | 10 1/2 |        | 10 1/2 |        | 10 1/2 |        | 10 1/2 |        |
| 10 3/4 | 76,324 | 10 3/4 | 43,392 | 10 3/4 | 30,729 | 10 3/4 | 17,787 | 10 3/4 | 4,845  | 10 3/4 |        | 10 3/4 |        | 10 3/4 |        | 10 3/4 |        | 10 3/4 |        |
| 11     | 76,055 | 11     | 43,123 | 11     | 30,469 | 11     | 17,518 | 11     | 4,577  | 11     |        | 11     |        | 11     |        | 11     |        | 11     |        |
| 11 1/4 | 75,786 | 11 1/4 | 42,854 | 11 1/4 | 30,189 | 11 1/4 | 17,248 | 11 1/4 | 4,308  | 11 1/4 |        | 11 1/4 |        | 11 1/4 |        | 11 1/4 |        | 11 1/4 |        |
| 11 1/2 | 75,516 | 11 1/2 | 42,584 | 11 1/2 | 29,920 | 11 1/2 | 16,978 | 11 1/2 | 4,040  | 11 1/2 |        | 11 1/2 |        | 11 1/2 |        | 11 1/2 |        | 11 1/2 |        |
| 11 3/4 | 75,247 | 11 3/4 | 42,315 | 11 3/4 | 29,650 | 11 3/4 | 16,709 | 11 3/4 | 3,771  | 11 3/4 |        | 11 3/4 |        | 11 3/4 |        | 11 3/4 |        | 11 3/4 |        |

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CANCELS AND SUPERCEDES  
ALL PRIOR TO 06/2019

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
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# BARGE "HFL 100"

