



# BARGE "HFL 433"

## 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"

October 21, 2015

**PRECISION MEASUREMENT  
& ANALYSIS, INC.**

P.O. Box 2092  
 Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 433"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 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	188,525	0	178,206	0	167,887	0	157,532	0	146,836	0	132,128	0	117,149	0	102,163
1/4		1/4		1/4	188,310	1/4	177,991	1/4	167,672	1/4	157,317	1/4	146,573	1/4	131,816	1/4	116,837	1/4	101,850
1/2		1/2		1/2	188,095	1/2	177,776	1/2	167,456	1/2	157,101	1/2	146,294	1/2	131,504	1/2	116,525	1/2	101,538
3/4		3/4		3/4	187,880	3/4	177,561	3/4	167,240	3/4	156,885	3/4	146,015	3/4	131,192	3/4	116,213	3/4	101,225
1		1		1	187,665	1	177,347	1	167,024	1	156,670	1	145,737	1	130,880	1	115,901	1	100,913
1/4		1/4		1/4	187,450	1/4	177,132	1/4	166,809	1/4	156,454	1/4	145,458	1/4	130,568	1/4	115,589	1/4	100,600
1/2		1/2		1/2	187,235	1/2	176,917	1/2	166,593	1/2	156,238	1/2	145,163	1/2	130,256	1/2	115,277	1/2	100,288
3/4		3/4		3/4	187,020	3/4	176,702	3/4	166,377	3/4	156,022	3/4	144,868	3/4	129,944	3/4	114,965	3/4	99,975
2		2		2	186,805	2	176,487	2	166,161	2	155,807	2	144,573	2	129,631	2	114,653	2	99,663
1/4		1/4		1/4	186,590	1/4	176,272	1/4	165,946	1/4	155,591	1/4	144,278	1/4	129,319	1/4	114,341	1/4	99,350
1/2		1/2		1/2	186,375	1/2	176,057	1/2	165,730	1/2	155,375	1/2	143,970	1/2	129,007	1/2	114,029	1/2	99,038
3/4		3/4		3/4	186,160	3/4	175,842	3/4	165,514	3/4	155,159	3/4	143,663	3/4	128,695	3/4	113,717	3/4	98,725
3		3		3	185,945	3	175,627	3	165,299	3	154,944	3	143,356	3	128,383	3	113,405	3	98,413
1/4		1/4		1/4	185,730	1/4	175,412	1/4	165,083	1/4	154,728	1/4	143,048	1/4	128,071	1/4	113,093	1/4	98,100
1/2		1/2		1/2	185,515	1/2	175,197	1/2	164,867	1/2	154,512	1/2	142,737	1/2	127,759	1/2	112,780	1/2	97,788
3/4		3/4		3/4	185,300	3/4	174,982	3/4	164,651	3/4	154,297	3/4	142,425	3/4	127,447	3/4	112,468	3/4	97,476
4		4		4	185,085	4	174,767	4	164,436	4	154,081	4	142,113	4	127,135	4	112,156	4	97,163
1/4		1/4		1/4	184,870	1/4	174,552	1/4	164,220	1/4	153,865	1/4	141,801	1/4	126,823	1/4	111,844	1/4	96,851
1/2		1/2		1/2	184,655	1/2	174,337	1/2	164,004	1/2	153,649	1/2	141,489	1/2	126,511	1/2	111,532	1/2	96,538
3/4		3/4		3/4	184,440	3/4	174,122	3/4	163,788	3/4	153,434	3/4	141,177	3/4	126,199	3/4	111,220	3/4	96,226
5		5		5	184,225	5	173,907	5	163,573	5	153,218	5	140,865	5	125,887	5	110,908	5	95,913
1/4		1/4		1/4	184,010	1/4	173,692	1/4	163,357	1/4	153,002	1/4	140,553	1/4	125,575	1/4	110,596	1/4	95,601
1/2		1/2		1/2	183,795	1/2	173,477	1/2	163,141	1/2	152,786	1/2	140,241	1/2	125,263	1/2	110,284	1/2	95,288
3/4		3/4		3/4	183,581	3/4	173,262	3/4	162,926	3/4	152,571	3/4	139,929	3/4	124,951	3/4	109,972	3/4	94,976
6		6		6	183,366	6	173,047	6	162,710	6	152,355	6	139,617	6	124,639	6	109,660	6	94,663
1/4		1/4		1/4	192,778	1/4	183,151	1/4	172,832	1/4	162,494	1/4	152,139	1/4	139,305	1/4	124,327	1/4	109,348
1/2		1/2		1/2	192,654	1/2	182,936	1/2	172,617	1/2	162,278	1/2	151,924	1/2	138,993	1/2	124,014	1/2	109,035
3/4		3/4		3/4	192,531	3/4	182,721	3/4	172,402	3/4	162,063	3/4	151,708	3/4	138,681	3/4	123,702	3/4	108,723
7		7		7	192,407	7	182,506	7	172,187	7	161,847	7	151,492	7	138,369	7	123,390	7	108,411
1/4		1/4		1/4	192,284	1/4	182,291	1/4	171,972	1/4	161,631	1/4	151,276	1/4	138,057	1/4	123,078	1/4	108,099
1/2		1/2		1/2	192,124	1/2	182,076	1/2	171,757	1/2	161,416	1/2	151,061	1/2	137,745	1/2	122,766	1/2	107,787
3/4		3/4		3/4	191,965	3/4	181,861	3/4	171,542	3/4	161,200	3/4	150,845	3/4	137,433	3/4	122,454	3/4	107,474
8		8		8	191,806	8	181,646	8	171,327	8	160,984	8	150,629	8	137,121	8	122,142	8	107,162
1/4		1/4		1/4	191,646	1/4	181,431	1/4	171,113	1/4	160,768	1/4	150,414	1/4	136,809	1/4	121,830	1/4	106,850
1/2		1/2		1/2	191,453	1/2	181,216	1/2	170,898	1/2	160,553	1/2	150,194	1/2	136,497	1/2	121,518	1/2	106,537
3/4		3/4		3/4	191,260	3/4	181,001	3/4	170,683	3/4	160,337	3/4	149,975	3/4	136,185	3/4	121,206	3/4	106,225
9		9		9	191,068	9	180,786	9	170,468	9	160,121	9	149,756	9	135,873	9	120,894	9	105,912
1/4		1/4		1/4	190,875	1/4	180,571	1/4	170,253	1/4	159,905	1/4	149,536	1/4	135,561	1/4	120,582	1/4	105,600
1/2		1/2		1/2	190,663	1/2	180,356	1/2	170,038	1/2	159,690	1/2	149,306	1/2	135,248	1/2	120,270	1/2	105,287
3/4		3/4		3/4	190,452	3/4	180,141	3/4	169,823	3/4	159,474	3/4	149,075	3/4	134,936	3/4	119,958	3/4	104,975
10		10		10	190,241	10	179,926	10	169,608	10	159,258	10	148,844	10	134,624	10	119,646	10	104,662
1/4		1/4		1/4	190,029	1/4	179,711	1/4	169,393	1/4	159,043	1/4	148,613	1/4	134,312	1/4	119,334	1/4	104,350
1/2		1/2		1/2	189,815	1/2	179,496	1/2	169,178	1/2	158,827	1/2	148,366	1/2	134,000	1/2	119,022	1/2	104,037
3/4		3/4		3/4	189,600	3/4	179,281	3/4	168,963	3/4	158,611	3/4	148,119	3/4	133,688	3/4	118,710	3/4	103,725
11		11		11	189,385	11	179,066	11	168,748	11	158,395	11	147,872	11	133,376	11	118,397	11	103,413
1/4		1/4		1/4	189,170	1/4	178,851	1/4	168,533	1/4	158,180	1/4	147,625	1/4	133,064	1/4	118,085	1/4	103,100
1/2		1/2		1/2	188,955	1/2	178,636	1/2	168,318	1/2	157,964	1/2	147,362	1/2	132,752	1/2	117,773	1/2	102,788
3/4		3/4		3/4	188,740	3/4	178,421	3/4	168,102	3/4	157,748	3/4	147,099	3/4	132,440	3/4	117,461	3/4	102,476

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.

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# BARGE "HFL 433"

## 3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 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	87,164	0	72,165	0	57,167	0	42,175	0	27,188	0	12,189	0		0		0		0	
1/4	86,852	1/4	71,853	1/4	56,854	1/4	41,863	1/4	26,875	1/4	11,877	1/4		1/4		1/4		1/4	
1/2	86,539	1/2	71,540	1/2	56,542	1/2	41,551	1/2	26,563	1/2	11,564	1/2		1/2		1/2		1/2	
3/4	86,227	3/4	71,228	3/4	56,229	3/4	41,239	3/4	26,250	3/4	11,252	3/4		3/4		3/4		3/4	
1	85,914	1	70,915	1	55,917	1	40,927	1	25,938	1	10,939	1		1		1		1	
1/4	85,602	1/4	70,603	1/4	55,604	1/4	40,615	1/4	25,625	1/4	10,627	1/4		1/4		1/4		1/4	
1/2	85,289	1/2	70,290	1/2	55,292	1/2	40,303	1/2	25,313	1/2	10,315	1/2		1/2		1/2		1/2	
3/4	84,977	3/4	69,978	3/4	54,979	3/4	39,991	3/4	25,000	3/4	10,002	3/4		3/4		3/4		3/4	
2	84,664	2	69,666	2	54,667	2	39,679	2	24,688	2	9,690	2		2		2		2	
1/4	84,352	1/4	69,353	1/4	54,354	1/4	39,367	1/4	24,375	1/4	9,377	1/4		1/4		1/4		1/4	
1/2	84,039	1/2	69,041	1/2	54,042	1/2	39,055	1/2	24,063	1/2	9,065	1/2		1/2		1/2		1/2	
3/4	83,727	3/4	68,728	3/4	53,729	3/4	38,743	3/4	23,750	3/4	8,752	3/4		3/4		3/4		3/4	
3	83,414	3	68,416	3	53,417	3	38,431	3	23,438	3	8,440	3		3		3		3	
1/4	83,102	1/4	68,103	1/4	53,105	1/4	38,119	1/4	23,126	1/4	8,127	1/4		1/4		1/4		1/4	
1/2	82,789	1/2	67,791	1/2	52,792	1/2	37,807	1/2	22,813	1/2	7,815	1/2		1/2		1/2		1/2	
3/4	82,477	3/4	67,478	3/4	52,480	3/4	37,495	3/4	22,501	3/4	7,502	3/4		3/4		3/4		3/4	
4	82,164	4	67,166	4	52,167	4	37,183	4	22,188	4	7,190	4		4		4		4	
1/4	81,852	1/4	66,853	1/4	51,855	1/4	36,871	1/4	21,876	1/4	6,877	1/4		1/4		1/4		1/4	
1/2	81,539	1/2	66,541	1/2	51,542	1/2	36,559	1/2	21,563	1/2	6,565	1/2		1/2		1/2		1/2	
3/4	81,227	3/4	66,228	3/4	51,230	3/4	36,247	3/4	21,251	3/4	6,253	3/4		3/4		3/4		3/4	
5	80,915	5	65,916	5	50,917	5	35,935	5	20,938	5	5,940	5		5		5		5	
1/4	80,602	1/4	65,603	1/4	50,605	1/4	35,623	1/4	20,626	1/4	5,628	1/4		1/4		1/4		1/4	
1/2	80,290	1/2	65,291	1/2	50,292	1/2	35,311	1/2	20,313	1/2	5,316	1/2		1/2		1/2		1/2	
3/4	79,977	3/4	64,978	3/4	49,980	3/4	34,999	3/4	20,001	3/4	5,003	3/4		3/4		3/4		3/4	
6	79,665	6	64,666	6	49,667	6	34,686	6	19,688	6	4,691	6		6		6		6	
1/4	79,352	1/4	64,354	1/4	49,355	1/4	34,374	1/4	19,376	1/4	4,379	1/4		1/4		1/4		1/4	
1/2	79,040	1/2	64,041	1/2	49,042	1/2	34,062	1/2	19,064	1/2	4,067	1/2		1/2		1/2		1/2	
3/4	78,727	3/4	63,729	3/4	48,730	3/4	33,749	3/4	18,751	3/4	3,756	3/4		3/4		3/4		3/4	
7	78,415	7	63,416	7	48,417	7	33,437	7	18,439	7	3,444	7		7		7		7	
1/4	78,102	1/4	63,104	1/4	48,105	1/4	33,124	1/4	18,126	1/4	3,133	1/4		1/4		1/4		1/4	
1/2	77,790	1/2	62,791	1/2	47,793	1/2	32,812	1/2	17,814	1/2	2,841	1/2		1/2		1/2		1/2	
3/4	77,477	3/4	62,479	3/4	47,480	3/4	32,499	3/4	17,501	3/4	2,549	3/4		3/4		3/4		3/4	
8	77,165	8	62,166	8	47,168	8	32,187	8	17,189	8	2,256	8		8		8		8	
1/4	76,852	1/4	61,854	1/4	46,856	1/4	31,874	1/4	16,876	1/4	1,964	1/4		1/4		1/4		1/4	
1/2	76,540	1/2	61,541	1/2	46,543	1/2	31,562	1/2	16,564	1/2	1,730	1/2		1/2		1/2		1/2	
3/4	76,227	3/4	61,229	3/4	46,231	3/4	31,250	3/4	16,251	3/4	1,496	3/4		3/4		3/4		3/4	
9	75,915	9	60,916	9	45,919	9	30,937	9	15,939	9	1,261	9		9		9		9	
1/4	75,603	1/4	60,604	1/4	45,607	1/4	30,625	1/4	15,626	1/4	1,027	1/4		1/4		1/4		1/4	
1/2	75,290	1/2	60,291	1/2	45,295	1/2	30,312	1/2	15,314	1/2		1/2		1/2		1/2		1/2	
3/4	74,978	3/4	59,979	3/4	44,983	3/4	30,000	3/4	15,002	3/4		3/4		3/4		3/4		3/4	
10	74,665	10	59,666	10	44,671	10	29,687	10	14,689	10		10		10		10		10	
1/4	74,353	1/4	59,354	1/4	44,358	1/4	29,375	1/4	14,377	1/4		1/4		1/4		1/4		1/4	
1/2	74,040	1/2	59,041	1/2	44,046	1/2	29,062	1/2	14,064	1/2		1/2		1/2		1/2		1/2	
3/4	73,728	3/4	58,729	3/4	43,734	3/4	28,750	3/4	13,752	3/4		3/4		3/4		3/4		3/4	
11	73,415	11	58,417	11	43,422	11	28,437	11	13,439	11		11		11		11		11	
1/4	73,103	1/4	58,104	1/4	43,111	1/4	28,125	1/4	13,127	1/4		1/4		1/4		1/4		1/4	
1/2	72,790	1/2	57,792	1/2	42,799	1/2	27,812	1/2	12,814	1/2		1/2		1/2		1/2		1/2	
3/4	72,478	3/4	57,479	3/4	42,487	3/4	27,500	3/4	12,502	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2015 CL  
CALCULATED: 10/21/2015 CL  
PRINTED: 10/21/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2015

