



BARGE "KIRBY 31009"

ULLAGE TRIM TABLE FORMERLY "SMS 30016"

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

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 2'-00"
 AFT DRAFT = 8'-00"
 DIFF. = 6'-00" (DOWN BY STERN)

THE CORRECTION FOR 6'-00" TRIM DOWN BY STERN FOR 1 PORT IS - 00-1/8"
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED ULLAGE IS 3'-11 7/8"

June 8, 2021

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

<http://www.pmacorp.net>



BARGE "KIRBY 31009"

1 PORT ULLAGE TABLE

MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	4,936.31	0	4,577.89	0	4,219.47	0	3,861.06	0	3,502.64	0	3,144.23	0	2,785.80	0	2,427.39
1/4		1/4		1/4	4,928.84	1/4	4,570.42	1/4	4,212.01	1/4	3,853.59	1/4	3,495.17	1/4	3,136.76	1/4	2,778.34	1/4	2,419.92
1/2		1/2		1/2	4,921.37	1/2	4,562.95	1/2	4,204.54	1/2	3,846.12	1/2	3,487.70	1/2	3,129.29	1/2	2,770.87	1/2	2,412.46
3/4		3/4		3/4	4,913.90	3/4	4,555.48	3/4	4,197.07	3/4	3,838.65	3/4	3,480.24	3/4	3,121.82	3/4	2,763.40	3/4	2,404.99
1		1		1	4,906.44	1	4,548.02	1	4,189.61	1	3,831.19	1	3,472.77	1	3,114.36	1	2,755.93	1	2,397.52
1/4		1/4		1/4	4,898.97	1/4	4,540.55	1/4	4,182.14	1/4	3,823.72	1/4	3,465.31	1/4	3,106.89	1/4	2,748.47	1/4	2,390.06
1/2		1/2		1/2	4,891.50	1/2	4,533.08	1/2	4,174.67	1/2	3,816.25	1/2	3,457.84	1/2	3,099.42	1/2	2,741.00	1/2	2,382.59
3/4		3/4		3/4	4,884.03	3/4	4,525.62	3/4	4,167.20	3/4	3,808.78	3/4	3,450.37	3/4	3,091.95	3/4	2,733.53	3/4	2,375.12
2		2		2	4,876.57	2	4,518.15	2	4,159.74	2	3,801.32	2	3,442.91	2	3,084.49	2	2,726.07	2	2,367.65
1/4		1/4		1/4	4,869.10	1/4	4,510.69	1/4	4,152.27	1/4	3,793.85	1/4	3,435.44	1/4	3,077.02	1/4	2,718.60	1/4	2,360.19
1/2		1/2		1/2	4,861.63	1/2	4,503.22	1/2	4,144.80	1/2	3,786.38	1/2	3,427.97	1/2	3,069.55	1/2	2,711.14	1/2	2,352.72
3/4		3/4		3/4	4,854.16	3/4	4,495.75	3/4	4,137.33	3/4	3,778.92	3/4	3,420.50	3/4	3,062.08	3/4	2,703.67	3/4	2,345.25
3		3		3	4,846.70	3	4,488.29	3	4,129.87	3	3,771.45	3	3,413.04	3	3,054.61	3	2,696.20	3	2,337.78
1/4		1/4		1/4	4,839.23	1/4	4,480.82	1/4	4,122.40	1/4	3,763.99	1/4	3,405.57	1/4	3,047.15	1/4	2,688.74	1/4	2,330.32
1/2		1/2		1/2	5,100.57	1/2	4,831.76	1/2	4,473.35	1/2	4,114.93	1/2	3,756.52	1/2	3,398.10	1/2	3,039.68	1/2	2,681.27
3/4		3/4		3/4	5,099.95	3/4	4,824.30	3/4	4,465.88	3/4	4,107.46	3/4	3,749.05	3/4	3,390.63	3/4	3,032.21	3/4	2,673.80
4		4		4	5,099.33	4	4,816.83	4	4,458.42	4	4,100.00	4	3,741.59	4	3,383.17	4	3,024.75	4	2,666.33
1/4		1/4		1/4	5,098.70	1/4	4,809.37	1/4	4,450.95	1/4	4,092.53	1/4	3,734.12	1/4	3,375.70	1/4	3,017.28	1/4	2,658.87
1/2		1/2		1/2	5,098.08	1/2	4,801.90	1/2	4,443.48	1/2	4,085.06	1/2	3,726.65	1/2	3,368.23	1/2	3,009.82	1/2	2,651.40
3/4		3/4		3/4	5,096.27	3/4	4,794.43	3/4	4,436.01	3/4	4,077.60	3/4	3,719.18	3/4	3,360.76	3/4	3,002.35	3/4	2,643.93
5		5		5	5,094.45	5	4,792.97	5	4,428.55	5	4,071.13	5	3,711.72	5	3,353.30	5	2,994.88	5	2,636.46
1/4		1/4		1/4	5,092.64	1/4	4,779.50	1/4	4,421.08	1/4	4,062.67	1/4	3,704.25	1/4	3,345.83	1/4	2,987.42	1/4	2,629.00
1/2		1/2		1/2	5,090.82	1/2	4,772.03	1/2	4,413.61	1/2	4,055.20	1/2	3,696.78	1/2	3,338.36	1/2	2,979.95	1/2	2,621.53
3/4		3/4		3/4	5,087.66	3/4	4,764.56	3/4	4,406.14	3/4	4,047.73	3/4	3,689.31	3/4	3,330.90	3/4	2,972.48	3/4	2,614.06
6		6		6	5,084.50	6	4,757.10	6	4,398.68	6	4,040.27	6	3,681.85	6	3,323.43	6	2,965.01	6	2,606.59
1/4		1/4		1/4	5,081.33	1/4	4,749.63	1/4	4,391.21	1/4	4,032.80	1/4	3,674.38	1/4	3,315.97	1/4	2,957.55	1/4	2,599.13
1/2		1/2		1/2	5,078.17	1/2	4,742.16	1/2	4,383.74	1/2	4,025.33	1/2	3,666.91	1/2	3,308.50	1/2	2,950.08	1/2	2,591.66
3/4		3/4		3/4	5,073.82	3/4	4,734.69	3/4	4,376.28	3/4	4,017.86	3/4	3,659.44	3/4	3,301.03	3/4	2,942.61	3/4	2,584.19
7		7		7	5,069.46	7	4,727.23	7	4,368.81	7	4,010.40	7	3,651.98	7	3,293.57	7	2,935.14	7	2,576.73
1/4		1/4		1/4	5,065.11	1/4	4,719.76	1/4	4,361.35	1/4	4,002.93	1/4	3,644.51	1/4	3,286.10	1/4	2,927.68	1/4	2,569.26
1/2		1/2		1/2	5,060.75	1/2	4,712.29	1/2	4,353.88	1/2	3,995.46	1/2	3,637.04	1/2	3,278.63	1/2	2,920.21	1/2	2,561.80
3/4		3/4		3/4	5,055.15	3/4	4,704.82	3/4	4,346.41	3/4	3,987.99	3/4	3,629.57	3/4	3,271.16	3/4	2,912.74	3/4	2,554.33
8		8		8	5,049.55	8	4,697.36	8	4,338.95	8	3,980.53	8	3,622.10	8	3,263.70	8	2,905.27	8	2,546.86
1/4		1/4		1/4	5,043.95	1/4	4,689.89	1/4	4,331.48	1/4	3,973.06	1/4	3,614.63	1/4	3,256.23	1/4	2,897.81	1/4	2,539.40
1/2		1/2		1/2	5,038.35	1/2	4,682.42	1/2	4,324.01	1/2	3,965.59	1/2	3,607.16	1/2	3,248.76	1/2	2,890.34	1/2	2,531.93
3/4		3/4		3/4	5,031.51	3/4	4,674.96	3/4	4,316.54	3/4	3,958.12	3/4	3,599.70	3/4	3,241.29	3/4	2,882.87	3/4	2,524.46
9		9		9	5,024.66	9	4,667.49	9	4,309.08	9	3,950.66	9	3,592.24	9	3,233.83	9	2,875.41	9	2,516.99
1/4		1/4		1/4	5,017.82	1/4	4,660.03	1/4	4,301.61	1/4	3,943.19	1/4	3,584.77	1/4	3,226.36	1/4	2,867.94	1/4	2,509.53
1/2		1/2		1/2	5,010.97	1/2	4,652.56	1/2	4,294.14	1/2	3,935.72	1/2	3,577.31	1/2	3,218.89	1/2	2,860.48	1/2	2,502.06
3/4		3/4		3/4	5,003.50	3/4	4,645.09	3/4	4,286.67	3/4	3,928.26	3/4	3,569.84	3/4	3,211.42	3/4	2,853.01	3/4	2,494.59
10		10		10	4,996.04	10	4,637.63	10	4,279.21	10	3,920.79	10	3,562.38	10	3,203.96	10	2,845.54	10	2,487.12
1/4		1/4		1/4	4,988.57	1/4	4,630.16	1/4	4,271.74	1/4	3,913.33	1/4	3,554.91	1/4	3,196.49	1/4	2,838.08	1/4	2,479.66
1/2		1/2		1/2	4,981.10	1/2	4,622.69	1/2	4,264.27	1/2	3,905.86	1/2	3,547.44	1/2	3,189.02	1/2	2,830.61	1/2	2,472.19
3/4		3/4		3/4	4,973.64	3/4	4,615.22	3/4	4,256.80	3/4	3,898.39	3/4	3,539.97	3/4	3,181.56	3/4	2,823.14	3/4	2,464.72
11		11		11	4,966.17	11	4,607.76	11	4,249.34	11	3,890.93	11	3,532.51	11	3,174.09	11	2,815.67	11	2,457.25
1/4		1/4		1/4	4,958.71	1/4	4,600.29	1/4	4,241.87	1/4	3,883.46	1/4	3,525.04	1/4	3,166.63	1/4	2,808.21	1/4	2,449.79
1/2		1/2		1/2	4,951.24	1/2	4,592.82	1/2	4,234.40	1/2	3,875.99	1/2	3,517.57	1/2	3,159.16	1/2	2,800.74	1/2	2,442.32
3/4		3/4		3/4	4,943.77	3/4	4,585.35	3/4	4,226.94	3/4	3,868.52	3/4	3,510.10	3/4	3,151.69	3/4	2,793.27	3/4	2,434.85

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE
 GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
 & ANALYSIS, INC.
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BARGE "KIRBY 31009"

1 PORT ULLAGE TABLE MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 1/2"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,068.97	0	1,710.55	0	1,352.14	0	993.72	0	635.31	0	284.00	0		0		0		0	
1/4	2,061.51	1/4	1,703.09	1/4	1,344.68	1/4	986.25	1/4	627.84	1/4	276.97	1/4		1/4		1/4		1/4	
1/2	2,054.04	1/2	1,695.62	1/2	1,337.21	1/2	978.78	1/2	620.38	1/2	269.94	1/2		1/2		1/2		1/2	
3/4	2,046.57	3/4	1,688.15	3/4	1,329.74	3/4	971.31	3/4	612.91	3/4	263.03	3/4		3/4		3/4		3/4	
1	2,039.10	1	1,680.69	1	1,322.27	1	963.85	1	605.44	1	256.13	1		1		1		1	
1/4	2,031.64	1/4	1,673.22	1/4	1,314.81	1/4	956.38	1/4	597.98	1/4	249.22	1/4		1/4		1/4		1/4	
1/2	2,024.17	1/2	1,665.76	1/2	1,307.34	1/2	948.92	1/2	590.51	1/2	242.32	1/2		1/2		1/2		1/2	
3/4	2,016.70	3/4	1,658.29	3/4	1,299.87	3/4	941.45	3/4	583.04	3/4	235.41	3/4		3/4		3/4		3/4	
2	2,009.23	2	1,650.82	2	1,292.40	2	933.98	2	575.57	2	228.50	2		2		2		2	
1/4	2,001.77	1/4	1,643.36	1/4	1,284.94	1/4	926.52	1/4	568.11	1/4	221.60	1/4		1/4		1/4		1/4	
1/2	1,994.30	1/2	1,635.89	1/2	1,277.47	1/2	919.05	1/2	560.64	1/2	214.69	1/2		1/2		1/2		1/2	
3/4	1,986.83	3/4	1,628.42	3/4	1,270.00	3/4	911.58	3/4	553.17	3/4	207.91	3/4		3/4		3/4		3/4	
3	1,979.37	3	1,620.95	3	1,262.53	3	904.12	3	545.70	3	201.13	3		3		3		3	
1/4	1,971.90	1/4	1,613.49	1/4	1,255.07	1/4	896.65	1/4	538.24	1/4	194.36	1/4		1/4		1/4		1/4	
1/2	1,964.44	1/2	1,606.02	1/2	1,247.60	1/2	889.19	1/2	530.77	1/2	187.58	1/2		1/2		1/2		1/2	
3/4	1,956.97	3/4	1,598.55	3/4	1,240.13	3/4	881.72	3/4	523.30	3/4	180.79	3/4		3/4		3/4		3/4	
4	1,949.50	4	1,591.09	4	1,232.67	4	874.25	4	515.83	4	174.00	4		4		4		4	
1/4	1,942.04	1/4	1,583.62	1/4	1,225.20	1/4	866.79	1/4	508.37	1/4	167.22	1/4		1/4		1/4		1/4	
1/2	1,934.57	1/2	1,576.16	1/2	1,217.74	1/2	859.32	1/2	500.90	1/2	160.43	1/2		1/2		1/2		1/2	
3/4	1,927.10	3/4	1,568.69	3/4	1,210.27	3/4	851.85	3/4	493.50	3/4	153.77	3/4		3/4		3/4		3/4	
5	1,919.63	5	1,561.22	5	1,202.80	5	844.38	5	486.09	5	147.11	5		5		5		5	
1/4	1,912.17	1/4	1,553.75	1/4	1,195.34	1/4	836.92	1/4	478.69	1/4	140.46	1/4		1/4		1/4		1/4	
1/2	1,904.70	1/2	1,546.28	1/2	1,187.87	1/2	829.45	1/2	471.29	1/2	133.80	1/2		1/2		1/2		1/2	
3/4	1,897.23	3/4	1,538.81	3/4	1,180.40	3/4	821.98	3/4	463.88	3/4	127.14	3/4		3/4		3/4		3/4	
6	1,889.76	6	1,531.35	6	1,172.93	6	814.51	6	456.48	6	120.48	6		6		6		6	
1/4	1,882.30	1/4	1,523.88	1/4	1,165.47	1/4	807.05	1/4	449.07	1/4	113.83	1/4		1/4		1/4		1/4	
1/2	1,874.83	1/2	1,516.42	1/2	1,158.00	1/2	799.58	1/2	441.67	1/2	107.17	1/2		1/2		1/2		1/2	
3/4	1,867.36	3/4	1,508.95	3/4	1,150.53	3/4	792.11	3/4	434.39	3/4	100.64	3/4		3/4		3/4		3/4	
7	1,859.89	7	1,501.48	7	1,143.06	7	784.65	7	427.11	7	94.10	7		7		7		7	
1/4	1,852.43	1/4	1,494.02	1/4	1,135.60	1/4	777.18	1/4	419.83	1/4	87.57	1/4		1/4		1/4		1/4	
1/2	1,844.96	1/2	1,486.55	1/2	1,128.13	1/2	769.72	1/2	412.55	1/2	81.04	1/2		1/2		1/2		1/2	
3/4	1,837.49	3/4	1,479.08	3/4	1,120.66	3/4	762.25	3/4	405.27	3/4	74.50	3/4		3/4		3/4		3/4	
8	1,830.03	8	1,471.61	8	1,113.19	8	754.78	8	397.99	8	67.97	8		8		8		8	
1/4	1,822.56	1/4	1,464.15	1/4	1,105.73	1/4	747.32	1/4	390.71	1/4	61.43	1/4		1/4		1/4		1/4	
1/2	1,815.10	1/2	1,456.68	1/2	1,098.26	1/2	739.85	1/2	383.43	1/2	54.90	1/2		1/2		1/2		1/2	
3/4	1,807.63	3/4	1,449.21	3/4	1,090.79	3/4	732.38	3/4	376.27	3/4	49.22	3/4		3/4		3/4		3/4	
9	1,800.16	9	1,441.74	9	1,083.33	9	724.91	9	369.12	9	43.55	9		9		9		9	
1/4	1,792.70	1/4	1,434.28	1/4	1,075.86	1/4	717.45	1/4	361.96	1/4	37.87	1/4		1/4		1/4		1/4	
1/2	1,785.23	1/2	1,426.81	1/2	1,068.40	1/2	709.98	1/2	354.81	1/2	32.20	1/2		1/2		1/2		1/2	
3/4	1,777.76	3/4	1,419.34	3/4	1,060.93	3/4	702.51	3/4	347.65	3/4	27.99	3/4		3/4		3/4		3/4	
10	1,770.29	10	1,411.87	10	1,053.46	10	695.04	10	340.50	10	23.78	10		10		10		10	
1/4	1,762.83	1/4	1,404.41	1/4	1,046.00	1/4	687.58	1/4	333.34	1/4	19.57	1/4		1/4		1/4		1/4	
1/2	1,755.36	1/2	1,396.94	1/2	1,038.53	1/2	680.11	1/2	326.19	1/2	15.36	1/2		1/2		1/2		1/2	
3/4	1,747.89	3/4	1,389.47	3/4	1,031.06	3/4	672.64	3/4	319.16	3/4		3/4		3/4		3/4		3/4	
11	1,740.42	11	1,382.01	11	1,023.59	11	665.17	11	312.13	11		11		11		11		11	
1/4	1,732.96	1/4	1,374.54	1/4	1,016.13	1/4	657.71	1/4	305.10	1/4		1/4		1/4		1/4		1/4	
1/2	1,725.49	1/2	1,367.08	1/2	1,008.66	1/2	650.24	1/2	298.07	1/2		1/2		1/2		1/2		1/2	
3/4	1,718.02	3/4	1,359.61	3/4	1,001.19	3/4	642.77	3/4	291.04	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/18/2010 INSP
RECALCULATED: 06/11/2021 PMA
REPRINTED: 06/11/2021 PMA

