



# BARGE "HFL 437"

## 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 | 00-0/8     | - 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     | 00-1/8     | - 00-1/8     |
| 1 STBD | 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     | 00-1/8     | - 00-1/8     |
| 2 PORT | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-1/8     | - 00-1/8     |
| 2 STBD | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-1/8     | - 00-1/8     |
| 3 PORT | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-1/8     | - 00-1/8     |
| 3 STBD | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-0/8     | - 00-0/8     | 00-1/8     | - 00-1/8     |

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 1'-00"  
 AFT DRAFT = 4'-00"  
 DIFF. = 3'-00" (DOWN BY STERN)

THE CORRECTION FOR 3'-00" TRIM DOWN BY STERN FOR 3 PORT IS - 00-0/8"  
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 3 PORT, THE TRIM CORRECTED ULLAGE IS 4'-00"

LENGTH BETWEEN DRAFT MARKS: 238'-06"

November 2, 2015

**PRECISION MEASUREMENT  
& ANALYSIS, INC.**

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# BARGE "HFL 437"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

| 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   | 188,971 | 0   | 178,662 | 0   | 168,355 | 0   | 158,012 | 0   | 147,469 | 0   | 132,923 | 0   | 117,961 | 0   | 102,991 |
| 1/4 |       | 1/4 |         | 1/4 | 188,756 | 1/4 | 178,448 | 1/4 | 168,140 | 1/4 | 157,797 | 1/4 | 147,206 | 1/4 | 132,612 | 1/4 | 117,649 | 1/4 | 102,679 |
| 1/2 |       | 1/2 |         | 1/2 | 188,541 | 1/2 | 178,233 | 1/2 | 167,925 | 1/2 | 157,581 | 1/2 | 146,944 | 1/2 | 132,300 | 1/2 | 117,337 | 1/2 | 102,367 |
| 3/4 |       | 3/4 |         | 3/4 | 188,326 | 3/4 | 178,018 | 3/4 | 167,709 | 3/4 | 157,366 | 3/4 | 146,681 | 3/4 | 131,988 | 3/4 | 117,025 | 3/4 | 102,055 |
| 1   |       | 1   |         | 1   | 188,111 | 1   | 177,803 | 1   | 167,494 | 1   | 157,150 | 1   | 146,418 | 1   | 131,677 | 1   | 116,714 | 1   | 101,743 |
| 1/4 |       | 1/4 |         | 1/4 | 187,897 | 1/4 | 177,589 | 1/4 | 167,279 | 1/4 | 156,935 | 1/4 | 146,140 | 1/4 | 131,365 | 1/4 | 116,402 | 1/4 | 101,430 |
| 1/2 |       | 1/2 |         | 1/2 | 187,682 | 1/2 | 177,374 | 1/2 | 167,063 | 1/2 | 156,719 | 1/2 | 145,861 | 1/2 | 131,053 | 1/2 | 116,090 | 1/2 | 101,118 |
| 3/4 |       | 3/4 |         | 3/4 | 187,467 | 3/4 | 177,159 | 3/4 | 166,848 | 3/4 | 156,504 | 3/4 | 145,583 | 3/4 | 130,741 | 3/4 | 115,779 | 3/4 | 100,806 |
| 2   |       | 2   |         | 2   | 187,252 | 2   | 176,944 | 2   | 166,632 | 2   | 156,288 | 2   | 145,304 | 2   | 130,430 | 2   | 115,467 | 2   | 100,494 |
| 1/4 |       | 1/4 |         | 1/4 | 187,037 | 1/4 | 176,730 | 1/4 | 166,417 | 1/4 | 156,073 | 1/4 | 145,009 | 1/4 | 130,118 | 1/4 | 115,155 | 1/4 | 100,182 |
| 1/2 |       | 1/2 |         | 1/2 | 186,822 | 1/2 | 176,515 | 1/2 | 166,201 | 1/2 | 155,858 | 1/2 | 144,715 | 1/2 | 129,806 | 1/2 | 114,843 | 1/2 | 99,870  |
| 3/4 |       | 3/4 |         | 3/4 | 186,608 | 3/4 | 176,300 | 3/4 | 165,986 | 3/4 | 155,642 | 3/4 | 144,420 | 3/4 | 129,495 | 3/4 | 114,532 | 3/4 | 99,558  |
| 3   |       | 3   |         | 3   | 186,393 | 3   | 176,085 | 3   | 165,770 | 3   | 155,427 | 3   | 144,125 | 3   | 129,183 | 3   | 114,220 | 3   | 99,245  |
| 1/4 |       | 1/4 |         | 1/4 | 186,178 | 1/4 | 175,871 | 1/4 | 165,555 | 1/4 | 155,211 | 1/4 | 143,818 | 1/4 | 128,871 | 1/4 | 113,908 | 1/4 | 98,933  |
| 1/2 |       | 1/2 |         | 1/2 | 185,963 | 1/2 | 175,656 | 1/2 | 165,339 | 1/2 | 154,996 | 1/2 | 143,511 | 1/2 | 128,559 | 1/2 | 113,596 | 1/2 | 98,621  |
| 3/4 |       | 3/4 |         | 3/4 | 185,749 | 3/4 | 175,441 | 3/4 | 165,124 | 3/4 | 154,780 | 3/4 | 143,204 | 3/4 | 128,248 | 3/4 | 113,285 | 3/4 | 98,309  |
| 4   |       | 4   |         | 4   | 185,534 | 4   | 175,226 | 4   | 164,908 | 4   | 154,565 | 4   | 142,897 | 4   | 127,936 | 4   | 112,973 | 4   | 97,997  |
| 1/4 |       | 1/4 |         | 1/4 | 185,319 | 1/4 | 175,012 | 1/4 | 164,693 | 1/4 | 154,349 | 1/4 | 142,586 | 1/4 | 127,624 | 1/4 | 112,661 | 1/4 | 97,685  |
| 1/2 |       | 1/2 |         | 1/2 | 185,104 | 1/2 | 174,797 | 1/2 | 164,477 | 1/2 | 154,134 | 1/2 | 142,274 | 1/2 | 127,312 | 1/2 | 112,350 | 1/2 | 97,373  |
| 3/4 |       | 3/4 |         | 3/4 | 184,890 | 3/4 | 174,582 | 3/4 | 164,262 | 3/4 | 153,918 | 3/4 | 141,963 | 3/4 | 127,001 | 3/4 | 112,038 | 3/4 | 97,060  |
| 5   |       | 5   |         | 5   | 184,675 | 5   | 174,368 | 5   | 164,046 | 5   | 153,703 | 5   | 141,652 | 5   | 126,689 | 5   | 111,726 | 5   | 96,748  |
| 1/4 |       | 1/4 |         | 1/4 | 184,460 | 1/4 | 174,153 | 1/4 | 163,831 | 1/4 | 153,487 | 1/4 | 141,340 | 1/4 | 126,377 | 1/4 | 111,414 | 1/4 | 96,436  |
| 1/2 |       | 1/2 |         | 1/2 | 184,245 | 1/2 | 173,938 | 1/2 | 163,615 | 1/2 | 153,272 | 1/2 | 141,028 | 1/2 | 126,066 | 1/2 | 111,103 | 1/2 | 96,124  |
| 3/4 |       | 3/4 |         | 3/4 | 184,031 | 3/4 | 173,723 | 3/4 | 163,400 | 3/4 | 153,056 | 3/4 | 140,717 | 3/4 | 125,754 | 3/4 | 110,791 | 3/4 | 95,812  |
| 6   |       | 6   |         | 6   | 183,816 | 6   | 173,509 | 6   | 163,184 | 6   | 152,841 | 6   | 140,405 | 6   | 125,442 | 6   | 110,479 | 6   | 95,500  |
| 1/4 |       | 1/4 |         | 1/4 | 183,601 | 1/4 | 173,294 | 1/4 | 162,969 | 1/4 | 152,625 | 1/4 | 140,093 | 1/4 | 125,130 | 1/4 | 110,167 | 1/4 | 95,188  |
| 1/2 |       | 1/2 |         | 1/2 | 183,387 | 1/2 | 173,079 | 1/2 | 162,753 | 1/2 | 152,410 | 1/2 | 139,781 | 1/2 | 124,819 | 1/2 | 109,856 | 1/2 | 94,875  |
| 3/4 |       | 3/4 |         | 3/4 | 183,172 | 3/4 | 172,864 | 3/4 | 162,538 | 3/4 | 152,194 | 3/4 | 139,470 | 3/4 | 124,507 | 3/4 | 109,544 | 3/4 | 94,563  |
| 7   |       | 7   | 192,574 | 7   | 182,957 | 7   | 172,650 | 7   | 162,322 | 7   | 151,979 | 7   | 139,158 | 7   | 124,195 | 7   | 109,232 | 7   | 94,251  |
| 1/4 |       | 1/4 | 192,451 | 1/4 | 182,742 | 1/4 | 172,435 | 1/4 | 162,107 | 1/4 | 151,763 | 1/4 | 138,846 | 1/4 | 123,883 | 1/4 | 108,920 | 1/4 | 93,939  |
| 1/2 |       | 1/2 | 192,327 | 1/2 | 182,528 | 1/2 | 172,220 | 1/2 | 161,891 | 1/2 | 151,548 | 1/2 | 138,535 | 1/2 | 123,572 | 1/2 | 108,608 | 1/2 | 93,627  |
| 3/4 |       | 3/4 | 192,204 | 3/4 | 182,313 | 3/4 | 172,005 | 3/4 | 161,676 | 3/4 | 151,332 | 3/4 | 138,223 | 3/4 | 123,260 | 3/4 | 108,297 | 3/4 | 93,315  |
| 8   |       | 8   | 192,081 | 8   | 182,098 | 8   | 171,791 | 8   | 161,460 | 8   | 151,117 | 8   | 137,911 | 8   | 122,948 | 8   | 107,985 | 8   | 93,003  |
| 1/4 |       | 1/4 | 191,921 | 1/4 | 181,883 | 1/4 | 171,576 | 1/4 | 161,245 | 1/4 | 150,901 | 1/4 | 137,599 | 1/4 | 122,637 | 1/4 | 107,673 | 1/4 | 92,690  |
| 1/2 |       | 1/2 | 191,762 | 1/2 | 181,669 | 1/2 | 171,361 | 1/2 | 161,029 | 1/2 | 150,686 | 1/2 | 137,288 | 1/2 | 122,325 | 1/2 | 107,361 | 1/2 | 92,378  |
| 3/4 |       | 3/4 | 191,603 | 3/4 | 181,454 | 3/4 | 171,146 | 3/4 | 160,814 | 3/4 | 150,470 | 3/4 | 136,976 | 3/4 | 122,013 | 3/4 | 107,049 | 3/4 | 92,066  |
| 9   |       | 9   | 191,444 | 9   | 181,239 | 9   | 170,932 | 9   | 160,598 | 9   | 150,255 | 9   | 136,664 | 9   | 121,701 | 9   | 106,737 | 9   | 91,754  |
| 1/4 |       | 1/4 | 191,251 | 1/4 | 181,024 | 1/4 | 170,717 | 1/4 | 160,383 | 1/4 | 150,036 | 1/4 | 136,352 | 1/4 | 121,390 | 1/4 | 106,425 | 1/4 | 91,442  |
| 1/2 |       | 1/2 | 191,058 | 1/2 | 180,810 | 1/2 | 170,502 | 1/2 | 160,167 | 1/2 | 149,816 | 1/2 | 136,041 | 1/2 | 121,078 | 1/2 | 106,113 | 1/2 | 91,130  |
| 3/4 |       | 3/4 | 190,866 | 3/4 | 180,595 | 3/4 | 170,287 | 3/4 | 159,952 | 3/4 | 149,597 | 3/4 | 135,729 | 3/4 | 120,766 | 3/4 | 105,800 | 3/4 | 90,818  |
| 10  |       | 10  | 190,673 | 10  | 180,380 | 10  | 170,073 | 10  | 159,736 | 10  | 149,378 | 10  | 135,417 | 10  | 120,454 | 10  | 105,488 | 10  | 90,505  |
| 1/4 |       | 1/4 | 190,462 | 1/4 | 180,165 | 1/4 | 169,858 | 1/4 | 159,521 | 1/4 | 149,148 | 1/4 | 135,106 | 1/4 | 120,143 | 1/4 | 105,176 | 1/4 | 90,193  |
| 1/2 |       | 1/2 | 190,251 | 1/2 | 179,951 | 1/2 | 169,643 | 1/2 | 159,305 | 1/2 | 148,917 | 1/2 | 134,794 | 1/2 | 119,831 | 1/2 | 104,864 | 1/2 | 89,881  |
| 3/4 |       | 3/4 | 190,040 | 3/4 | 179,736 | 3/4 | 169,429 | 3/4 | 159,090 | 3/4 | 148,687 | 3/4 | 134,482 | 3/4 | 119,519 | 3/4 | 104,552 | 3/4 | 89,569  |
| 11  |       | 11  | 189,829 | 11  | 179,521 | 11  | 169,214 | 11  | 158,874 | 11  | 148,456 | 11  | 134,170 | 11  | 119,208 | 11  | 104,240 | 11  | 89,257  |
| 1/4 |       | 1/4 | 189,614 | 1/4 | 179,306 | 1/4 | 168,999 | 1/4 | 158,659 | 1/4 | 148,209 | 1/4 | 133,859 | 1/4 | 118,896 | 1/4 | 103,928 | 1/4 | 88,945  |
| 1/2 |       | 1/2 | 189,400 | 1/2 | 179,092 | 1/2 | 168,784 | 1/2 | 158,443 | 1/2 | 147,962 | 1/2 | 133,547 | 1/2 | 118,584 | 1/2 | 103,615 | 1/2 | 88,633  |
| 3/4 |       | 3/4 | 189,185 | 3/4 | 178,877 | 3/4 | 168,570 | 3/4 | 158,228 | 3/4 | 147,716 | 3/4 | 133,235 | 3/4 | 118,272 | 3/4 | 103,303 | 3/4 | 88,320  |

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 LIP OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-0" FORWARD OF AFT BULKHEAD

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
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# BARGE "HFL 437"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