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



# BARGE "HFL 433"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 3/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0	187,917	0	177,598	0	167,280	0	156,927	0	146,326	0	131,749	0	116,803	0	101,851
1/4		1/4		1/4	187,702	1/4	177,383	1/4	167,064	1/4	156,711	1/4	146,064	1/4	131,437	1/4	116,492	1/4	101,539
1/2		1/2		1/2	187,487	1/2	177,168	1/2	166,849	1/2	156,495	1/2	145,801	1/2	131,126	1/2	116,181	1/2	101,228
3/4		3/4		3/4	187,272	3/4	176,953	3/4	166,634	3/4	156,279	3/4	145,539	3/4	130,815	3/4	115,869	3/4	100,916
1		1		1	187,057	1	176,738	1	166,418	1	156,064	1	145,260	1	130,503	1	115,558	1	100,604
1/4		1/4		1/4	186,842	1/4	176,523	1/4	166,202	1/4	155,848	1/4	144,982	1/4	130,192	1/4	115,247	1/4	100,292
1/2		1/2		1/2	186,627	1/2	176,308	1/2	165,987	1/2	155,632	1/2	144,704	1/2	129,881	1/2	114,935	1/2	99,980
3/4		3/4		3/4	186,412	3/4	176,093	3/4	165,771	3/4	155,417	3/4	144,426	3/4	129,569	3/4	114,624	3/4	99,669
2		2		2	186,197	2	175,878	2	165,555	2	155,201	2	144,131	2	129,258	2	114,313	2	99,357
1/4		1/4		1/4	185,981	1/4	175,663	1/4	165,339	1/4	154,985	1/4	143,837	1/4	128,946	1/4	114,001	1/4	99,045
1/2		1/2		1/2	185,766	1/2	175,448	1/2	165,124	1/2	154,769	1/2	143,543	1/2	128,635	1/2	113,690	1/2	98,733
3/4		3/4		3/4	185,551	3/4	175,234	3/4	164,908	3/4	154,554	3/4	143,249	3/4	128,324	3/4	113,379	3/4	98,422
3		3		3	185,337	3	175,019	3	164,692	3	154,338	3	142,942	3	128,012	3	113,067	3	98,110
1/4		1/4		1/4	185,122	1/4	174,804	1/4	164,477	1/4	154,122	1/4	142,635	1/4	127,701	1/4	112,756	1/4	97,798
1/2		1/2		1/2	184,907	1/2	174,589	1/2	164,261	1/2	153,907	1/2	142,329	1/2	127,390	1/2	112,444	1/2	97,487
3/4		3/4		3/4	184,692	3/4	174,374	3/4	164,045	3/4	153,691	3/4	142,022	3/4	127,078	3/4	112,133	3/4	97,175
4		4		4	184,477	4	174,159	4	163,829	4	153,475	4	141,711	4	126,767	4	111,822	4	96,863
1/4		1/4		1/4	184,262	1/4	173,944	1/4	163,614	1/4	153,259	1/4	141,400	1/4	126,456	1/4	111,510	1/4	96,552
1/2		1/2		1/2	184,047	1/2	173,729	1/2	163,398	1/2	153,044	1/2	141,089	1/2	126,144	1/2	111,199	1/2	96,240
3/4		3/4		3/4	183,832	3/4	173,514	3/4	163,182	3/4	152,828	3/4	140,778	3/4	125,833	3/4	110,888	3/4	95,929
5		5		5	183,617	5	173,299	5	162,967	5	152,612	5	140,467	5	125,522	5	110,576	5	95,617
1/4		1/4		1/4	183,402	1/4	173,084	1/4	162,751	1/4	152,396	1/4	140,155	1/4	125,210	1/4	110,265	1/4	95,306
1/2		1/2		1/2	183,187	1/2	172,869	1/2	162,535	1/2	152,181	1/2	139,844	1/2	124,899	1/2	109,954	1/2	94,994
3/4		3/4		3/4	182,972	3/4	172,654	3/4	162,319	3/4	151,965	3/4	139,533	3/4	124,587	3/4	109,642	3/4	94,683
6		6		6	182,757	6	172,439	6	162,104	6	151,749	6	139,221	6	124,276	6	109,331	6	94,371
1/4		1/4		1/4	182,542	1/4	172,224	1/4	161,888	1/4	151,534	1/4	138,910	1/4	123,965	1/4	109,019	1/4	94,060
1/2		1/2		1/2	182,327	1/2	172,009	1/2	161,672	1/2	151,318	1/2	138,599	1/2	123,653	1/2	108,708	1/2	93,748
3/4		3/4	191,739	3/4	182,112	3/4	171,794	3/4	161,457	3/4	151,102	3/4	138,287	3/4	123,342	3/4	108,397	3/4	93,437
7		7	191,616	7	181,897	7	171,579	7	161,241	7	150,886	7	137,976	7	123,031	7	108,085	7	93,125
1/4		1/4	191,492	1/4	181,682	1/4	171,364	1/4	161,025	1/4	150,671	1/4	137,665	1/4	122,719	1/4	107,774	1/4	92,814
1/2		1/2	191,369	1/2	181,467	1/2	171,149	1/2	160,809	1/2	150,455	1/2	137,353	1/2	122,408	1/2	107,462	1/2	92,502
3/4		3/4	191,245	3/4	181,252	3/4	170,934	3/4	160,594	3/4	150,239	3/4	137,042	3/4	122,097	3/4	107,151	3/4	92,191
8		8	191,086	8	181,037	8	170,719	8	160,378	8	150,024	8	136,730	8	121,785	8	106,839	8	91,879
1/4		1/4	190,926	1/4	180,822	1/4	170,504	1/4	160,162	1/4	149,808	1/4	136,419	1/4	121,474	1/4	106,527	1/4	91,568
1/2		1/2	190,767	1/2	180,607	1/2	170,290	1/2	159,947	1/2	149,592	1/2	136,108	1/2	121,162	1/2	106,216	1/2	91,256
3/4		3/4	190,607	3/4	180,393	3/4	170,075	3/4	159,731	3/4	149,376	3/4	135,796	3/4	120,851	3/4	105,904	3/4	90,945
9		9	190,415	9	180,178	9	169,860	9	159,515	9	149,157	9	135,485	9	120,540	9	105,592	9	90,633
1/4		1/4	190,229	1/4	179,963	1/4	169,645	1/4	159,299	1/4	148,938	1/4	135,174	1/4	120,228	1/4	105,281	1/4	90,322
1/2		1/2	190,029	1/2	179,748	1/2	169,430	1/2	159,084	1/2	148,719	1/2	134,862	1/2	119,917	1/2	104,969	1/2	90,010
3/4		3/4	189,836	3/4	179,533	3/4	169,215	3/4	158,868	3/4	148,500	3/4	134,551	3/4	119,606	3/4	104,657	3/4	89,698
10		10	189,625	10	179,318	10	169,000	10	158,652	10	148,269	10	134,240	10	119,294	10	104,345	10	89,387
1/4		1/4	189,413	1/4	179,103	1/4	168,785	1/4	158,437	1/4	148,038	1/4	133,928	1/4	118,983	1/4	104,034	1/4	89,075
1/2		1/2	189,202	1/2	178,888	1/2	168,570	1/2	158,221	1/2	147,807	1/2	133,617	1/2	118,672	1/2	103,722	1/2	88,764
3/4		3/4	188,991	3/4	178,673	3/4	168,355	3/4	158,005	3/4	147,576	3/4	133,305	3/4	118,360	3/4	103,410	3/4	88,452
11		11	188,776	11	178,458	11	168,140	11	157,789	11	147,330	11	132,994	11	118,049	11	103,098	11	88,141
1/4		1/4	188,561	1/4	178,243	1/4	167,925	1/4	157,574	1/4	147,083	1/4	132,683	1/4	117,738	1/4	102,786	1/4	87,829
1/2		1/2	188,347	1/2	178,028	1/2	167,710	1/2	157,358	1/2	146,836	1/2	132,371	1/2	117,426	1/2	102,475	1/2	87,517
3/4		3/4	188,132	3/4	177,813	3/4	167,495	3/4	157,142	3/4	146,589	3/4	132,060	3/4	117,115	3/4	102,163	3/4	87,206

