



BARGE "EMS 398"

INNAGE TRIM TABLE

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>
1 PORT	- 00-3/8	00-3/8	- 00-3/4	00-3/4	- 01-1/8	01-1/8	- 01-1/2	01-1/2	- 02-0/8	02-0/8	- 02-3/8	02-3/8
1 STBD	- 00-3/8	00-3/8	- 00-3/4	00-3/4	- 01-1/8	01-1/8	- 01-1/2	01-1/2	- 02-0/8	02-0/8	- 02-3/8	02-3/8
2 PORT	- 00-3/8	00-3/8	- 00-3/4	00-3/4	- 01-1/8	01-1/8	- 01-1/2	01-1/2	- 01-7/8	01-7/8	- 02-1/4	02-1/4
2 STBD	- 00-3/8	00-3/8	- 00-3/4	00-3/4	- 01-1/8	01-1/8	- 01-1/2	01-1/2	- 01-7/8	01-7/8	- 02-1/4	02-1/4
3 PORT	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/4	00-1/4	- 00-1/4	00-1/4	- 00-3/8	00-3/8
3 STBD	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/4	00-1/4	- 00-1/4	00-1/4	- 00-3/8	00-3/8

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

LENGTH BETWEEN DRAFT MARKS: 245'-00"

January 11, 2016

PRECISION MEASUREMENT
 & ANALYSIS, INC.
 P.O. Box 2092
 Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "EMS 398"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	4.23	0	299.91	0	646.86	0	1,005.99	0	1,365.42	0	1,724.84	0	2,084.27	0	2,443.70	0	2,803.13	0	3,162.56
1/4	8.04	1/4	306.76	1/4	654.33	1/4	1,013.48	1/4	1,372.90	1/4	1,732.33	1/4	2,091.76	1/4	2,451.19	1/4	2,810.62	1/4	3,170.05
1/2	11.85	1/2	313.61	1/2	661.80	1/2	1,020.96	1/2	1,380.39	1/2	1,739.82	1/2	2,099.25	1/2	2,458.68	1/2	2,818.11	1/2	3,177.54
3/4	15.65	3/4	320.46	3/4	669.28	3/4	1,028.45	3/4	1,387.88	3/4	1,747.31	3/4	2,106.74	3/4	2,466.17	3/4	2,825.60	3/4	3,185.02
1	19.46	1	327.31	1	676.75	1	1,035.94	1	1,395.37	1	1,754.80	1	2,114.23	1	2,473.65	1	2,833.08	1	3,192.51
1/4	25.22	1/4	334.23	1/4	684.22	1/4	1,043.43	1/4	1,402.86	1/4	1,762.29	1/4	2,121.71	1/4	2,481.14	1/4	2,840.57	1/4	3,200.00
1/2	30.97	1/2	341.16	1/2	691.70	1/2	1,050.92	1/2	1,410.34	1/2	1,769.77	1/2	2,129.20	1/2	2,488.63	1/2	2,848.06	1/2	3,207.49
3/4	36.73	3/4	348.08	3/4	699.17	3/4	1,058.40	3/4	1,417.83	3/4	1,777.26	3/4	2,136.69	3/4	2,496.12	3/4	2,855.55	3/4	3,214.98
2	42.48	2	355.00	2	706.64	2	1,065.89	2	1,425.32	2	1,784.75	2	2,144.18	2	2,503.61	2	2,863.04	2	3,222.46
1/4	48.58	1/4	362.00	1/4	714.12	1/4	1,073.38	1/4	1,432.81	1/4	1,792.24	1/4	2,151.67	1/4	2,511.10	1/4	2,870.52	1/4	3,229.95
1/2	54.68	1/2	369.00	1/2	721.59	1/2	1,080.87	1/2	1,440.30	1/2	1,799.73	1/2	2,159.15	1/2	2,518.58	1/2	2,878.01	1/2	3,237.44
3/4	60.77	3/4	376.00	3/4	729.06	3/4	1,088.36	3/4	1,447.79	3/4	1,807.21	3/4	2,166.64	3/4	2,526.07	3/4	2,885.50	3/4	3,244.93
3	66.87	3	383.00	3	736.54	3	1,095.84	3	1,455.27	3	1,814.70	3	2,174.13	3	2,533.56	3	2,892.99	3	3,252.42
1/4	73.04	1/4	390.08	1/4	744.01	1/4	1,103.33	1/4	1,462.76	1/4	1,822.19	1/4	2,181.62	1/4	2,541.05	1/4	2,900.48	1/4	3,259.91
1/2	79.22	1/2	397.15	1/2	751.48	1/2	1,110.82	1/2	1,470.25	1/2	1,829.68	1/2	2,189.11	1/2	2,548.54	1/2	2,907.96	1/2	3,267.39
3/4	85.39	3/4	404.23	3/4	758.95	3/4	1,118.31	3/4	1,477.74	3/4	1,837.17	3/4	2,196.60	3/4	2,556.02	3/4	2,915.45	3/4	3,274.88
4	91.56	4	411.30	4	766.43	4	1,125.80	4	1,485.23	4	1,844.65	4	2,204.08	4	2,563.51	4	2,922.94	4	3,282.37
1/4	97.81	1/4	418.45	1/4	773.90	1/4	1,133.28	1/4	1,492.71	1/4	1,852.14	1/4	2,211.57	1/4	2,571.00	1/4	2,930.43	1/4	3,289.86
1/2	104.06	1/2	425.60	1/2	781.37	1/2	1,140.77	1/2	1,500.20	1/2	1,859.63	1/2	2,219.06	1/2	2,578.49	1/2	2,937.92	1/2	3,297.35
3/4	110.31	3/4	432.75	3/4	788.85	3/4	1,148.26	3/4	1,507.69	3/4	1,867.12	3/4	2,226.55	3/4	2,585.98	3/4	2,945.41	3/4	3,304.83
5	116.55	5	439.90	5	796.32	5	1,155.75	5	1,515.18	5	1,874.61	5	2,234.04	5	2,593.46	5	2,952.89	5	3,312.32
1/4	122.88	1/4	447.12	1/4	803.81	1/4	1,163.24	1/4	1,522.67	1/4	1,882.09	1/4	2,241.52	1/4	2,600.95	1/4	2,960.38	1/4	3,319.81
1/2	129.20	1/2	454.35	1/2	811.30	1/2	1,170.73	1/2	1,530.15	1/2	1,889.58	1/2	2,249.01	1/2	2,608.44	1/2	2,967.87	1/2	3,327.30
3/4	135.52	3/4	461.57	3/4	818.78	3/4	1,178.21	3/4	1,537.64	3/4	1,897.07	3/4	2,256.50	3/4	2,615.93	3/4	2,975.36	3/4	3,334.79
6	141.85	6	468.80	6	826.27	6	1,185.70	6	1,545.13	6	1,904.56	6	2,263.99	6	2,623.42	6	2,982.85	6	3,342.27
1/4	148.24	1/4	476.10	1/4	833.76	1/4	1,193.19	1/4	1,552.62	1/4	1,912.05	1/4	2,271.48	1/4	2,630.90	1/4	2,990.33	1/4	3,349.76
1/2	154.64	1/2	483.40	1/2	841.25	1/2	1,200.68	1/2	1,560.11	1/2	1,919.54	1/2	2,278.96	1/2	2,638.39	1/2	2,997.82	1/2	3,357.25
3/4	161.04	3/4	490.70	3/4	848.74	3/4	1,208.17	3/4	1,567.59	3/4	1,927.02	3/4	2,286.45	3/4	2,645.88	3/4	3,005.31	3/4	3,364.74
7	167.44	7	498.00	7	856.23	7	1,215.65	7	1,575.08	7	1,934.51	7	2,293.94	7	2,653.37	7	3,012.80	7	3,372.23
1/4	173.91	1/4	505.36	1/4	863.71	1/4	1,223.14	1/4	1,582.57	1/4	1,942.00	1/4	2,301.43	1/4	2,660.86	1/4	3,020.29	1/4	3,379.71
1/2	180.39	1/2	512.72	1/2	871.20	1/2	1,230.63	1/2	1,590.06	1/2	1,949.49	1/2	2,308.92	1/2	2,668.35	1/2	3,027.77	1/2	3,387.20
3/4	186.86	3/4	520.08	3/4	878.69	3/4	1,238.12	3/4	1,597.55	3/4	1,956.98	3/4	2,316.40	3/4	2,675.83	3/4	3,035.26	3/4	3,394.69
8	193.33	8	527.44	8	886.18	8	1,245.61	8	1,605.04	8	1,964.46	8	2,323.89	8	2,683.32	8	3,042.75	8	3,402.18
1/4	199.88	1/4	534.87	1/4	893.67	1/4	1,253.09	1/4	1,612.52	1/4	1,971.95	1/4	2,331.38	1/4	2,690.81	1/4	3,050.24	1/4	3,409.67
1/2	206.43	1/2	542.31	1/2	901.15	1/2	1,260.58	1/2	1,620.01	1/2	1,979.44	1/2	2,338.87	1/2	2,698.30	1/2	3,057.73	1/2	3,417.16
3/4	212.98	3/4	549.75	3/4	908.64	3/4	1,268.07	3/4	1,627.50	3/4	1,986.93	3/4	2,346.36	3/4	2,705.79	3/4	3,065.21	3/4	3,424.64
9	219.53	9	557.18	9	916.13	9	1,275.56	9	1,634.99	9	1,994.42	9	2,353.85	9	2,713.27	9	3,072.70	9	3,432.13
1/4	226.15	1/4	564.65	1/4	923.62	1/4	1,283.05	1/4	1,642.48	1/4	2,001.90	1/4	2,361.33	1/4	2,720.76	1/4	3,080.19	1/4	3,439.62
1/2	232.77	1/2	572.13	1/2	931.11	1/2	1,290.53	1/2	1,649.96	1/2	2,009.39	1/2	2,368.82	1/2	2,728.25	1/2	3,087.68	1/2	3,447.11
3/4	239.40	3/4	579.60	3/4	938.59	3/4	1,298.02	3/4	1,657.45	3/4	2,016.88	3/4	2,376.31	3/4	2,735.74	3/4	3,095.17	3/4	3,454.60
10	246.02	10	587.07	10	946.08	10	1,305.51	10	1,664.94	10	2,024.37	10	2,383.80	10	2,743.23	10	3,102.66	10	3,462.08
1/4	252.72	1/4	594.55	1/4	953.57	1/4	1,313.00	1/4	1,672.43	1/4	2,031.86	1/4	2,391.29	1/4	2,750.71	1/4	3,110.14	1/4	3,469.56
1/2	259.42	1/2	602.02	1/2	961.06	1/2	1,320.49	1/2	1,679.92	1/2	2,039.34	1/2	2,398.77	1/2	2,758.20	1/2	3,117.63	1/2	3,477.03
3/4	266.12	3/4	609.49	3/4	968.55	3/4	1,327.98	3/4	1,687.40	3/4	2,046.83	3/4	2,406.26	3/4	2,765.69	3/4	3,125.12	3/4	3,484.51
11	272.82	11	616.97	11	976.03	11	1,335.46	11	1,694.89	11	2,054.32	11	2,413.75	11	2,773.18	11	3,132.61	11	3,491.99
1/4	279.59	1/4	624.44	1/4	983.52	1/4	1,342.95	1/4	1,702.38	1/4	2,061.81	1/4	2,421.24	1/4	2,780.67	1/4	3,140.10	1/4	3,499.42
1/2	286.36	1/2	631.91	1/2	991.01	1/2	1,350.44	1/2	1,709.87	1/2	2,069.30	1/2	2,428.73	1/2	2,788.15	1/2	3,147.58	1/2	3,506.86
3/4	293.14	3/4	639.39	3/4	998.50	3/4	1,357.93	3/4	1,717.36	3/4	2,076.79	3/4	2,436.21	3/4	2,795.64	3/4	3,155.07	3/4	3,514.30

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 INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 51'-00" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	3,521.73	0	3,867.95	0	4,193.70	0	4,499.74	0		0		0		0		0		0	
1/4	3,529.13	1/4	3,874.93	1/4	4,200.27	1/4	4,505.89	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,536.54	1/2	3,881.90	1/2	4,206.83	1/2	4,512.04	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,543.94	3/4	3,888.88	3/4	4,213.39	3/4	4,518.20	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,551.34	1	3,895.85	1	4,219.96	1	4,524.35	1		1		1		1		1		1	
1/4	3,558.71	1/4	3,902.79	1/4	4,226.49	1/4	4,530.47	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,566.08	1/2	3,909.73	1/2	4,233.02	1/2	4,536.59	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,573.45	3/4	3,916.67	3/4	4,239.55	3/4	4,542.71	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,580.82	2	3,923.61	2	4,246.08	2	4,548.83	2		2		2		2		2		2	
1/4	3,588.15	1/4	3,930.52	1/4	4,252.57	1/4	4,554.91	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,595.48	1/2	3,937.43	1/2	4,259.07	1/2	4,561.00	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,602.82	3/4	3,944.33	3/4	4,265.56	3/4	4,567.08	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,610.15	3	3,951.24	3	4,272.06	3	4,573.17	3		3		3		3		3		3	
1/4	3,617.45	1/4	3,958.11	1/4	4,278.52	1/4	4,579.22	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,624.75	1/2	3,964.98	1/2	4,284.98	1/2	4,585.27	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,632.05	3/4	3,971.85	3/4	4,291.44	3/4	4,591.32	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,639.35	4	3,978.73	4	4,297.90	4	4,597.37	4		4		4		4		4		4	
1/4	3,646.62	1/4	3,985.56	1/4	4,304.33	1/4	4,604.84	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,653.88	1/2	3,992.40	1/2	4,310.76	1/2	4,612.31	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,661.15	3/4	3,999.24	3/4	4,317.19	3/4	4,619.78	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,668.42	5	4,006.08	5	4,323.61	5	4,627.25	5		5		5		5		5		5	
1/4	3,675.65	1/4	4,012.88	1/4	4,330.01	1/4	4,634.72	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,682.88	1/2	4,019.68	1/2	4,336.40	1/2	4,642.19	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,690.11	3/4	4,026.49	3/4	4,342.79	3/4	4,649.67	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,697.34	6	4,033.29	6	4,349.18	6	4,657.14	6		6		6		6		6		6	
1/4	3,704.54	1/4	4,040.06	1/4	4,355.54	1/4	4,664.61	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,711.74	1/2	4,046.83	1/2	4,361.90	1/2	4,672.08	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,718.93	3/4	4,053.60	3/4	4,368.26	3/4	4,679.55	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,726.13	7	4,060.37	7	4,374.62	7	4,687.02	7		7		7		7		7		7	
1/4	3,733.29	1/4	4,067.10	1/4	4,380.94	1/4	4,694.33	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,740.46	1/2	4,073.84	1/2	4,387.27	1/2	4,701.64	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,747.62	3/4	4,080.57	3/4	4,393.59	3/4	4,708.95	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,754.78	8	4,087.31	8	4,399.92	8	4,716.26	8		8		8		8		8		8	
1/4	3,761.91	1/4	4,094.01	1/4	4,406.21	1/4	4,722.89	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,769.04	1/2	4,100.71	1/2	4,412.50	1/2	4,729.52	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,776.17	3/4	4,107.41	3/4	4,418.79	3/4	4,736.15	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,783.30	9	4,114.11	9	4,425.08	9	4,742.78	9		9		9		9		9		9	
1/4	3,790.39	1/4	4,120.78	1/4	4,431.33	1/4	4,748.05	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,797.49	1/2	4,127.45	1/2	4,437.59	1/2	4,753.32	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,804.58	3/4	4,134.11	3/4	4,443.84	3/4	4,758.59	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,811.68	10	4,140.78	10	4,450.10	10	4,763.85	10		10		10		10		10		10	
1/4	3,818.74	1/4	4,147.41	1/4	4,456.32	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,825.80	1/2	4,154.04	1/2	4,462.54	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,832.86	3/4	4,160.68	3/4	4,468.77	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,839.92	11	4,167.31	11	4,474.99	11		11		11		11		11		11		11	
1/4	3,846.93	1/4	4,173.91	1/4	4,481.18	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,853.93	1/2	4,180.51	1/2	4,487.36	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,860.94	3/4	4,187.10	3/4	4,493.55	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	4.23	0	299.91	0	646.86	0	1,005.43	0	1,364.31	0	1,723.75	0	2,083.18	0	2,442.61	0	2,802.05	0	3,161.48
1/4	8.04	1/4	306.76	1/4	654.33	1/4	1,012.90	1/4	1,371.80	1/4	1,731.24	1/4	2,090.67	1/4	2,450.10	1/4	2,809.54	1/4	3,168.97
1/2	11.85	1/2	313.61	1/2	661.80	1/2	1,020.36	1/2	1,379.29	1/2	1,738.72	1/2	2,098.16	1/2	2,457.59	1/2	2,817.02	1/2	3,176.46
3/4	15.65	3/4	320.46	3/4	669.28	3/4	1,027.83	3/4	1,386.78	3/4	1,746.21	3/4	2,105.65	3/4	2,465.08	3/4	2,824.51	3/4	3,183.95
1	19.46	1	327.31	1	676.75	1	1,035.30	1	1,394.27	1	1,753.70	1	2,113.13	1	2,472.57	1	2,832.00	1	3,191.43
1/4	25.22	1/4	334.23	1/4	684.22	1/4	1,042.76	1/4	1,401.75	1/4	1,761.19	1/4	2,120.62	1/4	2,480.06	1/4	2,839.49	1/4	3,198.92
1/2	30.97	1/2	341.16	1/2	691.70	1/2	1,050.23	1/2	1,409.24	1/2	1,768.68	1/2	2,128.11	1/2	2,487.54	1/2	2,846.98	1/2	3,206.41
3/4	36.73	3/4	348.08	3/4	699.17	3/4	1,057.69	3/4	1,416.73	3/4	1,776.16	3/4	2,135.60	3/4	2,495.03	3/4	2,854.47	3/4	3,213.90
2	42.48	2	355.00	2	706.64	2	1,065.16	2	1,424.22	2	1,783.65	2	2,143.09	2	2,502.52	2	2,861.95	2	3,221.39
1/4	48.58	1/4	362.00	1/4	714.12	1/4	1,072.62	1/4	1,431.71	1/4	1,791.14	1/4	2,150.57	1/4	2,510.01	1/4	2,869.44	1/4	3,228.88
1/2	54.68	1/2	369.00	1/2	721.59	1/2	1,080.09	1/2	1,439.20	1/2	1,798.63	1/2	2,158.06	1/2	2,517.50	1/2	2,876.93	1/2	3,236.36
3/4	60.77	3/4	376.00	3/4	729.06	3/4	1,087.55	3/4	1,446.68	3/4	1,806.12	3/4	2,165.55	3/4	2,524.98	3/4	2,884.42	3/4	3,243.85
3	66.87	3	383.00	3	736.54	3	1,095.02	3	1,454.17	3	1,813.61	3	2,173.04	3	2,532.47	3	2,891.91	3	3,251.34
1/4	73.04	1/4	390.08	1/4	744.01	1/4	1,102.48	1/4	1,461.66	1/4	1,821.09	1/4	2,180.53	1/4	2,539.96	1/4	2,899.39	1/4	3,258.83
1/2	79.22	1/2	397.15	1/2	751.48	1/2	1,109.95	1/2	1,469.15	1/2	1,828.58	1/2	2,188.02	1/2	2,547.45	1/2	2,906.88	1/2	3,266.32
3/4	85.39	3/4	404.23	3/4	758.95	3/4	1,117.41	3/4	1,476.64	3/4	1,836.07	3/4	2,195.50	3/4	2,554.94	3/4	2,914.37	3/4	3,273.80
4	91.56	4	411.30	4	766.43	4	1,124.88	4	1,484.13	4	1,843.56	4	2,202.99	4	2,562.43	4	2,921.86	4	3,281.29
1/4	97.81	1/4	418.45	1/4	773.90	1/4	1,132.34	1/4	1,491.61	1/4	1,851.05	1/4	2,210.48	1/4	2,569.91	1/4	2,929.35	1/4	3,288.78
1/2	104.06	1/2	425.60	1/2	781.37	1/2	1,139.81	1/2	1,499.10	1/2	1,858.54	1/2	2,217.97	1/2	2,577.40	1/2	2,936.84	1/2	3,296.27
3/4	110.31	3/4	432.75	3/4	788.85	3/4	1,147.27	3/4	1,506.59	3/4	1,866.02	3/4	2,225.46	3/4	2,584.89	3/4	2,944.32	3/4	3,303.76
5	116.55	5	439.90	5	796.32	5	1,154.74	5	1,514.08	5	1,873.51	5	2,232.95	5	2,592.38	5	2,951.81	5	3,311.25
1/4	122.88	1/4	447.12	1/4	803.81	1/4	1,162.20	1/4	1,521.57	1/4	1,881.00	1/4	2,240.43	1/4	2,599.87	1/4	2,959.30	1/4	3,318.73
1/2	129.20	1/2	454.35	1/2	811.30	1/2	1,169.67	1/2	1,529.05	1/2	1,888.49	1/2	2,247.92	1/2	2,607.36	1/2	2,966.79	1/2	3,326.22
3/4	135.52	3/4	461.57	3/4	818.78	3/4	1,177.13	3/4	1,536.54	3/4	1,895.98	3/4	2,255.41	3/4	2,614.84	3/4	2,974.28	3/4	3,333.71
6	141.85	6	468.80	6	826.27	6	1,184.60	6	1,544.03	6	1,903.46	6	2,262.90	6	2,622.33	6	2,981.77	6	3,341.20
1/4	148.24	1/4	476.10	1/4	833.74	1/4	1,192.09	1/4	1,551.52	1/4	1,910.95	1/4	2,270.39	1/4	2,629.82	1/4	2,989.25	1/4	3,348.69
1/2	154.64	1/2	483.40	1/2	841.20	1/2	1,199.57	1/2	1,559.01	1/2	1,918.44	1/2	2,277.87	1/2	2,637.31	1/2	2,996.74	1/2	3,356.18
3/4	161.04	3/4	490.70	3/4	848.67	3/4	1,207.06	3/4	1,566.50	3/4	1,925.93	3/4	2,285.36	3/4	2,644.80	3/4	3,004.23	3/4	3,363.66
7	167.44	7	498.00	7	856.13	7	1,214.55	7	1,573.98	7	1,933.42	7	2,292.85	7	2,652.28	7	3,011.72	7	3,371.15
1/4	173.91	1/4	505.36	1/4	863.60	1/4	1,222.04	1/4	1,581.47	1/4	1,940.91	1/4	2,300.34	1/4	2,659.77	1/4	3,019.21	1/4	3,378.64
1/2	180.39	1/2	512.72	1/2	871.06	1/2	1,229.53	1/2	1,588.96	1/2	1,948.39	1/2	2,307.83	1/2	2,667.26	1/2	3,026.69	1/2	3,386.13
3/4	186.86	3/4	520.08	3/4	878.53	3/4	1,237.01	3/4	1,596.45	3/4	1,955.88	3/4	2,315.32	3/4	2,674.75	3/4	3,034.18	3/4	3,393.62
8	193.33	8	527.44	8	885.99	8	1,244.50	8	1,603.94	8	1,963.37	8	2,322.80	8	2,682.24	8	3,041.67	8	3,401.10
1/4	199.88	1/4	534.87	1/4	893.46	1/4	1,251.99	1/4	1,611.42	1/4	1,970.86	1/4	2,330.29	1/4	2,689.73	1/4	3,049.16	1/4	3,408.59
1/2	206.43	1/2	542.31	1/2	900.92	1/2	1,259.48	1/2	1,618.91	1/2	1,978.35	1/2	2,337.78	1/2	2,697.21	1/2	3,056.65	1/2	3,416.08
3/4	212.98	3/4	549.75	3/4	908.39	3/4	1,266.97	3/4	1,626.40	3/4	1,985.83	3/4	2,345.27	3/4	2,704.70	3/4	3,064.14	3/4	3,423.57
9	219.53	9	557.18	9	915.85	9	1,274.46	9	1,633.89	9	1,993.32	9	2,352.76	9	2,712.19	9	3,071.62	9	3,431.06
1/4	226.15	1/4	564.65	1/4	923.32	1/4	1,281.94	1/4	1,641.38	1/4	2,000.81	1/4	2,360.24	1/4	2,719.68	1/4	3,079.11	1/4	3,438.55
1/2	232.77	1/2	572.13	1/2	930.78	1/2	1,289.43	1/2	1,648.87	1/2	2,008.30	1/2	2,367.73	1/2	2,727.17	1/2	3,086.60	1/2	3,446.03
3/4	239.40	3/4	579.60	3/4	938.25	3/4	1,296.92	3/4	1,656.35	3/4	2,015.79	3/4	2,375.22	3/4	2,734.65	3/4	3,094.09	3/4	3,453.52
10	246.02	10	587.07	10	945.71	10	1,304.41	10	1,663.84	10	2,023.28	10	2,382.71	10	2,742.14	10	3,101.58	10	3,461.01
1/4	252.72	1/4	594.55	1/4	953.18	1/4	1,311.90	1/4	1,671.33	1/4	2,030.76	1/4	2,390.20	1/4	2,749.63	1/4	3,109.06	1/4	3,468.48
1/2	259.42	1/2	602.02	1/2	960.64	1/2	1,319.38	1/2	1,678.82	1/2	2,038.25	1/2	2,397.69	1/2	2,757.12	1/2	3,116.55	1/2	3,475.94
3/4	266.12	3/4	609.49	3/4	968.11	3/4	1,326.87	3/4	1,686.31	3/4	2,045.74	3/4	2,405.17	3/4	2,764.61	3/4	3,124.04	3/4	3,483.41
11	272.82	11	616.97	11	975.57	11	1,334.36	11	1,693.79	11	2,053.23	11	2,412.66	11	2,772.10	11	3,131.53	11	3,490.88
1/4	279.59	1/4	624.44	1/4	983.04	1/4	1,341.85	1/4	1,701.28	1/4	2,060.72	1/4	2,420.15	1/4	2,779.58	1/4	3,139.02	1/4	3,498.32
1/2	286.36	1/2	631.91	1/2	990.50	1/2	1,349.34	1/2	1,708.77	1/2	2,068.20	1/2	2,427.64	1/2	2,787.07	1/2	3,146.51	1/2	3,505.75
3/4	293.14	3/4	639.39	3/4	997.97	3/4	1,356.83	3/4	1,716.26	3/4	2,075.69	3/4	2,435.13	3/4	2,794.56	3/4	3,153.99	3/4	3,513.19

