

# BARGE "HFL 222 SS"

## 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 CENTER	- 00-1/2	00-1/2	- 01-0/8	01-0/8	- 01-1/2	01-1/2	- 02-0/8	02-0/8	- 02-1/2	02-1/2	- 03-0/8	03-0/8
2 CENTER	00-3/8	- 00-3/8	00-3/4	- 00-3/4	01-1/8	- 01-1/8	01-1/2	- 01-1/2	01-7/8	- 01-7/8	02-1/4	- 02-1/4
3 CENTER	00-1/8	- 00-1/8	00-1/4	- 00-1/4	00-3/8	- 00-3/8	00-1/2	- 00-1/2	00-5/8	- 00-5/8	00-3/4	- 00-3/4

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

### EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT = 2'-00"  
 AFT DRAFT = 4'-00"  
 DIFF. = 2'-00" (DOWN BY STERN)

THE CORRECTION FOR 2'-00" TRIM DOWN BY STERN FOR 3 CENTER IS - 00-1/4"  
 FOR A MEASURED ULLAGE GAUGE OF 4'-00" ON 3 CENTER, THE TRIM CORRECTED ULLAGE IS 3'-11 3/4"

LENGTH BETWEEN DRAFT MARKS: 163'-03"

August 16, 2014

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

<http://www.pmacorp.net>



# BARGE "HFL 222 SS"

# 1 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN
0	0	126,742	0	118,684	0	110,626	0	102,567	0	93,407	0	84,021	0	74,638	0	65,253	0	55,868	0
1/4	1/4	126,576	1/4	118,516	1/4	110,468	1/4	102,400	1/4	93,242	1/4	83,826	1/4	74,442	1/4	65,058	1/4	55,673	1/4
1/2	1/2	126,407	1/2	118,348	1/2	110,290	1/2	102,232	1/2	93,084	1/2	83,660	1/2	74,247	1/2	64,863	1/2	55,488	1/2
3/4	3/4	126,239	3/4	118,180	3/4	110,122	3/4	102,064	3/4	92,896	3/4	83,435	3/4	74,061	3/4	64,673	3/4	55,303	3/4
1	1	126,071	1	118,013	1	109,954	1	101,896	1	92,728	1	83,239	1	73,866	1	64,472	1	55,118	1
1/4	1/4	126,903	1/4	117,845	1/4	109,786	1/4	101,728	1/4	92,429	1/4	83,044	1/4	73,680	1/4	64,277	1/4	54,933	1/4
1/2	1/2	126,735	1/2	117,677	1/2	109,619	1/2	101,560	1/2	92,234	1/2	82,849	1/2	73,466	1/2	64,082	1/2	54,748	1/2
3/4	3/4	126,567	3/4	117,509	3/4	109,451	3/4	101,392	3/4	92,038	3/4	82,653	3/4	73,253	3/4	63,886	3/4	54,563	3/4
2	2	126,399	2	117,341	2	109,283	2	101,224	2	91,833	2	82,468	2	73,073	2	63,691	2	54,378	2
1/4	1/4	126,232	1/4	117,173	1/4	109,115	1/4	101,035	1/4	91,647	1/4	82,262	1/4	72,878	1/4	63,496	1/4	54,193	1/4
1/2	1/2	126,064	1/2	117,005	1/2	108,947	1/2	100,846	1/2	91,451	1/2	82,057	1/2	72,682	1/2	63,301	1/2	54,008	1/2
3/4	3/4	124,896	3/4	116,837	3/4	108,779	3/4	100,657	3/4	91,256	3/4	81,872	3/4	72,487	3/4	63,106	3/4	53,823	3/4
3	3	124,728	3	116,670	3	108,611	3	100,468	3	91,060	3	81,678	3	72,291	3	62,910	3	53,638	3
1/4	1/4	124,560	1/4	116,502	1/4	108,443	1/4	100,272	1/4	90,855	1/4	81,481	1/4	72,096	1/4	62,715	1/4	53,453	1/4
1/2	1/2	124,392	1/2	116,334	1/2	108,275	1/2	100,076	1/2	90,659	1/2	81,285	1/2	71,890	1/2	62,520	1/2	53,268	1/2
3/4	3/4	124,224	3/4	116,166	3/4	108,108	3/4	99,880	3/4	90,474	3/4	81,090	3/4	71,704	3/4	62,325	3/4	53,083	3/4
4	4	124,056	4	115,998	4	107,940	4	99,694	4	90,278	4	80,895	4	71,509	4	62,129	4	52,898	4
1/4	1/4	123,888	1/4	115,830	1/4	107,772	1/4	99,497	1/4	90,081	1/4	80,698	1/4	71,313	1/4	61,934	1/4	52,713	1/4
1/2	1/2	123,721	1/2	115,662	1/2	107,604	1/2	99,291	1/2	89,887	1/2	80,504	1/2	71,118	1/2	61,739	1/2	52,528	1/2
3/4	3/4	123,553	3/4	115,494	3/4	107,436	3/4	99,095	3/4	89,692	3/4	80,309	3/4	70,922	3/4	61,544	3/4	52,343	3/4
5	5	123,385	5	115,326	5	107,268	5	98,899	5	89,496	5	80,113	5	70,727	5	61,348	5	52,158	5
1/4	1/4	123,217	1/4	115,159	1/4	107,100	1/4	98,703	1/4	89,301	1/4	79,918	1/4	70,531	1/4	61,153	1/4	51,973	1/4
1/2	1/2	123,049	1/2	114,991	1/2	106,932	1/2	98,507	1/2	89,106	1/2	79,722	1/2	70,335	1/2	60,968	1/2	51,788	1/2
3/4	3/4	122,881	3/4	114,823	3/4	106,764	3/4	98,311	3/4	88,909	3/4	79,527	3/4	70,140	3/4	60,773	3/4	51,603	3/4
6	6	122,713	6	114,655	6	106,597	6	98,115	6	88,714	6	79,332	6	69,944	6	60,578	6	51,418	6
1/4	1/4	122,545	1/4	114,487	1/4	106,429	1/4	97,918	1/4	88,518	1/4	79,136	1/4	69,749	1/4	60,383	1/4	51,233	1/4
1/2	1/2	122,377	1/2	114,319	1/2	106,261	1/2	97,722	1/2	88,323	1/2	78,941	1/2	69,553	1/2	60,188	1/2	51,048	1/2
3/4	3/4	122,210	3/4	114,151	3/4	106,093	3/4	97,526	3/4	88,127	3/4	78,745	3/4	69,358	3/4	59,992	3/4	50,863	3/4
7	7	122,042	7	113,983	7	105,925	7	97,330	7	87,932	7	78,549	7	69,162	7	59,796	7	50,678	7
1/4	1/4	121,874	1/4	113,815	1/4	105,757	1/4	97,134	1/4	87,736	1/4	78,354	1/4	68,967	1/4	59,601	1/4	50,493	1/4
1/2	1/2	121,706	1/2	113,648	1/2	105,589	1/2	96,938	1/2	87,541	1/2	78,158	1/2	68,771	1/2	59,406	1/2	50,308	1/2
3/4	3/4	121,538	3/4	113,480	3/4	105,421	3/4	96,742	3/4	87,345	3/4	77,963	3/4	68,575	3/4	59,201	3/4	50,123	3/4
8	8	121,370	8	113,312	8	105,254	8	96,546	8	87,150	8	77,767	8	68,380	8	59,006	8	50,000	8
1/4	1/4	121,202	1/4	113,144	1/4	105,086	1/4	96,348	1/4	86,954	1/4	77,572	1/4	68,184	1/4	58,810	1/4	49,815	1/4
1/2	1/2	121,034	1/2	112,976	1/2	104,918	1/2	96,153	1/2	86,759	1/2	77,376	1/2	67,989	1/2	58,615	1/2	49,630	1/2
3/4	3/4	120,867	3/4	112,808	3/4	104,750	3/4	95,957	3/4	86,553	3/4	77,180	3/4	67,793	3/4	58,419	3/4	49,445	3/4
9	9	120,699	9	112,640	9	104,582	9	95,751	9	86,367	9	76,985	9	67,598	9	58,224	9	49,260	9
1/4	1/4	120,531	1/4	112,472	1/4	104,414	1/4	95,555	1/4	86,172	1/4	76,789	1/4	67,402	1/4	58,028	1/4	49,075	1/4
1/2	1/2	120,363	1/2	112,305	1/2	104,246	1/2	95,359	1/2	85,976	1/2	76,594	1/2	67,206	1/2	57,833	1/2	48,890	1/2
3/4	3/4	120,195	3/4	112,137	3/4	104,078	3/4	95,173	3/4	85,781	3/4	76,398	3/4	67,011	3/4	57,637	3/4	48,705	3/4
10	10	120,027	10	111,969	10	103,911	10	94,976	10	85,585	10	76,203	10	66,815	10	57,442	10	48,520	10
1/4	1/4	119,859	1/4	111,801	1/4	103,743	1/4	94,780	1/4	85,390	1/4	76,007	1/4	66,620	1/4	57,247	1/4	48,335	1/4
1/2	1/2	119,691	1/2	111,633	1/2	103,575	1/2	94,584	1/2	85,194	1/2	75,811	1/2	66,425	1/2	57,052	1/2	48,150	1/2
3/4	3/4	119,523	3/4	111,465	3/4	103,407	3/4	94,388	3/4	84,999	3/4	75,616	3/4	66,229	3/4	56,856	3/4	47,965	3/4
11	11	119,355	11	111,297	11	103,239	11	94,192	11	84,803	11	75,420	11	66,034	11	56,660	11	47,780	11
1/4	1/4	119,187	1/4	111,129	1/4	103,071	1/4	93,996	1/4	84,608	1/4	75,225	1/4	65,839	1/4	56,465	1/4	47,595	1/4
1/2	1/2	119,020	1/2	110,962	1/2	102,903	1/2	93,800	1/2	84,412	1/2	75,029	1/2	65,644	1/2	56,269	1/2	47,410	1/2
3/4	3/4	118,852	3/4	110,794	3/4	102,736	3/4	93,604	3/4	84,217	3/4	74,834	3/4	65,448	3/4	56,074	3/4	47,225	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH NPMMS 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 THREADS ON "MIMC" VALVE.  
 GAUGE POINT: (MIMC) LOCATED ON CENTERLINE AND 17'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT & ANALYSIS, INC.  
 Pearland, Texas 77588  
 P.O. Box 4002  
<http://www.pmacorp.net>



