



Intertek Testing Services  
Caleb Brett

DOUBLE SKIN BARGE  
"IB-1931"

**TANK: 1**

TOTAL GAUGE HEIGHT: 15' 08 5/8"

CAPACITIES IN U.S. GALLONS

HULL # 97-2140

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	10418	0	22029	0	33618	0	45225	0	56837	0	68449	0	80061
1/4	67	1/4	10660	1/4	22271	1/4	33859	1/4	45467	1/4	57079	1/4	68691	1/4	80303
1/2	117	1/2	10902	1/2	22513	1/2	34100	1/2	45709	1/2	57321	1/2	68933	1/2	80545
3/4	188	3/4	11144	3/4	22755	3/4	34342	3/4	45951	3/4	57563	3/4	69175	3/4	80787
1	278	1	11386	1	22997	1	34583	1	46193	1	57805	1	69416	1	81028
1/4	389	1/4	11628	1/4	23239	1/4	34824	1/4	46435	1/4	58047	1/4	69658	1/4	81270
1/2	520	1/2	11869	1/2	23480	1/2	35065	1/2	46677	1/2	58288	1/2	69900	1/2	81512
3/4	671	3/4	12111	3/4	23722	3/4	35307	3/4	46918	3/4	58530	3/4	70142	3/4	81754
2	843	2	12353	2	23964	2	35548	2	47160	2	58772	2	70384	2	81996
1/4	1034	1/4	12595	1/4	24206	1/4	35790	1/4	47402	1/4	59014	1/4	70626	1/4	82238
1/2	1246	1/2	12837	1/2	24448	1/2	36032	1/2	47644	1/2	59256	1/2	70868	1/2	82480
3/4	1478	3/4	13079	3/4	24690	3/4	36274	3/4	47886	3/4	59498	3/4	71110	3/4	82722
3	1709	3	13321	3	24932	3	36516	3	48128	3	59740	3	71352	3	82964
1/4	1951	1/4	13563	1/4	25173	1/4	36758	1/4	48370	1/4	59982	1/4	71594	1/4	83206
1/2	2193	1/2	13805	1/2	25415	1/2	37000	1/2	48612	1/2	60224	1/2	71836	1/2	83448
3/4	2435	3/4	14047	3/4	25657	3/4	37242	3/4	48854	3/4	60466	3/4	72077	3/4	83690
4	2677	4	14288	4	25899	4	37484	4	49096	4	60708	4	72319	4	83932
1/4	2919	1/4	14530	1/4	26140	1/4	37726	1/4	49338	1/4	60949	1/4	72561	1/4	84173
1/2	3161	1/2	14772	1/2	26381	1/2	37968	1/2	49580	1/2	61191	1/2	72803	1/2	84415
3/4	3403	3/4	15014	3/4	26623	3/4	38210	3/4	49821	3/4	61433	3/4	73045	3/4	84657
5	3645	5	15256	5	26864	5	38451	5	50063	5	61675	5	73287	5	84899
1/4	3887	1/4	15498	1/4	27105	1/4	38693	1/4	50305	1/4	61917	1/4	73529	1/4	85141
1/2	4128	1/2	15740	1/2	27346	1/2	38935	1/2	50547	1/2	62159	1/2	73771	1/2	85383
