



BARGE "HFL 423"

INNAGE 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	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/4	00-1/4
2 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
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 INNAGE GAUGE OF 4'-00" ON 1 PORT, THE TRIM CORRECTED INNAGE IS 4'-00 1/8"

LENGTH BETWEEN DRAFT MARKS: 238'-06"

August 6, 2013

**PRECISION MEASUREMENT
& ANALYSIS, INC.**

P.O. Box 2092
 Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "HFL 423"

**1 PORT
INNAGE TABLE**

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 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	386	0	13,276	0	28,230	0	43,280	0	58,269	0	73,277	0	88,328	0	103,379	0	118,425	0	133,469
1/4	563	1/4	13,578	1/4	28,543	1/4	43,594	1/4	58,580	1/4	73,591	1/4	88,641	1/4	103,692	1/4	118,738	1/4	133,783
1/2	740	1/2	13,880	1/2	28,857	1/2	43,907	1/2	58,891	1/2	73,904	1/2	88,955	1/2	104,006	1/2	119,052	1/2	134,096
3/4	918	3/4	14,182	3/4	29,171	3/4	44,221	3/4	59,203	3/4	74,218	3/4	89,269	3/4	104,319	3/4	119,365	3/4	134,410
1	1,095	1	14,484	1	29,484	1	44,535	1	59,514	1	74,531	1	89,582	1	104,633	1	119,679	1	134,723
1/4	1,334	1/4	14,790	1/4	29,798	1/4	44,848	1/4	59,825	1/4	74,845	1/4	89,896	1/4	104,947	1/4	119,992	1/4	135,036
1/2	1,573	1/2	15,096	1/2	30,111	1/2	45,162	1/2	60,136	1/2	75,158	1/2	90,209	1/2	105,260	1/2	120,306	1/2	135,350
3/4	1,812	3/4	15,401	3/4	30,425	3/4	45,475	3/4	60,447	3/4	75,472	3/4	90,523	3/4	105,574	3/4	120,619	3/4	135,663
2	2,051	2	15,707	2	30,738	2	45,789	2	60,758	2	75,785	2	90,836	2	105,887	2	120,932	2	135,977
1/4	2,314	1/4	16,017	1/4	31,052	1/4	46,102	1/4	61,070	1/4	76,099	1/4	91,150	1/4	106,201	1/4	121,246	1/4	136,290
1/2	2,576	1/2	16,327	1/2	31,365	1/2	46,416	1/2	61,381	1/2	76,413	1/2	91,463	1/2	106,514	1/2	121,559	1/2	136,604
3/4	2,839	3/4	16,636	3/4	31,679	3/4	46,729	3/4	61,692	3/4	76,726	3/4	91,777	3/4	106,828	3/4	121,873	3/4	136,917
3	3,101	3	16,946	3	31,993	3	47,043	3	62,003	3	77,040	3	92,091	3	107,141	3	122,186	3	137,230
1/4	3,368	1/4	17,259	1/4	32,306	1/4	47,356	1/4	62,315	1/4	77,353	1/4	92,404	1/4	107,455	1/4	122,499	1/4	137,544
1/2	3,635	1/2	17,571	1/2	32,620	1/2	47,670	1/2	62,626	1/2	77,667	1/2	92,718	1/2	107,768	1/2	122,813	1/2	137,857
3/4	3,902	3/4	17,884	3/4	32,933	3/4	47,984	3/4	62,937	3/4	77,980	3/4	93,031	3/4	108,082	3/4	123,126	3/4	138,171
4	4,169	4	18,196	4	33,247	4	48,297	4	63,249	4	78,294	4	93,345	4	108,395	4	123,440	4	138,484
1/4	4,440	1/4	18,510	1/4	33,560	1/4	48,610	1/4	63,561	1/4	78,608	1/4	93,658	1/4	108,709	1/4	123,753	1/4	138,798
1/2	4,711	1/2	18,823	1/2	33,874	1/2	48,923	1/2	63,873	1/2	78,921	1/2	93,972	1/2	109,022	1/2	124,067	1/2	139,111
3/4	4,982	3/4	19,137	3/4	34,187	3/4	49,236	3/4	64,186	3/4	79,235	3/4	94,286	3/4	109,336	3/4	124,380	3/4	139,424
5	5,253	5	19,451	5	34,501	5	49,548	5	64,498	5	79,548	5	94,599	5	109,649	5	124,693	5	139,738
1/4	5,528	1/4	19,764	1/4	34,814	1/4	49,861	1/4	64,811	1/4	79,862	1/4	94,913	1/4	109,963	1/4	125,007	1/4	140,051
1/2	5,803	1/2	20,078	1/2	35,128	1/2	50,173	1/2	65,125	1/2	80,175	1/2	95,226	1/2	110,276	1/2	125,320	1/2	140,365
3/4	6,078	3/4	20,391	3/4	35,442	3/4	50,485	3/4	65,438	3/4	80,489	3/4	95,540	3/4	110,589	3/4	125,634	3/4	140,678
6	6,353	6	20,705	6	35,755	6	50,797	6	65,752	6	80,802	6	95,853	6	110,903	6	125,947	6	140,991
1/4	6,632	1/4	21,018	1/4	36,069	1/4	51,109	1/4	66,065	1/4	81,116	1/4	96,167	1/4	111,216	1/4	126,261	1/4	141,305
1/2	6,911	1/2	21,332	1/2	36,382	1/2	51,421	1/2	66,379	1/2	81,430	1/2	96,480	1/2	111,530	1/2	126,574	1/2	141,618
3/4	7,189	3/4	21,645	3/4	36,696	3/4	51,732	3/4	66,692	3/4	81,743	3/4	96,794	3/4	111,843	3/4	126,887	3/4	141,932
7	7,468	7	21,959	7	37,009	7	52,044	7	67,006	7	82,057	7	97,108	7	112,157	7	127,201	7	142,245
1/4	7,751	1/4	22,272	1/4	37,323	1/4	52,356	1/4	67,319	1/4	82,370	1/4	97,421	1/4	112,470	1/4	127,514	1/4	142,559
1/2	8,034	1/2	22,586	1/2	37,636	1/2	52,667	1/2	67,633	1/2	82,684	1/2	97,735	1/2	112,783	1/2	127,828	1/2	142,872
3/4	8,316	3/4	22,900	3/4	37,950	3/4	52,979	3/4	67,947	3/4	82,997	3/4	98,048	3/4	113,097	3/4	128,141	3/4	143,185
8	8,599	8	23,213	8	38,264	8	53,290	8	68,260	8	83,311	8	98,362	8	113,410	8	128,455	8	143,499
1/4	8,885	1/4	23,527	1/4	38,577	1/4	53,601	1/4	68,574	1/4	83,624	1/4	98,675	1/4	113,724	1/4	128,768	1/4	143,812
1/2	9,172	1/2	23,840	1/2	38,891	1/2	53,912	1/2	68,887	1/2	83,938	1/2	98,989	1/2	114,037	1/2	129,081	1/2	144,126
3/4	9,458	3/4	24,154	3/4	39,204	3/4	54,224	3/4	69,201	3/4	84,252	3/4	99,302	3/4	114,350	3/4	129,395	3/4	144,439
9	9,745	9	24,467	9	39,518	9	54,535	9	69,514	9	84,565	9	99,616	9	114,664	9	129,708	9	144,753
1/4	10,035	1/4	24,781	1/4	39,831	1/4	54,846	1/4	69,828	1/4	84,879	1/4	99,930	1/4	114,977	1/4	130,022	1/4	145,066
1/2	10,326	1/2	25,094	1/2	40,145	1/2	55,157	1/2	70,141	1/2	85,192	1/2	100,243	1/2	115,291	1/2	130,335	1/2	145,379
3/4	10,616	3/4	25,408	3/4	40,458	3/4	55,468	3/4	70,455	3/4	85,506	3/4	100,557	3/4	115,604	3/4	130,649	3/4	145,693
10	10,907	10	25,722	10	40,772	10	55,780	10	70,769	10	85,819	10	100,870	10	115,918	10	130,962	10	146,006
1/4	11,201	1/4	26,035	1/4	41,085	1/4	56,091	1/4	71,082	1/4	86,133	1/4	101,184	1/4	116,231	1/4	131,275	1/4	146,320
1/2	11,495	1/2	26,349	1/2	41,399	1/2	56,402	1/2	71,396	1/2	86,447	1/2	101,497	1/2	116,544	1/2	131,589	1/2	146,633
3/4	11,789	3/4	26,662	3/4	41,713	3/4	56,713	3/4	71,709	3/4	86,760	3/4	101,811	3/4	116,858	3/4	131,902	3/4	146,947
11	12,084	11	26,976	11	42,026	11	57,024	11	72,023	11	87,074	11	102,124	11	117,171	11	132,216	11	147,260
1/4	12,382	1/4	27,289	1/4	42,340	1/4	57,335	1/4	72,336	1/4	87,387	1/4	102,438	1/4	117,485	1/4	132,529	1/4	147,573
1/2	12,680	1/2	27,603	1/2	42,653	1/2	57,647	1/2	72,650	1/2	87,701	1/2	102,752	1/2	117,798	1/2	132,842	1/2	147,887
3/4	12,978	3/4	27,916	3/4	42,967	3/4	57,958	3/4	72,963	3/4	88,014	3/4	103,065	3/4	118,112	3/4	133,156	3/4	148,200

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
 CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO THREADS ON "MMC" VALVE.
 GAUGE POINT: (MMC) LOCATED 10'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

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





BARGE "HFL 423"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 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	148,514	0	163,558	0	178,593	0	193,594	0	208,522	0		0		0		0		0	
1/4	148,827	1/4	163,871	1/4	178,906	1/4	193,906	1/4	208,802	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,141	1/2	164,185	1/2	179,218	1/2	194,219	1/2	209,083	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	149,454	3/4	164,498	3/4	179,531	3/4	194,531	3/4	209,363	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	149,767	1	164,812	1	179,843	1	194,844	1	209,644	1	1	1	1	1	1	1	1	1	1
1/4	150,081	1/4	165,125	1/4	180,156	1/4	195,156	1/4	209,876	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,394	1/2	165,439	1/2	180,468	1/2	195,469	1/2	210,108	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,708	3/4	165,752	3/4	180,781	3/4	195,781	3/4	210,340	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	151,021	2	166,065	2	181,093	2	196,094	2	210,572	2	2	2	2	2	2	2	2	2	2
1/4	151,334	1/4	166,379	1/4	181,406	1/4	196,406	1/4	210,752	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,648	1/2	166,692	1/2	181,718	1/2	196,719	1/2	210,932	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,961	3/4	167,006	3/4	182,031	3/4	197,031	3/4	211,112	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	152,275	3	167,319	3	182,343	3	197,344	3	211,292	3	3	3	3	3	3	3	3	3	3
1/4	152,588	1/4	167,633	1/4	182,656	1/4	197,656	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,902	1/2	167,946	1/2	182,968	1/2	197,969	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,215	3/4	168,259	3/4	183,281	3/4	198,281	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	153,528	4	168,573	4	183,593	4	198,594	4		4	4	4	4	4	4	4	4	4	4
1/4	153,842	1/4	168,886	1/4	183,906	1/4	198,906	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,155	1/2	169,200	1/2	184,218	1/2	199,219	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,469	3/4	169,513	3/4	184,531	3/4	199,531	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	154,782	5	169,826	5	184,843	5	199,844	5		5	5	5	5	5	5	5	5	5	5
1/4	155,096	1/4	170,140	1/4	185,156	1/4	200,155	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,409	1/2	170,453	1/2	185,468	1/2	200,467	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,722	3/4	170,767	3/4	185,781	3/4	200,778	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	156,036	6	171,080	6	186,093	6	201,090	6		6	6	6	6	6	6	6	6	6	6
1/4	156,349	1/4	171,394	1/4	186,406	1/4	201,400	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,663	1/2	171,707	1/2	186,718	1/2	201,710	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,976	3/4	172,020	3/4	187,031	3/4	202,021	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	157,290	7	172,334	7	187,343	7	202,331	7		7	7	7	7	7	7	7	7	7	7
1/4	157,603	1/4	172,647	1/4	187,656	1/4	202,641	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,916	1/2	172,961	1/2	187,968	1/2	202,952	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,230	3/4	173,274	3/4	188,281	3/4	203,262	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	158,543	8	173,588	8	188,594	8	203,573	8		8	8	8	8	8	8	8	8	8	8
1/4	158,857	1/4	173,901	1/4	188,906	1/4	203,883	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,170	1/2	174,214	1/2	189,219	1/2	204,194	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	159,483	3/4	174,528	3/4	189,531	3/4	204,504	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	159,797	9	174,841	9	189,844	9	204,815	9		9	9	9	9	9	9	9	9	9	9
1/4	160,110	1/4	175,154	1/4	190,156	1/4	205,125	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	160,424	1/2	175,467	1/2	190,469	1/2	205,436	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	160,737	3/4	175,780	3/4	190,781	3/4	205,746	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	161,051	10	176,093	10	191,094	10	206,056	10		10	10	10	10	10	10	10	10	10	10
1/4	161,364	1/4	176,406	1/4	191,406	1/4	206,366	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	161,677	1/2	176,718	1/2	191,719	1/2	206,676	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	161,991	3/4	177,031	3/4	192,031	3/4	206,986	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	162,304	11	177,343	11	192,344	11	207,296	11		11	11	11	11	11	11	11	11	11	11
1/4	162,618	1/4	177,656	1/4	192,656	1/4	207,603	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	162,931	1/2	177,968	1/2	192,969	1/2	207,909	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	163,245	3/4	178,281	3/4	193,281	3/4	208,215	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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



