BARGE "E2MS 313"

INNAGE (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 INNAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED INNAGE IS 3'-03 7/8"

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

INNAGE 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	2.23	0	262.79	0	607.87	0	964.19	0	1,320.96	0	1,678.78	0	2,036.59	0	2,394.41	0	2,752.18	0	3,109.90
1/4	4.09	1/4	269.54	1/4	615.33	1/4	971.58	1/4	1,328.42	1/4	1,686.23	1/4	2,044.05	1/4	2,401.86	1/4	2,759.64	1/4	3,117.35
1/2	5.96	1/2	276.29	1/2	622.78	1/2	978.98	1/2	1,335.87	1/2	1,693.69	1/2	2,051.50	1/2	2,409.32	1/2	2,767.09	1/2	3,124.80
3/4	7.82	3/4	283.05	3/4	630.23	3/4	986.37	3/4	1,343.33	3/4	1,701.14	3/4	2,058.96	3/4	2,416.77	3/4	2,774.54	3/4	3,132.26
1	9.68	1	289.80	1	637.69	1	993.77	1	1,350.78	1	1,708.60	1	2,066.41	1	2,424.23	1	2,781.99	1	3,139.71
1/4	12.60	1/4	296.65	1/4	645.14	1/4	1,001.16	1/4	1,358.23	1/4	1,716.05	1/4	2,073.87	1/4	2,431.68	1/4	2,789.45	1/4	3,147.16
1/2	15.52	1/2	303.49	1/2	652.60	1/2	1,008.56	1/2	1,365.69	1/2	1,723.50	1/2	2,081.32	1/2	2,439.14	1/2	2,796.90	1/2	3,154.61
3/4	18.44	3/4	310.33	3/4	660.05	3/4	1,015.96	3/4	1,373.14	3/4	1,730.96	3/4	2,088.78	3/4	2,446.59	3/4	2,804.35	3/4	3,162.07
2	21.36	2	317.17	2	667.51	2	1,023.35	2	1,380.60	2	1,738.41	2	2,096.23	2	2,454.05	2	2,811.80	2	3,169.52
1/4	25.37	1/4	324.10	1/4	674.96	1/4	1,030.75	1/4	1,388.05	1/4	1,745.87	1/4	2,103.68	1/4	2,461.50	1/4	2,819.26	1/4	3,176.97
1/2	29.39	1/2	331.03	1/2	682.41	1/2	1,038.15	1/2	1,395.51	1/2	1,753.32	1/2	2,111.14	1/2	2,468.95	1/2	2,826.71	1/2	3,184.42
3/4	33.40	3/4	337.96	3/4	689.87	3/4	1,045.55	3/4	1,402.96	3/4	1,760.78	3/4	2,118.59	3/4	2,476.41	3/4	2,834.16	3/4	3,191.88
3	37.42	3	344.89	3	697.32	3	1,052.95	3	1,410.42	3	1,768.23	3	2,126.05	3	2,483.86	3	2,841.61	3	3,199.33
1/4	42.90	1/4	351.91	1/4	704.78	1/4	1,060.37	1/4	1,417.87	1/4	1,775.69	1/4	2,133.50	1/4	2,491.32	1/4	2,849.07	1/4	3,206.78
1/2	48.38	1/2	358.93	1/2	712.23	1/2	1,067.78	1/2	1,425.32	1/2	1,783.14	1/2	2,140.96	1/2	2,498.77	1/2	2,856.52	1/2	3,214.23
3/4	53.87	3/4	365.94	3/4	719.69	3/4	1,075.19	3/4	1,432.78	3/4	1,790.60	3/4	2,148.41	3/4	2,506.23	3/4	2,863.97	3/4	3,221.69
4	59.35	4	372.96	4	727.14	4	1,082.61	4	1,440.23	4	1,798.05	4	2,155.87	4	2,513.68	4	2,871.42	4	3,229.14
1/4	65.38	1/4	380.06	1/4	734.59	1/4	1,090.03	1/4	1,447.69	1/4	1,805.50	1/4	2,163.32	1/4	2,521.14	1/4	2,878.88	1/4	3,236.59
1/2	71.41	1/2	387.17	1/2	742.05	1/2	1,097.45	1/2	1,455.14	1/2	1,812.96	1/2	2,170.77	1/2	2,528.59	1/2	2,886.33	1/2	3,244.04
3/4	77.44	3/4	394.27	3/4	749.50	3/4	1,104.88	3/4	1,462.60	3/4	1,820.41	3/4	2,178.23	3/4	2,536.04	3/4	2,893.78	3/4	3,251.50
5	83.48	5	401.38	5	756.96	5	1,112.30	5	1,470.05	5	1,827.87	5	2,185.68	5	2,543.50	5	2,901.23	5	3,258.95
1/4	89.61	1/4	408.57	1/4	764.39	1/4	1,119.74	1/4	1,477.51	1/4	1,835.32	1/4	2,193.14	1/4	2,550.95	1/4	2,908.68	1/4	3,266.40
1/2	95.75	1/2	415.76	1/2	771.82	1/2	1,127.18	1/2	1,484.96	1/2	1,842.78	1/2	2,200.59	1/2	2,558.41	1/2	2,916.14	1/2	3,273.85
3/4	101.89	3/4	422.95	3/4	779.25	3/4	1,134.61	3/4	1,492.42	3/4	1,850.23	3/4	2,208.05	3/4	2,565.86	3/4	2,923.59	3/4	3,281.30
6	108.02	6	430.15	6	786.67	6	1,142.05	6	1,499.87	6	1,857.69	6	2,215.50	6	2,573.32	6	2,931.04	6	3,288.76
1/4	114.25	1/4	437.43	1/4	794.07	1/4	1,149.51	1/4	1,507.32	1/4	1,865.14	1/4	2,222.96	1/4	2,580.77	1/4	2,938.49	1/4	3,296.21
1/2	120.48	1/2	444.71	1/2	801.47	1/2	1,156.96	1/2	1,514.78	1/2	1,872.59	1/2	2,230.41	1/2	2,588.23	1/2	2,945.95	1/2	3,303.66
3/4	126.71	3/4	451.98	3/4	808.87	3/4	1,164.42	3/4	1,522.23	3/4	1,880.05	3/4	2,237.87	3/4	2,595.68	3/4	2,953.40	3/4	3,311.11
7	132.94	7	459.26	7	816.27	7	1,171.87	7	1,529.69	7	1,887.50	7	2,245.32	7	2,603.14	7	2,960.85	7	3,318.57
1/4	139.26	1/4	466.63	1/4	823.67	1/4	1,179.33	1/4	1,537.14	1/4	1,894.96	1/4	2,252.77	1/4	2,610.59	1/4	2,968.30	1/4	3,326.02
1/2	145.57	1/2	474.00	1/2	831.07	1/2	1,186.78	1/2	1,544.60	1/2	1,902.41	1/2	2,260.23	1/2	2,618.04	1/2	2,975.76	1/2	3,333.47
3/4	151.89	3/4	481.37	3/4	838.46	3/4	1,194.24	3/4	1,552.05	3/4	1,909.87	3/4	2,267.68	3/4	2,625.49	3/4	2,983.21	3/4	3,340.92
8	158.21	8	488.73	8	845.86	8	1,201.69	8	1,559.51	8	1,917.32	8	2,275.14	8	2,632.95	8	2,990.66	8	3,348.38
1/4	164.61	1/4	496.16	1/4	853.25	1/4	1,209.14	1/4	1,566.96	1/4	1,924.78	1/4	2,282.59	1/4	2,640.40	1/4	2,998.11	1/4	3,355.83
1/2	171.02	1/2	503.60	1/2	860.65	1/2	1,216.60	1/2	1,574.41	1/2	1,932.23	1/2	2,290.05	1/2	2,647.85	1/2	3,005.57	1/2	3,363.28
3/4	177.42	3/4	511.03	3/4	868.04	3/4	1,224.05	3/4	1,581.87	3/4	1,939.69	3/4	2,297.50	3/4	2,655.30	3/4	3,013.02	3/4	3,370.73
9	183.83	9	518.46	9	875.44	9	1,231.51	9	1,589.32	9	1,947.14	9	2,304.96	9	2,662.76	9	3,020.47	9	3,378.19
1/4	190.32	1/4	525.91	1/4	882.83	1/4	1,238.96	1/4	1,596.78	1/4	1,954.59	1/4	2,312.41	1/4	2,670.21	1/4	3,027.92	1/4	3,385.64
1/2	196.81	1/2	533.37	1/2	890.23	1/2	1,246.42	1/2	1,604.23	1/2	1,962.05	1/2	2,319.86	1/2	2,677.66	1/2	3,035.38	1/2	3,393.09
3/4	203.30	3/4	540.82	3/4	897.63	3/4	1,253.87	3/4	1,611.69	3/4	1,969.50	3/4	2,327.32	3/4	2,685.11	3/4	3,042.83	3/4	3,400.54
10	209.80	10	548.27	10	905.02	10	1,261.33	10	1,619.14	10	1,976.96	10	2,334.77	10	2,692.57	10	3,050.28	10	3,408.00
1/4	216.38	1/4	555.72	1/4	912.42	1/4	1,268.78	1/4	1,626.60	1/4	1,984.41	1/4	2,342.23	1/4	2,700.02	1/4	3,057.73	1/4	3,415.45
1/2	222.96	1/2	563.17	1/2	919.81	1/2	1,276.23	1/2	1,634.05	1/2	1,991.87	1/2	2,349.68	1/2	2,707.47	1/2	3,065.19	1/2	3,422.90
3/4	229.54	3/4	570.62	3/4	927.21	3/4	1,283.69	3/4	1,641.51	3/4	1,999.32	3/4	2,357.14	3/4	2,714.92	3/4	3,072.64	3/4	3,430.35
11	236.12	11	578.06	11	934.60	11	1,291.14	11	1,648.96	11	2,006.78	11	2,364.59	11	2,722.37	11	3,080.09	11	3,437.81
1/4	242.78	1/4	585.52	1/4	942.00	1/4	1,298.60	1/4	1,656.41	1/4	2,014.23	1/4	2,372.05	1/4	2,729.83	1/4	3,087.54	1/4	3,445.26
1/2	249.45	1/2	592.97	1/2	949.39	1/2	1,306.05	1/2	1,663.87	1/2	2,021.68	1/2	2,379.50	1/2	2,737.28	1/2	3,094.99	1/2	3,452.71
3/4	256.12	3/4	600.42	3/4	956.79	3/4	1,313.51	3/4	1,671.32	3/4	2,029.14	3/4	2,386.96	3/4	2,744.73	3/4	3,102.45	3/4	3,460.16

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP 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.
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BARGE "E2MS 313"