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 INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 51'-00" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	3,520.63	0	3,866.85	0	4,192.60	0	4,498.63	0		0		0		0		0		0	
1/4	3,528.03	1/4	3,873.82	1/4	4,199.16	1/4	4,504.79	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,535.43	1/2	3,880.80	1/2	4,205.72	1/2	4,510.94	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,542.83	3/4	3,887.77	3/4	4,212.29	3/4	4,517.09	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,550.24	1	3,894.75	1	4,218.85	1	4,523.25	1		1		1		1		1		1	
1/4	3,557.61	1/4	3,901.69	1/4	4,225.38	1/4	4,529.36	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,564.97	1/2	3,908.63	1/2	4,231.91	1/2	4,535.48	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,572.34	3/4	3,915.57	3/4	4,238.44	3/4	4,541.60	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,579.71	2	3,922.51	2	4,244.97	2	4,547.72	2		2		2		2		2		2	
1/4	3,587.05	1/4	3,929.41	1/4	4,251.47	1/4	4,553.81	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,594.38	1/2	3,936.32	1/2	4,257.96	1/2	4,559.89	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,601.71	3/4	3,943.23	3/4	4,264.46	3/4	4,565.98	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,609.05	3	3,950.13	3	4,270.95	3	4,572.06	3		3		3		3		3		3	
1/4	3,616.35	1/4	3,957.00	1/4	4,277.41	1/4	4,578.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,623.65	1/2	3,963.88	1/2	4,283.88	1/2	4,584.16	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,630.95	3/4	3,970.75	3/4	4,290.34	3/4	4,590.21	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,638.25	4	3,977.62	4	4,296.80	4	4,596.26	4		4		4		4		4		4	
1/4	3,645.51	1/4	3,984.46	1/4	4,303.23	1/4	4,603.73	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,652.78	1/2	3,991.30	1/2	4,309.65	1/2	4,611.21	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,660.04	3/4	3,998.13	3/4	4,316.08	3/4	4,618.68	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,667.31	5	4,004.97	5	4,322.51	5	4,626.15	5		5		5		5		5		5	
1/4	3,674.54	1/4	4,011.78	1/4	4,328.90	1/4	4,633.62	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,681.77	1/2	4,018.58	1/2	4,335.29	1/2	4,641.09	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,689.00	3/4	4,025.38	3/4	4,341.69	3/4	4,648.56	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,696.24	6	4,032.19	6	4,348.08	6	4,656.03	6		6		6		6		6		6	
1/4	3,703.43	1/4	4,038.96	1/4	4,354.44	1/4	4,663.50	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,710.63	1/2	4,045.72	1/2	4,360.80	1/2	4,670.97	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,717.83	3/4	4,052.49	3/4	4,367.15	3/4	4,678.44	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,725.03	7	4,059.26	7	4,373.51	7	4,685.91	7		7		7		7		7		7	
1/4	3,732.19	1/4	4,066.00	1/4	4,379.84	1/4	4,693.22	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,739.35	1/2	4,072.73	1/2	4,386.16	1/2	4,700.53	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,746.51	3/4	4,079.47	3/4	4,392.49	3/4	4,707.84	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,753.68	8	4,086.20	8	4,398.81	8	4,715.15	8		8		8		8		8		8	
1/4	3,760.81	1/4	4,092.90	1/4	4,405.10	1/4	4,721.78	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,767.93	1/2	4,099.61	1/2	4,411.39	1/2	4,728.42	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,775.06	3/4	4,106.31	3/4	4,417.68	3/4	4,735.05	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,782.19	9	4,113.01	9	4,423.97	9	4,741.68	9		9		9		9		9		9	
1/4	3,789.29	1/4	4,119.67	1/4	4,430.23	1/4	4,746.94	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,796.38	1/2	4,126.34	1/2	4,436.48	1/2	4,752.21	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,803.48	3/4	4,133.01	3/4	4,442.74	3/4	4,757.48	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,810.57	10	4,139.67	10	4,449.00	10	4,762.75	10		10		10		10		10		10	
1/4	3,817.63	1/4	4,146.31	1/4	4,455.22	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,824.69	1/2	4,152.94	1/2	4,461.44	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,831.75	3/4	4,159.57	3/4	4,467.66	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,838.81	11	4,166.20	11	4,473.88	11		11		11		11		11		11		11	
1/4	3,845.82	1/4	4,172.80	1/4	4,480.07	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,852.83	1/2	4,179.40	1/2	4,486.26	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,859.84	3/4	4,186.00	3/4	4,492.44	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	17.52	0	368.58	0	729.01	0	1,089.44	0	1,450.17	0	1,810.91	0	2,171.64	0	2,532.38	0	2,893.11	0	3,253.85
1/4	22.89	1/4	376.10	1/4	736.51	1/4	1,096.96	1/4	1,457.69	1/4	1,818.42	1/4	2,179.16	1/4	2,539.89	1/4	2,900.63	1/4	3,261.36
1/2	28.25	1/2	383.61	1/2	744.01	1/2	1,104.47	1/2	1,465.20	1/2	1,826.94	1/2	2,186.67	1/2	2,547.41	1/2	2,908.14	1/2	3,268.88
3/4	33.62	3/4	391.13	3/4	751.51	3/4	1,111.99	3/4	1,472.72	3/4	1,833.45	3/4	2,194.19	3/4	2,554.92	3/4	2,915.66	3/4	3,276.39
1	38.99	1	398.64	1	759.01	1	1,119.50	1	1,480.24	1	1,840.97	1	2,201.70	1	2,562.44	1	2,923.17	1	3,283.91
1/4	46.24	1/4	406.16	1/4	766.51	1/4	1,127.02	1/4	1,487.75	1/4	1,848.49	1/4	2,209.22	1/4	2,569.95	1/4	2,930.69	1/4	3,291.42
1/2	53.48	1/2	413.67	1/2	774.01	1/2	1,134.53	1/2	1,495.27	1/2	1,856.00	1/2	2,216.73	1/2	2,577.47	1/2	2,938.20	1/2	3,298.94
3/4	60.73	3/4	421.19	3/4	781.51	3/4	1,142.05	3/4	1,502.78	3/4	1,863.52	3/4	2,224.25	3/4	2,584.98	3/4	2,945.72	3/4	3,306.45
2	67.98	2	428.70	2	789.01	2	1,149.56	2	1,510.30	2	1,871.03	2	2,231.77	2	2,592.50	2	2,953.23	2	3,313.97
1/4	75.49	1/4	436.22	1/4	796.51	1/4	1,157.08	1/4	1,517.81	1/4	1,878.55	1/4	2,239.28	1/4	2,600.02	1/4	2,960.75	1/4	3,321.48
1/2	83.01	1/2	443.73	1/2	804.01	1/2	1,164.59	1/2	1,525.33	1/2	1,886.06	1/2	2,246.80	1/2	2,607.53	1/2	2,967.26	1/2	3,329.00
3/4	90.52	3/4	451.25	3/4	811.51	3/4	1,172.11	3/4	1,532.84	3/4	1,893.58	3/4	2,254.31	3/4	2,615.05	3/4	2,975.78	3/4	3,336.51
3	98.04	3	458.76	3	819.01	3	1,179.62	3	1,540.36	3	1,901.09	3	2,261.83	3	2,622.56	3	2,983.30	3	3,344.03
1/4	105.55	1/4	466.28	1/4	826.51	1/4	1,187.14	1/4	1,547.87	1/4	1,908.61	1/4	2,269.34	1/4	2,630.08	1/4	2,990.81	1/4	3,351.55
1/2	113.07	1/2	473.79	1/2	834.01	1/2	1,194.65	1/2	1,555.39	1/2	1,916.12	1/2	2,276.86	1/2	2,637.59	1/2	2,998.33	1/2	3,359.06
3/4	120.58	3/4	481.31	3/4	841.51	3/4	1,202.17	3/4	1,562.90	3/4	1,923.64	3/4	2,284.37	3/4	2,645.11	3/4	3,005.84	3/4	3,366.58
4	128.10	4	488.82	4	849.01	4	1,209.68	4	1,570.42	4	1,931.15	4	2,291.89	4	2,652.62	4	3,013.36	4	3,374.09
1/4	135.61	1/4	496.34	1/4	856.51	1/4	1,217.20	1/4	1,577.93	1/4	1,938.67	1/4	2,299.40	1/4	2,660.14	1/4	3,020.87	1/4	3,381.61
1/2	143.13	1/2	503.85	1/2	864.01	1/2	1,224.72	1/2	1,585.45	1/2	1,946.18	1/2	2,306.92	1/2	2,667.65	1/2	3,028.39	1/2	3,389.12
3/4	150.64	3/4	511.37	3/4	871.51	3/4	1,232.23	3/4	1,592.96	3/4	1,953.70	3/4	2,314.43	3/4	2,675.17	3/4	3,035.90	3/4	3,396.64
5	158.16	5	518.88	5	879.01	5	1,239.75	5	1,600.48	5	1,961.21	5	2,321.95	5	2,682.68	5	3,043.42	5	3,404.15
1/4	165.67	1/4	526.40	1/4	886.53	1/4	1,247.26	1/4	1,608.00	1/4	1,968.73	1/4	2,329.46	1/4	2,690.20	1/4	3,050.93	1/4	3,411.67
1/2	173.19	1/2	533.91	1/2	894.04	1/2	1,254.78	1/2	1,615.51	1/2	1,976.25	1/2	2,336.98	1/2	2,697.71	1/2	3,058.45	1/2	3,419.18
3/4	180.70	3/4	541.43	3/4	901.56	3/4	1,262.29	3/4	1,623.03	3/4	1,983.76	3/4	2,344.49	3/4	2,705.23	3/4	3,065.96	3/4	3,426.70
6	188.22	6	548.94	6	909.07	6	1,269.81	6	1,630.54	6	1,991.28	6	2,352.01	6	2,712.74	6	3,073.48	6	3,434.21
1/4	195.73	1/4	556.46	1/4	916.59	1/4	1,277.32	1/4	1,638.06	1/4	1,998.79	1/4	2,359.53	1/4	2,720.26	1/4	3,080.99	1/4	3,441.73
1/2	203.25	1/2	563.97	1/2	924.10	1/2	1,284.84	1/2	1,645.57	1/2	2,006.31	1/2	2,367.04	1/2	2,727.78	1/2	3,088.51	1/2	3,449.24
3/4	210.76	3/4	571.49	3/4	931.62	3/4	1,292.35	3/4	1,653.09	3/4	2,013.82	3/4	2,374.56	3/4	2,735.29	3/4	3,096.02	3/4	3,456.76
7	218.28	7	579.00	7	939.13	7	1,299.87	7	1,660.60	7	2,021.34	7	2,382.07	7	2,742.81	7	3,103.54	7	3,464.27
1/4	225.79	1/4	586.50	1/4	946.65	1/4	1,307.38	1/4	1,668.12	1/4	2,028.85	1/4	2,389.59	1/4	2,750.32	1/4	3,111.06	1/4	3,471.79
1/2	233.31	1/2	594.00	1/2	954.16	1/2	1,314.90	1/2	1,675.63	1/2	2,036.37	1/2	2,397.10	1/2	2,757.84	1/2	3,118.57	1/2	3,479.31
3/4	240.82	3/4	601.50	3/4	961.68	3/4	1,322.41	3/4	1,683.15	3/4	2,043.88	3/4	2,404.62	3/4	2,765.35	3/4	3,126.09	3/4	3,486.82
8	248.34	8	609.00	8	969.19	8	1,329.93	8	1,690.66	8	2,051.40	8	2,412.13	8	2,772.87	8	3,133.60	8	3,494.34
1/4	255.85	1/4	616.50	1/4	976.71	1/4	1,337.44	1/4	1,698.18	1/4	2,058.91	1/4	2,419.65	1/4	2,780.38	1/4	3,141.12	1/4	3,501.85
1/2	263.37	1/2	624.00	1/2	984.23	1/2	1,344.96	1/2	1,705.69	1/2	2,066.43	1/2	2,427.16	1/2	2,787.90	1/2	3,148.63	1/2	3,509.37
3/4	270.88	3/4	631.50	3/4	991.74	3/4	1,352.48	3/4	1,713.21	3/4	2,073.94	3/4	2,434.68	3/4	2,795.41	3/4	3,156.15	3/4	3,516.88
9	278.40	9	639.00	9	999.26	9	1,359.99	9	1,720.72	9	2,081.46	9	2,442.19	9	2,802.93	9	3,163.66	9	3,524.40
1/4	285.91	1/4	646.51	1/4	1,006.77	1/4	1,367.51	1/4	1,728.24	1/4	2,088.97	1/4	2,449.71	1/4	2,810.44	1/4	3,171.18	1/4	3,531.91
1/2	293.43	1/2	654.01	1/2	1,014.29	1/2	1,375.02	1/2	1,735.76	1/2	2,096.49	1/2	2,457.22	1/2	2,817.96	1/2	3,178.69	1/2	3,539.43
3/4	300.94	3/4	661.51	3/4	1,021.80	3/4	1,382.54	3/4	1,743.27	3/4	2,104.01	3/4	2,464.74	3/4	2,825.47	3/4	3,186.21	3/4	3,546.94
10	308.46	10	669.01	10	1,029.32	10	1,390.05	10	1,750.79	10	2,111.52	10	2,472.25	10	2,832.99	10	3,193.72	10	3,554.46
1/4	315.97	1/4	676.51	1/4	1,036.83	1/4	1,397.57	1/4	1,758.30	1/4	2,119.04	1/4	2,479.77	1/4	2,840.50	1/4	3,201.24	1/4	3,561.96
1/2	323.49	1/2	684.01	1/2	1,044.35	1/2	1,405.08	1/2	1,765.82	1/2	2,126.55	1/2	2,487.29	1/2	2,848.02	1/2	3,208.75	1/2	3,569.46
3/4	331.01	3/4	691.51	3/4	1,051.86	3/4	1,412.60	3/4	1,773.33	3/4	2,134.07	3/4	2,494.80	3/4	2,855.54	3/4	3,216.27	3/4	3,576.97
11	338.52	11	699.01	11	1,059.38	11	1,420.11	11	1,780.85	11	2,141.58	11	2,502.32	11	2,863.05	11	3,223.78	11	3,584.47
1/4	346.04	1/4	706.51	1/4	1,066.89	1/4	1,427.63	1/4	1,788.36	1/4	2,149.10	1/4	2,479.77	1/4	2,840.50	1/4	3,201.24	1/4	3,561.96
1/2	353.55	1/2	714.01	1/2	1,074.41	1/2	1,435.14	1/2	1,795.88	1/2	2,156.61	1/2	2,487.29	1/2	2,848.02	1/2	3,208.75	1/2	3,569.46
3/4	361.07	3/4	721.51	3/4	1,081.92	3/4	1,442.66	3/4	1,803.39	3/4	2,164.13	3/4	2,524.86	3/4	2,885.60	3/4	3,246.33	3/4	3,606.86

