According to our measurements γ_{44} decreases from -0.58 at zero pressure to -1.21 at 20 kbar. Apparently this decrease is not enough to cause a measurable effect on the thermal contribution to P or K.

TABLE 2. Comparison of Elastic Constants of KCl at Zero Pressure, kbar

	C_{11}	C_{12}	C_{44}	C_S	K_S
Present study	405.6	65.5	63.3	170.1	178.9
Dobretsov and *Peresada* [1969]	406.2	65.4	63.9	170.4	179.0
Drabble and *Strathen* [1967]	409.0	70.4	62.7	169.3	183.3
Bartels and *Schuele* [1965]	405.0	69.8	63.0	167.6	181.5
Haussuhl [1960]	407.8	69.0	63.3	169.4	181.9
Lazarus [1949]	409.5	70.6	63.0	169.4	183.6

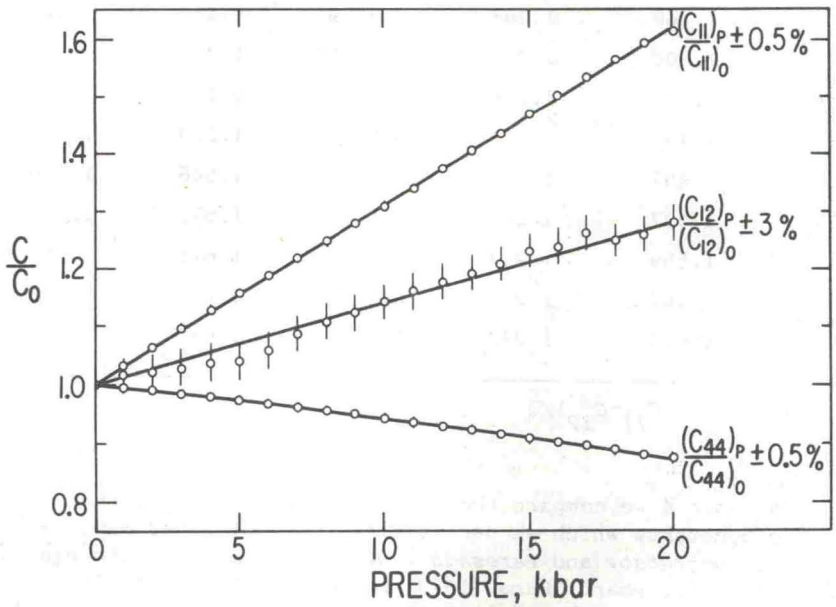

Fig. 3. Variation of elastic constants C/C_0 with pressure for KCl single crystal.

TABLE 3. Elastic Constants and Adiabatic Bulk Modulus of KCl Single-Crystal as a Function of Pressure

P, kbar	Elastic Constant $C_{11}/C_{11}(0)$	$C_{12}/C_{12}(0)$	$C_{44}/C_{44}(0)$	$C_s/C_s(0)$[a]	Bulk Modulus $K_S/K_S(0)$
0	1.000	1.000	1.0000	1.000	1.000
1	1.031	1.014	0.9944	1.034	1.027
2	1.061	1.028	0.9889	1.067	1.053
3	1.094	1.035	0.9829	1.105	1.081
4	1.123	1.047	0.9771	1.138	1.106
5	1.151	1.049	0.9714	1.171	1.131
6	1.183	1.068	0.9651	1.205	1.158
7	1.216	1.094	0.9593	1.239	1.187
8	1.247	1.116	0.9530	1.272	1.214
9	1.276	1.129	0.9466	1.304	1.239
10	1.309	1.155	0.9398	1.338	1.267
11	1.337	1.169	0.9328	1.369	1.292
12	1.368	1.185	0.9259	1.403	1.319
13	1.400	1.207	0.9196	1.437	1.346
14	1.433	1.216	0.9127	1.475	1.375
15	1.465	1.234	0.9060	1.509	1.403
16	1.497	1.242	0.8991	1.546	1.430
17	1.527	1.263	0.8922	1.578	1.455
18	1.559	1.237	0.8853	1.621	1.483
19	1.587	1.255	0.8782	1.651	1.508
20	1.614	1.273	0.8712	1.680	1.532

a. $C_s = (C_{11}-C_{12})/2$

In Table 4 we compare the pressure derivatives of the elastic constants which we derive with those of other experimenters. *Dobretsov* and *Peresada* [1969] also measured the elastic constants to 20 kbar. *Wang* [1973] measured only C_{44} to 20 kbar. The other measurements were limited to lower pressures. Our pressure derivatives measure the average change from 0 to 20 kbar, while the others measure the average change at a much lower