The Sabine Block, Gulf of Mexico: Promontory on the North American Margin?

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METHODS

Ten samples were analysed to determine bulk rock $^{143}Nd/^{144}Nd$ and $^{86}Sr/^{87}Sr$ values (Table DR1). Samples were dissolved in 3:1 mixture of concentrated HF and HNO_3 on hot plate at 100˚C for at least 24 hours, followed by three dry downs in 6.2 N HCl. Solutions were loaded on to Sr-spec resin in order to separate Sr isotopes, following the procedure outlined by Deniel and Pin(2001). One-step column chemistry utilizing Ln resin was used for Nd separation(Scher and Delaney, 2010). Nd and Sr isotopic compositions were determined by Finnigan Neptune multi-collector inductively coupled plasma mass spectrometer (MC-ICP-MS) at Woods Hole Oceanographic Institution. Nd and Sr isotope analyses were corrected against La Jolla Nd standard $^{143}Nd/^{144}Nd$=0.511847 and NBS987 standard $^{87}Sr/^{86}Sr$=0.710240. Procedural blanks for analyses were 20–25 pg for Sr (and 50–70 pg for Nd). We calculate the parameter ε_{Nd} (DePaolo and Wasserburg, 1976) using a $^{143}Nd/^{144}Nd$ value of 0.512638 for the Chondritic Uniform Reservoir (CHUR)(Hamilton et al., 1983). Data is provided in Table DR1. The standards Sr NBS 987 and Nd La Jolla were run to monitor machine performance and yielded an average $^{87}Sr/^{86}Sr$ of 0.710254 ± 18, $^{143}Nd/^{144}Nd$=0.511839 ± 10.

Samples for zircon U-Pb dating were taken from the Black Lick and Twin Knobs trenches of the Prairie Creek Lamproite Province then sorted by lithology. Once assigned a lithology the samples were then crushed with a minimum jaw separation of 2–3 mm. Heavy minerals were concentrated by shaking bed and heavy liquid methods. Zircons from the granite and lamproite samples were then separated via hand picking and used for age dating as described in Donelick et al. (2005). This process enhances the recovery of all possible grain sizes while minimizing the potential loss of the smaller grains within a sample by the use of water-table devices. The Donelick et al. method also ensures the preservation of complete grains by minimizing grain breakage and/or fracturing that are associated with traditional procedures to isolate individual grains from whole rock samples. Epoxy wafers containing zircon grains for LA-ICP-MS were polished manually using 3.0 μm and 0.3 μm Al_2O_3 slurries to expose internal zircon grain surfaces. The polished zircon grain surfaces were washed in 5.5 M HNO_3 for 20 sec. at 21ºC in order to clean the grain surfaces prior to introduction into the laser system sample cell.

Individual zircon grains were targeted for data collection using a New Wave YP213 213 nm solid state laser ablation system in the GeoAnalytical Lab at Washington State University using a 20 μm diameter laser spot size, 5 Hz laser firing rate, and ultra-high purity He as the carrier gas. Isotopic analyses of the ablated zircon were performed using a ThermoScientific Element2 magnetic sector mass spectrometer. At time = 0.0 s, the mass spectrometer began monitoring signal intensities; at time = 6.0 s, the laser began ablating zircon material; at time = 30.0 s, the laser was turned off and the mass spectrometer stopped monitoring signal intensities. A total of 200 data scans were collected for each zircon spot analysed comprising: approximately 55 background scans; approximately 20 transitions scans between background and background + signal, approximately 125 background + signal scans. A scheme was developed to check whether mass 238 experienced a switch from pulse to analog mode during data collection and a correction procedure was employed to ensure the use of good quality intensity data for masses 235 and 238 when such a switch was observed. The U/Pb ages were then calculated and considered concordant, if the $^{207}Pb/^{235}U$, $^{206}Pb/^{238}U$, and $^{207}Pb/^{206}Pb$ ages overlap each other at the 2σ level. A number of zircon U-Pb age standards were used during analysis to help calibrate the LA-ICP-MS session. These included the 1099±0.6 Ma FC zircon (FC-1)(Paces and Miller, 1993) as the primary age standard. The secondary age standard was the 61.2±0.1 Ma Tardree Rhyolite zicon (Dave Chew, personal communication). Third-level age standards included the Fish Canyon Tuff with an age of 28.20±0.1 Ma(Lanphere and Baadsgaard), and the Temora2 diorite with an age of 416.8±0.3 Ma (Black et al., 2004).

ZIRCON AGE COMPILATION

In order to determine possible correlations between the Sabine Block xenoliths and other crustal blocks we have compiled existing bedrock zircon ages that we plot on Figure 3. Yavapai-Mazatal data (E) are from Finzel (2014) and Gehrels et al. (2011); Amazon Craton data (F) are from Ibanez-Mejia et al. (2015), Neder et al. (2002) and Vasquez et al. (2008); Rio de la Plata Craton (G) data are from Chernicoff et al. (2012), Ramos et al. (2014), and Siegesmund et al. (2010); Kalahari Craton (H) data are from Longridge et al. (2014), Mendonidis and Armstrong (2016) and Zeh et al. (2016); Congo Craton (I) data are from Agbossoumondé et al. (2007), Kristoffersen et al. (2016) and Weislogel et al. (2015); Cathaysia (J) and Yangtze Craton (K) data are from He et al. (2014); (L) Gondwana (Suwanee) data are Weislogel et al. (2015); Peri-Gondwana (M) data are from Macdonald et al. (2014) and Fyffe et al. (2009); Yucatan (N) data are from Weber et al. (2012); Llano Uplift (O) data are from and Howard et al. (2015); Grenville (P) data are from Macdonald et al. (2014) and Howard et al. (2015); Appalachian (Q) data are from Merschat et al. (2010) and Park et al. (2010); Dalradian (R) data are from Banks et al. (2007) and Cawood et al. (2003); Greenland-Laurentian (S) data are from Strachan et al.

(1995), Watt et al. (2000) and Tucker et al. (1993); Baltica data are from Bogdanova et al. (2014).

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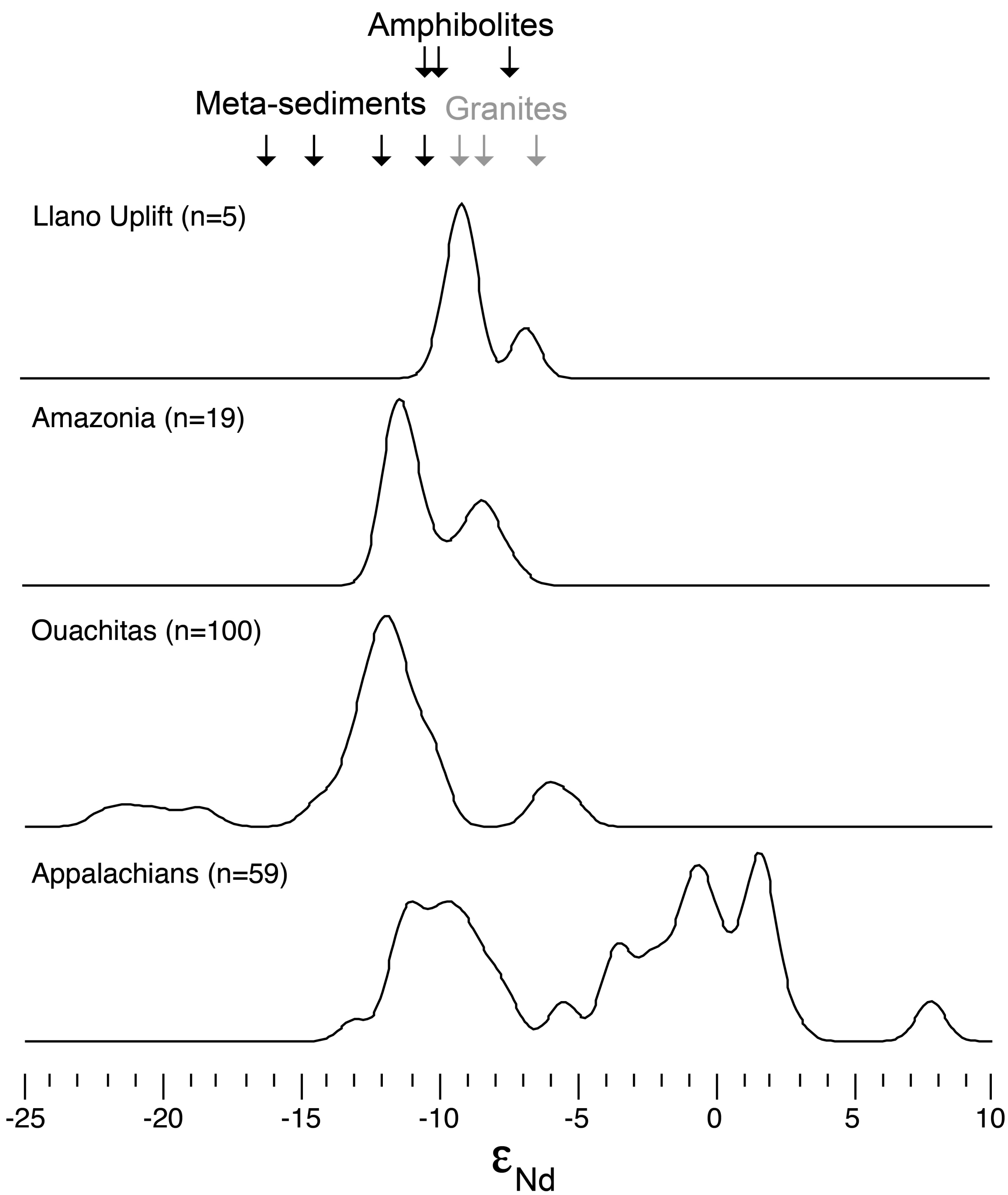

Figure DR1. Nd isotope composition of xenoliths from the Prairie Creek Lamproite. Kernel Density Estimate (KDE) diagrams for the isotope composition of the metasedimentary rocks plot with more negative e_{Nd} values than the amphibolites and granites. Data are compared with bedrock data from the Llano Uplift data are from Smith et al.(1997); Amazonia data are from Basu et al. (1990) and Guimãraes et al.(1998); Ouachita data are from Gleason et al. (1995); Appalachian data are from Georoc (http://georoc.mpch-mainz.gwdg.de/georoc/).

Table DR1. Strontium and neodymium isotope data. Data collected from bulk rock samples of xenoliths from within the Black Lick (BL) and Twin Knobs (TK) pipes.

