



# BARGE "HFL 443"

## 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	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8
2 PORT	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	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 = 5'-00"  
 DIFF. = 4'-00" (DOWN BY STERN)

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

LENGTH BETWEEN DRAFT MARKS: 238'-06"

November 12, 2015

PRECISION MEASUREMENT  
 & ANALYSIS, INC.

P.O. Box 2092  
 Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 443"

## 3 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	188,956	0	178,636	0	168,318	0	157,964	0	147,362	0	132,752	0	117,774	0	102,788
1/4		1/4		1/4	188,741	1/4	178,421	1/4	168,102	1/4	157,748	1/4	147,099	1/4	132,440	1/4	117,461	1/4	102,475
1/2		1/2		1/2	188,526	1/2	178,207	1/2	167,887	1/2	157,533	1/2	146,836	1/2	132,128	1/2	117,149	1/2	102,163
3/4		3/4		3/4	188,311	3/4	177,992	3/4	167,672	3/4	157,317	3/4	146,573	3/4	131,816	3/4	116,837	3/4	101,850
1		1		1	188,095	1	177,777	1	167,456	1	157,101	1	146,294	1	131,504	1	116,525	1	101,538
1/4		1/4		1/4	187,880	1/4	177,562	1/4	167,240	1/4	156,885	1/4	146,016	1/4	131,192	1/4	116,213	1/4	101,225
1/2		1/2		1/2	187,665	1/2	177,347	1/2	167,025	1/2	156,670	1/2	145,737	1/2	130,880	1/2	115,901	1/2	100,913
3/4		3/4		3/4	187,450	3/4	177,132	3/4	166,809	3/4	156,454	3/4	145,458	3/4	130,568	3/4	115,589	3/4	100,600
2		2		2	187,235	2	176,917	2	166,593	2	156,238	2	145,163	2	130,256	2	115,277	2	100,288
1/4		1/4		1/4	187,020	1/4	176,702	1/4	166,377	1/4	156,023	1/4	144,868	1/4	129,944	1/4	114,965	1/4	99,975
1/2		1/2		1/2	186,805	1/2	176,487	1/2	166,162	1/2	155,807	1/2	144,573	1/2	129,632	1/2	114,653	1/2	99,663
3/4		3/4		3/4	186,590	3/4	176,272	3/4	165,946	3/4	155,591	3/4	144,278	3/4	129,320	3/4	114,341	3/4	99,351
3		3		3	186,375	3	176,057	3	165,730	3	155,375	3	143,971	3	129,008	3	114,029	3	99,038
1/4		1/4		1/4	186,160	1/4	175,842	1/4	165,514	1/4	155,160	1/4	143,663	1/4	128,695	1/4	113,717	1/4	98,726
1/2		1/2		1/2	185,945	1/2	175,627	1/2	165,299	1/2	154,944	1/2	143,356	1/2	128,383	1/2	113,405	1/2	98,413
3/4		3/4		3/4	185,730	3/4	175,412	3/4	165,083	3/4	154,728	3/4	143,049	3/4	128,071	3/4	113,093	3/4	98,101
4		4		4	185,515	4	175,197	4	164,867	4	154,512	4	142,737	4	127,759	4	112,781	4	97,788
1/4		1/4		1/4	185,300	1/4	174,982	1/4	164,652	1/4	154,297	1/4	142,425	1/4	127,447	1/4	112,469	1/4	97,476
1/2		1/2		1/2	185,085	1/2	174,767	1/2	164,436	1/2	154,081	1/2	142,113	1/2	127,135	1/2	112,157	1/2	97,163
3/4		3/4		3/4	184,870	3/4	174,552	3/4	164,220	3/4	153,865	3/4	141,802	3/4	126,823	3/4	111,844	3/4	96,851
5		5		5	184,655	5	174,337	5	164,004	5	153,650	5	141,490	5	126,511	5	111,532	5	96,538
1/4		1/4		1/4	184,441	1/4	174,122	1/4	163,789	1/4	153,434	1/4	141,178	1/4	126,199	1/4	111,220	1/4	96,226
1/2		1/2		1/2	184,226	1/2	173,907	1/2	163,573	1/2	153,218	1/2	140,866	1/2	125,887	1/2	110,908	1/2	95,913
3/4		3/4		3/4	184,011	3/4	173,692	3/4	163,357	3/4	153,002	3/4	140,554	3/4	125,575	3/4	110,596	3/4	95,601
6		6		6	183,796	6	173,477	6	163,141	6	152,787	6	140,242	6	125,263	6	110,284	6	95,288
1/4		1/4		1/4	183,581	1/4	173,262	1/4	162,926	1/4	152,571	1/4	139,929	1/4	124,951	1/4	109,972	1/4	94,976
1/2		1/2		1/2	183,366	1/2	173,047	1/2	162,710	1/2	152,355	1/2	139,617	1/2	124,639	1/2	109,660	1/2	94,663
3/4		3/4		3/4	192,778	3/4	183,151	3/4	172,832	3/4	162,494	3/4	152,139	3/4	139,305	3/4	124,327	3/4	109,348
7		7		7	192,655	7	182,936	7	172,617	7	162,279	7	151,924	7	138,993	7	124,015	7	109,036
1/4		1/4		1/4	192,531	1/4	182,721	1/4	172,402	1/4	162,063	1/4	151,708	1/4	138,681	1/4	123,703	1/4	108,723
1/2		1/2		1/2	192,408	1/2	182,506	1/2	172,187	1/2	161,847	1/2	151,492	1/2	138,369	1/2	123,391	1/2	108,411
3/4		3/4		3/4	192,284	3/4	182,291	3/4	171,973	3/4	161,631	3/4	151,277	3/4	138,057	3/4	123,078	3/4	108,099
8		8		8	192,125	8	182,076	8	171,758	8	161,416	8	151,061	8	137,745	8	122,766	8	107,787
1/4		1/4		1/4	191,965	1/4	181,861	1/4	171,543	1/4	161,200	1/4	150,845	1/4	137,433	1/4	122,454	1/4	107,474
1/2		1/2		1/2	191,806	1/2	181,646	1/2	171,328	1/2	160,984	1/2	150,629	1/2	137,121	1/2	122,142	1/2	107,162
3/4		3/4		3/4	191,646	3/4	181,431	3/4	171,113	3/4	160,768	3/4	150,414	3/4	136,809	3/4	121,830	3/4	106,850
9		9		9	191,453	9	181,216	9	170,898	9	160,553	9	150,194	9	136,497	9	121,518	9	106,537
1/4		1/4		1/4	191,261	1/4	181,001	1/4	170,683	1/4	160,337	1/4	149,975	1/4	136,185	1/4	121,206	1/4	106,225
1/2		1/2		1/2	191,068	1/2	180,786	1/2	170,468	1/2	160,121	1/2	149,756	1/2	135,873	1/2	120,894	1/2	105,912
3/4		3/4		3/4	190,875	3/4	180,571	3/4	170,253	3/4	159,906	3/4	149,537	3/4	135,561	3/4	120,582	3/4	105,600
10		10		10	190,664	10	180,356	10	170,038	10	159,690	10	149,306	10	135,249	10	120,270	10	105,288
1/4		1/4		1/4	190,452	1/4	180,141	1/4	169,823	1/4	159,474	1/4	149,075	1/4	134,937	1/4	119,958	1/4	104,975
1/2		1/2		1/2	190,241	1/2	179,926	1/2	169,608	1/2	159,258	1/2	148,844	1/2	134,625	1/2	119,646	1/2	104,663
3/4		3/4		3/4	190,030	3/4	179,711	3/4	169,393	3/4	159,043	3/4	148,613	3/4	134,312	3/4	119,334	3/4	104,350
11		11		11	189,815	11	179,496	11	169,178	11	158,827	11	148,366	11	134,000	11	119,022	11	104,038
1/4		1/4		1/4	189,600	1/4	179,281	1/4	168,963	1/4	158,611	1/4	148,119	1/4	133,688	1/4	118,710	1/4	103,725
1/2		1/2		1/2	189,385	1/2	179,066	1/2	168,748	1/2	158,395	1/2	147,872	1/2	133,376	1/2	118,398	1/2	103,413
3/4		3/4		3/4	189,171	3/4	178,851	3/4	168,533	3/4	158,180	3/4	147,625	3/4	133,064	3/4	118,086	3/4	103,100

