



BARGE "HFL 421"

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	- 00-1/8	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
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 1, 2013

**PRECISION MEASUREMENT
 & ANALYSIS, INC.**
 P.O. Box 2092
 Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "HFL 421"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11"

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	385	0	13,241	0	28,156	0	43,167	0	58,116	0	73,085	0	88,096	0	103,107	0	118,114	0	133,119
1/4	562	1/4	13,542	1/4	28,469	1/4	43,479	1/4	58,426	1/4	73,397	1/4	88,409	1/4	103,420	1/4	118,427	1/4	133,432
1/2	739	1/2	13,844	1/2	28,781	1/2	43,792	1/2	58,737	1/2	73,710	1/2	88,722	1/2	103,733	1/2	118,739	1/2	133,744
3/4	915	3/4	14,145	3/4	29,094	3/4	44,105	3/4	59,047	3/4	74,023	3/4	89,034	3/4	104,046	3/4	119,052	3/4	134,057
1	1,092	1	14,446	1	29,407	1	44,418	1	59,358	1	74,336	1	89,347	1	104,358	1	119,365	1	134,369
1/4	1,331	1/4	14,751	1/4	29,719	1/4	44,730	1/4	59,668	1/4	74,648	1/4	89,660	1/4	104,671	1/4	119,677	1/4	134,682
1/2	1,569	1/2	15,056	1/2	30,032	1/2	45,043	1/2	59,978	1/2	74,961	1/2	89,972	1/2	104,984	1/2	119,990	1/2	134,995
3/4	1,808	3/4	15,361	3/4	30,345	3/4	45,356	3/4	60,289	3/4	75,274	3/4	90,285	3/4	105,297	3/4	120,302	3/4	135,307
2	2,046	2	15,666	2	30,658	2	45,669	2	60,599	2	75,587	2	90,598	2	105,609	2	120,615	2	135,620
1/4	2,308	1/4	15,975	1/4	30,970	1/4	45,981	1/4	60,909	1/4	75,899	1/4	90,911	1/4	105,922	1/4	120,928	1/4	135,932
1/2	2,569	1/2	16,284	1/2	31,283	1/2	46,294	1/2	61,220	1/2	76,212	1/2	91,223	1/2	106,235	1/2	121,240	1/2	136,245
3/4	2,831	3/4	16,593	3/4	31,596	3/4	46,607	3/4	61,530	3/4	76,525	3/4	91,536	3/4	106,547	3/4	121,553	3/4	136,558
3	3,093	3	16,901	3	31,909	3	46,919	3	61,841	3	76,838	3	91,849	3	106,860	3	121,865	3	136,870
1/4	3,359	1/4	17,213	1/4	32,221	1/4	47,232	1/4	62,151	1/4	77,150	1/4	92,162	1/4	107,173	1/4	122,178	1/4	137,183
1/2	3,625	1/2	17,525	1/2	32,534	1/2	47,545	1/2	62,462	1/2	77,463	1/2	92,474	1/2	107,486	1/2	122,491	1/2	137,495
3/4	3,892	3/4	17,837	3/4	32,847	3/4	47,858	3/4	62,772	3/4	77,776	3/4	92,787	3/4	107,798	3/4	122,803	3/4	137,808
4	4,158	4	18,149	4	33,159	4	48,170	4	63,083	4	78,088	4	93,100	4	108,111	4	123,116	4	138,121
1/4	4,428	1/4	18,461	1/4	33,472	1/4	48,482	1/4	63,394	1/4	78,401	1/4	93,413	1/4	108,423	1/4	123,428	1/4	138,433
1/2	4,699	1/2	18,774	1/2	33,785	1/2	48,794	1/2	63,706	1/2	78,714	1/2	93,725	1/2	108,736	1/2	123,741	1/2	138,746
3/4	4,969	3/4	19,087	3/4	34,098	3/4	49,106	3/4	64,017	3/4	79,027	3/4	94,038	3/4	109,049	3/4	124,054	3/4	139,058
5	5,239	5	19,399	5	34,410	5	49,418	5	64,329	5	79,339	5	94,351	5	109,361	5	124,366	5	139,371
1/4	5,514	1/4	19,712	1/4	34,723	1/4	49,730	1/4	64,641	1/4	79,652	1/4	94,663	1/4	109,674	1/4	124,679	1/4	139,684
1/2	5,788	1/2	20,025	1/2	35,036	1/2	50,041	1/2	64,954	1/2	79,965	1/2	94,976	1/2	109,987	1/2	124,991	1/2	139,996
3/4	6,062	3/4	20,338	3/4	35,349	3/4	50,352	3/4	65,266	3/4	80,278	3/4	95,289	3/4	110,299	3/4	125,304	3/4	140,309
6	6,336	6	20,650	6	35,661	6	50,664	6	65,579	6	80,590	6	95,602	6	110,612	6	125,617	6	140,621
1/4	6,614	1/4	20,963	1/4	35,974	1/4	50,975	1/4	65,892	1/4	80,903	1/4	95,914	1/4	110,924	1/4	125,929	1/4	140,934
1/2	6,892	1/2	21,276	1/2	36,287	1/2	51,286	1/2	66,204	1/2	81,216	1/2	96,227	1/2	111,237	1/2	126,242	1/2	141,247
3/4	7,171	3/4	21,589	3/4	36,599	3/4	51,597	3/4	66,517	3/4	81,529	3/4	96,540	3/4	111,550	3/4	126,554	3/4	141,559
7	7,449	7	21,901	7	36,912	7	51,908	7	66,830	7	81,841	7	96,853	7	111,862	7	126,867	7	141,872
1/4	7,731	1/4	22,214	1/4	37,225	1/4	52,218	1/4	67,143	1/4	82,154	1/4	97,165	1/4	112,175	1/4	127,180	1/4	142,184
1/2	8,012	1/2	22,527	1/2	37,538	1/2	52,529	1/2	67,455	1/2	82,467	1/2	97,478	1/2	112,487	1/2	127,492	1/2	142,497
3/4	8,294	3/4	22,839	3/4	37,850	3/4	52,840	3/4	67,768	3/4	82,780	3/4	97,791	3/4	112,800	3/4	127,805	3/4	142,810
8	8,576	8	23,152	8	38,163	8	53,150	8	68,081	8	83,092	8	98,104	8	113,113	8	128,117	8	143,122
1/4	8,862	1/4	23,465	1/4	38,476	1/4	53,461	1/4	68,394	1/4	83,405	1/4	98,416	1/4	113,425	1/4	128,430	1/4	143,435
1/2	9,148	1/2	23,778	1/2	38,789	1/2	53,771	1/2	68,706	1/2	83,718	1/2	98,729	1/2	113,738	1/2	128,743	1/2	143,747
3/4	9,434	3/4	24,090	3/4	39,101	3/4	54,081	3/4	69,019	3/4	84,030	3/4	99,042	3/4	114,050	3/4	129,055	3/4	144,060
9	9,719	9	24,403	9	39,414	9	54,392	9	69,332	9	84,343	9	99,355	9	114,363	9	129,368	9	144,373
1/4	10,009	1/4	24,716	1/4	39,727	1/4	54,702	1/4	69,645	1/4	84,656	1/4	99,667	1/4	114,676	1/4	129,680	1/4	144,685
1/2	10,299	1/2	25,029	1/2	40,039	1/2	55,012	1/2	69,957	1/2	84,969	1/2	99,980	1/2	114,988	1/2	129,993	1/2	144,998
3/4	10,588	3/4	25,341	3/4	40,352	3/4	55,323	3/4	70,270	3/4	85,281	3/4	100,293	3/4	115,301	3/4	130,306	3/4	145,310
10	10,878	10	25,654	10	40,665	10	55,633	10	70,583	10	85,594	10	100,605	10	115,613	10	130,618	10	145,623
1/4	11,171	1/4	25,967	1/4	40,978	1/4	55,943	1/4	70,896	1/4	85,907	1/4	100,918	1/4	115,926	1/4	130,931	1/4	145,936
1/2	11,465	1/2	26,279	1/2	41,290	1/2	56,254	1/2	71,208	1/2	86,220	1/2	101,231	1/2	116,239	1/2	131,243	1/2	146,248
3/4	11,758	3/4	26,592	3/4	41,603	3/4	56,564	3/4	71,521	3/4	86,532	3/4	101,544	3/4	116,551	3/4	131,556	3/4	146,561
11	12,052	11	26,905	11	41,916	11	56,875	11	71,834	11	86,845	11	101,856	11	116,864	11	131,869	11	146,873
1/4	12,349	1/4	27,218	1/4	42,229	1/4	57,185	1/4	72,146	1/4	87,158	1/4	102,169	1/4	117,176	1/4	132,181	1/4	147,186
1/2	12,647	1/2	27,530	1/2	42,541	1/2	57,495	1/2	72,459	1/2	87,471	1/2	102,482	1/2	117,489	1/2	132,494	1/2	147,499
3/4	12,944	3/4	27,843	3/4	42,854	3/4	57,806	3/4	72,772	3/4	87,783	3/4	102,795	3/4	117,802	3/4	132,806	3/4	147,811

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.

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BARGE "HFL 421"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11"

