



BARGE "EMS 381"

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	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 01-0/8	01-0/8	- 01-1/4	01-1/4	- 01-1/2	01-1/2
1 STBD	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-3/4	00-3/4	- 01-0/8	01-0/8	- 01-1/4	01-1/4	- 01-1/2	01-1/2
2 PORT	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-5/8	- 00-5/8	00-7/8	- 00-7/8	01-1/8	- 01-1/8	01-1/4	- 01-1/4
2 STBD	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-5/8	- 00-5/8	00-7/8	- 00-7/8	01-1/8	- 01-1/8	01-1/4	- 01-1/4
3 PORT	- 00-3/8	00-3/8	- 00-7/8	00-7/8	- 01-1/4	01-1/4	- 01-3/4	01-3/4	- 02-1/8	02-1/8	- 02-1/2	02-1/2
3 STBD	- 00-3/8	00-3/8	- 00-7/8	00-7/8	- 01-1/4	01-1/4	- 01-3/4	01-3/4	- 02-1/8	02-1/8	- 02-1/2	02-1/2

(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 00-1/2"
 FOR A MEASURED INNAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED INNAGE IS 4'-00 1/2"

LENGTH BETWEEN DRAFT MARKS: 236'-00"

April 22, 2013

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "EMS 381"

1 PORT 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	2.65	0	255.52	0	537.15	0	837.55	0	1,158.24	0	1,489.57	0	1,820.90	0	2,152.23	0	2,483.55	0	2,814.88
1/4	5.94	1/4	261.20	1/4	543.24	1/4	844.01	1/4	1,165.14	1/4	1,496.47	1/4	1,827.80	1/4	2,159.13	1/4	2,490.46	1/4	2,821.78
1/2	9.23	1/2	266.88	1/2	549.33	1/2	850.48	1/2	1,172.04	1/2	1,503.37	1/2	1,834.70	1/2	2,166.03	1/2	2,497.36	1/2	2,828.68
3/4	12.52	3/4	272.56	3/4	555.43	3/4	856.94	3/4	1,178.94	3/4	1,510.27	3/4	1,841.60	3/4	2,172.93	3/4	2,504.26	3/4	2,835.58
1	15.81	1	278.23	1	561.52	1	863.40	1	1,185.85	1	1,517.18	1	1,848.51	1	2,179.84	1	2,511.17	1	2,842.48
1/4	20.86	1/4	283.95	1/4	567.64	1/4	869.90	1/4	1,192.75	1/4	1,524.08	1/4	1,855.41	1/4	2,186.74	1/4	2,518.07	1/4	2,849.38
1/2	25.91	1/2	289.66	1/2	573.77	1/2	876.40	1/2	1,199.65	1/2	1,530.98	1/2	1,862.31	1/2	2,193.64	1/2	2,524.97	1/2	2,856.29
3/4	30.96	3/4	295.37	3/4	579.90	3/4	882.90	3/4	1,206.56	3/4	1,537.88	3/4	1,869.21	3/4	2,200.54	3/4	2,531.87	3/4	2,863.19
2	36.02	2	301.08	2	586.02	2	889.40	2	1,213.46	2	1,544.79	2	1,876.12	2	2,207.45	2	2,538.78	2	2,870.09
1/4	41.35	1/4	306.83	1/4	592.18	1/4	895.93	1/4	1,220.36	1/4	1,551.69	1/4	1,883.02	1/4	2,214.35	1/4	2,545.68	1/4	2,876.99
1/2	46.68	1/2	312.57	1/2	598.34	1/2	902.46	1/2	1,227.26	1/2	1,558.59	1/2	1,889.92	1/2	2,221.25	1/2	2,552.58	1/2	2,883.89
3/4	52.01	3/4	318.32	3/4	604.50	3/4	909.00	3/4	1,234.17	3/4	1,565.50	3/4	1,896.83	3/4	2,228.15	3/4	2,559.48	3/4	2,890.79
3	57.35	3	324.07	3	610.66	3	915.53	3	1,241.07	3	1,572.40	3	1,903.73	3	2,235.06	3	2,566.39	3	2,897.69
1/4	62.71	1/4	329.85	1/4	616.86	1/4	922.11	1/4	1,247.97	1/4	1,579.30	1/4	1,910.63	1/4	2,241.96	1/4	2,573.29	1/4	2,904.60
1/2	68.08	1/2	335.63	1/2	623.05	1/2	928.70	1/2	1,254.87	1/2	1,586.20	1/2	1,917.53	1/2	2,248.86	1/2	2,580.19	1/2	2,911.50
3/4	73.45	3/4	341.41	3/4	629.25	3/4	935.28	3/4	1,261.78	3/4	1,593.11	3/4	1,924.44	3/4	2,255.77	3/4	2,587.10	3/4	2,918.40
4	78.81	4	347.19	4	635.44	4	941.87	4	1,268.68	4	1,600.01	4	1,931.34	4	2,262.67	4	2,594.00	4	2,925.30
1/4	84.21	1/4	353.01	1/4	641.67	1/4	948.49	1/4	1,275.58	1/4	1,606.91	1/4	1,938.24	1/4	2,269.57	1/4	2,600.90	1/4	2,932.20
1/2	89.62	1/2	358.82	1/2	647.90	1/2	955.11	1/2	1,282.49	1/2	1,613.81	1/2	1,945.14	1/2	2,276.47	1/2	2,607.80	1/2	2,939.10
3/4	95.02	3/4	364.64	3/4	654.13	3/4	961.72	3/4	1,289.39	3/4	1,620.72	3/4	1,952.05	3/4	2,283.38	3/4	2,614.71	3/4	2,946.01
5	100.42	5	370.45	5	660.36	5	968.34	5	1,296.29	5	1,627.62	5	1,958.95	5	2,290.28	5	2,621.61	5	2,952.91
1/4	105.85	1/4	376.30	1/4	666.60	1/4	975.02	1/4	1,303.19	1/4	1,634.52	1/4	1,965.85	1/4	2,297.18	1/4	2,628.51	1/4	2,959.81
1/2	111.29	1/2	382.15	1/2	672.83	1/2	981.70	1/2	1,310.10	1/2	1,641.43	1/2	1,972.76	1/2	2,304.08	1/2	2,635.41	1/2	2,966.71
3/4	116.73	3/4	388.00	3/4	679.07	3/4	988.38	3/4	1,317.00	3/4	1,648.33	3/4	1,979.66	3/4	2,310.99	3/4	2,642.32	3/4	2,973.61
6	122.16	6	393.85	6	685.30	6	995.06	6	1,323.90	6	1,655.23	6	1,986.56	6	2,317.89	6	2,649.22	6	2,980.51
1/4	127.63	1/4	399.74	1/4	691.57	1/4	1,001.77	1/4	1,330.80	1/4	1,662.13	1/4	1,993.46	1/4	2,324.79	1/4	2,656.12	1/4	2,987.42
1/2	133.10	1/2	405.62	1/2	697.84	1/2	1,008.48	1/2	1,337.71	1/2	1,669.04	1/2	2,000.37	1/2	2,331.70	1/2	2,663.03	1/2	2,994.32
3/4	138.57	3/4	411.51	3/4	704.11	3/4	1,015.20	3/4	1,344.61	3/4	1,675.94	3/4	2,007.27	3/4	2,338.60	3/4	2,669.93	3/4	3,001.22
7	144.04	7	417.39	7	710.38	7	1,021.91	7	1,351.51	7	1,682.84	7	2,014.17	7	2,345.50	7	2,676.83	7	3,008.12
1/4	149.55	1/4	423.31	1/4	716.67	1/4	1,028.66	1/4	1,358.41	1/4	1,689.74	1/4	2,021.07	1/4	2,352.40	1/4	2,683.73	1/4	3,015.02
1/2	155.05	1/2	429.23	1/2	722.96	1/2	1,035.40	1/2	1,365.32	1/2	1,696.65	1/2	2,027.98	1/2	2,359.31	1/2	2,690.64	1/2	3,021.92
3/4	160.56	3/4	435.15	3/4	729.26	3/4	1,042.15	3/4	1,372.22	3/4	1,703.55	3/4	2,034.88	3/4	2,366.21	3/4	2,697.54	3/4	3,028.83
8	166.06	8	441.07	8	735.55	8	1,048.90	8	1,379.12	8	1,710.45	8	2,041.78	8	2,373.11	8	2,704.44	8	3,035.73
1/4	171.60	1/4	447.02	1/4	741.87	1/4	1,055.68	1/4	1,386.03	1/4	1,717.36	1/4	2,048.68	1/4	2,380.01	1/4	2,711.34	1/4	3,042.63
1/2	177.14	1/2	452.97	1/2	748.20	1/2	1,062.46	1/2	1,392.93	1/2	1,724.26	1/2	2,055.59	1/2	2,386.92	1/2	2,718.25	1/2	3,049.53
3/4	182.68	3/4	458.93	3/4	754.52	3/4	1,069.24	3/4	1,399.83	3/4	1,731.16	3/4	2,062.49	3/4	2,393.82	3/4	2,725.15	3/4	3,056.43
9	188.22	9	464.88	9	760.85	9	1,076.03	9	1,406.73	9	1,738.06	9	2,069.39	9	2,400.72	9	2,732.05	9	3,063.33
1/4	193.80	1/4	470.87	1/4	767.21	1/4	1,082.84	1/4	1,413.64	1/4	1,744.97	1/4	2,076.30	1/4	2,407.63	1/4	2,738.95	1/4	3,070.23
1/2	199.37	1/2	476.86	1/2	773.57	1/2	1,089.66	1/2	1,420.54	1/2	1,751.87	1/2	2,083.20	1/2	2,414.53	1/2	2,745.86	1/2	3,077.14
3/4	204.94	3/4	482.85	3/4	779.93	3/4	1,096.47	3/4	1,427.44	3/4	1,758.77	3/4	2,090.10	3/4	2,421.43	3/4	2,752.76	3/4	3,084.04
10	210.52	10	488.83	10	786.29	10	1,103.29	10	1,434.34	10	1,765.67	10	2,097.00	10	2,428.33	10	2,759.66	10	3,090.94
1/4	216.13	1/4	494.86	1/4	792.68	1/4	1,110.14	1/4	1,441.25	1/4	1,772.58	1/4	2,103.91	1/4	2,435.24	1/4	2,766.56	1/4	3,097.84
1/2	221.73	1/2	500.88	1/2	799.07	1/2	1,116.99	1/2	1,448.15	1/2	1,779.48	1/2	2,110.81	1/2	2,442.14	1/2	2,773.47	1/2	3,104.74
3/4	227.34	3/4	506.90	3/4	805.46	3/4	1,123.84	3/4	1,455.05	3/4	1,786.38	3/4	2,117.71	3/4	2,449.04	3/4	2,780.37	3/4	3,111.64
11	232.95	11	512.92	11	811.85	11	1,130.69	11	1,461.96	11	1,793.28	11	2,124.61	11	2,455.94	11	2,787.27	11	3,118.55
1/4	238.59	1/4	518.98	1/4	818.28	1/4	1,137.58	1/4	1,468.86	1/4	1,800.19	1/4	2,131.52	1/4	2,462.85	1/4	2,794.17	1/4	3,125.45
1/2	244.24	1/2	525.04	1/2	824.70	1/2	1,144.47	1/2	1,475.76	1/2	1,807.09	1/2	2,138.42	1/2	2,469.75	1/2	2,801.07	1/2	3,132.35
3/4	249.88	3/4	531.09	3/4	831.13	3/4	1,151.35	3/4	1,482.66	3/4	1,813.99	3/4	2,145.32	3/4	2,476.65	3/4	2,807.97	3/4	3,139.25

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.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
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BARGE "EMS 381"

1 PORT 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	3,146.15	0	3,477.43	0	3,808.71	0	4,139.19	0		0		0		0		0		0	
1/4	3,153.05	1/4	3,484.33	1/4	3,815.61	1/4	4,146.05	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,159.96	1/2	3,491.23	1/2	3,822.51	1/2	4,152.91	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,166.86	3/4	3,498.13	3/4	3,829.41	3/4	4,159.77	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,173.76	1	3,505.04	1	3,836.31	1	4,166.64	1		1		1		1		1		1	
1/4	3,180.66	1/4	3,511.94	1/4	3,843.21	1/4	4,173.50	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,187.56	1/2	3,518.84	1/2	3,850.12	1/2	4,180.36	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,194.46	3/4	3,525.74	3/4	3,857.02	3/4	4,187.22	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,201.37	2	3,532.64	2	3,863.92	2	4,194.08	2		2		2		2		2		2	
1/4	3,208.27	1/4	3,539.54	1/4	3,870.82	1/4	4,200.95	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,215.17	1/2	3,546.45	1/2	3,877.72	1/2	4,207.81	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,222.07	3/4	3,553.35	3/4	3,884.62	3/4	4,214.67	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,228.97	3	3,560.25	3	3,891.53	3	4,221.53	3		3		3		3		3		3	
1/4	3,235.87	1/4	3,567.15	1/4	3,898.43	1/4	4,228.39	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,242.77	1/2	3,574.05	1/2	3,905.33	1/2	4,235.26	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,249.68	3/4	3,580.95	3/4	3,912.23	3/4	4,242.12	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,256.58	4	3,587.85	4	3,919.13	4	4,248.98	4		4		4		4		4		4	
1/4	3,263.48	1/4	3,594.76	1/4	3,926.03	1/4	4,255.84	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,270.38	1/2	3,601.66	1/2	3,932.93	1/2	4,262.70	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,277.28	3/4	3,608.56	3/4	3,939.84	3/4	4,269.56	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,284.18	5	3,615.46	5	3,946.74	5	4,276.43	5		5		5		5		5		5	
1/4	3,291.09	1/4	3,622.36	1/4	3,953.64	1/4	4,283.29	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,297.99	1/2	3,629.26	1/2	3,960.54	1/2	4,290.15	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,304.89	3/4	3,636.17	3/4	3,967.44	3/4	4,297.01	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,311.79	6	3,643.07	6	3,974.34	6	4,303.87	6		6		6		6		6		6	
1/4	3,318.69	1/4	3,649.97	1/4	3,981.25	1/4	4,310.74	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,325.59	1/2	3,656.87	1/2	3,988.15	1/2	4,317.60	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,332.50	3/4	3,663.77	3/4	3,995.05	3/4	4,324.46	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,339.40	7	3,670.67	7	4,001.95	7	4,331.32	7		7		7		7		7		7	
1/4	3,346.30	1/4	3,677.58	1/4	4,008.81	1/4	4,338.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,353.20	1/2	3,684.48	1/2	4,015.67	1/2	4,344.90	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,360.10	3/4	3,691.38	3/4	4,022.54	3/4	4,351.68	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,367.00	8	3,698.28	8	4,029.40	8	4,358.47	8		8		8		8		8		8	
1/4	3,373.91	1/4	3,705.18	1/4	4,036.26	1/4	4,364.91	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,380.81	1/2	3,712.08	1/2	4,043.12	1/2	4,371.34	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,387.71	3/4	3,718.99	3/4	4,049.98	3/4	4,377.78	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,394.61	9	3,725.89	9	4,056.85	9	4,384.22	9		9		9		9		9		9	
1/4	3,401.51	1/4	3,732.79	1/4	4,063.71	1/4	4,389.44	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,408.41	1/2	3,739.69	1/2	4,070.57	1/2	4,394.66	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,415.31	3/4	3,746.59	3/4	4,077.43	3/4	4,399.88	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,422.22	10	3,753.49	10	4,084.29	10		10		10		10		10		10		10	
1/4	3,429.12	1/4	3,760.39	1/4	4,091.16	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,436.02	1/2	3,767.30	1/2	4,098.02	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,442.92	3/4	3,774.20	3/4	4,104.88	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,449.82	11	3,781.10	11	4,111.74	11		11		11		11		11		11		11	
1/4	3,456.72	1/4	3,788.00	1/4	4,118.60	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,463.63	1/2	3,794.90	1/2	4,125.47	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,470.53	3/4	3,801.80	3/4	4,132.33	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
REPRINTED: 04/22/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 04/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
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BARGE "EMS 381"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 3/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
	2.65		255.57		537.22		838.44		1,159.68		1,491.01		1,822.34		2,153.67		2,485.00		2,816.32
1/4	5.95	1/4	261.24	1/4	543.31	1/4	844.94	1/4	1,166.58	1/4	1,497.91	1/4	1,829.24	1/4	2,160.57	1/4	2,491.90	1/4	2,823.22
1/2	9.24	1/2	266.92	1/2	549.40	1/2	851.43	1/2	1,173.48	1/2	1,504.81	1/2	1,836.14	1/2	2,167.47	1/2	2,498.80	1/2	2,830.12
3/4	12.53	3/4	272.60	3/4	555.50	3/4	857.92	3/4	1,180.39	3/4	1,511.72	3/4	1,843.05	3/4	2,174.38	3/4	2,505.71	3/4	2,837.02
1	15.82	1	278.28	1	561.59	1	864.41	1	1,187.29	1	1,518.62	1	1,849.95	1	2,181.28	1	2,512.61	1	2,843.92
1/4	20.87	1/4	283.99	1/4	567.72	1/4	870.94	1/4	1,194.19	1/4	1,525.52	1/4	1,856.85	1/4	2,188.18	1/4	2,519.51	1/4	2,850.83
1/2	25.93	1/2	289.70	1/2	573.84	1/2	877.47	1/2	1,201.10	1/2	1,532.42	1/2	1,863.75	1/2	2,195.08	1/2	2,526.41	1/2	2,857.73
3/4	30.98	3/4	295.42	3/4	579.97	3/4	884.00	3/4	1,208.00	3/4	1,539.33	3/4	1,870.66	3/4	2,201.99	3/4	2,533.32	3/4	2,864.63
2	36.03	2	301.13	2	586.09	2	890.52	2	1,214.90	2	1,546.23	2	1,877.56	2	2,208.89	2	2,540.22	2	2,871.53
1/4	41.36	1/4	306.88	1/4	592.26	1/4	897.09	1/4	1,221.80	1/4	1,553.13	1/4	1,884.46	1/4	2,215.79	1/4	2,547.12	1/4	2,878.43
1/2	46.70	1/2	312.62	1/2	598.42	1/2	903.65	1/2	1,228.71	1/2	1,560.04	1/2	1,891.37	1/2	2,222.69	1/2	2,554.02	1/2	2,885.33
3/4	52.03	3/4	318.37	3/4	604.58	3/4	910.21	3/4	1,235.61	3/4	1,566.94	3/4	1,898.27	3/4	2,229.60	3/4	2,560.93	3/4	2,892.24
3	57.36	3	324.12	3	610.74	3	916.77	3	1,242.51	3	1,573.84	3	1,905.17	3	2,236.50	3	2,567.83	3	2,899.14
1/4	62.73	1/4	329.90	1/4	616.93	1/4	923.38	1/4	1,249.41	1/4	1,580.74	1/4	1,912.07	1/4	2,243.40	1/4	2,574.73	1/4	2,906.04
1/2	68.10	1/2	335.68	1/2	623.13	1/2	929.99	1/2	1,256.32	1/2	1,587.65	1/2	1,918.98	1/2	2,250.31	1/2	2,581.64	1/2	2,912.94
3/4	73.47	3/4	341.46	3/4	629.32	3/4	936.60	3/4	1,263.22	3/4	1,594.55	3/4	1,925.88	3/4	2,257.21	3/4	2,588.54	3/4	2,919.84
4	78.83	4	347.24	4	635.52	4	943.21	4	1,270.12	4	1,601.45	4	1,932.78	4	2,264.11	4	2,595.44	4	2,926.74
1/4	84.24	1/4	353.06	1/4	641.75	1/4	949.85	1/4	1,277.02	1/4	1,608.35	1/4	1,939.68	1/4	2,271.01	1/4	2,602.34	1/4	2,933.65
1/2	89.64	1/2	358.88	1/2	647.98	1/2	956.50	1/2	1,283.93	1/2	1,615.26	1/2	1,946.59	1/2	2,277.92	1/2	2,609.25	1/2	2,940.55
3/4	95.04	3/4	364.69	3/4	654.21	3/4	963.14	3/4	1,290.83	3/4	1,622.16	3/4	1,953.49	3/4	2,284.82	3/4	2,616.15	3/4	2,947.45
5	100.44	5	370.51	5	660.44	5	969.78	5	1,297.73	5	1,629.06	5	1,960.39	5	2,291.72	5	2,623.05	5	2,954.35
1/4	105.88	1/4	376.36	1/4	666.70	1/4	976.46	1/4	1,304.64	1/4	1,635.97	1/4	1,967.29	1/4	2,298.62	1/4	2,629.95	1/4	2,961.25
1/2	111.32	1/2	382.21	1/2	672.97	1/2	983.14	1/2	1,311.54	1/2	1,642.87	1/2	1,974.20	1/2	2,305.53	1/2	2,636.86	1/2	2,968.15
3/4	116.75	3/4	388.06	3/4	679.23	3/4	989.82	3/4	1,318.44	3/4	1,649.77	3/4	1,981.10	3/4	2,312.43	3/4	2,643.76	3/4	2,975.05
6	122.19	6	393.91	6	685.50	6	996.50	6	1,325.34	6	1,656.67	6	1,988.00	6	2,319.33	6	2,650.66	6	2,981.96
1/4	127.66	1/4	399.80	1/4	691.80	1/4	1,003.21	1/4	1,332.25	1/4	1,663.58	1/4	1,994.91	1/4	2,326.24	1/4	2,657.56	1/4	2,988.86
1/2	133.13	1/2	405.68	1/2	698.10	1/2	1,009.92	1/2	1,339.15	1/2	1,670.48	1/2	2,001.81	1/2	2,333.14	1/2	2,664.47	1/2	2,995.76
3/4	138.60	3/4	411.57	3/4	704.39	3/4	1,016.64	3/4	1,346.05	3/4	1,677.38	3/4	2,008.71	3/4	2,340.04	3/4	2,671.37	3/4	3,002.66
7	144.07	7	417.45	7	710.69	7	1,023.35	7	1,352.95	7	1,684.28	7	2,015.61	7	2,346.94	7	2,678.27	7	3,009.56
1/4	149.58	1/4	423.37	1/4	717.01	1/4	1,030.10	1/4	1,359.86	1/4	1,691.19	1/4	2,022.52	1/4	2,353.85	1/4	2,685.18	1/4	3,016.46
1/2	155.09	1/2	429.29	1/2	723.33	1/2	1,036.84	1/2	1,366.76	1/2	1,698.09	1/2	2,029.42	1/2	2,360.75	1/2	2,692.08	1/2	3,023.37
3/4	160.59	3/4	435.21	3/4	729.65	3/4	1,043.59	3/4	1,373.66	3/4	1,704.99	3/4	2,036.32	3/4	2,367.65	3/4	2,698.98	3/4	3,030.27
8	166.10	8	441.13	8	735.97	8	1,050.34	8	1,380.57	8	1,711.89	8	2,043.22	8	2,374.55	8	2,705.88	8	3,037.17
1/4	171.64	1/4	447.08	1/4	742.33	1/4	1,057.12	1/4	1,387.47	1/4	1,718.80	1/4	2,050.13	1/4	2,381.46	1/4	2,712.79	1/4	3,044.07
1/2	177.18	1/2	453.04	1/2	748.68	1/2	1,063.90	1/2	1,394.37	1/2	1,725.70	1/2	2,057.03	1/2	2,388.36	1/2	2,719.69	1/2	3,050.97
3/4	182.72	3/4	458.99	3/4	755.04	3/4	1,070.69	3/4	1,401.27	3/4	1,732.60	3/4	2,063.93	3/4	2,395.26	3/4	2,726.59	3/4	3,057.87
9	188.26	9	464.94	9	761.39	9	1,077.47	9	1,408.18	9	1,739.51	9	2,070.84	9	2,402.16	9	2,733.49	9	3,064.78
1/4	193.83	1/4	470.93	1/4	767.78	1/4	1,084.28	1/4	1,415.08	1/4	1,746.41	1/4	2,077.74	1/4	2,409.07	1/4	2,740.40	1/4	3,071.68
1/2	199.41	1/2	476.92	1/2	774.17	1/2	1,091.10	1/2	1,421.98	1/2	1,753.31	1/2	2,084.64	1/2	2,415.97	1/2	2,747.30	1/2	3,078.58
3/4	204.98	3/4	482.91	3/4	780.56	3/4	1,097.92	3/4	1,428.88	3/4	1,760.21	3/4	2,091.54	3/4	2,422.87	3/4	2,754.20	3/4	3,085.48
10	210.56	10	488.90	10	786.95	10	1,104.73	10	1,435.79	10	1,767.12	10	2,098.45	10	2,429.78	10	2,761.11	10	3,092.38
1/4	216.16	1/4	494.92	1/4	793.37	1/4	1,111.58	1/4	1,442.69	1/4	1,774.02	1/4	2,105.35	1/4	2,436.68	1/4	2,768.01	1/4	3,099.28
1/2	221.77	1/2	500.94	1/2	799.79	1/2	1,118.44	1/2	1,449.59	1/2	1,780.92	1/2	2,112.25	1/2	2,443.58	1/2	2,774.91	1/2	3,106.19
3/4	227.38	3/4	506.97	3/4	806.21	3/4	1,125.29	3/4	1,456.49	3/4	1,787.82	3/4	2,119.15	3/4	2,450.48	3/4	2,781.81	3/4	3,113.09
11	232.99	11	512.99	11	812.63	11	1,132.14	11	1,463.40	11	1,794.73	11	2,126.06	11	2,457.39	11	2,788.71	11	3,119.99
1/4	238.64	1/4	519.05	1/4	819.08	1/4	1,139.02	1/4	1,470.30	1/4	1,801.63	1/4	2,132.96	1/4	2,464.29	1/4	2,795.61	1/4	3,126.89
1/2	244.28	1/2	525.11	1/2	825.54	1/2	1,145.91	1/2	1,477.20	1/2	1,808.53	1/2	2,139.86	1/2	2,471.19	1/2	2,802.51	1/2	3,133.79
3/4	249.92	3/4	531.16	3/4	831.99	3/4	1,152.79	3/4	1,484.11	3/4	1,815.44	3/4	2,146.76	3/4	2,478.09	3/4	2,809.42	3/4	3,140.69