Sample number	Rock type	$^{87}Sr/^{86}Sr$	$^{143}Nd/^{144}Nd$	Epsilon Nd
BL1	Amphibolite	0.708236	0.512130	-9.9
BL2	Amphibolite	0.707414	0.512265	-7.3
BL4	Amphibolite	0.712479	0.512104	-10.4
Meta Sed BL1	Metasedimentary	0.704392	0.512021	-12.0
Meta Sed BL2	Metasedimentary	0.709266	0.511903	-14.3
Meta Sed BL3	Metasedimentary	0.717588	0.512095	-10.6
Meta Sed BL4	Metasedimentary	0.708334	0.511801	-16.3
TK1 13.5-8.5 m	Granite	0.712478	0.512167	-9.2
TK1 16.5 m	Granite	0.710301	0.512207	-8.4
TK1 20.5 m	Granite	0.717152	0.512304	-6.5

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
Sample Name	**Lamproite 1**																	
1561AZ1_38	123.89	3.96	0.13000	0.00630	0.01940	0.00063	0.04859	0.00237	0.00679	0.00024	123	5.6	124	4.0	128	116.9	1350	703
1561AZ1_22	379.80	8.20	0.45879	0.01246	0.06069	0.00135	0.05483	0.00138	0.01832	0.00036	379	9.4	380	8.2	405	56.7	936	677
1561AZ1_31	383.34	8.35	0.46298	0.01270	0.06127	0.00137	0.05481	0.00139	0.01879	0.00037	382	9.5	383	8.3	404	57.3	937	678
1561AZ1_2	430.72	47.31	0.59306	0.11614	0.06910	0.00783	0.06225	0.01199	0.02174	0.00333	486	92.9	431	47.3	683	440.4	181	122
1561AZ1_18	435.39	47.75	0.59949	0.11736	0.06987	0.00791	0.06223	0.01198	0.02241	0.00342	486	92.9	435	47.7	682	440.2	181	122
1561AZ1_48	448.95	11.73	0.56829	0.04004	0.07213	0.00195	0.05715	0.00411	0.02144	0.00088	448	29.9	449	11.7	497	162.7	103	46
1561AZ1_3	483.21	31.25	0.65575	0.04953	0.07784	0.00522	0.06110	0.00406	0.02581	0.00186	507	30.3	483	31.3	643	146.2	2012	1095
1561AZ1_25	489.05	31.47	0.66153	0.04985	0.07882	0.00526	0.06087	0.00408	0.02671	0.00192	511	30.4	489	31.5	635	147.5	2032	1096
1561AZ1_58	629.69	12.74	0.85931	0.02916	0.10261	0.00218	0.06074	0.00209	0.03263	0.00077	615	19.5	630	12.7	630	75.0	343	271
1561AZ1_56	631.75	10.61	0.85499	0.02573	0.10296	0.00181	0.06023	0.00177	0.03204	0.00066	622	18.0	632	10.6	612	64.1	367	297
1561AZ1_34	668.95	14.84	0.94680	0.03649	0.10935	0.00255	0.06280	0.00246	0.03608	0.00119	668	21.9	669	14.8	701	84.5	606	160
1561AZ1_32	688.54	12.04	0.99117	0.04032	0.11272	0.00208	0.06377	0.00267	0.03696	0.00117	673	28.0	689	12.0	734	90.0	132	57
1561AZ1_37	972.62	19.07	1.59793	0.05305	0.16285	0.00344	0.07116	0.00236	0.05553	0.00170	982	35.7	973	19.1	962	68.4	136	45
1561AZ1_10	1000.18	19.58	1.66544	0.04165	0.16784	0.00354	0.07197	0.00179	0.05275	0.00140	990	20.9	1000	19.6	985	51.1	506	125
1561AZ1_9	1000.85	20.46	1.69627	0.06836	0.16796	0.00370	0.07325	0.00300	0.04877	0.00160	989	33.8	1001	20.5	1021	84.0	128	28
1561AZ1_57	1004.36	38.36	1.80235	0.09331	0.16859	0.00694	0.07754	0.00322	0.03473	0.00329	1025	38.0	1004	38.4	1135	83.7	532	70
1561AZ1_16	1015.50	17.65	1.74843	0.06832	0.17062	0.00320	0.07432	0.00286	0.05272	0.00153	1027	38.0	1016	17.7	1050	78.5	103	31
1561AZ1_35	1021.56	14.20	1.73314	0.05863	0.17172	0.00258	0.07320	0.00251	0.05015	0.00109	1024	32.5	1022	14.2	1020	70.2	118	160
1561AZ1_26	1022.58	17.57	1.76999	0.06857	0.17190	0.00319	0.07468	0.00285	0.05342	0.00154	1035	37.9	1023	17.6	1060	77.8	103	31
1561AZ1_33	1022.60	14.17	1.73362	0.05020	0.17191	0.00257	0.07314	0.00214	0.04973	0.00087	1014	27.6	1023	14.2	1018	59.8	183	392
1561AZ1_20	1033.45	25.87	1.74371	0.05265	0.17388	0.00471	0.07273	0.00219	0.04372	0.00145	1022	25.4	1033	25.9	1006	61.7	409	102
1561AZ1_12	1037.93	25.26	1.78470	0.05838	0.17470	0.00460	0.07409	0.00214	0.05188	0.00157	1027	25.8	1038	25.3	1044	58.8	175	87
1561AZ1_14	1044.85	39.18	1.82346	0.09364	0.17596	0.00714	0.07516	0.00398	0.05320	0.00217	1002	43.1	1045	39.2	1073	108.2	91	59
1561AZ1_8	1047.35	39.05	1.82994	0.09073	0.17641	0.00711	0.07523	0.00364	0.05498	0.00249	1045	40.2	1047	39.0	1075	98.8	78	55
1561AZ1_27	1049.58	25.36	1.80823	0.05890	0.17682	0.00462	0.07417	0.00213	0.05313	0.00160	1035	25.8	1050	25.4	1046	58.6	175	87
1561AZ1_49	1050.39	19.84	1.82178	0.05069	0.17697	0.00362	0.07466	0.00209	0.05637	0.00147	1059	26.4	1050	19.8	1059	56.8	288	68
1561AZ1_51	1052.80	18.68	1.84313	0.07509	0.17741	0.00341	0.07535	0.00309	0.05679	0.00197	1057	39.1	1053	18.7	1078	83.5	92	29
1561AZ1_54	1053.92	18.67	1.84575	0.07518	0.17761	0.00341	0.07537	0.00309	0.05685	0.00197	1058	39.1	1054	18.7	1078	83.5	92	29
1561AZ1_30	1055.49	29.41	1.82638	0.06309	0.17790	0.00537	0.07446	0.00267	0.05198	0.00152	1034	30.2	1055	29.4	1054	73.1	275	90
1561AZ1_11	1057.20	36.55	1.82775	0.07726	0.17821	0.00667	0.07438	0.00306	0.05315	0.00197	1032	37.2	1057	36.6	1052	84.1	126	75
1561AZ1_24	1060.14	39.16	1.85924	0.09142	0.17875	0.00715	0.07544	0.00362	0.05639	0.00254	1057	40.2	1060	39.2	1080	97.9	78	55
1561AZ1_1	1091.23	35.23	1.93306	0.09429	0.18445	0.00646	0.07601	0.00372	0.05574	0.00298	1095	46.4	1091	35.2	1095	99.6	65	19
1561AZ1_6	1095.61	34.75	2.04947	0.07128	0.18525	0.00638	0.08024	0.00278	0.04588	0.00157	1125	25.0	1096	34.8	1203	69.0	1651	609
1561AZ1_28	1107.02	34.93	2.08371	0.07207	0.18735	0.00643	0.08066	0.00279	0.04731	0.00161	1135	25.1	1107	34.9	1213	68.8	1653	610
1561AZ1_46	1126.00	26.50	2.11291	0.08088	0.19085	0.00489	0.08029	0.00317	0.05207	0.00180	1137	39.0	1126	26.5	1204	78.9	115	64
1561AZ1_4	1147.64	31.28	2.10820	0.10009	0.19486	0.00579	0.07847	0.00377	0.05482	0.00205	1120	46.8	1148	31.3	1159	96.8	72	30
1561AZ1_29	1148.99	45.55	2.25211	0.09454	0.19511	0.00843	0.08372	0.00360	0.07049	0.00266	1191	28.7	1149	45.6	1286	84.8	1416	308
1561AZ1_52	1278.36	20.64	2.57767	0.06459	0.21933	0.00390	0.08524	0.00212	0.06671	0.00150	1282	28.3	1278	20.6	1321	48.6	226	144
1561AZ1_53	1305.82	17.13	2.62741	0.05449	0.22454	0.00325	0.08487	0.00178	0.06636	0.00128	1293	25.1	1306	17.1	1312	40.9	229	148
1561AZ1_60	1308.42	17.01	2.63840	0.05414	0.22503	0.00323	0.08503	0.00177	0.06650	0.00127	1296	24.9	1308	17.0	1316	40.6	229	148
1561AZ1_19	1368.77	26.63	3.02455	0.07574	0.23656	0.00510	0.09273	0.00222	0.08477	0.00212	1405	23.7	1369	26.6	1482	45.7	943	169
1561AZ1_39	1463.29	20.11	3.22559	0.06551	0.25482	0.00391	0.09181	0.00183	0.07445	0.00155	1454	22.7	1463	20.1	1463	38.1	470	78
1561AZ1_36	1473.95	25.17	3.32094	0.09069	0.25690	0.00490	0.09376	0.00264	0.06842	0.00147	1494	34.0	1474	25.2	1503	53.7	159	170
1561AZ1_41	1496.63	21.45	3.37357	0.08400	0.26133	0.00419	0.09363	0.00236	0.07577	0.00199	1481	29.1	1497	21.5	1501	48.0	275	52
1561AZ1_5	1612.82	39.71	3.82019	0.08128	0.27875	0.00474	0.09940	0.00210	0.07696	0.00132	1592	30.2	1585	23.9	1613	39.7	345	462
1561AZ1_15	1634.75	42.00	3.90894	0.08662	0.28188	0.00489	0.10058	0.00226	0.08588	0.00186	1608	31.2	1601	24.6	1635	42.0	193	170
1561AZ1_21	1635.22	41.92	3.92757	0.08670	0.28315	0.00488	0.10060	0.00225	0.08669	0.00187	1612	31.2	1607	24.5	1635	41.9	193	170
1561AZ1_42	1657.58	67.41	4.18935	0.14905	0.29841	0.00931	0.10182	0.00366	0.07180	0.00258	1643	41.3	1683	46.3	1658	67.4	150	82
1561AZ1_47	1709.79	126.08	4.10507	0.26941	0.28425	0.00779	0.10474	0.00703	0.08644	0.00337	1541	113.1	1613	39.2	1710	126.1	13	20
1561AZ1_50	1748.39	42.68	4.53405	0.11547	0.30742	0.00636	0.10697	0.00248	0.09229	0.00210	1729	34.8	1728	31.4	1748	42.7	193	63
1561AZ1_40	1753.77	44.85	4.60769	0.11003	0.31150	0.00580	0.10728	0.00261	0.09477	0.00228	1735	33.3	1748	28.6	1754	44.8	229	61
1561AZ1_45	1756.57	44.62	4.62510	0.10988	0.31219	0.00578	0.10745	0.00260	0.09503	0.00228	1739	33.2	1751	28.4	1757	44.6	228	61

