

GSA Data Repository Item 2015290

Data Repository Appendix 1: U-Pb data (Martin and Clemens-Knott, 2015)

At CSU Fullerton, Zircon crystals are extracted from samples by traditional methods of crushing and grinding, followed by separation with a Wilfley table, heavy liquids, and a Frantz magnetic separator. Samples are processed such that all zircons are retained in the final heavy mineral fraction. At ALC, a large split of these grains (generally thousands of grains) is incorporated into a 1" epoxy mount together with fragments of our Sri Lanka standard zircon. The mounts are sanded down to a depth of ~20 microns, polished, imaged, and cleaned prior to isotopic analysis.

U-Pb geochronology of zircons is conducted by laser ablation multicollector inductively coupled plasma mass spectrometry (LA-MC-ICPMS) at the Arizona LaserChron Center (Gehrels et al., 2006, 2008). The analyses involve ablation of zircon with a Photon Machines Analyte G2 excimer laser (GVG samples) or, prior to May 2011, a New Wave UP193HE Excimer laser (GP samples) using a spot diameter of 30 microns. The ablated material is carried in helium into the plasma source of a Nu HR ICPMS, which is equipped with a flight tube of sufficient width that U, Th, and Pb isotopes are measured simultaneously. All measurements are made in static mode, using Faraday detectors with 3×10^{11} ohm resistors for ^{238}U , ^{232}Th , ^{208}Pb - ^{206}Pb , and discrete dynode ion counters for ^{204}Pb and ^{202}Hg . Ion yields are ~0.8 mv per ppm. Each analysis consists of one 15-second integration on peaks with the laser off (for backgrounds), 15 one-second integrations with the laser firing, and a 30 second delay to purge the previous sample and prepare for the next analysis. The ablation pit is ~15 microns in depth.

For each analysis, the errors in determining $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{204}\text{Pb}$ result in a measurement error of ~1-2% (at 2-sigma level) in the $^{206}\text{Pb}/^{238}\text{U}$ age. The errors in measurement of $^{206}\text{Pb}/^{207}\text{Pb}$ and $^{206}\text{Pb}/^{204}\text{Pb}$ also result in ~1-2% (at 2-sigma level) uncertainty in age for grains that are >1.0 Ga, but are substantially larger for younger grains due to low intensity of the ^{207}Pb signal. For most analyses, the cross-over in precision of $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{207}\text{Pb}$ ages occurs at ~1.0 Ga.

^{204}Hg interference with ^{204}Pb is accounted for measurement of ^{202}Hg during laser ablation and subtraction of ^{204}Hg according to the natural $^{202}\text{Hg}/^{204}\text{Hg}$ of 4.35. This Hg correction is not significant for most analyses because our Hg backgrounds are low (generally ~150 cps at mass 204). Common Pb correction is accomplished by using the Hg-corrected ^{204}Pb and assuming an initial Pb composition from Stacey and Kramers (1975). Uncertainties of 1.5 for $^{206}\text{Pb}/^{204}\text{Pb}$ and 0.3 for $^{207}\text{Pb}/^{204}\text{Pb}$ are applied to these compositional values based on the variation in Pb isotopic composition in modern crystal rocks. Inter-element fractionation of Pb/U is generally ~5%, whereas apparent fractionation of Pb isotopes is generally <0.2%. In-run analysis of fragments of a large zircon crystal (generally every fifth measurement) with known age of 563.5 ± 3.2 Ma (2-sigma error) is used to correct for this fractionation. The uncertainty resulting from the calibration correction is generally 1-2% (2-sigma) for both $^{206}\text{Pb}/^{207}\text{Pb}$ and $^{206}\text{Pb}/^{238}\text{U}$ ages. Concentrations of U and Th are calibrated relative to our Sri Lanka zircon, which contains ~518 ppm of U and 68 ppm Th.

Uncertainties shown in the following table are at the 1-sigma level, and include only measurement errors. Analyses that are >20% discordant (by comparison of $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{207}\text{Pb}$ ages) or >5% reverse discordant are not considered further. The resulting interpreted ages are shown on Pb*/U concordia diagrams and relative age-probability diagrams using the routines in Isoplot (Ludwig, 2008). The age-probability diagrams show each age and its uncertainty (for measurement error only) as a normal distribution, and sum all ages from a sample into a single curve. Composite age probability plots are made from an in-house Excel program (see Analysis Tools for link) that normalizes each curve according to the number of constituent analyses, such that each curve contains the same area, and then stacks the probability curves.

The above information is provided by the Arizona Laserchron Center for use in publications. Additional analytical information and references are provided in the Analytical Notes section following the data table.

GP-07: Goldstein Peak Formation (11S 0307305, E 4053154) Red-gray, poorly sorted, subrounded-to-rounded pebbly metasandstone																			
Analysis	U (ppm)	Isotope ratios								error corr.	Apparent ages (Ma)								Conc (%)
		206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±		206Pb*	±	207Pb*	±	206Pb*	±	Best age (Ma)	±	
		204Pb		207Pb*	(%)	235U*	(%)	238U	(%)		238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(%)	
GP07-1	400	84123	3.2	18.8371	3.3	0.3924	3.7	0.0536	1.7	0.47	336.6	5.7	336.1	10.6	332.5	74.3	336.6	5.7	NA
GP07-2	2581	9502	11.7	19.8249	1.3	0.1867	3.7	0.0268	3.5	0.93	170.7	5.9	173.8	6.0	215.4	30.9	170.7	5.9	NA
GP07-3	20	8621	1.4	11.5481	5.0	2.7088	5.8	0.2269	3.0	0.51	1318.1	35.3	1330.9	43.3	1351.5	97.0	1351.5	97.0	97.5
GP07-4	125	102025	1.5	8.7032	0.7	4.9646	1.9	0.3134	1.7	0.92	1757.3	26.5	1813.3	15.9	1878.3	13.4	1878.3	13.4	93.6
GP07-5	422	57812	3.8	13.9521	0.9	1.2757	2.1	0.1291	1.9	0.89	782.7	13.9	835.0	12.0	976.7	19.4	782.7	13.9	80.1
GP07-7	253	132836	3.4	11.0391	0.4	2.9129	1.8	0.2332	1.8	0.97	1351.3	21.3	1385.3	13.6	1437.9	7.7	1437.9	7.7	94.0
GP07-8	2207	88645	2.6	19.8974	2.0	0.1623	2.6	0.0234	1.6	0.62	149.3	2.4	152.7	3.6	206.9	46.3	149.3	2.4	NA
GP07-9	342	27662	2.2	19.3857	10.9	0.1797	11.8	0.0253	4.4	0.37	160.9	6.9	167.8	18.2	267.0	251.5	160.9	6.9	NA
GP07-11	130	5013	4.6	20.6648	23.0	0.1440	23.4	0.0216	4.6	0.20	137.6	6.3	136.6	29.9	118.5	547.7	137.6	6.3	NA
GP07-12	683	52528	1.8	20.2792	4.5	0.1755	5.0	0.0258	2.2	0.44	164.3	3.5	164.2	7.5	162.6	104.4	164.3	3.5	NA
GP07-13	94	9068	1.9	24.8008	31.4	0.1362	33.3	0.0245	11.1	0.33	156.0	17.1	129.6	40.5	-330.3	823.4	156.0	17.1	NA
GP07-14	47	18712	2.9	13.1597	3.9	2.0027	5.7	0.1911	4.2	0.73	1127.6	43.2	1116.4	38.8	1094.8	78.5	1094.8	78.5	103.0
GP07-15	253	3781	0.9	17.6289	9.1	0.1840	10.2	0.0235	4.5	0.44	149.9	6.7	171.5	16.1	480.8	202.3	149.9	6.7	NA
GP07-16	227	253179	2.0	10.1132	0.5	3.8596	1.9	0.2831	1.8	0.96	1606.9	25.2	1605.3	14.9	1603.1	9.9	1603.1	9.9	100.2
GP07-17	950	597546	5.5	9.7305	0.6	3.5803	5.1	0.2527	5.1	0.99	1452.2	66.2	1545.2	40.7	1674.7	11.9	1674.7	11.9	86.7
GP07-18	83	93241	2.1	5.8051	0.4	11.3835	0.9	0.4793	0.8	0.89	2524.1	16.7	2555.1	8.4	2579.7	6.8	2579.7	6.8	97.8
GP07-20	523	37622	2.3	21.2082	4.7	0.1461	5.5	0.0225	2.8	0.52	143.3	4.0	138.5	7.1	56.9	111.8	143.3	4.0	NA
GP07-21	221	8511	2.7	19.6268	14.2	0.1480	17.1	0.0211	9.6	0.56	134.4	12.7	140.1	22.4	238.6	329.3	134.4	12.7	NA
GP07-23	109	136877	0.4	6.5815	2.3	7.9953	8.0	0.3816	7.7	0.96	2084.0	136.9	2230.5	72.5	2367.9	39.2	2367.9	39.2	88.0
GP07-24	346	359412	29.3	5.9197	0.6	8.7605	7.4	0.3761	7.4	1.00	2058.1	129.8	2313.4	67.4	2547.0	9.3	2547.0	9.3	80.8
GP07-25	376	11894	1.5	19.8427	9.1	0.1865	10.7	0.0268	5.5	0.52	170.8	9.3	173.7	17.1	213.3	212.4	170.8	9.3	NA
GP07-26	142	7136	2.6	19.0059	13.7	0.1821	14.8	0.0251	5.6	0.38	159.8	8.9	169.8	23.2	312.2	313.6	159.8	8.9	NA
GP07-27	179	44944	1.8	9.6554	1.2	3.8871	3.6	0.2722	3.4	0.95	1552.0	46.9	1611.0	29.0	1689.0	21.5	1689.0	21.5	91.9
GP07-28	530	43545	1.7	19.7676	5.4	0.1607	6.4	0.0230	3.4	0.53	146.8	4.9	151.3	9.0	222.1	125.3	146.8	4.9	NA
GP07-29	201	10391	1.0	19.9676	14.5	0.1666	15.0	0.0241	3.7	0.25	153.6	5.7	156.4	21.7	198.7	338.9	153.6	5.7	NA
GP07-30	717	205078	2.6	9.5521	0.3	3.8945	2.5	0.2698	2.5	0.99	1539.8	34.2	1612.5	20.3	1708.8	5.4	1708.8	5.4	90.1
GP07-31	153	22055	1.9	19.6780	15.1	0.2616	15.2	0.0373	1.6	0.11	236.3	3.8	236.0	32.0	232.6	350.4	236.3	3.8	NA
GP07-32	175	22440	2.9	18.6155	14.9	0.1613	15.5	0.0218	4.1	0.26	138.9	5.6	151.8	21.8	359.3	338.6	138.9	5.6	NA
GP07-33	235	174247	4.6	12.6876	0.8	2.1358	2.0	0.1965	1.9	0.92	1156.7	20.0	1160.5	14.2	1167.5	15.5	1167.5	15.5	99.1
GP07-34	131	6050	3.7	22.1111	30.7	0.1381	31.3	0.0222	6.1	0.19	141.3	8.5	131.4	38.6	-43.4	761.4	141.3	8.5	NA

GP07-35	64	26985	2.1	13.7333	5.9	1.6595	6.4	0.1653	2.6	0.40	986.1	23.6	993.2	40.6	1008.8	118.9	1008.8	118.9	97.7
GP07-37	140	143711	2.1	8.2473	0.5	5.6748	1.6	0.3394	1.5	0.94	1884.0	25.0	1927.5	14.0	1974.7	9.5	1974.7	9.5	95.4
GP07-39	176	9024	3.9	22.5900	14.3	0.1296	14.5	0.0212	2.2	0.15	135.4	2.9	123.7	16.9	-95.8	352.7	135.4	2.9	NA
GP07-40	350	29492	2.0	20.4137	6.4	0.1710	7.4	0.0253	3.7	0.50	161.1	5.9	160.3	10.9	147.2	149.3	161.1	5.9	NA
GP07-41	428	342724	2.4	11.9593	0.3	2.5065	1.9	0.2174	1.9	0.98	1268.1	22.0	1273.9	14.1	1283.6	6.7	1283.6	6.7	98.8
GP07-42	177	25645	2.4	19.4861	15.4	0.1551	15.7	0.0219	2.9	0.18	139.8	4.0	146.4	21.4	255.2	356.8	139.8	4.0	NA
GP07-43	221	266771	2.4	9.5131	3.1	4.2049	4.8	0.2901	3.7	0.77	1642.1	53.7	1675.0	39.4	1716.4	56.3	1716.4	56.3	95.7
GP07-45	250	30788	1.9	21.4834	12.8	0.1601	13.2	0.0249	3.2	0.24	158.8	5.1	150.8	18.5	26.1	308.8	158.8	5.1	NA
GP07-46	219	81407	3.1	12.9824	1.1	1.9512	2.2	0.1837	1.9	0.86	1087.3	18.8	1098.9	14.6	1121.9	21.8	1121.9	21.8	96.9
GP07-47	227	156638	1.2	8.3593	0.3	5.2082	1.8	0.3158	1.7	0.98	1769.0	26.7	1854.0	15.0	1950.6	6.1	1950.6	6.1	90.7
GP07-48	100	59820	2.3	13.1917	3.1	1.8728	3.6	0.1792	1.8	0.51	1062.5	18.0	1071.5	24.0	1089.9	62.6	1089.9	62.6	97.5
GP07-49	327	11208	0.7	20.6918	13.4	0.1671	13.8	0.0251	3.2	0.23	159.6	5.0	156.9	20.1	115.4	318.3	159.6	5.0	NA
GP07-50	46	84181	1.7	8.5629	1.4	5.6539	11.9	0.3511	11.8	0.99	1940.0	197.9	1924.4	102.9	1907.6	24.3	1907.6	24.3	101.7
GP07-51	144	60801	1.8	14.8990	1.6	1.2806	2.9	0.1384	2.4	0.83	835.5	19.2	837.1	16.8	841.5	34.2	835.5	19.2	99.3
GP07-52	148	127682	2.1	12.4976	1.6	2.1221	4.1	0.1923	3.8	0.92	1134.1	39.4	1156.0	28.5	1197.4	32.4	1197.4	32.4	94.7
GP07-53	96	63151	1.1	12.3253	2.0	2.2277	2.9	0.1991	2.1	0.72	1170.7	22.4	1189.8	20.3	1224.7	39.3	1224.7	39.3	95.6
GP07-54	173	15792	3.2	18.0947	17.4	0.1656	17.6	0.0217	2.9	0.17	138.6	4.0	155.6	25.4	422.9	390.1	138.6	4.0	NA
GP07-55	260	236236	2.3	9.1845	0.5	4.5079	1.5	0.3003	1.4	0.94	1692.7	21.3	1732.4	12.6	1780.7	9.1	1780.7	9.1	95.1
GP07-56	286	151711	3.1	12.8914	0.9	1.8651	2.6	0.1744	2.4	0.93	1036.2	23.1	1068.8	17.1	1135.9	18.5	1135.9	18.5	91.2
GP07-58	87	20584	2.1	18.1300	8.9	0.5179	9.6	0.0681	3.4	0.36	424.7	14.0	423.7	33.1	418.6	199.5	424.7	14.0	NA
GP07-60	280	197821	2.1	9.1021	0.5	4.5800	4.6	0.3023	4.5	0.99	1702.9	68.0	1745.6	38.1	1797.2	9.7	1797.2	9.7	94.8
GP07-61	375	31258	1.2	21.4197	8.3	0.1536	8.7	0.0239	2.6	0.30	152.0	3.8	145.0	11.7	33.2	198.7	152.0	3.8	NA
GP07-62	172	226451	2.5	7.7562	0.3	6.4058	0.9	0.3603	0.9	0.94	1983.8	14.8	2033.1	8.1	2083.4	5.3	2083.4	5.3	95.2
GP07-63	21	13858	0.8	10.0619	3.9	3.9587	5.3	0.2889	3.6	0.68	1636.0	52.0	1625.8	42.8	1612.6	72.0	1612.6	72.0	101.5
GP07-64	102	9253	2.7	23.3481	19.3	0.1647	21.1	0.0279	8.6	0.41	177.3	15.0	154.8	30.3	-177.5	484.8	177.3	15.0	NA
GP07-65	81	40747	1.6	13.5422	2.4	1.8124	5.0	0.1780	4.4	0.88	1056.1	42.6	1050.0	32.6	1037.2	48.1	1037.2	48.1	101.8
GP07-66	193	10434	3.0	20.1849	8.7	0.1453	8.9	0.0213	2.1	0.24	135.7	2.9	137.8	11.5	173.5	202.2	135.7	2.9	NA
GP07-67	135	221284	2.1	8.1422	0.4	5.8905	0.9	0.3478	0.8	0.88	1924.3	13.5	1959.8	8.0	1997.5	7.7	1997.5	7.7	96.3
GP07-68	192	109950	1.2	9.2333	0.6	4.0493	4.0	0.2712	3.9	0.99	1546.7	54.1	1644.2	32.4	1771.1	11.3	1771.1	11.3	87.3
GP07-69	310	15206	2.2	19.1478	12.4	0.1740	13.2	0.0242	4.4	0.33	153.9	6.6	162.8	19.8	295.3	284.5	153.9	6.6	NA
GP07-70	195	26045	0.9	20.9405	19.3	0.1495	19.9	0.0227	4.7	0.24	144.7	6.8	141.5	26.3	87.1	462.0	144.7	6.8	NA
GP07-71	257	12412	2.6	21.1407	7.6	0.1498	8.0	0.0230	2.6	0.32	146.4	3.8	141.7	10.6	64.5	181.3	146.4	3.8	NA
GP07-72	216	30882	3.1	21.9053	16.6	0.1320	18.6	0.0210	8.5	0.46	133.8	11.3	125.9	22.1	-20.8	403.4	133.8	11.3	NA
GP07-73	181	72585	2.2	13.7076	1.1	1.6546	5.1	0.1645	5.0	0.98	981.7	45.8	991.3	32.5	1012.6	21.6	1012.6	21.6	96.9
GP07-74	43	63639	1.5	4.5684	0.7	16.8754	2.0	0.5591	1.8	0.93	2863.1	42.3	2927.8	18.8	2972.6	11.2	2972.6	11.2	96.3

GP07-75	41	3238	1.2	-0.3224	####	-9.4123	#####	0.0220	10.4	0.00	140.3	14.5	#NUM!	#####	0.0	109.1	140.3	14.5	NA
GP07-76	125	92429	1.3	8.8570	1.4	5.0598	1.9	0.3250	1.4	0.71	1814.2	21.7	1829.4	16.4	1846.7	24.7	1846.7	24.7	98.2
GP07-77	125	81292	1.6	11.0544	0.7	3.0523	3.9	0.2447	3.9	0.98	1411.1	49.1	1420.8	30.1	1435.3	13.7	1435.3	13.7	98.3
GP07-78	147	67520	1.5	13.5175	1.1	1.7934	1.4	0.1758	0.9	0.62	1044.1	8.6	1043.1	9.4	1040.9	22.9	1040.9	22.9	100.3
GP07-79	116	89507	1.5	10.9088	1.1	3.1669	2.0	0.2506	1.7	0.85	1441.3	21.8	1449.1	15.4	1460.5	20.0	1460.5	20.0	98.7
GP07-80	283	71488	1.3	18.7972	5.4	0.2835	6.3	0.0387	3.2	0.51	244.5	7.7	253.4	14.1	337.3	122.9	244.5	7.7	NA
GP07-81	869	183499	1.8	16.7075	0.8	0.7139	3.2	0.0865	3.1	0.97	534.8	16.1	547.1	13.7	598.3	16.4	534.8	16.1	89.4
GP07-82	343	51676	1.2	19.9133	5.2	0.2716	5.5	0.0392	1.8	0.32	248.1	4.3	244.0	11.8	205.1	119.9	248.1	4.3	NA
GP07-83	101	5203	3.4	19.0813	25.9	0.1579	28.0	0.0218	10.6	0.38	139.3	14.7	148.8	38.8	303.2	600.2	139.3	14.7	NA
GP07-84	223	25772	0.8	19.7342	14.8	0.1627	15.3	0.0233	3.5	0.23	148.4	5.2	153.0	21.7	226.0	344.7	148.4	5.2	NA
GP07-85	288	82028	2.3	16.7249	2.0	0.7781	3.2	0.0944	2.5	0.78	581.4	13.9	584.4	14.3	596.0	43.9	581.4	13.9	97.5
GP07-86	100	153650	1.2	5.7861	0.6	9.9067	2.8	0.4157	2.7	0.98	2241.1	52.0	2426.1	26.0	2585.2	10.2	2585.2	10.2	86.7
GP07-88	169	6424	3.4	19.7516	12.7	0.1469	13.9	0.0210	5.8	0.41	134.2	7.7	139.2	18.1	224.0	294.7	134.2	7.7	NA
GP07-89	204	166592	3.1	13.7208	1.7	1.6158	4.1	0.1608	3.7	0.91	961.2	33.5	976.4	25.8	1010.7	34.4	1010.7	34.4	95.1
GP07-90	199	76710	3.4	13.6803	1.2	1.6760	3.0	0.1663	2.7	0.91	991.7	25.2	999.5	19.1	1016.6	24.9	1016.6	24.9	97.5
GP07-91	332	383165	2.0	5.4839	0.4	12.0459	1.7	0.4791	1.6	0.98	2523.4	34.1	2608.0	15.7	2674.4	5.8	2674.4	5.8	94.4
GP07-92	166	10844	1.2	18.3764	16.2	0.1842	16.8	0.0245	4.4	0.26	156.3	6.7	171.7	26.5	388.3	365.3	156.3	6.7	NA
GP07-93	271	216829	2.3	9.4538	0.5	4.4502	4.0	0.3051	4.0	0.99	1716.7	60.3	1721.7	33.4	1727.9	9.3	1727.9	9.3	99.4
GP07-94	407	33781	2.4	19.4456	4.1	0.1893	8.1	0.0267	7.0	0.86	169.9	11.7	176.1	13.1	259.9	94.9	169.9	11.7	NA
GP07-95	306	20515	1.3	20.1327	9.4	0.2050	9.8	0.0299	2.7	0.28	190.1	5.0	189.3	16.9	179.6	219.5	190.1	5.0	NA
GP07-96	416	376722	12.8	9.2525	0.4	3.7822	3.2	0.2538	3.2	0.99	1458.1	42.0	1589.0	26.0	1767.3	6.7	1767.3	6.7	82.5
GP07-97	618	95731	9.2	18.1722	1.8	0.4274	5.8	0.0563	5.5	0.95	353.3	18.9	361.4	17.6	413.4	41.4	353.3	18.9	NA
GP07-98	254	12411	5.0	21.6784	11.8	0.1606	12.0	0.0252	2.0	0.17	160.7	3.2	151.2	16.8	4.3	285.1	160.7	3.2	NA
GP07-99	412	33928	2.7	20.2156	4.2	0.1519	5.6	0.0223	3.7	0.66	142.0	5.2	143.6	7.4	170.0	97.0	142.0	5.2	NA
GP07-100	302	40039	2.2	20.3493	9.6	0.1730	9.8	0.0255	1.9	0.19	162.5	3.0	162.0	14.6	154.6	224.9	162.5	3.0	NA

GP- 02: Goldstein Peak Formation (11S 0307329, E 4054955) Gray, moderately sorted, subangular-to-subrounded, medium-grained metasandstone																			
		Isotope ratios										Apparent ages (Ma)							
Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(%)	
GP02-2	81	4927	2.0	17.1323	35.3	0.1809	37.2	0.0225	11.8	0.32	143.3	16.7	168.8	57.9	543.7	793.7	143.3	16.7	NA
GP02-3	45	3569	2.1	8.6712	178.0	0.3366	178.3	0.0212	11.3	0.06	135.0	15.1	294.6	491.0	1884.9	128.7	135.0	15.1	7.2
GP02-4	286	15388	1.7	20.3910	13.2	0.1535	13.5	0.0227	3.1	0.23	144.7	4.4	145.0	18.3	149.8	310.2	144.7	4.4	NA
GP02-5	137	13849	1.8	21.7273	25.6	0.1909	27.6	0.0301	10.2	0.37	191.1	19.2	177.4	44.9	-1.0	626.5	191.1	19.2	NA