BARGE "HFL 423"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 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	386	0	13,273	0	28,223	0	43,269	0	58,311	0	73,355	0	88,402	0	103,449	0	118,491	0	133,532
1/4	563	1/4	13,575	1/4	28,536	1/4	43,583	1/4	58,624	1/4	73,669	1/4	88,716	1/4	103,762	1/4	118,805	1/4	133,845
1/2	740	1/2	13,876	1/2	28,850	1/2	43,896	1/2	58,938	1/2	73,982	1/2	89,029	1/2	104,076	1/2	119,118	1/2	134,158
3/4	918	3/4	14,178	3/4	29,163	3/4	44,209	3/4	59,251	3/4	74,296	3/4	89,343	3/4	104,389	3/4	119,431	3/4	134,472
1	1,095	1	14,480	1	29,476	1	44,523	1	59,564	1	74,609	1	89,656	1	104,703	1	119,745	1	134,785
1/4	1,334	1/4	14,786	1/4	29,790	1/4	44,836	1/4	59,877	1/4	74,923	1/4	89,969	1/4	105,016	1/4	120,058	1/4	135,098
1/2	1,573	1/2	15,092	1/2	30,103	1/2	45,150	1/2	60,191	1/2	75,236	1/2	90,283	1/2	105,330	1/2	120,371	1/2	135,412
3/4	1,812	3/4	15,397	3/4	30,417	3/4	45,463	3/4	60,504	3/4	75,550	3/4	90,596	3/4	105,643	3/4	120,685	3/4	135,725
2	2,051	2	15,703	2	30,730	2	45,777	2	60,817	2	75,863	2	90,910	2	105,957	2	120,998	2	136,038
1/4	2,313	1/4	16,013	1/4	31,044	1/4	46,090	1/4	61,130	1/4	76,177	1/4	91,223	1/4	106,270	1/4	121,311	1/4	136,352
1/2	2,576	1/2	16,322	1/2	31,357	1/2	46,404	1/2	61,444	1/2	76,490	1/2	91,537	1/2	106,584	1/2	121,625	1/2	136,665
3/4	2,838	3/4	16,632	3/4	31,671	3/4	46,717	3/4	61,757	3/4	76,803	3/4	91,850	3/4	106,897	3/4	121,938	3/4	136,978
3	3,100	3	16,942	3	31,984	3	47,031	3	62,070	3	77,117	3	92,164	3	107,211	3	122,251	3	137,292
1/4	3,367	1/4	17,254	1/4	32,298	1/4	47,344	1/4	62,384	1/4	77,430	1/4	92,477	1/4	107,524	1/4	122,565	1/4	137,605
1/2	3,634	1/2	17,567	1/2	32,611	1/2	47,658	1/2	62,697	1/2	77,744	1/2	92,791	1/2	107,838	1/2	122,878	1/2	137,918
3/4	3,901	3/4	17,879	3/4	32,925	3/4	47,971	3/4	63,011	3/4	78,057	3/4	93,104	3/4	108,151	3/4	123,191	3/4	138,232
4	4,168	4	18,192	4	33,238	4	48,285	4	63,324	4	78,371	4	93,418	4	108,464	4	123,505	4	138,545
1/4	4,439	1/4	18,505	1/4	33,552	1/4	48,598	1/4	63,637	1/4	78,684	1/4	93,731	1/4	108,778	1/4	123,818	1/4	138,859
1/2	4,710	1/2	18,819	1/2	33,865	1/2	48,911	1/2	63,951	1/2	78,998	1/2	94,045	1/2	109,091	1/2	124,131	1/2	139,172
3/4	4,981	3/4	19,132	3/4	34,178	3/4	49,225	3/4	64,264	3/4	79,311	3/4	94,358	3/4	109,404	3/4	124,445	3/4	139,485
5	5,252	5	19,446	5	34,492	5	49,538	5	64,578	5	79,625	5	94,672	5	109,718	5	124,758	5	139,799
1/4	5,527	1/4	19,759	1/4	34,805	1/4	49,852	1/4	64,891	1/4	79,938	1/4	94,985	1/4	110,031	1/4	125,071	1/4	140,112
1/2	5,802	1/2	20,072	1/2	35,119	1/2	50,165	1/2	65,205	1/2	80,252	1/2	95,299	1/2	110,344	1/2	125,385	1/2	140,425
3/4	6,077	3/4	20,386	3/4	35,432	3/4	50,479	3/4	65,518	3/4	80,565	3/4	95,612	3/4	110,658	3/4	125,698	3/4	140,739
6	6,351	6	20,699	6	35,746	6	50,792	6	65,832	6	80,879	6	95,926	6	110,971	6	126,011	6	141,052
1/4	6,630	1/4	21,013	1/4	36,059	1/4	51,106	1/4	66,145	1/4	81,192	1/4	96,239	1/4	111,284	1/4	126,325	1/4	141,365
1/2	6,909	1/2	21,326	1/2	36,373	1/2	51,419	1/2	66,459	1/2	81,506	1/2	96,553	1/2	111,598	1/2	126,638	1/2	141,679
3/4	7,188	3/4	21,640	3/4	36,686	3/4	51,733	3/4	66,772	3/4	81,819	3/4	96,866	3/4	111,911	3/4	126,952	3/4	141,992
7	7,466	7	21,953	7	37,000	7	52,046	7	67,086	7	82,133	7	97,179	7	112,224	7	127,265	7	142,305
1/4	7,749	1/4	22,267	1/4	37,313	1/4	52,359	1/4	67,399	1/4	82,446	1/4	97,493	1/4	112,538	1/4	127,578	1/4	142,619
1/2	8,032	1/2	22,580	1/2	37,627	1/2	52,673	1/2	67,713	1/2	82,760	1/2	97,806	1/2	112,851	1/2	127,892	1/2	142,932
3/4	8,314	3/4	22,894	3/4	37,940	3/4	52,986	3/4	68,026	3/4	83,073	3/4	98,120	3/4	113,164	3/4	128,205	3/4	143,245
8	8,597	8	23,207	8	38,254	8	53,299	8	68,340	8	83,386	8	98,433	8	113,478	8	128,518	8	143,559
1/4	8,883	1/4	23,521	1/4	38,567	1/4	53,612	1/4	68,653	1/4	83,700	1/4	98,747	1/4	113,791	1/4	128,832	1/4	143,872
1/2	9,170	1/2	23,834	1/2	38,880	1/2	53,926	1/2	68,967	1/2	84,013	1/2	99,060	1/2	114,105	1/2	129,145	1/2	144,185
3/4	9,456	3/4	24,148	3/4	39,194	3/4	54,239	3/4	69,280	3/4	84,327	3/4	99,374	3/4	114,418	3/4	129,458	3/4	144,499
9	9,743	9	24,461	9	39,507	9	54,552	9	69,593	9	84,640	9	99,687	9	114,731	9	129,772	9	144,812
1/4	10,033	1/4	24,774	1/4	39,821	1/4	54,865	1/4	69,907	1/4	84,954	1/4	100,001	1/4	115,045	1/4	130,085	1/4	145,125
1/2	10,323	1/2	25,088	1/2	40,134	1/2	55,179	1/2	70,220	1/2	85,267	1/2	100,314	1/2	115,358	1/2	130,398	1/2	145,439
3/4	10,613	3/4	25,401	3/4	40,448	3/4	55,492	3/4	70,534	3/4	85,581	3/4	100,628	3/4	115,671	3/4	130,712	3/4	145,752
10	10,904	10	25,715	10	40,761	10	55,805	10	70,847	10	85,894	10	100,941	10	115,985	10	131,025	10	146,065
1/4	11,198	1/4	26,028	1/4	41,075	1/4	56,118	1/4	71,161	1/4	86,208	1/4	101,255	1/4	116,298	1/4	131,338	1/4	146,379
1/2	11,492	1/2	26,342	1/2	41,388	1/2	56,432	1/2	71,474	1/2	86,521	1/2	101,568	1/2	116,611	1/2	131,652	1/2	146,692
3/4	11,786	3/4	26,655	3/4	41,702	3/4	56,745	3/4	71,788	3/4	86,835	3/4	101,882	3/4	116,925	3/4	131,965	3/4	147,006
11	12,081	11	26,969	11	42,015	11	57,058	11	72,101	11	87,148	11	102,195	11	117,238	11	132,278	11	147,319
1/4	12,379	1/4	27,282	1/4	42,329	1/4	57,371	1/4	72,415	1/4	87,462	1/4	102,509	1/4	117,551	1/4	132,592	1/4	147,632
1/2	12,677	1/2	27,596	1/2	42,642	1/2	57,685	1/2	72,728	1/2	87,775	1/2	102,822	1/2	117,865	1/2	132,905	1/2	147,946
3/4	12,975	3/4	27,909	3/4	42,956	3/4	57,998	3/4	73,042	3/4	88,089	3/4	103,136	3/4	118,178	3/4	133,218	3/4	148,259

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
 CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO THREADS ON "MMC" VALVE.
 GAUGE POINT: (MMC) LOCATED 10'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

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



BARGE "HFL 423"

