



# BARGE "HFL 404"

## 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	00-0/8	00-0/8
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	00-0/8	00-0/8
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	00-0/8	00-0/8
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	00-0/8	00-0/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 2'-00"  
 AFT DRAFT = 6'-00"  
 DIFF. = 4'-00" (DOWN BY STERN)

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

December 1, 2023

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 404"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-10 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	4,535.28	0	4,266.33	0	3,955.58	0	3,644.81	0	3,334.05	0	3,023.29	0	2,712.54	0	2,401.78
1/4	1/4	1/4	1/4	1/4	4,533.52	1/4	4,259.86	1/4	3,949.10	1/4	3,638.34	1/4	3,327.57	1/4	3,016.81	1/4	2,706.07	1/4	2,395.31
1/2	1/2	1/2	1/2	1/2	4,531.77	1/2	4,253.38	1/2	3,942.62	1/2	3,631.86	1/2	3,321.10	1/2	3,010.34	1/2	2,699.60	1/2	2,388.84
3/4	3/4	3/4	3/4	3/4	4,528.93	3/4	4,246.91	3/4	3,936.15	3/4	3,625.38	3/4	3,314.63	3/4	3,003.87	3/4	2,693.12	3/4	2,382.36
1		1		1	4,526.10	1	4,240.43	1	3,929.67	1	3,618.91	1	3,308.16	1	2,997.40	1	2,686.65	1	2,375.88
1/4	1/4	1/4	1/4	1/4	4,523.27	1/4	4,233.96	1/4	3,923.19	1/4	3,612.43	1/4	3,301.69	1/4	2,990.93	1/4	2,680.17	1/4	2,369.41
1/2	1/2	1/2	1/2	1/2	4,520.43	1/2	4,227.48	1/2	3,916.72	1/2	3,605.96	1/2	3,295.22	1/2	2,984.46	1/2	2,673.69	1/2	2,362.93
3/4	3/4	3/4	3/4	3/4	4,516.52	3/4	4,221.00	3/4	3,910.25	3/4	3,599.49	3/4	3,288.74	3/4	2,977.98	3/4	2,667.22	3/4	2,356.46
2		2		2	4,512.61	2	4,214.53	2	3,903.78	2	3,593.02	2	3,282.27	2	2,971.50	2	2,660.74	2	2,349.98
1/4	1/4	1/4	1/4	1/4	4,508.70	1/4	4,208.05	1/4	3,897.31	1/4	3,586.55	1/4	3,275.79	1/4	2,965.03	1/4	2,654.27	1/4	2,343.50
1/2	1/2	1/2	1/2	1/2	4,504.79	1/2	4,201.58	1/2	3,890.84	1/2	3,580.08	1/2	3,269.31	1/2	2,958.55	1/2	2,647.79	1/2	2,337.03
3/4	3/4	3/4	3/4	3/4	4,499.80	3/4	4,195.10	3/4	3,884.36	3/4	3,573.60	3/4	3,262.84	3/4	2,952.07	3/4	2,641.32	3/4	2,330.56
3		3		3	4,494.81	3	4,188.63	3	3,877.88	3	3,567.12	3	3,256.36	3	2,945.60	3	2,634.85	3	2,324.09
1/4	1/4	1/4	1/4	1/4	4,489.82	1/4	4,182.16	1/4	3,871.41	1/4	3,560.65	1/4	3,249.88	1/4	2,939.12	1/4	2,628.38	1/4	2,317.62
1/2	1/2	1/2	1/2	1/2	4,484.84	1/2	4,175.69	1/2	3,864.93	1/2	3,554.17	1/2	3,243.41	1/2	2,932.65	1/2	2,621.91	1/2	2,311.15
3/4	3/4	3/4	3/4	3/4	4,478.77	3/4	4,169.22	3/4	3,858.46	3/4	3,547.69	3/4	3,236.94	3/4	2,926.18	3/4	2,615.43	3/4	2,304.67
4		4		4	4,472.69	4	4,162.74	4	3,851.98	4	3,541.22	4	3,230.47	4	2,919.71	4	2,608.96	4	2,298.19
1/4	1/4	1/4	1/4	1/4	4,466.62	1/4	4,156.27	1/4	3,845.50	1/4	3,534.74	1/4	3,224.00	1/4	2,913.24	1/4	2,602.48	1/4	2,291.72
1/2	1/2	1/2	1/2	1/2	4,460.55	1/2	4,149.79	1/2	3,839.03	1/2	3,528.27	1/2	3,217.53	1/2	2,906.77	1/2	2,596.00	1/2	2,285.24
3/4	3/4	3/4	3/4	3/4	4,454.08	3/4	4,143.32	3/4	3,832.56	3/4	3,521.80	3/4	3,211.05	3/4	2,900.29	3/4	2,589.53	3/4	2,278.77
5		5		5	4,447.60	5	4,136.85	5	3,826.09	5	3,515.33	5	3,204.58	5	2,893.81	5	2,583.05	5	2,272.29
1/4	1/4	1/4	1/4	1/4	4,441.12	1/4	4,130.38	1/4	3,819.62	1/4	3,508.85	1/4	3,198.10	1/4	2,887.34	1/4	2,576.57	1/4	2,265.81
1/2	1/2	1/2	1/2	1/2	4,434.65	1/2	4,123.91	1/2	3,813.15	1/2	3,502.38	1/2	3,191.62	1/2	2,880.86	1/2	2,570.10	1/2	2,259.34
3/4	3/4	3/4	3/4	3/4	4,428.18	3/4	4,117.43	3/4	3,806.67	3/4	3,495.91	3/4	3,185.15	3/4	2,874.38	3/4	2,563.63	3/4	2,252.87
6		6		6	4,421.71	6	4,110.96	6	3,800.19	6	3,489.43	6	3,178.67	6	2,867.91	6	2,557.16	6	2,246.40
1/4	1/4	1/4	1/4	1/4	4,415.24	1/4	4,104.48	1/4	3,793.72	1/4	3,482.96	1/4	3,172.19	1/4	2,861.43	1/4	2,550.69	1/4	2,239.93
1/2	1/2	1/2	1/2	1/2	4,408.77	1/2	4,098.00	1/2	3,787.24	1/2	3,476.48	1/2	3,165.72	1/2	2,854.96	1/2	2,544.22	1/2	2,233.46
3/4	3/4	3/4	3/4	3/4	4,402.29	3/4	4,091.53	3/4	3,780.77	3/4	3,470.01	3/4	3,159.25	3/4	2,848.49	3/4	2,537.74	3/4	2,226.98
7		7		7	4,395.81	7	4,085.05	7	3,774.29	7	3,463.54	7	3,152.78	7	2,842.02	7	2,531.27	7	2,220.50
1/4	1/4	1/4	1/4	1/4	4,389.34	1/4	4,078.58	1/4	3,767.81	1/4	3,457.07	1/4	3,146.31	1/4	2,835.55	1/4	2,524.79	1/4	2,214.03
1/2	1/2	1/2	1/2	1/2	4,382.86	1/2	4,072.10	1/2	3,761.34	1/2	3,450.60	1/2	3,139.84	1/2	2,829.08	1/2	2,518.31	1/2	2,207.55
3/4	3/4	3/4	3/4	3/4	4,376.38	3/4	4,065.63	3/4	3,754.87	3/4	3,444.12	3/4	3,133.36	3/4	2,822.60	3/4	2,511.84	3/4	2,201.07
8		8		8	4,369.91	8	4,059.16	8	3,748.40	8	3,437.65	8	3,126.88	8	2,816.12	8	2,505.36	8	2,194.60
1/4	1/4	1/4	1/4	1/4	4,363.43	1/4	4,052.69	1/4	3,741.93	1/4	3,431.17	1/4	3,120.41	1/4	2,809.65	1/4	2,498.88	1/4	2,188.12
1/2	1/2	1/2	1/2	1/2	4,356.96	1/2	4,046.22	1/2	3,735.46	1/2	3,424.69	1/2	3,113.93	1/2	2,803.17	1/2	2,492.41	1/2	2,181.65
3/4	3/4	3/4	3/4	3/4	4,350.49	3/4	4,039.74	3/4	3,728.98	3/4	3,418.22	3/4	3,107.46	3/4	2,796.70	3/4	2,485.94	3/4	2,175.18
9		9		9	4,344.02	9	4,033.27	9	3,722.50	9	3,411.74	9	3,100.98	9	2,790.23	9	2,479.47	9	2,168.71
1/4	1/4	1/4	1/4	1/4	4,337.55	1/4	4,026.79	1/4	3,716.03	1/4	3,405.27	1/4	3,094.50	1/4	2,783.76	1/4	2,473.00	1/4	2,162.24
1/2	1/2	1/2	1/2	1/2	4,331.08	1/2	4,020.31	1/2	3,709.55	1/2	3,398.79	1/2	3,088.03	1/2	2,777.29	1/2	2,466.53	1/2	2,155.77
3/4	3/4	3/4	3/4	3/4	4,324.60	3/4	4,013.84	3/4	3,703.08	3/4	3,392.32	3/4	3,081.56	3/4	2,770.81	3/4	2,460.05	3/4	2,149.29
10		10		10	4,318.12	10	4,007.36	10	3,696.60	10	3,385.85	10	3,075.09	10	2,764.34	10	2,453.58	10	2,142.81
1/4	1/4	1/4	1/4	1/4	4,311.65	1/4	4,000.88	1/4	3,690.12	1/4	3,379.38	1/4	3,068.62	1/4	2,757.86	1/4	2,447.10	1/4	2,136.34
1/2	1/2	1/2	1/2	1/2	4,541.48	1/2	4,305.17	1/2	3,994.41	1/2	3,683.65	1/2	3,372.91	1/2	3,062.15	1/2	2,751.38	1/2	2,440.62
3/4	3/4	3/4	3/4	3/4	4,540.81	3/4	4,298.69	3/4	3,987.94	3/4	3,677.18	3/4	3,366.43	3/4	3,055.67	3/4	2,744.91	3/4	2,434.15
11		11		11	4,540.13	11	4,292.22	11	3,981.47	11	3,670.71	11	3,359.96	11	3,049.19	11	2,738.43	11	2,427.67
1/4	1/4	1/4	1/4	1/4	4,539.46	1/4	4,285.74	1/4	3,975.00	1/4	3,664.24	1/4	3,353.48	1/4	3,042.72	1/4	2,731.96	1/4	2,421.19
1/2	1/2	1/2	1/2	1/2	4,538.79	1/2	4,279.27	1/2	3,968.53	1/2	3,657.77	1/2	3,347.00	1/2	3,036.24	1/2	2,725.48	1/2	2,414.72
3/4	3/4	3/4	3/4	3/4	4,537.03	3/4	4,272.80	3/4	3,962.05	3/4	3,651.29	3/4	3,340.53	3/4	3,029.77	3/4	2,719.01	3/4	2,408.25

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 AT GAUGE POINT.  
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON MMC VALVE.  
GAUGE POINT: (MMC) LOCATED 11'-06" OFF CENTERLINE AND 39'-06" FORWARD OF AFT BULKHEAD.

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



# BARGE "HFL 404"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-10 1/2"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,091.03	0	1,780.27	0	1,469.50	0	1,158.74	0	848.16	0	537.47	0	235.41	0		0			
1/4	2,084.55	1/4	1,773.79	1/4	1,463.03	1/4	1,152.27	1/4	841.69	1/4	531.00	1/4	229.52	1/4		1/4			
1/2	2,078.08	1/2	1,767.31	1/2	1,456.55	1/2	1,145.79	1/2	835.22	1/2	524.53	1/2	223.62	1/2		1/2			
3/4	2,071.60	3/4	1,760.84	3/4	1,450.08	3/4	1,139.32	3/4	828.75	3/4	518.05	3/4	217.80	3/4		3/4			
1	2,065.12	1	1,754.36	1	1,443.61	1	1,132.85	1	822.28	1	511.58	1	211.98	1		1			
1/4	2,058.65	1/4	1,747.88	1/4	1,437.14	1/4	1,126.38	1/4	815.81	1/4	505.10	1/4	206.16	1/4		1/4			
1/2	2,052.17	1/2	1,741.41	1/2	1,430.67	1/2	1,119.91	1/2	809.34	1/2	498.62	1/2	200.34	1/2		1/2			
3/4	2,045.70	3/4	1,734.94	3/4	1,424.19	3/4	1,113.43	3/4	802.87	3/4	492.15	3/4	194.59	3/4		3/4			
2	2,039.23	2	1,728.47	2	1,417.72	2	1,106.96	2	796.40	2	485.67	2	188.85	2		2			
1/4	2,032.76	1/4	1,722.00	1/4	1,411.24	1/4	1,100.48	1/4	789.93	1/4	479.19	1/4	183.10	1/4		1/4			
1/2	2,026.29	1/2	1,715.53	1/2	1,404.77	1/2	1,094.00	1/2	783.46	1/2	472.72	1/2	177.36	1/2		1/2			
3/4	2,019.81	3/4	1,709.05	3/4	1,398.29	3/4	1,087.53	3/4	776.98	3/4	466.25	3/4	171.69	3/4		3/4			
3	2,013.34	3	1,702.58	3	1,391.81	3	1,081.06	3	770.50	3	459.78	3	166.03	3		3			
1/4	2,006.86	1/4	1,696.10	1/4	1,385.34	1/4	1,074.59	1/4	764.03	1/4	453.31	1/4	160.36	1/4		1/4			
1/2	2,000.38	1/2	1,689.62	1/2	1,378.86	1/2	1,068.12	1/2	757.55	1/2	446.84	1/2	154.69	1/2		1/2			
3/4	1,993.91	3/4	1,683.15	3/4	1,372.39	3/4	1,061.65	3/4	751.08	3/4	440.36	3/4	149.10	3/4		3/4			
4	1,987.43	4	1,676.67	4	1,365.92	4	1,055.18	4	744.61	4	433.88	4	143.52	4		4			
1/4	1,980.96	1/4	1,670.19	1/4	1,359.45	1/4	1,048.71	1/4	738.14	1/4	427.41	1/4	137.93	1/4		1/4			
1/2	1,974.48	1/2	1,663.72	1/2	1,352.98	1/2	1,042.24	1/2	731.67	1/2	420.93	1/2	132.34	1/2		1/2			
3/4	1,968.01	3/4	1,657.25	3/4	1,346.50	3/4	1,035.77	3/4	725.20	3/4	414.50	3/4	126.82	3/4		3/4			
5	1,961.54	5	1,650.78	5	1,340.03	5	1,029.30	5	718.73	5	408.06	5	121.31	5		5			
1/4	1,955.07	1/4	1,644.31	1/4	1,333.55	1/4	1,022.83	1/4	712.26	1/4	401.63	1/4	115.80	1/4		1/4			
1/2	1,948.60	1/2	1,637.84	1/2	1,327.08	1/2	1,016.36	1/2	705.79	1/2	395.19	1/2	110.29	1/2		1/2			
3/4	1,942.12	3/4	1,631.36	3/4	1,320.60	3/4	1,009.89	3/4	699.31	3/4	388.84	3/4	104.85	3/4		3/4			
6	1,935.65	6	1,624.88	6	1,314.12	6	1,003.42	6	692.84	6	382.48	6	99.41	6		6			
1/4	1,929.17	1/4	1,618.41	1/4	1,307.65	1/4	996.95	1/4	686.36	1/4	376.12	1/4	93.97	1/4		1/4			
1/2	1,922.69	1/2	1,611.93	1/2	1,301.17	1/2	990.48	1/2	679.88	1/2	369.77	1/2	88.53	1/2		1/2			
3/4	1,916.22	3/4	1,605.46	3/4	1,294.70	3/4	984.01	3/4	673.41	3/4	363.49	3/4	83.17	3/4		3/4			
7	1,909.74	7	1,598.98	7	1,288.23	7	977.54	7	666.94	7	357.21	7	77.81	7		7			
1/4	1,903.27	1/4	1,592.50	1/4	1,281.76	1/4	971.07	1/4	660.47	1/4	350.93	1/4	72.46	1/4		1/4			
1/2	1,896.79	1/2	1,586.03	1/2	1,275.29	1/2	964.60	1/2	654.00	1/2	344.65	1/2	67.10	1/2		1/2			
3/4	1,890.32	3/4	1,579.56	3/4	1,268.81	3/4	958.13	3/4	647.53	3/4	338.44	3/4	61.82	3/4		3/4			
8	1,883.85	8	1,573.09	8	1,262.34	8	951.66	8	641.05	8	332.23	8	56.54	8		8			
1/4	1,877.38	1/4	1,566.62	1/4	1,255.86	1/4	945.19	1/4	634.57	1/4	326.02	1/4	51.26	1/4		1/4			
1/2	1,870.91	1/2	1,560.15	1/2	1,249.38	1/2	938.72	1/2	628.10	1/2	319.81	1/2	45.98	1/2		1/2			
3/4	1,864.43	3/4	1,553.67	3/4	1,242.91	3/4	932.25	3/4	621.62	3/4	313.69	3/4	41.39	3/4		3/4			
9	1,857.96	9	1,547.19	9	1,236.43	9	925.79	9	615.15	9	307.56	9	36.80	9		9			
1/4	1,851.48	1/4	1,540.72	1/4	1,229.96	1/4	919.32	1/4	608.67	1/4	301.44	1/4	32.21	1/4		1/4			
1/2	1,845.00	1/2	1,534.24	1/2	1,223.48	1/2	912.86	1/2	602.19	1/2	295.31	1/2	27.62	1/2		1/2			
3/4	1,838.53	3/4	1,527.77	3/4	1,217.01	3/4	906.39	3/4	595.72	3/4	289.26	3/4	24.34	3/4		3/4			
10	1,832.05	10	1,521.29	10	1,210.54	10	899.92	10	589.25	10	283.21	10	21.06	10		10			
1/4	1,825.57	1/4	1,514.81	1/4	1,204.07	1/4	893.45	1/4	582.78	1/4	277.15	1/4	17.78	1/4		1/4			
1/2	1,819.10	1/2	1,508.34	1/2	1,197.60	1/2	886.98	1/2	576.31	1/2	271.10	1/2	14.50	1/2		1/2			
3/4	1,812.63	3/4	1,501.87	3/4	1,191.12	3/4	880.51	3/4	569.84	3/4	265.12	3/4		3/4		3/4			
11	1,806.16	11	1,495.40	11	1,184.65	11	874.04	11	563.36	11	259.15	11		11		11			
1/4	1,799.69	1/4	1,488.93	1/4	1,178.17	1/4	867.57	1/4	556.88	1/4	253.17	1/4		1/4		1/4			
1/2	1,793.22	1/2	1,482.46	1/2	1,171.69	1/2	861.10	1/2	550.41	1/2	247.19	1/2		1/2		1/2			
3/4	1,786.74	3/4	1,475.98	3/4	1,165.22	3/4	854.63	3/4	543.94	3/4	241.30	3/4		3/4		3/4			

