

CAPACITIES IN U.S. GALLONS

IN	8 FT	IN	9 FT	IN	10 FT	IN	11 FT	IN	12 FT	IN	13 FT	IN	14 FT	IN	15 FT
0	91537	0	103132	0	114726	0	125904	0	136730	0	147557	0	158383	0	
1/4	91779	1/4	103374	1/4	114968	1/4	126130	1/4	136956	1/4	147782	1/4	158609	1/4	
1/2	92020	1/2	103615	1/2	115209	1/2	126355	1/2	137181	1/2	148008	1/2	158834	1/2	
3/4	92262	3/4	103857	3/4	115451	3/4	126581	3/4	137407	3/4	148233	3/4	159060	3/4	
1	92504	1	104098	1	115692	1	126806	1	137632	1	148459	1	159285	1	
1/4	92745	1/4	104340	1/4	115934	1/4	127032	1/4	137858	1/4	148684	1/4	159511	1/4	
1/2	92987	1/2	104581	1/2	116175	1/2	127257	1/2	138084	1/2	148910	1/2	159737	1/2	
3/4	93228	3/4	104823	3/4	116417	3/4	127483	3/4	138309	3/4	149136	3/4	159962	3/4	
2	93470	2	105065	2	116658	2	127708	2	138535	2	149361	2	160188	2	
1/4	93711	1/4	105306	1/4	116900	1/4	127934	1/4	138760	1/4	149587	1/4	160413	1/4	
1/2	93953	1/2	105540	1/2	117141	1/2	128159	1/2	138986	1/2	149812	1/2	160639	1/2	
3/4	94195	3/4	105789	3/4	117383	3/4	128385	3/4	139211	3/4	150038	3/4	160864	3/4	
3	94436	3	106031	3	117625	3	128611	3	139437	3	150263	3	161086	3	
1/4	94678	1/4	106272	1/4	117866	1/4	128836	1/4	139662	1/4	150489	1/4	161298	1/4	
1/2	04919	1/2	106514	1/2	118108	1/2	129062	1/2	139888	1/2	150714	1/2	161502	1/2	
3/4	95161	3/4	106755	3/4	118349	3/4	129287	3/4	140113	3/4	150940	3/4	161697	3/4	
4	95402	4	106997	4	118591	4	129513	4	140339	4	151166	4	161884	4	
1/4	95644	1/4	107238	1/4	118832	1/4	129738	1/4	140565	1/4	151391	1/4	162062	1/4	
1/2	95885	1/2	107480	1/2	119074	1/2	129904	1/2	140790	1/2	151617	1/2	162231	1/2	
3/4	96127	3/4	107721	3/4	119315	3/4	130189	3/4	141016	3/4	151842	3/4	162391	3/4	
5	96369	5	107963	5	119557	5	130415	5	141241	5	152068	5	162543	5	
1/4	96610	1/4	108205	1/4	119798	1/4	130040	1/4	141467	1/4	152293	1/4	162686	1/4	
1/2	96852	1/2	108446	1/2	120040	1/2	130866	1/2	141692	1/2	152519	1/2	162821	1/2	
3/4	97093	3/4	108688	3/4	120265	3/4	131092	3/4	141918	3/4	152744	3/4	162046	3/4	
6	97335	6	108929	6	120491	6	131317	6	142143	6	152970	6	163063	6	
1/4	97576	1/4	109171	1/4	120717	1/4	131543	1/4	142369	1/4	153196	1/4	163172	1/4	
1/2	97818	1/2	109412	1/2	120942	1/2	131768	1/2	142595	1/2	153421	1/2	163272	1/2	
3/4	98060	3/4	109654	3/4	12n68	3/4	131994	3/4	142820	3/4	153647	3/4	163363	3/4	
7	98301	7	109895	7	121393	7	132219	7	143046	7	153872	7	163445	7	
1/4	98543	1/4	110137	1/4	121619	1/4	132445	1/4	143271	1/4	154098	1/4	163519	1/4	
1/2	98784	1/2	110378	1/2	121844	1/2	132670	1/2	143497	1/2	154323	1/2	163584	1/2	
3/4	99026	3/4	110620	3/4	122070	3/4	132896	3/4	143722	3/4	154549	3/4	163640	3/4	
8	99267	8	110861	8	122295	8	133121	8	143948	8	154774	8	163688	8	
1/4	99509	1/4	111103	1/4	122521	1/4	133347	1/4	144173	1/4	155000	1/4	163727	1/4	
1/2	99751	1/2	111345	1/2	122746	1/2	133573	1/2	144399	1/2	155226	1/2		1/2	
3/4	99992	3/4	111586	3/4	122972	3/4	133798	3/4	144625	3/4	155451	3/4		3/4	
9	100234	9	111828	9	123198	9	134024	9	144850	9	155677	9		9	
1/4	100475	1/4	112069	1/4	123423	1/4	134249	1/4	145076	1/4	155902	1/4		1/4	
1/2	100717	1/2	112311	1/2	123649	1/2	134475	1/2	145301	1/2	156128	1/2		1/2	
3/4	100958	3/4	112552	3/4	123874	3/4	134700	3/4	145527	3/4	156353	3/4		3/4	
10	101200	10	112794	10	124100	10	134926	10	145752	10	156579	10		10	
1/4	101441	1/4	113035	1/4	124325	1/4	135151	1/4	145978	1/4	156804	1/4		1/4	
1/2	101683	1/2	113277	1/2	124551	1/2	135377	1/2	146203	1/2	157030	1/2		1/2	
3/4	101924	3/4	113518	3/4	124776	3/4	135602	3/4	146429	3/4	157256	3/4		3/4	
11	102166	11	113760	11	125002	11	135828	11	146655	11	157481	11		11	
1/4	102408	1/4	114001	1/4	125227	1/4	136054	1/4	146880	1/4	157707	1/4		1/4	
1/2	102649	1/2	114243	1/2	125453	1/2	136279	1/2	147106	1/2	157932	1/2		1/2	
3/4	102891	3/4	114485	3/4	125679	3/4	136505	3/4	147331	3/4	158158	3/4		3/4	

