

TABLE S7: SLM LA-ICPMS U-Pb ZIRCON GEOCHRONOLOGY

Zircon #	Composition									Error Corr.	Ages					
	U (ppm)	206Pb/204Pb	U/Th	206Pb/207Pb	2σ (%)	207Pb/235U	2σ (%)	206Pb/238U	2σ (%)		206Pb/238U	2σ (Ma)	207Pb/235U	2σ (Ma)	206Pb/207Pb	2σ (Ma)
SLM no CA Run 1																
SLM-1	207	13334	6.00	16.587	3.3	0.7247	4.8	0.08722	3.5	0.729	539.1	18.0	553.5	20.4	613.0	70.6
SLM-10	437	32288	3.45	17.286	1.6	0.7157	3.0	0.08976	2.6	0.859	554.1	13.9	548.1	12.9	523.2	34.2
SLM-11	371	58062	6.51	16.976	1.6	0.7163	3.3	0.08824	2.9	0.870	545.1	15.0	548.5	13.9	562.7	35.3
SLM-12	188	14747	6.28	17.134	2.6	0.7671	3.6	0.09536	2.5	0.682	587.2	13.8	578.1	15.9	542.5	57.5
SLM-13	351	31095	4.26	17.005	2.2	0.7380	4.2	0.09105	3.6	0.846	561.8	19.2	561.2	18.2	559.0	48.9
SLM-14	177	72348	5.34	16.801	2.3	0.7644	4.1	0.09319	3.4	0.828	574.4	18.9	576.5	18.3	585.2	50.4
SLM-15	346	24512	6.31	17.106	2.0	0.7155	3.3	0.08880	2.7	0.807	548.5	14.0	548.0	14.0	546.1	42.7
SLM-2	131	18639	7.18	17.029	2.8	0.7519	4.5	0.09291	3.4	0.769	572.7	18.8	569.3	19.4	555.9	62.1
SLM-3	205	4613	6.20	16.519	3.1	0.7381	4.1	0.08847	2.8	0.666	546.5	14.4	561.3	17.9	621.9	66.7
SLM-4	577	81163	5.13	17.106	1.4	0.7370	3.0	0.09147	2.6	0.882	564.2	14.2	560.6	12.8	546.1	30.6
SLM-5	776	56723	5.37	17.221	1.8	0.7204	3.5	0.09002	3.0	0.850	555.7	15.8	550.9	14.9	531.4	40.4
SLM-6	392	207689	6.68	16.852	2.7	0.7197	4.8	0.08801	3.9	0.819	543.7	20.4	550.5	20.3	578.6	59.4
SLM-7	187	10636	6.23	16.646	3.9	0.7204	5.3	0.08701	3.6	0.677	537.8	18.6	550.9	22.7	605.3	84.8
SLM-8	480	27718	5.69	18.208	4.3	0.7038	20.2	0.09298	19.7	0.977	573.1	108.2	541.0	84.8	408.0	96.5
SLM-9	426	65139	5.98	17.036	1.6	0.7124	2.8	0.08806	2.3	0.820	544.1	11.9	546.2	11.8	555.0	34.8
SLM no CA Run 2																
SLM 1	365	82685	3.89	16.967	2.4	0.7261	3.2	0.0894	2	0.647	551.9	10.8	554.3	13.5	563.9	52.5
SLM 10	351	105401	4.03	17.014	2.6	0.7293	3.5	0.09	2.4	0.673	555.8	12.5	556.2	15	557.9	56.4
SLM 11	187	73916	6.51	17.083	2.8	0.7176	3.6	0.089	2.3	0.64	549.3	12.3	549.2	15.4	548.9	61
SLM 12	342	344129	6.86	17.128	2.1	0.7248	3.5	0.0901	2.7	0.788	556	14.6	553.5	14.9	543.3	46.9