1 STBD
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
0	148,572	0	163,613	0	178,644	0	193,641	0	208,565	0		0		0		0		0	
1/4	148,886	1/4	163,926	1/4	178,957	1/4	193,954	1/4	208,846	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,199	1/2	164,240	1/2	179,269	1/2	194,266	1/2	209,126	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	149,512	3/4	164,553	3/4	179,582	3/4	194,578	3/4	209,407	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	149,826	1	164,866	1	179,894	1	194,891	1	209,688	1	1	1	1	1	1	1	1	1	1
1/4	150,139	1/4	165,180	1/4	180,207	1/4	195,203	1/4	209,920	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,452	1/2	165,493	1/2	180,519	1/2	195,516	1/2	210,152	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,766	3/4	165,806	3/4	180,831	3/4	195,828	3/4	210,384	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	151,079	2	166,120	2	181,144	2	196,141	2	210,616	2	2	2	2	2	2	2	2	2	2
1/4	151,392	1/4	166,433	1/4	181,456	1/4	196,453	1/4	210,796	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,706	1/2	166,746	1/2	181,769	1/2	196,765	1/2	210,975	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,019	3/4	167,060	3/4	182,081	3/4	197,078	3/4	211,155	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	152,332	3	167,373	3	182,394	3	197,390	3	211,335	3	3	3	3	3	3	3	3	3	3
1/4	152,646	1/4	167,686	1/4	182,706	1/4	197,703	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,959	1/2	168,000	1/2	183,018	1/2	198,015	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,272	3/4	168,313	3/4	183,331	3/4	198,328	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	153,586	4	168,626	4	183,643	4	198,640	4	4	4	4	4	4	4	4	4	4	4	4
1/4	153,899	1/4	168,940	1/4	183,956	1/4	198,953	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,213	1/2	169,253	1/2	184,268	1/2	199,265	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	154,526	3/4	169,566	3/4	184,581	3/4	199,577	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	154,839	5	169,880	5	184,893	5	199,890	5	5	5	5	5	5	5	5	5	5	5	5
1/4	155,153	1/4	170,193	1/4	185,205	1/4	200,201	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,466	1/2	170,507	1/2	185,518	1/2	200,513	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	155,779	3/4	170,820	3/4	185,830	3/4	200,824	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	156,093	6	171,133	6	186,143	6	201,135	6	6	6	6	6	6	6	6	6	6	6	6
1/4	156,406	1/4	171,447	1/4	186,455	1/4	201,446	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,719	1/2	171,760	1/2	186,768	1/2	201,756	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	157,033	3/4	172,073	3/4	187,080	3/4	202,066	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	157,346	7	172,387	7	187,393	7	202,376	7	7	7	7	7	7	7	7	7	7	7	7
1/4	157,659	1/4	172,700	1/4	187,705	1/4	202,687	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,973	1/2	173,013	1/2	188,017	1/2	202,997	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	158,286	3/4	173,327	3/4	188,330	3/4	203,307	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	158,599	8	173,640	8	188,642	8	203,618	8	8	8	8	8	8	8	8	8	8	8	8
1/4	158,913	1/4	173,953	1/4	188,955	1/4	203,928	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,226	1/2	174,267	1/2	189,267	1/2	204,239	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	159,539	3/4	174,580	3/4	189,580	3/4	204,549	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	159,853	9	174,893	9	189,892	9	204,860	9	9	9	9	9	9	9	9	9	9	9	9
1/4	160,166	1/4	175,206	1/4	190,204	1/4	205,170	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	160,479	1/2	175,519	1/2	190,517	1/2	205,480	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	160,793	3/4	175,832	3/4	190,829	3/4	205,791	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	161,106	10	176,145	10	191,142	10	206,101	10	10	10	10	10	10	10	10	10	10	10	10
1/4	161,419	1/4	176,457	1/4	191,454	1/4	206,411	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	161,733	1/2	176,770	1/2	191,767	1/2	206,721	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	162,046	3/4	177,082	3/4	192,079	3/4	207,031	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	162,360	11	177,395	11	192,391	11	207,341	11	11	11	11	11	11	11	11	11	11	11	11
1/4	162,673	1/4	177,707	1/4	192,704	1/4	207,647	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	162,986	1/2	178,020	1/2	193,016	1/2	207,953	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	163,300	3/4	178,332	3/4	193,329	3/4	208,259	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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



BARGE "HFL 423"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	1,034	0	15,738	0	30,841	0	45,571	0	60,096	0	74,989	0	90,095	0	105,200	0	120,301	0	135,399
1/4	1,270	1/4	16,052	1/4	31,155	1/4	45,873	1/4	60,399	1/4	75,304	1/4	90,409	1/4	105,515	1/4	120,615	1/4	135,713
1/2	1,506	1/2	16,367	1/2	31,470	1/2	46,175	1/2	60,702	1/2	75,618	1/2	90,724	1/2	105,830	1/2	120,930	1/2	136,028
3/4	1,742	3/4	16,682	3/4	31,785	3/4	46,477	3/4	61,004	3/4	75,933	3/4	91,039	3/4	106,144	3/4	121,244	3/4	136,342
1	1,978	1	16,997	1	32,099	1	46,779	1	61,307	1	76,248	1	91,353	1	106,459	1	121,559	1	136,657
1/4	2,272	1/4	17,311	1/4	32,414	1/4	47,081	1/4	61,610	1/4	76,562	1/4	91,668	1/4	106,774	1/4	121,873	1/4	136,971
1/2	2,567	1/2	17,626	1/2	32,729	1/2	47,383	1/2	61,913	1/2	76,877	1/2	91,983	1/2	107,088	1/2	122,188	1/2	137,286
3/4	2,861	3/4	17,941	3/4	33,043	3/4	47,685	3/4	62,216	3/4	77,192	3/4	92,298	3/4	107,403	3/4	122,502	3/4	137,600
2	3,155	2	18,255	2	33,358	2	47,987	2	62,519	2	77,507	2	92,612	2	107,718	2	122,817	2	137,915
1/4	3,469	1/4	18,570	1/4	33,673	1/4	48,289	1/4	62,822	1/4	77,821	1/4	92,927	1/4	108,033	1/4	123,131	1/4	138,230
1/2	3,783	1/2	18,885	1/2	33,988	1/2	48,591	1/2	63,125	1/2	78,136	1/2	93,242	1/2	108,347	1/2	123,446	1/2	138,544
3/4	4,096	3/4	19,199	3/4	34,302	3/4	48,893	3/4	63,428	3/4	78,451	3/4	93,556	3/4	108,662	3/4	123,761	3/4	138,859
3	4,410	3	19,514	3	34,617	3	49,195	3	63,731	3	78,765	3	93,871	3	108,977	3	124,075	3	139,173
1/4	4,724	1/4	19,829	1/4	34,932	1/4	49,498	1/4	64,033	1/4	79,080	1/4	94,186	1/4	109,291	1/4	124,390	1/4	139,488
1/2	5,039	1/2	20,143	1/2	35,246	1/2	49,800	1/2	64,336	1/2	79,395	1/2	94,500	1/2	109,606	1/2	124,704	1/2	139,802
3/4	5,353	3/4	20,458	3/4	35,561	3/4	50,102	3/4	64,639	3/4	79,710	3/4	94,815	3/4	109,921	3/4	125,019	3/4	140,117
4	5,668	4	20,773	4	35,876	4	50,404	4	64,942	4	80,024	4	95,130	4	110,235	4	125,333	4	140,431
1/4	5,982	1/4	21,088	1/4	36,184	1/4	50,707	1/4	65,251	1/4	80,339	1/4	95,445	1/4	110,550	1/4	125,648	1/4	140,746
1/2	6,297	1/2	21,402	1/2	36,493	1/2	51,009	1/2	65,560	1/2	80,654	1/2	95,759	1/2	110,864	1/2	125,962	1/2	141,060
3/4	6,612	3/4	21,717	3/4	36,802	3/4	51,312	3/4	65,869	3/4	80,968	3/4	96,074	3/4	111,179	3/4	126,277	3/4	141,375
5	6,926	5	22,032	5	37,111	5	51,614	5	66,177	5	81,283	5	96,389	5	111,493	5	126,591	5	141,689
1/4	7,241	1/4	22,346	1/4	37,414	1/4	51,917	1/4	66,492	1/4	81,598	1/4	96,703	1/4	111,808	1/4	126,906	1/4	142,004
1/2	7,556	1/2	22,661	1/2	37,717	1/2	52,220	1/2	66,807	1/2	81,912	1/2	97,018	1/2	112,122	1/2	127,220	1/2	142,319
3/4	7,870	3/4	22,976	3/4	38,020	3/4	52,523	3/4	67,121	3/4	82,227	3/4	97,333	3/4	112,437	3/4	127,535	3/4	142,633
6	8,185	6	23,290	6	38,322	6	52,826	6	67,436	6	82,542	6	97,647	6	112,752	6	127,850	6	142,948
1/4	8,500	1/4	23,605	1/4	38,625	1/4	53,129	1/4	67,751	1/4	82,857	1/4	97,962	1/4	113,066	1/4	128,164	1/4	143,262
1/2	8,815	1/2	23,920	1/2	38,927	1/2	53,432	1/2	68,066	1/2	83,171	1/2	98,277	1/2	113,381	1/2	128,479	1/2	143,577
3/4	9,129	3/4	24,234	3/4	39,230	3/4	53,735	3/4	68,380	3/4	83,486	3/4	98,592	3/4	113,695	3/4	128,793	3/4	143,891
7	9,444	7	24,549	7	39,532	7	54,038	7	68,695	7	83,801	7	98,906	7	114,010	7	129,108	7	144,206
1/4	9,759	1/4	24,864	1/4	39,834	1/4	54,341	1/4	69,010	1/4	84,115	1/4	99,221	1/4	114,324	1/4	129,422	1/4	144,520
1/2	10,073	1/2	25,179	1/2	40,136	1/2	54,643	1/2	69,324	1/2	84,430	1/2	99,536	1/2	114,639	1/2	129,737	1/2	144,835
3/4	10,388	3/4	25,493	3/4	40,438	3/4	54,946	3/4	69,639	3/4	84,745	3/4	99,850	3/4	114,953	3/4	130,051	3/4	145,149
8	10,703	8	25,808	8	40,740	8	55,249	8	69,954	8	85,059	8	100,165	8	115,268	8	130,366	8	145,464
1/4	11,017	1/4	26,123	1/4	41,042	1/4	55,552	1/4	70,268	1/4	85,374	1/4	100,480	1/4	115,582	1/4	130,680	1/4	145,779
1/2	11,332	1/2	26,437	1/2	41,344	1/2	55,855	1/2	70,583	1/2	85,689	1/2	100,794	1/2	115,897	1/2	130,995	1/2	146,093
3/4	11,647	3/4	26,752	3/4	41,646	3/4	56,158	3/4	70,898	3/4	86,004	3/4	101,109	3/4	116,211	3/4	131,310	3/4	146,408
9	11,961	9	27,066	9	41,948	9	56,461	9	71,213	9	86,318	9	101,424	9	116,526	9	131,624	9	146,722
1/4	12,276	1/4	27,381	1/4	42,250	1/4	56,764	1/4	71,527	1/4	86,633	1/4	101,739	1/4	116,841	1/4	131,939	1/4	147,037
1/2	12,591	1/2	27,695	1/2	42,552	1/2	57,067	1/2	71,842	1/2	86,948	1/2	102,053	1/2	117,155	1/2	132,253	1/2	147,351
3/4	12,906	3/4	28,010	3/4	42,854	3/4	57,370	3/4	72,157	3/4	87,262	3/4	102,368	3/4	117,470	3/4	132,568	3/4	147,666
10	13,220	10	28,324	10	43,156	10	57,672	10	72,471	10	87,577	10	102,683	10	117,784	10	132,882	10	147,980
1/4	13,535	1/4	28,639	1/4	43,458	1/4	57,975	1/4	72,786	1/4	87,892	1/4	102,997	1/4	118,099	1/4	133,197	1/4	148,295
1/2	13,850	1/2	28,953	1/2	43,760	1/2	58,278	1/2	73,101	1/2	88,206	1/2	103,312	1/2	118,413	1/2	133,511	1/2	148,609
3/4	14,164	3/4	29,268	3/4	44,062	3/4	58,581	3/4	73,415	3/4	88,521	3/4	103,627	3/4	118,728	3/4	133,826	3/4	148,924
11	14,479	11	29,582	11	44,364	11	58,884	11	73,730	11	88,836	11	103,941	11	119,042	11	134,140	11	149,239
1/4	14,794	1/4	29,897	1/4	44,666	1/4	59,187	1/4	74,045	1/4	89,151	1/4	104,256	1/4	119,357	1/4	134,455	1/4	149,553
1/2	15,108	1/2	30,211	1/2	44,967	1/2	59,490	1/2	74,360	1/2	89,465	1/2	104,571	1/2	119,671	1/2	134,770	1/2	149,868
3/4	15,423	3/4	30,526	3/4	45,269	3/4	59,793	3/4	74,674	3/4	89,780	3/4	104,886	3/4	119,986	3/4	135,084	3/4	150,182