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 09/08/2008 CB  
RECALCULATED: 10/04/2018  
VERIFIED: 12/01/2023

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2023

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



# BARGE "HFL 404"

## 1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-10 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	4,538.58	0	4,269.45	0	3,958.46	0	3,647.48	0	3,336.49	0	3,025.50	0	2,714.52	0	2,403.54
1/4	1/4	1/4	1/4	1/4	4,536.83	1/4	4,262.98	1/4	3,951.98	1/4	3,641.00	1/4	3,330.01	1/4	3,019.02	1/4	2,708.05	1/4	2,397.05
1/2	1/2	1/2	1/2	1/2	4,535.07	1/2	4,256.50	1/2	3,945.50	1/2	3,634.52	1/2	3,323.52	1/2	3,012.55	1/2	2,701.57	1/2	2,390.57
3/4	3/4	3/4	3/4	3/4	4,532.24	3/4	4,250.02	3/4	3,939.02	3/4	3,628.04	3/4	3,317.05	3/4	3,006.07	3/4	2,695.09	3/4	2,384.10
1		1		1	4,529.41	1	4,243.54	1	3,932.55	1	3,621.56	1	3,310.57	1	2,999.60	1	2,688.61	1	2,377.62
1/4	1/4	1/4	1/4	1/4	4,526.57	1/4	4,237.05	1/4	3,926.07	1/4	3,615.08	1/4	3,304.10	1/4	2,993.12	1/4	2,682.13	1/4	2,371.14
1/2	1/2	1/2	1/2	1/2	4,523.74	1/2	4,230.57	1/2	3,919.60	1/2	3,608.60	1/2	3,297.62	1/2	2,986.64	1/2	2,675.64	1/2	2,364.67
3/4	3/4	3/4	3/4	3/4	4,519.83	3/4	4,224.10	3/4	3,913.11	3/4	3,602.12	3/4	3,291.14	3/4	2,980.16	3/4	2,669.17	3/4	2,358.19
2		2		2	4,515.92	2	4,217.62	2	3,906.63	2	3,595.64	2	3,284.67	2	2,973.68	2	2,662.69	2	2,351.70
1/4	1/4	1/4	1/4	1/4	4,512.01	1/4	4,211.14	1/4	3,900.15	1/4	3,589.17	1/4	3,278.19	1/4	2,967.20	1/4	2,656.21	1/4	2,345.22
1/2	1/2	1/2	1/2	1/2	4,508.10	1/2	4,204.67	1/2	3,893.67	1/2	3,582.69	1/2	3,271.71	1/2	2,960.71	1/2	2,649.74	1/2	2,338.74
3/4	3/4	3/4	3/4	3/4	4,503.10	3/4	4,198.19	3/4	3,887.19	3/4	3,576.21	3/4	3,265.23	3/4	2,954.24	3/4	2,643.26	3/4	2,332.26
3		3		3	4,498.11	3	4,191.70	3	3,880.71	3	3,569.73	3	3,258.75	3	2,947.76	3	2,636.77	3	2,325.79
1/4	1/4	1/4	1/4	1/4	4,493.11	1/4	4,185.22	1/4	3,874.24	1/4	3,563.24	1/4	3,252.27	1/4	2,941.29	1/4	2,630.29	1/4	2,319.31
1/2	1/2	1/2	1/2	1/2	4,488.12	1/2	4,178.74	1/2	3,867.76	1/2	3,556.76	1/2	3,245.79	1/2	2,934.81	1/2	2,623.81	1/2	2,312.83
3/4	3/4	3/4	3/4	3/4	4,482.04	3/4	4,172.26	3/4	3,861.28	3/4	3,550.29	3/4	3,239.31	3/4	2,928.33	3/4	2,617.33	3/4	2,306.35
4		4		4	4,475.96	4	4,165.79	4	3,854.80	4	3,543.81	4	3,232.83	4	2,921.85	4	2,610.86	4	2,299.87
1/4	1/4	1/4	1/4	1/4	4,469.89	1/4	4,159.31	1/4	3,848.32	1/4	3,537.33	1/4	3,226.36	1/4	2,915.36	1/4	2,604.38	1/4	2,293.39
1/2	1/2	1/2	1/2	1/2	4,463.81	1/2	4,152.83	1/2	3,841.83	1/2	3,530.86	1/2	3,219.88	1/2	2,908.88	1/2	2,597.91	1/2	2,286.91
3/4	3/4	3/4	3/4	3/4	4,457.33	3/4	4,146.35	3/4	3,835.36	3/4	3,524.38	3/4	3,213.40	3/4	2,902.41	3/4	2,591.42	3/4	2,280.43
5		5		5	4,450.86	5	4,139.87	5	3,828.88	5	3,517.91	5	3,206.92	5	2,895.93	5	2,584.94	5	2,273.95
1/4	1/4	1/4	1/4	1/4	4,444.38	1/4	4,133.39	1/4	3,822.41	1/4	3,511.43	1/4	3,200.44	1/4	2,889.45	1/4	2,578.46	1/4	2,267.48
1/2	1/2	1/2	1/2	1/2	4,437.91	1/2	4,126.91	1/2	3,815.93	1/2	3,504.95	1/2	3,193.95	1/2	2,882.98	1/2	2,571.98	1/2	2,261.00
3/4	3/4	3/4	3/4	3/4	4,431.42	3/4	4,120.43	3/4	3,809.45	3/4	3,498.47	3/4	3,187.48	3/4	2,876.49	3/4	2,565.50	3/4	2,254.52
6		6		6	4,424.94	6	4,113.95	6	3,802.98	6	3,491.99	6	3,181.00	6	2,870.01	6	2,559.02	6	2,248.04
1/4	1/4	1/4	1/4	1/4	4,418.46	1/4	4,107.48	1/4	3,796.50	1/4	3,485.51	1/4	3,174.52	1/4	2,863.53	1/4	2,552.55	1/4	2,241.55
1/2	1/2	1/2	1/2	1/2	4,411.98	1/2	4,101.00	1/2	3,790.02	1/2	3,479.02	1/2	3,168.05	1/2	2,857.05	1/2	2,546.07	1/2	2,235.07
3/4	3/4	3/4	3/4	3/4	4,405.50	3/4	4,094.52	3/4	3,783.54	3/4	3,472.55	3/4	3,161.57	3/4	2,850.57	3/4	2,539.59	3/4	2,228.60
7		7		7	4,399.02	7	4,088.05	7	3,777.06	7	3,466.07	7	3,155.08	7	2,844.10	7	2,533.11	7	2,222.12
1/4	1/4	1/4	1/4	1/4	4,392.55	1/4	4,081.57	1/4	3,770.58	1/4	3,459.60	1/4	3,148.60	1/4	2,837.62	1/4	2,526.63	1/4	2,215.64
1/2	1/2	1/2	1/2	1/2	4,386.07	1/2	4,075.10	1/2	3,764.10	1/2	3,453.12	1/2	3,142.12	1/2	2,831.14	1/2	2,520.14	1/2	2,209.17
3/4	3/4	3/4	3/4	3/4	4,379.59	3/4	4,068.61	3/4	3,757.62	3/4	3,446.64	3/4	3,135.64	3/4	2,824.66	3/4	2,513.67	3/4	2,202.69
8		8		8	4,373.11	8	4,062.13	8	3,751.14	8	3,440.16	8	3,129.17	8	2,818.18	8	2,507.19	8	2,196.21
1/4	1/4	1/4	1/4	1/4	4,366.63	1/4	4,055.65	1/4	3,744.67	1/4	3,433.67	1/4	3,122.69	1/4	2,811.70	1/4	2,500.71	1/4	2,189.74
1/2	1/2	1/2	1/2	1/2	4,360.14	1/2	4,049.17	1/2	3,738.19	1/2	3,427.19	1/2	3,116.21	1/2	2,805.21	1/2	2,494.24	1/2	2,183.26
3/4	3/4	3/4	3/4	3/4	4,353.67	3/4	4,042.69	3/4	3,731.71	3/4	3,420.71	3/4	3,109.73	3/4	2,798.74	3/4	2,487.76	3/4	2,176.78
9		9		9	4,347.19	9	4,036.21	9	3,725.23	9	3,414.24	9	3,103.25	9	2,792.26	9	2,481.29	9	2,170.30
1/4	1/4	1/4	1/4	1/4	4,340.71	1/4	4,029.74	1/4	3,718.74	1/4	3,407.76	1/4	3,096.77	1/4	2,785.79	1/4	2,474.81	1/4	2,163.82
1/2	1/2	1/2	1/2	1/2	4,334.24	1/2	4,023.26	1/2	3,712.26	1/2	3,401.29	1/2	3,090.29	1/2	2,779.31	1/2	2,468.33	1/2	2,157.33
3/4	3/4	3/4	3/4	3/4	4,327.76	3/4	4,016.78	3/4	3,705.79	3/4	3,394.80	3/4	3,083.81	3/4	2,772.83	3/4	2,461.85	3/4	2,150.86
10		10		10	4,321.29	10	4,010.30	10	3,699.31	10	3,388.32	10	3,077.33	10	2,766.36	10	2,455.37	10	2,144.38
1/4	1/4	1/4	1/4	1/4	4,314.81	1/4	4,003.82	1/4	3,692.83	1/4	3,381.84	1/4	3,070.86	1/4	2,759.88	1/4	2,448.89	1/4	2,137.91
1/2	1/2	1/2	1/2	1/2	4,544.81	1/2	4,308.33	1/2	3,997.33	1/2	3,686.36	1/2	3,375.36	1/2	3,064.38	1/2	2,753.41	1/2	2,442.41
3/4	3/4	3/4	3/4	3/4	4,544.13	3/4	4,301.85	3/4	3,990.86	3/4	3,679.88	3/4	3,368.88	3/4	3,057.90	3/4	2,746.92	3/4	2,435.93
11		11		11	4,543.45	11	4,295.37	11	3,984.38	11	3,673.39	11	3,362.41	11	3,051.42	11	2,740.44	11	2,429.45
1/4	1/4	1/4	1/4	1/4	4,542.77	1/4	4,288.89	1/4	3,977.91	1/4	3,666.91	1/4	3,355.93	1/4	3,044.94	1/4	2,733.96	1/4	2,422.98
1/2	1/2	1/2	1/2	1/2	4,542.10	1/2	4,282.41	1/2	3,971.43	1/2	3,660.43	1/2	3,349.45	1/2	3,038.45	1/2	2,727.48	1/2	2,416.50
3/4	3/4	3/4	3/4	3/4	4,540.34	3/4	4,275.93	3/4	3,964.95	3/4	3,653.95	3/4	3,342.97	3/4	3,031.98	3/4	2,721.00	3/4	2,410.02

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 AT GAUGE POINT.  
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON MMC VALVE.  
GAUGE POINT: (MMC) LOCATED 11'-06" OFF CENTERLINE AND 39'-06" FORWARD OF AFT BULKHEAD.