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  
<http://www.pmacorp.net>



# BARGE "HFL 433"

## 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	86,894	0	71,963	0	57,103	0	42,588	0	27,776	0	12,806	0		0		0		0	
1/4	86,582	1/4	71,653	1/4	56,799	1/4	42,284	1/4	27,465	1/4	12,494	1/4		1/4		1/4		1/4	
1/2	86,270	1/2	71,343	1/2	56,496	1/2	41,979	1/2	27,153	1/2	12,182	1/2		1/2		1/2		1/2	
3/4	85,958	3/4	71,033	3/4	56,192	3/4	41,675	3/4	26,841	3/4	11,870	3/4		3/4		3/4		3/4	
1	85,646	1	70,723	1	55,890	1	41,370	1	26,529	1	11,558	1		1		1		1	
1/4	85,335	1/4	70,413	1/4	55,588	1/4	41,066	1/4	26,217	1/4	11,246	1/4		1/4		1/4		1/4	
1/2	85,023	1/2	70,104	1/2	55,286	1/2	40,761	1/2	25,906	1/2	10,934	1/2		1/2		1/2		1/2	
3/4	84,711	3/4	69,794	3/4	54,984	3/4	40,456	3/4	25,594	3/4	10,622	3/4		3/4		3/4		3/4	
2	84,399	2	69,484	2	54,682	2	40,152	2	25,282	2	10,309	2		2		2		2	
1/4	84,087	1/4	69,174	1/4	54,380	1/4	39,847	1/4	24,970	1/4	9,997	1/4		1/4		1/4		1/4	
1/2	83,775	1/2	68,864	1/2	54,078	1/2	39,543	1/2	24,658	1/2	9,684	1/2		1/2		1/2		1/2	
3/4	83,464	3/4	68,554	3/4	53,776	3/4	39,238	3/4	24,346	3/4	9,372	3/4		3/4		3/4		3/4	
3	83,152	3	68,244	3	53,474	3	38,933	3	24,034	3	9,060	3		3		3		3	
1/4	82,840	1/4	67,934	1/4	53,172	1/4	38,629	1/4	23,722	1/4	8,747	1/4		1/4		1/4		1/4	
1/2	82,528	1/2	67,625	1/2	52,870	1/2	38,324	1/2	23,410	1/2	8,435	1/2		1/2		1/2		1/2	
3/4	82,216	3/4	67,315	3/4	52,568	3/4	38,020	3/4	23,099	3/4	8,123	3/4		3/4		3/4		3/4	
4	81,904	4	67,005	4	52,266	4	37,715	4	22,787	4	7,811	4		4		4		4	
1/4	81,593	1/4	66,695	1/4	51,963	1/4	37,411	1/4	22,475	1/4	7,499	1/4		1/4		1/4		1/4	
1/2	81,281	1/2	66,385	1/2	51,661	1/2	37,106	1/2	22,163	1/2	7,186	1/2		1/2		1/2		1/2	
3/4	80,969	3/4	66,075	3/4	51,359	3/4	36,801	3/4	21,851	3/4	6,874	3/4		3/4		3/4		3/4	
5	80,657	5	65,765	5	51,057	5	36,494	5	21,539	5	6,562	5		5		5		5	
1/4	80,345	1/4	65,455	1/4	50,755	1/4	36,186	1/4	21,227	1/4	6,250	1/4		1/4		1/4		1/4	
1/2	80,033	1/2	65,146	1/2	50,453	1/2	35,878	1/2	20,915	1/2	5,938	1/2		1/2		1/2		1/2	
3/4	79,722	3/4	64,836	3/4	50,151	3/4	35,570	3/4	20,603	3/4	5,626	3/4		3/4		3/4		3/4	
6	79,410	6	64,526	6	49,849	6	35,259	6	20,291	6	5,314	6		6		6		6	
1/4	79,098	1/4	64,216	1/4	49,547	1/4	34,948	1/4	19,980	1/4	5,002	1/4		1/4		1/4		1/4	
1/2	78,786	1/2	63,906	1/2	49,245	1/2	34,636	1/2	19,668	1/2	4,690	1/2		1/2		1/2		1/2	
3/4	78,474	3/4	63,596	3/4	48,943	3/4	34,325	3/4	19,356	3/4	4,378	3/4		3/4		3/4		3/4	
7	78,163	7	63,286	7	48,641	7	34,013	7	19,044	7	4,066	7		7		7		7	
1/4	77,852	1/4	62,975	1/4	48,339	1/4	33,701	1/4	18,732	1/4	3,755	1/4		1/4		1/4		1/4	
1/2	77,542	1/2	62,664	1/2	48,037	1/2	33,389	1/2	18,420	1/2	3,444	1/2		1/2		1/2		1/2	
3/4	77,231	3/4	62,353	3/4	47,735	3/4	33,077	3/4	18,108	3/4	3,132	3/4		3/4		3/4		3/4	
8	76,921	8	62,042	8	47,433	8	32,765	8	17,796	8	2,840	8		8		8		8	
1/4	76,611	1/4	61,730	1/4	47,131	1/4	32,454	1/4	17,484	1/4	2,548	1/4		1/4		1/4		1/4	
1/2	76,301	1/2	61,419	1/2	46,830	1/2	32,142	1/2	17,172	1/2	2,256	1/2		1/2		1/2		1/2	
3/4	75,991	3/4	61,107	3/4	46,528	3/4	31,830	3/4	16,860	3/4	1,964	3/4		3/4		3/4		3/4	
9	75,681	9	60,796	9	46,227	9	31,518	9	16,549	9	1,730	9		9		9		9	
1/4	75,372	1/4	60,484	1/4	45,926	1/4	31,206	1/4	16,237	1/4	1,495	1/4		1/4		1/4		1/4	
1/2	75,062	1/2	60,173	1/2	45,624	1/2	30,894	1/2	15,925	1/2	1,261	1/2		1/2		1/2		1/2	
3/4	74,752	3/4	59,861	3/4	45,323	3/4	30,582	3/4	15,613	3/4	1,027	3/4		3/4		3/4		3/4	
10	74,442	10	59,553	10	45,020	10	30,270	10	15,301	10		10		10		10		10	
1/4	74,132	1/4	59,244	1/4	44,717	1/4	29,959	1/4	14,989	1/4		1/4		1/4		1/4		1/4	
1/2	73,822	1/2	58,936	1/2	44,414	1/2	29,647	1/2	14,677	1/2		1/2		1/2		1/2		1/2	
3/4	73,512	3/4	58,628	3/4	44,111	3/4	29,335	3/4	14,365	3/4		3/4		3/4		3/4		3/4	
11	73,202	11	58,322	11	43,807	11	29,023	11	14,053	11		11		11		11		11	
1/4	72,892	1/4	58,017	1/4	43,502	1/4	28,711	1/4	13,741	1/4		1/4		1/4		1/4		1/4	
1/2	72,583	1/2	57,712	1/2	43,198	1/2	28,400	1/2	13,430	1/2		1/2		1/2		1/2		1/2	
3/4	72,273	3/4	57,407	3/4	42,893	3/4	28,088	3/4	13,118	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2015 CL  
CALCULATED: 10/21/2015 CL  
PRINTED: 10/21/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2015

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



# BARGE "HFL 433"

## 2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-09 1/2"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0	208,129	0	193,174	0	178,169	0	163,115	0	148,060	0	133,005	0	117,951	0	102,892
1/4	1/4	1/4	1/4	1/4	207,819	1/4	192,861	1/4	177,856	1/4	162,801	1/4	147,747	1/4	132,692	1/4	117,637	1/4	102,578
1/2	1/2	1/2	1/2	1/2	207,510	1/2	192,548	1/2	177,543	1/2	162,488	1/2	147,433	1/2	132,378	1/2	117,323	1/2	102,264
3/4	3/4	3/4	3/4	3/4	207,200	3/4	192,236	3/4	177,229	3/4	162,174	3/4	147,119	3/4	132,064	3/4	117,010	3/4	101,951
1	1	1	1	1	206,891	1	191,923	1	176,915	1	161,860	1	146,806	1	131,751	1	116,696	1	101,637
1/4	1/4	1/4	1/4	1/4	206,581	1/4	191,611	1/4	176,602	1/4	161,547	1/4	146,492	1/4	131,437	1/4	116,382	1/4	101,323
1/2	1/2	1/2	1/2	1/2	206,271	1/2	191,298	1/2	176,288	1/2	161,233	1/2	146,178	1/2	131,124	1/2	116,069	1/2	101,009
3/4	3/4	3/4	3/4	3/4	205,962	3/4	190,986	3/4	175,974	3/4	160,920	3/4	145,865	3/4	130,810	3/4	115,755	3/4	100,695
2	2	2	2	2	205,652	2	190,673	2	175,661	2	160,606	2	145,551	2	130,496	2	115,441	2	100,382
1/4	1/4	1/4	1/4	1/4	205,343	1/4	190,360	1/4	175,347	1/4	160,292	1/4	145,237	1/4	130,183	1/4	115,128	1/4	100,068
1/2	1/2	1/2	1/2	1/2	205,033	1/2	190,048	1/2	175,033	1/2	159,979	1/2	144,924	1/2	129,869	1/2	114,814	1/2	99,754
3/4	3/4	3/4	3/4	3/4	204,724	3/4	189,735	3/4	174,720	3/4	159,665	3/4	144,610	3/4	129,555	3/4	114,500	3/4	99,440
3	3	3	3	3	204,414	3	189,423	3	174,406	3	159,351	3	144,296	3	129,242	3	114,187	3	99,126
1/4	1/4	1/4	1/4	1/4	204,105	1/4	189,110	1/4	174,093	1/4	159,038	1/4	143,983	1/4	128,928	1/4	113,873	1/4	98,813
1/2	1/2	1/2	1/2	1/2	203,795	1/2	188,798	1/2	173,779	1/2	158,724	1/2	143,669	1/2	128,614	1/2	113,560	1/2	98,499
3/4	3/4	3/4	3/4	3/4	203,484	3/4	188,485	3/4	173,465	3/4	158,410	3/4	143,356	3/4	128,301	3/4	113,246	3/4	98,185
4	4	4	4	4	203,173	4	188,172	4	173,152	4	158,097	4	143,042	4	127,987	4	112,932	4	97,871
1/4	1/4	1/4	1/4	1/4	202,862	1/4	187,860	1/4	172,838	1/4	157,783	1/4	142,728	1/4	127,673	1/4	112,619	1/4	97,557
1/2	1/2	1/2	1/2	1/2	202,551	1/2	187,547	1/2	172,524	1/2	157,469	1/2	142,415	1/2	127,360	1/2	112,305	1/2	97,244
3/4	3/4	3/4	3/4	3/4	202,238	3/4	187,235	3/4	172,211	3/4	157,156	3/4	142,101	3/4	127,046	3/4	111,991	3/4	96,930
5	5	5	5	5	201,926	5	186,922	5	171,897	5	156,842	5	141,787	5	126,733	5	111,678	5	96,616
1/4	1/4	1/4	1/4	1/4	201,613	1/4	186,609	1/4	171,583	1/4	156,529	1/4	141,474	1/4	126,419	1/4	111,364	1/4	96,302
1/2	1/2	1/2	1/2	1/2	201,301	1/2	186,297	1/2	171,270	1/2	156,215	1/2	141,160	1/2	126,105	1/2	111,050	1/2	95,988
3/4	3/4	3/4	3/4	3/4	200,988	3/4	185,984	3/4	170,956	3/4	155,901	3/4	140,846	3/4	125,792	3/4	110,737	3/4	95,675
6	6	6	6	6	200,676	6	185,672	6	170,642	6	155,588	6	140,533	6	125,478	6	110,423	6	95,361
1/4	1/4	1/4	1/4	1/4	200,363	1/4	185,359	1/4	170,329	1/4	155,274	1/4	140,219	1/4	125,164	1/4	110,109	1/4	95,047
1/2	1/2	1/2	1/2	1/2	213,966	1/2	200,050	1/2	185,047	1/2	170,015	1/2	154,960	1/2	139,905	1/2	124,851	1/2	109,796
3/4	3/4	3/4	3/4	3/4	213,787	3/4	199,738	3/4	184,734	3/4	169,702	3/4	154,647	3/4	139,592	3/4	124,537	3/4	109,482
7	7	7	7	7	213,608	7	199,425	7	184,421	7	169,388	7	154,333	7	139,278	7	124,223	7	109,168
1/4	1/4	1/4	1/4	1/4	213,429	1/4	199,113	1/4	184,109	1/4	169,074	1/4	154,019	1/4	138,965	1/4	123,910	1/4	108,854
1/2	1/2	1/2	1/2	1/2	213,250	1/2	198,800	1/2	183,796	1/2	168,761	1/2	153,706	1/2	138,651	1/2	123,596	1/2	108,540
3/4	3/4	3/4	3/4	3/4	213,019	3/4	198,487	3/4	183,484	3/4	168,447	3/4	153,392	3/4	138,337	3/4	123,282	3/4	108,227
8	8	8	8	8	212,788	8	198,175	8	183,171	8	168,133	8	153,078	8	138,024	8	122,969	8	107,913
1/4	1/4	1/4	1/4	1/4	212,556	1/4	197,862	1/4	182,859	1/4	167,820	1/4	152,765	1/4	137,710	1/4	122,655	1/4	107,599
1/2	1/2	1/2	1/2	1/2	212,325	1/2	197,550	1/2	182,546	1/2	167,506	1/2	152,451	1/2	137,396	1/2	122,342	1/2	107,285
3/4	3/4	3/4	3/4	3/4	212,045	3/4	197,237	3/4	182,233	3/4	167,192	3/4	152,138	3/4	137,083	3/4	122,028	3/4	106,971
9	9	9	9	9	211,766	9	196,925	9	181,921	9	166,879	9	151,824	9	136,769	9	121,714	9	106,658
1/4	1/4	1/4	1/4	1/4	211,486	1/4	196,612	1/4	181,608	1/4	166,565	1/4	151,510	1/4	136,455	1/4	121,401	1/4	106,344
1/2	1/2	1/2	1/2	1/2	211,206	1/2	196,299	1/2	181,296	1/2	166,251	1/2	151,197	1/2	136,142	1/2	121,087	1/2	106,030
3/4	3/4	3/4	3/4	3/4	210,901	3/4	195,987	3/4	180,983	3/4	165,938	3/4	150,883	3/4	135,828	3/4	120,773	3/4	105,716
10	10	10	10	10	210,595	10	195,674	10	180,670	10	165,624	10	150,569	10	135,514	10	120,460	10	105,402
1/4	1/4	1/4	1/4	1/4	210,290	1/4	195,362	1/4	180,358	1/4	165,311	1/4	150,256	1/4	135,201	1/4	120,146	1/4	105,089
1/2	1/2	1/2	1/2	1/2	209,985	1/2	195,049	1/2	180,045	1/2	164,997	1/2	149,942	1/2	134,887	1/2	119,832	1/2	104,775
3/4	3/4	3/4	3/4	3/4	209,675	3/4	194,737	3/4	179,733	3/4	164,683	3/4	149,628	3/4	134,574	3/4	119,519	3/4	104,461
11	11	11	11	11	209,366	11	194,424	11	179,420	11	164,370	11	149,315	11	134,260	11	119,205	11	104,147
1/4	1/4	1/4	1/4	1/4	209,057	1/4	194,111	1/4	179,108	1/4	164,056	1/4	149,001	1/4	133,946	1/4	118,891	1/4	103,833
1/2	1/2	1/2	1/2	1/2	208,748	1/2	193,799	1/2	178,795	1/2	163,742	1/2	148,687	1/2	133,633	1/2	118,578	1/2	103,520
3/4	3/4	3/4	3/4	3/4	208,439	3/4	193,486	3/4	178,482	3/4	163,429	3/4	148,374	3/4	133,319	3/4	118,264	3/4	103,206

