



# BARGE "HFL 457"

ULLAGE TRIM TABLE  
FORMERLY "CHEM 3004"

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>
1 PORT	- 00-1/4	00-1/4	- 00-3/8	00-3/8	- 00-5/8	00-5/8	- 00-7/8	00-7/8	- 01-1/8	01-1/8	- 01-1/4	01-1/4
1 STBD	- 00-1/4	00-1/4	- 00-3/8	00-3/8	- 00-5/8	00-5/8	- 00-7/8	00-7/8	- 01-1/8	01-1/8	- 01-1/4	01-1/4
2 PORT	- 00-3/8	00-3/8	- 00-5/8	00-5/8	- 01-0/8	01-0/8	- 01-1/4	01-1/4	- 01-5/8	01-5/8	- 01-7/8	01-7/8
2 STBD	- 00-3/8	00-3/8	- 00-5/8	00-5/8	- 01-0/8	01-0/8	- 01-1/4	01-1/4	- 01-5/8	01-5/8	- 01-7/8	01-7/8
3 PORT	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-3/8	- 00-3/8	00-1/2	- 00-1/2	00-3/4	- 00-3/4	00-7/8	- 00-7/8
3 STBD	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-3/8	- 00-3/8	00-1/2	- 00-1/2	00-3/4	- 00-3/4	00-7/8	- 00-7/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

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

THE CORRECTION FOR 2'-00" TRIM DOWN BY STERN FOR 1 PORT IS 00-3/8"  
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED ULLAGE IS 4'-00 3/8"

LENGTH BETWEEN DRAFT MARKS: 238'-06"

December 10, 2014

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 457"

# 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0	4,684.57	0	4,345.17	0	4,005.78	0	3,665.22	0	3,324.50	0	2,983.78	0	2,643.04	0	2,302.22
1/4	1/4	1/4	4,677.50	1/4	4,338.10	1/4	3,998.71	1/4	3,658.12	1/4	3,317.40	1/4	2,976.68	1/4	2,635.94	1/4	2,295.12		
1/2	1/2	1/2	4,670.43	1/2	4,331.03	1/2	3,991.64	1/2	3,651.02	1/2	3,310.30	1/2	2,969.59	1/2	2,628.84	1/2	2,288.02		
3/4	3/4	3/4	4,663.36	3/4	4,323.96	3/4	3,984.57	3/4	3,643.92	3/4	3,303.21	3/4	2,962.49	3/4	2,621.74	3/4	2,280.92		
1		1	4,656.28	1	4,316.89	1	3,977.50	1	3,636.83	1	3,296.11	1	2,955.39	1	2,614.64	1	2,273.82		
1/4	1/4	1/4	4,649.21	1/4	4,309.82	1/4	3,970.43	1/4	3,629.73	1/4	3,289.01	1/4	2,948.29	1/4	2,607.54	1/4	2,266.72		
1/2	1/2	1/2	4,642.14	1/2	4,302.75	1/2	3,963.33	1/2	3,622.63	1/2	3,281.91	1/2	2,941.19	1/2	2,600.44	1/2	2,259.62		
3/4	3/4	3/4	4,635.07	3/4	4,295.68	3/4	3,956.24	3/4	3,615.53	3/4	3,274.81	3/4	2,934.09	3/4	2,593.34	3/4	2,252.52		
2		2	4,628.00	2	4,288.61	2	3,949.14	2	3,608.43	2	3,267.71	2	2,927.00	2	2,586.24	2	2,245.42		
1/4	1/4	1/4	4,620.93	1/4	4,281.54	1/4	3,942.04	1/4	3,601.33	1/4	3,260.62	1/4	2,919.90	1/4	2,579.14	1/4	2,238.32		
1/2	1/2	1/2	4,613.86	1/2	4,274.47	1/2	3,934.95	1/2	3,594.24	1/2	3,253.52	1/2	2,912.80	1/2	2,572.04	1/2	2,231.22		
3/4	3/4	3/4	4,924.65	3/4	4,606.79	3/4	4,267.40	3/4	3,927.85	3/4	3,587.14	3/4	3,246.42	3/4	2,905.70	3/4	2,564.94	3/4	2,224.12
3		3	4,921.21	3	4,599.72	3	4,260.33	3	3,920.76	3	3,580.04	3	3,239.32	3	2,898.60	3	2,557.84	3	2,217.02
1/4	1/4	1/4	4,917.78	1/4	4,592.65	1/4	4,253.25	1/4	3,913.66	1/4	3,572.94	1/4	3,232.22	1/4	2,891.50	1/4	2,550.74	1/4	2,209.92
1/2	1/2	1/2	4,912.92	1/2	4,585.58	1/2	4,246.18	1/2	3,906.56	1/2	3,565.84	1/2	3,225.12	1/2	2,884.41	1/2	2,543.64	1/2	2,202.82
3/4	3/4	3/4	4,908.06	3/4	4,578.51	3/4	4,239.11	3/4	3,899.46	3/4	3,558.74	3/4	3,218.03	3/4	2,877.31	3/4	2,536.53	3/4	2,195.72
4		4	4,903.20	4	4,571.44	4	4,232.04	4	3,892.36	4	3,551.65	4	3,210.93	4	2,870.21	4	2,529.43	4	2,188.62
1/4	1/4	1/4	4,898.35	1/4	4,564.37	1/4	4,224.97	1/4	3,885.27	1/4	3,544.55	1/4	3,203.83	1/4	2,863.11	1/4	2,522.33	1/4	2,181.51
1/2	1/2	1/2	4,892.07	1/2	4,557.30	1/2	4,217.90	1/2	3,878.17	1/2	3,537.45	1/2	3,196.73	1/2	2,856.01	1/2	2,515.23	1/2	2,174.41
3/4	3/4	3/4	4,885.80	3/4	4,550.22	3/4	4,210.83	3/4	3,871.07	3/4	3,530.35	3/4	3,189.63	3/4	2,848.91	3/4	2,508.13	3/4	2,167.31
5		5	4,879.52	5	4,543.15	5	4,203.76	5	3,863.97	5	3,523.25	5	3,182.53	5	2,841.82	5	2,501.03	5	2,160.21
1/4	1/4	1/4	4,873.25	1/4	4,536.08	1/4	4,196.69	1/4	3,856.87	1/4	3,516.15	1/4	3,175.44	1/4	2,834.72	1/4	2,493.93	1/4	2,153.11
1/2	1/2	1/2	4,866.29	1/2	4,529.01	1/2	4,189.62	1/2	3,849.78	1/2	3,509.06	1/2	3,168.34	1/2	2,827.62	1/2	2,486.83	1/2	2,146.01
3/4	3/4	3/4	4,859.34	3/4	4,521.94	3/4	4,182.55	3/4	3,842.68	3/4	3,501.96	3/4	3,161.24	3/4	2,820.52	3/4	2,479.73	3/4	2,138.91
6		6	4,852.39	6	4,514.87	6	4,175.48	6	3,835.58	6	3,494.86	6	3,154.14	6	2,813.42	6	2,472.63	6	2,131.81
1/4	1/4	1/4	4,845.43	1/4	4,507.80	1/4	4,168.41	1/4	3,828.48	1/4	3,487.76	1/4	3,147.04	1/4	2,806.32	1/4	2,465.53	1/4	2,124.71
1/2	1/2	1/2	4,838.46	1/2	4,500.73	1/2	4,161.34	1/2	3,821.38	1/2	3,480.66	1/2	3,139.95	1/2	2,799.23	1/2	2,458.43	1/2	2,117.61
3/4	3/4	3/4	4,831.48	3/4	4,493.66	3/4	4,154.27	3/4	3,814.28	3/4	3,473.57	3/4	3,132.85	3/4	2,792.13	3/4	2,451.33	3/4	2,110.51
7		7	4,824.50	7	4,486.59	7	4,147.19	7	3,807.19	7	3,466.47	7	3,125.75	7	2,785.03	7	2,444.23	7	2,103.41
1/4	1/4	1/4	4,817.53	1/4	4,479.52	1/4	4,140.12	1/4	3,800.09	1/4	3,459.37	1/4	3,118.65	1/4	2,777.93	1/4	2,437.13	1/4	2,096.31
1/2	1/2	1/2	4,810.54	1/2	4,472.45	1/2	4,133.05	1/2	3,792.99	1/2	3,452.27	1/2	3,111.55	1/2	2,770.83	1/2	2,430.03	1/2	2,089.21
3/4	3/4	3/4	4,803.55	3/4	4,465.38	3/4	4,125.98	3/4	3,785.89	3/4	3,445.17	3/4	3,104.45	3/4	2,763.74	3/4	2,422.93	3/4	2,082.11
8		8	4,796.56	8	4,458.31	8	4,118.91	8	3,778.79	8	3,438.07	8	3,097.36	8	2,756.64	8	2,415.83	8	2,075.01
1/4	1/4	1/4	4,789.57	1/4	4,451.23	1/4	4,111.84	1/4	3,771.69	1/4	3,430.98	1/4	3,090.26	1/4	2,749.54	1/4	2,408.73	1/4	2,067.91
1/2	1/2	1/2	4,782.59	1/2	4,444.16	1/2	4,104.77	1/2	3,764.60	1/2	3,423.88	1/2	3,083.16	1/2	2,742.44	1/2	2,401.63	1/2	2,060.81
3/4	3/4	3/4	4,775.61	3/4	4,437.09	3/4	4,097.70	3/4	3,757.50	3/4	3,416.78	3/4	3,076.06	3/4	2,735.34	3/4	2,394.53	3/4	2,053.71
9		9	4,768.63	9	4,430.02	9	4,090.63	9	3,750.40	9	3,409.68	9	3,068.96	9	2,728.24	9	2,387.43	9	2,046.61
1/4	1/4	1/4	4,761.64	1/4	4,422.95	1/4	4,083.56	1/4	3,743.30	1/4	3,402.58	1/4	3,061.86	1/4	2,721.15	1/4	2,380.33	1/4	2,039.51
1/2	1/2	1/2	4,754.66	1/2	4,415.88	1/2	4,076.49	1/2	3,736.20	1/2	3,395.48	1/2	3,054.77	1/2	2,714.04	1/2	2,373.23	1/2	2,032.41
3/4	3/4	3/4	4,747.68	3/4	4,408.81	3/4	4,069.42	3/4	3,729.10	3/4	3,388.39	3/4	3,047.67	3/4	2,706.94	3/4	2,366.13	3/4	2,025.31
10		10	4,740.69	10	4,401.74	10	4,062.35	10	3,722.01	10	3,381.29	10	3,040.57	10	2,699.84	10	2,359.02	10	2,018.21
1/4	1/4	1/4	4,733.71	1/4	4,394.67	1/4	4,055.28	1/4	3,714.91	1/4	3,374.19	1/4	3,033.47	1/4	2,692.74	1/4	2,351.92	1/4	2,011.11
1/2	1/2	1/2	4,726.73	1/2	4,387.60	1/2	4,048.20	1/2	3,707.81	1/2	3,367.09	1/2	3,026.37	1/2	2,685.64	1/2	2,344.82	1/2	2,004.00
3/4	3/4	3/4	4,719.75	3/4	4,380.53	3/4	4,041.13	3/4	3,700.71	3/4	3,359.99	3/4	3,019.27	3/4	2,678.54	3/4	2,337.72	3/4	1,996.90
11		11	4,712.76	11	4,373.46	11	4,034.06	11	3,693.61	11	3,352.89	11	3,012.18	11	2,671.44	11	2,330.62	11	1,989.80
1/4	1/4	1/4	4,705.78	1/4	4,366.39	1/4	4,026.99	1/4	3,686.51	1/4	3,345.80	1/4	3,005.08	1/4	2,664.34	1/4	2,323.52	1/4	1,982.70
1/2	1/2	1/2	4,698.71	1/2	4,359.32	1/2	4,019.92	1/2	3,679.42	1/2	3,338.70	1/2	2,997.98	1/2	2,657.24	1/2	2,316.42	1/2	1,975.60
3/4	3/4	3/4	4,691.64	3/4	4,352.24	3/4	4,012.85	3/4	3,672.32	3/4	3,331.60	3/4	2,990.88	3/4	2,650.14	3/4	2,309.32	3/4	1,968.50

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 CLOSED GAUGING VALVE.  
 GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 36'-06" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