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED 10'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "HFL 423"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 1/2"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0	150,497	0	165,595	0	180,682	0	195,729	0	210,679	0		0		0		0		0	
1/4	150,811	1/4	165,909	1/4	180,996	1/4	196,042	1/4	210,959	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,126	1/2	166,224	1/2	181,309	1/2	196,356	1/2	211,240	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,440	3/4	166,538	3/4	181,623	3/4	196,669	3/4	211,520	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	151,755	1	166,853	1	181,936	1	196,983	1	211,801	1		1		1		1		1	
1/4	152,069	1/4	167,167	1/4	182,250	1/4	197,296	1/4	212,033	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,384	1/2	167,482	1/2	182,563	1/2	197,610	1/2	212,264	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,698	3/4	167,797	3/4	182,876	3/4	197,923	3/4	212,496	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	153,013	2	168,111	2	183,190	2	198,237	2	212,728	2		2		2		2		2	
1/4	153,328	1/4	168,426	1/4	183,503	1/4	198,550	1/4	212,907	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,642	1/2	168,740	1/2	183,817	1/2	198,864	1/2	213,087	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,957	3/4	169,055	3/4	184,130	3/4	199,177	3/4	213,266	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	154,271	3	169,369	3	184,444	3	199,491	3	213,446	3		3		3		3		3	
1/4	154,586	1/4	169,684	1/4	184,757	1/4	199,804	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,900	1/2	169,998	1/2	185,071	1/2	200,118	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,215	3/4	170,313	3/4	185,384	3/4	200,431	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	155,529	4	170,627	4	185,698	4	200,745	4		4		4		4		4		4	
1/4	155,844	1/4	170,942	1/4	186,011	1/4	201,058	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,158	1/2	171,257	1/2	186,325	1/2	201,372	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,473	3/4	171,571	3/4	186,638	3/4	201,685	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	156,788	5	171,886	5	186,952	5	201,998	5		5		5		5		5		5	
1/4	157,102	1/4	172,200	1/4	187,265	1/4	202,310	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,417	1/2	172,515	1/2	187,579	1/2	202,622	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,731	3/4	172,829	3/4	187,892	3/4	202,934	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	158,046	6	173,144	6	188,206	6	203,246	6		6		6		6		6		6	
1/4	158,360	1/4	173,458	1/4	188,519	1/4	203,557	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,675	1/2	173,773	1/2	188,832	1/2	203,867	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,989	3/4	174,087	3/4	189,146	3/4	204,177	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	159,304	7	174,402	7	189,459	7	204,488	7		7		7		7		7		7	
1/4	159,618	1/4	174,716	1/4	189,773	1/4	204,798	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,933	1/2	175,031	1/2	190,086	1/2	205,109	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	160,248	3/4	175,346	3/4	190,400	3/4	205,419	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	160,562	8	175,660	8	190,713	8	205,729	8		8		8		8		8		8	
1/4	160,877	1/4	175,975	1/4	191,027	1/4	206,040	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	161,191	1/2	176,289	1/2	191,340	1/2	206,350	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	161,506	3/4	176,604	3/4	191,654	3/4	206,661	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	161,820	9	176,918	9	191,967	9	206,972	9		9		9		9		9		9	
1/4	162,135	1/4	177,232	1/4	192,281	1/4	207,282	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	162,449	1/2	177,546	1/2	192,594	1/2	207,592	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	162,764	3/4	177,860	3/4	192,908	3/4	207,903	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	163,078	10	178,174	10	193,221	10	208,213	10		10		10		10		10		10	
1/4	163,393	1/4	178,488	1/4	193,535	1/4	208,523	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	163,707	1/2	178,801	1/2	193,848	1/2	208,833	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	164,022	3/4	179,115	3/4	194,162	3/4	209,143	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	164,337	11	179,428	11	194,475	11	209,453	11		11		11		11		11		11	
1/4	164,651	1/4	179,742	1/4	194,789	1/4	209,760	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	164,966	1/2	180,055	1/2	195,102	1/2	210,066	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	165,280	3/4	180,369	3/4	195,415	3/4	210,372	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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



BARGE "HFL 423"

2 STBD

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	1,035	0	15,742	0	30,849	0	45,938	0	61,032	0	76,141	0	91,251	0	106,360	0	121,464	0	136,566
1/4	1,271	1/4	16,057	1/4	31,164	1/4	46,252	1/4	61,347	1/4	76,456	1/4	91,566	1/4	106,675	1/4	121,779	1/4	136,880
1/2	1,507	1/2	16,372	1/2	31,479	1/2	46,566	1/2	61,662	1/2	76,771	1/2	91,880	1/2	106,990	1/2	122,093	1/2	137,195
3/4	1,743	3/4	16,686	3/4	31,793	3/4	46,879	3/4	61,977	3/4	77,086	3/4	92,195	3/4	107,304	3/4	122,408	3/4	137,510
1	1,979	1	17,001	1	32,108	1	47,193	1	62,291	1	77,401	1	92,510	1	107,619	1	122,723	1	137,824
1/4	2,273	1/4	17,316	1/4	32,423	1/4	47,507	1/4	62,606	1/4	77,715	1/4	92,825	1/4	107,934	1/4	123,037	1/4	138,139
1/2	2,568	1/2	17,631	1/2	32,738	1/2	47,821	1/2	62,921	1/2	78,030	1/2	93,139	1/2	108,249	1/2	123,352	1/2	138,453
3/4	2,862	3/4	17,946	3/4	33,053	3/4	48,135	3/4	63,236	3/4	78,345	3/4	93,454	3/4	108,564	3/4	123,666	3/4	138,768
2	3,156	2	18,260	2	33,367	2	48,449	2	63,550	2	78,660	2	93,769	2	108,878	2	123,981	2	139,083
1/4	3,470	1/4	18,575	1/4	33,682	1/4	48,763	1/4	63,865	1/4	78,974	1/4	94,084	1/4	109,193	1/4	124,296	1/4	139,397
1/2	3,784	1/2	18,890	1/2	33,997	1/2	49,077	1/2	64,180	1/2	79,289	1/2	94,399	1/2	109,508	1/2	124,610	1/2	139,712
3/4	4,098	3/4	19,205	3/4	34,312	3/4	49,391	3/4	64,495	3/4	79,604	3/4	94,713	3/4	109,823	3/4	124,925	3/4	140,027
3	4,411	3	19,519	3	34,626	3	49,704	3	64,810	3	79,919	3	95,028	3	110,137	3	125,239	3	140,341
1/4	4,726	1/4	19,834	1/4	34,941	1/4	50,019	1/4	65,124	1/4	80,234	1/4	95,343	1/4	110,452	1/4	125,554	1/4	140,656
1/2	5,040	1/2	20,149	1/2	35,256	1/2	50,333	1/2	65,439	1/2	80,548	1/2	95,658	1/2	110,767	1/2	125,869	1/2	140,970
3/4	5,355	3/4	20,464	3/4	35,571	3/4	50,647	3/4	65,754	3/4	80,863	3/4	95,972	3/4	111,082	3/4	126,183	3/4	141,285
4	5,669	4	20,779	4	35,886	4	50,961	4	66,069	4	81,178	4	96,287	4	111,396	4	126,498	4	141,600
1/4	5,984	1/4	21,093	1/4	36,200	1/4	51,275	1/4	66,383	1/4	81,493	1/4	96,602	1/4	111,711	1/4	126,813	1/4	141,914
1/2	6,299	1/2	21,408	1/2	36,515	1/2	51,590	1/2	66,698	1/2	81,807	1/2	96,917	1/2	112,025	1/2	127,127	1/2	142,229
3/4	6,614	3/4	21,723	3/4	36,830	3/4	51,904	3/4	67,013	3/4	82,122	3/4	97,232	3/4	112,340	3/4	127,442	3/4	142,544
5	6,928	5	22,038	5	37,145	5	52,218	5	67,328	5	82,437	5	97,546	5	112,655	5	127,756	5	142,858
1/4	7,243	1/4	22,352	1/4	37,459	1/4	52,533	1/4	67,643	1/4	82,752	1/4	97,861	1/4	112,969	1/4	128,071	1/4	143,173
1/2	7,558	1/2	22,667	1/2	37,774	1/2	52,848	1/2	67,957	1/2	83,067	1/2	98,176	1/2	113,284	1/2	128,386	1/2	143,487
3/4	7,873	3/4	22,982	3/4	38,089	3/4	53,163	3/4	68,272	3/4	83,381	3/4	98,491	3/4	113,599	3/4	128,700	3/4	143,802
6	8,188	6	23,297	6	38,404	6	53,478	6	68,587	6	83,696	6	98,805	6	113,913	6	129,015	6	144,117
1/4	8,502	1/4	23,612	1/4	38,718	1/4	53,792	1/4	68,902	1/4	84,011	1/4	99,120	1/4	114,228	1/4	129,330	1/4	144,431
1/2	8,817	1/2	23,926	1/2	39,032	1/2	54,107	1/2	69,216	1/2	84,326	1/2	99,435	1/2	114,542	1/2	129,644	1/2	144,746
3/4	9,132	3/4	24,241	3/4	39,347	3/4	54,422	3/4	69,531	3/4	84,640	3/4	99,750	3/4	114,857	3/4	129,959	3/4	145,060
7	9,447	7	24,556	7	39,661	7	54,737	7	69,846	7	84,955	7	100,065	7	115,172	7	130,273	7	145,375
1/4	9,761	1/4	24,871	1/4	39,975	1/4	55,051	1/4	70,161	1/4	85,270	1/4	100,379	1/4	115,486	1/4	130,588	1/4	145,690
1/2	10,076	1/2	25,185	1/2	40,289	1/2	55,366	1/2	70,476	1/2	85,585	1/2	100,694	1/2	115,801	1/2	130,903	1/2	146,004
3/4	10,391	3/4	25,500	3/4	40,603	3/4	55,681	3/4	70,790	3/4	85,900	3/4	101,009	3/4	116,115	3/4	131,217	3/4	146,319
8	10,706	8	25,815	8	40,916	8	55,996	8	71,105	8	86,214	8	101,324	8	116,430	8	131,532	8	146,634
1/4	11,021	1/4	26,130	1/4	41,230	1/4	56,311	1/4	71,420	1/4	86,529	1/4	101,638	1/4	116,745	1/4	131,846	1/4	146,948
1/2	11,335	1/2	26,444	1/2	41,544	1/2	56,625	1/2	71,735	1/2	86,844	1/2	101,953	1/2	117,059	1/2	132,161	1/2	147,263
3/4	11,650	3/4	26,759	3/4	41,858	3/4	56,940	3/4	72,049	3/4	87,159	3/4	102,268	3/4	117,374	3/4	132,476	3/4	147,577
9	11,965	9	27,074	9	42,172	9	57,255	9	72,364	9	87,473	9	102,583	9	117,689	9	132,790	9	147,892
1/4	12,280	1/4	27,388	1/4	42,486	1/4	57,570	1/4	72,679	1/4	87,788	1/4	102,898	1/4	118,003	1/4	133,105	1/4	148,207
1/2	12,594	1/2	27,703	1/2	42,799	1/2	57,884	1/2	72,994	1/2	88,103	1/2	103,212	1/2	118,318	1/2	133,420	1/2	148,521
3/4	12,909	3/4	28,017	3/4	43,113	3/4	58,199	3/4	73,309	3/4	88,418	3/4	103,527	3/4	118,632	3/4	133,734	3/4	148,836
10	13,224	10	28,332	10	43,427	10	58,514	10	73,623	10	88,733	10	103,842	10	118,947	10	134,049	10	149,151
1/4	13,539	1/4	28,647	1/4	43,741	1/4	58,829	1/4	73,938	1/4	89,047	1/4	104,157	1/4	119,262	1/4	134,363	1/4	149,465
1/2	13,853	1/2	28,961	1/2	44,055	1/2	59,144	1/2	74,253	1/2	89,362	1/2	104,471	1/2	119,576	1/2	134,678	1/2	149,780
3/4	14,168	3/4	29,276	3/4	44,369	3/4	59,458	3/4	74,568	3/4	89,677	3/4	104,786	3/4	119,891	3/4	134,993	3/4	150,094
11	14,483	11	29,590	11	44,683	11	59,773	11	74,882	11	89,992	11	105,101	11	120,206	11	135,307	11	150,409
1/4	14,798	1/4	29,905	1/4	44,996	1/4	60,088	1/4	75,197	1/4	90,306	1/4	105,416	1/4	120,520	1/4	135,622	1/4	150,724
1/2	15,113	1/2	30,220	1/2	45,310	1/2	60,403	1/2	75,512	1/2	90,621	1/2	105,731	1/2	120,835	1/2	135,937	1/2	151,038
3/4	15,427	3/4	30,534	3/4	45,624	3/4	60,717	3/4	75,827	3/4	90,936	3/4	106,045	3/4	121,149	3/4	136,251	3/4	151,353