SLM 13	532	253077	5.58	16.912	2.2	0.7249	3.2	0.089	2.4	0.74	549.4	12.5	553.6	13.7	570.9	46.9
SLM 14	324	301471	6.96	17.202	2.3	0.7062	3.6	0.0881	2.8	0.782	544.5	14.8	542.5	15.2	533.9	49.4
SLM 15	351	118662	4.03	17.133	2.5	0.734	4.2	0.0913	3.3	0.796	563	17.9	558.9	17.9	542.5	55.3
SLM 16	180	52805	7.15	17.255	2.9	0.6972	3.7	0.0873	2.4	0.641	539.5	12.4	537.1	15.6	527.1	63.1
SLM 17	672	424775	5.53	17.054	2	0.7378	3.1	0.0913	2.4	0.777	563.2	13	561.1	13.4	552.6	42.6
SLM 18	329	101331	6.81	16.978	2.2	0.7228	4	0.089	3.3	0.837	549.9	17.6	552.3	17	562.4	47.7
SLM 19	170	65655	6.69	17.117	2.4	0.7113	3.9	0.0883	3.1	0.787	545.7	16	545.5	16.4	544.6	52.4
SLM 2	543	331675	5.71	17.122	1.6	0.7222	3	0.0897	2.5	0.834	553.9	13.1	552	12.6	544	35.8
SLM 20	345	639867	3.93	16.974	2.2	0.7424	3.2	0.0914	2.4	0.742	564	13	563.8	14	562.9	47.3
SLM 21	421	80490	6.12	17.279	2	0.704	3.6	0.0883	3	0.83	545.2	15.5	541.2	15	524	43.6
SLM 22	125	88185	6.64	16.881	2.7	0.7405	4.3	0.0907	3.3	0.772	559.7	17.7	562.7	18.5	574.9	59.2
SLM 23	419	646582	6.12	17.382	2.1	0.7025	3.3	0.0886	2.6	0.782	547.2	13.7	540.3	14	511	45.7
SLM 24	120	103566	6.38	17.001	3.1	0.7456	4.5	0.092	3.3	0.733	567.2	17.8	565.7	19.5	559.4	66.5
SLM 25	342	150869	7.02	16.982	2.1	0.7125	3.4	0.0878	2.6	0.779	542.5	13.7	546.2	14.3	561.8	46.4
SLM 26	192	338877	6.52	17.091	2.9	0.7274	5.5	0.0902	4.7	0.85	556.7	24.9	555	23.5	548	63.3
SLM 27	352	163579	3.81	16.829	2	0.7392	3.2	0.0903	2.5	0.783	557.1	13.4	561.9	13.8	581.6	43.2
SLM 28	360	1E+07	3.91	16.908	2.1	0.7429	3.4	0.0912	2.6	0.779	562.3	14.1	564.1	14.5	571.4	45.7
SLM 29	544	1E+07	5.68	16.896	2.3	0.7366	3.6	0.0903	2.7	0.76	557.4	14.4	560.4	15.3	572.9	50.2
SLM 3	562	141347	5.57	17.086	2.2	0.7244	3.2	0.0898	2.3	0.719	554.4	12.3	553.3	13.8	548.6	49
SLM 30	456	128673	5.71	17.067	2.2	0.7319	3.8	0.0906	3.1	0.816	559.3	16.6	557.7	16.3	551.1	47.9
SLM 4	545	293124	5.97	17.088	2.5	0.7224	3.5	0.0896	2.4	0.687	553	12.6	552.1	14.7	548.4	54.9
SLM 5	315	268686	4.64	17.104	1.8	0.7194	3	0.0893	2.4	0.795	551.3	12.4	550.3	12.6	546.2	39.2
SLM 6	382	133547	3.8	17.069	2.6	0.726	3.5	0.0899	2.3	0.656	555	12.2	554.2	15	550.8	57.7