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.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



BARGE "EMS 381"

**1 STBD
INNAGE TABLE**

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 3/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0	3,147.59	0	3,478.87	0	3,810.15	0	4,140.63	0		0		0		0		0		0	
1/4	3,154.50	1/4	3,485.77	1/4	3,817.05	1/4	4,147.49	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,161.40	1/2	3,492.67	1/2	3,823.95	1/2	4,154.36	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,168.30	3/4	3,499.58	3/4	3,830.85	3/4	4,161.22	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,175.20	1	3,506.48	1	3,837.75	1	4,168.08	1		1		1		1		1		1	
1/4	3,182.10	1/4	3,513.38	1/4	3,844.66	1/4	4,174.94	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,189.00	1/2	3,520.28	1/2	3,851.56	1/2	4,181.80	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,195.91	3/4	3,527.18	3/4	3,858.46	3/4	4,188.66	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,202.81	2	3,534.08	2	3,865.36	2	4,195.53	2		2		2		2		2		2	
1/4	3,209.71	1/4	3,540.99	1/4	3,872.26	1/4	4,202.39	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,216.61	1/2	3,547.89	1/2	3,879.16	1/2	4,209.25	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,223.51	3/4	3,554.79	3/4	3,886.07	3/4	4,216.11	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,230.41	3	3,561.69	3	3,892.97	3	4,222.97	3		3		3		3		3		3	
1/4	3,237.32	1/4	3,568.59	1/4	3,899.87	1/4	4,229.84	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,244.22	1/2	3,575.49	1/2	3,906.77	1/2	4,236.70	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,251.12	3/4	3,582.40	3/4	3,913.67	3/4	4,243.56	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,258.02	4	3,589.30	4	3,920.57	4	4,250.42	4		4		4		4		4		4	
1/4	3,264.92	1/4	3,596.20	1/4	3,927.48	1/4	4,257.28	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,271.82	1/2	3,603.10	1/2	3,934.38	1/2	4,264.15	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,278.73	3/4	3,610.00	3/4	3,941.28	3/4	4,271.01	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,285.63	5	3,616.90	5	3,948.18	5	4,277.87	5		5		5		5		5		5	
1/4	3,292.53	1/4	3,623.81	1/4	3,955.08	1/4	4,284.73	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,299.43	1/2	3,630.71	1/2	3,961.98	1/2	4,291.59	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,306.33	3/4	3,637.61	3/4	3,968.89	3/4	4,298.45	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,313.23	6	3,644.51	6	3,975.79	6	4,305.32	6		6		6		6		6		6	
1/4	3,320.13	1/4	3,651.41	1/4	3,982.69	1/4	4,312.18	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,327.04	1/2	3,658.31	1/2	3,989.59	1/2	4,319.04	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,333.94	3/4	3,665.21	3/4	3,996.49	3/4	4,325.90	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,340.84	7	3,672.12	7	4,003.39	7	4,332.76	7		7		7		7		7		7	
1/4	3,347.74	1/4	3,679.02	1/4	4,010.26	1/4	4,339.55	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,354.64	1/2	3,685.92	1/2	4,017.12	1/2	4,346.34	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,361.54	3/4	3,692.82	3/4	4,023.98	3/4	4,353.13	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,368.45	8	3,699.72	8	4,030.84	8	4,359.91	8		8		8		8		8		8	
1/4	3,375.35	1/4	3,706.62	1/4	4,037.70	1/4	4,366.35	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,382.25	1/2	3,713.53	1/2	4,044.56	1/2	4,372.79	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,389.15	3/4	3,720.43	3/4	4,051.43	3/4	4,379.23	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,396.05	9	3,727.33	9	4,058.29	9	4,385.66	9		9		9		9		9		9	
1/4	3,402.95	1/4	3,734.23	1/4	4,065.15	1/4	4,390.88	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,409.86	1/2	3,741.13	1/2	4,072.01	1/2	4,396.10	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,416.76	3/4	3,748.03	3/4	4,078.87	3/4	4,401.32	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,423.66	10	3,754.94	10	4,085.74	10		10		10		10		10		10		10	
1/4	3,430.56	1/4	3,761.84	1/4	4,092.60	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,437.46	1/2	3,768.74	1/2	4,099.46	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,444.36	3/4	3,775.64	3/4	4,106.32	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,451.27	11	3,782.54	11	4,113.18	11		11		11		11		11		11		11	
1/4	3,458.17	1/4	3,789.44	1/4	4,120.05	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,465.07	1/2	3,796.35	1/2	4,126.91	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,471.97	3/4	3,803.25	3/4	4,133.77	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
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CANCELS AND SUPERCEDES
ALL PRIOR TO 04/2013

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



BARGE "EMS 381"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 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	18.86	0	396.53	0	774.33	0	1,157.46	0	1,545.56	0	1,933.65	0	2,321.75	0	2,709.85	0	3,097.95	0	3,486.04
1/4	24.63	1/4	404.61	1/4	782.10	1/4	1,165.54	1/4	1,553.64	1/4	1,941.74	1/4	2,329.84	1/4	2,717.94	1/4	3,106.04	1/4	3,494.13
1/2	30.41	1/2	412.70	1/2	789.86	1/2	1,173.63	1/2	1,561.73	1/2	1,949.83	1/2	2,337.92	1/2	2,726.02	1/2	3,114.12	1/2	3,502.21
3/4	36.18	3/4	420.78	3/4	797.62	3/4	1,181.71	3/4	1,569.81	3/4	1,957.91	3/4	2,346.01	3/4	2,734.11	3/4	3,122.21	3/4	3,510.29
1	41.95	1	428.87	1	805.39	1	1,189.80	1	1,577.90	1	1,966.00	1	2,354.10	1	2,742.19	1	3,130.29	1	3,518.38
1/4	49.75	1/4	436.95	1/4	813.16	1/4	1,197.88	1/4	1,585.98	1/4	1,974.08	1/4	2,362.18	1/4	2,750.28	1/4	3,138.38	1/4	3,526.46
1/2	57.55	1/2	445.04	1/2	820.94	1/2	1,205.97	1/2	1,594.07	1/2	1,982.17	1/2	2,370.27	1/2	2,758.37	1/2	3,146.46	1/2	3,534.55
3/4	65.34	3/4	453.12	3/4	828.71	3/4	1,214.05	3/4	1,602.15	3/4	1,990.25	3/4	2,378.35	3/4	2,766.45	3/4	3,154.55	3/4	3,542.63
2	73.14	2	461.21	2	836.48	2	1,222.14	2	1,610.24	2	1,998.34	2	2,386.44	2	2,774.54	2	3,162.64	2	3,550.72
1/4	81.22	1/4	469.29	1/4	844.26	1/4	1,230.23	1/4	1,618.32	1/4	2,006.42	1/4	2,394.52	1/4	2,782.62	1/4	3,170.72	1/4	3,558.80
1/2	89.31	1/2	477.38	1/2	852.04	1/2	1,238.31	1/2	1,626.41	1/2	2,014.51	1/2	2,402.61	1/2	2,790.71	1/2	3,178.81	1/2	3,566.88
3/4	97.39	3/4	485.46	3/4	859.82	3/4	1,246.40	3/4	1,634.50	3/4	2,022.59	3/4	2,410.69	3/4	2,798.79	3/4	3,186.89	3/4	3,574.97
3	105.48	3	493.55	3	867.60	3	1,254.48	3	1,642.58	3	2,030.68	3	2,418.78	3	2,806.88	3	3,194.98	3	3,583.05
1/4	113.56	1/4	501.63	1/4	875.38	1/4	1,262.57	1/4	1,650.67	1/4	2,038.77	1/4	2,426.86	1/4	2,814.96	1/4	3,203.06	1/4	3,591.14
1/2	121.65	1/2	509.72	1/2	883.16	1/2	1,270.65	1/2	1,658.75	1/2	2,046.85	1/2	2,434.95	1/2	2,823.05	1/2	3,211.15	1/2	3,599.22
3/4	129.73	3/4	517.80	3/4	890.94	3/4	1,278.74	3/4	1,666.84	3/4	2,054.94	3/4	2,443.04	3/4	2,831.13	3/4	3,219.23	3/4	3,607.31
4	137.82	4	525.89	4	898.72	4	1,286.82	4	1,674.92	4	2,063.02	4	2,451.12	4	2,839.22	4	3,227.32	4	3,615.39
1/4	145.90	1/4	533.66	1/4	906.81	1/4	1,294.91	1/4	1,683.01	1/4	2,071.11	1/4	2,459.21	1/4	2,847.31	1/4	3,235.40	1/4	3,623.47
1/2	153.99	1/2	541.43	1/2	914.89	1/2	1,302.99	1/2	1,691.09	1/2	2,079.19	1/2	2,467.29	1/2	2,855.39	1/2	3,243.49	1/2	3,631.56
3/4	162.07	3/4	549.21	3/4	922.98	3/4	1,311.08	3/4	1,699.18	3/4	2,087.28	3/4	2,475.38	3/4	2,863.48	3/4	3,251.58	3/4	3,639.64
5	170.16	5	556.98	5	931.07	5	1,319.16	5	1,707.26	5	2,095.36	5	2,483.46	5	2,871.56	5	3,259.66	5	3,647.73
1/4	178.24	1/4	564.74	1/4	939.15	1/4	1,327.25	1/4	1,715.35	1/4	2,103.45	1/4	2,491.55	1/4	2,879.65	1/4	3,267.75	1/4	3,655.81
1/2	186.32	1/2	572.51	1/2	947.24	1/2	1,335.34	1/2	1,723.43	1/2	2,111.53	1/2	2,499.63	1/2	2,887.73	1/2	3,275.83	1/2	3,663.89
3/4	194.41	3/4	580.27	3/4	955.32	3/4	1,343.42	3/4	1,731.52	3/4	2,119.62	3/4	2,507.72	3/4	2,895.82	3/4	3,283.92	3/4	3,671.98
6	202.49	6	588.03	6	963.41	6	1,351.51	6	1,739.61	6	2,127.70	6	2,515.80	6	2,903.90	6	3,292.00	6	3,680.06
1/4	210.58	1/4	595.80	1/4	971.49	1/4	1,359.59	1/4	1,747.69	1/4	2,135.79	1/4	2,523.89	1/4	2,911.99	1/4	3,300.09	1/4	3,688.15
1/2	218.66	1/2	603.56	1/2	979.58	1/2	1,367.68	1/2	1,755.78	1/2	2,143.88	1/2	2,531.97	1/2	2,920.07	1/2	3,308.17	1/2	3,696.23
3/4	226.75	3/4	611.33	3/4	987.66	3/4	1,375.76	3/4	1,763.86	3/4	2,151.96	3/4	2,540.06	3/4	2,928.16	3/4	3,316.26	3/4	3,704.32
7	234.83	7	619.09	7	995.75	7	1,383.85	7	1,771.95	7	2,160.05	7	2,548.15	7	2,936.24	7	3,324.34	7	3,712.40
1/4	242.92	1/4	626.85	1/4	1,003.83	1/4	1,391.93	1/4	1,780.03	1/4	2,168.13	1/4	2,556.23	1/4	2,944.33	1/4	3,332.43	1/4	3,720.48
1/2	251.00	1/2	634.62	1/2	1,011.92	1/2	1,400.02	1/2	1,788.12	1/2	2,176.22	1/2	2,564.32	1/2	2,952.42	1/2	3,340.51	1/2	3,728.57
3/4	259.09	3/4	642.38	3/4	1,020.00	3/4	1,408.10	3/4	1,796.20	3/4	2,184.30	3/4	2,572.40	3/4	2,960.50	3/4	3,348.60	3/4	3,736.65
8	267.17	8	650.15	8	1,028.09	8	1,416.19	8	1,804.29	8	2,192.39	8	2,580.49	8	2,968.59	8	3,356.69	8	3,744.74
1/4	275.26	1/4	657.90	1/4	1,036.18	1/4	1,424.27	1/4	1,812.37	1/4	2,200.47	1/4	2,588.57	1/4	2,976.67	1/4	3,364.77	1/4	3,752.82
1/2	283.34	1/2	665.66	1/2	1,044.26	1/2	1,432.36	1/2	1,820.46	1/2	2,208.56	1/2	2,596.66	1/2	2,984.76	1/2	3,372.86	1/2	3,760.90
3/4	291.43	3/4	673.42	3/4	1,052.35	3/4	1,440.45	3/4	1,828.54	3/4	2,216.64	3/4	2,604.74	3/4	2,992.84	3/4	3,380.94	3/4	3,768.99
9	299.51	9	681.18	9	1,060.43	9	1,448.53	9	1,836.63	9	2,224.73	9	2,612.83	9	3,000.93	9	3,389.03	9	3,777.07
1/4	307.60	1/4	688.94	1/4	1,068.52	1/4	1,456.62	1/4	1,844.72	1/4	2,232.81	1/4	2,620.91	1/4	3,009.01	1/4	3,397.11	1/4	3,785.16
1/2	315.68	1/2	696.70	1/2	1,076.60	1/2	1,464.70	1/2	1,852.80	1/2	2,240.90	1/2	2,629.00	1/2	3,017.10	1/2	3,405.20	1/2	3,793.24
3/4	323.77	3/4	704.46	3/4	1,084.69	3/4	1,472.79	3/4	1,860.89	3/4	2,248.99	3/4	2,637.08	3/4	3,025.18	3/4	3,413.28	3/4	3,801.33
10	331.85	10	712.22	10	1,092.77	10	1,480.87	10	1,868.97	10	2,257.07	10	2,645.17	10	3,033.27	10	3,421.37	10	3,809.41
1/4	339.94	1/4	719.98	1/4	1,100.86	1/4	1,488.96	1/4	1,877.06	1/4	2,265.16	1/4	2,653.26	1/4	3,041.35	1/4	3,429.45	1/4	3,817.49
1/2	348.02	1/2	727.75	1/2	1,108.94	1/2	1,497.04	1/2	1,885.14	1/2	2,273.24	1/2	2,661.34	1/2	3,049.44	1/2	3,437.54	1/2	3,825.58
3/4	356.11	3/4	735.51	3/4	1,117.03	3/4	1,505.13	3/4	1,893.23	3/4	2,281.33	3/4	2,669.43	3/4	3,057.53	3/4	3,445.62	3/4	3,833.66
11	364.19	11	743.28	11	1,125.12	11	1,513.21	11	1,901.31	11	2,289.41	11	2,677.51	11	3,065.61	11	3,453.71	11	3,841.75
1/4	372.28	1/4	751.04	1/4	1,133.20	1/4	1,521.30	1/4	1,909.40	1/4	2,297.50	1/4	2,685.60	1/4	3,073.70	1/4	3,461.79	1/4	3,849.83
1/2	380.36	1/2	758.80	1/2	1,141.29	1/2	1,529.39	1/2	1,917.48	1/2	2,305.58	1/2	2,693.68	1/2	3,081.78	1/2	3,469.87	1/2	3,857.92
3/4	388.44	3/4	766.57	3/4	1,149.37	3/4	1,537.47	3/4	1,925.57	3/4	2,313.67	3/4	2,701.77	3/4	3,089.87	3/4	3,477.96	3/4	3,866.00

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 42'-03" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "EMS 381"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 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	3,874.08	0	4,262.13	0	4,650.17	0	5,037.27	0		0		0		0		0		0	
1/4	3,882.17	1/4	4,270.21	1/4	4,658.25	1/4	5,045.31	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,890.25	1/2	4,278.29	1/2	4,666.34	1/2	5,053.35	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,898.34	3/4	4,286.38	3/4	4,674.42	3/4	5,061.38	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,906.42	1	4,294.46	1	4,682.50	1	5,069.42	1		1		1		1		1		1	
1/4	3,914.50	1/4	4,302.55	1/4	4,690.59	1/4	5,077.46	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,922.59	1/2	4,310.63	1/2	4,698.67	1/2	5,085.50	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,930.67	3/4	4,318.71	3/4	4,706.76	3/4	5,093.53	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,938.76	2	4,326.80	2	4,714.84	2	5,101.57	2		2		2		2		2		2	
1/4	3,946.84	1/4	4,334.88	1/4	4,722.92	1/4	5,109.61	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,954.93	1/2	4,342.97	1/2	4,731.01	1/2	5,117.65	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,963.01	3/4	4,351.05	3/4	4,739.09	3/4	5,125.68	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,971.09	3	4,359.14	3	4,747.18	3	5,133.72	3		3		3		3		3		3	
1/4	3,979.18	1/4	4,367.22	1/4	4,755.26	1/4	5,141.76	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,987.26	1/2	4,375.30	1/2	4,763.35	1/2	5,149.80	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,995.35	3/4	4,383.39	3/4	4,771.43	3/4	5,157.83	3/4		3/4		3/4		3/4		3/4		3/4	
4	4,003.43	4	4,391.47	4	4,779.51	4	5,165.87	4		4		4		4		4		4	
1/4	4,011.52	1/4	4,399.56	1/4	4,787.60	1/4	5,173.91	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,019.60	1/2	4,407.64	1/2	4,795.68	1/2	5,181.95	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,027.68	3/4	4,415.73	3/4	4,803.77	3/4	5,189.98	3/4		3/4		3/4		3/4		3/4		3/4	
5	4,035.77	5	4,423.81	5	4,811.85	5	5,198.02	5		5		5		5		5		5	
1/4	4,043.85	1/4	4,431.89	1/4	4,819.94	1/4	5,206.06	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,051.94	1/2	4,439.98	1/2	4,828.02	1/2	5,214.10	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,060.02	3/4	4,448.06	3/4	4,836.10	3/4	5,222.13	3/4		3/4		3/4		3/4		3/4		3/4	
6	4,068.10	6	4,456.15	6	4,844.19	6	5,230.17	6		6		6		6		6		6	
1/4	4,076.19	1/4	4,464.23	1/4	4,852.27	1/4	5,238.21	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,084.27	1/2	4,472.31	1/2	4,860.36	1/2	5,246.24	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,092.36	3/4	4,480.40	3/4	4,868.44	3/4	5,254.28	3/4		3/4		3/4		3/4		3/4		3/4	
7	4,100.44	7	4,488.48	7	4,876.52	7	5,262.32	7		7		7		7		7		7	
1/4	4,108.53	1/4	4,496.57	1/4	4,884.56	1/4	5,270.27	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,116.61	1/2	4,504.65	1/2	4,892.60	1/2	5,278.22	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,124.69	3/4	4,512.74	3/4	4,900.64	3/4	5,286.17	3/4		3/4		3/4		3/4		3/4		3/4	
8	4,132.78	8	4,520.82	8	4,908.67	8	5,294.12	8		8		8		8		8		8	
1/4	4,140.86	1/4	4,528.90	1/4	4,916.71	1/4	5,301.66	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,148.95	1/2	4,536.99	1/2	4,924.75	1/2	5,309.20	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,157.03	3/4	4,545.07	3/4	4,932.79	3/4	5,316.74	3/4		3/4		3/4		3/4		3/4		3/4	
9	4,165.11	9	4,553.16	9	4,940.82	9	5,324.28	9		9		9		9		9		9	
1/4	4,173.20	1/4	4,561.24	1/4	4,948.86	1/4	5,330.39	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,181.28	1/2	4,569.32	1/2	4,956.90	1/2	5,336.50	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,189.37	3/4	4,577.41	3/4	4,964.94	3/4	5,342.62	3/4		3/4		3/4		3/4		3/4		3/4	
10	4,197.45	10	4,585.49	10	4,972.97	10		10		10		10		10		10		10	
1/4	4,205.54	1/4	4,593.58	1/4	4,981.01	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,213.62	1/2	4,601.66	1/2	4,989.05	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,221.70	3/4	4,609.75	3/4	4,997.09	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	4,229.79	11	4,617.83	11	5,005.12	11		11		11		11		11		11		11	
1/4	4,237.87	1/4	4,625.91	1/4	5,013.16	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,245.96	1/2	4,634.00	1/2	5,021.20	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,254.04	3/4	4,642.08	3/4	5,029.24	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
REPRINTED: 04/22/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 04/2013