# BARGE "HFL 222 SS"

## 1 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.		
IN	10 FT.	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	
0	55,878	0	46,496	0	37,113	0	27,731	0	18,380	0	9,217	0	277	0	0	0	0	0	0	
1/4	56,583	1/4	46,300	1/4	36,918	1/4	27,535	1/4	18,200	1/4	9,021	1/4	228	1/4	1/4	1/4	1/4	1/4	1/4	
1/2	55,487	1/2	46,106	1/2	36,722	1/2	27,340	1/2	18,012	1/2	8,825	1/2	179	1/2	1/2	1/2	1/2	1/2	1/2	
3/4	55,282	3/4	45,908	3/4	36,527	3/4	27,144	3/4	17,824	3/4	8,629	3/4	130	3/4	3/4	3/4	3/4	3/4	3/4	
1	55,096	1	45,714	1	36,331	1	26,949	1	17,635	1	8,433	1	81	1	1	1	1	1	1	
1 1/4	54,901	1 1/4	45,518	1 1/4	36,136	1 1/4	26,753	1 1/4	17,446	1 1/4	8,237	1 1/4	32	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	
1 1/2	54,705	1 1/2	45,323	1 1/2	35,940	1 1/2	26,558	1 1/2	17,257	1 1/2	8,040	1 1/2	3	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	
1 3/4	54,510	1 3/4	45,127	1 3/4	35,745	1 3/4	26,362	1 3/4	17,069	1 3/4	7,844	1 3/4	34	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	1 3/4	
2	54,314	2	44,932	2	35,549	2	26,167	2	16,880	2	7,648	2	35	2	2	2	2	2	2	
2 1/4	54,119	2 1/4	44,738	2 1/4	35,354	2 1/4	25,971	2 1/4	16,691	2 1/4	7,452	2 1/4	36	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4	
2 1/2	53,923	2 1/2	44,541	2 1/2	35,158	2 1/2	25,776	2 1/2	16,503	2 1/2	7,256	2 1/2	37	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	
2 3/4	53,728	2 3/4	44,345	2 3/4	34,963	2 3/4	25,580	2 3/4	16,314	2 3/4	7,060	2 3/4	38	2 3/4	2 3/4	2 3/4	2 3/4	2 3/4	2 3/4	
3	53,533	3	44,150	3	34,767	3	25,385	3	16,125	3	6,864	3	39	3	3	3	3	3	3	
3 1/4	53,337	3 1/4	43,954	3 1/4	34,572	3 1/4	25,189	3 1/4	15,937	3 1/4	6,669	3 1/4	40	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	3 1/4	
3 1/2	53,142	3 1/2	43,759	3 1/2	34,376	3 1/2	24,994	3 1/2	15,748	3 1/2	6,474	3 1/2	41	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	
3 3/4	52,946	3 3/4	43,564	3 3/4	34,181	3 3/4	24,799	3 3/4	15,559	3 3/4	6,279	3 3/4	42	3 3/4	3 3/4	3 3/4	3 3/4	3 3/4	3 3/4	
4	52,751	4	43,368	4	33,985	4	24,603	4	15,370	4	6,084	4	43	4	4	4	4	4	4	4
4 1/4	52,555	4 1/4	43,173	4 1/4	33,790	4 1/4	24,408	4 1/4	15,182	4 1/4	5,889	4 1/4	44	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	4 1/4	
4 1/2	52,360	4 1/2	42,977	4 1/2	33,595	4 1/2	24,212	4 1/2	14,993	4 1/2	5,694	4 1/2	45	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	
4 3/4	52,164	4 3/4	42,782	4 3/4	33,399	4 3/4	24,017	4 3/4	14,804	4 3/4	5,500	4 3/4	46	4 3/4	4 3/4	4 3/4	4 3/4	4 3/4	4 3/4	
5	51,969	5	42,586	5	33,204	5	23,821	5	14,616	5	5,305	5	47	5	5	5	5	5	5	5
5 1/4	51,773	5 1/4	42,391	5 1/4	33,008	5 1/4	23,626	5 1/4	14,427	5 1/4	5,110	5 1/4	48	5 1/4	5 1/4	5 1/4	5 1/4	5 1/4	5 1/4	
5 1/2	51,578	5 1/2	42,195	5 1/2	32,813	5 1/2	23,430	5 1/2	14,238	5 1/2	4,914	5 1/2	49	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	
5 3/4	51,382	5 3/4	42,000	5 3/4	32,617	5 3/4	23,235	5 3/4	14,050	5 3/4	4,718	5 3/4	50	5 3/4	5 3/4	5 3/4	5 3/4	5 3/4	5 3/4	
6	51,187	6	41,804	6	32,422	6	23,039	6	13,861	6	4,523	6	51	6	6	6	6	6	6	6
6 1/4	50,991	6 1/4	41,609	6 1/4	32,226	6 1/4	22,844	6 1/4	13,672	6 1/4	4,327	6 1/4	52	6 1/4	6 1/4	6 1/4	6 1/4	6 1/4	6 1/4	
6 1/2	50,795	6 1/2	41,413	6 1/2	32,031	6 1/2	22,648	6 1/2	13,484	6 1/2	4,132	6 1/2	53	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	
6 3/4	50,600	6 3/4	41,218	6 3/4	31,835	6 3/4	22,453	6 3/4	13,295	6 3/4	3,936	6 3/4	54	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	
7	50,405	7	41,022	7	31,640	7	22,257	7	13,106	7	3,740	7	55	7	7	7	7	7	7	7
7 1/4	50,210	7 1/4	40,827	7 1/4	31,444	7 1/4	22,062	7 1/4	12,917	7 1/4	3,545	7 1/4	56	7 1/4	7 1/4	7 1/4	7 1/4	7 1/4	7 1/4	
7 1/2	50,014	7 1/2	40,631	7 1/2	31,249	7 1/2	21,867	7 1/2	12,727	7 1/2	3,350	7 1/2	57	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	
7 3/4	49,819	7 3/4	40,436	7 3/4	31,053	7 3/4	21,671	7 3/4	12,538	7 3/4	3,155	7 3/4	58	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4	7 3/4	
8	49,623	8	40,241	8	30,858	8	21,476	8	12,348	8	2,960	8	59	8	8	8	8	8	8	8
8 1/4	49,428	8 1/4	40,045	8 1/4	30,662	8 1/4	21,280	8 1/4	12,154	8 1/4	2,765	8 1/4	60	8 1/4	8 1/4	8 1/4	8 1/4	8 1/4	8 1/4	
8 1/2	49,232	8 1/2	39,850	8 1/2	30,467	8 1/2	21,085	8 1/2	11,959	8 1/2	2,572	8 1/2	61	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	8 1/2	
8 3/4	49,037	8 3/4	39,654	8 3/4	30,272	8 3/4	20,889	8 3/4	11,766	8 3/4	2,379	8 3/4	62	8 3/4	8 3/4	8 3/4	8 3/4	8 3/4	8 3/4	
9	48,841	9	39,459	9	30,076	9	20,694	9	11,570	9	2,185	9	63	9	9	9	9	9	9	9
9 1/4	48,646	9 1/4	39,263	9 1/4	29,881	9 1/4	20,498	9 1/4	11,374	9 1/4	1,992	9 1/4	64	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	
9 1/2	48,450	9 1/2	39,068	9 1/2	29,685	9 1/2	20,302	9 1/2	11,178	9 1/2	1,800	9 1/2	65	9 1/2	9 1/2	9 1/2	9 1/2	9 1/2	9 1/2	
9 3/4	48,255	9 3/4	38,872	9 3/4	29,490	9 3/4	20,106	9 3/4	10,982	9 3/4	1,608	9 3/4	66	9 3/4	9 3/4	9 3/4	9 3/4	9 3/4	9 3/4	
10	48,060	10	38,677	10	29,294	10	19,910	10	10,786	10	1,415	10	67	10	10	10	10	10	10	10
10 1/4	47,864	10 1/4	38,481	10 1/4	29,099	10 1/4	19,719	10 1/4	10,590	10 1/4	1,245	10 1/4	68	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4	10 1/4
10 1/2	47,668	10 1/2	38,286	10 1/2	28,903	10 1/2	19,528	10 1/2	10,394	10 1/2	1,075	10 1/2	69	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2
10 3/4	47,473	10 3/4	38,090	10 3/4	28,708	10 3/4	19,337	10 3/4	10,198	10 3/4	906	10 3/4	70	10 3/4	10 3/4	10 3/4	10 3/4	10 3/4	10 3/4	10 3/4
11	47,277	11	37,895	11	28,512	11	19,146	11	10,002	11	734	11	71	11	11	11	11	11	11	11
11 1/4	47,082	11 1/4	37,699	11 1/4	28,317	11 1/4	18,957	11 1/4	9,805	11 1/4	620	11 1/4	72	11 1/4	11 1/4	11 1/4	11 1/4	11 1/4	11 1/4	11 1/4
11 1/2	46,887	11 1/2	37,504	11 1/2	28,121	11 1/2	18,768	11 1/2	9,609	11 1/2	506	11 1/2	73	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2
11 3/4	46,691	11 3/4	37,308	11 3/4	27,926	11 3/4	18,579	11 3/4	9,413	11 3/4	391	11 3/4	74	11 3/4	11 3/4	11 3/4	11 3/4	11 3/4	11 3/4	11 3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/16/2014 SW  
CALCULATED: 08/16/2014 CL  
PRINTED: 08/16/2014 SW

CANCELS AND SUPERCEDES  
ALL PRIOR TO 08/2014

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







# BARGE "HFL 222 SS"

## 2 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN
0	72,034	0	59,836	0	47,839	0	35,741	0	23,695	0	11,846	0	342	0	0	0	0	0	0
1/4	71,782	59,584	47,587	35,489	23,450	11,594	279	279	279	1/4	11,594	1/4	279	1/4	279	1/4	279	1/4	279
1/2	71,530	59,332	47,336	35,237	23,206	11,342	216	216	216	1/2	11,342	1/2	216	1/2	216	1/2	216	1/2	216
3/4	71,278	59,080	47,082	34,985	22,961	11,090	153	153	153	3/4	11,090	3/4	153	3/4	153	3/4	153	3/4	153
1	71,026	58,828	46,830	34,733	22,717	10,838	90	90	90	1	10,838	1	90	1	90	1	90	1	90
1 1/4	70,774	58,576	46,578	34,481	22,471	10,586	27	27	27	1 1/4	10,586	1 1/4	27	1 1/4	27	1 1/4	27	1 1/4	27
1 1/2	70,522	58,324	46,326	34,229	22,228	10,334	12	12	12	1 1/2	10,334	1 1/2	12	1 1/2	12	1 1/2	12	1 1/2	12
1 3/4	70,270	58,072	46,074	33,977	21,984	10,082	3/4	3/4	3/4	1 3/4	10,082	1 3/4	3/4	1 3/4	3/4	3/4	1 3/4	3/4	3/4
2	70,018	57,820	45,822	33,724	21,739	9,830	2	2	2	2	9,830	2	2	2	2	2	2	2	2
2 1/4	69,766	57,568	45,570	33,472	21,495	9,578	1/4	1/4	1/4	2 1/4	9,578	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
2 1/2	69,514	57,316	45,318	33,220	21,250	9,326	1/2	1/2	1/2	2 1/2	9,326	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
2 3/4	69,262	57,064	45,066	32,968	21,006	9,074	3/4	3/4	3/4	2 3/4	9,074	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
3	69,010	56,812	44,814	32,716	20,761	8,822	3	3	3	3	8,822	3	3	3	3	3	3	3	3
3 1/4	68,758	56,560	44,562	32,464	20,517	8,570	1/4	1/4	1/4	3 1/4	8,570	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
3 1/2	68,506	56,308	44,310	32,212	20,272	8,318	1/2	1/2	1/2	3 1/2	8,318	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3 3/4	68,254	56,056	44,058	31,960	20,028	8,066	3/4	3/4	3/4	3 3/4	8,066	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
4	68,002	55,804	43,806	31,708	19,784	7,814	4	4	4	4	7,814	4	4	4	4	4	4	4	4
4 1/4	67,750	55,552	43,554	31,456	19,539	7,562	1/4	1/4	1/4	4 1/4	7,562	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
4 1/2	67,498	55,300	43,302	31,204	19,295	7,310	1/2	1/2	1/2	4 1/2	7,310	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
4 3/4	67,246	55,048	43,050	30,952	19,050	7,058	3/4	3/4	3/4	4 3/4	7,058	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
5	66,994	54,796	42,798	30,700	18,806	6,806	5	5	5	5	6,806	5	5	5	5	5	5	5	5
5 1/4	66,742	54,544	42,546	30,448	18,561	6,554	1/4	1/4	1/4	5 1/4	6,554	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
5 1/2	66,490	54,292	42,294	30,196	18,317	6,302	1/2	1/2	1/2	5 1/2	6,302	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
5 3/4	66,238	54,040	42,042	29,944	18,072	6,050	3/4	3/4	3/4	5 3/4	6,050	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
6	65,986	53,788	41,790	29,692	17,828	5,798	6	6	6	6	5,798	6	6	6	6	6	6	6	6
6 1/4	65,734	53,536	41,538	29,440	17,583	5,547	1/4	1/4	1/4	6 1/4	5,547	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
6 1/2	65,482	53,284	41,286	29,188	17,339	5,295	1/2	1/2	1/2	6 1/2	5,295	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
6 3/4	65,230	53,032	41,034	28,936	17,095	5,044	3/4	3/4	3/4	6 3/4	5,044	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
7	64,978	52,780	40,782	28,684	16,850	4,793	7	7	7	7	4,793	7	7	7	7	7	7	7	7
7 1/4	64,726	52,528	40,530	28,432	16,605	4,542	1/4	1/4	1/4	7 1/4	4,542	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
7 1/2	64,474	52,276	40,278	28,180	16,361	4,292	1/2	1/2	1/2	7 1/2	4,292	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
7 3/4	64,222	52,024	40,026	27,928	16,116	4,041	3/4	3/4	3/4	7 3/4	4,041	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
8	63,970	51,772	39,774	27,676	15,871	3,791	8	8	8	8	3,791	8	8	8	8	8	8	8	8
8 1/4	63,718	51,520	39,522	27,424	15,621	3,541	1/4	1/4	1/4	8 1/4	3,541	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
8 1/2	63,466	51,268	39,270	27,172	15,371	3,292	1/2	1/2	1/2	8 1/2	3,292	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
8 3/4	63,214	51,016	39,018	26,920	15,121	3,043	3/4	3/4	3/4	8 3/4	3,043	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
9	62,962	50,764	38,766	26,668	14,871	2,793	9	9	9	9	2,793	9	9	9	9	9	9	9	9
9 1/4	62,710	50,512	38,514	26,416	14,619	2,546	1/4	1/4	1/4	9 1/4	2,546	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
9 1/2	62,458	50,260	38,262	26,163	14,367	2,299	1/2	1/2	1/2	9 1/2	2,299	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
9 3/4	62,206	50,008	38,010	25,911	14,115	2,052	3/4	3/4	3/4	9 3/4	2,052	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
10	61,954	49,756	37,758	25,659	13,862	1,805	10	10	10	10	1,805	10	10	10	10	10	10	10	10
10 1/4	61,702	49,504	37,506	25,407	13,610	1,558	1/4	1/4	1/4	10 1/4	1,558	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
10 1/2	61,450	49,252	37,254	25,155	13,358	1,311	1/2	1/2	1/2	10 1/2	1,311	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
10 3/4	61,198	49,000	37,002	24,903	13,106	1,064	3/4	3/4	3/4	10 3/4	1,064	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
11	60,946	48,748	36,750	24,651	12,854	930	11	11	11	11	930	11	11	11	11	11	11	11	11
11 1/4	60,694	48,496	36,498	24,399	12,602	783	1/4	1/4	1/4	11 1/4	783	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
11 1/2	60,442	48,244	36,246	24,147	12,350	636	1/2	1/2	1/2	11 1/2	636	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
11 3/4	60,190	47,992	35,994	23,895	12,098	489	3/4	3/4	3/4	11 3/4	489	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/16/2014 SW  
 CALCULATED: 08/16/2014 CL  
 PRINTED: 08/16/2014 SW  
 CANCELS AND SUPERCEDES  
 ALL PRIOR TO 08/2014