## 2 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-02 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       | 173,813 | 0       | 182,142 | 0       | 149,725 | 0       | 137,309 | 0       | 124,893 | 0       | 112,477 | 0       | 100,061 | 0      | 87,645 | 0      | 75,229 |        |
| 1/4    | 1/4     | 173,727 | 1/4     | 181,883 | 1/4     | 149,467 | 1/4     | 137,051 | 1/4     | 124,635 | 1/4     | 112,218 | 1/4     | 99,802  | 1/4    | 87,386 | 1/4    | 74,970 |        |
| 1/2    | 1/2     | 173,641 | 1/2     | 181,624 | 1/2     | 149,208 | 1/2     | 136,792 | 1/2     | 124,376 | 1/2     | 111,960 | 1/2     | 99,544  | 1/2    | 87,128 | 1/2    | 74,711 |        |
| 3/4    | 3/4     | 173,469 | 3/4     | 181,366 | 3/4     | 148,949 | 3/4     | 136,633 | 3/4     | 124,117 | 3/4     | 111,701 | 3/4     | 99,285  | 3/4    | 86,869 | 3/4    | 74,453 |        |
| 1      | 1       | 173,296 | 1       | 181,107 | 1       | 148,691 | 1       | 136,275 | 1       | 123,859 | 1       | 111,442 | 1       | 99,026  | 1      | 86,610 | 1      | 74,194 |        |
| 1 1/4  | 1 1/4   | 173,124 | 1 1/4   | 180,848 | 1 1/4   | 148,432 | 1 1/4   | 136,016 | 1 1/4   | 123,600 | 1 1/4   | 111,184 | 1 1/4   | 98,768  | 1 1/4  | 86,352 | 1 1/4  | 73,935 |        |
| 1 1/2  | 1 1/2   | 172,951 | 1 1/2   | 180,590 | 1 1/2   | 148,173 | 1 1/2   | 135,757 | 1 1/2   | 123,343 | 1 1/2   | 110,925 | 1 1/2   | 98,509  | 1 1/2  | 86,093 | 1 1/2  | 73,677 |        |
| 1 3/4  | 1 3/4   | 172,705 | 1 3/4   | 180,331 | 1 3/4   | 147,915 | 1 3/4   | 135,499 | 1 3/4   | 123,083 | 1 3/4   | 110,666 | 1 3/4   | 98,250  | 1 3/4  | 85,834 | 1 3/4  | 73,418 |        |
| 2      | 2       | 172,458 | 2       | 180,072 | 2       | 147,656 | 2       | 135,240 | 2       | 122,824 | 2       | 110,408 | 2       | 97,992  | 2      | 85,576 | 2      | 73,159 |        |
| 2 1/4  | 2 1/4   | 172,212 | 2 1/4   | 179,814 | 2 1/4   | 147,397 | 2 1/4   | 134,981 | 2 1/4   | 122,565 | 2 1/4   | 110,149 | 2 1/4   | 97,733  | 2 1/4  | 85,317 | 2 1/4  | 72,901 |        |
| 2 1/2  | 2 1/2   | 171,965 | 2 1/2   | 179,555 | 2 1/2   | 147,139 | 2 1/2   | 134,723 | 2 1/2   | 122,307 | 2 1/2   | 109,890 | 2 1/2   | 97,474  | 2 1/2  | 85,058 | 2 1/2  | 72,642 |        |
| 2 3/4  | 2 3/4   | 171,708 | 2 3/4   | 179,296 | 2 3/4   | 146,880 | 2 3/4   | 134,464 | 2 3/4   | 122,048 | 2 3/4   | 109,632 | 2 3/4   | 97,216  | 2 3/4  | 84,799 | 2 3/4  | 72,383 |        |
| 3      | 3       | 171,450 | 3       | 179,038 | 3       | 146,621 | 3       | 134,205 | 3       | 121,789 | 3       | 109,373 | 3       | 96,957  | 3      | 84,541 | 3      | 72,125 |        |
| 3 1/4  | 3 1/4   | 171,193 | 3 1/4   | 178,779 | 3 1/4   | 146,363 | 3 1/4   | 133,947 | 3 1/4   | 121,531 | 3 1/4   | 109,114 | 3 1/4   | 96,698  | 3 1/4  | 84,282 | 3 1/4  | 71,866 |        |
| 3 1/2  | 3 1/2   | 170,936 | 3 1/2   | 178,520 | 3 1/2   | 146,104 | 3 1/2   | 133,688 | 3 1/2   | 121,272 | 3 1/2   | 108,856 | 3 1/2   | 96,440  | 3 1/2  | 84,023 | 3 1/2  | 71,607 |        |
| 3 3/4  | 3 3/4   | 170,677 | 3 3/4   | 178,262 | 3 3/4   | 145,845 | 3 3/4   | 133,429 | 3 3/4   | 121,013 | 3 3/4   | 108,597 | 3 3/4   | 96,181  | 3 3/4  | 83,765 | 3 3/4  | 71,349 |        |