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# BARGE "HFL 457"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0	1,961.40	0	1,620.58	0	1,279.76	0	938.94	0	599.08	0	269.57	0		0		0		0	
1/4	1,954.30	1/4	1,613.48	1/4	1,272.66	1/4	931.84	1/4	592.04	1/4	263.09	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,947.20	1/2	1,606.38	1/2	1,265.56	1/2	924.74	1/2	584.99	1/2	256.70	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,940.10	3/4	1,599.28	3/4	1,258.46	3/4	917.64	3/4	577.94	3/4	250.30	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	1,933.00	1	1,592.18	1	1,251.36	1	910.54	1	570.89	1	243.91	1	1	1	1	1	1	1	1
1/4	1,925.90	1/4	1,585.08	1/4	1,244.26	1/4	903.44	1/4	563.84	1/4	237.51	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,918.80	1/2	1,577.98	1/2	1,237.16	1/2	896.34	1/2	556.79	1/2	231.20	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,911.70	3/4	1,570.88	3/4	1,230.06	3/4	889.24	3/4	549.75	3/4	224.89	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	1,904.60	2	1,563.78	2	1,222.96	2	882.14	2	542.70	2	218.58	2	2	2	2	2	2	2	2
1/4	1,897.50	1/4	1,556.68	1/4	1,215.86	1/4	875.04	1/4	535.65	1/4	212.26	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,890.40	1/2	1,549.58	1/2	1,208.76	1/2	867.94	1/2	528.60	1/2	206.04	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,883.30	3/4	1,542.48	3/4	1,201.66	3/4	860.84	3/4	521.55	3/4	199.81	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	1,876.20	3	1,535.38	3	1,194.56	3	853.74	3	514.51	3	193.58	3	3	3	3	3	3	3	3
1/4	1,869.10	1/4	1,528.28	1/4	1,187.46	1/4	846.64	1/4	507.46	1/4	187.35	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,862.00	1/2	1,521.18	1/2	1,180.36	1/2	839.54	1/2	500.41	1/2	181.20	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,854.90	3/4	1,514.08	3/4	1,173.26	3/4	832.44	3/4	493.36	3/4	175.06	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	1,847.80	4	1,506.98	4	1,166.16	4	825.34	4	486.31	4	168.91	4	4	4	4	4	4	4	4
1/4	1,840.70	1/4	1,499.88	1/4	1,159.06	1/4	818.24	1/4	479.26	1/4	162.77	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,833.60	1/2	1,492.78	1/2	1,151.96	1/2	811.14	1/2	472.26	1/2	156.71	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,826.49	3/4	1,485.68	3/4	1,144.86	3/4	804.04	3/4	465.25	3/4	150.65	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	1,819.39	5	1,478.58	5	1,137.76	5	796.94	5	458.24	5	144.59	5	5	5	5	5	5	5	5
1/4	1,812.29	1/4	1,471.47	1/4	1,130.66	1/4	789.84	1/4	451.24	1/4	138.53	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,805.19	1/2	1,464.37	1/2	1,123.56	1/2	782.74	1/2	444.31	1/2	132.56	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,798.09	3/4	1,457.27	3/4	1,116.45	3/4	775.64	3/4	437.39	3/4	126.60	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	1,790.99	6	1,450.17	6	1,109.35	6	768.54	6	430.47	6	120.63	6	6	6	6	6	6	6	6
1/4	1,783.89	1/4	1,443.07	1/4	1,102.25	1/4	761.43	1/4	423.54	1/4	114.66	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,776.79	1/2	1,435.97	1/2	1,095.15	1/2	754.36	1/2	416.65	1/2	108.79	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,769.69	3/4	1,428.87	3/4	1,088.05	3/4	747.29	3/4	409.76	3/4	102.92	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	1,762.59	7	1,421.77	7	1,080.95	7	740.22	7	402.86	7	97.05	7	7	7	7	7	7	7	7
1/4	1,755.49	1/4	1,414.67	1/4	1,073.85	1/4	733.15	1/4	395.97	1/4	91.18	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,748.39	1/2	1,407.57	1/2	1,066.75	1/2	726.07	1/2	389.16	1/2	85.42	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,741.29	3/4	1,400.47	3/4	1,059.65	3/4	719.00	3/4	382.35	3/4	79.65	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	1,734.19	8	1,393.37	8	1,052.55	8	711.93	8	375.54	8	73.89	8	8	8	8	8	8	8	8
1/4	1,727.09	1/4	1,386.27	1/4	1,045.45	1/4	704.86	1/4	368.73	1/4	68.12	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,719.99	1/2	1,379.17	1/2	1,038.35	1/2	697.80	1/2	362.01	1/2	62.48	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,712.89	3/4	1,372.07	3/4	1,031.25	3/4	690.75	3/4	355.28	3/4	56.84	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	1,705.79	9	1,364.97	9	1,024.15	9	683.69	9	348.55	9	51.20	9	9	9	9	9	9	9	9
1/4	1,698.69	1/4	1,357.87	1/4	1,017.05	1/4	676.64	1/4	341.82	1/4	45.55	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,691.59	1/2	1,350.77	1/2	1,009.95	1/2	669.58	1/2	335.18	1/2	40.80	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,684.49	3/4	1,343.67	3/4	1,002.85	3/4	662.53	3/4	328.54	3/4	36.04	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	1,677.39	10	1,336.57	10	995.75	10	655.48	10	321.89	10	31.29	10	10	10	10	10	10	10	10
1/4	1,670.29	1/4	1,329.47	1/4	988.65	1/4	648.42	1/4	315.25	1/4	26.53	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,663.19	1/2	1,322.37	1/2	981.55	1/2	641.37	1/2	308.69	1/2	23.63	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,656.09	3/4	1,315.27	3/4	974.45	3/4	634.32	3/4	302.13	3/4	20.72	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	1,648.98	11	1,308.17	11	967.35	11	627.28	11	295.57	11	17.82	11	11	11	11	11	11	11	11
1/4	1,641.88	1/4	1,301.07	1/4	960.25	1/4	620.23	1/4	289.01	1/4	14.92	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,634.78	1/2	1,293.96	1/2	953.15	1/2	613.18	1/2	282.53	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,627.68	3/4	1,286.86	3/4	946.05	3/4	606.13	3/4	276.05	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/09/2014 SW  
CALCULATED: 12/10/2014 CL  
PRINTED: 12/10/2014 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2014

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77588  
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# BARGE "HFL 457"

# 1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0	4,686.20	0	4,346.81	0	4,007.42	0	3,666.86	0	3,326.14	0	2,985.42	0	2,644.68	0	2,303.86
1/4	1/4	1/4	4,679.13	1/4	4,339.74	1/4	4,000.35	1/4	3,659.76	1/4	3,319.04	1/4	2,978.32	1/4	2,637.58	1/4	2,296.76		
1/2	1/2	1/2	4,672.06	1/2	4,332.67	1/2	3,993.28	1/2	3,652.66	1/2	3,311.94	1/2	2,971.22	1/2	2,630.48	1/2	2,289.66		
3/4	3/4	3/4	4,664.99	3/4	4,325.60	3/4	3,986.21	3/4	3,645.56	3/4	3,304.84	3/4	2,964.12	3/4	2,623.38	3/4	2,282.56		
1	1	1	4,657.92	1	4,318.53	1	3,979.13	1	3,638.46	1	3,297.74	1	2,957.03	1	2,616.28	1	2,275.46		
1/4	1/4	1/4	4,650.85	1/4	4,311.46	1/4	3,972.06	1/4	3,631.36	1/4	3,290.65	1/4	2,949.93	1/4	2,609.18	1/4	2,268.36		
1/2	1/2	1/2	4,643.78	1/2	4,304.39	1/2	3,964.97	1/2	3,624.27	1/2	3,283.55	1/2	2,942.83	1/2	2,602.08	1/2	2,261.26		
3/4	3/4	3/4	4,636.71	3/4	4,297.32	3/4	3,957.87	3/4	3,617.17	3/4	3,276.45	3/4	2,935.73	3/4	2,594.98	3/4	2,254.16		
2	2	2	4,629.64	2	4,290.25	2	3,950.78	2	3,610.07	2	3,269.35	2	2,928.63	2	2,587.87	2	2,247.06		
1/4	1/4	1/4	4,622.57	1/4	4,283.17	1/4	3,943.68	1/4	3,602.97	1/4	3,262.25	1/4	2,921.53	1/4	2,580.77	1/4	2,239.96		
1/2	1/2	1/2	4,615.50	1/2	4,276.10	1/2	3,936.58	1/2	3,595.87	1/2	3,255.16	1/2	2,914.44	1/2	2,573.67	1/2	2,232.85		
3/4	3/4	3/4	4,926.29	3/4	4,608.43	3/4	4,269.03	3/4	3,929.49	3/4	3,588.78	3/4	3,248.06	3/4	2,907.34	3/4	2,566.57	3/4	2,225.75
3	3	3	4,922.85	3	4,601.36	3	4,261.96	3	3,922.39	3	3,581.68	3	3,240.96	3	2,900.24	3	2,559.47	3	2,218.65
1/4	1/4	1/4	4,919.41	1/4	4,594.29	1/4	4,254.89	1/4	3,915.30	1/4	3,574.58	1/4	3,233.86	1/4	2,893.14	1/4	2,552.37	1/4	2,211.55
1/2	1/2	1/2	4,914.56	1/2	4,587.22	1/2	4,247.82	1/2	3,908.20	1/2	3,567.48	1/2	3,226.76	1/2	2,886.04	1/2	2,545.27	1/2	2,204.45
3/4	3/4	3/4	4,909.70	3/4	4,580.14	3/4	4,240.75	3/4	3,901.10	3/4	3,560.38	3/4	3,219.66	3/4	2,878.95	3/4	2,538.17	3/4	2,197.35
4	4	4	4,904.84	4	4,573.07	4	4,233.68	4	3,894.00	4	3,553.28	4	3,212.57	4	2,871.85	4	2,531.07	4	2,190.25
1/4	1/4	1/4	4,899.98	1/4	4,566.00	1/4	4,226.61	1/4	3,886.90	1/4	3,546.19	1/4	3,205.47	1/4	2,864.75	1/4	2,523.97	1/4	2,183.15
1/2	1/2	1/2	4,893.71	1/2	4,558.93	1/2	4,219.54	1/2	3,879.81	1/2	3,539.09	1/2	3,198.37	1/2	2,857.65	1/2	2,516.87	1/2	2,176.05
3/4	3/4	3/4	4,887.43	3/4	4,551.86	3/4	4,212.47	3/4	3,872.71	3/4	3,531.99	3/4	3,191.27	3/4	2,850.55	3/4	2,509.77	3/4	2,168.95
5	5	5	4,881.16	5	4,544.79	5	4,205.40	5	3,865.61	5	3,524.89	5	3,184.17	5	2,843.45	5	2,502.67	5	2,161.85
1/4	1/4	1/4	4,874.88	1/4	4,537.72	1/4	4,198.33	1/4	3,858.51	1/4	3,517.79	1/4	3,177.07	1/4	2,836.36	1/4	2,495.57	1/4	2,154.75
1/2	1/2	1/2	4,867.93	1/2	4,530.65	1/2	4,191.26	1/2	3,851.41	1/2	3,510.69	1/2	3,169.98	1/2	2,829.26	1/2	2,488.47	1/2	2,147.65
3/4	3/4	3/4	4,860.98	3/4	4,523.58	3/4	4,184.19	3/4	3,844.31	3/4	3,503.60	3/4	3,162.88	3/4	2,822.16	3/4	2,481.37	3/4	2,140.55
6	6	6	4,854.02	6	4,516.51	6	4,177.11	6	3,837.22	6	3,496.50	6	3,155.78	6	2,815.06	6	2,474.27	6	2,133.45
1/4	1/4	1/4	4,847.07	1/4	4,509.44	1/4	4,170.04	1/4	3,830.12	1/4	3,489.40	1/4	3,148.68	1/4	2,807.96	1/4	2,467.17	1/4	2,126.35
1/2	1/2	1/2	4,840.09	1/2	4,502.37	1/2	4,162.97	1/2	3,823.02	1/2	3,482.30	1/2	3,141.58	1/2	2,800.86	1/2	2,460.07	1/2	2,119.25
3/4	3/4	3/4	4,833.12	3/4	4,495.30	3/4	4,155.90	3/4	3,815.92	3/4	3,475.20	3/4	3,134.48	3/4	2,793.77	3/4	2,452.97	3/4	2,112.15
7	7	7	4,826.14	7	4,488.23	7	4,148.83	7	3,808.82	7	3,468.10	7	3,127.39	7	2,786.67	7	2,445.87	7	2,105.05
1/4	1/4	1/4	4,819.16	1/4	4,481.15	1/4	4,141.76	1/4	3,801.72	1/4	3,461.01	1/4	3,120.29	1/4	2,779.57	1/4	2,438.77	1/4	2,097.95
1/2	1/2	1/2	4,812.17	1/2	4,474.08	1/2	4,134.69	1/2	3,794.63	1/2	3,453.91	1/2	3,113.19	1/2	2,772.47	1/2	2,431.67	1/2	2,090.85
3/4	3/4	3/4	4,805.19	3/4	4,467.01	3/4	4,127.62	3/4	3,787.53	3/4	3,446.81	3/4	3,106.09	3/4	2,765.37	3/4	2,424.57	3/4	2,083.75
8	8	8	4,798.20	8	4,459.94	8	4,120.55	8	3,780.43	8	3,439.71	8	3,098.99	8	2,758.27	8	2,417.47	8	2,076.65
1/4	1/4	1/4	4,791.21	1/4	4,452.87	1/4	4,113.48	1/4	3,773.33	1/4	3,432.61	1/4	3,091.89	1/4	2,751.18	1/4	2,410.36	1/4	2,069.55
1/2	1/2	1/2	4,784.23	1/2	4,445.80	1/2	4,106.41	1/2	3,766.23	1/2	3,425.51	1/2	3,084.80	1/2	2,744.08	1/2	2,403.26	1/2	2,062.45
3/4	3/4	3/4	4,777.25	3/4	4,438.73	3/4	4,099.34	3/4	3,759.13	3/4	3,418.42	3/4	3,077.70	3/4	2,736.98	3/4	2,396.16	3/4	2,055.34
9	9	9	4,770.26	9	4,431.66	9	4,092.27	9	3,752.04	9	3,411.32	9	3,070.60	9	2,729.88	9	2,389.06	9	2,048.24
1/4	1/4	1/4	4,763.28	1/4	4,424.59	1/4	4,085.20	1/4	3,744.94	1/4	3,404.22	1/4	3,063.50	1/4	2,722.78	1/4	2,381.96	1/4	2,041.14
1/2	1/2	1/2	4,756.30	1/2	4,417.52	1/2	4,078.12	1/2	3,737.84	1/2	3,397.12	1/2	3,056.40	1/2	2,715.68	1/2	2,374.86	1/2	2,034.04
3/4	3/4	3/4	4,749.31	3/4	4,410.45	3/4	4,071.05	3/4	3,730.74	3/4	3,390.02	3/4	3,049.30	3/4	2,708.58	3/4	2,367.76	3/4	2,026.94
10	10	10	4,742.33	10	4,403.38	10	4,063.98	10	3,723.64	10	3,382.92	10	3,042.21	10	2,701.48	10	2,360.66	10	2,019.84
1/4	1/4	1/4	4,735.35	1/4	4,396.31	1/4	4,056.91	1/4	3,716.54	1/4	3,375.83	1/4	3,035.11	1/4	2,694.38	1/4	2,353.56	1/4	2,012.74
1/2	1/2	1/2	4,728.37	1/2	4,389.24	1/2	4,049.84	1/2	3,709.45	1/2	3,368.73	1/2	3,028.01	1/2	2,687.28	1/2	2,346.46	1/2	2,005.64
3/4	3/4	3/4	4,721.38	3/4	4,382.16	3/4	4,042.77	3/4	3,702.35	3/4	3,361.63	3/4	3,020.91	3/4	2,680.18	3/4	2,339.36	3/4	1,998.54
11	11	11	4,714.40	11	4,375.09	11	4,035.70	11	3,695.25	11	3,354.53	11	3,013.81	11	2,673.08	11	2,332.26	11	1,991.44
1/4	1/4	1/4	4,707.42	1/4	4,368.02	1/4	4,028.63	1/4	3,688.15	1/4	3,347.43	1/4	3,006.71	1/4	2,665.98	1/4	2,325.16	1/4	1,984.34
1/2	1/2	1/2	4,700.35	1/2	4,360.95	1/2	4,021.56	1/2	3,681.05	1/2	3,340.33	1/2	2,999.62	1/2	2,658.88	1/2	2,318.06	1/2	1,977.24
3/4	3/4	3/4	4,693.28	3/4	4,353.88	3/4	4,014.49	3/4	3,673.95	3/4	3,333.24	3/4	2,992.52	3/4	2,651.78	3/4	2,310.96	3/4	1,970.14

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 CLOSED GAUGING VALVE.  
 GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 36'-06" 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 457"