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 433"

## 2 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	87,830	0	72,767	0	57,705	0	42,667	0	27,617	0	12,555	0		0		0		0	
1/4	87,516	1/4	72,453	1/4	57,391	1/4	42,354	1/4	27,303	1/4	12,241	1/4		1/4		1/4		1/4	
1/2	87,202	1/2	72,140	1/2	57,077	1/2	42,041	1/2	26,990	1/2	11,928	1/2		1/2		1/2		1/2	
3/4	86,888	3/4	71,826	3/4	56,763	3/4	41,728	3/4	26,676	3/4	11,614	3/4		3/4		3/4		3/4	
1	86,574	1	71,512	1	56,450	1	41,415	1	26,362	1	11,300	1		1		1		1	
1/4	86,261	1/4	71,198	1/4	56,136	1/4	41,102	1/4	26,049	1/4	10,986	1/4		1/4		1/4		1/4	
1/2	85,947	1/2	70,884	1/2	55,822	1/2	40,789	1/2	25,735	1/2	10,673	1/2		1/2		1/2		1/2	
3/4	85,633	3/4	70,571	3/4	55,508	3/4	40,476	3/4	25,421	3/4	10,359	3/4		3/4		3/4		3/4	
2	85,319	2	70,257	2	55,194	2	40,164	2	25,107	2	10,045	2		2		2		2	
1/4	85,005	1/4	69,943	1/4	54,881	1/4	39,851	1/4	24,793	1/4	9,731	1/4		1/4		1/4		1/4	
1/2	84,692	1/2	69,629	1/2	54,567	1/2	39,538	1/2	24,480	1/2	9,417	1/2		1/2		1/2		1/2	
3/4	84,378	3/4	69,315	3/4	54,253	3/4	39,225	3/4	24,166	3/4	9,104	3/4		3/4		3/4		3/4	
3	84,064	3	69,002	3	53,939	3	38,911	3	23,852	3	8,790	3		3		3		3	
1/4	83,750	1/4	68,688	1/4	53,625	1/4	38,598	1/4	23,538	1/4	8,476	1/4		1/4		1/4		1/4	
1/2	83,436	1/2	68,374	1/2	53,312	1/2	38,285	1/2	23,224	1/2	8,162	1/2		1/2		1/2		1/2	
3/4	83,123	3/4	68,060	3/4	52,998	3/4	37,971	3/4	22,911	3/4	7,848	3/4		3/4		3/4		3/4	
4	82,809	4	67,746	4	52,684	4	37,657	4	22,597	4	7,535	4		4		4		4	
1/4	82,495	1/4	67,433	1/4	52,370	1/4	37,343	1/4	22,283	1/4	7,221	1/4		1/4		1/4		1/4	
1/2	82,181	1/2	67,119	1/2	52,056	1/2	37,029	1/2	21,969	1/2	6,907	1/2		1/2		1/2		1/2	
3/4	81,867	3/4	66,805	3/4	51,743	3/4	36,716	3/4	21,655	3/4	6,593	3/4		3/4		3/4		3/4	
5	81,554	5	66,491	5	51,429	5	36,402	5	21,342	5	6,279	5		5		5		5	
1/4	81,240	1/4	66,177	1/4	51,116	1/4	36,088	1/4	21,028	1/4	5,966	1/4		1/4		1/4		1/4	
1/2	80,926	1/2	65,864	1/2	50,803	1/2	35,774	1/2	20,714	1/2	5,652	1/2		1/2		1/2		1/2	
3/4	80,612	3/4	65,550	3/4	50,489	3/4	35,460	3/4	20,400	3/4	5,338	3/4		3/4		3/4		3/4	
6	80,298	6	65,236	6	50,176	6	35,147	6	20,086	6	5,025	6		6		6		6	
1/4	79,985	1/4	64,922	1/4	49,863	1/4	34,833	1/4	19,773	1/4	4,711	1/4		1/4		1/4		1/4	
1/2	79,671	1/2	64,608	1/2	49,550	1/2	34,519	1/2	19,459	1/2	4,398	1/2		1/2		1/2		1/2	
3/4	79,357	3/4	64,295	3/4	49,237	3/4	34,205	3/4	19,145	3/4	4,085	3/4		3/4		3/4		3/4	
7	79,043	7	63,981	7	48,924	7	33,891	7	18,831	7	3,772	7		7		7		7	
1/4	78,729	1/4	63,667	1/4	48,611	1/4	33,578	1/4	18,517	1/4	3,459	1/4		1/4		1/4		1/4	
1/2	78,416	1/2	63,353	1/2	48,298	1/2	33,264	1/2	18,204	1/2	3,146	1/2		1/2		1/2		1/2	
3/4	78,102	3/4	63,039	3/4	47,985	3/4	32,950	3/4	17,890	3/4	2,833	3/4		3/4		3/4		3/4	
8	77,788	8	62,726	8	47,672	8	32,636	8	17,576	8	2,560	8		8		8		8	
1/4	77,474	1/4	62,412	1/4	47,360	1/4	32,322	1/4	17,262	1/4	2,266	1/4		1/4		1/4		1/4	
1/2	77,160	1/2	62,098	1/2	47,047	1/2	32,009	1/2	16,948	1/2	1,973	1/2		1/2		1/2		1/2	
3/4	76,847	3/4	61,784	3/4	46,734	3/4	31,695	3/4	16,635	3/4	1,737	3/4		3/4		3/4		3/4	
9	76,533	9	61,470	9	46,421	9	31,381	9	16,321	9	1,502	9		9		9		9	
1/4	76,219	1/4	61,157	1/4	46,108	1/4	31,067	1/4	16,007	1/4	1,267	1/4		1/4		1/4		1/4	
1/2	75,905	1/2	60,843	1/2	45,795	1/2	30,753	1/2	15,693	1/2	1,032	1/2		1/2		1/2		1/2	
3/4	75,591	3/4	60,529	3/4	45,482	3/4	30,440	3/4	15,379	3/4		3/4		3/4		3/4		3/4	
10	75,278	10	60,215	10	45,170	10	30,126	10	15,066	10		10		10		10		10	
1/4	74,964	1/4	59,901	1/4	44,857	1/4	29,812	1/4	14,752	1/4		1/4		1/4		1/4		1/4	
1/2	74,650	1/2	59,588	1/2	44,544	1/2	29,498	1/2	14,438	1/2		1/2		1/2		1/2		1/2	
3/4	74,336	3/4	59,274	3/4	44,231	3/4	29,185	3/4	14,124	3/4		3/4		3/4		3/4		3/4	
11	74,022	11	58,960	11	43,918	11	28,871	11	13,810	11		11		11		11		11	
1/4	73,709	1/4	58,646	1/4	43,605	1/4	28,558	1/4	13,497	1/4		1/4		1/4		1/4		1/4	
1/2	73,395	1/2	58,332	1/2	43,292	1/2	28,244	1/2	13,183	1/2		1/2		1/2		1/2		1/2	
3/4	73,081	3/4	58,019	3/4	42,979	3/4	27,931	3/4	12,869	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2015 CL  
CALCULATED: 10/21/2015 CL  
PRINTED: 10/21/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2015