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	148,124	0	163,129	0	178,124	0	193,086	0	207,974	0		0		0		0		0	
1/4	148,436	1/4	163,441	1/4	178,436	1/4	193,397	1/4	208,254	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	148,749	1/2	163,754	1/2	178,748	1/2	193,709	1/2	208,534	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	149,062	3/4	164,066	3/4	179,059	3/4	194,021	3/4	208,814	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	149,374	1	164,379	1	179,371	1	194,332	1	209,094	1	1	1	1	1	1	1	1	1	1
1/4	149,687	1/4	164,692	1/4	179,683	1/4	194,644	1/4	209,325	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,999	1/2	165,004	1/2	179,995	1/2	194,956	1/2	209,557	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,312	3/4	165,317	3/4	180,306	3/4	195,267	3/4	209,788	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	150,625	2	165,629	2	180,618	2	195,579	2	210,020	2	2	2	2	2	2	2	2	2	2
1/4	150,937	1/4	165,942	1/4	180,930	1/4	195,891	1/4	210,199	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,250	1/2	166,255	1/2	181,241	1/2	196,202	1/2	210,378	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,562	3/4	166,567	3/4	181,553	3/4	196,514	3/4	210,558	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	151,875	3	166,880	3	181,865	3	196,826	3	210,737	3	3	3	3	3	3	3	3	3	3
1/4	152,188	1/4	167,193	1/4	182,176	1/4	197,137	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,500	1/2	167,505	1/2	182,488	1/2	197,449	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,813	3/4	167,818	3/4	182,800	3/4	197,761	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	153,125	4	168,130	4	183,111	4	198,073	4		4	4	4	4	4	4	4	4	4	4
1/4	153,438	1/4	168,443	1/4	183,423	1/4	198,384	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,751	1/2	168,756	1/2	183,735	1/2	198,696	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,063	3/4	169,068	3/4	184,047	3/4	199,008	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	154,376	5	169,381	5	184,358	5	199,319	5		5	5	5	5	5	5	5	5	5	5
1/4	154,688	1/4	169,693	1/4	184,670	1/4	199,630	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,001	1/2	170,006	1/2	184,982	1/2	199,941	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,314	3/4	170,319	3/4	185,293	3/4	200,251	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	155,626	6	170,631	6	185,605	6	200,562	6		6	6	6	6	6	6	6	6	6	6
1/4	155,939	1/4	170,944	1/4	185,917	1/4	200,871	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,251	1/2	171,256	1/2	186,228	1/2	201,181	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,564	3/4	171,569	3/4	186,540	3/4	201,490	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	156,877	7	171,882	7	186,852	7	201,800	7		7	7	7	7	7	7	7	7	7	7
1/4	157,189	1/4	172,194	1/4	187,163	1/4	202,110	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,502	1/2	172,507	1/2	187,475	1/2	202,419	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,814	3/4	172,819	3/4	187,787	3/4	202,729	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	158,127	8	173,132	8	188,098	8	203,038	8		8	8	8	8	8	8	8	8	8	8
1/4	158,440	1/4	173,445	1/4	188,410	1/4	203,348	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,752	1/2	173,757	1/2	188,722	1/2	203,658	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	159,065	3/4	174,070	3/4	189,034	3/4	203,967	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	159,377	9	174,382	9	189,345	9	204,277	9		9	9	9	9	9	9	9	9	9	9
1/4	159,690	1/4	174,694	1/4	189,657	1/4	204,587	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	160,003	1/2	175,007	1/2	189,969	1/2	204,896	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	160,315	3/4	175,319	3/4	190,280	3/4	205,206	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	160,628	10	175,631	10	190,592	10	205,516	10		10	10	10	10	10	10	10	10	10	10
1/4	160,940	1/4	175,943	1/4	190,904	1/4	205,825	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	161,253	1/2	176,254	1/2	191,215	1/2	206,134	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	161,566	3/4	176,566	3/4	191,527	3/4	206,443	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	161,878	11	176,878	11	191,839	11	206,752	11		11	11	11	11	11	11	11	11	11	11
1/4	162,191	1/4	177,189	1/4	192,150	1/4	207,058	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	162,503	1/2	177,501	1/2	192,462	1/2	207,363	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	162,816	3/4	177,813	3/4	192,774	3/4	207,669	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: 08/01/2013 CL
CALCULATED: 08/01/2013 CL
PRINTED: 08/01/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 421"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11"

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	385	0	13,244	0	28,162	0	43,176	0	58,186	0	73,198	0	88,213	0	103,228	0	118,238	0	133,246
1/4	562	1/4	13,545	1/4	28,475	1/4	43,489	1/4	58,499	1/4	73,511	1/4	88,526	1/4	103,540	1/4	118,550	1/4	133,559
1/2	739	1/2	13,847	1/2	28,788	1/2	43,802	1/2	58,811	1/2	73,824	1/2	88,839	1/2	103,853	1/2	118,863	1/2	133,871
3/4	916	3/4	14,148	3/4	29,101	3/4	44,115	3/4	59,124	3/4	74,137	3/4	89,151	3/4	104,166	3/4	119,176	3/4	134,184
1	1,092	1	14,449	1	29,413	1	44,428	1	59,437	1	74,449	1	89,464	1	104,479	1	119,488	1	134,497
1/4	1,331	1/4	14,754	1/4	29,726	1/4	44,740	1/4	59,749	1/4	74,762	1/4	89,777	1/4	104,792	1/4	119,801	1/4	134,809
1/2	1,569	1/2	15,059	1/2	30,039	1/2	45,053	1/2	60,062	1/2	75,075	1/2	90,090	1/2	105,104	1/2	120,114	1/2	135,122
3/4	1,808	3/4	15,364	3/4	30,352	3/4	45,366	3/4	60,374	3/4	75,388	3/4	90,403	3/4	105,417	3/4	120,426	3/4	135,435
2	2,047	2	15,670	2	30,665	2	45,679	2	60,687	2	75,701	2	90,715	2	105,730	2	120,739	2	135,747
1/4	2,308	1/4	15,979	1/4	30,977	1/4	45,992	1/4	61,000	1/4	76,013	1/4	91,028	1/4	106,043	1/4	121,052	1/4	136,060
1/2	2,570	1/2	16,287	1/2	31,290	1/2	46,304	1/2	61,312	1/2	76,326	1/2	91,341	1/2	106,356	1/2	121,364	1/2	136,373
3/4	2,832	3/4	16,596	3/4	31,603	3/4	46,617	3/4	61,625	3/4	76,639	3/4	91,654	3/4	106,668	3/4	121,677	3/4	136,685
3	3,094	3	16,905	3	31,916	3	46,930	3	61,937	3	76,952	3	91,967	3	106,981	3	121,990	3	136,998
1/4	3,360	1/4	17,217	1/4	32,229	1/4	47,243	1/4	62,250	1/4	77,265	1/4	92,279	1/4	107,294	1/4	122,302	1/4	137,311
1/2	3,626	1/2	17,529	1/2	32,541	1/2	47,556	1/2	62,563	1/2	77,578	1/2	92,592	1/2	107,607	1/2	122,615	1/2	137,623
3/4	3,893	3/4	17,841	3/4	32,854	3/4	47,868	3/4	62,876	3/4	77,890	3/4	92,905	3/4	107,920	3/4	122,928	3/4	137,936
4	4,159	4	18,153	4	33,167	4	48,181	4	63,188	4	78,203	4	93,218	4	108,232	4	123,240	4	138,249
1/4	4,429	1/4	18,466	1/4	33,480	1/4	48,494	1/4	63,501	1/4	78,516	1/4	93,531	1/4	108,545	1/4	123,553	1/4	138,561
1/2	4,700	1/2	18,778	1/2	33,793	1/2	48,807	1/2	63,814	1/2	78,829	1/2	93,843	1/2	108,858	1/2	123,866	1/2	138,874
3/4	4,970	3/4	19,091	3/4	34,105	3/4	49,120	3/4	64,127	3/4	79,142	3/4	94,156	3/4	109,170	3/4	124,178	3/4	139,187
5	5,241	5	19,404	5	34,418	5	49,432	5	64,440	5	79,454	5	94,469	5	109,483	5	124,491	5	139,499
1/4	5,515	1/4	19,717	1/4	34,731	1/4	49,745	1/4	64,752	1/4	79,767	1/4	94,782	1/4	109,796	1/4	124,804	1/4	139,812
1/2	5,789	1/2	20,029	1/2	35,044	1/2	50,058	1/2	65,065	1/2	80,080	1/2	95,095	1/2	110,108	1/2	125,116	1/2	140,125
3/4	6,064	3/4	20,342	3/4	35,357	3/4	50,371	3/4	65,378	3/4	80,393	3/4	95,407	3/4	110,421	3/4	125,429	3/4	140,437
6	6,338	6	20,655	6	35,669	6	50,684	6	65,691	6	80,706	6	95,720	6	110,734	6	125,742	6	140,750
1/4	6,616	1/4	20,968	1/4	35,982	1/4	50,996	1/4	66,004	1/4	81,018	1/4	96,033	1/4	111,046	1/4	126,054	1/4	141,063
1/2	6,894	1/2	21,281	1/2	36,295	1/2	51,309	1/2	66,316	1/2	81,331	1/2	96,346	1/2	111,359	1/2	126,367	1/2	141,375
3/4	7,172	3/4	21,593	3/4	36,608	3/4	51,622	3/4	66,629	3/4	81,644	3/4	96,659	3/4	111,672	3/4	126,680	3/4	141,688
7	7,450	7	21,906	7	36,921	7	51,935	7	66,942	7	81,957	7	96,971	7	111,984	7	126,992	7	142,001
1/4	7,732	1/4	22,219	1/4	37,233	1/4	52,247	1/4	67,255	1/4	82,270	1/4	97,284	1/4	112,297	1/4	127,305	1/4	142,313
1/2	8,014	1/2	22,532	1/2	37,546	1/2	52,560	1/2	67,568	1/2	82,582	1/2	97,597	1/2	112,610	1/2	127,618	1/2	142,626
3/4	8,296	3/4	22,845	3/4	37,859	3/4	52,872	3/4	67,881	3/4	82,895	3/4	97,910	3/4	112,922	3/4	127,931	3/4	142,939
8	8,578	8	23,157	8	38,172	8	53,185	8	68,193	8	83,208	8	98,223	8	113,235	8	128,243	8	143,251
1/4	8,864	1/4	23,470	1/4	38,484	1/4	53,498	1/4	68,506	1/4	83,521	1/4	98,536	1/4	113,548	1/4	128,556	1/4	143,564
1/2	9,150	1/2	23,783	1/2	38,797	1/2	53,810	1/2	68,819	1/2	83,834	1/2	98,848	1/2	113,860	1/2	128,869	1/2	143,877
3/4	9,436	3/4	24,096	3/4	39,110	3/4	54,123	3/4	69,132	3/4	84,146	3/4	99,161	3/4	114,173	3/4	129,181	3/4	144,190
9	9,722	9	24,409	9	39,423	9	54,435	9	69,445	9	84,459	9	99,474	9	114,486	9	129,494	9	144,502
1/4	10,011	1/4	24,721	1/4	39,736	1/4	54,748	1/4	69,757	1/4	84,772	1/4	99,787	1/4	114,798	1/4	129,807	1/4	144,815
1/2	10,301	1/2	25,034	1/2	40,048	1/2	55,061	1/2	70,070	1/2	85,085	1/2	100,100	1/2	115,111	1/2	130,119	1/2	145,128
3/4	10,591	3/4	25,347	3/4	40,361	3/4	55,373	3/4	70,383	3/4	85,398	3/4	100,412	3/4	115,424	3/4	130,432	3/4	145,440
10	10,880	10	25,660	10	40,674	10	55,686	10	70,696	10	85,710	10	100,725	10	115,736	10	130,745	10	145,753
1/4	11,174	1/4	25,973	1/4	40,987	1/4	55,998	1/4	71,009	1/4	86,023	1/4	101,038	1/4	116,049	1/4	131,057	1/4	146,066
1/2	11,468	1/2	26,285	1/2	41,300	1/2	56,311	1/2	71,321	1/2	86,336	1/2	101,351	1/2	116,362	1/2	131,370	1/2	146,378
3/4	11,761	3/4	26,598	3/4	41,612	3/4	56,623	3/4	71,634	3/4	86,649	3/4	101,664	3/4	116,674	3/4	131,683	3/4	146,691
11	12,055	11	26,911	11	41,925	11	56,936	11	71,947	11	86,962	11	101,976	11	116,987	11	131,995	11	147,004
1/4	12,352	1/4	27,224	1/4	42,238	1/4	57,249	1/4	72,260	1/4	87,275	1/4	102,289	1/4	117,300	1/4	132,308	1/4	147,316
1/2	12,649	1/2	27,537	1/2	42,551	1/2	57,561	1/2	72,573	1/2	87,587	1/2	102,602	1/2	117,612	1/2	132,621	1/2	147,629
3/4	12,947	3/4	27,849	3/4	42,864	3/4	57,874	3/4	72,885	3/4	87,900	3/4	102,915	3/4	117,925	3/4	132,933	3/4	147,942

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.
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 Pearland, Texas 77588
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BARGE "HFL 421"