| 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   | 88,008 | 0   | 73,025 | 0   | 58,043 | 0   | 43,065 | 0   | 28,095 | 0   | 13,113 | 0   |        | 0   |        | 0   |        | 0   |        |
| 1/4 | 87,696 | 1/4 | 72,713 | 1/4 | 57,731 | 1/4 | 42,753 | 1/4 | 27,783 | 1/4 | 12,801 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 87,384 | 1/2 | 72,401 | 1/2 | 57,418 | 1/2 | 42,442 | 1/2 | 27,471 | 1/2 | 12,489 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 87,072 | 3/4 | 72,089 | 3/4 | 57,106 | 3/4 | 42,130 | 3/4 | 27,159 | 3/4 | 12,176 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 1   | 86,760 | 1   | 71,777 | 1   | 56,794 | 1   | 41,818 | 1   | 26,847 | 1   | 11,864 | 1   |        | 1   |        | 1   |        | 1   |        |
| 1/4 | 86,448 | 1/4 | 71,465 | 1/4 | 56,482 | 1/4 | 41,507 | 1/4 | 26,535 | 1/4 | 11,552 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 86,135 | 1/2 | 71,153 | 1/2 | 56,170 | 1/2 | 41,195 | 1/2 | 26,222 | 1/2 | 11,240 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 85,823 | 3/4 | 70,840 | 3/4 | 55,858 | 3/4 | 40,883 | 3/4 | 25,910 | 3/4 | 10,928 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 2   | 85,511 | 2   | 70,528 | 2   | 55,546 | 2   | 40,572 | 2   | 25,598 | 2   | 10,616 | 2   |        | 2   |        | 2   |        | 2   |        |
| 1/4 | 85,199 | 1/4 | 70,216 | 1/4 | 55,233 | 1/4 | 40,260 | 1/4 | 25,286 | 1/4 | 10,304 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 84,887 | 1/2 | 69,904 | 1/2 | 54,921 | 1/2 | 39,948 | 1/2 | 24,974 | 1/2 | 9,992  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 84,575 | 3/4 | 69,592 | 3/4 | 54,609 | 3/4 | 39,637 | 3/4 | 24,662 | 3/4 | 9,679  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 3   | 84,263 | 3   | 69,280 | 3   | 54,297 | 3   | 39,325 | 3   | 24,350 | 3   | 9,367  | 3   |        | 3   |        | 3   |        | 3   |        |
| 1/4 | 83,950 | 1/4 | 68,968 | 1/4 | 53,985 | 1/4 | 39,014 | 1/4 | 24,037 | 1/4 | 9,055  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 83,638 | 1/2 | 68,655 | 1/2 | 53,673 | 1/2 | 38,702 | 1/2 | 23,725 | 1/2 | 8,743  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 83,326 | 3/4 | 68,343 | 3/4 | 53,361 | 3/4 | 38,390 | 3/4 | 23,413 | 3/4 | 8,431  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 4   | 83,014 | 4   | 68,031 | 4   | 53,048 | 4   | 38,079 | 4   | 23,101 | 4   | 8,119  | 4   |        | 4   |        | 4   |        | 4   |        |
| 1/4 | 82,702 | 1/4 | 67,719 | 1/4 | 52,736 | 1/4 | 37,767 | 1/4 | 22,789 | 1/4 | 7,807  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 82,390 | 1/2 | 67,407 | 1/2 | 52,424 | 1/2 | 37,455 | 1/2 | 22,477 | 1/2 | 7,494  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 82,078 | 3/4 | 67,095 | 3/4 | 52,112 | 3/4 | 37,144 | 3/4 | 22,165 | 3/4 | 7,182  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 5   | 81,765 | 5   | 66,783 | 5   | 51,800 | 5   | 36,832 | 5   | 21,853 | 5   | 6,870  | 5   |        | 5   |        | 5   |        | 5   |        |
| 1/4 | 81,453 | 1/4 | 66,471 | 1/4 | 51,488 | 1/4 | 36,520 | 1/4 | 21,540 | 1/4 | 6,558  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 81,141 | 1/2 | 66,158 | 1/2 | 51,176 | 1/2 | 36,209 | 1/2 | 21,228 | 1/2 | 6,246  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 80,829 | 3/4 | 65,846 | 3/4 | 50,863 | 3/4 | 35,897 | 3/4 | 20,916 | 3/4 | 5,934  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 6   | 80,517 | 6   | 65,534 | 6   | 50,551 | 6   | 35,585 | 6   | 20,604 | 6   | 5,622  | 6   |        | 6   |        | 6   |        | 6   |        |
| 1/4 | 80,205 | 1/4 | 65,222 | 1/4 | 50,239 | 1/4 | 35,274 | 1/4 | 20,292 | 1/4 | 5,310  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 79,893 | 1/2 | 64,910 | 1/2 | 49,927 | 1/2 | 34,962 | 1/2 | 19,980 | 1/2 | 4,998  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 79,580 | 3/4 | 64,598 | 3/4 | 49,615 | 3/4 | 34,650 | 3/4 | 19,668 | 3/4 | 4,686  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 7   | 79,268 | 7   | 64,286 | 7   | 49,303 | 7   | 34,338 | 7   | 19,356 | 7   | 4,374  | 7   |        | 7   |        | 7   |        | 7   |        |
| 1/4 | 78,956 | 1/4 | 63,973 | 1/4 | 48,991 | 1/4 | 34,026 | 1/4 | 19,043 | 1/4 | 4,063  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 78,644 | 1/2 | 63,661 | 1/2 | 48,678 | 1/2 | 33,714 | 1/2 | 18,731 | 1/2 | 3,752  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 78,332 | 3/4 | 63,349 | 3/4 | 48,366 | 3/4 | 33,401 | 3/4 | 18,419 | 3/4 | 3,441  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 8   | 78,020 | 8   | 63,037 | 8   | 48,054 | 8   | 33,089 | 8   | 18,107 | 8   | 3,130  | 8   |        | 8   |        | 8   |        | 8   |        |
| 1/4 | 77,708 | 1/4 | 62,725 | 1/4 | 47,742 | 1/4 | 32,777 | 1/4 | 17,795 | 1/4 | 2,838  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 77,395 | 1/2 | 62,413 | 1/2 | 47,430 | 1/2 | 32,465 | 1/2 | 17,483 | 1/2 | 2,546  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 77,083 | 3/4 | 62,101 | 3/4 | 47,118 | 3/4 | 32,153 | 3/4 | 17,171 | 3/4 | 2,254  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 9   | 76,771 | 9   | 61,788 | 9   | 46,806 | 9   | 31,841 | 9   | 16,858 | 9   | 1,962  | 9   |        | 9   |        | 9   |        | 9   |        |
| 1/4 | 76,459 | 1/4 | 61,476 | 1/4 | 46,494 | 1/4 | 31,529 | 1/4 | 16,546 | 1/4 | 1,728  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 76,147 | 1/2 | 61,164 | 1/2 | 46,182 | 1/2 | 31,217 | 1/2 | 16,234 | 1/2 | 1,494  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 75,835 | 3/4 | 60,852 | 3/4 | 45,870 | 3/4 | 30,904 | 3/4 | 15,922 | 3/4 | 1,260  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 10  | 75,523 | 10  | 60,540 | 10  | 45,559 | 10  | 30,592 | 10  | 15,610 | 10  | 1,026  | 10  |        | 10  |        | 10  |        | 10  |        |
| 1/4 | 75,210 | 1/4 | 60,228 | 1/4 | 45,247 | 1/4 | 30,280 | 1/4 | 15,298 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 74,898 | 1/2 | 59,916 | 1/2 | 44,935 | 1/2 | 29,968 | 1/2 | 14,986 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 74,586 | 3/4 | 59,603 | 3/4 | 44,623 | 3/4 | 29,656 | 3/4 | 14,674 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 11  | 74,274 | 11  | 59,291 | 11  | 44,312 | 11  | 29,344 | 11  | 14,361 | 11  |        | 11  |        | 11  |        | 11  |        | 11  |        |
| 1/4 | 73,962 | 1/4 | 58,979 | 1/4 | 44,000 | 1/4 | 29,032 | 1/4 | 14,049 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 73,650 | 1/2 | 58,667 | 1/2 | 43,688 | 1/2 | 28,719 | 1/2 | 13,737 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 73,338 | 3/4 | 58,355 | 3/4 | 43,377 | 3/4 | 28,407 | 3/4 | 13,425 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/02/2015 CL  
CALCULATED: 11/02/2015 CL  
PRINTED: 11/02/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 437"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 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   | 187,652 | 0   | 177,348 | 0   | 167,044 | 0   | 156,705 | 0   | 146,120 | 0   | 131,563 | 0   | 116,639 | 0   | 101,708 |
| 1/4 |       | 1/4 |       | 1/4 | 187,437 | 1/4 | 177,133 | 1/4 | 166,829 | 1/4 | 156,490 | 1/4 | 145,858 | 1/4 | 131,252 | 1/4 | 116,328 | 1/4 | 101,396 |
| 1/2 |       | 1/2 |       | 1/2 | 187,223 | 1/2 | 176,919 | 1/2 | 166,614 | 1/2 | 156,275 | 1/2 | 145,596 | 1/2 | 130,941 | 1/2 | 116,017 | 1/2 | 101,085 |
| 3/4 |       | 3/4 |       | 3/4 | 187,008 | 3/4 | 176,704 | 3/4 | 166,399 | 3/4 | 156,059 | 3/4 | 145,334 | 3/4 | 130,630 | 3/4 | 115,706 | 3/4 | 100,774 |
| 1   |       | 1   |       | 1   | 186,793 | 1   | 176,489 | 1   | 166,184 | 1   | 155,844 | 1   | 145,056 | 1   | 130,319 | 1   | 115,395 | 1   | 100,462 |
| 1/4 |       | 1/4 |       | 1/4 | 186,578 | 1/4 | 176,275 | 1/4 | 165,968 | 1/4 | 155,628 | 1/4 | 144,778 | 1/4 | 130,008 | 1/4 | 115,084 | 1/4 | 100,151 |
| 1/2 |       | 1/2 |       | 1/2 | 186,364 | 1/2 | 176,060 | 1/2 | 165,753 | 1/2 | 155,413 | 1/2 | 144,500 | 1/2 | 129,698 | 1/2 | 114,773 | 1/2 | 99,840  |
| 3/4 |       | 3/4 |       | 3/4 | 186,149 | 3/4 | 175,845 | 3/4 | 165,537 | 3/4 | 155,198 | 3/4 | 144,222 | 3/4 | 129,387 | 3/4 | 114,462 | 3/4 | 99,528  |
| 2   |       | 2   |       | 2   | 185,934 | 2   | 175,631 | 2   | 165,322 | 2   | 154,982 | 2   | 143,928 | 2   | 129,076 | 2   | 114,152 | 2   | 99,217  |
| 1/4 |       | 1/4 |       | 1/4 | 185,719 | 1/4 | 175,416 | 1/4 | 165,107 | 1/4 | 154,767 | 1/4 | 143,635 | 1/4 | 128,765 | 1/4 | 113,841 | 1/4 | 98,906  |
| 1/2 |       | 1/2 |       | 1/2 | 185,505 | 1/2 | 175,201 | 1/2 | 164,891 | 1/2 | 154,551 | 1/2 | 143,341 | 1/2 | 128,454 | 1/2 | 113,530 | 1/2 | 98,594  |
| 3/4 |       | 3/4 |       | 3/4 | 185,290 | 3/4 | 174,987 | 3/4 | 164,676 | 3/4 | 154,336 | 3/4 | 143,047 | 3/4 | 128,143 | 3/4 | 113,219 | 3/4 | 98,283  |
| 3   |       | 3   |       | 3   | 185,075 | 3   | 174,772 | 3   | 164,460 | 3   | 154,120 | 3   | 142,741 | 3   | 127,832 | 3   | 112,908 | 3   | 97,972  |
| 1/4 |       | 1/4 |       | 1/4 | 184,861 | 1/4 | 174,557 | 1/4 | 164,245 | 1/4 | 153,905 | 1/4 | 142,434 | 1/4 | 127,521 | 1/4 | 112,597 | 1/4 | 97,661  |
| 1/2 |       | 1/2 |       | 1/2 | 184,646 | 1/2 | 174,343 | 1/2 | 164,029 | 1/2 | 153,690 | 1/2 | 142,128 | 1/2 | 127,210 | 1/2 | 112,286 | 1/2 | 97,349  |
| 3/4 |       | 3/4 |       | 3/4 | 184,431 | 3/4 | 174,128 | 3/4 | 163,814 | 3/4 | 153,474 | 3/4 | 141,822 | 3/4 | 126,899 | 3/4 | 111,975 | 3/4 | 97,038  |
| 4   |       | 4   |       | 4   | 184,217 | 4   | 173,913 | 4   | 163,599 | 4   | 153,259 | 4   | 141,511 | 4   | 126,588 | 4   | 111,664 | 4   | 96,727  |
| 1/4 |       | 1/4 |       | 1/4 | 184,002 | 1/4 | 173,699 | 1/4 | 163,383 | 1/4 | 153,043 | 1/4 | 141,201 | 1/4 | 126,277 | 1/4 | 111,353 | 1/4 | 96,416  |
| 1/2 |       | 1/2 |       | 1/2 | 183,787 | 1/2 | 173,484 | 1/2 | 163,168 | 1/2 | 152,828 | 1/2 | 140,890 | 1/2 | 125,967 | 1/2 | 111,042 | 1/2 | 96,105  |
| 3/4 |       | 3/4 |       | 3/4 | 183,573 | 3/4 | 173,269 | 3/4 | 162,952 | 3/4 | 152,613 | 3/4 | 140,579 | 3/4 | 125,656 | 3/4 | 110,731 | 3/4 | 95,794  |
| 5   |       | 5   |       | 5   | 183,358 | 5   | 173,055 | 5   | 162,737 | 5   | 152,397 | 5   | 140,269 | 5   | 125,345 | 5   | 110,421 | 5   | 95,483  |
| 1/4 |       | 1/4 |       | 1/4 | 183,144 | 1/4 | 172,840 | 1/4 | 162,522 | 1/4 | 152,182 | 1/4 | 139,958 | 1/4 | 125,034 | 1/4 | 110,110 | 1/4 | 95,172  |
| 1/2 |       | 1/2 |       | 1/2 | 182,929 | 1/2 | 172,625 | 1/2 | 162,306 | 1/2 | 151,966 | 1/2 | 139,647 | 1/2 | 124,723 | 1/2 | 109,799 | 1/2 | 94,861  |
| 3/4 |       | 3/4 |       | 3/4 | 182,714 | 3/4 | 172,411 | 3/4 | 162,091 | 3/4 | 151,751 | 3/4 | 139,336 | 3/4 | 124,412 | 3/4 | 109,488 | 3/4 | 94,549  |
| 6   |       | 6   |       | 6   | 182,500 | 6   | 172,196 | 6   | 161,875 | 6   | 151,536 | 6   | 139,025 | 6   | 124,101 | 6   | 109,177 | 6   | 94,238  |
| 1/4 |       | 1/4 |       | 1/4 | 182,285 | 1/4 | 171,982 | 1/4 | 161,660 | 1/4 | 151,320 | 1/4 | 138,714 | 1/4 | 123,790 | 1/4 | 108,866 | 1/4 | 93,927  |
| 1/2 |       | 1/2 |       | 1/2 | 182,070 | 1/2 | 171,767 | 1/2 | 161,445 | 1/2 | 151,105 | 1/2 | 138,403 | 1/2 | 123,479 | 1/2 | 108,555 | 1/2 | 93,616  |
| 3/4 |       | 3/4 |       | 3/4 | 191,469 | 3/4 | 181,856 | 3/4 | 171,552 | 3/4 | 161,229 | 3/4 | 150,889 | 3/4 | 138,092 | 3/4 | 108,244 | 3/4 | 93,305  |
| 7   |       | 7   |       | 7   | 191,346 | 7   | 181,641 | 7   | 171,338 | 7   | 161,014 | 7   | 150,674 | 7   | 137,781 | 7   | 107,933 | 7   | 92,994  |
| 1/4 |       | 1/4 |       | 1/4 | 191,222 | 1/4 | 181,426 | 1/4 | 171,123 | 1/4 | 160,798 | 1/4 | 150,458 | 1/4 | 137,471 | 1/4 | 107,622 | 1/4 | 92,683  |
| 1/2 |       | 1/2 |       | 1/2 | 191,099 | 1/2 | 181,212 | 1/2 | 170,908 | 1/2 | 160,583 | 1/2 | 150,243 | 1/2 | 137,160 | 1/2 | 107,311 | 1/2 | 92,372  |
| 3/4 |       | 3/4 |       | 3/4 | 190,976 | 3/4 | 180,997 | 3/4 | 170,694 | 3/4 | 160,367 | 3/4 | 150,028 | 3/4 | 136,849 | 3/4 | 107,000 | 3/4 | 92,061  |
| 8   |       | 8   |       | 8   | 190,816 | 8   | 180,782 | 8   | 170,479 | 8   | 160,152 | 8   | 149,812 | 8   | 136,538 | 8   | 106,689 | 8   | 91,750  |
| 1/4 |       | 1/4 |       | 1/4 | 190,657 | 1/4 | 180,568 | 1/4 | 170,264 | 1/4 | 159,937 | 1/4 | 149,597 | 1/4 | 136,227 | 1/4 | 106,377 | 1/4 | 91,439  |
| 1/2 |       | 1/2 |       | 1/2 | 190,498 | 1/2 | 180,353 | 1/2 | 170,050 | 1/2 | 159,721 | 1/2 | 149,381 | 1/2 | 135,916 | 1/2 | 106,066 | 1/2 | 91,128  |
| 3/4 |       | 3/4 |       | 3/4 | 190,339 | 3/4 | 180,138 | 3/4 | 169,835 | 3/4 | 159,506 | 3/4 | 149,166 | 3/4 | 135,605 | 3/4 | 105,755 | 3/4 | 90,816  |
| 9   |       | 9   |       | 9   | 190,146 | 9   | 179,924 | 9   | 169,620 | 9   | 159,290 | 9   | 148,947 | 9   | 135,294 | 9   | 105,444 | 9   | 90,505  |
| 1/4 |       | 1/4 |       | 1/4 | 189,954 | 1/4 | 179,709 | 1/4 | 169,406 | 1/4 | 159,075 | 1/4 | 148,728 | 1/4 | 134,983 | 1/4 | 105,132 | 1/4 | 90,194  |
| 1/2 |       | 1/2 |       | 1/2 | 189,761 | 1/2 | 179,494 | 1/2 | 169,191 | 1/2 | 158,860 | 1/2 | 148,509 | 1/2 | 134,672 | 1/2 | 104,821 | 1/2 | 89,883  |
| 3/4 |       | 3/4 |       | 3/4 | 189,569 | 3/4 | 179,280 | 3/4 | 168,976 | 3/4 | 158,644 | 3/4 | 148,290 | 3/4 | 134,361 | 3/4 | 104,510 | 3/4 | 89,572  |
| 10  |       | 10  |       | 10  | 189,358 | 10  | 179,065 | 10  | 168,762 | 10  | 158,429 | 10  | 148,060 | 10  | 134,050 | 10  | 104,198 | 10  | 89,261  |
| 1/4 |       | 1/4 |       | 1/4 | 189,147 | 1/4 | 178,850 | 1/4 | 168,547 | 1/4 | 158,213 | 1/4 | 147,829 | 1/4 | 133,740 | 1/4 | 103,887 | 1/4 | 88,950  |
| 1/2 |       | 1/2 |       | 1/2 | 188,935 | 1/2 | 178,636 | 1/2 | 168,332 | 1/2 | 157,998 | 1/2 | 147,599 | 1/2 | 133,429 | 1/2 | 103,576 | 1/2 | 88,639  |
| 3/4 |       | 3/4 |       | 3/4 | 188,724 | 3/4 | 178,421 | 3/4 | 168,118 | 3/4 | 157,783 | 3/4 | 147,368 | 3/4 | 133,118 | 3/4 | 103,264 | 3/4 | 88,328  |
| 11  |       | 11  |       | 11  | 188,510 | 11  | 178,206 | 11  | 167,903 | 11  | 157,567 | 11  | 147,122 | 11  | 132,807 | 11  | 102,953 | 11  | 88,017  |
| 1/4 |       | 1/4 |       | 1/4 | 188,296 | 1/4 | 177,992 | 1/4 | 167,688 | 1/4 | 157,352 | 1/4 | 146,875 | 1/4 | 132,496 | 1/4 | 102,642 | 1/4 | 87,705  |
| 1/2 |       | 1/2 |       | 1/2 | 188,081 | 1/2 | 177,777 | 1/2 | 167,474 | 1/2 | 157,136 | 1/2 | 146,629 | 1/2 | 132,185 | 1/2 | 102,330 | 1/2 | 87,394  |
| 3/4 |       | 3/4 |       | 3/4 | 187,867 | 3/4 | 177,563 | 3/4 | 167,259 | 3/4 | 156,921 | 3/4 | 146,382 | 3/4 | 131,874 | 3/4 | 102,019 | 3/4 | 87,083  |

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 LIP OF 2" "HERMETIC" VALVE

GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-0" FORWARD OF AFT BULKHEAD

