BARGE "E2MS 313"

ULLAGE (10" HATCH)

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN
1 PORT	- 02-0/8	02-0/8	- 04-1/8	04-1/8	- 06-1/8	06-1/8	- 08-1/8	08-1/8	- 10-1/8	10-1/8	- 12-2/8	12-2/8
1 STBD	- 02-0/8	02-0/8	- 04-0/8	04-0/8	- 06-1/8	06-1/8	- 08-1/8	08-1/8	- 10-1/8	10-1/8	- 12-1/8	12-1/8
2 PORT	- 02-0/8	02-0/8	- 04-1/8	04-1/8	- 06-1/8	06-1/8	- 08-1/8	08-1/8	- 10-1/8	10-1/8	- 12-1/4	12-1/4
2 STBD	- 02-0/8	02-0/8	- 04-1/8	04-1/8	- 06-1/8	06-1/8	- 08-1/8	08-1/8	- 10-1/4	10-1/4	- 12-1/4	12-1/4
3 PORT	02-0/8	- 02-0/8	04-0/8	- 04-0/8	06-1/8	- 06-1/8	08-1/8	- 08-1/8	10-1/8	- 10-1/8	12-1/8	- 12-1/8
3 STBD	02-0/8	- 02-0/8	04-0/8	- 04-0/8	06-1/8	- 06-1/8	08-1/8	- 08-1/8	10-1/8	- 10-1/8	12-1/8	- 12-1/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT	=	2'-00"	
AFT DRAFT	=	6'-00"	
DIFF.	=	4'-00"	(DOWN BY STERN)

THE CORRECTION FOR 4'-00" TRIM DOWN BY STERN FOR 1 PORT IS 08-1/8"
FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED ULLAGE IS 4'-08 1/8"

LENGTH BETWEEN DRAFT MARKS: 235'-09"

January 11, 2019

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

http://www.pmacorp.net

BARGE "E2MS 313"

1 PORT

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-06 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	5,041.61	0	4,739.79	0	4,383.12	0	4,026.44	0	3,668.83	0	3,311.12	0	2,953.40
1/4		1/4		1/4		1/4	5,039.53	1/4	4,732.36	1/4	4,375.69	1/4	4,019.01	1/4	3,661.38	1/4	3,303.66	1/4	2,945.95
1/2		1/2		1/2		1/2	5,037.45	1/2	4,724.93	1/2	4,368.25	1/2	4,011.58	1/2	3,653.93	1/2	3,296.21	1/2	2,938.50
3/4		3/4		3/4		3/4	5,035.38	3/4	4,717.50	3/4	4,360.82	3/4	4,004.15	3/4	3,646.47	3/4	3,288.76	3/4	2,931.04
1		1		1		1	5,032.05	1	4,710.07	1	4,353.39	1	3,996.71	1	3,639.02	1	3,281.31	1	2,923.59
1/4		1/4		1/4		1/4	5,028.73	1/4	4,702.64	1/4	4,345.96	1/4	3,989.26	1/4	3,631.57	1/4	3,273.85	1/4	2,916.14
1/2		1/2		1/2		1/2	5,025.41	1/2	4,695.21	1/2	4,338.53	1/2	3,981.82	1/2	3,624.12	1/2	3,266.40	1/2	2,908.69
3/4		3/4		3/4		3/4	5,022.09	3/4	4,687.77	3/4	4,331.10	3/4	3,974.38	3/4	3,616.66	3/4	3,258.95	3/4	2,901.23
2		2		2		2	5,017.53	2	4,680.34	2	4,323.67	2	3,966.93	2	3,609.21	2	3,251.50	2	2,893.78
1/4		1/4		1/4		1/4	5,012.96	1/4	4,672.91	1/4	4,316.24	1/4	3,959.47	1/4	3,601.76	1/4	3,244.04	1/4	2,886.33
1/2		1/2		1/2		1/2	5,008.40	1/2	4,665.48	1/2	4,308.81	1/2	3,952.02	1/2	3,594.31	1/2	3,236.59	1/2	2,878.88
3/4		3/4		3/4		3/4	5,003.84	3/4	4,658.05	3/4	4,301.38	3/4	3,944.57	3/4	3,586.85	3/4	3,229.14	3/4	2,871.42
3		3		3		3	4,998.03	3	4,650.62	3	4,293.95	3	3,937.12	3	3,579.40	3	3,221.69	3	2,863.97
1/4		1/4		1/4		1/4	4,992.22	1/4	4,643.19	1/4	4,286.52	1/4	3,929.66	1/4	3,571.95	1/4	3,214.23	1/4	2,856.52
1/2		1/2		1/2		1/2	4,986.42	1/2	4,635.76	1/2	4,279.09	1/2	3,922.21	1/2	3,564.50	1/2	3,206.78	1/2	2,849.07
3/4		3/4		3/4		3/4	4,980.61	3/4	4,628.33	3/4	4,271.66	3/4	3,914.76	3/4	3,557.04	3/4	3,199.33	3/4	2,841.61
4		4		4		4	4,973.75	4	4,620.90	4	4,264.22	4	3,907.31	4	3,549.59	4	3,191.88	4	2,834.16
1/4		1/4		1/4		1/4	4,966.90	1/4	4,613.47	1/4	4,256.79	1/4	3,899.85	1/4	3,542.14	1/4	3,184.42	1/4	2,826.71
1/2		1/2		1/2		1/2	4,960.04	1/2	4,606.04	1/2	4,249.36	1/2	3,892.40	1/2	3,534.69	1/2	3,176.97	1/2	2,819.26
3/4		3/4		3/4		3/4	4,953.18	3/4	4,598.61	3/4	4,241.93	3/4	3,884.95	3/4	3,527.23	3/4	3,169.52	3/4	2,811.80
5		5		5		5	4,945.86	5	4,591.18	5	4,234.50	5	3,877.50	5	3,519.78	5	3,162.07	5	2,804.35
1/4		1/4		1/4		1/4	4,938.55	1/4	4,583.75	1/4	4,227.07	1/4	3,870.05	1/4	3,512.33	1/4	3,154.61	1/4	2,796.90
1/2		1/2		1/2		1/2	4,931.23	1/2	4,576.31	1/2	4,219.64	1/2	3,862.59	1/2	3,504.88	1/2	3,147.16	1/2	2,789.45
3/4		3/4		3/4		3/4	4,923.91	3/4	4,568.88	3/4	4,212.21	3/4	3,855.14	3/4	3,497.43	3/4	3,139.71	3/4	2,781.99
6		6		6		6	4,916.56	6	4,561.45	6	4,204.78	6	3,847.69	6	3,489.97	6	3,132.26	6	2,774.54
1/4		1/4		1/4		1/4	4,909.21	1/4	4,554.02	1/4	4,197.35	1/4	3,840.24	1/4	3,482.52	1/4	3,124.81	1/4	2,767.09
1/2		1/2		1/2		1/2	4,901.86	1/2	4,546.59	1/2	4,189.92	1/2	3,832.78	1/2	3,475.07	1/2	3,117.35	1/2	2,759.64
3/4		3/4		3/4		3/4	4,894.51	3/4	4,539.16	3/4	4,182.49	3/4	3,825.33	3/4	3,467.62	3/4	3,109.90	3/4	2,752.19
7		7		7		7	4,887.16	7	4,531.73	7	4,175.06	7	3,817.88	7	3,460.16	7	3,102.45	7	2,744.73
1/4		1/4		1/4		1/4	4,879.80	1/4	4,524.30	1/4	4,167.63	1/4	3,810.43	1/4	3,452.71	1/4	3,095.00	1/4	2,737.28
1/2		1/2		1/2		1/2	4,872.44	1/2	4,516.87	1/2	4,160.20	1/2	3,802.97	1/2	3,445.26	1/2	3,087.54	1/2	2,729.83
3/4		3/4		3/4		3/4	4,865.09	3/4	4,509.44	3/4	4,152.76	3/4	3,795.52	3/4	3,437.81	3/4	3,080.09	3/4	2,722.38
8		8		8		8	4,857.73	8	4,502.01	8	4,145.33	8	3,788.07	8	3,430.35	8	3,072.64	8	2,714.92
1/4		1/4		1/4		1/4	4,850.37	1/4	4,494.58	1/4	4,137.90	1/4	3,780.62	1/4	3,422.90	1/4	3,065.19	1/4	2,707.47
1/2		1/2		1/2		1/2	4,843.01	1/2	4,487.15	1/2	4,130.47	1/2	3,773.16	1/2	3,415.45	1/2	3,057.73	1/2	2,700.02
3/4		3/4		3/4		3/4	4,835.65	3/4	4,479.72	3/4	4,123.04	3/4	3,765.71	3/4	3,408.00	3/4	3,050.28	3/4	2,692.57
9		9		9		9	4,828.30	9	4,472.28	9	4,115.61	9	3,758.26	9	3,400.54	9	3,042.83	9	2,685.11
1/4		1/4		1/4		1/4	4,820.94	1/4	4,464.85	1/4	4,108.18	1/4	3,750.81	1/4	3,393.09	1/4	3,035.38	1/4	2,677.66
1/2		1/2		1/2		1/2	4,813.58	1/2	4,457.42	1/2	4,100.75	1/2	3,743.35	1/2	3,385.64	1/2	3,027.92	1/2	2,670.21
3/4		3/4		3/4		3/4	4,806.23	3/4	4,449.99	3/4	4,093.32	3/4	3,735.90	3/4	3,378.19	3/4	3,020.47	3/4	2,662.76
10		10		10		10	4,798.87	10	4,442.56	10	4,085.89	10	3,728.45	10	3,370.73	10	3,013.02	10	2,655.30
1/4		1/4		1/4		1/4	4,791.51	1/4	4,435.13	1/4	4,078.46	1/4	3,721.00	1/4	3,363.28	1/4	3,005.57	1/4	2,647.85
1/2		1/2		1/2		1/2	4,784.15	1/2	4,427.70	1/2	4,071.03	1/2	3,713.54	1/2	3,355.83	1/2	2,998.11	1/2	2,640.40
3/4		3/4		3/4		3/4	4,776.80	3/4	4,420.27	3/4	4,063.60	3/4	3,706.09	3/4	3,348.38	3/4	2,990.66	3/4	2,632.95
11		11		11		11	4,769.40	11	4,412.84	11	4,056.17	11	3,698.64	11	3,340.92	11	2,983.21	11	2,625.49
1/4		1/4		1/4		1/4	4,762.01	1/4	4,405.41	1/4	4,048.73	1/4	3,691.19	1/4	3,333.47	1/4	2,975.76	1/4	2,618.04
1/2		1/2		1/2		1/2	4,754.61	1/2	4,397.98	1/2	4,041.30	1/2	3,683.74	1/2	3,326.02	1/2	2,968.30	1/2	2,610.59
3/4		3/4		3/4	5,043.69	3/4	4,747.22	3/4	4,390.55	3/4	4,033.87	3/4	3,676.28	3/4	3,318.57	3/4	2,960.85	3/4	2,603.14

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP 10" HATCH ON EXPANSION DOME.
GAUGE POINT: (10" HATCH) LOCATED 3'-00" OFF CENTERLINE AND 3'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
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BARGE "E2MS 313"

1 PORT

ULLAGE TABLE

10" HATCH

GAUGE HEIGHT 17'-06 3/4"