THIS TABLE IS SCALED FROM THE BOTTOM STRIKE POINT BELOW THE IMCOULT VALVE TO TOP OF THE TANK AT CENTERLINE

Calibrated: KT/AH  
Calculation: W/F  
Dated: March 23, 1998



**Intertek Testing Services**  
Caleb Brett

**DOUBLE SKIN BARGE**  
**"IB-1930"**

**TANK: 2**

HULL# 97-2139

TOTAL GAUGE HEIGHT: 15' 09 1/8"

CAPACITIES IN U.S. GALLONS

IN	0 FT	IN	1 FT	IN	2 FT	IN	3 FT	IN	4 FT	IN	5 FT	IN	6 FT	IN	7 FT
0	37	0	10444	0	22083	0	33696	0	45332	0	56973	0	68614	0	80255
1/4	<b>67</b>	1/4	10686	1/4	22326	1/4	33938	1/4	45574	1/4	57215	1/4	<b>68856</b>	1/4	80497
1/2	117	1/2	10929	1/2	22568	1/2	34180	1/2	45817	1/2	57458	1/2	69099	1/2	80740
3/4	<b>188</b>	3/4	11171	3/4	22811	3/4	34421	3/4	46059	3/4	57700	3/4	69341	3/4	80982
1	279	1	11414	1	23053	1	34663	1	46302	1	57943	1	69584	1	81225
1/4	390	1/4	11656	1/4	23295	1/4	34905	1/4	46544	1/4	58185	1/4	69826	1/4	81467
1/2	521	1/2	<b>11899</b>	1/2	23538	1/2	35146	1/2	46787	1/2	58428	1/2	70069	1/2	<b>81710</b>
3/4	673	3/4	<b>12141</b>	3/4	23780	3/4	35388	3/4	47029	3/4	58670	3/4	70311	3/4	81952
2	845	2	12384	2	24023	2	35631	2	47272	2	58913	2	70554	2	82195
1/4	1037	1/4	12626	1/4	24265	1/4	35873	1/4	47514	1/4	59155	1/4	70796	1/4	82437
1/2	1249	1/2	12869	1/2	24508	1/2	36116	1/2	47757	1/2	59398	1/2	71039	1/2	82680
3/4	<b>1481</b>	3/4	13111	3/4	24750	3/4	36358	3/4	47999	3/4	59640	3/4	71281	3/4	82922
3	1714	3	13354	3	24993	3	36601	3	48242	3	59883	3	71524	3	83165
1/4	1957	1/4	13596	1/4	25235	1/4	36843	1/4	48484	1/4	60125	1/4	71766	1/4	83407
1/2	2199	1/2	13839	1/2	25477	1/2	37086	1/2	48727	1/2	60368	1/2	72009	1/2	83650
3/4	2442	3/4	14081	3/4	25720	3/4	37328	3/4	48969	3/4	60610	3/4	72251	3/4	83892
4	2684	4	14324	4	25962	4	37571	4	49212	4	60853	4	72494	4	84135
1/4	2926	1/4	14566	1/4	26204	1/4	37813	1/4	49454	1/4	61096	1/4	72737	1/4	84377
1/2	3169	1/2	14809	1/2	26446	1/2	38056	1/2	49697	1/2	61338	1/2	72979	1/2	84620
3/4	3411	3/4	15051	3/4	26687	3/4	38298	3/4	49940	3/4	61581	3/4	73222	3/4	84862
5	3654	5	15294	5	26929	5	38541	5	50182	5	61823	5	73464	5	85105
1/4	3896	1/4	15536	1/4	27171	1/4	38783	1/4	50425	1/4	62066	1/4	73707	1/4	85347