GP02-6	593	30621	1.6	19.8427	3.2	0.1619	3.9	0.0233	2.3	0.59	148.4	3.4	152.3	5.6	213.3	73.2	148.4	3.4	NA
GP02-7	389	25108	1.6	20.1609	4.9	0.1567	6.4	0.0229	4.1	0.65	146.0	6.0	147.8	8.8	176.3	113.5	146.0	6.0	NA
GP02-8	478	48569	1.1	20.0294	6.5	0.2035	7.1	0.0296	2.8	0.39	187.8	5.2	188.1	12.2	191.6	152.2	187.8	5.2	NA
GP02-10	1350	109566	1.5	20.5441	2.3	0.1539	4.8	0.0229	4.2	0.88	146.1	6.0	145.3	6.5	132.2	53.9	146.1	6.0	NA
GP02-11	132	4465	1.1	21.0351	25.8	0.1520	26.1	0.0232	4.1	0.16	147.7	6.1	143.6	35.0	76.4	621.3	147.7	6.1	NA
GP02-13	264	22988	1.3	19.2869	9.7	0.1638	10.1	0.0229	2.9	0.29	146.0	4.2	154.0	14.5	278.8	222.7	146.0	4.2	NA
GP02-14	368	45754	1.0	20.0694	9.0	0.1771	9.4	0.0258	2.6	0.27	164.1	4.2	165.6	14.3	186.9	210.4	164.1	4.2	NA
GP02-15	843	228913	1.9	16.8787	1.0	0.7477	1.8	0.0915	1.5	0.84	564.6	8.0	566.9	7.6	576.1	20.7	564.6	8.0	98.0
GP02-16	352	163158	2.1	13.5442	1.5	1.5336	3.0	0.1507	2.6	0.86	904.6	21.7	944.0	18.4	1036.9	30.8	1036.9	30.8	87.2
GP02-17	497	33296	1.2	20.8562	6.5	0.1441	7.3	0.0218	3.3	0.46	139.0	4.6	136.7	9.3	96.7	152.8	139.0	4.6	NA
GP02-19	523	26900	3.0	20.3854	4.0	0.1680	8.1	0.0248	7.0	0.87	158.1	11.0	157.7	11.8	150.4	94.1	158.1	11.0	NA
GP02-20	681	107517	1.0	20.5502	4.5	0.1704	5.5	0.0254	3.2	0.58	161.6	5.0	159.7	8.1	131.6	105.6	161.6	5.0	NA
GP02-21	1033	77688	2.6	20.5487	3.4	0.1638	4.1	0.0244	2.3	0.57	155.5	3.6	154.0	5.9	131.7	80.0	155.5	3.6	NA
GP02-22	110	6500	3.4	20.6077	29.1	0.1490	30.5	0.0223	9.0	0.30	141.9	12.7	141.0	40.2	124.9	699.0	141.9	12.7	NA
GP02-23	684	46348	2.2	18.5857	5.2	0.1818	6.8	0.0245	4.4	0.65	156.1	6.7	169.6	10.6	362.9	116.6	156.1	6.7	NA
GP02-24	171	13157	1.6	25.0366	29.8	0.1223	30.1	0.0222	4.8	0.16	141.6	6.7	117.1	33.3	-354.7	783.2	141.6	6.7	NA
GP02-25	531	15141	1.1	19.4465	6.4	0.1495	7.0	0.0211	2.8	0.40	134.5	3.7	141.5	9.2	259.8	146.7	134.5	3.7	NA
GP02-26	168	348161	1.3	5.5304	0.4	11.9210	1.4	0.4782	1.3	0.96	2519.2	27.7	2598.2	12.9	2660.4	6.3	2660.4	6.3	94.7
GP02-27	441	46557	2.3	19.7440	8.0	0.1654	8.5	0.0237	2.8	0.33	150.9	4.1	155.4	12.3	224.8	186.2	150.9	4.1	NA
GP02-28	801	70908	1.5	20.1117	3.5	0.1717	4.5	0.0250	2.8	0.62	159.5	4.3	160.9	6.6	182.0	81.9	159.5	4.3	NA
GP02-30	521	30861	3.4	20.3936	4.9	0.1623	6.7	0.0240	4.6	0.68	152.9	6.9	152.7	9.5	149.5	114.2	152.9	6.9	NA
GP02-31	72	8686	1.8	19.6421	34.3	0.2090	34.9	0.0298	6.4	0.18	189.2	12.0	192.7	61.4	236.8	813.0	189.2	12.0	NA
GP02-32	42	4966	2.5	18.9176	74.8	0.1501	76.0	0.0206	13.5	0.18	131.4	17.5	142.0	101.1	322.9	#####	131.4	17.5	NA
GP02-33	605	47627	1.5	20.5970	4.6	0.1578	6.6	0.0236	4.8	0.72	150.2	7.1	148.8	9.2	126.2	107.9	150.2	7.1	NA
GP02-34	58	2639	1.9	40.5366	92.7	0.0774	94.4	0.0228	17.9	0.19	145.0	25.7	75.7	69.0	-1806.2	#####	145.0	25.7	NA
GP02-35	981	114687	2.0	19.1748	1.3	0.2840	1.9	0.0395	1.5	0.76	249.7	3.6	253.8	4.4	292.1	28.8	249.7	3.6	NA
GP02-37	77	7161	1.6	23.6234	29.0	0.1315	30.0	0.0225	7.7	0.26	143.6	11.0	125.5	35.5	-206.8	741.4	143.6	11.0	NA
GP02-39	972	47799	3.3	20.7332	3.8	0.1582	6.2	0.0238	5.0	0.80	151.6	7.4	149.1	8.7	110.7	89.4	151.6	7.4	NA
GP02-40	219	9796	2.3	22.6440	14.8	0.1350	16.2	0.0222	6.6	0.41	141.4	9.2	128.6	19.6	-101.6	365.6	141.4	9.2	NA
GP02-41	98	5939	1.5	24.1308	46.8	0.1253	47.4	0.0219	7.5	0.16	139.8	10.4	119.8	53.6	-260.4	#####	139.8	10.4	NA
GP02-42	50	5470	1.9	-5.2531	502.7	-0.5781	503.0	0.0220	15.2	0.03	140.5	21.0	-876.4	#####	0.0	31.4	140.5	21.0	NA
GP02-43	190	142556	1.8	10.9760	1.1	3.1519	5.1	0.2509	5.0	0.98	1443.2	64.3	1445.5	39.2	1448.8	20.1	1448.8	20.1	99.6
GP02-44	654	54199	1.2	20.3810	4.6	0.1726	7.5	0.0255	6.0	0.79	162.4	9.6	161.7	11.2	150.9	107.0	162.4	9.6	NA
GP02-45	177	12762	1.6	18.6464	15.7	0.1700	16.5	0.0230	5.1	0.31	146.5	7.4	159.4	24.4	355.5	357.5	146.5	7.4	NA
GP02-46	130	10256	1.8	22.9762	18.7	0.1407	20.2	0.0234	7.6	0.38	149.4	11.2	133.6	25.3	-137.6	465.6	149.4	11.2	NA

GP02-47	352	31520	1.4	19.0023	7.1	0.1787	8.0	0.0246	3.7	0.46	156.8	5.8	166.9	12.4	312.6	161.9	156.8	5.8	NA			
GP02-48	296	18113	2.1	22.0756	9.3	0.1394	10.3	0.0223	4.3	0.42	142.3	6.1	132.5	12.8	-39.5	226.6	142.3	6.1	NA			
GP02-49	41	3156	2.8	19.5409	48.6	0.1546	50.6	0.0219	14.1	0.28	139.7	19.4	146.0	68.9	248.7	#####	139.7	19.4	NA			
GP02-50	241	124759	1.9	13.0714	1.3	1.8277	2.3	0.1733	1.9	0.82	1030.1	18.1	1055.4	15.3	1108.2	26.9	1108.2	26.9	92.9			
GP02-51	96	6722	3.0	21.0139	22.7	0.1494	23.3	0.0228	5.5	0.24	145.2	7.9	141.4	30.8	78.8	544.2	145.2	7.9	NA			
GP02-52	474	28068	2.4	19.7797	3.9	0.1658	5.3	0.0238	3.5	0.67	151.5	5.3	155.7	7.6	220.7	90.0	151.5	5.3	NA			
GP02-53	451	25014	1.8	19.5489	8.3	0.1713	8.6	0.0243	2.0	0.24	154.7	3.1	160.6	12.7	247.8	192.2	154.7	3.1	NA			
GP02-54	271	21835	2.2	21.3914	8.3	0.1743	9.7	0.0270	5.0	0.51	172.0	8.5	163.2	14.6	36.3	199.1	172.0	8.5	NA			
GP02-55	701	54605	4.9	20.2635	5.2	0.1590	5.3	0.0234	1.1	0.21	148.9	1.6	149.8	7.3	164.5	120.5	148.9	1.6	NA			
GP02-56	181	9909	1.5	21.3593	17.2	0.1549	18.5	0.0240	6.8	0.37	152.9	10.3	146.3	25.2	40.0	414.6	152.9	10.3	NA			
GP02-57	586	57340	2.0	19.7728	3.6	0.2586	4.2	0.0371	2.1	0.51	234.7	4.9	233.5	8.8	221.5	83.8	234.7	4.9	NA			
GP02-58	192	8322	1.5	20.9896	8.7	0.1516	9.4	0.0231	3.5	0.37	147.1	5.1	143.4	12.6	81.5	208.0	147.1	5.1	NA			
GP02-59	940	79530	1.2	20.1868	1.0	0.1838	3.0	0.0269	2.9	0.95	171.2	4.8	171.3	4.8	173.3	23.0	171.2	4.8	NA			
GP02-60	240	284781	1.5	8.9281	0.6	5.0121	4.2	0.3245	4.2	0.99	1811.9	65.7	1821.4	35.6	1832.2	11.1	1832.2	11.1	98.9			
GP02-61	114	5590	1.3	29.5957	33.5	0.1160	34.4	0.0249	7.8	0.23	158.5	12.2	111.4	36.3	-807.6	973.3	158.5	12.2	NA			
GP02-62	548	21506	0.9	20.9709	8.8	0.1504	9.3	0.0229	3.0	0.32	145.8	4.3	142.3	12.3	83.7	208.8	145.8	4.3	NA			
GP02-63	394	27555	1.6	19.7561	4.8	0.1642	7.6	0.0235	5.9	0.78	149.9	8.8	154.4	10.9	223.4	110.1	149.9	8.8	NA			
GP02-64	360	26582	1.5	19.8484	9.4	0.1641	10.9	0.0236	5.4	0.50	150.5	8.0	154.3	15.5	212.6	219.0	150.5	8.0	NA			
GP02-65	274	256244	2.9	9.2221	0.8	4.3854	4.8	0.2933	4.7	0.99	1658.1	68.9	1709.6	39.5	1773.3	15.0	1773.3	15.0	93.5			
GP02-66	43	3561	2.0	8.2642	142.6	0.3618	143.4	0.0217	15.2	0.11	138.3	20.7	313.6	407.4	1971.1	94.7	138.3	20.7	7.0			
GP02-67	918	54968	1.7	20.2240	3.5	0.1558	5.6	0.0229	4.4	0.79	145.7	6.4	147.1	7.7	169.0	81.0	145.7	6.4	NA			
GP02-68	44	2886	2.3	10.7079	49.4	0.2831	51.6	0.0220	15.1	0.29	140.2	20.9	253.1	116.1	1495.8	#####	140.2	20.9	9.4			
GP02-69	548	22899	1.5	19.9628	5.9	0.1616	6.2	0.0234	1.9	0.30	149.1	2.8	152.1	8.7	199.3	136.4	149.1	2.8	NA			
GP02-70	442	94199	2.5	19.9843	6.3	0.1846	11.2	0.0268	9.3	0.83	170.2	15.6	172.0	17.7	196.8	145.6	170.2	15.6	NA			
GP02-71	397	34391	1.5	20.3167	7.2	0.1592	8.6	0.0235	4.7	0.54	149.5	6.9	150.0	12.0	158.4	169.0	149.5	6.9	NA			
GP02-73	82	4573	1.5	21.5869	33.3	0.1365	34.5	0.0214	9.0	0.26	136.3	12.2	129.9	42.1	14.6	820.6	136.3	12.2	NA			
GP02-74	839	84884	3.1	20.0064	6.0	0.1701	13.5	0.0247	12.1	0.90	157.2	18.8	159.5	19.9	194.3	139.1	157.2	18.8	NA			
GP02-75	107	12138	0.8	21.9216	26.7	0.1521	27.7	0.0242	7.3	0.27	154.1	11.2	143.8	37.1	-22.6	655.7	154.1	11.2	NA			
GP02-76	174	10608	1.6	19.6612	14.3	0.1607	14.5	0.0229	2.3	0.16	146.1	3.3	151.3	20.4	234.6	332.3	146.1	3.3	NA			
GP02-77	1284	84978	1.9	20.1789	2.3	0.1640	4.9	0.0240	4.4	0.89	152.9	6.6	154.2	7.1	174.2	52.9	152.9	6.6	NA			
GP02-78	252	41650	2.4	19.9783	17.1	0.1714	17.4	0.0248	2.9	0.17	158.1	4.6	160.6	25.8	197.5	400.3	158.1	4.6	NA			
GP02-79	220	14114	1.5	22.6160	18.3	0.1321	19.2	0.0217	5.7	0.30	138.2	7.8	126.0	22.8	-98.6	453.3	138.2	7.8	NA			
GP02-80	44	4974	2.3	-4.9524	#####	-0.6483	#####	0.0233	7.1	0.01	148.4	10.4	-1060.9	#####	0.0	#####	148.4	10.4	NA			
GP02-81	149	7412	2.1	22.5614	12.5	0.1341	13.7	0.0219	5.7	0.41	139.9	7.8	127.8	16.5	-92.7	308.2	139.9	7.8	NA			
GP02-82	1484	98688	1.8	20.0179	1.1	0.1656	2.7	0.0240	2.5	0.91	153.1	3.7	155.6	3.9	192.9	25.2	153.1	3.7	NA			

GP02-83	281	7424	1.9	20.1030	8.1	0.1513	10.1	0.0221	6.1	0.60	140.7	8.4	143.1	13.5	183.0	189.6	140.7	8.4	NA
GP02-86	686	91526	1.2	20.1988	2.8	0.1747	3.7	0.0256	2.4	0.65	162.9	3.9	163.5	5.6	171.9	66.5	162.9	3.9	NA
GP02-87	249	19071	1.3	21.0891	15.2	0.1489	15.7	0.0228	3.8	0.24	145.2	5.5	141.0	20.6	70.3	363.4	145.2	5.5	NA
GP02-89	162	7765	1.5	22.3604	22.2	0.1449	22.8	0.0235	5.3	0.23	149.7	7.8	137.4	29.3	-70.8	547.4	149.7	7.8	NA
GP02-90	69	41775	2.1	12.7545	2.0	2.1104	4.0	0.1952	3.4	0.86	1149.6	36.0	1152.2	27.5	1157.1	40.5	1157.1	40.5	99.4
GP02-91	2266	124398	2.1	20.3365	1.5	0.1621	2.8	0.0239	2.3	0.84	152.3	3.5	152.5	4.0	156.1	36.1	152.3	3.5	NA
GP02-92	479	416599	9.2	5.7362	0.6	8.4913	7.7	0.3533	7.7	1.00	1950.1	129.9	2285.0	70.4	2599.7	9.6	2599.7	9.6	75.0
GP02-93	249	236720	1.6	9.1445	1.2	4.5620	5.8	0.3026	5.7	0.98	1704.0	84.9	1742.4	48.3	1788.7	21.8	1788.7	21.8	95.3
GP02-94	59	3916	1.8	18.8202	44.3	0.1619	45.6	0.0221	10.9	0.24	140.9	15.3	152.4	64.6	334.6	####	140.9	15.3	NA
GP02-95	516	39446	1.8	20.2645	3.9	0.1796	5.3	0.0264	3.5	0.67	168.0	5.9	167.7	8.1	164.3	91.2	168.0	5.9	NA
GP02-96	1399	83252	1.8	20.2284	1.7	0.1619	5.0	0.0238	4.7	0.94	151.3	7.0	152.4	7.0	168.5	39.3	151.3	7.0	NA
GP02-97	85	7156	2.7	19.9461	11.1	0.2018	14.1	0.0292	8.8	0.62	185.5	16.1	186.6	24.1	201.2	258.1	185.5	16.1	NA
GP02-98	539	40191	2.1	20.9940	8.6	0.1538	8.9	0.0234	2.4	0.27	149.3	3.6	145.3	12.1	81.0	204.2	149.3	3.6	NA
GP02-99	356	342471	2.0	9.4592	0.5	4.3223	3.0	0.2965	3.0	0.99	1674.1	43.7	1697.6	24.8	1726.8	9.0	1726.8	9.0	96.9
GP02-100	58	4956	1.9	24.6591	225.9	0.1316	226.6	0.0235	18.2	0.08	149.9	27.0	125.5	274.0	-315.6	0.0	149.9	27.0	NA

GP--03: Goldstein Peak Formation (11S 0307374, E 4055032) Buff-to-tan, moderately sorted, subangular, fine-to-medium-grained metasandstone																			
				Isotope ratios							Apparent ages (Ma)								
Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(%)	
GP03-1	197	8925	1.7	20.0739	9.0	0.2761	9.2	0.0402	2.0	0.22	254.0	5.1	247.5	20.3	186.4	210.3	254.0	5.1	NA
GP03-2	260	21431	2.3	19.4809	3.4	0.2871	3.7	0.0406	1.5	0.40	256.3	3.7	256.2	8.5	255.8	78.8	256.3	3.7	NA
GP03-3	1032	74944	3.0	19.9953	1.6	0.1817	2.4	0.0264	1.8	0.75	167.7	3.1	169.5	3.8	195.6	37.3	167.7	3.1	NA
GP03-4	74	20213	2.1	13.9569	2.6	1.6467	3.9	0.1667	2.9	0.73	993.9	26.4	988.3	24.6	976.0	53.8	976.0	53.8	101.8
GP03-5	689	25258	2.4	20.4524	2.7	0.1786	3.4	0.0265	2.0	0.59	168.6	3.4	166.9	5.2	142.7	64.2	168.6	3.4	NA
GP03-7	218	8699	2.2	21.8341	9.1	0.1520	9.4	0.0241	2.3	0.24	153.4	3.5	143.7	12.6	-12.9	220.1	153.4	3.5	NA
GP03-8	177	24679	1.9	16.0039	2.8	0.9813	6.8	0.1139	6.2	0.91	695.4	40.9	694.3	34.2	690.7	59.1	695.4	40.9	100.7
GP03-9	485	25467	1.4	20.3595	4.1	0.1606	4.2	0.0237	1.1	0.26	151.1	1.7	151.3	6.0	153.4	95.8	151.1	1.7	NA
GP03-10	116	26113	1.6	11.5468	1.5	2.7242	1.7	0.2281	0.7	0.43	1324.7	8.6	1335.1	12.4	1351.7	29.1	1351.7	29.1	98.0
GP03-11	221	156400	4.4	8.1525	0.3	5.8701	1.0	0.3471	0.9	0.94	1920.7	15.6	1956.8	8.7	1995.3	6.0	1995.3	6.0	96.3
GP03-12	123	4060	1.0	24.0392	20.3	0.1440	20.6	0.0251	3.1	0.15	159.8	4.9	136.6	26.3	-250.7	518.6	159.8	4.9	NA
GP03-13	189	100552	2.1	8.5955	1.0	4.9818	2.2	0.3106	1.9	0.89	1743.5	29.2	1816.2	18.3	1900.7	18.0	1900.7	18.0	91.7
GP03-14	159	15262	3.3	20.3759	18.4	0.1668	18.7	0.0246	3.1	0.17	156.9	4.8	156.6	27.1	151.5	435.1	156.9	4.8	NA
GP03-15	74	2470	3.8	24.8902	29.1	0.1258	32.0	0.0227	13.3	0.42	144.8	19.0	120.3	36.4	-339.6	764.0	144.8	19.0	NA
GP03-16	145	6721	2.1	21.8706	16.5	0.1399	17.5	0.0222	5.9	0.34	141.5	8.2	132.9	21.8	-16.9	401.2	141.5	8.2	NA

GP03-17	58	3231	2.1	30.2915	28.9	0.1069	31.4	0.0235	12.4	0.39	149.7	18.3	103.2	30.8	-874.2	846.3	149.7	18.3	NA	
GP03-18	463	21678	0.9	20.6999	3.4	0.1632	3.9	0.0245	2.0	0.51	156.0	3.1	153.5	5.6	114.5	79.8	156.0	3.1	NA	
GP03-19	196	30907	1.2	17.0030	3.5	0.6847	3.9	0.0844	1.7	0.44	522.5	8.5	529.6	16.0	560.2	76.1	522.5	8.5	93.3	
GP03-20	272	11102	3.9	20.8877	6.8	0.2066	7.1	0.0313	2.0	0.28	198.7	3.9	190.7	12.4	93.1	161.9	198.7	3.9	NA	
GP03-21	238	63048	1.6	13.1539	1.1	1.9475	1.6	0.1858	1.2	0.73	1098.5	11.9	1097.6	10.9	1095.7	22.3	1095.7	22.3	100.3	
GP03-22	56	4399	2.7	22.0138	38.4	0.2438	39.6	0.0389	9.9	0.25	246.2	23.8	221.5	79.0	-32.7	961.8	246.2	23.8	NA	
GP03-23	149	7684	2.2	20.2002	11.3	0.1746	15.8	0.0256	11.0	0.70	162.8	17.7	163.4	23.9	171.8	265.6	162.8	17.7	NA	
GP03-24	65	2939	2.5	26.2375	42.4	0.1269	43.8	0.0241	10.9	0.25	153.8	16.6	121.3	50.1	-477.3	#####	153.8	16.6	NA	
GP03-25	235	13739	2.0	19.9826	7.6	0.2669	7.9	0.0387	2.3	0.29	244.7	5.5	240.2	16.9	197.0	176.3	244.7	5.5	NA	
GP03-26	42	7841	1.8	13.5828	4.5	1.7875	4.7	0.1761	1.4	0.30	1045.6	13.5	1040.9	30.5	1031.1	90.5	1031.1	90.5	101.4	
GP03-27	304	159299	3.4	10.8658	0.6	3.1047	1.4	0.2447	1.2	0.90	1410.9	15.4	1433.9	10.4	1468.0	11.4	1468.0	11.4	96.1	
GP03-28	200	21640	1.7	17.8279	2.9	0.6081	3.8	0.0786	2.5	0.66	488.0	12.0	482.4	14.7	456.0	63.5	488.0	12.0	NA	
GP03-29	257	8743	1.7	19.0866	8.3	0.1623	9.3	0.0225	4.2	0.45	143.2	6.0	152.7	13.2	302.6	190.2	143.2	6.0	NA	
GP03-30	121	35943	2.3	11.5214	1.0	2.6008	1.5	0.2173	1.1	0.73	1267.7	12.3	1300.9	10.7	1355.9	19.3	1355.9	19.3	93.5	
GP03-31	484	14917	2.0	20.2386	5.3	0.1659	5.6	0.0244	1.7	0.31	155.1	2.6	155.9	8.1	167.3	123.9	155.1	2.6	NA	
GP03-32	61	2953	1.8	24.5156	58.7	0.1255	61.0	0.0223	16.4	0.27	142.3	23.1	120.1	69.2	-300.7	#####	142.3	23.1	NA	
GP03-33	81	3135	3.0	19.7167	40.1	0.1615	40.4	0.0231	4.5	0.11	147.1	6.5	152.0	57.0	228.1	962.0	147.1	6.5	NA	
GP03-35	101	63836	3.0	12.1407	1.3	2.3883	2.8	0.2103	2.5	0.89	1230.4	28.0	1239.1	20.1	1254.3	25.0	1254.3	25.0	98.1	
GP03-36	587	33868	1.7	20.4873	2.1	0.1823	3.2	0.0271	2.5	0.76	172.3	4.2	170.0	5.1	138.7	49.9	172.3	4.2	NA	
GP03-37	157	108423	3.4	11.2883	0.9	2.8219	2.1	0.2310	1.9	0.91	1339.9	23.6	1361.4	16.1	1395.2	17.3	1395.2	17.3	96.0	
GP03-38	90	18882	2.4	18.1909	7.0	0.6044	7.3	0.0797	1.9	0.26	494.6	9.2	480.0	28.0	411.1	157.8	494.6	9.2	NA	
GP03-39	86	17933	2.3	13.5703	2.7	1.4453	3.3	0.1422	1.9	0.57	857.4	15.3	907.9	19.9	1033.0	55.1	1033.0	55.1	83.0	
GP03-40	761	31417	2.0	20.1249	2.5	0.1607	2.6	0.0235	0.8	0.32	149.5	1.2	151.3	3.7	180.5	57.6	149.5	1.2	NA	
GP03-41	241	158437	2.4	12.8239	0.8	1.9751	2.0	0.1837	1.8	0.91	1087.2	18.4	1107.1	13.6	1146.3	16.4	1146.3	16.4	94.8	
GP03-43	117	7842	4.8	21.8506	30.4	0.1326	32.8	0.0210	12.4	0.38	134.1	16.4	126.4	39.1	-14.7	750.4	134.1	16.4	NA	
GP03-44	61	3263	1.3	32.3212	49.7	0.1001	50.8	0.0235	10.4	0.20	149.5	15.4	96.8	46.9	-1065.1	#####	149.5	15.4	NA	
GP03-45	201	132299	3.3	6.1204	0.6	7.6889	1.9	0.3413	1.8	0.95	1892.9	29.6	2195.3	17.0	2491.0	9.9	2491.0	9.9	76.0	
GP03-46	1026	50554	1.1	20.2974	1.8	0.1902	2.2	0.0280	1.1	0.53	178.1	2.0	176.8	3.5	160.5	42.8	178.1	2.0	NA	
GP03-47	281	44751	1.9	21.2732	8.3	0.1531	8.6	0.0236	2.3	0.27	150.5	3.4	144.6	11.6	49.6	198.2	150.5	3.4	NA	
GP03-48	264	11192	1.4	20.2867	7.7	0.1589	7.9	0.0234	1.9	0.24	149.0	2.8	149.7	11.0	161.8	180.0	149.0	2.8	NA	
GP03-49	319	48353	1.8	18.3745	2.4	0.4967	2.7	0.0662	1.1	0.40	413.2	4.2	409.5	9.0	388.6	54.9	413.2	4.2	NA	
GP03-50	95	4384	1.7	23.2464	29.5	0.1403	30.6	0.0236	8.4	0.27	150.7	12.5	133.3	38.3	-166.6	746.9	150.7	12.5	NA	
GP03-51	177	10193	2.2	21.5590	18.7	0.1538	19.0	0.0240	3.3	0.17	153.2	5.0	145.3	25.7	17.6	452.4	153.2	5.0	NA	
GP03-52	249	18589	3.0	19.3205	8.7	0.1686	9.2	0.0236	2.9	0.32	150.5	4.4	158.2	13.4	274.7	198.8	150.5	4.4	NA	
GP03-53	112	4264	1.1	25.3387	16.5	0.1519	16.7	0.0279	2.7	0.16	177.4	4.8	143.5	22.3	-385.8	430.6	177.4	4.8	NA	

