



BARGE "HFL 410"

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	- 00-0/8	00-0/8	- 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	- 00-0/8	00-0/8	- 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	- 00-1/8	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	- 00-0/8	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"

February 1, 2019

**PRECISION MEASUREMENT
& ANALYSIS, INC.**

P.O. Box 2092
 Pearland, Texas 77588

<http://www.pmacorp.net>



BARGE "HFL 410"

1 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	142,128	0	156,995	0	171,862	0	186,730	0	201,588	0		0		0		0		0	
1/4	142,437	1/4	157,305	1/4	172,172	1/4	187,039	1/4	201,895	1/4		1/4		1/4		1/4		1/4	
1/2	142,747	1/2	157,614	1/2	172,482	1/2	187,349	1/2	202,203	1/2		1/2		1/2		1/2		1/2	
3/4	143,057	3/4	157,924	3/4	172,791	3/4	187,659	3/4	202,510	3/4		3/4		3/4		3/4		3/4	
1	143,366	1	158,234	1	173,101	1	187,969	1	202,817	1		1		1		1		1	
1/4	143,676	1/4	158,544	1/4	173,411	1/4	188,278	1/4	203,120	1/4		1/4		1/4		1/4		1/4	
1/2	143,986	1/2	158,853	1/2	173,721	1/2	188,588	1/2	203,422	1/2		1/2		1/2		1/2		1/2	
3/4	144,296	3/4	159,163	3/4	174,030	3/4	188,898	3/4	203,724	3/4		3/4		3/4		3/4		3/4	
2	144,605	2	159,473	2	174,340	2	189,207	2	204,026	2		2		2		2		2	
1/4	144,915	1/4	159,782	1/4	174,650	1/4	189,517	1/4	204,294	1/4		1/4		1/4		1/4		1/4	
1/2	145,225	1/2	160,092	1/2	174,960	1/2	189,827	1/2	204,561	1/2		1/2		1/2		1/2		1/2	
3/4	145,535	3/4	160,402	3/4	175,269	3/4	190,137	3/4	204,828	3/4		3/4		3/4		3/4		3/4	
3	145,844	3	160,712	3	175,579	3	190,446	3	205,095	3		3		3		3		3	
1/4	146,154	1/4	161,021	1/4	175,889	1/4	190,756	1/4	205,304	1/4		1/4		1/4		1/4		1/4	
1/2	146,464	1/2	161,331	1/2	176,199	1/2	191,066	1/2	205,513	1/2		1/2		1/2		1/2		1/2	
3/4	146,774	3/4	161,641	3/4	176,508	3/4	191,376	3/4	205,722	3/4		3/4		3/4		3/4		3/4	
4	147,083	4	161,951	4	176,818	4	191,685	4	205,932	4		4		4		4		4	
1/4	147,393	1/4	162,260	1/4	177,128	1/4	191,995	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	147,703	1/2	162,570	1/2	177,437	1/2	192,305	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	148,013	3/4	162,880	3/4	177,747	3/4	192,615	3/4		3/4		3/4		3/4		3/4		3/4	
5	148,322	5	163,190	5	178,057	5	192,924	5		5		5		5		5		5	
1/4	148,632	1/4	163,499	1/4	178,367	1/4	193,234	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	148,942	1/2	163,809	1/2	178,676	1/2	193,544	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	149,251	3/4	164,119	3/4	178,986	3/4	193,853	3/4		3/4		3/4		3/4		3/4		3/4	
6	149,561	6	164,429	6	179,296	6	194,163	6		6		6		6		6		6	
1/4	149,871	1/4	164,738	1/4	179,606	1/4	194,473	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	150,181	1/2	165,048	1/2	179,915	1/2	194,783	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	150,490	3/4	165,358	3/4	180,225	3/4	195,092	3/4		3/4		3/4		3/4		3/4		3/4	
7	150,800	7	165,667	7	180,535	7	195,402	7		7		7		7		7		7	
1/4	151,110	1/4	165,977	1/4	180,845	1/4	195,712	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	151,420	1/2	166,287	1/2	181,154	1/2	196,022	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	151,729	3/4	166,597	3/4	181,464	3/4	196,331	3/4		3/4		3/4		3/4		3/4		3/4	
8	152,039	8	166,906	8	181,774	8	196,641	8		8		8		8		8		8	
1/4	152,349	1/4	167,216	1/4	182,084	1/4	196,951	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	152,659	1/2	167,526	1/2	182,393	1/2	197,260	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	152,968	3/4	167,836	3/4	182,703	3/4	197,570	3/4		3/4		3/4		3/4		3/4		3/4	
9	153,278	9	168,145	9	183,013	9	197,880	9		9		9		9		9		9	
1/4	153,588	1/4	168,455	1/4	183,322	1/4	198,189	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	153,898	1/2	168,765	1/2	183,632	1/2	198,499	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	154,207	3/4	169,075	3/4	183,942	3/4	198,808	3/4		3/4		3/4		3/4		3/4		3/4	
10	154,517	10	169,384	10	184,252	10	199,118	10		10		10		10		10		10	
1/4	154,827	1/4	169,694	1/4	184,561	1/4	199,427	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	155,136	1/2	170,004	1/2	184,871	1/2	199,736	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,446	3/4	170,314	3/4	185,181	3/4	200,045	3/4		3/4		3/4		3/4		3/4		3/4	
11	155,756	11	170,623	11	185,491	11	200,354	11		11		11		11		11		11	
1/4	156,066	1/4	170,933	1/4	185,800	1/4	200,663	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,375	1/2	171,243	1/2	186,110	1/2	200,971	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,685	3/4	171,552	3/4	186,420	3/4	201,279	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

PRECISION MEASUREMENT
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BARGE "HFL 410"

1 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	42	0	11,007	0	23,898	0	38,228	0	53,117	0	68,010	0	82,904	0	97,798	0	112,692	0	127,586
1/4	176	1/4	11,262	1/4	24,183	1/4	38,538	1/4	53,427	1/4	68,321	1/4	83,214	1/4	98,108	1/4	113,002	1/4	127,896
1/2	309	1/2	11,517	1/2	24,468	1/2	38,847	1/2	53,737	1/2	68,631	1/2	83,525	1/2	98,419	1/2	113,312	1/2	128,206
3/4	443	3/4	11,772	3/4	24,753	3/4	39,157	3/4	54,047	3/4	68,941	3/4	83,835	3/4	98,729	3/4	113,623	3/4	128,516
1	577	1	12,027	1	25,038	1	39,467	1	54,358	1	69,252	1	84,145	1	99,039	1	113,933	1	128,827
1/4	782	1/4	12,284	1/4	25,326	1/4	39,777	1/4	54,668	1/4	69,562	1/4	84,456	1/4	99,349	1/4	114,243	1/4	129,137
1/2	987	1/2	12,541	1/2	25,614	1/2	40,086	1/2	54,978	1/2	69,872	1/2	84,766	1/2	99,660	1/2	114,554	1/2	129,447
3/4	1,192	3/4	12,799	3/4	25,902	3/4	40,396	3/4	55,289	3/4	70,182	3/4	85,076	3/4	99,970	3/4	114,864	3/4	129,758
2	1,397	2	13,056	2	26,190	2	40,706	2	55,599	2	70,493	2	85,386	2	100,280	2	115,174	2	130,068
1/4	1,623	1/4	13,316	1/4	26,480	1/4	41,016	1/4	55,909	1/4	70,803	1/4	85,697	1/4	100,591	1/4	115,484	1/4	130,378
1/2	1,850	1/2	13,576	1/2	26,770	1/2	41,326	1/2	56,219	1/2	71,113	1/2	86,007	1/2	100,901	1/2	115,795	1/2	130,688
3/4	2,077	3/4	13,835	3/4	27,060	3/4	41,636	3/4	56,530	3/4	71,424	3/4	86,317	3/4	101,211	3/4	116,105	3/4	130,999
3	2,303	3	14,095	3	27,351	3	41,946	3	56,840	3	71,734	3	86,628	3	101,521	3	116,415	3	131,309
1/4	2,534	1/4	14,358	1/4	27,644	1/4	42,257	1/4	57,150	1/4	72,044	1/4	86,938	1/4	101,832	1/4	116,726	1/4	131,619
1/2	2,764	1/2	14,620	1/2	27,936	1/2	42,567	1/2	57,461	1/2	72,354	1/2	87,248	1/2	102,142	1/2	117,036	1/2	131,930
3/4	2,994	3/4	14,883	3/4	28,229	3/4	42,877	3/4	57,771	3/4	72,665	3/4	87,559	3/4	102,452	3/4	117,346	3/4	132,240
4	3,225	4	15,145	4	28,522	4	43,187	4	58,081	4	72,975	4	87,869	4	102,763	4	117,656	4	132,550
1/4	3,458	1/4	15,410	1/4	28,817	1/4	43,498	1/4	58,391	1/4	73,285	1/4	88,179	1/4	103,073	1/4	117,967	1/4	132,860
1/2	3,692	1/2	15,674	1/2	29,112	1/2	43,808	1/2	58,702	1/2	73,596	1/2	88,489	1/2	103,383	1/2	118,277	1/2	133,171
3/4	3,926	3/4	15,939	3/4	29,407	3/4	44,118	3/4	59,012	3/4	73,906	3/4	88,800	3/4	103,693	3/4	118,587	3/4	133,481
5	4,159	5	16,204	5	29,702	5	44,429	5	59,322	5	74,216	5	89,110	5	104,004	5	118,898	5	133,791
1/4	4,396	1/4	16,471	1/4	30,000	1/4	44,739	1/4	59,633	1/4	74,526	1/4	89,420	1/4	104,314	1/4	119,208	1/4	134,102
1/2	4,633	1/2	16,738	1/2	30,297	1/2	45,049	1/2	59,943	1/2	74,837	1/2	89,731	1/2	104,624	1/2	119,518	1/2	134,412
3/4	4,869	3/4	17,005	3/4	30,595	3/4	45,359	3/4	60,253	3/4	75,147	3/4	90,041	3/4	104,935	3/4	119,828	3/4	134,722
6	5,106	6	17,273	6	30,892	6	45,670	6	60,564	6	75,457	6	90,351	6	105,245	6	120,139	6	135,032
1/4	5,345	1/4	17,542	1/4	31,192	1/4	45,980	1/4	60,874	1/4	75,768	1/4	90,661	1/4	105,555	1/4	120,449	1/4	135,343
1/2	5,585	1/2	17,812	1/2	31,492	1/2	46,290	1/2	61,184	1/2	76,078	1/2	90,972	1/2	105,865	1/2	120,759	1/2	135,653
3/4	5,824	3/4	18,082	3/4	31,792	3/4	46,601	3/4	61,494	3/4	76,388	3/4	91,282	3/4	106,176	3/4	121,070	3/4	135,963
7	6,064	7	18,352	7	32,092	7	46,911	7	61,805	7	76,698	7	91,592	7	106,486	7	121,380	7	136,274
1/4	6,306	1/4	18,624	1/4	32,394	1/4	47,221	1/4	62,115	1/4	77,009	1/4	91,903	1/4	106,796	1/4	121,690	1/4	136,584
1/2	6,548	1/2	18,896	1/2	32,697	1/2	47,531	1/2	62,425	1/2	77,319	1/2	92,213	1/2	107,107	1/2	122,000	1/2	136,894
3/4	6,790	3/4	19,168	3/4	32,999	3/4	47,842	3/4	62,736	3/4	77,629	3/4	92,523	3/4	107,417	3/4	122,311	3/4	137,204
8	7,032	8	19,441	8	33,302	8	48,152	8	63,046	8	77,940	8	92,833	8	107,727	8	122,621	8	137,515
1/4	7,277	1/4	19,715	1/4	33,607	1/4	48,462	1/4	63,356	1/4	78,250	1/4	93,144	1/4	108,037	1/4	122,931	1/4	137,825
1/2	7,521	1/2	19,990	1/2	33,912	1/2	48,773	1/2	63,666	1/2	78,560	1/2	93,454	1/2	108,348	1/2	123,242	1/2	138,135
3/4	7,766	3/4	20,265	3/4	34,217	3/4	49,083	3/4	63,977	3/4	78,870	3/4	93,764	3/4	108,658	3/4	123,552	3/4	138,446
9	8,011	9	20,540	9	34,522	9	49,393	9	64,287	9	79,181	9	94,075	9	108,968	9	123,862	9	138,756
1/4	8,258	1/4	20,817	1/4	34,829	1/4	49,703	1/4	64,597	1/4	79,491	1/4	94,385	1/4	109,279	1/4	124,172	1/4	139,066
1/2	8,505	1/2	21,094	1/2	35,137	1/2	50,014	1/2	64,908	1/2	79,801	1/2	94,695	1/2	109,589	1/2	124,483	1/2	139,377
3/4	8,752	3/4	21,372	3/4	35,444	3/4	50,324	3/4	65,218	3/4	80,112	3/4	95,005	3/4	109,899	3/4	124,793	3/4	139,687
10	9,000	10	21,649	10	35,752	10	50,634	10	65,528	10	80,422	10	95,316	10	110,209	10	125,103	10	139,997
1/4	9,249	1/4	21,929	1/4	36,061	1/4	50,945	1/4	65,838	1/4	80,732	1/4	95,626	1/4	110,520	1/4	125,414	1/4	140,307
1/2	9,499	1/2	22,209	1/2	36,370	1/2	51,255	1/2	66,149	1/2	81,042	1/2	95,936	1/2	110,830	1/2	125,724	1/2	140,618
3/4	9,749	3/4	22,489	3/4	36,680	3/4	51,565	3/4	66,459	3/4	81,353	3/4	96,247	3/4	111,140	3/4	126,034	3/4	140,928
11	9,998	11	22,768	11	36,989	11	51,875	11	66,769	11	81,663	11	96,557	11	111,451	11	126,344	11	141,238
1/4	10,251	1/4	23,051	1/4	37,299	1/4	52,186	1/4	67,080	1/4	81,973	1/4	96,867	1/4	111,761	1/4	126,655	1/4	141,549
1/2	10,503	1/2	23,333	1/2	37,608	1/2	52,496	1/2	67,390	1/2	82,284	1/2	97,177	1/2	112,071	1/2	126,965	1/2	141,859
3/4	10,755	3/4	23,616	3/4	37,918	3/4	52,806	3/4	67,700	3/4	82,594	3/4	97,488	3/4	112,382	3/4	127,275	3/4	142,169

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

PRECISION MEASUREMENT
& ANALYSIS, INC.