PRECISION MEASUREMENT
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BARGE "EMS 381"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	18.86	0	396.62	0	784.46	0	1,172.61	0	1,560.79	0	1,948.98	0	2,337.16	0	2,725.35	0	3,113.53	0	3,501.71
1/4	24.64	1/4	404.70	1/4	792.54	1/4	1,180.69	1/4	1,568.88	1/4	1,957.06	1/4	2,345.25	1/4	2,733.44	1/4	3,121.62	1/4	3,509.80
1/2	30.41	1/2	412.79	1/2	800.62	1/2	1,188.78	1/2	1,576.97	1/2	1,965.15	1/2	2,353.34	1/2	2,741.52	1/2	3,129.71	1/2	3,517.88
3/4	36.19	3/4	420.88	3/4	808.69	3/4	1,196.87	3/4	1,585.05	3/4	1,973.24	3/4	2,361.42	3/4	2,749.61	3/4	3,137.80	3/4	3,525.97
1	41.96	1	428.96	1	816.77	1	1,204.95	1	1,593.14	1	1,981.33	1	2,369.51	1	2,757.70	1	3,145.88	1	3,534.06
1/4	49.76	1/4	437.05	1/4	824.86	1/4	1,213.04	1/4	1,601.23	1/4	1,989.41	1/4	2,377.60	1/4	2,765.78	1/4	3,153.97	1/4	3,542.14
1/2	57.56	1/2	445.14	1/2	832.94	1/2	1,221.13	1/2	1,609.31	1/2	1,997.50	1/2	2,385.69	1/2	2,773.87	1/2	3,162.06	1/2	3,550.23
3/4	65.36	3/4	453.22	3/4	841.03	3/4	1,229.22	3/4	1,617.40	3/4	2,005.59	3/4	2,393.77	3/4	2,781.96	3/4	3,170.14	3/4	3,558.31
2	73.15	2	461.31	2	849.12	2	1,237.30	2	1,625.49	2	2,013.67	2	2,401.86	2	2,790.05	2	3,178.23	2	3,566.40
1/4	81.24	1/4	469.40	1/4	857.21	1/4	1,245.39	1/4	1,633.58	1/4	2,021.76	1/4	2,409.95	1/4	2,798.13	1/4	3,186.32	1/4	3,574.49
1/2	89.33	1/2	477.48	1/2	865.29	1/2	1,253.48	1/2	1,641.66	1/2	2,029.85	1/2	2,418.03	1/2	2,806.22	1/2	3,194.41	1/2	3,582.57
3/4	97.41	3/4	485.57	3/4	873.38	3/4	1,261.57	3/4	1,649.75	3/4	2,037.94	3/4	2,426.12	3/4	2,814.31	3/4	3,202.49	3/4	3,590.66
3	105.50	3	493.66	3	881.47	3	1,269.65	3	1,657.84	3	2,046.02	3	2,434.21	3	2,822.39	3	3,210.58	3	3,598.74
1/4	113.59	1/4	501.74	1/4	889.55	1/4	1,277.74	1/4	1,665.93	1/4	2,054.11	1/4	2,442.30	1/4	2,830.48	1/4	3,218.67	1/4	3,606.83
1/2	121.67	1/2	509.83	1/2	897.64	1/2	1,285.83	1/2	1,674.01	1/2	2,062.20	1/2	2,450.38	1/2	2,838.57	1/2	3,226.75	1/2	3,614.92
3/4	129.76	3/4	517.92	3/4	905.73	3/4	1,293.91	3/4	1,682.10	3/4	2,070.29	3/4	2,458.47	3/4	2,846.66	3/4	3,234.84	3/4	3,623.00
4	137.85	4	526.00	4	913.82	4	1,302.00	4	1,690.19	4	2,078.37	4	2,466.56	4	2,854.74	4	3,242.93	4	3,631.09
1/4	145.93	1/4	534.09	1/4	921.90	1/4	1,310.09	1/4	1,698.27	1/4	2,086.46	1/4	2,474.65	1/4	2,862.83	1/4	3,251.02	1/4	3,639.17
1/2	154.02	1/2	542.18	1/2	929.99	1/2	1,318.18	1/2	1,706.36	1/2	2,094.55	1/2	2,482.73	1/2	2,870.92	1/2	3,259.10	1/2	3,647.26
3/4	162.11	3/4	550.26	3/4	938.08	3/4	1,326.26	3/4	1,714.45	3/4	2,102.63	3/4	2,490.82	3/4	2,879.01	3/4	3,267.19	3/4	3,655.35
5	170.19	5	558.35	5	946.16	5	1,334.35	5	1,722.54	5	2,110.72	5	2,498.91	5	2,887.09	5	3,275.28	5	3,663.43
1/4	178.28	1/4	566.43	1/4	954.25	1/4	1,342.44	1/4	1,730.62	1/4	2,118.81	1/4	2,506.99	1/4	2,895.18	1/4	3,283.37	1/4	3,671.52
1/2	186.37	1/2	574.50	1/2	962.34	1/2	1,350.52	1/2	1,738.71	1/2	2,126.90	1/2	2,515.08	1/2	2,903.27	1/2	3,291.45	1/2	3,679.61
3/4	194.45	3/4	582.58	3/4	970.43	3/4	1,358.61	3/4	1,746.80	3/4	2,134.98	3/4	2,523.17	3/4	2,911.35	3/4	3,299.54	3/4	3,687.69
6	202.54	6	590.66	6	978.51	6	1,366.70	6	1,754.88	6	2,143.07	6	2,531.26	6	2,919.44	6	3,307.63	6	3,695.78
1/4	210.63	1/4	598.73	1/4	986.60	1/4	1,374.79	1/4	1,762.97	1/4	2,151.16	1/4	2,539.34	1/4	2,927.53	1/4	3,315.71	1/4	3,703.86
1/2	218.71	1/2	606.81	1/2	994.69	1/2	1,382.87	1/2	1,771.06	1/2	2,159.24	1/2	2,547.43	1/2	2,935.62	1/2	3,323.80	1/2	3,711.95
3/4	226.80	3/4	614.89	3/4	1,002.77	3/4	1,390.96	3/4	1,779.15	3/4	2,167.33	3/4	2,555.52	3/4	2,943.70	3/4	3,331.89	3/4	3,720.04
7	234.89	7	622.96	7	1,010.86	7	1,399.05	7	1,787.23	7	2,175.42	7	2,563.60	7	2,951.79	7	3,339.98	7	3,728.12
1/4	242.97	1/4	631.04	1/4	1,018.95	1/4	1,407.13	1/4	1,795.32	1/4	2,183.51	1/4	2,571.69	1/4	2,959.88	1/4	3,348.06	1/4	3,736.21
1/2	251.06	1/2	639.11	1/2	1,027.04	1/2	1,415.22	1/2	1,803.41	1/2	2,191.59	1/2	2,579.78	1/2	2,967.96	1/2	3,356.15	1/2	3,744.29
3/4	259.15	3/4	647.19	3/4	1,035.12	3/4	1,423.31	3/4	1,811.49	3/4	2,199.68	3/4	2,587.87	3/4	2,976.05	3/4	3,364.24	3/4	3,752.38
8	267.23	8	655.27	8	1,043.21	8	1,431.40	8	1,819.58	8	2,207.77	8	2,595.95	8	2,984.14	8	3,372.32	8	3,760.47
1/4	275.32	1/4	663.34	1/4	1,051.30	1/4	1,439.48	1/4	1,827.67	1/4	2,215.85	1/4	2,604.04	1/4	2,992.23	1/4	3,380.41	1/4	3,768.55
1/2	283.41	1/2	671.41	1/2	1,059.39	1/2	1,447.57	1/2	1,835.76	1/2	2,223.94	1/2	2,612.13	1/2	3,000.31	1/2	3,388.50	1/2	3,776.64
3/4	291.49	3/4	679.49	3/4	1,067.47	3/4	1,455.66	3/4	1,843.84	3/4	2,232.03	3/4	2,620.21	3/4	3,008.40	3/4	3,396.59	3/4	3,784.72
9	299.58	9	687.56	9	1,075.56	9	1,463.75	9	1,851.93	9	2,240.12	9	2,628.30	9	3,016.49	9	3,404.67	9	3,792.81
1/4	307.67	1/4	695.63	1/4	1,083.65	1/4	1,471.83	1/4	1,860.02	1/4	2,248.20	1/4	2,636.39	1/4	3,024.57	1/4	3,412.76	1/4	3,800.90
1/2	315.75	1/2	703.70	1/2	1,091.73	1/2	1,479.92	1/2	1,868.11	1/2	2,256.29	1/2	2,644.48	1/2	3,032.66	1/2	3,420.85	1/2	3,808.98
3/4	323.84	3/4	711.78	3/4	1,099.82	3/4	1,488.01	3/4	1,876.19	3/4	2,264.38	3/4	2,652.56	3/4	3,040.75	3/4	3,428.93	3/4	3,817.07
10	331.92	10	719.85	10	1,107.91	10	1,496.09	10	1,884.28	10	2,272.47	10	2,660.65	10	3,048.84	10	3,437.02	10	3,825.15
1/4	340.01	1/4	727.92	1/4	1,116.00	1/4	1,504.18	1/4	1,892.37	1/4	2,280.55	1/4	2,668.74	1/4	3,056.92	1/4	3,445.11	1/4	3,833.24
1/2	348.10	1/2	736.00	1/2	1,124.08	1/2	1,512.27	1/2	1,900.45	1/2	2,288.64	1/2	2,676.83	1/2	3,065.01	1/2	3,453.19	1/2	3,841.33
3/4	356.18	3/4	744.08	3/4	1,132.17	3/4	1,520.36	3/4	1,908.54	3/4	2,296.73	3/4	2,684.91	3/4	3,073.10	3/4	3,461.28	3/4	3,849.41
11	364.27	11	752.15	11	1,140.26	11	1,528.44	11	1,916.63	11	2,304.81	11	2,693.00	11	3,081.19	11	3,469.37	11	3,857.50
1/4	372.36	1/4	760.23	1/4	1,148.34	1/4	1,536.53	1/4	1,924.72	1/4	2,312.90	1/4	2,701.09	1/4	3,089.27	1/4	3,477.45	1/4	3,865.59
1/2	380.44	1/2	768.31	1/2	1,156.43	1/2	1,544.62	1/2	1,932.80	1/2	2,320.99	1/2	2,709.17	1/2	3,097.36	1/2	3,485.54	1/2	3,873.67
3/4	388.53	3/4	776.39	3/4	1,164.52	3/4	1,552.70	3/4	1,940.89	3/4	2,329.08	3/4	2,717.26	3/4	3,105.45	3/4	3,493.62	3/4	3,881.76

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
 CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE
 GAUGE POINT: (HERMETIC) LOCATED 12'-06" OFF CENTERLINE AND 42'-03" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



BARGE "EMS 381"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	3,889.84	0	4,277.98	0	4,666.11	0	5,053.30	0		0		0		0		0		0	
1/4	3,897.93	1/4	4,286.06	1/4	4,674.20	1/4	5,061.33	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,906.02	1/2	4,294.15	1/2	4,682.28	1/2	5,069.37	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,914.10	3/4	4,302.23	3/4	4,690.37	3/4	5,077.41	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,922.19	1	4,310.32	1	4,698.45	1	5,085.45	1		1		1		1		1		1	
1/4	3,930.27	1/4	4,318.41	1/4	4,706.54	1/4	5,093.49	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,938.36	1/2	4,326.49	1/2	4,714.63	1/2	5,101.53	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,946.45	3/4	4,334.58	3/4	4,722.71	3/4	5,109.57	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,954.53	2	4,342.67	2	4,730.80	2	5,117.61	2		2		2		2		2		2	
1/4	3,962.62	1/4	4,350.75	1/4	4,738.88	1/4	5,125.65	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,970.70	1/2	4,358.84	1/2	4,746.97	1/2	5,133.68	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,978.79	3/4	4,366.92	3/4	4,755.06	3/4	5,141.72	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,986.88	3	4,375.01	3	4,763.14	3	5,149.76	3		3		3		3		3		3	
1/4	3,994.96	1/4	4,383.10	1/4	4,771.23	1/4	5,157.80	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,003.05	1/2	4,391.18	1/2	4,779.31	1/2	5,165.84	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,011.14	3/4	4,399.27	3/4	4,787.40	3/4	5,173.88	3/4		3/4		3/4		3/4		3/4		3/4	
4	4,019.22	4	4,407.35	4	4,795.49	4	5,181.92	4		4		4		4		4		4	
1/4	4,027.31	1/4	4,415.44	1/4	4,803.57	1/4	5,189.96	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,035.39	1/2	4,423.53	1/2	4,811.66	1/2	5,197.99	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,043.48	3/4	4,431.61	3/4	4,819.75	3/4	5,206.03	3/4		3/4		3/4		3/4		3/4		3/4	
5	4,051.57	5	4,439.70	5	4,827.83	5	5,214.07	5		5		5		5		5		5	
1/4	4,059.65	1/4	4,447.78	1/4	4,835.92	1/4	5,222.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,067.74	1/2	4,455.87	1/2	4,844.00	1/2	5,230.15	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,075.82	3/4	4,463.96	3/4	4,852.09	3/4	5,238.19	3/4		3/4		3/4		3/4		3/4		3/4	
6	4,083.91	6	4,472.04	6	4,860.18	6	5,246.23	6		6		6		6		6		6	
1/4	4,092.00	1/4	4,480.13	1/4	4,868.26	1/4	5,254.27	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,100.08	1/2	4,488.22	1/2	4,876.35	1/2	5,262.30	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,108.17	3/4	4,496.30	3/4	4,884.43	3/4	5,270.34	3/4		3/4		3/4		3/4		3/4		3/4	
7	4,116.25	7	4,504.39	7	4,892.52	7	5,278.38	7		7		7		7		7		7	
1/4	4,124.34	1/4	4,512.47	1/4	4,900.56	1/4	5,286.34	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,132.43	1/2	4,520.56	1/2	4,908.60	1/2	5,294.29	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,140.51	3/4	4,528.65	3/4	4,916.64	3/4	5,302.24	3/4		3/4		3/4		3/4		3/4		3/4	
8	4,148.60	8	4,536.73	8	4,924.68	8	5,310.19	8		8		8		8		8		8	
1/4	4,156.68	1/4	4,544.82	1/4	4,932.71	1/4	5,317.73	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,164.77	1/2	4,552.90	1/2	4,940.75	1/2	5,325.27	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,172.86	3/4	4,560.99	3/4	4,948.79	3/4	5,332.81	3/4		3/4		3/4		3/4		3/4		3/4	
9	4,180.94	9	4,569.08	9	4,956.83	9	5,340.36	9		9		9		9		9		9	
1/4	4,189.03	1/4	4,577.16	1/4	4,964.87	1/4	5,346.47	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,197.12	1/2	4,585.25	1/2	4,972.91	1/2	5,352.59	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,205.20	3/4	4,593.33	3/4	4,980.95	3/4	5,358.70	3/4		3/4		3/4		3/4		3/4		3/4	
10	4,213.29	10	4,601.42	10	4,988.99	10		10		10		10		10		10		10	
1/4	4,221.37	1/4	4,609.51	1/4	4,997.02	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,229.46	1/2	4,617.59	1/2	5,005.06	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,237.55	3/4	4,625.68	3/4	5,013.10	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	4,245.63	11	4,633.76	11	5,021.14	11		11		11		11		11		11		11	
1/4	4,253.72	1/4	4,641.85	1/4	5,029.18	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,261.80	1/2	4,649.94	1/2	5,037.22	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,269.89	3/4	4,658.02	3/4	5,045.26	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
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CANCELS AND SUPERCEDES
ALL PRIOR TO 04/2013

PRECISION MEASUREMENT
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BARGE "EMS 381"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	17.58	0	369.02	0	720.83	0	1,076.99	0	1,437.91	0	1,798.63	0	2,158.83	0	2,519.91	0	2,880.98	0	3,241.71
1/4	22.95	1/4	376.54	1/4	728.07	1/4	1,084.51	1/4	1,445.42	1/4	1,806.13	1/4	2,166.35	1/4	2,527.43	1/4	2,888.50	1/4	3,249.23
1/2	28.32	1/2	384.06	1/2	735.30	1/2	1,092.03	1/2	1,452.94	1/2	1,813.63	1/2	2,173.88	1/2	2,534.95	1/2	2,896.01	1/2	3,256.75
3/4	33.69	3/4	391.59	3/4	742.53	3/4	1,099.55	3/4	1,460.46	3/4	1,821.13	3/4	2,181.40	3/4	2,542.47	3/4	2,903.53	3/4	3,264.27
1	39.07	1	399.11	1	749.76	1	1,107.07	1	1,467.98	1	1,828.63	1	2,188.92	1	2,550.00	1	2,911.04	1	3,271.79
1/4	46.32	1/4	406.63	1/4	757.01	1/4	1,114.58	1/4	1,475.50	1/4	1,836.13	1/4	2,196.44	1/4	2,557.52	1/4	2,918.56	1/4	3,279.31
1/2	53.58	1/2	414.16	1/2	764.25	1/2	1,122.10	1/2	1,483.02	1/2	1,843.63	1/2	2,203.97	1/2	2,565.04	1/2	2,926.07	1/2	3,286.84
3/4	60.83	3/4	421.68	3/4	771.49	3/4	1,129.62	3/4	1,490.54	3/4	1,851.12	3/4	2,211.49	3/4	2,572.56	3/4	2,933.59	3/4	3,294.36
2	68.09	2	429.20	2	778.73	2	1,137.14	2	1,498.06	2	1,858.62	2	2,219.01	2	2,580.09	2	2,941.10	2	3,301.88
1/4	75.61	1/4	436.73	1/4	785.97	1/4	1,144.66	1/4	1,505.58	1/4	1,866.12	1/4	2,226.53	1/4	2,587.61	1/4	2,948.62	1/4	3,309.40
1/2	83.13	1/2	444.25	1/2	793.20	1/2	1,152.18	1/2	1,513.10	1/2	1,873.62	1/2	2,234.06	1/2	2,595.13	1/2	2,956.13	1/2	3,316.92
3/4	90.66	3/4	451.77	3/4	800.43	3/4	1,159.70	3/4	1,520.62	3/4	1,881.12	3/4	2,241.58	3/4	2,602.65	3/4	2,963.65	3/4	3,324.44
3	98.18	3	459.30	3	807.66	3	1,167.22	3	1,528.13	3	1,888.62	3	2,249.10	3	2,610.18	3	2,971.16	3	3,331.96
1/4	105.70	1/4	466.82	1/4	814.90	1/4	1,174.74	1/4	1,535.65	1/4	1,896.12	1/4	2,256.62	1/4	2,617.70	1/4	2,978.68	1/4	3,339.49
1/2	113.23	1/2	474.34	1/2	822.13	1/2	1,182.26	1/2	1,543.17	1/2	1,903.62	1/2	2,264.14	1/2	2,625.22	1/2	2,986.19	1/2	3,347.01
3/4	120.75	3/4	481.87	3/4	829.36	3/4	1,189.78	3/4	1,550.69	3/4	1,911.12	3/4	2,271.67	3/4	2,632.74	3/4	2,993.71	3/4	3,354.53
4	128.27	4	489.39	4	836.59	4	1,197.29	4	1,558.21	4	1,918.62	4	2,279.19	4	2,640.26	4	3,001.22	4	3,362.05
1/4	135.80	1/4	496.63	1/4	844.10	1/4	1,204.81	1/4	1,565.73	1/4	1,926.12	1/4	2,286.71	1/4	2,647.79	1/4	3,008.74	1/4	3,369.57
1/2	143.32	1/2	503.87	1/2	851.61	1/2	1,212.33	1/2	1,573.25	1/2	1,933.62	1/2	2,294.23	1/2	2,655.31	1/2	3,016.26	1/2	3,377.09
3/4	150.84	3/4	511.12	3/4	859.12	3/4	1,219.85	3/4	1,580.77	3/4	1,941.12	3/4	2,301.76	3/4	2,662.83	3/4	3,023.77	3/4	3,384.62
5	158.37	5	518.36	5	866.63	5	1,227.37	5	1,588.29	5	1,948.62	5	2,309.28	5	2,670.35	5	3,031.29	5	3,392.14
1/4	165.89	1/4	525.59	1/4	874.14	1/4	1,234.89	1/4	1,595.81	1/4	1,956.12	1/4	2,316.80	1/4	2,677.88	1/4	3,038.80	1/4	3,398.52
1/2	173.41	1/2	532.82	1/2	881.65	1/2	1,242.41	1/2	1,603.33	1/2	1,963.62	1/2	2,324.32	1/2	2,685.40	1/2	3,046.32	1/2	3,404.89
3/4	180.94	3/4	540.06	3/4	889.16	3/4	1,249.93	3/4	1,610.84	3/4	1,971.12	3/4	2,331.85	3/4	2,692.92	3/4	3,053.83	3/4	3,411.27
6	188.46	6	547.29	6	896.67	6	1,257.45	6	1,618.36	6	1,978.61	6	2,339.37	6	2,700.44	6	3,061.35	6	3,417.65
1/4	195.98	1/4	554.52	1/4	904.18	1/4	1,264.97	1/4	1,625.88	1/4	1,986.11	1/4	2,346.89	1/4	2,707.97	1/4	3,068.86	1/4	3,424.03
1/2	203.51	1/2	561.75	1/2	911.69	1/2	1,272.49	1/2	1,633.40	1/2	1,993.61	1/2	2,354.41	1/2	2,715.49	1/2	3,076.38	1/2	3,430.41
3/4	211.03	3/4	568.99	3/4	919.20	3/4	1,280.00	3/4	1,640.92	3/4	2,001.11	3/4	2,361.94	3/4	2,723.01	3/4	3,083.89	3/4	3,436.79
7	218.55	7	576.22	7	926.71	7	1,287.52	7	1,648.44	7	2,008.61	7	2,369.46	7	2,730.53	7	3,091.41	7	3,443.17
1/4	226.08	1/4	583.45	1/4	934.22	1/4	1,295.04	1/4	1,655.96	1/4	2,016.11	1/4	2,376.98	1/4	2,738.06	1/4	3,098.92	1/4	3,449.55
1/2	233.60	1/2	590.68	1/2	941.73	1/2	1,302.56	1/2	1,663.48	1/2	2,023.61	1/2	2,384.50	1/2	2,745.58	1/2	3,106.44	1/2	3,455.92
3/4	241.12	3/4	597.92	3/4	949.24	3/4	1,310.08	3/4	1,671.00	3/4	2,031.11	3/4	2,392.03	3/4	2,753.10	3/4	3,113.95	3/4	3,462.30
8	248.65	8	605.15	8	956.75	8	1,317.60	8	1,678.52	8	2,038.61	8	2,399.55	8	2,760.62	8	3,121.47	8	3,468.68
1/4	256.17	1/4	612.38	1/4	964.27	1/4	1,325.12	1/4	1,686.04	1/4	2,046.11	1/4	2,407.07	1/4	2,768.15	1/4	3,128.98	1/4	3,475.06
1/2	263.69	1/2	619.60	1/2	971.78	1/2	1,332.64	1/2	1,693.55	1/2	2,053.61	1/2	2,414.59	1/2	2,775.67	1/2	3,136.50	1/2	3,481.44
3/4	271.21	3/4	626.83	3/4	979.29	3/4	1,340.16	3/4	1,701.07	3/4	2,061.11	3/4	2,422.12	3/4	2,783.19	3/4	3,144.01	3/4	3,487.82
9	278.74	9	634.06	9	986.80	9	1,347.68	9	1,708.59	9	2,068.61	9	2,429.64	9	2,790.71	9	3,151.53	9	3,494.20
1/4	286.26	1/4	641.29	1/4	994.31	1/4	1,355.20	1/4	1,716.10	1/4	2,076.12	1/4	2,437.16	1/4	2,798.24	1/4	3,159.04	1/4	3,500.57
1/2	293.78	1/2	648.52	1/2	1,001.82	1/2	1,362.71	1/2	1,723.61	1/2	2,083.63	1/2	2,444.68	1/2	2,805.76	1/2	3,166.56	1/2	3,506.95
3/4	301.31	3/4	655.74	3/4	1,009.33	3/4	1,370.23	3/4	1,731.12	3/4	2,091.14	3/4	2,452.20	3/4	2,813.28	3/4	3,174.07	3/4	3,513.33
10	308.83	10	662.97	10	1,016.84	10	1,377.75	10	1,738.63	10	2,098.65	10	2,459.73	10	2,820.80	10	3,181.59	10	3,519.71
1/4	316.35	1/4	670.21	1/4	1,024.35	1/4	1,385.27	1/4	1,746.13	1/4	2,106.17	1/4	2,467.25	1/4	2,828.32	1/4	3,189.10	1/4	3,526.09
1/2	323.88	1/2	677.44	1/2	1,031.87	1/2	1,392.79	1/2	1,753.63	1/2	2,113.70	1/2	2,474.77	1/2	2,835.85	1/2	3,196.62	1/2	3,532.47
3/4	331.40	3/4	684.67	3/4	1,039.39	3/4	1,400.31	3/4	1,761.13	3/4	2,121.22	3/4	2,482.29	3/4	2,843.37	3/4	3,204.13	3/4	3,538.85
11	338.92	11	691.90	11	1,046.91	11	1,407.83	11	1,768.63	11	2,128.74	11	2,489.82	11	2,850.89	11	3,211.65	11	3,545.22
1/4	346.45	1/4	699.14	1/4	1,054.43	1/4	1,415.35	1/4	1,776.13	1/4	2,136.26	1/4	2,497.34	1/4	2,858.41	1/4	3,219.16	1/4	3,551.60
1/2	353.97	1/2	706.37	1/2	1,061.95	1/2	1,422.87	1/2	1,783.63	1/2	2,143.79	1/2	2,504.86	1/2	2,865.94	1/2	3,226.68	1/2	3,557.98
3/4	361.49	3/4	713.60	3/4	1,069.47	3/4	1,430.39	3/4	1,791.13	3/4	2,151.31	3/4	2,512.38	3/4	2,873.46	3/4	3,234.19	3/4	3,564.36

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'-06" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



