



BARGE "HFL 412"

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	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
1 STBD	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
2 PORT	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
2 STBD	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
3 PORT	- 00-3/8	00-3/8	- 00-5/8	00-5/8	- 01-0/8	01-0/8	- 01-1/4	01-1/4	- 01-5/8	01-5/8	- 01-7/8	01-7/8
3 STBD	- 00-3/8	00-3/8	- 00-5/8	00-5/8	- 01-0/8	01-0/8	- 01-1/4	01-1/4	- 01-5/8	01-5/8	- 01-7/8	01-7/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 1'-00"
 AFT DRAFT = 5'-00"
 DIFF. = 4'-00" (DOWN BY STERN)

THE CORRECTION FOR 4'-00" TRIM DOWN BY STERN FOR 3 PORT IS 00-5/8"
 FOR A MEASURED INNAGE GAUGE OF 4'-00" ON 3 PORT, THE TRIM CORRECTED INNAGE IS 4'-00 5/8"

LENGTH BETWEEN DRAFT MARKS: 242'-09"

June 13, 2019

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

<http://www.pmacorp.net>



BARGE "HFL 412"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07"

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	41	0	10,977	0	23,838	0	38,068	0	52,908	0	67,771	0	82,634	0	97,497	0	112,360	0	127,223
1/4	174	1/4	11,232	1/4	24,122	1/4	38,375	1/4	53,218	1/4	68,081	1/4	82,944	1/4	97,807	1/4	112,670	1/4	127,533
1/2	308	1/2	11,486	1/2	24,407	1/2	38,682	1/2	53,527	1/2	68,390	1/2	83,253	1/2	98,116	1/2	112,979	1/2	127,842
3/4	441	3/4	11,740	3/4	24,691	3/4	38,989	3/4	53,837	3/4	68,700	3/4	83,563	3/4	98,426	3/4	113,289	3/4	128,152
1	574	1	11,994	1	24,976	1	39,297	1	54,147	1	69,010	1	83,873	1	98,736	1	113,599	1	128,462
1/4	779	1/4	12,251	1/4	25,263	1/4	39,604	1/4	54,456	1/4	69,319	1/4	84,182	1/4	99,045	1/4	113,908	1/4	128,771
1/2	983	1/2	12,508	1/2	25,550	1/2	39,911	1/2	54,766	1/2	69,629	1/2	84,492	1/2	99,355	1/2	114,218	1/2	129,081
3/4	1,187	3/4	12,764	3/4	25,837	3/4	40,219	3/4	55,076	3/4	69,939	3/4	84,802	3/4	99,665	3/4	114,528	3/4	129,391
2	1,392	2	13,021	2	26,124	2	40,526	2	55,385	2	70,248	2	85,111	2	99,974	2	114,837	2	129,700
1/4	1,618	1/4	13,280	1/4	26,413	1/4	40,835	1/4	55,695	1/4	70,558	1/4	85,421	1/4	100,284	1/4	115,147	1/4	130,010
1/2	1,844	1/2	13,539	1/2	26,702	1/2	41,143	1/2	56,004	1/2	70,867	1/2	85,730	1/2	100,593	1/2	115,457	1/2	130,320
3/4	2,070	3/4	13,799	3/4	26,990	3/4	41,452	3/4	56,314	3/4	71,177	3/4	86,040	3/4	100,903	3/4	115,766	3/4	130,629
3	2,296	3	14,058	3	27,279	3	41,761	3	56,624	3	71,487	3	86,350	3	101,213	3	116,076	3	130,939
1/4	2,525	1/4	14,320	1/4	27,570	1/4	42,070	1/4	56,933	1/4	71,796	1/4	86,659	1/4	101,522	1/4	116,385	1/4	131,248
1/2	2,755	1/2	14,581	1/2	27,860	1/2	42,380	1/2	57,243	1/2	72,106	1/2	86,969	1/2	101,832	1/2	116,695	1/2	131,558
3/4	2,985	3/4	14,843	3/4	28,151	3/4	42,690	3/4	57,553	3/4	72,416	3/4	87,279	3/4	102,142	3/4	117,005	3/4	131,868
4	3,215	4	15,105	4	28,441	4	42,999	4	57,862	4	72,725	4	87,588	4	102,451	4	117,314	4	132,177
1/4	3,448	1/4	15,369	1/4	28,734	1/4	43,309	1/4	58,172	1/4	73,035	1/4	87,898	1/4	102,761	1/4	117,624	1/4	132,487
1/2	3,681	1/2	15,633	1/2	29,027	1/2	43,619	1/2	58,482	1/2	73,345	1/2	88,208	1/2	103,071	1/2	117,934	1/2	132,797
3/4	3,914	3/4	15,897	3/4	29,319	3/4	43,928	3/4	58,791	3/4	73,654	3/4	88,517	3/4	103,380	3/4	118,243	3/4	133,106
5	4,147	5	16,161	5	29,612	5	44,238	5	59,101	5	73,964	5	88,827	5	103,690	5	118,553	5	133,416
1/4	4,383	1/4	16,428	1/4	29,907	1/4	44,548	1/4	59,411	1/4	74,274	1/4	89,137	1/4	104,000	1/4	118,863	1/4	133,726
1/2	4,619	1/2	16,695	1/2	30,202	1/2	44,857	1/2	59,720	1/2	74,583	1/2	89,446	1/2	104,309	1/2	119,172	1/2	134,035
3/4	4,855	3/4	16,961	3/4	30,497	3/4	45,167	3/4	60,030	3/4	74,893	3/4	89,756	3/4	104,619	3/4	119,482	3/4	134,345
6	5,091	6	17,228	6	30,792	6	45,477	6	60,340	6	75,203	6	90,066	6	104,929	6	119,792	6	134,655
1/4	5,330	1/4	17,497	1/4	31,089	1/4	45,786	1/4	60,649	1/4	75,512	1/4	90,375	1/4	105,238	1/4	120,101	1/4	134,964
1/2	5,569	1/2	17,766	1/2	31,387	1/2	46,096	1/2	60,959	1/2	75,822	1/2	90,685	1/2	105,548	1/2	120,411	1/2	135,274
3/4	5,807	3/4	18,035	3/4	31,684	3/4	46,405	3/4	61,268	3/4	76,131	3/4	90,994	3/4	105,857	3/4	120,720	3/4	135,583
7	6,046	7	18,304	7	31,981	7	46,715	7	61,578	7	76,441	7	91,304	7	106,167	7	121,030	7	135,893
1/4	6,288	1/4	18,576	1/4	32,281	1/4	47,025	1/4	61,888	1/4	76,751	1/4	91,614	1/4	106,477	1/4	121,340	1/4	136,203
1/2	6,529	1/2	18,847	1/2	32,581	1/2	47,334	1/2	62,197	1/2	77,060	1/2	91,923	1/2	106,786	1/2	121,649	1/2	136,512
3/4	6,771	3/4	19,119	3/4	32,881	3/4	47,644	3/4	62,507	3/4	77,370	3/4	92,233	3/4	107,096	3/4	121,959	3/4	136,822
8	7,012	8	19,390	8	33,181	8	47,954	8	62,817	8	77,680	8	92,543	8	107,406	8	122,269	8	137,132
1/4	7,256	1/4	19,665	1/4	33,484	1/4	48,263	1/4	63,126	1/4	77,989	1/4	92,852	1/4	107,715	1/4	122,578	1/4	137,441
1/2	7,500	1/2	19,939	1/2	33,786	1/2	48,573	1/2	63,436	1/2	78,299	1/2	93,162	1/2	108,025	1/2	122,888	1/2	137,751
3/4	7,744	3/4	20,213	3/4	34,089	3/4	48,883	3/4	63,746	3/4	78,609	3/4	93,472	3/4	108,335	3/4	123,198	3/4	138,061
9	7,988	9	20,487	9	34,391	9	49,192	9	64,055	9	78,918	9	93,781	9	108,644	9	123,507	9	138,370
1/4	8,235	1/4	20,764	1/4	34,696	1/4	49,502	1/4	64,365	1/4	79,228	1/4	94,091	1/4	108,954	1/4	123,817	1/4	138,680
1/2	8,481	1/2	21,040	1/2	35,001	1/2	49,812	1/2	64,675	1/2	79,538	1/2	94,401	1/2	109,264	1/2	124,127	1/2	138,990
3/4	8,728	3/4	21,317	3/4	35,306	3/4	50,121	3/4	64,984	3/4	79,847	3/4	94,710	3/4	109,573	3/4	124,436	3/4	139,299
10	8,975	10	21,594	10	35,612	10	50,431	10	65,294	10	80,157	10	95,020	10	109,883	10	124,746	10	139,609
1/4	9,224	1/4	21,873	1/4	35,918	1/4	50,741	1/4	65,604	1/4	80,467	1/4	95,330	1/4	110,193	1/4	125,056	1/4	139,919
1/2	9,473	1/2	22,152	1/2	36,225	1/2	51,050	1/2	65,913	1/2	80,776	1/2	95,639	1/2	110,502	1/2	125,365	1/2	140,228
3/4	9,722	3/4	22,432	3/4	36,532	3/4	51,360	3/4	66,223	3/4	81,086	3/4	95,949	3/4	110,812	3/4	125,675	3/4	140,538
11	9,971	11	22,711	11	36,839	11	51,669	11	66,532	11	81,395	11	96,258	11	111,121	11	125,984	11	140,847
1/4	10,223	1/4	22,993	1/4	37,146	1/4	51,979	1/4	66,842	1/4	81,705	1/4	96,568	1/4	111,431	1/4	126,294	1/4	141,157
1/2	10,474	1/2	23,274	1/2	37,453	1/2	52,289	1/2	67,152	1/2	82,015	1/2	96,878	1/2	111,741	1/2	126,604	1/2	141,467
3/4	10,726	3/4	23,556	3/4	37,760	3/4	52,598	3/4	67,461	3/4	82,324	3/4	97,187	3/4	112,050	3/4	126,913	3/4	141,776

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 LIP OF 2" DIAMETER "HERMETIC" VALVE
 GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 42'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
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BARGE "HFL 412"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07"