3/4	4370	3/4	15982	3/4	27588	3/4	39177	3/4	50789	3/4	62401	3/4	74013	3/4	85625
6	4612	6	16224	6	27829	6	39419	6	51031	6	62643	6	74255	6	85867
1/4	4854	1/4	16466	1/4	28070	1/4	39661	1/4	51273	1/4	62885	1/4	74497	1/4	86109
1/2	5096	1/2	16707	1/2	28311	1/2	39903	1/2	51515	1/2	63127	1/2	74738	1/2	86351
3/4	5338	3/4	16949	3/4	28552	3/4	40145	3/4	51757	3/4	63369	3/4	74980	3/4	86593
7	5580	7	17191	7	28794	7	40387	7	51999	7	63611	7	75222	7	86835
1/4	5822	1/4	17433	1/4	29035	1/4	40629	1/4	52241	1/4	63852	1/4	75464	1/4	87077
1/2	6064	1/2	17675	1/2	29276	1/2	40871	1/2	52483	1/2	64094	1/2	75706	1/2	87318
3/4	6306	3/4	17917	3/4	29517	3/4	41113	3/4	52724	3/4	64336	3/4	75048	3/4	87560
8	6548	8	18159	8	29759	8	41354	8	52966	8	64678	8	76190	8	87802
1/4	6790	1/4	18401	1/4	30000	1/4	41596	1/4	53208	1/4	64820	1/4	76432	1/4	88044
1/2	7031	1/2	18643	1/2	30241	1/2	41838	1/2	53450	1/2	65062	1/2	76674	1/2	88286
3/4	7273	3/4	18885	3/4	30482	3/4	42080	3/4	53692	3/4	65304	3/4	76916	3/4	88528
9	7515	9	19126	9	30723	9	42322	9	53934	9	65546	9	77158	9	88770
1/4	7757	1/4	19368	1/4	30965	1/4	42564	1/4	54176	1/4	65788	1/4	77400	1/4	89012
1/2	7999	1/2	19610	1/2	31206	1/2	42806	1/2	54418	1/2	66030	1/2	77642	1/2	89254
3/4	8241	3/4	19852	3/4	31447	3/4	43048	3/4	54660	3/4	66272	3/4	77883	3/4	89496
10	8483	10	20094	10	31688	10	43290	10	54902	10	66513	10	78125	10	89738
1/4	8725	1/4	20336	1/4	31929	1/4	43532	1/4	55144	1/4	66755	1/4	78367	1/4	89980
1/2	8967	1/2	20578	1/2	32171	1/2	43774	1/2	55385	1/2	66997	1/2	78609	1/2	90222
3/4	9209	3/4	20820	3/4	32412	3/4	44015	3/4	55627	3/4	67239	3/4	78851	3/4	90463
11	9450	11	21062	11	32653	11	44267	11	55869	11	67481	11	79093	11	90705
1/4	9692	1/4	21304	1/4	32894	1/4	44499	1/4	56111	1/4	67723	1/4	79335	1/4	90947
1/2	9934	1/2	21546	1/2	33136	1/2	44741	1/2	56353	1/2	67965	1/2	79577	1/2	91189
3/4	10176	3/4	21787	3/4	33377	3/4	44983	3/4	56595	3/4	68207	3/4	79819	3/4	91431

