



# BARGE "HFL 439"

## ULLAGE TRIM TABLE

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

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 1'-00"  
 AFT DRAFT = 4'-00"  
 DIFF. = 3'-00" (DOWN BY STERN)

THE CORRECTION FOR 3'-00" TRIM DOWN BY STERN FOR 3 PORT IS - 00-0/8"  
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 3 PORT, THE TRIM CORRECTED ULLAGE IS 4'-00"

LENGTH BETWEEN DRAFT MARKS: 238'-06"

November 5, 2015

PRECISION MEASUREMENT  
 & ANALYSIS, INC.

P.O. Box 2092  
 Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 439"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	188,608	0	178,296	0	167,984	0	157,637	0	146,995	0	132,347	0	117,379	0	102,403
1/4		1/4		1/4	188,393	1/4	178,081	1/4	167,769	1/4	157,421	1/4	146,733	1/4	132,035	1/4	117,067	1/4	102,091
1/2		1/2		1/2	188,178	1/2	177,866	1/2	167,553	1/2	157,206	1/2	146,470	1/2	131,723	1/2	116,755	1/2	101,778
3/4		3/4		3/4	187,963	3/4	177,651	3/4	167,338	3/4	156,990	3/4	146,191	3/4	131,411	3/4	116,443	3/4	101,466
1		1		1	187,748	1	177,436	1	167,122	1	156,775	1	145,913	1	131,099	1	116,131	1	101,154
1/4		1/4		1/4	187,533	1/4	177,222	1/4	166,907	1/4	156,559	1/4	145,634	1/4	130,788	1/4	115,819	1/4	100,842
1/2		1/2		1/2	187,318	1/2	177,007	1/2	166,691	1/2	156,344	1/2	145,355	1/2	130,476	1/2	115,508	1/2	100,529
3/4		3/4		3/4	187,103	3/4	176,792	3/4	166,476	3/4	156,128	3/4	145,060	3/4	130,164	3/4	115,196	3/4	100,217
2		2		2	186,888	2	176,577	2	166,260	2	155,912	2	144,766	2	129,852	2	114,884	2	99,905
1/4		1/4		1/4	186,673	1/4	176,362	1/4	166,044	1/4	155,697	1/4	144,471	1/4	129,540	1/4	114,572	1/4	99,593
1/2		1/2		1/2	186,459	1/2	176,148	1/2	165,829	1/2	155,481	1/2	144,176	1/2	129,228	1/2	114,260	1/2	99,280
3/4		3/4		3/4	186,244	3/4	175,933	3/4	165,613	3/4	155,266	3/4	143,869	3/4	128,916	3/4	113,948	3/4	98,968
3		3		3	186,029	3	175,718	3	165,398	3	155,050	3	143,562	3	128,605	3	113,637	3	98,656
1/4		1/4		1/4	185,814	1/4	175,503	1/4	165,182	1/4	154,835	1/4	143,255	1/4	128,293	1/4	113,325	1/4	98,344
1/2		1/2		1/2	185,599	1/2	175,288	1/2	164,967	1/2	154,619	1/2	142,948	1/2	127,981	1/2	113,013	1/2	98,031
3/4		3/4		3/4	185,385	3/4	175,073	3/4	164,751	3/4	154,403	3/4	142,636	3/4	127,669	3/4	112,701	3/4	97,719
4		4		4	185,170	4	174,859	4	164,535	4	154,188	4	142,325	4	127,357	4	112,389	4	97,407
1/4		1/4		1/4	184,955	1/4	174,644	1/4	164,320	1/4	153,972	1/4	142,013	1/4	127,045	1/4	112,077	1/4	97,095
1/2		1/2		1/2	184,740	1/2	174,429	1/2	164,104	1/2	153,757	1/2	141,701	1/2	126,734	1/2	111,766	1/2	96,782
3/4		3/4		3/4	184,525	3/4	174,214	3/4	163,889	3/4	153,541	3/4	141,390	3/4	126,422	3/4	111,454	3/4	96,470
5		5		5	184,310	5	173,999	5	163,673	5	153,326	5	141,078	5	126,110	5	111,142	5	96,158
1/4		1/4		1/4	184,096	1/4	173,785	1/4	163,458	1/4	153,110	1/4	140,766	1/4	125,798	1/4	110,830	1/4	95,846
1/2		1/2		1/2	183,881	1/2	173,570	1/2	163,242	1/2	152,894	1/2	140,454	1/2	125,486	1/2	110,518	1/2	95,533
3/4		3/4		3/4	183,666	3/4	173,355	3/4	163,026	3/4	152,679	3/4	140,143	3/4	125,174	3/4	110,206	3/4	95,221
6		6		6	183,451	6	173,140	6	162,811	6	152,463	6	139,831	6	124,863	6	109,894	6	94,909
1/4		1/4		1/4	183,236	1/4	172,925	1/4	162,595	1/4	152,248	1/4	139,519	1/4	124,551	1/4	109,583	1/4	94,597
1/2		1/2		1/2	192,642	1/2	183,022	1/2	172,710	1/2	162,380	1/2	152,032	1/2	139,207	1/2	124,239	1/2	109,271
3/4		3/4		3/4	192,519	3/4	182,807	3/4	172,496	3/4	162,164	3/4	151,817	3/4	138,895	3/4	123,927	3/4	108,959
7		7		7	192,395	7	182,592	7	172,281	7	161,949	7	151,601	7	138,583	7	123,615	7	108,647
1/4		1/4		1/4	192,272	1/4	182,377	1/4	172,066	1/4	161,733	1/4	151,385	1/4	138,272	1/4	123,303	1/4	108,335
1/2		1/2		1/2	192,148	1/2	182,162	1/2	171,851	1/2	161,517	1/2	151,170	1/2	137,960	1/2	122,992	1/2	108,023
3/4		3/4		3/4	191,989	3/4	181,947	3/4	171,636	3/4	161,302	3/4	150,954	3/4	137,648	3/4	122,680	3/4	107,711
8		8		8	191,830	8	181,733	8	171,422	8	161,086	8	150,739	8	137,336	8	122,368	8	107,399
1/4		1/4		1/4	191,670	1/4	181,518	1/4	171,207	1/4	160,871	1/4	150,523	1/4	137,024	1/4	122,056	1/4	107,087
1/2		1/2		1/2	191,511	1/2	181,303	1/2	170,992	1/2	160,655	1/2	150,308	1/2	136,712	1/2	121,744	1/2	106,774
3/4		3/4		3/4	191,318	3/4	181,088	3/4	170,777	3/4	160,439	3/4	150,088	3/4	136,401	3/4	121,432	3/4	106,462
9		9		9	191,126	9	180,873	9	170,562	9	160,224	9	149,869	9	136,089	9	121,121	9	106,150
1/4		1/4		1/4	190,933	1/4	180,659	1/4	170,348	1/4	160,008	1/4	149,650	1/4	135,777	1/4	120,809	1/4	105,838
1/2		1/2		1/2	190,740	1/2	180,444	1/2	170,133	1/2	159,793	1/2	149,431	1/2	135,465	1/2	120,497	1/2	105,525
3/4		3/4		3/4	190,529	3/4	180,229	3/4	169,918	3/4	159,577	3/4	149,200	3/4	135,153	3/4	120,185	3/4	105,213
10		10		10	190,318	10	180,014	10	169,703	10	159,362	10	148,970	10	134,841	10	119,873	10	104,901
1/4		1/4		1/4	190,107	1/4	179,799	1/4	169,488	1/4	159,146	1/4	148,739	1/4	134,530	1/4	119,561	1/4	104,589
1/2		1/2		1/2	189,896	1/2	179,585	1/2	169,273	1/2	158,930	1/2	148,508	1/2	134,218	1/2	119,250	1/2	104,276
3/4		3/4		3/4	189,681	3/4	179,370	3/4	169,059	3/4	158,715	3/4	148,261	3/4	133,906	3/4	118,938	3/4	103,964
11		11		11	189,466	11	179,155	11	168,844	11	158,499	11	148,015	11	133,594	11	118,626	11	103,652
1/4		1/4		1/4	189,252	1/4	178,940	1/4	168,629	1/4	158,284	1/4	147,768	1/4	133,282	1/4	118,314	1/4	103,340
1/2		1/2		1/2	189,037	1/2	178,725	1/2	168,414	1/2	158,068	1/2	147,521	1/2	132,970	1/2	118,002	1/2	103,027
3/4		3/4		3/4	188,822	3/4	178,510	3/4	168,199	3/4	157,853	3/4	147,258	3/4	132,659	3/4	117,690	3/4	102,715

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 OF 2" "HERMETIC" VALVE

GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-0" FORWARD OF AFT BULKHEAD

PRECISION MEASUREMENT  
& ANALYSIS, INC.