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 INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 51'-00" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	3,614.32	0	3,961.85	0	4,288.90	0	4,596.25	0		0		0		0		0		0	
1/4	3,621.75	1/4	3,968.85	1/4	4,295.50	1/4	4,602.43	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,629.18	1/2	3,975.85	1/2	4,302.09	1/2	4,608.61	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,636.61	3/4	3,982.86	3/4	4,308.68	3/4	4,614.79	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,644.04	1	3,989.86	1	4,315.27	1	4,620.97	1		1		1		1		1		1	
1/4	3,651.44	1/4	3,996.83	1/4	4,321.83	1/4	4,627.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,658.83	1/2	4,003.79	1/2	4,328.38	1/2	4,633.26	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,666.23	3/4	4,010.76	3/4	4,334.94	3/4	4,639.41	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,673.63	2	4,017.73	2	4,341.50	2	4,645.55	2		2		2		2		2		2	
1/4	3,680.99	1/4	4,024.66	1/4	4,348.02	1/4	4,651.67	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,688.35	1/2	4,031.60	1/2	4,354.54	1/2	4,657.78	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,695.71	3/4	4,038.53	3/4	4,361.07	3/4	4,663.89	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,703.07	3	4,045.46	3	4,367.59	3	4,670.00	3		3		3		3		3		3	
1/4	3,710.40	1/4	4,052.36	1/4	4,374.08	1/4	4,676.08	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,717.73	1/2	4,059.26	1/2	4,380.57	1/2	4,682.16	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,725.05	3/4	4,066.16	3/4	4,387.05	3/4	4,688.24	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,732.38	4	4,073.06	4	4,393.54	4	4,694.31	4		4		4		4		4		4	
1/4	3,739.67	1/4	4,079.92	1/4	4,400.00	1/4	4,701.81	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,746.97	1/2	4,086.79	1/2	4,406.45	1/2	4,709.31	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,754.26	3/4	4,093.65	3/4	4,412.91	3/4	4,716.81	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,761.55	5	4,100.52	5	4,419.36	5	4,724.31	5		5		5		5		5		5	
1/4	3,768.81	1/4	4,107.35	1/4	4,425.78	1/4	4,731.80	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,776.07	1/2	4,114.18	1/2	4,432.20	1/2	4,739.30	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,783.33	3/4	4,121.01	3/4	4,438.62	3/4	4,746.80	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,790.59	6	4,127.84	6	4,445.04	6	4,754.30	6		6		6		6		6		6	
1/4	3,797.81	1/4	4,134.64	1/4	4,451.43	1/4	4,761.80	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,805.04	1/2	4,141.44	1/2	4,457.81	1/2	4,769.29	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,812.26	3/4	4,148.23	3/4	4,464.20	3/4	4,776.79	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,819.48	7	4,155.03	7	4,470.58	7	4,784.29	7		7		7		7		7		7	
1/4	3,826.67	1/4	4,161.79	1/4	4,476.93	1/4	4,791.63	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,833.86	1/2	4,168.55	1/2	4,483.29	1/2	4,798.96	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,841.05	3/4	4,175.32	3/4	4,489.64	3/4	4,806.30	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,848.24	8	4,182.08	8	4,495.99	8	4,813.64	8		8		8		8		8		8	
1/4	3,855.40	1/4	4,188.81	1/4	4,502.31	1/4	4,820.29	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,862.56	1/2	4,195.53	1/2	4,508.62	1/2	4,826.94	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,869.71	3/4	4,202.26	3/4	4,514.94	3/4	4,833.59	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,876.87	9	4,208.99	9	4,521.26	9	4,840.25	9		9		9		9		9		9	
1/4	3,883.99	1/4	4,215.68	1/4	4,527.54	1/4	4,845.53	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,891.11	1/2	4,222.38	1/2	4,533.83	1/2	4,850.82	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,898.23	3/4	4,229.07	3/4	4,540.11	3/4	4,856.11	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,905.36	10	4,235.76	10	4,546.39	10	4,861.40	10		10		10		10		10		10	
1/4	3,912.44	1/4	4,242.42	1/4	4,552.64	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,919.53	1/2	4,249.08	1/2	4,558.89	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,926.62	3/4	4,255.74	3/4	4,565.14	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,933.71	11	4,262.40	11	4,571.39	11		11		11		11		11		11		11	
1/4	3,940.74	1/4	4,269.03	1/4	4,577.60	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,947.78	1/2	4,275.65	1/2	4,583.82	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,954.81	3/4	4,282.28	3/4	4,590.03	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	17.52	0	368.58	0	722.67	0	1,074.23	0	1,434.96	0	1,795.70	0	2,156.43	0	2,517.17	0	2,877.90	0	3,238.63
1/4	22.89	1/4	376.10	1/4	729.85	1/4	1,081.74	1/4	1,442.48	1/4	1,803.21	1/4	2,163.95	1/4	2,524.68	1/4	2,885.42	1/4	3,246.15
1/2	28.25	1/2	383.61	1/2	737.04	1/2	1,089.26	1/2	1,449.99	1/2	1,810.73	1/2	2,171.46	1/2	2,532.20	1/2	2,892.93	1/2	3,253.66
3/4	33.62	3/4	391.13	3/4	744.22	3/4	1,096.77	3/4	1,457.51	3/4	1,818.24	3/4	2,178.98	3/4	2,539.71	3/4	2,900.45	3/4	3,261.18
1	38.99	1	398.64	1	751.40	1	1,104.29	1	1,465.02	1	1,825.76	1	2,186.49	1	2,547.23	1	2,907.96	1	3,268.70
1/4	46.24	1/4	406.16	1/4	758.59	1/4	1,111.80	1/4	1,472.54	1/4	1,833.27	1/4	2,194.01	1/4	2,554.74	1/4	2,915.48	1/4	3,276.21
1/2	53.48	1/2	413.67	1/2	765.77	1/2	1,119.32	1/2	1,480.05	1/2	1,840.79	1/2	2,201.52	1/2	2,562.26	1/2	2,922.99	1/2	3,283.73
3/4	60.73	3/4	421.19	3/4	772.95	3/4	1,126.83	3/4	1,487.57	3/4	1,848.30	3/4	2,209.04	3/4	2,569.77	3/4	2,930.51	3/4	3,291.24
2	67.98	2	428.70	2	780.14	2	1,134.35	2	1,495.08	2	1,855.82	2	2,216.55	2	2,577.29	2	2,938.02	2	3,298.76
1/4	75.49	1/4	436.22	1/4	787.32	1/4	1,141.87	1/4	1,502.60	1/4	1,863.33	1/4	2,224.07	1/4	2,584.80	1/4	2,945.54	1/4	3,306.27
1/2	83.01	1/2	443.73	1/2	794.50	1/2	1,150.38	1/2	1,510.12	1/2	1,870.85	1/2	2,231.58	1/2	2,592.32	1/2	2,953.05	1/2	3,313.79
3/4	90.52	3/4	451.25	3/4	801.69	3/4	1,156.90	3/4	1,517.63	3/4	1,878.36	3/4	2,239.10	3/4	2,599.83	3/4	2,960.57	3/4	3,321.30
3	98.04	3	458.76	3	808.87	3	1,164.41	3	1,525.15	3	1,885.88	3	2,246.61	3	2,607.35	3	2,968.08	3	3,328.82
1/4	105.55	1/4	466.28	1/4	816.05	1/4	1,171.93	1/4	1,532.66	1/4	1,893.40	1/4	2,254.13	1/4	2,614.86	1/4	2,975.60	1/4	3,336.33
1/2	113.07	1/2	473.79	1/2	823.24	1/2	1,179.44	1/2	1,540.18	1/2	1,900.91	1/2	2,261.65	1/2	2,622.38	1/2	2,983.11	1/2	3,343.85
3/4	120.58	3/4	481.31	3/4	830.42	3/4	1,186.96	3/4	1,547.69	3/4	1,908.43	3/4	2,269.16	3/4	2,629.89	3/4	2,990.63	3/4	3,351.36
4	128.10	4	488.82	4	837.60	4	1,194.47	4	1,555.21	4	1,915.94	4	2,276.68	4	2,637.41	4	2,998.14	4	3,358.88
1/4	135.61	1/4	496.34	1/4	844.79	1/4	1,201.99	1/4	1,562.72	1/4	1,923.46	1/4	2,284.19	1/4	2,644.93	1/4	3,005.66	1/4	3,366.39
1/2	143.13	1/2	503.85	1/2	851.97	1/2	1,209.50	1/2	1,570.24	1/2	1,930.97	1/2	2,291.71	1/2	2,652.44	1/2	3,013.18	1/2	3,373.91
3/4	150.64	3/4	511.37	3/4	859.15	3/4	1,217.02	3/4	1,577.75	3/4	1,938.49	3/4	2,299.22	3/4	2,659.96	3/4	3,020.69	3/4	3,381.42
5	158.16	5	518.88	5	866.34	5	1,224.53	5	1,585.27	5	1,946.00	5	2,306.74	5	2,667.47	5	3,028.21	5	3,388.94
1/4	165.67	1/4	526.40	1/4	873.53	1/4	1,232.05	1/4	1,592.78	1/4	1,953.52	1/4	2,314.25	1/4	2,674.99	1/4	3,035.72	1/4	3,396.46
1/2	173.19	1/2	533.91	1/2	880.73	1/2	1,239.56	1/2	1,600.30	1/2	1,961.03	1/2	2,321.77	1/2	2,682.50	1/2	3,043.24	1/2	3,403.97
3/4	180.70	3/4	541.43	3/4	887.93	3/4	1,247.08	3/4	1,607.81	3/4	1,968.55	3/4	2,329.28	3/4	2,690.02	3/4	3,050.75	3/4	3,411.49
6	188.22	6	548.94	6	895.13	6	1,254.59	6	1,615.33	6	1,976.06	6	2,336.80	6	2,697.53	6	3,058.27	6	3,419.00
1/4	195.73	1/4	556.46	1/4	902.33	1/4	1,262.11	1/4	1,622.84	1/4	1,983.58	1/4	2,344.31	1/4	2,705.05	1/4	3,065.78	1/4	3,426.52
1/2	203.25	1/2	563.97	1/2	909.53	1/2	1,269.63	1/2	1,630.36	1/2	1,991.09	1/2	2,351.83	1/2	2,712.56	1/2	3,073.30	1/2	3,434.03
3/4	210.76	3/4	571.49	3/4	916.72	3/4	1,277.14	3/4	1,637.88	3/4	1,998.61	3/4	2,359.34	3/4	2,720.08	3/4	3,080.81	3/4	3,441.55
7	218.28	7	579.00	7	923.92	7	1,284.66	7	1,645.39	7	2,006.12	7	2,366.86	7	2,727.59	7	3,088.33	7	3,449.06
1/4	225.79	1/4	586.19	1/4	931.44	1/4	1,292.17	1/4	1,652.91	1/4	2,013.64	1/4	2,374.37	1/4	2,735.11	1/4	3,095.84	1/4	3,456.58
1/2	233.31	1/2	593.37	1/2	938.95	1/2	1,299.69	1/2	1,660.42	1/2	2,021.16	1/2	2,381.89	1/2	2,742.62	1/2	3,103.36	1/2	3,464.09
3/4	240.82	3/4	600.55	3/4	946.47	3/4	1,307.20	3/4	1,667.94	3/4	2,028.67	3/4	2,389.41	3/4	2,750.14	3/4	3,110.87	3/4	3,471.61
8	248.34	8	607.74	8	953.98	8	1,314.72	8	1,675.45	8	2,036.19	8	2,396.92	8	2,757.65	8	3,118.39	8	3,479.12
1/4	255.85	1/4	614.92	1/4	961.50	1/4	1,322.23	1/4	1,682.97	1/4	2,043.70	1/4	2,404.44	1/4	2,765.17	1/4	3,125.90	1/4	3,486.64
1/2	263.37	1/2	622.10	1/2	969.01	1/2	1,329.75	1/2	1,690.48	1/2	2,051.22	1/2	2,411.95	1/2	2,772.69	1/2	3,133.42	1/2	3,494.15
3/4	270.88	3/4	629.29	3/4	976.53	3/4	1,337.26	3/4	1,698.00	3/4	2,058.73	3/4	2,419.47	3/4	2,780.20	3/4	3,140.94	3/4	3,501.67
9	278.40	9	636.47	9	984.04	9	1,344.78	9	1,705.51	9	2,066.25	9	2,426.98	9	2,787.72	9	3,148.45	9	3,509.18
1/4	285.91	1/4	643.65	1/4	991.56	1/4	1,352.29	1/4	1,713.03	1/4	2,073.76	1/4	2,434.50	1/4	2,795.23	1/4	3,155.97	1/4	3,516.70
1/2	293.43	1/2	650.84	1/2	999.07	1/2	1,359.81	1/2	1,720.54	1/2	2,081.28	1/2	2,442.01	1/2	2,802.75	1/2	3,163.48	1/2	3,524.22
3/4	300.94	3/4	658.02	3/4	1,006.59	3/4	1,367.32	3/4	1,728.06	3/4	2,088.79	3/4	2,449.53	3/4	2,810.26	3/4	3,171.00	3/4	3,531.73
10	308.46	10	665.20	10	1,014.11	10	1,374.84	10	1,735.57	10	2,096.31	10	2,457.04	10	2,817.78	10	3,178.51	10	3,539.25
1/4	315.97	1/4	672.39	1/4	1,021.62	1/4	1,382.36	1/4	1,743.09	1/4	2,103.82	1/4	2,464.56	1/4	2,825.29	1/4	3,186.03	1/4	3,546.75
1/2	323.49	1/2	679.57	1/2	1,029.14	1/2	1,389.87	1/2	1,750.60	1/2	2,111.34	1/2	2,472.07	1/2	2,832.81	1/2	3,193.54	1/2	3,554.25
3/4	331.01	3/4	686.75	3/4	1,036.65	3/4	1,397.39	3/4	1,758.12	3/4	2,118.85	3/4	2,479.59	3/4	2,840.32	3/4	3,201.06	3/4	3,561.75
11	338.52	11	693.94	11	1,044.17	11	1,404.90	11	1,765.64	11	2,126.37	11	2,487.10	11	2,847.84	11	3,208.57	11	3,569.26
1/4	346.04	1/4	701.12	1/4	1,051.68	1/4	1,412.42	1/4	1,773.15	1/4	2,133.89	1/4	2,494.62	1/4	2,855.35	1/4	3,216.09	1/4	3,576.72
1/2	353.55	1/2	708.30	1/2	1,059.20	1/2	1,419.93	1/2	1,780.67	1/2	2,141.40	1/2	2,502.13	1/2	2,862.87	1/2	3,223.60	1/2	3,584.18
3/4	361.07	3/4	715.49	3/4	1,066.71	3/4	1,427.45	3/4	1,788.18	3/4	2,148.92	3/4	2,509.65	3/4	2,870.38	3/4	3,231.12	3/4	3,591.65

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 INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 51'-00" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	3,599.11	0	3,946.64	0	4,273.69	0	4,581.03	0		0		0		0		0		0	
1/4	3,606.54	1/4	3,953.64	1/4	4,280.28	1/4	4,587.21	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,613.97	1/2	3,960.64	1/2	4,286.87	1/2	4,593.40	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,621.40	3/4	3,967.64	3/4	4,293.47	3/4	4,599.58	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,628.83	1	3,974.65	1	4,300.06	1	4,605.76	1		1		1		1		1		1	
1/4	3,636.23	1/4	3,981.61	1/4	4,306.61	1/4	4,611.90	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,643.62	1/2	3,988.58	1/2	4,313.17	1/2	4,618.05	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,651.02	3/4	3,995.55	3/4	4,319.73	3/4	4,624.20	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,658.41	2	4,002.52	2	4,326.28	2	4,630.34	2		2		2		2		2		2	
1/4	3,665.78	1/4	4,009.45	1/4	4,332.81	1/4	4,636.45	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,673.14	1/2	4,016.38	1/2	4,339.33	1/2	4,642.57	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,680.50	3/4	4,023.32	3/4	4,345.85	3/4	4,648.68	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,687.86	3	4,030.25	3	4,352.38	3	4,654.79	3		3		3		3		3		3	
1/4	3,695.19	1/4	4,037.15	1/4	4,358.86	1/4	4,660.87	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,702.51	1/2	4,044.05	1/2	4,365.35	1/2	4,666.94	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,709.84	3/4	4,050.95	3/4	4,371.84	3/4	4,673.02	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,717.17	4	4,057.85	4	4,378.33	4	4,679.10	4		4		4		4		4		4	
1/4	3,724.46	1/4	4,064.71	1/4	4,384.78	1/4	4,686.60	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,731.75	1/2	4,071.58	1/2	4,391.24	1/2	4,694.10	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,739.05	3/4	4,078.44	3/4	4,397.69	3/4	4,701.59	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,746.34	5	4,085.31	5	4,404.15	5	4,709.09	5		5		5		5		5		5	
1/4	3,753.60	1/4	4,092.14	1/4	4,410.57	1/4	4,716.59	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,760.86	1/2	4,098.97	1/2	4,416.99	1/2	4,724.09	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,768.12	3/4	4,105.80	3/4	4,423.41	3/4	4,731.59	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,775.37	6	4,112.63	6	4,429.83	6	4,739.09	6		6		6		6		6		6	
1/4	3,782.60	1/4	4,119.43	1/4	4,436.21	1/4	4,746.58	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,789.82	1/2	4,126.22	1/2	4,442.60	1/2	4,754.08	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,797.05	3/4	4,133.02	3/4	4,448.99	3/4	4,761.58	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,804.27	7	4,139.82	7	4,455.37	7	4,769.08	7		7		7		7		7		7	
1/4	3,811.46	1/4	4,146.58	1/4	4,461.72	1/4	4,776.41	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,818.65	1/2	4,153.34	1/2	4,468.07	1/2	4,783.75	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,825.84	3/4	4,160.10	3/4	4,474.43	3/4	4,791.09	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,833.03	8	4,166.86	8	4,480.78	8	4,798.43	8		8		8		8		8		8	
1/4	3,840.19	1/4	4,173.59	1/4	4,487.09	1/4	4,805.08	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,847.34	1/2	4,180.32	1/2	4,493.41	1/2	4,811.73	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,854.50	3/4	4,187.05	3/4	4,499.73	3/4	4,818.38	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,861.66	9	4,193.78	9	4,506.05	9	4,825.03	9		9		9		9		9		9	
1/4	3,868.78	1/4	4,200.47	1/4	4,512.33	1/4	4,830.32	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,875.90	1/2	4,207.16	1/2	4,518.61	1/2	4,835.61	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,883.02	3/4	4,213.86	3/4	4,524.90	3/4	4,840.90	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,890.14	10	4,220.55	10	4,531.18	10	4,846.18	10		10		10		10		10		10	
1/4	3,897.23	1/4	4,227.21	1/4	4,537.43	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,904.32	1/2	4,233.87	1/2	4,543.68	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,911.41	3/4	4,240.53	3/4	4,549.93	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,918.49	11	4,247.19	11	4,556.18	11		11		11		11		11		11		11	
1/4	3,925.53	1/4	4,253.82	1/4	4,562.39	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,932.57	1/2	4,260.44	1/2	4,568.60	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,939.60	3/4	4,267.07	3/4	4,574.82	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	17.54	0	369.02	0	729.88	0	1,090.75	0	1,451.92	0	1,813.09	0	2,174.27	0	2,535.28	0	2,896.28	0	3,257.28
1/4	22.91	1/4	376.55	1/4	737.39	1/4	1,098.28	1/4	1,459.45	1/4	1,820.62	1/4	2,181.79	1/4	2,542.80	1/4	2,903.80	1/4	3,264.80
1/2	28.29	1/2	384.07	1/2	744.90	1/2	1,105.80	1/2	1,466.97	1/2	1,828.14	1/2	2,189.31	1/2	2,550.32	1/2	2,911.32	1/2	3,272.32
3/4	33.66	3/4	391.59	3/4	752.41	3/4	1,113.33	3/4	1,474.50	3/4	1,835.67	3/4	2,196.84	3/4	2,557.84	3/4	2,918.84	3/4	3,279.84
1	39.04	1	399.12	1	759.92	1	1,120.85	1	1,482.02	1	1,843.19	1	2,204.36	1	2,565.36	1	2,926.36	1	3,287.36
1/4	46.29	1/4	406.64	1/4	767.43	1/4	1,128.37	1/4	1,489.55	1/4	1,850.72	1/4	2,211.88	1/4	2,572.88	1/4	2,933.88	1/4	3,294.88
1/2	53.55	1/2	414.17	1/2	774.94	1/2	1,135.90	1/2	1,497.07	1/2	1,858.24	1/2	2,219.40	1/2	2,580.40	1/2	2,941.40	1/2	3,302.40
3/4	60.80	3/4	421.69	3/4	782.45	3/4	1,143.42	3/4	1,504.59	3/4	1,865.77	3/4	2,226.93	3/4	2,587.92	3/4	2,948.92	3/4	3,309.92
2	68.06	2	429.21	2	789.96	2	1,150.95	2	1,512.12	2	1,873.29	2	2,234.45	2	2,595.44	2	2,956.44	2	3,317.44
1/4	75.58	1/4	436.74	1/4	797.47	1/4	1,158.47	1/4	1,519.64	1/4	1,880.81	1/4	2,241.97	1/4	2,602.97	1/4	2,963.96	1/4	3,324.96
1/2	83.11	1/2	444.26	1/2	804.98	1/2	1,166.00	1/2	1,527.17	1/2	1,888.34	1/2	2,249.49	1/2	2,610.49	1/2	2,971.48	1/2	3,332.48
3/4	90.63	3/4	451.79	3/4	812.49	3/4	1,173.52	3/4	1,534.69	3/4	1,895.86	3/4	2,257.01	3/4	2,618.01	3/4	2,979.01	3/4	3,340.00
3	98.15	3	459.31	3	819.99	3	1,181.04	3	1,542.22	3	1,903.39	3	2,264.53	3	2,625.53	3	2,986.53	3	3,347.52
1/4	105.68	1/4	466.84	1/4	827.50	1/4	1,188.57	1/4	1,549.74	1/4	1,910.91	1/4	2,272.05	1/4	2,633.05	1/4	2,994.05	1/4	3,355.05
1/2	113.20	1/2	474.36	1/2	835.01	1/2	1,196.09	1/2	1,557.26	1/2	1,918.44	1/2	2,279.57	1/2	2,640.57	1/2	3,001.57	1/2	3,362.57
3/4	120.73	3/4	481.88	3/4	842.52	3/4	1,203.62	3/4	1,564.79	3/4	1,925.96	3/4	2,287.09	3/4	2,648.09	3/4	3,009.09	3/4	3,370.10
4	128.25	4	489.41	4	850.03	4	1,211.14	4	1,572.31	4	1,933.48	4	2,294.61	4	2,655.61	4	3,016.61	4	3,377.62
1/4	135.77	1/4	496.93	1/4	857.54	1/4	1,218.67	1/4	1,579.84	1/4	1,941.01	1/4	2,302.13	1/4	2,663.13	1/4	3,024.13	1/4	3,385.15
1/2	143.30	1/2	504.46	1/2	865.05	1/2	1,226.19	1/2	1,587.36	1/2	1,948.53	1/2	2,309.65	1/2	2,670.65	1/2	3,031.65	1/2	3,392.67
3/4	150.82	3/4	511.98	3/4	872.56	3/4	1,233.72	3/4	1,594.89	3/4	1,956.06	3/4	2,317.18	3/4	2,678.17	3/4	3,039.17	3/4	3,400.19
5	158.35	5	519.50	5	880.07	5	1,241.24	5	1,602.41	5	1,963.58	5	2,324.70	5	2,685.69	5	3,046.69	5	3,407.72
1/4	165.87	1/4	527.03	1/4	887.59	1/4	1,248.76	1/4	1,609.94	1/4	1,971.11	1/4	2,332.22	1/4	2,693.22	1/4	3,054.21	1/4	3,415.24
1/2	173.40	1/2	534.55	1/2	895.12	1/2	1,256.29	1/2	1,617.46	1/2	1,978.63	1/2	2,339.74	1/2	2,700.74	1/2	3,061.73	1/2	3,422.77
3/4	180.92	3/4	542.08	3/4	902.64	3/4	1,263.81	3/4	1,624.98	3/4	1,986.16	3/4	2,347.26	3/4	2,708.26	3/4	3,069.26	3/4	3,430.29
6	188.44	6	549.60	6	910.17	6	1,271.34	6	1,632.51	6	1,993.68	6	2,354.78	6	2,715.78	6	3,076.78	6	3,437.82
1/4	195.97	1/4	557.12	1/4	917.69	1/4	1,278.86	1/4	1,640.03	1/4	2,001.20	1/4	2,362.30	1/4	2,723.30	1/4	3,084.30	1/4	3,445.34
1/2	203.49	1/2	564.65	1/2	925.22	1/2	1,286.39	1/2	1,647.56	1/2	2,008.73	1/2	2,369.82	1/2	2,730.82	1/2	3,091.82	1/2	3,452.86
3/4	211.02	3/4	572.17	3/4	932.74	3/4	1,293.91	3/4	1,655.08	3/4	2,016.25	3/4	2,377.34	3/4	2,738.34	3/4	3,099.34	3/4	3,460.39
7	218.54	7	579.70	7	940.26	7	1,301.44	7	1,662.61	7	2,023.78	7	2,384.86	7	2,745.86	7	3,106.86	7	3,467.91
1/4	226.06	1/4	587.21	1/4	947.79	1/4	1,308.96	1/4	1,670.13	1/4	2,031.30	1/4	2,392.38	1/4	2,753.38	1/4	3,114.38	1/4	3,474.15
1/2	233.59	1/2	594.72	1/2	955.31	1/2	1,316.48	1/2	1,677.66	1/2	2,038.83	1/2	2,399.90	1/2	2,760.90	1/2	3,121.90	1/2	3,480.40
3/4	241.11	3/4	602.22	3/4	962.84	3/4	1,324.01	3/4	1,685.18	3/4	2,046.35	3/4	2,407.42	3/4	2,768.42	3/4	3,129.42	3/4	3,486.64
8	248.64	8	609.73	8	970.36	8	1,331.53	8	1,692.70	8	2,053.88	8	2,414.95	8	2,775.94	8	3,136.94	8	3,492.88
1/4	256.16	1/4	617.24	1/4	977.89	1/4	1,339.06	1/4	1,700.23	1/4	2,061.40	1/4	2,422.47	1/4	2,783.46	1/4	3,144.46	1/4	3,499.12
1/2	263.68	1/2	624.75	1/2	985.41	1/2	1,346.58	1/2	1,707.75	1/2	2,068.92	1/2	2,429.99	1/2	2,790.99	1/2	3,151.98	1/2	3,505.36
3/4	271.21	3/4	632.26	3/4	992.93	3/4	1,354.11	3/4	1,715.28	3/4	2,076.45	3/4	2,437.51	3/4	2,798.51	3/4	3,159.50	3/4	3,511.60
9	278.73	9	639.77	9	1,000.46	9	1,361.63	9	1,722.80	9	2,083.97	9	2,445.03	9	2,806.03	9	3,167.03	9	3,517.85
1/4	286.26	1/4	647.28	1/4	1,007.98	1/4	1,369.15	1/4	1,730.33	1/4	2,091.50	1/4	2,452.55	1/4	2,813.55	1/4	3,174.55	1/4	3,524.09
1/2	293.78	1/2	654.79	1/2	1,015.51	1/2	1,376.68	1/2	1,737.85	1/2	2,099.02	1/2	2,460.07	1/2	2,821.07	1/2	3,182.07	1/2	3,530.33
3/4	301.31	3/4	662.30	3/4	1,023.03	3/4	1,384.20	3/4	1,745.37	3/4	2,106.55	3/4	2,467.59	3/4	2,828.59	3/4	3,189.59	3/4	3,536.57
10	308.83	10	669.81	10	1,030.56	10	1,391.73	10	1,752.90	10	2,114.07	10	2,475.11	10	2,836.11	10	3,197.11	10	3,542.81
1/4	316.35	1/4	677.32	1/4	1,038.08	1/4	1,399.25	1/4	1,760.42	1/4	2,121.59	1/4	2,482.63	1/4	2,843.63	1/4	3,204.63	1/4	3,549.04
1/2	323.88	1/2	684.83	1/2	1,045.61	1/2	1,406.78	1/2	1,767.95	1/2	2,129.12	1/2	2,490.15	1/2	2,851.15	1/2	3,212.15	1/2	3,555.26
3/4	331.40	3/4	692.34	3/4	1,053.13	3/4	1,414.30	3/4	1,775.47	3/4	2,136.64	3/4	2,497.67	3/4	2,858.67	3/4	3,219.67	3/4	3,561.49
11	338.93	11	699.85	11	1,060.65	11	1,421.83	11	1,783.00	11	2,144.17	11	2,505.20	11	2,866.19	11	3,227.19	11	3,567.71
1/4	346.45	1/4	707.35	1/4	1,068.18	1/4	1,429.35	1/4	1,790.52	1/4	2,151.69	1/4	2,512.72	1/4	2,873.71	1/4	3,234.71	1/4	3,573.90
1/2	353.97	1/2	714.86	1/2	1,075.70	1/2	1,436.87	1/2	1,798.05	1/2	2,159.22	1/2	2,520.24	1/2	2,881.24	1/2	3,242.23	1/2	3,580.09
3/4	361.50	3/4	722.37	3/4	1,083.23	3/4	1,444.40	3/4	1,805.57	3/4	2,166.74	3/4	2,527.76	3/4	2,888.76	3/4	3,249.75	3/4	3,586.28