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BARGE "HFL 410"

**1 STBD
INNAGE TABLE**

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
	142,479		157,373		172,267		187,161		202,046										
1/4	142,790	1/4	157,683	1/4	172,577	1/4	187,471	1/4	202,353	1/4		1/4		1/4		1/4		1/4	
1/2	143,100	1/2	157,994	1/2	172,888	1/2	187,781	1/2	202,661	1/2		1/2		1/2		1/2		1/2	
3/4	143,410	3/4	158,304	3/4	173,198	3/4	188,092	3/4	202,969	3/4		3/4		3/4		3/4		3/4	
1	143,721	1	158,614	1	173,508	1	188,402	1	203,277	1	1	1	1	1	1	1	1	1	1
1/4	144,031	1/4	158,925	1/4	173,818	1/4	188,712	1/4	203,580	1/4		1/4		1/4		1/4		1/4	
1/2	144,341	1/2	159,235	1/2	174,129	1/2	189,022	1/2	203,883	1/2		1/2		1/2		1/2		1/2	
3/4	144,651	3/4	159,545	3/4	174,439	3/4	189,333	3/4	204,186	3/4		3/4		3/4		3/4		3/4	
2	144,962	2	159,855	2	174,749	2	189,643	2	204,489	2	2	2	2	2	2	2	2	2	2
1/4	145,272	1/4	160,166	1/4	175,060	1/4	189,953	1/4	204,756	1/4		1/4		1/4		1/4		1/4	
1/2	145,582	1/2	160,476	1/2	175,370	1/2	190,264	1/2	205,024	1/2		1/2		1/2		1/2		1/2	
3/4	145,893	3/4	160,786	3/4	175,680	3/4	190,574	3/4	205,292	3/4		3/4		3/4		3/4		3/4	
3	146,203	3	161,097	3	175,990	3	190,884	3	205,559	3	3	3	3	3	3	3	3	3	3
1/4	146,513	1/4	161,407	1/4	176,301	1/4	191,194	1/4	205,769	1/4		1/4		1/4		1/4		1/4	
1/2	146,823	1/2	161,717	1/2	176,611	1/2	191,505	1/2	205,978	1/2		1/2		1/2		1/2		1/2	
3/4	147,134	3/4	162,027	3/4	176,921	3/4	191,815	3/4	206,188	3/4		3/4		3/4		3/4		3/4	
4	147,444	4	162,338	4	177,232	4	192,125	4	206,397	4	4	4	4	4	4	4	4	4	4
1/4	147,754	1/4	162,648	1/4	177,542	1/4	192,436	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	148,065	1/2	162,958	1/2	177,852	1/2	192,746	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	148,375	3/4	163,269	3/4	178,162	3/4	193,056	3/4		3/4		3/4		3/4		3/4		3/4	
5	148,685	5	163,579	5	178,473	5	193,367	5	5	5	5	5	5	5	5	5	5	5	5
1/4	148,995	1/4	163,889	1/4	178,783	1/4	193,677	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	149,306	1/2	164,199	1/2	179,093	1/2	193,987	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	149,616	3/4	164,510	3/4	179,404	3/4	194,297	3/4		3/4		3/4		3/4		3/4		3/4	
6	149,926	6	164,820	6	179,714	6	194,608	6	6	6	6	6	6	6	6	6	6	6	6
1/4	150,237	1/4	165,130	1/4	180,024	1/4	194,918	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	150,547	1/2	165,441	1/2	180,334	1/2	195,228	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	150,857	3/4	165,751	3/4	180,645	3/4	195,539	3/4		3/4		3/4		3/4		3/4		3/4	
7	151,167	7	166,061	7	180,955	7	195,849	7	7	7	7	7	7	7	7	7	7	7	7
1/4	151,478	1/4	166,372	1/4	181,265	1/4	196,159	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	151,788	1/2	166,682	1/2	181,576	1/2	196,469	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	152,098	3/4	166,992	3/4	181,886	3/4	196,780	3/4		3/4		3/4		3/4		3/4		3/4	
8	152,409	8	167,302	8	182,196	8	197,090	8	8	8	8	8	8	8	8	8	8	8	8
1/4	152,719	1/4	167,613	1/4	182,506	1/4	197,400	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	153,029	1/2	167,923	1/2	182,817	1/2	197,710	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	153,339	3/4	168,233	3/4	183,127	3/4	198,021	3/4		3/4		3/4		3/4		3/4		3/4	
9	153,650	9	168,544	9	183,437	9	198,331	9	9	9	9	9	9	9	9	9	9	9	9
1/4	153,960	1/4	168,854	1/4	183,748	1/4	198,641	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	154,270	1/2	169,164	1/2	184,058	1/2	198,951	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	154,581	3/4	169,474	3/4	184,368	3/4	199,261	3/4		3/4		3/4		3/4		3/4		3/4	
10	154,891	10	169,785	10	184,678	10	199,571	10	10	10	10	10	10	10	10	10	10	10	10
1/4	155,201	1/4	170,095	1/4	184,989	1/4	199,881	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	155,511	1/2	170,405	1/2	185,299	1/2	200,190	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,822	3/4	170,716	3/4	185,609	3/4	200,500	3/4		3/4		3/4		3/4		3/4		3/4	
11	156,132	11	171,026	11	185,920	11	200,810	11	11	11	11	11	11	11	11	11	11	11	11
1/4	156,442	1/4	171,336	1/4	186,230	1/4	201,119	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,753	1/2	171,646	1/2	186,540	1/2	201,428	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	157,063	3/4	171,957	3/4	186,850	3/4	201,737	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

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



BARGE "HFL 410"

2 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
0	147,327	0	162,116	0	176,905	0	191,695	0	206,475	0		0		0		0		0	
1/4	147,635	1/4	162,424	1/4	177,214	1/4	192,003	1/4	206,781	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	147,943	1/2	162,732	1/2	177,522	1/2	192,311	1/2	207,087	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	148,251	3/4	163,040	3/4	177,830	3/4	192,619	3/4	207,392	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	148,559	1	163,349	1	178,138	1	192,927	1	207,698	1	1	1	1	1	1	1	1	1	1
1/4	148,867	1/4	163,657	1/4	178,446	1/4	193,235	1/4	207,999	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	149,176	1/2	163,965	1/2	178,754	1/2	193,543	1/2	208,300	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	149,484	3/4	164,273	3/4	179,062	3/4	193,852	3/4	208,600	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	149,792	2	164,581	2	179,370	2	194,160	2	208,901	2	2	2	2	2	2	2	2	2	2
1/4	150,100	1/4	164,889	1/4	179,678	1/4	194,468	1/4	209,167	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	150,408	1/2	165,197	1/2	179,987	1/2	194,776	1/2	209,433	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	150,716	3/4	165,505	3/4	180,295	3/4	195,084	3/4	209,698	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	151,024	3	165,813	3	180,603	3	195,392	3	209,964	3	3	3	3	3	3	3	3	3	3
1/4	151,332	1/4	166,122	1/4	180,911	1/4	195,700	1/4	210,172	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	151,640	1/2	166,430	1/2	181,219	1/2	196,008	1/2	210,380	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	151,949	3/4	166,738	3/4	181,527	3/4	196,316	3/4	210,588	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	152,257	4	167,046	4	181,835	4	196,625	4	210,796	4	4	4	4	4	4	4	4	4	4
1/4	152,565	1/4	167,354	1/4	182,143	1/4	196,933	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	152,873	1/2	167,662	1/2	182,451	1/2	197,241	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	153,181	3/4	167,970	3/4	182,760	3/4	197,549	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	153,489	5	168,278	5	183,068	5	197,857	5		5	5	5	5	5	5	5	5	5	5
1/4	153,797	1/4	168,586	1/4	183,376	1/4	198,165	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	154,105	1/2	168,895	1/2	183,684	1/2	198,473	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	154,413	3/4	169,203	3/4	183,992	3/4	198,781	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	154,722	6	169,511	6	184,300	6	199,089	6		6	6	6	6	6	6	6	6	6	6
1/4	155,030	1/4	169,819	1/4	184,608	1/4	199,398	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	155,338	1/2	170,127	1/2	184,916	1/2	199,706	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	155,646	3/4	170,435	3/4	185,224	3/4	200,014	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	155,954	7	170,743	7	185,533	7	200,322	7		7	7	7	7	7	7	7	7	7	7
1/4	156,262	1/4	171,051	1/4	185,841	1/4	200,630	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	156,570	1/2	171,359	1/2	186,149	1/2	200,938	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	156,878	3/4	171,668	3/4	186,457	3/4	201,246	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	157,186	8	171,976	8	186,765	8	201,554	8		8	8	8	8	8	8	8	8	8	8
1/4	157,495	1/4	172,284	1/4	187,073	1/4	201,862	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	157,803	1/2	172,592	1/2	187,381	1/2	202,170	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	158,111	3/4	172,900	3/4	187,689	3/4	202,479	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	158,419	9	173,208	9	187,997	9	202,787	9		9	9	9	9	9	9	9	9	9	9
1/4	158,727	1/4	173,516	1/4	188,306	1/4	203,094	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	159,035	1/2	173,824	1/2	188,614	1/2	203,402	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	159,343	3/4	174,132	3/4	188,922	3/4	203,710	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	159,651	10	174,441	10	189,230	10	204,018	10		10	10	10	10	10	10	10	10	10	10
1/4	159,959	1/4	174,749	1/4	189,538	1/4	204,325	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	160,267	1/2	175,057	1/2	189,846	1/2	204,633	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	160,576	3/4	175,365	3/4	190,154	3/4	204,940	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	160,884	11	175,673	11	190,462	11	205,248	11		11	11	11	11	11	11	11	11	11	11
1/4	161,192	1/4	175,981	1/4	190,770	1/4	205,555	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	161,500	1/2	176,289	1/2	191,079	1/2	205,862	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	161,808	3/4	176,597	3/4	191,387	3/4	206,168	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: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 410"

2 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 1/4"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
0	148,082	0	162,878	0	177,675	0	192,472	0	207,259	0		0		0		0		0	
1/4	148,390	1/4	163,187	1/4	177,983	1/4	192,780	1/4	207,565	1/4		1/4		1/4		1/4		1/4	
1/2	148,698	1/2	163,495	1/2	178,292	1/2	193,088	1/2	207,871	1/2		1/2		1/2		1/2		1/2	
3/4	149,007	3/4	163,803	3/4	178,600	3/4	193,396	3/4	208,177	3/4		3/4		3/4		3/4		3/4	
1	149,315	1	164,111	1	178,908	1	193,705	1	208,483	1		1		1		1		1	
1/4	149,623	1/4	164,420	1/4	179,216	1/4	194,013	1/4	208,784	1/4		1/4		1/4		1/4		1/4	
1/2	149,931	1/2	164,728	1/2	179,525	1/2	194,321	1/2	209,085	1/2		1/2		1/2		1/2		1/2	
3/4	150,240	3/4	165,036	3/4	179,833	3/4	194,629	3/4	209,385	3/4		3/4		3/4		3/4		3/4	
2	150,548	2	165,345	2	180,141	2	194,938	2	209,686	2		2		2		2		2	
1/4	150,856	1/4	165,653	1/4	180,449	1/4	195,246	1/4	209,952	1/4		1/4		1/4		1/4		1/4	
1/2	151,164	1/2	165,961	1/2	180,758	1/2	195,554	1/2	210,218	1/2		1/2		1/2		1/2		1/2	
3/4	151,473	3/4	166,269	3/4	181,066	3/4	195,863	3/4	210,484	3/4		3/4		3/4		3/4		3/4	
3	151,781	3	166,578	3	181,374	3	196,171	3	210,750	3		3		3		3		3	
1/4	152,089	1/4	166,886	1/4	181,682	1/4	196,479	1/4	210,958	1/4		1/4		1/4		1/4		1/4	
1/2	152,397	1/2	167,194	1/2	181,991	1/2	196,787	1/2	211,166	1/2		1/2		1/2		1/2		1/2	
3/4	152,706	3/4	167,502	3/4	182,299	3/4	197,096	3/4	211,374	3/4		3/4		3/4		3/4		3/4	
4	153,014	4	167,811	4	182,607	4	197,404	4	211,582	4		4		4		4		4	
1/4	153,322	1/4	168,119	1/4	182,915	1/4	197,712	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	153,631	1/2	168,427	1/2	183,224	1/2	198,020	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	153,939	3/4	168,735	3/4	183,532	3/4	198,329	3/4		3/4		3/4		3/4		3/4		3/4	
5	154,247	5	169,044	5	183,840	5	198,637	5		5		5		5		5		5	
1/4	154,555	1/4	169,352	1/4	184,149	1/4	198,945	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	154,864	1/2	169,660	1/2	184,457	1/2	199,253	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	155,172	3/4	169,968	3/4	184,765	3/4	199,562	3/4		3/4		3/4		3/4		3/4		3/4	
6	155,480	6	170,277	6	185,073	6	199,870	6		6		6		6		6		6	
1/4	155,788	1/4	170,585	1/4	185,382	1/4	200,178	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	156,097	1/2	170,893	1/2	185,690	1/2	200,486	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	156,405	3/4	171,202	3/4	185,998	3/4	200,795	3/4		3/4		3/4		3/4		3/4		3/4	
7	156,713	7	171,510	7	186,306	7	201,103	7		7		7		7		7		7	
1/4	157,021	1/4	171,818	1/4	186,615	1/4	201,411	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	157,330	1/2	172,126	1/2	186,923	1/2	201,720	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	157,638	3/4	172,435	3/4	187,231	3/4	202,028	3/4		3/4		3/4		3/4		3/4		3/4	
8	157,946	8	172,743	8	187,539	8	202,336	8		8		8		8		8		8	
1/4	158,254	1/4	173,051	1/4	187,848	1/4	202,644	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	158,563	1/2	173,359	1/2	188,156	1/2	202,952	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	158,871	3/4	173,668	3/4	188,464	3/4	203,261	3/4		3/4		3/4		3/4		3/4		3/4	
9	159,179	9	173,976	9	188,772	9	203,569	9		9		9		9		9		9	
1/4	159,488	1/4	174,284	1/4	189,081	1/4	203,877	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	159,796	1/2	174,592	1/2	189,389	1/2	204,185	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	160,104	3/4	174,901	3/4	189,697	3/4	204,493	3/4		3/4		3/4		3/4		3/4		3/4	
10	160,412	10	175,209	10	190,006	10	204,801	10		10		10		10		10		10	
1/4	160,721	1/4	175,517	1/4	190,314	1/4	205,109	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	161,029	1/2	175,825	1/2	190,622	1/2	205,416	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	161,337	3/4	176,134	3/4	190,930	3/4	205,724	3/4		3/4		3/4		3/4		3/4		3/4	
11	161,645	11	176,442	11	191,239	11	206,031	11		11		11		11		11		11	
1/4	161,954	1/4	176,750	1/4	191,547	1/4	206,338	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	162,262	1/2	177,058	1/2	191,855	1/2	206,645	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	162,570	3/4	177,367	3/4	192,163	3/4	206,952	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
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CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

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



BARGE "HFL 410"

3 PORT INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 1/2"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4	168,453	1/4	179,765	1/4	191,076	1/4	202,388	1/4	213,687	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	168,689	1/2	180,000	1/2	191,312	1/2	202,624	1/2	213,920	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	168,924	3/4	180,236	3/4	191,548	3/4	202,860	3/4	214,153	3/4		3/4		3/4		3/4		3/4		3/4	
1	169,160	1	180,472	1	191,783	1	203,095	1	214,386	1	1	1	1	1	1	1	1	1	1	1	1
1/4	169,396	1/4	180,707	1/4	192,019	1/4	203,331	1/4	214,613	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	169,631	1/2	180,943	1/2	192,255	1/2	203,567	1/2	214,840	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	169,867	3/4	181,179	3/4	192,490	3/4	203,802	3/4	215,067	3/4		3/4		3/4		3/4		3/4		3/4	
2	170,102	2	181,414	2	192,726	2	204,038	2	215,295	2	2	2	2	2	2	2	2	2	2	2	2
1/4	170,338	1/4	181,650	1/4	192,962	1/4	204,274	1/4	215,481	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	170,574	1/2	181,886	1/2	193,197	1/2	204,509	1/2	215,668	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	170,809	3/4	182,121	3/4	193,433	3/4	204,745	3/4	215,855	3/4		3/4		3/4		3/4		3/4		3/4	
3	171,045	3	182,357	3	193,669	3	204,981	3	216,042	3	3	3	3	3	3	3	3	3	3	3	3
1/4	171,281	1/4	182,593	1/4	193,904	1/4	205,216	1/4	216,163	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	171,516	1/2	182,828	1/2	194,140	1/2	205,452	1/2	216,283	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	171,752	3/4	183,064	3/4	194,376	3/4	205,688	3/4	216,404	3/4		3/4		3/4		3/4		3/4		3/4	
4	171,988	4	183,300	4	194,611	4	205,923	4	216,524	4	4	4	4	4	4	4	4	4	4	4	4
1/4	172,223	1/4	183,535	1/4	194,847	1/4	206,159	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	172,459	1/2	183,771	1/2	195,083	1/2	206,395	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	172,695	3/4	184,007	3/4	195,318	3/4	206,630	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
5	172,930	5	184,242	5	195,554	5	206,866	5	5	5	5	5	5	5	5	5	5	5	5	5	5
1/4	173,166	1/4	184,478	1/4	195,790	1/4	207,102	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	173,402	1/2	184,714	1/2	196,025	1/2	207,337	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	173,637	3/4	184,949	3/4	196,261	3/4	207,573	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
6	173,873	6	185,185	6	196,497	6	207,809	6	6	6	6	6	6	6	6	6	6	6	6	6	6
1/4	174,109	1/4	185,421	1/4	196,732	1/4	208,044	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	174,344	1/2	185,656	1/2	196,968	1/2	208,280	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	174,580	3/4	185,892	3/4	197,204	3/4	208,516	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
7	174,816	7	186,128	7	197,439	7	208,751	7	7	7	7	7	7	7	7	7	7	7	7	7	7
1/4	175,051	1/4	186,363	1/4	197,675	1/4	208,987	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	175,287	1/2	186,599	1/2	197,911	1/2	209,222	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	175,523	3/4	186,835	3/4	198,146	3/4	209,458	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
8	175,758	8	187,070	8	198,382	8	209,694	8	8	8	8	8	8	8	8	8	8	8	8	8	8
1/4	175,994	1/4	187,306	1/4	198,618	1/4	209,929	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	176,230	1/2	187,542	1/2	198,853	1/2	210,165	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	176,465	3/4	187,777	3/4	199,089	3/4	210,401	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
9	176,701	9	188,013	9	199,325	9	210,636	9	9	9	9	9	9	9	9	9	9	9	9	9	9
1/4	176,937	1/4	188,249	1/4	199,560	1/4	210,872	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	177,172	1/2	188,484	1/2	199,796	1/2	211,107	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	177,408	3/4	188,720	3/4	200,032	3/4	211,342	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
10	177,644	10	188,956	10	200,267	10	211,578	10	10	10	10	10	10	10	10	10	10	10	10	10	10
1/4	177,879	1/4	189,191	1/4	200,503	1/4	211,813	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	178,115	1/2	189,427	1/2	200,739	1/2	212,048	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	178,351	3/4	189,662	3/4	200,974	3/4	212,283	3/4		3/4		3/4		3/4		3/4		3/4		3/4	
11	178,586	11	189,898	11	201,210	11	212,517	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1/4	178,822	1/4	190,134	1/4	201,446	1/4	212,752	1/4		1/4		1/4		1/4		1/4		1/4		1/4	
1/2	179,058	1/2	190,369	1/2	201,681	1/2	212,986	1/2		1/2		1/2		1/2		1/2		1/2		1/2	
3/4	179,293	3/4	190,605	3/4	201,917	3/4	213,220	3/4		3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/31/2019 SW
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ALL PRIOR TO 02/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 410"