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# BARGE "HFL 439"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 1/2"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	87,415	0	72,427	0	57,439	0	42,457	0	27,481	0	12,493	0		0		0		0	
1/4	87,103	1/4	72,114	1/4	57,126	1/4	42,145	1/4	27,168	1/4	12,181	1/4		1/4		1/4		1/4	
1/2	86,790	1/2	71,802	1/2	56,814	1/2	41,833	1/2	26,856	1/2	11,869	1/2		1/2		1/2		1/2	
3/4	86,478	3/4	71,490	3/4	56,502	3/4	41,521	3/4	26,544	3/4	11,556	3/4		3/4		3/4		3/4	
1	86,166	1	71,178	1	56,190	1	41,210	1	26,232	1	11,244	1		1		1		1	
1/4	85,854	1/4	70,865	1/4	55,877	1/4	40,898	1/4	25,919	1/4	10,932	1/4		1/4		1/4		1/4	
1/2	85,541	1/2	70,553	1/2	55,565	1/2	40,586	1/2	25,607	1/2	10,620	1/2		1/2		1/2		1/2	
3/4	85,229	3/4	70,241	3/4	55,253	3/4	40,274	3/4	25,295	3/4	10,307	3/4		3/4		3/4		3/4	
2	84,917	2	69,929	2	54,941	2	39,963	2	24,983	2	9,995	2		2		2		2	
1/4	84,605	1/4	69,616	1/4	54,628	1/4	39,651	1/4	24,670	1/4	9,683	1/4		1/4		1/4		1/4	
1/2	84,292	1/2	69,304	1/2	54,316	1/2	39,339	1/2	24,358	1/2	9,371	1/2		1/2		1/2		1/2	
3/4	83,980	3/4	68,992	3/4	54,004	3/4	39,027	3/4	24,046	3/4	9,058	3/4		3/4		3/4		3/4	
3	83,668	3	68,680	3	53,692	3	38,716	3	23,734	3	8,746	3		3		3		3	
1/4	83,356	1/4	68,367	1/4	53,379	1/4	38,404	1/4	23,421	1/4	8,434	1/4		1/4		1/4		1/4	
1/2	83,043	1/2	68,055	1/2	53,067	1/2	38,092	1/2	23,109	1/2	8,122	1/2		1/2		1/2		1/2	
3/4	82,731	3/4	67,743	3/4	52,755	3/4	37,780	3/4	22,797	3/4	7,809	3/4		3/4		3/4		3/4	
4	82,419	4	67,431	4	52,443	4	37,469	4	22,485	4	7,497	4		4		4		4	
1/4	82,107	1/4	67,118	1/4	52,130	1/4	37,157	1/4	22,173	1/4	7,185	1/4		1/4		1/4		1/4	
1/2	81,794	1/2	66,806	1/2	51,818	1/2	36,845	1/2	21,860	1/2	6,873	1/2		1/2		1/2		1/2	
3/4	81,482	3/4	66,494	3/4	51,506	3/4	36,533	3/4	21,548	3/4	6,560	3/4		3/4		3/4		3/4	
5	81,170	5	66,182	5	51,194	5	36,221	5	21,236	5	6,248	5		5		5		5	
1/4	80,858	1/4	65,869	1/4	50,881	1/4	35,910	1/4	20,924	1/4	5,936	1/4		1/4		1/4		1/4	
1/2	80,545	1/2	65,557	1/2	50,569	1/2	35,598	1/2	20,611	1/2	5,624	1/2		1/2		1/2		1/2	
3/4	80,233	3/4	65,245	3/4	50,257	3/4	35,286	3/4	20,299	3/4	5,312	3/4		3/4		3/4		3/4	
6	79,921	6	64,933	6	49,945	6	34,974	6	19,987	6	5,000	6		6		6		6	
1/4	79,609	1/4	64,620	1/4	49,632	1/4	34,662	1/4	19,675	1/4	4,688	1/4		1/4		1/4		1/4	
1/2	79,296	1/2	64,308	1/2	49,320	1/2	34,350	1/2	19,362	1/2	4,376	1/2		1/2		1/2		1/2	
3/4	78,984	3/4	63,996	3/4	49,008	3/4	34,038	3/4	19,050	3/4	4,065	3/4		3/4		3/4		3/4	
7	78,672	7	63,684	7	48,696	7	33,725	7	18,738	7	3,753	7		7		7		7	
1/4	78,360	1/4	63,371	1/4	48,383	1/4	33,413	1/4	18,426	1/4	3,442	1/4		1/4		1/4		1/4	
1/2	78,047	1/2	63,059	1/2	48,071	1/2	33,101	1/2	18,113	1/2	3,131	1/2		1/2		1/2		1/2	
3/4	77,735	3/4	62,747	3/4	47,759	3/4	32,789	3/4	17,801	3/4	2,839	3/4		3/4		3/4		3/4	
8	77,423	8	62,435	8	47,447	8	32,477	8	17,489	8	2,547	8		8		8		8	
1/4	77,111	1/4	62,122	1/4	47,135	1/4	32,164	1/4	17,177	1/4	2,255	1/4		1/4		1/4		1/4	
1/2	76,798	1/2	61,810	1/2	46,823	1/2	31,852	1/2	16,864	1/2	1,963	1/2		1/2		1/2		1/2	
3/4	76,486	3/4	61,498	3/4	46,511	3/4	31,540	3/4	16,552	3/4	1,729	3/4		3/4		3/4		3/4	
9	76,174	9	61,186	9	46,199	9	31,228	9	16,240	9	1,495	9		9		9		9	
1/4	75,861	1/4	60,873	1/4	45,887	1/4	30,915	1/4	15,928	1/4	1,260	1/4		1/4		1/4		1/4	
1/2	75,549	1/2	60,561	1/2	45,575	1/2	30,603	1/2	15,615	1/2	1,026	1/2		1/2		1/2		1/2	
3/4	75,237	3/4	60,249	3/4	45,263	3/4	30,291	3/4	15,303	3/4		3/4		3/4		3/4		3/4	
10	74,925	10	59,937	10	44,951	10	29,979	10	14,991	10		10		10		10		10	
1/4	74,612	1/4	59,624	1/4	44,639	1/4	29,666	1/4	14,679	1/4		1/4		1/4		1/4		1/4	
1/2	74,300	1/2	59,312	1/2	44,327	1/2	29,354	1/2	14,366	1/2		1/2		1/2		1/2		1/2	
3/4	73,988	3/4	59,000	3/4	44,015	3/4	29,042	3/4	14,054	3/4		3/4		3/4		3/4		3/4	
11	73,676	11	58,688	11	43,704	11	28,730	11	13,742	11		11		11		11		11	
1/4	73,363	1/4	58,375	1/4	43,392	1/4	28,417	1/4	13,430	1/4		1/4		1/4		1/4		1/4	
1/2	73,051	1/2	58,063	1/2	43,080	1/2	28,105	1/2	13,117	1/2		1/2		1/2		1/2		1/2	
3/4	72,739	3/4	57,751	3/4	42,768	3/4	27,793	3/4	12,805	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/05/2015 CL  
CALCULATED: 11/05/2015 CL  
PRINTED: 11/05/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77588  
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# BARGE "HFL 439"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	187,999	0	177,688	0	167,377	0	157,032	0	146,486	0	131,967	0	117,032	0	102,091
1/4		1/4		1/4	187,784	1/4	177,473	1/4	167,162	1/4	156,816	1/4	146,223	1/4	131,656	1/4	116,721	1/4	101,779
1/2		1/2		1/2	187,570	1/2	177,258	1/2	166,947	1/2	156,600	1/2	145,961	1/2	131,345	1/2	116,410	1/2	101,468
3/4		3/4		3/4	187,355	3/4	177,043	3/4	166,732	3/4	156,385	3/4	145,699	3/4	131,034	3/4	116,099	3/4	101,156
1		1		1	187,140	1	176,829	1	166,516	1	156,169	1	145,436	1	130,722	1	115,788	1	100,845
1/4		1/4		1/4	186,925	1/4	176,614	1/4	166,301	1/4	155,954	1/4	145,158	1/4	130,411	1/4	115,477	1/4	100,533
1/2		1/2		1/2	186,710	1/2	176,399	1/2	166,085	1/2	155,738	1/2	144,880	1/2	130,100	1/2	115,165	1/2	100,222
3/4		3/4		3/4	186,495	3/4	176,184	3/4	165,870	3/4	155,523	3/4	144,602	3/4	129,789	3/4	114,854	3/4	99,910
2		2		2	186,280	2	175,969	2	165,654	2	155,307	2	144,324	2	129,478	2	114,543	2	99,598
1/4		1/4		1/4	186,065	1/4	175,755	1/4	165,439	1/4	155,091	1/4	144,030	1/4	129,167	1/4	114,232	1/4	99,287
1/2		1/2		1/2	185,850	1/2	175,540	1/2	165,223	1/2	154,876	1/2	143,736	1/2	128,856	1/2	113,921	1/2	98,975
3/4		3/4		3/4	185,636	3/4	175,325	3/4	165,007	3/4	154,660	3/4	143,442	3/4	128,544	3/4	113,610	3/4	98,664
3		3		3	185,421	3	175,110	3	164,792	3	154,445	3	143,148	3	128,233	3	113,299	3	98,352
1/4		1/4		1/4	185,206	1/4	174,895	1/4	164,576	1/4	154,229	1/4	142,841	1/4	127,922	1/4	112,988	1/4	98,041
1/2		1/2		1/2	184,991	1/2	174,680	1/2	164,361	1/2	154,014	1/2	142,535	1/2	127,611	1/2	112,676	1/2	97,729
3/4		3/4		3/4	184,776	3/4	174,466	3/4	164,145	3/4	153,798	3/4	142,228	3/4	127,300	3/4	112,365	3/4	97,418
4		4		4	184,562	4	174,251	4	163,930	4	153,583	4	141,922	4	126,989	4	112,054	4	97,107
1/4		1/4		1/4	184,347	1/4	174,036	1/4	163,714	1/4	153,367	1/4	141,611	1/4	126,678	1/4	111,743	1/4	96,795
1/2		1/2		1/2	184,132	1/2	173,821	1/2	163,498	1/2	153,151	1/2	141,300	1/2	126,367	1/2	111,432	1/2	96,484
3/4		3/4		3/4	183,917	3/4	173,606	3/4	163,283	3/4	152,936	3/4	140,989	3/4	126,055	3/4	111,121	3/4	96,173
5		5		5	183,702	5	173,392	5	163,067	5	152,720	5	140,679	5	125,744	5	110,810	5	95,861
1/4		1/4		1/4	183,488	1/4	173,177	1/4	162,852	1/4	152,505	1/4	140,368	1/4	125,433	1/4	110,498	1/4	95,550
1/2		1/2		1/2	183,273	1/2	172,962	1/2	162,636	1/2	152,289	1/2	140,057	1/2	125,122	1/2	110,187	1/2	95,239
3/4		3/4		3/4	183,058	3/4	172,747	3/4	162,421	3/4	152,074	3/4	139,745	3/4	124,811	3/4	109,876	3/4	94,927
6		6		6	182,843	6	172,532	6	162,205	6	151,858	6	139,434	6	124,500	6	109,565	6	94,616
1/4		1/4		1/4	182,628	1/4	172,318	1/4	161,990	1/4	151,642	1/4	139,123	1/4	124,189	1/4	109,254	1/4	94,305
1/2		1/2		1/2	182,413	1/2	172,103	1/2	161,774	1/2	151,427	1/2	138,812	1/2	123,877	1/2	108,943	1/2	93,994
3/4		3/4		3/4	182,199	3/4	171,888	3/4	161,558	3/4	151,211	3/4	138,501	3/4	123,566	3/4	108,631	3/4	93,682
7		7	191,604	7	181,984	7	171,673	7	161,343	7	150,996	7	138,190	7	123,255	7	108,320	7	93,371
1/4		1/4	191,481	1/4	181,769	1/4	171,458	1/4	161,127	1/4	150,780	1/4	137,879	1/4	122,944	1/4	108,009	1/4	93,060
1/2		1/2	191,357	1/2	181,554	1/2	171,244	1/2	160,912	1/2	150,565	1/2	137,568	1/2	122,633	1/2	107,698	1/2	92,748
3/4		3/4	191,234	3/4	181,339	3/4	171,029	3/4	160,696	3/4	150,349	3/4	137,256	3/4	122,322	3/4	107,386	3/4	92,437
8		8	191,110	8	181,125	8	170,814	8	160,481	8	150,134	8	136,945	8	122,011	8	107,075	8	92,126
1/4		1/4	190,951	1/4	180,910	1/4	170,599	1/4	160,265	1/4	149,918	1/4	136,634	1/4	121,699	1/4	106,764	1/4	91,814
1/2		1/2	190,792	1/2	180,695	1/2	170,384	1/2	160,049	1/2	149,702	1/2	136,323	1/2	121,388	1/2	106,452	1/2	91,503
3/4		3/4	190,632	3/4	180,480	3/4	170,170	3/4	159,834	3/4	149,487	3/4	136,012	3/4	121,077	3/4	106,141	3/4	91,192
9		9	190,473	9	180,265	9	169,955	9	159,618	9	149,271	9	135,701	9	120,766	9	105,830	9	90,880
1/4		1/4	190,280	1/4	180,051	1/4	169,740	1/4	159,403	1/4	149,052	1/4	135,390	1/4	120,455	1/4	105,518	1/4	90,569
1/2		1/2	190,088	1/2	179,836	1/2	169,525	1/2	159,187	1/2	148,833	1/2	135,078	1/2	120,144	1/2	105,206	1/2	90,258
3/4		3/4	189,895	3/4	179,621	3/4	169,310	3/4	158,972	3/4	148,614	3/4	134,767	3/4	119,833	3/4	104,895	3/4	89,947
10		10	189,702	10	179,406	10	169,096	10	158,756	10	148,395	10	134,456	10	119,521	10	104,583	10	89,635
1/4		1/4	189,491	1/4	179,191	1/4	168,881	1/4	158,540	1/4	148,164	1/4	134,145	1/4	119,210	1/4	104,272	1/4	89,324
1/2		1/2	189,280	1/2	178,977	1/2	168,666	1/2	158,325	1/2	147,934	1/2	133,834	1/2	118,899	1/2	103,960	1/2	89,013
3/4		3/4	189,069	3/4	178,762	3/4	168,451	3/4	158,109	3/4	147,703	3/4	133,523	3/4	118,588	3/4	103,649	3/4	88,701
11		11	188,858	11	178,547	11	168,236	11	157,894	11	147,472	11	133,212	11	118,277	11	103,337	11	88,390
1/4		1/4	188,643	1/4	178,332	1/4	168,022	1/4	157,678	1/4	147,226	1/4	132,900	1/4	117,966	1/4	103,026	1/4	88,079
1/2		1/2	188,428	1/2	178,117	1/2	167,807	1/2	157,463	1/2	146,979	1/2	132,589	1/2	117,655	1/2	102,714	1/2	87,767
3/4		3/4	188,214	3/4	177,903	3/4	167,592	3/4	157,247	3/4	146,732	3/4	132,278	3/4	117,343	3/4	102,402	3/4	87,456

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 OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-0" FORWARD OF AFT BULKHEAD

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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



