



BARGE "KIRBY 28160"

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

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

LENGTH BETWEEN DRAFT MARKS: 241'-06"

February 23, 2011

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

<http://www.pmacorp.net>



BARGE "KIRBY 28160"

1 PORT

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08"

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		0	4,521.84	0	4,190.01	0	3,834.31	0	3,468.18	0	3,102.05	0	2,735.93
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,515.16	1/4	4,182.80	1/4	3,826.68	1/4	3,460.55	1/4	3,094.43	1/4	2,728.30
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,833.73	1/2	4,508.47	1/2	4,175.59	1/2	3,819.05	1/2	3,452.92	1/2	3,086.80
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,828.10	3/4	4,501.79	3/4	4,168.38	3/4	3,811.42	3/4	3,445.29	3/4	3,079.17
1	1	1	1	1	1	1	1	1	4,822.46	1	4,495.10	1	4,161.17	1	3,803.79	1	3,437.67	1	3,071.54
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,815.64	1/4	4,488.38	1/4	4,153.92	1/4	3,796.16	1/4	3,430.04	1/4	3,063.91
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,808.81	1/2	4,481.67	1/2	4,146.67	1/2	3,788.54	1/2	3,422.41	1/2	3,056.29
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,801.98	3/4	4,474.95	3/4	4,139.42	3/4	3,780.91	3/4	3,414.78	3/4	3,048.66
2	2	2	2	2	2	2	2	2	4,795.15	2	4,468.23	2	4,132.17	2	3,773.28	2	3,407.16	2	3,041.03
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,787.69	1/4	4,461.48	1/4	4,124.89	1/4	3,765.65	1/4	3,399.53	1/4	3,033.40
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,780.23	1/2	4,454.72	1/2	4,117.60	1/2	3,758.03	1/2	3,391.90	1/2	3,025.78
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,772.76	3/4	4,447.97	3/4	4,110.31	3/4	3,750.40	3/4	3,384.27	3/4	3,018.15
3	3	3	3	3	3	3	3	3	4,765.30	3	4,441.22	3	4,103.03	3	3,742.77	3	3,376.65	3	3,010.52
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,757.76	1/4	4,434.42	1/4	4,095.70	1/4	3,735.14	1/4	3,369.02	1/4	3,002.89
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,750.21	1/2	4,427.63	1/2	4,088.38	1/2	3,727.52	1/2	3,361.39	1/2	2,995.27
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,742.67	3/4	4,420.84	3/4	4,081.06	3/4	3,719.89	3/4	3,353.76	3/4	2,987.64
4	4	4	4	4	4	4	4	4	4,735.13	4	4,414.05	4	4,073.74	4	3,712.26	4	3,346.14	4	2,980.01
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,727.86	1/4	4,407.22	1/4	4,066.39	1/4	3,704.63	1/4	3,338.51	1/4	2,972.38
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,720.60	1/2	4,400.40	1/2	4,059.03	1/2	3,697.01	1/2	3,330.88	1/2	2,964.76
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,713.34	3/4	4,393.57	3/4	4,051.68	3/4	3,689.38	3/4	3,323.25	3/4	2,957.13
5	5	5	5	5	5	5	5	5	4,706.07	5	4,386.74	5	4,044.32	5	3,681.75	5	3,315.63	5	2,949.50
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,699.36	1/4	4,379.87	1/4	4,036.93	1/4	3,674.12	1/4	3,308.00	1/4	2,941.87
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,692.64	1/2	4,373.01	1/2	4,029.54	1/2	3,666.50	1/2	3,300.37	1/2	2,934.25
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,685.93	3/4	4,366.14	3/4	4,022.16	3/4	3,658.87	3/4	3,292.74	3/4	2,926.62
6	6	6	6	6	6	6	6	6	4,679.21	6	4,359.28	6	4,014.77	6	3,651.24	6	3,285.12	6	2,918.99
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,672.75	1/4	4,352.38	1/4	4,007.34	1/4	3,643.61	1/4	3,277.49	1/4	2,911.36
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,666.29	1/2	4,345.47	1/2	3,999.91	1/2	3,635.98	1/2	3,269.86	1/2	2,903.74
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,659.82	3/4	4,338.57	3/4	3,992.49	3/4	3,628.36	3/4	3,262.23	3/4	2,896.11
7	7	7	7	7	7	7	7	7	4,653.36	7	4,331.67	7	3,985.06	7	3,620.73	7	3,254.60	7	2,888.48
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,646.86	1/4	4,324.71	1/4	3,977.60	1/4	3,613.10	1/4	3,246.98	1/4	2,880.85
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,640.36	1/2	4,317.74	1/2	3,970.13	1/2	3,605.47	1/2	3,239.35	1/2	2,873.22
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,633.86	3/4	4,310.78	3/4	3,962.67	3/4	3,597.85	3/4	3,231.72	3/4	2,865.60
8	8	8	8	8	8	8	8	8	4,627.35	8	4,303.82	8	3,955.20	8	3,590.22	8	3,224.09	8	2,857.97
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,620.82	1/4	4,296.78	1/4	3,947.70	1/4	3,582.59	1/4	3,216.47	1/4	2,850.34
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,614.28	1/2	4,289.74	1/2	3,940.20	1/2	3,574.96	1/2	3,208.84	1/2	2,842.71
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,607.74	3/4	4,282.70	3/4	3,932.70	3/4	3,567.34	3/4	3,201.21	3/4	2,835.09
9	9	9	9	9	9	9	9	9	4,601.20	9	4,275.66	9	3,925.20	9	3,559.71	9	3,193.58	9	2,827.46
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,594.63	1/4	4,268.56	1/4	3,917.66	1/4	3,552.08	1/4	3,185.96	1/4	2,819.83
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,588.05	1/2	4,261.46	1/2	3,910.12	1/2	3,544.45	1/2	3,178.33	1/2	2,812.20
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,581.47	3/4	4,254.36	3/4	3,902.58	3/4	3,536.83	3/4	3,170.70	3/4	2,804.58
10	10	10	10	10	10	10	10	10	4,574.90	10	4,247.26	10	3,895.04	10	3,529.20	10	3,163.07	10	2,796.95
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,568.29	1/4	4,240.12	1/4	3,887.47	1/4	3,521.57	1/4	3,155.45	1/4	2,789.32
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,561.67	1/2	4,232.99	1/2	3,879.89	1/2	3,513.94	1/2	3,147.82	1/2	2,781.69
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,555.06	3/4	4,225.85	3/4	3,872.31	3/4	3,506.32	3/4	3,140.19	3/4	2,774.07
11	11	11	11	11	11	11	11	11	4,548.45	11	4,218.71	11	3,864.74	11	3,498.69	11	3,132.56	11	2,766.44
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,541.80	1/4	4,211.54	1/4	3,857.13	1/4	3,491.06	1/4	3,124.94	1/4	2,758.81
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,535.15	1/2	4,204.36	1/2	3,849.52	1/2	3,483.43	1/2	3,117.31	1/2	2,751.18
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,528.49	3/4	4,197.19	3/4	3,841.91	3/4	3,475.81	3/4	3,109.68	3/4	2,743.56

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'-09" OFF CENTERLINE AND 52'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

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BARGE "KIRBY 28160"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08"

	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		IN
0	2,369.80	0	2,003.68	0	1,637.54	0	1,272.05	0	907.96	0	542.25	0	194.82	0		0		0		
1/4	2,362.18	1/4	1,996.05	1/4	1,629.91	1/4	1,264.42	1/4	900.39	1/4	534.62	1/4	188.12	1/4			1/4		1/4	
1/2	2,354.55	1/2	1,988.43	1/2	1,622.29	1/2	1,256.80	1/2	892.82	1/2	527.00	1/2	181.43	1/2			1/2		1/2	
3/4	2,346.92	3/4	1,980.80	3/4	1,614.66	3/4	1,249.17	3/4	885.25	3/4	519.37	3/4	174.73	3/4			3/4		3/4	
1	2,339.29	1	1,973.17	1	1,607.03	1	1,241.54	1	877.68	1	511.74	1	168.04	1			1		1	
1/4	2,331.67	1/4	1,965.55	1/4	1,599.40	1/4	1,233.91	1/4	870.09	1/4	504.13	1/4	161.43	1/4			1/4		1/4	
1/2	2,324.04	1/2	1,957.92	1/2	1,591.77	1/2	1,226.28	1/2	862.50	1/2	496.52	1/2	154.82	1/2			1/2		1/2	
3/4	2,316.41	3/4	1,950.29	3/4	1,584.15	3/4	1,218.65	3/4	854.92	3/4	488.92	3/4	148.21	3/4			3/4		3/4	
2	2,308.78	2	1,942.66	2	1,576.52	2	1,211.02	2	847.33	2	481.31	2	141.61	2			2		2	
1/4	2,301.15	1/4	1,935.03	1/4	1,568.89	1/4	1,203.41	1/4	839.72	1/4	473.77	1/4	135.09	1/4			1/4		1/4	
1/2	2,293.53	1/2	1,927.41	1/2	1,561.26	1/2	1,195.80	1/2	832.10	1/2	466.22	1/2	128.57	1/2			1/2		1/2	
3/4	2,285.90	3/4	1,919.78	3/4	1,553.63	3/4	1,188.18	3/4	824.49	3/4	458.68	3/4	122.06	3/4			3/4		3/4	
3	2,278.27	3	1,912.15	3	1,546.01	3	1,180.57	3	816.87	3	451.13	3	115.54	3			3		3	
1/4	2,270.64	1/4	1,904.52	1/4	1,538.38	1/4	1,172.98	1/4	809.25	1/4	443.67	1/4	109.12	1/4			1/4		1/4	
1/2	2,263.02	1/2	1,896.89	1/2	1,530.75	1/2	1,165.39	1/2	801.62	1/2	436.22	1/2	102.70	1/2			1/2		1/2	
3/4	2,255.39	3/4	1,889.27	3/4	1,523.12	3/4	1,157.81	3/4	793.99	3/4	428.76	3/4	96.28	3/4			3/4		3/4	
4	2,247.76	4	1,881.64	4	1,515.49	4	1,150.22	4	786.36	4	421.30	4	89.86	4			4		4	
1/4	2,240.13	1/4	1,874.01	1/4	1,507.87	1/4	1,142.65	1/4	778.73	1/4	413.92	1/4	83.55	1/4			1/4		1/4	
1/2	2,232.51	1/2	1,866.38	1/2	1,500.24	1/2	1,135.08	1/2	771.10	1/2	406.55	1/2	77.23	1/2			1/2		1/2	
3/4	2,224.88	3/4	1,858.75	3/4	1,492.61	3/4	1,127.50	3/4	763.48	3/4	399.17	3/4	70.92	3/4			3/4		3/4	
5	2,217.25	5	1,851.13	5	1,484.98	5	1,119.93	5	755.85	5	391.80	5	64.60	5			5		5	
1/4	2,209.62	1/4	1,843.50	1/4	1,477.37	1/4	1,112.36	1/4	748.22	1/4	384.51	1/4	58.41	1/4			1/4		1/4	
1/2	2,202.00	1/2	1,835.87	1/2	1,469.75	1/2	1,104.79	1/2	740.59	1/2	377.22	1/2	52.21	1/2			1/2		1/2	
3/4	2,194.37	3/4	1,828.24	3/4	1,462.14	3/4	1,097.22	3/4	732.96	3/4	369.93	3/4	46.01	3/4			3/4		3/4	
6	2,186.74	6	1,820.61	6	1,454.52	6	1,089.65	6	725.34	6	362.64	6	39.82	6			6		6	
1/4	2,179.11	1/4	1,812.99	1/4	1,446.92	1/4	1,082.08	1/4	717.71	1/4	355.44	1/4	34.32	1/4			1/4		1/4	
1/2	2,171.49	1/2	1,805.36	1/2	1,439.32	1/2	1,074.51	1/2	710.08	1/2	348.23	1/2	28.81	1/2			1/2		1/2	
3/4	2,163.86	3/4	1,797.73	3/4	1,431.72	3/4	1,066.94	3/4	702.45	3/4	341.03	3/4	23.31	3/4			3/4		3/4	
7	2,156.23	7	1,790.10	7	1,424.12	7	1,059.37	7	694.82	7	333.82	7	17.81	7			7		7	
1/4	2,148.60	1/4	1,782.47	1/4	1,416.52	1/4	1,051.80	1/4	687.19	1/4	326.70	1/4	14.26	1/4			1/4		1/4	
1/2	2,140.98	1/2	1,774.85	1/2	1,408.92	1/2	1,044.23	1/2	679.57	1/2	319.58	1/2	10.70	1/2			1/2		1/2	
3/4	2,133.35	3/4	1,767.22	3/4	1,401.32	3/4	1,036.66	3/4	671.94	3/4	312.46	3/4	7.14	3/4			3/4		3/4	
8	2,125.72	8	1,759.59	8	1,393.72	8	1,029.09	8	664.31	8	305.35	8	3.59	8			8		8	
1/4	2,118.09	1/4	1,751.96	1/4	1,386.12	1/4	1,021.52	1/4	656.68	1/4	298.31	1/4		1/4			1/4		1/4	
1/2	2,110.46	1/2	1,744.33	1/2	1,378.52	1/2	1,013.95	1/2	649.05	1/2	291.27	1/2		1/2			1/2		1/2	
3/4	2,102.84	3/4	1,736.71	3/4	1,370.92	3/4	1,006.38	3/4	641.43	3/4	284.24	3/4		3/4			3/4		3/4	
9	2,095.21	9	1,729.08	9	1,363.32	9	998.81	9	633.80	9	277.20	9		9			9		9	
1/4	2,087.58	1/4	1,721.45	1/4	1,355.72	1/4	991.24	1/4	626.17	1/4	270.25	1/4		1/4			1/4		1/4	
1/2	2,079.95	1/2	1,713.82	1/2	1,348.12	1/2	983.67	1/2	618.54	1/2	263.30	1/2		1/2			1/2		1/2	
3/4	2,072.33	3/4	1,706.19	3/4	1,340.52	3/4	976.10	3/4	610.91	3/4	256.35	3/4		3/4			3/4		3/4	
10	2,064.70	10	1,698.57	10	1,332.92	10	968.53	10	603.28	10	249.40	10		10			10		10	
1/4	2,057.07	1/4	1,690.94	1/4	1,325.31	1/4	960.96	1/4	595.65	1/4	242.54	1/4		1/4			1/4		1/4	
1/2	2,049.44	1/2	1,683.31	1/2	1,317.71	1/2	953.39	1/2	588.03	1/2	235.67	1/2		1/2			1/2		1/2	
3/4	2,041.82	3/4	1,675.68	3/4	1,310.11	3/4	945.82	3/4	580.40	3/4	228.81	3/4		3/4			3/4		3/4	
11	2,034.19	11	1,668.05	11	1,302.51	11	938.25	11	572.77	11	221.94	11		11			11		11	
1/4	2,026.56	1/4	1,660.43	1/4	1,294.90	1/4	930.68	1/4	565.14	1/4	215.16	1/4		1/4			1/4		1/4	
1/2	2,018.93	1/2	1,652.80	1/2	1,287.28	1/2	923.11	1/2	557.51	1/2	208.38	1/2		1/2			1/2		1/2	
3/4	2,011.31	3/4	1,645.17	3/4	1,279.67	3/4	915.53	3/4	549.88	3/4	201.60	3/4		3/4			3/4		3/4	