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2021

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



BARGE "KIRBY 31009"

1 STBD ULLAGE TABLE

MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 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	4,943.77	0	4,585.35	0	4,226.94	0	3,868.52	0	3,510.10	0	3,151.69	0	2,793.27	0	2,434.85
1/4		1/4		1/4	4,936.31	1/4	4,577.89	1/4	4,219.47	1/4	3,861.06	1/4	3,502.64	1/4	3,144.23	1/4	2,785.80	1/4	2,427.39
1/2		1/2		1/2	4,928.84	1/2	4,570.42	1/2	4,212.01	1/2	3,853.59	1/2	3,495.17	1/2	3,136.76	1/2	2,778.34	1/2	2,419.92
3/4		3/4		3/4	4,921.37	3/4	4,562.95	3/4	4,204.54	3/4	3,846.12	3/4	3,487.70	3/4	3,129.29	3/4	2,770.87	3/4	2,412.46
1		1		1	4,913.90	1	4,555.48	1	4,197.07	1	3,838.65	1	3,480.24	1	3,121.82	1	2,763.40	1	2,404.99
1/4		1/4		1/4	4,906.44	1/4	4,548.02	1/4	4,189.61	1/4	3,831.19	1/4	3,472.77	1/4	3,114.36	1/4	2,755.93	1/4	2,397.52
1/2		1/2		1/2	4,898.97	1/2	4,540.55	1/2	4,182.14	1/2	3,823.72	1/2	3,465.31	1/2	3,106.89	1/2	2,748.47	1/2	2,390.06
3/4		3/4		3/4	4,891.50	3/4	4,533.08	3/4	4,174.67	3/4	3,816.25	3/4	3,457.84	3/4	3,099.42	3/4	2,741.00	3/4	2,382.59
2		2		2	4,884.03	2	4,525.62	2	4,167.20	2	3,808.78	2	3,450.37	2	3,091.95	2	2,733.53	2	2,375.12
1/4		1/4		1/4	4,876.57	1/4	4,518.15	1/4	4,159.74	1/4	3,801.32	1/4	3,442.91	1/4	3,084.49	1/4	2,726.07	1/4	2,367.65
1/2		1/2		1/2	4,869.10	1/2	4,510.69	1/2	4,152.27	1/2	3,793.85	1/2	3,435.44	1/2	3,077.02	1/2	2,718.60	1/2	2,360.19
3/4		3/4		3/4	4,861.63	3/4	4,503.22	3/4	4,144.80	3/4	3,786.38	3/4	3,427.97	3/4	3,069.55	3/4	2,711.14	3/4	2,352.72
3		3		3	4,854.16	3	4,495.75	3	4,137.33	3	3,778.92	3	3,420.50	3	3,062.08	3	2,703.67	3	2,345.25
1/4		1/4		1/4	4,846.70	1/4	4,488.29	1/4	4,129.87	1/4	3,771.45	1/4	3,413.04	1/4	3,054.61	1/4	2,696.20	1/4	2,337.78
1/2		1/2		1/2	4,839.23	1/2	4,480.82	1/2	4,122.40	1/2	3,763.99	1/2	3,405.57	1/2	3,047.15	1/2	2,688.74	1/2	2,330.32
3/4		3/4		3/4	5,100.57	3/4	4,831.76	3/4	4,473.35	3/4	4,114.93	3/4	3,756.52	3/4	3,398.10	3/4	3,039.68	3/4	2,681.27
4		4		4	5,099.95	4	4,824.30	4	4,465.88	4	4,107.46	4	3,749.05	4	3,390.63	4	3,032.21	4	2,673.80
1/4		1/4		1/4	5,099.33	1/4	4,816.83	1/4	4,458.42	1/4	4,100.00	1/4	3,741.59	1/4	3,383.17	1/4	3,024.75	1/4	2,666.33
1/2		1/2		1/2	5,098.70	1/2	4,809.37	1/2	4,450.95	1/2	4,092.53	1/2	3,734.12	1/2	3,375.70	1/2	3,017.28	1/2	2,658.87
3/4		3/4		3/4	5,098.08	3/4	4,801.90	3/4	4,443.48	3/4	4,085.06	3/4	3,726.65	3/4	3,368.23	3/4	3,009.82	3/4	2,651.40
5		5		5	5,096.27	5	4,794.43	5	4,436.01	5	4,077.60	5	3,719.18	5	3,360.76	5	3,002.35	5	2,643.93
1/4		1/4		1/4	5,094.45	1/4	4,786.97	1/4	4,428.55	1/4	4,070.13	1/4	3,711.72	1/4	3,353.30	1/4	2,994.88	1/4	2,636.46
1/2		1/2		1/2	5,092.64	1/2	4,779.50	1/2	4,421.08	1/2	4,062.67	1/2	3,704.25	1/2	3,345.83	1/2	2,987.42	1/2	2,629.00
3/4		3/4		3/4	5,090.82	3/4	4,772.03	3/4	4,413.61	3/4	4,055.20	3/4	3,696.78	3/4	3,338.36	3/4	2,979.95	3/4	2,621.53
6		6		6	5,087.66	6	4,764.56	6	4,406.14	6	4,047.73	6	3,689.31	6	3,330.90	6	2,972.48	6	2,614.06
1/4		1/4		1/4	5,084.50	1/4	4,757.10	1/4	4,398.68	1/4	4,040.27	1/4	3,681.85	1/4	3,323.43	1/4	2,965.01	1/4	2,606.59
1/2		1/2		1/2	5,081.33	1/2	4,749.63	1/2	4,391.21	1/2	4,032.80	1/2	3,674.38	1/2	3,315.97	1/2	2,957.55	1/2	2,599.13
3/4		3/4		3/4	5,078.17	3/4	4,742.16	3/4	4,383.74	3/4	4,025.33	3/4	3,666.91	3/4	3,308.50	3/4	2,950.08	3/4	2,591.66
7		7		7	5,073.82	7	4,734.69	7	4,376.28	7	4,017.86	7	3,659.44	7	3,301.03	7	2,942.61	7	2,584.19
1/4		1/4		1/4	5,069.46	1/4	4,727.23	1/4	4,368.81	1/4	4,010.40	1/4	3,651.98	1/4	3,293.57	1/4	2,935.14	1/4	2,576.73
1/2		1/2		1/2	5,065.11	1/2	4,719.76	1/2	4,361.35	1/2	4,002.93	1/2	3,644.51	1/2	3,286.10	1/2	2,927.68	1/2	2,569.26
3/4		3/4		3/4	5,060.75	3/4	4,712.29	3/4	4,353.88	3/4	3,995.46	3/4	3,637.04	3/4	3,278.63	3/4	2,920.21	3/4	2,561.80
8		8		8	5,055.15	8	4,704.82	8	4,346.41	8	3,987.99	8	3,629.57	8	3,271.16	8	2,912.74	8	2,554.33
1/4		1/4		1/4	5,049.55	1/4	4,697.36	1/4	4,338.95	1/4	3,980.53	1/4	3,622.10	1/4	3,263.70	1/4	2,905.27	1/4	2,546.86
1/2		1/2		1/2	5,043.95	1/2	4,689.89	1/2	4,331.48	1/2	3,973.06	1/2	3,614.63	1/2	3,256.23	1/2	2,897.81	1/2	2,539.40
3/4		3/4		3/4	5,038.35	3/4	4,682.42	3/4	4,324.01	3/4	3,965.59	3/4	3,607.16	3/4	3,248.76	3/4	2,890.34	3/4	2,531.93
9		9		9	5,031.51	9	4,674.96	9	4,316.54	9	3,958.12	9	3,599.70	9	3,241.29	9	2,882.87	9	2,524.46
1/4		1/4		1/4	5,024.66	1/4	4,667.49	1/4	4,309.08	1/4	3,950.66	1/4	3,592.24	1/4	3,233.83	1/4	2,875.41	1/4	2,516.99
1/2		1/2		1/2	5,017.82	1/2	4,660.03	1/2	4,301.61	1/2	3,943.19	1/2	3,584.77	1/2	3,226.36	1/2	2,867.94	1/2	2,509.53
3/4		3/4		3/4	5,010.97	3/4	4,652.56	3/4	4,294.14	3/4	3,935.72	3/4	3,577.31	3/4	3,218.89	3/4	2,860.48	3/4	2,502.06
10		10		10	5,003.50	10	4,645.09	10	4,286.67	10	3,928.26	10	3,569.84	10	3,211.42	10	2,853.01	10	2,494.59
1/4		1/4		1/4	4,996.04	1/4	4,637.63	1/4	4,279.21	1/4	3,920.79	1/4	3,562.38	1/4	3,203.96	1/4	2,845.54	1/4	2,487.12
1/2		1/2		1/2	4,988.57	1/2	4,630.16	1/2	4,271.74	1/2	3,913.33	1/2	3,554.91	1/2	3,196.49	1/2	2,838.08	1/2	2,479.66
3/4		3/4		3/4	4,981.10	3/4	4,622.69	3/4	4,264.27	3/4	3,905.86	3/4	3,547.44	3/4	3,189.02	3/4	2,830.61	3/4	2,472.19
11		11		11	4,973.64	11	4,615.22	11	4,256.80	11	3,898.39	11	3,539.97	11	3,181.56	11	2,823.14	11	2,464.72
1/4		1/4		1/4	4,966.17	1/4	4,607.76	1/4	4,249.34	1/4	3,890.93	1/4	3,532.51	1/4	3,174.09	1/4	2,815.67	1/4	2,457.25
1/2		1/2		1/2	4,958.71	1/2	4,600.29	1/2	4,241.87	1/2	3,883.46	1/2	3,525.04	1/2	3,166.63	1/2	2,808.21	1/2	2,449.79
3/4		3/4		3/4	4,951.24	3/4	4,592.82	3/4	4,234.40	3/4	3,875.99	3/4	3,517.57	3/4	3,159.16	3/4	2,800.74	3/4	2,442.32

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE
 GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

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



BARGE "KIRBY 31009"

