

SUPPLEMENTARY TABLE 4. MINERALS ENCOUNTERED IN AND NEAR
THE PERTHITE-RICH XENOLITH TRANSPORTED
IN THE CALCITE-FLUORITE DIKE

	Early minerals	Late minerals
Dwyer mine 2B		
#1	[Kfs, Ab, Cal], Cal, Fl	Aln-(Ce)
#2	[Kfs, Ab, Cal], Cal, Fl	Aln-(Ce), Hem
#3	[Kfs, Ab, Cal], Cal, Fl	Aln-(Ce), Hem, Cch, Chm
#4	[Kfs, Ab, Pl, Fl]	Hem, Cch
#5	[Kfs, Ab], Fl, Hem, Ttn	Cch
#6	[Kfs, Ab, Cal]	Cch, Hem
#7	[Kfs, Ab, Cal, Fl, Anh?, AeAu]	Cch
#8	[Kfs, Ab, Pl], Cal, Fl, Ttn, AeAu, Phl	Cch, Chm
#9	[Kfs, Ab, Fl]	
#10	[Kfs, Ab, Cal, AeAu], Cal, Fl	Aln-(Ce)
#11	[Kfs, Ab, Cal, AeAu]	Cch
#12	[Kfs, Ab, Fl, Ilm, Hem]	Chm
#13	[Kfs, Ab, Cal, Hem]	Cch
#14	[Kfs, Ab, Cal, Hem]	Cch
#15	[Kfs, Ab, Hem, Gn]	
#16	[Kfs, Ab, Cal], Cal, Fl	Aln-(Ce), Hem
#17	[Kfs, Ab, Cal]	Aln-(Ce), Urn, Cch, Hem
#18		Urn, Cch, Syn-(Ce) (blowup of #17)
#19		Urn, Cch, Chm, Thr
#20	[Kfs, Ab, Qtz], Cal, Fl	
#21	[Kfs, Ab, Qtz], Cal, Fl	Aln-(Ce), Cch
#22	Cal, Fl (zone of deformation)	Aln-(Ce), Bri-(Y), Hem
#23	Cal, Fl (zone of deformation)	Aln-(Ce), Bri-(Y), Cch, Hem
#24	Cal, Fl (zone of deformation)	Cch, Hem
#25	Cal, Fl (zone of deformation)	Aln-(Ce), Bri-(Y), Cch, Hem
#26	[Kfs, Ab, Qtz], Cal	Aln-(Ce), Hem
Dwyer mine 2C		
#1	[Kfs, Ab, Qtz]	Aln-(Ce), Hem
#2	[Kfs, Ab], Cal, Fl	Aln-(Ce), Hem, Cch
#3	[Kfs, Ab, Cal, Fl], Cal, Fl	Aln-(Ce)
#4	[Kfs, Ab, Cal, Fl], Cal, Fl, AeAu	Aln-(Ce), Cch
#5	[Kfs, Ab, Cal, Fl], Cal, Fl, AeAu	Aln-(Ce), Cch (blowup of #4)
#6	[Kfs, Ab, Cal, Fl], Cal, Fl	Aln-(Ce)
#7	[Kfs, Ab, Cal, Ap]	Hem, Cch
#8	[Kfs, Ab, Cal, Hem]	Cch
#9	[Kfs, Ab, Cal, Fl, AeAu]	Aln-(Ce), Hem
#10	[Ab], Cal, Fl	Aln-(Ce), Bri-(Y), Hem, Cch

#11	[Kfs, Ab, Cal, Fl], Cal	Aln-(Ce), Bri-(Y), Hem, Cch
#12	[Kfs, Ab, Cal, Fl, AeAu]	Hem, Cch
#13	Cal, Fl	Syn-(Ce), Cch
#14	Cal	Aln-(Ce), Bri-(Y), Hem, Cch
#15	[Kfs, Ab, Cal, Fl]	Aln-(Ce), Bri-(Y), Hem
#16	[Kfs, Ab, Fl], Cal, Fl	Aln-(Ce), Bri-(Y), Cch
#17	Cal, Fl	Bri-(Y), Cch
#18	Cal	Ap, Hem, Cch
#19	Cal, Fl	Syn-(Ce), Cch
#20	[Kfs, Ab], Cal, Fl	Ap, Cch
#21	[Kfs, Ab], Cal	Ap, Bri-(Y), Hem, Cch

The perthite grains consist of three feldspars: orthoclase, believed to now be dominant over microcline (thus the generalized symbol Kfs) and albite. Also present as an accessory is albitized plagioclase, recognized by a rectangular tablet shape and the presence of a small EDS peak for Ca. What is in the domain of perthite is enclosed in square brackets. The late minerals are considered to be secondary, *i.e.*, crystallized from an aqueous fluid phase. Symbols: Ab: albite, AeAu: aegirine-augite, Aln-(Ce): allanite-(Ce), Anh: anhydrite (?), Ap: fluorapatite, Bri-(Y): britholite-(Y), Cal: calcite, Cch: clinocllore, Chm: chamosite, Fl: fluorite, Gn: galena, Hem: hematite, Ilm: ilmenite, Kfs: K-feldspar, Phl: phlogopite, Qtz: quartz, Syn-(Ce): synchysite-(Ce), Ttn: titanite.