3 STBD INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	705	0	17,166	0	34,138	0	51,133	0	68,134	0	85,135	0	102,136	0	119,137	0	136,138	0	153,139
1/4	956	1/4	17,520	1/4	34,492	1/4	51,487	1/4	68,488	1/4	85,489	1/4	102,490	1/4	119,491	1/4	136,492	1/4	153,493
1/2	1,207	1/2	17,874	1/2	34,845	1/2	51,841	1/2	68,842	1/2	85,843	1/2	102,844	1/2	119,845	1/2	136,846	1/2	153,847
3/4	1,457	3/4	18,228	3/4	35,199	3/4	52,196	3/4	69,197	3/4	86,197	3/4	103,198	3/4	120,199	3/4	137,200	3/4	154,201
1	1,708	1	18,583	1	35,552	1	52,550	1	69,551	1	86,552	1	103,553	1	120,554	1	137,555	1	154,556
1/4	2,037	1/4	18,937	1/4	35,906	1/4	52,904	1/4	69,905	1/4	86,906	1/4	103,907	1/4	120,908	1/4	137,909	1/4	154,910
1/2	2,366	1/2	19,291	1/2	36,259	1/2	53,258	1/2	70,259	1/2	87,260	1/2	104,261	1/2	121,262	1/2	138,263	1/2	155,264
3/4	2,696	3/4	19,645	3/4	36,613	3/4	53,612	3/4	70,613	3/4	87,614	3/4	104,615	3/4	121,616	3/4	138,617	3/4	155,618
2	3,025	2	19,999	2	36,966	2	53,967	2	70,967	2	87,968	2	104,969	2	121,970	2	138,971	2	155,972
1/4	3,376	1/4	20,353	1/4	37,320	1/4	54,321	1/4	71,322	1/4	88,323	1/4	105,324	1/4	122,325	1/4	139,325	1/4	156,326
1/2	3,727	1/2	20,708	1/2	37,674	1/2	54,675	1/2	71,676	1/2	88,677	1/2	105,678	1/2	122,679	1/2	139,680	1/2	156,681
3/4	4,077	3/4	21,062	3/4	38,028	3/4	55,029	3/4	72,030	3/4	89,031	3/4	106,032	3/4	123,033	3/4	140,034	3/4	157,035
3	4,428	3	21,416	3	38,382	3	55,383	3	72,384	3	89,385	3	106,386	3	123,387	3	140,388	3	157,389
1/4	4,781	1/4	21,770	1/4	38,736	1/4	55,737	1/4	72,738	1/4	89,739	1/4	106,740	1/4	123,741	1/4	140,742	1/4	157,743
1/2	5,133	1/2	22,124	1/2	39,091	1/2	56,092	1/2	73,093	1/2	90,094	1/2	107,095	1/2	124,095	1/2	141,096	1/2	158,097
3/4	5,486	3/4	22,479	3/4	39,445	3/4	56,446	3/4	73,447	3/4	90,448	3/4	107,449	3/4	124,450	3/4	141,451	3/4	158,452
4	5,838	4	22,833	4	39,799	4	56,800	4	73,801	4	90,802	4	107,803	4	124,804	4	141,805	4	158,806
1/4	6,191	1/4	23,186	1/4	40,153	1/4	57,154	1/4	74,155	1/4	91,156	1/4	108,157	1/4	125,158	1/4	142,159	1/4	159,160
1/2	6,544	1/2	23,540	1/2	40,507	1/2	57,508	1/2	74,509	1/2	91,510	1/2	108,511	1/2	125,512	1/2	142,513	1/2	159,514
3/4	6,898	3/4	23,894	3/4	40,862	3/4	57,863	3/4	74,864	3/4	91,864	3/4	108,865	3/4	125,866	3/4	142,867	3/4	159,868
5	7,251	5	24,247	5	41,216	5	58,217	5	75,218	5	92,219	5	109,220	5	126,221	5	143,222	5	160,222
1/4	7,605	1/4	24,600	1/4	41,570	1/4	58,571	1/4	75,572	1/4	92,573	1/4	109,574	1/4	126,575	1/4	143,576	1/4	160,577
1/2	7,958	1/2	24,954	1/2	41,924	1/2	58,925	1/2	75,926	1/2	92,927	1/2	109,928	1/2	126,929	1/2	143,930	1/2	160,931
3/4	8,312	3/4	25,307	3/4	42,278	3/4	59,279	3/4	76,280	3/4	93,281	3/4	110,282	3/4	127,283	3/4	144,284	3/4	161,285
6	8,666	6	25,660	6	42,633	6	59,634	6	76,634	6	93,635	6	110,636	6	127,637	6	144,638	6	161,639
1/4	9,020	1/4	26,013	1/4	42,987	1/4	59,988	1/4	76,989	1/4	93,990	1/4	110,991	1/4	127,992	1/4	144,992	1/4	161,993
1/2	9,374	1/2	26,367	1/2	43,341	1/2	60,342	1/2	77,343	1/2	94,344	1/2	111,345	1/2	128,346	1/2	145,347	1/2	162,348
3/4	9,728	3/4	26,720	3/4	43,695	3/4	60,696	3/4	77,697	3/4	94,698	3/4	111,699	3/4	128,700	3/4	145,701	3/4	162,702
7	10,082	7	27,073	7	44,049	7	61,050	7	78,051	7	95,052	7	112,053	7	129,054	7	146,055	7	163,056
1/4	10,437	1/4	27,426	1/4	44,403	1/4	61,404	1/4	78,405	1/4	95,406	1/4	112,407	1/4	129,408	1/4	146,409	1/4	163,410
1/2	10,791	1/2	27,780	1/2	44,758	1/2	61,759	1/2	78,760	1/2	95,761	1/2	112,761	1/2	129,762	1/2	146,763	1/2	163,764
3/4	11,145	3/4	28,133	3/4	45,112	3/4	62,113	3/4	79,114	3/4	96,115	3/4	113,116	3/4	130,117	3/4	147,118	3/4	164,119
8	11,499	8	28,486	8	45,466	8	62,467	8	79,468	8	96,469	8	113,470	8	130,471	8	147,472	8	164,473
1/4	11,853	1/4	28,840	1/4	45,820	1/4	62,821	1/4	79,822	1/4	96,823	1/4	113,824	1/4	130,825	1/4	147,826	1/4	164,827
1/2	12,207	1/2	29,193	1/2	46,174	1/2	63,175	1/2	80,176	1/2	97,177	1/2	114,178	1/2	131,179	1/2	148,180	1/2	165,181
3/4	12,562	3/4	29,546	3/4	46,529	3/4	63,530	3/4	80,531	3/4	97,531	3/4	114,532	3/4	131,533	3/4	148,534	3/4	165,535
9	12,916	9	29,899	9	46,883	9	63,884	9	80,885	9	97,886	9	114,887	9	131,888	9	148,889	9	165,889
1/4	13,270	1/4	30,253	1/4	47,237	1/4	64,238	1/4	81,239	1/4	98,240	1/4	115,241	1/4	132,242	1/4	149,243	1/4	166,244
1/2	13,624	1/2	30,606	1/2	47,591	1/2	64,592	1/2	81,593	1/2	98,594	1/2	115,595	1/2	132,596	1/2	149,597	1/2	166,598
3/4	13,978	3/4	30,959	3/4	47,945	3/4	64,946	3/4	81,947	3/4	98,948	3/4	115,949	3/4	132,950	3/4	149,951	3/4	166,952
10	14,332	10	31,312	10	48,300	10	65,300	10	82,301	10	99,302	10	116,303	10	133,304	10	150,305	10	167,306
1/4	14,687	1/4	31,666	1/4	48,654	1/4	65,655	1/4	82,656	1/4	99,657	1/4	116,658	1/4	133,659	1/4	150,659	1/4	167,586
1/2	15,041	1/2	32,019	1/2	49,008	1/2	66,009	1/2	83,010	1/2	100,011	1/2	117,012	1/2	134,013	1/2	151,014	1/2	167,866
3/4	15,395	3/4	32,372	3/4	49,362	3/4	66,363	3/4	83,364	3/4	100,365	3/4	117,366	3/4	134,367	3/4	151,368	3/4	168,146
11	15,749	11	32,725	11	49,716	11	66,717	11	83,718	11	100,719	11	117,720	11	134,721	11	151,722	11	168,426
1/4	16,103	1/4	33,079	1/4	50,070	1/4	67,071	1/4	84,072	1/4	101,073	1/4	118,074	1/4	135,075	1/4	152,076	1/4	168,662
1/2	16,458	1/2	33,432	1/2	50,425	1/2	67,426	1/2	84,427	1/2	101,428	1/2	118,428	1/2	135,429	1/2	152,430	1/2	168,897
3/4	16,812	3/4	33,785	3/4	50,779	3/4	67,780	3/4	84,781	3/4	101,782	3/4	118,783	3/4	135,784	3/4	152,785	3/4	169,133

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

PRECISION MEASUREMENT
& ANALYSIS, INC.

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



BARGE "HFL 410"

**3 STBD
INNAGE TABLE**

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 1/2"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.			
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4	169,368	1/4	180,671	1/4	191,974	1/4	203,277	1/4	214,569			1/4		1/4		1/4		1/4		1/4	
1/2	169,604	1/2	180,907	1/2	192,209	1/2	203,512	1/2	214,802	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	169,839	3/4	181,142	3/4	192,445	3/4	203,748	3/4	215,035	1/2		1/2		1/2		1/2		1/2		1/2	
1	170,075	1	181,377	1	192,680	1	203,983	1	215,268	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	170,310	1/4	181,613	1/4	192,916	1/4	204,219	1/4	215,501	1		1		1		1		1		1	
1/2	170,546	1/2	181,848	1/2	193,151	1/2	204,454	1/2	215,727	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	170,781	3/4	182,084	3/4	193,387	3/4	204,690	3/4	215,954	1/2		1/2		1/2		1/2		1/2		1/2	
1	171,016	1	182,319	1	193,622	1	204,925	1	216,181	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	171,252	1/4	182,555	1/4	193,858	1/4	205,161	1/4	216,408	1		1		1		1		1		1	
1/2	171,487	1/2	182,790	1/2	194,093	1/2	205,396	1/2	216,595	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	171,723	3/4	183,026	3/4	194,329	3/4	205,632	3/4	216,782	1/2		1/2		1/2		1/2		1/2		1/2	
1	171,958	1	183,261	1	194,564	1	205,867	1	216,969	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	172,194	1/4	183,497	1/4	194,800	1/4	206,103	1/4	217,156	1		1		1		1		1		1	
1/2	172,429	1/2	183,732	1/2	195,035	1/2	206,338	1/2	217,276	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	172,665	3/4	183,968	3/4	195,271	3/4	206,574	3/4	217,396	1/2		1/2		1/2		1/2		1/2		1/2	
1	172,900	1	184,203	1	195,506	1	206,809	1	217,517	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	173,136	1/4	184,439	1/4	195,742	1/4	207,044	1/4	217,637	1		1		1		1		1		1	
1/2	173,371	1/2	184,674	1/2	195,977	1/2	207,280	1/2		1/4		1/4		1/4		1/4		1/4		1/4	
3/4	173,607	3/4	184,910	3/4	196,213	3/4	207,515	3/4		1/2		1/2		1/2		1/2		1/2		1/2	
1	173,842	1	185,145	1	196,448	1	207,751	1		3/4		3/4		3/4		3/4		3/4		3/4	
1/4	174,078	1/4	185,381	1/4	196,683	1/4	207,986	1/4	5	1		1		1		1		1		1	
1/2	174,313	1/2	185,616	1/2	196,919	1/2	208,222	1/2	5	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	174,549	3/4	185,852	3/4	197,154	3/4	208,457	3/4	5	1/2		1/2		1/2		1/2		1/2		1/2	
1	174,784	1	186,087	1	197,390	1	208,693	1	5	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	175,020	1/4	186,322	1/4	197,625	1/4	208,928	1/4	6	1		1		1		1		1		1	
1/2	175,255	1/2	186,558	1/2	197,861	1/2	209,164	1/2	6	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	175,491	3/4	186,793	3/4	198,096	3/4	209,399	3/4	6	1/2		1/2		1/2		1/2		1/2		1/2	
1	175,726	1	187,029	1	198,332	1	209,635	1	6	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	175,961	1/4	187,264	1/4	198,567	1/4	209,870	1/4	7	1		1		1		1		1		1	
1/2	176,197	1/2	187,500	1/2	198,803	1/2	210,106	1/2	7	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	176,432	3/4	187,735	3/4	199,038	3/4	210,341	3/4	7	1/2		1/2		1/2		1/2		1/2		1/2	
1	176,668	1	187,971	1	199,274	1	210,577	1	7	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	176,903	1/4	188,206	1/4	199,509	1/4	210,812	1/4	8	1		1		1		1		1		1	
1/2	177,139	1/2	188,442	1/2	199,745	1/2	211,048	1/2	8	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	177,374	3/4	188,677	3/4	199,980	3/4	211,283	3/4	8	1/2		1/2		1/2		1/2		1/2		1/2	
1	177,610	1	188,913	1	200,216	1	211,518	1	8	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	177,845	1/4	189,148	1/4	200,451	1/4	211,754	1/4	9	1		1		1		1		1		1	
1/2	178,081	1/2	189,384	1/2	200,687	1/2	211,989	1/2	9	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	178,316	3/4	189,619	3/4	200,922	3/4	212,224	3/4	9	1/2		1/2		1/2		1/2		1/2		1/2	
1	178,552	1	189,855	1	201,158	1	212,459	1	9	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	178,787	1/4	190,090	1/4	201,393	1/4	212,695	1/4	10	1		1		1		1		1		1	
1/2	179,023	1/2	190,326	1/2	201,628	1/2	212,929	1/2	10	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	179,258	3/4	190,561	3/4	201,864	3/4	213,164	3/4	10	1/2		1/2		1/2		1/2		1/2		1/2	
1	179,494	1	190,797	1	202,099	1	213,399	1	10	3/4		3/4		3/4		3/4		3/4		3/4	
1/4	179,729	1/4	191,032	1/4	202,335	1/4	213,633	1/4	11	1		1		1		1		1		1	
1/2	179,965	1/2	191,268	1/2	202,570	1/2	213,867	1/2	11	1/4		1/4		1/4		1/4		1/4		1/4	
3/4	180,200	3/4	191,503	3/4	202,806	3/4	214,101	3/4	11	1/2		1/2		1/2		1/2		1/2		1/2	
1	180,436	1	191,738	1	203,041	1	214,335	1	11	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

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



BARGE "HFL 410"