1 STBD ULLAGE TABLE MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 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	2,076.44	0	1,718.02	0	1,359.61	0	1,001.19	0	642.77	0	291.04	0		0		0		0	
1/4	2,068.97	1/4	1,710.55	1/4	1,352.14	1/4	993.72	1/4	635.31	1/4	284.00	1/4		1/4		1/4		1/4	
1/2	2,061.51	1/2	1,703.09	1/2	1,344.68	1/2	986.25	1/2	627.84	1/2	276.97	1/2		1/2		1/2		1/2	
3/4	2,054.04	3/4	1,695.62	3/4	1,337.21	3/4	978.78	3/4	620.38	3/4	269.94	3/4		3/4		3/4		3/4	
1	2,046.57	1	1,688.15	1	1,329.74	1	971.31	1	612.91	1	263.03	1		1		1		1	
1/4	2,039.10	1/4	1,680.69	1/4	1,322.27	1/4	963.85	1/4	605.44	1/4	256.13	1/4		1/4		1/4		1/4	
1/2	2,031.64	1/2	1,673.22	1/2	1,314.81	1/2	956.38	1/2	597.98	1/2	249.22	1/2		1/2		1/2		1/2	
3/4	2,024.17	3/4	1,665.76	3/4	1,307.34	3/4	948.92	3/4	590.51	3/4	242.32	3/4		3/4		3/4		3/4	
2	2,016.70	2	1,658.29	2	1,299.87	2	941.45	2	583.04	2	235.41	2		2		2		2	
1/4	2,009.23	1/4	1,650.82	1/4	1,292.40	1/4	933.98	1/4	575.57	1/4	228.50	1/4		1/4		1/4		1/4	
1/2	2,001.77	1/2	1,643.36	1/2	1,284.94	1/2	926.52	1/2	568.11	1/2	221.60	1/2		1/2		1/2		1/2	
3/4	1,994.30	3/4	1,635.89	3/4	1,277.47	3/4	919.05	3/4	560.64	3/4	214.69	3/4		3/4		3/4		3/4	
3	1,986.83	3	1,628.42	3	1,270.00	3	911.58	3	553.17	3	207.91	3		3		3		3	
1/4	1,979.37	1/4	1,620.95	1/4	1,262.53	1/4	904.12	1/4	545.70	1/4	201.13	1/4		1/4		1/4		1/4	
1/2	1,971.90	1/2	1,613.49	1/2	1,255.07	1/2	896.65	1/2	538.24	1/2	194.36	1/2		1/2		1/2		1/2	
3/4	1,964.44	3/4	1,606.02	3/4	1,247.60	3/4	889.19	3/4	530.77	3/4	187.58	3/4		3/4		3/4		3/4	
4	1,956.97	4	1,598.55	4	1,240.13	4	881.72	4	523.30	4	180.79	4		4		4		4	
1/4	1,949.50	1/4	1,591.09	1/4	1,232.67	1/4	874.25	1/4	515.83	1/4	174.00	1/4		1/4		1/4		1/4	
1/2	1,942.04	1/2	1,583.62	1/2	1,225.20	1/2	866.79	1/2	508.37	1/2	167.22	1/2		1/2		1/2		1/2	
3/4	1,934.57	3/4	1,576.16	3/4	1,217.74	3/4	859.32	3/4	500.90	3/4	160.43	3/4		3/4		3/4		3/4	
5	1,927.10	5	1,568.69	5	1,210.27	5	851.85	5	493.50	5	153.77	5		5		5		5	
1/4	1,919.63	1/4	1,561.22	1/4	1,202.80	1/4	844.38	1/4	486.09	1/4	147.11	1/4		1/4		1/4		1/4	
1/2	1,912.17	1/2	1,553.75	1/2	1,195.34	1/2	836.92	1/2	478.69	1/2	140.46	1/2		1/2		1/2		1/2	
3/4	1,904.70	3/4	1,546.28	3/4	1,187.87	3/4	829.45	3/4	471.29	3/4	133.80	3/4		3/4		3/4		3/4	
6	1,897.23	6	1,538.81	6	1,180.40	6	821.98	6	463.88	6	127.14	6		6		6		6	
1/4	1,889.76	1/4	1,531.35	1/4	1,172.93	1/4	814.51	1/4	456.48	1/4	120.48	1/4		1/4		1/4		1/4	
1/2	1,882.30	1/2	1,523.88	1/2	1,165.47	1/2	807.05	1/2	449.07	1/2	113.83	1/2		1/2		1/2		1/2	
3/4	1,874.83	3/4	1,516.42	3/4	1,158.00	3/4	799.58	3/4	441.67	3/4	107.17	3/4		3/4		3/4		3/4	
7	1,867.36	7	1,508.95	7	1,150.53	7	792.11	7	434.39	7	100.64	7		7		7		7	
1/4	1,859.89	1/4	1,501.48	1/4	1,143.06	1/4	784.65	1/4	427.11	1/4	94.10	1/4		1/4		1/4		1/4	
1/2	1,852.43	1/2	1,494.02	1/2	1,135.60	1/2	777.18	1/2	419.83	1/2	87.57	1/2		1/2		1/2		1/2	
3/4	1,844.96	3/4	1,486.55	3/4	1,128.13	3/4	769.72	3/4	412.55	3/4	81.04	3/4		3/4		3/4		3/4	
8	1,837.49	8	1,479.08	8	1,120.66	8	762.25	8	405.27	8	74.50	8		8		8		8	
1/4	1,830.03	1/4	1,471.61	1/4	1,113.19	1/4	754.78	1/4	397.99	1/4	67.97	1/4		1/4		1/4		1/4	
1/2	1,822.56	1/2	1,464.15	1/2	1,105.73	1/2	747.32	1/2	390.71	1/2	61.43	1/2		1/2		1/2		1/2	
3/4	1,815.10	3/4	1,456.68	3/4	1,098.26	3/4	739.85	3/4	383.43	3/4	54.90	3/4		3/4		3/4		3/4	
9	1,807.63	9	1,449.21	9	1,090.79	9	732.38	9	376.27	9	49.22	9		9		9		9	
1/4	1,800.16	1/4	1,441.74	1/4	1,083.33	1/4	724.91	1/4	369.12	1/4	43.55	1/4		1/4		1/4		1/4	
1/2	1,792.70	1/2	1,434.28	1/2	1,075.86	1/2	717.45	1/2	361.96	1/2	37.87	1/2		1/2		1/2		1/2	
3/4	1,785.23	3/4	1,426.81	3/4	1,068.40	3/4	709.98	3/4	354.81	3/4	32.20	3/4		3/4		3/4		3/4	
10	1,777.76	10	1,419.34	10	1,060.93	10	702.51	10	347.65	10	27.99	10		10		10		10	
1/4	1,770.29	1/4	1,411.87	1/4	1,053.46	1/4	695.04	1/4	340.50	1/4	23.78	1/4		1/4		1/4		1/4	
1/2	1,762.83	1/2	1,404.41	1/2	1,046.00	1/2	687.58	1/2	333.34	1/2	19.57	1/2		1/2		1/2		1/2	
3/4	1,755.36	3/4	1,396.94	3/4	1,038.53	3/4	680.11	3/4	326.19	3/4	15.36	3/4		3/4		3/4		3/4	
11	1,747.89	11	1,389.47	11	1,031.06	11	672.64	11	319.16	11		11		11		11		11	
1/4	1,740.42	1/4	1,382.01	1/4	1,023.59	1/4	665.17	1/4	312.13	1/4		1/4		1/4		1/4		1/4	
1/2	1,732.96	1/2	1,374.54	1/2	1,016.13	1/2	657.71	1/2	305.10	1/2		1/2		1/2		1/2		1/2	
3/4	1,725.49	3/4	1,367.08	3/4	1,008.66	3/4	650.24	3/4	298.07	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/18/2010 INSP
RECALCULATED: 06/11/2021 PMA
REPRINTED: 06/11/2021 PMA

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2021

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



BARGE "KIRBY 31009"

2 PORT ULLAGE TABLE

MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 3/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0	5,000.11	0	4,640.29	0	4,280.48	0	3,920.68	0	3,560.87	0	3,201.09	0	2,841.26	0	2,481.45
1/4		1/4		1/4	4,992.61	1/4	4,632.80	1/4	4,272.99	1/4	3,913.18	1/4	3,553.37	1/4	3,193.62	1/4	2,833.77	1/4	2,473.95
1/2		1/2		1/2	4,985.12	1/2	4,625.30	1/2	4,265.49	1/2	3,905.69	1/2	3,545.88	1/2	3,186.15	1/2	2,826.27	1/2	2,466.46
3/4		3/4		3/4	4,977.62	3/4	4,617.81	3/4	4,258.00	3/4	3,898.19	3/4	3,538.38	3/4	3,178.68	3/4	2,818.77	3/4	2,458.96
1		1		1	4,970.12	1	4,610.31	1	4,250.50	1	3,890.69	1	3,530.88	1	3,171.18	1	2,811.27	1	2,451.47
1/4		1/4		1/4	4,962.63	1/4	4,602.81	1/4	4,243.01	1/4	3,883.20	1/4	3,523.39	1/4	3,163.69	1/4	2,803.78	1/4	2,443.97
1/2		1/2		1/2	4,955.13	1/2	4,595.32	1/2	4,235.51	1/2	3,875.70	1/2	3,515.89	1/2	3,156.19	1/2	2,796.28	1/2	2,436.48
3/4		3/4		3/4	4,947.63	3/4	4,587.82	3/4	4,228.02	3/4	3,868.21	3/4	3,508.40	3/4	3,148.69	3/4	2,788.78	3/4	2,428.98
2		2		2	4,940.14	2	4,580.32	2	4,220.52	2	3,860.71	2	3,500.90	2	3,141.17	2	2,781.29	2	2,421.48
1/4		1/4		1/4	4,932.64	1/4	4,572.83	1/4	4,213.02	1/4	3,853.21	1/4	3,493.41	1/4	3,133.65	1/4	2,773.79	1/4	2,413.99
1/2		1/2		1/2	4,925.15	1/2	4,565.33	1/2	4,205.53	1/2	3,845.72	1/2	3,485.91	1/2	3,126.13	1/2	2,766.30	1/2	2,406.49
3/4		3/4		3/4	4,917.65	3/4	4,557.84	3/4	4,198.03	3/4	3,838.22	3/4	3,478.42	3/4	3,118.61	3/4	2,758.80	3/4	2,398.99
3		3		3	4,910.15	3	4,550.34	3	4,190.53	3	3,830.72	3	3,470.92	3	3,111.11	3	2,751.31	3	2,391.50
1/4		1/4		1/4	4,902.66	1/4	4,542.85	1/4	4,183.04	1/4	3,823.23	1/4	3,463.42	1/4	3,103.62	1/4	2,743.81	1/4	2,384.00
1/2		1/2		1/2	4,895.16	1/2	4,535.35	1/2	4,175.54	1/2	3,815.73	1/2	3,455.93	1/2	3,096.12	1/2	2,736.32	1/2	2,376.51
3/4		3/4	5,157.51	3/4	4,887.66	3/4	4,527.86	3/4	4,168.05	3/4	3,808.24	3/4	3,448.43	3/4	3,088.62	3/4	2,728.82	3/4	2,369.01
4		4	5,156.89	4	4,880.16	4	4,520.36	4	4,160.55	4	3,800.74	4	3,440.93	4	3,081.13	4	2,721.32	4	2,361.51
1/4		1/4	5,156.26	1/4	4,872.67	1/4	4,512.86	1/4	4,153.05	1/4	3,793.25	1/4	3,433.44	1/4	3,073.63	1/4	2,713.83	1/4	2,354.02
1/2		1/2	5,155.64	1/2	4,865.17	1/2	4,505.37	1/2	4,145.56	1/2	3,785.75	1/2	3,425.94	1/2	3,066.14	1/2	2,706.33	1/2	2,346.52
3/4		3/4	5,155.01	3/4	4,857.68	3/4	4,497.87	3/4	4,138.06	3/4	3,778.26	3/4	3,418.45	3/4	3,058.64	3/4	2,698.83	3/4	2,339.02
5		5	5,153.16	5	4,850.18	5	4,490.37	5	4,130.56	5	3,770.76	5	3,410.95	5	3,051.15	5	2,691.34	5	2,331.53
1/4		1/4	5,151.31	1/4	4,842.69	1/4	4,482.88	1/4	4,123.07	1/4	3,763.26	1/4	3,403.45	1/4	3,043.65	1/4	2,683.84	1/4	2,324.03
1/2		1/2	5,149.46	1/2	4,835.20	1/2	4,475.38	1/2	4,115.57	1/2	3,755.77	1/2	3,395.96	1/2	3,036.16	1/2	2,676.35	1/2	2,316.54
3/4		3/4	5,147.61	3/4	4,827.70	3/4	4,467.89	3/4	4,108.08	3/4	3,748.27	3/4	3,388.46	3/4	3,028.66	3/4	2,668.85	3/4	2,309.04
6		6	5,144.46	6	4,820.20	6	4,460.39	6	4,100.58	6	3,740.77	6	3,380.96	6	3,021.16	6	2,661.35	6	2,301.55
1/4		1/4	5,141.32	1/4	4,812.70	1/4	4,452.89	1/4	4,093.09	1/4	3,733.28	1/4	3,373.47	1/4	3,013.67	1/4	2,653.86	1/4	2,294.05
1/2		1/2	5,138.17	1/2	4,805.21	1/2	4,445.40	1/2	4,085.59	1/2	3,725.78	1/2	3,365.97	1/2	3,006.17	1/2	2,646.36	1/2	2,286.56
3/4		3/4	5,135.02	3/4	4,797.71	3/4	4,437.90	3/4	4,078.10	3/4	3,718.29	3/4	3,358.48	3/4	2,998.67	3/4	2,638.86	3/4	2,279.06
7		7	5,130.65	7	4,790.21	7	4,430.40	7	4,070.60	7	3,710.79	7	3,350.98	7	2,991.18	7	2,631.37	7	2,271.56
1/4		1/4	5,126.28	1/4	4,782.72	1/4	4,422.91	1/4	4,063.10	1/4	3,703.29	1/4	3,343.49	1/4	2,983.68	1/4	2,623.87	1/4	2,264.07
1/2		1/2	5,121.90	1/2	4,775.22	1/2	4,415.41	1/2	4,055.61	1/2	3,695.80	1/2	3,335.99	1/2	2,976.19	1/2	2,616.38	1/2	2,256.57
3/4		3/4	5,117.53	3/4	4,767.73	3/4	4,407.92	3/4	4,048.11	3/4	3,688.30	3/4	3,328.50	3/4	2,968.69	3/4	2,608.88	3/4	2,249.07
8		8	5,111.91	8	4,760.23	8	4,400.42	8	4,040.61	8	3,680.80	8	3,321.00	8	2,961.19	8	2,601.39	8	2,241.58
1/4		1/4	5,106.29	1/4	4,752.73	1/4	4,392.93	1/4	4,033.12	1/4	3,673.31	1/4	3,313.50	1/4	2,953.70	1/4	2,593.89	1/4	2,234.08
1/2		1/2	5,100.67	1/2	4,745.24	1/2	4,385.43	1/2	4,025.62	1/2	3,665.81	1/2	3,306.01	1/2	2,946.20	1/2	2,586.40	1/2	2,226.59
3/4		3/4	5,095.05	3/4	4,737.74	3/4	4,377.94	3/4	4,018.13	3/4	3,658.32	3/4	3,298.51	3/4	2,938.70	3/4	2,578.90	3/4	2,219.09
9		9	5,088.18	9	4,730.24	9	4,370.44	9	4,010.63	9	3,650.82	9	3,291.01	9	2,931.21	9	2,571.40	9	2,211.59
1/4		1/4	5,081.31	1/4	4,722.75	1/4	4,362.94	1/4	4,003.13	1/4	3,643.33	1/4	3,283.52	1/4	2,923.71	1/4	2,563.91	1/4	2,204.10
1/2		1/2	5,074.44	1/2	4,715.25	1/2	4,355.45	1/2	3,995.64	1/2	3,635.83	1/2	3,276.03	1/2	2,916.22	1/2	2,556.41	1/2	2,196.60
3/4		3/4	5,067.57	3/4	4,707.76	3/4	4,347.95	3/4	3,988.14	3/4	3,628.34	3/4	3,268.53	3/4	2,908.72	3/4	2,548.91	3/4	2,189.10
10		10	5,060.07	10	4,700.26	10	4,340.45	10	3,980.64	10	3,620.84	10	3,261.03	10	2,901.23	10	2,541.42	10	2,181.61
1/4		1/4	5,052.58	1/4	4,692.77	1/4	4,332.96	1/4	3,973.15	1/4	3,613.34	1/4	3,253.54	1/4	2,893.73	1/4	2,533.92	1/4	2,174.11
1/2		1/2	5,045.08	1/2	4,685.27	1/2	4,325.46	1/2	3,965.65	1/2	3,605.85	1/2	3,246.04	1/2	2,886.24	1/2	2,526.43	1/2	2,166.62
3/4		3/4	5,037.58	3/4	4,677.78	3/4	4,317.97	3/4	3,958.16	3/4	3,598.35	3/4	3,238.54	3/4	2,878.74	3/4	2,518.93	3/4	2,159.12
11		11	5,030.09	11	4,670.28	11	4,310.47	11	3,950.66	11	3,590.85	11	3,231.05	11	2,871.25	11	2,511.43	11	2,151.63
1/4		1/4	5,022.59	1/4	4,662.78	1/4	4,302.97	1/4	3,943.17	1/4	3,583.36	1/4	3,223.55	1/4	2,863.75	1/4	2,503.94	1/4	2,144.13
1/2		1/2	5,015.10	1/2	4,655.29	1/2	4,295.48	1/2	3,935.67	1/2	3,575.86	1/2	3,216.06	1/2	2,856.26	1/2	2,496.44	1/2	2,136.64
3/4		3/4	5,007.60	3/4	4,647.79	3/4	4,287.98	3/4	3,928.18	3/4	3,568.37	3/4	3,208.56	3/4	2,848.76	3/4	2,488.94	3/4	2,129.14

