



# BARGE "HFL 427"

## 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	00-1/8	- 00-1/8	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	- 00-0/8	00-0/8
2 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
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 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: 236'-00"

October 22, 2013

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092  
Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 427"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 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	197,680	0	183,400	0	169,052	0	154,665	0	140,273	0	125,881	0	111,490	0	97,095
1/4		1/4		1/4	197,385	1/4	183,101	1/4	168,753	1/4	154,365	1/4	139,973	1/4	125,582	1/4	111,190	1/4	96,795
1/2		1/2		1/2	197,091	1/2	182,802	1/2	168,454	1/2	154,065	1/2	139,673	1/2	125,282	1/2	110,890	1/2	96,495
3/4		3/4		3/4	196,796	3/4	182,503	3/4	168,155	3/4	153,765	3/4	139,374	3/4	124,982	3/4	110,590	3/4	96,195
1		1		1	196,501	1	182,204	1	167,856	1	153,466	1	139,074	1	124,682	1	110,290	1	95,895
1/4		1/4		1/4	196,205	1/4	181,906	1/4	167,557	1/4	153,166	1/4	138,774	1/4	124,382	1/4	109,990	1/4	95,595
1/2		1/2		1/2	195,910	1/2	181,607	1/2	167,257	1/2	152,866	1/2	138,474	1/2	124,082	1/2	109,691	1/2	95,295
3/4		3/4		3/4	195,614	3/4	181,308	3/4	166,958	3/4	152,566	3/4	138,174	3/4	123,783	3/4	109,391	3/4	94,995
2		2		2	195,318	2	181,009	2	166,658	2	152,266	2	137,874	2	123,483	2	109,091	2	94,695
1/4		1/4		1/4	195,022	1/4	180,710	1/4	166,358	1/4	151,966	1/4	137,575	1/4	123,183	1/4	108,791	1/4	94,396
1/2		1/2		1/2	194,726	1/2	180,411	1/2	166,058	1/2	151,667	1/2	137,275	1/2	122,883	1/2	108,491	1/2	94,096
3/4		3/4		3/4	194,430	3/4	180,112	3/4	165,759	3/4	151,367	3/4	136,975	3/4	122,583	3/4	108,191	3/4	93,796
3		3		3	194,134	3	179,813	3	165,459	3	151,067	3	136,675	3	122,283	3	107,892	3	93,496
1/4		1/4		1/4	193,838	1/4	179,514	1/4	165,159	1/4	150,767	1/4	136,375	1/4	121,984	1/4	107,592	1/4	93,196
1/2		1/2		1/2	193,542	1/2	179,215	1/2	164,859	1/2	150,467	1/2	136,076	1/2	121,684	1/2	107,292	1/2	92,896
3/4		3/4		3/4	193,247	3/4	178,916	3/4	164,559	3/4	150,167	3/4	135,776	3/4	121,384	3/4	106,992	3/4	92,596
4		4		4	192,951	4	178,617	4	164,259	4	149,868	4	135,476	4	121,084	4	106,692	4	92,296
1/4		1/4		1/4	192,655	1/4	178,319	1/4	163,960	1/4	149,568	1/4	135,176	1/4	120,784	1/4	106,392	1/4	91,996
1/2		1/2		1/2	192,359	1/2	178,020	1/2	163,660	1/2	149,268	1/2	134,876	1/2	120,484	1/2	106,093	1/2	91,696
3/4		3/4		3/4	192,063	3/4	177,721	3/4	163,360	3/4	148,968	3/4	134,576	3/4	120,185	3/4	105,793	3/4	91,396
5		5		5	191,765	5	177,422	5	163,060	5	148,668	5	134,277	5	119,885	5	105,493	5	91,096
1/4		1/4		1/4	191,468	1/4	177,123	1/4	162,760	1/4	148,369	1/4	133,977	1/4	119,585	1/4	105,193	1/4	90,796
1/2		1/2		1/2	191,170	1/2	176,824	1/2	162,460	1/2	148,069	1/2	133,677	1/2	119,285	1/2	104,893	1/2	90,496
3/4		3/4		3/4	190,873	3/4	176,525	3/4	162,161	3/4	147,769	3/4	133,377	3/4	118,985	3/4	104,593	3/4	90,196
6		6		6	190,574	6	176,226	6	161,861	6	147,469	6	133,077	6	118,685	6	104,294	6	89,896
1/4		1/4		1/4	190,275	1/4	175,927	1/4	161,561	1/4	147,169	1/4	132,777	1/4	118,386	1/4	103,994	1/4	89,596
1/2		1/2		1/2	189,976	1/2	175,628	1/2	161,261	1/2	146,869	1/2	132,478	1/2	118,086	1/2	103,694	1/2	89,296
3/4		3/4		3/4	189,677	3/4	175,329	3/4	160,961	3/4	146,570	3/4	132,178	3/4	117,786	3/4	103,394	3/4	88,996
7		7		7	189,378	7	175,030	7	160,661	7	146,270	7	131,878	7	117,486	7	103,094	7	88,696
1/4		1/4		1/4	189,080	1/4	174,732	1/4	160,362	1/4	145,970	1/4	131,578	1/4	117,186	1/4	102,794	1/4	88,396
1/2		1/2		1/2	188,781	1/2	174,433	1/2	160,062	1/2	145,670	1/2	131,278	1/2	116,886	1/2	102,494	1/2	88,096
3/4		3/4		3/4	188,482	3/4	174,134	3/4	159,762	3/4	145,370	3/4	130,978	3/4	116,587	3/4	102,195	3/4	87,796
8		8		8	201,468	8	188,183	8	173,835	8	159,462	8	145,070	8	130,679	8	116,287	8	101,895
1/4		1/4		1/4	201,301	1/4	187,884	1/4	173,536	1/4	159,162	1/4	144,771	1/4	130,379	1/4	115,987	1/4	101,595
1/2		1/2		1/2	201,133	1/2	187,585	1/2	173,237	1/2	158,863	1/2	144,471	1/2	130,079	1/2	115,687	1/2	101,295
3/4		3/4		3/4	200,965	3/4	187,286	3/4	172,938	3/4	158,563	3/4	144,171	3/4	129,779	3/4	115,387	3/4	100,995
9		9		9	200,755	9	186,987	9	172,639	9	158,263	9	143,871	9	129,479	9	115,088	9	100,695
1/4		1/4		1/4	200,545	1/4	186,688	1/4	172,340	1/4	157,963	1/4	143,571	1/4	129,179	1/4	114,788	1/4	100,395
1/2		1/2		1/2	200,334	1/2	186,389	1/2	172,041	1/2	157,663	1/2	143,271	1/2	128,880	1/2	114,488	1/2	100,095
3/4		3/4		3/4	200,124	3/4	186,090	3/4	171,742	3/4	157,363	3/4	142,972	3/4	128,580	3/4	114,188	3/4	99,795
10		10		10	199,871	10	185,791	10	171,443	10	157,064	10	142,672	10	128,280	10	113,888	10	99,495
1/4		1/4		1/4	199,618	1/4	185,493	1/4	171,145	1/4	156,764	1/4	142,372	1/4	127,980	1/4	113,588	1/4	99,195
1/2		1/2		1/2	199,365	1/2	185,194	1/2	170,846	1/2	156,464	1/2	142,072	1/2	127,680	1/2	113,289	1/2	98,895
3/4		3/4		3/4	199,111	3/4	184,895	3/4	170,547	3/4	156,164	3/4	141,772	3/4	127,380	3/4	112,989	3/4	98,595
11		11		11	198,827	11	184,596	11	170,248	11	155,864	11	141,472	11	127,081	11	112,689	11	98,295
1/4		1/4		1/4	198,543	1/4	184,297	1/4	169,949	1/4	155,564	1/4	141,173	1/4	126,781	1/4	112,389	1/4	97,995
1/2		1/2		1/2	198,259	1/2	183,998	1/2	169,650	1/2	155,265	1/2	140,873	1/2	126,481	1/2	112,089	1/2	97,695
3/4		3/4		3/4	197,974	3/4	183,699	3/4	169,351	3/4	154,965	3/4	140,573	3/4	126,181	3/4	111,789	3/4	97,395

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 THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 41'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

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# BARGE "HFL 427"

## 1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 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	82,697	0	68,299	0	53,955	0	39,607	0	25,209	0	11,386	0		0		0		0	
1/4	82,397	1/4	67,999	1/4	53,657	1/4	39,307	1/4	24,909	1/4	11,118	1/4		1/4		1/4		1/4	
1/2	82,097	1/2	67,699	1/2	53,360	1/2	39,007	1/2	24,609	1/2	10,850	1/2		1/2		1/2		1/2	
3/4	81,797	3/4	67,399	3/4	53,062	3/4	38,707	3/4	24,309	3/4	10,581	3/4		3/4		3/4		3/4	
1	81,497	1	67,099	1	52,765	1	38,407	1	24,009	1	10,316	1		1		1		1	
1/4	81,197	1/4	66,799	1/4	52,467	1/4	38,107	1/4	23,709	1/4	10,051	1/4		1/4		1/4		1/4	
1/2	80,897	1/2	66,499	1/2	52,169	1/2	37,807	1/2	23,409	1/2	9,786	1/2		1/2		1/2		1/2	
3/4	80,597	3/4	66,199	3/4	51,872	3/4	37,507	3/4	23,109	3/4	9,521	3/4		3/4		3/4		3/4	
2	80,297	2	65,899	2	51,574	2	37,207	2	22,810	2	9,260	2		2		2		2	
1/4	79,997	1/4	65,599	1/4	51,277	1/4	36,907	1/4	22,510	1/4	8,998	1/4		1/4		1/4		1/4	
1/2	79,697	1/2	65,299	1/2	50,979	1/2	36,607	1/2	22,211	1/2	8,737	1/2		1/2		1/2		1/2	
3/4	79,397	3/4	64,999	3/4	50,681	3/4	36,307	3/4	21,911	3/4	8,475	3/4		3/4		3/4		3/4	
3	79,097	3	64,699	3	50,384	3	36,007	3	21,613	3	8,217	3		3		3		3	
1/4	78,797	1/4	64,399	1/4	50,086	1/4	35,707	1/4	21,315	1/4	7,958	1/4		1/4		1/4		1/4	
1/2	78,497	1/2	64,099	1/2	49,788	1/2	35,408	1/2	21,018	1/2	7,700	1/2		1/2		1/2		1/2	
3/4	78,197	3/4	63,799	3/4	49,490	3/4	35,108	3/4	20,720	3/4	7,442	3/4		3/4		3/4		3/4	
4	77,897	4	63,499	4	49,192	4	34,808	4	20,425	4	7,187	4		4		4		4	
1/4	77,598	1/4	63,199	1/4	48,894	1/4	34,508	1/4	20,130	1/4	6,932	1/4		1/4		1/4		1/4	
1/2	77,298	1/2	62,899	1/2	48,595	1/2	34,208	1/2	19,835	1/2	6,677	1/2		1/2		1/2		1/2	
3/4	76,998	3/4	62,599	3/4	48,297	3/4	33,908	3/4	19,540	3/4	6,422	3/4		3/4		3/4		3/4	
5	76,698	5	62,300	5	47,998	5	33,608	5	19,248	5	6,171	5		5		5		5	
1/4	76,398	1/4	62,000	1/4	47,700	1/4	33,308	1/4	18,957	1/4	5,920	1/4		1/4		1/4		1/4	
1/2	76,098	1/2	61,700	1/2	47,401	1/2	33,008	1/2	18,665	1/2	5,669	1/2		1/2		1/2		1/2	
3/4	75,798	3/4	61,400	3/4	47,103	3/4	32,708	3/4	18,373	3/4	5,417	3/4		3/4		3/4		3/4	
6	75,498	6	61,101	6	46,804	6	32,408	6	18,085	6	5,170	6		6		6		6	
1/4	75,198	1/4	60,803	1/4	46,504	1/4	32,108	1/4	17,797	1/4	4,923	1/4		1/4		1/4		1/4	
1/2	74,898	1/2	60,504	1/2	46,205	1/2	31,808	1/2	17,509	1/2	4,675	1/2		1/2		1/2		1/2	
3/4	74,598	3/4	60,205	3/4	45,906	3/4	31,508	3/4	17,220	3/4	4,428	3/4		3/4		3/4		3/4	
7	74,298	7	59,908	7	45,606	7	31,208	7	16,935	7	4,184	7		7		7		7	
1/4	73,998	1/4	59,610	1/4	45,306	1/4	30,908	1/4	16,650	1/4	3,941	1/4		1/4		1/4		1/4	
1/2	73,698	1/2	59,312	1/2	45,006	1/2	30,608	1/2	16,365	1/2	3,698	1/2		1/2		1/2		1/2	
3/4	73,398	3/4	59,014	3/4	44,706	3/4	30,308	3/4	16,080	3/4	3,454	3/4		3/4		3/4		3/4	
8	73,098	8	58,717	8	44,406	8	30,008	8	15,799	8	3,216	8		8		8		8	
1/4	72,798	1/4	58,419	1/4	44,106	1/4	29,708	1/4	15,517	1/4	2,977	1/4		1/4		1/4		1/4	
1/2	72,498	1/2	58,121	1/2	43,806	1/2	29,408	1/2	15,236	1/2	2,738	1/2		1/2		1/2		1/2	
3/4	72,198	3/4	57,824	3/4	43,506	3/4	29,108	3/4	14,954	3/4	2,499	3/4		3/4		3/4		3/4	
9	71,898	9	57,526	9	43,206	9	28,809	9	14,676	9	2,282	9		9		9		9	
1/4	71,598	1/4	57,228	1/4	42,906	1/4	28,509	1/4	14,397	1/4	2,064	1/4		1/4		1/4		1/4	
1/2	71,298	1/2	56,931	1/2	42,606	1/2	28,209	1/2	14,119	1/2	1,847	1/2		1/2		1/2		1/2	
3/4	70,998	3/4	56,633	3/4	42,306	3/4	27,909	3/4	13,841	3/4	1,629	3/4		3/4		3/4		3/4	
10	70,698	10	56,336	10	42,007	10	27,609	10	13,566	10	1,452	10		10		10		10	
1/4	70,398	1/4	56,038	1/4	41,707	1/4	27,309	1/4	13,291	1/4	1,275	1/4		1/4		1/4		1/4	
1/2	70,098	1/2	55,740	1/2	41,407	1/2	27,009	1/2	13,016	1/2	1,098	1/2		1/2		1/2		1/2	
3/4	69,798	3/4	55,443	3/4	41,107	3/4	26,709	3/4	12,741	3/4	921	3/4		3/4		3/4		3/4	
11	69,498	11	55,145	11	40,807	11	26,409	11	12,469	11		11		11		11		11	
1/4	69,199	1/4	54,848	1/4	40,507	1/4	26,109	1/4	12,198	1/4		1/4		1/4		1/4		1/4	
1/2	68,899	1/2	54,550	1/2	40,207	1/2	25,809	1/2	11,926	1/2		1/2		1/2		1/2		1/2	
3/4	68,599	3/4	54,253	3/4	39,907	3/4	25,509	3/4	11,654	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2013 CL - SW  
CALCULATED: 10/22/2013 CL  
PRINTED: 10/22/2013 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2013

