Supplementary appendix 4: LA-ICPMS trace element data (in ppm) of zircon, monazite and garnet

LA-ICPMS zircon trace element data (in ppm) and Ti-in-zircon temperatures for KT7B

Spot	Ti	Average T (C)	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
KT7B_1	4.82	680.70	547.39	1.86	0.11	24.51	0.03	1.22	2.36	0.41	10.24	3.84	44.47	17.54	84.17	18.69	158.48	32.99	10162.65
KT7B_2	7.68	718.31	552.81	2.13	0.06	22.80	0.05	0.86	2.29	0.43	8.12	3.19	42.20	17.16	92.67	21.10	198.47	42.08	10308.12
KT7B_3	8.01	721.82	798.87	2.63	0.93	32.92	0.31	2.03	3.48	0.39	18.87	5.34	67.81	26.32	122.70	26.05	237.73	54.63	10605.00
KT7B_4	7.09	711.66	453.61	2.25	0.77	19.01	0.44	1.61	1.52	0.44	6.88	2.09	29.04	12.56	67.37	16.72	167.85	39.28	10930.54
KT7B_5	5.28	687.87	671.85	1.57	0.06	19.34	0.09	1.21	2.57	0.71	11.92	4.08	49.43	19.98	98.61	22.25	196.98	44.33	9526.35
KT7B_6	2.81	640.39	456.42	2.00	0.03	23.86	0.06	0.46	0.97	0.26	5.59	2.39	36.24	14.67	72.00	17.66	189.04	38.82	11830.30
KT7B_7	6.78	707.97	408.23	2.57	0.01	23.59	0.02	0.50	1.14	0.10	5.25	2.11	33.39	12.54	65.22	15.32	161.22	32.98	11522.03
KT7B_8	4.23	670.67	811.06	1.79	0.05	25.98	0.11	1.97	3.39	0.55	17.76	6.02	77.14	27.63	125.50	27.17	249.97	50.54	11183.22
KT7B_9	7.91	720.85	688.42	0.97	0.01	15.96	0.13	2.56	4.45	0.92	16.02	5.30	64.92	23.86	111.49	22.96	205.98	44.13	9617.28
KT7B_10	4.14	668.91	426.24	1.79	0.03	17.92	0.02	0.52	1.72	0.38	6.96	2.52	36.20	13.08	65.10	16.19	172.12	36.38	11025.95
KT7B_11	3.91	664.62	861.30	1.22	0.02	20.21	0.22	3.39	5.71	1.23	21.81	6.37	71.37	27.86	134.91	26.51	226.15	51.75	9998.37
KT7B_12	7.67	718.23	740.19	1.89	0.08	28.61	1.07	3.80	3.04	0.38	15.08	4.68	53.93	21.02	107.36	25.19	221.10	48.08	11434.95
KT7B_13	8.54	727.29	461.76	2.36	0.06	30.25	0.63	2.60	2.04	0.25	8.69	3.01	33.61	13.16	69.59	16.47	151.80	34.81	10861.53
KT7B_14	3.93	665.01	680.47	1.17	0.04	12.88	0.10	2.48	3.54	0.78	17.05	4.95	59.84	23.23	113.99	23.35	214.44	46.19	10518.36
KT7B_15	8.31	724.99	734.11	2.42	0.02	23.90	0.13	1.45	3.27	0.72	15.13	5.03	65.14	23.64	106.28	23.92	228.69	49.39	9634.69
KT7B_16	7.17	712.61	639.06	1.13	0.03	20.20	0.05	1.03	2.48	0.51	13.52	4.12	51.83	20.69	98.86	20.82	194.82	43.16	10592.75
KT7B_17	4.93	682.50	1169.58	2.13	0.01	40.98	0.26	4.91	8.40	2.22	38.83	10.05	103.26	36.69	168.99	34.67	294.62	59.06	8995.82
KT7B_18	5.49	690.88	910.80	1.89	0.27	26.41	0.20	2.67	3.63	0.64	18.87	6.05	80.28	29.39	142.29	32.12	309.52	63.31	12207.60
KT7B_19	11.98	757.18	1817.94	3.78	0.04	44.64	0.30	5.13	10.27	1.70	41.49	12.69	157.74	57.47	278.18	57.74	499.29	102.59	9819.30
KT7B_20	3.61	658.74	808.73	2.43	0.13	28.15	0.09	1.43	3.19	0.45	14.00	5.09	62.92	23.56	126.09	28.64	266.51	53.88	10727.85
KT7B_21	2.82	640.65	467.66	1.65	0.07	24.77	0.09	0.90	2.23	0.32	10.32	2.99	40.62	14.96	74.63	16.99	164.27	37.00	10996.36
KT7B_22	6.11	699.53	444.85	2.02	0.21	21.75	0.02	0.49	1.21	0.20	6.55	2.69	36.86	14.16	72.42	17.36	153.59	31.67	12282.41