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  
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## 3 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	87,789	0	72,790	0	57,792	0	42,799	0	27,813	0	12,814	0		0		0		0	
1/4	87,477	1/4	72,478	1/4	57,479	1/4	42,487	1/4	27,500	1/4	12,502	1/4		1/4		1/4		1/4	
1/2	87,164	1/2	72,165	1/2	57,167	1/2	42,175	1/2	27,188	1/2	12,189	1/2		1/2		1/2		1/2	
3/4	86,852	3/4	71,853	3/4	56,854	3/4	41,863	3/4	26,875	3/4	11,877	3/4		3/4		3/4		3/4	
1	86,539	1	71,541	1	56,542	1	41,551	1	26,563	1	11,565	1		1		1		1	
1/4	86,227	1/4	71,228	1/4	56,229	1/4	41,239	1/4	26,250	1/4	11,252	1/4		1/4		1/4		1/4	
1/2	85,914	1/2	70,916	1/2	55,917	1/2	40,927	1/2	25,938	1/2	10,940	1/2		1/2		1/2		1/2	
3/4	85,602	3/4	70,603	3/4	55,604	3/4	40,615	3/4	25,625	3/4	10,627	3/4		3/4		3/4		3/4	
2	85,289	2	70,291	2	55,292	2	40,303	2	25,313	2	10,315	2		2		2		2	
1/4	84,977	1/4	69,978	1/4	54,979	1/4	39,991	1/4	25,000	1/4	10,002	1/4		1/4		1/4		1/4	
1/2	84,664	1/2	69,666	1/2	54,667	1/2	39,679	1/2	24,688	1/2	9,690	1/2		1/2		1/2		1/2	
3/4	84,352	3/4	69,353	3/4	54,355	3/4	39,367	3/4	24,376	3/4	9,377	3/4		3/4		3/4		3/4	
3	84,039	3	69,041	3	54,042	3	39,055	3	24,063	3	9,065	3		3		3		3	
1/4	83,727	1/4	68,728	1/4	53,730	1/4	38,743	1/4	23,751	1/4	8,752	1/4		1/4		1/4		1/4	
1/2	83,414	1/2	68,416	1/2	53,417	1/2	38,431	1/2	23,438	1/2	8,440	1/2		1/2		1/2		1/2	
3/4	83,102	3/4	68,103	3/4	53,105	3/4	38,119	3/4	23,126	3/4	8,127	3/4		3/4		3/4		3/4	
4	82,790	4	67,791	4	52,792	4	37,807	4	22,813	4	7,815	4		4		4		4	
1/4	82,477	1/4	67,478	1/4	52,480	1/4	37,495	1/4	22,501	1/4	7,503	1/4		1/4		1/4		1/4	
1/2	82,165	1/2	67,166	1/2	52,167	1/2	37,183	1/2	22,188	1/2	7,190	1/2		1/2		1/2		1/2	
3/4	81,852	3/4	66,853	3/4	51,855	3/4	36,871	3/4	21,876	3/4	6,878	3/4		3/4		3/4		3/4	
5	81,540	5	66,541	5	51,542	5	36,559	5	21,563	5	6,565	5		5		5		5	
1/4	81,227	1/4	66,228	1/4	51,230	1/4	36,247	1/4	21,251	1/4	6,253	1/4		1/4		1/4		1/4	
1/2	80,915	1/2	65,916	1/2	50,917	1/2	35,935	1/2	20,938	1/2	5,940	1/2		1/2		1/2		1/2	
3/4	80,602	3/4	65,604	3/4	50,605	3/4	35,623	3/4	20,626	3/4	5,628	3/4		3/4		3/4		3/4	
6	80,290	6	65,291	6	50,292	6	35,311	6	20,314	6	5,316	6		6		6		6	
1/4	79,977	1/4	64,979	1/4	49,980	1/4	34,999	1/4	20,001	1/4	5,003	1/4		1/4		1/4		1/4	
1/2	79,665	1/2	64,666	1/2	49,667	1/2	34,687	1/2	19,689	1/2	4,691	1/2		1/2		1/2		1/2	
3/4	79,352	3/4	64,354	3/4	49,355	3/4	34,374	3/4	19,376	3/4	4,379	3/4		3/4		3/4		3/4	
7	79,040	7	64,041	7	49,043	7	34,062	7	19,064	7	4,068	7		7		7		7	
1/4	78,727	1/4	63,729	1/4	48,730	1/4	33,749	1/4	18,751	1/4	3,756	1/4		1/4		1/4		1/4	
1/2	78,415	1/2	63,416	1/2	48,418	1/2	33,437	1/2	18,439	1/2	3,445	1/2		1/2		1/2		1/2	
3/4	78,102	3/4	63,104	3/4	48,105	3/4	33,124	3/4	18,126	3/4	3,133	3/4		3/4		3/4		3/4	
8	77,790	8	62,791	8	47,793	8	32,812	8	17,814	8	2,841	8		8		8		8	
1/4	77,477	1/4	62,479	1/4	47,480	1/4	32,500	1/4	17,501	1/4	2,549	1/4		1/4		1/4		1/4	
1/2	77,165	1/2	62,166	1/2	47,168	1/2	32,187	1/2	17,189	1/2	2,257	1/2		1/2		1/2		1/2	
3/4	76,853	3/4	61,854	3/4	46,856	3/4	31,875	3/4	16,876	3/4	1,964	3/4		3/4		3/4		3/4	
9	76,540	9	61,541	9	46,544	9	31,562	9	16,564	9	1,730	9		9		9		9	
1/4	76,228	1/4	61,229	1/4	46,231	1/4	31,250	1/4	16,251	1/4	1,496	1/4		1/4		1/4		1/4	
1/2	75,915	1/2	60,916	1/2	45,919	1/2	30,937	1/2	15,939	1/2	1,262	1/2		1/2		1/2		1/2	
3/4	75,603	3/4	60,604	3/4	45,607	3/4	30,625	3/4	15,627	3/4	1,027	3/4		3/4		3/4		3/4	
10	75,290	10	60,292	10	45,295	10	30,312	10	15,314	10		10		10		10		10	
1/4	74,978	1/4	59,979	1/4	44,983	1/4	30,000	1/4	15,002	1/4		1/4		1/4		1/4		1/4	
1/2	74,665	1/2	59,667	1/2	44,671	1/2	29,687	1/2	14,689	1/2		1/2		1/2		1/2		1/2	
3/4	74,353	3/4	59,354	3/4	44,359	3/4	29,375	3/4	14,377	3/4		3/4		3/4		3/4		3/4	
11	74,040	11	59,042	11	44,047	11	29,062	11	14,064	11		11		11		11		11	
1/4	73,728	1/4	58,729	1/4	43,735	1/4	28,750	1/4	13,752	1/4		1/4		1/4		1/4		1/4	
1/2	73,415	1/2	58,417	1/2	43,423	1/2	28,438	1/2	13,439	1/2		1/2		1/2		1/2		1/2	
3/4	73,103	3/4	58,104	3/4	43,111	3/4	28,125	3/4	13,127	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/12/2015 SW  
CALCULATED: 11/12/2015 CL  
PRINTED: 11/13/2015 JS

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 443"

## 3 PORT 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	187,850	0	177,535	0	167,220	0	156,871	0	146,274	0	131,702	0	116,762	0	101,815
1/4		1/4		1/4	187,635	1/4	177,320	1/4	167,005	1/4	156,655	1/4	146,012	1/4	131,391	1/4	116,451	1/4	101,503
1/2		1/2		1/2	187,420	1/2	177,105	1/2	166,790	1/2	156,439	1/2	145,749	1/2	131,079	1/2	116,139	1/2	101,191
3/4		3/4		3/4	187,205	3/4	176,890	3/4	166,575	3/4	156,224	3/4	145,487	3/4	130,768	3/4	115,828	3/4	100,880
1		1		1	186,990	1	176,675	1	166,359	1	156,008	1	145,209	1	130,457	1	115,517	1	100,568
1/4		1/4		1/4	186,775	1/4	176,461	1/4	166,143	1/4	155,793	1/4	144,931	1/4	130,146	1/4	115,206	1/4	100,256
1/2		1/2		1/2	186,560	1/2	176,246	1/2	165,928	1/2	155,577	1/2	144,653	1/2	129,834	1/2	114,894	1/2	99,945
3/4		3/4		3/4	186,345	3/4	176,031	3/4	165,712	3/4	155,361	3/4	144,374	3/4	129,523	3/4	114,583	3/4	99,633
2		2		2	186,130	2	175,816	2	165,496	2	155,146	2	144,080	2	129,212	2	114,272	2	99,321
1/4		1/4		1/4	185,915	1/4	175,601	1/4	165,281	1/4	154,930	1/4	143,786	1/4	128,901	1/4	113,961	1/4	99,010
1/2		1/2		1/2	185,701	1/2	175,386	1/2	165,065	1/2	154,714	1/2	143,492	1/2	128,589	1/2	113,649	1/2	98,698
3/4		3/4		3/4	185,486	3/4	175,171	3/4	164,849	3/4	154,499	3/4	143,198	3/4	128,278	3/4	113,338	3/4	98,386
3		3		3	185,271	3	174,956	3	164,634	3	154,283	3	142,891	3	127,967	3	113,027	3	98,075
1/4		1/4		1/4	185,056	1/4	174,742	1/4	164,418	1/4	154,067	1/4	142,585	1/4	127,656	1/4	112,716	1/4	97,763
1/2		1/2		1/2	184,841	1/2	174,527	1/2	164,203	1/2	153,852	1/2	142,278	1/2	127,344	1/2	112,404	1/2	97,452
3/4		3/4		3/4	184,626	3/4	174,312	3/4	163,987	3/4	153,636	3/4	141,972	3/4	127,033	3/4	112,093	3/4	97,140
4		4		4	184,411	4	174,097	4	163,771	4	153,421	4	141,661	4	126,722	4	111,782	4	96,829
1/4		1/4		1/4	184,196	1/4	173,882	1/4	163,556	1/4	153,205	1/4	141,350	1/4	126,411	1/4	111,471	1/4	96,517
1/2		1/2		1/2	183,981	1/2	173,667	1/2	163,340	1/2	152,989	1/2	141,039	1/2	126,099	1/2	111,159	1/2	96,206
3/4		3/4		3/4	183,767	3/4	173,452	3/4	163,124	3/4	152,774	3/4	140,728	3/4	125,788	3/4	110,848	3/4	95,895
5		5		5	183,552	5	173,237	5	162,909	5	152,558	5	140,417	5	125,477	5	110,537	5	95,583
1/4		1/4		1/4	183,337	1/4	173,023	1/4	162,693	1/4	152,342	1/4	140,105	1/4	125,166	1/4	110,226	1/4	95,272
1/2		1/2		1/2	183,122	1/2	172,808	1/2	162,477	1/2	152,127	1/2	139,794	1/2	124,854	1/2	109,914	1/2	94,960
3/4		3/4		3/4	182,907	3/4	172,593	3/4	162,262	3/4	151,911	3/4	139,483	3/4	124,543	3/4	109,603	3/4	94,649
6		6		6	182,692	6	172,378	6	162,046	6	151,695	6	139,172	6	124,232	6	109,292	6	94,338
1/4		1/4		1/4	182,477	1/4	172,163	1/4	161,830	1/4	151,480	1/4	138,861	1/4	123,921	1/4	108,980	1/4	94,026
1/2		1/2		1/2	182,262	1/2	171,948	1/2	161,615	1/2	151,264	1/2	138,549	1/2	123,609	1/2	108,669	1/2	93,715
3/4		3/4		3/4	191,671	3/4	182,048	3/4	171,733	3/4	161,399	3/4	151,048	3/4	138,238	3/4	123,298	3/4	93,403
7		7		7	191,548	7	181,833	7	171,518	7	161,184	7	150,833	7	137,927	7	122,987	7	93,092
1/4		1/4		1/4	191,424	1/4	181,618	1/4	171,303	1/4	160,968	1/4	150,617	1/4	137,616	1/4	122,676	1/4	92,780
1/2		1/2		1/2	191,301	1/2	181,403	1/2	171,089	1/2	160,752	1/2	150,402	1/2	137,304	1/2	122,364	1/2	92,469
3/4		3/4		3/4	191,177	3/4	181,188	3/4	170,874	3/4	160,537	3/4	150,186	3/4	136,993	3/4	122,053	3/4	92,158
8		8		8	191,018	8	180,973	8	170,659	8	160,321	8	149,970	8	136,682	8	121,742	8	91,846
1/4		1/4		1/4	190,859	1/4	180,758	1/4	170,444	1/4	160,105	1/4	149,755	1/4	136,371	1/4	121,431	1/4	91,535
1/2		1/2		1/2	190,699	1/2	180,543	1/2	170,229	1/2	159,890	1/2	149,539	1/2	136,059	1/2	121,119	1/2	91,223
3/4		3/4		3/4	190,540	3/4	180,328	3/4	170,014	3/4	159,674	3/4	149,323	3/4	135,748	3/4	120,808	3/4	90,912
9		9		9	190,347	9	180,114	9	169,799	9	159,458	9	149,104	9	135,437	9	120,497	9	90,601
1/4		1/4		1/4	190,154	1/4	179,899	1/4	169,584	1/4	159,243	1/4	148,885	1/4	135,126	1/4	120,186	1/4	90,289
1/2		1/2		1/2	189,961	1/2	179,684	1/2	169,370	1/2	159,027	1/2	148,666	1/2	134,814	1/2	119,874	1/2	89,978
3/4		3/4		3/4	189,769	3/4	179,469	3/4	169,155	3/4	158,812	3/4	148,447	3/4	134,503	3/4	119,563	3/4	89,666
10		10		10	189,557	10	179,254	10	168,940	10	158,596	10	148,216	10	134,192	10	119,252	10	89,355
1/4		1/4		1/4	189,346	1/4	179,039	1/4	168,725	1/4	158,380	1/4	147,985	1/4	133,881	1/4	118,941	1/4	89,044
1/2		1/2		1/2	189,135	1/2	178,824	1/2	168,510	1/2	158,165	1/2	147,755	1/2	133,569	1/2	118,629	1/2	88,732
3/4		3/4		3/4	188,924	3/4	178,609	3/4	168,295	3/4	157,949	3/4	147,524	3/4	133,258	3/4	118,318	3/4	88,421
11		11		11	188,709	11	178,395	11	168,080	11	157,733	11	147,277	11	132,947	11	118,007	11	88,109
1/4		1/4		1/4	188,494	1/4	178,180	1/4	167,865	1/4	157,518	1/4	147,030	1/4	132,636	1/4	117,696	1/4	87,798
1/2		1/2		1/2	188,280	1/2	177,965	1/2	167,650	1/2	157,302	1/2	146,784	1/2	132,324	1/2	117,384	1/2	87,486
3/4		3/4		3/4	188,065	3/4	177,750	3/4	167,436	3/4	157,086	3/4	146,537	3/4	132,013	3/4	117,073	3/4	87,174

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.