GP03-54	156	15330	1.4	18.7169	4.6	0.4631	5.1	0.0629	2.0	0.39	393.0	7.6	386.4	16.3	347.0	105.2	393.0	7.6	NA	
GP03-55	173	6902	1.3	25.7251	8.9	0.1239	9.6	0.0231	3.6	0.38	147.3	5.3	118.6	10.7	-425.3	232.9	147.3	5.3	NA	
GP03-57	315	24406	1.1	20.3992	8.1	0.1596	8.3	0.0236	1.7	0.21	150.4	2.6	150.3	11.5	148.9	189.5	150.4	2.6	NA	
GP03-58	831	44992	1.9	20.4401	2.2	0.1584	2.6	0.0235	1.3	0.52	149.6	2.0	149.3	3.6	144.1	51.3	149.6	2.0	NA	
GP03-59	159	88367	2.1	11.6785	1.7	2.7318	2.0	0.2314	1.1	0.55	1341.8	13.7	1337.2	15.2	1329.8	33.1	1329.8	33.1	100.9	
GP03-60	181	276272	2.5	9.8339	0.6	3.9894	1.4	0.2845	1.3	0.89	1614.1	17.9	1632.0	11.4	1655.2	11.9	1655.2	11.9	97.5	
GP03-62	458	29562	1.0	20.5695	6.5	0.1547	6.7	0.0231	1.9	0.28	147.1	2.8	146.1	9.2	129.4	152.4	147.1	2.8	NA	
GP03-63	41	2191	2.7	12.8476	51.1	0.2330	53.9	0.0217	17.2	0.32	138.5	23.5	212.7	103.8	1142.7	#####	138.5	23.5	12.1	
GP03-64	246	11389	0.7	20.1013	11.2	0.1612	11.4	0.0235	2.5	0.22	149.8	3.7	151.8	16.1	183.2	261.0	149.8	3.7	NA	
GP03-65	689	22435	2.9	20.5794	2.6	0.1660	2.8	0.0248	1.2	0.43	157.8	1.9	155.9	4.1	128.2	60.5	157.8	1.9	NA	
GP03-66	159	67164	2.8	12.1646	0.9	2.2200	1.6	0.1959	1.3	0.82	1153.1	14.0	1187.4	11.3	1250.4	18.1	1250.4	18.1	92.2	
GP03-67	170	7874	1.9	20.2603	11.7	0.1922	13.2	0.0282	6.2	0.47	179.5	10.9	178.5	21.6	164.8	273.1	179.5	10.9	NA	
GP03-68	174	15281	5.3	19.1297	6.6	0.3741	6.9	0.0519	2.1	0.30	326.2	6.7	322.7	19.2	297.4	151.2	326.2	6.7	NA	
GP03-69	53	3619	0.9	36.1166	118.9	0.0871	120.0	0.0228	16.5	0.14	145.4	23.7	84.8	98.0	-1412.5	0.0	145.4	23.7	NA	
GP03-70	390	53413	1.5	18.7997	2.9	0.3577	3.3	0.0488	1.4	0.44	307.0	4.3	310.5	8.7	337.0	66.6	307.0	4.3	NA	
GP03-71	108	40242	3.8	12.8177	1.5	2.0175	1.9	0.1875	1.1	0.57	1108.1	10.7	1121.4	12.6	1147.3	30.4	1147.3	30.4	96.6	
GP03-72	272	7375	2.2	22.3003	7.4	0.1476	8.0	0.0239	3.1	0.38	152.1	4.6	139.8	10.4	-64.2	180.3	152.1	4.6	NA	
GP03-73	334	49322	1.9	20.3517	8.5	0.1571	9.0	0.0232	2.9	0.32	147.8	4.2	148.2	12.4	154.3	199.2	147.8	4.2	NA	
GP03-74	190	11423	1.9	20.6873	6.4	0.1964	9.9	0.0295	7.5	0.76	187.2	13.8	182.1	16.4	115.9	151.1	187.2	13.8	NA	
GP03-75	543	20178	1.9	20.8030	3.2	0.1541	3.4	0.0232	1.1	0.32	148.2	1.6	145.5	4.6	102.7	76.7	148.2	1.6	NA	
GP03-76	318	13759	2.8	21.2103	13.1	0.1681	13.3	0.0259	2.1	0.16	164.6	3.4	157.8	19.4	56.7	313.9	164.6	3.4	NA	
GP03-77	520	69395	1.5	17.6186	2.2	0.5889	2.6	0.0753	1.5	0.57	467.7	6.8	470.2	9.9	482.2	47.6	467.7	6.8	NA	
GP03-79	931	157159	5.6	18.8115	1.8	0.3558	4.8	0.0485	4.5	0.93	305.6	13.3	309.1	12.8	335.6	40.3	305.6	13.3	NA	
GP03-80	266	8320	4.3	21.9096	9.7	0.1513	10.3	0.0240	3.5	0.34	153.2	5.2	143.1	13.8	-21.2	235.8	153.2	5.2	NA	
GP03-81	483	14761	1.1	20.6432	4.8	0.1446	4.8	0.0217	0.9	0.18	138.1	1.2	137.2	6.2	120.9	112.1	138.1	1.2	NA	
GP03-82	358	22973	2.5	21.4391	9.4	0.1615	9.8	0.0251	2.7	0.27	159.9	4.2	152.0	13.8	31.0	225.9	159.9	4.2	NA	
GP03-83	258	11698	3.0	18.8414	7.7	0.1954	8.7	0.0267	4.1	0.47	169.9	6.9	181.3	14.5	332.0	175.1	169.9	6.9	NA	
GP03-84	223	8210	2.0	20.6724	12.9	0.1666	13.7	0.0250	4.6	0.34	159.0	7.3	156.4	19.8	117.6	304.1	159.0	7.3	NA	
GP03-85	81	23473	2.1	13.8333	2.4	1.6215	2.9	0.1627	1.6	0.56	971.7	14.5	978.6	18.1	994.1	48.7	994.1	48.7	97.7	
GP03-86	75	2487	2.3	31.0084	87.8	0.1010	88.4	0.0227	10.3	0.12	144.8	14.7	97.7	82.6	-942.1	#####	144.8	14.7	NA	
GP03-87	270	107879	2.0	11.7493	0.6	2.4984	2.4	0.2129	2.4	0.97	1244.2	26.8	1271.6	17.8	1318.1	12.0	1318.1	12.0	94.4	
GP03-88	70	3435	3.6	36.2707	44.4	0.0778	45.4	0.0205	9.4	0.21	130.6	12.2	76.1	33.3	-1426.4	#####	130.6	12.2	NA	
GP03-89	160	80240	2.0	11.3667	1.2	2.7494	2.1	0.2267	1.7	0.83	1317.0	20.6	1341.9	15.6	1381.9	22.7	1381.9	22.7	95.3	
GP03-90	215	58661	2.3	9.9117	0.7	3.7841	1.3	0.2720	1.2	0.87	1551.1	16.1	1589.4	10.8	1640.5	12.5	1640.5	12.5	94.5	
GP03-91	366	12292	2.0	20.1443	5.5	0.1551	5.8	0.0227	1.8	0.31	144.4	2.5	146.4	7.9	178.2	128.0	144.4	2.5	NA	

GP03-92	120	7343	1.8	19.3893	14.5	0.1574	15.6	0.0221	5.7	0.37	141.1	8.0	148.4	21.6	266.6	334.6	141.1	8.0	NA
GP03-93	113	37170	1.6	13.7216	3.3	1.7112	4.2	0.1703	2.6	0.62	1013.7	24.2	1012.7	26.7	1010.5	66.2	1010.5	66.2	100.3
GP03-94	426	34539	8.4	18.4502	2.1	0.4565	2.5	0.0611	1.2	0.50	382.2	4.6	381.8	7.8	379.3	47.8	382.2	4.6	NA
GP03-95	435	12379	2.1	20.9628	4.7	0.1484	5.4	0.0226	2.7	0.49	143.9	3.8	140.5	7.1	84.6	111.8	143.9	3.8	NA
GP03-96	154	12958	1.6	20.2652	14.6	0.1516	16.3	0.0223	7.3	0.45	142.0	10.3	143.3	21.9	164.3	343.0	142.0	10.3	NA
GP03-97	273	7091	10.9	21.5684	14.7	0.1275	15.4	0.0199	4.6	0.30	127.3	5.8	121.9	17.7	16.6	354.0	127.3	5.8	NA
GP03-98	233	47698	1.6	13.2503	0.7	1.7464	1.8	0.1678	1.7	0.92	1000.1	15.7	1025.8	11.9	1081.0	14.5	1081.0	14.5	92.5
GP03-99	118	39707	3.3	12.6871	2.6	1.9342	2.8	0.1780	1.1	0.39	1055.9	10.6	1093.0	18.6	1167.6	50.7	1167.6	50.7	90.4
GP03-100	142	8105	2.8	22.1122	11.0	0.1376	11.3	0.0221	2.4	0.21	140.7	3.3	130.9	13.8	-43.6	268.2	140.7	3.3	NA
GP03-101	96	3193	2.5	33.1463	49.7	0.0951	50.7	0.0229	9.8	0.19	145.7	14.2	92.2	44.7	-1141.6	#####	145.7	14.2	NA
GP03-102	158	9469	1.6	20.6421	14.4	0.1695	16.1	0.0254	7.3	0.45	161.5	11.6	159.0	23.7	121.1	340.0	161.5	11.6	NA
GP03-103	205	7551	1.1	20.1667	8.1	0.1680	8.6	0.0246	2.8	0.32	156.5	4.3	157.7	12.5	175.6	189.9	156.5	4.3	NA
GP03-104	60	22901	1.1	13.4750	2.9	1.6939	3.1	0.1655	1.1	0.36	987.5	10.3	1006.2	19.9	1047.2	58.6	1047.2	58.6	94.3
GP03-105	587	28067	1.5	20.0090	5.2	0.1852	5.5	0.0269	1.5	0.27	171.0	2.5	172.5	8.7	194.0	122.0	171.0	2.5	NA
GP03-106	260	88110	3.1	12.8424	0.6	1.9729	3.8	0.1838	3.8	0.99	1087.5	37.8	1106.3	25.7	1143.5	11.4	1143.5	11.4	95.1

GP--08: Goldstein Peak Formation (11S 0307663, E 4054350) Reddish-to-dark-gray, poorly sorted, subrounded-to-rounded metaconglomerate

Analysis	U	Isotope ratios						error	206Pb*	±	Apparent ages (Ma)						Best age	±	Conc
		(ppm)	204Pb	207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
GP08-1	457	242343	2.9	10.6843	0.4	3.3060	1.4	0.2562	1.3	0.97	1470.3	17.5	1482.5	10.8	1499.9	6.8	1499.9	6.8	98.0
GP08-2	1214	357817	5.9	9.3760	0.4	4.2477	2.6	0.2888	2.5	0.99	1635.8	36.6	1683.3	21.0	1743.0	6.5	1743.0	6.5	93.8
GP08-3	168	97572	1.4	11.6366	0.6	2.2923	3.7	0.1935	3.6	0.99	1140.1	37.6	1209.9	25.9	1336.7	12.0	1336.7	12.0	85.3
GP08-4	75	5926	2.1	9.5956	2.0	4.0756	4.2	0.2836	3.7	0.89	1609.7	53.1	1649.4	34.3	1700.5	36.0	1700.5	36.0	94.7
GP08-5	488	20150	2.4	20.9099	7.6	0.1484	7.9	0.0225	2.0	0.25	143.5	2.8	140.5	10.3	90.6	181.0	143.5	2.8	NA
GP08-6	404	20907	2.0	20.4803	5.8	0.1761	6.4	0.0262	2.7	0.42	166.5	4.4	164.7	9.7	139.6	135.6	166.5	4.4	NA
GP08-7	222	103971	1.7	5.9207	0.3	11.2974	2.1	0.4851	2.1	0.99	2549.5	43.5	2548.0	19.5	2546.7	5.5	2546.7	5.5	100.1
GP08-8	966	92156	2.0	20.5125	1.7	0.1605	4.2	0.0239	3.8	0.91	152.1	5.8	151.1	5.9	135.8	40.1	152.1	5.8	NA
GP08-9	308	47259	1.6	17.9991	2.7	0.5195	4.1	0.0678	3.2	0.76	423.0	12.9	424.8	14.3	434.7	59.3	423.0	12.9	NA
GP08-10	191	91351	1.7	11.0831	0.9	3.1829	3.2	0.2559	3.0	0.96	1468.6	39.8	1453.0	24.4	1430.3	16.5	1430.3	16.5	102.7
GP08-11	176	14331	1.4	19.2425	14.8	0.1725	15.1	0.0241	3.0	0.20	153.3	4.5	161.6	22.5	284.0	339.9	153.3	4.5	NA
GP08-12	158	81725	4.0	13.7010	1.3	1.7194	3.1	0.1709	2.9	0.92	1016.8	27.1	1015.8	20.2	1013.6	25.4	1013.6	25.4	100.3
GP08-13	352	18012	1.4	20.2558	13.1	0.1564	13.2	0.0230	2.0	0.15	146.4	2.9	147.5	18.2	165.4	307.2	146.4	2.9	NA
GP08-14	131	93328	2.0	8.5485	0.8	5.2098	1.9	0.3230	1.7	0.92	1804.4	27.4	1854.2	16.2	1910.6	13.6	1910.6	13.6	94.4

GP08-15	634	242212	2.3	5.6620	0.3	9.7480	3.4	0.4003	3.4	1.00	2170.4	62.5	2411.3	31.4	2621.3	5.1	2621.3	5.1	82.8	
GP08-17	325	33796	1.7	19.7751	10.8	0.1724	11.6	0.0247	4.1	0.36	157.4	6.4	161.5	17.3	221.2	251.1	157.4	6.4	NA	
GP08-20	229	50319	1.5	12.8307	1.1	1.9768	3.4	0.1840	3.2	0.95	1088.5	31.8	1107.6	22.6	1145.3	21.5	1145.3	21.5	95.0	
GP08-21	371	14628	7.1	19.4282	8.6	0.1731	9.9	0.0244	4.9	0.49	155.4	7.5	162.1	14.8	262.0	197.1	155.4	7.5	NA	
GP08-22	83	7427	1.3	34.3720	110.7	0.0912	110.8	0.0227	4.8	0.04	144.9	6.9	88.6	94.3	-1254.2	0.0	144.9	6.9	NA	
GP08-23	257	18087	2.6	18.8909	9.6	0.1795	9.9	0.0246	2.7	0.27	156.6	4.2	167.6	15.3	326.0	217.4	156.6	4.2	NA	
GP08-24	530	315388	2.9	13.4262	0.6	1.7296	2.3	0.1684	2.2	0.97	1003.4	20.6	1019.6	14.8	1054.6	11.4	1054.6	11.4	95.2	
GP08-25	360	15155	1.7	19.2241	4.9	0.1977	7.7	0.0276	6.0	0.77	175.3	10.3	183.2	13.0	286.2	112.9	175.3	10.3	NA	
GP08-26	508	9777	1.9	20.1638	6.0	0.1673	7.8	0.0245	5.0	0.64	155.8	7.7	157.1	11.4	176.0	140.4	155.8	7.7	NA	
GP08-27	375	27560	1.9	20.8090	9.0	0.1561	10.9	0.0236	6.2	0.57	150.1	9.1	147.2	14.9	102.0	212.7	150.1	9.1	NA	
GP08-28	259	37420	1.9	11.8001	0.7	2.2509	3.1	0.1926	3.0	0.97	1135.6	31.6	1197.1	21.9	1309.7	13.8	1309.7	13.8	86.7	
GP08-29	218	10076	1.8	21.2783	12.4	0.1771	13.1	0.0273	4.3	0.33	173.9	7.5	165.6	20.1	49.0	296.7	173.9	7.5	NA	
GP08-30	306	26795	1.8	19.5571	12.5	0.1845	12.8	0.0262	2.6	0.21	166.5	4.3	171.9	20.2	246.8	288.6	166.5	4.3	NA	
GP08-31	340	22385	0.7	18.9197	5.3	0.3548	6.0	0.0487	2.9	0.48	306.4	8.7	308.3	16.0	322.6	119.8	306.4	8.7	NA	
GP08-32	71	26211	0.9	13.1152	4.5	1.8105	5.7	0.1722	3.5	0.61	1024.3	32.9	1049.3	37.1	1101.6	89.7	1101.6	89.7	93.0	
GP08-33	537	523966	4.9	7.3420	0.4	6.2617	3.3	0.3334	3.3	0.99	1855.0	52.9	2013.1	28.9	2179.5	6.1	2179.5	6.1	85.1	
GP08-34	254	140311	2.8	10.7203	1.0	3.2029	3.0	0.2490	2.8	0.94	1433.4	36.4	1457.9	23.3	1493.6	19.3	1493.6	19.3	96.0	
GP08-35	710	10968	2.9	19.8627	6.4	0.1439	6.9	0.0207	2.5	0.36	132.3	3.3	136.5	8.8	211.0	148.8	132.3	3.3	NA	
GP08-36	414	15212	2.4	20.1707	12.1	0.1455	12.3	0.0213	1.8	0.15	135.8	2.4	137.9	15.8	175.2	283.9	135.8	2.4	NA	
GP08-37	560	23401	1.7	20.3086	5.5	0.1695	7.2	0.0250	4.6	0.64	159.0	7.2	159.0	10.5	159.3	128.7	159.0	7.2	NA	
GP08-38	186	9737	2.8	17.2625	6.9	0.6224	10.1	0.0779	7.4	0.73	483.7	34.5	491.4	39.6	527.1	152.2	483.7	34.5	91.8	
GP08-39	292	19701	1.4	20.3027	12.2	0.1546	12.4	0.0228	2.3	0.19	145.1	3.3	146.0	16.9	160.0	286.7	145.1	3.3	NA	
GP08-40	177	22278	1.8	16.9807	3.0	0.7058	4.7	0.0869	3.6	0.77	537.3	18.6	542.3	19.7	563.0	65.4	537.3	18.6	95.4	
GP08-41	61	52621	1.8	13.5314	4.4	1.7454	5.6	0.1713	3.4	0.61	1019.2	32.2	1025.5	35.9	1038.8	88.5	1038.8	88.5	98.1	
GP08-42	200	75774	1.8	11.4171	1.9	2.7641	5.4	0.2289	5.1	0.94	1328.6	61.1	1345.9	40.6	1373.4	37.0	1373.4	37.0	96.7	
GP08-43	137	1252	1.6	16.7853	20.4	0.4444	21.3	0.0541	6.2	0.29	339.7	20.5	373.4	66.8	588.2	447.3	339.7	20.5	NA	
GP08-45	1359	130223	4.7	19.0214	1.6	0.3091	3.3	0.0426	3.0	0.89	269.2	7.8	273.5	8.0	310.4	35.5	269.2	7.8	NA	
GP08-47	937	74723	1.8	19.8231	2.9	0.1693	4.6	0.0243	3.6	0.78	155.0	5.5	158.8	6.8	215.6	66.4	155.0	5.5	NA	
GP08-48	448	23614	3.6	19.1329	4.0	0.1607	6.8	0.0223	5.4	0.80	142.2	7.6	151.4	9.5	297.1	92.2	142.2	7.6	NA	
GP08-50	540	23043	1.6	20.0065	5.7	0.1582	6.2	0.0229	2.4	0.39	146.3	3.5	149.1	8.6	194.3	133.5	146.3	3.5	NA	
GP08-51	602	422965	3.2	8.9806	0.5	4.4876	1.1	0.2923	1.0	0.91	1653.0	14.3	1728.7	9.0	1821.6	8.3	1821.6	8.3	90.7	
GP08-52	270	58725	1.9	16.2021	1.8	0.8694	3.1	0.1022	2.5	0.80	627.1	14.8	635.2	14.5	664.5	39.4	627.1	14.8	94.4	
GP08-53	330	20524	2.1	19.8719	14.4	0.1648	14.6	0.0237	2.6	0.18	151.3	3.9	154.9	21.0	209.9	335.1	151.3	3.9	NA	
GP08-54	437	16853	1.4	19.6792	13.0	0.1786	13.4	0.0255	3.1	0.24	162.2	5.0	166.8	20.6	232.4	300.9	162.2	5.0	NA	
GP08-55	437	26804	1.8	20.2695	8.6	0.1612	9.1	0.0237	2.9	0.32	150.9	4.4	151.7	12.8	163.8	201.7	150.9	4.4	NA	