SLM 7	341	258430	4.17	17.249	2.2	0.7224	3.1	0.0904	2.2	0.703	558	11.7	552.1	13.3	527.8	48.7
SLM 8	196	481965	6.76	17.08	3.3	0.7347	4.4	0.0911	2.9	0.657	561.8	15.4	559.3	18.8	549.4	71.8
SLM 9	562	253778	5.71	16.865	2	0.7264	3.3	0.0889	2.5	0.781	549	13.4	554.4	13.9	576.9	44.1
Ages																
Zircon #	U (ppm)	206Pb/204Pb	U/Th	206Pb/207Pb	2σ (%)	207Pb/235U	2σ (%)	206Pb/238U	2σ (%)	Error Corr.	206Pb/238U	2σ (Ma)	207Pb/235U	2σ (Ma)	206Pb/207Pb	2σ (Ma)
SLM CA Run 1																
SLM-1	1080	170477	5.50	17.003	2.3	0.7299	3.8	0.09005	3.0	0.793	555.8	15.9	556.5	16.1	559.2	50.0
SLM-3	945	38391	5.08	17.253	1.6	0.7217	3.5	0.09034	3.1	0.885	557.6	16.7	551.7	15.1	527.3	36.1
SLM-4	995	37284	5.30	16.879	1.8	0.7551	3.2	0.09247	2.7	0.838	570.1	14.7	571.2	14.0	575.2	38.1
SLM-5	212	6968	4.92	17.427	2.8	0.7045	3.8	0.08909	2.5	0.667	550.1	13.3	541.5	15.9	505.4	62.1
SLM-6	1024	8237	5.54	17.287	1.7	0.7113	3.3	0.08922	2.8	0.863	550.9	15.0	545.5	13.9	523.0	36.4
SLM-8	943	33885	5.44	16.858	2.1	0.7397	3.3	0.09048	2.5	0.765	558.4	13.5	562.2	14.2	577.8	46.0
SLM-7	1026	38414	5.06	16.913	2.0	0.7395	3.1	0.09076	2.3	0.757	560.0	12.6	562.1	13.4	570.7	44.0
SLM-10	726	109262	5.23	16.873	2.8	0.7263	4.2	0.08892	3.1	0.744	549.2	16.3	554.4	17.8	576.0	60.5
SLM-9	387	47428	5.75	16.719	2.3	0.7605	3.9	0.09226	3.2	0.811	568.9	17.3	574.3	17.2	595.8	49.7
SLM-11	1034	38532	5.21	17.403	2.0	0.7355	3.5	0.09288	2.9	0.827	572.5	15.8	559.8	15.0	508.3	43.1
SLM-12	1057	37831	5.25	17.019	2.1	0.7348	3.0	0.09074	2.0	0.691	559.9	11.0	559.4	12.8	557.2	46.8
SLM-13	966	16653	5.25	17.079	2.1	0.7446	3.2	0.09227	2.4	0.760	568.9	13.3	565.1	13.9	549.6	45.5
SLM-14	907	#####	5.12	16.646	2.0	0.7454	3.6	0.09003	3.0	0.833	555.7	16.1	565.5	15.7	605.3	43.4
SLM-2	969	56602	5.42	17.844	4.5	0.7276	8.9	0.09421	7.7	0.862	580.4	42.6	555.2	38.1	453.0	100.2
SLM-15	1000	45967	5.43	16.628	2.1	0.7487	2.7	0.09034	1.8	0.663	557.5	9.7	567.5	11.9	607.6	44.4
SLM CA Run 2																
SLM 1	1188	1E+06	5.08	16.946	2.3	0.7366	3.2	0.0906	2.2	0.693	558.9	11.9	560.4	13.8	566.5	50.3
SLM 10	837	214351	5.04	16.955	1.9	0.7422	3.2	0.0913	2.6	0.809	563.2	14	563.7			