P.O. Box 2092

Pearland, Texas 77588

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# BARGE "HFL 443"

## 3 PORT 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	86,863	0	71,937	0	57,082	0	42,573	0	27,766	0	12,801	0		0		0		0	
1/4	86,551	1/4	71,627	1/4	56,779	1/4	42,268	1/4	27,454	1/4	12,489	1/4		1/4		1/4		1/4	
1/2	86,239	1/2	71,317	1/2	56,475	1/2	41,964	1/2	27,143	1/2	12,177	1/2		1/2		1/2		1/2	
3/4	85,928	3/4	71,008	3/4	56,172	3/4	41,660	3/4	26,831	3/4	11,865	3/4		3/4		3/4		3/4	
1	85,616	1	70,698	1	55,870	1	41,355	1	26,519	1	11,553	1		1		1		1	
1/4	85,304	1/4	70,388	1/4	55,568	1/4	41,051	1/4	26,208	1/4	11,241	1/4		1/4		1/4		1/4	
1/2	84,992	1/2	70,078	1/2	55,266	1/2	40,746	1/2	25,896	1/2	10,929	1/2		1/2		1/2		1/2	
3/4	84,681	3/4	69,769	3/4	54,964	3/4	40,442	3/4	25,584	3/4	10,617	3/4		3/4		3/4		3/4	
2	84,369	2	69,459	2	54,662	2	40,137	2	25,272	2	10,305	2		2		2		2	
1/4	84,057	1/4	69,149	1/4	54,360	1/4	39,833	1/4	24,961	1/4	9,993	1/4		1/4		1/4		1/4	
1/2	83,745	1/2	68,839	1/2	54,058	1/2	39,528	1/2	24,649	1/2	9,680	1/2		1/2		1/2		1/2	
3/4	83,434	3/4	68,530	3/4	53,756	3/4	39,224	3/4	24,337	3/4	9,368	3/4		3/4		3/4		3/4	
3	83,122	3	68,220	3	53,454	3	38,919	3	24,025	3	9,056	3		3		3		3	
1/4	82,810	1/4	67,910	1/4	53,152	1/4	38,615	1/4	23,713	1/4	8,744	1/4		1/4		1/4		1/4	
1/2	82,499	1/2	67,600	1/2	52,850	1/2	38,310	1/2	23,402	1/2	8,432	1/2		1/2		1/2		1/2	
3/4	82,187	3/4	67,291	3/4	52,549	3/4	38,006	3/4	23,090	3/4	8,119	3/4		3/4		3/4		3/4	
4	81,875	4	66,981	4	52,247	4	37,701	4	22,778	4	7,807	4		4		4		4	
1/4	81,563	1/4	66,671	1/4	51,945	1/4	37,397	1/4	22,466	1/4	7,495	1/4		1/4		1/4		1/4	
1/2	81,252	1/2	66,361	1/2	51,643	1/2	37,092	1/2	22,155	1/2	7,183	1/2		1/2		1/2		1/2	
3/4	80,940	3/4	66,051	3/4	51,341	3/4	36,788	3/4	21,843	3/4	6,871	3/4		3/4		3/4		3/4	
5	80,628	5	65,742	5	51,039	5	36,480	5	21,531	5	6,559	5		5		5		5	
1/4	80,316	1/4	65,432	1/4	50,737	1/4	36,173	1/4	21,219	1/4	6,247	1/4		1/4		1/4		1/4	
1/2	80,005	1/2	65,122	1/2	50,435	1/2	35,865	1/2	20,907	1/2	5,935	1/2		1/2		1/2		1/2	
3/4	79,693	3/4	64,812	3/4	50,133	3/4	35,557	3/4	20,596	3/4	5,624	3/4		3/4		3/4		3/4	
6	79,381	6	64,503	6	49,831	6	35,246	6	20,284	6	5,312	6		6		6		6	
1/4	79,070	1/4	64,193	1/4	49,529	1/4	34,935	1/4	19,972	1/4	5,000	1/4		1/4		1/4		1/4	
1/2	78,758	1/2	63,883	1/2	49,227	1/2	34,624	1/2	19,660	1/2	4,688	1/2		1/2		1/2		1/2	
3/4	78,446	3/4	63,573	3/4	48,925	3/4	34,312	3/4	19,348	3/4	4,376	3/4		3/4		3/4		3/4	
7	78,135	7	63,263	7	48,623	7	34,001	7	19,037	7	4,064	7		7		7		7	
1/4	77,825	1/4	62,952	1/4	48,321	1/4	33,689	1/4	18,725	1/4	3,753	1/4		1/4		1/4		1/4	
1/2	77,514	1/2	62,642	1/2	48,019	1/2	33,377	1/2	18,413	1/2	3,442	1/2		1/2		1/2		1/2	
3/4	77,203	3/4	62,331	3/4	47,717	3/4	33,065	3/4	18,101	3/4	3,131	3/4		3/4		3/4		3/4	
8	76,893	8	62,020	8	47,416	8	32,753	8	17,789	8	2,839	8		8		8		8	
1/4	76,584	1/4	61,708	1/4	47,114	1/4	32,442	1/4	17,478	1/4	2,547	1/4		1/4		1/4		1/4	
1/2	76,274	1/2	61,397	1/2	46,813	1/2	32,130	1/2	17,166	1/2	2,255	1/2		1/2		1/2		1/2	
3/4	75,964	3/4	61,085	3/4	46,511	3/4	31,818	3/4	16,854	3/4	1,963	3/4		3/4		3/4		3/4	
9	75,654	9	60,774	9	46,210	9	31,506	9	16,542	9	1,728	9		9		9		9	
1/4	75,344	1/4	60,462	1/4	45,909	1/4	31,194	1/4	16,230	1/4	1,494	1/4		1/4		1/4		1/4	
1/2	75,035	1/2	60,151	1/2	45,608	1/2	30,883	1/2	15,919	1/2	1,260	1/2		1/2		1/2		1/2	
3/4	74,725	3/4	59,840	3/4	45,307	3/4	30,571	3/4	15,607	3/4	1,026	3/4		3/4		3/4		3/4	
10	74,415	10	59,531	10	45,004	10	30,259	10	15,295	10		10		10		10		10	
1/4	74,105	1/4	59,223	1/4	44,701	1/4	29,947	1/4	14,983	1/4		1/4		1/4		1/4		1/4	
1/2	73,796	1/2	58,915	1/2	44,398	1/2	29,636	1/2	14,672	1/2		1/2		1/2		1/2		1/2	
3/4	73,486	3/4	58,606	3/4	44,095	3/4	29,324	3/4	14,360	3/4		3/4		3/4		3/4		3/4	
11	73,176	11	58,301	11	43,791	11	29,012	11	14,048	11		11		11		11		11	
1/4	72,866	1/4	57,996	1/4	43,486	1/4	28,701	1/4	13,736	1/4		1/4		1/4		1/4		1/4	
1/2	72,557	1/2	57,691	1/2	43,182	1/2	28,389	1/2	13,424	1/2		1/2		1/2		1/2		1/2	
3/4	72,247	3/4	57,386	3/4	42,877	3/4	28,078	3/4	13,113	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/12/2015 SW  
CALCULATED: 11/12/2015 CL  
PRINTED: 11/13/2015 JS

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 443"

