apparent field boundaries is given in Table 3. The fact that anorthite appears as low as 340°C in the presence of quartz suggests that wairakite is not stable above this temperature. AMES and SAND (1958) and KOIZUMI and ROY (1958) have produced wairakite from reactive materials at higher temperatures.

(2) Calcium mordenite replaces wairakite at lower temperatures when the silica activity is high in the same way as sodium mordenite replaces analcime (Figs. 11

Table 3

Starting materials	Pressure (bars)	Upper limit of wairakite	Lower limit of anorthite
Oxide mixes	335	440°C	440°C
Glass	2000	450°C	420°C
Glass	5000	450°C	450°C
Oxide mix with quartz	w.v.p.	375°C	340°C
Xonotlite + quartz	2000	380°C	360°C
Stilbite	5000	403°C+	not determined
Chabazite	w.v.p.	310°C+	not determined
Laumontite (amorphous) + quartz	2000	380°C+	not determined
Laumontite + quartz	2000	400°C+	not determined
Lawsonite + silica	3000	440°C	440°C
Lawsonite + quartz	2000	400°C+	390°C
Heulandite (amorphous)	2200	410°C	
Heulandite (amorphous)	w.v.p.	370°	370°C
Prehnite + SiO_2 (glass)	2000	440°C	390°C

Table 4

Starting materials.	P (bars)	Lower limit of wairakite (°C)	Upper limit of epistilbite (°C)
Glass	2000	325	360
Glass	5000	not det.	350+
Oxide mix with quartz	w.v.p.	285	285
Xonotlite + quartz	2000	310	320
Stilbite	5000	ca. 390	ca. 390
Prehnite glass + SiO_2	5000	(missing)	360

and 18). When the silica activity is reduced by the use of quartz, calcium mordenite does not appear even at 212°C. Its field of synthesis is thus lowered by at least 200°C by reducing silica activity.

(3) With many starting materials epistilbite appears as the common low temperature calcium zeolite. A summary of upper limits of synthesis for epistilbite is given in Table 4. Its ready synthesis contrasts with its comparative rarity in nature.

(4) The naturally important zeolite heulandite appeared as only a minor phase in a few runs. It is doubtful if these represent equilibrium (see A.1.6.8). As heulandite