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

*[Signature]*



# BARGE "HFL 222 SS"

## 3 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
0	0	150,939	140,140	129,342	118,543	107,745	96,946	86,148	75,349											1/4	1/4	150,714	139,916	129,117	118,318	107,520	96,721	85,923	75,124											1/2	1/2	150,489	139,690	128,892	118,092	107,296	96,496	85,698	74,900											3/4	3/4	150,264	139,465	128,667	117,868	107,070	96,271	85,473	74,675											1	1	150,039	139,240	128,442	117,643	106,846	96,046	85,248	74,460											1/4	1/4	149,814	139,015	128,217	117,418	106,620	95,821	85,023	74,225											1/2	1/2	149,589	138,790	127,992	117,193	106,395	95,597	84,798	74,000											3/4	3/4	149,364	138,565	127,767	116,968	106,170	95,372	84,573	73,775											2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775										
1/4	1/4	150,714	139,916	129,117	118,318	107,520	96,721	85,923	75,124											1/2	1/2	150,489	139,690	128,892	118,092	107,296	96,496	85,698	74,900											3/4	3/4	150,264	139,465	128,667	117,868	107,070	96,271	85,473	74,675											1	1	150,039	139,240	128,442	117,643	106,846	96,046	85,248	74,460											1/4	1/4	149,814	139,015	128,217	117,418	106,620	95,821	85,023	74,225											1/2	1/2	149,589	138,790	127,992	117,193	106,395	95,597	84,798	74,000											3/4	3/4	149,364	138,565	127,767	116,968	106,170	95,372	84,573	73,775											2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																														
1/2	1/2	150,489	139,690	128,892	118,092	107,296	96,496	85,698	74,900											3/4	3/4	150,264	139,465	128,667	117,868	107,070	96,271	85,473	74,675											1	1	150,039	139,240	128,442	117,643	106,846	96,046	85,248	74,460											1/4	1/4	149,814	139,015	128,217	117,418	106,620	95,821	85,023	74,225											1/2	1/2	149,589	138,790	127,992	117,193	106,395	95,597	84,798	74,000											3/4	3/4	149,364	138,565	127,767	116,968	106,170	95,372	84,573	73,775											2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																		
3/4	3/4	150,264	139,465	128,667	117,868	107,070	96,271	85,473	74,675											1	1	150,039	139,240	128,442	117,643	106,846	96,046	85,248	74,460											1/4	1/4	149,814	139,015	128,217	117,418	106,620	95,821	85,023	74,225											1/2	1/2	149,589	138,790	127,992	117,193	106,395	95,597	84,798	74,000											3/4	3/4	149,364	138,565	127,767	116,968	106,170	95,372	84,573	73,775											2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																						
1	1	150,039	139,240	128,442	117,643	106,846	96,046	85,248	74,460											1/4	1/4	149,814	139,015	128,217	117,418	106,620	95,821	85,023	74,225											1/2	1/2	149,589	138,790	127,992	117,193	106,395	95,597	84,798	74,000											3/4	3/4	149,364	138,565	127,767	116,968	106,170	95,372	84,573	73,775											2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																										
1/4	1/4	149,814	139,015	128,217	117,418	106,620	95,821	85,023	74,225											1/2	1/2	149,589	138,790	127,992	117,193	106,395	95,597	84,798	74,000											3/4	3/4	149,364	138,565	127,767	116,968	106,170	95,372	84,573	73,775											2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																														
1/2	1/2	149,589	138,790	127,992	117,193	106,395	95,597	84,798	74,000											3/4	3/4	149,364	138,565	127,767	116,968	106,170	95,372	84,573	73,775											2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																		
3/4	3/4	149,364	138,565	127,767	116,968	106,170	95,372	84,573	73,775											2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																						
2	2	149,139	138,340	127,542	116,743	105,945	95,147	84,348	73,550											1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																										
1/4	1/4	148,914	138,115	127,317	116,519	105,720	94,922	84,123	73,325											1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																														
1/2	1/2	148,689	137,890	127,092	116,294	105,496	94,697	83,898	73,100											3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																		
3/4	3/4	148,464	137,665	126,867	116,069	105,270	94,472	83,673	72,875											3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																						
3	3	148,239	137,440	126,642	115,844	105,045	94,247	83,448	72,650											1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																										
1/4	1/4	148,014	137,216	126,417	115,619	104,820	94,022	83,223	72,425											1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																														
1/2	1/2	147,789	136,991	126,192	115,394	104,596	93,797	82,998	72,200											3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																		
3/4	3/4	147,564	136,766	125,967	115,169	104,370	93,572	82,773	71,975											4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																						
4	4	147,339	136,541	125,742	114,944	104,145	93,347	82,548	71,750											1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																										
1/4	1/4	147,114	136,316	125,517	114,719	103,920	93,122	82,323	71,525											1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																														
1/2	1/2	146,889	136,091	125,292	114,494	103,696	92,897	82,098	71,300											3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																		
3/4	3/4	146,664	135,866	125,067	114,269	103,470	92,672	81,874	71,075											5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																						
5	5	146,439	135,641	124,842	114,044	103,245	92,447	81,649	70,850											1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																										
1/4	1/4	146,214	135,416	124,617	113,819	103,020	92,222	81,424	70,625											1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																														
1/2	1/2	145,989	135,191	124,392	113,594	102,796	91,997	81,199	70,400											3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3/4	3/4	145,764	134,966	124,167	113,369	102,571	91,772	80,974	70,175											6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
6	6	145,539	134,741	123,942	113,144	102,346	91,547	80,749	69,950											1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1/4	1/4	145,314	134,516	123,717	112,919	102,121	91,322	80,524	69,725											1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1/2	1/2	145,089	134,291	123,492	112,694	101,896	91,097	80,299	69,500											3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3/4	3/4	144,864	134,066	123,267	112,469	101,671	90,872	80,074	69,275											7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
7	7	144,639	133,841	123,042	112,244	101,446	90,647	79,849	69,050											1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1/4	1/4	144,414	133,616	122,818	112,019	101,221	90,422	79,624	68,825											1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1/2	1/2	144,189	133,391	122,593	111,794	100,996	90,197	79,399	68,600											3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3/4	3/4	143,964	133,166	122,368	111,569	100,771	89,972	79,174	68,375											8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
8	8	143,740	132,941	122,143	111,344	100,546	89,747	78,949	68,150											1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1/4	1/4	143,515	132,716	121,918	111,119	100,321	89,522	78,724	67,925											1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1/2	1/2	143,290	132,491	121,693	110,894	100,096	89,297	78,499	67,700											3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3/4	3/4	143,065	132,266	121,468	110,669	99,871	89,072	78,274	67,475											9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
9	9	142,840	132,041	121,243	110,444	99,646	88,848	78,049	67,250											1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1/4	1/4	142,615	131,816	121,019	110,219	99,421	88,623	77,824	67,025											1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1/2	1/2	142,390	131,591	120,793	109,994	99,196	88,398	77,599	66,800											3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3/4	3/4	142,165	131,366	120,568	109,769	98,971	88,173	77,374	66,575											10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
10	10	141,940	131,141	120,343	109,545	98,746	87,948	77,149	66,350											1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1/4	1/4	141,715	130,916	120,118	109,320	98,521	87,723	76,924	66,125											1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1/2	1/2	141,490	130,691	119,893	109,095	98,296	87,498	76,699	65,900											3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3/4	3/4	141,265	130,466	119,668	108,870	98,071	87,273	76,474	65,675											11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
11	11	141,040	130,242	119,443	108,645	97,846	87,048	76,249	65,450											1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1/4	1/4	140,815	130,017	119,218	108,420	97,621	86,823	76,024	65,225											1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
1/2	1/2	140,590	129,792	118,993	108,195	97,396	86,598	75,799	65,000											3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3/4	3/4	140,365	129,567	118,768	107,970	97,171	86,373	75,574	64,775																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

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 THREADS ON "MIMC" VALVE. GAUGE POINT: (MIMC) LOCATED ON CENTERLINE AND 29"06" FORWARD OF AFT BULKHEAD.