PORT 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	1,138	0	2,276	0	3,413	0	4,551	0		0		0		0		0	
1/4	24	1/4	1,161	1/4	2,299	1/4	3,437	1/4	4,575	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	47	1/2	1,185	1/2	2,323	1/2	3,461	1/2	4,599	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	71	3/4	1,209	3/4	2,347	3/4	3,484	3/4	4,622	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
1	95	1	1,233	1	2,370	1	3,508	1	4,646	1		1		1	1	1	1	1	1
1/4	119	1/4	1,256	1/4	2,394	1/4	3,532	1/4	4,670	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	142	1/2	1,280	1/2	2,418	1/2	3,556	1/2	4,693	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	166	3/4	1,304	3/4	2,441	3/4	3,579	3/4	4,717	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
2	190	2	1,327	2	2,465	2	3,603	2	4,741	2		2		2	2	2	2	2	2
1/4	213	1/4	1,351	1/4	2,489	1/4	3,627	1/4	4,764	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	237	1/2	1,375	1/2	2,513	1/2	3,650	1/2	4,788	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	261	3/4	1,399	3/4	2,536	3/4	3,674	3/4	4,812	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
3	284	3	1,422	3	2,560	3	3,698	3	4,836	3		3		3	3	3	3	3	3
1/4	308	1/4	1,446	1/4	2,584	1/4	3,721	1/4	4,859	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	332	1/2	1,470	1/2	2,607	1/2	3,745	1/2	4,883	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	356	3/4	1,493	3/4	2,631	3/4	3,769	3/4	4,907	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
4	379	4	1,517	4	2,655	4	3,793	4	4,930	4		4		4	4	4	4	4	4
1/4	403	1/4	1,541	1/4	2,679	1/4	3,816	1/4	4,954	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	427	1/2	1,564	1/2	2,702	1/2	3,840	1/2	4,978	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	450	3/4	1,588	3/4	2,726	3/4	3,864	3/4	5,002	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
5	474	5	1,612	5	2,750	5	3,887	5	5,025	5		5		5	5	5	5	5	5
1/4	498	1/4	1,636	1/4	2,773	1/4	3,911	1/4	5,049	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	521	1/2	1,659	1/2	2,797	1/2	3,935	1/2	5,073	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	545	3/4	1,683	3/4	2,821	3/4	3,959	3/4	5,096	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
6	569	6	1,707	6	2,844	6	3,982	6	5,120	6		6		6	6	6	6	6	6
1/4	593	1/4	1,730	1/4	2,868	1/4	4,006	1/4	5,144	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	616	1/2	1,754	1/2	2,892	1/2	4,030	1/2	5,167	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	640	3/4	1,778	3/4	2,916	3/4	4,053	3/4	5,191	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
7	664	7	1,801	7	2,939	7	4,077	7	5,215	7		7		7	7	7	7	7	7
1/4	687	1/4	1,825	1/4	2,963	1/4	4,101	1/4	5,239	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	711	1/2	1,849	1/2	2,987	1/2	4,124	1/2	5,262	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	735	3/4	1,873	3/4	3,010	3/4	4,148	3/4		3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
8	759	8	1,896	8	3,034	8	4,172	8		8		8		8	8	8	8	8	8
1/4	782	1/4	1,920	1/4	3,058	1/4	4,196	1/4		1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	806	1/2	1,944	1/2	3,081	1/2	4,219	1/2		1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	830	3/4	1,967	3/4	3,105	3/4	4,243	3/4		3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
9	853	9	1,991	9	3,129	9	4,267	9		9		9		9	9	9	9	9	9
1/4	877	1/4	2,015	1/4	3,153	1/4	4,290	1/4		1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	901	1/2	2,039	1/2	3,176	1/2	4,314	1/2		1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	924	3/4	2,062	3/4	3,200	3/4	4,338	3/4		3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
10	948	10	2,086	10	3,224	10	4,361	10		10		10		10	10	10	10	10	10
1/4	972	1/4	2,110	1/4	3,247	1/4	4,385	1/4		1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	996	1/2	2,133	1/2	3,271	1/2	4,409	1/2		1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,019	3/4	2,157	3/4	3,295	3/4	4,433	3/4		3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
11	1,043	11	2,181	11	3,319	11	4,456	11		11		11		11	11	11	11	11	11
1/4	1,067	1/4	2,204	1/4	3,342	1/4	4,480	1/4		1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,090	1/2	2,228	1/2	3,366	1/2	4,504	1/2		1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,114	3/4	2,252	3/4	3,390	3/4	4,527	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.

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: 01/31/2019 SW
 CALCULATED: 02/01/2019 CL
 PRINTED: 02/01/2019 CL

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

CANCELS AND SUPERCEDES
 ALL PRIOR TO 02/2019



BARGE "HFL 410"

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	1,138	0	2,276	0	3,413	0	4,551	0		0		0		0		0	
1/4	24	1/4	1,161	1/4	2,299	1/4	3,437	1/4	4,575	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	47	1/2	1,185	1/2	2,323	1/2	3,461	1/2	4,599	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	71	3/4	1,209	3/4	2,347	3/4	3,484	3/4	4,622	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
1	95	1	1,233	1	2,370	1	3,508	1	4,646	1		1		1	1	1	1	1	1
1/4	119	1/4	1,256	1/4	2,394	1/4	3,532	1/4	4,670	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	142	1/2	1,280	1/2	2,418	1/2	3,556	1/2	4,693	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	166	3/4	1,304	3/4	2,441	3/4	3,579	3/4	4,717	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
2	190	2	1,327	2	2,465	2	3,603	2	4,741	2		2		2	2	2	2	2	2
1/4	213	1/4	1,351	1/4	2,489	1/4	3,627	1/4	4,764	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	237	1/2	1,375	1/2	2,513	1/2	3,650	1/2	4,788	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	261	3/4	1,399	3/4	2,536	3/4	3,674	3/4	4,812	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
3	284	3	1,422	3	2,560	3	3,698	3	4,836	3		3		3	3	3	3	3	3
1/4	308	1/4	1,446	1/4	2,584	1/4	3,721	1/4	4,859	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	332	1/2	1,470	1/2	2,607	1/2	3,745	1/2	4,883	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	356	3/4	1,493	3/4	2,631	3/4	3,769	3/4	4,907	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
4	379	4	1,517	4	2,655	4	3,793	4	4,930	4		4		4	4	4	4	4	4
1/4	403	1/4	1,541	1/4	2,679	1/4	3,816	1/4	4,954	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	427	1/2	1,564	1/2	2,702	1/2	3,840	1/2	4,978	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	450	3/4	1,588	3/4	2,726	3/4	3,864	3/4	5,002	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
5	474	5	1,612	5	2,750	5	3,887	5	5,025	5		5		5	5	5	5	5	5
1/4	498	1/4	1,636	1/4	2,773	1/4	3,911	1/4	5,049	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	521	1/2	1,659	1/2	2,797	1/2	3,935	1/2	5,073	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	545	3/4	1,683	3/4	2,821	3/4	3,959	3/4	5,096	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
6	569	6	1,707	6	2,844	6	3,982	6	5,120	6		6		6	6	6	6	6	6
1/4	593	1/4	1,730	1/4	2,868	1/4	4,006	1/4	5,144	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	616	1/2	1,754	1/2	2,892	1/2	4,030	1/2	5,167	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	640	3/4	1,778	3/4	2,916	3/4	4,053	3/4	5,191	3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
7	664	7	1,801	7	2,939	7	4,077	7	5,215	7		7		7	7	7	7	7	7
1/4	687	1/4	1,825	1/4	2,963	1/4	4,101	1/4	5,239	1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	711	1/2	1,849	1/2	2,987	1/2	4,124	1/2	5,262	1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	735	3/4	1,873	3/4	3,010	3/4	4,148	3/4		3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
8	759	8	1,896	8	3,034	8	4,172	8		8		8		8	8	8	8	8	8
1/4	782	1/4	1,920	1/4	3,058	1/4	4,196	1/4		1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	806	1/2	1,944	1/2	3,081	1/2	4,219	1/2		1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	830	3/4	1,967	3/4	3,105	3/4	4,243	3/4		3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
9	853	9	1,991	9	3,129	9	4,267	9		9		9		9	9	9	9	9	9
1/4	877	1/4	2,015	1/4	3,153	1/4	4,290	1/4		1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	901	1/2	2,039	1/2	3,176	1/2	4,314	1/2		1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	924	3/4	2,062	3/4	3,200	3/4	4,338	3/4		3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
10	948	10	2,086	10	3,224	10	4,361	10		10		10		10	10	10	10	10	10
1/4	972	1/4	2,110	1/4	3,247	1/4	4,385	1/4		1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	996	1/2	2,133	1/2	3,271	1/2	4,409	1/2		1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,019	3/4	2,157	3/4	3,295	3/4	4,433	3/4		3/4		3/4		3/4	3/4	3/4	3/4	3/4	3/4
11	1,043	11	2,181	11	3,319	11	4,456	11		11		11		11	11	11	11	11	11
1/4	1,067	1/4	2,204	1/4	3,342	1/4	4,480	1/4		1/4		1/4		1/4	1/4	1/4	1/4	1/4	1/4
1/2	1,090	1/2	2,228	1/2	3,366	1/2	4,504	1/2		1/2		1/2		1/2	1/2	1/2	1/2	1/2	1/2
3/4	1,114	3/4	2,252	3/4	3,390	3/4	4,527	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.

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

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CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019



BARGE "HFL 410"

FUEL TANK INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-04 1/4"

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

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 LIP OPPOSITE HINGE OF 8" HATCH

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CANCELS AND SUPERCEDES
 ALL PRIOR TO 02/2019



BARGE "HFL 410"

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	00-0/8	- 00-0/8	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	00-0/8	- 00-0/8	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	00-1/8	- 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	00-0/8	- 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"

February 1, 2019

**PRECISION MEASUREMENT
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BARGE "HFL 410"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	0	0	196,022	0	181,154	0	166,287	0	151,420	0	136,552	0	121,685	0	106,818	0	91,950
1/4		1/4		1/4	195,712	1/4	180,845	1/4	165,977	1/4	151,110	1/4	136,243	1/4	121,375	1/4	106,508	1/4	91,641
1/2		1/2		1/2	195,402	1/2	180,535	1/2	165,667	1/2	150,800	1/2	135,933	1/2	121,065	1/2	106,198	1/2	91,331
3/4		3/4		3/4	195,092	3/4	180,225	3/4	165,358	3/4	150,490	3/4	135,623	3/4	120,756	3/4	105,888	3/4	91,021
1	1	1	1	1	194,783	1	179,915	1	165,048	1	150,181	1	135,313	1	120,446	1	105,579	1	90,711
1/4		1/4		1/4	194,473	1/4	179,606	1/4	164,738	1/4	149,871	1/4	135,004	1/4	120,136	1/4	105,269	1/4	90,402
1/2		1/2		1/2	194,163	1/2	179,296	1/2	164,429	1/2	149,561	1/2	134,694	1/2	119,827	1/2	104,959	1/2	90,092
3/4		3/4		3/4	193,853	3/4	178,986	3/4	164,119	3/4	149,251	3/4	134,384	3/4	119,517	3/4	104,649	3/4	89,782
2	2	2	2	2	193,544	2	178,676	2	163,809	2	148,942	2	134,074	2	119,207	2	104,340	2	89,472
1/4		1/4		1/4	193,234	1/4	178,367	1/4	163,499	1/4	148,632	1/4	133,765	1/4	118,897	1/4	104,030	1/4	89,163
1/2		1/2		1/2	192,924	1/2	178,057	1/2	163,190	1/2	148,322	1/2	133,455	1/2	118,588	1/2	103,720	1/2	88,853
3/4		3/4		3/4	192,615	3/4	177,747	3/4	162,880	3/4	148,013	3/4	133,145	3/4	118,278	3/4	103,410	3/4	88,543
3	3	3	3	3	192,305	3	177,437	3	162,570	3	147,703	3	132,835	3	117,968	3	103,101	3	88,233
1/4		1/4		1/4	191,995	1/4	177,128	1/4	162,260	1/4	147,393	1/4	132,526	1/4	117,658	1/4	102,791	1/4	87,924
1/2		1/2		1/2	205,932	1/2	191,685	1/2	176,818	1/2	161,951	1/2	147,083	1/2	132,216	1/2	117,349	1/2	102,481
3/4		3/4		3/4	205,722	3/4	191,376	3/4	176,508	3/4	161,641	3/4	146,774	3/4	131,906	3/4	117,039	3/4	102,172
4	4	4	4	4	205,513	4	191,066	4	176,199	4	161,331	4	146,464	4	131,596	4	116,729	4	101,862
1/4		1/4		1/4	205,304	1/4	190,756	1/4	175,889	1/4	161,021	1/4	146,154	1/4	131,287	1/4	116,419	1/4	101,552
1/2		1/2		1/2	205,095	1/2	190,446	1/2	175,579	1/2	160,712	1/2	145,844	1/2	130,977	1/2	116,110	1/2	101,242
3/4		3/4		3/4	204,828	3/4	190,137	3/4	175,269	3/4	160,402	3/4	145,535	3/4	130,667	3/4	115,800	3/4	100,933
5	5	5	5	5	204,561	5	189,827	5	174,960	5	160,092	5	145,225	5	130,358	5	115,490	5	100,623
1/4		1/4		1/4	204,294	1/4	189,517	1/4	174,650	1/4	159,782	1/4	144,915	1/4	130,048	1/4	115,180	1/4	100,313
1/2		1/2		1/2	204,026	1/2	189,207	1/2	174,340	1/2	159,473	1/2	144,605	1/2	129,738	1/2	114,871	1/2	100,003
3/4		3/4		3/4	203,724	3/4	188,898	3/4	174,030	3/4	159,163	3/4	144,296	3/4	129,428	3/4	114,561	3/4	99,694
6	6	6	6	6	203,422	6	188,588	6	173,721	6	158,853	6	143,986	6	129,119	6	114,251	6	99,384
1/4		1/4		1/4	203,120	1/4	188,278	1/4	173,411	1/4	158,544	1/4	143,676	1/4	128,809	1/4	113,942	1/4	99,074
1/2		1/2		1/2	202,817	1/2	187,969	1/2	173,101	1/2	158,234	1/2	143,366	1/2	128,499	1/2	113,632	1/2	98,764
3/4		3/4		3/4	202,510	3/4	187,659	3/4	172,791	3/4	157,924	3/4	143,057	3/4	128,189	3/4	113,322	3/4	98,455
7	7	7	7	7	202,203	7	187,349	7	172,482	7	157,614	7	142,747	7	127,880	7	113,012	7	98,145
1/4		1/4		1/4	201,895	1/4	187,039	1/4	172,172	1/4	157,305	1/4	142,437	1/4	127,570	1/4	112,703	1/4	97,835
1/2		1/2		1/2	201,588	1/2	186,730	1/2	171,862	1/2	156,995	1/2	142,128	1/2	127,260	1/2	112,393	1/2	97,526
3/4		3/4		3/4	201,279	3/4	186,420	3/4	171,552	3/4	156,685	3/4	141,818	3/4	126,950	3/4	112,083	3/4	97,216
8	8	8	8	8	200,971	8	186,110	8	171,243	8	156,375	8	141,508	8	126,641	8	111,773	8	96,906
1/4		1/4		1/4	200,663	1/4	185,800	1/4	170,933	1/4	156,066	1/4	141,198	1/4	126,331	1/4	111,464	1/4	96,596
1/2		1/2		1/2	200,354	1/2	185,491	1/2	170,623	1/2	155,756	1/2	140,889	1/2	126,021	1/2	111,154	1/2	96,287
3/4		3/4		3/4	200,045	3/4	185,181	3/4	170,314	3/4	155,446	3/4	140,579	3/4	125,712	3/4	110,844	3/4	95,977
9	9	9	9	9	199,736	9	184,871	9	170,004	9	155,136	9	140,269	9	125,402	9	110,534	9	95,667
1/4		1/4		1/4	199,427	1/4	184,561	1/4	169,694	1/4	154,827	1/4	139,959	1/4	125,092	1/4	110,225	1/4	95,357
1/2		1/2		1/2	199,118	1/2	184,252	1/2	169,384	1/2	154,517	1/2	139,650	1/2	124,782	1/2	109,915	1/2	95,048
3/4		3/4		3/4	198,808	3/4	183,942	3/4	169,075	3/4	154,207	3/4	139,340	3/4	124,473	3/4	109,605	3/4	94,738
10	10	10	10	10	198,499	10	183,632	10	168,765	10	153,898	10	139,030	10	124,163	10	109,295	10	94,428
1/4		1/4		1/4	198,189	1/4	183,322	1/4	168,455	1/4	153,588	1/4	138,720	1/4	123,853	1/4	108,986	1/4	94,118
1/2		1/2		1/2	197,880	1/2	183,013	1/2	168,145	1/2	153,278	1/2	138,411	1/2	123,543	1/2	108,676	1/2	93,809
3/4		3/4		3/4	197,570	3/4	182,703	3/4	167,836	3/4	152,968	3/4	138,101	3/4	123,234	3/4	108,366	3/4	93,499
11	11	11	11	11	197,260	11	182,393	11	167,526	11	152,659	11	137,791	11	122,924	11	108,057	11	93,189
1/4		1/4		1/4	196,951	1/4	182,084	1/4	167,216	1/4	152,349	1/4	137,481	1/4	122,614	1/4	107,747	1/4	92,879
1/2		1/2		1/2	196,641	1/2	181,774	1/2	166,906	1/2	152,039	1/2	137,172	1/2	122,304	1/2	107,437	1/2	92,570
3/4		3/4		3/4	196,331	3/4	181,464	3/4	166,597	3/4	151,729	3/4	136,862	3/4	121,995	3/4	107,127	3/4	92,260

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK

CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE

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

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



BARGE "HFL 410"