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 INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 44'-06" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10 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	3,592.47	0	3,878.86	0	4,144.78	0	4,390.98	0		0		0		0		0		0	
1/4	3,598.63	1/4	3,884.59	1/4	4,150.09	1/4	4,395.89	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,604.78	1/2	3,890.32	1/2	4,155.41	1/2	4,400.79	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,610.94	3/4	3,896.04	3/4	4,160.73	3/4	4,405.70	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,617.10	1	3,901.77	1	4,166.05	1	4,410.61	1		1		1		1		1		1	
1/4	3,623.22	1/4	3,907.47	1/4	4,171.33	1/4	4,415.48	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,629.34	1/2	3,913.16	1/2	4,176.61	1/2	4,420.35	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,635.46	3/4	3,918.85	3/4	4,181.90	3/4	4,425.23	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,641.58	2	3,924.55	2	4,187.18	2	4,430.10	2		2		2		2		2		2	
1/4	3,647.67	1/4	3,930.21	1/4	4,192.43	1/4	4,434.94	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,653.76	1/2	3,935.87	1/2	4,197.68	1/2	4,439.77	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,659.85	3/4	3,941.53	3/4	4,202.93	3/4	4,444.61	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,665.93	3	3,947.19	3	4,208.18	3	4,449.45	3		3		3		3		3		3	
1/4	3,671.99	1/4	3,952.81	1/4	4,213.39	1/4	4,454.26	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,678.04	1/2	3,958.44	1/2	4,218.61	1/2	4,459.06	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,684.09	3/4	3,964.06	3/4	4,223.82	3/4	4,463.86	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,690.15	4	3,969.69	4	4,229.04	4	4,468.67	4		4		4		4		4		4	
1/4	3,696.17	1/4	3,975.28	1/4	4,234.22	1/4	4,474.89	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,702.19	1/2	3,980.87	1/2	4,239.40	1/2	4,481.12	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,708.21	3/4	3,986.46	3/4	4,244.58	3/4	4,487.34	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,714.22	5	3,992.05	5	4,249.76	5	4,493.57	5		5		5		5		5		5	
1/4	3,720.21	1/4	3,997.61	1/4	4,254.90	1/4	4,499.79	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,726.19	1/2	4,003.17	1/2	4,260.05	1/2	4,506.01	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,732.18	3/4	4,008.73	3/4	4,265.20	3/4	4,512.24	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,738.16	6	4,014.28	6	4,270.34	6	4,518.46	6		6		6		6		6		6	
1/4	3,744.12	1/4	4,019.81	1/4	4,275.45	1/4	4,524.69	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,750.07	1/2	4,025.33	1/2	4,280.57	1/2	4,530.91	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,756.02	3/4	4,030.85	3/4	4,285.68	3/4	4,537.14	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,761.97	7	4,036.37	7	4,290.79	7	4,543.36	7		7		7		7		7		7	
1/4	3,767.88	1/4	4,041.86	1/4	4,295.87	1/4	4,549.42	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,773.80	1/2	4,047.35	1/2	4,300.95	1/2	4,555.49	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,779.72	3/4	4,052.84	3/4	4,306.03	3/4	4,561.55	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,785.63	8	4,058.33	8	4,311.10	8	4,567.61	8		8		8		8		8		8	
1/4	3,791.52	1/4	4,063.78	1/4	4,316.15	1/4	4,572.99	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,797.40	1/2	4,069.24	1/2	4,321.19	1/2	4,578.37	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,803.28	3/4	4,074.69	3/4	4,326.23	3/4	4,583.75	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,809.16	9	4,080.15	9	4,331.28	9	4,589.13	9		9		9		9		9		9	
1/4	3,815.01	1/4	4,085.57	1/4	4,336.29	1/4	4,593.14	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,820.86	1/2	4,090.99	1/2	4,341.30	1/2	4,597.15	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,826.71	3/4	4,096.41	3/4	4,346.31	3/4	4,601.16	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,832.56	10	4,101.83	10	4,351.32	10	4,605.17	10		10		10		10		10		10	
1/4	3,838.37	1/4	4,107.21	1/4	4,356.29	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,844.18	1/2	4,112.60	1/2	4,361.27	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,850.00	3/4	4,117.98	3/4	4,366.24	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,855.81	11	4,123.37	11	4,371.22	11		11		11		11		11		11		11	
1/4	3,861.57	1/4	4,128.72	1/4	4,376.16	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,867.34	1/2	4,134.07	1/2	4,381.10	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,873.10	3/4	4,139.43	3/4	4,386.04	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	17.54	0	368.45	0	728.74	0	1,085.60	0	1,441.36	0	1,795.90	0	2,152.78	0	2,513.10	0	2,873.53	0	3,233.98
1/4	22.91	1/4	375.96	1/4	736.24	1/4	1,093.00	1/4	1,448.78	1/4	1,803.26	1/4	2,160.29	1/4	2,520.60	1/4	2,881.04	1/4	3,241.49
1/2	28.29	1/2	383.47	1/2	743.73	1/2	1,100.40	1/2	1,456.19	1/2	1,810.62	1/2	2,167.80	1/2	2,528.10	1/2	2,888.55	1/2	3,249.00
3/4	33.66	3/4	390.99	3/4	751.23	3/4	1,107.80	3/4	1,463.60	3/4	1,817.98	3/4	2,175.31	3/4	2,535.61	3/4	2,896.06	3/4	3,256.51
1	39.04	1	398.50	1	758.73	1	1,115.20	1	1,471.02	1	1,825.34	1	2,182.82	1	2,543.11	1	2,903.57	1	3,264.02
1/4	46.28	1/4	406.01	1/4	766.23	1/4	1,122.60	1/4	1,478.43	1/4	1,832.70	1/4	2,190.33	1/4	2,550.62	1/4	2,911.08	1/4	3,271.53
1/2	53.52	1/2	413.52	1/2	773.72	1/2	1,130.00	1/2	1,485.85	1/2	1,840.06	1/2	2,197.84	1/2	2,558.13	1/2	2,918.58	1/2	3,279.04
3/4	60.77	3/4	421.04	3/4	781.22	3/4	1,137.41	3/4	1,493.26	3/4	1,847.42	3/4	2,205.35	3/4	2,565.64	3/4	2,926.09	3/4	3,286.55
2	68.01	2	428.55	2	788.72	2	1,144.81	2	1,500.67	2	1,854.77	2	2,212.87	2	2,573.15	2	2,933.60	2	3,294.06
1/4	75.52	1/4	436.06	1/4	796.22	1/4	1,152.22	1/4	1,508.09	1/4	1,862.13	1/4	2,220.38	1/4	2,580.66	1/4	2,941.11	1/4	3,301.57
1/2	83.04	1/2	443.57	1/2	803.71	1/2	1,159.63	1/2	1,515.50	1/2	1,869.49	1/2	2,227.89	1/2	2,588.17	1/2	2,948.62	1/2	3,309.08
3/4	90.55	3/4	451.08	3/4	811.21	3/4	1,167.05	3/4	1,522.92	3/4	1,876.85	3/4	2,235.40	3/4	2,595.68	3/4	2,956.13	3/4	3,316.59
3	98.06	3	458.60	3	818.71	3	1,174.46	3	1,530.33	3	1,884.21	3	2,242.91	3	2,603.19	3	2,963.64	3	3,324.10
1/4	105.57	1/4	466.11	1/4	826.21	1/4	1,181.88	1/4	1,537.74	1/4	1,891.57	1/4	2,250.42	1/4	2,610.70	1/4	2,971.15	1/4	3,331.62
1/2	113.09	1/2	473.62	1/2	833.70	1/2	1,189.29	1/2	1,545.16	1/2	1,898.93	1/2	2,257.93	1/2	2,618.20	1/2	2,978.66	1/2	3,339.15
3/4	120.60	3/4	481.13	3/4	841.20	3/4	1,196.70	3/4	1,552.57	3/4	1,906.29	3/4	2,265.44	3/4	2,625.71	3/4	2,986.17	3/4	3,346.67
4	128.11	4	488.65	4	848.70	4	1,204.12	4	1,559.98	4	1,913.64	4	2,272.95	4	2,633.22	4	2,993.68	4	3,354.19
1/4	135.62	1/4	496.16	1/4	856.10	1/4	1,211.53	1/4	1,567.40	1/4	1,921.00	1/4	2,280.46	1/4	2,640.73	1/4	3,001.19	1/4	3,361.72
1/2	143.14	1/2	503.67	1/2	863.50	1/2	1,218.95	1/2	1,574.81	1/2	1,928.36	1/2	2,287.98	1/2	2,648.24	1/2	3,008.70	1/2	3,369.24
3/4	150.65	3/4	511.18	3/4	870.90	3/4	1,226.36	3/4	1,582.23	3/4	1,935.72	3/4	2,295.49	3/4	2,655.75	3/4	3,016.21	3/4	3,376.77
5	158.16	5	518.69	5	878.30	5	1,233.77	5	1,589.64	5	1,943.08	5	2,303.00	5	2,663.26	5	3,023.72	5	3,384.29
1/4	165.67	1/4	526.21	1/4	885.72	1/4	1,241.19	1/4	1,597.05	1/4	1,950.44	1/4	2,310.50	1/4	2,670.77	1/4	3,031.23	1/4	3,391.82
1/2	173.19	1/2	533.72	1/2	893.13	1/2	1,248.60	1/2	1,604.47	1/2	1,957.80	1/2	2,318.00	1/2	2,678.28	1/2	3,038.74	1/2	3,399.34
3/4	180.70	3/4	541.23	3/4	900.55	3/4	1,256.01	3/4	1,611.88	3/4	1,965.15	3/4	2,325.51	3/4	2,685.79	3/4	3,046.25	3/4	3,406.86
6	188.21	6	548.74	6	907.96	6	1,263.43	6	1,619.30	6	1,972.51	6	2,333.01	6	2,693.30	6	3,053.76	6	3,414.39
1/4	195.72	1/4	556.26	1/4	915.36	1/4	1,270.84	1/4	1,626.65	1/4	1,980.02	1/4	2,340.52	1/4	2,700.81	1/4	3,061.27	1/4	3,421.91
1/2	203.23	1/2	563.77	1/2	922.76	1/2	1,278.26	1/2	1,634.01	1/2	1,987.54	1/2	2,348.02	1/2	2,708.32	1/2	3,068.77	1/2	3,429.44
3/4	210.74	3/4	571.28	3/4	930.17	3/4	1,285.67	3/4	1,641.37	3/4	1,995.05	3/4	2,355.52	3/4	2,715.83	3/4	3,076.28	3/4	3,436.96
7	218.25	7	578.79	7	937.57	7	1,293.08	7	1,648.73	7	2,002.56	7	2,363.03	7	2,723.34	7	3,083.79	7	3,444.48
1/4	225.76	1/4	586.29	1/4	944.97	1/4	1,300.50	1/4	1,656.09	1/4	2,010.07	1/4	2,370.53	1/4	2,730.85	1/4	3,091.30	1/4	3,450.73
1/2	233.26	1/2	593.79	1/2	952.37	1/2	1,307.91	1/2	1,663.45	1/2	2,017.58	1/2	2,378.03	1/2	2,738.36	1/2	3,098.81	1/2	3,456.97
3/4	240.77	3/4	601.28	3/4	959.77	3/4	1,315.33	3/4	1,670.81	3/4	2,025.09	3/4	2,385.54	3/4	2,745.87	3/4	3,106.32	3/4	3,463.21
8	248.28	8	608.78	8	967.17	8	1,322.74	8	1,678.17	8	2,032.60	8	2,393.04	8	2,753.38	8	3,113.83	8	3,469.45
1/4	255.79	1/4	616.28	1/4	974.57	1/4	1,330.15	1/4	1,685.52	1/4	2,040.11	1/4	2,400.54	1/4	2,760.89	1/4	3,121.34	1/4	3,475.69
1/2	263.31	1/2	623.78	1/2	981.98	1/2	1,337.57	1/2	1,692.88	1/2	2,047.62	1/2	2,408.05	1/2	2,768.39	1/2	3,128.85	1/2	3,481.93
3/4	270.82	3/4	631.27	3/4	989.38	3/4	1,344.98	3/4	1,700.24	3/4	2,055.13	3/4	2,415.55	3/4	2,775.90	3/4	3,136.36	3/4	3,488.18
9	278.33	9	638.77	9	996.78	9	1,352.40	9	1,707.60	9	2,062.65	9	2,423.05	9	2,783.41	9	3,143.87	9	3,494.42
1/4	285.84	1/4	646.27	1/4	1,004.18	1/4	1,359.81	1/4	1,714.96	1/4	2,070.16	1/4	2,430.56	1/4	2,790.92	1/4	3,151.38	1/4	3,500.66
1/2	293.35	1/2	653.77	1/2	1,011.58	1/2	1,367.22	1/2	1,722.32	1/2	2,077.67	1/2	2,438.06	1/2	2,798.43	1/2	3,158.89	1/2	3,506.90
3/4	300.86	3/4	661.26	3/4	1,018.98	3/4	1,374.64	3/4	1,729.68	3/4	2,085.18	3/4	2,445.56	3/4	2,805.94	3/4	3,166.40	3/4	3,513.14
10	308.37	10	668.76	10	1,026.38	10	1,382.05	10	1,737.04	10	2,092.69	10	2,453.07	10	2,813.45	10	3,173.91	10	3,519.38
1/4	315.88	1/4	676.26	1/4	1,033.79	1/4	1,389.47	1/4	1,744.39	1/4	2,100.20	1/4	2,460.57	1/4	2,820.96	1/4	3,181.42	1/4	3,525.61
1/2	323.38	1/2	683.76	1/2	1,041.19	1/2	1,396.88	1/2	1,751.75	1/2	2,107.71	1/2	2,468.07	1/2	2,828.47	1/2	3,188.93	1/2	3,531.83
3/4	330.89	3/4	691.25	3/4	1,048.59	3/4	1,404.29	3/4	1,759.11	3/4	2,115.22	3/4	2,475.58	3/4	2,835.98	3/4	3,196.44	3/4	3,538.06
11	338.40	11	698.75	11	1,055.99	11	1,411.71	11	1,766.47	11	2,122.73	11	2,483.08	11	2,843.49	11	3,203.95	11	3,544.28
1/4	345.91	1/4	706.25	1/4	1,063.39	1/4	1,419.12	1/4	1,773.83	1/4	2,130.24	1/4	2,490.59	1/4	2,851.00	1/4	3,211.46	1/4	3,550.47
1/2	353.43	1/2	713.75	1/2	1,070.79	1/2	1,426.53	1/2	1,781.19	1/2	2,137.76	1/2	2,498.09	1/2	2,858.51	1/2	3,218.96	1/2	3,556.66
3/4	360.94	3/4	721.24	3/4	1,078.19	3/4	1,433.95	3/4	1,788.55	3/4	2,145.27	3/4	2,505.59	3/4	2,866.02	3/4	3,226.47	3/4	3,562.85

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 INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 44'-06" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-10"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	3,569.04	0	3,855.42	0	4,121.33	0	4,367.53	0		0		0		0		0		0	
1/4	3,575.20	1/4	3,861.15	1/4	4,126.65	1/4	4,372.44	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,581.35	1/2	3,866.88	1/2	4,131.97	1/2	4,377.35	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,587.51	3/4	3,872.61	3/4	4,137.29	3/4	4,382.25	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,593.67	1	3,878.34	1	4,142.60	1	4,387.16	1		1		1		1		1		1	
1/4	3,599.79	1/4	3,884.03	1/4	4,147.89	1/4	4,392.03	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,605.91	1/2	3,889.72	1/2	4,153.17	1/2	4,396.90	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,612.03	3/4	3,895.42	3/4	4,158.45	3/4	4,401.78	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,618.15	2	3,901.11	2	4,163.74	2	4,406.65	2		2		2		2		2		2	
1/4	3,624.24	1/4	3,906.77	1/4	4,168.99	1/4	4,411.49	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,630.33	1/2	3,912.43	1/2	4,174.23	1/2	4,416.33	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,636.42	3/4	3,918.09	3/4	4,179.48	3/4	4,421.16	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,642.50	3	3,923.75	3	4,184.73	3	4,426.00	3		3		3		3		3		3	
1/4	3,648.56	1/4	3,929.38	1/4	4,189.95	1/4	4,430.81	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,654.61	1/2	3,935.00	1/2	4,195.16	1/2	4,435.61	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,660.66	3/4	3,940.63	3/4	4,200.38	3/4	4,440.41	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,666.72	4	3,946.25	4	4,205.59	4	4,445.22	4		4		4		4		4		4	
1/4	3,672.74	1/4	3,951.84	1/4	4,210.77	1/4	4,451.44	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,678.75	1/2	3,957.43	1/2	4,215.95	1/2	4,457.67	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,684.77	3/4	3,963.02	3/4	4,221.13	3/4	4,463.89	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,690.79	5	3,968.62	5	4,226.31	5	4,470.12	5		5		5		5		5		5	
1/4	3,696.78	1/4	3,974.17	1/4	4,231.46	1/4	4,476.34	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,702.76	1/2	3,979.73	1/2	4,236.61	1/2	4,482.56	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,708.75	3/4	3,985.29	3/4	4,241.75	3/4	4,488.79	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,714.73	6	3,990.84	6	4,246.90	6	4,495.01	6		6		6		6		6		6	
1/4	3,720.68	1/4	3,996.37	1/4	4,252.01	1/4	4,501.24	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,726.63	1/2	4,001.89	1/2	4,257.12	1/2	4,507.46	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,732.58	3/4	4,007.41	3/4	4,262.23	3/4	4,513.69	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,738.53	7	4,012.93	7	4,267.35	7	4,519.91	7		7		7		7		7		7	
1/4	3,744.45	1/4	4,018.42	1/4	4,272.42	1/4	4,525.97	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,750.37	1/2	4,023.91	1/2	4,277.50	1/2	4,532.04	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,756.28	3/4	4,029.40	3/4	4,282.58	3/4	4,538.10	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,762.20	8	4,034.89	8	4,287.66	8	4,544.16	8		8		8		8		8		8	
1/4	3,768.08	1/4	4,040.34	1/4	4,292.70	1/4	4,549.54	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,773.96	1/2	4,045.80	1/2	4,297.74	1/2	4,554.92	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,779.85	3/4	4,051.25	3/4	4,302.79	3/4	4,560.30	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,785.73	9	4,056.71	9	4,307.83	9	4,565.68	9		9		9		9		9		9	
1/4	3,791.58	1/4	4,062.13	1/4	4,312.84	1/4	4,569.69	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,797.42	1/2	4,067.55	1/2	4,317.85	1/2	4,573.70	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,803.27	3/4	4,072.97	3/4	4,322.86	3/4	4,577.71	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,809.12	10	4,078.39	10	4,327.87	10	4,581.72	10		10		10		10		10		10	
1/4	3,814.93	1/4	4,083.77	1/4	4,332.84	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,820.75	1/2	4,089.16	1/2	4,337.82	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,826.56	3/4	4,094.54	3/4	4,342.79	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,832.38	11	4,099.93	11	4,347.77	11		11		11		11		11		11		11	
1/4	3,838.14	1/4	4,105.28	1/4	4,352.71	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,843.90	1/2	4,110.63	1/2	4,357.65	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,849.66	3/4	4,115.98	3/4	4,362.59	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "EMS 398"

ULLAGE TRIM TABLE

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>
1 PORT	00-3/8	- 00-3/8	00-3/4	- 00-3/4	01-1/8	- 01-1/8	01-1/2	- 01-1/2	02-0/8	- 02-0/8	02-3/8	- 02-3/8
1 STBD	00-3/8	- 00-3/8	00-3/4	- 00-3/4	01-1/8	- 01-1/8	01-1/2	- 01-1/2	02-0/8	- 02-0/8	02-3/8	- 02-3/8
2 PORT	00-3/8	- 00-3/8	00-3/4	- 00-3/4	01-1/8	- 01-1/8	01-1/2	- 01-1/2	01-7/8	- 01-7/8	02-1/4	- 02-1/4
2 STBD	00-3/8	- 00-3/8	00-3/4	- 00-3/4	01-1/8	- 01-1/8	01-1/2	- 01-1/2	01-7/8	- 01-7/8	02-1/4	- 02-1/4
3 PORT	00-0/8	- 00-0/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-1/4	- 00-1/4	00-3/8	- 00-3/8
3 STBD	00-0/8	- 00-0/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-1/4	- 00-1/4	00-3/8	- 00-3/8

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

LENGTH BETWEEN DRAFT MARKS: 245'-00"

January 11, 2016

PRECISION MEASUREMENT
 & ANALYSIS, INC.
 P.O. Box 2092
 Pearland, Texas 77588

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BARGE "EMS 398"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0	4,619.78	0	4,317.18	0	3,999.24	0	3,661.15	0	3,304.83	0	2,945.40	0	2,585.97
1/4		1/4		1/4		1/4	4,612.31	1/4	4,310.76	1/4	3,992.40	1/4	3,653.88	1/4	3,297.34	1/4	2,937.91	1/4	2,578.49
1/2		1/2		1/2		1/2	4,604.84	1/2	4,304.33	1/2	3,985.56	1/2	3,646.62	1/2	3,289.85	1/2	2,930.43	1/2	2,571.00
3/4		3/4		3/4		3/4	4,597.37	3/4	4,297.90	3/4	3,978.72	3/4	3,639.35	3/4	3,282.37	3/4	2,922.94	3/4	2,563.51
1		1		1		1	4,591.32	1	4,291.44	1	3,971.85	1	3,632.05	1	3,274.88	1	2,915.45	1	2,556.02
1/4		1/4		1/4		1/4	4,585.26	1/4	4,284.98	1/4	3,964.98	1/4	3,624.75	1/4	3,267.39	1/4	2,907.96	1/4	2,548.53
1/2		1/2		1/2		1/2	4,579.21	1/2	4,278.52	1/2	3,958.11	1/2	3,617.45	1/2	3,259.90	1/2	2,900.47	1/2	2,541.04
3/4		3/4		3/4		3/4	4,573.16	3/4	4,272.06	3/4	3,951.24	3/4	3,610.15	3/4	3,252.41	3/4	2,892.99	3/4	2,533.56
2		2		2		2	4,567.08	2	4,265.56	2	3,944.33	2	3,602.82	2	3,244.93	2	2,885.50	2	2,526.07
1/4		1/4		1/4		1/4	4,560.99	1/4	4,259.06	1/4	3,937.42	1/4	3,595.48	1/4	3,237.44	1/4	2,878.01	1/4	2,518.58
1/2		1/2		1/2		1/2	4,554.91	1/2	4,252.57	1/2	3,930.52	1/2	3,588.15	1/2	3,229.95	1/2	2,870.52	1/2	2,511.09
3/4		3/4		3/4		3/4	4,548.82	3/4	4,246.07	3/4	3,923.61	3/4	3,580.81	3/4	3,222.46	3/4	2,863.03	3/4	2,503.60
3		3		3		3	4,542.71	3	4,239.54	3	3,916.67	3	3,573.45	3	3,214.97	3	2,855.55	3	2,496.12
1/4		1/4		1/4		1/4	4,536.59	1/4	4,233.01	1/4	3,909.73	1/4	3,566.08	1/4	3,207.49	1/4	2,848.06	1/4	2,488.63
1/2		1/2		1/2		1/2	4,530.47	1/2	4,226.48	1/2	3,902.79	1/2	3,558.71	1/2	3,200.00	1/2	2,840.57	1/2	2,481.14
3/4		3/4		3/4		3/4	4,524.35	3/4	4,219.95	3/4	3,895.85	3/4	3,551.34	3/4	3,192.51	3/4	2,833.08	3/4	2,473.65
4		4		4		4	4,518.19	4	4,213.39	4	3,888.87	4	3,543.94	4	3,185.02	4	2,825.59	4	2,466.16
1/4		1/4		1/4		1/4	4,512.04	1/4	4,206.83	1/4	3,881.90	1/4	3,536.53	1/4	3,177.53	1/4	2,818.10	1/4	2,458.68
1/2		1/2		1/2		1/2	4,505.89	1/2	4,200.26	1/2	3,874.92	1/2	3,529.13	1/2	3,170.05	1/2	2,810.62	1/2	2,451.19
3/4		3/4		3/4		3/4	4,499.73	3/4	4,193.70	3/4	3,867.95	3/4	3,521.73	3/4	3,162.56	3/4	2,803.13	3/4	2,443.70
5		5		5		5	4,493.55	5	4,187.10	5	3,860.94	5	3,514.29	5	3,155.07	5	2,795.64	5	2,436.21
1/4		1/4		1/4		1/4	4,487.36	1/4	4,180.50	1/4	3,853.93	1/4	3,506.86	1/4	3,147.58	1/4	2,788.15	1/4	2,428.72
1/2		1/2		1/2		1/2	4,481.17	1/2	4,173.90	1/2	3,846.92	1/2	3,499.42	1/2	3,140.09	1/2	2,780.66	1/2	2,421.24
3/4		3/4		3/4		3/4	4,474.98	3/4	4,167.31	3/4	3,839.91	3/4	3,491.98	3/4	3,132.60	3/4	2,773.18	3/4	2,413.75
6		6		6		6	4,468.76	6	4,160.67	6	3,832.85	6	3,484.51	6	3,125.12	6	2,765.69	6	2,406.26
1/4		1/4		1/4		1/4	4,462.54	1/4	4,154.04	1/4	3,825.79	1/4	3,477.03	1/4	3,117.63	1/4	2,758.20	1/4	2,398.77
1/2		1/2		1/2		1/2	4,456.32	1/2	4,147.41	1/2	3,818.73	1/2	3,469.56	1/2	3,110.14	1/2	2,750.71	1/2	2,391.28
3/4		3/4		3/4		3/4	4,763.85	3/4	4,450.10	3/4	3,811.67	3/4	3,462.08	3/4	3,102.65	3/4	2,743.22	3/4	2,383.79
7		7		7		7	4,758.58	7	4,443.84	7	3,804.58	7	3,454.59	7	3,095.16	7	2,735.74	7	2,376.31
1/4		1/4		1/4		1/4	4,753.32	1/4	4,437.59	1/4	3,797.48	1/4	3,447.11	1/4	3,087.68	1/4	2,728.25	1/4	2,368.82
1/2		1/2		1/2		1/2	4,748.05	1/2	4,431.33	1/2	3,790.39	1/2	3,439.62	1/2	3,080.19	1/2	2,720.76	1/2	2,361.33
3/4		3/4		3/4		3/4	4,742.78	3/4	4,425.07	3/4	3,783.29	3/4	3,432.13	3/4	3,072.70	3/4	2,713.27	3/4	2,353.84
8		8		8		8	4,736.15	8	4,418.78	8	3,776.17	8	3,424.64	8	3,065.21	8	2,705.78	8	2,346.35
1/4		1/4		1/4		1/4	4,729.52	1/4	4,412.49	1/4	3,769.04	1/4	3,417.15	1/4	3,057.72	1/4	2,698.30	1/4	2,338.87
1/2		1/2		1/2		1/2	4,722.89	1/2	4,406.20	1/2	3,761.91	1/2	3,409.66	1/2	3,050.24	1/2	2,690.81	1/2	2,331.38
3/4		3/4		3/4		3/4	4,716.26	3/4	4,399.91	3/4	3,754.78	3/4	3,402.18	3/4	3,042.75	3/4	2,683.32	3/4	2,323.89
9		9		9		9	4,708.95	9	4,393.59	9	3,747.62	9	3,394.69	9	3,035.26	9	2,675.83	9	2,316.40
1/4		1/4		1/4		1/4	4,701.64	1/4	4,387.26	1/4	3,740.45	1/4	3,387.20	1/4	3,027.77	1/4	2,668.34	1/4	2,308.91
1/2		1/2		1/2		1/2	4,694.33	1/2	4,380.94	1/2	3,733.29	1/2	3,379.71	1/2	3,020.28	1/2	2,660.85	1/2	2,301.43
3/4		3/4		3/4		3/4	4,687.02	3/4	4,374.62	3/4	3,726.13	3/4	3,372.22	3/4	3,012.80	3/4	2,653.37	3/4	2,293.94
10		10		10		10	4,679.55	10	4,368.26	10	3,718.93	10	3,364.74	10	3,005.31	10	2,645.88	10	2,286.45
1/4		1/4		1/4		1/4	4,672.08	1/4	4,361.90	1/4	3,711.73	1/4	3,357.25	1/4	2,997.82	1/4	2,638.39	1/4	2,278.96
1/2		1/2		1/2		1/2	4,664.60	1/2	4,355.54	1/2	3,704.54	1/2	3,349.76	1/2	2,990.33	1/2	2,630.90	1/2	2,271.47
3/4		3/4		3/4		3/4	4,657.13	3/4	4,349.18	3/4	3,697.34	3/4	3,342.27	3/4	2,982.84	3/4	2,623.41	3/4	2,263.99
11		11		11		11	4,649.66	11	4,342.79	11	3,690.11	11	3,334.78	11	2,975.35	11	2,615.93	11	2,256.50
1/4		1/4		1/4		1/4	4,642.19	1/4	4,336.40	1/4	3,682.88	1/4	3,327.30	1/4	2,967.87	1/4	2,608.44	1/4	2,249.01
1/2		1/2		1/2		1/2	4,634.72	1/2	4,330.00	1/2	3,675.64	1/2	3,319.81	1/2	2,960.38	1/2	2,600.95	1/2	2,241.52
3/4		3/4		3/4		3/4	4,627.25	3/4	4,323.61	3/4	3,668.41	3/4	3,312.32	3/4	2,952.89	3/4	2,593.46	3/4	2,234.03