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

*[Signature]*



# BARGE "HFL 222 SS"

# 3 CENTER ULLAGE TABLE

CAPACITIES GIVEN IN WEDGE GALLONS

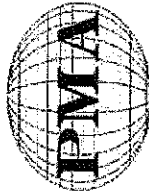
10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0	IN	0
0	54,881	0	53,728	0	52,564	0	51,388	0	50,201	0	49,013	0	47,814	0	46,604	0	45,383	0	44,151
1/4	64,326	1/4	63,158	1/4	61,978	1/4	60,786	1/4	59,582	1/4	58,367	1/4	57,141	1/4	55,904	1/4	54,656	1/4	53,407
1/2	64,101	1/2	62,923	1/2	61,732	1/2	60,529	1/2	59,314	1/2	58,087	1/2	56,849	1/2	55,600	1/2	54,351	1/2	53,102
3/4	63,876	3/4	62,685	3/4	61,483	3/4	60,269	3/4	59,044	3/4	57,807	3/4	56,559	3/4	55,300	3/4	54,041	3/4	52,792
1	63,651	1	62,448	1	61,235	1	60,011	1	58,776	1	57,529	1	56,270	1	55,001	1	53,732	1	52,463
1/4	63,426	1/4	62,213	1/4	60,990	1/4	59,755	1/4	58,510	1/4	57,253	1/4	55,994	1/4	54,725	1/4	53,456	1/4	52,187
1/2	63,201	1/2	61,978	1/2	60,743	1/2	59,498	1/2	58,243	1/2	56,977	1/2	55,700	1/2	54,413	1/2	53,126	1/2	51,839
3/4	62,976	3/4	61,743	3/4	60,498	3/4	59,243	3/4	57,977	3/4	56,699	3/4	55,402	3/4	54,095	3/4	52,778	3/4	51,461
2	62,751	2	61,518	2	60,273	2	59,018	2	57,752	2	56,475	2	55,178	2	53,861	2	52,534	2	51,207
1/4	62,526	1/4	61,283	1/4	60,028	1/4	58,763	1/4	57,487	1/4	56,199	1/4	54,892	1/4	53,565	1/4	52,228	1/4	50,891
1/2	62,301	1/2	61,053	1/2	60,008	1/2	59,006	1/2	58,006	1/2	57,006	1/2	56,006	1/2	55,006	1/2	54,006	1/2	53,006
3/4	62,076	3/4	61,821	3/4	60,556	3/4	59,281	3/4	58,006	3/4	56,721	3/4	55,436	3/4	54,151	3/4	52,866	3/4	51,581
1	61,851	1	61,586	1	60,311	1	59,036	1	57,761	1	56,486	1	55,211	1	53,936	1	52,661	1	51,386
1/4	61,626	1/4	61,351	1/4	60,076	1/4	58,801	1/4	57,526	1/4	56,251	1/4	54,976	1/4	53,701	1/4	52,426	1/4	51,151
1/2	61,401	1/2	61,116	1/2	60,006	1/2	59,006	1/2	58,006	1/2	57,006	1/2	56,006	1/2	55,006	1/2	54,006	1/2	53,006
3/4	61,176	3/4	60,881	3/4	59,576	3/4	58,271	3/4	56,966	3/4	55,661	3/4	54,356	3/4	53,051	3/4	51,746	3/4	50,441
2	60,951	2	60,646	2	59,331	2	58,026	2	56,721	2	55,416	2	54,111	2	52,806	2	51,501	2	50,196
1/4	60,726	1/4	60,411	1/4	59,096	1/4	57,781	1/4	56,466	1/4	55,151	1/4	53,836	1/4	52,521	1/4	51,206	1/4	49,891
1/2	60,501	1/2	60,186	1/2	58,871	1/2	57,556	1/2	56,241	1/2	54,926	1/2	53,611	1/2	52,296	1/2	50,981	1/2	49,666
3/4	60,276	3/4	59,961	3/4	58,646	3/4	57,331	3/4	56,016	3/4	54,691	3/4	53,376	3/4	52,061	3/4	50,746	3/4	49,431
1	60,051	1	59,726	1	58,401	1	57,076	1	55,751	1	54,426	1	53,101	1	51,776	1	50,451	1	49,126
1/4	59,826	1/4	59,491	1/4	58,156	1/4	56,821	1/4	55,446	1/4	54,071	1/4	52,696	1/4	51,321	1/4	49,946	1/4	48,571
1/2	59,601	1/2	59,266	1/2	57,931	1/2	56,556	1/2	55,181	1/2	53,806	1/2	52,431	1/2	51,056	1/2	49,681	1/2	48,306
3/4	59,376	3/4	59,041	3/4	57,706	3/4	56,331	3/4	54,956	3/4	53,581	3/4	52,206	3/4	50,831	3/4	49,456	3/4	48,081
2	59,151	2	58,816	2	57,481	2	56,106	2	54,731	2	53,356	2	51,981	2	50,606	2	49,231	2	47,856
1/4	58,926	1/4	58,581	1/4	57,246	1/4	55,871	1/4	54,506	1/4	53,131	1/4	51,756	1/4	50,381	1/4	49,006	1/4	47,631
1/2	58,701	1/2	58,356	1/2	57,021	1/2	55,646	1/2	54,281	1/2	52,916	1/2	51,541	1/2	50,176	1/2	48,801	1/2	47,406
3/4	58,476	3/4	58,131	3/4	56,806	3/4	55,431	3/4	54,076	3/4	52,721	3/4	51,366	3/4	49,961	3/4	48,596	3/4	47,231
1	58,251	1	57,906	1	56,581	1	55,256	1	53,841	1	52,476	1	51,071	1	49,666	1	48,261	1	46,856
1/4	58,026	1/4	57,681	1/4	56,356	1/4	55,031	1/4	53,626	1/4	52,221	1/4	50,816	1/4	49,411	1/4	48,006	1/4	46,601
1/2	57,801	1/2	57,456	1/2	56,131	1/2	54,806	1/2	53,401	1/2	52,006	1/2	50,601	1/2	49,206	1/2	47,801	1/2	46,406
3/4	57,576	3/4	57,231	3/4	55,906	3/4	54,581	3/4	53,196	3/4	51,801	3/4	50,406	3/4	49,001	3/4	47,606	3/4	46,201
2	57,351	2	57,006	2	55,681	2	54,356	2	53,006	2	51,601	2	50,206	2	48,801	2	47,406	2	46,001
1/4	57,126	1/4	56,781	1/4	55,456	1/4	54,131	1/4	52,806	1/4	51,401	1/4	50,006	1/4	48,601	1/4	47,206	1/4	45,801
1/2	56,901	1/2	56,556	1/2	55,231	1/2	53,906	1/2	52,581	1/2	51,186	1/2	49,781	1/2	48,381	1/2	46,986	1/2	45,581
3/4	56,676	3/4	56,331	3/4	55,006	3/4	53,681	3/4	52,356	3/4	50,951	3/4	49,556	3/4	48,151	3/4	46,756	3/4	45,356
1	56,451	1	56,106	1	54,781	1	53,456	1	52,131	1	50,726	1	49,321	1	47,916	1	46,511	1	45,106
1/4	56,226	1/4	55,881	1/4	54,556	1/4	53,231	1/4	51,906	1/4	50,501	1/4	49,096	1/4	47,691	1/4	46,281	1/4	44,881
1/2	56,001	1/2	55,656	1/2	54,331	1/2	53,006	1/2	51,681	1/2	50,276	1/2	48,871	1/2	47,466	1/2	46,066	1/2	44,666
3/4	55,776	3/4	55,431	3/4	54,106	3/4	52,781	3/4	51,401	3/4	50,006	3/4	48,601	3/4	47,206	3/4	45,806	3/4	44,406
2	55,551	2	55,206	2	53,881	2	52,556	2	51,186	2	49,781	2	48,376	2	46,971	2	45,566	2	44,166
1/4	55,326	1/4	54,981	1/4	53,656	1/4	52,331	1/4	51,006	1/4	49,601	1/4	48,196	1/4	46,791	1/4	45,381	1/4	43,976
1/2	55,101	1/2	54,756	1/2	53,431	1/2	52,106	1/2	50,781	1/2	49,376	1/2	47,971	1/2	46,566	1/2	45,166	1/2	43,766
3/4	54,876	3/4	54,531	3/4	53,206	3/4	51,881	3/4	50,476	3/4	49,071	3/4	47,666	3/4	46,266	3/4	44,866	3/4	43,566
1	54,651	1	54,306	1	53,006	1	51,681	1	50,276	1	48,871	1	47,466	1	46,066	1	44,666	1	43,366
1/4	54,426	1/4	54,081	1/4	52,781	1/4	51,456	1/4	50,056	1/4	48,656	1/4	47,256	1/4	45,856	1/4	44,456	1/4	43,156
1/2	54,201	1/2	53,856	1/2	52,556	1/2	51,231	1/2	49,846	1/2	48,446	1/2	47,046	1/2	45,646	1/2	44,246	1/2	42,946
3/4	53,976	3/4	53,631	3/4	52,331	3/4	51,016	3/4	49,626	3/4	48,236	3/4	46,836	3/4	45,436	3/4	44,036	3/4	42,736
2	53,751	2	53,406	2	52,106	2	50,791	2	49,406	2	48,016	2	46,626	2	45,236	2	43,846	2	42,536

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/16/2014 SW  
CALCULATED: 08/16/2014 CL  
PRINTED: 08/16/2014 SW  
CANGELS AND SUPERCEDES  
ALL PRIOR TO 08/2014

PRECISION MEASUREMENT & ANALYSIS, INC.  
P.O. Box 2092  
Pearland, Texas 77888  
http://www.pmacorp.net

SHEET NO. 6 OF 8



# BARGE "HFL 222 SS"

## 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 CENTER	00-1/2	-00-1/2	01-0/8	-01-0/8	01-1/2	-01-1/2	02-0/8	-02-0/8	02-1/2	-02-1/2	03-0/8	-03-0/8
2 CENTER	-00-3/8	00-3/8	-00-3/4	00-3/4	-01-1/8	01-1/8	-01-1/2	01-1/2	-01-7/8	01-7/8	-02-1/4	02-1/4
3 CENTER	-00-1/8	00-1/8	-00-1/4	00-1/4	-00-3/8	00-3/8	-00-1/2	00-1/2	-00-5/8	00-5/8	-00-3/4	00-3/4

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

**EXAMPLE FOR ABOVE TRIM CORRECTIONS:**

FWD. DRAFT = 2'-00"  
 AFT DRAFT = 4'-00"  
 DIFF. = 2'-00" (DOWN BY STERN)

THE CORRECTION FOR 2'-00" TRIM DOWN BY STERN FOR 3 CENTER IS 00-1/4"  
 FOR A MEASURED INNAGE GAUGE OF 4'-00" ON 3 CENTER, THE TRIM CORRECTED INNAGE IS 4'-00 1/4"

LENGTH BETWEEN DRAFT MARKS: 163'-03"