1 STBD  
ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0	1,963.04	0	1,622.22	0	1,281.40	0	940.58	0	599.97	0	269.57	0		0		0		0	
1/4	1,955.94	1/4	1,615.12	1/4	1,274.30	1/4	933.48	1/4	592.88	1/4	263.09	1/4		1/4		1/4		1/4	
1/2	1,948.84	1/2	1,608.02	1/2	1,267.20	1/2	926.38	1/2	585.80	1/2	256.70	1/2		1/2		1/2		1/2	
3/4	1,941.74	3/4	1,600.92	3/4	1,260.10	3/4	919.28	3/4	578.72	3/4	250.30	3/4		3/4		3/4		3/4	
1	1,934.64	1	1,593.82	1	1,253.00	1	912.18	1	571.63	1	243.91	1		1		1		1	
1/4	1,927.54	1/4	1,586.72	1/4	1,245.90	1/4	905.08	1/4	564.55	1/4	237.51	1/4		1/4		1/4		1/4	
1/2	1,920.44	1/2	1,579.62	1/2	1,238.80	1/2	897.98	1/2	557.47	1/2	231.20	1/2		1/2		1/2		1/2	
3/4	1,913.34	3/4	1,572.52	3/4	1,231.70	3/4	890.88	3/4	550.38	3/4	224.89	3/4		3/4		3/4		3/4	
2	1,906.24	2	1,565.42	2	1,224.60	2	883.78	2	543.30	2	218.58	2		2		2		2	
1/4	1,899.14	1/4	1,558.32	1/4	1,217.50	1/4	876.68	1/4	536.21	1/4	212.26	1/4		1/4		1/4		1/4	
1/2	1,892.04	1/2	1,551.22	1/2	1,210.40	1/2	869.58	1/2	529.13	1/2	206.04	1/2		1/2		1/2		1/2	
3/4	1,884.94	3/4	1,544.12	3/4	1,203.30	3/4	862.48	3/4	522.05	3/4	199.81	3/4		3/4		3/4		3/4	
3	1,877.83	3	1,537.02	3	1,196.20	3	855.38	3	514.96	3	193.58	3		3		3		3	
1/4	1,870.73	1/4	1,529.92	1/4	1,189.10	1/4	848.28	1/4	507.88	1/4	187.35	1/4		1/4		1/4		1/4	
1/2	1,863.63	1/2	1,522.81	1/2	1,182.00	1/2	841.18	1/2	500.80	1/2	181.20	1/2		1/2		1/2		1/2	
3/4	1,856.53	3/4	1,515.71	3/4	1,174.90	3/4	834.08	3/4	493.71	3/4	175.06	3/4		3/4		3/4		3/4	
4	1,849.43	4	1,508.61	4	1,167.79	4	826.98	4	486.63	4	168.91	4		4		4		4	
1/4	1,842.33	1/4	1,501.51	1/4	1,160.69	1/4	819.88	1/4	479.55	1/4	162.77	1/4		1/4		1/4		1/4	
1/2	1,835.23	1/2	1,494.41	1/2	1,153.59	1/2	812.77	1/2	472.50	1/2	156.71	1/2		1/2		1/2		1/2	
3/4	1,828.13	3/4	1,487.31	3/4	1,146.49	3/4	805.67	3/4	465.46	3/4	150.65	3/4		3/4		3/4		3/4	
5	1,821.03	5	1,480.21	5	1,139.39	5	798.57	5	458.42	5	144.59	5		5		5		5	
1/4	1,813.93	1/4	1,473.11	1/4	1,132.29	1/4	791.47	1/4	451.38	1/4	138.53	1/4		1/4		1/4		1/4	
1/2	1,806.83	1/2	1,466.01	1/2	1,125.19	1/2	784.37	1/2	444.42	1/2	132.56	1/2		1/2		1/2		1/2	
3/4	1,799.73	3/4	1,458.91	3/4	1,118.09	3/4	777.27	3/4	437.46	3/4	126.60	3/4		3/4		3/4		3/4	
6	1,792.63	6	1,451.81	6	1,110.99	6	770.17	6	430.50	6	120.63	6		6		6		6	
1/4	1,785.53	1/4	1,444.71	1/4	1,103.89	1/4	763.07	1/4	423.54	1/4	114.66	1/4		1/4		1/4		1/4	
1/2	1,778.43	1/2	1,437.61	1/2	1,096.79	1/2	755.97	1/2	416.65	1/2	108.79	1/2		1/2		1/2		1/2	
3/4	1,771.33	3/4	1,430.51	3/4	1,089.69	3/4	748.87	3/4	409.76	3/4	102.92	3/4		3/4		3/4		3/4	
7	1,764.23	7	1,423.41	7	1,082.59	7	741.77	7	402.86	7	97.05	7		7		7		7	
1/4	1,757.13	1/4	1,416.31	1/4	1,075.49	1/4	734.67	1/4	395.97	1/4	91.18	1/4		1/4		1/4		1/4	
1/2	1,750.03	1/2	1,409.21	1/2	1,068.39	1/2	727.57	1/2	389.16	1/2	85.42	1/2		1/2		1/2		1/2	
3/4	1,742.93	3/4	1,402.11	3/4	1,061.29	3/4	720.47	3/4	382.35	3/4	79.65	3/4		3/4		3/4		3/4	
8	1,735.83	8	1,395.01	8	1,054.19	8	713.37	8	375.54	8	73.89	8		8		8		8	
1/4	1,728.73	1/4	1,387.91	1/4	1,047.09	1/4	706.27	1/4	368.73	1/4	68.12	1/4		1/4		1/4		1/4	
1/2	1,721.63	1/2	1,380.81	1/2	1,039.99	1/2	699.18	1/2	362.01	1/2	62.48	1/2		1/2		1/2		1/2	
3/4	1,714.53	3/4	1,373.71	3/4	1,032.89	3/4	692.09	3/4	355.28	3/4	56.84	3/4		3/4		3/4		3/4	
9	1,707.43	9	1,366.61	9	1,025.79	9	685.00	9	348.55	9	51.20	9		9		9		9	
1/4	1,700.32	1/4	1,359.51	1/4	1,018.69	1/4	677.91	1/4	341.82	1/4	45.55	1/4		1/4		1/4		1/4	
1/2	1,693.22	1/2	1,352.41	1/2	1,011.59	1/2	670.82	1/2	335.18	1/2	40.80	1/2		1/2		1/2		1/2	
3/4	1,686.12	3/4	1,345.30	3/4	1,004.49	3/4	663.73	3/4	328.54	3/4	36.04	3/4		3/4		3/4		3/4	
10	1,679.02	10	1,338.20	10	997.39	10	656.64	10	321.89	10	31.29	10		10		10		10	
1/4	1,671.92	1/4	1,331.10	1/4	990.28	1/4	649.55	1/4	315.25	1/4	26.53	1/4		1/4		1/4		1/4	
1/2	1,664.82	1/2	1,324.00	1/2	983.18	1/2	642.47	1/2	308.69	1/2	23.63	1/2		1/2		1/2		1/2	
3/4	1,657.72	3/4	1,316.90	3/4	976.08	3/4	635.38	3/4	302.13	3/4	20.72	3/4		3/4		3/4		3/4	
11	1,650.62	11	1,309.80	11	968.98	11	628.30	11	295.57	11	17.82	11		11		11		11	
1/4	1,643.52	1/4	1,302.70	1/4	961.88	1/4	621.22	1/4	289.01	1/4	14.92	1/4		1/4		1/4		1/4	
1/2	1,636.42	1/2	1,295.60	1/2	954.78	1/2	614.13	1/2	282.53	1/2		1/2		1/2		1/2		1/2	
3/4	1,629.32	3/4	1,288.50	3/4	947.68	3/4	607.05	3/4	276.05	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/09/2014 SW  
CALCULATED: 12/10/2014 CL  
PRINTED: 12/10/2014 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2014

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



# BARGE "HFL 457"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004

GAUGE HEIGHT 15'-11 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0	4,954.12	0	4,598.81	0	4,243.50	0	3,887.02	0	3,530.39	0	3,173.76	0	2,817.11	0	2,460.37
1/4		1/4		1/4	4,946.72	1/4	4,591.41	1/4	4,236.10	1/4	3,879.59	1/4	3,522.96	1/4	3,166.33	1/4	2,809.68	1/4	2,452.94
1/2		1/2		1/2	4,939.32	1/2	4,584.01	1/2	4,228.70	1/2	3,872.16	1/2	3,515.53	1/2	3,158.90	1/2	2,802.24	1/2	2,445.51
3/4		3/4		3/4	4,931.92	3/4	4,576.61	3/4	4,221.30	3/4	3,864.73	3/4	3,508.10	3/4	3,151.47	3/4	2,794.81	3/4	2,438.08
1		1		1	4,924.51	1	4,569.20	1	4,213.89	1	3,857.30	1	3,500.67	1	3,144.04	1	2,787.38	1	2,430.64
1/4		1/4		1/4	4,917.11	1/4	4,561.80	1/4	4,206.49	1/4	3,849.87	1/4	3,493.24	1/4	3,136.61	1/4	2,779.95	1/4	2,423.21
1/2		1/2		1/2	4,909.71	1/2	4,554.40	1/2	4,199.06	1/2	3,842.44	1/2	3,485.81	1/2	3,129.18	1/2	2,772.52	1/2	2,415.78
3/4		3/4		3/4	4,902.31	3/4	4,547.00	3/4	4,191.63	3/4	3,835.01	3/4	3,478.38	3/4	3,121.75	3/4	2,765.08	3/4	2,408.35
2		2		2	4,894.91	2	4,539.59	2	4,184.21	2	3,827.58	2	3,470.95	2	3,114.32	2	2,757.65	2	2,400.92
1/4		1/4		1/4	4,887.50	1/4	4,532.19	1/4	4,176.78	1/4	3,820.15	1/4	3,463.52	1/4	3,106.89	1/4	2,750.22	1/4	2,393.48
1/2		1/2		1/2	4,880.10	1/2	4,524.79	1/2	4,169.35	1/2	3,812.72	1/2	3,456.09	1/2	3,099.46	1/2	2,742.79	1/2	2,386.05
3/4		3/4	5,205.59	3/4	4,872.70	3/4	4,517.39	3/4	4,161.92	3/4	3,805.29	3/4	3,448.66	3/4	3,092.03	3/4	2,735.36	3/4	2,378.62
3		3	5,201.99	3	4,865.30	3	4,509.99	3	4,154.49	3	3,797.87	3	3,441.23	3	3,084.60	3	2,727.92	3	2,371.19
1/4		1/4	5,198.38	1/4	4,857.89	1/4	4,502.58	1/4	4,147.07	1/4	3,790.44	1/4	3,433.80	1/4	3,077.17	1/4	2,720.49	1/4	2,363.76
1/2		1/2	5,193.30	1/2	4,850.49	1/2	4,495.18	1/2	4,139.64	1/2	3,783.01	1/2	3,426.38	1/2	3,069.74	1/2	2,713.06	1/2	2,356.32
3/4		3/4	5,188.21	3/4	4,843.09	3/4	4,487.78	3/4	4,132.21	3/4	3,775.58	3/4	3,418.95	3/4	3,062.31	3/4	2,705.63	3/4	2,348.89
4		4	5,183.12	4	4,835.69	4	4,480.38	4	4,124.78	4	3,768.15	4	3,411.52	4	3,054.89	4	2,698.20	4	2,341.46
1/4		1/4	5,178.03	1/4	4,828.28	1/4	4,472.97	1/4	4,117.35	1/4	3,760.72	1/4	3,404.09	1/4	3,047.46	1/4	2,690.76	1/4	2,334.03
1/2		1/2	5,171.45	1/2	4,820.88	1/2	4,465.57	1/2	4,109.92	1/2	3,753.29	1/2	3,396.66	1/2	3,040.03	1/2	2,683.33	1/2	2,326.60
3/4		3/4	5,164.88	3/4	4,813.48	3/4	4,458.17	3/4	4,102.49	3/4	3,745.86	3/4	3,389.23	3/4	3,032.60	3/4	2,675.90	3/4	2,319.16
5		5	5,158.31	5	4,806.08	5	4,450.77	5	4,095.06	5	3,738.43	5	3,381.80	5	3,025.17	5	2,668.47	5	2,311.73
1/4		1/4	5,151.73	1/4	4,798.68	1/4	4,443.36	1/4	4,087.63	1/4	3,731.00	1/4	3,374.37	1/4	3,017.74	1/4	2,661.04	1/4	2,304.30
1/2		1/2	5,144.45	1/2	4,791.27	1/2	4,435.96	1/2	4,080.20	1/2	3,723.57	1/2	3,366.94	1/2	3,010.31	1/2	2,653.60	1/2	2,296.87
3/4		3/4	5,137.17	3/4	4,783.87	3/4	4,428.56	3/4	4,072.77	3/4	3,716.14	3/4	3,359.51	3/4	3,002.88	3/4	2,646.17	3/4	2,289.44
6		6	5,129.88	6	4,776.47	6	4,421.16	6	4,065.34	6	3,708.71	6	3,352.08	6	2,995.45	6	2,638.74	6	2,282.00
1/4		1/4	5,122.60	1/4	4,769.07	1/4	4,413.76	1/4	4,057.91	1/4	3,701.28	1/4	3,344.65	1/4	2,988.02	1/4	2,631.31	1/4	2,274.57
1/2		1/2	5,115.29	1/2	4,761.66	1/2	4,406.35	1/2	4,050.48	1/2	3,693.85	1/2	3,337.22	1/2	2,980.59	1/2	2,623.88	1/2	2,267.14
3/4		3/4	5,107.98	3/4	4,754.26	3/4	4,398.95	3/4	4,043.05	3/4	3,686.42	3/4	3,329.79	3/4	2,973.16	3/4	2,616.44	3/4	2,259.71
7		7	5,100.68	7	4,746.86	7	4,391.55	7	4,035.62	7	3,678.99	7	3,322.36	7	2,965.73	7	2,609.01	7	2,252.28
1/4		1/4	5,093.37	1/4	4,739.46	1/4	4,384.15	1/4	4,028.19	1/4	3,671.56	1/4	3,314.93	1/4	2,958.30	1/4	2,601.58	1/4	2,244.84
1/2		1/2	5,086.05	1/2	4,732.05	1/2	4,376.74	1/2	4,020.76	1/2	3,664.13	1/2	3,307.50	1/2	2,950.87	1/2	2,594.15	1/2	2,237.41
3/4		3/4	5,078.74	3/4	4,724.65	3/4	4,369.34	3/4	4,013.33	3/4	3,656.70	3/4	3,300.07	3/4	2,943.44	3/4	2,586.72	3/4	2,229.98
8		8	5,071.42	8	4,717.25	8	4,361.94	8	4,005.90	8	3,649.27	8	3,292.64	8	2,936.01	8	2,579.28	8	2,222.55
1/4		1/4	5,064.10	1/4	4,709.85	1/4	4,354.54	1/4	3,998.47	1/4	3,641.84	1/4	3,285.21	1/4	2,928.58	1/4	2,571.85	1/4	2,215.12
1/2		1/2	5,056.79	1/2	4,702.45	1/2	4,347.14	1/2	3,991.04	1/2	3,634.41	1/2	3,277.78	1/2	2,921.15	1/2	2,564.42	1/2	2,207.68
3/4		3/4	5,049.47	3/4	4,695.04	3/4	4,339.73	3/4	3,983.61	3/4	3,626.98	3/4	3,270.35	3/4	2,913.72	3/4	2,556.99	3/4	2,200.25
9		9	5,042.16	9	4,687.64	9	4,332.33	9	3,976.18	9	3,619.55	9	3,262.92	9	2,906.29	9	2,549.56	9	2,192.82
1/4		1/4	5,034.84	1/4	4,680.24	1/4	4,324.93	1/4	3,968.75	1/4	3,612.12	1/4	3,255.49	1/4	2,898.86	1/4	2,542.12	1/4	2,185.39
1/2		1/2	5,027.53	1/2	4,672.84	1/2	4,317.53	1/2	3,961.32	1/2	3,604.69	1/2	3,248.06	1/2	2,891.43	1/2	2,534.69	1/2	2,177.96
3/4		3/4	5,020.22	3/4	4,665.43	3/4	4,310.12	3/4	3,953.89	3/4	3,597.26	3/4	3,240.63	3/4	2,884.00	3/4	2,527.26	3/4	2,170.52
10		10	5,012.90	10	4,658.03	10	4,302.72	10	3,946.46	10	3,589.83	10	3,233.20	10	2,876.56	10	2,519.83	10	2,163.09
1/4		1/4	5,005.59	1/4	4,650.63	1/4	4,295.32	1/4	3,939.03	1/4	3,582.40	1/4	3,225.77	1/4	2,869.13	1/4	2,512.40	1/4	2,155.66
1/2		1/2	4,998.27	1/2	4,643.23	1/2	4,287.92	1/2	3,931.60	1/2	3,574.97	1/2	3,218.34	1/2	2,861.70	1/2	2,504.96	1/2	2,148.23
3/4		3/4	4,990.96	3/4	4,635.82	3/4	4,280.51	3/4	3,924.17	3/4	3,567.54	3/4	3,210.91	3/4	2,854.27	3/4	2,497.53	3/4	2,140.80
11		11	4,983.64	11	4,628.42	11	4,273.11	11	3,916.74	11	3,560.11	11	3,203.48	11	2,846.84	11	2,490.10	11	2,133.36
1/4		1/4	4,976.33	1/4	4,621.02	1/4	4,265.71	1/4	3,909.31	1/4	3,552.68	1/4	3,196.05	1/4	2,839.40	1/4	2,482.67	1/4	2,125.93
1/2		1/2	4,968.93	1/2	4,613.62	1/2	4,258.31	1/2	3,901.88	1/2	3,545.25	1/2	3,188.62	1/2	2,831.97	1/2	2,475.24	1/2	2,118.50
3/4		3/4	4,961.53	3/4	4,606.22	3/4	4,250.91	3/4	3,894.45	3/4	3,537.82	3/4	3,181.19	3/4	2,824.54	3/4	2,467.80	3/4	2,111.07