1 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	77,083	0	62,216	0	47,348	0	32,591	0	18,853	0	6,531	0		0		0		0	
1/4	76,773	1/4	61,906	1/4	47,038	1/4	32,291	1/4	18,581	1/4	6,290	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	76,463	1/2	61,596	1/2	46,729	1/2	31,991	1/2	18,309	1/2	6,048	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	76,154	3/4	61,286	3/4	46,419	3/4	31,693	3/4	18,040	3/4	5,809	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	75,844	1	60,977	1	46,109	1	31,396	1	17,771	1	5,570	1	1	1	1	1	1	1	1
1/4	75,534	1/4	60,667	1/4	45,800	1/4	31,098	1/4	17,502	1/4	5,331	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	75,224	1/2	60,357	1/2	45,490	1/2	30,801	1/2	17,233	1/2	5,092	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	74,915	3/4	60,047	3/4	45,180	3/4	30,506	3/4	16,966	3/4	4,856	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	74,605	2	59,738	2	44,870	2	30,211	2	16,699	2	4,620	2	2	2	2	2	2	2	2
1/4	74,295	1/4	59,428	1/4	44,561	1/4	29,916	1/4	16,433	1/4	4,384	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	73,986	1/2	59,118	1/2	44,251	1/2	29,621	1/2	16,166	1/2	4,148	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	73,676	3/4	58,808	3/4	43,941	3/4	29,328	3/4	15,902	3/4	3,915	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	73,366	3	58,499	3	43,631	3	29,035	3	15,638	3	3,682	3	3	3	3	3	3	3	3
1/4	73,056	1/4	58,189	1/4	43,322	1/4	28,743	1/4	15,374	1/4	3,449	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	72,747	1/2	57,879	1/2	43,012	1/2	28,450	1/2	15,109	1/2	3,216	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	72,437	3/4	57,570	3/4	42,702	3/4	28,159	3/4	14,848	3/4	2,986	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	72,127	4	57,260	4	42,392	4	27,868	4	14,586	4	2,756	4	4	4	4	4	4	4	4
1/4	71,817	1/4	56,950	1/4	42,083	1/4	27,578	1/4	14,324	1/4	2,526	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	71,508	1/2	56,640	1/2	41,773	1/2	27,287	1/2	14,062	1/2	2,296	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	71,198	3/4	56,331	3/4	41,464	3/4	26,998	3/4	13,803	3/4	2,070	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	70,888	5	56,021	5	41,155	5	26,709	5	13,543	5	1,844	5	5	5	5	5	5	5	5
1/4	70,578	1/4	55,711	1/4	40,846	1/4	26,421	1/4	13,284	1/4	1,618	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	70,269	1/2	55,401	1/2	40,538	1/2	26,132	1/2	13,025	1/2	1,392	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	69,959	3/4	55,092	3/4	40,230	3/4	25,845	3/4	12,768	3/4	1,188	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	69,649	6	54,782	6	39,923	6	25,558	6	12,511	6	983	6	6	6	6	6	6	6	6
1/4	69,339	1/4	54,472	1/4	39,616	1/4	25,270	1/4	12,254	1/4	779	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	69,030	1/2	54,162	1/2	39,308	1/2	24,983	1/2	11,998	1/2	574	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	68,720	3/4	53,853	3/4	39,001	3/4	24,698	3/4	11,743	3/4	441	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	68,410	7	53,543	7	38,694	7	24,414	7	11,489	7	308	7	7	7	7	7	7	7	7
1/4	68,101	1/4	53,233	1/4	38,386	1/4	24,129	1/4	11,235	1/4	174	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	67,791	1/2	52,923	1/2	38,079	1/2	23,845	1/2	10,981	1/2	41	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	67,481	3/4	52,614	3/4	37,771	3/4	23,563	3/4	10,729	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	67,171	8	52,304	8	37,464	8	23,281	8	10,477	8		8	8	8	8	8	8	8	8
1/4	66,862	1/4	51,994	1/4	37,157	1/4	22,999	1/4	10,226	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	66,552	1/2	51,685	1/2	36,849	1/2	22,717	1/2	9,974	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	66,242	3/4	51,375	3/4	36,543	3/4	22,438	3/4	9,725	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	65,932	9	51,065	9	36,236	9	22,159	9	9,476	9		9	9	9	9	9	9	9	9
1/4	65,623	1/4	50,755	1/4	35,929	1/4	21,879	1/4	9,226	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	65,313	1/2	50,446	1/2	35,622	1/2	21,600	1/2	8,977	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	65,003	3/4	50,136	3/4	35,317	3/4	21,323	3/4	8,731	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	64,693	10	49,826	10	35,012	10	21,047	10	8,484	10		10	10	10	10	10	10	10	10
1/4	64,384	1/4	49,516	1/4	34,707	1/4	20,770	1/4	8,237	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	64,074	1/2	49,207	1/2	34,401	1/2	20,493	1/2	7,991	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	63,764	3/4	48,897	3/4	34,099	3/4	20,219	3/4	7,747	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	63,455	11	48,587	11	33,796	11	19,945	11	7,502	11		11	11	11	11	11	11	11	11
1/4	63,145	1/4	48,277	1/4	33,494	1/4	19,670	1/4	7,258	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	62,835	1/2	47,968	1/2	33,191	1/2	19,396	1/2	7,014	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	62,525	3/4	47,658	3/4	32,891	3/4	19,124	3/4	6,773	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: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

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



BARGE "HFL 410"

1 STBD
ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GUAGE HEIGHT 15'-07 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	195,159	0	181,265	0	166,372	0	151,478	0	136,584	0	121,690	0	106,796	0	91,903		
1/4	1/4	1/4	195,849	1/4	180,955	1/4	166,061	1/4	151,167	1/4	136,274	1/4	121,380	1/4	106,486	1/4	91,592		
1/2	1/2	1/2	195,539	1/2	180,645	1/2	165,751	1/2	150,857	1/2	135,963	1/2	121,070	1/2	106,176	1/2	91,282		
3/4	3/4	3/4	195,228	3/4	180,334	3/4	165,441	3/4	150,547	3/4	135,653	3/4	120,759	3/4	105,865	3/4	90,972		
1	1	1	194,918	1	180,024	1	165,130	1	150,237	1	135,343	1	120,449	1	105,555	1	90,661		
1/4	1/4	1/4	194,608	1/4	179,714	1/4	164,820	1/4	149,926	1/4	135,032	1/4	120,139	1/4	105,245	1/4	90,351		
1/2	1/2	1/2	194,297	1/2	179,404	1/2	164,510	1/2	149,616	1/2	134,722	1/2	119,828	1/2	104,935	1/2	90,041		
3/4	3/4	3/4	193,987	3/4	179,093	3/4	164,199	3/4	149,306	3/4	134,412	3/4	119,518	3/4	104,624	3/4	89,731		
2	2	2	193,677	2	178,783	2	163,889	2	148,995	2	134,102	2	119,208	2	104,314	2	89,420		
1/4	1/4	1/4	193,367	1/4	178,473	1/4	163,579	1/4	148,685	1/4	133,791	1/4	118,898	1/4	104,004	1/4	89,110		
1/2	1/2	1/2	193,056	1/2	178,162	1/2	163,269	1/2	148,375	1/2	133,481	1/2	118,587	1/2	103,693	1/2	88,800		
3/4	3/4	3/4	192,746	3/4	177,852	3/4	162,958	3/4	148,065	3/4	133,171	3/4	118,277	3/4	103,383	3/4	88,489		
3	3	3	192,436	3	177,542	3	162,648	3	147,754	3	132,860	3	117,967	3	103,073	3	88,179		
1/4	1/4	206,397	192,125	1/4	177,232	1/4	162,338	1/4	147,444	1/4	132,550	1/4	117,656	1/4	102,763	1/4	87,869		
1/2	1/2	206,188	191,815	1/2	176,921	1/2	162,027	1/2	147,134	1/2	132,240	1/2	117,346	1/2	102,452	1/2	87,559		
3/4	3/4	205,978	191,505	3/4	176,611	3/4	161,717	3/4	146,823	3/4	131,930	3/4	117,036	3/4	102,142	3/4	87,248		
4	4	205,769	191,194	4	176,301	4	161,407	4	146,513	4	131,619	4	116,726	4	101,832	4	86,938		
1/4	1/4	205,559	190,884	1/4	175,990	1/4	161,097	1/4	146,203	1/4	131,309	1/4	116,415	1/4	101,521	1/4	86,628		
1/2	1/2	205,292	190,574	1/2	175,680	1/2	160,786	1/2	145,893	1/2	130,999	1/2	116,105	1/2	101,211	1/2	86,317		
3/4	3/4	205,024	190,264	3/4	175,370	3/4	160,476	3/4	145,582	3/4	130,688	3/4	115,795	3/4	100,901	3/4	86,007		
5	5	204,756	189,953	5	175,060	5	160,166	5	145,272	5	130,378	5	115,484	5	100,591	5	85,697		
1/4	1/4	204,489	189,643	1/4	174,749	1/4	159,855	1/4	144,962	1/4	130,068	1/4	115,174	1/4	100,280	1/4	85,386		
1/2	1/2	204,186	189,333	1/2	174,439	1/2	159,545	1/2	144,651	1/2	129,758	1/2	114,864	1/2	99,970	1/2	85,076		
3/4	3/4	203,883	189,022	3/4	174,129	3/4	159,235	3/4	144,341	3/4	129,447	3/4	114,554	3/4	99,660	3/4	84,766		
6	6	203,580	188,712	6	173,818	6	158,925	6	144,031	6	129,137	6	114,243	6	99,349	6	84,456		
1/4	1/4	203,277	188,402	1/4	173,508	1/4	158,614	1/4	143,721	1/4	128,827	1/4	113,933	1/4	99,039	1/4	84,145		
1/2	1/2	202,969	188,092	1/2	173,198	1/2	158,304	1/2	143,410	1/2	128,516	1/2	113,623	1/2	98,729	1/2	83,835		
3/4	3/4	202,661	187,781	3/4	172,888	3/4	157,994	3/4	143,100	3/4	128,206	3/4	113,312	3/4	98,419	3/4	83,525		
7	7	202,353	187,471	7	172,577	7	157,683	7	142,790	7	127,896	7	113,002	7	98,108	7	83,214		
1/4	1/4	202,046	187,161	1/4	172,267	1/4	157,373	1/4	142,479	1/4	127,586	1/4	112,692	1/4	97,798	1/4	82,904		
1/2	1/2	201,737	186,850	1/2	171,957	1/2	157,063	1/2	142,169	1/2	127,275	1/2	112,382	1/2	97,488	1/2	82,594		
3/4	3/4	201,428	186,540	3/4	171,646	3/4	156,753	3/4	141,859	3/4	126,965	3/4	112,071	3/4	97,177	3/4	82,284		
8	8	201,119	186,230	8	171,336	8	156,442	8	141,549	8	126,655	8	111,761	8	96,867	8	81,973		
1/4	1/4	200,810	185,920	1/4	171,026	1/4	156,132	1/4	141,238	1/4	126,344	1/4	111,451	1/4	96,557	1/4	81,663		
1/2	1/2	200,500	185,609	1/2	170,716	1/2	155,822	1/2	140,928	1/2	126,034	1/2	111,140	1/2	96,247	1/2	81,353		
3/4	3/4	200,190	185,299	3/4	170,405	3/4	155,511	3/4	140,618	3/4	125,724	3/4	110,830	3/4	95,936	3/4	81,042		
9	9	199,881	184,989	9	170,095	9	155,201	9	140,307	9	125,414	9	110,520	9	95,626	9	80,732		
1/4	1/4	199,571	184,678	1/4	169,785	1/4	154,891	1/4	139,997	1/4	125,103	1/4	110,209	1/4	95,316	1/4	80,422		
1/2	1/2	199,261	184,368	1/2	169,474	1/2	154,581	1/2	139,687	1/2	124,793	1/2	109,899	1/2	95,005	1/2	80,112		
3/4	3/4	198,951	184,058	3/4	169,164	3/4	154,270	3/4	139,377	3/4	124,483	3/4	109,589	3/4	94,695	3/4	79,801		
10	10	198,641	183,748	10	168,854	10	153,960	10	139,066	10	124,172	10	109,279	10	94,385	10	79,491		
1/4	1/4	198,331	183,437	1/4	168,544	1/4	153,650	1/4	138,756	1/4	123,862	1/4	108,968	1/4	94,075	1/4	79,181		
1/2	1/2	198,021	183,127	1/2	168,233	1/2	153,339	1/2	138,446	1/2	123,552	1/2	108,658	1/2	93,764	1/2	78,870		
3/4	3/4	197,710	182,817	3/4	167,923	3/4	153,029	3/4	138,135	3/4	123,242	3/4	108,348	3/4	93,454	3/4	78,560		
11	11	197,400	182,506	11	167,613	11	152,719	11	137,825	11	122,931	11	108,037	11	93,144	11	78,250		
1/4	1/4	197,090	182,196	1/4	167,302	1/4	152,409	1/4	137,515	1/4	122,621	1/4	107,727	1/4	92,833	1/4	77,940		
1/2	1/2	196,780	181,886	1/2	166,992	1/2	152,098	1/2	137,204	1/2	122,311	1/2	107,417	1/2	92,523	1/2	77,629		
3/4	3/4	196,469	181,576	3/4	166,682	3/4	151,788	3/4	136,894	3/4	122,000	3/4	107,107	3/4	92,213	3/4	77,319		

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK

CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE

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

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

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BARGE "HFL 410"

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	77,009	0	62,115	0	47,221	0	32,394	0	18,624	0	6,306	0		0		0		0	
1/4	76,698	1/4	61,805	1/4	46,911	1/4	32,092	1/4	18,352	1/4	6,064	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	76,388	1/2	61,494	1/2	46,601	1/2	31,792	1/2	18,082	1/2	5,824	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	76,078	3/4	61,184	3/4	46,290	3/4	31,492	3/4	17,812	3/4	5,585	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	75,768	1	60,874	1	45,980	1	31,192	1	17,542	1	5,345	1	1	1	1	1	1	1	1
1/4	75,457	1/4	60,564	1/4	45,670	1/4	30,892	1/4	17,273	1/4	5,106	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	75,147	1/2	60,253	1/2	45,359	1/2	30,595	1/2	17,005	1/2	4,869	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	74,837	3/4	59,943	3/4	45,049	3/4	30,297	3/4	16,738	3/4	4,633	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	74,526	2	59,633	2	44,739	2	30,000	2	16,471	2	4,396	2	2	2	2	2	2	2	2
1/4	74,216	1/4	59,322	1/4	44,429	1/4	29,702	1/4	16,204	1/4	4,159	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	73,906	1/2	59,012	1/2	44,118	1/2	29,407	1/2	15,939	1/2	3,926	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	73,596	3/4	58,702	3/4	43,808	3/4	29,112	3/4	15,674	3/4	3,692	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	73,285	3	58,391	3	43,498	3	28,817	3	15,410	3	3,458	3	3	3	3	3	3	3	3
1/4	72,975	1/4	58,081	1/4	43,187	1/4	28,522	1/4	15,145	1/4	3,225	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	72,665	1/2	57,771	1/2	42,877	1/2	28,229	1/2	14,883	1/2	2,994	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	72,354	3/4	57,461	3/4	42,567	3/4	27,936	3/4	14,620	3/4	2,764	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	72,044	4	57,150	4	42,257	4	27,644	4	14,358	4	2,534	4	4	4	4	4	4	4	4
1/4	71,734	1/4	56,840	1/4	41,946	1/4	27,351	1/4	14,095	1/4	2,303	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	71,424	1/2	56,530	1/2	41,636	1/2	27,060	1/2	13,835	1/2	2,077	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	71,113	3/4	56,219	3/4	41,326	3/4	26,770	3/4	13,576	3/4	1,850	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	70,803	5	55,909	5	41,016	5	26,480	5	13,316	5	1,623	5	5	5	5	5	5	5	5
1/4	70,493	1/4	55,599	1/4	40,706	1/4	26,190	1/4	13,056	1/4	1,397	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	70,182	1/2	55,289	1/2	40,396	1/2	25,902	1/2	12,799	1/2	1,192	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	69,872	3/4	54,978	3/4	40,086	3/4	25,614	3/4	12,541	3/4	987	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	69,562	6	54,668	6	39,777	6	25,326	6	12,284	6	782	6	6	6	6	6	6	6	6
1/4	69,252	1/4	54,358	1/4	39,467	1/4	25,038	1/4	12,027	1/4	577	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	68,941	1/2	54,047	1/2	39,157	1/2	24,753	1/2	11,772	1/2	443	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	68,631	3/4	53,737	3/4	38,847	3/4	24,468	3/4	11,517	3/4	309	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	68,321	7	53,427	7	38,538	7	24,183	7	11,262	7	176	7	7	7	7	7	7	7	7
1/4	68,010	1/4	53,117	1/4	38,228	1/4	23,898	1/4	11,007	1/4	42	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	67,700	1/2	52,806	1/2	37,918	1/2	23,616	1/2	10,755	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	67,390	3/4	52,496	3/4	37,608	3/4	23,333	3/4	10,503	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	67,080	8	52,186	8	37,299	8	23,051	8	10,251	8		8	8	8	8	8	8	8	8
1/4	66,769	1/4	51,875	1/4	36,989	1/4	22,768	1/4	9,998	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	66,459	1/2	51,565	1/2	36,680	1/2	22,489	1/2	9,749	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	66,149	3/4	51,255	3/4	36,370	3/4	22,209	3/4	9,499	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	65,838	9	50,945	9	36,061	9	21,929	9	9,249	9		9	9	9	9	9	9	9	9
1/4	65,528	1/4	50,634	1/4	35,752	1/4	21,649	1/4	9,000	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	65,218	1/2	50,324	1/2	35,444	1/2	21,372	1/2	8,752	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	64,908	3/4	50,014	3/4	35,137	3/4	21,094	3/4	8,505	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	64,597	10	49,703	10	34,829	10	20,817	10	8,258	10		10	10	10	10	10	10	10	10
1/4	64,287	1/4	49,393	1/4	34,522	1/4	20,540	1/4	8,011	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	63,977	1/2	49,083	1/2	34,217	1/2	20,265	1/2	7,766	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	63,666	3/4	48,773	3/4	33,912	3/4	19,990	3/4	7,521	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	63,356	11	48,462	11	33,607	11	19,715	11	7,277	11		11	11	11	11	11	11	11	11
1/4	63,046	1/4	48,152	1/4	33,302	1/4	19,441	1/4	7,032	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	62,736	1/2	47,842	1/2	32,999	1/2	19,168	1/2	6,790	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	62,425	3/4	47,531	3/4	32,697	3/4	18,896	3/4	6,548	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: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
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BARGE "HFL 410"