GP08-56	192	18906	2.0	18.8235	11.3	0.1887	14.0	0.0258	8.2	0.59	164.0	13.3	175.6	22.6	334.1	257.4	164.0	13.3	NA	
GP08-57	295	15361	2.6	19.5066	7.9	0.1648	8.7	0.0233	3.8	0.44	148.6	5.6	154.9	12.6	252.8	181.4	148.6	5.6	NA	
GP08-58	130	161266	1.2	11.0351	1.4	3.0550	4.0	0.2445	3.7	0.94	1410.1	46.9	1421.5	30.2	1438.6	26.2	1438.6	26.2	98.0	
GP08-59	110	11169	2.2	20.6865	23.4	0.1733	23.9	0.0260	5.0	0.21	165.5	8.1	162.3	35.9	116.0	557.8	165.5	8.1	NA	
GP08-60	232	163292	2.7	9.5843	0.6	4.1693	2.1	0.2898	2.0	0.96	1640.6	28.8	1668.0	17.0	1702.6	10.4	1702.6	10.4	96.4	
GP08-61	168	16497	1.3	19.2151	18.7	0.1565	19.0	0.0218	3.2	0.17	139.1	4.4	147.7	26.1	287.2	430.5	139.1	4.4	NA	
GP08-62	158	151206	1.2	9.7846	1.1	4.0947	3.0	0.2906	2.8	0.93	1644.4	39.9	1653.2	24.1	1664.5	19.7	1664.5	19.7	98.8	
GP08-63	928	165570	4.5	18.2635	1.6	0.3691	6.1	0.0489	5.9	0.97	307.7	17.6	319.0	16.6	402.2	35.4	307.7	17.6	NA	
GP08-64	249	17956	1.8	21.0756	17.3	0.1494	17.5	0.0228	2.6	0.15	145.6	3.7	141.4	23.1	71.9	413.7	145.6	3.7	NA	
GP08-65	198	6943	0.9	20.6918	11.2	0.1561	11.9	0.0234	4.1	0.34	149.3	6.0	147.3	16.4	115.4	265.5	149.3	6.0	NA	
GP08-66	357	2324	0.8	18.7134	13.2	0.1668	13.7	0.0226	3.9	0.28	144.3	5.5	156.6	19.9	347.4	298.8	144.3	5.5	NA	
GP08-67	53	25065	1.0	9.1940	2.6	4.6766	2.9	0.3118	1.4	0.48	1749.8	21.4	1763.1	24.6	1778.8	47.2	1778.8	47.2	98.4	
GP08-68	316	64787	1.4	13.2087	1.0	1.9776	3.6	0.1895	3.5	0.96	1118.4	35.8	1107.9	24.4	1087.3	19.7	1087.3	19.7	102.9	
GP08-69	596	30354	0.8	20.4149	5.8	0.1722	6.4	0.0255	2.6	0.41	162.3	4.1	161.3	9.5	147.1	136.3	162.3	4.1	NA	
GP08-70	284	18599	1.6	20.4687	11.6	0.1678	12.1	0.0249	3.5	0.29	158.7	5.6	157.6	17.7	140.9	272.3	158.7	5.6	NA	
GP08-71	599	4983	1.4	20.0411	5.4	0.1625	6.4	0.0236	3.5	0.54	150.5	5.2	152.9	9.1	190.2	126.0	150.5	5.2	NA	
GP08-72	194	119667	2.4	11.2951	1.0	2.9006	2.4	0.2376	2.2	0.91	1374.3	27.2	1382.1	18.2	1394.1	19.0	1394.1	19.0	98.6	
GP08-73	770	406021	21.2	12.6727	0.6	1.7919	3.4	0.1647	3.3	0.99	982.8	30.4	1042.5	22.0	1169.8	11.1	1169.8	11.1	84.0	
GP08-74	294	21607	1.0	20.7111	10.4	0.1567	11.8	0.0235	5.7	0.48	150.0	8.4	147.8	16.3	113.2	245.5	150.0	8.4	NA	
GP08-78	259	9380	2.5	18.5259	15.4	0.1876	16.2	0.0252	5.2	0.32	160.5	8.3	174.6	26.1	370.1	348.3	160.5	8.3	NA	
GP08-79	197	132100	1.4	8.2246	0.7	6.2082	2.8	0.3703	2.7	0.97	2030.9	47.5	2005.6	24.6	1979.6	12.4	1979.6	12.4	102.6	
GP08-80	644	25670	1.6	20.6789	5.1	0.1588	6.5	0.0238	4.0	0.62	151.7	6.0	149.6	9.1	116.9	121.0	151.7	6.0	NA	
GP08-82	194	57861	1.3	9.6735	0.8	3.3671	9.5	0.2362	9.4	1.00	1367.1	116.2	1496.8	74.2	1685.6	14.9	1685.6	14.9	81.1	
GP08-83	152	22610	0.7	18.7497	7.9	0.3658	8.2	0.0497	2.2	0.27	312.9	6.9	316.5	22.4	343.1	179.5	312.9	6.9	NA	
GP08-84	313	369032	2.4	8.9180	0.3	4.4963	2.0	0.2908	1.9	0.99	1645.6	28.3	1730.3	16.4	1834.2	6.1	1834.2	6.1	89.7	
GP08-85	432	66037	2.2	18.1295	2.2	0.4910	2.6	0.0646	1.4	0.54	403.3	5.5	405.6	8.6	418.6	48.6	403.3	5.5	NA	
GP08-86	217	8558	0.9	20.5186	19.8	0.1537	20.7	0.0229	6.2	0.30	145.8	8.9	145.2	28.0	135.2	468.2	145.8	8.9	NA	
GP08-88	159	13105	0.5	23.8369	19.7	0.1335	20.3	0.0231	4.8	0.24	147.1	7.0	127.2	24.2	-229.4	499.8	147.1	7.0	NA	
GP08-89	227	14220	1.9	19.2030	11.3	0.1843	12.8	0.0257	6.0	0.47	163.4	9.7	171.8	20.2	288.7	258.1	163.4	9.7	NA	
GP08-90	34	12620	0.9	14.3677	9.3	1.5403	9.9	0.1605	3.5	0.35	959.6	31.0	946.6	61.1	916.6	191.3	916.6	191.3	104.7	
GP08-91	469	5237	1.2	20.4384	10.7	0.1722	12.0	0.0255	5.5	0.46	162.5	8.9	161.3	17.9	144.3	250.8	162.5	8.9	NA	
GP08-92	500	166469	2.4	9.6414	0.4	3.7888	2.6	0.2649	2.6	0.99	1515.1	34.7	1590.4	21.0	1691.7	8.3	1691.7	8.3	89.6	
GP08-93	386	51515	3.1	11.9049	0.6	2.0316	3.7	0.1754	3.7	0.99	1041.9	35.3	1126.1	25.3	1292.5	11.7	1292.5	11.7	80.6	
GP08-94	321	190108	1.0	11.4455	0.7	2.7587	4.3	0.2290	4.2	0.99	1329.3	50.5	1344.4	31.8	1368.7	13.6	1368.7	13.6	97.1	
GP08-96	117	73375	1.2	9.2015	2.0	4.8703	11.7	0.3250	11.6	0.99	1814.2	183.0	1797.1	99.2	1777.4	35.9	1777.4	35.9	102.1	

GP08-97	119	62056	2.7	9.2849	1.0	4.6964	7.5	0.3163	7.4	0.99	1771.4	115.2	1766.6	62.9	1760.9	18.8	1760.9	18.8	100.6
GP08-98	247	110965	1.6	9.2397	0.8	4.8963	5.5	0.3281	5.4	0.99	1829.3	86.3	1801.6	46.2	1769.8	14.5	1769.8	14.5	103.4
GP08-99	523	71068	2.0	12.9285	0.8	1.9213	3.2	0.1801	3.1	0.97	1067.8	30.8	1088.5	21.5	1130.2	15.1	1130.2	15.1	94.5
GP08-100	235	10888	1.9	18.1067	20.9	0.1783	21.2	0.0234	3.6	0.17	149.2	5.2	166.6	32.6	421.5	471.6	149.2	5.2	NA

GP--12: Goldstein Peak Formation (11S 0308038, E 4054155) Gray, moderately-to-poorly sorted, subrounded-to-subangular metaconglomerate																				
Analysis	U	Isotope ratios								Apparent ages (Ma)										Conc
		(ppm)	204Pb	206Pb*	±	207Pb*	±	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	
																			(%)	
GP12Z-2	296	47697	0.8	12.8873	0.7	1.8270	1.5	0.1708		1.3	0.88	1016.3	12.5	1055.2	9.9	1136.6	14.0	1136.6	14.0	89.4
GP12Z-3	344	165024	2.0	13.0145	1.0	1.7563	1.5	0.1658		1.2	0.77	988.8	10.8	1029.5	9.9	1117.0	19.3	1117.0	19.3	88.5
GP12Z-4	144	3736	0.8	20.4139	22.2	0.1554	22.5	0.0230		3.7	0.17	146.6	5.4	146.7	30.7	147.2	525.8	146.6	5.4	NA
GP12Z-5	708	21808	1.4	19.5961	4.4	0.1790	4.5	0.0254		1.2	0.26	161.9	1.9	167.2	7.0	242.2	100.6	161.9	1.9	NA
GP12Z-6	172	34924	3.7	12.7970	1.2	1.9338	2.7	0.1795		2.5	0.89	1064.2	24.1	1092.9	18.4	1150.5	24.6	1150.5	24.6	92.5
GP12Z-7	221	10124	1.2	22.0018	14.4	0.1485	15.2	0.0237		4.8	0.32	151.0	7.2	140.6	20.0	-31.4	351.1	151.0	7.2	NA
GP12Z-9	353	75439	1.6	13.0416	0.6	1.9152	1.1	0.1812		0.9	0.85	1073.3	9.3	1086.4	7.3	1112.8	11.5	1112.8	11.5	96.4
GP12Z-10	221	6115	2.0	18.1634	15.6	0.1758	15.9	0.0232		2.9	0.18	147.6	4.2	164.4	24.1	414.5	350.5	147.6	4.2	NA
GP12Z-11	933	19267	3.6	19.7948	2.9	0.1532	5.0	0.0220		4.2	0.82	140.2	5.8	144.7	6.8	218.9	66.2	140.2	5.8	NA
GP12Z-12	394	133274	2.3	9.2058	0.3	4.4081	2.7	0.2943		2.6	0.99	1663.1	38.6	1713.9	21.9	1776.5	6.0	1776.5	6.0	93.6
GP12Z-13	508	10714	4.6	20.7398	2.6	0.1450	3.9	0.0218		2.9	0.75	139.1	4.0	137.5	5.0	109.9	60.3	139.1	4.0	NA
GP12Z-14	974	388477	3.7	12.6098	0.5	2.1276	2.4	0.1946		2.3	0.98	1146.1	24.3	1157.8	16.3	1179.7	9.0	1179.7	9.0	97.2
GP12Z-15	249	147269	3.1	11.1523	1.0	2.9625	4.4	0.2396		4.2	0.97	1384.7	52.7	1398.1	33.0	1418.4	19.8	1418.4	19.8	97.6
GP12Z-16	82	18200	2.3	13.1072	2.2	1.9553	4.2	0.1859		3.6	0.85	1099.0	36.0	1100.3	28.2	1102.8	44.4	1102.8	44.4	99.7
GP12Z-17	331	52164	3.1	10.8047	1.6	1.0285	4.4	0.0806		4.1	0.93	499.7	19.5	718.2	22.5	1478.7	30.8	1478.7	30.8	33.8
GP12Z-18	1740	135304	2.0	17.7953	0.4	0.5469	2.1	0.0706		2.1	0.98	439.7	8.9	443.0	7.7	460.1	9.1	439.7	8.9	NA
GP12Z-19	188	80459	1.7	9.2805	0.7	4.4734	2.5	0.3011		2.4	0.96	1696.7	36.0	1726.0	20.8	1761.7	12.8	1761.7	12.8	96.3
GP12Z-20	122	22154	2.6	13.8375	3.3	1.6892	3.4	0.1695		1.0	0.29	1009.5	9.4	1004.4	21.8	993.5	66.4	993.5	66.4	101.6
GP12Z-21	444	16129	1.9	20.9079	8.0	0.1741	8.7	0.0264		3.4	0.39	167.9	5.6	162.9	13.1	90.8	189.8	167.9	5.6	NA
GP12Z-22	1738	61444	1.2	20.2424	2.3	0.1600	2.6	0.0235		1.3	0.49	149.7	1.9	150.7	3.7	166.9	53.9	149.7	1.9	NA
GP12Z-23	182	3506	1.3	20.8911	13.0	0.1526	13.7	0.0231		4.5	0.33	147.3	6.6	144.2	18.5	92.7	308.6	147.3	6.6	NA
GP12Z-25	451	72421	1.6	13.9666	0.9	1.2756	2.4	0.1292		2.2	0.93	783.4	16.6	834.9	13.7	974.5	17.5	783.4	16.6	80.4
GP12Z-26	235	77955	1.1	9.8645	0.8	4.2454	2.7	0.3037		2.5	0.95	1709.8	38.3	1682.8	22.0	1649.4	15.4	1649.4	15.4	103.7
GP12Z-27	505	166810	3.1	8.5829	3.8	5.0700	4.5	0.3156		2.3	0.51	1768.2	35.7	1831.1	38.1	1903.4	69.2	1903.4	69.2	92.9
GP12Z-28	507	20351	1.6	20.5035	5.1	0.1572	5.5	0.0234		1.8	0.34	149.0	2.7	148.2	7.5	136.9	120.7	149.0	2.7	NA
GP12Z-29	186	11821	1.9	19.9403	11.5	0.2817	11.7	0.0407		1.9	0.16	257.4	4.7	252.0	26.0	201.9	268.1	257.4	4.7	NA

GP12Z-30	152	7544	2.9	22.3747	14.9	0.1559	16.7	0.0253	7.6	0.46	161.1	12.1	147.1	22.9	-72.3	365.5	161.1	12.1	NA
GP12Z-31	173	23316	2.2	12.8008	1.1	2.1056	1.7	0.1955	1.2	0.74	1151.0	12.9	1150.7	11.4	1149.9	22.0	1149.9	22.0	100.1
GP12Z-32	217	70107	1.0	7.5083	0.4	6.6546	1.0	0.3624	0.9	0.90	1993.4	14.7	2066.6	8.4	2140.4	7.4	2140.4	7.4	93.1
GP12Z-33	311	10539	1.8	20.5016	14.6	0.1610	14.7	0.0239	1.3	0.09	152.5	1.9	151.5	20.7	137.1	345.6	152.5	1.9	NA
GP12Z-34	337	12574	1.4	21.4048	6.7	0.1467	6.8	0.0228	1.4	0.20	145.2	2.0	139.0	8.9	34.9	160.5	145.2	2.0	NA
GP12Z-35	201	49209	0.6	13.6413	1.6	1.6843	2.6	0.1666	2.1	0.79	993.5	19.0	1002.6	16.6	1022.4	32.3	1022.4	32.3	97.2
GP12Z-36	263	46401	1.8	17.5957	3.0	0.5131	3.5	0.0655	1.8	0.52	408.8	7.3	420.5	12.0	485.0	65.8	408.8	7.3	NA
GP12Z-37	35	15008	1.6	6.2570	1.4	9.9196	3.3	0.4502	3.0	0.90	2395.9	59.2	2427.3	30.1	2453.7	23.5	2453.7	23.5	97.6
GP12Z-38	79	1757	1.2	23.5832	24.3	0.1448	24.9	0.0248	5.6	0.23	157.7	8.8	137.3	32.0	-202.5	616.5	157.7	8.8	NA
GP12Z-39	82	10193	3.6	14.0099	5.5	1.5619	5.8	0.1587	1.8	0.31	949.6	15.6	955.2	35.9	968.2	112.7	968.2	112.7	98.1
GP12Z-40	1037	23101	4.8	20.1983	2.6	0.1258	7.4	0.0184	6.9	0.93	117.7	8.0	120.3	8.4	172.0	61.3	117.7	8.0	NA
GP12Z-41	177	38823	1.3	13.5267	1.3	1.7283	2.1	0.1696	1.6	0.77	1009.7	14.8	1019.1	13.2	1039.5	26.3	1039.5	26.3	97.1
GP12Z-43	316	7079	1.0	22.2348	9.2	0.1498	9.4	0.0242	2.1	0.22	153.9	3.2	141.7	12.4	-57.0	223.6	153.9	3.2	NA
GP12Z-44	300	35552	2.1	16.7183	2.1	0.7322	2.3	0.0950	1.0	0.43	584.8	5.6	587.3	10.4	596.9	45.7	584.8	5.6	98.0
GP12Z-45	489	12745	1.0	20.5129	4.4	0.1603	4.7	0.0238	1.5	0.33	151.9	2.3	150.9	6.5	135.8	103.6	151.9	2.3	NA
GP12Z-46	469	17307	2.0	19.2418	4.2	0.1696	4.6	0.0237	2.0	0.43	150.8	2.9	159.0	6.8	284.1	95.5	150.8	2.9	NA
GP12Z-47	157	74542	1.2	9.5862	0.9	4.2226	1.9	0.2936	1.7	0.87	1659.4	24.2	1678.4	15.6	1702.3	17.2	1702.3	17.2	97.5
GP12Z-48	287	5517	1.3	20.0267	12.2	0.1786	13.4	0.0259	5.6	0.42	165.1	9.2	166.8	20.7	191.9	284.4	165.1	9.2	NA
GP12Z-49	325	95107	2.1	10.9704	0.6	3.0318	2.4	0.2412	2.3	0.97	1393.1	29.2	1415.7	18.3	1449.8	10.7	1449.8	10.7	96.1
GP12Z-50	80	60526	1.6	5.4432	0.4	12.8987	2.6	0.5092	2.6	0.99	2653.2	55.6	2672.3	24.4	2686.7	7.3	2686.7	7.3	98.8
GP12Z-51	919	51202	1.6	17.7033	1.2	0.5068	3.1	0.0651	2.8	0.92	406.4	11.1	416.3	10.5	471.5	27.2	406.4	11.1	NA
GP12Z-52	910	65921	1.6	20.7327	2.2	0.1642	2.8	0.0247	1.6	0.59	157.2	2.5	154.3	4.0	110.7	52.9	157.2	2.5	NA
GP12Z-53	192	4243	1.2	23.8524	13.3	0.1360	13.9	0.0235	4.1	0.30	149.9	6.1	129.5	16.9	-231.0	336.2	149.9	6.1	NA
GP12Z-54	387	17128	1.4	20.3657	7.1	0.1656	7.4	0.0245	2.2	0.30	155.8	3.4	155.6	10.7	152.7	166.3	155.8	3.4	NA
GP12Z-55	443	11914	4.3	18.7927	8.0	0.1882	9.6	0.0257	5.4	0.56	163.3	8.7	175.1	15.5	337.8	180.8	163.3	8.7	NA
GP12Z-56	318	12108	1.0	22.6134	15.9	0.1524	17.0	0.0250	6.0	0.35	159.2	9.4	144.1	22.8	-98.3	392.2	159.2	9.4	NA
GP12Z-58	1276	591451	1.2	9.7882	0.2	4.2595	3.3	0.3024	3.2	1.00	1703.1	48.6	1685.6	26.8	1663.8	3.6	1663.8	3.6	102.4
GP12Z-59	239	5777	2.0	23.3315	20.8	0.1425	21.4	0.0241	4.9	0.23	153.6	7.4	135.2	27.1	-175.7	524.4	153.6	7.4	NA
GP12Z-60	908	121963	6.1	13.6920	0.5	1.6554	2.2	0.1644	2.2	0.97	981.1	19.6	991.6	14.0	1014.9	10.8	1014.9	10.8	96.7
GP12Z-61	124	96414	4.0	5.4514	1.4	11.4065	2.5	0.4510	2.0	0.82	2399.6	41.0	2557.0	23.4	2684.2	23.9	2684.2	23.9	89.4
GP12Z-62	572	28804	1.4	19.9288	2.5	0.2779	3.2	0.0402	2.0	0.62	253.9	4.9	249.0	7.0	203.3	58.1	253.9	4.9	NA
GP12Z-63	1231	32454	2.0	20.5751	1.7	0.1643	2.9	0.0245	2.3	0.80	156.1	3.5	154.4	4.1	128.7	40.7	156.1	3.5	NA
GP12Z-64	226	43509	2.0	12.8424	0.7	2.0192	2.0	0.1881	1.9	0.94	1110.9	19.5	1122.0	13.9	1143.5	14.0	1143.5	14.0	97.1
GP12Z-65	301	10289	2.8	20.6583	11.5	0.1602	11.8	0.0240	2.4	0.21	152.9	3.7	150.8	16.5	119.2	272.2	152.9	3.7	NA
GP12Z-66	300	6157	0.6	22.4629	23.0	0.1417	23.7	0.0231	5.6	0.24	147.1	8.1	134.5	29.8	-81.9	569.8	147.1	8.1	NA

GP12Z-67	2472	74604	0.9	20.4386	1.1	0.1678	2.4	0.0249	2.1	0.89	158.4	3.3	157.5	3.5	144.3	25.6	158.4	3.3	NA
GP12Z-68	316	8887	2.7	21.6898	6.6	0.1548	8.4	0.0244	5.3	0.63	155.1	8.1	146.1	11.4	3.1	158.0	155.1	8.1	NA
GP12Z-69	148	3875	2.8	20.2512	20.3	0.1649	21.1	0.0242	5.6	0.27	154.2	8.6	155.0	30.4	165.9	479.8	154.2	8.6	NA
GP12Z-70	201	4761	2.1	23.9095	18.8	0.1420	19.1	0.0246	3.5	0.18	156.8	5.4	134.8	24.1	-237.1	477.2	156.8	5.4	NA
GP12Z-71	637	18062	1.2	20.6407	3.5	0.1615	4.3	0.0242	2.4	0.57	154.0	3.7	152.0	6.1	121.2	83.0	154.0	3.7	NA
GP12Z-72	191	5863	2.5	18.8369	12.8	0.1911	13.0	0.0261	2.5	0.19	166.1	4.0	177.5	21.2	332.5	290.3	166.1	4.0	NA
GP12Z-73	249	22339	2.1	22.6554	19.1	0.1557	19.5	0.0256	3.8	0.20	162.8	6.1	146.9	26.6	-102.9	472.8	162.8	6.1	NA
GP12Z-74	410	116009	1.3	10.1299	0.5	3.9056	4.4	0.2869	4.4	0.99	1626.2	62.6	1614.8	35.4	1600.0	9.1	1600.0	9.1	101.6
GP12Z-76	1351	546084	3.5	3.0961	0.3	27.6371	2.0	0.6206	2.0	0.99	3112.3	48.2	3406.3	19.4	3584.1	4.6	3584.1	4.6	86.8
GP12Z-77	932	44961	1.3	21.1628	1.7	0.1538	2.1	0.0236	1.3	0.62	150.4	2.0	145.3	2.9	62.0	39.4	150.4	2.0	NA
GP12Z-78	301	10115	2.7	21.3246	11.1	0.1522	11.9	0.0235	4.2	0.36	150.0	6.3	143.9	15.9	43.8	265.6	150.0	6.3	NA
GP12Z-79	654	15952	1.5	20.4168	5.0	0.1643	7.3	0.0243	5.4	0.74	155.0	8.3	154.5	10.5	146.9	116.3	155.0	8.3	NA
GP12Z-80	172	4844	1.3	21.1498	20.5	0.1634	20.7	0.0251	3.4	0.16	159.6	5.4	153.7	29.6	63.5	491.5	159.6	5.4	NA
GP12Z-81	692	42137	1.6	20.9787	5.3	0.1560	5.8	0.0237	2.3	0.40	151.2	3.5	147.2	8.0	82.8	126.5	151.2	3.5	NA
GP12Z-83	369	17895	1.3	22.0889	6.5	0.1440	7.4	0.0231	3.6	0.49	147.1	5.2	136.6	9.5	-41.0	157.3	147.1	5.2	NA
GP12Z-84	658	21966	1.7	19.5002	3.1	0.1664	4.8	0.0235	3.6	0.75	149.9	5.3	156.3	6.9	253.5	72.0	149.9	5.3	NA
GP12Z-85	143	63279	1.1	9.9980	0.8	3.7984	2.5	0.2754	2.3	0.94	1568.3	32.3	1592.4	19.9	1624.4	15.7	1624.4	15.7	96.5
GP12Z-86	85	103188	2.1	5.8586	0.8	11.4576	1.7	0.4868	1.5	0.87	2557.0	31.9	2561.1	16.2	2564.4	14.1	2564.4	14.1	99.7
GP12Z-87	695	15442	6.3	19.9507	4.1	0.1786	5.9	0.0258	4.3	0.73	164.5	7.0	166.9	9.1	200.7	94.5	164.5	7.0	NA
GP12Z-88	153	4567	1.4	23.2864	17.0	0.1447	17.6	0.0244	4.6	0.26	155.6	7.1	137.2	22.6	-170.9	426.4	155.6	7.1	NA
GP12Z-89	105	77410	0.9	7.2279	1.7	6.7813	4.3	0.3555	4.0	0.92	1960.7	67.5	2083.3	38.3	2206.7	29.0	2206.7	29.0	88.9
GP12Z-90	225	8354	1.7	21.3105	11.8	0.1693	11.9	0.0262	1.9	0.16	166.5	3.1	158.8	17.6	45.4	282.6	166.5	3.1	NA
GP12Z-91	324	9508	1.5	20.5225	5.9	0.1673	6.2	0.0249	1.7	0.28	158.6	2.7	157.1	9.0	134.7	139.8	158.6	2.7	NA
GP12Z-92	753	32280	2.3	20.7216	4.5	0.1599	4.7	0.0240	1.6	0.33	153.1	2.4	150.6	6.6	112.0	105.2	153.1	2.4	NA
GP12Z-93	462	181470	1.0	8.1541	0.2	5.9919	1.9	0.3544	1.9	0.99	1955.4	32.4	1974.7	16.8	1994.9	4.2	1994.9	4.2	98.0
GP12Z-94	403	10400	2.5	20.5019	7.6	0.1563	7.7	0.0232	1.5	0.19	148.1	2.1	147.5	10.6	137.1	177.7	148.1	2.1	NA
GP12Z-95	200	3883	1.4	21.9099	21.3	0.1479	21.8	0.0235	4.7	0.21	149.8	6.9	140.1	28.5	-21.3	520.4	149.8	6.9	NA
GP12Z-97	501	11790	1.3	20.7345	4.2	0.1722	4.8	0.0259	2.3	0.48	164.8	3.8	161.3	7.2	110.5	99.9	164.8	3.8	NA
GP12Z-98	66	692	0.6	93.0598	139.6	0.0330	139.8	0.0223	7.8	0.06	142.0	11.0	33.0	45.4	0.0	0.0	142.0	11.0	NA
GP12Z-99	243	3818	3.3	20.5631	7.7	0.1648	9.2	0.0246	5.0	0.55	156.6	7.8	154.9	13.2	130.1	180.3	156.6	7.8	NA
GP12Z-100	267	178824	1.6	6.1382	0.4	10.4856	1.3	0.4668	1.3	0.96	2469.5	26.6	2478.6	12.5	2486.1	6.1	2486.1	6.1	99.3