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



# BARGE "HFL 427"

1 STBD  
ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 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	197,774	0	183,494	0	169,147	0	154,759	0	140,368	0	125,976	0	111,584	0	97,190
1/4		1/4		1/4	197,480	1/4	183,196	1/4	168,848	1/4	154,460	1/4	140,068	1/4	125,676	1/4	111,285	1/4	96,890
1/2		1/2		1/2	197,185	1/2	182,897	1/2	168,549	1/2	154,160	1/2	139,768	1/2	125,376	1/2	110,985	1/2	96,591
3/4		3/4		3/4	196,890	3/4	182,598	3/4	168,250	3/4	153,860	3/4	139,468	3/4	125,077	3/4	110,685	3/4	96,291
1		1		1	196,595	1	182,299	1	167,950	1	153,560	1	139,168	1	124,777	1	110,385	1	95,991
1/4		1/4		1/4	196,299	1/4	182,000	1/4	167,651	1/4	153,260	1/4	138,868	1/4	124,477	1/4	110,085	1/4	95,691
1/2		1/2		1/2	196,004	1/2	181,701	1/2	167,352	1/2	152,960	1/2	138,569	1/2	124,177	1/2	109,786	1/2	95,391
3/4		3/4		3/4	195,708	3/4	181,402	3/4	167,052	3/4	152,661	3/4	138,269	3/4	123,877	3/4	109,486	3/4	95,091
2		2		2	195,413	2	181,103	2	166,752	2	152,361	2	137,969	2	123,577	2	109,186	2	94,791
1/4		1/4		1/4	195,117	1/4	180,804	1/4	166,453	1/4	152,061	1/4	137,669	1/4	123,278	1/4	108,886	1/4	94,491
1/2		1/2		1/2	194,821	1/2	180,505	1/2	166,153	1/2	151,761	1/2	137,369	1/2	122,978	1/2	108,586	1/2	94,191
3/4		3/4		3/4	194,525	3/4	180,206	3/4	165,853	3/4	151,461	3/4	137,070	3/4	122,678	3/4	108,286	3/4	93,891
3		3		3	194,229	3	179,907	3	165,553	3	151,161	3	136,770	3	122,378	3	107,987	3	93,591
1/4		1/4		1/4	193,933	1/4	179,609	1/4	165,253	1/4	150,862	1/4	136,470	1/4	122,078	1/4	107,687	1/4	93,291
1/2		1/2		1/2	193,637	1/2	179,310	1/2	164,954	1/2	150,562	1/2	136,170	1/2	121,778	1/2	107,387	1/2	92,991
3/4		3/4		3/4	193,341	3/4	179,011	3/4	164,654	3/4	150,262	3/4	135,870	3/4	121,479	3/4	107,087	3/4	92,691
4		4		4	193,045	4	178,712	4	164,354	4	149,962	4	135,570	4	121,179	4	106,787	4	92,391
1/4		1/4		1/4	192,749	1/4	178,413	1/4	164,054	1/4	149,662	1/4	135,271	1/4	120,879	1/4	106,488	1/4	92,091
1/2		1/2		1/2	192,453	1/2	178,114	1/2	163,754	1/2	149,362	1/2	134,971	1/2	120,579	1/2	106,188	1/2	91,791
3/4		3/4		3/4	192,157	3/4	177,815	3/4	163,454	3/4	149,063	3/4	134,671	3/4	120,279	3/4	105,888	3/4	91,491
5		5		5	191,860	5	177,516	5	163,155	5	148,763	5	134,371	5	119,980	5	105,588	5	91,191
1/4		1/4		1/4	191,562	1/4	177,217	1/4	162,855	1/4	148,463	1/4	134,071	1/4	119,680	1/4	105,288	1/4	90,891
1/2		1/2		1/2	191,265	1/2	176,918	1/2	162,555	1/2	148,163	1/2	133,771	1/2	119,380	1/2	104,988	1/2	90,591
3/4		3/4		3/4	190,967	3/4	176,619	3/4	162,255	3/4	147,863	3/4	133,472	3/4	119,080	3/4	104,689	3/4	90,291
6		6		6	190,668	6	176,321	6	161,955	6	147,563	6	133,172	6	118,780	6	104,389	6	89,991
1/4		1/4		1/4	190,370	1/4	176,022	1/4	161,655	1/4	147,264	1/4	132,872	1/4	118,480	1/4	104,089	1/4	89,691
1/2		1/2		1/2	190,071	1/2	175,723	1/2	161,356	1/2	146,964	1/2	132,572	1/2	118,181	1/2	103,789	1/2	89,392
3/4		3/4		3/4	189,772	3/4	175,424	3/4	161,056	3/4	146,664	3/4	132,272	3/4	117,881	3/4	103,489	3/4	89,092
7		7		7	189,473	7	175,125	7	160,756	7	146,364	7	131,972	7	117,581	7	103,189	7	88,792
1/4		1/4		1/4	189,174	1/4	174,826	1/4	160,456	1/4	146,064	1/4	131,673	1/4	117,281	1/4	102,890	1/4	88,492
1/2		1/2		1/2	188,875	1/2	174,527	1/2	160,156	1/2	145,765	1/2	131,373	1/2	116,981	1/2	102,590	1/2	88,192
3/4		3/4		3/4	201,730	3/4	188,576	3/4	174,228	3/4	159,856	3/4	145,465	3/4	131,073	3/4	116,681	3/4	87,892
8		8		8	201,562	8	188,277	8	173,929	8	159,557	8	145,165	8	130,773	8	116,382	8	87,592
1/4		1/4		1/4	201,395	1/4	187,978	1/4	173,630	1/4	159,257	1/4	144,865	1/4	130,473	1/4	116,082	1/4	87,292
1/2		1/2		1/2	201,227	1/2	187,679	1/2	173,331	1/2	158,957	1/2	144,565	1/2	130,173	1/2	115,782	1/2	86,992
3/4		3/4		3/4	201,060	3/4	187,380	3/4	173,032	3/4	158,657	3/4	144,265	3/4	129,874	3/4	115,482	3/4	86,692
9		9		9	200,849	9	187,081	9	172,734	9	158,357	9	143,966	9	129,574	9	115,182	9	86,392
1/4		1/4		1/4	200,639	1/4	186,783	1/4	172,435	1/4	158,057	1/4	143,666	1/4	129,274	1/4	114,883	1/4	86,092
1/2		1/2		1/2	200,429	1/2	186,484	1/2	172,136	1/2	157,758	1/2	143,366	1/2	128,974	1/2	114,583	1/2	85,792
3/4		3/4		3/4	200,218	3/4	186,185	3/4	171,837	3/4	157,458	3/4	143,066	3/4	128,674	3/4	114,283	3/4	85,492
10		10		10	199,965	10	185,886	10	171,538	10	157,158	10	142,766	10	128,375	10	113,983	10	85,192
1/4		1/4		1/4	199,712	1/4	185,587	1/4	171,239	1/4	156,858	1/4	142,466	1/4	128,075	1/4	113,683	1/4	84,892
1/2		1/2		1/2	199,459	1/2	185,288	1/2	170,940	1/2	156,558	1/2	142,167	1/2	127,775	1/2	113,383	1/2	84,592
3/4		3/4		3/4	199,206	3/4	184,989	3/4	170,641	3/4	156,259	3/4	141,867	3/4	127,475	3/4	113,084	3/4	84,292
11		11		11	198,921	11	184,690	11	170,342	11	155,959	11	141,567	11	127,175	11	112,784	11	83,992
1/4		1/4		1/4	198,637	1/4	184,391	1/4	170,043	1/4	155,659	1/4	141,267	1/4	126,875	1/4	112,484	1/4	83,692
1/2		1/2		1/2	198,353	1/2	184,092	1/2	169,744	1/2	155,359	1/2	140,967	1/2	126,576	1/2	112,184	1/2	83,392
3/4		3/4		3/4	198,069	3/4	183,793	3/4	169,445	3/4	155,059	3/4	140,667	3/4	126,276	3/4	111,884	3/4	83,092

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 THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 41'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 427"