1 PORT

INNAGE 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	3,467.61	0	3,825.33	0	4,182.49	0	4,539.16	0	4,894.51	0		0		0		0		0	
1/4	3,475.07	1/4	3,832.78	1/4	4,189.92	1/4	4,546.59	1/4	4,901.86	1/4		1/4		1/4		1/4		1/4	
1/2	3,482.52	1/2	3,840.23	1/2	4,197.35	1/2	4,554.02	1/2	4,909.21	1/2		1/2		1/2		1/2		1/2	
3/4	3,489.97	3/4	3,847.69	3/4	4,204.78	3/4	4,561.45	3/4	4,916.56	3/4		3/4		3/4		3/4		3/4	
1	3,497.42	1	3,855.14	1	4,212.21	1	4,568.88	1	4,923.91	1		1		1		1		1	
1/4	3,504.88	1/4	3,862.59	1/4	4,219.64	1/4	4,576.31	1/4	4,931.23	1/4		1/4		1/4		1/4		1/4	
1/2	3,512.33	1/2	3,870.04	1/2	4,227.07	1/2	4,583.74	1/2	4,938.55	1/2		1/2		1/2		1/2		1/2	
3/4	3,519.78	3/4	3,877.50	3/4	4,234.50	3/4	4,591.17	3/4	4,945.86	3/4		3/4		3/4		3/4		3/4	
2	3,527.23	2	3,884.95	2	4,241.93	2	4,598.61	2	4,953.18	2		2		2		2		2	
1/4	3,534.69	1/4	3,892.40	1/4	4,249.36	1/4	4,606.04	1/4	4,960.04	1/4		1/4		1/4		1/4		1/4	
1/2	3,542.14	1/2	3,899.85	1/2	4,256.79	1/2	4,613.47	1/2	4,966.90	1/2		1/2		1/2		1/2		1/2	
3/4	3,549.59	3/4	3,907.31	3/4	4,264.22	3/4	4,620.90	3/4	4,973.75	3/4		3/4		3/4		3/4		3/4	
3	3,557.04	3	3,914.76	3	4,271.65	3	4,628.33	3	4,980.61	3		3		3		3		3	
1/4	3,564.50	1/4	3,922.21	1/4	4,279.09	1/4	4,635.76	1/4	4,986.42	1/4		1/4		1/4		1/4		1/4	
1/2	3,571.95	1/2	3,929.66	1/2	4,286.52	1/2	4,643.19	1/2	4,992.22	1/2		1/2		1/2		1/2		1/2	
3/4	3,579.40	3/4	3,937.12	3/4	4,293.95	3/4	4,650.62	3/4	4,998.03	3/4		3/4		3/4		3/4		3/4	
4	3,586.85	4	3,944.57	4	4,301.38	4	4,658.05	4	5,003.84	4		4		4		4		4	
1/4	3,594.31	1/4	3,952.02	1/4	4,308.81	1/4	4,665.48	1/4	5,008.40	1/4		1/4		1/4		1/4		1/4	
1/2	3,601.76	1/2	3,959.47	1/2	4,316.24	1/2	4,672.91	1/2	5,012.96	1/2		1/2		1/2		1/2		1/2	
3/4	3,609.21	3/4	3,966.93	3/4	4,323.67	3/4	4,680.34	3/4	5,017.53	3/4		3/4		3/4		3/4		3/4	
5	3,616.66	5	3,974.38	5	4,331.10	5	4,687.77	5	5,022.09	5		5		5		5		5	
1/4	3,624.12	1/4	3,981.82	1/4	4,338.53	1/4	4,695.20	1/4	5,025.41	1/4		1/4		1/4		1/4		1/4	
1/2	3,631.57	1/2	3,989.26	1/2	4,345.96	1/2	4,702.64	1/2	5,028.73	1/2		1/2		1/2		1/2		1/2	
3/4	3,639.02	3/4	3,996.71	3/4	4,353.39	3/4	4,710.07	3/4	5,032.05	3/4		3/4		3/4		3/4		3/4	
6	3,646.47	6	4,004.15	6	4,360.82	6	4,717.50	6	5,035.37	6		6		6		6		6	
1/4	3,653.92	1/4	4,011.58	1/4	4,368.25	1/4	4,724.93	1/4	5,037.45	1/4		1/4		1/4		1/4		1/4	
1/2	3,661.38	1/2	4,019.01	1/2	4,375.68	1/2	4,732.36	1/2	5,039.53	1/2		1/2		1/2		1/2		1/2	
3/4	3,668.83	3/4	4,026.44	3/4	4,383.12	3/4	4,739.79	3/4	5,041.61	3/4		3/4		3/4		3/4		3/4	
7	3,676.28	7	4,033.87	7	4,390.55	7	4,747.22	7	5,043.69	7		7		7		7		7	
1/4	3,683.73	1/4	4,041.30	1/4	4,397.98	1/4	4,754.61	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,691.19	1/2	4,048.73	1/2	4,405.41	1/2	4,762.01	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,698.64	3/4	4,056.16	3/4	4,412.84	3/4	4,769.40	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,706.09	8	4,063.60	8	4,420.27	8	4,776.80	8		8		8		8		8		8	
1/4	3,713.54	1/4	4,071.03	1/4	4,427.70	1/4	4,784.15	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,721.00	1/2	4,078.46	1/2	4,435.13	1/2	4,791.51	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,728.45	3/4	4,085.89	3/4	4,442.56	3/4	4,798.87	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,735.90	9	4,093.32	9	4,449.99	9	4,806.22	9		9		9		9		9		9	
1/4	3,743.35	1/4	4,100.75	1/4	4,457.42	1/4	4,813.58	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,750.81	1/2	4,108.18	1/2	4,464.85	1/2	4,820.94	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,758.26	3/4	4,115.61	3/4	4,472.28	3/4	4,828.30	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,765.71	10	4,123.04	10	4,479.71	10	4,835.65	10		10		10		10		10		10	
1/4	3,773.16	1/4	4,130.47	1/4	4,487.15	1/4	4,843.01	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,780.62	1/2	4,137.90	1/2	4,494.58	1/2	4,850.37	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,788.07	3/4	4,145.33	3/4	4,502.01	3/4	4,857.73	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,795.52	11	4,152.76	11	4,509.44	11	4,865.08	11		11		11		11		11		11	
1/4	3,802.97	1/4	4,160.19	1/4	4,516.87	1/4	4,872.44	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,810.43	1/2	4,167.62	1/2	4,524.30	1/2	4,879.80	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,817.88	3/4	4,175.06	3/4	4,531.73	3/4	4,887.16	3/4		3/4		3/4		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
Pearland, Texas 77588
http://www.pmacorp.net

BARGE "E2MS 313"

1 STBD

INNAGE 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	2.23	0	262.62	0	607.56	0	964.88	0	1,322.31	0	1,679.94	0	2,037.56	0	2,395.19	0	2,752.76	0	3,110.29
1/4	4.09	1/4	269.37	1/4	615.02	1/4	972.31	1/4	1,329.77	1/4	1,687.39	1/4	2,045.01	1/4	2,402.64	1/4	2,760.21	1/4	3,117.74
1/2	5.95	1/2	276.12	1/2	622.47	1/2	979.75	1/2	1,337.22	1/2	1,694.84	1/2	2,052.46	1/2	2,410.09	1/2	2,767.66	1/2	3,125.18
3/4	7.82	3/4	282.87	3/4	629.92	3/4	987.19	3/4	1,344.67	3/4	1,702.29	3/4	2,059.91	3/4	2,417.54	3/4	2,775.11	3/4	3,132.63
1	9.68	1	289.63	1	637.37	1	994.62	1	1,352.12	1	1,709.74	1	2,067.36	1	2,424.99	1	2,782.56	1	3,140.08
1/4	12.59	1/4	296.46	1/4	644.82	1/4	1,002.06	1/4	1,359.57	1/4	1,717.19	1/4	2,074.82	1/4	2,432.44	1/4	2,790.01	1/4	3,147.53
1/2	15.51	1/2	303.30	1/2	652.27	1/2	1,009.49	1/2	1,367.02	1/2	1,724.64	1/2	2,082.27	1/2	2,439.89	1/2	2,797.46	1/2	3,154.98
3/4	18.43	3/4	310.14	3/4	659.72	3/4	1,016.93	3/4	1,374.47	3/4	1,732.09	3/4	2,089.72	3/4	2,447.34	3/4	2,804.90	3/4	3,162.43
2	21.34	2	316.98	2	667.17	2	1,024.37	2	1,381.92	2	1,739.54	2	2,097.17	2	2,454.79	2	2,812.35	2	3,169.88
1/4	25.36	1/4	323.90	1/4	674.62	1/4	1,031.81	1/4	1,389.37	1/4	1,746.99	1/4	2,104.62	1/4	2,462.24	1/4	2,819.80	1/4	3,177.32
1/2	29.37	1/2	330.83	1/2	682.07	1/2	1,039.25	1/2	1,396.82	1/2	1,754.44	1/2	2,112.07	1/2	2,469.69	1/2	2,827.25	1/2	3,184.77
3/4	33.38	3/4	337.76	3/4	689.52	3/4	1,046.69	3/4	1,404.27	3/4	1,761.89	3/4	2,119.52	3/4	2,477.14	3/4	2,834.70	3/4	3,192.22
3	37.39	3	344.68	3	696.97	3	1,054.13	3	1,411.72	3	1,769.34	3	2,126.97	3	2,484.59	3	2,842.15	3	3,199.67
1/4	42.87	1/4	351.70	1/4	704.42	1/4	1,061.58	1/4	1,419.17	1/4	1,776.80	1/4	2,134.42	1/4	2,492.04	1/4	2,849.59	1/4	3,207.12
1/2	48.35	1/2	358.71	1/2	711.87	1/2	1,069.02	1/2	1,426.62	1/2	1,784.25	1/2	2,141.87	1/2	2,499.49	1/2	2,857.04	1/2	3,214.57
3/4	53.83	3/4	365.72	3/4	719.32	3/4	1,076.47	3/4	1,434.07	3/4	1,791.70	3/4	2,149.32	3/4	2,506.94	3/4	2,864.49	3/4	3,222.01
4	59.31	4	372.73	4	726.77	4	1,083.91	4	1,441.52	4	1,799.15	4	2,156.77	4	2,514.39	4	2,871.94	4	3,229.46
1/4	65.34	1/4	379.84	1/4	734.22	1/4	1,091.36	1/4	1,448.97	1/4	1,806.60	1/4	2,164.22	1/4	2,521.85	1/4	2,879.39	1/4	3,236.91
1/2	71.37	1/2	386.94	1/2	741.67	1/2	1,098.81	1/2	1,456.42	1/2	1,814.05	1/2	2,171.67	1/2	2,529.30	1/2	2,886.84	1/2	3,244.36
3/4	77.39	3/4	394.04	3/4	749.12	3/4	1,106.25	3/4	1,463.87	3/4	1,821.50	3/4	2,179.12	3/4	2,536.75	3/4	2,894.28	3/4	3,251.81
5	83.42	5	401.14	5	756.57	5	1,113.70	5	1,471.32	5	1,828.95	5	2,186.57	5	2,544.20	5	2,901.73	5	3,259.26
1/4	89.55	1/4	408.33	1/4	764.03	1/4	1,121.15	1/4	1,478.78	1/4	1,836.40	1/4	2,194.02	1/4	2,551.65	1/4	2,909.18	1/4	3,266.70
1/2	95.69	1/2	415.51	1/2	771.48	1/2	1,128.60	1/2	1,486.23	1/2	1,843.85	1/2	2,201.47	1/2	2,559.10	1/2	2,916.63	1/2	3,274.15
3/4	101.82	3/4	422.70	3/4	778.93	3/4	1,136.05	3/4	1,493.68	3/4	1,851.30	3/4	2,208.92	3/4	2,566.55	3/4	2,924.08	3/4	3,281.60
6	107.95	6	429.89	6	786.38	6	1,143.50	6	1,501.13	6	1,858.75	6	2,216.37	6	2,574.00	6	2,931.53	6	3,289.05
1/4	114.18	1/4	437.17	1/4	793.82	1/4	1,150.95	1/4	1,508.58	1/4	1,866.20	1/4	2,223.83	1/4	2,581.45	1/4	2,938.97	1/4	3,296.50
1/2	120.40	1/2	444.44	1/2	801.26	1/2	1,158.40	1/2	1,516.03	1/2	1,873.65	1/2	2,231.28	1/2	2,588.90	1/2	2,946.42	1/2	3,303.95
3/4	126.63	3/4	451.72	3/4	808.71	3/4	1,165.85	3/4	1,523.48	3/4	1,881.10	3/4	2,238.73	3/4	2,596.35	3/4	2,953.87	3/4	3,311.39
7	132.85	7	458.99	7	816.15	7	1,173.30	7	1,530.93	7	1,888.55	7	2,246.18	7	2,603.80	7	2,961.32	7	3,318.84
1/4	139.17	1/4	466.36	1/4	823.59	1/4	1,180.76	1/4	1,538.38	1/4	1,896.00	1/4	2,253.63	1/4	2,611.25	1/4	2,968.77	1/4	3,326.29
1/2	145.48	1/2	473.72	1/2	831.02	1/2	1,188.21	1/2	1,545.83	1/2	1,903.45	1/2	2,261.08	1/2	2,618.69	1/2	2,976.22	1/2	3,333.74
3/4	151.79	3/4	481.08	3/4	838.46	3/4	1,195.66	3/4	1,553.28	3/4	1,910.90	3/4	2,268.53	3/4	2,626.14	3/4	2,983.67	3/4	3,341.19
8	158.11	8	488.44	8	845.90	8	1,203.11	8	1,560.73	8	1,918.35	8	2,275.98	8	2,633.59	8	2,991.11	8	3,348.64
1/4	164.51	1/4	495.87	1/4	853.33	1/4	1,210.56	1/4	1,568.18	1/4	1,925.81	1/4	2,283.43	1/4	2,641.04	1/4	2,998.56	1/4	3,356.09
1/2	170.91	1/2	503.30	1/2	860.77	1/2	1,218.01	1/2	1,575.63	1/2	1,933.26	1/2	2,290.88	1/2	2,648.49	1/2	3,006.01	1/2	3,363.53
3/4	177.31	3/4	510.73	3/4	868.20	3/4	1,225.46	3/4	1,583.08	3/4	1,940.71	3/4	2,298.33	3/4	2,655.94	3/4	3,013.46	3/4	3,370.98
9	183.71	9	518.16	9	875.64	9	1,232.91	9	1,590.53	9	1,948.16	9	2,305.78	9	2,663.38	9	3,020.91	9	3,378.43
1/4	190.20	1/4	525.61	1/4	883.08	1/4	1,240.36	1/4	1,597.98	1/4	1,955.61	1/4	2,313.23	1/4	2,670.83	1/4	3,028.36	1/4	3,385.88
1/2	196.69	1/2	533.06	1/2	890.51	1/2	1,247.81	1/2	1,605.43	1/2	1,963.06	1/2	2,320.68	1/2	2,678.28	1/2	3,035.80	1/2	3,393.33
3/4	203.18	3/4	540.51	3/4	897.95	3/4	1,255.26	3/4	1,612.88	3/4	1,970.51	3/4	2,328.13	3/4	2,685.73	3/4	3,043.25	3/4	3,400.78
10	209.67	10	547.96	10	905.39	10	1,262.71	10	1,620.33	10	1,977.96	10	2,335.58	10	2,693.18	10	3,050.70	10	3,408.22
1/4	216.24	1/4	555.41	1/4	912.82	1/4	1,270.16	1/4	1,627.79	1/4	1,985.41	1/4	2,343.03	1/4	2,700.63	1/4	3,058.15	1/4	3,415.67
1/2	222.82	1/2	562.86	1/2	920.26	1/2	1,277.61	1/2	1,635.24	1/2	1,992.86	1/2	2,350.48	1/2	2,708.07	1/2	3,065.60	1/2	3,423.12
3/4	229.39	3/4	570.31	3/4	927.70	3/4	1,285.06	3/4	1,642.69	3/4	2,000.31	3/4	2,357.93	3/4	2,715.52	3/4	3,073.05	3/4	3,430.57
11	235.97	11	577.76	11	935.13	11	1,292.51	11	1,650.14	11	2,007.76	11	2,365.38	11	2,722.97	11	3,080.49	11	3,438.02
1/4	242.63	1/4	585.21	1/4	942.57	1/4	1,299.96	1/4	1,657.59	1/4	2,015.21	1/4	2,372.84	1/4	2,730.42	1/4	3,087.94	1/4	3,445.47
1/2	249.30	1/2	592.66	1/2	950.00	1/2	1,307.41	1/2	1,665.04	1/2	2,022.66	1/2	2,380.29	1/2	2,737.87	1/2	3,095.39	1/2	3,452.91
3/4	255.96	3/4	600.11	3/4	957.44	3/4	1,314.86	3/4	1,672.49	3/4	2,030.11	3/4	2,387.74	3/4	2,745.32	3/4	3,102.84	3/4	3,460.36

