

**TABLE S3: 49127 LA-ICPMS U-Pb ZIRCON GEOCHRONOLOGY RESULTS**

Composition											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)
49127 no CA Run 1																
49127-1	416	10652	1.76	20.241	3.5	0.1476	4.8	0.02168	3.3	0.683	138.3	4.5	139.8	6.3	166.1	82.1
49127-2	127	1229	1.15	20.503	11.0	0.1435	13.2	0.02135	7.4	0.558	136.2	10.0	136.2	16.9	135.9	258.4
49127-3	92	11375	1.88	25.496	6.2	0.1566	7.9	0.02897	4.9	0.618	184.1	8.9	147.7	10.9	NA	NA
49127-5	82	12448	2.04	17.172	12.8	0.1901	16.2	0.02369	9.9	0.613	150.9	14.8	176.7	26.2	537.7	279.8
49127-6	307	4976	1.19	21.159	7.7	0.1437	8.8	0.02206	4.4	0.496	140.7	6.1	136.3	11.3	61.3	NA
49127-7	159	4559	1.04	20.863	7.5	0.1519	10.4	0.02300	7.2	0.689	146.6	10.4	143.6	13.9	94.9	178.0
49127-8	1523	23463	1.16	21.092	1.9	0.1416	3.1	0.02167	2.5	0.801	138.2	3.4	134.4	3.9	68.9	44.5
49127-10	996	20920	1.85	20.769	2.5	0.1439	3.9	0.02169	2.9	0.765	138.3	4.0	136.6	4.9	105.5	58.7
49127-11	279	12689	1.15	20.942	5.2	0.1514	9.5	0.02300	8.0	0.842	146.6	11.6	143.1	12.7	86.0	122.3
49127-12	130	2787	1.12	20.408	14.0	0.1581	14.9	0.02341	4.9	0.331	149.2	7.3	149.0	20.6	146.8	NA
49127-13	120	2484	1.44	23.866	7.2	0.1315	10.6	0.02278	7.9	0.739	145.2	11.3	125.5	12.5	NA	NA
49127-15	211	8166	1.10	18.705	5.7	0.1640	7.6	0.02225	5.2	0.673	141.9	7.2	154.2	10.9	347.4	127.9
49127 no CA run 1 (discordant)																
49127-4	124	4643	0.99	23.411	6.1	0.1447	20.5	0.02459	19.5	0.955	156.6	30.2	137.3	26.3	NA	NA
49127-9	891	8761	1.91	21.388	3.8	0.1400	13.7	0.02172	13.2	0.961	138.5	18.0	133.0	17.1	35.7	NA
49127-14	139	3722	1.54	34.109	14.8	0.1802	61.8	0.04460	60.0	0.971	281.3	165.1	168.2	95.9	NA	NA
49127 no CA Run 2																
49127 1	146	5000	1.18	21.802	10.7	0.1322	11.2	0.02091	3.2	0.286	133.4	4.2	126.1	13.3	10.4	259.1
49127 10	218	5000	1.86	21.63	10.6	0.1355	10.8	0.02126	1.9	0.176	135.6	2.5	129	13.1	8.6	255.3
49127 11	171	46403	1.66	20.523	5	0.143	6	0.0213	3.3	0.55	135.9	4.4	135.8	7.6	133.7	117.9
49127 12	51	5000	1.88	22.207	14.3	0.1337	15	0.02154	4.6	0.305	137.4	6.2	127.4	18	55	349
49127 13	101	5000	2.06	21.713	10.4	0.1344	11	0.02118	3.5	0.317	135.1	4.6	128.1	13.2	0.5	251
49127 14	132	24537	1.71	19.72	5.4	0.147	6.4	0.02104	3.5	0.538	134.2	4.6	139.3	8.4	226.6	125.2
49127 15	150	69357	1.55	20.372	4.8	0.1444	5.4	0.02135	2.6	0.471	136.2	3.4	137	6.9	150.9	112
49127 16	141	163670	1.33	20.226	5	0.143	5.9	0.02099	3.2	0.541	133.9	4.3	135.7	7.5	167.7	116.8
49127 17	83	82457	1.67	19.951	6.4	0.1462	6.9	0.02116	2.7	0.386	135	3.6	138.6	9	199.7	148.5
49127 18	74	5000	1.82	21.006	11.1	0.137	11.8	0.02088	4.1	0.343	133.2	5.4	130.3	14.5	78.6	264.2
49127 19	98	5000	1.87	21.505	11.2	0.136	11.6	0.02122	3.1	0.269	135.4	4.2	129.5	14.1	22.6	268.1
49127 2	1060	365080	2.01	20.754	2.3	0.1477	3.1	0.02224	2	0.651	141.8	2.8	139.9	4	107.3	55.4
49127 20	94	119437	1.55	20.129	5.9	0.144	7	0.02103	3.7	0.527	134.1	4.9	136.6	8.9	179	137.9
49127 21	107	238006	1.16	20.379	5.5	0.1424	6.3	0.02106	2.9	0.47	134.4	3.9	135.2	7.9	150.1	129.5
49127 22	192	5000	1.36	22.166	10.5	0.1305	10.9	0.02099	2.8	0.254	133.9	3.7	124.6	12.8	50.6	256.2
49127 23	130	5000	1.34	21.097	11.5	0.1365	12.1	0.02089	3.7	0.307	133.3	4.9	129.9	14.7	68.3	274