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED 10'-09" OFF CENTERLINE AND 43'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT & ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>





BARGE "HFL 423"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 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	151,667	0	166,769	0	181,860	0	196,911	0	211,864	0		0		0		0		0	
1/4	151,982	1/4	167,084	1/4	182,174	1/4	197,224	1/4	212,145	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,297	1/2	167,398	1/2	182,487	1/2	197,538	1/2	212,425	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,611	3/4	167,713	3/4	182,801	3/4	197,851	3/4	212,706	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	152,926	1	168,028	1	183,114	1	198,165	1	212,986	1		1		1		1		1	
1/4	153,241	1/4	168,342	1/4	183,428	1/4	198,478	1/4	213,218	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,555	1/2	168,657	1/2	183,742	1/2	198,792	1/2	213,450	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,870	3/4	168,972	3/4	184,055	3/4	199,106	3/4	213,682	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	154,184	2	169,286	2	184,369	2	199,419	2	213,914	2		2		2		2		2	
1/4	154,499	1/4	169,601	1/4	184,682	1/4	199,733	1/4	214,094	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,814	1/2	169,915	1/2	184,996	1/2	200,046	1/2	214,273	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,128	3/4	170,230	3/4	185,309	3/4	200,360	3/4	214,452	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	155,443	3	170,545	3	185,623	3	200,673	3	214,632	3		3		3		3		3	
1/4	155,758	1/4	170,859	1/4	185,936	1/4	200,987	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,072	1/2	171,174	1/2	186,250	1/2	201,300	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,387	3/4	171,488	3/4	186,564	3/4	201,614	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	156,701	4	171,803	4	186,877	4	201,928	4		4		4		4		4		4	
1/4	157,016	1/4	172,118	1/4	187,191	1/4	202,241	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,331	1/2	172,432	1/2	187,504	1/2	202,555	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,645	3/4	172,747	3/4	187,818	3/4	202,868	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	157,960	5	173,062	5	188,131	5	203,182	5		5		5		5		5		5	
1/4	158,274	1/4	173,376	1/4	188,445	1/4	203,494	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,589	1/2	173,691	1/2	188,758	1/2	203,806	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,904	3/4	174,005	3/4	189,072	3/4	204,118	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	159,218	6	174,320	6	189,385	6	204,430	6		6		6		6		6		6	
1/4	159,533	1/4	174,635	1/4	189,699	1/4	204,740	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,848	1/2	174,949	1/2	190,013	1/2	205,051	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	160,162	3/4	175,264	3/4	190,326	3/4	205,361	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	160,477	7	175,579	7	190,640	7	205,672	7		7		7		7		7		7	
1/4	160,791	1/4	175,893	1/4	190,953	1/4	205,982	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	161,106	1/2	176,208	1/2	191,267	1/2	206,293	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	161,421	3/4	176,522	3/4	191,580	3/4	206,603	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	161,735	8	176,837	8	191,894	8	206,914	8		8		8		8		8		8	
1/4	162,050	1/4	177,152	1/4	192,207	1/4	207,224	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	162,365	1/2	177,466	1/2	192,521	1/2	207,535	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	162,679	3/4	177,781	3/4	192,835	3/4	207,845	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	162,994	9	178,095	9	193,148	9	208,156	9		9		9		9		9		9	
1/4	163,308	1/4	178,410	1/4	193,462	1/4	208,467	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	163,623	1/2	178,724	1/2	193,775	1/2	208,777	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	163,938	3/4	179,038	3/4	194,089	3/4	209,088	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	164,252	10	179,352	10	194,402	10	209,398	10		10		10		10		10		10	
1/4	164,567	1/4	179,665	1/4	194,716	1/4	209,708	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	164,881	1/2	179,979	1/2	195,029	1/2	210,018	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	165,196	3/4	180,292	3/4	195,343	3/4	210,328	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	165,511	11	180,606	11	195,657	11	210,639	11		11		11		11		11		11	
1/4	165,825	1/4	180,920	1/4	195,970	1/4	210,945	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	166,140	1/2	181,233	1/2	196,284	1/2	211,251	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	166,455	3/4	181,547	3/4	196,597	3/4	211,558	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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



BARGE "HFL 423"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 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	1,030	0	15,657	0	30,669	0	45,452	0	60,031	0	74,964	0	89,953	0	104,954	0	119,945	0	134,933
1/4	1,265	1/4	15,970	1/4	30,982	1/4	45,754	1/4	60,343	1/4	75,275	1/4	90,265	1/4	105,267	1/4	120,257	1/4	135,245
1/2	1,500	1/2	16,283	1/2	31,295	1/2	46,056	1/2	60,656	1/2	75,585	1/2	90,578	1/2	105,579	1/2	120,570	1/2	135,557
3/4	1,734	3/4	16,596	3/4	31,607	3/4	46,358	3/4	60,968	3/4	75,896	3/4	90,890	3/4	105,892	3/4	120,882	3/4	135,869
1	1,969	1	16,908	1	31,920	1	46,660	1	61,281	1	76,207	1	91,203	1	106,205	1	121,194	1	136,182
1/4	2,262	1/4	17,221	1/4	32,233	1/4	46,963	1/4	61,593	1/4	76,518	1/4	91,515	1/4	106,517	1/4	121,506	1/4	136,494
1/2	2,555	1/2	17,534	1/2	32,546	1/2	47,265	1/2	61,906	1/2	76,828	1/2	91,827	1/2	106,830	1/2	121,819	1/2	136,806
3/4	2,848	3/4	17,847	3/4	32,858	3/4	47,568	3/4	62,218	3/4	77,139	3/4	92,140	3/4	107,142	3/4	122,131	3/4	137,118
2	3,141	2	18,159	2	33,171	2	47,870	2	62,530	2	77,450	2	92,452	2	107,455	2	122,443	2	137,431
1/4	3,453	1/4	18,472	1/4	33,484	1/4	48,173	1/4	62,842	1/4	77,762	1/4	92,765	1/4	107,767	1/4	122,755	1/4	137,743
1/2	3,766	1/2	18,785	1/2	33,797	1/2	48,476	1/2	63,154	1/2	78,073	1/2	93,077	1/2	108,079	1/2	123,068	1/2	138,055
3/4	4,078	3/4	19,098	3/4	34,110	3/4	48,779	3/4	63,465	3/4	78,385	3/4	93,389	3/4	108,392	3/4	123,380	3/4	138,367
3	4,390	3	19,411	3	34,422	3	49,082	3	63,777	3	78,697	3	93,702	3	108,704	3	123,692	3	138,680
1/4	4,703	1/4	19,723	1/4	34,735	1/4	49,385	1/4	64,087	1/4	79,010	1/4	94,014	1/4	109,016	1/4	124,004	1/4	138,992
1/2	5,016	1/2	20,036	1/2	35,047	1/2	49,688	1/2	64,398	1/2	79,322	1/2	94,327	1/2	109,329	1/2	124,317	1/2	139,304
3/4	5,329	3/4	20,349	3/4	35,359	3/4	49,991	3/4	64,709	3/4	79,635	3/4	94,639	3/4	109,641	3/4	124,629	3/4	139,616
4	5,642	4	20,662	4	35,671	4	50,293	4	65,020	4	79,948	4	94,952	4	109,953	4	124,941	4	139,929
1/4	5,955	1/4	20,975	1/4	35,980	1/4	50,596	1/4	65,330	1/4	80,261	1/4	95,264	1/4	110,266	1/4	125,253	1/4	140,241
1/2	6,268	1/2	21,287	1/2	36,289	1/2	50,899	1/2	65,641	1/2	80,573	1/2	95,576	1/2	110,578	1/2	125,566	1/2	140,553
3/4	6,581	3/4	21,600	3/4	36,597	3/4	51,202	3/4	65,952	3/4	80,886	3/4	95,889	3/4	110,890	3/4	125,878	3/4	140,865
5	6,894	5	21,913	5	36,906	5	51,505	5	66,263	5	81,199	5	96,201	5	111,202	5	126,190	5	141,177
1/4	7,207	1/4	22,226	1/4	37,211	1/4	51,808	1/4	66,573	1/4	81,511	1/4	96,514	1/4	111,515	1/4	126,502	1/4	141,489
1/2	7,520	1/2	22,538	1/2	37,517	1/2	52,111	1/2	66,884	1/2	81,824	1/2	96,826	1/2	111,827	1/2	126,814	1/2	141,801
3/4	7,833	3/4	22,851	3/4	37,822	3/4	52,414	3/4	67,195	3/4	82,137	3/4	97,138	3/4	112,139	3/4	127,127	3/4	142,113
6	8,146	6	23,164	6	38,128	6	52,717	6	67,506	6	82,450	6	97,451	6	112,451	6	127,439	6	142,425
1/4	8,459	1/4	23,477	1/4	38,433	1/4	53,020	1/4	67,817	1/4	82,762	1/4	97,763	1/4	112,764	1/4	127,751	1/4	142,733
1/2	8,772	1/2	23,790	1/2	38,738	1/2	53,323	1/2	68,127	1/2	83,075	1/2	98,076	1/2	113,076	1/2	128,063	1/2	143,040
3/4	9,085	3/4	24,102	3/4	39,044	3/4	53,625	3/4	68,438	3/4	83,388	3/4	98,388	3/4	113,388	3/4	128,376	3/4	143,348
7	9,399	7	24,415	7	39,349	7	53,928	7	68,749	7	83,700	7	98,701	7	113,700	7	128,688	7	143,655
1/4	9,712	1/4	24,728	1/4	39,655	1/4	54,231	1/4	69,060	1/4	84,013	1/4	99,014	1/4	114,013	1/4	129,000	1/4	143,950
1/2	10,025	1/2	25,041	1/2	39,960	1/2	54,534	1/2	69,370	1/2	84,326	1/2	99,326	1/2	114,325	1/2	129,312	1/2	144,245
3/4	10,338	3/4	25,354	3/4	40,266	3/4	54,837	3/4	69,681	3/4	84,639	3/4	99,639	3/4	114,637	3/4	129,625	3/4	144,541
8	10,652	8	25,666	8	40,571	8	55,140	8	69,992	8	84,951	8	99,952	8	114,949	8	129,937	8	144,836
1/4	10,965	1/4	25,979	1/4	40,877	1/4	55,443	1/4	70,303	1/4	85,264	1/4	100,264	1/4	115,262	1/4	130,249	1/4	145,115
1/2	11,278	1/2	26,292	1/2	41,182	1/2	55,746	1/2	70,613	1/2	85,577	1/2	100,577	1/2	115,574	1/2	130,561	1/2	145,394
3/4	11,591	3/4	26,605	3/4	41,488	3/4	56,049	3/4	70,924	3/4	85,890	3/4	100,890	3/4	115,886	3/4	130,874	3/4	145,673
9	11,904	9	26,917	9	41,793	9	56,352	9	71,235	9	86,202	9	101,202	9	116,198	9	131,186	9	145,952
1/4	12,217	1/4	27,230	1/4	42,098	1/4	56,656	1/4	71,546	1/4	86,515	1/4	101,515	1/4	116,510	1/4	131,498	1/4	146,215
1/2	12,529	1/2	27,542	1/2	42,404	1/2	56,961	1/2	71,856	1/2	86,828	1/2	101,828	1/2	116,823	1/2	131,810	1/2	146,478
3/4	12,842	3/4	27,855	3/4	42,709	3/4	57,265	3/4	72,167	3/4	87,140	3/4	102,140	3/4	117,135	3/4	132,123	3/4	146,742
10	13,155	10	28,168	10	43,015	10	57,570	10	72,478	10	87,453	10	102,453	10	117,447	10	132,435	10	147,005
1/4	13,468	1/4	28,480	1/4	43,320	1/4	57,876	1/4	72,789	1/4	87,766	1/4	102,765	1/4	117,759	1/4	132,747	1/4	147,252
1/2	13,780	1/2	28,793	1/2	43,626	1/2	58,182	1/2	73,099	1/2	88,078	1/2	103,078	1/2	118,072	1/2	133,059	1/2	147,500
3/4	14,093	3/4	29,105	3/4	43,931	3/4	58,488	3/4	73,410	3/4	88,391	3/4	103,391	3/4	118,384	3/4	133,372	3/4	147,748
11	14,406	11	29,418	11	44,237	11	58,794	11	73,721	11	88,703	11	103,703	11	118,696	11	133,684	11	147,995
1/4	14,719	1/4	29,731	1/4	44,540	1/4	59,103	1/4	74,032	1/4	89,016	1/4	104,016	1/4	119,008	1/4	133,996	1/4	148,227
1/2	15,032	1/2	30,044	1/2	44,844	1/2	59,413	1/2	74,342	1/2	89,328	1/2	104,329	1/2	119,321	1/2	134,308	1/2	148,458
3/4	15,344	3/4	30,356	3/4	45,148	3/4	59,722	3/4	74,653	3/4	89,641	3/4	104,641	3/4	119,633	3/4	134,621	3/4	148,690