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

INNAGE 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	3,467.81	0	3,825.33	0	4,182.29	0	4,538.78	0	4,893.93	0		0		0		0		0	
1/4	3,475.26	1/4	3,832.78	1/4	4,189.72	1/4	4,546.20	1/4	4,901.28	1/4		1/4		1/4		1/4		1/4	
1/2	3,482.71	1/2	3,840.23	1/2	4,197.15	1/2	4,553.63	1/2	4,908.63	1/2		1/2		1/2		1/2		1/2	
3/4	3,490.16	3/4	3,847.68	3/4	4,204.57	3/4	4,561.06	3/4	4,915.97	3/4		3/4		3/4		3/4		3/4	
1	3,497.60	1	3,855.13	1	4,212.00	1	4,568.48	1	4,923.32	1		1		1		1		1	
1/4	3,505.05	1/4	3,862.58	1/4	4,219.43	1/4	4,575.91	1/4	4,930.63	1/4		1/4		1/4		1/4		1/4	
1/2	3,512.50	1/2	3,870.02	1/2	4,226.85	1/2	4,583.34	1/2	4,937.94	1/2		1/2		1/2		1/2		1/2	
3/4	3,519.95	3/4	3,877.47	3/4	4,234.28	3/4	4,590.76	3/4	4,945.26	3/4		3/4		3/4		3/4		3/4	
2	3,527.40	2	3,884.92	2	4,241.71	2	4,598.19	2	4,952.57	2		2		2		2		2	
1/4	3,534.85	1/4	3,892.37	1/4	4,249.13	1/4	4,605.62	1/4	4,959.42	1/4		1/4		1/4		1/4		1/4	
1/2	3,542.30	1/2	3,899.82	1/2	4,256.56	1/2	4,613.04	1/2	4,966.28	1/2		1/2		1/2		1/2		1/2	
3/4	3,549.74	3/4	3,907.27	3/4	4,263.99	3/4	4,620.47	3/4	4,973.13	3/4		3/4		3/4		3/4		3/4	
3	3,557.19	3	3,914.72	3	4,271.41	3	4,627.90	3	4,979.98	3		3		3		3		3	
1/4	3,564.64	1/4	3,922.16	1/4	4,278.84	1/4	4,635.32	1/4	4,985.79	1/4		1/4		1/4		1/4		1/4	
1/2	3,572.09	1/2	3,929.61	1/2	4,286.27	1/2	4,642.75	1/2	4,991.59	1/2		1/2		1/2		1/2		1/2	
3/4	3,579.54	3/4	3,937.06	3/4	4,293.70	3/4	4,650.18	3/4	4,997.39	3/4		3/4		3/4		3/4		3/4	
4	3,586.99	4	3,944.51	4	4,301.12	4	4,657.60	4	5,003.20	4		4		4		4		4	
1/4	3,594.43	1/4	3,951.96	1/4	4,308.55	1/4	4,665.03	1/4	5,007.76	1/4		1/4		1/4		1/4		1/4	
1/2	3,601.88	1/2	3,959.41	1/2	4,315.98	1/2	4,672.46	1/2	5,012.32	1/2		1/2		1/2		1/2		1/2	
3/4	3,609.33	3/4	3,966.85	3/4	4,323.40	3/4	4,679.88	3/4	5,016.88	3/4		3/4		3/4		3/4		3/4	
5	3,616.78	5	3,974.30	5	4,330.83	5	4,687.31	5	5,021.44	5		5		5		5		5	
1/4	3,624.23	1/4	3,981.74	1/4	4,338.26	1/4	4,694.74	1/4	5,024.76	1/4		1/4		1/4		1/4		1/4	
1/2	3,631.68	1/2	3,989.18	1/2	4,345.68	1/2	4,702.16	1/2	5,028.08	1/2		1/2		1/2		1/2		1/2	
3/4	3,639.12	3/4	3,996.62	3/4	4,353.11	3/4	4,709.59	3/4	5,031.40	3/4		3/4		3/4		3/4		3/4	
6	3,646.57	6	4,004.05	6	4,360.54	6	4,717.02	6	5,034.72	6		6		6		6		6	
1/4	3,654.02	1/4	4,011.48	1/4	4,367.96	1/4	4,724.44	1/4	5,036.79	1/4		1/4		1/4		1/4		1/4	
1/2	3,661.47	1/2	4,018.91	1/2	4,375.39	1/2	4,731.87	1/2	5,038.87	1/2		1/2		1/2		1/2		1/2	
3/4	3,668.92	3/4	4,026.33	3/4	4,382.82	3/4	4,739.30	3/4	5,040.95	3/4		3/4		3/4		3/4		3/4	
7	3,676.37	7	4,033.76	7	4,390.24	7	4,746.72	7	5,043.03	7		7		7		7		7	
1/4	3,683.81	1/4	4,041.19	1/4	4,397.67	1/4	4,754.11	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,691.26	1/2	4,048.61	1/2	4,405.10	1/2	4,761.50	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,698.71	3/4	4,056.04	3/4	4,412.52	3/4	4,768.89	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,706.16	8	4,063.47	8	4,419.95	8	4,776.28	8		8		8		8		8		8	
1/4	3,713.61	1/4	4,070.89	1/4	4,427.38	1/4	4,783.64	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,721.06	1/2	4,078.32	1/2	4,434.80	1/2	4,790.99	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,728.51	3/4	4,085.75	3/4	4,442.23	3/4	4,798.34	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,735.95	9	4,093.17	9	4,449.66	9	4,805.69	9		9		9		9		9		9	
1/4	3,743.40	1/4	4,100.60	1/4	4,457.08	1/4	4,813.05	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,750.85	1/2	4,108.03	1/2	4,464.51	1/2	4,820.40	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,758.30	3/4	4,115.45	3/4	4,471.94	3/4	4,827.75	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,765.75	10	4,122.88	10	4,479.36	10	4,835.11	10		10		10		10		10		10	
1/4	3,773.20	1/4	4,130.31	1/4	4,486.79	1/4	4,842.46	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,780.64	1/2	4,137.73	1/2	4,494.22	1/2	4,849.81	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,788.09	3/4	4,145.16	3/4	4,501.64	3/4	4,857.17	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,795.54	11	4,152.59	11	4,509.07	11	4,864.52	11		11		11		11		11		11	
1/4	3,802.99	1/4	4,160.01	1/4	4,516.50	1/4	4,871.88	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,810.44	1/2	4,167.44	1/2	4,523.92	1/2	4,879.23	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,817.89	3/4	4,174.87	3/4	4,531.35	3/4	4,886.58	3/4		3/4		3/4		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
Pearland, Texas 77588
http://www.pmacorp.net

BARGE "E2MS 313"