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 51'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
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 P.O. Box 2092
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BARGE "EMS 398"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,226.54	0	1,867.12	0	1,507.69	0	1,148.26	0	788.84	0	432.75	0	110.30	0		0			
1/4	2,219.06	1/4	1,859.63	1/4	1,500.20	1/4	1,140.77	1/4	781.37	1/4	425.60	1/4	104.06	1/4		1/4		1/4	
1/2	2,211.57	1/2	1,852.14	1/2	1,492.71	1/2	1,133.28	1/2	773.90	1/2	418.45	1/2	97.81	1/2		1/2		1/2	
3/4	2,204.08	3/4	1,844.65	3/4	1,485.22	3/4	1,125.79	3/4	766.43	3/4	411.30	3/4	91.56	3/4		3/4		3/4	
1	2,196.59	1	1,837.16	1	1,477.73	1	1,118.31	1	758.95	1	404.22	1	85.39	1		1		1	
1/4	2,189.10	1/4	1,829.68	1/4	1,470.25	1/4	1,110.82	1/4	751.48	1/4	397.15	1/4	79.21	1/4		1/4		1/4	
1/2	2,181.62	1/2	1,822.19	1/2	1,462.76	1/2	1,103.33	1/2	744.01	1/2	390.07	1/2	73.04	1/2		1/2		1/2	
3/4	2,174.13	3/4	1,814.70	3/4	1,455.27	3/4	1,095.84	3/4	736.53	3/4	383.00	3/4	66.87	3/4		3/4		3/4	
2	2,166.64	2	1,807.21	2	1,447.78	2	1,088.35	2	729.06	2	376.00	2	60.77	2		2		2	
1/4	2,159.15	1/4	1,799.72	1/4	1,440.29	1/4	1,080.87	1/4	721.59	1/4	369.00	1/4	54.67	1/4		1/4		1/4	
1/2	2,151.66	1/2	1,792.23	1/2	1,432.81	1/2	1,073.38	1/2	714.11	1/2	362.00	1/2	48.58	1/2		1/2		1/2	
3/4	2,144.18	3/4	1,784.75	3/4	1,425.32	3/4	1,065.89	3/4	706.64	3/4	355.00	3/4	42.48	3/4		3/4		3/4	
3	2,136.69	3	1,777.26	3	1,417.83	3	1,058.40	3	699.17	3	348.08	3	36.72	3		3		3	
1/4	2,129.20	1/4	1,769.77	1/4	1,410.34	1/4	1,050.91	1/4	691.69	1/4	341.15	1/4	30.97	1/4		1/4		1/4	
1/2	2,121.71	1/2	1,762.28	1/2	1,402.85	1/2	1,043.42	1/2	684.22	1/2	334.23	1/2	25.21	1/2		1/2		1/2	
3/4	2,114.22	3/4	1,754.79	3/4	1,395.37	3/4	1,035.94	3/4	676.75	3/4	327.30	3/4	19.46	3/4		3/4		3/4	
4	2,106.74	4	1,747.31	4	1,387.88	4	1,028.45	4	669.27	4	320.46	4	15.65	4		4		4	
1/4	2,099.25	1/4	1,739.82	1/4	1,380.39	1/4	1,020.96	1/4	661.80	1/4	313.61	1/4	11.84	1/4		1/4		1/4	
1/2	2,091.76	1/2	1,732.33	1/2	1,372.90	1/2	1,013.47	1/2	654.33	1/2	306.76	1/2	8.04	1/2		1/2		1/2	
3/4	2,084.27	3/4	1,724.84	3/4	1,365.41	3/4	1,005.98	3/4	646.86	3/4	299.91	3/4	4.23	3/4		3/4		3/4	
5	2,076.78	5	1,717.35	5	1,357.93	5	998.50	5	639.38	5	293.13	5		5		5		5	
1/4	2,069.29	1/4	1,709.87	1/4	1,350.44	1/4	991.01	1/4	631.91	1/4	286.36	1/4		1/4		1/4		1/4	
1/2	2,061.81	1/2	1,702.38	1/2	1,342.95	1/2	983.52	1/2	624.44	1/2	279.59	1/2		1/2		1/2		1/2	
3/4	2,054.32	3/4	1,694.89	3/4	1,335.46	3/4	976.03	3/4	616.96	3/4	272.81	3/4		3/4		3/4		3/4	
6	2,046.83	6	1,687.40	6	1,327.97	6	968.54	6	609.49	6	266.11	6		6		6		6	
1/4	2,039.34	1/4	1,679.91	1/4	1,320.48	1/4	961.06	1/4	602.02	1/4	259.42	1/4		1/4		1/4		1/4	
1/2	2,031.85	1/2	1,672.43	1/2	1,313.00	1/2	953.57	1/2	594.54	1/2	252.72	1/2		1/2		1/2		1/2	
3/4	2,024.37	3/4	1,664.94	3/4	1,305.51	3/4	946.08	3/4	587.07	3/4	246.02	3/4		3/4		3/4		3/4	
7	2,016.88	7	1,657.45	7	1,298.02	7	938.59	7	579.60	7	239.39	7		7		7		7	
1/4	2,009.39	1/4	1,649.96	1/4	1,290.53	1/4	931.10	1/4	572.12	1/4	232.77	1/4		1/4		1/4		1/4	
1/2	2,001.90	1/2	1,642.47	1/2	1,283.04	1/2	923.62	1/2	564.65	1/2	226.15	1/2		1/2		1/2		1/2	
3/4	1,994.41	3/4	1,634.98	3/4	1,275.56	3/4	916.13	3/4	557.18	3/4	219.52	3/4		3/4		3/4		3/4	
8	1,986.93	8	1,627.50	8	1,268.07	8	908.64	8	549.74	8	212.97	8		8		8		8	
1/4	1,979.44	1/4	1,620.01	1/4	1,260.58	1/4	901.15	1/4	542.31	1/4	206.43	1/4		1/4		1/4		1/4	
1/2	1,971.95	1/2	1,612.52	1/2	1,253.09	1/2	893.66	1/2	534.87	1/2	199.88	1/2		1/2		1/2		1/2	
3/4	1,964.46	3/4	1,605.03	3/4	1,245.60	3/4	886.17	3/4	527.44	3/4	193.33	3/4		3/4		3/4		3/4	
9	1,956.97	9	1,597.54	9	1,238.12	9	878.69	9	520.08	9	186.86	9		9		9		9	
1/4	1,949.48	1/4	1,590.06	1/4	1,230.63	1/4	871.20	1/4	512.72	1/4	180.38	1/4		1/4		1/4		1/4	
1/2	1,942.00	1/2	1,582.57	1/2	1,223.14	1/2	863.71	1/2	505.36	1/2	173.91	1/2		1/2		1/2		1/2	
3/4	1,934.51	3/4	1,575.08	3/4	1,215.65	3/4	856.22	3/4	498.00	3/4	167.44	3/4		3/4		3/4		3/4	
10	1,927.02	10	1,567.59	10	1,208.16	10	848.73	10	490.70	10	161.04	10		10		10		10	
1/4	1,919.53	1/4	1,560.10	1/4	1,200.67	1/4	841.25	1/4	483.40	1/4	154.64	1/4		1/4		1/4		1/4	
1/2	1,912.04	1/2	1,552.62	1/2	1,193.19	1/2	833.76	1/2	476.10	1/2	148.24	1/2		1/2		1/2		1/2	
3/4	1,904.56	3/4	1,545.13	3/4	1,185.70	3/4	826.27	3/4	468.80	3/4	141.84	3/4		3/4		3/4		3/4	
11	1,897.07	11	1,537.64	11	1,178.21	11	818.78	11	461.57	11	135.52	11		11		11		11	
1/4	1,889.58	1/4	1,530.15	1/4	1,170.72	1/4	811.29	1/4	454.35	1/4	129.20	1/4		1/4		1/4		1/4	
1/2	1,882.09	1/2	1,522.66	1/2	1,163.23	1/2	803.81	1/2	447.12	1/2	122.87	1/2		1/2		1/2		1/2	
3/4	1,874.60	3/4	1,515.18	3/4	1,155.75	3/4	796.32	3/4	439.90	3/4	116.55	3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0	4,611.21	0	4,309.66	0	3,991.30	0	3,652.78	0	3,296.27	0	2,936.84	0	2,577.40
1/4		1/4		1/4		1/4	4,603.74	1/4	4,303.23	1/4	3,984.46	1/4	3,645.52	1/4	3,288.78	1/4	2,929.35	1/4	2,569.92
1/2		1/2		1/2		1/2	4,596.27	1/2	4,296.80	1/2	3,977.62	1/2	3,638.25	1/2	3,281.30	1/2	2,921.86	1/2	2,562.43
3/4		3/4		3/4		3/4	4,590.22	3/4	4,290.34	3/4	3,970.75	3/4	3,630.95	3/4	3,273.81	3/4	2,914.37	3/4	2,554.94
1		1		1		1	4,584.16	1	4,283.88	1	3,963.88	1	3,623.65	1	3,266.32	1	2,906.89	1	2,547.45
1/4		1/4		1/4		1/4	4,578.11	1/4	4,277.42	1/4	3,957.01	1/4	3,616.35	1/4	3,258.83	1/4	2,899.40	1/4	2,539.96
1/2		1/2		1/2		1/2	4,572.06	1/2	4,270.96	1/2	3,950.14	1/2	3,609.05	1/2	3,251.34	1/2	2,891.91	1/2	2,532.48
3/4		3/4		3/4		3/4	4,565.98	3/4	4,264.46	3/4	3,943.23	3/4	3,601.72	3/4	3,243.85	3/4	2,884.42	3/4	2,524.99
2		2		2		2	4,559.89	2	4,257.96	2	3,936.32	2	3,594.38	2	3,236.37	2	2,876.93	2	2,517.50
1/4		1/4		1/4		1/4	4,553.81	1/4	4,251.47	1/4	3,929.42	1/4	3,587.05	1/4	3,228.88	1/4	2,869.44	1/4	2,510.01
1/2		1/2		1/2		1/2	4,547.72	1/2	4,244.97	1/2	3,922.51	1/2	3,579.71	1/2	3,221.39	1/2	2,861.96	1/2	2,502.52
3/4		3/4		3/4		3/4	4,541.61	3/4	4,238.44	3/4	3,915.57	3/4	3,572.35	3/4	3,213.90	3/4	2,854.47	3/4	2,495.03
3		3		3		3	4,535.49	3	4,231.91	3	3,908.63	3	3,564.98	3	3,206.41	3	2,846.98	3	2,487.55
1/4		1/4		1/4		1/4	4,529.37	1/4	4,225.38	1/4	3,901.69	1/4	3,557.61	1/4	3,198.93	1/4	2,839.49	1/4	2,480.06
1/2		1/2		1/2		1/2	4,523.25	1/2	4,218.85	1/2	3,894.75	1/2	3,550.24	1/2	3,191.44	1/2	2,832.00	1/2	2,472.57
3/4		3/4		3/4		3/4	4,517.09	3/4	4,212.29	3/4	3,887.77	3/4	3,542.84	3/4	3,183.95	3/4	2,824.52	3/4	2,465.08
4		4		4		4	4,510.94	4	4,205.73	4	3,880.80	4	3,535.43	4	3,176.46	4	2,817.03	4	2,457.59
1/4		1/4		1/4		1/4	4,504.79	1/4	4,199.16	1/4	3,873.82	1/4	3,528.03	1/4	3,168.97	1/4	2,809.54	1/4	2,450.11
1/2		1/2		1/2		1/2	4,498.63	1/2	4,192.60	1/2	3,866.85	1/2	3,520.63	1/2	3,161.48	1/2	2,802.05	1/2	2,442.62
3/4		3/4		3/4		3/4	4,492.45	3/4	4,186.00	3/4	3,859.84	3/4	3,513.19	3/4	3,154.00	3/4	2,794.56	3/4	2,435.13
5		5		5		5	4,486.26	5	4,179.40	5	3,852.83	5	3,505.76	5	3,146.51	5	2,787.07	5	2,427.64
1/4		1/4		1/4		1/4	4,480.07	1/4	4,172.80	1/4	3,845.82	1/4	3,498.32	1/4	3,139.02	1/4	2,779.59	1/4	2,420.15
1/2		1/2		1/2		1/2	4,473.88	1/2	4,166.21	1/2	3,838.81	1/2	3,490.88	1/2	3,131.53	1/2	2,772.10	1/2	2,412.66
3/4		3/4		3/4		3/4	4,467.66	3/4	4,159.57	3/4	3,831.75	3/4	3,483.41	3/4	3,124.04	3/4	2,764.61	3/4	2,405.18
6		6		6		6	4,461.44	6	4,152.94	6	3,824.69	6	3,475.95	6	3,116.56	6	2,757.12	6	2,397.69
1/4		1/4		1/4		1/4	4,455.22	1/4	4,146.31	1/4	3,817.63	1/4	3,468.48	1/4	3,109.07	1/4	2,749.63	1/4	2,390.20
1/2		1/2		1/2		1/2	4,762.75	1/2	4,449.00	1/2	4,139.68	1/2	3,810.57	1/2	3,461.01	1/2	3,101.58	1/2	2,742.15
3/4		3/4		3/4		3/4	4,757.48	3/4	4,442.74	3/4	4,133.01	3/4	3,803.48	3/4	3,453.52	3/4	3,094.09	3/4	2,734.66
7		7		7		7	4,752.22	7	4,436.49	7	4,126.34	7	3,796.38	7	3,446.04	7	3,086.60	7	2,727.17
1/4		1/4		1/4		1/4	4,746.95	1/4	4,430.23	1/4	4,119.68	1/4	3,789.29	1/4	3,438.55	1/4	3,079.11	1/4	2,719.68
1/2		1/2		1/2		1/2	4,741.68	1/2	4,423.97	1/2	4,113.01	1/2	3,782.19	1/2	3,431.06	1/2	3,071.63	1/2	2,712.19
3/4		3/4		3/4		3/4	4,735.05	3/4	4,417.68	3/4	4,106.31	3/4	3,775.07	3/4	3,423.57	3/4	3,064.14	3/4	2,704.70
8		8		8		8	4,728.42	8	4,411.39	8	4,099.61	8	3,767.94	8	3,416.08	8	3,056.65	8	2,697.22
1/4		1/4		1/4		1/4	4,721.79	1/4	4,405.10	1/4	4,092.91	1/4	3,760.81	1/4	3,408.60	1/4	3,049.16	1/4	2,689.73
1/2		1/2		1/2		1/2	4,715.16	1/2	4,398.81	1/2	4,086.21	1/2	3,753.68	1/2	3,401.11	1/2	3,041.67	1/2	2,682.24
3/4		3/4		3/4		3/4	4,707.85	3/4	4,392.49	3/4	4,079.47	3/4	3,746.52	3/4	3,393.62	3/4	3,034.19	3/4	2,674.75
9		9		9		9	4,700.54	9	4,386.16	9	4,072.74	9	3,739.35	9	3,386.13	9	3,026.70	9	2,667.26
1/4		1/4		1/4		1/4	4,693.23	1/4	4,379.84	1/4	4,066.00	1/4	3,732.19	1/4	3,378.64	1/4	3,019.21	1/4	2,659.78
1/2		1/2		1/2		1/2	4,685.92	1/2	4,373.52	1/2	4,059.27	1/2	3,725.03	1/2	3,371.15	1/2	3,011.72	1/2	2,652.29
3/4		3/4		3/4		3/4	4,678.45	3/4	4,367.16	3/4	4,052.50	3/4	3,717.83	3/4	3,363.67	3/4	3,004.23	3/4	2,644.80
10		10		10		10	4,670.98	10	4,360.80	10	4,045.73	10	3,710.63	10	3,356.18	10	2,996.74	10	2,637.31
1/4		1/4		1/4		1/4	4,663.50	1/4	4,354.44	1/4	4,038.96	1/4	3,703.44	1/4	3,348.69	1/4	2,989.26	1/4	2,629.82
1/2		1/2		1/2		1/2	4,656.03	1/2	4,348.08	1/2	4,032.19	1/2	3,696.24	1/2	3,341.20	1/2	2,981.77	1/2	2,622.33
3/4		3/4		3/4		3/4	4,648.56	3/4	4,341.69	3/4	4,025.38	3/4	3,689.01	3/4	3,333.71	3/4	2,974.28	3/4	2,614.85
11		11		11		11	4,641.09	11	4,335.30	11	4,018.58	11	3,681.78	11	3,326.22	11	2,966.79	11	2,607.36
1/4		1/4		1/4		1/4	4,633.62	1/4	4,328.90	1/4	4,011.78	1/4	3,674.54	1/4	3,318.74	1/4	2,959.30	1/4	2,599.87
1/2		1/2		1/2		1/2	4,626.15	1/2	4,322.51	1/2	4,004.97	1/2	3,667.31	1/2	3,311.25	1/2	2,951.81	1/2	2,592.38
3/4		3/4		3/4		3/4	4,618.68	3/4	4,316.08	3/4	3,998.14	3/4	3,660.05	3/4	3,303.76	3/4	2,944.33	3/4	2,584.89