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	142,086	0	156,949	0	171,812	0	186,675	0	201,529	0		0		0		0		0	
1/4	142,396	1/4	157,259	1/4	172,122	1/4	186,985	1/4	201,836	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	142,705	1/2	157,568	1/2	172,431	1/2	187,294	1/2	202,144	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	143,015	3/4	157,878	3/4	172,741	3/4	187,604	3/4	202,451	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	143,325	1	158,188	1	173,051	1	187,914	1	202,758	1	1	1	1	1	1	1	1	1	1
1/4	143,634	1/4	158,497	1/4	173,360	1/4	188,223	1/4	203,060	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	143,944	1/2	158,807	1/2	173,670	1/2	188,533	1/2	203,363	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	144,254	3/4	159,117	3/4	173,980	3/4	188,843	3/4	203,665	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	144,563	2	159,426	2	174,289	2	189,152	2	203,967	2	2	2	2	2	2	2	2	2	2
1/4	144,873	1/4	159,736	1/4	174,599	1/4	189,462	1/4	204,234	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	145,183	1/2	160,046	1/2	174,909	1/2	189,772	1/2	204,501	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	145,492	3/4	160,355	3/4	175,218	3/4	190,081	3/4	204,768	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	145,802	3	160,665	3	175,528	3	190,391	3	205,035	3	3	3	3	3	3	3	3	3	3
1/4	146,111	1/4	160,974	1/4	175,837	1/4	190,700	1/4	205,244	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	146,421	1/2	161,284	1/2	176,147	1/2	191,010	1/2	205,453	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	146,731	3/4	161,594	3/4	176,457	3/4	191,320	3/4	205,662	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	147,040	4	161,903	4	176,766	4	191,629	4	205,871	4	4	4	4	4	4	4	4	4	4
1/4	147,350	1/4	162,213	1/4	177,076	1/4	191,939	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	147,660	1/2	162,523	1/2	177,386	1/2	192,249	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	147,969	3/4	162,832	3/4	177,695	3/4	192,558	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	148,279	5	163,142	5	178,005	5	192,868	5		5	5	5	5	5	5	5	5	5	5
1/4	148,589	1/4	163,452	1/4	178,315	1/4	193,178	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	148,898	1/2	163,761	1/2	178,624	1/2	193,487	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	149,208	3/4	164,071	3/4	178,934	3/4	193,797	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	149,518	6	164,381	6	179,244	6	194,107	6		6	6	6	6	6	6	6	6	6	6
1/4	149,827	1/4	164,690	1/4	179,553	1/4	194,416	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,137	1/2	165,000	1/2	179,863	1/2	194,726	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,446	3/4	165,309	3/4	180,172	3/4	195,035	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	150,756	7	165,619	7	180,482	7	195,345	7		7	7	7	7	7	7	7	7	7	7
1/4	151,066	1/4	165,929	1/4	180,792	1/4	195,655	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,375	1/2	166,238	1/2	181,101	1/2	195,964	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,685	3/4	166,548	3/4	181,411	3/4	196,274	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	151,995	8	166,858	8	181,721	8	196,584	8		8	8	8	8	8	8	8	8	8	8
1/4	152,304	1/4	167,167	1/4	182,030	1/4	196,893	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,614	1/2	167,477	1/2	182,340	1/2	197,203	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,924	3/4	167,787	3/4	182,650	3/4	197,513	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	153,233	9	168,096	9	182,959	9	197,822	9		9	9	9	9	9	9	9	9	9	9
1/4	153,543	1/4	168,406	1/4	183,269	1/4	198,132	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,853	1/2	168,716	1/2	183,579	1/2	198,441	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,162	3/4	169,025	3/4	183,888	3/4	198,750	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	154,472	10	169,335	10	184,198	10	199,060	10		10	10	10	10	10	10	10	10	10	10
1/4	154,782	1/4	169,645	1/4	184,508	1/4	199,369	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,091	1/2	169,954	1/2	184,817	1/2	199,678	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,401	3/4	170,264	3/4	185,127	3/4	199,987	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	155,710	11	170,573	11	185,436	11	200,296	11		11	11	11	11	11	11	11	11	11	11
1/4	156,020	1/4	170,883	1/4	185,746	1/4	200,604	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,330	1/2	171,193	1/2	186,056	1/2	200,912	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,639	3/4	171,502	3/4	186,365	3/4	201,221	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: 06/13/2019 SW
CALCULATED: 06/13/2019 CL
PRINTED: 06/13/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>



BARGE "HFL 412"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	142,265	0	157,137	0	172,008	0	186,880	0	201,742	0		0		0		0		0	
1/4	142,575	1/4	157,447	1/4	172,318	1/4	187,190	1/4	202,050	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	142,885	1/2	157,757	1/2	172,628	1/2	187,499	1/2	202,357	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	143,195	3/4	158,066	3/4	172,938	3/4	187,809	3/4	202,665	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	143,505	1	158,376	1	173,248	1	188,119	1	202,972	1	1	1	1	1	1	1	1	1	1
1/4	143,815	1/4	158,686	1/4	173,557	1/4	188,429	1/4	203,274	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	144,124	1/2	158,996	1/2	173,867	1/2	188,739	1/2	203,577	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	144,434	3/4	159,306	3/4	174,177	3/4	189,049	3/4	203,879	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	144,744	2	159,615	2	174,487	2	189,358	2	204,182	2	2	2	2	2	2	2	2	2	2
1/4	145,054	1/4	159,925	1/4	174,797	1/4	189,668	1/4	204,449	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	145,364	1/2	160,235	1/2	175,107	1/2	189,978	1/2	204,716	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	145,674	3/4	160,545	3/4	175,416	3/4	190,288	3/4	204,983	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	145,983	3	160,855	3	175,726	3	190,598	3	205,251	3	3	3	3	3	3	3	3	3	3
1/4	146,293	1/4	161,165	1/4	176,036	1/4	190,907	1/4	205,460	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	146,603	1/2	161,474	1/2	176,346	1/2	191,217	1/2	205,669	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	146,913	3/4	161,784	3/4	176,656	3/4	191,527	3/4	205,878	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	147,223	4	162,094	4	176,966	4	191,837	4	206,087	4	4	4	4	4	4	4	4	4	4
1/4	147,532	1/4	162,404	1/4	177,275	1/4	192,147	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	147,842	1/2	162,714	1/2	177,585	1/2	192,457	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	148,152	3/4	163,024	3/4	177,895	3/4	192,766	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	148,462	5	163,333	5	178,205	5	193,076	5	5	5	5	5	5	5	5	5	5	5	5
1/4	148,772	1/4	163,643	1/4	178,515	1/4	193,386	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,082	1/2	163,953	1/2	178,824	1/2	193,696	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	149,391	3/4	164,263	3/4	179,134	3/4	194,006	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	149,701	6	164,573	6	179,444	6	194,316	6	6	6	6	6	6	6	6	6	6	6	6
1/4	150,011	1/4	164,882	1/4	179,754	1/4	194,625	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,321	1/2	165,192	1/2	180,064	1/2	194,935	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	150,631	3/4	165,502	3/4	180,374	3/4	195,245	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	150,940	7	165,812	7	180,683	7	195,555	7	7	7	7	7	7	7	7	7	7	7	7
1/4	151,250	1/4	166,122	1/4	180,993	1/4	195,865	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,560	1/2	166,432	1/2	181,303	1/2	196,174	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	151,870	3/4	166,741	3/4	181,613	3/4	196,484	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	152,180	8	167,051	8	181,923	8	196,794	8	8	8	8	8	8	8	8	8	8	8	8
1/4	152,490	1/4	167,361	1/4	182,232	1/4	197,104	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,799	1/2	167,671	1/2	182,542	1/2	197,414	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	153,109	3/4	167,981	3/4	182,852	3/4	197,723	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	153,419	9	168,290	9	183,162	9	198,033	9	9	9	9	9	9	9	9	9	9	9	9
1/4	153,729	1/4	168,600	1/4	183,472	1/4	198,343	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,039	1/2	168,910	1/2	183,782	1/2	198,652	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	154,349	3/4	169,220	3/4	184,091	3/4	198,962	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	154,658	10	169,530	10	184,401	10	199,271	10	10	10	10	10	10	10	10	10	10	10	10
1/4	154,968	1/4	169,840	1/4	184,711	1/4	199,581	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,278	1/2	170,149	1/2	185,021	1/2	199,890	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	155,588	3/4	170,459	3/4	185,331	3/4	200,199	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	155,898	11	170,769	11	185,641	11	200,508	11	11	11	11	11	11	11	11	11	11	11	11
1/4	156,207	1/4	171,079	1/4	185,950	1/4	200,817	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,517	1/2	171,389	1/2	186,260	1/2	201,125	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	156,827	3/4	171,699	3/4	186,570	3/4	201,434	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.

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ALL PRIOR TO 06/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 412"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	147,323	0	162,112	0	176,901	0	191,690	0	206,479	0		0		0		0		0	
1/4	147,631	1/4	162,420	1/4	177,209	1/4	191,998	1/4	206,776	1/4		1/4		1/4		1/4		1/4	
1/2	147,939	1/2	162,728	1/2	177,517	1/2	192,306	1/2	207,081	1/2		1/2		1/2		1/2		1/2	
3/4	148,247	3/4	163,036	3/4	177,825	3/4	192,614	3/4	207,387	3/4		3/4		3/4		3/4		3/4	
1	148,556	1	163,344	1	178,133	1	192,922	1	207,693	1		1		1		1		1	
1/4	148,864	1/4	163,653	1/4	178,442	1/4	193,230	1/4	207,994	1/4		1/4		1/4		1/4		1/4	
1/2	149,172	1/2	163,961	1/2	178,750	1/2	193,539	1/2	208,294	1/2		1/2		1/2		1/2		1/2	
3/4	149,480	3/4	164,269	3/4	179,058	3/4	193,847	3/4	208,595	3/4		3/4		3/4		3/4		3/4	
2	149,788	2	164,577	2	179,366	2	194,155	2	208,896	2		2		2		2		2	
1/4	150,096	1/4	164,885	1/4	179,674	1/4	194,463	1/4	209,161	1/4		1/4		1/4		1/4		1/4	
1/2	150,404	1/2	165,193	1/2	179,982	1/2	194,771	1/2	209,427	1/2		1/2		1/2		1/2		1/2	
3/4	150,712	3/4	165,501	3/4	180,290	3/4	195,079	3/4	209,693	3/4		3/4		3/4		3/4		3/4	
3	151,020	3	165,809	3	180,598	3	195,387	3	209,959	3		3		3		3		3	
1/4	151,328	1/4	166,117	1/4	180,906	1/4	195,695	1/4	210,167	1/4		1/4		1/4		1/4		1/4	
1/2	151,637	1/2	166,425	1/2	181,214	1/2	196,003	1/2	210,375	1/2		1/2		1/2		1/2		1/2	
3/4	151,945	3/4	166,734	3/4	181,523	3/4	196,311	3/4	210,583	3/4		3/4		3/4		3/4		3/4	
4	152,253	4	167,042	4	181,831	4	196,620	4	210,791	4		4		4		4		4	
1/4	152,561	1/4	167,350	1/4	182,139	1/4	196,928	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	152,869	1/2	167,658	1/2	182,447	1/2	197,236	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	153,177	3/4	167,966	3/4	182,755	3/4	197,544	3/4		3/4		3/4		3/4		3/4		3/4	
5	153,485	5	168,274	5	183,063	5	197,852	5		5		5		5		5		5	
1/4	153,793	1/4	168,582	1/4	183,371	1/4	198,160	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	154,101	1/2	168,890	1/2	183,679	1/2	198,468	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	154,409	3/4	169,198	3/4	183,987	3/4	198,776	3/4		3/4		3/4		3/4		3/4		3/4	
6	154,718	6	169,507	6	184,295	6	199,084	6		6		6		6		6		6	
1/4	155,026	1/4	169,815	1/4	184,604	1/4	199,392	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	155,334	1/2	170,123	1/2	184,912	1/2	199,701	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,642	3/4	170,431	3/4	185,220	3/4	200,009	3/4		3/4		3/4		3/4		3/4		3/4	
7	155,950	7	170,739	7	185,528	7	200,317	7		7		7		7		7		7	
1/4	156,258	1/4	171,047	1/4	185,836	1/4	200,625	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,566	1/2	171,355	1/2	186,144	1/2	200,933	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,874	3/4	171,663	3/4	186,452	3/4	201,241	3/4		3/4		3/4		3/4		3/4		3/4	
8	157,182	8	171,971	8	186,760	8	201,549	8		8		8		8		8		8	
1/4	157,491	1/4	172,279	1/4	187,068	1/4	201,857	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	157,799	1/2	172,588	1/2	187,376	1/2	202,165	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	158,107	3/4	172,896	3/4	187,685	3/4	202,473	3/4		3/4		3/4		3/4		3/4		3/4	
9	158,415	9	173,204	9	187,993	9	202,781	9		9		9		9		9		9	
1/4	158,723	1/4	173,512	1/4	188,301	1/4	203,089	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	159,031	1/2	173,820	1/2	188,609	1/2	203,397	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	159,339	3/4	174,128	3/4	188,917	3/4	203,705	3/4		3/4		3/4		3/4		3/4		3/4	
10	159,647	10	174,436	10	189,225	10	204,013	10		10		10		10		10		10	
1/4	159,955	1/4	174,744	1/4	189,533	1/4	204,320	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	160,263	1/2	175,052	1/2	189,841	1/2	204,628	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	160,572	3/4	175,360	3/4	190,149	3/4	204,935	3/4		3/4		3/4		3/4		3/4		3/4	
11	160,880	11	175,669	11	190,458	11	205,243	11		11		11		11		11		11	
1/4	161,188	1/4	175,977	1/4	190,766	1/4	205,549	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	161,496	1/2	176,285	1/2	191,074	1/2	205,856	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	161,804	3/4	176,593	3/4	191,382	3/4	206,163	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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ALL PRIOR TO 06/2019