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



# BARGE "HFL 433"

## 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	207,617	0	192,668	0	177,664	0	162,611	0	147,557	0	132,502	0	117,447	0	102,389		
1/4		1/4		1/4	207,308	1/4	192,355	1/4	177,351	1/4	162,298	1/4	147,243	1/4	132,188	1/4	117,133	1/4	102,075		
1/2		1/2		1/2	206,998	1/2	192,043	1/2	177,038	1/2	161,984	1/2	146,929	1/2	131,875	1/2	116,820	1/2	101,761		
3/4		3/4		3/4	206,688	3/4	191,730	3/4	176,725	3/4	161,671	3/4	146,616	3/4	131,561	3/4	116,506	3/4	101,447		
1		1		1	206,379	1	191,418	1	176,412	1	161,357	1	146,302	1	131,247	1	116,192	1	101,133		
1/4		1/4		1/4	206,069	1/4	191,105	1/4	176,098	1/4	161,043	1/4	145,988	1/4	130,934	1/4	115,879	1/4	100,820		
1/2		1/2		1/2	205,760	1/2	190,792	1/2	175,784	1/2	160,730	1/2	145,675	1/2	130,620	1/2	115,565	1/2	100,506		
3/4		3/4		3/4	205,450	3/4	190,480	3/4	175,471	3/4	160,416	3/4	145,361	3/4	130,306	3/4	115,251	3/4	100,192		
2		2		2	205,140	2	190,167	2	175,157	2	160,102	2	145,047	2	129,993	2	114,938	2	99,878		
1/4		1/4		1/4	204,831	1/4	189,855	1/4	174,843	1/4	159,789	1/4	144,734	1/4	129,679	1/4	114,624	1/4	99,564		
1/2		1/2		1/2	204,521	1/2	189,542	1/2	174,530	1/2	159,475	1/2	144,420	1/2	129,365	1/2	114,311	1/2	99,251		
3/4		3/4		3/4	204,212	3/4	189,230	3/4	174,216	3/4	159,161	3/4	144,107	3/4	129,052	3/4	113,997	3/4	98,937		
3		3		3	203,902	3	188,917	3	173,903	3	158,848	3	143,793	3	128,738	3	113,683	3	98,623		
1/4		1/4		1/4	203,593	1/4	188,604	1/4	173,589	1/4	158,534	1/4	143,479	1/4	128,424	1/4	113,370	1/4	98,309		
1/2		1/2		1/2	203,283	1/2	188,292	1/2	173,275	1/2	158,220	1/2	143,166	1/2	128,111	1/2	113,056	1/2	97,995		
3/4		3/4		3/4	202,974	3/4	187,979	3/4	172,962	3/4	157,907	3/4	142,852	3/4	127,797	3/4	112,742	3/4	97,682		
4		4		4	202,664	4	187,667	4	172,648	4	157,593	4	142,538	4	127,484	4	112,429	4	97,368		
1/4		1/4		1/4	202,353	1/4	187,354	1/4	172,334	1/4	157,280	1/4	142,225	1/4	127,170	1/4	112,115	1/4	97,054		
1/2		1/2		1/2	202,042	1/2	187,042	1/2	172,021	1/2	156,966	1/2	141,911	1/2	126,856	1/2	111,801	1/2	96,740		
3/4		3/4		3/4	201,731	3/4	186,729	3/4	171,707	3/4	156,652	3/4	141,597	3/4	126,543	3/4	111,488	3/4	96,426		
5		5		5	201,420	5	186,416	5	171,393	5	156,339	5	141,284	5	126,229	5	111,174	5	96,113		
1/4		1/4		1/4	201,108	1/4	186,104	1/4	171,080	1/4	156,025	1/4	140,970	1/4	125,915	1/4	110,860	1/4	95,799		
1/2		1/2		1/2	200,795	1/2	185,791	1/2	170,766	1/2	155,711	1/2	140,656	1/2	125,602	1/2	110,547	1/2	95,485		
3/4		3/4		3/4	200,482	3/4	185,479	3/4	170,453	3/4	155,398	3/4	140,343	3/4	125,288	3/4	110,233	3/4	95,171		
6		6		6	200,170	6	185,166	6	170,139	6	155,084	6	140,029	6	124,974	6	109,920	6	94,857		
1/4		1/4		1/4	199,857	1/4	184,853	1/4	169,825	1/4	154,770	1/4	139,716	1/4	124,661	1/4	109,606	1/4	94,544		
1/2		1/2		1/2	199,545	1/2	184,541	1/2	169,512	1/2	154,457	1/2	139,402	1/2	124,347	1/2	109,292	1/2	94,230		
3/4		3/4		3/4	199,232	3/4	184,228	3/4	169,198	3/4	154,143	3/4	139,088	3/4	124,033	3/4	108,978	3/4	93,916		
7		7		7	212,835	7	198,919	7	183,916	7	168,884	7	153,829	7	138,775	7	123,720	7	108,665	7	93,602
1/4		1/4		1/4	212,656	1/4	198,607	1/4	183,603	1/4	168,571	1/4	153,516	1/4	138,461	1/4	123,406	1/4	108,351	1/4	93,288
1/2		1/2		1/2	212,477	1/2	198,294	1/2	183,291	1/2	168,257	1/2	153,202	1/2	138,147	1/2	123,093	1/2	108,037	1/2	92,975
3/4		3/4		3/4	212,298	3/4	197,982	3/4	182,978	3/4	167,943	3/4	152,889	3/4	137,834	3/4	122,779	3/4	107,723	3/4	92,661
8		8		8	212,119	8	197,669	8	182,665	8	167,630	8	152,575	8	137,520	8	122,465	8	107,409	8	92,347
1/4		1/4		1/4	211,888	1/4	197,357	1/4	182,353	1/4	167,316	1/4	152,261	1/4	137,206	1/4	122,152	1/4	107,096	1/4	92,033
1/2		1/2		1/2	211,657	1/2	197,044	1/2	182,040	1/2	167,002	1/2	151,948	1/2	136,893	1/2	121,838	1/2	106,782	1/2	91,719
3/4		3/4		3/4	211,425	3/4	196,731	3/4	181,728	3/4	166,689	3/4	151,634	3/4	136,579	3/4	121,524	3/4	106,468	3/4	91,406
9		9		9	211,194	9	196,419	9	181,415	9	166,375	9	151,320	9	136,265	9	121,211	9	106,154	9	91,092
1/4		1/4		1/4	210,915	1/4	196,106	1/4	181,103	1/4	166,062	1/4	151,007	1/4	135,952	1/4	120,897	1/4	105,840	1/4	90,778
1/2		1/2		1/2	210,635	1/2	195,794	1/2	180,790	1/2	165,748	1/2	150,693	1/2	135,638	1/2	120,583	1/2	105,527	1/2	90,464
3/4		3/4		3/4	210,355	3/4	195,481	3/4	180,477	3/4	165,434	3/4	150,379	3/4	135,325	3/4	120,270	3/4	105,213	3/4	90,150
10		10		10	210,075	10	195,169	10	180,165	10	165,121	10	150,066	10	135,011	10	119,956	10	104,899	10	89,837
1/4		1/4		1/4	209,770	1/4	194,856	1/4	179,852	1/4	164,807	1/4	149,752	1/4	134,697	1/4	119,642	1/4	104,585	1/4	89,523
1/2		1/2		1/2	209,465	1/2	194,543	1/2	179,540	1/2	164,493	1/2	149,438	1/2	134,384	1/2	119,329	1/2	104,271	1/2	89,209
3/4		3/4		3/4	209,159	3/4	194,231	3/4	179,227	3/4	164,180	3/4	149,125	3/4	134,070	3/4	119,015	3/4	103,958	3/4	88,895
11		11		11	208,854	11	193,918	11	178,914	11	163,866	11	148,811	11	133,756	11	118,702	11	103,644	11	88,581
1/4		1/4		1/4	208,544	1/4	193,606	1/4	178,602	1/4	163,552	1/4	148,498	1/4	133,443	1/4	118,388	1/4	103,330	1/4	88,268
1/2		1/2		1/2	208,235	1/2	193,293	1/2	178,289	1/2	163,239	1/2	148,184	1/2	133,129	1/2	118,074	1/2	103,016	1/2	87,954
3/4		3/4		3/4	207,926	3/4	192,980	3/4	177,977	3/4	162,925	3/4	147,870	3/4	132,815	3/4	117,761	3/4	102,702	3/4	87,640

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 433"

## 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	87,326	0	72,264	0	57,507	0	43,032	0	28,243	0	13,182	0		0		0		0	
1/4	87,012	1/4	71,950	1/4	57,205	1/4	42,731	1/4	27,930	1/4	12,869	1/4		1/4		1/4		1/4	
1/2	86,699	1/2	71,636	1/2	56,903	1/2	42,430	1/2	27,616	1/2	12,555	1/2		1/2		1/2		1/2	
3/4	86,385	3/4	71,322	3/4	56,601	3/4	42,129	3/4	27,302	3/4	12,241	3/4		3/4		3/4		3/4	
1	86,071	1	71,009	1	56,299	1	41,828	1	26,989	1	11,927	1		1		1		1	
1/4	85,757	1/4	70,695	1/4	55,997	1/4	41,527	1/4	26,675	1/4	11,613	1/4		1/4		1/4		1/4	
1/2	85,443	1/2	70,381	1/2	55,695	1/2	41,226	1/2	26,361	1/2	11,300	1/2		1/2		1/2		1/2	
3/4	85,130	3/4	70,067	3/4	55,393	3/4	40,924	3/4	26,048	3/4	10,986	3/4		3/4		3/4		3/4	
2	84,816	2	69,753	2	55,091	2	40,623	2	25,734	2	10,672	2		2		2		2	
1/4	84,502	1/4	69,440	1/4	54,789	1/4	40,322	1/4	25,420	1/4	10,358	1/4		1/4		1/4		1/4	
1/2	84,188	1/2	69,126	1/2	54,487	1/2	40,021	1/2	25,106	1/2	10,044	1/2		1/2		1/2		1/2	
3/4	83,874	3/4	68,812	3/4	54,185	3/4	39,720	3/4	24,793	3/4	9,731	3/4		3/4		3/4		3/4	
3	83,561	3	68,498	3	53,883	3	39,419	3	24,479	3	9,417	3		3		3		3	
1/4	83,247	1/4	68,184	1/4	53,581	1/4	39,117	1/4	24,165	1/4	9,103	1/4		1/4		1/4		1/4	
1/2	82,933	1/2	67,871	1/2	53,279	1/2	38,816	1/2	23,851	1/2	8,789	1/2		1/2		1/2		1/2	
3/4	82,619	3/4	67,557	3/4	52,977	3/4	38,514	3/4	23,537	3/4	8,476	3/4		3/4		3/4		3/4	
4	82,305	4	67,243	4	52,675	4	38,213	4	23,224	4	8,162	4		4		4		4	
1/4	81,992	1/4	66,929	1/4	52,373	1/4	37,911	1/4	22,910	1/4	7,848	1/4		1/4		1/4		1/4	
1/2	81,678	1/2	66,615	1/2	52,071	1/2	37,609	1/2	22,596	1/2	7,534	1/2		1/2		1/2		1/2	
3/4	81,364	3/4	66,302	3/4	51,769	3/4	37,307	3/4	22,282	3/4	7,220	3/4		3/4		3/4		3/4	
5	81,050	5	65,988	5	51,467	5	37,005	5	21,969	5	6,907	5		5		5		5	
1/4	80,736	1/4	65,680	1/4	51,165	1/4	36,697	1/4	21,655	1/4	6,593	1/4		1/4		1/4		1/4	
1/2	80,423	1/2	65,372	1/2	50,863	1/2	36,389	1/2	21,341	1/2	6,279	1/2		1/2		1/2		1/2	
3/4	80,109	3/4	65,064	3/4	50,562	3/4	36,081	3/4	21,027	3/4	5,965	3/4		3/4		3/4		3/4	
6	79,795	6	64,756	6	50,260	6	35,773	6	20,713	6	5,652	6		6		6		6	
1/4	79,481	1/4	64,454	1/4	49,959	1/4	35,459	1/4	20,400	1/4	5,338	1/4		1/4		1/4		1/4	
1/2	79,167	1/2	64,152	1/2	49,657	1/2	35,145	1/2	20,086	1/2	5,024	1/2		1/2		1/2		1/2	
3/4	78,854	3/4	63,850	3/4	49,356	3/4	34,832	3/4	19,772	3/4	4,711	3/4		3/4		3/4		3/4	
7	78,540	7	63,548	7	49,055	7	34,518	7	19,458	7	4,397	7		7		7		7	
1/4	78,226	1/4	63,246	1/4	48,753	1/4	34,204	1/4	19,144	1/4	4,085	1/4		1/4		1/4		1/4	
1/2	77,912	1/2	62,944	1/2	48,452	1/2	33,890	1/2	18,831	1/2	3,772	1/2		1/2		1/2		1/2	
3/4	77,598	3/4	62,642	3/4	48,151	3/4	33,576	3/4	18,517	3/4	3,459	3/4		3/4		3/4		3/4	
8	77,285	8	62,340	8	47,850	8	33,263	8	18,203	8	3,146	8		8		8		8	
1/4	76,971	1/4	62,038	1/4	47,549	1/4	32,949	1/4	17,889	1/4	2,853	1/4		1/4		1/4		1/4	
1/2	76,657	1/2	61,736	1/2	47,248	1/2	32,635	1/2	17,575	1/2	2,559	1/2		1/2		1/2		1/2	
3/4	76,343	3/4	61,434	3/4	46,946	3/4	32,321	3/4	17,262	3/4	2,266	3/4		3/4		3/4		3/4	
9	76,029	9	61,132	9	46,645	9	32,007	9	16,948	9	1,973	9		9		9		9	
1/4	75,716	1/4	60,830	1/4	46,344	1/4	31,694	1/4	16,634	1/4	1,737	1/4		1/4		1/4		1/4	
1/2	75,402	1/2	60,528	1/2	46,043	1/2	31,380	1/2	16,320	1/2	1,502	1/2		1/2		1/2		1/2	
3/4	75,088	3/4	60,226	3/4	45,742	3/4	31,066	3/4	16,006	3/4	1,267	3/4		3/4		3/4		3/4	
10	74,774	10	59,924	10	45,441	10	30,752	10	15,693	10	1,031	10		10		10		10	
1/4	74,460	1/4	59,622	1/4	45,140	1/4	30,439	1/4	15,379	1/4		1/4		1/4		1/4		1/4	
1/2	74,147	1/2	59,320	1/2	44,839	1/2	30,125	1/2	15,065	1/2		1/2		1/2		1/2		1/2	
3/4	73,833	3/4	59,018	3/4	44,538	3/4	29,811	3/4	14,751	3/4		3/4		3/4		3/4		3/4	
11	73,519	11	58,715	11	44,237	11	29,497	11	14,438	11		11		11		11		11	
1/4	73,205	1/4	58,413	1/4	43,935	1/4	29,184	1/4	14,124	1/4		1/4		1/4		1/4		1/4	
1/2	72,891	1/2	58,111	1/2	43,634	1/2	28,870	1/2	13,810	1/2		1/2		1/2		1/2		1/2	
3/4	72,578	3/4	57,809	3/4	43,333	3/4	28,557	3/4	13,496	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2015 CL  
CALCULATED: 10/21/2015 CL  
PRINTED: 10/21/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2015