SLM 20	240	172597	4.44	17.028	2.7	0.7589	3.6	0.0938	2.3	0.642	577.8	12.6	573.4	15.6	556	59.5
SLM 21	831	2E+06	4.98	17.06	1.9	0.7408	2.7	0.0917	2	0.721	565.6	10.7	562.9	11.8	551.9	41.4
SLM 22	1248	430158	5.05	16.804	1.7	0.744	3.2	0.0907	2.7	0.843	559.7	14.3	564.7	13.7	584.9	36.8
SLM 23	1145	3E+06	5.23	17.082	2	0.7331	3.2	0.0909	2.5	0.783	560.6	13.4	558.4	13.7	549.1	43.3
SLM 24	1179	325083	4.78	16.837	1.7	0.7406	2.8	0.0905	2.2	0.792	558.4	11.9	562.7	12.2	580.5	37.3
SLM 25	1071	286485	5.26	17.051	2.3	0.7335	3	0.0908	2	0.658	559.9	10.7	558.6	13	553.1	49.6
SLM 26	1141	116626	5.15	16.911	1.8	0.7379	4.7	0.0906	4.3	0.919	558.8	23.1	561.2	20.2	571	40.3
SLM 27	1059	544134	4.8	17.05	1.6	0.7414	2.2	0.0917	1.5	0.699	565.7	8.3	563.2	9.5	553.2	34.4
SLM 28	1041	485514	4.9	17.021	1.8	0.7363	2.8	0.0909	2.2	0.762	561	11.6	560.2	12.2	556.9	40.2
SLM 29	1166	4E+06	5.04	17.07	1.7	0.7343	2.5	0.091	1.9	0.738	561.1	10	559	10.9	550.6	37.2
SLM 3	1210	1E+06	5.2	17.001	2	0.7374	2.8	0.091	2.1	0.726	561.3	11.1	560.9	12.3	559.5	42.7
SLM 30	1118	606987	5.33	16.906	1.9	0.7388	2.6	0.0906	1.8	0.7	559.2	9.8	561.7	11.3	571.6	40.6
SLM 4	1074	6E+06	4.86	16.789	1.4	0.7405	2.4	0.0902	1.9	0.802	556.7	10.2	562.7	10.3	586.8	30.8
SLM 5	1108	280175	5.16	16.91	1.5	0.7359	2.3	0.0903	1.7	0.731	557.3	8.9	560	9.8	571.2	33.7
SLM 6	1096	262113	5.23	16.745	2	0.7401	3.1	0.0899	2.4	0.762	555.1	12.7	562.5	13.5	592.4	44
SLM 7	1218	372548	4.77	17.054	2	0.7251	3	0.0897	2.3	0.757	553.9	12	553.6	12.8	552.7	42.6
SLM 8	1148	315856	5.32	16.995	1.8	0.7288	2.6	0.0899	1.9	0.716	554.8	10	555.8	11.2	560.2	39.9
SLM 9	1047	3E+06	5.43	16.997	1.8	0.7312	2.8	0.0902	2.1	0.763	556.6	11.3	557.3	11.9	560	39.2

%
Disc.

12.1
-5.9
3.1
-8.2
-0.5
1.9
-0.4
-3.0
12.1
-3.3
-4.6
6.0
11.1
-40.5
2.0
2.1
0.4
-0.1
-2.3
3.8
-2.0
-3.8
-2.4
-1.9
2.2
-0.2
-1.8
-0.2
-4.0
2.6
-7.1
-1.4
3.4
-1.6
4.2
1.6
2.7
-1.1
-1.5
-0.8
-0.9
-0.8
-5.7
-2.3
4.8

%
Disc.

0.6
-5.7
0.9
-8.9
-5.3
3.4
1.9
4.7
4.5
-12.6
-0.5
-3.5
8.2
-28.1
8.2
1.3
0.4
-3.9
1.9
4.1
-6.6
-6.5
-3.7
-0.8
3.2
0.2
0.0

-3.9
-2.5
4.3
-2.1
3.8
-1.2
2.1
-2.3
-0.7
-1.9
-0.3
2.2
5.1
2.4
6.3
-0.2
1.0
0.6