August 16, 2014

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

<http://www.pmacorp.net>





# BARGE "HFL 222 SS"

# 1 CENTER INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	0	8,433	0	17,835	0	26,949	0	36,331	0	45,714	0	55,096	0	64,472	0	73,856	0	83,239	0
1/4	1/4	8,629	1/4	17,824	1/4	27,144	1/4	36,527	1/4	46,909	1/4	56,292	1/4	64,672	1/4	74,056	1/4	83,435	1/4
1/2	1/2	8,825	1/2	18,012	1/2	27,340	1/2	36,722	1/2	47,105	1/2	56,487	1/2	64,863	1/2	74,247	1/2	83,630	1/2
3/4	3/4	9,021	3/4	18,201	3/4	27,535	3/4	37,118	3/4	47,501	3/4	56,883	3/4	65,258	3/4	74,642	3/4	83,826	3/4
1	1	9,217	1	18,390	1	27,731	1	37,413	1	47,896	1	57,277	1	66,658	1	76,042	1	85,421	1
1/4	1/4	9,413	1/4	18,579	1/4	27,925	1/4	37,308	1/4	47,691	1/4	57,074	1/4	66,458	1/4	75,842	1/4	85,221	1/4
1/2	1/2	9,609	1/2	18,768	1/2	28,121	1/2	37,504	1/2	47,887	1/2	57,269	1/2	66,654	1/2	76,038	1/2	85,417	1/2
3/4	3/4	9,805	3/4	18,957	3/4	28,317	3/4	37,699	3/4	48,082	3/4	57,465	3/4	66,850	3/4	76,234	3/4	85,613	3/4
2	2	10,002	2	19,146	2	28,512	2	37,895	2	47,277	2	56,660	2	65,434	2	74,818	2	84,201	2
1/4	1/4	10,198	1/4	19,337	1/4	28,708	1/4	38,090	1/4	47,473	1/4	56,856	1/4	66,229	1/4	75,612	1/4	84,999	1/4
1/2	1/2	10,394	1/2	19,528	1/2	28,903	1/2	38,286	1/2	47,668	1/2	57,051	1/2	66,425	1/2	75,811	1/2	85,194	1/2
3/4	3/4	10,590	3/4	19,719	3/4	29,099	3/4	38,481	3/4	47,854	3/4	57,247	3/4	66,620	3/4	76,007	3/4	85,390	3/4
3	3	10,786	3	19,910	3	29,294	3	38,677	3	48,059	3	57,442	3	66,815	3	76,203	3	85,585	3
1/4	1/4	10,982	1/4	20,106	1/4	29,490	1/4	38,872	1/4	48,255	1/4	57,637	1/4	67,011	1/4	76,398	1/4	85,781	1/4
1/2	1/2	11,178	1/2	20,302	1/2	29,685	1/2	39,068	1/2	48,450	1/2	57,833	1/2	67,206	1/2	76,594	1/2	85,976	1/2
3/4	3/4	11,374	3/4	20,498	3/4	29,881	3/4	39,263	3/4	48,646	3/4	58,028	3/4	67,402	3/4	76,789	3/4	86,172	3/4
4	4	11,570	4	20,694	4	30,076	4	39,459	4	48,841	4	58,224	4	67,598	4	77,000	4	86,367	4
1/4	1/4	11,765	1/4	20,889	1/4	30,272	1/4	39,654	1/4	49,037	1/4	58,419	1/4	67,793	1/4	77,180	1/4	86,553	1/4
1/2	1/2	11,961	1/2	21,085	1/2	30,467	1/2	39,860	1/2	49,232	1/2	58,616	1/2	67,989	1/2	77,376	1/2	86,759	1/2
3/4	3/4	12,156	3/4	21,280	3/4	30,662	3/4	40,045	3/4	49,428	3/4	58,810	3/4	68,184	3/4	77,572	3/4	86,954	3/4
5	5	12,348	5	21,476	5	30,868	5	40,241	5	49,623	5	59,006	5	68,380	5	77,767	5	87,150	5
1/4	1/4	12,543	1/4	21,671	1/4	31,063	1/4	40,436	1/4	49,819	1/4	59,201	1/4	68,576	1/4	77,963	1/4	87,345	1/4
1/2	1/2	12,727	1/2	21,867	1/2	31,249	1/2	40,631	1/2	50,014	1/2	59,396	1/2	68,771	1/2	78,156	1/2	87,541	1/2
3/4	3/4	12,917	3/4	22,062	3/4	31,444	3/4	40,827	3/4	50,210	3/4	59,591	3/4	68,967	3/4	78,354	3/4	87,737	3/4
6	6	13,106	6	22,257	6	31,640	6	41,022	6	50,405	6	59,786	6	69,162	6	78,549	6	87,932	6
1/4	1/4	13,295	1/4	22,453	1/4	31,835	1/4	41,218	1/4	50,600	1/4	59,982	1/4	69,358	1/4	78,745	1/4	88,127	1/4
1/2	1/2	13,484	1/2	22,648	1/2	32,031	1/2	41,413	1/2	50,796	1/2	60,177	1/2	69,553	1/2	78,941	1/2	88,323	1/2
3/4	3/4	13,672	3/4	22,844	3/4	32,226	3/4	41,609	3/4	50,991	3/4	60,372	3/4	69,749	3/4	79,136	3/4	88,518	3/4
7	7	13,861	7	23,039	7	32,422	7	41,804	7	51,187	7	60,567	7	69,944	7	79,332	7	88,714	7
1/4	1/4	14,050	1/4	23,235	1/4	32,617	1/4	42,000	1/4	51,382	1/4	60,763	1/4	70,140	1/4	79,527	1/4	88,909	1/4
1/2	1/2	14,238	1/2	23,430	1/2	32,813	1/2	42,195	1/2	51,578	1/2	60,958	1/2	70,335	1/2	79,722	1/2	89,106	1/2
3/4	3/4	14,427	3/4	23,626	3/4	33,008	3/4	42,391	3/4	51,773	3/4	61,153	3/4	70,531	3/4	79,918	3/4	89,301	3/4
8	8	14,616	8	23,821	8	33,204	8	42,586	8	51,969	8	61,348	8	70,727	8	80,113	8	89,486	8
1/4	1/4	14,804	1/4	24,017	1/4	33,399	1/4	42,782	1/4	52,164	1/4	61,544	1/4	70,922	1/4	80,309	1/4	89,682	1/4
1/2	1/2	14,993	1/2	24,212	1/2	33,595	1/2	42,977	1/2	52,360	1/2	61,739	1/2	71,118	1/2	80,504	1/2	89,877	1/2
3/4	3/4	15,182	3/4	24,408	3/4	33,790	3/4	43,173	3/4	52,555	3/4	61,934	3/4	71,313	3/4	80,699	3/4	90,083	3/4
9	9	15,370	9	24,603	9	33,985	9	43,368	9	52,751	9	62,129	9	71,509	9	80,895	9	90,278	9
1/4	1/4	15,559	1/4	24,799	1/4	34,181	1/4	43,564	1/4	52,946	1/4	62,325	1/4	71,704	1/4	81,090	1/4	90,474	1/4
1/2	1/2	15,748	1/2	24,994	1/2	34,376	1/2	43,759	1/2	53,142	1/2	62,520	1/2	71,900	1/2	81,286	1/2	90,669	1/2
3/4	3/4	15,937	3/4	25,189	3/4	34,572	3/4	43,954	3/4	53,337	3/4	62,716	3/4	72,096	3/4	81,481	3/4	90,866	3/4
10	10	16,125	10	25,385	10	34,767	10	44,150	10	53,533	10	62,910	10	72,291	10	81,676	10	91,060	10
1/4	1/4	16,314	1/4	25,580	1/4	34,963	1/4	44,345	1/4	53,728	1/4	63,105	1/4	72,487	1/4	81,872	1/4	91,256	1/4
1/2	1/2	16,503	1/2	25,776	1/2	35,158	1/2	44,541	1/2	53,924	1/2	63,301	1/2	72,682	1/2	82,067	1/2	91,451	1/2
3/4	3/4	16,691	3/4	25,971	3/4	35,354	3/4	44,736	3/4	54,119	3/4	63,496	3/4	72,878	3/4	82,262	3/4	91,647	3/4
11	11	16,880	11	26,167	11	35,549	11	44,932	11	54,314	11	63,691	11	73,073	11	82,458	11	91,843	11
1/4	1/4	17,069	1/4	26,362	1/4	36,746	1/4	45,127	1/4	54,510	1/4	63,886	1/4	73,269	1/4	82,653	1/4	92,038	1/4
1/2	1/2	17,258	1/2	26,558	1/2	36,940	1/2	45,323	1/2	54,705	1/2	64,082	1/2	73,465	1/2	82,849	1/2	92,234	1/2
3/4	3/4	17,446	3/4	26,753	3/4	37,136	3/4	45,518	3/4	54,901	3/4	64,277	3/4	73,660	3/4	83,044	3/4	92,429	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 27.  
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 THREADS ON "IMC" VALVE.  
GAUGE POINT: (IMC) LOCATED ON CENTERLINE AND 17'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
P.O. Box 2082  
Patterson, Texas 77669  
<http://www.pma-corp.net>



# BARGE "HFL 222 SS"

## 1 CENTER INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	92,826	0	101,896	0	108,964	0	118,013	0	126,071	0	0	0	0	0	0	0	0
1/4	92,820	1/4	102,084	1/4	110,122	1/4	118,180	1/4	126,239	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	93,016	1/2	102,232	1/2	110,290	1/2	118,348	1/2	126,407	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	93,212	3/4	102,400	3/4	110,458	3/4	118,516	3/4	126,575	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	93,407	1	102,587	1	110,626	1	118,684	1	126,742	1	1	1	1	1	1	1	1
1/4	93,604	1/4	102,735	1/4	110,794	1/4	118,852	1/4	126,910	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	93,800	1/2	102,903	1/2	110,962	1/2	119,020	1/2	127,078	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	93,996	3/4	103,071	3/4	111,129	3/4	119,188	3/4	127,246	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	94,192	1	103,239	1	111,297	1	119,356	1	127,414	1	1	1	1	1	1	1	1
1/4	94,388	1/4	103,407	1/4	111,465	1/4	119,524	1/4	127,582	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	94,584	1/2	103,576	1/2	111,633	1/2	119,691	1/2	127,750	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	94,780	3/4	103,743	3/4	111,801	3/4	119,859	3/4	127,918	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	94,976	1	103,911	1	111,969	1	120,027	1	128,086	1	1	1	1	1	1	1	1
1/4	95,173	1/4	104,078	1/4	112,137	1/4	120,195	1/4	128,253	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	95,369	1/2	104,246	1/2	112,305	1/2	120,363	1/2	128,421	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	95,565	3/4	104,414	3/4	112,473	3/4	120,531	3/4	128,589	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	95,761	1	104,582	1	112,640	1	120,699	1	128,757	1	1	1	1	1	1	1	1
1/4	95,957	1/4	104,750	1/4	112,808	1/4	120,867	1/4	128,925	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	96,153	1/2	104,918	1/2	112,976	1/2	121,034	1/2	129,093	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	96,349	3/4	105,086	3/4	113,144	3/4	121,202	3/4	129,261	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	96,545	1	105,254	1	113,312	1	121,370	1	129,429	1	1	1	1	1	1	1	1
1/4	96,742	1/4	105,421	1/4	113,480	1/4	121,538	1/4	129,596	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	96,938	1/2	105,589	1/2	113,648	1/2	121,706	1/2	129,764	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	97,134	3/4	105,757	3/4	113,816	3/4	121,874	3/4	129,932	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	97,330	1	105,925	1	113,983	1	122,042	1	130,100	1	1	1	1	1	1	1	1
1/4	97,526	1/4	106,093	1/4	114,151	1/4	122,210	1/4	130,268	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	97,722	1/2	106,261	1/2	114,319	1/2	122,378	1/2	130,436	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	97,918	3/4	106,429	3/4	114,487	3/4	122,546	3/4	130,604	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	98,115	1	106,597	1	114,655	1	122,713	1	130,772	1	1	1	1	1	1	1	1
1/4	98,311	1/4	106,765	1/4	114,823	1/4	122,881	1/4	130,940	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	98,507	1/2	106,932	1/2	114,991	1/2	123,049	1/2	131,108	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	98,703	3/4	107,100	3/4	115,159	3/4	123,217	3/4	131,276	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	98,899	1	107,268	1	115,326	1	123,385	1	131,444	1	1	1	1	1	1	1	1
1/4	99,095	1/4	107,436	1/4	115,494	1/4	123,553	1/4	131,612	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	99,291	1/2	107,604	1/2	115,662	1/2	123,721	1/2	131,780	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	99,487	3/4	107,772	3/4	115,830	3/4	123,889	3/4	131,948	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	99,684	1	107,940	1	115,998	1	124,056	1	132,116	1	1	1	1	1	1	1	1
1/4	99,880	1/4	108,108	1/4	116,166	1/4	124,224	1/4	132,284	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	100,076	1/2	108,276	1/2	116,334	1/2	124,392	1/2	132,452	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	100,272	3/4	108,444	3/4	116,502	3/4	124,560	3/4	132,620	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	100,468	1	108,611	1	116,670	1	124,728	1	132,788	1	1	1	1	1	1	1	1
1/4	100,664	1/4	108,779	1/4	116,837	1/4	124,896	1/4	132,956	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	100,860	1/2	108,947	1/2	117,005	1/2	125,064	1/2	133,124	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	101,056	3/4	109,115	3/4	117,173	3/4	125,232	3/4	133,292	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
1	101,252	1	109,283	1	117,341	1	125,399	1	133,460	1	1	1	1	1	1	1	1
1/4	101,448	1/4	109,451	1/4	117,509	1/4	125,567	1/4	133,628	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2	101,644	1/2	109,619	1/2	117,677	1/2	125,735	1/2	133,796	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
3/4	101,840	3/4	109,787	3/4	117,845	3/4	125,903	3/4	133,964	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/16/2014 SW  
CALCULATED: 08/16/2014 CL  
PRINTED: 08/16/2014 SW

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
Pearland, Texas 77598  
P.O. Box 2197  
<http://www.pmacorp.net>