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE
 GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

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



BARGE "KIRBY 31009"

2 PORT ULLAGE TABLE MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 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	2,121.64	0	1,761.83	0	1,402.03	0	1,042.22	0	682.41	0	322.60	0		0		0		0	
1/4	2,114.15	1/4	1,754.34	1/4	1,394.53	1/4	1,034.72	1/4	674.91	1/4	315.11	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,106.65	1/2	1,746.84	1/2	1,387.04	1/2	1,027.23	1/2	667.42	1/2	307.61	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,099.15	3/4	1,739.34	3/4	1,379.54	3/4	1,019.73	3/4	659.92	3/4	300.11	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	2,091.66	1	1,731.85	1	1,372.04	1	1,012.23	1	652.43	1	292.62	1	1	1	1	1	1	1	1
1/4	2,084.16	1/4	1,724.35	1/4	1,364.55	1/4	1,004.74	1/4	644.93	1/4	285.12	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,076.67	1/2	1,716.86	1/2	1,357.05	1/2	997.24	1/2	637.44	1/2	277.63	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,069.17	3/4	1,709.36	3/4	1,349.55	3/4	989.74	3/4	629.94	3/4	270.13	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	2,061.67	2	1,701.87	2	1,342.06	2	982.25	2	622.44	2	262.63	2	2	2	2	2	2	2	2
1/4	2,054.18	1/4	1,694.37	1/4	1,334.56	1/4	974.75	1/4	614.95	1/4	255.14	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,046.68	1/2	1,686.88	1/2	1,327.07	1/2	967.26	1/2	607.45	1/2	247.64	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,039.18	3/4	1,679.38	3/4	1,319.57	3/4	959.76	3/4	599.95	3/4	240.14	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	2,031.69	3	1,671.88	3	1,312.07	3	952.27	3	592.46	3	232.65	3	3	3	3	3	3	3	3
1/4	2,024.19	1/4	1,664.39	1/4	1,304.58	1/4	944.77	1/4	584.96	1/4	225.15	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,016.70	1/2	1,656.89	1/2	1,297.08	1/2	937.28	1/2	577.47	1/2	217.66	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,009.20	3/4	1,649.39	3/4	1,289.58	3/4	929.78	3/4	569.97	3/4	210.16	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	2,001.71	4	1,641.90	4	1,282.09	4	922.28	4	562.47	4	202.67	4	4	4	4	4	4	4	4
1/4	1,994.21	1/4	1,634.40	1/4	1,274.59	1/4	914.79	1/4	554.98	1/4	195.17	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,986.72	1/2	1,626.91	1/2	1,267.10	1/2	907.29	1/2	547.48	1/2	187.68	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,979.22	3/4	1,619.41	3/4	1,259.60	3/4	899.79	3/4	539.98	3/4	180.18	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	1,971.72	5	1,611.91	5	1,252.11	5	892.30	5	532.49	5	172.68	5	5	5	5	5	5	5	5
1/4	1,964.23	1/4	1,604.42	1/4	1,244.61	1/4	884.80	1/4	524.99	1/4	165.19	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,956.73	1/2	1,596.92	1/2	1,237.12	1/2	877.31	1/2	517.50	1/2	157.69	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,949.23	3/4	1,589.42	3/4	1,229.62	3/4	869.81	3/4	510.00	3/4	150.19	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	1,941.74	6	1,581.93	6	1,222.12	6	862.31	6	502.51	6	142.70	6	6	6	6	6	6	6	6
1/4	1,934.24	1/4	1,574.43	1/4	1,214.63	1/4	854.82	1/4	495.01	1/4	135.20	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,926.75	1/2	1,566.94	1/2	1,207.13	1/2	847.32	1/2	487.52	1/2	127.71	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,919.25	3/4	1,559.44	3/4	1,199.63	3/4	839.82	3/4	480.02	3/4	120.21	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	1,911.75	7	1,551.95	7	1,192.14	7	832.33	7	472.52	7	112.71	7	7	7	7	7	7	7	7
1/4	1,904.26	1/4	1,544.45	1/4	1,184.64	1/4	824.83	1/4	465.03	1/4	105.22	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,896.76	1/2	1,536.96	1/2	1,177.15	1/2	817.34	1/2	457.53	1/2	97.72	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,889.26	3/4	1,529.46	3/4	1,169.65	3/4	809.84	3/4	450.03	3/4	90.22	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	1,881.76	8	1,521.96	8	1,162.15	8	802.35	8	442.54	8	82.73	8	8	8	8	8	8	8	8
1/4	1,874.26	1/4	1,514.47	1/4	1,154.66	1/4	794.85	1/4	435.04	1/4	75.23	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,866.76	1/2	1,506.97	1/2	1,147.16	1/2	787.36	1/2	427.55	1/2	67.74	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,859.26	3/4	1,499.47	3/4	1,139.66	3/4	779.86	3/4	420.05	3/4	60.24	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	1,851.77	9	1,491.98	9	1,132.17	9	772.36	9	412.55	9	53.68	9	9	9	9	9	9	9	9
1/4	1,844.28	1/4	1,484.48	1/4	1,124.67	1/4	764.87	1/4	405.06	1/4	47.13	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,836.79	1/2	1,476.99	1/2	1,117.18	1/2	757.37	1/2	397.56	1/2	40.57	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,829.30	3/4	1,469.49	3/4	1,109.68	3/4	749.87	3/4	390.06	3/4	34.01	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	1,821.80	10	1,461.99	10	1,102.19	10	742.38	10	382.57	10	29.33	10	10	10	10	10	10	10	10
1/4	1,814.31	1/4	1,454.50	1/4	1,094.69	1/4	734.88	1/4	375.07	1/4	24.64	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,806.81	1/2	1,447.00	1/2	1,087.20	1/2	727.39	1/2	367.58	1/2	19.96	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,799.31	3/4	1,439.50	3/4	1,079.70	3/4	719.89	3/4	360.08	3/4	15.27	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	1,791.82	11	1,432.01	11	1,072.20	11	712.39	11	352.59	11		11	11	11	11	11	11	11	11
1/4	1,784.32	1/4	1,424.51	1/4	1,064.71	1/4	704.90	1/4	345.09	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,776.83	1/2	1,417.02	1/2	1,057.21	1/2	697.40	1/2	337.60	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,769.33	3/4	1,409.52	3/4	1,049.71	3/4	689.90	3/4	330.10	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/18/2010 INSP
RECALCULATED: 06/11/2021 PMA
REPRINTED: 06/11/2021 PMA

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2021

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



BARGE "KIRBY 31009"