GP--13: Goldstein Peak Formation (11S 0308144, E 4054059) Reddish-to-dark-gray, poorly sorted, angular, stretched pebble metaconglomerate																			
				Isotope ratios							Apparent ages (Ma)								
Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(%)	
GP-13-3	102	20047	3.9	14.4751	2.1	1.4402	3.0	0.1512	2.1	0.70	907.7	17.9	905.8	18.0	901.2	44.2	901.2	44.2	100.7
GP-13-4	151	37219	1.9	8.8858	1.3	4.9009	1.9	0.3158	1.4	0.72	1769.4	21.0	1802.4	15.8	1840.8	23.4	1840.8	23.4	96.1
GP-13-5	98	43364	1.6	9.6417	1.7	4.1741	3.2	0.2919	2.7	0.84	1651.0	38.7	1669.0	26.0	1691.6	31.9	1691.6	31.9	97.6
GP-13-6	444	20663	4.4	23.6669	25.3	0.1267	26.8	0.0218	8.8	0.33	138.7	12.1	121.2	30.6	-211.4	643.2	138.7	12.1	NA
GP-13-8	367	166862	2.9	9.1867	0.6	4.1745	2.2	0.2781	2.2	0.96	1582.0	30.4	1669.0	18.4	1780.3	10.9	1780.3	10.9	88.9
GP-13-10	537	21249	3.1	20.7315	8.7	0.1540	9.0	0.0232	2.4	0.26	147.6	3.5	145.5	12.2	110.8	206.2	147.6	3.5	NA
GP-13-11	580	28751	3.3	20.0209	3.8	0.2486	5.4	0.0361	3.8	0.70	228.6	8.4	225.4	10.8	192.6	88.9	228.6	8.4	NA
GP-13-12	565	19488	1.9	21.1445	7.3	0.1664	7.9	0.0255	3.1	0.39	162.4	4.9	156.3	11.5	64.1	174.3	162.4	4.9	NA
GP-13-14	141	5040	1.6	23.3114	35.7	0.1488	35.9	0.0252	4.1	0.11	160.2	6.4	140.9	47.2	-173.5	913.9	160.2	6.4	NA
GP-13-15	203	19023	1.9	18.0430	5.6	0.5981	6.4	0.0783	3.0	0.47	485.8	14.1	476.0	24.3	429.3	126.0	485.8	14.1	NA
GP-13-16	791	22593	5.3	20.6580	4.3	0.1398	5.3	0.0209	3.0	0.57	133.6	4.0	132.9	6.6	119.2	102.5	133.6	4.0	NA
GP-13-17	302	19576	2.1	19.5694	11.0	0.1708	11.7	0.0242	4.0	0.34	154.4	6.1	160.1	17.3	245.4	254.0	154.4	6.1	NA
GP-13-18	83	113842	1.0	5.3824	0.7	12.5109	1.5	0.4884	1.4	0.90	2563.7	29.5	2643.5	14.5	2705.2	11.0	2705.2	11.0	94.8
GP-13-20	122	11288	1.9	19.0763	26.9	0.1646	28.6	0.0228	9.7	0.34	145.2	13.9	154.7	41.0	303.8	622.6	145.2	13.9	NA
GP-13-21	414	11157	2.9	20.2692	5.5	0.1775	6.6	0.0261	3.7	0.56	166.0	6.1	165.9	10.2	163.8	128.3	166.0	6.1	NA
GP-13-22	423	13251	1.1	19.9218	5.9	0.1791	6.4	0.0259	2.4	0.37	164.7	3.9	167.3	9.9	204.1	138.2	164.7	3.9	NA
GP-13-26	177	54960	3.4	9.1611	0.6	4.7190	2.7	0.3135	2.7	0.98	1758.1	41.1	1770.6	22.9	1785.4	10.8	1785.4	10.8	98.5
GP-13-27	295	14056	1.4	20.0555	13.0	0.1575	13.3	0.0229	2.9	0.22	146.0	4.2	148.5	18.4	188.5	304.0	146.0	4.2	NA
GP-13-28	545	8575	2.2	21.4106	7.9	0.1509	8.2	0.0234	2.3	0.27	149.3	3.3	142.7	11.0	34.2	190.0	149.3	3.3	NA
GP-13-29	62	13204	1.9	11.3805	4.0	2.8676	4.4	0.2367	1.8	0.42	1369.5	22.8	1373.4	33.1	1379.6	76.6	1379.6	76.6	99.3
GP-13-30	188	81941	1.8	7.7738	0.5	6.7036	1.6	0.3780	1.5	0.96	2066.7	26.9	2073.1	14.0	2079.4	8.3	2079.4	8.3	99.4
GP-13-31	69	15452	3.6	13.9776	8.1	1.5189	8.3	0.1540	1.8	0.22	923.2	15.7	938.0	51.1	973.0	166.2	973.0	166.2	94.9
GP-13-32	1063	343623	4.9	9.3143	0.6	3.4105	2.5	0.2304	2.4	0.97	1336.5	29.2	1506.8	19.5	1755.1	10.6	1755.1	10.6	76.2
GP-13-34	248	6005	2.6	19.4414	18.6	0.1684	19.3	0.0237	5.1	0.27	151.2	7.7	158.0	28.2	260.5	429.6	151.2	7.7	NA
GP-13-36	400	7221	0.8	21.7715	8.5	0.1601	11.0	0.0253	7.1	0.64	160.9	11.2	150.8	15.4	-5.9	204.3	160.9	11.2	NA
GP-13-39	48	35748	2.2	9.7721	2.9	4.1747	5.0	0.2959	4.0	0.81	1670.8	59.4	1669.1	40.8	1666.8	53.9	1666.8	53.9	100.2
GP-13-40	1248	58265	2.0	19.7653	3.2	0.1641	4.0	0.0235	2.5	0.61	149.9	3.7	154.3	5.8	222.4	73.6	149.9	3.7	NA
GP-13-41	380	13690	3.0	18.7982	7.8	0.2640	8.3	0.0360	2.9	0.35	227.9	6.4	237.9	17.5	337.2	175.9	227.9	6.4	NA
GP-13-42	301	6078	2.6	20.2988	9.0	0.1650	9.4	0.0243	2.7	0.28	154.7	4.1	155.0	13.5	160.4	211.5	154.7	4.1	NA
GP-13-43	344	70631	2.2	9.1489	0.7	4.3234	3.3	0.2869	3.2	0.98	1625.9	46.1	1697.8	27.0	1787.8	12.3	1787.8	12.3	90.9
GP-13-44	97	17665	2.3	13.6365	3.5	1.6417	7.3	0.1624	6.4	0.88	969.9	57.7	986.4	46.0	1023.1	70.3	1023.1	70.3	94.8

GP-13-45	78	23356	2.2	13.2527	4.6	1.9103	4.9	0.1836	1.7	0.34	1086.7	16.7	1084.7	32.9	1080.7	93.3	1080.7	93.3	100.6	
GP-13-47	665	17203	2.1	20.2308	4.2	0.1574	5.4	0.0231	3.4	0.63	147.2	4.9	148.5	7.4	168.2	97.4	147.2	4.9	NA	
GP-13-50	379	8994	2.1	22.5385	4.9	0.1573	5.7	0.0257	2.8	0.50	163.6	4.6	148.3	7.8	-90.2	120.5	163.6	4.6	NA	
GP-13-52	293	5752	2.7	22.7171	17.1	0.1398	17.4	0.0230	3.3	0.19	146.8	4.8	132.9	21.7	-109.6	423.7	146.8	4.8	NA	
GP-13-53	1009	21243	2.8	20.8426	5.2	0.1443	5.4	0.0218	1.6	0.30	139.1	2.2	136.9	6.9	98.2	122.5	139.1	2.2	NA	
GP-13-54	173	45558	2.4	11.8343	1.5	2.4346	7.6	0.2090	7.4	0.98	1223.3	82.7	1252.9	54.5	1304.1	28.7	1304.1	28.7	93.8	
GP-13-56	69	1607	0.9	33.5115	92.9	0.0949	93.4	0.0231	9.8	0.11	147.0	14.3	92.1	82.4	-1175.3	#####	147.0	14.3	NA	
GP-13-57	130	9118	2.2	22.9085	33.1	0.2468	33.2	0.0410	2.8	0.09	259.1	7.2	224.0	66.9	-130.3	837.9	259.1	7.2	NA	
GP-13-58	736	17497	2.2	20.5817	10.9	0.1522	11.6	0.0227	3.9	0.34	144.8	5.6	143.8	15.6	128.0	258.0	144.8	5.6	NA	
GP-13-59	430	12981	3.3	20.8982	13.3	0.1437	14.7	0.0218	6.3	0.43	138.9	8.7	136.3	18.8	91.9	316.3	138.9	8.7	NA	
GP-13-60	170	243770	1.1	5.6459	0.5	12.0515	1.2	0.4935	1.1	0.91	2585.7	24.0	2608.4	11.7	2626.1	8.8	2626.1	8.8	98.5	
GP-13-61	72	2260	2.1	20.2270	35.4	0.2014	36.7	0.0295	9.8	0.27	187.7	18.1	186.3	62.5	168.7	850.1	187.7	18.1	NA	
GP-13-62	179	154314	1.8	5.8249	0.4	11.2939	1.6	0.4771	1.6	0.98	2514.7	33.0	2547.7	15.2	2574.0	6.0	2574.0	6.0	97.7	
GP-13-63	231	1764	2.2	17.8419	20.0	0.2018	20.5	0.0261	4.5	0.22	166.1	7.4	186.6	35.0	454.3	448.0	166.1	7.4	NA	
GP-13-64	153	3171	0.9	21.3978	24.5	0.1474	24.8	0.0229	3.7	0.15	145.8	5.4	139.7	32.3	35.6	593.9	145.8	5.4	NA	
GP-13-65	501	22890	2.4	19.5291	5.7	0.2595	6.3	0.0368	2.7	0.43	232.7	6.1	234.3	13.1	250.1	130.5	232.7	6.1	NA	
GP-13-66	445	16284	3.9	21.4804	10.3	0.2031	10.9	0.0316	3.5	0.32	200.8	6.9	187.7	18.7	26.4	248.4	200.8	6.9	NA	
GP-13-67	958	18058	2.3	20.6561	5.0	0.1509	5.3	0.0226	1.5	0.29	144.1	2.2	142.7	7.0	119.5	119.0	144.1	2.2	NA	
GP-13-68	1155	29583	1.8	20.1374	2.9	0.1574	3.5	0.0230	1.9	0.54	146.5	2.7	148.4	4.8	179.0	68.2	146.5	2.7	NA	
GP-13-70	375	9561	1.1	20.7060	11.1	0.1680	11.3	0.0252	2.1	0.19	160.7	3.4	157.7	16.5	113.8	261.9	160.7	3.4	NA	
GP-13-71	370	145545	1.2	9.1491	0.5	4.6937	0.9	0.3115	0.7	0.80	1747.8	10.5	1766.1	7.2	1787.8	9.3	1787.8	9.3	97.8	
GP-13-72	597	24038	1.6	20.2658	4.8	0.1633	5.2	0.0240	2.0	0.38	152.9	3.0	153.6	7.4	164.2	112.4	152.9	3.0	NA	
GP-13-73	594	18464	1.4	20.2587	9.4	0.1804	9.8	0.0265	2.7	0.27	168.7	4.4	168.4	15.1	165.0	219.7	168.7	4.4	NA	
GP-13-75	201	61009	4.5	9.1073	0.5	4.8074	1.4	0.3175	1.3	0.93	1777.7	20.4	1786.2	11.8	1796.1	9.3	1796.1	9.3	99.0	
GP-13-76	343	11107	2.4	22.0972	13.0	0.1433	13.3	0.0230	3.2	0.24	146.4	4.6	136.0	17.0	-41.9	315.9	146.4	4.6	NA	
GP-13-77	266	97696	3.8	9.1531	0.9	4.4310	1.8	0.2942	1.5	0.86	1662.2	22.0	1718.2	14.5	1787.0	16.4	1787.0	16.4	93.0	
GP-13-78	219	8780	3.8	22.6877	16.1	0.1430	16.4	0.0235	3.2	0.20	149.9	4.8	135.7	20.8	-106.4	397.7	149.9	4.8	NA	
GP-13-79	299	96464	1.6	6.8840	0.3	6.9392	3.3	0.3465	3.3	1.00	1917.7	54.3	2103.7	29.2	2290.9	4.9	2290.9	4.9	83.7	
GP-13-80	1090	94135	4.4	21.0756	6.5	0.1658	7.3	0.0253	3.3	0.46	161.3	5.3	155.8	10.5	71.9	154.1	161.3	5.3	NA	
GP-13-81	167	8256	2.2	23.1595	15.2	0.1478	18.1	0.0248	9.9	0.55	158.1	15.5	140.0	23.7	-157.3	378.3	158.1	15.5	NA	
GP-13-82	492	22171	1.1	20.1119	7.5	0.1795	7.5	0.0262	1.1	0.15	166.7	1.9	167.7	11.7	182.0	173.8	166.7	1.9	NA	
GP-13-83	109	34613	1.7	9.1126	1.0	4.6324	1.7	0.3062	1.4	0.82	1721.8	20.7	1755.1	14.0	1795.0	17.6	1795.0	17.6	95.9	
GP-13-84	299	41467	2.8	13.0574	1.0	1.8776	2.3	0.1778	2.1	0.90	1055.0	20.3	1073.2	15.4	1110.4	20.5	1110.4	20.5	95.0	
GP-13-85	168	3257	1.9	18.5555	33.0	0.1745	33.2	0.0235	3.7	0.11	149.6	5.5	163.3	50.1	366.5	761.5	149.6	5.5	NA	
GP-13-86	72	2045	0.9	50.9698	44.6	0.0677	45.3	0.0250	8.3	0.18	159.4	13.1	66.5	29.2	-2720.8	339.2	159.4	13.1	NA	

GP-13-87	103	2445	0.9	32.4766	107.5	0.1029	107.6	0.0242	5.7	0.05	154.4	8.7	99.5	102.3	-1079.6	0.0	154.4	8.7	NA
GP-13-88	121	4033	2.0	34.5284	47.9	0.0933	48.6	0.0234	8.0	0.16	148.9	11.7	90.6	42.1	-1268.5	#####	148.9	11.7	NA
GP-13-89	2009	61423	0.4	20.1972	1.3	0.1596	2.8	0.0234	2.5	0.89	149.0	3.7	150.3	3.9	172.1	29.2	149.0	3.7	NA
GP-13-90	210	52605	1.3	9.5669	1.2	4.1764	2.2	0.2898	1.9	0.85	1640.4	27.5	1669.4	18.3	1706.0	21.6	1706.0	21.6	96.2
GP-13-91	270	8761	1.5	19.7548	17.4	0.1712	17.5	0.0245	1.8	0.11	156.2	2.8	160.5	25.9	223.6	404.3	156.2	2.8	NA
GP-13-92	193	6793	1.5	19.4526	11.5	0.2037	12.5	0.0287	4.8	0.39	182.7	8.7	188.3	21.5	259.1	265.8	182.7	8.7	NA
GP-13-93	84	37909	1.3	13.3246	5.4	1.9259	5.7	0.1861	1.9	0.33	1100.3	18.9	1090.1	38.1	1069.8	108.3	1069.8	108.3	102.8
GP-13-94	735	18940	1.6	19.5662	3.0	0.1697	3.2	0.0241	1.1	0.35	153.4	1.7	159.2	4.7	245.7	69.0	153.4	1.7	NA
GP-13-95	1109	82221	5.9	16.6030	1.0	0.8245	1.3	0.0993	0.9	0.67	610.2	5.2	610.5	6.1	611.8	21.4	610.2	5.2	99.7
GP-13-96	192	57075	2.0	11.0813	1.2	3.1655	1.8	0.2544	1.4	0.77	1461.2	18.7	1448.8	14.2	1430.6	22.3	1430.6	22.3	102.1
GP-13-99	209	6259	1.8	25.4422	18.8	0.1378	19.1	0.0254	3.3	0.17	161.9	5.3	131.1	23.4	-396.4	492.7	161.9	5.3	NA
GP-13-100	355	30813	1.0	17.6561	2.5	0.5036	3.2	0.0645	2.0	0.61	402.9	7.7	414.2	10.9	477.4	55.9	402.9	7.7	NA
GP-13-R33	388	39273	1.5	18.1412	3.3	0.5146	3.9	0.0677	2.1	0.53	422.3	8.4	421.5	13.5	417.2	74.3	422.3	8.4	NA
GP-13-R33	185	18558	1.8	17.5392	4.1	0.5381	4.4	0.0685	1.5	0.35	426.8	6.4	437.2	15.5	492.1	90.3	426.8	6.4	NA
GP-13-R33	483	51495	1.3	17.9576	2.1	0.5289	2.5	0.0689	1.3	0.53	429.5	5.4	431.1	8.7	439.9	46.7	429.5	5.4	NA
GP-13-R33	546	37895	1.3	17.9489	2.9	0.5152	4.5	0.0671	3.5	0.77	418.4	14.0	421.9	15.6	441.0	64.6	418.4	14.0	NA
GP-13-R33	190	12203	2.0	19.2668	7.7	0.4819	8.0	0.0673	2.2	0.27	420.1	8.8	399.3	26.4	281.1	176.3	420.1	8.8	NA
GP-13-R33	557	42817	1.2	17.8229	2.3	0.5173	2.8	0.0669	1.7	0.60	417.3	6.9	423.3	9.8	456.6	50.4	417.3	6.9	NA

GP--09: Goldstein Peak Fm. (11S 0309073, E 4049828) Dark gray, mod. well-sorted, subangular-to-subrounded, medium-grained metasandstone																				
Analysis	U	Isotope ratios								Apparent ages (Ma)								Best age	±	Conc
		(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(%)	
GP09Z-1	189	3586	1.0	22.2436	9.5	0.1505	11.5	0.0243	6.4	0.56	154.6	9.8	142.3	15.2	-58.0	232.3	154.6	9.8	NA	
GP09Z-5	288	25658	2.0	12.4245	1.6	1.9830	7.7	0.1787	7.6	0.98	1059.8	74.1	1109.8	52.3	1209.0	31.6	1209.0	31.6	87.7	
GP09Z-6	225	5295	2.2	22.2114	17.7	0.1601	17.9	0.0258	2.2	0.13	164.2	3.6	150.8	25.0	-54.4	434.5	164.2	3.6	NA	
GP09Z-7	297	9359	2.6	19.2646	8.2	0.1846	8.6	0.0258	2.7	0.31	164.1	4.3	172.0	13.6	281.4	187.4	164.1	4.3	NA	
GP09Z-8	1388	387647	3.6	9.2843	0.3	4.2544	4.0	0.2865	4.0	1.00	1623.9	57.8	1684.6	33.2	1761.0	4.7	1761.0	4.7	92.2	
GP09Z-9	77	24532	2.2	4.6747	0.9	13.9458	3.2	0.4728	3.1	0.96	2495.9	63.6	2746.0	30.4	2935.4	14.8	2935.4	14.8	85.0	
GP09Z-10	616	24248	2.5	19.2190	3.5	0.1664	3.9	0.0232	1.8	0.46	147.8	2.6	156.3	5.7	286.8	79.5	147.8	2.6	NA	
GP09Z-11	195	2894	2.0	20.9893	21.2	0.1461	21.8	0.0222	5.1	0.23	141.8	7.1	138.5	28.2	81.6	507.0	141.8	7.1	NA	
GP09Z-12	136	6659	2.8	19.3049	5.0	0.5064	5.6	0.0709	2.5	0.45	441.6	10.6	416.0	19.0	276.6	113.9	441.6	10.6	NA	
GP09Z-13	612	13916	1.8	20.0883	8.5	0.1685	8.7	0.0245	2.2	0.25	156.3	3.4	158.1	12.8	184.7	197.2	156.3	3.4	NA	
GP09Z-15	125	2083	3.4	24.1508	31.9	0.1486	32.3	0.0260	5.2	0.16	165.6	8.5	140.7	42.5	-262.5	827.4	165.6	8.5	NA	
GP09Z-16	216	2096	0.8	21.7250	15.5	0.1550	16.7	0.0244	6.1	0.37	155.5	9.4	146.3	22.7	-0.8	375.1	155.5	9.4	NA	

GP09Z-18	87	9816	1.4	9.9545	1.0	3.9725	2.6	0.2868	2.4	0.92	1625.5	34.0	1628.6	20.9	1632.5	19.0	1632.5	19.0	99.6
GP09Z-19	87	10117	0.7	16.5964	9.6	0.6176	10.2	0.0743	3.5	0.34	462.2	15.6	488.3	39.5	612.7	207.1	462.2	15.6	75.4
GP09Z-20	125	3200	1.2	24.5724	30.7	0.1481	31.1	0.0264	4.9	0.16	168.0	8.1	140.3	40.8	-306.6	802.7	168.0	8.1	NA
GP09Z-21	91	6769	2.2	17.6940	11.9	0.5722	12.2	0.0734	2.5	0.21	456.8	11.2	459.5	45.0	472.7	263.9	456.8	11.2	NA
GP09Z-22	143	15959	4.6	13.8971	2.7	1.3366	3.9	0.1347	2.8	0.72	814.7	21.4	861.7	22.5	984.7	54.9	814.7	21.4	82.7
GP09Z-23	405	5671	2.3	21.4590	13.6	0.1425	13.8	0.0222	2.3	0.17	141.4	3.2	135.3	17.5	28.8	327.5	141.4	3.2	NA
GP09Z-25	221	51474	1.5	8.8738	0.9	4.5080	1.9	0.2901	1.6	0.87	1642.2	23.6	1732.5	15.6	1843.2	16.8	1843.2	16.8	89.1
GP09Z-26	315	3503	0.6	23.8925	17.1	0.1394	17.6	0.0242	4.1	0.23	153.8	6.2	132.5	21.8	-235.3	433.3	153.8	6.2	NA
GP09Z-27	151	31828	2.2	9.1603	0.9	4.5120	2.1	0.2998	1.9	0.91	1690.1	28.7	1733.2	17.7	1785.5	16.1	1785.5	16.1	94.7
GP09Z-28	826	25466	2.0	20.2295	3.0	0.1729	3.6	0.0254	1.9	0.52	161.5	3.0	161.9	5.3	168.4	71.2	161.5	3.0	NA
GP09Z-29	213	6838	3.6	18.4385	17.8	0.1705	19.0	0.0228	6.5	0.34	145.4	9.4	159.9	28.0	380.8	402.8	145.4	9.4	NA
GP09Z-30	97	6978	1.0	19.1473	9.3	0.4880	9.9	0.0678	3.4	0.34	422.7	14.0	403.5	33.1	295.3	213.4	422.7	14.0	NA
GP09Z-31	227	3914	1.4	23.8977	21.1	0.1227	21.7	0.0213	5.0	0.23	135.6	6.7	117.5	24.1	-235.8	538.0	135.6	6.7	NA
GP09Z-32	112	21492	1.0	12.7635	3.2	2.0586	3.8	0.1906	2.0	0.54	1124.5	21.1	1135.2	25.9	1155.7	63.3	1155.7	63.3	97.3
GP09Z-33	240	6760	1.2	20.7185	25.4	0.1564	26.0	0.0235	5.6	0.21	149.8	8.3	147.6	35.7	112.3	608.0	149.8	8.3	NA
GP09Z-34	614	10589	3.7	20.6796	6.5	0.1526	6.9	0.0229	2.3	0.34	145.9	3.4	144.2	9.2	116.8	152.6	145.9	3.4	NA
GP09Z-35	123	4120	2.1	19.2866	12.5	0.3636	13.0	0.0509	3.6	0.28	319.8	11.3	314.9	35.2	278.8	286.9	319.8	11.3	NA
GP09Z-36	275	13464	3.1	18.3126	5.6	0.4388	5.8	0.0583	1.3	0.22	365.2	4.5	369.4	17.8	396.2	125.8	365.2	4.5	NA
GP09Z-37	339	14823	1.5	20.8669	7.6	0.1774	8.0	0.0269	2.5	0.32	170.8	4.3	165.9	12.2	95.5	179.5	170.8	4.3	NA
GP09Z-39	190	47630	2.3	8.8307	1.1	4.6838	1.9	0.3000	1.6	0.81	1691.2	23.4	1764.4	16.3	1852.1	20.5	1852.1	20.5	91.3
GP09Z-41	247	44125	1.7	8.8059	0.7	4.3861	1.3	0.2801	1.1	0.86	1592.0	15.3	1709.7	10.5	1857.1	11.9	1857.1	11.9	85.7
GP09Z-42	307	16344	2.1	18.6170	4.2	0.3945	7.8	0.0533	6.6	0.84	334.5	21.4	337.6	22.4	359.1	95.6	334.5	21.4	NA
GP09Z-43	222	40900	4.1	13.4115	1.2	1.7670	3.1	0.1719	2.9	0.92	1022.4	27.2	1033.4	20.3	1056.8	24.9	1056.8	24.9	96.8
GP09Z-44	324	7436	2.2	22.9772	12.0	0.1528	12.1	0.0255	1.7	0.14	162.1	2.8	144.4	16.4	-137.7	298.5	162.1	2.8	NA
GP09Z-45	206	27329	2.2	13.2963	1.9	1.6828	2.6	0.1623	1.8	0.69	969.4	16.1	1002.0	16.5	1074.1	37.6	1074.1	37.6	90.3
GP09Z-46	165	22324	3.4	10.8696	1.3	3.0504	1.8	0.2405	1.3	0.73	1389.1	16.6	1420.3	14.0	1467.4	23.8	1467.4	23.8	94.7
GP09Z-48	288	44440	3.6	12.6087	1.3	1.9590	3.0	0.1791	2.7	0.90	1062.3	26.7	1101.5	20.4	1179.9	26.3	1179.9	26.3	90.0
GP09Z-49	278	5551	3.9	21.4893	11.0	0.1603	11.4	0.0250	3.0	0.26	159.1	4.7	150.9	16.0	25.4	265.3	159.1	4.7	NA
GP09Z-50	260	5018	4.0	21.3512	10.2	0.1357	10.7	0.0210	3.2	0.30	134.1	4.2	129.2	13.0	40.9	244.7	134.1	4.2	NA
GP09Z-51	156	18200	0.7	13.3799	2.4	1.7892	3.4	0.1736	2.3	0.69	1032.1	22.2	1041.5	22.0	1061.5	49.3	1061.5	49.3	97.2
GP09Z-52	654	49680	2.0	18.5247	2.9	0.4017	4.0	0.0540	2.7	0.68	338.9	8.9	342.9	11.5	370.3	65.5	338.9	8.9	NA
GP09Z-54	124	2652	1.6	21.8502	20.9	0.1857	21.9	0.0294	6.5	0.29	186.9	11.9	172.9	34.8	-14.7	510.8	186.9	11.9	NA
GP09Z-55	203	2761	1.2	17.6188	20.0	0.1923	20.9	0.0246	6.0	0.29	156.5	9.2	178.6	34.2	482.1	445.9	156.5	9.2	NA
GP09Z-58	175	29233	1.8	13.6525	2.0	1.7794	2.9	0.1762	2.2	0.74	1046.1	20.8	1038.0	19.1	1020.8	40.2	1020.8	40.2	102.5
GP09Z-59	258	8833	1.1	19.6992	8.5	0.2784	9.4	0.0398	4.0	0.42	251.4	9.8	249.4	20.7	230.1	196.2	251.4	9.8	NA