1 STBD  
ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 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	82,792	0	68,394	0	54,000	0	39,606	0	25,209	0	11,386	0		0		0		0	
1/4	82,492	1/4	68,095	1/4	53,701	1/4	39,306	1/4	24,909	1/4	11,118	1/4		1/4		1/4		1/4	
1/2	82,193	1/2	67,795	1/2	53,401	1/2	39,006	1/2	24,609	1/2	10,849	1/2		1/2		1/2		1/2	
3/4	81,893	3/4	67,495	3/4	53,101	3/4	38,706	3/4	24,309	3/4	10,581	3/4		3/4		3/4		3/4	
1	81,593	1	67,195	1	52,801	1	38,406	1	24,009	1	10,316	1		1		1		1	
1/4	81,293	1/4	66,895	1/4	52,502	1/4	38,106	1/4	23,709	1/4	10,051	1/4		1/4		1/4		1/4	
1/2	80,993	1/2	66,595	1/2	52,202	1/2	37,806	1/2	23,409	1/2	9,786	1/2		1/2		1/2		1/2	
3/4	80,693	3/4	66,295	3/4	51,902	3/4	37,507	3/4	23,109	3/4	9,521	3/4		3/4		3/4		3/4	
2	80,393	2	65,995	2	51,603	2	37,207	2	22,809	2	9,260	2		2		2		2	
1/4	80,093	1/4	65,695	1/4	51,303	1/4	36,907	1/4	22,510	1/4	8,998	1/4		1/4		1/4		1/4	
1/2	79,793	1/2	65,395	1/2	51,003	1/2	36,607	1/2	22,210	1/2	8,737	1/2		1/2		1/2		1/2	
3/4	79,493	3/4	65,095	3/4	50,703	3/4	36,307	3/4	21,911	3/4	8,475	3/4		3/4		3/4		3/4	
3	79,193	3	64,795	3	50,404	3	36,007	3	21,613	3	8,217	3		3		3		3	
1/4	78,893	1/4	64,495	1/4	50,104	1/4	35,707	1/4	21,315	1/4	7,958	1/4		1/4		1/4		1/4	
1/2	78,593	1/2	64,195	1/2	49,804	1/2	35,407	1/2	21,017	1/2	7,700	1/2		1/2		1/2		1/2	
3/4	78,293	3/4	63,895	3/4	49,504	3/4	35,107	3/4	20,719	3/4	7,442	3/4		3/4		3/4		3/4	
4	77,993	4	63,595	4	49,204	4	34,807	4	20,424	4	7,187	4		4		4		4	
1/4	77,693	1/4	63,295	1/4	48,904	1/4	34,507	1/4	20,130	1/4	6,932	1/4		1/4		1/4		1/4	
1/2	77,393	1/2	62,995	1/2	48,605	1/2	34,207	1/2	19,835	1/2	6,677	1/2		1/2		1/2		1/2	
3/4	77,093	3/4	62,695	3/4	48,305	3/4	33,907	3/4	19,540	3/4	6,422	3/4		3/4		3/4		3/4	
5	76,793	5	62,395	5	48,005	5	33,607	5	19,248	5	6,171	5		5		5		5	
1/4	76,493	1/4	62,095	1/4	47,705	1/4	33,307	1/4	18,956	1/4	5,920	1/4		1/4		1/4		1/4	
1/2	76,193	1/2	61,795	1/2	47,405	1/2	33,007	1/2	18,665	1/2	5,669	1/2		1/2		1/2		1/2	
3/4	75,893	3/4	61,495	3/4	47,105	3/4	32,707	3/4	18,373	3/4	5,417	3/4		3/4		3/4		3/4	
6	75,593	6	61,195	6	46,805	6	32,407	6	18,085	6	5,170	6		6		6		6	
1/4	75,294	1/4	60,896	1/4	46,505	1/4	32,107	1/4	17,797	1/4	4,923	1/4		1/4		1/4		1/4	
1/2	74,994	1/2	60,596	1/2	46,205	1/2	31,808	1/2	17,508	1/2	4,675	1/2		1/2		1/2		1/2	
3/4	74,694	3/4	60,296	3/4	45,905	3/4	31,508	3/4	17,220	3/4	4,428	3/4		3/4		3/4		3/4	
7	74,394	7	59,996	7	45,605	7	31,208	7	16,935	7	4,184	7		7		7		7	
1/4	74,094	1/4	59,696	1/4	45,305	1/4	30,908	1/4	16,650	1/4	3,941	1/4		1/4		1/4		1/4	
1/2	73,794	1/2	59,396	1/2	45,005	1/2	30,608	1/2	16,365	1/2	3,698	1/2		1/2		1/2		1/2	
3/4	73,494	3/4	59,096	3/4	44,705	3/4	30,308	3/4	16,080	3/4	3,454	3/4		3/4		3/4		3/4	
8	73,194	8	58,796	8	44,405	8	30,008	8	15,799	8	3,216	8		8		8		8	
1/4	72,894	1/4	58,496	1/4	44,105	1/4	29,708	1/4	15,517	1/4	2,977	1/4		1/4		1/4		1/4	
1/2	72,594	1/2	58,197	1/2	43,805	1/2	29,408	1/2	15,235	1/2	2,738	1/2		1/2		1/2		1/2	
3/4	72,294	3/4	57,897	3/4	43,506	3/4	29,108	3/4	14,954	3/4	2,499	3/4		3/4		3/4		3/4	
9	71,994	9	57,597	9	43,206	9	28,808	9	14,675	9	2,282	9		9		9		9	
1/4	71,694	1/4	57,297	1/4	42,906	1/4	28,508	1/4	14,397	1/4	2,064	1/4		1/4		1/4		1/4	
1/2	71,394	1/2	56,998	1/2	42,606	1/2	28,208	1/2	14,119	1/2	1,847	1/2		1/2		1/2		1/2	
3/4	71,094	3/4	56,698	3/4	42,306	3/4	27,908	3/4	13,841	3/4	1,629	3/4		3/4		3/4		3/4	
10	70,794	10	56,398	10	42,006	10	27,608	10	13,566	10	1,452	10		10		10		10	
1/4	70,494	1/4	56,098	1/4	41,706	1/4	27,308	1/4	13,291	1/4	1,275	1/4		1/4		1/4		1/4	
1/2	70,194	1/2	55,799	1/2	41,406	1/2	27,008	1/2	13,016	1/2	1,098	1/2		1/2		1/2		1/2	
3/4	69,894	3/4	55,499	3/4	41,106	3/4	26,708	3/4	12,741	3/4	921	3/4		3/4		3/4		3/4	
11	69,594	11	55,199	11	40,806	11	26,408	11	12,469	11		11		11		11		11	
1/4	69,294	1/4	54,900	1/4	40,506	1/4	26,108	1/4	12,198	1/4		1/4		1/4		1/4		1/4	
1/2	68,994	1/2	54,600	1/2	40,206	1/2	25,809	1/2	11,926	1/2		1/2		1/2		1/2		1/2	
3/4	68,694	3/4	54,300	3/4	39,906	3/4	25,509	3/4	11,654	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2013 CL - SW  
CALCULATED: 10/22/2013 CL  
PRINTED: 10/22/2013 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2013

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



# BARGE "HFL 427"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0		0	212,483	0	197,238	0	181,927	0	166,569	0	151,207	0	135,845	0	120,482	0	105,117
1/4		1/4		1/4	212,169	1/4	196,919	1/4	181,608	1/4	166,249	1/4	150,887	1/4	135,525	1/4	120,162	1/4	104,797
1/2		1/2		1/2	211,854	1/2	196,600	1/2	181,289	1/2	165,929	1/2	150,567	1/2	135,204	1/2	119,842	1/2	104,476
3/4		3/4		3/4	211,539	3/4	196,281	3/4	180,970	3/4	165,609	3/4	150,247	3/4	134,884	3/4	119,522	3/4	104,156
1		1		1	211,223	1	195,962	1	180,650	1	165,289	1	149,927	1	134,564	1	119,202	1	103,836
1/4		1/4		1/4	210,908	1/4	195,643	1/4	180,331	1/4	164,969	1/4	149,607	1/4	134,244	1/4	118,882	1/4	103,516
1/2		1/2		1/2	210,592	1/2	195,324	1/2	180,011	1/2	164,649	1/2	149,287	1/2	133,924	1/2	118,562	1/2	103,196
3/4		3/4		3/4	210,276	3/4	195,005	3/4	179,691	3/4	164,329	3/4	148,967	3/4	133,604	3/4	118,242	3/4	102,875
2		2		2	209,961	2	194,686	2	179,371	2	164,009	2	148,646	2	133,284	2	117,922	2	102,555
1/4		1/4		1/4	209,645	1/4	194,367	1/4	179,051	1/4	163,689	1/4	148,326	1/4	132,964	1/4	117,602	1/4	102,235
1/2		1/2		1/2	209,329	1/2	194,048	1/2	178,731	1/2	163,369	1/2	148,006	1/2	132,644	1/2	117,282	1/2	101,915
3/4		3/4		3/4	209,013	3/4	193,729	3/4	178,411	3/4	163,049	3/4	147,686	3/4	132,324	3/4	116,962	3/4	101,595
3		3		3	208,697	3	193,410	3	178,091	3	162,729	3	147,366	3	132,004	3	116,642	3	101,274
1/4		1/4		1/4	208,381	1/4	193,091	1/4	177,771	1/4	162,408	1/4	147,046	1/4	131,684	1/4	116,322	1/4	100,954
1/2		1/2		1/2	208,065	1/2	192,773	1/2	177,451	1/2	162,088	1/2	146,726	1/2	131,364	1/2	116,002	1/2	100,634
3/4		3/4		3/4	207,749	3/4	192,454	3/4	177,131	3/4	161,768	3/4	146,406	3/4	131,044	3/4	115,682	3/4	100,314
4		4		4	207,433	4	192,135	4	176,811	4	161,448	4	146,086	4	130,724	4	115,362	4	99,994
1/4		1/4		1/4	207,117	1/4	191,816	1/4	176,491	1/4	161,128	1/4	145,766	1/4	130,404	1/4	115,041	1/4	99,673
1/2		1/2		1/2	206,802	1/2	191,497	1/2	176,171	1/2	160,808	1/2	145,446	1/2	130,084	1/2	114,721	1/2	99,353
3/4		3/4		3/4	206,484	3/4	191,178	3/4	175,850	3/4	160,488	3/4	145,126	3/4	129,764	3/4	114,401	3/4	99,033
5		5		5	206,167	5	190,859	5	175,530	5	160,168	5	144,806	5	129,444	5	114,081	5	98,713
1/4		1/4		1/4	205,849	1/4	190,540	1/4	175,210	1/4	159,848	1/4	144,486	1/4	129,124	1/4	113,761	1/4	98,393
1/2		1/2		1/2	205,532	1/2	190,221	1/2	174,890	1/2	159,528	1/2	144,166	1/2	128,804	1/2	113,441	1/2	98,072
3/4		3/4		3/4	205,213	3/4	189,902	3/4	174,570	3/4	159,208	3/4	143,846	3/4	128,483	3/4	113,121	3/4	97,752
6		6		6	204,894	6	189,583	6	174,250	6	158,888	6	143,526	6	128,163	6	112,801	6	97,432
1/4		1/4		1/4	204,575	1/4	189,264	1/4	173,930	1/4	158,568	1/4	143,206	1/4	127,843	1/4	112,481	1/4	97,112
1/2		1/2		1/2	204,256	1/2	188,945	1/2	173,610	1/2	158,248	1/2	142,886	1/2	127,523	1/2	112,161	1/2	96,792
3/4		3/4		3/4	203,937	3/4	188,626	3/4	173,290	3/4	157,928	3/4	142,566	3/4	127,203	3/4	111,841	3/4	96,471
7		7		7	203,618	7	188,307	7	172,970	7	157,608	7	142,246	7	126,883	7	111,521	7	96,151
1/4		1/4		1/4	203,299	1/4	187,988	1/4	172,650	1/4	157,288	1/4	141,925	1/4	126,563	1/4	111,201	1/4	95,831
1/2		1/2		1/2	217,020	1/2	202,980	1/2	187,669	1/2	172,330	1/2	156,968	1/2	141,605	1/2	126,243	1/2	95,511
3/4		3/4		3/4	216,841	3/4	202,661	3/4	187,350	3/4	172,010	3/4	156,648	3/4	141,285	3/4	125,923	3/4	95,191
8		8		8	216,662	8	202,342	8	187,031	8	171,690	8	156,328	8	140,965	8	125,603	8	94,870
1/4		1/4		1/4	216,483	1/4	202,023	1/4	186,712	1/4	171,370	1/4	156,008	1/4	140,645	1/4	125,283	1/4	94,550
1/2		1/2		1/2	216,305	1/2	201,704	1/2	186,393	1/2	171,050	1/2	155,687	1/2	140,325	1/2	124,963	1/2	94,230
3/4		3/4		3/4	216,080	3/4	201,385	3/4	186,074	3/4	170,730	3/4	155,367	3/4	140,005	3/4	124,643	3/4	93,910
9		9		9	215,855	9	201,066	9	185,755	9	170,410	9	155,047	9	139,685	9	124,323	9	93,590
1/4		1/4		1/4	215,631	1/4	200,747	1/4	185,436	1/4	170,090	1/4	154,727	1/4	139,365	1/4	124,003	1/4	93,269
1/2		1/2		1/2	215,406	1/2	200,428	1/2	185,117	1/2	169,770	1/2	154,407	1/2	139,045	1/2	123,683	1/2	92,949
3/4		3/4		3/4	215,136	3/4	200,109	3/4	184,798	3/4	169,450	3/4	154,087	3/4	138,725	3/4	123,363	3/4	92,629
10		10		10	214,866	10	199,790	10	184,479	10	169,129	10	153,767	10	138,405	10	123,043	10	92,309
1/4		1/4		1/4	214,596	1/4	199,471	1/4	184,160	1/4	168,809	1/4	153,447	1/4	138,085	1/4	122,723	1/4	91,988
1/2		1/2		1/2	214,325	1/2	199,152	1/2	183,841	1/2	168,489	1/2	153,127	1/2	137,765	1/2	122,403	1/2	91,668
3/4		3/4		3/4	214,022	3/4	198,833	3/4	183,522	3/4	168,169	3/4	152,807	3/4	137,445	3/4	122,083	3/4	91,348
11		11		11	213,719	11	198,514	11	183,203	11	167,849	11	152,487	11	137,125	11	121,762	11	91,028
1/4		1/4		1/4	213,415	1/4	198,195	1/4	182,884	1/4	167,529	1/4	152,167	1/4	136,805	1/4	121,442	1/4	90,708
1/2		1/2		1/2	213,112	1/2	197,876	1/2	182,565	1/2	167,209	1/2	151,847	1/2	136,485	1/2	121,122	1/2	90,387
3/4		3/4		3/4	212,797	3/4	197,557	3/4	182,246	3/4	166,889	3/4	151,527	3/4	136,165	3/4	120,802	3/4	90,067

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 THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-09" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 427"