# BARGE "HFL 439"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	87,144	0	72,222	0	57,366	0	42,863	0	28,068	0	13,108	0		0		0		0	
1/4	86,833	1/4	71,912	1/4	57,063	1/4	42,558	1/4	27,757	1/4	12,797	1/4		1/4		1/4		1/4	
1/2	86,521	1/2	71,603	1/2	56,759	1/2	42,254	1/2	27,445	1/2	12,485	1/2		1/2		1/2		1/2	
3/4	86,209	3/4	71,293	3/4	56,456	3/4	41,950	3/4	27,134	3/4	12,173	3/4		3/4		3/4		3/4	
1	85,898	1	70,983	1	56,153	1	41,645	1	26,822	1	11,862	1		1		1		1	
1/4	85,586	1/4	70,674	1/4	55,851	1/4	41,341	1/4	26,511	1/4	11,550	1/4		1/4		1/4		1/4	
1/2	85,275	1/2	70,364	1/2	55,549	1/2	41,037	1/2	26,199	1/2	11,238	1/2		1/2		1/2		1/2	
3/4	84,963	3/4	70,054	3/4	55,247	3/4	40,732	3/4	25,887	3/4	10,926	3/4		3/4		3/4		3/4	
2	84,651	2	69,745	2	54,945	2	40,428	2	25,576	2	10,614	2		2		2		2	
1/4	84,340	1/4	69,435	1/4	54,643	1/4	40,124	1/4	25,264	1/4	10,302	1/4		1/4		1/4		1/4	
1/2	84,028	1/2	69,125	1/2	54,342	1/2	39,819	1/2	24,952	1/2	9,990	1/2		1/2		1/2		1/2	
3/4	83,716	3/4	68,816	3/4	54,040	3/4	39,515	3/4	24,641	3/4	9,678	3/4		3/4		3/4		3/4	
3	83,405	3	68,506	3	53,738	3	39,210	3	24,329	3	9,365	3		3		3		3	
1/4	83,093	1/4	68,196	1/4	53,436	1/4	38,906	1/4	24,017	1/4	9,053	1/4		1/4		1/4		1/4	
1/2	82,782	1/2	67,887	1/2	53,134	1/2	38,602	1/2	23,706	1/2	8,741	1/2		1/2		1/2		1/2	
3/4	82,470	3/4	67,577	3/4	52,832	3/4	38,297	3/4	23,394	3/4	8,429	3/4		3/4		3/4		3/4	
4	82,158	4	67,267	4	52,531	4	37,993	4	23,082	4	8,117	4		4		4		4	
1/4	81,847	1/4	66,958	1/4	52,229	1/4	37,689	1/4	22,771	1/4	7,805	1/4		1/4		1/4		1/4	
1/2	81,535	1/2	66,648	1/2	51,927	1/2	37,384	1/2	22,459	1/2	7,493	1/2		1/2		1/2		1/2	
3/4	81,223	3/4	66,338	3/4	51,625	3/4	37,080	3/4	22,147	3/4	7,181	3/4		3/4		3/4		3/4	
5	80,912	5	66,029	5	51,323	5	36,775	5	21,836	5	6,869	5		5		5		5	
1/4	80,600	1/4	65,719	1/4	51,021	1/4	36,468	1/4	21,524	1/4	6,558	1/4		1/4		1/4		1/4	
1/2	80,289	1/2	65,409	1/2	50,720	1/2	36,160	1/2	21,212	1/2	6,246	1/2		1/2		1/2		1/2	
3/4	79,977	3/4	65,100	3/4	50,418	3/4	35,853	3/4	20,900	3/4	5,934	3/4		3/4		3/4		3/4	
6	79,665	6	64,790	6	50,116	6	35,545	6	20,589	6	5,622	6		6		6		6	
1/4	79,354	1/4	64,480	1/4	49,814	1/4	35,234	1/4	20,277	1/4	5,310	1/4		1/4		1/4		1/4	
1/2	79,042	1/2	64,171	1/2	49,512	1/2	34,923	1/2	19,965	1/2	4,998	1/2		1/2		1/2		1/2	
3/4	78,731	3/4	63,861	3/4	49,210	3/4	34,612	3/4	19,654	3/4	4,687	3/4		3/4		3/4		3/4	
7	78,419	7	63,551	7	48,908	7	34,301	7	19,342	7	4,375	7		7		7		7	
1/4	78,108	1/4	63,241	1/4	48,607	1/4	33,989	1/4	19,030	1/4	4,064	1/4		1/4		1/4		1/4	
1/2	77,798	1/2	62,930	1/2	48,305	1/2	33,677	1/2	18,719	1/2	3,752	1/2		1/2		1/2		1/2	
3/4	77,487	3/4	62,620	3/4	48,003	3/4	33,366	3/4	18,407	3/4	3,441	3/4		3/4		3/4		3/4	
8	77,176	8	62,309	8	47,701	8	33,054	8	18,095	8	3,130	8		8		8		8	
1/4	76,867	1/4	61,998	1/4	47,400	1/4	32,742	1/4	17,784	1/4	2,838	1/4		1/4		1/4		1/4	
1/2	76,557	1/2	61,687	1/2	47,098	1/2	32,431	1/2	17,472	1/2	2,546	1/2		1/2		1/2		1/2	
3/4	76,247	3/4	61,376	3/4	46,797	3/4	32,119	3/4	17,160	3/4	2,254	3/4		3/4		3/4		3/4	
9	75,938	9	61,064	9	46,495	9	31,807	9	16,849	9	1,962	9		9		9		9	
1/4	75,628	1/4	60,753	1/4	46,194	1/4	31,496	1/4	16,537	1/4	1,728	1/4		1/4		1/4		1/4	
1/2	75,318	1/2	60,442	1/2	45,893	1/2	31,184	1/2	16,225	1/2	1,494	1/2		1/2		1/2		1/2	
3/4	75,009	3/4	60,130	3/4	45,592	3/4	30,872	3/4	15,914	3/4	1,260	3/4		3/4		3/4		3/4	
10	74,699	10	59,819	10	45,291	10	30,561	10	15,602	10	1,026	10		10		10		10	
1/4	74,389	1/4	59,511	1/4	44,988	1/4	30,249	1/4	15,290	1/4		1/4		1/4		1/4		1/4	
1/2	74,080	1/2	59,203	1/2	44,686	1/2	29,937	1/2	14,979	1/2		1/2		1/2		1/2		1/2	
3/4	73,770	3/4	58,894	3/4	44,383	3/4	29,626	3/4	14,667	3/4		3/4		3/4		3/4		3/4	
11	73,460	11	58,586	11	44,080	11	29,314	11	14,355	11		11		11		11		11	
1/4	73,151	1/4	58,281	1/4	43,776	1/4	29,003	1/4	14,043	1/4		1/4		1/4		1/4		1/4	
1/2	72,841	1/2	57,976	1/2	43,472	1/2	28,691	1/2	13,732	1/2		1/2		1/2		1/2		1/2	
3/4	72,531	3/4	57,671	3/4	43,167	3/4	28,380	3/4	13,420	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/05/2015 CL  
CALCULATED: 11/05/2015 CL  
PRINTED: 11/05/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 439"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	208,464	0	193,510	0	178,504	0	163,448	0	148,392	0	133,335	0	118,278	0	103,218
1/4		1/4		1/4	208,154	1/4	193,197	1/4	178,190	1/4	163,135	1/4	148,078	1/4	133,021	1/4	117,965	1/4	102,904
1/2		1/2		1/2	207,845	1/2	192,884	1/2	177,877	1/2	162,821	1/2	147,764	1/2	132,708	1/2	117,651	1/2	102,591
3/4		3/4		3/4	207,535	3/4	192,572	3/4	177,564	3/4	162,507	3/4	147,451	3/4	132,394	3/4	117,337	3/4	102,277
1		1		1	207,225	1	192,259	1	177,250	1	162,194	1	147,137	1	132,080	1	117,024	1	101,963
1/4		1/4		1/4	206,916	1/4	191,947	1/4	176,937	1/4	161,880	1/4	146,823	1/4	131,767	1/4	116,710	1/4	101,649
1/2		1/2		1/2	206,606	1/2	191,634	1/2	176,623	1/2	161,566	1/2	146,510	1/2	131,453	1/2	116,396	1/2	101,335
3/4		3/4		3/4	206,296	3/4	191,321	3/4	176,309	3/4	161,253	3/4	146,196	3/4	131,139	3/4	116,083	3/4	101,021
2		2		2	205,987	2	191,009	2	175,996	2	160,939	2	145,882	2	130,826	2	115,769	2	100,708
1/4		1/4		1/4	205,677	1/4	190,696	1/4	175,682	1/4	160,625	1/4	145,569	1/4	130,512	1/4	115,455	1/4	100,394
1/2		1/2		1/2	205,367	1/2	190,383	1/2	175,368	1/2	160,312	1/2	145,255	1/2	130,198	1/2	115,142	1/2	100,080
3/4		3/4		3/4	205,058	3/4	190,071	3/4	175,055	3/4	159,998	3/4	144,941	3/4	129,885	3/4	114,828	3/4	99,766
3		3		3	204,748	3	189,758	3	174,741	3	159,684	3	144,628	3	129,571	3	114,514	3	99,452
1/4		1/4		1/4	204,439	1/4	189,446	1/4	174,427	1/4	159,371	1/4	144,314	1/4	129,257	1/4	114,201	1/4	99,138
1/2		1/2		1/2	204,129	1/2	189,133	1/2	174,114	1/2	159,057	1/2	144,000	1/2	128,944	1/2	113,887	1/2	98,824
3/4		3/4		3/4	203,820	3/4	188,820	3/4	173,800	3/4	158,743	3/4	143,687	3/4	128,630	3/4	113,573	3/4	98,511
4		4		4	203,509	4	188,508	4	173,486	4	158,430	4	143,373	4	128,316	4	113,260	4	98,197
1/4		1/4		1/4	203,198	1/4	188,195	1/4	173,173	1/4	158,116	1/4	143,059	1/4	128,003	1/4	112,946	1/4	97,883
1/2		1/2		1/2	202,887	1/2	187,883	1/2	172,859	1/2	157,802	1/2	142,746	1/2	127,689	1/2	112,632	1/2	97,569
3/4		3/4		3/4	202,576	3/4	187,570	3/4	172,545	3/4	157,489	3/4	142,432	3/4	127,375	3/4	112,319	3/4	97,255
5		5		5	202,263	5	187,257	5	172,232	5	157,175	5	142,118	5	127,062	5	112,005	5	96,941
1/4		1/4		1/4	201,950	1/4	186,945	1/4	171,918	1/4	156,861	1/4	141,805	1/4	126,748	1/4	111,691	1/4	96,628
1/2		1/2		1/2	201,638	1/2	186,632	1/2	171,604	1/2	156,548	1/2	141,491	1/2	126,434	1/2	111,378	1/2	96,314
3/4		3/4		3/4	201,325	3/4	186,319	3/4	171,290	3/4	156,234	3/4	141,177	3/4	126,120	3/4	111,064	3/4	96,000
6		6		6	201,012	6	186,007	6	170,977	6	155,920	6	140,863	6	125,807	6	110,750	6	95,686
1/4		1/4		1/4	200,700	1/4	185,694	1/4	170,663	1/4	155,606	1/4	140,550	1/4	125,493	1/4	110,436	1/4	95,372
1/2		1/2		1/2	200,387	1/2	185,382	1/2	170,349	1/2	155,293	1/2	140,236	1/2	125,179	1/2	110,123	1/2	95,058
3/4		3/4		3/4	213,991	3/4	200,075	3/4	185,069	3/4	170,036	3/4	154,979	3/4	139,922	3/4	124,866	3/4	94,745
7		7		7	213,813	7	199,762	7	184,756	7	169,722	7	154,665	7	139,609	7	124,552	7	94,431
1/4		1/4		1/4	213,634	1/4	199,449	1/4	184,444	1/4	169,408	1/4	154,352	1/4	139,295	1/4	124,238	1/4	94,117
1/2		1/2		1/2	213,455	1/2	199,137	1/2	184,131	1/2	169,095	1/2	154,038	1/2	138,981	1/2	123,925	1/2	93,803
3/4		3/4		3/4	213,276	3/4	198,824	3/4	183,819	3/4	168,781	3/4	153,724	3/4	138,668	3/4	123,611	3/4	93,489
8		8		8	213,045	8	198,511	8	183,506	8	168,467	8	153,411	8	138,354	8	123,297	8	93,175
1/4		1/4		1/4	212,813	1/4	198,199	1/4	183,193	1/4	168,154	1/4	153,097	1/4	138,040	1/4	122,984	1/4	92,862
1/2		1/2		1/2	212,582	1/2	197,886	1/2	182,881	1/2	167,840	1/2	152,783	1/2	137,727	1/2	122,670	1/2	92,548
3/4		3/4		3/4	212,351	3/4	197,574	3/4	182,568	3/4	167,526	3/4	152,470	3/4	137,413	3/4	122,356	3/4	92,234
9		9		9	212,071	9	197,261	9	182,255	9	167,213	9	152,156	9	137,099	9	122,043	9	91,920
1/4		1/4		1/4	211,791	1/4	196,948	1/4	181,943	1/4	166,899	1/4	151,842	1/4	136,786	1/4	121,729	1/4	91,606
1/2		1/2		1/2	211,512	1/2	196,636	1/2	181,630	1/2	166,585	1/2	151,529	1/2	136,472	1/2	121,415	1/2	91,292
3/4		3/4		3/4	211,232	3/4	196,323	3/4	181,318	3/4	166,272	3/4	151,215	3/4	136,158	3/4	121,102	3/4	90,979
10		10		10	210,926	10	196,011	10	181,005	10	165,958	10	150,901	10	135,845	10	120,788	10	90,665
1/4		1/4		1/4	210,621	1/4	195,698	1/4	180,692	1/4	165,644	1/4	150,588	1/4	135,531	1/4	120,474	1/4	90,351
1/2		1/2		1/2	210,316	1/2	195,385	1/2	180,380	1/2	165,331	1/2	150,274	1/2	135,217	1/2	120,161	1/2	90,037
3/4		3/4		3/4	210,010	3/4	195,073	3/4	180,067	3/4	165,017	3/4	149,960	3/4	134,904	3/4	119,847	3/4	89,723
11		11		11	209,701	11	194,760	11	179,755	11	164,703	11	149,647	11	134,590	11	119,533	11	89,409
1/4		1/4		1/4	209,392	1/4	194,447	1/4	179,442	1/4	164,390	1/4	149,333	1/4	134,276	1/4	119,220	1/4	89,095
1/2		1/2		1/2	209,083	1/2	194,135	1/2	179,129	1/2	164,076	1/2	149,019	1/2	133,963	1/2	118,906	1/2	88,782
3/4		3/4		3/4	208,773	3/4	193,822	3/4	178,817	3/4	163,762	3/4	148,705	3/4	133,649	3/4	118,592	3/4	88,468

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 OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-3" FORWARD OF AFT BULKHEAD