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BARGE "HFL 412"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	148,041	0	162,834	0	177,627	0	192,419	0	207,203	0		0		0		0		0	
1/4	148,350	1/4	163,142	1/4	177,935	1/4	192,727	1/4	207,509	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	148,658	1/2	163,450	1/2	178,243	1/2	193,036	1/2	207,814	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	148,966	3/4	163,759	3/4	178,551	3/4	193,344	3/4	208,120	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	149,274	1	164,067	1	178,859	1	193,652	1	208,426	1	1	1	1	1	1	1	1	1	1
1/4	149,582	1/4	164,375	1/4	179,168	1/4	193,960	1/4	208,727	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,891	1/2	164,683	1/2	179,476	1/2	194,268	1/2	209,028	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,199	3/4	164,991	3/4	179,784	3/4	194,576	3/4	209,328	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	150,507	2	165,299	2	180,092	2	194,885	2	209,629	2		2		2		2		2	
1/4	150,815	1/4	165,608	1/4	180,400	1/4	195,193	1/4	209,895	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,123	1/2	165,916	1/2	180,708	1/2	195,501	1/2	210,161	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,431	3/4	166,224	3/4	181,017	3/4	195,809	3/4	210,427	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	151,740	3	166,532	3	181,325	3	196,117	3	210,693	3		3		3		3		3	
1/4	152,048	1/4	166,840	1/4	181,633	1/4	196,426	1/4	210,901	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,356	1/2	167,149	1/2	181,941	1/2	196,734	1/2	211,109	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	152,664	3/4	167,457	3/4	182,249	3/4	197,042	3/4	211,317	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	152,972	4	167,765	4	182,557	4	197,350	4	211,525	4		4		4		4		4	
1/4	153,280	1/4	168,073	1/4	182,866	1/4	197,658	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	153,589	1/2	168,381	1/2	183,174	1/2	197,966	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,897	3/4	168,689	3/4	183,482	3/4	198,275	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	154,205	5	168,998	5	183,790	5	198,583	5		5		5		5		5		5	
1/4	154,513	1/4	169,306	1/4	184,098	1/4	198,891	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,821	1/2	169,614	1/2	184,407	1/2	199,199	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,130	3/4	169,922	3/4	184,715	3/4	199,507	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	155,438	6	170,230	6	185,023	6	199,815	6		6		6		6		6		6	
1/4	155,746	1/4	170,538	1/4	185,331	1/4	200,124	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,054	1/2	170,847	1/2	185,639	1/2	200,432	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,362	3/4	171,155	3/4	185,947	3/4	200,740	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	156,670	7	171,463	7	186,256	7	201,048	7		7		7		7		7		7	
1/4	156,979	1/4	171,771	1/4	186,564	1/4	201,356	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,287	1/2	172,079	1/2	186,872	1/2	201,665	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	157,595	3/4	172,388	3/4	187,180	3/4	201,973	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	157,903	8	172,696	8	187,488	8	202,281	8		8		8		8		8		8	
1/4	158,211	1/4	173,004	1/4	187,797	1/4	202,589	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	158,520	1/2	173,312	1/2	188,105	1/2	202,897	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,828	3/4	173,620	3/4	188,413	3/4	203,205	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	159,136	9	173,928	9	188,721	9	203,513	9		9		9		9		9		9	
1/4	159,444	1/4	174,237	1/4	189,029	1/4	203,821	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,752	1/2	174,545	1/2	189,337	1/2	204,129	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	160,060	3/4	174,853	3/4	189,646	3/4	204,437	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	160,369	10	175,161	10	189,954	10	204,745	10		10		10		10		10		10	
1/4	160,677	1/4	175,469	1/4	190,262	1/4	205,053	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	160,985	1/2	175,778	1/2	190,570	1/2	205,360	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	161,293	3/4	176,086	3/4	190,878	3/4	205,668	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	161,601	11	176,394	11	191,186	11	205,975	11		11		11		11		11		11	
1/4	161,909	1/4	176,702	1/4	191,495	1/4	206,282	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	162,218	1/2	177,010	1/2	191,803	1/2	206,589	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	162,526	3/4	177,318	3/4	192,111	3/4	206,896	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: 06/13/2019 SW
CALCULATED: 06/13/2019 CL
PRINTED: 06/13/2019 CL

PRECISION MEASUREMENT
& ANALYSIS, INC.

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2019

P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 412"

3 STBD
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07"

Table with 18 columns (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.) and 32 rows of capacity data.

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 LIP OF 2" DIAMETER "HERMETIC" VALVE
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 55'-00" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

Signature of Paul Adams



BARGE "HFL 412"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07"

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	169,290	0	180,588	0	191,886	0	203,183	0	214,471	0		0		0		0		0	
1/4	169,526	1/4	180,823	1/4	192,121	1/4	203,419	1/4	214,703	1/4		1/4		1/4		1/4		1/4	
1/2	169,761	1/2	181,059	1/2	192,356	1/2	203,654	1/2	214,936	1/2		1/2		1/2		1/2		1/2	
3/4	169,996	3/4	181,294	3/4	192,592	3/4	203,890	3/4	215,169	3/4		3/4		3/4		3/4		3/4	
1	170,232	1	181,529	1	192,827	1	204,125	1	215,401	1		1		1		1		1	
1/4	170,467	1/4	181,765	1/4	193,063	1/4	204,360	1/4	215,628	1/4		1/4		1/4		1/4		1/4	
1/2	170,703	1/2	182,000	1/2	193,298	1/2	204,596	1/2	215,855	1/2		1/2		1/2		1/2		1/2	
3/4	170,938	3/4	182,236	3/4	193,533	3/4	204,831	3/4	216,082	3/4		3/4		3/4		3/4		3/4	
2	171,173	2	182,471	2	193,769	2	205,066	2	216,309	2		2		2		2		2	
1/4	171,409	1/4	182,706	1/4	194,004	1/4	205,302	1/4	216,496	1/4		1/4		1/4		1/4		1/4	
1/2	171,644	1/2	182,942	1/2	194,239	1/2	205,537	1/2	216,682	1/2		1/2		1/2		1/2		1/2	
3/4	171,879	3/4	183,177	3/4	194,475	3/4	205,772	3/4	216,869	3/4		3/4		3/4		3/4		3/4	
3	172,115	3	183,412	3	194,710	3	206,008	3	217,056	3		3		3		3		3	
1/4	172,350	1/4	183,648	1/4	194,946	1/4	206,243	1/4	217,176	1/4		1/4		1/4		1/4		1/4	
1/2	172,585	1/2	183,883	1/2	195,181	1/2	206,479	1/2	217,296	1/2		1/2		1/2		1/2		1/2	
3/4	172,821	3/4	184,119	3/4	195,416	3/4	206,714	3/4	217,417	3/4		3/4		3/4		3/4		3/4	
4	173,056	4	184,354	4	195,652	4	206,949	4	217,537	4		4		4		4		4	
1/4	173,292	1/4	184,589	1/4	195,887	1/4	207,185	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	173,527	1/2	184,825	1/2	196,122	1/2	207,420	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	173,762	3/4	185,060	3/4	196,358	3/4	207,655	3/4		3/4		3/4		3/4		3/4		3/4	
5	173,998	5	185,295	5	196,593	5	207,891	5		5		5		5		5		5	
1/4	174,233	1/4	185,531	1/4	196,828	1/4	208,126	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	174,468	1/2	185,766	1/2	197,064	1/2	208,362	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	174,704	3/4	186,001	3/4	197,299	3/4	208,597	3/4		3/4		3/4		3/4		3/4		3/4	
6	174,939	6	186,237	6	197,535	6	208,832	6		6		6		6		6		6	
1/4	175,175	1/4	186,472	1/4	197,770	1/4	209,068	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	175,410	1/2	186,708	1/2	198,005	1/2	209,303	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	175,645	3/4	186,943	3/4	198,241	3/4	209,538	3/4		3/4		3/4		3/4		3/4		3/4	
7	175,881	7	187,178	7	198,476	7	209,774	7		7		7		7		7		7	
1/4	176,116	1/4	187,414	1/4	198,711	1/4	210,009	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	176,351	1/2	187,649	1/2	198,947	1/2	210,244	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	176,587	3/4	187,884	3/4	199,182	3/4	210,480	3/4		3/4		3/4		3/4		3/4		3/4	
8	176,822	8	188,120	8	199,418	8	210,715	8		8		8		8		8		8	
1/4	177,057	1/4	188,355	1/4	199,653	1/4	210,951	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	177,293	1/2	188,591	1/2	199,888	1/2	211,186	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	177,528	3/4	188,826	3/4	200,124	3/4	211,421	3/4		3/4		3/4		3/4		3/4		3/4	
9	177,764	9	189,061	9	200,359	9	211,656	9		9		9		9		9		9	
1/4	177,999	1/4	189,297	1/4	200,594	1/4	211,892	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	178,234	1/2	189,532	1/2	200,830	1/2	212,127	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	178,470	3/4	189,767	3/4	201,065	3/4	212,362	3/4		3/4		3/4		3/4		3/4		3/4	
10	178,705	10	190,003	10	201,300	10	212,597	10		10		10		10		10		10	
1/4	178,940	1/4	190,238	1/4	201,536	1/4	212,831	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	179,176	1/2	190,474	1/2	201,771	1/2	213,066	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	179,411	3/4	190,709	3/4	202,007	3/4	213,301	3/4		3/4		3/4		3/4		3/4		3/4	
11	179,647	11	190,944	11	202,242	11	213,535	11		11		11		11		11		11	
1/4	179,882	1/4	191,180	1/4	202,477	1/4	213,769	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	180,117	1/2	191,415	1/2	202,713	1/2	214,003	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	180,353	3/4	191,650	3/4	202,948	3/4	214,237	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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ALL PRIOR TO 06/2019

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BARGE "HFL 412"