## 2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 1/2"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	89,747	0	74,377	0	59,290	0	44,505	0	29,434	0	14,066	0		0		0		0	
1/4	89,427	1/4	74,057	1/4	58,981	1/4	44,198	1/4	29,114	1/4	13,746	1/4		1/4		1/4		1/4	
1/2	89,107	1/2	73,737	1/2	58,673	1/2	43,890	1/2	28,794	1/2	13,426	1/2		1/2		1/2		1/2	
3/4	88,786	3/4	73,417	3/4	58,364	3/4	43,583	3/4	28,474	3/4	13,106	3/4		3/4		3/4		3/4	
1	88,466	1	73,096	1	58,056	1	43,275	1	28,154	1	12,785	1		1		1		1	
1/4	88,146	1/4	72,776	1/4	57,748	1/4	42,968	1/4	27,834	1/4	12,465	1/4		1/4		1/4		1/4	
1/2	87,826	1/2	72,456	1/2	57,439	1/2	42,660	1/2	27,514	1/2	12,145	1/2		1/2		1/2		1/2	
3/4	87,506	3/4	72,136	3/4	57,131	3/4	42,353	3/4	27,194	3/4	11,825	3/4		3/4		3/4		3/4	
2	87,185	2	71,816	2	56,822	2	42,045	2	26,874	2	11,505	2		2		2		2	
1/4	86,865	1/4	71,495	1/4	56,514	1/4	41,738	1/4	26,554	1/4	11,184	1/4		1/4		1/4		1/4	
1/2	86,545	1/2	71,175	1/2	56,205	1/2	41,430	1/2	26,234	1/2	10,864	1/2		1/2		1/2		1/2	
3/4	86,225	3/4	70,855	3/4	55,897	3/4	41,123	3/4	25,913	3/4	10,544	3/4		3/4		3/4		3/4	
3	85,905	3	70,535	3	55,588	3	40,815	3	25,593	3	10,224	3		3		3		3	
1/4	85,584	1/4	70,215	1/4	55,280	1/4	40,508	1/4	25,273	1/4	9,904	1/4		1/4		1/4		1/4	
1/2	85,264	1/2	69,894	1/2	54,972	1/2	40,200	1/2	24,953	1/2	9,583	1/2		1/2		1/2		1/2	
3/4	84,944	3/4	69,574	3/4	54,663	3/4	39,892	3/4	24,633	3/4	9,263	3/4		3/4		3/4		3/4	
4	84,624	4	69,254	4	54,355	4	39,584	4	24,312	4	8,943	4		4		4		4	
1/4	84,304	1/4	68,934	1/4	54,046	1/4	39,276	1/4	23,992	1/4	8,623	1/4		1/4		1/4		1/4	
1/2	83,983	1/2	68,614	1/2	53,738	1/2	38,968	1/2	23,672	1/2	8,303	1/2		1/2		1/2		1/2	
3/4	83,663	3/4	68,293	3/4	53,429	3/4	38,660	3/4	23,352	3/4	7,983	3/4		3/4		3/4		3/4	
5	83,343	5	67,973	5	53,121	5	38,352	5	23,032	5	7,663	5		5		5		5	
1/4	83,023	1/4	67,653	1/4	52,813	1/4	38,043	1/4	22,711	1/4	7,344	1/4		1/4		1/4		1/4	
1/2	82,703	1/2	67,333	1/2	52,504	1/2	37,735	1/2	22,391	1/2	7,024	1/2		1/2		1/2		1/2	
3/4	82,382	3/4	67,018	3/4	52,196	3/4	37,420	3/4	22,071	3/4	6,705	3/4		3/4		3/4		3/4	
6	82,062	6	66,704	6	51,888	6	37,106	6	21,751	6	6,385	6		6		6		6	
1/4	81,742	1/4	66,390	1/4	51,580	1/4	36,792	1/4	21,431	1/4	6,066	1/4		1/4		1/4		1/4	
1/2	81,422	1/2	66,075	1/2	51,272	1/2	36,477	1/2	21,110	1/2	5,747	1/2		1/2		1/2		1/2	
3/4	81,102	3/4	65,767	3/4	50,964	3/4	36,157	3/4	20,790	3/4	5,428	3/4		3/4		3/4		3/4	
7	80,781	7	65,459	7	50,656	7	35,837	7	20,470	7	5,110	7		7		7		7	
1/4	80,461	1/4	65,150	1/4	50,349	1/4	35,517	1/4	20,150	1/4	4,791	1/4		1/4		1/4		1/4	
1/2	80,141	1/2	64,842	1/2	50,041	1/2	35,197	1/2	19,830	1/2	4,473	1/2		1/2		1/2		1/2	
3/4	79,821	3/4	64,533	3/4	49,733	3/4	34,876	3/4	19,509	3/4	4,156	3/4		3/4		3/4		3/4	
8	79,500	8	64,225	8	49,426	8	34,556	8	19,189	8	3,839	8		8		8		8	
1/4	79,180	1/4	63,916	1/4	49,118	1/4	34,236	1/4	18,869	1/4	3,522	1/4		1/4		1/4		1/4	
1/2	78,860	1/2	63,608	1/2	48,810	1/2	33,916	1/2	18,549	1/2	3,205	1/2		1/2		1/2		1/2	
3/4	78,540	3/4	63,299	3/4	48,503	3/4	33,596	3/4	18,229	3/4	2,906	3/4		3/4		3/4		3/4	
9	78,220	9	62,991	9	48,195	9	33,276	9	17,908	9	2,608	9		9		9		9	
1/4	77,899	1/4	62,683	1/4	47,888	1/4	32,955	1/4	17,588	1/4	2,310	1/4		1/4		1/4		1/4	
1/2	77,579	1/2	62,374	1/2	47,580	1/2	32,635	1/2	17,268	1/2	2,012	1/2		1/2		1/2		1/2	
3/4	77,259	3/4	62,066	3/4	47,273	3/4	32,315	3/4	16,948	3/4	1,772	3/4		3/4		3/4		3/4	
10	76,939	10	61,757	10	46,965	10	31,995	10	16,628	10	1,532	10		10		10		10	
1/4	76,619	1/4	61,449	1/4	46,658	1/4	31,675	1/4	16,307	1/4	1,292	1/4		1/4		1/4		1/4	
1/2	76,298	1/2	61,140	1/2	46,350	1/2	31,354	1/2	15,987	1/2	1,052	1/2		1/2		1/2		1/2	
3/4	75,978	3/4	60,832	3/4	46,043	3/4	31,034	3/4	15,667	3/4		3/4		3/4		3/4		3/4	
11	75,658	11	60,524	11	45,735	11	30,714	11	15,347	11		11		11		11		11	
1/4	75,338	1/4	60,215	1/4	45,428	1/4	30,394	1/4	15,027	1/4		1/4		1/4		1/4		1/4	
1/2	75,018	1/2	59,907	1/2	45,120	1/2	30,074	1/2	14,706	1/2		1/2		1/2		1/2		1/2	
3/4	74,697	3/4	59,598	3/4	44,813	3/4	29,754	3/4	14,386	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2013 CL - SW  
CALCULATED: 10/22/2013 CL  
PRINTED: 10/22/2013 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2013

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





# BARGE "HFL 427"

## 2 STBD 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	212,884	0	197,637	0	182,333	0	166,981	0	151,626	0	136,271	0	120,916	0	105,557
1/4		1/4		1/4	212,568	1/4	197,318	1/4	182,014	1/4	166,661	1/4	151,306	1/4	135,951	1/4	120,596	1/4	105,237
1/2		1/2		1/2	212,253	1/2	197,000	1/2	181,695	1/2	166,341	1/2	150,986	1/2	135,631	1/2	120,276	1/2	104,917
3/4		3/4		3/4	211,938	3/4	196,681	3/4	181,375	3/4	166,021	3/4	150,666	3/4	135,311	3/4	119,956	3/4	104,597
1		1		1	211,623	1	196,362	1	181,056	1	165,701	1	150,346	1	134,991	1	119,636	1	104,277
1/4		1/4		1/4	211,307	1/4	196,043	1/4	180,736	1/4	165,381	1/4	150,026	1/4	134,671	1/4	119,316	1/4	103,957
1/2		1/2		1/2	210,991	1/2	195,724	1/2	180,416	1/2	165,061	1/2	149,706	1/2	134,351	1/2	118,996	1/2	103,637
3/4		3/4		3/4	210,675	3/4	195,405	3/4	180,096	3/4	164,741	3/4	149,386	3/4	134,031	3/4	118,676	3/4	103,317
2		2		2	210,360	2	195,087	2	179,776	2	164,421	2	149,066	2	133,711	2	118,356	2	102,997
1/4		1/4		1/4	210,044	1/4	194,768	1/4	179,456	1/4	164,101	1/4	148,747	1/4	133,392	1/4	118,037	1/4	102,677
1/2		1/2		1/2	209,728	1/2	194,449	1/2	179,137	1/2	163,782	1/2	148,427	1/2	133,072	1/2	117,717	1/2	102,357
3/4		3/4		3/4	209,412	3/4	194,130	3/4	178,817	3/4	163,462	3/4	148,107	3/4	132,752	3/4	117,397	3/4	102,037
3		3		3	209,097	3	193,811	3	178,497	3	163,142	3	147,787	3	132,432	3	117,077	3	101,717
1/4		1/4		1/4	208,781	1/4	193,492	1/4	178,177	1/4	162,822	1/4	147,467	1/4	132,112	1/4	116,757	1/4	101,397
1/2		1/2		1/2	208,465	1/2	193,174	1/2	177,857	1/2	162,502	1/2	147,147	1/2	131,792	1/2	116,437	1/2	101,076
3/4		3/4		3/4	208,149	3/4	192,855	3/4	177,537	3/4	162,182	3/4	146,827	3/4	131,472	3/4	116,117	3/4	100,756
4		4		4	207,834	4	192,536	4	177,217	4	161,862	4	146,507	4	131,152	4	115,797	4	100,436
1/4		1/4		1/4	207,516	1/4	192,217	1/4	176,897	1/4	161,542	1/4	146,187	1/4	130,832	1/4	115,477	1/4	100,116
1/2		1/2		1/2	207,199	1/2	191,898	1/2	176,577	1/2	161,222	1/2	145,867	1/2	130,512	1/2	115,158	1/2	99,796
3/4		3/4		3/4	206,882	3/4	191,579	3/4	176,257	3/4	160,903	3/4	145,548	3/4	130,193	3/4	114,838	3/4	99,476
5		5		5	206,564	5	191,261	5	175,938	5	160,583	5	145,228	5	129,873	5	114,518	5	99,156
1/4		1/4		1/4	206,246	1/4	190,942	1/4	175,618	1/4	160,263	1/4	144,908	1/4	129,553	1/4	114,198	1/4	98,836
1/2		1/2		1/2	205,927	1/2	190,623	1/2	175,298	1/2	159,943	1/2	144,588	1/2	129,233	1/2	113,878	1/2	98,516
3/4		3/4		3/4	205,608	3/4	190,304	3/4	174,978	3/4	159,623	3/4	144,268	3/4	128,913	3/4	113,558	3/4	98,196
6		6		6	205,289	6	189,985	6	174,658	6	159,303	6	143,948	6	128,593	6	113,238	6	97,876
1/4		1/4		1/4	204,970	1/4	189,666	1/4	174,338	1/4	158,983	1/4	143,628	1/4	128,273	1/4	112,918	1/4	97,556
1/2		1/2		1/2	204,651	1/2	189,348	1/2	174,018	1/2	158,663	1/2	143,308	1/2	127,953	1/2	112,598	1/2	97,236
3/4		3/4		3/4	204,333	3/4	189,029	3/4	173,698	3/4	158,343	3/4	142,988	3/4	127,633	3/4	112,278	3/4	96,916
7		7	218,047	7	204,014	7	188,710	7	173,378	7	158,023	7	142,669	7	127,314	7	111,958	7	96,596
1/4		1/4	217,868	1/4	203,695	1/4	188,391	1/4	173,059	1/4	157,704	1/4	142,349	1/4	126,994	1/4	111,638	1/4	96,276
1/2		1/2	217,690	1/2	203,376	1/2	188,072	1/2	172,739	1/2	157,384	1/2	142,029	1/2	126,674	1/2	111,318	1/2	95,956
3/4		3/4	217,511	3/4	203,057	3/4	187,753	3/4	172,419	3/4	157,064	3/4	141,709	3/4	126,354	3/4	110,998	3/4	95,636
8		8	217,332	8	202,739	8	187,435	8	172,099	8	156,744	8	141,389	8	126,034	8	110,678	8	95,316
1/4		1/4	217,108	1/4	202,420	1/4	187,116	1/4	171,779	1/4	156,424	1/4	141,069	1/4	125,714	1/4	110,358	1/4	94,995
1/2		1/2	216,883	1/2	202,101	1/2	186,797	1/2	171,459	1/2	156,104	1/2	140,749	1/2	125,394	1/2	110,038	1/2	94,675
3/4		3/4	216,659	3/4	201,782	3/4	186,478	3/4	171,139	3/4	155,784	3/4	140,429	3/4	125,074	3/4	109,718	3/4	94,355
9		9	216,434	9	201,463	9	186,159	9	170,819	9	155,464	9	140,109	9	124,754	9	109,398	9	94,035
1/4		1/4	216,164	1/4	201,144	1/4	185,840	1/4	170,499	1/4	155,144	1/4	139,789	1/4	124,434	1/4	109,078	1/4	93,715
1/2		1/2	215,894	1/2	200,826	1/2	185,522	1/2	170,179	1/2	154,825	1/2	139,470	1/2	124,115	1/2	108,758	1/2	93,395
3/4		3/4	215,624	3/4	200,507	3/4	185,203	3/4	169,860	3/4	154,505	3/4	139,150	3/4	123,795	3/4	108,438	3/4	93,075
10		10	215,354	10	200,188	10	184,884	10	169,540	10	154,185	10	138,830	10	123,475	10	108,118	10	92,755
1/4		1/4	215,051	1/4	199,869	1/4	184,565	1/4	169,220	1/4	153,865	1/4	138,510	1/4	123,155	1/4	107,798	1/4	92,435
1/2		1/2	214,747	1/2	199,550	1/2	184,246	1/2	168,900	1/2	153,545	1/2	138,190	1/2	122,835	1/2	107,478	1/2	92,115
3/4		3/4	214,444	3/4	199,231	3/4	183,928	3/4	168,580	3/4	153,225	3/4	137,870	3/4	122,515	3/4	107,157	3/4	91,795
11		11	214,141	11	198,913	11	183,609	11	168,260	11	152,905	11	137,550	11	122,195	11	106,837	11	91,475
1/4		1/4	213,827	1/4	198,594	1/4	183,290	1/4	167,940	1/4	152,585	1/4	137,230	1/4	121,875	1/4	106,517	1/4	91,155
1/2		1/2	213,512	1/2	198,275	1/2	182,971	1/2	167,620	1/2	152,265	1/2	136,910	1/2	121,555	1/2	106,197	1/2	90,835
3/4		3/4	213,198	3/4	197,956	3/4	182,652	3/4	167,300	3/4	151,945	3/4	136,591	3/4	121,236	3/4	105,877	3/4	90,515