1/2	4139	1/2	15778	1/2	27412	1/2	39026	1/2	50667	1/2	62308	1/2	73949	1/2	85590
3/4	4381	3/4	16021	3/4	27654	3/4	39268	3/4	50910	3/4	62551	3/4	74192	3/4	85832
6	4624	6	16263	6	27896	6	39511	6	51152	6	62793	6	74434	6	86075
1/4	4866	1/4	16506	1/4	28138	1/4	39754	1/4	51395	1/4	63036	1/4	74677	1/4	86317
1/2	5109	1/2	16748	1/2	28379	1/2	39996	1/2	51637	1/2	63278	1/2	74919	1/2	86560
3/4	5351	3/4	16991	3/4	28621	3/4	40239	3/4	51880	3/4	63521	3/4	75162	3/4	86802
7	5594	7	17233	7	28863	7	40481	7	52122	7	63763	7	75404	7	87045
1/4	5836	1/4	17476	1/4	29104	1/4	40724	1/4	52365	1/4	64006	1/4	75047	1/4	87287
1/2	6079	1/2	17718	1/2	29346	1/2	40966	1/2	52607	1/2	64248	1/2	75289	1/2	87530
3/4	6321	3/4	17961	3/4	29588	3/4	41209	3/4	52850	3/4	64491	3/4	75532	3/4	87772
8	6564	8	18203	8	29829	8	41451	8	53092	8	64733	8	76374	8	88015
1/4	6806	1/4	18446	1/4	30071	1/4	41694	1/4	53335	1/4	64976	1/4	76617	1/4	88257
1/2	7049	1/2	<b>18688</b>	1/2	30313	1/2	41936	1/2	53577	1/2	65218	1/2	76859	1/2	88500
3/4	7291	3/4	18931	3/4	30554	3/4	42179	3/4	53820	3/4	65461	3/4	77102	3/4	88742
9	7534	9	19173	9	30796	9	42421	9	54062	9	65703	9	77344	9	<b>88985</b>
1/4	7776	1/4	19416	1/4	31038	1/4	42664	1/4	54305	1/4	65946	1/4	77587	1/4	89227
1/2	<b>8019</b>	1/2	19658	1/2	31279	1/2	42906	1/2	54547	1/2	66188	1/2	77829	1/2	89470
3/4	<b>8261</b>	3/4	19901	3/4	31521	3/4	43149	3/4	54790	3/4	66431	3/4	78072	3/4	89712
10	8504	10	20143	10	31763	10	43391	10	55032	10	66674	10	78314	10	89955
1/4	8746	1/4	20386	1/4	32005	1/4	43634	1/4	55275	1/4	66916	1/4	78557	1/4	90198
1/2	<b>8989</b>	1/2	20628	1/2	32246	1/2	43876	1/2	55518	1/2	67159	1/2	78799	1/2	90440
3/4	9231	3/4	20871	3/4	32488	3/4	44119	3/4	55760	3/4	67401	3/4	79042	3/4	90683
11	9474	11	<b>21113</b>	11	32730	11	44361	11	56003	11	67644	11	79284	11	90925
1/4	9716	1/4	21356	1/4	32971	1/4	44604	1/4	56245	1/4	67886	1/4	79527	1/4	91168
1/2	9959	1/2	21598	1/2	33213	1/2	44847	1/2	56488	1/2	68129	1/2	79769	1/2	91410
3/4	10201	3/4	21841	3/4	33455	3/4	45089	3/4	56730	3/4	68371	3/4	80012	3/4	91653