GP09Z-60	122	3590	1.1	19.8206	15.7	0.2201	18.3	0.0316	9.5	0.52	200.8	18.9	202.0	33.6	215.9	364.4	200.8	18.9	NA
GP09Z-61	88	1261	2.1	12.1113	204.4	0.2530	204.7	0.0222	9.7	0.05	141.7	13.6	229.0	446.2	1259.0	740.1	141.7	13.6	11.3
GP09Z-62	266	7633	2.6	19.7114	12.7	0.1775	12.8	0.0254	2.2	0.17	161.6	3.4	165.9	19.7	228.7	293.3	161.6	3.4	NA
GP09Z-63	134	3198	2.1	31.5846	42.9	0.1173	43.3	0.0269	5.6	0.13	171.0	9.5	112.6	46.2	-996.3	#####	171.0	9.5	NA
GP09Z-64	493	54216	1.2	10.8010	0.6	2.9494	2.2	0.2310	2.1	0.96	1340.0	25.5	1394.7	16.7	1479.4	12.0	1479.4	12.0	90.6
GP09Z-65	283	11499	1.2	20.5565	6.7	0.2091	7.9	0.0312	4.1	0.53	197.9	8.1	192.8	13.9	130.8	158.0	197.9	8.1	NA
GP09Z-66	40	9904	0.7	10.8445	4.5	3.3732	4.9	0.2653	2.0	0.41	1516.9	26.7	1498.2	38.2	1471.8	84.6	1471.8	84.6	103.1
GP09Z-67	66	1259	1.4	17.2262	37.5	0.2466	38.6	0.0308	9.4	0.24	195.6	18.1	223.8	77.7	531.7	848.7	195.6	18.1	NA
GP09Z-68	240	6446	1.3	20.6497	7.5	0.1658	7.9	0.0248	2.5	0.32	158.1	3.9	155.7	11.4	120.2	176.6	158.1	3.9	NA
GP09Z-70	1427	41105	1.7	20.3660	2.5	0.1575	3.8	0.0233	2.9	0.76	148.3	4.2	148.5	5.3	152.7	58.5	148.3	4.2	NA
GP09Z-72	276	61506	2.3	11.2082	0.5	2.1923	3.4	0.1782	3.3	0.99	1057.2	32.5	1178.6	23.5	1408.9	10.5	1408.9	10.5	75.0
GP09Z-74	213	7378	2.3	18.3031	13.0	0.1990	14.7	0.0264	6.9	0.47	168.1	11.4	184.3	24.8	397.3	292.5	168.1	11.4	NA
GP09Z-75	246	112096	0.3	6.0844	1.0	8.5487	5.9	0.3772	5.8	0.99	2063.4	102.6	2291.1	53.7	2500.9	16.9	2500.9	16.9	82.5
GP09Z-76	368	135197	1.4	5.6649	0.2	10.6917	1.8	0.4393	1.8	0.99	2347.4	34.9	2496.7	16.6	2620.5	3.1	2620.5	3.1	89.6
GP09Z-77	883	17869	1.5	19.9430	4.9	0.1629	5.1	0.0236	1.5	0.29	150.1	2.2	153.2	7.3	201.6	114.2	150.1	2.2	NA
GP09Z-78	453	38324	1.3	17.8814	3.9	0.5098	4.3	0.0661	1.6	0.38	412.7	6.5	418.3	14.6	449.3	87.6	412.7	6.5	NA
GP09Z-79	88	14964	2.5	12.9694	5.2	2.0034	7.5	0.1884	5.4	0.72	1112.9	55.6	1116.7	51.2	1123.9	104.4	1123.9	104.4	99.0
GP09Z-80	439	9327	1.5	20.2305	9.5	0.1552	10.3	0.0228	4.0	0.39	145.2	5.8	146.5	14.0	168.3	221.5	145.2	5.8	NA
GP09Z-82	100	17925	1.9	11.6442	3.2	2.4598	5.1	0.2077	4.0	0.78	1216.8	44.3	1260.3	37.2	1335.5	62.7	1335.5	62.7	91.1
GP09Z-83	158	3553	1.6	17.0601	14.0	0.1971	15.3	0.0244	6.3	0.41	155.3	9.6	182.7	25.6	552.9	307.0	155.3	9.6	NA
GP09Z-84	129	42680	1.0	6.3710	0.8	9.4321	1.9	0.4358	1.7	0.90	2331.9	33.4	2381.0	17.4	2423.2	14.1	2423.2	14.1	96.2
GP09Z-85	450	13545	1.4	20.7879	10.7	0.1415	10.9	0.0213	1.9	0.18	136.1	2.6	134.4	13.7	104.4	254.2	136.1	2.6	NA
GP09Z-86	111	1626	1.4	45.4848	79.6	0.0770	79.7	0.0254	3.7	0.05	161.7	5.9	75.3	57.9	-2240.3	880.8	161.7	5.9	NA
GP09Z-87	207	17394	0.8	20.2660	11.5	0.2683	12.0	0.0394	3.4	0.28	249.3	8.3	241.3	25.7	164.2	268.9	249.3	8.3	NA
GP09Z-88	108	1767	3.4	20.0719	25.8	0.1349	27.2	0.0196	8.7	0.32	125.4	10.8	128.5	32.9	186.6	609.7	125.4	10.8	NA
GP09Z-89	54	20166	1.7	5.8386	1.2	11.0618	2.9	0.4684	2.7	0.91	2476.6	54.7	2528.4	27.4	2570.1	20.9	2570.1	20.9	96.4
GP09Z-90	102	16412	2.5	13.2831	3.3	1.8133	3.8	0.1747	2.0	0.52	1037.9	19.0	1050.3	25.1	1076.1	65.9	1076.1	65.9	96.5
GP09Z-92	342	84377	1.2	9.2705	0.5	3.8866	2.4	0.2613	2.3	0.98	1496.6	31.2	1610.9	19.3	1763.7	9.0	1763.7	9.0	84.9
GP09Z-94	184	5630	3.5	20.5908	18.3	0.1633	19.2	0.0244	5.8	0.30	155.3	8.9	153.6	27.4	126.9	434.6	155.3	8.9	NA
GP09Z-95	162	48287	2.7	8.9377	1.1	4.4079	2.9	0.2857	2.6	0.92	1620.2	37.8	1713.8	23.8	1830.3	20.6	1830.3	20.6	88.5
GP09Z-96	186	3680	1.3	19.4295	10.5	0.1354	12.4	0.0191	6.6	0.53	121.8	7.9	128.9	15.0	261.8	240.9	121.8	7.9	NA
GP09Z-97	64	5865	1.1	13.4391	5.0	1.8753	5.5	0.1828	2.4	0.43	1082.2	23.8	1072.4	36.6	1052.6	100.2	1052.6	100.2	102.8
GP09Z-98	54	7550	1.6	9.8307	3.0	4.1439	3.5	0.2955	1.8	0.50	1668.7	25.8	1663.0	28.5	1655.8	55.8	1655.8	55.8	100.8
GP09Z-99	224	60688	1.6	5.8247	0.5	9.4964	3.9	0.4012	3.8	0.99	2174.4	70.7	2387.2	35.5	2574.1	8.0	2574.1	8.0	84.5
GP09Z-100	138	28010	1.1	10.9238	1.4	3.0177	2.3	0.2391	1.8	0.79	1381.9	22.4	1412.1	17.4	1457.9	26.6	1457.9	26.6	94.8

GVG-103: Gravelly Flat Formation (lower), Great Valley Group: (10S 0751383N, 3963129E) collected on north side of SR41																					
Analysis	U (ppm)	Isotope ratios										Apparent ages (Ma)							Best age (Ma)	± (%)	Conc
		206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age (Ma)				
		204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(%)			
GVG-03-28	73	4294	3.1	20.7270	79.2	0.1257	79.8	0.0189	9.6	0.12	120.7	11.5	120.3	90.7	111.4	#####	120.7	11.5	NA		
GVG-03-98	458	44642	1.4	20.7864	6.5	0.1474	6.6	0.0222	1.3	0.20	141.7	1.8	139.6	8.7	104.6	153.9	141.7	1.8	NA		
GVG-03-88	155	7887	1.9	18.5084	12.0	0.1658	12.3	0.0223	2.7	0.22	141.9	3.8	155.7	17.7	372.3	270.0	141.9	3.8	NA		
GVG-03-51	442	14909	0.9	19.7991	5.2	0.1627	5.8	0.0234	2.4	0.42	148.9	3.6	153.0	8.2	218.4	121.2	148.9	3.6	NA		
GVG-03-54	103	5279	2.0	20.3949	23.3	0.1584	24.0	0.0234	6.1	0.25	149.3	9.0	149.3	33.4	149.4	551.5	149.3	9.0	NA		
GVG-03-71	172	13627	1.1	24.3173	23.1	0.1347	23.2	0.0238	2.7	0.12	151.4	4.0	128.3	28.0	-279.9	593.7	151.4	4.0	NA		
GVG-03-40	132	10942	2.0	20.9876	17.0	0.1563	17.5	0.0238	4.1	0.23	151.6	6.1	147.5	24.0	81.8	406.2	151.6	6.1	NA		
GVG-03-81	62	2862	2.8	21.0336	28.4	0.1572	28.8	0.0240	4.8	0.17	152.8	7.2	148.3	39.8	76.6	687.5	152.8	7.2	NA		
GVG-03-11	340	20245	2.1	19.8937	8.1	0.1688	8.2	0.0244	1.5	0.18	155.1	2.3	158.4	12.1	207.4	187.8	155.1	2.3	NA		
GVG-03-94	36	2282	1.6	13.1629	72.9	0.2555	73.7	0.0244	11.1	0.15	155.3	17.1	231.0	153.5	1094.3	#####	155.3	17.1	NA		
GVG-03-76	369	19191	1.9	21.0471	5.2	0.1606	5.5	0.0245	1.7	0.30	156.1	2.5	151.2	7.7	75.1	123.8	156.1	2.5	NA		
GVG-03-89	56	2521	2.3	23.9267	44.0	0.1423	44.8	0.0247	8.4	0.19	157.2	13.1	135.1	56.7	-238.9	#####	157.2	13.1	NA		
GVG-03-44	68	3194	3.5	27.9811	44.6	0.1218	45.1	0.0247	6.3	0.14	157.5	9.8	116.7	49.7	-650.9	#####	157.5	9.8	NA		
GVG-03-101	72	5063	2.2	25.9073	56.4	0.1318	56.9	0.0248	7.1	0.13	157.7	11.1	125.7	67.3	-443.9	#####	157.7	11.1	NA		
GVG-03-91	44	3198	2.7	15.6887	39.2	0.2177	40.7	0.0248	11.1	0.27	157.7	17.3	200.0	74.0	733.0	861.5	157.7	17.3	NA		
GVG-03-39	43	2654	3.0	25.7129	69.0	0.1329	69.5	0.0248	9.0	0.13	157.8	14.0	126.7	83.0	-424.1	#####	157.8	14.0	NA		
GVG-03-19	35	2059	3.3	18.5589	83.4	0.1848	84.0	0.0249	10.6	0.13	158.4	16.5	172.2	133.8	366.1	#####	158.4	16.5	NA		
GVG-03-104	101	12091	2.1	19.0292	39.0	0.1803	39.3	0.0249	5.3	0.14	158.5	8.4	168.4	61.1	309.4	919.7	158.5	8.4	NA		
GVG-03-92	358	23167	1.8	20.1730	6.9	0.1708	7.6	0.0250	3.2	0.42	159.1	5.0	160.1	11.2	174.9	161.3	159.1	5.0	NA		
GVG-03-57	111	9008	2.4	19.2693	12.2	0.1791	13.4	0.0250	5.5	0.41	159.4	8.6	167.3	20.6	280.9	279.7	159.4	8.6	NA		
GVG-03-96	138	18912	1.9	19.2138	16.0	0.1806	16.5	0.0252	4.2	0.26	160.3	6.7	168.6	25.7	287.4	367.8	160.3	6.7	NA		
GVG-03-46	42	1269	2.6	18.3563	25.2	0.1898	25.8	0.0253	5.7	0.22	160.8	9.0	176.4	41.8	390.8	572.6	160.8	9.0	NA		
GVG-03-35	71	2735	2.4	23.4488	36.4	0.1486	36.6	0.0253	3.4	0.09	160.8	5.4	140.6	48.1	-188.2	937.9	160.8	5.4	NA		
GVG-03-64	118	5804	1.1	19.8832	16.6	0.1752	17.2	0.0253	4.5	0.26	160.9	7.2	164.0	26.0	208.6	386.6	160.9	7.2	NA		
GVG-03-68	179	8618	2.0	20.4237	12.6	0.1714	12.9	0.0254	2.6	0.20	161.7	4.1	160.7	19.2	146.1	297.4	161.7	4.1	NA		
GVG-03-69	77	6130	1.8	25.0723	50.3	0.1400	51.2	0.0255	9.3	0.18	162.1	14.9	133.1	63.9	-358.4	#####	162.1	14.9	NA		
GVG-03-15	128	6971	2.0	25.1260	24.2	0.1398	24.4	0.0255	3.6	0.15	162.2	5.8	132.9	30.4	-363.9	632.9	162.2	5.8	NA		
GVG-03-74	37	4366	2.3	20.8263	82.1	0.1689	82.2	0.0255	5.3	0.06	162.4	8.4	158.5	121.2	100.1	#####	162.4	8.4	NA		
GVG-03-90	113	7411	1.6	18.1904	20.8	0.1936	21.1	0.0255	3.3	0.16	162.6	5.3	179.7	34.7	411.1	470.5	162.6	5.3	NA		
GVG-03-48	626	40573	1.3	20.3582	4.0	0.1735	4.2	0.0256	1.3	0.30	163.1	2.1	162.5	6.4	153.6	94.5	163.1	2.1	NA		
GVG-03-47	375	31704	2.1	20.7799	6.5	0.1701	6.9	0.0256	2.3	0.33	163.2	3.7	159.5	10.1	105.3	152.8	163.2	3.7	NA		

GVG-03-97	51	1974	1.2	38.8492	82.2	0.0911	82.6	0.0257	7.1	0.09	163.3	11.5	88.5	70.1	-1656.9	#####	163.3	11.5	NA
GVG-03-52	204	13242	2.1	21.5194	14.6	0.1645	14.7	0.0257	1.6	0.11	163.4	2.7	154.7	21.1	22.1	352.7	163.4	2.7	NA
GVG-03-55	133	7353	2.2	19.2843	11.8	0.1837	12.5	0.0257	4.2	0.34	163.6	6.8	171.3	19.7	279.1	270.5	163.6	6.8	NA
GVG-03-38	78	4084	2.2	26.9093	48.9	0.1318	49.1	0.0257	4.0	0.08	163.7	6.5	125.7	58.1	-544.8	#####	163.7	6.5	NA
GVG-03-50	111	6471	1.5	22.0964	12.8	0.1612	13.3	0.0258	3.6	0.27	164.4	5.9	151.7	18.7	-41.8	312.1	164.4	5.9	NA
GVG-03-58	387	16070	1.8	20.4432	5.3	0.1747	5.4	0.0259	0.9	0.17	164.9	1.5	163.5	8.2	143.8	125.3	164.9	1.5	NA
GVG-03-49	160	9372	1.5	24.3347	14.3	0.1469	14.6	0.0259	3.0	0.20	165.0	4.9	139.2	19.0	-281.8	366.2	165.0	4.9	NA
GVG-03-53	266	11201	1.5	19.8433	9.4	0.1804	9.6	0.0260	1.9	0.20	165.2	3.2	168.4	14.9	213.2	218.4	165.2	3.2	NA
GVG-03-08	231	11443	1.5	21.5167	10.0	0.1682	10.1	0.0263	1.8	0.17	167.0	2.9	157.9	14.8	22.4	240.4	167.0	2.9	NA
GVG-03-31	184	12120	1.7	20.0417	10.9	0.1813	11.1	0.0264	2.2	0.20	167.7	3.7	169.2	17.4	190.2	254.5	167.7	3.7	NA
GVG-03-66	21	893	3.0	7.1825	145.9	0.5320	146.4	0.0277	12.3	0.08	176.2	21.3	433.1	569.3	2217.6	238.4	176.2	21.3	NA
GVG-03-61	298	20361	2.1	19.7094	4.6	0.2204	4.8	0.0315	1.1	0.24	199.9	2.3	202.2	8.8	228.9	107.4	199.9	2.3	NA
GVG-03-26	499	73869	1.8	19.3808	2.1	0.3025	2.6	0.0425	1.5	0.58	268.4	3.9	268.3	6.1	267.6	48.1	268.4	3.9	NA
GVG-03-78	261	29749	2.3	18.4548	2.7	0.4756	5.6	0.0637	4.9	0.87	397.8	18.7	395.0	18.2	378.8	61.3	397.8	18.7	NA
GVG-03-79	179	24152	1.2	17.6351	4.4	0.5349	4.8	0.0684	1.9	0.39	426.6	7.7	435.1	17.0	480.1	97.7	426.6	7.7	88.9
GVG-03-100	560	66817	1.6	17.7553	0.7	0.6026	1.3	0.0776	1.0	0.82	481.7	4.8	478.9	4.9	465.1	16.1	481.7	4.8	103.6
GVG-03-75	487	140413	3.1	17.4646	2.1	0.6480	2.2	0.0821	0.6	0.27	508.5	2.8	507.2	8.6	501.5	45.6	508.5	2.8	101.4
GVG-03-24	82	16304	1.3	17.3197	7.7	0.7197	7.8	0.0904	1.3	0.17	557.9	7.2	550.5	33.1	519.8	168.6	557.9	7.2	107.3
GVG-03-85	513	127239	4.5	16.9622	1.0	0.7432	1.5	0.0914	1.2	0.78	564.0	6.5	564.3	6.7	565.4	21.2	564.0	6.5	99.8
GVG-03-80	177	36580	1.5	16.3222	3.2	0.8577	3.6	0.1015	1.7	0.46	623.4	9.9	628.9	16.7	648.6	67.9	623.4	9.9	96.1
GVG-03-10	148	40077	3.1	13.6314	1.0	1.7357	1.6	0.1716	1.3	0.80	1020.9	12.1	1021.9	10.4	1023.9	19.5	1023.9	19.5	99.7
GVG-03-65	910	256464	3.5	13.5365	0.3	1.7884	1.9	0.1756	1.8	0.99	1042.7	17.8	1041.2	12.2	1038.0	6.5	1038.0	6.5	100.5
GVG-03-60	140	50171	1.6	13.4729	1.7	1.7872	1.9	0.1746	0.8	0.45	1037.6	7.9	1040.8	12.1	1047.6	33.4	1047.6	33.4	99.0
GVG-03-41	52	18353	1.9	13.3667	4.4	1.7641	4.5	0.1710	1.1	0.24	1017.7	10.3	1032.4	29.1	1063.5	87.6	1063.5	87.6	95.7
GVG-03-23	140	103923	2.3	13.3459	1.0	1.8974	1.2	0.1837	0.7	0.58	1086.9	7.0	1080.2	8.1	1066.6	19.9	1066.6	19.9	101.9
GVG-03-102	130	49482	2.3	13.3001	1.3	1.8704	1.7	0.1804	1.0	0.60	1069.3	10.0	1070.7	11.1	1073.5	26.9	1073.5	26.9	99.6
GVG-03-32	129	54503	3.0	12.9737	1.6	2.0936	1.7	0.1970	0.6	0.35	1159.2	6.2	1146.7	11.5	1123.2	31.4	1123.2	31.4	103.2
GVG-03-30	180	160171	1.2	12.8769	1.3	2.0432	1.8	0.1908	1.2	0.67	1125.8	12.4	1130.0	12.2	1138.2	26.5	1138.2	26.5	98.9
GVG-03-84	37	17520	3.5	12.7691	3.1	2.0569	3.5	0.1905	1.7	0.47	1124.0	17.0	1134.6	24.1	1154.8	62.0	1154.8	62.0	97.3
GVG-03-04	81	37013	2.0	12.7403	1.6	2.0795	2.4	0.1921	1.8	0.74	1133.0	18.4	1142.1	16.3	1159.3	31.5	1159.3	31.5	97.7
GVG-03-99	26	9721	1.3	12.7247	8.4	1.9722	8.6	0.1820	1.5	0.17	1077.9	14.7	1106.0	57.7	1161.7	167.3	1161.7	167.3	92.8
GVG-03-95	184	53555	3.8	12.6500	0.8	2.1045	1.5	0.1931	1.2	0.82	1138.0	12.7	1150.3	10.2	1173.4	16.8	1173.4	16.8	97.0
GVG-03-85	34	11778	2.1	12.6219	5.0	2.2525	5.3	0.2062	1.6	0.30	1208.6	17.6	1197.6	37.0	1177.8	99.0	1177.8	99.0	102.6
GVG-03-73	146	184702	3.3	12.3648	1.7	2.3734	2.0	0.2128	1.1	0.54	1243.9	12.1	1234.6	14.1	1218.4	32.5	1218.4	32.5	102.1
GVG-03-02	43	18285	1.2	12.3643	3.1	2.2022	3.4	0.1975	1.4	0.40	1161.8	14.5	1181.8	23.6	1218.5	60.9	1218.5	60.9	95.3