1 STBD
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-11"

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	148,254	0	163,263	0	178,262	0	193,227	0	208,119	0		0		0		0		0	
1/4	148,567	1/4	163,575	1/4	178,574	1/4	193,539	1/4	208,399	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	148,880	1/2	163,888	1/2	178,886	1/2	193,850	1/2	208,679	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	149,192	3/4	164,201	3/4	179,197	3/4	194,162	3/4	208,959	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	149,505	1	164,513	1	179,509	1	194,474	1	209,239	1	1	1	1	1	1	1	1	1	1
1/4	149,818	1/4	164,826	1/4	179,821	1/4	194,786	1/4	209,470	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,130	1/2	165,139	1/2	180,133	1/2	195,097	1/2	209,702	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,443	3/4	165,451	3/4	180,444	3/4	195,409	3/4	209,933	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	150,756	2	165,764	2	180,756	2	195,721	2	210,165	2	2	2	2	2	2	2	2	2	2
1/4	151,068	1/4	166,077	1/4	181,068	1/4	196,033	1/4	210,344	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,381	1/2	166,390	1/2	181,380	1/2	196,344	1/2	210,524	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,694	3/4	166,702	3/4	181,691	3/4	196,656	3/4	210,703	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	152,006	3	167,015	3	182,003	3	196,968	3	210,883	3	3	3	3	3	3	3	3	3	3
1/4	152,319	1/4	167,328	1/4	182,315	1/4	197,280	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,632	1/2	167,640	1/2	182,627	1/2	197,591	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,944	3/4	167,953	3/4	182,939	3/4	197,903	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	153,257	4	168,266	4	183,250	4	198,215	4		4	4	4	4	4	4	4	4	4	4
1/4	153,570	1/4	168,578	1/4	183,562	1/4	198,527	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,882	1/2	168,891	1/2	183,874	1/2	198,839	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,195	3/4	169,204	3/4	184,186	3/4	199,150	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	154,508	5	169,516	5	184,497	5	199,462	5		5	5	5	5	5	5	5	5	5	5
1/4	154,821	1/4	169,829	1/4	184,809	1/4	199,773	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,133	1/2	170,142	1/2	185,121	1/2	200,083	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,446	3/4	170,454	3/4	185,433	3/4	200,394	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	155,759	6	170,767	6	185,744	6	200,705	6		6	6	6	6	6	6	6	6	6	6
1/4	156,071	1/4	171,080	1/4	186,056	1/4	201,014	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,384	1/2	171,392	1/2	186,368	1/2	201,324	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,697	3/4	171,705	3/4	186,680	3/4	201,634	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	157,009	7	172,018	7	186,991	7	201,943	7		7	7	7	7	7	7	7	7	7	7
1/4	157,322	1/4	172,330	1/4	187,303	1/4	202,253	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,635	1/2	172,643	1/2	187,615	1/2	202,563	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,947	3/4	172,956	3/4	187,927	3/4	202,872	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	158,260	8	173,268	8	188,239	8	203,182	8		8	8	8	8	8	8	8	8	8	8
1/4	158,573	1/4	173,581	1/4	188,550	1/4	203,492	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,885	1/2	173,894	1/2	188,862	1/2	203,802	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	159,198	3/4	174,206	3/4	189,174	3/4	204,111	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	159,511	9	174,519	9	189,486	9	204,421	9		9	9	9	9	9	9	9	9	9	9
1/4	159,823	1/4	174,831	1/4	189,797	1/4	204,731	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	160,136	1/2	175,144	1/2	190,109	1/2	205,040	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	160,449	3/4	175,456	3/4	190,421	3/4	205,350	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	160,761	10	175,768	10	190,733	10	205,660	10		10	10	10	10	10	10	10	10	10	10
1/4	161,074	1/4	176,080	1/4	191,044	1/4	205,969	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	161,387	1/2	176,392	1/2	191,356	1/2	206,278	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	161,699	3/4	176,703	3/4	191,668	3/4	206,588	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	162,012	11	177,015	11	191,980	11	206,897	11		11	11	11	11	11	11	11	11	11	11
1/4	162,325	1/4	177,327	1/4	192,291	1/4	207,202	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	162,637	1/2	177,639	1/2	192,603	1/2	207,508	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	162,950	3/4	177,950	3/4	192,915	3/4	207,814	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

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<http://www.pmacorp.net>



BARGE "HFL 421"

2 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	1,032	0	15,706	0	30,778	0	45,479	0	59,974	0	74,838	0	89,913	0	104,988	0	120,058	0	135,125
1/4	1,268	1/4	16,020	1/4	31,092	1/4	45,781	1/4	60,277	1/4	75,152	1/4	90,227	1/4	105,302	1/4	120,372	1/4	135,439
1/2	1,503	1/2	16,334	1/2	31,407	1/2	46,082	1/2	60,579	1/2	75,466	1/2	90,541	1/2	105,616	1/2	120,686	1/2	135,753
3/4	1,739	3/4	16,648	3/4	31,721	3/4	46,384	3/4	60,881	3/4	75,780	3/4	90,855	3/4	105,930	3/4	121,000	3/4	136,067
1	1,974	1	16,962	1	32,035	1	46,685	1	61,184	1	76,094	1	91,169	1	106,244	1	121,313	1	136,381
1/4	2,268	1/4	17,276	1/4	32,349	1/4	46,986	1/4	61,486	1/4	76,408	1/4	91,483	1/4	106,558	1/4	121,627	1/4	136,695
1/2	2,562	1/2	17,590	1/2	32,663	1/2	47,288	1/2	61,788	1/2	76,722	1/2	91,797	1/2	106,872	1/2	121,941	1/2	137,009
3/4	2,855	3/4	17,904	3/4	32,977	3/4	47,589	3/4	62,090	3/4	77,036	3/4	92,111	3/4	107,186	3/4	122,255	3/4	137,323
2	3,149	2	18,218	2	33,291	2	47,890	2	62,393	2	77,350	2	92,425	2	107,501	2	122,569	2	137,637
1/4	3,462	1/4	18,533	1/4	33,605	1/4	48,192	1/4	62,695	1/4	77,664	1/4	92,739	1/4	107,815	1/4	122,883	1/4	137,951
1/2	3,775	1/2	18,847	1/2	33,919	1/2	48,493	1/2	62,997	1/2	77,978	1/2	93,053	1/2	108,129	1/2	123,197	1/2	138,264
3/4	4,088	3/4	19,161	3/4	34,233	3/4	48,795	3/4	63,300	3/4	78,292	3/4	93,368	3/4	108,443	3/4	123,511	3/4	138,578
3	4,401	3	19,475	3	34,547	3	49,096	3	63,602	3	78,606	3	93,682	3	108,757	3	123,825	3	138,892
1/4	4,715	1/4	19,789	1/4	34,861	1/4	49,398	1/4	63,904	1/4	78,921	1/4	93,996	1/4	109,071	1/4	124,139	1/4	139,206
1/2	5,029	1/2	20,103	1/2	35,175	1/2	49,699	1/2	64,207	1/2	79,235	1/2	94,310	1/2	109,385	1/2	124,453	1/2	139,520
3/4	5,342	3/4	20,417	3/4	35,489	3/4	50,001	3/4	64,509	3/4	79,549	3/4	94,624	3/4	109,699	3/4	124,766	3/4	139,834
4	5,656	4	20,731	4	35,803	4	50,303	4	64,811	4	79,863	4	94,938	4	110,013	4	125,080	4	140,148
1/4	5,970	1/4	21,045	1/4	36,111	1/4	50,604	1/4	65,119	1/4	80,177	1/4	95,252	1/4	110,327	1/4	125,394	1/4	140,462
1/2	6,284	1/2	21,359	1/2	36,420	1/2	50,906	1/2	65,427	1/2	80,491	1/2	95,566	1/2	110,641	1/2	125,708	1/2	140,776
3/4	6,598	3/4	21,673	3/4	36,728	3/4	51,208	3/4	65,736	3/4	80,805	3/4	95,880	3/4	110,954	3/4	126,022	3/4	141,090
5	6,912	5	21,987	5	37,036	5	51,510	5	66,044	5	81,119	5	96,194	5	111,268	5	126,336	5	141,404
1/4	7,226	1/4	22,301	1/4	37,338	1/4	51,813	1/4	66,358	1/4	81,433	1/4	96,508	1/4	111,582	1/4	126,650	1/4	141,717
1/2	7,541	1/2	22,615	1/2	37,641	1/2	52,115	1/2	66,672	1/2	81,747	1/2	96,822	1/2	111,896	1/2	126,964	1/2	142,031
3/4	7,855	3/4	22,929	3/4	37,943	3/4	52,417	3/4	66,986	3/4	82,061	3/4	97,136	3/4	112,210	3/4	127,278	3/4	142,345
6	8,169	6	23,243	6	38,245	6	52,719	6	67,300	6	82,375	6	97,450	6	112,524	6	127,592	6	142,659
1/4	8,483	1/4	23,557	1/4	38,547	1/4	53,022	1/4	67,614	1/4	82,689	1/4	97,764	1/4	112,838	1/4	127,906	1/4	142,973
1/2	8,797	1/2	23,871	1/2	38,849	1/2	53,324	1/2	67,928	1/2	83,003	1/2	98,079	1/2	113,152	1/2	128,219	1/2	143,287
3/4	9,111	3/4	24,186	3/4	39,151	3/4	53,626	3/4	68,242	3/4	83,317	3/4	98,393	3/4	113,466	3/4	128,533	3/4	143,601
7	9,425	7	24,500	7	39,452	7	53,929	7	68,556	7	83,632	7	98,707	7	113,780	7	128,847	7	143,915
1/4	9,739	1/4	24,814	1/4	39,754	1/4	54,231	1/4	68,870	1/4	83,946	1/4	99,021	1/4	114,094	1/4	129,161	1/4	144,229
1/2	10,053	1/2	25,128	1/2	40,055	1/2	54,533	1/2	69,184	1/2	84,260	1/2	99,335	1/2	114,407	1/2	129,475	1/2	144,543
3/4	10,367	3/4	25,442	3/4	40,356	3/4	54,835	3/4	69,499	3/4	84,574	3/4	99,649	3/4	114,721	3/4	129,789	3/4	144,857
8	10,681	8	25,756	8	40,658	8	55,138	8	69,813	8	84,888	8	99,963	8	115,035	8	130,103	8	145,170
1/4	10,995	1/4	26,070	1/4	40,959	1/4	55,440	1/4	70,127	1/4	85,202	1/4	100,277	1/4	115,349	1/4	130,417	1/4	145,484
1/2	11,309	1/2	26,384	1/2	41,261	1/2	55,742	1/2	70,441	1/2	85,516	1/2	100,591	1/2	115,663	1/2	130,731	1/2	145,798
3/4	11,623	3/4	26,698	3/4	41,562	3/4	56,045	3/4	70,755	3/4	85,830	3/4	100,905	3/4	115,977	3/4	131,045	3/4	146,112
9	11,937	9	27,012	9	41,863	9	56,347	9	71,069	9	86,144	9	101,219	9	116,291	9	131,358	9	146,426
1/4	12,251	1/4	27,326	1/4	42,165	1/4	56,649	1/4	71,383	1/4	86,458	1/4	101,533	1/4	116,605	1/4	131,672	1/4	146,740
1/2	12,565	1/2	27,639	1/2	42,466	1/2	56,952	1/2	71,697	1/2	86,772	1/2	101,847	1/2	116,919	1/2	131,986	1/2	147,054
3/4	12,879	3/4	27,953	3/4	42,767	3/4	57,254	3/4	72,011	3/4	87,086	3/4	102,161	3/4	117,233	3/4	132,300	3/4	147,368
10	13,194	10	28,267	10	43,069	10	57,556	10	72,325	10	87,400	10	102,475	10	117,547	10	132,614	10	147,682
1/4	13,508	1/4	28,581	1/4	43,370	1/4	57,858	1/4	72,639	1/4	87,714	1/4	102,790	1/4	117,860	1/4	132,928	1/4	147,996
1/2	13,822	1/2	28,895	1/2	43,671	1/2	58,161	1/2	72,953	1/2	88,028	1/2	103,104	1/2	118,174	1/2	133,242	1/2	148,310
3/4	14,136	3/4	29,209	3/4	43,973	3/4	58,463	3/4	73,267	3/4	88,343	3/4	103,418	3/4	118,488	3/4	133,556	3/4	148,623
11	14,450	11	29,522	11	44,274	11	58,765	11	73,581	11	88,657	11	103,732	11	118,802	11	133,870	11	148,937
1/4	14,764	1/4	29,836	1/4	44,575	1/4	59,068	1/4	73,895	1/4	88,971	1/4	104,046	1/4	119,116	1/4	134,184	1/4	149,251
1/2	15,078	1/2	30,150	1/2	44,877	1/2	59,370	1/2	74,210	1/2	89,285	1/2	104,360	1/2	119,430	1/2	134,498	1/2	149,565
3/4	15,392	3/4	30,464	3/4	45,178	3/4	59,672	3/4	74,524	3/4	89,599	3/4	104,674	3/4	119,744	3/4	134,811	3/4	149,879