2 PORT

INNAGE 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	2.23	0	313.86	0	672.37	0	1,023.00	0	1,374.93	0	1,733.44	0	2,091.95	0	2,450.45	0	2,808.96	0	3,167.47
1/4	4.10	1/4	321.33	1/4	679.84	1/4	1,030.16	1/4	1,382.40	1/4	1,740.91	1/4	2,099.42	1/4	2,457.92	1/4	2,816.43	1/4	3,174.94
1/2	5.97	1/2	328.80	1/2	687.30	1/2	1,037.33	1/2	1,389.87	1/2	1,748.38	1/2	2,106.88	1/2	2,465.39	1/2	2,823.90	1/2	3,182.41
3/4	7.83	3/4	336.27	3/4	694.77	3/4	1,044.49	3/4	1,397.34	3/4	1,755.85	3/4	2,114.35	3/4	2,472.86	3/4	2,831.37	3/4	3,189.88
1	9.70	1	343.73	1	702.24	1	1,051.65	1	1,404.81	1	1,763.32	1	2,121.82	1	2,480.33	1	2,838.84	1	3,197.34
1/4	13.44	1/4	351.20	1/4	709.71	1/4	1,058.81	1/4	1,412.28	1/4	1,770.78	1/4	2,129.29	1/4	2,487.80	1/4	2,846.31	1/4	3,204.81
1/2	17.17	1/2	358.67	1/2	717.18	1/2	1,065.98	1/2	1,419.75	1/2	1,778.25	1/2	2,136.76	1/2	2,495.27	1/2	2,853.77	1/2	3,212.28
3/4	20.90	3/4	366.14	3/4	724.65	3/4	1,073.14	3/4	1,427.22	3/4	1,785.72	3/4	2,144.23	3/4	2,502.74	3/4	2,861.24	3/4	3,219.75
2	24.64	2	373.61	2	732.12	2	1,080.30	2	1,434.68	2	1,793.19	2	2,151.70	2	2,510.21	2	2,868.71	2	3,227.22
1/4	30.24	1/4	381.08	1/4	739.59	1/4	1,087.47	1/4	1,442.15	1/4	1,800.66	1/4	2,159.17	1/4	2,517.67	1/4	2,876.18	1/4	3,234.69
1/2	35.84	1/2	388.55	1/2	747.06	1/2	1,094.64	1/2	1,449.62	1/2	1,808.13	1/2	2,166.64	1/2	2,525.14	1/2	2,883.65	1/2	3,242.16
3/4	41.44	3/4	396.02	3/4	754.52	3/4	1,101.80	3/4	1,457.09	3/4	1,815.60	3/4	2,174.11	3/4	2,532.61	3/4	2,891.12	3/4	3,249.63
3	47.04	3	403.49	3	761.99	3	1,108.97	3	1,464.56	3	1,823.07	3	2,181.57	3	2,540.08	3	2,898.59	3	3,257.10
1/4	54.03	1/4	410.95	1/4	769.46	1/4	1,116.14	1/4	1,472.03	1/4	1,830.54	1/4	2,189.04	1/4	2,547.55	1/4	2,906.06	1/4	3,264.56
1/2	61.01	1/2	418.42	1/2	776.93	1/2	1,123.31	1/2	1,479.50	1/2	1,838.00	1/2	2,196.51	1/2	2,555.02	1/2	2,913.53	1/2	3,272.03
3/4	67.99	3/4	425.89	3/4	784.40	3/4	1,130.48	3/4	1,486.97	3/4	1,845.47	3/4	2,203.98	3/4	2,562.49	3/4	2,920.99	3/4	3,279.50
4	74.98	4	433.36	4	791.87	4	1,137.65	4	1,494.44	4	1,852.94	4	2,211.45	4	2,569.96	4	2,928.46	4	3,286.97
1/4	82.42	1/4	440.83	1/4	799.34	1/4	1,144.83	1/4	1,501.90	1/4	1,860.41	1/4	2,218.92	1/4	2,577.43	1/4	2,935.93	1/4	3,294.44
1/2	89.87	1/2	448.30	1/2	806.81	1/2	1,152.01	1/2	1,509.37	1/2	1,867.88	1/2	2,226.39	1/2	2,584.89	1/2	2,943.40	1/2	3,301.91
3/4	97.31	3/4	455.77	3/4	814.28	3/4	1,159.19	3/4	1,516.84	3/4	1,875.35	3/4	2,233.86	3/4	2,592.36	3/4	2,950.87	3/4	3,309.38
5	104.76	5	463.24	5	821.74	5	1,166.37	5	1,524.31	5	1,882.82	5	2,241.33	5	2,599.83	5	2,958.34	5	3,316.85
1/4	112.22	1/4	470.71	1/4	829.07	1/4	1,173.70	1/4	1,531.78	1/4	1,890.29	1/4	2,248.79	1/4	2,607.30	1/4	2,965.81	1/4	3,324.32
1/2	119.68	1/2	478.17	1/2	836.40	1/2	1,181.02	1/2	1,539.25	1/2	1,897.76	1/2	2,256.26	1/2	2,614.77	1/2	2,973.28	1/2	3,331.78
3/4	127.15	3/4	485.64	3/4	843.73	3/4	1,188.35	3/4	1,546.72	3/4	1,905.22	3/4	2,263.73	3/4	2,622.24	3/4	2,980.75	3/4	3,339.25
6	134.61	6	493.11	6	851.06	6	1,195.68	6	1,554.19	6	1,912.69	6	2,271.20	6	2,629.71	6	2,988.22	6	3,346.72
1/4	142.08	1/4	500.58	1/4	858.23	1/4	1,203.15	1/4	1,561.66	1/4	1,920.16	1/4	2,278.67	1/4	2,637.18	1/4	2,995.68	1/4	3,354.19
1/2	149.54	1/2	508.05	1/2	865.41	1/2	1,210.62	1/2	1,569.12	1/2	1,927.63	1/2	2,286.14	1/2	2,644.65	1/2	3,003.15	1/2	3,361.66
3/4	157.01	3/4	515.52	3/4	872.58	3/4	1,218.09	3/4	1,576.59	3/4	1,935.10	3/4	2,293.61	3/4	2,652.11	3/4	3,010.62	3/4	3,369.13
7	164.48	7	522.99	7	879.75	7	1,225.55	7	1,584.06	7	1,942.57	7	2,301.08	7	2,659.58	7	3,018.09	7	3,376.60
1/4	171.95	1/4	530.46	1/4	886.92	1/4	1,233.02	1/4	1,591.53	1/4	1,950.04	1/4	2,308.55	1/4	2,667.05	1/4	3,025.56	1/4	3,384.07
1/2	179.42	1/2	537.93	1/2	894.08	1/2	1,240.49	1/2	1,599.00	1/2	1,957.51	1/2	2,316.01	1/2	2,674.52	1/2	3,033.03	1/2	3,391.54
3/4	186.89	3/4	545.40	3/4	901.24	3/4	1,247.96	3/4	1,606.47	3/4	1,964.98	3/4	2,323.48	3/4	2,681.99	3/4	3,040.50	3/4	3,399.00
8	194.36	8	552.86	8	908.40	8	1,255.43	8	1,613.94	8	1,972.44	8	2,330.95	8	2,689.46	8	3,047.97	8	3,406.47
1/4	201.83	1/4	560.33	1/4	915.57	1/4	1,262.90	1/4	1,621.41	1/4	1,979.91	1/4	2,338.42	1/4	2,696.93	1/4	3,055.44	1/4	3,413.94
1/2	209.29	1/2	567.80	1/2	922.73	1/2	1,270.37	1/2	1,628.88	1/2	1,987.38	1/2	2,345.89	1/2	2,704.40	1/2	3,062.90	1/2	3,421.41
3/4	216.76	3/4	575.27	3/4	929.89	3/4	1,277.84	3/4	1,636.34	3/4	1,994.85	3/4	2,353.36	3/4	2,711.87	3/4	3,070.37	3/4	3,428.88
9	224.23	9	582.74	9	937.05	9	1,285.31	9	1,643.81	9	2,002.32	9	2,360.83	9	2,719.33	9	3,077.84	9	3,436.35
1/4	231.70	1/4	590.21	1/4	944.22	1/4	1,292.77	1/4	1,651.28	1/4	2,009.79	1/4	2,368.30	1/4	2,726.80	1/4	3,085.31	1/4	3,443.82
1/2	239.17	1/2	597.68	1/2	951.38	1/2	1,300.24	1/2	1,658.75	1/2	2,017.26	1/2	2,375.77	1/2	2,734.27	1/2	3,092.78	1/2	3,451.29
3/4	246.64	3/4	605.15	3/4	958.54	3/4	1,307.71	3/4	1,666.22	3/4	2,024.73	3/4	2,383.23	3/4	2,741.74	3/4	3,100.25	3/4	3,458.76
10	254.11	10	612.62	10	965.70	10	1,315.18	10	1,673.69	10	2,032.20	10	2,390.70	10	2,749.21	10	3,107.72	10	3,466.22
1/4	261.58	1/4	620.08	1/4	972.87	1/4	1,322.65	1/4	1,681.16	1/4	2,039.66	1/4	2,398.17	1/4	2,756.68	1/4	3,115.19	1/4	3,473.69
1/2	269.05	1/2	627.55	1/2	980.03	1/2	1,330.12	1/2	1,688.63	1/2	2,047.13	1/2	2,405.64	1/2	2,764.15	1/2	3,122.66	1/2	3,481.16
3/4	276.51	3/4	635.02	3/4	987.19	3/4	1,337.59	3/4	1,696.10	3/4	2,054.60	3/4	2,413.11	3/4	2,771.62	3/4	3,130.12	3/4	3,488.63
11	283.98	11	642.49	11	994.35	11	1,345.06	11	1,703.56	11	2,062.07	11	2,420.58	11	2,779.09	11	3,137.59	11	3,496.10
1/4	291.45	1/4	649.96	1/4	1,001.52	1/4	1,352.53	1/4	1,711.03	1/4	2,069.54	1/4	2,428.05	1/4	2,786.55	1/4	3,145.06	1/4	3,503.57
1/2	298.92	1/2	657.43	1/2	1,008.68	1/2	1,359.99	1/2	1,718.50	1/2	2,077.01	1/2	2,435.52	1/2	2,794.02	1/2	3,152.53	1/2	3,511.04
3/4	306.39	3/4	664.90	3/4	1,015.84	3/4	1,367.46	3/4	1,725.97	3/4	2,084.48	3/4	2,442.99	3/4	2,801.49	3/4	3,160.00	3/4	3,518.51

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

INNAGE 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	3,525.98	0	3,884.48	0	4,242.43	0	4,599.89	0	4,956.16	0		0		0		0		0	
1/4	3,533.44	1/4	3,891.95	1/4	4,249.87	1/4	4,607.34	1/4	4,963.53	1/4		1/4		1/4		1/4		1/4	
1/2	3,540.91	1/2	3,899.42	1/2	4,257.32	1/2	4,614.79	1/2	4,970.90	1/2		1/2		1/2		1/2		1/2	
3/4	3,548.38	3/4	3,906.89	3/4	4,264.77	3/4	4,622.23	3/4	4,978.28	3/4		3/4		3/4		3/4		3/4	
1	3,555.85	1	3,914.36	1	4,272.22	1	4,629.68	1	4,985.65	1		1		1		1		1	
1/4	3,563.32	1/4	3,921.83	1/4	4,279.66	1/4	4,637.13	1/4	4,992.99	1/4		1/4		1/4		1/4		1/4	
1/2	3,570.79	1/2	3,929.30	1/2	4,287.11	1/2	4,644.58	1/2	5,000.33	1/2		1/2		1/2		1/2		1/2	
3/4	3,578.26	3/4	3,936.77	3/4	4,294.56	3/4	4,652.02	3/4	5,007.66	3/4		3/4		3/4		3/4		3/4	
2	3,585.73	2	3,944.23	2	4,302.00	2	4,659.47	2	5,015.00	2		2		2		2		2	
1/4	3,593.20	1/4	3,951.70	1/4	4,309.45	1/4	4,666.92	1/4	5,021.88	1/4		1/4		1/4		1/4		1/4	
1/2	3,600.66	1/2	3,959.17	1/2	4,316.90	1/2	4,674.36	1/2	5,028.76	1/2		1/2		1/2		1/2		1/2	
3/4	3,608.13	3/4	3,966.64	3/4	4,324.35	3/4	4,681.81	3/4	5,035.64	3/4		3/4		3/4		3/4		3/4	
3	3,615.60	3	3,974.11	3	4,331.79	3	4,689.26	3	5,042.52	3		3		3		3		3	
1/4	3,623.07	1/4	3,981.58	1/4	4,339.24	1/4	4,696.71	1/4	5,048.34	1/4		1/4		1/4		1/4		1/4	
1/2	3,630.54	1/2	3,989.05	1/2	4,346.69	1/2	4,704.15	1/2	5,054.17	1/2		1/2		1/2		1/2		1/2	
3/4	3,638.01	3/4	3,996.52	3/4	4,354.13	3/4	4,711.60	3/4	5,059.99	3/4		3/4		3/4		3/4		3/4	
4	3,645.48	4	4,003.99	4	4,361.58	4	4,719.05	4	5,065.82	4		4		4		4		4	
1/4	3,652.95	1/4	4,011.45	1/4	4,369.03	1/4	4,726.49	1/4	5,070.40	1/4		1/4		1/4		1/4		1/4	
1/2	3,660.42	1/2	4,018.92	1/2	4,376.48	1/2	4,733.94	1/2	5,074.98	1/2		1/2		1/2		1/2		1/2	
3/4	3,667.88	3/4	4,026.39	3/4	4,383.92	3/4	4,741.39	3/4	5,079.56	3/4		3/4		3/4		3/4		3/4	
5	3,675.35	5	4,033.86	5	4,391.37	5	4,748.84	5	5,084.14	5		5		5		5		5	
1/4	3,682.82	1/4	4,041.32	1/4	4,398.82	1/4	4,756.28	1/4	5,087.47	1/4		1/4		1/4		1/4		1/4	
1/2	3,690.29	1/2	4,048.78	1/2	4,406.26	1/2	4,763.73	1/2	5,090.81	1/2		1/2		1/2		1/2		1/2	
3/4	3,697.76	3/4	4,056.24	3/4	4,413.71	3/4	4,771.18	3/4	5,094.14	3/4		3/4		3/4		3/4		3/4	
6	3,705.23	6	4,063.69	6	4,421.16	6	4,778.62	6	5,097.48	6		6		6		6		6	
1/4	3,712.70	1/4	4,071.14	1/4	4,428.61	1/4	4,786.07	1/4	5,099.57	1/4		1/4		1/4		1/4		1/4	
1/2	3,720.17	1/2	4,078.59	1/2	4,436.05	1/2	4,793.52	1/2	5,101.66	1/2		1/2		1/2		1/2		1/2	
3/4	3,727.64	3/4	4,086.04	3/4	4,443.50	3/4	4,800.97	3/4	5,103.75	3/4		3/4		3/4		3/4		3/4	
7	3,735.11	7	4,093.48	7	4,450.95	7	4,808.41	7	5,105.84	7		7		7		7		7	
1/4	3,742.57	1/4	4,100.93	1/4	4,458.40	1/4	4,815.83	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,750.04	1/2	4,108.38	1/2	4,465.84	1/2	4,823.24	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,757.51	3/4	4,115.82	3/4	4,473.29	3/4	4,830.66	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,764.98	8	4,123.27	8	4,480.74	8	4,838.07	8		8		8		8		8		8	
1/4	3,772.45	1/4	4,130.72	1/4	4,488.18	1/4	4,845.45	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,779.92	1/2	4,138.17	1/2	4,495.63	1/2	4,852.83	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,787.39	3/4	4,145.61	3/4	4,503.08	3/4	4,860.21	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,794.86	9	4,153.06	9	4,510.53	9	4,867.60	9		9		9		9		9		9	
1/4	3,802.33	1/4	4,160.51	1/4	4,517.97	1/4	4,874.98	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,809.79	1/2	4,167.95	1/2	4,525.42	1/2	4,882.36	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,817.26	3/4	4,175.40	3/4	4,532.87	3/4	4,889.74	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,824.73	10	4,182.85	10	4,540.31	10	4,897.12	10		10		10		10		10		10	
1/4	3,832.20	1/4	4,190.30	1/4	4,547.76	1/4	4,904.50	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,839.67	1/2	4,197.74	1/2	4,555.21	1/2	4,911.88	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,847.14	3/4	4,205.19	3/4	4,562.66	3/4	4,919.26	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,854.61	11	4,212.64	11	4,570.10	11	4,926.64	11		11		11		11		11		11	
1/4	3,862.08	1/4	4,220.08	1/4	4,577.55	1/4	4,934.02	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,869.55	1/2	4,227.53	1/2	4,585.00	1/2	4,941.40	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,877.01	3/4	4,234.98	3/4	4,592.44	3/4	4,948.78	3/4		3/4		3/4		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
Pearland, Texas 77588
http://www.pmacorp.net