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 437"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 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   | 86,771 | 0   | 71,861 | 0   | 57,023 | 0   | 42,528 | 0   | 27,737 | 0   | 12,788 | 0   |        | 0   |        | 0   |        | 0   |        |
| 1/4 | 86,460 | 1/4 | 71,552 | 1/4 | 56,719 | 1/4 | 42,224 | 1/4 | 27,426 | 1/4 | 12,476 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 86,149 | 1/2 | 71,243 | 1/2 | 56,416 | 1/2 | 41,920 | 1/2 | 27,115 | 1/2 | 12,165 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 85,837 | 3/4 | 70,933 | 3/4 | 56,113 | 3/4 | 41,616 | 3/4 | 26,803 | 3/4 | 11,853 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 1   | 85,526 | 1   | 70,624 | 1   | 55,811 | 1   | 41,312 | 1   | 26,492 | 1   | 11,542 | 1   |        | 1   |        | 1   |        | 1   |        |
| 1/4 | 85,214 | 1/4 | 70,314 | 1/4 | 55,510 | 1/4 | 41,008 | 1/4 | 26,180 | 1/4 | 11,230 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 84,903 | 1/2 | 70,005 | 1/2 | 55,208 | 1/2 | 40,704 | 1/2 | 25,869 | 1/2 | 10,918 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 84,592 | 3/4 | 69,695 | 3/4 | 54,906 | 3/4 | 40,399 | 3/4 | 25,558 | 3/4 | 10,607 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 2   | 84,280 | 2   | 69,386 | 2   | 54,605 | 2   | 40,095 | 2   | 25,246 | 2   | 10,295 | 2   |        | 2   |        | 2   |        | 2   |        |
| 1/4 | 83,969 | 1/4 | 69,077 | 1/4 | 54,303 | 1/4 | 39,791 | 1/4 | 24,935 | 1/4 | 9,983  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 83,657 | 1/2 | 68,767 | 1/2 | 54,002 | 1/2 | 39,487 | 1/2 | 24,623 | 1/2 | 9,671  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 83,346 | 3/4 | 68,458 | 3/4 | 53,700 | 3/4 | 39,183 | 3/4 | 24,312 | 3/4 | 9,359  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 3   | 83,035 | 3   | 68,148 | 3   | 53,398 | 3   | 38,879 | 3   | 24,000 | 3   | 9,047  | 3   |        | 3   |        | 3   |        | 3   |        |
| 1/4 | 82,723 | 1/4 | 67,839 | 1/4 | 53,097 | 1/4 | 38,574 | 1/4 | 23,689 | 1/4 | 8,735  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 82,412 | 1/2 | 67,529 | 1/2 | 52,795 | 1/2 | 38,270 | 1/2 | 23,377 | 1/2 | 8,423  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 82,100 | 3/4 | 67,220 | 3/4 | 52,493 | 3/4 | 37,966 | 3/4 | 23,066 | 3/4 | 8,111  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 4   | 81,789 | 4   | 66,910 | 4   | 52,192 | 4   | 37,662 | 4   | 22,755 | 4   | 7,800  | 4   |        | 4   |        | 4   |        | 4   |        |
| 1/4 | 81,478 | 1/4 | 66,601 | 1/4 | 51,890 | 1/4 | 37,358 | 1/4 | 22,443 | 1/4 | 7,488  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 81,166 | 1/2 | 66,292 | 1/2 | 51,589 | 1/2 | 37,054 | 1/2 | 22,132 | 1/2 | 7,176  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 80,855 | 3/4 | 65,982 | 3/4 | 51,287 | 3/4 | 36,750 | 3/4 | 21,820 | 3/4 | 6,865  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 5   | 80,543 | 5   | 65,673 | 5   | 50,985 | 5   | 36,442 | 5   | 21,509 | 5   | 6,553  | 5   |        | 5   |        | 5   |        | 5   |        |
| 1/4 | 80,232 | 1/4 | 65,363 | 1/4 | 50,684 | 1/4 | 36,135 | 1/4 | 21,197 | 1/4 | 6,241  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 79,921 | 1/2 | 65,054 | 1/2 | 50,382 | 1/2 | 35,828 | 1/2 | 20,886 | 1/2 | 5,930  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 79,609 | 3/4 | 64,744 | 3/4 | 50,081 | 3/4 | 35,520 | 3/4 | 20,574 | 3/4 | 5,618  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 6   | 79,298 | 6   | 64,435 | 6   | 49,779 | 6   | 35,209 | 6   | 20,263 | 6   | 5,306  | 6   |        | 6   |        | 6   |        | 6   |        |
| 1/4 | 78,986 | 1/4 | 64,125 | 1/4 | 49,477 | 1/4 | 34,898 | 1/4 | 19,951 | 1/4 | 4,995  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 78,675 | 1/2 | 63,816 | 1/2 | 49,176 | 1/2 | 34,587 | 1/2 | 19,640 | 1/2 | 4,683  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 78,364 | 3/4 | 63,507 | 3/4 | 48,874 | 3/4 | 34,277 | 3/4 | 19,328 | 3/4 | 4,372  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 7   | 78,053 | 7   | 63,196 | 7   | 48,572 | 7   | 33,965 | 7   | 19,017 | 7   | 4,061  | 7   |        | 7   |        | 7   |        | 7   |        |
| 1/4 | 77,743 | 1/4 | 62,886 | 1/4 | 48,271 | 1/4 | 33,654 | 1/4 | 18,706 | 1/4 | 3,750  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 77,432 | 1/2 | 62,576 | 1/2 | 47,969 | 1/2 | 33,342 | 1/2 | 18,394 | 1/2 | 3,439  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 77,122 | 3/4 | 62,266 | 3/4 | 47,668 | 3/4 | 33,031 | 3/4 | 18,083 | 3/4 | 3,128  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 8   | 76,813 | 8   | 61,954 | 8   | 47,366 | 8   | 32,719 | 8   | 17,771 | 8   | 2,836  | 8   |        | 8   |        | 8   |        | 8   |        |
| 1/4 | 76,503 | 1/4 | 61,643 | 1/4 | 47,065 | 1/4 | 32,408 | 1/4 | 17,460 | 1/4 | 2,544  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 76,194 | 1/2 | 61,332 | 1/2 | 46,764 | 1/2 | 32,096 | 1/2 | 17,148 | 1/2 | 2,253  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 75,884 | 3/4 | 61,021 | 3/4 | 46,463 | 3/4 | 31,785 | 3/4 | 16,837 | 3/4 | 1,961  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 9   | 75,575 | 9   | 60,710 | 9   | 46,162 | 9   | 31,473 | 9   | 16,525 | 9   | 1,727  | 9   |        | 9   |        | 9   |        | 9   |        |
| 1/4 | 75,265 | 1/4 | 60,399 | 1/4 | 45,861 | 1/4 | 31,162 | 1/4 | 16,214 | 1/4 | 1,493  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 74,956 | 1/2 | 60,088 | 1/2 | 45,560 | 1/2 | 30,851 | 1/2 | 15,902 | 1/2 | 1,259  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 74,646 | 3/4 | 59,777 | 3/4 | 45,259 | 3/4 | 30,539 | 3/4 | 15,591 | 3/4 | 1,025  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 10  | 74,337 | 10  | 59,469 | 10  | 44,957 | 10  | 30,228 | 10  | 15,279 | 10  |        | 10  |        | 10  |        | 10  |        | 10  |        |
| 1/4 | 74,028 | 1/4 | 59,161 | 1/4 | 44,654 | 1/4 | 29,916 | 1/4 | 14,968 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 73,718 | 1/2 | 58,853 | 1/2 | 44,352 | 1/2 | 29,605 | 1/2 | 14,657 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 73,409 | 3/4 | 58,545 | 3/4 | 44,049 | 3/4 | 29,294 | 3/4 | 14,345 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 11  | 73,099 | 11  | 58,240 | 11  | 43,745 | 11  | 28,982 | 11  | 14,034 | 11  |        | 11  |        | 11  |        | 11  |        | 11  |        |
| 1/4 | 72,790 | 1/4 | 57,935 | 1/4 | 43,441 | 1/4 | 28,671 | 1/4 | 13,722 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 72,480 | 1/2 | 57,631 | 1/2 | 43,137 | 1/2 | 28,360 | 1/2 | 13,411 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 72,171 | 3/4 | 57,326 | 3/4 | 42,833 | 3/4 | 28,048 | 3/4 | 13,099 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/02/2015 CL  
CALCULATED: 11/02/2015 CL  
PRINTED: 11/02/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 437"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

| 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   | 208,976 | 0   | 194,010 | 0   | 178,990 | 0   | 163,921 | 0   | 148,850 | 0   | 133,778 | 0   | 118,707 | 0   | 103,632 |
| 1/4 |       | 1/4 |         | 1/4 | 208,666 | 1/4 | 193,697 | 1/4 | 178,676 | 1/4 | 163,607 | 1/4 | 148,536 | 1/4 | 133,464 | 1/4 | 118,393 | 1/4 | 103,318 |
| 1/2 |       | 1/2 |         | 1/2 | 208,356 | 1/2 | 193,384 | 1/2 | 178,363 | 1/2 | 163,293 | 1/2 | 148,222 | 1/2 | 133,150 | 1/2 | 118,079 | 1/2 | 103,004 |
| 3/4 |       | 3/4 |         | 3/4 | 208,046 | 3/4 | 193,071 | 3/4 | 178,050 | 3/4 | 162,979 | 3/4 | 147,908 | 3/4 | 132,836 | 3/4 | 117,765 | 3/4 | 102,690 |
| 1   |       | 1   |         | 1   | 207,736 | 1   | 192,758 | 1   | 177,736 | 1   | 162,665 | 1   | 147,594 | 1   | 132,522 | 1   | 117,451 | 1   | 102,376 |
| 1/4 |       | 1/4 |         | 1/4 | 207,426 | 1/4 | 192,445 | 1/4 | 177,422 | 1/4 | 162,351 | 1/4 | 147,280 | 1/4 | 132,208 | 1/4 | 117,137 | 1/4 | 102,062 |
| 1/2 |       | 1/2 |         | 1/2 | 207,116 | 1/2 | 192,133 | 1/2 | 177,108 | 1/2 | 162,037 | 1/2 | 146,966 | 1/2 | 131,894 | 1/2 | 116,823 | 1/2 | 101,748 |
| 3/4 |       | 3/4 |         | 3/4 | 206,806 | 3/4 | 191,820 | 3/4 | 176,794 | 3/4 | 161,723 | 3/4 | 146,652 | 3/4 | 131,580 | 3/4 | 116,509 | 3/4 | 101,433 |
| 2   |       | 2   |         | 2   | 206,496 | 2   | 191,507 | 2   | 176,480 | 2   | 161,409 | 2   | 146,338 | 2   | 131,266 | 2   | 116,195 | 2   | 101,119 |
| 1/4 |       | 1/4 |         | 1/4 | 206,186 | 1/4 | 191,194 | 1/4 | 176,166 | 1/4 | 161,095 | 1/4 | 146,024 | 1/4 | 130,952 | 1/4 | 115,881 | 1/4 | 100,805 |
| 1/2 |       | 1/2 |         | 1/2 | 205,876 | 1/2 | 190,881 | 1/2 | 175,852 | 1/2 | 160,781 | 1/2 | 145,710 | 1/2 | 130,638 | 1/2 | 115,567 | 1/2 | 100,491 |
| 3/4 |       | 3/4 |         | 3/4 | 205,566 | 3/4 | 190,568 | 3/4 | 175,538 | 3/4 | 160,467 | 3/4 | 145,396 | 3/4 | 130,325 | 3/4 | 115,253 | 3/4 | 100,177 |
| 3   |       | 3   |         | 3   | 205,257 | 3   | 190,255 | 3   | 175,224 | 3   | 160,153 | 3   | 145,082 | 3   | 130,011 | 3   | 114,939 | 3   | 99,863  |
| 1/4 |       | 1/4 |         | 1/4 | 204,947 | 1/4 | 189,942 | 1/4 | 174,910 | 1/4 | 159,839 | 1/4 | 144,768 | 1/4 | 129,697 | 1/4 | 114,625 | 1/4 | 99,549  |
| 1/2 |       | 1/2 |         | 1/2 | 204,637 | 1/2 | 189,629 | 1/2 | 174,596 | 1/2 | 159,525 | 1/2 | 144,454 | 1/2 | 129,383 | 1/2 | 114,311 | 1/2 | 99,234  |
| 3/4 |       | 3/4 |         | 3/4 | 204,327 | 3/4 | 189,316 | 3/4 | 174,282 | 3/4 | 159,211 | 3/4 | 144,140 | 3/4 | 129,069 | 3/4 | 113,997 | 3/4 | 98,920  |
| 4   |       | 4   |         | 4   | 204,017 | 4   | 189,003 | 4   | 173,968 | 4   | 158,897 | 4   | 143,826 | 4   | 128,755 | 4   | 113,683 | 4   | 98,606  |
| 1/4 |       | 1/4 |         | 1/4 | 203,706 | 1/4 | 188,690 | 1/4 | 173,654 | 1/4 | 158,583 | 1/4 | 143,512 | 1/4 | 128,441 | 1/4 | 113,369 | 1/4 | 98,292  |
| 1/2 |       | 1/2 |         | 1/2 | 203,395 | 1/2 | 188,378 | 1/2 | 173,340 | 1/2 | 158,269 | 1/2 | 143,198 | 1/2 | 128,127 | 1/2 | 113,055 | 1/2 | 97,978  |
| 3/4 |       | 3/4 |         | 3/4 | 203,083 | 3/4 | 188,065 | 3/4 | 173,026 | 3/4 | 157,955 | 3/4 | 142,884 | 3/4 | 127,813 | 3/4 | 112,741 | 3/4 | 97,664  |
| 5   |       | 5   |         | 5   | 202,772 | 5   | 187,752 | 5   | 172,712 | 5   | 157,641 | 5   | 142,570 | 5   | 127,499 | 5   | 112,427 | 5   | 97,350  |
| 1/4 |       | 1/4 |         | 1/4 | 202,459 | 1/4 | 187,439 | 1/4 | 172,398 | 1/4 | 157,327 | 1/4 | 142,256 | 1/4 | 127,185 | 1/4 | 112,113 | 1/4 | 97,035  |
| 1/2 |       | 1/2 |         | 1/2 | 202,146 | 1/2 | 187,126 | 1/2 | 172,084 | 1/2 | 157,013 | 1/2 | 141,942 | 1/2 | 126,871 | 1/2 | 111,799 | 1/2 | 96,721  |
| 3/4 |       | 3/4 |         | 3/4 | 201,833 | 3/4 | 186,813 | 3/4 | 171,770 | 3/4 | 156,699 | 3/4 | 141,628 | 3/4 | 126,557 | 3/4 | 111,485 | 3/4 | 96,407  |
| 6   |       | 6   |         | 6   | 201,520 | 6   | 186,500 | 6   | 171,456 | 6   | 156,385 | 6   | 141,314 | 6   | 126,243 | 6   | 111,171 | 6   | 96,093  |
| 1/4 |       | 1/4 |         | 1/4 | 201,207 | 1/4 | 186,187 | 1/4 | 171,142 | 1/4 | 156,071 | 1/4 | 141,000 | 1/4 | 125,929 | 1/4 | 110,857 | 1/4 | 95,779  |
| 1/2 |       | 1/2 |         | 1/2 | 200,894 | 1/2 | 185,874 | 1/2 | 170,828 | 1/2 | 155,757 | 1/2 | 140,686 | 1/2 | 125,615 | 1/2 | 110,543 | 1/2 | 95,465  |
| 3/4 |       | 3/4 |         | 3/4 | 200,581 | 3/4 | 185,561 | 3/4 | 170,515 | 3/4 | 155,443 | 3/4 | 140,372 | 3/4 | 125,301 | 3/4 | 110,229 | 3/4 | 95,151  |
| 7   |       | 7   | 214,199 | 7   | 200,268 | 7   | 185,248 | 7   | 170,201 | 7   | 155,129 | 7   | 140,058 | 7   | 124,987 | 7   | 109,915 | 7   | 94,836  |
| 1/4 |       | 1/4 | 214,020 | 1/4 | 199,956 | 1/4 | 184,935 | 1/4 | 169,887 | 1/4 | 154,815 | 1/4 | 139,744 | 1/4 | 124,673 | 1/4 | 109,601 | 1/4 | 94,522  |
| 1/2 |       | 1/2 | 213,841 | 1/2 | 199,643 | 1/2 | 184,622 | 1/2 | 169,573 | 1/2 | 154,501 | 1/2 | 139,430 | 1/2 | 124,359 | 1/2 | 109,287 | 1/2 | 94,208  |
| 3/4 |       | 3/4 | 213,662 | 3/4 | 199,330 | 3/4 | 184,310 | 3/4 | 169,259 | 3/4 | 154,187 | 3/4 | 139,116 | 3/4 | 124,045 | 3/4 | 108,973 | 3/4 | 93,894  |
| 8   |       | 8   | 213,482 | 8   | 199,017 | 8   | 183,997 | 8   | 168,945 | 8   | 153,873 | 8   | 138,802 | 8   | 123,731 | 8   | 108,659 | 8   | 93,580  |
| 1/4 |       | 1/4 | 213,251 | 1/4 | 198,704 | 1/4 | 183,684 | 1/4 | 168,631 | 1/4 | 153,559 | 1/4 | 138,488 | 1/4 | 123,417 | 1/4 | 108,344 | 1/4 | 93,266  |
| 1/2 |       | 1/2 | 213,020 | 1/2 | 198,391 | 1/2 | 183,371 | 1/2 | 168,317 | 1/2 | 153,245 | 1/2 | 138,174 | 1/2 | 123,103 | 1/2 | 108,030 | 1/2 | 92,952  |
| 3/4 |       | 3/4 | 212,788 | 3/4 | 198,078 | 3/4 | 183,058 | 3/4 | 168,003 | 3/4 | 152,931 | 3/4 | 137,860 | 3/4 | 122,789 | 3/4 | 107,716 | 3/4 | 92,637  |
| 9   |       | 9   | 212,557 | 9   | 197,765 | 9   | 182,745 | 9   | 167,689 | 9   | 152,617 | 9   | 137,546 | 9   | 122,475 | 9   | 107,402 | 9   | 92,323  |
| 1/4 |       | 1/4 | 212,277 | 1/4 | 197,452 | 1/4 | 182,432 | 1/4 | 167,375 | 1/4 | 152,303 | 1/4 | 137,232 | 1/4 | 122,161 | 1/4 | 107,088 | 1/4 | 92,009  |
| 1/2 |       | 1/2 | 211,997 | 1/2 | 197,139 | 1/2 | 182,119 | 1/2 | 167,061 | 1/2 | 151,989 | 1/2 | 136,918 | 1/2 | 121,847 | 1/2 | 106,774 | 1/2 | 91,695  |
| 3/4 |       | 3/4 | 211,717 | 3/4 | 196,826 | 3/4 | 181,806 | 3/4 | 166,747 | 3/4 | 151,675 | 3/4 | 136,604 | 3/4 | 121,533 | 3/4 | 106,460 | 3/4 | 91,381  |
| 10  |       | 10  | 211,437 | 10  | 196,513 | 10  | 181,493 | 10  | 166,433 | 10  | 151,361 | 10  | 136,290 | 10  | 121,219 | 10  | 106,146 | 10  | 91,067  |
| 1/4 |       | 1/4 | 211,131 | 1/4 | 196,201 | 1/4 | 181,180 | 1/4 | 166,119 | 1/4 | 151,047 | 1/4 | 135,976 | 1/4 | 120,905 | 1/4 | 105,831 | 1/4 | 90,753  |
| 1/2 |       | 1/2 | 210,825 | 1/2 | 195,888 | 1/2 | 180,867 | 1/2 | 165,805 | 1/2 | 150,733 | 1/2 | 135,662 | 1/2 | 120,591 | 1/2 | 105,517 | 1/2 | 90,438  |
| 3/4 |       | 3/4 | 210,519 | 3/4 | 195,575 | 3/4 | 180,555 | 3/4 | 165,491 | 3/4 | 150,420 | 3/4 | 135,348 | 3/4 | 120,277 | 3/4 | 105,203 | 3/4 | 90,124  |
| 11  |       | 11  | 210,214 | 11  | 195,262 | 11  | 180,242 | 11  | 165,177 | 11  | 150,106 | 11  | 135,034 | 11  | 119,963 | 11  | 104,889 | 11  | 89,810  |
| 1/4 |       | 1/4 | 209,904 | 1/4 | 194,949 | 1/4 | 179,929 | 1/4 | 164,863 | 1/4 | 149,792 | 1/4 | 134,720 | 1/4 | 119,649 | 1/4 | 104,575 | 1/4 | 89,496  |
| 1/2 |       | 1/2 | 209,595 | 1/2 | 194,636 | 1/2 | 179,616 | 1/2 | 164,549 | 1/2 | 149,478 | 1/2 | 134,406 | 1/2 | 119,335 | 1/2 | 104,261 | 1/2 | 89,182  |
| 3/4 |       | 3/4 | 209,285 | 3/4 | 194,323 | 3/4 | 179,303 | 3/4 | 164,235 | 3/4 | 149,164 | 3/4 | 134,092 | 3/4 | 119,021 | 3/4 | 103,947 | 3/4 | 88,868  |