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO THREADS ON "MMC" VALVE.

GAUGE POINT: (MMC) LOCATED 10'-09" OFF CENTERLINE AND 43'-00" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "HFL 423"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11 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	148,921	0	159,319	0	169,695	0	180,042	0	190,375	0		0		0		0		0	
1/4	149,141	1/4	159,535	1/4	169,911	1/4	180,258	1/4	190,568	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,361	1/2	159,752	1/2	170,126	1/2	180,473	1/2	190,762	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	149,581	3/4	159,968	3/4	170,342	3/4	180,689	3/4	190,955	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	149,800	1	160,184	1	170,557	1	180,904	1	191,148	1	1	1	1	1	1	1	1	1	1
1/4	150,017	1/4	160,400	1/4	170,773	1/4	181,120	1/4	191,308	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,233	1/2	160,617	1/2	170,988	1/2	181,336	1/2	191,468	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,449	3/4	160,833	3/4	171,204	3/4	181,551	3/4	191,628	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	150,666	2	161,049	2	171,420	2	181,767	2	191,788	2	2	2	2	2	2	2	2	2	2
1/4	150,882	1/4	161,266	1/4	171,635	1/4	181,982	1/4	191,912	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,098	1/2	161,482	1/2	171,851	1/2	182,198	1/2	192,036	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,315	3/4	161,698	3/4	172,066	3/4	182,413	3/4	192,159	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	151,531	3	161,915	3	172,282	3	182,629	3	192,283	3	3	3	3	3	3	3	3	3	3
1/4	151,747	1/4	162,131	1/4	172,497	1/4	182,845	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,964	1/2	162,347	1/2	172,713	1/2	183,060	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,180	3/4	162,564	3/4	172,928	3/4	183,276	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	152,396	4	162,780	4	173,144	4	183,491	4	4	4	4	4	4	4	4	4	4	4	4
1/4	152,613	1/4	162,996	1/4	173,360	1/4	183,707	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,829	1/2	163,213	1/2	173,575	1/2	183,922	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,045	3/4	163,429	3/4	173,791	3/4	184,138	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	153,262	5	163,645	5	174,006	5	184,354	5	5	5	5	5	5	5	5	5	5	5	5
1/4	153,478	1/4	163,862	1/4	174,222	1/4	184,569	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,694	1/2	164,078	1/2	174,437	1/2	184,785	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,911	3/4	164,294	3/4	174,653	3/4	185,000	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	154,127	6	164,511	6	174,869	6	185,216	6	6	6	6	6	6	6	6	6	6	6	6
1/4	154,343	1/4	164,727	1/4	175,084	1/4	185,431	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,560	1/2	164,943	1/2	175,300	1/2	185,647	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,776	3/4	165,160	3/4	175,515	3/4	185,862	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	154,992	7	165,376	7	175,731	7	186,078	7	7	7	7	7	7	7	7	7	7	7	7
1/4	155,209	1/4	165,592	1/4	175,946	1/4	186,294	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,425	1/2	165,809	1/2	176,162	1/2	186,509	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,641	3/4	166,025	3/4	176,378	3/4	186,725	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	155,858	8	166,241	8	176,593	8	186,941	8	8	8	8	8	8	8	8	8	8	8	8
1/4	156,074	1/4	166,458	1/4	176,809	1/4	187,156	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,290	1/2	166,674	1/2	177,024	1/2	187,372	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,507	3/4	166,890	3/4	177,240	3/4	187,588	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	156,723	9	167,107	9	177,455	9	187,803	9	9	9	9	9	9	9	9	9	9	9	9
1/4	156,939	1/4	167,323	1/4	177,671	1/4	188,019	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,156	1/2	167,539	1/2	177,887	1/2	188,235	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,372	3/4	167,754	3/4	178,102	3/4	188,450	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	157,588	10	167,970	10	178,318	10	188,666	10	10	10	10	10	10	10	10	10	10	10	10
1/4	157,805	1/4	168,186	1/4	178,533	1/4	188,881	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,021	1/2	168,402	1/2	178,749	1/2	189,096	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,237	3/4	168,617	3/4	178,964	3/4	189,312	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	158,454	11	168,833	11	179,180	11	189,527	11	11	11	11	11	11	11	11	11	11	11	11
1/4	158,670	1/4	169,048	1/4	179,395	1/4	189,739	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,886	1/2	169,264	1/2	179,611	1/2	189,951	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	159,103	3/4	169,479	3/4	179,827	3/4	190,163	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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



BARGE "HFL 423"