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 51'-00" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 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	2,217.97	0	1,858.54	0	1,499.10	0	1,139.81	0	781.38	0	425.60	0	104.06	0		0		0	
1/4	2,210.48	1/4	1,851.05	1/4	1,491.62	1/4	1,132.34	1/4	773.90	1/4	418.45	1/4	97.81	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,202.99	1/2	1,843.56	1/2	1,484.13	1/2	1,124.88	1/2	766.43	1/2	411.30	1/2	91.57	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,195.51	3/4	1,836.07	3/4	1,476.64	3/4	1,117.41	3/4	758.96	3/4	404.23	3/4	85.39	3/4	3/4	3/4	3/4	3/4	3/4
1	2,188.02	1	1,828.58	1	1,469.15	1	1,109.95	1	751.48	1	397.15	1	79.22	1	1	1	1	1	1
1/4	2,180.53	1/4	1,821.10	1/4	1,461.66	1/4	1,102.48	1/4	744.01	1/4	390.08	1/4	73.05	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,173.04	1/2	1,813.61	1/2	1,454.17	1/2	1,095.02	1/2	736.54	1/2	383.00	1/2	66.87	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,165.55	3/4	1,806.12	3/4	1,446.69	3/4	1,087.55	3/4	729.06	3/4	376.01	3/4	60.78	3/4	3/4	3/4	3/4	3/4	3/4
2	2,158.07	2	1,798.63	2	1,439.20	2	1,080.09	2	721.59	2	369.01	2	54.68	2	2	2	2	2	2
1/4	2,150.58	1/4	1,791.14	1/4	1,431.71	1/4	1,072.62	1/4	714.12	1/4	362.01	1/4	48.58	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,143.09	1/2	1,783.66	1/2	1,424.22	1/2	1,065.16	1/2	706.65	1/2	355.01	1/2	42.48	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,135.60	3/4	1,776.17	3/4	1,416.73	3/4	1,057.69	3/4	699.17	3/4	348.08	3/4	36.73	3/4	3/4	3/4	3/4	3/4	3/4
3	2,128.11	3	1,768.68	3	1,409.25	3	1,050.23	3	691.70	3	341.16	3	30.97	3	3	3	3	3	3
1/4	2,120.62	1/4	1,761.19	1/4	1,401.76	1/4	1,042.76	1/4	684.23	1/4	334.23	1/4	25.22	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,113.14	1/2	1,753.70	1/2	1,394.27	1/2	1,035.30	1/2	676.75	1/2	327.31	1/2	19.46	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,105.65	3/4	1,746.21	3/4	1,386.78	3/4	1,027.83	3/4	669.28	3/4	320.46	3/4	15.66	3/4	3/4	3/4	3/4	3/4	3/4
4	2,098.16	4	1,738.73	4	1,379.29	4	1,020.37	4	661.81	4	313.61	4	11.85	4	4	4	4	4	4
1/4	2,090.67	1/4	1,731.24	1/4	1,371.80	1/4	1,012.90	1/4	654.33	1/4	306.76	1/4	8.04	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,083.18	1/2	1,723.75	1/2	1,364.32	1/2	1,005.44	1/2	646.86	1/2	299.91	1/2	4.23	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,075.70	3/4	1,716.26	3/4	1,356.83	3/4	997.97	3/4	639.39	3/4	293.14	3/4		3/4	3/4	3/4	3/4	3/4	3/4
5	2,068.21	5	1,708.77	5	1,349.34	5	990.51	5	631.91	5	286.37	5		5	5	5	5	5	5
1/4	2,060.72	1/4	1,701.29	1/4	1,341.85	1/4	983.04	1/4	624.44	1/4	279.59	1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,053.23	1/2	1,693.80	1/2	1,334.36	1/2	975.58	1/2	616.97	1/2	272.82	1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,045.74	3/4	1,686.31	3/4	1,326.88	3/4	968.11	3/4	609.50	3/4	266.12	3/4		3/4	3/4	3/4	3/4	3/4	3/4
6	2,038.25	6	1,678.82	6	1,319.39	6	960.65	6	602.02	6	259.42	6		6	6	6	6	6	6
1/4	2,030.77	1/4	1,671.33	1/4	1,311.90	1/4	953.18	1/4	594.55	1/4	252.72	1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,023.28	1/2	1,663.84	1/2	1,304.41	1/2	945.72	1/2	587.08	1/2	246.02	1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,015.79	3/4	1,656.36	3/4	1,296.92	3/4	938.25	3/4	579.60	3/4	239.40	3/4		3/4	3/4	3/4	3/4	3/4	3/4
7	2,008.30	7	1,648.87	7	1,289.43	7	930.79	7	572.13	7	232.78	7		7	7	7	7	7	7
1/4	2,000.81	1/4	1,641.38	1/4	1,281.95	1/4	923.32	1/4	564.66	1/4	226.15	1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,993.33	1/2	1,633.89	1/2	1,274.46	1/2	915.86	1/2	557.18	1/2	219.53	1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,985.84	3/4	1,626.40	3/4	1,266.97	3/4	908.39	3/4	549.75	3/4	212.98	3/4		3/4	3/4	3/4	3/4	3/4	3/4
8	1,978.35	8	1,618.92	8	1,259.48	8	900.93	8	542.31	8	206.43	8		8	8	8	8	8	8
1/4	1,970.86	1/4	1,611.43	1/4	1,251.99	1/4	893.46	1/4	534.88	1/4	199.88	1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,963.37	1/2	1,603.94	1/2	1,244.51	1/2	886.00	1/2	527.44	1/2	193.33	1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,955.88	3/4	1,596.45	3/4	1,237.02	3/4	878.53	3/4	520.08	3/4	186.86	3/4		3/4	3/4	3/4	3/4	3/4	3/4
9	1,948.40	9	1,588.96	9	1,229.53	9	871.07	9	512.72	9	180.39	9		9	9	9	9	9	9
1/4	1,940.91	1/4	1,581.47	1/4	1,222.04	1/4	863.60	1/4	505.36	1/4	173.91	1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,933.42	1/2	1,573.99	1/2	1,214.55	1/2	856.14	1/2	498.00	1/2	167.44	1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,925.93	3/4	1,566.50	3/4	1,207.06	3/4	848.67	3/4	490.70	3/4	161.04	3/4		3/4	3/4	3/4	3/4	3/4	3/4
10	1,918.44	10	1,559.01	10	1,199.58	10	841.21	10	483.40	10	154.65	10		10	10	10	10	10	10
1/4	1,910.96	1/4	1,551.52	1/4	1,192.09	1/4	833.74	1/4	476.10	1/4	148.25	1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,903.47	1/2	1,544.03	1/2	1,184.60	1/2	826.27	1/2	468.80	1/2	141.85	1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,895.98	3/4	1,536.55	3/4	1,177.13	3/4	818.79	3/4	461.58	3/4	135.53	3/4		3/4	3/4	3/4	3/4	3/4	3/4
11	1,888.49	11	1,529.06	11	1,169.67	11	811.30	11	454.35	11	129.20	11		11	11	11	11	11	11
1/4	1,881.00	1/4	1,521.57	1/4	1,162.20	1/4	803.81	1/4	447.13	1/4	122.88	1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,873.51	1/2	1,514.08	1/2	1,154.74	1/2	796.32	1/2	439.90	1/2	116.56	1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,866.03	3/4	1,506.59	3/4	1,147.27	3/4	788.85	3/4	432.75	3/4	110.31	3/4		3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0	4,716.81	0	4,412.91	0	4,093.66	0	3,754.26	0	3,396.64	0	3,035.91	0	2,675.17
1/4		1/4		1/4		1/4	4,709.31	1/4	4,406.46	1/4	4,086.79	1/4	3,746.97	1/4	3,389.13	1/4	3,028.39	1/4	2,667.66
1/2		1/2		1/2		1/2	4,701.82	1/2	4,400.00	1/2	4,079.93	1/2	3,739.68	1/2	3,381.61	1/2	3,020.88	1/2	2,660.14
3/4		3/4		3/4		3/4	4,694.32	3/4	4,393.55	3/4	4,073.06	3/4	3,732.38	3/4	3,374.10	3/4	3,013.36	3/4	2,652.63
1		1		1		1	4,688.24	1	4,387.06	1	4,066.16	1	3,725.06	1	3,366.58	1	3,005.85	1	2,645.11
1/4		1/4		1/4		1/4	4,682.16	1/4	4,380.57	1/4	4,059.27	1/4	3,717.73	1/4	3,359.07	1/4	2,998.33	1/4	2,637.60
1/2		1/2		1/2		1/2	4,676.08	1/2	4,374.08	1/2	4,052.37	1/2	3,710.40	1/2	3,351.55	1/2	2,990.82	1/2	2,630.08
3/4		3/4		3/4		3/4	4,670.01	3/4	4,367.59	3/4	4,045.47	3/4	3,703.08	3/4	3,344.03	3/4	2,983.30	3/4	2,622.57
2		2		2		2	4,663.89	2	4,361.07	2	4,038.53	2	3,695.71	2	3,336.52	2	2,975.78	2	2,615.05
1/4		1/4		1/4		1/4	4,657.78	1/4	4,354.55	1/4	4,031.60	1/4	3,688.35	1/4	3,329.00	1/4	2,968.27	1/4	2,607.53
1/2		1/2		1/2		1/2	4,651.67	1/2	4,348.03	1/2	4,024.67	1/2	3,680.99	1/2	3,321.49	1/2	2,960.75	1/2	2,600.02
3/4		3/4		3/4		3/4	4,645.56	3/4	4,341.50	3/4	4,017.73	3/4	3,673.63	3/4	3,313.97	3/4	2,953.24	3/4	2,592.50
3		3		3		3	4,639.41	3	4,334.95	3	4,010.77	3	3,666.24	3	3,306.46	3	2,945.72	3	2,584.99
1/4		1/4		1/4		1/4	4,633.27	1/4	4,328.39	1/4	4,003.80	1/4	3,658.84	1/4	3,298.94	1/4	2,938.21	1/4	2,577.47
1/2		1/2		1/2		1/2	4,627.12	1/2	4,321.83	1/2	3,996.83	1/2	3,651.44	1/2	3,291.43	1/2	2,930.69	1/2	2,569.96
3/4		3/4		3/4		3/4	4,620.97	3/4	4,315.27	3/4	3,989.86	3/4	3,644.05	3/4	3,283.91	3/4	2,923.18	3/4	2,562.44
4		4		4		4	4,614.79	4	4,308.68	4	3,982.86	4	3,636.62	4	3,276.40	4	2,915.66	4	2,554.93
1/4		1/4		1/4		1/4	4,608.61	1/4	4,302.09	1/4	3,975.86	1/4	3,629.19	1/4	3,268.88	1/4	2,908.15	1/4	2,547.41
1/2		1/2		1/2		1/2	4,602.43	1/2	4,295.50	1/2	3,968.86	1/2	3,621.76	1/2	3,261.37	1/2	2,900.63	1/2	2,539.90
3/4		3/4		3/4		3/4	4,596.25	3/4	4,288.91	3/4	3,961.86	3/4	3,614.33	3/4	3,253.85	3/4	2,893.12	3/4	2,532.38
5		5		5		5	4,590.04	5	4,282.28	5	3,954.82	5	3,606.87	5	3,246.34	5	2,885.60	5	2,524.87
1/4		1/4		1/4		1/4	4,583.82	1/4	4,275.66	1/4	3,947.78	1/4	3,599.40	1/4	3,238.82	1/4	2,878.09	1/4	2,517.35
1/2		1/2		1/2		1/2	4,577.61	1/2	4,269.03	1/2	3,940.75	1/2	3,591.94	1/2	3,231.30	1/2	2,870.57	1/2	2,509.84
3/4		3/4		3/4		3/4	4,571.39	3/4	4,262.41	3/4	3,933.71	3/4	3,584.47	3/4	3,223.79	3/4	2,863.06	3/4	2,502.32
6		6		6		6	4,565.14	6	4,255.75	6	3,926.62	6	3,576.97	6	3,216.27	6	2,855.54	6	2,494.81
1/4		1/4		1/4		1/4	4,558.89	1/4	4,249.09	1/4	3,919.54	1/4	3,569.47	1/4	3,208.76	1/4	2,848.02	1/4	2,487.29
1/2		1/2		1/2		1/2	4,552.65	1/2	4,242.43	1/2	3,912.45	1/2	3,561.97	1/2	3,201.24	1/2	2,840.51	1/2	2,479.77
3/4		3/4		3/4		3/4	4,861.40	3/4	4,546.40	3/4	4,235.77	3/4	3,905.36	3/4	3,554.46	3/4	3,193.73	3/4	2,832.99
7		7		7		7	4,856.11	7	4,540.11	7	4,229.08	7	3,898.24	7	3,546.95	7	3,186.21	7	2,825.48
1/4		1/4		1/4		1/4	4,850.83	1/4	4,533.83	1/4	4,222.38	1/4	3,891.12	1/4	3,539.43	1/4	3,178.70	1/4	2,817.96
1/2		1/2		1/2		1/2	4,845.54	1/2	4,527.55	1/2	4,215.69	1/2	3,884.00	1/2	3,531.92	1/2	3,171.18	1/2	2,810.45
3/4		3/4		3/4		3/4	4,840.25	3/4	4,521.26	3/4	4,208.99	3/4	3,876.87	3/4	3,524.40	3/4	3,163.67	3/4	2,802.93
8		8		8		8	4,833.60	8	4,514.95	8	4,202.27	8	3,869.72	8	3,516.89	8	3,156.15	8	2,795.42
1/4		1/4		1/4		1/4	4,826.95	1/4	4,508.63	1/4	4,195.54	1/4	3,862.56	1/4	3,509.37	1/4	3,148.64	1/4	2,787.90
1/2		1/2		1/2		1/2	4,820.29	1/2	4,502.31	1/2	4,188.81	1/2	3,855.41	1/2	3,501.86	1/2	3,141.12	1/2	2,780.39
3/4		3/4		3/4		3/4	4,813.64	3/4	4,495.99	3/4	4,182.08	3/4	3,848.25	3/4	3,494.34	3/4	3,133.61	3/4	2,772.87
9		9		9		9	4,806.31	9	4,489.64	9	4,175.32	9	3,841.06	9	3,486.83	9	3,126.09	9	2,765.36
1/4		1/4		1/4		1/4	4,798.97	1/4	4,483.29	1/4	4,168.56	1/4	3,833.87	1/4	3,479.31	1/4	3,118.58	1/4	2,757.84
1/2		1/2		1/2		1/2	4,791.63	1/2	4,476.94	1/2	4,161.80	1/2	3,826.68	1/2	3,471.79	1/2	3,111.06	1/2	2,750.33
3/4		3/4		3/4		3/4	4,784.30	3/4	4,470.59	3/4	4,155.03	3/4	3,819.49	3/4	3,464.28	3/4	3,103.54	3/4	2,742.81
10		10		10		10	4,776.80	10	4,464.20	10	4,148.24	10	3,812.26	10	3,456.76	10	3,096.03	10	2,735.30
1/4		1/4		1/4		1/4	4,769.30	1/4	4,457.82	1/4	4,141.44	1/4	3,805.04	1/4	3,449.25	1/4	3,088.51	1/4	2,727.78
1/2		1/2		1/2		1/2	4,761.80	1/2	4,451.43	1/2	4,134.64	1/2	3,797.82	1/2	3,441.73	1/2	3,081.00	1/2	2,720.26
3/4		3/4		3/4		3/4	4,754.30	3/4	4,445.04	3/4	4,127.85	3/4	3,790.59	3/4	3,434.22	3/4	3,073.48	3/4	2,712.75
11		11		11		11	4,746.80	11	4,438.62	11	4,121.02	11	3,783.33	11	3,426.70	11	3,065.97	11	2,705.23
1/4		1/4		1/4		1/4	4,739.31	1/4	4,432.20	1/4	4,114.19	1/4	3,776.07	1/4	3,419.19	1/4	3,058.45	1/4	2,697.72
1/2		1/2		1/2		1/2	4,731.81	1/2	4,425.78	1/2	4,107.35	1/2	3,768.81	1/2	3,411.67	1/2	3,050.94	1/2	2,690.20
3/4		3/4		3/4		3/4	4,724.31	3/4	4,419.36	3/4	4,100.52	3/4	3,761.56	3/4	3,404.16	3/4	3,043.42	3/4	2,682.69

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.

GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 51'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "EMS 398"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,314.44	0	1,953.70	0	1,592.97	0	1,232.24	0	871.52	0	511.37	0	150.65	0		0			
1/4	2,306.92	1/4	1,946.19	1/4	1,585.45	1/4	1,224.72	1/4	864.02	1/4	503.86	1/4	143.13	1/4		1/4			
1/2	2,299.41	1/2	1,938.67	1/2	1,577.94	1/2	1,217.20	1/2	856.52	1/2	496.34	1/2	135.62	1/2		1/2			
3/4	2,291.89	3/4	1,931.16	3/4	1,570.42	3/4	1,209.69	3/4	849.02	3/4	488.83	3/4	128.10	3/4		3/4			
1	2,284.38	1	1,923.64	1	1,562.91	1	1,202.17	1	841.51	1	481.31	1	120.59	1		1			
1/4	2,276.86	1/4	1,916.13	1/4	1,555.39	1/4	1,194.66	1/4	834.01	1/4	473.80	1/4	113.07	1/4		1/4			
1/2	2,269.35	1/2	1,908.61	1/2	1,547.88	1/2	1,187.14	1/2	826.51	1/2	466.28	1/2	105.56	1/2		1/2			
3/4	2,261.83	3/4	1,901.10	3/4	1,540.36	3/4	1,179.63	3/4	819.01	3/4	458.77	3/4	98.04	3/4		3/4			
2	2,254.32	2	1,893.58	2	1,532.85	2	1,172.11	2	811.51	2	451.25	2	90.53	2		2			
1/4	2,246.80	1/4	1,886.07	1/4	1,525.33	1/4	1,164.60	1/4	804.01	1/4	443.74	1/4	83.01	1/4		1/4			
1/2	2,239.29	1/2	1,878.55	1/2	1,517.82	1/2	1,157.08	1/2	796.51	1/2	436.22	1/2	75.50	1/2		1/2			
3/4	2,231.77	3/4	1,871.04	3/4	1,510.30	3/4	1,149.57	3/4	789.01	3/4	428.71	3/4	67.98	3/4		3/4			
3	2,224.25	3	1,863.52	3	1,502.79	3	1,142.05	3	781.51	3	421.19	3	60.73	3		3			
1/4	2,216.74	1/4	1,856.00	1/4	1,495.27	1/4	1,134.54	1/4	774.01	1/4	413.68	1/4	53.49	1/4		1/4			
1/2	2,209.22	1/2	1,848.49	1/2	1,487.76	1/2	1,127.02	1/2	766.51	1/2	406.16	1/2	46.24	1/2		1/2			
3/4	2,201.71	3/4	1,840.97	3/4	1,480.24	3/4	1,119.51	3/4	759.01	3/4	398.65	3/4	38.99	3/4		3/4			
4	2,194.19	4	1,833.46	4	1,472.72	4	1,111.99	4	751.51	4	391.13	4	33.63	4		4			
1/4	2,186.68	1/4	1,825.94	1/4	1,465.21	1/4	1,104.47	1/4	744.01	1/4	383.62	1/4	28.26	1/4		1/4			
1/2	2,179.16	1/2	1,818.43	1/2	1,457.69	1/2	1,096.96	1/2	736.51	1/2	376.10	1/2	22.89	1/2		1/2			
3/4	2,171.65	3/4	1,810.91	3/4	1,450.18	3/4	1,089.44	3/4	729.01	3/4	368.59	3/4	17.52	3/4		3/4			
5	2,164.13	5	1,803.40	5	1,442.66	5	1,081.93	5	721.51	5	361.07	5		5		5			
1/4	2,156.62	1/4	1,795.88	1/4	1,435.15	1/4	1,074.41	1/4	714.01	1/4	353.55	1/4		1/4		1/4			
1/2	2,149.10	1/2	1,788.37	1/2	1,427.63	1/2	1,066.90	1/2	706.51	1/2	346.04	1/2		1/2		1/2			
3/4	2,141.59	3/4	1,780.85	3/4	1,420.12	3/4	1,059.38	3/4	699.01	3/4	338.52	3/4		3/4		3/4			
6	2,134.07	6	1,773.34	6	1,412.60	6	1,051.87	6	691.51	6	331.01	6		6		6			
1/4	2,126.56	1/4	1,765.82	1/4	1,405.09	1/4	1,044.35	1/4	684.01	1/4	323.49	1/4		1/4		1/4			
1/2	2,119.04	1/2	1,758.31	1/2	1,397.57	1/2	1,036.84	1/2	676.51	1/2	315.98	1/2		1/2		1/2			
3/4	2,111.53	3/4	1,750.79	3/4	1,390.06	3/4	1,029.32	3/4	669.01	3/4	308.46	3/4		3/4		3/4			
7	2,104.01	7	1,743.28	7	1,382.54	7	1,021.81	7	661.51	7	300.95	7		7		7			
1/4	2,096.49	1/4	1,735.76	1/4	1,375.03	1/4	1,014.29	1/4	654.01	1/4	293.43	1/4		1/4		1/4			
1/2	2,088.98	1/2	1,728.24	1/2	1,367.51	1/2	1,006.78	1/2	646.51	1/2	285.92	1/2		1/2		1/2			
3/4	2,081.46	3/4	1,720.73	3/4	1,360.00	3/4	999.26	3/4	639.01	3/4	278.40	3/4		3/4		3/4			
8	2,073.95	8	1,713.21	8	1,352.48	8	991.75	8	631.51	8	270.89	8		8		8			
1/4	2,066.43	1/4	1,705.70	1/4	1,344.96	1/4	984.23	1/4	624.01	1/4	263.37	1/4		1/4		1/4			
1/2	2,058.92	1/2	1,698.18	1/2	1,337.45	1/2	976.71	1/2	616.51	1/2	255.86	1/2		1/2		1/2			
3/4	2,051.40	3/4	1,690.67	3/4	1,329.93	3/4	969.20	3/4	609.01	3/4	248.34	3/4		3/4		3/4			
9	2,043.89	9	1,683.15	9	1,322.42	9	961.68	9	601.51	9	240.83	9		9		9			
1/4	2,036.37	1/4	1,675.64	1/4	1,314.90	1/4	954.17	1/4	594.01	1/4	233.31	1/4		1/4		1/4			
1/2	2,028.86	1/2	1,668.12	1/2	1,307.39	1/2	946.65	1/2	586.51	1/2	225.80	1/2		1/2		1/2			
3/4	2,021.34	3/4	1,660.61	3/4	1,299.87	3/4	939.14	3/4	579.01	3/4	218.28	3/4		3/4		3/4			
10	2,013.83	10	1,653.09	10	1,292.36	10	931.62	10	571.49	10	210.77	10		10		10			
1/4	2,006.31	1/4	1,645.58	1/4	1,284.84	1/4	924.11	1/4	563.98	1/4	203.25	1/4		1/4		1/4			
1/2	1,998.80	1/2	1,638.06	1/2	1,277.33	1/2	916.59	1/2	556.46	1/2	195.74	1/2		1/2		1/2			
3/4	1,991.28	3/4	1,630.55	3/4	1,269.81	3/4	909.08	3/4	548.95	3/4	188.22	3/4		3/4		3/4			
11	1,983.77	11	1,623.03	11	1,262.30	11	901.56	11	541.43	11	180.71	11		11		11			
1/4	1,976.25	1/4	1,615.52	1/4	1,254.78	1/4	894.05	1/4	533.92	1/4	173.19	1/4		1/4		1/4			
1/2	1,968.73	1/2	1,608.00	1/2	1,247.27	1/2	886.53	1/2	526.40	1/2	165.68	1/2		1/2		1/2			
3/4	1,961.22	3/4	1,600.48	3/4	1,239.75	3/4	879.02	3/4	518.89	3/4	158.16	3/4		3/4		3/4			