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



# BARGE "HFL 404"

## 1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-10 1/2"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,092.55	0	1,781.56	0	1,470.57	0	1,159.60	0	848.79	0	537.86	0	235.58	0		0			
1/4	2,086.07	1/4	1,775.08	1/4	1,464.10	1/4	1,153.12	1/4	842.31	1/4	531.38	1/4	229.69	1/4		1/4		1/4	
1/2	2,079.60	1/2	1,768.60	1/2	1,457.62	1/2	1,146.64	1/2	835.83	1/2	524.91	1/2	223.79	1/2		1/2		1/2	
3/4	2,073.11	3/4	1,762.12	3/4	1,451.14	3/4	1,140.16	3/4	829.36	3/4	518.42	3/4	217.96	3/4		3/4		3/4	
1	2,066.63	1	1,755.64	1	1,444.67	1	1,133.68	1	822.88	1	511.94	1	212.13	1		1		1	
1/4	2,060.15	1/4	1,749.17	1/4	1,438.19	1/4	1,127.20	1/4	816.41	1/4	505.46	1/4	206.30	1/4		1/4		1/4	
1/2	2,053.67	1/2	1,742.69	1/2	1,431.71	1/2	1,120.72	1/2	809.93	1/2	498.98	1/2	200.48	1/2		1/2		1/2	
3/4	2,047.19	3/4	1,736.21	3/4	1,425.23	3/4	1,114.24	3/4	803.45	3/4	492.50	3/4	194.73	3/4		3/4		3/4	
2	2,040.71	2	1,729.73	2	1,418.75	2	1,107.76	2	796.98	2	486.02	2	188.98	2		2		2	
1/4	2,034.24	1/4	1,723.24	1/4	1,412.27	1/4	1,101.29	1/4	790.50	1/4	479.55	1/4	183.23	1/4		1/4		1/4	
1/2	2,027.76	1/2	1,716.76	1/2	1,405.79	1/2	1,094.81	1/2	784.02	1/2	473.07	1/2	177.48	1/2		1/2		1/2	
3/4	2,021.28	3/4	1,710.29	3/4	1,399.31	3/4	1,088.33	3/4	777.55	3/4	466.60	3/4	171.81	3/4		3/4		3/4	
3	2,014.80	3	1,703.81	3	1,392.83	3	1,081.86	3	771.07	3	460.12	3	166.14	3		3		3	
1/4	2,008.32	1/4	1,697.33	1/4	1,386.36	1/4	1,075.38	1/4	764.60	1/4	453.64	1/4	160.48	1/4		1/4		1/4	
1/2	2,001.83	1/2	1,690.86	1/2	1,379.88	1/2	1,068.91	1/2	758.12	1/2	447.17	1/2	154.81	1/2		1/2		1/2	
3/4	1,995.36	3/4	1,684.38	3/4	1,373.40	3/4	1,062.43	3/4	751.64	3/4	440.69	3/4	149.21	3/4		3/4		3/4	
4	1,988.88	4	1,677.91	4	1,366.92	4	1,055.95	4	745.16	4	434.20	4	143.62	4		4		4	
1/4	1,982.41	1/4	1,671.43	1/4	1,360.43	1/4	1,049.48	1/4	738.67	1/4	427.72	1/4	138.02	1/4		1/4		1/4	
1/2	1,975.93	1/2	1,664.95	1/2	1,353.95	1/2	1,043.00	1/2	732.19	1/2	421.24	1/2	132.43	1/2		1/2		1/2	
3/4	1,969.45	3/4	1,658.47	3/4	1,347.48	3/4	1,036.52	3/4	725.71	3/4	414.80	3/4	126.91	3/4		3/4		3/4	
5	1,962.98	5	1,651.99	5	1,341.00	5	1,030.05	5	719.24	5	408.36	5	121.39	5		5		5	
1/4	1,956.50	1/4	1,645.51	1/4	1,334.52	1/4	1,023.57	1/4	712.76	1/4	401.92	1/4	115.88	1/4		1/4		1/4	
1/2	1,950.02	1/2	1,639.02	1/2	1,328.05	1/2	1,017.10	1/2	706.29	1/2	395.48	1/2	110.36	1/2		1/2		1/2	
3/4	1,943.54	3/4	1,632.55	3/4	1,321.57	3/4	1,010.62	3/4	699.81	3/4	389.11	3/4	104.92	3/4		3/4		3/4	
6	1,937.06	6	1,626.07	6	1,315.08	6	1,004.14	6	693.33	6	382.75	6	99.48	6		6		6	
1/4	1,930.58	1/4	1,619.60	1/4	1,308.60	1/4	997.67	1/4	686.86	1/4	376.39	1/4	94.04	1/4		1/4		1/4	
1/2	1,924.10	1/2	1,613.12	1/2	1,302.12	1/2	991.19	1/2	680.38	1/2	370.02	1/2	88.60	1/2		1/2		1/2	
3/4	1,917.62	3/4	1,606.64	3/4	1,295.64	3/4	984.72	3/4	673.91	3/4	363.74	3/4	83.23	3/4		3/4		3/4	
7	1,911.14	7	1,600.16	7	1,289.17	7	978.25	7	667.43	7	357.45	7	77.87	7		7		7	
1/4	1,904.67	1/4	1,593.67	1/4	1,282.69	1/4	971.78	1/4	660.95	1/4	351.17	1/4	72.51	1/4		1/4		1/4	
1/2	1,898.19	1/2	1,587.19	1/2	1,276.21	1/2	965.31	1/2	654.48	1/2	344.88	1/2	67.14	1/2		1/2		1/2	
3/4	1,891.71	3/4	1,580.71	3/4	1,269.73	3/4	958.83	3/4	647.99	3/4	338.67	3/4	61.86	3/4		3/4		3/4	
8	1,885.23	8	1,574.24	8	1,263.25	8	952.36	8	641.51	8	332.46	8	56.57	8		8		8	
1/4	1,878.74	1/4	1,567.76	1/4	1,256.77	1/4	945.88	1/4	635.03	1/4	326.26	1/4	51.29	1/4		1/4		1/4	
1/2	1,872.26	1/2	1,561.29	1/2	1,250.29	1/2	939.41	1/2	628.55	1/2	320.05	1/2	46.00	1/2		1/2		1/2	
3/4	1,865.79	3/4	1,554.80	3/4	1,243.81	3/4	932.93	3/4	622.07	3/4	313.92	3/4	41.41	3/4		3/4		3/4	
9	1,859.31	9	1,548.32	9	1,237.33	9	926.46	9	615.60	9	307.79	9	36.82	9		9		9	
1/4	1,852.83	1/4	1,541.84	1/4	1,230.86	1/4	919.99	1/4	609.12	1/4	301.66	1/4	32.23	1/4		1/4		1/4	
1/2	1,846.36	1/2	1,535.36	1/2	1,224.38	1/2	913.52	1/2	602.64	1/2	295.52	1/2	27.64	1/2		1/2		1/2	
3/4	1,839.88	3/4	1,528.88	3/4	1,217.90	3/4	907.05	3/4	596.17	3/4	289.46	3/4	24.36	3/4		3/4		3/4	
10	1,833.39	10	1,522.41	10	1,211.42	10	900.57	10	589.69	10	283.41	10	21.08	10		10		10	
1/4	1,826.91	1/4	1,515.93	1/4	1,204.94	1/4	894.10	1/4	583.21	1/4	277.35	1/4	17.80	1/4		1/4		1/4	
1/2	1,820.43	1/2	1,509.45	1/2	1,198.45	1/2	887.62	1/2	576.74	1/2	271.29	1/2	14.51	1/2		1/2		1/2	
3/4	1,813.95	3/4	1,502.97	3/4	1,191.98	3/4	881.15	3/4	570.26	3/4	265.31	3/4		3/4		3/4		3/4	
11	1,807.48	11	1,496.49	11	1,185.50	11	874.68	11	563.77	11	259.33	11		11		11		11	
1/4	1,801.00	1/4	1,490.01	1/4	1,179.02	1/4	868.21	1/4	557.29	1/4	253.36	1/4		1/4		1/4		1/4	
1/2	1,794.52	1/2	1,483.52	1/2	1,172.55	1/2	861.74	1/2	550.81	1/2	247.38	1/2		1/2		1/2		1/2	
3/4	1,788.04	3/4	1,477.05	3/4	1,166.07	3/4	855.26	3/4	544.33	3/4	241.48	3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 09/08/2008 CB  
RECALCULATED: 10/04/2018  
VERIFIED: 12/01/2023

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2023

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



# BARGE "HFL 404"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-11"

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	5,271.03	0	4,972.79	0	4,615.55	0	4,258.31	0	3,901.10	0	3,543.86	0	3,186.65	0	2,829.41
1/4		1/4		1/4	5,269.02	1/4	4,965.34	1/4	4,608.11	1/4	4,250.87	1/4	3,893.66	1/4	3,536.42	1/4	3,179.20	1/4	2,821.97
1/2		1/2		1/2	5,267.01	1/2	4,957.90	1/2	4,600.67	1/2	4,243.43	1/2	3,886.22	1/2	3,528.98	1/2	3,171.76	1/2	2,814.53
3/4		3/4		3/4	5,264.99	3/4	4,950.45	3/4	4,593.23	3/4	4,235.99	3/4	3,878.78	3/4	3,521.54	3/4	3,164.31	3/4	2,807.09
1		1		1	5,262.98	1	4,943.01	1	4,585.79	1	4,228.55	1	3,871.34	1	3,514.10	1	3,156.86	1	2,799.65
1/4		1/4		1/4	5,259.73	1/4	4,935.56	1/4	4,578.34	1/4	4,221.11	1/4	3,863.89	1/4	3,506.66	1/4	3,149.42	1/4	2,792.21
1/2		1/2		1/2	5,256.48	1/2	4,928.12	1/2	4,570.90	1/2	4,213.67	1/2	3,856.45	1/2	3,499.22	1/2	3,141.98	1/2	2,784.77
3/4		3/4		3/4	5,253.23	3/4	4,920.68	3/4	4,563.45	3/4	4,206.23	3/4	3,849.00	3/4	3,491.78	3/4	3,134.54	3/4	2,777.33
2		2		2	5,249.98	2	4,913.24	2	4,556.01	2	4,198.79	2	3,841.55	2	3,484.34	2	3,127.10	2	2,769.89
1/4		1/4		1/4	5,245.49	1/4	4,905.80	1/4	4,548.56	1/4	4,191.35	1/4	3,834.11	1/4	3,476.89	1/4	3,119.66	1/4	2,762.44
1/2		1/2		1/2	5,240.99	1/2	4,898.36	1/2	4,541.12	1/2	4,183.91	1/2	3,826.67	1/2	3,469.45	1/2	3,112.22	1/2	2,754.99
3/4		3/4		3/4	5,236.50	3/4	4,890.92	3/4	4,533.68	3/4	4,176.47	3/4	3,819.23	3/4	3,462.00	3/4	3,104.78	3/4	2,747.55
3		3		3	5,232.00	3	4,883.48	3	4,526.24	3	4,169.03	3	3,811.79	3	3,454.55	3	3,097.34	3	2,740.10
1/4		1/4		1/4	5,226.27	1/4	4,876.03	1/4	4,518.80	1/4	4,161.58	1/4	3,804.35	1/4	3,447.11	1/4	3,089.90	1/4	2,732.66
1/2		1/2		1/2	5,220.54	1/2	4,868.59	1/2	4,511.36	1/2	4,154.14	1/2	3,796.91	1/2	3,439.67	1/2	3,082.46	1/2	2,725.22
3/4		3/4		3/4	5,214.81	3/4	4,861.14	3/4	4,503.92	3/4	4,146.69	3/4	3,789.47	3/4	3,432.23	3/4	3,075.02	3/4	2,717.78
4		4		4	5,209.08	4	4,853.70	4	4,496.48	4	4,139.24	4	3,782.03	4	3,424.79	4	3,067.58	4	2,710.34
1/4		1/4		1/4	5,202.10	1/4	4,846.26	1/4	4,489.03	1/4	4,131.80	1/4	3,774.58	1/4	3,417.35	1/4	3,060.13	1/4	2,702.90
1/2		1/2		1/2	5,195.12	1/2	4,838.81	1/2	4,481.59	1/2	4,124.36	1/2	3,767.14	1/2	3,409.91	1/2	3,052.68	1/2	2,695.46
3/4		3/4		3/4	5,188.15	3/4	4,831.37	3/4	4,474.14	3/4	4,116.92	3/4	3,759.69	3/4	3,402.47	3/4	3,045.24	3/4	2,688.02
5		5		5	5,181.17	5	4,823.93	5	4,466.70	5	4,109.48	5	3,752.24	5	3,395.03	5	3,037.79	5	2,680.58
1/4		1/4		1/4	5,173.73	1/4	4,816.49	1/4	4,459.26	1/4	4,102.04	1/4	3,744.80	1/4	3,387.59	1/4	3,030.35	1/4	2,673.13
1/2		1/2		1/2	5,166.28	1/2	4,809.05	1/2	4,451.81	1/2	4,094.60	1/2	3,737.36	1/2	3,380.15	1/2	3,022.91	1/2	2,665.68
3/4		3/4		3/4	5,158.83	3/4	4,801.61	3/4	4,444.37	3/4	4,087.16	3/4	3,729.92	3/4	3,372.71	3/4	3,015.47	3/4	2,658.24
6		6		6	5,151.39	6	4,794.17	6	4,436.93	6	4,079.72	6	3,722.48	6	3,365.27	6	3,008.03	6	2,650.79
1/4		1/4		1/4	5,143.95	1/4	4,786.73	1/4	4,429.49	1/4	4,072.27	1/4	3,715.04	1/4	3,357.82	1/4	3,000.59	1/4	2,643.35
1/2		1/2		1/2	5,136.51	1/2	4,779.28	1/2	4,422.05	1/2	4,064.83	1/2	3,707.60	1/2	3,350.37	1/2	2,993.15	1/2	2,635.91
3/4		3/4		3/4	5,129.06	3/4	4,771.83	3/4	4,414.61	3/4	4,057.38	3/4	3,700.16	3/4	3,342.93	3/4	2,985.71	3/4	2,628.47
7		7		7	5,121.62	7	4,764.39	7	4,407.17	7	4,049.93	7	3,692.72	7	3,335.48	7	2,978.27	7	2,621.03
1/4		1/4		1/4	5,114.18	1/4	4,756.95	1/4	4,399.73	1/4	4,042.49	1/4	3,685.28	1/4	3,328.04	1/4	2,970.82	1/4	2,613.59
1/2		1/2		1/2	5,106.74	1/2	4,749.51	1/2	4,392.29	1/2	4,035.05	1/2	3,677.84	1/2	3,320.60	1/2	2,963.37	1/2	2,606.15
3/4		3/4		3/4	5,099.30	3/4	4,742.06	3/4	4,384.85	3/4	4,027.61	3/4	3,670.40	3/4	3,313.16	3/4	2,955.93	3/4	2,598.71
8		8		8	5,091.86	8	4,734.62	8	4,377.41	8	4,020.17	8	3,662.96	8	3,305.72	8	2,948.48	8	2,591.27
1/4		1/4		1/4	5,084.42	1/4	4,727.18	1/4	4,369.96	1/4	4,012.73	1/4	3,655.51	1/4	3,298.28	1/4	2,941.04	1/4	2,583.83
1/2		1/2		1/2	5,076.97	1/2	4,719.74	1/2	4,362.52	1/2	4,005.29	1/2	3,648.06	1/2	3,290.84	1/2	2,933.60	1/2	2,576.39
3/4		3/4		3/4	5,069.52	3/4	4,712.30	3/4	4,355.07	3/4	3,997.85	3/4	3,640.62	3/4	3,283.40	3/4	2,926.16	3/4	2,568.95
9		9		9	5,062.08	9	4,704.86	9	4,347.62	9	3,990.41	9	3,633.17	9	3,275.96	9	2,918.72	9	2,561.50
1/4		1/4		1/4	5,054.64	1/4	4,697.42	1/4	4,340.18	1/4	3,982.96	1/4	3,625.73	1/4	3,268.51	1/4	2,911.28	1/4	2,554.06
1/2		1/2		1/2	5,047.20	1/2	4,689.98	1/2	4,332.74	1/2	3,975.52	1/2	3,618.29	1/2	3,261.06	1/2	2,903.84	1/2	2,546.61
3/4		3/4		3/4	5,039.76	3/4	4,682.54	3/4	4,325.30	3/4	3,968.07	3/4	3,610.85	3/4	3,253.62	3/4	2,896.40	3/4	2,539.17
10		10		10	5,032.31	10	4,675.10	10	4,317.86	10	3,960.62	10	3,603.41	10	3,246.17	10	2,888.96	10	2,531.72
1/4		1/4		1/4	5,024.87	1/4	4,667.65	1/4	4,310.42	1/4	3,953.18	1/4	3,595.97	1/4	3,238.73	1/4	2,881.52	1/4	2,524.28
1/2		1/2		1/2	5,017.43	1/2	4,660.21	1/2	4,302.98	1/2	3,945.74	1/2	3,588.53	1/2	3,231.29	1/2	2,874.08	1/2	2,516.84
3/4		3/4		3/4	5,009.99	3/4	4,652.76	3/4	4,295.54	3/4	3,938.30	3/4	3,581.09	3/4	3,223.85	3/4	2,866.64	3/4	2,509.40
11		11	5,274.10	11	5,002.55	11	4,645.31	11	4,288.10	11	3,930.86	11	3,573.65	11	3,216.41	11	2,859.20	11	2,501.96
1/4		1/4	5,273.33	1/4	4,995.11	1/4	4,637.87	1/4	4,280.65	1/4	3,923.42	1/4	3,566.20	1/4	3,208.97	1/4	2,851.75	1/4	2,494.52
1/2		1/2	5,272.56	1/2	4,987.67	1/2	4,630.43	1/2	4,273.21	1/2	3,915.98	1/2	3,558.76	1/2	3,201.53	1/2	2,844.30	1/2	2,487.08
3/4		3/4	5,271.80	3/4	4,980.23	3/4	4,622.99	3/4	4,265.76	3/4	3,908.54	3/4	3,551.31	3/4	3,194.09	3/4	2,836.86	3/4	2,479.64

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 AT GAUGE POINT.  
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON MMC VALVE.  
 GAUGE POINT: (MMC) LOCATED 11'-06" OFF CENTERLINE AND 45'-00" FORWARD OF AFT BULKHEAD.

