

181938

**TANK: 1**  
TOTAL GAUGE HEIGHT: 16' 03 7/8"

CAPACITIES IN U.S. GALLONS		0 FT		1 FT		2 FT		3 FT		4 FT		5 FT		6 FT		7 FT	
IN	1/4	1/2	3/4	IN	1/4	1/2	3/4	IN	1/4	1/2	3/4	IN	1/4	1/2	3/4	IN	1/4
80118	67	117	188	10443	22071	22313	22556	33698	33939	34180	34422	45286	45527	46010	46252	68488	68731
80845	117	188	10928	10685	10928	11170	10928	34180	34180	34180	34222	45286	45286	46010	46252	68488	68731
81087	278	389	11412	11654	11412	1170	11412	34663	34663	34663	34663	46252	46252	46010	46252	68488	68731
81329	389	521	12866	12623	12866	12623	12866	34905	34905	34905	34905	46493	46493	46010	46252	68488	68731
81572	521	672	14804	14561	14804	14561	14804	35146	35146	35146	35146	46493	46493	46010	46252	68488	68731
81814	672	844	15046	14561	14804	15046	14804	35387	35387	35387	35387	46976	46976	46010	46252	68488	68731
82056	844	1035	16984	16499	16742	16984	16742	35629	35629	35629	35629	47218	47218	46010	46252	68488	68731
82299	1035	1247	17226	16499	16742	17226	16742	35870	35870	35870	35870	47459	47459	46010	46252	68488	68731
82541	1247	1480	17711	17468	17711	17711	17711	36111	36111	36111	36111	47701	47701	46010	46252	68488	68731
82783	1480	1964	18195	17468	17711	18195	17711	36353	36353	36353	36353	47942	47942	46010	46252	68488	68731
83025	1964	2206	18823	17468	17711	18823	17711	36594	36594	36594	36594	48184	48184	46010	46252	68488	68731
83268	2206	2691	19297	17468	17711	19297	17711	36836	36836	36836	36836	48425	48425	46010	46252	68488	68731
83510	2691	2902	19977	17468	17711	19977	17711	37077	37077	37077	37077	48667	48667	46010	46252	68488	68731
83752	2902	3175	20097	17468	17711	20097	17711	37318	37318	37318	37318	48908	48908	46010	46252	68488	68731
83994	3175	3392	20339	17468	17711	20339	17711	37560	37560	37560	37560	49150	49150	46010	46252	68488	68731
84237	3392	3660	20581	17468	17711	20581	17711	37801	37801	37801	37801	49392	49392	46010	46252	68488	68731
84479	3660	3902	20823	17468	17711	20823	17711	38043	38043	38043	38043	49633	49633	46010	46252	68488	68731
84721	3902	4144	20997	17468	17711	20997	17711	38284	38284	38284	38284	49875	49875	46010	46252	68488	68731
84964	4144	4387	21181	17468	17711	21181	17711	38525	38525	38525	38525	50116	50116	46010	46252	68488	68731
85206	4387	4629	21373	17468	17711	21373	17711	38767	38767	38767	38767	50358	50358	46010	46252	68488	68731
85448	4629	4871	21565	17468	17711	21565	17711	39008	39008	39008	39008	50599	50599	46010	46252	68488	68731
85690	4871	5113	21757	17468	17711	21757	17711	39250	39250	39250	39250	50841	50841	46010	46252	68488	68731
85933	5113	5356	21949	17468	17711	21949	17711	39491	39491	39491	39491	51082	51082	46010	46252	68488	68731
86175	5356	5598	22141	17468	17711	22141	17711	39732	39732	39732	39732	51324	51324	46010	46252	68488	68731
86417	5598	5840	22333	17468	17711	22333	17711	39974	39974	39974	39974	51565	51565	46010	46252	68488	68731
86660	5840	6082	22525	17468	17711	22525	17711	40215	40215	40215	40215	51807	51807	46010	46252	68488	68731
86902	6082	6325	22717	17468	17711	22717	17711	40457	40457	40457	40457	52049	52049	46010	46252	68488	68731
87144	6325	6567	22909	17468	17711	22909	17711	40698	40698	40698	40698	52290	52290	46010	46252	68488	68731
87386	6567	6809	23101	17468	17711	23101	17711	40940	40940	40940	40940	52532	52532	46010	46252	68488	68731
87629	6809	7051	23293	17468	17711	23293	17711	41181	41181	41181	41181	52773	52773	46010	46252	68488	68731
87871	7051	7294	23485	17468	17711	23485	17711	41422	41422	41422	41422	53015	53015	46010	46252	68488	68731
88113	7294	7536	23677	17468	17711	23677	17711	41664	41664	41664	41664	53256	53256	46010	46252	68488	68731
88356	7536	7778	23869	17468	17711	23869	17711	41905	41905	41905	41905	53498	53498	46010	46252	68488	68731
88598	7778	8020	24061	17468	17711	24061	17711	42147	42147	42147	42147	53740	53740	46010	46252	68488	68731
88840	8020	8263	24253	17468	17711	24253	17711	42388	42388	42388	42388	53981	53981	46010	46252	68488	68731
89082	8263	8505	24445	17468	17711	24445	17711	42629	42629	42629	42629	54223	54223	46010	46252	68488	68731
89325	8505	8747	24637	17468	17711	24637	17711	42871	42871	42871	42871	54464	54464	46010	46252	68488	68731
89567	8747	8989	24829	17468	17711	24829	17711	43112	43112	43112	43112	54706	54706	46010	46252	68488	68731
89809	8989	9232	25021	17468	17711	25021	17711	43354	43354	43354	43354	54947	54947	46010	46252	68488	68731
90052	9232	9474	25213	17468	17711	25213	17711	43595	43595	43595	43595	55189	55189	46010	46252	68488	68731
90294	9474	9716	25405	17468	17711	25405	17711	43837	43837	43837	43837	55431	55431	46010	46252	68488	68731
90536	9716	9958	25597	17468	17711	25597	17711	44078	44078	44078	44078	55672	55672	46010	46252	68488	68731
90778	9958	10201	25789	17468	17711	25789	17711	44320	44320	44320	44320	55914	55914	46010	46252	68488	68731
91021	10201	10443	25981	17468	17711	25981	17711	44561	44561	44561	44561	56155	56155	46010	46252	68488	68731
91263	10443	10685	26173	17468	17711	26173	17711	44803	44803	44803	44803	56397	56397	46010	46252	68488	68731
91505	10685	10928	26365	17468	17711	26365	17711	45044	45044	45044	45044	56639	56639	46010	46252	68488	68731