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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	2,595.68	0	2,237.87	0	1,880.05	0	1,522.23	0	1,164.42	0	808.87	0	451.99	0	126.71	0		0	
1/4	2,588.23	1/4	2,230.41	1/4	1,872.60	1/4	1,514.78	1/4	1,156.96	1/4	801.47	1/4	444.71	1/4	120.48	1/4		1/4	
1/2	2,580.77	1/2	2,222.96	1/2	1,865.14	1/2	1,507.32	1/2	1,149.51	1/2	794.08	1/2	437.43	1/2	114.25	1/2		1/2	
3/4	2,573.32	3/4	2,215.50	3/4	1,857.69	3/4	1,499.87	3/4	1,142.05	3/4	786.68	3/4	430.15	3/4	108.02	3/4		3/4	
1	2,565.86	1	2,208.05	1	1,850.23	1	1,492.42	1	1,134.62	1	779.25	1	422.96	1	101.89	1		1	
1/4	2,558.41	1/4	2,200.59	1/4	1,842.78	1/4	1,484.96	1/4	1,127.18	1/4	771.82	1/4	415.76	1/4	95.75	1/4		1/4	
1/2	2,550.95	1/2	2,193.14	1/2	1,835.32	1/2	1,477.51	1/2	1,119.74	1/2	764.39	1/2	408.57	1/2	89.61	1/2		1/2	
3/4	2,543.50	3/4	2,185.68	3/4	1,827.87	3/4	1,470.05	3/4	1,112.30	3/4	756.96	3/4	401.38	3/4	83.48	3/4		3/4	
2	2,536.05	2	2,178.23	2	1,820.41	2	1,462.60	2	1,104.88	2	749.50	2	394.27	2	77.45	2		2	
1/4	2,528.59	1/4	2,170.78	1/4	1,812.96	1/4	1,455.14	1/4	1,097.45	1/4	742.05	1/4	387.17	1/4	71.41	1/4		1/4	
1/2	2,521.14	1/2	2,163.32	1/2	1,805.50	1/2	1,447.69	1/2	1,090.03	1/2	734.60	1/2	380.07	1/2	65.38	1/2		1/2	
3/4	2,513.68	3/4	2,155.87	3/4	1,798.05	3/4	1,440.23	3/4	1,082.61	3/4	727.14	3/4	372.96	3/4	59.35	3/4		3/4	
3	2,506.23	3	2,148.41	3	1,790.60	3	1,432.78	3	1,075.19	3	719.69	3	365.94	3	53.87	3		3	
1/4	2,498.77	1/4	2,140.96	1/4	1,783.14	1/4	1,425.33	1/4	1,067.78	1/4	712.23	1/4	358.93	1/4	48.38	1/4		1/4	
1/2	2,491.32	1/2	2,133.50	1/2	1,775.69	1/2	1,417.87	1/2	1,060.37	1/2	704.78	1/2	351.91	1/2	42.90	1/2		1/2	
3/4	2,483.86	3/4	2,126.05	3/4	1,768.23	3/4	1,410.42	3/4	1,052.95	3/4	697.32	3/4	344.89	3/4	37.42	3/4		3/4	
4	2,476.41	4	2,118.59	4	1,760.78	4	1,402.96	4	1,045.55	4	689.87	4	337.96	4	33.40	4		4	
1/4	2,468.96	1/4	2,111.14	1/4	1,753.32	1/4	1,395.51	1/4	1,038.15	1/4	682.42	1/4	331.03	1/4	29.39	1/4		1/4	
1/2	2,461.50	1/2	2,103.68	1/2	1,745.87	1/2	1,388.05	1/2	1,030.75	1/2	674.96	1/2	324.10	1/2	25.37	1/2		1/2	
3/4	2,454.05	3/4	2,096.23	3/4	1,738.41	3/4	1,380.60	3/4	1,023.35	3/4	667.51	3/4	317.17	3/4	21.36	3/4		3/4	
5	2,446.59	5	2,088.78	5	1,730.96	5	1,373.14	5	1,015.96	5	660.05	5	310.33	5	18.44	5		5	
1/4	2,439.14	1/4	2,081.32	1/4	1,723.51	1/4	1,365.69	1/4	1,008.56	1/4	652.60	1/4	303.49	1/4	15.52	1/4		1/4	
1/2	2,431.68	1/2	2,073.87	1/2	1,716.05	1/2	1,358.23	1/2	1,001.16	1/2	645.14	1/2	296.65	1/2	12.60	1/2		1/2	
3/4	2,424.23	3/4	2,066.41	3/4	1,708.60	3/4	1,350.78	3/4	993.77	3/4	637.69	3/4	289.81	3/4	9.68	3/4		3/4	
6	2,416.77	6	2,058.96	6	1,701.14	6	1,343.33	6	986.37	6	630.24	6	283.05	6	7.82	6		6	
1/4	2,409.32	1/4	2,051.50	1/4	1,693.69	1/4	1,335.87	1/4	978.98	1/4	622.78	1/4	276.30	1/4	5.96	1/4		1/4	
1/2	2,401.86	1/2	2,044.05	1/2	1,686.23	1/2	1,328.42	1/2	971.58	1/2	615.33	1/2	269.54	1/2	4.09	1/2		1/2	
3/4	2,394.41	3/4	2,036.59	3/4	1,678.78	3/4	1,320.96	3/4	964.19	3/4	607.87	3/4	262.79	3/4	2.23	3/4		3/4	
7	2,386.96	7	2,029.14	7	1,671.32	7	1,313.51	7	956.79	7	600.42	7	256.12	7		7		7	
1/4	2,379.50	1/4	2,021.69	1/4	1,663.87	1/4	1,306.05	1/4	949.40	1/4	592.97	1/4	249.45	1/4		1/4		1/4	
1/2	2,372.05	1/2	2,014.23	1/2	1,656.41	1/2	1,298.60	1/2	942.00	1/2	585.52	1/2	242.78	1/2		1/2		1/2	
3/4	2,364.59	3/4	2,006.78	3/4	1,648.96	3/4	1,291.14	3/4	934.60	3/4	578.07	3/4	236.12	3/4		3/4		3/4	
8	2,357.14	8	1,999.32	8	1,641.51	8	1,283.69	8	927.21	8	570.62	8	229.54	8		8		8	
1/4	2,349.68	1/4	1,991.87	1/4	1,634.05	1/4	1,276.24	1/4	919.81	1/4	563.17	1/4	222.96	1/4		1/4		1/4	
1/2	2,342.23	1/2	1,984.41	1/2	1,626.60	1/2	1,268.78	1/2	912.42	1/2	555.72	1/2	216.38	1/2		1/2		1/2	
3/4	2,334.77	3/4	1,976.96	3/4	1,619.14	3/4	1,261.33	3/4	905.02	3/4	548.27	3/4	209.80	3/4		3/4		3/4	
9	2,327.32	9	1,969.50	9	1,611.69	9	1,253.87	9	897.63	9	540.82	9	203.31	9		9		9	
1/4	2,319.87	1/4	1,962.05	1/4	1,604.23	1/4	1,246.42	1/4	890.23	1/4	533.37	1/4	196.81	1/4		1/4		1/4	
1/2	2,312.41	1/2	1,954.59	1/2	1,596.78	1/2	1,238.96	1/2	882.84	1/2	525.91	1/2	190.32	1/2		1/2		1/2	
3/4	2,304.96	3/4	1,947.14	3/4	1,589.32	3/4	1,231.51	3/4	875.44	3/4	518.46	3/4	183.83	3/4		3/4		3/4	
10	2,297.50	10	1,939.69	10	1,581.87	10	1,224.05	10	868.04	10	511.03	10	177.42	10		10		10	
1/4	2,290.05	1/4	1,932.23	1/4	1,574.42	1/4	1,216.60	1/4	860.65	1/4	503.60	1/4	171.02	1/4		1/4		1/4	
1/2	2,282.59	1/2	1,924.78	1/2	1,566.96	1/2	1,209.14	1/2	853.25	1/2	496.17	1/2	164.61	1/2		1/2		1/2	
3/4	2,275.14	3/4	1,917.32	3/4	1,559.51	3/4	1,201.69	3/4	845.86	3/4	488.73	3/4	158.21	3/4		3/4		3/4	
11	2,267.68	11	1,909.87	11	1,552.05	11	1,194.24	11	838.46	11	481.37	11	151.89	11		11		11	
1/4	2,260.23	1/4	1,902.41	1/4	1,544.60	1/4	1,186.78	1/4	831.07	1/4	474.00	1/4	145.57	1/4		1/4		1/4	
1/2	2,252.77	1/2	1,894.96	1/2	1,537.14	1/2	1,179.33	1/2	823.67	1/2	466.63	1/2	139.26	1/2		1/2		1/2	
3/4	2,245.32	3/4	1,887.50	3/4	1,529.69	3/4	1,171.87	3/4	816.27	3/4	459.27	3/4	132.94	3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2019 CL
CALCULATED: 01/14/2019 CL
PRINTED: 01/15/2019 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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http://www.pmacorp.net

BARGE "E2MS 313"

1 STBD

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-07"

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	5,043.03	0	4,746.73	0	4,390.25	0	4,033.76	0	3,676.37	0	3,318.85	0	2,961.32
1/4		1/4		1/4		1/4	5,040.95	1/4	4,739.30	1/4	4,382.82	1/4	4,026.34	1/4	3,668.92	1/4	3,311.40	1/4	2,953.88
1/2		1/2		1/2		1/2	5,038.88	1/2	4,731.87	1/2	4,375.39	1/2	4,018.91	1/2	3,661.47	1/2	3,303.95	1/2	2,946.43
3/4		3/4		3/4		3/4	5,036.80	3/4	4,724.45	3/4	4,367.97	3/4	4,011.48	3/4	3,654.02	3/4	3,296.50	3/4	2,938.98
1		1		1		1	5,034.72	1	4,717.02	1	4,360.54	1	4,004.06	1	3,646.58	1	3,289.05	1	2,931.53
1/4		1/4		1/4		1/4	5,031.40	1/4	4,709.59	1/4	4,353.11	1/4	3,996.62	1/4	3,639.13	1/4	3,281.60	1/4	2,924.08
1/2		1/2		1/2		1/2	5,028.08	1/2	4,702.17	1/2	4,345.69	1/2	3,989.18	1/2	3,631.68	1/2	3,274.16	1/2	2,916.63
3/4		3/4		3/4		3/4	5,024.76	3/4	4,694.74	3/4	4,338.26	3/4	3,981.74	3/4	3,624.23	3/4	3,266.71	3/4	2,909.18
2		2		2		2	5,021.44	2	4,687.31	2	4,330.83	2	3,974.31	2	3,616.78	2	3,259.26	2	2,901.74
1/4		1/4		1/4		1/4	5,016.88	1/4	4,679.89	1/4	4,323.41	1/4	3,966.86	1/4	3,609.33	1/4	3,251.81	1/4	2,894.29
1/2		1/2		1/2		1/2	5,012.32	1/2	4,672.46	1/2	4,315.98	1/2	3,959.41	1/2	3,601.89	1/2	3,244.36	1/2	2,886.84
3/4		3/4		3/4		3/4	5,007.76	3/4	4,665.03	3/4	4,308.55	3/4	3,951.96	3/4	3,594.44	3/4	3,236.91	3/4	2,879.39
3		3		3		3	5,003.20	3	4,657.61	3	4,301.13	3	3,944.51	3	3,586.99	3	3,229.47	3	2,871.94
1/4		1/4		1/4		1/4	4,997.40	1/4	4,650.18	1/4	4,293.70	1/4	3,937.06	1/4	3,579.54	1/4	3,222.02	1/4	2,864.49
1/2		1/2		1/2		1/2	4,991.59	1/2	4,642.75	1/2	4,286.27	1/2	3,929.62	1/2	3,572.09	1/2	3,214.57	1/2	2,857.05
3/4		3/4		3/4		3/4	4,985.79	3/4	4,635.33	3/4	4,278.85	3/4	3,922.17	3/4	3,564.64	3/4	3,207.12	3/4	2,849.60
4		4		4		4	4,979.99	4	4,627.90	4	4,271.42	4	3,914.72	4	3,557.20	4	3,199.67	4	2,842.15
1/4		1/4		1/4		1/4	4,973.13	1/4	4,620.47	1/4	4,263.99	1/4	3,907.27	1/4	3,549.75	1/4	3,192.22	1/4	2,834.70
1/2		1/2		1/2		1/2	4,966.28	1/2	4,613.05	1/2	4,256.57	1/2	3,899.82	1/2	3,542.30	1/2	3,184.78	1/2	2,827.25
3/4		3/4		3/4		3/4	4,959.43	3/4	4,605.62	3/4	4,249.14	3/4	3,892.37	3/4	3,534.85	3/4	3,177.33	3/4	2,819.80
5		5		5		5	4,952.57	5	4,598.19	5	4,241.71	5	3,884.93	5	3,527.40	5	3,169.88	5	2,812.36
1/4		1/4		1/4		1/4	4,945.26	1/4	4,590.77	1/4	4,234.28	1/4	3,877.48	1/4	3,519.95	1/4	3,162.43	1/4	2,804.91
1/2		1/2		1/2		1/2	4,937.95	1/2	4,583.34	1/2	4,226.86	1/2	3,870.03	1/2	3,512.51	1/2	3,154.98	1/2	2,797.46
3/4		3/4		3/4		3/4	4,930.63	3/4	4,575.91	3/4	4,219.43	3/4	3,862.58	3/4	3,505.06	3/4	3,147.53	3/4	2,790.01
6		6		6		6	4,923.32	6	4,568.49	6	4,212.00	6	3,855.13	6	3,497.61	6	3,140.09	6	2,782.56
1/4		1/4		1/4		1/4	4,915.98	1/4	4,561.06	1/4	4,204.58	1/4	3,847.68	1/4	3,490.16	1/4	3,132.64	1/4	2,775.11
1/2		1/2		1/2		1/2	4,908.63	1/2	4,553.63	1/2	4,197.15	1/2	3,840.23	1/2	3,482.71	1/2	3,125.19	1/2	2,767.67
3/4		3/4		3/4		3/4	4,901.28	3/4	4,546.21	3/4	4,189.72	3/4	3,832.79	3/4	3,475.26	3/4	3,117.74	3/4	2,760.22
7		7		7		7	4,893.94	7	4,538.78	7	4,182.30	7	3,825.34	7	3,467.81	7	3,110.29	7	2,752.77
1/4		1/4		1/4		1/4	4,886.58	1/4	4,531.35	1/4	4,174.87	1/4	3,817.89	1/4	3,460.37	1/4	3,102.84	1/4	2,745.32
1/2		1/2		1/2		1/2	4,879.23	1/2	4,523.93	1/2	4,167.44	1/2	3,810.44	1/2	3,452.92	1/2	3,095.39	1/2	2,737.87
3/4		3/4		3/4		3/4	4,871.88	3/4	4,516.50	3/4	4,160.02	3/4	3,802.99	3/4	3,445.47	3/4	3,087.95	3/4	2,730.42
8		8		8		8	4,864.53	8	4,509.07	8	4,152.59	8	3,795.54	8	3,438.02	8	3,080.50	8	2,722.97
1/4		1/4		1/4		1/4	4,857.17	1/4	4,501.65	1/4	4,145.16	1/4	3,788.10	1/4	3,430.57	1/4	3,073.05	1/4	2,715.53
1/2		1/2		1/2		1/2	4,849.82	1/2	4,494.22	1/2	4,137.74	1/2	3,780.65	1/2	3,423.12	1/2	3,065.60	1/2	2,708.08
3/4		3/4		3/4		3/4	4,842.46	3/4	4,486.79	3/4	4,130.31	3/4	3,773.20	3/4	3,415.68	3/4	3,058.15	3/4	2,700.63
9		9		9		9	4,835.11	9	4,479.37	9	4,122.88	9	3,765.75	9	3,408.23	9	3,050.70	9	2,693.18
1/4		1/4		1/4		1/4	4,827.76	1/4	4,471.94	1/4	4,115.46	1/4	3,758.30	1/4	3,400.78	1/4	3,043.26	1/4	2,685.73
1/2		1/2		1/2		1/2	4,820.40	1/2	4,464.51	1/2	4,108.03	1/2	3,750.85	1/2	3,393.33	1/2	3,035.81	1/2	2,678.28
3/4		3/4		3/4		3/4	4,813.05	3/4	4,457.09	3/4	4,100.60	3/4	3,743.41	3/4	3,385.88	3/4	3,028.36	3/4	2,670.84
10		10		10		10	4,805.70	10	4,449.66	10	4,093.18	10	3,735.96	10	3,378.43	10	3,020.91	10	2,663.39
1/4		1/4		1/4		1/4	4,798.34	1/4	4,442.23	1/4	4,085.75	1/4	3,728.51	1/4	3,370.99	1/4	3,013.46	1/4	2,655.94
1/2		1/2		1/2		1/2	4,790.99	1/2	4,434.81	1/2	4,078.32	1/2	3,721.06	1/2	3,363.54	1/2	3,006.01	1/2	2,648.49
3/4		3/4		3/4		3/4	4,783.64	3/4	4,427.38	3/4	4,070.90	3/4	3,713.61	3/4	3,356.09	3/4	2,998.57	3/4	2,641.04
11		11		11		11	4,776.29	11	4,419.95	11	4,063.47	11	3,706.16	11	3,348.64	11	2,991.12	11	2,633.59
1/4		1/4		1/4		1/4	4,768.90	1/4	4,412.53	1/4	4,056.04	1/4	3,698.72	1/4	3,341.19	1/4	2,983.67	1/4	2,626.15
1/2		1/2		1/2		1/2	4,761.51	1/2	4,405.10	1/2	4,048.62	1/2	3,691.27	1/2	3,333.74	1/2	2,976.22	1/2	2,618.70
3/4		3/4		3/4		3/4	4,754.12	3/4	4,397.67	3/4	4,041.19	3/4	3,683.82	3/4	3,326.30	3/4	2,968.77	3/4	2,611.25

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP 10" HATCH ON EXPANSION DOME.
GAUGE POINT: (10" HATCH) LOCATED 3'-00" OFF CENTERLINE AND 3'-00" FORWARD OF AFT BULKHEAD.