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



# BARGE "HFL 404"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-11"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,472.20	0	2,114.96	0	1,757.74	0	1,400.51	0	1,045.43	0	688.50	0	331.29	0		0			
1/4	2,464.75	1/4	2,107.52	1/4	1,750.30	1/4	1,393.06	1/4	1,038.05	1/4	681.06	1/4	323.85	1/4		1/4			
1/2	2,457.30	1/2	2,100.08	1/2	1,742.85	1/2	1,385.62	1/2	1,030.67	1/2	673.61	1/2	316.41	1/2		1/2			
3/4	2,449.86	3/4	2,092.64	3/4	1,735.40	3/4	1,378.18	3/4	1,023.29	3/4	666.17	3/4	308.97	3/4		3/4			
1	2,442.41	1	2,085.20	1	1,727.96	1	1,370.74	1	1,015.91	1	658.72	1	301.53	1		1			
1/4	2,434.97	1/4	2,077.76	1/4	1,720.52	1/4	1,363.30	1/4	1,008.47	1/4	651.28	1/4	294.09	1/4		1/4			
1/2	2,427.53	1/2	2,070.31	1/2	1,713.08	1/2	1,355.85	1/2	1,001.03	1/2	643.84	1/2	286.66	1/2		1/2			
3/4	2,420.09	3/4	2,062.87	3/4	1,705.64	3/4	1,348.40	3/4	993.59	3/4	636.40	3/4	279.23	3/4		3/4			
2	2,412.65	2	2,055.43	2	1,698.20	2	1,340.96	2	986.15	2	628.96	2	271.79	2		2			
1/4	2,405.21	1/4	2,047.99	1/4	1,690.76	1/4	1,333.52	1/4	978.71	1/4	621.52	1/4	264.35	1/4		1/4			
1/2	2,397.77	1/2	2,040.54	1/2	1,683.31	1/2	1,326.08	1/2	971.27	1/2	614.08	1/2	256.91	1/2		1/2			
3/4	2,390.33	3/4	2,033.09	3/4	1,675.87	3/4	1,318.64	3/4	963.83	3/4	606.64	3/4	249.47	3/4		3/4			
3	2,382.89	3	2,025.65	3	1,668.43	3	1,311.20	3	956.39	3	599.20	3	242.03	3		3			
1/4	2,375.44	1/4	2,018.21	1/4	1,660.99	1/4	1,303.78	1/4	948.95	1/4	591.76	1/4	234.59	1/4		1/4			
1/2	2,367.99	1/2	2,010.77	1/2	1,653.54	1/2	1,296.37	1/2	941.51	1/2	584.31	1/2	227.15	1/2		1/2			
3/4	2,360.55	3/4	2,003.33	3/4	1,646.09	3/4	1,288.96	3/4	934.06	3/4	576.87	3/4	219.71	3/4		3/4			
4	2,353.10	4	1,995.89	4	1,638.65	4	1,281.55	4	926.62	4	569.43	4	212.27	4		4			
1/4	2,345.66	1/4	1,988.45	1/4	1,631.21	1/4	1,274.15	1/4	919.18	1/4	561.99	1/4	204.83	1/4		1/4			
1/2	2,338.22	1/2	1,981.01	1/2	1,623.77	1/2	1,266.74	1/2	911.74	1/2	554.54	1/2	197.40	1/2		1/2			
3/4	2,330.78	3/4	1,973.56	3/4	1,616.33	3/4	1,259.34	3/4	904.30	3/4	547.09	3/4	189.96	3/4		3/4			
5	2,323.34	5	1,966.12	5	1,608.89	5	1,251.93	5	896.86	5	539.65	5	182.53	5		5			
1/4	2,315.90	1/4	1,958.68	1/4	1,601.45	1/4	1,244.56	1/4	889.42	1/4	532.21	1/4	175.09	1/4		1/4			
1/2	2,308.46	1/2	1,951.23	1/2	1,594.01	1/2	1,237.18	1/2	881.98	1/2	524.77	1/2	167.65	1/2		1/2			
3/4	2,301.02	3/4	1,943.78	3/4	1,586.56	3/4	1,229.81	3/4	874.54	3/4	517.33	3/4	160.21	3/4		3/4			
6	2,293.58	6	1,936.34	6	1,579.12	6	1,222.43	6	867.10	6	509.89	6	152.77	6		6			
1/4	2,286.14	1/4	1,928.90	1/4	1,571.68	1/4	1,215.06	1/4	859.66	1/4	502.45	1/4	145.33	1/4		1/4			
1/2	2,278.70	1/2	1,921.46	1/2	1,564.24	1/2	1,207.68	1/2	852.22	1/2	495.01	1/2	137.89	1/2		1/2			
3/4	2,271.25	3/4	1,914.02	3/4	1,556.80	3/4	1,200.31	3/4	844.78	3/4	487.56	3/4	130.45	3/4		3/4			
7	2,263.81	7	1,906.58	7	1,549.36	7	1,192.93	7	837.34	7	480.12	7	123.00	7		7			
1/4	2,256.37	1/4	1,899.14	1/4	1,541.92	1/4	1,185.56	1/4	829.90	1/4	472.68	1/4	115.57	1/4		1/4			
1/2	2,248.92	1/2	1,891.70	1/2	1,534.47	1/2	1,178.18	1/2	822.46	1/2	465.23	1/2	108.14	1/2		1/2			
3/4	2,241.48	3/4	1,884.25	3/4	1,527.02	3/4	1,170.81	3/4	815.02	3/4	457.78	3/4	100.70	3/4		3/4			
8	2,234.03	8	1,876.81	8	1,519.58	8	1,163.43	8	807.58	8	450.34	8	93.27	8		8			
1/4	2,226.59	1/4	1,869.37	1/4	1,512.14	1/4	1,156.06	1/4	800.14	1/4	442.90	1/4	85.83	1/4		1/4			
1/2	2,219.15	1/2	1,861.92	1/2	1,504.70	1/2	1,148.68	1/2	792.70	1/2	435.46	1/2	78.39	1/2		1/2			
3/4	2,211.71	3/4	1,854.48	3/4	1,497.25	3/4	1,141.31	3/4	785.25	3/4	428.02	3/4	70.95	3/4		3/4			
9	2,204.27	9	1,847.03	9	1,489.81	9	1,133.93	9	777.81	9	420.58	9	63.50	9		9			
1/4	2,196.83	1/4	1,839.59	1/4	1,482.37	1/4	1,126.56	1/4	770.37	1/4	413.14	1/4	56.99	1/4		1/4			
1/2	2,189.39	1/2	1,832.15	1/2	1,474.93	1/2	1,119.18	1/2	762.92	1/2	405.70	1/2	50.48	1/2		1/2			
3/4	2,181.95	3/4	1,824.71	3/4	1,467.49	3/4	1,111.81	3/4	755.48	3/4	398.25	3/4	43.97	3/4		3/4			
10	2,174.50	10	1,817.27	10	1,460.05	10	1,104.43	10	748.03	10	390.81	10	37.46	10		10			
1/4	2,167.06	1/4	1,809.83	1/4	1,452.61	1/4	1,097.06	1/4	740.59	1/4	383.37	1/4	32.81	1/4		1/4			
1/2	2,159.61	1/2	1,802.39	1/2	1,445.16	1/2	1,089.68	1/2	733.15	1/2	375.92	1/2	28.16	1/2		1/2			
3/4	2,152.17	3/4	1,794.95	3/4	1,437.71	3/4	1,082.31	3/4	725.71	3/4	368.48	3/4	23.51	3/4		3/4			
11	2,144.72	11	1,787.51	11	1,430.27	11	1,074.93	11	718.27	11	361.03	11	18.86	11		11			
1/4	2,137.28	1/4	1,780.06	1/4	1,422.83	1/4	1,067.56	1/4	710.83	1/4	353.59	1/4		1/4		1/4			
1/2	2,129.84	1/2	1,772.62	1/2	1,415.39	1/2	1,060.18	1/2	703.39	1/2	346.16	1/2		1/2		1/2			
3/4	2,122.40	3/4	1,765.18	3/4	1,407.95	3/4	1,052.81	3/4	695.95	3/4	338.73	3/4		3/4		3/4			

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 09/08/2008 CB  
RECALCULATED: 10/04/2018  
VERIFIED: 12/01/2023

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2023

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



# BARGE "HFL 404"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-11"

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	5,281.35	0	4,982.52	0	4,624.59	0	4,266.66	0	3,908.74	0	3,550.81	0	3,192.88	0	2,834.95
1/4	1/4	1/4	1/4	1/4	5,279.34	1/4	4,975.07	1/4	4,617.14	1/4	4,259.21	1/4	3,901.28	1/4	3,543.35	1/4	3,185.43	1/4	2,827.50
1/2	1/2	1/2	1/2	1/2	5,277.33	1/2	4,967.62	1/2	4,609.69	1/2	4,251.76	1/2	3,893.83	1/2	3,535.90	1/2	3,177.97	1/2	2,820.04
3/4	3/4	3/4	3/4	3/4	5,275.32	3/4	4,960.16	3/4	4,602.24	3/4	4,244.31	3/4	3,886.38	3/4	3,528.45	3/4	3,170.52	3/4	2,812.59
1	1	1	1	1	5,273.31	1	4,952.71	1	4,594.78	1	4,236.85	1	3,878.93	1	3,521.00	1	3,163.07	1	2,805.14
1/4	1/4	1/4	1/4	1/4	5,270.05	1/4	4,945.25	1/4	4,587.32	1/4	4,229.40	1/4	3,871.47	1/4	3,513.54	1/4	3,155.61	1/4	2,797.68
1/2	1/2	1/2	1/2	1/2	5,266.80	1/2	4,937.79	1/2	4,579.87	1/2	4,221.94	1/2	3,864.01	1/2	3,506.08	1/2	3,148.15	1/2	2,790.22
3/4	3/4	3/4	3/4	3/4	5,263.54	3/4	4,930.34	3/4	4,572.41	3/4	4,214.48	3/4	3,856.55	3/4	3,498.62	3/4	3,140.69	3/4	2,782.77
2	2	2	2	2	5,260.28	2	4,922.88	2	4,564.95	2	4,207.02	2	3,849.09	2	3,491.16	2	3,133.24	2	2,775.31
1/4	1/4	1/4	1/4	1/4	5,255.78	1/4	4,915.42	1/4	4,557.49	1/4	4,199.56	1/4	3,841.63	1/4	3,483.71	1/4	3,125.78	1/4	2,767.85
1/2	1/2	1/2	1/2	1/2	5,251.27	1/2	4,907.96	1/2	4,550.03	1/2	4,192.10	1/2	3,834.18	1/2	3,476.25	1/2	3,118.32	1/2	2,760.39
3/4	3/4	3/4	3/4	3/4	5,246.77	3/4	4,900.50	3/4	4,542.57	3/4	4,184.65	3/4	3,826.72	3/4	3,468.79	3/4	3,110.86	3/4	2,752.93
3	3	3	3	3	5,242.26	3	4,893.05	3	4,535.12	3	4,177.19	3	3,819.26	3	3,461.33	3	3,103.40	3	2,745.47
1/4	1/4	1/4	1/4	1/4	5,236.52	1/4	4,885.59	1/4	4,527.66	1/4	4,169.73	1/4	3,811.80	1/4	3,453.87	1/4	3,095.94	1/4	2,738.02
1/2	1/2	1/2	1/2	1/2	5,230.77	1/2	4,878.13	1/2	4,520.20	1/2	4,162.27	1/2	3,804.34	1/2	3,446.41	1/2	3,088.49	1/2	2,730.56
3/4	3/4	3/4	3/4	3/4	5,225.03	3/4	4,870.67	3/4	4,512.74	3/4	4,154.81	3/4	3,796.88	3/4	3,438.96	3/4	3,081.03	3/4	2,723.10
4	4	4	4	4	5,219.28	4	4,863.21	4	4,505.28	4	4,147.35	4	3,789.43	4	3,431.50	4	3,073.57	4	2,715.64
1/4	1/4	1/4	1/4	1/4	5,212.30	1/4	4,855.76	1/4	4,497.83	1/4	4,139.90	1/4	3,781.97	1/4	3,424.05	1/4	3,066.12	1/4	2,708.19
1/2	1/2	1/2	1/2	1/2	5,205.31	1/2	4,848.31	1/2	4,490.38	1/2	4,132.45	1/2	3,774.52	1/2	3,416.59	1/2	3,058.66	1/2	2,700.74
3/4	3/4	3/4	3/4	3/4	5,198.32	3/4	4,840.85	3/4	4,482.93	3/4	4,125.00	3/4	3,767.07	3/4	3,409.14	3/4	3,051.21	3/4	2,693.28
5	5	5	5	5	5,191.33	5	4,833.40	5	4,475.47	5	4,117.54	5	3,759.62	5	3,401.69	5	3,043.76	5	2,685.83
1/4	1/4	1/4	1/4	1/4	5,183.87	1/4	4,825.94	1/4	4,468.02	1/4	4,110.09	1/4	3,752.16	1/4	3,394.23	1/4	3,036.30	1/4	2,678.37
1/2	1/2	1/2	1/2	1/2	5,176.41	1/2	4,818.49	1/2	4,460.56	1/2	4,102.63	1/2	3,744.70	1/2	3,386.77	1/2	3,028.84	1/2	2,670.91
3/4	3/4	3/4	3/4	3/4	5,168.96	3/4	4,811.03	3/4	4,453.10	3/4	4,095.17	3/4	3,737.24	3/4	3,379.31	3/4	3,021.38	3/4	2,663.46
6	6	6	6	6	5,161.50	6	4,803.57	6	4,445.64	6	4,087.71	6	3,729.78	6	3,371.85	6	3,013.93	6	2,656.00
1/4	1/4	1/4	1/4	1/4	5,154.04	1/4	4,796.11	1/4	4,438.18	1/4	4,080.25	1/4	3,722.32	1/4	3,364.40	1/4	3,006.47	1/4	2,648.54
1/2	1/2	1/2	1/2	1/2	5,146.58	1/2	4,788.65	1/2	4,430.72	1/2	4,072.79	1/2	3,714.87	1/2	3,356.94	1/2	2,999.01	1/2	2,641.08
3/4	3/4	3/4	3/4	3/4	5,139.12	3/4	4,781.19	3/4	4,423.27	3/4	4,065.34	3/4	3,707.41	3/4	3,349.48	3/4	2,991.55	3/4	2,633.62
7	7	7	7	7	5,131.66	7	4,773.74	7	4,415.81	7	4,057.88	7	3,699.95	7	3,342.02	7	2,984.09	7	2,626.16
1/4	1/4	1/4	1/4	1/4	5,124.21	1/4	4,766.28	1/4	4,408.35	1/4	4,050.42	1/4	3,692.49	1/4	3,334.56	1/4	2,976.63	1/4	2,618.71
1/2	1/2	1/2	1/2	1/2	5,116.75	1/2	4,758.82	1/2	4,400.89	1/2	4,042.96	1/2	3,685.03	1/2	3,327.10	1/2	2,969.18	1/2	2,611.25
3/4	3/4	3/4	3/4	3/4	5,109.29	3/4	4,751.36	3/4	4,393.43	3/4	4,035.50	3/4	3,677.58	3/4	3,319.65	3/4	2,961.72	3/4	2,603.79
8	8	8	8	8	5,101.83	8	4,743.90	8	4,385.97	8	4,028.05	8	3,670.12	8	3,312.19	8	2,954.26	8	2,596.33
1/4	1/4	1/4	1/4	1/4	5,094.38	1/4	4,736.45	1/4	4,378.52	1/4	4,020.59	1/4	3,662.66	1/4	3,304.74	1/4	2,946.81	1/4	2,588.88
1/2	1/2	1/2	1/2	1/2	5,086.93	1/2	4,729.00	1/2	4,371.07	1/2	4,013.14	1/2	3,655.21	1/2	3,297.28	1/2	2,939.35	1/2	2,581.43
3/4	3/4	3/4	3/4	3/4	5,079.47	3/4	4,721.54	3/4	4,363.62	3/4	4,005.69	3/4	3,647.76	3/4	3,289.83	3/4	2,931.90	3/4	2,573.97
9	9	9	9	9	5,072.02	9	4,714.09	9	4,356.16	9	3,998.24	9	3,640.31	9	3,282.38	9	2,924.45	9	2,566.52
1/4	1/4	1/4	1/4	1/4	5,064.56	1/4	4,706.63	1/4	4,348.71	1/4	3,990.78	1/4	3,632.85	1/4	3,274.92	1/4	2,916.99	1/4	2,559.06
1/2	1/2	1/2	1/2	1/2	5,057.10	1/2	4,699.18	1/2	4,341.25	1/2	3,983.32	1/2	3,625.39	1/2	3,267.46	1/2	2,909.53	1/2	2,551.60
3/4	3/4	3/4	3/4	3/4	5,049.65	3/4	4,691.72	3/4	4,333.79	3/4	3,975.86	3/4	3,617.93	3/4	3,260.00	3/4	2,902.07	3/4	2,544.15
10	10	10	10	10	5,042.19	10	4,684.26	10	4,326.33	10	3,968.40	10	3,610.47	10	3,252.54	10	2,894.62	10	2,536.69
1/4	1/4	1/4	1/4	1/4	5,034.73	1/4	4,676.80	1/4	4,318.87	1/4	3,960.94	1/4	3,603.02	1/4	3,245.09	1/4	2,887.16	1/4	2,529.23
1/2	1/2	1/2	1/2	1/2	5,027.27	1/2	4,669.34	1/2	4,311.41	1/2	3,953.49	1/2	3,595.56	1/2	3,237.63	1/2	2,879.70	1/2	2,521.77
3/4	3/4	3/4	3/4	3/4	5,019.81	3/4	4,661.88	3/4	4,303.96	3/4	3,946.03	3/4	3,588.10	3/4	3,230.17	3/4	2,872.24	3/4	2,514.31
11	11	5,284.45	11	5,012.35	11	4,654.43	11	4,296.50	11	3,938.57	11	3,580.64	11	3,222.71	11	2,864.78	11	2,506.85	
1/4	1/4	5,283.68	1/4	5,004.90	1/4	4,646.97	1/4	4,289.04	1/4	3,931.11	1/4	3,573.18	1/4	3,215.25	1/4	2,857.32	1/4	2,499.40	
1/2	1/2	5,282.90	1/2	4,997.44	1/2	4,639.51	1/2	4,281.58	1/2	3,923.65	1/2	3,565.72	1/2	3,207.79	1/2	2,849.87	1/2	2,491.94	
3/4	3/4	5,282.13	3/4	4,989.98	3/4	4,632.05	3/4	4,274.12	3/4	3,916.19	3/4	3,558.27	3/4	3,200.34	3/4	2,842.41	3/4	2,484.48	