## 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	208,463	0	193,509	0	178,503	0	163,448	0	148,391	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	163,134	1/4	148,078	1/4	133,021	1/4	117,964	1/4	102,904
1/2		1/2		1/2	207,844	1/2	192,884	1/2	177,877	1/2	162,821	1/2	147,764	1/2	132,707	1/2	117,651	1/2	102,590
3/4		3/4		3/4	207,535	3/4	192,571	3/4	177,564	3/4	162,507	3/4	147,450	3/4	132,394	3/4	117,337	3/4	102,276
1		1		1	207,225	1	192,259	1	177,250	1	162,193	1	147,137	1	132,080	1	117,023	1	101,962
1/4		1/4		1/4	206,915	1/4	191,946	1/4	176,936	1/4	161,880	1/4	146,823	1/4	131,766	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	146,509	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	161,252	3/4	146,196	3/4	131,139	3/4	116,082	3/4	101,021
2		2		2	205,986	2	191,008	2	175,995	2	160,939	2	145,882	2	130,825	2	115,769	2	100,707
1/4		1/4		1/4	205,677	1/4	190,696	1/4	175,682	1/4	160,625	1/4	145,568	1/4	130,512	1/4	115,455	1/4	100,393
1/2		1/2		1/2	205,367	1/2	190,383	1/2	175,368	1/2	160,311	1/2	145,255	1/2	130,198	1/2	115,141	1/2	100,079
3/4		3/4		3/4	205,057	3/4	190,070	3/4	175,054	3/4	159,998	3/4	144,941	3/4	129,884	3/4	114,828	3/4	99,766
3		3		3	204,748	3	189,758	3	174,741	3	159,684	3	144,627	3	129,571	3	114,514	3	99,452
1/4		1/4		1/4	204,438	1/4	189,445	1/4	174,427	1/4	159,370	1/4	144,314	1/4	129,257	1/4	114,200	1/4	99,138
1/2		1/2		1/2	204,129	1/2	189,133	1/2	174,113	1/2	159,057	1/2	144,000	1/2	128,943	1/2	113,887	1/2	98,824
3/4		3/4		3/4	203,819	3/4	188,820	3/4	173,799	3/4	158,743	3/4	143,686	3/4	128,630	3/4	113,573	3/4	98,510
4		4		4	203,508	4	188,507	4	173,486	4	158,429	4	143,372	4	128,316	4	113,259	4	98,196
1/4		1/4		1/4	203,197	1/4	188,195	1/4	173,172	1/4	158,115	1/4	143,059	1/4	128,002	1/4	112,945	1/4	97,883
1/2		1/2		1/2	202,886	1/2	187,882	1/2	172,858	1/2	157,802	1/2	142,745	1/2	127,688	1/2	112,632	1/2	97,569
3/4		3/4		3/4	202,575	3/4	187,569	3/4	172,545	3/4	157,488	3/4	142,431	3/4	127,375	3/4	112,318	3/4	97,255
5		5		5	202,262	5	187,257	5	172,231	5	157,174	5	142,118	5	127,061	5	112,004	5	96,941
1/4		1/4		1/4	201,950	1/4	186,944	1/4	171,917	1/4	156,861	1/4	141,804	1/4	126,747	1/4	111,691	1/4	96,627
1/2		1/2		1/2	201,637	1/2	186,632	1/2	171,604	1/2	156,547	1/2	141,490	1/2	126,434	1/2	111,377	1/2	96,313
3/4		3/4		3/4	201,325	3/4	186,319	3/4	171,290	3/4	156,233	3/4	141,177	3/4	126,120	3/4	111,063	3/4	96,000
6		6		6	201,012	6	186,006	6	170,976	6	155,920	6	140,863	6	125,806	6	110,750	6	95,686
1/4		1/4		1/4	200,699	1/4	185,694	1/4	170,663	1/4	155,606	1/4	140,549	1/4	125,493	1/4	110,436	1/4	95,372
1/2		1/2		1/2	200,387	1/2	185,381	1/2	170,349	1/2	155,292	1/2	140,236	1/2	125,179	1/2	110,122	1/2	95,058
3/4		3/4		3/4	213,991	3/4	200,074	3/4	185,069	3/4	170,035	3/4	154,979	3/4	139,922	3/4	124,865	3/4	109,808
7		7		7	213,812	7	199,762	7	184,756	7	169,722	7	154,665	7	139,608	7	124,552	7	109,495
1/4		1/4		1/4	213,633	1/4	199,449	1/4	184,443	1/4	169,408	1/4	154,351	1/4	139,295	1/4	124,238	1/4	109,181
1/2		1/2		1/2	213,454	1/2	199,136	1/2	184,131	1/2	169,094	1/2	154,038	1/2	138,981	1/2	123,924	1/2	108,867
3/4		3/4		3/4	213,275	3/4	198,824	3/4	183,818	3/4	168,781	3/4	153,724	3/4	138,667	3/4	123,611	3/4	108,553
8		8		8	213,044	8	198,511	8	183,505	8	168,467	8	153,410	8	138,354	8	123,297	8	108,239
1/4		1/4		1/4	212,813	1/4	198,198	1/4	183,193	1/4	168,153	1/4	153,097	1/4	138,040	1/4	122,983	1/4	107,925
1/2		1/2		1/2	212,582	1/2	197,886	1/2	182,880	1/2	167,840	1/2	152,783	1/2	137,726	1/2	122,670	1/2	107,612
3/4		3/4		3/4	212,350	3/4	197,573	3/4	182,568	3/4	167,526	3/4	152,469	3/4	137,413	3/4	122,356	3/4	107,298
9		9		9	212,071	9	197,261	9	182,255	9	167,212	9	152,156	9	137,099	9	122,042	9	106,984
1/4		1/4		1/4	211,791	1/4	196,948	1/4	181,942	1/4	166,899	1/4	151,842	1/4	136,785	1/4	121,729	1/4	106,670
1/2		1/2		1/2	211,511	1/2	196,635	1/2	181,630	1/2	166,585	1/2	151,528	1/2	136,472	1/2	121,415	1/2	106,356
3/4		3/4		3/4	211,232	3/4	196,323	3/4	181,317	3/4	166,271	3/4	151,214	3/4	136,158	3/4	121,101	3/4	106,042
10		10		10	210,926	10	196,010	10	181,005	10	165,957	10	150,901	10	135,844	10	120,787	10	105,728
1/4		1/4		1/4	210,621	1/4	195,698	1/4	180,692	1/4	165,644	1/4	150,587	1/4	135,530	1/4	120,474	1/4	105,415
1/2		1/2		1/2	210,315	1/2	195,385	1/2	180,379	1/2	165,330	1/2	150,273	1/2	135,217	1/2	120,160	1/2	105,101
3/4		3/4		3/4	210,010	3/4	195,072	3/4	180,067	3/4	165,016	3/4	149,960	3/4	134,903	3/4	119,846	3/4	104,787
11		11		11	209,700	11	194,760	11	179,754	11	164,703	11	149,646	11	134,589	11	119,533	11	104,473
1/4		1/4		1/4	209,391	1/4	194,447	1/4	179,441	1/4	164,389	1/4	149,332	1/4	134,276	1/4	119,219	1/4	104,159
1/2		1/2		1/2	209,082	1/2	194,134	1/2	179,129	1/2	164,075	1/2	149,019	1/2	133,962	1/2	118,905	1/2	103,845
3/4		3/4		3/4	208,773	3/4	193,822	3/4	178,816	3/4	163,762	3/4	148,705	3/4	133,648	3/4	118,592	3/4	103,532

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 INNAE 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 443"

## 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	73,089	0	58,025	0	42,984	0	27,933	0	12,870	0		0		0		0	
1/4	87,840	1/4	72,775	1/4	57,711	1/4	42,671	1/4	27,620	1/4	12,556	1/4		1/4		1/4		1/4	
1/2	87,526	1/2	72,462	1/2	57,397	1/2	42,358	1/2	27,306	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	42,045	3/4	26,993	3/4	11,929	3/4		3/4		3/4		3/4	
1	86,898	1	71,834	1	56,770	1	41,733	1	26,679	1	11,615	1		1		1		1	
1/4	86,584	1/4	71,520	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	71,206	1/2	56,142	1/2	41,107	1/2	26,051	1/2	10,987	1/2		1/2		1/2		1/2	
3/4	85,957	3/4	70,892	3/4	55,828	3/4	40,794	3/4	25,738	3/4	10,673	3/4		3/4		3/4		3/4	
2	85,643	2	70,579	2	55,514	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	85,015	1/2	69,951	1/2	54,887	1/2	39,855	1/2	24,796	1/2	9,732	1/2		1/2		1/2		1/2	
3/4	84,701	3/4	69,637	3/4	54,573	3/4	39,542	3/4	24,482	3/4	9,418	3/4		3/4		3/4		3/4	
3	84,387	3	69,323	3	54,259	3	39,229	3	24,168	3	9,104	3		3		3		3	
1/4	84,074	1/4	69,009	1/4	53,945	1/4	38,915	1/4	23,855	1/4	8,790	1/4		1/4		1/4		1/4	
1/2	83,760	1/2	68,696	1/2	53,631	1/2	38,602	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	83,132	4	68,068	4	53,004	4	37,975	4	22,913	4	7,849	4		4		4		4	
1/4	82,818	1/4	67,754	1/4	52,690	1/4	37,661	1/4	22,599	1/4	7,535	1/4		1/4		1/4		1/4	
1/2	82,504	1/2	67,440	1/2	52,376	1/2	37,347	1/2	22,285	1/2	7,221	1/2		1/2		1/2		1/2	
3/4	82,191	3/4	67,126	3/4	52,062	3/4	37,033	3/4	21,971	3/4	6,907	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	51,435	1/4	36,406	1/4	21,344	1/4	6,280	1/4		1/4		1/4		1/4	
1/2	81,249	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	80,935	3/4	65,871	3/4	50,808	3/4	35,778	3/4	20,716	3/4	5,652	3/4		3/4		3/4		3/4	
6	80,621	6	65,557	6	50,495	6	35,464	6	20,402	6	5,338	6		6		6		6	
1/4	80,308	1/4	65,243	1/4	50,182	1/4	35,150	1/4	20,088	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	4,711	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	79,366	7	64,302	7	49,243	7	34,209	7	19,147	7	4,085	7		7		7		7	
1/4	79,052	1/4	63,988	1/4	48,930	1/4	33,895	1/4	18,833	1/4	3,772	1/4		1/4		1/4		1/4	
1/2	78,738	1/2	63,674	1/2	48,617	1/2	33,581	1/2	18,519	1/2	3,459	1/2		1/2		1/2		1/2	
3/4	78,425	3/4	63,360	3/4	48,304	3/4	33,267	3/4	18,205	3/4	3,146	3/4		3/4		3/4		3/4	
8	78,111	8	63,047	8	47,991	8	32,953	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	2,559	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	77,169	3/4	62,105	3/4	47,052	3/4	32,012	3/4	16,950	3/4	1,973	3/4		3/4		3/4		3/4	
9	76,855	9	61,791	9	46,739	9	31,698	9	16,636	9	1,737	9		9		9		9	
1/4	76,542	1/4	61,477	1/4	46,426	1/4	31,384	1/4	16,322	1/4	1,502	1/4		1/4		1/4		1/4	
1/2	76,228	1/2	61,163	1/2	46,113	1/2	31,070	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	45,800	3/4	30,757	3/4	15,695	3/4	1,031	3/4		3/4		3/4		3/4	
10	75,600	10	60,536	10	45,487	10	30,443	10	15,381	10		10		10		10		10	
1/4	75,286	1/4	60,222	1/4	45,175	1/4	30,129	1/4	15,067	1/4		1/4		1/4		1/4		1/4	
1/2	74,972	1/2	59,908	1/2	44,862	1/2	29,815	1/2	14,753	1/2		1/2		1/2		1/2		1/2	
3/4	74,659	3/4	59,594	3/4	44,549	3/4	29,502	3/4	14,439	3/4		3/4		3/4		3/4		3/4	
11	74,345	11	59,280	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	28,874	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	73,403	3/4	58,339	3/4	43,297	3/4	28,247	3/4	13,184	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/12/2015 SW  
CALCULATED: 11/12/2015 CL  
PRINTED: 11/13/2015 JS

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 443"