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



# BARGE "HFL 439"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	88,154	0	73,090	0	58,026	0	42,985	0	27,934	0	12,871	0		0		0		0	
1/4	87,840	1/4	72,776	1/4	57,712	1/4	42,672	1/4	27,620	1/4	12,557	1/4		1/4		1/4		1/4	
1/2	87,526	1/2	72,462	1/2	57,398	1/2	42,359	1/2	27,307	1/2	12,243	1/2		1/2		1/2		1/2	
3/4	87,212	3/4	72,148	3/4	57,084	3/4	42,046	3/4	26,993	3/4	11,929	3/4		3/4		3/4		3/4	
1	86,899	1	71,834	1	56,770	1	41,733	1	26,679	1	11,615	1		1		1		1	
1/4	86,585	1/4	71,521	1/4	56,456	1/4	41,420	1/4	26,365	1/4	11,301	1/4		1/4		1/4		1/4	
1/2	86,271	1/2	71,207	1/2	56,143	1/2	41,107	1/2	26,052	1/2	10,988	1/2		1/2		1/2		1/2	
3/4	85,957	3/4	70,893	3/4	55,829	3/4	40,794	3/4	25,738	3/4	10,674	3/4		3/4		3/4		3/4	
2	85,643	2	70,579	2	55,515	2	40,481	2	25,424	2	10,360	2		2		2		2	
1/4	85,329	1/4	70,265	1/4	55,201	1/4	40,168	1/4	25,110	1/4	10,046	1/4		1/4		1/4		1/4	
1/2	85,016	1/2	69,951	1/2	54,887	1/2	39,856	1/2	24,796	1/2	9,732	1/2		1/2		1/2		1/2	
3/4	84,702	3/4	69,638	3/4	54,573	3/4	39,543	3/4	24,483	3/4	9,418	3/4		3/4		3/4		3/4	
3	84,388	3	69,324	3	54,259	3	39,229	3	24,169	3	9,105	3		3		3		3	
1/4	84,074	1/4	69,010	1/4	53,946	1/4	38,916	1/4	23,855	1/4	8,791	1/4		1/4		1/4		1/4	
1/2	83,760	1/2	68,696	1/2	53,632	1/2	38,603	1/2	23,541	1/2	8,477	1/2		1/2		1/2		1/2	
3/4	83,446	3/4	68,382	3/4	53,318	3/4	38,289	3/4	23,227	3/4	8,163	3/4		3/4		3/4		3/4	
4	83,133	4	68,068	4	53,004	4	37,975	4	22,913	4	7,849	4		4		4		4	
1/4	82,819	1/4	67,755	1/4	52,690	1/4	37,661	1/4	22,600	1/4	7,535	1/4		1/4		1/4		1/4	
1/2	82,505	1/2	67,441	1/2	52,376	1/2	37,348	1/2	22,286	1/2	7,222	1/2		1/2		1/2		1/2	
3/4	82,191	3/4	67,127	3/4	52,063	3/4	37,034	3/4	21,972	3/4	6,908	3/4		3/4		3/4		3/4	
5	81,877	5	66,813	5	51,749	5	36,720	5	21,658	5	6,594	5		5		5		5	
1/4	81,563	1/4	66,499	1/4	51,436	1/4	36,406	1/4	21,344	1/4	6,280	1/4		1/4		1/4		1/4	
1/2	81,250	1/2	66,185	1/2	51,122	1/2	36,092	1/2	21,030	1/2	5,966	1/2		1/2		1/2		1/2	
3/4	80,936	3/4	65,871	3/4	50,809	3/4	35,778	3/4	20,717	3/4	5,653	3/4		3/4		3/4		3/4	
6	80,622	6	65,558	6	50,496	6	35,465	6	20,403	6	5,339	6		6		6		6	
1/4	80,308	1/4	65,244	1/4	50,182	1/4	35,151	1/4	20,089	1/4	5,025	1/4		1/4		1/4		1/4	
1/2	79,994	1/2	64,930	1/2	49,869	1/2	34,837	1/2	19,775	1/2	4,712	1/2		1/2		1/2		1/2	
3/4	79,680	3/4	64,616	3/4	49,556	3/4	34,523	3/4	19,461	3/4	4,398	3/4		3/4		3/4		3/4	
7	79,367	7	64,302	7	49,243	7	34,209	7	19,147	7	4,085	7		7		7		7	
1/4	79,053	1/4	63,988	1/4	48,930	1/4	33,895	1/4	18,834	1/4	3,772	1/4		1/4		1/4		1/4	
1/2	78,739	1/2	63,675	1/2	48,617	1/2	33,582	1/2	18,520	1/2	3,460	1/2		1/2		1/2		1/2	
3/4	78,425	3/4	63,361	3/4	48,304	3/4	33,268	3/4	18,206	3/4	3,147	3/4		3/4		3/4		3/4	
8	78,111	8	63,047	8	47,991	8	32,954	8	17,892	8	2,853	8		8		8		8	
1/4	77,797	1/4	62,733	1/4	47,678	1/4	32,640	1/4	17,578	1/4	2,560	1/4		1/4		1/4		1/4	
1/2	77,483	1/2	62,419	1/2	47,365	1/2	32,326	1/2	17,264	1/2	2,266	1/2		1/2		1/2		1/2	
3/4	77,170	3/4	62,105	3/4	47,052	3/4	32,012	3/4	16,951	3/4	1,973	3/4		3/4		3/4		3/4	
9	76,856	9	61,792	9	46,740	9	31,699	9	16,637	9	1,738	9		9		9		9	
1/4	76,542	1/4	61,478	1/4	46,427	1/4	31,385	1/4	16,323	1/4	1,502	1/4		1/4		1/4		1/4	
1/2	76,228	1/2	61,164	1/2	46,114	1/2	31,071	1/2	16,009	1/2	1,267	1/2		1/2		1/2		1/2	
3/4	75,914	3/4	60,850	3/4	45,801	3/4	30,757	3/4	15,695	3/4	1,032	3/4		3/4		3/4		3/4	
10	75,600	10	60,536	10	45,488	10	30,443	10	15,381	10		10		10		10		10	
1/4	75,287	1/4	60,222	1/4	45,175	1/4	30,130	1/4	15,068	1/4		1/4		1/4		1/4		1/4	
1/2	74,973	1/2	59,909	1/2	44,862	1/2	29,816	1/2	14,754	1/2		1/2		1/2		1/2		1/2	
3/4	74,659	3/4	59,595	3/4	44,549	3/4	29,502	3/4	14,440	3/4		3/4		3/4		3/4		3/4	
11	74,345	11	59,281	11	44,236	11	29,188	11	14,126	11		11		11		11		11	
1/4	74,031	1/4	58,967	1/4	43,923	1/4	28,875	1/4	13,812	1/4		1/4		1/4		1/4		1/4	
1/2	73,717	1/2	58,653	1/2	43,610	1/2	28,561	1/2	13,498	1/2		1/2		1/2		1/2		1/2	
3/4	73,404	3/4	58,339	3/4	43,298	3/4	28,248	3/4	13,184	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/05/2015 CL  
CALCULATED: 11/05/2015 CL  
PRINTED: 11/05/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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





# BARGE "HFL 439"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	208,185	0	193,246	0	178,246	0	163,199	0	148,148	0	133,097	0	118,046	0	102,991
1/4		1/4		1/4	207,876	1/4	192,934	1/4	177,934	1/4	162,886	1/4	147,834	1/4	132,783	1/4	117,732	1/4	102,678
1/2		1/2		1/2	207,567	1/2	192,621	1/2	177,621	1/2	162,572	1/2	147,521	1/2	132,470	1/2	117,419	1/2	102,364
3/4		3/4		3/4	207,257	3/4	192,309	3/4	177,308	3/4	162,259	3/4	147,207	3/4	132,156	3/4	117,105	3/4	102,050
1		1		1	206,948	1	191,996	1	176,995	1	161,945	1	146,894	1	131,843	1	116,791	1	101,736
1/4		1/4		1/4	206,638	1/4	191,684	1/4	176,682	1/4	161,631	1/4	146,580	1/4	131,529	1/4	116,478	1/4	101,423
1/2		1/2		1/2	206,329	1/2	191,371	1/2	176,369	1/2	161,318	1/2	146,267	1/2	131,215	1/2	116,164	1/2	101,109
3/4		3/4		3/4	206,019	3/4	191,059	3/4	176,055	3/4	161,004	3/4	145,953	3/4	130,902	3/4	115,851	3/4	100,795
2		2		2	205,710	2	190,746	2	175,742	2	160,691	2	145,639	2	130,588	2	115,537	2	100,482
1/4		1/4		1/4	205,400	1/4	190,434	1/4	175,428	1/4	160,377	1/4	145,326	1/4	130,275	1/4	115,224	1/4	100,168
1/2		1/2		1/2	205,091	1/2	190,121	1/2	175,115	1/2	160,064	1/2	145,012	1/2	129,961	1/2	114,910	1/2	99,854
3/4		3/4		3/4	204,781	3/4	189,809	3/4	174,801	3/4	159,750	3/4	144,699	3/4	129,648	3/4	114,596	3/4	99,540
3		3		3	204,472	3	189,496	3	174,488	3	159,436	3	144,385	3	129,334	3	114,283	3	99,227
1/4		1/4		1/4	204,162	1/4	189,184	1/4	174,174	1/4	159,123	1/4	144,072	1/4	129,020	1/4	113,969	1/4	98,913
1/2		1/2		1/2	203,853	1/2	188,871	1/2	173,860	1/2	158,809	1/2	143,758	1/2	128,707	1/2	113,656	1/2	98,599
3/4		3/4		3/4	203,543	3/4	188,559	3/4	173,547	3/4	158,496	3/4	143,445	3/4	128,393	3/4	113,342	3/4	98,285
4		4		4	203,234	4	188,246	4	173,233	4	158,182	4	143,131	4	128,080	4	113,029	4	97,972
1/4		1/4		1/4	202,925	1/4	187,934	1/4	172,920	1/4	157,869	1/4	142,817	1/4	127,766	1/4	112,715	1/4	97,658
1/2		1/2		1/2	202,615	1/2	187,621	1/2	172,606	1/2	157,555	1/2	142,504	1/2	127,453	1/2	112,401	1/2	97,344
3/4		3/4		3/4	202,304	3/4	187,309	3/4	172,293	3/4	157,241	3/4	142,190	3/4	127,139	3/4	112,088	3/4	97,031
5		5		5	201,993	5	186,996	5	171,979	5	156,928	5	141,877	5	126,825	5	111,774	5	96,717
1/4		1/4		1/4	201,682	1/4	186,684	1/4	171,665	1/4	156,614	1/4	141,563	1/4	126,512	1/4	111,461	1/4	96,403
1/2		1/2		1/2	201,371	1/2	186,371	1/2	171,352	1/2	156,301	1/2	141,250	1/2	126,198	1/2	111,147	1/2	96,089
3/4		3/4		3/4	201,059	3/4	186,059	3/4	171,038	3/4	155,987	3/4	140,936	3/4	125,885	3/4	110,834	3/4	95,776
6		6		6	200,746	6	185,746	6	170,725	6	155,674	6	140,622	6	125,571	6	110,520	6	95,462
1/4		1/4		1/4	200,434	1/4	185,434	1/4	170,411	1/4	155,360	1/4	140,309	1/4	125,258	1/4	110,206	1/4	95,148
1/2		1/2		1/2	200,121	1/2	185,121	1/2	170,098	1/2	155,046	1/2	139,995	1/2	124,944	1/2	109,893	1/2	94,834
3/4		3/4		3/4	199,809	3/4	184,809	3/4	169,784	3/4	154,733	3/4	139,682	3/4	124,631	3/4	109,579	3/4	94,521
7		7		7	199,496	7	184,496	7	169,471	7	154,419	7	139,368	7	124,317	7	109,266	7	94,207
1/4		1/4		1/4	199,184	1/4	184,184	1/4	169,157	1/4	154,106	1/4	139,055	1/4	124,003	1/4	108,952	1/4	93,893
1/2		1/2		1/2	212,783	1/2	198,871	1/2	183,871	1/2	168,843	1/2	153,792	1/2	138,741	1/2	123,690	1/2	93,580
3/4		3/4		3/4	212,604	3/4	198,559	3/4	183,559	3/4	168,530	3/4	153,479	3/4	138,427	3/4	123,376	3/4	93,266
8		8		8	212,425	8	198,246	8	183,246	8	168,216	8	153,165	8	138,114	8	123,063	8	92,952
1/4		1/4		1/4	212,246	1/4	197,934	1/4	182,934	1/4	167,903	1/4	152,852	1/4	137,800	1/4	122,749	1/4	92,638
1/2		1/2		1/2	212,068	1/2	197,621	1/2	182,621	1/2	167,589	1/2	152,538	1/2	137,487	1/2	122,436	1/2	92,325
3/4		3/4		3/4	211,836	3/4	197,309	3/4	182,309	3/4	167,276	3/4	152,224	3/4	137,173	3/4	122,122	3/4	92,011
9		9		9	211,605	9	196,996	9	181,996	9	166,962	9	151,911	9	136,860	9	121,808	9	91,697
1/4		1/4		1/4	211,374	1/4	196,684	1/4	181,684	1/4	166,648	1/4	151,597	1/4	136,546	1/4	121,495	1/4	91,384
1/2		1/2		1/2	211,143	1/2	196,371	1/2	181,371	1/2	166,335	1/2	151,284	1/2	136,232	1/2	121,181	1/2	91,070
3/4		3/4		3/4	210,863	3/4	196,059	3/4	181,059	3/4	166,021	3/4	150,970	3/4	135,919	3/4	120,868	3/4	90,756
10		10		10	210,584	10	195,746	10	180,746	10	165,708	10	150,657	10	135,605	10	120,554	10	90,442
1/4		1/4		1/4	210,304	1/4	195,434	1/4	180,434	1/4	165,394	1/4	150,343	1/4	135,292	1/4	120,241	1/4	90,129
1/2		1/2		1/2	210,024	1/2	195,121	1/2	180,121	1/2	165,081	1/2	150,029	1/2	134,978	1/2	119,927	1/2	89,815
3/4		3/4		3/4	209,719	3/4	194,809	3/4	179,809	3/4	164,767	3/4	149,716	3/4	134,665	3/4	119,613	3/4	89,501
11		11		11	209,414	11	194,496	11	179,496	11	164,453	11	149,402	11	134,351	11	119,300	11	89,187
1/4		1/4		1/4	209,108	1/4	194,184	1/4	179,184	1/4	164,140	1/4	149,089	1/4	134,038	1/4	118,986	1/4	88,874
1/2		1/2		1/2	208,803	1/2	193,871	1/2	178,871	1/2	163,826	1/2	148,775	1/2	133,724	1/2	118,673	1/2	88,560
3/4		3/4		3/4	208,494	3/4	193,559	3/4	178,559	3/4	163,513	3/4	148,462	3/4	133,410	3/4	118,359	3/4	88,246