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 THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-09" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

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# BARGE "HFL 427"

**2 STBD**  
**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	90,195	0	74,832	0	59,470	0	44,130	0	28,781	0	13,420	0		0		0		0	
1/4	89,875	1/4	74,512	1/4	59,150	1/4	43,810	1/4	28,461	1/4	13,100	1/4		1/4		1/4		1/4	
1/2	89,555	1/2	74,192	1/2	58,830	1/2	43,491	1/2	28,142	1/2	12,780	1/2		1/2		1/2		1/2	
3/4	89,235	3/4	73,872	3/4	58,509	3/4	43,172	3/4	27,822	3/4	12,460	3/4		3/4		3/4		3/4	
1	88,914	1	73,552	1	58,189	1	42,853	1	27,502	1	12,140	1		1		1		1	
1/4	88,594	1/4	73,232	1/4	57,869	1/4	42,534	1/4	27,182	1/4	11,820	1/4		1/4		1/4		1/4	
1/2	88,274	1/2	72,912	1/2	57,549	1/2	42,215	1/2	26,862	1/2	11,500	1/2		1/2		1/2		1/2	
3/4	87,954	3/4	72,592	3/4	57,229	3/4	41,896	3/4	26,542	3/4	11,179	3/4		3/4		3/4		3/4	
2	87,634	2	72,272	2	56,909	2	41,577	2	26,222	2	10,859	2		2		2		2	
1/4	87,314	1/4	71,952	1/4	56,589	1/4	41,257	1/4	25,902	1/4	10,539	1/4		1/4		1/4		1/4	
1/2	86,994	1/2	71,632	1/2	56,269	1/2	40,938	1/2	25,582	1/2	10,219	1/2		1/2		1/2		1/2	
3/4	86,674	3/4	71,312	3/4	55,949	3/4	40,619	3/4	25,262	3/4	9,899	3/4		3/4		3/4		3/4	
3	86,354	3	70,992	3	55,629	3	40,300	3	24,942	3	9,579	3		3		3		3	
1/4	86,034	1/4	70,671	1/4	55,309	1/4	39,980	1/4	24,622	1/4	9,259	1/4		1/4		1/4		1/4	
1/2	85,714	1/2	70,351	1/2	54,989	1/2	39,661	1/2	24,302	1/2	8,939	1/2		1/2		1/2		1/2	
3/4	85,394	3/4	70,031	3/4	54,669	3/4	39,341	3/4	23,982	3/4	8,619	3/4		3/4		3/4		3/4	
4	85,074	4	69,711	4	54,349	4	39,022	4	23,662	4	8,300	4		4		4		4	
1/4	84,754	1/4	69,391	1/4	54,029	1/4	38,702	1/4	23,341	1/4	7,980	1/4		1/4		1/4		1/4	
1/2	84,434	1/2	69,071	1/2	53,709	1/2	38,382	1/2	23,021	1/2	7,660	1/2		1/2		1/2		1/2	
3/4	84,114	3/4	68,751	3/4	53,389	3/4	38,062	3/4	22,701	3/4	7,341	3/4		3/4		3/4		3/4	
5	83,794	5	68,431	5	53,069	5	37,741	5	22,381	5	7,021	5		5		5		5	
1/4	83,474	1/4	68,111	1/4	52,749	1/4	37,421	1/4	22,061	1/4	6,702	1/4		1/4		1/4		1/4	
1/2	83,154	1/2	67,791	1/2	52,429	1/2	37,101	1/2	21,741	1/2	6,383	1/2		1/2		1/2		1/2	
3/4	82,833	3/4	67,471	3/4	52,109	3/4	36,781	3/4	21,421	3/4	6,063	3/4		3/4		3/4		3/4	
6	82,513	6	67,151	6	51,790	6	36,461	6	21,101	6	5,744	6		6		6		6	
1/4	82,193	1/4	66,831	1/4	51,470	1/4	36,141	1/4	20,781	1/4	5,426	1/4		1/4		1/4		1/4	
1/2	81,873	1/2	66,511	1/2	51,151	1/2	35,821	1/2	20,461	1/2	5,108	1/2		1/2		1/2		1/2	
3/4	81,553	3/4	66,191	3/4	50,832	3/4	35,501	3/4	20,141	3/4	4,789	3/4		3/4		3/4		3/4	
7	81,233	7	65,871	7	50,512	7	35,181	7	19,821	7	4,471	7		7		7		7	
1/4	80,913	1/4	65,551	1/4	50,193	1/4	34,861	1/4	19,501	1/4	4,154	1/4		1/4		1/4		1/4	
1/2	80,593	1/2	65,231	1/2	49,874	1/2	34,541	1/2	19,181	1/2	3,837	1/2		1/2		1/2		1/2	
3/4	80,273	3/4	64,911	3/4	49,555	3/4	34,221	3/4	18,861	3/4	3,520	3/4		3/4		3/4		3/4	
8	79,953	8	64,590	8	49,235	8	33,901	8	18,541	8	3,203	8		8		8		8	
1/4	79,633	1/4	64,270	1/4	48,916	1/4	33,581	1/4	18,221	1/4	2,905	1/4		1/4		1/4		1/4	
1/2	79,313	1/2	63,950	1/2	48,597	1/2	33,261	1/2	17,901	1/2	2,607	1/2		1/2		1/2		1/2	
3/4	78,993	3/4	63,630	3/4	48,278	3/4	32,941	3/4	17,581	3/4	2,309	3/4		3/4		3/4		3/4	
9	78,673	9	63,310	9	47,959	9	32,621	9	17,260	9	2,012	9		9		9		9	
1/4	78,353	1/4	62,990	1/4	47,640	1/4	32,301	1/4	16,940	1/4	1,772	1/4		1/4		1/4		1/4	
1/2	78,033	1/2	62,670	1/2	47,321	1/2	31,981	1/2	16,620	1/2	1,532	1/2		1/2		1/2		1/2	
3/4	77,713	3/4	62,350	3/4	47,002	3/4	31,660	3/4	16,300	3/4	1,292	3/4		3/4		3/4		3/4	
10	77,393	10	62,030	10	46,682	10	31,340	10	15,980	10	1,052	10		10		10		10	
1/4	77,073	1/4	61,710	1/4	46,363	1/4	31,020	1/4	15,660	1/4		1/4		1/4		1/4		1/4	
1/2	76,752	1/2	61,390	1/2	46,044	1/2	30,700	1/2	15,340	1/2		1/2		1/2		1/2		1/2	
3/4	76,432	3/4	61,070	3/4	45,725	3/4	30,381	3/4	15,020	3/4		3/4		3/4		3/4		3/4	
11	76,112	11	60,750	11	45,406	11	30,061	11	14,700	11		11		11		11		11	
1/4	75,792	1/4	60,430	1/4	45,087	1/4	29,741	1/4	14,380	1/4		1/4		1/4		1/4		1/4	
1/2	75,472	1/2	60,110	1/2	44,768	1/2	29,421	1/2	14,060	1/2		1/2		1/2		1/2		1/2	
3/4	75,152	3/4	59,790	3/4	44,449	3/4	29,101	3/4	13,740	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2013 CL - SW  
CALCULATED: 10/22/2013 CL  
PRINTED: 10/22/2013 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2013

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



# BARGE "HFL 427"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 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	193,548	0	183,033	0	172,464	0	161,864	0	151,217	0	136,083	0	120,789	0	105,490	
1/4		1/4		1/4	193,332	1/4	182,812	1/4	172,244	1/4	161,643	1/4	150,948	1/4	135,764	1/4	120,470	1/4	105,171	
1/2		1/2		1/2	193,115	1/2	182,592	1/2	172,024	1/2	161,422	1/2	150,678	1/2	135,446	1/2	120,152	1/2	104,852	
3/4		3/4		3/4	192,899	3/4	182,372	3/4	171,804	3/4	161,201	3/4	150,409	3/4	135,127	3/4	119,833	3/4	104,533	
1		1		1	192,681	1	182,152	1	171,583	1	160,980	1	150,091	1	134,808	1	119,515	1	104,214	
1/4		1/4		1/4	192,464	1/4	181,932	1/4	171,363	1/4	160,759	1/4	149,773	1/4	134,490	1/4	119,196	1/4	103,895	
1/2		1/2		1/2	192,246	1/2	181,712	1/2	171,142	1/2	160,538	1/2	149,455	1/2	134,171	1/2	118,877	1/2	103,576	
3/4		3/4		3/4	192,029	3/4	181,491	3/4	170,922	3/4	160,317	3/4	149,137	3/4	133,852	3/4	118,559	3/4	103,256	
2		2		2	191,811	2	181,271	2	170,701	2	160,096	2	148,819	2	133,534	2	118,240	2	102,937	
1/4		1/4		1/4	191,593	1/4	181,051	1/4	170,480	1/4	159,875	1/4	148,501	1/4	133,215	1/4	117,921	1/4	102,618	
1/2		1/2		1/2	191,375	1/2	180,831	1/2	170,259	1/2	159,654	1/2	148,184	1/2	132,897	1/2	117,603	1/2	102,299	
3/4		3/4		3/4	191,157	3/4	180,611	3/4	170,038	3/4	159,433	3/4	147,866	3/4	132,578	3/4	117,284	3/4	101,980	
3		3		3	190,939	3	180,391	3	169,817	3	159,212	3	147,548	3	132,259	3	116,966	3	101,661	
1/4		1/4		1/4	190,721	1/4	180,170	1/4	169,596	1/4	158,991	1/4	147,231	1/4	131,941	1/4	116,647	1/4	101,342	
1/2		1/2		1/2	190,503	1/2	179,950	1/2	169,375	1/2	158,771	1/2	146,913	1/2	131,622	1/2	116,328	1/2	101,023	
3/4		3/4		3/4	190,285	3/4	179,730	3/4	169,154	3/4	158,550	3/4	146,595	3/4	131,303	3/4	116,010	3/4	100,704	
4		4		4	190,067	4	179,510	4	168,933	4	158,329	4	146,277	4	130,985	4	115,691	4	100,385	
1/4		1/4		1/4	189,849	1/4	179,290	1/4	168,712	1/4	158,108	1/4	145,959	1/4	130,666	1/4	115,372	1/4	100,066	
1/2		1/2		1/2	189,631	1/2	179,070	1/2	168,491	1/2	157,887	1/2	145,641	1/2	130,348	1/2	115,054	1/2	99,747	
3/4		3/4		3/4	189,413	3/4	178,849	3/4	168,271	3/4	157,666	3/4	145,323	3/4	130,029	3/4	114,735	3/4	99,429	
5		5		5	189,194	5	178,629	5	168,050	5	157,445	5	145,004	5	129,710	5	114,417	5	99,110	
1/4		1/4		1/4	188,975	1/4	178,409	1/4	167,829	1/4	157,224	1/4	144,686	1/4	129,392	1/4	114,098	1/4	98,791	
1/2		1/2		1/2	188,756	1/2	178,189	1/2	167,608	1/2	157,003	1/2	144,367	1/2	129,073	1/2	113,779	1/2	98,472	
3/4		3/4		3/4	188,537	3/4	177,969	3/4	167,387	3/4	156,782	3/4	144,048	3/4	128,754	3/4	113,461	3/4	98,153	
6		6		6	188,317	6	177,749	6	167,166	6	156,561	6	143,730	6	128,436	6	113,142	6	97,835	
1/4		1/4		1/4	188,096	1/4	177,528	1/4	166,945	1/4	156,340	1/4	143,411	1/4	128,117	1/4	112,823	1/4	97,516	
1/2		1/2		1/2	187,876	1/2	177,308	1/2	166,724	1/2	156,119	1/2	143,092	1/2	127,799	1/2	112,505	1/2	97,197	
3/4		3/4		3/4	187,656	3/4	177,088	3/4	166,503	3/4	155,898	3/4	142,774	3/4	127,480	3/4	112,186	3/4	96,878	
7		7		7	187,436	7	176,868	7	166,282	7	155,678	7	142,455	7	127,161	7	111,868	7	96,560	
1/4		1/4		1/4	187,216	1/4	176,648	1/4	166,061	1/4	155,457	1/4	142,137	1/4	126,843	1/4	111,549	1/4	96,241	
1/2		1/2		1/2	186,996	1/2	176,427	1/2	165,840	1/2	155,236	1/2	141,818	1/2	126,524	1/2	111,230	1/2	95,922	
3/4		3/4	196,108	186,775	3/4	176,207	3/4	165,619	3/4	155,015	3/4	141,499	3/4	126,206	3/4	110,912	3/4	110,912	3/4	95,603
8		8	196,027	8	186,555	8	175,987	8	165,398	8	154,794	8	141,181	8	125,887	8	110,593	8	95,284	
1/4		1/4	195,945	1/4	186,335	1/4	175,767	1/4	165,178	1/4	154,573	1/4	140,862	1/4	125,568	1/4	110,274	1/4	94,966	
1/2		1/2	195,864	1/2	186,115	1/2	175,547	1/2	164,957	1/2	154,352	1/2	140,543	1/2	125,250	1/2	109,955	1/2	94,647	
3/4		3/4	195,783	3/4	185,895	3/4	175,327	3/4	164,736	3/4	154,131	3/4	140,225	3/4	124,931	3/4	109,637	3/4	94,328	
9		9	195,657	9	185,675	9	175,106	9	164,515	9	153,910	9	139,906	9	124,612	9	109,318	9	94,009	
1/4		1/4	195,530	1/4	185,454	1/4	174,886	1/4	164,294	1/4	153,689	1/4	139,588	1/4	124,294	1/4	108,999	1/4	93,690	
1/2		1/2	195,403	1/2	185,234	1/2	174,666	1/2	164,073	1/2	153,468	1/2	139,269	1/2	123,975	1/2	108,680	1/2	93,372	
3/4		3/4	195,276	3/4	185,014	3/4	174,446	3/4	163,852	3/4	153,247	3/4	138,950	3/4	123,657	3/4	108,361	3/4	93,053	
10		10	195,104	10	184,794	10	174,226	10	163,631	10	153,027	10	138,632	10	123,338	10	108,042	10	92,734	
1/4		1/4	194,932	1/4	184,574	1/4	174,006	1/4	163,410	1/4	152,806	1/4	138,313	1/4	123,019	1/4	107,723	1/4	92,415	
1/2		1/2	194,759	1/2	184,354	1/2	173,785	1/2	163,189	1/2	152,586	1/2	137,994	1/2	122,701	1/2	107,404	1/2	92,097	
3/4		3/4	194,587	3/4	184,133	3/4	173,565	3/4	162,968	3/4	152,366	3/4	137,676	3/4	122,382	3/4	107,085	3/4	91,778	
11		11	194,381	11	183,913	11	173,345	11	162,747	11	152,146	11	137,357	11	122,063	11	106,766	11	91,459	
1/4		1/4	194,176	1/4	183,693	1/4	173,125	1/4	162,526	1/4	151,926	1/4	137,039	1/4	121,745	1/4	106,447	1/4	91,140	
1/2		1/2	193,970	1/2	183,473	1/2	172,905	1/2	162,305	1/2	151,706	1/2	136,720	1/2	121,426	1/2	106,128	1/2	90,821	
3/4		3/4	193,765	3/4	183,253	3/4	172,685	3/4	162,085	3/4	151,486	3/4	136,401	3/4	121,108	3/4	105,809	3/4	90,503	