COMPUTATION IN ACCORDANCE WITH API MPMS CHAPTER 2.7

GUAGE FROM M/MC/UT VALVE LOCATED NEAR GEOMETRIC CENTER OF TANK

Calibrated: JDC/JH

W/HF

Dated: November 16, 1998

**CHEM-263**  
DOUBLE SKIN BARGE

181938

**TANK: 1**

TOTAL GAUGE HEIGHT: 16 03 7/8"

HULL # 98-2359

IN	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT	15 FT
0	91747	103377	115007	126203	137062	147920	158778	
1/4	91990	103619	115249	126430	137288	148146	159004	
1/2	92232	103862	115492	126656	137514	148372	159230	
3/4	92474	104104	115734	126882	137741	148598	159456	
1	92717	104346	115976	127108	137967	148825	159682	
1/4	92959	104589	116218	127334	138193	149051	159909	
1/2	93201	104831	116461	127561	138419	149277	160135	
3/4	93443	105073	116703	127787	138645	149503	160361	
2	93686	105315	116945	128013	138872	149729	160587	
1/4	93928	105558	117188	128239	139098	149956	160813	
1/2	94170	105800	117430	128466	139324	150182	161040	
3/4	94413	106042	117672	128692	139550	150408	161261	
3	94655	106285	117914	128918	139776	150634	161473	
1/4	94897	106527	118157	129144	140003	150860	161676	
1/2	95139	106769	118399	129371	140229	151087	161869	
3/4	95382	107011	118641	129597	140455	151313	162053	
4	95624	107254	118884	129823	140681	151539	162227	
1/4	95866	107496	119126	130049	140907	151765	162392	
1/2	96109	107738	119368	130275	141134	151991	162548	
3/4	96351	107981	119610	130502	141360	152218	162694	
5	96593	108223	119853	130728	141586	152444	162830	
1/4	96835	108465	120095	130954	141812	152670	162958	
1/2	97078	108707	120321	131180	142038	152896	163075	
3/4	97320	108950	120548	131407	142265	153123	163184	
6	97562	109192	120774	131633	142491	153349	163283	
1/4	97805	109434	121000	131859	142717	153575	163372	
1/2	98047	109677	121226	132085	142943	153801	163452	
3/4	98289	109919	121452	132312	143169	154027	163523	
7	98531	110161	121679	132538	143396	154254	163584	
1/4	98774	110403	121905	132764	143622	154480	163636	
1/2	99016	110646	122131	132990	143848	154706	163678	
3/4	99258	110888	122357	133216	144074	154932	163711	
8	99500	111130	122584	133443	144301	155158	163735	
1/4	99743	111373	122810	133669	144527	155385	163749	
1/2	99985	111615	123036	133895	144753	155611	163754	
3/4	100227	111857	123262	134121	144979	155837	163754	
9	100470	112100	123489	134347	145205	156063	163754	
1/4	100712	112342	123715	134574	145432	156289	163754	
1/2	100954	112584	123941	134800	145658	156516	163754	
3/4	101196	112826	124167	135026	145884	156742	163754	
10	101439	113069	124393	135252	146110	156968	163754	
1/4	101681	113311	124620	135479	146336	157194	163754	
1/2	101923	113553	124846	135705	146563	157420	163754	
3/4	102166	113796	125072	135931	146789	157647	163754	
11	102408	114038	125298	136157	147015	157873	163754	
1/4	102650	114280	125525	136383	147241	158099	163754	
1/2	102892	114522	125751	136610	147467	158325	163754	
3/4	103135	114765	125977	136836	147694	158551	163754	