VOLUME OF SUMP COMPUTATION IN ACCORDANCE WITH API MPMS CHAPTER 2.7  
GAUGE FROM MMC/UTI VALVE LOCATED NEAR GEOMETRIC CENTER OF TANK

Calibrated: KT/AH  
Calculation: WHF  
Dated: April 7, 1998

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	91673	0	103285	0	114896	0	126109	0	136955	0	147801	0	158647	0	
1/4	91915	1/4	103527	1/4	115138	1/4	126335	1/4	137181	1/4	148027	1/4	158873	1/4	
1/2	92157	1/2	103769	1/2	115380	1/2	126561	1/2	137407	1/2	148253	1/2	159099	1/2	
3/4	92399	3/4	104011	3/4	115622	3/4	126787	3/4	137632	3/4	148479	3/4	159325	3/4	
1	92641	1	104253	1	115864	1	127013	1	137858	1	148705	1	159551	1	
1/4	92883	1/4	104495	1/4	116106	1/4	127238	1/4	138084	1/4	148931	1/4	159777	1/4	
1/2	93125	1/2	104736	1/2	116348	1/2	127464	1/2	138310	1/2	149157	1/2	160003	1/2	
3/4	93366	3/4	104978	3/4	116589	3/4	127690	3/4	138536	3/4	149383	3/4	160229	3/4	
2	93608	2	105220	2	116831	2	127916	2	138762	2	149609	2	160455	2	
1/4	93850	1/4	105462	1/4	117073	1/4	128142	1/4	138988	1/4	149835	1/4	160681	1/4	
1/2	04092	1/2	105704	1/2	117315	1/2	128368	1/2	139214	1/2	150061	1/2	160907	1/2	
3/4	94334	3/4	105046	3/4	117557	3/4	128504	3/4	139440	3/4	150287	3/4	161133	3/4	
3	04576	3	106188	3	117799	3	128820	3	139666	3	150512	3	161354	3	
1/4	94818	1/4	106430	1/4	118041	1/4	129046	1/4	139892	1/4	150738	1/4	161566	1/4	
1/2	95060	1/2	106672	1/2	118283	1/2	129272	1/2	140118	1/2	150964	1/2	161768	1/2	
3/4	95302	3/4	106914	3/4	118525	3/4	129498	3/4	140344	3/4	151190	3/4	161961	3/4	
4	95544	4	107155	4	118766	4	129724	4	140570	4	151416	4	162145	4	
1/4	95786	1/4	107397	1/4	119008	1/4	129950	1/4	140796	1/4	151642	1/4	162319	1/4	
1/2	96028	1/2	107639	1/2	119250	1/2	130176	1/2	141022	1/2	151868	1/2	162484	1/2	
3/4	96270	3/4	107881	3/4	119492	3/4	130402	3/4	141248	3/4	152094	3/4	162639	3/4	
5	96511	5	108123	5	119734	5	130628	5	141474	5	152320	5	162785	5	
1/4	96753	1/4	108365	1/4	119976	1/4	130854	1/4	141700	1/4	152546	1/4	162922	1/4	