| 4      | 4       | 170,419 | 4       | 178,003 | 4       | 145,587 | 4       | 133,171 | 4       | 120,755 | 4       | 108,338 | 4       | 95,922  | 4      | 83,506 | 4      | 71,090 |        |
| 4 1/4  | 4 1/4   | 170,160 | 4 1/4   | 177,744 | 4 1/4   | 145,328 | 4 1/4   | 132,912 | 4 1/4   | 120,496 | 4 1/4   | 108,080 | 4 1/4   | 95,664  | 4 1/4  | 83,247 | 4 1/4  | 70,831 |        |
| 4 1/2  | 4 1/2   | 169,902 | 4 1/2   | 177,486 | 4 1/2   | 145,069 | 4 1/2   | 132,653 | 4 1/2   | 120,237 | 4 1/2   | 107,821 | 4 1/2   | 95,405  | 4 1/2  | 82,989 | 4 1/2  | 70,573 |        |
| 4 3/4  | 4 3/4   | 169,643 | 4 3/4   | 177,227 | 4 3/4   | 144,811 | 4 3/4   | 132,395 | 4 3/4   | 119,979 | 4 3/4   | 107,562 | 4 3/4   | 95,146  | 4 3/4  | 82,730 | 4 3/4  | 70,314 |        |
| 5      | 5       | 169,384 | 5       | 176,968 | 5       | 144,552 | 5       | 132,136 | 5       | 119,720 | 5       | 107,304 | 5       | 94,888  | 5      | 82,471 | 5      | 70,055 |        |
| 5 1/4  | 5 1/4   | 169,126 | 5 1/4   | 176,710 | 5 1/4   | 144,293 | 5 1/4   | 131,877 | 5 1/4   | 119,461 | 5 1/4   | 107,045 | 5 1/4   | 94,629  | 5 1/4  | 82,213 | 5 1/4  | 69,797 |        |
| 5 1/2  | 5 1/2   | 168,867 | 5 1/2   | 176,451 | 5 1/2   | 144,035 | 5 1/2   | 131,619 | 5 1/2   | 119,203 | 5 1/2   | 106,786 | 5 1/2   | 94,370  | 5 1/2  | 81,954 | 5 1/2  | 69,538 |        |
| 5 3/4  | 5 3/4   | 168,608 | 5 3/4   | 176,192 | 5 3/4   | 143,776 | 5 3/4   | 131,360 | 5 3/4   | 118,944 | 5 3/4   | 106,528 | 5 3/4   | 94,112  | 5 3/4  | 81,695 | 5 3/4  | 69,279 |        |
| 6      | 6       | 168,350 | 6       | 175,934 | 6       | 143,517 | 6       | 131,101 | 6       | 118,685 | 6       | 106,269 | 6       | 93,853  | 6      | 81,437 | 6      | 69,021 |        |
| 6 1/4  | 6 1/4   | 168,091 | 6 1/4   | 175,675 | 6 1/4   | 143,259 | 6 1/4   | 130,843 | 6 1/4   | 118,426 | 6 1/4   | 106,010 | 6 1/4   | 93,594  | 6 1/4  | 81,178 | 6 1/4  | 68,762 |        |
| 6 1/2  | 6 1/2   | 167,832 | 6 1/2   | 175,416 | 6 1/2   | 143,000 | 6 1/2   | 130,584 | 6 1/2   | 118,168 | 6 1/2   | 105,752 | 6 1/2   | 93,336  | 6 1/2  | 80,919 | 6 1/2  | 68,503 |        |
| 6 3/4  | 6 3/4   | 167,574 | 6 3/4   | 175,158 | 6 3/4   | 142,741 | 6 3/4   | 130,325 | 6 3/4   | 117,909 | 6 3/4   | 105,493 | 6 3/4   | 93,077  | 6 3/4  | 80,661 | 6 3/4  | 68,245 |        |
| 7      | 7       | 167,315 | 7       | 174,899 | 7       | 142,483 | 7       | 130,067 | 7       | 117,650 | 7       | 105,234 | 7       | 92,818  | 7      | 80,402 | 7      | 67,986 |        |
| 7 1/4  | 7 1/4   | 167,056 | 7 1/4   | 174,640 | 7 1/4   | 142,224 | 7 1/4   | 129,808 | 7 1/4   | 117,392 | 7 1/4   | 104,976 | 7 1/4   | 92,560  | 7 1/4  | 80,143 | 7 1/4  | 67,727 |        |
| 7 1/2  | 7 1/2   | 166,798 | 7 1/2   | 174,382 | 7 1/2   | 141,965 | 7 1/2   | 129,549 | 7 1/2   | 117,133 | 7 1/2   | 104,717 | 7 1/2   | 92,301  | 7 1/2  | 79,885 | 7 1/2  | 67,469 |        |
| 7 3/4  | 7 3/4   | 166,539 | 7 3/4   | 174,123 | 7 3/4   | 141,707 | 7 3/4   | 129,291 | 7 3/4   | 116,874 | 7 3/4   | 104,458 | 7 3/4   | 92,042  | 7 3/4  | 79,626 | 7 3/4  | 67,210 |        |
| 8      | 8       | 166,280 | 8       | 173,864 | 8       | 141,448 | 8       | 129,032 | 8       | 116,616 | 8       | 104,200 | 8       | 91,784  | 8      | 79,367 | 8      | 66,951 |        |