2 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GUAGE HEIGHT 15'-07 1/4"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	0	0	200,630	0	185,841	0	171,051	0	156,262	0	141,473	0	126,683	0	111,894	0	97,105
1/4		1/4		1/4	200,322	1/4	185,533	1/4	170,743	1/4	155,954	1/4	141,165	1/4	126,375	1/4	111,586	1/4	96,797
1/2		1/2		1/2	200,014	1/2	185,224	1/2	170,435	1/2	155,646	1/2	140,857	1/2	126,067	1/2	111,278	1/2	96,489
3/4		3/4		3/4	199,706	3/4	184,916	3/4	170,127	3/4	155,338	3/4	140,548	3/4	125,759	3/4	110,970	3/4	96,180
1	1	1	1	1	199,398	1	184,608	1	169,819	1	155,030	1	140,240	1	125,451	1	110,662	1	95,872
1/4		1/4		1/4	199,089	1/4	184,300	1/4	169,511	1/4	154,722	1/4	139,932	1/4	125,143	1/4	110,354	1/4	95,564
1/2		1/2		1/2	198,781	1/2	183,992	1/2	169,203	1/2	154,413	1/2	139,624	1/2	124,835	1/2	110,045	1/2	95,256
3/4		3/4		3/4	198,473	3/4	183,684	3/4	168,895	3/4	154,105	3/4	139,316	3/4	124,527	3/4	109,737	3/4	94,948
2	2	2	2	2	198,165	2	183,376	2	168,586	2	153,797	2	139,008	2	124,219	2	109,429	2	94,640
1/4		1/4		1/4	197,857	1/4	183,068	1/4	168,278	1/4	153,489	1/4	138,700	1/4	123,910	1/4	109,121	1/4	94,332
1/2		1/2		1/2	197,549	1/2	182,760	1/2	167,970	1/2	153,181	1/2	138,392	1/2	123,602	1/2	108,813	1/2	94,024
3/4		3/4		3/4	197,241	3/4	182,451	3/4	167,662	3/4	152,873	3/4	138,084	3/4	123,294	3/4	108,505	3/4	93,716
3	3	3	3	3	196,933	3	182,143	3	167,354	3	152,565	3	137,775	3	122,986	3	108,197	3	93,407
1/4		1/4	210,796	1/4	196,625	1/4	181,835	1/4	167,046	1/4	152,257	1/4	137,467	1/4	122,678	1/4	107,889	1/4	93,099
1/2		1/2	210,588	1/2	196,316	1/2	181,527	1/2	166,738	1/2	151,949	1/2	137,159	1/2	122,370	1/2	107,581	1/2	92,791
3/4		3/4	210,380	3/4	196,008	3/4	181,219	3/4	166,430	3/4	151,640	3/4	136,851	3/4	122,062	3/4	107,272	3/4	92,483
4	4	4	4	4	195,700	4	180,911	4	166,122	4	151,332	4	136,543	4	121,754	4	106,964	4	92,175
1/4		1/4	209,964	1/4	195,392	1/4	180,603	1/4	165,813	1/4	151,024	1/4	136,235	1/4	121,446	1/4	106,656	1/4	91,867
1/2		1/2	209,698	1/2	195,084	1/2	180,295	1/2	165,505	1/2	150,716	1/2	135,927	1/2	121,137	1/2	106,348	1/2	91,559
3/4		3/4	209,433	3/4	194,776	3/4	179,987	3/4	165,197	3/4	150,408	3/4	135,619	3/4	120,829	3/4	106,040	3/4	91,251
5	5	5	5	5	194,468	5	179,678	5	164,889	5	150,100	5	135,311	5	120,521	5	105,732	5	90,943
1/4		1/4	208,901	1/4	194,160	1/4	179,370	1/4	164,581	1/4	149,792	1/4	135,002	1/4	120,213	1/4	105,424	1/4	90,635
1/2		1/2	208,600	1/2	193,852	1/2	179,062	1/2	164,273	1/2	149,484	1/2	134,694	1/2	119,905	1/2	105,116	1/2	90,326
3/4		3/4	208,300	3/4	193,543	3/4	178,754	3/4	163,965	3/4	149,176	3/4	134,386	3/4	119,597	3/4	104,808	3/4	90,018
6	6	6	6	6	193,235	6	178,446	6	163,657	6	148,867	6	134,078	6	119,289	6	104,499	6	89,710
1/4		1/4	207,698	1/4	192,927	1/4	178,138	1/4	163,349	1/4	148,559	1/4	133,770	1/4	118,981	1/4	104,191	1/4	89,402
1/2		1/2	207,392	1/2	192,619	1/2	177,830	1/2	163,040	1/2	148,251	1/2	133,462	1/2	118,673	1/2	103,883	1/2	89,094
3/4		3/4	207,087	3/4	192,311	3/4	177,522	3/4	162,732	3/4	147,943	3/4	133,154	3/4	118,364	3/4	103,575	3/4	88,786
7	7	7	7	7	192,003	7	177,214	7	162,424	7	147,635	7	132,846	7	118,056	7	103,267	7	88,478
1/4		1/4	206,475	1/4	191,695	1/4	176,905	1/4	162,116	1/4	147,327	1/4	132,538	1/4	117,748	1/4	102,959	1/4	88,170
1/2		1/2	206,168	1/2	191,387	1/2	176,597	1/2	161,808	1/2	147,019	1/2	132,229	1/2	117,440	1/2	102,651	1/2	87,862
3/4		3/4	205,862	3/4	191,079	3/4	176,289	3/4	161,500	3/4	146,711	3/4	131,921	3/4	117,132	3/4	102,343	3/4	87,553
8	8	8	8	8	190,770	8	175,981	8	161,192	8	146,403	8	131,613	8	116,824	8	102,035	8	87,245
1/4		1/4	205,248	1/4	190,462	1/4	175,673	1/4	160,884	1/4	146,094	1/4	131,305	1/4	116,516	1/4	101,726	1/4	86,937
1/2		1/2	204,940	1/2	190,154	1/2	175,365	1/2	160,576	1/2	145,786	1/2	130,997	1/2	116,208	1/2	101,418	1/2	86,629
3/4		3/4	204,633	3/4	189,846	3/4	175,057	3/4	160,267	3/4	145,478	3/4	130,689	3/4	115,900	3/4	101,110	3/4	86,321
9	9	9	9	9	189,538	9	174,749	9	159,959	9	145,170	9	130,381	9	115,591	9	100,802	9	86,013
1/4		1/4	204,018	1/4	189,230	1/4	174,441	1/4	159,651	1/4	144,862	1/4	130,073	1/4	115,283	1/4	100,494	1/4	85,705
1/2		1/2	203,710	1/2	188,922	1/2	174,132	1/2	159,343	1/2	144,554	1/2	129,765	1/2	114,975	1/2	100,186	1/2	85,397
3/4		3/4	203,402	3/4	188,614	3/4	173,824	3/4	159,035	3/4	144,246	3/4	129,456	3/4	114,667	3/4	99,878	3/4	85,089
10	10	10	10	10	188,306	10	173,516	10	158,727	10	143,938	10	129,148	10	114,359	10	99,570	10	84,780
1/4		1/4	202,787	1/4	187,997	1/4	173,208	1/4	158,419	1/4	143,630	1/4	128,840	1/4	114,051	1/4	99,262	1/4	84,472
1/2		1/2	202,479	1/2	187,689	1/2	172,900	1/2	158,111	1/2	143,321	1/2	128,532	1/2	113,743	1/2	98,953	1/2	84,164
3/4		3/4	202,170	3/4	187,381	3/4	172,592	3/4	157,803	3/4	143,013	3/4	128,224	3/4	113,435	3/4	98,645	3/4	83,856
11	11	11	11	11	187,073	11	172,284	11	157,495	11	142,705	11	127,916	11	113,127	11	98,337	11	83,548
1/4		1/4	201,554	1/4	186,765	1/4	171,976	1/4	157,186	1/4	142,397	1/4	127,608	1/4	112,818	1/4	98,029	1/4	83,240
1/2		1/2	201,246	1/2	186,457	1/2	171,668	1/2	156,878	1/2	142,089	1/2	127,300	1/2	112,510	1/2	97,721	1/2	82,932
3/4		3/4	200,938	3/4	186,149	3/4	171,359	3/4	156,570	3/4	141,781	3/4	126,992	3/4	112,202	3/4	97,413	3/4	82,624

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7
 CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL
 CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK
 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVI
 GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 42'-06" FORWARD OF AFT BULKHEAD

PRECISION MEASUREMENT
& ANALYSIS, INC.

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



BARGE "HFL 410"

2 PORT 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	82,316	0	67,526	0	52,737	0	37,948	0	23,698	0	9,082	0		0		0		0	
1/4	82,007	1/4	67,218	1/4	52,429	1/4	37,639	1/4	23,405	1/4	8,774	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	81,699	1/2	66,910	1/2	52,121	1/2	37,331	1/2	23,112	1/2	8,466	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	81,391	3/4	66,602	3/4	51,813	3/4	37,023	3/4	22,819	3/4	8,158	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	81,083	1	66,294	1	51,504	1	36,715	1	22,526	1	7,850	1	1	1	1	1	1	1	1
1/4	80,775	1/4	65,986	1/4	51,196	1/4	36,407	1/4	22,233	1/4	7,542	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	80,467	1/2	65,678	1/2	50,888	1/2	36,099	1/2	21,940	1/2	7,234	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	80,159	3/4	65,369	3/4	50,580	3/4	35,791	3/4	21,646	3/4	6,927	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	79,851	2	65,061	2	50,272	2	35,483	2	21,353	2	6,619	2	2	2	2	2	2	2	2
1/4	79,543	1/4	64,753	1/4	49,964	1/4	35,175	1/4	21,060	1/4	6,311	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	79,234	1/2	64,445	1/2	49,656	1/2	34,872	1/2	20,762	1/2	6,004	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	78,926	3/4	64,137	3/4	49,348	3/4	34,569	3/4	20,463	3/4	5,696	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	78,618	3	63,829	3	49,040	3	34,266	3	20,164	3	5,389	3	3	3	3	3	3	3	3
1/4	78,310	1/4	63,521	1/4	48,731	1/4	33,963	1/4	19,866	1/4	5,082	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	78,002	1/2	63,213	1/2	48,423	1/2	33,669	1/2	19,558	1/2	4,775	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	77,694	3/4	62,905	3/4	48,115	3/4	33,375	3/4	19,250	3/4	4,469	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	77,386	4	62,596	4	47,807	4	33,081	4	18,941	4	4,162	4	4	4	4	4	4	4	4
1/4	77,078	1/4	62,288	1/4	47,499	1/4	32,787	1/4	18,633	1/4	3,856	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	76,770	1/2	61,980	1/2	47,191	1/2	32,493	1/2	18,325	1/2	3,550	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	76,461	3/4	61,672	3/4	46,883	3/4	32,199	3/4	18,017	3/4	3,245	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	76,153	5	61,364	5	46,575	5	31,905	5	17,709	5	2,940	5	5	5	5	5	5	5	5
1/4	75,845	1/4	61,056	1/4	46,267	1/4	31,611	1/4	17,401	1/4	2,635	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	75,537	1/2	60,748	1/2	45,958	1/2	31,318	1/2	17,093	1/2	2,348	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	75,229	3/4	60,440	3/4	45,650	3/4	31,025	3/4	16,785	3/4	2,062	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	74,921	6	60,132	6	45,342	6	30,731	6	16,477	6	1,776	6	6	6	6	6	6	6	6
1/4	74,613	1/4	59,823	1/4	45,034	1/4	30,438	1/4	16,169	1/4	1,489	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	74,305	1/2	59,515	1/2	44,726	1/2	30,145	1/2	15,860	1/2	1,271	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	73,997	3/4	59,207	3/4	44,418	3/4	29,852	3/4	15,552	3/4	1,053	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	73,688	7	58,899	7	44,110	7	29,558	7	15,244	7	835	7	7	7	7	7	7	7	7
1/4	73,380	1/4	58,591	1/4	43,802	1/4	29,265	1/4	14,936	1/4	617	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	73,072	1/2	58,283	1/2	43,494	1/2	28,972	1/2	14,628	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	72,764	3/4	57,975	3/4	43,185	3/4	28,679	3/4	14,320	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	72,456	8	57,667	8	42,877	8	28,386	8	14,012	8		8	8	8	8	8	8	8	8
1/4	72,148	1/4	57,359	1/4	42,569	1/4	28,093	1/4	13,704	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	71,840	1/2	57,050	1/2	42,261	1/2	27,800	1/2	13,396	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	71,532	3/4	56,742	3/4	41,953	3/4	27,507	3/4	13,088	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	71,224	9	56,434	9	41,645	9	27,214	9	12,779	9		9	9	9	9	9	9	9	9
1/4	70,915	1/4	56,126	1/4	41,337	1/4	26,921	1/4	12,471	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	70,607	1/2	55,818	1/2	41,029	1/2	26,628	1/2	12,163	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	70,299	3/4	55,510	3/4	40,721	3/4	26,335	3/4	11,855	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	69,991	10	55,202	10	40,412	10	26,042	10	11,547	10		10	10	10	10	10	10	10	10
1/4	69,683	1/4	54,894	1/4	40,104	1/4	25,749	1/4	11,239	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	69,375	1/2	54,586	1/2	39,796	1/2	25,456	1/2	10,931	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	69,067	3/4	54,277	3/4	39,488	3/4	25,163	3/4	10,623	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	68,759	11	53,969	11	39,180	11	24,870	11	10,315	11		11	11	11	11	11	11	11	11
1/4	68,451	1/4	53,661	1/4	38,872	1/4	24,577	1/4	10,006	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	68,142	1/2	53,353	1/2	38,564	1/2	24,284	1/2	9,698	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	67,834	3/4	53,045	3/4	38,256	3/4	23,991	3/4	9,390	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: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
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BARGE "HFL 410"