GVG-03-43	304	133749	3.5	11.9781	0.6	2.4536	1.4	0.2132	1.3	0.92	1245.6	14.7	1258.5	10.2	1280.6	11.1	1280.6	11.1	97.3	
GVG-03-87	198	103811	3.3	11.9691	0.9	2.4777	2.7	0.2151	2.5	0.94	1255.8	28.7	1265.5	19.4	1282.0	17.8	1282.0	17.8	98.0	
GVG-03-72	97	29112	2.4	11.8538	2.0	2.5701	2.3	0.2210	1.2	0.50	1286.9	13.7	1292.2	17.2	1300.9	39.5	1300.9	39.5	98.9	
GVG-03-103	74	21997	2.3	11.8442	2.5	2.6731	4.0	0.2296	3.2	0.79	1332.6	38.4	1321.1	29.8	1302.4	47.8	1302.4	47.8	102.3	
GVG-03-03	68	35313	1.5	11.7908	1.9	2.7681	2.3	0.2367	1.3	0.54	1369.6	15.5	1347.0	17.2	1311.2	37.5	1311.2	37.5	104.5	
GVG-03-17	227	174921	2.1	11.7402	0.9	2.6542	1.4	0.2260	1.0	0.76	1313.5	12.2	1315.8	10.0	1319.6	17.1	1319.6	17.1	99.5	
GVG-03-29	222	89599	1.4	11.7167	0.3	2.6636	1.8	0.2263	1.7	0.99	1315.3	20.8	1318.4	13.0	1323.4	5.0	1323.4	5.0	99.4	
GVG-03-93	89	49448	2.6	11.6574	2.1	2.6589	3.5	0.2248	2.8	0.79	1307.2	33.1	1317.1	26.0	1333.3	41.4	1333.3	41.4	98.0	
GVG-03-25	162	104582	1.3	11.6231	0.9	2.6758	1.4	0.2256	1.1	0.76	1311.2	12.5	1321.8	10.2	1339.0	17.3	1339.0	17.3	97.9	
GVG-03-62	101	122141	2.9	11.4225	1.0	2.8658	1.7	0.2374	1.4	0.80	1373.2	17.1	1373.0	12.9	1372.5	19.7	1372.5	19.7	100.1	
GVG-03-27	77	43846	1.5	11.1941	1.8	3.0995	2.8	0.2516	2.2	0.78	1446.9	28.8	1432.6	21.8	1411.3	33.9	1411.3	33.9	102.5	
GVG-03-36	46	16180	1.2	11.1334	3.7	3.1399	3.9	0.2535	1.1	0.28	1456.7	14.5	1442.5	30.0	1421.7	71.4	1421.7	71.4	102.5	
GVG-03-16	38	17610	1.3	11.1215	4.4	3.0806	4.9	0.2485	2.3	0.46	1430.7	29.0	1427.9	37.7	1423.7	83.4	1423.7	83.4	100.5	
GVG-03-82	194	119219	1.9	10.9923	0.7	3.1100	1.1	0.2479	0.9	0.79	1427.9	11.4	1435.2	8.6	1446.0	13.0	1446.0	13.0	98.7	
GVG-03-63	188	94965	2.2	9.9436	0.5	3.8867	1.4	0.2803	1.3	0.94	1592.9	18.7	1610.9	11.4	1634.6	9.2	1634.6	9.2	97.4	
GVG-03-07	169	167129	1.9	9.7062	0.7	3.5543	3.1	0.2502	3.0	0.97	1439.5	38.9	1539.4	24.6	1679.3	13.4	1679.3	13.4	85.7	
GVG-03-22	141	64130	2.2	9.4098	0.8	4.6290	1.5	0.3159	1.3	0.86	1769.7	20.0	1754.5	12.5	1736.4	13.9	1736.4	13.9	101.9	
GVG-03-37	447	644161	1.6	9.3172	0.3	4.1208	8.1	0.2785	8.1	1.00	1583.6	113.6	1658.4	66.2	1754.5	6.0	1754.5	6.0	90.3	
GVG-03-33	66	21798	1.0	9.2253	1.6	4.6627	5.8	0.3120	5.5	0.96	1750.4	84.7	1760.6	48.1	1772.6	29.2	1772.6	29.2	98.7	
GVG-03-34	36	24365	3.9	9.2000	2.9	4.8922	3.1	0.3264	1.2	0.40	1821.1	19.7	1800.9	26.5	1777.6	52.7	1777.6	52.7	102.4	
GVG-03-01	282	149714	3.3	9.1653	0.3	4.8536	1.1	0.3226	1.1	0.96	1802.6	17.2	1794.2	9.6	1784.5	5.5	1784.5	5.5	101.0	
GVG-03-13	204	229107	2.5	9.1466	0.4	4.7988	1.6	0.3183	1.5	0.96	1781.6	23.4	1784.7	13.1	1788.3	8.0	1788.3	8.0	99.6	
GVG-03-14	308	283172	6.1	9.1435	0.3	4.9040	1.4	0.3252	1.4	0.98	1815.1	22.1	1802.9	12.1	1788.9	5.7	1788.9	5.7	101.5	
GVG-03-77	72	93873	2.3	9.0690	0.7	4.9925	2.2	0.3284	2.1	0.95	1830.5	34.0	1818.1	19.0	1803.8	12.7	1803.8	12.7	101.5	
GVG-03-70	50	30194	1.3	8.9598	1.4	5.1465	2.0	0.3344	1.4	0.72	1859.8	22.9	1843.8	16.7	1825.8	24.8	1825.8	24.8	101.9	
GVG-03-06	180	95867	2.4	8.8973	0.4	4.8942	1.2	0.3158	1.1	0.96	1769.3	17.8	1801.3	10.2	1838.5	6.5	1838.5	6.5	96.2	
GVG-03-18	62	40699	6.5	8.4763	1.0	5.6659	2.7	0.3483	2.6	0.93	1926.6	42.5	1926.2	23.7	1925.8	18.4	1925.8	18.4	100.0	
GVG-03-83	126	78574	1.5	8.4603	0.5	5.5603	1.0	0.3412	0.9	0.87	1892.3	14.3	1910.0	8.6	1929.2	8.9	1929.2	8.9	98.1	
GVG-03-56	132	90824	1.9	8.0717	0.6	6.3530	1.5	0.3719	1.4	0.92	2038.4	24.0	2025.8	13.2	2013.0	10.7	2013.0	10.7	101.3	
GVG-03-05	52	25992	0.7	7.8066	0.9	6.7214	2.0	0.3806	1.7	0.88	2078.9	30.7	2075.4	17.3	2072.0	16.1	2072.0	16.1	100.3	
GVG-03-86	30	21899	1.4	7.5004	1.3	7.1171	1.5	0.3872	0.8	0.51	2109.6	13.6	2126.2	13.3	2142.2	22.5	2142.2	22.5	98.5	
GVG-03-12	90	92312	1.8	6.0599	0.3	11.1146	1.3	0.4885	1.2	0.97	2564.2	26.1	2532.8	11.9	2507.7	5.6	2507.7	5.6	102.3	
GVG-03-59	88	15210	1.0	5.4317	0.8	13.2832	9.7	0.5233	9.7	1.00	2713.1	214.3	2700.0	92.0	2690.2	13.8	2690.2	13.8	100.9	
GVG-03-42	71	64535	1.3	5.4109	0.6	11.7956	2.0	0.4629	1.9	0.95	2452.4	39.7	2588.3	19.1	2696.5	10.0	2696.5	10.0	90.9	
GVG-03-21	97	199573	0.8	5.4003	0.4	12.8473	1.4	0.5032	1.3	0.97	2627.5	28.8	2668.5	13.0	2699.8	5.8	2699.8	5.8	97.3	

GVG-102: Gravelly Flat Formation (upper), Great Valley Group (10S 0751508N, 3963169E) collected on north side of SR41																			
				Isotope ratios							Apparent ages (Ma)								
Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(%)	
GVG-02-38	341	8338	1.6	20.6903	16.5	0.1033	16.6	0.0155	1.7	0.10	99.1	1.6	99.8	15.8	115.6	392.6	99.1	1.6	NA
GVG-02-72	251	10292	1.8	22.1080	18.1	0.0977	18.2	0.0157	2.4	0.13	100.2	2.3	94.6	16.5	-43.1	442.1	100.2	2.3	NA
GVG-02-105	348	22171	1.5	21.6318	11.8	0.1010	12.1	0.0159	2.6	0.22	101.4	2.6	97.7	11.3	9.5	285.0	101.4	2.6	NA
GVG-02-60	131	3454	2.4	25.6745	29.9	0.0862	30.0	0.0161	3.3	0.11	102.7	3.3	84.0	24.2	-420.2	796.7	102.7	3.3	NA
GVG-02-93	339	22938	1.6	19.1004	4.8	0.1164	5.8	0.0161	3.4	0.58	103.2	3.5	111.8	6.2	301.0	108.8	103.2	3.5	NA
GVG-02-59	295	10262	2.1	19.7866	10.2	0.1128	10.4	0.0162	2.2	0.21	103.5	2.2	108.5	10.7	219.9	236.0	103.5	2.2	NA
GVG-02-99	66	2845	2.4	27.9385	136.6	0.0814	137.1	0.0165	11.3	0.08	105.5	11.8	79.5	105.2	-646.7	0.0	105.5	11.8	NA
GVG-02-90	131	6949	3.0	28.6894	41.0	0.0814	41.2	0.0169	4.6	0.11	108.3	5.0	79.5	31.5	-720.1	#####	108.3	5.0	NA
GVG-02-24	420	27216	1.5	21.3001	12.0	0.1475	12.1	0.0228	1.9	0.16	145.2	2.7	139.7	15.8	46.6	286.9	145.2	2.7	NA
GVG-02-64	347	37349	1.5	20.1950	8.5	0.1573	9.2	0.0230	3.6	0.39	146.9	5.2	148.4	12.7	172.4	198.6	146.9	5.2	NA
GVG-02-33	140	6962	1.7	19.2955	14.0	0.1663	16.3	0.0233	8.4	0.52	148.3	12.3	156.2	23.6	277.7	321.1	148.3	12.3	NA
GVG-02-51	51	2684	2.3	22.3289	45.6	0.1443	46.3	0.0234	8.3	0.18	148.9	12.2	136.9	59.4	-67.3	#####	148.9	12.2	NA
GVG-02-18	116	6710	1.8	21.7208	30.8	0.1501	31.1	0.0236	4.1	0.13	150.7	6.1	142.0	41.2	-0.3	759.0	150.7	6.1	NA
GVG-02-09	65	6243	2.0	18.1379	218.2	0.1803	218.4	0.0237	8.2	0.04	151.1	12.2	168.3	352.2	417.6	0.0	151.1	12.2	NA
GVG-02-49	128	4747	1.6	16.5736	22.0	0.1978	24.5	0.0238	10.6	0.44	151.5	15.9	183.3	41.1	615.7	481.3	151.5	15.9	NA
GVG-02-04	53	2296	3.0	29.1938	49.4	0.1124	50.4	0.0238	10.1	0.20	151.6	15.1	108.2	51.8	-769.0	#####	151.6	15.1	NA
GVG-02-32	224	44358	0.6	18.6624	10.2	0.1760	10.6	0.0238	2.9	0.28	151.7	4.4	164.6	16.1	353.6	230.0	151.7	4.4	NA
GVG-02-26	45	2274	2.0	19.3398	90.5	0.1701	91.2	0.0239	11.4	0.12	152.0	17.1	159.5	135.4	272.4	#####	152.0	17.1	NA
GVG-02-62	413	15358	2.8	20.8674	4.7	0.1577	5.2	0.0239	2.3	0.43	152.0	3.4	148.7	7.2	95.4	111.9	152.0	3.4	NA
GVG-02-95	39	2492	2.7	15.5688	44.5	0.2148	46.5	0.0243	13.7	0.29	154.5	20.9	197.6	83.7	749.2	987.9	154.5	20.9	NA
GVG-02-08	557	31428	1.3	20.6617	3.7	0.1623	4.2	0.0243	2.0	0.48	154.9	3.1	152.7	5.9	118.8	86.8	154.9	3.1	NA
GVG-02-37	52	1962	1.6	17.6668	31.6	0.1899	32.8	0.0243	8.9	0.27	154.9	13.6	176.5	53.2	476.1	714.4	154.9	13.6	NA
GVG-02-78	50	3499	3.4	0.5544	#####	6.0589	#####	0.0244	19.8	0.00	155.2	30.4	1984.4	#####	NA	NA	155.2	30.4	NA
GVG-02-82	47	2581	3.5	21.5181	31.0	0.1561	33.2	0.0244	11.8	0.36	155.2	18.1	147.3	45.5	22.2	759.9	155.2	18.1	NA
GVG-02-47	51	4329	3.7	29.3145	83.8	0.1148	84.1	0.0244	7.2	0.09	155.5	11.1	110.4	88.2	-780.6	#####	155.5	11.1	NA
GVG-02-41	71	7107	3.0	9.2042	178.0	0.3674	178.3	0.0245	10.3	0.06	156.2	15.9	317.7	529.9	1776.8	205.8	156.2	15.9	NA
GVG-02-89	58	2824	2.4	17.8113	42.7	0.1904	43.4	0.0246	8.1	0.19	156.7	12.5	177.0	70.6	458.1	989.1	156.7	12.5	NA
GVG-02-44	76	5755	1.7	23.1467	29.8	0.1468	30.2	0.0247	4.8	0.16	157.0	7.4	139.1	39.2	-155.9	753.7	157.0	7.4	NA
GVG-02-77	49	2024	2.2	18.0854	32.0	0.1880	33.0	0.0247	8.1	0.24	157.1	12.5	175.0	53.1	424.1	731.9	157.1	12.5	NA
GVG-02-29	86	6402	2.0	20.1318	13.7	0.1691	14.2	0.0247	3.7	0.26	157.3	5.8	158.7	20.8	179.7	319.6	157.3	5.8	NA
GVG-02-25	120	7368	2.0	30.5821	28.3	0.1115	28.8	0.0247	5.2	0.18	157.5	8.1	107.3	29.4	-901.8	835.4	157.5	8.1	NA

GVG-02-94	64	4514	2.2	23.1701	28.9	0.1472	29.4	0.0247	5.5	0.19	157.5	8.5	139.4	38.3	-158.4	730.2	157.5	8.5	NA
GVG-02-45	47	5312	3.0	14.9332	89.6	0.2287	90.1	0.0248	9.0	0.10	157.7	14.0	209.1	171.9	836.7	341.9	157.7	14.0	NA
GVG-02-13	90	4078	1.7	22.9481	51.8	0.1492	52.0	0.0248	5.0	0.10	158.1	7.8	141.2	68.7	-134.5	#####	158.1	7.8	NA
GVG-02-69	248	16232	1.9	23.7236	22.2	0.1445	22.5	0.0249	3.5	0.16	158.3	5.5	137.1	28.8	-217.4	564.2	158.3	5.5	NA
GVG-02-15	72	2241	3.0	32.0081	44.8	0.1077	45.3	0.0250	6.4	0.14	159.2	10.1	103.9	44.7	-1036.0	#####	159.2	10.1	NA
GVG-02-55	58	4287	2.4	35.9996	87.2	0.0958	87.7	0.0250	8.9	0.10	159.3	14.0	92.9	78.0	NA	NA	159.3	14.0	NA
GVG-02-71	104	13768	3.9	18.5769	25.2	0.1862	25.4	0.0251	3.2	0.13	159.7	5.1	173.4	40.5	363.9	575.5	159.7	5.1	NA
GVG-02-43	59	3449	2.5	38.3123	110.5	0.0904	110.8	0.0251	7.7	0.07	159.9	12.1	87.9	93.5	NA	NA	159.9	12.1	NA
GVG-02-17	68	3120	2.2	14.5569	32.9	0.2380	33.2	0.0251	4.0	0.12	160.0	6.4	216.8	64.8	889.6	698.2	160.0	6.4	NA
GVG-02-22	91	5315	2.4	22.3659	31.2	0.1552	31.7	0.0252	5.7	0.18	160.3	8.9	146.5	43.3	-71.4	779.5	160.3	8.9	NA
GVG-02-88	89	4773	2.7	33.8065	114.8	0.1028	115.1	0.0252	8.1	0.07	160.5	12.8	99.3	109.3	NA	NA	160.5	12.8	NA
GVG-02-42	302	17967	1.3	21.4629	9.7	0.1622	9.9	0.0253	1.5	0.15	160.8	2.4	152.7	14.0	28.4	234.1	160.8	2.4	NA
GVG-02-92	107	8282	2.4	20.5528	19.2	0.1694	19.8	0.0253	4.8	0.24	160.8	7.6	158.9	29.1	131.2	454.8	160.8	7.6	NA
GVG-02-57	73	5108	1.4	25.5857	92.2	0.1363	92.3	0.0253	5.7	0.06	161.1	9.0	129.8	112.9	-411.1	#####	161.1	9.0	NA
GVG-02-63	472	40641	3.2	19.6990	6.4	0.1774	6.6	0.0253	1.5	0.22	161.3	2.3	165.8	10.1	230.1	148.3	161.3	2.3	NA
GVG-02-03	519	17436	0.9	20.7305	4.7	0.1686	5.1	0.0254	2.0	0.39	161.4	3.1	158.2	7.4	111.0	110.6	161.4	3.1	NA
GVG-02-101	59	2381	2.8	19.9164	32.3	0.1756	33.0	0.0254	6.3	0.19	161.5	10.0	164.3	50.0	204.7	768.4	161.5	10.0	NA
GVG-02-34	77	7034	2.1	22.1746	37.0	0.1580	37.2	0.0254	4.0	0.11	161.8	6.4	148.9	51.6	-50.4	927.7	161.8	6.4	NA
GVG-02-96	226	6902	1.7	21.2856	7.2	0.1646	7.7	0.0254	2.8	0.36	161.8	4.5	154.7	11.0	48.2	171.2	161.8	4.5	NA
GVG-02-46	75	8640	2.8	18.2389	27.5	0.1921	28.3	0.0254	6.3	0.22	161.8	10.1	178.4	46.3	405.2	627.3	161.8	10.1	NA
GVG-02-14	97	13074	1.8	20.5777	18.6	0.1705	19.1	0.0254	4.1	0.22	162.0	6.6	159.9	28.2	128.4	441.3	162.0	6.6	NA
GVG-02-81	211	10843	2.3	20.6638	10.7	0.1701	12.2	0.0255	5.9	0.48	162.3	9.4	159.5	18.0	118.6	252.8	162.3	9.4	NA
GVG-02-87	78	2914	2.0	15.1267	18.9	0.2325	19.8	0.0255	6.1	0.31	162.4	9.7	212.3	38.0	809.8	398.3	162.4	9.7	NA
GVG-02-68	66	5251	1.7	13.5844	25.4	0.2599	26.5	0.0256	7.6	0.29	163.0	12.2	234.6	55.5	1030.9	520.6	163.0	12.2	NA
GVG-02-06	68	2684	2.3	23.2001	54.9	0.1523	55.2	0.0256	5.5	0.10	163.2	8.9	144.0	74.3	-161.6	#####	163.2	8.9	NA
GVG-02-98	68	4564	2.4	20.6480	32.5	0.1713	33.2	0.0257	6.7	0.20	163.3	10.8	160.6	49.3	120.4	783.4	163.3	10.8	NA
GVG-02-27	235	8372	1.5	19.8336	8.1	0.1784	8.3	0.0257	2.2	0.26	163.3	3.5	166.7	12.8	214.4	186.8	163.3	3.5	NA
GVG-02-31	53	11203	2.4	21.5247	41.7	0.1645	42.0	0.0257	5.6	0.13	163.4	9.0	154.6	60.3	21.5	#####	163.4	9.0	NA
GVG-02-23	169	6337	1.6	21.0426	17.3	0.1683	17.4	0.0257	1.9	0.11	163.5	3.0	158.0	25.5	75.5	414.2	163.5	3.0	NA
GVG-02-53	147	14168	1.1	20.5898	21.1	0.1729	21.4	0.0258	3.5	0.16	164.3	5.6	161.9	32.0	127.0	501.0	164.3	5.6	NA
GVG-02-75	833	16213	1.6	19.4180	6.1	0.1833	6.5	0.0258	2.4	0.37	164.3	3.9	170.9	10.2	263.2	139.0	164.3	3.9	NA
GVG-02-76	284	13285	1.7	19.3268	6.3	0.1843	6.5	0.0258	1.8	0.27	164.4	2.9	171.7	10.3	274.0	143.6	164.4	2.9	NA
GVG-02-70	95	4324	1.3	22.1858	20.0	0.1606	20.5	0.0258	4.6	0.22	164.4	7.4	151.2	28.8	-51.6	490.1	164.4	7.4	NA
GVG-02-79	259	17933	1.4	20.3985	9.4	0.1749	10.0	0.0259	3.5	0.35	164.7	5.7	163.6	15.1	148.9	220.3	164.7	5.7	NA
GVG-02-61	228	22812	1.5	21.1860	11.6	0.1685	12.0	0.0259	3.2	0.27	164.8	5.3	158.1	17.6	59.4	277.0	164.8	5.3	NA

GVG-02-07	178	8967	1.8	21.3519	8.7	0.1673	9.4	0.0259	3.5	0.37	164.9	5.6	157.1	13.7	40.8	209.0	164.9	5.6	NA
GVG-02-80	135	8670	1.6	22.3481	19.2	0.1599	20.0	0.0259	5.4	0.27	165.0	8.9	150.6	28.0	-69.4	473.0	165.0	8.9	NA
GVG-02-67	41	1705	1.6	13.6688	160.9	0.2623	161.5	0.0260	14.4	0.09	165.5	23.6	236.5	354.5	1018.3	685.4	165.5	23.6	NA
GVG-02-84	43	3775	2.5	21.0854	44.3	0.1701	47.4	0.0260	16.8	0.35	165.6	27.4	159.5	70.0	70.7	#####	165.6	27.4	NA
GVG-02-20	45	2586	1.9	57.8065	99.1	0.0622	99.4	0.0261	7.6	0.08	166.1	12.4	61.3	59.2	NA	NA	166.1	12.4	NA
GVG-02-30	55	6930	1.4	36.4929	44.0	0.0988	46.4	0.0262	14.8	0.32	166.5	24.3	95.7	42.4	NA	NA	166.5	24.3	NA
GVG-02-102	49	2624	1.5	20.1221	17.5	0.1793	18.4	0.0262	5.6	0.30	166.5	9.2	167.4	28.4	180.8	411.0	166.5	9.2	NA
GVG-02-74	53	4227	2.7	26.9291	38.4	0.1342	38.7	0.0262	4.9	0.13	166.8	8.1	127.9	46.5	-546.7	#####	166.8	8.1	NA
GVG-02-12	35	1741	2.0	16.8303	44.3	0.2155	45.4	0.0263	10.1	0.22	167.4	16.7	198.1	82.0	582.4	#####	167.4	16.7	NA
GVG-02-05	255	18776	1.1	20.5811	13.1	0.1768	13.4	0.0264	3.1	0.23	167.9	5.1	165.3	20.5	128.0	308.9	167.9	5.1	NA
GVG-02-86	1286	112062	0.9	20.3113	1.0	0.1807	2.3	0.0266	2.0	0.90	169.3	3.4	168.6	3.5	159.0	23.6	169.3	3.4	NA
GVG-02-50	348	27605	1.1	20.9323	5.0	0.1763	5.4	0.0268	2.1	0.39	170.2	3.5	164.9	8.2	88.1	118.4	170.2	3.5	NA
GVG-02-91	46	2061	3.1	22.6357	57.9	0.1631	58.3	0.0268	6.4	0.11	170.3	10.8	153.4	83.2	-100.7	#####	170.3	10.8	NA
GVG-02-103	31	1344	1.6	9.3363	128.2	0.3973	129.1	0.0269	16.0	0.12	171.2	26.9	339.7	391.2	1750.8	23.2	171.2	26.9	NA
GVG-02-66	273	23896	2.0	21.2472	5.2	0.1761	5.6	0.0271	2.0	0.35	172.6	3.4	164.7	8.5	52.5	125.3	172.6	3.4	NA
GVG-02-01	184	7037	2.3	20.4851	18.1	0.1885	18.5	0.0280	3.6	0.19	178.0	6.3	175.3	29.7	139.0	428.2	178.0	6.3	NA
GVG-02-54	329	13425	1.6	20.2297	8.8	0.1946	9.1	0.0286	2.5	0.27	181.5	4.5	180.6	15.1	168.4	205.3	181.5	4.5	NA
GVG-02-28	148	8181	2.7	19.9669	24.6	0.2005	24.7	0.0290	2.8	0.11	184.5	5.0	185.5	42.0	198.8	578.5	184.5	5.0	NA
GVG-02-40	357	14096	1.4	19.8600	5.4	0.2207	5.6	0.0318	1.5	0.27	201.8	3.0	202.5	10.2	211.3	124.1	201.8	3.0	NA
GVG-02-65	184	22682	0.5	18.5912	6.0	0.4296	6.3	0.0579	1.9	0.31	363.0	6.8	362.9	19.1	362.2	134.5	363.0	6.8	NA
GVG-02-02	285	65665	1.2	17.6156	1.5	0.6170	2.4	0.0788	1.8	0.77	489.1	8.6	488.0	9.1	482.5	33.1	489.1	8.6	101.4
GVG-02-21	429	95558	3.7	17.0272	1.2	0.7602	1.6	0.0939	1.0	0.64	578.4	5.7	574.1	7.1	557.1	27.2	578.4	5.7	103.8
GVG-02-83	61	51926	1.0	16.9202	8.0	0.7976	8.4	0.0979	2.5	0.30	602.0	14.4	595.5	37.8	570.8	174.1	602.0	14.4	105.5
GVG-02-19	142	36103	1.8	16.1101	3.9	0.8552	4.3	0.0999	1.9	0.44	613.9	11.3	627.5	20.3	676.6	83.0	613.9	11.3	90.7
GVG-02-104	160	67025	1.2	16.5285	3.1	0.8771	4.1	0.1051	2.6	0.64	644.5	16.0	639.4	19.4	621.5	68.0	644.5	16.0	103.7
GVG-02-58	52	19106	2.7	14.1760	4.2	1.6189	4.7	0.1664	2.0	0.43	992.5	18.4	977.6	29.4	944.2	86.7	944.2	86.7	105.1
GVG-02-39	25	12407	1.2	13.8409	8.2	1.7091	8.8	0.1716	3.0	0.34	1020.7	28.0	1011.9	56.1	993.0	167.8	993.0	167.8	102.8
GVG-02-52	125	81139	0.9	13.7695	2.3	1.7765	2.6	0.1774	1.2	0.46	1052.8	11.8	1036.9	17.0	1003.5	47.1	1003.5	47.1	104.9
GVG-02-73	58	26842	0.6	13.7557	5.5	1.6185	5.7	0.1615	1.7	0.29	965.0	14.9	977.4	35.9	1005.5	111.2	1005.5	111.2	96.0
GVG-02-85	71	29220	1.3	13.6469	4.6	1.7984	4.9	0.1780	1.5	0.31	1056.1	14.5	1044.9	31.8	1021.6	93.8	1021.6	93.8	103.4
GVG-02-97	156	54377	5.9	13.6309	1.2	1.7758	1.9	0.1756	1.4	0.75	1042.6	13.4	1036.6	12.1	1024.0	24.9	1024.0	24.9	101.8
GVG-02-16	81	29086	1.4	12.8765	2.1	2.1062	2.8	0.1967	1.8	0.64	1157.5	18.9	1150.8	19.2	1138.2	42.7	1138.2	42.7	101.7
GVG-02-48	409	338774	1.6	11.7055	0.4	2.7706	1.1	0.2352	1.0	0.94	1361.8	12.7	1347.7	8.2	1325.3	7.2	1325.3	7.2	102.8
GVG-02-36	146	146005	1.5	10.8360	1.0	3.2778	1.7	0.2576	1.3	0.80	1477.6	17.8	1475.8	13.1	1473.2	19.2	1473.2	19.2	100.3
GVG-02-35	855	553740	4.5	9.5061	0.2	3.8805	1.8	0.2675	1.8	0.99	1528.3	24.4	1609.6	14.6	1717.7	4.4	1717.7	4.4	89.0