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 LIP OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-3" FORWARD OF AFT BULKHEAD

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



# BARGE "HFL 437"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

| 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   | 88,554 | 0   | 73,475 | 0   | 58,396 | 0   | 43,339 | 0   | 28,275 | 0   | 13,197 | 0   |        | 0   |        | 0   |        | 0   |        |
| 1/4 | 88,239 | 1/4 | 73,161 | 1/4 | 58,082 | 1/4 | 43,026 | 1/4 | 27,961 | 1/4 | 12,883 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 87,925 | 1/2 | 72,846 | 1/2 | 57,768 | 1/2 | 42,713 | 1/2 | 27,647 | 1/2 | 12,569 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 87,611 | 3/4 | 72,532 | 3/4 | 57,453 | 3/4 | 42,400 | 3/4 | 27,333 | 3/4 | 12,255 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 1   | 87,297 | 1   | 72,218 | 1   | 57,139 | 1   | 42,087 | 1   | 27,019 | 1   | 11,941 | 1   |        | 1   |        | 1   |        | 1   |        |
| 1/4 | 86,983 | 1/4 | 71,904 | 1/4 | 56,825 | 1/4 | 41,773 | 1/4 | 26,705 | 1/4 | 11,627 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 86,669 | 1/2 | 71,590 | 1/2 | 56,511 | 1/2 | 41,460 | 1/2 | 26,391 | 1/2 | 11,312 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 86,355 | 3/4 | 71,276 | 3/4 | 56,197 | 3/4 | 41,147 | 3/4 | 26,077 | 3/4 | 10,998 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 2   | 86,040 | 2   | 70,962 | 2   | 55,883 | 2   | 40,834 | 2   | 25,763 | 2   | 10,684 | 2   |        | 2   |        | 2   |        | 2   |        |
| 1/4 | 85,726 | 1/4 | 70,647 | 1/4 | 55,569 | 1/4 | 40,521 | 1/4 | 25,449 | 1/4 | 10,370 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 85,412 | 1/2 | 70,333 | 1/2 | 55,254 | 1/2 | 40,207 | 1/2 | 25,135 | 1/2 | 10,056 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 85,098 | 3/4 | 70,019 | 3/4 | 54,940 | 3/4 | 39,894 | 3/4 | 24,820 | 3/4 | 9,742  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 3   | 84,784 | 3   | 69,705 | 3   | 54,626 | 3   | 39,581 | 3   | 24,506 | 3   | 9,428  | 3   |        | 3   |        | 3   |        | 3   |        |
| 1/4 | 84,470 | 1/4 | 69,391 | 1/4 | 54,312 | 1/4 | 39,267 | 1/4 | 24,192 | 1/4 | 9,113  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 84,156 | 1/2 | 69,077 | 1/2 | 53,998 | 1/2 | 38,954 | 1/2 | 23,878 | 1/2 | 8,799  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 83,841 | 3/4 | 68,763 | 3/4 | 53,684 | 3/4 | 38,640 | 3/4 | 23,564 | 3/4 | 8,485  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 4   | 83,527 | 4   | 68,448 | 4   | 53,370 | 4   | 38,326 | 4   | 23,250 | 4   | 8,171  | 4   |        | 4   |        | 4   |        | 4   |        |
| 1/4 | 83,213 | 1/4 | 68,134 | 1/4 | 53,056 | 1/4 | 38,012 | 1/4 | 22,936 | 1/4 | 7,857  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 82,899 | 1/2 | 67,820 | 1/2 | 52,741 | 1/2 | 37,698 | 1/2 | 22,621 | 1/2 | 7,543  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 82,585 | 3/4 | 67,506 | 3/4 | 52,427 | 3/4 | 37,384 | 3/4 | 22,307 | 3/4 | 7,229  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 5   | 82,271 | 5   | 67,192 | 5   | 52,113 | 5   | 37,070 | 5   | 21,993 | 5   | 6,914  | 5   |        | 5   |        | 5   |        | 5   |        |
| 1/4 | 81,957 | 1/4 | 66,878 | 1/4 | 51,799 | 1/4 | 36,756 | 1/4 | 21,679 | 1/4 | 6,600  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 81,642 | 1/2 | 66,564 | 1/2 | 51,486 | 1/2 | 36,441 | 1/2 | 21,365 | 1/2 | 6,286  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 81,328 | 3/4 | 66,249 | 3/4 | 51,172 | 3/4 | 36,127 | 3/4 | 21,051 | 3/4 | 5,972  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 6   | 81,014 | 6   | 65,935 | 6   | 50,858 | 6   | 35,813 | 6   | 20,737 | 6   | 5,658  | 6   |        | 6   |        | 6   |        | 6   |        |
| 1/4 | 80,700 | 1/4 | 65,621 | 1/4 | 50,544 | 1/4 | 35,499 | 1/4 | 20,423 | 1/4 | 5,344  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 80,386 | 1/2 | 65,307 | 1/2 | 50,231 | 1/2 | 35,185 | 1/2 | 20,108 | 1/2 | 5,030  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 80,072 | 3/4 | 64,993 | 3/4 | 49,918 | 3/4 | 34,871 | 3/4 | 19,794 | 3/4 | 4,716  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 7   | 79,758 | 7   | 64,679 | 7   | 49,604 | 7   | 34,557 | 7   | 19,480 | 7   | 4,402  | 7   |        | 7   |        | 7   |        | 7   |        |
| 1/4 | 79,443 | 1/4 | 64,365 | 1/4 | 49,291 | 1/4 | 34,242 | 1/4 | 19,166 | 1/4 | 4,089  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 79,129 | 1/2 | 64,050 | 1/2 | 48,978 | 1/2 | 33,928 | 1/2 | 18,852 | 1/2 | 3,776  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 78,815 | 3/4 | 63,736 | 3/4 | 48,664 | 3/4 | 33,614 | 3/4 | 18,538 | 3/4 | 3,463  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 8   | 78,501 | 8   | 63,422 | 8   | 48,351 | 8   | 33,300 | 8   | 18,224 | 8   | 3,150  | 8   |        | 8   |        | 8   |        | 8   |        |
| 1/4 | 78,187 | 1/4 | 63,108 | 1/4 | 48,038 | 1/4 | 32,986 | 1/4 | 17,909 | 1/4 | 2,856  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 77,873 | 1/2 | 62,794 | 1/2 | 47,724 | 1/2 | 32,672 | 1/2 | 17,595 | 1/2 | 2,562  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 77,559 | 3/4 | 62,480 | 3/4 | 47,411 | 3/4 | 32,358 | 3/4 | 17,281 | 3/4 | 2,269  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 9   | 77,244 | 9   | 62,166 | 9   | 47,098 | 9   | 32,043 | 9   | 16,967 | 9   | 1,975  | 9   |        | 9   |        | 9   |        | 9   |        |
| 1/4 | 76,930 | 1/4 | 61,851 | 1/4 | 46,785 | 1/4 | 31,729 | 1/4 | 16,653 | 1/4 | 1,739  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 76,616 | 1/2 | 61,537 | 1/2 | 46,472 | 1/2 | 31,415 | 1/2 | 16,339 | 1/2 | 1,504  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 76,302 | 3/4 | 61,223 | 3/4 | 46,158 | 3/4 | 31,101 | 3/4 | 16,025 | 3/4 | 1,268  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 10  | 75,988 | 10  | 60,909 | 10  | 45,845 | 10  | 30,787 | 10  | 15,710 | 10  | 1,033  | 10  |        | 10  |        | 10  |        | 10  |        |
| 1/4 | 75,674 | 1/4 | 60,595 | 1/4 | 45,532 | 1/4 | 30,473 | 1/4 | 15,396 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 75,360 | 1/2 | 60,281 | 1/2 | 45,219 | 1/2 | 30,159 | 1/2 | 15,082 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 75,045 | 3/4 | 59,967 | 3/4 | 44,906 | 3/4 | 29,845 | 3/4 | 14,768 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 11  | 74,731 | 11  | 59,652 | 11  | 44,592 | 11  | 29,531 | 11  | 14,454 | 11  |        | 11  |        | 11  |        | 11  |        | 11  |        |
| 1/4 | 74,417 | 1/4 | 59,338 | 1/4 | 44,279 | 1/4 | 29,217 | 1/4 | 14,140 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 74,103 | 1/2 | 59,024 | 1/2 | 43,966 | 1/2 | 28,903 | 1/2 | 13,826 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 73,789 | 3/4 | 58,710 | 3/4 | 43,653 | 3/4 | 28,589 | 3/4 | 13,511 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/02/2015 CL  
CALCULATED: 11/02/2015 CL  
PRINTED: 11/02/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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





# BARGE "HFL 437"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

| 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   | 207,743 | 0   | 192,785 | 0   | 177,772 | 0   | 162,710 | 0   | 147,646 | 0   | 132,582 | 0   | 117,518 | 0   | 102,451 |
| 1/4 |       | 1/4 |         | 1/4 | 207,433 | 1/4 | 192,472 | 1/4 | 177,458 | 1/4 | 162,396 | 1/4 | 147,332 | 1/4 | 132,268 | 1/4 | 117,204 | 1/4 | 102,137 |
| 1/2 |       | 1/2 |         | 1/2 | 207,123 | 1/2 | 192,159 | 1/2 | 177,145 | 1/2 | 162,082 | 1/2 | 147,018 | 1/2 | 131,954 | 1/2 | 116,890 | 1/2 | 101,823 |
| 3/4 |       | 3/4 |         | 3/4 | 206,814 | 3/4 | 191,846 | 3/4 | 176,832 | 3/4 | 161,768 | 3/4 | 146,704 | 3/4 | 131,641 | 3/4 | 116,577 | 3/4 | 101,509 |
| 1   |       | 1   |         | 1   | 206,504 | 1   | 191,534 | 1   | 176,519 | 1   | 161,455 | 1   | 146,391 | 1   | 131,327 | 1   | 116,263 | 1   | 101,195 |
| 1/4 |       | 1/4 |         | 1/4 | 206,194 | 1/4 | 191,221 | 1/4 | 176,205 | 1/4 | 161,141 | 1/4 | 146,077 | 1/4 | 131,013 | 1/4 | 115,949 | 1/4 | 100,881 |
| 1/2 |       | 1/2 |         | 1/2 | 205,884 | 1/2 | 190,908 | 1/2 | 175,891 | 1/2 | 160,827 | 1/2 | 145,763 | 1/2 | 130,699 | 1/2 | 115,635 | 1/2 | 100,567 |
| 3/4 |       | 3/4 |         | 3/4 | 205,574 | 3/4 | 190,595 | 3/4 | 175,577 | 3/4 | 160,513 | 3/4 | 145,449 | 3/4 | 130,385 | 3/4 | 115,321 | 3/4 | 100,253 |
| 2   |       | 2   |         | 2   | 205,265 | 2   | 190,282 | 2   | 175,263 | 2   | 160,199 | 2   | 145,135 | 2   | 130,071 | 2   | 115,007 | 2   | 99,939  |
| 1/4 |       | 1/4 |         | 1/4 | 204,955 | 1/4 | 189,970 | 1/4 | 174,949 | 1/4 | 159,885 | 1/4 | 144,821 | 1/4 | 129,758 | 1/4 | 114,694 | 1/4 | 99,625  |
| 1/2 |       | 1/2 |         | 1/2 | 204,645 | 1/2 | 189,657 | 1/2 | 174,636 | 1/2 | 159,572 | 1/2 | 144,508 | 1/2 | 129,444 | 1/2 | 114,380 | 1/2 | 99,311  |
| 3/4 |       | 3/4 |         | 3/4 | 204,335 | 3/4 | 189,344 | 3/4 | 174,322 | 3/4 | 159,258 | 3/4 | 144,194 | 3/4 | 129,130 | 3/4 | 114,066 | 3/4 | 98,997  |
| 3   |       | 3   |         | 3   | 204,026 | 3   | 189,031 | 3   | 174,008 | 3   | 158,944 | 3   | 143,880 | 3   | 128,816 | 3   | 113,752 | 3   | 98,683  |
| 1/4 |       | 1/4 |         | 1/4 | 203,716 | 1/4 | 188,719 | 1/4 | 173,694 | 1/4 | 158,630 | 1/4 | 143,566 | 1/4 | 128,502 | 1/4 | 113,438 | 1/4 | 98,369  |
| 1/2 |       | 1/2 |         | 1/2 | 203,406 | 1/2 | 188,406 | 1/2 | 173,380 | 1/2 | 158,316 | 1/2 | 143,252 | 1/2 | 128,188 | 1/2 | 113,124 | 1/2 | 98,055  |
| 3/4 |       | 3/4 |         | 3/4 | 203,097 | 3/4 | 188,093 | 3/4 | 173,066 | 3/4 | 158,002 | 3/4 | 142,939 | 3/4 | 127,875 | 3/4 | 112,811 | 3/4 | 97,741  |
| 4   |       | 4   |         | 4   | 202,787 | 4   | 187,780 | 4   | 172,753 | 4   | 157,689 | 4   | 142,625 | 4   | 127,561 | 4   | 112,497 | 4   | 97,427  |
| 1/4 |       | 1/4 |         | 1/4 | 202,476 | 1/4 | 187,468 | 1/4 | 172,439 | 1/4 | 157,375 | 1/4 | 142,311 | 1/4 | 127,247 | 1/4 | 112,183 | 1/4 | 97,113  |
| 1/2 |       | 1/2 |         | 1/2 | 202,164 | 1/2 | 187,155 | 1/2 | 172,125 | 1/2 | 157,061 | 1/2 | 141,997 | 1/2 | 126,933 | 1/2 | 111,869 | 1/2 | 96,799  |
| 3/4 |       | 3/4 |         | 3/4 | 201,853 | 3/4 | 186,842 | 3/4 | 171,811 | 3/4 | 156,747 | 3/4 | 141,683 | 3/4 | 126,619 | 3/4 | 111,555 | 3/4 | 96,485  |
| 5   |       | 5   |         | 5   | 201,542 | 5   | 186,529 | 5   | 171,497 | 5   | 156,433 | 5   | 141,369 | 5   | 126,305 | 5   | 111,241 | 5   | 96,171  |
| 1/4 |       | 1/4 |         | 1/4 | 201,229 | 1/4 | 186,216 | 1/4 | 171,183 | 1/4 | 156,119 | 1/4 | 141,056 | 1/4 | 125,992 | 1/4 | 110,928 | 1/4 | 95,857  |
| 1/2 |       | 1/2 |         | 1/2 | 200,917 | 1/2 | 185,904 | 1/2 | 170,870 | 1/2 | 155,806 | 1/2 | 140,742 | 1/2 | 125,678 | 1/2 | 110,614 | 1/2 | 95,543  |
| 3/4 |       | 3/4 |         | 3/4 | 200,604 | 3/4 | 185,591 | 3/4 | 170,556 | 3/4 | 155,492 | 3/4 | 140,428 | 3/4 | 125,364 | 3/4 | 110,300 | 3/4 | 95,229  |
| 6   |       | 6   |         | 6   | 200,291 | 6   | 185,278 | 6   | 170,242 | 6   | 155,178 | 6   | 140,114 | 6   | 125,050 | 6   | 109,986 | 6   | 94,915  |
| 1/4 |       | 1/4 |         | 1/4 | 199,978 | 1/4 | 184,965 | 1/4 | 169,928 | 1/4 | 154,864 | 1/4 | 139,800 | 1/4 | 124,736 | 1/4 | 109,672 | 1/4 | 94,601  |
| 1/2 |       | 1/2 |         | 1/2 | 199,665 | 1/2 | 184,653 | 1/2 | 169,614 | 1/2 | 154,550 | 1/2 | 139,486 | 1/2 | 124,422 | 1/2 | 109,358 | 1/2 | 94,287  |
| 3/4 |       | 3/4 |         | 3/4 | 199,353 | 3/4 | 184,340 | 3/4 | 169,300 | 3/4 | 154,236 | 3/4 | 139,173 | 3/4 | 124,109 | 3/4 | 109,044 | 3/4 | 93,973  |
| 7   |       | 7   | 212,963 | 7   | 199,040 | 7   | 184,027 | 7   | 168,987 | 7   | 153,923 | 7   | 138,859 | 7   | 123,795 | 7   | 108,730 | 7   | 93,659  |
| 1/4 |       | 1/4 | 212,784 | 1/4 | 198,727 | 1/4 | 183,714 | 1/4 | 168,673 | 1/4 | 153,609 | 1/4 | 138,545 | 1/4 | 123,481 | 1/4 | 108,416 | 1/4 | 93,345  |
| 1/2 |       | 1/2 | 212,605 | 1/2 | 198,414 | 1/2 | 183,402 | 1/2 | 168,359 | 1/2 | 153,295 | 1/2 | 138,231 | 1/2 | 123,167 | 1/2 | 108,102 | 1/2 | 93,031  |
| 3/4 |       | 3/4 | 212,426 | 3/4 | 198,102 | 3/4 | 183,089 | 3/4 | 168,045 | 3/4 | 152,981 | 3/4 | 137,917 | 3/4 | 122,853 | 3/4 | 107,789 | 3/4 | 92,717  |
| 8   |       | 8   | 212,247 | 8   | 197,789 | 8   | 182,776 | 8   | 167,731 | 8   | 152,667 | 8   | 137,603 | 8   | 122,539 | 8   | 107,475 | 8   | 92,403  |
| 1/4 |       | 1/4 | 212,016 | 1/4 | 197,476 | 1/4 | 182,463 | 1/4 | 167,417 | 1/4 | 152,353 | 1/4 | 137,290 | 1/4 | 122,226 | 1/4 | 107,161 | 1/4 | 92,089  |
| 1/2 |       | 1/2 | 211,785 | 1/2 | 197,163 | 1/2 | 182,151 | 1/2 | 167,104 | 1/2 | 152,040 | 1/2 | 136,976 | 1/2 | 121,912 | 1/2 | 106,847 | 1/2 | 91,775  |
| 3/4 |       | 3/4 | 211,553 | 3/4 | 196,851 | 3/4 | 181,838 | 3/4 | 166,790 | 3/4 | 151,726 | 3/4 | 136,662 | 3/4 | 121,598 | 3/4 | 106,533 | 3/4 | 91,461  |
| 9   |       | 9   | 211,322 | 9   | 196,538 | 9   | 181,525 | 9   | 166,476 | 9   | 151,412 | 9   | 136,348 | 9   | 121,284 | 9   | 106,219 | 9   | 91,147  |
| 1/4 |       | 1/4 | 211,042 | 1/4 | 196,225 | 1/4 | 181,212 | 1/4 | 166,162 | 1/4 | 151,098 | 1/4 | 136,034 | 1/4 | 120,970 | 1/4 | 105,905 | 1/4 | 90,833  |
| 1/2 |       | 1/2 | 210,762 | 1/2 | 195,912 | 1/2 | 180,899 | 1/2 | 165,848 | 1/2 | 150,784 | 1/2 | 135,720 | 1/2 | 120,656 | 1/2 | 105,591 | 1/2 | 90,519  |
| 3/4 |       | 3/4 | 210,482 | 3/4 | 195,599 | 3/4 | 180,587 | 3/4 | 165,534 | 3/4 | 150,470 | 3/4 | 135,407 | 3/4 | 120,343 | 3/4 | 105,277 | 3/4 | 90,205  |
| 10  |       | 10  | 210,203 | 10  | 195,287 | 10  | 180,274 | 10  | 165,221 | 10  | 150,157 | 10  | 135,093 | 10  | 120,029 | 10  | 104,963 | 10  | 89,891  |
| 1/4 |       | 1/4 | 209,897 | 1/4 | 194,974 | 1/4 | 179,961 | 1/4 | 164,907 | 1/4 | 149,843 | 1/4 | 134,779 | 1/4 | 119,715 | 1/4 | 104,649 | 1/4 | 89,577  |
| 1/2 |       | 1/2 | 209,591 | 1/2 | 194,661 | 1/2 | 179,648 | 1/2 | 164,593 | 1/2 | 149,529 | 1/2 | 134,465 | 1/2 | 119,401 | 1/2 | 104,335 | 1/2 | 89,263  |
| 3/4 |       | 3/4 | 209,286 | 3/4 | 194,348 | 3/4 | 179,336 | 3/4 | 164,279 | 3/4 | 149,215 | 3/4 | 134,151 | 3/4 | 119,087 | 3/4 | 104,021 | 3/4 | 88,949  |
| 11  |       | 11  | 208,980 | 11  | 194,036 | 11  | 179,023 | 11  | 163,965 | 11  | 148,901 | 11  | 133,837 | 11  | 118,773 | 11  | 103,707 | 11  | 88,635  |
| 1/4 |       | 1/4 | 208,671 | 1/4 | 193,723 | 1/4 | 178,710 | 1/4 | 163,651 | 1/4 | 148,587 | 1/4 | 133,524 | 1/4 | 118,460 | 1/4 | 103,393 | 1/4 | 88,321  |
| 1/2 |       | 1/2 | 208,361 | 1/2 | 193,410 | 1/2 | 178,397 | 1/2 | 163,338 | 1/2 | 148,274 | 1/2 | 133,210 | 1/2 | 118,146 | 1/2 | 103,079 | 1/2 | 88,007  |
| 3/4 |       | 3/4 | 208,052 | 3/4 | 193,097 | 3/4 | 178,085 | 3/4 | 163,024 | 3/4 | 147,960 | 3/4 | 132,896 | 3/4 | 117,832 | 3/4 | 102,765 | 3/4 | 87,693  |