CANCELS AND SUPERCEDES  
ALL PRIOR TO 08/2014



# BARGE "HFL 222 SS"

## 2 CENTER INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	0	10,838	0	22,717	0	34,733	0	46,830	0	58,928	0	71,026	0	83,124	0	95,222	0	107,320	0
1/4	1/4	163	1/4	22,861	1/4	34,985	1/4	47,082	1/4	59,180	1/4	71,278	1/4	83,376	1/4	95,474	1/4	107,572	1/4
1/2	1/2	216	1/2	23,206	1/2	35,237	1/2	47,335	1/2	59,432	1/2	71,530	1/2	83,628	1/2	95,726	1/2	107,824	1/2
3/4	3/4	279	3/4	23,460	3/4	35,489	3/4	47,587	3/4	59,684	3/4	71,782	3/4	83,880	3/4	95,978	3/4	108,076	3/4
1	1	342	1	23,695	1	35,741	1	47,839	1	59,936	1	72,034	1	84,132	1	96,230	1	108,328	1
1/4	1/4	489	1/4	23,939	1/4	35,993	1/4	48,091	1/4	60,188	1/4	72,286	1/4	84,384	1/4	96,482	1/4	108,580	1/4
1/2	1/2	636	1/2	24,184	1/2	36,247	1/2	48,343	1/2	60,440	1/2	72,538	1/2	84,636	1/2	96,734	1/2	108,832	1/2
3/4	3/4	783	3/4	24,428	3/4	36,497	3/4	48,595	3/4	60,693	3/4	72,790	3/4	84,888	3/4	96,986	3/4	109,084	3/4
2	2	930	2	24,673	2	36,749	2	48,847	2	60,948	2	73,042	2	85,140	2	97,238	2	109,336	2
1/4	1/4	1,149	1/4	24,920	1/4	37,001	1/4	49,099	1/4	61,197	1/4	73,294	1/4	85,392	1/4	97,490	1/4	109,588	1/4
1/2	1/2	1,368	1/2	25,166	1/2	37,253	1/2	49,351	1/2	61,449	1/2	73,546	1/2	85,644	1/2	97,742	1/2	109,840	1/2
3/4	3/4	1,586	3/4	25,413	3/4	37,505	3/4	49,603	3/4	61,701	3/4	73,798	3/4	85,896	3/4	97,994	3/4	110,092	3/4
3	3	1,805	3	25,659	3	37,757	3	49,855	3	61,953	3	74,051	3	86,148	3	98,245	3	110,344	3
1/4	1/4	2,052	1/4	25,911	1/4	38,009	1/4	50,107	1/4	62,205	1/4	74,303	1/4	86,400	1/4	98,498	1/4	110,596	1/4
1/2	1/2	2,299	1/2	26,163	1/2	38,261	1/2	50,359	1/2	62,457	1/2	74,555	1/2	86,652	1/2	98,750	1/2	110,848	1/2
3/4	3/4	2,546	3/4	26,415	3/4	38,513	3/4	50,611	3/4	62,709	3/4	74,807	3/4	86,904	3/4	99,002	3/4	111,100	3/4
4	4	2,793	4	26,667	4	38,765	4	50,863	4	62,961	4	75,059	4	87,157	4	99,254	4	111,352	4
1/4	1/4	3,043	1/4	26,919	1/4	39,017	1/4	51,115	1/4	63,213	1/4	75,311	1/4	87,409	1/4	99,506	1/4	111,604	1/4
1/2	1/2	3,292	1/2	27,171	1/2	39,269	1/2	51,367	1/2	63,465	1/2	75,563	1/2	87,661	1/2	99,758	1/2	111,856	1/2
3/4	3/4	3,541	3/4	27,424	3/4	39,521	3/4	51,619	3/4	63,717	3/4	75,815	3/4	87,913	3/4	100,010	3/4	112,108	3/4
5	5	3,791	5	27,676	5	39,773	5	51,871	5	63,969	5	76,067	5	88,165	5	100,262	5	112,360	5
1/4	1/4	4,041	1/4	27,928	1/4	40,025	1/4	52,123	1/4	64,221	1/4	76,319	1/4	88,417	1/4	100,515	1/4	112,612	1/4
1/2	1/2	4,292	1/2	28,180	1/2	40,277	1/2	52,375	1/2	64,475	1/2	76,571	1/2	88,669	1/2	100,767	1/2	112,864	1/2
3/4	3/4	4,542	3/4	28,432	3/4	40,529	3/4	52,627	3/4	64,728	3/4	76,823	3/4	88,921	3/4	101,019	3/4	113,116	3/4
6	6	4,793	6	28,684	6	40,782	6	52,879	6	64,977	6	77,075	6	89,173	6	101,271	6	113,368	6
1/4	1/4	5,044	1/4	28,936	1/4	41,034	1/4	53,131	1/4	65,229	1/4	77,327	1/4	89,425	1/4	101,523	1/4	113,620	1/4
1/2	1/2	5,295	1/2	29,188	1/2	41,286	1/2	53,383	1/2	65,481	1/2	77,579	1/2	89,677	1/2	101,775	1/2	113,872	1/2
3/4	3/4	5,547	3/4	29,440	3/4	41,538	3/4	53,635	3/4	65,733	3/4	77,831	3/4	89,929	3/4	102,027	3/4	114,124	3/4
7	7	5,798	7	29,692	7	41,790	7	53,888	7	65,985	7	78,083	7	90,181	7	102,279	7	114,377	7
1/4	1/4	6,050	1/4	29,944	1/4	42,042	1/4	54,140	1/4	66,237	1/4	78,335	1/4	90,433	1/4	102,531	1/4	114,629	1/4
1/2	1/2	6,302	1/2	30,196	1/2	42,294	1/2	54,392	1/2	66,489	1/2	78,587	1/2	90,685	1/2	102,783	1/2	114,881	1/2
3/4	3/4	6,554	3/4	30,448	3/4	42,546	3/4	54,644	3/4	66,741	3/4	78,839	3/4	90,937	3/4	103,035	3/4	115,133	3/4
8	8	6,806	8	30,700	8	42,798	8	54,896	8	66,993	8	79,091	8	91,189	8	103,287	8	115,385	8
1/4	1/4	7,058	1/4	30,952	1/4	43,050	1/4	55,148	1/4	67,245	1/4	79,343	1/4	91,441	1/4	103,539	1/4	115,637	1/4
1/2	1/2	7,310	1/2	31,204	1/2	43,302	1/2	55,400	1/2	67,498	1/2	79,595	1/2	91,693	1/2	103,791	1/2	115,889	1/2
3/4	3/4	7,562	3/4	31,456	3/4	43,554	3/4	55,652	3/4	67,750	3/4	79,847	3/4	91,945	3/4	104,043	3/4	116,141	3/4
9	9	7,814	9	31,708	9	43,806	9	55,904	9	68,002	9	80,099	9	92,197	9	104,295	9	116,393	9
1/4	1/4	8,066	1/4	31,960	1/4	44,058	1/4	56,156	1/4	68,254	1/4	80,351	1/4	92,449	1/4	104,547	1/4	116,645	1/4
1/2	1/2	8,318	1/2	32,212	1/2	44,310	1/2	56,408	1/2	68,506	1/2	80,604	1/2	92,701	1/2	104,799	1/2	116,897	1/2
3/4	3/4	8,570	3/4	32,464	3/4	44,562	3/4	56,660	3/4	68,758	3/4	80,856	3/4	92,953	3/4	105,051	3/4	117,149	3/4
10	10	8,822	10	32,716	10	44,814	10	56,912	10	69,010	10	81,108	10	93,205	10	105,303	10	117,401	10
1/4	1/4	9,074	1/4	32,968	1/4	45,066	1/4	57,164	1/4	69,262	1/4	81,360	1/4	93,457	1/4	105,555	1/4	117,653	1/4
1/2	1/2	9,326	1/2	33,220	1/2	45,318	1/2	57,416	1/2	69,514	1/2	81,612	1/2	93,709	1/2	105,807	1/2	117,905	1/2
3/4	3/4	9,578	3/4	33,472	3/4	45,570	3/4	57,668	3/4	69,766	3/4	81,864	3/4	93,962	3/4	106,059	3/4	118,157	3/4
11	11	9,830	11	33,724	11	45,822	11	57,920	11	70,018	11	82,116	11	94,214	11	106,311	11	118,409	11
1/4	1/4	10,082	1/4	33,976	1/4	46,074	1/4	58,172	1/4	70,270	1/4	82,368	1/4	94,466	1/4	106,563	1/4	118,661	1/4
1/2	1/2	10,334	1/2	34,228	1/2	46,326	1/2	58,424	1/2	70,522	1/2	82,620	1/2	94,718	1/2	106,815	1/2	118,913	1/2
3/4	3/4	10,586	3/4	34,481	3/4	46,578	3/4	58,676	3/4	70,774	3/4	82,872	3/4	94,970	3/4	107,068	3/4	119,165	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 THREADS ON "IMC" VALVE.

GAUGE POINT: (IMC) LOCATED ON CENTERLINE AND 38'-03" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT  
& ANALYSIS, INC.  
Pearland, Texas 77688  
P.O. Box 2092  
http://www.pmacorp.net



# BARGE "HFL 222 SS"

## 2 CENTER INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS		10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
		IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/4	119,669	1/4	131,615	1/4	143,613	1/4	155,711	1/4	167,809	1/4	179,907	1/4	192,005	1/4	204,103	1/4	216,201	1/4	228,299	1/4	240,397
1/2	119,921	1/2	131,767	1/2	143,866	1/2	155,963	1/2	168,061	1/2	180,159	1/2	192,257	1/2	204,355	1/2	216,453	1/2	228,551	1/2	240,649
3/4	120,173	3/4	132,071	3/4	144,117	3/4	156,215	3/4	168,313	3/4	180,411	3/4	192,509	3/4	204,607	3/4	216,705	3/4	228,803	3/4	240,901
1	120,426	1	132,523	1	144,621	1	156,719	1	168,817	1	180,915	1	193,013	1	205,111	1	217,209	1	229,307	1	241,405
1/4	120,678	1/4	132,775	1/4	144,873	1/4	156,971	1/4	169,069	1/4	181,167	1/4	193,265	1/4	205,363	1/4	217,461	1/4	229,559	1/4	241,657
1/2	120,930	1/2	133,027	1/2	145,125	1/2	157,223	1/2	169,321	1/2	181,419	1/2	193,517	1/2	205,615	1/2	217,713	1/2	229,811	1/2	241,905
3/4	121,182	3/4	133,279	3/4	145,377	3/4	157,475	3/4	169,573	3/4	181,671	3/4	193,769	3/4	205,867	3/4	217,965	3/4	230,063	3/4	242,157
1	121,434	1	133,531	1	145,629	1	157,727	1	169,825	1	181,923	1	194,021	1	206,119	1	218,217	1	230,315	1	242,405
1/4	121,686	1/4	133,784	1/4	145,881	1/4	157,979	1/4	170,077	1/4	182,175	1/4	194,273	1/4	206,371	1/4	218,469	1/4	230,563	1/4	242,657
1/2	121,938	1/2	134,036	1/2	146,133	1/2	158,231	1/2	170,329	1/2	182,427	1/2	194,525	1/2	206,623	1/2	218,721	1/2	230,815	1/2	242,909
3/4	122,190	3/4	134,288	3/4	146,385	3/4	158,483	3/4	170,581	3/4	182,679	3/4	194,777	3/4	206,875	3/4	219,019	3/4	231,063	3/4	243,157
1	122,442	1	134,540	1	146,637	1	158,735	1	170,833	1	182,931	1	195,029	1	207,127	1	219,325	1	231,421	1	243,511
1/4	122,694	1/4	134,792	1/4	146,889	1/4	158,987	1/4	171,085	1/4	183,183	1/4	195,281	1/4	207,379	1/4	219,573	1/4	231,669	1/4	243,759
1/2	122,946	1/2	135,044	1/2	147,142	1/2	159,239	1/2	171,337	1/2	183,435	1/2	195,533	1/2	207,631	1/2	219,821	1/2	231,917	1/2	244,007
3/4	123,198	3/4	135,296	3/4	147,394	3/4	159,491	3/4	171,589	3/4	183,687	3/4	195,781	3/4	207,879	3/4	220,069	3/4	232,155	3/4	244,255
1	123,450	1	135,548	1	147,646	1	159,743	1	171,841	1	183,939	1	196,037	1	208,135	1	220,317	1	232,403	1	244,503
1/4	123,702	1/4	135,800	1/4	147,898	1/4	159,996	1/4	172,093	1/4	184,191	1/4	196,289	1/4	208,387	1/4	220,565	1/4	232,651	1/4	244,751
1/2	123,954	1/2	136,052	1/2	148,150	1/2	160,247	1/2	172,345	1/2	184,443	1/2	196,541	1/2	208,639	1/2	220,813	1/2	232,899	1/2	245,003
3/4	124,206	3/4	136,304	3/4	148,402	3/4	160,500	3/4	172,597	3/4	184,695	3/4	196,793	3/4	208,837	3/4	221,061	3/4	233,147	3/4	245,255
1	124,458	1	136,556	1	148,654	1	160,752	1	172,849	1	184,947	1	197,045	1	209,143	1	221,309	1	233,395	1	245,507
1/4	124,710	1/4	136,808	1/4	148,906	1/4	161,009	1/4	173,106	1/4	185,203	1/4	197,301	1/4	209,399	1/4	221,497	1/4	233,643	1/4	245,759
1/2	124,962	1/2	137,060	1/2	149,158	1/2	161,256	1/2	173,353	1/2	185,450	1/2	197,548	1/2	209,647	1/2	221,745	1/2	233,891	1/2	246,011
3/4	125,214	3/4	137,312	3/4	149,410	3/4	161,508	3/4	173,606	3/4	185,703	3/4	197,846	3/4	209,895	3/4	221,993	3/4	234,139	3/4	246,263
1	125,466	1	137,564	1	149,662	1	161,760	1	173,858	1	185,955	1	198,053	1	210,143	1	222,241	1	234,387	1	246,515
1/4	125,718	1/4	137,816	1/4	149,914	1/4	162,012	1/4	174,086	1/4	186,181	1/4	198,279	1/4	210,391	1/4	222,489	1/4	234,635	1/4	246,767
1/2	125,970	1/2	138,068	1/2	150,166	1/2	162,264	1/2	174,314	1/2	186,408	1/2	198,506	1/2	210,639	1/2	222,737	1/2	234,883	1/2	247,019
3/4	126,222	3/4	138,320	3/4	150,418	3/4	162,516	3/4	174,564	3/4	186,658	3/4	198,756	3/4	210,887	3/4	222,985	3/4	235,131	3/4	247,271
1	126,474	1	138,572	1	150,670	1	162,768	1	174,771	1	186,865	1	198,963	1	211,135	1	223,233	1	235,379	1	247,523
1/4	126,726	1/4	138,824	1/4	150,922	1/4	163,020	1/4	174,901	1/4	187,000	1/4	199,098	1/4	211,383	1/4	223,481	1/4	235,627	1/4	247,775
1/2	126,978	1/2	139,076	1/2	151,174	1/2	163,272	1/2	175,031	1/2	187,130	1/2	199,228	1/2	211,631	1/2	223,729	1/2	235,875	1/2	248,027
3/4	127,231	3/4	139,328	3/4	151,426	3/4	163,524	3/4	175,283	3/4	187,382	3/4	199,476	3/4	211,879	3/4	223,977	3/4	236,123	3/4	248,279
1	127,483	1	139,580	1	151,678	1	163,776	1	175,531	1	187,630	1	199,724	1	212,127	1	224,225	1	236,371	1	248,531
1/4	127,735	1/4	139,832	1/4	151,930	1/4	164,028	1/4	175,780	1/4	187,879	1/4	199,972	1/4	212,375	1/4	224,473	1/4	236,619	1/4	248,783
1/2	127,987	1/2	140,084	1/2	152,182	1/2	164,280	1/2	176,028	1/2	188,127	1/2	200,220	1/2	212,623	1/2	224,721	1/2	236,867	1/2	249,035
3/4	128,239	3/4	140,337	3/4	152,434	3/4	164,532	3/4	176,276	3/4	188,375	3/4	200,468	3/4	212,871	3/4	224,969	3/4	237,115	3/4	249,287
1	128,491	1	140,589	1	152,686	1	164,784	1	176,521	1	188,620	1	200,712	1	213,119	1	225,217	1	237,363	1	249,539
1/4	128,743	1/4	140,841	1/4	152,938	1/4	165,036	1/4	176,768	1/4	188,805	1/4	200,958	1/4	213,367	1/4	225,465	1/4	237,611	1/4	249,791
1/2	128,995	1/2	141,093	1/2	153,190	1/2	165,288	1/2	177,001	1/2	189,030	1/2	201,200	1/2	213,615	1/2	225,713	1/2	237,859	1/2	250,043
3/4	129,247	3/4	141,345	3/4	153,442	3/4	165,540	3/4	177,253	3/4	189,281	3/4	201,448	3/4	213,863	3/4	225,961	3/4	238,107	3/4	250,295
1	129,499	1	141,597	1	153,694	1	165,792	1	177,504	1	189,533	1	201,696	1	214,111	1	226,209	1	238,355	1	250,547
1/4	129,751	1/4	141,849	1/4	153,947	1/4	166,044	1/4	177,757	1/4	189,786	1/4	201,948	1/4	214,359	1/4	226,457	1/4	238,603	1/4	250,801
1/2	130,003	1/2	142,101	1/2	154,199	1/2	166,296	1/2	178,001	1/2	190,130	1/2	202,252	1/2	214,607	1/2	226,705	1/2	238,851	1/2	251,053
3/4	130,255	3/4	142,353	3/4	154,451	3/4	166,548	3/4	178,253	3/4	190,382	3/4	202,504	3/4	214,855	3/4	226,953	3/4	239,099	3/4	251,305
1	130,507	1	142,605	1	154,703	1	166,800	1	178,504	1	190,633	1	202,756	1	215,103	1	227,201	1	239,347	1	251,557
1/4	130,759	1/4	142,857	1/4	154,955	1/4	167,053	1/4	178,757	1/4	190,881	1/4	203,008	1/4	215,351	1/4	227,449	1/4	239,595	1/4	251,809
1/2	131,011	1/2	143,109	1/2	155,203	1/2	167,305	1/2	179,061	1/2	191,129	1/2	203,260	1/2	215,603	1/2	227,697	1/2	239,843	1/2	252,061
3/4	131,263	3/4	143,361	3/4	155,459	3/4	167,557	3/4	179,313	3/4	191,377	3/4	203,512	3/4	215,851	3/4	227,945	3/4	240,091	3/4	252,313