49127 24	189	41627	1.66	20.506	4	0.1409	4.7	0.02096	2.6	0.54	133.7	3.4	133.8	5.9	135.5	93.7
49127 25	865	4509535	2.15	20.547	2.1	0.1461	3	0.02178	2.2	0.724	138.9	3	138.4	3.9	130.9	49.4
49127 26	158	58523	1.27	20.406	5.3	0.1403	6.3	0.02077	3.4	0.533	132.5	4.4	133.3	7.9	147.1	125
49127 27	422	33138	1.44	21.113	3	0.1405	4	0.02153	2.6	0.651	137.3	3.5	133.5	5	66.6	71.9
49127 28	83	5000	1.59	20.537	10.8	0.1435	11.8	0.02139	4.6	0.39	136.4	6.2	136.2	15	131.9	254.8
49127 29	1325	146336	1.84	20.686	2.4	0.15	3.3	0.02251	2.3	0.706	143.5	3.3	141.9	4.4	115	55.5
49127 3	183	5000	1.25	22.108	10.2	0.1321	10.8	0.0212	3.7	0.341	135.2	4.9	126	12.8	44.1	247.7
49127 30	929	112969	2.17	20.233	2.4	0.1482	3.4	0.02176	2.4	0.709	138.8	3.3	140.3	4.4	166.9	55.4
49127 4	226	379859	1.21	19.903	6.2	0.1452	7	0.02097	3.2	0.464	133.8	4.3	137.6	9	205.2	143.8
49127 5	311	106614	1.94	20.701	3.1	0.1428	4.1	0.02145	2.7	0.661	136.8	3.7	135.5	5.3	113.3	73.4
49127 6	1104	365913	1.36	20.456	2.2	0.1502	2.8	0.0223	1.7	0.614	142.2	2.5	142.1	3.8	141.2	52.7
49127 7	1485	122205	2.01	20.48	2	0.1514	2.8	0.0225	2.1	0.724	143.4	2.9	143.2	3.8	138.5	46.1
49127 8	140	29310	1.24	20.498	5.9	0.1416	6.7	0.02106	3.2	0.477	134.3	4.2	134.5	8.4	136.5	137.7
49127 9	115	5000	1.19	22.031	11.1	0.1302	11.7	0.02081	3.8	0.321	132.8	5	124.2	13.7	35.7	270.1
Composition											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)
49127 CA Run 1																
49127-2	152	830	1.31	24.046	18.1	0.119	18.4	0.02071	3.2	0.176	132.1	4.2	113.9	19.8	NA	NA
49127-4	210	2073	1.66	23.756	5.8	0.129	7.2	0.02222	4.2	0.589	141.7	5.9	123.1	8.3	NA	NA
49127-5	136	1202	1.48	15.038	17.5	0.187	18.6	0.02046	6.4	0.345	130.5	8.3	174.5	29.9	821.2	366.0
49127-6	3222	64816	5.64	20.330	2.3	0.149	3.7	0.02204	2.9	0.780	140.5	4.0	141.4	4.9	155.8	54.6
49127-7	222	1324	1.11	25.646	13.1	0.119	14.2	0.02216	5.4	0.378	141.3	7.5	114.2	15.3	NA	NA
49127-8	200	830	1.50	25.599	47.7	0.112	48.1	0.02074	5.6	0.116	132.4	7.3	107.5	49.0	NA	NA
49127-9	238	8406	1.05	19.601	6.8	0.156	7.9	0.02212	4.0	0.508	141.0	5.6	146.8	10.8	240.6	156.4
49127-10	485	8867	2.06	17.816	7.9	0.171	8.7	0.02206	3.7	0.424	140.7	5.1	160.0	12.9	456.5	175.1
49127-11	367	8870	1.21	20.277	5.2	0.147	6.9	0.02170	4.5	0.656	138.4	6.2	139.7	9.0	161.9	122.1
49127-12	249	2237	1.53	18.206	9.8	0.168	10.9	0.02220	4.7	0.431	141.5	6.6	157.7	15.9	408.2	219.2
49127-13	399	19088	1.81	20.773	4.5	0.146	5.6	0.02202	3.3	0.597	140.4	4.6	138.5	7.2	105.1	105.4
49127-14	109	20817	2.10	16.680	12.2	0.176	15.2	0.02136	9.1	0.598	136.3	12.3	165.0	23.2	600.9	264.4
49127-15	172	2589	2.36	19.481	9.7	0.147	11.4	0.02074	5.8	0.514	132.3	7.7	139.0	14.8	254.8	224.0
49127 CA Run 1 (discordant)																
49127-1	149	35254	1.59	19.235	10.5	0.176	26.0	0.02460	23.8	0.915	156.6	36.8	164.8	39.6	284.0	240.5
49127-3	335	6132	1.68	26.640	5.8	0.147	55.5	0.02841	55.2	0.995	180.6	98.3	139.3	72.2	NA	NA
49127 CA Run 2																
49127 1	269	26367	0.99	20.781	6.8	0.146	7.5	0.02202	3.2	0.423	140.4	4.4	138.4	9.7	104.1	160.1
49127 10	219	5000	1.03	22.118	10.7	0.1353	11.2	0.02171	3.2	0.289	138.4	4.4	128.8	13.5	45.3	260.5
49127 11	167	5000	1.53	20.94	10.7	0.1415	11	0.02149	2.7	0						