| 8 1/4  | 8 1/4   | 166,022 | 8 1/4   | 173,606 | 8 1/4   | 141,189 | 8 1/4   | 128,773 | 8 1/4   | 116,357 | 8 1/4   | 103,941 | 8 1/4   | 91,525  | 8 1/4  | 79,109 | 8 1/4  | 66,693 |        |
| 8 1/2  | 8 1/2   | 165,763 | 8 1/2   | 173,347 | 8 1/2   | 140,931 | 8 1/2   | 128,515 | 8 1/2   | 116,098 | 8 1/2   | 103,682 | 8 1/2   | 91,266  | 8 1/2  | 78,850 | 8 1/2  | 66,434 |        |
| 8 3/4  | 8 3/4   | 165,504 | 8 3/4   | 173,088 | 8 3/4   | 140,672 | 8 3/4   | 128,256 | 8 3/4   | 115,840 | 8 3/4   | 103,424 | 8 3/4   | 91,008  | 8 3/4  | 78,591 | 8 3/4  | 66,175 |        |
| 9      | 9       | 165,246 | 9       | 172,829 | 9       | 140,413 | 9       | 127,997 | 9       | 115,581 | 9       | 103,165 | 9       | 90,749  | 9      | 78,333 | 9      | 65,917 |        |
| 9 1/4  | 9 1/4   | 164,987 | 9 1/4   | 172,571 | 9 1/4   | 140,155 | 9 1/4   | 127,739 | 9 1/4   | 115,322 | 9 1/4   | 102,906 | 9 1/4   | 90,490  | 9 1/4  | 78,074 | 9 1/4  | 65,658 |        |
| 9 1/2  | 9 1/2   | 164,728 | 9 1/2   | 172,312 | 9 1/2   | 139,896 | 9 1/2   | 127,480 | 9 1/2   | 115,064 | 9 1/2   | 102,648 | 9 1/2   | 90,232  | 9 1/2  | 77,815 | 9 1/2  | 65,399 |        |
| 9 3/4  | 9 3/4   | 164,470 | 9 3/4   | 172,053 | 9 3/4   | 139,637 | 9 3/4   | 127,221 | 9 3/4   | 114,805 | 9 3/4   | 102,389 | 9 3/4   | 89,973  | 9 3/4  | 77,557 | 9 3/4  | 65,141 |        |
| 10     | 10      | 164,211 | 10      | 171,795 | 10      | 139,379 | 10      | 126,963 | 10      | 114,546 | 10      | 102,130 | 10      | 89,714  | 10     | 77,299 | 10     | 64,882 |        |
| 10 1/4 | 10 1/4  | 163,952 | 10 1/4  | 171,536 | 10 1/4  | 139,120 | 10 1/4  | 126,704 | 10 1/4  | 114,288 | 10 1/4  | 101,872 | 10 1/4  | 89,456  | 10 1/4 | 77,039 | 10 1/4 | 64,623 |        |
| 10 1/2 | 10 1/2  | 163,694 | 10 1/2  | 171,277 | 10 1/2  | 138,861 | 10 1/2  | 126,445 | 10 1/2  | 114,029 | 10 1/2  | 101,613 | 10 1/2  | 89,197  | 10 1/2 | 76,781 | 10 1/2 | 64,365 |        |
| 10 3/4 | 10 3/4  | 163,435 | 10 3/4  | 171,019 | 10 3/4  | 138,603 | 10 3/4  | 126,187 | 10 3/4  | 113,770 | 10 3/4  | 101,354 | 10 3/4  | 88,938  | 10 3/4 | 76,522 | 10 3/4 | 64,106 |        |
| 11     | 174,029 | 11      | 163,176 | 11      | 170,760 | 11      | 138,344 | 11      | 125,928 | 11      | 113,512 | 11      | 101,096 | 11      | 88,680 | 11     | 76,263 | 11     | 63,847 |
| 11 1/4 | 174,007 | 11 1/4  | 162,918 | 11 1/4  | 180,501 | 11 1/4  | 138,085 | 11 1/4  | 125,669 | 11 1/4  | 113,253 | 11 1/4  | 100,837 | 11 1/4  | 88,421 | 11 1/4 | 76,005 | 11 1/4 | 63,589 |
| 11 1/2 | 173,986 | 11 1/2  | 162,659 | 11 1/2  | 180,243 | 11 1/2  | 137,827 | 11 1/2  | 125,411 | 11 1/2  | 112,994 | 11 1/2  | 100,578 | 11 1/2  | 88,162 | 11 1/2 | 75,746 | 11 1/2 | 63,330 |
| 11 3/4 | 173,900 | 11 3/4  | 162,400 | 11 3/4  | 149,984 | 11 3/4  | 137,568 | 11 3/4  | 125,152 | 11 3/4  | 112,736 | 11 3/4  | 100,320 | 11 3/4  | 87,904 | 11 3/4 | 75,487 | 11 3/4 | 63,071 |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.  
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.  
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.  
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF 2" DIAMETER "HERMETIC" VALVE.  
GAUGE POINT: (HERMETIC) LOCATED ON CENTERLINE AND 31'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
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# BARGE "HFL 100"