BARGE "E2MS 313"

2 STBD

INNAGE 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	2.23	0	314.00	0	672.66	0	1,031.02	0	1,389.50	0	1,748.17	0	2,106.85	0	2,465.52	0	2,824.12	0	3,182.69
1/4	4.10	1/4	321.47	1/4	680.14	1/4	1,038.48	1/4	1,396.98	1/4	1,755.65	1/4	2,114.32	1/4	2,472.99	1/4	2,831.59	1/4	3,190.16
1/2	5.97	1/2	328.94	1/2	687.61	1/2	1,045.94	1/2	1,404.45	1/2	1,763.12	1/2	2,121.79	1/2	2,480.46	1/2	2,839.07	1/2	3,197.63
3/4	7.84	3/4	336.42	3/4	695.08	3/4	1,053.40	3/4	1,411.92	3/4	1,770.59	3/4	2,129.26	3/4	2,487.93	3/4	2,846.54	3/4	3,205.11
1	9.71	1	343.89	1	702.55	1	1,060.85	1	1,419.39	1	1,778.06	1	2,136.73	1	2,495.40	1	2,854.01	1	3,212.58
1/4	13.44	1/4	351.36	1/4	710.03	1/4	1,068.31	1/4	1,426.87	1/4	1,785.54	1/4	2,144.21	1/4	2,502.88	1/4	2,861.48	1/4	3,220.05
1/2	17.18	1/2	358.83	1/2	717.50	1/2	1,075.77	1/2	1,434.34	1/2	1,793.01	1/2	2,151.68	1/2	2,510.35	1/2	2,868.95	1/2	3,227.52
3/4	20.91	3/4	366.30	3/4	724.97	3/4	1,083.23	3/4	1,441.81	3/4	1,800.48	3/4	2,159.15	3/4	2,517.82	3/4	2,876.42	3/4	3,234.99
2	24.65	2	373.78	2	732.44	2	1,090.69	2	1,449.28	2	1,807.95	2	2,166.62	2	2,525.29	2	2,883.89	2	3,242.46
1/4	30.25	1/4	381.25	1/4	739.91	1/4	1,098.15	1/4	1,456.76	1/4	1,815.43	1/4	2,174.10	1/4	2,532.77	1/4	2,891.36	1/4	3,249.93
1/2	35.86	1/2	388.72	1/2	747.39	1/2	1,105.61	1/2	1,464.23	1/2	1,822.90	1/2	2,181.57	1/2	2,540.24	1/2	2,898.83	1/2	3,257.40
3/4	41.46	3/4	396.19	3/4	754.86	3/4	1,113.07	3/4	1,471.70	3/4	1,830.37	3/4	2,189.04	3/4	2,547.71	3/4	2,906.30	3/4	3,264.87
3	47.06	3	403.67	3	762.33	3	1,120.54	3	1,479.17	3	1,837.84	3	2,196.51	3	2,555.18	3	2,913.77	3	3,272.34
1/4	54.05	1/4	411.14	1/4	769.80	1/4	1,128.00	1/4	1,486.64	1/4	1,845.31	1/4	2,203.99	1/4	2,562.66	1/4	2,921.24	1/4	3,279.81
1/2	61.04	1/2	418.61	1/2	777.28	1/2	1,135.47	1/2	1,494.12	1/2	1,852.79	1/2	2,211.46	1/2	2,570.13	1/2	2,928.71	1/2	3,287.28
3/4	68.02	3/4	426.08	3/4	784.75	3/4	1,142.94	3/4	1,501.59	3/4	1,860.26	3/4	2,218.93	3/4	2,577.60	3/4	2,936.18	3/4	3,294.75
4	75.01	4	433.55	4	792.22	4	1,150.40	4	1,509.06	4	1,867.73	4	2,226.40	4	2,585.07	4	2,943.65	4	3,302.22
1/4	82.46	1/4	441.03	1/4	799.69	1/4	1,157.87	1/4	1,516.53	1/4	1,875.20	1/4	2,233.87	1/4	2,592.54	1/4	2,951.12	1/4	3,309.69
1/2	89.91	1/2	448.50	1/2	807.16	1/2	1,165.34	1/2	1,524.01	1/2	1,882.68	1/2	2,241.35	1/2	2,600.02	1/2	2,958.59	1/2	3,317.16
3/4	97.35	3/4	455.97	3/4	814.64	3/4	1,172.81	3/4	1,531.48	3/4	1,890.15	3/4	2,248.82	3/4	2,607.49	3/4	2,966.06	3/4	3,324.63
5	104.80	5	463.44	5	822.11	5	1,180.28	5	1,538.95	5	1,897.62	5	2,256.29	5	2,614.96	5	2,973.53	5	3,332.10
1/4	112.27	1/4	470.91	1/4	829.58	1/4	1,187.75	1/4	1,546.42	1/4	1,905.09	1/4	2,263.76	1/4	2,622.43	1/4	2,981.00	1/4	3,339.57
1/2	119.74	1/2	478.39	1/2	837.05	1/2	1,195.22	1/2	1,553.90	1/2	1,912.57	1/2	2,271.24	1/2	2,629.91	1/2	2,988.47	1/2	3,347.04
3/4	127.20	3/4	485.86	3/4	844.53	3/4	1,202.70	3/4	1,561.37	3/4	1,920.04	3/4	2,278.71	3/4	2,637.38	3/4	2,995.94	3/4	3,354.51
6	134.67	6	493.33	6	852.00	6	1,210.17	6	1,568.84	6	1,927.51	6	2,286.18	6	2,644.85	6	3,003.41	6	3,361.98
1/4	142.14	1/4	500.80	1/4	859.46	1/4	1,217.64	1/4	1,576.31	1/4	1,934.98	1/4	2,293.65	1/4	2,652.32	1/4	3,010.88	1/4	3,369.45
1/2	149.61	1/2	508.28	1/2	866.93	1/2	1,225.11	1/2	1,583.78	1/2	1,942.45	1/2	2,301.12	1/2	2,659.79	1/2	3,018.35	1/2	3,376.92
3/4	157.08	3/4	515.75	3/4	874.39	3/4	1,232.59	3/4	1,591.26	3/4	1,949.93	3/4	2,308.60	3/4	2,667.25	3/4	3,025.82	3/4	3,384.39
7	164.55	7	523.22	7	881.86	7	1,240.06	7	1,598.73	7	1,957.40	7	2,316.07	7	2,674.72	7	3,033.29	7	3,391.86
1/4	172.03	1/4	530.69	1/4	889.32	1/4	1,247.53	1/4	1,606.20	1/4	1,964.87	1/4	2,323.54	1/4	2,682.19	1/4	3,040.76	1/4	3,399.33
1/2	179.50	1/2	538.16	1/2	896.78	1/2	1,255.00	1/2	1,613.67	1/2	1,972.34	1/2	2,331.01	1/2	2,689.66	1/2	3,048.23	1/2	3,406.80
3/4	186.97	3/4	545.64	3/4	904.23	3/4	1,262.48	3/4	1,621.15	3/4	1,979.82	3/4	2,338.49	3/4	2,697.13	3/4	3,055.70	3/4	3,414.27
8	194.44	8	553.11	8	911.69	8	1,269.95	8	1,628.62	8	1,987.29	8	2,345.96	8	2,704.60	8	3,063.17	8	3,421.74
1/4	201.92	1/4	560.58	1/4	919.15	1/4	1,277.42	1/4	1,636.09	1/4	1,994.76	1/4	2,353.43	1/4	2,712.07	1/4	3,070.64	1/4	3,429.21
1/2	209.39	1/2	568.05	1/2	926.61	1/2	1,284.89	1/2	1,643.56	1/2	2,002.23	1/2	2,360.90	1/2	2,719.54	1/2	3,078.11	1/2	3,436.68
3/4	216.86	3/4	575.53	3/4	934.07	3/4	1,292.36	3/4	1,651.03	3/4	2,009.71	3/4	2,368.38	3/4	2,727.01	3/4	3,085.58	3/4	3,444.15
9	224.33	9	583.00	9	941.52	9	1,299.84	9	1,658.51	9	2,017.18	9	2,375.85	9	2,734.48	9	3,093.05	9	3,451.62
1/4	231.80	1/4	590.47	1/4	948.98	1/4	1,307.31	1/4	1,665.98	1/4	2,024.65	1/4	2,383.32	1/4	2,741.95	1/4	3,100.52	1/4	3,459.09
1/2	239.28	1/2	597.94	1/2	956.44	1/2	1,314.78	1/2	1,673.45	1/2	2,032.12	1/2	2,390.79	1/2	2,749.42	1/2	3,107.99	1/2	3,466.56
3/4	246.75	3/4	605.41	3/4	963.90	3/4	1,322.25	3/4	1,680.92	3/4	2,039.59	3/4	2,398.26	3/4	2,756.89	3/4	3,115.46	3/4	3,474.03
10	254.22	10	612.89	10	971.36	10	1,329.73	10	1,688.40	10	2,047.07	10	2,405.74	10	2,764.36	10	3,122.93	10	3,481.50
1/4	261.69	1/4	620.36	1/4	978.82	1/4	1,337.20	1/4	1,695.87	1/4	2,054.54	1/4	2,413.21	1/4	2,771.83	1/4	3,130.40	1/4	3,488.97
1/2	269.17	1/2	627.83	1/2	986.27	1/2	1,344.67	1/2	1,703.34	1/2	2,062.01	1/2	2,420.68	1/2	2,779.30	1/2	3,137.87	1/2	3,496.44
3/4	276.64	3/4	635.30	3/4	993.73	3/4	1,352.14	3/4	1,710.81	3/4	2,069.48	3/4	2,428.15	3/4	2,786.77	3/4	3,145.34	3/4	3,503.91
11	284.11	11	642.78	11	1,001.19	11	1,359.62	11	1,718.29	11	2,076.96	11	2,435.63	11	2,794.24	11	3,152.81	11	3,511.38
1/4	291.58	1/4	650.25	1/4	1,008.65	1/4	1,367.09	1/4	1,725.76	1/4	2,084.43	1/4	2,443.10	1/4	2,801.71	1/4	3,160.28	1/4	3,518.85
1/2	299.05	1/2	657.72	1/2	1,016.11	1/2	1,374.56	1/2	1,733.23	1/2	2,091.90	1/2	2,450.57	1/2	2,809.18	1/2	3,167.75	1/2	3,526.32
3/4	306.53	3/4	665.19	3/4	1,023.56	3/4	1,382.03	3/4	1,740.70	3/4	2,099.37	3/4	2,458.04	3/4	2,816.65	3/4	3,175.22	3/4	3,533.79