STRAPPED: 02/23/2011 CL - SW
CALCULATED: 02/23/2011 CL
PRINTED: 02/23/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "KIRBY 28160"

1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.		
0		0		0		0		0	4,530.42	0	4,199.08	0	3,843.77	0	3,477.63	0	3,111.45	0	2,745.28		
1/4		1/4		1/4		1/4		1/4	4,523.77	1/4	4,191.91	1/4	3,836.16	1/4	3,470.00	1/4	3,103.83	1/4	2,737.65		
1/2		1/2		1/2		1/2		1/2	4,517.09	1/2	4,184.69	1/2	3,828.53	1/2	3,462.37	1/2	3,096.20	1/2	2,730.02		
3/4		3/4		3/4		3/4		3/4	4,510.40	3/4	4,177.48	3/4	3,820.91	3/4	3,454.74	3/4	3,088.57	3/4	2,722.40		
1		1		1		1		1	4,503.71	1	4,170.27	1	3,813.28	1	3,447.11	1	3,080.94	1	2,714.77		
1/4		1/4		1/4		1/4		1/4	4,824.42	1/4	4,497.03	1/4	4,163.06	1/4	3,805.66	1/4	3,439.48	1/4	3,073.31	1/4	2,707.14
1/2		1/2		1/2		1/2		1/2	4,817.59	1/2	4,490.31	1/2	4,155.81	1/2	3,798.03	1/2	3,431.86	1/2	3,065.68	1/2	2,699.51
3/4		3/4		3/4		3/4		3/4	4,810.77	3/4	4,483.59	3/4	4,148.56	3/4	3,790.40	3/4	3,424.23	3/4	3,058.05	3/4	2,691.88
2		2		2		2		2	4,803.94	2	4,476.87	2	4,141.31	2	3,782.77	2	3,416.60	2	3,050.43	2	2,684.25
1/4		1/4		1/4		1/4		1/4	4,797.11	1/4	4,470.15	1/4	4,134.06	1/4	3,775.14	1/4	3,408.97	1/4	3,042.80	1/4	2,676.62
1/2		1/2		1/2		1/2		1/2	4,789.65	1/2	4,463.40	1/2	4,126.77	1/2	3,767.51	1/2	3,401.34	1/2	3,035.17	1/2	2,669.00
3/4		3/4		3/4		3/4		3/4	4,782.18	3/4	4,456.64	3/4	4,119.48	3/4	3,759.89	3/4	3,393.71	3/4	3,027.54	3/4	2,661.37
3		3		3		3		3	4,774.72	3	4,449.89	3	4,112.20	3	3,752.26	3	3,386.08	3	3,019.91	3	2,653.74
1/4		1/4		1/4		1/4		1/4	4,767.25	1/4	4,443.14	1/4	4,104.91	1/4	3,744.63	1/4	3,378.46	1/4	3,012.28	1/4	2,646.11
1/2		1/2		1/2		1/2		1/2	4,759.71	1/2	4,436.34	1/2	4,097.59	1/2	3,737.00	1/2	3,370.83	1/2	3,004.65	1/2	2,638.48
3/4		3/4		3/4		3/4		3/4	4,752.17	3/4	4,429.55	3/4	4,090.26	3/4	3,729.37	3/4	3,363.20	3/4	2,997.03	3/4	2,630.85
4		4		4		4		4	4,744.62	4	4,422.76	4	4,082.94	4	3,721.74	4	3,355.57	4	2,989.40	4	2,623.22
1/4		1/4		1/4		1/4		1/4	4,737.08	1/4	4,415.97	1/4	4,075.62	1/4	3,714.11	1/4	3,347.94	1/4	2,981.77	1/4	2,615.60
1/2		1/2		1/2		1/2		1/2	4,729.81	1/2	4,409.14	1/2	4,068.26	1/2	3,706.49	1/2	3,340.31	1/2	2,974.14	1/2	2,607.97
3/4		3/4		3/4		3/4		3/4	4,722.55	3/4	4,402.31	3/4	4,060.91	3/4	3,698.86	3/4	3,332.68	3/4	2,966.51	3/4	2,600.34
5		5		5		5		5	4,715.28	5	4,395.48	5	4,053.55	5	3,691.23	5	3,325.06	5	2,958.88	5	2,592.71
1/4		1/4		1/4		1/4		1/4	4,708.02	1/4	4,388.65	1/4	4,046.20	1/4	3,683.60	1/4	3,317.43	1/4	2,951.25	1/4	2,585.08
1/2		1/2		1/2		1/2		1/2	4,701.30	1/2	4,381.79	1/2	4,038.81	1/2	3,675.97	1/2	3,309.80	1/2	2,943.63	1/2	2,577.45
3/4		3/4		3/4		3/4		3/4	4,694.59	3/4	4,374.92	3/4	4,031.42	3/4	3,668.34	3/4	3,302.17	3/4	2,936.00	3/4	2,569.82
6		6		6		6		6	4,687.87	6	4,368.06	6	4,024.03	6	3,660.71	6	3,294.54	6	2,928.37	6	2,562.20
1/4		1/4		1/4		1/4		1/4	4,681.16	1/4	4,361.19	1/4	4,016.64	1/4	3,653.09	1/4	3,286.91	1/4	2,920.74	1/4	2,554.57
1/2		1/2		1/2		1/2		1/2	4,674.69	1/2	4,354.29	1/2	4,009.21	1/2	3,645.46	1/2	3,279.28	1/2	2,913.11	1/2	2,546.94
3/4		3/4		3/4		3/4		3/4	4,668.23	3/4	4,347.38	3/4	4,001.78	3/4	3,637.83	3/4	3,271.66	3/4	2,905.48	3/4	2,539.31
7		7		7		7		7	4,661.76	7	4,340.48	7	3,994.36	7	3,630.20	7	3,264.03	7	2,897.85	7	2,531.68
1/4		1/4		1/4		1/4		1/4	4,655.30	1/4	4,333.58	1/4	3,986.93	1/4	3,622.57	1/4	3,256.40	1/4	2,890.22	1/4	2,524.05
1/2		1/2		1/2		1/2		1/2	4,648.80	1/2	4,326.61	1/2	3,979.46	1/2	3,614.94	1/2	3,248.77	1/2	2,882.60	1/2	2,516.42
3/4		3/4		3/4		3/4		3/4	4,642.30	3/4	4,319.65	3/4	3,972.00	3/4	3,607.31	3/4	3,241.14	3/4	2,874.97	3/4	2,508.79
8		8		8		8		8	4,635.80	8	4,312.69	8	3,964.53	8	3,599.68	8	3,233.51	8	2,867.34	8	2,501.17
1/4		1/4		1/4		1/4		1/4	4,629.29	1/4	4,305.73	1/4	3,957.07	1/4	3,592.06	1/4	3,225.88	1/4	2,859.71	1/4	2,493.54
1/2		1/2		1/2		1/2		1/2	4,622.76	1/2	4,298.69	1/2	3,949.57	1/2	3,584.43	1/2	3,218.25	1/2	2,852.08	1/2	2,485.91
3/4		3/4		3/4		3/4		3/4	4,616.22	3/4	4,291.64	3/4	3,942.06	3/4	3,576.80	3/4	3,210.63	3/4	2,844.45	3/4	2,478.28
9		9		9		9		9	4,609.68	9	4,284.60	9	3,934.56	9	3,569.17	9	3,203.00	9	2,836.82	9	2,470.65
1/4		1/4		1/4		1/4		1/4	4,603.14	1/4	4,277.56	1/4	3,927.06	1/4	3,561.54	1/4	3,195.37	1/4	2,829.20	1/4	2,463.02
1/2		1/2		1/2		1/2		1/2	4,596.56	1/2	4,270.46	1/2	3,919.52	1/2	3,553.91	1/2	3,187.74	1/2	2,821.57	1/2	2,455.39
3/4		3/4		3/4		3/4		3/4	4,589.99	3/4	4,263.36	3/4	3,911.98	3/4	3,546.28	3/4	3,180.11	3/4	2,813.94	3/4	2,447.77
10		10		10		10		10	4,583.41	10	4,256.26	10	3,904.44	10	3,538.66	10	3,172.48	10	2,806.31	10	2,440.14
1/4		1/4		1/4		1/4		1/4	4,576.83	1/4	4,249.16	1/4	3,896.90	1/4	3,531.03	1/4	3,164.85	1/4	2,798.68	1/4	2,432.51
1/2		1/2		1/2		1/2		1/2	4,570.22	1/2	4,242.02	1/2	3,889.32	1/2	3,523.40	1/2	3,157.23	1/2	2,791.05	1/2	2,424.88
3/4		3/4		3/4		3/4		3/4	4,563.61	3/4	4,234.88	3/4	3,881.75	3/4	3,515.77	3/4	3,149.60	3/4	2,783.42	3/4	2,417.25
11		11		11		11		11	4,556.99	11	4,227.75	11	3,874.17	11	3,508.14	11	3,141.97	11	2,775.80	11	2,409.62
1/4		1/4		1/4		1/4		1/4	4,550.38	1/4	4,220.61	1/4	3,866.59	1/4	3,500.51	1/4	3,134.34	1/4	2,768.17	1/4	2,401.99
1/2		1/2		1/2		1/2		1/2	4,543.73	1/2	4,213.43	1/2	3,858.98	1/2	3,492.88	1/2	3,126.71	1/2	2,760.54	1/2	2,394.37
3/4		3/4		3/4		3/4		3/4	4,537.08	3/4	4,206.26	3/4	3,851.37	3/4	3,485.26	3/4	3,119.08	3/4	2,752.91	3/4	2,386.74

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'-09" OFF CENTERLINE AND 52'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
 & ANALYSIS, INC.
 P.O. Box 2092
 Pearland, Texas 77588
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BARGE "KIRBY 28160"

