

Table 2

Opx and Ilmenite Analyses used for Oxygen Fugacity Calculations

P In kb T In oC	OPX			PB-92-1			OPX			PB-92-2		
	10	10	10	10	10	10	10	10	10	10	10	
	950	975	1000	950	975	1000	950	975	1000	950	975	1000
SiO2	49.53	49.18	49.28	50.47	50.03	51.24	50.47	50.03	51.24	50.47	50.03	51.24
TiO2	0.44	0.52	0.56	0.34	0.38	0.41	0.34	0.38	0.41	0.34	0.38	0.41
Al2O3	5.8	6.51	5.66	3.11	3.95	2.97	3.11	3.95	2.97	3.11	3.95	2.97
FeO	22.46	23.36	22.86	23.46	23.39	21.56	23.46	23.39	21.56	23.46	23.39	21.56
MnO	0.69	0.48	0.48	0.73	0.62	0.72	0.73	0.62	0.72	0.73	0.62	0.72
MgO	20.43	18.99	19.84	19.7	19.18	20.85	19.7	19.18	20.85	19.7	19.18	20.85
CaO	0.58	0.66	0.78	1.8	1.86	1.67	1.8	1.86	1.67	1.8	1.86	1.67
Total	99.93	99.7	99.46	99.61	99.41	99.42	99.61	99.41	99.42	99.61	99.41	99.42
Cations/6ox.												
Si	1.853	1.849	1.856	1.911	1.897	1.923	1.911	1.897	1.923	1.911	1.897	1.923
Ti	0.012	0.015	0.016	0.010	0.011	0.012	0.010	0.011	0.012	0.010	0.011	0.012
Al	0.256	0.288	0.251	0.139	0.176	0.131	0.139	0.176	0.131	0.139	0.176	0.131
Fe	0.702	0.734	0.720	0.743	0.741	0.677	0.743	0.741	0.677	0.743	0.741	0.677
Mn	0.022	0.015	0.015	0.023	0.020	0.023	0.023	0.020	0.023	0.023	0.020	0.023
Mg	1.139	1.064	1.114	1.112	1.084	1.166	1.112	1.084	1.166	1.112	1.084	1.166
Ca	0.023	0.027	0.031	0.073	0.076	0.067	0.073	0.076	0.067	0.073	0.076	0.067
Total	4.007	3.992	4.003	4.010	4.004	3.999	4.010	4.004	3.999	4.010	4.004	3.999
En	61.1	58.3	59.7	57.7	57.0	61.1	57.7	57.0	61.1	57.7	57.0	61.1
Fs	37.7	40.2	38.8	38.5	39.0	35.4	38.5	39.0	35.4	38.5	39.0	35.4
Wo	1.2	1.5	1.7	3.8	4.0	3.5	3.8	4.0	3.5	3.8	4.0	3.5

P In kb T In oC	Ilmenite PB-92-1			Ilmenite PB-92-2		
	10	10	10	10	10	10
	950	975	1000	950	975	1000
SiO2	0.11	0.09	0.14	0.05	0.06	0.64
TiO2	50.43	51.59	49.07	51.05	51.48	48.57
Al2O3	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
Fe2O3	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 Repository