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
1561AZ1_55	1846.27	37.73	5.09960	0.11308	0.32766	0.00636	0.11288	0.00234	0.09632	0.00204	1838	25.5	1827	30.9	1846	37.7	504	133
1561AZ1_59	2194.27	42.19	7.46180	0.18624	0.39397	0.00771	0.13737	0.00331	0.11118	0.00249	2159	35.7	2141	35.7	2194	42.2	158	101
Sample Name	**Lamproite 2**																	
1562AZ1_38	262.08	5.71	0.29815	0.01410	0.04149	0.00092	0.05211	0.00248	0.01276	0.00044	261	12.5	262	5.7	290	110.5	401	222
1562AZ1_35	312.92	12.05	0.37989	0.05492	0.04974	0.00196	0.05539	0.00812	0.01562	0.00108	329	48.0	313	12.1	428	344.5	41	32
1562AZ1_15	356.94	10.98	0.41663	0.01388	0.05693	0.00180	0.05308	0.00183	0.01751	0.00056	351	11.1	357	11.0	332	79.2	920	359
1562AZ1_5	393.09	26.80	0.47826	0.03747	0.06287	0.00441	0.05517	0.00408	0.02090	0.00161	393	27.1	393	26.8	419	169.4	502	61
1562AZ1_25	414.42	25.57	0.50928	0.03793	0.06640	0.00423	0.05563	0.00397	0.02020	0.00150	411	26.3	414	25.6	438	162.9	422	208
1562AZ1_99	421.23	33.21	0.53662	0.04217	0.06752	0.00549	0.05764	0.00465	0.02080	0.00166	429	29.4	421	33.2	516	182.3	685	674
1562AZ1_44	428.83	12.04	0.53622	0.03509	0.06878	0.00200	0.05654	0.00379	0.02099	0.00077	439	28.5	429	12.0	474	151.7	89	83
1562AZ1_93	428.91	30.07	0.52551	0.03861	0.06880	0.00498	0.05540	0.00410	0.02086	0.00151	429	27.3	429	30.1	428	169.4	416	199
1562AZ1_32	437.56	29.71	0.55298	0.04801	0.07023	0.00493	0.05710	0.00512	0.02346	0.00184	433	33.8	438	29.7	496	204.1	122	107
1562AZ1_6	458.35	12.01	0.56207	0.01877	0.07369	0.00200	0.05532	0.00186	0.02246	0.00076	450	14.4	458	12.0	425	75.8	715	726
1562AZ1_98	460.53	21.40	0.58201	0.03330	0.07405	0.00356	0.05700	0.00350	0.02288	0.00141	470	24.4	461	21.4	492	138.2	319	189
1562AZ1_8	461.01	22.51	0.57659	0.05228	0.07413	0.00375	0.05641	0.00508	0.02557	0.00188	465	37.3	461	22.5	469	205.7	321	201
1562AZ1_92	495.73	35.16	0.62078	0.04727	0.07993	0.00588	0.05633	0.00427	0.02350	0.00154	497	32.2	496	35.2	465	172.4	159	118
1562AZ1_60	518.81	39.90	0.74622	0.15372	0.08381	0.00670	0.06458	0.01357	0.08555	0.01840	501	104.2	519	39.9	761	477.3	9	1
1562AZ1_72	611.86	31.67	0.83440	0.08936	0.09957	0.00540	0.06078	0.00649	0.03179	0.00200	603	57.2	612	31.7	631	238.9	31	23
1562AZ1_70	630.59	31.03	0.86724	0.05161	0.10276	0.00530	0.06121	0.00360	0.03030	0.00156	627	29.2	631	31.0	646	128.9	367	375
1562AZ1_19	716.32	49.76	1.05242	0.10145	0.11753	0.00861	0.06495	0.00667	0.03662	0.00289	729	59.0	716	49.8	773	223.9	35	14
1562AZ1_106	786.73	21.42	1.15154	0.03788	0.12980	0.00375	0.06434	0.00221	0.03837	0.00135	781	21.3	787	21.4	753	73.4	478	96
1562AZ1_94	806.36	54.20	1.26671	0.09395	0.13325	0.00951	0.06895	0.00475	0.03968	0.00265	834	41.8	806	54.2	897	145.3	473	100
1562AZ1_12	916.27	22.32	1.46319	0.05682	0.15273	0.00399	0.06948	0.00271	0.04526	0.00166	915	35.6	916	22.3	913	81.4	122	64
1562AZ1_3	944.51	15.67	1.51134	0.06357	0.15780	0.00281	0.06947	0.00298	0.04678	0.00128	922	38.5	945	15.7	913	89.6	89	43
1562AZ1_22	975.32	27.50	1.62593	0.10040	0.16334	0.00496	0.07219	0.00457	0.04907	0.00201	938	52.2	975	27.5	991	131.5	45	28
1562AZ1_30	994.94	58.86	1.68213	0.10837	0.16689	0.01063	0.07310	0.00468	0.05443	0.00384	999	47.3	995	58.9	1017	132.6	158	35
1562AZ1_33	998.07	67.73	1.74210	0.14658	0.16745	0.01223	0.07545	0.00653	0.05278	0.00474	1032	61.2	998	67.7	1081	178.6	81	59
1562AZ1_78	1009.49	44.80	1.72993	0.08252	0.16953	0.00811	0.07401	0.00382	0.04867	0.00261	1021	34.5	1009	44.8	1042	106.0	489	183
1562AZ1_57	1010.42	67.20	1.74208	0.13978	0.16969	0.01216	0.07446	0.00564	0.05197	0.00380	1029	55.4	1010	67.2	1054	156.4	133	65
1562AZ1_56	1010.95	74.67	1.74565	0.14860	0.16979	0.01351	0.07457	0.00637	0.05172	0.00388	1008	64.7	1011	74.7	1057	177.0	55	39
1562AZ1_86	1013.55	74.82	1.75152	0.14898	0.17026	0.01354	0.07461	0.00638	0.05166	0.00387	1012	64.8	1014	74.8	1058	177.1	55	39
1562AZ1_9	1013.57	32.41	1.72860	0.08378	0.17027	0.00588	0.07363	0.00349	0.05607	0.00284	1028	45.5	1014	32.4	1031	97.3	85	24
1562AZ1_41	1013.84	37.79	1.70236	0.09269	0.17031	0.00685	0.07249	0.00399	0.05378	0.00287	987	45.4	1014	37.8	1000	114.0	84	26
1562AZ1_101	1015.57	48.81	1.67465	0.09521	0.17063	0.00885	0.07118	0.00370	0.04904	0.00253	1010	39.3	1016	48.8	963	108.0	299	128
1562AZ1_1	1026.86	72.82	1.76201	0.13022	0.17268	0.01321	0.07401	0.00532	0.05358	0.00390	1017	48.6	1027	72.8	1042	148.4	492	433
1562AZ1_62	1030.13	39.05	1.78499	0.09021	0.17328	0.00710	0.07471	0.00364	0.05216	0.00259	1025	40.2	1030	39.1	1061	99.6	114	33
1562AZ1_61	1032.39	28.44	1.77705	0.06630	0.17369	0.00517	0.07420	0.00290	0.05245	0.00185	1041	34.3	1032	28.4	1047	79.8	177	115
1562AZ1_81	1032.49	20.87	1.73927	0.07712	0.17370	0.00380	0.07262	0.00326	0.05174	0.00174	1016	39.3	1032	20.9	1003	92.5	84	42
1562AZ1_2	1033.44	14.92	1.75764	0.05273	0.17388	0.00272	0.07331	0.00217	0.05122	0.00128	1030	26.3	1033	14.9	1023	60.6	177	53
1562AZ1_24	1036.12	50.33	1.80519	0.12478	0.17437	0.00915	0.07509	0.00520	0.05250	0.00291	1043	64.2	1036	50.3	1071	142.4	41	29
1562AZ1_87	1037.95	33.95	1.80152	0.07184	0.17470	0.00618	0.07479	0.00279	0.05142	0.00180	1064	32.1	1038	34.0	1063	75.9	289	383
1562AZ1_58	1048.54	63.87	1.89994	0.13732	0.17663	0.01163	0.07801	0.00587	0.05160	0.00401	1077	58.5	1049	63.9	1147	153.3	73	34
1562AZ1_83	1049.14	29.50	1.81774	0.06461	0.17674	0.00538	0.07459	0.00265	0.05177	0.00159	1049	27.3	1049	29.5	1058	72.3	314	150
1562AZ1_96	1052.59	69.25	1.80271	0.13204	0.17737	0.01261	0.07371	0.00518	0.05102	0.00349	1024	48.1	1053	69.2	1034	145.4	174	86
1562AZ1_71	1057.92	54.64	1.85536	0.11190	0.17834	0.00997	0.07545	0.00435	0.05423	0.00300	1067	46.0	1058	54.6	1081	118.0	117	43
1562AZ1_52	1062.66	63.84	1.77315	0.16379	0.17921	0.01165	0.07176	0.00663	0.05546	0.00412	1012	81.8	1063	63.8	979	194.2	33	17
1562AZ1_67	1063.20	30.01	1.85354	0.06933	0.17931	0.00548	0.07497	0.00260	0.05586	0.00183	1057	26.5	1063	30.0	1068	70.4	345	116
1562AZ1_16	1066.27	30.00	1.84015	0.06871	0.17987	0.00548	0.07420	0.00275	0.05383	0.00203	1054	34.4	1066	30.0	1047	75.6	156	80
1562AZ1_105	1067.49	31.27	1.90097	0.08269	0.18009	0.00572	0.07656	0.00357	0.05301	0.00213	1067	49.4	1067	31.3	1110	94.7	71	33
1562AZ1_108	1069.30	25.47	1.87140	0.07426	0.18043	0.00466	0.07523	0.00310	0.05177	0.00173	1068	36.0	1069	25.5	1075	83.8	124	75
1562AZ1_14	1069.82	27.88	1.87402	0.08359	0.18052	0.00510	0.07529	0.00340	0.05309	0.00179	1067	39.6	1070	27.9	1076	91.9	113	68
1562AZ1_100	1079.74	72.52	1.90489	0.14972	0.18234	0.01326	0.07577	0.00636	0.05167	0.00362	1086	61.2	1080	72.5	1089	173.0	102	74