1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08 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	2,379.11	0	2,012.94	0	1,646.75	0	1,281.21	0	915.96	0	549.94	0	201.62	0		0		0	
1/4	2,371.48	1/4	2,005.31	1/4	1,639.13	1/4	1,273.59	1/4	908.36	1/4	542.31	1/4	194.84	1/4		1/4		1/4	
1/2	2,363.85	1/2	1,997.68	1/2	1,631.50	1/2	1,265.96	1/2	900.76	1/2	534.68	1/2	188.14	1/2		1/2		1/2	
3/4	2,356.22	3/4	1,990.05	3/4	1,623.87	3/4	1,258.34	3/4	893.15	3/4	527.05	3/4	181.45	3/4		3/4		3/4	
1	2,348.59	1	1,982.42	1	1,616.24	1	1,250.71	1	885.55	1	519.42	1	174.75	1		1		1	
1/4	2,340.97	1/4	1,974.80	1/4	1,608.61	1/4	1,243.08	1/4	877.95	1/4	511.79	1/4	168.05	1/4		1/4		1/4	
1/2	2,333.34	1/2	1,967.17	1/2	1,600.98	1/2	1,235.45	1/2	870.33	1/2	504.18	1/2	161.44	1/2		1/2		1/2	
3/4	2,325.71	3/4	1,959.54	3/4	1,593.35	3/4	1,227.82	3/4	862.72	3/4	496.58	3/4	154.84	3/4		3/4		3/4	
2	2,318.08	2	1,951.91	2	1,585.72	2	1,220.19	2	855.10	2	488.97	2	148.23	2		2		2	
1/4	2,310.45	1/4	1,944.28	1/4	1,578.09	1/4	1,212.56	1/4	847.48	1/4	481.36	1/4	141.62	1/4		1/4		1/4	
1/2	2,302.82	1/2	1,936.65	1/2	1,570.47	1/2	1,204.93	1/2	839.85	1/2	473.81	1/2	135.10	1/2		1/2		1/2	
3/4	2,295.19	3/4	1,929.02	3/4	1,562.84	3/4	1,197.30	3/4	832.22	3/4	466.27	3/4	128.58	3/4		3/4		3/4	
3	2,287.57	3	1,921.39	3	1,555.21	3	1,189.67	3	824.60	3	458.73	3	122.07	3		3		3	
1/4	2,279.94	1/4	1,913.77	1/4	1,547.58	1/4	1,182.04	1/4	816.97	1/4	451.18	1/4	115.55	1/4		1/4		1/4	
1/2	2,272.31	1/2	1,906.14	1/2	1,539.95	1/2	1,174.42	1/2	809.34	1/2	443.72	1/2	109.13	1/2		1/2		1/2	
3/4	2,264.68	3/4	1,898.51	3/4	1,532.32	3/4	1,166.81	3/4	801.71	3/4	436.26	3/4	102.71	3/4		3/4		3/4	
4	2,257.05	4	1,890.88	4	1,524.69	4	1,159.19	4	794.08	4	428.80	4	96.29	4		4		4	
1/4	2,249.42	1/4	1,883.25	1/4	1,517.06	1/4	1,151.57	1/4	786.45	1/4	421.34	1/4	89.87	1/4		1/4		1/4	
1/2	2,241.79	1/2	1,875.62	1/2	1,509.43	1/2	1,143.97	1/2	778.82	1/2	413.97	1/2	83.55	1/2		1/2		1/2	
3/4	2,234.17	3/4	1,867.99	3/4	1,501.81	3/4	1,136.37	3/4	771.19	3/4	406.59	3/4	77.24	3/4		3/4		3/4	
5	2,226.54	5	1,860.36	5	1,494.18	5	1,128.77	5	763.56	5	399.22	5	70.92	5		5		5	
1/4	2,218.91	1/4	1,852.73	1/4	1,486.55	1/4	1,121.17	1/4	755.93	1/4	391.84	1/4	64.61	1/4		1/4		1/4	
1/2	2,211.28	1/2	1,845.11	1/2	1,478.93	1/2	1,113.57	1/2	748.30	1/2	384.55	1/2	58.41	1/2		1/2		1/2	
3/4	2,203.65	3/4	1,837.48	3/4	1,471.32	3/4	1,105.97	3/4	740.67	3/4	377.26	3/4	52.21	3/4		3/4		3/4	
6	2,196.02	6	1,829.85	6	1,463.70	6	1,098.36	6	733.05	6	369.97	6	46.02	6		6		6	
1/4	2,188.39	1/4	1,822.22	1/4	1,456.09	1/4	1,090.76	1/4	725.42	1/4	362.68	1/4	39.82	1/4		1/4		1/4	
1/2	2,180.77	1/2	1,814.59	1/2	1,448.49	1/2	1,083.16	1/2	717.79	1/2	355.47	1/2	34.32	1/2		1/2		1/2	
3/4	2,173.14	3/4	1,806.96	3/4	1,440.89	3/4	1,075.56	3/4	710.16	3/4	348.27	3/4	28.82	3/4		3/4		3/4	
7	2,165.51	7	1,799.33	7	1,433.28	7	1,067.96	7	702.53	7	341.06	7	23.32	7		7		7	
1/4	2,157.88	1/4	1,791.70	1/4	1,425.68	1/4	1,060.36	1/4	694.90	1/4	333.86	1/4	17.81	1/4		1/4		1/4	
1/2	2,150.25	1/2	1,784.07	1/2	1,418.08	1/2	1,052.76	1/2	687.27	1/2	326.74	1/2	14.26	1/2		1/2		1/2	
3/4	2,142.62	3/4	1,776.45	3/4	1,410.48	3/4	1,045.16	3/4	679.64	3/4	319.62	3/4	10.70	3/4		3/4		3/4	
8	2,134.99	8	1,768.82	8	1,402.88	8	1,037.56	8	672.01	8	312.50	8	7.14	8		8		8	
1/4	2,127.36	1/4	1,761.19	1/4	1,395.28	1/4	1,029.96	1/4	664.38	1/4	305.37	1/4	3.58	1/4		1/4		1/4	
1/2	2,119.74	1/2	1,753.56	1/2	1,387.68	1/2	1,022.36	1/2	656.75	1/2	298.34	1/2		1/2		1/2		1/2	
3/4	2,112.11	3/4	1,745.93	3/4	1,380.07	3/4	1,014.76	3/4	649.12	3/4	291.30	3/4		3/4		3/4		3/4	
9	2,104.48	9	1,738.30	9	1,372.47	9	1,007.16	9	641.49	9	284.27	9		9		9		9	
1/4	2,096.85	1/4	1,730.67	1/4	1,364.87	1/4	999.56	1/4	633.87	1/4	277.23	1/4		1/4		1/4		1/4	
1/2	2,089.22	1/2	1,723.04	1/2	1,357.27	1/2	991.96	1/2	626.24	1/2	270.28	1/2		1/2		1/2		1/2	
3/4	2,081.59	3/4	1,715.41	3/4	1,349.67	3/4	984.36	3/4	618.61	3/4	263.33	3/4		3/4		3/4		3/4	
10	2,073.96	10	1,707.79	10	1,342.07	10	976.76	10	610.98	10	256.38	10		10		10		10	
1/4	2,066.34	1/4	1,700.16	1/4	1,334.46	1/4	969.16	1/4	603.35	1/4	249.43	1/4		1/4		1/4		1/4	
1/2	2,058.71	1/2	1,692.53	1/2	1,326.86	1/2	961.56	1/2	595.72	1/2	242.56	1/2		1/2		1/2		1/2	
3/4	2,051.08	3/4	1,684.90	3/4	1,319.26	3/4	953.96	3/4	588.09	3/4	235.70	3/4		3/4		3/4		3/4	
11	2,043.45	11	1,677.27	11	1,311.66	11	946.36	11	580.46	11	228.83	11		11		11		11	
1/4	2,035.82	1/4	1,669.64	1/4	1,304.06	1/4	938.76	1/4	572.83	1/4	221.96	1/4		1/4		1/4		1/4	
1/2	2,028.19	1/2	1,662.01	1/2	1,296.44	1/2	931.16	1/2	565.20	1/2	215.18	1/2		1/2		1/2		1/2	
3/4	2,020.56	3/4	1,654.38	3/4	1,288.83	3/4	923.56	3/4	557.57	3/4	208.40	3/4		3/4		3/4		3/4	

STRAPPED: 02/23/2011 CL - SW
CALCULATED: 02/23/2011 CL
PRINTED: 02/23/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
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BARGE "KIRBY 28160"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0		0	4,539.50	0	4,210.04	0	3,856.86	0	3,493.36	0	3,129.83	0	2,766.31
1/4		1/4		1/4		1/4		1/4	4,532.86	1/4	4,202.88	1/4	3,849.29	1/4	3,485.78	1/4	3,122.26	1/4	2,758.74
1/2		1/2		1/2		1/2		1/2	4,526.22	1/2	4,195.72	1/2	3,841.72	1/2	3,478.21	1/2	3,114.69	1/2	2,751.16
3/4		3/4		3/4		3/4		3/4	4,843.56	3/4	4,519.59	3/4	4,188.56	3/4	3,834.15	3/4	3,470.64	3/4	3,107.11
1		1		1		1		1	4,837.97	1	4,512.95	1	4,181.40	1	3,826.59	1	3,463.06	1	3,099.54
1/4		1/4		1/4		1/4		1/4	4,831.19	1/4	4,506.28	1/4	4,174.20	1/4	3,819.01	1/4	3,455.49	1/4	3,091.97
1/2		1/2		1/2		1/2		1/2	4,824.41	1/2	4,499.61	1/2	4,167.00	1/2	3,811.44	1/2	3,447.92	1/2	3,084.39
3/4		3/4		3/4		3/4		3/4	4,817.63	3/4	4,492.94	3/4	4,159.80	3/4	3,803.87	3/4	3,440.34	3/4	3,076.82
2		2		2		2		2	4,810.85	2	4,486.27	2	4,152.61	2	3,796.29	2	3,432.77	2	3,069.25
1/4		1/4		1/4		1/4		1/4	4,803.44	1/4	4,479.56	1/4	4,145.37	1/4	3,788.72	1/4	3,425.19	1/4	3,061.67
1/2		1/2		1/2		1/2		1/2	4,796.03	1/2	4,472.86	1/2	4,138.14	1/2	3,781.14	1/2	3,417.62	1/2	3,054.10
3/4		3/4		3/4		3/4		3/4	4,788.62	3/4	4,466.15	3/4	4,130.90	3/4	3,773.57	3/4	3,410.05	3/4	3,046.52
3		3		3		3		3	4,781.21	3	4,459.45	3	4,123.67	3	3,766.00	3	3,402.47	3	3,038.95
1/4		1/4		1/4		1/4		1/4	4,773.72	1/4	4,452.71	1/4	4,116.40	1/4	3,758.42	1/4	3,394.90	1/4	3,031.38
1/2		1/2		1/2		1/2		1/2	4,766.23	1/2	4,445.96	1/2	4,109.13	1/2	3,750.85	1/2	3,387.33	1/2	3,023.80
3/4		3/4		3/4		3/4		3/4	4,758.75	3/4	4,439.22	3/4	4,101.86	3/4	3,743.28	3/4	3,379.75	3/4	3,016.23
4		4		4		4		4	4,751.26	4	4,432.48	4	4,094.59	4	3,735.70	4	3,372.18	4	3,008.66
1/4		1/4		1/4		1/4		1/4	4,744.04	1/4	4,425.70	1/4	4,087.29	1/4	3,728.13	1/4	3,364.61	1/4	3,001.08
1/2		1/2		1/2		1/2		1/2	4,736.83	1/2	4,418.92	1/2	4,079.99	1/2	3,720.56	1/2	3,357.03	1/2	2,993.51
3/4		3/4		3/4		3/4		3/4	4,729.62	3/4	4,412.14	3/4	4,072.68	3/4	3,712.98	3/4	3,349.46	3/4	2,985.94
5		5		5		5		5	4,722.41	5	4,405.36	5	4,065.38	5	3,705.41	5	3,341.89	5	2,978.36
1/4		1/4		1/4		1/4		1/4	4,715.74	1/4	4,398.55	1/4	4,058.05	1/4	3,697.84	1/4	3,334.31	1/4	2,970.79
1/2		1/2		1/2		1/2		1/2	4,709.08	1/2	4,391.73	1/2	4,050.71	1/2	3,690.26	1/2	3,326.74	1/2	2,963.22
3/4		3/4		3/4		3/4		3/4	4,702.41	3/4	4,384.91	3/4	4,043.37	3/4	3,682.69	3/4	3,319.17	3/4	2,955.64
6		6		6		6		6	4,695.74	6	4,378.10	6	4,036.04	6	3,675.12	6	3,311.59	6	2,948.07
1/4		1/4		1/4		1/4		1/4	4,689.33	1/4	4,371.24	1/4	4,028.66	1/4	3,667.54	1/4	3,304.02	1/4	2,940.50
1/2		1/2		1/2		1/2		1/2	4,682.91	1/2	4,364.39	1/2	4,021.29	1/2	3,659.97	1/2	3,296.45	1/2	2,932.92
3/4		3/4		3/4		3/4		3/4	4,676.49	3/4	4,357.54	3/4	4,013.91	3/4	3,652.40	3/4	3,288.87	3/4	2,925.35
7		7		7		7		7	4,670.07	7	4,350.68	7	4,006.54	7	3,644.82	7	3,281.30	7	2,917.78
1/4		1/4		1/4		1/4		1/4	4,663.62	1/4	4,343.77	1/4	3,999.13	1/4	3,637.25	1/4	3,273.73	1/4	2,910.20
1/2		1/2		1/2		1/2		1/2	4,657.16	1/2	4,336.86	1/2	3,991.72	1/2	3,629.68	1/2	3,266.15	1/2	2,902.63
3/4		3/4		3/4		3/4		3/4	4,650.71	3/4	4,329.95	3/4	3,984.31	3/4	3,622.10	3/4	3,258.58	3/4	2,895.06
8		8		8		8		8	4,644.26	8	4,323.04	8	3,976.90	8	3,614.53	8	3,251.01	8	2,887.48
1/4		1/4		1/4		1/4		1/4	4,637.76	1/4	4,316.05	1/4	3,969.45	1/4	3,606.96	1/4	3,243.43	1/4	2,879.91
1/2		1/2		1/2		1/2		1/2	4,631.27	1/2	4,309.06	1/2	3,962.00	1/2	3,599.38	1/2	3,235.86	1/2	2,872.34
3/4		3/4		3/4		3/4		3/4	4,624.78	3/4	4,302.07	3/4	3,954.55	3/4	3,591.81	3/4	3,228.29	3/4	2,864.76
9		9		9		9		9	4,618.29	9	4,295.07	9	3,947.10	9	3,584.24	9	3,220.71	9	2,857.19
1/4		1/4		1/4		1/4		1/4	4,611.76	1/4	4,288.03	1/4	3,939.62	1/4	3,576.66	1/4	3,213.14	1/4	2,849.62
1/2		1/2		1/2		1/2		1/2	4,605.23	1/2	4,280.98	1/2	3,932.13	1/2	3,569.09	1/2	3,205.57	1/2	2,842.04
3/4		3/4		3/4		3/4		3/4	4,598.70	3/4	4,273.93	3/4	3,924.65	3/4	3,561.52	3/4	3,197.99	3/4	2,834.47
10		10		10		10		10	4,592.17	10	4,266.88	10	3,917.16	10	3,553.94	10	3,190.42	10	2,826.90
1/4		1/4		1/4		1/4		1/4	4,585.61	1/4	4,259.79	1/4	3,909.64	1/4	3,546.37	1/4	3,182.85	1/4	2,819.32
1/2		1/2		1/2		1/2		1/2	4,579.04	1/2	4,252.70	1/2	3,902.12	1/2	3,538.80	1/2	3,175.27	1/2	2,811.75
3/4		3/4		3/4		3/4		3/4	4,572.48	3/4	4,245.62	3/4	3,894.60	3/4	3,531.22	3/4	3,167.70	3/4	2,804.18
11		11		11		11		11	4,565.91	11	4,238.53	11	3,887.07	11	3,523.65	11	3,160.13	11	2,796.60
1/4		1/4		1/4		1/4		1/4	4,559.31	1/4	4,231.41	1/4	3,879.52	1/4	3,516.08	1/4	3,152.55	1/4	2,789.03
1/2		1/2		1/2		1/2		1/2	4,552.71	1/2	4,224.29	1/2	3,871.97	1/2	3,508.50	1/2	3,144.98	1/2	2,781.46
3/4		3/4		3/4		3/4		3/4	4,546.10	3/4	4,217.16	3/4	3,864.41	3/4	3,500.93	3/4	3,137.41	3/4	2,773.88