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



# BARGE "HFL 433"

## 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	205,475	0	190,537	0	175,562	0	160,546	0	145,529	0	130,511	0	115,494	0	100,473
1/4		1/4		1/4	205,165	1/4	190,225	1/4	175,250	1/4	160,233	1/4	145,216	1/4	130,198	1/4	115,181	1/4	100,160
1/2		1/2		1/2	204,855	1/2	189,913	1/2	174,938	1/2	159,920	1/2	144,903	1/2	129,885	1/2	114,868	1/2	99,847
3/4		3/4		3/4	204,545	3/4	189,601	3/4	174,625	3/4	159,608	3/4	144,590	3/4	129,573	3/4	114,555	3/4	99,534
1		1		1	204,235	1	189,289	1	174,312	1	159,295	1	144,277	1	129,260	1	114,242	1	99,221
1/4		1/4		1/4	203,925	1/4	188,977	1/4	173,999	1/4	158,982	1/4	143,964	1/4	128,947	1/4	113,930	1/4	98,908
1/2		1/2		1/2	203,616	1/2	188,665	1/2	173,687	1/2	158,669	1/2	143,651	1/2	128,634	1/2	113,617	1/2	98,595
3/4		3/4		3/4	203,306	3/4	188,353	3/4	173,374	3/4	158,356	3/4	143,339	3/4	128,321	3/4	113,304	3/4	98,282
2		2		2	202,996	2	188,041	2	173,061	2	158,043	2	143,026	2	128,008	2	112,991	2	97,969
1/4		1/4		1/4	202,686	1/4	187,729	1/4	172,748	1/4	157,730	1/4	142,713	1/4	127,695	1/4	112,678	1/4	97,656
1/2		1/2		1/2	202,376	1/2	187,417	1/2	172,435	1/2	157,418	1/2	142,400	1/2	127,383	1/2	112,365	1/2	97,343
3/4		3/4		3/4	202,066	3/4	187,105	3/4	172,122	3/4	157,105	3/4	142,087	3/4	127,070	3/4	112,052	3/4	97,030
3		3		3	201,756	3	186,793	3	171,809	3	156,792	3	141,774	3	126,757	3	111,739	3	96,717
1/4		1/4		1/4	201,446	1/4	186,481	1/4	171,496	1/4	156,479	1/4	141,461	1/4	126,444	1/4	111,427	1/4	96,404
1/2		1/2		1/2	201,137	1/2	186,169	1/2	171,184	1/2	156,166	1/2	141,148	1/2	126,131	1/2	111,114	1/2	96,091
3/4		3/4		3/4	200,827	3/4	185,857	3/4	170,871	3/4	155,853	3/4	140,836	3/4	125,818	3/4	110,801	3/4	95,778
4		4		4	200,516	4	185,545	4	170,558	4	155,540	4	140,523	4	125,505	4	110,488	4	95,465
1/4		1/4		1/4	200,205	1/4	185,233	1/4	170,245	1/4	155,227	1/4	140,210	1/4	125,193	1/4	110,175	1/4	95,152
1/2		1/2		1/2	199,894	1/2	184,921	1/2	169,932	1/2	154,915	1/2	139,897	1/2	124,880	1/2	109,862	1/2	94,839
3/4		3/4		3/4	199,583	3/4	184,609	3/4	169,619	3/4	154,602	3/4	139,584	3/4	124,567	3/4	109,549	3/4	94,526
5		5		5	199,271	5	184,298	5	169,306	5	154,289	5	139,271	5	124,254	5	109,237	5	94,213
1/4		1/4		1/4	198,959	1/4	183,986	1/4	168,994	1/4	153,976	1/4	138,958	1/4	123,941	1/4	108,924	1/4	93,900
1/2		1/2		1/2	198,647	1/2	183,674	1/2	168,681	1/2	153,663	1/2	138,646	1/2	123,628	1/2	108,611	1/2	93,587
3/4		3/4		3/4	198,335	3/4	183,362	3/4	168,368	3/4	153,350	3/4	138,333	3/4	123,315	3/4	108,298	3/4	93,274
6		6		6	198,023	6	183,050	6	168,055	6	153,037	6	138,020	6	123,002	6	107,985	6	92,961
1/4		1/4		1/4	197,712	1/4	182,738	1/4	167,742	1/4	152,725	1/4	137,707	1/4	122,690	1/4	107,672	1/4	92,648
1/2		1/2		1/2	197,400	1/2	182,426	1/2	167,429	1/2	152,412	1/2	137,394	1/2	122,377	1/2	107,359	1/2	92,335
3/4		3/4		3/4	211,011	3/4	197,088	3/4	182,114	3/4	167,116	3/4	152,099	3/4	137,081	3/4	107,046	3/4	92,022
7		7		7	210,831	7	196,776	7	181,802	7	166,804	7	151,786	7	136,768	7	106,733	7	91,709
1/4		1/4		1/4	210,652	1/4	196,464	1/4	181,490	1/4	166,491	1/4	151,473	1/4	136,455	1/4	106,420	1/4	91,396
1/2		1/2		1/2	210,472	1/2	196,152	1/2	181,178	1/2	166,178	1/2	151,160	1/2	136,143	1/2	106,107	1/2	91,083
3/4		3/4		3/4	210,293	3/4	195,840	3/4	180,866	3/4	165,865	3/4	150,847	3/4	135,830	3/4	105,794	3/4	90,770
8		8		8	210,061	8	195,528	8	180,554	8	165,552	8	150,534	8	135,517	8	105,481	8	90,458
1/4		1/4		1/4	209,829	1/4	195,216	1/4	180,242	1/4	165,239	1/4	150,222	1/4	135,204	1/4	105,168	1/4	90,145
1/2		1/2		1/2	209,598	1/2	194,904	1/2	179,930	1/2	164,926	1/2	149,909	1/2	134,891	1/2	104,855	1/2	89,832
3/4		3/4		3/4	209,366	3/4	194,592	3/4	179,618	3/4	164,613	3/4	149,596	3/4	134,578	3/4	104,542	3/4	89,519
9		9		9	209,086	9	194,280	9	179,306	9	164,301	9	149,283	9	134,265	9	104,229	9	89,206
1/4		1/4		1/4	208,806	1/4	193,968	1/4	178,994	1/4	163,988	1/4	148,970	1/4	133,953	1/4	103,916	1/4	88,893
1/2		1/2		1/2	208,526	1/2	193,656	1/2	178,682	1/2	163,675	1/2	148,657	1/2	133,640	1/2	103,603	1/2	88,580
3/4		3/4		3/4	208,246	3/4	193,344	3/4	178,370	3/4	163,362	3/4	148,344	3/4	133,327	3/4	103,290	3/4	88,267
10		10		10	207,940	10	193,032	10	178,058	10	163,049	10	148,032	10	133,014	10	102,977	10	87,954
1/4		1/4		1/4	207,634	1/4	192,720	1/4	177,747	1/4	162,736	1/4	147,719	1/4	132,701	1/4	102,664	1/4	87,641
1/2		1/2		1/2	207,328	1/2	192,408	1/2	177,435	1/2	162,423	1/2	147,406	1/2	132,388	1/2	102,351	1/2	87,328
3/4		3/4		3/4	207,023	3/4	192,096	3/4	177,123	3/4	162,111	3/4	147,093	3/4	132,075	3/4	102,038	3/4	87,015
11		11		11	206,713	11	191,784	11	176,811	11	161,798	11	146,780	11	131,763	11	101,725	11	86,702
1/4		1/4		1/4	206,404	1/4	191,472	1/4	176,499	1/4	161,485	1/4	146,467	1/4	131,450	1/4	101,412	1/4	86,389
1/2		1/2		1/2	206,094	1/2	191,161	1/2	176,187	1/2	161,172	1/2	146,154	1/2	131,137	1/2	101,099	1/2	86,076
3/4		3/4		3/4	205,785	3/4	190,849	3/4	175,875	3/4	160,859	3/4	145,841	3/4	130,824	3/4	100,786	3/4	85,763

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 433"

## 1 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	85,450	0	70,426	0	55,407	0	40,386	0	25,362	0	10,597	0		0		0		0	
1/4	85,137	1/4	70,113	1/4	55,094	1/4	40,073	1/4	25,049	1/4	10,307	1/4		1/4		1/4		1/4	
1/2	84,824	1/2	69,800	1/2	54,781	1/2	39,760	1/2	24,736	1/2	10,017	1/2		1/2		1/2		1/2	
3/4	84,511	3/4	69,487	3/4	54,468	3/4	39,447	3/4	24,423	3/4	9,728	3/4		3/4		3/4		3/4	
1	84,198	1	69,174	1	54,156	1	39,134	1	24,110	1	9,442	1		1		1		1	
1/4	83,885	1/4	68,861	1/4	53,843	1/4	38,821	1/4	23,798	1/4	9,156	1/4		1/4		1/4		1/4	
1/2	83,572	1/2	68,548	1/2	53,530	1/2	38,508	1/2	23,485	1/2	8,870	1/2		1/2		1/2		1/2	
3/4	83,259	3/4	68,235	3/4	53,217	3/4	38,195	3/4	23,172	3/4	8,584	3/4		3/4		3/4		3/4	
2	82,946	2	67,922	2	52,905	2	37,882	2	22,859	2	8,301	2		2		2		2	
1/4	82,633	1/4	67,609	1/4	52,592	1/4	37,569	1/4	22,546	1/4	8,019	1/4		1/4		1/4		1/4	
1/2	82,320	1/2	67,296	1/2	52,279	1/2	37,256	1/2	22,233	1/2	7,737	1/2		1/2		1/2		1/2	
3/4	82,007	3/4	66,983	3/4	51,966	3/4	36,943	3/4	21,920	3/4	7,455	3/4		3/4		3/4		3/4	
3	81,694	3	66,670	3	51,653	3	36,630	3	21,607	3	7,177	3		3		3		3	
1/4	81,381	1/4	66,357	1/4	51,340	1/4	36,317	1/4	21,294	1/4	6,898	1/4		1/4		1/4		1/4	
1/2	81,068	1/2	66,044	1/2	51,027	1/2	36,004	1/2	20,981	1/2	6,620	1/2		1/2		1/2		1/2	
3/4	80,755	3/4	65,731	3/4	50,714	3/4	35,691	3/4	20,668	3/4	6,342	3/4		3/4		3/4		3/4	
4	80,442	4	65,418	4	50,401	4	35,378	4	20,355	4	6,067	4		4		4		4	
1/4	80,129	1/4	65,105	1/4	50,088	1/4	35,065	1/4	20,042	1/4	5,793	1/4		1/4		1/4		1/4	
1/2	79,816	1/2	64,792	1/2	49,775	1/2	34,752	1/2	19,729	1/2	5,518	1/2		1/2		1/2		1/2	
3/4	79,503	3/4	64,479	3/4	49,462	3/4	34,439	3/4	19,416	3/4	5,244	3/4		3/4		3/4		3/4	
5	79,190	5	64,166	5	49,149	5	34,126	5	19,103	5	4,973	5		5		5		5	
1/4	78,877	1/4	63,853	1/4	48,836	1/4	33,813	1/4	18,790	1/4	4,703	1/4		1/4		1/4		1/4	
1/2	78,564	1/2	63,540	1/2	48,523	1/2	33,500	1/2	18,477	1/2	4,432	1/2		1/2		1/2		1/2	
3/4	78,251	3/4	63,227	3/4	48,210	3/4	33,187	3/4	18,164	3/4	4,162	3/4		3/4		3/4		3/4	
6	77,938	6	62,914	6	47,897	6	32,874	6	17,852	6	3,895	6		6		6		6	
1/4	77,625	1/4	62,601	1/4	47,584	1/4	32,561	1/4	17,540	1/4	3,629	1/4		1/4		1/4		1/4	
1/2	77,312	1/2	62,288	1/2	47,272	1/2	32,248	1/2	17,228	1/2	3,362	1/2		1/2		1/2		1/2	
3/4	76,999	3/4	61,975	3/4	46,959	3/4	31,935	3/4	16,916	3/4	3,096	3/4		3/4		3/4		3/4	
7	76,686	7	61,662	7	46,646	7	31,622	7	16,607	7	2,834	7		7		7		7	
1/4	76,373	1/4	61,349	1/4	46,333	1/4	31,309	1/4	16,297	1/4	2,572	1/4		1/4		1/4		1/4	
1/2	76,060	1/2	61,037	1/2	46,020	1/2	30,996	1/2	15,988	1/2	2,310	1/2		1/2		1/2		1/2	
3/4	75,747	3/4	60,724	3/4	45,707	3/4	30,683	3/4	15,679	3/4	2,048	3/4		3/4		3/4		3/4	
8	75,434	8	60,411	8	45,394	8	30,370	8	15,374	8	1,809	8		8		8		8	
1/4	75,121	1/4	60,098	1/4	45,081	1/4	30,057	1/4	15,069	1/4	1,570	1/4		1/4		1/4		1/4	
1/2	74,808	1/2	59,785	1/2	44,768	1/2	29,744	1/2	14,763	1/2	1,332	1/2		1/2		1/2		1/2	
3/4	74,495	3/4	59,473	3/4	44,455	3/4	29,431	3/4	14,458	3/4	1,093	3/4		3/4		3/4		3/4	
9	74,182	9	59,160	9	44,142	9	29,118	9	14,157	9	916	9		9		9		9	
1/4	73,869	1/4	58,847	1/4	43,829	1/4	28,805	1/4	13,855	1/4	739	1/4		1/4		1/4		1/4	
1/2	73,556	1/2	58,534	1/2	43,516	1/2	28,492	1/2	13,554	1/2	562	1/2		1/2		1/2		1/2	
3/4	73,243	3/4	58,222	3/4	43,203	3/4	28,179	3/4	13,252	3/4	385	3/4		3/4		3/4		3/4	
10	72,930	10	57,909	10	42,890	10	27,866	10	12,955	10		10		10		10		10	
1/4	72,617	1/4	57,596	1/4	42,577	1/4	27,553	1/4	12,657	1/4		1/4		1/4		1/4		1/4	
1/2	72,304	1/2	57,283	1/2	42,264	1/2	27,240	1/2	12,360	1/2		1/2		1/2		1/2		1/2	
3/4	71,991	3/4	56,971	3/4	41,951	3/4	26,927	3/4	12,062	3/4		3/4		3/4		3/4		3/4	
11	71,678	11	56,658	11	41,638	11	26,614	11	11,768	11		11		11		11		11	
1/4	71,365	1/4	56,345	1/4	41,325	1/4	26,301	1/4	11,475	1/4		1/4		1/4		1/4		1/4	
1/2	71,052	1/2	56,032	1/2	41,012	1/2	25,988	1/2	11,181	1/2		1/2		1/2		1/2		1/2	
3/4	70,739	3/4	55,720	3/4	40,699	3/4	25,675	3/4	10,887	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2015 CL  
CALCULATED: 10/21/2015 CL  
PRINTED: 10/21/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2015