PORT SLOP INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 5'-11"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4	24	1/4	1,152	1/4	2,280	1/4	3,408	1/4	4,536	1/4		1/4		1/4		1/4		1/4	
1/2	47	1/2	1,176	1/2	2,304	1/2	3,432	1/2	4,560	1/2		1/2		1/2		1/2		1/2	
3/4	71	3/4	1,199	3/4	2,327	3/4	3,455	3/4	4,583	3/4		3/4		3/4		3/4		3/4	
1	94	1	1,223	1	2,351	1	3,479	1	4,607	1		1		1		1		1	
1/4	118	1/4	1,246	1/4	2,374	1/4	3,502	1/4	4,630	1/4		1/4		1/4		1/4		1/4	
1/2	141	1/2	1,270	1/2	2,398	1/2	3,526	1/2	4,654	1/2		1/2		1/2		1/2		1/2	
3/4	165	3/4	1,293	3/4	2,421	3/4	3,549	3/4	4,677	3/4		3/4		3/4		3/4		3/4	
2	189	2	1,317	2	2,445	2	3,573	2	4,701	2		2		2		2		2	
1/4	212	1/4	1,340	1/4	2,468	1/4	3,596	1/4	4,724	1/4		1/4		1/4		1/4		1/4	
1/2	236	1/2	1,364	1/2	2,492	1/2	3,620	1/2	4,748	1/2		1/2		1/2		1/2		1/2	
3/4	259	3/4	1,387	3/4	2,515	3/4	3,643	3/4	4,771	3/4		3/4		3/4		3/4		3/4	
3	283	3	1,411	3	2,539	3	3,667	3	4,795	3		3		3		3		3	
1/4	306	1/4	1,434	1/4	2,562	1/4	3,690	1/4	4,818	1/4		1/4		1/4		1/4		1/4	
1/2	330	1/2	1,458	1/2	2,586	1/2	3,714	1/2	4,842	1/2		1/2		1/2		1/2		1/2	
3/4	353	3/4	1,481	3/4	2,609	3/4	3,737	3/4	4,865	3/4		3/4		3/4		3/4		3/4	
4	377	4	1,505	4	2,633	4	3,761	4	4,889	4		4		4		4		4	
1/4	400	1/4	1,528	1/4	2,656	1/4	3,784	1/4	4,912	1/4		1/4		1/4		1/4		1/4	
1/2	424	1/2	1,552	1/2	2,680	1/2	3,808	1/2	4,936	1/2		1/2		1/2		1/2		1/2	
3/4	447	3/4	1,575	3/4	2,703	3/4	3,831	3/4	4,959	3/4		3/4		3/4		3/4		3/4	
5	471	5	1,599	5	2,727	5	3,855	5	4,983	5		5		5		5		5	
1/4	494	1/4	1,622	1/4	2,750	1/4	3,878	1/4	5,007	1/4		1/4		1/4		1/4		1/4	
1/2	518	1/2	1,646	1/2	2,774	1/2	3,902	1/2	5,030	1/2		1/2		1/2		1/2		1/2	
3/4	541	3/4	1,669	3/4	2,797	3/4	3,925	3/4	5,054	3/4		3/4		3/4		3/4		3/4	
6	565	6	1,693	6	2,821	6	3,949	6	5,077	6		6		6		6		6	
1/4	588	1/4	1,716	1/4	2,844	1/4	3,972	1/4	5,101	1/4		1/4		1/4		1/4		1/4	
1/2	612	1/2	1,740	1/2	2,868	1/2	3,996	1/2	5,124	1/2		1/2		1/2		1/2		1/2	
3/4	635	3/4	1,763	3/4	2,891	3/4	4,019	3/4	5,148	3/4		3/4		3/4		3/4		3/4	
7	659	7	1,787	7	2,915	7	4,043	7	5,172	7		7		7		7		7	
1/4	682	1/4	1,810	1/4	2,938	1/4	4,066	1/4	5,195	1/4		1/4		1/4		1/4		1/4	
1/2	706	1/2	1,834	1/2	2,962	1/2	4,090	1/2	5,219	1/2		1/2		1/2		1/2		1/2	
3/4	729	3/4	1,857	3/4	2,985	3/4	4,113	3/4		3/4		3/4		3/4		3/4		3/4	
8	753	8	1,881	8	3,009	8	4,137	8		8		8		8		8		8	
1/4	776	1/4	1,904	1/4	3,032	1/4	4,160	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	800	1/2	1,928	1/2	3,056	1/2	4,184	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	823	3/4	1,951	3/4	3,079	3/4	4,207	3/4		3/4		3/4		3/4		3/4		3/4	
9	847	9	1,975	9	3,103	9	4,231	9		9		9		9		9		9	
1/4	870	1/4	1,998	1/4	3,126	1/4	4,254	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	894	1/2	2,022	1/2	3,150	1/2	4,278	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	917	3/4	2,045	3/4	3,173	3/4	4,301	3/4		3/4		3/4		3/4		3/4		3/4	
10	941	10	2,069	10	3,197	10	4,325	10		10		10		10		10		10	
1/4	964	1/4	2,092	1/4	3,220	1/4	4,348	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	988	1/2	2,116	1/2	3,244	1/2	4,372	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,011	3/4	2,139	3/4	3,267	3/4	4,395	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,035	11	2,163	11	3,291	11	4,419	11		11		11		11		11		11	
1/4	1,058	1/4	2,186	1/4	3,314	1/4	4,442	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,082	1/2	2,210	1/2	3,338	1/2	4,466	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,105	3/4	2,233	3/4	3,361	3/4	4,489	3/4		3/4		3/4		3/4		3/4		3/4	

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

STRAPPED: 06/13/2019 SW
CALCULATED: 06/13/2019 CL
PRINTED: 06/13/2019 CL

CANCELS AND SUPERCEDES
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PRECISION MEASUREMENT
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P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 412"

STBD SLOP INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 5'-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	0	0	1,132	0	2,264	0	3,396	0	4,527	0		0		0		0		0	
1/4	24	1/4	1,156	1/4	2,287	1/4	3,419	1/4	4,551	1/4		1/4		1/4		1/4		1/4	
1/2	47	1/2	1,179	1/2	2,311	1/2	3,443	1/2	4,574	1/2		1/2		1/2		1/2		1/2	
3/4	71	3/4	1,203	3/4	2,335	3/4	3,466	3/4	4,598	3/4		3/4		3/4		3/4		3/4	
1	95	1	1,227	1	2,358	1	3,490	1	4,622	1		1		1		1		1	
1/4	118	1/4	1,250	1/4	2,382	1/4	3,514	1/4	4,645	1/4		1/4		1/4		1/4		1/4	
1/2	142	1/2	1,274	1/2	2,405	1/2	3,537	1/2	4,669	1/2		1/2		1/2		1/2		1/2	
3/4	166	3/4	1,297	3/4	2,429	3/4	3,561	3/4	4,692	3/4		3/4		3/4		3/4		3/4	
2	189	2	1,321	2	2,453	2	3,584	2	4,716	2		2		2		2		2	
1/4	213	1/4	1,344	1/4	2,476	1/4	3,608	1/4	4,740	1/4		1/4		1/4		1/4		1/4	
1/2	236	1/2	1,368	1/2	2,500	1/2	3,631	1/2	4,763	1/2		1/2		1/2		1/2		1/2	
3/4	260	3/4	1,392	3/4	2,523	3/4	3,655	3/4	4,787	3/4		3/4		3/4		3/4		3/4	
3	283	3	1,415	3	2,547	3	3,679	3	4,810	3		3		3		3		3	
1/4	307	1/4	1,439	1/4	2,570	1/4	3,702	1/4	4,834	1/4		1/4		1/4		1/4		1/4	
1/2	331	1/2	1,462	1/2	2,594	1/2	3,726	1/2	4,857	1/2		1/2		1/2		1/2		1/2	
3/4	354	3/4	1,486	3/4	2,618	3/4	3,749	3/4	4,881	3/4		3/4		3/4		3/4		3/4	
4	378	4	1,509	4	2,641	4	3,773	4	4,905	4		4		4		4		4	
1/4	401	1/4	1,533	1/4	2,665	1/4	3,796	1/4	4,928	1/4		1/4		1/4		1/4		1/4	
1/2	425	1/2	1,557	1/2	2,688	1/2	3,820	1/2	4,952	1/2		1/2		1/2		1/2		1/2	
3/4	449	3/4	1,580	3/4	2,712	3/4	3,844	3/4	4,976	3/4		3/4		3/4		3/4		3/4	
5	472	5	1,604	5	2,735	5	3,867	5	4,999	5		5		5		5		5	
1/4	496	1/4	1,627	1/4	2,759	1/4	3,891	1/4	5,023	1/4		1/4		1/4		1/4		1/4	
1/2	519	1/2	1,651	1/2	2,783	1/2	3,914	1/2	5,046	1/2		1/2		1/2		1/2		1/2	
3/4	543	3/4	1,674	3/4	2,806	3/4	3,938	3/4	5,070	3/4		3/4		3/4		3/4		3/4	
6	566	6	1,698	6	2,830	6	3,961	6	5,094	6		6		6		6		6	
1/4	590	1/4	1,722	1/4	2,853	1/4	3,985	1/4	5,117	1/4		1/4		1/4		1/4		1/4	
1/2	614	1/2	1,745	1/2	2,877	1/2	4,009	1/2	5,141	1/2		1/2		1/2		1/2		1/2	
3/4	637	3/4	1,769	3/4	2,900	3/4	4,032	3/4	5,165	3/4		3/4		3/4		3/4		3/4	
7	661	7	1,792	7	2,924	7	4,056	7	5,188	7		7		7		7		7	
1/4	684	1/4	1,816	1/4	2,948	1/4	4,079	1/4	5,212	1/4		1/4		1/4		1/4		1/4	
1/2	708	1/2	1,840	1/2	2,971	1/2	4,103	1/2	5,236	1/2		1/2		1/2		1/2		1/2	
3/4	731	3/4	1,863	3/4	2,995	3/4	4,127	3/4		3/4		3/4		3/4		3/4		3/4	
8	755	8	1,887	8	3,018	8	4,150	8		8		8		8		8		8	
1/4	779	1/4	1,910	1/4	3,042	1/4	4,174	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	802	1/2	1,934	1/2	3,066	1/2	4,197	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	826	3/4	1,957	3/4	3,089	3/4	4,221	3/4		3/4		3/4		3/4		3/4		3/4	
9	849	9	1,981	9	3,113	9	4,244	9		9		9		9		9		9	
1/4	873	1/4	2,005	1/4	3,136	1/4	4,268	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	896	1/2	2,028	1/2	3,160	1/2	4,292	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	920	3/4	2,052	3/4	3,183	3/4	4,315	3/4		3/4		3/4		3/4		3/4		3/4	
10	944	10	2,075	10	3,207	10	4,339	10		10		10		10		10		10	
1/4	967	1/4	2,099	1/4	3,231	1/4	4,362	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	991	1/2	2,122	1/2	3,254	1/2	4,386	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,014	3/4	2,146	3/4	3,278	3/4	4,409	3/4		3/4		3/4		3/4		3/4		3/4	
11	1,038	11	2,170	11	3,301	11	4,433	11		11		11		11		11		11	
1/4	1,062	1/4	2,193	1/4	3,325	1/4	4,457	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1,085	1/2	2,217	1/2	3,348	1/2	4,480	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	1,109	3/4	2,240	3/4	3,372	3/4	4,504	3/4		3/4		3/4		3/4		3/4		3/4	