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'-09" OFF CENTERLINE AND 52'-09" 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 "KIRBY 28160"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08"

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	2,402.79	0	2,039.26	0	1,675.73	0	1,316.08	0	964.94	0	605.76	0	242.19	0		0			
1/4	2,395.21	1/4	2,031.69	1/4	1,668.16	1/4	1,308.50	1/4	957.69	1/4	598.19	1/4	234.62	1/4		1/4			
1/2	2,387.64	1/2	2,024.12	1/2	1,660.58	1/2	1,300.93	1/2	950.45	1/2	590.61	1/2	227.04	1/2		1/2			
3/4	2,380.07	3/4	2,016.54	3/4	1,653.01	3/4	1,293.35	3/4	943.20	3/4	583.04	3/4	219.47	3/4		3/4			
1	2,372.49	1	2,008.97	1	1,645.44	1	1,285.78	1	935.96	1	575.47	1	211.90	1		1			
1/4	2,364.92	1/4	2,001.40	1/4	1,637.86	1/4	1,278.21	1/4	928.70	1/4	567.89	1/4	204.32	1/4		1/4			
1/2	2,357.35	1/2	1,993.82	1/2	1,630.29	1/2	1,270.63	1/2	921.44	1/2	560.32	1/2	196.75	1/2		1/2			
3/4	2,349.77	3/4	1,986.25	3/4	1,622.72	3/4	1,263.06	3/4	914.18	3/4	552.74	3/4	189.18	3/4		3/4			
2	2,342.20	2	1,978.67	2	1,615.14	2	1,255.48	2	906.91	2	545.17	2	181.61	2		2			
1/4	2,334.63	1/4	1,971.10	1/4	1,607.57	1/4	1,248.06	1/4	899.64	1/4	537.59	1/4	174.04	1/4		1/4			
1/2	2,327.05	1/2	1,963.53	1/2	1,599.99	1/2	1,240.64	1/2	892.37	1/2	530.02	1/2	166.48	1/2		1/2			
3/4	2,319.48	3/4	1,955.95	3/4	1,592.42	3/4	1,233.21	3/4	885.10	3/4	522.44	3/4	158.91	3/4		3/4			
3	2,311.91	3	1,948.38	3	1,584.85	3	1,225.79	3	877.82	3	514.87	3	151.35	3		3			
1/4	2,304.33	1/4	1,940.81	1/4	1,577.27	1/4	1,218.53	1/4	870.40	1/4	507.30	1/4	143.80	1/4		1/4			
1/2	2,296.76	1/2	1,933.23	1/2	1,569.70	1/2	1,211.27	1/2	862.98	1/2	499.72	1/2	136.24	1/2		1/2			
3/4	2,289.18	3/4	1,925.66	3/4	1,562.13	3/4	1,204.01	3/4	855.56	3/4	492.15	3/4	128.69	3/4		3/4			
4	2,281.61	4	1,918.09	4	1,554.55	4	1,196.75	4	848.13	4	484.57	4	121.14	4		4			
1/4	2,274.04	1/4	1,910.51	1/4	1,547.06	1/4	1,189.50	1/4	840.56	1/4	477.00	1/4	113.61	1/4		1/4			
1/2	2,266.46	1/2	1,902.94	1/2	1,539.57	1/2	1,182.26	1/2	832.98	1/2	469.42	1/2	106.07	1/2		1/2			
3/4	2,258.89	3/4	1,895.36	3/4	1,532.07	3/4	1,175.01	3/4	825.41	3/4	461.85	3/4	98.54	3/4		3/4			
5	2,251.32	5	1,887.79	5	1,524.58	5	1,167.77	5	817.84	5	454.27	5	91.01	5		5			
1/4	2,243.74	1/4	1,880.22	1/4	1,517.17	1/4	1,160.52	1/4	810.26	1/4	446.70	1/4	83.51	1/4		1/4			
1/2	2,236.17	1/2	1,872.64	1/2	1,509.76	1/2	1,153.28	1/2	802.69	1/2	439.13	1/2	76.01	1/2		1/2			
3/4	2,228.60	3/4	1,865.07	3/4	1,502.35	3/4	1,146.03	3/4	795.11	3/4	431.55	3/4	68.51	3/4		3/4			
6	2,221.02	6	1,857.50	6	1,494.94	6	1,138.79	6	787.54	6	423.98	6	61.01	6		6			
1/4	2,213.45	1/4	1,849.92	1/4	1,487.52	1/4	1,131.55	1/4	779.97	1/4	416.40	1/4	54.12	1/4		1/4			
1/2	2,205.88	1/2	1,842.35	1/2	1,480.11	1/2	1,124.30	1/2	772.39	1/2	408.83	1/2	47.22	1/2		1/2			
3/4	2,198.30	3/4	1,834.78	3/4	1,472.70	3/4	1,117.06	3/4	764.82	3/4	401.25	3/4	40.33	3/4		3/4			
7	2,190.73	7	1,827.20	7	1,465.29	7	1,109.81	7	757.24	7	393.68	7	33.44	7		7			
1/4	2,183.16	1/4	1,819.63	1/4	1,457.88	1/4	1,102.57	1/4	749.67	1/4	386.11	1/4	28.39	1/4		1/4			
1/2	2,175.58	1/2	1,812.06	1/2	1,450.47	1/2	1,095.33	1/2	742.10	1/2	378.53	1/2	23.34	1/2		1/2			
3/4	2,168.01	3/4	1,804.48	3/4	1,443.05	3/4	1,088.08	3/4	734.52	3/4	370.96	3/4	18.29	3/4		3/4			
8	2,160.44	8	1,796.91	8	1,435.64	8	1,080.84	8	726.95	8	363.38	8	13.25	8		8			
1/4	2,152.86	1/4	1,789.33	1/4	1,428.23	1/4	1,073.60	1/4	719.37	1/4	355.81	1/4		1/4		1/4			
1/2	2,145.29	1/2	1,781.76	1/2	1,420.82	1/2	1,066.35	1/2	711.80	1/2	348.23	1/2		1/2		1/2			
3/4	2,137.72	3/4	1,774.19	3/4	1,413.41	3/4	1,059.11	3/4	704.23	3/4	340.66	3/4		3/4		3/4			
9	2,130.14	9	1,766.61	9	1,406.00	9	1,051.86	9	696.65	9	333.08	9		9		9			
1/4	2,122.57	1/4	1,759.04	1/4	1,398.58	1/4	1,044.62	1/4	689.08	1/4	325.51	1/4		1/4		1/4			
1/2	2,115.00	1/2	1,751.47	1/2	1,391.17	1/2	1,037.38	1/2	681.51	1/2	317.94	1/2		1/2		1/2			
3/4	2,107.42	3/4	1,743.89	3/4	1,383.76	3/4	1,030.13	3/4	673.93	3/4	310.36	3/4		3/4		3/4			
10	2,099.85	10	1,736.32	10	1,376.35	10	1,022.89	10	666.36	10	302.79	10		10		10			
1/4	2,092.28	1/4	1,728.75	1/4	1,368.85	1/4	1,015.65	1/4	658.78	1/4	295.21	1/4		1/4		1/4			
1/2	2,084.70	1/2	1,721.17	1/2	1,361.36	1/2	1,008.40	1/2	651.21	1/2	287.64	1/2		1/2		1/2			
3/4	2,077.13	3/4	1,713.60	3/4	1,353.87	3/4	1,001.16	3/4	643.63	3/4	280.06	3/4		3/4		3/4			
11	2,069.56	11	1,706.02	11	1,346.37	11	993.91	11	636.06	11	272.49	11		11		11			
1/4	2,061.98	1/4	1,698.45	1/4	1,338.80	1/4	986.67	1/4	628.49	1/4	264.91	1/4		1/4		1/4			
1/2	2,054.41	1/2	1,690.88	1/2	1,331.23	1/2	979.43	1/2	620.91	1/2	257.34	1/2		1/2		1/2			
3/4	2,046.84	3/4	1,683.30	3/4	1,323.65	3/4	972.18	3/4	613.34	3/4	249.77	3/4		3/4		3/4			

STRAPPED: 02/23/2011 CL - SW
CALCULATED: 02/23/2011 CL
PRINTED: 02/23/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "KIRBY 28160"