KT7B_23	9.53	736.80	764.18	3.69	0.23	36.52	0.11	1.63	2.91	0.54	11.93	4.42	63.73	25.94	128.86	28.19	284.57	62.51	12528.78
KT7B_24	6.91	709.53	583.44	1.70	0.09	18.15	0.03	0.64	2.15	0.62	14.40	3.81	50.23	18.09	84.94	18.55	172.13	36.12	9214.68
KT7B_25	2.53	633.02	773.40	4.55	0.24	43.12	0.10	0.80	2.87	0.42	14.84	4.83	71.88	24.98	113.55	25.49	217.07	43.43	11466.10
KT7B_26	5.32	688.45	562.73	2.40	0.02	18.61	0.02	0.55	2.67	0.34	9.64	3.64	44.92	16.24	84.89	20.06	172.05	35.58	10397.78
KT7B_27	7.81	719.69	478.98	3.70	0.02	33.55	0.03	0.42	0.92	0.13	7.94	3.01	38.68	14.94	76.92	17.38	148.70	32.31	13524.59
KT7B_28	16.94	789.53	633.11	1.98	0.05	20.24	0.13	1.95	2.56	0.47	14.48	4.68	55.97	18.66	96.57	22.35	192.06	41.20	9335.58
KT7B_29	5.61	692.61	693.06	1.97	0.19	44.13	1.02	6.41	5.85	0.90	21.52	5.89	66.43	22.64	107.50	23.35	191.07	39.66	10528.44
KT7B_30	2.93	643.46	347.98	1.69	0.11	20.39	0.07	0.42	0.95	0.39	4.28	1.79	25.92	11.29	58.90	14.79	155.19	35.02	11590.79
KT7B_31	9.57	737.14	730.02	2.25	0.02	23.90	0.12	1.97	4.12	0.64	16.72	5.31	62.06	25.00	121.40	26.83	251.67	51.28	9872.79
KT7B_32	3.84	663.41	242.23	1.54	0.04	14.84	0.02	0.40	0.86	0.27	4.38	1.40	18.55	7.28	40.25	9.37	90.48	18.94	11724.74
KT7B_33	4.74	679.31	866.30	4.55	0.02	51.99	0.09	1.49	3.28	0.71	18.29	6.29	74.31	27.05	138.08	28.54	246.47	48.78	11268.58
KT7B_34	10.51	745.37	491.72	3.32	0.27	30.11	0.41	2.56	1.90	0.13	7.87	2.72	36.48	15.31	80.89	17.95	167.98	35.08	12346.29
KT7B_35	9.60	737.47	383.11	1.50	0.03	23.14	0.02	0.46	1.19	0.28	4.73	2.00	28.68	10.82	63.86	14.70	164.43	37.73	12108.21
KT7B_36	10.81	747.93	1006.44	0.95	0.03	20.08	0.38	4.60	7.37	1.42	31.76	8.40	94.00	33.04	160.08	32.55	278.35	56.27	8582.40
KT7B_37	13.07	765.10	518.69	1.19	0.12	18.85	0.12	1.54	3.10	0.54	13.62	3.70	44.38	17.43	85.16	18.19	156.50	32.26	9294.90
KT7B_38	5.85	695.98	769.10	2.31	0.05	21.77	0.09	2.00	3.20	0.78	14.82	5.19	70.83	24.86	117.62	26.72	247.20	49.89	9597.13
KT7B_39	10.23	743.01	1138.86	1.22	0.01	17.81	0.32	5.07	4.99	1.39	30.31	8.92	101.37	35.60	177.43	37.25	324.02	64.65	8412.80
KT7B_40	5.00	683.46	953.88	4.00	0.10	35.44	0.13	1.40	3.16	0.31	19.39	6.16	74.55	27.89	144.21	32.83	264.02	55.32	11330.21
KT7B_41	9.25	734.23	549.72	1.05	0.01	17.82	0.10	1.62	2.57	0.83	13.07	4.11	51.07	17.24	83.41	17.85	150.06	32.96	9340.23
KT7B_42	12.80	763.20	566.87	1.40	0.02	16.54	0.03	1.61	2.44	0.52	11.97	4.36	51.20	18.61	88.41	19.65	175.32	39.66	9518.35
KT7B_43	7.65	717.94	1062.33	1.38	0.35	23.94	1.74	5.89	6.78	1.45	24.61	8.35	94.01	33.82	173.78	35.77	310.23	68.26	9522.72
KT7B_44	7.14	712.21	1006.00	1.37	0.40	19.70	0.29	3.45	6.82	1.37	26.09	8.28	104.01	36.67	157.27	32.19	295.00	63.85	8996.55
KT7B_45	2.08	619.57	383.54	0.84	0.61	14.69	0.34	1.20	1.09	0.26	4.15	1.94	24.59	12.21	73.93	16.86	179.79	40.13	12017.53
KT7B_46	7.89	720.59	1044.01	1.38	0.08	16.62	0.25	3.35	6.10	1.36	26.74	8.29	88.00	32.47	160.43	32.90	285.30	60.10	8260.72
KT7B_47	8.12	723.01	697.36	1.72	0.13	22.52	0.06	1.87	4.31	0.58	14.47	4.59	57.98	20.84	110.12	23.27	212.86	43.30	9341.07