## 2 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 16'-02 1/2"

|       | 10 FT. |       | 11 FT. |       | 12 FT. |       | 13 FT. |       | 14 FT. |       | 15 FT. |       | 16 FT. |    | 17 FT. |    | 18 FT. |    | 19 FT. |    |
|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|----|--------|----|--------|----|--------|----|
| IN    |        | IN    |        | IN    |        | IN    |        | IN    |        | IN    |        | IN    |        | IN |        | IN |        | IN |        | IN |
| 0     | 62,813 | 0     | 50,396 | 0     | 38,022 | 0     | 25,847 | 0     | 13,431 | 0     | 1,147  | 0     |        | 0  |        | 0  |        | 0  |        | 0  |
| 1/4   | 62,554 | 1/4   | 50,138 | 1/4   | 37,771 | 1/4   | 25,588 | 1/4   | 13,172 | 1/4   | 932    | 1/4   |        |    | 1/4    |    | 1/4    |    | 1/4    |    |
| 1/2   | 62,295 | 1/2   | 49,879 | 1/2   | 37,519 | 1/2   | 25,329 | 1/2   | 12,914 | 1/2   | 717    | 1/2   |        |    | 1/2    |    | 1/2    |    | 1/2    |    |
| 3/4   | 62,037 | 3/4   | 49,620 | 3/4   | 37,268 | 3/4   | 25,071 | 3/4   | 12,655 | 3/4   | 587    | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 1     | 61,778 | 1     | 49,362 | 1     | 37,016 | 1     | 24,812 | 1     | 12,398 | 1     | 458    | 1     |        |    | 1      |    | 1      |    | 1      |    |
| 1 1/4 | 61,519 | 1 1/4 | 49,103 | 1 1/4 | 36,764 | 1 1/4 | 24,553 | 1 1/4 | 12,138 | 1 1/4 | 329    | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 61,261 | 1 1/2 | 48,844 | 1 1/2 | 36,513 | 1 1/2 | 24,295 | 1 1/2 | 11,879 | 1 1/2 | 199    | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 61,002 | 3/4   | 48,586 | 3/4   | 36,261 | 3/4   | 24,038 | 3/4   | 11,620 | 3/4   | 166    | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 2     | 60,743 | 2     | 48,327 | 2     | 36,010 | 2     | 23,778 | 2     | 11,362 | 2     | 113    | 2     |        |    | 2      |    | 2      |    | 2      |    |
| 1 1/4 | 60,485 | 1 1/4 | 48,068 | 1 1/4 | 35,758 | 1 1/4 | 23,519 | 1 1/4 | 11,103 | 1 1/4 | 70     | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 60,226 | 1 1/2 | 47,810 | 1 1/2 | 35,506 | 1 1/2 | 23,260 | 1 1/2 | 10,845 | 1 1/2 | 26     | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 59,967 | 3/4   | 47,551 | 3/4   | 35,255 | 3/4   | 23,002 | 3/4   | 10,586 | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 3     | 59,709 | 3     | 47,292 | 3     | 35,003 | 3     | 22,743 | 3     | 10,327 | 3     |        | 3     |        |    | 3      |    | 3      |    | 3      |    |
| 1 1/4 | 59,450 | 1 1/4 | 47,034 | 1 1/4 | 34,752 | 1 1/4 | 22,484 | 1 1/4 | 10,069 | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 59,191 | 1 1/2 | 46,775 | 1 1/2 | 34,500 | 1 1/2 | 22,226 | 1 1/2 | 9,810  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 58,933 | 3/4   | 46,516 | 3/4   | 34,248 | 3/4   | 21,967 | 3/4   | 9,551  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 4     | 58,674 | 4     | 46,258 | 4     | 33,997 | 4     | 21,708 | 4     | 9,293  | 4     |        | 4     |        |    | 4      |    | 4      |    | 4      |    |
| 1 1/4 | 58,415 | 1 1/4 | 45,999 | 1 1/4 | 33,745 | 1 1/4 | 21,450 | 1 1/4 | 9,034  | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 58,157 | 1 1/2 | 45,740 | 1 1/2 | 33,494 | 1 1/2 | 21,191 | 1 1/2 | 8,775  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 57,898 | 3/4   | 45,482 | 3/4   | 33,242 | 3/4   | 20,932 | 3/4   | 8,517  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 5     | 57,639 | 5     | 45,223 | 5     | 32,990 | 5     | 20,674 | 5     | 8,258  | 5     |        | 5     |        |    | 5      |    | 5      |    | 5      |    |
| 1 1/4 | 57,381 | 1 1/4 | 44,964 | 1 1/4 | 32,739 | 1 1/4 | 20,415 | 1 1/4 | 7,999  | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 57,122 | 1 1/2 | 44,706 | 1 1/2 | 32,487 | 1 1/2 | 20,156 | 1 1/2 | 7,741  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 56,863 | 3/4   | 44,447 | 3/4   | 32,236 | 3/4   | 19,898 | 3/4   | 7,482  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 6     | 56,605 | 6     | 44,188 | 6     | 31,984 | 6     | 19,639 | 6     | 7,223  | 6     |        | 6     |        |    | 6      |    | 6      |    | 6      |    |
| 1 1/4 | 56,346 | 1 1/4 | 43,930 | 1 1/4 | 31,732 | 1 1/4 | 19,380 | 1 1/4 | 6,965  | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 56,087 | 1 1/2 | 43,671 | 1 1/2 | 31,481 | 1 1/2 | 19,122 | 1 1/2 | 6,706  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 55,829 | 3/4   | 43,412 | 3/4   | 31,229 | 3/4   | 18,863 | 3/4   | 6,448  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 7     | 55,570 | 7     | 43,154 | 7     | 30,978 | 7     | 18,604 | 7     | 6,189  | 7     |        | 7     |        |    | 7      |    | 7      |    | 7      |    |
| 1 1/4 | 55,311 | 1 1/4 | 42,895 | 1 1/4 | 30,726 | 1 1/4 | 18,346 | 1 1/4 | 5,931  | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 55,053 | 1 1/2 | 42,636 | 1 1/2 | 30,474 | 1 1/2 | 18,087 | 1 1/2 | 5,673  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 54,794 | 3/4   | 42,378 | 3/4   | 30,223 | 3/4   | 17,828 | 3/4   | 5,415  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 8     | 54,535 | 8     | 42,119 | 8     | 29,971 | 8     | 17,570 | 8     | 5,157  | 8     |        | 8     |        |    | 8      |    | 8      |    | 8      |    |
| 1 1/4 | 54,277 | 1 1/4 | 41,860 | 1 1/4 | 29,720 | 1 1/4 | 17,311 | 1 1/4 | 4,899  | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 54,018 | 1 1/2 | 41,602 | 1 1/2 | 29,468 | 1 1/2 | 17,052 | 1 1/2 | 4,641  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 53,759 | 3/4   | 41,343 | 3/4   | 29,209 | 3/4   | 16,794 | 3/4   | 4,384  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 9     | 53,501 | 9     | 41,084 | 9     | 28,951 | 9     | 16,535 | 9     | 4,127  | 9     |        | 9     |        |    | 9      |    | 9      |    | 9      |    |
| 1 1/4 | 53,242 | 1 1/4 | 40,826 | 1 1/4 | 28,692 | 1 1/4 | 16,276 | 1 1/4 | 3,870  | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 52,983 | 1 1/2 | 40,567 | 1 1/2 | 28,433 | 1 1/2 | 16,018 | 1 1/2 | 3,613  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 52,725 | 3/4   | 40,308 | 3/4   | 28,175 | 3/4   | 15,759 | 3/4   | 3,357  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 10    | 52,466 | 10    | 40,050 | 10    | 27,916 | 10    | 15,500 | 10    | 3,102  | 10    |        | 10    |        |    | 10     |    | 10     |    | 10     |    |
| 1 1/4 | 52,207 | 1 1/4 | 39,791 | 1 1/4 | 27,657 | 1 1/4 | 15,242 | 1 1/4 | 2,846  | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 51,949 | 1 1/2 | 39,532 | 1 1/2 | 27,399 | 1 1/2 | 14,983 | 1 1/2 | 2,590  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 51,690 | 3/4   | 39,281 | 3/4   | 27,140 | 3/4   | 14,724 | 3/4   | 2,337  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |
| 11    | 51,431 | 11    | 39,029 | 11    | 26,881 | 11    | 14,466 | 11    | 2,084  | 11    |        | 11    |        |    | 11     |    | 11     |    | 11     |    |
| 1 1/4 | 51,173 | 1 1/4 | 38,777 | 1 1/4 | 26,623 | 1 1/4 | 14,207 | 1 1/4 | 1,831  | 1 1/4 |        | 1 1/4 |        |    | 1 1/4  |    | 1 1/4  |    | 1 1/4  |    |
| 1 1/2 | 50,914 | 1 1/2 | 38,526 | 1 1/2 | 26,364 | 1 1/2 | 13,948 | 1 1/2 | 1,577  | 1 1/2 |        | 1 1/2 |        |    | 1 1/2  |    | 1 1/2  |    | 1 1/2  |    |
| 3/4   | 50,655 | 3/4   | 38,274 | 3/4   | 26,105 | 3/4   | 13,690 | 3/4   | 1,322  | 3/4   |        | 3/4   |        |    | 3/4    |    | 3/4    |    | 3/4    |    |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