2 STBD

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0		0	4,553.55	0	4,224.20	0	3,871.14	0	3,507.77	0	3,144.38	0	2,780.98
1/4		1/4		1/4		1/4		1/4	4,546.91	1/4	4,217.04	1/4	3,863.58	1/4	3,500.20	1/4	3,136.81	1/4	2,773.41
1/2		1/2		1/2		1/2		1/2	4,540.28	1/2	4,209.88	1/2	3,856.01	1/2	3,492.63	1/2	3,129.24	1/2	2,765.84
3/4		3/4		3/4		3/4		3/4	4,533.64	3/4	4,202.73	3/4	3,848.45	3/4	3,485.06	3/4	3,121.67	3/4	2,758.27
1		1		1		1	4,851.92	1	4,527.01	1	4,195.57	1	3,840.88	1	3,477.49	1	3,114.09	1	2,750.70
1/4		1/4		1/4		1/4	4,845.14	1/4	4,520.34	1/4	4,188.37	1/4	3,833.31	1/4	3,469.92	1/4	3,106.52	1/4	2,743.13
1/2		1/2		1/2		1/2	4,838.36	1/2	4,513.67	1/2	4,181.18	1/2	3,825.74	1/2	3,462.35	1/2	3,098.95	1/2	2,735.56
3/4		3/4		3/4		3/4	4,831.59	3/4	4,507.00	3/4	4,173.98	3/4	3,818.17	3/4	3,454.78	3/4	3,091.38	3/4	2,727.99
2		2		2		2	4,824.81	2	4,500.33	2	4,166.79	2	3,810.60	2	3,447.21	2	3,083.81	2	2,720.42
1/4		1/4		1/4		1/4	4,817.40	1/4	4,493.63	1/4	4,159.56	1/4	3,803.03	1/4	3,439.63	1/4	3,076.24	1/4	2,712.85
1/2		1/2		1/2		1/2	4,809.99	1/2	4,486.93	1/2	4,152.32	1/2	3,795.46	1/2	3,432.06	1/2	3,068.67	1/2	2,705.28
3/4		3/4		3/4		3/4	4,802.58	3/4	4,480.23	3/4	4,145.09	3/4	3,787.89	3/4	3,424.49	3/4	3,061.10	3/4	2,697.71
3		3		3		3	4,795.18	3	4,473.52	3	4,137.86	3	3,780.32	3	3,416.92	3	3,053.53	3	2,690.14
1/4		1/4		1/4		1/4	4,787.69	1/4	4,466.78	1/4	4,130.59	1/4	3,772.75	1/4	3,409.35	1/4	3,045.96	1/4	2,682.56
1/2		1/2		1/2		1/2	4,780.20	1/2	4,460.04	1/2	4,123.33	1/2	3,765.17	1/2	3,401.78	1/2	3,038.39	1/2	2,674.99
3/4		3/4		3/4		3/4	4,772.72	3/4	4,453.30	3/4	4,116.06	3/4	3,757.60	3/4	3,394.21	3/4	3,030.82	3/4	2,667.42
4		4		4		4	4,765.23	4	4,446.56	4	4,108.79	4	3,750.03	4	3,386.64	4	3,023.25	4	2,659.85
1/4		1/4		1/4		1/4	4,758.02	1/4	4,439.79	1/4	4,101.49	1/4	3,742.46	1/4	3,379.07	1/4	3,015.68	1/4	2,652.28
1/2		1/2		1/2		1/2	4,750.81	1/2	4,433.01	1/2	4,094.19	1/2	3,734.89	1/2	3,371.50	1/2	3,008.10	1/2	2,644.71
3/4		3/4		3/4		3/4	4,743.60	3/4	4,426.23	3/4	4,086.89	3/4	3,727.32	3/4	3,363.93	3/4	3,000.53	3/4	2,637.14
5		5		5		5	4,736.40	5	4,419.46	5	4,079.59	5	3,719.75	5	3,356.36	5	2,992.96	5	2,629.57
1/4		1/4		1/4		1/4	4,729.73	1/4	4,412.64	1/4	4,072.26	1/4	3,712.18	1/4	3,348.79	1/4	2,985.39	1/4	2,622.00
1/2		1/2		1/2		1/2	4,723.07	1/2	4,405.83	1/2	4,064.93	1/2	3,704.61	1/2	3,341.22	1/2	2,977.82	1/2	2,614.43
3/4		3/4		3/4		3/4	4,716.40	3/4	4,399.01	3/4	4,057.59	3/4	3,697.04	3/4	3,333.64	3/4	2,970.25	3/4	2,606.86
6		6		6		6	4,709.74	6	4,392.20	6	4,050.26	6	3,689.47	6	3,326.07	6	2,962.68	6	2,599.29
1/4		1/4		1/4		1/4	4,703.32	1/4	4,385.35	1/4	4,042.89	1/4	3,681.90	1/4	3,318.50	1/4	2,955.11	1/4	2,591.72
1/2		1/2		1/2		1/2	4,696.91	1/2	4,378.50	1/2	4,035.51	1/2	3,674.33	1/2	3,310.93	1/2	2,947.54	1/2	2,584.15
3/4		3/4		3/4		3/4	4,690.49	3/4	4,371.65	3/4	4,028.14	3/4	3,666.76	3/4	3,303.36	3/4	2,939.97	3/4	2,576.57
7		7		7		7	4,684.08	7	4,364.80	7	4,020.77	7	3,659.18	7	3,295.79	7	2,932.40	7	2,569.00
1/4		1/4		1/4		1/4	4,677.62	1/4	4,357.89	1/4	4,013.36	1/4	3,651.61	1/4	3,288.22	1/4	2,924.83	1/4	2,561.43
1/2		1/2		1/2		1/2	4,671.17	1/2	4,350.98	1/2	4,005.96	1/2	3,644.04	1/2	3,280.65	1/2	2,917.26	1/2	2,553.86
3/4		3/4		3/4		3/4	4,664.72	3/4	4,344.07	3/4	3,998.55	3/4	3,636.47	3/4	3,273.08	3/4	2,909.69	3/4	2,546.29
8		8		8		8	4,658.27	8	4,337.16	8	3,991.14	8	3,628.90	8	3,265.51	8	2,902.11	8	2,538.72
1/4		1/4		1/4		1/4	4,651.78	1/4	4,330.17	1/4	3,983.69	1/4	3,621.33	1/4	3,257.94	1/4	2,894.54	1/4	2,531.15
1/2		1/2		1/2		1/2	4,645.29	1/2	4,323.18	1/2	3,976.25	1/2	3,613.76	1/2	3,250.37	1/2	2,886.97	1/2	2,523.58
3/4		3/4		3/4		3/4	4,638.80	3/4	4,316.19	3/4	3,968.80	3/4	3,606.19	3/4	3,242.80	3/4	2,879.40	3/4	2,516.01
9		9		9		9	4,632.31	9	4,309.21	9	3,961.36	9	3,598.62	9	3,235.23	9	2,871.83	9	2,508.44
1/4		1/4		1/4		1/4	4,625.78	1/4	4,302.16	1/4	3,953.87	1/4	3,591.05	1/4	3,227.65	1/4	2,864.26	1/4	2,500.87
1/2		1/2		1/2		1/2	4,619.26	1/2	4,295.11	1/2	3,946.39	1/2	3,583.48	1/2	3,220.08	1/2	2,856.69	1/2	2,493.30
3/4		3/4		3/4		3/4	4,612.73	3/4	4,288.07	3/4	3,938.91	3/4	3,575.91	3/4	3,212.51	3/4	2,849.12	3/4	2,485.73
10		10		10		10	4,606.20	10	4,281.02	10	3,931.43	10	3,568.34	10	3,204.94	10	2,841.55	10	2,478.16
1/4		1/4		1/4		1/4	4,599.64	1/4	4,273.93	1/4	3,923.91	1/4	3,560.77	1/4	3,197.37	1/4	2,833.98	1/4	2,470.58
1/2		1/2		1/2		1/2	4,593.08	1/2	4,266.85	1/2	3,916.39	1/2	3,553.19	1/2	3,189.80	1/2	2,826.41	1/2	2,463.01
3/4		3/4		3/4		3/4	4,586.51	3/4	4,259.77	3/4	3,908.87	3/4	3,545.62	3/4	3,182.23	3/4	2,818.84	3/4	2,455.44
11		11		11		11	4,579.95	11	4,252.68	11	3,901.35	11	3,538.05	11	3,174.66	11	2,811.27	11	2,447.87
1/4		1/4		1/4		1/4	4,573.35	1/4	4,245.56	1/4	3,893.80	1/4	3,530.48	1/4	3,167.09	1/4	2,803.70	1/4	2,440.30
1/2		1/2		1/2		1/2	4,566.75	1/2	4,238.44	1/2	3,886.25	1/2	3,522.91	1/2	3,159.52	1/2	2,796.12	1/2	2,432.73
3/4		3/4		3/4		3/4	4,560.15	3/4	4,231.32	3/4	3,878.70	3/4	3,515.34	3/4	3,151.95	3/4	2,788.55	3/4	2,425.16

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'-09" OFF CENTERLINE AND 52'-09" 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 "KIRBY 28160"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-08"

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	2,417.59	0	2,054.20	0	1,690.79	0	1,331.27	0	968.81	0	605.55	0	242.11	0					
1/4	2,410.02	1/4	2,046.63	1/4	1,683.22	1/4	1,323.70	1/4	961.27	1/4	597.98	1/4	234.53	1/4					
1/2	2,402.45	1/2	2,039.05	1/2	1,675.65	1/2	1,316.13	1/2	953.72	1/2	590.40	1/2	226.96	1/2					
3/4	2,394.88	3/4	2,031.48	3/4	1,668.08	3/4	1,308.55	3/4	946.18	3/4	582.83	3/4	219.39	3/4					
1	2,387.31	1	2,023.91	1	1,660.51	1	1,300.98	1	938.63	1	575.26	1	211.82	1					
1/4	2,379.74	1/4	2,016.34	1/4	1,652.94	1/4	1,293.41	1/4	931.08	1/4	567.69	1/4	204.25	1/4					
1/2	2,372.17	1/2	2,008.77	1/2	1,645.37	1/2	1,285.84	1/2	923.52	1/2	560.12	1/2	196.68	1/2					
3/4	2,364.60	3/4	2,001.20	3/4	1,637.80	3/4	1,278.27	3/4	915.96	3/4	552.54	3/4	189.11	3/4					
2	2,357.02	2	1,993.63	2	1,630.23	2	1,270.70	2	908.40	2	544.97	2	181.54	2					
1/4	2,349.45	1/4	1,986.06	1/4	1,622.66	1/4	1,263.12	1/4	900.83	1/4	537.40	1/4	173.98	1/4					
1/2	2,341.88	1/2	1,978.49	1/2	1,615.08	1/2	1,255.55	1/2	893.26	1/2	529.83	1/2	166.42	1/2					
3/4	2,334.31	3/4	1,970.92	3/4	1,607.51	3/4	1,247.98	3/4	885.68	3/4	522.26	3/4	158.86	3/4					
3	2,326.74	3	1,963.35	3	1,599.94	3	1,240.41	3	878.11	3	514.69	3	151.30	3					
1/4	2,319.17	1/4	1,955.78	1/4	1,592.37	1/4	1,232.85	1/4	870.54	1/4	507.11	1/4	143.75	1/4					
1/2	2,311.60	1/2	1,948.20	1/2	1,584.80	1/2	1,225.29	1/2	862.97	1/2	499.54	1/2	136.20	1/2					
3/4	2,304.03	3/4	1,940.63	3/4	1,577.23	3/4	1,217.73	3/4	855.40	3/4	491.97	3/4	128.65	3/4					
4	2,296.46	4	1,933.06	4	1,569.66	4	1,210.17	4	847.83	4	484.40	4	121.10	4					
1/4	2,288.89	1/4	1,925.49	1/4	1,562.17	1/4	1,202.63	1/4	840.26	1/4	476.83	1/4	113.57	1/4					
1/2	2,281.32	1/2	1,917.92	1/2	1,554.68	1/2	1,195.09	1/2	832.69	1/2	469.26	1/2	106.03	1/2					
3/4	2,273.75	3/4	1,910.35	3/4	1,547.19	3/4	1,187.54	3/4	825.12	3/4	461.68	3/4	98.50	3/4					
5	2,266.18	5	1,902.78	5	1,539.70	5	1,180.00	5	817.54	5	454.11	5	90.97	5					
1/4	2,258.61	1/4	1,895.21	1/4	1,532.29	1/4	1,172.46	1/4	809.97	1/4	446.54	1/4	83.48	1/4					
1/2	2,251.03	1/2	1,887.64	1/2	1,524.88	1/2	1,164.91	1/2	802.40	1/2	438.97	1/2	75.98	1/2					
3/4	2,243.46	3/4	1,880.07	3/4	1,517.47	3/4	1,157.37	3/4	794.83	3/4	431.40	3/4	68.48	3/4					
6	2,235.89	6	1,872.50	6	1,510.06	6	1,149.83	6	787.26	6	423.83	6	60.99	6					
1/4	2,228.32	1/4	1,864.92	1/4	1,502.65	1/4	1,142.29	1/4	779.69	1/4	416.25	1/4	54.10	1/4					
1/2	2,220.75	1/2	1,857.35	1/2	1,495.25	1/2	1,134.74	1/2	772.12	1/2	408.68	1/2	47.21	1/2					
3/4	2,213.18	3/4	1,849.78	3/4	1,487.84	3/4	1,127.20	3/4	764.55	3/4	401.11	3/4	40.32	3/4					
7	2,205.61	7	1,842.21	7	1,480.43	7	1,119.66	7	756.97	7	393.54	7	33.42	7					
1/4	2,198.04	1/4	1,834.64	1/4	1,473.02	1/4	1,112.12	1/4	749.40	1/4	385.97	1/4	28.38	1/4					
1/2	2,190.47	1/2	1,827.07	1/2	1,465.61	1/2	1,104.57	1/2	741.83	1/2	378.40	1/2	23.33	1/2					
3/4	2,182.90	3/4	1,819.50	3/4	1,458.20	3/4	1,097.03	3/4	734.26	3/4	370.82	3/4	18.29	3/4					
8	2,175.33	8	1,811.93	8	1,450.79	8	1,089.49	8	726.69	8	363.25	8	13.24	8					
1/4	2,167.76	1/4	1,804.36	1/4	1,443.38	1/4	1,081.95	1/4	719.12	1/4	355.68	1/4		1/4					
1/2	2,160.19	1/2	1,796.79	1/2	1,435.97	1/2	1,074.40	1/2	711.55	1/2	348.11	1/2		1/2					
3/4	2,152.62	3/4	1,789.22	3/4	1,428.56	3/4	1,066.86	3/4	703.98	3/4	340.54	3/4		3/4					
9	2,145.04	9	1,781.64	9	1,421.16	9	1,059.32	9	696.40	9	332.97	9		9					
1/4	2,137.47	1/4	1,774.07	1/4	1,413.75	1/4	1,051.78	1/4	688.83	1/4	325.39	1/4		1/4					
1/2	2,129.90	1/2	1,766.50	1/2	1,406.34	1/2	1,044.24	1/2	681.26	1/2	317.82	1/2		1/2					
3/4	2,122.33	3/4	1,758.93	3/4	1,398.93	3/4	1,036.69	3/4	673.69	3/4	310.25	3/4		3/4					
10	2,114.76	10	1,751.36	10	1,391.52	10	1,029.15	10	666.12	10	302.68	10		10					
1/4	2,107.19	1/4	1,743.79	1/4	1,384.03	1/4	1,021.61	1/4	658.55	1/4	295.11	1/4		1/4					
1/2	2,099.62	1/2	1,736.22	1/2	1,376.54	1/2	1,014.07	1/2	650.98	1/2	287.54	1/2		1/2					
3/4	2,092.05	3/4	1,728.65	3/4	1,369.05	3/4	1,006.52	3/4	643.41	3/4	279.96	3/4		3/4					
11	2,084.48	11	1,721.08	11	1,361.56	11	998.98	11	635.83	11	272.39	11		11					
1/4	2,076.91	1/4	1,713.51	1/4	1,353.98	1/4	991.44	1/4	628.26	1/4	264.82	1/4		1/4					
1/2	2,069.34	1/2	1,705.94	1/2	1,346.41	1/2	983.90	1/2	620.69	1/2	257.25	1/2		1/2					
3/4	2,061.77	3/4	1,698.36	3/4	1,338.84	3/4	976.35	3/4	613.12	3/4	249.68	3/4		3/4					