KT7B_48	14.37	773.89	1299.38	3.60	0.27	37.79	0.97	4.91	7.22	0.79	26.95	9.37	120.61	43.60	210.22	43.86	422.00	83.63	9950.04
KT7B_49	3.87	663.91	662.67	2.75	0.17	32.89	0.07	1.00	2.58	0.39	13.82	4.51	53.79	20.88	104.80	23.91	225.58	44.94	11261.32

LA-ICPMS zircon trace element data (in ppm) and Ti-in-zircon temperatures for KT9B

Spot	Ti	Average T (C)	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf
KT9B_1	5.62	692.72	516.28	1.38	0.01	16.15	0.05	0.92	2.19	0.59	11.87	3.72	45.63	17.45	80.36	17.08	194.15	35.81	8656.82
KT9B_2	14.87	777.12	701.61	2.64	0.54	31.15	0.15	1.96	2.42	0.40	14.43	4.43	52.32	22.29	116.76	26.74	287.75	49.25	11213.42
KT9B_3	9.69	738.24	915.29	2.03	0.02	23.98	0.19	2.99	5.20	1.00	23.05	6.71	76.36	32.29	148.44	33.61	291.40	63.33	10871.02
KT9B_4	15.32	779.97	720.35	3.93	0.01	30.21	0.06	1.27	3.21	0.46	16.52	4.94	56.12	23.58	121.23	26.38	239.06	49.71	12659.79
KT9B_5	15.18	779.10	611.07	1.81	0.02	20.49	0.07	1.16	2.85	0.62	12.35	4.23	46.80	19.45	96.90	22.29	191.72	40.87	9953.02
KT9B_6	6.72	707.19	377.39	1.53	0.04	21.67	0.01	0.84	1.08	0.25	6.87	2.25	27.81	11.42	61.88	14.54	148.85	31.74	12082.68
KT9B_7	20.58	808.68	776.36	2.04	0.01	17.26	0.11	1.96	3.15	0.76	16.97	5.22	69.40	25.86	128.43	26.13	294.12	57.00	8711.50
KT9B_8	4.59	676.83	509.50	3.41	0.02	31.91	0.03	0.70	1.62	0.51	9.44	3.31	43.75	17.13	81.68	18.72	195.79	43.19	13033.74
KT9B_9	1.72	606.87	277.98	1.64	0.01	20.56	0.03	0.34	0.88	0.28	5.27	1.60	24.48	9.38	43.99	11.18	124.32	27.62	12585.66
KT9B_10	2.15	621.64	426.98	1.13	0.01	18.32	0.05	0.86	2.64	0.52	9.71	3.09	39.04	15.18	66.12	15.07	148.53	31.57	9564.95
KT9B_11	10.20	742.79	459.56	3.51	0.01	26.43	0.06	0.58	1.52	0.19	8.35	3.02	38.18	14.75	70.61	17.21	159.97	34.34	11833.27
KT9B_12	6.69	706.90	273.60	1.76	0.20	20.80	0.02	0.44	0.94	0.21	3.81	1.49	19.97	8.34	42.67	11.60	110.38	26.42	11936.54
KT9B_13	10.14	742.21	549.38	3.04	0.02	27.65	0.07	0.42	1.71	0.44	9.29	3.74	42.33	17.15	84.14	20.05	181.99	36.08	11472.22
KT9B_14	7.90	720.72	865.76	3.41	0.02	28.94	0.06	0.89	3.43	0.43	16.12	5.63	74.89	28.97	144.89	30.00	273.66	58.52	10689.18
KT9B_15	6.74	707.49	296.47	2.09	0.01	19.13	0.05	0.36	0.64	0.25	3.90	1.38	22.07	9.72	54.61	13.22	148.79	31.42	12134.83
KT9B_16	12.63	761.97	417.00	1.24	0.02	16.08	0.03	0.61	1.64	0.42	6.84	2.71	37.64	14.79	72.15	14.83	153.47	31.69	10241.82
KT9B_17	12.29	759.49	868.59	0.97	0.23	17.98	0.27	3.09	5.61	1.80	20.57	6.46	77.00	30.33	136.97	29.41	272.78	56.55	9545.76
KT9B_18	7.59	717.29	338.45	1.08	0.18	13.04	0.09	1.03	1.16	0.54	5.43	2.13	27.80	11.80	57.71	14.30	145.87	31.28	11330.81
KT9B_19	6.26	701.42	722.90	3.82	0.11	39.24	0.03	0.82	3.27	0.36	10.80	4.48	59.86	24.07	113.51	26.40	273.43	54.23	11764.22
KT9B_20	6.54	705.01	404.03	1.82	0.06	17.47	0.04	0.62	1.23	0.36	7.08	2.46	28.60	13.23	62.01	14.31	140.13	26.38	11005.51
