Geochronology samples were collected from both outcrop and core. Approximately 3-5 kg of material were collected from each sample locality. Core samples were collected from the sandiest parts of the core interval examined. A 1.5 m continuous section of core was sampled by cutting a 2.5 cm wide slice off of the back of the core. Prior to further processing, the pieces of core were washed and scrubbed with a wire brush to remove possible contamination from drilling mud. Samples were then crushed using a rock hammer and disc mill (Larsen and Poldervaart, 1957), and sorted by density using a Wilfley table and organic heavy liquids (bromoform (ρ=2.96 g/cm^3) and methylene iodide (ρ=3.32)). Prior to the heavy liquid mineral separation, a Frantz magnetic separator was used in freefall mode to remove metal shavings and strongly magnetic minerals. Following the heavy liquid separation, samples were processed through a Frantz magnetic separator three times, once with all of the grains at 1.0 A, once with the non-magnetic fraction from the previous step at 1.8 A, and finally the magnetic fraction at 1.8 A to ensure that no non-magnetic grains had become entrained with the magnetic grains and improperly sorted. The mechanical parameters for each of these steps were set at 20˚ side slope and 20˚ front slope to minimize bias towards less paramagnetic age populations at the expense of increased discordance in the sample population (Sircombe and Stern, 2002). To minimize bias in visual picking, 1000-2000 grains were separated from a small aliquot of the non-magnetic fraction. From the selected fraction ~500 grains were pipetted onto a sheet of weighing paper and dried. Each sample was allotted a 1 x 10 mm space on the 2.5 cm epoxy mount, and as many pipetted grains as possible were placed in 4 rows on double-stick tape to construct the mount. Typically 250-350 grains were mounted per sample. Epoxy was poured around the grains to create a 1” diameter epoxy mount. The epoxy mount was ground using a 30 μm grit grinding disc to expose the grains, and then polished using 1 μm grit polishing paste. Cathodoluminescence (CL) images were produced for each grain to serve as a guide during ablation.

Zircon grains were analyzed on a GVI Isoprobe multicollector magnetic sector Laser Ablation-Inductively Coupled Plasma-Mass Spectrometer (LA-ICP-MS) with a Merchantek New Wave LUV213 sample introduction system, using a 213 nm Nd:YAG laser to ablate the grains. Faraday cups with 10^{11} Ω resistors were used to collect ^{238}U, ^{207}Pb, and ^{206}Pb, while a channeltron ion counter was used to collect ^{204}Pb in isobaric interference with ^{204}Hg. The laser was set at 52% power with a 30 μm spot size and 10 Hz laser cycle, resulting in approximately 70-80 J/cm^2 of energy delivered to ablate the zircon grain during each analysis. U concentrations for each grain were determined based on an analysis carried out on NIST SRM 610 glass (^{238}U concentration ~461.5 ppm) (Reed, 1992) at the beginning of each day. Prior to analysis, each grain was pre-ablated for 1-2 s with an expanded 410 μm laser beam, delivering 2-3 J/cm^2 of energy, in order to remove any material that may have accumulated on the grain surfaces while the mount was exposed during transfer to the sample introduction system. Each analysis consisted of 30 s data collection prior to ablation to measure background counts, otherwise known as an on peak zero, 10 s warm-up time for the laser and 20 s analysis time, followed by 20-30 s to flush the ablation chamber before analyzing the next grain. Every effort was made to ablate only the most recent magmatic growth of each grain since this will indicate its crystallization age and can be linked to a basement provenance. CL images were used to identify recycled cores and metamorphic rims on grains so that they could be avoided during isotopic analysis (Connelly, 2001; Corfu et al., 2003). To reduce the effects of any bias in the order of the placement of grains in the mounts every other grain was analyzed, so that grains from all rows could be analyzed. Analyses of the in-house standard S97-19 were conducted after every 15 unknown grains to characterize mass fractionation and elemental (U/Pb) bias during the course of the day. S97-19 has been characterized by ID-TIMS at The University of Texas at Austin. In addition, the Plešovice (PL) zircon standard (Sláma et al., 2008) was analyzed to monitor system behavior. Reproducibility of PL during the course of the measurements was 336.7±1.4