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

BARGE "E2MS 313"

1 STBD

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-07"

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	2,603.80	0	2,246.18	0	1,888.56	0	1,530.93	0	1,173.31	0	816.15	0	459.00	0	132.86	0		0	
1/4	2,596.35	1/4	2,238.73	1/4	1,881.11	1/4	1,523.48	1/4	1,165.86	1/4	808.71	1/4	451.72	1/4	126.63	1/4		1/4	
1/2	2,588.90	1/2	2,231.28	1/2	1,873.66	1/2	1,516.03	1/2	1,158.41	1/2	801.27	1/2	444.44	1/2	120.41	1/2		1/2	
3/4	2,581.45	3/4	2,223.83	3/4	1,866.20	3/4	1,508.58	3/4	1,150.96	3/4	793.82	3/4	437.17	3/4	114.18	3/4		3/4	
1	2,574.00	1	2,216.38	1	1,858.75	1	1,501.13	1	1,143.51	1	786.38	1	429.89	1	107.96	1		1	
1/4	2,566.55	1/4	2,208.93	1/4	1,851.30	1/4	1,493.68	1/4	1,136.06	1/4	778.93	1/4	422.71	1/4	101.82	1/4		1/4	
1/2	2,559.10	1/2	2,201.48	1/2	1,843.85	1/2	1,486.23	1/2	1,128.61	1/2	771.48	1/2	415.52	1/2	95.69	1/2		1/2	
3/4	2,551.65	3/4	2,194.03	3/4	1,836.40	3/4	1,478.78	3/4	1,121.15	3/4	764.03	3/4	408.33	3/4	89.56	3/4		3/4	
2	2,544.20	2	2,186.58	2	1,828.95	2	1,471.33	2	1,113.70	2	756.58	2	401.14	2	83.43	2		2	
1/4	2,536.75	1/4	2,179.13	1/4	1,821.50	1/4	1,463.88	1/4	1,106.26	1/4	749.13	1/4	394.04	1/4	77.40	1/4		1/4	
1/2	2,529.30	1/2	2,171.68	1/2	1,814.05	1/2	1,456.43	1/2	1,098.81	1/2	741.68	1/2	386.94	1/2	71.37	1/2		1/2	
3/4	2,521.85	3/4	2,164.22	3/4	1,806.60	3/4	1,448.98	3/4	1,091.36	3/4	734.23	3/4	379.84	3/4	65.34	3/4		3/4	
3	2,514.40	3	2,156.77	3	1,799.15	3	1,441.53	3	1,083.91	3	726.78	3	372.74	3	59.31	3		3	
1/4	2,506.95	1/4	2,149.32	1/4	1,791.70	1/4	1,434.08	1/4	1,076.47	1/4	719.33	1/4	365.73	1/4	53.84	1/4		1/4	
1/2	2,499.50	1/2	2,141.87	1/2	1,784.25	1/2	1,426.63	1/2	1,069.02	1/2	711.88	1/2	358.71	1/2	48.36	1/2		1/2	
3/4	2,492.05	3/4	2,134.42	3/4	1,776.80	3/4	1,419.17	3/4	1,061.58	3/4	704.42	3/4	351.70	3/4	42.88	3/4		3/4	
4	2,484.60	4	2,126.97	4	1,769.35	4	1,411.72	4	1,054.13	4	696.97	4	344.69	4	37.40	4		4	
1/4	2,477.15	1/4	2,119.52	1/4	1,761.90	1/4	1,404.27	1/4	1,046.69	1/4	689.52	1/4	337.76	1/4	33.38	1/4		1/4	
1/2	2,469.70	1/2	2,112.07	1/2	1,754.45	1/2	1,396.82	1/2	1,039.25	1/2	682.07	1/2	330.83	1/2	29.37	1/2		1/2	
3/4	2,462.24	3/4	2,104.62	3/4	1,747.00	3/4	1,389.37	3/4	1,031.81	3/4	674.62	3/4	323.91	3/4	25.36	3/4		3/4	
5	2,454.79	5	2,097.17	5	1,739.55	5	1,381.92	5	1,024.37	5	667.17	5	316.98	5	21.35	5		5	
1/4	2,447.34	1/4	2,089.72	1/4	1,732.10	1/4	1,374.47	1/4	1,016.93	1/4	659.72	1/4	310.14	1/4	18.43	1/4		1/4	
1/2	2,439.89	1/2	2,082.27	1/2	1,724.65	1/2	1,367.02	1/2	1,009.50	1/2	652.27	1/2	303.31	1/2	15.51	1/2		1/2	
3/4	2,432.44	3/4	2,074.82	3/4	1,717.19	3/4	1,359.57	3/4	1,002.06	3/4	644.82	3/4	296.47	3/4	12.60	3/4		3/4	
6	2,424.99	6	2,067.37	6	1,709.74	6	1,352.12	6	994.63	6	637.37	6	289.63	6	9.68	6		6	
1/4	2,417.54	1/4	2,059.92	1/4	1,702.29	1/4	1,344.67	1/4	987.19	1/4	629.92	1/4	282.88	1/4	7.82	1/4		1/4	
1/2	2,410.09	1/2	2,052.47	1/2	1,694.84	1/2	1,337.22	1/2	979.75	1/2	622.47	1/2	276.13	1/2	5.96	1/2		1/2	
3/4	2,402.64	3/4	2,045.02	3/4	1,687.39	3/4	1,329.77	3/4	972.32	3/4	615.02	3/4	269.38	3/4	4.09	3/4		3/4	
7	2,395.19	7	2,037.57	7	1,679.94	7	1,322.32	7	964.88	7	607.57	7	262.63	7	2.23	7		7	
1/4	2,387.74	1/4	2,030.12	1/4	1,672.49	1/4	1,314.87	1/4	957.44	1/4	600.12	1/4	255.96	1/4		1/4		1/4	
1/2	2,380.29	1/2	2,022.67	1/2	1,665.04	1/2	1,307.42	1/2	950.01	1/2	592.67	1/2	249.30	1/2		1/2		1/2	
3/4	2,372.84	3/4	2,015.21	3/4	1,657.59	3/4	1,299.97	3/4	942.57	3/4	585.22	3/4	242.64	3/4		3/4		3/4	
8	2,365.39	8	2,007.76	8	1,650.14	8	1,292.52	8	935.13	8	577.77	8	235.97	8		8		8	
1/4	2,357.94	1/4	2,000.31	1/4	1,642.69	1/4	1,285.07	1/4	927.70	1/4	570.32	1/4	229.40	1/4		1/4		1/4	
1/2	2,350.49	1/2	1,992.86	1/2	1,635.24	1/2	1,277.62	1/2	920.26	1/2	562.87	1/2	222.82	1/2		1/2		1/2	
3/4	2,343.04	3/4	1,985.41	3/4	1,627.79	3/4	1,270.16	3/4	912.83	3/4	555.41	3/4	216.25	3/4		3/4		3/4	
9	2,335.59	9	1,977.96	9	1,620.34	9	1,262.71	9	905.39	9	547.96	9	209.67	9		9		9	
1/4	2,328.14	1/4	1,970.51	1/4	1,612.89	1/4	1,255.26	1/4	897.95	1/4	540.51	1/4	203.18	1/4		1/4		1/4	
1/2	2,320.69	1/2	1,963.06	1/2	1,605.44	1/2	1,247.81	1/2	890.52	1/2	533.06	1/2	196.69	1/2		1/2		1/2	
3/4	2,313.23	3/4	1,955.61	3/4	1,597.99	3/4	1,240.36	3/4	883.08	3/4	525.61	3/4	190.20	3/4		3/4		3/4	
10	2,305.78	10	1,948.16	10	1,590.54	10	1,232.91	10	875.64	10	518.16	10	183.72	10		10		10	
1/4	2,298.33	1/4	1,940.71	1/4	1,583.09	1/4	1,225.46	1/4	868.21	1/4	510.73	1/4	177.31	1/4		1/4		1/4	
1/2	2,290.88	1/2	1,933.26	1/2	1,575.64	1/2	1,218.01	1/2	860.77	1/2	503.30	1/2	170.91	1/2		1/2		1/2	
3/4	2,283.43	3/4	1,925.81	3/4	1,568.18	3/4	1,210.56	3/4	853.34	3/4	495.88	3/4	164.51	3/4		3/4		3/4	
11	2,275.98	11	1,918.36	11	1,560.73	11	1,203.11	11	845.90	11	488.45	11	158.11	11		11		11	
1/4	2,268.53	1/4	1,910.91	1/4	1,553.28	1/4	1,195.66	1/4	838.46	1/4	481.08	1/4	151.80	1/4		1/4		1/4	
1/2	2,261.08	1/2	1,903.46	1/2	1,545.83	1/2	1,188.21	1/2	831.03	1/2	473.72	1/2	145.48	1/2		1/2		1/2	
3/4	2,253.63	3/4	1,896.01	3/4	1,538.38	3/4	1,180.76	3/4	823.59	3/4	466.36	3/4	139.17	3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2019 CL
CALCULATED: 01/14/2019 CL
PRINTED: 01/15/2019 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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http://www.pmacorp.net

BARGE "E2MS 313"

2 PORT

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-07"