2 STBD ULLAGE TABLE

MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.		
0		0		0	4,985.12	0	4,625.30	0	4,265.49	0	3,905.69	0	3,545.88	0	3,186.15	0	2,826.27	0	2,466.46		
1/4		1/4		1/4	4,977.62	1/4	4,617.81	1/4	4,258.00	1/4	3,898.19	1/4	3,538.38	1/4	3,178.68	1/4	2,818.77	1/4	2,458.96		
1/2		1/2		1/2	4,970.12	1/2	4,610.31	1/2	4,250.50	1/2	3,890.69	1/2	3,530.88	1/2	3,171.18	1/2	2,811.27	1/2	2,451.47		
3/4		3/4		3/4	4,962.63	3/4	4,602.81	3/4	4,243.01	3/4	3,883.20	3/4	3,523.39	3/4	3,163.69	3/4	2,803.78	3/4	2,443.97		
1		1		1	4,955.13	1	4,595.32	1	4,235.51	1	3,875.70	1	3,515.89	1	3,156.19	1	2,796.28	1	2,436.48		
1/4		1/4		1/4	4,947.63	1/4	4,587.82	1/4	4,228.02	1/4	3,868.21	1/4	3,508.40	1/4	3,148.69	1/4	2,788.78	1/4	2,428.98		
1/2		1/2		1/2	4,940.14	1/2	4,580.32	1/2	4,220.52	1/2	3,860.71	1/2	3,500.90	1/2	3,141.17	1/2	2,781.29	1/2	2,421.48		
3/4		3/4		3/4	4,932.64	3/4	4,572.83	3/4	4,213.02	3/4	3,853.21	3/4	3,493.41	3/4	3,133.65	3/4	2,773.79	3/4	2,413.99		
2		2		2	4,925.15	2	4,565.33	2	4,205.53	2	3,845.72	2	3,485.91	2	3,126.13	2	2,766.30	2	2,406.49		
1/4		1/4		1/4	4,917.65	1/4	4,557.84	1/4	4,198.03	1/4	3,838.22	1/4	3,478.42	1/4	3,118.61	1/4	2,758.80	1/4	2,398.99		
1/2		1/2		1/2	4,910.15	1/2	4,550.34	1/2	4,190.53	1/2	3,830.72	1/2	3,470.92	1/2	3,111.11	1/2	2,751.31	1/2	2,391.50		
3/4		3/4		3/4	4,902.66	3/4	4,542.85	3/4	4,183.04	3/4	3,823.23	3/4	3,463.42	3/4	3,103.62	3/4	2,743.81	3/4	2,384.00		
3		3		3	4,895.16	3	4,535.35	3	4,175.54	3	3,815.73	3	3,455.93	3	3,096.12	3	2,736.32	3	2,376.51		
1/4		1/4		1/4	5,157.51	1/4	4,887.66	1/4	4,527.86	1/4	4,168.05	1/4	3,808.24	1/4	3,448.43	1/4	3,088.62	1/4	2,728.82	1/4	2,369.01
1/2		1/2		1/2	5,156.89	1/2	4,880.16	1/2	4,520.36	1/2	4,160.55	1/2	3,800.74	1/2	3,440.93	1/2	3,081.13	1/2	2,721.32	1/2	2,361.51
3/4		3/4		3/4	5,156.26	3/4	4,872.67	3/4	4,512.86	3/4	4,153.05	3/4	3,793.25	3/4	3,433.44	3/4	3,073.63	3/4	2,713.83	3/4	2,354.02
4		4		4	5,155.64	4	4,865.17	4	4,505.37	4	4,145.56	4	3,785.75	4	3,425.94	4	3,066.14	4	2,706.33	4	2,346.52
1/4		1/4		1/4	5,155.01	1/4	4,867.68	1/4	4,497.87	1/4	4,138.06	1/4	3,778.26	1/4	3,418.45	1/4	3,058.64	1/4	2,698.83	1/4	2,339.02
1/2		1/2		1/2	5,153.16	1/2	4,850.18	1/2	4,490.37	1/2	4,130.56	1/2	3,770.76	1/2	3,410.95	1/2	3,051.15	1/2	2,691.34	1/2	2,331.53
3/4		3/4		3/4	5,151.31	3/4	4,842.69	3/4	4,482.88	3/4	4,123.07	3/4	3,763.26	3/4	3,403.45	3/4	3,043.65	3/4	2,683.84	3/4	2,324.03
5		5		5	5,149.46	5	4,835.20	5	4,475.38	5	4,115.57	5	3,755.77	5	3,395.96	5	3,036.16	5	2,676.35	5	2,316.54
1/4		1/4		1/4	5,147.61	1/4	4,827.70	1/4	4,467.89	1/4	4,108.08	1/4	3,748.27	1/4	3,388.46	1/4	3,028.66	1/4	2,668.85	1/4	2,309.04
1/2		1/2		1/2	5,144.46	1/2	4,820.20	1/2	4,460.39	1/2	4,100.58	1/2	3,740.77	1/2	3,380.96	1/2	3,021.16	1/2	2,661.35	1/2	2,301.55
3/4		3/4		3/4	5,141.32	3/4	4,812.70	3/4	4,452.89	3/4	4,093.09	3/4	3,733.28	3/4	3,373.47	3/4	3,013.67	3/4	2,653.86	3/4	2,294.05
6		6		6	5,138.17	6	4,805.21	6	4,445.40	6	4,085.59	6	3,725.78	6	3,365.97	6	3,006.17	6	2,646.36	6	2,286.56
1/4		1/4		1/4	5,135.02	1/4	4,797.71	1/4	4,437.90	1/4	4,078.10	1/4	3,718.29	1/4	3,358.48	1/4	2,998.67	1/4	2,638.86	1/4	2,279.06
1/2		1/2		1/2	5,130.65	1/2	4,790.21	1/2	4,430.40	1/2	4,070.60	1/2	3,710.79	1/2	3,350.98	1/2	2,991.18	1/2	2,631.37	1/2	2,271.56
3/4		3/4		3/4	5,126.28	3/4	4,782.72	3/4	4,422.91	3/4	4,063.10	3/4	3,703.29	3/4	3,343.49	3/4	2,983.68	3/4	2,623.87	3/4	2,264.07
7		7		7	5,121.90	7	4,775.22	7	4,415.41	7	4,055.61	7	3,695.80	7	3,335.99	7	2,976.19	7	2,616.38	7	2,256.57
1/4		1/4		1/4	5,117.53	1/4	4,767.73	1/4	4,407.92	1/4	4,048.11	1/4	3,688.30	1/4	3,328.50	1/4	2,968.69	1/4	2,608.88	1/4	2,249.07
1/2		1/2		1/2	5,111.91	1/2	4,760.23	1/2	4,400.42	1/2	4,040.61	1/2	3,680.80	1/2	3,321.00	1/2	2,961.19	1/2	2,601.39	1/2	2,241.58
3/4		3/4		3/4	5,106.29	3/4	4,752.73	3/4	4,392.93	3/4	4,033.12	3/4	3,673.31	3/4	3,313.50	3/4	2,953.70	3/4	2,593.89	3/4	2,234.08
8		8		8	5,100.67	8	4,745.24	8	4,385.43	8	4,025.62	8	3,665.81	8	3,306.01	8	2,946.20	8	2,586.40	8	2,226.59
1/4		1/4		1/4	5,095.05	1/4	4,737.74	1/4	4,377.94	1/4	4,018.13	1/4	3,658.32	1/4	3,298.51	1/4	2,938.70	1/4	2,578.90	1/4	2,219.09
1/2		1/2		1/2	5,088.18	1/2	4,730.24	1/2	4,370.44	1/2	4,010.63	1/2	3,650.82	1/2	3,291.01	1/2	2,931.21	1/2	2,571.40	1/2	2,211.59
3/4		3/4		3/4	5,081.31	3/4	4,722.75	3/4	4,362.94	3/4	4,003.13	3/4	3,643.33	3/4	3,283.52	3/4	2,923.71	3/4	2,563.91	3/4	2,204.10
9		9		9	5,074.44	9	4,715.25	9	4,355.45	9	3,995.64	9	3,635.83	9	3,276.03	9	2,916.22	9	2,556.41	9	2,196.60
1/4		1/4		1/4	5,067.57	1/4	4,707.76	1/4	4,347.95	1/4	3,988.14	1/4	3,628.34	1/4	3,268.53	1/4	2,908.72	1/4	2,548.91	1/4	2,189.10
1/2		1/2		1/2	5,060.07	1/2	4,700.26	1/2	4,340.45	1/2	3,980.64	1/2	3,620.84	1/2	3,261.03	1/2	2,901.23	1/2	2,541.42	1/2	2,181.61
3/4		3/4		3/4	5,052.58	3/4	4,692.77	3/4	4,332.96	3/4	3,973.15	3/4	3,613.34	3/4	3,253.54	3/4	2,893.73	3/4	2,533.92	3/4	2,174.11
10		10		10	5,045.08	10	4,685.27	10	4,325.46	10	3,965.65	10	3,605.85	10	3,246.04	10	2,886.24	10	2,526.43	10	2,166.62
1/4		1/4		1/4	5,037.58	1/4	4,677.78	1/4	4,317.97	1/4	3,958.16	1/4	3,598.35	1/4	3,238.54	1/4	2,878.74	1/4	2,518.93	1/4	2,159.12
1/2		1/2		1/2	5,030.09	1/2	4,670.28	1/2	4,310.47	1/2	3,950.66	1/2	3,590.85	1/2	3,231.05	1/2	2,871.25	1/2	2,511.43	1/2	2,151.63
3/4		3/4		3/4	5,022.59	3/4	4,662.78	3/4	4,302.97	3/4	3,943.17	3/4	3,583.36	3/4	3,223.55	3/4	2,863.75	3/4	2,503.94	3/4	2,144.13
11		11		11	5,015.10	11	4,655.29	11	4,295.48	11	3,935.67	11	3,575.86	11	3,216.06	11	2,856.26	11	2,496.44	11	2,136.64
1/4		1/4		1/4	5,007.60	1/4	4,647.79	1/4	4,287.98	1/4	3,928.18	1/4	3,568.37	1/4	3,208.56	1/4	2,848.76	1/4	2,488.94	1/4	2,129.14
1/2		1/2		1/2	5,000.11	1/2	4,640.29	1/2	4,280.48	1/2	3,920.68	1/2	3,560.87	1/2	3,201.09	1/2	2,841.26	1/2	2,481.45	1/2	2,121.64
3/4		3/4		3/4	4,992.61	3/4	4,632.80	3/4	4,272.99	3/4	3,913.18	3/4	3,553.37	3/4	3,193.62	3/4	2,833.77	3/4	2,473.95	3/4	2,114.15

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE
 GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

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



BARGE "KIRBY 31009"

2 STBD

ULLAGE TABLE

MMC

GAUGE HEIGHT 15'-10 1/4"

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

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	2,106.65	0	1,746.84	0	1,387.04	0	1,027.23	0	667.42	0	307.61	0		0		0		0	
1/4	2,099.15	1/4	1,739.34	1/4	1,379.54	1/4	1,019.73	1/4	659.92	1/4	300.11	1/4		1/4		1/4		1/4	
1/2	2,091.66	1/2	1,731.85	1/2	1,372.04	1/2	1,012.23	1/2	652.43	1/2	292.62	1/2		1/2		1/2		1/2	
3/4	2,084.16	3/4	1,724.35	3/4	1,364.55	3/4	1,004.74	3/4	644.93	3/4	285.12	3/4		3/4		3/4		3/4	
1	2,076.67	1	1,716.86	1	1,357.05	1	997.24	1	637.44	1	277.63	1		1		1		1	
1/4	2,069.17	1/4	1,709.36	1/4	1,349.55	1/4	989.74	1/4	629.94	1/4	270.13	1/4		1/4		1/4		1/4	
1/2	2,061.67	1/2	1,701.87	1/2	1,342.06	1/2	982.25	1/2	622.44	1/2	262.63	1/2		1/2		1/2		1/2	
3/4	2,054.18	3/4	1,694.37	3/4	1,334.56	3/4	974.75	3/4	614.95	3/4	255.14	3/4		3/4		3/4		3/4	
2	2,046.68	2	1,686.88	2	1,327.07	2	967.26	2	607.45	2	247.64	2		2		2		2	
1/4	2,039.18	1/4	1,679.38	1/4	1,319.57	1/4	959.76	1/4	599.95	1/4	240.14	1/4		1/4		1/4		1/4	
1/2	2,031.69	1/2	1,671.88	1/2	1,312.07	1/2	952.27	1/2	592.46	1/2	232.65	1/2		1/2		1/2		1/2	
3/4	2,024.19	3/4	1,664.39	3/4	1,304.58	3/4	944.77	3/4	584.96	3/4	225.15	3/4		3/4		3/4		3/4	
3	2,016.70	3	1,656.89	3	1,297.08	3	937.28	3	577.47	3	217.66	3		3		3		3	
1/4	2,009.20	1/4	1,649.39	1/4	1,289.58	1/4	929.78	1/4	569.97	1/4	210.16	1/4		1/4		1/4		1/4	
1/2	2,001.71	1/2	1,641.90	1/2	1,282.09	1/2	922.28	1/2	562.47	1/2	202.67	1/2		1/2		1/2		1/2	
3/4	1,994.21	3/4	1,634.40	3/4	1,274.59	3/4	914.79	3/4	554.98	3/4	195.17	3/4		3/4		3/4		3/4	
4	1,986.72	4	1,626.91	4	1,267.10	4	907.29	4	547.48	4	187.68	4		4		4		4	
1/4	1,979.22	1/4	1,619.41	1/4	1,259.60	1/4	899.79	1/4	539.98	1/4	180.18	1/4		1/4		1/4		1/4	
1/2	1,971.72	1/2	1,611.91	1/2	1,252.11	1/2	892.30	1/2	532.49	1/2	172.68	1/2		1/2		1/2		1/2	
3/4	1,964.23	3/4	1,604.42	3/4	1,244.61	3/4	884.80	3/4	524.99	3/4	165.19	3/4		3/4		3/4		3/4	
5	1,956.73	5	1,596.92	5	1,237.12	5	877.31	5	517.50	5	157.69	5		5		5		5	
1/4	1,949.23	1/4	1,589.42	1/4	1,229.62	1/4	869.81	1/4	510.00	1/4	150.19	1/4		1/4		1/4		1/4	
1/2	1,941.74	1/2	1,581.93	1/2	1,222.12	1/2	862.31	1/2	502.51	1/2	142.70	1/2		1/2		1/2		1/2	
3/4	1,934.24	3/4	1,574.43	3/4	1,214.63	3/4	854.82	3/4	495.01	3/4	135.20	3/4		3/4		3/4		3/4	
6	1,926.75	6	1,566.94	6	1,207.13	6	847.32	6	487.52	6	127.71	6		6		6		6	
1/4	1,919.25	1/4	1,559.44	1/4	1,199.63	1/4	839.82	1/4	480.02	1/4	120.21	1/4		1/4		1/4		1/4	
1/2	1,911.75	1/2	1,551.95	1/2	1,192.14	1/2	832.33	1/2	472.52	1/2	112.71	1/2		1/2		1/2		1/2	
3/4	1,904.26	3/4	1,544.45	3/4	1,184.64	3/4	824.83	3/4	465.03	3/4	105.22	3/4		3/4		3/4		3/4	
7	1,896.76	7	1,536.96	7	1,177.15	7	817.34	7	457.53	7	97.72	7		7		7		7	
1/4	1,889.26	1/4	1,529.46	1/4	1,169.65	1/4	809.84	1/4	450.03	1/4	90.22	1/4		1/4		1/4		1/4	
1/2	1,881.76	1/2	1,521.96	1/2	1,162.15	1/2	802.35	1/2	442.54	1/2	82.73	1/2		1/2		1/2		1/2	
3/4	1,874.26	3/4	1,514.47	3/4	1,154.66	3/4	794.85	3/4	435.04	3/4	75.23	3/4		3/4		3/4		3/4	
8	1,866.76	8	1,506.97	8	1,147.16	8	787.36	8	427.55	8	67.74	8		8		8		8	
1/4	1,859.26	1/4	1,499.47	1/4	1,139.66	1/4	779.86	1/4	420.05	1/4	60.24	1/4		1/4		1/4		1/4	
1/2	1,851.77	1/2	1,491.98	1/2	1,132.17	1/2	772.36	1/2	412.55	1/2	52.68	1/2		1/2		1/2		1/2	
3/4	1,844.28	3/4	1,484.48	3/4	1,124.67	3/4	764.87	3/4	405.06	3/4	47.13	3/4		3/4		3/4		3/4	
9	1,836.79	9	1,476.99	9	1,117.18	9	757.37	9	397.56	9	40.57	9		9		9		9	
1/4	1,829.30	1/4	1,469.49	1/4	1,109.68	1/4	749.87	1/4	390.06	1/4	34.01	1/4		1/4		1/4		1/4	
1/2	1,821.80	1/2	1,461.99	1/2	1,102.19	1/2	742.38	1/2	382.57	1/2	29.33	1/2		1/2		1/2		1/2	
3/4	1,814.31	3/4	1,454.50	3/4	1,094.69	3/4	734.88	3/4	375.07	3/4	24.64	3/4		3/4		3/4		3/4	
10	1,806.81	10	1,447.00	10	1,087.20	10	727.39	10	367.58	10	19.96	10		10		10		10	
1/4	1,799.31	1/4	1,439.50	1/4	1,079.70	1/4	719.89	1/4	360.08	1/4	15.27	1/4		1/4		1/4		1/4	
1/2	1,791.82	1/2	1,432.01	1/2	1,072.20	1/2	712.39	1/2	352.59	1/2		1/2		1/2		1/2		1/2	
3/4	1,784.32	3/4	1,424.51	3/4	1,064.71	3/4	704.90	3/4	345.09	3/4		3/4		3/4		3/4		3/4	
11	1,776.83	11	1,417.02	11	1,057.21	11	697.40	11	337.60	11		11		11		11		11	
1/4	1,769.33	1/4	1,409.52	1/4	1,049.71	1/4	689.90	1/4	330.10	1/4		1/4		1/4		1/4		1/4	
1/2	1,761.83	1/2	1,402.03	1/2	1,042.22	1/2	682.41	1/2	322.60	1/2		1/2		1/2		1/2		1/2	
3/4	1,754.34	3/4	1,394.53	3/4	1,034.72	3/4	674.91	3/4	315.11	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/18/2010 INSP
 RECALCULATED: 06/11/2021 PMA
 REPRINTED: 06/11/2021 PMA

CANCELS AND SUPERCEDES
 ALL PRIOR TO 06/2021

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



BARGE "KIRBY 31009"