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 AT GAUGE POINT.  
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON MMC VALVE.  
GAUGE POINT: (MMC) LOCATED 11'-06" OFF CENTERLINE AND 45'-00" FORWARD OF AFT BULKHEAD.

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





# BARGE "HFL 404"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-11"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,477.02	0	2,119.09	0	1,761.16	0	1,403.24	0	1,047.47	0	689.83	0	331.93	0		0			
1/4	2,469.57	1/4	2,111.64	1/4	1,753.71	1/4	1,395.78	1/4	1,040.08	1/4	682.38	1/4	324.47	1/4		1/4			
1/2	2,462.12	1/2	2,104.19	1/2	1,746.26	1/2	1,388.33	1/2	1,032.69	1/2	674.93	1/2	317.02	1/2		1/2			
3/4	2,454.66	3/4	2,096.74	3/4	1,738.81	3/4	1,380.88	3/4	1,025.30	3/4	667.47	3/4	309.57	3/4		3/4			
1	2,447.21	1	2,089.28	1	1,731.35	1	1,373.43	1	1,017.90	1	660.02	1	302.12	1		1			
1/4	2,439.75	1/4	2,081.82	1/4	1,723.90	1/4	1,365.97	1/4	1,010.45	1/4	652.56	1/4	294.66	1/4		1/4			
1/2	2,432.30	1/2	2,074.37	1/2	1,716.44	1/2	1,358.51	1/2	1,003.00	1/2	645.10	1/2	287.21	1/2		1/2			
3/4	2,424.84	3/4	2,066.91	3/4	1,708.98	3/4	1,351.05	3/4	995.55	3/4	637.65	3/4	279.76	3/4		3/4			
2	2,417.38	2	2,059.45	2	1,701.52	2	1,343.59	2	988.09	2	630.19	2	272.31	2		2			
1/4	2,409.62	1/4	2,051.99	1/4	1,694.06	1/4	1,336.13	1/4	980.63	1/4	622.73	1/4	264.86	1/4		1/4			
1/2	2,401.87	1/2	2,044.53	1/2	1,686.60	1/2	1,328.68	1/2	973.18	1/2	615.27	1/2	257.40	1/2		1/2			
3/4	2,394.11	3/4	2,037.07	3/4	1,679.15	3/4	1,321.22	3/4	965.72	3/4	607.81	3/4	249.95	3/4		3/4			
3	2,386.35	3	2,029.62	3	1,671.69	3	1,313.76	3	958.26	3	600.35	3	242.50	3		3			
1/4	2,379.19	1/4	2,022.16	1/4	1,664.23	1/4	1,306.34	1/4	950.81	1/4	592.90	1/4	235.05	1/4		1/4			
1/2	2,372.03	1/2	2,014.70	1/2	1,656.77	1/2	1,298.91	1/2	943.35	1/2	585.44	1/2	227.59	1/2		1/2			
3/4	2,364.87	3/4	2,007.24	3/4	1,649.31	3/4	1,291.49	3/4	935.90	3/4	577.98	3/4	220.14	3/4		3/4			
4	2,357.71	4	1,999.78	4	1,641.85	4	1,284.07	4	928.45	4	570.52	4	212.69	4		4			
1/4	2,350.26	1/4	1,992.33	1/4	1,634.40	1/4	1,276.65	1/4	920.99	1/4	563.07	1/4	205.24	1/4		1/4			
1/2	2,342.81	1/2	1,984.88	1/2	1,626.95	1/2	1,269.22	1/2	913.53	1/2	555.62	1/2	197.78	1/2		1/2			
3/4	2,335.35	3/4	1,977.43	3/4	1,619.50	3/4	1,261.80	3/4	906.08	3/4	548.16	3/4	190.33	3/4		3/4			
5	2,327.90	5	1,969.97	5	1,612.04	5	1,254.38	5	898.62	5	540.71	5	182.88	5		5			
1/4	2,320.44	1/4	1,962.52	1/4	1,604.59	1/4	1,246.99	1/4	891.16	1/4	533.25	1/4	175.43	1/4		1/4			
1/2	2,312.99	1/2	1,955.06	1/2	1,597.13	1/2	1,239.60	1/2	883.71	1/2	525.80	1/2	167.97	1/2		1/2			
3/4	2,305.53	3/4	1,947.60	3/4	1,589.67	3/4	1,232.22	3/4	876.26	3/4	518.34	3/4	160.52	3/4		3/4			
6	2,298.07	6	1,940.14	6	1,582.21	6	1,224.83	6	868.81	6	510.88	6	153.07	6		6			
1/4	2,290.61	1/4	1,932.68	1/4	1,574.75	1/4	1,217.44	1/4	861.35	1/4	503.42	1/4	145.61	1/4		1/4			
1/2	2,283.15	1/2	1,925.22	1/2	1,567.30	1/2	1,210.05	1/2	853.89	1/2	495.96	1/2	138.15	1/2		1/2			
3/4	2,275.69	3/4	1,917.77	3/4	1,559.84	3/4	1,202.65	3/4	846.43	3/4	488.50	3/4	130.69	3/4		3/4			
7	2,268.24	7	1,910.31	7	1,552.38	7	1,195.26	7	838.97	7	481.05	7	123.24	7		7			
1/4	2,260.78	1/4	1,902.85	1/4	1,544.92	1/4	1,187.87	1/4	831.52	1/4	473.59	1/4	115.78	1/4		1/4			
1/2	2,253.32	1/2	1,895.39	1/2	1,537.46	1/2	1,180.49	1/2	824.06	1/2	466.13	1/2	108.33	1/2		1/2			
3/4	2,245.86	3/4	1,887.93	3/4	1,530.00	3/4	1,173.10	3/4	816.60	3/4	458.67	3/4	100.88	3/4		3/4			
8	2,238.40	8	1,880.47	8	1,522.55	8	1,165.71	8	809.14	8	451.21	8	93.43	8		8			
1/4	2,230.95	1/4	1,873.02	1/4	1,515.09	1/4	1,158.32	1/4	801.69	1/4	443.76	1/4	85.97	1/4		1/4			
1/2	2,223.50	1/2	1,865.57	1/2	1,507.64	1/2	1,150.93	1/2	794.24	1/2	436.31	1/2	78.52	1/2		1/2			
3/4	2,216.04	3/4	1,858.12	3/4	1,500.19	3/4	1,143.53	3/4	786.78	3/4	428.85	3/4	71.07	3/4		3/4			
9	2,208.59	9	1,850.66	9	1,492.74	9	1,136.14	9	779.33	9	421.40	9	63.62	9		9			
1/4	2,201.13	1/4	1,843.21	1/4	1,485.28	1/4	1,128.75	1/4	771.87	1/4	413.94	1/4	57.09	1/4		1/4			
1/2	2,193.68	1/2	1,835.75	1/2	1,477.82	1/2	1,121.37	1/2	764.41	1/2	406.49	1/2	50.57	1/2		1/2			
3/4	2,186.22	3/4	1,828.29	3/4	1,470.36	3/4	1,113.98	3/4	756.96	3/4	399.03	3/4	44.05	3/4		3/4			
10	2,178.76	10	1,820.83	10	1,462.90	10	1,106.59	10	749.50	10	391.57	10	37.52	10		10			
1/4	2,171.30	1/4	1,813.37	1/4	1,455.44	1/4	1,099.20	1/4	742.04	1/4	384.11	1/4	32.87	1/4		1/4			
1/2	2,163.84	1/2	1,805.91	1/2	1,447.99	1/2	1,091.81	1/2	734.58	1/2	376.65	1/2	28.21	1/2		1/2			
3/4	2,156.38	3/4	1,798.46	3/4	1,440.53	3/4	1,084.41	3/4	727.12	3/4	369.19	3/4	23.56	3/4		3/4			
11	2,148.93	11	1,791.00	11	1,433.07	11	1,077.02	11	719.66	11	361.74	11	18.90	11		11			
1/4	2,141.47	1/4	1,783.54	1/4	1,425.61	1/4	1,069.63	1/4	712.21	1/4	354.28	1/4		1/4		1/4			
1/2	2,134.01	1/2	1,776.08	1/2	1,418.15	1/2	1,062.25	1/2	704.75	1/2	346.83	1/2		1/2		1/2			
3/4	2,126.55	3/4	1,768.62	3/4	1,410.69	3/4	1,054.86	3/4	697.29	3/4	339.38	3/4		3/4		3/4			

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 09/08/2008 CB  
RECALCULATED: 10/04/2018  
VERIFIED: 12/01/2023