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 OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-3" FORWARD OF AFT BULKHEAD

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>





# BARGE "HFL 439"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 1/2"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	87,933	0	72,874	0	58,097	0	43,624	0	28,863	0	13,807	0		0		0		0	
1/4	87,619	1/4	72,560	1/4	57,795	1/4	43,323	1/4	28,550	1/4	13,493	1/4		1/4		1/4		1/4	
1/2	87,305	1/2	72,246	1/2	57,493	1/2	43,022	1/2	28,236	1/2	13,179	1/2		1/2		1/2		1/2	
3/4	86,991	3/4	71,933	3/4	57,191	3/4	42,721	3/4	27,923	3/4	12,865	3/4		3/4		3/4		3/4	
1	86,678	1	71,619	1	56,889	1	42,420	1	27,609	1	12,552	1		1		1		1	
1/4	86,364	1/4	71,305	1/4	56,588	1/4	42,119	1/4	27,296	1/4	12,238	1/4		1/4		1/4		1/4	
1/2	86,050	1/2	70,991	1/2	56,286	1/2	41,818	1/2	26,982	1/2	11,924	1/2		1/2		1/2		1/2	
3/4	85,736	3/4	70,678	3/4	55,984	3/4	41,517	3/4	26,669	3/4	11,611	3/4		3/4		3/4		3/4	
2	85,423	2	70,364	2	55,682	2	41,216	2	26,355	2	11,297	2		2		2		2	
1/4	85,109	1/4	70,050	1/4	55,380	1/4	40,915	1/4	26,041	1/4	10,983	1/4		1/4		1/4		1/4	
1/2	84,795	1/2	69,737	1/2	55,078	1/2	40,614	1/2	25,728	1/2	10,669	1/2		1/2		1/2		1/2	
3/4	84,482	3/4	69,423	3/4	54,776	3/4	40,312	3/4	25,414	3/4	10,356	3/4		3/4		3/4		3/4	
3	84,168	3	69,109	3	54,474	3	40,011	3	25,100	3	10,042	3		3		3		3	
1/4	83,854	1/4	68,795	1/4	54,172	1/4	39,710	1/4	24,787	1/4	9,728	1/4		1/4		1/4		1/4	
1/2	83,540	1/2	68,482	1/2	53,870	1/2	39,409	1/2	24,473	1/2	9,415	1/2		1/2		1/2		1/2	
3/4	83,227	3/4	68,168	3/4	53,568	3/4	39,108	3/4	24,159	3/4	9,101	3/4		3/4		3/4		3/4	
4	82,913	4	67,854	4	53,266	4	38,806	4	23,845	4	8,787	4		4		4		4	
1/4	82,599	1/4	67,541	1/4	52,964	1/4	38,505	1/4	23,532	1/4	8,473	1/4		1/4		1/4		1/4	
1/2	82,286	1/2	67,227	1/2	52,662	1/2	38,203	1/2	23,218	1/2	8,160	1/2		1/2		1/2		1/2	
3/4	81,972	3/4	66,913	3/4	52,360	3/4	37,902	3/4	22,904	3/4	7,846	3/4		3/4		3/4		3/4	
5	81,658	5	66,599	5	52,058	5	37,600	5	22,591	5	7,532	5		5		5		5	
1/4	81,344	1/4	66,286	1/4	51,756	1/4	37,298	1/4	22,277	1/4	7,219	1/4		1/4		1/4		1/4	
1/2	81,031	1/2	65,972	1/2	51,454	1/2	36,996	1/2	21,963	1/2	6,905	1/2		1/2		1/2		1/2	
3/4	80,717	3/4	65,664	3/4	51,153	3/4	36,688	3/4	21,649	3/4	6,591	3/4		3/4		3/4		3/4	
6	80,403	6	65,356	6	50,851	6	36,380	6	21,336	6	6,278	6		6		6		6	
1/4	80,089	1/4	65,048	1/4	50,549	1/4	36,072	1/4	21,022	1/4	5,964	1/4		1/4		1/4		1/4	
1/2	79,776	1/2	64,741	1/2	50,248	1/2	35,764	1/2	20,708	1/2	5,650	1/2		1/2		1/2		1/2	
3/4	79,462	3/4	64,439	3/4	49,946	3/4	35,451	3/4	20,395	3/4	5,337	3/4		3/4		3/4		3/4	
7	79,148	7	64,137	7	49,645	7	35,137	7	20,081	7	5,023	7		7		7		7	
1/4	78,835	1/4	63,835	1/4	49,344	1/4	34,823	1/4	19,767	1/4	4,710	1/4		1/4		1/4		1/4	
1/2	78,521	1/2	63,533	1/2	49,043	1/2	34,509	1/2	19,453	1/2	4,396	1/2		1/2		1/2		1/2	
3/4	78,207	3/4	63,231	3/4	48,742	3/4	34,196	3/4	19,140	3/4	4,084	3/4		3/4		3/4		3/4	
8	77,893	8	62,929	8	48,440	8	33,882	8	18,826	8	3,771	8		8		8		8	
1/4	77,580	1/4	62,627	1/4	48,139	1/4	33,568	1/4	18,512	1/4	3,458	1/4		1/4		1/4		1/4	
1/2	77,266	1/2	62,325	1/2	47,838	1/2	33,255	1/2	18,199	1/2	3,145	1/2		1/2		1/2		1/2	
3/4	76,952	3/4	62,023	3/4	47,537	3/4	32,941	3/4	17,885	3/4	2,852	3/4		3/4		3/4		3/4	
9	76,639	9	61,721	9	47,236	9	32,627	9	17,571	9	2,559	9		9		9		9	
1/4	76,325	1/4	61,419	1/4	46,935	1/4	32,313	1/4	17,257	1/4	2,265	1/4		1/4		1/4		1/4	
1/2	76,011	1/2	61,117	1/2	46,634	1/2	32,000	1/2	16,944	1/2	1,972	1/2		1/2		1/2		1/2	
3/4	75,697	3/4	60,815	3/4	46,333	3/4	31,686	3/4	16,630	3/4	1,737	3/4		3/4		3/4		3/4	
10	75,384	10	60,513	10	46,032	10	31,372	10	16,316	10	1,502	10		10		10		10	
1/4	75,070	1/4	60,211	1/4	45,731	1/4	31,059	1/4	16,003	1/4	1,266	1/4		1/4		1/4		1/4	
1/2	74,756	1/2	59,909	1/2	45,430	1/2	30,745	1/2	15,689	1/2	1,031	1/2		1/2		1/2		1/2	
3/4	74,442	3/4	59,607	3/4	45,129	3/4	30,431	3/4	15,375	3/4	—	3/4		3/4		3/4		3/4	
11	74,129	11	59,305	11	44,828	11	30,118	11	15,061	11		11		11		11		11	
1/4	73,815	1/4	59,003	1/4	44,527	1/4	29,804	1/4	14,748	1/4		1/4		1/4		1/4		1/4	
1/2	73,501	1/2	58,701	1/2	44,226	1/2	29,490	1/2	14,434	1/2		1/2		1/2		1/2		1/2	
3/4	73,188	3/4	58,399	3/4	43,925	3/4	29,177	3/4	14,120	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/05/2015 CL  
CALCULATED: 11/05/2015 CL  
PRINTED: 11/05/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 439"

## 1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	204,991	0	190,063	0	175,101	0	160,097	0	145,093	0	130,088	0	115,083	0	100,075
1/4		1/4		1/4	204,681	1/4	189,752	1/4	174,789	1/4	159,785	1/4	144,780	1/4	129,775	1/4	114,771	1/4	99,763
1/2		1/2		1/2	204,372	1/2	189,440	1/2	174,477	1/2	159,472	1/2	144,467	1/2	129,463	1/2	114,458	1/2	99,450
3/4		3/4		3/4	204,062	3/4	189,128	3/4	174,164	3/4	159,160	3/4	144,155	3/4	129,150	3/4	114,145	3/4	99,137
1		1		1	203,752	1	188,816	1	173,852	1	158,847	1	143,842	1	128,837	1	113,833	1	98,824
1/4		1/4		1/4	203,443	1/4	188,505	1/4	173,539	1/4	158,534	1/4	143,530	1/4	128,525	1/4	113,520	1/4	98,512
1/2		1/2		1/2	203,133	1/2	188,193	1/2	173,227	1/2	158,222	1/2	143,217	1/2	128,212	1/2	113,208	1/2	98,199
3/4		3/4		3/4	202,823	3/4	187,881	3/4	172,914	3/4	157,909	3/4	142,904	3/4	127,900	3/4	112,895	3/4	97,886
2		2		2	202,514	2	187,570	2	172,601	2	157,597	2	142,592	2	127,587	2	112,582	2	97,574
1/4		1/4		1/4	202,204	1/4	187,258	1/4	172,289	1/4	157,284	1/4	142,279	1/4	127,274	1/4	112,270	1/4	97,261
1/2		1/2		1/2	201,895	1/2	186,946	1/2	171,976	1/2	156,971	1/2	141,967	1/2	126,962	1/2	111,957	1/2	96,948
3/4		3/4		3/4	201,585	3/4	186,635	3/4	171,664	3/4	156,659	3/4	141,654	3/4	126,649	3/4	111,645	3/4	96,635
3		3		3	201,275	3	186,323	3	171,351	3	156,346	3	141,341	3	126,337	3	111,332	3	96,323
1/4		1/4		1/4	200,966	1/4	186,011	1/4	171,038	1/4	156,034	1/4	141,029	1/4	126,024	1/4	111,019	1/4	96,010
1/2		1/2		1/2	200,656	1/2	185,700	1/2	170,726	1/2	155,721	1/2	140,716	1/2	125,711	1/2	110,707	1/2	95,697
3/4		3/4		3/4	200,346	3/4	185,388	3/4	170,413	3/4	155,408	3/4	140,403	3/4	125,399	3/4	110,394	3/4	95,384
4		4		4	200,035	4	185,076	4	170,101	4	155,096	4	140,091	4	125,086	4	110,082	4	95,072
1/4		1/4		1/4	199,724	1/4	184,765	1/4	169,788	1/4	154,783	1/4	139,778	1/4	124,774	1/4	109,769	1/4	94,759
1/2		1/2		1/2	199,414	1/2	184,453	1/2	169,475	1/2	154,471	1/2	139,466	1/2	124,461	1/2	109,456	1/2	94,446
3/4		3/4		3/4	199,102	3/4	184,141	3/4	169,163	3/4	154,158	3/4	139,153	3/4	124,148	3/4	109,144	3/4	94,134
5		5		5	198,790	5	183,829	5	168,850	5	153,845	5	138,840	5	123,836	5	108,831	5	93,821
1/4		1/4		1/4	198,479	1/4	183,518	1/4	168,538	1/4	153,533	1/4	138,528	1/4	123,523	1/4	108,519	1/4	93,508
1/2		1/2		1/2	198,167	1/2	183,206	1/2	168,225	1/2	153,220	1/2	138,215	1/2	123,211	1/2	108,206	1/2	93,195
3/4		3/4		3/4	197,855	3/4	182,894	3/4	167,912	3/4	152,908	3/4	137,903	3/4	122,898	3/4	107,893	3/4	92,883
6		6		6	197,544	6	182,583	6	167,600	6	152,595	6	137,590	6	122,585	6	107,581	6	92,570
1/4		1/4		1/4	197,232	1/4	182,271	1/4	167,287	1/4	152,282	1/4	137,277	1/4	122,273	1/4	107,268	1/4	92,257
1/2		1/2		1/2	210,832	1/2	196,920	1/2	181,959	1/2	166,975	1/2	151,970	1/2	136,965	1/2	121,960	1/2	106,955
3/4		3/4		3/4	210,652	3/4	196,609	3/4	181,648	3/4	166,662	3/4	151,657	3/4	136,652	3/4	121,648	3/4	106,643
7		7		7	210,473	7	196,297	7	181,336	7	166,349	7	151,345	7	136,340	7	121,335	7	106,330
1/4		1/4		1/4	210,294	1/4	195,985	1/4	181,024	1/4	166,037	1/4	151,032	1/4	136,027	1/4	121,023	1/4	106,017
1/2		1/2		1/2	210,114	1/2	195,674	1/2	180,713	1/2	165,724	1/2	150,719	1/2	135,714	1/2	120,710	1/2	105,705
3/4		3/4		3/4	209,883	3/4	195,362	3/4	180,401	3/4	165,412	3/4	150,407	3/4	135,402	3/4	120,397	3/4	105,392
8		8		8	209,651	8	195,050	8	180,089	8	165,099	8	150,094	8	135,089	8	120,085	8	105,079
1/4		1/4		1/4	209,420	1/4	194,739	1/4	179,777	1/4	164,786	1/4	149,782	1/4	134,777	1/4	119,772	1/4	104,766
1/2		1/2		1/2	209,188	1/2	194,427	1/2	179,466	1/2	164,474	1/2	149,469	1/2	134,464	1/2	119,460	1/2	104,454
3/4		3/4		3/4	208,908	3/4	194,115	3/4	179,154	3/4	164,161	3/4	149,156	3/4	134,152	3/4	119,147	3/4	104,141
9		9		9	208,629	9	193,803	9	178,842	9	163,849	9	148,844	9	133,839	9	118,834	9	103,828
1/4		1/4		1/4	208,349	1/4	193,492	1/4	178,531	1/4	163,536	1/4	148,531	1/4	133,526	1/4	118,522	1/4	103,515
1/2		1/2		1/2	208,069	1/2	193,180	1/2	178,219	1/2	163,223	1/2	148,219	1/2	133,214	1/2	118,209	1/2	103,203
3/4		3/4		3/4	207,763	3/4	192,868	3/4	177,907	3/4	162,911	3/4	147,906	3/4	132,901	3/4	117,897	3/4	102,890
10		10		10	207,458	10	192,557	10	177,596	10	162,598	10	147,593	10	132,589	10	117,584	10	102,577
1/4		1/4		1/4	207,152	1/4	192,245	1/4	177,284	1/4	162,286	1/4	147,281	1/4	132,276	1/4	117,271	1/4	102,265
1/2		1/2		1/2	206,847	1/2	191,933	1/2	176,972	1/2	161,973	1/2	146,968	1/2	131,963	1/2	116,959	1/2	101,952
3/4		3/4		3/4	206,538	3/4	191,622	3/4	176,661	3/4	161,660	3/4	146,656	3/4	131,651	3/4	116,646	3/4	101,639
11		11		11	206,228	11	191,310	11	176,349	11	161,348	11	146,343	11	131,338	11	116,334	11	101,326
1/4		1/4		1/4	205,919	1/4	190,998	1/4	176,037	1/4	161,035	1/4	146,030	1/4	131,026	1/4	116,021	1/4	101,014
1/2		1/2		1/2	205,610	1/2	190,687	1/2	175,726	1/2	160,723	1/2	145,718	1/2	130,713	1/2	115,708	1/2	100,701
3/4		3/4		3/4	205,301	3/4	190,375	3/4	175,413	3/4	160,410	3/4	145,405	3/4	130,400	3/4	115,396	3/4	100,388

