

Sample	KHO3- 3		KHO3- 4		KHO3- 15		KHO3- 16		KHO3- 21	
	Olivine	2 s.e.	Olivine	2 s.e.	Olivine	2 s.e.	Olivine	2 s.e.	Olivine	2 s.e.
Rb	0.005	0.003	0.000	0.008			0.003	0.001	0.006	0.003
Ba	0.000	0.001	0.000	0.013			0.013	0.008	0.139	0.016
Th	0.138	0.004	12.55	3.140			0.000	0.002	0.006	0.001
U	0.001	0.030	0.000	0.001			0.000	0.001	0.002	0.001
Nb	0.002	0.005	0.000	0.005			0.007	0.002	0.008	0.002
Ta	0.000	0.003	0.001	0.001			0.001	0.001	0.001	0.000
La	0.001	0.007	0.000	0.002			0.000	0.001	0.003	0.001
Ce	0.025	0.001	0.002	0.003			0.001	0.001	0.006	0.002
Pr	0.003	0.002	0.001	0.001			0.001	0.001	0.002	0.001
Sr	0.022	0.004	0.000	0.013			0.017	0.003	0.055	0.006
Nd	0.004	0.001	0.000	0.006			0.000	0.006	0.000	0.005
Zr	0.017	0.007	0.047	0.036			0.025	0.004	0.047	0.007
Hf	0.000	0.002	0.005	0.005			0.000	0.005	0.003	0.003
Sm	0.005	0.003	0.008	0.007			0.000	0.007	0.000	0.006
Eu	0.001	0.004	0.002	0.002			0.000	0.002	0.000	0.002
Ti	29.48	3.780	52.63	39.42			10.86	0.892	23.17	2.720
Gd	0.000	0.001	0.009	0.008			0.000	0.007	0.000	0.006
Tb	0.000	0.004	0.000	0.003			0.000	0.001	0.001	0.001
Dy	0.004	0.001	0.011	0.008			0.008	0.005	0.006	0.004
Ho	0.002	0.003	0.002	0.002			0.000	0.001	0.002	0.001
Er	0.008	0.001	0.016	0.011			0.004	0.004	0.004	0.003
Yb	0.025	0.001	0.045	0.032			0.007	0.006	0.009	0.005
Lu	0.006	0.008	0.011	0.007			0.002	0.001	0.003	0.001
Sc	-	-	-	-			-	-	3.378	0.288
V	3.688	0.516	5.132	3.488			4.012	0.360	4.174	0.308
Cr	73.59	66.98	64.10	14.84			281.7	56.36	-	-
Co	171.2	20.42	238.6	168.7			-	-	-	-
Ni	3354	524.1	4521	3318			2478	270.5	3365	245.6
Cu	3.150	0.656	4.17	2.96			10.80	0.932	2.297	0.178
Zn	66.15	9.696	65.72	31.64			58.65	4.656	61.09	4.968

Sample	KHO3- 24		KHO3- 25		KHO3- 27		KH96- 1		KH96-	
	Olivine	2 s.e.	Olivine	2 s.e.	Olivine	2 s.e.	Olivine	2 s.e	Olivine	2 s.e
Rb	0.013	0.002	0.003	0.002	0.003	0.003	0.003	0.001	0.004	0.002
Ba	0.014	0.013	0.004	0.005	0.046	0.009	0.006	0.005	0.008	0.009
Th	0.216	0.006	0.001	0.001	0.001	0.001	0.001	0.000	0.002	0.001
U	0.016	0.002	0.004	0.001	0.001	0.001	0.000	0.000	0.002	0.001
Nb	0.005	0.002	0.004	0.001	0.000	0.001	0.004	0.001	0.003	0.001
Ta	0.000	0.002	0.001	0.000	0.001	0.001	0.000	0.001	0.002	0.000
La	0.002	0.002	0.001	0.000	0.001	0.001	0.004	0.001	0.002	0.001
Ce	0.001	0.002	0.001	0.001	0.001	0.001	0.005	0.001	0.038	0.002
Pr	0.002	0.001	0.002	0.000	0.001	0.001	0.003	0.001	0.002	0.001
Sr	0.008	0.003	0.004	0.001	0.009	0.002	0.088	0.007	0.014	0.003
Nd	0.015	0.009	0.003	0.002	0.000	0.003	0.032	0.003	0.006	0.005
Zr	0.011	0.005	0.013	0.003	0.019	0.004	0.427	0.038	0.011	0.003
Hf	0.000	0.009	0.000	0.002	0.004	0.003	0.037	0.003	0.000	0.003
Sm	0.000	0.011	0.000	0.003	0.000	0.003	0.027	0.004	0.000	0.006
Eu	0.000	0.003	0.001	0.001	0.001	0.001	0.009	0.001	0.002	0.002
Ti	20.49	2.108	22.83	2.320	34.58	3.136	244.1	19.52	17.17	2.248
Gd	0.000	0.012	0.000	0.003	0.004	0.003	0.075	0.004	0.000	0.006
Tb	0.000	0.002	0.001	0.001	0.000	0.001	0.018	0.001	0.002	0.001
Dy	0.000	0.008	0.004	0.002	0.005	0.003	0.039	0.005	0.005	0.004
Ho	0.000	0.002	0.002	0.001	0.002	0.001	0.012	0.002	0.003	0.001
Er	0.000	0.006	0.008	0.002	0.009	0.003	0.044	0.006	0.006	0.003
Yb	0.014	0.009	0.024	0.006	0.003	0.001	0.082	0.010	0.016	0.006
Lu	0.003	0.002	0.005	0.001	0.026	0.007	0.016	0.002	0.004	0.001
Sc					0.007	0.001	6.380	0.608	2.862	0.264
V	1.874	0.189	3.370	0.360			25.17	1.872	3.208	0.252
Cr	2.468	0.264	107.3	65.12	3.624	0.336				
Co	57.47	6.184	151.7	14.36	68.74	30.43				
Ni	1728	183.5	3112	361.7	147.8	12.55	2608	168.7	3196	246.1
Cu	7.048	1.300	2.65	0.400	2801	275.5	1.778	0.168	1.744	0.145
Zn	46.40	4.532	60.22	6.856	2.622	0.324	49.10	3.940	54.46	4.772