\*\* VOLUME OF SUMP COMPUTATION IN ACCORDANCE WITH API MPMS CHAPTER 2.7

Calculated: KTAIH  
Calculation: WHF  
Date: March 23, 1998

INR-ND-1

**DOUBLE SKIN BARGE  
 "IB-1930"**

**TANK: 2**  
 TOTAL GAUGE HEIGHT: 15' 09 1/8"

0	91895	0	103535	0	115175	0	126814	0	138453	0	150094	0	161735	0
1/4	92138	3/4	103778	1/4	115417	1/4	127057	1/4	138696	1/4	150337	1/4	161978	1/4
1/2	92380	1/2	104020	1/2	115660	1/2	127299	1/2	138939	1/2	150580	1/2	162220	1/2
3/4	92623	3/4	104263	3/4	115902	3/4	127542	3/4	139181	3/4	150822	3/4	162463	3/4
1	92865	1	104505	1	116145	1	127784	1	139424	1	151065	1	162706	1
1/4	93108	1/4	104748	1/4	116387	1/4	128027	1/4	139666	1/4	151307	1/4	162948	1/4
1/2	93350	1/2	104990	1/2	116630	1/2	128269	1/2	139909	1/2	151550	1/2	163191	1/2
3/4	93593	3/4	105233	3/4	116872	3/4	128512	3/4	140151	3/4	151792	3/4	163433	3/4
2	93835	2	105475	2	117115	2	128754	2	140394	2	152035	2	163676	2
1/4	94078	1/4	105718	1/4	117357	1/4	128996	1/4	140636	1/4	152277	1/4	163918	1/4
1/2	94320	1/2	105960	1/2	117600	1/2	129239	1/2	140879	1/2	152520	1/2	164161	1/2
3/4	94563	3/4	106203	3/4	117842	3/4	129481	3/4	141121	3/4	152762	3/4	164399	3/4
3	94805	3	106445	3	118085	3	129724	3	141364	3	153005	3	164627	3
1/4	95048	1/4	106688	1/4	118327	1/4	129966	1/4	141606	1/4	153247	1/4	164846	1/4
1/2	95290	1/2	106930	1/2	118570	1/2	130209	1/2	141849	1/2	153490	1/2	165056	1/2
3/4	95533	3/4	107173	3/4	118812	3/4	130451	3/4	142091	3/4	153732	3/4	165257	3/4
4	95775	4	107415	4	119055	4	130694	4	142334	4	153975	4	165448	4
1/4	96018	1/4	107658	1/4	119297	1/4	130936	1/4	142576	1/4	154217	1/4	165630	1/4
1/2	96260	1/2	107900	1/2	119540	1/2	131179	1/2	142819	1/2	154460	1/2	165802	1/2
3/4	96503	3/4	108143	3/4	119782	3/4	131421	3/4	143061	3/4	154702	3/4	165966	3/4
5	96745	5	108385	5	120024	5	131664	5	143304	5	154945	5	166119	5
1/4	96988	1/4	108628	1/4	120267	1/4	131906	1/4	143546	1/4	155187	1/4	166264	1/4
1/2	97230	1/2	108870	1/2	120509	1/2	132149	1/2	143789	1/2	155430	1/2	166399	1/2
3/4	97473	3/4	109113	3/4	120752	3/4	132391	3/4	144031	3/4	155672	3/4	166525	3/4
6	97715	6	109355	6	120994	6	132634	6	144274	6	155915	6	166642	6
1/4	97958	1/4	109598	1/4	121237	1/4	132876	1/4	144516	1/4	156157	1/4	166749	1/4
1/2	98200	1/2	109840	1/2	121479	1/2	133119	1/2	144759	1/2	156400	1/2	166847	1/2
3/4	98443	3/4	110083	3/4	121722	3/4	133361	3/4	145002	3/4	156643	3/4	166936	3/4
7	98685	7	110325	7	121964	7	133604	7	145244	7	156885	7	167015	7
1/4	98928	1/4	110568	1/4	122207	1/4	133846	1/4	145487	1/4	157128	1/4	167085	1/4
1/2	99170	1/2	110810	1/2	122449	1/2	134089	1/2	145729	1/2	157370	1/2	167145	1/2
3/4	99413	3/4	111053	3/4	122692	3/4	134331	3/4	145972	3/4	157613	3/4	167197	3/4
8	99655	8	111295	8	122934	8	134574	8	146214	8	157855	8	167239	8
1/4	99898	1/4	111537	1/4	123177	1/4	134816	1/4	146457	1/4	158098	1/4	167271	1/4
1/2	100141	1/2	111780	1/2	123419	1/2	135059	1/2	146699	1/2	158340	1/2		1/2
3/4	100383	3/4	112022	3/4	123662	3/4	135301	3/4	146942	3/4	158583	3/4		3/4
9	100626	9	112265	9	123904	9	135544	9	147184	9	158825	9		9
1/4	100868	1/4	112507	1/4	124147	1/4	135786	1/4	147427	1/4	159068	1/4		1/4
1/2	101111	1/2	112750	1/2	124389	1/2	136029	1/2	147669	1/2	159310	1/2		1/2
3/4	101353	3/4	112992	3/4	124632	3/4	136271	3/4	147912	3/4	159553	3/4		3/4
10	101596	10	113235	10	124874	10	136514	10	148154	10	159795	10		10
1/4	101838	1/4	113477	1/4	125117	1/4	136756	1/4	148397	1/4	160038	1/4		1/4
1/2	102081	1/2	113720	1/2	125359	1/2	136999	1/2	148639	1/2	160280	1/2		1/2
3/4	102323	3/4	113962	3/4	125602	3/4	137241	3/4	148882	3/4	160523	3/4		3/4
11	102565	11	114205	11	125844	11	137483	11	149124	11	160765	11		11
1/4	102808	1/4	114447	1/4	126087	1/4	137726	1/4	149367	1/4	161008	1/4		1/4
1/2	103050	1/2	114690	1/2	126329	1/2	137968	1/2	149609	1/2	161250	1/2		1/2
3/4	103293	3/4	114932	3/4	126572	3/4	138211	3/4	149852	3/4	161493	3/4		3/4

THIS TABLE IS SCALED FROM THE BOTTOM STRIKE POINT BELOW THE MGCUTI VALVE TO TOP OF THE TANK AT CENTERLINE

Calibrated: KTAH  
 Calculation: WHF  
 Dated: March 23, 1998



Intertek Testing Services DOUBLE SKIN BARGE  
Caleb Brett

"IB-1930"

TANK: 3

CAPACITIES IN U.S. GALLONSHULL# 97-213

TOTAL GAUGE HEIGHT: 15' 08 1/4"