KT9B_21	11.52	753.62	409.24	3.75	0.01	20.46	0.03	0.36	1.18	0.42	6.74	2.18	29.86	13.86	67.07	16.46	190.29	37.13	12309.93
KT9B_22	9.94	740.49	310.35	2.32	0.01	22.16	0.04	0.33	0.86	0.13	4.78	1.79	23.22	9.63	50.21	12.43	135.97	25.12	11262.99
KT9B_23	10.39	744.36	251.66	2.45	0.01	20.40	0.05	0.35	0.90	0.24	4.29	1.43	18.71	8.37	43.30	9.92	118.36	23.08	10726.91
KT9B_24	7.34	714.59	441.83	1.23	0.02	18.68	0.05	1.00	2.14	0.59	11.18	3.19	41.27	15.38	71.27	16.58	149.47	35.13	11625.83
KT9B_25	8.19	723.79	588.75	1.65	0.05	19.02	0.07	1.13	2.57	0.50	13.29	3.83	48.03	19.67	101.47	20.68	211.14	41.49	10393.65
KT9B_26	15.85	783.21	454.89	0.95	0.01	15.67	0.06	1.84	3.05	0.77	11.92	3.45	41.88	14.43	72.26	15.08	135.02	28.44	8769.90
KT9B_27	7.41	715.28	765.95	3.68	0.01	31.86	0.10	0.67	2.86	0.29	16.79	5.13	60.82	25.97	128.23	27.64	258.72	54.56	12398.24
KT9B_28	6.38	702.93	708.29	1.06	0.08	19.13	0.07	1.82	3.89	0.73	18.44	5.43	59.36	23.45	109.15	23.43	220.46	43.48	10380.61
KT9B_29	5.86	696.05	508.95	2.26	0.00	25.78	0.05	1.51	1.77	0.47	10.91	3.80	42.49	16.42	80.29	18.31	178.10	36.24	10349.79
KT9B_30	7.64	717.91	754.89	2.58	0.04	31.44	0.09	2.26	2.84	0.53	17.11	5.04	64.09	25.02	117.63	25.98	241.02	51.23	11249.21
KT9B_31	4.82	680.61	522.29	1.24	0.13	14.91	0.09	1.57	2.85	0.79	11.64	3.59	44.79	17.76	81.67	17.99	187.47	43.70	11360.26
KT9B_32	6.88	709.20	929.40	1.99	0.21	21.23	0.34	3.12	5.21	1.06	19.64	6.94	80.46	30.47	138.79	31.91	288.66	61.11	9144.21
KT9B_33	7.83	719.94	1007.73	4.12	0.02	22.90	0.10	2.27	4.14	0.96	23.52	6.80	85.26	31.85	159.52	36.30	359.34	67.75	9770.60
KT9B_34	10.93	748.88	372.29	1.50	0.01	20.40	0.02	0.68	1.51	0.53	8.34	2.49	33.82	12.73	59.54	12.78	122.00	26.56	10035.03
KT9B_35	8.71	729.02	1229.87	1.75	0.05	22.73	0.29	4.68	7.16	1.50	34.07	10.39	113.08	39.96	177.43	39.23	342.96	68.27	8481.42
KT9B_36	6.00	698.00	867.77	1.01	0.01	15.33	0.13	3.12	4.52	1.42	22.96	6.86	76.43	26.79	127.77	27.71	249.80	46.97	8248.86
KT9B_37	13.26	766.43	467.34	1.09	0.57	11.17	0.18	2.02	3.08	0.40	9.83	3.35	40.27	13.90	66.94	16.10	156.27	29.30	7691.00
KT9B_38	10.77	747.54	890.51	3.47	0.04	29.44	0.10	2.13	4.28	0.69	17.35	6.18	76.27	29.80	130.71	31.02	310.87	57.84	8739.97
KT9B_39	16.57	787.45	1432.01	3.74	0.19	36.17	0.22	3.75	6.65	1.76	31.62	11.63	129.09	48.82	209.18	46.53	451.93	79.19	8088.14
KT9B_40	11.60	754.21	895.31	1.31	0.01	19.82	0.34	3.36	5.42	1.43	33.42	6.95	84.80	30.32	147.26	28.47	252.66	50.05	9495.33
KT9B_41	10.66	746.62	900.44	2.44	0.01	21.18	0.13	2.45	4.38	0.91	18.93	6.46	78.55	33.04	144.98	32.42	329.76	63.11	8719.60
KT9B_42	10.93	748.87	745.54	2.29	0.01	22.66	0.09	1.73	3.27	0.54	17.65	5.51	59.60	24.00	116.93	26.51	257.88	45.41	9049.30
KT9B_43	7.25	713.52	707.06	3.74	0.02	30.93	0.11	1.39	2.30	0.46	13.66	4.85	54.78	22.87	112.11	25.36	281.26	48.86	10431.99
KT9B_44	7.77	719.31	646.58	1.33	0.01	14.73	0.10	1.53	2.90	0.89	15.71	4.59	51.68	20.02	98.89	22.50	239.62	41.58	7683.68