Sample	KH96- 8		KH96- 18		KH96- 21		KH96- 24	
	Olivine	2 s.e.	Olivine	2 s.e.	Olivine	2 s.e.	Olivine	2 s.e.
<b>Rb</b>	0.007	0.003	0.019	0.002	0.005	0.003	0	0.001
<b>Ba</b>	0.000	0.011	0.128	0.011	0.100	0.016	0	0.004
<b>Th</b>	0.003	0.001	0.010	0.001	0.006	0.001	0	0
<b>U</b>	0.006	0.001	0.000	0.000	0.002	0.001	0.001	0
<b>Nb</b>	0.011	0.003	0.005	0.001	0.008	0.002	0	0.001
<b>Ta</b>	0.002	0.001	0.000	0.001	0.001	0.000	0	0
<b>La</b>	0.003	0.002	0.002	0.001	0.003	0.001	0.001	0
<b>Ce</b>	0.007	0.002	0.007	0.001	0.006	0.002	0.001	0
<b>Pr</b>	0.004	0.001	0.000	0.001	0.001	0.001	0	0
<b>Sr</b>	0.025	0.004	0.061	0.007	0.055	0.006	0.014	0.001
<b>Nd</b>	0.000	0.006	0.000	0.004	0.000	0.005	0	0.002
<b>Zr</b>	0.046	0.009	0.020	0.004	0.045	0.007	0.024	0.002
<b>Hf</b>	0.004	0.004	0.000	0.002	0.003	0.003	0	0.001
<b>Sm</b>	0.000	0.008	0.000	0.004	0.000	0.006	0	0.002
<b>Eu</b>	0.004	0.002	0.000	0.001	0.000	0.002	0.001	0.001
<b>Ti</b>	47.24	7.512	18.29	2.116	23.15	2.720	33.36	1.573
<b>Gd</b>	0.009	0.007	0.004	0.004	0.007	0.006	0	0.002
<b>Tb</b>	0.003	0.001	0.000	0.001	0.001	0.001	0.001	0
<b>Dy</b>	0.008	0.005	0.003	0.003	0.006	0.004	0.004	0.002
<b>Ho</b>	0.003	0.001	0.001	0.001	0.002	0.001	0.002	0
<b>Er</b>	0.010	0.004	0.004	0.002	0.005	0.003	0.006	0.001
<b>Yb</b>			0.017	0.005	0.009	0.005	0.026	0.003
<b>Lu</b>	0.023	0.008	0.004	0.001	0.003	0.001	0.006	0.001
<b>Sc</b>	0.005	0.002	2.266	0.336	3.374	0.288	2.847	0.167
<b>V</b>	4.946	0.532	2.492	0.256	4.172	0.304	2.773	0.120
<b>Cr</b>	7.256	0.628						
<b>Co</b>								
<b>Ni</b>	3695	319.3	3103	232.2	3357	245.0	2765	94.35
<b>Cu</b>	3.212	0.284	2.510	0.372	2.261	0.176	1.803	0.103
<b>Zn</b>	76.11	7.728	48.89	5.848	60.86	4.952	50.05	2.377

Table B.1.5.1. Trace element concentrations in Kilbourne Hole olivine by LA ICP-MS. All concentrations expressed in ppm.