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	5,105.84	0	4,808.41	0	4,450.95	0	4,093.48	0	3,735.10	0	3,376.60	0	3,018.09
1/4		1/4		1/4		1/4	5,103.75	1/4	4,800.97	1/4	4,443.50	1/4	4,086.03	1/4	3,727.64	1/4	3,369.13	1/4	3,010.62
1/2		1/2		1/2		1/2	5,101.66	1/2	4,793.52	1/2	4,436.05	1/2	4,078.59	1/2	3,720.17	1/2	3,361.66	1/2	3,003.15
3/4		3/4		3/4		3/4	5,099.57	3/4	4,786.07	3/4	4,428.61	3/4	4,071.14	3/4	3,712.70	3/4	3,354.19	3/4	2,995.68
1		1		1		1	5,097.48	1	4,778.62	1	4,421.16	1	4,063.69	1	3,705.23	1	3,346.72	1	2,988.21
1/4		1/4		1/4		1/4	5,094.14	1/4	4,771.18	1/4	4,413.71	1/4	4,056.23	1/4	3,697.76	1/4	3,339.25	1/4	2,980.75
1/2		1/2		1/2		1/2	5,090.81	1/2	4,763.73	1/2	4,406.26	1/2	4,048.78	1/2	3,690.29	1/2	3,331.78	1/2	2,973.28
3/4		3/4		3/4		3/4	5,087.47	3/4	4,756.28	3/4	4,398.82	3/4	4,041.32	3/4	3,682.82	3/4	3,324.31	3/4	2,965.81
2		2		2		2	5,084.14	2	4,748.83	2	4,391.37	2	4,033.86	2	3,675.35	2	3,316.85	2	2,958.34
1/4		1/4		1/4		1/4	5,079.56	1/4	4,741.39	1/4	4,383.92	1/4	4,026.39	1/4	3,667.88	1/4	3,309.38	1/4	2,950.87
1/2		1/2		1/2		1/2	5,074.98	1/2	4,733.94	1/2	4,376.47	1/2	4,018.92	1/2	3,660.42	1/2	3,301.91	1/2	2,943.40
3/4		3/4		3/4		3/4	5,070.40	3/4	4,726.49	3/4	4,369.03	3/4	4,011.45	3/4	3,652.95	3/4	3,294.44	3/4	2,935.93
3		3		3		3	5,065.82	3	4,719.05	3	4,361.58	3	4,003.98	3	3,645.48	3	3,286.97	3	2,928.46
1/4		1/4		1/4		1/4	5,059.99	1/4	4,711.60	1/4	4,354.13	1/4	3,996.52	1/4	3,638.01	1/4	3,279.50	1/4	2,920.99
1/2		1/2		1/2		1/2	5,054.17	1/2	4,704.15	1/2	4,346.69	1/2	3,989.05	1/2	3,630.54	1/2	3,272.03	1/2	2,913.53
3/4		3/4		3/4		3/4	5,048.34	3/4	4,696.70	3/4	4,339.24	3/4	3,981.58	3/4	3,623.07	3/4	3,264.56	3/4	2,906.06
4		4		4		4	5,042.52	4	4,689.26	4	4,331.79	4	3,974.11	4	3,615.60	4	3,257.09	4	2,898.59
1/4		1/4		1/4		1/4	5,035.64	1/4	4,681.81	1/4	4,324.34	1/4	3,966.64	1/4	3,608.13	1/4	3,249.63	1/4	2,891.12
1/2		1/2		1/2		1/2	5,028.76	1/2	4,674.36	1/2	4,316.90	1/2	3,959.17	1/2	3,600.66	1/2	3,242.16	1/2	2,883.65
3/4		3/4		3/4		3/4	5,021.88	3/4	4,666.92	3/4	4,309.45	3/4	3,951.70	3/4	3,593.19	3/4	3,234.69	3/4	2,876.18
5		5		5		5	5,015.00	5	4,659.47	5	4,302.00	5	3,944.23	5	3,585.73	5	3,227.22	5	2,868.71
1/4		1/4		1/4		1/4	5,007.66	1/4	4,652.02	1/4	4,294.56	1/4	3,936.76	1/4	3,578.26	1/4	3,219.75	1/4	2,861.24
1/2		1/2		1/2		1/2	5,000.32	1/2	4,644.57	1/2	4,287.11	1/2	3,929.30	1/2	3,570.79	1/2	3,212.28	1/2	2,853.77
3/4		3/4		3/4		3/4	4,992.99	3/4	4,637.13	3/4	4,279.66	3/4	3,921.83	3/4	3,563.32	3/4	3,204.81	3/4	2,846.30
6		6		6		6	4,985.65	6	4,629.68	6	4,272.21	6	3,914.36	6	3,555.85	6	3,197.34	6	2,838.84
1/4		1/4		1/4		1/4	4,978.28	1/4	4,622.23	1/4	4,264.77	1/4	3,906.89	1/4	3,548.38	1/4	3,189.87	1/4	2,831.37
1/2		1/2		1/2		1/2	4,970.90	1/2	4,614.79	1/2	4,257.32	1/2	3,899.42	1/2	3,540.91	1/2	3,182.41	1/2	2,823.90
3/4		3/4		3/4		3/4	4,963.53	3/4	4,607.34	3/4	4,249.87	3/4	3,891.95	3/4	3,533.44	3/4	3,174.94	3/4	2,816.43
7		7		7		7	4,956.16	7	4,599.89	7	4,242.43	7	3,884.48	7	3,525.97	7	3,167.47	7	2,808.96
1/4		1/4		1/4		1/4	4,948.78	1/4	4,592.44	1/4	4,234.98	1/4	3,877.01	1/4	3,518.51	1/4	3,160.00	1/4	2,801.49
1/2		1/2		1/2		1/2	4,941.40	1/2	4,585.00	1/2	4,227.53	1/2	3,869.54	1/2	3,511.04	1/2	3,152.53	1/2	2,794.02
3/4		3/4		3/4		3/4	4,934.02	3/4	4,577.55	3/4	4,220.08	3/4	3,862.08	3/4	3,503.57	3/4	3,145.06	3/4	2,786.55
8		8		8		8	4,926.64	8	4,570.10	8	4,212.64	8	3,854.61	8	3,496.10	8	3,137.59	8	2,779.08
1/4		1/4		1/4		1/4	4,919.26	1/4	4,562.65	1/4	4,205.19	1/4	3,847.14	1/4	3,488.63	1/4	3,130.12	1/4	2,771.62
1/2		1/2		1/2		1/2	4,911.88	1/2	4,555.21	1/2	4,197.74	1/2	3,839.67	1/2	3,481.16	1/2	3,122.65	1/2	2,764.15
3/4		3/4		3/4		3/4	4,904.50	3/4	4,547.76	3/4	4,190.29	3/4	3,832.20	3/4	3,473.69	3/4	3,115.19	3/4	2,756.68
9		9		9		9	4,897.12	9	4,540.31	9	4,182.85	9	3,824.73	9	3,466.22	9	3,107.72	9	2,749.21
1/4		1/4		1/4		1/4	4,889.74	1/4	4,532.87	1/4	4,175.40	1/4	3,817.26	1/4	3,458.75	1/4	3,100.25	1/4	2,741.74
1/2		1/2		1/2		1/2	4,882.36	1/2	4,525.42	1/2	4,167.95	1/2	3,809.79	1/2	3,451.29	1/2	3,092.78	1/2	2,734.27
3/4		3/4		3/4		3/4	4,874.98	3/4	4,517.97	3/4	4,160.51	3/4	3,802.32	3/4	3,443.82	3/4	3,085.31	3/4	2,726.80
10		10		10		10	4,867.59	10	4,510.52	10	4,153.06	10	3,794.86	10	3,436.35	10	3,077.84	10	2,719.33
1/4		1/4		1/4		1/4	4,860.21	1/4	4,503.08	1/4	4,145.61	1/4	3,787.39	1/4	3,428.88	1/4	3,070.37	1/4	2,711.86
1/2		1/2		1/2		1/2	4,852.83	1/2	4,495.63	1/2	4,138.16	1/2	3,779.92	1/2	3,421.41	1/2	3,062.90	1/2	2,704.40
3/4		3/4		3/4		3/4	4,845.45	3/4	4,488.18	3/4	4,130.72	3/4	3,772.45	3/4	3,413.94	3/4	3,055.43	3/4	2,696.93
11		11		11		11	4,838.07	11	4,480.74	11	4,123.27	11	3,764.98	11	3,406.47	11	3,047.97	11	2,689.46
1/4		1/4		1/4		1/4	4,830.66	1/4	4,473.29	1/4	4,115.82	1/4	3,757.51	1/4	3,399.00	1/4	3,040.50	1/4	2,681.99
1/2		1/2		1/2		1/2	4,823.24	1/2	4,465.84	1/2	4,108.38	1/2	3,750.04	1/2	3,391.53	1/2	3,033.03	1/2	2,674.52
3/4		3/4		3/4		3/4	4,815.83	3/4	4,458.39	3/4	4,100.93	3/4	3,742.57	3/4	3,384.07	3/4	3,025.56	3/4	2,667.05

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP 10" HATCH ON EXPANSION DOME.
GAUGE POINT: (10" HATCH) LOCATED 3'-00" OFF CENTERLINE AND 3'-00" FORWARD OF AFT BULKHEAD.

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

BARGE "E2MS 313"

2 PORT

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-07"

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	2,659.58	0	2,301.08	0	1,942.57	0	1,584.06	0	1,225.55	0	879.75	0	522.99	0	164.48	0		0	
1/4	2,652.11	1/4	2,293.61	1/4	1,935.10	1/4	1,576.59	1/4	1,218.08	1/4	872.58	1/4	515.52	1/4	157.01	1/4		1/4	
1/2	2,644.64	1/2	2,286.14	1/2	1,927.63	1/2	1,569.12	1/2	1,210.62	1/2	865.40	1/2	508.05	1/2	149.54	1/2		1/2	
3/4	2,637.18	3/4	2,278.67	3/4	1,920.16	3/4	1,561.65	3/4	1,203.15	3/4	858.23	3/4	500.58	3/4	142.08	3/4		3/4	
1	2,629.71	1	2,271.20	1	1,912.69	1	1,554.19	1	1,195.68	1	851.05	1	493.11	1	134.61	1		1	
1/4	2,622.24	1/4	2,263.73	1/4	1,905.22	1/4	1,546.72	1/4	1,188.35	1/4	843.73	1/4	485.64	1/4	127.14	1/4		1/4	
1/2	2,614.77	1/2	2,256.26	1/2	1,897.75	1/2	1,539.25	1/2	1,181.02	1/2	836.40	1/2	478.17	1/2	119.68	1/2		1/2	
3/4	2,607.30	3/4	2,248.79	3/4	1,890.29	3/4	1,531.78	3/4	1,173.69	3/4	829.07	3/4	470.70	3/4	112.22	3/4		3/4	
2	2,599.83	2	2,241.32	2	1,882.82	2	1,524.31	2	1,166.37	2	821.74	2	463.24	2	104.76	2		2	
1/4	2,592.36	1/4	2,233.86	1/4	1,875.35	1/4	1,516.84	1/4	1,159.19	1/4	814.27	1/4	455.77	1/4	97.31	1/4		1/4	
1/2	2,584.89	1/2	2,226.39	1/2	1,867.88	1/2	1,509.37	1/2	1,152.01	1/2	806.81	1/2	448.30	1/2	89.86	1/2		1/2	
3/4	2,577.42	3/4	2,218.92	3/4	1,860.41	3/4	1,501.90	3/4	1,144.83	3/4	799.34	3/4	440.83	3/4	82.42	3/4		3/4	
3	2,569.96	3	2,211.45	3	1,852.94	3	1,494.43	3	1,137.65	3	791.87	3	433.36	3	74.97	3		3	
1/4	2,562.49	1/4	2,203.98	1/4	1,845.47	1/4	1,486.97	1/4	1,130.48	1/4	784.40	1/4	425.89	1/4	67.99	1/4		1/4	
1/2	2,555.02	1/2	2,196.51	1/2	1,838.00	1/2	1,479.50	1/2	1,123.31	1/2	776.93	1/2	418.42	1/2	61.01	1/2		1/2	
3/4	2,547.55	3/4	2,189.04	3/4	1,830.53	3/4	1,472.03	3/4	1,116.14	3/4	769.46	3/4	410.95	3/4	54.02	3/4		3/4	
4	2,540.08	4	2,181.57	4	1,823.07	4	1,464.56	4	1,108.97	4	761.99	4	403.48	4	47.04	4		4	
1/4	2,532.61	1/4	2,174.10	1/4	1,815.60	1/4	1,457.09	1/4	1,101.80	1/4	754.52	1/4	396.02	1/4	41.44	1/4		1/4	
1/2	2,525.14	1/2	2,166.64	1/2	1,808.13	1/2	1,449.62	1/2	1,094.63	1/2	747.05	1/2	388.55	1/2	35.84	1/2		1/2	
3/4	2,517.67	3/4	2,159.17	3/4	1,800.66	3/4	1,442.15	3/4	1,087.47	3/4	739.59	3/4	381.08	3/4	30.24	3/4		3/4	
5	2,510.20	5	2,151.70	5	1,793.19	5	1,434.68	5	1,080.30	5	732.12	5	373.61	5	24.64	5		5	
1/4	2,502.74	1/4	2,144.23	1/4	1,785.72	1/4	1,427.21	1/4	1,073.14	1/4	724.65	1/4	366.14	1/4	20.90	1/4		1/4	
1/2	2,495.27	1/2	2,136.76	1/2	1,778.25	1/2	1,419.75	1/2	1,065.98	1/2	717.18	1/2	358.67	1/2	17.17	1/2		1/2	
3/4	2,487.80	3/4	2,129.29	3/4	1,770.78	3/4	1,412.28	3/4	1,058.81	3/4	709.71	3/4	351.20	3/4	13.43	3/4		3/4	
6	2,480.33	6	2,121.82	6	1,763.31	6	1,404.81	6	1,051.65	6	702.24	6	343.73	6	9.70	6		6	
1/4	2,472.86	1/4	2,114.35	1/4	1,755.85	1/4	1,397.34	1/4	1,044.49	1/4	694.77	1/4	336.26	1/4	7.83	1/4		1/4	
1/2	2,465.39	1/2	2,106.88	1/2	1,748.38	1/2	1,389.87	1/2	1,037.33	1/2	687.30	1/2	328.80	1/2	5.97	1/2		1/2	
3/4	2,457.92	3/4	2,099.41	3/4	1,740.91	3/4	1,382.40	3/4	1,030.16	3/4	679.83	3/4	321.33	3/4	4.10	3/4		3/4	
7	2,450.45	7	2,091.95	7	1,733.44	7	1,374.93	7	1,023.00	7	672.37	7	313.86	7	2.23	7		7	
1/4	2,442.98	1/4	2,084.48	1/4	1,725.97	1/4	1,367.46	1/4	1,015.84	1/4	664.90	1/4	306.39	1/4		1/4		1/4	
1/2	2,435.52	1/2	2,077.01	1/2	1,718.50	1/2	1,359.99	1/2	1,008.68	1/2	657.43	1/2	298.92	1/2		1/2		1/2	
3/4	2,428.05	3/4	2,069.54	3/4	1,711.03	3/4	1,352.52	3/4	1,001.51	3/4	649.96	3/4	291.45	3/4		3/4		3/4	
8	2,420.58	8	2,062.07	8	1,703.56	8	1,345.06	8	994.35	8	642.49	8	283.98	8		8		8	
1/4	2,413.11	1/4	2,054.60	1/4	1,696.09	1/4	1,337.59	1/4	987.19	1/4	635.02	1/4	276.51	1/4		1/4		1/4	
1/2	2,405.64	1/2	2,047.13	1/2	1,688.63	1/2	1,330.12	1/2	980.03	1/2	627.55	1/2	269.04	1/2		1/2		1/2	
3/4	2,398.17	3/4	2,039.66	3/4	1,681.16	3/4	1,322.65	3/4	972.86	3/4	620.08	3/4	261.58	3/4		3/4		3/4	
9	2,390.70	9	2,032.19	9	1,673.69	9	1,315.18	9	965.70	9	612.61	9	254.11	9		9		9	
1/4	2,383.23	1/4	2,024.73	1/4	1,666.22	1/4	1,307.71	1/4	958.54	1/4	605.15	1/4	246.64	1/4		1/4		1/4	
1/2	2,375.76	1/2	2,017.26	1/2	1,658.75	1/2	1,300.24	1/2	951.38	1/2	597.68	1/2	239.17	1/2		1/2		1/2	
3/4	2,368.30	3/4	2,009.79	3/4	1,651.28	3/4	1,292.77	3/4	944.21	3/4	590.21	3/4	231.70	3/4		3/4		3/4	
10	2,360.83	10	2,002.32	10	1,643.81	10	1,285.30	10	937.05	10	582.74	10	224.23	10		10		10	
1/4	2,353.36	1/4	1,994.85	1/4	1,636.34	1/4	1,277.84	1/4	929.89	1/4	575.27	1/4	216.76	1/4		1/4		1/4	
1/2	2,345.89	1/2	1,987.38	1/2	1,628.87	1/2	1,270.37	1/2	922.73	1/2	567.80	1/2	209.29	1/2		1/2		1/2	
3/4	2,338.42	3/4	1,979.91	3/4	1,621.41	3/4	1,262.90	3/4	915.57	3/4	560.33	3/4	201.82	3/4		3/4		3/4	
11	2,330.95	11	1,972.44	11	1,613.94	11	1,255.43	11	908.40	11	552.86	11	194.36	11		11		11	
1/4	2,323.48	1/4	1,964.97	1/4	1,606.47	1/4	1,247.96	1/4	901.24	1/4	545.39	1/4	186.89	1/4		1/4		1/4	
1/2	2,316.01	1/2	1,957.51	1/2	1,599.00	1/2	1,240.49	1/2	894.08	1/2	537.93	1/2	179.42	1/2		1/2		1/2	
3/4	2,308.54	3/4	1,950.04	3/4	1,591.53	3/4	1,233.02	3/4	886.92	3/4	530.46	3/4	171.95	3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2019 CL
CALCULATED: 01/14/2019 CL
PRINTED: 01/15/2019 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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http://www.pmacorp.net

