TABLE 2. THERMODYNAMIC PROPERTIES OF WATER AT SATURATION[a] (Continued)

FAHR. TEMP. t(F)	ABSOLUTE PRESSURE $p_s \times 10^5$		SPECIFIC VOLUME, CU FT PER LB			ENTHALPY, BTU PER LB			ENTROPY, BTU PER (LB) (°F)			FAHR. TEMP. t(F)
	Lb/Sq In.	In. Hg	Sat. Solid v_i	Evap. $v_{ig} \times 10^{-6}$	Sat. Vapor $v_g \times 10^{-6}$	Sat. Solid h_i	Evap. h_{ig}	Sat. Vapor h_g	Sat. Solid s_i	Evap. s_{ig}	Sat. Vapor s_g	
−96	3.212	6.539	0.01729	6.745	6.745	−199.78	1218.44	1018.66	−0.4235	3.3502	2.9267	−96
−95	3.491	7.108	0.01729	6.223	6.223	−199.40	1218.50	1019.10	−0.4225	3.3412	2.9187	−95
−94	3.793	7.722	0.01729	5.743	5.743	−199.02	1218.56	1019.54	−0.4214	3.3322	2.9108	−94
−93	4.118	8.385	0.01730	5.303	5.303	−198.64	1218.62	1019.98	−0.4204	3.3233	2.9029	−93
−92	4.470	9.102	0.01730	4.899	4.899	−198.25	1218.68	1020.43	−0.4194	3.3145	2.8951	−92
−91	4.850	9.876	0.01730	4.528	4.528	−197.87	1218.74	1020.87	−0.4183	3.3056	2.8873	−91
−90	5.260	10.71	0.01730	4.186	4.186	−197.49	1218.80	1021.31	−0.4173	3.2969	2.8796	−90
−89	5.702	11.61	0.01730	3.872	3.872	−197.10	1218.85	1021.75	−0.4162	3.2880	2.8718	−89
−88	6.179	12.58	0.01730	3.583	3.583	−196.72	1218.92	1022.20	−0.4152	3.2794	2.8642	−88
−87	6.692	13.63	0.01730	3.317	3.317	−196.33	1218.97	1022.64	−0.4142	3.2708	2.8566	−87
−86	7.245	14.75	0.01730	3.072	3.072	−195.94	1219.02	1023.08	−0.4131	3.2621	2.8490	−86
−85	7.841	15.96	0.01730	2.846	2.846	−195.56	1219.08	1023.52	−0.4121	3.2536	2.8415	−85
−84	8.482	17.27	0.01731	2.638	2.638	−195.16	1219.12	1023.96	−0.4110	3.2450	2.8340	−84
−83	9.171	18.67	0.01731	2.446	2.446	−194.78	1219.18	1024.40	−0.4100	3.2366	2.8266	−83
−82	9.913	20.18	0.01731	2.270	2.270	−194.38	1219.23	1024.85	−0.4090	3.2282	2.8192	−82
−81	10.71	21.81	0.01731	2.106	2.106	−193.99	1219.28	1025.29	−0.4079	3.2197	2.8118	−81
−80	11.57	23.55	0.01731	1.955	1.955	−193.60	1219.33	1025.73	−0.4069	3.2114	2.8045	−80
−79	12.49	25.42	0.01731	1.816	1.816	−193.20	1219.37	1026.17	−0.4058	3.2030	2.7972	−79
−78	13.47	27.43	0.01731	1.687	1.687	−192.81	1219.43	1026.62	−0.4048	3.1948	2.7900	−78
−77	14.53	29.59	0.01732	1.568	1.568	−192.41	1219.47	1027.06	−0.4038	3.1866	2.7828	−77
−76	15.67	31.91	0.01732	1.458	1.458	−192.01	1219.51	1027.50	−0.4028	3.1784	2.7756	−76
−75	16.89	34.39	0.01732	1.356	1.356	−191.62	1219.56	1027.94	−0.4017	3.1702	2.7685	−75
−74	18.20	37.05	0.01732	1.262	1.262	−191.22	1219.60	1028.38	−0.4007	3.1622	2.7615	−74
−73	19.60	39.91	0.01732	1.175	1.175	−190.82	1219.65	1028.83	−0.3996	3.1540	2.7544	−73
−72	21.10	42.96	0.01732	1.094	1.094	−190.41	1219.68	1029.27	−0.3986	3.1460	2.7474	−72
−71	22.71	46.24	0.01732	1.020	1.020	−190.01	1219.72	1029.71	−0.3976	3.1381	2.7405	−71
−70	24.43	49.74	0.01732	0.9501	0.9501	−189.61	1219.76	1030.15	−0.3965	3.1301	2.7336	−70
−69	26.27	53.49	0.01732	0.8858	0.8858	−189.20	1219.80	1030.60	−0.3955	3.1222	2.7267	−69
−68	28.24	57.51	0.01733	0.8261	0.8261	−188.80	1219.84	1031.04	−0.3945	3.1143	2.7198	−68
−67	30.35	61.80	0.01733	0.7707	0.7707	−188.39	1219.87	1031.48	−0.3934	3.1064	2.7130	−67
−66	32.60	66.38	0.01733	0.7193	0.7193	−187.98	1219.90	1031.92	−0.3924	3.0987	2.7063	−66
−65	35.01	71.28	0.01733	0.6715	0.6715	−187.58	1219.94	1032.36	−0.3914	3.0910	2.6996	−65

[a]Compiled by John A. Goff and S. Gratch.