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 LIP OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-3" 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 "HFL 437"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

| 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   | 87,379 | 0   | 72,308 | 0   | 57,542 | 0   | 43,058 | 0   | 28,260 | 0   | 13,190 | 0   |        | 0   |        | 0   |        | 0   |        |
| 1/4 | 87,065 | 1/4 | 71,994 | 1/4 | 57,240 | 1/4 | 42,757 | 1/4 | 27,946 | 1/4 | 12,876 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 86,751 | 1/2 | 71,680 | 1/2 | 56,938 | 1/2 | 42,456 | 1/2 | 27,633 | 1/2 | 12,562 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 86,437 | 3/4 | 71,366 | 3/4 | 56,636 | 3/4 | 42,154 | 3/4 | 27,319 | 3/4 | 12,248 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 1   | 86,123 | 1   | 71,052 | 1   | 56,333 | 1   | 41,853 | 1   | 27,005 | 1   | 11,934 | 1   |        | 1   |        | 1   |        | 1   |        |
| 1/4 | 85,809 | 1/4 | 70,738 | 1/4 | 56,031 | 1/4 | 41,552 | 1/4 | 26,691 | 1/4 | 11,620 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 85,495 | 1/2 | 70,424 | 1/2 | 55,729 | 1/2 | 41,251 | 1/2 | 26,377 | 1/2 | 11,306 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 85,181 | 3/4 | 70,110 | 3/4 | 55,427 | 3/4 | 40,949 | 3/4 | 26,063 | 3/4 | 10,992 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 2   | 84,867 | 2   | 69,796 | 2   | 55,124 | 2   | 40,648 | 2   | 25,750 | 2   | 10,679 | 2   |        | 2   |        | 2   |        | 2   |        |
| 1/4 | 84,553 | 1/4 | 69,482 | 1/4 | 54,822 | 1/4 | 40,347 | 1/4 | 25,436 | 1/4 | 10,365 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 84,239 | 1/2 | 69,168 | 1/2 | 54,520 | 1/2 | 40,045 | 1/2 | 25,122 | 1/2 | 10,051 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 83,925 | 3/4 | 68,854 | 3/4 | 54,218 | 3/4 | 39,744 | 3/4 | 24,808 | 3/4 | 9,737  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 3   | 83,611 | 3   | 68,540 | 3   | 53,916 | 3   | 39,443 | 3   | 24,494 | 3   | 9,423  | 3   |        | 3   |        | 3   |        | 3   |        |
| 1/4 | 83,297 | 1/4 | 68,226 | 1/4 | 53,613 | 1/4 | 39,141 | 1/4 | 24,180 | 1/4 | 9,109  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 82,983 | 1/2 | 67,912 | 1/2 | 53,311 | 1/2 | 38,839 | 1/2 | 23,866 | 1/2 | 8,795  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 82,669 | 3/4 | 67,598 | 3/4 | 53,009 | 3/4 | 38,538 | 3/4 | 23,552 | 3/4 | 8,481  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 4   | 82,355 | 4   | 67,284 | 4   | 52,707 | 4   | 38,236 | 4   | 23,238 | 4   | 8,167  | 4   |        | 4   |        | 4   |        | 4   |        |
| 1/4 | 82,041 | 1/4 | 66,970 | 1/4 | 52,404 | 1/4 | 37,934 | 1/4 | 22,924 | 1/4 | 7,853  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 81,727 | 1/2 | 66,656 | 1/2 | 52,102 | 1/2 | 37,631 | 1/2 | 22,610 | 1/2 | 7,539  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 81,413 | 3/4 | 66,342 | 3/4 | 51,800 | 3/4 | 37,329 | 3/4 | 22,296 | 3/4 | 7,225  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 5   | 81,099 | 5   | 66,028 | 5   | 51,498 | 5   | 37,027 | 5   | 21,982 | 5   | 6,911  | 5   |        | 5   |        | 5   |        | 5   |        |
| 1/4 | 80,785 | 1/4 | 65,720 | 1/4 | 51,196 | 1/4 | 36,719 | 1/4 | 21,668 | 1/4 | 6,597  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 80,471 | 1/2 | 65,412 | 1/2 | 50,894 | 1/2 | 36,411 | 1/2 | 21,354 | 1/2 | 6,283  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 80,157 | 3/4 | 65,104 | 3/4 | 50,592 | 3/4 | 36,103 | 3/4 | 21,040 | 3/4 | 5,969  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 6   | 79,843 | 6   | 64,795 | 6   | 50,290 | 6   | 35,795 | 6   | 20,726 | 6   | 5,655  | 6   |        | 6   |        | 6   |        | 6   |        |
| 1/4 | 79,529 | 1/4 | 64,493 | 1/4 | 49,989 | 1/4 | 35,481 | 1/4 | 20,412 | 1/4 | 5,341  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 79,215 | 1/2 | 64,191 | 1/2 | 49,687 | 1/2 | 35,167 | 1/2 | 20,098 | 1/2 | 5,027  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 78,901 | 3/4 | 63,889 | 3/4 | 49,386 | 3/4 | 34,853 | 3/4 | 19,784 | 3/4 | 4,714  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 7   | 78,587 | 7   | 63,587 | 7   | 49,084 | 7   | 34,539 | 7   | 19,470 | 7   | 4,400  | 7   |        | 7   |        | 7   |        | 7   |        |
| 1/4 | 78,273 | 1/4 | 63,284 | 1/4 | 48,783 | 1/4 | 34,225 | 1/4 | 19,156 | 1/4 | 4,087  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 77,959 | 1/2 | 62,982 | 1/2 | 48,481 | 1/2 | 33,911 | 1/2 | 18,842 | 1/2 | 3,774  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 77,645 | 3/4 | 62,680 | 3/4 | 48,180 | 3/4 | 33,597 | 3/4 | 18,528 | 3/4 | 3,461  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 8   | 77,331 | 8   | 62,378 | 8   | 47,879 | 8   | 33,283 | 8   | 18,214 | 8   | 3,148  | 8   |        | 8   |        | 8   |        | 8   |        |
| 1/4 | 77,017 | 1/4 | 62,075 | 1/4 | 47,577 | 1/4 | 32,969 | 1/4 | 17,900 | 1/4 | 2,854  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 76,703 | 1/2 | 61,773 | 1/2 | 47,276 | 1/2 | 32,655 | 1/2 | 17,586 | 1/2 | 2,561  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 76,390 | 3/4 | 61,471 | 3/4 | 46,975 | 3/4 | 32,341 | 3/4 | 17,272 | 3/4 | 2,267  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 9   | 76,076 | 9   | 61,169 | 9   | 46,674 | 9   | 32,027 | 9   | 16,958 | 9   | 1,974  | 9   |        | 9   |        | 9   |        | 9   |        |
| 1/4 | 75,762 | 1/4 | 60,867 | 1/4 | 46,372 | 1/4 | 31,713 | 1/4 | 16,644 | 1/4 | 1,738  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 75,448 | 1/2 | 60,564 | 1/2 | 46,071 | 1/2 | 31,399 | 1/2 | 16,330 | 1/2 | 1,503  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 75,134 | 3/4 | 60,262 | 3/4 | 45,770 | 3/4 | 31,085 | 3/4 | 16,016 | 3/4 | 1,267  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 10  | 74,820 | 10  | 59,960 | 10  | 45,468 | 10  | 30,771 | 10  | 15,702 | 10  | 1,032  | 10  |        | 10  |        | 10  |        | 10  |        |
| 1/4 | 74,506 | 1/4 | 59,658 | 1/4 | 45,167 | 1/4 | 30,457 | 1/4 | 15,388 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 74,192 | 1/2 | 59,355 | 1/2 | 44,866 | 1/2 | 30,143 | 1/2 | 15,074 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 73,878 | 3/4 | 59,053 | 3/4 | 44,565 | 3/4 | 29,829 | 3/4 | 14,760 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 11  | 73,564 | 11  | 58,751 | 11  | 44,263 | 11  | 29,515 | 11  | 14,446 | 11  |        | 11  |        | 11  |        | 11  |        | 11  |        |
| 1/4 | 73,250 | 1/4 | 58,449 | 1/4 | 43,962 | 1/4 | 29,202 | 1/4 | 14,132 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 72,936 | 1/2 | 58,147 | 1/2 | 43,661 | 1/2 | 28,888 | 1/2 | 13,818 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 72,622 | 3/4 | 57,844 | 3/4 | 43,359 | 3/4 | 28,574 | 3/4 | 13,504 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/02/2015 CL  
CALCULATED: 11/02/2015 CL  
PRINTED: 11/02/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 437"