BARGE "E2MS 313"

2 STBD

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-06 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	5,119.02	0	4,816.45	0	4,458.93	0	4,101.41	0	3,742.96	0	3,384.39	0	3,025.82
1/4		1/4		1/4		1/4	5,116.93	1/4	4,809.00	1/4	4,451.48	1/4	4,093.96	1/4	3,735.49	1/4	3,376.92	1/4	3,018.35
1/2		1/2		1/2		1/2	5,114.85	1/2	4,801.56	1/2	4,444.03	1/2	4,086.51	1/2	3,728.02	1/2	3,369.45	1/2	3,010.88
3/4		3/4		3/4		3/4	5,112.76	3/4	4,794.11	3/4	4,436.58	3/4	4,079.06	3/4	3,720.55	3/4	3,361.98	3/4	3,003.41
1		1		1		1	5,109.44	1	4,786.66	1	4,429.14	1	4,071.60	1	3,713.08	1	3,354.51	1	2,995.94
1/4		1/4		1/4		1/4	5,106.11	1/4	4,779.21	1/4	4,421.69	1/4	4,064.15	1/4	3,705.61	1/4	3,347.04	1/4	2,988.47
1/2		1/2		1/2		1/2	5,102.78	1/2	4,771.76	1/2	4,414.24	1/2	4,056.69	1/2	3,698.14	1/2	3,339.57	1/2	2,981.00
3/4		3/4		3/4		3/4	5,099.45	3/4	4,764.31	3/4	4,406.79	3/4	4,049.24	3/4	3,690.67	3/4	3,332.10	3/4	2,973.53
2		2		2		2	5,094.87	2	4,756.87	2	4,399.34	2	4,041.77	2	3,683.20	2	3,324.63	2	2,966.06
1/4		1/4		1/4		1/4	5,090.30	1/4	4,749.42	1/4	4,391.89	1/4	4,034.30	1/4	3,675.73	1/4	3,317.16	1/4	2,958.59
1/2		1/2		1/2		1/2	5,085.72	1/2	4,741.97	1/2	4,384.45	1/2	4,026.83	1/2	3,668.26	1/2	3,309.69	1/2	2,951.12
3/4		3/4		3/4		3/4	5,081.15	3/4	4,734.52	3/4	4,377.00	3/4	4,019.36	3/4	3,660.79	3/4	3,302.22	3/4	2,943.65
3		3		3		3	5,075.33	3	4,727.07	3	4,369.55	3	4,011.89	3	3,653.32	3	3,294.75	3	2,936.18
1/4		1/4		1/4		1/4	5,069.51	1/4	4,719.62	1/4	4,362.10	1/4	4,004.42	1/4	3,645.85	1/4	3,287.28	1/4	2,928.71
1/2		1/2		1/2		1/2	5,063.69	1/2	4,712.18	1/2	4,354.65	1/2	3,996.94	1/2	3,638.38	1/2	3,279.81	1/2	2,921.24
3/4		3/4		3/4		3/4	5,057.87	3/4	4,704.73	3/4	4,347.20	3/4	3,989.47	3/4	3,630.91	3/4	3,272.34	3/4	2,913.77
4		4		4		4	5,050.99	4	4,697.28	4	4,339.76	4	3,982.00	4	3,623.43	4	3,264.87	4	2,906.30
1/4		1/4		1/4		1/4	5,044.12	1/4	4,689.83	1/4	4,332.31	1/4	3,974.53	1/4	3,615.96	1/4	3,257.40	1/4	2,898.83
1/2		1/2		1/2		1/2	5,037.24	1/2	4,682.38	1/2	4,324.86	1/2	3,967.06	1/2	3,608.49	1/2	3,249.92	1/2	2,891.36
3/4		3/4		3/4		3/4	5,030.37	3/4	4,674.93	3/4	4,317.41	3/4	3,959.59	3/4	3,601.02	3/4	3,242.45	3/4	2,883.89
5		5		5		5	5,023.04	5	4,667.48	5	4,309.96	5	3,952.12	5	3,593.55	5	3,234.98	5	2,876.41
1/4		1/4		1/4		1/4	5,015.70	1/4	4,660.04	1/4	4,302.51	1/4	3,944.65	1/4	3,586.08	1/4	3,227.51	1/4	2,868.94
1/2		1/2		1/2		1/2	5,008.37	1/2	4,652.59	1/2	4,295.06	1/2	3,937.18	1/2	3,578.61	1/2	3,220.04	1/2	2,861.47
3/4		3/4		3/4		3/4	5,001.03	3/4	4,645.14	3/4	4,287.62	3/4	3,929.71	3/4	3,571.14	3/4	3,212.57	3/4	2,854.00
6		6		6		6	4,993.66	6	4,637.69	6	4,280.17	6	3,922.24	6	3,563.67	6	3,205.10	6	2,846.53
1/4		1/4		1/4		1/4	4,986.29	1/4	4,630.24	1/4	4,272.72	1/4	3,914.77	1/4	3,556.20	1/4	3,197.63	1/4	2,839.06
1/2		1/2		1/2		1/2	4,978.93	1/2	4,622.79	1/2	4,265.27	1/2	3,907.30	1/2	3,548.73	1/2	3,190.16	1/2	2,831.59
3/4		3/4		3/4		3/4	4,971.56	3/4	4,615.35	3/4	4,257.82	3/4	3,899.83	3/4	3,541.26	3/4	3,182.69	3/4	2,824.12
7		7		7		7	4,964.18	7	4,607.90	7	4,250.37	7	3,892.36	7	3,533.79	7	3,175.22	7	2,816.65
1/4		1/4		1/4		1/4	4,956.81	1/4	4,600.45	1/4	4,242.93	1/4	3,884.89	1/4	3,526.32	1/4	3,167.75	1/4	2,809.18
1/2		1/2		1/2		1/2	4,949.43	1/2	4,593.00	1/2	4,235.48	1/2	3,877.42	1/2	3,518.85	1/2	3,160.28	1/2	2,801.71
3/4		3/4		3/4		3/4	4,942.05	3/4	4,585.55	3/4	4,228.03	3/4	3,869.95	3/4	3,511.38	3/4	3,152.81	3/4	2,794.24
8		8		8		8	4,934.68	8	4,578.10	8	4,220.58	8	3,862.48	8	3,503.91	8	3,145.34	8	2,786.77
1/4		1/4		1/4		1/4	4,927.30	1/4	4,570.66	1/4	4,213.13	1/4	3,855.01	1/4	3,496.44	1/4	3,137.87	1/4	2,779.30
1/2		1/2		1/2		1/2	4,919.93	1/2	4,563.21	1/2	4,205.68	1/2	3,847.54	1/2	3,488.97	1/2	3,130.40	1/2	2,771.83
3/4		3/4		3/4		3/4	4,912.55	3/4	4,555.76	3/4	4,198.24	3/4	3,840.07	3/4	3,481.50	3/4	3,122.93	3/4	2,764.36
9		9		9		9	4,905.18	9	4,548.31	9	4,190.79	9	3,832.60	9	3,474.03	9	3,115.46	9	2,756.89
1/4		1/4		1/4		1/4	4,897.80	1/4	4,540.86	1/4	4,183.34	1/4	3,825.13	1/4	3,466.56	1/4	3,107.99	1/4	2,749.42
1/2		1/2		1/2		1/2	4,890.43	1/2	4,533.41	1/2	4,175.89	1/2	3,817.66	1/2	3,459.09	1/2	3,100.52	1/2	2,741.95
3/4		3/4		3/4		3/4	4,883.05	3/4	4,525.97	3/4	4,168.44	3/4	3,810.19	3/4	3,451.62	3/4	3,093.05	3/4	2,734.48
10		10		10		10	4,875.68	10	4,518.52	10	4,160.99	10	3,802.72	10	3,444.15	10	3,085.58	10	2,727.01
1/4		1/4		1/4		1/4	4,868.30	1/4	4,511.07	1/4	4,153.55	1/4	3,795.25	1/4	3,436.68	1/4	3,078.11	1/4	2,719.54
1/2		1/2		1/2		1/2	4,860.93	1/2	4,503.62	1/2	4,146.10	1/2	3,787.78	1/2	3,429.21	1/2	3,070.64	1/2	2,712.07
3/4		3/4		3/4		3/4	4,853.55	3/4	4,496.17	3/4	4,138.65	3/4	3,780.31	3/4	3,421.74	3/4	3,063.17	3/4	2,704.60
11		11		11		11	4,846.14	11	4,488.72	11	4,131.20	11	3,772.84	11	3,414.27	11	3,055.70	11	2,697.13
1/4		1/4		1/4		1/4	4,838.73	1/4	4,481.27	1/4	4,123.75	1/4	3,765.37	1/4	3,406.80	1/4	3,048.23	1/4	2,689.66
1/2		1/2		1/2		1/2	4,831.31	1/2	4,473.83	1/2	4,116.30	1/2	3,757.90	1/2	3,399.33	1/2	3,040.76	1/2	2,682.19
3/4		3/4		3/4	5,121.10	3/4	4,823.90	3/4	4,466.38	3/4	4,108.85	3/4	3,750.43	3/4	3,391.86	3/4	3,033.29	3/4	2,674.72

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP 10" HATCH ON EXPANSION DOME.
GAUGE POINT: (10" HATCH) LOCATED 3'-00" OFF CENTERLINE AND 3'-00" FORWARD OF AFT BULKHEAD.

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

BARGE "E2MS 313"