1/2	96995	1/2	108607	1/2	120218	1/2	131080	1/2	141926	1/2	152772	1/2	163049	1/2	
3/4	97237	3/4	108849	3/4	120460	3/4	131306	3/4	142152	3/4	152998	3/4	163167	3/4	
6	97479	6	109091	6	120686	6	131532	6	142378	6	153224	6	163275	6	
1/4	97721	1/4	109333	1/4	120912	1/4	131758	1/4	142604	1/4	153450	1/4	163374	1/4	
1/2	97963	1/2	109574	1/2	121138	1/2	131984	1/2	142830	1/2	153676	1/2	163463	1/2	
3/4	98205	3/4	109816	3/4	121364	3/4	132210	3/4	143056	3/4	153902	3/4	163543	3/4	
7	98447	7	110058	7	121590	7	132435	7	143282	7	154128	7	163614	7	
1/4	98689	1/4	110300	1/4	121816	1/4	132661	1/4	143508	1/4	154354	1/4	163675	1/4	
1/2	98931	1/2	110642	1/2	122041	1/2	132887	1/2	143734	1/2	154580	1/2	163727	1/2	
3/4	99173	3/4	110784	3/4	122267	3/4	133113	3/4	143960	3/4	154806	3/4	163769	3/4	
8	99415	8	111026	8	122493	8	133339	8	144185	8	155032	8	163802	8	
1/4	99656	1/4	111268	1/4	122719	1/4	133565	1/4	144411	1/4	155258	1/4	163826	1/4	
1/2	99898	1/2	111510	1/2	122945	1/2	133791	1/2	144637	1/2	155484	1/2		1/2	
3/4	100140	3/4	111751	3/4	123171	3/4	134017	3/4	144863	3/4	155710	3/4		3/4	
9	100382	9	111993	9	123397	9	134243	9	145089	9	155936	9		9	
1/4	100624	1/4	112235	1/4	123623	1/4	134469	1/4	145315	1/4	156162	1/4		1/4	
1/2	100866	1/2	112477	1/2	123849	1/2	134695	1/2	145541	1/2	156388	1/2		1/2	
3/4	101108	3/4	112719	3/4	124075	3/4	134921	3/4	145767	3/4	156614	3/4		3/4	
10	101350	10	112961	10	124301	10	135147	10	145993	10	156840	10		10	
1/4	101592	1/4	113203	1/4	124527	1/4	135373	1/4	146219	1/4	157065	1/4		1/4	
1/2	101834	1/2	113445	1/2	124753	1/2	135599	1/2	146445	1/2	157291	1/2		1/2	
3/4	102076	3/4	113687	3/4	124979	3/4	135825	3/4	146671	3/4	157517	3/4		3/4	
11	102318	11	113929	11	125205	11	136051	11	146897	11	157743	11		11	
1/4	102559	1/4	114170	1/4	125431	1/4	136277	1/4	147123	1/4	157969	1/4		1/4	
1/2	102801	1/2	114412	1/2	125657	1/2	136503	1/2	147349	1/2	158195	1/2		1/2	
3/4	103043	3/4	114654	3/4	125883	3/4	136729	3/4	147575	3/4	158421	3/4		3/4	

