

ESI Table S5. Analytical results for jadeite using crater volume-corrected LA-MFC-ICPMS<sup>a</sup>

Run #	Ablation condition	Sample	Crat. vol. (µm <sup>3</sup> )	Li (ppm)	2SE (ppm)	<sup>6</sup> Li / V	2SE	<sup>7</sup> Li / V	2SE	<sup>7</sup> Li/ <sup>6</sup> Li	2SE	δ <sup>7</sup> Li	δ <sup>7</sup> Li (vcv)	2SE
Run1	100um/10Hz/193nm (150 mJ)	SRM612_1	549779	<b>40.2</b>		0.0930	0.0026	1.4654	0.0405	15.750	0.010	<b>31.20</b>		0.65
Run2	100um/10Hz/193nm (150 mJ)	Jade-0	290597	20.2	0.9	0.0261	0.0012	0.3981	0.0180	15.276	0.018	1.00	0.65	1.15
Run3	100um/10Hz/193nm (150 mJ)	SRM612_2	549779			0.0976	0.0021	1.5369	0.0335	15.753	0.014			0.86
Run4	100um/10Hz/193nm (150 mJ)	Jade-1	290597	28.3	0.7	0.0373	0.0009	0.5690	0.0133	15.271	0.010	0.05	-0.30	0.62
Run5	100um/10Hz/193nm (150 mJ)	SRM612_3	549779			0.0968	0.0025	1.5262	0.0393	15.770	0.009			0.58
Run6	100um/10Hz/193nm (150 mJ)	Jade-2	290597	39.4	1.6	0.0515	0.0021	0.7848	0.0314	15.251	0.010	-0.76	-1.11	0.64
Run7	100um/10Hz/193nm (150 mJ)	SRM612_4	549779			0.0954	0.0019	1.5021	0.0307	15.738	0.010			0.66
Run8	100um/10Hz/193nm (150 mJ)	Jade-3	290597	21.6	1.0	0.0286	0.0013	0.4355	0.0202	15.226	0.012	-0.63	-0.98	0.82
Run9	100um/10Hz/193nm (150 mJ)	SRM612_5	549779			0.0996	0.0011	1.5651	0.0174	15.715	0.011			0.70
Run10	100um/10Hz/193nm (150 mJ)	Jade-4	290597	10.4	0.4	0.0140	0.0005	0.2125	0.0075	15.153	0.019	-5.53	-5.88	1.27
Run11	100um/10Hz/193nm (150 mJ)	SRM612_6	549779			0.0972	0.0009	1.5305	0.0138	15.746	0.010			0.65
Run12	100um/10Hz/193nm (150 mJ)	Jade-5	290597	11.2	0.4	0.0148	0.0006	0.2237	0.0088	15.134	0.019	-8.35	-8.70	1.27
Run13	100um/10Hz/193nm (150 mJ)	SRM612_7	549779			0.0950	0.0008	1.4980	0.0132	15.769	0.011			0.68
Run14	100um/10Hz/193nm (150 mJ)	Jade-6	290597	21.0	0.9	0.0264	0.0011	0.4030	0.0177	15.252	0.017	-1.88	-2.23	1.09
Run15	100um/10Hz/193nm (150 mJ)	SRM612_8	549779			0.0900	0.0009	1.4205	0.0144	15.779	0.012			0.74
Run16	100um/10Hz/193nm (150 mJ)	Jade-7	290597	9.3	0.4	0.0114	0.0004	0.1721	0.0067	15.132	0.031	-9.57	-9.92	2.02
Run17	100um/10Hz/193nm (150 mJ)	SRM612_9	549779			0.0892	0.0009	1.4068	0.0146	15.772	0.010			0.64
Run18	100um/10Hz/193nm (150 mJ)	Jade-8	290597	16.2	0.9	0.0196	0.0010	0.2978	0.0159	15.213	0.020	-4.05	-4.40	1.29
Run19	100um/10Hz/193nm (150 mJ)	SRM612_10	549779			0.0883	0.0011	1.3918	0.0169	15.766	0.010			0.61
Run20	100um/10Hz/193nm (150 mJ)	Jade-9	290597	17.3	0.8	0.0208	0.0009	0.3162	0.0145	15.209	0.019	-4.09	-4.44	1.25