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 CLOSED GAUGING VALVE.

GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 36'-06" 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 457"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004

GAUGE HEIGHT 15'-11 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0	2,103.64	0	1,746.90	0	1,390.16	0	1,033.43	0	683.46	0	334.36	0		0		0		0	
1/4	2,096.20	1/4	1,739.47	1/4	1,382.73	1/4	1,026.00	1/4	676.34	1/4	326.93	1/4		1/4		1/4		1/4	
1/2	2,088.77	1/2	1,732.04	1/2	1,375.30	1/2	1,018.56	1/2	669.21	1/2	319.49	1/2		1/2		1/2		1/2	
3/4	2,081.34	3/4	1,724.60	3/4	1,367.87	3/4	1,011.13	3/4	662.08	3/4	312.06	3/4		3/4		3/4		3/4	
1	2,073.91	1	1,717.17	1	1,360.44	1	1,003.70	1	654.95	1	304.63	1		1		1		1	
1/4	2,066.48	1/4	1,709.74	1/4	1,353.00	1/4	996.27	1/4	647.83	1/4	297.20	1/4		1/4		1/4		1/4	
1/2	2,059.04	1/2	1,702.31	1/2	1,345.57	1/2	988.84	1/2	640.70	1/2	289.77	1/2		1/2		1/2		1/2	
3/4	2,051.61	3/4	1,694.88	3/4	1,338.14	3/4	981.40	3/4	633.57	3/4	282.34	3/4		3/4		3/4		3/4	
2	2,044.18	2	1,687.44	2	1,330.71	2	973.97	2	626.45	2	274.90	2		2		2		2	
1/4	2,036.75	1/4	1,680.01	1/4	1,323.28	1/4	966.54	1/4	619.32	1/4	267.47	1/4		1/4		1/4		1/4	
1/2	2,029.32	1/2	1,672.58	1/2	1,315.84	1/2	959.11	1/2	612.19	1/2	260.04	1/2		1/2		1/2		1/2	
3/4	2,021.88	3/4	1,665.15	3/4	1,308.41	3/4	951.68	3/4	605.07	3/4	252.61	3/4		3/4		3/4		3/4	
3	2,014.45	3	1,657.72	3	1,300.98	3	944.24	3	597.94	3	245.18	3		3		3		3	
1/4	2,007.02	1/4	1,650.28	1/4	1,293.55	1/4	936.81	1/4	590.81	1/4	237.74	1/4		1/4		1/4		1/4	
1/2	1,999.59	1/2	1,642.85	1/2	1,286.12	1/2	929.38	1/2	583.69	1/2	230.31	1/2		1/2		1/2		1/2	
3/4	1,992.16	3/4	1,635.42	3/4	1,278.68	3/4	921.95	3/4	576.56	3/4	222.88	3/4		3/4		3/4		3/4	
4	1,984.72	4	1,627.99	4	1,271.25	4	914.52	4	569.43	4	215.45	4		4		4		4	
1/4	1,977.29	1/4	1,620.56	1/4	1,263.82	1/4	907.08	1/4	562.30	1/4	208.02	1/4		1/4		1/4		1/4	
1/2	1,969.86	1/2	1,613.12	1/2	1,256.39	1/2	899.65	1/2	555.18	1/2	200.59	1/2		1/2		1/2		1/2	
3/4	1,962.43	3/4	1,605.69	3/4	1,248.96	3/4	892.22	3/4	548.05	3/4	193.17	3/4		3/4		3/4		3/4	
5	1,955.00	5	1,598.26	5	1,241.52	5	884.79	5	540.92	5	185.74	5		5		5		5	
1/4	1,947.56	1/4	1,590.83	1/4	1,234.09	1/4	877.36	1/4	533.80	1/4	178.31	1/4		1/4		1/4		1/4	
1/2	1,940.13	1/2	1,583.40	1/2	1,226.66	1/2	869.92	1/2	526.67	1/2	170.89	1/2		1/2		1/2		1/2	
3/4	1,932.70	3/4	1,575.96	3/4	1,219.23	3/4	862.49	3/4	519.54	3/4	163.48	3/4		3/4		3/4		3/4	
6	1,925.27	6	1,568.53	6	1,211.80	6	855.06	6	512.42	6	156.06	6		6		6		6	
1/4	1,917.84	1/4	1,561.10	1/4	1,204.36	1/4	847.63	1/4	505.29	1/4	148.64	1/4		1/4		1/4		1/4	
1/2	1,910.40	1/2	1,553.67	1/2	1,196.93	1/2	840.48	1/2	497.86	1/2	141.24	1/2		1/2		1/2		1/2	
3/4	1,902.97	3/4	1,546.24	3/4	1,189.50	3/4	833.33	3/4	490.43	3/4	133.83	3/4		3/4		3/4		3/4	
7	1,895.54	7	1,538.80	7	1,182.07	7	826.17	7	482.99	7	126.43	7		7		7		7	
1/4	1,888.11	1/4	1,531.37	1/4	1,174.64	1/4	819.02	1/4	475.56	1/4	119.03	1/4		1/4		1/4		1/4	
1/2	1,880.68	1/2	1,523.94	1/2	1,167.20	1/2	811.87	1/2	468.13	1/2	111.65	1/2		1/2		1/2		1/2	
3/4	1,873.24	3/4	1,516.51	3/4	1,159.77	3/4	804.72	3/4	460.70	3/4	104.27	3/4		3/4		3/4		3/4	
8	1,865.81	8	1,509.08	8	1,152.34	8	797.57	8	453.27	8	96.89	8		8		8		8	
1/4	1,858.38	1/4	1,501.64	1/4	1,144.91	1/4	790.42	1/4	445.84	1/4	89.51	1/4		1/4		1/4		1/4	
1/2	1,850.95	1/2	1,494.21	1/2	1,137.48	1/2	783.29	1/2	438.40	1/2	82.17	1/2		1/2		1/2		1/2	
3/4	1,843.52	3/4	1,486.78	3/4	1,130.04	3/4	776.15	3/4	430.97	3/4	74.83	3/4		3/4		3/4		3/4	
9	1,836.08	9	1,479.35	9	1,122.61	9	769.02	9	423.54	9	67.49	9		9		9		9	
1/4	1,828.65	1/4	1,471.92	1/4	1,115.18	1/4	761.88	1/4	416.11	1/4	60.15	1/4		1/4		1/4		1/4	
1/2	1,821.22	1/2	1,464.48	1/2	1,107.75	1/2	754.75	1/2	408.68	1/2	53.65	1/2		1/2		1/2		1/2	
3/4	1,813.79	3/4	1,457.05	3/4	1,100.32	3/4	747.62	3/4	401.24	3/4	47.16	3/4		3/4		3/4		3/4	
10	1,806.36	10	1,449.62	10	1,092.88	10	740.48	10	393.81	10	40.66	10		10		10		10	
1/4	1,798.92	1/4	1,442.19	1/4	1,085.45	1/4	733.35	1/4	386.38	1/4	34.16	1/4		1/4		1/4		1/4	
1/2	1,791.49	1/2	1,434.76	1/2	1,078.02	1/2	726.22	1/2	378.95	1/2	29.52	1/2		1/2		1/2		1/2	
3/4	1,784.06	3/4	1,427.32	3/4	1,070.59	3/4	719.10	3/4	371.52	3/4	24.87	3/4		3/4		3/4		3/4	
11	1,776.63	11	1,419.89	11	1,063.16	11	711.97	11	364.09	11	20.23	11		11		11		11	
1/4	1,769.20	1/4	1,412.46	1/4	1,055.72	1/4	704.84	1/4	356.65	1/4	15.58	1/4		1/4		1/4		1/4	
1/2	1,761.76	1/2	1,405.03	1/2	1,048.29	1/2	697.72	1/2	349.22	1/2		1/2		1/2		1/2		1/2	
3/4	1,754.33	3/4	1,397.60	3/4	1,040.86	3/4	690.59	3/4	341.79	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/09/2014 SW  
CALCULATED: 12/10/2014 CL  
PRINTED: 12/10/2014 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2014