BARGE "EMS 381"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	3,570.74	0	3,876.91	0	4,183.08	0	4,488.52	0		0		0		0		0		0	
1/4	3,577.12	1/4	3,883.29	1/4	4,189.46	1/4	4,494.87	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,583.50	1/2	3,889.67	1/2	4,195.84	1/2	4,501.21	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,589.87	3/4	3,896.05	3/4	4,202.22	3/4	4,507.55	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,596.25	1	3,902.43	1	4,208.60	1	4,513.89	1		1		1		1		1		1	
1/4	3,602.63	1/4	3,908.80	1/4	4,214.98	1/4	4,520.23	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,609.01	1/2	3,915.18	1/2	4,221.36	1/2	4,526.58	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,615.39	3/4	3,921.56	3/4	4,227.73	3/4	4,532.92	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,621.77	2	3,927.94	2	4,234.11	2	4,539.26	2		2		2		2		2		2	
1/4	3,628.15	1/4	3,934.32	1/4	4,240.49	1/4	4,545.60	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,634.52	1/2	3,940.70	1/2	4,246.87	1/2	4,551.94	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,640.90	3/4	3,947.08	3/4	4,253.25	3/4	4,558.29	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,647.28	3	3,953.45	3	4,259.63	3	4,564.63	3		3		3		3		3		3	
1/4	3,653.66	1/4	3,959.83	1/4	4,266.01	1/4	4,570.97	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,660.04	1/2	3,966.21	1/2	4,272.38	1/2	4,577.31	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,666.42	3/4	3,972.59	3/4	4,278.76	3/4	4,583.65	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,672.80	4	3,978.97	4	4,285.14	4	4,590.00	4		4		4		4		4		4	
1/4	3,679.17	1/4	3,985.35	1/4	4,291.52	1/4	4,596.34	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,685.55	1/2	3,991.73	1/2	4,297.90	1/2	4,602.68	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,691.93	3/4	3,998.10	3/4	4,304.28	3/4	4,609.02	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,698.31	5	4,004.48	5	4,310.66	5	4,615.36	5		5		5		5		5		5	
1/4	3,704.69	1/4	4,010.86	1/4	4,317.03	1/4	4,621.71	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,711.07	1/2	4,017.24	1/2	4,323.41	1/2	4,628.05	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,717.45	3/4	4,023.62	3/4	4,329.79	3/4	4,634.39	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,723.82	6	4,030.00	6	4,336.17	6	4,640.73	6		6		6		6		6		6	
1/4	3,730.20	1/4	4,036.38	1/4	4,342.55	1/4	4,647.07	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,736.58	1/2	4,042.75	1/2	4,348.93	1/2	4,653.42	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,742.96	3/4	4,049.13	3/4	4,355.31	3/4	4,659.76	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,749.34	7	4,055.51	7	4,361.68	7	4,666.10	7		7		7		7		7		7	
1/4	3,755.72	1/4	4,061.89	1/4	4,368.03	1/4	4,673.50	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,762.10	1/2	4,068.27	1/2	4,374.37	1/2	4,680.90	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,768.48	3/4	4,074.65	3/4	4,380.71	3/4	4,688.30	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,774.85	8	4,081.03	8	4,387.05	8	4,695.70	8		8		8		8		8		8	
1/4	3,781.23	1/4	4,087.41	1/4	4,393.39	1/4	4,702.71	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,787.61	1/2	4,093.78	1/2	4,399.74	1/2	4,709.73	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,793.99	3/4	4,100.16	3/4	4,406.08	3/4	4,716.74	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,800.37	9	4,106.54	9	4,412.42	9	4,723.76	9		9		9		9		9		9	
1/4	3,806.75	1/4	4,112.92	1/4	4,418.76	1/4	4,729.45	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,813.13	1/2	4,119.30	1/2	4,425.10	1/2	4,735.13	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,819.50	3/4	4,125.68	3/4	4,431.45	3/4	4,740.82	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,825.88	10	4,132.06	10	4,437.79	10		10		10		10		10		10		10	
1/4	3,832.26	1/4	4,138.43	1/4	4,444.13	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,838.64	1/2	4,144.81	1/2	4,450.47	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,845.02	3/4	4,151.19	3/4	4,456.81	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,851.40	11	4,157.57	11	4,463.16	11		11		11		11		11		11		11	
1/4	3,857.78	1/4	4,163.95	1/4	4,469.50	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,864.15	1/2	4,170.33	1/2	4,475.84	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,870.53	3/4	4,176.71	3/4	4,482.18	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
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CANCELS AND SUPERCEDES
ALL PRIOR TO 04/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
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Pearland, Texas 77588
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BARGE "EMS 381"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	17.57	0	368.42	0	721.38	0	1,078.13	0	1,438.48	0	1,798.08	0	2,155.66	0	2,515.87	0	2,876.27	0	3,236.34
1/4	22.94	1/4	375.92	1/4	728.65	1/4	1,085.64	1/4	1,445.98	1/4	1,805.52	1/4	2,163.17	1/4	2,523.37	1/4	2,883.77	1/4	3,243.85
1/2	28.32	1/2	383.43	1/2	735.93	1/2	1,093.15	1/2	1,453.49	1/2	1,812.95	1/2	2,170.68	1/2	2,530.87	1/2	2,891.27	1/2	3,251.36
3/4	33.69	3/4	390.94	3/4	743.20	3/4	1,100.65	3/4	1,461.00	3/4	1,820.39	3/4	2,178.20	3/4	2,538.37	3/4	2,898.77	3/4	3,258.87
1	39.06	1	398.45	1	750.48	1	1,108.16	1	1,468.51	1	1,827.82	1	2,185.71	1	2,545.87	1	2,906.27	1	3,266.38
1/4	46.30	1/4	405.96	1/4	757.76	1/4	1,115.67	1/4	1,476.01	1/4	1,835.25	1/4	2,193.22	1/4	2,553.38	1/4	2,913.78	1/4	3,273.88
1/2	53.54	1/2	413.47	1/2	765.05	1/2	1,123.17	1/2	1,483.52	1/2	1,842.69	1/2	2,200.73	1/2	2,560.89	1/2	2,921.28	1/2	3,281.39
3/4	60.78	3/4	420.98	3/4	772.33	3/4	1,130.68	3/4	1,491.03	3/4	1,850.12	3/4	2,208.24	3/4	2,568.40	3/4	2,928.78	3/4	3,288.90
2	68.02	2	428.49	2	779.62	2	1,138.19	2	1,498.53	2	1,857.55	2	2,215.75	2	2,575.91	2	2,936.28	2	3,296.41
1/4	75.53	1/4	436.00	1/4	786.90	1/4	1,145.70	1/4	1,506.04	1/4	1,864.99	1/4	2,223.26	1/4	2,583.42	1/4	2,943.78	1/4	3,303.92
1/2	83.04	1/2	443.51	1/2	794.19	1/2	1,153.20	1/2	1,513.55	1/2	1,872.42	1/2	2,230.77	1/2	2,590.92	1/2	2,951.28	1/2	3,311.43
3/4	90.55	3/4	451.02	3/4	801.47	3/4	1,160.71	3/4	1,521.06	3/4	1,879.85	3/4	2,238.28	3/4	2,598.43	3/4	2,958.79	3/4	3,318.93
3	98.06	3	458.53	3	808.76	3	1,168.22	3	1,528.56	3	1,887.29	3	2,245.79	3	2,605.94	3	2,966.29	3	3,326.44
1/4	105.57	1/4	466.04	1/4	816.04	1/4	1,175.73	1/4	1,536.07	1/4	1,894.72	1/4	2,253.30	1/4	2,613.45	1/4	2,973.79	1/4	3,333.95
1/2	113.08	1/2	473.55	1/2	823.33	1/2	1,183.23	1/2	1,543.58	1/2	1,902.15	1/2	2,260.81	1/2	2,620.96	1/2	2,981.29	1/2	3,341.46
3/4	120.59	3/4	481.06	3/4	830.62	3/4	1,190.74	3/4	1,551.09	3/4	1,909.59	3/4	2,268.32	3/4	2,628.47	3/4	2,988.79	3/4	3,348.97
4	128.10	4	488.57	4	837.90	4	1,198.25	4	1,558.59	4	1,917.02	4	2,275.83	4	2,635.98	4	2,996.30	4	3,356.47
1/4	135.61	1/4	495.86	1/4	845.41	1/4	1,205.75	1/4	1,566.10	1/4	1,924.45	1/4	2,283.34	1/4	2,643.49	1/4	3,003.80	1/4	3,363.98
1/2	143.12	1/2	503.14	1/2	852.92	1/2	1,213.26	1/2	1,573.61	1/2	1,931.89	1/2	2,290.85	1/2	2,651.00	1/2	3,011.30	1/2	3,371.49
3/4	150.63	3/4	510.43	3/4	860.42	3/4	1,220.77	3/4	1,581.11	3/4	1,939.32	3/4	2,298.36	3/4	2,658.51	3/4	3,018.80	3/4	3,379.00
5	158.14	5	517.71	5	867.93	5	1,228.28	5	1,588.62	5	1,946.75	5	2,305.87	5	2,666.01	5	3,026.30	5	3,386.51
1/4	165.65	1/4	524.99	1/4	875.44	1/4	1,235.78	1/4	1,596.13	1/4	1,954.19	1/4	2,313.37	1/4	2,673.52	1/4	3,033.80	1/4	3,392.88
1/2	173.16	1/2	532.26	1/2	882.94	1/2	1,243.29	1/2	1,603.64	1/2	1,961.62	1/2	2,320.87	1/2	2,681.03	1/2	3,041.31	1/2	3,399.26
3/4	180.67	3/4	539.54	3/4	890.45	3/4	1,250.80	3/4	1,611.14	3/4	1,969.06	3/4	2,328.37	3/4	2,688.54	3/4	3,048.81	3/4	3,405.64
6	188.18	6	546.81	6	897.96	6	1,258.30	6	1,618.65	6	1,976.49	6	2,335.87	6	2,696.05	6	3,056.31	6	3,412.01
1/4	195.69	1/4	554.09	1/4	905.47	1/4	1,265.81	1/4	1,626.16	1/4	1,983.92	1/4	2,343.37	1/4	2,703.56	1/4	3,063.81	1/4	3,418.39
1/2	203.20	1/2	561.36	1/2	912.97	1/2	1,273.32	1/2	1,633.66	1/2	1,991.36	1/2	2,350.87	1/2	2,711.07	1/2	3,071.31	1/2	3,424.77
3/4	210.71	3/4	568.64	3/4	920.48	3/4	1,280.83	3/4	1,641.17	3/4	1,998.79	3/4	2,358.37	3/4	2,718.58	3/4	3,078.82	3/4	3,431.14
7	218.22	7	575.91	7	927.99	7	1,288.33	7	1,648.68	7	2,006.22	7	2,365.87	7	2,726.09	7	3,086.32	7	3,437.52
1/4	225.73	1/4	583.19	1/4	935.49	1/4	1,295.84	1/4	1,656.19	1/4	2,013.66	1/4	2,373.37	1/4	2,733.60	1/4	3,093.82	1/4	3,443.90
1/2	233.24	1/2	590.46	1/2	943.00	1/2	1,303.35	1/2	1,663.69	1/2	2,021.09	1/2	2,380.87	1/2	2,741.10	1/2	3,101.32	1/2	3,450.28
3/4	240.75	3/4	597.74	3/4	950.51	3/4	1,310.85	3/4	1,671.20	3/4	2,028.52	3/4	2,388.37	3/4	2,748.61	3/4	3,108.82	3/4	3,456.65
8	248.26	8	605.01	8	958.02	8	1,318.36	8	1,678.71	8	2,035.96	8	2,395.87	8	2,756.12	8	3,116.32	8	3,463.03
1/4	255.77	1/4	612.28	1/4	965.52	1/4	1,325.87	1/4	1,686.21	1/4	2,043.39	1/4	2,403.37	1/4	2,763.63	1/4	3,123.83	1/4	3,469.41
1/2	263.28	1/2	619.55	1/2	973.03	1/2	1,333.38	1/2	1,693.72	1/2	2,050.82	1/2	2,410.87	1/2	2,771.14	1/2	3,131.33	1/2	3,475.78
3/4	270.79	3/4	626.82	3/4	980.54	3/4	1,340.88	3/4	1,701.23	3/4	2,058.26	3/4	2,418.37	3/4	2,778.65	3/4	3,138.83	3/4	3,482.16
9	278.30	9	634.09	9	988.05	9	1,348.39	9	1,708.74	9	2,065.69	9	2,425.87	9	2,786.16	9	3,146.33	9	3,488.54
1/4	285.81	1/4	641.37	1/4	995.55	1/4	1,355.90	1/4	1,716.21	1/4	2,073.16	1/4	2,433.37	1/4	2,793.67	1/4	3,153.83	1/4	3,494.91
1/2	293.32	1/2	648.64	1/2	1,003.06	1/2	1,363.41	1/2	1,723.68	1/2	2,080.64	1/2	2,440.87	1/2	2,801.18	1/2	3,161.34	1/2	3,501.29
3/4	300.83	3/4	655.91	3/4	1,010.57	3/4	1,370.91	3/4	1,731.15	3/4	2,088.11	3/4	2,448.37	3/4	2,808.69	3/4	3,168.84	3/4	3,507.67
10	308.34	10	663.18	10	1,018.07	10	1,378.42	10	1,738.62	10	2,095.58	10	2,455.87	10	2,816.19	10	3,176.34	10	3,514.04
1/4	315.85	1/4	670.45	1/4	1,025.58	1/4	1,385.93	1/4	1,746.05	1/4	2,103.09	1/4	2,463.37	1/4	2,823.70	1/4	3,183.84	1/4	3,520.42
1/2	323.36	1/2	677.73	1/2	1,033.09	1/2	1,393.43	1/2	1,753.48	1/2	2,110.60	1/2	2,470.87	1/2	2,831.21	1/2	3,191.34	1/2	3,526.80
3/4	330.87	3/4	685.00	3/4	1,040.60	3/4	1,400.94	3/4	1,760.92	3/4	2,118.11	3/4	2,478.37	3/4	2,838.72	3/4	3,198.84	3/4	3,533.18
11	338.38	11	692.28	11	1,048.10	11	1,408.45	11	1,768.35	11	2,125.62	11	2,485.87	11	2,846.23	11	3,206.34	11	3,539.55
1/4	345.89	1/4	699.55	1/4	1,055.61	1/4	1,415.96	1/4	1,775.78	1/4	2,133.13	1/4	2,493.37	1/4	2,853.74	1/4	3,213.84	1/4	3,545.93
1/2	353.40	1/2	706.83	1/2	1,063.12	1/2	1,423.46	1/2	1,783.22	1/2	2,140.64	1/2	2,500.87	1/2	2,861.25	1/2	3,221.34	1/2	3,552.31
3/4	360.91	3/4	714.10	3/4	1,070.62	3/4	1,430.97	3/4	1,790.65	3/4	2,148.15	3/4	2,508.37	3/4	2,868.76	3/4	3,228.84	3/4	3,558.68

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'-06" FORWARD OF AFT BULKHEAD.

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



BARGE "EMS 381"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 14'-09 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	3,565.06	0	3,871.15	0	4,177.24	0	4,482.60	0		0		0		0		0		0	
1/4	3,571.44	1/4	3,877.53	1/4	4,183.62	1/4	4,488.94	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,577.81	1/2	3,883.90	1/2	4,190.00	1/2	4,495.28	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,584.19	3/4	3,890.28	3/4	4,196.37	3/4	4,501.62	3/4		3/4		3/4		3/4		3/4		3/4	
1	3,590.57	1	3,896.66	1	4,202.75	1	4,507.96	1		1		1		1		1		1	
1/4	3,596.94	1/4	3,903.04	1/4	4,209.13	1/4	4,514.31	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,603.32	1/2	3,909.41	1/2	4,215.50	1/2	4,520.65	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,609.70	3/4	3,915.79	3/4	4,221.88	3/4	4,526.99	3/4		3/4		3/4		3/4		3/4		3/4	
2	3,616.07	2	3,922.17	2	4,228.26	2	4,533.33	2		2		2		2		2		2	
1/4	3,622.45	1/4	3,928.54	1/4	4,234.63	1/4	4,539.67	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,628.83	1/2	3,934.92	1/2	4,241.01	1/2	4,546.01	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,635.21	3/4	3,941.30	3/4	4,247.39	3/4	4,552.35	3/4		3/4		3/4		3/4		3/4		3/4	
3	3,641.58	3	3,947.67	3	4,253.76	3	4,558.69	3		3		3		3		3		3	
1/4	3,647.96	1/4	3,954.05	1/4	4,260.14	1/4	4,565.03	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,654.34	1/2	3,960.43	1/2	4,266.52	1/2	4,571.37	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,660.71	3/4	3,966.80	3/4	4,272.90	3/4	4,577.71	3/4		3/4		3/4		3/4		3/4		3/4	
4	3,667.09	4	3,973.18	4	4,279.27	4	4,584.05	4		4		4		4		4		4	
1/4	3,673.47	1/4	3,979.56	1/4	4,285.65	1/4	4,590.39	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,679.84	1/2	3,985.93	1/2	4,292.03	1/2	4,596.73	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,686.22	3/4	3,992.31	3/4	4,298.40	3/4	4,603.07	3/4		3/4		3/4		3/4		3/4		3/4	
5	3,692.60	5	3,998.69	5	4,304.78	5	4,609.41	5		5		5		5		5		5	
1/4	3,698.97	1/4	4,005.07	1/4	4,311.16	1/4	4,615.75	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,705.35	1/2	4,011.44	1/2	4,317.53	1/2	4,622.09	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,711.73	3/4	4,017.82	3/4	4,323.91	3/4	4,628.43	3/4		3/4		3/4		3/4		3/4		3/4	
6	3,718.11	6	4,024.20	6	4,330.29	6	4,634.77	6		6		6		6		6		6	
1/4	3,724.48	1/4	4,030.57	1/4	4,336.66	1/4	4,641.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,730.86	1/2	4,036.95	1/2	4,343.04	1/2	4,647.45	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,737.24	3/4	4,043.33	3/4	4,349.42	3/4	4,653.79	3/4		3/4		3/4		3/4		3/4		3/4	
7	3,743.61	7	4,049.70	7	4,355.80	7	4,660.13	7		7		7		7		7		7	
1/4	3,749.99	1/4	4,056.08	1/4	4,362.14	1/4	4,667.53	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,756.37	1/2	4,062.46	1/2	4,368.48	1/2	4,674.93	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,762.74	3/4	4,068.83	3/4	4,374.82	3/4	4,682.33	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,769.12	8	4,075.21	8	4,381.16	8	4,689.73	8		8		8		8		8		8	
1/4	3,775.50	1/4	4,081.59	1/4	4,387.50	1/4	4,696.74	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,781.87	1/2	4,087.97	1/2	4,393.84	1/2	4,703.75	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,788.25	3/4	4,094.34	3/4	4,400.18	3/4	4,710.76	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,794.63	9	4,100.72	9	4,406.52	9	4,717.78	9		9		9		9		9		9	
1/4	3,801.00	1/4	4,107.10	1/4	4,412.86	1/4	4,723.46	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,807.38	1/2	4,113.47	1/2	4,419.20	1/2	4,729.15	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,813.76	3/4	4,119.85	3/4	4,425.54	3/4	4,734.84	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,820.14	10	4,126.23	10	4,431.88	10		10		10		10		10		10		10	
1/4	3,826.51	1/4	4,132.60	1/4	4,438.22	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,832.89	1/2	4,138.98	1/2	4,444.56	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,839.27	3/4	4,145.36	3/4	4,450.90	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	3,845.64	11	4,151.73	11	4,457.24	11		11		11		11		11		11		11	
1/4	3,852.02	1/4	4,158.11	1/4	4,463.58	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,858.40	1/2	4,164.49	1/2	4,469.92	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,864.77	3/4	4,170.87	3/4	4,476.26	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
REPRINTED: 04/22/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 04/2013

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



BARGE "EMS 381"

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	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-3/4	- 00-3/4	01-0/8	- 01-0/8	01-1/4	- 01-1/4	01-1/2	- 01-1/2
1 STBD	00-1/4	- 00-1/4	00-1/2	- 00-1/2	00-3/4	- 00-3/4	01-0/8	- 01-0/8	01-1/4	- 01-1/4	01-1/2	- 01-1/2
2 PORT	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-5/8	00-5/8	- 00-7/8	00-7/8	- 01-1/8	01-1/8	- 01-1/4	01-1/4
2 STBD	- 00-1/4	00-1/4	- 00-1/2	00-1/2	- 00-5/8	00-5/8	- 00-7/8	00-7/8	- 01-1/8	01-1/8	- 01-1/4	01-1/4
3 PORT	00-3/8	- 00-3/8	00-7/8	- 00-7/8	01-1/4	- 01-1/4	01-3/4	- 01-3/4	02-1/8	- 02-1/8	02-1/2	- 02-1/2
3 STBD	00-3/8	- 00-3/8	00-7/8	- 00-7/8	01-1/4	- 01-1/4	01-3/4	- 01-3/4	02-1/8	- 02-1/8	02-1/2	- 02-1/2

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

LENGTH BETWEEN DRAFT MARKS: 236'-00"

January 16, 2013

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
 Pearland, Texas 77588

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BARGE "EMS 381"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/2"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0		
1/4		1/4		1/4		1/4	4,255.84	1/4	3,926.04	1/4	3,594.76	1/4	3,263.48	1/4	2,932.21	1/4	2,600.90	1/4	2,269.57		
1/2		1/2		1/2		1/2	4,248.98	1/2	3,919.14	1/2	3,587.86	1/2	3,256.58	1/2	2,925.30	1/2	2,594.00	1/2	2,262.67		
3/4		3/4		3/4		3/4	4,242.12	3/4	3,912.23	3/4	3,580.96	3/4	3,249.68	3/4	2,918.40	3/4	2,587.10	3/4	2,255.77		
1	1	1	1	1	1	1	4,235.26	1	3,905.33	1	3,574.06	1	3,242.78	1	2,911.50	1	2,580.20	1	2,248.87		
1/4		1/4		1/4		1/4	4,228.40	1/4	3,898.43	1/4	3,567.15	1/4	3,235.88	1/4	2,904.60	1/4	2,573.29	1/4	2,241.96		
1/2		1/2		1/2		1/2	4,221.54	1/2	3,891.53	1/2	3,560.25	1/2	3,228.98	1/2	2,897.70	1/2	2,566.39	1/2	2,235.06		
3/4		3/4		3/4		3/4	4,214.67	3/4	3,884.63	3/4	3,553.35	3/4	3,222.07	3/4	2,890.80	3/4	2,559.49	3/4	2,228.16		
2	2	2	2	2	2	2	4,207.81	2	3,877.73	2	3,546.45	2	3,215.17	2	2,883.90	2	2,552.59	2	2,221.26		
1/4		1/4		1/4		1/4	4,200.95	1/4	3,870.82	1/4	3,539.55	1/4	3,208.27	1/4	2,876.99	1/4	2,545.68	1/4	2,214.35		
1/2		1/2		1/2		1/2	4,194.09	1/2	3,863.92	1/2	3,532.65	1/2	3,201.37	1/2	2,870.09	1/2	2,538.78	1/2	2,207.45		
3/4		3/4		3/4		3/4	4,187.23	3/4	3,857.02	3/4	3,525.74	3/4	3,194.47	3/4	2,863.19	3/4	2,531.88	3/4	2,200.55		
3	3	3	3	3	3	3	4,180.36	3	3,850.12	3	3,518.84	3	3,187.57	3	2,856.29	3	2,524.97	3	2,193.65		
1/4		1/4		1/4		1/4	4,173.50	1/4	3,843.22	1/4	3,511.94	1/4	3,180.66	1/4	2,849.39	1/4	2,518.07	1/4	2,186.74		
1/2		1/2		1/2		1/2	4,166.64	1/2	3,836.32	1/2	3,505.04	1/2	3,173.76	1/2	2,842.49	1/2	2,511.17	1/2	2,179.84		
3/4		3/4		3/4		3/4	4,159.78	3/4	3,829.41	3/4	3,498.14	3/4	3,166.86	3/4	2,835.58	3/4	2,504.27	3/4	2,172.94		
4	4	4	4	4	4	4	4,152.92	4	3,822.51	4	3,491.24	4	3,159.96	4	2,828.68	4	2,497.36	4	2,166.03		
1/4		1/4		1/4		1/4	4,146.05	1/4	3,815.61	1/4	3,484.33	1/4	3,153.06	1/4	2,821.78	1/4	2,490.46	1/4	2,159.13		
1/2		1/2		1/2		1/2	4,139.19	1/2	3,808.71	1/2	3,477.43	1/2	3,146.16	1/2	2,814.88	1/2	2,483.56	1/2	2,152.23		
3/4		3/4		3/4		3/4	4,132.33	3/4	3,801.81	3/4	3,470.53	3/4	3,139.25	3/4	2,807.98	3/4	2,476.66	3/4	2,145.33		
5	5	5	5	5	5	5	4,125.47	5	3,794.91	5	3,463.63	5	3,132.35	5	2,801.08	5	2,469.75	5	2,138.42		
1/4		1/4		1/4		1/4	4,118.61	1/4	3,788.00	1/4	3,456.73	1/4	3,125.45	1/4	2,794.17	1/4	2,462.85	1/4	2,131.52		
1/2		1/2		1/2		1/2	4,111.74	1/2	3,781.10	1/2	3,449.83	1/2	3,118.55	1/2	2,787.27	1/2	2,455.95	1/2	2,124.62		
3/4		3/4		3/4		3/4	4,104.88	3/4	3,774.20	3/4	3,442.92	3/4	3,111.65	3/4	2,780.37	3/4	2,449.04	3/4	2,117.72		
6	6	6	6	6	6	6	4,098.02	6	3,767.30	6	3,436.02	6	3,104.75	6	2,773.47	6	2,442.14	6	2,110.81		
1/4		1/4		1/4		1/4	4,091.16	1/4	3,760.40	1/4	3,429.12	1/4	3,097.84	1/4	2,766.57	1/4	2,435.24	1/4	2,103.91		
1/2		1/2		1/2		1/2	4,084.30	1/2	3,753.50	1/2	3,422.22	1/2	3,090.94	1/2	2,759.67	1/2	2,428.34	1/2	2,097.01		
3/4		3/4		3/4		3/4	4,399.88	3/4	4,077.44	3/4	3,746.60	3/4	3,415.32	3/4	3,084.04	3/4	2,752.76	3/4	2,421.43	3/4	2,090.10
7	7	7	7	7	7	7	4,394.66	7	4,070.57	7	3,739.69	7	3,408.42	7	3,077.14	7	2,745.86	7	2,414.53	7	2,083.20
1/4		1/4		1/4		1/4	4,389.44	1/4	4,063.71	1/4	3,732.79	1/4	3,401.52	1/4	3,070.24	1/4	2,738.96	1/4	2,407.63	1/4	2,076.30
1/2		1/2		1/2		1/2	4,384.22	1/2	4,056.85	1/2	3,725.89	1/2	3,394.61	1/2	3,063.34	1/2	2,732.06	1/2	2,400.73	1/2	2,069.40
3/4		3/4		3/4		3/4	4,377.79	3/4	4,049.99	3/4	3,718.99	3/4	3,387.71	3/4	3,056.44	3/4	2,725.15	3/4	2,393.82	3/4	2,062.49
8	8	8	8	8	8	8	4,371.35	8	4,043.13	8	3,712.09	8	3,380.81	8	3,049.53	8	2,718.25	8	2,386.92	8	2,055.59
1/4		1/4		1/4		1/4	4,364.91	1/4	4,036.26	1/4	3,705.19	1/4	3,373.91	1/4	3,042.63	1/4	2,711.35	1/4	2,380.02	1/4	2,048.69
1/2		1/2		1/2		1/2	4,358.47	1/2	4,029.40	1/2	3,698.28	1/2	3,367.01	1/2	3,035.73	1/2	2,704.44	1/2	2,373.12	1/2	2,041.79
3/4		3/4		3/4		3/4	4,351.69	3/4	4,022.54	3/4	3,691.38	3/4	3,360.11	3/4	3,028.83	3/4	2,697.54	3/4	2,366.21	3/4	2,034.88
9	9	9	9	9	9	9	4,344.90	9	4,015.68	9	3,684.48	9	3,353.20	9	3,021.93	9	2,690.64	9	2,359.31	9	2,027.98
1/4		1/4		1/4		1/4	4,338.11	1/4	4,008.82	1/4	3,677.58	1/4	3,346.30	1/4	3,015.03	1/4	2,683.74	1/4	2,352.41	1/4	2,021.08
1/2		1/2		1/2		1/2	4,331.33	1/2	4,001.95	1/2	3,670.68	1/2	3,339.40	1/2	3,008.12	1/2	2,676.83	1/2	2,345.50	1/2	2,014.17
3/4		3/4		3/4		3/4	4,324.46	3/4	3,995.05	3/4	3,663.78	3/4	3,332.50	3/4	3,001.22	3/4	2,669.93	3/4	2,338.60	3/4	2,007.27
10	10	10	10	10	10	10	4,317.60	10	3,988.15	10	3,656.87	10	3,325.60	10	2,994.32	10	2,663.03	10	2,331.70	10	2,000.37
1/4		1/4		1/4		1/4	4,310.74	1/4	3,981.25	1/4	3,649.97	1/4	3,318.70	1/4	2,987.42	1/4	2,656.13	1/4	2,324.80	1/4	1,993.47
1/2		1/2		1/2		1/2	4,303.88	1/2	3,974.35	1/2	3,643.07	1/2	3,311.79	1/2	2,980.52	1/2	2,649.22	1/2	2,317.89	1/2	1,986.56
3/4		3/4		3/4		3/4	4,297.02	3/4	3,967.45	3/4	3,636.17	3/4	3,304.89	3/4	2,973.62	3/4	2,642.32	3/4	2,310.99	3/4	1,979.66
11	11	11	11	11	11	11	4,290.15	11	3,960.54	11	3,629.27	11	3,297.99	11	2,966.71	11	2,635.42	11	2,304.09	11	1,972.76
1/4		1/4		1/4		1/4	4,283.29	1/4	3,953.64	1/4	3,622.37	1/4	3,291.09	1/4	2,959.81	1/4	2,628.52	1/4	2,297.19	1/4	1,965.86
1/2		1/2		1/2		1/2	4,276.43	1/2	3,946.74	1/2	3,615.46	1/2	3,284.19	1/2	2,952.91	1/2	2,621.61	1/2	2,290.28	1/2	1,958.95
3/4		3/4		3/4		3/4	4,269.57	3/4	3,939.84	3/4	3,608.56	3/4	3,277.29	3/4	2,946.01	3/4	2,614.71	3/4	2,283.38	3/4	1,952.05