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 THREADS ON "MMC" VALVE.  
GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-09" FORWARD OF AFT BULKHEAD.

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



# BARGE "HFL 427"

## 3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-10 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	90,184	0	74,897	0	59,668	0	44,805	0	29,673	0	14,355	0		0		0		0	
1/4	89,865	1/4	74,580	1/4	59,356	1/4	44,493	1/4	29,354	1/4	14,035	1/4		1/4		1/4		1/4	
1/2	89,546	1/2	74,263	1/2	59,043	1/2	44,181	1/2	29,035	1/2	13,716	1/2		1/2		1/2		1/2	
3/4	89,227	3/4	73,945	3/4	58,731	3/4	43,869	3/4	28,716	3/4	13,397	3/4		3/4		3/4		3/4	
1	88,908	1	73,628	1	58,420	1	43,558	1	28,397	1	13,078	1		1		1		1	
1/4	88,589	1/4	73,311	1/4	58,109	1/4	43,246	1/4	28,078	1/4	12,759	1/4		1/4		1/4		1/4	
1/2	88,270	1/2	72,994	1/2	57,798	1/2	42,934	1/2	27,759	1/2	12,440	1/2		1/2		1/2		1/2	
3/4	87,950	3/4	72,677	3/4	57,487	3/4	42,622	3/4	27,440	3/4	12,120	3/4		3/4		3/4		3/4	
2	87,631	2	72,360	2	57,178	2	42,310	2	27,121	2	11,801	2		2		2		2	
1/4	87,312	1/4	72,043	1/4	56,869	1/4	41,998	1/4	26,802	1/4	11,482	1/4		1/4		1/4		1/4	
1/2	86,993	1/2	71,725	1/2	56,559	1/2	41,686	1/2	26,483	1/2	11,162	1/2		1/2		1/2		1/2	
3/4	86,674	3/4	71,408	3/4	56,250	3/4	41,375	3/4	26,164	3/4	10,843	3/4		3/4		3/4		3/4	
3	86,355	3	71,091	3	55,941	3	41,063	3	25,844	3	10,523	3		3		3		3	
1/4	86,036	1/4	70,774	1/4	55,632	1/4	40,751	1/4	25,525	1/4	10,204	1/4		1/4		1/4		1/4	
1/2	85,717	1/2	70,457	1/2	55,322	1/2	40,439	1/2	25,206	1/2	9,884	1/2		1/2		1/2		1/2	
3/4	85,398	3/4	70,140	3/4	55,013	3/4	40,127	3/4	24,887	3/4	9,564	3/4		3/4		3/4		3/4	
4	85,079	4	69,823	4	54,704	4	39,815	4	24,568	4	9,245	4		4		4		4	
1/4	84,759	1/4	69,506	1/4	54,394	1/4	39,504	1/4	24,249	1/4	8,925	1/4		1/4		1/4		1/4	
1/2	84,440	1/2	69,188	1/2	54,085	1/2	39,192	1/2	23,929	1/2	8,606	1/2		1/2		1/2		1/2	
3/4	84,121	3/4	68,871	3/4	53,776	3/4	38,880	3/4	23,610	3/4	8,286	3/4		3/4		3/4		3/4	
5	83,802	5	68,554	5	53,467	5	38,568	5	23,291	5	7,967	5		5		5		5	
1/4	83,483	1/4	68,237	1/4	53,157	1/4	38,256	1/4	22,972	1/4	7,648	1/4		1/4		1/4		1/4	
1/2	83,164	1/2	67,920	1/2	52,848	1/2	37,944	1/2	22,653	1/2	7,330	1/2		1/2		1/2		1/2	
3/4	82,845	3/4	67,603	3/4	52,539	3/4	37,633	3/4	22,334	3/4	7,011	3/4		3/4		3/4		3/4	
6	82,526	6	67,286	6	52,229	6	37,318	6	22,014	6	6,692	6		6		6		6	
1/4	82,207	1/4	66,968	1/4	51,920	1/4	37,003	1/4	21,695	1/4	6,374	1/4		1/4		1/4		1/4	
1/2	81,888	1/2	66,651	1/2	51,611	1/2	36,688	1/2	21,376	1/2	6,055	1/2		1/2		1/2		1/2	
3/4	81,568	3/4	66,334	3/4	51,301	3/4	36,373	3/4	21,057	3/4	5,737	3/4		3/4		3/4		3/4	
7	81,249	7	66,017	7	50,992	7	36,054	7	20,738	7	5,419	7		7		7		7	
1/4	80,930	1/4	65,700	1/4	50,683	1/4	35,735	1/4	20,419	1/4	5,101	1/4		1/4		1/4		1/4	
1/2	80,611	1/2	65,383	1/2	50,374	1/2	35,417	1/2	20,099	1/2	4,783	1/2		1/2		1/2		1/2	
3/4	80,292	3/4	65,066	3/4	50,064	3/4	35,098	3/4	19,780	3/4	4,465	3/4		3/4		3/4		3/4	
8	79,974	8	64,748	8	49,755	8	34,779	8	19,461	8	4,149	8		8		8		8	
1/4	79,656	1/4	64,430	1/4	49,446	1/4	34,460	1/4	19,142	1/4	3,832	1/4		1/4		1/4		1/4	
1/2	79,338	1/2	64,112	1/2	49,136	1/2	34,141	1/2	18,823	1/2	3,516	1/2		1/2		1/2		1/2	
3/4	79,020	3/4	63,794	3/4	48,827	3/4	33,821	3/4	18,504	3/4	3,199	3/4		3/4		3/4		3/4	
9	78,702	9	63,475	9	48,518	9	33,502	9	18,185	9	2,902	9		9		9		9	
1/4	78,385	1/4	63,156	1/4	48,209	1/4	33,183	1/4	17,865	1/4	2,604	1/4		1/4		1/4		1/4	
1/2	78,068	1/2	62,837	1/2	47,900	1/2	32,864	1/2	17,546	1/2	2,306	1/2		1/2		1/2		1/2	
3/4	77,751	3/4	62,519	3/4	47,591	3/4	32,545	3/4	17,227	3/4	2,009	3/4		3/4		3/4		3/4	
10	77,434	10	62,200	10	47,283	10	32,226	10	16,908	10	1,769	10		10		10		10	
1/4	77,117	1/4	61,881	1/4	46,974	1/4	31,907	1/4	16,589	1/4	1,530	1/4		1/4		1/4		1/4	
1/2	76,800	1/2	61,562	1/2	46,666	1/2	31,587	1/2	16,270	1/2	1,290	1/2		1/2		1/2		1/2	
3/4	76,482	3/4	61,243	3/4	46,357	3/4	31,268	3/4	15,950	3/4	1,050	3/4		3/4		3/4		3/4	
11	76,165	11	60,928	11	46,047	11	30,949	11	15,631	11		11		11		11		11	
1/4	75,848	1/4	60,612	1/4	45,737	1/4	30,630	1/4	15,312	1/4		1/4		1/4		1/4		1/4	
1/2	75,531	1/2	60,297	1/2	45,427	1/2	30,311	1/2	14,993	1/2		1/2		1/2		1/2		1/2	
3/4	75,214	3/4	59,981	3/4	45,117	3/4	29,992	3/4	14,674	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2013 CL - SW  
CALCULATED: 10/22/2013 CL  
PRINTED: 10/22/2013 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2013

