

Table 3

Opx and Ilmenite Analyses used for Oxygen Fugacity Calculations

	OPX			PB-92-1				OPX			PB-92-2		
P In kb	10	10	10		10	10	10		10	10	10		
T In oC	950	975	1000		950	975	1000		950	975	1000		
SiO ₂	49.53	49.18	49.28		50.47	50.03	51.24						
TiO ₂	0.44	0.52	0.56		0.34	0.38	0.41						
Al ₂ O ₃	5.8	6.51	5.66		3.11	3.95	2.97						
FeO	22.46	23.36	22.86		23.46	23.39	21.56						
MnO	0.69	0.48	0.48		0.73	0.62	0.72						
MgO	20.43	18.99	19.84		19.7	19.18	20.85						
CaO	0.58	0.66	0.78		1.8	1.86	1.67						
Total	99.93	99.7	99.46		99.61	99.41	99.42						
Cations/6ox.													
Si	1.853	1.849	1.856		1.911	1.897	1.923						
Ti	0.012	0.015	0.016		0.010	0.011	0.012						
Al	0.256	0.288	0.251		0.139	0.176	0.131						
Fe	0.702	0.734	0.720		0.743	0.741	0.677						
Mn	0.022	0.015	0.015		0.023	0.020	0.023						
Mg	1.139	1.064	1.114		1.112	1.084	1.166						
Ca	0.023	0.027	0.031		0.073	0.076	0.067						
Total	4.007	3.992	4.003		4.010	4.004	3.999						
En	61.1	58.3	59.7		57.7	57.0	61.1						
Fs	37.7	40.2	38.6		38.5	39.0	35.4						
Wo	1.2	1.5	1.7		3.8	4.0	3.5						

	Ilmenite			PB-92-1				Ilmenite			PB-92-2		
P In kb	10	10	10		10	10	10		10	10	10		
T In oC	950	975	1000		950	975	1000		950	975	1000		
SiO ₂	0.11	0.09	0.14		0.05	0.06	0.64						
TiO ₂	50.43	51.59	49.07		51.05	51.48	48.57						
Al ₂ O ₃	0.39	0.34	0.71		0.28	0.34	0.68						
FeO	38.57	39.1	35.92		39.47	39.04	35.88						
Fe ₂ O ₃	3.23	1.03	5.62		0.89	0.89	5.24						
MnO	0.88	0.79	0.51		1.03	0.88	0.7						
MgO	3.37	3.71	4.4		3.05	3.6	4.4						
total	96.98	96.65	96.37		95.82	96.29	96.11						

Cations (total = 2)/3ox.

Si	0.003	0.002	0.004		0.001	0.002	0.016					
Ti	0.961	0.983	0.933		0.986	0.985	0.924					
Al	0.012	0.01	0.021		0.009	0.01	0.02					
Fe+2	0.817	0.828	0.759		0.848	0.831	0.759					
Fe+3	0.062	0.02	0.107		0.017	0.017	0.1					
Mn	0.019	0.017	0.011		0.022	0.019	0.015					
Mg	0.127	0.14	0.166		0.117	0.137	0.166					
total	2.001	2	2.001		2	2.001	2					

Il	81.7	82.8	75.9		84.8	83.1	75.9					
Hm	3.1	1	5.3		0.9	0.9	5					
Gk	12.7	14	16.6		11.7	13.7	16.6					
Il/Il+Hm	96.4	98.8	93.4		99	99	93.8					

Table for Data Register