Run21	100um/10Hz/193nm (150 mJ)	SRM612_11	549779			0.0885	0.0008	1.3953	0.0135	15.765	0.008			0.52
Run22	100um/10Hz/193nm (150 mJ)	Jade-10	290597	10.9	0.7	0.0136	0.0008	0.2060	0.0123	15.182	0.028	-4.69	-5.04	1.84
Run23	100um/10Hz/193nm (150 mJ)	SRM612_12	549779			0.0934	0.0014	1.4685	0.0230	15.728	0.011			0.68
Run24	100um/10Hz/193nm (150 mJ)	Jade-11	290597	11.4	0.7	0.0145	0.0009	0.2206	0.0136	15.164	0.029	-5.28	-5.63	1.90
Run25	100um/10Hz/193nm (150 mJ)	SRM612_13	549779			0.0937	0.0015	1.4759	0.0232	15.749	0.007			0.46
Run26	100um/10Hz/193nm (150 mJ)	Jade-12	290597	13.5	0.4	0.0173	0.0006	0.2624	0.0085	15.209	0.019	-2.84	-3.19	1.25
Run27	100um/10Hz/193nm (150 mJ)	SRM612_14	549779			0.0947	0.0015	1.4904	0.0238	15.742	0.012			0.79
Run28	100um/10Hz/193nm (150 mJ)	Jade-13	290597	12.5	0.6	0.0159	0.0008	0.2415	0.0124	15.183	0.022	-3.76	-4.11	1.43
Run29	100um/10Hz/193nm (150 mJ)	SRM612_15	549779			0.0916	0.0018	1.4408	0.0280	15.723	0.010			0.62
Run30	100um/10Hz/193nm (150 mJ)	Jade-14	290597	12.5	0.4	0.0162	0.0005	0.2443	0.0074	15.121	0.017	-7.35	-7.70	1.10
Run31	100um/10Hz/193nm (150 mJ)	SRM612_16	549779			0.0982	0.0022	1.5441	0.0341	15.731	0.007			0.44
<b>Average / 1SD</b>				<b>17.0</b>	<b>8.2</b>					<b>Average / 2SD</b>			<b>-4.2</b>	<b>6.2</b>
Run #	Ablation condition	Sample	Crat. vol. (µm <sup>3</sup> )	Li (ppm)	2SE (ppm)	<sup>6</sup> Li / V	2SE	<sup>7</sup> Li / V	2SE	<sup>7</sup> Li/ <sup>6</sup> Li	2SE	δ <sup>7</sup> Li		2SE
Run31	100um/10Hz/193nm (150 mJ)	SRM612_16	549779	<b>40.2</b>		0.0982	0.0022	1.5441	0.0341	15.731	0.007	<b>31.20</b>		0.44
Run32	100um/5Hz/193nm (150 mJ)	SRM612_17	314159	39.5	1.1	0.0552	0.0016	0.8679	0.0247	15.726	0.009	30.88		0.55
Run31	100um/10Hz/193nm (150 mJ)	SRM612_16	549779			0.0982	0.0022	1.5441	0.0341	15.731	0.007			0.44
Run34	100um/15Hz/193nm (150 mJ)	SRM612_18	785398	39.7	0.9	0.1384	0.0030	2.1759	0.0481	15.718	0.009	30.41		0.60
Run31	100um/10Hz/193nm (150 mJ)	SRM612_16	549779			0.0982	0.0022	1.5441	0.0341	15.731	0.007			0.44
Run36	100um/20Hz/193nm (150 mJ)	SRM612_19	1044580	37.8	0.7	0.1756	0.0031	2.7576	0.0486	15.705	0.008	29.57		0.52
Run31	100um/10Hz/193nm (150 mJ)	SRM612_16	549779			0.0982	0.0022	1.5441	0.0341	15.731	0.007			0.44

<sup>a</sup>: 2SE: 2-standard error, volume: µm<sup>3</sup>, depth µm; Crat. Vol.: crater volume; vcv: volume-corrected value. Run 31 to 36 were used for crater volume correction calculations