## 1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

| 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   | 205,585 | 0   | 190,663 | 0   | 175,704 | 0   | 160,703 | 0   | 145,700 | 0   | 130,697 | 0   | 115,694 | 0   | 100,688 |
| 1/4 |       | 1/4 |         | 1/4 | 205,275 | 1/4 | 190,351 | 1/4 | 175,392 | 1/4 | 160,390 | 1/4 | 145,387 | 1/4 | 130,384 | 1/4 | 115,382 | 1/4 | 100,376 |
| 1/2 |       | 1/2 |         | 1/2 | 204,966 | 1/2 | 190,040 | 1/2 | 175,080 | 1/2 | 160,078 | 1/2 | 145,075 | 1/2 | 130,072 | 1/2 | 115,069 | 1/2 | 100,063 |
| 3/4 |       | 3/4 |         | 3/4 | 204,656 | 3/4 | 189,728 | 3/4 | 174,768 | 3/4 | 159,765 | 3/4 | 144,762 | 3/4 | 129,759 | 3/4 | 114,756 | 3/4 | 99,750  |
| 1   |       | 1   |         | 1   | 204,347 | 1   | 189,417 | 1   | 174,455 | 1   | 159,453 | 1   | 144,450 | 1   | 129,447 | 1   | 114,444 | 1   | 99,438  |
| 1/4 |       | 1/4 |         | 1/4 | 204,037 | 1/4 | 189,105 | 1/4 | 174,143 | 1/4 | 159,140 | 1/4 | 144,137 | 1/4 | 129,134 | 1/4 | 114,131 | 1/4 | 99,125  |
| 1/2 |       | 1/2 |         | 1/2 | 203,727 | 1/2 | 188,793 | 1/2 | 173,830 | 1/2 | 158,827 | 1/2 | 143,824 | 1/2 | 128,822 | 1/2 | 113,819 | 1/2 | 98,812  |
| 3/4 |       | 3/4 |         | 3/4 | 203,418 | 3/4 | 188,482 | 3/4 | 173,518 | 3/4 | 158,515 | 3/4 | 143,512 | 3/4 | 128,509 | 3/4 | 113,506 | 3/4 | 98,500  |
| 2   |       | 2   |         | 2   | 203,108 | 2   | 188,170 | 2   | 173,205 | 2   | 158,202 | 2   | 143,199 | 2   | 128,196 | 2   | 113,194 | 2   | 98,187  |
| 1/4 |       | 1/4 |         | 1/4 | 202,798 | 1/4 | 187,858 | 1/4 | 172,893 | 1/4 | 157,890 | 1/4 | 142,887 | 1/4 | 127,884 | 1/4 | 112,881 | 1/4 | 97,874  |
| 1/2 |       | 1/2 |         | 1/2 | 202,489 | 1/2 | 187,547 | 1/2 | 172,580 | 1/2 | 157,577 | 1/2 | 142,574 | 1/2 | 127,571 | 1/2 | 112,569 | 1/2 | 97,562  |
| 3/4 |       | 3/4 |         | 3/4 | 202,179 | 3/4 | 187,235 | 3/4 | 172,268 | 3/4 | 157,265 | 3/4 | 142,262 | 3/4 | 127,259 | 3/4 | 112,256 | 3/4 | 97,249  |
| 3   |       | 3   |         | 3   | 201,870 | 3   | 186,923 | 3   | 171,955 | 3   | 156,952 | 3   | 141,949 | 3   | 126,946 | 3   | 111,943 | 3   | 96,936  |
| 1/4 |       | 1/4 |         | 1/4 | 201,560 | 1/4 | 186,612 | 1/4 | 171,642 | 1/4 | 156,639 | 1/4 | 141,636 | 1/4 | 126,634 | 1/4 | 111,631 | 1/4 | 96,623  |
| 1/2 |       | 1/2 |         | 1/2 | 201,251 | 1/2 | 186,300 | 1/2 | 171,330 | 1/2 | 156,327 | 1/2 | 141,324 | 1/2 | 126,321 | 1/2 | 111,318 | 1/2 | 96,311  |
| 3/4 |       | 3/4 |         | 3/4 | 200,941 | 3/4 | 185,988 | 3/4 | 171,017 | 3/4 | 156,014 | 3/4 | 141,011 | 3/4 | 126,009 | 3/4 | 111,006 | 3/4 | 95,998  |
| 4   |       | 4   |         | 4   | 200,632 | 4   | 185,677 | 4   | 170,705 | 4   | 155,702 | 4   | 140,699 | 4   | 125,696 | 4   | 110,693 | 4   | 95,685  |
| 1/4 |       | 1/4 |         | 1/4 | 200,321 | 1/4 | 185,365 | 1/4 | 170,392 | 1/4 | 155,389 | 1/4 | 140,386 | 1/4 | 125,383 | 1/4 | 110,381 | 1/4 | 95,373  |
| 1/2 |       | 1/2 |         | 1/2 | 200,010 | 1/2 | 185,053 | 1/2 | 170,080 | 1/2 | 155,077 | 1/2 | 140,074 | 1/2 | 125,071 | 1/2 | 110,068 | 1/2 | 95,060  |
| 3/4 |       | 3/4 |         | 3/4 | 199,700 | 3/4 | 184,742 | 3/4 | 169,767 | 3/4 | 154,764 | 3/4 | 139,761 | 3/4 | 124,758 | 3/4 | 109,756 | 3/4 | 94,747  |
| 5   |       | 5   |         | 5   | 199,389 | 5   | 184,430 | 5   | 169,454 | 5   | 154,452 | 5   | 139,449 | 5   | 124,446 | 5   | 109,443 | 5   | 94,435  |
| 1/4 |       | 1/4 |         | 1/4 | 199,078 | 1/4 | 184,118 | 1/4 | 169,142 | 1/4 | 154,139 | 1/4 | 139,136 | 1/4 | 124,133 | 1/4 | 109,130 | 1/4 | 94,122  |
| 1/2 |       | 1/2 |         | 1/2 | 198,766 | 1/2 | 183,807 | 1/2 | 168,829 | 1/2 | 153,826 | 1/2 | 138,823 | 1/2 | 123,821 | 1/2 | 108,818 | 1/2 | 93,809  |
| 3/4 |       | 3/4 |         | 3/4 | 198,454 | 3/4 | 183,495 | 3/4 | 168,517 | 3/4 | 153,514 | 3/4 | 138,511 | 3/4 | 123,508 | 3/4 | 108,505 | 3/4 | 93,497  |
| 6   |       | 6   |         | 6   | 198,143 | 6   | 183,184 | 6   | 168,204 | 6   | 153,201 | 6   | 138,198 | 6   | 123,196 | 6   | 108,193 | 6   | 93,184  |
| 1/4 |       | 1/4 |         | 1/4 | 197,831 | 1/4 | 182,872 | 1/4 | 167,892 | 1/4 | 152,889 | 1/4 | 137,886 | 1/4 | 122,883 | 1/4 | 107,880 | 1/4 | 92,871  |
| 1/2 |       | 1/2 |         | 1/2 | 197,519 | 1/2 | 182,560 | 1/2 | 167,579 | 1/2 | 152,576 | 1/2 | 137,573 | 1/2 | 122,570 | 1/2 | 107,568 | 1/2 | 92,558  |
| 3/4 |       | 3/4 |         | 3/4 | 197,208 | 3/4 | 182,249 | 3/4 | 167,267 | 3/4 | 152,264 | 3/4 | 137,261 | 3/4 | 122,258 | 3/4 | 107,255 | 3/4 | 92,246  |
| 7   |       | 7   | 210,806 | 7   | 196,896 | 7   | 181,937 | 7   | 166,954 | 7   | 151,951 | 7   | 136,948 | 7   | 121,945 | 7   | 106,942 | 7   | 91,933  |
| 1/4 |       | 1/4 | 210,626 | 1/4 | 196,584 | 1/4 | 181,625 | 1/4 | 166,641 | 1/4 | 151,638 | 1/4 | 136,635 | 1/4 | 121,633 | 1/4 | 106,630 | 1/4 | 91,620  |
| 1/2 |       | 1/2 | 210,447 | 1/2 | 196,273 | 1/2 | 181,314 | 1/2 | 166,329 | 1/2 | 151,326 | 1/2 | 136,323 | 1/2 | 121,320 | 1/2 | 106,317 | 1/2 | 91,308  |
| 3/4 |       | 3/4 | 210,268 | 3/4 | 195,961 | 3/4 | 181,002 | 3/4 | 166,016 | 3/4 | 151,013 | 3/4 | 136,010 | 3/4 | 121,008 | 3/4 | 106,004 | 3/4 | 90,995  |
| 8   |       | 8   | 210,088 | 8   | 195,650 | 8   | 180,690 | 8   | 165,704 | 8   | 150,701 | 8   | 135,698 | 8   | 120,695 | 8   | 105,692 | 8   | 90,682  |
| 1/4 |       | 1/4 | 209,857 | 1/4 | 195,338 | 1/4 | 180,379 | 1/4 | 165,391 | 1/4 | 150,388 | 1/4 | 135,385 | 1/4 | 120,383 | 1/4 | 105,379 | 1/4 | 90,370  |
| 1/2 |       | 1/2 | 209,625 | 1/2 | 195,026 | 1/2 | 180,067 | 1/2 | 165,079 | 1/2 | 150,076 | 1/2 | 135,073 | 1/2 | 120,070 | 1/2 | 105,066 | 1/2 | 90,057  |
| 3/4 |       | 3/4 | 209,394 | 3/4 | 194,715 | 3/4 | 179,755 | 3/4 | 164,766 | 3/4 | 149,763 | 3/4 | 134,760 | 3/4 | 119,757 | 3/4 | 104,753 | 3/4 | 89,744  |
| 9   |       | 9   | 209,163 | 9   | 194,403 | 9   | 179,444 | 9   | 164,453 | 9   | 149,451 | 9   | 134,448 | 9   | 119,445 | 9   | 104,441 | 9   | 89,432  |
| 1/4 |       | 1/4 | 208,883 | 1/4 | 194,091 | 1/4 | 179,132 | 1/4 | 164,141 | 1/4 | 149,138 | 1/4 | 134,135 | 1/4 | 119,132 | 1/4 | 104,128 | 1/4 | 89,119  |
| 1/2 |       | 1/2 | 208,603 | 1/2 | 193,780 | 1/2 | 178,820 | 1/2 | 163,828 | 1/2 | 148,825 | 1/2 | 133,822 | 1/2 | 118,820 | 1/2 | 103,815 | 1/2 | 88,806  |
| 3/4 |       | 3/4 | 208,323 | 3/4 | 193,468 | 3/4 | 178,509 | 3/4 | 163,516 | 3/4 | 148,513 | 3/4 | 133,510 | 3/4 | 118,507 | 3/4 | 103,503 | 3/4 | 88,493  |
| 10  |       | 10  | 208,043 | 10  | 193,156 | 10  | 178,197 | 10  | 163,203 | 10  | 148,200 | 10  | 133,197 | 10  | 118,195 | 10  | 103,190 | 10  | 88,181  |
| 1/4 |       | 1/4 | 207,738 | 1/4 | 192,845 | 1/4 | 177,885 | 1/4 | 162,891 | 1/4 | 147,888 | 1/4 | 132,885 | 1/4 | 117,882 | 1/4 | 102,877 | 1/4 | 87,868  |
| 1/2 |       | 1/2 | 207,432 | 1/2 | 192,533 | 1/2 | 177,574 | 1/2 | 162,578 | 1/2 | 147,575 | 1/2 | 132,572 | 1/2 | 117,569 | 1/2 | 102,565 | 1/2 | 87,555  |
| 3/4 |       | 3/4 | 207,127 | 3/4 | 192,221 | 3/4 | 177,262 | 3/4 | 162,266 | 3/4 | 147,263 | 3/4 | 132,260 | 3/4 | 117,257 | 3/4 | 102,252 | 3/4 | 87,243  |
| 11  |       | 11  | 206,821 | 11  | 191,910 | 11  | 176,951 | 11  | 161,953 | 11  | 146,950 | 11  | 131,947 | 11  | 116,944 | 11  | 101,939 | 11  | 86,930  |
| 1/4 |       | 1/4 | 206,512 | 1/4 | 191,598 | 1/4 | 176,639 | 1/4 | 161,640 | 1/4 | 146,637 | 1/4 | 131,635 | 1/4 | 116,632 | 1/4 | 101,627 | 1/4 | 86,617  |
| 1/2 |       | 1/2 | 206,203 | 1/2 | 191,286 | 1/2 | 176,327 | 1/2 | 161,328 | 1/2 | 146,325 | 1/2 | 131,322 | 1/2 | 116,319 | 1/2 | 101,314 | 1/2 | 86,305  |
| 3/4 |       | 3/4 | 205,894 | 3/4 | 190,975 | 3/4 | 176,016 | 3/4 | 161,015 | 3/4 | 146,012 | 3/4 | 131,009 | 3/4 | 116,007 | 3/4 | 101,001 | 3/4 | 85,992  |

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 LIP OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-3" 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 "HFL 437"