LA-ICPMS monazite trace element data (in ppm) for KT7B

Sample	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
KT 7B_1	50204.4	177912.1	342496.9	36588.7	142179.4	24214.6	1903.5	16081.2	1541.7	6006.4	700.5	950.1	60.7	184.0	15.9
KT 7B_2	52305.2	168266.9	327799.0	35129.3	138512.2	24516.6	1976.3	16833.7	1567.0	5966.9	585.4	675.9	34.2	90.4	7.3
KT 7B_3	52394.3	174554.5	337366.5	35873.9	142439.2	23633.5	1901.6	16262.6	1396.8	4852.6	474.1	531.3	27.5	74.9	6.3
KT 7B_4	51524.4	173491.7	337293.1	36139.2	141709.1	24717.5	1875.1	15424.5	1301.0	4288.6	370.1	399.5	19.8	57.2	4.7
KT 7B_5	57236.4	163999.9	337877.9	38927.8	153798.8	25586.4	1807.0	17219.9	1339.6	3602.4	268.9	243.6	14.0	46.5	3.9
KT 7B_6	53730.6	165344.1	337269.0	37944.8	149454.6	26618.9	1881.2	17485.0	1342.3	3669.4	276.2	238.6	13.6	45.7	3.6
KT 7B_7	47939.2	162680.4	340991.2	40458.5	155034.5	25916.0	1790.5	18291.1	1357.0	3420.1	243.1	216.5	10.2	26.0	2.0
KT 7B_8	42735.6	164843.0	342731.3	39559.5	152397.9	25985.8	1772.5	17992.5	1327.3	3463.5	242.8	211.9	10.2	27.1	2.1
KT 7B_9	48535.8	173616.4	337420.7	36668.4	147287.7	24887.5	1901.9	16298.5	1300.9	3633.2	262.7	215.8	10.6	30.3	3.4
KT 7B_10	45392.6	165602.6	342465.8	39460.7	157365.8	28916.7	1806.2	19455.4	1304.8	3159.9	221.8	207.1	11.4	31.5	2.3
KT 7B_11	51814.9	183239.4	343829.5	39437.6	143197.9	25645.7	2071.6	14425.2	1150.4	3023.9	223.6	204.4	10.3	28.3	2.5
KT 7B_12	47996.6	163927.5	351595.7	40926.3	152018.3	24969.3	1645.4	16749.6	1179.5	2827.6	198.6	183.4	9.2	26.4	2.1
KT 7B_13	50600.2	167785.4	337771.9	38928.4	152029.7	26381.4	1549.6	14200.1	1028.5	2687.2	191.9	198.6	9.8	25.1	2.2
KT 7B_14	48119.7	170465.2	341323.1	39976.3	151832.6	27324.1	1764.8	19670.6	1489.4	3457.7	210.4	143.0	6.8	24.4	2.9
KT 7B_15	49622.0	178945.7	334621.4	39812.8	141960.3	24635.8	2021.4	15877.9	1171.1	2977.1	200.3	161.5	7.7	25.6	2.6
KT 7B_16	39117.6	168588.7	344014.1	38473.0	157490.2	22877.5	1697.1	14809.8	1086.7	2720.3	181.8	148.3	6.0	19.3	1.6
KT 7B_17	46842.8	175578.5	337820.2	37982.4	152711.4	26994.8	1832.9	16637.7	1268.7	3146.1	206.3	162.2	9.1	33.1	3.6
KT 7B_18	45149.5	179914.4	340434.6	39823.6	137952.4	24139.8	2028.9	15003.1	1092.3	2550.6	168.2	133.5	5.6	13.6	1.1
KT 7B_19	41802.9	159058.5	336520.3	40219.7	161751.8	28217.9	1693.1	19999.9	1269.8	2657.2	156.3	112.4	5.0	13.2	1.0
KT 7B_20	50395.4	160502.1	329966.4	38614.2	166475.4	22786.0	1489.2	12215.0	920.5	2345.4	163.4	145.8	6.9	20.7	1.6
KT 7B_21	46902.1	165267.4	342515.6	38898.0	160380.6	23918.4	1639.4	15421.4	1028.3	2446.7	158.3	126.6	5.5	14.8	1.4
KT 7B_22	47884.3	176732.6	343643.9	38437.9	142283.0	25355.1	1537.8	11396.9	863.3	2300.1	157.9	130.7	6.3	19.0	2.0
KT 7B_23	38317.0	168782.2	344820.8	39254.4	159605.0	24044.2	1829.3	14576.6	999.8	2293.4	136.0	97.1	3.9	12.2	0.9
KT 7B_24	51979.3	182963.6	345468.5	40476.4	138162.1	24105.6	2100.0	14140.6	974.3	2158.3	134.8	104.6	4.3	10.7	1.0
KT 7B_25	37542.6	168700.1	341870.5	40028.0	154902.9	27844.2	1726.6	19732.6	1337.9	2668.8	139.2	86.6	5.1	18.8	2.5
KT 7B_26	46394.7	165552.3	339895.4	39673.7	160168.1	29832.5	1729.9	19515.9	1210.4	2477.2	134.5	86.5	3.8	10.3	0.8
KT 7B_27	40499.2	181617.5	347039.0	40523.1	147567.3	23224.4	1989.6	12741.3	849.1	1750.5	109.3	94.2	4.6	11.6	1.0
KT 7B_28	42142.8	170470.5	345437.5	39522.7	162056.0	23524.2	1778.6	13701.1	923.9	1952.9	111.1	74.3	3.1	9.1	0.9
KT 7B_29	29671.8	169563.1	337638.5	37647.7	152916.3	25628.6	1482.8	14558.9	902.8	1817.4	98.3	80.1	4.4	12.5	1.6
KT 7B_30	44850.6	180664.0	349835.0	37453.0	140741.1	25049.6	1995.2	15110.9	966.2	1899.1	102.5	69.4	4.1	15.2	2.1
KT 7B_31	31105.4	165282.0	332635.7	38565.0	166573.7	23388.9	1146.5	11162.8	628.9	1328.2	88.3	78.7	3.5	10.6	1.0
KT 7B_32	47037.0	178755.2	346145.5	36819.2	146993.7	28382.4	1646.6	15847.1	995.8	1932.0	87.0	59.9	2.5	8.7	1.2
KT 7B_33	42000.7	158265.3	338457.9	40603.1	172671.8	30801.7	1587.7	19955.4	1002.0	1684.1	78.5	44.3	1.8	6.0	0.7
KT 7B_34	41126.2	162410.3	343127.4	40047.0	172051.0	30217.8	1570.0	19171.4	944.6	1530.0	67.4	34.7	1.5	5.5	0.6
KT 7B_35	48230.4	161064.1	338026.6	39911.4	166618.2	26437.1	1312.8	13973.2	769.9	1199.3	55.6	37.9	1.8	6.1	0.7