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2023

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



# BARGE "HFL 404"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-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	4,830.88	0	4,612.18	0	4,350.12	0	4,088.05	0	3,825.98	0	3,557.95	0	3,200.28	0	2,842.62		
1/4	1/4	1/4	1/4	1/4	4,830.09	1/4	4,606.71	1/4	4,344.66	1/4	4,082.59	1/4	3,820.52	1/4	3,550.50	1/4	3,192.83	1/4	2,835.17		
1/2	1/2	1/2	1/2	1/2	4,828.38	1/2	4,601.25	1/2	4,339.20	1/2	4,077.13	1/2	3,815.06	1/2	3,543.05	1/2	3,185.38	1/2	2,827.71		
3/4	3/4	3/4	3/4	3/4	4,826.68	3/4	4,595.80	3/4	4,333.74	3/4	4,071.68	3/4	3,809.60	3/4	3,535.59	3/4	3,177.93	3/4	2,820.26		
1	1	1	1	1	4,824.97	1	4,590.34	1	4,328.27	1	4,066.22	1	3,804.15	1	3,528.14	1	3,170.47	1	2,812.81		
1/4	1/4	1/4	1/4	1/4	4,823.26	1/4	4,584.88	1/4	4,322.81	1/4	4,060.76	1/4	3,798.69	1/4	3,520.69	1/4	3,163.02	1/4	2,805.36		
1/2	1/2	1/2	1/2	1/2	4,820.65	1/2	4,579.42	1/2	4,317.35	1/2	4,055.30	1/2	3,793.23	1/2	3,513.24	1/2	3,155.57	1/2	2,797.90		
3/4	3/4	3/4	3/4	3/4	4,818.03	3/4	4,573.96	3/4	4,311.89	3/4	4,049.84	3/4	3,787.77	3/4	3,505.78	3/4	3,148.12	3/4	2,790.45		
2	2	2	2	2	4,815.42	2	4,568.50	2	4,306.43	2	4,044.39	2	3,782.31	2	3,498.33	2	3,140.66	2	2,783.00		
1/4	1/4	1/4	1/4	1/4	4,812.81	1/4	4,563.05	1/4	4,300.97	1/4	4,038.93	1/4	3,776.86	1/4	3,490.88	1/4	3,133.21	1/4	2,775.55		
1/2	1/2	1/2	1/2	1/2	4,809.28	1/2	4,557.59	1/2	4,295.52	1/2	4,033.46	1/2	3,771.40	1/2	3,483.43	1/2	3,125.76	1/2	2,768.09		
3/4	3/4	3/4	3/4	3/4	4,805.76	3/4	4,552.13	3/4	4,290.06	3/4	4,028.00	3/4	3,765.94	3/4	3,475.97	3/4	3,118.31	3/4	2,760.64		
3	3	3	3	3	4,802.24	3	4,546.67	3	4,284.60	3	4,022.53	3	3,760.48	3	3,468.52	3	3,110.86	3	2,753.19		
1/4	1/4	1/4	1/4	1/4	4,798.71	1/4	4,541.21	1/4	4,279.14	1/4	4,017.07	1/4	3,755.02	1/4	3,461.07	1/4	3,103.40	1/4	2,745.74		
1/2	1/2	1/2	1/2	1/2	4,794.28	1/2	4,535.75	1/2	4,273.68	1/2	4,011.61	1/2	3,749.56	1/2	3,453.62	1/2	3,095.95	1/2	2,738.28		
3/4	3/4	3/4	3/4	3/4	4,789.84	3/4	4,530.30	3/4	4,268.22	3/4	4,006.15	3/4	3,744.09	3/4	3,446.18	3/4	3,088.50	3/4	2,730.83		
4	4	4	4	4	4,785.41	4	4,524.84	4	4,262.77	4	4,000.69	4	3,738.63	4	3,438.73	4	3,081.05	4	2,723.38		
1/4	1/4	1/4	1/4	1/4	4,780.97	1/4	4,519.38	1/4	4,257.31	1/4	3,995.24	1/4	3,733.16	1/4	3,431.28	1/4	3,073.59	1/4	2,715.93		
1/2	1/2	1/2	1/2	1/2	4,775.63	1/2	4,513.91	1/2	4,251.85	1/2	3,989.78	1/2	3,727.71	1/2	3,423.83	1/2	3,066.15	1/2	2,708.47		
3/4	3/4	3/4	3/4	3/4	4,770.28	3/4	4,508.45	3/4	4,246.39	3/4	3,984.32	3/4	3,722.25	3/4	3,416.38	3/4	3,058.70	3/4	2,701.02		
5	5	5	5	5	4,764.94	5	4,502.99	5	4,240.93	5	3,978.86	5	3,716.79	5	3,408.93	5	3,051.25	5	2,693.57		
1/4	1/4	1/4	1/4	1/4	4,759.59	1/4	4,497.52	1/4	4,235.47	1/4	3,973.40	1/4	3,711.33	1/4	3,401.47	1/4	3,043.81	1/4	2,686.12		
1/2	1/2	1/2	1/2	1/2	4,754.13	1/2	4,492.06	1/2	4,230.01	1/2	3,967.94	1/2	3,705.87	1/2	3,394.02	1/2	3,036.36	1/2	2,678.67		
3/4	3/4	3/4	3/4	3/4	4,748.68	3/4	4,486.60	3/4	4,224.55	3/4	3,962.49	3/4	3,700.41	3/4	3,386.57	3/4	3,028.90	3/4	2,671.22		
6	6	6	6	6	4,743.22	6	4,481.15	6	4,219.08	6	3,957.03	6	3,694.96	6	3,379.12	6	3,021.45	6	2,663.78		
1/4	1/4	1/4	1/4	1/4	4,737.76	1/4	4,475.69	1/4	4,213.62	1/4	3,951.57	1/4	3,689.50	1/4	3,371.66	1/4	3,014.00	1/4	2,656.33		
1/2	1/2	1/2	1/2	1/2	4,732.30	1/2	4,470.23	1/2	4,208.16	1/2	3,946.11	1/2	3,684.04	1/2	3,364.21	1/2	3,006.55	1/2	2,648.88		
3/4	3/4	3/4	3/4	3/4	4,726.84	3/4	4,464.77	3/4	4,202.70	3/4	3,940.64	3/4	3,678.58	3/4	3,356.76	3/4	2,999.09	3/4	2,641.43		
7	7	7	7	7	4,721.39	7	4,459.31	7	4,197.24	7	3,935.18	7	3,673.12	7	3,349.31	7	2,991.64	7	2,633.97		
1/4	1/4	1/4	1/4	1/4	4,715.93	1/4	4,453.86	1/4	4,191.78	1/4	3,929.71	1/4	3,667.66	1/4	3,341.86	1/4	2,984.19	1/4	2,626.52		
1/2	1/2	1/2	1/2	1/2	4,710.46	1/2	4,448.40	1/2	4,186.33	1/2	3,924.25	1/2	3,662.20	1/2	3,334.40	1/2	2,976.74	1/2	2,619.07		
3/4	3/4	3/4	3/4	3/4	4,705.00	3/4	4,442.94	3/4	4,180.87	3/4	3,918.80	3/4	3,656.74	3/4	3,326.95	3/4	2,969.28	3/4	2,611.62		
8	8	8	8	8	4,699.53	8	4,437.48	8	4,175.41	8	3,913.34	8	3,651.27	8	3,319.50	8	2,961.83	8	2,604.16		
1/4	1/4	1/4	1/4	1/4	4,694.07	1/4	4,432.02	1/4	4,169.95	1/4	3,907.88	1/4	3,645.81	1/4	3,312.05	1/4	2,954.38	1/4	2,596.71		
1/2	1/2	1/2	1/2	1/2	4,688.61	1/2	4,426.56	1/2	4,164.49	1/2	3,902.42	1/2	3,640.35	1/2	3,304.59	1/2	2,946.93	1/2	2,589.26		
3/4	3/4	3/4	3/4	3/4	4,683.15	3/4	4,421.09	3/4	4,159.03	3/4	3,896.96	3/4	3,634.89	3/4	3,297.14	3/4	2,939.47	3/4	2,581.81		
9	9	9	9	9	4,677.69	9	4,415.63	9	4,153.58	9	3,891.50	9	3,629.43	9	3,289.69	9	2,932.02	9	2,574.36		
1/4	1/4	1/4	1/4	1/4	4,672.24	1/4	4,410.16	1/4	4,148.12	1/4	3,886.05	1/4	3,623.97	1/4	3,282.24	1/4	2,924.57	1/4	2,566.90		
1/2	1/2	1/2	1/2	1/2	4,666.78	1/2	4,404.71	1/2	4,142.65	1/2	3,880.59	1/2	3,618.52	1/2	3,274.78	1/2	2,917.12	1/2	2,559.45		
3/4	3/4	3/4	3/4	3/4	4,661.32	3/4	4,399.25	3/4	4,137.19	3/4	3,875.13	3/4	3,613.06	3/4	3,267.33	3/4	2,909.66	3/4	2,552.00		
10	10	10	10	10	4,655.86	10	4,393.79	10	4,131.72	10	3,869.67	10	3,607.60	10	3,259.88	10	2,902.21	10	2,544.55		
1/4	1/4	1/4	1/4	1/4	4,650.40	1/4	4,388.33	1/4	4,126.26	1/4	3,864.21	1/4	3,602.14	1/4	3,252.43	1/4	2,894.76	1/4	2,537.09		
1/2	1/2	1/2	1/2	1/2	4,644.94	1/2	4,382.87	1/2	4,120.80	1/2	3,858.75	1/2	3,596.68	1/2	3,244.98	1/2	2,887.31	1/2	2,529.64		
3/4	3/4	3/4	3/4	3/4	4,639.49	3/4	4,377.41	3/4	4,115.34	3/4	3,853.28	3/4	3,591.22	3/4	3,237.53	3/4	2,879.87	3/4	2,522.19		
11	11	11	11	11	4,634.03	11	4,371.96	11	4,109.88	11	3,847.82	11	3,585.77	11	3,230.09	11	2,872.42	11	2,514.74		
1/4	1/4	1/4	1/4	1/4	4,833.26	1/4	4,628.57	1/4	4,366.50	1/4	4,104.43	1/4	3,842.35	1/4	3,580.31	1/4	3,222.64	1/4	2,864.97	1/4	2,507.28
1/2	1/2	1/2	1/2	1/2	4,832.47	1/2	4,623.11	1/2	4,361.04	1/2	4,098.97	1/2	3,836.90	1/2	3,572.86	1/2	3,215.19	1/2	2,857.52	1/2	2,499.84
3/4	3/4	3/4	3/4	3/4	4,831.68	3/4	4,617.64	3/4	4,355.58	3/4	4,093.51	3/4	3,831.44	3/4	3,565.40	3/4	3,207.74	3/4	2,850.07	3/4	2,492.39

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 AT GAUGE POINT.  
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON MMC VALVE.  
 GAUGE POINT: (MMC) LOCATED 11'-06" OFF CENTERLINE AND 45'-00" FORWARD OF AFT BULKHEAD.

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



# BARGE "HFL 404"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-11 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,484.94	0	2,127.26	0	1,769.59	0	1,411.93	0	1,054.40	0	696.78	0	339.13	0		0			
1/4	2,477.50	1/4	2,119.81	1/4	1,762.14	1/4	1,404.47	1/4	1,046.95	1/4	689.33	1/4	331.69	1/4		1/4			
1/2	2,470.05	1/2	2,112.36	1/2	1,754.69	1/2	1,397.02	1/2	1,039.50	1/2	681.88	1/2	324.24	1/2		1/2			
3/4	2,462.59	3/4	2,104.91	3/4	1,747.25	3/4	1,389.57	3/4	1,032.05	3/4	674.43	3/4	316.80	3/4		3/4			
1	2,455.14	1	2,097.47	1	1,739.80	1	1,382.12	1	1,024.59	1	666.97	1	309.35	1		1			
1/4	2,447.69	1/4	2,090.02	1/4	1,732.36	1/4	1,374.66	1/4	1,017.14	1/4	659.52	1/4	301.90	1/4		1/4			
1/2	2,440.24	1/2	2,082.57	1/2	1,724.90	1/2	1,367.22	1/2	1,009.69	1/2	652.08	1/2	294.46	1/2		1/2			
3/4	2,432.78	3/4	2,075.12	3/4	1,717.45	3/4	1,359.77	3/4	1,002.25	3/4	644.63	3/4	287.01	3/4		3/4			
2	2,425.33	2	2,067.67	2	1,710.00	2	1,352.33	2	994.80	2	637.18	2	279.56	2		2			
1/4	2,417.88	1/4	2,060.21	1/4	1,702.55	1/4	1,344.88	1/4	987.36	1/4	629.74	1/4	272.12	1/4		1/4			
1/2	2,410.43	1/2	2,052.76	1/2	1,695.09	1/2	1,337.43	1/2	979.90	1/2	622.28	1/2	264.67	1/2		1/2			
3/4	2,402.97	3/4	2,045.31	3/4	1,687.64	3/4	1,329.97	3/4	972.45	3/4	614.83	3/4	257.22	3/4		3/4			
3	2,395.52	3	2,037.86	3	1,680.19	3	1,322.52	3	965.00	3	607.38	3	249.78	3		3			
1/4	2,388.07	1/4	2,030.40	1/4	1,672.74	1/4	1,315.07	1/4	957.55	1/4	599.93	1/4	242.33	1/4		1/4			
1/2	2,380.62	1/2	2,022.95	1/2	1,665.28	1/2	1,307.62	1/2	950.10	1/2	592.47	1/2	234.88	1/2		1/2			
3/4	2,373.16	3/4	2,015.50	3/4	1,657.83	3/4	1,300.16	3/4	942.65	3/4	585.02	3/4	227.44	3/4		3/4			
4	2,365.71	4	2,008.05	4	1,650.38	4	1,292.71	4	935.21	4	577.57	4	219.99	4		4			
1/4	2,358.26	1/4	2,000.59	1/4	1,642.93	1/4	1,285.26	1/4	927.76	1/4	570.12	1/4	212.55	1/4		1/4			
1/2	2,350.81	1/2	1,993.14	1/2	1,635.47	1/2	1,277.81	1/2	920.31	1/2	562.66	1/2	205.10	1/2		1/2			
3/4	2,343.36	3/4	1,985.69	3/4	1,628.02	3/4	1,270.37	3/4	912.86	3/4	555.21	3/4	197.65	3/4		3/4			
5	2,335.90	5	1,978.24	5	1,620.57	5	1,262.92	5	905.40	5	547.76	5	190.21	5		5			
1/4	2,328.45	1/4	1,970.78	1/4	1,613.12	1/4	1,255.47	1/4	897.95	1/4	540.31	1/4	182.76	1/4		1/4			
1/2	2,321.00	1/2	1,963.33	1/2	1,605.66	1/2	1,248.03	1/2	890.50	1/2	532.86	1/2	175.31	1/2		1/2			
3/4	2,313.56	3/4	1,955.88	3/4	1,598.21	3/4	1,240.58	3/4	883.06	3/4	525.40	3/4	167.85	3/4		3/4			
6	2,306.11	6	1,948.43	6	1,590.76	6	1,233.13	6	875.61	6	517.95	6	160.40	6		6			
1/4	2,298.67	1/4	1,940.97	1/4	1,583.31	1/4	1,225.69	1/4	868.16	1/4	510.50	1/4	152.95	1/4		1/4			
1/2	2,291.21	1/2	1,933.53	1/2	1,575.86	1/2	1,218.24	1/2	860.71	1/2	503.05	1/2	145.50	1/2		1/2			
3/4	2,283.76	3/4	1,926.08	3/4	1,568.40	3/4	1,210.80	3/4	853.26	3/4	495.60	3/4	138.06	3/4		3/4			
7	2,276.31	7	1,918.64	7	1,560.95	7	1,203.35	7	845.81	7	488.16	7	130.61	7		7			
1/4	2,268.86	1/4	1,911.19	1/4	1,553.50	1/4	1,195.90	1/4	838.36	1/4	480.71	1/4	123.16	1/4		1/4			
1/2	2,261.40	1/2	1,903.74	1/2	1,546.05	1/2	1,188.45	1/2	830.90	1/2	473.26	1/2	115.72	1/2		1/2			
3/4	2,253.95	3/4	1,896.28	3/4	1,538.61	3/4	1,181.00	3/4	823.45	3/4	465.81	3/4	108.27	3/4		3/4			
8	2,246.50	8	1,888.83	8	1,531.16	8	1,173.55	8	816.00	8	458.35	8	100.83	8		8			
1/4	2,239.05	1/4	1,881.38	1/4	1,523.71	1/4	1,166.09	1/4	808.55	1/4	450.90	1/4	93.38	1/4		1/4			
1/2	2,231.59	1/2	1,873.93	1/2	1,516.26	1/2	1,158.65	1/2	801.09	1/2	443.45	1/2	85.93	1/2		1/2			
3/4	2,224.14	3/4	1,866.47	3/4	1,508.81	3/4	1,151.20	3/4	793.64	3/4	436.00	3/4	78.49	3/4		3/4			
9	2,216.69	9	1,859.02	9	1,501.36	9	1,143.75	9	786.19	9	428.55	9	71.04	9		9			
1/4	2,209.24	1/4	1,851.57	1/4	1,493.90	1/4	1,136.31	1/4	778.74	1/4	421.09	1/4	63.59	1/4		1/4			
1/2	2,201.78	1/2	1,844.12	1/2	1,486.45	1/2	1,128.86	1/2	771.29	1/2	413.64	1/2	57.08	1/2		1/2			
3/4	2,194.33	3/4	1,836.66	3/4	1,479.00	3/4	1,121.41	3/4	763.84	3/4	406.19	3/4	50.56	3/4		3/4			
10	2,186.88	10	1,829.21	10	1,471.55	10	1,113.97	10	756.40	10	398.74	10	44.04	10		10			
1/4	2,179.43	1/4	1,821.76	1/4	1,464.09	1/4	1,106.52	1/4	748.95	1/4	391.28	1/4	37.52	1/4		1/4			
1/2	2,171.97	1/2	1,814.31	1/2	1,456.64	1/2	1,099.08	1/2	741.50	1/2	383.83	1/2	32.87	1/2		1/2			
3/4	2,164.52	3/4	1,806.86	3/4	1,449.19	3/4	1,091.63	3/4	734.05	3/4	376.38	3/4	28.21	3/4		3/4			
11	2,157.07	11	1,799.40	11	1,441.74	11	1,084.18	11	726.59	11	368.93	11	23.56	11		11			
1/4	2,149.62	1/4	1,791.95	1/4	1,434.28	1/4	1,076.74	1/4	719.14	1/4	361.47	1/4	18.90	1/4		1/4			
1/2	2,142.16	1/2	1,784.50	1/2	1,426.83	1/2	1,069.29	1/2	711.69	1/2	354.03	1/2		1/2		1/2			
3/4	2,134.71	3/4	1,777.05	3/4	1,419.38	3/4	1,061.84	3/4	704.24	3/4	346.58	3/4		3/4		3/4			

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 09/08/2008 CB  
RECALCULATED: 10/04/2018  
VERIFIED: 12/01/2023