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
1562AZ1_68	1084.98	32.68	1.90310	0.06492	0.18330	0.00599	0.07530	0.00282	0.05397	0.00288	1085	30.8	1085	32.7	1077	76.0	496	97
1562AZ1_73	1086.80	49.24	2.02727	0.10692	0.18364	0.00902	0.08007	0.00416	0.05459	0.00284	1123	35.5	1087	49.2	1199	104.3	1210	803
1562AZ1_82	1087.07	33.63	1.89505	0.07279	0.18368	0.00617	0.07483	0.00291	0.05444	0.00215	1082	29.9	1087	33.6	1064	79.1	267	167
1562AZ1_31	1087.63	78.07	1.92969	0.16198	0.18379	0.01429	0.07615	0.00634	0.05577	0.00494	1062	59.2	1088	78.1	1099	171.4	148	44
1562AZ1_42	1092.00	74.80	1.94388	0.15752	0.18459	0.01370	0.07638	0.00641	0.05515	0.00475	1097	57.8	1092	74.8	1105	172.6	156	94
1562AZ1_40	1104.93	22.23	2.00047	0.06485	0.18697	0.00409	0.07760	0.00268	0.05766	0.00181	1110	32.3	1105	22.2	1137	69.4	176	54
1562AZ1_63	1105.86	32.21	1.95612	0.06575	0.18714	0.00592	0.07581	0.00256	0.05742	0.00192	1109	29.9	1106	32.2	1090	68.3	210	83
1562AZ1_89	1114.14	23.78	2.01234	0.06804	0.18867	0.00438	0.07736	0.00278	0.05740	0.00187	1115	33.2	1114	23.8	1130	72.4	177	54
1562AZ1_34	1119.68	57.65	1.95488	0.12574	0.18969	0.01062	0.07474	0.00488	0.05970	0.00416	1057	49.0	1120	57.7	1062	134.2	91	63
1562AZ1_65	1121.81	35.71	1.96811	0.08582	0.19008	0.00658	0.07510	0.00312	0.05715	0.00208	1110	36.2	1122	35.7	1071	84.7	177	44
1562AZ1_91	1127.83	73.79	2.00717	0.15878	0.19119	0.01360	0.07614	0.00615	0.05573	0.00398	1104	59.0	1128	73.8	1099	166.0	221	91
1562AZ1_97	1131.47	79.77	2.04026	0.17163	0.19187	0.01470	0.07712	0.00612	0.05373	0.00490	1109	74.7	1131	79.8	1124	162.4	31	7
1562AZ1_36	1132.67	24.19	2.08233	0.08972	0.19209	0.00447	0.07862	0.00349	0.05887	0.00193	1124	42.0	1133	24.2	1163	89.2	94	68
1562AZ1_43	1133.09	26.34	2.09981	0.09172	0.19216	0.00487	0.07925	0.00349	0.05852	0.00232	1136	48.1	1133	26.3	1178	88.4	87	39
1562AZ1_26	1136.31	70.02	2.08847	0.15685	0.19276	0.01292	0.07858	0.00583	0.06187	0.00370	1139	61.4	1136	70.0	1162	150.7	80	46
1562AZ1_104	1143.20	28.72	2.10314	0.07194	0.19404	0.00531	0.07861	0.00271	0.05556	0.00183	1158	31.7	1143	28.7	1162	69.0	220	85
1562AZ1_102	1154.68	71.34	2.49766	0.21517	0.19616	0.01320	0.09234	0.00728	0.05664	0.00405	1280	91.9	1155	71.3	1474	153.3	36	64
1562AZ1_77	1155.64	58.44	2.10281	0.29905	0.19634	0.01082	0.07768	0.01114	0.24781	0.12258	1031	141.2	1156	58.4	1139	299.3	8	0
1562AZ1_48	1159.49	58.17	2.17103	0.12723	0.19706	0.01078	0.07991	0.00454	0.06043	0.00354	1178	47.4	1159	58.2	1195	114.1	148	48
1562AZ1_80	1171.22	38.18	2.19806	0.09376	0.19924	0.00709	0.08001	0.00342	0.05999	0.00243	1191	42.9	1171	38.2	1197	85.5	134	80
1562AZ1_95	1174.46	78.22	2.15327	0.17391	0.19984	0.01451	0.07815	0.00620	0.05815	0.00471	1166	59.5	1174	78.2	1151	161.7	139	49
1562AZ1_84	1176.15	35.51	2.15701	0.08197	0.20015	0.00660	0.07816	0.00292	0.05850	0.00187	1151	31.0	1176	35.5	1151	75.2	305	198
1562AZ1_11	1187.42	76.37	2.19542	0.14830	0.20225	0.01420	0.07873	0.00527	0.05900	0.00384	1175	50.3	1187	76.4	1165	135.6	415	150
1562AZ1_29	1188.22	66.51	2.08872	0.13429	0.20240	0.01237	0.07484	0.00420	0.06167	0.00372	1121	45.0	1188	66.5	1064	114.9	175	54
1562AZ1_54	1191.45	76.72	2.26029	0.15635	0.20301	0.01427	0.08075	0.00541	0.05963	0.00381	1197	52.5	1191	76.7	1215	134.7	410	241
1562AZ1_55	1200.15	76.92	2.21459	0.14982	0.20463	0.01433	0.07849	0.00526	0.05920	0.00386	1185	50.7	1200	76.9	1159	135.9	415	150
1562AZ1_59	1204.59	58.91	2.27624	0.12847	0.20546	0.01099	0.08035	0.00426	0.06045	0.00326	1194	42.0	1205	58.9	1206	106.2	403	161
1562AZ1_13	1212.92	35.96	2.35508	0.08256	0.20702	0.00672	0.08251	0.00282	0.06366	0.00223	1238	33.6	1213	36.0	1258	67.5	475	131
1562AZ1_49	1234.64	98.95	2.98927	0.28300	0.21109	0.01852	0.10270	0.00967	0.05312	0.00465	1364	76.1	1235	99.0	1674	179.2	151	42
1562AZ1_47	1235.41	102.50	2.39868	0.22485	0.21124	0.01918	0.08236	0.00777	0.06016	0.00601	1198	70.1	1235	102.5	1254	190.4	58	21
1562AZ1_17	1236.54	31.34	2.45741	0.09057	0.21145	0.00588	0.08429	0.00319	0.06186	0.00225	1265	39.0	1237	31.3	1299	74.5	121	68
1562AZ1_85	1245.85	54.25	2.42686	0.11962	0.21320	0.01019	0.08256	0.00377	0.06164	0.00282	1225	39.3	1246	54.3	1259	90.5	156	131
1562AZ1_110	1254.22	26.33	2.40985	0.07313	0.21478	0.00496	0.08138	0.00249	0.06147	0.00173	1237	28.6	1254	26.3	1231	60.6	194	80
1562AZ1_45	1287.18	102.25	2.69960	0.68029	0.22100	0.01929	0.08859	0.02252	0.07779	0.02984	1312	202.2	1287	102.3	1395	531.1	58	18
1562AZ1_28	1292.19	80.79	2.53362	0.17440	0.22195	0.01527	0.08279	0.00566	0.06703	0.00465	1293	60.3	1292	80.8	1264	136.4	104	112
1562AZ1_7	1307.77	34.71	2.66180	0.07732	0.22491	0.00659	0.08584	0.00262	0.06661	0.00192	1313	27.5	1308	34.7	1334	59.6	263	105
1562AZ1_27	1350.64	88.48	2.71613	0.20471	0.23308	0.01687	0.08452	0.00638	0.06918	0.00531	1315	59.1	1351	88.5	1304	150.3	149	87
1562AZ1_66	1434.09	35.82	3.05735	0.12540	0.24915	0.00693	0.08900	0.00372	0.07471	0.00263	1397	51.0	1434	35.8	1404	81.2	78	23
1562AZ1_20	1463.11	54.50	3.30629	0.15922	0.25479	0.01059	0.09412	0.00423	0.07457	0.00318	1446	52.9	1463	54.5	1510	86.1	112	86
1562AZ1_51	1465.77	85.46	3.26748	0.22881	0.25530	0.01659	0.09282	0.00611	0.07911	0.00553	1493	58.2	1466	85.5	1484	127.4	221	38
1562AZ1_76	1470.97	85.94	3.27748	0.23008	0.25632	0.01669	0.09274	0.00612	0.07892	0.00553	1498	58.4	1471	85.9	1483	127.8	221	38
1562AZ1_74	1477.70	103.29	3.39096	0.18652	0.26587	0.01309	0.09250	0.00495	0.07329	0.00367	1475	48.2	1520	66.8	1478	103.3	164	83
1562AZ1_107	1512.65	89.82	3.48285	0.18507	0.26808	0.01443	0.09423	0.00442	0.08031	0.00430	1517	42.2	1531	73.5	1513	89.8	362	141
1562AZ1_50	1514.77	87.85	3.47006	0.18173	0.26679	0.01416	0.09433	0.00433	0.08082	0.00426	1508	41.3	1525	72.3	1515	87.8	361	141
1562AZ1_53	1587.04	138.98	3.58307	0.26510	0.26508	0.02058	0.09803	0.00712	0.08092	0.00562	1561	63.9	1516	105.3	1587	139.0	173	150
1562AZ1_64	1617.17	91.64	4.01039	0.19610	0.29194	0.01065	0.09963	0.00483	0.08416	0.00422	1629	67.3	1651	53.3	1617	91.6	44	12
1562AZ1_69	1653.10	73.94	4.06878	0.14667	0.29052	0.00963	0.10158	0.00400	0.08070	0.00318	1642	39.2	1644	48.2	1653	73.9	153	90
1562AZ1_79	1664.47	92.12	3.99060	0.17604	0.28319	0.01127	0.10220	0.00501	0.07849	0.00376	1615	47.8	1607	56.7	1664	92.1	112	100
1562AZ1_75	1672.09	150.10	3.99458	0.32582	0.28231	0.02365	0.10262	0.00813	0.07607	0.00569	1603	76.7	1603	119.4	1672	150.1	109	93
1562AZ1_88	1672.77	64.57	3.90551	0.13317	0.27591	0.00848	0.10266	0.00355	0.07848	0.00313	1619	37.5	1571	42.9	1673	64.6	239	51
1562AZ1_46	1674.38	149.71	3.98155	0.32403	0.28104	0.02350	0.10275	0.00812	0.07616	0.00568	1597	76.4	1597	118.8	1674	149.7	109	93
1562AZ1_23	1729.36	72.14	4.47110	0.18891	0.30631	0.01129	0.10586	0.00411	0.08675	0.00372	1699	41.6	1723	55.8	1729	72.1	289	62
1562AZ1_18	1749.08	66.43	4.40175	0.16180	0.29834	0.01112	0.10701	0.00384	0.08961	0.00338	1728	36.9	1683	55.3	1749	66.4	463	130

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
1562AZ1_39	1767.81	78.32	4.64413	0.19610	0.31156	0.01105	0.10811	0.00457	0.09541	0.00425	1727	45.6	1748	54.4	1768	78.3	139	44
1562AZ1_4	1925.14	48.45	5.64205	0.14821	0.34698	0.00534	0.11793	0.00316	0.09807	0.00196	1907	44.1	1920	25.6	1925	48.4	75	80
1562AZ1_90	1939.84	124.24	6.04923	0.43038	0.36898	0.02509	0.11891	0.00809	0.10196	0.00657	1968	69.8	2025	118.7	1940	124.2	79	110
1562AZ1_10	2053.72	79.16	6.51991	0.29034	0.37300	0.01135	0.12677	0.00561	0.10580	0.00469	2037	84.8	2044	53.4	2054	79.2	27	14
1562AZ1_109	2668.52	45.25	12.85683	0.34485	0.51317	0.01108	0.18171	0.00493	0.13419	0.00321	2672	44.5	2670	47.3	2669	45.3	106	138
1562AZ1_103	2732.15	55.91	13.74083	0.44236	0.52772	0.01299	0.18885	0.00635	0.13911	0.00492	2707	60.6	2732	54.9	2732	55.9	46	19
1562AZ1_37	2735.66	52.84	13.65807	0.41672	0.52342	0.01204	0.18925	0.00602	0.14022	0.00474	2699	59.5	2714	51.0	2736	52.8	46	19
1562AZ1_21	2978.66	52.20	17.73980	0.56646	0.58556	0.01698	0.21972	0.00706	0.15816	0.00439	2966	56.5	2971	69.2	2979	52.2	80	62
Sample Name	**Granite TK1-13.5**																	
1563AZ1_37	1466.58	55.93	2.87303	0.08396	0.22659	0.00459	0.09196	0.00268	0.06849	0.00174	1388	33.3	1317	24.1	1467	55.9	229	193
1563AZ1_44	1474.21	57.45	2.79396	0.08535	0.21947	0.00490	0.09233	0.00277	0.06617	0.00186	1365	33.6	1279	25.9	1474	57.4	229	192
1563AZ1_55	1477.49	58.35	2.77463	0.08589	0.21757	0.00496	0.09249	0.00282	0.06512	0.00190	1352	34.2	1269	26.3	1477	58.3	229	191
1563AZ1_47	1607.51	63.06	3.79500	0.12284	0.27770	0.00710	0.09911	0.00332	0.07455	0.00379	1611	48.6	1580	35.9	1608	63.1	100	10
1563AZ1_74	1616.20	80.18	3.72325	0.14726	0.27118	0.00776	0.09958	0.00423	0.07126	0.00712	1603	68.9	1547	39.4	1616	80.2	68	3
1563AZ1_57	1622.68	77.98	3.73740	0.14455	0.27127	0.00761	0.09992	0.00413	0.07266	0.00703	1588	66.7	1547	38.6	1623	78.0	68	3
1563AZ1_102	1622.71	77.58	3.75410	0.14519	0.27247	0.00782	0.09993	0.00411	0.07469	0.00715	1589	65.8	1553	39.7	1623	77.6	68	3
1563AZ1_59	1629.64	79.21	3.75812	0.15257	0.27175	0.00730	0.10030	0.00422	0.07238	0.00680	1629	58.9	1550	37.0	1630	79.2	74	4
1563AZ1_45	1633.01	45.97	3.53573	0.10225	0.25521	0.00683	0.10048	0.00247	0.08966	0.00293	1554	24.9	1465	35.1	1633	46.0	1686	114
1563AZ1_51	1633.23	46.26	3.52268	0.10234	0.25423	0.00688	0.10049	0.00248	0.08882	0.00295	1552	25.1	1460	35.4	1633	46.3	1684	114
1563AZ1_70	1633.88	48.44	3.54993	0.10691	0.25611	0.00727	0.10053	0.00260	0.08532	0.00309	1566	26.1	1470	37.3	1634	48.4	1708	113
1563AZ1_79	1639.48	81.04	3.75731	0.15633	0.27026	0.00742	0.10083	0.00434	0.06979	0.00678	1636	60.5	1542	37.7	1639	81.0	73	4
1563AZ1_26	1649.77	44.91	4.12107	0.10338	0.29478	0.00639	0.10139	0.00244	0.08500	0.00464	1673	25.0	1665	31.9	1650	44.9	1106	5
1563AZ1_58	1652.48	48.75	4.02677	0.10818	0.28762	0.00722	0.10154	0.00265	0.07872	0.00467	1679	26.6	1630	36.2	1652	48.8	1130	5
1563AZ1_11	1655.82	62.44	3.95673	0.12779	0.28210	0.00586	0.10172	0.00339	0.08184	0.00582	1653	47.3	1602	29.5	1656	62.4	75	4
1563AZ1_67	1661.07	49.23	4.03616	0.10888	0.28695	0.00727	0.10201	0.00269	0.07816	0.00467	1685	26.8	1626	36.5	1661	49.2	1131	5
1563AZ1_49	1665.64	48.59	4.19927	0.10951	0.29781	0.00649	0.10227	0.00266	0.05926	0.00431	1709	29.4	1680	32.3	1666	48.6	551	7
1563AZ1_8	1671.80	41.70	4.21326	0.09243	0.29781	0.00552	0.10261	0.00230	0.07474	0.00560	1684	25.1	1680	27.5	1672	41.7	675	4
1563AZ1_98	1674.90	47.92	4.07872	0.10362	0.28782	0.00693	0.10278	0.00264	0.06419	0.00542	1683	27.5	1631	34.8	1675	47.9	673	4
1563AZ1_83	1675.41	50.45	4.05063	0.12153	0.28576	0.00826	0.10281	0.00278	0.07798	0.00268	1689	26.8	1620	41.5	1675	50.4	1223	58
1563AZ1_96	1675.89	53.38	4.08991	0.11764	0.28845	0.00796	0.10283	0.00294	0.09118	0.00853	1689	27.9	1634	39.9	1676	53.4	475	2
1563AZ1_53	1687.23	62.42	3.79808	0.14521	0.26623	0.00908	0.10347	0.00346	0.13848	0.00576	1604	37.1	1522	46.3	1687	62.4	657	33
1563AZ1_106	1692.75	61.78	3.83663	0.14596	0.26813	0.00923	0.10378	0.00344	0.14350	0.00565	1616	36.3	1531	47.0	1693	61.8	631	33
1563AZ1_16	1704.84	49.21	4.00984	0.11821	0.27840	0.00704	0.10446	0.00277	0.14582	0.00430	1640	29.2	1583	35.5	1705	49.2	658	36
1563AZ1_68	1707.38	56.74	4.14394	0.12600	0.28732	0.00740	0.10461	0.00319	0.08075	0.00259	1702	33.5	1628	37.1	1707	56.7	460	113
1563AZ1_66	1707.39	56.67	4.14701	0.12602	0.28753	0.00741	0.10461	0.00319	0.08101	0.00259	1702	33.5	1629	37.1	1707	56.7	460	113
1563AZ1_24	1710.40	40.47	4.24405	0.10519	0.29377	0.00638	0.10478	0.00229	0.08403	0.00205	1697	23.8	1660	31.8	1710	40.5	2035	630
1563AZ1_23	1710.40	40.43	4.24663	0.10512	0.29395	0.00638	0.10478	0.00229	0.08415	0.00205	1697	23.8	1661	31.8	1710	40.4	2035	630
1563AZ1_71	1711.46	45.69	4.15439	0.11479	0.28740	0.00752	0.10484	0.00258	0.07554	0.00232	1706	26.3	1629	37.7	1711	45.7	2051	641
1563AZ1_31	1711.81	42.31	4.49764	0.11551	0.31109	0.00708	0.10486	0.00239	0.08670	0.00198	1751	25.7	1746	34.9	1712	42.3	1353	418
1563AZ1_88	1713.63	55.58	4.15153	0.12610	0.28687	0.00756	0.10496	0.00314	0.08143	0.00250	1708	32.5	1626	37.9	1714	55.6	462	113
1563AZ1_41	1714.62	50.63	4.09026	0.12485	0.28248	0.00830	0.10502	0.00287	0.08408	0.00235	1676	27.5	1604	41.8	1715	50.6	1698	594
1563AZ1_27	1717.82	46.21	4.53542	0.11858	0.31268	0.00772	0.10520	0.00262	0.08095	0.00209	1757	25.2	1754	38.0	1718	46.2	1452	545
1563AZ1_14	1718.57	40.39	4.34171	0.11063	0.29920	0.00673	0.10524	0.00230	0.08740	0.00194	1711	24.0	1687	33.4	1719	40.4	1199	393
1563AZ1_1	1720.77	45.75	4.43413	0.12275	0.30521	0.00803	0.10537	0.00260	0.08199	0.00224	1756	27.4	1717	39.7	1721	45.8	1350	412
1563AZ1_54	1720.77	45.75	4.43413	0.12275	0.30521	0.00803	0.10537	0.00260	0.08199	0.00224	1756	27.4	1717	39.7	1721	45.8	1350	412
1563AZ1_18	1720.88	42.29	4.51033	0.10482	0.31043	0.00598	0.10538	0.00241	0.08933	0.00206	1744	26.7	1743	29.4	1721	42.3	715	169
1563AZ1_32	1721.64	48.77	4.35244	0.13884	0.29944	0.00895	0.10542	0.00278	0.09486	0.00255	1722	28.0	1689	44.5	1722	48.8	1505	463
1563AZ1_33	1724.70	41.13	4.50330	0.11595	0.30930	0.00704	0.10560	0.00235	0.08195	0.00196	1752	26.0	1737	34.7	1725	41.1	883	326
1563AZ1_52	1724.92	52.76	4.24877	0.14548	0.29179	0.00976	0.10561	0.00301	0.09046	0.00281	1719	29.7	1650	48.8	1725	52.8	1513	459
1563AZ1_101	1727.26	45.48	4.18008	0.12066	0.28671	0.00792	0.10574	0.00260	0.08265	0.00217	1701	25.8	1625	39.7	1727	45.5	1206	392
1563AZ1_46	1727.58	47.94	4.32173	0.11641	0.29637	0.00666	0.10576	0.00274	0.08173	0.00236	1727	31.3	1673	33.2	1728	47.9	512	128
1563AZ1_50	1728.14	48.02	4.30951	0.11604	0.29544	0.00668	0.10579	0.00275	0.08118	0.00237	1726	31.4	1669	33.3	1728	48.0	509	127