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

INNAGE 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	3,541.26	0	3,899.83	0	4,257.82	0	4,615.35	0	4,971.56	0		0		0		0		0	
1/4	3,548.73	1/4	3,907.30	1/4	4,265.27	1/4	4,622.80	1/4	4,978.93	1/4		1/4		1/4		1/4		1/4	
1/2	3,556.20	1/2	3,914.77	1/2	4,272.72	1/2	4,630.24	1/2	4,986.30	1/2		1/2		1/2		1/2		1/2	
3/4	3,563.67	3/4	3,922.24	3/4	4,280.17	3/4	4,637.69	3/4	4,993.66	3/4		3/4		3/4		3/4		3/4	
1	3,571.14	1	3,929.71	1	4,287.62	1	4,645.14	1	5,001.03	1		1		1		1		1	
1/4	3,578.62	1/4	3,937.18	1/4	4,295.07	1/4	4,652.59	1/4	5,008.37	1/4		1/4		1/4		1/4		1/4	
1/2	3,586.09	1/2	3,944.65	1/2	4,302.51	1/2	4,660.04	1/2	5,015.70	1/2		1/2		1/2		1/2		1/2	
3/4	3,593.56	3/4	3,952.13	3/4	4,309.96	3/4	4,667.49	3/4	5,023.04	3/4		3/4		3/4		3/4		3/4	
2	3,601.03	2	3,959.60	2	4,317.41	2	4,674.93	2	5,030.37	2		2		2		2		2	
1/4	3,608.50	1/4	3,967.07	1/4	4,324.86	1/4	4,682.38	1/4	5,037.25	1/4		1/4		1/4		1/4		1/4	
1/2	3,615.97	1/2	3,974.54	1/2	4,332.31	1/2	4,689.83	1/2	5,044.12	1/2		1/2		1/2		1/2		1/2	
3/4	3,623.44	3/4	3,982.01	3/4	4,339.76	3/4	4,697.28	3/4	5,050.99	3/4		3/4		3/4		3/4		3/4	
3	3,630.91	3	3,989.48	3	4,347.20	3	4,704.73	3	5,057.87	3		3		3		3		3	
1/4	3,638.38	1/4	3,996.95	1/4	4,354.65	1/4	4,712.18	1/4	5,063.69	1/4		1/4		1/4		1/4		1/4	
1/2	3,645.85	1/2	4,004.42	1/2	4,362.10	1/2	4,719.62	1/2	5,069.51	1/2		1/2		1/2		1/2		1/2	
3/4	3,653.32	3/4	4,011.89	3/4	4,369.55	3/4	4,727.07	3/4	5,075.33	3/4		3/4		3/4		3/4		3/4	
4	3,660.79	4	4,019.36	4	4,377.00	4	4,734.52	4	5,081.15	4		4		4		4		4	
1/4	3,668.26	1/4	4,026.83	1/4	4,384.45	1/4	4,741.97	1/4	5,085.72	1/4		1/4		1/4		1/4		1/4	
1/2	3,675.73	1/2	4,034.30	1/2	4,391.90	1/2	4,749.42	1/2	5,090.30	1/2		1/2		1/2		1/2		1/2	
3/4	3,683.20	3/4	4,041.77	3/4	4,399.34	3/4	4,756.87	3/4	5,094.87	3/4		3/4		3/4		3/4		3/4	
5	3,690.67	5	4,049.24	5	4,406.79	5	4,764.32	5	5,099.45	5		5		5		5		5	
1/4	3,698.14	1/4	4,056.69	1/4	4,414.24	1/4	4,771.76	1/4	5,102.78	1/4		1/4		1/4		1/4		1/4	
1/2	3,705.61	1/2	4,064.15	1/2	4,421.69	1/2	4,779.21	1/2	5,106.11	1/2		1/2		1/2		1/2		1/2	
3/4	3,713.08	3/4	4,071.61	3/4	4,429.14	3/4	4,786.66	3/4	5,109.44	3/4		3/4		3/4		3/4		3/4	
6	3,720.55	6	4,079.06	6	4,436.59	6	4,794.11	6	5,112.77	6		6		6		6		6	
1/4	3,728.02	1/4	4,086.51	1/4	4,444.03	1/4	4,801.56	1/4	5,114.85	1/4		1/4		1/4		1/4		1/4	
1/2	3,735.49	1/2	4,093.96	1/2	4,451.48	1/2	4,809.01	1/2	5,116.93	1/2		1/2		1/2		1/2		1/2	
3/4	3,742.96	3/4	4,101.41	3/4	4,458.93	3/4	4,816.45	3/4	5,119.02	3/4		3/4		3/4		3/4		3/4	
7	3,750.43	7	4,108.86	7	4,466.38	7	4,823.90	7	5,121.10	7		7		7		7		7	
1/4	3,757.90	1/4	4,116.30	1/4	4,473.83	1/4	4,831.32	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,765.37	1/2	4,123.75	1/2	4,481.28	1/2	4,838.73	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,772.84	3/4	4,131.20	3/4	4,488.72	3/4	4,846.14	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,780.31	8	4,138.65	8	4,496.17	8	4,853.55	8		8		8		8		8		8	
1/4	3,787.78	1/4	4,146.10	1/4	4,503.62	1/4	4,860.93	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,795.25	1/2	4,153.55	1/2	4,511.07	1/2	4,868.30	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,802.72	3/4	4,160.99	3/4	4,518.52	3/4	4,875.68	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,810.19	9	4,168.44	9	4,525.97	9	4,883.05	9		9		9		9		9		9	
1/4	3,817.66	1/4	4,175.89	1/4	4,533.41	1/4	4,890.43	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,825.13	1/2	4,183.34	1/2	4,540.86	1/2	4,897.80	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,832.60	3/4	4,190.79	3/4	4,548.31	3/4	4,905.18	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,840.07	10	4,198.24	10	4,555.76	10	4,912.55	10		10		10		10		10		10	
1/4	3,847.54	1/4	4,205.69	1/4	4,563.21	1/4	4,919.93	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,855.01	1/2	4,213.13	1/2	4,570.66	1/2	4,927.30	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,862.48	3/4	4,220.58	3/4	4,578.11	3/4	4,934.68	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,869.95	11	4,228.03	11	4,585.55	11	4,942.05	11		11		11		11		11		11	
1/4	3,877.42	1/4	4,235.48	1/4	4,593.00	1/4	4,949.43	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,884.89	1/2	4,242.93	1/2	4,600.45	1/2	4,956.81	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,892.36	3/4	4,250.38	3/4	4,607.90	3/4	4,964.18	3/4		3/4		3/4		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

INNAGE 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	2.22	0	312.45	0	668.81	0	1,017.32	0	1,367.94	0	1,724.06	0	2,079.40	0	2,435.42	0	2,791.19	0	3,146.93
1/4	4.08	1/4	319.87	1/4	676.23	1/4	1,024.45	1/4	1,375.36	1/4	1,731.48	1/4	2,086.80	1/4	2,442.83	1/4	2,798.60	1/4	3,154.34
1/2	5.94	1/2	327.30	1/2	683.66	1/2	1,031.58	1/2	1,382.78	1/2	1,738.89	1/2	2,094.21	1/2	2,450.25	1/2	2,806.01	1/2	3,161.75
3/4	7.80	3/4	334.72	3/4	691.08	3/4	1,038.70	3/4	1,390.20	3/4	1,746.30	3/4	2,101.61	3/4	2,457.66	3/4	2,813.42	3/4	3,169.16
1	9.66	1	342.14	1	698.51	1	1,045.83	1	1,397.62	1	1,753.71	1	2,109.02	1	2,465.07	1	2,820.83	1	3,176.57
1/4	13.38	1/4	349.57	1/4	705.93	1/4	1,052.96	1/4	1,405.04	1/4	1,761.12	1/4	2,116.44	1/4	2,472.48	1/4	2,828.25	1/4	3,183.97
1/2	17.09	1/2	356.99	1/2	713.35	1/2	1,060.09	1/2	1,412.46	1/2	1,768.52	1/2	2,123.85	1/2	2,479.90	1/2	2,835.66	1/2	3,191.37
3/4	20.81	3/4	364.42	3/4	720.78	3/4	1,067.22	3/4	1,419.88	3/4	1,775.92	3/4	2,131.27	3/4	2,487.31	3/4	2,843.07	3/4	3,198.76
2	24.53	2	371.84	2	728.20	2	1,074.35	2	1,427.30	2	1,783.32	2	2,138.68	2	2,494.72	2	2,850.48	2	3,206.16
1/4	30.11	1/4	379.27	1/4	735.63	1/4	1,081.51	1/4	1,434.71	1/4	1,790.73	1/4	2,146.10	1/4	2,502.13	1/4	2,857.89	1/4	3,213.54
1/2	35.68	1/2	386.69	1/2	743.05	1/2	1,088.67	1/2	1,442.13	1/2	1,798.13	1/2	2,153.51	1/2	2,509.55	1/2	2,865.30	1/2	3,220.92
3/4	41.26	3/4	394.11	3/4	750.48	3/4	1,095.84	3/4	1,449.55	3/4	1,805.53	3/4	2,160.93	3/4	2,516.96	3/4	2,872.71	3/4	3,228.31
3	46.84	3	401.54	3	757.90	3	1,103.00	3	1,456.97	3	1,812.94	3	2,168.35	3	2,524.37	3	2,880.12	3	3,235.69
1/4	53.79	1/4	408.96	1/4	765.32	1/4	1,110.20	1/4	1,464.39	1/4	1,820.34	1/4	2,175.76	1/4	2,531.78	1/4	2,887.54	1/4	3,243.07
1/2	60.74	1/2	416.39	1/2	772.75	1/2	1,117.40	1/2	1,471.81	1/2	1,827.74	1/2	2,183.18	1/2	2,539.19	1/2	2,894.95	1/2	3,250.46
3/4	67.69	3/4	423.81	3/4	780.17	3/4	1,124.60	3/4	1,479.23	3/4	1,835.15	3/4	2,190.59	3/4	2,546.61	3/4	2,902.36	3/4	3,257.84
4	74.64	4	431.24	4	787.60	4	1,131.79	4	1,486.65	4	1,842.55	4	2,198.01	4	2,554.02	4	2,909.77	4	3,265.22
1/4	82.06	1/4	438.66	1/4	794.99	1/4	1,139.00	1/4	1,494.07	1/4	1,849.95	1/4	2,205.43	1/4	2,561.43	1/4	2,917.18	1/4	3,272.60
1/2	89.47	1/2	446.08	1/2	802.38	1/2	1,146.21	1/2	1,501.49	1/2	1,857.35	1/2	2,212.84	1/2	2,568.84	1/2	2,924.59	1/2	3,279.99
3/4	96.88	3/4	453.51	3/4	809.78	3/4	1,153.41	3/4	1,508.91	3/4	1,864.76	3/4	2,220.26	3/4	2,576.26	3/4	2,932.00	3/4	3,287.37
5	104.29	5	460.93	5	817.17	5	1,160.62	5	1,516.33	5	1,872.16	5	2,227.67	5	2,583.67	5	2,939.41	5	3,294.75
1/4	111.72	1/4	468.36	1/4	824.42	1/4	1,167.93	1/4	1,523.75	1/4	1,879.56	1/4	2,235.09	1/4	2,591.08	1/4	2,946.82	1/4	3,302.14
1/2	119.15	1/2	475.78	1/2	831.68	1/2	1,175.25	1/2	1,531.16	1/2	1,886.97	1/2	2,242.51	1/2	2,598.49	1/2	2,954.24	1/2	3,309.52
3/4	126.58	3/4	483.20	3/4	838.94	3/4	1,182.57	3/4	1,538.58	3/4	1,894.37	3/4	2,249.92	3/4	2,605.91	3/4	2,961.65	3/4	3,316.90
6	134.01	6	490.63	6	846.19	6	1,189.88	6	1,546.00	6	1,901.77	6	2,257.34	6	2,613.32	6	2,969.06	6	3,324.28
1/4	141.45	1/4	498.05	1/4	853.33	1/4	1,197.30	1/4	1,553.42	1/4	1,909.17	1/4	2,264.76	1/4	2,620.73	1/4	2,976.47	1/4	3,331.66
1/2	148.88	1/2	505.48	1/2	860.47	1/2	1,204.72	1/2	1,560.84	1/2	1,916.58	1/2	2,272.17	1/2	2,628.14	1/2	2,983.88	1/2	3,339.04
3/4	156.32	3/4	512.90	3/4	867.61	3/4	1,212.14	3/4	1,568.26	3/4	1,923.98	3/4	2,279.59	3/4	2,635.55	3/4	2,991.29	3/4	3,346.43
7	163.75	7	520.33	7	874.75	7	1,219.56	7	1,575.68	7	1,931.38	7	2,287.01	7	2,642.97	7	2,998.70	7	3,353.81
1/4	171.19	1/4	527.75	1/4	881.88	1/4	1,226.98	1/4	1,583.10	1/4	1,938.79	1/4	2,294.43	1/4	2,650.38	1/4	3,006.11	1/4	3,361.18
1/2	178.63	1/2	535.17	1/2	889.01	1/2	1,234.40	1/2	1,590.52	1/2	1,946.19	1/2	2,301.85	1/2	2,657.79	1/2	3,013.53	1/2	3,368.55
3/4	186.06	3/4	542.60	3/4	896.14	3/4	1,241.82	3/4	1,597.94	3/4	1,953.59	3/4	2,309.27	3/4	2,665.20	3/4	3,020.94	3/4	3,375.93
8	193.50	8	550.02	8	903.26	8	1,249.23	8	1,605.36	8	1,960.99	8	2,316.70	8	2,672.61	8	3,028.35	8	3,383.30
1/4	200.93	1/4	557.45	1/4	910.39	1/4	1,256.65	1/4	1,612.78	1/4	1,968.40	1/4	2,324.12	1/4	2,680.02	1/4	3,035.76	1/4	3,390.56
1/2	208.37	1/2	564.87	1/2	917.52	1/2	1,264.07	1/2	1,620.19	1/2	1,975.80	1/2	2,331.54	1/2	2,687.43	1/2	3,043.17	1/2	3,397.81
3/4	215.81	3/4	572.29	3/4	924.65	3/4	1,271.49	3/4	1,627.61	3/4	1,983.20	3/4	2,338.96	3/4	2,694.84	3/4	3,050.58	3/4	3,405.07
9	223.24	9	579.72	9	931.78	9	1,278.91	9	1,635.03	9	1,990.61	9	2,346.38	9	2,702.26	9	3,057.99	9	3,412.33
1/4	230.68	1/4	587.14	1/4	938.91	1/4	1,286.33	1/4	1,642.45	1/4	1,998.01	1/4	2,353.80	1/4	2,709.67	1/4	3,065.40	1/4	3,419.23
1/2	238.11	1/2	594.57	1/2	946.03	1/2	1,293.75	1/2	1,649.87	1/2	2,005.41	1/2	2,361.23	1/2	2,717.08	1/2	3,072.82	1/2	3,426.14
3/4	245.55	3/4	601.99	3/4	953.16	3/4	1,301.17	3/4	1,657.29	3/4	2,012.81	3/4	2,368.65	3/4	2,724.49	3/4	3,080.23	3/4	3,433.04
10	252.98	10	609.42	10	960.29	10	1,308.59	10	1,664.71	10	2,020.22	10	2,376.07	10	2,731.90	10	3,087.64	10	3,439.94
1/4	260.42	1/4	616.84	1/4	967.42	1/4	1,316.01	1/4	1,672.13	1/4	2,027.62	1/4	2,383.49	1/4	2,739.31	1/4	3,095.05	1/4	3,446.37
1/2	267.86	1/2	624.26	1/2	974.55	1/2	1,323.43	1/2	1,679.55	1/2	2,035.02	1/2	2,390.91	1/2	2,746.72	1/2	3,102.46	1/2	3,452.80
3/4	275.29	3/4	631.69	3/4	981.68	3/4	1,330.85	3/4	1,686.97	3/4	2,042.41	3/4	2,398.33	3/4	2,754.13	3/4	3,109.87	3/4	3,459.23
11	282.73	11	639.11	11	988.80	11	1,338.27	11	1,694.39	11	2,049.81	11	2,405.75	11	2,761.54	11	3,117.28	11	3,465.65
1/4	290.16	1/4	646.54	1/4	995.93	1/4	1,345.68	1/4	1,701.81	1/4	2,057.21	1/4	2,413.17	1/4	2,768.96	1/4	3,124.69	1/4	3,471.61
1/2	297.59	1/2	653.96	1/2	1,003.06	1/2	1,353.10	1/2	1,709.23	1/2	2,064.61	1/2	2,420.59	1/2	2,776.37	1/2	3,132.10	1/2	3,477.57
3/4	305.02	3/4	661.39	3/4	1,010.19	3/4	1,360.52	3/4	1,716.64	3/4	2,072.00	3/4	2,428.00	3/4	2,783.78	3/4	3,139.52	3/4	3,483.52