(2σ, n=140). Typically 135-150 grains were analyzed per sample, so that even after rejecting some analyses due to high discordance or error there should be approximately 120 acceptable ages for each sample. This meets the criteria of Vermeesch (2004), so it is possible to be certain, at the 95% confidence level, of not missing a fraction of the population comprising at least 5% of the total population. While many detrital zircon studies typically have approximately 100 grains per sample ~~(Dickinson and Gehrels, 2003, 2008a, b, 2009; Dickinson et al., 2009)~~, Andersen (2005) warns that interpretations of the relative proportions of inputs from different source areas even when 120 grains are analyzed must be looked at with caution. In his study, Andersen (2005) used Monte Carlo simulations to compare the age spectra of samples of 120 grains drawn from a total population of 2000 grains to the age spectra of the total population, and found that the sample populations were not quantitatively similar to the total population.

Data were downloaded and reduced off-line using in-house Excel software to remove unacceptable data points for each analysis that may be the product of common Pb on the surface of the epoxy mount, ablating into another zone of the grain or ablating all the way through the grain. Depth-dependent U/Pb fractionation was also corrected at this step by using regression of the U/Pb data points to determine the initial U/Pb ratio at time zero (Košler and Sylvester, 2003). A second step of data reduction was conducted to correct for mass fractionation, elemental bias, and initial Pb. An isobarically corrected $^{206}Pb/^{204}Pb$ ratio was determined using the method of Gehrels et al. (2006), and then used to correct for common Pb using the Stacey and Kramers (1975) model for Pb evolution. Following established lab procedure, no uncertainty was applied to the common Pb correction. Work by the University of Texas at Austin LA-ICP-MS lab has found that for moderately radiogenic zircons, the uncertainty on the grain age is dominated by uncertainty on the U/Pb ratios, while uncertainty on the common Pb correction typically makes up less than 1% of the final age uncertainty (Housh, 2009, personal communication). Finally, mass fractionation and elemental bias factors determined on

the standard were applied to the unknowns to determine the corrected, radiogenic $^{206}Pb^*/^{238}U$ and $^{207}Pb^*/^{206}Pb^*$ ratios and ages. The $^{207}Pb^*/^{235}U$ ratio and age was determined using a $^{238}U/^{235}U$ ratio of 137.88 (Faure and Mensing, 2005). Measured errors as well as the errors associated with mass fractionation and the elemental (U/Pb) bias determined on the standard S97-19 were propagated to yield the final errors on $^{207}Pb^*/^{206}Pb^*$, $^{206}Pb^*/^{238}U$, and $^{207}Pb^*/^{235}U$ for the unknown grains; measured errors alone are reported for $^{206}Pb/^{204}Pb$. The best ages for each grain were identified based on the $^{206}Pb^*/^{238}U$ age for grains generally younger than 1000 Ma and the $^{207}Pb^*/^{206}Pb^*$ age for grains generally older than 1000 Ma; however, the precise cutoff was picked individually for each sample to avoid splitting up clusters of grain ages. Discordance for each analysis was determined using the following equation:

$$Discordance = \left(\frac{^{207}Pb^*/^{235}U\ age - {}^{206}Pb^*/^{238}U\ age}{\left(^{207}Pb^*/^{235}U\ age + {}^{206}Pb^*/^{238}U\ age\right)/2} \right) \quad (1)$$

Grains were filtered by discordance and error with the filter being set at -10% to 60% discordance for grains younger than 350 Ma, -10% to 30% discordance for grains 1000-350 Ma in age, and -5% to 10% discordance for grains older than 1000 Ma. Grains outside of those ranges or with 1σ error exceeding 10% on the best age were excluded from further analysis.

All plots and analysis were conducted using Isoplot 3.2 and 3.7 (Ludwig, 2003, 2008) and Excel worksheets designed by the University of Arizona (U of A) Laserchron center (available online at http://sites.google.com/a/laserchron.org/laserchron/home). Statistical tests of sample similarity were conducted using the K-S Test 1.0.xls spreadsheet available from the U of A Laserchron center. The website listed above has documentation on how the spreadsheet works, but in short it uses a non-parametric Kolmogorov-Smirnov test to compare the cumulative probability density functions of the two samples. The maximum distance between the two curves is determined and is used

to calculate the probability that the two samples came from the same population. If P>0.05 then the user can not be confident, at the 95% confidence level, that the samples were not drawn from different sources~~the samples are said to have come from the sample population at the 95% confidence interval~~.