RESTRAPPED: 05/03/2019 JS  
RECALCULATED: 05/04/2019 CL  
REPRINTED: 08/19/2019 SW

CANCELS AND SUPERCEDES  
ALL PRIOR TO 08/2019

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77688  
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# BARGE "HFL 100"

# 3 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-02 3/4"

| IN     | 0 FT.  | 1 FT.   | 2 FT.   | 3 FT.   | 4 FT.   | 5 FT.   | 6 FT.   | 7 FT.   | 8 FT.  | 9 FT.  |
|--------|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0      | 0      | 172,885 | 161,470 | 149,145 | 138,820 | 124,495 | 112,170 | 99,845  | 87,520 | 75,195 |
| 1/4    | 1/4    | 172,799 | 161,213 | 148,888 | 136,563 | 124,238 | 111,913 | 99,588  | 87,263 | 74,938 |
| 1/2    | 1/2    | 172,713 | 160,956 | 148,631 | 136,306 | 123,981 | 111,656 | 99,331  | 87,006 | 74,682 |
| 3/4    | 3/4    | 172,628 | 160,699 | 148,374 | 136,049 | 123,725 | 111,400 | 99,075  | 86,750 | 74,425 |
| 1      | 1      | 172,457 | 160,443 | 148,118 | 135,793 | 123,468 | 111,143 | 98,818  | 86,493 | 74,168 |
| 1 1/4  | 1 1/4  | 172,285 | 160,186 | 147,861 | 135,536 | 123,211 | 110,886 | 98,561  | 86,236 | 73,911 |
| 1 1/2  | 1 1/2  | 172,114 | 159,928 | 147,604 | 135,279 | 122,954 | 110,629 | 98,304  | 85,979 | 73,654 |
| 1 3/4  | 1 3/4  | 171,943 | 159,672 | 147,347 | 135,022 | 122,697 | 110,373 | 98,048  | 85,723 | 73,398 |
| 2      | 2      | 171,698 | 159,416 | 147,091 | 134,766 | 122,441 | 110,116 | 97,791  | 85,466 | 73,141 |
| 2 1/4  | 2 1/4  | 171,454 | 159,159 | 146,834 | 134,509 | 122,184 | 109,859 | 97,534  | 85,209 | 72,884 |
| 2 1/2  | 2 1/2  | 171,209 | 158,902 | 146,577 | 134,252 | 121,927 | 109,602 | 97,277  | 84,952 | 72,627 |
| 2 3/4  | 2 3/4  | 170,965 | 158,645 | 146,320 | 133,995 | 121,670 | 109,345 | 97,021  | 84,696 | 72,371 |
| 3      | 3      | 170,709 | 158,388 | 146,063 | 133,739 | 121,414 | 109,089 | 96,764  | 84,439 | 72,114 |
| 3 1/4  | 3 1/4  | 170,453 | 158,132 | 145,807 | 133,482 | 121,157 | 108,832 | 96,507  | 84,182 | 71,857 |
| 3 1/2  | 3 1/2  | 170,198 | 157,875 | 145,550 | 133,225 | 120,900 | 108,575 | 96,250  | 83,925 | 71,600 |
| 3 3/4  | 3 3/4  | 169,943 | 157,618 | 145,293 | 132,968 | 120,643 | 108,318 | 95,993  | 83,668 | 71,344 |
| 4      | 4      | 169,686 | 157,361 | 145,036 | 132,711 | 120,387 | 108,062 | 95,737  | 83,412 | 71,087 |
| 4 1/4  | 4 1/4  | 169,429 | 157,105 | 144,780 | 132,455 | 120,130 | 107,805 | 95,480  | 83,155 | 70,830 |
| 4 1/2  | 4 1/2  | 169,173 | 156,848 | 144,523 | 132,198 | 119,873 | 107,548 | 95,223  | 82,898 | 70,573 |
| 4 3/4  | 4 3/4  | 168,916 | 156,591 | 144,266 | 131,941 | 119,616 | 107,291 | 94,966  | 82,641 | 70,316 |
| 5      | 5      | 168,659 | 156,334 | 144,009 | 131,684 | 119,359 | 107,035 | 94,710  | 82,385 | 70,060 |
| 5 1/4  | 5 1/4  | 168,402 | 156,078 | 143,753 | 131,428 | 119,103 | 106,778 | 94,453  | 82,128 | 69,803 |
| 5 1/2  | 5 1/2  | 168,146 | 155,821 | 143,496 | 131,171 | 118,846 | 106,521 | 94,196  | 81,871 | 69,546 |
| 5 3/4  | 5 3/4  | 167,889 | 155,564 | 143,239 | 130,914 | 118,589 | 106,264 | 93,939  | 81,614 | 69,289 |
| 6      | 6      | 167,632 | 155,307 | 142,982 | 130,657 | 118,332 | 106,007 | 93,682  | 81,358 | 69,033 |
| 6 1/4  | 6 1/4  | 167,375 | 155,050 | 142,725 | 130,401 | 118,076 | 105,751 | 93,426  | 81,101 | 68,776 |
| 6 1/2  | 6 1/2  | 167,119 | 154,794 | 142,469 | 130,144 | 117,819 | 105,494 | 93,169  | 80,844 | 68,519 |
| 6 3/4  | 6 3/4  | 166,862 | 154,537 | 142,212 | 129,887 | 117,562 | 105,237 | 92,912  | 80,587 | 68,262 |
| 7      | 7      | 166,605 | 154,280 | 141,955 | 129,630 | 117,305 | 104,980 | 92,655  | 80,330 | 68,006 |
| 7 1/4  | 7 1/4  | 166,348 | 154,023 | 141,698 | 129,373 | 117,049 | 104,724 | 92,399  | 80,074 | 67,749 |
| 7 1/2  | 7 1/2  | 166,092 | 153,767 | 141,442 | 129,117 | 116,792 | 104,467 | 92,142  | 79,817 | 67,492 |
| 7 3/4  | 7 3/4  | 165,835 | 153,510 | 141,185 | 128,860 | 116,535 | 104,210 | 91,885  | 79,560 | 67,235 |
| 8      | 8      | 165,578 | 153,253 | 140,928 | 128,603 | 116,278 | 103,953 | 91,628  | 79,303 | 66,978 |
| 8 1/4  | 8 1/4  | 165,321 | 152,996 | 140,671 | 128,346 | 116,021 | 103,697 | 91,372  | 79,047 | 66,722 |
| 8 1/2  | 8 1/2  | 165,064 | 152,740 | 140,415 | 128,090 | 115,765 | 103,440 | 91,115  | 78,790 | 66,465 |
| 8 3/4  | 8 3/4  | 164,808 | 152,483 | 140,158 | 127,833 | 115,508 | 103,183 | 90,858  | 78,533 | 66,208 |
| 9      | 9      | 164,551 | 152,226 | 139,901 | 127,576 | 115,251 | 102,926 | 90,601  | 78,276 | 65,951 |
| 9 1/4  | 9 1/4  | 164,294 | 151,969 | 139,644 | 127,319 | 114,994 | 102,689 | 90,344  | 78,020 | 65,695 |
| 9 1/2  | 9 1/2  | 164,037 | 151,712 | 139,387 | 127,063 | 114,738 | 102,413 | 90,088  | 77,763 | 65,438 |
| 9 3/4  | 9 3/4  | 163,781 | 151,456 | 139,131 | 126,806 | 114,481 | 102,166 | 89,831  | 77,506 | 65,181 |
| 10     | 10     | 163,524 | 151,199 | 138,874 | 126,549 | 114,224 | 101,899 | 89,574  | 77,249 | 64,924 |
| 10 1/4 | 10 1/4 | 163,267 | 150,942 | 138,617 | 126,292 | 113,967 | 101,642 | 89,317  | 76,992 | 64,668 |
| 10 1/2 | 10 1/2 | 163,010 | 150,685 | 138,360 | 126,035 | 113,711 | 101,386 | 89,061  | 76,736 | 64,411 |
| 10 3/4 | 10 3/4 | 162,754 | 150,429 | 138,104 | 125,779 | 113,454 | 101,129 | 88,804  | 76,479 | 64,154 |
| 11     | 11     | 162,497 | 150,172 | 137,847 | 125,522 | 113,197 | 100,872 | 88,547  | 76,222 | 63,897 |
| 11 1/4 | 11 1/4 | 173,013 | 162,240 | 149,915 | 137,590 | 125,265 | 114,940 | 100,615 | 88,290 | 75,955 |
| 11 1/2 | 11 1/2 | 172,992 | 161,983 | 149,658 | 137,333 | 125,008 | 114,683 | 100,359 | 88,034 | 75,700 |
| 11 3/4 | 11 3/4 | 172,970 | 161,726 | 149,402 | 137,077 | 124,752 | 114,427 | 100,102 | 87,777 | 75,452 |