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77588  
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# BARGE "HFL 457"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/2"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT		
0		0		0	4,975.90	0	4,620.55	0	4,265.19	0	3,908.70	0	3,552.02	0	3,195.35	0	2,838.65	0	2,481.87		
1/4	1/4	1/4		1/4	4,968.50	1/4	4,613.14	1/4	4,257.79	1/4	3,901.27	1/4	3,544.59	1/4	3,187.92	1/4	2,831.22	1/4	2,474.44		
1/2	1/2	1/2		1/2	4,961.09	1/2	4,605.74	1/2	4,250.39	1/2	3,893.83	1/2	3,537.16	1/2	3,180.49	1/2	2,823.79	1/2	2,467.01		
3/4	3/4	3/4		3/4	4,953.69	3/4	4,598.34	3/4	4,242.98	3/4	3,886.40	3/4	3,529.73	3/4	3,173.06	3/4	2,816.35	3/4	2,459.58		
1		1		1	4,946.29	1	4,590.93	1	4,235.58	1	3,878.97	1	3,522.30	1	3,165.63	1	2,808.92	1	2,452.14		
1/4	1/4	1/4		1/4	4,938.88	1/4	4,583.53	1/4	4,228.18	1/4	3,871.54	1/4	3,514.87	1/4	3,158.20	1/4	2,801.49	1/4	2,444.71		
1/2	1/2	1/2		1/2	4,931.48	1/2	4,576.13	1/2	4,220.77	1/2	3,864.11	1/2	3,507.44	1/2	3,150.76	1/2	2,794.06	1/2	2,437.28		
3/4	3/4	3/4		3/4	4,924.08	3/4	4,568.72	3/4	4,213.34	3/4	3,856.68	3/4	3,500.01	3/4	3,143.33	3/4	2,786.62	3/4	2,429.84		
2		2		2	4,916.67	2	4,561.32	2	4,205.91	2	3,849.25	2	3,492.58	2	3,135.90	2	2,779.19	2	2,422.41		
1/4	1/4	1/4		1/4	4,909.27	1/4	4,553.92	1/4	4,198.49	1/4	3,841.82	1/4	3,485.15	1/4	3,128.47	1/4	2,771.76	1/4	2,414.98		
1/2	1/2	1/2		1/2	4,901.87	1/2	4,546.51	1/2	4,191.06	1/2	3,834.39	1/2	3,477.72	1/2	3,121.04	1/2	2,764.32	1/2	2,407.55		
3/4	3/4	3/4		3/4	4,894.46	3/4	4,539.11	3/4	4,183.63	3/4	3,826.96	3/4	3,470.28	3/4	3,113.61	3/4	2,756.89	3/4	2,400.11		
3		3	5,220.00	3	4,887.06	3	4,531.71	3	4,176.20	3	3,819.53	3	3,462.85	3	3,106.18	3	2,749.46	3	2,392.68		
1/4	1/4	1/4		1/4	4,879.66	1/4	4,524.30	1/4	4,168.77	1/4	3,812.10	1/4	3,455.42	1/4	3,098.75	1/4	2,742.03	1/4	2,385.25		
1/2	1/2	1/2		1/2	4,872.25	1/2	4,516.90	1/2	4,161.34	1/2	3,804.67	1/2	3,447.99	1/2	3,091.32	1/2	2,734.59	1/2	2,377.81		
3/4	3/4	3/4		3/4	4,864.85	3/4	4,509.50	3/4	4,153.91	3/4	3,797.24	3/4	3,440.56	3/4	3,083.89	3/4	2,727.16	3/4	2,370.38		
4		4	5,202.61	4	4,857.45	4	4,502.09	4	4,146.48	4	3,789.81	4	3,433.13	4	3,076.46	4	2,719.73	4	2,362.95		
1/4	1/4	1/4		1/4	4,850.04	1/4	4,494.69	1/4	4,139.05	1/4	3,782.37	1/4	3,425.70	1/4	3,069.03	1/4	2,712.29	1/4	2,355.51		
1/2	1/2	1/2		1/2	4,842.64	1/2	4,487.29	1/2	4,131.62	1/2	3,774.94	1/2	3,418.27	1/2	3,061.60	1/2	2,704.86	1/2	2,348.08		
3/4	3/4	3/4		3/4	4,835.24	3/4	4,479.88	3/4	4,124.19	3/4	3,767.51	3/4	3,410.84	3/4	3,054.17	3/4	2,697.43	3/4	2,340.65		
5		5	5,179.28	5	4,827.84	5	4,472.48	5	4,116.76	5	3,760.08	5	3,403.41	5	3,046.74	5	2,690.00	5	2,333.22		
1/4	1/4	1/4		1/4	4,820.43	1/4	4,465.08	1/4	4,109.33	1/4	3,752.65	1/4	3,395.98	1/4	3,039.30	1/4	2,682.56	1/4	2,325.78		
1/2	1/2	1/2		1/2	4,813.03	1/2	4,457.68	1/2	4,101.89	1/2	3,745.22	1/2	3,388.55	1/2	3,031.87	1/2	2,675.13	1/2	2,318.35		
3/4	3/4	3/4		3/4	4,805.63	3/4	4,450.27	3/4	4,094.46	3/4	3,737.79	3/4	3,381.12	3/4	3,024.44	3/4	2,667.70	3/4	2,310.92		
6		6	5,151.57	6	4,798.22	6	4,442.87	6	4,087.03	6	3,730.36	6	3,373.69	6	3,017.01	6	2,660.26	6	2,303.48		
1/4	1/4	1/4		1/4	4,790.82	1/4	4,435.47	1/4	4,079.60	1/4	3,722.93	1/4	3,366.26	1/4	3,009.58	1/4	2,652.83	1/4	2,296.05		
1/2	1/2	1/2		1/2	4,783.42	1/2	4,428.06	1/2	4,072.17	1/2	3,715.50	1/2	3,358.82	1/2	3,002.15	1/2	2,645.40	1/2	2,288.62		
3/4	3/4	3/4		3/4	4,776.01	3/4	4,420.66	3/4	4,064.74	3/4	3,708.07	3/4	3,351.39	3/4	2,994.72	3/4	2,637.97	3/4	2,281.19		
7		7	5,122.38	7	4,768.61	7	4,413.26	7	4,057.31	7	3,700.64	7	3,343.96	7	2,987.29	7	2,630.53	7	2,273.75		
1/4	1/4	1/4		1/4	4,761.21	1/4	4,405.85	1/4	4,049.88	1/4	3,693.21	1/4	3,336.53	1/4	2,979.86	1/4	2,623.10	1/4	2,266.32		
1/2	1/2	1/2		1/2	4,753.80	1/2	4,398.45	1/2	4,042.45	1/2	3,685.78	1/2	3,329.10	1/2	2,972.43	1/2	2,615.67	1/2	2,258.89		
3/4	3/4	3/4		3/4	4,746.40	3/4	4,391.05	3/4	4,035.02	3/4	3,678.34	3/4	3,321.67	3/4	2,965.00	3/4	2,608.23	3/4	2,251.45		
8		8	5,093.12	8	4,739.00	8	4,383.64	8	4,027.59	8	3,670.91	8	3,314.24	8	2,957.57	8	2,600.80	8	2,244.02		
1/4	1/4	1/4		1/4	4,731.59	1/4	4,376.24	1/4	4,020.16	1/4	3,663.48	1/4	3,306.81	1/4	2,950.14	1/4	2,593.37	1/4	2,236.59		
1/2	1/2	1/2		1/2	4,724.19	1/2	4,368.84	1/2	4,012.73	1/2	3,656.05	1/2	3,299.38	1/2	2,942.71	1/2	2,585.93	1/2	2,229.16		
3/4	3/4	3/4		3/4	4,716.79	3/4	4,361.43	3/4	4,005.30	3/4	3,648.62	3/4	3,291.95	3/4	2,935.27	3/4	2,578.50	3/4	2,221.72		
9		9	5,063.86	9	4,709.38	9	4,354.03	9	3,997.86	9	3,641.19	9	3,284.52	9	2,927.84	9	2,571.07	9	2,214.29		
1/4	1/4	1/4		1/4	4,701.98	1/4	4,346.63	1/4	3,990.43	1/4	3,633.76	1/4	3,277.09	1/4	2,920.41	1/4	2,563.64	1/4	2,206.86		
1/2	1/2	1/2		1/2	4,694.58	1/2	4,339.22	1/2	3,983.00	1/2	3,626.33	1/2	3,269.66	1/2	2,912.98	1/2	2,556.20	1/2	2,199.42		
3/4	3/4	3/4		3/4	4,687.17	3/4	4,331.82	3/4	3,975.57	3/4	3,618.90	3/4	3,262.23	3/4	2,905.55	3/4	2,548.77	3/4	2,191.99		
10		10	5,034.60	10	4,679.77	10	4,324.42	10	3,968.14	10	3,611.47	10	3,254.79	10	2,898.12	10	2,541.34	10	2,184.56		
1/4	1/4	1/4		1/4	4,672.37	1/4	4,317.01	1/4	3,960.71	1/4	3,604.04	1/4	3,247.36	1/4	2,890.68	1/4	2,533.90	1/4	2,177.13		
1/2	1/2	1/2		1/2	4,664.96	1/2	4,309.61	1/2	3,953.28	1/2	3,596.61	1/2	3,239.93	1/2	2,883.25	1/2	2,526.47	1/2	2,169.69		
3/4	3/4	3/4		3/4	4,657.56	3/4	4,302.21	3/4	3,945.85	3/4	3,589.18	3/4	3,232.50	3/4	2,875.82	3/4	2,519.04	3/4	2,162.26		
11		11	5,005.34	11	4,650.16	11	4,294.80	11	3,938.42	11	3,581.75	11	3,225.07	11	2,868.39	11	2,511.61	11	2,154.83		
1/4	1/4	1/4		1/4	4,642.76	1/4	4,287.40	1/4	3,930.99	1/4	3,574.31	1/4	3,217.64	1/4	2,860.95	1/4	2,504.17	1/4	2,147.39		
1/2	1/2	1/2		1/2	4,990.71	1/2	4,635.35	1/2	4,280.00	1/2	3,923.56	1/2	3,566.88	1/2	3,210.21	1/2	2,853.52	1/2	2,496.74	1/2	2,139.96
3/4	3/4	3/4		3/4	4,983.30	3/4	4,627.95	3/4	4,272.60	3/4	3,916.13	3/4	3,559.45	3/4	3,202.78	3/4	2,846.09	3/4	2,489.31	3/4	2,132.53

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 CLOSED GAUGING VALVE.  
 GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 36'-06" 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 457"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/2"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0	2,125.10	0	1,768.32	0	1,411.54	0	1,054.76	0	698.16	0	341.83	0		0		0		0	
1/4	2,117.66	1/4	1,760.88	1/4	1,404.10	1/4	1,047.32	1/4	690.75	1/4	334.40	1/4		1/4		1/4		1/4	
1/2	2,110.23	1/2	1,753.45	1/2	1,396.67	1/2	1,039.89	1/2	683.33	1/2	326.97	1/2		1/2		1/2		1/2	
3/4	2,102.80	3/4	1,746.02	3/4	1,389.24	3/4	1,032.46	3/4	675.92	3/4	319.53	3/4		3/4		3/4		3/4	
1	2,095.36	1	1,738.58	1	1,381.81	1	1,025.03	1	668.50	1	312.10	1		1		1		1	
1/4	2,087.93	1/4	1,731.15	1/4	1,374.37	1/4	1,017.59	1/4	661.08	1/4	304.67	1/4		1/4		1/4		1/4	
1/2	2,080.50	1/2	1,723.72	1/2	1,366.94	1/2	1,010.16	1/2	653.67	1/2	297.24	1/2		1/2		1/2		1/2	
3/4	2,073.06	3/4	1,716.29	3/4	1,359.51	3/4	1,002.73	3/4	646.25	3/4	289.80	3/4		3/4		3/4		3/4	
2	2,065.63	2	1,708.85	2	1,352.07	2	995.29	2	638.84	2	282.37	2		2		2		2	
1/4	2,058.20	1/4	1,701.42	1/4	1,344.64	1/4	987.86	1/4	631.42	1/4	274.94	1/4		1/4		1/4		1/4	
1/2	2,050.77	1/2	1,693.99	1/2	1,337.21	1/2	980.43	1/2	624.01	1/2	267.50	1/2		1/2		1/2		1/2	
3/4	2,043.33	3/4	1,686.55	3/4	1,329.77	3/4	973.00	3/4	616.59	3/4	260.07	3/4		3/4		3/4		3/4	
3	2,035.90	3	1,679.12	3	1,322.34	3	965.56	3	609.17	3	252.64	3		3		3		3	
1/4	2,028.47	1/4	1,671.69	1/4	1,314.91	1/4	958.13	1/4	601.76	1/4	245.21	1/4		1/4		1/4		1/4	
1/2	2,021.03	1/2	1,664.26	1/2	1,307.48	1/2	950.70	1/2	594.34	1/2	237.77	1/2		1/2		1/2		1/2	
3/4	2,013.60	3/4	1,656.82	3/4	1,300.04	3/4	943.26	3/4	586.93	3/4	230.34	3/4		3/4		3/4		3/4	
4	2,006.17	4	1,649.39	4	1,292.61	4	935.83	4	579.51	4	222.91	4		4		4		4	
1/4	1,998.74	1/4	1,641.96	1/4	1,285.18	1/4	928.40	1/4	572.09	1/4	215.48	1/4		1/4		1/4		1/4	
1/2	1,991.30	1/2	1,634.52	1/2	1,277.74	1/2	920.97	1/2	564.68	1/2	208.05	1/2		1/2		1/2		1/2	
3/4	1,983.87	3/4	1,627.09	3/4	1,270.31	3/4	913.53	3/4	557.26	3/4	200.62	3/4		3/4		3/4		3/4	
5	1,976.44	5	1,619.66	5	1,262.88	5	906.10	5	549.85	5	193.19	5		5		5		5	
1/4	1,969.00	1/4	1,612.22	1/4	1,255.45	1/4	898.67	1/4	542.43	1/4	185.76	1/4		1/4		1/4		1/4	
1/2	1,961.57	1/2	1,604.79	1/2	1,248.01	1/2	891.23	1/2	535.01	1/2	178.33	1/2		1/2		1/2		1/2	
3/4	1,954.14	3/4	1,597.36	3/4	1,240.58	3/4	883.80	3/4	527.60	3/4	170.91	3/4		3/4		3/4		3/4	
6	1,946.71	6	1,589.93	6	1,233.15	6	876.37	6	520.18	6	163.50	6		6		6		6	
1/4	1,939.27	1/4	1,582.49	1/4	1,225.71	1/4	868.93	1/4	512.77	1/4	156.08	1/4		1/4		1/4		1/4	
1/2	1,931.84	1/2	1,575.06	1/2	1,218.28	1/2	861.50	1/2	505.35	1/2	148.66	1/2		1/2		1/2		1/2	
3/4	1,924.41	3/4	1,567.63	3/4	1,210.85	3/4	854.07	3/4	497.92	3/4	141.25	3/4		3/4		3/4		3/4	
7	1,916.97	7	1,560.19	7	1,203.42	7	846.64	7	490.49	7	133.85	7		7		7		7	
1/4	1,909.54	1/4	1,552.76	1/4	1,195.98	1/4	839.20	1/4	483.05	1/4	126.44	1/4		1/4		1/4		1/4	
1/2	1,902.11	1/2	1,545.33	1/2	1,188.55	1/2	831.77	1/2	475.62	1/2	119.04	1/2		1/2		1/2		1/2	
3/4	1,894.68	3/4	1,537.90	3/4	1,181.12	3/4	824.34	3/4	468.19	3/4	111.66	3/4		3/4		3/4		3/4	
8	1,887.24	8	1,530.46	8	1,173.68	8	816.90	8	460.75	8	104.28	8		8		8		8	
1/4	1,879.81	1/4	1,523.03	1/4	1,166.25	1/4	809.47	1/4	453.32	1/4	96.90	1/4		1/4		1/4		1/4	
1/2	1,872.38	1/2	1,515.60	1/2	1,158.82	1/2	802.04	1/2	445.89	1/2	89.52	1/2		1/2		1/2		1/2	
3/4	1,864.94	3/4	1,508.16	3/4	1,151.39	3/4	794.62	3/4	438.46	3/4	82.18	3/4		3/4		3/4		3/4	
9	1,857.51	9	1,500.73	9	1,143.95	9	787.19	9	431.02	9	74.84	9		9		9		9	
1/4	1,850.08	1/4	1,493.30	1/4	1,136.52	1/4	779.77	1/4	423.59	1/4	67.50	1/4		1/4		1/4		1/4	
1/2	1,842.64	1/2	1,485.87	1/2	1,129.09	1/2	772.35	1/2	416.16	1/2	60.16	1/2		1/2		1/2		1/2	
3/4	1,835.21	3/4	1,478.43	3/4	1,121.65	3/4	764.93	3/4	408.73	3/4	53.66	3/4		3/4		3/4		3/4	
10	1,827.78	10	1,471.00	10	1,114.22	10	757.50	10	401.29	10	47.16	10		10		10		10	
1/4	1,820.35	1/4	1,463.57	1/4	1,106.79	1/4	750.08	1/4	393.86	1/4	40.66	1/4		1/4		1/4		1/4	
1/2	1,812.91	1/2	1,456.13	1/2	1,099.35	1/2	742.66	1/2	386.43	1/2	34.16	1/2		1/2		1/2		1/2	
3/4	1,805.48	3/4	1,448.70	3/4	1,091.92	3/4	735.24	3/4	378.99	3/4	29.52	3/4		3/4		3/4		3/4	
11	1,798.05	11	1,441.27	11	1,084.49	11	727.83	11	371.56	11	24.87	11		11		11		11	
1/4	1,790.61	1/4	1,433.84	1/4	1,077.06	1/4	720.41	1/4	364.13	1/4	20.23	1/4		1/4		1/4		1/4	
1/2	1,783.18	1/2	1,426.40	1/2	1,069.62	1/2	713.00	1/2	356.70	1/2	15.58	1/2		1/2		1/2		1/2	
3/4	1,775.75	3/4	1,418.97	3/4	1,062.19	3/4	705.58	3/4	349.26	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/09/2014 SW  
CALCULATED: 12/10/2014 CL  
PRINTED: 12/10/2014 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2014