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

Calibrated: RT/AH  
Calculation: WHF  
Dated: April 7, 1998

3 IN U.S. GALLONS HULL # 97-2140

0 FT	IN	1 FT	IN	2 FT	IN	3 FT	IN	4 FT	IN	5 FT	IN	6 FT	IN
36	0	10431	0	22056	0	33655	0	45276	0	56903	0	68530	0
67	1/4	10673	1/4	22298	1/4	33896	1/4	45518	1/4	57145	1/4	68772	1/4
117	1/2	10915	1/2	22540	1/2	34138	1/2	45761	1/2	57387	1/2	69014	1/2
188	3/4	11158	3/4	22783	3/4	34379	3/4	46003	3/4	57630	3/4	69256	3/4
279	1	11400	1	23025	1	34621	1	46245	1	57872	1	69499	1
390	1/4	11642	1/4	23267	1/4	34862	1/4	46487	1/4	58114	1/4	69741	1/4
521	1/2	11884	1/2	23509	1/2	35103	1/2	46729	1/2	58356	1/2	69983	1/2
672	3/4	12126	3/4	23751	3/4	35345	3/4	46972	3/4	58599	3/4	70225	3/4
844	2	12368	2	23993	2	35587	2	47214	2	58841	2	70467	2
1035	1/4	12611	1/4	24236	1/4	35829	1/4	47456	1/4	59083	1/4	70710	1/4
1247	1/2	12853	1/2	24478	1/2	36071	1/2	47698	1/2	59325	1/2	70952	1/2
1479	3/4	13095	3/4	24720	3/4	36314	3/4	47941	3/4	59567	3/4	71194	3/4
1712	3	13337	3	24962	3	36556	3	48183	3	59810	3	71436	3
1954	1/4	13579	1/4	25204	1/4	36798	1/4	48425	1/4	60052	1/4	71679	1/4
2196	1/2	13822	1/2	25446	1/2	37040	1/2	48667	1/2	60294	1/2	71921	1/2
2439	3/4	14064	3/4	25688	3/4	37283	3/4	48909	3/4	60536	3/4	72163	3/4
2681	4	14306	4	25931	4	37525	4	49152	4	60779	4	72405	4
2923	1/4	14648	1/4	26172	1/4	37767	1/4	49394	1/4	61021	1/4	72648	1/4
3165	1/2	14790	1/2	26413	1/2	38009	1/2	49636	1/2	61263	1/2	72890	1/2
3407	3/4	15033	3/4	26655	3/4	38252	3/4	49878	3/4	61505	3/4	73132	3/4
3650	5	15275	5	26896	5	38494	5	50121	5	61747	5	73374	5
3892	1/4	15517	1/4	27138	1/4	38736	1/4	50363	1/4	61990	1/4	73616	1/4
4134	1/2	15759	1/2	27379	1/2	38978	1/2	50605	1/2	62232	1/2	73859	1/2
4376	3/4	16001	3/4	27620	3/4	39220	3/4	50847	3/4	62474	3/4	74101	3/4
4618	6	16244	6	27862	6	33463	6	51090	6	62716	6	74343	6
4860	1/4	16486	1/4	28103	1/4	39705	1/4	51332	1/4	62959	1/4	74585	1/4
5103	1/2	16728	1/2	28344	1/2	39947	1/2	51574	1/2	63201	1/2	74828	1/2
5345	3/4	16970	3/4	28586	3/4	40189	3/4	51816	3/4	63443	3/4	75070	3/4
5587	7	17212	7	28827	7	40432	7	52058	7	63685	7	75312	7
5829	1/4	17455	1/4	29069	1/4	40674	1/4	52301	1/4	63927	1/4	75554	1/4
6071	1/2	17697	1/2	29310	1/2	40916	1/2	52543	1/2	64170	1/2	75796	1/2
6314	3/4	17939	3/4	29551	3/4	41158	3/4	52785	3/4	64412	3/4	76039	3/4
6556	8	18181	8	29793	8	41400	8	53027	8	64654	8	76281	8
6798	1/4	18423	1/4	30034	1/4	41643	1/4	53270	1/4	64896	1/4	76523	1/4
7040	1/2	18666	1/2	30276	1/2	41885	1/2	53512	1/2	65139	1/2	76765	1/2
7282	3/4	18908	3/4	30517	3/4	42127	3/4	53754	3/4	65381	3/4	77008	3/4
7525	9	19150	9	30758	9	42369	9	53996	9	65623	9	77250	9
7767	1/4	19392	1/4	31000	1/4	42612	1/4	54238	1/4	65865	1/4	77492	1/4
8009	1/2	19634	1/2	31241	1/2	42854	1/2	54481	1/2	66107	1/2	77734	1/2
8251	3/4	19876	3/4	31483	3/4	43096	3/4	54723	3/4	66350	3/4	77976	3/4
8493	10	20119	10	31724	10	43338	10	54965	10	66592	10	78219	10
8736	1/4	20361	1/4	31965	1/4	43581	1/4	55207	1/4	66834	1/4	78461	1/4
8978	1/2	20603	1/2	32207	1/2	43823	1/2	55450	1/2	67076	1/2	78703	1/2
9220	3/4	20845	3/4	32448	3/4	44065	3/4	55692	3/4	67319	3/4	78945	3/4
9462	11	21087	11	32690	11	44307	11	55934	11	67561	11	79187	11
9704	1/4	21330	1/4	32931	1/4	44549	1/4	56176	1/4	67803	1/4	73430	1/4
9947	1/2	21572	1/2	33172	1/2	44792	1/2	56419	1/2	68045	1/2	79672	1/2
10189	3/4	21814	3/4	33414	3/4	45034	3/4	56661	3/4	68287	3/4	79914	3/4