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

Calibrated: JD/JH  
WHF

Calculation: WHF  
Dated: November 16, 1998

181938

**TANK: 2**  
TOTAL GAUGE HEIGHT: 16' 04 1/4"

CAPACITIES IN U.S. GALLONS		HULL # 98-2359		TOTAL GAUGE HEIGHT: 16' 04 1/4"	
IN	0 FT	IN	1 FT	IN	2 FT
0	36	0	10433	0	22049
1/4	67	1/4	10675	1/4	22291
1/2	117	1/2	10917	1/2	22533
3/4	187	3/4	11159	3/4	22775
1	278	1	11401	1	23017
1/4	389	1/4	11643	1/4	23259
1/2	520	1/2	11885	1/2	23501
3/4	671	3/4	12127	3/4	23743
2	843	2	12369	2	23985
1/4	1034	1/4	12611	1/4	24227
1/2	1246	1/2	12853	1/2	24469
3/4	1478	3/4	13095	3/4	24711
3	1720	3	13337	3	24953
1/4	1962	1/4	13579	1/4	25195
1/2	2204	1/2	13821	1/2	25437
3/4	2446	3/4	14063	3/4	25679
4	2688	4	14305	4	25921
1/4	2930	1/4	14547	1/4	26163
1/2	3172	1/2	14789	1/2	26405
3/4	3414	3/4	15031	3/4	26648
5	3656	5	15273	5	26890
1/4	3898	1/4	15515	1/4	27132
1/2	4140	1/2	15757	1/2	27374
3/4	4382	3/4	15999	3/4	27616
6	4624	6	16241	6	27858
1/4	4866	1/4	16483	1/4	28100
1/2	5108	1/2	16725	1/2	28342
3/4	5350	3/4	16967	3/4	28584
7	5592	7	17209	7	28826
1/4	5834	1/4	17451	1/4	29068
1/2	6076	1/2	17693	1/2	29310
3/4	6318	3/4	17935	3/4	29552
8	6560	8	18177	8	29794
1/4	6802	1/4	18419	1/4	30036
1/2	7044	1/2	18661	1/2	30278
3/4	7286	3/4	18903	3/4	30520
9	7528	9	19145	9	30762
1/4	7770	1/4	19387	1/4	31004
1/2	8012	1/2	19629	1/2	31246
3/4	8254	3/4	19871	3/4	31488
10	8497	10	20113	10	31730
1/4	8739	1/4	20355	1/4	31972
1/2	8981	1/2	20597	1/2	32214
3/4	9223	3/4	20839	3/4	32456
11	9465	11	21081	11	32698
1/4	9707	1/4	21323	1/4	32940
1/2	9949	1/2	21565	1/2	33182
3/4	10191	3/4	21807	3/4	33423