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



# BARGE "HFL 427"

## 3 STBD 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	194,008	0	183,474	0	172,898	0	162,287	0	151,487	0	136,168	0	120,837	0	105,499
1/4		1/4		1/4	193,791	1/4	183,253	1/4	172,677	1/4	162,066	1/4	151,168	1/4	135,849	1/4	120,517	1/4	105,179
1/2		1/2		1/2	193,573	1/2	183,033	1/2	172,456	1/2	161,845	1/2	150,850	1/2	135,529	1/2	120,198	1/2	104,859
3/4		3/4		3/4	193,355	3/4	182,813	3/4	172,236	3/4	161,624	3/4	150,531	3/4	135,210	3/4	119,879	3/4	104,539
1		1		1	193,138	1	182,592	1	172,015	1	161,403	1	150,212	1	134,891	1	119,559	1	104,220
1/4		1/4		1/4	192,920	1/4	182,372	1/4	171,794	1/4	161,182	1/4	149,894	1/4	134,571	1/4	119,240	1/4	103,900
1/2		1/2		1/2	192,702	1/2	182,152	1/2	171,573	1/2	160,960	1/2	149,576	1/2	134,252	1/2	118,920	1/2	103,580
3/4		3/4		3/4	192,483	3/4	181,931	3/4	171,352	3/4	160,739	3/4	149,257	3/4	133,932	3/4	118,601	3/4	103,260
2		2		2	192,265	2	181,711	2	171,131	2	160,518	2	148,939	2	133,613	2	118,282	2	102,940
1/4		1/4		1/4	192,047	1/4	181,491	1/4	170,910	1/4	160,297	1/4	148,620	1/4	133,294	1/4	117,962	1/4	102,620
1/2		1/2		1/2	191,829	1/2	181,270	1/2	170,688	1/2	160,076	1/2	148,302	1/2	132,974	1/2	117,643	1/2	102,301
3/4		3/4		3/4	191,611	3/4	181,050	3/4	170,467	3/4	159,855	3/4	147,983	3/4	132,655	3/4	117,323	3/4	101,981
3		3		3	191,393	3	180,830	3	170,246	3	159,634	3	147,665	3	132,335	3	117,004	3	101,661
1/4		1/4		1/4	191,174	1/4	180,609	1/4	170,025	1/4	159,413	1/4	147,346	1/4	132,016	1/4	116,685	1/4	101,341
1/2		1/2		1/2	190,956	1/2	180,389	1/2	169,804	1/2	159,192	1/2	147,027	1/2	131,697	1/2	116,365	1/2	101,021
3/4		3/4		3/4	190,738	3/4	180,169	3/4	169,583	3/4	158,971	3/4	146,708	3/4	131,377	3/4	116,046	3/4	100,702
4		4		4	190,520	4	179,948	4	169,362	4	158,750	4	146,389	4	131,058	4	115,726	4	100,382
1/4		1/4		1/4	190,301	1/4	179,728	1/4	169,141	1/4	158,528	1/4	146,070	1/4	130,738	1/4	115,407	1/4	100,062
1/2		1/2		1/2	190,082	1/2	179,508	1/2	168,920	1/2	158,307	1/2	145,750	1/2	130,419	1/2	115,088	1/2	99,742
3/4		3/4		3/4	189,862	3/4	179,287	3/4	168,699	3/4	158,086	3/4	145,431	3/4	130,100	3/4	114,768	3/4	99,422
5		5		5	189,643	5	179,067	5	168,478	5	157,865	5	145,112	5	129,780	5	114,449	5	99,102
1/4		1/4		1/4	189,423	1/4	178,847	1/4	168,256	1/4	157,644	1/4	144,792	1/4	129,461	1/4	114,129	1/4	98,783
1/2		1/2		1/2	189,202	1/2	178,626	1/2	168,035	1/2	157,423	1/2	144,473	1/2	129,141	1/2	113,810	1/2	98,463
3/4		3/4		3/4	188,982	3/4	178,406	3/4	167,814	3/4	157,202	3/4	144,153	3/4	128,822	3/4	113,491	3/4	98,143
6		6		6	188,762	6	178,186	6	167,593	6	156,981	6	143,834	6	128,503	6	113,171	6	97,823
1/4		1/4		1/4	188,541	1/4	177,965	1/4	167,372	1/4	156,760	1/4	143,514	1/4	128,183	1/4	112,852	1/4	97,503
1/2		1/2		1/2	188,321	1/2	177,745	1/2	167,151	1/2	156,539	1/2	143,195	1/2	127,864	1/2	112,532	1/2	97,184
3/4		3/4		3/4	188,101	3/4	177,525	3/4	166,930	3/4	156,318	3/4	142,876	3/4	127,544	3/4	112,213	3/4	96,864
7		7	197,220	7	187,880	7	177,305	7	166,709	7	156,096	7	142,556	7	127,225	7	111,893	7	96,544
1/4		1/4	197,139	1/4	187,660	1/4	177,084	1/4	166,488	1/4	155,875	1/4	142,237	1/4	126,906	1/4	111,574	1/4	96,224
1/2		1/2	197,057	1/2	187,440	1/2	176,864	1/2	166,267	1/2	155,654	1/2	141,917	1/2	126,586	1/2	111,254	1/2	95,904
3/4		3/4	196,976	3/4	187,219	3/4	176,644	3/4	166,046	3/4	155,433	3/4	141,598	3/4	126,267	3/4	110,935	3/4	95,584
8		8	196,895	8	186,999	8	176,423	8	165,824	8	155,212	8	141,279	8	125,947	8	110,615	8	95,265
1/4		1/4	196,768	1/4	186,779	1/4	176,203	1/4	165,603	1/4	154,991	1/4	140,959	1/4	125,628	1/4	110,296	1/4	94,945
1/2		1/2	196,641	1/2	186,558	1/2	175,983	1/2	165,382	1/2	154,770	1/2	140,640	1/2	125,309	1/2	109,976	1/2	94,625
3/4		3/4	196,514	3/4	186,338	3/4	175,762	3/4	165,161	3/4	154,549	3/4	140,320	3/4	124,989	3/4	109,656	3/4	94,305
9		9	196,388	9	186,118	9	175,542	9	164,940	9	154,328	9	140,001	9	124,670	9	109,337	9	93,985
1/4		1/4	196,215	1/4	185,897	1/4	175,322	1/4	164,719	1/4	154,107	1/4	139,682	1/4	124,350	1/4	109,017	1/4	93,666
1/2		1/2	196,043	1/2	185,677	1/2	175,101	1/2	164,498	1/2	153,886	1/2	139,362	1/2	124,031	1/2	108,697	1/2	93,346
3/4		3/4	195,870	3/4	185,457	3/4	174,881	3/4	164,277	3/4	153,666	3/4	139,043	3/4	123,712	3/4	108,377	3/4	93,026
10		10	195,698	10	185,236	10	174,661	10	164,056	10	153,445	10	138,723	10	123,392	10	108,057	10	92,706
1/4		1/4	195,492	1/4	185,016	1/4	174,440	1/4	163,835	1/4	153,225	1/4	138,404	1/4	123,073	1/4	107,738	1/4	92,386
1/2		1/2	195,286	1/2	184,796	1/2	174,220	1/2	163,614	1/2	153,005	1/2	138,085	1/2	122,753	1/2	107,418	1/2	92,066
3/4		3/4	195,081	3/4	184,575	3/4	174,000	3/4	163,392	3/4	152,785	3/4	137,765	3/4	122,434	3/4	107,098	3/4	91,747
11		11	194,875	11	184,355	11	173,779	11	163,171	11	152,565	11	137,446	11	122,115	11	106,778	11	91,427
1/4		1/4	194,658	1/4	184,135	1/4	173,559	1/4	162,950	1/4	152,295	1/4	137,126	1/4	121,795	1/4	106,458	1/4	91,107
1/2		1/2	194,442	1/2	183,914	1/2	173,339	1/2	162,729	1/2	152,026	1/2	136,807	1/2	121,476	1/2	106,138	1/2	90,787
3/4		3/4	194,225	3/4	183,694	3/4	173,118	3/4	162,508	3/4	151,756	3/4	136,488	3/4	121,156	3/4	105,819	3/4	90,467

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 THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED 12'-09" OFF CENTERLINE AND 43'-09" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



# BARGE "HFL 427"

**3 STBD**  
**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	90,148	0	74,796	0	59,445	0	44,099	0	28,760	0	13,410	0		0		0		0	
1/4	89,828	1/4	74,476	1/4	59,125	1/4	43,779	1/4	28,441	1/4	13,090	1/4		1/4		1/4		1/4	
1/2	89,508	1/2	74,157	1/2	58,805	1/2	43,460	1/2	28,121	1/2	12,770	1/2		1/2		1/2		1/2	
3/4	89,188	3/4	73,837	3/4	58,485	3/4	43,141	3/4	27,801	3/4	12,450	3/4		3/4		3/4		3/4	
1	88,868	1	73,517	1	58,166	1	42,821	1	27,481	1	12,130	1		1		1		1	
1/4	88,548	1/4	73,197	1/4	57,846	1/4	42,502	1/4	27,161	1/4	11,811	1/4		1/4		1/4		1/4	
1/2	88,229	1/2	72,877	1/2	57,526	1/2	42,183	1/2	26,842	1/2	11,491	1/2		1/2		1/2		1/2	
3/4	87,909	3/4	72,558	3/4	57,206	3/4	41,863	3/4	26,522	3/4	11,171	3/4		3/4		3/4		3/4	
2	87,589	2	72,238	2	56,886	2	41,544	2	26,202	2	10,851	2		2		2		2	
1/4	87,269	1/4	71,918	1/4	56,567	1/4	41,225	1/4	25,882	1/4	10,531	1/4		1/4		1/4		1/4	
1/2	86,949	1/2	71,598	1/2	56,247	1/2	40,905	1/2	25,562	1/2	10,212	1/2		1/2		1/2		1/2	
3/4	86,630	3/4	71,278	3/4	55,927	3/4	40,586	3/4	25,243	3/4	9,892	3/4		3/4		3/4		3/4	
3	86,310	3	70,958	3	55,607	3	40,267	3	24,923	3	9,572	3		3		3		3	
1/4	85,990	1/4	70,639	1/4	55,287	1/4	39,948	1/4	24,603	1/4	9,252	1/4		1/4		1/4		1/4	
1/2	85,670	1/2	70,319	1/2	54,967	1/2	39,628	1/2	24,283	1/2	8,933	1/2		1/2		1/2		1/2	
3/4	85,350	3/4	69,999	3/4	54,648	3/4	39,309	3/4	23,963	3/4	8,613	3/4		3/4		3/4		3/4	
4	85,030	4	69,679	4	54,328	4	38,990	4	23,644	4	8,293	4		4		4		4	
1/4	84,711	1/4	69,359	1/4	54,008	1/4	38,670	1/4	23,324	1/4	7,974	1/4		1/4		1/4		1/4	
1/2	84,391	1/2	69,039	1/2	53,688	1/2	38,351	1/2	23,004	1/2	7,654	1/2		1/2		1/2		1/2	
3/4	84,071	3/4	68,720	3/4	53,368	3/4	38,032	3/4	22,684	3/4	7,335	3/4		3/4		3/4		3/4	
5	83,751	5	68,400	5	53,049	5	37,712	5	22,364	5	7,016	5		5		5		5	
1/4	83,431	1/4	68,080	1/4	52,729	1/4	37,393	1/4	22,044	1/4	6,697	1/4		1/4		1/4		1/4	
1/2	83,112	1/2	67,760	1/2	52,409	1/2	37,074	1/2	21,725	1/2	6,378	1/2		1/2		1/2		1/2	
3/4	82,792	3/4	67,440	3/4	52,089	3/4	36,754	3/4	21,405	3/4	6,059	3/4		3/4		3/4		3/4	
6	82,472	6	67,121	6	51,769	6	36,435	6	21,085	6	5,740	6		6		6		6	
1/4	82,152	1/4	66,801	1/4	51,449	1/4	36,115	1/4	20,765	1/4	5,422	1/4		1/4		1/4		1/4	
1/2	81,832	1/2	66,481	1/2	51,130	1/2	35,796	1/2	20,445	1/2	5,104	1/2		1/2		1/2		1/2	
3/4	81,512	3/4	66,161	3/4	50,810	3/4	35,476	3/4	20,126	3/4	4,786	3/4		3/4		3/4		3/4	
7	81,193	7	65,841	7	50,490	7	35,157	7	19,806	7	4,468	7		7		7		7	
1/4	80,873	1/4	65,521	1/4	50,170	1/4	34,837	1/4	19,486	1/4	4,151	1/4		1/4		1/4		1/4	
1/2	80,553	1/2	65,202	1/2	49,850	1/2	34,517	1/2	19,166	1/2	3,834	1/2		1/2		1/2		1/2	
3/4	80,233	3/4	64,882	3/4	49,531	3/4	34,197	3/4	18,846	3/4	3,517	3/4		3/4		3/4		3/4	
8	79,913	8	64,562	8	49,211	8	33,877	8	18,527	8	3,201	8		8		8		8	
1/4	79,594	1/4	64,242	1/4	48,891	1/4	33,558	1/4	18,207	1/4	2,903	1/4		1/4		1/4		1/4	
1/2	79,274	1/2	63,922	1/2	48,571	1/2	33,238	1/2	17,887	1/2	2,605	1/2		1/2		1/2		1/2	
3/4	78,954	3/4	63,603	3/4	48,252	3/4	32,918	3/4	17,567	3/4	2,308	3/4		3/4		3/4		3/4	
9	78,634	9	63,283	9	47,932	9	32,598	9	17,247	9	2,010	9		9		9		9	
1/4	78,314	1/4	62,963	1/4	47,612	1/4	32,278	1/4	16,928	1/4	1,770	1/4		1/4		1/4		1/4	
1/2	77,994	1/2	62,643	1/2	47,293	1/2	31,959	1/2	16,608	1/2	1,530	1/2		1/2		1/2		1/2	
3/4	77,675	3/4	62,323	3/4	46,973	3/4	31,639	3/4	16,288	3/4	1,291	3/4		3/4		3/4		3/4	
10	77,355	10	62,003	10	46,654	10	31,319	10	15,968	10	1,051	10		10		10		10	
1/4	77,035	1/4	61,684	1/4	46,334	1/4	30,999	1/4	15,648	1/4		1/4		1/4		1/4		1/4	
1/2	76,715	1/2	61,364	1/2	46,015	1/2	30,679	1/2	15,328	1/2		1/2		1/2		1/2		1/2	
3/4	76,395	3/4	61,044	3/4	45,695	3/4	30,360	3/4	15,009	3/4		3/4		3/4		3/4		3/4	
11	76,076	11	60,724	11	45,376	11	30,040	11	14,689	11		11		11		11		11	
1/4	75,756	1/4	60,404	1/4	45,057	1/4	29,720	1/4	14,369	1/4		1/4		1/4		1/4		1/4	
1/2	75,436	1/2	60,085	1/2	44,737	1/2	29,400	1/2	14,049	1/2		1/2		1/2		1/2		1/2	
3/4	75,116	3/4	59,765	3/4	44,418	3/4	29,080	3/4	13,729	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 10/21/2013 CL - SW  
CALCULATED: 10/22/2013 CL  
PRINTED: 10/22/2013 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2013

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



# BARGE "HFL 427"

## FUEL OIL ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 3'-10 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0		0	442	0	273	0	96	0		0		0		0		0		0	
1/4		1/4	440	1/4	269	1/4	92	1/4		1/4		1/4		1/4		1/4		1/4	
1/2		1/2	436	1/2	265	1/2	89	1/2		1/2		1/2		1/2		1/2		1/2	
3/4		3/4	433	3/4	261	3/4	86	3/4		3/4		3/4		3/4		3/4		3/4	
1		1	430	1	257	1	83	1		1		1		1		1		1	
1/4		1/4	427	1/4	253	1/4	80	1/4		1/4		1/4		1/4		1/4		1/4	
1/2		1/2	424	1/2	250	1/2	77	1/2		1/2		1/2		1/2		1/2		1/2	
3/4		3/4	421	3/4	246	3/4	73	3/4		3/4		3/4		3/4		3/4		3/4	
2		2	418	2	242	2	70	2		2		2		2		2		2	
1/4		1/4	414	1/4	238	1/4	67	1/4		1/4		1/4		1/4		1/4		1/4	
1/2		1/2	411	1/2	234	1/2	64	1/2		1/2		1/2		1/2		1/2		1/2	
3/4		3/4	408	3/4	230	3/4	61	3/4		3/4		3/4		3/4		3/4		3/4	
3		3	404	3	227	3	58	3		3		3		3		3		3	
1/4		1/4	401	1/4	223	1/4	56	1/4		1/4		1/4		1/4		1/4		1/4	
1/2		1/2	398	1/2	219	1/2	53	1/2		1/2		1/2		1/2		1/2		1/2	
3/4		3/4	394	3/4	215	3/4	50	3/4		3/4		3/4		3/4		3/4		3/4	
4		4	391	4	211	4	47	4		4		4		4		4		4	
1/4	507	1/4	387	1/4	207	1/4	44	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	506	1/2	384	1/2	204	1/2	42	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	505	3/4	380	3/4	200	3/4	39	3/4		3/4		3/4		3/4		3/4		3/4	
5	504	5	377	5	196	5	37	5		5		5		5		5		5	
1/4	504	1/4	373	1/4	192	1/4	34	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	502	1/2	370	1/2	189	1/2	32	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	501	3/4	366	3/4	185	3/4	29	3/4		3/4		3/4		3/4		3/4		3/4	
6	499	6	363	6	181	6	27	6		6		6		6		6		6	
1/4	498	1/4	359	1/4	177	1/4	25	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	496	1/2	355	1/2	174	1/2	22	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	494	3/4	352	3/4	170	3/4	20	3/4		3/4		3/4		3/4		3/4		3/4	
7	493	7	348	7	166	7	18	7		7		7		7		7		7	
1/4	491	1/4	344	1/4	162	1/4	16	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	489	1/2	341	1/2	159	1/2	14	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	486	3/4	337	3/4	155	3/4	12	3/4		3/4		3/4		3/4		3/4		3/4	
8	484	8	333	8	152	8	11	8		8		8		8		8		8	
1/4	482	1/4	329	1/4	148	1/4	9	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	480	1/2	326	1/2	144	1/2	7	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	477	3/4	322	3/4	141	3/4	6	3/4		3/4		3/4		3/4		3/4		3/4	
9	475	9	318	9	137	9	5	9		9		9		9		9		9	
1/4	473	1/4	314	1/4	134	1/4	3	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	470	1/2	311	1/2	130	1/2	2	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	468	3/4	307	3/4	127	3/4	2	3/4		3/4		3/4		3/4		3/4		3/4	
10	465	10	303	10	123	10	1	10		10		10		10		10		10	
1/4	462	1/4	299	1/4	119	1/4	0	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	460	1/2	296	1/2	116	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	457	3/4	292	3/4	113	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	454	11	288	11	109	11		11		11		11		11		11		11	
1/4	451	1/4	284	1/4	106	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	448	1/2	280	1/2	102	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	445	3/4	276	3/4	99	3/4		3/4		3/4		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 2" DIAMETER PIPE.