IN	0 FT	IN	1 FT	IN	2 FT	IN	3 FT	IN	4 FT	IN	5 FT	IN	6 FT	IN	7 FT
0	36	0	9406	0	19886	0	30366	0	40848	0	51330	0	61812	0	72294
1/4	63	1/4	9624	1/4	20105	1/4	30584	1/4	41066	1/4	51548	1/4	62031	1/4	72513
1/2	108	1/2	9842	1/2	20323	1/2	30802	1/2	41284	1/2	51767	1/2	62249	1/2	72731
3/4	172	3/4	10061	3/4	20541	3/4	31021	3/4	41503	3/4	51985	3/4	62467	3/4	72950
1	254	1	10279	1	20760	1	31239	1	41721	1	52204	1	62686	1	73168
1/4	354	1/4	10497	1/4	20978	1/4	31457	1/4	41940	1/4	52422	1/4	62904	1/4	73386
1/2	472	1/2	10716	1/2	21196	1/2	31676	1/2	42158	1/2	52640	1/2	63123	1/2	73605
3/4	609	3/4	10934	3/4	21415	3/4	31894	3/4	42376	3/4	52859	3/4	63341	3/4	73823
2	763	2	11152	2	21633	2	32112	2	42595	2	53077	2	63559	2	74041
1/4	936	1/4	11371	1/4	21851	1/4	32331	1/4	42813	1/4	53295	1/4	63778	1/4	74260
1/2	1127	1/2	11589	1/2	22070	1/2	32549	1/2	43031	1/2	53514	1/2	63996	1/2	74478
3/4	1327	3/4	11808	3/4	22288	3/4	32767	3/4	43250	3/4	53732	3/4	64214	3/4	74697
3	1545	3	12026	3	22506	3	32986	3	43468	3	53951	3	64433	3	74915
1/4	1763	1/4	12244	1/4	22724	1/4	33204	1/4	43687	1/4	54169	1/4	64651	1/4	75133
1/2	1982	1/2	12463	1/2	22943	1/2	33423	1/2	43905	1/2	54387	1/2	64870	1/2	75352
3/4	2200	3/4	12681	3/4	23161	3/4	33641	3/4	44123	3/4	54606	3/4	65088	3/4	75570
4	2418	4	12899	4	23379	4	33859	4	44342	4	54824	4	65306	4	75788
1/4	2637	1/4	13118	1/4	23598	1/4	34078	1/4	44560	1/4	55043	1/4	65525	1/4	76007
1/2	2855	1/2	13336	1/2	23816	1/2	34296	1/2	44779	1/2	55261	1/2	65743	1/2	76225
3/4	3074	3/4	13554	3/4	24034	3/4	34515	3/4	44997	3/4	55479	3/4	65962	3/4	76444
5	3292	5	13773	5	24253	5	34733	5	45215	5	55698	5	66180	5	76662
1/4	3510	1/4	13991	1/4	24471	1/4	34951	1/4	45434	1/4	55916	1/4	66398	1/4	76880
1/2	3729	1/2	14209	1/2	24689	1/2	35170	1/2	45652	1/2	56134	1/2	66617	1/2	77099
3/4	3947	3/4	14428	3/4	24908	3/4	35388	3/4	45870	3/4	56353	3/4	66835	3/4	77317
6	4165	6	14646	6	25126	6	35606	6	46089	6	56571	6	67053	6	77535
1/4	4384	1/4	14864	1/4	25344	1/4	35825	1/4	46307	1/4	56790	1/4	67272	1/4	77754
1/2	4602	1/2	15083	1/2	25563	1/2	36043	1/2	46526	1/2	57008	1/2	67490	1/2	77972
3/4	4820	3/4	15301	3/4	25781	3/4	36262	3/4	46744	3/4	57226	3/4	67709	3/4	78190
7	5039	7	15519	7	25999	7	36480	7	46962	7	57445	7	67927	7	78409
1/4	5257	1/4	15738	1/4	26218	1/4	36698	1/4	47181	1/4	57663	1/4	68145	1/4	78627
1/2	5475	1/2	15956	1/2	26436	1/2	36917	1/2	47399	1/2	57881	1/2	68364	1/2	78846
3/4	5694	3/4	16176	3/4	26654	3/4	37135	3/4	47618	3/4	58100	3/4	68582	3/4	79064
8	5912	8	16393	8	26873	8	37354	8	47836	8	58318	8	68800	8	79282
1/4	6130	1/4	16611	1/4	27091	1/4	37572	1/4	48054	1/4	58537	1/4	69019	1/4	79501
1/2	6349	1/2	16830	1/2	27309	1/2	37790	1/2	48273	1/2	58755	1/2	69237	1/2	79719
3/4	6567	3/4	17048	3/4	27527	3/4	38009	3/4	48491	3/4	58973	3/4	69456	3/4	79937
9	6785	9	17266	9	27746	9	38227	9	48709	9	59192	9	69674	9	80156
1/4	7004	1/4	17485	1/4	27964	1/4	38445	1/4	48928	1/4	59410	1/4	69892	1/4	80374
1/2	7222	1/2	17703	1/2	28182	1/2	38664	1/2	49146	1/2	59629	1/2	70111	1/2	80593
3/4	7441	3/4	17921	3/4	28401	3/4	38882	3/4	49365	3/4	59847	3/4	70329	3/4	80811
10	7659	10	18140	10	28619	10	39101	10	49583	10	60065	10	70547	10	81029
1/4	7877	1/4	18358	1/4	28837	1/4	39319	1/4	49801	1/4	60284	1/4	70766	1/4	81248
1/2	8096	1/2	18576	1/2	29056	1/2	39537	1/2	50020	1/2	60502	1/2	70984	1/2	81466
3/4	8314	3/4	18795	3/4	29274	3/4	39756	3/4	50238	3/4	60720	3/4	71203	3/4	81684
11	8532	11	19013	11	29492	11	39974	11	50457	11	60939	11	71421	11	81903
1/4	8751	1/4	19231	1/4	29711	1/4	40192	1/4	50675	1/4	61157	1/4	71639	1/4	82121
1/2	8969	1/2	19450	1/2	29929	1/2	40411	1/2	50893	1/2	61376	1/2	71858	1/2	82340
3/4	9187	3/4	19668	3/4	30147	3/4	40629	3/4	51112	3/4	61594	3/4	72076	3/4	82558