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 OF 2" "HERMETIC" VALVE

GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-3" FORWARD OF AFT BULKHEAD

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588  
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# BARGE "HFL 439"

**1 STBD**  
**ULLAGE TABLE**

CAPACITIES GIVEN IN WHOLE GALLONS

GUAGE HEIGHT 15'-09 1/2"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	85,064	0	70,053	0	55,047	0	40,039	0	25,028	0	10,299	0		0		0		0	
1/4	84,752	1/4	69,741	1/4	54,735	1/4	39,726	1/4	24,715	1/4	10,009	1/4		1/4		1/4		1/4	
1/2	84,439	1/2	69,428	1/2	54,422	1/2	39,413	1/2	24,403	1/2	9,719	1/2		1/2		1/2		1/2	
3/4	84,126	3/4	69,115	3/4	54,110	3/4	39,101	3/4	24,090	3/4	9,434	3/4		3/4		3/4		3/4	
1	83,813	1	68,802	1	53,797	1	38,788	1	23,777	1	9,148	1		1		1		1	
1/4	83,501	1/4	68,490	1/4	53,485	1/4	38,475	1/4	23,465	1/4	8,862	1/4		1/4		1/4		1/4	
1/2	83,188	1/2	68,177	1/2	53,172	1/2	38,162	1/2	23,152	1/2	8,576	1/2		1/2		1/2		1/2	
3/4	82,875	3/4	67,864	3/4	52,860	3/4	37,850	3/4	22,839	3/4	8,294	3/4		3/4		3/4		3/4	
2	82,562	2	67,551	2	52,547	2	37,537	2	22,526	2	8,012	2		2		2		2	
1/4	82,250	1/4	67,239	1/4	52,235	1/4	37,224	1/4	22,214	1/4	7,730	1/4		1/4		1/4		1/4	
1/2	81,937	1/2	66,926	1/2	51,922	1/2	36,912	1/2	21,901	1/2	7,449	1/2		1/2		1/2		1/2	
3/4	81,624	3/4	66,613	3/4	51,609	3/4	36,599	3/4	21,588	3/4	7,171	3/4		3/4		3/4		3/4	
3	81,312	3	66,300	3	51,297	3	36,286	3	21,276	3	6,892	3		3		3		3	
1/4	80,999	1/4	65,988	1/4	50,984	1/4	35,973	1/4	20,963	1/4	6,614	1/4		1/4		1/4		1/4	
1/2	80,686	1/2	65,675	1/2	50,671	1/2	35,661	1/2	20,650	1/2	6,336	1/2		1/2		1/2		1/2	
3/4	80,373	3/4	65,362	3/4	50,359	3/4	35,348	3/4	20,337	3/4	6,062	3/4		3/4		3/4		3/4	
4	80,061	4	65,050	4	50,046	4	35,035	4	20,025	4	5,788	4		4		4		4	
1/4	79,748	1/4	64,737	1/4	49,733	1/4	34,723	1/4	19,712	1/4	5,514	1/4		1/4		1/4		1/4	
1/2	79,435	1/2	64,424	1/2	49,420	1/2	34,410	1/2	19,399	1/2	5,239	1/2		1/2		1/2		1/2	
3/4	79,122	3/4	64,111	3/4	49,108	3/4	34,097	3/4	19,086	3/4	4,969	3/4		3/4		3/4		3/4	
5	78,810	5	63,799	5	48,795	5	33,784	5	18,774	5	4,699	5		5		5		5	
1/4	78,497	1/4	63,486	1/4	48,482	1/4	33,472	1/4	18,461	1/4	4,428	1/4		1/4		1/4		1/4	
1/2	78,184	1/2	63,173	1/2	48,170	1/2	33,159	1/2	18,148	1/2	4,158	1/2		1/2		1/2		1/2	
3/4	77,872	3/4	62,860	3/4	47,857	3/4	32,846	3/4	17,837	3/4	3,892	3/4		3/4		3/4		3/4	
6	77,559	6	62,548	6	47,544	6	32,533	6	17,525	6	3,625	6		6		6		6	
1/4	77,246	1/4	62,235	1/4	47,231	1/4	32,221	1/4	17,213	1/4	3,359	1/4		1/4		1/4		1/4	
1/2	76,933	1/2	61,922	1/2	46,919	1/2	31,908	1/2	16,901	1/2	3,093	1/2		1/2		1/2		1/2	
3/4	76,621	3/4	61,610	3/4	46,606	3/4	31,595	3/4	16,592	3/4	2,831	3/4		3/4		3/4		3/4	
7	76,308	7	61,297	7	46,293	7	31,283	7	16,284	7	2,569	7		7		7		7	
1/4	75,995	1/4	60,985	1/4	45,981	1/4	30,970	1/4	15,975	1/4	2,308	1/4		1/4		1/4		1/4	
1/2	75,682	1/2	60,672	1/2	45,668	1/2	30,657	1/2	15,666	1/2	2,046	1/2		1/2		1/2		1/2	
3/4	75,370	3/4	60,360	3/4	45,355	3/4	30,344	3/4	15,361	3/4	1,808	3/4		3/4		3/4		3/4	
8	75,057	8	60,047	8	45,042	8	30,032	8	15,056	8	1,569	8		8		8		8	
1/4	74,744	1/4	59,735	1/4	44,730	1/4	29,719	1/4	14,751	1/4	1,331	1/4		1/4		1/4		1/4	
1/2	74,431	1/2	59,422	1/2	44,417	1/2	29,406	1/2	14,446	1/2	1,092	1/2		1/2		1/2		1/2	
3/4	74,119	3/4	59,110	3/4	44,104	3/4	29,094	3/4	14,145	3/4	915	3/4		3/4		3/4		3/4	
9	73,806	9	58,797	9	43,791	9	28,781	9	13,843	9	739	9		9		9		9	
1/4	73,493	1/4	58,485	1/4	43,479	1/4	28,468	1/4	13,542	1/4	562	1/4		1/4		1/4		1/4	
1/2	73,181	1/2	58,172	1/2	43,166	1/2	28,155	1/2	13,241	1/2	385	1/2		1/2		1/2		1/2	
3/4	72,868	3/4	57,860	3/4	42,853	3/4	27,843	3/4	12,944	3/4		3/4		3/4		3/4		3/4	
10	72,555	10	57,547	10	42,541	10	27,530	10	12,646	10		10		10		10		10	
1/4	72,242	1/4	57,235	1/4	42,228	1/4	27,217	1/4	12,349	1/4		1/4		1/4		1/4		1/4	
1/2	71,930	1/2	56,922	1/2	41,915	1/2	26,905	1/2	12,052	1/2		1/2		1/2		1/2		1/2	
3/4	71,617	3/4	56,610	3/4	41,602	3/4	26,592	3/4	11,758	3/4		3/4		3/4		3/4		3/4	
11	71,304	11	56,297	11	41,290	11	26,279	11	11,465	11		11		11		11		11	
1/4	70,991	1/4	55,985	1/4	40,977	1/4	25,966	1/4	11,171	1/4		1/4		1/4		1/4		1/4	
1/2	70,679	1/2	55,672	1/2	40,664	1/2	25,654	1/2	10,878	1/2		1/2		1/2		1/2		1/2	
3/4	70,366	3/4	55,360	3/4	40,352	3/4	25,341	3/4	10,588	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/05/2015 CL  
CALCULATED: 11/05/2015 CL  
PRINTED: 11/05/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 439"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	0	0	205,900	0	190,973	0	176,007	0	160,999	0	145,989	0	130,979	0	115,968	0	100,955
1/4		1/4		1/4	205,591	1/4	190,662	1/4	175,695	1/4	160,686	1/4	145,676	1/4	130,666	1/4	115,655	1/4	100,642
1/2		1/2		1/2	205,281	1/2	190,350	1/2	175,383	1/2	160,374	1/2	145,363	1/2	130,353	1/2	115,343	1/2	100,329
3/4		3/4		3/4	204,971	3/4	190,038	3/4	175,070	3/4	160,061	3/4	145,051	3/4	130,040	3/4	115,030	3/4	100,016
1	1	1	1	1	204,661	1	189,726	1	174,758	1	159,748	1	144,738	1	129,728	1	114,717	1	99,704
1/4		1/4		1/4	204,352	1/4	189,414	1/4	174,446	1/4	159,436	1/4	144,425	1/4	129,415	1/4	114,405	1/4	99,391
1/2		1/2		1/2	204,042	1/2	189,102	1/2	174,133	1/2	159,123	1/2	144,113	1/2	129,102	1/2	114,092	1/2	99,078
3/4		3/4		3/4	203,732	3/4	188,791	3/4	173,820	3/4	158,810	3/4	143,800	3/4	128,790	3/4	113,779	3/4	98,765
2	2	2	2	2	203,422	2	188,479	2	173,508	2	158,497	2	143,487	2	128,477	2	113,466	2	98,452
1/4		1/4		1/4	203,113	1/4	188,167	1/4	173,195	1/4	158,185	1/4	143,174	1/4	128,164	1/4	113,154	1/4	98,139
1/2		1/2		1/2	202,803	1/2	187,855	1/2	172,882	1/2	157,872	1/2	142,862	1/2	127,851	1/2	112,841	1/2	97,827
3/4		3/4		3/4	202,493	3/4	187,543	3/4	172,570	3/4	157,559	3/4	142,549	3/4	127,539	3/4	112,528	3/4	97,514
3	3	3	3	3	202,183	3	187,232	3	172,257	3	157,247	3	142,236	3	127,226	3	112,216	3	97,201
1/4		1/4		1/4	201,874	1/4	186,920	1/4	171,944	1/4	156,934	1/4	141,924	1/4	126,913	1/4	111,903	1/4	96,888
1/2		1/2		1/2	201,564	1/2	186,608	1/2	171,631	1/2	156,621	1/2	141,611	1/2	126,601	1/2	111,590	1/2	96,575
3/4		3/4		3/4	201,254	3/4	186,296	3/4	171,319	3/4	156,308	3/4	141,298	3/4	126,288	3/4	111,277	3/4	96,262
4	4	4	4	4	200,945	4	185,984	4	171,006	4	155,996	4	140,985	4	125,975	4	110,965	4	95,949
1/4		1/4		1/4	200,635	1/4	185,673	1/4	170,693	1/4	155,683	1/4	140,673	1/4	125,662	1/4	110,652	1/4	95,637
1/2		1/2		1/2	200,324	1/2	185,361	1/2	170,381	1/2	155,370	1/2	140,360	1/2	125,350	1/2	110,339	1/2	95,324
3/4		3/4		3/4	200,013	3/4	185,049	3/4	170,068	3/4	155,058	3/4	140,047	3/4	125,037	3/4	110,027	3/4	95,011
5	5	5	5	5	199,703	5	184,737	5	169,755	5	154,745	5	139,735	5	124,724	5	109,714	5	94,698
1/4		1/4		1/4	199,392	1/4	184,425	1/4	169,442	1/4	154,432	1/4	139,422	1/4	124,412	1/4	109,401	1/4	94,385
1/2		1/2		1/2	199,080	1/2	184,114	1/2	169,130	1/2	154,119	1/2	139,109	1/2	124,099	1/2	109,088	1/2	94,072
3/4		3/4		3/4	198,768	3/4	183,802	3/4	168,817	3/4	153,807	3/4	138,796	3/4	123,786	3/4	108,776	3/4	93,759
6	6	6	6	6	198,457	6	183,490	6	168,504	6	153,494	6	138,484	6	123,473	6	108,463	6	93,447
1/4		1/4		1/4	198,145	1/4	183,178	1/4	168,192	1/4	153,181	1/4	138,171	1/4	123,161	1/4	108,150	1/4	93,134
1/2		1/2		1/2	197,833	1/2	182,866	1/2	167,879	1/2	152,869	1/2	137,858	1/2	122,848	1/2	107,838	1/2	92,821
3/4		3/4		3/4	197,521	3/4	182,555	3/4	167,566	3/4	152,556	3/4	137,546	3/4	122,535	3/4	107,525	3/4	92,508
7	7	7	7	7	197,209	7	182,243	7	167,253	7	152,243	7	137,233	7	122,223	7	107,212	7	92,195
1/4		1/4		1/4	210,814	1/4	196,898	1/4	181,931	1/4	166,941	1/4	151,930	1/4	136,920	1/4	121,910	1/4	106,899
1/2		1/2		1/2	210,635	1/2	196,586	1/2	181,619	1/2	166,628	1/2	151,618	1/2	136,607	1/2	121,597	1/2	106,586
3/4		3/4		3/4	210,455	3/4	196,274	3/4	181,307	3/4	166,315	3/4	151,305	3/4	136,295	3/4	121,284	3/4	106,273
8	8	8	8	8	210,276	8	195,962	8	180,996	8	166,003	8	150,992	8	135,982	8	120,972	8	105,961
1/4		1/4		1/4	210,096	1/4	195,650	1/4	180,684	1/4	165,690	1/4	150,680	1/4	135,669	1/4	120,659	1/4	105,648
1/2		1/2		1/2	209,865	1/2	195,339	1/2	180,372	1/2	165,377	1/2	150,367	1/2	135,357	1/2	120,346	1/2	105,335
3/4		3/4		3/4	209,633	3/4	195,027	3/4	180,060	3/4	165,064	3/4	150,054	3/4	135,044	3/4	120,034	3/4	105,022
9	9	9	9	9	209,402	9	194,715	9	179,748	9	164,752	9	149,741	9	134,731	9	119,721	9	104,709
1/4		1/4		1/4	209,170	1/4	194,403	1/4	179,437	1/4	164,439	1/4	149,429	1/4	134,418	1/4	119,408	1/4	104,396
1/2		1/2		1/2	208,939	1/2	194,091	1/2	179,125	1/2	164,126	1/2	149,116	1/2	134,106	1/2	119,095	1/2	104,084
3/4		3/4		3/4	208,610	3/4	193,780	3/4	178,813	3/4	163,814	3/4	148,803	3/4	133,793	3/4	118,783	3/4	103,771
10	10	10	10	10	208,330	10	193,468	10	178,501	10	163,501	10	148,491	10	133,480	10	118,470	10	103,458
1/4		1/4		1/4	208,050	1/4	193,156	1/4	178,189	1/4	163,188	1/4	148,178	1/4	133,168	1/4	118,157	1/4	103,145
1/2		1/2		1/2	207,745	1/2	192,844	1/2	177,878	1/2	162,875	1/2	147,865	1/2	132,855	1/2	117,844	1/2	102,832
3/4		3/4		3/4	207,439	3/4	192,532	3/4	177,566	3/4	162,563	3/4	147,552	3/4	132,542	3/4	117,532	3/4	102,519
11	11	11	11	11	207,133	11	192,221	11	177,254	11	162,250	11	147,240	11	132,229	11	117,219	11	102,206
1/4		1/4		1/4	206,828	1/4	191,909	1/4	176,942	1/4	161,937	1/4	146,927	1/4	131,917	1/4	116,906	1/4	101,894
1/2		1/2		1/2	206,518	1/2	191,597	1/2	176,630	1/2	161,625	1/2	146,614	1/2	131,604	1/2	116,594	1/2	101,581
3/4		3/4		3/4	206,209	3/4	191,285	3/4	176,319	3/4	161,312	3/4	146,302	3/4	131,291	3/4	116,281	3/4	101,268