TIME OF SUMP  
TATION IN ACCORDANCE WITH API MPMS CHAPTER 2.7

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

Calibrated: KT/AH  
Calculation: WHF  
Dated: April 7, 1998



0 FT	IN	1 FT	IN	2 FT	IN	3 FT	IN	4 FT	IN	5 FT	IN	6 FT	IN	7
35	0	9392	0	19858	0	30322	0	40790	0	51257	0	61724	0	7
63	1/4	9610	1/4	20076	1/4	30540	1/4	41008	1/4	51475	1/4	61942	1/4	7
108	1/2	9828	1/2	20294	1/2	30758	1/2	41226	1/2	51693	1/2	62160	1/2	7
172	3/4	10046	3/4	20512	3/4	30977	3/4	41444	3/4	51911	3/4	62379	3/4	7
253	1	10204	1	20730	1	31195	1	41662	1	52129	1	62597	1	7
353	1/4	10483	1/4	20948	1/4	31413	1/4	41880	1/4	52347	1/4	62816	1/4	7
471	1/2	10701	1/2	21166	1/2	31631	1/2	42098	1/2	52565	1/2	63033	1/2	7
608	3/4	10919	3/4	21384	3/4	31849	3/4	42316	3/4	52783	3/4	63251	3/4	7
762	2	11137	2	21602	2	32067	2	42534	2	53002	2	63469	2	7
935	1/4	11355	1/4	21820	1/4	32285	1/4	42752	1/4	53220	1/4	63687	1/4	7
1126	1/2	11573	1/2	22038	1/2	32503	1/2	42970	1/2	53438	1/2	63905	1/2	7
1325	3/4	11791	3/4	22256	3/4	32721	3/4	43188	3/4	53656	3/4	64123	3/4	7
1643	3	12009	3	22474	3	32939	3	43406	3	53874	3	64341	3	7
1761	1/4	12227	1/4	22692	1/4	33157	1/4	43624	1/4	54092	1/4	64559	1/4	7
1979	1/2	12445	1/2	22910	1/2	33375	1/2	43843	1/2	54310	1/2	64777	1/2	7
2197	3/4	12663	3/4	23128	3/4	33593	3/4	44061	3/4	54528	3/4	64995	3/4	7
2415	4	12881	4	23346	4	33811	4	44279	4	54746	4	65213	4	7
2633	1/4	13099	1/4	23564	1/4	34029	1/4	44497	1/4	54964	1/4	65432	1/4	7
2851	1/2	13317	1/2	23782	1/2	34247	1/2	44715	1/2	55182	1/2	65650	1/2	7
3069	3/4	13535	3/4	24000	3/4	34465	3/4	44933	3/4	55400	3/4	65868	3/4	7
3287	5	13753	5	24218	5	34683	6	45151	5	55618	5	66086	5	7
3505	1/4	13971	1/4	24436	1/4	34902	1/4	45369	1/4	55836	1/4	66304	1/4	7
3723	1/2	14189	1/2	24654	1/2	35120	1/2	45587	1/2	56055	1/2	66522	1/2	7
3941	3/4	14407	3/4	24872	3/4	35338	3/4	45805	3/4	56273	3/4	66740	3/4	7
4159	6	14625	6	25090	6	35556	6	46023	6	56491	6	66958	6	7
4377	1/4	14843	1/4	25308	1/4	35774	1/4	46241	1/4	56709	1/4	67176	1/4	7
4595	1/2	15061	1/2	25526	1/2	35992	1/2	46459	1/2	56927	1/2	67394	1/2	7
4813	3/4	15279	3/4	25744	3/4	36210	3/4	46677	3/4	57145	3/4	67612	3/4	7
5032	7	15497	7	25962	7	36428	7	46896	7	57363	7	67830	7	7
5250	1/4	15715	1/4	26180	1/4	36646	1/4	47114	1/4	57581	1/4	68048	1/4	7
5468	1/2	15934	1/2	26398	1/2	36864	1/2	47332	1/2	57799	1/2	68266	1/2	7
5686	3/4	16152	3/4	26616	3/4	37082	3/4	47550	3/4	58017	3/4	68485	3/4	7
5904	8	16370	8	26834	8	37300	8	47768	8	58235	8	68703	8	7
6122	1/4	16588	1/4	27052	1/4	37518	1/4	47986	1/4	58453	1/4	68921	1/4	7
6340	1/2	16806	1/2	27270	1/2	37737	1/2	48204	1/2	58671	1/2	69139	1/2	7
6558	3/4	17024	3/4	27488	3/4	37955	3/4	48422	3/4	58889	3/4	69357	3/4	7
6776	9	17242	9	27706	9	38173	9	48640	9	59108	9	69575	9	80
6904	1/4	17460	1/4	27924	1/4	38391	1/4	48858	1/4	59326	1/4	69793	1/4	80
7212	1/2	17678	1/2	28142	1/2	38609	1/2	49076	1/2	59544	1/2	70011	1/2	80
7430	3/4	17896	3/4	28360	3/4	38827	3/4	49294	3/4	59762	3/4	70229	3/4	80
7048	10	18114	10	28578	10	39045	10	49512	10	59980	10	70447	10	80
7866	1/4	18332	1/4	28796	1/4	39263	1/4	49730	1/4	60198	1/4	70665	1/4	81
8084	1/2	18550	1/2	29014	1/2	39481	1/2	49949	1/2	60416	1/2	70883	1/2	81
8302	3/4	18768	3/4	29232	3/4	39699	3/4	50167	3/4	60634	3/4	71101	3/4	81
8520	11	18986	11	29450	11	39917	11	50386	11	60862	11	71319	11	81
8738	1/4	19204	1/4	29668	1/4	40135	1/4	50603	1/4	61070	1/4	71537	1/4	82
8956	1/2	19422	1/2	29886	1/2	40353	1/2	50821	1/2	61288	1/2	71755	1/2	82
9174	3/4	19640	3/4	30104	3/4	40571	3/4	51039	3/4	61506	3/4	71974	3/4	82