VOLUME OF BUMP  
COMPUTATION IN ACCORDANCE WITH API MPMS CHAPTER 2.7  
GAGE FROM MIDDLE VALVE LOCATED NEAR GEOMETRIC CENTER OF TANK  
PAGE NO. 1

Calculated: RYAN  
Calculation: WFF  
Date: March 23, 1998

CAPACITIES IN U.S. GALLONS

HULL# 97-2139

IN	8 FT	IN	9 FT	IN	10 FT	IN	11 FT	IN	12 FT	IN	13 FT	IN	14 FT	IN	15 FT
0	82776	0	93258	0	103739	0	114219	0	124700	0	135182	0	145664	0	
1/4	82995	1/4	93476	1/4	103957	1/4	114438	1/4	124918	1/4	135400	1/4	145883	1/4	
1/2	83213	1/2	93695	1/2	104175	1/2	114656	1/2	125137	1/2	135619	1/2	146101	1/2	
3/4	83431	3/4	93913	3/4	104394	3/4	114874	3/4	125355	3/4	135837	3/4	146320	3/4	
1	83650	1	94131	1	104612	1	115093	1	125573	1	136056	1	146538	1	
1/4	83868	1/4	94350	1/4	104830	1/4	115311	1/4	125792	1/4	136274	1/4	146756	1/4	
1/2	84087	1/2	94568	1/2	105049	1/2	115529	1/2	126010	1/2	136492	1/2	146975	1/2	
3/4	84305	3/4	94786	3/4	105267	3/4	115748	3/4	126228	3/4	136711	3/4	147193	3/4	
2	84523	2	95005	2	105485	2	115966	2	126447	2	136929	2	147411	2	
1/4	84742	1/4	95223	1/4	105704	1/4	116184	1/4	126665	1/4	137140	1/4	147630	1/4	
1/2	84960	1/2	95441	1/2	105922	1/2	116403	1/2	126884	1/2	137366	1/2	147848	1/2	
3/4	85178	3/4	95660	3/4	106140	3/4	116621	3/4	127102	3/4	137584	3/4	148067	3/4	
3	85397	3	95878	3	106359	3	116839	3	127320	3	137803	3	148285	3	
1/4	85615	1/4	96096	1/4	106577	1/4	117058	1/4	127539	1/4	138021	1/4	148503	1/4	
1/2	85834	1/2	96315	1/2	106795	1/2	117276	1/2	127757	1/2	138239	1/2	148721	1/2	
3/4	86052	3/4	96533	3/4	107014	3/4	117494	3/4	127976	3/4	138458	3/4	148939	3/4	
4	86270	4	96751	4	107232	4	117713	4	128194	4	138676	4	149157	4	
1/4	86489	1/4	96970	1/4	107450	1/4	117931	1/4	128412	1/4	138895	1/4	149375	1/4	
1/2	86707	1/2	97188	1/2	107669	1/2	118149	1/2	128631	1/2	139113	1/2	149593	1/2	
3/4	86925	3/4	97407	3/4	107887	3/4	118368	3/4	128849	3/4	139331	3/4	149811	3/4	
5	87144	5	97625	5	108105	5	118586	5	129067	5	139550	5	149854	5	
1/4	87362	1/4	97843	1/4	108324	1/4	118804	1/4	129286	1/4	139768	1/4	149999	1/4	
1/2	87580	1/2	98062	1/2	108542	1/2	119023	1/2	129504	1/2	139986	1/2	150133	1/2	
3/4	87799	3/4	98280	3/4	108761	3/4	119241	3/4	129723	3/4	140205	3/4	150256	3/4	
6	88017	6	98498	6	108979	6	119459	6	129941	6	140423	6	150369	6	
1/4	88236	1/4	98717	1/4	109197	1/4	119678	1/4	130159	1/4	140642	1/4	150471	1/4	
1/2	88454	1/2	98935	1/2	109416	1/2	119896	1/2	130378	1/2	140860	1/2	150562	1/2	
3/4	88672	3/4	99153	3/4	109634	3/4	120115	3/4	130596	3/4	141078	3/4	150643	3/4	
7	88891	7	99372	7	109852	7	120333	7	130814	7	141297	7	150712	7	
1/4	89109	1/4	99590	1/4	110071	1/4	120551	1/4	131033	1/4	141515	1/4	150771	1/4	
1/2	89327	1/2	99808	1/2	110289	1/2	120770	1/2	131251	1/2	141734	1/2	150820	1/2	
3/4	89546	3/4	100027	3/4	110507	3/4	120988	3/4	131470	3/4	141952	3/4	150857	3/4	
8	89764	8	100245	8	110726	8	121206	8	131688	8	142170	8	150884	8	
1/4	89983	1/4	100463	1/4	110944	1/4	121425	1/4	131906	1/4	142389	1/4	150900	1/4	
1/2	90201	1/2	100682	1/2	111162	1/2	121643	1/2	132125	1/2	142607	1/2		1/2	
3/4	90419	3/4	100900	3/4	111381	3/4	121861	3/4	132343	3/4	142825	3/4		3/4	
9	90638	9	101118	9	111599	9	122080	9	132562	9	143044	9		9	
1/4	90856	1/4	101337	1/4	111817	1/4	122298	1/4	132780	1/4	143262	1/4		1/4	
1/2	91074	1/2	101555	1/2	112036	1/2	122516	1/2	132998	1/2	143481	1/2		1/2	
3/4	91293	3/4	101773	3/4	112254	3/4	122735	3/4	133217	3/4	143699	3/4		3/4	
10	91511	10	101992	10	112472	10	122953	10	133435	10	143917	10		10	
1/4	91730	1/4	102210	1/4	112691	1/4	123171	1/4	133653	1/4	144136	1/4		1/4	
1/2	91948	1/2	102428	1/2	112909	1/2	123390	1/2	133872	1/2	144354	1/2		1/2	
3/4	92166	3/4	102647	3/4	113127	3/4	123608	3/4	134090	3/4	144572	3/4		3/4	
11	92385	11	102865	11	113346	11	123826	11	134309	11	144791	11		11	
1/4	92603	1/4	103084	1/4	113564	1/4	124045	1/4	134527	1/4	145009	1/4		1/4	
1/2	92821	1/2	103302	1/2	113782	1/2	124263	1/2	134745	1/2	145228	1/2		1/2	
3/4	93040	3/4	103520	3/4	114001	3/4	124481	3/4	134964	3/4	145446	3/4		3/4	