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

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PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 412"

FUEL TANK INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-04 3/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	110	0	278	0	444	0		0		0		0		0		0	
1/4	1	1/4	114	1/4	282	1/4	447	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	1	1/2	117	1/2	286	1/2	450	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	2	3/4	120	3/4	289	3/4	453	3/4		3/4		3/4		3/4		3/4		3/4	
1	3	1	123	1	293	1	456	1	1	1	1	1	1	1	1	1	1	1	1
1/4	4	1/4	126	1/4	297	1/4	459	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	5	1/2	130	1/2	300	1/2	462	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	7	3/4	133	3/4	304	3/4	465	3/4		3/4		3/4		3/4		3/4		3/4	
2	8	2	136	2	307	2	467	2	2	2	2	2	2	2	2	2	2	2	2
1/4	10	1/4	140	1/4	311	1/4	470	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	11	1/2	143	1/2	315	1/2	473	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	13	3/4	147	3/4	318	3/4	476	3/4		3/4		3/4		3/4		3/4		3/4	
3	15	3	150	3	322	3	479	3	3	3	3	3	3	3	3	3	3	3	3
1/4	17	1/4	153	1/4	325	1/4	481	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	19	1/2	157	1/2	329	1/2	484	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	21	3/4	160	3/4	333	3/4	487	3/4		3/4		3/4		3/4		3/4		3/4	
4	23	4	164	4	336	4	489	4	4	4	4	4	4	4	4	4	4	4	4
1/4	25	1/4	167	1/4	340	1/4	492	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	27	1/2	171	1/2	343	1/2	494	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	29	3/4	174	3/4	347	3/4	497	3/4		3/4		3/4		3/4		3/4		3/4	
5	31	5	178	5	350	5	499	5	5	5	5	5	5	5	5	5	5	5	5
1/4	34	1/4	181	1/4	354	1/4	501	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	36	1/2	185	1/2	357	1/2	504	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	39	3/4	188	3/4	361	3/4	506	3/4		3/4		3/4		3/4		3/4		3/4	
6	41	6	192	6	364	6	508	6	6	6	6	6	6	6	6	6	6	6	6
1/4	44	1/4	195	1/4	368	1/4	510	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	46	1/2	199	1/2	371	1/2	512	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	49	3/4	202	3/4	375	3/4	515	3/4		3/4		3/4		3/4		3/4		3/4	
7	51	7	206	7	378	7	517	7	7	7	7	7	7	7	7	7	7	7	7
1/4	54	1/4	209	1/4	382	1/4	518	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	57	1/2	213	1/2	385	1/2	520	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	59	3/4	217	3/4	389	3/4	522	3/4		3/4		3/4		3/4		3/4		3/4	
8	62	8	220	8	392	8	524	8	8	8	8	8	8	8	8	8	8	8	8
1/4	65	1/4	224	1/4	395	1/4	526	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	68	1/2	227	1/2	399	1/2	527	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	71	3/4	231	3/4	402	3/4	529	3/4		3/4		3/4		3/4		3/4		3/4	
9	74	9	235	9	405	9	530	9	9	9	9	9	9	9	9	9	9	9	9
1/4	77	1/4	238	1/4	409	1/4	531	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	80	1/2	242	1/2	412	1/2	533	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	83	3/4	246	3/4	415	3/4	534	3/4		3/4		3/4		3/4		3/4		3/4	
10	86	10	249	10	419	10	535	10	10	10	10	10	10	10	10	10	10	10	10
1/4	89	1/4	253	1/4	422	1/4	536	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	92	1/2	257	1/2	425	1/2	536	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	95	3/4	260	3/4	428	3/4	537	3/4		3/4		3/4		3/4		3/4		3/4	
11	98	11	264	11	431	11		11	11	11	11	11	11	11	11	11	11	11	11
1/4	101	1/4	267	1/4	434	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	104	1/2	271	1/2	438	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	107	3/4	275	3/4	441	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

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 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 LIP OPPOSITE HINGE OF 8" HATCH.

STRAPPED: 06/13/2019 SW
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BARGE "HFL 412"

ULLAGE TRIM TABLE

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>	<u>BOW</u>	<u>STERN</u>
1 PORT	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8
1 STBD	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8
2 PORT	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8
2 STBD	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8
3 PORT	00-3/8	- 00-3/8	00-5/8	- 00-5/8	01-0/8	- 01-0/8	01-1/4	- 01-1/4	01-5/8	- 01-5/8	01-7/8	- 01-7/8
3 STBD	00-3/8	- 00-3/8	00-5/8	- 00-5/8	01-0/8	- 01-0/8	01-1/4	- 01-1/4	01-5/8	- 01-5/8	01-7/8	- 01-7/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 1'-00"
 AFT DRAFT = 5'-00"
 DIFF. = 4'-00" (DOWN BY STERN)

THE CORRECTION FOR 4'-00" TRIM DOWN BY STERN FOR 3 PORT IS - 00-5/8"
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 3 PORT, THE TRIM CORRECTED ULLAGE IS 3'-11 3/8"

LENGTH BETWEEN DRAFT MARKS: 242'-09"

June 13, 2019

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

<http://www.pmacorp.net>



BARGE "HFL 412"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07"

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	76,441	0	61,578	0	46,715	0	31,981	0	18,304	0	6,046	0		0		0		0	
1/4	76,131	1/4	61,268	1/4	46,405	1/4	31,684	1/4	18,035	1/4	5,807	1/4		1/4		1/4		1/4	
1/2	75,822	1/2	60,959	1/2	46,096	1/2	31,387	1/2	17,766	1/2	5,569	1/2		1/2		1/2		1/2	
3/4	75,512	3/4	60,649	3/4	45,786	3/4	31,089	3/4	17,497	3/4	5,330	3/4		3/4		3/4		3/4	
1	75,203	1	60,340	1	45,477	1	30,792	1	17,228	1	5,091	1		1		1		1	
1/4	74,893	1/4	60,030	1/4	45,167	1/4	30,497	1/4	16,961	1/4	4,855	1/4		1/4		1/4		1/4	
1/2	74,583	1/2	59,720	1/2	44,857	1/2	30,202	1/2	16,695	1/2	4,619	1/2		1/2		1/2		1/2	
3/4	74,274	3/4	59,411	3/4	44,548	3/4	29,907	3/4	16,428	3/4	4,383	3/4		3/4		3/4		3/4	
2	73,964	2	59,101	2	44,238	2	29,612	2	16,161	2	4,147	2		2		2		2	
1/4	73,654	1/4	58,791	1/4	43,928	1/4	29,319	1/4	15,897	1/4	3,914	1/4		1/4		1/4		1/4	
1/2	73,345	1/2	58,482	1/2	43,619	1/2	29,027	1/2	15,633	1/2	3,681	1/2		1/2		1/2		1/2	
3/4	73,035	3/4	58,172	3/4	43,309	3/4	28,734	3/4	15,369	3/4	3,448	3/4		3/4		3/4		3/4	
3	72,725	3	57,862	3	42,999	3	28,441	3	15,105	3	3,215	3		3		3		3	
1/4	72,416	1/4	57,553	1/4	42,690	1/4	28,151	1/4	14,843	1/4	2,985	1/4		1/4		1/4		1/4	
1/2	72,106	1/2	57,243	1/2	42,380	1/2	27,860	1/2	14,581	1/2	2,755	1/2		1/2		1/2		1/2	
3/4	71,796	3/4	56,933	3/4	42,070	3/4	27,570	3/4	14,320	3/4	2,525	3/4		3/4		3/4		3/4	
4	71,487	4	56,624	4	41,761	4	27,279	4	14,058	4	2,296	4		4		4		4	
1/4	71,177	1/4	56,314	1/4	41,452	1/4	26,990	1/4	13,799	1/4	2,070	1/4		1/4		1/4		1/4	
1/2	70,867	1/2	56,004	1/2	41,143	1/2	26,702	1/2	13,539	1/2	1,844	1/2		1/2		1/2		1/2	
3/4	70,558	3/4	55,695	3/4	40,835	3/4	26,413	3/4	13,280	3/4	1,618	3/4		3/4		3/4		3/4	
5	70,248	5	55,385	5	40,526	5	26,124	5	13,021	5	1,392	5		5		5		5	
1/4	69,939	1/4	55,076	1/4	40,219	1/4	25,837	1/4	12,764	1/4	1,187	1/4		1/4		1/4		1/4	
1/2	69,629	1/2	54,766	1/2	39,911	1/2	25,550	1/2	12,508	1/2	983	1/2		1/2		1/2		1/2	
3/4	69,319	3/4	54,456	3/4	39,604	3/4	25,263	3/4	12,251	3/4	779	3/4		3/4		3/4		3/4	
6	69,010	6	54,147	6	39,297	6	24,976	6	11,994	6	574	6		6		6		6	
1/4	68,700	1/4	53,837	1/4	38,989	1/4	24,691	1/4	11,740	1/4	441	1/4		1/4		1/4		1/4	
1/2	68,390	1/2	53,527	1/2	38,682	1/2	24,407	1/2	11,486	1/2	308	1/2		1/2		1/2		1/2	
3/4	68,081	3/4	53,218	3/4	38,375	3/4	24,122	3/4	11,232	3/4	174	3/4		3/4		3/4		3/4	
7	67,771	7	52,908	7	38,068	7	23,838	7	10,977	7	41	7		7		7		7	
1/4	67,461	1/4	52,598	1/4	37,760	1/4	23,556	1/4	10,726	1/4		1/4		1/4		1/4		1/4	
1/2	67,152	1/2	52,289	1/2	37,453	1/2	23,274	1/2	10,474	1/2		1/2		1/2		1/2		1/2	
3/4	66,842	3/4	51,979	3/4	37,146	3/4	22,993	3/4	10,223	3/4		3/4		3/4		3/4		3/4	
8	66,532	8	51,669	8	36,839	8	22,711	8	9,971	8		8		8		8		8	
1/4	66,223	1/4	51,360	1/4	36,532	1/4	22,432	1/4	9,722	1/4		1/4		1/4		1/4		1/4	
1/2	65,913	1/2	51,050	1/2	36,225	1/2	22,152	1/2	9,473	1/2		1/2		1/2		1/2		1/2	
3/4	65,604	3/4	50,741	3/4	35,918	3/4	21,873	3/4	9,224	3/4		3/4		3/4		3/4		3/4	
9	65,294	9	50,431	9	35,612	9	21,594	9	8,975	9		9		9		9		9	
1/4	64,984	1/4	50,121	1/4	35,306	1/4	21,317	1/4	8,728	1/4		1/4		1/4		1/4		1/4	
1/2	64,675	1/2	49,812	1/2	35,001	1/2	21,040	1/2	8,481	1/2		1/2		1/2		1/2		1/2	
3/4	64,365	3/4	49,502	3/4	34,696	3/4	20,764	3/4	8,235	3/4		3/4		3/4		3/4		3/4	
10	64,055	10	49,192	10	34,391	10	20,487	10	7,988	10		10		10		10		10	
1/4	63,746	1/4	48,883	1/4	34,089	1/4	20,213	1/4	7,744	1/4		1/4		1/4		1/4		1/4	
1/2	63,436	1/2	48,573	1/2	33,786	1/2	19,939	1/2	7,500	1/2		1/2		1/2		1/2		1/2	
3/4	63,126	3/4	48,263	3/4	33,484	3/4	19,665	3/4	7,256	3/4		3/4		3/4		3/4		3/4	
11	62,817	11	47,954	11	33,181	11	19,390	11	7,012	11		11		11		11		11	
1/4	62,507	1/4	47,644	1/4	32,881	1/4	19,119	1/4	6,771	1/4		1/4		1/4		1/4		1/4	
1/2	62,197	1/2	47,334	1/2	32,581	1/2	18,847	1/2	6,529	1/2		1/2		1/2		1/2		1/2	
3/4	61,888	3/4	47,025	3/4	32,281	3/4	18,576	3/4	6,288	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 06/13/2019 SW
CALCULATED: 06/13/2019 CL
PRINTED: 06/13/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>