STRAPPED: 10/21/2013 CL - SW  
CALCULATED: 10/22/2013 CL  
PRINTED: 10/22/2013 CL

CANCELS AND SUPERCEDES  
ALL PRIOR TO 10/2013

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



# BARGE "HFL 427"

## PORT SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 6'-01"

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	4,872	0	3,679	0	2,485	0	1,291	0	98	0		0		0	
1/4		1/4		1/4	4,848	1/4	3,654	1/4	2,460	1/4	1,266	1/4	74	1/4		1/4		1/4	
1/2		1/2		1/2	4,823	1/2	3,629	1/2	2,435	1/2	1,241	1/2	49	1/2		1/2		1/2	
3/4		3/4		3/4	4,798	3/4	3,604	3/4	2,410	3/4	1,216	3/4	25	3/4		3/4		3/4	
1		1		1	4,773	1	3,579	1	2,385	1	1,191	1	0	1		1		1	
1/4		1/4		1/4	4,748	1/4	3,554	1/4	2,360	1/4	1,166	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,723	1/2	3,529	1/2	2,335	1/2	1,141	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,698	3/4	3,504	3/4	2,311	3/4	1,117	3/4		3/4		3/4		3/4	
2		2		2	4,673	2	3,480	2	2,286	2	1,092	2		2		2		2	
1/4		1/4		1/4	4,649	1/4	3,455	1/4	2,261	1/4	1,067	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,624	1/2	3,430	1/2	2,236	1/2	1,042	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,599	3/4	3,405	3/4	2,211	3/4	1,017	3/4		3/4		3/4		3/4	
3		3		3	4,574	3	3,380	3	2,186	3	992	3		3		3		3	
1/4		1/4		1/4	4,549	1/4	3,355	1/4	2,161	1/4	967	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,524	1/2	3,330	1/2	2,136	1/2	942	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,499	3/4	3,305	3/4	2,112	3/4	918	3/4		3/4		3/4		3/4	
4		4		4	4,474	4	3,281	4	2,087	4	893	4		4		4		4	
1/4		1/4		1/4	4,450	1/4	3,256	1/4	2,062	1/4	868	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,425	1/2	3,231	1/2	2,037	1/2	843	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,400	3/4	3,206	3/4	2,012	3/4	818	3/4		3/4		3/4		3/4	
5		5		5	4,375	5	3,181	5	1,987	5	793	5		5		5		5	
1/4		1/4		1/4	4,350	1/4	3,156	1/4	1,962	1/4	768	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,325	1/2	3,131	1/2	1,937	1/2	744	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,300	3/4	3,106	3/4	1,913	3/4	719	3/4		3/4		3/4		3/4	
6		6	5,469	6	4,275	6	3,082	6	1,888	6	694	6		6		6		6	
1/4		1/4	5,445	1/4	4,251	1/4	3,057	1/4	1,863	1/4	669	1/4		1/4		1/4		1/4	
1/2		1/2	5,420	1/2	4,226	1/2	3,032	1/2	1,838	1/2	644	1/2		1/2		1/2		1/2	
3/4		3/4	5,395	3/4	4,201	3/4	3,007	3/4	1,813	3/4	619	3/4		3/4		3/4		3/4	
7		7	5,370	7	4,176	7	2,982	7	1,788	7	594	7		7		7		7	
1/4		1/4	5,345	1/4	4,151	1/4	2,957	1/4	1,763	1/4	569	1/4		1/4		1/4		1/4	
1/2		1/2	5,320	1/2	4,126	1/2	2,932	1/2	1,738	1/2	545	1/2		1/2		1/2		1/2	
3/4		3/4	5,295	3/4	4,101	3/4	2,907	3/4	1,714	3/4	520	3/4		3/4		3/4		3/4	
8		8	5,270	8	4,076	8	2,883	8	1,689	8	495	8		8		8		8	
1/4		1/4	5,246	1/4	4,052	1/4	2,858	1/4	1,664	1/4	470	1/4		1/4		1/4		1/4	
1/2		1/2	5,221	1/2	4,027	1/2	2,833	1/2	1,639	1/2	445	1/2		1/2		1/2		1/2	
3/4		3/4	5,196	3/4	4,002	3/4	2,808	3/4	1,614	3/4	420	3/4		3/4		3/4		3/4	
9		9	5,171	9	3,977	9	2,783	9	1,589	9	395	9		9		9		9	
1/4		1/4	5,146	1/4	3,952	1/4	2,758	1/4	1,564	1/4	371	1/4		1/4		1/4		1/4	
1/2		1/2	5,121	1/2	3,927	1/2	2,733	1/2	1,539	1/2	346	1/2		1/2		1/2		1/2	
3/4		3/4	5,096	3/4	3,902	3/4	2,708	3/4	1,515	3/4	321	3/4		3/4		3/4		3/4	
10		10	5,071	10	3,878	10	2,684	10	1,490	10	296	10		10		10		10	
1/4		1/4	5,047	1/4	3,853	1/4	2,659	1/4	1,465	1/4	271	1/4		1/4		1/4		1/4	
1/2		1/2	5,022	1/2	3,828	1/2	2,634	1/2	1,440	1/2	247	1/2		1/2		1/2		1/2	
3/4		3/4	4,997	3/4	3,803	3/4	2,609	3/4	1,415	3/4	222	3/4		3/4		3/4		3/4	
11		11	4,972	11	3,778	11	2,584	11	1,390	11	197	11		11		11		11	
1/4		1/4	4,947	1/4	3,753	1/4	2,559	1/4	1,365	1/4	172	1/4		1/4		1/4		1/4	
1/2		1/2	4,922	1/2	3,728	1/2	2,534	1/2	1,340	1/2	148	1/2		1/2		1/2		1/2	
3/4		3/4	4,897	3/4	3,703	3/4	2,509	3/4	1,316	3/4	123	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 THREADS ON "MMC" VALVE.

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PRECISION MEASUREMENT  
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

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# BARGE "HFL 427"

## STBD SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 6'-01"

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	4,710	0	3,556	0	2,402	0	1,248	0	95	0		0		0	
1/4		1/4		1/4	4,686	1/4	3,532	1/4	2,378	1/4	1,224	1/4	71	1/4		1/4		1/4	
1/2		1/2		1/2	4,662	1/2	3,508	1/2	2,354	1/2	1,200	1/2	47	1/2		1/2		1/2	
3/4		3/4		3/4	4,638	3/4	3,484	3/4	2,330	3/4	1,176	3/4	24	3/4		3/4		3/4	
1		1		1	4,614	1	3,460	1	2,306	1	1,151	1	0	1		1		1	
1/4		1/4		1/4	4,590	1/4	3,436	1/4	2,282	1/4	1,127	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,566	1/2	3,412	1/2	2,258	1/2	1,103	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,542	3/4	3,388	3/4	2,234	3/4	1,079	3/4		3/4		3/4		3/4	
2		2		2	4,518	2	3,364	2	2,209	2	1,055	2		2		2		2	
1/4		1/4		1/4	4,494	1/4	3,340	1/4	2,185	1/4	1,031	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,470	1/2	3,316	1/2	2,161	1/2	1,007	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,446	3/4	3,292	3/4	2,137	3/4	983	3/4		3/4		3/4		3/4	
3		3		3	4,422	3	3,267	3	2,113	3	959	3		3		3		3	
1/4		1/4		1/4	4,398	1/4	3,243	1/4	2,089	1/4	935	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,374	1/2	3,219	1/2	2,065	1/2	911	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,350	3/4	3,195	3/4	2,041	3/4	887	3/4		3/4		3/4		3/4	
4		4		4	4,325	4	3,171	4	2,017	4	863	4		4		4		4	
1/4		1/4		1/4	4,301	1/4	3,147	1/4	1,993	1/4	839	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,277	1/2	3,123	1/2	1,969	1/2	815	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,253	3/4	3,099	3/4	1,945	3/4	791	3/4		3/4		3/4		3/4	
5		5		5	4,229	5	3,075	5	1,921	5	767	5		5		5		5	
1/4		1/4		1/4	4,205	1/4	3,051	1/4	1,897	1/4	743	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,181	1/2	3,027	1/2	1,873	1/2	719	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,157	3/4	3,003	3/4	1,849	3/4	695	3/4		3/4		3/4		3/4	
6		6	5,287	6	4,133	6	2,979	6	1,825	6	671	6		6		6		6	
1/4		1/4	5,263	1/4	4,109	1/4	2,955	1/4	1,801	1/4	647	1/4		1/4		1/4		1/4	
1/2		1/2	5,239	1/2	4,085	1/2	2,931	1/2	1,777	1/2	622	1/2		1/2		1/2		1/2	
3/4		3/4	5,215	3/4	4,061	3/4	2,907	3/4	1,753	3/4	598	3/4		3/4		3/4		3/4	
7		7	5,191	7	4,037	7	2,883	7	1,729	7	574	7		7		7		7	
1/4		1/4	5,167	1/4	4,013	1/4	2,859	1/4	1,705	1/4	550	1/4		1/4		1/4		1/4	
1/2		1/2	5,143	1/2	3,989	1/2	2,835	1/2	1,680	1/2	526	1/2		1/2		1/2		1/2	
3/4		3/4	5,119	3/4	3,965	3/4	2,811	3/4	1,656	3/4	502	3/4		3/4		3/4		3/4	
8		8	5,095	8	3,941	8	2,787	8	1,632	8	478	8		8		8		8	
1/4		1/4	5,071	1/4	3,917	1/4	2,763	1/4	1,608	1/4	454	1/4		1/4		1/4		1/4	
1/2		1/2	5,047	1/2	3,893	1/2	2,738	1/2	1,584	1/2	430	1/2		1/2		1/2		1/2	
3/4		3/4	5,023	3/4	3,869	3/4	2,714	3/4	1,560	3/4	406	3/4		3/4		3/4		3/4	
9		9	4,999	9	3,845	9	2,690	9	1,536	9	382	9		9		9		9	
1/4		1/4	4,975	1/4	3,821	1/4	2,666	1/4	1,512	1/4	358	1/4		1/4		1/4		1/4	
1/2		1/2	4,951	1/2	3,796	1/2	2,642	1/2	1,488	1/2	334	1/2		1/2		1/2		1/2	
3/4		3/4	4,927	3/4	3,772	3/4	2,618	3/4	1,464	3/4	310	3/4		3/4		3/4		3/4	
10		10	4,903	10	3,748	10	2,594	10	1,440	10	286	10		10		10		10	
1/4		1/4	4,879	1/4	3,724	1/4	2,570	1/4	1,416	1/4	262	1/4		1/4		1/4		1/4	
1/2		1/2	4,854	1/2	3,700	1/2	2,546	1/2	1,392	1/2	238	1/2		1/2		1/2		1/2	
3/4		3/4	4,830	3/4	3,676	3/4	2,522	3/4	1,368	3/4	214	3/4		3/4		3/4		3/4	
11		11	4,806	11	3,652	11	2,498	11	1,344	11	190	11		11		11		11	
1/4		1/4	4,782	1/4	3,628	1/4	2,474	1/4	1,320	1/4	166	1/4		1/4		1/4		1/4	
1/2		1/2	4,758	1/2	3,604	1/2	2,450	1/2	1,296	1/2	143	1/2		1/2		1/2		1/2	
3/4		3/4	4,734	3/4	3,580	3/4	2,426	3/4	1,272	3/4	119	3/4		3/4		3/4		3/4	

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