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 TO TOP OF 2" DIAMETER "HERMETIC" VALVE.  
GAUGE POINT: (HERMETIC) LOCATED ON CENTERLINE AND 31'-00" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
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Pearland, Texas 77688  
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# BARGE "HFL 100"

## 3 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-02 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      | 62,870 | 0      | 50,545 | 0      | 38,222 | 0      | 25,913 | 0      | 13,589 | 0      | 1,361  | 0     |        |    |        |    |        |    |        |
| 1/4    | 62,813 | 1/4    | 50,288 | 1/4    | 37,966 | 1/4    | 25,656 | 1/4    | 13,332 | 1/4    | 1,138  | 1/4   |        |    |        |    |        |    |        |
| 1/2    | 62,357 | 1/2    | 50,032 | 1/2    | 37,709 | 1/2    | 25,400 | 1/2    | 13,075 | 1/2    | 924    | 1/2   |        |    |        |    |        |    |        |
| 3/4    | 62,100 | 3/4    | 49,775 | 3/4    | 37,453 | 3/4    | 25,143 | 3/4    | 12,818 | 3/4    | 710    | 3/4   |        |    |        |    |        |    |        |
| 1      | 61,843 | 1      | 49,518 | 1      | 37,197 | 1      | 24,886 | 1      | 12,562 | 1      | 582    | 1     |        |    |        |    |        |    |        |
| 1 1/4  | 61,586 | 1 1/4  | 49,261 | 1 1/4  | 36,940 | 1 1/4  | 24,629 | 1 1/4  | 12,305 | 1 1/4  | 454    | 1 1/4 |        |    |        |    |        |    |        |
| 1 1/2  | 61,330 | 1 1/2  | 49,005 | 1 1/2  | 36,684 | 1 1/2  | 24,372 | 1 1/2  | 12,048 | 1 1/2  | 325    | 1 1/2 |        |    |        |    |        |    |        |
| 1 3/4  | 61,073 | 1 3/4  | 48,748 | 1 3/4  | 36,428 | 1 3/4  | 24,116 | 1 3/4  | 11,791 | 1 3/4  | 197    | 1 3/4 |        |    |        |    |        |    |        |
| 2      | 60,816 | 2      | 48,491 | 2      | 36,172 | 2      | 23,859 | 2      | 11,534 | 2      | 154    | 2     |        |    |        |    |        |    |        |
| 2 1/4  | 60,559 | 2 1/4  | 48,234 | 2 1/4  | 35,915 | 2 1/4  | 23,602 | 2 1/4  | 11,278 | 2 1/4  | 111    | 2 1/4 |        |    |        |    |        |    |        |
| 2 1/2  | 60,302 | 2 1/2  | 47,978 | 2 1/2  | 35,659 | 2 1/2  | 23,345 | 2 1/2  | 11,021 | 2 1/2  | 69     | 2 1/2 |        |    |        |    |        |    |        |
| 2 3/4  | 60,046 | 2 3/4  | 47,721 | 2 3/4  | 35,403 | 2 3/4  | 23,089 | 2 3/4  | 10,764 | 2 3/4  | 26     | 2 3/4 |        |    |        |    |        |    |        |
| 3      | 59,789 | 3      | 47,464 | 3      | 35,146 | 3      | 22,832 | 3      | 10,507 | 3      |        | 3     |        |    |        |    |        |    |        |
| 3 1/4  | 59,532 | 3 1/4  | 47,207 | 3 1/4  | 34,890 | 3 1/4  | 22,575 | 3 1/4  | 10,251 | 3 1/4  |        |       |        |    |        |    |        |    |        |
| 3 1/2  | 59,275 | 3 1/2  | 46,950 | 3 1/2  | 34,634 | 3 1/2  | 22,318 | 3 1/2  | 9,994  | 3 1/2  |        |       |        |    |        |    |        |    |        |
| 3 3/4  | 59,019 | 3 3/4  | 46,694 | 3 3/4  | 34,377 | 3 3/4  | 22,062 | 3 3/4  | 9,737  | 3 3/4  |        |       |        |    |        |    |        |    |        |
| 4      | 58,762 | 4      | 46,437 | 4      | 34,121 | 4      | 21,805 | 4      | 9,480  | 4      |        |       |        |    |        |    |        |    |        |
| 4 1/4  | 58,505 | 4 1/4  | 46,180 | 4 1/4  | 33,865 | 4 1/4  | 21,548 | 4 1/4  | 9,224  | 4 1/4  |        |       |        |    |        |    |        |    |        |
| 4 1/2  | 58,248 | 4 1/2  | 45,923 | 4 1/2  | 33,608 | 4 1/2  | 21,291 | 4 1/2  | 8,967  | 4 1/2  |        |       |        |    |        |    |        |    |        |
| 4 3/4  | 57,992 | 4 3/4  | 45,667 | 4 3/4  | 33,352 | 4 3/4  | 21,035 | 4 3/4  | 8,710  | 4 3/4  |        |       |        |    |        |    |        |    |        |
| 5      | 57,735 | 5      | 45,410 | 5      | 33,096 | 5      | 20,778 | 5      | 8,453  | 5      |        |       |        |    |        |    |        |    |        |
| 5 1/4  | 57,478 | 5 1/4  | 45,153 | 5 1/4  | 32,839 | 5 1/4  | 20,521 | 5 1/4  | 8,197  | 5 1/4  |        |       |        |    |        |    |        |    |        |
| 5 1/2  | 57,221 | 5 1/2  | 44,896 | 5 1/2  | 32,583 | 5 1/2  | 20,264 | 5 1/2  | 7,940  | 5 1/2  |        |       |        |    |        |    |        |    |        |