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 421"

2 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	150,193	0	165,261	0	180,318	0	195,334	0	210,253	0		0		0		0		0	
1/4	150,507	1/4	165,575	1/4	180,630	1/4	195,647	1/4	210,533	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,821	1/2	165,888	1/2	180,943	1/2	195,960	1/2	210,813	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,135	3/4	166,202	3/4	181,256	3/4	196,273	3/4	211,093	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	151,449	1	166,516	1	181,569	1	196,585	1	211,373	1	1	1	1	1	1	1	1	1	1
1/4	151,763	1/4	166,830	1/4	181,882	1/4	196,898	1/4	211,605	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,076	1/2	167,144	1/2	182,195	1/2	197,211	1/2	211,836	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,390	3/4	167,458	3/4	182,507	3/4	197,524	3/4	212,067	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	152,704	2	167,772	2	182,820	2	197,837	2	212,299	2	2	2	2	2	2	2	2	2	2
1/4	153,018	1/4	168,086	1/4	183,133	1/4	198,150	1/4	212,478	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,332	1/2	168,400	1/2	183,446	1/2	198,462	1/2	212,657	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,646	3/4	168,714	3/4	183,759	3/4	198,775	3/4	212,836	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	153,960	3	169,027	3	184,072	3	199,088	3	213,015	3	3	3	3	3	3	3	3	3	3
1/4	154,274	1/4	169,341	1/4	184,384	1/4	199,401	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,588	1/2	169,655	1/2	184,697	1/2	199,714	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,902	3/4	169,969	3/4	185,010	3/4	200,027	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	155,216	4	170,283	4	185,323	4	200,339	4	4	4	4	4	4	4	4	4	4	4	4
1/4	155,529	1/4	170,597	1/4	185,636	1/4	200,652	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,843	1/2	170,911	1/2	185,949	1/2	200,965	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	156,157	3/4	171,225	3/4	186,262	3/4	201,278	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	156,471	5	171,539	5	186,574	5	201,591	5	5	5	5	5	5	5	5	5	5	5	5
1/4	156,785	1/4	171,853	1/4	186,887	1/4	201,902	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,099	1/2	172,167	1/2	187,200	1/2	202,213	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	157,413	3/4	172,480	3/4	187,513	3/4	202,525	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	157,727	6	172,794	6	187,826	6	202,836	6	6	6	6	6	6	6	6	6	6	6	6
1/4	158,041	1/4	173,108	1/4	188,139	1/4	203,146	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,355	1/2	173,422	1/2	188,451	1/2	203,456	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	158,669	3/4	173,736	3/4	188,764	3/4	203,765	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	158,982	7	174,050	7	189,077	7	204,075	7	7	7	7	7	7	7	7	7	7	7	7
1/4	159,296	1/4	174,364	1/4	189,390	1/4	204,385	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,610	1/2	174,678	1/2	189,703	1/2	204,695	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	159,924	3/4	174,992	3/4	190,016	3/4	205,004	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	160,238	8	175,306	8	190,329	8	205,314	8	8	8	8	8	8	8	8	8	8	8	8
1/4	160,552	1/4	175,620	1/4	190,641	1/4	205,624	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	160,866	1/2	175,933	1/2	190,954	1/2	205,934	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	161,180	3/4	176,247	3/4	191,267	3/4	206,244	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	161,494	9	176,561	9	191,580	9	206,554	9	9	9	9	9	9	9	9	9	9	9	9
1/4	161,808	1/4	176,875	1/4	191,893	1/4	206,864	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	162,122	1/2	177,188	1/2	192,206	1/2	207,174	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	162,435	3/4	177,501	3/4	192,518	3/4	207,483	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	162,749	10	177,815	10	192,831	10	207,793	10	10	10	10	10	10	10	10	10	10	10	10
1/4	163,063	1/4	178,128	1/4	193,144	1/4	208,103	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	163,377	1/2	178,440	1/2	193,457	1/2	208,412	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	163,691	3/4	178,753	3/4	193,770	3/4	208,721	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	164,005	11	179,066	11	194,083	11	209,031	11	11	11	11	11	11	11	11	11	11	11	11
1/4	164,319	1/4	179,379	1/4	194,395	1/4	209,336	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	164,633	1/2	179,692	1/2	194,708	1/2	209,642	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	164,947	3/4	180,005	3/4	195,021	3/4	209,948	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: 08/01/2013 CL
CALCULATED: 08/01/2013 CL
PRINTED: 08/01/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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BARGE "HFL 421"

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	1,032	0	15,703	0	30,772	0	45,823	0	60,880	0	75,951	0	91,023	0	106,094	0	121,160	0	136,224
1/4	1,268	1/4	16,017	1/4	31,086	1/4	46,136	1/4	61,194	1/4	76,265	1/4	91,337	1/4	106,408	1/4	121,474	1/4	136,538
1/2	1,503	1/2	16,331	1/2	31,400	1/2	46,449	1/2	61,508	1/2	76,579	1/2	91,651	1/2	106,722	1/2	121,788	1/2	136,852
3/4	1,739	3/4	16,645	3/4	31,714	3/4	46,762	3/4	61,822	3/4	76,893	3/4	91,965	3/4	107,036	3/4	122,102	3/4	137,166
1	1,974	1	16,959	1	32,028	1	47,075	1	62,136	1	77,207	1	92,279	1	107,350	1	122,416	1	137,480
1/4	2,268	1/4	17,273	1/4	32,342	1/4	47,388	1/4	62,450	1/4	77,521	1/4	92,593	1/4	107,664	1/4	122,729	1/4	137,793
1/2	2,561	1/2	17,587	1/2	32,656	1/2	47,701	1/2	62,764	1/2	77,835	1/2	92,907	1/2	107,978	1/2	123,043	1/2	138,107
3/4	2,855	3/4	17,901	3/4	32,970	3/4	48,014	3/4	63,077	3/4	78,149	3/4	93,221	3/4	108,292	3/4	123,357	3/4	138,421
2	3,148	2	18,215	2	33,284	2	48,327	2	63,391	2	78,463	2	93,535	2	108,606	2	123,671	2	138,735
1/4	3,461	1/4	18,529	1/4	33,598	1/4	48,641	1/4	63,705	1/4	78,777	1/4	93,849	1/4	108,920	1/4	123,985	1/4	139,049
1/2	3,774	1/2	18,843	1/2	33,912	1/2	48,954	1/2	64,019	1/2	79,091	1/2	94,162	1/2	109,234	1/2	124,299	1/2	139,363
3/4	4,087	3/4	19,157	3/4	34,226	3/4	49,267	3/4	64,333	3/4	79,405	3/4	94,476	3/4	109,548	3/4	124,612	3/4	139,676
3	4,400	3	19,471	3	34,540	3	49,580	3	64,647	3	79,719	3	94,790	3	109,862	3	124,926	3	139,990
1/4	4,714	1/4	19,785	1/4	34,854	1/4	49,893	1/4	64,961	1/4	80,033	1/4	95,104	1/4	110,176	1/4	125,240	1/4	140,304
1/2	5,028	1/2	20,099	1/2	35,168	1/2	50,207	1/2	65,275	1/2	80,347	1/2	95,418	1/2	110,490	1/2	125,554	1/2	140,618
3/4	5,342	3/4	20,413	3/4	35,482	3/4	50,520	3/4	65,589	3/4	80,661	3/4	95,732	3/4	110,804	3/4	125,868	3/4	140,932
4	5,655	4	20,727	4	35,796	4	50,833	4	65,903	4	80,975	4	96,046	4	111,118	4	126,182	4	141,246
1/4	5,969	1/4	21,041	1/4	36,110	1/4	51,147	1/4	66,217	1/4	81,289	1/4	96,360	1/4	111,431	1/4	126,495	1/4	141,559
1/2	6,283	1/2	21,355	1/2	36,424	1/2	51,461	1/2	66,531	1/2	81,603	1/2	96,674	1/2	111,745	1/2	126,809	1/2	141,873
3/4	6,597	3/4	21,669	3/4	36,738	3/4	51,774	3/4	66,845	3/4	81,917	3/4	96,988	3/4	112,059	3/4	127,123	3/4	142,187
5	6,911	5	21,983	5	37,052	5	52,088	5	67,159	5	82,231	5	97,302	5	112,373	5	127,437	5	142,501
1/4	7,225	1/4	22,297	1/4	37,366	1/4	52,402	1/4	67,473	1/4	82,545	1/4	97,616	1/4	112,687	1/4	127,751	1/4	142,815
1/2	7,539	1/2	22,611	1/2	37,680	1/2	52,716	1/2	67,787	1/2	82,859	1/2	97,930	1/2	113,001	1/2	128,065	1/2	143,129
3/4	7,853	3/4	22,925	3/4	37,994	3/4	53,030	3/4	68,101	3/4	83,173	3/4	98,244	3/4	113,314	3/4	128,378	3/4	143,442
6	8,167	6	23,239	6	38,308	6	53,344	6	68,415	6	83,487	6	98,558	6	113,628	6	128,692	6	143,756
1/4	8,481	1/4	23,553	1/4	38,621	1/4	53,658	1/4	68,729	1/4	83,801	1/4	98,872	1/4	113,942	1/4	129,006	1/4	144,070
1/2	8,795	1/2	23,866	1/2	38,935	1/2	53,972	1/2	69,043	1/2	84,115	1/2	99,186	1/2	114,256	1/2	129,320	1/2	144,384
3/4	9,109	3/4	24,180	3/4	39,248	3/4	54,286	3/4	69,357	3/4	84,429	3/4	99,500	3/4	114,570	3/4	129,634	3/4	144,698
7	9,423	7	24,494	7	39,562	7	54,600	7	69,671	7	84,743	7	99,814	7	114,884	7	129,948	7	145,012
1/4	9,737	1/4	24,808	1/4	39,875	1/4	54,914	1/4	69,985	1/4	85,057	1/4	100,128	1/4	115,197	1/4	130,261	1/4	145,325
1/2	10,051	1/2	25,122	1/2	40,188	1/2	55,228	1/2	70,299	1/2	85,371	1/2	100,442	1/2	115,511	1/2	130,575	1/2	145,639
3/4	10,365	3/4	25,436	3/4	40,501	3/4	55,542	3/4	70,613	3/4	85,685	3/4	100,756	3/4	115,825	3/4	130,889	3/4	145,953
8	10,679	8	25,750	8	40,814	8	55,856	8	70,927	8	85,999	8	101,070	8	116,139	8	131,203	8	146,267
1/4	10,993	1/4	26,064	1/4	41,127	1/4	56,170	1/4	71,241	1/4	86,313	1/4	101,384	1/4	116,453	1/4	131,517	1/4	146,581
1/2	11,307	1/2	26,378	1/2	41,440	1/2	56,484	1/2	71,555	1/2	86,627	1/2	101,698	1/2	116,767	1/2	131,831	1/2	146,895
3/4	11,621	3/4	26,692	3/4	41,753	3/4	56,798	3/4	71,869	3/4	86,941	3/4	102,012	3/4	117,080	3/4	132,144	3/4	147,208
9	11,935	9	27,006	9	42,066	9	57,112	9	72,183	9	87,255	9	102,326	9	117,394	9	132,458	9	147,522
1/4	12,249	1/4	27,320	1/4	42,379	1/4	57,426	1/4	72,497	1/4	87,569	1/4	102,640	1/4	117,708	1/4	132,772	1/4	147,836
1/2	12,563	1/2	27,634	1/2	42,692	1/2	57,740	1/2	72,811	1/2	87,883	1/2	102,954	1/2	118,022	1/2	133,086	1/2	148,150
3/4	12,877	3/4	27,947	3/4	43,005	3/4	58,054	3/4	73,125	3/4	88,197	3/4	103,268	3/4	118,336	3/4	133,400	3/4	148,464
10	13,191	10	28,261	10	43,319	10	58,368	10	73,439	10	88,511	10	103,582	10	118,650	10	133,714	10	148,778
1/4	13,505	1/4	28,575	1/4	43,632	1/4	58,682	1/4	73,753	1/4	88,825	1/4	103,896	1/4	118,963	1/4	134,027	1/4	149,091
1/2	13,819	1/2	28,889	1/2	43,945	1/2	58,996	1/2	74,067	1/2	89,139	1/2	104,210	1/2	119,277	1/2	134,341	1/2	149,405
3/4	14,133	3/4	29,203	3/4	44,258	3/4	59,310	3/4	74,381	3/4	89,453	3/4	104,524	3/4	119,591	3/4	134,655	3/4	149,719
11	14,447	11	29,516	11	44,571	11	59,624	11	74,695	11	89,767	11	104,838	11	119,905	11	134,969	11	150,033
1/4	14,761	1/4	29,830	1/4	44,884	1/4	59,938	1/4	75,009	1/4	90,081	1/4	105,152	1/4	120,219	1/4	135,283	1/4	150,347
1/2	15,075	1/2	30,144	1/2	45,197	1/2	60,252	1/2	75,323	1/2	90,395	1/2	105,466	1/2	120,533	1/2	135,597	1/2	150,661
3/4	15,389	3/4	30,458	3/4	45,510	3/4	60,566	3/4	75,637	3/4	90,709	3/4	105,780	3/4	120,846	3/4	135,910	3/4	150,974