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 OF 2" "HERMETIC" VALVE  
GAUGE POINT: (HERMETIC) LOCATED 10'-09" OFF CENTERLINE AND 43'-3" FORWARD OF AFT BULKHEAD

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588  
<http://www.pmacorp.net>



# BARGE "HFL 439"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 1/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	85,938	0	70,921	0	55,964	0	40,993	0	25,976	0	11,175	0		0		0		0	
1/4	85,625	1/4	70,609	1/4	55,653	1/4	40,680	1/4	25,663	1/4	10,882	1/4		1/4		1/4		1/4	
1/2	85,313	1/2	70,296	1/2	55,343	1/2	40,367	1/2	25,351	1/2	10,592	1/2		1/2		1/2		1/2	
3/4	85,000	3/4	69,983	3/4	55,032	3/4	40,054	3/4	25,038	3/4	10,302	3/4		3/4		3/4		3/4	
1	84,687	1	69,670	1	54,722	1	39,741	1	24,725	1	10,013	1		1		1		1	
1/4	84,374	1/4	69,357	1/4	54,411	1/4	39,428	1/4	24,412	1/4	9,723	1/4		1/4		1/4		1/4	
1/2	84,061	1/2	69,044	1/2	54,101	1/2	39,116	1/2	24,099	1/2	9,437	1/2		1/2		1/2		1/2	
3/4	83,748	3/4	68,731	3/4	53,790	3/4	38,803	3/4	23,786	3/4	9,151	3/4		3/4		3/4		3/4	
2	83,435	2	68,419	2	53,480	2	38,490	2	23,473	2	8,865	2		2		2		2	
1/4	83,123	1/4	68,106	1/4	53,170	1/4	38,177	1/4	23,161	1/4	8,579	1/4		1/4		1/4		1/4	
1/2	82,810	1/2	67,793	1/2	52,859	1/2	37,864	1/2	22,848	1/2	8,297	1/2		1/2		1/2		1/2	
3/4	82,497	3/4	67,480	3/4	52,548	3/4	37,551	3/4	22,535	3/4	8,015	3/4		3/4		3/4		3/4	
3	82,184	3	67,167	3	52,237	3	37,238	3	22,222	3	7,733	3		3		3		3	
1/4	81,871	1/4	66,854	1/4	51,927	1/4	36,926	1/4	21,909	1/4	7,451	1/4		1/4		1/4		1/4	
1/2	81,558	1/2	66,541	1/2	51,616	1/2	36,613	1/2	21,596	1/2	7,173	1/2		1/2		1/2		1/2	
3/4	81,245	3/4	66,229	3/4	51,304	3/4	36,300	3/4	21,284	3/4	6,895	3/4		3/4		3/4		3/4	
4	80,933	4	65,916	4	50,993	4	35,987	4	20,971	4	6,617	4		4		4		4	
1/4	80,620	1/4	65,603	1/4	50,682	1/4	35,674	1/4	20,658	1/4	6,339	1/4		1/4		1/4		1/4	
1/2	80,307	1/2	65,290	1/2	50,371	1/2	35,361	1/2	20,345	1/2	6,064	1/2		1/2		1/2		1/2	
3/4	79,994	3/4	64,978	3/4	50,059	3/4	35,049	3/4	20,032	3/4	5,790	3/4		3/4		3/4		3/4	
5	79,681	5	64,665	5	49,748	5	34,736	5	19,719	5	5,516	5		5		5		5	
1/4	79,368	1/4	64,352	1/4	49,436	1/4	34,423	1/4	19,407	1/4	5,241	1/4		1/4		1/4		1/4	
1/2	79,055	1/2	64,041	1/2	49,124	1/2	34,110	1/2	19,094	1/2	4,971	1/2		1/2		1/2		1/2	
3/4	78,743	3/4	63,729	3/4	48,812	3/4	33,797	3/4	18,781	3/4	4,700	3/4		3/4		3/4		3/4	
6	78,430	6	63,417	6	48,500	6	33,484	6	18,468	6	4,430	6		6		6		6	
1/4	78,117	1/4	63,106	1/4	48,188	1/4	33,172	1/4	18,155	1/4	4,159	1/4		1/4		1/4		1/4	
1/2	77,804	1/2	62,795	1/2	47,875	1/2	32,859	1/2	17,843	1/2	3,893	1/2		1/2		1/2		1/2	
3/4	77,491	3/4	62,485	3/4	47,562	3/4	32,546	3/4	17,531	3/4	3,627	3/4		3/4		3/4		3/4	
7	77,178	7	62,174	7	47,249	7	32,233	7	17,220	7	3,360	7		7		7		7	
1/4	76,866	1/4	61,863	1/4	46,937	1/4	31,920	1/4	16,908	1/4	3,094	1/4		1/4		1/4		1/4	
1/2	76,553	1/2	61,553	1/2	46,624	1/2	31,607	1/2	16,599	1/2	2,832	1/2		1/2		1/2		1/2	
3/4	76,240	3/4	61,242	3/4	46,311	3/4	31,294	3/4	16,290	3/4	2,570	3/4		3/4		3/4		3/4	
8	75,927	8	60,932	8	45,998	8	30,982	8	15,981	8	2,309	8		8		8		8	
1/4	75,614	1/4	60,621	1/4	45,685	1/4	30,669	1/4	15,672	1/4	2,047	1/4		1/4		1/4		1/4	
1/2	75,301	1/2	60,311	1/2	45,372	1/2	30,356	1/2	15,367	1/2	1,808	1/2		1/2		1/2		1/2	
3/4	74,988	3/4	60,000	3/4	45,060	3/4	30,043	3/4	15,061	3/4	1,570	3/4		3/4		3/4		3/4	
9	74,676	9	59,690	9	44,747	9	29,730	9	14,756	9	1,331	9		9		9		9	
1/4	74,363	1/4	59,379	1/4	44,434	1/4	29,417	1/4	14,451	1/4	1,092	1/4		1/4		1/4		1/4	
1/2	74,050	1/2	59,069	1/2	44,121	1/2	29,105	1/2	14,150	1/2	916	1/2		1/2		1/2		1/2	
3/4	73,737	3/4	58,758	3/4	43,808	3/4	28,792	3/4	13,849	3/4	739	3/4		3/4		3/4		3/4	
10	73,424	10	58,448	10	43,495	10	28,479	10	13,547	10	562	10		10		10		10	
1/4	73,111	1/4	58,137	1/4	43,182	1/4	28,166	1/4	13,246	1/4	385	1/4		1/4		1/4		1/4	
1/2	72,798	1/2	57,827	1/2	42,870	1/2	27,853	1/2	12,949	1/2		1/2		1/2		1/2		1/2	
3/4	72,486	3/4	57,516	3/4	42,557	3/4	27,540	3/4	12,651	3/4		3/4		3/4		3/4		3/4	
11	72,173	11	57,206	11	42,244	11	27,228	11	12,354	11		11		11		11		11	
1/4	71,860	1/4	56,895	1/4	41,931	1/4	26,915	1/4	12,056	1/4		1/4		1/4		1/4		1/4	
1/2	71,547	1/2	56,585	1/2	41,618	1/2	26,602	1/2	11,763	1/2		1/2		1/2		1/2		1/2	
3/4	71,234	3/4	56,274	3/4	41,305	3/4	26,289	3/4	11,469	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/05/2015 CL  
CALCULATED: 11/05/2015 CL  
PRINTED: 11/05/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 439"