## 2 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	207,693	0	192,738	0	177,729	0	162,671	0	147,610	0	132,550	0	117,490	0	102,426
1/4		1/4		1/4	207,383	1/4	192,425	1/4	177,416	1/4	162,357	1/4	147,297	1/4	132,236	1/4	117,176	1/4	102,112
1/2		1/2		1/2	207,073	1/2	192,113	1/2	177,102	1/2	162,043	1/2	146,983	1/2	131,923	1/2	116,862	1/2	101,798
3/4		3/4		3/4	206,764	3/4	191,800	3/4	176,789	3/4	161,729	3/4	146,669	3/4	131,609	3/4	116,549	3/4	101,484
1		1		1	206,454	1	191,487	1	176,476	1	161,416	1	146,355	1	131,295	1	116,235	1	101,170
1/4		1/4		1/4	206,144	1/4	191,175	1/4	176,162	1/4	161,102	1/4	146,042	1/4	130,981	1/4	115,921	1/4	100,856
1/2		1/2		1/2	205,835	1/2	190,862	1/2	175,848	1/2	160,788	1/2	145,728	1/2	130,668	1/2	115,607	1/2	100,543
3/4		3/4		3/4	205,525	3/4	190,549	3/4	175,535	3/4	160,474	3/4	145,414	3/4	130,354	3/4	115,293	3/4	100,229
2		2		2	205,215	2	190,237	2	175,221	2	160,161	2	145,100	2	130,040	2	114,980	2	99,915
1/4		1/4		1/4	204,905	1/4	189,924	1/4	174,907	1/4	159,847	1/4	144,787	1/4	129,726	1/4	114,666	1/4	99,601
1/2		1/2		1/2	204,596	1/2	189,611	1/2	174,593	1/2	159,533	1/2	144,473	1/2	129,413	1/2	114,352	1/2	99,287
3/4		3/4		3/4	204,286	3/4	189,298	3/4	174,280	3/4	159,219	3/4	144,159	3/4	129,099	3/4	114,038	3/4	98,973
3		3		3	203,976	3	188,986	3	173,966	3	158,906	3	143,845	3	128,785	3	113,725	3	98,659
1/4		1/4		1/4	203,667	1/4	188,673	1/4	173,652	1/4	158,592	1/4	143,532	1/4	128,471	1/4	113,411	1/4	98,345
1/2		1/2		1/2	203,357	1/2	188,360	1/2	173,338	1/2	158,278	1/2	143,218	1/2	128,158	1/2	113,097	1/2	98,031
3/4		3/4		3/4	203,048	3/4	188,048	3/4	173,025	3/4	157,964	3/4	142,904	3/4	127,844	3/4	112,783	3/4	97,717
4		4		4	202,738	4	187,735	4	172,711	4	157,651	4	142,590	4	127,530	4	112,470	4	97,403
1/4		1/4		1/4	202,427	1/4	187,422	1/4	172,397	1/4	157,337	1/4	142,277	1/4	127,216	1/4	112,156	1/4	97,089
1/2		1/2		1/2	202,116	1/2	187,110	1/2	172,083	1/2	157,023	1/2	141,963	1/2	126,902	1/2	111,842	1/2	96,776
3/4		3/4		3/4	201,805	3/4	186,797	3/4	171,770	3/4	156,709	3/4	141,649	3/4	126,589	3/4	111,528	3/4	96,462
5		5		5	201,493	5	186,484	5	171,456	5	156,396	5	141,335	5	126,275	5	111,215	5	96,148
1/4		1/4		1/4	201,181	1/4	186,172	1/4	171,142	1/4	156,082	1/4	141,022	1/4	125,961	1/4	110,901	1/4	95,834
1/2		1/2		1/2	200,868	1/2	185,859	1/2	170,828	1/2	155,768	1/2	140,708	1/2	125,647	1/2	110,587	1/2	95,520
3/4		3/4		3/4	200,555	3/4	185,546	3/4	170,515	3/4	155,454	3/4	140,394	3/4	125,334	3/4	110,273	3/4	95,206
6		6		6	200,243	6	185,233	6	170,201	6	155,141	6	140,080	6	125,020	6	109,960	6	94,892
1/4		1/4		1/4	199,930	1/4	184,921	1/4	169,887	1/4	154,827	1/4	139,766	1/4	124,706	1/4	109,646	1/4	94,578
1/2		1/2		1/2	199,617	1/2	184,608	1/2	169,573	1/2	154,513	1/2	139,453	1/2	124,392	1/2	109,332	1/2	94,264
3/4		3/4		3/4	199,305	3/4	184,295	3/4	169,260	3/4	154,199	3/4	139,139	3/4	124,079	3/4	109,018	3/4	93,950
7		7	212,912	7	198,992	7	183,983	7	168,946	7	153,886	7	138,825	7	123,765	7	108,704	7	93,636
1/4		1/4	212,733	1/4	198,679	1/4	183,670	1/4	168,632	1/4	153,572	1/4	138,511	1/4	123,451	1/4	108,390	1/4	93,323
1/2		1/2	212,554	1/2	198,367	1/2	183,357	1/2	168,318	1/2	153,258	1/2	138,198	1/2	123,137	1/2	108,076	1/2	93,009
3/4		3/4	212,375	3/4	198,054	3/4	183,045	3/4	168,005	3/4	152,944	3/4	137,884	3/4	122,824	3/4	107,763	3/4	92,695
8		8	212,196	8	197,741	8	182,732	8	167,691	8	152,630	8	137,570	8	122,510	8	107,449	8	92,381
1/4		1/4	211,965	1/4	197,428	1/4	182,419	1/4	167,377	1/4	152,317	1/4	137,256	1/4	122,196	1/4	107,135	1/4	92,067
1/2		1/2	211,734	1/2	197,116	1/2	182,107	1/2	167,063	1/2	152,003	1/2	136,943	1/2	121,882	1/2	106,821	1/2	91,753
3/4		3/4	211,502	3/4	196,803	3/4	181,794	3/4	166,750	3/4	151,689	3/4	136,629	3/4	121,569	3/4	106,507	3/4	91,439
9		9	211,271	9	196,490	9	181,481	9	166,436	9	151,375	9	136,315	9	121,255	9	106,193	9	91,125
1/4		1/4	210,991	1/4	196,178	1/4	181,168	1/4	166,122	1/4	151,062	1/4	136,001	1/4	120,941	1/4	105,879	1/4	90,811
1/2		1/2	210,711	1/2	195,865	1/2	180,856	1/2	165,808	1/2	150,748	1/2	135,688	1/2	120,627	1/2	105,565	1/2	90,497
3/4		3/4	210,432	3/4	195,552	3/4	180,543	3/4	165,495	3/4	150,434	3/4	135,374	3/4	120,314	3/4	105,251	3/4	90,183
10		10	210,152	10	195,240	10	180,230	10	165,181	10	150,120	10	135,060	10	120,000	10	104,937	10	89,869
1/4		1/4	209,846	1/4	194,927	1/4	179,918	1/4	164,867	1/4	149,807	1/4	134,746	1/4	119,686	1/4	104,623	1/4	89,556
1/2		1/2	209,541	1/2	194,614	1/2	179,605	1/2	164,553	1/2	149,493	1/2	134,433	1/2	119,372	1/2	104,309	1/2	89,242
3/4		3/4	209,235	3/4	194,302	3/4	179,292	3/4	164,239	3/4	149,179	3/4	134,119	3/4	119,059	3/4	103,996	3/4	88,928
11		11	208,930	11	193,989	11	178,980	11	163,926	11	148,865	11	133,805	11	118,745	11	103,682	11	88,614
1/4		1/4	208,620	1/4	193,676	1/4	178,667	1/4	163,612	1/4	148,552	1/4	133,491	1/4	118,431	1/4	103,368	1/4	88,300
1/2		1/2	208,311	1/2	193,363	1/2	178,354	1/2	163,298	1/2	148,238	1/2	133,178	1/2	118,117	1/2	103,054	1/2	87,986
3/4		3/4	208,002	3/4	193,051	3/4	178,042	3/4	162,984	3/4	147,924	3/4	132,864	3/4	117,804	3/4	102,740	3/4	87,672

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 443"

## 2 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	87,358	0	72,290	0	57,528	0	43,048	0	28,254	0	13,187	0		0		0		0	
1/4	87,044	1/4	71,976	1/4	57,226	1/4	42,747	1/4	27,940	1/4	12,873	1/4		1/4		1/4		1/4	
1/2	86,730	1/2	71,662	1/2	56,924	1/2	42,446	1/2	27,626	1/2	12,560	1/2		1/2		1/2		1/2	
3/4	86,416	3/4	71,349	3/4	56,622	3/4	42,144	3/4	27,313	3/4	12,246	3/4		3/4		3/4		3/4	
1	86,102	1	71,035	1	56,320	1	41,843	1	26,999	1	11,932	1		1		1		1	
1/4	85,789	1/4	70,721	1/4	56,018	1/4	41,542	1/4	26,685	1/4	11,618	1/4		1/4		1/4		1/4	
1/2	85,475	1/2	70,407	1/2	55,716	1/2	41,241	1/2	26,371	1/2	11,304	1/2		1/2		1/2		1/2	
3/4	85,161	3/4	70,093	3/4	55,413	3/4	40,939	3/4	26,057	3/4	10,990	3/4		3/4		3/4		3/4	
2	84,847	2	69,779	2	55,111	2	40,638	2	25,743	2	10,676	2		2		2		2	
1/4	84,533	1/4	69,465	1/4	54,809	1/4	40,337	1/4	25,430	1/4	10,362	1/4		1/4		1/4		1/4	
1/2	84,219	1/2	69,151	1/2	54,507	1/2	40,036	1/2	25,116	1/2	10,048	1/2		1/2		1/2		1/2	
3/4	83,905	3/4	68,837	3/4	54,205	3/4	39,735	3/4	24,802	3/4	9,734	3/4		3/4		3/4		3/4	
3	83,591	3	68,523	3	53,903	3	39,433	3	24,488	3	9,420	3		3		3		3	
1/4	83,277	1/4	68,209	1/4	53,600	1/4	39,132	1/4	24,174	1/4	9,107	1/4		1/4		1/4		1/4	
1/2	82,963	1/2	67,895	1/2	53,298	1/2	38,830	1/2	23,860	1/2	8,793	1/2		1/2		1/2		1/2	
3/4	82,649	3/4	67,582	3/4	52,996	3/4	38,528	3/4	23,546	3/4	8,479	3/4		3/4		3/4		3/4	
4	82,336	4	67,268	4	52,694	4	38,227	4	23,232	4	8,165	4		4		4		4	
1/4	82,022	1/4	66,954	1/4	52,392	1/4	37,925	1/4	22,918	1/4	7,851	1/4		1/4		1/4		1/4	
1/2	81,708	1/2	66,640	1/2	52,090	1/2	37,622	1/2	22,604	1/2	7,537	1/2		1/2		1/2		1/2	
3/4	81,394	3/4	66,326	3/4	51,788	3/4	37,320	3/4	22,291	3/4	7,223	3/4		3/4		3/4		3/4	
5	81,080	5	66,012	5	51,485	5	37,018	5	21,977	5	6,909	5		5		5		5	
1/4	80,766	1/4	65,704	1/4	51,184	1/4	36,710	1/4	21,663	1/4	6,595	1/4		1/4		1/4		1/4	
1/2	80,452	1/2	65,396	1/2	50,882	1/2	36,402	1/2	21,349	1/2	6,281	1/2		1/2		1/2		1/2	
3/4	80,138	3/4	65,088	3/4	50,580	3/4	36,094	3/4	21,035	3/4	5,968	3/4		3/4		3/4		3/4	
6	79,824	6	64,780	6	50,278	6	35,786	6	20,721	6	5,654	6		6		6		6	
1/4	79,510	1/4	64,478	1/4	49,977	1/4	35,472	1/4	20,407	1/4	5,340	1/4		1/4		1/4		1/4	
1/2	79,196	1/2	64,176	1/2	49,675	1/2	35,158	1/2	20,093	1/2	5,026	1/2		1/2		1/2		1/2	
3/4	78,882	3/4	63,873	3/4	49,374	3/4	34,844	3/4	19,779	3/4	4,713	3/4		3/4		3/4		3/4	
7	78,569	7	63,571	7	49,073	7	34,531	7	19,465	7	4,399	7		7		7		7	
1/4	78,255	1/4	63,269	1/4	48,771	1/4	34,217	1/4	19,151	1/4	4,086	1/4		1/4		1/4		1/4	
1/2	77,941	1/2	62,967	1/2	48,470	1/2	33,903	1/2	18,838	1/2	3,773	1/2		1/2		1/2		1/2	
3/4	77,627	3/4	62,665	3/4	48,169	3/4	33,589	3/4	18,524	3/4	3,460	3/4		3/4		3/4		3/4	
8	77,313	8	62,363	8	47,867	8	33,275	8	18,210	8	3,147	8		8		8		8	
1/4	76,999	1/4	62,061	1/4	47,566	1/4	32,961	1/4	17,896	1/4	2,854	1/4		1/4		1/4		1/4	
1/2	76,685	1/2	61,758	1/2	47,265	1/2	32,647	1/2	17,582	1/2	2,560	1/2		1/2		1/2		1/2	
3/4	76,371	3/4	61,456	3/4	46,964	3/4	32,333	3/4	17,268	3/4	2,267	3/4		3/4		3/4		3/4	
9	76,057	9	61,154	9	46,662	9	32,019	9	16,954	9	1,973	9		9		9		9	
1/4	75,743	1/4	60,852	1/4	46,361	1/4	31,705	1/4	16,640	1/4	1,738	1/4		1/4		1/4		1/4	
1/2	75,429	1/2	60,550	1/2	46,060	1/2	31,391	1/2	16,326	1/2	1,503	1/2		1/2		1/2		1/2	
3/4	75,116	3/4	60,248	3/4	45,759	3/4	31,078	3/4	16,012	3/4	1,267	3/4		3/4		3/4		3/4	
10	74,802	10	59,946	10	45,458	10	30,764	10	15,699	10	1,032	10		10		10		10	
1/4	74,488	1/4	59,643	1/4	45,156	1/4	30,450	1/4	15,385	1/4		1/4		1/4		1/4		1/4	
1/2	74,174	1/2	59,341	1/2	44,855	1/2	30,136	1/2	15,071	1/2		1/2		1/2		1/2		1/2	
3/4	73,860	3/4	59,039	3/4	44,554	3/4	29,822	3/4	14,757	3/4		3/4		3/4		3/4		3/4	
11	73,546	11	58,737	11	44,253	11	29,508	11	14,443	11		11		11		11		11	
1/4	73,232	1/4	58,435	1/4	43,952	1/4	29,195	1/4	14,129	1/4		1/4		1/4		1/4		1/4	
1/2	72,918	1/2	58,133	1/2	43,650	1/2	28,881	1/2	13,815	1/2		1/2		1/2		1/2		1/2	
3/4	72,604	3/4	57,831	3/4	43,349	3/4	28,567	3/4	13,501	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/12/2015 SW  
CALCULATED: 11/12/2015 CL  
PRINTED: 11/13/2015 JS