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	82659	0	93125	0	103591	0	114057	0	124522	0	134990	0	145457	0	
1/4	82877	1/4	93343	1/4	103809	1/4	114275	1/4	124740	1/4	135208	1/4	145675	1/4	
1/2	83095	1/2	93561	1/2	104027	1/2	114493	1/2	124958	1/2	135426	1/2	145893	1/2	
3/4	83313	3/4	93779	3/4	104245	3/4	114711	3/4	125177	3/4	135644	3/4	146111	3/4	
1	83531	1	93997	1	104463	1	114929	1	125395	1	135862	1	146329	1	
1/4	83749	1/4	94215	1/4	104681	1/4	115147	1/4	125613	1/4	136080	1/4	146547	1/4	
1/2	83967	1/2	94433	1/2	104899	1/2	115365	1/2	125831	1/2	136298	1/2	146765	1/2	
3/4	84185	3/4	94651	3/4	105117	3/4	115583	3/4	126049	3/4	136516	3/4	146984	3/4	
2	84403	2	94870	2	105335	2	115801	2	126267	2	136734	2	147202	2	
1/4	84621	1/4	95088	1/4	105553	1/4	116019	1/4	126485	1/4	136952	1/4	147420	1/4	
1/2	84839	1/2	95306	1/2	105771	1/2	116237	1/2	126703	1/2	137170	1/2	147638	1/2	
3/4	85057	3/4	95524	3/4	105989	3/4	116455	3/4	126921	3/4	137388	3/4	147856	3/4	
3	85275	3	95742	3	106207	3	116673	3	127139	3	137607	3	148099	3	
1/4	85493	1/4	95960	1/4	106425	1/4	116891	1/4	127357	1/4	137825	1/4	148331	1/4	
1/2	85711	1/2	96178	1/2	106643	1/2	117109	1/2	127575	1/2	138043	1/2	148550	1/2	
3/4	85929	3/4	96396	3/4	106861	3/4	117327	3/4	127793	3/4	138261	3/4	148758	3/4	
4	86147	4	96614	4	107079	4	117545	4	128011	4	138479	4	148954	4	
1/4	86366	1/4	96832	1/4	107298	1/4	117763	1/4	128230	1/4	138697	1/4	149138	1/4	
1/2	86584	1/2	97050	1/2	107516	1/2	117981	1/2	128448	1/2	138915	1/2	149310	1/2	
3/4	86802	3/4	97268	3/4	107734	3/4	118199	3/4	128666	3/4	139133	3/4	149470	3/4	
5	87020	5	97486	5	107952	5	118417	5	128834	5	139351	5	149618	5	
1/4	87238	1/4	97704	1/4	108170	1/4	118635	1/4	129102	1/4	139569	1/4	149755	1/4	
1/2	87456	1/2	97922	1/2	108388	1/2	118853	1/2	129320	1/2	139787	1/2	149879	1/2	
3/4	87674	3/4	98140	3/4	108606	3/4	119071	3/4	129538	3/4	140005	3/4	149992	3/4	
6	87892	6	98368	6	108824	6	119289	6	129756	6	140223	6	150093	6	
1/4	88110	1/4	98576	1/4	109042	1/4	119508	1/4	129974	1/4	140441	1/4	150182	1/4	
1/2	88328	1/2	98794	1/2	109260	1/2	119726	1/2	130192	1/2	140660	1/2	150259	1/2	
3/4	88546	3/4	99012	3/4	109478	3/4	119944	3/4	130410	3/4	140878	3/4	150324	3/4	
7	88764	7	99230	7	109696	7	120162	7	130628	7	141096	7	150378	7	
1/4	88982	1/4	99448	1/4	109914	1/4	120380	1/4	130846	1/4	141314	1/4	150419	1/4	
1/2	89200	1/2	99666	1/2	110132	1/2	120598	1/2	131064	1/2	141532	1/2	150449	1/2	
3/4	89418	3/4	99884	3/4	110350	3/4	120816	3/4	131283	3/4	141750	3/4	150467	3/4	
8	89636	8	100102	8	110568	8	121034	8	131501	8	141968	8	150473	8	
1/4	89855	1/4	100320	1/4	110786	1/4	121252	1/4	131719	1/4	142186	1/4		1/4	
1/2	90073	1/2	100538	1/2	111004	1/2	121470	1/2	131937	1/2	142404	1/2		1/2	
3/4	90291	3/4	100756	3/4	111222	3/4	121688	3/4	132155	3/4	142622	3/4		3/4	
9	90509	9	100974	9	111440	9	121906	9	132373	9	142840	9		9	
1/4	90727	1/4	101193	1/4	111658	1/4	122124	1/4	132591	1/4	143058	1/4		1/4	
1/2	90945	1/2	101411	1/2	111876	1/2	122342	1/2	132809	1/2	143276	1/2		1/2	
3/4	91163	3/4	101629	3/4	112094	3/4	122560	3/4	133027	3/4	143494	3/4		3/4	
10	91381	10	101847	10	112312	10	122778	10	133245	10	143713	10		10	
1/4	91599	1/4	102065	1/4	112530	1/4	122996	1/4	133463	1/4	143931	1/4		1/4	
1/2	91817	1/2	102283	1/2	112748	1/2	123214	1/2	133681	1/2	144149	1/2		1/2	
3/4	92035	3/4	102501	3/4	112966	3/4	123432	3/4	133899	3/4	144367	3/4		3/4	
11	92253	11	102719	11	113184	11	123650	11	134117	11	144585	11		11	
1/4	92471	1/4	102937	1/4	113403	1/4	123868	1/4	134336	1/4	144803	1/4		1/4	
1/2	92689	1/2	103155	1/2	113621	1/2	124086	1/2	134554	1/2	145021	1/2		1/2	
3/4	92907	3/4	103373	3/4	113839	3/4	124304	3/4	134772	3/4	145239	3/4		3/4	

THIS TABLE IS SCALED FROM THE BOTTOM STRIKE POINT BELOW THE MNCU11 VALVE TO TOP OF THE TANK AT CENTERLINE

\*\*\*\*  
PAGE NO 2

Calibrated: RT/AH  
Calculation: WHF  
Dated: April 7, 1998