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
1563AZ1_62	1728.47	52.39	4.39930	0.12292	0.30154	0.00787	0.10581	0.00299	0.07734	0.00275	1753	29.4	1699	39.0	1728	52.4	656	184
1563AZ1_9	1729.04	44.25	4.28768	0.11354	0.29380	0.00721	0.10584	0.00253	0.08984	0.00210	1700	24.7	1660	36.0	1729	44.3	1725	600
1563AZ1_105	1729.18	46.12	4.44681	0.12553	0.30468	0.00834	0.10585	0.00264	0.08322	0.00221	1757	26.9	1714	41.3	1729	46.1	1339	408
1563AZ1_75	1729.96	50.18	4.26819	0.11659	0.29232	0.00737	0.10590	0.00287	0.07638	0.00248	1730	30.6	1653	36.8	1730	50.2	529	150
1563AZ1_109	1730.25	48.12	4.31572	0.11745	0.29553	0.00700	0.10591	0.00276	0.08313	0.00236	1729	30.8	1669	34.9	1730	48.1	511	128
1563AZ1_69	1730.85	50.06	4.27196	0.11579	0.29243	0.00734	0.10595	0.00287	0.07716	0.00248	1729	30.5	1654	36.7	1731	50.1	528	150
1563AZ1_43	1732.31	45.27	4.46651	0.11194	0.30551	0.00687	0.10603	0.00260	0.08485	0.00226	1756	28.2	1719	34.0	1732	45.3	709	168
1563AZ1_95	1732.61	49.08	4.43797	0.12334	0.30351	0.00858	0.10605	0.00281	0.07583	0.00220	1759	25.6	1709	42.5	1733	49.1	1453	543
1563AZ1_97	1733.35	49.30	4.26691	0.11593	0.29169	0.00749	0.10609	0.00283	0.07902	0.00238	1727	29.2	1650	37.5	1733	49.3	529	150
1563AZ1_78	1733.72	47.52	4.29705	0.11957	0.29369	0.00765	0.10612	0.00273	0.07562	0.00252	1739	28.3	1660	38.2	1734	47.5	781	191
1563AZ1_100	1734.07	48.85	4.44794	0.12283	0.30395	0.00855	0.10614	0.00280	0.07685	0.00220	1759	25.5	1711	42.3	1734	48.9	1452	542
1563AZ1_10	1735.60	41.09	4.71442	0.11286	0.32189	0.00648	0.10622	0.00236	0.07942	0.00178	1783	25.3	1799	31.6	1736	41.1	1053	285
1563AZ1_99	1736.07	53.48	4.27388	0.14868	0.29173	0.01007	0.10625	0.00307	0.09125	0.00280	1726	29.4	1650	50.3	1736	53.5	1517	461
1563AZ1_64	1736.23	46.96	4.30798	0.11777	0.29404	0.00756	0.10626	0.00270	0.07741	0.00252	1739	28.1	1662	37.7	1736	47.0	784	191
1563AZ1_84	1736.65	46.99	4.42593	0.12269	0.30202	0.00785	0.10629	0.00270	0.07514	0.00215	1760	27.5	1701	38.9	1737	47.0	814	244
1563AZ1_89	1737.02	46.98	4.42860	0.12290	0.30214	0.00784	0.10631	0.00270	0.07568	0.00214	1759	27.4	1702	38.9	1737	47.0	815	244
1563AZ1_35	1737.15	43.63	4.46198	0.11618	0.30439	0.00696	0.10631	0.00251	0.08395	0.00237	1741	26.9	1713	34.5	1737	43.6	762	185
1563AZ1_93	1738.94	46.36	4.53759	0.12680	0.30925	0.00852	0.10642	0.00267	0.07889	0.00221	1777	27.8	1737	42.0	1739	46.4	1334	449
1563AZ1_104	1738.99	46.30	4.45779	0.11461	0.30380	0.00733	0.10642	0.00267	0.08474	0.00227	1757	28.2	1710	36.3	1739	46.3	706	167
1563AZ1_3	1739.63	40.72	4.56714	0.11083	0.31115	0.00662	0.10646	0.00235	0.08807	0.00232	1752	25.4	1746	32.6	1740	40.7	745	180
1563AZ1_92	1739.88	58.66	4.03516	0.14237	0.27487	0.00861	0.10647	0.00337	0.07035	0.00272	1645	40.4	1565	43.6	1740	58.7	744	174
1563AZ1_108	1740.14	50.51	4.13072	0.12710	0.28134	0.00822	0.10649	0.00291	0.08410	0.00226	1686	28.4	1598	41.4	1740	50.5	919	224
1563AZ1_91	1740.16	52.17	4.11402	0.13038	0.28020	0.00844	0.10649	0.00300	0.08116	0.00227	1687	29.3	1592	42.6	1740	52.2	928	226
1563AZ1_90	1740.32	44.71	4.40103	0.12280	0.29972	0.00808	0.10650	0.00258	0.07600	0.00213	1754	26.9	1690	40.1	1740	44.7	881	319
1563AZ1_107	1744.17	52.04	4.02244	0.12668	0.27336	0.00761	0.10672	0.00301	0.07530	0.00252	1628	35.0	1558	38.6	1744	52.0	752	176
1563AZ1_17	1744.75	44.21	4.25582	0.10978	0.28913	0.00621	0.10676	0.00256	0.07980	0.00214	1685	29.9	1637	31.1	1745	44.2	746	177
1563AZ1_25	1745.06	61.22	4.29374	0.18654	0.29166	0.01124	0.10677	0.00353	0.11497	0.00364	1693	37.8	1650	56.2	1745	61.2	760	125
1563AZ1_15	1747.44	43.95	4.28833	0.11228	0.29091	0.00674	0.10691	0.00255	0.08656	0.00195	1696	25.6	1646	33.7	1747	43.9	938	230
1563AZ1_38	1749.97	52.22	4.47407	0.14303	0.30309	0.00882	0.10706	0.00303	0.09025	0.00264	1741	28.7	1707	43.7	1750	52.2	1536	516
1563AZ1_28	1752.05	51.80	4.49922	0.14227	0.30445	0.00875	0.10718	0.00301	0.09122	0.00264	1742	28.5	1713	43.3	1752	51.8	1531	515
1563AZ1_86	1758.08	77.53	4.06089	0.22387	0.27388	0.01371	0.10754	0.00450	0.11007	0.00468	1653	46.4	1560	69.5	1758	77.5	804	119
1563AZ1_48	1759.58	73.78	4.13388	0.21726	0.27858	0.01323	0.10762	0.00429	0.10769	0.00439	1663	44.9	1584	66.9	1760	73.8	792	122
1563AZ1_85	1767.46	83.01	3.81897	0.23032	0.25625	0.01380	0.10809	0.00484	0.08590	0.00371	1605	53.3	1471	71.0	1767	83.0	970	265
1563AZ1_21	1773.29	134.09	4.19430	0.11262	0.28054	0.02034	0.10844	0.00779	0.16359	0.00444	1683	22.3	1594	102.8	1773	134.1	2262	34
1563AZ1_110	1776.90	62.88	3.94978	0.17842	0.26366	0.01070	0.10865	0.00371	0.08907	0.00299	1616	40.4	1509	54.7	1777	62.9	1037	287
1563AZ1_42	1782.82	62.47	3.92887	0.17611	0.26141	0.01037	0.10900	0.00370	0.08507	0.00290	1613	40.5	1497	53.1	1783	62.5	1042	287
1563AZ1_61	1819.00	135.89	3.98781	0.11408	0.26011	0.01930	0.11119	0.00814	0.15281	0.00476	1648	24.2	1490	99.1	1819	135.9	2268	34
1563AZ1_76	1823.53	73.42	1.79664	0.07930	0.11690	0.00525	0.11147	0.00446	0.08375	0.00398	1043	31.6	713	30.4	1824	73.4	2167	270
1563AZ1_80	1842.43	135.82	3.96291	0.11499	0.25517	0.01896	0.11264	0.00826	0.14928	0.00478	1643	24.3	1465	97.7	1842	135.8	2271	34
1563AZ1_4	1855.83	50.16	4.90300	0.15155	0.31337	0.00914	0.11348	0.00312	0.11878	0.00320	1808	29.0	1757	45.0	1856	50.2	1504	446
1563AZ1_5	1857.67	63.10	4.53353	0.18215	0.28946	0.01047	0.11359	0.00393	0.11390	0.00407	1727	38.9	1639	52.5	1858	63.1	1161	339
1563AZ1_36	1865.12	51.61	4.78513	0.15244	0.30426	0.00910	0.11406	0.00323	0.11392	0.00318	1795	29.7	1712	45.1	1865	51.6	1513	447
1563AZ1_77	1865.41	87.17	4.41020	0.33992	0.28038	0.02077	0.11408	0.00543	0.10827	0.00565	1712	69.7	1593	105.0	1865	87.2	697	96
1563AZ1_29	1872.21	55.93	4.44204	0.15834	0.28134	0.00884	0.11451	0.00352	0.10916	0.00349	1702	34.7	1598	44.6	1872	55.9	1156	338
1563AZ1_103	1891.47	52.68	4.62690	0.15204	0.28993	0.00924	0.11574	0.00336	0.11369	0.00336	1776	29.6	1641	46.3	1891	52.7	1520	447
1563AZ1_63	1891.55	52.67	4.56878	0.14946	0.28628	0.00889	0.11575	0.00336	0.10939	0.00341	1759	30.6	1623	44.7	1892	52.7	1522	449
1563AZ1_72	1902.03	72.07	4.41669	0.20485	0.27514	0.01172	0.11642	0.00461	0.11053	0.00481	1712	44.6	1567	59.4	1902	72.1	1163	329
1563AZ1_65	1903.14	73.59	4.40857	0.20860	0.27446	0.01196	0.11650	0.00471	0.11035	0.00489	1709	45.5	1563	60.6	1903	73.6	1166	329
1563AZ1_82	1913.39	68.86	2.53904	0.11782	0.15717	0.00665	0.11716	0.00444	0.14774	0.00685	1282	38.0	941	37.1	1913	68.9	1228	103
1563AZ1_56	1916.87	73.14	2.52371	0.12400	0.15592	0.00695	0.11739	0.00473	0.15192	0.00743	1274	40.5	934	38.8	1917	73.1	1243	104
1563AZ1_20	1929.69	385.18	4.75441	0.98193	0.29165	0.03322	0.11823	0.02384	0.14981	0.09297	1667	450.7	1650	166.9	1930	385.2	1	0
1563AZ1_13	1954.82	384.46	4.85761	1.00538	0.29382	0.03395	0.11991	0.02421	0.18151	0.11341	1765	513.7	1661	170.3	1955	384.5	1	0
1563AZ1_40	1971.77	381.92	4.80914	0.98992	0.28814	0.03325	0.12105	0.02434	0.17148	0.10308	1660	447.4	1632	167.5	1972	381.9	1	0