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 443"

## 1 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	205,574	0	190,629	0	175,647	0	160,624	0	145,599	0	130,574	0	115,550	0	100,522
1/4		1/4		1/4	205,264	1/4	190,317	1/4	175,335	1/4	160,311	1/4	145,286	1/4	130,261	1/4	115,237	1/4	100,209
1/2		1/2		1/2	204,954	1/2	190,005	1/2	175,022	1/2	159,998	1/2	144,973	1/2	129,948	1/2	114,924	1/2	99,896
3/4		3/4		3/4	204,644	3/4	189,692	3/4	174,710	3/4	159,685	3/4	144,660	3/4	129,635	3/4	114,611	3/4	99,582
1		1		1	204,334	1	189,380	1	174,397	1	159,372	1	144,347	1	129,322	1	114,298	1	99,269
1/4		1/4		1/4	204,024	1/4	189,068	1/4	174,084	1/4	159,059	1/4	144,034	1/4	129,009	1/4	113,985	1/4	98,956
1/2		1/2		1/2	203,714	1/2	188,756	1/2	173,771	1/2	158,746	1/2	143,721	1/2	128,696	1/2	113,671	1/2	98,643
3/4		3/4		3/4	203,404	3/4	188,444	3/4	173,458	3/4	158,433	3/4	143,408	3/4	128,383	3/4	113,358	3/4	98,330
2		2		2	203,094	2	188,132	2	173,145	2	158,120	2	143,095	2	128,070	2	113,045	2	98,017
1/4		1/4		1/4	202,784	1/4	187,820	1/4	172,832	1/4	157,807	1/4	142,782	1/4	127,757	1/4	112,732	1/4	97,704
1/2		1/2		1/2	202,474	1/2	187,508	1/2	172,519	1/2	157,494	1/2	142,469	1/2	127,444	1/2	112,419	1/2	97,390
3/4		3/4		3/4	202,164	3/4	187,196	3/4	172,205	3/4	157,181	3/4	142,156	3/4	127,131	3/4	112,106	3/4	97,077
3		3		3	201,854	3	186,884	3	171,892	3	156,868	3	141,843	3	126,818	3	111,793	3	96,764
1/4		1/4		1/4	201,544	1/4	186,571	1/4	171,579	1/4	156,555	1/4	141,530	1/4	126,505	1/4	111,480	1/4	96,451
1/2		1/2		1/2	201,234	1/2	186,259	1/2	171,266	1/2	156,242	1/2	141,217	1/2	126,192	1/2	111,167	1/2	96,138
3/4		3/4		3/4	200,924	3/4	185,947	3/4	170,953	3/4	155,929	3/4	140,904	3/4	125,879	3/4	110,854	3/4	95,825
4		4		4	200,613	4	185,635	4	170,640	4	155,616	4	140,591	4	125,566	4	110,541	4	95,511
1/4		1/4		1/4	200,302	1/4	185,323	1/4	170,327	1/4	155,303	1/4	140,278	1/4	125,253	1/4	110,228	1/4	95,198
1/2		1/2		1/2	199,991	1/2	185,011	1/2	170,014	1/2	154,989	1/2	139,965	1/2	124,940	1/2	109,915	1/2	94,885
3/4		3/4		3/4	199,680	3/4	184,699	3/4	169,701	3/4	154,676	3/4	139,652	3/4	124,627	3/4	109,602	3/4	94,572
5		5		5	199,368	5	184,387	5	169,388	5	154,363	5	139,339	5	124,314	5	109,289	5	94,259
1/4		1/4		1/4	199,056	1/4	184,075	1/4	169,075	1/4	154,050	1/4	139,026	1/4	124,001	1/4	108,976	1/4	93,946
1/2		1/2		1/2	198,744	1/2	183,762	1/2	168,762	1/2	153,737	1/2	138,713	1/2	123,688	1/2	108,663	1/2	93,633
3/4		3/4		3/4	198,431	3/4	183,450	3/4	168,449	3/4	153,424	3/4	138,400	3/4	123,375	3/4	108,350	3/4	93,319
6		6		6	198,119	6	183,138	6	168,136	6	153,111	6	138,087	6	123,062	6	108,037	6	93,006
1/4		1/4		1/4	197,807	1/4	182,826	1/4	167,823	1/4	152,798	1/4	137,773	1/4	122,749	1/4	107,724	1/4	92,693
1/2		1/2		1/2	197,495	1/2	182,514	1/2	167,510	1/2	152,485	1/2	137,460	1/2	122,436	1/2	107,411	1/2	92,380
3/4		3/4	211,113	3/4	197,183	3/4	182,202	3/4	167,197	3/4	152,172	3/4	137,147	3/4	122,123	3/4	107,098	3/4	92,067
7		7	210,933	7	196,871	7	181,890	7	166,884	7	151,859	7	136,834	7	121,810	7	106,785	7	91,754
1/4		1/4	210,754	1/4	196,559	1/4	181,578	1/4	166,571	1/4	151,546	1/4	136,521	1/4	121,497	1/4	106,472	1/4	91,441
1/2		1/2	210,574	1/2	196,247	1/2	181,266	1/2	166,258	1/2	151,233	1/2	136,208	1/2	121,184	1/2	106,159	1/2	91,127
3/4		3/4	210,395	3/4	195,935	3/4	180,954	3/4	165,945	3/4	150,920	3/4	135,895	3/4	120,871	3/4	105,845	3/4	90,814
8		8	210,163	8	195,622	8	180,641	8	165,632	8	150,607	8	135,582	8	120,558	8	105,532	8	90,501
1/4		1/4	209,931	1/4	195,310	1/4	180,329	1/4	165,319	1/4	150,294	1/4	135,269	1/4	120,245	1/4	105,219	1/4	90,188
1/2		1/2	209,699	1/2	194,998	1/2	180,017	1/2	165,006	1/2	149,981	1/2	134,956	1/2	119,932	1/2	104,906	1/2	89,875
3/4		3/4	209,467	3/4	194,686	3/4	179,705	3/4	164,693	3/4	149,668	3/4	134,643	3/4	119,619	3/4	104,593	3/4	89,562
9		9	209,187	9	194,374	9	179,393	9	164,380	9	149,355	9	134,330	9	119,306	9	104,280	9	89,248
1/4		1/4	208,907	1/4	194,062	1/4	179,081	1/4	164,067	1/4	149,042	1/4	134,017	1/4	118,993	1/4	103,966	1/4	88,935
1/2		1/2	208,627	1/2	193,750	1/2	178,769	1/2	163,754	1/2	148,729	1/2	133,704	1/2	118,680	1/2	103,653	1/2	88,622
3/4		3/4	208,346	3/4	193,438	3/4	178,457	3/4	163,441	3/4	148,416	3/4	133,391	3/4	118,367	3/4	103,340	3/4	88,309
10		10	208,040	10	193,126	10	178,145	10	163,128	10	148,103	10	133,078	10	118,054	10	103,027	10	87,996
1/4		1/4	207,735	1/4	192,814	1/4	177,832	1/4	162,815	1/4	147,790	1/4	132,765	1/4	117,741	1/4	102,714	1/4	87,683
1/2		1/2	207,429	1/2	192,501	1/2	177,520	1/2	162,502	1/2	147,477	1/2	132,452	1/2	117,428	1/2	102,401	1/2	87,370
3/4		3/4	207,123	3/4	192,189	3/4	177,208	3/4	162,189	3/4	147,164	3/4	132,139	3/4	117,115	3/4	102,088	3/4	87,056
11		11	206,813	11	191,877	11	176,896	11	161,876	11	146,851	11	131,826	11	116,802	11	101,774	11	86,743
1/4		1/4	206,504	1/4	191,565	1/4	176,584	1/4	161,563	1/4	146,538	1/4	131,513	1/4	116,489	1/4	101,461	1/4	86,430
1/2		1/2	206,194	1/2	191,253	1/2	176,272	1/2	161,250	1/2	146,225	1/2	131,200	1/2	116,176	1/2	101,148	1/2	86,117
3/4		3/4	205,884	3/4	190,941	3/4	175,960	3/4	160,937	3/4	145,912	3/4	130,887	3/4	115,863	3/4	100,835	3/4	85,804

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 443"