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/16/2014 SW  
 CALCULATED: 08/16/2014 CL  
 PRINTED: 08/16/2014 SW  
 CANCELS AND SUPERCEDES  
 ALL PRIOR TO 08/20/14

PRECISION MEASUREMENT  
 & ANALYSIS, INC.  
 P.O. Box 2892  
 Pearland, Texas 77666  
[http://www](http://www.pmacorp.net)



# BARGE "HFL 222 SS"

## 3 CENTER INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN
0	88	0	20,463	0	42,064	0	63,665	0	85,266	0	106,867	0	128,468	0	150,069	0	171,670	0	193,271
1/4	142	9,804	20,887	1/4	42,487	1/4	64,088	1/4	85,689	1/4	107,290	1/4	128,891	1/4	150,492	1/4	172,093	1/4	193,694
1/2	188	10,129	20,912	1/2	42,504	1/2	64,105	1/2	85,706	1/2	107,307	1/2	128,908	1/2	150,503	1/2	172,104	1/2	193,705
3/4	254	10,364	21,136	3/4	42,720	3/4	64,321	3/4	85,922	3/4	107,523	3/4	129,124	3/4	150,725	3/4	172,326	3/4	193,927
1	311	10,579	21,361	1	42,936	1	64,537	1	86,138	1	107,729	1	129,330	1	150,931	1	172,532	1	194,133
1 1/4	442	10,804	21,585	1 1/4	43,179	1 1/4	64,782	1 1/4	86,383	1 1/4	107,930	1 1/4	129,527	1 1/4	151,128	1 1/4	172,729	1 1/4	194,334
1 1/2	573	11,029	21,810	1 1/2	43,404	1 1/2	65,002	1 1/2	86,604	1 1/2	108,129	1 1/2	129,728	1 1/2	151,329	1 1/2	172,930	1 1/2	194,535
1 3/4	704	11,254	22,034	1 3/4	43,629	1 3/4	65,227	1 3/4	86,826	1 3/4	108,330	1 3/4	130,000	1 3/4	151,530	1 3/4	173,131	1 3/4	194,736
2	835	11,479	22,259	2	43,854	2	65,452	2	87,047	2	108,531	2	130,201	2	151,731	2	173,332	2	194,937
2 1/4	1,030	11,704	22,483	2 1/4	44,079	2 1/4	65,677	2 1/4	87,272	2 1/4	108,732	2 1/4	130,402	2 1/4	151,932	2 1/4	173,533	2 1/4	195,138
2 1/2	1,226	11,929	22,708	2 1/2	44,304	2 1/2	65,902	2 1/2	87,497	2 1/2	108,933	2 1/2	130,603	2 1/2	152,133	2 1/2	173,734	2 1/2	195,339
2 3/4	1,421	12,154	22,932	2 3/4	44,529	2 3/4	66,127	2 3/4	87,722	2 3/4	109,134	2 3/4	130,804	2 3/4	152,334	2 3/4	173,935	2 3/4	195,540
3	1,616	12,379	23,157	3	44,754	3	66,352	3	87,947	3	109,335	3	131,005	3	152,535	3	174,136	3	195,741
3 1/4	1,837	12,604	23,382	3 1/4	44,979	3 1/4	66,577	3 1/4	88,172	3 1/4	109,536	3 1/4	131,206	3 1/4	152,736	3 1/4	174,337	3 1/4	195,942
3 1/2	2,068	12,829	23,607	3 1/2	45,204	3 1/2	66,802	3 1/2	88,397	3 1/2	109,737	3 1/2	131,407	3 1/2	152,937	3 1/2	174,538	3 1/2	196,143
3 3/4	2,278	13,054	23,832	3 3/4	45,429	3 3/4	67,027	3 3/4	88,622	3 3/4	109,938	3 3/4	131,608	3 3/4	153,138	3 3/4	174,739	3 3/4	196,344
4	2,499	13,279	24,057	4	45,654	4	67,252	4	88,847	4	110,139	4	131,809	4	153,339	4	174,940	4	196,545
4 1/4	2,721	13,504	24,282	4 1/4	45,879	4 1/4	67,477	4 1/4	89,072	4 1/4	110,340	4 1/4	132,010	4 1/4	153,540	4 1/4	175,141	4 1/4	196,746
4 1/2	2,944	13,728	24,507	4 1/2	46,104	4 1/2	67,702	4 1/2	89,297	4 1/2	110,541	4 1/2	132,211	4 1/2	153,741	4 1/2	175,342	4 1/2	196,947
4 3/4	3,166	13,953	24,732	4 3/4	46,329	4 3/4	67,927	4 3/4	89,522	4 3/4	110,742	4 3/4	132,412	4 3/4	153,942	4 3/4	175,543	4 3/4	197,148
5	3,389	14,178	24,957	5	46,554	5	68,152	5	89,747	5	110,943	5	132,613	5	154,143	5	175,744	5	197,349
5 1/4	3,612	14,402	25,182	5 1/4	46,779	5 1/4	68,377	5 1/4	90,000	5 1/4	111,144	5 1/4	132,814	5 1/4	154,344	5 1/4	175,945	5 1/4	197,550
5 1/2	3,836	14,627	25,407	5 1/2	47,004	5 1/2	68,602	5 1/2	90,225	5 1/2	111,345	5 1/2	133,015	5 1/2	154,545	5 1/2	176,146	5 1/2	197,751
5 3/4	4,060	14,852	25,632	5 3/4	47,229	5 3/4	68,827	5 3/4	90,450	5 3/4	111,546	5 3/4	133,216	5 3/4	154,746	5 3/4	176,347	5 3/4	197,952
6	4,283	15,076	25,857	6	47,453	6	69,052	6	90,675	6	111,747	6	133,417	6	154,947	6	176,548	6	198,153
6 1/4	4,508	15,300	26,082	6 1/4	47,678	6 1/4	69,277	6 1/4	90,900	6 1/4	111,948	6 1/4	133,618	6 1/4	155,148	6 1/4	176,749	6 1/4	198,354
6 1/2	4,732	15,525	26,307	6 1/2	47,903	6 1/2	69,502	6 1/2	91,125	6 1/2	112,149	6 1/2	133,819	6 1/2	155,349	6 1/2	176,950	6 1/2	198,555
6 3/4	4,956	15,749	26,532	6 3/4	48,128	6 3/4	69,727	6 3/4	91,350	6 3/4	112,350	6 3/4	134,020	6 3/4	155,550	6 3/4	177,151	6 3/4	198,756
7	5,181	15,974	26,757	7	48,353	7	69,952	7	91,575	7	112,551	7	134,221	7	155,751	7	177,352	7	198,957
7 1/4	5,405	16,198	26,982	7 1/4	48,578	7 1/4	70,177	7 1/4	91,800	7 1/4	112,752	7 1/4	134,422	7 1/4	155,952	7 1/4	177,553	7 1/4	199,158
7 1/2	5,630	16,423	27,207	7 1/2	48,803	7 1/2	70,402	7 1/2	92,025	7 1/2	112,953	7 1/2	134,623	7 1/2	156,153	7 1/2	177,754	7 1/2	199,359
7 3/4	5,855	16,647	27,432	7 3/4	49,028	7 3/4	70,627	7 3/4	92,250	7 3/4	113,154	7 3/4	134,824	7 3/4	156,354	7 3/4	177,955	7 3/4	199,560
8	6,080	16,871	27,657	8	49,253	8	70,852	8	92,475	8	113,355	8	135,025	8	156,555	8	178,156	8	199,761
8 1/4	6,305	17,096	27,882	8 1/4	49,478	8 1/4	71,077	8 1/4	92,700	8 1/4	113,556	8 1/4	135,226	8 1/4	156,756	8 1/4	178,357	8 1/4	199,962
8 1/2	6,530	17,320	28,107	8 1/2	49,703	8 1/2	71,302	8 1/2	92,925	8 1/2	113,757	8 1/2	135,427	8 1/2	156,957	8 1/2	178,558	8 1/2	200,163
8 3/4	6,755	17,545	28,332	8 3/4	49,928	8 3/4	71,527	8 3/4	93,150	8 3/4	113,958	8 3/4	135,628	8 3/4	157,158	8 3/4	178,759	8 3/4	200,364
9	6,980	17,769	28,557	9	50,153	9	71,752	9	93,375	9	114,159	9	135,829	9	157,359	9	178,960	9	200,565
9 1/4	7,205	17,994	28,782	9 1/4	50,378	9 1/4	71,977	9 1/4	93,600	9 1/4	114,360	9 1/4	136,030	9 1/4	157,560	9 1/4	179,161	9 1/4	200,766
9 1/2	7,430	18,218	29,007	9 1/2	50,603	9 1/2	72,202	9 1/2	93,825	9 1/2	114,561	9 1/2	136,231	9 1/2	157,761	9 1/2	179,362	9 1/2	200,967
9 3/4	7,655	18,443	29,232	9 3/4	50,828	9 3/4	72,427	9 3/4	94,050	9 3/4	114,762	9 3/4	136,432	9 3/4	157,962	9 3/4	179,563	9 3/4	201,168
10	7,880	18,667	29,457	10	51,053	10	72,652	10	94,275	10	114,963	10	136,633	10	158,163	10	179,764	10	201,369
10 1/4	8,104	18,892	29,682	10 1/4	51,278	10 1/4	72,877	10 1/4	94,500	10 1/4	115,164	10 1/4	136,834	10 1/4	158,364	10 1/4	179,965	10 1/4	201,570
10 1/2	8,329	19,116	29,907	10 1/2	51,503	10 1/2	73,102	10 1/2	94,725	10 1/2	115,365	10 1/2	137,035	10 1/2	158,565	10 1/2	180,166	10 1/2	201,771
10 3/4	8,554	19,341	30,132	10 3/4	51,728	10 3/4	73,327	10 3/4	94,950	10 3/4	115,566	10 3/4	137,236	10 3/4	158,766	10 3/4	180,367	10 3/4	201,972
11	8,779	19,565	30,357	11	51,953	11	73,552	11	95,175	11	115,767	11	137,437	11	158,967	11	180,568	11	202,173
11 1/4	9,004	19,789	30,582	11 1/4	52,178	11 1/4	73,777	11 1/4	95,400	11 1/4	115,968	11 1/4	137,638	11 1/4	159,168	11 1/4	180,769	11 1/4	202,374
11 1/2	9,229	20,014	30,807	11 1/2	52,403	11 1/2	74,002	11 1/2	95,625	11 1/2	116,169	11 1/2	137,839	11 1/2	159,369	11 1/2	180,970	11 1/2	202,575
11 3/4	9,454	20,238	31,032	11 3/4	52,628	11 3/4	74,227	11 3/4	95,850	11 3/4	116,370	11 3/4	138,040	11 3/4	159,570	11 3/4	181,171	11 3/4	202,776