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 421"

**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	151,288	0	166,352	0	181,405	0	196,418	0	211,334	0		0		0		0		0	
1/4	151,602	1/4	166,666	1/4	181,718	1/4	196,731	1/4	211,614	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,916	1/2	166,980	1/2	182,031	1/2	197,044	1/2	211,894	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,230	3/4	167,294	3/4	182,344	3/4	197,357	3/4	212,174	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	152,544	1	167,607	1	182,657	1	197,669	1	212,454	1	1	1	1	1	1	1	1	1	1
1/4	152,857	1/4	167,921	1/4	182,969	1/4	197,982	1/4	212,685	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,171	1/2	168,235	1/2	183,282	1/2	198,295	1/2	212,916	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,485	3/4	168,549	3/4	183,595	3/4	198,608	3/4	213,148	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	153,799	2	168,863	2	183,908	2	198,920	2	213,379	2	2	2	2	2	2	2	2	2	2
1/4	154,113	1/4	169,177	1/4	184,220	1/4	199,233	1/4	213,558	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,426	1/2	169,490	1/2	184,533	1/2	199,546	1/2	213,737	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,740	3/4	169,804	3/4	184,846	3/4	199,859	3/4	213,916	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	155,054	3	170,118	3	185,159	3	200,171	3	214,095	3	3	3	3	3	3	3	3	3	3
1/4	155,368	1/4	170,432	1/4	185,471	1/4	200,484	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,682	1/2	170,746	1/2	185,784	1/2	200,797	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,996	3/4	171,060	3/4	186,097	3/4	201,110	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	156,309	4	171,373	4	186,410	4	201,423	4	4	4	4	4	4	4	4	4	4	4	4
1/4	156,623	1/4	171,687	1/4	186,722	1/4	201,735	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,937	1/2	172,001	1/2	187,035	1/2	202,048	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	157,251	3/4	172,315	3/4	187,348	3/4	202,361	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	157,565	5	172,629	5	187,661	5	202,674	5	5	5	5	5	5	5	5	5	5	5	5
1/4	157,879	1/4	172,943	1/4	187,974	1/4	202,985	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,192	1/2	173,256	1/2	188,286	1/2	203,296	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	158,506	3/4	173,570	3/4	188,599	3/4	203,607	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	158,820	6	173,884	6	188,912	6	203,919	6	6	6	6	6	6	6	6	6	6	6	6
1/4	159,134	1/4	174,198	1/4	189,225	1/4	204,228	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,448	1/2	174,512	1/2	189,537	1/2	204,538	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	159,762	3/4	174,826	3/4	189,850	3/4	204,848	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	160,075	7	175,139	7	190,163	7	205,157	7	7	7	7	7	7	7	7	7	7	7	7
1/4	160,389	1/4	175,453	1/4	190,476	1/4	205,467	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	160,703	1/2	175,767	1/2	190,788	1/2	205,777	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	161,017	3/4	176,081	3/4	191,101	3/4	206,086	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	161,331	8	176,395	8	191,414	8	206,396	8	8	8	8	8	8	8	8	8	8	8	8
1/4	161,645	1/4	176,709	1/4	191,727	1/4	206,706	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	161,958	1/2	177,022	1/2	192,040	1/2	207,016	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	162,272	3/4	177,336	3/4	192,352	3/4	207,326	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	162,586	9	177,650	9	192,665	9	207,636	9	9	9	9	9	9	9	9	9	9	9	9
1/4	162,900	1/4	177,963	1/4	192,978	1/4	207,945	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	163,214	1/2	178,277	1/2	193,291	1/2	208,255	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	163,528	3/4	178,590	3/4	193,603	3/4	208,565	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	163,841	10	178,903	10	193,916	10	208,874	10	10	10	10	10	10	10	10	10	10	10	10
1/4	164,155	1/4	179,216	1/4	194,229	1/4	209,184	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	164,469	1/2	179,529	1/2	194,542	1/2	209,493	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	164,783	3/4	179,842	3/4	194,854	3/4	209,802	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	165,097	11	180,154	11	195,167	11	210,112	11	11	11	11	11	11	11	11	11	11	11	11
1/4	165,411	1/4	180,467	1/4	195,480	1/4	210,417	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	165,724	1/2	180,780	1/2	195,793	1/2	210,723	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	166,038	3/4	181,093	3/4	196,106	3/4	211,029	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: 08/01/2013 CL
CALCULATED: 08/01/2013 CL
PRINTED: 08/01/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 421"