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.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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BARGE "EMS 381"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/2"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
0	1,945.15	0	1,613.82	0	1,282.49	0	955.11	0	647.91	0	358.83	0	89.62	0		0		0	
1/4	1,938.25	1/4	1,606.92	1/4	1,275.59	1/4	948.49	1/4	641.68	1/4	353.01	1/4	84.22	1/4	1/4	1/4		1/4	
1/2	1,931.34	1/2	1,600.01	1/2	1,268.68	1/2	941.87	1/2	635.45	1/2	347.19	1/2	78.82	1/2	1/2	1/2		1/2	
3/4	1,924.44	3/4	1,593.11	3/4	1,261.78	3/4	935.29	3/4	629.25	3/4	341.41	3/4	73.45	3/4	3/4	3/4		3/4	
1	1,917.54	1	1,586.21	1	1,254.88	1	928.70	1	623.06	1	335.63	1	68.08	1	1	1		1	
1/4	1,910.63	1/4	1,579.30	1/4	1,247.98	1/4	922.12	1/4	616.86	1/4	329.85	1/4	62.72	1/4	1/4	1/4		1/4	
1/2	1,903.73	1/2	1,572.40	1/2	1,241.07	1/2	915.53	1/2	610.67	1/2	324.07	1/2	57.35	1/2	1/2	1/2		1/2	
3/4	1,896.83	3/4	1,565.50	3/4	1,234.17	3/4	909.00	3/4	604.51	3/4	318.32	3/4	52.02	3/4	3/4	3/4		3/4	
2	1,889.93	2	1,558.60	2	1,227.27	2	902.47	2	598.35	2	312.58	2	46.68	2	2	2		2	
1/4	1,883.02	1/4	1,551.69	1/4	1,220.36	1/4	895.93	1/4	592.19	1/4	306.83	1/4	41.35	1/4	1/4	1/4		1/4	
1/2	1,876.12	1/2	1,544.79	1/2	1,213.46	1/2	889.40	1/2	586.03	1/2	301.08	1/2	36.02	1/2	1/2	1/2		1/2	
3/4	1,869.22	3/4	1,537.89	3/4	1,206.56	3/4	882.90	3/4	579.90	3/4	295.37	3/4	30.97	3/4	3/4	3/4		3/4	
3	1,862.32	3	1,530.99	3	1,199.66	3	876.40	3	573.77	3	289.66	3	25.92	3	3	3		3	
1/4	1,855.41	1/4	1,524.08	1/4	1,192.75	1/4	869.91	1/4	567.65	1/4	283.95	1/4	20.87	1/4	1/4	1/4		1/4	
1/2	1,848.51	1/2	1,517.18	1/2	1,185.85	1/2	863.41	1/2	561.52	1/2	278.24	1/2	15.81	1/2	1/2	1/2		1/2	
3/4	1,841.61	3/4	1,510.28	3/4	1,178.95	3/4	856.94	3/4	555.43	3/4	272.56	3/4	12.52	3/4	3/4	3/4		3/4	
4	1,834.70	4	1,503.38	4	1,172.05	4	850.48	4	549.34	4	266.88	4	9.23	4	4	4		4	
1/4	1,827.80	1/4	1,496.47	1/4	1,165.14	1/4	844.02	1/4	543.25	1/4	261.20	1/4	5.94	1/4	1/4	1/4		1/4	
1/2	1,820.90	1/2	1,489.57	1/2	1,158.24	1/2	837.55	1/2	537.15	1/2	255.53	1/2	2.65	1/2	1/2	1/2		1/2	
3/4	1,814.00	3/4	1,482.67	3/4	1,151.35	3/4	831.13	3/4	531.10	3/4	249.88	3/4		3/4	3/4	3/4		3/4	
5	1,807.09	5	1,475.76	5	1,144.47	5	824.70	5	525.04	5	244.24	5		5	5	5		5	
1/4	1,800.19	1/4	1,468.86	1/4	1,137.58	1/4	818.28	1/4	518.98	1/4	238.60	1/4		1/4	1/4	1/4		1/4	
1/2	1,793.29	1/2	1,461.96	1/2	1,130.70	1/2	811.85	1/2	512.93	1/2	232.95	1/2		1/2	1/2	1/2		1/2	
3/4	1,786.39	3/4	1,455.06	3/4	1,123.85	3/4	805.46	3/4	506.90	3/4	227.35	3/4		3/4	3/4	3/4		3/4	
6	1,779.48	6	1,448.15	6	1,117.00	6	799.07	6	500.88	6	221.74	6		6	6	6		6	
1/4	1,772.58	1/4	1,441.25	1/4	1,110.15	1/4	792.68	1/4	494.86	1/4	216.13	1/4		1/4	1/4	1/4		1/4	
1/2	1,765.68	1/2	1,434.35	1/2	1,103.29	1/2	786.29	1/2	488.84	1/2	210.52	1/2		1/2	1/2	1/2		1/2	
3/4	1,758.77	3/4	1,427.45	3/4	1,096.48	3/4	779.93	3/4	482.85	3/4	204.95	3/4		3/4	3/4	3/4		3/4	
7	1,751.87	7	1,420.54	7	1,089.66	7	773.57	7	476.86	7	199.37	7		7	7	7		7	
1/4	1,744.97	1/4	1,413.64	1/4	1,082.85	1/4	767.21	1/4	470.87	1/4	193.80	1/4		1/4	1/4	1/4		1/4	
1/2	1,738.07	1/2	1,406.74	1/2	1,076.03	1/2	760.85	1/2	464.88	1/2	188.23	1/2		1/2	1/2	1/2		1/2	
3/4	1,731.16	3/4	1,399.83	3/4	1,069.25	3/4	754.53	3/4	458.93	3/4	182.69	3/4		3/4	3/4	3/4		3/4	
8	1,724.26	8	1,392.93	8	1,062.47	8	748.20	8	452.98	8	177.15	8		8	8	8		8	
1/4	1,717.36	1/4	1,386.03	1/4	1,055.68	1/4	741.88	1/4	447.02	1/4	171.61	1/4		1/4	1/4	1/4		1/4	
1/2	1,710.46	1/2	1,379.13	1/2	1,048.90	1/2	735.55	1/2	441.07	1/2	166.07	1/2		1/2	1/2	1/2		1/2	
3/4	1,703.55	3/4	1,372.22	3/4	1,042.15	3/4	729.26	3/4	435.15	3/4	160.56	3/4		3/4	3/4	3/4		3/4	
9	1,696.65	9	1,365.32	9	1,035.41	9	722.97	9	429.23	9	155.06	9		9	9	9		9	
1/4	1,689.75	1/4	1,358.42	1/4	1,028.66	1/4	716.68	1/4	423.31	1/4	149.55	1/4		1/4	1/4	1/4		1/4	
1/2	1,682.85	1/2	1,351.52	1/2	1,021.91	1/2	710.39	1/2	417.39	1/2	144.05	1/2		1/2	1/2	1/2		1/2	
3/4	1,675.94	3/4	1,344.61	3/4	1,015.20	3/4	704.12	3/4	411.51	3/4	138.58	3/4		3/4	3/4	3/4		3/4	
10	1,669.04	10	1,337.71	10	1,008.49	10	697.85	10	405.63	10	133.11	10		10	10	10		10	
1/4	1,662.14	1/4	1,330.81	1/4	1,001.77	1/4	691.58	1/4	399.74	1/4	127.64	1/4		1/4	1/4	1/4		1/4	
1/2	1,655.23	1/2	1,323.90	1/2	995.06	1/2	685.31	1/2	393.86	1/2	122.17	1/2		1/2	1/2	1/2		1/2	
3/4	1,648.33	3/4	1,317.00	3/4	988.38	3/4	679.07	3/4	388.01	3/4	116.73	3/4		3/4	3/4	3/4		3/4	
11	1,641.43	11	1,310.10	11	981.70	11	672.84	11	382.16	11	111.29	11		11	11	11		11	
1/4	1,634.53	1/4	1,303.20	1/4	975.03	1/4	666.60	1/4	376.31	1/4	105.86	1/4		1/4	1/4	1/4		1/4	
1/2	1,627.62	1/2	1,296.29	1/2	968.35	1/2	660.37	1/2	370.46	1/2	100.42	1/2		1/2	1/2	1/2		1/2	
3/4	1,620.72	3/4	1,289.39	3/4	961.73	3/4	654.14	3/4	364.64	3/4	95.02	3/4		3/4	3/4	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
PRINTED: 01/18/2013 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2013

PRECISION MEASUREMENT
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BARGE "EMS 381"

1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0		0		0		0	4,257.28	0	3,927.47	0	3,596.20	0	3,264.92	0	2,933.64	0	2,602.34	0	2,271.01
1/4		1/4		1/4		1/4	4,250.42	1/4	3,920.57	1/4	3,589.30	1/4	3,258.02	1/4	2,926.74	1/4	2,595.44	1/4	2,264.11
1/2		1/2		1/2		1/2	4,243.56	1/2	3,913.67	1/2	3,582.39	1/2	3,251.12	1/2	2,919.84	1/2	2,588.54	1/2	2,257.21
3/4		3/4		3/4		3/4	4,236.70	3/4	3,906.77	3/4	3,575.49	3/4	3,244.21	3/4	2,912.94	3/4	2,581.63	3/4	2,250.30
1		1		1		1	4,229.83	1	3,899.87	1	3,568.59	1	3,237.31	1	2,906.04	1	2,574.73	1	2,243.40
1/4		1/4		1/4		1/4	4,222.97	1/4	3,892.97	1/4	3,561.69	1/4	3,230.41	1/4	2,899.13	1/4	2,567.83	1/4	2,236.50
1/2		1/2		1/2		1/2	4,216.11	1/2	3,886.06	1/2	3,554.79	1/2	3,223.51	1/2	2,892.23	1/2	2,560.92	1/2	2,229.60
3/4		3/4		3/4		3/4	4,209.25	3/4	3,879.16	3/4	3,547.89	3/4	3,216.61	3/4	2,885.33	3/4	2,554.02	3/4	2,222.69
2		2		2		2	4,202.39	2	3,872.26	2	3,540.98	2	3,209.71	2	2,878.43	2	2,547.12	2	2,215.79
1/4		1/4		1/4		1/4	4,195.52	1/4	3,865.36	1/4	3,534.08	1/4	3,202.81	1/4	2,871.53	1/4	2,540.22	1/4	2,208.89
1/2		1/2		1/2		1/2	4,188.66	1/2	3,858.46	1/2	3,527.18	1/2	3,195.90	1/2	2,864.63	1/2	2,533.31	1/2	2,201.98
3/4		3/4		3/4		3/4	4,181.80	3/4	3,851.56	3/4	3,520.28	3/4	3,189.00	3/4	2,857.73	3/4	2,526.41	3/4	2,195.08
3		3		3		3	4,174.94	3	3,844.65	3	3,513.38	3	3,182.10	3	2,850.82	3	2,519.51	3	2,188.18
1/4		1/4		1/4		1/4	4,168.08	1/4	3,837.75	1/4	3,506.48	1/4	3,175.20	1/4	2,843.92	1/4	2,512.61	1/4	2,181.28
1/2		1/2		1/2		1/2	4,161.21	1/2	3,830.85	1/2	3,499.57	1/2	3,168.30	1/2	2,837.02	1/2	2,505.70	1/2	2,174.37
3/4		3/4		3/4		3/4	4,154.35	3/4	3,823.95	3/4	3,492.67	3/4	3,161.40	3/4	2,830.12	3/4	2,498.80	3/4	2,167.47
4		4		4		4	4,147.49	4	3,817.05	4	3,485.77	4	3,154.49	4	2,823.22	4	2,491.90	4	2,160.57
1/4		1/4		1/4		1/4	4,140.63	1/4	3,810.15	1/4	3,478.87	1/4	3,147.59	1/4	2,816.32	1/4	2,484.99	1/4	2,153.67
1/2		1/2		1/2		1/2	4,133.77	1/2	3,803.24	1/2	3,471.97	1/2	3,140.69	1/2	2,809.41	1/2	2,478.09	1/2	2,146.76
3/4		3/4		3/4		3/4	4,126.91	3/4	3,796.34	3/4	3,465.07	3/4	3,133.79	3/4	2,802.51	3/4	2,471.19	3/4	2,139.86
5		5		5		5	4,120.04	5	3,789.44	5	3,458.16	5	3,126.89	5	2,795.61	5	2,464.29	5	2,132.96
1/4		1/4		1/4		1/4	4,113.18	1/4	3,782.54	1/4	3,451.26	1/4	3,119.99	1/4	2,788.71	1/4	2,457.38	1/4	2,126.05
1/2		1/2		1/2		1/2	4,106.32	1/2	3,775.64	1/2	3,444.36	1/2	3,113.08	1/2	2,781.81	1/2	2,450.48	1/2	2,119.15
3/4		3/4		3/4		3/4	4,099.46	3/4	3,768.74	3/4	3,437.46	3/4	3,106.18	3/4	2,774.91	3/4	2,443.58	3/4	2,112.25
6		6		6		6	4,092.60	6	3,761.84	6	3,430.56	6	3,099.28	6	2,768.00	6	2,436.68	6	2,105.35
1/4		1/4		1/4		1/4	4,085.73	1/4	3,754.93	1/4	3,423.66	1/4	3,092.38	1/4	2,761.10	1/4	2,429.77	1/4	2,098.44
1/2		1/2		1/2	4,401.32	1/2	4,078.87	1/2	3,748.03	1/2	3,416.75	1/2	3,085.48	1/2	2,754.20	1/2	2,422.87	1/2	2,091.54
3/4		3/4		3/4	4,396.10	3/4	4,072.01	3/4	3,741.13	3/4	3,409.85	3/4	3,078.58	3/4	2,747.30	3/4	2,415.97	3/4	2,084.64
7		7		7	4,390.88	7	4,065.15	7	3,734.23	7	3,402.95	7	3,071.67	7	2,740.39	7	2,409.07	7	2,077.74
1/4		1/4		1/4	4,385.66	1/4	4,058.29	1/4	3,727.33	1/4	3,396.05	1/4	3,064.77	1/4	2,733.49	1/4	2,402.16	1/4	2,070.83
1/2		1/2		1/2	4,379.22	1/2	4,051.42	1/2	3,720.43	1/2	3,389.15	1/2	3,057.87	1/2	2,726.59	1/2	2,395.26	1/2	2,063.93
3/4		3/4		3/4	4,372.79	3/4	4,044.56	3/4	3,713.52	3/4	3,382.25	3/4	3,050.97	3/4	2,719.69	3/4	2,388.36	3/4	2,057.03
8		8		8	4,366.35	8	4,037.70	8	3,706.62	8	3,375.35	8	3,044.07	8	2,712.78	8	2,381.45	8	2,050.12
1/4		1/4		1/4	4,359.91	1/4	4,030.84	1/4	3,699.72	1/4	3,368.44	1/4	3,037.17	1/4	2,705.88	1/4	2,374.55	1/4	2,043.22
1/2		1/2		1/2	4,353.12	1/2	4,023.98	1/2	3,692.82	1/2	3,361.54	1/2	3,030.27	1/2	2,698.98	1/2	2,367.65	1/2	2,036.32
3/4		3/4		3/4	4,346.34	3/4	4,017.11	3/4	3,685.92	3/4	3,354.64	3/4	3,023.36	3/4	2,692.08	3/4	2,360.75	3/4	2,029.42
9		9		9	4,339.55	9	4,010.25	9	3,679.02	9	3,347.74	9	3,016.46	9	2,685.17	9	2,353.84	9	2,022.51
1/4		1/4		1/4	4,332.76	1/4	4,003.39	1/4	3,672.11	1/4	3,340.84	1/4	3,009.56	1/4	2,678.27	1/4	2,346.94	1/4	2,015.61
1/2		1/2		1/2	4,325.90	1/2	3,996.49	1/2	3,665.21	1/2	3,333.94	1/2	3,002.66	1/2	2,671.37	1/2	2,340.04	1/2	2,008.71
3/4		3/4		3/4	4,319.04	3/4	3,989.59	3/4	3,658.31	3/4	3,327.03	3/4	2,995.76	3/4	2,664.47	3/4	2,333.14	3/4	2,001.81
10		10		10	4,312.18	10	3,982.69	10	3,651.41	10	3,320.13	10	2,988.86	10	2,657.56	10	2,326.23	10	1,994.90
1/4		1/4		1/4	4,305.31	1/4	3,975.78	1/4	3,644.51	1/4	3,313.23	1/4	2,981.95	1/4	2,650.66	1/4	2,319.33	1/4	1,988.00
1/2		1/2		1/2	4,298.45	1/2	3,968.88	1/2	3,637.61	1/2	3,306.33	1/2	2,975.05	1/2	2,643.76	1/2	2,312.43	1/2	1,981.10
3/4		3/4		3/4	4,291.59	3/4	3,961.98	3/4	3,630.70	3/4	3,299.43	3/4	2,968.15	3/4	2,636.85	3/4	2,305.52	3/4	1,974.20
11		11		11	4,284.73	11	3,955.08	11	3,623.80	11	3,292.53	11	2,961.25	11	2,629.95	11	2,298.62	11	1,967.29
1/4		1/4		1/4	4,277.87	1/4	3,948.18	1/4	3,616.90	1/4	3,285.62	1/4	2,954.35	1/4	2,623.05	1/4	2,291.72	1/4	1,960.39
1/2		1/2		1/2	4,271.01	1/2	3,941.28	1/2	3,610.00	1/2	3,278.72	1/2	2,947.45	1/2	2,616.15	1/2	2,284.82	1/2	1,953.49
3/4		3/4		3/4	4,264.14	3/4	3,934.38	3/4	3,603.10	3/4	3,271.82	3/4	2,940.54	3/4	2,609.24	3/4	2,277.91	3/4	1,946.58

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 381"

1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 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	1,939.68	0	1,608.35	0	1,277.02	0	949.85	0	641.75	0	353.06	0	84.23	0		0		0	
1/4	1,932.78	1/4	1,601.45	1/4	1,270.12	1/4	943.21	1/4	635.52	1/4	347.24	1/4	78.83	1/4	1/4	1/4		1/4	
1/2	1,925.88	1/2	1,594.55	1/2	1,263.22	1/2	936.60	1/2	629.32	1/2	341.46	1/2	73.46	1/2	1/2	1/2		1/2	
3/4	1,918.97	3/4	1,587.64	3/4	1,256.31	3/4	929.99	3/4	623.13	3/4	335.68	3/4	68.10	3/4	3/4	3/4		3/4	
1	1,912.07	1	1,580.74	1	1,249.41	1	923.38	1	616.93	1	329.90	1	62.73	1	1	1		1	
1/4	1,905.17	1/4	1,573.84	1/4	1,242.51	1/4	916.77	1/4	610.74	1/4	324.12	1/4	57.36	1/4	1/4	1/4		1/4	
1/2	1,898.27	1/2	1,566.94	1/2	1,235.61	1/2	910.21	1/2	604.58	1/2	318.37	1/2	52.03	1/2	1/2	1/2		1/2	
3/4	1,891.36	3/4	1,560.03	3/4	1,228.70	3/4	903.64	3/4	598.41	3/4	312.62	3/4	46.69	3/4	3/4	3/4		3/4	
2	1,884.46	2	1,553.13	2	1,221.80	2	897.08	2	592.25	2	306.87	2	41.36	2	2	2		2	
1/4	1,877.56	1/4	1,546.23	1/4	1,214.90	1/4	890.52	1/4	586.09	1/4	301.13	1/4	36.03	1/4	1/4	1/4		1/4	
1/2	1,870.65	1/2	1,539.33	1/2	1,208.00	1/2	883.99	1/2	579.97	1/2	295.41	1/2	30.97	1/2	1/2	1/2		1/2	
3/4	1,863.75	3/4	1,532.42	3/4	1,201.09	3/4	877.47	3/4	573.84	3/4	289.70	3/4	25.92	3/4	3/4	3/4		3/4	
3	1,856.85	3	1,525.52	3	1,194.19	3	870.94	3	567.71	3	283.99	3	20.87	3	3	3		3	
1/4	1,849.95	1/4	1,518.62	1/4	1,187.29	1/4	864.41	1/4	561.59	1/4	278.28	1/4	15.82	1/4	1/4	1/4		1/4	
1/2	1,843.04	1/2	1,511.71	1/2	1,180.38	1/2	857.92	1/2	555.49	1/2	272.60	1/2	12.53	1/2	1/2	1/2		1/2	
3/4	1,836.14	3/4	1,504.81	3/4	1,173.48	3/4	851.43	3/4	549.40	3/4	266.92	3/4	9.24	3/4	3/4	3/4		3/4	
4	1,829.24	4	1,497.91	4	1,166.58	4	844.93	4	543.31	4	261.24	4	5.94	4	4	4		4	
1/4	1,822.34	1/4	1,491.01	1/4	1,159.68	1/4	838.44	1/4	537.22	1/4	255.56	1/4	2.65	1/4	1/4	1/4		1/4	
1/2	1,815.43	1/2	1,484.10	1/2	1,152.79	1/2	831.99	1/2	531.16	1/2	249.92	1/2		1/2	1/2	1/2		1/2	
3/4	1,808.53	3/4	1,477.20	3/4	1,145.91	3/4	825.53	3/4	525.10	3/4	244.28	3/4		3/4	3/4	3/4		3/4	
5	1,801.63	5	1,470.30	5	1,139.02	5	819.08	5	519.05	5	238.63	5		5	5	5		5	
1/4	1,794.72	1/4	1,463.40	1/4	1,132.13	1/4	812.63	1/4	512.99	1/4	232.99	1/4		1/4	1/4	1/4		1/4	
1/2	1,787.82	1/2	1,456.49	1/2	1,125.28	1/2	806.21	1/2	506.97	1/2	227.38	1/2		1/2	1/2	1/2		1/2	
3/4	1,780.92	3/4	1,449.59	3/4	1,118.43	3/4	799.79	3/4	500.94	3/4	221.77	3/4		3/4	3/4	3/4		3/4	
6	1,774.02	6	1,442.69	6	1,111.58	6	793.37	6	494.92	6	216.16	6		6	6	6		6	
1/4	1,767.11	1/4	1,435.78	1/4	1,104.73	1/4	786.95	1/4	488.90	1/4	210.55	1/4		1/4	1/4	1/4		1/4	
1/2	1,760.21	1/2	1,428.88	1/2	1,097.91	1/2	780.56	1/2	482.91	1/2	204.98	1/2		1/2	1/2	1/2		1/2	
3/4	1,753.31	3/4	1,421.98	3/4	1,091.10	3/4	774.17	3/4	476.92	3/4	199.40	3/4		3/4	3/4	3/4		3/4	
7	1,746.41	7	1,415.08	7	1,084.28	7	767.78	7	470.93	7	193.83	7		7	7	7		7	
1/4	1,739.50	1/4	1,408.17	1/4	1,077.47	1/4	761.39	1/4	464.94	1/4	188.25	1/4		1/4	1/4	1/4		1/4	
1/2	1,732.60	1/2	1,401.27	1/2	1,070.68	1/2	755.04	1/2	458.99	1/2	182.71	1/2		1/2	1/2	1/2		1/2	
3/4	1,725.70	3/4	1,394.37	3/4	1,063.90	3/4	748.68	3/4	453.03	3/4	177.17	3/4		3/4	3/4	3/4		3/4	
8	1,718.80	8	1,387.47	8	1,057.12	8	742.33	8	447.08	8	171.63	8		8	8	8		8	
1/4	1,711.89	1/4	1,380.56	1/4	1,050.34	1/4	735.97	1/4	441.13	1/4	166.09	1/4		1/4	1/4	1/4		1/4	
1/2	1,704.99	1/2	1,373.66	1/2	1,043.59	1/2	729.65	1/2	435.21	1/2	160.59	1/2		1/2	1/2	1/2		1/2	
3/4	1,698.09	3/4	1,366.76	3/4	1,036.84	3/4	723.33	3/4	429.29	3/4	155.08	3/4		3/4	3/4	3/4		3/4	
9	1,691.18	9	1,359.85	9	1,030.10	9	717.01	9	423.37	9	149.58	9		9	9	9		9	
1/4	1,684.28	1/4	1,352.95	1/4	1,023.35	1/4	710.69	1/4	417.45	1/4	144.07	1/4		1/4	1/4	1/4		1/4	
1/2	1,677.38	1/2	1,346.05	1/2	1,016.63	1/2	704.39	1/2	411.56	1/2	138.60	1/2		1/2	1/2	1/2		1/2	
3/4	1,670.48	3/4	1,339.15	3/4	1,009.92	3/4	698.09	3/4	405.68	3/4	133.13	3/4		3/4	3/4	3/4		3/4	
10	1,663.57	10	1,332.24	10	1,003.21	10	691.79	10	399.79	10	127.66	10		10	10	10		10	
1/4	1,656.67	1/4	1,325.34	1/4	996.50	1/4	685.50	1/4	393.91	1/4	122.19	1/4		1/4	1/4	1/4		1/4	
1/2	1,649.77	1/2	1,318.44	1/2	989.82	1/2	679.23	1/2	388.06	1/2	116.75	1/2		1/2	1/2	1/2		1/2	
3/4	1,642.87	3/4	1,311.54	3/4	983.14	3/4	672.97	3/4	382.21	3/4	111.31	3/4		3/4	3/4	3/4		3/4	
11	1,635.96	11	1,304.63	11	976.46	11	666.70	11	376.36	11	105.88	11		11	11	11		11	
1/4	1,629.06	1/4	1,297.73	1/4	969.78	1/4	660.44	1/4	370.51	1/4	100.44	1/4		1/4	1/4	1/4		1/4	
1/2	1,622.16	1/2	1,290.83	1/2	963.14	1/2	654.21	1/2	364.69	1/2	95.04	1/2		1/2	1/2	1/2		1/2	
3/4	1,615.25	3/4	1,283.93	3/4	956.49	3/4	647.98	3/4	358.87	3/4	89.64	3/4		3/4	3/4	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
PRINTED: 01/18/2013 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2013