BARGE "HFL 412"

1 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	76,893	0	62,022	0	47,150	0	32,346	0	18,596	0	6,296	0		0		0		0	
1/4	76,583	1/4	61,712	1/4	46,840	1/4	32,044	1/4	18,324	1/4	6,055	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	76,273	1/2	61,402	1/2	46,531	1/2	31,744	1/2	18,055	1/2	5,816	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	75,964	3/4	61,092	3/4	46,221	3/4	31,445	3/4	17,785	3/4	5,576	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	75,654	1	60,782	1	45,911	1	31,145	1	17,516	1	5,337	1	1	1	1	1	1	1	1
1/4	75,344	1/4	60,473	1/4	45,601	1/4	30,846	1/4	17,247	1/4	5,098	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	75,034	1/2	60,163	1/2	45,291	1/2	30,549	1/2	16,980	1/2	4,862	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	74,724	3/4	59,853	3/4	44,982	3/4	30,252	3/4	16,713	3/4	4,626	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	74,415	2	59,543	2	44,672	2	29,955	2	16,446	2	4,389	2	2	2	2	2	2	2	2
1/4	74,105	1/4	59,233	1/4	44,362	1/4	29,658	1/4	16,180	1/4	4,153	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	73,795	1/2	58,923	1/2	44,052	1/2	29,363	1/2	15,915	1/2	3,920	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	73,485	3/4	58,614	3/4	43,742	3/4	29,069	3/4	15,651	3/4	3,686	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	73,175	3	58,304	3	43,432	3	28,774	3	15,387	3	3,453	3	3	3	3	3	3	3	3
1/4	72,865	1/4	57,994	1/4	43,123	1/4	28,479	1/4	15,122	1/4	3,220	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	72,556	1/2	57,684	1/2	42,813	1/2	28,187	1/2	14,860	1/2	2,990	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	72,246	3/4	57,374	3/4	42,503	3/4	27,895	3/4	14,598	3/4	2,760	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	71,936	4	57,065	4	42,193	4	27,602	4	14,336	4	2,530	4	4	4	4	4	4	4	4
1/4	71,626	1/4	56,755	1/4	41,883	1/4	27,310	1/4	14,074	1/4	2,300	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	71,316	1/2	56,445	1/2	41,574	1/2	27,020	1/2	13,815	1/2	2,073	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	71,007	3/4	56,135	3/4	41,264	3/4	26,730	3/4	13,555	3/4	1,847	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	70,697	5	55,825	5	40,954	5	26,440	5	13,296	5	1,621	5	5	5	5	5	5	5	5
1/4	70,387	1/4	55,515	1/4	40,645	1/4	26,150	1/4	13,036	1/4	1,395	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	70,077	1/2	55,206	1/2	40,336	1/2	25,863	1/2	12,779	1/2	1,190	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	69,767	3/4	54,896	3/4	40,026	3/4	25,576	3/4	12,522	3/4	985	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	69,457	6	54,586	6	39,717	6	25,288	6	12,265	6	781	6	6	6	6	6	6	6	6
1/4	69,148	1/4	54,276	1/4	39,408	1/4	25,001	1/4	12,009	1/4	576	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	68,838	1/2	53,966	1/2	39,098	1/2	24,716	1/2	11,754	1/2	443	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	68,528	3/4	53,657	3/4	38,789	3/4	24,431	3/4	11,500	3/4	309	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	68,218	7	53,347	7	38,480	7	24,147	7	11,245	7	175	7	7	7	7	7	7	7	7
1/4	67,908	1/4	53,037	1/4	38,170	1/4	23,862	1/4	10,991	1/4	42	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	67,598	1/2	52,727	1/2	37,861	1/2	23,580	1/2	10,739	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	67,289	3/4	52,417	3/4	37,552	3/4	23,298	3/4	10,487	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	66,979	8	52,107	8	37,243	8	23,016	8	10,235	8		8	8	8	8	8	8	8	8
1/4	66,669	1/4	51,798	1/4	36,933	1/4	22,734	1/4	9,983	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	66,359	1/2	51,488	1/2	36,624	1/2	22,455	1/2	9,734	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	66,049	3/4	51,178	3/4	36,316	3/4	22,175	3/4	9,485	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	65,740	9	50,868	9	36,007	9	21,896	9	9,235	9		9	9	9	9	9	9	9	9
1/4	65,430	1/4	50,558	1/4	35,698	1/4	21,616	1/4	8,986	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	65,120	1/2	50,248	1/2	35,391	1/2	21,340	1/2	8,739	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	64,810	3/4	49,939	3/4	35,084	3/4	21,063	3/4	8,492	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	64,500	10	49,629	10	34,777	10	20,786	10	8,246	10		10	10	10	10	10	10	10	10
1/4	64,190	1/4	49,319	1/4	34,470	1/4	20,509	1/4	7,999	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	63,881	1/2	49,009	1/2	34,165	1/2	20,234	1/2	7,754	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	63,571	3/4	48,699	3/4	33,861	3/4	19,960	3/4	7,510	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	63,261	11	48,390	11	33,556	11	19,686	11	7,266	11		11	11	11	11	11	11	11	11
1/4	62,951	1/4	48,080	1/4	33,252	1/4	19,411	1/4	7,022	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	62,641	1/2	47,770	1/2	32,950	1/2	19,139	1/2	6,780	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	62,332	3/4	47,460	3/4	32,648	3/4	18,868	3/4	6,538	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: 06/13/2019 SW
CALCULATED: 06/13/2019 CL
PRINTED: 06/13/2019 CL

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

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2019



BARGE "HFL 412"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 3/4"

IN	10 FT.	IN	11 FT.	IN	12 FT.	IN	13 FT.	IN	14 FT.	IN	15 FT.	IN	16 FT.	IN	17 FT.	IN	18 FT.	IN	19 FT.
0	82,930	0	68,141	0	53,352	0	38,563	0	24,283	0	9,698	0		0		0		0	
1/4	82,622	1/4	67,833	1/4	53,044	1/4	38,255	1/4	23,990	1/4	9,390	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	82,313	1/2	67,524	1/2	52,736	1/2	37,947	1/2	23,697	1/2	9,082	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	82,005	3/4	67,216	3/4	52,427	3/4	37,639	3/4	23,404	3/4	8,774	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
1	81,697	1	66,908	1	52,119	1	37,330	1	23,111	1	8,466	1	1	1	1	1	1	1	
1/4	81,389	1/4	66,600	1/4	51,811	1/4	37,022	1/4	22,818	1/4	8,158	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	81,081	1/2	66,292	1/2	51,503	1/2	36,714	1/2	22,525	1/2	7,850	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	80,773	3/4	65,984	3/4	51,195	3/4	36,406	3/4	22,232	3/4	7,542	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
2	80,465	2	65,676	2	50,887	2	36,098	2	21,939	2	7,234	2	2	2	2	2	2	2	
1/4	80,157	1/4	65,368	1/4	50,579	1/4	35,790	1/4	21,646	1/4	6,926	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	79,849	1/2	65,060	1/2	50,271	1/2	35,482	1/2	21,353	1/2	6,619	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	79,541	3/4	64,752	3/4	49,963	3/4	35,174	3/4	21,060	3/4	6,311	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
3	79,232	3	64,443	3	49,655	3	34,871	3	20,761	3	6,004	3	3	3	3	3	3	3	
1/4	78,924	1/4	64,135	1/4	49,346	1/4	34,568	1/4	20,463	1/4	5,696	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	78,616	1/2	63,827	1/2	49,038	1/2	34,265	1/2	20,164	1/2	5,389	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	78,308	3/4	63,519	3/4	48,730	3/4	33,962	3/4	19,865	3/4	5,082	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
4	78,000	4	63,211	4	48,422	4	33,668	4	19,557	4	4,775	4	4	4	4	4	4	4	
1/4	77,692	1/4	62,903	1/4	48,114	1/4	33,374	1/4	19,249	1/4	4,469	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	77,384	1/2	62,595	1/2	47,806	1/2	33,080	1/2	18,941	1/2	4,162	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	77,076	3/4	62,287	3/4	47,498	3/4	32,786	3/4	18,633	3/4	3,856	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
5	76,768	5	61,979	5	47,190	5	32,492	5	18,325	5	3,550	5	5	5	5	5	5	5	
1/4	76,459	1/4	61,671	1/4	46,882	1/4	32,198	1/4	18,017	1/4	3,245	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	76,151	1/2	61,362	1/2	46,574	1/2	31,904	1/2	17,709	1/2	2,940	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	75,843	3/4	61,054	3/4	46,265	3/4	31,611	3/4	17,400	3/4	2,635	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
6	75,535	6	60,746	6	45,957	6	31,317	6	17,092	6	2,348	6	6	6	6	6	6	6	
1/4	75,227	1/4	60,438	1/4	45,649	1/4	31,024	1/4	16,784	1/4	2,062	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	74,919	1/2	60,130	1/2	45,341	1/2	30,731	1/2	16,476	1/2	1,776	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	74,611	3/4	59,822	3/4	45,033	3/4	30,437	3/4	16,168	3/4	1,489	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
7	74,303	7	59,514	7	44,725	7	30,144	7	15,860	7	1,271	7	7	7	7	7	7	7	
1/4	73,995	1/4	59,206	1/4	44,417	1/4	29,851	1/4	15,552	1/4	1,053	1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	73,687	1/2	58,898	1/2	44,109	1/2	29,558	1/2	15,244	1/2	835	1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	73,378	3/4	58,590	3/4	43,801	3/4	29,264	3/4	14,936	3/4	617	3/4	3/4	3/4	3/4	3/4	3/4	3/4	
8	73,070	8	58,281	8	43,492	8	28,971	8	14,628	8		8	8	8	8	8	8	8	
1/4	72,762	1/4	57,973	1/4	43,184	1/4	28,678	1/4	14,320	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	72,454	1/2	57,665	1/2	42,876	1/2	28,385	1/2	14,011	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	72,146	3/4	57,357	3/4	42,568	3/4	28,092	3/4	13,703	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	
9	71,838	9	57,049	9	42,260	9	27,799	9	13,395	9		9	9	9	9	9	9	9	
1/4	71,530	1/4	56,741	1/4	41,952	1/4	27,506	1/4	13,087	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	71,222	1/2	56,433	1/2	41,644	1/2	27,213	1/2	12,779	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	70,914	3/4	56,125	3/4	41,336	3/4	26,920	3/4	12,471	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	
10	70,606	10	55,817	10	41,028	10	26,627	10	12,163	10		10	10	10	10	10	10	10	
1/4	70,297	1/4	55,508	1/4	40,720	1/4	26,334	1/4	11,855	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	69,989	1/2	55,200	1/2	40,411	1/2	26,041	1/2	11,547	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	69,681	3/4	54,892	3/4	40,103	3/4	25,748	3/4	11,239	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	
11	69,373	11	54,584	11	39,795	11	25,455	11	10,931	11		11	11	11	11	11	11	11	
1/4	69,065	1/4	54,276	1/4	39,487	1/4	25,162	1/4	10,622	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	68,757	1/2	53,968	1/2	39,179	1/2	24,869	1/2	10,314	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	68,449	3/4	53,660	3/4	38,871	3/4	24,576	3/4	10,006	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: 06/13/2019 SW
CALCULATED: 06/13/2019 CL
PRINTED: 06/13/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2019

