Table 3 $\Lambda^{\circ(P)}$ (ohm^{-1}·cm^2·equiv^{-1}) of Et_4NClO_4 in H_2O at 25°C

Pressure, atm \ Sample*	A	B	C	D	Average
1	99.86	99.95	99.82	99.95	99.9
500	98.37	98.71	98.61	98.89	98.6
1,000	95.94	96.49	96.27	96.43	96.3
1,500	93.55	93.82	93.41	93.60	93.6
2,000	90.45	90.69	90.41	90.53	90.5
2,500	87.34	87.46	87.20	87.46	87.4
3,000	84.40	84.38	84.11	84.16	84.3
3,500	81.11	81.11	80.90	80.94	81.0
4,000	77.89	78.02	77.85	77.88	77.9
4,500	74.80	74.99	74.82	74.88	74.9
5,000	71.93	72.08	71.96	72.02	72.0

* A: 4.547×10^{-4} N, B: 7.276×10^{-4} N, C: 9.093×10^{-4} N, D: 10.919×10^{-4} N

that from the plot of log η° against pressure at the high pressures due to the steep dependency of η° upon pressure and the scarcity of the measured points (The corrected values of η° in Table 4 does not make the curve of Λ°(KCl)·η° *vs.* pressure at 25°C cross that at 40°C; see Fig. 4 in Ref. (1)) The obtained values of $\lambda^{\circ(P)}$ at 25°C are summarized in Table 5, where the values of $\lambda^{\circ(P)}$ of other ions so far investigated are also given for comparison after the above correction has been made. In Table 5, it is seen that the correction does not cause so large alteration in the values of $\lambda^{\circ(P)}$ and the discussion and conclusion in the previous paper might not be amended.

Table 4 The viscosity of water, η°(cP) at 25°C (interpolated by plotting Cappi's data against pressure)

Pressure, atm	Present	Previous[25]
1	0.8937	
500	0.8865	
1,000	0.8905	
1,500	0.9053	
2,000	0.9260	0.9266
2,500	0.9532	0.9534
3,000	0.9853	0.9709
3,500	1.0135	1.0022
4,000	1.0589	1.0392
4,500	1.0895	1.0756
5,000	1.1457	1.1163

Table 5 $\lambda^{\circ(P)}$ ($ohm^{-1}\cdot cm^2\cdot equiv^{-1}$) of the ions in H_2O at 25°C

Pressure, atm \ Ions	Bu_4N^+	Bu_4N^{+}*	Et_4N^+	Me_4N^+	K^+	Cl^-	ClO_4^-
1	19.4	19.4	32.5	44.7	73.5	76.4	67.4
500	19.6	19.6	32.9	45.0	74.7	77.9	65.7
1,000	19.5	19.5	32.5	44.4	74.6	78.8	63.8
1,500	19.2	19.2	31.8	43.8	74.0	78.9	61.8
2,000	18.7	18.7	30.9	42.8	73.0	78.6	59.6
2,500	18.2	18.2	30.0	41.6	71.9	77.7	57.4
3,000	17.6	17.9	29.0	40.3	70.1	76.6	55.3
3,500	17.1	17.3	27.8	38.9	68.4	75.2	53.2
4,000	16.4	16.7	26.8	37.6	66.6	73.6	51.1
4,500	15.9	16.1	26.0	36.1	64.9	71.8	48.9
5,000	15.1	15.5	24.8	34.5	62.4	70.2	47.2

* From Ref. (2)

The postulate introduced to obtain the single-ion equivalent conductances at infinite dilution at high pressures has been justified in Ref. (2) by comparing the calculated transference numbers of K^+ in KCl,

$$t^{\circ(P)}(K^+)=\frac{\lambda^{\circ(P)}(K^+)}{\Lambda^{\circ(P)}(KCl)}, \tag{3}$$

with those directly measured up to 2,000 atm at 25°C. In order to estimate the values of $\lambda^{\circ(P)}$ at 40°C, it was additionally assumed that

$$\tau^{\circ(P)}(K^+)=\frac{t^{\circ(P)}(K^+)}{t^{\circ(1)}(K^+)} \tag{4}$$

Table 6 Walden products of the ions in H_2O at 40°C ($ohm^{-1}\cdot cm^2\cdot equiv^{-1}\cdot cP$)

Pressure, atm \ Ions	Et_4N^+	Me_4N^+	K^+	Cl^-
1	28.5	41.1	63.0	66.0
500	27.4	39.8	63.7	67.9
1,000	27.9	40.2	64.4	68.5
1,500	27.8	40.9	65.4	70.3
2,000	27.5	39.8	66.2	72.0
2,500	27.5	39.8	67.1	73.2
3,000	27.5	39.8	67.9	74.3
3,500	27.5	39.8	68.7	75.5
4,000	27.2	39.5	69.4	76.8
4,500	27.2	39.5	70.0	77.5
5,000	27.0	39.1	70.3	79.0