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.		
0		0		0		0	4,701.59	0	4,397.69	0	4,078.44	0	3,739.04	0	3,381.42	0	3,020.69	0	2,659.95		
1/4		1/4		1/4		1/4	4,694.09	1/4	4,391.24	1/4	4,071.57	1/4	3,731.75	1/4	3,373.91	1/4	3,013.17	1/4	2,652.44		
1/2		1/2		1/2		1/2	4,686.60	1/2	4,384.78	1/2	4,064.71	1/2	3,724.46	1/2	3,366.39	1/2	3,005.66	1/2	2,644.92		
3/4		3/4		3/4		3/4	4,679.10	3/4	4,378.33	3/4	4,057.84	3/4	3,717.16	3/4	3,358.88	3/4	2,998.14	3/4	2,637.41		
1		1		1		1	4,673.02	1	4,371.84	1	4,050.94	1	3,709.84	1	3,351.36	1	2,990.63	1	2,629.89		
1/4		1/4		1/4		1/4	4,666.94	1/4	4,365.35	1/4	4,044.05	1/4	3,702.51	1/4	3,343.85	1/4	2,983.11	1/4	2,622.38		
1/2		1/2		1/2		1/2	4,660.86	1/2	4,358.86	1/2	4,037.15	1/2	3,695.18	1/2	3,336.33	1/2	2,975.60	1/2	2,614.86		
3/4		3/4		3/4		3/4	4,654.79	3/4	4,352.37	3/4	4,030.25	3/4	3,687.86	3/4	3,328.81	3/4	2,968.08	3/4	2,607.35		
2		2		2		2	4,648.67	2	4,345.85	2	4,023.31	2	3,680.49	2	3,321.30	2	2,960.57	2	2,599.83		
1/4		1/4		1/4		1/4	4,642.56	1/4	4,339.33	1/4	4,016.38	1/4	3,673.13	1/4	3,313.78	1/4	2,953.05	1/4	2,592.32		
1/2		1/2		1/2		1/2	4,636.45	1/2	4,332.80	1/2	4,009.45	1/2	3,665.77	1/2	3,306.27	1/2	2,945.53	1/2	2,584.80		
3/4		3/4		3/4		3/4	4,630.34	3/4	4,326.28	3/4	4,002.51	3/4	3,658.41	3/4	3,298.75	3/4	2,938.02	3/4	2,577.28		
3		3		3		3	4,624.19	3	4,319.73	3	3,995.55	3	3,651.02	3	3,291.24	3	2,930.50	3	2,569.77		
1/4		1/4		1/4		1/4	4,618.05	1/4	4,313.17	1/4	3,988.58	1/4	3,643.62	1/4	3,283.72	1/4	2,922.99	1/4	2,562.25		
1/2		1/2		1/2		1/2	4,611.90	1/2	4,306.61	1/2	3,981.61	1/2	3,636.22	1/2	3,276.21	1/2	2,915.47	1/2	2,554.74		
3/4		3/4		3/4		3/4	4,605.75	3/4	4,300.05	3/4	3,974.64	3/4	3,628.83	3/4	3,268.69	3/4	2,907.96	3/4	2,547.22		
4		4		4		4	4,599.57	4	4,293.46	4	3,967.64	4	3,621.40	4	3,261.18	4	2,900.44	4	2,539.71		
1/4		1/4		1/4		1/4	4,593.39	1/4	4,286.87	1/4	3,960.64	1/4	3,613.97	1/4	3,253.66	1/4	2,892.93	1/4	2,532.19		
1/2		1/2		1/2		1/2	4,587.21	1/2	4,280.28	1/2	3,953.64	1/2	3,606.54	1/2	3,246.15	1/2	2,885.41	1/2	2,524.68		
3/4		3/4		3/4		3/4	4,581.03	3/4	4,273.69	3/4	3,946.64	3/4	3,599.11	3/4	3,238.63	3/4	2,877.90	3/4	2,517.16		
5		5		5		5	4,574.82	5	4,267.06	5	3,939.60	5	3,591.65	5	3,231.12	5	2,870.38	5	2,509.65		
1/4		1/4		1/4		1/4	4,568.60	1/4	4,260.44	1/4	3,932.56	1/4	3,584.18	1/4	3,223.60	1/4	2,862.87	1/4	2,502.13		
1/2		1/2		1/2		1/2	4,562.39	1/2	4,253.81	1/2	3,925.53	1/2	3,576.72	1/2	3,216.09	1/2	2,855.35	1/2	2,494.62		
3/4		3/4		3/4		3/4	4,556.17	3/4	4,247.19	3/4	3,918.49	3/4	3,569.25	3/4	3,208.57	3/4	2,847.84	3/4	2,487.10		
6		6		6		6	4,549.92	6	4,240.53	6	3,911.40	6	3,561.75	6	3,201.05	6	2,840.32	6	2,479.59		
1/4		1/4		1/4		1/4	4,543.67	1/4	4,233.87	1/4	3,904.32	1/4	3,554.25	1/4	3,193.54	1/4	2,832.81	1/4	2,472.07		
1/2		1/2		1/2		1/2	4,537.43	1/2	4,227.21	1/2	3,897.23	1/2	3,546.75	1/2	3,186.02	1/2	2,825.29	1/2	2,464.56		
3/4		3/4		3/4		3/4	4,531.18	3/4	4,220.55	3/4	3,890.14	3/4	3,539.24	3/4	3,178.51	3/4	2,817.77	3/4	2,457.04		
7		7		7		7	4,840.89	7	4,524.89	7	4,213.86	7	3,883.02	7	3,531.73	7	3,170.99	7	2,810.26	7	2,449.52
1/4		1/4		1/4		1/4	4,835.61	1/4	4,518.61	1/4	4,207.16	1/4	3,875.90	1/4	3,524.21	1/4	3,163.48	1/4	2,802.74	1/4	2,442.01
1/2		1/2		1/2		1/2	4,830.32	1/2	4,512.33	1/2	4,200.47	1/2	3,868.78	1/2	3,516.70	1/2	3,155.96	1/2	2,795.23	1/2	2,434.49
3/4		3/4		3/4		3/4	4,825.03	3/4	4,506.04	3/4	4,193.77	3/4	3,861.65	3/4	3,509.18	3/4	3,148.45	3/4	2,787.71	3/4	2,426.98
8		8		8		8	4,818.38	8	4,499.73	8	4,187.05	8	3,854.50	8	3,501.67	8	3,140.93	8	2,780.20	8	2,419.46
1/4		1/4		1/4		1/4	4,811.73	1/4	4,493.41	1/4	4,180.32	1/4	3,847.34	1/4	3,494.15	1/4	3,133.42	1/4	2,772.68	1/4	2,411.95
1/2		1/2		1/2		1/2	4,805.07	1/2	4,487.09	1/2	4,173.59	1/2	3,840.19	1/2	3,486.64	1/2	3,125.90	1/2	2,765.17	1/2	2,404.43
3/4		3/4		3/4		3/4	4,798.42	3/4	4,480.77	3/4	4,166.86	3/4	3,833.03	3/4	3,479.12	3/4	3,118.39	3/4	2,757.65	3/4	2,396.92
9		9		9		9	4,791.09	9	4,474.42	9	4,160.10	9	3,825.84	9	3,471.61	9	3,110.87	9	2,750.14	9	2,389.40
1/4		1/4		1/4		1/4	4,783.75	1/4	4,468.07	1/4	4,153.34	1/4	3,818.65	1/4	3,464.09	1/4	3,103.36	1/4	2,742.62	1/4	2,381.89
1/2		1/2		1/2		1/2	4,776.41	1/2	4,461.72	1/2	4,146.57	1/2	3,811.46	1/2	3,456.57	1/2	3,095.84	1/2	2,735.11	1/2	2,374.37
3/4		3/4		3/4		3/4	4,769.07	3/4	4,455.37	3/4	4,139.81	3/4	3,804.27	3/4	3,449.06	3/4	3,088.33	3/4	2,727.59	3/4	2,366.86
10		10		10		10	4,761.58	10	4,448.98	10	4,133.02	10	3,797.04	10	3,441.54	10	3,080.81	10	2,720.08	10	2,359.34
1/4		1/4		1/4		1/4	4,754.08	1/4	4,442.60	1/4	4,126.22	1/4	3,789.82	1/4	3,434.03	1/4	3,073.29	1/4	2,712.56	1/4	2,351.83
1/2		1/2		1/2		1/2	4,746.58	1/2	4,436.21	1/2	4,119.42	1/2	3,782.60	1/2	3,426.51	1/2	3,065.78	1/2	2,705.04	1/2	2,344.31
3/4		3/4		3/4		3/4	4,739.08	3/4	4,429.82	3/4	4,112.63	3/4	3,775.37	3/4	3,419.00	3/4	3,058.26	3/4	2,697.53	3/4	2,336.80
11		11		11		11	4,731.58	11	4,423.40	11	4,105.80	11	3,768.11	11	3,411.48	11	3,050.75	11	2,690.01	11	2,329.28
1/4		1/4		1/4		1/4	4,724.09	1/4	4,416.98	1/4	4,098.96	1/4	3,760.85	1/4	3,403.97	1/4	3,043.23	1/4	2,682.50	1/4	2,321.76
1/2		1/2		1/2		1/2	4,716.59	1/2	4,410.56	1/2	4,092.13	1/2	3,753.59	1/2	3,396.45	1/2	3,035.72	1/2	2,674.98	1/2	2,314.25
3/4		3/4		3/4		3/4	4,709.09	3/4	4,404.14	3/4	4,085.30	3/4	3,746.34	3/4	3,388.94	3/4	3,028.20	3/4	2,667.47	3/4	2,306.73

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 51'-00" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,299.22	0	1,938.48	0	1,577.75	0	1,217.02	0	859.15	0	511.36	0	150.64	0		0		0	
1/4	2,291.70	1/4	1,930.97	1/4	1,570.23	1/4	1,209.50	1/4	851.97	1/4	503.85	1/4	143.12	1/4		1/4		1/4	
1/2	2,284.19	1/2	1,923.45	1/2	1,562.72	1/2	1,201.98	1/2	844.78	1/2	496.33	1/2	135.61	1/2		1/2		1/2	
3/4	2,276.67	3/4	1,915.94	3/4	1,555.20	3/4	1,194.47	3/4	837.60	3/4	488.82	3/4	128.09	3/4		3/4		3/4	
1	2,269.16	1	1,908.42	1	1,547.69	1	1,186.95	1	830.42	1	481.30	1	120.58	1		1		1	
1/4	2,261.64	1/4	1,900.91	1/4	1,540.17	1/4	1,179.44	1/4	823.23	1/4	473.79	1/4	113.06	1/4		1/4		1/4	
1/2	2,254.13	1/2	1,893.39	1/2	1,532.66	1/2	1,171.92	1/2	816.05	1/2	466.27	1/2	105.55	1/2		1/2		1/2	
3/4	2,246.61	3/4	1,885.88	3/4	1,525.14	3/4	1,164.41	3/4	808.87	3/4	458.76	3/4	98.03	3/4		3/4		3/4	
2	2,239.10	2	1,878.36	2	1,517.63	2	1,156.89	2	801.68	2	451.24	2	90.52	2		2		2	
1/4	2,231.58	1/4	1,870.85	1/4	1,510.11	1/4	1,149.38	1/4	794.50	1/4	443.73	1/4	83.00	1/4		1/4		1/4	
1/2	2,224.07	1/2	1,863.33	1/2	1,502.60	1/2	1,141.86	1/2	787.32	1/2	436.21	1/2	75.49	1/2		1/2		1/2	
3/4	2,216.55	3/4	1,855.82	3/4	1,495.08	3/4	1,134.35	3/4	780.13	3/4	428.70	3/4	67.97	3/4		3/4		3/4	
3	2,209.04	3	1,848.30	3	1,487.57	3	1,126.83	3	772.95	3	421.18	3	60.73	3		3		3	
1/4	2,201.52	1/4	1,840.79	1/4	1,480.05	1/4	1,119.32	1/4	765.77	1/4	413.67	1/4	53.48	1/4		1/4		1/4	
1/2	2,194.00	1/2	1,833.27	1/2	1,472.54	1/2	1,111.80	1/2	758.58	1/2	406.15	1/2	46.23	1/2		1/2		1/2	
3/4	2,186.49	3/4	1,825.75	3/4	1,465.02	3/4	1,104.29	3/4	751.40	3/4	398.64	3/4	38.99	3/4		3/4		3/4	
4	2,178.97	4	1,818.24	4	1,457.51	4	1,096.77	4	744.22	4	391.12	4	33.62	4		4		4	
1/4	2,171.46	1/4	1,810.72	1/4	1,449.99	1/4	1,089.26	1/4	737.03	1/4	383.61	1/4	28.25	1/4		1/4		1/4	
1/2	2,163.94	1/2	1,803.21	1/2	1,442.47	1/2	1,081.74	1/2	729.85	1/2	376.09	1/2	22.88	1/2		1/2		1/2	
3/4	2,156.43	3/4	1,795.69	3/4	1,434.96	3/4	1,074.22	3/4	722.67	3/4	368.58	3/4	17.52	3/4		3/4		3/4	
5	2,148.91	5	1,788.18	5	1,427.44	5	1,066.71	5	715.48	5	361.06	5		5		5		5	
1/4	2,141.40	1/4	1,780.66	1/4	1,419.93	1/4	1,059.19	1/4	708.30	1/4	353.55	1/4		1/4		1/4		1/4	
1/2	2,133.88	1/2	1,773.15	1/2	1,412.41	1/2	1,051.68	1/2	701.12	1/2	346.03	1/2		1/2		1/2		1/2	
3/4	2,126.37	3/4	1,765.63	3/4	1,404.90	3/4	1,044.16	3/4	693.93	3/4	338.52	3/4		3/4		3/4		3/4	
6	2,118.85	6	1,758.12	6	1,397.38	6	1,036.65	6	686.75	6	331.00	6		6		6		6	
1/4	2,111.34	1/4	1,750.60	1/4	1,389.87	1/4	1,029.13	1/4	679.57	1/4	323.49	1/4		1/4		1/4		1/4	
1/2	2,103.82	1/2	1,743.09	1/2	1,382.35	1/2	1,021.62	1/2	672.38	1/2	315.97	1/2		1/2		1/2		1/2	
3/4	2,096.31	3/4	1,735.57	3/4	1,374.84	3/4	1,014.10	3/4	665.20	3/4	308.46	3/4		3/4		3/4		3/4	
7	2,088.79	7	1,728.06	7	1,367.32	7	1,006.59	7	658.02	7	300.94	7		7		7		7	
1/4	2,081.27	1/4	1,720.54	1/4	1,359.81	1/4	999.07	1/4	650.83	1/4	293.43	1/4		1/4		1/4		1/4	
1/2	2,073.76	1/2	1,713.03	1/2	1,352.29	1/2	991.56	1/2	643.65	1/2	285.91	1/2		1/2		1/2		1/2	
3/4	2,066.24	3/4	1,705.51	3/4	1,344.78	3/4	984.04	3/4	636.47	3/4	278.40	3/4		3/4		3/4		3/4	
8	2,058.73	8	1,697.99	8	1,337.26	8	976.53	8	629.28	8	270.88	8		8		8		8	
1/4	2,051.21	1/4	1,690.48	1/4	1,329.74	1/4	969.01	1/4	622.10	1/4	263.37	1/4		1/4		1/4		1/4	
1/2	2,043.70	1/2	1,682.96	1/2	1,322.23	1/2	961.50	1/2	614.92	1/2	255.85	1/2		1/2		1/2		1/2	
3/4	2,036.18	3/4	1,675.45	3/4	1,314.71	3/4	953.98	3/4	607.73	3/4	248.34	3/4		3/4		3/4		3/4	
9	2,028.67	9	1,667.93	9	1,307.20	9	946.46	9	600.55	9	240.82	9		9		9		9	
1/4	2,021.15	1/4	1,660.42	1/4	1,299.68	1/4	938.95	1/4	593.37	1/4	233.31	1/4		1/4		1/4		1/4	
1/2	2,013.64	1/2	1,652.90	1/2	1,292.17	1/2	931.43	1/2	586.18	1/2	225.79	1/2		1/2		1/2		1/2	
3/4	2,006.12	3/4	1,645.39	3/4	1,284.65	3/4	923.92	3/4	579.00	3/4	218.28	3/4		3/4		3/4		3/4	
10	1,998.61	10	1,637.87	10	1,277.14	10	916.72	10	571.49	10	210.76	10		10		10		10	
1/4	1,991.09	1/4	1,630.36	1/4	1,269.62	1/4	909.52	1/4	563.97	1/4	203.25	1/4		1/4		1/4		1/4	
1/2	1,983.58	1/2	1,622.84	1/2	1,262.11	1/2	902.32	1/2	556.46	1/2	195.73	1/2		1/2		1/2		1/2	
3/4	1,976.06	3/4	1,615.33	3/4	1,254.59	3/4	895.13	3/4	548.94	3/4	188.22	3/4		3/4		3/4		3/4	
11	1,968.55	11	1,607.81	11	1,247.08	11	887.93	11	541.42	11	180.70	11		11		11		11	
1/4	1,961.03	1/4	1,600.30	1/4	1,239.56	1/4	880.73	1/4	533.91	1/4	173.18	1/4		1/4		1/4		1/4	
1/2	1,953.51	1/2	1,592.78	1/2	1,232.05	1/2	873.53	1/2	526.39	1/2	165.67	1/2		1/2		1/2		1/2	
3/4	1,946.00	3/4	1,585.27	3/4	1,224.53	3/4	866.33	3/4	518.88	3/4	158.15	3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.		
0		0		0		0	4,487.34	0	4,244.57	0	3,986.46	0	3,708.20	0	3,400.19	0	3,039.17	0	2,678.17		
1/4		1/4		1/4		1/4	4,481.11	1/4	4,239.39	1/4	3,980.87	1/4	3,702.18	1/4	3,392.67	1/4	3,031.65	1/4	2,670.65		
1/2		1/2		1/2		1/2	4,474.89	1/2	4,234.21	1/2	3,975.28	1/2	3,696.16	1/2	3,385.14	1/2	3,024.13	1/2	2,663.13		
3/4		3/4		3/4		3/4	4,468.66	3/4	4,229.03	3/4	3,969.69	3/4	3,690.14	3/4	3,377.62	3/4	3,016.61	3/4	2,655.61		
1		1		1		1	4,463.86	1	4,223.82	1	3,964.06	1	3,684.09	1	3,370.09	1	3,009.08	1	2,648.09		
1/4		1/4		1/4		1/4	4,459.06	1/4	4,218.60	1/4	3,958.43	1/4	3,678.04	1/4	3,362.57	1/4	3,001.56	1/4	2,640.57		
1/2		1/2		1/2		1/2	4,454.25	1/2	4,213.39	1/2	3,952.81	1/2	3,671.98	1/2	3,355.05	1/2	2,994.04	1/2	2,633.04		
3/4		3/4		3/4		3/4	4,449.45	3/4	4,208.17	3/4	3,947.18	3/4	3,665.93	3/4	3,347.52	3/4	2,986.52	3/4	2,625.52		
2		2		2		2	4,444.61	2	4,202.92	2	3,941.52	2	3,659.84	2	3,340.00	2	2,979.00	2	2,618.00		
1/4		1/4		1/4		1/4	4,439.77	1/4	4,197.67	1/4	3,935.86	1/4	3,653.75	1/4	3,332.48	1/4	2,971.48	1/4	2,610.48		
1/2		1/2		1/2		1/2	4,434.93	1/2	4,192.42	1/2	3,930.20	1/2	3,647.67	1/2	3,324.96	1/2	2,963.96	1/2	2,602.96		
3/4		3/4		3/4		3/4	4,430.09	3/4	4,187.18	3/4	3,924.54	3/4	3,641.58	3/4	3,317.44	3/4	2,956.44	3/4	2,595.44		
3		3		3		3	4,425.22	3	4,181.89	3	3,918.85	3	3,635.46	3	3,309.92	3	2,948.92	3	2,587.92		
1/4		1/4		1/4		1/4	4,420.35	1/4	4,176.61	1/4	3,913.16	1/4	3,629.34	1/4	3,302.40	1/4	2,941.40	1/4	2,580.40		
1/2		1/2		1/2		1/2	4,415.48	1/2	4,171.33	1/2	3,907.46	1/2	3,623.21	1/2	3,294.88	1/2	2,933.88	1/2	2,572.88		
3/4		3/4		3/4		3/4	4,410.60	3/4	4,166.04	3/4	3,901.77	3/4	3,617.09	3/4	3,287.35	3/4	2,926.36	3/4	2,565.36		
4		4		4		4	4,405.70	4	4,160.73	4	3,896.04	4	3,610.94	4	3,279.83	4	2,918.84	4	2,557.84		
1/4		1/4		1/4		1/4	4,400.79	1/4	4,155.41	1/4	3,890.31	1/4	3,604.78	1/4	3,272.31	1/4	2,911.31	1/4	2,550.32		
1/2		1/2		1/2		1/2	4,395.88	1/2	4,150.09	1/2	3,884.58	1/2	3,598.62	1/2	3,264.79	1/2	2,903.79	1/2	2,542.80		
3/4		3/4		3/4		3/4	4,390.98	3/4	4,144.77	3/4	3,878.86	3/4	3,592.47	3/4	3,257.27	3/4	2,896.27	3/4	2,535.27		
5		5		5		5	4,386.04	5	4,139.42	5	3,873.09	5	3,586.28	5	3,249.75	5	2,888.75	5	2,527.75		
1/4		1/4		1/4		1/4	4,381.09	1/4	4,134.07	1/4	3,867.33	1/4	3,580.09	1/4	3,242.23	1/4	2,881.23	1/4	2,520.23		
1/2		1/2		1/2		1/2	4,376.15	1/2	4,128.72	1/2	3,861.57	1/2	3,573.90	1/2	3,234.71	1/2	2,873.71	1/2	2,512.71		
3/4		3/4		3/4		3/4	4,371.21	3/4	4,123.37	3/4	3,855.81	3/4	3,567.71	3/4	3,227.19	3/4	2,866.19	3/4	2,505.19		
6		6		6		6	4,366.24	6	4,117.98	6	3,849.99	6	3,561.48	6	3,219.67	6	2,858.67	6	2,497.67		
1/4		1/4		1/4		1/4	4,361.26	1/4	4,112.59	1/4	3,844.18	1/4	3,555.26	1/4	3,212.15	1/4	2,851.15	1/4	2,490.15		
1/2		1/2		1/2		1/2	4,356.29	1/2	4,107.21	1/2	3,838.37	1/2	3,549.03	1/2	3,204.63	1/2	2,843.63	1/2	2,482.63		
3/4		3/4		3/4		3/4	4,605.17	3/4	4,351.31	3/4	3,832.55	3/4	3,542.81	3/4	3,197.10	3/4	2,836.11	3/4	2,475.11		
7		7		7		7	4,601.16	7	4,346.30	7	4,096.40	7	3,826.70	7	3,536.57	7	3,189.58	7	2,828.59	7	2,467.59
1/4		1/4		1/4		1/4	4,597.15	1/4	4,341.29	1/4	4,090.98	1/4	3,820.86	1/4	3,530.33	1/4	3,182.06	1/4	2,821.06	1/4	2,460.07
1/2		1/2		1/2		1/2	4,593.14	1/2	4,336.28	1/2	4,085.56	1/2	3,815.01	1/2	3,524.08	1/2	3,174.54	1/2	2,813.54	1/2	2,452.55
3/4		3/4		3/4		3/4	4,589.13	3/4	4,331.27	3/4	4,080.14	3/4	3,809.16	3/4	3,517.84	3/4	3,167.02	3/4	2,806.02	3/4	2,445.02
8		8		8		8	4,583.75	8	4,326.23	8	4,074.69	8	3,803.28	8	3,511.60	8	3,159.50	8	2,798.50	8	2,437.50
1/4		1/4		1/4		1/4	4,578.37	1/4	4,321.19	1/4	4,069.23	1/4	3,797.39	1/4	3,505.36	1/4	3,151.98	1/4	2,790.98	1/4	2,429.98
1/2		1/2		1/2		1/2	4,572.99	1/2	4,316.14	1/2	4,063.78	1/2	3,791.51	1/2	3,499.12	1/2	3,144.46	1/2	2,783.46	1/2	2,422.46
3/4		3/4		3/4		3/4	4,567.61	3/4	4,311.10	3/4	4,058.32	3/4	3,785.63	3/4	3,492.87	3/4	3,136.94	3/4	2,775.94	3/4	2,414.94
9		9		9		9	4,561.55	9	4,306.02	9	4,052.84	9	3,779.71	9	3,486.63	9	3,129.42	9	2,768.42	9	2,407.42
1/4		1/4		1/4		1/4	4,555.48	1/4	4,300.94	1/4	4,047.35	1/4	3,773.80	1/4	3,480.39	1/4	3,121.90	1/4	2,760.90	1/4	2,399.90
1/2		1/2		1/2		1/2	4,549.42	1/2	4,295.87	1/2	4,041.86	1/2	3,767.88	1/2	3,474.15	1/2	3,114.38	1/2	2,753.38	1/2	2,392.38
3/4		3/4		3/4		3/4	4,543.36	3/4	4,290.79	3/4	4,036.37	3/4	3,761.96	3/4	3,467.91	3/4	3,106.86	3/4	2,745.86	3/4	2,384.86
10		10		10		10	4,537.13	10	4,285.68	10	4,030.85	10	3,756.01	10	3,460.38	10	3,099.33	10	2,738.34	10	2,377.34
1/4		1/4		1/4		1/4	4,530.91	1/4	4,280.56	1/4	4,025.32	1/4	3,750.06	1/4	3,452.86	1/4	3,091.81	1/4	2,730.82	1/4	2,369.82
1/2		1/2		1/2		1/2	4,524.68	1/2	4,275.45	1/2	4,019.80	1/2	3,744.11	1/2	3,445.34	1/2	3,084.29	1/2	2,723.29	1/2	2,362.30
3/4		3/4		3/4		3/4	4,518.46	3/4	4,270.34	3/4	4,014.28	3/4	3,738.16	3/4	3,437.81	3/4	3,076.77	3/4	2,715.77	3/4	2,354.78
11		11		11		11	4,512.23	11	4,265.19	11	4,008.72	11	3,732.18	11	3,430.29	11	3,069.25	11	2,708.25	11	2,347.25
1/4		1/4		1/4		1/4	4,506.01	1/4	4,260.05	1/4	4,003.16	1/4	3,726.19	1/4	3,422.76	1/4	3,061.73	1/4	2,700.73	1/4	2,339.73
1/2		1/2		1/2		1/2	4,499.79	1/2	4,254.90	1/2	3,997.61	1/2	3,720.21	1/2	3,415.24	1/2	3,054.21	1/2	2,693.21	1/2	2,332.21
3/4		3/4		3/4		3/4	4,493.56	3/4	4,249.75	3/4	3,992.05	3/4	3,714.22	3/4	3,407.71	3/4	3,046.69	3/4	2,685.69	3/4	2,324.69

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.

GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 44'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "EMS 398"

3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,317.17	0	1,956.05	0	1,594.88	0	1,233.71	0	872.56	0	511.98	0	150.82	0		0			
1/4	2,309.65	1/4	1,948.53	1/4	1,587.36	1/4	1,226.19	1/4	865.05	1/4	504.45	1/4	143.30	1/4		1/4			
1/2	2,302.13	1/2	1,941.01	1/2	1,579.83	1/2	1,218.66	1/2	857.54	1/2	496.93	1/2	135.77	1/2		1/2			
3/4	2,294.61	3/4	1,933.48	3/4	1,572.31	3/4	1,211.14	3/4	850.03	3/4	489.40	3/4	128.25	3/4		3/4			
1	2,287.09	1	1,925.96	1	1,564.79	1	1,203.61	1	842.52	1	481.88	1	120.72	1		1			
1/4	2,279.57	1/4	1,918.43	1/4	1,557.26	1/4	1,196.09	1/4	835.01	1/4	474.36	1/4	113.20	1/4		1/4			
1/2	2,272.05	1/2	1,910.91	1/2	1,549.74	1/2	1,188.57	1/2	827.50	1/2	466.83	1/2	105.67	1/2		1/2			
3/4	2,264.53	3/4	1,903.38	3/4	1,542.21	3/4	1,181.04	3/4	819.99	3/4	459.31	3/4	98.15	3/4		3/4			
2	2,257.00	2	1,895.86	2	1,534.69	2	1,173.52	2	812.48	2	451.78	2	90.63	2		2			
1/4	2,249.48	1/4	1,888.33	1/4	1,527.16	1/4	1,165.99	1/4	804.97	1/4	444.26	1/4	83.10	1/4		1/4			
1/2	2,241.96	1/2	1,880.81	1/2	1,519.64	1/2	1,158.47	1/2	797.46	1/2	436.73	1/2	75.58	1/2		1/2			
3/4	2,234.44	3/4	1,873.29	3/4	1,512.11	3/4	1,150.94	3/4	789.95	3/4	429.21	3/4	68.05	3/4		3/4			
3	2,226.92	3	1,865.76	3	1,504.59	3	1,143.42	3	782.44	3	421.69	3	60.80	3		3			
1/4	2,219.40	1/4	1,858.24	1/4	1,497.07	1/4	1,135.89	1/4	774.93	1/4	414.16	1/4	53.54	1/4		1/4			
1/2	2,211.88	1/2	1,850.71	1/2	1,489.54	1/2	1,128.37	1/2	767.43	1/2	406.64	1/2	46.29	1/2		1/2			
3/4	2,204.36	3/4	1,843.19	3/4	1,482.02	3/4	1,120.85	3/4	759.92	3/4	399.11	3/4	39.03	3/4		3/4			
4	2,196.83	4	1,835.66	4	1,474.49	4	1,113.32	4	752.41	4	391.59	4	33.66	4		4			
1/4	2,189.31	1/4	1,828.14	1/4	1,466.97	1/4	1,105.80	1/4	744.90	1/4	384.07	1/4	28.28	1/4		1/4			
1/2	2,181.79	1/2	1,820.61	1/2	1,459.44	1/2	1,098.27	1/2	737.39	1/2	376.54	1/2	22.91	1/2		1/2			
3/4	2,174.26	3/4	1,813.09	3/4	1,451.92	3/4	1,090.75	3/4	729.88	3/4	369.02	3/4	17.54	3/4		3/4			
5	2,166.74	5	1,805.57	5	1,444.39	5	1,083.22	5	722.37	5	361.49	5		5		5			
1/4	2,159.21	1/4	1,798.04	1/4	1,436.87	1/4	1,075.70	1/4	714.86	1/4	353.97	1/4		1/4		1/4			
1/2	2,151.69	1/2	1,790.52	1/2	1,429.35	1/2	1,068.17	1/2	707.35	1/2	346.45	1/2		1/2		1/2			
3/4	2,144.16	3/4	1,782.99	3/4	1,421.82	3/4	1,060.65	3/4	699.84	3/4	338.92	3/4		3/4		3/4			
6	2,136.64	6	1,775.47	6	1,414.30	6	1,053.13	6	692.33	6	331.40	6		6		6			
1/4	2,129.12	1/4	1,767.94	1/4	1,406.77	1/4	1,045.60	1/4	684.82	1/4	323.87	1/4		1/4		1/4			
1/2	2,121.59	1/2	1,760.42	1/2	1,399.25	1/2	1,038.08	1/2	677.31	1/2	316.35	1/2		1/2		1/2			
3/4	2,114.07	3/4	1,752.90	3/4	1,391.72	3/4	1,030.55	3/4	669.80	3/4	308.83	3/4		3/4		3/4			
7	2,106.54	7	1,745.37	7	1,384.20	7	1,023.03	7	662.30	7	301.30	7		7		7			
1/4	2,099.02	1/4	1,737.85	1/4	1,376.68	1/4	1,015.50	1/4	654.79	1/4	293.78	1/4		1/4		1/4			
1/2	2,091.49	1/2	1,730.32	1/2	1,369.15	1/2	1,007.98	1/2	647.28	1/2	286.25	1/2		1/2		1/2			
3/4	2,083.97	3/4	1,722.80	3/4	1,361.63	3/4	1,000.46	3/4	639.77	3/4	278.73	3/4		3/4		3/4			
8	2,076.44	8	1,715.27	8	1,354.10	8	992.93	8	632.26	8	271.20	8		8		8			
1/4	2,068.92	1/4	1,707.75	1/4	1,346.58	1/4	985.41	1/4	624.75	1/4	263.68	1/4		1/4		1/4			
1/2	2,061.40	1/2	1,700.22	1/2	1,339.05	1/2	977.88	1/2	617.24	1/2	256.16	1/2		1/2		1/2			
3/4	2,053.87	3/4	1,692.70	3/4	1,331.53	3/4	970.36	3/4	609.73	3/4	248.63	3/4		3/4		3/4			
9	2,046.35	9	1,685.18	9	1,324.00	9	962.83	9	602.22	9	241.11	9		9		9			
1/4	2,038.82	1/4	1,677.65	1/4	1,316.48	1/4	955.31	1/4	594.71	1/4	233.58	1/4		1/4		1/4			
1/2	2,031.30	1/2	1,670.13	1/2	1,308.96	1/2	947.78	1/2	587.20	1/2	226.06	1/2		1/2		1/2			
3/4	2,023.77	3/4	1,662.60	3/4	1,301.43	3/4	940.26	3/4	579.69	3/4	218.54	3/4		3/4		3/4			
10	2,016.25	10	1,655.08	10	1,293.91	10	932.74	10	572.17	10	211.01	10		10		10			
1/4	2,008.72	1/4	1,647.55	1/4	1,286.38	1/4	925.21	1/4	564.64	1/4	203.49	1/4		1/4		1/4			
1/2	2,001.20	1/2	1,640.03	1/2	1,278.86	1/2	917.69	1/2	557.12	1/2	195.96	1/2		1/2		1/2			
3/4	1,993.68	3/4	1,632.50	3/4	1,271.33	3/4	910.16	3/4	549.60	3/4	188.44	3/4		3/4		3/4			
11	1,986.15	11	1,624.98	11	1,263.81	11	902.64	11	542.07	11	180.92	11		11		11			
1/4	1,978.63	1/4	1,617.46	1/4	1,256.28	1/4	895.11	1/4	534.55	1/4	173.39	1/4		1/4		1/4			
1/2	1,971.10	1/2	1,609.93	1/2	1,248.76	1/2	887.59	1/2	527.02	1/2	165.87	1/2		1/2		1/2			
3/4	1,963.58	3/4	1,602.41	3/4	1,241.24	3/4	880.06	3/4	519.50	3/4	158.34	3/4		3/4		3/4			

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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



BARGE "EMS 398"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0	4,457.67	0	4,215.95	0	3,957.43	0	3,678.75	0	3,369.24	0	3,008.70	0	2,648.24
1/4		1/4		1/4		1/4	4,451.44	1/4	4,210.77	1/4	3,951.84	1/4	3,672.73	1/4	3,361.72	1/4	3,001.19	1/4	2,640.73
1/2		1/2		1/2		1/2	4,445.22	1/2	4,205.59	1/2	3,946.25	1/2	3,666.71	1/2	3,354.19	1/2	2,993.68	1/2	2,633.22
3/4		3/4		3/4		3/4	4,440.41	3/4	4,200.38	3/4	3,940.63	3/4	3,660.66	3/4	3,346.67	3/4	2,986.17	3/4	2,625.71
1		1		1		1	4,435.61	1	4,195.16	1	3,935.00	1	3,654.61	1	3,339.14	1	2,978.66	1	2,618.20
1/4		1/4		1/4		1/4	4,430.81	1/4	4,189.95	1/4	3,929.37	1/4	3,648.55	1/4	3,331.62	1/4	2,971.15	1/4	2,610.69
1/2		1/2		1/2		1/2	4,426.00	1/2	4,184.73	1/2	3,923.75	1/2	3,642.50	1/2	3,324.10	1/2	2,963.64	1/2	2,603.18
3/4		3/4		3/4		3/4	4,421.16	3/4	4,179.48	3/4	3,918.09	3/4	3,636.41	3/4	3,316.59	3/4	2,956.13	3/4	2,595.67
2		2		2		2	4,416.32	2	4,174.23	2	3,912.43	2	3,630.33	2	3,309.08	2	2,948.62	2	2,588.17
1/4		1/4		1/4		1/4	4,411.49	1/4	4,168.98	1/4	3,906.77	1/4	3,624.24	1/4	3,301.57	1/4	2,941.11	1/4	2,580.66
1/2		1/2		1/2		1/2	4,406.65	1/2	4,163.74	1/2	3,901.11	1/2	3,618.15	1/2	3,294.06	1/2	2,933.60	1/2	2,573.15
3/4		3/4		3/4		3/4	4,401.78	3/4	4,158.45	3/4	3,895.42	3/4	3,612.03	3/4	3,286.55	3/4	2,926.09	3/4	2,565.64
3		3		3		3	4,396.90	3	4,153.17	3	3,889.72	3	3,605.91	3	3,279.04	3	2,918.58	3	2,558.13
1/4		1/4		1/4		1/4	4,392.03	1/4	4,147.89	1/4	3,884.03	1/4	3,599.79	1/4	3,271.53	1/4	2,911.07	1/4	2,550.62
1/2		1/2		1/2		1/2	4,387.16	1/2	4,142.60	1/2	3,878.34	1/2	3,593.66	1/2	3,264.02	1/2	2,903.56	1/2	2,543.11
3/4		3/4		3/4		3/4	4,382.25	3/4	4,137.29	3/4	3,872.61	3/4	3,587.51	3/4	3,256.51	3/4	2,896.05	3/4	2,535.60
4		4		4		4	4,377.35	4	4,131.97	4	3,866.88	4	3,581.35	4	3,249.00	4	2,888.55	4	2,528.10
1/4		1/4		1/4		1/4	4,372.44	1/4	4,126.65	1/4	3,861.15	1/4	3,575.20	1/4	3,241.49	1/4	2,881.04	1/4	2,520.60
1/2		1/2		1/2		1/2	4,367.53	1/2	4,121.33	1/2	3,855.42	1/2	3,569.04	1/2	3,233.98	1/2	2,873.53	1/2	2,513.09
3/4		3/4		3/4		3/4	4,362.59	3/4	4,115.98	3/4	3,849.66	3/4	3,562.85	3/4	3,226.47	3/4	2,866.02	3/4	2,505.59
5		5		5		5	4,357.65	5	4,110.63	5	3,843.90	5	3,556.66	5	3,218.96	5	2,858.51	5	2,498.09
1/4		1/4		1/4		1/4	4,352.71	1/4	4,105.28	1/4	3,838.14	1/4	3,550.47	1/4	3,211.45	1/4	2,851.00	1/4	2,490.58
1/2		1/2		1/2		1/2	4,347.77	1/2	4,099.93	1/2	3,832.37	1/2	3,544.28	1/2	3,203.94	1/2	2,843.49	1/2	2,483.08
3/4		3/4		3/4		3/4	4,342.79	3/4	4,094.54	3/4	3,826.56	3/4	3,538.06	3/4	3,196.43	3/4	2,835.98	3/4	2,475.58
6		6		6		6	4,337.82	6	4,089.16	6	3,820.75	6	3,531.83	6	3,188.93	6	2,828.47	6	2,468.07
1/4		1/4		1/4		1/4	4,332.84	1/4	4,083.77	1/4	3,814.93	1/4	3,525.61	1/4	3,181.42	1/4	2,820.96	1/4	2,460.57
1/2		1/2		1/2		1/2	4,581.72	1/2	4,327.87	1/2	3,809.12	1/2	3,519.38	1/2	3,173.91	1/2	2,813.45	1/2	2,453.07
3/4		3/4		3/4		3/4	4,577.71	3/4	4,322.86	3/4	3,803.27	3/4	3,513.14	3/4	3,166.40	3/4	2,805.94	3/4	2,445.56
7		7		7		7	4,573.70	7	4,317.85	7	3,797.42	7	3,506.90	7	3,158.89	7	2,798.43	7	2,438.06
1/4		1/4		1/4		1/4	4,569.69	1/4	4,312.84	1/4	3,791.58	1/4	3,500.66	1/4	3,151.38	1/4	2,790.92	1/4	2,430.56
1/2		1/2		1/2		1/2	4,565.68	1/2	4,307.83	1/2	3,785.73	1/2	3,494.42	1/2	3,143.87	1/2	2,783.41	1/2	2,423.05
3/4		3/4		3/4		3/4	4,560.30	3/4	4,302.79	3/4	3,779.85	3/4	3,488.17	3/4	3,136.36	3/4	2,775.90	3/4	2,415.55
8		8		8		8	4,554.92	8	4,297.74	8	3,773.96	8	3,481.93	8	3,128.85	8	2,768.39	8	2,408.05
1/4		1/4		1/4		1/4	4,549.54	1/4	4,292.70	1/4	3,768.08	1/4	3,475.69	1/4	3,121.34	1/4	2,760.88	1/4	2,400.54
1/2		1/2		1/2		1/2	4,544.16	1/2	4,287.66	1/2	3,762.20	1/2	3,469.45	1/2	3,113.83	1/2	2,753.37	1/2	2,393.04
3/4		3/4		3/4		3/4	4,538.10	3/4	4,282.58	3/4	3,756.28	3/4	3,463.21	3/4	3,106.32	3/4	2,745.86	3/4	2,385.53
9		9		9		9	4,532.03	9	4,277.50	9	3,750.37	9	3,456.97	9	3,098.81	9	2,738.36	9	2,378.03
1/4		1/4		1/4		1/4	4,525.97	1/4	4,272.42	1/4	3,744.45	1/4	3,450.73	1/4	3,091.30	1/4	2,730.85	1/4	2,370.53
1/2		1/2		1/2		1/2	4,519.91	1/2	4,267.34	1/2	3,738.53	1/2	3,444.48	1/2	3,083.79	1/2	2,723.34	1/2	2,363.02
3/4		3/4		3/4		3/4	4,513.68	3/4	4,262.23	3/4	3,732.58	3/4	3,438.96	3/4	3,076.28	3/4	2,715.83	3/4	2,355.52
10		10		10		10	4,507.46	10	4,257.12	10	3,726.63	10	3,429.44	10	3,068.77	10	2,708.32	10	2,348.02
1/4		1/4		1/4		1/4	4,501.24	1/4	4,252.01	1/4	3,996.37	1/4	3,720.68	1/4	3,421.91	1/4	3,061.26	1/4	2,700.81
1/2		1/2		1/2		1/2	4,495.01	1/2	4,246.90	1/2	3,990.84	1/2	3,714.73	1/2	3,414.39	1/2	3,053.75	1/2	2,693.30
3/4		3/4		3/4		3/4	4,488.79	3/4	4,241.75	3/4	3,985.29	3/4	3,708.75	3/4	3,406.86	3/4	3,046.24	3/4	2,685.79
11		11		11		11	4,482.56	11	4,236.60	11	3,979.73	11	3,702.76	11	3,399.34	11	3,038.74	11	2,678.28
1/4		1/4		1/4		1/4	4,476.34	1/4	4,231.46	1/4	3,974.17	1/4	3,696.78	1/4	3,391.81	1/4	3,031.23	1/4	2,670.77
1/2		1/2		1/2		1/2	4,470.11	1/2	4,226.31	1/2	3,968.61	1/2	3,690.79	1/2	3,384.29	1/2	3,023.72	1/2	2,663.26
3/4		3/4		3/4		3/4	4,463.89	3/4	4,221.13	3/4	3,963.02	3/4	3,684.77	3/4	3,376.77	3/4	3,016.21	3/4	2,655.75

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 WITH "HERMETIC" CLOSED GAUGING DEVICE.
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 44'-06" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 398"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 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	2,287.97	0	1,928.36	0	1,574.81	0	1,218.94	0	863.50	0	503.67	0	143.13	0		0			
1/4	2,280.46	1/4	1,921.00	1/4	1,567.40	1/4	1,211.53	1/4	856.10	1/4	496.16	1/4	135.62	1/4		1/4			
1/2	2,272.95	1/2	1,913.64	1/2	1,559.98	1/2	1,204.12	1/2	848.70	1/2	488.64	1/2	128.11	1/2		1/2			
3/4	2,265.44	3/4	1,906.28	3/4	1,552.57	3/4	1,196.70	3/4	841.20	3/4	481.13	3/4	120.60	3/4		3/4			
1	2,257.93	1	1,898.93	1	1,545.16	1	1,189.29	1	833.70	1	473.62	1	113.08	1		1			
1/4	2,250.42	1/4	1,891.57	1/4	1,537.74	1/4	1,181.87	1/4	826.21	1/4	466.11	1/4	105.57	1/4		1/4			
1/2	2,242.91	1/2	1,884.21	1/2	1,530.33	1/2	1,174.46	1/2	818.71	1/2	458.60	1/2	98.06	1/2		1/2			
3/4	2,235.40	3/4	1,876.85	3/4	1,522.91	3/4	1,167.05	3/4	811.21	3/4	451.08	3/4	90.55	3/4		3/4			
2	2,227.89	2	1,869.49	2	1,515.50	2	1,159.63	2	803.71	2	443.57	2	83.04	2		2			
1/4	2,220.38	1/4	1,862.13	1/4	1,508.09	1/4	1,152.22	1/4	796.22	1/4	436.06	1/4	75.52	1/4		1/4			
1/2	2,212.86	1/2	1,854.77	1/2	1,500.67	1/2	1,144.81	1/2	788.72	1/2	428.55	1/2	68.01	1/2		1/2			
3/4	2,205.35	3/4	1,847.41	3/4	1,493.26	3/4	1,137.40	3/4	781.22	3/4	421.03	3/4	60.77	3/4		3/4			
3	2,197.84	3	1,840.06	3	1,485.84	3	1,130.00	3	773.72	3	413.52	3	53.52	3		3			
1/4	2,190.33	1/4	1,832.70	1/4	1,478.43	1/4	1,122.60	1/4	766.23	1/4	406.01	1/4	46.28	1/4		1/4			
1/2	2,182.82	1/2	1,825.34	1/2	1,471.02	1/2	1,115.20	1/2	758.73	1/2	398.50	1/2	39.04	1/2		1/2			
3/4	2,175.31	3/4	1,817.98	3/4	1,463.60	3/4	1,107.80	3/4	751.23	3/4	390.99	3/4	33.66	3/4		3/4			
4	2,167.80	4	1,810.62	4	1,456.19	4	1,100.40	4	743.73	4	383.47	4	28.29	4		4			
1/4	2,160.29	1/4	1,803.26	1/4	1,448.78	1/4	1,093.00	1/4	736.24	1/4	376.96	1/4	22.91	1/4		1/4			
1/2	2,152.78	1/2	1,795.90	1/2	1,441.36	1/2	1,085.59	1/2	728.74	1/2	368.45	1/2	17.54	1/2		1/2			
3/4	2,145.27	3/4	1,788.54	3/4	1,433.95	3/4	1,078.19	3/4	721.24	3/4	360.94	3/4		3/4		3/4			
5	2,137.75	5	1,781.19	5	1,426.53	5	1,070.79	5	713.74	5	353.42	5		5		5			
1/4	2,130.24	1/4	1,773.83	1/4	1,419.12	1/4	1,063.39	1/4	706.25	1/4	345.91	1/4		1/4		1/4			
1/2	2,122.73	1/2	1,766.47	1/2	1,411.71	1/2	1,055.99	1/2	698.75	1/2	338.40	1/2		1/2		1/2			
3/4	2,115.22	3/4	1,759.11	3/4	1,404.29	3/4	1,048.59	3/4	691.25	3/4	330.89	3/4		3/4		3/4			
6	2,107.71	6	1,751.75	6	1,396.88	6	1,041.19	6	683.75	6	323.38	6		6		6			
1/4	2,100.20	1/4	1,744.39	1/4	1,389.46	1/4	1,033.78	1/4	676.26	1/4	315.87	1/4		1/4		1/4			
1/2	2,092.69	1/2	1,737.03	1/2	1,382.05	1/2	1,026.38	1/2	668.76	1/2	308.37	1/2		1/2		1/2			
3/4	2,085.18	3/4	1,729.68	3/4	1,374.64	3/4	1,018.98	3/4	661.26	3/4	300.86	3/4		3/4		3/4			
7	2,077.67	7	1,722.32	7	1,367.22	7	1,011.58	7	653.76	7	293.35	7		7		7			
1/4	2,070.16	1/4	1,714.96	1/4	1,359.81	1/4	1,004.18	1/4	646.27	1/4	285.84	1/4		1/4		1/4			
1/2	2,062.64	1/2	1,707.60	1/2	1,352.39	1/2	996.78	1/2	638.77	1/2	278.33	1/2		1/2		1/2			
3/4	2,055.13	3/4	1,700.24	3/4	1,344.98	3/4	989.38	3/4	631.27	3/4	270.82	3/4		3/4		3/4			
8	2,047.62	8	1,692.88	8	1,337.57	8	981.97	8	623.78	8	263.31	8		8		8			
1/4	2,040.11	1/4	1,685.52	1/4	1,330.15	1/4	974.57	1/4	616.28	1/4	255.79	1/4		1/4		1/4			
1/2	2,032.60	1/2	1,678.16	1/2	1,322.74	1/2	967.17	1/2	608.78	1/2	248.28	1/2		1/2		1/2			
3/4	2,025.09	3/4	1,670.81	3/4	1,315.32	3/4	959.77	3/4	601.28	3/4	240.77	3/4		3/4		3/4			
9	2,017.58	9	1,663.45	9	1,307.91	9	952.37	9	593.79	9	233.26	9		9		9			
1/4	2,010.07	1/4	1,656.09	1/4	1,300.50	1/4	944.97	1/4	586.29	1/4	225.75	1/4		1/4		1/4			
1/2	2,002.56	1/2	1,648.73	1/2	1,293.08	1/2	937.57	1/2	578.79	1/2	218.24	1/2		1/2		1/2			
3/4	1,995.05	3/4	1,641.37	3/4	1,285.67	3/4	930.16	3/4	571.28	3/4	210.74	3/4		3/4		3/4			
10	1,987.53	10	1,634.01	10	1,278.26	10	922.76	10	563.77	10	203.23	10		10		10			
1/4	1,980.02	1/4	1,626.65	1/4	1,270.84	1/4	915.36	1/4	556.25	1/4	195.72	1/4		1/4		1/4			
1/2	1,972.51	1/2	1,619.29	1/2	1,263.43	1/2	907.96	1/2	548.74	1/2	188.21	1/2		1/2		1/2			
3/4	1,965.15	3/4	1,611.88	3/4	1,256.01	3/4	900.55	3/4	541.23	3/4	180.70	3/4		3/4		3/4			
11	1,957.80	11	1,604.47	11	1,248.60	11	893.13	11	533.72	11	173.18	11		11		11			
1/4	1,950.44	1/4	1,597.05	1/4	1,241.19	1/4	885.71	1/4	526.21	1/4	165.67	1/4		1/4		1/4			
1/2	1,943.08	1/2	1,589.64	1/2	1,233.77	1/2	878.30	1/2	518.69	1/2	158.16	1/2		1/2		1/2			
3/4	1,935.72	3/4	1,582.23	3/4	1,226.36	3/4	870.90	3/4	511.18	3/4	150.65	3/4		3/4		3/4			

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2016 SW
CALCULATED: 01/11/2016 CL
PRINTED: 01/12/2016 JS

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2016

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