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



BARGE "HFL 412"

2 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	83,016	0	68,223	0	53,431	0	38,638	0	23,867	0	9,084	0		0		0		0	
1/4	82,708	1/4	67,915	1/4	53,122	1/4	38,330	1/4	23,559	1/4	8,776	1/4		1/4		1/4		1/4	
1/2	82,399	1/2	67,607	1/2	52,814	1/2	38,022	1/2	23,252	1/2	8,468	1/2		1/2		1/2		1/2	
3/4	82,091	3/4	67,299	3/4	52,506	3/4	37,713	3/4	22,945	3/4	8,160	3/4		3/4		3/4		3/4	
1	81,783	1	66,990	1	52,198	1	37,405	1	22,637	1	7,852	1		1		1		1	
1/4	81,475	1/4	66,682	1/4	51,890	1/4	37,097	1/4	22,330	1/4	7,544	1/4		1/4		1/4		1/4	
1/2	81,167	1/2	66,374	1/2	51,581	1/2	36,789	1/2	22,023	1/2	7,236	1/2		1/2		1/2		1/2	
3/4	80,858	3/4	66,066	3/4	51,273	3/4	36,481	3/4	21,715	3/4	6,928	3/4		3/4		3/4		3/4	
2	80,550	2	65,758	2	50,965	2	36,173	2	21,408	2	6,620	2		2		2		2	
1/4	80,242	1/4	65,450	1/4	50,657	1/4	35,864	1/4	21,101	1/4	6,312	1/4		1/4		1/4		1/4	
1/2	79,934	1/2	65,141	1/2	50,349	1/2	35,556	1/2	20,793	1/2	6,005	1/2		1/2		1/2		1/2	
3/4	79,626	3/4	64,833	3/4	50,041	3/4	35,248	3/4	20,485	3/4	5,698	3/4		3/4		3/4		3/4	
3	79,318	3	64,525	3	49,732	3	34,940	3	20,178	3	5,390	3		3		3		3	
1/4	79,009	1/4	64,217	1/4	49,424	1/4	34,632	1/4	19,870	1/4	5,083	1/4		1/4		1/4		1/4	
1/2	78,701	1/2	63,909	1/2	49,116	1/2	34,323	1/2	19,562	1/2	4,776	1/2		1/2		1/2		1/2	
3/4	78,393	3/4	63,600	3/4	48,808	3/4	34,015	3/4	19,254	3/4	4,470	3/4		3/4		3/4		3/4	
4	78,085	4	63,292	4	48,500	4	33,707	4	18,946	4	4,163	4		4		4		4	
1/4	77,777	1/4	62,984	1/4	48,192	1/4	33,399	1/4	18,637	1/4	3,857	1/4		1/4		1/4		1/4	
1/2	77,468	1/2	62,676	1/2	47,883	1/2	33,091	1/2	18,329	1/2	3,551	1/2		1/2		1/2		1/2	
3/4	77,160	3/4	62,368	3/4	47,575	3/4	32,783	3/4	18,021	3/4	3,246	3/4		3/4		3/4		3/4	
5	76,852	5	62,060	5	47,267	5	32,475	5	17,713	5	2,941	5		5		5		5	
1/4	76,544	1/4	61,751	1/4	46,959	1/4	32,167	1/4	17,405	1/4	2,635	1/4		1/4		1/4		1/4	
1/2	76,236	1/2	61,443	1/2	46,651	1/2	31,859	1/2	17,097	1/2	2,349	1/2		1/2		1/2		1/2	
3/4	75,928	3/4	61,135	3/4	46,342	3/4	31,552	3/4	16,788	3/4	2,062	3/4		3/4		3/4		3/4	
6	75,619	6	60,827	6	46,034	6	31,244	6	16,480	6	1,776	6		6		6		6	
1/4	75,311	1/4	60,519	1/4	45,726	1/4	30,936	1/4	16,172	1/4	1,490	1/4		1/4		1/4		1/4	
1/2	75,003	1/2	60,210	1/2	45,418	1/2	30,629	1/2	15,864	1/2	1,271	1/2		1/2		1/2		1/2	
3/4	74,695	3/4	59,902	3/4	45,110	3/4	30,321	3/4	15,556	3/4	1,053	3/4		3/4		3/4		3/4	
7	74,387	7	59,594	7	44,802	7	30,014	7	15,248	7	835	7		7		7		7	
1/4	74,079	1/4	59,286	1/4	44,493	1/4	29,706	1/4	14,939	1/4	617	1/4		1/4		1/4		1/4	
1/2	73,770	1/2	58,978	1/2	44,185	1/2	29,399	1/2	14,631	1/2		1/2		1/2		1/2		1/2	
3/4	73,462	3/4	58,670	3/4	43,877	3/4	29,092	3/4	14,323	3/4		3/4		3/4		3/4		3/4	
8	73,154	8	58,361	8	43,569	8	28,784	8	14,015	8		8		8		8		8	
1/4	72,846	1/4	58,053	1/4	43,261	1/4	28,477	1/4	13,707	1/4		1/4		1/4		1/4		1/4	
1/2	72,538	1/2	57,745	1/2	42,952	1/2	28,170	1/2	13,399	1/2		1/2		1/2		1/2		1/2	
3/4	72,229	3/4	57,437	3/4	42,644	3/4	27,862	3/4	13,090	3/4		3/4		3/4		3/4		3/4	
9	71,921	9	57,129	9	42,336	9	27,555	9	12,782	9		9		9		9		9	
1/4	71,613	1/4	56,821	1/4	42,028	1/4	27,248	1/4	12,474	1/4		1/4		1/4		1/4		1/4	
1/2	71,305	1/2	56,512	1/2	41,720	1/2	26,940	1/2	12,166	1/2		1/2		1/2		1/2		1/2	
3/4	70,997	3/4	56,204	3/4	41,412	3/4	26,633	3/4	11,858	3/4		3/4		3/4		3/4		3/4	
10	70,689	10	55,896	10	41,103	10	26,326	10	11,550	10		10		10		10		10	
1/4	70,380	1/4	55,588	1/4	40,795	1/4	26,018	1/4	11,241	1/4		1/4		1/4		1/4		1/4	
1/2	70,072	1/2	55,280	1/2	40,487	1/2	25,711	1/2	10,933	1/2		1/2		1/2		1/2		1/2	
3/4	69,764	3/4	54,971	3/4	40,179	3/4	25,404	3/4	10,625	3/4		3/4		3/4		3/4		3/4	
11	69,456	11	54,663	11	39,871	11	25,096	11	10,317	11		11		11		11		11	
1/4	69,148	1/4	54,355	1/4	39,563	1/4	24,789	1/4	10,009	1/4		1/4		1/4		1/4		1/4	
1/2	68,839	1/2	54,047	1/2	39,254	1/2	24,481	1/2	9,701	1/2		1/2		1/2		1/2		1/2	
3/4	68,531	3/4	53,739	3/4	38,946	3/4	24,174	3/4	9,392	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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PRECISION MEASUREMENT
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P.O. Box 2092
Pearland, Texas 77588
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CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2019





BARGE "HFL 412"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07"