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2023

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



# BARGE "HFL 404"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-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	4,836.04	0	4,617.11	0	4,354.78	0	4,092.42	0	3,830.08	0	3,561.75	0	3,203.70	0	2,845.65		
1/4	1/4	1/4	1/4	1/4	4,835.24	1/4	4,611.64	1/4	4,349.31	1/4	4,086.95	1/4	3,824.62	1/4	3,554.29	1/4	3,196.24	1/4	2,838.19		
1/2	1/2	1/2	1/2	1/2	4,833.54	1/2	4,606.18	1/2	4,343.84	1/2	4,081.49	1/2	3,819.15	1/2	3,546.83	1/2	3,188.78	1/2	2,830.73		
3/4	3/4	3/4	3/4	3/4	4,831.83	3/4	4,600.72	3/4	4,338.37	3/4	4,076.03	3/4	3,813.68	3/4	3,539.37	3/4	3,181.32	3/4	2,823.28		
1		1		1	4,830.13	1	4,595.25	1	4,332.90	1	4,070.56	1	3,808.21	1	3,531.91	1	3,173.86	1	2,815.82		
1/4	1/4	1/4	1/4	1/4	4,828.43	1/4	4,589.79	1/4	4,327.43	1/4	4,065.10	1/4	3,802.74	1/4	3,524.45	1/4	3,166.41	1/4	2,808.36		
1/2	1/2	1/2	1/2	1/2	4,825.81	1/2	4,584.32	1/2	4,321.97	1/2	4,059.63	1/2	3,797.28	1/2	3,517.00	1/2	3,158.95	1/2	2,800.90		
3/4	3/4	3/4	3/4	3/4	4,823.19	3/4	4,578.86	3/4	4,316.50	3/4	4,054.17	3/4	3,791.81	3/4	3,509.54	3/4	3,151.49	3/4	2,793.44		
2		2		2	4,820.57	2	4,573.39	2	4,311.04	2	4,048.70	2	3,786.35	2	3,502.08	2	3,144.03	2	2,785.98		
1/4	1/4	1/4	1/4	1/4	4,817.95	1/4	4,567.93	1/4	4,305.57	1/4	4,043.24	1/4	3,780.88	1/4	3,494.62	1/4	3,136.57	1/4	2,778.53		
1/2	1/2	1/2	1/2	1/2	4,814.43	1/2	4,562.47	1/2	4,300.11	1/2	4,037.78	1/2	3,775.42	1/2	3,487.16	1/2	3,129.11	1/2	2,771.06		
3/4	3/4	3/4	3/4	3/4	4,810.91	3/4	4,557.00	3/4	4,294.64	3/4	4,032.31	3/4	3,769.95	3/4	3,479.70	3/4	3,121.66	3/4	2,763.60		
3		3		3	4,807.38	3	4,551.54	3	4,289.18	3	4,026.85	3	3,764.49	3	3,472.25	3	3,114.20	3	2,756.13		
1/4	1/4	1/4	1/4	1/4	4,803.86	1/4	4,546.07	1/4	4,283.72	1/4	4,021.38	1/4	3,759.03	1/4	3,464.79	1/4	3,106.74	1/4	2,748.67		
1/2	1/2	1/2	1/2	1/2	4,799.42	1/2	4,540.60	1/2	4,278.25	1/2	4,015.91	1/2	3,753.56	1/2	3,457.33	1/2	3,099.28	1/2	2,741.21		
3/4	3/4	3/4	3/4	3/4	4,794.98	3/4	4,535.13	3/4	4,272.79	3/4	4,010.44	3/4	3,748.10	3/4	3,449.87	3/4	3,091.81	3/4	2,733.75		
4		4		4	4,790.54	4	4,529.66	4	4,267.32	4	4,004.97	4	3,742.63	4	3,442.41	4	3,084.35	4	2,726.29		
1/4	1/4	1/4	1/4	1/4	4,786.10	1/4	4,524.19	1/4	4,261.86	1/4	3,999.50	1/4	3,737.17	1/4	3,434.95	1/4	3,076.88	1/4	2,718.83		
1/2	1/2	1/2	1/2	1/2	4,780.75	1/2	4,518.73	1/2	4,256.39	1/2	3,994.04	1/2	3,731.70	1/2	3,427.49	1/2	3,069.42	1/2	2,711.38		
3/4	3/4	3/4	3/4	3/4	4,775.39	3/4	4,513.26	3/4	4,250.93	3/4	3,988.57	3/4	3,726.24	3/4	3,420.03	3/4	3,061.97	3/4	2,703.92		
5		5		5	4,770.04	5	4,507.80	5	4,245.47	5	3,983.11	5	3,720.78	5	3,412.56	5	3,054.51	5	2,696.46		
1/4	1/4	1/4	1/4	1/4	4,764.69	1/4	4,502.33	1/4	4,240.00	1/4	3,977.64	1/4	3,715.31	1/4	3,405.10	1/4	3,047.05	1/4	2,689.00		
1/2	1/2	1/2	1/2	1/2	4,759.22	1/2	4,496.87	1/2	4,234.53	1/2	3,972.18	1/2	3,709.84	1/2	3,397.64	1/2	3,039.59	1/2	2,681.54		
3/4	3/4	3/4	3/4	3/4	4,753.75	3/4	4,491.41	3/4	4,229.06	3/4	3,966.72	3/4	3,704.37	3/4	3,390.18	3/4	3,032.13	3/4	2,674.08		
6		6		6	4,748.28	6	4,485.94	6	4,223.59	6	3,961.25	6	3,698.90	6	3,382.72	6	3,024.67	6	2,666.63		
1/4	1/4	1/4	1/4	1/4	4,742.81	1/4	4,480.48	1/4	4,218.12	1/4	3,955.79	1/4	3,693.43	1/4	3,375.26	1/4	3,017.22	1/4	2,659.17		
1/2	1/2	1/2	1/2	1/2	4,737.35	1/2	4,475.01	1/2	4,212.66	1/2	3,950.32	1/2	3,687.97	1/2	3,367.80	1/2	3,009.76	1/2	2,651.71		
3/4	3/4	3/4	3/4	3/4	4,731.88	3/4	4,469.55	3/4	4,207.19	3/4	3,944.86	3/4	3,682.50	3/4	3,360.35	3/4	3,002.30	3/4	2,644.25		
7		7		7	4,726.42	7	4,464.08	7	4,201.73	7	3,939.39	7	3,677.04	7	3,352.89	7	2,994.84	7	2,636.79		
1/4	1/4	1/4	1/4	1/4	4,720.95	1/4	4,458.62	1/4	4,196.26	1/4	3,933.93	1/4	3,671.57	1/4	3,345.43	1/4	2,987.38	1/4	2,629.33		
1/2	1/2	1/2	1/2	1/2	4,715.49	1/2	4,453.15	1/2	4,190.80	1/2	3,928.47	1/2	3,666.11	1/2	3,337.97	1/2	2,979.92	1/2	2,621.87		
3/4	3/4	3/4	3/4	3/4	4,710.03	3/4	4,447.68	3/4	4,185.34	3/4	3,923.00	3/4	3,660.64	3/4	3,330.51	3/4	2,972.47	3/4	2,614.41		
8		8		8	4,704.56	8	4,442.21	8	4,179.87	8	3,917.54	8	3,655.18	8	3,323.05	8	2,965.01	8	2,606.94		
1/4	1/4	1/4	1/4	1/4	4,699.10	1/4	4,436.74	1/4	4,174.41	1/4	3,912.07	1/4	3,649.72	1/4	3,315.60	1/4	2,957.55	1/4	2,599.48		
1/2	1/2	1/2	1/2	1/2	4,693.63	1/2	4,431.28	1/2	4,168.94	1/2	3,906.60	1/2	3,644.25	1/2	3,308.14	1/2	2,950.08	1/2	2,592.02		
3/4	3/4	3/4	3/4	3/4	4,688.17	3/4	4,425.81	3/4	4,163.48	3/4	3,901.13	3/4	3,638.79	3/4	3,300.68	3/4	2,942.62	3/4	2,584.56		
9		9		9	4,682.70	9	4,420.35	9	4,158.01	9	3,895.66	9	3,633.32	9	3,293.22	9	2,935.16	9	2,577.10		
1/4	1/4	1/4	1/4	1/4	4,677.24	1/4	4,414.88	1/4	4,152.55	1/4	3,890.19	1/4	3,627.86	1/4	3,285.76	1/4	2,927.69	1/4	2,569.64		
1/2	1/2	1/2	1/2	1/2	4,671.78	1/2	4,409.42	1/2	4,147.08	1/2	3,884.73	1/2	3,622.39	1/2	3,278.30	1/2	2,920.23	1/2	2,562.19		
3/4	3/4	3/4	3/4	3/4	4,666.31	3/4	4,403.95	3/4	4,141.62	3/4	3,879.26	3/4	3,616.93	3/4	3,270.83	3/4	2,912.77	3/4	2,554.73		
10		10		10	4,660.85	10	4,398.49	10	4,136.16	10	3,873.80	10	3,611.47	10	3,263.37	10	2,905.32	10	2,547.27		
1/4	1/4	1/4	1/4	1/4	4,655.38	1/4	4,393.03	1/4	4,130.69	1/4	3,868.33	1/4	3,606.00	1/4	3,255.91	1/4	2,897.86	1/4	2,539.81		
1/2	1/2	1/2	1/2	1/2	4,649.91	1/2	4,387.56	1/2	4,125.22	1/2	3,862.87	1/2	3,600.53	1/2	3,248.45	1/2	2,890.40	1/2	2,532.35		
3/4	3/4	3/4	3/4	3/4	4,644.44	3/4	4,382.10	3/4	4,119.75	3/4	3,857.41	3/4	3,595.06	3/4	3,240.99	3/4	2,882.94	3/4	2,524.89		
11		11		11	4,638.97	11	4,376.63	11	4,114.28	11	3,851.94	11	3,589.59	11	3,233.53	11	2,875.48	11	2,517.44		
1/4	1/4	1/4	1/4	1/4	4,838.43	1/4	4,633.50	1/4	4,371.17	1/4	4,108.81	1/4	3,846.48	1/4	3,584.12	1/4	3,226.07	1/4	2,868.02	1/4	2,509.98
1/2	1/2	1/2	1/2	1/2	4,837.63	1/2	4,628.04	1/2	4,365.70	1/2	4,103.35	1/2	3,841.01	1/2	3,576.66	1/2	3,218.61	1/2	2,860.57	1/2	2,502.52
3/4	3/4	3/4	3/4	3/4	4,836.83	3/4	4,622.57	3/4	4,360.24	3/4	4,097.88	3/4	3,835.55	3/4	3,569.20	3/4	3,211.16	3/4	2,853.11	3/4	2,495.06

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 AT GAUGE POINT.  
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON MMC VALVE.  
GAUGE POINT: (MMC) LOCATED 11'-06" OFF CENTERLINE AND 45'-00" FORWARD OF AFT BULKHEAD.

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



# BARGE "HFL 404"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-11 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,487.60	0	2,129.56	0	1,771.49	0	1,413.44	0	1,055.52	0	697.53	0	339.51	0		0		0	
1/4	2,480.14	1/4	2,122.10	1/4	1,764.02	1/4	1,405.98	1/4	1,048.07	1/4	690.07	1/4	332.05	1/4		1/4		1/4	
1/2	2,472.69	1/2	2,114.63	1/2	1,756.57	1/2	1,398.52	1/2	1,040.61	1/2	682.61	1/2	324.60	1/2		1/2		1/2	
3/4	2,465.23	3/4	2,107.17	3/4	1,749.11	3/4	1,391.06	3/4	1,033.16	3/4	675.16	3/4	317.14	3/4		3/4		3/4	
1	2,457.77	1	2,099.70	1	1,741.65	1	1,383.60	1	1,025.70	1	667.70	1	309.69	1		1		1	
1/4	2,450.31	1/4	2,092.24	1/4	1,734.19	1/4	1,376.14	1/4	1,018.24	1/4	660.24	1/4	302.24	1/4		1/4		1/4	
1/2	2,442.85	1/2	2,084.78	1/2	1,726.73	1/2	1,368.69	1/2	1,010.78	1/2	652.78	1/2	294.78	1/2		1/2		1/2	
3/4	2,435.38	3/4	2,077.32	3/4	1,719.27	3/4	1,361.23	3/4	1,003.32	3/4	645.32	3/4	287.32	3/4		3/4		3/4	
2	2,427.92	2	2,069.86	2	1,711.82	2	1,353.77	2	995.86	2	637.86	2	279.86	2		2		2	
1/4	2,420.45	1/4	2,062.41	1/4	1,704.36	1/4	1,346.31	1/4	988.41	1/4	630.41	1/4	272.41	1/4		1/4		1/4	
1/2	2,412.99	1/2	2,054.95	1/2	1,696.90	1/2	1,338.85	1/2	980.95	1/2	622.95	1/2	264.95	1/2		1/2		1/2	
3/4	2,405.54	3/4	2,047.49	3/4	1,689.44	3/4	1,331.39	3/4	973.49	3/4	615.49	3/4	257.50	3/4		3/4		3/4	
3	2,398.08	3	2,040.03	3	1,681.98	3	1,323.94	3	966.03	3	608.03	3	250.05	3		3		3	
1/4	2,390.62	1/4	2,032.57	1/4	1,674.52	1/4	1,316.48	1/4	958.57	1/4	600.57	1/4	242.60	1/4		1/4		1/4	
1/2	2,383.16	1/2	2,025.11	1/2	1,667.07	1/2	1,309.02	1/2	951.11	1/2	593.11	1/2	235.14	1/2		1/2		1/2	
3/4	2,375.70	3/4	2,017.66	3/4	1,659.61	3/4	1,301.56	3/4	943.66	3/4	585.66	3/4	227.68	3/4		3/4		3/4	
4	2,368.25	4	2,010.20	4	1,652.15	4	1,294.10	4	936.20	4	578.20	4	220.22	4		4		4	
1/4	2,360.79	1/4	2,002.74	1/4	1,644.69	1/4	1,286.64	1/4	928.74	1/4	570.74	1/4	212.76	1/4		1/4		1/4	
1/2	2,353.33	1/2	1,995.28	1/2	1,637.23	1/2	1,279.19	1/2	921.28	1/2	563.28	1/2	205.31	1/2		1/2		1/2	
3/4	2,345.87	3/4	1,987.82	3/4	1,629.78	3/4	1,271.73	3/4	913.82	3/4	555.81	3/4	197.86	3/4		3/4		3/4	
5	2,338.41	5	1,980.36	5	1,622.32	5	1,264.27	5	906.36	5	548.35	5	190.41	5		5		5	
1/4	2,330.95	1/4	1,972.91	1/4	1,614.86	1/4	1,256.81	1/4	898.91	1/4	540.88	1/4	182.95	1/4		1/4		1/4	
1/2	2,323.50	1/2	1,965.45	1/2	1,607.39	1/2	1,249.36	1/2	891.45	1/2	533.42	1/2	175.50	1/2		1/2		1/2	
3/4	2,316.04	3/4	1,957.99	3/4	1,599.93	3/4	1,241.91	3/4	884.00	3/4	525.97	3/4	168.04	3/4		3/4		3/4	
6	2,308.58	6	1,950.53	6	1,592.47	6	1,234.45	6	876.55	6	518.51	6	160.58	6		6		6	
1/4	2,301.12	1/4	1,943.07	1/4	1,585.00	1/4	1,227.00	1/4	869.10	1/4	511.05	1/4	153.12	1/4		1/4		1/4	
1/2	2,293.66	1/2	1,935.61	1/2	1,577.54	1/2	1,219.54	1/2	861.64	1/2	503.59	1/2	145.67	1/2		1/2		1/2	
3/4	2,286.19	3/4	1,928.14	3/4	1,570.08	3/4	1,212.08	3/4	854.18	3/4	496.13	3/4	138.22	3/4		3/4		3/4	
7	2,278.73	7	1,920.68	7	1,562.63	7	1,204.63	7	846.72	7	488.67	7	130.76	7		7		7	
1/4	2,271.26	1/4	1,913.22	1/4	1,555.17	1/4	1,197.17	1/4	839.26	1/4	481.22	1/4	123.31	1/4		1/4		1/4	
1/2	2,263.80	1/2	1,905.76	1/2	1,547.71	1/2	1,189.72	1/2	831.80	1/2	473.76	1/2	115.85	1/2		1/2		1/2	
3/4	2,256.35	3/4	1,898.30	3/4	1,540.25	3/4	1,182.26	3/4	824.35	3/4	466.30	3/4	108.39	3/4		3/4		3/4	
8	2,248.89	8	1,890.84	8	1,532.79	8	1,174.81	8	816.89	8	458.84	8	100.94	8		8		8	
1/4	2,241.43	1/4	1,883.38	1/4	1,525.33	1/4	1,167.36	1/4	809.43	1/4	451.38	1/4	93.48	1/4		1/4		1/4	
1/2	2,233.97	1/2	1,875.92	1/2	1,517.88	1/2	1,159.90	1/2	801.97	1/2	443.92	1/2	86.03	1/2		1/2		1/2	
3/4	2,226.51	3/4	1,868.47	3/4	1,510.42	3/4	1,152.44	3/4	794.50	3/4	436.45	3/4	78.57	3/4		3/4		3/4	
9	2,219.05	9	1,861.01	9	1,502.96	9	1,144.98	9	787.04	9	428.99	9	71.12	9		9		9	
1/4	2,211.60	1/4	1,853.55	1/4	1,495.50	1/4	1,137.53	1/4	779.57	1/4	421.53	1/4	63.67	1/4		1/4		1/4	
1/2	2,204.14	1/2	1,846.09	1/2	1,488.04	1/2	1,130.07	1/2	772.11	1/2	414.07	1/2	57.14	1/2		1/2		1/2	
3/4	2,196.68	3/4	1,838.63	3/4	1,480.58	3/4	1,122.62	3/4	764.66	3/4	406.62	3/4	50.61	3/4		3/4		3/4	
10	2,189.22	10	1,831.17	10	1,473.13	10	1,115.17	10	757.20	10	399.17	10	44.08	10		10		10	
1/4	2,181.76	1/4	1,823.72	1/4	1,465.67	1/4	1,107.72	1/4	749.74	1/4	391.72	1/4	37.55	1/4		1/4		1/4	
1/2	2,174.30	1/2	1,816.26	1/2	1,458.20	1/2	1,100.26	1/2	742.28	1/2	384.26	1/2	32.89	1/2		1/2		1/2	
3/4	2,166.85	3/4	1,808.80	3/4	1,450.74	3/4	1,092.80	3/4	734.82	3/4	376.80	3/4	28.24	3/4		3/4		3/4	
11	2,159.39	11	1,801.34	11	1,443.27	11	1,085.34	11	727.36	11	369.34	11	23.58	11		11		11	
1/4	2,151.93	1/4	1,793.88	1/4	1,435.81	1/4	1,077.88	1/4	719.91	1/4	361.88	1/4	18.92	1/4		1/4		1/4	
1/2	2,144.47	1/2	1,786.42	1/2	1,428.35	1/2	1,070.43	1/2	712.45	1/2	354.42	1/2		1/2		1/2		1/2	
3/4	2,137.01	3/4	1,778.95	3/4	1,420.89	3/4	1,062.98	3/4	704.99	3/4	346.97	3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 09/08/2008 CB  
RECALCULATED: 10/04/2018  
VERIFIED: 12/01/2023