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
1563AZ1_94	2096.33	80.73	3.18141	0.15166	0.17766	0.00841	0.12988	0.00589	0.12184	0.00658	1430	39.9	1054	46.1	2096	80.7	1525	260
1563AZ1_87	2171.19	68.31	3.23659	0.17440	0.17317	0.00895	0.13556	0.00525	0.06636	0.00536	1464	39.0	1030	49.3	2171	68.3	1791	632
1731AZ1_1	1546.90	40.60	3.52902	0.07619	0.26674	0.00412	0.09596	0.00206	0.08995	0.00157	1546	27.6	1524	21.4	1547	40.6	125	98
1731AZ1_2	1638.94	141.44	4.11314	0.32461	0.29594	0.02203	0.10080	0.00802	0.09748	0.01822	1634	67.3	1671	110.1	1639	141.4	64	0
1731AZ1_3	1810.33	29.56	4.63848	0.07776	0.30400	0.00435	0.11066	0.00179	0.08920	0.00142	1758	18.7	1711	21.5	1810	29.6	775	339
1731AZ1_4	1742.97	58.14	4.54250	0.13614	0.30890	0.00856	0.10665	0.00335	0.09056	0.00300	1747	29.2	1735	42.2	1743	58.1	530	160
1731AZ1_5	1812.65	24.71	4.64823	0.07832	0.30425	0.00438	0.11080	0.00180	0.08924	0.00143	1760	18.8	1712	21.7	1813	24.7	774	339
1731AZ1_6	1370.45	108.11	2.82839	0.25257	0.23688	0.02066	0.08660	0.00797	0.08493	0.00869	1421	78.3	1370	108.1	1352	182.9	90	59
1731AZ1_8	1744.47	57.68	4.53906	0.13478	0.30842	0.00846	0.10674	0.00333	0.09037	0.00296	1746	28.9	1733	41.7	1744	57.7	533	160
1731AZ1_9	1287.71	60.11	2.72979	0.14408	0.22110	0.01203	0.08954	0.00505	0.07718	0.00422	1358	46.5	1288	60.1	1416	109.7	205	138
1731AZ1_10	1342.33	27.67	2.84385	0.07389	0.23149	0.00528	0.08910	0.00225	0.08539	0.00220	1372	26.1	1342	27.7	1406	48.8	385	172
1731AZ1_11	1288.82	49.72	2.73233	0.14423	0.22131	0.01204	0.08954	0.00505	0.07714	0.00421	1359	46.6	1289	49.7	1416	109.7	205	138
1731AZ1_12	1550.73	41.08	3.54453	0.07654	0.26736	0.00412	0.09615	0.00207	0.08938	0.00157	1551	27.7	1527	24.0	1551	41.1	124	97
1731AZ1_13	1370.46	67.79	2.83399	0.25210	0.23688	0.02060	0.08677	0.00797	0.08459	0.00861	1422	78.0	1370	67.8	1355	132.4	90	59
1731AZ1_14	1811.17	27.70	4.67191	0.07830	0.30605	0.00435	0.11071	0.00180	0.08903	0.00141	1764	18.8	1721	21.5	1811	27.7	776	341
1731AZ1_15	1638.10	137.55	4.13698	0.32664	0.29779	0.02217	0.10076	0.00802	0.08768	0.01777	1638	67.5	1680	110.6	1638	137.5	64	0
1731AZ1_16	1550.62	31.79	3.55104	0.07665	0.26787	0.00412	0.09615	0.00207	0.08941	0.00157	1554	27.8	1530	20.0	1551	31.8	124	98
1731AZ1_17	1293.17	52.22	2.73666	0.14509	0.22214	0.01212	0.08935	0.00506	0.07707	0.00422	1359	46.8	1293	52.2	1412	110.2	205	138
1731AZ1_18	1348.84	27.93	2.85781	0.07474	0.23274	0.00534	0.08906	0.00227	0.08518	0.00221	1375	26.4	1349	27.9	1405	49.1	385	173
1731AZ1_19	1637.62	151.58	4.14460	0.32731	0.29841	0.02221	0.10073	0.00802	0.09203	0.01786	1640	67.5	1683	110.8	1638	151.6	64	0
1731AZ1_20	1293.22	63.72	2.74137	0.14442	0.22215	0.01205	0.08950	0.00503	0.07693	0.00419	1360	46.5	1293	63.7	1415	109.5	206	139
1731AZ1_21	1350.15	27.74	2.86174	0.07441	0.23299	0.00530	0.08908	0.00226	0.08515	0.00219	1377	26.3	1350	27.7	1406	48.9	385	173
1731AZ1_22	1745.50	45.72	4.57861	0.13603	0.31093	0.00850	0.10680	0.00333	0.09028	0.00296	1754	29.2	1745	41.9	1746	45.7	533	160
1731AZ1_23	1637.40	151.62	4.15233	0.32797	0.29901	0.02226	0.10072	0.00802	0.09424	0.01788	1641	67.6	1686	110.9	1637	151.6	64	0
1731AZ1_24	1382.08	28.91	2.85265	0.25491	0.23911	0.02085	0.08653	0.00797	0.08475	0.00867	1428	78.6	1382	28.9	1350	173.1	90	59
1731AZ1_26	1745.55	57.76	4.58913	0.13639	0.31164	0.00851	0.10680	0.00334	0.09023	0.00296	1756	29.2	1749	41.9	1746	57.8	533	160
1731AZ1_27	1384.07	109.05	2.85855	0.25539	0.23949	0.02088	0.08657	0.00797	0.08472	0.00867	1430	78.7	1384	109.0	1351	183.0	90	59
1731AZ1_28	1354.40	27.43	2.86962	0.07393	0.23380	0.00524	0.08902	0.00224	0.08518	0.00217	1380	26.2	1354	27.4	1405	48.5	385	172
1731AZ1_29	1813.41	31.77	4.71632	0.07837	0.30858	0.00426	0.11085	0.00180	0.08902	0.00139	1773	19.0	1734	21.0	1813	31.8	772	339
1731AZ1_30	1552.87	36.34	3.57858	0.07744	0.26962	0.00411	0.09626	0.00208	0.08939	0.00156	1556	27.9	1539	27.9	1553	36.3	124	98
Sample Name	**Granite TL1-16.5**																	
1564AZ1_6	454.24	11.37	0.55786	0.03733	0.07301	0.00189	0.05542	0.00380	0.02076	0.00094	451	30.1	454	11.4	429	156.7	103	53
1564AZ1_20	457.88	11.32	0.56032	0.03741	0.07361	0.00188	0.05521	0.00377	0.02152	0.00097	451	29.9	458	11.3	421	156.4	103	53
1564AZ1_36	458.68	11.28	0.56208	0.03757	0.07375	0.00188	0.05528	0.00378	0.02245	0.00099	448	29.7	459	11.3	424	156.5	104	53
1564AZ1_71	459.86	10.64	0.56420	0.03687	0.07394	0.00177	0.05534	0.00369	0.02319	0.00099	445	28.8	460	10.6	426	152.4	104	53
1564AZ1_44	495.45	28.29	0.62629	0.03998	0.07989	0.00473	0.05686	0.00338	0.02571	0.00126	489	25.4	495	28.3	486	133.9	295	252
1564AZ1_54	496.43	28.28	0.62760	0.04002	0.08005	0.00473	0.05686	0.00337	0.02589	0.00127	489	25.4	496	28.3	486	133.7	295	252
1564AZ1_84	497.51	28.49	0.62446	0.04009	0.08023	0.00477	0.05645	0.00337	0.02603	0.00128	485	25.5	498	28.5	470	134.8	294	252
1564AZ1_109	498.17	28.55	0.62777	0.04025	0.08034	0.00478	0.05667	0.00338	0.02568	0.00126	486	25.5	498	28.5	479	134.5	294	251
1564AZ1_103	986.40	67.90	1.65859	0.13110	0.16534	0.01224	0.07275	0.00560	0.05427	0.00453	974	54.9	986	67.9	1007	160.1	123	35
1564AZ1_14	1067.90	32.17	1.89603	0.06506	0.18017	0.00588	0.07632	0.00274	0.05217	0.00183	1093	27.9	1068	32.2	1104	72.7	390	177
1564AZ1_33	1084.77	31.69	1.93154	0.06391	0.18326	0.00581	0.07644	0.00266	0.05465	0.00185	1099	27.1	1085	31.7	1107	70.2	390	176
1564AZ1_42	1087.13	31.35	1.95439	0.06426	0.18370	0.00575	0.07716	0.00264	0.05628	0.00187	1100	26.8	1087	31.4	1125	69.0	390	177
1564AZ1_104	1094.66	30.00	1.94800	0.06157	0.18508	0.00551	0.07634	0.00252	0.05641	0.00180	1091	26.2	1095	30.0	1104	66.8	390	177
1564AZ1_27	1102.09	71.02	1.91785	0.06411	0.18238	0.00583	0.07627	0.00268	0.05378	0.00184	1097	27.3	1080	31.8	1102	71.0	390	177
1564AZ1_85	1403.55	45.75	3.04633	0.11575	0.24325	0.00881	0.09083	0.00349	0.07450	0.00315	1417	36.9	1404	45.8	1443	74.2	343	42
1564AZ1_97	1486.53	160.94	2.52155	0.21548	0.19679	0.01612	0.09293	0.00769	0.07401	0.00654	1278	69.6	1158	87.1	1487	160.9	645	383
1564AZ1_12	1617.20	144.63	3.98917	0.30743	0.29039	0.01664	0.09963	0.00756	0.09466	0.01518	1595	105.5	1643	83.4	1617	144.6	13	1
1564AZ1_99	1622.24	144.82	4.07747	0.31547	0.29602	0.01689	0.09990	0.00759	0.10328	0.01654	1586	106.1	1672	84.3	1622	144.8	13	1
1564AZ1_19	1622.54	145.64	4.00999	0.31115	0.29107	0.01681	0.09992	0.00763	0.09884	0.01591	1595	106.0	1647	84.2	1623	145.6	13	1
1564AZ1_32	1622.96	146.28	4.03711	0.31443	0.29298	0.01693	0.09994	0.00767	0.10205	0.01661	1599	106.9	1656	84.7	1623	146.3	13	1
1564AZ1_28	1627.92	141.65	3.97082	0.28702	0.28740	0.01930	0.10021	0.00746	0.08960	0.00955	1590	82.0	1629	97.0	1628	141.6	32	2