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

INNAGE 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	3,489.48	0	3,714.57	0	3,933.34	0	4,151.82	0	4,369.51	0		0		0		0		0	
1/4	3,494.96	1/4	3,719.14	1/4	3,937.89	1/4	4,156.37	1/4	4,374.01	1/4		1/4		1/4		1/4		1/4	
1/2	3,500.45	1/2	3,723.70	1/2	3,942.44	1/2	4,160.93	1/2	4,378.52	1/2		1/2		1/2		1/2		1/2	
3/4	3,505.93	3/4	3,728.26	3/4	3,946.99	3/4	4,165.48	3/4	4,383.02	3/4		3/4		3/4		3/4		3/4	
1	3,511.42	1	3,732.83	1	3,951.54	1	4,170.03	1	4,387.53	1		1		1		1		1	
1/4	3,516.44	1/4	3,737.39	1/4	3,956.10	1/4	4,174.58	1/4	4,392.01	1/4		1/4		1/4		1/4		1/4	
1/2	3,521.46	1/2	3,741.96	1/2	3,960.65	1/2	4,179.13	1/2	4,396.49	1/2		1/2		1/2		1/2		1/2	
3/4	3,526.49	3/4	3,746.52	3/4	3,965.20	3/4	4,183.69	3/4	4,400.97	3/4		3/4		3/4		3/4		3/4	
2	3,531.51	2	3,751.09	2	3,969.75	2	4,188.24	2	4,405.45	2		2		2		2		2	
1/4	3,536.20	1/4	3,755.65	1/4	3,974.30	1/4	4,192.79	1/4	4,409.65	1/4		1/4		1/4		1/4		1/4	
1/2	3,540.88	1/2	3,760.22	1/2	3,978.85	1/2	4,197.34	1/2	4,413.86	1/2		1/2		1/2		1/2		1/2	
3/4	3,545.56	3/4	3,764.78	3/4	3,983.41	3/4	4,201.89	3/4	4,418.06	3/4		3/4		3/4		3/4		3/4	
3	3,550.25	3	3,769.34	3	3,987.96	3	4,206.44	3	4,422.26	3		3		3		3		3	
1/4	3,554.81	1/4	3,773.91	1/4	3,992.51	1/4	4,211.00	1/4	4,425.81	1/4		1/4		1/4		1/4		1/4	
1/2	3,559.38	1/2	3,778.47	1/2	3,997.06	1/2	4,215.55	1/2	4,429.37	1/2		1/2		1/2		1/2		1/2	
3/4	3,563.94	3/4	3,783.04	3/4	4,001.61	3/4	4,220.10	3/4	4,432.93	3/4		3/4		3/4		3/4		3/4	
4	3,568.51	4	3,787.60	4	4,006.17	4	4,224.65	4	4,436.49	4		4		4		4		4	
1/4	3,573.07	1/4	3,792.17	1/4	4,010.72	1/4	4,229.20	1/4	4,439.28	1/4		1/4		1/4		1/4		1/4	
1/2	3,577.64	1/2	3,796.73	1/2	4,015.27	1/2	4,233.76	1/2	4,442.08	1/2		1/2		1/2		1/2		1/2	
3/4	3,582.20	3/4	3,801.30	3/4	4,019.82	3/4	4,238.31	3/4	4,444.87	3/4		3/4		3/4		3/4		3/4	
5	3,586.76	5	3,805.86	5	4,024.37	5	4,242.86	5	4,447.67	5		5		5		5		5	
1/4	3,591.33	1/4	3,810.42	1/4	4,028.92	1/4	4,247.41	1/4	4,449.70	1/4		1/4		1/4		1/4		1/4	
1/2	3,595.89	1/2	3,814.98	1/2	4,033.48	1/2	4,251.96	1/2	4,451.74	1/2		1/2		1/2		1/2		1/2	
3/4	3,600.46	3/4	3,819.54	3/4	4,038.03	3/4	4,256.51	3/4	4,453.77	3/4		3/4		3/4		3/4		3/4	
6	3,605.02	6	3,824.09	6	4,042.58	6	4,261.07	6	4,455.81	6		6		6		6		6	
1/4	3,609.59	1/4	3,828.65	1/4	4,047.13	1/4	4,265.62	1/4	4,457.08	1/4		1/4		1/4		1/4		1/4	
1/2	3,614.15	1/2	3,833.20	1/2	4,051.68	1/2	4,270.17	1/2	4,458.36	1/2		1/2		1/2		1/2		1/2	
3/4	3,618.72	3/4	3,837.75	3/4	4,056.24	3/4	4,274.72	3/4	4,459.63	3/4		3/4		3/4		3/4		3/4	
7	3,623.28	7	3,842.30	7	4,060.79	7	4,279.27	7	4,460.90	7		7		7		7		7	
1/4	3,627.85	1/4	3,846.85	1/4	4,065.34	1/4	4,283.80	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,632.41	1/2	3,851.40	1/2	4,069.89	1/2	4,288.33	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,636.97	3/4	3,855.96	3/4	4,074.44	3/4	4,292.86	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,641.54	8	3,860.51	8	4,078.99	8	4,297.39	8		8		8		8		8		8	
1/4	3,646.10	1/4	3,865.06	1/4	4,083.55	1/4	4,301.90	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,650.67	1/2	3,869.61	1/2	4,088.10	1/2	4,306.41	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,655.23	3/4	3,874.16	3/4	4,092.65	3/4	4,310.92	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,659.80	9	3,878.72	9	4,097.20	9	4,315.42	9		9		9		9		9		9	
1/4	3,664.36	1/4	3,883.27	1/4	4,101.75	1/4	4,319.93	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,668.93	1/2	3,887.82	1/2	4,106.31	1/2	4,324.44	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,673.49	3/4	3,892.37	3/4	4,110.86	3/4	4,328.94	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,678.05	10	3,896.92	10	4,115.41	10	4,333.45	10		10		10		10		10		10	
1/4	3,682.62	1/4	3,901.47	1/4	4,119.96	1/4	4,337.96	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,687.18	1/2	3,906.03	1/2	4,124.51	1/2	4,342.46	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,691.75	3/4	3,910.58	3/4	4,129.06	3/4	4,346.97	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,696.31	11	3,915.13	11	4,133.62	11	4,351.48	11		11		11		11		11		11	
1/4	3,700.88	1/4	3,919.68	1/4	4,138.17	1/4	4,355.99	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,705.44	1/2	3,924.23	1/2	4,142.72	1/2	4,360.49	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,710.01	3/4	3,928.78	3/4	4,147.27	3/4	4,365.00	3/4		3/4		3/4		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