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

CAPACITIES GIVEN IN WHOLE GALLONS

GUAGE 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	85,491	0	70,460	0	55,433	0	40,405	0	25,374	0	10,602	0		0		0		0	
1/4	85,178	1/4	70,146	1/4	55,120	1/4	40,092	1/4	25,061	1/4	10,312	1/4		1/4		1/4		1/4	
1/2	84,864	1/2	69,833	1/2	54,807	1/2	39,779	1/2	24,748	1/2	10,022	1/2		1/2		1/2		1/2	
3/4	84,551	3/4	69,520	3/4	54,495	3/4	39,466	3/4	24,435	3/4	9,732	3/4		3/4		3/4		3/4	
1	84,238	1	69,207	1	54,182	1	39,153	1	24,122	1	9,446	1		1		1		1	
1/4	83,925	1/4	68,894	1/4	53,869	1/4	38,839	1/4	23,809	1/4	9,160	1/4		1/4		1/4		1/4	
1/2	83,612	1/2	68,581	1/2	53,556	1/2	38,526	1/2	23,496	1/2	8,874	1/2		1/2		1/2		1/2	
3/4	83,299	3/4	68,268	3/4	53,243	3/4	38,213	3/4	23,182	3/4	8,587	3/4		3/4		3/4		3/4	
2	82,986	2	67,954	2	52,930	2	37,900	2	22,869	2	8,305	2		2		2		2	
1/4	82,672	1/4	67,641	1/4	52,617	1/4	37,587	1/4	22,556	1/4	8,023	1/4		1/4		1/4		1/4	
1/2	82,359	1/2	67,328	1/2	52,304	1/2	37,274	1/2	22,243	1/2	7,740	1/2		1/2		1/2		1/2	
3/4	82,046	3/4	67,015	3/4	51,991	3/4	36,961	3/4	21,930	3/4	7,458	3/4		3/4		3/4		3/4	
3	81,733	3	66,702	3	51,678	3	36,647	3	21,617	3	7,180	3		3		3		3	
1/4	81,420	1/4	66,389	1/4	51,365	1/4	36,334	1/4	21,304	1/4	6,901	1/4		1/4		1/4		1/4	
1/2	81,107	1/2	66,076	1/2	51,052	1/2	36,021	1/2	20,990	1/2	6,623	1/2		1/2		1/2		1/2	
3/4	80,793	3/4	65,762	3/4	50,739	3/4	35,708	3/4	20,677	3/4	6,344	3/4		3/4		3/4		3/4	
4	80,480	4	65,449	4	50,426	4	35,395	4	20,364	4	6,070	4		4		4		4	
1/4	80,167	1/4	65,136	1/4	50,112	1/4	35,082	1/4	20,051	1/4	5,795	1/4		1/4		1/4		1/4	
1/2	79,854	1/2	64,823	1/2	49,799	1/2	34,769	1/2	19,738	1/2	5,521	1/2		1/2		1/2		1/2	
3/4	79,541	3/4	64,510	3/4	49,486	3/4	34,455	3/4	19,425	3/4	5,246	3/4		3/4		3/4		3/4	
5	79,228	5	64,197	5	49,173	5	34,142	5	19,112	5	4,975	5		5		5		5	
1/4	78,915	1/4	63,883	1/4	48,860	1/4	33,829	1/4	18,798	1/4	4,705	1/4		1/4		1/4		1/4	
1/2	78,601	1/2	63,570	1/2	48,547	1/2	33,516	1/2	18,485	1/2	4,434	1/2		1/2		1/2		1/2	
3/4	78,288	3/4	63,257	3/4	48,234	3/4	33,203	3/4	18,172	3/4	4,163	3/4		3/4		3/4		3/4	
6	77,975	6	62,944	6	47,920	6	32,890	6	17,860	6	3,897	6		6		6		6	
1/4	77,662	1/4	62,631	1/4	47,607	1/4	32,577	1/4	17,548	1/4	3,630	1/4		1/4		1/4		1/4	
1/2	77,349	1/2	62,318	1/2	47,294	1/2	32,263	1/2	17,236	1/2	3,363	1/2		1/2		1/2		1/2	
3/4	77,036	3/4	62,005	3/4	46,981	3/4	31,950	3/4	16,924	3/4	3,097	3/4		3/4		3/4		3/4	
7	76,723	7	61,692	7	46,668	7	31,637	7	16,614	7	2,835	7		7		7		7	
1/4	76,409	1/4	61,379	1/4	46,355	1/4	31,324	1/4	16,305	1/4	2,573	1/4		1/4		1/4		1/4	
1/2	76,096	1/2	61,066	1/2	46,042	1/2	31,011	1/2	15,996	1/2	2,311	1/2		1/2		1/2		1/2	
3/4	75,783	3/4	60,753	3/4	45,728	3/4	30,698	3/4	15,686	3/4	2,048	3/4		3/4		3/4		3/4	
8	75,470	8	60,440	8	45,415	8	30,385	8	15,381	8	1,810	8		8		8		8	
1/4	75,157	1/4	60,127	1/4	45,102	1/4	30,071	1/4	15,076	1/4	1,571	1/4		1/4		1/4		1/4	
1/2	74,844	1/2	59,814	1/2	44,789	1/2	29,758	1/2	14,770	1/2	1,332	1/2		1/2		1/2		1/2	
3/4	74,531	3/4	59,501	3/4	44,476	3/4	29,445	3/4	14,465	3/4	1,093	3/4		3/4		3/4		3/4	
9	74,217	9	59,188	9	44,163	9	29,132	9	14,163	9	916	9		9		9		9	
1/4	73,904	1/4	58,875	1/4	43,850	1/4	28,819	1/4	13,862	1/4	739	1/4		1/4		1/4		1/4	
1/2	73,591	1/2	58,562	1/2	43,536	1/2	28,506	1/2	13,560	1/2	562	1/2		1/2		1/2		1/2	
3/4	73,278	3/4	58,250	3/4	43,223	3/4	28,193	3/4	13,258	3/4	386	3/4		3/4		3/4		3/4	
10	72,965	10	57,937	10	42,910	10	27,880	10	12,961	10		10		10		10		10	
1/4	72,652	1/4	57,624	1/4	42,597	1/4	27,566	1/4	12,663	1/4		1/4		1/4		1/4		1/4	
1/2	72,338	1/2	57,311	1/2	42,284	1/2	27,253	1/2	12,365	1/2		1/2		1/2		1/2		1/2	
3/4	72,025	3/4	56,998	3/4	41,971	3/4	26,940	3/4	12,067	3/4		3/4		3/4		3/4		3/4	
11	71,712	11	56,685	11	41,658	11	26,627	11	11,774	11		11		11		11		11	
1/4	71,399	1/4	56,372	1/4	41,344	1/4	26,314	1/4	11,480	1/4		1/4		1/4		1/4		1/4	
1/2	71,086	1/2	56,059	1/2	41,031	1/2	26,001	1/2	11,186	1/2		1/2		1/2		1/2		1/2	
3/4	70,773	3/4	55,746	3/4	40,718	3/4	25,688	3/4	10,892	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/12/2015 SW  
CALCULATED: 11/12/2015 CL  
PRINTED: 11/13/2015 JS

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 443"

## 1 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	205,790	0	190,847	0	175,866	0	160,843	0	145,818	0	130,793	0	115,768	0	100,740
1/4		1/4		1/4	205,480	1/4	190,535	1/4	175,553	1/4	160,530	1/4	145,505	1/4	130,480	1/4	115,455	1/4	100,427
1/2		1/2		1/2	205,170	1/2	190,223	1/2	175,241	1/2	160,217	1/2	145,192	1/2	130,167	1/2	115,142	1/2	100,114
3/4		3/4		3/4	204,860	3/4	189,911	3/4	174,928	3/4	159,904	3/4	144,879	3/4	129,854	3/4	114,829	3/4	99,801
1		1		1	204,550	1	189,598	1	174,616	1	159,591	1	144,566	1	129,541	1	114,516	1	99,487
1/4		1/4		1/4	204,240	1/4	189,286	1/4	174,302	1/4	159,278	1/4	144,253	1/4	129,228	1/4	114,203	1/4	99,174
1/2		1/2		1/2	203,930	1/2	188,974	1/2	173,989	1/2	158,965	1/2	143,940	1/2	128,915	1/2	113,890	1/2	98,861
3/4		3/4		3/4	203,620	3/4	188,662	3/4	173,676	3/4	158,652	3/4	143,627	3/4	128,602	3/4	113,577	3/4	98,548
2		2		2	203,310	2	188,350	2	173,363	2	158,339	2	143,314	2	128,289	2	113,264	2	98,235
1/4		1/4		1/4	203,000	1/4	188,038	1/4	173,050	1/4	158,025	1/4	143,001	1/4	127,976	1/4	113,951	1/4	97,922
1/2		1/2		1/2	202,690	1/2	187,726	1/2	172,737	1/2	157,712	1/2	142,688	1/2	127,663	1/2	112,638	1/2	97,608
3/4		3/4		3/4	202,380	3/4	187,414	3/4	172,424	3/4	157,399	3/4	142,375	3/4	127,350	3/4	112,325	3/4	97,295
3		3		3	202,070	3	187,102	3	172,111	3	157,086	3	142,062	3	127,037	3	112,012	3	96,982
1/4		1/4		1/4	201,760	1/4	186,789	1/4	171,798	1/4	156,773	1/4	141,749	1/4	126,724	1/4	111,699	1/4	96,669
1/2		1/2		1/2	201,450	1/2	186,477	1/2	171,485	1/2	156,460	1/2	141,435	1/2	126,411	1/2	111,386	1/2	96,356
3/4		3/4		3/4	201,140	3/4	186,165	3/4	171,172	3/4	156,147	3/4	141,122	3/4	126,098	3/4	111,073	3/4	96,043
4		4		4	200,830	4	185,853	4	170,859	4	155,834	4	140,809	4	125,785	4	110,760	4	95,730
1/4		1/4		1/4	200,519	1/4	185,541	1/4	170,546	1/4	155,521	1/4	140,496	1/4	125,472	1/4	110,447	1/4	95,416
1/2		1/2		1/2	200,208	1/2	185,229	1/2	170,233	1/2	155,208	1/2	140,183	1/2	125,158	1/2	110,134	1/2	95,103
3/4		3/4		3/4	199,897	3/4	184,917	3/4	169,920	3/4	154,895	3/4	139,870	3/4	124,845	3/4	109,821	3/4	94,790
5		5		5	199,586	5	184,605	5	169,607	5	154,582	5	139,557	5	124,532	5	109,508	5	94,477
1/4		1/4		1/4	199,274	1/4	184,293	1/4	169,294	1/4	154,269	1/4	139,244	1/4	124,219	1/4	109,195	1/4	94,164
1/2		1/2		1/2	198,962	1/2	183,981	1/2	168,981	1/2	153,956	1/2	138,931	1/2	123,906	1/2	108,881	1/2	93,851
3/4		3/4		3/4	198,649	3/4	183,668	3/4	168,668	3/4	153,643	3/4	138,618	3/4	123,593	3/4	108,568	3/4	93,537
6		6		6	198,337	6	183,356	6	168,355	6	153,330	6	138,305	6	123,280	6	108,255	6	93,224
1/4		1/4		1/4	198,025	1/4	183,044	1/4	168,042	1/4	153,017	1/4	137,992	1/4	122,967	1/4	107,942	1/4	92,911
1/2		1/2		1/2	197,713	1/2	182,732	1/2	167,729	1/2	152,704	1/2	137,679	1/2	122,654	1/2	107,629	1/2	92,598
3/4		3/4		3/4	197,401	3/4	182,420	3/4	167,416	3/4	152,391	3/4	137,366	3/4	122,341	3/4	107,316	3/4	92,285
7		7	211,019	7	197,089	7	182,108	7	167,103	7	152,078	7	137,053	7	122,028	7	107,003	7	91,972
1/4		1/4	210,839	1/4	196,777	1/4	181,796	1/4	166,790	1/4	151,765	1/4	136,740	1/4	121,715	1/4	106,690	1/4	91,659
1/2		1/2	210,660	1/2	196,465	1/2	181,484	1/2	166,477	1/2	151,452	1/2	136,427	1/2	121,402	1/2	106,377	1/2	91,345
3/4		3/4	210,480	3/4	196,153	3/4	181,172	3/4	166,164	3/4	151,139	3/4	136,114	3/4	121,089	3/4	106,064	3/4	91,032
8		8	210,301	8	195,841	8	180,859	8	165,851	8	150,826	8	135,801	8	120,776	8	105,750	8	90,719
1/4		1/4	210,069	1/4	195,528	1/4	180,547	1/4	165,538	1/4	150,513	1/4	135,488	1/4	120,463	1/4	105,437	1/4	90,406
1/2		1/2	209,837	1/2	195,216	1/2	180,235	1/2	165,225	1/2	150,200	1/2	135,175	1/2	120,150	1/2	105,124	1/2	90,093
3/4		3/4	209,605	3/4	194,904	3/4	179,923	3/4	164,912	3/4	149,887	3/4	134,862	3/4	119,837	3/4	104,811	3/4	89,780
9		9	209,373	9	194,592	9	179,611	9	164,599	9	149,574	9	134,549	9	119,524	9	104,498	9	89,466
1/4		1/4	209,093	1/4	194,280	1/4	179,299	1/4	164,286	1/4	149,261	1/4	134,236	1/4	119,211	1/4	104,185	1/4	89,153
1/2		1/2	208,813	1/2	193,968	1/2	178,987	1/2	163,973	1/2	148,948	1/2	133,923	1/2	118,898	1/2	103,872	1/2	88,840
3/4		3/4	208,533	3/4	193,656	3/4	178,675	3/4	163,660	3/4	148,635	3/4	133,610	3/4	118,585	3/4	103,558	3/4	88,527
10		10	208,252	10	193,344	10	178,363	10	163,347	10	148,322	10	133,297	10	118,272	10	103,245	10	88,214
1/4		1/4	207,946	1/4	193,032	1/4	178,050	1/4	163,034	1/4	148,009	1/4	132,984	1/4	117,959	1/4	102,932	1/4	87,901
1/2		1/2	207,641	1/2	192,719	1/2	177,738	1/2	162,721	1/2	147,696	1/2	132,671	1/2	117,646	1/2	102,619	1/2	87,588
3/4		3/4	207,335	3/4	192,407	3/4	177,426	3/4	162,408	3/4	147,383	3/4	132,358	3/4	117,333	3/4	102,306	3/4	87,274
11		11	207,029	11	192,095	11	177,114	11	162,095	11	147,070	11	132,045	11	117,020	11	101,993	11	86,961
1/4		1/4	206,719	1/4	191,783	1/4	176,802	1/4	161,782	1/4	146,757	1/4	131,732	1/4	116,707	1/4	101,679	1/4	86,648
1/2		1/2	206,410	1/2	191,471	1/2	176,490	1/2	161,469	1/2	146,444	1/2	131,419	1/2	116,394	1/2	101,366	1/2	86,335
3/4		3/4	206,100	3/4	191,159	3/4	176,178	3/4	161,156	3/4	146,131	3/4	131,106	3/4	116,081	3/4	101,053	3/4	86,022