3 STBD INNAGE 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	1,030	0	15,671	0	30,712	0	45,736	0	60,776	0	75,817	0	90,858	0	105,900	0	120,924	0	135,945
1/4	1,265	1/4	15,984	1/4	31,025	1/4	46,049	1/4	61,089	1/4	76,130	1/4	91,172	1/4	106,213	1/4	121,237	1/4	136,258
1/2	1,500	1/2	16,297	1/2	31,338	1/2	46,362	1/2	61,403	1/2	76,444	1/2	91,485	1/2	106,526	1/2	121,550	1/2	136,571
3/4	1,735	3/4	16,611	3/4	31,652	3/4	46,675	3/4	61,716	3/4	76,757	3/4	91,798	3/4	106,840	3/4	121,863	3/4	136,884
1	1,970	1	16,924	1	31,965	1	46,989	1	62,029	1	77,071	1	92,112	1	107,153	1	122,176	1	137,197
1/4	2,263	1/4	17,238	1/4	32,278	1/4	47,302	1/4	62,343	1/4	77,384	1/4	92,425	1/4	107,466	1/4	122,489	1/4	137,510
1/2	2,556	1/2	17,551	1/2	32,592	1/2	47,615	1/2	62,656	1/2	77,697	1/2	92,738	1/2	107,779	1/2	122,802	1/2	137,823
3/4	2,849	3/4	17,864	3/4	32,905	3/4	47,928	3/4	62,969	3/4	78,011	3/4	93,052	3/4	108,093	3/4	123,115	3/4	138,136
2	3,142	2	18,178	2	33,218	2	48,241	2	63,283	2	78,324	2	93,365	2	108,406	2	123,428	2	138,449
1/4	3,454	1/4	18,491	1/4	33,532	1/4	48,555	1/4	63,596	1/4	78,637	1/4	93,679	1/4	108,719	1/4	123,741	1/4	138,762
1/2	3,767	1/2	18,804	1/2	33,845	1/2	48,868	1/2	63,909	1/2	78,951	1/2	93,992	1/2	109,032	1/2	124,054	1/2	139,075
3/4	4,079	3/4	19,118	3/4	34,158	3/4	49,182	3/4	64,223	3/4	79,264	3/4	94,305	3/4	109,345	3/4	124,366	3/4	139,388
3	4,391	3	19,431	3	34,472	3	49,495	3	64,536	3	79,577	3	94,619	3	109,658	3	124,679	3	139,701
1/4	4,704	1/4	19,744	1/4	34,785	1/4	49,808	1/4	64,850	1/4	79,891	1/4	94,932	1/4	109,971	1/4	124,992	1/4	140,014
1/2	5,017	1/2	20,058	1/2	35,098	1/2	50,122	1/2	65,163	1/2	80,204	1/2	95,245	1/2	110,284	1/2	125,305	1/2	140,326
3/4	5,331	3/4	20,371	3/4	35,411	3/4	50,435	3/4	65,476	3/4	80,517	3/4	95,559	3/4	110,597	3/4	125,618	3/4	140,639
4	5,644	4	20,684	4	35,724	4	50,748	4	65,790	4	80,831	4	95,872	4	110,910	4	125,931	4	140,952
1/4	5,957	1/4	20,998	1/4	36,037	1/4	51,062	1/4	66,103	1/4	81,144	1/4	96,185	1/4	111,223	1/4	126,244	1/4	141,265
1/2	6,270	1/2	21,311	1/2	36,350	1/2	51,375	1/2	66,416	1/2	81,458	1/2	96,499	1/2	111,536	1/2	126,557	1/2	141,578
3/4	6,584	3/4	21,624	3/4	36,663	3/4	51,688	3/4	66,730	3/4	81,771	3/4	96,812	3/4	111,849	3/4	126,870	3/4	141,891
5	6,897	5	21,938	5	36,976	5	52,002	5	67,043	5	82,084	5	97,125	5	112,162	5	127,183	5	142,204
1/4	7,210	1/4	22,251	1/4	37,288	1/4	52,315	1/4	67,356	1/4	82,398	1/4	97,439	1/4	112,475	1/4	127,496	1/4	142,516
1/2	7,524	1/2	22,564	1/2	37,601	1/2	52,629	1/2	67,670	1/2	82,711	1/2	97,752	1/2	112,788	1/2	127,809	1/2	142,829
3/4	7,837	3/4	22,878	3/4	37,914	3/4	52,942	3/4	67,983	3/4	83,024	3/4	98,066	3/4	113,101	3/4	128,122	3/4	143,142
6	8,150	6	23,191	6	38,227	6	53,255	6	68,296	6	83,338	6	98,379	6	113,414	6	128,435	6	143,454
1/4	8,464	1/4	23,505	1/4	38,540	1/4	53,569	1/4	68,610	1/4	83,651	1/4	98,692	1/4	113,726	1/4	128,748	1/4	143,763
1/2	8,777	1/2	23,818	1/2	38,853	1/2	53,882	1/2	68,923	1/2	83,964	1/2	99,006	1/2	114,039	1/2	129,061	1/2	144,071
3/4	9,090	3/4	24,131	3/4	39,166	3/4	54,195	3/4	69,237	3/4	84,278	3/4	99,319	3/4	114,352	3/4	129,374	3/4	144,379
7	9,404	7	24,445	7	39,479	7	54,509	7	69,550	7	84,591	7	99,632	7	114,665	7	129,686	7	144,687
1/4	9,717	1/4	24,758	1/4	39,791	1/4	54,822	1/4	69,863	1/4	84,904	1/4	99,946	1/4	114,978	1/4	129,999	1/4	144,983
1/2	10,030	1/2	25,071	1/2	40,104	1/2	55,135	1/2	70,177	1/2	85,218	1/2	100,259	1/2	115,291	1/2	130,312	1/2	145,279
3/4	10,344	3/4	25,385	3/4	40,417	3/4	55,449	3/4	70,490	3/4	85,531	3/4	100,572	3/4	115,604	3/4	130,625	3/4	145,575
8	10,657	8	25,698	8	40,730	8	55,762	8	70,803	8	85,845	8	100,886	8	115,917	8	130,938	8	145,870
1/4	10,971	1/4	26,011	1/4	41,043	1/4	56,075	1/4	71,117	1/4	86,158	1/4	101,199	1/4	116,230	1/4	131,251	1/4	146,150
1/2	11,284	1/2	26,325	1/2	41,356	1/2	56,389	1/2	71,430	1/2	86,471	1/2	101,512	1/2	116,543	1/2	131,564	1/2	146,430
3/4	11,597	3/4	26,638	3/4	41,669	3/4	56,702	3/4	71,743	3/4	86,785	3/4	101,826	3/4	116,856	3/4	131,877	3/4	146,710
9	11,911	9	26,951	9	41,981	9	57,016	9	72,057	9	87,098	9	102,139	9	117,169	9	132,190	9	146,989
1/4	12,224	1/4	27,265	1/4	42,294	1/4	57,329	1/4	72,370	1/4	87,411	1/4	102,453	1/4	117,482	1/4	132,503	1/4	147,253
1/2	12,537	1/2	27,578	1/2	42,607	1/2	57,642	1/2	72,683	1/2	87,725	1/2	102,766	1/2	117,795	1/2	132,816	1/2	147,517
3/4	12,851	3/4	27,891	3/4	42,920	3/4	57,956	3/4	72,997	3/4	88,038	3/4	103,079	3/4	118,108	3/4	133,129	3/4	147,780
10	13,164	10	28,205	10	43,233	10	58,269	10	73,310	10	88,351	10	103,393	10	118,421	10	133,442	10	148,044
1/4	13,477	1/4	28,518	1/4	43,546	1/4	58,582	1/4	73,624	1/4	88,665	1/4	103,706	1/4	118,734	1/4	133,755	1/4	148,292
1/2	13,791	1/2	28,831	1/2	43,859	1/2	58,896	1/2	73,937	1/2	88,978	1/2	104,019	1/2	119,046	1/2	134,068	1/2	148,539
3/4	14,104	3/4	29,145	3/4	44,171	3/4	59,209	3/4	74,250	3/4	89,292	3/4	104,333	3/4	119,359	3/4	134,381	3/4	148,787
11	14,417	11	29,458	11	44,484	11	59,522	11	74,564	11	89,605	11	104,646	11	119,672	11	134,694	11	149,035
1/4	14,731	1/4	29,771	1/4	44,797	1/4	59,836	1/4	74,877	1/4	89,918	1/4	104,959	1/4	119,985	1/4	135,006	1/4	149,266
1/2	15,044	1/2	30,085	1/2	45,110	1/2	60,149	1/2	75,190	1/2	90,232	1/2	105,273	1/2	120,298	1/2	135,319	1/2	149,498
3/4	15,357	3/4	30,398	3/4	45,423	3/4	60,462	3/4	75,504	3/4	90,545	3/4	105,586	3/4	120,611	3/4	135,632	3/4	149,729

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
 CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO THREADS ON "MMC" VALVE.
 GAUGE POINT: (MMC) LOCATED 10'-09" OFF CENTERLINE AND 43'-00" FORWARD OF AFT BULKHEAD.

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





BARGE "HFL 423"

3 STBD INNAGE 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	149,961	0	160,359	0	170,736	0	181,083	0	191,417	0		0		0		0		0	
1/4	150,181	1/4	160,576	1/4	170,951	1/4	181,299	1/4	191,610	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,401	1/2	160,792	1/2	171,167	1/2	181,515	1/2	191,803	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,620	3/4	161,008	3/4	171,383	3/4	181,730	3/4	191,997	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	150,840	1	161,225	1	171,598	1	181,946	1	192,190	1	1	1	1	1	1	1	1	1	1
1/4	151,057	1/4	161,441	1/4	171,814	1/4	182,161	1/4	192,350	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,273	1/2	161,657	1/2	172,029	1/2	182,377	1/2	192,510	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,489	3/4	161,874	3/4	172,245	3/4	182,592	3/4	192,670	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	151,706	2	162,090	2	172,460	2	182,808	2	192,830	2	2	2	2	2	2	2	2	2	2
1/4	151,922	1/4	162,306	1/4	172,676	1/4	183,024	1/4	192,953	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,138	1/2	162,523	1/2	172,892	1/2	183,239	1/2	193,077	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,355	3/4	162,739	3/4	173,107	3/4	183,455	3/4	193,201	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	152,571	3	162,955	3	173,323	3	183,670	3	193,325	3	3	3	3	3	3	3	3	3	3
1/4	152,787	1/4	163,172	1/4	173,538	1/4	183,886	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,004	1/2	163,388	1/2	173,754	1/2	184,102	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,220	3/4	163,604	3/4	173,969	3/4	184,317	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	153,436	4	163,821	4	174,185	4	184,533	4		4	4	4	4	4	4	4	4	4	4
1/4	153,653	1/4	164,037	1/4	174,401	1/4	184,748	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,869	1/2	164,253	1/2	174,616	1/2	184,964	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,085	3/4	164,470	3/4	174,832	3/4	185,179	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	154,302	5	164,686	5	175,047	5	185,395	5		5	5	5	5	5	5	5	5	5	5
1/4	154,518	1/4	164,902	1/4	175,263	1/4	185,611	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,734	1/2	165,119	1/2	175,478	1/2	185,826	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,951	3/4	165,335	3/4	175,694	3/4	186,042	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	155,167	6	165,551	6	175,910	6	186,257	6		6	6	6	6	6	6	6	6	6	6
1/4	155,383	1/4	165,768	1/4	176,125	1/4	186,473	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,600	1/2	165,984	1/2	176,341	1/2	186,688	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,816	3/4	166,200	3/4	176,556	3/4	186,904	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	156,032	7	166,417	7	176,772	7	187,120	7		7	7	7	7	7	7	7	7	7	7
1/4	156,249	1/4	166,633	1/4	176,988	1/4	187,335	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,465	1/2	166,849	1/2	177,203	1/2	187,551	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,681	3/4	167,066	3/4	177,419	3/4	187,766	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	156,898	8	167,282	8	177,634	8	187,982	8		8	8	8	8	8	8	8	8	8	8
1/4	157,114	1/4	167,498	1/4	177,850	1/4	188,198	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,331	1/2	167,715	1/2	178,065	1/2	188,413	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,547	3/4	167,931	3/4	178,281	3/4	188,629	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	157,763	9	168,147	9	178,497	9	188,845	9		9	9	9	9	9	9	9	9	9	9
1/4	157,980	1/4	168,363	1/4	178,712	1/4	189,060	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,196	1/2	168,579	1/2	178,928	1/2	189,276	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,412	3/4	168,795	3/4	179,143	3/4	189,492	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	158,629	10	169,011	10	179,359	10	189,707	10		10	10	10	10	10	10	10	10	10	10
1/4	158,845	1/4	169,227	1/4	179,574	1/4	189,923	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,061	1/2	169,442	1/2	179,790	1/2	190,138	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	159,278	3/4	169,658	3/4	180,006	3/4	190,353	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	159,494	11	169,874	11	180,221	11	190,569	11		11	11	11	11	11	11	11	11	11	11
1/4	159,710	1/4	170,089	1/4	180,437	1/4	190,781	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,927	1/2	170,305	1/2	180,652	1/2	190,993	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	160,143	3/4	170,520	3/4	180,868	3/4	191,205	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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



BARGE "HFL 423"

FUEL TANK INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-06"

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	101	0	259	0	416	0	517	0		0		0		0		0	
1/4	1	1/4	104	1/4	262	1/4	419	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1	1/2	107	1/2	265	1/2	422	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	2	3/4	110	3/4	269	3/4	425	3/4		3/4		3/4		3/4		3/4		3/4	
1	3	1	113	1	272	1	428	1		1		1		1		1		1	
1/4	4	1/4	116	1/4	276	1/4	430	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	5	1/2	119	1/2	279	1/2	433	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	6	3/4	122	3/4	282	3/4	436	3/4		3/4		3/4		3/4		3/4		3/4	
2	7	2	125	2	286	2	439	2		2		2		2		2		2	
1/4	9	1/4	129	1/4	289	1/4	442	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	10	1/2	132	1/2	293	1/2	444	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	12	3/4	135	3/4	296	3/4	447	3/4		3/4		3/4		3/4		3/4		3/4	
3	13	3	138	3	300	3	450	3		3		3		3		3		3	
1/4	15	1/4	141	1/4	303	1/4	453	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	17	1/2	144	1/2	306	1/2	455	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	19	3/4	148	3/4	310	3/4	458	3/4		3/4		3/4		3/4		3/4		3/4	
4	21	4	151	4	313	4	460	4		4		4		4		4		4	
1/4	23	1/4	154	1/4	316	1/4	463	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	25	1/2	157	1/2	320	1/2	465	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	27	3/4	161	3/4	323	3/4	468	3/4		3/4		3/4		3/4		3/4		3/4	
5	29	5	164	5	327	5	470	5		5		5		5		5		5	
1/4	31	1/4	167	1/4	330	1/4	473	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	33	1/2	170	1/2	333	1/2	475	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	35	3/4	174	3/4	337	3/4	477	3/4		3/4		3/4		3/4		3/4		3/4	
6	37	6	177	6	340	6	480	6		6		6		6		6		6	
1/4	40	1/4	180	1/4	343	1/4	482	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	42	1/2	184	1/2	347	1/2	484	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	44	3/4	187	3/4	350	3/4	486	3/4		3/4		3/4		3/4		3/4		3/4	
7	47	7	190	7	353	7	488	7		7		7		7		7		7	
1/4	49	1/4	194	1/4	356	1/4	490	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	52	1/2	197	1/2	360	1/2	492	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	54	3/4	201	3/4	363	3/4	494	3/4		3/4		3/4		3/4		3/4		3/4	
8	57	8	204	8	366	8	496	8		8		8		8		8		8	
1/4	59	1/4	207	1/4	369	1/4	498	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	62	1/2	211	1/2	373	1/2	500	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	64	3/4	214	3/4	376	3/4	502	3/4		3/4		3/4		3/4		3/4		3/4	
9	67	9	217	9	379	9	504	9		9		9		9		9		9	
1/4	70	1/4	221	1/4	382	1/4	505	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	73	1/2	224	1/2	385	1/2	507	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	75	3/4	228	3/4	388	3/4	508	3/4		3/4		3/4		3/4		3/4		3/4	
10	78	10	231	10	392	10	510	10		10		10		10		10		10	
1/4	81	1/4	235	1/4	395	1/4	511	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	84	1/2	238	1/2	398	1/2	512	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	87	3/4	241	3/4	401	3/4	513	3/4		3/4		3/4		3/4		3/4		3/4	
11	89	11	245	11	404	11	514	11		11		11		11		11		11	
1/4	92	1/4	248	1/4	407	1/4	515	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	95	1/2	252	1/2	410	1/2	516	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	98	3/4	255	3/4	413	3/4	516	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 INNAGE GAUGES TAKEN TO TOP OF 2" DIAMETER PIPE.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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