THIS TABLE IS SCALED FROM THE BOTTOM STRIKE POINT BELOW THE MNCUTI VALVE TO TOP OF THE TANK AT CENTERLINE

####

Calculated: RT/AH  
Calculation: WHF  
Date: March 23, 1998

PAGE NO. 2

CAPACITIES IN U.S. GALLONS

IN	0 FT	IN	1 FT	IN	2 FT	IN	3 FT	IN	4 FT	IN	5 FT	IN	6 FT	IN	7 FT
0	36	0	10403	0	21997	0	33568	0	45158	0	56753	0	68347	0	79942
1/4	67	1/4	10644	1/4	22238	1/4	33809	1/4	45400	1/4	56994	1/4	68589	1/4	80184
1/2	117	1/2	10886	1/2	22480	1/2	34050	1/2	45641	1/2	57236	1/2	68831	1/2	80425
3/4	187	3/4	11127	3/4	22721	3/4	34291	3/4	45883	3/4	57477	3/4	69072	3/4	80667
1	278	1	11369	1	22963	1	34532	1	46124	1	57719	1	69314	1	80908
1/4	389	1/4	11610	1/4	23204	1/4	34773	1/4	46366	1/4	57961	1/4	69555	1/4	81150
1/2	519	1/2	11852	1/2	23446	1/2	35013	1/2	46607	1/2	58202	1/2	69797	1/2	81392
3/4	670	3/4	12093	3/4	23687	3/4	35254	3/4	46849	3/4	58444	3/4	70038	3/4	81633
2	842	2	12335	2	23929	2	35496	2	47091	2	58685	2	70280	2	81875
1/4	1033	1/4	12577	1/4	24170	1/4	35737	1/4	47332	1/4	58927	1/4	70521	1/4	82116
1/2	1244	1/2	12818	1/2	24412	1/2	35979	1/2	47574	1/2	59168	1/2	70763	1/2	82358
3/4	1476	3/4	13060	3/4	24653	3/4	36221	3/4	47815	3/4	59410	3/4	71005	3/4	82599
3	1707	3	13301	3	24895	3	36462	3	48057	3	59651	3	71246	3	82841
1/4	1948	1/4	13543	1/4	25136	1/4	36704	1/4	48298	1/4	59893	1/4	71488	1/4	83083
1/2	2190	1/2	13784	1/2	25378	1/2	36945	1/2	48540	1/2	60135	1/2	71729	1/2	83324
3/4	2431	3/4	14026	3/4	25619	3/4	37187	3/4	48781	3/4	60376	3/4	71971	3/4	83566
4	2673	4	14267	4	25861	4	37428	4	49023	4	60618	4	72212	4	83807
1/4	2914	1/4	14509	1/4	26102	1/4	37670	1/4	49265	1/4	60859	1/4	72454	1/4	84049
1/2	3156	1/2	14750	1/2	26342	1/2	37911	1/2	49506	1/2	61101	1/2	72695	1/2	84290
3/4	3398	3/4	14992	3/4	26583	3/4	38153	3/4	49748	3/4	61342	3/4	72937	3/4	84532
5	3639	5	15234	5	26824	5	38395	5	49989	5	61584	5	73179	5	84774
1/4	3881	1/4	15475	1/4	27065	1/4	38636	1/4	50231	1/4	61825	1/4	73420	1/4	85015
1/2	4122	1/2	15717	1/2	27306	1/2	38878	1/2	50472	1/2	62067	1/2	73662	1/2	85257
3/4	4364	3/4	15958	3/4	27547	3/4	39119	3/4	50714	3/4	62309	3/4	73903	3/4	85498