LA-ICPMS monazite trace element data (in ppm) for KT7B

Spot	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
KT 9B_1	169.81	142701.85	330883.54	37326.95	156350.04	22240.88	391.85	4416.20	126.52	184.33	9.37	7.00	0.50	1.05	0.07
KT 9B_2	207.56	125316.20	318914.45	39747.24	158427.93	19172.82	330.64	4199.43	128.04	169.29	9.07	7.90	0.55	1.28	0.12
KT 9B_3	289.25	133946.30	299637.41	36314.51	159375.43	23099.94	566.77	6614.58	216.40	304.77	13.11	10.49	0.69	1.46	0.20
KT 9B_4	519.34	146649.49	363983.92	42109.64	167498.81	23348.54	409.93	4973.31	194.52	329.88	22.71	19.58	1.19	2.94	0.28
KT 9B_5	526.91	142878.59	325117.54	37296.35	150391.69	24823.27	762.56	8609.32	334.73	473.37	23.29	16.78	0.99	2.68	0.17
KT 9B_6	552.14	166188.69	329775.93	36451.00	156321.81	24461.20	1032.23	10345.99	465.47	637.06	25.90	17.85	0.79	2.72	0.45
KT 9B_7	778.24	150903.16	333087.18	39488.29	155907.51	24453.11	1044.39	10754.33	457.77	660.02	33.91	27.75	1.30	4.22	0.40
KT 9B_8	881.58	166642.34	346179.85	37220.31	152905.98	26148.44	1285.08	12791.29	629.98	935.83	42.52	26.69	1.18	3.65	0.41
KT 9B_9	914.42	166560.44	330698.32	37976.00	164631.82	26007.12	1214.88	12595.08	678.36	981.94	39.47	25.77	1.18	4.80	0.53
KT 9B_10	1324.39	172495.82	344991.36	38681.40	157009.71	27769.53	1507.90	13900.19	804.32	1364.91	62.61	34.66	1.45	4.65	0.61
KT 9B_11	1958.07	182826.74	344010.48	37174.09	154935.50	27871.23	1721.12	14835.79	1023.56	1952.77	90.10	52.41	2.09	5.70	0.64