INNAGE 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	2.22	0	312.36	0	669.16	0	1,025.65	0	1,382.26	0	1,739.07	0	2,095.88	0	2,452.66	0	2,809.01	0	3,165.32
1/4	4.08	1/4	319.80	1/4	676.59	1/4	1,033.06	1/4	1,389.70	1/4	1,746.50	1/4	2,103.31	1/4	2,460.09	1/4	2,816.43	1/4	3,172.75
1/2	5.94	1/2	327.23	1/2	684.02	1/2	1,040.48	1/2	1,397.13	1/2	1,753.94	1/2	2,110.75	1/2	2,467.51	1/2	2,823.86	1/2	3,180.17
3/4	7.80	3/4	334.66	3/4	691.46	3/4	1,047.90	3/4	1,404.56	3/4	1,761.37	3/4	2,118.18	3/4	2,474.94	3/4	2,831.28	3/4	3,187.59
1	9.66	1	342.09	1	698.89	1	1,055.32	1	1,412.00	1	1,768.81	1	2,125.61	1	2,482.36	1	2,838.70	1	3,195.02
1/4	13.37	1/4	349.53	1/4	706.32	1/4	1,062.74	1/4	1,419.43	1/4	1,776.24	1/4	2,133.05	1/4	2,489.79	1/4	2,846.13	1/4	3,202.43
1/2	17.09	1/2	356.96	1/2	713.75	1/2	1,070.16	1/2	1,426.86	1/2	1,783.67	1/2	2,140.48	1/2	2,497.21	1/2	2,853.55	1/2	3,209.84
3/4	20.81	3/4	364.39	3/4	721.19	3/4	1,077.58	3/4	1,434.30	3/4	1,791.11	3/4	2,147.91	3/4	2,504.64	3/4	2,860.97	3/4	3,217.24
2	24.52	2	371.83	2	728.62	2	1,085.00	2	1,441.73	2	1,798.54	2	2,155.35	2	2,512.06	2	2,868.40	2	3,224.65
1/4	30.10	1/4	379.26	1/4	736.05	1/4	1,092.42	1/4	1,449.16	1/4	1,805.97	1/4	2,162.78	1/4	2,519.48	1/4	2,875.82	1/4	3,232.05
1/2	35.67	1/2	386.69	1/2	743.49	1/2	1,099.85	1/2	1,456.60	1/2	1,813.41	1/2	2,170.21	1/2	2,526.91	1/2	2,883.24	1/2	3,239.44
3/4	41.24	3/4	394.13	3/4	750.92	3/4	1,107.27	3/4	1,464.03	3/4	1,820.84	3/4	2,177.65	3/4	2,534.33	3/4	2,890.67	3/4	3,246.84
3	46.82	3	401.56	3	758.35	3	1,114.69	3	1,471.47	3	1,828.27	3	2,185.08	3	2,541.76	3	2,898.09	3	3,254.23
1/4	53.77	1/4	408.99	1/4	765.79	1/4	1,122.12	1/4	1,478.90	1/4	1,835.71	1/4	2,192.51	1/4	2,549.18	1/4	2,905.51	1/4	3,261.63
1/2	60.72	1/2	416.43	1/2	773.22	1/2	1,129.55	1/2	1,486.33	1/2	1,843.14	1/2	2,199.95	1/2	2,556.61	1/2	2,912.94	1/2	3,269.02
3/4	67.67	3/4	423.86	3/4	780.65	3/4	1,136.97	3/4	1,493.77	3/4	1,850.57	3/4	2,207.38	3/4	2,564.03	3/4	2,920.36	3/4	3,276.42
4	74.62	4	431.29	4	788.09	4	1,144.40	4	1,501.20	4	1,858.01	4	2,214.82	4	2,571.46	4	2,927.78	4	3,283.81
1/4	82.03	1/4	438.73	1/4	795.52	1/4	1,151.83	1/4	1,508.63	1/4	1,865.44	1/4	2,222.25	1/4	2,578.88	1/4	2,935.20	1/4	3,291.21
1/2	89.44	1/2	446.16	1/2	802.95	1/2	1,159.26	1/2	1,516.07	1/2	1,872.87	1/2	2,229.68	1/2	2,586.30	1/2	2,942.63	1/2	3,298.60
3/4	96.85	3/4	453.59	3/4	810.39	3/4	1,166.69	3/4	1,523.50	3/4	1,880.31	3/4	2,237.12	3/4	2,593.73	3/4	2,950.05	3/4	3,306.00
5	104.26	5	461.03	5	817.82	5	1,174.13	5	1,530.93	5	1,887.74	5	2,244.55	5	2,601.15	5	2,957.47	5	3,313.39
1/4	111.69	1/4	468.46	1/4	825.25	1/4	1,181.56	1/4	1,538.37	1/4	1,895.17	1/4	2,251.98	1/4	2,608.58	1/4	2,964.90	1/4	3,320.79
1/2	119.11	1/2	475.89	1/2	832.69	1/2	1,188.99	1/2	1,545.80	1/2	1,902.61	1/2	2,259.42	1/2	2,616.00	1/2	2,972.32	1/2	3,328.18
3/4	126.54	3/4	483.33	3/4	840.12	3/4	1,196.43	3/4	1,553.23	3/4	1,910.04	3/4	2,266.85	3/4	2,623.43	3/4	2,979.74	3/4	3,335.58
6	133.97	6	490.76	6	847.55	6	1,203.86	6	1,560.67	6	1,917.48	6	2,274.28	6	2,630.85	6	2,987.17	6	3,342.97
1/4	141.40	1/4	498.19	1/4	854.98	1/4	1,211.29	1/4	1,568.10	1/4	1,924.91	1/4	2,281.72	1/4	2,638.27	1/4	2,994.59	1/4	3,350.36
1/2	148.83	1/2	505.63	1/2	862.41	1/2	1,218.73	1/2	1,575.53	1/2	1,932.34	1/2	2,289.15	1/2	2,645.70	1/2	3,002.01	1/2	3,357.76
3/4	156.27	3/4	513.06	3/4	869.83	3/4	1,226.16	3/4	1,582.97	3/4	1,939.78	3/4	2,296.58	3/4	2,653.12	3/4	3,009.44	3/4	3,365.15
7	163.70	7	520.49	7	877.26	7	1,233.59	7	1,590.40	7	1,947.21	7	2,304.02	7	2,660.55	7	3,016.86	7	3,372.54
1/4	171.13	1/4	527.92	1/4	884.68	1/4	1,241.03	1/4	1,597.83	1/4	1,954.64	1/4	2,311.45	1/4	2,667.97	1/4	3,024.28	1/4	3,379.93
1/2	178.56	1/2	535.36	1/2	892.10	1/2	1,248.46	1/2	1,605.27	1/2	1,962.08	1/2	2,318.88	1/2	2,675.39	1/2	3,031.71	1/2	3,387.32
3/4	186.00	3/4	542.79	3/4	899.52	3/4	1,255.89	3/4	1,612.70	3/4	1,969.51	3/4	2,326.32	3/4	2,682.82	3/4	3,039.13	3/4	3,394.70
8	193.43	8	550.22	8	906.94	8	1,263.33	8	1,620.14	8	1,976.94	8	2,333.75	8	2,690.24	8	3,046.55	8	3,402.09
1/4	200.86	1/4	557.66	1/4	914.36	1/4	1,270.76	1/4	1,627.57	1/4	1,984.38	1/4	2,341.18	1/4	2,697.66	1/4	3,053.98	1/4	3,409.36
1/2	208.30	1/2	565.09	1/2	921.78	1/2	1,278.19	1/2	1,635.00	1/2	1,991.81	1/2	2,348.62	1/2	2,705.09	1/2	3,061.40	1/2	3,416.62
3/4	215.73	3/4	572.52	3/4	929.20	3/4	1,285.63	3/4	1,642.44	3/4	1,999.24	3/4	2,356.05	3/4	2,712.51	3/4	3,068.82	3/4	3,423.89
9	223.16	9	579.96	9	936.62	9	1,293.06	9	1,649.87	9	2,006.68	9	2,363.49	9	2,719.93	9	3,076.25	9	3,431.16
1/4	230.60	1/4	587.39	1/4	944.03	1/4	1,300.49	1/4	1,657.30	1/4	2,014.11	1/4	2,370.92	1/4	2,727.36	1/4	3,083.67	1/4	3,438.08
1/2	238.03	1/2	594.82	1/2	951.45	1/2	1,307.93	1/2	1,664.74	1/2	2,021.54	1/2	2,378.35	1/2	2,734.78	1/2	3,091.09	1/2	3,444.99
3/4	245.46	3/4	602.26	3/4	958.87	3/4	1,315.36	3/4	1,672.17	3/4	2,028.98	3/4	2,385.79	3/4	2,742.20	3/4	3,098.52	3/4	3,451.91
10	252.90	10	609.69	10	966.29	10	1,322.80	10	1,679.60	10	2,036.41	10	2,393.22	10	2,749.62	10	3,105.94	10	3,458.83
1/4	260.33	1/4	617.12	1/4	973.71	1/4	1,330.23	1/4	1,687.04	1/4	2,043.84	1/4	2,400.65	1/4	2,757.05	1/4	3,113.36	1/4	3,465.27
1/2	267.76	1/2	624.56	1/2	981.13	1/2	1,337.66	1/2	1,694.47	1/2	2,051.28	1/2	2,408.09	1/2	2,764.47	1/2	3,120.78	1/2	3,471.70
3/4	275.20	3/4	631.99	3/4	988.55	3/4	1,345.10	3/4	1,701.90	3/4	2,058.71	3/4	2,415.52	3/4	2,771.89	3/4	3,128.21	3/4	3,478.14
11	282.63	11	639.42	11	995.97	11	1,352.53	11	1,709.34	11	2,066.15	11	2,422.95	11	2,779.32	11	3,135.63	11	3,484.58
1/4	290.06	1/4	646.86	1/4	1,003.39	1/4	1,359.96	1/4	1,716.77	1/4	2,073.58	1/4	2,430.38	1/4	2,786.74	1/4	3,143.05	1/4	3,490.54
1/2	297.50	1/2	654.29	1/2	1,010.81	1/2	1,367.40	1/2	1,724.20	1/2	2,081.01	1/2	2,437.81	1/2	2,794.16	1/2	3,150.48	1/2	3,496.50
3/4	304.93	3/4	661.72	3/4	1,018.23	3/4	1,374.83	3/4	1,731.64	3/4	2,088.45	3/4	2,445.24	3/4	2,801.59	3/4	3,157.90	3/4	3,502.46

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

INNAGE 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	3,508.42	0	3,733.47	0	3,952.19	0	4,170.64	0	4,388.28	0		0		0		0		0	
1/4	3,513.91	1/4	3,738.03	1/4	3,956.75	1/4	4,175.19	1/4	4,392.78	1/4		1/4		1/4		1/4		1/4	
1/2	3,519.39	1/2	3,742.60	1/2	3,961.30	1/2	4,179.74	1/2	4,397.28	1/2		1/2		1/2		1/2		1/2	
3/4	3,524.87	3/4	3,747.16	3/4	3,965.85	3/4	4,184.30	3/4	4,401.79	3/4		3/4		3/4		3/4		3/4	
1	3,530.35	1	3,751.73	1	3,970.40	1	4,188.85	1	4,406.29	1		1		1		1		1	
1/4	3,535.38	1/4	3,756.29	1/4	3,974.95	1/4	4,193.40	1/4	4,410.77	1/4		1/4		1/4		1/4		1/4	
1/2	3,540.40	1/2	3,760.85	1/2	3,979.50	1/2	4,197.95	1/2	4,415.25	1/2		1/2		1/2		1/2		1/2	
3/4	3,545.42	3/4	3,765.42	3/4	3,984.05	3/4	4,202.50	3/4	4,419.73	3/4		3/4		3/4		3/4		3/4	
2	3,550.45	2	3,769.98	2	3,988.60	2	4,207.05	2	4,424.21	2		2		2		2		2	
1/4	3,555.13	1/4	3,774.54	1/4	3,993.15	1/4	4,211.60	1/4	4,428.41	1/4		1/4		1/4		1/4		1/4	
1/2	3,559.81	1/2	3,779.11	1/2	3,997.70	1/2	4,216.15	1/2	4,432.61	1/2		1/2		1/2		1/2		1/2	
3/4	3,564.49	3/4	3,783.67	3/4	4,002.26	3/4	4,220.70	3/4	4,436.81	3/4		3/4		3/4		3/4		3/4	
3	3,569.18	3	3,788.24	3	4,006.81	3	4,225.25	3	4,441.01	3		3		3		3		3	
1/4	3,573.74	1/4	3,792.80	1/4	4,011.36	1/4	4,229.81	1/4	4,444.57	1/4		1/4		1/4		1/4		1/4	
1/2	3,578.31	1/2	3,797.36	1/2	4,015.91	1/2	4,234.36	1/2	4,448.13	1/2		1/2		1/2		1/2		1/2	
3/4	3,582.87	3/4	3,801.93	3/4	4,020.46	3/4	4,238.91	3/4	4,451.68	3/4		3/4		3/4		3/4		3/4	
4	3,587.43	4	3,806.49	4	4,025.01	4	4,243.46	4	4,455.24	4		4		4		4		4	
1/4	3,592.00	1/4	3,811.05	1/4	4,029.56	1/4	4,248.01	1/4	4,458.03	1/4		1/4		1/4		1/4		1/4	
1/2	3,596.56	1/2	3,815.62	1/2	4,034.11	1/2	4,252.56	1/2	4,460.83	1/2		1/2		1/2		1/2		1/2	
3/4	3,601.12	3/4	3,820.18	3/4	4,038.66	3/4	4,257.11	3/4	4,463.62	3/4		3/4		3/4		3/4		3/4	
5	3,605.69	5	3,824.75	5	4,043.21	5	4,261.66	5	4,466.42	5		5		5		5		5	
1/4	3,610.25	1/4	3,829.30	1/4	4,047.77	1/4	4,266.21	1/4	4,468.45	1/4		1/4		1/4		1/4		1/4	
1/2	3,614.81	1/2	3,833.86	1/2	4,052.32	1/2	4,270.76	1/2	4,470.49	1/2		1/2		1/2		1/2		1/2	
3/4	3,619.38	3/4	3,838.41	3/4	4,056.87	3/4	4,275.32	3/4	4,472.52	3/4		3/4		3/4		3/4		3/4	
6	3,623.94	6	3,842.97	6	4,061.42	6	4,279.87	6	4,474.56	6		6		6		6		6	
1/4	3,628.51	1/4	3,847.52	1/4	4,065.97	1/4	4,284.42	1/4	4,475.83	1/4		1/4		1/4		1/4		1/4	
1/2	3,633.07	1/2	3,852.07	1/2	4,070.52	1/2	4,288.97	1/2	4,477.11	1/2		1/2		1/2		1/2		1/2	
3/4	3,637.63	3/4	3,856.62	3/4	4,075.07	3/4	4,293.52	3/4	4,478.38	3/4		3/4		3/4		3/4		3/4	
7	3,642.20	7	3,861.17	7	4,079.62	7	4,298.07	7	4,479.65	7		7		7		7		7	
1/4	3,646.76	1/4	3,865.73	1/4	4,084.17	1/4	4,302.60	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,651.32	1/2	3,870.28	1/2	4,088.72	1/2	4,307.13	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,655.89	3/4	3,874.83	3/4	4,093.28	3/4	4,311.65	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,660.45	8	3,879.38	8	4,097.83	8	4,316.18	8		8		8		8		8		8	
1/4	3,665.02	1/4	3,883.93	1/4	4,102.38	1/4	4,320.69	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,669.58	1/2	3,888.48	1/2	4,106.93	1/2	4,325.19	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,674.14	3/4	3,893.03	3/4	4,111.48	3/4	4,329.70	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,678.71	9	3,897.58	9	4,116.03	9	4,334.21	9		9		9		9		9		9	
1/4	3,683.27	1/4	3,902.13	1/4	4,120.58	1/4	4,338.71	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,687.83	1/2	3,906.68	1/2	4,125.13	1/2	4,343.22	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,692.40	3/4	3,911.24	3/4	4,129.68	3/4	4,347.72	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,696.96	10	3,915.79	10	4,134.23	10	4,352.23	10		10		10		10		10		10	
1/4	3,701.53	1/4	3,920.34	1/4	4,138.79	1/4	4,356.74	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,706.09	1/2	3,924.89	1/2	4,143.34	1/2	4,361.24	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,710.65	3/4	3,929.44	3/4	4,147.89	3/4	4,365.75	3/4		3/4		3/4		3/4		3/4		3/4	
11	3,715.22	11	3,933.99	11	4,152.44	11	4,370.26	11		11		11		11		11		11	
1/4	3,719.78	1/4	3,938.54	1/4	4,156.99	1/4	4,374.76	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,724.34	1/2	3,943.09	1/2	4,161.54	1/2	4,379.27	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,728.91	3/4	3,947.64	3/4	4,166.09	3/4	4,383.77	3/4		3/4		3/4		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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