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
1564AZ1_87	1633.06	140.21	4.02941	0.28925	0.29083	0.01932	0.10048	0.00741	0.09533	0.01002	1582	81.4	1646	96.9	1633	140.2	32	2
1564AZ1_48	1633.26	145.02	4.08625	0.31681	0.29490	0.01689	0.10049	0.00766	0.10661	0.01669	1603	107.2	1666	84.4	1633	145.0	13	1
1564AZ1_81	1634.17	140.31	4.02935	0.28955	0.29065	0.01933	0.10054	0.00742	0.09551	0.01003	1583	81.5	1645	96.9	1634	140.3	32	2
1564AZ1_91	1636.45	169.13	4.06623	0.37030	0.29295	0.02256	0.10067	0.00891	0.09603	0.01003	1650	99.9	1656	113.0	1636	169.1	34	3
1564AZ1_95	1640.42	54.00	4.06842	0.11717	0.29249	0.00658	0.10088	0.00291	0.04464	0.00525	1647	36.7	1654	32.9	1640	54.0	167	2
1564AZ1_38	1641.88	56.64	4.06679	0.12167	0.29214	0.00718	0.10096	0.00305	0.04348	0.00514	1660	37.3	1652	35.9	1642	56.6	167	2
1564AZ1_43	1646.84	55.15	4.09054	0.12049	0.29306	0.00700	0.10123	0.00298	0.04558	0.00512	1658	36.5	1657	34.9	1647	55.1	167	2
1564AZ1_59	1650.38	169.25	4.09462	0.37414	0.29280	0.02262	0.10143	0.00900	0.09658	0.01006	1660	100.3	1655	113.3	1650	169.3	34	3
1564AZ1_46	1651.48	169.36	4.08728	0.37360	0.29210	0.02260	0.10149	0.00902	0.09578	0.00997	1662	100.5	1652	113.3	1651	169.4	34	3
1564AZ1_18	1651.54	61.01	4.02946	0.12992	0.28795	0.00751	0.10149	0.00331	0.04095	0.00534	1665	40.7	1631	37.6	1652	61.0	166	2
1564AZ1_88	1651.91	134.10	3.60212	0.27515	0.25736	0.01906	0.10151	0.00718	0.08146	0.00809	1529	73.3	1476	98.1	1652	134.1	590	193
1564AZ1_79	1654.35	119.80	4.01317	0.25634	0.28635	0.01300	0.10164	0.00644	0.09964	0.01212	1574	99.0	1623	65.3	1654	119.8	22	1
1564AZ1_107	1654.52	133.67	3.61367	0.27542	0.25783	0.01906	0.10165	0.00717	0.07954	0.00788	1538	73.5	1479	98.1	1655	133.7	590	194
1564AZ1_52	1656.73	140.26	4.05923	0.29227	0.28927	0.01934	0.10177	0.00753	0.09578	0.00995	1594	81.9	1638	97.1	1657	140.3	32	2
1564AZ1_23	1657.53	117.01	3.95830	0.24623	0.28196	0.01269	0.10182	0.00631	0.09235	0.01117	1589	96.9	1601	64.0	1658	117.0	22	1
1564AZ1_66	1657.73	140.22	3.63387	0.29095	0.25882	0.02009	0.10183	0.00753	0.08009	0.00833	1544	77.2	1484	103.3	1658	140.2	588	193
1564AZ1_31	1661.64	84.44	4.00592	0.17932	0.28472	0.00789	0.10204	0.00459	0.08269	0.00636	1594	63.5	1615	39.7	1662	84.4	47	3
1564AZ1_101	1661.82	63.06	4.13355	0.13933	0.29376	0.00737	0.10205	0.00344	0.08833	0.00750	1682	52.6	1660	36.8	1662	63.1	66	3
1564AZ1_40	1663.49	118.93	4.00226	0.25334	0.28417	0.01295	0.10215	0.00644	0.09639	0.01170	1589	98.6	1612	65.2	1663	118.9	22	1
1564AZ1_5	1663.62	85.24	3.97750	0.17576	0.28239	0.00709	0.10215	0.00464	0.08911	0.02954	1652	71.0	1603	35.7	1664	85.2	40	0
1564AZ1_89	1666.20	80.29	4.04455	0.17354	0.28675	0.00731	0.10230	0.00438	0.08661	0.00642	1583	61.2	1625	36.7	1666	80.3	47	3
1564AZ1_45	1666.34	66.15	4.13467	0.14618	0.29312	0.00792	0.10230	0.00362	0.08892	0.00766	1689	54.0	1657	39.6	1666	66.1	66	3
1564AZ1_35	1668.91	74.90	4.01963	0.16114	0.28457	0.00880	0.10245	0.00410	0.07567	0.00636	1608	57.8	1614	44.3	1669	74.9	65	3
1564AZ1_110	1669.11	76.53	4.12108	0.16499	0.29172	0.00622	0.10246	0.00419	0.12306	0.03360	1643	65.2	1650	31.1	1669	76.5	40	0
1564AZ1_58	1669.75	65.38	4.14513	0.14517	0.29332	0.00779	0.10249	0.00358	0.08982	0.00768	1687	53.4	1658	38.9	1670	65.4	66	3
1564AZ1_53	1672.38	65.71	4.14577	0.14581	0.29295	0.00785	0.10264	0.00361	0.08926	0.00769	1689	53.8	1656	39.2	1672	65.7	66	3
1564AZ1_77	1673.34	81.11	4.05274	0.17599	0.28623	0.00744	0.10269	0.00445	0.08698	0.00648	1589	61.6	1623	37.4	1673	81.1	47	3
1564AZ1_73	1674.99	81.21	4.05452	0.17627	0.28610	0.00747	0.10278	0.00446	0.08683	0.00647	1589	61.6	1622	37.5	1675	81.2	47	3
1564AZ1_100	1677.13	66.52	4.14485	0.14668	0.29213	0.00631	0.10290	0.00366	0.08932	0.00639	1623	60.1	1652	31.5	1677	66.5	47	4
1564AZ1_30	1678.51	96.09	3.45810	0.18742	0.24355	0.01286	0.10298	0.00527	0.07777	0.00546	1531	52.0	1405	66.9	1679	96.1	594	188
1564AZ1_83	1680.11	63.80	4.07213	0.15157	0.28654	0.00983	0.10307	0.00352	0.11416	0.00621	1630	35.7	1624	49.4	1680	63.8	218	10
1564AZ1_3	1682.04	75.26	4.00077	0.15873	0.28123	0.00714	0.10318	0.00415	0.07867	0.00617	1638	67.6	1598	36.0	1682	75.3	47	4
1564AZ1_94	1686.14	79.99	3.79605	0.16605	0.26625	0.01094	0.10341	0.00442	0.08931	0.00348	1593	38.8	1522	55.8	1686	80.0	596	170
1564AZ1_51	1686.54	77.00	4.14111	0.16741	0.29039	0.00668	0.10343	0.00426	0.12894	0.03211	1652	64.6	1643	33.4	1687	77.0	40	0
1564AZ1_93	1689.79	71.66	4.03473	0.15252	0.28243	0.00758	0.10361	0.00398	0.03137	0.00206	1610	53.6	1604	38.1	1690	71.7	80	19
1564AZ1_70	1690.36	72.39	4.08636	0.16015	0.28595	0.00847	0.10364	0.00402	0.07819	0.00634	1608	56.7	1621	42.6	1690	72.4	65	3
1564AZ1_72	1690.69	59.17	4.12821	0.14374	0.28883	0.00928	0.10366	0.00329	0.08713	0.00286	1662	35.0	1636	46.5	1691	59.2	616	236
1564AZ1_76	1690.98	160.10	3.87078	0.32589	0.27078	0.02298	0.10368	0.00876	0.07268	0.00604	1558	68.0	1545	117.1	1691	160.1	200	56
1564AZ1_61	1691.91	59.99	4.13128	0.14562	0.28885	0.00943	0.10373	0.00334	0.08699	0.00289	1665	35.4	1636	47.3	1692	60.0	615	235
1564AZ1_64	1692.60	160.84	3.87669	0.32814	0.27095	0.02312	0.10377	0.00881	0.07259	0.00606	1559	68.3	1546	117.8	1693	160.8	199	56
1564AZ1_56	1692.85	72.93	4.08545	0.16113	0.28550	0.00858	0.10378	0.00406	0.07914	0.00642	1609	56.9	1619	43.1	1693	72.9	65	3
1564AZ1_49	1694.99	160.93	3.87358	0.32806	0.27038	0.02310	0.10390	0.00883	0.07224	0.00603	1561	68.4	1543	117.7	1695	160.9	199	56
1564AZ1_78	1701.40	66.10	4.18636	0.14818	0.29120	0.00645	0.10427	0.00370	0.09015	0.00646	1636	59.7	1648	32.3	1701	66.1	47	3
1564AZ1_67	1702.01	66.22	4.17737	0.14794	0.29048	0.00652	0.10430	0.00371	0.09015	0.00640	1633	59.2	1644	32.6	1702	66.2	47	3
1564AZ1_29	1710.58	55.96	4.18570	0.12149	0.28971	0.00827	0.10479	0.00316	0.09530	0.00275	1685	32.1	1640	41.4	1711	56.0	450	110
1564AZ1_82	1714.61	54.60	4.54256	0.14947	0.31372	0.00935	0.10502	0.00309	0.09367	0.00331	1747	34.4	1759	45.9	1715	54.6	426	144
1564AZ1_108	1715.08	49.09	4.24433	0.10896	0.29305	0.00724	0.10504	0.00278	0.09960	0.00248	1673	29.1	1657	36.1	1715	49.1	453	110
1564AZ1_102	1716.86	39.32	4.33513	0.10111	0.29903	0.00631	0.10515	0.00223	0.08879	0.00203	1686	24.4	1686	31.4	1717	39.3	621	163
1564AZ1_96	1717.05	129.65	4.62974	0.32961	0.31932	0.02157	0.10516	0.00726	0.09362	0.00632	1735	61.9	1786	105.8	1717	129.6	265	112
1564AZ1_74	1718.16	61.45	4.29734	0.14656	0.29621	0.00955	0.10522	0.00348	0.09323	0.00333	1678	35.2	1672	47.6	1718	61.5	395	109
1564AZ1_26	1718.31	132.58	4.54764	0.32958	0.31344	0.02163	0.10523	0.00743	0.08848	0.00611	1739	63.0	1758	106.6	1718	132.6	265	111
1564AZ1_17	1718.52	44.63	4.24872	0.11033	0.29280	0.00704	0.10524	0.00254	0.08356	0.00218	1691	26.2	1656	35.2	1719	44.6	625	164
1564AZ1_11	1723.82	135.32	4.49062	0.33195	0.30858	0.02172	0.10554	0.00760	0.08547	0.00602	1728	64.0	1734	107.4	1724	135.3	264	111

