TABLE II

PROPERTIES OF He^3 ALONG THE MELTING CURVE

P_m (kg/cm²)	T_m (°K)	ΔV_m (cm³/mol)	n[a]	Av. dev.[b] (±%)	V_f (cm³/mol)	ΔS_m[c] (cal/deg/mol)
			α-solid			
51.61	1.332	1.0366[d]	2	0.45	23.700[d]	0.842
53.17	1.375	1.0360[d]	1	—	23.575	0.856
64.06	1.659	0.9700[d]	2	0.20	22.767[d]	0.930
69.28	1.783	0.9435	2	0.11	22.450	0.955
78.95	1.998	0.9060[d]	1	—	21.920[d]	0.988
79.00	2.000	0.8880	4	0.72	21.917	0.988
91.27	2.255	0.8633	2	0.97	21.360	1.018
92.08	2.272	0.8656[d]	2	0.28	21.330	1.020
99.94	2.425	0.8523[d]	1	—	21.015	1.033
100.00	2.427	0.8488	3	1.64	21.012	1.033
110.86	2.630	0.8153	3	0.55	20.625	1.048
112.42	2.658	0.8107[d]	4	1.06	20.575	1.049
118.85	2.775	0.8063	3	2.88	20.355	1.056
125.16	2.887	0.7856	2	0.15	20.152	1.060
125.41	2.893	0.7954[d]	2	0.53	20.145	1.061
128.40	2.943	0.7955	2	0.36	20.055	1.063
			β-solid			
146.29	3.252	0.8868[d]	4	0.56	19.543	1.186
151.51	3.343	0.8816[d]	2	0.84	19.417	1.193
160.13	3.490	0.8766[d]	2	0.16	19.230	1.204
175.01	3.735	0.8583	5	0.50	18.935	1.223
204.57	4.205	0.8250[d]	3	1.15	18.388	1.259
237.43	4.732	0.8066	5	0.46	17.848	1.299
1208.8	14.689	0.5617	2	0.02	12.991	1.617
1449.2	16.592	0.5394	2	0.53	12.511	1.648
1707.2	18.518	0.5231	2	0.36	12.123	1.669
2098.6	21.256	0.4880	3	0.08	11.595	1.695
2543.0	24.158	0.4664	3	0.13	11.140	1.714
2986.8	26.887	0.4373	3	0.14	10.800	1.727
3554.8	30.184	0.4179	3	0.58	10.398	1.738

[a] n = number of ΔV_m determinations at each P_m.

[b] The average deviation from the mean of the n determinations of ΔV_m.

[c] Smoothed values.

[d] Results with the large cell; all others with the small cell.

Fig. 2 and the lower solid curve gives ΔV_{trans}. The dotted curve appears to hook over, and one can speculate that it intersects the solid curve at $\sim$102 kg cm^{-2} at which point ΔV_{trans} is zero. It is interesting to note that the solid transition curve of Fig. 9 seems to extrapolate to about this same pressure at 0°K and to exhibit a zero slope. As shown in Table III, ΔS_{trans} approaches zero at a faster rate than ΔV_{trans}.