2 STBD

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-06 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	2,667.25	0	2,308.60	0	1,949.93	0	1,591.26	0	1,232.58	0	874.39	0	515.75	0	157.08	0		0	
1/4	2,659.78	1/4	2,301.12	1/4	1,942.45	1/4	1,583.78	1/4	1,225.11	1/4	866.93	1/4	508.27	1/4	149.61	1/4		1/4	
1/2	2,652.32	1/2	2,293.65	1/2	1,934.98	1/2	1,576.31	1/2	1,217.64	1/2	859.46	1/2	500.80	1/2	142.14	1/2		1/2	
3/4	2,644.85	3/4	2,286.18	3/4	1,927.51	3/4	1,568.84	3/4	1,210.17	3/4	852.00	3/4	493.33	3/4	134.67	3/4		3/4	
1	2,637.38	1	2,278.71	1	1,920.04	1	1,561.37	1	1,202.70	1	844.52	1	485.86	1	127.20	1		1	
1/4	2,629.90	1/4	2,271.23	1/4	1,912.56	1/4	1,553.89	1/4	1,195.22	1/4	837.05	1/4	478.39	1/4	119.73	1/4		1/4	
1/2	2,622.43	1/2	2,263.76	1/2	1,905.09	1/2	1,546.42	1/2	1,187.75	1/2	829.58	1/2	470.91	1/2	112.27	1/2		1/2	
3/4	2,614.96	3/4	2,256.29	3/4	1,897.62	3/4	1,538.95	3/4	1,180.28	3/4	822.11	3/4	463.44	3/4	104.80	3/4		3/4	
2	2,607.49	2	2,248.82	2	1,890.15	2	1,531.48	2	1,172.81	2	814.63	2	455.97	2	97.35	2		2	
1/4	2,600.02	1/4	2,241.35	1/4	1,882.67	1/4	1,524.00	1/4	1,165.34	1/4	807.16	1/4	448.50	1/4	89.90	1/4		1/4	
1/2	2,592.54	1/2	2,233.87	1/2	1,875.20	1/2	1,516.53	1/2	1,157.87	1/2	799.69	1/2	441.02	1/2	82.46	1/2		1/2	
3/4	2,585.07	3/4	2,226.40	3/4	1,867.73	3/4	1,509.06	3/4	1,150.40	3/4	792.22	3/4	433.55	3/4	75.01	3/4		3/4	
3	2,577.60	3	2,218.93	3	1,860.26	3	1,501.59	3	1,142.93	3	784.75	3	426.08	3	68.02	3		3	
1/4	2,570.13	1/4	2,211.46	1/4	1,852.79	1/4	1,494.12	1/4	1,135.47	1/4	777.27	1/4	418.61	1/4	61.03	1/4		1/4	
1/2	2,562.65	1/2	2,203.98	1/2	1,845.31	1/2	1,486.64	1/2	1,128.00	1/2	769.80	1/2	411.14	1/2	54.05	1/2		1/2	
3/4	2,555.18	3/4	2,196.51	3/4	1,837.84	3/4	1,479.17	3/4	1,120.53	3/4	762.33	3/4	403.66	3/4	47.06	3/4		3/4	
4	2,547.71	4	2,189.04	4	1,830.37	4	1,471.70	4	1,113.07	4	754.86	4	396.19	4	41.46	4		4	
1/4	2,540.24	1/4	2,181.57	1/4	1,822.90	1/4	1,464.23	1/4	1,105.61	1/4	747.39	1/4	388.72	1/4	35.85	1/4		1/4	
1/2	2,532.77	1/2	2,174.09	1/2	1,815.42	1/2	1,456.75	1/2	1,098.15	1/2	739.91	1/2	381.25	1/2	30.25	1/2		1/2	
3/4	2,525.29	3/4	2,166.62	3/4	1,807.95	3/4	1,449.28	3/4	1,090.69	3/4	732.44	3/4	373.78	3/4	24.65	3/4		3/4	
5	2,517.82	5	2,159.15	5	1,800.48	5	1,441.81	5	1,083.23	5	724.97	5	366.30	5	20.91	5		5	
1/4	2,510.35	1/4	2,151.68	1/4	1,793.01	1/4	1,434.34	1/4	1,075.77	1/4	717.50	1/4	358.83	1/4	17.18	1/4		1/4	
1/2	2,502.88	1/2	2,144.21	1/2	1,785.54	1/2	1,426.86	1/2	1,068.31	1/2	710.02	1/2	351.36	1/2	13.44	1/2		1/2	
3/4	2,495.40	3/4	2,136.73	3/4	1,778.06	3/4	1,419.39	3/4	1,060.85	3/4	702.55	3/4	343.89	3/4	9.70	3/4		3/4	
6	2,487.93	6	2,129.26	6	1,770.59	6	1,411.92	6	1,053.40	6	695.08	6	336.41	6	7.84	6		6	
1/4	2,480.46	1/4	2,121.79	1/4	1,763.12	1/4	1,404.45	1/4	1,045.94	1/4	687.61	1/4	328.94	1/4	5.97	1/4		1/4	
1/2	2,472.99	1/2	2,114.32	1/2	1,755.65	1/2	1,396.98	1/2	1,038.48	1/2	680.14	1/2	321.47	1/2	4.10	1/2		1/2	
3/4	2,465.51	3/4	2,106.84	3/4	1,748.17	3/4	1,389.50	3/4	1,031.02	3/4	672.66	3/4	314.00	3/4	2.23	3/4		3/4	
7	2,458.04	7	2,099.37	7	1,740.70	7	1,382.03	7	1,023.56	7	665.19	7	306.53	7		7		7	
1/4	2,450.57	1/4	2,091.90	1/4	1,733.23	1/4	1,374.56	1/4	1,016.10	1/4	657.72	1/4	299.05	1/4		1/4		1/4	
1/2	2,443.10	1/2	2,084.43	1/2	1,725.76	1/2	1,367.09	1/2	1,008.65	1/2	650.25	1/2	291.58	1/2		1/2		1/2	
3/4	2,435.63	3/4	2,076.95	3/4	1,718.28	3/4	1,359.61	3/4	1,001.19	3/4	642.77	3/4	284.11	3/4		3/4		3/4	
8	2,428.15	8	2,069.48	8	1,710.81	8	1,352.14	8	993.73	8	635.30	8	276.64	8		8		8	
1/4	2,420.68	1/4	2,062.01	1/4	1,703.34	1/4	1,344.67	1/4	986.27	1/4	627.83	1/4	269.16	1/4		1/4		1/4	
1/2	2,413.21	1/2	2,054.54	1/2	1,695.87	1/2	1,337.20	1/2	978.81	1/2	620.36	1/2	261.69	1/2		1/2		1/2	
3/4	2,405.74	3/4	2,047.07	3/4	1,688.40	3/4	1,329.72	3/4	971.36	3/4	612.89	3/4	254.22	3/4		3/4		3/4	
9	2,398.26	9	2,039.59	9	1,680.92	9	1,322.25	9	963.90	9	605.41	9	246.75	9		9		9	
1/4	2,390.79	1/4	2,032.12	1/4	1,673.45	1/4	1,314.78	1/4	956.44	1/4	597.94	1/4	239.28	1/4		1/4		1/4	
1/2	2,383.32	1/2	2,024.65	1/2	1,665.98	1/2	1,307.31	1/2	948.98	1/2	590.47	1/2	231.80	1/2		1/2		1/2	
3/4	2,375.85	3/4	2,017.18	3/4	1,658.51	3/4	1,299.84	3/4	941.52	3/4	583.00	3/4	224.33	3/4		3/4		3/4	
10	2,368.37	10	2,009.70	10	1,651.03	10	1,292.36	10	934.07	10	575.52	10	216.86	10		10		10	
1/4	2,360.90	1/4	2,002.23	1/4	1,643.56	1/4	1,284.89	1/4	926.61	1/4	568.05	1/4	209.39	1/4		1/4		1/4	
1/2	2,353.43	1/2	1,994.76	1/2	1,636.09	1/2	1,277.42	1/2	919.15	1/2	560.58	1/2	201.91	1/2		1/2		1/2	
3/4	2,345.96	3/4	1,987.29	3/4	1,628.62	3/4	1,269.95	3/4	911.69	3/4	553.11	3/4	194.44	3/4		3/4		3/4	
11	2,338.49	11	1,979.81	11	1,621.14	11	1,262.47	11	904.23	11	545.64	11	186.97	11		11		11	
1/4	2,331.01	1/4	1,972.34	1/4	1,613.67	1/4	1,255.00	1/4	896.77	1/4	538.16	1/4	179.50	1/4		1/4		1/4	
1/2	2,323.54	1/2	1,964.87	1/2	1,606.20	1/2	1,247.53	1/2	889.32	1/2	530.69	1/2	172.03	1/2		1/2		1/2	
3/4	2,316.07	3/4	1,957.40	3/4	1,598.73	3/4	1,240.06	3/4	881.86	3/4	523.22	3/4	164.55	3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2019 CL
CALCULATED: 01/14/2019 CL
PRINTED: 01/15/2019 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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http://www.pmacorp.net

BARGE "E2MS 313"

3 PORT

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-07"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0	4,460.90	0	4,279.27	0	4,060.78	0	3,842.30	0	3,623.28	0	3,353.80	0	2,998.70
1/4		1/4		1/4		1/4	4,459.63	1/4	4,274.72	1/4	4,056.23	1/4	3,837.75	1/4	3,618.71	1/4	3,346.42	1/4	2,991.29
1/2		1/2		1/2		1/2	4,458.35	1/2	4,270.17	1/2	4,051.68	1/2	3,833.19	1/2	3,614.15	1/2	3,339.04	1/2	2,983.88
3/4		3/4		3/4		3/4	4,457.08	3/4	4,265.61	3/4	4,047.13	3/4	3,828.64	3/4	3,609.58	3/4	3,331.66	3/4	2,976.47
1		1		1		1	4,455.80	1	4,261.06	1	4,042.58	1	3,824.09	1	3,605.02	1	3,324.28	1	2,969.05
1/4		1/4		1/4		1/4	4,453.77	1/4	4,256.51	1/4	4,038.02	1/4	3,819.53	1/4	3,600.45	1/4	3,316.90	1/4	2,961.64
1/2		1/2		1/2		1/2	4,451.73	1/2	4,251.96	1/2	4,033.47	1/2	3,814.97	1/2	3,595.89	1/2	3,309.51	1/2	2,954.23
3/4		3/4		3/4		3/4	4,449.70	3/4	4,247.41	3/4	4,028.92	3/4	3,810.42	3/4	3,591.33	3/4	3,302.13	3/4	2,946.82
2		2		2		2	4,447.66	2	4,242.86	2	4,024.37	2	3,805.86	2	3,586.76	2	3,294.75	2	2,939.41
1/4		1/4		1/4		1/4	4,444.87	1/4	4,238.30	1/4	4,019.82	1/4	3,801.29	1/4	3,582.20	1/4	3,287.37	1/4	2,932.00
1/2		1/2		1/2		1/2	4,442.07	1/2	4,233.75	1/2	4,015.27	1/2	3,796.73	1/2	3,577.63	1/2	3,279.98	1/2	2,924.59
3/4		3/4		3/4		3/4	4,439.28	3/4	4,229.20	3/4	4,010.71	3/4	3,792.16	3/4	3,573.07	3/4	3,272.60	3/4	2,917.18
3		3		3		3	4,436.48	3	4,224.65	3	4,006.16	3	3,787.60	3	3,568.50	3	3,265.22	3	2,909.77
1/4		1/4		1/4		1/4	4,432.92	1/4	4,220.10	1/4	4,001.61	1/4	3,783.03	1/4	3,563.94	1/4	3,257.84	1/4	2,902.35
1/2		1/2		1/2		1/2	4,429.37	1/2	4,215.54	1/2	3,997.06	1/2	3,778.47	1/2	3,559.37	1/2	3,250.45	1/2	2,894.94
3/4		3/4		3/4		3/4	4,425.81	3/4	4,210.99	3/4	3,992.51	3/4	3,773.91	3/4	3,554.81	3/4	3,243.07	3/4	2,887.53
4		4		4		4	4,422.25	4	4,206.44	4	3,987.95	4	3,769.34	4	3,550.25	4	3,235.69	4	2,880.12
1/4		1/4		1/4		1/4	4,418.05	1/4	4,201.89	1/4	3,983.40	1/4	3,764.78	1/4	3,545.56	1/4	3,228.30	1/4	2,872.71
1/2		1/2		1/2		1/2	4,413.85	1/2	4,197.34	1/2	3,978.85	1/2	3,760.21	1/2	3,540.88	1/2	3,220.92	1/2	2,865.30
3/4		3/4		3/4		3/4	4,409.65	3/4	4,192.79	3/4	3,974.30	3/4	3,755.65	3/4	3,536.19	3/4	3,213.54	3/4	2,857.89
5		5		5		5	4,405.45	5	4,188.23	5	3,969.75	5	3,751.08	5	3,531.51	5	3,206.15	5	2,850.48
1/4		1/4		1/4		1/4	4,400.97	1/4	4,183.68	1/4	3,965.20	1/4	3,746.52	1/4	3,526.48	1/4	3,198.76	1/4	2,843.06
1/2		1/2		1/2		1/2	4,396.49	1/2	4,179.13	1/2	3,960.64	1/2	3,741.95	1/2	3,521.46	1/2	3,191.36	1/2	2,835.65
3/4		3/4		3/4		3/4	4,392.00	3/4	4,174.58	3/4	3,956.09	3/4	3,737.39	3/4	3,516.44	3/4	3,183.96	3/4	2,828.24
6		6		6		6	4,387.52	6	4,170.03	6	3,951.54	6	3,732.83	6	3,511.41	6	3,176.57	6	2,820.83
1/4		1/4		1/4		1/4	4,383.02	1/4	4,165.47	1/4	3,946.99	1/4	3,728.26	1/4	3,505.93	1/4	3,169.16	1/4	2,813.42
1/2		1/2		1/2		1/2	4,378.51	1/2	4,160.92	1/2	3,942.44	1/2	3,723.70	1/2	3,500.44	1/2	3,161.75	1/2	2,806.01
3/4		3/4		3/4		3/4	4,374.01	3/4	4,156.37	3/4	3,937.88	3/4	3,719.13	3/4	3,494.96	3/4	3,154.33	3/4	2,798.60
7		7		7		7	4,369.51	7	4,151.82	7	3,933.33	7	3,714.57	7	3,489.48	7	3,146.92	7	2,791.19
1/4		1/4		1/4		1/4	4,365.00	1/4	4,147.27	1/4	3,928.78	1/4	3,710.00	1/4	3,483.52	1/4	3,139.51	1/4	2,783.77
1/2		1/2		1/2		1/2	4,360.49	1/2	4,142.72	1/2	3,924.23	1/2	3,705.44	1/2	3,477.56	1/2	3,132.10	1/2	2,776.36
3/4		3/4		3/4		3/4	4,355.98	3/4	4,138.16	3/4	3,919.68	3/4	3,700.87	3/4	3,471.61	3/4	3,124.69	3/4	2,768.95
8		8		8		8	4,351.47	8	4,133.61	8	3,915.13	8	3,696.31	8	3,465.65	8	3,117.28	8	2,761.54
1/4		1/4		1/4		1/4	4,346.97	1/4	4,129.06	1/4	3,910.57	1/4	3,691.74	1/4	3,459.22	1/4	3,109.87	1/4	2,754.13
1/2		1/2		1/2		1/2	4,342.46	1/2	4,124.51	1/2	3,906.02	1/2	3,687.18	1/2	3,452.79	1/2	3,102.46	1/2	2,746.72
3/4		3/4		3/4		3/4	4,337.95	3/4	4,119.96	3/4	3,901.47	3/4	3,682.62	3/4	3,446.37	3/4	3,095.05	3/4	2,739.31
9		9		9		9	4,333.45	9	4,115.41	9	3,896.92	9	3,678.05	9	3,439.94	9	3,087.63	9	2,731.90
1/4		1/4		1/4		1/4	4,328.94	1/4	4,110.85	1/4	3,892.37	1/4	3,673.49	1/4	3,433.04	1/4	3,080.22	1/4	2,724.49
1/2		1/2		1/2		1/2	4,324.43	1/2	4,106.30	1/2	3,887.82	1/2	3,668.92	1/2	3,426.13	1/2	3,072.81	1/2	2,717.07
3/4		3/4		3/4		3/4	4,319.93	3/4	4,101.75	3/4	3,883.26	3/4	3,664.36	3/4	3,419.23	3/4	3,065.40	3/4	2,709.66
10		10		10		10	4,315.42	10	4,097.20	10	3,878.71	10	3,659.79	10	3,412.32	10	3,057.99	10	2,702.25
1/4		1/4		1/4		1/4	4,310.91	1/4	4,092.65	1/4	3,874.16	1/4	3,655.23	1/4	3,405.07	1/4	3,050.58	1/4	2,694.84
1/2		1/2		1/2		1/2	4,306.40	1/2	4,088.09	1/2	3,869.61	1/2	3,650.66	1/2	3,397.81	1/2	3,043.17	1/2	2,687.43
3/4		3/4		3/4		3/4	4,301.90	3/4	4,083.54	3/4	3,865.06	3/4	3,646.10	3/4	3,390.56	3/4	3,035.76	3/4	2,680.02
11		11		11		11	4,297.39	11	4,078.99	11	3,860.50	11	3,641.54	11	3,383.30	11	3,028.34	11	2,672.61
1/4		1/4		1/4		1/4	4,292.86	1/4	4,074.44	1/4	3,855.95	1/4	3,636.97	1/4	3,375.93	1/4	3,020.93	1/4	2,665.20
1/2		1/2		1/2		1/2	4,288.33	1/2	4,069.89	1/2	3,851.40	1/2	3,632.41	1/2	3,368.55	1/2	3,013.52	1/2	2,657.78
3/4		3/4		3/4		3/4	4,283.80	3/4	4,065.34	3/4	3,846.85	3/4	3,627.84	3/4	3,361.18	3/4	3,006.11	3/4	2,650.37

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP 10" HATCH ON EXPANSION DOME.
GAUGE POINT: (10" HATCH) LOCATED 3'-00" OFF CENTERLINE AND 82'-08" FORWARD OF AFT BULKHEAD.