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
1564AZ1_65	1723.85	51.77	4.25089	0.11621	0.29210	0.00769	0.10555	0.00295	0.10063	0.00267	1680	30.0	1652	38.4	1724	51.8	451	110
1564AZ1_4	1725.56	63.62	4.41012	0.16548	0.30276	0.01051	0.10564	0.00362	0.08389	0.00347	1752	39.1	1705	52.1	1726	63.6	422	142
1564AZ1_8	1727.17	137.47	4.47606	0.33544	0.30702	0.02193	0.10574	0.00774	0.08477	0.00605	1726	64.9	1726	108.6	1727	137.5	264	111
1564AZ1_68	1727.30	54.97	4.57162	0.15129	0.31355	0.00943	0.10574	0.00314	0.09364	0.00332	1753	34.4	1758	46.4	1727	55.0	426	144
1564AZ1_15	1727.48	54.29	4.51751	0.13357	0.30981	0.00723	0.10576	0.00310	0.08800	0.00246	1764	41.1	1740	35.6	1727	54.3	152	55
1564AZ1_69	1729.90	41.15	4.36205	0.10632	0.29876	0.00662	0.10589	0.00236	0.08942	0.00213	1696	24.7	1685	32.9	1730	41.1	622	164
1564AZ1_34	1733.41	51.31	4.57244	0.12742	0.31257	0.00701	0.10610	0.00294	0.09170	0.00240	1759	38.4	1753	34.5	1733	51.3	152	55
1564AZ1_57	1734.19	41.60	4.36519	0.10722	0.29827	0.00673	0.10614	0.00239	0.08936	0.00215	1697	24.8	1683	33.5	1734	41.6	623	164
1564AZ1_86	1735.17	48.36	4.59308	0.12278	0.31368	0.00636	0.10620	0.00278	0.09533	0.00232	1742	37.4	1759	31.2	1735	48.4	152	55
1564AZ1_47	1738.80	130.91	4.64184	0.33396	0.31638	0.02165	0.10641	0.00743	0.09308	0.00636	1744	62.5	1772	106.5	1739	130.9	265	112
1564AZ1_1	1743.29	64.01	4.21862	0.14105	0.28683	0.00868	0.10667	0.00369	0.08480	0.00296	1689	34.5	1626	43.6	1743	64.0	478	120
1564AZ1_25	1746.04	58.09	4.31029	0.13171	0.29262	0.00813	0.10683	0.00336	0.08999	0.00283	1700	31.6	1655	40.6	1746	58.1	483	122
1564AZ1_80	1753.93	55.52	4.40171	0.12991	0.29754	0.00780	0.10729	0.00323	0.09620	0.00287	1700	30.6	1679	38.8	1754	55.5	483	122
1564AZ1_21	1759.15	138.69	4.62178	0.33464	0.31153	0.02260	0.10760	0.00797	0.09022	0.00683	1742	67.2	1748	111.6	1759	138.7	298	157
1564AZ1_98	1759.48	137.28	4.70057	0.33706	0.31678	0.02274	0.10762	0.00790	0.09634	0.00722	1735	66.5	1774	111.8	1759	137.3	298	158
1564AZ1_60	1777.35	137.67	4.72999	0.34111	0.31566	0.02280	0.10868	0.00801	0.09654	0.00727	1745	66.9	1769	112.2	1777	137.7	298	157
1564AZ1_55	1778.38	137.71	4.72927	0.34114	0.31544	0.02279	0.10874	0.00802	0.09643	0.00726	1746	66.9	1767	112.2	1778	137.7	298	157
1564AZ1_92	1783.94	110.42	4.42033	0.26536	0.29393	0.01718	0.10907	0.00649	0.09325	0.00559	1706	56.6	1661	85.9	1784	110.4	392	177
1564AZ1_105	1784.04	110.15	4.42672	0.26493	0.29434	0.01716	0.10908	0.00647	0.09243	0.00553	1708	56.5	1663	85.8	1784	110.2	392	177
1564AZ1_13	1784.30	112.07	4.32665	0.26328	0.28765	0.01707	0.10909	0.00658	0.08544	0.00522	1709	57.2	1630	85.8	1784	112.1	392	177
1564AZ1_7	1784.34	112.19	4.30741	0.26216	0.28636	0.01702	0.10909	0.00659	0.08425	0.00515	1706	57.2	1623	85.6	1784	112.2	392	177
1564AZ1_39	1796.61	111.01	4.41892	0.26624	0.29180	0.01722	0.10983	0.00658	0.09071	0.00548	1719	56.8	1651	86.2	1797	111.0	393	177
1564AZ1_16	1821.93	296.00	4.45940	0.68815	0.29040	0.02031	0.11137	0.01730	0.51161	0.21368	1651	325.1	1644	101.8	1822	296.0	3	0
1564AZ1_10	1829.31	288.61	4.69212	0.71347	0.30432	0.02768	0.11183	0.01697	0.09185	0.01660	1804	207.2	1713	137.5	1829	288.6	4	0
1564AZ1_2	1849.76	286.49	4.48614	0.67326	0.28769	0.01989	0.11310	0.01708	0.41646	0.17868	1706	342.2	1630	99.9	1850	286.5	3	0
1564AZ1_106	1859.01	294.85	4.69595	0.73158	0.29961	0.02188	0.11368	0.01767	0.55670	0.23987	1641	324.7	1689	109.0	1859	294.8	3	0
1564AZ1_90	1872.65	295.18	4.71064	0.73012	0.29828	0.02123	0.11454	0.01785	0.57543	0.24287	1651	330.3	1683	105.8	1873	295.2	3	0
1564AZ1_50	1879.04	276.35	4.90401	0.72029	0.30943	0.02744	0.11495	0.01683	0.11174	0.01838	1794	197.1	1738	135.8	1879	276.4	4	0
1564AZ1_63	1883.52	274.05	4.93002	0.71896	0.31029	0.02739	0.11523	0.01675	0.10787	0.01837	1784	193.4	1742	135.5	1884	274.1	4	0
1732AZ1_2	965.13	27.91	1.58701	0.07063	0.16280	0.00625	0.07070	0.00315	0.05295	0.00216	999	34.9	972	34.7	949	92.5	109	53
1732AZ1_11	970.55	26.89	1.60086	0.06843	0.16428	0.00528	0.07068	0.00305	0.05270	0.00197	975	33.3	981	29.3	948	89.8	121	79
1732AZ1_14	971.42	27.99	1.60310	0.07126	0.16346	0.00625	0.07113	0.00317	0.05313	0.00216	1005	35.1	976	34.7	961	92.3	109	53
1732AZ1_18	972.15	27.10	1.60497	0.06907	0.16464	0.00530	0.07070	0.00308	0.05267	0.00198	976	33.6	982	29.4	949	90.4	121	79
1732AZ1_22	974.95	26.93	1.61216	0.06882	0.16506	0.00528	0.07084	0.00306	0.05275	0.00197	979	33.4	985	29.2	953	89.5	121	79
1732AZ1_25	975.77	23.68	1.61427	0.06061	0.16438	0.00520	0.07122	0.00265	0.05288	0.00176	975	28.3	981	28.8	964	76.9	150	66
1732AZ1_29	977.31	28.13	1.61824	0.07202	0.16432	0.00628	0.07142	0.00318	0.05319	0.00216	1009	35.3	981	34.8	970	92.3	109	53
1732AZ1_3	1346.54	35.75	2.76646	0.13146	0.23726	0.01038	0.08457	0.00396	0.07376	0.00346	1366	38.7	1372	54.2	1306	92.4	206	160
1732AZ1_20	1358.07	36.08	2.80947	0.13416	0.23937	0.01049	0.08513	0.00401	0.07387	0.00348	1375	39.1	1383	54.7	1318	92.6	206	160
1732AZ1_26	1360.33	36.11	2.81797	0.13458	0.23917	0.01049	0.08545	0.00403	0.07384	0.00348	1377	39.2	1382	54.7	1326	92.7	206	160
1732AZ1_27	1487.17	14.67	3.32598	0.06229	0.25672	0.00358	0.09396	0.00177	0.08694	0.00149	1495	21.1	1473	18.4	1507	35.7	331	188
1732AZ1_4	1682.08	36.98	4.23983	0.21536	0.29814	0.00744	0.10314	0.00549	0.22045	0.06018	1593	74.4	1682	37.0	1681	100.0	14	0
1732AZ1_9	1684.52	25.99	4.25405	0.13361	0.28683	0.00764	0.10757	0.00332	0.09099	0.00302	1681	35.1	1626	38.3	1759	57.0	338	112
1732AZ1_15	1688.53	37.19	4.29385	0.21880	0.29944	0.00749	0.10400	0.00556	0.21832	0.05974	1602	74.9	1689	37.2	1697	100.1	14	0
1732AZ1_21	1694.09	25.78	4.30379	0.13380	0.28794	0.00756	0.10841	0.00331	0.09103	0.00299	1690	34.9	1631	37.9	1773	56.3	332	110
1732AZ1_7	1715.73	60.49	4.45478	0.34544	0.30493	0.01222	0.10595	0.00841	0.10669	0.01691	1588	114.7	1716	60.5	1731	149.2	6	0
1732AZ1_10	1718.12	60.55	4.47226	0.34647	0.30542	0.01223	0.10620	0.00842	0.10703	0.01691	1591	114.8	1718	60.5	1735	149.0	6	0
1732AZ1_1	1721.21	33.30	4.44736	0.17719	0.29793	0.01124	0.10827	0.00365	0.11432	0.00386	1723	34.2	1681	55.9	1770	62.2	1479	477
1732AZ1_28	1725.87	60.50	4.50478	0.34981	0.30699	0.01224	0.10643	0.00845	0.10634	0.01672	1594	114.8	1726	60.5	1739	149.3	6	0
1732AZ1_16	1733.83	33.27	4.51549	0.17926	0.30044	0.01126	0.10900	0.00366	0.11442	0.00384	1733	34.4	1694	55.9	1783	61.9	1477	477
1732AZ1_5	1756.92	36.29	4.64234	0.19987	0.31402	0.01316	0.10722	0.00482	0.10023	0.00460	1777	39.6	1760	64.7	1753	83.4	394	75
1732AZ1_24	1757.03	16.45	4.64299	0.09103	0.31401	0.00472	0.10724	0.00213	0.10356	0.00215	1755	28.4	1760	23.2	1753	36.6	146	99
1732AZ1_8	1764.55	13.64	4.68490	0.07609	0.31424	0.00396	0.10813	0.00181	0.09998	0.00161	1768	20.5	1762	19.4	1768	30.8	466	179
1732AZ1_12	1767.02	13.57	4.69874	0.07590	0.31515	0.00393	0.10813	0.00181	0.10003	0.00160	1771	20.5	1766	19.3	1768	30.7	466	180

Analysis Name	Preferred Age (Ma)	2 sigma	$^{207}Pb/^{235}U$	2 sigma	$^{206}Pb/^{238}U$	2 sigma	$^{207}Pb/^{206}Pb$	2 sigma	$^{208}Pb/^{232}Th$	2 sigma	$^{207}Pb/^{235}U$ Age (Ma)	2 sigma	$^{206}Pb/^{238}U$ Age (Ma)	2 sigma	$^{207}Pb/^{206}Pb$ Age (Ma)	2 sigma	[U] (ppm)	[Th] (ppm)
1732AZ1_19	1767.69	36.39	4.70255	0.20257	0.31602	0.01323	0.10792	0.00485	0.10032	0.00460	1785	39.9	1770	64.9	1765	83.3	394	75
1732AZ1_30	1776.36	13.60	4.75140	0.07675	0.31698	0.00384	0.10871	0.00181	0.10022	0.00155	1777	20.7	1775	18.8	1778	30.6	467	180
1732AZ1_17	1808.18	15.08	4.93450	0.08782	0.32401	0.00462	0.11046	0.00201	0.10661	0.00181	1817	23.2	1809	22.5	1807	33.3	364	151
1732AZ1_6	1808.41	25.55	4.93585	0.14844	0.31902	0.00945	0.11221	0.00366	0.11310	0.00348	1812	28.8	1785	46.3	1836	59.7	1474	626
1732AZ1_23	1810.51	15.08	4.94816	0.08802	0.32465	0.00459	0.11054	0.00201	0.10661	0.00179	1819	23.3	1812	22.4	1808	33.3	364	151
1732AZ1_13	1814.96	25.79	4.97429	0.15079	0.32064	0.00956	0.11252	0.00370	0.11317	0.00350	1817	29.1	1793	46.7	1840	60.2	1472	626