GVG-02-10	133	115731	2.9	9.3234	0.6	4.6413	2.9	0.3138	2.8	0.98	1759.6	43.1	1756.7	23.9	1753.3	11.1	1753.3	11.1	100.4
GVG-02-11	107	100564	1.2	7.8666	0.9	6.5212	1.4	0.3721	1.1	0.79	2039.1	19.7	2048.8	12.5	2058.5	15.2	2058.5	15.2	99.1
GVG-02-56	64	132052	0.9	5.0670	0.8	14.3804	1.2	0.5285	0.9	0.77	2735.0	20.5	2775.1	11.4	2804.4	12.6	2804.4	12.6	97.5
GVG-02-100	184	218013	2.4	4.1081	1.4	17.2964	3.1	0.5153	2.8	0.90	2679.4	61.4	2951.4	30.0	3142.5	22.1	3142.5	22.1	85.3

GVG-101: Gravelly Flat Formation (upper), Great Valley Group (10S 0751925N, 3963108E) collected on north side of SR41

Analysis	U (ppm)	Isotope ratios								Apparent ages (Ma)								Best age (Ma)	± (%)	Conc
		206Pb 204Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	207Pb*	±		
		204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	207Pb*	(Ma)		
GVG-01-14	187	28569	2.0	21.6537	25.3	0.0993	25.9	0.0156	5.6	0.22	99.8	5.6	96.1	23.7	7.1	616.3	99.8	5.6	NA	
GVG-01-06	203	31311	0.7	20.9889	17.9	0.1040	19.3	0.0158	7.1	0.37	101.3	7.2	100.5	18.5	81.6	428.9	101.3	7.2	NA	
GVG-01-99	132	16351	2.6	21.5318	34.6	0.1049	34.8	0.0164	4.2	0.12	104.7	4.4	101.3	33.6	20.7	852.1	104.7	4.4	NA	
GVG-01-17	29	5644	3.0	1.3326	926.6	2.2527	926.8	0.0218	16.3	0.02	138.8	22.5	1197.6	#####	NA	NA	138.8	22.5	NA	
GVG-01-83	202	38997	2.2	18.7468	12.5	0.1726	12.6	0.0235	1.7	0.13	149.5	2.5	161.7	18.8	343.4	283.3	149.5	2.5	NA	
GVG-01-89	86	14053	2.2	20.9102	17.9	0.1561	19.2	0.0237	6.8	0.35	150.8	10.1	147.3	26.3	90.5	428.1	150.8	10.1	NA	
GVG-01-03	30	10121	1.7	13.7670	58.7	0.2385	60.9	0.0238	16.3	0.27	151.7	24.5	217.2	119.6	1003.8	#####	151.7	24.5	NA	
GVG-01-55	247	27231	1.1	20.4834	9.3	0.1635	10.2	0.0243	4.1	0.40	154.8	6.2	153.8	14.5	139.2	219.7	154.8	6.2	NA	
GVG-01-96	60	9127	1.6	25.4605	46.8	0.1318	47.6	0.0243	8.8	0.19	155.0	13.5	125.7	56.3	-398.3	#####	155.0	13.5	NA	
GVG-01-11	24	3737	1.8	8.7854	267.3	0.3821	267.6	0.0243	13.0	0.05	155.1	19.9	328.6	965.0	1861.3	530.3	155.1	19.9	NA	
GVG-01-47	52	8909	2.3	21.0518	44.9	0.1610	47.2	0.0246	14.5	0.31	156.5	22.5	151.6	66.5	74.5	#####	156.5	22.5	NA	
GVG-01-78	103	28166	1.8	21.0107	20.4	0.1613	20.8	0.0246	4.0	0.19	156.6	6.1	151.9	29.4	79.2	489.5	156.6	6.1	NA	
GVG-01-44	38	8841	1.6	18.4776	153.7	0.1836	153.8	0.0246	6.4	0.04	156.7	9.9	171.1	247.0	376.0	#####	156.7	9.9	NA	
GVG-01-56	52	14684	2.8	28.3192	44.6	0.1201	45.2	0.0247	7.1	0.16	157.1	11.0	115.2	49.2	-684.0	#####	157.1	11.0	NA	
GVG-01-58	70	11616	1.9	20.1093	29.6	0.1694	30.4	0.0247	7.1	0.23	157.3	11.0	158.9	44.8	182.3	703.4	157.3	11.0	NA	
GVG-01-82	51	7942	2.0	32.8949	54.3	0.1036	55.2	0.0247	9.8	0.18	157.5	15.3	100.1	52.7	NA	NA	157.5	15.3	NA	
GVG-01-45	211	32938	1.1	21.4846	7.6	0.1588	8.5	0.0247	3.8	0.45	157.6	5.9	149.7	11.8	25.9	181.5	157.6	5.9	NA	
GVG-01-36	61	12834	3.9	20.7560	31.2	0.1645	31.8	0.0248	6.2	0.19	157.7	9.6	154.6	45.7	108.1	753.6	157.7	9.6	NA	
GVG-01-10	107	25818	3.7	22.7346	29.5	0.1512	29.7	0.0249	3.7	0.12	158.7	5.8	142.9	39.7	-111.5	740.5	158.7	5.8	NA	
GVG-01-75	224	42773	0.8	19.4126	8.8	0.1770	9.2	0.0249	2.6	0.29	158.7	4.1	165.5	14.0	263.8	202.0	158.7	4.1	NA	
GVG-01-25	863	147142	1.2	20.2183	3.2	0.1700	3.4	0.0249	1.0	0.28	158.8	1.5	159.5	5.0	169.7	75.6	158.8	1.5	NA	
GVG-01-49	187	34171	2.1	21.7474	20.1	0.1581	20.3	0.0249	2.5	0.12	158.8	3.9	149.0	28.1	-3.3	489.0	158.8	3.9	NA	
GVG-01-53	88	13667	1.8	35.7668	77.6	0.0963	78.0	0.0250	8.0	0.10	159.0	12.5	93.3	69.7	NA	NA	159.0	12.5	NA	
GVG-01-21	55	10421	2.5	19.8354	58.4	0.1738	60.4	0.0250	15.5	0.26	159.2	24.3	162.7	91.1	214.2	#####	159.2	24.3	NA	
GVG-01-22	101	9504	1.9	27.0319	33.6	0.1277	33.8	0.0250	3.4	0.10	159.4	5.3	122.0	38.9	-557.0	926.8	159.4	5.3	NA	
GVG-01-26	153	21780	1.7	19.3183	9.9	0.1787	12.6	0.0250	7.9	0.62	159.5	12.4	167.0	19.5	275.0	227.3	159.5	12.4	NA	

GVG-01-59	98	23839	2.1	17.1145	15.5	0.2023	15.8	0.0251	2.7	0.17	159.9	4.2	187.1	27.0	545.9	341.6	159.9	4.2	NA	
GVG-01-15	231	46785	1.3	19.5622	9.2	0.1770	9.5	0.0251	2.5	0.26	159.9	3.9	165.5	14.5	246.2	211.4	159.9	3.9	NA	
GVG-01-57	165	17515	2.0	18.9640	14.0	0.1827	14.1	0.0251	2.0	0.14	160.0	3.1	170.3	22.1	317.2	318.8	160.0	3.1	NA	
GVG-01-48	41	5203	3.6	38.6537	105.6	0.0897	105.8	0.0251	6.6	0.06	160.0	10.4	87.2	88.6	NA	NA	160.0	10.4	NA	
GVG-01-39	82	144443	3.2	17.7901	19.2	0.1949	19.8	0.0251	5.0	0.25	160.1	7.9	180.8	32.9	460.7	429.3	160.1	7.9	NA	
GVG-01-09	135	27048	2.5	21.3570	12.3	0.1623	12.9	0.0251	4.0	0.31	160.1	6.3	152.8	18.4	40.2	295.5	160.1	6.3	NA	
GVG-01-93	49	22364	2.7	33.2099	71.1	0.1044	71.3	0.0252	6.2	0.09	160.1	9.8	100.9	68.6	NA	NA	160.1	9.8	NA	
GVG-01-95	54	17295	2.1	31.2769	53.7	0.1109	54.2	0.0252	7.2	0.13	160.2	11.4	106.8	55.0	NA	NA	160.2	11.4	NA	
GVG-01-71	369	41717	1.4	20.4690	7.1	0.1695	7.4	0.0252	1.9	0.26	160.2	3.0	159.0	10.8	140.9	166.9	160.2	3.0	NA	
GVG-01-54	952	227075	0.7	20.4056	2.9	0.1700	3.4	0.0252	1.7	0.49	160.2	2.6	159.4	5.0	148.1	68.9	160.2	2.6	NA	
GVG-01-92	77	8290	3.4	19.0851	18.5	0.1819	19.0	0.0252	4.5	0.23	160.3	7.0	169.7	29.7	302.8	423.9	160.3	7.0	NA	
GVG-01-43	335	54357	1.2	20.5908	5.9	0.1687	5.9	0.0252	0.9	0.15	160.4	1.5	158.3	8.7	126.9	138.0	160.4	1.5	NA	
GVG-01-41	360	75819	2.0	20.6846	5.9	0.1681	6.0	0.0252	1.1	0.18	160.6	1.8	157.8	8.8	116.2	140.3	160.6	1.8	NA	
GVG-01-91	1333	191722	36.9	20.0886	2.0	0.1733	2.4	0.0252	1.3	0.53	160.7	2.0	162.3	3.6	184.7	47.0	160.7	2.0	NA	
GVG-01-13	46	15051	1.7	17.9625	46.8	0.1938	47.9	0.0252	10.1	0.21	160.7	16.1	179.9	79.0	439.3	#####	160.7	16.1	NA	
GVG-01-67	65	9023	3.1	19.3114	14.1	0.1803	15.0	0.0253	5.1	0.34	160.8	8.0	168.3	23.3	275.8	325.4	160.8	8.0	NA	
GVG-01-31	242	38121	1.8	21.6686	11.0	0.1608	11.4	0.0253	2.7	0.24	160.9	4.3	151.4	16.0	5.5	266.2	160.9	4.3	NA	
GVG-01-98	187	32752	1.2	20.2551	12.7	0.1721	13.7	0.0253	5.3	0.38	160.9	8.4	161.2	20.5	165.4	297.5	160.9	8.4	NA	
GVG-01-32	122	32818	2.0	24.2243	21.1	0.1440	21.3	0.0253	3.3	0.15	161.0	5.2	136.6	27.2	-270.2	540.1	161.0	5.2	NA	
GVG-01-74	683	97656	2.7	20.3887	2.5	0.1711	2.8	0.0253	1.2	0.45	161.1	2.0	160.4	4.1	150.0	58.1	161.1	2.0	NA	
GVG-01-33	227	41119	2.6	21.1107	10.8	0.1654	11.1	0.0253	2.7	0.25	161.2	4.4	155.4	16.0	67.9	257.1	161.2	4.4	NA	
GVG-01-72	142	25547	3.0	18.5803	14.8	0.1880	15.2	0.0253	3.5	0.23	161.3	5.6	174.9	24.4	363.5	334.3	161.3	5.6	NA	
GVG-01-86	63	9863	1.9	25.9935	53.1	0.1344	53.4	0.0253	5.8	0.11	161.3	9.3	128.0	64.3	-452.6	#####	161.3	9.3	NA	
GVG-01-24	280	30752	1.6	20.8460	7.8	0.1676	8.1	0.0253	2.0	0.25	161.4	3.2	157.4	11.8	97.9	185.6	161.4	3.2	NA	
GVG-01-52	84	32653	2.4	18.4133	14.9	0.1900	16.3	0.0254	6.6	0.40	161.5	10.5	176.6	26.4	383.9	336.1	161.5	10.5	NA	
GVG-01-79	105	19880	2.4	19.9645	16.2	0.1753	17.1	0.0254	5.5	0.32	161.5	8.8	164.0	25.9	199.1	377.4	161.5	8.8	NA	
GVG-01-77	124	21563	1.2	24.4141	18.8	0.1434	19.5	0.0254	4.8	0.25	161.6	7.7	136.1	24.8	-290.1	484.1	161.6	7.7	NA	
GVG-01-37	73	15479	1.9	17.9624	28.9	0.1950	29.2	0.0254	4.2	0.14	161.7	6.7	180.9	48.3	439.3	654.4	161.7	6.7	NA	
GVG-01-76	358	39198	1.9	20.9210	5.3	0.1675	5.5	0.0254	1.5	0.26	161.8	2.3	157.2	8.0	89.3	126.1	161.8	2.3	NA	
GVG-01-69	184	23156	1.3	20.8184	15.1	0.1685	15.4	0.0254	3.0	0.19	161.9	4.7	158.1	22.5	101.0	358.1	161.9	4.7	NA	
GVG-01-63	437	58794	0.6	20.2036	5.2	0.1736	6.1	0.0254	3.2	0.52	162.0	5.1	162.6	9.1	171.4	120.9	162.0	5.1	NA	
GVG-01-05	74	16129	1.9	20.9485	40.5	0.1680	41.4	0.0255	8.9	0.21	162.5	14.3	157.7	60.6	86.2	996.8	162.5	14.3	NA	
GVG-01-64	94	29845	1.6	18.9533	22.2	0.1858	22.5	0.0255	3.7	0.16	162.6	5.9	173.1	35.8	318.5	509.6	162.6	5.9	NA	
GVG-01-02	287	59715	1.1	20.5969	9.0	0.1711	9.5	0.0256	3.1	0.32	162.7	5.0	160.3	14.2	126.2	213.0	162.7	5.0	NA	
GVG-01-70	112	15256	1.8	22.3782	22.1	0.1575	23.3	0.0256	7.5	0.32	162.7	12.0	148.5	32.2	-72.7	544.7	162.7	12.0	NA	

GVG-01-40	354	50915	2.0	20.0382	5.3	0.1762	5.7	0.0256	2.1	0.37	163.0	3.4	164.8	8.6	190.6	122.7	163.0	3.4	NA
GVG-01-50	55	10792	1.5	15.9478	53.3	0.2215	54.0	0.0256	8.6	0.16	163.0	13.9	203.1	99.7	698.2	#####	163.0	13.9	NA
GVG-01-60	117	25887	1.9	24.2040	33.3	0.1461	33.5	0.0256	3.3	0.10	163.2	5.4	138.4	43.4	-268.1	866.7	163.2	5.4	NA
GVG-01-51	120	15752	0.9	22.2980	25.8	0.1587	26.2	0.0257	4.7	0.18	163.4	7.6	149.6	36.5	-63.9	638.9	163.4	7.6	NA
GVG-01-42	191	31059	1.8	21.9388	16.3	0.1614	17.0	0.0257	4.9	0.29	163.5	7.9	151.9	24.0	-24.5	397.5	163.5	7.9	NA
GVG-01-97	101	32893	2.2	22.1548	21.5	0.1598	21.6	0.0257	2.5	0.12	163.5	4.0	150.6	30.3	-48.2	528.0	163.5	4.0	NA
GVG-01-16	46	5565	1.5	16.9955	95.7	0.2084	95.9	0.0257	6.5	0.07	163.5	10.4	192.2	169.5	561.2	576.0	163.5	10.4	NA
GVG-01-01	157	26311	1.4	20.9802	23.6	0.1691	23.8	0.0257	3.5	0.15	163.8	5.6	158.7	35.0	82.6	565.8	163.8	5.6	NA
GVG-01-12	374	21930	2.3	19.5955	9.5	0.1812	10.2	0.0258	3.9	0.38	163.9	6.4	169.1	16.0	242.3	218.4	163.9	6.4	NA
GVG-01-66	112	18228	1.3	21.3926	19.9	0.1660	20.1	0.0258	3.1	0.15	163.9	4.9	156.0	29.1	36.2	480.3	163.9	4.9	NA
GVG-01-23	70	14762	2.8	23.4589	68.9	0.1515	69.0	0.0258	4.3	0.06	164.1	7.0	143.3	92.5	-189.3	#####	164.1	7.0	NA
GVG-01-73	151	26216	1.6	25.2074	31.8	0.1411	32.0	0.0258	3.7	0.11	164.2	5.9	134.0	40.2	-372.3	841.4	164.2	5.9	NA
GVG-01-19	601	66223	1.1	19.7672	4.5	0.1800	4.6	0.0258	0.7	0.16	164.2	1.2	168.0	7.1	222.2	104.5	164.2	1.2	NA
GVG-01-68	270	61561	1.9	19.2039	7.4	0.1854	7.6	0.0258	1.7	0.22	164.3	2.7	172.7	12.1	288.6	169.9	164.3	2.7	NA
GVG-01-29	44	13034	1.5	21.9779	59.0	0.1620	59.5	0.0258	7.7	0.13	164.3	12.4	152.4	84.4	-28.8	#####	164.3	12.4	NA
GVG-01-100	113	21622	1.5	22.9712	29.4	0.1552	29.6	0.0259	3.0	0.10	164.5	4.8	146.5	40.4	-137.0	742.0	164.5	4.8	NA
GVG-01-62	57	9162	2.3	20.2217	30.8	0.1764	32.9	0.0259	11.6	0.35	164.7	18.9	165.0	50.2	169.3	735.1	164.7	18.9	NA
GVG-01-81	19	3619	3.5	6.7706	39.3	0.5271	42.7	0.0259	16.6	0.39	164.7	27.1	429.9	150.7	2319.4	705.2	164.7	27.1	NA
GVG-01-20	325	67659	1.5	21.4582	10.0	0.1666	10.1	0.0259	1.5	0.15	165.0	2.4	156.4	14.7	28.9	240.6	165.0	2.4	NA
GVG-01-35	51	14240	2.3	26.4693	89.8	0.1351	90.3	0.0259	9.5	0.10	165.1	15.4	128.7	109.6	-500.7	#####	165.1	15.4	NA
GVG-01-28	93	26059	2.2	27.6637	43.2	0.1294	43.3	0.0260	3.3	0.08	165.3	5.3	123.6	50.5	-619.7	#####	165.3	5.3	NA
GVG-01-30	60	11130	2.0	22.7021	38.6	0.1580	39.1	0.0260	6.0	0.15	165.5	9.9	148.9	54.2	-107.9	981.7	165.5	9.9	NA
GVG-01-61	48	7892	3.0	28.0011	36.1	0.1285	36.5	0.0261	5.6	0.15	166.1	9.3	122.8	42.2	-652.9	#####	166.1	9.3	NA
GVG-01-90	112	13097	2.1	21.7068	21.1	0.1667	21.4	0.0262	3.7	0.17	166.9	6.0	156.5	31.1	1.2	513.2	166.9	6.0	NA
GVG-01-85	195	36910	1.4	19.1306	10.2	0.1898	10.8	0.0263	3.5	0.33	167.5	5.9	176.4	17.5	297.3	233.3	167.5	5.9	NA
GVG-01-87	181	27757	2.4	21.0651	7.0	0.1723	7.8	0.0263	3.5	0.45	167.5	5.9	161.4	11.6	73.0	165.5	167.5	5.9	NA
GVG-01-34	44	11734	3.2	24.7428	73.0	0.1469	73.4	0.0264	7.5	0.10	167.8	12.4	139.2	95.8	-324.3	#####	167.8	12.4	NA
GVG-01-94	38	11039	1.5	6.7010	261.7	0.5429	262.1	0.0264	15.6	0.06	167.9	25.9	440.3	#####	2337.1	135.7	167.9	25.9	NA
GVG-01-46	35	10279	2.3	21.3656	59.5	0.1709	61.0	0.0265	13.4	0.22	168.5	22.3	160.2	90.7	39.3	#####	168.5	22.3	NA
GVG-01-88	58	12230	1.5	25.0984	43.1	0.1461	43.6	0.0266	6.9	0.16	169.2	11.6	138.5	56.6	-361.1	#####	169.2	11.6	NA
GVG-01-80	36	1797	2.5	15.6559	33.9	0.2498	35.1	0.0284	9.4	0.27	180.3	16.7	226.4	71.4	737.5	736.7	180.3	16.7	NA
GVG-01-04	10	4438	-18.9	27.6840	60.6	0.4026	61.7	0.0808	11.4	0.18	501.1	54.8	343.5	181.7	-621.7	#####	501.1	54.8	NA
GVG-01-65	506	314959	3.3	13.5128	0.4	1.7617	1.5	0.1726	1.4	0.97	1026.7	13.6	1031.5	9.6	1041.6	7.8	1041.6	7.8	98.6
GVG-01-18	114	164603	0.9	8.8873	0.7	5.1443	1.6	0.3316	1.5	0.91	1846.1	23.8	1843.5	13.8	1840.5	11.9	1840.5	11.9	100.3
GVG-01-27	90	435529	1.6	5.5107	0.3	12.7195	1.7	0.5084	1.7	0.98	2649.7	36.4	2659.1	16.1	2666.3	5.3	2666.3	5.3	99.4

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Analytical Notes (provided by Arizona Laserchron Center)

1. Analyses with >10% uncertainty (1-sigma) in 206Pb/238U age are not included.
2. Analyses with >10% uncertainty (1-sigma) in 206Pb/207Pb age are not included, unless 206Pb/238U age is <500 Ma.
3. Best age is determined from 206Pb/238U age for analyses with 206Pb/238U age <1000 Ma and from 206Pb/207Pb age for analyses with 206Pb/238Uage > 1000 Ma.
4. Concordance is based on 206Pb/238U age / 206Pb/207Pb age. Value is not reported for 206Pb/238U ages <500 Ma because of large uncertainty in 206Pb/207Pb age.
5. Analyses with 206Pb/238U age > 500 Ma and with >20% discordance (<80% concordance) are not included.
6. Analyses with 206Pb/238U age > 500 Ma and with >5% reverse discordance (<105% concordance) are not included.
7. All uncertainties are reported at the 1-sigma level, and include only measurement errors.
8. Systematic errors are as follows (at 2-sigma level): [GP-07: 1.9% (206Pb/238U) & 1.0% (206Pb/207Pb)]; [GP-02: 1.1% (206Pb/238U) & 0.9% (206Pb/207Pb)]; [GP-03: 1.3% (206Pb/238U) & 0.9% (206Pb/207Pb)]; [GP-08: 1.3% (206Pb/238U) & 0.9% (206Pb/207Pb)]; [GP-12: 1.5% (206Pb/238U) & 1.0% (206Pb/207Pb)]; [GP-13: 1.2% (206Pb/238U) & 0.9% (206Pb/207Pb)]; [GP-09: 2.2% (206Pb/238U) & 1.3% (206Pb/207Pb)]; [G VG-103: 1.3% (206Pb/238U) & 0.9% (206Pb/207Pb)]; [G VG-102: 1.5% (206Pb/238U) & 0.9% (206Pb/207Pb)]; [G VG-101: 1.4% (206Pb/238U) & 0.8% (206Pb/207Pb)].
9. Analyses conducted by LA-MC-ICPMS, as described by Gehrels et al. (2008).
10. U concentration and U/Th are calibrated relative to Sri Lanka zircon standard and are accurate to ~20%.
11. Common Pb correction is from measured 204Pb with common Pb composition interpreted from Stacey and Kramers (1975).
12. Common Pb composition assigned uncertainties of 1.5 for 206Pb/204Pb, 0.3 for 207Pb/204Pb, and 2.0 for 208Pb/204Pb.
13. U/Pb and 206Pb/207Pb fractionation is calibrated relative to fragments of a large Sri Lanka zircon of 563.5 ± 3.2 Ma (2-sigma).
14. U decay constants and composition as follows: $238\text{U} = 9.8485 \times 10^{-10}$, $235\text{U} = 1.55125 \times 10^{-10}$, $238\text{U}/235\text{U} = 137.88$.
15. Weighted mean and concordia plots determined with Isoplot (Ludwig, 2008).

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