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



# BARGE "HFL 433"

# 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0		0		0	205,690	0	190,754	0	175,780	0	160,765	0	145,747	0	130,729	0	115,712	0	100,691
1/4	1/4	1/4	1/4	1/4	205,381	1/4	190,442	1/4	175,468	1/4	160,452	1/4	145,434	1/4	130,416	1/4	115,399	1/4	100,378
1/2	1/2	1/2	1/2	1/2	205,071	1/2	190,130	1/2	175,156	1/2	160,139	1/2	145,121	1/2	130,104	1/2	115,086	1/2	100,065
3/4	3/4	3/4	3/4	3/4	204,761	3/4	189,818	3/4	174,843	3/4	159,826	3/4	144,808	3/4	129,791	3/4	114,773	3/4	99,752
1	1	1	1	1	204,451	1	189,506	1	174,531	1	159,513	1	144,495	1	129,478	1	114,460	1	99,439
1/4	1/4	1/4	1/4	1/4	204,141	1/4	189,194	1/4	174,218	1/4	159,200	1/4	144,183	1/4	129,165	1/4	114,147	1/4	99,126
1/2	1/2	1/2	1/2	1/2	203,831	1/2	188,882	1/2	173,905	1/2	158,887	1/2	143,870	1/2	128,852	1/2	113,834	1/2	98,813
3/4	3/4	3/4	3/4	3/4	203,521	3/4	188,570	3/4	173,592	3/4	158,574	3/4	143,557	3/4	128,539	3/4	113,522	3/4	98,500
2	2	2	2	2	203,211	2	188,259	2	173,279	2	158,262	2	143,244	2	128,226	2	113,209	2	98,187
1/4	1/4	1/4	1/4	1/4	202,901	1/4	187,947	1/4	172,966	1/4	157,949	1/4	142,931	1/4	127,914	1/4	112,896	1/4	97,874
1/2	1/2	1/2	1/2	1/2	202,591	1/2	187,635	1/2	172,654	1/2	157,636	1/2	142,618	1/2	127,601	1/2	112,583	1/2	97,561
3/4	3/4	3/4	3/4	3/4	202,282	3/4	187,323	3/4	172,341	3/4	157,323	3/4	142,305	3/4	127,288	3/4	112,270	3/4	97,248
3	3	3	3	3	201,972	3	187,011	3	172,028	3	157,010	3	141,993	3	126,975	3	111,957	3	96,935
1/4	1/4	1/4	1/4	1/4	201,662	1/4	186,699	1/4	171,715	1/4	156,697	1/4	141,680	1/4	126,662	1/4	111,644	1/4	96,622
1/2	1/2	1/2	1/2	1/2	201,352	1/2	186,387	1/2	171,402	1/2	156,384	1/2	141,367	1/2	126,349	1/2	111,332	1/2	96,309
3/4	3/4	3/4	3/4	3/4	201,042	3/4	186,075	3/4	171,089	3/4	156,072	3/4	141,054	3/4	126,036	3/4	111,019	3/4	95,996
4	4	4	4	4	200,732	4	185,763	4	170,776	4	155,759	4	140,741	4	125,723	4	110,706	4	95,683
1/4	1/4	1/4	1/4	1/4	200,422	1/4	185,451	1/4	170,463	1/4	155,446	1/4	140,428	1/4	125,411	1/4	110,393	1/4	95,370
1/2	1/2	1/2	1/2	1/2	200,111	1/2	185,139	1/2	170,151	1/2	155,133	1/2	140,115	1/2	125,098	1/2	110,080	1/2	95,057
3/4	3/4	3/4	3/4	3/4	199,800	3/4	184,827	3/4	169,838	3/4	154,820	3/4	139,802	3/4	124,785	3/4	109,767	3/4	94,744
5	5	5	5	5	199,489	5	184,515	5	169,525	5	154,507	5	139,490	5	124,472	5	109,454	5	94,431
1/4	1/4	1/4	1/4	1/4	199,177	1/4	184,203	1/4	169,212	1/4	154,194	1/4	139,177	1/4	124,159	1/4	109,141	1/4	94,118
1/2	1/2	1/2	1/2	1/2	198,865	1/2	183,891	1/2	168,899	1/2	153,881	1/2	138,864	1/2	123,846	1/2	108,829	1/2	93,805
3/4	3/4	3/4	3/4	3/4	198,553	3/4	183,579	3/4	168,586	3/4	153,569	3/4	138,551	3/4	123,533	3/4	108,516	3/4	93,492
6	6	6	6	6	198,241	6	183,267	6	168,273	6	153,256	6	138,238	6	123,221	6	108,203	6	93,179
1/4	1/4	1/4	1/4	1/4	197,929	1/4	182,955	1/4	167,961	1/4	152,943	1/4	137,925	1/4	122,908	1/4	107,890	1/4	92,866
1/2	1/2	1/2	1/2	1/2	197,617	1/2	182,643	1/2	167,648	1/2	152,630	1/2	137,612	1/2	122,595	1/2	107,577	1/2	92,553
3/4	3/4	3/4	3/4	3/4	197,305	3/4	182,331	3/4	167,335	3/4	152,317	3/4	137,300	3/4	122,282	3/4	107,264	3/4	92,240
7	7	210,917	7	196,993	7	182,019	7	167,022	7	152,004	7	136,987	7	121,969	7	106,951	7	91,927	
1/4	1/4	210,737	1/4	196,681	1/4	181,707	1/4	166,709	1/4	151,691	1/4	136,674	1/4	121,656	1/4	106,638	1/4	91,614	
1/2	1/2	210,557	1/2	196,369	1/2	181,396	1/2	166,396	1/2	151,379	1/2	136,361	1/2	121,343	1/2	106,325	1/2	91,301	
3/4	3/4	210,378	3/4	196,057	3/4	181,084	3/4	166,083	3/4	151,066	3/4	136,048	3/4	121,030	3/4	106,012	3/4	90,988	
8	8	210,198	8	195,745	8	180,772	8	165,770	8	150,753	8	135,735	8	120,718	8	105,699	8	90,675	
1/4	1/4	209,967	1/4	195,433	1/4	180,460	1/4	165,458	1/4	150,440	1/4	135,422	1/4	120,405	1/4	105,386	1/4	90,362	
1/2	1/2	209,735	1/2	195,122	1/2	180,148	1/2	165,145	1/2	150,127	1/2	135,109	1/2	120,092	1/2	105,073	1/2	90,049	
3/4	3/4	209,503	3/4	194,810	3/4	179,836	3/4	164,832	3/4	149,814	3/4	134,797	3/4	119,779	3/4	104,760	3/4	89,736	
9	9	209,272	9	194,498	9	179,524	9	164,519	9	149,501	9	134,484	9	119,466	9	104,447	9	89,423	
1/4	1/4	208,992	1/4	194,186	1/4	179,212	1/4	164,206	1/4	149,188	1/4	134,171	1/4	119,153	1/4	104,134	1/4	89,110	
1/2	1/2	208,711	1/2	193,874	1/2	178,900	1/2	163,893	1/2	148,876	1/2	133,858	1/2	118,840	1/2	103,821	1/2	88,797	
3/4	3/4	208,431	3/4	193,562	3/4	178,588	3/4	163,580	3/4	148,563	3/4	133,545	3/4	118,528	3/4	103,508	3/4	88,484	
10	10	208,151	10	193,250	10	178,276	10	163,267	10	148,250	10	133,232	10	118,215	10	103,195	10	88,171	
1/4	1/4	207,846	1/4	192,938	1/4	177,964	1/4	162,955	1/4	147,937	1/4	132,919	1/4	117,902	1/4	102,882	1/4	87,858	
1/2	1/2	207,540	1/2	192,626	1/2	177,652	1/2	162,642	1/2	147,624	1/2	132,607	1/2	117,589	1/2	102,569	1/2	87,545	
3/4	3/4	207,234	3/4	192,314	3/4	177,340	3/4	162,329	3/4	147,311	3/4	132,294	3/4	117,276	3/4	102,256	3/4	87,232	
11	11	206,928	11	192,002	11	177,028	11	162,016	11	146,998	11	131,981	11	116,963	11	101,943	11	86,919	
1/4	1/4	206,619	1/4	191,690	1/4	176,716	1/4	161,703	1/4	146,686	1/4	131,668	1/4	116,650	1/4	101,630	1/4	86,606	
1/2	1/2	206,309	1/2	191,378	1/2	176,404	1/2	161,390	1/2	146,373	1/2	131,355	1/2	116,337	1/2	101,317	1/2	86,293	
3/4	3/4	206,000	3/4	191,066	3/4	176,092	3/4	161,077	3/4	146,060	3/4	131,042	3/4	116,025	3/4	101,004	3/4	85,980	

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 433"