## STBD SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 5'-11 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	4,667	0	3,512	0	2,358	0	1,203	0		0		0		0	
1/4		1/4		1/4	4,643	1/4	3,488	1/4	2,334	1/4	1,179	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,619	1/2	3,464	1/2	2,310	1/2	1,155	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,595	3/4	3,440	3/4	2,286	3/4	1,131	3/4		3/4		3/4		3/4	
1		1		1	4,570	1	3,415	1	2,262	1	1,107	1		1		1		1	
1/4		1/4		1/4	4,546	1/4	3,391	1/4	2,238	1/4	1,083	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,522	1/2	3,367	1/2	2,214	1/2	1,059	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,498	3/4	3,343	3/4	2,190	3/4	1,035	3/4		3/4		3/4		3/4	
2		2		2	4,474	2	3,319	2	2,165	2	1,011	2		2		2		2	
1/4		1/4		1/4	4,450	1/4	3,295	1/4	2,141	1/4	987	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,426	1/2	3,271	1/2	2,117	1/2	963	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,402	3/4	3,247	3/4	2,093	3/4	938	3/4		3/4		3/4		3/4	
3		3		3	4,378	3	3,223	3	2,069	3	914	3		3		3		3	
1/4		1/4		1/4	4,354	1/4	3,199	1/4	2,045	1/4	890	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,330	1/2	3,175	1/2	2,021	1/2	866	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,306	3/4	3,151	3/4	1,997	3/4	842	3/4		3/4		3/4		3/4	
4		4		4	4,282	4	3,127	4	1,973	4	818	4		4		4		4	
1/4		1/4		1/4	4,258	1/4	3,103	1/4	1,949	1/4	794	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,234	1/2	3,079	1/2	1,925	1/2	770	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,210	3/4	3,054	3/4	1,901	3/4	746	3/4		3/4		3/4		3/4	
5		5		5	4,185	5	3,030	5	1,877	5	722	5		5		5		5	
1/4		1/4		1/4	4,161	1/4	3,006	1/4	1,853	1/4	698	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,137	1/2	2,982	1/2	1,829	1/2	674	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,113	3/4	2,958	3/4	1,805	3/4	650	3/4		3/4		3/4		3/4	
6		6		6	4,089	6	2,934	6	1,780	6	626	6		6		6		6	
1/4		1/4		1/4	4,065	1/4	2,910	1/4	1,756	1/4	602	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,140	1/2	4,041	1/2	2,886	1/2	578	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,128	3/4	4,017	3/4	2,862	3/4	553	3/4		3/4		3/4		3/4	
7		7		7	5,117	7	3,993	7	2,838	7	529	7		7		7		7	
1/4		1/4		1/4	5,105	1/4	3,969	1/4	2,814	1/4	505	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,093	1/2	3,945	1/2	2,790	1/2	481	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,070	3/4	3,921	3/4	2,766	3/4	457	3/4		3/4		3/4		3/4	
8		8		8	5,046	8	3,897	8	2,742	8	433	8		8		8		8	
1/4		1/4		1/4	5,023	1/4	3,873	1/4	2,718	1/4	409	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,999	1/2	3,849	1/2	2,694	1/2	385	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,975	3/4	3,825	3/4	2,670	3/4	361	3/4		3/4		3/4		3/4	
9		9		9	4,952	9	3,800	9	2,646	9	337	9		9		9		9	
1/4		1/4		1/4	4,928	1/4	3,776	1/4	2,622	1/4	313	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,904	1/2	3,752	1/2	2,597	1/2	289	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,881	3/4	3,728	3/4	2,574	3/4	265	3/4		3/4		3/4		3/4	
10		10		10	4,857	10	3,704	10	2,550	10	241	10		10		10		10	
1/4		1/4		1/4	4,833	1/4	3,680	1/4	2,526	1/4	217	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,810	1/2	3,656	1/2	2,502	1/2	193	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,786	3/4	3,632	3/4	2,478	3/4	168	3/4		3/4		3/4		3/4	
11		11		11	4,762	11	3,608	11	2,454	11	144	11		11		11		11	
1/4		1/4		1/4	4,739	1/4	3,584	1/4	2,430	1/4	120	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,715	1/2	3,560	1/2	2,406	1/2	96	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,691	3/4	3,536	3/4	2,382	3/4	1,227	3/4		3/4		3/4		3/4	

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 OF 2" HERMETIC VALVE

STRAPPED: 11/05/2015 CL  
CALCULATED: 11/05/2015 CL  
PRINTED: 11/05/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 11/2015

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



# BARGE "HFL 439"

## PORT SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 5'-11 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	4,667	0	3,512	0	2,358	0	1,203	0		0		0		0	
1/4		1/4		1/4	4,643	1/4	3,488	1/4	2,334	1/4	1,179	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,619	1/2	3,464	1/2	2,310	1/2	1,155	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,595	3/4	3,440	3/4	2,286	3/4	1,131	3/4		3/4		3/4		3/4	
1		1		1	4,570	1	3,415	1	2,262	1	1,107	1		1		1		1	
1/4		1/4		1/4	4,546	1/4	3,391	1/4	2,238	1/4	1,083	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,522	1/2	3,367	1/2	2,214	1/2	1,059	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,498	3/4	3,343	3/4	2,190	3/4	1,035	3/4		3/4		3/4		3/4	
2		2		2	4,474	2	3,319	2	2,165	2	1,011	2		2		2		2	
1/4		1/4		1/4	4,450	1/4	3,295	1/4	2,141	1/4	987	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,426	1/2	3,271	1/2	2,117	1/2	963	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,402	3/4	3,247	3/4	2,093	3/4	938	3/4		3/4		3/4		3/4	
3		3		3	4,378	3	3,223	3	2,069	3	914	3		3		3		3	
1/4		1/4		1/4	4,354	1/4	3,199	1/4	2,045	1/4	890	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,330	1/2	3,175	1/2	2,021	1/2	866	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,306	3/4	3,151	3/4	1,997	3/4	842	3/4		3/4		3/4		3/4	
4		4		4	4,282	4	3,127	4	1,973	4	818	4		4		4		4	
1/4		1/4		1/4	4,258	1/4	3,103	1/4	1,949	1/4	794	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,234	1/2	3,079	1/2	1,925	1/2	770	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,210	3/4	3,054	3/4	1,901	3/4	746	3/4		3/4		3/4		3/4	
5		5		5	4,185	5	3,030	5	1,877	5	722	5		5		5		5	
1/4		1/4		1/4	4,161	1/4	3,006	1/4	1,853	1/4	698	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,137	1/2	2,982	1/2	1,829	1/2	674	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,113	3/4	2,958	3/4	1,805	3/4	650	3/4		3/4		3/4		3/4	
6		6		6	4,089	6	2,934	6	1,780	6	626	6		6		6		6	
1/4		1/4		1/4	4,065	1/4	2,910	1/4	1,756	1/4	602	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,140	1/2	4,041	1/2	2,886	1/2	578	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,128	3/4	4,017	3/4	2,862	3/4	553	3/4		3/4		3/4		3/4	
7		7		7	5,117	7	3,993	7	2,838	7	529	7		7		7		7	
1/4		1/4		1/4	5,105	1/4	3,969	1/4	2,814	1/4	505	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,093	1/2	3,945	1/2	2,790	1/2	481	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,070	3/4	3,921	3/4	2,766	3/4	457	3/4		3/4		3/4		3/4	
8		8		8	5,046	8	3,897	8	2,742	8	433	8		8		8		8	
1/4		1/4		1/4	5,023	1/4	3,873	1/4	2,718	1/4	409	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,999	1/2	3,849	1/2	2,694	1/2	385	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,975	3/4	3,825	3/4	2,670	3/4	361	3/4		3/4		3/4		3/4	
9		9		9	4,952	9	3,800	9	2,646	9	337	9		9		9		9	
1/4		1/4		1/4	4,928	1/4	3,776	1/4	2,622	1/4	313	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,904	1/2	3,752	1/2	2,597	1/2	289	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,881	3/4	3,728	3/4	2,574	3/4	265	3/4		3/4		3/4		3/4	
10		10		10	4,857	10	3,704	10	2,550	10	241	10		10		10		10	
1/4		1/4		1/4	4,833	1/4	3,680	1/4	2,526	1/4	217	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,810	1/2	3,656	1/2	2,502	1/2	193	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,786	3/4	3,632	3/4	2,478	3/4	168	3/4		3/4		3/4		3/4	
11		11		11	4,762	11	3,608	11	2,454	11	144	11		11		11		11	
1/4		1/4		1/4	4,739	1/4	3,584	1/4	2,430	1/4	120	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,715	1/2	3,560	1/2	2,406	1/2	96	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,691	3/4	3,536	3/4	2,382	3/4	1,227	3/4		3/4		3/4		3/4	

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 OF 2" HERMETIC VALVE

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Pearland, Texas 77588  
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# BARGE "HFL 439"

## FUEL TANK ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-05 1/2

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0	473	0	332	0	170	0	33	0		0		0		0		0	
1/4		1/4	471	1/4	329	1/4	167	1/4	31	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	469	1/2	325	1/2	163	1/2	28	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	466	3/4	322	3/4	160	3/4	26	3/4		3/4		3/4		3/4		3/4	
1		1	464	1	319	1	157	1	24	1		1		1		1		1	
1/4		1/4	461	1/4	315	1/4	154	1/4	22	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	459	1/2	312	1/2	150	1/2	21	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	456	3/4	309	3/4	147	3/4	19	3/4		3/4		3/4		3/4		3/4	
2		2	453	2	305	2	144	2	17	2		2		2		2		2	
1/4		1/4	451	1/4	302	1/4	141	1/4	15	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	448	1/2	298	1/2	138	1/2	13	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	445	3/4	295	3/4	134	3/4	12	3/4		3/4		3/4		3/4		3/4	
3		3	443	3	292	3	131	3	10	3		3		3		3		3	
1/4		1/4	440	1/4	288	1/4	128	1/4	9	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	437	1/2	285	1/2	125	1/2	7	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	434	3/4	281	3/4	122	3/4	6	3/4		3/4		3/4		3/4		3/4	
4		4	432	4	278	4	119	4	5	4		4		4		4		4	
1/4		1/4	429	1/4	275	1/4	116	1/4	4	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	426	1/2	271	1/2	113	1/2	3	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	423	3/4	268	3/4	110	3/4	2	3/4		3/4		3/4		3/4		3/4	
5		5	420	5	264	5	107	5	1	5		5		5		5		5	
1/4		1/4	417	1/4	261	1/4	104	1/4	1	1/4		1/4		1/4		1/4		1/4	
1/2	515	1/2	414	1/2	258	1/2	101	1/2	0	1/2		1/2		1/2		1/2		1/2	
3/4	514	3/4	411	3/4	254	3/4	98	1/2	0	3/4		3/4		3/4		3/4		3/4	
6	514	6	408	6	251	6	95	6		6		6		6		6		6	
1/4	513	1/4	405	1/4	247	1/4	92	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	512	1/2	402	1/2	244	1/2	89	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	511	3/4	399	3/4	240	3/4	86	3/4		3/4		3/4		3/4		3/4		3/4	
7	510	7	396	7	237	7	83	7		7		7		7		7		7	
1/4	509	1/4	393	1/4	234	1/4	81	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	508	1/2	390	1/2	230	1/2	78	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	506	3/4	387	3/4	227	3/4	75	3/4		3/4		3/4		3/4		3/4		3/4	
8	505	8	384	8	223	8	72	8		8		8		8		8		8	
1/4	503	1/4	381	1/4	220	1/4	70	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	502	1/2	378	1/2	217	1/2	67	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	500	3/4	374	3/4	213	3/4	64	3/4		3/4		3/4		3/4		3/4		3/4	
9	498	9	371	9	210	9	62	9		9		9		9		9		9	
1/4	496	1/4	368	1/4	207	1/4	59	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	495	1/2	365	1/2	203	1/2	56	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	493	3/4	362	3/4	200	3/4	54	3/4		3/4		3/4		3/4		3/4		3/4	
10	491	10	358	10	196	10	51	10		10		10		10		10		10	
1/4	489	1/4	355	1/4	193	1/4	49	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	487	1/2	352	1/2	190	1/2	47	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	484	3/4	349	3/4	186	3/4	44	3/4		3/4		3/4		3/4		3/4		3/4	
11	482	11	345	11	183	11	42	11		11		11		11		11		11	
1/4	480	1/4	342	1/4	180	1/4	39	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	478	1/2	339	1/2	176	1/2	37	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	476	3/4	335	3/4	173	3/4	35	3/4		3/4		3/4		3/4		3/4		3/4	

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