BARGE "HFL 423"

PORT SLOP INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 6'-00 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	96	0	1,251	0	2,406	0	3,560	0	4,715	0		0		0		0		0	
1/4	120	1/4	1,275	1/4	2,430	1/4	3,584	1/4	4,739	1/4		1/4		1/4		1/4		1/4	
1/2	144	1/2	1,299	1/2	2,454	1/2	3,608	1/2	4,762	1/2		1/2		1/2		1/2		1/2	
3/4	168	3/4	1,323	3/4	2,478	3/4	3,632	3/4	4,786	3/4		3/4		3/4		3/4		3/4	
1	193	1	1,347	1	2,502	1	3,656	1	4,810	1		1		1		1		1	
1/4	217	1/4	1,371	1/4	2,526	1/4	3,680	1/4	4,833	1/4		1/4		1/4		1/4		1/4	
1/2	241	1/2	1,395	1/2	2,550	1/2	3,704	1/2	4,857	1/2		1/2		1/2		1/2		1/2	
3/4	265	3/4	1,419	3/4	2,574	3/4	3,728	3/4	4,881	3/4		3/4		3/4		3/4		3/4	
2	289	2	1,444	2	2,597	2	3,752	2	4,904	2		2		2		2		2	
1/4	313	1/4	1,468	1/4	2,622	1/4	3,776	1/4	4,928	1/4		1/4		1/4		1/4		1/4	
1/2	337	1/2	1,492	1/2	2,646	1/2	3,800	1/2	4,952	1/2		1/2		1/2		1/2		1/2	
3/4	361	3/4	1,516	3/4	2,670	3/4	3,825	3/4	4,975	3/4		3/4		3/4		3/4		3/4	
3	385	3	1,540	3	2,694	3	3,849	3	4,999	3		3		3		3		3	
1/4	409	1/4	1,564	1/4	2,718	1/4	3,873	1/4	5,023	1/4		1/4		1/4		1/4		1/4	
1/2	433	1/2	1,588	1/2	2,742	1/2	3,897	1/2	5,046	1/2		1/2		1/2		1/2		1/2	
3/4	457	3/4	1,612	3/4	2,766	3/4	3,921	3/4	5,070	3/4		3/4		3/4		3/4		3/4	
4	481	4	1,636	4	2,790	4	3,945	4	5,093	4		4		4		4		4	
1/4	505	1/4	1,660	1/4	2,814	1/4	3,969	1/4	5,105	1/4		1/4		1/4		1/4		1/4	
1/2	529	1/2	1,684	1/2	2,838	1/2	3,993	1/2	5,117	1/2		1/2		1/2		1/2		1/2	
3/4	553	3/4	1,708	3/4	2,862	3/4	4,017	3/4	5,128	3/4		3/4		3/4		3/4		3/4	
5	578	5	1,732	5	2,886	5	4,041	5	5,140	5		5		5		5		5	
1/4	602	1/4	1,756	1/4	2,910	1/4	4,065	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	626	1/2	1,780	1/2	2,934	1/2	4,089	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	650	3/4	1,805	3/4	2,958	3/4	4,113	3/4		3/4		3/4		3/4		3/4		3/4	
6	674	6	1,829	6	2,982	6	4,137	6		6		6		6		6		6	
1/4	698	1/4	1,853	1/4	3,006	1/4	4,161	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	722	1/2	1,877	1/2	3,030	1/2	4,185	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	746	3/4	1,901	3/4	3,054	3/4	4,210	3/4		3/4		3/4		3/4		3/4		3/4	
7	770	7	1,925	7	3,079	7	4,234	7		7		7		7		7		7	
1/4	794	1/4	1,949	1/4	3,103	1/4	4,258	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	818	1/2	1,973	1/2	3,127	1/2	4,282	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	842	3/4	1,997	3/4	3,151	3/4	4,306	3/4		3/4		3/4		3/4		3/4		3/4	
8	866	8	2,021	8	3,175	8	4,330	8		8		8		8		8		8	
1/4	890	1/4	2,045	1/4	3,199	1/4	4,354	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	914	1/2	2,069	1/2	3,223	1/2	4,378	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	938	3/4	2,093	3/4	3,247	3/4	4,402	3/4		3/4		3/4		3/4		3/4		3/4	
9	963	9	2,117	9	3,271	9	4,426	9		9		9		9		9		9	
1/4	987	1/4	2,141	1/4	3,295	1/4	4,450	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,011	1/2	2,165	1/2	3,319	1/2	4,474	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,035	3/4	2,190	3/4	3,343	3/4	4,498	3/4		3/4		3/4		3/4		3/4		3/4	
10	1,059	10	2,214	10	3,367	10	4,522	10		10		10		10		10		10	
1/4	1,083	1/4	2,238	1/4	3,391	1/4	4,546	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,107	1/2	2,262	1/2	3,415	1/2	4,570	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,131	3/4	2,286	3/4	3,440	3/4	4,595	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,155	11	2,310	11	3,464	11	4,619	11		11		11		11		11		11	
1/4	1,179	1/4	2,334	1/4	3,488	1/4	4,643	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,203	1/2	2,358	1/2	3,512	1/2	4,667	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,227	3/4	2,382	3/4	3,536	3/4	4,691	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 INNAGE GAUGES TAKEN TO THREADS ON "MMC" VALVE.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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



BARGE "HFL 423"

STBD SLOP INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 6'-01 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	96	0	1,251	0	2,406	0	3,560	0	4,715	0		0		0		0		0	
1/4	120	1/4	1,275	1/4	2,430	1/4	3,584	1/4	4,739	1/4		1/4		1/4		1/4		1/4	
1/2	144	1/2	1,299	1/2	2,454	1/2	3,608	1/2	4,762	1/2		1/2		1/2		1/2		1/2	
3/4	168	3/4	1,323	3/4	2,478	3/4	3,632	3/4	4,786	3/4		3/4		3/4		3/4		3/4	
1	193	1	1,347	1	2,502	1	3,656	1	4,810	1		1		1		1		1	
1/4	217	1/4	1,371	1/4	2,526	1/4	3,680	1/4	4,833	1/4		1/4		1/4		1/4		1/4	
1/2	241	1/2	1,395	1/2	2,550	1/2	3,704	1/2	4,857	1/2		1/2		1/2		1/2		1/2	
3/4	265	3/4	1,419	3/4	2,574	3/4	3,728	3/4	4,881	3/4		3/4		3/4		3/4		3/4	
2	289	2	1,444	2	2,597	2	3,752	2	4,904	2		2		2		2		2	
1/4	313	1/4	1,468	1/4	2,622	1/4	3,776	1/4	4,928	1/4		1/4		1/4		1/4		1/4	
1/2	337	1/2	1,492	1/2	2,646	1/2	3,800	1/2	4,952	1/2		1/2		1/2		1/2		1/2	
3/4	361	3/4	1,516	3/4	2,670	3/4	3,825	3/4	4,975	3/4		3/4		3/4		3/4		3/4	
3	385	3	1,540	3	2,694	3	3,849	3	4,999	3		3		3		3		3	
1/4	409	1/4	1,564	1/4	2,718	1/4	3,873	1/4	5,023	1/4		1/4		1/4		1/4		1/4	
1/2	433	1/2	1,588	1/2	2,742	1/2	3,897	1/2	5,046	1/2		1/2		1/2		1/2		1/2	
3/4	457	3/4	1,612	3/4	2,766	3/4	3,921	3/4	5,070	3/4		3/4		3/4		3/4		3/4	
4	481	4	1,636	4	2,790	4	3,945	4	5,093	4		4		4		4		4	
1/4	505	1/4	1,660	1/4	2,814	1/4	3,969	1/4	5,105	1/4		1/4		1/4		1/4		1/4	
1/2	529	1/2	1,684	1/2	2,838	1/2	3,993	1/2	5,117	1/2		1/2		1/2		1/2		1/2	
3/4	553	3/4	1,708	3/4	2,862	3/4	4,017	3/4	5,128	3/4		3/4		3/4		3/4		3/4	
5	578	5	1,732	5	2,886	5	4,041	5	5,140	5		5		5		5		5	
1/4	602	1/4	1,756	1/4	2,910	1/4	4,065	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	626	1/2	1,780	1/2	2,934	1/2	4,089	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	650	3/4	1,805	3/4	2,958	3/4	4,113	3/4		3/4		3/4		3/4		3/4		3/4	
6	674	6	1,829	6	2,982	6	4,137	6		6		6		6		6		6	
1/4	698	1/4	1,853	1/4	3,006	1/4	4,161	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	722	1/2	1,877	1/2	3,030	1/2	4,185	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	746	3/4	1,901	3/4	3,054	3/4	4,210	3/4		3/4		3/4		3/4		3/4		3/4	
7	770	7	1,925	7	3,079	7	4,234	7		7		7		7		7		7	
1/4	794	1/4	1,949	1/4	3,103	1/4	4,258	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	818	1/2	1,973	1/2	3,127	1/2	4,282	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	842	3/4	1,997	3/4	3,151	3/4	4,306	3/4		3/4		3/4		3/4		3/4		3/4	
8	866	8	2,021	8	3,175	8	4,330	8		8		8		8		8		8	
1/4	890	1/4	2,045	1/4	3,199	1/4	4,354	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	914	1/2	2,069	1/2	3,223	1/2	4,378	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	938	3/4	2,093	3/4	3,247	3/4	4,402	3/4		3/4		3/4		3/4		3/4		3/4	
9	963	9	2,117	9	3,271	9	4,426	9		9		9		9		9		9	
1/4	987	1/4	2,141	1/4	3,295	1/4	4,450	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,011	1/2	2,165	1/2	3,319	1/2	4,474	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,035	3/4	2,190	3/4	3,343	3/4	4,498	3/4		3/4		3/4		3/4		3/4		3/4	
10	1,059	10	2,214	10	3,367	10	4,522	10		10		10		10		10		10	
1/4	1,083	1/4	2,238	1/4	3,391	1/4	4,546	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,107	1/2	2,262	1/2	3,415	1/2	4,570	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,131	3/4	2,286	3/4	3,440	3/4	4,595	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,155	11	2,310	11	3,464	11	4,619	11		11		11		11		11		11	
1/4	1,179	1/4	2,334	1/4	3,488	1/4	4,643	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,203	1/2	2,358	1/2	3,512	1/2	4,667	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,227	3/4	2,382	3/4	3,536	3/4	4,691	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 INNAGE GAUGES TAKEN TO THREADS ON "MMC" VALVE.

STRAPPED: 08/06/2013 SW
CALCULATED: 08/06/2013 CL
PRINTED: 08/06/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

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