3 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	1,028	0	15,627	0	30,609	0	45,363	0	59,914	0	74,818	0	89,777	0	104,749	0	119,711	0	134,669
1/4	1,262	1/4	15,939	1/4	30,921	1/4	45,665	1/4	60,226	1/4	75,128	1/4	90,089	1/4	105,061	1/4	120,023	1/4	134,981
1/2	1,497	1/2	16,251	1/2	31,233	1/2	45,966	1/2	60,537	1/2	75,438	1/2	90,401	1/2	105,373	1/2	120,334	1/2	135,293
3/4	1,731	3/4	16,563	3/4	31,546	3/4	46,268	3/4	60,849	3/4	75,748	3/4	90,713	3/4	105,685	3/4	120,646	3/4	135,604
1	1,966	1	16,875	1	31,858	1	46,569	1	61,161	1	76,058	1	91,025	1	105,997	1	120,958	1	135,916
1/4	2,258	1/4	17,188	1/4	32,170	1/4	46,871	1/4	61,473	1/4	76,368	1/4	91,336	1/4	106,309	1/4	121,269	1/4	136,228
1/2	2,550	1/2	17,500	1/2	32,482	1/2	47,173	1/2	61,785	1/2	76,678	1/2	91,648	1/2	106,621	1/2	121,581	1/2	136,539
3/4	2,843	3/4	17,812	3/4	32,794	3/4	47,475	3/4	62,096	3/4	76,989	3/4	91,960	3/4	106,933	3/4	121,892	3/4	136,851
2	3,135	2	18,124	2	33,106	2	47,777	2	62,408	2	77,299	2	92,272	2	107,245	2	122,204	2	137,162
1/4	3,447	1/4	18,436	1/4	33,419	1/4	48,079	1/4	62,719	1/4	77,610	1/4	92,584	1/4	107,557	1/4	122,516	1/4	137,474
1/2	3,758	1/2	18,748	1/2	33,731	1/2	48,381	1/2	63,030	1/2	77,921	1/2	92,895	1/2	107,869	1/2	122,827	1/2	137,786
3/4	4,070	3/4	19,061	3/4	34,043	3/4	48,684	3/4	63,341	3/4	78,232	3/4	93,207	3/4	108,180	3/4	123,139	3/4	138,097
3	4,382	3	19,373	3	34,355	3	48,986	3	63,652	3	78,543	3	93,519	3	108,492	3	123,451	3	138,409
1/4	4,694	1/4	19,685	1/4	34,667	1/4	49,288	1/4	63,962	1/4	78,855	1/4	93,831	1/4	108,804	1/4	123,762	1/4	138,721
1/2	5,006	1/2	19,997	1/2	34,978	1/2	49,591	1/2	64,273	1/2	79,168	1/2	94,143	1/2	109,115	1/2	124,074	1/2	139,032
3/4	5,319	3/4	20,309	3/4	35,290	3/4	49,893	3/4	64,583	3/4	79,480	3/4	94,454	3/4	109,427	3/4	124,386	3/4	139,344
4	5,631	4	20,621	4	35,602	4	50,195	4	64,893	4	79,792	4	94,766	4	109,739	4	124,697	4	139,656
1/4	5,943	1/4	20,934	1/4	35,910	1/4	50,498	1/4	65,203	1/4	80,104	1/4	95,078	1/4	110,050	1/4	125,009	1/4	139,967
1/2	6,256	1/2	21,246	1/2	36,218	1/2	50,800	1/2	65,513	1/2	80,416	1/2	95,390	1/2	110,362	1/2	125,320	1/2	140,279
3/4	6,568	3/4	21,558	3/4	36,526	3/4	51,102	3/4	65,823	3/4	80,728	3/4	95,702	3/4	110,674	3/4	125,632	3/4	140,590
5	6,880	5	21,870	5	36,834	5	51,405	5	66,133	5	81,040	5	96,013	5	110,985	5	125,944	5	140,902
1/4	7,193	1/4	22,182	1/4	37,139	1/4	51,707	1/4	66,444	1/4	81,352	1/4	96,325	1/4	111,297	1/4	126,255	1/4	141,213
1/2	7,505	1/2	22,494	1/2	37,443	1/2	52,009	1/2	66,754	1/2	81,664	1/2	96,637	1/2	111,609	1/2	126,567	1/2	141,524
3/4	7,818	3/4	22,807	3/4	37,748	3/4	52,312	3/4	67,064	3/4	81,977	3/4	96,949	3/4	111,920	3/4	126,879	3/4	141,836
6	8,130	6	23,119	6	38,053	6	52,614	6	67,374	6	82,289	6	97,261	6	112,232	6	127,190	6	142,147
1/4	8,442	1/4	23,431	1/4	38,358	1/4	52,916	1/4	67,684	1/4	82,601	1/4	97,572	1/4	112,543	1/4	127,502	1/4	142,454
1/2	8,755	1/2	23,743	1/2	38,663	1/2	53,218	1/2	67,994	1/2	82,913	1/2	97,884	1/2	112,855	1/2	127,813	1/2	142,761
3/4	9,068	3/4	24,055	3/4	38,968	3/4	53,521	3/4	68,304	3/4	83,225	3/4	98,196	3/4	113,167	3/4	128,125	3/4	143,068
7	9,380	7	24,368	7	39,273	7	53,823	7	68,615	7	83,537	7	98,508	7	113,478	7	128,437	7	143,375
1/4	9,693	1/4	24,680	1/4	39,577	1/4	54,125	1/4	68,925	1/4	83,849	1/4	98,820	1/4	113,790	1/4	128,748	1/4	143,669
1/2	10,006	1/2	24,992	1/2	39,882	1/2	54,428	1/2	69,235	1/2	84,161	1/2	99,132	1/2	114,102	1/2	129,060	1/2	143,964
3/4	10,318	3/4	25,304	3/4	40,187	3/4	54,730	3/4	69,545	3/4	84,473	3/4	99,444	3/4	114,413	3/4	129,372	3/4	144,258
8	10,631	8	25,616	8	40,492	8	55,032	8	69,855	8	84,786	8	99,756	8	114,725	8	129,683	8	144,553
1/4	10,943	1/4	25,928	1/4	40,797	1/4	55,335	1/4	70,165	1/4	85,098	1/4	100,068	1/4	115,037	1/4	129,995	1/4	144,831
1/2	11,256	1/2	26,240	1/2	41,102	1/2	55,637	1/2	70,475	1/2	85,410	1/2	100,381	1/2	115,348	1/2	130,307	1/2	145,110
3/4	11,568	3/4	26,553	3/4	41,407	3/4	55,939	3/4	70,786	3/4	85,722	3/4	100,693	3/4	115,660	3/4	130,618	3/4	145,388
9	11,881	9	26,865	9	41,711	9	56,242	9	71,096	9	86,034	9	101,005	9	115,971	9	130,930	9	145,667
1/4	12,193	1/4	27,177	1/4	42,016	1/4	56,546	1/4	71,406	1/4	86,346	1/4	101,317	1/4	116,283	1/4	131,241	1/4	145,930
1/2	12,505	1/2	27,489	1/2	42,321	1/2	56,849	1/2	71,716	1/2	86,658	1/2	101,629	1/2	116,595	1/2	131,553	1/2	146,192
3/4	12,817	3/4	27,801	3/4	42,626	3/4	57,153	3/4	72,026	3/4	86,970	3/4	101,941	3/4	116,906	3/4	131,865	3/4	146,455
10	13,129	10	28,113	10	42,931	10	57,457	10	72,336	10	87,282	10	102,253	10	117,218	10	132,176	10	146,718
1/4	13,441	1/4	28,425	1/4	43,236	1/4	57,763	1/4	72,647	1/4	87,594	1/4	102,565	1/4	117,530	1/4	132,488	1/4	146,965
1/2	13,754	1/2	28,737	1/2	43,541	1/2	58,068	1/2	72,957	1/2	87,906	1/2	102,877	1/2	117,841	1/2	132,800	1/2	147,212
3/4	14,066	3/4	29,049	3/4	43,845	3/4	58,374	3/4	73,267	3/4	88,218	3/4	103,189	3/4	118,153	3/4	133,111	3/4	147,459
11	14,378	11	29,361	11	44,150	11	58,679	11	73,577	11	88,530	11	103,501	11	118,464	11	133,423	11	147,706
1/4	14,690	1/4	29,673	1/4	44,453	1/4	58,988	1/4	73,887	1/4	88,842	1/4	103,813	1/4	118,776	1/4	133,734	1/4	147,937
1/2	15,002	1/2	29,985	1/2	44,757	1/2	59,297	1/2	74,197	1/2	89,154	1/2	104,125	1/2	119,088	1/2	134,046	1/2	148,168
3/4	15,314	3/4	30,297	3/4	45,060	3/4	59,605	3/4	74,507	3/4	89,466	3/4	104,437	3/4	119,399	3/4	134,358	3/4	148,399

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 421"

3 PORT 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	148,630	0	159,008	0	169,364	0	179,691	0	190,003	0		0		0		0		0	
1/4	148,850	1/4	159,224	1/4	169,579	1/4	179,906	1/4	190,196	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,069	1/2	159,440	1/2	169,794	1/2	180,121	1/2	190,389	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	149,289	3/4	159,656	3/4	170,009	3/4	180,336	3/4	190,582	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	149,508	1	159,871	1	170,224	1	180,551	1	190,775	1	1	1	1	1	1	1	1	1	1
1/4	149,724	1/4	160,087	1/4	170,439	1/4	180,766	1/4	190,935	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,940	1/2	160,303	1/2	170,655	1/2	180,982	1/2	191,094	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,156	3/4	160,519	3/4	170,870	3/4	181,197	3/4	191,254	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	150,372	2	160,735	2	171,085	2	181,412	2	191,414	2	2	2	2	2	2	2	2	2	2
1/4	150,588	1/4	160,951	1/4	171,300	1/4	181,627	1/4	191,537	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,803	1/2	161,167	1/2	171,515	1/2	181,842	1/2	191,661	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,019	3/4	161,383	3/4	171,730	3/4	182,057	3/4	191,784	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	151,235	3	161,599	3	171,945	3	182,273	3	191,908	3	3	3	3	3	3	3	3	3	3
1/4	151,451	1/4	161,815	1/4	172,161	1/4	182,488	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,667	1/2	162,031	1/2	172,376	1/2	182,703	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,883	3/4	162,246	3/4	172,591	3/4	182,918	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	152,099	4	162,462	4	172,806	4	183,133	4		4	4	4	4	4	4	4	4	4	4
1/4	152,315	1/4	162,678	1/4	173,021	1/4	183,348	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,531	1/2	162,894	1/2	173,236	1/2	183,563	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,747	3/4	163,110	3/4	173,452	3/4	183,779	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	152,962	5	163,326	5	173,667	5	183,994	5		5	5	5	5	5	5	5	5	5	5
1/4	153,178	1/4	163,542	1/4	173,882	1/4	184,209	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,394	1/2	163,758	1/2	174,097	1/2	184,424	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,610	3/4	163,974	3/4	174,312	3/4	184,639	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	153,826	6	164,190	6	174,527	6	184,854	6		6	6	6	6	6	6	6	6	6	6
1/4	154,042	1/4	164,406	1/4	174,742	1/4	185,069	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,258	1/2	164,621	1/2	174,958	1/2	185,285	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,474	3/4	164,837	3/4	175,173	3/4	185,500	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	154,690	7	165,053	7	175,388	7	185,715	7		7	7	7	7	7	7	7	7	7	7
1/4	154,906	1/4	165,269	1/4	175,603	1/4	185,930	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,122	1/2	165,485	1/2	175,818	1/2	186,145	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,337	3/4	165,701	3/4	176,033	3/4	186,360	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	155,553	8	165,917	8	176,248	8	186,576	8		8	8	8	8	8	8	8	8	8	8
1/4	155,769	1/4	166,133	1/4	176,464	1/4	186,791	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,985	1/2	166,349	1/2	176,679	1/2	187,006	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,201	3/4	166,565	3/4	176,894	3/4	187,221	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	156,417	9	166,780	9	177,109	9	187,437	9		9	9	9	9	9	9	9	9	9	9
1/4	156,633	1/4	166,996	1/4	177,324	1/4	187,652	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,849	1/2	167,212	1/2	177,539	1/2	187,867	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,065	3/4	167,427	3/4	177,754	3/4	188,082	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	157,281	10	167,643	10	177,970	10	188,297	10		10	10	10	10	10	10	10	10	10	10
1/4	157,497	1/4	167,858	1/4	178,185	1/4	188,512	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,712	1/2	168,073	1/2	178,400	1/2	188,727	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,928	3/4	168,288	3/4	178,615	3/4	188,942	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	158,144	11	168,503	11	178,830	11	189,157	11		11	11	11	11	11	11	11	11	11	11
1/4	158,360	1/4	168,718	1/4	179,045	1/4	189,369	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,576	1/2	168,933	1/2	179,260	1/2	189,580	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,792	3/4	169,149	3/4	179,476	3/4	189,792	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: 08/01/2013 CL
CALCULATED: 08/01/2013 CL
PRINTED: 08/01/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
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BARGE "HFL 421"