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
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# BARGE "HFL 457"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0	5,010.66	0	4,724.40	0	4,438.14	0	4,150.97	0	3,772.59	0	3,391.56	0	3,010.51	0	2,629.17
1/4	1/4	1/4		1/4	5,004.70	1/4	4,718.44	1/4	4,432.18	1/4	4,144.98	1/4	3,764.66	1/4	3,383.62	1/4	3,002.57	1/4	2,621.23
1/2	1/2	1/2		1/2	4,998.73	1/2	4,712.47	1/2	4,426.22	1/2	4,137.03	1/2	3,756.72	1/2	3,375.68	1/2	2,994.63	1/2	2,613.28
3/4	3/4	3/4		3/4	4,992.77	3/4	4,706.51	3/4	4,420.25	3/4	4,129.07	3/4	3,748.78	3/4	3,367.75	3/4	2,986.69	3/4	2,605.34
1		1		1	4,986.81	1	4,700.55	1	4,414.29	1	4,121.12	1	3,740.84	1	3,359.81	1	2,978.75	1	2,597.39
1/4	1/4	1/4		1/4	4,980.84	1/4	4,694.58	1/4	4,408.33	1/4	4,113.16	1/4	3,732.90	1/4	3,351.87	1/4	2,970.81	1/4	2,589.45
1/2	1/2	1/2		1/2	4,974.88	1/2	4,688.62	1/2	4,402.34	1/2	4,105.25	1/2	3,724.97	1/2	3,343.93	1/2	2,962.86	1/2	2,581.50
3/4	3/4	3/4		3/4	4,968.91	3/4	4,682.66	3/4	4,396.36	3/4	4,097.33	3/4	3,717.03	3/4	3,335.99	3/4	2,954.92	3/4	2,573.56
2		2		2	4,962.95	2	4,676.69	2	4,390.37	2	4,089.42	2	3,709.09	2	3,328.06	2	2,946.97	2	2,565.61
1/4	1/4	1/4		1/4	4,956.99	1/4	4,670.73	1/4	4,384.39	1/4	4,081.51	1/4	3,701.15	1/4	3,320.12	1/4	2,939.03	1/4	2,557.67
1/2	1/2	1/2		1/2	4,951.02	1/2	4,664.77	1/2	4,378.41	1/2	4,073.60	1/2	3,693.21	1/2	3,312.18	1/2	2,931.08	1/2	2,549.72
3/4	3/4	3/4	5,208.09	3/4	4,945.06	3/4	4,658.80	3/4	4,372.42	3/4	4,065.68	3/4	3,685.27	3/4	3,304.24	3/4	2,923.14	3/4	2,541.78
3		3	5,206.17	3	4,939.10	3	4,652.84	3	4,366.44	3	4,057.77	3	3,677.34	3	3,296.30	3	2,915.19	3	2,533.83
1/4	1/4	1/4	5,204.26	1/4	4,933.13	1/4	4,646.87	1/4	4,360.46	1/4	4,049.86	1/4	3,669.40	1/4	3,288.36	1/4	2,907.25	1/4	2,525.89
1/2	1/2	1/2	5,200.75	1/2	4,927.17	1/2	4,640.91	1/2	4,354.47	1/2	4,041.95	1/2	3,661.46	1/2	3,280.43	1/2	2,899.30	1/2	2,517.94
3/4	3/4	3/4	5,197.24	3/4	4,921.20	3/4	4,634.95	3/4	4,348.49	3/4	4,034.03	3/4	3,653.52	3/4	3,272.49	3/4	2,891.36	3/4	2,510.00
4		4	5,193.73	4	4,915.24	4	4,628.98	4	4,342.50	4	4,026.12	4	3,645.58	4	3,264.55	4	2,883.41	4	2,502.05
1/4	1/4	1/4	5,190.22	1/4	4,909.28	1/4	4,623.02	1/4	4,336.51	1/4	4,018.21	1/4	3,637.64	1/4	3,256.61	1/4	2,875.47	1/4	2,494.11
1/2	1/2	1/2	5,185.12	1/2	4,903.31	1/2	4,617.06	1/2	4,330.53	1/2	4,010.31	1/2	3,629.71	1/2	3,248.67	1/2	2,867.52	1/2	2,486.16
3/4	3/4	3/4	5,180.02	3/4	4,897.35	3/4	4,611.09	3/4	4,324.54	3/4	4,002.41	3/4	3,621.77	3/4	3,240.73	3/4	2,859.58	3/4	2,478.22
5		5	5,174.92	5	4,891.39	5	4,605.13	5	4,318.56	5	3,994.51	5	3,613.83	5	3,232.80	5	2,851.63	5	2,470.27
1/4	1/4	1/4	5,169.82	1/4	4,885.42	1/4	4,599.16	1/4	4,312.57	1/4	3,986.61	1/4	3,605.89	1/4	3,224.86	1/4	2,843.69	1/4	2,462.33
1/2	1/2	1/2	5,163.96	1/2	4,879.46	1/2	4,593.20	1/2	4,306.59	1/2	3,978.71	1/2	3,597.95	1/2	3,216.92	1/2	2,835.74	1/2	2,454.38
3/4	3/4	3/4	5,158.11	3/4	4,873.49	3/4	4,587.24	3/4	4,300.60	3/4	3,970.81	3/4	3,590.02	3/4	3,208.98	3/4	2,827.80	3/4	2,446.44
6		6	5,152.25	6	4,867.53	6	4,581.27	6	4,294.62	6	3,962.92	6	3,582.08	6	3,201.04	6	2,819.85	6	2,438.49
1/4	1/4	1/4	5,146.39	1/4	4,861.57	1/4	4,575.31	1/4	4,288.63	1/4	3,955.02	1/4	3,574.14	1/4	3,193.11	1/4	2,811.91	1/4	2,430.55
1/2	1/2	1/2	5,140.50	1/2	4,855.60	1/2	4,569.35	1/2	4,282.65	1/2	3,947.12	1/2	3,566.20	1/2	3,185.17	1/2	2,803.96	1/2	2,422.60
3/4	3/4	3/4	5,134.62	3/4	4,849.64	3/4	4,563.38	3/4	4,276.66	3/4	3,939.22	3/4	3,558.26	3/4	3,177.23	3/4	2,796.02	3/4	2,414.66
7		7	5,128.73	7	4,843.68	7	4,557.42	7	4,270.68	7	3,931.32	7	3,550.32	7	3,169.29	7	2,788.07	7	2,406.71
1/4	1/4	1/4	5,122.85	1/4	4,837.71	1/4	4,551.45	1/4	4,264.69	1/4	3,923.42	1/4	3,542.39	1/4	3,161.35	1/4	2,780.13	1/4	2,398.77
1/2	1/2	1/2	5,116.95	1/2	4,831.75	1/2	4,545.49	1/2	4,258.71	1/2	3,915.48	1/2	3,534.45	1/2	3,153.41	1/2	2,772.18	1/2	2,390.82
3/4	3/4	3/4	5,111.06	3/4	4,825.79	3/4	4,539.53	3/4	4,252.72	3/4	3,907.54	3/4	3,526.51	3/4	3,145.48	3/4	2,764.24	3/4	2,382.88
8		8	5,105.16	8	4,819.82	8	4,533.56	8	4,246.74	8	3,899.61	8	3,518.57	8	3,137.54	8	2,756.29	8	2,374.93
1/4	1/4	1/4	5,099.27	1/4	4,813.86	1/4	4,527.60	1/4	4,240.75	1/4	3,891.67	1/4	3,510.63	1/4	3,129.60	1/4	2,748.35	1/4	2,366.99
1/2	1/2	1/2	5,093.38	1/2	4,807.89	1/2	4,521.64	1/2	4,234.76	1/2	3,883.73	1/2	3,502.70	1/2	3,121.66	1/2	2,740.40	1/2	2,359.04
3/4	3/4	3/4	5,087.48	3/4	4,801.93	3/4	4,515.67	3/4	4,228.78	3/4	3,875.79	3/4	3,494.76	3/4	3,113.72	3/4	2,732.46	3/4	2,351.10
9		9	5,081.59	9	4,795.97	9	4,509.71	9	4,222.79	9	3,867.85	9	3,486.82	9	3,105.79	9	2,724.51	9	2,343.15
1/4	1/4	1/4	5,075.70	1/4	4,790.00	1/4	4,503.75	1/4	4,216.81	1/4	3,859.91	1/4	3,478.88	1/4	3,097.85	1/4	2,716.57	1/4	2,335.21
1/2	1/2	1/2	5,069.80	1/2	4,784.04	1/2	4,497.78	1/2	4,210.82	1/2	3,851.98	1/2	3,470.94	1/2	3,089.91	1/2	2,708.62	1/2	2,327.26
3/4	3/4	3/4	5,063.91	3/4	4,778.08	3/4	4,491.82	3/4	4,204.84	3/4	3,844.04	3/4	3,463.00	3/4	3,081.97	3/4	2,700.68	3/4	2,319.32
10		10	5,058.02	10	4,772.11	10	4,485.85	10	4,198.85	10	3,836.10	10	3,455.07	10	3,074.03	10	2,692.73	10	2,311.37
1/4	1/4	1/4	5,052.12	1/4	4,766.15	1/4	4,479.89	1/4	4,192.87	1/4	3,828.16	1/4	3,447.13	1/4	3,066.09	1/4	2,684.79	1/4	2,303.43
1/2	1/2	1/2	5,046.23	1/2	4,760.18	1/2	4,473.93	1/2	4,186.88	1/2	3,820.22	1/2	3,439.19	1/2	3,058.15	1/2	2,676.84	1/2	2,295.48
3/4	3/4	3/4	5,040.34	3/4	4,754.22	3/4	4,467.96	3/4	4,180.90	3/4	3,812.29	3/4	3,431.25	3/4	3,050.21	3/4	2,668.90	3/4	2,287.54
11		11	5,034.44	11	4,748.26	11	4,462.00	11	4,174.91	11	3,804.35	11	3,423.31	11	3,042.27	11	2,660.95	11	2,279.59
1/4	1/4	1/4	5,028.55	1/4	4,742.29	1/4	4,456.04	1/4	4,168.93	1/4	3,796.41	1/4	3,415.38	1/4	3,034.33	1/4	2,653.01	1/4	2,271.65
1/2	1/2	1/2	5,022.59	1/2	4,736.33	1/2	4,450.07	1/2	4,162.94	1/2	3,788.47	1/2	3,407.44	1/2	3,026.39	1/2	2,645.06	1/2	2,263.70
3/4	3/4	3/4	5,016.62	3/4	4,730.37	3/4	4,444.11	3/4	4,156.96	3/4	3,780.53	3/4	3,399.50	3/4	3,018.45	3/4	2,637.12	3/4	2,255.76

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 CLOSED GAUGING VALVE.

GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 48'-06" 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 457"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0	2,247.81	0	1,868.44	0	1,487.45	0	1,106.25	0	736.75	0	357.92	0		0		0		0	
1/4	2,239.87	1/4	1,860.54	1/4	1,479.51	1/4	1,098.31	1/4	729.12	1/4	349.96	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,231.92	1/2	1,852.64	1/2	1,471.57	1/2	1,090.36	1/2	721.45	1/2	342.00	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,223.98	3/4	1,844.74	3/4	1,463.62	3/4	1,082.42	3/4	713.78	3/4	334.05	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	2,216.03	1	1,836.84	1	1,455.68	1	1,074.48	1	706.11	1	326.09	1	1	1	1	1	1	1	1
1/4	2,208.09	1/4	1,828.94	1/4	1,447.74	1/4	1,066.54	1/4	698.44	1/4	318.13	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,200.19	1/2	1,821.00	1/2	1,439.80	1/2	1,058.60	1/2	690.77	1/2	310.18	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,192.29	3/4	1,813.06	3/4	1,431.86	3/4	1,050.66	3/4	683.10	3/4	302.22	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	2,184.39	2	1,805.12	2	1,423.92	2	1,042.71	2	675.42	2	294.27	2	2	2	2	2	2	2	2
1/4	2,176.49	1/4	1,797.17	1/4	1,415.97	1/4	1,034.77	1/4	667.75	1/4	286.31	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,168.59	1/2	1,789.23	1/2	1,408.03	1/2	1,027.12	1/2	659.83	1/2	278.35	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,160.70	3/4	1,781.29	3/4	1,400.09	3/4	1,019.47	3/4	651.91	3/4	270.39	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	2,152.80	3	1,773.35	3	1,392.15	3	1,011.82	3	643.99	3	262.43	3	3	3	3	3	3	3	3
1/4	2,144.90	1/4	1,765.41	1/4	1,384.21	1/4	1,004.17	1/4	636.07	1/4	254.48	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,137.00	1/2	1,757.47	1/2	1,376.26	1/2	996.52	1/2	628.15	1/2	246.52	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,129.10	3/4	1,749.52	3/4	1,368.32	3/4	988.87	3/4	620.22	3/4	238.56	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	2,121.20	4	1,741.58	4	1,360.38	4	981.22	4	612.30	4	230.60	4	4	4	4	4	4	4	4
1/4	2,113.30	1/4	1,733.64	1/4	1,352.44	1/4	973.57	1/4	604.38	1/4	222.65	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,105.40	1/2	1,725.70	1/2	1,344.50	1/2	965.92	1/2	596.46	1/2	214.69	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,097.50	3/4	1,717.76	3/4	1,336.56	3/4	958.27	3/4	588.53	3/4	206.74	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	2,089.61	5	1,709.82	5	1,328.61	5	950.62	5	580.61	5	198.79	5	5	5	5	5	5	5	5
1/4	2,081.71	1/4	1,701.87	1/4	1,320.67	1/4	942.97	1/4	572.69	1/4	190.83	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,073.81	1/2	1,693.93	1/2	1,312.73	1/2	935.32	1/2	564.75	1/2	182.89	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,065.91	3/4	1,685.99	3/4	1,304.79	3/4	927.67	3/4	556.82	3/4	174.95	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	2,058.01	6	1,678.05	6	1,296.85	6	920.02	6	548.88	6	167.00	6	6	6	6	6	6	6	6
1/4	2,050.11	1/4	1,670.11	1/4	1,288.91	1/4	912.37	1/4	540.95	1/4	159.06	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,042.21	1/2	1,662.17	1/2	1,280.96	1/2	904.72	1/2	532.99	1/2	151.13	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,034.31	3/4	1,654.22	3/4	1,273.02	3/4	897.07	3/4	525.03	3/4	143.21	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	2,026.41	7	1,646.28	7	1,265.08	7	889.42	7	517.08	7	135.28	7	7	7	7	7	7	7	7
1/4	2,018.52	1/4	1,638.34	1/4	1,257.14	1/4	881.77	1/4	509.12	1/4	127.35	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,010.62	1/2	1,630.40	1/2	1,249.20	1/2	874.12	1/2	501.16	1/2	119.45	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,002.72	3/4	1,622.46	3/4	1,241.26	3/4	866.47	3/4	493.20	3/4	111.55	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	1,994.82	8	1,614.52	8	1,233.31	8	858.82	8	485.24	8	103.64	8	8	8	8	8	8	8	8
1/4	1,986.92	1/4	1,606.57	1/4	1,225.37	1/4	851.17	1/4	477.29	1/4	95.74	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,979.02	1/2	1,598.63	1/2	1,217.43	1/2	843.54	1/2	469.33	1/2	87.89	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,971.12	3/4	1,590.69	3/4	1,209.49	3/4	835.91	3/4	461.37	3/4	80.04	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	1,963.22	9	1,582.75	9	1,201.55	9	828.28	9	453.41	9	72.19	9	9	9	9	9	9	9	9
1/4	1,955.32	1/4	1,574.81	1/4	1,193.61	1/4	820.65	1/4	445.46	1/4	64.33	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,947.43	1/2	1,566.87	1/2	1,185.66	1/2	813.02	1/2	437.50	1/2	57.38	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,939.53	3/4	1,558.92	3/4	1,177.72	3/4	805.39	3/4	429.54	3/4	50.43	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	1,931.63	10	1,550.98	10	1,169.78	10	797.75	10	421.58	10	43.48	10	10	10	10	10	10	10	10
1/4	1,923.73	1/4	1,543.04	1/4	1,161.84	1/4	790.12	1/4	413.62	1/4	36.53	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,915.83	1/2	1,535.10	1/2	1,153.90	1/2	782.50	1/2	405.67	1/2	31.56	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,907.93	3/4	1,527.16	3/4	1,145.96	3/4	774.87	3/4	397.71	3/4	26.58	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	1,900.03	11	1,519.22	11	1,138.01	11	767.25	11	389.75	11	21.61	11	11	11	11	11	11	11	11
1/4	1,892.13	1/4	1,511.27	1/4	1,130.07	1/4	759.62	1/4	381.79	1/4	16.64	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,884.23	1/2	1,503.33	1/2	1,122.13	1/2	752.00	1/2	373.83	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,876.34	3/4	1,495.39	3/4	1,114.19	3/4	744.37	3/4	365.88	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/09/2014 SW  
CALCULATED: 12/10/2014 CL  
PRINTED: 12/10/2014 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2014