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 THREADS ON "MMG" VALVE.  
 GAUGE POINT: (MMG) LOCATED ON CENTERLINE AND 28'-06" FORWARD OF AFT BULKHEAD.

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



# BARGE "HFL 222 SS"

## 3 CENTER INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

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
0	106,846	0	117,843	0	128,442	0	139,240	0	150,039	0	160,039	0	170,039	0	180,039	0	190,039	0	200,039
1/4	107,070	1/4	117,868	1/4	128,667	1/4	139,465	1/4	150,264	1/4	161,062	1/4	171,860	1/4	182,658	1/4	193,456	1/4	204,254
1/2	107,295	1/2	118,093	1/2	128,892	1/2	139,690	1/2	150,489	1/2	161,287	1/2	172,085	1/2	182,883	1/2	193,681	1/2	204,479
3/4	107,520	3/4	118,318	3/4	129,117	3/4	139,915	3/4	150,713	3/4	161,511	3/4	172,309	3/4	183,107	3/4	193,905	3/4	204,703
1	107,745	1	118,543	1	129,342	1	140,140	1	150,939	1	161,737	1	172,535	1	183,333	1	194,131	1	204,929
1 1/4	107,970	1 1/4	118,768	1 1/4	129,567	1 1/4	140,365	1 1/4	151,164	1 1/4	161,962	1 1/4	172,760	1 1/4	183,558	1 1/4	194,356	1 1/4	205,154
1 1/2	108,195	1 1/2	118,993	1 1/2	129,792	1 1/2	140,590	1 1/2	151,389	1 1/2	162,187	1 1/2	172,985	1 1/2	183,783	1 1/2	194,581	1 1/2	205,379
3/4	108,420	3/4	119,218	3/4	130,017	3/4	140,815	3/4	151,613	3/4	162,411	3/4	173,209	3/4	184,007	3/4	194,805	3/4	205,603
2	108,646	2	119,443	2	130,242	2	141,040	2	151,838	2	162,636	2	173,433	2	184,231	2	195,030	2	205,830
1/4	108,870	1/4	119,668	1/4	130,466	1/4	141,265	1/4	152,063	1/4	162,861	1/4	173,658	1/4	184,456	1/4	195,254	1/4	206,054
1/2	109,095	1/2	119,893	1/2	130,691	1/2	141,490	1/2	152,288	1/2	163,088	1/2	173,883	1/2	184,681	1/2	195,479	1/2	206,279
3/4	109,320	3/4	120,118	3/4	130,916	3/4	141,715	3/4	152,513	3/4	163,285	3/4	174,078	3/4	184,876	3/4	195,677	3/4	206,479
1	109,545	1	120,343	1	131,141	1	141,940	1	152,738	1	163,533	1	174,273	1	185,071	1	195,877	1	206,679
1 1/4	109,769	1 1/4	120,568	1 1/4	131,366	1 1/4	142,165	1 1/4	152,963	1 1/4	163,778	1 1/4	174,503	1 1/4	185,296	1 1/4	196,077	1 1/4	206,879
1 1/2	109,994	1 1/2	120,793	1 1/2	131,591	1 1/2	142,390	1 1/2	153,188	1 1/2	164,013	1 1/2	174,738	1 1/2	185,494	1 1/2	196,277	1 1/2	207,079
3/4	110,219	3/4	121,018	3/4	131,816	3/4	142,615	3/4	153,413	3/4	164,211	3/4	174,933	3/4	185,691	3/4	196,475	3/4	207,279
1	110,444	1	121,243	1	132,041	1	142,840	1	153,638	1	164,438	1	175,133	1	185,888	1	196,673	1	207,479
1 1/4	110,669	1 1/4	121,468	1 1/4	132,266	1 1/4	143,065	1 1/4	153,863	1 1/4	164,636	1 1/4	175,333	1 1/4	186,083	1 1/4	196,871	1 1/4	207,679
1 1/2	110,894	1 1/2	121,693	1 1/2	132,491	1 1/2	143,290	1 1/2	154,088	1 1/2	164,834	1 1/2	175,531	1 1/2	186,281	1 1/2	197,069	1 1/2	207,879
3/4	111,119	3/4	121,918	3/4	132,716	3/4	143,515	3/4	154,313	3/4	165,032	3/4	175,728	3/4	186,479	3/4	197,267	3/4	208,079
1	111,344	1	122,143	1	132,941	1	143,740	1	154,538	1	165,230	1	175,923	1	186,676	1	197,465	1	208,279
1 1/4	111,569	1 1/4	122,368	1 1/4	133,166	1 1/4	143,965	1 1/4	154,763	1 1/4	165,428	1 1/4	176,118	1 1/4	186,875	1 1/4	197,663	1 1/4	208,479
1 1/2	111,794	1 1/2	122,593	1 1/2	133,391	1 1/2	144,190	1 1/2	154,988	1 1/2	165,626	1 1/2	176,313	1 1/2	187,070	1 1/2	197,861	1 1/2	208,679
3/4	112,019	3/4	122,818	3/4	133,616	3/4	144,414	3/4	155,213	3/4	165,824	3/4	176,508	3/4	187,268	3/4	198,059	3/4	208,879
1	112,244	1	123,043	1	133,841	1	144,639	1	155,438	1	166,032	1	176,703	1	187,465	1	198,257	1	209,079
1 1/4	112,469	1 1/4	123,268	1 1/4	134,066	1 1/4	144,864	1 1/4	155,642	1 1/4	166,240	1 1/4	176,898	1 1/4	187,663	1 1/4	198,455	1 1/4	209,279
1 1/2	112,694	1 1/2	123,492	1 1/2	134,291	1 1/2	145,089	1 1/2	155,846	1 1/2	166,438	1 1/2	177,094	1 1/2	187,829	1 1/2	198,643	1 1/2	209,479
3/4	112,919	3/4	123,717	3/4	134,516	3/4	145,314	3/4	156,050	3/4	166,636	3/4	177,289	3/4	188,014	3/4	198,831	3/4	209,679
1	113,144	1	123,942	1	134,741	1	145,539	1	156,263	1	166,830	1	177,483	1	188,208	1	199,029	1	209,879
1 1/4	113,369	1 1/4	124,167	1 1/4	134,966	1 1/4	145,764	1 1/4	156,487	1 1/4	167,027	1 1/4	177,677	1 1/4	188,393	1 1/4	199,227	1 1/4	210,079
1 1/2	113,594	1 1/2	124,392	1 1/2	135,191	1 1/2	145,989	1 1/2	156,705	1 1/2	167,221	1 1/2	177,871	1 1/2	188,589	1 1/2	199,425	1 1/2	210,279
3/4	113,819	3/4	124,617	3/4	135,416	3/4	146,214	3/4	156,913	3/4	167,419	3/4	178,066	3/4	188,786	3/4	199,623	3/4	210,479
1	114,044	1	124,842	1	135,641	1	146,439	1	157,117	1	167,617	1	178,259	1	188,981	1	199,821	1	210,679
1 1/4	114,269	1 1/4	125,067	1 1/4	135,866	1 1/4	146,664	1 1/4	157,342	1 1/4	167,814	1 1/4	178,453	1 1/4	189,175	1 1/4	199,999	1 1/4	210,879
1 1/2	114,494	1 1/2	125,292	1 1/2	136,091	1 1/2	146,889	1 1/2	157,569	1 1/2	168,011	1 1/2	178,644	1 1/2	189,366	1 1/2	200,197	1 1/2	211,079
3/4	114,719	3/4	125,517	3/4	136,316	3/4	147,114	3/4	157,788	3/4	168,236	3/4	178,836	3/4	189,588	3/4	200,395	3/4	211,279
1	114,944	1	125,742	1	136,541	1	147,339	1	158,011	1	168,458	1	179,029	1	189,781	1	200,593	1	211,479
1 1/4	115,169	1 1/4	125,967	1 1/4	136,766	1 1/4	147,564	1 1/4	158,236	1 1/4	168,680	1 1/4	179,221	1 1/4	189,983	1 1/4	200,791	1 1/4	211,679
1 1/2	115,394	1 1/2	126,192	1 1/2	136,991	1 1/2	147,789	1 1/2	158,461	1 1/2	168,901	1 1/2	179,413	1 1/2	190,185	1 1/2	200,989	1 1/2	211,879
3/4	115,619	3/4	126,417	3/4	137,216	3/4	148,014	3/4	158,636	3/4	169,119	3/4	179,606	3/4	190,383	3/4	201,187	3/4	212,079
1	115,844	1	126,642	1	137,440	1	148,239	1	158,811	1	169,317	1	179,799	1	190,581	1	201,385	1	212,279
1 1/4	116,069	1 1/4	126,867	1 1/4	137,665	1 1/4	148,464	1 1/4	159,038	1 1/4	169,501	1 1/4	180,001	1 1/4	190,779	1 1/4	201,583	1 1/4	212,479
1 1/2	116,294	1 1/2	127,092	1 1/2	137,890	1 1/2	148,689	1 1/2	159,261	1 1/2	169,679	1 1/2	180,193	1 1/2	190,977	1 1/2	201,781	1 1/2	212,679
3/4	116,519	3/4	127,317	3/4	138,115	3/4	148,914	3/4	159,483	3/4	169,873	3/4	180,386	3/4	191,175	3/4	201,979	3/4	212,879
1	116,743	1	127,542	1	138,340	1	149,139	1	159,697	1	170,071	1	180,579	1	191,373	1	202,177	1	213,079
1 1/4	116,968	1 1/4	127,767	1 1/4	138,565	1 1/4	149,364	1 1/4	160,001	1 1/4	170,269	1 1/4	180,771	1 1/4	191,571	1 1/4	202,375	1 1/4	213,279
1 1/2	117,193	1 1/2	127,992	1 1/2	138,790	1 1/2	149,589	1 1/2	160,213	1 1/2	170,463	1 1/2	180,965	1 1/2	191,769	1 1/2	202,573	1 1/2	213,479
3/4	117,418	3/4	128,217	3/4	139,015	3/4	149,814	3/4	160,411	3/4	170,657	3/4	181,163	3/4	191,967	3/4	202,771	3/4	213,679

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 08/16/2014 SW  
 CALCULATED: 08/16/2014 CL  
 PRINTED: 08/16/2014 SW  
 CANCELS AND SUPERCEDES  
 ALL PRIOR TO 08/20/14

PRECISION MEASUREMENT  
 & ANALYSIS, INC.  
 P.O. Box 2082  
 Pearland, Texas 77086  
 http://www.pmacorp.net