STRAPPED: 02/23/2011 CL - SW
CALCULATED: 02/23/2011 CL
PRINTED: 02/23/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "KIRBY 28160"

3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0		0	4,207.89	0	3,947.29	0	3,672.80	0	3,392.10	0	3,030.94	0	2,667.64
1/4		1/4		1/4		1/4	4,457.29	1/4	4,202.60	1/4	3,941.68	1/4	3,666.97	1/4	3,385.39	1/4	3,023.37	1/4	2,660.07
1/2		1/2		1/2		1/2	4,452.56	1/2	4,197.32	1/2	3,936.07	1/2	3,661.15	1/2	3,378.68	1/2	3,015.81	1/2	2,652.50
3/4		3/4		3/4		3/4	4,447.83	3/4	4,192.03	3/4	3,930.47	3/4	3,655.32	3/4	3,371.97	3/4	3,008.24	3/4	2,644.93
1		1		1		1	4,442.80	1	4,186.72	1	3,924.84	1	3,649.49	1	3,364.38	1	3,000.67	1	2,637.37
1/4		1/4		1/4		1/4	4,437.77	1/4	4,181.42	1/4	3,919.21	1/4	3,643.66	1/4	3,356.80	1/4	2,993.10	1/4	2,629.80
1/2		1/2		1/2		1/2	4,432.73	1/2	4,176.11	1/2	3,913.58	1/2	3,637.83	1/2	3,349.21	1/2	2,985.53	1/2	2,622.23
3/4		3/4		3/4		3/4	4,427.70	3/4	4,170.81	3/4	3,907.96	3/4	3,632.00	3/4	3,341.62	3/4	2,977.96	3/4	2,614.66
2		2		2		2	4,422.03	2	4,165.48	2	3,902.31	2	3,626.17	2	3,334.03	2	2,970.39	2	2,607.09
1/4		1/4		1/4		1/4	4,416.36	1/4	4,160.16	1/4	3,896.66	1/4	3,620.34	1/4	3,326.44	1/4	2,962.82	1/4	2,599.52
1/2		1/2		1/2		1/2	4,410.70	1/2	4,154.83	1/2	3,891.01	1/2	3,614.51	1/2	3,318.85	1/2	2,955.25	1/2	2,591.95
3/4		3/4		3/4		3/4	4,405.03	3/4	4,149.51	3/4	3,885.36	3/4	3,608.68	3/4	3,311.26	3/4	2,947.69	3/4	2,584.38
3		3		3		3	4,399.28	3	4,144.16	3	3,879.70	3	3,602.85	3	3,303.67	3	2,940.12	3	2,576.81
1/4		1/4		1/4		1/4	4,393.54	1/4	4,138.82	1/4	3,874.03	1/4	3,597.02	1/4	3,296.09	1/4	2,932.55	1/4	2,569.25
1/2		1/2		1/2		1/2	4,387.79	1/2	4,133.48	1/2	3,868.37	1/2	3,591.19	1/2	3,288.50	1/2	2,924.98	1/2	2,561.68
3/4		3/4		3/4		3/4	4,382.05	3/4	4,128.13	3/4	3,862.70	3/4	3,585.36	3/4	3,280.91	3/4	2,917.41	3/4	2,554.11
4		4		4		4	4,376.45	4	4,122.77	4	3,857.01	4	3,579.53	4	3,273.32	4	2,909.84	4	2,546.54
1/4		1/4		1/4		1/4	4,370.86	1/4	4,117.40	1/4	3,851.33	1/4	3,573.70	1/4	3,265.73	1/4	2,902.27	1/4	2,538.97
1/2		1/2		1/2		1/2	4,365.26	1/2	4,112.04	1/2	3,845.65	1/2	3,567.87	1/2	3,258.14	1/2	2,894.70	1/2	2,531.40
3/4		3/4		3/4		3/4	4,359.66	3/4	4,106.68	3/4	3,839.96	3/4	3,562.04	3/4	3,250.55	3/4	2,887.14	3/4	2,523.83
5		5		5		5	4,354.36	5	4,101.29	5	3,834.26	5	3,556.21	5	3,242.96	5	2,879.57	5	2,516.26
1/4		1/4		1/4		1/4	4,349.06	1/4	4,095.91	1/4	3,828.56	1/4	3,550.38	1/4	3,235.38	1/4	2,872.00	1/4	2,508.70
1/2		1/2		1/2		1/2	4,343.75	1/2	4,090.52	1/2	3,822.86	1/2	3,544.55	1/2	3,227.79	1/2	2,864.43	1/2	2,501.13
3/4		3/4		3/4		3/4	4,338.45	3/4	4,085.14	3/4	3,817.15	3/4	3,538.72	3/4	3,220.20	3/4	2,856.86	3/4	2,493.56
6		6		6		6	4,333.28	6	4,079.74	6	3,811.43	6	3,532.89	6	3,212.62	6	2,849.29	6	2,485.99
1/4		1/4		1/4		1/4	4,328.11	1/4	4,074.33	1/4	3,805.71	1/4	3,527.06	1/4	3,205.04	1/4	2,841.72	1/4	2,478.42
1/2		1/2		1/2		1/2	4,322.94	1/2	4,068.93	1/2	3,799.98	1/2	3,521.23	1/2	3,197.47	1/2	2,834.15	1/2	2,470.85
3/4		3/4		3/4		3/4	4,317.77	3/4	4,063.52	3/4	3,794.26	3/4	3,515.40	3/4	3,189.89	3/4	2,826.59	3/4	2,463.28
7		7		7		7	4,312.58	7	4,058.08	7	3,788.52	7	3,509.58	7	3,182.32	7	2,819.02	7	2,455.71
1/4		1/4		1/4		1/4	4,307.39	1/4	4,052.63	1/4	3,782.78	1/4	3,503.75	1/4	3,174.75	1/4	2,811.45	1/4	2,448.15
1/2		1/2		1/2		1/2	4,302.20	1/2	4,047.19	1/2	3,777.03	1/2	3,497.92	1/2	3,167.18	1/2	2,803.88	1/2	2,440.58
3/4		3/4		3/4		3/4	4,297.01	3/4	4,041.74	3/4	3,771.29	3/4	3,492.09	3/4	3,159.61	3/4	2,796.31	3/4	2,433.01
8		8		8		8	4,291.80	8	4,036.24	8	3,765.53	8	3,486.26	8	3,152.04	8	2,788.74	8	2,425.44
1/4		1/4		1/4		1/4	4,286.59	1/4	4,030.73	1/4	3,759.77	1/4	3,480.43	1/4	3,144.47	1/4	2,781.17	1/4	2,417.87
1/2		1/2		1/2		1/2	4,281.38	1/2	4,025.22	1/2	3,754.00	1/2	3,474.60	1/2	3,136.91	1/2	2,773.60	1/2	2,410.30
3/4		3/4		3/4		3/4	4,276.17	3/4	4,019.72	3/4	3,748.24	3/4	3,468.77	3/4	3,129.34	3/4	2,766.03	3/4	2,402.73
9		9		9		9	4,270.94	9	4,014.17	9	3,742.46	9	3,462.94	9	3,121.77	9	2,758.47	9	2,395.16
1/4		1/4		1/4		1/4	4,265.71	1/4	4,008.62	1/4	3,736.68	1/4	3,457.11	1/4	3,114.20	1/4	2,750.90	1/4	2,387.59
1/2		1/2		1/2		1/2	4,260.48	1/2	4,003.07	1/2	3,730.90	1/2	3,451.28	1/2	3,106.63	1/2	2,743.33	1/2	2,380.03
3/4		3/4		3/4		3/4	4,255.26	3/4	3,997.52	3/4	3,725.11	3/4	3,445.45	3/4	3,099.06	3/4	2,735.76	3/4	2,372.46
10		10		10		10	4,250.01	10	3,991.95	10	3,719.31	10	3,439.62	10	3,091.49	10	2,728.19	10	2,364.89
1/4		1/4		1/4		1/4	4,244.76	1/4	3,986.39	1/4	3,713.51	1/4	3,433.79	1/4	3,083.92	1/4	2,720.62	1/4	2,357.32
1/2		1/2		1/2		1/2	4,239.51	1/2	3,980.82	1/2	3,707.71	1/2	3,427.96	1/2	3,076.36	1/2	2,713.05	1/2	2,349.75
3/4		3/4		3/4		3/4	4,234.26	3/4	3,975.25	3/4	3,701.90	3/4	3,422.13	3/4	3,068.79	3/4	2,705.48	3/4	2,342.18
11		11		11		11	4,228.99	11	3,969.66	11	3,696.09	11	3,416.30	11	3,061.22	11	2,697.92	11	2,334.61
1/4		1/4		1/4		1/4	4,223.72	1/4	3,964.07	1/4	3,690.27	1/4	3,410.47	1/4	3,053.65	1/4	2,690.35	1/4	2,327.04
1/2		1/2		1/2		1/2	4,218.45	1/2	3,958.49	1/2	3,684.45	1/2	3,404.64	1/2	3,046.08	1/2	2,682.78	1/2	2,319.48
3/4		3/4		3/4		3/4	4,213.18	3/4	3,952.90	3/4	3,678.63	3/4	3,398.81	3/4	3,038.51	3/4	2,675.21	3/4	2,311.91

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'-09" OFF CENTERLINE AND 62'-09" 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 "KIRBY 28160"