KT 9B_12	2385.10	165292.44	362527.91	38805.82	147987.53	25452.70	1410.26	12599.43	850.34	1614.31	89.59	71.74	3.38	8.41	0.87
KT 9B_13	2666.37	161211.23	328643.43	37523.60	169312.28	23860.30	765.61	8650.08	571.77	1587.45	125.25	118.62	6.82	25.01	2.14
KT 9B_14	2900.95	161525.39	333840.28	37540.56	157784.55	23885.46	1134.25	12291.11	772.02	1849.33	127.59	102.92	4.41	13.98	1.01
KT 9B_15	3295.90	166419.02	349126.92	37900.84	144952.66	24896.19	1561.74	12946.39	955.88	2240.03	136.05	103.53	4.72	12.53	1.09
KT 9B_16	3337.37	171876.47	339111.70	38893.17	157687.15	28405.32	1616.18	17773.02	1213.59	2524.68	146.91	111.55	4.65	13.72	1.12
KT 9B_17	3594.41	172047.01	352555.46	37676.84	145291.24	25082.42	1740.39	13089.72	1040.66	2351.73	144.87	118.30	5.89	16.20	1.32
KT 9B_18	4198.98	162697.43	345738.30	39744.47	155082.97	25322.50	1677.38	15137.00	1120.43	2592.16	167.74	141.85	5.66	15.97	1.20
KT 9B_19	4217.90	177125.97	335175.51	37593.85	160689.84	28347.34	1658.00	16024.49	1252.13	3015.28	192.19	147.13	6.51	19.97	1.64
KT 9B_20	4338.82	169982.15	357006.08	38064.05	146367.28	25030.42	1537.41	13201.37	972.55	2349.08	156.00	127.19	6.49	14.66	1.40
KT 9B_21	4490.59	170184.60	324203.28	37523.24	158307.50	26352.29	1930.27	15284.12	1233.81	3138.40	210.43	183.53	9.09	29.55	2.65
KT 9B_22	4495.98	155215.42	358658.92	39903.16	155673.23	27665.87	1430.80	12878.95	845.13	2205.32	207.83	222.85	10.00	26.81	1.89
KT 9B_23	6094.69	162742.59	354919.70	40751.85	150045.31	23865.74	1779.70	16015.05	1269.13	3145.90	244.79	215.54	9.65	24.02	1.85
KT 9B_24	6109.40	166714.65	344624.83	39049.85	155239.48	28432.51	1781.73	17459.60	1277.85	3156.06	229.57	225.57	12.66	33.82	2.69
KT 9B_25	6255.00	164268.90	343580.13	40029.50	151493.79	26274.28	1778.81	18513.11	1325.41	3400.99	235.76	206.82	9.95	24.03	2.02
KT 9B_26	7855.49	168960.57	341474.04	38040.09	146485.55	24134.45	1928.32	15747.01	1355.96	3967.68	309.92	316.92	15.86	54.75	5.04
KT 9B_27	7967.87	159871.34	334756.51	40096.40	153442.68	26997.13	1930.89	16865.89	1442.38	4056.15	298.57	292.16	15.70	50.15	4.09
KT 9B_28	9598.80	168936.35	343393.91	37425.99	149354.95	24810.08	1928.65	16093.58	1329.47	4205.02	380.03	431.26	22.99	66.67	5.73
KT 9B_29	11851.88	158122.73	355947.71	39264.86	149744.27	27322.28	1799.58	18243.31	1616.55	4874.92	423.41	444.82	21.61	53.39	3.47

Garnet trace element data (in ppm) - KT7B

Spot	Ti	Y	Zr	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
KT-7B-C_1	204.65	486.09	18.05	0.03	0.13	0.16	3.22	11.80	0.55	34.56	6.74	42.45	7.44	13.02	1.76	10.29	1.74
KT-7B-C_2	195.58	509.31	18.85	0.01	0.07	0.13	3.00	11.34	0.60	35.65	7.31	46.76	7.23	12.44	1.86	10.22	1.66
KT-7B-C_3	197.70	437.19	23.21	0.21	0.25	0.18	3.77	12.40	0.54	34.43	6.98	41.05	6.66	12.51	1.95	10.41	1.63
KT-7B-C_4	213.93	472.73	24.28	0.00	0.07	0.13	3.46	12.34	0.57	37.34	7.54	43.45	7.42	11.36	1.61	10.03	1.57
KT-7B-C_5	198.93	462.31	23.38	0.02	0.12	0.11	2.73	12.49	0.53	40.08	7.73	41.13	6.48	13.27	1.78	11.31	1.61
KT-7B-C_6	186.58	396.70	27.79	0.18	0.26	0.11	2.95	12.30	0.49	40.19	7.83	34.50	6.86	15.53	1.90	9.00	1.41
KT-7B-C_7	203.74	435.11	22.07	0.06	0.13	0.11	3.34	11.61	0.60	36.36	7.28	41.41	8.31	15.37	1.83	10.85	1.72
KT-7B-C_8	220.95	357.13	23.87	0.00	0.15	0.16	4.16	14.33	0.64	44.50	7.64	30.78	5.11	14.85	1.91	10.78	1.98
KT-7B-C_9	213.27	458.48	30.56	0.05	0.07	0.10	3.20	13.75	0.70	51.48	8.85	41.61	7.22	14.01	1.71	11.53	1.75
KT-7B-C_10	193.28	369.50	23.02	0.13	0.20	0.12	3.21	11.63	0.53	44.47	7.47	27.47	7.76	13.32	1.75	10.18	1.50
KT-7B-R_1	177.65	136.78	26.92	0.05	0.28	0.20	3.56	11.69	0.49	33.17	5.89	28.91	4.56	9.00	0.98	6.61	0.86
KT-7B-R_2	186.92	122.96	27.33	0.03	0.22	0.18	4.24	11.19	0.44	27.64	5.29	26.38	3.86	7.71	0.91	6.51	0.69
KT-7B-R_3	153.65	118.53	28.31	0.02	0.28	0.22	3.92	13.38	0.52	28.48	4.83	26.69	3.86	7.37	0.80	5.75	0.70
KT-7B-R_4	173.58	144.65	30.02	0.13	0.58	0.27	4.94	12.31	0.57	31.94	6.35	30.39	4.74	9.20	0.99	5.76	0.77
KT-7B-R_5	185.76	124.68	27.47	0.02	0.17	0.21	4.81	12.26	0.55	31.70	5.33	27.89	4.23	7.95	0.94	5.45	0.68
KT-7B-R_6	166.53	117.35	24.91	0.03	0.42	0.15	4.14	11.48	0.51	29.76	5.11	25.99	3.76	7.43	0.76	4.35	0.64
KT-7B-R_7	177.76	125.29	24.96	0.10	0.33	0.17	4.57	11.16	0.52	31.15	5.50	27.60	4.04	7.94	0.80	5.61	0.66
KT-7B-R_8	186.43	119.88	27.46	0.04	0.20	0.18	4.14	11.41	0.60	29.28	5.15	26.09	4.11	7.54	0.92	5.99	0.61
KT-7B-R_9	175.57	116.60	24.14	0.04	0.38	0.20	3.94	10.84	0.50	28.70	5.23	26.91	3.97	6.96	0.86	4.87	0.59
KT-7B-R_10	165.88	113.22	25.11	0.01	0.17	0.20	4.15	10.25	0.52	27.47	4.84	25.57	3.84	7.05	0.83	5.23	0.55