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 443"

## 1 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	85,709	0	70,677	0	55,707	0	40,719	0	25,688	0	10,892	0		0		0		0	
1/4	85,395	1/4	70,364	1/4	55,397	1/4	40,406	1/4	25,375	1/4	10,602	1/4		1/4		1/4		1/4	
1/2	85,082	1/2	70,051	1/2	55,086	1/2	40,093	1/2	25,062	1/2	10,312	1/2		1/2		1/2		1/2	
3/4	84,769	3/4	69,738	3/4	54,775	3/4	39,780	3/4	24,749	3/4	10,022	3/4		3/4		3/4		3/4	
1	84,456	1	69,425	1	54,464	1	39,467	1	24,436	1	9,732	1		1		1		1	
1/4	84,143	1/4	69,111	1/4	54,154	1/4	39,154	1/4	24,123	1/4	9,446	1/4		1/4		1/4		1/4	
1/2	83,830	1/2	68,798	1/2	53,843	1/2	38,840	1/2	23,809	1/2	9,160	1/2		1/2		1/2		1/2	
3/4	83,517	3/4	68,485	3/4	53,532	3/4	38,527	3/4	23,496	3/4	8,874	3/4		3/4		3/4		3/4	
2	83,203	2	68,172	2	53,221	2	38,214	2	23,183	2	8,588	2		2		2		2	
1/4	82,890	1/4	67,859	1/4	52,910	1/4	37,901	1/4	22,870	1/4	8,305	1/4		1/4		1/4		1/4	
1/2	82,577	1/2	67,546	1/2	52,599	1/2	37,588	1/2	22,557	1/2	8,023	1/2		1/2		1/2		1/2	
3/4	82,264	3/4	67,232	3/4	52,288	3/4	37,275	3/4	22,244	3/4	7,741	3/4		3/4		3/4		3/4	
3	81,951	3	66,919	3	51,977	3	36,962	3	21,931	3	7,459	3		3		3		3	
1/4	81,638	1/4	66,606	1/4	51,666	1/4	36,648	1/4	21,617	1/4	7,180	1/4		1/4		1/4		1/4	
1/2	81,324	1/2	66,293	1/2	51,354	1/2	36,335	1/2	21,304	1/2	6,902	1/2		1/2		1/2		1/2	
3/4	81,011	3/4	65,980	3/4	51,043	3/4	36,022	3/4	20,991	3/4	6,623	3/4		3/4		3/4		3/4	
4	80,698	4	65,667	4	50,731	4	35,709	4	20,678	4	6,345	4		4		4		4	
1/4	80,385	1/4	65,354	1/4	50,420	1/4	35,396	1/4	20,365	1/4	6,070	1/4		1/4		1/4		1/4	
1/2	80,072	1/2	65,041	1/2	50,108	1/2	35,083	1/2	20,052	1/2	5,796	1/2		1/2		1/2		1/2	
3/4	79,759	3/4	64,728	3/4	49,796	3/4	34,770	3/4	19,739	3/4	5,521	3/4		3/4		3/4		3/4	
5	79,446	5	64,415	5	49,484	5	34,456	5	19,425	5	5,246	5		5		5		5	
1/4	79,132	1/4	64,103	1/4	49,172	1/4	34,143	1/4	19,112	1/4	4,976	1/4		1/4		1/4		1/4	
1/2	78,819	1/2	63,791	1/2	48,860	1/2	33,830	1/2	18,799	1/2	4,705	1/2		1/2		1/2		1/2	
3/4	78,506	3/4	63,479	3/4	48,547	3/4	33,517	3/4	18,486	3/4	4,434	3/4		3/4		3/4		3/4	
6	78,193	6	63,167	6	48,235	6	33,204	6	18,173	6	4,164	6		6		6		6	
1/4	77,880	1/4	62,856	1/4	47,922	1/4	32,891	1/4	17,861	1/4	3,897	1/4		1/4		1/4		1/4	
1/2	77,567	1/2	62,545	1/2	47,608	1/2	32,577	1/2	17,548	1/2	3,630	1/2		1/2		1/2		1/2	
3/4	77,253	3/4	62,234	3/4	47,295	3/4	32,264	3/4	17,236	3/4	3,364	3/4		3/4		3/4		3/4	
7	76,940	7	61,923	7	46,982	7	31,951	7	16,924	7	3,097	7		7		7		7	
1/4	76,627	1/4	61,613	1/4	46,669	1/4	31,638	1/4	16,615	1/4	2,835	1/4		1/4		1/4		1/4	
1/2	76,314	1/2	61,302	1/2	46,356	1/2	31,325	1/2	16,306	1/2	2,573	1/2		1/2		1/2		1/2	
3/4	76,001	3/4	60,991	3/4	46,043	3/4	31,012	3/4	15,996	3/4	2,311	3/4		3/4		3/4		3/4	
8	75,688	8	60,680	8	45,730	8	30,699	8	15,687	8	2,049	8		8		8		8	
1/4	75,374	1/4	60,369	1/4	45,416	1/4	30,385	1/4	15,381	1/4	1,810	1/4		1/4		1/4		1/4	
1/2	75,061	1/2	60,058	1/2	45,103	1/2	30,072	1/2	15,076	1/2	1,571	1/2		1/2		1/2		1/2	
3/4	74,748	3/4	59,748	3/4	44,790	3/4	29,759	3/4	14,771	3/4	1,332	3/4		3/4		3/4		3/4	
9	74,435	9	59,437	9	44,477	9	29,446	9	14,465	9	1,094	9		9		9		9	
1/4	74,122	1/4	59,126	1/4	44,164	1/4	29,133	1/4	14,164	1/4	917	1/4		1/4		1/4		1/4	
1/2	73,809	1/2	58,815	1/2	43,851	1/2	28,820	1/2	13,862	1/2	740	1/2		1/2		1/2		1/2	
3/4	73,496	3/4	58,505	3/4	43,538	3/4	28,507	3/4	13,560	3/4	563	3/4		3/4		3/4		3/4	
10	73,182	10	58,194	10	43,224	10	28,193	10	13,259	10	386	10		10		10		10	
1/4	72,869	1/4	57,883	1/4	42,911	1/4	27,880	1/4	12,961	1/4		1/4		1/4		1/4		1/4	
1/2	72,556	1/2	57,572	1/2	42,598	1/2	27,567	1/2	12,663	1/2		1/2		1/2		1/2		1/2	
3/4	72,243	3/4	57,261	3/4	42,285	3/4	27,254	3/4	12,366	3/4		3/4		3/4		3/4		3/4	
11	71,930	11	56,951	11	41,972	11	26,941	11	12,068	11		11		11		11		11	
1/4	71,617	1/4	56,640	1/4	41,659	1/4	26,628	1/4	11,774	1/4		1/4		1/4		1/4		1/4	
1/2	71,303	1/2	56,329	1/2	41,346	1/2	26,315	1/2	11,480	1/2		1/2		1/2		1/2		1/2	
3/4	70,990	3/4	56,018	3/4	41,032	3/4	26,001	3/4	11,186	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 11/12/2015 SW  
CALCULATED: 11/12/2015 CL  
PRINTED: 11/13/2015 JS

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 443"

## 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	4,594	3/4	3,439	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	2,189	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	962	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	3,078	1/2	1,925	1/2	770	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,209	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	1,804	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	577	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	2,693	1/2	385	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,975	3/4	3,824	3/4	2,669	3/4	361	3/4		3/4		3/4		3/4	
9		9		9	4,952	9	3,800	9	2,645	9	337	9		9		9		9	
1/4		1/4		1/4	4,928	1/4	3,776	1/4	2,621	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	2,573	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	192	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 INNAUGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE

STRAPPED: 11/12/2015 SW  
CALCULATED: 11/12/2015 CL  
PRINTED: 11/13/2015 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 443"

## 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	4,594	3/4	3,439	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	2,189	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	962	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	3,078	1/2	1,925	1/2	770	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,209	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	1,804	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	577	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	2,693	1/2	385	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,975	3/4	3,824	3/4	2,669	3/4	361	3/4		3/4		3/4		3/4	
9		9		9	4,952	9	3,800	9	2,645	9	337	9		9		9		9	
1/4		1/4		1/4	4,928	1/4	3,776	1/4	2,621	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	2,573	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	192	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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P.O. Box 2092  
Pearland, Texas 77588  
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# BARGE "HFL 443"

## 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	=====	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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