3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,304.34	0	1,941.04	0	1,577.79	0	1,219.01	0	864.81	0	508.42	0	144.44	0		0		0	
1/4	2,296.77	1/4	1,933.47	1/4	1,570.25	1/4	1,211.46	1/4	857.46	1/4	500.84	1/4	137.16	1/4		1/4		1/4	
1/2	2,289.20	1/2	1,925.90	1/2	1,562.70	1/2	1,203.91	1/2	850.11	1/2	493.25	1/2	129.89	1/2		1/2		1/2	
3/4	2,281.63	3/4	1,918.33	3/4	1,555.16	3/4	1,196.35	3/4	842.76	3/4	485.66	3/4	122.61	3/4		3/4		3/4	
1	2,274.06	1	1,910.76	1	1,547.61	1	1,188.80	1	835.39	1	478.07	1	116.29	1		1		1	
1/4	2,266.49	1/4	1,903.19	1/4	1,540.07	1/4	1,181.25	1/4	828.02	1/4	470.48	1/4	109.97	1/4		1/4		1/4	
1/2	2,258.93	1/2	1,895.62	1/2	1,532.52	1/2	1,173.69	1/2	820.66	1/2	462.89	1/2	103.64	1/2		1/2		1/2	
3/4	2,251.36	3/4	1,888.05	3/4	1,524.98	3/4	1,166.14	3/4	813.29	3/4	455.30	3/4	97.32	3/4		3/4		3/4	
2	2,243.79	2	1,880.48	2	1,517.43	2	1,158.69	2	805.91	2	447.71	2	92.27	2		2		2	
1/4	2,236.22	1/4	1,872.92	1/4	1,509.89	1/4	1,151.24	1/4	798.53	1/4	440.12	1/4	87.21	1/4		1/4		1/4	
1/2	2,228.65	1/2	1,865.35	1/2	1,502.34	1/2	1,143.79	1/2	791.15	1/2	432.53	1/2	82.16	1/2		1/2		1/2	
3/4	2,221.08	3/4	1,857.78	3/4	1,494.79	3/4	1,136.34	3/4	783.77	3/4	424.94	3/4	77.11	3/4		3/4		3/4	
3	2,213.51	3	1,850.21	3	1,487.25	3	1,129.00	3	776.40	3	417.35	3	73.33	3		3		3	
1/4	2,205.94	1/4	1,842.64	1/4	1,479.70	1/4	1,121.66	1/4	769.02	1/4	409.76	1/4	69.55	1/4		1/4		1/4	
1/2	2,198.37	1/2	1,835.07	1/2	1,472.16	1/2	1,114.32	1/2	761.64	1/2	402.17	1/2	65.78	1/2		1/2		1/2	
3/4	2,190.81	3/4	1,827.50	3/4	1,464.61	3/4	1,106.98	3/4	754.26	3/4	394.58	3/4	62.00	3/4		3/4		3/4	
4	2,183.24	4	1,819.93	4	1,457.15	4	1,099.65	4	746.88	4	386.99	4	59.50	4		4		4	
1/4	2,175.67	1/4	1,812.36	1/4	1,449.68	1/4	1,092.32	1/4	739.50	1/4	379.40	1/4	57.01	1/4		1/4		1/4	
1/2	2,168.10	1/2	1,804.79	1/2	1,442.22	1/2	1,084.98	1/2	732.12	1/2	371.81	1/2	54.52	1/2		1/2		1/2	
3/4	2,160.53	3/4	1,797.23	3/4	1,434.75	3/4	1,077.65	3/4	724.74	3/4	364.22	3/4	52.02	3/4		3/4		3/4	
5	2,152.96	5	1,789.66	5	1,427.36	5	1,070.32	5	717.36	5	356.63	5	50.82	5		5		5	
1/4	2,145.39	1/4	1,782.09	1/4	1,419.96	1/4	1,062.98	1/4	709.98	1/4	349.04	1/4	49.63	1/4		1/4		1/4	
1/2	2,137.82	1/2	1,774.52	1/2	1,412.57	1/2	1,055.65	1/2	702.60	1/2	341.45	1/2	48.43	1/2		1/2		1/2	
3/4	2,130.26	3/4	1,766.95	3/4	1,405.17	3/4	1,048.32	3/4	695.22	3/4	333.86	3/4	47.23	3/4		3/4		3/4	
6	2,122.69	6	1,759.38	6	1,397.76	6	1,040.99	6	687.85	6	326.27	6		6		6		6	
1/4	2,115.12	1/4	1,751.81	1/4	1,390.36	1/4	1,033.66	1/4	680.47	1/4	318.68	1/4		1/4		1/4		1/4	
1/2	2,107.55	1/2	1,744.24	1/2	1,382.95	1/2	1,026.32	1/2	673.09	1/2	311.09	1/2		1/2		1/2		1/2	
3/4	2,099.98	3/4	1,736.67	3/4	1,375.54	3/4	1,018.99	3/4	665.71	3/4	303.50	3/4		3/4		3/4		3/4	
7	2,092.41	7	1,729.10	7	1,368.13	7	1,011.66	7	658.33	7	295.91	7		7		7		7	
1/4	2,084.84	1/4	1,721.54	1/4	1,360.72	1/4	1,004.33	1/4	650.95	1/4	288.32	1/4		1/4		1/4		1/4	
1/2	2,077.27	1/2	1,713.97	1/2	1,353.32	1/2	997.00	1/2	643.57	1/2	280.73	1/2		1/2		1/2		1/2	
3/4	2,069.71	3/4	1,706.40	3/4	1,345.91	3/4	989.66	3/4	636.19	3/4	273.14	3/4		3/4		3/4		3/4	
8	2,062.14	8	1,698.83	8	1,338.50	8	982.33	8	628.81	8	265.55	8		8		8		8	
1/4	2,054.57	1/4	1,691.26	1/4	1,331.09	1/4	975.00	1/4	621.43	1/4	257.96	1/4		1/4		1/4		1/4	
1/2	2,047.00	1/2	1,683.69	1/2	1,323.68	1/2	967.67	1/2	614.05	1/2	250.37	1/2		1/2		1/2		1/2	
3/4	2,039.43	3/4	1,676.12	3/4	1,316.27	3/4	960.33	3/4	606.67	3/4	242.79	3/4		3/4		3/4		3/4	
9	2,031.86	9	1,668.55	9	1,308.87	9	952.99	9	599.19	9	235.20	9		9		9		9	
1/4	2,024.29	1/4	1,660.98	1/4	1,301.47	1/4	945.65	1/4	591.70	1/4	227.61	1/4		1/4		1/4		1/4	
1/2	2,016.72	1/2	1,653.41	1/2	1,294.07	1/2	938.31	1/2	584.22	1/2	220.02	1/2		1/2		1/2		1/2	
3/4	2,009.15	3/4	1,645.85	3/4	1,286.67	3/4	930.97	3/4	576.73	3/4	212.43	3/4		3/4		3/4		3/4	
10	2,001.59	10	1,638.28	10	1,279.20	10	923.62	10	569.14	10	204.84	10		10		10		10	
1/4	1,994.02	1/4	1,630.71	1/4	1,271.73	1/4	916.27	1/4	561.55	1/4	197.25	1/4		1/4		1/4		1/4	
1/2	1,986.45	1/2	1,623.14	1/2	1,264.26	1/2	908.92	1/2	553.96	1/2	189.66	1/2		1/2		1/2		1/2	
3/4	1,978.88	3/4	1,615.57	3/4	1,256.78	3/4	901.57	3/4	546.37	3/4	182.07	3/4		3/4		3/4		3/4	
11	1,971.31	11	1,608.01	11	1,249.23	11	894.22	11	538.78	11	174.48	11		11		11		11	
1/4	1,963.74	1/4	1,600.45	1/4	1,241.68	1/4	886.87	1/4	531.19	1/4	166.89	1/4		1/4		1/4		1/4	
1/2	1,956.17	1/2	1,592.90	1/2	1,234.12	1/2	879.52	1/2	523.60	1/2	159.30	1/2		1/2		1/2		1/2	
3/4	1,948.60	3/4	1,585.34	3/4	1,226.57	3/4	872.17	3/4	516.01	3/4	151.71	3/4		3/4		3/4		3/4	

STRAPPED: 02/23/2011 CL - SW
CALCULATED: 02/23/2011 CL
PRINTED: 02/23/2011 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2011

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "KIRBY 28160"

3 STBD

ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	0	0	0	0	4,476.48	0	4,221.18	0	3,959.87	0	3,684.88	0	3,402.35	0	3,038.89	0	2,674.54
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,471.76	1/4	4,215.89	1/4	3,954.27	1/4	3,679.05	1/4	3,395.64	1/4	3,031.30	1/4	2,666.95
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,466.72	1/2	4,210.58	1/2	3,948.64	1/2	3,673.22	1/2	3,388.05	1/2	3,023.71	1/2	2,659.36
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,461.68	3/4	4,205.27	3/4	3,943.01	3/4	3,667.39	3/4	3,380.46	3/4	3,016.11	3/4	2,651.77
1	1	1	1	1	1	1	4,456.65	1	4,199.97	1	3,937.38	1	3,661.56	1	3,372.87	1	3,008.52	1	2,644.18
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,451.61	1/4	4,194.66	1/4	3,931.75	1/4	3,655.73	1/4	3,365.28	1/4	3,000.93	1/4	2,636.58
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,445.95	1/2	4,189.34	1/2	3,926.10	1/2	3,649.90	1/2	3,357.69	1/2	2,993.34	1/2	2,628.99
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,440.28	3/4	4,184.01	3/4	3,920.45	3/4	3,644.06	3/4	3,350.10	3/4	2,985.75	3/4	2,621.40
2	2	2	2	2	2	2	4,434.61	2	4,178.68	2	3,914.80	2	3,638.23	2	3,342.51	2	2,978.16	2	2,613.81
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,428.94	1/4	4,173.36	1/4	3,909.15	1/4	3,632.40	1/4	3,334.92	1/4	2,970.57	1/4	2,606.22
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,423.19	1/2	4,168.01	1/2	3,903.48	1/2	3,626.57	1/2	3,327.33	1/2	2,962.98	1/2	2,598.63
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,417.45	3/4	4,162.67	3/4	3,897.82	3/4	3,620.74	3/4	3,319.74	3/4	2,955.39	3/4	2,591.04
3	3	3	3	3	3	3	4,411.70	3	4,157.32	3	3,892.15	3	3,614.91	3	3,312.15	3	2,947.80	3	2,583.45
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,405.95	1/4	4,151.98	1/4	3,886.48	1/4	3,609.08	1/4	3,304.56	1/4	2,940.21	1/4	2,575.86
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,400.36	1/2	4,146.61	1/2	3,880.80	1/2	3,603.25	1/2	3,296.97	1/2	2,932.62	1/2	2,568.27
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,394.76	3/4	4,141.25	3/4	3,875.11	3/4	3,597.42	3/4	3,289.38	3/4	2,925.03	3/4	2,560.68
4	4	4	4	4	4	4	4,389.16	4	4,135.88	4	3,869.43	4	3,591.58	4	3,281.79	4	2,917.44	4	2,553.09
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,383.56	1/4	4,130.52	1/4	3,863.74	1/4	3,585.75	1/4	3,274.19	1/4	2,909.85	1/4	2,545.50
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,378.26	1/2	4,125.13	1/2	3,858.04	1/2	3,579.92	1/2	3,266.60	1/2	2,902.26	1/2	2,537.91
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,372.95	3/4	4,119.75	3/4	3,852.33	3/4	3,574.09	3/4	3,259.01	3/4	2,894.66	3/4	2,530.32
5	5	5	5	5	5	5	4,367.65	5	4,114.36	5	3,846.63	5	3,568.26	5	3,251.42	5	2,887.07	5	2,522.73
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,362.34	1/4	4,108.97	1/4	3,840.92	1/4	3,562.43	1/4	3,243.83	1/4	2,879.48	1/4	2,515.13
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,357.17	1/2	4,103.57	1/2	3,835.20	1/2	3,556.60	1/2	3,236.24	1/2	2,871.89	1/2	2,507.54
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,352.00	3/4	4,098.16	3/4	3,829.48	3/4	3,550.77	3/4	3,228.65	3/4	2,864.30	3/4	2,499.95
6	6	6	6	6	6	6	4,346.83	6	4,092.76	6	3,823.75	6	3,544.94	6	3,221.06	6	2,856.71	6	2,492.36
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,341.66	1/4	4,087.35	1/4	3,818.03	1/4	3,539.10	1/4	3,213.47	1/4	2,849.12	1/4	2,484.77
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,336.47	1/2	4,081.91	1/2	3,812.28	1/2	3,533.27	1/2	3,205.88	1/2	2,841.53	1/2	2,477.18
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,331.28	3/4	4,076.46	3/4	3,806.54	3/4	3,527.44	3/4	3,198.29	3/4	2,833.94	3/4	2,469.59
7	7	7	7	7	7	7	4,326.09	7	4,071.02	7	3,800.80	7	3,521.61	7	3,190.70	7	2,826.35	7	2,462.00
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,320.90	1/4	4,065.57	1/4	3,795.05	1/4	3,515.78	1/4	3,183.11	1/4	2,818.76	1/4	2,454.41
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,315.69	1/2	4,060.06	1/2	3,789.29	1/2	3,509.95	1/2	3,175.52	1/2	2,811.17	1/2	2,446.82
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,310.48	3/4	4,054.55	3/4	3,783.53	3/4	3,504.12	3/4	3,167.93	3/4	2,803.58	3/4	2,439.23
8	8	8	8	8	8	8	4,305.26	8	4,049.04	8	3,777.76	8	3,498.29	8	3,160.34	8	2,795.99	8	2,431.64
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,300.05	1/4	4,043.54	1/4	3,772.00	1/4	3,492.46	1/4	3,152.75	1/4	2,788.40	1/4	2,424.05
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,294.82	1/2	4,037.99	1/2	3,766.21	1/2	3,486.62	1/2	3,145.15	1/2	2,780.81	1/2	2,416.46
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,289.59	3/4	4,032.44	3/4	3,760.43	3/4	3,480.79	3/4	3,137.56	3/4	2,773.22	3/4	2,408.87
9	9	9	9	9	9	9	4,284.36	9	4,026.89	9	3,754.65	9	3,474.96	9	3,129.97	9	2,765.62	9	2,401.28
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,279.13	1/4	4,021.34	1/4	3,748.86	1/4	3,469.13	1/4	3,122.38	1/4	2,758.03	1/4	2,393.69
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,273.88	1/2	4,015.77	1/2	3,743.06	1/2	3,463.30	1/2	3,114.79	1/2	2,750.44	1/2	2,386.09
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,268.63	3/4	4,010.20	3/4	3,737.26	3/4	3,457.47	3/4	3,107.20	3/4	2,742.85	3/4	2,378.50
10	10	10	10	10	10	10	4,263.38	10	4,004.63	10	3,731.45	10	3,451.64	10	3,099.61	10	2,735.26	10	2,370.91
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,258.13	1/4	3,999.06	1/4	3,725.65	1/4	3,445.81	1/4	3,092.02	1/4	2,727.67	1/4	2,363.32
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,252.86	1/2	3,993.47	1/2	3,719.83	1/2	3,439.98	1/2	3,084.43	1/2	2,720.08	1/2	2,355.73
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,247.59	3/4	3,987.88	3/4	3,714.01	3/4	3,434.15	3/4	3,076.84	3/4	2,712.49	3/4	2,348.14
11	11	11	11	11	11	11	4,242.32	11	3,982.29	11	3,708.19	11	3,428.31	11	3,069.25	11	2,704.90	11	2,340.55
1/4	1/4	1/4	1/4	1/4	1/4	1/4	4,490.67	1/4	4,237.05	1/4	3,976.70	1/4	3,702.37	1/4	3,422.48	1/4	3,061.66	1/4	2,332.96
1/2	1/2	1/2	1/2	1/2	1/2	1/2	4,485.94	1/2	4,231.76	1/2	3,971.09	1/2	3,696.54	1/2	3,415.77	1/2	3,054.07	1/2	2,325.37
3/4	3/4	3/4	3/4	3/4	3/4	3/4	4,481.21	3/4	4,226.47	3/4	3,965.48	3/4	3,690.71	3/4	3,409.06	3/4	3,046.48	3/4	2,317.78