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



# BARGE "HFL 457"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/2"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.																																																								
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0																																																							
					5,038.88				4,752.61				3,802.37				3,038.95			2,657.01																																																						
1/4	1/4	1/4		1/4	5,032.92	1/4		1/4	4,746.64	1/4		1/4	3,794.42	1/4		1/4	3,030.99	1/4		2,649.06																																																						
1/2	1/2	1/2		1/2	5,026.95	1/2		1/2	4,740.68	1/2		1/2	3,786.47	1/2		1/2	3,023.04	1/2		2,641.10																																																						
3/4	3/4	3/4		3/4	5,020.99	3/4		3/4	4,734.72	3/4		3/4	3,778.51	3/4		3/4	3,015.09	3/4		2,633.14																																																						
1	1	1		1	5,015.02	1		1	4,728.75	1		1	3,770.56	1		1	3,007.13	1		2,625.18																																																						
1/4	1/4	1/4		1/4	5,009.06	1/4		1/4	4,722.79	1/4		1/4	3,762.61	1/4		1/4	2,999.18	1/4		2,617.23																																																						
1/2	1/2	1/2		1/2	5,003.10	1/2		1/2	4,716.82	1/2		1/2	3,754.66	1/2		1/2	2,991.22	1/2		2,609.27																																																						
3/4	3/4	3/4		3/4	4,997.13	3/4		3/4	4,710.86	3/4		3/4	3,746.71	3/4		3/4	2,983.27	3/4		2,601.31																																																						
2	2	2		2	4,991.17	2		2	4,704.90	2		2	3,738.75	2		2	2,975.31	2		2,593.35																																																						
1/4	1/4	1/4		1/4	4,985.20	1/4		1/4	4,698.93	1/4		1/4	3,730.80	1/4		1/4	2,967.35	1/4		2,585.40																																																						
1/2	1/2	1/2		1/2	4,979.24	1/2		1/2	4,692.97	1/2		1/2	3,722.85	1/2		1/2	2,959.39	1/2		2,577.44																																																						
3/4	3/4	3/4		3/4	4,973.28	3/4		3/4	4,687.00	3/4		3/4	3,714.90	3/4		3/4	2,951.44	3/4		2,569.48																																																						
3	3	5,230.36	3	4,967.31	3	4,961.35	3	4,955.38	3	4,949.42	3	4,943.46	3	4,937.49	3	4,931.53	3	4,925.56	3	4,919.60	3	4,913.64	3	4,907.67	3	4,901.71	3	4,895.74	3	4,889.78	3	4,883.82	3	4,877.85	3	4,871.89	3	4,865.92	3	4,859.96	3	4,854.00	3	4,848.03	3	4,842.07	3	4,836.10	3	4,830.14	3	4,824.18	3	4,818.21	3	4,812.25	3	4,806.28	3	4,800.32	3	4,794.36	3	4,788.39	3	4,782.43	3	4,776.46	3	4,770.50	3	4,764.54	3	4,758.57
1/4	1/4	5,228.44	1/4	4,961.35	1/4	4,955.38	1/4	4,949.42	1/4	4,943.46	1/4	4,937.49	1/4	4,931.53	1/4	4,925.56	1/4	4,919.60	1/4	4,913.64	1/4	4,907.67	1/4	4,901.71	1/4	4,895.74	1/4	4,889.78	1/4	4,883.82	1/4	4,877.85	1/4	4,871.89	1/4	4,865.92	1/4	4,859.96	1/4	4,854.00	1/4	4,848.03	1/4	4,842.07	1/4	4,836.10	1/4	4,830.14	1/4	4,824.18	1/4	4,818.21	1/4	4,812.25	1/4	4,806.28	1/4	4,800.32	1/4	4,794.36	1/4	4,788.39	1/4	4,782.43	1/4	4,776.46	1/4	4,770.50	1/4	4,764.54	1/4	4,758.57		
1/2	1/2	5,226.52	1/2	4,955.38	1/2	4,949.42	1/2	4,943.46	1/2	4,937.49	1/2	4,931.53	1/2	4,925.56	1/2	4,919.60	1/2	4,913.64	1/2	4,907.67	1/2	4,901.71	1/2	4,895.74	1/2	4,889.78	1/2	4,883.82	1/2	4,877.85	1/2	4,871.89	1/2	4,865.92	1/2	4,859.96	1/2	4,854.00	1/2	4,848.03	1/2	4,842.07	1/2	4,836.10	1/2	4,830.14	1/2	4,824.18	1/2	4,818.21	1/2	4,812.25	1/2	4,806.28	1/2	4,800.32	1/2	4,794.36	1/2	4,788.39	1/2	4,782.43	1/2	4,776.46	1/2	4,770.50	1/2	4,764.54	1/2	4,758.57				
3/4	3/4	5,223.01	3/4	4,949.42	3/4	4,943.46	3/4	4,937.49	3/4	4,931.53	3/4	4,925.56	3/4	4,919.60	3/4	4,913.64	3/4	4,907.67	3/4	4,901.71	3/4	4,895.74	3/4	4,889.78	3/4	4,883.82	3/4	4,877.85	3/4	4,871.89	3/4	4,865.92	3/4	4,859.96	3/4	4,854.00	3/4	4,848.03	3/4	4,842.07	3/4	4,836.10	3/4	4,830.14	3/4	4,824.18	3/4	4,818.21	3/4	4,812.25	3/4	4,806.28	3/4	4,800.32	3/4	4,794.36	3/4	4,788.39	3/4	4,782.43	3/4	4,776.46	3/4	4,770.50	3/4	4,764.54	3/4	4,758.57						
4	4	5,219.50	4	4,943.46	4	4,937.49	4	4,931.53	4	4,925.56	4	4,919.60	4	4,913.64	4	4,907.67	4	4,901.71	4	4,895.74	4	4,889.78	4	4,883.82	4	4,877.85	4	4,871.89	4	4,865.92	4	4,859.96	4	4,854.00	4	4,848.03	4	4,842.07	4	4,836.10	4	4,830.14	4	4,824.18	4	4,818.21	4	4,812.25	4	4,806.28	4	4,800.32	4	4,794.36	4	4,788.39	4	4,782.43	4	4,776.46	4	4,770.50	4	4,764.54	4	4,758.57								
1/4	1/4	5,216.00	1/4	4,937.49	1/4	4,931.53	1/4	4,925.56	1/4	4,919.60	1/4	4,913.64	1/4	4,907.67	1/4	4,901.71	1/4	4,895.74	1/4	4,889.78	1/4	4,883.82	1/4	4,877.85	1/4	4,871.89	1/4	4,865.92	1/4	4,859.96	1/4	4,854.00	1/4	4,848.03	1/4	4,842.07	1/4	4,836.10	1/4	4,830.14	1/4	4,824.18	1/4	4,818.21	1/4	4,812.25	1/4	4,806.28	1/4	4,800.32	1/4	4,794.36	1/4	4,788.39	1/4	4,782.43	1/4	4,776.46	1/4	4,770.50	1/4	4,764.54	1/4	4,758.57										
1/2	1/2	5,212.49	1/2	4,931.53	1/2	4,925.56	1/2	4,919.60	1/2	4,913.64	1/2	4,907.67	1/2	4,901.71	1/2	4,895.74	1/2	4,889.78	1/2	4,883.82	1/2	4,877.85	1/2	4,871.89	1/2	4,865.92	1/2	4,859.96	1/2	4,854.00	1/2	4,848.03	1/2	4,842.07	1/2	4,836.10	1/2	4,830.14	1/2	4,824.18	1/2	4,818.21	1/2	4,812.25	1/2	4,806.28	1/2	4,800.32	1/2	4,794.36	1/2	4,788.39	1/2	4,782.43	1/2	4,776.46	1/2	4,770.50	1/2	4,764.54	1/2	4,758.57												
3/4	3/4	5,207.39	3/4	4,925.56	3/4	4,919.60	3/4	4,913.64	3/4	4,907.67	3/4	4,901.71	3/4	4,895.74	3/4	4,889.78	3/4	4,883.82	3/4	4,877.85	3/4	4,871.89	3/4	4,865.92	3/4	4,859.96	3/4	4,854.00	3/4	4,848.03	3/4	4,842.07	3/4	4,836.10	3/4	4,830.14	3/4	4,824.18	3/4	4,818.21	3/4	4,812.25	3/4	4,806.28	3/4	4,800.32	3/4	4,794.36	3/4	4,788.39	3/4	4,782.43	3/4	4,776.46	3/4	4,770.50	3/4	4,764.54	3/4	4,758.57														
5	5	5,202.29	5	4,919.60	5	4,913.64	5	4,907.67	5	4,901.71	5	4,895.74	5	4,889.78	5	4,883.82	5	4,877.85	5	4,871.89	5	4,865.92	5	4,859.96	5	4,854.00	5	4,848.03	5	4,842.07	5	4,836.10	5	4,830.14	5	4,824.18	5	4,818.21	5	4,812.25	5	4,806.28	5	4,800.32	5	4,794.36	5	4,788.39	5	4,782.43	5	4,776.46	5	4,770.50	5	4,764.54	5	4,758.57																
1/4	1/4	5,197.19	1/4	4,913.64	1/4	4,907.67	1/4	4,901.71	1/4	4,895.74	1/4	4,889.78	1/4	4,883.82	1/4	4,877.85	1/4	4,871.89	1/4	4,865.92	1/4	4,859.96	1/4	4,854.00	1/4	4,848.03	1/4	4,842.07	1/4	4,836.10	1/4	4,830.14	1/4	4,824.18	1/4	4,818.21	1/4	4,812.25	1/4	4,806.28	1/4	4,800.32	1/4	4,794.36	1/4	4,788.39	1/4	4,782.43	1/4	4,776.46	1/4	4,770.50	1/4	4,764.54	1/4	4,758.57																		
1/2	1/2	5,192.09	1/2	4,907.67	1/2	4,901.71	1/2	4,895.74	1/2	4,889.78	1/2	4,883.82	1/2	4,877.85	1/2	4,871.89	1/2	4,865.92	1/2	4,859.96	1/2	4,854.00	1/2	4,848.03	1/2	4,842.07	1/2	4,836.10	1/2	4,830.14	1/2	4,824.18	1/2	4,818.21	1/2	4,812.25	1/2	4,806.28	1/2	4,800.32	1/2	4,794.36	1/2	4,788.39	1/2	4,782.43	1/2	4,776.46	1/2	4,770.50	1/2	4,764.54	1/2	4,758.57																				
3/4	3/4	5,186.23	3/4	4,901.71	3/4	4,895.74	3/4	4,889.78	3/4	4,883.82	3/4	4,877.85	3/4	4,871.89	3/4	4,865.92	3/4	4,859.96	3/4	4,854.00	3/4	4,848.03	3/4	4,842.07	3/4	4,836.10	3/4	4,830.14	3/4	4,824.18	3/4	4,818.21	3/4	4,812.25	3/4	4,806.28	3/4	4,800.32	3/4	4,794.36	3/4	4,788.39	3/4	4,782.43	3/4	4,776.46	3/4	4,770.50	3/4	4,764.54	3/4	4,758.57																						
6	6	5,180.37	6	4,895.74	6	4,889.78	6	4,883.82	6	4,877.85	6	4,871.89	6	4,865.92	6	4,859.96	6	4,854.00	6	4,848.03	6	4,842.07	6	4,836.10	6	4,830.14	6	4,824.18	6	4,818.21	6	4,812.25	6	4,806.28	6	4,800.32	6	4,794.36	6	4,788.39	6	4,782.43	6	4,776.46	6	4,770.50	6	4,764.54	6	4,758.57																								
1/4	1/4	5,174.51	1/4	4,889.78	1/4	4,883.82	1/4	4,877.85	1/4	4,871.89	1/4	4,865.92	1/4	4,859.96	1/4	4,854.00	1/4	4,848.03	1/4	4,842.07	1/4	4,836.10	1/4	4,830.14	1/4	4,824.18	1/4	4,818.21	1/4	4,812.25	1/4	4,806.28	1/4	4,800.32	1/4	4,794.36	1/4	4,788.39	1/4	4,782.43	1/4	4,776.46	1/4	4,770.50	1/4	4,764.54	1/4	4,758.57																										
1/2	1/2	5,168.65	1/2	4,883.82	1/2	4,877.85	1/2	4,871.89	1/2	4,865.92	1/2	4,859.96	1/2	4,854.00	1/2	4,848.03	1/2	4,842.07	1/2	4,836.10	1/2	4,830.14	1/2	4,824.18	1/2	4,818.21	1/2	4,812.25	1/2	4,806.28	1/2	4,800.32	1/2	4,794.36	1/2	4,788.39	1/2	4,782.43	1/2	4,776.46	1/2	4,770.50	1/2	4,764.54	1/2	4,758.57																												
3/4	3/4	5,162.77	3/4	4,877.85	3/4	4,871.89	3/4	4,865.92	3/4	4,859.96	3/4	4,854.00	3/4	4,848.03	3/4	4,842.07	3/4	4,836.10	3/4	4,830.14	3/4	4,824.18	3/4	4,818.21	3/4	4,812.25	3/4																																															