TABLE 2. THERMODYNAMIC PROPERTIES OF WATER AT SATURATION[a] (Continued)

FAHR. TEMP. t(F)	ABSOLUTE PRESSURE $p_s \times 10^3$		SPECIFIC VOLUME, CU FT PER LB			ENTHALPY, BTU PER LB			ENTROPY, BTU PER (LB) (°F)			FAHR. TEMP. t(F)
	Lb/Sq In.	In. Hg	Sat. Solid v_i	Evap. $v_{ig} \times 10^{-6}$	Sat. Vapor $v_g \times 10^{-6}$	Sat. Solid h_i	Evap. h_{ig}	Sat. Vapor h_g	Sat. Solid s_i	Evap. s_{ig}	Sat. Vapor s_g	
−64	0.3758	0.7652	0.01733	6.272	6.272	−187.17	1219.98	1032.81	−0.3903	3.0832	2.6929	−64
−63	0.4033	0.8211	0.01733	5.859	5.859	−186.76	1220.01	1033.25	−0.3893	3.0755	2.6862	−63
−62	0.4326	0.8808	0.01734	5.476	5.476	−186.35	1220.04	1033.69	−0.3882	3.0678	2.6796	−62
−61	0.4639	0.9444	0.01734	5.120	5.120	−185.93	1220.06	1034.13	−0.3872	3.0602	2.6730	−61
−60	0.4972	1.012	0.01734	4.788	4.788	−185.52	1220.10	1034.58	−0.3862	3.0526	2.6664	−60
−59	0.5328	1.085	0.01734	4.479	4.479	−185.11	1220.13	1035.02	−0.3851	3.0450	2.6599	−59
−58	0.5708	1.162	0.01734	4.192	4.192	−184.69	1220.15	1035.46	−0.3841	3.0376	2.6535	−58
−57	0.6112	1.244	0.01734	3.925	3.925	−184.28	1220.18	1035.90	−0.3831	3.0301	2.6470	−57
−56	0.6543	1.332	0.01734	3.675	3.675	−183.86	1220.20	1036.34	−0.3820	3.0226	2.6406	−56
−55	0.7001	1.426	0.01734	3.443	3.443	−183.44	1220.23	1036.79	−0.3810	3.0152	2.6342	−55
−54	0.7489	1.525	0.01735	3.226	3.226	−183.02	1220.25	1037.23	−0.3800	3.0079	2.6279	−54
−53	0.8009	1.631	0.01735	3.024	3.024	−182.60	1220.27	1037.67	−0.3789	3.0005	2.6210	−53
−52	0.8562	1.743	0.01735	2.836	2.836	−182.18	1220.29	1038.11	−0.3779	2.9932	2.6153	−52
−51	0.9151	1.863	0.01735	2.660	2.660	−181.76	1220.31	1038.55	−0.3769	2.9860	2.6091	−51
−50	0.9776	1.990	0.01735	2.496	2.496	−181.34	1220.34	1039.00	−0.3758	2.9786	2.6028	−50
−49	1.044	2.126	0.01735	2.343	2.343	−180.92	1220.36	1039.44	−0.3748	2.9715	2.5967	−49
−48	1.115	2.270	0.01736	2.200	2.200	−180.49	1220.37	1039.88	−0.3738	2.9643	2.5905	−48
−47	1.190	2.422	0.01736	2.066	2.066	−180.06	1220.38	1040.32	−0.3727	2.9571	2.5844	−47
−46	1.270	2.585	0.01736	1.941	1.941	−179.64	1220.40	1040.76	−0.3717	2.9501	2.5784	−46
−45	1.354	2.757	0.01736	1.824	1.824	−179.21	1220.42	1041.21	−0.3707	2.9430	2.5723	−45
−44	1.444	2.940	0.01736	1.715	1.715	−178.78	1220.43	1041.65	−0.3696	2.9359	2.5663	−44
−43	1.539	3.134	0.01736	1.612	1.612	−178.35	1220.44	1042.09	−0.3686	2.9289	2.5603	−43
−42	1.641	3.340	0.01736	1.516	1.516	−177.92	1220.45	1042.53	−0.3676	2.9219	2.5543	−42
−41	1.748	3.559	0.01736	1.427	1.427	−177.49	1220.47	1042.98	−0.3665	2.9149	2.5484	−41
−40	1.861	3.790	0.01737	1.343	1.343	−177.06	1220.48	1043.42	−0.3655	2.9080	2.5425	−40
−39	1.982	4.035	0.01737	1.264	1.264	−176.63	1220.49	1043.86	−0.3645	2.9012	2.5367	−39
−38	2.110	4.295	0.01737	1.191	1.191	−176.19	1220.49	1044.30	−0.3634	2.8942	2.5308	−38
−37	2.245	4.570	0.01737	1.122	1.122	−175.76	1220.50	1044.74	−0.3624	2.8874	2.5250	−37
−36	2.388	4.862	0.01737	1.057	1.057	−175.32	1220.51	1045.19	−0.3614	2.8807	2.5193	−36
−35	2.540	5.170	0.01737	0.9961	0.9961	−174.88	1220.51	1045.63	−0.3604	2.8739	2.5135	−35
−34	2.700	5.497	0.01737	0.9391	0.9391	−174.45	1220.52	1046.07	−0.3593	2.8671	2.5078	−34
−33	2.870	5.843	0.01738	0.8857	0.8857	−174.01	1220.52	1046.51	−0.3583	2.8604	2.5021	−33

[a]Compiled by John A. Goff and S. Gratch.