3 PORT ULLAGE TABLE

MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 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	4,408.76	0	4,188.44	0	3,968.12	0	3,747.80	0	3,524.60	0	3,186.45	0	2,828.17	0	2,469.90
1/4		1/4		1/4	4,404.17	1/4	4,183.85	1/4	3,963.53	1/4	3,743.21	1/4	3,519.12	1/4	3,178.98	1/4	2,820.70	1/4	2,462.44
1/2		1/2		1/2	4,399.58	1/2	4,179.26	1/2	3,958.94	1/2	3,738.62	1/2	3,513.64	1/2	3,171.52	1/2	2,813.23	1/2	2,454.97
3/4		3/4		3/4	4,394.99	3/4	4,174.67	3/4	3,954.35	3/4	3,734.03	3/4	3,508.16	3/4	3,164.06	3/4	2,805.76	3/4	2,447.51
1		1		1	4,390.40	1	4,170.08	1	3,949.76	1	3,729.44	1	3,502.25	1	3,156.59	1	2,798.30	1	2,440.05
1/4		1/4		1/4	4,385.81	1/4	4,165.49	1/4	3,945.17	1/4	3,724.85	1/4	3,496.34	1/4	3,149.13	1/4	2,790.84	1/4	2,432.58
1/2		1/2		1/2	4,381.22	1/2	4,160.90	1/2	3,940.58	1/2	3,720.26	1/2	3,490.43	1/2	3,141.66	1/2	2,783.39	1/2	2,425.12
3/4		3/4		3/4	4,376.63	3/4	4,156.31	3/4	3,935.99	3/4	3,715.67	3/4	3,484.52	3/4	3,134.20	3/4	2,775.93	3/4	2,417.66
2		2		2	4,372.04	2	4,151.72	2	3,931.40	2	3,711.08	2	3,478.16	2	3,126.73	2	2,768.46	2	2,410.19
1/4		1/4		1/4	4,367.45	1/4	4,147.13	1/4	3,926.81	1/4	3,706.49	1/4	3,471.80	1/4	3,119.27	1/4	2,761.00	1/4	2,402.73
1/2		1/2		1/2	4,362.86	1/2	4,142.54	1/2	3,922.22	1/2	3,701.90	1/2	3,465.44	1/2	3,111.80	1/2	2,753.53	1/2	2,395.26
3/4		3/4		3/4	4,358.27	3/4	4,137.95	3/4	3,917.63	3/4	3,697.31	3/4	3,459.08	3/4	3,104.34	3/4	2,746.07	3/4	2,387.80
3		3		3	4,353.68	3	4,133.36	3	3,913.04	3	3,692.72	3	3,452.28	3	3,096.88	3	2,738.61	3	2,380.33
1/4		1/4		1/4	4,349.09	1/4	4,128.77	1/4	3,908.45	1/4	3,688.13	1/4	3,445.48	1/4	3,089.41	1/4	2,731.14	1/4	2,372.87
1/2		1/2		1/2	4,344.50	1/2	4,124.18	1/2	3,903.86	1/2	3,683.54	1/2	3,438.68	1/2	3,081.95	1/2	2,723.68	1/2	2,365.40
3/4		3/4	4,505.14	3/4	4,339.91	3/4	4,119.59	3/4	3,899.27	3/4	3,678.95	3/4	3,431.88	3/4	3,074.49	3/4	2,716.22	3/4	2,357.94
4		4	4,504.76	4	4,335.32	4	4,115.00	4	3,894.68	4	3,674.36	4	3,424.63	4	3,067.02	4	2,708.75	4	2,350.48
1/4		1/4	4,504.38	1/4	4,330.73	1/4	4,110.41	1/4	3,890.09	1/4	3,669.77	1/4	3,417.39	1/4	3,059.56	1/4	2,701.29	1/4	2,343.01
1/2		1/2	4,503.99	1/2	4,326.14	1/2	4,105.82	1/2	3,885.50	1/2	3,665.18	1/2	3,410.14	1/2	3,052.09	1/2	2,693.82	1/2	2,335.55
3/4		3/4	4,503.61	3/4	4,321.55	3/4	4,101.23	3/4	3,880.91	3/4	3,660.59	3/4	3,402.90	3/4	3,044.63	3/4	2,686.36	3/4	2,328.09
5		5	4,502.46	5	4,316.96	5	4,096.64	5	3,876.32	5	3,656.00	5	3,395.44	5	3,037.17	5	2,678.89	5	2,320.62
1/4		1/4	4,501.32	1/4	4,312.37	1/4	4,092.05	1/4	3,871.73	1/4	3,651.41	1/4	3,387.97	1/4	3,029.70	1/4	2,671.43	1/4	2,313.16
1/2		1/2	4,500.17	1/2	4,307.78	1/2	4,087.46	1/2	3,867.14	1/2	3,646.82	1/2	3,380.51	1/2	3,022.24	1/2	2,663.96	1/2	2,305.69
3/4		3/4	4,499.02	3/4	4,303.19	3/4	4,082.87	3/4	3,862.55	3/4	3,642.23	3/4	3,373.05	3/4	3,014.78	3/4	2,656.50	3/4	2,298.23
6		6	4,497.11	6	4,298.60	6	4,078.28	6	3,857.96	6	3,637.64	6	3,365.58	6	3,007.31	6	2,649.04	6	2,290.77
1/4		1/4	4,495.20	1/4	4,294.01	1/4	4,073.69	1/4	3,853.37	1/4	3,633.05	1/4	3,358.12	1/4	2,999.85	1/4	2,641.57	1/4	2,283.30
1/2		1/2	4,493.28	1/2	4,289.42	1/2	4,069.10	1/2	3,848.78	1/2	3,628.46	1/2	3,350.65	1/2	2,992.38	1/2	2,634.11	1/2	2,275.84
3/4		3/4	4,491.37	3/4	4,284.83	3/4	4,064.51	3/4	3,844.19	3/4	3,623.87	3/4	3,343.19	3/4	2,984.92	3/4	2,626.65	3/4	2,268.38
7		7	4,488.69	7	4,280.24	7	4,059.92	7	3,839.60	7	3,619.30	7	3,335.73	7	2,977.45	7	2,619.18	7	2,260.91
1/4		1/4	4,486.02	1/4	4,275.65	1/4	4,055.33	1/4	3,835.01	1/4	3,614.74	1/4	3,328.26	1/4	2,969.98	1/4	2,611.72	1/4	2,253.45
1/2		1/2	4,483.34	1/2	4,271.06	1/2	4,050.74	1/2	3,830.42	1/2	3,610.17	1/2	3,320.80	1/2	2,962.52	1/2	2,604.25	1/2	2,245.98
3/4		3/4	4,480.66	3/4	4,266.47	3/4	4,046.15	3/4	3,825.83	3/4	3,605.61	3/4	3,313.34	3/4	2,955.05	3/4	2,596.79	3/4	2,238.52
8		8	4,477.22	8	4,261.88	8	4,041.56	8	3,821.24	8	3,600.99	8	3,305.87	8	2,947.59	8	2,589.33	8	2,231.05
1/4		1/4	4,473.78	1/4	4,257.29	1/4	4,036.97	1/4	3,816.65	1/4	3,596.38	1/4	3,298.41	1/4	2,940.13	1/4	2,581.86	1/4	2,223.59
1/2		1/2	4,470.34	1/2	4,252.70	1/2	4,032.38	1/2	3,812.06	1/2	3,591.76	1/2	3,290.94	1/2	2,932.67	1/2	2,574.40	1/2	2,216.12
3/4		3/4	4,466.90	3/4	4,248.11	3/4	4,027.79	3/4	3,807.47	3/4	3,587.15	3/4	3,283.48	3/4	2,925.21	3/4	2,566.94	3/4	2,208.66
9		9	4,462.69	9	4,243.52	9	4,023.20	9	3,802.88	9	3,582.56	9	3,276.01	9	2,917.74	9	2,559.47	9	2,201.20
1/4		1/4	4,458.49	1/4	4,238.93	1/4	4,018.61	1/4	3,798.29	1/4	3,577.97	1/4	3,268.55	1/4	2,910.28	1/4	2,552.01	1/4	2,193.73
1/2		1/2	4,454.28	1/2	4,234.35	1/2	4,014.02	1/2	3,793.70	1/2	3,573.38	1/2	3,261.08	1/2	2,902.81	1/2	2,544.54	1/2	2,186.27
3/4		3/4	4,450.07	3/4	4,229.76	3/4	4,009.43	3/4	3,789.11	3/4	3,568.79	3/4	3,253.62	3/4	2,895.35	3/4	2,537.08	3/4	2,178.81
10		10	4,445.48	10	4,225.17	10	4,004.84	10	3,784.52	10	3,564.14	10	3,246.16	10	2,887.89	10	2,529.61	10	2,171.34
1/4		1/4	4,440.89	1/4	4,220.58	1/4	4,000.25	1/4	3,779.93	1/4	3,559.50	1/4	3,238.69	1/4	2,880.42	1/4	2,522.15	1/4	2,163.88
1/2		1/2	4,436.30	1/2	4,215.98	1/2	3,995.66	1/2	3,775.35	1/2	3,554.85	1/2	3,231.23	1/2	2,872.96	1/2	2,514.68	1/2	2,156.41
3/4		3/4	4,431.71	3/4	4,211.39	3/4	3,991.07	3/4	3,770.76	3/4	3,550.21	3/4	3,223.77	3/4	2,865.50	3/4	2,507.22	3/4	2,148.95
11		11	4,427.12	11	4,206.80	11	3,986.48	11	3,766.17	11	3,545.18	11	3,216.30	11	2,858.03	11	2,499.76	11	2,141.49
1/4		1/4	4,422.53	1/4	4,202.21	1/4	3,981.89	1/4	3,761.57	1/4	3,540.14	1/4	3,208.84	1/4	2,850.57	1/4	2,492.29	1/4	2,134.02
1/2		1/2	4,417.94	1/2	4,197.62	1/2	3,977.30	1/2	3,756.98	1/2	3,535.11	1/2	3,201.37	1/2	2,843.10	1/2	2,484.83	1/2	2,126.56
3/4		3/4	4,413.35	3/4	4,193.03	3/4	3,972.71	3/4	3,752.39	3/4	3,530.08	3/4	3,193.91	3/4	2,835.64	3/4	2,477.37	3/4	2,119.10

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE
 GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-00" FORWARD OF AFT BULKHEAD.

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



BARGE "KIRBY 31009"

3 PORT ULLAGE TABLE MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 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	2,111.63	0	1,753.36	0	1,395.09	0	1,037.71	0	679.50	0	321.23	0		0		0		0	
1/4	2,104.17	1/4	1,745.89	1/4	1,387.62	1/4	1,030.27	1/4	672.04	1/4	313.77	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,096.70	1/2	1,738.43	1/2	1,380.16	1/2	1,022.82	1/2	664.57	1/2	306.30	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,089.24	3/4	1,730.97	3/4	1,372.70	3/4	1,015.38	3/4	657.11	3/4	298.84	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	2,081.77	1	1,723.50	1	1,365.25	1	1,007.92	1	649.65	1	291.37	1	1	1	1	1	1	1	1
1/4	2,074.31	1/4	1,716.04	1/4	1,357.81	1/4	1,000.45	1/4	642.19	1/4	283.91	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,066.84	1/2	1,708.57	1/2	1,350.36	1/2	992.99	1/2	634.74	1/2	276.44	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,059.38	3/4	1,701.11	3/4	1,342.92	3/4	985.53	3/4	627.28	3/4	268.98	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	2,051.92	2	1,693.65	2	1,335.47	2	978.06	2	619.81	2	261.52	2	2	2	2	2	2	2	2
1/4	2,044.45	1/4	1,686.18	1/4	1,328.03	1/4	970.60	1/4	612.34	1/4	254.05	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,036.99	1/2	1,678.72	1/2	1,320.58	1/2	963.13	1/2	604.87	1/2	246.59	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,029.53	3/4	1,671.26	3/4	1,313.14	3/4	955.67	3/4	597.40	3/4	239.13	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	2,022.06	3	1,663.79	3	1,305.70	3	948.21	3	589.93	3	231.66	3	3	3	3	3	3	3	3
1/4	2,014.60	1/4	1,656.33	1/4	1,298.25	1/4	940.74	1/4	582.47	1/4	224.20	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,007.13	1/2	1,648.86	1/2	1,290.81	1/2	933.28	1/2	575.00	1/2	216.73	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,999.67	3/4	1,641.40	3/4	1,283.37	3/4	925.82	3/4	567.54	3/4	209.27	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	1,992.21	4	1,633.93	4	1,275.92	4	918.36	4	560.08	4	201.81	4	4	4	4	4	4	4	4
1/4	1,984.74	1/4	1,626.47	1/4	1,268.48	1/4	910.90	1/4	552.61	1/4	194.34	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,977.28	1/2	1,619.00	1/2	1,261.03	1/2	903.44	1/2	545.15	1/2	186.88	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,969.82	3/4	1,611.54	3/4	1,253.59	3/4	895.98	3/4	537.69	3/4	179.42	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	1,962.35	5	1,604.08	5	1,246.15	5	888.51	5	530.22	5	171.95	5	5	5	5	5	5	5	5
1/4	1,954.89	1/4	1,596.61	1/4	1,238.70	1/4	881.04	1/4	522.76	1/4	164.49	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,947.42	1/2	1,589.15	1/2	1,231.26	1/2	873.57	1/2	515.29	1/2	157.02	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,939.96	3/4	1,581.69	3/4	1,223.82	3/4	866.10	3/4	507.83	3/4	149.56	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	1,932.49	6	1,574.22	6	1,216.37	6	858.64	6	500.37	6	142.09	6	6	6	6	6	6	6	6
1/4	1,925.03	1/4	1,566.76	1/4	1,208.93	1/4	851.17	1/4	492.90	1/4	134.63	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,917.56	1/2	1,559.29	1/2	1,201.48	1/2	843.71	1/2	485.44	1/2	127.16	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,910.10	3/4	1,551.83	3/4	1,194.04	3/4	836.25	3/4	477.98	3/4	119.70	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	1,902.64	7	1,544.37	7	1,186.59	7	828.78	7	470.51	7	112.24	7	7	7	7	7	7	7	7
1/4	1,895.17	1/4	1,536.90	1/4	1,179.15	1/4	821.32	1/4	463.05	1/4	104.77	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,887.71	1/2	1,529.44	1/2	1,171.70	1/2	813.85	1/2	455.58	1/2	97.31	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,880.25	3/4	1,521.98	3/4	1,164.26	3/4	806.39	3/4	448.12	3/4	89.85	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	1,872.78	8	1,514.51	8	1,156.82	8	798.93	8	440.65	8	82.38	8	8	8	8	8	8	8	8
1/4	1,865.32	1/4	1,507.05	1/4	1,149.37	1/4	791.46	1/4	433.19	1/4	74.92	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,857.85	1/2	1,499.58	1/2	1,141.93	1/2	784.00	1/2	425.72	1/2	67.45	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,850.39	3/4	1,492.12	3/4	1,134.49	3/4	776.54	3/4	418.26	3/4	59.99	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	1,842.93	9	1,484.65	9	1,127.04	9	769.07	9	410.80	9	53.46	9	9	9	9	9	9	9	9
1/4	1,835.46	1/4	1,477.19	1/4	1,119.60	1/4	761.61	1/4	403.33	1/4	46.93	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,828.00	1/2	1,469.72	1/2	1,112.15	1/2	754.14	1/2	395.87	1/2	40.40	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,820.54	3/4	1,462.26	3/4	1,104.71	3/4	746.68	3/4	388.41	3/4	33.87	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	1,813.07	10	1,454.80	10	1,097.27	10	739.21	10	380.94	10	29.20	10	10	10	10	10	10	10	10
1/4	1,805.61	1/4	1,447.33	1/4	1,089.82	1/4	731.75	1/4	373.48	1/4	24.54	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,798.14	1/2	1,439.87	1/2	1,082.38	1/2	724.28	1/2	366.01	1/2	19.87	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,790.68	3/4	1,432.41	3/4	1,074.94	3/4	716.82	3/4	358.55	3/4	15.21	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	1,783.21	11	1,424.94	11	1,067.49	11	709.36	11	351.09	11		11	11	11	11	11	11	11	11
1/4	1,775.75	1/4	1,417.48	1/4	1,060.05	1/4	701.89	1/4	343.62	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,768.28	1/2	1,410.01	1/2	1,052.60	1/2	694.43	1/2	336.16	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,760.82	3/4	1,402.55	3/4	1,045.16	3/4	686.97	3/4	328.70	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/18/2010 INSP
RECALCULATED: 06/11/2021 PMA
REPRINTED: 06/11/2021 PMA