## 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	85,667	0	70,643	0	55,680	0	40,699	0	25,676	0	10,887	0		0		0		0	
1/4	85,354	1/4	70,330	1/4	55,370	1/4	40,387	1/4	25,363	1/4	10,597	1/4		1/4		1/4		1/4	
1/2	85,041	1/2	70,017	1/2	55,059	1/2	40,074	1/2	25,050	1/2	10,307	1/2		1/2		1/2		1/2	
3/4	84,728	3/4	69,704	3/4	54,749	3/4	39,761	3/4	24,737	3/4	10,018	3/4		3/4		3/4		3/4	
1	84,415	1	69,391	1	54,438	1	39,448	1	24,424	1	9,728	1		1		1		1	
1/4	84,102	1/4	69,078	1/4	54,127	1/4	39,135	1/4	24,111	1/4	9,442	1/4		1/4		1/4		1/4	
1/2	83,789	1/2	68,765	1/2	53,817	1/2	38,822	1/2	23,798	1/2	9,156	1/2		1/2		1/2		1/2	
3/4	83,476	3/4	68,452	3/4	53,506	3/4	38,509	3/4	23,485	3/4	8,870	3/4		3/4		3/4		3/4	
2	83,163	2	68,139	2	53,195	2	38,196	2	23,172	2	8,584	2		2		2		2	
1/4	82,850	1/4	67,826	1/4	52,885	1/4	37,883	1/4	22,859	1/4	8,301	1/4		1/4		1/4		1/4	
1/2	82,537	1/2	67,513	1/2	52,574	1/2	37,570	1/2	22,546	1/2	8,019	1/2		1/2		1/2		1/2	
3/4	82,224	3/4	67,200	3/4	52,263	3/4	37,257	3/4	22,233	3/4	7,737	3/4		3/4		3/4		3/4	
3	81,911	3	66,887	3	51,952	3	36,944	3	21,920	3	7,455	3		3		3		3	
1/4	81,598	1/4	66,574	1/4	51,641	1/4	36,631	1/4	21,607	1/4	7,177	1/4		1/4		1/4		1/4	
1/2	81,285	1/2	66,261	1/2	51,329	1/2	36,318	1/2	21,294	1/2	6,898	1/2		1/2		1/2		1/2	
3/4	80,972	3/4	65,948	3/4	51,018	3/4	36,005	3/4	20,981	3/4	6,620	3/4		3/4		3/4		3/4	
4	80,659	4	65,635	4	50,707	4	35,692	4	20,668	4	6,342	4		4		4		4	
1/4	80,346	1/4	65,322	1/4	50,395	1/4	35,379	1/4	20,355	1/4	6,067	1/4		1/4		1/4		1/4	
1/2	80,033	1/2	65,009	1/2	50,084	1/2	35,066	1/2	20,042	1/2	5,793	1/2		1/2		1/2		1/2	
3/4	79,720	3/4	64,696	3/4	49,772	3/4	34,753	3/4	19,729	3/4	5,518	3/4		3/4		3/4		3/4	
5	79,407	5	64,384	5	49,460	5	34,440	5	19,416	5	5,244	5		5		5		5	
1/4	79,094	1/4	64,072	1/4	49,148	1/4	34,127	1/4	19,103	1/4	4,973	1/4		1/4		1/4		1/4	
1/2	78,781	1/2	63,760	1/2	48,836	1/2	33,814	1/2	18,790	1/2	4,703	1/2		1/2		1/2		1/2	
3/4	78,468	3/4	63,448	3/4	48,524	3/4	33,501	3/4	18,477	3/4	4,432	3/4		3/4		3/4		3/4	
6	78,155	6	63,136	6	48,211	6	33,188	6	18,164	6	4,161	6		6		6		6	
1/4	77,842	1/4	62,826	1/4	47,898	1/4	32,875	1/4	17,852	1/4	3,895	1/4		1/4		1/4		1/4	
1/2	77,529	1/2	62,515	1/2	47,585	1/2	32,562	1/2	17,540	1/2	3,628	1/2		1/2		1/2		1/2	
3/4	77,216	3/4	62,204	3/4	47,272	3/4	32,249	3/4	17,228	3/4	3,362	3/4		3/4		3/4		3/4	
7	76,903	7	61,893	7	46,959	7	31,936	7	16,916	7	3,095	7		7		7		7	
1/4	76,590	1/4	61,583	1/4	46,646	1/4	31,623	1/4	16,607	1/4	2,834	1/4		1/4		1/4		1/4	
1/2	76,277	1/2	61,272	1/2	46,333	1/2	31,310	1/2	16,298	1/2	2,572	1/2		1/2		1/2		1/2	
3/4	75,964	3/4	60,961	3/4	46,020	3/4	30,997	3/4	15,988	3/4	2,310	3/4		3/4		3/4		3/4	
8	75,651	8	60,651	8	45,707	8	30,684	8	15,679	8	2,048	8		8		8		8	
1/4	75,338	1/4	60,340	1/4	45,394	1/4	30,371	1/4	15,374	1/4	1,809	1/4		1/4		1/4		1/4	
1/2	75,025	1/2	60,029	1/2	45,081	1/2	30,058	1/2	15,069	1/2	1,570	1/2		1/2		1/2		1/2	
3/4	74,712	3/4	59,719	3/4	44,768	3/4	29,745	3/4	14,763	3/4	1,332	3/4		3/4		3/4		3/4	
9	74,399	9	59,408	9	44,455	9	29,432	9	14,458	9	1,093	9		9		9		9	
1/4	74,086	1/4	59,097	1/4	44,142	1/4	29,119	1/4	14,157	1/4	916	1/4		1/4		1/4		1/4	
1/2	73,773	1/2	58,787	1/2	43,829	1/2	28,806	1/2	13,855	1/2	739	1/2		1/2		1/2		1/2	
3/4	73,460	3/4	58,476	3/4	43,516	3/4	28,493	3/4	13,554	3/4	562	3/4		3/4		3/4		3/4	
10	73,147	10	58,165	10	43,203	10	28,180	10	13,252	10	385	10		10		10		10	
1/4	72,834	1/4	57,855	1/4	42,890	1/4	27,867	1/4	12,955	1/4		1/4		1/4		1/4		1/4	
1/2	72,521	1/2	57,544	1/2	42,577	1/2	27,554	1/2	12,657	1/2		1/2		1/2		1/2		1/2	
3/4	72,208	3/4	57,234	3/4	42,264	3/4	27,241	3/4	12,360	3/4		3/4		3/4		3/4		3/4	
11	71,895	11	56,923	11	41,951	11	26,928	11	12,062	11		11		11		11		11	
1/4	71,582	1/4	56,612	1/4	41,638	1/4	26,615	1/4	11,768	1/4		1/4		1/4		1/4		1/4	
1/2	71,269	1/2	56,302	1/2	41,325	1/2	26,302	1/2	11,475	1/2		1/2		1/2		1/2		1/2	
3/4	70,956	3/4	55,991	3/4	41,012	3/4	25,989	3/4	11,181	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2015 CL  
CALCULATED: 10/21/2015 CL  
PRINTED: 10/21/2015 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2015

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



# BARGE "HFL 433"

## STBD SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 6'-00"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4,619</b>	<b>1</b>	<b>4,619</b>	<b>1</b>	<b>3,464</b>	<b>1</b>	<b>2,310</b>	<b>1</b>	<b>1,155</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4,522</b>	<b>2</b>	<b>4,522</b>	<b>2</b>	<b>3,367</b>	<b>2</b>	<b>2,214</b>	<b>2</b>	<b>1,059</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4,426</b>	<b>3</b>	<b>4,426</b>	<b>3</b>	<b>3,271</b>	<b>3</b>	<b>2,117</b>	<b>3</b>	<b>963</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4,330</b>	<b>4</b>	<b>4,330</b>	<b>4</b>	<b>3,175</b>	<b>4</b>	<b>2,021</b>	<b>4</b>	<b>866</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4,234</b>	<b>5</b>	<b>4,234</b>	<b>5</b>	<b>3,079</b>	<b>5</b>	<b>1,925</b>	<b>5</b>	<b>770</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>4,137</b>	<b>6</b>	<b>4,137</b>	<b>6</b>	<b>2,982</b>	<b>6</b>	<b>1,829</b>	<b>6</b>	<b>674</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>7</b>	<b>7</b>	<b>5,140</b>	<b>7</b>	<b>4,041</b>	<b>7</b>	<b>2,886</b>	<b>7</b>	<b>1,732</b>	<b>7</b>	<b>578</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>8</b>	<b>8</b>	<b>5,093</b>	<b>8</b>	<b>3,945</b>	<b>8</b>	<b>2,790</b>	<b>8</b>	<b>1,636</b>	<b>8</b>	<b>481</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>9</b>	<b>9</b>	<b>4,999</b>	<b>9</b>	<b>3,849</b>	<b>9</b>	<b>2,694</b>	<b>9</b>	<b>1,540</b>	<b>9</b>	<b>385</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>10</b>	<b>10</b>	<b>4,904</b>	<b>10</b>	<b>3,752</b>	<b>10</b>	<b>2,597</b>	<b>10</b>	<b>1,444</b>	<b>10</b>	<b>289</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>11</b>	<b>11</b>	<b>4,810</b>	<b>11</b>	<b>3,656</b>	<b>11</b>	<b>2,502</b>	<b>11</b>	<b>1,347</b>	<b>11</b>	<b>193</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.  
 CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.  
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.  
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.

STRAPPED: 10/21/2015 CL  
 CALCULATED: 10/21/2015 CL  
 PRINTED: 10/21/2015 CL

CANCELS AND SUPERCEDES  
 ALL PRIOR TO 10/2015

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT  
 & ANALYSIS, INC.

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# BARGE "HFL 433"

## PORT SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 6'-00"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4,619</b>	<b>1</b>	<b>4,619</b>	<b>1</b>	<b>3,464</b>	<b>1</b>	<b>2,310</b>	<b>1</b>	<b>1,155</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4,522</b>	<b>2</b>	<b>4,522</b>	<b>2</b>	<b>3,367</b>	<b>2</b>	<b>2,214</b>	<b>2</b>	<b>1,059</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4,426</b>	<b>3</b>	<b>4,426</b>	<b>3</b>	<b>3,271</b>	<b>3</b>	<b>2,117</b>	<b>3</b>	<b>963</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4,330</b>	<b>4</b>	<b>4,330</b>	<b>4</b>	<b>3,175</b>	<b>4</b>	<b>2,021</b>	<b>4</b>	<b>866</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4,234</b>	<b>5</b>	<b>4,234</b>	<b>5</b>	<b>3,079</b>	<b>5</b>	<b>1,925</b>	<b>5</b>	<b>770</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>4,137</b>	<b>6</b>	<b>4,137</b>	<b>6</b>	<b>2,982</b>	<b>6</b>	<b>1,829</b>	<b>6</b>	<b>674</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>7</b>	<b>7</b>	<b>5,140</b>	<b>7</b>	<b>4,041</b>	<b>7</b>	<b>2,886</b>	<b>7</b>	<b>1,732</b>	<b>7</b>	<b>578</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>8</b>	<b>8</b>	<b>5,093</b>	<b>8</b>	<b>3,945</b>	<b>8</b>	<b>2,790</b>	<b>8</b>	<b>1,636</b>	<b>8</b>	<b>481</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>9</b>	<b>9</b>	<b>4,999</b>	<b>9</b>	<b>3,849</b>	<b>9</b>	<b>2,694</b>	<b>9</b>	<b>1,540</b>	<b>9</b>	<b>385</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>10</b>	<b>10</b>	<b>4,904</b>	<b>10</b>	<b>3,752</b>	<b>10</b>	<b>2,597</b>	<b>10</b>	<b>1,444</b>	<b>10</b>	<b>289</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
<b>11</b>	<b>11</b>	<b>4,810</b>	<b>11</b>	<b>3,656</b>	<b>11</b>	<b>2,502</b>	<b>11</b>	<b>1,347</b>	<b>11</b>	<b>193</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.  
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PRECISION MEASUREMENT  
 & ANALYSIS, INC.  
 P.O. Box 2092  
 Pearland, Texas 77588  
<http://www.pmacorp.net>



# BARGE "HFL 433"

# FUEL TANK ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GUAGE HEIGHT 4'-05 1/2

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
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	3/4		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	

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" DIAMETER PIPE.

STRAPPED: 10/21/2015 CL  
 CALCULATED: 10/21/2015 CL  
 PRINTED: 10/21/2015 CL

CANCELS AND SUPERCEDES  
 ALL PRIOR TO 10/2015

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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