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

BARGE "E2MS 313"

3 PORT

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-07"

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	2,642.96	0	2,287.01	0	1,931.38	0	1,575.68	0	1,219.55	0	874.75	0	520.32	0	163.75	0		0	
1/4	2,635.55	1/4	2,279.59	1/4	1,923.98	1/4	1,568.26	1/4	1,212.14	1/4	867.61	1/4	512.90	1/4	156.32	1/4		1/4	
1/2	2,628.14	1/2	2,272.17	1/2	1,916.57	1/2	1,560.84	1/2	1,204.72	1/2	860.47	1/2	505.47	1/2	148.88	1/2		1/2	
3/4	2,620.73	3/4	2,264.75	3/4	1,909.17	3/4	1,553.42	3/4	1,197.30	3/4	853.33	3/4	498.05	3/4	141.45	3/4		3/4	
1	2,613.32	1	2,257.33	1	1,901.77	1	1,546.00	1	1,189.88	1	846.19	1	490.63	1	134.01	1		1	
1/4	2,605.90	1/4	2,249.92	1/4	1,894.36	1/4	1,538.58	1/4	1,182.56	1/4	838.93	1/4	483.20	1/4	126.58	1/4		1/4	
1/2	2,598.49	1/2	2,242.50	1/2	1,886.96	1/2	1,531.16	1/2	1,175.25	1/2	831.68	1/2	475.78	1/2	119.15	1/2		1/2	
3/4	2,591.08	3/4	2,235.09	3/4	1,879.56	3/4	1,523.74	3/4	1,167.93	3/4	824.42	3/4	468.35	3/4	111.72	3/4		3/4	
2	2,583.67	2	2,227.67	2	1,872.16	2	1,516.32	2	1,160.61	2	817.16	2	460.93	2	104.29	2		2	
1/4	2,576.25	1/4	2,220.25	1/4	1,864.75	1/4	1,508.90	1/4	1,153.41	1/4	809.77	1/4	453.50	1/4	96.88	1/4		1/4	
1/2	2,568.84	1/2	2,212.84	1/2	1,857.35	1/2	1,501.48	1/2	1,146.20	1/2	802.38	1/2	446.08	1/2	89.47	1/2		1/2	
3/4	2,561.43	3/4	2,205.42	3/4	1,849.95	3/4	1,494.06	3/4	1,139.00	3/4	794.99	3/4	438.66	3/4	82.05	3/4		3/4	
3	2,554.02	3	2,198.01	3	1,842.54	3	1,486.65	3	1,131.79	3	787.59	3	431.23	3	74.64	3		3	
1/4	2,546.60	1/4	2,190.59	1/4	1,835.14	1/4	1,479.23	1/4	1,124.59	1/4	780.17	1/4	423.81	1/4	67.69	1/4		1/4	
1/2	2,539.19	1/2	2,183.17	1/2	1,827.74	1/2	1,471.81	1/2	1,117.39	1/2	772.74	1/2	416.38	1/2	60.74	1/2		1/2	
3/4	2,531.78	3/4	2,175.76	3/4	1,820.34	3/4	1,464.39	3/4	1,110.20	3/4	765.32	3/4	408.96	3/4	53.78	3/4		3/4	
4	2,524.37	4	2,168.34	4	1,812.93	4	1,456.97	4	1,103.00	4	757.90	4	401.53	4	46.83	4		4	
1/4	2,516.95	1/4	2,160.93	1/4	1,805.53	1/4	1,449.55	1/4	1,095.83	1/4	750.47	1/4	394.11	1/4	41.26	1/4		1/4	
1/2	2,509.54	1/2	2,153.51	1/2	1,798.13	1/2	1,442.13	1/2	1,088.67	1/2	743.05	1/2	386.69	1/2	35.68	1/2		1/2	
3/4	2,502.13	3/4	2,146.10	3/4	1,790.72	3/4	1,434.71	3/4	1,081.51	3/4	735.62	3/4	379.26	3/4	30.10	3/4		3/4	
5	2,494.72	5	2,138.68	5	1,783.32	5	1,427.29	5	1,074.34	5	728.20	5	371.84	5	24.53	5		5	
1/4	2,487.30	1/4	2,131.26	1/4	1,775.92	1/4	1,419.87	1/4	1,067.21	1/4	720.78	1/4	364.41	1/4	20.81	1/4		1/4	
1/2	2,479.89	1/2	2,123.85	1/2	1,768.52	1/2	1,412.45	1/2	1,060.09	1/2	713.35	1/2	356.99	1/2	17.09	1/2		1/2	
3/4	2,472.48	3/4	2,116.43	3/4	1,761.11	3/4	1,405.03	3/4	1,052.96	3/4	705.93	3/4	349.57	3/4	13.37	3/4		3/4	
6	2,465.07	6	2,109.02	6	1,753.71	6	1,397.62	6	1,045.83	6	698.50	6	342.14	6	9.66	6		6	
1/4	2,457.65	1/4	2,101.61	1/4	1,746.30	1/4	1,390.20	1/4	1,038.70	1/4	691.08	1/4	334.72	1/4	7.80	1/4		1/4	
1/2	2,450.24	1/2	2,094.20	1/2	1,738.88	1/2	1,382.78	1/2	1,031.57	1/2	683.65	1/2	327.29	1/2	5.94	1/2		1/2	
3/4	2,442.83	3/4	2,086.80	3/4	1,731.47	3/4	1,375.36	3/4	1,024.44	3/4	676.23	3/4	319.87	3/4	4.08	3/4		3/4	
7	2,435.42	7	2,079.39	7	1,724.06	7	1,367.94	7	1,017.31	7	668.81	7	312.44	7	2.22	7		7	
1/4	2,428.00	1/4	2,072.00	1/4	1,716.64	1/4	1,360.52	1/4	1,010.19	1/4	661.38	1/4	305.01	1/4		1/4		1/4	
1/2	2,420.58	1/2	2,064.60	1/2	1,709.22	1/2	1,353.10	1/2	1,003.06	1/2	653.96	1/2	297.58	1/2		1/2		1/2	
3/4	2,413.17	3/4	2,057.21	3/4	1,701.80	3/4	1,345.68	3/4	995.93	3/4	646.53	3/4	290.15	3/4		3/4		3/4	
8	2,405.75	8	2,049.81	8	1,694.38	8	1,338.26	8	988.80	8	639.11	8	282.72	8		8		8	
1/4	2,398.33	1/4	2,042.41	1/4	1,686.96	1/4	1,330.84	1/4	981.67	1/4	631.68	1/4	275.29	1/4		1/4		1/4	
1/2	2,390.91	1/2	2,035.01	1/2	1,679.54	1/2	1,323.42	1/2	974.54	1/2	624.26	1/2	267.85	1/2		1/2		1/2	
3/4	2,383.49	3/4	2,027.61	3/4	1,672.13	3/4	1,316.00	3/4	967.42	3/4	616.84	3/4	260.42	3/4		3/4		3/4	
9	2,376.06	9	2,020.21	9	1,664.71	9	1,308.58	9	960.29	9	609.41	9	252.98	9		9		9	
1/4	2,368.64	1/4	2,012.81	1/4	1,657.29	1/4	1,301.17	1/4	953.16	1/4	601.99	1/4	245.54	1/4		1/4		1/4	
1/2	2,361.22	1/2	2,005.41	1/2	1,649.87	1/2	1,293.75	1/2	946.03	1/2	594.56	1/2	238.11	1/2		1/2		1/2	
3/4	2,353.80	3/4	1,998.01	3/4	1,642.45	3/4	1,286.33	3/4	938.90	3/4	587.14	3/4	230.67	3/4		3/4		3/4	
10	2,346.38	10	1,990.60	10	1,635.03	10	1,278.91	10	931.77	10	579.72	10	223.24	10		10		10	
1/4	2,338.96	1/4	1,983.20	1/4	1,627.61	1/4	1,271.49	1/4	924.65	1/4	572.29	1/4	215.80	1/4		1/4		1/4	
1/2	2,331.54	1/2	1,975.80	1/2	1,620.19	1/2	1,264.07	1/2	917.52	1/2	564.87	1/2	208.37	1/2		1/2		1/2	
3/4	2,324.11	3/4	1,968.39	3/4	1,612.77	3/4	1,256.65	3/4	910.39	3/4	557.44	3/4	200.93	3/4		3/4		3/4	
11	2,316.69	11	1,960.99	11	1,605.35	11	1,249.23	11	903.26	11	550.02	11	193.49	11		11		11	
1/4	2,309.27	1/4	1,953.59	1/4	1,597.93	1/4	1,241.81	1/4	896.13	1/4	542.59	1/4	186.06	1/4		1/4		1/4	
1/2	2,301.85	1/2	1,946.18	1/2	1,590.51	1/2	1,234.39	1/2	889.00	1/2	535.17	1/2	178.62	1/2		1/2		1/2	
3/4	2,294.43	3/4	1,938.78	3/4	1,583.10	3/4	1,226.97	3/4	881.88	3/4	527.75	3/4	171.19	3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2019 CL
CALCULATED: 01/14/2019 CL
PRINTED: 01/15/2019 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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http://www.pmacorp.net

BARGE "E2MS 313"