| 5 3/4  | 56,964 | 5 3/4  | 44,640 | 5 3/4  | 32,327 | 5 3/4  | 20,008 | 5 3/4  | 7,683  | 5 3/4  |        |       |        |    |        |    |        |    |        |
| 6      | 56,708 | 6      | 44,383 | 6      | 32,070 | 6      | 19,751 | 6      | 7,426  | 6      |        |       |        |    |        |    |        |    |        |
| 6 1/4  | 56,451 | 6 1/4  | 44,126 | 6 1/4  | 31,814 | 6 1/4  | 19,494 | 6 1/4  | 7,170  | 6 1/4  |        |       |        |    |        |    |        |    |        |
| 6 1/2  | 56,194 | 6 1/2  | 43,869 | 6 1/2  | 31,558 | 6 1/2  | 19,237 | 6 1/2  | 6,913  | 6 1/2  |        |       |        |    |        |    |        |    |        |
| 6 3/4  | 55,937 | 6 3/4  | 43,612 | 6 3/4  | 31,301 | 6 3/4  | 18,981 | 6 3/4  | 6,656  | 6 3/4  |        |       |        |    |        |    |        |    |        |
| 7      | 55,681 | 7      | 43,356 | 7      | 31,045 | 7      | 18,724 | 7      | 6,400  | 7      |        |       |        |    |        |    |        |    |        |
| 7 1/4  | 55,424 | 7 1/4  | 43,099 | 7 1/4  | 30,789 | 7 1/4  | 18,467 | 7 1/4  | 6,143  | 7 1/4  |        |       |        |    |        |    |        |    |        |
| 7 1/2  | 55,167 | 7 1/2  | 42,842 | 7 1/2  | 30,533 | 7 1/2  | 18,210 | 7 1/2  | 5,887  | 7 1/2  |        |       |        |    |        |    |        |    |        |
| 7 3/4  | 54,910 | 7 3/4  | 42,585 | 7 3/4  | 30,276 | 7 3/4  | 17,953 | 7 3/4  | 5,630  | 7 3/4  |        |       |        |    |        |    |        |    |        |
| 8      | 54,654 | 8      | 42,329 | 8      | 30,020 | 8      | 17,697 | 8      | 5,374  | 8      |        |       |        |    |        |    |        |    |        |
| 8 1/4  | 54,397 | 8 1/4  | 42,072 | 8 1/4  | 29,764 | 8 1/4  | 17,440 | 8 1/4  | 5,118  | 8 1/4  |        |       |        |    |        |    |        |    |        |
| 8 1/2  | 54,140 | 8 1/2  | 41,815 | 8 1/2  | 29,507 | 8 1/2  | 17,183 | 8 1/2  | 4,862  | 8 1/2  |        |       |        |    |        |    |        |    |        |
| 8 3/4  | 53,883 | 8 3/4  | 41,558 | 8 3/4  | 29,251 | 8 3/4  | 16,926 | 8 3/4  | 4,606  | 8 3/4  |        |       |        |    |        |    |        |    |        |
| 9      | 53,626 | 9      | 41,301 | 9      | 28,994 | 9      | 16,670 | 9      | 4,351  | 9      |        |       |        |    |        |    |        |    |        |
| 9 1/4  | 53,370 | 9 1/4  | 41,045 | 9 1/4  | 28,737 | 9 1/4  | 16,413 | 9 1/4  | 4,096  | 9 1/4  |        |       |        |    |        |    |        |    |        |
| 9 1/2  | 53,113 | 9 1/2  | 40,788 | 9 1/2  | 28,481 | 9 1/2  | 16,156 | 9 1/2  | 3,841  | 9 1/2  |        |       |        |    |        |    |        |    |        |
| 9 3/4  | 52,856 | 9 3/4  | 40,531 | 9 3/4  | 28,224 | 9 3/4  | 15,899 | 9 3/4  | 3,586  | 9 3/4  |        |       |        |    |        |    |        |    |        |
| 10     | 52,599 | 10     | 40,274 | 10     | 27,967 | 10     | 15,643 | 10     | 3,332  | 10     |        |       |        |    |        |    |        |    |        |
| 10 1/4 | 52,343 | 10 1/4 | 40,018 | 10 1/4 | 27,710 | 10 1/4 | 15,386 | 10 1/4 | 3,078  | 10 1/4 |        |       |        |    |        |    |        |    |        |
| 10 1/2 | 52,086 | 10 1/2 | 39,761 | 10 1/2 | 27,454 | 10 1/2 | 15,129 | 10 1/2 | 2,824  | 10 1/2 |        |       |        |    |        |    |        |    |        |
| 10 3/4 | 51,829 | 10 3/4 | 39,504 | 10 3/4 | 27,197 | 10 3/4 | 14,872 | 10 3/4 | 2,571  | 10 3/4 |        |       |        |    |        |    |        |    |        |
| 11     | 51,572 | 11     | 39,248 | 11     | 26,940 | 11     | 14,616 | 11     | 2,319  | 11     |        |       |        |    |        |    |        |    |        |
| 11 1/4 | 51,316 | 11 1/4 | 38,991 | 11 1/4 | 26,683 | 11 1/4 | 14,359 | 11 1/4 | 2,068  | 11 1/4 |        |       |        |    |        |    |        |    |        |
| 11 1/2 | 51,059 | 11 1/2 | 38,735 | 11 1/2 | 26,427 | 11 1/2 | 14,102 | 11 1/2 | 1,816  | 11 1/2 |        |       |        |    |        |    |        |    |        |
| 11 3/4 | 50,802 | 11 3/4 | 38,479 | 11 3/4 | 26,170 | 11 3/4 | 13,845 | 11 3/4 | 1,565  | 11 3/4 |        |       |        |    |        |    |        |    |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

RESTRAPPED: 05/03/2019 JS  
 RECALCULATED: 05/04/2019 CL  
 REPRINTED: 08/19/2019 SW

CANCELS AND SUPERCEDES  
 ALL PRIOR TO 08/2019

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