

	Composition of liquid wt. %				Ratio		Composition of Crystals %				% of Minerals Crystallized				Comp. of Plag.		
	Or	Q	Ab	An	Liq.	Cry.	Or	Q	Ab	An	Or	Q	Ab	An	Plag.	Ab	An
Pt. A	22.0	33.0	29.0	16.0	100	0	0	0	0	0	0	0	0	0	0	-	-
Pt. B	27.0	40.0	26.8	6.2	82	18	0	0	40.0	60.0	0	0	25.0	68.0	40.0	40	60
Pt. C	44.5	30.0	23.0	2.5	49	51	0	36.0	35.0	29.0	0	55.0	61.0	91.0	72.0	55	45
Pt. D	29.3	28.3	42.1	0.3	0	100	22.0	33.0	29.0	16.0	100	100	100	100	100	65	35
Pt. X	40.0	29.0	24.5	6.5	55	45	0	38.0	35.0	27.0							
Pt. C'	49.5	30.5	15.8	4.0	44	56	0	35.0	39.5	25.5							
Pt. C''	39.5	29.0	30.0	1.5	56	44	0	38.0	28.0	34.0							
Pt. C'''	35.0	28.4	35.5	0.9	63	37	0	40.5	18.0	41.5							

% of Minerals Crystallized						Comp. of Plag.	
Or	Q	Ab	An	Plag.	Ab	An	
0	52.0	54.0	77.0	62.0	56	44	Pt. X
0	59.5	76.0	88.5	80.5	61	39	Pt. C'
0	51.0	42.5	94.5	61.0	45	55	Pt. C''
0	45.5	23.0	96.0	49.0	30	70	Pt. C'''

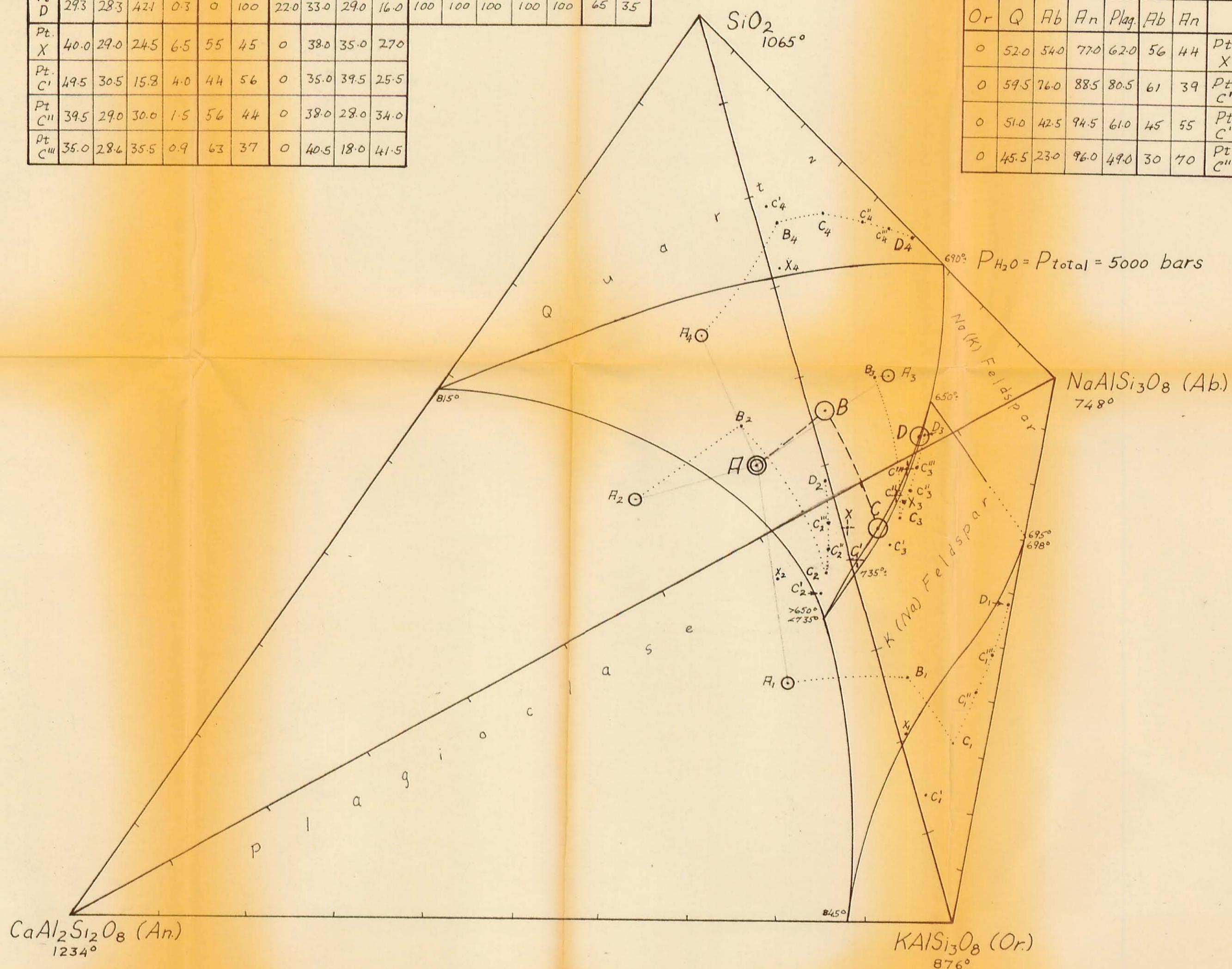


Plate 4

Isometric projection of tetrahedron representing the system  $KAlSi_3O_8$  -  $NaAlSi_3O_8$  -  $CaAl_2Si_2O_8$  -  $SiO_2$  assuming water vapour pressure is equivalent to total pressure of 5000 bars. Derived from Figure 68.

Point A represents composition of melt when totally liquid;  $A_1$ ,  $A_2$ , etc. are projections of A on faces.

Point B represents composition on saturation plane of both plagioclase and quartz.

Point C represents composition of liquid on line of intersection of the stability fields of the three mineral phases.

Point D represents composition of last drop of liquid assuming that water is continuously expelled as crystallization proceeds and that no separate fluid phase appears.

Points X, C', C'', and C''' are test positions of point C. Their significance is discussed in the text.