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'-09" OFF CENTERLINE AND 52'-09" 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 "KIRBY 28160"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 16'-05 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	2,310.19	0	1,945.84	0	1,581.48	0	1,221.00	0	857.67	0	493.36	0	129.92	0		0			
1/4	2,302.60	1/4	1,938.25	1/4	1,573.89	1/4	1,213.41	1/4	850.10	1/4	485.77	1/4	122.64	1/4		1/4			
1/2	2,295.01	1/2	1,930.66	1/2	1,566.30	1/2	1,205.82	1/2	842.53	1/2	478.18	1/2	116.32	1/2		1/2			
3/4	2,287.42	3/4	1,923.07	3/4	1,558.71	3/4	1,198.23	3/4	834.95	3/4	470.59	3/4	109.99	3/4		3/4			
1	2,279.83	1	1,915.48	1	1,551.12	1	1,190.63	1	827.37	1	463.00	1	103.67	1		1			
1 1/4	2,272.24	1 1/4	1,907.89	1 1/4	1,543.53	1 1/4	1,183.04	1 1/4	819.79	1 1/4	455.40	1 1/4	97.34	1 1/4		1 1/4			
1 1/2	2,264.65	1 1/2	1,900.29	1 1/2	1,535.94	1 1/2	1,175.45	1 1/2	812.20	1 1/2	447.81	1 1/2	92.29	1 1/2		1 1/2			
3/4	2,257.05	3/4	1,892.70	3/4	1,528.35	3/4	1,167.86	3/4	804.61	3/4	440.22	3/4	87.24	3/4		3/4			
2	2,249.46	2	1,885.11	2	1,520.75	2	1,160.27	2	797.02	2	432.63	2	82.18	2		2			
2 1/4	2,241.87	2 1/4	1,877.52	2 1/4	1,513.16	2 1/4	1,152.68	2 1/4	789.42	2 1/4	425.04	2 1/4	77.13	2 1/4		2 1/4			
1 1/2	2,234.28	1 1/2	1,869.93	1 1/2	1,505.57	1 1/2	1,145.10	1 1/2	781.83	1 1/2	417.45	1 1/2	73.35	1 1/2		1 1/2			
3/4	2,226.69	3/4	1,862.34	3/4	1,497.98	3/4	1,137.52	3/4	774.24	3/4	409.86	3/4	69.57	3/4		3/4			
3	2,219.10	3	1,854.75	3	1,490.39	3	1,129.94	3	766.65	3	402.26	3	65.79	3		3			
3 1/4	2,211.51	3 1/4	1,847.16	3 1/4	1,482.80	3 1/4	1,122.36	3 1/4	759.06	3 1/4	394.67	3 1/4	62.01	3 1/4		3 1/4			
1 1/2	2,203.92	1 1/2	1,839.57	1 1/2	1,475.29	1 1/2	1,114.80	1 1/2	751.47	1 1/2	387.08	1 1/2	59.52	1 1/2		1 1/2			
3/4	2,196.33	3/4	1,831.98	3/4	1,467.78	3/4	1,107.23	3/4	743.88	3/4	379.49	3/4	57.02	3/4		3/4			
4	2,188.74	4	1,824.39	4	1,460.27	4	1,099.67	4	736.29	4	371.90	4	54.53	4		4			
4 1/4	2,181.15	4 1/4	1,816.80	4 1/4	1,452.76	4 1/4	1,092.11	4 1/4	728.70	4 1/4	364.31	4 1/4	52.03	4 1/4		4 1/4			
1 1/2	2,173.56	1 1/2	1,809.21	1 1/2	1,445.33	1 1/2	1,084.54	1 1/2	721.10	1 1/2	356.72	1 1/2	50.84	1 1/2		1 1/2			
3/4	2,165.97	3/4	1,801.61	3/4	1,437.90	3/4	1,076.98	3/4	713.51	3/4	349.12	3/4	49.64	3/4		3/4			
5	2,158.38	5	1,794.02	5	1,430.48	5	1,069.42	5	705.92	5	341.53	5	48.44	5		5			
5 1/4	2,150.79	5 1/4	1,786.43	5 1/4	1,423.05	5 1/4	1,061.86	5 1/4	698.33	5 1/4	333.94	5 1/4	47.24	5 1/4		5 1/4			
1 1/2	2,143.20	1 1/2	1,778.84	1 1/2	1,415.62	1 1/2	1,054.29	1 1/2	690.74	1 1/2	326.35	1 1/2		1 1/2		1 1/2			
3/4	2,135.60	3/4	1,771.25	3/4	1,408.19	3/4	1,046.73	3/4	683.15	3/4	318.76	3/4		3/4		3/4			
6	2,128.01	6	1,763.66	6	1,400.76	6	1,039.17	6	675.56	6	311.17	6		6		6			
6 1/4	2,120.42	6 1/4	1,756.07	6 1/4	1,393.33	6 1/4	1,031.61	6 1/4	667.97	6 1/4	303.57	6 1/4		6 1/4		6 1/4			
1 1/2	2,112.83	1 1/2	1,748.48	1 1/2	1,385.90	1 1/2	1,024.05	1 1/2	660.38	1 1/2	295.98	1 1/2		1 1/2		1 1/2			
3/4	2,105.24	3/4	1,740.89	3/4	1,378.47	3/4	1,016.48	3/4	652.79	3/4	288.39	3/4		3/4		3/4			
7	2,097.65	7	1,733.30	7	1,371.04	7	1,008.92	7	645.19	7	280.80	7		7		7			
7 1/4	2,090.06	7 1/4	1,725.71	7 1/4	1,363.62	7 1/4	1,001.36	7 1/4	637.60	7 1/4	273.21	7 1/4		7 1/4		7 1/4			
1 1/2	2,082.47	1 1/2	1,718.12	1 1/2	1,356.19	1 1/2	993.80	1 1/2	630.01	1 1/2	265.62	1 1/2		1 1/2		1 1/2			
3/4	2,074.88	3/4	1,710.52	3/4	1,348.76	3/4	986.23	3/4	622.42	3/4	258.03	3/4		3/4		3/4			
8	2,067.29	8	1,702.93	8	1,341.33	8	978.67	8	614.83	8	250.43	8		8		8			
8 1/4	2,059.70	8 1/4	1,695.34	8 1/4	1,333.90	8 1/4	971.11	8 1/4	607.24	8 1/4	242.84	8 1/4		8 1/4		8 1/4			
1 1/2	2,052.11	1 1/2	1,687.75	1 1/2	1,326.47	1 1/2	963.55	1 1/2	599.65	1 1/2	235.25	1 1/2		1 1/2		1 1/2			
3/4	2,044.52	3/4	1,680.16	3/4	1,319.04	3/4	955.98	3/4	592.05	3/4	227.66	3/4		3/4		3/4			
9	2,036.93	9	1,672.57	9	1,311.61	9	948.42	9	584.46	9	220.07	9		9		9			
9 1/4	2,029.34	9 1/4	1,664.98	9 1/4	1,304.18	9 1/4	940.86	9 1/4	576.87	9 1/4	212.48	9 1/4		9 1/4		9 1/4			
1 1/2	2,021.75	1 1/2	1,657.39	1 1/2	1,296.67	1 1/2	933.30	1 1/2	569.28	1 1/2	204.89	1 1/2		1 1/2		1 1/2			
3/4	2,014.16	3/4	1,649.80	3/4	1,289.16	3/4	925.74	3/4	561.69	3/4	197.29	3/4		3/4		3/4			
10	2,006.56	10	1,642.21	10	1,281.65	10	918.17	10	554.09	10	189.70	10		10		10			
10 1/4	1,998.97	10 1/4	1,634.62	10 1/4	1,274.14	10 1/4	910.61	10 1/4	546.50	10 1/4	182.11	10 1/4		10 1/4		10 1/4			
1 1/2	1,991.38	1 1/2	1,627.03	1 1/2	1,266.55	1 1/2	903.05	1 1/2	538.91	1 1/2	174.52	1 1/2		1 1/2		1 1/2			
3/4	1,983.79	3/4	1,619.44	3/4	1,258.96	3/4	895.49	3/4	531.32	3/4	166.93	3/4		3/4		3/4			
11	1,976.20	11	1,611.84	11	1,251.37	11	887.92	11	523.73	11	159.34	11		11		11			
11 1/4	1,968.61	11 1/4	1,604.25	11 1/4	1,243.77	11 1/4	880.36	11 1/4	516.14	11 1/4	151.74	11 1/4		11 1/4		11 1/4			
1 1/2	1,961.02	1 1/2	1,596.66	1 1/2	1,236.18	1 1/2	872.80	1 1/2	508.55	1 1/2	144.47	1 1/2		1 1/2		1 1/2			
3/4	1,953.43	3/4	1,589.07	3/4	1,228.59	3/4	865.23	3/4	500.95	3/4	137.19	3/4		3/4		3/4			

STRAPPED: 02/23/2011 CL - SW
CALCULATED: 02/23/2011 CL
PRINTED: 02/23/2011 CL

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2011

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