**1 STBD**  
**ULLAGE TABLE**

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

| 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   | 85,679 | 0   | 70,670 | 0   | 55,665 | 0   | 40,659 | 0   | 25,650 | 0   | 10,877 | 0   |        | 0   |        | 0   |        | 0   |        |
| 1/4 | 85,367 | 1/4 | 70,357 | 1/4 | 55,353 | 1/4 | 40,347 | 1/4 | 25,338 | 1/4 | 10,587 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 85,054 | 1/2 | 70,045 | 1/2 | 55,040 | 1/2 | 40,034 | 1/2 | 25,025 | 1/2 | 10,297 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 84,741 | 3/4 | 69,732 | 3/4 | 54,728 | 3/4 | 39,721 | 3/4 | 24,712 | 3/4 | 10,008 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 1   | 84,428 | 1   | 69,419 | 1   | 54,416 | 1   | 39,409 | 1   | 24,400 | 1   | 9,718  | 1   |        | 1   |        | 1   |        | 1   |        |
| 1/4 | 84,116 | 1/4 | 69,107 | 1/4 | 54,103 | 1/4 | 39,096 | 1/4 | 24,087 | 1/4 | 9,432  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 83,803 | 1/2 | 68,794 | 1/2 | 53,791 | 1/2 | 38,783 | 1/2 | 23,774 | 1/2 | 9,147  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 83,490 | 3/4 | 68,481 | 3/4 | 53,478 | 3/4 | 38,470 | 3/4 | 23,462 | 3/4 | 8,861  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 2   | 83,178 | 2   | 68,168 | 2   | 53,166 | 2   | 38,158 | 2   | 23,149 | 2   | 8,575  | 2   |        | 2   |        | 2   |        | 2   |        |
| 1/4 | 82,865 | 1/4 | 67,856 | 1/4 | 52,853 | 1/4 | 37,845 | 1/4 | 22,836 | 1/4 | 8,293  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 82,552 | 1/2 | 67,543 | 1/2 | 52,541 | 1/2 | 37,532 | 1/2 | 22,524 | 1/2 | 8,011  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 82,240 | 3/4 | 67,230 | 3/4 | 52,228 | 3/4 | 37,220 | 3/4 | 22,211 | 3/4 | 7,730  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 3   | 81,927 | 3   | 66,918 | 3   | 51,916 | 3   | 36,907 | 3   | 21,898 | 3   | 7,448  | 3   |        | 3   |        | 3   |        | 3   |        |
| 1/4 | 81,614 | 1/4 | 66,605 | 1/4 | 51,603 | 1/4 | 36,594 | 1/4 | 21,586 | 1/4 | 7,170  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 81,302 | 1/2 | 66,292 | 1/2 | 51,290 | 1/2 | 36,282 | 1/2 | 21,273 | 1/2 | 6,892  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 80,989 | 3/4 | 65,980 | 3/4 | 50,978 | 3/4 | 35,969 | 3/4 | 20,960 | 3/4 | 6,614  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 4   | 80,676 | 4   | 65,667 | 4   | 50,665 | 4   | 35,656 | 4   | 20,648 | 4   | 6,336  | 4   |        | 4   |        | 4   |        | 4   |        |
| 1/4 | 80,363 | 1/4 | 65,354 | 1/4 | 50,352 | 1/4 | 35,344 | 1/4 | 20,335 | 1/4 | 6,061  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 80,051 | 1/2 | 65,042 | 1/2 | 50,040 | 1/2 | 35,031 | 1/2 | 20,022 | 1/2 | 5,787  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 79,738 | 3/4 | 64,729 | 3/4 | 49,727 | 3/4 | 34,718 | 3/4 | 19,710 | 3/4 | 5,513  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 5   | 79,425 | 5   | 64,416 | 5   | 49,414 | 5   | 34,406 | 5   | 19,397 | 5   | 5,239  | 5   |        | 5   |        | 5   |        | 5   |        |
| 1/4 | 79,113 | 1/4 | 64,103 | 1/4 | 49,102 | 1/4 | 34,093 | 1/4 | 19,084 | 1/4 | 4,968  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 78,800 | 1/2 | 63,791 | 1/2 | 48,789 | 1/2 | 33,780 | 1/2 | 18,771 | 1/2 | 4,698  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 78,487 | 3/4 | 63,478 | 3/4 | 48,476 | 3/4 | 33,468 | 3/4 | 18,459 | 3/4 | 4,428  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 6   | 78,175 | 6   | 63,165 | 6   | 48,164 | 6   | 33,155 | 6   | 18,146 | 6   | 4,157  | 6   |        | 6   |        | 6   |        | 6   |        |
| 1/4 | 77,862 | 1/4 | 62,853 | 1/4 | 47,851 | 1/4 | 32,842 | 1/4 | 17,834 | 1/4 | 3,891  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 77,549 | 1/2 | 62,540 | 1/2 | 47,538 | 1/2 | 32,529 | 1/2 | 17,523 | 1/2 | 3,625  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 77,237 | 3/4 | 62,227 | 3/4 | 47,226 | 3/4 | 32,217 | 3/4 | 17,211 | 3/4 | 3,359  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 7   | 76,924 | 7   | 61,915 | 7   | 46,913 | 7   | 31,904 | 7   | 16,899 | 7   | 3,093  | 7   |        | 7   |        | 7   |        | 7   |        |
| 1/4 | 76,611 | 1/4 | 61,602 | 1/4 | 46,600 | 1/4 | 31,591 | 1/4 | 16,590 | 1/4 | 2,831  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 76,298 | 1/2 | 61,290 | 1/2 | 46,288 | 1/2 | 31,279 | 1/2 | 16,282 | 1/2 | 2,569  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 75,986 | 3/4 | 60,977 | 3/4 | 45,975 | 3/4 | 30,966 | 3/4 | 15,973 | 3/4 | 2,308  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 8   | 75,673 | 8   | 60,665 | 8   | 45,662 | 8   | 30,653 | 8   | 15,664 | 8   | 2,046  | 8   |        | 8   |        | 8   |        | 8   |        |
| 1/4 | 75,360 | 1/4 | 60,352 | 1/4 | 45,349 | 1/4 | 30,341 | 1/4 | 15,359 | 1/4 | 1,807  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 75,048 | 1/2 | 60,040 | 1/2 | 45,037 | 1/2 | 30,028 | 1/2 | 15,054 | 1/2 | 1,569  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 74,735 | 3/4 | 59,727 | 3/4 | 44,724 | 3/4 | 29,715 | 3/4 | 14,749 | 3/4 | 1,330  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 9   | 74,422 | 9   | 59,415 | 9   | 44,411 | 9   | 29,403 | 9   | 14,444 | 9   | 1,092  | 9   |        | 9   |        | 9   |        | 9   |        |
| 1/4 | 74,110 | 1/4 | 59,102 | 1/4 | 44,099 | 1/4 | 29,090 | 1/4 | 14,143 | 1/4 | 915    | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 73,797 | 1/2 | 58,790 | 1/2 | 43,786 | 1/2 | 28,777 | 1/2 | 13,842 | 1/2 | 738    | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 73,484 | 3/4 | 58,478 | 3/4 | 43,473 | 3/4 | 28,465 | 3/4 | 13,541 | 3/4 | 562    | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 10  | 73,172 | 10  | 58,165 | 10  | 43,161 | 10  | 28,152 | 10  | 13,239 | 10  | 385    | 10  |        | 10  |        | 10  |        | 10  |        |
| 1/4 | 72,859 | 1/4 | 57,853 | 1/4 | 42,848 | 1/4 | 27,839 | 1/4 | 12,942 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 72,546 | 1/2 | 57,540 | 1/2 | 42,535 | 1/2 | 27,527 | 1/2 | 12,645 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 72,233 | 3/4 | 57,228 | 3/4 | 42,223 | 3/4 | 27,214 | 3/4 | 12,348 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 11  | 71,921 | 11  | 56,915 | 11  | 41,910 | 11  | 26,901 | 11  | 12,050 | 11  |        | 11  |        | 11  |        | 11  |        | 11  |        |
| 1/4 | 71,608 | 1/4 | 56,603 | 1/4 | 41,597 | 1/4 | 26,589 | 1/4 | 11,757 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 71,295 | 1/2 | 56,290 | 1/2 | 41,285 | 1/2 | 26,276 | 1/2 | 11,463 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 70,983 | 3/4 | 55,978 | 3/4 | 40,972 | 3/4 | 25,963 | 3/4 | 11,170 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/02/2015 CL  
CALCULATED: 11/02/2015 CL  
PRINTED: 11/02/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 437"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 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   | 205,331 | 0   | 190,396 | 0   | 175,425 | 0   | 160,413 | 0   | 145,399 | 0   | 130,385 | 0   | 115,371 | 0   | 100,354 |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 205,021 | 1/4 | 190,084 | 1/4 | 175,113 | 1/4 | 160,100 | 1/4 | 145,086 | 1/4 | 130,072 | 1/4 | 115,058 | 1/4 | 100,041 |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 204,711 | 1/2 | 189,772 | 1/2 | 174,801 | 1/2 | 159,787 | 1/2 | 144,773 | 1/2 | 129,759 | 1/2 | 114,745 | 1/2 | 99,728  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 204,401 | 3/4 | 189,460 | 3/4 | 174,488 | 3/4 | 159,474 | 3/4 | 144,460 | 3/4 | 129,446 | 3/4 | 114,432 | 3/4 | 99,415  |
| 1   | 1     | 1   | 1     | 1   | 204,091 | 1   | 189,148 | 1   | 174,176 | 1   | 159,162 | 1   | 144,148 | 1   | 129,134 | 1   | 114,120 | 1   | 99,102  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 203,782 | 1/4 | 188,837 | 1/4 | 173,863 | 1/4 | 158,849 | 1/4 | 143,835 | 1/4 | 128,821 | 1/4 | 113,807 | 1/4 | 98,789  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 203,472 | 1/2 | 188,525 | 1/2 | 173,550 | 1/2 | 158,536 | 1/2 | 143,522 | 1/2 | 128,508 | 1/2 | 113,494 | 1/2 | 98,476  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 203,162 | 3/4 | 188,213 | 3/4 | 173,237 | 3/4 | 158,223 | 3/4 | 143,209 | 3/4 | 128,195 | 3/4 | 113,181 | 3/4 | 98,163  |
| 2   | 2     | 2   | 2     | 2   | 202,852 | 2   | 187,901 | 2   | 172,924 | 2   | 157,910 | 2   | 142,896 | 2   | 127,882 | 2   | 112,868 | 2   | 97,850  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 202,542 | 1/4 | 187,589 | 1/4 | 172,612 | 1/4 | 157,598 | 1/4 | 142,584 | 1/4 | 127,570 | 1/4 | 112,556 | 1/4 | 97,537  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 202,232 | 1/2 | 187,277 | 1/2 | 172,299 | 1/2 | 157,285 | 1/2 | 142,271 | 1/2 | 127,257 | 1/2 | 112,243 | 1/2 | 97,224  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 201,923 | 3/4 | 186,965 | 3/4 | 171,986 | 3/4 | 156,972 | 3/4 | 141,958 | 3/4 | 126,944 | 3/4 | 111,930 | 3/4 | 96,912  |
| 3   | 3     | 3   | 3     | 3   | 201,613 | 3   | 186,653 | 3   | 171,673 | 3   | 156,659 | 3   | 141,645 | 3   | 126,631 | 3   | 111,617 | 3   | 96,599  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 201,303 | 1/4 | 186,342 | 1/4 | 171,360 | 1/4 | 156,346 | 1/4 | 141,332 | 1/4 | 126,318 | 1/4 | 111,305 | 1/4 | 96,286  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 200,993 | 1/2 | 186,030 | 1/2 | 171,048 | 1/2 | 156,034 | 1/2 | 141,020 | 1/2 | 126,006 | 1/2 | 110,992 | 1/2 | 95,973  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 200,684 | 3/4 | 185,718 | 3/4 | 170,735 | 3/4 | 155,721 | 3/4 | 140,707 | 3/4 | 125,693 | 3/4 | 110,679 | 3/4 | 95,660  |
| 4   | 4     | 4   | 4     | 4   | 200,373 | 4   | 185,406 | 4   | 170,422 | 4   | 155,408 | 4   | 140,394 | 4   | 125,380 | 4   | 110,366 | 4   | 95,347  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 200,062 | 1/4 | 185,094 | 1/4 | 170,109 | 1/4 | 155,095 | 1/4 | 140,081 | 1/4 | 125,067 | 1/4 | 110,053 | 1/4 | 95,034  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 199,751 | 1/2 | 184,782 | 1/2 | 169,796 | 1/2 | 154,782 | 1/2 | 139,769 | 1/2 | 124,755 | 1/2 | 109,741 | 1/2 | 94,721  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 199,440 | 3/4 | 184,470 | 3/4 | 169,484 | 3/4 | 154,470 | 3/4 | 139,456 | 3/4 | 124,442 | 3/4 | 109,428 | 3/4 | 94,408  |
| 5   | 5     | 5   | 5     | 5   | 199,129 | 5   | 184,158 | 5   | 169,171 | 5   | 154,157 | 5   | 139,143 | 5   | 124,129 | 5   | 109,115 | 5   | 94,095  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 198,817 | 1/4 | 183,847 | 1/4 | 168,858 | 1/4 | 153,844 | 1/4 | 138,830 | 1/4 | 123,816 | 1/4 | 108,802 | 1/4 | 93,782  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 198,505 | 1/2 | 183,535 | 1/2 | 168,545 | 1/2 | 153,531 | 1/2 | 138,517 | 1/2 | 123,503 | 1/2 | 108,489 | 1/2 | 93,469  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 198,193 | 3/4 | 183,223 | 3/4 | 168,232 | 3/4 | 153,219 | 3/4 | 138,205 | 3/4 | 123,191 | 3/4 | 108,177 | 3/4 | 93,156  |
| 6   | 6     | 6   | 6     | 6   | 197,881 | 6   | 182,911 | 6   | 167,920 | 6   | 152,906 | 6   | 137,892 | 6   | 122,878 | 6   | 107,864 | 6   | 92,843  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 197,569 | 1/4 | 182,599 | 1/4 | 167,607 | 1/4 | 152,593 | 1/4 | 137,579 | 1/4 | 122,565 | 1/4 | 107,551 | 1/4 | 92,531  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 197,257 | 1/2 | 182,287 | 1/2 | 167,294 | 1/2 | 152,280 | 1/2 | 137,266 | 1/2 | 122,252 | 1/2 | 107,238 | 1/2 | 92,218  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 210,865 | 3/4 | 196,945 | 3/4 | 181,975 | 3/4 | 166,981 | 3/4 | 151,967 | 3/4 | 136,953 | 3/4 | 121,939 | 3/4 | 91,905  |
| 7   | 7     | 7   | 7     | 7   | 210,686 | 7   | 196,634 | 7   | 181,663 | 7   | 166,669 | 7   | 151,655 | 7   | 136,641 | 7   | 121,627 | 7   | 91,592  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 210,506 | 1/4 | 196,322 | 1/4 | 181,351 | 1/4 | 166,356 | 1/4 | 151,342 | 1/4 | 136,328 | 1/4 | 121,314 | 1/4 | 91,279  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 210,327 | 1/2 | 196,010 | 1/2 | 181,040 | 1/2 | 166,043 | 1/2 | 151,029 | 1/2 | 136,015 | 1/2 | 121,001 | 1/2 | 90,966  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 210,147 | 3/4 | 195,698 | 3/4 | 180,728 | 3/4 | 165,730 | 3/4 | 150,716 | 3/4 | 135,702 | 3/4 | 120,688 | 3/4 | 90,653  |
| 8   | 8     | 8   | 8     | 8   | 209,916 | 8   | 195,386 | 8   | 180,416 | 8   | 165,417 | 8   | 150,403 | 8   | 135,389 | 8   | 120,375 | 8   | 90,340  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 209,684 | 1/4 | 195,074 | 1/4 | 180,104 | 1/4 | 165,105 | 1/4 | 150,091 | 1/4 | 135,077 | 1/4 | 120,063 | 1/4 | 90,027  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 209,452 | 1/2 | 194,762 | 1/2 | 179,792 | 1/2 | 164,792 | 1/2 | 149,778 | 1/2 | 134,764 | 1/2 | 119,750 | 1/2 | 89,714  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 209,221 | 3/4 | 194,450 | 3/4 | 179,480 | 3/4 | 164,479 | 3/4 | 149,465 | 3/4 | 134,451 | 3/4 | 119,437 | 3/4 | 89,401  |
| 9   | 9     | 9   | 9     | 9   | 208,941 | 9   | 194,139 | 9   | 179,168 | 9   | 164,166 | 9   | 149,152 | 9   | 134,138 | 9   | 119,124 | 9   | 89,088  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 208,661 | 1/4 | 193,827 | 1/4 | 178,856 | 1/4 | 163,853 | 1/4 | 148,839 | 1/4 | 133,825 | 1/4 | 118,812 | 1/4 | 88,775  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 208,381 | 1/2 | 193,515 | 1/2 | 178,545 | 1/2 | 163,541 | 1/2 | 148,527 | 1/2 | 133,513 | 1/2 | 118,499 | 1/2 | 88,463  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 208,101 | 3/4 | 193,203 | 3/4 | 178,233 | 3/4 | 163,228 | 3/4 | 148,214 | 3/4 | 133,200 | 3/4 | 118,186 | 3/4 | 88,150  |
| 10  | 10    | 10  | 10    | 10  | 207,795 | 10  | 192,891 | 10  | 177,921 | 10  | 162,915 | 10  | 147,901 | 10  | 132,887 | 10  | 117,873 | 10  | 87,837  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 207,489 | 1/4 | 192,579 | 1/4 | 177,609 | 1/4 | 162,602 | 1/4 | 147,588 | 1/4 | 132,574 | 1/4 | 117,560 | 1/4 | 87,524  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 207,184 | 1/2 | 192,267 | 1/2 | 177,297 | 1/2 | 162,289 | 1/2 | 147,275 | 1/2 | 132,262 | 1/2 | 117,248 | 1/2 | 87,211  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 206,878 | 3/4 | 191,955 | 3/4 | 176,985 | 3/4 | 161,977 | 3/4 | 146,963 | 3/4 | 131,949 | 3/4 | 116,935 | 3/4 | 86,898  |
| 11  | 11    | 11  | 11    | 11  | 206,569 | 11  | 191,643 | 11  | 176,673 | 11  | 161,664 | 11  | 146,650 | 11  | 131,636 | 11  | 116,622 | 11  | 86,585  |
| 1/4 | 1/4   | 1/4 | 1/4   | 1/4 | 206,259 | 1/4 | 191,332 | 1/4 | 176,361 | 1/4 | 161,351 | 1/4 | 146,337 | 1/4 | 131,323 | 1/4 | 116,309 | 1/4 | 86,272  |
| 1/2 | 1/2   | 1/2 | 1/2   | 1/2 | 205,950 | 1/2 | 191,020 | 1/2 | 176,050 | 1/2 | 161,038 | 1/2 | 146,024 | 1/2 | 131,010 | 1/2 | 115,996 | 1/2 | 85,959  |
| 3/4 | 3/4   | 3/4 | 3/4   | 3/4 | 205,640 | 3/4 | 190,708 | 3/4 | 175,738 | 3/4 | 160,726 | 3/4 | 145,712 | 3/4 | 130,698 | 3/4 | 115,684 | 3/4 | 85,646  |

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 LIP OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-3" 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 "HFL 437"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 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   | 85,333 | 0   | 70,313 | 0   | 55,356 | 0   | 40,377 | 0   | 25,357 | 0   | 10,595 | 0   |        | 0   |        | 0   |        | 0   |        |
| 1/4 | 85,020 | 1/4 | 70,000 | 1/4 | 55,046 | 1/4 | 40,064 | 1/4 | 25,044 | 1/4 | 10,305 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 84,707 | 1/2 | 69,687 | 1/2 | 54,735 | 1/2 | 39,751 | 1/2 | 24,731 | 1/2 | 10,015 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 84,394 | 3/4 | 69,374 | 3/4 | 54,425 | 3/4 | 39,438 | 3/4 | 24,418 | 3/4 | 9,725  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 1   | 84,082 | 1   | 69,061 | 1   | 54,114 | 1   | 39,125 | 1   | 24,105 | 1   | 9,439  | 1   |        | 1   |        | 1   |        | 1   |        |
| 1/4 | 83,769 | 1/4 | 68,748 | 1/4 | 53,804 | 1/4 | 38,812 | 1/4 | 23,792 | 1/4 | 9,153  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 83,456 | 1/2 | 68,435 | 1/2 | 53,493 | 1/2 | 38,499 | 1/2 | 23,479 | 1/2 | 8,867  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 83,143 | 3/4 | 68,122 | 3/4 | 53,182 | 3/4 | 38,186 | 3/4 | 23,166 | 3/4 | 8,582  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 2   | 82,830 | 2   | 67,809 | 2   | 52,872 | 2   | 37,873 | 2   | 22,853 | 2   | 8,299  | 2   |        | 2   |        | 2   |        | 2   |        |
| 1/4 | 82,517 | 1/4 | 67,496 | 1/4 | 52,561 | 1/4 | 37,560 | 1/4 | 22,540 | 1/4 | 8,017  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 82,204 | 1/2 | 67,183 | 1/2 | 52,250 | 1/2 | 37,248 | 1/2 | 22,228 | 1/2 | 7,735  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 81,891 | 3/4 | 66,871 | 3/4 | 51,939 | 3/4 | 36,935 | 3/4 | 21,915 | 3/4 | 7,453  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 3   | 81,578 | 3   | 66,558 | 3   | 51,628 | 3   | 36,622 | 3   | 21,602 | 3   | 7,175  | 3   |        | 3   |        | 3   |        | 3   |        |
| 1/4 | 81,265 | 1/4 | 66,245 | 1/4 | 51,317 | 1/4 | 36,309 | 1/4 | 21,289 | 1/4 | 6,897  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 80,952 | 1/2 | 65,932 | 1/2 | 51,006 | 1/2 | 35,996 | 1/2 | 20,976 | 1/2 | 6,618  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 80,639 | 3/4 | 65,619 | 3/4 | 50,694 | 3/4 | 35,683 | 3/4 | 20,663 | 3/4 | 6,340  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 4   | 80,326 | 4   | 65,306 | 4   | 50,383 | 4   | 35,370 | 4   | 20,350 | 4   | 6,066  | 4   |        | 4   |        | 4   |        | 4   |        |
| 1/4 | 80,013 | 1/4 | 64,993 | 1/4 | 50,071 | 1/4 | 35,057 | 1/4 | 20,037 | 1/4 | 5,791  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 79,701 | 1/2 | 64,681 | 1/2 | 49,760 | 1/2 | 34,744 | 1/2 | 19,724 | 1/2 | 5,517  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 79,388 | 3/4 | 64,368 | 3/4 | 49,448 | 3/4 | 34,431 | 3/4 | 19,411 | 3/4 | 5,243  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 5   | 79,075 | 5   | 64,056 | 5   | 49,136 | 5   | 34,118 | 5   | 19,098 | 5   | 4,972  | 5   |        | 5   |        | 5   |        | 5   |        |
| 1/4 | 78,762 | 1/4 | 63,745 | 1/4 | 48,824 | 1/4 | 33,805 | 1/4 | 18,785 | 1/4 | 4,702  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 78,449 | 1/2 | 63,433 | 1/2 | 48,512 | 1/2 | 33,493 | 1/2 | 18,472 | 1/2 | 4,431  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 78,136 | 3/4 | 63,121 | 3/4 | 48,200 | 3/4 | 33,180 | 3/4 | 18,160 | 3/4 | 4,160  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 6   | 77,823 | 6   | 62,810 | 6   | 47,887 | 6   | 32,867 | 6   | 17,848 | 6   | 3,894  | 6   |        | 6   |        | 6   |        | 6   |        |
| 1/4 | 77,510 | 1/4 | 62,500 | 1/4 | 47,574 | 1/4 | 32,554 | 1/4 | 17,536 | 1/4 | 3,628  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 77,197 | 1/2 | 62,189 | 1/2 | 47,261 | 1/2 | 32,241 | 1/2 | 17,224 | 1/2 | 3,361  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 76,884 | 3/4 | 61,878 | 3/4 | 46,948 | 3/4 | 31,928 | 3/4 | 16,912 | 3/4 | 3,095  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 7   | 76,571 | 7   | 61,568 | 7   | 46,635 | 7   | 31,615 | 7   | 16,603 | 7   | 2,833  | 7   |        | 7   |        | 7   |        | 7   |        |
| 1/4 | 76,258 | 1/4 | 61,257 | 1/4 | 46,322 | 1/4 | 31,302 | 1/4 | 16,294 | 1/4 | 2,571  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 75,945 | 1/2 | 60,946 | 1/2 | 46,009 | 1/2 | 30,989 | 1/2 | 15,985 | 1/2 | 2,309  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 75,633 | 3/4 | 60,636 | 3/4 | 45,696 | 3/4 | 30,676 | 3/4 | 15,676 | 3/4 | 2,047  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 8   | 75,320 | 8   | 60,325 | 8   | 45,383 | 8   | 30,363 | 8   | 15,370 | 8   | 1,809  | 8   |        | 8   |        | 8   |        | 8   |        |
| 1/4 | 75,007 | 1/4 | 60,015 | 1/4 | 45,070 | 1/4 | 30,050 | 1/4 | 15,065 | 1/4 | 1,570  | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 74,694 | 1/2 | 59,704 | 1/2 | 44,758 | 1/2 | 29,738 | 1/2 | 14,760 | 1/2 | 1,331  | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 74,381 | 3/4 | 59,394 | 3/4 | 44,445 | 3/4 | 29,425 | 3/4 | 14,455 | 3/4 | 1,093  | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 9   | 74,068 | 9   | 59,083 | 9   | 44,132 | 9   | 29,112 | 9   | 14,153 | 9   | 916    | 9   |        | 9   |        | 9   |        | 9   |        |
| 1/4 | 73,755 | 1/4 | 58,772 | 1/4 | 43,819 | 1/4 | 28,799 | 1/4 | 13,852 | 1/4 | 739    | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 73,442 | 1/2 | 58,462 | 1/2 | 43,506 | 1/2 | 28,486 | 1/2 | 13,551 | 1/2 | 562    | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 73,129 | 3/4 | 58,151 | 3/4 | 43,193 | 3/4 | 28,173 | 3/4 | 13,249 | 3/4 | 385    | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 10  | 72,816 | 10  | 57,841 | 10  | 42,880 | 10  | 27,860 | 10  | 12,952 | 10  |        | 10  |        | 10  |        | 10  |        | 10  |        |
| 1/4 | 72,503 | 1/4 | 57,530 | 1/4 | 42,567 | 1/4 | 27,547 | 1/4 | 12,654 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 72,190 | 1/2 | 57,220 | 1/2 | 42,254 | 1/2 | 27,234 | 1/2 | 12,357 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 71,877 | 3/4 | 56,909 | 3/4 | 41,941 | 3/4 | 26,921 | 3/4 | 12,059 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |
| 11  | 71,564 | 11  | 56,599 | 11  | 41,628 | 11  | 26,608 | 11  | 11,766 | 11  |        | 11  |        | 11  |        | 11  |        | 11  |        |
| 1/4 | 71,252 | 1/4 | 56,288 | 1/4 | 41,315 | 1/4 | 26,295 | 1/4 | 11,472 | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        | 1/4 |        |
| 1/2 | 70,939 | 1/2 | 55,977 | 1/2 | 41,003 | 1/2 | 25,983 | 1/2 | 11,178 | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        | 1/2 |        |
| 3/4 | 70,626 | 3/4 | 55,667 | 3/4 | 40,690 | 3/4 | 25,670 | 3/4 | 10,885 | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        | 3/4 |        |