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2023

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



# BARGE "HFL 404"

# PORT SLOP TANK INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

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	1,023	0	2,046	0	3,069	0	4,092	0		0		0		0		0	
1/4	21	1/4	1,044	1/4	2,067	1/4	3,090	1/4	4,114	1/4		1/4		1/4		1/4		1/4	
1/2	43	1/2	1,066	1/2	2,089	1/2	3,112	1/2	4,135	1/2		1/2		1/2		1/2		1/2	
3/4	64	3/4	1,087	3/4	2,110	3/4	3,133	3/4	4,156	3/4		3/4		3/4		3/4		3/4	
1	85	1	1,108	1	2,131	1	3,154	1	4,177	1		1		1		1		1	
1/4	107	1/4	1,130	1/4	2,153	1/4	3,176	1/4	4,199	1/4		1/4		1/4		1/4		1/4	
1/2	128	1/2	1,151	1/2	2,174	1/2	3,197	1/2	4,220	1/2		1/2		1/2		1/2		1/2	
3/4	149	3/4	1,172	3/4	2,195	3/4	3,218	3/4	4,241	3/4		3/4		3/4		3/4		3/4	
2	171	2	1,194	2	2,217	2	3,240	2	4,263	2		2		2		2		2	
1/4	192	1/4	1,215	1/4	2,238	1/4	3,261	1/4	4,284	1/4		1/4		1/4		1/4		1/4	
1/2	213	1/2	1,236	1/2	2,259	1/2	3,282	1/2	4,305	1/2		1/2		1/2		1/2		1/2	
3/4	234	3/4	1,258	3/4	2,281	3/4	3,304	3/4	4,327	3/4		3/4		3/4		3/4		3/4	
3	256	3	1,279	3	2,302	3	3,325	3	4,348	3		3		3		3		3	
1/4	277	1/4	1,300	1/4	2,323	1/4	3,346	1/4	4,369	1/4		1/4		1/4		1/4		1/4	
1/2	298	1/2	1,321	1/2	2,344	1/2	3,368	1/2	4,391	1/2		1/2		1/2		1/2		1/2	
3/4	320	3/4	1,343	3/4	2,366	3/4	3,389	3/4	4,412	3/4		3/4		3/4		3/4		3/4	
4	341	4	1,364	4	2,387	4	3,410	4	4,433	4		4		4		4		4	
1/4	362	1/4	1,385	1/4	2,408	1/4	3,431	1/4	4,455	1/4		1/4		1/4		1/4		1/4	
1/2	384	1/2	1,407	1/2	2,430	1/2	3,453	1/2	4,476	1/2		1/2		1/2		1/2		1/2	
3/4	405	3/4	1,428	3/4	2,451	3/4	3,474	3/4	4,497	3/4		3/4		3/4		3/4		3/4	
5	426	5	1,449	5	2,472	5	3,495	5	4,518	5		5		5		5		5	
1/4	448	1/4	1,471	1/4	2,494	1/4	3,517	1/4	4,540	1/4		1/4		1/4		1/4		1/4	
1/2	469	1/2	1,492	1/2	2,515	1/2	3,538	1/2	4,561	1/2		1/2		1/2		1/2		1/2	
3/4	490	3/4	1,513	3/4	2,536	3/4	3,559	3/4	4,582	3/4		3/4		3/4		3/4		3/4	
6	512	6	1,535	6	2,558	6	3,581	6	4,604	6		6		6		6		6	
1/4	533	1/4	1,556	1/4	2,579	1/4	3,602	1/4	4,625	1/4		1/4		1/4		1/4		1/4	
1/2	554	1/2	1,577	1/2	2,600	1/2	3,623	1/2	4,646	1/2		1/2		1/2		1/2		1/2	
3/4	575	3/4	1,599	3/4	2,622	3/4	3,645	3/4	4,668	3/4		3/4		3/4		3/4		3/4	
7	597	7	1,620	7	2,643	7	3,666	7	4,689	7		7		7		7		7	
1/4	618	1/4	1,641	1/4	2,664	1/4	3,687	1/4	4,710	1/4		1/4		1/4		1/4		1/4	
1/2	639	1/2	1,662	1/2	2,686	1/2	3,709	1/2	4,732	1/2		1/2		1/2		1/2		1/2	
3/4	661	3/4	1,684	3/4	2,707	3/4	3,730	3/4	4,753	3/4		3/4		3/4		3/4		3/4	
8	682	8	1,705	8	2,728	8	3,751	8	4,774	8		8		8		8		8	
1/4	703	1/4	1,726	1/4	2,749	1/4	3,773	1/4	4,796	1/4		1/4		1/4		1/4		1/4	
1/2	725	1/2	1,748	1/2	2,771	1/2	3,794	1/2	4,817	1/2		1/2		1/2		1/2		1/2	
3/4	746	3/4	1,769	3/4	2,792	3/4	3,815	3/4	4,838	3/4		3/4		3/4		3/4		3/4	
9	767	9	1,790	9	2,813	9	3,836	9	4,860	9		9		9		9		9	
1/4	789	1/4	1,812	1/4	2,835	1/4	3,858	1/4	4,881	1/4		1/4		1/4		1/4		1/4	
1/2	810	1/2	1,833	1/2	2,856	1/2	3,879	1/2	4,902	1/2		1/2		1/2		1/2		1/2	
3/4	831	3/4	1,854	3/4	2,877	3/4	3,900	3/4	4,923	3/4		3/4		3/4		3/4		3/4	
10	853	10	1,876	10	2,899	10	3,922	10	4,945	10		10		10		10		10	
1/4	874	1/4	1,897	1/4	2,920	1/4	3,943	1/4	4,966	1/4		1/4		1/4		1/4		1/4	
1/2	895	1/2	1,918	1/2	2,941	1/2	3,964	1/2	4,987	1/2		1/2		1/2		1/2		1/2	
3/4	916	3/4	1,940	3/4	2,963	3/4	3,986	3/4	5,009	3/4		3/4		3/4		3/4		3/4	
11	938	11	1,961	11	2,984	11	4,007	11	5,030	11		11		11		11		11	
1/4	959	1/4	1,982	1/4	3,005	1/4	4,028	1/4	5,051	1/4		1/4		1/4		1/4		1/4	
1/2	980	1/2	2,003	1/2	3,027	1/2	4,050	1/2	5,073	1/2		1/2		1/2		1/2		1/2	
3/4	1,002	3/4	2,025	3/4	3,048	3/4	4,071	3/4		3/4		3/4		3/4		3/4		3/4	

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 AT GAUGE POINT.  
CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES.

STRAPPED: 12/01/2023 JS  
CALCULATED: 12/04/2023 CL  
PRINTED: 12/04/2023 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2023

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 404"

# STBD SLOP TANK INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

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	1,019	0	2,039	0	3,058	0	4,078	0		0		0		0		0	
1/4	21	1/4	1,041	1/4	2,060	1/4	3,080	1/4	4,099	1/4		1/4		1/4		1/4		1/4	
1/2	42	1/2	1,062	1/2	2,081	1/2	3,101	1/2	4,120	1/2		1/2		1/2		1/2		1/2	
3/4	64	3/4	1,083	3/4	2,103	3/4	3,122	3/4	4,142	3/4		3/4		3/4		3/4		3/4	
1	85	1	1,104	1	2,124	1	3,143	1	4,163	1		1		1		1		1	
1/4	106	1/4	1,126	1/4	2,145	1/4	3,165	1/4	4,184	1/4		1/4		1/4		1/4		1/4	
1/2	127	1/2	1,147	1/2	2,166	1/2	3,186	1/2	4,205	1/2		1/2		1/2		1/2		1/2	
3/4	149	3/4	1,168	3/4	2,188	3/4	3,207	3/4	4,227	3/4		3/4		3/4		3/4		3/4	
2	170	2	1,189	2	2,209	2	3,228	2	4,248	2		2		2		2		2	
1/4	191	1/4	1,211	1/4	2,230	1/4	3,250	1/4	4,269	1/4		1/4		1/4		1/4		1/4	
1/2	212	1/2	1,232	1/2	2,251	1/2	3,271	1/2	4,290	1/2		1/2		1/2		1/2		1/2	
3/4	234	3/4	1,253	3/4	2,273	3/4	3,292	3/4	4,312	3/4		3/4		3/4		3/4		3/4	
3	255	3	1,274	3	2,294	3	3,313	3	4,333	3		3		3		3		3	
1/4	276	1/4	1,296	1/4	2,315	1/4	3,335	1/4	4,354	1/4		1/4		1/4		1/4		1/4	
1/2	297	1/2	1,317	1/2	2,336	1/2	3,356	1/2	4,375	1/2		1/2		1/2		1/2		1/2	
3/4	319	3/4	1,338	3/4	2,358	3/4	3,377	3/4	4,397	3/4		3/4		3/4		3/4		3/4	
4	340	4	1,359	4	2,379	4	3,398	4	4,418	4		4		4		4		4	
1/4	361	1/4	1,381	1/4	2,400	1/4	3,420	1/4	4,439	1/4		1/4		1/4		1/4		1/4	
1/2	382	1/2	1,402	1/2	2,421	1/2	3,441	1/2	4,460	1/2		1/2		1/2		1/2		1/2	
3/4	404	3/4	1,423	3/4	2,443	3/4	3,462	3/4	4,482	3/4		3/4		3/4		3/4		3/4	
5	425	5	1,444	5	2,464	5	3,483	5	4,503	5		5		5		5		5	
1/4	446	1/4	1,466	1/4	2,485	1/4	3,505	1/4	4,524	1/4		1/4		1/4		1/4		1/4	
1/2	467	1/2	1,487	1/2	2,506	1/2	3,526	1/2	4,545	1/2		1/2		1/2		1/2		1/2	
3/4	489	3/4	1,508	3/4	2,527	3/4	3,547	3/4	4,566	3/4		3/4		3/4		3/4		3/4	
6	510	6	1,529	6	2,549	6	3,568	6	4,588	6		6		6		6		6	
1/4	531	1/4	1,550	1/4	2,570	1/4	3,589	1/4	4,609	1/4		1/4		1/4		1/4		1/4	
1/2	552	1/2	1,572	1/2	2,591	1/2	3,611	1/2	4,630	1/2		1/2		1/2		1/2		1/2	
3/4	573	3/4	1,593	3/4	2,612	3/4	3,632	3/4	4,651	3/4		3/4		3/4		3/4		3/4	
7	595	7	1,614	7	2,634	7	3,653	7	4,673	7		7		7		7		7	
1/4	616	1/4	1,635	1/4	2,655	1/4	3,674	1/4	4,694	1/4		1/4		1/4		1/4		1/4	
1/2	637	1/2	1,657	1/2	2,676	1/2	3,696	1/2	4,715	1/2		1/2		1/2		1/2		1/2	
3/4	658	3/4	1,678	3/4	2,697	3/4	3,717	3/4	4,736	3/4		3/4		3/4		3/4		3/4	
8	680	8	1,699	8	2,719	8	3,738	8	4,758	8		8		8		8		8	
1/4	701	1/4	1,720	1/4	2,740	1/4	3,759	1/4	4,779	1/4		1/4		1/4		1/4		1/4	
1/2	722	1/2	1,742	1/2	2,761	1/2	3,781	1/2	4,800	1/2		1/2		1/2		1/2		1/2	
3/4	743	3/4	1,763	3/4	2,782	3/4	3,802	3/4	4,821	3/4		3/4		3/4		3/4		3/4	
9	765	9	1,784	9	2,804	9	3,823	9	4,843	9		9		9		9		9	
1/4	786	1/4	1,805	1/4	2,825	1/4	3,844	1/4	4,864	1/4		1/4		1/4		1/4		1/4	
1/2	807	1/2	1,827	1/2	2,846	1/2	3,866	1/2	4,885	1/2		1/2		1/2		1/2		1/2	
3/4	828	3/4	1,848	3/4	2,867	3/4	3,887	3/4	4,906	3/4		3/4		3/4		3/4		3/4	
10	850	10	1,869	10	2,889	10	3,908	10	4,928	10		10		10		10		10	
1/4	871	1/4	1,890	1/4	2,910	1/4	3,929	1/4	4,949	1/4		1/4		1/4		1/4		1/4	
1/2	892	1/2	1,912	1/2	2,931	1/2	3,951	1/2	4,970	1/2		1/2		1/2		1/2		1/2	
3/4	913	3/4	1,933	3/4	2,952	3/4	3,972	3/4	4,991	3/4		3/4		3/4		3/4		3/4	
11	935	11	1,954	11	2,974	11	3,993	11	5,012	11		11		11		11		11	
1/4	956	1/4	1,975	1/4	2,995	1/4	4,014	1/4	5,034	1/4		1/4		1/4		1/4		1/4	
1/2	977	1/2	1,997	1/2	3,016	1/2	4,035	1/2	5,055	1/2		1/2		1/2		1/2		1/2	
3/4	998	3/4	2,018	3/4	3,037	3/4	4,057	3/4		3/4		3/4		3/4		3/4		3/4	

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 AT GAUGE POINT.  
CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES.

STRAPPED: 12/01/2023 JS  
CALCULATED: 12/04/2023 CL  
PRINTED: 12/04/2023 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2023

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
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