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	83,038	0	68,242	0	53,445	0	38,649	0	23,873	0	9,087	0		0		0		0	
1/4	82,730	1/4	67,933	1/4	53,137	1/4	38,340	1/4	23,566	1/4	8,778	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	82,422	1/2	67,625	1/2	52,829	1/2	38,032	1/2	23,258	1/2	8,470	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	82,114	3/4	67,317	3/4	52,520	3/4	37,724	3/4	22,951	3/4	8,162	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	81,805	1	67,009	1	52,212	1	37,415	1	22,644	1	7,854	1	1	1	1	1	1	1	1
1/4	81,497	1/4	66,700	1/4	51,904	1/4	37,107	1/4	22,336	1/4	7,546	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	81,189	1/2	66,392	1/2	51,596	1/2	36,799	1/2	22,029	1/2	7,238	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	80,881	3/4	66,084	3/4	51,287	3/4	36,491	3/4	21,721	3/4	6,930	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	80,572	2	65,776	2	50,979	2	36,182	2	21,414	2	6,622	2	2	2	2	2	2	2	2
1/4	80,264	1/4	65,467	1/4	50,671	1/4	35,874	1/4	21,106	1/4	6,314	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	79,956	1/2	65,159	1/2	50,362	1/2	35,566	1/2	20,799	1/2	6,007	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	79,647	3/4	64,851	3/4	50,054	3/4	35,258	3/4	20,491	3/4	5,699	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	79,339	3	64,543	3	49,746	3	34,949	3	20,183	3	5,392	3	3	3	3	3	3	3	3
1/4	79,031	1/4	64,234	1/4	49,438	1/4	34,641	1/4	19,876	1/4	5,084	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	78,723	1/2	63,926	1/2	49,129	1/2	34,333	1/2	19,567	1/2	4,777	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	78,414	3/4	63,618	3/4	48,821	3/4	34,025	3/4	19,259	3/4	4,471	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	78,106	4	63,310	4	48,513	4	33,716	4	18,951	4	4,164	4	4	4	4	4	4	4	4
1/4	77,798	1/4	63,001	1/4	48,205	1/4	33,408	1/4	18,643	1/4	3,858	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	77,490	1/2	62,693	1/2	47,896	1/2	33,100	1/2	18,334	1/2	3,552	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	77,181	3/4	62,385	3/4	47,588	3/4	32,792	3/4	18,026	3/4	3,247	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	76,873	5	62,076	5	47,280	5	32,484	5	17,718	5	2,941	5	5	5	5	5	5	5	5
1/4	76,565	1/4	61,768	1/4	46,972	1/4	32,176	1/4	17,410	1/4	2,636	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	76,257	1/2	61,460	1/2	46,663	1/2	31,868	1/2	17,101	1/2	2,349	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	75,948	3/4	61,152	3/4	46,355	3/4	31,560	3/4	16,793	3/4	2,063	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	75,640	6	60,843	6	46,047	6	31,253	6	16,485	6	1,776	6	6	6	6	6	6	6	6
1/4	75,332	1/4	60,535	1/4	45,739	1/4	30,945	1/4	16,176	1/4	1,490	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	75,024	1/2	60,227	1/2	45,430	1/2	30,637	1/2	15,868	1/2	1,272	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	74,715	3/4	59,919	3/4	45,122	3/4	30,330	3/4	15,560	3/4	1,054	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	74,407	7	59,610	7	44,814	7	30,022	7	15,252	7	835	7	7	7	7	7	7	7	7
1/4	74,099	1/4	59,302	1/4	44,505	1/4	29,714	1/4	14,943	1/4	617	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	73,790	1/2	58,994	1/2	44,197	1/2	29,407	1/2	14,635	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	73,482	3/4	58,686	3/4	43,889	3/4	29,100	3/4	14,327	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	73,174	8	58,377	8	43,581	8	28,792	8	14,019	8		8	8	8	8	8	8	8	8
1/4	72,866	1/4	58,069	1/4	43,272	1/4	28,485	1/4	13,710	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	72,557	1/2	57,761	1/2	42,964	1/2	28,177	1/2	13,402	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	72,249	3/4	57,453	3/4	42,656	3/4	27,870	3/4	13,094	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	71,941	9	57,144	9	42,348	9	27,562	9	12,786	9		9	9	9	9	9	9	9	9
1/4	71,633	1/4	56,836	1/4	42,039	1/4	27,255	1/4	12,477	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	71,324	1/2	56,528	1/2	41,731	1/2	26,948	1/2	12,169	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	71,016	3/4	56,219	3/4	41,423	3/4	26,640	3/4	11,861	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	70,708	10	55,911	10	41,115	10	26,333	10	11,553	10		10	10	10	10	10	10	10	10
1/4	70,400	1/4	55,603	1/4	40,806	1/4	26,025	1/4	11,244	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	70,091	1/2	55,295	1/2	40,498	1/2	25,718	1/2	10,936	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	69,783	3/4	54,986	3/4	40,190	3/4	25,410	3/4	10,628	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	69,475	11	54,678	11	39,882	11	25,103	11	10,320	11		11	11	11	11	11	11	11	11
1/4	69,167	1/4	54,370	1/4	39,573	1/4	24,796	1/4	10,011	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	68,858	1/2	54,062	1/2	39,265	1/2	24,488	1/2	9,703	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	68,550	3/4	53,753	3/4	38,957	3/4	24,181	3/4	9,395	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: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

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



BARGE "HFL 410"

3 PORT ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 1/2"

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
1/4	94,489	1/4	77,599	1/4	60,796	1/4	43,859	1/4	27,273	1/4	10,426	1/4		1/4		1/4		1/4	
1/2	94,138	1/2	77,250	1/2	60,443	1/2	43,506	1/2	26,930	1/2	10,075	1/2		1/2		1/2		1/2	
3/4	93,786	3/4	76,901	3/4	60,090	3/4	43,153	3/4	26,587	3/4	9,723	3/4		3/4		3/4		3/4	
1	93,434	1	76,552	1	59,738	1	42,801	1	26,245	1	9,371	1		1		1		1	
1/4	93,082	1/4	76,203	1/4	59,385	1/4	42,448	1/4	25,902	1/4	9,019	1/4		1/4		1/4		1/4	
1/2	92,730	1/2	75,854	1/2	59,032	1/2	42,095	1/2	25,559	1/2	8,666	1/2		1/2		1/2		1/2	
3/4	92,377	3/4	75,505	3/4	58,679	3/4	41,742	3/4	25,216	3/4	8,313	3/4		3/4		3/4		3/4	
2	92,024	2	75,156	2	58,326	2	41,389	2	24,873	2	7,960	2		2		2		2	
1/4	91,671	1/4	74,806	1/4	57,973	1/4	41,036	1/4	24,530	1/4	7,606	1/4		1/4		1/4		1/4	
1/2	91,318	1/2	74,457	1/2	57,621	1/2	40,683	1/2	24,187	1/2	7,253	1/2		1/2		1/2		1/2	
3/4	90,965	3/4	74,108	3/4	57,268	3/4	40,334	3/4	23,840	3/4	6,899	3/4		3/4		3/4		3/4	
3	90,612	3	73,759	3	56,915	3	39,984	3	23,493	3	6,546	3		3		3		3	
1/4	90,259	1/4	73,410	1/4	56,562	1/4	39,635	1/4	23,146	1/4	6,193	1/4		1/4		1/4		1/4	
1/2	89,906	1/2	73,061	1/2	56,209	1/2	39,285	1/2	22,799	1/2	5,840	1/2		1/2		1/2		1/2	
3/4	89,553	3/4	72,712	3/4	55,856	3/4	38,942	3/4	22,445	3/4	5,487	3/4		3/4		3/4		3/4	
4	89,200	4	72,363	4	55,503	4	38,598	4	22,091	4	5,135	4		4		4		4	
1/4	88,846	1/4	72,014	1/4	55,151	1/4	38,254	1/4	21,737	1/4	4,782	1/4		1/4		1/4		1/4	
1/2	88,493	1/2	71,665	1/2	54,798	1/2	37,910	1/2	21,383	1/2	4,430	1/2		1/2		1/2		1/2	
3/4	88,140	3/4	71,316	3/4	54,445	3/4	37,566	3/4	21,029	3/4	4,079	3/4		3/4		3/4		3/4	
5	87,787	5	70,967	5	54,092	5	37,222	5	20,675	5	3,728	5		5		5		5	
1/4	87,434	1/4	70,618	1/4	53,739	1/4	36,879	1/4	20,322	1/4	3,377	1/4		1/4		1/4		1/4	
1/2	87,081	1/2	70,269	1/2	53,386	1/2	36,535	1/2	19,968	1/2	3,026	1/2		1/2		1/2		1/2	
3/4	86,728	3/4	69,920	3/4	53,033	3/4	36,192	3/4	19,614	3/4	2,696	3/4		3/4		3/4		3/4	
6	86,375	6	69,571	6	52,681	6	35,848	6	19,260	6	2,367	6		6		6		6	
1/4	86,022	1/4	69,222	1/4	52,328	1/4	35,505	1/4	18,906	1/4	2,038	1/4		1/4		1/4		1/4	
1/2	85,669	1/2	68,873	1/2	51,975	1/2	35,162	1/2	18,552	1/2	1,709	1/2		1/2		1/2		1/2	
3/4	85,316	3/4	68,523	3/4	51,622	3/4	34,819	3/4	18,198	3/4	1,458	3/4		3/4		3/4		3/4	
7	84,963	7	68,174	7	51,269	7	34,476	7	17,845	7	1,207	7		7		7		7	
1/4	84,610	1/4	67,825	1/4	50,916	1/4	34,133	1/4	17,491	1/4	956	1/4		1/4		1/4		1/4	
1/2	84,257	1/2	67,476	1/2	50,563	1/2	33,789	1/2	17,137	1/2	705	1/2		1/2		1/2		1/2	
3/4	83,904	3/4	67,127	3/4	50,211	3/4	33,446	3/4	16,783	3/4		3/4		3/4		3/4		3/4	
8	83,551	8	66,778	8	49,858	8	33,103	8	16,429	8		8		8		8		8	
1/4	83,198	1/4	66,429	1/4	49,505	1/4	32,761	1/4	16,075	1/4		1/4		1/4		1/4		1/4	
1/2	82,845	1/2	66,080	1/2	49,152	1/2	32,418	1/2	15,721	1/2		1/2		1/2		1/2		1/2	
3/4	82,493	3/4	65,729	3/4	48,799	3/4	32,075	3/4	15,367	3/4		3/4		3/4		3/4		3/4	
9	82,142	9	65,379	9	48,446	9	31,732	9	15,014	9		9		9		9		9	
1/4	81,790	1/4	65,028	1/4	48,093	1/4	31,389	1/4	14,660	1/4		1/4		1/4		1/4		1/4	
1/2	81,438	1/2	64,678	1/2	47,741	1/2	31,046	1/2	14,306	1/2		1/2		1/2		1/2		1/2	
3/4	81,089	3/4	64,325	3/4	47,388	3/4	30,703	3/4	13,952	3/4		3/4		3/4		3/4		3/4	
10	80,740	10	63,972	10	47,035	10	30,360	10	13,598	10		10		10		10		10	
1/4	80,391	1/4	63,619	1/4	46,682	1/4	30,017	1/4	13,244	1/4		1/4		1/4		1/4		1/4	
1/2	80,042	1/2	63,266	1/2	46,329	1/2	29,674	1/2	12,890	1/2		1/2		1/2		1/2		1/2	
3/4	79,693	3/4	62,913	3/4	45,976	3/4	29,331	3/4	12,538	3/4		3/4		3/4		3/4		3/4	
11	79,344	11	62,560	11	45,623	11	28,988	11	12,185	11		11		11		11		11	
1/4	78,995	1/4	62,208	1/4	45,271	1/4	28,645	1/4	11,832	1/4		1/4		1/4		1/4		1/4	
1/2	78,646	1/2	61,855	1/2	44,918	1/2	28,302	1/2	11,479	1/2		1/2		1/2		1/2		1/2	
3/4	78,297	3/4	61,502	3/4	44,565	3/4	27,959	3/4	11,128	3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 410"

3 STBD ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 1/2"

IN	0 FT.	IN	1 FT.	IN	2 FT.	IN	3 FT.	IN	4 FT.	IN	5 FT.	IN	6 FT.	IN	7 FT.	IN	8 FT.	IN	9 FT.
0	0	0	210,341	0	199,038	0	187,735	0	176,432	0	163,764	0	146,763	0	129,762	0	112,761		
1/4	1/4	1/4	210,106	1/4	198,803	1/4	187,500	1/4	176,197	1/4	163,410	1/4	146,409	1/4	129,408	1/4	112,407		
1/2	1/2	1/2	209,870	1/2	198,567	1/2	187,264	1/2	175,961	1/2	163,056	1/2	146,055	1/2	129,054	1/2	112,053		
3/4	3/4	3/4	209,635	3/4	198,332	3/4	187,029	3/4	175,726	3/4	162,702	3/4	145,701	3/4	128,700	3/4	111,699		
1	1	1	209,399	1	198,096	1	186,793	1	175,491	1	162,348	1	145,347	1	128,346	1	111,345		
1/4	1/4	1/4	209,164	1/4	197,861	1/4	186,558	1/4	175,255	1/4	161,993	1/4	144,992	1/4	127,992	1/4	110,991		
1/2	1/2	1/2	208,928	1/2	197,625	1/2	186,322	1/2	175,020	1/2	161,639	1/2	144,638	1/2	127,637	1/2	110,636		
3/4	3/4	3/4	208,693	3/4	197,390	3/4	186,087	3/4	174,784	3/4	161,285	3/4	144,284	3/4	127,283	3/4	110,282		
2	2	2	208,457	2	197,154	2	185,852	2	174,549	2	160,931	2	143,930	2	126,929	2	109,928		
1/4	1/4	1/4	208,222	1/4	196,919	1/4	185,616	1/4	174,313	1/4	160,577	1/4	143,576	1/4	126,575	1/4	109,574		
1/2	1/2	1/2	207,986	1/2	196,683	1/2	185,381	1/2	174,078	1/2	160,222	1/2	143,222	1/2	126,221	1/2	109,220		
3/4	3/4	3/4	207,751	3/4	196,448	3/4	185,145	3/4	173,842	3/4	159,868	3/4	142,867	3/4	125,866	3/4	108,865		
3	3	3	207,515	3	196,213	3	184,910	3	173,607	3	159,514	3	142,513	3	125,512	3	108,511		
1/4	1/4	1/4	207,280	1/4	195,977	1/4	184,674	1/4	173,371	1/4	159,160	1/4	142,159	1/4	125,158	1/4	108,157		
1/2	1/2	1/2	217,637	1/2	207,044	1/2	195,742	1/2	184,439	1/2	173,136	1/2	158,806	1/2	141,805	1/2	124,804		
3/4	3/4	3/4	217,517	3/4	206,809	3/4	195,506	3/4	184,203	3/4	172,900	3/4	158,452	3/4	141,451	3/4	124,450		
4	4	4	217,396	4	206,574	4	195,271	4	183,968	4	172,665	4	158,097	4	141,096	4	124,095		
1/4	1/4	1/4	217,276	1/4	206,338	1/4	195,035	1/4	183,732	1/4	172,429	1/4	157,743	1/4	140,742	1/4	123,741		
1/2	1/2	1/2	217,156	1/2	206,103	1/2	194,800	1/2	183,497	1/2	172,194	1/2	157,389	1/2	140,388	1/2	123,387		
3/4	3/4	3/4	216,969	3/4	205,867	3/4	194,564	3/4	183,261	3/4	171,958	3/4	157,035	3/4	140,034	3/4	123,033		
5	5	5	216,782	5	205,632	5	194,329	5	183,026	5	171,723	5	156,681	5	139,680	5	122,679		
1/4	1/4	1/4	216,595	1/4	205,396	1/4	194,093	1/4	182,790	1/4	171,487	1/4	156,326	1/4	139,325	1/4	122,325		
1/2	1/2	1/2	216,408	1/2	205,161	1/2	193,858	1/2	182,555	1/2	171,252	1/2	155,972	1/2	138,971	1/2	121,970		
3/4	3/4	3/4	216,181	3/4	204,925	3/4	193,622	3/4	182,319	3/4	171,016	3/4	155,618	3/4	138,617	3/4	121,616		
6	6	6	215,954	6	204,690	6	193,387	6	182,084	6	170,781	6	155,264	6	138,263	6	121,262		
1/4	1/4	1/4	215,727	1/4	204,454	1/4	193,151	1/4	181,848	1/4	170,546	1/4	154,910	1/4	137,909	1/4	120,908		
1/2	1/2	1/2	215,501	1/2	204,219	1/2	192,916	1/2	181,613	1/2	170,310	1/2	154,556	1/2	137,555	1/2	120,554		
3/4	3/4	3/4	215,268	3/4	203,983	3/4	192,680	3/4	181,377	3/4	170,075	3/4	154,201	3/4	137,200	3/4	120,199		
7	7	7	215,035	7	203,748	7	192,445	7	181,142	7	169,839	7	153,847	7	136,846	7	119,845		
1/4	1/4	1/4	214,802	1/4	203,512	1/4	192,209	1/4	180,907	1/4	169,604	1/4	153,493	1/4	136,492	1/4	119,491		
1/2	1/2	1/2	214,569	1/2	203,277	1/2	191,974	1/2	180,671	1/2	169,368	1/2	153,139	1/2	136,138	1/2	119,137		
3/4	3/4	3/4	214,335	3/4	203,041	3/4	191,738	3/4	180,436	3/4	169,133	3/4	152,785	3/4	135,784	3/4	118,783		
8	8	8	214,101	8	202,806	8	191,503	8	180,200	8	168,897	8	152,430	8	135,429	8	118,428		
1/4	1/4	1/4	213,867	1/4	202,570	1/4	191,268	1/4	179,965	1/4	168,662	1/4	152,076	1/4	135,075	1/4	118,074		
1/2	1/2	1/2	213,633	1/2	202,335	1/2	191,032	1/2	179,729	1/2	168,426	1/2	151,722	1/2	134,721	1/2	117,720		
3/4	3/4	3/4	213,399	3/4	202,099	3/4	190,797	3/4	179,494	3/4	168,146	3/4	151,368	3/4	134,367	3/4	117,366		
9	9	9	213,164	9	201,864	9	190,561	9	179,258	9	167,866	9	151,014	9	134,013	9	117,012		
1/4	1/4	1/4	212,929	1/4	201,628	1/4	190,326	1/4	179,023	1/4	167,586	1/4	150,659	1/4	133,659	1/4	116,658		
1/2	1/2	1/2	212,695	1/2	201,393	1/2	190,090	1/2	178,787	1/2	167,306	1/2	150,305	1/2	133,304	1/2	116,303		
3/4	3/4	3/4	212,459	3/4	201,158	3/4	189,855	3/4	178,552	3/4	166,952	3/4	149,951	3/4	132,950	3/4	115,949		
10	10	10	212,224	10	200,922	10	189,619	10	178,316	10	166,598	10	149,597	10	132,596	10	115,595		
1/4	1/4	1/4	211,989	1/4	200,687	1/4	189,384	1/4	178,081	1/4	166,244	1/4	149,243	1/4	132,242	1/4	115,241		
1/2	1/2	1/2	211,754	1/2	200,451	1/2	189,148	1/2	177,845	1/2	165,889	1/2	148,889	1/2	131,888	1/2	114,887		
3/4	3/4	3/4	211,518	3/4	200,216	3/4	188,913	3/4	177,610	3/4	165,535	3/4	148,534	3/4	131,533	3/4	114,532		
11	11	11	211,283	11	199,980	11	188,677	11	177,374	11	165,181	11	148,180	11	131,179	11	114,178		
1/4	1/4	1/4	211,048	1/4	199,745	1/4	188,442	1/4	177,139	1/4	164,827	1/4	147,826	1/4	130,825	1/4	113,824		
1/2	1/2	1/2	210,812	1/2	199,509	1/2	188,206	1/2	176,903	1/2	164,473	1/2	147,472	1/2	130,471	1/2	113,470		
3/4	3/4	3/4	210,577	3/4	199,274	3/4	187,971	3/4	176,668	3/4	164,119	3/4	147,118	3/4	130,117	3/4	113,116		

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK

CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP OF 2" DIAMETER "HERMETIC" VALVE

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

PRECISION MEASUREMENT
& ANALYSIS, INC.