# BARGE "HFL 457"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 15'-11 1/2"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0	2,275.06	0	1,893.10	0	1,511.15	0	1,129.19	0	747.42	0	365.90	0		0		0		0	
1/4	2,267.10	1/4	1,885.14	1/4	1,503.19	1/4	1,121.23	1/4	739.48	1/4	357.95	1/4		1/4		1/4		1/4	
1/2	2,259.14	1/2	1,877.19	1/2	1,495.23	1/2	1,113.28	1/2	731.54	1/2	349.99	1/2		1/2		1/2		1/2	
3/4	2,251.19	3/4	1,869.23	3/4	1,487.27	3/4	1,105.32	3/4	723.60	3/4	342.03	3/4		3/4		3/4		3/4	
1	2,243.23	1	1,861.27	1	1,479.32	1	1,097.36	1	715.66	1	334.07	1		1		1		1	
1/4	2,235.27	1/4	1,853.32	1/4	1,471.36	1/4	1,089.40	1/4	707.72	1/4	326.12	1/4		1/4		1/4		1/4	
1/2	2,227.31	1/2	1,845.36	1/2	1,463.40	1/2	1,081.45	1/2	699.78	1/2	318.16	1/2		1/2		1/2		1/2	
3/4	2,219.36	3/4	1,837.40	3/4	1,455.45	3/4	1,073.49	3/4	691.84	3/4	310.20	3/4		3/4		3/4		3/4	
2	2,211.40	2	1,829.44	2	1,447.49	2	1,065.53	2	683.89	2	302.25	2		2		2		2	
1/4	2,203.44	1/4	1,821.49	1/4	1,439.53	1/4	1,057.58	1/4	675.95	1/4	294.29	1/4		1/4		1/4		1/4	
1/2	2,195.48	1/2	1,813.53	1/2	1,431.57	1/2	1,049.62	1/2	668.01	1/2	286.33	1/2		1/2		1/2		1/2	
3/4	2,187.53	3/4	1,805.57	3/4	1,423.62	3/4	1,041.66	3/4	660.07	3/4	278.37	3/4		3/4		3/4		3/4	
3	2,179.57	3	1,797.61	3	1,415.66	3	1,033.70	3	652.13	3	270.42	3		3		3		3	
1/4	2,171.61	1/4	1,789.66	1/4	1,407.70	1/4	1,025.75	1/4	644.19	1/4	262.46	1/4		1/4		1/4		1/4	
1/2	2,163.65	1/2	1,781.70	1/2	1,399.74	1/2	1,017.79	1/2	636.25	1/2	254.50	1/2		1/2		1/2		1/2	
3/4	2,155.70	3/4	1,773.74	3/4	1,391.79	3/4	1,009.83	3/4	628.31	3/4	246.55	3/4		3/4		3/4		3/4	
4	2,147.74	4	1,765.78	4	1,383.83	4	1,001.87	4	620.37	4	238.59	4		4		4		4	
1/4	2,139.78	1/4	1,757.83	1/4	1,375.87	1/4	993.92	1/4	612.43	1/4	230.63	1/4		1/4		1/4		1/4	
1/2	2,131.82	1/2	1,749.87	1/2	1,367.91	1/2	985.96	1/2	604.49	1/2	222.68	1/2		1/2		1/2		1/2	
3/4	2,123.87	3/4	1,741.91	3/4	1,359.96	3/4	978.00	3/4	596.55	3/4	214.72	3/4		3/4		3/4		3/4	
5	2,115.91	5	1,733.95	5	1,352.00	5	970.04	5	588.61	5	206.77	5		5		5		5	
1/4	2,107.95	1/4	1,726.00	1/4	1,344.04	1/4	962.09	1/4	580.67	1/4	198.82	1/4		1/4		1/4		1/4	
1/2	2,099.99	1/2	1,718.04	1/2	1,336.08	1/2	954.13	1/2	572.72	1/2	190.87	1/2		1/2		1/2		1/2	
3/4	2,092.04	3/4	1,710.08	3/4	1,328.13	3/4	946.17	3/4	564.78	3/4	182.92	3/4		3/4		3/4		3/4	
6	2,084.08	6	1,702.12	6	1,320.17	6	938.21	6	556.84	6	174.98	6		6		6		6	
1/4	2,076.12	1/4	1,694.17	1/4	1,312.21	1/4	930.26	1/4	548.90	1/4	167.04	1/4		1/4		1/4		1/4	
1/2	2,068.17	1/2	1,686.21	1/2	1,304.25	1/2	922.30	1/2	540.96	1/2	159.10	1/2		1/2		1/2		1/2	
3/4	2,060.21	3/4	1,678.25	3/4	1,296.30	3/4	914.34	3/4	533.00	3/4	151.17	3/4		3/4		3/4		3/4	
7	2,052.25	7	1,670.30	7	1,288.34	7	906.38	7	525.05	7	143.24	7		7		7		7	
1/4	2,044.29	1/4	1,662.34	1/4	1,280.38	1/4	898.43	1/4	517.09	1/4	135.32	1/4		1/4		1/4		1/4	
1/2	2,036.34	1/2	1,654.38	1/2	1,272.43	1/2	890.47	1/2	509.13	1/2	127.39	1/2		1/2		1/2		1/2	
3/4	2,028.38	3/4	1,646.42	3/4	1,264.47	3/4	882.51	3/4	501.18	3/4	119.49	3/4		3/4		3/4		3/4	
8	2,020.42	8	1,638.47	8	1,256.51	8	874.56	8	493.22	8	111.59	8		8		8		8	
1/4	2,012.46	1/4	1,630.51	1/4	1,248.55	1/4	866.60	1/4	485.26	1/4	103.69	1/4		1/4		1/4		1/4	
1/2	2,004.51	1/2	1,622.55	1/2	1,240.60	1/2	858.64	1/2	477.30	1/2	95.78	1/2		1/2		1/2		1/2	
3/4	1,996.55	3/4	1,614.59	3/4	1,232.64	3/4	850.69	3/4	469.35	3/4	87.93	3/4		3/4		3/4		3/4	
9	1,988.59	9	1,606.64	9	1,224.68	9	842.75	9	461.39	9	80.07	9		9		9		9	
1/4	1,980.63	1/4	1,598.68	1/4	1,216.72	1/4	834.80	1/4	453.43	1/4	72.21	1/4		1/4		1/4		1/4	
1/2	1,972.68	1/2	1,590.72	1/2	1,208.77	1/2	826.85	1/2	445.48	1/2	64.35	1/2		1/2		1/2		1/2	
3/4	1,964.72	3/4	1,582.76	3/4	1,200.81	3/4	818.91	3/4	437.52	3/4	57.40	3/4		3/4		3/4		3/4	
10	1,956.76	10	1,574.81	10	1,192.85	10	810.96	10	429.56	10	50.44	10		10		10		10	
1/4	1,948.80	1/4	1,566.85	1/4	1,184.89	1/4	803.01	1/4	421.60	1/4	43.48	1/4		1/4		1/4		1/4	
1/2	1,940.85	1/2	1,558.89	1/2	1,176.94	1/2	795.06	1/2	413.65	1/2	36.53	1/2		1/2		1/2		1/2	
3/4	1,932.89	3/4	1,550.93	3/4	1,168.98	3/4	787.12	3/4	405.69	3/4	31.55	3/4		3/4		3/4		3/4	
11	1,924.93	11	1,542.98	11	1,161.02	11	779.18	11	397.73	11	26.58	11		11		11		11	
1/4	1,916.97	1/4	1,535.02	1/4	1,153.06	1/4	771.24	1/4	389.78	1/4	21.61	1/4		1/4		1/4		1/4	
1/2	1,909.02	1/2	1,527.06	1/2	1,145.11	1/2	763.30	1/2	381.82	1/2	16.63	1/2		1/2		1/2		1/2	
3/4	1,901.06	3/4	1,519.10	3/4	1,137.15	3/4	755.36	3/4	373.86	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 12/09/2014 SW  
CALCULATED: 12/10/2014 CL  
PRINTED: 12/10/2014 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 12/2014

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



# BARGE "HFL 457"

# PORT SLOP TANK

## ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 4'-11 1/2"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0		0	3,868	0	2,907	0	1,924	0	942	0		0		0		0		0	
1/4	1/4	1/4	3,858	1/4	2,886	1/4	1,904	1/4	921	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,848	1/2	2,866	1/2	1,883	1/2	901	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,827	3/4	2,845	3/4	1,863	3/4	880	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1		1	3,807	1	2,825	1	1,842	1	860	1		1		1		1		1	
1/4	1/4	1/4	3,787	1/4	2,804	1/4	1,822	1/4	839	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,766	1/2	2,784	1/2	1,801	1/2	819	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,746	3/4	2,763	3/4	1,781	3/4	798	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2		2	3,725	2	2,743	2	1,760	2	778	2		2		2		2		2	
1/4	1/4	1/4	3,705	1/4	2,722	1/4	1,740	1/4	757	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,685	1/2	2,702	1/2	1,719	1/2	737	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,664	3/4	2,682	3/4	1,699	3/4	716	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3		3	3,644	3	2,661	3	1,679	3	696	3		3		3		3		3	
1/4	1/4	1/4	3,623	1/4	2,641	1/4	1,658	1/4	676	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,603	1/2	2,620	1/2	1,638	1/2	655	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,582	3/4	2,600	3/4	1,617	3/4	635	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4		4	3,562	4	2,579	4	1,597	4	614	4		4		4		4		4	
1/4	1/4	1/4	3,541	1/4	2,559	1/4	1,576	1/4	594	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,521	1/2	2,538	1/2	1,556	1/2	573	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,500	3/4	2,518	3/4	1,535	3/4	553	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5		5	3,480	5	2,497	5	1,515	5	532	5		5		5		5		5	
1/4	1/4	1/4	3,459	1/4	2,477	1/4	1,494	1/4	512	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,439	1/2	2,456	1/2	1,474	1/2	491	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,418	3/4	2,436	3/4	1,453	3/4	471	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6		6	3,398	6	2,415	6	1,433	6	450	6		6		6		6		6	
1/4	1/4	1/4	3,378	1/4	2,395	1/4	1,412	1/4	430	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,357	1/2	2,374	1/2	1,392	1/2	409	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,337	3/4	2,354	3/4	1,371	3/4	389	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7		7	3,316	7	2,334	7	1,351	7	368	7		7		7		7		7	
1/4	1/4	1/4	3,296	1/4	2,313	1/4	1,331	1/4	348	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,275	1/2	2,293	1/2	1,310	1/2	328	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,255	3/4	2,272	3/4	1,290	3/4	307	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8		8	3,234	8	2,252	8	1,269	8	287	8		8		8		8		8	
1/4	1/4	1/4	3,214	1/4	2,231	1/4	1,249	1/4	266	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,193	1/2	2,211	1/2	1,228	1/2	246	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,173	3/4	2,190	3/4	1,208	3/4	225	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9		9	3,152	9	2,170	9	1,187	9	205	9		9		9		9		9	
1/4	1/4	1/4	3,132	1/4	2,149	1/4	1,167	1/4	184	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,111	1/2	2,129	1/2	1,146	1/2	164	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,091	3/4	2,108	3/4	1,126	3/4	143	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10		10	3,070	10	2,088	10	1,105	10	123	10		10		10		10		10	
1/4	1/4	1/4	3,050	1/4	2,067	1/4	1,085	1/4	102	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,030	1/2	2,047	1/2	1,064	1/2	82	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,009	3/4	2,027	3/4	1,044	3/4	61	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11		11	2,989	11	2,006	11	1,023	11	41	11		11		11		11		11	
1/4	1/4	1/4	2,968	1/4	1,986	1/4	1,003	1/4	20	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	2,948	1/2	1,965	1/2	983	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	2,927	3/4	1,945	3/4	962	3/4		3/4	3/4	3/4	3/4	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 TOP 2" DIAMETER HERMETIC VALVE.

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



# BARGE "HFL 457"

# STBD SLOP TANK

## ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

FORMERLY "CHEM 3004"

GAUGE HEIGHT 4'-11 1/2"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0		0	3,868	0	2,907	0	1,924	0	942	0		0		0		0		0	
1/4	1/4	1/4	3,858	1/4	2,886	1/4	1,904	1/4	921	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,848	1/2	2,866	1/2	1,883	1/2	901	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,827	3/4	2,845	3/4	1,863	3/4	880	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1		1	3,807	1	2,825	1	1,842	1	860	1		1		1		1		1	
1/4	1/4	1/4	3,787	1/4	2,804	1/4	1,822	1/4	839	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,766	1/2	2,784	1/2	1,801	1/2	819	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,746	3/4	2,763	3/4	1,781	3/4	798	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2		2	3,725	2	2,743	2	1,760	2	778	2		2		2		2		2	
1/4	1/4	1/4	3,705	1/4	2,722	1/4	1,740	1/4	757	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,685	1/2	2,702	1/2	1,719	1/2	737	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,664	3/4	2,682	3/4	1,699	3/4	716	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3		3	3,644	3	2,661	3	1,679	3	696	3		3		3		3		3	
1/4	1/4	1/4	3,623	1/4	2,641	1/4	1,658	1/4	676	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,603	1/2	2,620	1/2	1,638	1/2	655	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,582	3/4	2,600	3/4	1,617	3/4	635	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4		4	3,562	4	2,579	4	1,597	4	614	4		4		4		4		4	
1/4	1/4	1/4	3,541	1/4	2,559	1/4	1,576	1/4	594	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,521	1/2	2,538	1/2	1,556	1/2	573	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,500	3/4	2,518	3/4	1,535	3/4	553	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5		5	3,480	5	2,497	5	1,515	5	532	5		5		5		5		5	
1/4	1/4	1/4	3,459	1/4	2,477	1/4	1,494	1/4	512	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,439	1/2	2,456	1/2	1,474	1/2	491	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,418	3/4	2,436	3/4	1,453	3/4	471	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6		6	3,398	6	2,415	6	1,433	6	450	6		6		6		6		6	
1/4	1/4	1/4	3,378	1/4	2,395	1/4	1,412	1/4	430	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,357	1/2	2,374	1/2	1,392	1/2	409	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,337	3/4	2,354	3/4	1,371	3/4	389	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7		7	3,316	7	2,334	7	1,351	7	368	7		7		7		7		7	
1/4	1/4	1/4	3,296	1/4	2,313	1/4	1,331	1/4	348	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,275	1/2	2,293	1/2	1,310	1/2	328	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,255	3/4	2,272	3/4	1,290	3/4	307	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8		8	3,234	8	2,252	8	1,269	8	287	8		8		8		8		8	
1/4	1/4	1/4	3,214	1/4	2,231	1/4	1,249	1/4	266	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,193	1/2	2,211	1/2	1,228	1/2	246	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,173	3/4	2,190	3/4	1,208	3/4	225	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9		9	3,152	9	2,170	9	1,187	9	205	9		9		9		9		9	
1/4	1/4	1/4	3,132	1/4	2,149	1/4	1,167	1/4	184	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,111	1/2	2,129	1/2	1,146	1/2	164	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,091	3/4	2,108	3/4	1,126	3/4	143	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10		10	3,070	10	2,088	10	1,105	10	123	10		10		10		10		10	
1/4	1/4	1/4	3,050	1/4	2,067	1/4	1,085	1/4	102	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	3,030	1/2	2,047	1/2	1,064	1/2	82	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3,009	3/4	2,027	3/4	1,044	3/4	61	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11		11	2,989	11	2,006	11	1,023	11	41	11		11		11		11		11	
1/4	1/4	1/4	2,968	1/4	1,986	1/4	1,003	1/4	20	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	2,948	1/2	1,965	1/2	983	1/2	0	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	2,927	3/4	1,945	3/4	962	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

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