49127 20	767	5000	1.63	22.11	2.7	0.136	4.2	0.02182	3.2	0.76	139.1	4.4	129.5	5.1	500	1.0
49127 21	205	5000	1.04	21.299	10.4	0.139	10.9	0.02148	3	0.277	137	4.1	132.2	13.5	45.7	249.4
49127 22	429	54677	1.93	20.269	5.1	0.1491	6	0.02192	3.1	0.514	139.8	4.2	141.1	7.9	162.8	119.7
49127 23	118	5000	1.45	21.851	12.8	0.1382	13.4	0.02191	4.1	0.304	139.7	5.6	131.4	16.6	15.8	309.6
49127 24	220	88472	1.09	20.439	6.1	0.1476	6.8	0.0219	3.1	0.454	139.6	4.3	139.8	8.9	143.3	142.6
49127 25	187	5000	1.38	22.332	11.4	0.1343	12	0.02176	4	0.329	138.8	5.4	127.9	14.5	68.8	278.0
49127 26	295	46441	1.46	20.975	5.9	0.1438	7.1	0.02188	3.8	0.543	139.5	5.3	136.4	9	82.1	141.1
49127 27	194	5000	1.47	22.051	6.5	0.1355	7.5	0.02168	3.8	0.505	138.3	5.2	129	9.1	38	157.9
49127 28	434	35382	1.29	21.548	5.4	0.1426	6.3	0.0223	3.2	0.502	142.2	4.4	135.4	8	17.8	130.6
49127 29	208	5000	1.23	21.738	10.9	0.1349	11.3	0.02128	2.8	0.245	135.8	3.7	128.5	13.6	3.3	263.6
49127 3	205	5000	1.07	21.554	10.7	0.1388	11.3	0.02171	3.7	0.325	138.5	5	132	14	17.1	256.4
49127 30	451	61717	2.01	20.468	4.6	0.146	4.9	0.02169	1.9	0.376	138.3	2.5	138.4	6.4	139.9	107.7
49127 4	410	31403	1.73	20.176	4.9	0.147	5.5	0.02152	2.6	0.477	137.2	3.6	139.2	7.2	173.5	113.8
49127 5	223	5000	0.99	22.831	11.2	0.1294	11.7	0.02144	3.5	0.3	136.8	4.8	123.6	13.6	123	275.9
49127 7	876	140926	1.46	20.574	3.6	0.147	4.6	0.02194	2.9	0.618	139.9	4	139.2	6	127.8	85.8
49127 8	449	32451	2.33	21.206	3.9	0.1417	4.7	0.02181	2.6	0.555	139.1	3.6	134.6	5.9	56.1	93.4
49127 9	184	5000	1.28	22.01	11.5	0.1373	12.2	0.02192	3.9	0.321	139.8	5.4	130.6	14.9	33.4	279.9

% Disc.
16.8
-0.2
NA
71.9
-129.3
-54.5
-100.4
-31.1
-70.5
-1.6
NA
59.2

NA
-288.0
NA
-1182.7
-1476.7
-1.6
-149.8
-26920.0
40.8
9.7
20.2
32.4
-69.5
-499.1
-32.2
25.1
10.5
-164.6
-95.2
1.3
-6.1
9.9
-106.2
-3.4
-24.8
-206.6
16.8
34.8
-20.7
-0.7
-3.5
1.6
-272.0

% Disc.
NA
NA
84.1
9.8
NA
NA
41.4
69.2
14.5
65.3
-33.6
77.3
48.1

44.8
NA
-34.9
-205.5
-59.0
27.7
12.2
-0.9
-3.2
19.5
27.5
26.1

72.2  
-199.8  
14.1  
-784.2  
2.6  
-101.7  
-69.9  
-263.9  
-698.9  
-4015.2  
-709.9  
1.1  
20.9  
-11.2  
-9.5  
-148.0  
-318.6