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2021

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



BARGE "KIRBY 31009"

3 STBD ULLAGE TABLE

MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	4,399.58	0	4,179.26	0	3,958.94	0	3,738.62	0	3,513.64	0	3,171.52	0	2,813.23	0	2,454.97
1/4		1/4		1/4	4,394.99	1/4	4,174.67	1/4	3,954.35	1/4	3,734.03	1/4	3,508.16	1/4	3,164.06	1/4	2,805.76	1/4	2,447.51
1/2		1/2		1/2	4,390.40	1/2	4,170.08	1/2	3,949.76	1/2	3,729.44	1/2	3,502.25	1/2	3,156.59	1/2	2,798.30	1/2	2,440.05
3/4		3/4		3/4	4,385.81	3/4	4,165.49	3/4	3,945.17	3/4	3,724.85	3/4	3,496.34	3/4	3,149.13	3/4	2,790.84	3/4	2,432.58
1		1		1	4,381.22	1	4,160.90	1	3,940.58	1	3,720.26	1	3,490.43	1	3,141.66	1	2,783.39	1	2,425.12
1/4		1/4		1/4	4,376.63	1/4	4,156.31	1/4	3,935.99	1/4	3,715.67	1/4	3,484.52	1/4	3,134.20	1/4	2,775.93	1/4	2,417.66
1/2		1/2		1/2	4,372.04	1/2	4,151.72	1/2	3,931.40	1/2	3,711.08	1/2	3,478.16	1/2	3,126.73	1/2	2,768.46	1/2	2,410.19
3/4		3/4		3/4	4,367.45	3/4	4,147.13	3/4	3,926.81	3/4	3,706.49	3/4	3,471.80	3/4	3,119.27	3/4	2,761.00	3/4	2,402.73
2		2		2	4,362.86	2	4,142.54	2	3,922.22	2	3,701.90	2	3,465.44	2	3,111.80	2	2,753.53	2	2,395.26
1/4		1/4		1/4	4,358.27	1/4	4,137.95	1/4	3,917.63	1/4	3,697.31	1/4	3,459.08	1/4	3,104.34	1/4	2,746.07	1/4	2,387.80
1/2		1/2		1/2	4,353.68	1/2	4,133.36	1/2	3,913.04	1/2	3,692.72	1/2	3,452.28	1/2	3,096.88	1/2	2,738.61	1/2	2,380.33
3/4		3/4		3/4	4,349.09	3/4	4,128.77	3/4	3,908.45	3/4	3,688.13	3/4	3,445.48	3/4	3,089.41	3/4	2,731.14	3/4	2,372.87
3		3		3	4,344.50	3	4,124.18	3	3,903.86	3	3,683.54	3	3,438.68	3	3,081.95	3	2,723.68	3	2,365.40
1/4		1/4	4,505.14	1/4	4,339.91	1/4	4,119.59	1/4	3,899.27	1/4	3,678.95	1/4	3,431.88	1/4	3,074.49	1/4	2,716.22	1/4	2,357.94
1/2		1/2	4,504.76	1/2	4,335.32	1/2	4,115.00	1/2	3,894.68	1/2	3,674.36	1/2	3,424.63	1/2	3,067.02	1/2	2,708.75	1/2	2,350.48
3/4		3/4	4,504.38	3/4	4,330.73	3/4	4,110.41	3/4	3,890.09	3/4	3,669.77	3/4	3,417.39	3/4	3,059.56	3/4	2,701.29	3/4	2,343.01
4		4	4,503.99	4	4,326.14	4	4,105.82	4	3,885.50	4	3,665.18	4	3,410.14	4	3,052.09	4	2,693.82	4	2,335.55
1/4		1/4	4,503.61	1/4	4,321.55	1/4	4,101.23	1/4	3,880.91	1/4	3,660.59	1/4	3,402.90	1/4	3,044.63	1/4	2,686.36	1/4	2,328.09
1/2		1/2	4,502.46	1/2	4,316.96	1/2	4,096.64	1/2	3,876.32	1/2	3,656.00	1/2	3,395.44	1/2	3,037.17	1/2	2,678.89	1/2	2,320.62
3/4		3/4	4,501.32	3/4	4,312.37	3/4	4,092.05	3/4	3,871.73	3/4	3,651.41	3/4	3,387.97	3/4	3,029.70	3/4	2,671.43	3/4	2,313.16
5		5	4,500.17	5	4,307.78	5	4,087.46	5	3,867.14	5	3,646.82	5	3,380.51	5	3,022.24	5	2,663.96	5	2,305.69
1/4		1/4	4,499.02	1/4	4,303.19	1/4	4,082.87	1/4	3,862.55	1/4	3,642.23	1/4	3,373.05	1/4	3,014.78	1/4	2,656.50	1/4	2,298.23
1/2		1/2	4,497.11	1/2	4,298.60	1/2	4,078.28	1/2	3,857.96	1/2	3,637.64	1/2	3,365.58	1/2	3,007.31	1/2	2,649.04	1/2	2,290.77
3/4		3/4	4,495.20	3/4	4,294.01	3/4	4,073.69	3/4	3,853.37	3/4	3,633.05	3/4	3,358.12	3/4	2,999.85	3/4	2,641.57	3/4	2,283.30
6		6	4,493.28	6	4,289.42	6	4,069.10	6	3,848.78	6	3,628.46	6	3,350.65	6	2,992.38	6	2,634.11	6	2,275.84
1/4		1/4	4,491.37	1/4	4,284.83	1/4	4,064.51	1/4	3,844.19	1/4	3,623.87	1/4	3,343.19	1/4	2,984.92	1/4	2,626.65	1/4	2,268.38
1/2		1/2	4,488.69	1/2	4,280.24	1/2	4,059.92	1/2	3,839.60	1/2	3,619.30	1/2	3,335.73	1/2	2,977.45	1/2	2,619.18	1/2	2,260.91
3/4		3/4	4,486.02	3/4	4,275.65	3/4	4,055.33	3/4	3,835.01	3/4	3,614.74	3/4	3,328.26	3/4	2,969.98	3/4	2,611.72	3/4	2,253.45
7		7	4,483.34	7	4,271.06	7	4,050.74	7	3,830.42	7	3,610.17	7	3,320.80	7	2,962.52	7	2,604.25	7	2,245.98
1/4		1/4	4,480.66	1/4	4,266.47	1/4	4,046.15	1/4	3,825.83	1/4	3,605.61	1/4	3,313.34	1/4	2,955.05	1/4	2,596.79	1/4	2,238.52
1/2		1/2	4,477.22	1/2	4,261.88	1/2	4,041.56	1/2	3,821.24	1/2	3,600.99	1/2	3,305.87	1/2	2,947.59	1/2	2,589.33	1/2	2,231.05
3/4		3/4	4,473.78	3/4	4,257.29	3/4	4,036.97	3/4	3,816.65	3/4	3,596.38	3/4	3,298.41	3/4	2,940.13	3/4	2,581.86	3/4	2,223.59
8		8	4,470.34	8	4,252.70	8	4,032.38	8	3,812.06	8	3,591.76	8	3,290.94	8	2,932.67	8	2,574.40	8	2,216.12
1/4		1/4	4,466.90	1/4	4,248.11	1/4	4,027.79	1/4	3,807.47	1/4	3,587.15	1/4	3,283.48	1/4	2,925.21	1/4	2,566.94	1/4	2,208.66
1/2		1/2	4,462.69	1/2	4,243.52	1/2	4,023.20	1/2	3,802.88	1/2	3,582.56	1/2	3,276.01	1/2	2,917.74	1/2	2,559.47	1/2	2,201.20
3/4		3/4	4,458.49	3/4	4,238.93	3/4	4,018.61	3/4	3,798.29	3/4	3,577.97	3/4	3,268.55	3/4	2,910.28	3/4	2,552.01	3/4	2,193.73
9		9	4,454.28	9	4,234.35	9	4,014.02	9	3,793.70	9	3,573.38	9	3,261.08	9	2,902.81	9	2,544.54	9	2,186.27
1/4		1/4	4,450.07	1/4	4,229.76	1/4	4,009.43	1/4	3,789.11	1/4	3,568.79	1/4	3,255.62	1/4	2,895.35	1/4	2,537.08	1/4	2,178.81
1/2		1/2	4,445.48	1/2	4,225.17	1/2	4,004.84	1/2	3,784.52	1/2	3,564.14	1/2	3,246.16	1/2	2,887.89	1/2	2,529.61	1/2	2,171.34
3/4		3/4	4,440.89	3/4	4,220.58	3/4	4,000.25	3/4	3,779.93	3/4	3,559.50	3/4	3,238.69	3/4	2,880.42	3/4	2,522.15	3/4	2,163.88
10		10	4,436.30	10	4,215.98	10	3,995.66	10	3,775.35	10	3,554.85	10	3,231.23	10	2,872.96	10	2,514.68	10	2,156.41
1/4		1/4	4,431.71	1/4	4,211.39	1/4	3,991.07	1/4	3,770.76	1/4	3,550.21	1/4	3,223.77	1/4	2,865.50	1/4	2,507.22	1/4	2,148.95
1/2		1/2	4,427.12	1/2	4,206.80	1/2	3,986.48	1/2	3,766.17	1/2	3,545.18	1/2	3,216.30	1/2	2,858.03	1/2	2,499.76	1/2	2,141.49
3/4		3/4	4,422.53	3/4	4,202.21	3/4	3,981.89	3/4	3,761.57	3/4	3,540.14	3/4	3,208.84	3/4	2,850.57	3/4	2,492.29	3/4	2,134.02
11		11	4,417.94	11	4,197.62	11	3,977.30	11	3,756.98	11	3,535.11	11	3,201.37	11	2,843.10	11	2,484.83	11	2,126.56
1/4		1/4	4,413.35	1/4	4,193.03	1/4	3,972.71	1/4	3,752.39	1/4	3,530.08	1/4	3,193.91	1/4	2,835.64	1/4	2,477.37	1/4	2,119.10
1/2		1/2	4,408.76	1/2	4,188.44	1/2	3,968.12	1/2	3,747.80	1/2	3,524.60	1/2	3,186.45	1/2	2,828.17	1/2	2,469.90	1/2	2,111.63
3/4		3/4	4,404.17	3/4	4,183.85	3/4	3,963.53	3/4	3,743.21	3/4	3,519.12	3/4	3,178.98	3/4	2,820.70	3/4	2,462.44	3/4	2,104.17

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF THREADS ON "MMC" VALVE
 GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-00" FORWARD OF AFT BULKHEAD.