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

COMPUTATION IN ACCORDANCE WITH API MPMS CHAPTER 2.7

Calculated: JD/JH

WHF

Dated: November 16, 1998

IN	8 FT	9 FT	10 FT	11 FT	12 FT	13 FT	14 FT	15 FT
0	91660	103278	114896	126515	138132	149749	161366	
1/4	91902	103520	115138	126757	138374	149991	161608	
1/2	92144	103762	115380	126999	138616	150233	161851	
3/4	92386	104004	115622	127241	138858	150475	162093	
1	92628	104246	115864	127483	139100	150717	162335	
1/4	92870	104488	116106	127725	139342	150960	162577	
1/2	93112	104730	116348	127967	139584	151202	162819	
3/4	93354	104972	116591	128209	139827	151444	163061	
2	93596	105214	116833	128451	140069	151686	163303	
1/4	93838	105456	117075	128693	140311	151928	163545	
1/2	94080	105698	117317	128935	140553	152170	163787	
3/4	94322	105940	117559	129177	140795	152412	164024	
3	94564	106182	117801	129419	141037	152654	164251	
1/4	94806	106425	118043	129661	141279	152896	164467	
1/2	95048	106667	118285	129903	141521	153138	164674	
3/4	95290	106909	118527	130145	141763	153380	164871	
4	95533	107151	118769	130387	142005	153622	165057	
1/4	95775	107393	119011	130629	142247	153864	165234	
1/2	96017	107635	119253	130871	142489	154106	165400	
3/4	96259	107877	119495	131113	142731	154348	165556	
5	96501	108119	119737	131355	142973	154590	165703	
1/4	96743	108361	119979	131598	143215	154832	165839	
1/2	96985	108603	120221	131840	143457	155074	165965	
3/4	97227	108845	120463	132082	143699	155316	166081	
6	97469	109087	120705	132324	143941	155558	166187	
1/4	97711	109329	120947	132566	144183	155800	166282	
1/2	97953	109571	121189	132808	144425	156042	166368	
3/4	98195	109813	121431	133050	144667	156284	166444	
7	98437	110055	121674	133292	144909	156526	166509	
1/4	98679	110297	121916	133534	145151	156768	166565	
1/2	98921	110539	122158	133776	145393	157010	166610	
3/4	99163	110781	122400	134018	145635	157252	166645	
8	99405	111023	122642	134260	145877	157494	166670	
1/4	99647	111265	122884	134502	146119	157736	166686	
1/2	99889	111508	123126	134744	146361	157978	166691	
3/4	100131	111750	123368	134986	146603	158220		
9	100373	111992	123610	135228	146845	158462		
1/4	100615	112234	123852	135470	147087	158704		
1/2	100857	112476	124094	135712	147329	158946		
3/4	101099	112718	124336	135954	147571	159188		
10	101342	112960	124578	136196	147813	159430		
1/4	101584	113202	124820	136438	148055	159672		
1/2	101826	113444	125062	136680	148297	159914		
3/4	102068	113686	125304	136922	148539	160156		
11	102310	113928	125546	137164	148781	160398		
1/4	102552	114170	125788	137406	149023	160640		
1/2	102794	114412	126030	137648	149265	160882		
3/4	103036	114654	126272	137890	149507	161124		

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

Calculated: JD/JH  
WHF

Dated: November 16, 1998



DOUBLE SKIN BARGE  
**CHEM-263**  
181938

**TANK: 3**  
TOTAL GAUGE HEIGHT: 16' 04 1/8"

CAPACITIES IN U.S. GALLONS		HULL # 98-2359		TOTAL GAUGE HEIGHT: 16' 04 1/8"	
IN	0 FT	IN	1 FT	IN	2 FT
0	35	0	19826	0	30268
1/4	62	1/4	9600	1/4	30485
1/2	108	1/2	9817	1/2	30703
3/4	171	3/4	10035	3/4	30920
1	253	1	10253	1	31137
1/4	353	1/4	10470	1/4	31354
1/2	470	1/2	10688	1/2	31572
3/4	606	3/4	10905	3/4	31789
2	760	2	11123	2	32006
1/4	933	1/4	11341	1/4	32224
1/2	1123	1/2	11558	1/2	32441
3/4	1332	3/4	11776	3/4	32658
3	1549	3	11993	3	32876
1/4	1767	1/4	12211	1/4	33093
1/2	1984	1/2	12429	1/2	33310
3/4	2202	3/4	12646	3/4	33528
4	2420	4	12864	4	33745
1/4	2637	1/4	13081	1/4	33962
1/2	2855	1/2	13299	1/2	34180
3/4	3072	3/4	13516	3/4	34397
5	3290	5	13734	5	34614
1/4	3507	1/4	13952	1/4	34832
1/2	3725	1/2	14169	1/2	35049
3/4	3943	3/4	14387	3/4	35266
6	4160	6	14604	6	35484
1/4	4378	1/4	14822	1/4	35701
1/2	4595	1/2	15040	1/2	35918
3/4	4813	3/4	15257	3/4	36136
7	5031	7	15475	7	36353
1/4	5248	1/4	15692	1/4	36570
1/2	5466	1/2	15910	1/2	36788
3/4	5683	3/4	16127	3/4	37005
8	5901	8	16345	8	37222
1/4	6119	1/4	16563	1/4	37440
1/2	6336	1/2	16780	1/2	37657
3/4	6554	3/4	16998	3/4	37874
9	6771	9	17215	9	38092
1/4	6989	1/4	17433	1/4	38309
1/2	7206	1/2	17651	1/2	38526
3/4	7424	3/4	17868	3/4	38744
10	7642	10	18086	10	38961
1/4	7859	1/4	18303	1/4	39178
1/2	8077	1/2	18521	1/2	39396
3/4	8294	3/4	18738	3/4	39613
11	8512	11	18956	11	39831
1/4	8730	1/4	19174	1/4	40048
1/2	8947	1/2	19391	1/2	40265
3/4	9165	3/4	19609	3/4	40483

VOLUME OF PUMP  
COMPUTATION IN ACCORDANCE WITH API MPMS CHAPTER 2.7

Calculated: JD/JH  
Calculation: WHF  
Dated: November 16, 1998