3 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	1,028	0	15,640	0	30,652	0	45,647	0	60,657	0	75,669	0	90,681	0	105,693	0	120,688	0	135,680
1/4	1,262	1/4	15,953	1/4	30,964	1/4	45,959	1/4	60,970	1/4	75,982	1/4	90,994	1/4	106,006	1/4	121,000	1/4	135,992
1/2	1,497	1/2	16,266	1/2	31,277	1/2	46,272	1/2	61,283	1/2	76,295	1/2	91,306	1/2	106,318	1/2	121,313	1/2	136,305
3/4	1,732	3/4	16,578	3/4	31,590	3/4	46,584	3/4	61,595	3/4	76,607	3/4	91,619	3/4	106,631	3/4	121,625	3/4	136,617
1	1,966	1	16,891	1	31,903	1	46,897	1	61,908	1	76,920	1	91,932	1	106,944	1	121,937	1	136,929
1/4	2,258	1/4	17,204	1/4	32,215	1/4	47,209	1/4	62,221	1/4	77,233	1/4	92,245	1/4	107,256	1/4	122,250	1/4	137,242
1/2	2,551	1/2	17,517	1/2	32,528	1/2	47,522	1/2	62,534	1/2	77,546	1/2	92,557	1/2	107,569	1/2	122,562	1/2	137,554
3/4	2,843	3/4	17,829	3/4	32,841	3/4	47,835	3/4	62,846	3/4	77,858	3/4	92,870	3/4	107,882	3/4	122,874	3/4	137,866
2	3,136	2	18,142	2	33,153	2	48,147	2	63,159	2	78,171	2	93,183	2	108,194	2	123,187	2	138,179
1/4	3,447	1/4	18,455	1/4	33,466	1/4	48,460	1/4	63,472	1/4	78,484	1/4	93,496	1/4	108,507	1/4	123,499	1/4	138,491
1/2	3,759	1/2	18,768	1/2	33,779	1/2	48,773	1/2	63,785	1/2	78,797	1/2	93,808	1/2	108,819	1/2	123,811	1/2	138,803
3/4	4,071	3/4	19,080	3/4	34,092	3/4	49,086	3/4	64,097	3/4	79,109	3/4	94,121	3/4	109,131	3/4	124,124	3/4	139,116
3	4,383	3	19,393	3	34,404	3	49,398	3	64,410	3	79,422	3	94,434	3	109,444	3	124,436	3	139,428
1/4	4,695	1/4	19,706	1/4	34,717	1/4	49,711	1/4	64,723	1/4	79,735	1/4	94,747	1/4	109,756	1/4	124,748	1/4	139,740
1/2	5,008	1/2	20,019	1/2	35,029	1/2	50,024	1/2	65,036	1/2	80,048	1/2	95,059	1/2	110,069	1/2	125,061	1/2	140,053
3/4	5,320	3/4	20,331	3/4	35,342	3/4	50,337	3/4	65,348	3/4	80,360	3/4	95,372	3/4	110,381	3/4	125,373	3/4	140,365
4	5,633	4	20,644	4	35,654	4	50,649	4	65,661	4	80,673	4	95,685	4	110,693	4	125,685	4	140,677
1/4	5,945	1/4	20,957	1/4	35,967	1/4	50,962	1/4	65,974	1/4	80,986	1/4	95,998	1/4	111,006	1/4	125,998	1/4	140,989
1/2	6,258	1/2	21,269	1/2	36,279	1/2	51,275	1/2	66,287	1/2	81,299	1/2	96,310	1/2	111,318	1/2	126,310	1/2	141,302
3/4	6,571	3/4	21,582	3/4	36,591	3/4	51,588	3/4	66,599	3/4	81,611	3/4	96,623	3/4	111,630	3/4	126,622	3/4	141,614
5	6,884	5	21,895	5	36,903	5	51,900	5	66,912	5	81,924	5	96,936	5	111,943	5	126,935	5	141,926
1/4	7,196	1/4	22,208	1/4	37,216	1/4	52,213	1/4	67,225	1/4	82,237	1/4	97,249	1/4	112,255	1/4	127,247	1/4	142,238
1/2	7,509	1/2	22,520	1/2	37,528	1/2	52,526	1/2	67,538	1/2	82,550	1/2	97,561	1/2	112,567	1/2	127,559	1/2	142,550
3/4	7,822	3/4	22,833	3/4	37,840	3/4	52,839	3/4	67,850	3/4	82,862	3/4	97,874	3/4	112,880	3/4	127,872	3/4	142,862
6	8,134	6	23,146	6	38,152	6	53,151	6	68,163	6	83,175	6	98,187	6	113,192	6	128,184	6	143,174
1/4	8,447	1/4	23,459	1/4	38,465	1/4	53,464	1/4	68,476	1/4	83,488	1/4	98,500	1/4	113,504	1/4	128,496	1/4	143,482
1/2	8,760	1/2	23,771	1/2	38,777	1/2	53,777	1/2	68,789	1/2	83,801	1/2	98,812	1/2	113,817	1/2	128,809	1/2	143,790
3/4	9,073	3/4	24,084	3/4	39,089	3/4	54,090	3/4	69,101	3/4	84,113	3/4	99,125	3/4	114,129	3/4	129,121	3/4	144,097
7	9,385	7	24,397	7	39,401	7	54,402	7	69,414	7	84,426	7	99,438	7	114,441	7	129,433	7	144,405
1/4	9,698	1/4	24,710	1/4	39,714	1/4	54,715	1/4	69,727	1/4	84,739	1/4	99,751	1/4	114,754	1/4	129,746	1/4	144,700
1/2	10,011	1/2	25,022	1/2	40,026	1/2	55,028	1/2	70,040	1/2	85,051	1/2	100,063	1/2	115,066	1/2	130,058	1/2	144,995
3/4	10,324	3/4	25,335	3/4	40,338	3/4	55,341	3/4	70,352	3/4	85,364	3/4	100,376	3/4	115,378	3/4	130,370	3/4	145,290
8	10,636	8	25,648	8	40,650	8	55,653	8	70,665	8	85,677	8	100,689	8	115,691	8	130,683	8	145,586
1/4	10,949	1/4	25,961	1/4	40,963	1/4	55,966	1/4	70,978	1/4	85,990	1/4	101,002	1/4	116,003	1/4	130,995	1/4	145,865
1/2	11,262	1/2	26,273	1/2	41,275	1/2	56,279	1/2	71,291	1/2	86,302	1/2	101,314	1/2	116,315	1/2	131,307	1/2	146,144
3/4	11,575	3/4	26,586	3/4	41,587	3/4	56,591	3/4	71,603	3/4	86,615	3/4	101,627	3/4	116,628	3/4	131,620	3/4	146,423
9	11,887	9	26,899	9	41,899	9	56,904	9	71,916	9	86,928	9	101,940	9	116,940	9	131,932	9	146,702
1/4	12,200	1/4	27,211	1/4	42,212	1/4	57,217	1/4	72,229	1/4	87,241	1/4	102,253	1/4	117,252	1/4	132,244	1/4	146,965
1/2	12,513	1/2	27,524	1/2	42,524	1/2	57,530	1/2	72,542	1/2	87,553	1/2	102,565	1/2	117,565	1/2	132,557	1/2	147,229
3/4	12,826	3/4	27,837	3/4	42,836	3/4	57,842	3/4	72,854	3/4	87,866	3/4	102,878	3/4	117,877	3/4	132,869	3/4	147,492
10	13,138	10	28,150	10	43,148	10	58,155	10	73,167	10	88,179	10	103,191	10	118,189	10	133,181	10	147,755
1/4	13,451	1/4	28,462	1/4	43,461	1/4	58,468	1/4	73,480	1/4	88,492	1/4	103,504	1/4	118,502	1/4	133,494	1/4	148,002
1/2	13,764	1/2	28,775	1/2	43,773	1/2	58,781	1/2	73,793	1/2	88,804	1/2	103,816	1/2	118,814	1/2	133,806	1/2	148,249
3/4	14,076	3/4	29,088	3/4	44,085	3/4	59,093	3/4	74,105	3/4	89,117	3/4	104,129	3/4	119,126	3/4	134,118	3/4	148,497
11	14,389	11	29,401	11	44,397	11	59,406	11	74,418	11	89,430	11	104,442	11	119,439	11	134,431	11	148,744
1/4	14,702	1/4	29,713	1/4	44,710	1/4	59,719	1/4	74,731	1/4	89,743	1/4	104,755	1/4	119,751	1/4	134,743	1/4	148,975
1/2	15,015	1/2	30,026	1/2	45,022	1/2	60,032	1/2	75,044	1/2	90,055	1/2	105,067	1/2	120,063	1/2	135,055	1/2	149,206
3/4	15,327	3/4	30,339	3/4	45,335	3/4	60,344	3/4	75,356	3/4	90,368	3/4	105,380	3/4	120,376	3/4	135,368	3/4	149,437

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 421"

**3 STBD
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	149,668	0	160,046	0	170,403	0	180,730	0	191,043	0		0		0		0		0	
1/4	149,888	1/4	160,262	1/4	170,618	1/4	180,945	1/4	191,236	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,107	1/2	160,478	1/2	170,833	1/2	181,160	1/2	191,429	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,326	3/4	160,694	3/4	171,048	3/4	181,375	3/4	191,622	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	150,546	1	160,910	1	171,263	1	181,591	1	191,815	1	1	1	1	1	1	1	1	1	1
1/4	150,762	1/4	161,126	1/4	171,478	1/4	181,806	1/4	191,974	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,978	1/2	161,342	1/2	171,693	1/2	182,021	1/2	192,134	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,194	3/4	161,558	3/4	171,909	3/4	182,236	3/4	192,294	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	151,410	2	161,774	2	172,124	2	182,451	2	192,453	2	2	2	2	2	2	2	2	2	2
1/4	151,626	1/4	161,989	1/4	172,339	1/4	182,666	1/4	192,577	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,841	1/2	162,205	1/2	172,554	1/2	182,882	1/2	192,700	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,057	3/4	162,421	3/4	172,769	3/4	183,097	3/4	192,824	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	152,273	3	162,637	3	172,984	3	183,312	3	192,948	3	3	3	3	3	3	3	3	3	3
1/4	152,489	1/4	162,853	1/4	173,200	1/4	183,527	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,705	1/2	163,069	1/2	173,415	1/2	183,742	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,921	3/4	163,285	3/4	173,630	3/4	183,957	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	153,137	4	163,501	4	173,845	4	184,172	4		4	4	4	4	4	4	4	4	4	4
1/4	153,353	1/4	163,717	1/4	174,060	1/4	184,388	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,569	1/2	163,933	1/2	174,275	1/2	184,603	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,785	3/4	164,149	3/4	174,490	3/4	184,818	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	154,001	5	164,365	5	174,706	5	185,033	5		5	5	5	5	5	5	5	5	5	5
1/4	154,217	1/4	164,580	1/4	174,921	1/4	185,248	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,432	1/2	164,796	1/2	175,136	1/2	185,463	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,648	3/4	165,012	3/4	175,351	3/4	185,679	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	154,864	6	165,228	6	175,566	6	185,894	6		6	6	6	6	6	6	6	6	6	6
1/4	155,080	1/4	165,444	1/4	175,781	1/4	186,109	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,296	1/2	165,660	1/2	175,997	1/2	186,324	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,512	3/4	165,876	3/4	176,212	3/4	186,539	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	155,728	7	166,092	7	176,427	7	186,754	7		7	7	7	7	7	7	7	7	7	7
1/4	155,944	1/4	166,308	1/4	176,642	1/4	186,970	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,160	1/2	166,524	1/2	176,857	1/2	187,185	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,376	3/4	166,740	3/4	177,072	3/4	187,400	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	156,592	8	166,956	8	177,288	8	187,615	8		8	8	8	8	8	8	8	8	8	8
1/4	156,807	1/4	167,171	1/4	177,503	1/4	187,830	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,023	1/2	167,387	1/2	177,718	1/2	188,046	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,239	3/4	167,603	3/4	177,933	3/4	188,261	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	157,455	9	167,819	9	178,148	9	188,476	9		9	9	9	9	9	9	9	9	9	9
1/4	157,671	1/4	168,035	1/4	178,363	1/4	188,691	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,887	1/2	168,250	1/2	178,578	1/2	188,907	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,103	3/4	168,466	3/4	178,794	3/4	189,122	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	158,319	10	168,681	10	179,009	10	189,337	10		10	10	10	10	10	10	10	10	10	10
1/4	158,535	1/4	168,896	1/4	179,224	1/4	189,552	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,751	1/2	169,112	1/2	179,439	1/2	189,767	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,967	3/4	169,327	3/4	179,654	3/4	189,982	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	159,183	11	169,542	11	179,869	11	190,197	11		11	11	11	11	11	11	11	11	11	11
1/4	159,398	1/4	169,757	1/4	180,085	1/4	190,408	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,614	1/2	169,972	1/2	180,300	1/2	190,620	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	159,830	3/4	170,187	3/4	180,515	3/4	190,831	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: 08/01/2013 CL
CALCULATED: 08/01/2013 CL
PRINTED: 08/01/2013 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 08/2013

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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BARGE "HFL 421"

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.