PRECISION MEASUREMENT
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BARGE "EMS 381"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.		
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	
							5,165.87		4,779.52		4,391.48		4,003.43		3,615.39		3,227.32		2,839.22	
1/4	1/4	1/4	1/4	1/4	1/4	1/4	5,157.84	1/4	4,771.43	1/4	4,383.39	1/4	3,995.35	1/4	3,607.31	1/4	3,219.24	1/4	2,831.14	
1/2	1/2	1/2	1/2	1/2	1/2	1/2	5,149.80	1/2	4,763.35	1/2	4,375.31	1/2	3,987.27	1/2	3,599.22	1/2	3,211.15	1/2	2,823.05	
3/4	3/4	3/4	3/4	3/4	3/4	3/4	5,141.76	3/4	4,755.26	3/4	4,367.22	3/4	3,979.18	3/4	3,591.14	3/4	3,203.07	3/4	2,814.97	
1	1	1	1	1	1	1	5,133.72	1	4,747.18	1	4,359.14	1	3,971.10	1	3,583.06	1	3,194.98	1	2,806.88	
1/4	1/4	1/4	1/4	1/4	1/4	1/4	5,125.69	1/4	4,739.10	1/4	4,351.05	1/4	3,963.01	1/4	3,574.97	1/4	3,186.89	1/4	2,798.80	
1/2	1/2	1/2	1/2	1/2	1/2	1/2	5,117.65	1/2	4,731.01	1/2	4,342.97	1/2	3,954.93	1/2	3,566.89	1/2	3,178.81	1/2	2,790.71	
3/4	3/4	3/4	3/4	3/4	3/4	3/4	5,109.61	3/4	4,722.93	3/4	4,334.89	3/4	3,946.84	3/4	3,558.80	3/4	3,170.72	3/4	2,782.62	
2	2	2	2	2	2	2	5,101.57	2	4,714.84	2	4,326.80	2	3,938.76	2	3,550.72	2	3,162.64	2	2,774.54	
1/4	1/4	1/4	1/4	1/4	1/4	1/4	5,093.54	1/4	4,706.76	1/4	4,318.72	1/4	3,930.68	1/4	3,542.63	1/4	3,154.55	1/4	2,766.45	
1/2	1/2	1/2	1/2	1/2	1/2	1/2	5,085.50	1/2	4,698.67	1/2	4,310.63	1/2	3,922.59	1/2	3,534.55	1/2	3,146.47	1/2	2,758.37	
3/4	3/4	3/4	3/4	3/4	3/4	3/4	5,077.46	3/4	4,690.59	3/4	4,302.55	3/4	3,914.51	3/4	3,526.47	3/4	3,138.38	3/4	2,750.28	
3	3	3	3	3	3	3	5,069.42	3	4,682.51	3	4,294.46	3	3,906.42	3	3,518.38	3	3,130.30	3	2,742.20	
1/4	1/4	1/4	1/4	1/4	1/4	1/4	5,061.39	1/4	4,674.42	1/4	4,286.38	1/4	3,898.34	1/4	3,510.30	1/4	3,122.21	1/4	2,734.11	
1/2	1/2	1/2	1/2	1/2	1/2	1/2	5,053.35	1/2	4,666.34	1/2	4,278.30	1/2	3,890.25	1/2	3,502.21	1/2	3,114.13	1/2	2,726.03	
3/4	3/4	3/4	3/4	3/4	3/4	3/4	5,045.31	3/4	4,658.25	3/4	4,270.21	3/4	3,882.17	3/4	3,494.13	3/4	3,106.04	3/4	2,717.94	
4	4	4	4	4	4	4	5,037.28	4	4,650.17	4	4,262.13	4	3,874.09	4	3,486.04	4	3,097.96	4	2,709.86	
1/4	1/4	1/4	1/4	1/4	1/4	1/4	5,029.24	1/4	4,642.09	1/4	4,254.04	1/4	3,866.00	1/4	3,477.96	1/4	3,089.87	1/4	2,701.77	
1/2	1/2	1/2	1/2	1/2	1/2	1/2	5,021.20	1/2	4,634.00	1/2	4,245.96	1/2	3,857.92	1/2	3,469.88	1/2	3,081.78	1/2	2,693.69	
3/4	3/4	3/4	3/4	3/4	3/4	3/4	5,013.16	3/4	4,625.92	3/4	4,237.88	3/4	3,849.83	3/4	3,461.79	3/4	3,073.70	3/4	2,685.60	
5	5	5	5	5	5	5	5,005.13	5	4,617.83	5	4,229.79	5	3,841.75	5	3,453.71	5	3,065.61	5	2,677.51	
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,997.09	1/4	4,609.75	1/4	4,221.71	1/4	3,833.67	1/4	3,445.62	1/4	3,057.53	1/4	2,669.43	
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,989.05	1/2	4,601.66	1/2	4,213.62	1/2	3,825.58	1/2	3,437.54	1/2	3,049.44	1/2	2,661.34	
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,981.01	3/4	4,593.58	3/4	4,205.54	3/4	3,817.50	3/4	3,429.46	3/4	3,041.36	3/4	2,653.26	
6	6	6	6	6	6	6	4,972.98	6	4,585.50	6	4,197.45	6	3,809.41	6	3,421.37	6	3,033.27	6	2,645.17	
1/4	1/4	1/4	5,342.62	1/4	4,964.94	1/4	4,577.41	1/4	4,189.37	1/4	3,801.33	1/4	3,413.29	1/4	3,025.19	1/4	2,637.09			
1/2	1/2	1/2	5,336.51	1/2	4,956.90	1/2	4,569.33	1/2	4,181.29	1/2	3,793.24	1/2	3,405.20	1/2	3,017.10	1/2	2,629.00			
3/4	3/4	3/4	5,330.39	3/4	4,948.86	3/4	4,561.24	3/4	4,173.20	3/4	3,785.16	3/4	3,397.11	3/4	3,009.02	3/4	2,620.92			
7	7	7	5,324.28	7	4,940.83	7	4,553.16	7	4,165.12	7	3,777.08	7	3,389.03	7	3,000.93	7	2,612.83			
1/4	1/4	1/4	5,316.74	1/4	4,932.79	1/4	4,545.07	1/4	4,157.03	1/4	3,768.99	1/4	3,380.94	1/4	2,992.84	1/4	2,604.75			
1/2	1/2	1/2	5,309.20	1/2	4,924.75	1/2	4,536.99	1/2	4,148.95	1/2	3,760.91	1/2	3,372.86	1/2	2,984.76	1/2	2,596.66			
3/4	3/4	3/4	5,301.67	3/4	4,916.71	3/4	4,528.91	3/4	4,140.86	3/4	3,752.82	3/4	3,364.77	3/4	2,976.67	3/4	2,588.57			
8	8	8	5,294.13	8	4,908.68	8	4,520.82	8	4,132.78	8	3,744.74	8	3,356.69	8	2,968.59	8	2,580.49			
1/4	1/4	1/4	5,286.18	1/4	4,900.64	1/4	4,512.74	1/4	4,124.70	1/4	3,736.65	1/4	3,348.60	1/4	2,960.50	1/4	2,572.40			
1/2	1/2	1/2	5,278.22	1/2	4,892.60	1/2	4,504.65	1/2	4,116.61	1/2	3,728.57	1/2	3,340.52	1/2	2,952.42	1/2	2,564.32			
3/4	3/4	3/4	5,270.27	3/4	4,884.56	3/4	4,496.57	3/4	4,108.53	3/4	3,720.49	3/4	3,332.43	3/4	2,944.33	3/4	2,556.23			
9	9	9	5,262.32	9	4,876.53	9	4,488.49	9	4,100.44	9	3,712.40	9	3,324.35	9	2,936.25	9	2,548.15			
1/4	1/4	1/4	5,254.28	1/4	4,868.44	1/4	4,480.40	1/4	4,092.36	1/4	3,704.32	1/4	3,316.26	1/4	2,928.16	1/4	2,540.06			
1/2	1/2	1/2	5,246.25	1/2	4,860.36	1/2	4,472.32	1/2	4,084.28	1/2	3,696.23	1/2	3,308.18	1/2	2,920.08	1/2	2,531.98			
3/4	3/4	3/4	5,238.21	3/4	4,852.27	3/4	4,464.23	3/4	4,076.19	3/4	3,688.15	3/4	3,300.09	3/4	2,911.99	3/4	2,523.89			
10	10	10	5,230.17	10	4,844.19	10	4,456.15	10	4,068.11	10	3,680.07	10	3,292.00	10	2,903.91	10	2,515.81			
1/4	1/4	1/4	5,222.14	1/4	4,836.11	1/4	4,448.06	1/4	4,060.02	1/4	3,671.98	1/4	3,283.92	1/4	2,895.82	1/4	2,507.72			
1/2	1/2	1/2	5,214.10	1/2	4,828.02	1/2	4,439.98	1/2	4,051.94	1/2	3,663.90	1/2	3,275.83	1/2	2,887.73	1/2	2,499.64			
3/4	3/4	3/4	5,206.06	3/4	4,819.94	3/4	4,431.90	3/4	4,043.85	3/4	3,655.81	3/4	3,267.75	3/4	2,879.65	3/4	2,491.55			
11	11	11	5,198.02	11	4,811.85	11	4,423.81	11	4,035.77	11	3,647.73	11	3,259.66	11	2,871.56	11	2,483.46			
1/4	1/4	1/4	5,189.99	1/4	4,803.77	1/4	4,415.73	1/4	4,027.69	1/4	3,639.64	1/4	3,251.58	1/4	2,863.48	1/4	2,475.38			
1/2	1/2	1/2	5,181.95	1/2	4,795.69	1/2	4,407.64	1/2	4,019.60	1/2	3,631.56	1/2	3,243.49	1/2	2,855.39	1/2	2,467.29			
3/4	3/4	3/4	5,173.91	3/4	4,787.60	3/4	4,399.56	3/4	4,011.52	3/4	3,623.48	3/4	3,235.41	3/4	2,847.31	3/4	2,459.21			

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 42'-03" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



BARGE "EMS 381"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04"

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	2,451.12	0	2,063.02	0	1,674.92	0	1,286.83	0	898.73	0	525.89	0	137.82	0		0		0	
1/4	2,443.04	1/4	2,054.94	1/4	1,666.84	1/4	1,278.74	1/4	890.95	1/4	517.80	1/4	129.73	1/4	1/4	1/4		1/4	
1/2	2,434.95	1/2	2,046.85	1/2	1,658.75	1/2	1,270.65	1/2	883.17	1/2	509.72	1/2	121.65	1/2	1/2	1/2		1/2	
3/4	2,426.87	3/4	2,038.77	3/4	1,650.67	3/4	1,262.57	3/4	875.39	3/4	501.63	3/4	113.56	3/4	3/4	3/4		3/4	
1	2,418.78	1	2,030.68	1	1,642.58	1	1,254.48	1	867.61	1	493.55	1	105.48	1	1	1		1	
1/4	2,410.70	1/4	2,022.60	1/4	1,634.50	1/4	1,246.40	1/4	859.83	1/4	485.46	1/4	97.39	1/4	1/4	1/4		1/4	
1/2	2,402.61	1/2	2,014.51	1/2	1,626.41	1/2	1,238.31	1/2	852.05	1/2	477.38	1/2	89.31	1/2	1/2	1/2		1/2	
3/4	2,394.53	3/4	2,006.43	3/4	1,618.33	3/4	1,230.23	3/4	844.27	3/4	469.30	3/4	81.22	3/4	3/4	3/4		3/4	
2	2,386.44	2	1,998.34	2	1,610.24	2	1,222.14	2	836.49	2	461.21	2	73.14	2	2	2		2	
1/4	2,378.35	1/4	1,990.26	1/4	1,602.16	1/4	1,214.06	1/4	828.71	1/4	453.13	1/4	65.34	1/4	1/4	1/4		1/4	
1/2	2,370.27	1/2	1,982.17	1/2	1,594.07	1/2	1,205.97	1/2	820.94	1/2	445.04	1/2	57.55	1/2	1/2	1/2		1/2	
3/4	2,362.18	3/4	1,974.08	3/4	1,585.99	3/4	1,197.89	3/4	813.16	3/4	436.96	3/4	49.75	3/4	3/4	3/4		3/4	
3	2,354.10	3	1,966.00	3	1,577.90	3	1,189.80	3	805.39	3	428.87	3	41.96	3	3	3		3	
1/4	2,346.01	1/4	1,957.91	1/4	1,569.81	1/4	1,181.72	1/4	797.63	1/4	420.79	1/4	36.18	1/4	1/4	1/4		1/4	
1/2	2,337.93	1/2	1,949.83	1/2	1,561.73	1/2	1,173.63	1/2	789.86	1/2	412.70	1/2	30.41	1/2	1/2	1/2		1/2	
3/4	2,329.84	3/4	1,941.74	3/4	1,553.64	3/4	1,165.54	3/4	782.10	3/4	404.62	3/4	24.63	3/4	3/4	3/4		3/4	
4	2,321.76	4	1,933.66	4	1,545.56	4	1,157.46	4	774.33	4	396.53	4	18.86	4	4	4		4	
1/4	2,313.67	1/4	1,925.57	1/4	1,537.47	1/4	1,149.37	1/4	766.57	1/4	388.45	1/4		1/4	1/4	1/4		1/4	
1/2	2,305.59	1/2	1,917.49	1/2	1,529.39	1/2	1,141.29	1/2	758.81	1/2	380.36	1/2		1/2	1/2	1/2		1/2	
3/4	2,297.50	3/4	1,909.40	3/4	1,521.30	3/4	1,133.20	3/4	751.04	3/4	372.28	3/4		3/4	3/4	3/4		3/4	
5	2,289.42	5	1,901.32	5	1,513.22	5	1,125.12	5	743.28	5	364.19	5		5	5	5		5	
1/4	2,281.33	1/4	1,893.23	1/4	1,505.13	1/4	1,117.03	1/4	735.51	1/4	356.11	1/4		1/4	1/4	1/4		1/4	
1/2	2,273.24	1/2	1,885.15	1/2	1,497.05	1/2	1,108.95	1/2	727.75	1/2	348.02	1/2		1/2	1/2	1/2		1/2	
3/4	2,265.16	3/4	1,877.06	3/4	1,488.96	3/4	1,100.86	3/4	719.99	3/4	339.94	3/4		3/4	3/4	3/4		3/4	
6	2,257.07	6	1,868.97	6	1,480.88	6	1,092.78	6	712.22	6	331.85	6		6	6	6		6	
1/4	2,248.99	1/4	1,860.89	1/4	1,472.79	1/4	1,084.69	1/4	704.46	1/4	323.77	1/4		1/4	1/4	1/4		1/4	
1/2	2,240.90	1/2	1,852.80	1/2	1,464.70	1/2	1,076.61	1/2	696.70	1/2	315.68	1/2		1/2	1/2	1/2		1/2	
3/4	2,232.82	3/4	1,844.72	3/4	1,456.62	3/4	1,068.52	3/4	688.95	3/4	307.60	3/4		3/4	3/4	3/4		3/4	
7	2,224.73	7	1,836.63	7	1,448.53	7	1,060.43	7	681.19	7	299.51	7		7	7	7		7	
1/4	2,216.65	1/4	1,828.55	1/4	1,440.45	1/4	1,052.35	1/4	673.43	1/4	291.43	1/4		1/4	1/4	1/4		1/4	
1/2	2,208.56	1/2	1,820.46	1/2	1,432.36	1/2	1,044.26	1/2	665.67	1/2	283.34	1/2		1/2	1/2	1/2		1/2	
3/4	2,200.48	3/4	1,812.38	3/4	1,424.28	3/4	1,036.18	3/4	657.91	3/4	275.26	3/4		3/4	3/4	3/4		3/4	
8	2,192.39	8	1,804.29	8	1,416.19	8	1,028.09	8	650.15	8	267.18	8		8	8	8		8	
1/4	2,184.30	1/4	1,796.21	1/4	1,408.11	1/4	1,020.01	1/4	642.38	1/4	259.09	1/4		1/4	1/4	1/4		1/4	
1/2	2,176.22	1/2	1,788.12	1/2	1,400.02	1/2	1,011.92	1/2	634.62	1/2	251.01	1/2		1/2	1/2	1/2		1/2	
3/4	2,168.13	3/4	1,780.03	3/4	1,391.94	3/4	1,003.84	3/4	626.86	3/4	242.92	3/4		3/4	3/4	3/4		3/4	
9	2,160.05	9	1,771.95	9	1,383.85	9	995.75	9	619.09	9	234.84	9		9	9	9		9	
1/4	2,151.96	1/4	1,763.86	1/4	1,375.76	1/4	987.67	1/4	611.33	1/4	226.75	1/4		1/4	1/4	1/4		1/4	
1/2	2,143.88	1/2	1,755.78	1/2	1,367.68	1/2	979.58	1/2	603.56	1/2	218.67	1/2		1/2	1/2	1/2		1/2	
3/4	2,135.79	3/4	1,747.69	3/4	1,359.59	3/4	971.49	3/4	595.80	3/4	210.58	3/4		3/4	3/4	3/4		3/4	
10	2,127.71	10	1,739.61	10	1,351.51	10	963.41	10	588.04	10	202.50	10		10	10	10		10	
1/4	2,119.62	1/4	1,731.52	1/4	1,343.42	1/4	955.32	1/4	580.27	1/4	194.41	1/4		1/4	1/4	1/4		1/4	
1/2	2,111.54	1/2	1,723.44	1/2	1,335.34	1/2	947.24	1/2	572.51	1/2	186.33	1/2		1/2	1/2	1/2		1/2	
3/4	2,103.45	3/4	1,715.35	3/4	1,327.25	3/4	939.15	3/4	564.74	3/4	178.24	3/4		3/4	3/4	3/4		3/4	
11	2,095.37	11	1,707.27	11	1,319.17	11	931.07	11	556.98	11	170.16	11		11	11	11		11	
1/4	2,087.28	1/4	1,699.18	1/4	1,311.08	1/4	922.98	1/4	549.21	1/4	162.07	1/4		1/4	1/4	1/4		1/4	
1/2	2,079.19	1/2	1,691.10	1/2	1,303.00	1/2	914.90	1/2	541.43	1/2	153.99	1/2		1/2	1/2	1/2		1/2	
3/4	2,071.11	3/4	1,683.01	3/4	1,294.91	3/4	906.81	3/4	533.66	3/4	145.90	3/4		3/4	3/4	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
PRINTED: 01/18/2013 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2013