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	95,008	0	78,015	0	61,022	0	44,029	0	27,061	0	10,078	0		0		0		0	
1/4	94,654	1/4	77,661	1/4	60,668	1/4	43,675	1/4	26,708	1/4	9,724	1/4		1/4		1/4		1/4	
1/2	94,300	1/2	77,307	1/2	60,314	1/2	43,321	1/2	26,355	1/2	9,370	1/2		1/2		1/2		1/2	
3/4	93,946	3/4	76,953	3/4	59,960	3/4	42,967	3/4	26,001	3/4	9,016	3/4		3/4		3/4		3/4	
1	93,592	1	76,599	1	59,606	1	42,613	1	25,648	1	8,662	1		1		1		1	
1/4	93,238	1/4	76,245	1/4	59,252	1/4	42,259	1/4	25,295	1/4	8,308	1/4		1/4		1/4		1/4	
1/2	92,884	1/2	75,891	1/2	58,898	1/2	41,905	1/2	24,942	1/2	7,955	1/2		1/2		1/2		1/2	
3/4	92,530	3/4	75,537	3/4	58,544	3/4	41,551	3/4	24,589	3/4	7,601	3/4		3/4		3/4		3/4	
2	92,176	2	75,183	2	58,190	2	41,197	2	24,236	2	7,248	2		2		2		2	
1/4	91,822	1/4	74,829	1/4	57,836	1/4	40,843	1/4	23,883	1/4	6,895	1/4		1/4		1/4		1/4	
1/2	91,468	1/2	74,475	1/2	57,482	1/2	40,489	1/2	23,529	1/2	6,541	1/2		1/2		1/2		1/2	
3/4	91,114	3/4	74,121	3/4	57,128	3/4	40,135	3/4	23,176	3/4	6,188	3/4		3/4		3/4		3/4	
3	90,760	3	73,767	3	56,774	3	39,781	3	22,822	3	5,835	3		3		3		3	
1/4	90,406	1/4	73,413	1/4	56,420	1/4	39,427	1/4	22,468	1/4	5,483	1/4		1/4		1/4		1/4	
1/2	90,052	1/2	73,059	1/2	56,066	1/2	39,073	1/2	22,114	1/2	5,131	1/2		1/2		1/2		1/2	
3/4	89,698	3/4	72,705	3/4	55,712	3/4	38,719	3/4	21,760	3/4	4,779	3/4		3/4		3/4		3/4	
4	89,344	4	72,351	4	55,358	4	38,365	4	21,406	4	4,426	4		4		4		4	
1/4	88,990	1/4	71,997	1/4	55,004	1/4	38,011	1/4	21,052	1/4	4,076	1/4		1/4		1/4		1/4	
1/2	88,636	1/2	71,643	1/2	54,650	1/2	37,657	1/2	20,698	1/2	3,725	1/2		1/2		1/2		1/2	
3/4	88,282	3/4	71,289	3/4	54,296	3/4	37,303	3/4	20,344	3/4	3,374	3/4		3/4		3/4		3/4	
5	87,928	5	70,935	5	53,942	5	36,950	5	19,990	5	3,023	5		5		5		5	
1/4	87,574	1/4	70,581	1/4	53,588	1/4	36,596	1/4	19,636	1/4	2,694	1/4		1/4		1/4		1/4	
1/2	87,220	1/2	70,227	1/2	53,234	1/2	36,243	1/2	19,282	1/2	2,365	1/2		1/2		1/2		1/2	
3/4	86,866	3/4	69,873	3/4	52,880	3/4	35,889	3/4	18,928	3/4	2,036	3/4		3/4		3/4		3/4	
6	86,512	6	69,519	6	52,526	6	35,536	6	18,574	6	1,707	6		6		6		6	
1/4	86,158	1/4	69,165	1/4	52,172	1/4	35,183	1/4	18,220	1/4	1,457	1/4		1/4		1/4		1/4	
1/2	85,804	1/2	68,811	1/2	51,818	1/2	34,829	1/2	17,866	1/2	1,206	1/2		1/2		1/2		1/2	
3/4	85,450	3/4	68,457	3/4	51,464	3/4	34,476	3/4	17,512	3/4	955	3/4		3/4		3/4		3/4	
7	85,096	7	68,103	7	51,110	7	34,123	7	17,158	7	705	7		7		7		7	
1/4	84,742	1/4	67,749	1/4	50,756	1/4	33,770	1/4	16,804	1/4		1/4		1/4		1/4		1/4	
1/2	84,388	1/2	67,395	1/2	50,401	1/2	33,417	1/2	16,450	1/2		1/2		1/2		1/2		1/2	
3/4	84,034	3/4	67,041	3/4	50,047	3/4	33,063	3/4	16,096	3/4		3/4		3/4		3/4		3/4	
8	83,680	8	66,687	8	49,693	8	32,710	8	15,742	8		8		8		8		8	
1/4	83,326	1/4	66,333	1/4	49,339	1/4	32,357	1/4	15,388	1/4		1/4		1/4		1/4		1/4	
1/2	82,972	1/2	65,979	1/2	48,985	1/2	32,004	1/2	15,034	1/2		1/2		1/2		1/2		1/2	
3/4	82,618	3/4	65,625	3/4	48,631	3/4	31,651	3/4	14,680	3/4		3/4		3/4		3/4		3/4	
9	82,264	9	65,270	9	48,277	9	31,298	9	14,326	9		9		9		9		9	
1/4	81,910	1/4	64,916	1/4	47,923	1/4	30,945	1/4	13,972	1/4		1/4		1/4		1/4		1/4	
1/2	81,556	1/2	64,562	1/2	47,569	1/2	30,592	1/2	13,618	1/2		1/2		1/2		1/2		1/2	
3/4	81,202	3/4	64,208	3/4	47,215	3/4	30,239	3/4	13,264	3/4		3/4		3/4		3/4		3/4	
10	80,848	10	63,854	10	46,861	10	29,886	10	12,910	10		10		10		10		10	
1/4	80,494	1/4	63,500	1/4	46,507	1/4	29,532	1/4	12,556	1/4		1/4		1/4		1/4		1/4	
1/2	80,139	1/2	63,146	1/2	46,153	1/2	29,179	1/2	12,202	1/2		1/2		1/2		1/2		1/2	
3/4	79,785	3/4	62,792	3/4	45,799	3/4	28,826	3/4	11,848	3/4		3/4		3/4		3/4		3/4	
11	79,431	11	62,438	11	45,445	11	28,473	11	11,494	11		11		11		11		11	
1/4	79,077	1/4	62,084	1/4	45,091	1/4	28,120	1/4	11,140	1/4		1/4		1/4		1/4		1/4	
1/2	78,723	1/2	61,730	1/2	44,737	1/2	27,767	1/2	10,786	1/2		1/2		1/2		1/2		1/2	
3/4	78,369	3/4	61,376	3/4	44,383	3/4	27,414	3/4	10,432	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 06/13/2019 SW
CALCULATED: 06/13/2019 CL
PRINTED: 06/13/2019 CL

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2019





BARGE "HFL 412"

STBD SLOP ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 5'-11"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4		1/4		1/4	4,409	1/4		1/4	3,278	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,386	1/2		1/2	3,254	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,362	3/4		3/4	3,231	3/4		3/4		3/4		3/4		3/4	
1	1	1	1	1	4,339	1	1	1	3,207	1	1	1	1	1	1	1	1	1	1
1/4		1/4		1/4	4,315	1/4		1/4	3,183	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,292	1/2		1/2	3,160	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,268	3/4		3/4	3,136	3/4		3/4		3/4		3/4		3/4	
2	2	2	2	2	4,244	2	2	2	3,113	2	2	2	2	2	2	2	2	2	2
1/4		1/4		1/4	4,221	1/4		1/4	3,089	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,197	1/2		1/2	3,066	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,174	3/4		3/4	3,042	3/4		3/4		3/4		3/4		3/4	
3	3	3	3	3	4,150	3	3	3	3,018	3	3	3	3	3	3	3	3	3	3
1/4		1/4		1/4	4,127	1/4		1/4	2,995	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,236	1/2		1/2	2,971	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,212	3/4		3/4	2,948	3/4		3/4		3/4		3/4		3/4	
4	4	4	4	4	5,188	4	4	4	2,924	4	4	4	4	4	4	4	4	4	4
1/4		1/4		1/4	5,165	1/4		1/4	2,900	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,141	1/2		1/2	2,877	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,117	3/4		3/4	2,853	3/4		3/4		3/4		3/4		3/4	
5	5	5	5	5	5,094	5	5	5	2,830	5	5	5	5	5	5	5	5	5	5
1/4		1/4		1/4	5,070	1/4		1/4	2,806	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,046	1/2		1/2	2,783	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,023	3/4		3/4	2,759	3/4		3/4		3/4		3/4		3/4	
6	6	6	6	6	4,999	6	6	6	2,735	6	6	6	6	6	6	6	6	6	6
1/4		1/4		1/4	4,976	1/4		1/4	2,712	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,952	1/2		1/2	2,688	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,928	3/4		3/4	2,665	3/4		3/4		3/4		3/4		3/4	
7	7	7	7	7	4,905	7	7	7	2,641	7	7	7	7	7	7	7	7	7	7
1/4		1/4		1/4	4,881	1/4		1/4	2,618	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,857	1/2		1/2	2,594	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,834	3/4		3/4	2,570	3/4		3/4		3/4		3/4		3/4	
8	8	8	8	8	4,810	8	8	8	2,547	8	8	8	8	8	8	8	8	8	8
1/4		1/4		1/4	4,787	1/4		1/4	2,523	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,763	1/2		1/2	2,500	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,740	3/4		3/4	2,476	3/4		3/4		3/4		3/4		3/4	
9	9	9	9	9	4,716	9	9	9	2,453	9	9	9	9	9	9	9	9	9	9
1/4		1/4		1/4	4,692	1/4		1/4	2,429	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,669	1/2		1/2	2,405	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,645	3/4		3/4	2,382	3/4		3/4		3/4		3/4		3/4	
10	10	10	10	10	4,622	10	10	10	2,358	10	10	10	10	10	10	10	10	10	10
1/4		1/4		1/4	4,598	1/4		1/4	2,335	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,574	1/2		1/2	2,311	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,551	3/4		3/4	2,287	3/4		3/4		3/4		3/4		3/4	
11	11	11	11	11	4,527	11	11	11	2,264	11	11	11	11	11	11	11	11	11	11
1/4		1/4		1/4	4,504	1/4		1/4	2,240	1/4		1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,480	1/2		1/2	2,217	1/2		1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,457	3/4		3/4	2,193	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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

STRAPPED: 06/13/2019 SW
CALCULATED: 06/13/2019 CL
PRINTED: 06/13/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 06/2019

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





BARGE "HFL 412"

FUEL TANK ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-04 3/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0		0	497	0	347	0	174	0	29	0		0		0		0		0	
1/4		1/4	494	1/4	343	1/4	171	1/4	27	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	492	1/2	340	1/2	167	1/2	25	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	489	3/4	336	3/4	164	3/4	23	3/4		3/4		3/4		3/4		3/4	
1		1	487	1	333	1	160	1	21	1		1		1		1		1	
1/4		1/4	484	1/4	329	1/4	157	1/4	19	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	481	1/2	325	1/2	153	1/2	17	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	479	3/4	322	3/4	150	3/4	15	3/4		3/4		3/4		3/4		3/4	
2		2	476	2	318	2	147	2	13	2		2		2		2		2	
1/4		1/4	473	1/4	315	1/4	143	1/4	11	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	470	1/2	311	1/2	140	1/2	10	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	467	3/4	307	3/4	136	3/4	8	3/4		3/4		3/4		3/4		3/4	
3		3	465	3	304	3	133	3	7	3		3		3		3		3	
1/4		1/4	462	1/4	300	1/4	130	1/4	5	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	459	1/2	297	1/2	126	1/2	4	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	456	3/4	293	3/4	123	3/4	3	3/4		3/4		3/4		3/4		3/4	
4		4	453	4	289	4	120	4	2	4		4		4		4		4	
1/4		1/4	450	1/4	286	1/4	117	1/4	1	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	447	1/2	282	1/2	114	1/2	1	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	444	3/4	278	3/4	110	3/4	0	3/4		3/4		3/4		3/4		3/4	
5		5	441	5	275	5	107	5		5		5		5		5		5	
1/4		1/4	438	1/4	271	1/4	104	1/4		1/4		1/4		1/4		1/4		1/4	
1/2		1/2	434	1/2	267	1/2	101	1/2		1/2		1/2		1/2		1/2		1/2	
3/4		3/4	431	3/4	264	3/4	98	3/4		3/4		3/4		3/4		3/4		3/4	
6	537	6	428	6	260	6	95	6		6		6		6		6		6	
1/4	536	1/4	425	1/4	257	1/4	92	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	536	1/2	422	1/2	253	1/2	89	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	535	3/4	419	3/4	249	3/4	86	3/4		3/4		3/4		3/4		3/4		3/4	
7	534	7	415	7	246	7	83	7		7		7		7		7		7	
1/4	533	1/4	412	1/4	242	1/4	80	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	531	1/2	409	1/2	238	1/2	77	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	530	3/4	405	3/4	235	3/4	74	3/4		3/4		3/4		3/4		3/4		3/4	
8	529	8	402	8	231	8	71	8		8		8		8		8		8	
1/4	527	1/4	399	1/4	227	1/4	68	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	526	1/2	395	1/2	224	1/2	65	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	524	3/4	392	3/4	220	3/4	62	3/4		3/4		3/4		3/4		3/4		3/4	
9	522	9	389	9	217	9	59	9		9		9		9		9		9	
1/4	520	1/4	385	1/4	213	1/4	57	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	518	1/2	382	1/2	209	1/2	54	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	517	3/4	378	3/4	206	3/4	51	3/4		3/4		3/4		3/4		3/4		3/4	
10	515	10	375	10	202	10	49	10		10		10		10		10		10	
1/4	512	1/4	371	1/4	199	1/4	46	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	510	1/2	368	1/2	195	1/2	44	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	508	3/4	364	3/4	192	3/4	41	3/4		3/4		3/4		3/4		3/4		3/4	
11	506	11	361	11	188	11	39	11		11		11		11		11		11	
1/4	504	1/4	357	1/4	185	1/4	36	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	501	1/2	354	1/2	181	1/2	34	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	499	3/4	350	3/4	178	3/4	31	3/4		3/4		3/4		3/4		3/4		3/4	

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
 CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP OPPOSITE HINGE OF 8" HATCH.

STRAPPED: 06/13/2019 SW
 CALCULATED: 06/13/2019 CL
 PRINTED: 06/13/2019 CL

CANCELS AND SUPERCEDES
 ALL PRIOR TO 06/2019

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

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