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ALL PRIOR TO 08/2013

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P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 421"

PORT SLOP INNAGE 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	97	0	1,254	0	2,412	0	3,569	0	4,727	0		0		0		0		0	
1/4	121	1/4	1,279	1/4	2,436	1/4	3,593	1/4	4,751	1/4		1/4		1/4		1/4		1/4	
1/2	145	1/2	1,303	1/2	2,460	1/2	3,618	1/2	4,775	1/2		1/2		1/2		1/2		1/2	
3/4	169	3/4	1,327	3/4	2,484	3/4	3,642	3/4	4,799	3/4		3/4		3/4		3/4		3/4	
1	193	1	1,351	1	2,508	1	3,666	1	4,822	1		1		1		1		1	
1/4	217	1/4	1,375	1/4	2,532	1/4	3,690	1/4	4,846	1/4		1/4		1/4		1/4		1/4	
1/2	241	1/2	1,399	1/2	2,556	1/2	3,714	1/2	4,870	1/2		1/2		1/2		1/2		1/2	
3/4	265	3/4	1,423	3/4	2,580	3/4	3,738	3/4	4,894	3/4		3/4		3/4		3/4		3/4	
2	290	2	1,447	2	2,604	2	3,762	2	4,918	2		2		2		2		2	
1/4	314	1/4	1,472	1/4	2,628	1/4	3,786	1/4	4,941	1/4		1/4		1/4		1/4		1/4	
1/2	338	1/2	1,496	1/2	2,653	1/2	3,811	1/2	4,965	1/2		1/2		1/2		1/2		1/2	
3/4	362	3/4	1,520	3/4	2,677	3/4	3,835	3/4	4,989	3/4		3/4		3/4		3/4		3/4	
3	386	3	1,544	3	2,701	3	3,859	3	5,012	3		3		3		3		3	
1/4	410	1/4	1,568	1/4	2,725	1/4	3,883	1/4	5,036	1/4		1/4		1/4		1/4		1/4	
1/2	434	1/2	1,592	1/2	2,749	1/2	3,907	1/2	5,060	1/2		1/2		1/2		1/2		1/2	
3/4	458	3/4	1,616	3/4	2,773	3/4	3,931	3/4	5,083	3/4		3/4		3/4		3/4		3/4	
4	483	4	1,640	4	2,797	4	3,955	4	5,107	4		4		4		4		4	
1/4	507	1/4	1,665	1/4	2,821	1/4	3,979	1/4	5,119	1/4		1/4		1/4		1/4		1/4	
1/2	531	1/2	1,689	1/2	2,845	1/2	4,004	1/2	5,130	1/2		1/2		1/2		1/2		1/2	
3/4	555	3/4	1,713	3/4	2,870	3/4	4,028	3/4	5,142	3/4		3/4		3/4		3/4		3/4	
5	579	5	1,737	5	2,894	5	4,052	5	5,154	5		5		5		5		5	
1/4	603	1/4	1,761	1/4	2,918	1/4	4,076	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	627	1/2	1,785	1/2	2,942	1/2	4,100	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	651	3/4	1,809	3/4	2,966	3/4	4,124	3/4		3/4		3/4		3/4		3/4		3/4	
6	676	6	1,833	6	2,990	6	4,148	6		6		6		6		6		6	
1/4	700	1/4	1,858	1/4	3,014	1/4	4,173	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	724	1/2	1,882	1/2	3,039	1/2	4,197	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	748	3/4	1,906	3/4	3,063	3/4	4,221	3/4		3/4		3/4		3/4		3/4		3/4	
7	772	7	1,930	7	3,087	7	4,245	7		7		7		7		7		7	
1/4	796	1/4	1,954	1/4	3,111	1/4	4,269	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	820	1/2	1,978	1/2	3,135	1/2	4,293	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	844	3/4	2,002	3/4	3,159	3/4	4,317	3/4		3/4		3/4		3/4		3/4		3/4	
8	869	8	2,026	8	3,183	8	4,341	8		8		8		8		8		8	
1/4	893	1/4	2,051	1/4	3,207	1/4	4,366	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	917	1/2	2,075	1/2	3,232	1/2	4,390	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	941	3/4	2,099	3/4	3,256	3/4	4,414	3/4		3/4		3/4		3/4		3/4		3/4	
9	965	9	2,123	9	3,280	9	4,438	9		9		9		9		9		9	
1/4	989	1/4	2,147	1/4	3,304	1/4	4,462	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,013	1/2	2,171	1/2	3,328	1/2	4,486	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,038	3/4	2,195	3/4	3,352	3/4	4,510	3/4		3/4		3/4		3/4		3/4		3/4	
10	1,062	10	2,219	10	3,376	10	4,534	10		10		10		10		10		10	
1/4	1,086	1/4	2,244	1/4	3,400	1/4	4,559	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,110	1/2	2,268	1/2	3,425	1/2	4,583	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,134	3/4	2,292	3/4	3,449	3/4	4,607	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,158	11	2,316	11	3,473	11	4,631	11		11		11		11		11		11	
1/4	1,182	1/4	2,340	1/4	3,497	1/4	4,655	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,206	1/2	2,364	1/2	3,521	1/2	4,679	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,230	3/4	2,388	3/4	3,545	3/4	4,703	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.

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BARGE "HFL 421"

STBD SLOP INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 6'-00 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	97	0	1,254	0	2,412	0	3,569	0	4,727	0		0		0		0		0	
1/4	121	1/4	1,279	1/4	2,436	1/4	3,593	1/4	4,751	1/4		1/4		1/4		1/4		1/4	
1/2	145	1/2	1,303	1/2	2,460	1/2	3,618	1/2	4,775	1/2		1/2		1/2		1/2		1/2	
3/4	169	3/4	1,327	3/4	2,484	3/4	3,642	3/4	4,799	3/4		3/4		3/4		3/4		3/4	
1	193	1	1,351	1	2,508	1	3,666	1	4,822	1		1		1		1		1	
1/4	217	1/4	1,375	1/4	2,532	1/4	3,690	1/4	4,846	1/4		1/4		1/4		1/4		1/4	
1/2	241	1/2	1,399	1/2	2,556	1/2	3,714	1/2	4,870	1/2		1/2		1/2		1/2		1/2	
3/4	265	3/4	1,423	3/4	2,580	3/4	3,738	3/4	4,894	3/4		3/4		3/4		3/4		3/4	
2	290	2	1,447	2	2,604	2	3,762	2	4,918	2		2		2		2		2	
1/4	314	1/4	1,472	1/4	2,628	1/4	3,786	1/4	4,941	1/4		1/4		1/4		1/4		1/4	
1/2	338	1/2	1,496	1/2	2,653	1/2	3,811	1/2	4,965	1/2		1/2		1/2		1/2		1/2	
3/4	362	3/4	1,520	3/4	2,677	3/4	3,835	3/4	4,989	3/4		3/4		3/4		3/4		3/4	
3	386	3	1,544	3	2,701	3	3,859	3	5,012	3		3		3		3		3	
1/4	410	1/4	1,568	1/4	2,725	1/4	3,883	1/4	5,036	1/4		1/4		1/4		1/4		1/4	
1/2	434	1/2	1,592	1/2	2,749	1/2	3,907	1/2	5,060	1/2		1/2		1/2		1/2		1/2	
3/4	458	3/4	1,616	3/4	2,773	3/4	3,931	3/4	5,083	3/4		3/4		3/4		3/4		3/4	
4	483	4	1,640	4	2,797	4	3,955	4	5,107	4		4		4		4		4	
1/4	507	1/4	1,665	1/4	2,821	1/4	3,979	1/4	5,119	1/4		1/4		1/4		1/4		1/4	
1/2	531	1/2	1,689	1/2	2,845	1/2	4,004	1/2	5,130	1/2		1/2		1/2		1/2		1/2	
3/4	555	3/4	1,713	3/4	2,870	3/4	4,028	3/4	5,142	3/4		3/4		3/4		3/4		3/4	
5	579	5	1,737	5	2,894	5	4,052	5	5,154	5		5		5		5		5	
1/4	603	1/4	1,761	1/4	2,918	1/4	4,076	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	627	1/2	1,785	1/2	2,942	1/2	4,100	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	651	3/4	1,809	3/4	2,966	3/4	4,124	3/4		3/4		3/4		3/4		3/4		3/4	
6	676	6	1,833	6	2,990	6	4,148	6		6		6		6		6		6	
1/4	700	1/4	1,858	1/4	3,014	1/4	4,173	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	724	1/2	1,882	1/2	3,039	1/2	4,197	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	748	3/4	1,906	3/4	3,063	3/4	4,221	3/4		3/4		3/4		3/4		3/4		3/4	
7	772	7	1,930	7	3,087	7	4,245	7		7		7		7		7		7	
1/4	796	1/4	1,954	1/4	3,111	1/4	4,269	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	820	1/2	1,978	1/2	3,135	1/2	4,293	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	844	3/4	2,002	3/4	3,159	3/4	4,317	3/4		3/4		3/4		3/4		3/4		3/4	
8	869	8	2,026	8	3,183	8	4,341	8		8		8		8		8		8	
1/4	893	1/4	2,051	1/4	3,207	1/4	4,366	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	917	1/2	2,075	1/2	3,232	1/2	4,390	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	941	3/4	2,099	3/4	3,256	3/4	4,414	3/4		3/4		3/4		3/4		3/4		3/4	
9	965	9	2,123	9	3,280	9	4,438	9		9		9		9		9		9	
1/4	989	1/4	2,147	1/4	3,304	1/4	4,462	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,013	1/2	2,171	1/2	3,328	1/2	4,486	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,038	3/4	2,195	3/4	3,352	3/4	4,510	3/4		3/4		3/4		3/4		3/4		3/4	
10	1,062	10	2,219	10	3,376	10	4,534	10		10		10		10		10		10	
1/4	1,086	1/4	2,244	1/4	3,400	1/4	4,559	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,110	1/2	2,268	1/2	3,425	1/2	4,583	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,134	3/4	2,292	3/4	3,449	3/4	4,607	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,158	11	2,316	11	3,473	11	4,631	11		11		11		11		11		11	
1/4	1,182	1/4	2,340	1/4	3,497	1/4	4,655	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,206	1/2	2,364	1/2	3,521	1/2	4,679	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,230	3/4	2,388	3/4	3,545	3/4	4,703	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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