PRECISION MEASUREMENT
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BARGE "EMS 381"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4		1/4		1/4		1/4	5,181.92	1/4	4,795.49	1/4	4,407.35	1/4	4,019.22	1/4	3,631.09	1/4	3,242.93	1/4	2,854.74		
1/2		1/2		1/2		1/2	5,173.88	1/2	4,787.40	1/2	4,399.27	1/2	4,011.14	1/2	3,623.00	1/2	3,234.84	1/2	2,846.66		
3/4		3/4		3/4		3/4	5,165.84	3/4	4,779.31	3/4	4,391.18	3/4	4,003.05	3/4	3,614.92	3/4	3,226.75	3/4	2,838.57		
1	1	1	1	1	1	1	5,157.80	1	4,771.23	1	4,383.10	1	3,994.96	1	3,606.83	1	3,218.67	1	2,830.48		
1/4		1/4		1/4		1/4	5,149.76	1/4	4,763.14	1/4	4,375.01	1/4	3,986.88	1/4	3,598.74	1/4	3,210.58	1/4	2,822.39		
1/2		1/2		1/2		1/2	5,141.72	1/2	4,755.06	1/2	4,366.92	1/2	3,978.79	1/2	3,590.66	1/2	3,202.49	1/2	2,814.31		
3/4		3/4		3/4		3/4	5,133.68	3/4	4,746.97	3/4	4,358.84	3/4	3,970.70	3/4	3,582.57	3/4	3,194.41	3/4	2,806.22		
2	2	2	2	2	2	2	5,125.65	2	4,738.88	2	4,350.75	2	3,962.62	2	3,574.49	2	3,186.32	2	2,798.13		
1/4		1/4		1/4		1/4	5,117.61	1/4	4,730.80	1/4	4,342.67	1/4	3,954.53	1/4	3,566.40	1/4	3,178.23	1/4	2,790.05		
1/2		1/2		1/2		1/2	5,109.57	1/2	4,722.71	1/2	4,334.58	1/2	3,946.45	1/2	3,558.31	1/2	3,170.14	1/2	2,781.96		
3/4		3/4		3/4		3/4	5,101.53	3/4	4,714.63	3/4	4,326.49	3/4	3,938.36	3/4	3,550.23	3/4	3,162.06	3/4	2,773.87		
3	3	3	3	3	3	3	5,093.49	3	4,706.54	3	4,318.41	3	3,930.27	3	3,542.14	3	3,153.97	3	2,765.78		
1/4		1/4		1/4		1/4	5,085.45	1/4	4,698.45	1/4	4,310.32	1/4	3,922.19	1/4	3,534.06	1/4	3,145.88	1/4	2,757.70		
1/2		1/2		1/2		1/2	5,077.41	1/2	4,690.37	1/2	4,302.23	1/2	3,914.10	1/2	3,525.97	1/2	3,137.80	1/2	2,749.61		
3/4		3/4		3/4		3/4	5,069.37	3/4	4,682.28	3/4	4,294.15	3/4	3,906.02	3/4	3,517.88	3/4	3,129.71	3/4	2,741.52		
4	4	4	4	4	4	4	5,061.33	4	4,674.20	4	4,286.06	4	3,897.93	4	3,509.80	4	3,121.62	4	2,733.44		
1/4		1/4		1/4		1/4	5,053.30	1/4	4,666.11	1/4	4,277.98	1/4	3,889.84	1/4	3,501.71	1/4	3,113.53	1/4	2,725.35		
1/2		1/2		1/2		1/2	5,045.26	1/2	4,658.02	1/2	4,269.89	1/2	3,881.76	1/2	3,493.62	1/2	3,105.45	1/2	2,717.26		
3/4		3/4		3/4		3/4	5,037.22	3/4	4,649.94	3/4	4,261.80	3/4	3,873.67	3/4	3,485.54	3/4	3,097.36	3/4	2,709.17		
5	5	5	5	5	5	5	5,029.18	5	4,641.85	5	4,253.72	5	3,865.59	5	3,477.45	5	3,089.27	5	2,701.09		
1/4		1/4		1/4		1/4	5,021.14	1/4	4,633.76	1/4	4,245.63	1/4	3,857.50	1/4	3,469.37	1/4	3,081.19	1/4	2,693.00		
1/2		1/2		1/2		1/2	5,013.10	1/2	4,625.68	1/2	4,237.55	1/2	3,849.41	1/2	3,461.28	1/2	3,073.10	1/2	2,684.91		
3/4		3/4		3/4		3/4	5,005.06	3/4	4,617.59	3/4	4,229.46	3/4	3,841.33	3/4	3,453.19	3/4	3,065.01	3/4	2,676.83		
6	6	6	6	6	6	6	4,997.02	6	4,609.51	6	4,221.37	6	3,833.24	6	3,445.11	6	3,056.92	6	2,668.74		
1/4		1/4		1/4		1/4	4,988.99	1/4	4,601.42	1/4	4,213.29	1/4	3,825.15	1/4	3,437.02	1/4	3,048.84	1/4	2,660.65		
1/2		1/2		1/2	5,358.70	1/2	4,980.95	1/2	4,593.33	1/2	4,205.20	1/2	3,817.07	1/2	3,428.93	1/2	3,040.75	1/2	2,652.56		
3/4		3/4		3/4	5,352.59	3/4	4,972.91	3/4	4,585.25	3/4	4,197.12	3/4	3,808.98	3/4	3,420.85	3/4	3,032.66	3/4	2,644.48		
7	7	7	7	7	5,346.47	7	4,964.87	7	4,577.16	7	4,189.03	7	3,800.90	7	3,412.76	7	3,024.57	7	2,636.39		
1/4		1/4		1/4	5,340.36	1/4	4,956.83	1/4	4,569.08	1/4	4,180.94	1/4	3,792.81	1/4	3,404.67	1/4	3,016.49	1/4	2,628.30		
1/2		1/2		1/2	5,332.81	1/2	4,948.79	1/2	4,560.99	1/2	4,172.86	1/2	3,784.72	1/2	3,396.59	1/2	3,008.40	1/2	2,620.21		
3/4		3/4		3/4	5,325.27	3/4	4,940.75	3/4	4,552.90	3/4	4,164.77	3/4	3,776.64	3/4	3,388.50	3/4	3,000.31	3/4	2,612.13		
8	8	8	8	8	5,317.73	8	4,932.71	8	4,544.82	8	4,156.68	8	3,768.55	8	3,380.41	8	2,992.23	8	2,604.04		
1/4		1/4		1/4	5,310.19	1/4	4,924.68	1/4	4,536.73	1/4	4,148.60	1/4	3,760.47	1/4	3,372.32	1/4	2,984.14	1/4	2,595.95		
1/2		1/2		1/2	5,302.24	1/2	4,916.64	1/2	4,528.65	1/2	4,140.51	1/2	3,752.38	1/2	3,364.24	1/2	2,976.05	1/2	2,587.87		
3/4		3/4		3/4	5,294.29	3/4	4,908.60	3/4	4,520.56	3/4	4,132.43	3/4	3,744.29	3/4	3,356.15	3/4	2,967.96	3/4	2,579.78		
9	9	9	9	9	5,286.34	9	4,900.56	9	4,512.47	9	4,124.34	9	3,736.21	9	3,348.06	9	2,959.88	9	2,571.69		
1/4		1/4		1/4	5,278.38	1/4	4,892.52	1/4	4,504.39	1/4	4,116.25	1/4	3,728.12	1/4	3,339.98	1/4	2,951.79	1/4	2,563.60		
1/2		1/2		1/2	5,270.34	1/2	4,884.43	1/2	4,496.30	1/2	4,108.17	1/2	3,720.04	1/2	3,331.89	1/2	2,943.70	1/2	2,555.52		
3/4		3/4		3/4	5,262.30	3/4	4,876.35	3/4	4,488.22	3/4	4,100.08	3/4	3,711.95	3/4	3,323.80	3/4	2,935.62	3/4	2,547.43		
10	10	10	10	10	5,254.27	10	4,868.26	10	4,480.13	10	4,092.00	10	3,703.86	10	3,315.71	10	2,927.53	10	2,539.34		
1/4		1/4		1/4	5,246.23	1/4	4,860.18	1/4	4,472.04	1/4	4,083.91	1/4	3,695.78	1/4	3,307.63	1/4	2,919.44	1/4	2,531.26		
1/2		1/2		1/2	5,238.19	1/2	4,852.09	1/2	4,463.96	1/2	4,075.82	1/2	3,687.69	1/2	3,299.54	1/2	2,911.35	1/2	2,523.17		
3/4		3/4		3/4	5,230.15	3/4	4,844.00	3/4	4,455.87	3/4	4,067.74	3/4	3,679.61	3/4	3,291.45	3/4	2,903.27	3/4	2,515.08		
11	11	11	11	11	5,222.11	11	4,835.92	11	4,447.78	11	4,059.65	11	3,671.52	11	3,283.37	11	2,895.18	11	2,506.99		
1/4		1/4		1/4	5,214.07	1/4	4,827.83	1/4	4,439.70	1/4	4,051.57	1/4	3,663.43	1/4	3,275.28	1/4	2,887.09	1/4	2,498.91		
1/2		1/2		1/2	5,206.03	1/2	4,819.75	1/2	4,431.61	1/2	4,043.48	1/2	3,655.35	1/2	3,267.19	1/2	2,879.01	1/2	2,490.82		
3/4		3/4		3/4	5,197.99	3/4	4,811.66	3/4	4,423.53	3/4	4,035.39	3/4	3,647.26	3/4	3,259.10	3/4	2,870.92	3/4	2,482.73		

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 42'-03" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



BARGE "EMS 381"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,474.65	0	2,086.46	0	1,698.27	0	1,310.09	0	921.90	0	534.09	0	145.93	0		0		0	
1/4	2,466.56	1/4	2,078.37	1/4	1,690.19	1/4	1,302.00	1/4	913.82	1/4	526.00	1/4	137.85	1/4	1/4	1/4		1/4	
1/2	2,458.47	1/2	2,070.29	1/2	1,682.10	1/2	1,293.91	1/2	905.73	1/2	517.92	1/2	129.76	1/2	1/2	1/2		1/2	
3/4	2,450.38	3/4	2,062.20	3/4	1,674.01	3/4	1,285.83	3/4	897.64	3/4	509.83	3/4	121.67	3/4	3/4	3/4		3/4	
1	2,442.30	1	2,054.11	1	1,665.93	1	1,277.74	1	889.55	1	501.74	1	113.59	1	1	1		1	
1/4	2,434.21	1/4	2,046.02	1/4	1,657.84	1/4	1,269.65	1/4	881.47	1/4	493.66	1/4	105.50	1/4	1/4	1/4		1/4	
1/2	2,426.12	1/2	2,037.94	1/2	1,649.75	1/2	1,261.57	1/2	873.38	1/2	485.57	1/2	97.41	1/2	1/2	1/2		1/2	
3/4	2,418.03	3/4	2,029.85	3/4	1,641.66	3/4	1,253.48	3/4	865.29	3/4	477.48	3/4	89.33	3/4	3/4	3/4		3/4	
2	2,409.95	2	2,021.76	2	1,633.58	2	1,245.39	2	857.21	2	469.40	2	81.24	2	2	2		2	
1/4	2,401.86	1/4	2,013.67	1/4	1,625.49	1/4	1,237.30	1/4	849.12	1/4	461.31	1/4	73.15	1/4	1/4	1/4		1/4	
1/2	2,393.77	1/2	2,005.59	1/2	1,617.40	1/2	1,229.22	1/2	841.03	1/2	453.22	1/2	65.36	1/2	1/2	1/2		1/2	
3/4	2,385.69	3/4	1,997.50	3/4	1,609.31	3/4	1,221.13	3/4	832.94	3/4	445.14	3/4	57.56	3/4	3/4	3/4		3/4	
3	2,377.60	3	1,989.41	3	1,601.23	3	1,213.04	3	824.86	3	437.05	3	49.76	3	3	3		3	
1/4	2,369.51	1/4	1,981.33	1/4	1,593.14	1/4	1,204.95	1/4	816.77	1/4	428.96	1/4	41.96	1/4	1/4	1/4		1/4	
1/2	2,361.42	1/2	1,973.24	1/2	1,585.05	1/2	1,196.87	1/2	808.69	1/2	420.88	1/2	36.19	1/2	1/2	1/2		1/2	
3/4	2,353.34	3/4	1,965.15	3/4	1,576.97	3/4	1,188.78	3/4	800.62	3/4	412.79	3/4	30.41	3/4	3/4	3/4		3/4	
4	2,345.25	4	1,957.06	4	1,568.88	4	1,180.69	4	792.54	4	404.70	4	24.64	4	4	4		4	
1/4	2,337.16	1/4	1,948.98	1/4	1,560.79	1/4	1,172.61	1/4	784.46	1/4	396.62	1/4	18.86	1/4	1/4	1/4		1/4	
1/2	2,329.08	1/2	1,940.89	1/2	1,552.70	1/2	1,164.52	1/2	776.39	1/2	388.53	1/2		1/2	1/2	1/2		1/2	
3/4	2,320.99	3/4	1,932.80	3/4	1,544.62	3/4	1,156.43	3/4	768.31	3/4	380.44	3/4		3/4	3/4	3/4		3/4	
5	2,312.90	5	1,924.72	5	1,536.53	5	1,148.34	5	760.23	5	372.36	5		5	5	5		5	
1/4	2,304.81	1/4	1,916.63	1/4	1,528.44	1/4	1,140.26	1/4	752.15	1/4	364.27	1/4		1/4	1/4	1/4		1/4	
1/2	2,296.73	1/2	1,908.54	1/2	1,520.36	1/2	1,132.17	1/2	744.08	1/2	356.18	1/2		1/2	1/2	1/2		1/2	
3/4	2,288.64	3/4	1,900.45	3/4	1,512.27	3/4	1,124.08	3/4	736.00	3/4	348.10	3/4		3/4	3/4	3/4		3/4	
6	2,280.55	6	1,892.37	6	1,504.18	6	1,116.00	6	727.92	6	340.01	6		6	6	6		6	
1/4	2,272.47	1/4	1,884.28	1/4	1,496.09	1/4	1,107.91	1/4	719.85	1/4	331.92	1/4		1/4	1/4	1/4		1/4	
1/2	2,264.38	1/2	1,876.19	1/2	1,488.01	1/2	1,099.82	1/2	711.78	1/2	323.84	1/2		1/2	1/2	1/2		1/2	
3/4	2,256.29	3/4	1,868.11	3/4	1,479.92	3/4	1,091.73	3/4	703.70	3/4	315.75	3/4		3/4	3/4	3/4		3/4	
7	2,248.20	7	1,860.02	7	1,471.83	7	1,083.65	7	695.63	7	307.67	7		7	7	7		7	
1/4	2,240.12	1/4	1,851.93	1/4	1,463.75	1/4	1,075.56	1/4	687.56	1/4	299.58	1/4		1/4	1/4	1/4		1/4	
1/2	2,232.03	1/2	1,843.84	1/2	1,455.66	1/2	1,067.47	1/2	679.49	1/2	291.49	1/2		1/2	1/2	1/2		1/2	
3/4	2,223.94	3/4	1,835.76	3/4	1,447.57	3/4	1,059.39	3/4	671.41	3/4	283.41	3/4		3/4	3/4	3/4		3/4	
8	2,215.85	8	1,827.67	8	1,439.48	8	1,051.30	8	663.34	8	275.32	8		8	8	8		8	
1/4	2,207.77	1/4	1,819.58	1/4	1,431.40	1/4	1,043.21	1/4	655.27	1/4	267.23	1/4		1/4	1/4	1/4		1/4	
1/2	2,199.68	1/2	1,811.49	1/2	1,423.31	1/2	1,035.12	1/2	647.19	1/2	259.15	1/2		1/2	1/2	1/2		1/2	
3/4	2,191.59	3/4	1,803.41	3/4	1,415.22	3/4	1,027.04	3/4	639.11	3/4	251.06	3/4		3/4	3/4	3/4		3/4	
9	2,183.51	9	1,795.32	9	1,407.13	9	1,018.95	9	631.04	9	242.97	9		9	9	9		9	
1/4	2,175.42	1/4	1,787.23	1/4	1,399.05	1/4	1,010.86	1/4	622.96	1/4	234.89	1/4		1/4	1/4	1/4		1/4	
1/2	2,167.33	1/2	1,779.15	1/2	1,390.96	1/2	1,002.77	1/2	614.89	1/2	226.80	1/2		1/2	1/2	1/2		1/2	
3/4	2,159.24	3/4	1,771.06	3/4	1,382.87	3/4	994.69	3/4	606.81	3/4	218.71	3/4		3/4	3/4	3/4		3/4	
10	2,151.16	10	1,762.97	10	1,374.79	10	986.60	10	598.73	10	210.63	10		10	10	10		10	
1/4	2,143.07	1/4	1,754.88	1/4	1,366.70	1/4	978.51	1/4	590.66	1/4	202.54	1/4		1/4	1/4	1/4		1/4	
1/2	2,134.98	1/2	1,746.80	1/2	1,358.61	1/2	970.43	1/2	582.58	1/2	194.45	1/2		1/2	1/2	1/2		1/2	
3/4	2,126.90	3/4	1,738.71	3/4	1,350.52	3/4	962.34	3/4	574.50	3/4	186.37	3/4		3/4	3/4	3/4		3/4	
11	2,118.81	11	1,730.62	11	1,342.44	11	954.25	11	566.43	11	178.28	11		11	11	11		11	
1/4	2,110.72	1/4	1,722.54	1/4	1,334.35	1/4	946.16	1/4	558.35	1/4	170.19	1/4		1/4	1/4	1/4		1/4	
1/2	2,102.63	1/2	1,714.45	1/2	1,326.26	1/2	938.08	1/2	550.26	1/2	162.11	1/2		1/2	1/2	1/2		1/2	
3/4	2,094.55	3/4	1,706.36	3/4	1,318.18	3/4	929.99	3/4	542.18	3/4	154.02	3/4		3/4	3/4	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
PRINTED: 01/18/2013 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "EMS 381"

3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0		0	4,596.34	0	4,291.52	0	3,985.34	0	3,679.17	0	3,369.57	0	3,008.74	0	2,647.78
1/4		1/4		1/4		1/4	4,589.99	1/4	4,285.14	1/4	3,978.97	1/4	3,672.79	1/4	3,362.05	1/4	3,001.22	1/4	2,640.26
1/2		1/2		1/2		1/2	4,583.65	1/2	4,278.76	1/2	3,972.59	1/2	3,666.41	1/2	3,354.53	1/2	2,993.71	1/2	2,632.74
3/4		3/4		3/4		3/4	4,577.31	3/4	4,272.38	3/4	3,966.21	3/4	3,660.04	3/4	3,347.01	3/4	2,986.19	3/4	2,625.22
1		1		1		1	4,570.97	1	4,266.00	1	3,959.83	1	3,653.66	1	3,339.48	1	2,978.68	1	2,617.70
1/4		1/4		1/4		1/4	4,564.63	1/4	4,259.62	1/4	3,953.45	1/4	3,647.28	1/4	3,331.96	1/4	2,971.16	1/4	2,610.17
1/2		1/2		1/2		1/2	4,558.28	1/2	4,253.25	1/2	3,947.07	1/2	3,640.90	1/2	3,324.44	1/2	2,963.65	1/2	2,602.65
3/4		3/4		3/4		3/4	4,551.94	3/4	4,246.87	3/4	3,940.69	3/4	3,634.52	3/4	3,316.92	3/4	2,956.13	3/4	2,595.13
2		2		2		2	4,545.60	2	4,240.49	2	3,934.32	2	3,628.14	2	3,309.40	2	2,948.62	2	2,587.61
1/4		1/4		1/4		1/4	4,539.26	1/4	4,234.11	1/4	3,927.94	1/4	3,621.76	1/4	3,301.88	1/4	2,941.10	1/4	2,580.08
1/2		1/2		1/2		1/2	4,532.92	1/2	4,227.73	1/2	3,921.56	1/2	3,615.39	1/2	3,294.35	1/2	2,933.59	1/2	2,572.56
3/4		3/4		3/4		3/4	4,526.57	3/4	4,221.35	3/4	3,915.18	3/4	3,609.01	3/4	3,286.83	3/4	2,926.07	3/4	2,565.04
3		3		3		3	4,520.23	3	4,214.97	3	3,908.80	3	3,602.63	3	3,279.31	3	2,918.56	3	2,557.52
1/4		1/4		1/4		1/4	4,513.89	1/4	4,208.60	1/4	3,902.42	1/4	3,596.25	1/4	3,271.79	1/4	2,911.04	1/4	2,549.99
1/2		1/2		1/2		1/2	4,507.55	1/2	4,202.22	1/2	3,896.04	1/2	3,589.87	1/2	3,264.27	1/2	2,903.52	1/2	2,542.47
3/4		3/4		3/4		3/4	4,501.21	3/4	4,195.84	3/4	3,889.67	3/4	3,583.49	3/4	3,256.75	3/4	2,896.01	3/4	2,534.95
4		4		4		4	4,494.86	4	4,189.46	4	3,883.29	4	3,577.11	4	3,249.22	4	2,888.49	4	2,527.43
1/4		1/4		1/4		1/4	4,488.52	1/4	4,183.08	1/4	3,876.91	1/4	3,570.74	1/4	3,241.70	1/4	2,880.98	1/4	2,519.90
1/2		1/2		1/2		1/2	4,482.18	1/2	4,176.70	1/2	3,870.53	1/2	3,564.36	1/2	3,234.19	1/2	2,873.46	1/2	2,512.38
3/4		3/4		3/4		3/4	4,475.84	3/4	4,170.32	3/4	3,864.15	3/4	3,557.98	3/4	3,226.67	3/4	2,865.93	3/4	2,504.86
5		5		5		5	4,469.50	5	4,163.95	5	3,857.77	5	3,551.60	5	3,219.16	5	2,858.41	5	2,497.34
1/4		1/4		1/4		1/4	4,463.15	1/4	4,157.57	1/4	3,851.39	1/4	3,545.22	1/4	3,211.65	1/4	2,850.89	1/4	2,489.81
1/2		1/2		1/2		1/2	4,456.81	1/2	4,151.19	1/2	3,845.02	1/2	3,538.84	1/2	3,204.13	1/2	2,843.37	1/2	2,482.29
3/4		3/4		3/4		3/4	4,450.47	3/4	4,144.81	3/4	3,838.64	3/4	3,532.46	3/4	3,196.62	3/4	2,835.84	3/4	2,474.77
6		6		6		6	4,444.13	6	4,138.43	6	3,832.26	6	3,526.09	6	3,189.10	6	2,828.32	6	2,467.25
1/4		1/4		1/4		1/4	4,437.79	1/4	4,132.05	1/4	3,825.88	1/4	3,519.71	1/4	3,181.59	1/4	2,820.80	1/4	2,459.72
1/2		1/2		1/2		1/2	4,740.82	1/2	4,431.44	1/2	4,125.67	1/2	3,819.50	1/2	3,513.33	1/2	3,174.07	1/2	2,813.28
3/4		3/4		3/4		3/4	4,735.13	3/4	4,425.10	3/4	4,119.30	3/4	3,813.12	3/4	3,506.95	3/4	3,166.56	3/4	2,805.76
7		7		7		7	4,729.44	7	4,418.76	7	4,112.92	7	3,806.74	7	3,500.57	7	3,159.04	7	2,798.23
1/4		1/4		1/4		1/4	4,723.75	1/4	4,412.42	1/4	4,106.54	1/4	3,800.37	1/4	3,494.19	1/4	3,151.53	1/4	2,790.71
1/2		1/2		1/2		1/2	4,716.74	1/2	4,406.08	1/2	4,100.16	1/2	3,793.99	1/2	3,487.81	1/2	3,144.01	1/2	2,783.19
3/4		3/4		3/4		3/4	4,709.72	3/4	4,399.73	3/4	4,093.78	3/4	3,787.61	3/4	3,481.44	3/4	3,136.50	3/4	2,775.67
8		8		8		8	4,702.71	8	4,393.39	8	4,087.40	8	3,781.23	8	3,475.06	8	3,128.98	8	2,768.14
1/4		1/4		1/4		1/4	4,695.69	1/4	4,387.05	1/4	4,081.02	1/4	3,774.85	1/4	3,468.68	1/4	3,121.47	1/4	2,760.62
1/2		1/2		1/2		1/2	4,688.29	1/2	4,380.71	1/2	4,074.65	1/2	3,768.47	1/2	3,462.30	1/2	3,113.95	1/2	2,753.10
3/4		3/4		3/4		3/4	4,680.90	3/4	4,374.37	3/4	4,068.27	3/4	3,762.09	3/4	3,455.92	3/4	3,106.44	3/4	2,745.58
9		9		9		9	4,673.50	9	4,368.02	9	4,061.89	9	3,755.72	9	3,449.54	9	3,098.92	9	2,738.05
1/4		1/4		1/4		1/4	4,666.10	1/4	4,361.68	1/4	4,055.51	1/4	3,749.34	1/4	3,443.16	1/4	3,091.40	1/4	2,730.53
1/2		1/2		1/2		1/2	4,659.76	1/2	4,355.30	1/2	4,049.13	1/2	3,742.96	1/2	3,436.79	1/2	3,083.89	1/2	2,723.01
3/4		3/4		3/4		3/4	4,653.41	3/4	4,348.93	3/4	4,042.75	3/4	3,736.58	3/4	3,430.41	3/4	3,076.37	3/4	2,715.49
10		10		10		10	4,647.07	10	4,342.55	10	4,036.37	10	3,730.20	10	3,424.03	10	3,068.86	10	2,707.96
1/4		1/4		1/4		1/4	4,640.73	1/4	4,336.17	1/4	4,030.00	1/4	3,723.82	1/4	3,417.65	1/4	3,061.34	1/4	2,700.44
1/2		1/2		1/2		1/2	4,634.39	1/2	4,329.79	1/2	4,023.62	1/2	3,717.44	1/2	3,411.27	1/2	3,053.83	1/2	2,692.92
3/4		3/4		3/4		3/4	4,628.05	3/4	4,323.41	3/4	4,017.24	3/4	3,711.07	3/4	3,404.89	3/4	3,046.31	3/4	2,685.40
11		11		11		11	4,621.70	11	4,317.03	11	4,010.86	11	3,704.69	11	3,398.51	11	3,038.80	11	2,677.87
1/4		1/4		1/4		1/4	4,615.36	1/4	4,310.65	1/4	4,004.48	1/4	3,698.31	1/4	3,392.14	1/4	3,031.28	1/4	2,670.35
1/2		1/2		1/2		1/2	4,609.02	1/2	4,304.27	1/2	3,998.10	1/2	3,691.93	1/2	3,384.61	1/2	3,023.77	1/2	2,662.83
3/4		3/4		3/4		3/4	4,602.68	3/4	4,297.90	3/4	3,991.72	3/4	3,685.55	3/4	3,377.09	3/4	3,016.25	3/4	2,655.31

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'-06" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



BARGE "EMS 381"