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/02/2015 CL  
CALCULATED: 11/02/2015 CL  
PRINTED: 11/02/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 437"

## STBD SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 5'-11 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   | 4,667 | 0   | 3,512 | 0   | 2,358 | 0   | 1,203 | 0   |       | 0   |       | 0   |       | 0   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,643 | 1/4 | 3,488 | 1/4 | 2,334 | 1/4 | 1,179 | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,619 | 1/2 | 3,464 | 1/2 | 2,310 | 1/2 | 1,155 | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,595 | 3/4 | 3,440 | 3/4 | 2,286 | 3/4 | 1,131 | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 1   |       | 1   |       | 1   | 4,570 | 1   | 3,415 | 1   | 2,262 | 1   | 1,107 | 1   |       | 1   |       | 1   |       | 1   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,546 | 1/4 | 3,391 | 1/4 | 2,238 | 1/4 | 1,083 | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,522 | 1/2 | 3,367 | 1/2 | 2,214 | 1/2 | 1,059 | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,498 | 3/4 | 3,343 | 3/4 | 2,190 | 3/4 | 1,035 | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 2   |       | 2   |       | 2   | 4,474 | 2   | 3,319 | 2   | 2,165 | 2   | 1,011 | 2   |       | 2   |       | 2   |       | 2   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,450 | 1/4 | 3,295 | 1/4 | 2,141 | 1/4 | 987   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,426 | 1/2 | 3,271 | 1/2 | 2,117 | 1/2 | 963   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,402 | 3/4 | 3,247 | 3/4 | 2,093 | 3/4 | 938   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 3   |       | 3   |       | 3   | 4,378 | 3   | 3,223 | 3   | 2,069 | 3   | 914   | 3   |       | 3   |       | 3   |       | 3   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,354 | 1/4 | 3,199 | 1/4 | 2,045 | 1/4 | 890   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,330 | 1/2 | 3,175 | 1/2 | 2,021 | 1/2 | 866   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,306 | 3/4 | 3,151 | 3/4 | 1,997 | 3/4 | 842   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 4   |       | 4   |       | 4   | 4,282 | 4   | 3,127 | 4   | 1,973 | 4   | 818   | 4   |       | 4   |       | 4   |       | 4   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,258 | 1/4 | 3,103 | 1/4 | 1,949 | 1/4 | 794   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,234 | 1/2 | 3,079 | 1/2 | 1,925 | 1/2 | 770   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,210 | 3/4 | 3,054 | 3/4 | 1,901 | 3/4 | 746   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 5   |       | 5   |       | 5   | 4,185 | 5   | 3,030 | 5   | 1,877 | 5   | 722   | 5   |       | 5   |       | 5   |       | 5   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,161 | 1/4 | 3,006 | 1/4 | 1,853 | 1/4 | 698   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,137 | 1/2 | 2,982 | 1/2 | 1,829 | 1/2 | 674   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,113 | 3/4 | 2,958 | 3/4 | 1,805 | 3/4 | 650   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 6   |       | 6   |       | 6   | 4,089 | 6   | 2,934 | 6   | 1,780 | 6   | 626   | 6   |       | 6   |       | 6   |       | 6   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,065 | 1/4 | 2,910 | 1/4 | 1,756 | 1/4 | 602   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 5,140 | 1/2 | 4,041 | 1/2 | 2,886 | 1/2 | 578   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 5,128 | 3/4 | 4,017 | 3/4 | 2,862 | 3/4 | 553   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 7   |       | 7   |       | 7   | 5,117 | 7   | 3,993 | 7   | 2,838 | 7   | 529   | 7   |       | 7   |       | 7   |       | 7   |       |
| 1/4 |       | 1/4 |       | 1/4 | 5,105 | 1/4 | 3,969 | 1/4 | 2,814 | 1/4 | 505   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 5,093 | 1/2 | 3,945 | 1/2 | 2,790 | 1/2 | 481   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 5,070 | 3/4 | 3,921 | 3/4 | 2,766 | 3/4 | 457   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 8   |       | 8   |       | 8   | 5,046 | 8   | 3,897 | 8   | 2,742 | 8   | 433   | 8   |       | 8   |       | 8   |       | 8   |       |
| 1/4 |       | 1/4 |       | 1/4 | 5,023 | 1/4 | 3,873 | 1/4 | 2,718 | 1/4 | 409   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,999 | 1/2 | 3,849 | 1/2 | 2,694 | 1/2 | 385   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,975 | 3/4 | 3,825 | 3/4 | 2,670 | 3/4 | 361   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 9   |       | 9   |       | 9   | 4,952 | 9   | 3,800 | 9   | 2,646 | 9   | 337   | 9   |       | 9   |       | 9   |       | 9   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,928 | 1/4 | 3,776 | 1/4 | 2,622 | 1/4 | 313   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,904 | 1/2 | 3,752 | 1/2 | 2,597 | 1/2 | 289   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,881 | 3/4 | 3,728 | 3/4 | 2,574 | 3/4 | 265   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 10  |       | 10  |       | 10  | 4,857 | 10  | 3,704 | 10  | 2,550 | 10  | 241   | 10  |       | 10  |       | 10  |       | 10  |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,833 | 1/4 | 3,680 | 1/4 | 2,526 | 1/4 | 217   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,810 | 1/2 | 3,656 | 1/2 | 2,502 | 1/2 | 193   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,786 | 3/4 | 3,632 | 3/4 | 2,478 | 3/4 | 168   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 11  |       | 11  |       | 11  | 4,762 | 11  | 3,608 | 11  | 2,454 | 11  | 144   | 11  |       | 11  |       | 11  |       | 11  |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,739 | 1/4 | 3,584 | 1/4 | 2,430 | 1/4 | 120   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,715 | 1/2 | 3,560 | 1/2 | 2,406 | 1/2 | 96    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,691 | 3/4 | 3,536 | 3/4 | 2,382 | 3/4 | 1,227 | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |

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" HERMETIC VALVE

STRAPPED: 11/02/2015 CL  
CALCULATED: 11/02/2015 CL  
PRINTED: 11/02/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 437"

## PORT SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 5'-11 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   | 4,643 | 0   | 3,488 | 0   | 2,334 | 0   | 1,179 | 0   |       | 0   |       | 0   |       | 0   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,619 | 1/4 | 3,464 | 1/4 | 2,310 | 1/4 | 1,155 | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,595 | 1/2 | 3,440 | 1/2 | 2,286 | 1/2 | 1,131 | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,570 | 3/4 | 3,415 | 3/4 | 2,262 | 3/4 | 1,107 | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 1   |       | 1   |       | 1   | 4,546 | 1   | 3,391 | 1   | 2,238 | 1   | 1,083 | 1   |       | 1   |       | 1   |       | 1   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,522 | 1/4 | 3,367 | 1/4 | 2,214 | 1/4 | 1,059 | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,498 | 1/2 | 3,343 | 1/2 | 2,190 | 1/2 | 1,035 | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,474 | 3/4 | 3,319 | 3/4 | 2,165 | 3/4 | 1,011 | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 2   |       | 2   |       | 2   | 4,450 | 2   | 3,295 | 2   | 2,141 | 2   | 987   | 2   |       | 2   |       | 2   |       | 2   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,426 | 1/4 | 3,271 | 1/4 | 2,117 | 1/4 | 963   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,402 | 1/2 | 3,247 | 1/2 | 2,093 | 1/2 | 938   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,378 | 3/4 | 3,223 | 3/4 | 2,069 | 3/4 | 914   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 3   |       | 3   |       | 3   | 4,354 | 3   | 3,199 | 3   | 2,045 | 3   | 890   | 3   |       | 3   |       | 3   |       | 3   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,330 | 1/4 | 3,175 | 1/4 | 2,021 | 1/4 | 866   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,306 | 1/2 | 3,151 | 1/2 | 1,997 | 1/2 | 842   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,282 | 3/4 | 3,127 | 3/4 | 1,973 | 3/4 | 818   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 4   |       | 4   |       | 4   | 4,258 | 4   | 3,103 | 4   | 1,949 | 4   | 794   | 4   |       | 4   |       | 4   |       | 4   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,234 | 1/4 | 3,079 | 1/4 | 1,925 | 1/4 | 770   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,210 | 1/2 | 3,054 | 1/2 | 1,901 | 1/2 | 746   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,185 | 3/4 | 3,030 | 3/4 | 1,877 | 3/4 | 722   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 5   |       | 5   |       | 5   | 4,161 | 5   | 3,006 | 5   | 1,853 | 5   | 698   | 5   |       | 5   |       | 5   |       | 5   |       |
| 1/4 |       | 1/4 |       | 1/4 | 4,137 | 1/4 | 2,982 | 1/4 | 1,829 | 1/4 | 674   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 |       | 1/2 | 4,113 | 1/2 | 2,958 | 1/2 | 1,805 | 1/2 | 650   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 |       | 3/4 | 4,089 | 3/4 | 2,934 | 3/4 | 1,780 | 3/4 | 626   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 6   |       | 6   |       | 6   | 4,065 | 6   | 2,910 | 6   | 1,756 | 6   | 602   | 6   |       | 6   |       | 6   |       | 6   |       |
| 1/4 |       | 1/4 | 5,140 | 1/4 | 4,041 | 1/4 | 2,886 | 1/4 | 1,732 | 1/4 | 578   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 5,128 | 1/2 | 4,017 | 1/2 | 2,862 | 1/2 | 1,708 | 1/2 | 553   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 5,117 | 3/4 | 3,993 | 3/4 | 2,838 | 3/4 | 1,684 | 3/4 | 529   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 7   |       | 7   | 5,105 | 7   | 3,969 | 7   | 2,814 | 7   | 1,660 | 7   | 505   | 7   |       | 7   |       | 7   |       | 7   |       |
| 1/4 |       | 1/4 | 5,093 | 1/4 | 3,945 | 1/4 | 2,790 | 1/4 | 1,636 | 1/4 | 481   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 5,070 | 1/2 | 3,921 | 1/2 | 2,766 | 1/2 | 1,612 | 1/2 | 457   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 5,046 | 3/4 | 3,897 | 3/4 | 2,742 | 3/4 | 1,588 | 3/4 | 433   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 8   |       | 8   | 5,023 | 8   | 3,873 | 8   | 2,718 | 8   | 1,564 | 8   | 409   | 8   |       | 8   |       | 8   |       | 8   |       |
| 1/4 |       | 1/4 | 4,999 | 1/4 | 3,849 | 1/4 | 2,694 | 1/4 | 1,540 | 1/4 | 385   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 4,975 | 1/2 | 3,825 | 1/2 | 2,670 | 1/2 | 1,516 | 1/2 | 361   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 4,952 | 3/4 | 3,800 | 3/4 | 2,646 | 3/4 | 1,492 | 3/4 | 337   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 9   |       | 9   | 4,928 | 9   | 3,776 | 9   | 2,622 | 9   | 1,468 | 9   | 313   | 9   |       | 9   |       | 9   |       | 9   |       |
| 1/4 |       | 1/4 | 4,904 | 1/4 | 3,752 | 1/4 | 2,597 | 1/4 | 1,444 | 1/4 | 289   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 4,881 | 1/2 | 3,728 | 1/2 | 2,574 | 1/2 | 1,419 | 1/2 | 265   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 4,857 | 3/4 | 3,704 | 3/4 | 2,550 | 3/4 | 1,395 | 3/4 | 241   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 10  |       | 10  | 4,833 | 10  | 3,680 | 10  | 2,526 | 10  | 1,371 | 10  | 217   | 10  |       | 10  |       | 10  |       | 10  |       |
| 1/4 |       | 1/4 | 4,810 | 1/4 | 3,656 | 1/4 | 2,502 | 1/4 | 1,347 | 1/4 | 193   | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 4,786 | 1/2 | 3,632 | 1/2 | 2,478 | 1/2 | 1,323 | 1/2 | 168   | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 4,762 | 3/4 | 3,608 | 3/4 | 2,454 | 3/4 | 1,299 | 3/4 | 144   | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 11  |       | 11  | 4,739 | 11  | 3,584 | 11  | 2,430 | 11  | 1,275 | 11  | 120   | 11  |       | 11  |       | 11  |       | 11  |       |
| 1/4 |       | 1/4 | 4,715 | 1/4 | 3,560 | 1/4 | 2,406 | 1/4 | 1,251 | 1/4 | 96    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 4,691 | 1/2 | 3,536 | 1/2 | 2,382 | 1/2 | 1,227 | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 4,667 | 3/4 | 3,512 | 3/4 | 2,358 | 3/4 | 1,203 | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |

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" HERMETIC VALVE

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CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

PRECISION MEASUREMENT  
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# BARGE "HFL 437"

## FUEL TANK ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-05 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   | 473   | 0   | 332   | 0   | 170   | 0   | 33    | 0   |       | 0   |       | 0   |       | 0   |       | 0   |       |
| 1/4 |       | 1/4 | 471   | 1/4 | 329   | 1/4 | 167   | 1/4 | 31    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 469   | 1/2 | 325   | 1/2 | 163   | 1/2 | 28    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 466   | 3/4 | 322   | 3/4 | 160   | 3/4 | 26    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 1   |       | 1   | 464   | 1   | 319   | 1   | 157   | 1   | 24    | 1   |       | 1   |       | 1   |       | 1   |       | 1   |       |
| 1/4 |       | 1/4 | 461   | 1/4 | 315   | 1/4 | 154   | 1/4 | 22    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 459   | 1/2 | 312   | 1/2 | 150   | 1/2 | 21    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 456   | 3/4 | 309   | 3/4 | 147   | 3/4 | 19    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 2   |       | 2   | 453   | 2   | 305   | 2   | 144   | 2   | 17    | 2   |       | 2   |       | 2   |       | 2   |       | 2   |       |
| 1/4 |       | 1/4 | 451   | 1/4 | 302   | 1/4 | 141   | 1/4 | 15    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 448   | 1/2 | 298   | 1/2 | 138   | 1/2 | 13    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 445   | 3/4 | 295   | 3/4 | 134   | 3/4 | 12    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 3   |       | 3   | 443   | 3   | 292   | 3   | 131   | 3   | 10    | 3   |       | 3   |       | 3   |       | 3   |       | 3   |       |
| 1/4 |       | 1/4 | 440   | 1/4 | 288   | 1/4 | 128   | 1/4 | 9     | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 437   | 1/2 | 285   | 1/2 | 125   | 1/2 | 7     | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 434   | 3/4 | 281   | 3/4 | 122   | 3/4 | 6     | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 4   |       | 4   | 432   | 4   | 278   | 4   | 119   | 4   | 5     | 4   |       | 4   |       | 4   |       | 4   |       | 4   |       |
| 1/4 |       | 1/4 | 429   | 1/4 | 275   | 1/4 | 116   | 1/4 | 4     | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 |       | 1/2 | 426   | 1/2 | 271   | 1/2 | 113   | 1/2 | 3     | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 |       | 3/4 | 423   | 3/4 | 268   | 3/4 | 110   | 3/4 | 2     | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 5   |       | 5   | 420   | 5   | 264   | 5   | 107   | 5   | 1     | 5   |       | 5   |       | 5   |       | 5   |       | 5   |       |
| 1/4 |       | 1/4 | 417   | 1/4 | 261   | 1/4 | 104   | 1/4 | 1     | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 | 515   | 1/2 | 414   | 1/2 | 258   | 1/2 | 101   | 1/2 | 0     | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 | 514   | 3/4 | 411   | 3/4 | 254   | 3/4 | 98    | 1/2 | ===== | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 6   | 514   | 6   | 408   | 6   | 251   | 6   | 95    | 6   |       | 6   |       | 6   |       | 6   |       | 6   |       | 6   |       |
| 1/4 | 513   | 1/4 | 405   | 1/4 | 247   | 1/4 | 92    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 | 512   | 1/2 | 402   | 1/2 | 244   | 1/2 | 89    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 | 511   | 3/4 | 399   | 3/4 | 240   | 3/4 | 86    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 7   | 510   | 7   | 396   | 7   | 237   | 7   | 83    | 7   |       | 7   |       | 7   |       | 7   |       | 7   |       | 7   |       |
| 1/4 | 509   | 1/4 | 393   | 1/4 | 234   | 1/4 | 81    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 | 508   | 1/2 | 390   | 1/2 | 230   | 1/2 | 78    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 | 506   | 3/4 | 387   | 3/4 | 227   | 3/4 | 75    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 8   | 505   | 8   | 384   | 8   | 223   | 8   | 72    | 8   |       | 8   |       | 8   |       | 8   |       | 8   |       | 8   |       |
| 1/4 | 503   | 1/4 | 381   | 1/4 | 220   | 1/4 | 70    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 | 502   | 1/2 | 378   | 1/2 | 217   | 1/2 | 67    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 | 500   | 3/4 | 374   | 3/4 | 213   | 3/4 | 64    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 9   | 498   | 9   | 371   | 9   | 210   | 9   | 62    | 9   |       | 9   |       | 9   |       | 9   |       | 9   |       | 9   |       |
| 1/4 | 496   | 1/4 | 368   | 1/4 | 207   | 1/4 | 59    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 | 495   | 1/2 | 365   | 1/2 | 203   | 1/2 | 56    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 | 493   | 3/4 | 362   | 3/4 | 200   | 3/4 | 54    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 10  | 491   | 10  | 358   | 10  | 196   | 10  | 51    | 10  |       | 10  |       | 10  |       | 10  |       | 10  |       | 10  |       |
| 1/4 | 489   | 1/4 | 355   | 1/4 | 193   | 1/4 | 49    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 | 487   | 1/2 | 352   | 1/2 | 190   | 1/2 | 47    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 | 484   | 3/4 | 349   | 3/4 | 186   | 3/4 | 44    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |
| 11  | 482   | 11  | 345   | 11  | 183   | 11  | 42    | 11  |       | 11  |       | 11  |       | 11  |       | 11  |       | 11  |       |
| 1/4 | 480   | 1/4 | 342   | 1/4 | 180   | 1/4 | 39    | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       | 1/4 |       |
| 1/2 | 478   | 1/2 | 339   | 1/2 | 176   | 1/2 | 37    | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       | 1/2 |       |
| 3/4 | 476   | 3/4 | 335   | 3/4 | 173   | 3/4 | 35    | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       | 3/4 |       |

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 PIPE

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