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



BARGE "KIRBY 31009"

3 STBD ULLAGE TABLE MMC

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

FORMERLY "SMS 30016"

GAUGE HEIGHT 15'-10 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	2,096.70	0	1,738.43	0	1,380.16	0	1,022.82	0	664.57	0	306.30	0		0		0		0	
1/4	2,089.24	1/4	1,730.97	1/4	1,372.70	1/4	1,015.38	1/4	657.11	1/4	298.84	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,081.77	1/2	1,723.50	1/2	1,365.25	1/2	1,007.92	1/2	649.65	1/2	291.37	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,074.31	3/4	1,716.04	3/4	1,357.81	3/4	1,000.45	3/4	642.19	3/4	283.91	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	2,066.84	1	1,708.57	1	1,350.36	1	992.99	1	634.74	1	276.44	1	1	1	1	1	1	1	1
1/4	2,059.38	1/4	1,701.11	1/4	1,342.92	1/4	985.53	1/4	627.28	1/4	268.98	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,051.92	1/2	1,693.65	1/2	1,335.47	1/2	978.06	1/2	619.81	1/2	261.52	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,044.45	3/4	1,686.18	3/4	1,328.03	3/4	970.60	3/4	612.34	3/4	254.05	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	2,036.99	2	1,678.72	2	1,320.58	2	963.13	2	604.87	2	246.59	2	2	2	2	2	2	2	2
1/4	2,029.53	1/4	1,671.26	1/4	1,313.14	1/4	955.67	1/4	597.40	1/4	239.13	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	2,022.06	1/2	1,663.79	1/2	1,305.70	1/2	948.21	1/2	589.93	1/2	231.66	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	2,014.60	3/4	1,656.33	3/4	1,298.25	3/4	940.74	3/4	582.47	3/4	224.20	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	2,007.13	3	1,648.86	3	1,290.81	3	933.28	3	575.00	3	216.73	3	3	3	3	3	3	3	3
1/4	1,999.67	1/4	1,641.40	1/4	1,283.37	1/4	925.82	1/4	567.54	1/4	209.27	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,992.21	1/2	1,633.93	1/2	1,275.92	1/2	918.36	1/2	560.08	1/2	201.81	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,984.74	3/4	1,626.47	3/4	1,268.48	3/4	910.90	3/4	552.61	3/4	194.34	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	1,977.28	4	1,619.00	4	1,261.03	4	903.44	4	545.15	4	186.88	4	4	4	4	4	4	4	4
1/4	1,969.82	1/4	1,611.54	1/4	1,253.59	1/4	895.98	1/4	537.69	1/4	179.42	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,962.35	1/2	1,604.08	1/2	1,246.15	1/2	888.51	1/2	530.22	1/2	171.95	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,954.89	3/4	1,596.61	3/4	1,238.70	3/4	881.04	3/4	522.76	3/4	164.49	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	1,947.42	5	1,589.15	5	1,231.26	5	873.57	5	515.29	5	157.02	5	5	5	5	5	5	5	5
1/4	1,939.96	1/4	1,581.69	1/4	1,223.82	1/4	866.10	1/4	507.83	1/4	149.56	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,932.49	1/2	1,574.22	1/2	1,216.37	1/2	858.64	1/2	500.37	1/2	142.09	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,925.03	3/4	1,566.76	3/4	1,208.93	3/4	851.17	3/4	492.90	3/4	134.63	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	1,917.56	6	1,559.29	6	1,201.48	6	843.71	6	485.44	6	127.16	6	6	6	6	6	6	6	6
1/4	1,910.10	1/4	1,551.83	1/4	1,194.04	1/4	836.25	1/4	477.98	1/4	119.70	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,902.64	1/2	1,544.37	1/2	1,186.59	1/2	828.78	1/2	470.51	1/2	112.24	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,895.17	3/4	1,536.90	3/4	1,179.15	3/4	821.32	3/4	463.05	3/4	104.77	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	1,887.71	7	1,529.44	7	1,171.70	7	813.85	7	455.58	7	97.31	7	7	7	7	7	7	7	7
1/4	1,880.25	1/4	1,521.98	1/4	1,164.26	1/4	806.39	1/4	448.12	1/4	89.85	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,872.78	1/2	1,514.51	1/2	1,156.82	1/2	798.93	1/2	440.65	1/2	82.38	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,865.32	3/4	1,507.05	3/4	1,149.37	3/4	791.46	3/4	433.19	3/4	74.92	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	1,857.85	8	1,499.58	8	1,141.93	8	784.00	8	425.72	8	67.45	8	8	8	8	8	8	8	8
1/4	1,850.39	1/4	1,492.12	1/4	1,134.49	1/4	776.54	1/4	418.26	1/4	59.99	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,842.93	1/2	1,484.65	1/2	1,127.04	1/2	769.07	1/2	410.80	1/2	53.46	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,835.46	3/4	1,477.19	3/4	1,119.60	3/4	761.61	3/4	403.33	3/4	46.93	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	1,828.00	9	1,469.72	9	1,112.15	9	754.14	9	395.87	9	40.40	9	9	9	9	9	9	9	9
1/4	1,820.54	1/4	1,462.26	1/4	1,104.71	1/4	746.68	1/4	388.41	1/4	33.87	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,813.07	1/2	1,454.80	1/2	1,097.27	1/2	739.21	1/2	380.94	1/2	29.20	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,805.61	3/4	1,447.33	3/4	1,089.82	3/4	731.75	3/4	373.48	3/4	24.54	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	1,798.14	10	1,439.87	10	1,082.38	10	724.28	10	366.01	10	19.87	10	10	10	10	10	10	10	10
1/4	1,790.68	1/4	1,432.41	1/4	1,074.94	1/4	716.82	1/4	358.55	1/4	15.21	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,783.21	1/2	1,424.94	1/2	1,067.49	1/2	709.36	1/2	351.09	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,775.75	3/4	1,417.48	3/4	1,060.05	3/4	701.89	3/4	343.62	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	1,768.28	11	1,410.01	11	1,052.60	11	694.43	11	336.16	11		11	11	11	11	11	11	11	11
1/4	1,760.82	1/4	1,402.55	1/4	1,045.16	1/4	686.97	1/4	328.70	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,753.36	1/2	1,395.09	1/2	1,037.71	1/2	679.50	1/2	321.23	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,745.89	3/4	1,387.62	3/4	1,030.27	3/4	672.04	3/4	313.77	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/18/2010 INSP
RECALCULATED: 06/11/2021 PMA
REPRINTED: 06/11/2021 PMA

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2021

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



BARGE "KIRBY 31009"

FUEL TANK INNAGE TABLE

CAPACITIES GIVEN IN WHOLE U.S. GALLONS

FORMERLY: "SMS 30016"

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	100	0	257	0	412	0		0		0		0		0		0	
1/4	1	1/4	103	1/4	260	1/4	415	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1	1/2	106	1/2	263	1/2	417	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	2	3/4	109	3/4	267	3/4	420	3/4		3/4		3/4		3/4		3/4		3/4	
1	3	1	112	1	270	1	423	1		1		1		1		1		1	
1/4	4	1/4	115	1/4	273	1/4	426	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	5	1/2	119	1/2	277	1/2	429	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	6	3/4	122	3/4	280	3/4	431	3/4		3/4		3/4		3/4		3/4		3/4	
2	7	2	125	2	284	2	434	2		2		2		2		2		2	
1/4	9	1/4	128	1/4	287	1/4	437	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	10	1/2	131	1/2	290	1/2	440	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	12	3/4	134	3/4	294	3/4	442	3/4		3/4		3/4		3/4		3/4		3/4	
3	13	3	137	3	297	3	445	3		3		3		3		3		3	
1/4	15	1/4	140	1/4	300	1/4	447	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	17	1/2	144	1/2	304	1/2	450	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	19	3/4	147	3/4	307	3/4	452	3/4		3/4		3/4		3/4		3/4		3/4	
4	20	4	150	4	311	4	455	4		4		4		4		4		4	
1/4	22	1/4	153	1/4	314	1/4	457	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	24	1/2	156	1/2	317	1/2	460	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	26	3/4	160	3/4	320	3/4	462	3/4		3/4		3/4		3/4		3/4		3/4	
5	28	5	163	5	324	5	465	5		5		5		5		5		5	
1/4	31	1/4	166	1/4	327	1/4	467	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	33	1/2	169	1/2	330	1/2	469	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	35	3/4	173	3/4	334	3/4	471	3/4		3/4		3/4		3/4		3/4		3/4	
6	37	6	176	6	337	6	474	6		6		6		6		6		6	
1/4	39	1/4	179	1/4	340	1/4	476	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	42	1/2	183	1/2	343	1/2	478	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	44	3/4	186	3/4	347	3/4	480	3/4		3/4		3/4		3/4		3/4		3/4	
7	46	7	189	7	350	7	482	7		7		7		7		7		7	
1/4	49	1/4	192	1/4	353	1/4	484	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	51	1/2	196	1/2	356	1/2	486	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	54	3/4	199	3/4	360	3/4	488	3/4		3/4		3/4		3/4		3/4		3/4	
8	56	8	202	8	363	8	489	8		8		8		8		8		8	
1/4	59	1/4	206	1/4	366	1/4	491	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	62	1/2	209	1/2	369	1/2	493	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	64	3/4	213	3/4	372	3/4	494	3/4		3/4		3/4		3/4		3/4		3/4	
9	67	9	216	9	375	9	496	9		9		9		9		9		9	
1/4	69	1/4	219	1/4	379	1/4	497	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	72	1/2	223	1/2	382	1/2	499	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	75	3/4	226	3/4	385	3/4	500	3/4		3/4		3/4		3/4		3/4		3/4	
10	78	10	229	10	388	10	502	10		10		10		10		10		10	
1/4	80	1/4	233	1/4	391	1/4	502	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	83	1/2	236	1/2	394	1/2	503	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	86	3/4	240	3/4	397	3/4	504	3/4		3/4		3/4		3/4		3/4		3/4	
11	89	11	243	11	400	11	505	11		11		11		11		11		11	
1/4	92	1/4	246	1/4	403	1/4	506	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	95	1/2	250	1/2	406	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	98	3/4	253	3/4	409	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

STRAPPED: 06/08/2021 JS
CALCULATED: 06/09/2021 CL
ISSUED: 06/09/2021 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2021

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
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Pearland, Texas 77588
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BARGE "KIRBY 31009"

SLOP TANK INNAGE TABLE

CAPACITIES GIVEN IN WHOLE U.S. GALLONS

FORMERLY: "SMS 30016"

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	426	0	1,007	0	1,618	0	2,176	0		0		0		0		0	
1/4	5	1/4	438	1/4	1,019	1/4	1,630	1/4	2,186	1/4		1/4		1/4		1/4		1/4	
1/2	10	1/2	449	1/2	1,032	1/2	1,643	1/2	2,196	1/2		1/2		1/2		1/2		1/2	
3/4	16	3/4	460	3/4	1,045	3/4	1,655	3/4	2,206	3/4		3/4		3/4		3/4		3/4	
1	21	1	471	1	1,057	1	1,668	1	2,217	1		1		1		1		1	
1/4	28	1/4	483	1/4	1,070	1/4	1,680	1/4	2,226	1/4		1/4		1/4		1/4		1/4	
1/2	34	1/2	494	1/2	1,083	1/2	1,692	1/2	2,236	1/2		1/2		1/2		1/2		1/2	
3/4	41	3/4	506	3/4	1,096	3/4	1,705	3/4	2,246	3/4		3/4		3/4		3/4		3/4	
2	47	2	517	2	1,109	2	1,717	2	2,256	2		2		2		2		2	
1/4	55	1/4	529	1/4	1,121	1/4	1,729	1/4	2,265	1/4		1/4		1/4		1/4		1/4	
1/2	62	1/2	540	1/2	1,134	1/2	1,742	1/2	2,275	1/2		1/2		1/2		1/2		1/2	
3/4	69	3/4	552	3/4	1,147	3/4	1,754	3/4	2,284	3/4		3/4		3/4		3/4		3/4	
3	77	3	564	3	1,160	3	1,766	3	2,294	3		3		3		3		3	
1/4	85	1/4	575	1/4	1,173	1/4	1,778	1/4	2,303	1/4		1/4		1/4		1/4		1/4	
1/2	93	1/2	587	1/2	1,185	1/2	1,790	1/2	2,312	1/2		1/2		1/2		1/2		1/2	
3/4	101	3/4	599	3/4	1,198	3/4	1,802	3/4	2,321	3/4		3/4		3/4		3/4		3/4	
4	109	4	611	4	1,211	4	1,815	4	2,330	4		4		4		4		4	
1/4	117	1/4	623	1/4	1,224	1/4	1,826	1/4	2,339	1/4		1/4		1/4		1/4		1/4	
1/2	126	1/2	635	1/2	1,237	1/2	1,838	1/2	2,347	1/2		1/2		1/2		1/2		1/2	
3/4	135	3/4	647	3/4	1,249	3/4	1,850	3/4	2,356	3/4		3/4		3/4		3/4		3/4	
5	143	5	659	5	1,262	5	1,862	5	2,364	5		5		5		5		5	
1/4	152	1/4	671	1/4	1,275	1/4	1,874	1/4	2,372	1/4		1/4		1/4		1/4		1/4	
1/2	161	1/2	683	1/2	1,288	1/2	1,886	1/2	2,380	1/2		1/2		1/2		1/2		1/2	
3/4	170	3/4	695	3/4	1,301	3/4	1,898	3/4	2,388	3/4		3/4		3/4		3/4		3/4	
6	179	6	707	6	1,313	6	1,910	6	2,396	6		6		6		6		6	
1/4	189	1/4	719	1/4	1,326	1/4	1,921	1/4	2,404	1/4		1/4		1/4		1/4		1/4	
1/2	198	1/2	732	1/2	1,339	1/2	1,933	1/2	2,411	1/2		1/2		1/2		1/2		1/2	
3/4	208	3/4	744	3/4	1,352	3/4	1,945	3/4	2,419	3/4		3/4		3/4		3/4		3/4	
7	217	7	756	7	1,365	7	1,956	7	2,426	7		7		7		7		7	
1/4	227	1/4	768	1/4	1,377	1/4	1,968	1/4	2,433	1/4		1/4		1/4		1/4		1/4	
1/2	237	1/2	781	1/2	1,390	1/2	1,979	1/2	2,439	1/2		1/2		1/2		1/2		1/2	
3/4	247	3/4	793	3/4	1,403	3/4	1,990	3/4	2,446	3/4		3/4		3/4		3/4		3/4	
8	257	8	805	8	1,416	8	2,002	8	2,452	8		8		8		8		8	
1/4	267	1/4	818	1/4	1,428	1/4	2,013	1/4	2,457	1/4		1/4		1/4		1/4		1/4	
1/2	277	1/2	830	1/2	1,441	1/2	2,024	1/2	2,463	1/2		1/2		1/2		1/2		1/2	
3/4	287	3/4	843	3/4	1,454	3/4	2,036	3/4	2,468	3/4		3/4		3/4		3/4		3/4	
9	297	9	855	9	1,467	9	2,047	9	2,473	9		9		9		9		9	
1/4	308	1/4	868	1/4	1,479	1/4	2,058	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	318	1/2	880	1/2	1,492	1/2	2,069	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	329	3/4	893	3/4	1,505	3/4	2,080	3/4		3/4		3/4		3/4		3/4		3/4	
10	339	10	905	10	1,517	10	2,091	10		10		10		10		10		10	
1/4	350	1/4	918	1/4	1,530	1/4	2,102	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	361	1/2	931	1/2	1,543	1/2	2,112	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	372	3/4	943	3/4	1,555	3/4	2,123	3/4		3/4		3/4		3/4		3/4		3/4	
11	382	11	956	11	1,568	11	2,134	11		11		11		11		11		11	
1/4	393	1/4	968	1/4	1,580	1/4	2,144	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	404	1/2	981	1/2	1,593	1/2	2,155	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	415	3/4	994	3/4	1,605	3/4	2,165	3/4		3/4		3/4		3/4		3/4		3/4	

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

STRAPPED: 06/08/2021 JS
CALCULATED: 06/09/2021 CL
ISSUED: 06/09/2021 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2021

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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