Garnet trace element data (in ppm) - KT9B

Spot	Ti	Y	Zr	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
KT-9B-C_1	167.01	83.60	31.35	0.00	0.00	0.00	0.48	7.54	0.91	24.30	3.85	18.57	2.95	6.92	0.91	6.48	0.99
KT-9B-C_2	163.36	86.69	28.24	0.00	0.01	0.01	0.35	6.71	0.71	26.83	4.16	20.92	3.21	6.94	0.98	6.69	1.09
KT-9B-C_3	172.40	82.85	29.30	0.00	0.00	0.02	0.38	6.59	0.71	23.28	3.80	18.15	2.98	6.86	0.97	6.95	0.91
KT-9B-C_4	133.63	89.14	24.46	0.00	0.00	0.01	0.29	5.60	0.63	25.17	4.54	21.64	3.29	6.95	0.94	6.50	0.95
KT-9B-C_5	175.53	85.12	33.49	0.00	0.00	0.01	0.27	6.79	0.74	25.46	3.97	18.99	2.98	7.11	0.97	6.67	0.92
KT-9B-C_6	125.12	89.07	20.81	0.01	0.00	0.01	0.08	4.58	0.70	25.38	4.61	21.44	3.27	7.19	0.84	6.28	0.92
KT-9B-C_7	154.08	84.91	28.95	0.00	0.02	0.00	0.30	6.09	0.61	26.35	4.18	19.31	3.04	7.23	0.94	6.51	0.93
KT-9B-C_8	157.22	85.71	27.64	0.00	0.08	0.02	0.38	6.40	0.68	25.86	4.43	19.47	3.00	6.75	0.91	5.87	0.91
KT-9B-C_9	174.76	82.30	28.09	0.01	0.03	0.01	0.45	5.99	0.75	24.13	3.75	17.19	2.92	7.18	0.86	6.45	0.84
KT-9B-C_10	155.40	89.98	25.86	0.00	0.01	0.01	0.29	6.25	0.69	27.45	4.32	20.83	3.30	7.09	0.87	6.90	0.90
KT-9B-R_1	155.66	66.45	14.98	0.01	0.03	0.02	1.06	6.77	0.72	11.11	2.15	13.27	2.67	6.51	0.83	5.59	0.81

KT-9B-R_2	153.58	70.57	17.00	0.00	0.00	0.02	1.04	7.59	0.75	11.43	2.26	14.32	2.68	7.24	0.95	5.85	0.82
KT-9B-R_3	154.16	67.28	15.02	0.00	0.02	0.02	1.45	6.70	0.78	11.46	2.14	13.09	2.44	6.31	0.78	5.49	0.78
KT-9B-R_4	153.45	58.73	12.62	0.00	0.02	0.05	1.23	5.92	0.57	9.00	1.81	11.38	2.03	5.41	0.60	4.47	0.59
KT-9B-R_5	151.57	67.31	16.91	0.01	0.00	0.02	0.78	6.17	0.77	12.05	2.22	13.65	2.46	6.70	0.81	5.49	0.75
KT-9B-R_6	151.30	66.82	16.18	0.00	0.02	0.04	1.27	7.13	0.65	11.91	2.42	13.94	2.56	6.22	0.75	4.96	0.68
KT-9B-R_7	156.62	68.13	16.28	0.01	0.02	0.01	1.23	5.69	0.77	12.86	2.38	14.00	2.48	6.41	0.86	5.53	0.70
KT-9B-R_8	150.38	70.65	17.22	0.00	0.02	0.02	1.29	7.33	0.69	14.10	2.45	14.71	2.65	6.44	0.80	5.22	0.73
KT-9B-R_9	150.26	85.32	17.93	0.00	0.02	0.02	1.43	6.88	0.77	14.62	2.77	16.69	2.88	6.42	0.89	5.50	0.75
KT-9B-R_10	146.76	69.97	21.01	0.00	0.03	0.02	1.27	7.34	0.59	15.19	2.60	13.82	2.35	5.94	0.85	4.69	0.63