3 STBD

ULLAGE TABLE

10" HATCH

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

GAUGE HEIGHT 17'-07"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0		0	4,479.65	0	4,298.07	0	4,079.62	0	3,861.17	0	3,642.19	0	3,372.54	0	3,016.86
1/4		1/4		1/4		1/4	4,478.38	1/4	4,293.52	1/4	4,075.07	1/4	3,856.62	1/4	3,637.63	1/4	3,365.15	1/4	3,009.43
1/2		1/2		1/2		1/2	4,477.10	1/2	4,288.97	1/2	4,070.52	1/2	3,852.07	1/2	3,633.07	1/2	3,357.75	1/2	3,002.01
3/4		3/4		3/4		3/4	4,475.83	3/4	4,284.41	3/4	4,065.97	3/4	3,847.52	3/4	3,628.50	3/4	3,350.36	3/4	2,994.59
1		1		1		1	4,474.56	1	4,279.86	1	4,061.42	1	3,842.97	1	3,623.94	1	3,342.97	1	2,987.16
1/4		1/4		1/4		1/4	4,472.52	1/4	4,275.31	1/4	4,056.86	1/4	3,838.41	1/4	3,619.38	1/4	3,335.57	1/4	2,979.74
1/2		1/2		1/2		1/2	4,470.49	1/2	4,270.76	1/2	4,052.31	1/2	3,833.85	1/2	3,614.81	1/2	3,328.18	1/2	2,972.32
3/4		3/4		3/4		3/4	4,468.45	3/4	4,266.21	3/4	4,047.76	3/4	3,829.30	3/4	3,610.25	3/4	3,320.78	3/4	2,964.89
2		2		2		2	4,466.42	2	4,261.66	2	4,043.21	2	3,824.74	2	3,605.68	2	3,313.39	2	2,957.47
1/4		1/4		1/4		1/4	4,463.62	1/4	4,257.11	1/4	4,038.66	1/4	3,820.18	1/4	3,601.12	1/4	3,305.99	1/4	2,950.05
1/2		1/2		1/2		1/2	4,460.83	1/2	4,252.56	1/2	4,034.11	1/2	3,815.61	1/2	3,596.56	1/2	3,298.60	1/2	2,942.63
3/4		3/4		3/4		3/4	4,458.03	3/4	4,248.01	3/4	4,029.56	3/4	3,811.05	3/4	3,591.99	3/4	3,291.20	3/4	2,935.20
3		3		3		3	4,455.24	3	4,243.46	3	4,025.01	3	3,806.49	3	3,587.43	3	3,283.81	3	2,927.78
1/4		1/4		1/4		1/4	4,451.68	1/4	4,238.90	1/4	4,020.46	1/4	3,801.92	1/4	3,582.87	1/4	3,276.41	1/4	2,920.36
1/2		1/2		1/2		1/2	4,448.12	1/2	4,234.35	1/2	4,015.91	1/2	3,797.36	1/2	3,578.30	1/2	3,269.02	1/2	2,912.93
3/4		3/4		3/4		3/4	4,444.57	3/4	4,229.80	3/4	4,011.35	3/4	3,792.80	3/4	3,573.74	3/4	3,261.63	3/4	2,905.51
4		4		4		4	4,441.01	4	4,225.25	4	4,006.80	4	3,788.23	4	3,569.18	4	3,254.23	4	2,898.09
1/4		1/4		1/4		1/4	4,436.81	1/4	4,220.70	1/4	4,002.25	1/4	3,783.67	1/4	3,564.49	1/4	3,246.84	1/4	2,890.66
1/2		1/2		1/2		1/2	4,432.61	1/2	4,216.15	1/2	3,997.70	1/2	3,779.11	1/2	3,559.81	1/2	3,239.44	1/2	2,883.24
3/4		3/4		3/4		3/4	4,428.41	3/4	4,211.60	3/4	3,993.15	3/4	3,774.54	3/4	3,555.13	3/4	3,232.05	3/4	2,875.82
5		5		5		5	4,424.21	5	4,207.05	5	3,988.60	5	3,769.98	5	3,550.44	5	3,224.65	5	2,868.39
1/4		1/4		1/4		1/4	4,419.73	1/4	4,202.50	1/4	3,984.05	1/4	3,765.41	1/4	3,545.42	1/4	3,217.24	1/4	2,860.97
1/2		1/2		1/2		1/2	4,415.25	1/2	4,197.95	1/2	3,979.50	1/2	3,760.85	1/2	3,540.40	1/2	3,209.83	1/2	2,853.55
3/4		3/4		3/4		3/4	4,410.77	3/4	4,193.39	3/4	3,974.95	3/4	3,756.29	3/4	3,535.37	3/4	3,202.42	3/4	2,846.12
6		6		6		6	4,406.29	6	4,188.84	6	3,970.40	6	3,751.72	6	3,530.35	6	3,195.01	6	2,838.70
1/4		1/4		1/4		1/4	4,401.78	1/4	4,184.29	1/4	3,965.84	1/4	3,747.16	1/4	3,524.87	1/4	3,187.59	1/4	2,831.28
1/2		1/2		1/2		1/2	4,397.28	1/2	4,179.74	1/2	3,961.29	1/2	3,742.60	1/2	3,519.39	1/2	3,180.17	1/2	2,823.85
3/4		3/4		3/4		3/4	4,392.78	3/4	4,175.19	3/4	3,956.74	3/4	3,738.03	3/4	3,513.90	3/4	3,172.74	3/4	2,816.43
7		7		7		7	4,388.28	7	4,170.64	7	3,952.19	7	3,733.47	7	3,508.42	7	3,165.32	7	2,809.01
1/4		1/4		1/4		1/4	4,383.77	1/4	4,166.09	1/4	3,947.64	1/4	3,728.90	1/4	3,502.46	1/4	3,157.90	1/4	2,801.58
1/2		1/2		1/2		1/2	4,379.27	1/2	4,161.54	1/2	3,943.09	1/2	3,724.34	1/2	3,496.50	1/2	3,150.47	1/2	2,794.16
3/4		3/4		3/4		3/4	4,374.76	3/4	4,156.99	3/4	3,938.54	3/4	3,719.78	3/4	3,490.54	3/4	3,143.05	3/4	2,786.74
8		8		8		8	4,370.25	8	4,152.44	8	3,933.99	8	3,715.21	8	3,484.58	8	3,135.63	8	2,779.31
1/4		1/4		1/4		1/4	4,365.75	1/4	4,147.88	1/4	3,929.44	1/4	3,710.65	1/4	3,478.14	1/4	3,128.21	1/4	2,771.89
1/2		1/2		1/2		1/2	4,361.24	1/2	4,143.33	1/2	3,924.89	1/2	3,706.09	1/2	3,471.70	1/2	3,120.78	1/2	2,764.47
3/4		3/4		3/4		3/4	4,356.73	3/4	4,138.78	3/4	3,920.33	3/4	3,701.52	3/4	3,465.26	3/4	3,113.36	3/4	2,757.05
9		9		9		9	4,352.23	9	4,134.23	9	3,915.78	9	3,696.96	9	3,458.82	9	3,105.94	9	2,749.62
1/4		1/4		1/4		1/4	4,347.72	1/4	4,129.68	1/4	3,911.23	1/4	3,692.40	1/4	3,451.91	1/4	3,098.51	1/4	2,742.20
1/2		1/2		1/2		1/2	4,343.21	1/2	4,125.13	1/2	3,906.68	1/2	3,687.83	1/2	3,444.99	1/2	3,091.09	1/2	2,734.78
3/4		3/4		3/4		3/4	4,338.71	3/4	4,120.58	3/4	3,902.13	3/4	3,683.27	3/4	3,438.07	3/4	3,083.67	3/4	2,727.35
10		10		10		10	4,334.20	10	4,116.03	10	3,897.58	10	3,678.70	10	3,431.16	10	3,076.24	10	2,719.93
1/4		1/4		1/4		1/4	4,329.70	1/4	4,111.48	1/4	3,893.03	1/4	3,674.14	1/4	3,423.89	1/4	3,068.82	1/4	2,712.51
1/2		1/2		1/2		1/2	4,325.19	1/2	4,106.93	1/2	3,888.48	1/2	3,669.58	1/2	3,416.62	1/2	3,061.40	1/2	2,705.08
3/4		3/4		3/4		3/4	4,320.69	3/4	4,102.37	3/4	3,883.93	3/4	3,665.01	3/4	3,409.35	3/4	3,053.97	3/4	2,697.66
11		11		11		11	4,316.18	11	4,097.82	11	3,879.38	11	3,660.45	11	3,402.08	11	3,046.55	11	2,690.24
1/4		1/4		1/4		1/4	4,311.65	1/4	4,093.27	1/4	3,874.82	1/4	3,655.89	1/4	3,394.70	1/4	3,039.13	1/4	2,682.81
1/2		1/2		1/2		1/2	4,307.12	1/2	4,088.72	1/2	3,870.27	1/2	3,651.32	1/2	3,387.31	1/2	3,031.70	1/2	2,675.39
3/4		3/4		3/4		3/4	4,302.60	3/4	4,084.17	3/4	3,865.72	3/4	3,646.76	3/4	3,379.93	3/4	3,024.28	3/4	2,667.97

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP 10" HATCH ON EXPANSION DOME.
GAUGE POINT: (10" HATCH) LOCATED 3'-00" OFF CENTERLINE AND 82'-08" FORWARD OF AFT BULKHEAD.

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

BARGE "E2MS 313"

3 STBD

ULLAGE TABLE
10" HATCH
GAUGE HEIGHT 17'-07"

CAPACITIES GIVEN IN BARRELS OF 42 U.S. GALLONS

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	2,660.54	0	2,304.01	0	1,947.21	0	1,590.40	0	1,233.59	0	877.26	0	520.49	0	163.70	0		0	
1/4	2,653.12	1/4	2,296.58	1/4	1,939.77	1/4	1,582.97	1/4	1,226.16	1/4	869.83	1/4	513.06	1/4	156.26	1/4		1/4	
1/2	2,645.70	1/2	2,289.15	1/2	1,932.34	1/2	1,575.53	1/2	1,218.72	1/2	862.40	1/2	505.62	1/2	148.83	1/2		1/2	
3/4	2,638.27	3/4	2,281.71	3/4	1,924.91	3/4	1,568.10	3/4	1,211.29	3/4	854.98	3/4	498.19	3/4	141.40	3/4		3/4	
1	2,630.85	1	2,274.28	1	1,917.47	1	1,560.66	1	1,203.86	1	847.55	1	490.76	1	133.96	1		1	
1/4	2,623.42	1/4	2,266.85	1/4	1,910.04	1/4	1,553.23	1/4	1,196.42	1/4	840.12	1/4	483.32	1/4	126.54	1/4		1/4	
1/2	2,616.00	1/2	2,259.41	1/2	1,902.61	1/2	1,545.80	1/2	1,188.99	1/2	832.68	1/2	475.89	1/2	119.11	1/2		1/2	
3/4	2,608.57	3/4	2,251.98	3/4	1,895.17	3/4	1,538.36	3/4	1,181.56	3/4	825.25	3/4	468.46	3/4	111.68	3/4		3/4	
2	2,601.15	2	2,244.55	2	1,887.74	2	1,530.93	2	1,174.12	2	817.82	2	461.02	2	104.26	2		2	
1/4	2,593.73	1/4	2,237.11	1/4	1,880.31	1/4	1,523.50	1/4	1,166.69	1/4	810.38	1/4	453.59	1/4	96.85	1/4		1/4	
1/2	2,586.30	1/2	2,229.68	1/2	1,872.87	1/2	1,516.06	1/2	1,159.26	1/2	802.95	1/2	446.16	1/2	89.44	1/2		1/2	
3/4	2,578.88	3/4	2,222.25	3/4	1,865.44	3/4	1,508.63	3/4	1,151.83	3/4	795.52	3/4	438.72	3/4	82.03	3/4		3/4	
3	2,571.45	3	2,214.81	3	1,858.00	3	1,501.20	3	1,144.40	3	788.08	3	431.29	3	74.62	3		3	
1/4	2,564.03	1/4	2,207.38	1/4	1,850.57	1/4	1,493.76	1/4	1,136.97	1/4	780.65	1/4	423.86	1/4	67.67	1/4		1/4	
1/2	2,556.60	1/2	2,199.95	1/2	1,843.14	1/2	1,486.33	1/2	1,129.54	1/2	773.22	1/2	416.42	1/2	60.72	1/2		1/2	
3/4	2,549.18	3/4	2,192.51	3/4	1,835.70	3/4	1,478.90	3/4	1,122.12	3/4	765.78	3/4	408.99	3/4	53.77	3/4		3/4	
4	2,541.75	4	2,185.08	4	1,828.27	4	1,471.46	4	1,114.69	4	758.35	4	401.56	4	46.82	4		4	
1/4	2,534.33	1/4	2,177.65	1/4	1,820.84	1/4	1,464.03	1/4	1,107.27	1/4	750.92	1/4	394.12	1/4	41.24	1/4		1/4	
1/2	2,526.91	1/2	2,170.21	1/2	1,813.40	1/2	1,456.60	1/2	1,099.84	1/2	743.48	1/2	386.69	1/2	35.67	1/2		1/2	
3/4	2,519.48	3/4	2,162.78	3/4	1,805.97	3/4	1,449.16	3/4	1,092.42	3/4	736.05	3/4	379.26	3/4	30.09	3/4		3/4	
5	2,512.06	5	2,155.34	5	1,798.54	5	1,441.73	5	1,085.00	5	728.62	5	371.82	5	24.52	5		5	
1/4	2,504.63	1/4	2,147.91	1/4	1,791.10	1/4	1,434.30	1/4	1,077.58	1/4	721.19	1/4	364.39	1/4	20.80	1/4		1/4	
1/2	2,497.21	1/2	2,140.48	1/2	1,783.67	1/2	1,426.86	1/2	1,070.16	1/2	713.75	1/2	356.96	1/2	17.09	1/2		1/2	
3/4	2,489.78	3/4	2,133.04	3/4	1,776.24	3/4	1,419.43	3/4	1,062.74	3/4	706.32	3/4	349.53	3/4	13.37	3/4		3/4	
6	2,482.36	6	2,125.61	6	1,768.80	6	1,411.99	6	1,055.32	6	698.89	6	342.09	6	9.65	6		6	
1/4	2,474.94	1/4	2,118.18	1/4	1,761.37	1/4	1,404.56	1/4	1,047.90	1/4	691.45	1/4	334.66	1/4	7.80	1/4		1/4	
1/2	2,467.51	1/2	2,110.74	1/2	1,753.94	1/2	1,397.13	1/2	1,040.48	1/2	684.02	1/2	327.23	1/2	5.94	1/2		1/2	
3/4	2,460.09	3/4	2,103.31	3/4	1,746.50	3/4	1,389.69	3/4	1,033.06	3/4	676.59	3/4	319.79	3/4	4.08	3/4		3/4	
7	2,452.66	7	2,095.88	7	1,739.07	7	1,382.26	7	1,025.64	7	669.15	7	312.36	7	2.22	7		7	
1/4	2,445.23	1/4	2,088.44	1/4	1,731.64	1/4	1,374.83	1/4	1,018.22	1/4	661.72	1/4	304.93	1/4		1/4		1/4	
1/2	2,437.81	1/2	2,081.01	1/2	1,724.20	1/2	1,367.39	1/2	1,010.80	1/2	654.29	1/2	297.49	1/2		1/2		1/2	
3/4	2,430.38	3/4	2,073.58	3/4	1,716.77	3/4	1,359.96	3/4	1,003.39	3/4	646.85	3/4	290.06	3/4		3/4		3/4	
8	2,422.95	8	2,066.14	8	1,709.33	8	1,352.53	8	995.97	8	639.42	8	282.63	8		8		8	
1/4	2,415.52	1/4	2,058.71	1/4	1,701.90	1/4	1,345.09	1/4	988.55	1/4	631.99	1/4	275.19	1/4		1/4		1/4	
1/2	2,408.08	1/2	2,051.28	1/2	1,694.47	1/2	1,337.66	1/2	981.13	1/2	624.55	1/2	267.76	1/2		1/2		1/2	
3/4	2,400.65	3/4	2,043.84	3/4	1,687.03	3/4	1,330.23	3/4	973.71	3/4	617.12	3/4	260.33	3/4		3/4		3/4	
9	2,393.22	9	2,036.41	9	1,679.60	9	1,322.79	9	966.29	9	609.69	9	252.89	9		9		9	
1/4	2,385.78	1/4	2,028.98	1/4	1,672.17	1/4	1,315.36	1/4	958.87	1/4	602.25	1/4	245.46	1/4		1/4		1/4	
1/2	2,378.35	1/2	2,021.54	1/2	1,664.73	1/2	1,307.93	1/2	951.45	1/2	594.82	1/2	238.03	1/2		1/2		1/2	
3/4	2,370.92	3/4	2,014.11	3/4	1,657.30	3/4	1,300.49	3/4	944.03	3/4	587.39	3/4	230.59	3/4		3/4		3/4	
10	2,363.48	10	2,006.67	10	1,649.87	10	1,293.06	10	936.61	10	579.95	10	223.16	10		10		10	
1/4	2,356.05	1/4	1,999.24	1/4	1,642.43	1/4	1,285.63	1/4	929.19	1/4	572.52	1/4	215.73	1/4		1/4		1/4	
1/2	2,348.62	1/2	1,991.81	1/2	1,635.00	1/2	1,278.19	1/2	921.77	1/2	565.09	1/2	208.29	1/2		1/2		1/2	
3/4	2,341.18	3/4	1,984.37	3/4	1,627.57	3/4	1,270.76	3/4	914.35	3/4	557.65	3/4	200.86	3/4		3/4		3/4	
11	2,333.75	11	1,976.94	11	1,620.13	11	1,263.32	11	906.94	11	550.22	11	193.43	11		11		11	
1/4	2,326.32	1/4	1,969.51	1/4	1,612.70	1/4	1,255.89	1/4	899.52	1/4	542.79	1/4	185.99	1/4		1/4		1/4	
1/2	2,318.88	1/2	1,962.07	1/2	1,605.27	1/2	1,248.46	1/2	892.10	1/2	535.36	1/2	178.56	1/2		1/2		1/2	
3/4	2,311.45	3/4	1,954.64	3/4	1,597.83	3/4	1,241.02	3/4	884.68	3/4	527.92	3/4	171.13	3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/11/2019 CL
CALCULATED: 01/14/2019 CL
PRINTED: 01/15/2019 SW

CANCELS AND SUPERCEDES
ALL PRIOR TO 01/2019

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