6	4606	6	16200	6	27788	6	39361	6	50955	6	62550	6	74145	6	85740
1/4	4847	1/4	16441	1/4	28028	1/4	39602	1/4	51197	1/4	62792	1/4	74386	1/4	85981
1/2	5089	1/2	16683	1/2	28269	1/2	39844	1/2	51439	1/2	63033	1/2	74628	1/2	86223
3/4	5330	3/4	16924	3/4	28510	3/4	40085	3/4	51680	3/4	63275	3/4	74869	3/4	86464
7	5572	7	17166	7	28751	7	40327	7	51922	7	63516	7	75111	7	86706
1/4	5813	1/4	17407	1/4	28992	1/4	40569	1/4	52163	1/4	63758	1/4	75353	1/4	86948
1/2	6055	1/2	17649	1/2	29233	1/2	40810	1/2	52405	1/2	63999	1/2	75594	1/2	87189
3/4	6296	3/4	17890	3/4	29474	3/4	41052	3/4	52646	3/4	64241	3/4	75836	3/4	87431
8	6538	8	18132	8	29714	8	41293	8	52888	8	64483	8	76077	8	87672
1/4	6780	1/4	18374	1/4	29955	1/4	41535	1/4	53129	1/4	64724	1/4	76319	1/4	87914
1/2	7021	1/2	18615	1/2	30196	1/2	41776	1/2	53371	1/2	64966	1/2	76560	1/2	88155
3/4	7263	3/4	18857	3/4	30437	3/4	42018	3/4	53613	3/4	65207	3/4	76802	3/4	88397
9	7504	9	19098	9	30678	9	42259	9	53854	9	65449	9	77043	9	88639
1/4	7746	1/4	19340	1/4	30919	1/4	42501	1/4	54096	1/4	65690	1/4	77285	1/4	88880
1/2	7987	1/2	19581	1/2	31160	1/2	42743	1/2	54337	1/2	65932	1/2	77527	1/2	89122
3/4	8229	3/4	19823	3/4	31400	3/4	42984	3/4	54579	3/4	66173	3/4	77768	3/4	89363
10	8470	10	20064	10	31641	10	43226	10	54820	10	66415	10	78010	10	89605
1/4	8712	1/4	20306	1/4	31882	1/4	43467	1/4	55062	1/4	66657	1/4	78251	1/4	89846
1/2	8953	1/2	20547	1/2	32123	1/2	43709	1/2	55303	1/2	66898	1/2	78493	1/2	90088
3/4	9195	3/4	20789	3/4	32364	3/4	43950	3/4	55545	3/4	67140	3/4	78734	3/4	90329
11	9436	11	21031	11	32605	11	44192	11	55787	11	67381	11	78976	11	90571
1/4	9678	1/4	21272	1/4	32846	1/4	44433	1/4	56028	1/4	67623	1/4	79218	1/4	90813
1/2	9920	1/2	21514	1/2	33087	1/2	44675	1/2	56270	1/2	67864	1/2	79459	1/2	91054
3/4	10161	3/4	21755	3/4	33327	3/4	44917	3/4	56511	3/4	68106	3/4	79701	3/4	91296

VOLUME OF SOUP COMPUTATION IN ACCORDANCE WITH API MPMS CHAPTER 2.7

GAUGE FROM MMC/UT VALVE LOCATED NEAR GEOMETRIC CENTER OF TANK

Calibrated: KTAH  
Calculation: WIF  
Dated: March 23, 1998