3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
0	2,286.71	0	1,926.12	0	1,565.73	0	1,204.81	0	844.10	0	496.63	0	135.79	0		0		0	
1/4	2,279.19	1/4	1,918.62	1/4	1,558.21	1/4	1,197.29	1/4	836.59	1/4	489.39	1/4	128.27	1/4	1/4	1/4		1/4	
1/2	2,271.66	1/2	1,911.12	1/2	1,550.69	1/2	1,189.77	1/2	829.36	1/2	481.86	1/2	120.75	1/2	1/2	1/2		1/2	
3/4	2,264.14	3/4	1,903.62	3/4	1,543.17	3/4	1,182.25	3/4	822.13	3/4	474.34	3/4	113.22	3/4	3/4	3/4		3/4	
1	2,256.62	1	1,896.12	1	1,535.65	1	1,174.73	1	814.89	1	466.82	1	105.70	1	1	1		1	
1/4	2,249.10	1/4	1,888.62	1/4	1,528.13	1/4	1,167.22	1/4	807.66	1/4	459.29	1/4	98.18	1/4	1/4	1/4		1/4	
1/2	2,241.58	1/2	1,881.12	1/2	1,520.61	1/2	1,159.70	1/2	800.43	1/2	451.77	1/2	90.65	1/2	1/2	1/2		1/2	
3/4	2,234.05	3/4	1,873.62	3/4	1,513.09	3/4	1,152.18	3/4	793.20	3/4	444.25	3/4	83.13	3/4	3/4	3/4		3/4	
2	2,226.53	2	1,866.12	2	1,505.57	2	1,144.66	2	785.96	2	436.72	2	75.61	2	2	2		2	
1/4	2,219.01	1/4	1,858.62	1/4	1,498.06	1/4	1,137.14	1/4	778.73	1/4	429.20	1/4	68.08	1/4	1/4	1/4		1/4	
1/2	2,211.49	1/2	1,851.12	1/2	1,490.54	1/2	1,129.62	1/2	771.49	1/2	421.68	1/2	60.83	1/2	1/2	1/2		1/2	
3/4	2,203.96	3/4	1,843.62	3/4	1,483.02	3/4	1,122.10	3/4	764.25	3/4	414.15	3/4	53.57	3/4	3/4	3/4		3/4	
3	2,196.44	3	1,836.12	3	1,475.50	3	1,114.58	3	757.00	3	406.63	3	46.32	3	3	3		3	
1/4	2,188.92	1/4	1,828.62	1/4	1,467.98	1/4	1,107.06	1/4	749.76	1/4	399.11	1/4	39.07	1/4	1/4	1/4		1/4	
1/2	2,181.40	1/2	1,821.12	1/2	1,460.46	1/2	1,099.54	1/2	742.53	1/2	391.58	1/2	33.69	1/2	1/2	1/2		1/2	
3/4	2,173.87	3/4	1,813.63	3/4	1,452.94	3/4	1,092.02	3/4	735.29	3/4	384.06	3/4	28.32	3/4	3/4	3/4		3/4	
4	2,166.35	4	1,806.13	4	1,445.42	4	1,084.50	4	728.06	4	376.54	4	22.95	4	4	4		4	
1/4	2,158.83	1/4	1,798.63	1/4	1,437.90	1/4	1,076.99	1/4	720.83	1/4	369.02	1/4	17.58	1/4	1/4	1/4		1/4	
1/2	2,151.31	1/2	1,791.13	1/2	1,430.38	1/2	1,069.47	1/2	713.60	1/2	361.49	1/2		1/2	1/2	1/2		1/2	
3/4	2,143.78	3/4	1,783.63	3/4	1,422.86	3/4	1,061.95	3/4	706.36	3/4	353.97	3/4		3/4	3/4	3/4		3/4	
5	2,136.26	5	1,776.13	5	1,415.35	5	1,054.43	5	699.13	5	346.45	5		5	5	5		5	
1/4	2,128.74	1/4	1,768.63	1/4	1,407.83	1/4	1,046.91	1/4	691.90	1/4	338.92	1/4		1/4	1/4	1/4		1/4	
1/2	2,121.22	1/2	1,761.13	1/2	1,400.31	1/2	1,039.39	1/2	684.67	1/2	331.40	1/2		1/2	1/2	1/2		1/2	
3/4	2,113.69	3/4	1,753.63	3/4	1,392.79	3/4	1,031.87	3/4	677.43	3/4	323.88	3/4		3/4	3/4	3/4		3/4	
6	2,106.17	6	1,746.13	6	1,385.27	6	1,024.35	6	670.20	6	316.35	6		6	6	6		6	
1/4	2,098.65	1/4	1,738.63	1/4	1,377.75	1/4	1,016.83	1/4	662.97	1/4	308.83	1/4		1/4	1/4	1/4		1/4	
1/2	2,091.14	1/2	1,731.12	1/2	1,370.23	1/2	1,009.32	1/2	655.74	1/2	301.31	1/2		1/2	1/2	1/2		1/2	
3/4	2,083.63	3/4	1,723.61	3/4	1,362.71	3/4	1,001.81	3/4	648.51	3/4	293.78	3/4		3/4	3/4	3/4		3/4	
7	2,076.12	7	1,716.10	7	1,355.19	7	994.30	7	641.29	7	286.26	7		7	7	7		7	
1/4	2,068.60	1/4	1,708.59	1/4	1,347.67	1/4	986.79	1/4	634.06	1/4	278.74	1/4		1/4	1/4	1/4		1/4	
1/2	2,061.11	1/2	1,701.07	1/2	1,340.15	1/2	979.28	1/2	626.83	1/2	271.21	1/2		1/2	1/2	1/2		1/2	
3/4	2,053.61	3/4	1,693.55	3/4	1,332.64	3/4	971.77	3/4	619.60	3/4	263.69	3/4		3/4	3/4	3/4		3/4	
8	2,046.11	8	1,686.03	8	1,325.12	8	964.26	8	612.37	8	256.17	8		8	8	8		8	
1/4	2,038.61	1/4	1,678.51	1/4	1,317.60	1/4	956.75	1/4	605.15	1/4	248.64	1/4		1/4	1/4	1/4		1/4	
1/2	2,031.11	1/2	1,670.99	1/2	1,310.08	1/2	949.24	1/2	597.91	1/2	241.12	1/2		1/2	1/2	1/2		1/2	
3/4	2,023.61	3/4	1,663.48	3/4	1,302.56	3/4	941.73	3/4	590.68	3/4	233.60	3/4		3/4	3/4	3/4		3/4	
9	2,016.11	9	1,655.96	9	1,295.04	9	934.22	9	583.45	9	226.07	9		9	9	9		9	
1/4	2,008.61	1/4	1,648.44	1/4	1,287.52	1/4	926.71	1/4	576.22	1/4	218.55	1/4		1/4	1/4	1/4		1/4	
1/2	2,001.11	1/2	1,640.92	1/2	1,280.00	1/2	919.20	1/2	568.98	1/2	211.03	1/2		1/2	1/2	1/2		1/2	
3/4	1,993.61	3/4	1,633.40	3/4	1,272.48	3/4	911.69	3/4	561.75	3/4	203.50	3/4		3/4	3/4	3/4		3/4	
10	1,986.11	10	1,625.88	10	1,264.96	10	904.18	10	554.52	10	195.98	10		10	10	10		10	
1/4	1,978.61	1/4	1,618.36	1/4	1,257.44	1/4	896.67	1/4	547.29	1/4	188.46	1/4		1/4	1/4	1/4		1/4	
1/2	1,971.11	1/2	1,610.84	1/2	1,249.93	1/2	889.16	1/2	540.05	1/2	180.93	1/2		1/2	1/2	1/2		1/2	
3/4	1,963.61	3/4	1,603.32	3/4	1,242.41	3/4	881.65	3/4	532.82	3/4	173.41	3/4		3/4	3/4	3/4		3/4	
11	1,956.11	11	1,595.80	11	1,234.89	11	874.14	11	525.59	11	165.89	11		11	11	11		11	
1/4	1,948.61	1/4	1,588.28	1/4	1,227.37	1/4	866.63	1/4	518.36	1/4	158.36	1/4		1/4	1/4	1/4		1/4	
1/2	1,941.11	1/2	1,580.77	1/2	1,219.85	1/2	859.12	1/2	511.11	1/2	150.84	1/2		1/2	1/2	1/2		1/2	
3/4	1,933.62	3/4	1,573.25	3/4	1,212.33	3/4	851.61	3/4	503.87	3/4	143.32	3/4		3/4	3/4	3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
PRINTED: 01/18/2013 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
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BARGE "EMS 381"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT		
0		0		0		0	4,590.39	0	4,285.65	0	3,979.56	0	3,673.47	0	3,363.98	0	3,003.80	0	2,643.49		
1/4		1/4		1/4		1/4	4,584.05	1/4	4,279.27	1/4	3,973.18	1/4	3,667.09	1/4	3,356.48	1/4	2,996.30	1/4	2,635.98		
1/2		1/2		1/2		1/2	4,577.71	1/2	4,272.90	1/2	3,966.81	1/2	3,660.71	1/2	3,348.97	1/2	2,988.80	1/2	2,628.47		
3/4		3/4		3/4		3/4	4,571.37	3/4	4,266.52	3/4	3,960.43	3/4	3,654.34	3/4	3,341.46	3/4	2,981.29	3/4	2,620.96		
1		1		1		1	4,565.03	1	4,260.14	1	3,954.05	1	3,647.96	1	3,333.95	1	2,973.79	1	2,613.45		
1/4		1/4		1/4		1/4	4,558.69	1/4	4,253.77	1/4	3,947.68	1/4	3,641.58	1/4	3,326.44	1/4	2,966.29	1/4	2,605.94		
1/2		1/2		1/2		1/2	4,552.35	1/2	4,247.39	1/2	3,941.30	1/2	3,635.21	1/2	3,318.94	1/2	2,958.79	1/2	2,598.44		
3/4		3/4		3/4		3/4	4,546.01	3/4	4,241.01	3/4	3,934.92	3/4	3,628.83	3/4	3,311.43	3/4	2,951.29	3/4	2,590.93		
2		2		2		2	4,539.67	2	4,234.64	2	3,928.54	2	3,622.45	2	3,303.92	2	2,943.78	2	2,583.42		
1/4		1/4		1/4		1/4	4,533.33	1/4	4,228.26	1/4	3,922.17	1/4	3,616.08	1/4	3,296.41	1/4	2,936.28	1/4	2,575.91		
1/2		1/2		1/2		1/2	4,526.99	1/2	4,221.88	1/2	3,915.79	1/2	3,609.70	1/2	3,288.90	1/2	2,928.78	1/2	2,568.40		
3/4		3/4		3/4		3/4	4,520.65	3/4	4,215.51	3/4	3,909.41	3/4	3,603.32	3/4	3,281.39	3/4	2,921.28	3/4	2,560.89		
3		3		3		3	4,514.31	3	4,209.13	3	3,903.04	3	3,596.95	3	3,273.89	3	2,913.78	3	2,553.38		
1/4		1/4		1/4		1/4	4,507.97	1/4	4,202.75	1/4	3,896.66	1/4	3,590.57	1/4	3,266.38	1/4	2,906.28	1/4	2,545.87		
1/2		1/2		1/2		1/2	4,501.63	1/2	4,196.37	1/2	3,890.28	1/2	3,584.19	1/2	3,258.87	1/2	2,898.77	1/2	2,538.37		
3/4		3/4		3/4		3/4	4,495.29	3/4	4,190.00	3/4	3,883.91	3/4	3,577.82	3/4	3,251.36	3/4	2,891.27	3/4	2,530.87		
4		4		4		4	4,488.95	4	4,183.62	4	3,877.53	4	3,571.44	4	3,243.85	4	2,883.77	4	2,523.37		
1/4		1/4		1/4		1/4	4,482.60	1/4	4,177.24	1/4	3,871.15	1/4	3,565.06	1/4	3,236.35	1/4	2,876.27	1/4	2,515.87		
1/2		1/2		1/2		1/2	4,476.26	1/2	4,170.87	1/2	3,864.78	1/2	3,558.68	1/2	3,228.85	1/2	2,868.76	1/2	2,508.37		
3/4		3/4		3/4		3/4	4,469.92	3/4	4,164.49	3/4	3,858.40	3/4	3,552.31	3/4	3,221.34	3/4	2,861.25	3/4	2,500.87		
5		5		5		5	4,463.58	5	4,158.11	5	3,852.02	5	3,545.93	5	3,213.84	5	2,853.74	5	2,493.37		
1/4		1/4		1/4		1/4	4,457.24	1/4	4,151.74	1/4	3,845.64	1/4	3,539.55	1/4	3,206.34	1/4	2,846.23	1/4	2,485.87		
1/2		1/2		1/2		1/2	4,450.90	1/2	4,145.36	1/2	3,839.27	1/2	3,533.18	1/2	3,198.84	1/2	2,838.72	1/2	2,478.37		
3/4		3/4		3/4		3/4	4,444.56	3/4	4,138.98	3/4	3,832.89	3/4	3,526.80	3/4	3,191.34	3/4	2,831.21	3/4	2,470.87		
6		6		6		6	4,438.22	6	4,132.61	6	3,826.51	6	3,520.42	6	3,183.84	6	2,823.71	6	2,463.37		
1/4		1/4		1/4		1/4	4,431.88	1/4	4,126.23	1/4	3,820.14	1/4	3,514.05	1/4	3,176.34	1/4	2,816.20	1/4	2,455.87		
1/2		1/2		1/2		1/2	4,734.84	1/2	4,425.54	1/2	4,119.85	1/2	3,813.76	1/2	3,507.67	1/2	3,168.84	1/2	2,808.69	1/2	2,448.37
3/4		3/4		3/4		3/4	4,729.15	3/4	4,419.20	3/4	4,113.47	3/4	3,807.38	3/4	3,501.29	3/4	3,161.34	3/4	2,801.18	3/4	2,440.87
7		7		7		7	4,723.47	7	4,412.86	7	4,107.10	7	3,801.01	7	3,494.92	7	3,153.84	7	2,793.67	7	2,433.37
1/4		1/4		1/4		1/4	4,717.78	1/4	4,406.52	1/4	4,100.72	1/4	3,794.63	1/4	3,488.54	1/4	3,146.33	1/4	2,786.16	1/4	2,425.87
1/2		1/2		1/2		1/2	4,710.77	1/2	4,400.18	1/2	4,094.34	1/2	3,788.25	1/2	3,482.16	1/2	3,138.83	1/2	2,778.65	1/2	2,418.37
3/4		3/4		3/4		3/4	4,703.75	3/4	4,393.84	3/4	4,087.97	3/4	3,781.88	3/4	3,475.78	3/4	3,131.33	3/4	2,771.14	3/4	2,410.87
8		8		8		8	4,696.74	8	4,387.50	8	4,081.59	8	3,775.50	8	3,469.41	8	3,123.83	8	2,763.63	8	2,403.37
1/4		1/4		1/4		1/4	4,689.73	1/4	4,381.16	1/4	4,075.21	1/4	3,769.12	1/4	3,463.03	1/4	3,116.33	1/4	2,756.12	1/4	2,395.87
1/2		1/2		1/2		1/2	4,682.33	1/2	4,374.82	1/2	4,068.84	1/2	3,762.75	1/2	3,456.65	1/2	3,108.82	1/2	2,748.62	1/2	2,388.37
3/4		3/4		3/4		3/4	4,674.93	3/4	4,368.48	3/4	4,062.46	3/4	3,756.37	3/4	3,450.28	3/4	3,101.32	3/4	2,741.11	3/4	2,380.87
9		9		9		9	4,667.53	9	4,362.14	9	4,056.08	9	3,749.99	9	3,443.90	9	3,093.82	9	2,733.60	9	2,373.37
1/4		1/4		1/4		1/4	4,660.14	1/4	4,355.80	1/4	4,049.71	1/4	3,743.61	1/4	3,437.52	1/4	3,086.32	1/4	2,726.09	1/4	2,365.87
1/2		1/2		1/2		1/2	4,653.80	1/2	4,349.42	1/2	4,043.33	1/2	3,737.24	1/2	3,431.15	1/2	3,078.82	1/2	2,718.58	1/2	2,358.37
3/4		3/4		3/4		3/4	4,647.46	3/4	4,343.04	3/4	4,036.95	3/4	3,730.86	3/4	3,424.77	3/4	3,071.32	3/4	2,711.07	3/4	2,350.88
10		10		10		10	4,641.11	10	4,336.67	10	4,030.57	10	3,724.48	10	3,418.39	10	3,063.81	10	2,703.56	10	2,343.38
1/4		1/4		1/4		1/4	4,634.77	1/4	4,330.29	1/4	4,024.20	1/4	3,718.11	1/4	3,412.02	1/4	3,056.31	1/4	2,696.05	1/4	2,335.88
1/2		1/2		1/2		1/2	4,628.43	1/2	4,323.91	1/2	4,017.82	1/2	3,711.73	1/2	3,405.64	1/2	3,048.81	1/2	2,688.54	1/2	2,328.38
3/4		3/4		3/4		3/4	4,622.09	3/4	4,317.54	3/4	4,011.44	3/4	3,705.35	3/4	3,399.26	3/4	3,041.31	3/4	2,681.03	3/4	2,320.88
11		11		11		11	4,615.75	11	4,311.16	11	4,005.07	11	3,698.98	11	3,392.88	11	3,033.81	11	2,673.53	11	2,313.38
1/4		1/4		1/4		1/4	4,609.41	1/4	4,304.78	1/4	3,998.69	1/4	3,692.60	1/4	3,386.51	1/4	3,026.30	1/4	2,666.02	1/4	2,305.88
1/2		1/2		1/2		1/2	4,603.07	1/2	4,298.40	1/2	3,992.31	1/2	3,686.22	1/2	3,379.00	1/2	3,018.80	1/2	2,658.51	1/2	2,298.37
3/4		3/4		3/4		3/4	4,596.73	3/4	4,292.03	3/4	3,985.94	3/4	3,679.85	3/4	3,371.49	3/4	3,011.30	3/4	2,651.00	3/4	2,290.85

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'-06" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



BARGE "EMS 381"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-04 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,283.34	0	1,924.46	0	1,566.10	0	1,205.76	0	845.41	0	495.86	0	135.61	0		0		0	
1/4	2,275.83	1/4	1,917.02	1/4	1,558.59	1/4	1,198.25	1/4	837.90	1/4	488.57	1/4	128.10	1/4	1/4	1/4		1/4	1/4
1/2	2,268.32	1/2	1,909.59	1/2	1,551.09	1/2	1,190.74	1/2	830.62	1/2	481.06	1/2	120.59	1/2	1/2	1/2		1/2	1/2
3/4	2,260.81	3/4	1,902.16	3/4	1,543.58	3/4	1,183.23	3/4	823.33	3/4	473.55	3/4	113.08	3/4	3/4	3/4		3/4	3/4
1	2,253.30	1	1,894.72	1	1,536.07	1	1,175.73	1	816.05	1	466.04	1	105.57	1	1	1		1	1
1/4	2,245.79	1/4	1,887.29	1/4	1,528.57	1/4	1,168.22	1/4	808.76	1/4	458.53	1/4	98.06	1/4	1/4	1/4		1/4	1/4
1/2	2,238.28	1/2	1,879.85	1/2	1,521.06	1/2	1,160.71	1/2	801.48	1/2	451.02	1/2	90.55	1/2	1/2	1/2		1/2	1/2
3/4	2,230.77	3/4	1,872.42	3/4	1,513.55	3/4	1,153.21	3/4	794.19	3/4	443.51	3/4	83.04	3/4	3/4	3/4		3/4	3/4
2	2,223.26	2	1,864.99	2	1,506.04	2	1,145.70	2	786.91	2	436.01	2	75.53	2	2	2		2	2
1/4	2,215.75	1/4	1,857.55	1/4	1,498.54	1/4	1,138.19	1/4	779.62	1/4	428.50	1/4	68.02	1/4	1/4	1/4		1/4	1/4
1/2	2,208.24	1/2	1,850.12	1/2	1,491.03	1/2	1,130.68	1/2	772.33	1/2	420.99	1/2	60.78	1/2	1/2	1/2		1/2	1/2
3/4	2,200.73	3/4	1,842.69	3/4	1,483.52	3/4	1,123.18	3/4	765.05	3/4	413.48	3/4	53.54	3/4	3/4	3/4		3/4	3/4
3	2,193.22	3	1,835.25	3	1,476.01	3	1,115.67	3	757.76	3	405.97	3	46.30	3	3	3		3	3
1/4	2,185.71	1/4	1,827.82	1/4	1,468.51	1/4	1,108.16	1/4	750.48	1/4	398.46	1/4	39.06	1/4	1/4	1/4		1/4	1/4
1/2	2,178.20	1/2	1,820.39	1/2	1,461.00	1/2	1,100.65	1/2	743.20	1/2	390.95	1/2	33.69	1/2	1/2	1/2		1/2	1/2
3/4	2,170.69	3/4	1,812.95	3/4	1,453.49	3/4	1,093.15	3/4	735.93	3/4	383.44	3/4	28.32	3/4	3/4	3/4		3/4	3/4
4	2,163.18	4	1,805.52	4	1,445.99	4	1,085.64	4	728.65	4	375.93	4	22.95	4	4	4		4	4
1/4	2,155.67	1/4	1,798.09	1/4	1,438.48	1/4	1,078.13	1/4	721.38	1/4	368.42	1/4	17.57	1/4	1/4	1/4		1/4	1/4
1/2	2,148.16	1/2	1,790.65	1/2	1,430.97	1/2	1,070.63	1/2	714.10	1/2	360.91	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,140.64	3/4	1,783.22	3/4	1,423.46	3/4	1,063.12	3/4	706.83	3/4	353.40	3/4		3/4	3/4	3/4		3/4	3/4
5	2,133.13	5	1,775.79	5	1,415.96	5	1,055.61	5	699.55	5	345.89	5		5	5	5		5	5
1/4	2,125.62	1/4	1,768.35	1/4	1,408.45	1/4	1,048.10	1/4	692.28	1/4	338.38	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,118.11	1/2	1,760.92	1/2	1,400.94	1/2	1,040.60	1/2	685.00	1/2	330.87	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,110.60	3/4	1,753.49	3/4	1,393.44	3/4	1,033.09	3/4	677.73	3/4	323.36	3/4		3/4	3/4	3/4		3/4	3/4
6	2,103.09	6	1,746.05	6	1,385.93	6	1,025.58	6	670.45	6	315.85	6		6	6	6		6	6
1/4	2,095.58	1/4	1,738.62	1/4	1,378.42	1/4	1,018.08	1/4	663.18	1/4	308.34	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,088.11	1/2	1,731.15	1/2	1,370.91	1/2	1,010.57	1/2	655.91	1/2	300.83	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,080.64	3/4	1,723.68	3/4	1,363.41	3/4	1,003.06	3/4	648.64	3/4	293.32	3/4		3/4	3/4	3/4		3/4	3/4
7	2,073.16	7	1,716.21	7	1,355.90	7	995.55	7	641.37	7	285.81	7		7	7	7		7	7
1/4	2,065.69	1/4	1,708.74	1/4	1,348.39	1/4	988.05	1/4	634.10	1/4	278.30	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,058.26	1/2	1,701.23	1/2	1,340.89	1/2	980.54	1/2	626.83	1/2	270.79	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,050.83	3/4	1,693.72	3/4	1,333.38	3/4	973.03	3/4	619.56	3/4	263.28	3/4		3/4	3/4	3/4		3/4	3/4
8	2,043.39	8	1,686.22	8	1,325.87	8	965.53	8	612.29	8	255.77	8		8	8	8		8	8
1/4	2,035.96	1/4	1,678.71	1/4	1,318.36	1/4	958.02	1/4	605.01	1/4	248.26	1/4		1/4	1/4	1/4		1/4	1/4
1/2	2,028.52	1/2	1,671.20	1/2	1,310.86	1/2	950.51	1/2	597.74	1/2	240.75	1/2		1/2	1/2	1/2		1/2	1/2
3/4	2,021.09	3/4	1,663.69	3/4	1,303.35	3/4	943.00	3/4	590.46	3/4	233.24	3/4		3/4	3/4	3/4		3/4	3/4
9	2,013.66	9	1,656.19	9	1,295.84	9	935.50	9	583.19	9	225.73	9		9	9	9		9	9
1/4	2,006.22	1/4	1,648.68	1/4	1,288.33	1/4	927.99	1/4	575.91	1/4	218.22	1/4		1/4	1/4	1/4		1/4	1/4
1/2	1,998.79	1/2	1,641.17	1/2	1,280.83	1/2	920.48	1/2	568.64	1/2	210.71	1/2		1/2	1/2	1/2		1/2	1/2
3/4	1,991.36	3/4	1,633.67	3/4	1,273.32	3/4	912.97	3/4	561.36	3/4	203.20	3/4		3/4	3/4	3/4		3/4	3/4
10	1,983.92	10	1,626.16	10	1,265.81	10	905.47	10	554.09	10	195.69	10		10	10	10		10	10
1/4	1,976.49	1/4	1,618.65	1/4	1,258.31	1/4	897.96	1/4	546.81	1/4	188.18	1/4		1/4	1/4	1/4		1/4	1/4
1/2	1,969.06	1/2	1,611.14	1/2	1,250.80	1/2	890.45	1/2	539.54	1/2	180.67	1/2		1/2	1/2	1/2		1/2	1/2
3/4	1,961.62	3/4	1,603.64	3/4	1,243.29	3/4	882.95	3/4	532.26	3/4	173.16	3/4		3/4	3/4	3/4		3/4	3/4
11	1,954.19	11	1,596.13	11	1,235.78	11	875.44	11	524.99	11	165.65	11		11	11	11		11	11
1/4	1,946.76	1/4	1,588.62	1/4	1,228.28	1/4	867.93	1/4	517.71	1/4	158.14	1/4		1/4	1/4	1/4		1/4	1/4
1/2	1,939.32	1/2	1,581.12	1/2	1,220.77	1/2	860.42	1/2	510.43	1/2	150.63	1/2		1/2	1/2	1/2		1/2	1/2
3/4	1,931.89	3/4	1,573.61	3/4	1,213.26	3/4	852.92	3/4	503.14	3/4	143.12	3/4		3/4	3/4	3/4		3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/16/2013 CL - SW
CALCULATED: 01/16/2013 CL
PRINTED: 01/18/2013 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2013

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