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



BARGE "HFL 410"

**3 STBD
ULLAGE TABLE**

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-07 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	95,761	0	78,760	0	61,759	0	44,758	0	27,780	0	10,791	0		0		0		0	
1/4	95,406	1/4	78,405	1/4	61,404	1/4	44,403	1/4	27,426	1/4	10,437	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	95,052	1/2	78,051	1/2	61,050	1/2	44,049	1/2	27,073	1/2	10,082	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	94,698	3/4	77,697	3/4	60,696	3/4	43,695	3/4	26,720	3/4	9,728	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	94,344	1	77,343	1	60,342	1	43,341	1	26,367	1	9,374	1	1	1	1	1	1	1	1
1/4	93,990	1/4	76,989	1/4	59,988	1/4	42,987	1/4	26,013	1/4	9,020	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	93,635	1/2	76,634	1/2	59,634	1/2	42,633	1/2	25,660	1/2	8,666	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	93,281	3/4	76,280	3/4	59,279	3/4	42,278	3/4	25,307	3/4	8,312	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
2	92,927	2	75,926	2	58,925	2	41,924	2	24,954	2	7,958	2	2	2	2	2	2	2	2
1/4	92,573	1/4	75,572	1/4	58,571	1/4	41,570	1/4	24,600	1/4	7,605	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	92,219	1/2	75,218	1/2	58,217	1/2	41,216	1/2	24,247	1/2	7,251	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	91,864	3/4	74,864	3/4	57,863	3/4	40,862	3/4	23,894	3/4	6,898	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	91,510	3	74,509	3	57,508	3	40,507	3	23,540	3	6,544	3	3	3	3	3	3	3	3
1/4	91,156	1/4	74,155	1/4	57,154	1/4	40,153	1/4	23,186	1/4	6,191	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	90,802	1/2	73,801	1/2	56,800	1/2	39,799	1/2	22,833	1/2	5,838	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	90,448	3/4	73,447	3/4	56,446	3/4	39,445	3/4	22,479	3/4	5,486	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	90,094	4	73,093	4	56,092	4	39,091	4	22,124	4	5,133	4	4	4	4	4	4	4	4
1/4	89,739	1/4	72,738	1/4	55,737	1/4	38,736	1/4	21,770	1/4	4,781	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	89,385	1/2	72,384	1/2	55,383	1/2	38,382	1/2	21,416	1/2	4,428	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	89,031	3/4	72,030	3/4	55,029	3/4	38,028	3/4	21,062	3/4	4,077	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	88,677	5	71,676	5	54,675	5	37,674	5	20,708	5	3,727	5	5	5	5	5	5	5	5
1/4	88,323	1/4	71,322	1/4	54,321	1/4	37,320	1/4	20,353	1/4	3,376	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	87,968	1/2	70,967	1/2	53,967	1/2	36,966	1/2	19,999	1/2	3,025	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	87,614	3/4	70,613	3/4	53,612	3/4	36,613	3/4	19,645	3/4	2,696	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	87,260	6	70,259	6	53,258	6	36,259	6	19,291	6	2,366	6	6	6	6	6	6	6	6
1/4	86,906	1/4	69,905	1/4	52,904	1/4	35,906	1/4	18,937	1/4	2,037	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	86,552	1/2	69,551	1/2	52,550	1/2	35,552	1/2	18,583	1/2	1,708	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	86,197	3/4	69,197	3/4	52,196	3/4	35,199	3/4	18,228	3/4	1,457	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	85,843	7	68,842	7	51,841	7	34,845	7	17,874	7	1,207	7	7	7	7	7	7	7	7
1/4	85,489	1/4	68,488	1/4	51,487	1/4	34,492	1/4	17,520	1/4	956	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	85,135	1/2	68,134	1/2	51,133	1/2	34,138	1/2	17,166	1/2	705	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	84,781	3/4	67,780	3/4	50,779	3/4	33,785	3/4	16,812	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	84,427	8	67,426	8	50,425	8	33,432	8	16,458	8		8	8	8	8	8	8	8	8
1/4	84,072	1/4	67,071	1/4	50,070	1/4	33,079	1/4	16,103	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	83,718	1/2	66,717	1/2	49,716	1/2	32,725	1/2	15,749	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	83,364	3/4	66,363	3/4	49,362	3/4	32,372	3/4	15,395	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	83,010	9	66,009	9	49,008	9	32,019	9	15,041	9		9	9	9	9	9	9	9	9
1/4	82,656	1/4	65,655	1/4	48,654	1/4	31,666	1/4	14,687	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	82,301	1/2	65,300	1/2	48,300	1/2	31,312	1/2	14,332	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	81,947	3/4	64,946	3/4	47,945	3/4	30,959	3/4	13,978	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	81,593	10	64,592	10	47,591	10	30,606	10	13,624	10		10	10	10	10	10	10	10	10
1/4	81,239	1/4	64,238	1/4	47,237	1/4	30,253	1/4	13,270	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	80,885	1/2	63,884	1/2	46,883	1/2	29,899	1/2	12,916	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	80,531	3/4	63,530	3/4	46,529	3/4	29,546	3/4	12,562	3/4		3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	80,176	11	63,175	11	46,174	11	29,193	11	12,207	11		11	11	11	11	11	11	11	11
1/4	79,822	1/4	62,821	1/4	45,820	1/4	28,840	1/4	11,853	1/4		1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	79,468	1/2	62,467	1/2	45,466	1/2	28,486	1/2	11,499	1/2		1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	79,114	3/4	62,113	3/4	45,112	3/4	28,133	3/4	11,145	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: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
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BARGE "HFL 410"

PORT SLOP ULLAGE 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	4,456	0	3,319	0	2,181	0	1,043	0		0		0		0		0	
1/4		1/4	4,433	1/4	3,295	1/4	2,157	1/4	1,019	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,409	1/2	3,271	1/2	2,133	1/2	996	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,385	3/4	3,247	3/4	2,110	3/4	972	3/4		3/4		3/4		3/4		3/4	
1	1	1	4,361	1	3,224	1	2,086	1	948	1		1		1		1		1	
1/4		1/4	4,338	1/4	3,200	1/4	2,062	1/4	924	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,314	1/2	3,176	1/2	2,039	1/2	901	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,290	3/4	3,153	3/4	2,015	3/4	877	3/4		3/4		3/4		3/4		3/4	
2	2	2	4,267	2	3,129	2	1,991	2	853	2		2		2		2		2	
1/4		1/4	4,243	1/4	3,105	1/4	1,967	1/4	830	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,219	1/2	3,081	1/2	1,944	1/2	806	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,196	3/4	3,058	3/4	1,920	3/4	782	3/4		3/4		3/4		3/4		3/4	
3	3	3	4,172	3	3,034	3	1,896	3	759	3		3		3		3		3	
1/4		1/4	4,148	1/4	3,010	1/4	1,873	1/4	735	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	5,262	1/2	4,124	1/2	2,987	1/2	1,849	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	5,239	3/4	4,101	3/4	2,963	3/4	1,825	3/4		3/4		3/4		3/4		3/4	
4	4	4	5,215	4	4,077	4	2,939	4	1,801	4		4		4		4		4	
1/4		1/4	5,191	1/4	4,053	1/4	2,916	1/4	1,778	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	5,167	1/2	4,030	1/2	2,892	1/2	1,754	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	5,144	3/4	4,006	3/4	2,868	3/4	1,730	3/4		3/4		3/4		3/4		3/4	
5	5	5	5,120	5	3,982	5	2,844	5	1,707	5		5		5		5		5	
1/4		1/4	5,096	1/4	3,959	1/4	2,821	1/4	1,683	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	5,073	1/2	3,935	1/2	2,797	1/2	1,659	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	5,049	3/4	3,911	3/4	2,773	3/4	1,636	3/4		3/4		3/4		3/4		3/4	
6	6	6	5,025	6	3,887	6	2,750	6	1,612	6		6		6		6		6	
1/4		1/4	5,002	1/4	3,864	1/4	2,726	1/4	1,588	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,978	1/2	3,840	1/2	2,702	1/2	1,564	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,954	3/4	3,816	3/4	2,679	3/4	1,541	3/4		3/4		3/4		3/4		3/4	
7	7	7	4,930	7	3,793	7	2,655	7	1,517	7		7		7		7		7	
1/4		1/4	4,907	1/4	3,769	1/4	2,631	1/4	1,493	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,883	1/2	3,745	1/2	2,607	1/2	1,470	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,859	3/4	3,721	3/4	2,584	3/4	1,446	3/4		3/4		3/4		3/4		3/4	
8	8	8	4,836	8	3,698	8	2,560	8	1,422	8		8		8		8		8	
1/4		1/4	4,812	1/4	3,674	1/4	2,536	1/4	1,399	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,788	1/2	3,650	1/2	2,513	1/2	1,375	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,764	3/4	3,627	3/4	2,489	3/4	1,351	3/4		3/4		3/4		3/4		3/4	
9	9	9	4,741	9	3,603	9	2,465	9	1,327	9		9		9		9		9	
1/4		1/4	4,717	1/4	3,579	1/4	2,441	1/4	1,304	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,693	1/2	3,556	1/2	2,418	1/2	1,280	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,670	3/4	3,532	3/4	2,394	3/4	1,256	3/4		3/4		3/4		3/4		3/4	
10	10	10	4,646	10	3,508	10	2,370	10	1,233	10		10		10		10		10	
1/4		1/4	4,622	1/4	3,484	1/4	2,347	1/4	1,209	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,599	1/2	3,461	1/2	2,323	1/2	1,185	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,575	3/4	3,437	3/4	2,299	3/4	1,161	3/4		3/4		3/4		3/4		3/4	
11	11	11	4,551	11	3,413	11	2,276	11	1,138	11		11		11		11		11	
1/4		1/4	4,527	1/4	3,390	1/4	2,252	1/4	1,114	1/4		1/4		1/4		1/4		1/4	
1/2		1/2	4,504	1/2	3,366	1/2	2,228	1/2	1,090	1/2		1/2		1/2		1/2		1/2	
3/4		3/4	4,480	3/4	3,342	3/4	2,204	3/4	1,067	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: 01/31/2019 SW
CALCULATED: 02/01/2019 CL
PRINTED: 02/01/2019 CL

PRECISION MEASUREMENT
& ANALYSIS, INC.
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CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019



BARGE "HFL 410"

STBD SLOP ULLAGE 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	4,456	0	3,319	0	2,181	0	1,043	0		0		0		0	
1/4		1/4		1/4	4,433	1/4	3,295	1/4	2,157	1/4	1,019	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,409	1/2	3,271	1/2	2,133	1/2	996	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,385	3/4	3,247	3/4	2,110	3/4	972	3/4		3/4		3/4		3/4	
1		1		1	4,361	1	3,224	1	2,086	1	948	1		1		1		1	
1/4		1/4		1/4	4,338	1/4	3,200	1/4	2,062	1/4	924	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,314	1/2	3,176	1/2	2,039	1/2	901	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,290	3/4	3,153	3/4	2,015	3/4	877	3/4		3/4		3/4		3/4	
2		2		2	4,267	2	3,129	2	1,991	2	853	2		2		2		2	
1/4		1/4		1/4	4,243	1/4	3,105	1/4	1,967	1/4	830	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,219	1/2	3,081	1/2	1,944	1/2	806	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,196	3/4	3,058	3/4	1,920	3/4	782	3/4		3/4		3/4		3/4	
3		3		3	4,172	3	3,034	3	1,896	3	759	3		3		3		3	
1/4		1/4		1/4	4,148	1/4	3,010	1/4	1,873	1/4	735	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,262	1/2	4,124	1/2	2,987	1/2	1,849	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,239	3/4	4,101	3/4	2,963	3/4	1,825	3/4		3/4		3/4		3/4	
4		4		4	5,215	4	4,077	4	2,939	4	1,801	4		4		4		4	
1/4		1/4		1/4	5,191	1/4	4,053	1/4	2,916	1/4	1,778	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,167	1/2	4,030	1/2	2,892	1/2	1,754	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,144	3/4	4,006	3/4	2,868	3/4	1,730	3/4		3/4		3/4		3/4	
5		5		5	5,120	5	3,982	5	2,844	5	1,707	5		5		5		5	
1/4		1/4		1/4	5,096	1/4	3,959	1/4	2,821	1/4	1,683	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	5,073	1/2	3,935	1/2	2,797	1/2	1,659	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	5,049	3/4	3,911	3/4	2,773	3/4	1,636	3/4		3/4		3/4		3/4	
6		6		6	5,025	6	3,887	6	2,750	6	1,612	6		6		6		6	
1/4		1/4		1/4	5,002	1/4	3,864	1/4	2,726	1/4	1,588	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,978	1/2	3,840	1/2	2,702	1/2	1,564	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,954	3/4	3,816	3/4	2,679	3/4	1,541	3/4		3/4		3/4		3/4	
7		7		7	4,930	7	3,793	7	2,655	7	1,517	7		7		7		7	
1/4		1/4		1/4	4,907	1/4	3,769	1/4	2,631	1/4	1,493	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,883	1/2	3,745	1/2	2,607	1/2	1,470	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,859	3/4	3,721	3/4	2,584	3/4	1,446	3/4		3/4		3/4		3/4	
8		8		8	4,836	8	3,698	8	2,560	8	1,422	8		8		8		8	
1/4		1/4		1/4	4,812	1/4	3,674	1/4	2,536	1/4	1,399	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,788	1/2	3,650	1/2	2,513	1/2	1,375	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,764	3/4	3,627	3/4	2,489	3/4	1,351	3/4		3/4		3/4		3/4	
9		9		9	4,741	9	3,603	9	2,465	9	1,327	9		9		9		9	
1/4		1/4		1/4	4,717	1/4	3,579	1/4	2,441	1/4	1,304	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,693	1/2	3,556	1/2	2,418	1/2	1,280	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,670	3/4	3,532	3/4	2,394	3/4	1,256	3/4		3/4		3/4		3/4	
10		10		10	4,646	10	3,508	10	2,370	10	1,233	10		10		10		10	
1/4		1/4		1/4	4,622	1/4	3,484	1/4	2,347	1/4	1,209	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,599	1/2	3,461	1/2	2,323	1/2	1,185	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,575	3/4	3,437	3/4	2,299	3/4	1,161	3/4		3/4		3/4		3/4	
11		11		11	4,551	11	3,413	11	2,276	11	1,138	11		11		11		11	
1/4		1/4		1/4	4,527	1/4	3,390	1/4	2,252	1/4	1,114	1/4		1/4		1/4		1/4	
1/2		1/2		1/2	4,504	1/2	3,366	1/2	2,228	1/2	1,090	1/2		1/2		1/2		1/2	
3/4		3/4		3/4	4,480	3/4	3,342	3/4	2,204	3/4	1,067	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: 01/31/2019 SW
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CANCELS AND SUPERCEDES
ALL PRIOR TO 02/2019



BARGE "HFL 410"

FUEL TANK ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 4'-04 1/4"

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

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 CAPACITY TABLE ONLY APPLIES TO ULLAGE GAUGES TAKEN TO TOP LIP OPPOSITE HINGE OF 8" HATCH

STRAPPED: 01/31/2019 SW
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