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Sample Name: GM-C-051408-1 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	158
Poly Crystalline:	23
Volcanic:	2
Sedimentary:	3
Total:	186
Feldspar	
Plagioclase:	3
Orthoclase:	2
Microcline:	5
Total	10
Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	1
Chert:	7
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	4
Unknown SRF:	
Total:	12
Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	6
Quartz-Rich	
foliated:	1
polygonal:	1
Mica-Rich	
foliated:	1
polygonal:	
Unknown MRF:	
Total:	9
Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	1
Felsitic:	1
Altered VRF:	
Unknown VRF:	
Total:	2
Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0
Other	
Unknown RF:	
Total:	0
Matrix	
Clay Cutans:	56
Pore Filling:	
Total:	56

[a] Rock Fragment

Category	Counts
Porosity	
Intergranular:	64
Intragranular Plagioclase:	4
Intragranular Microcline:	1
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	4
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	2
Intragranular Unknown Grain:	
Total:	75
Cement/Overgrowth	
Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	0
Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-C-051408-2 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	138
Poly Crystalline:	16
Volcanic:	5
Sedimentary:	3
Total:	162
Feldspar	
Plagioclase:	1
Orthoclase:	5
Microcline:	4
Total	10
Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	
Chert:	5
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	3
Unknown SRF:	
Total:	8
Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	2
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	2
Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	1
Unknown VRF:	
Total:	1
Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0
Other	
Unknown RF:	
Total:	0
Matrix	
Clay Cutans:	40
Pore Filling:	
Total:	40

[a] Rock Fragment

Category	Counts
Porosity	
Intergranular:	93
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	1
Oversized:	30
Intragrannular VRF	
Altered VRF:	1
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	126
Cement/Overgrowth	
Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	0
Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	1
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	1

Sample Name: GM-C-051408-3 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 349

Category	Counts
Quartz	
Mono Crystalline:	150
Poly Crystalline:	14
Volcanic:	
Sedimentary:	1
Total:	165

Feldspar	
Plagioclase:	1
Orthoclase:	3
Microcline:	
Total	4

Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	1
Chert:	8
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	4
Unknown SRF:	1
Total:	15

Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	0

Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	
Unknown VRF:	
Total:	0

Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	1
Sphene:	
Zircon:	1
Total:	2

Other	
Unknown RF:	
Total:	0

Matrix	
Clay Cutans:	27
Pore Filling:	15
Total:	42

Category	Counts
Porosity	
Intergranular:	90
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	2
Intragranular Unknown Feldspar:	1
Oversized:	26
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Chert:	1
Intragranular Unknown RF:	
Intragranular Unknown Grain:	1
Total:	121

Cement/Overgrowth	
Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	0

Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	

Unknown Grain:	
Total:	0

[a] Rock Fragment

Sample Name: GM-C-051408-5 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 352

Category	Counts
Quartz	
Mono Crystalline:	171
Poly Crystalline:	20
Volcanic:	
Sedimentary:	
Total:	191

Category	Counts
Feldspar	
Plagioclase:	
Orthoclase:	7
Microcline:	1
Unknown Feldspar:	1
Total	9

Category	Counts
Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	2
Chert:	3
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	4
Unknown SRF:	
Total:	9

Category	Counts
Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	0

Category	Counts
Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	1
Felsitic:	3
Altered VRF:	1
Unknown VRF:	
Total:	5

Category	Counts
Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Category	Counts
Other	
Unknown RF:	
Unknown Highly Dissolved Grain:	3
Total:	3

Matrix

Category	Counts
Porosity	
Intergranular:	84
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	1
Oversized:	21
Intragrannular VRF	
Altered VRF:	1
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	107

Category	Counts
Cement/Overgrowth	
Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	0

Category	Counts
Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	

Clay Cutans:	28
Pore Filling:	
Total:	28

[a] Rock Fragment

VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-C-051408-7 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 350

Quartz

Category	Counts
Mono Crystalline:	142
Poly Crystalline:	22
Volcanic:	12
Sedimentary:	1
Total:	177

Feldspar

Category	Counts
Plagioclase:	1
Orthoclase:	3
Microcline:	
Total	4

Sedimentary Rock Fragment (SRF)

Category	Counts
Argillaceous RF[a]:	
Chert:	2
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	4
Unknown SRF:	
Total:	7

Metamorphic Rock Fragment (MRF)

Category	Counts
Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	0

Volcanic Rock Fragment (VRF)

Category	Counts
Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	1
Unknown VRF:	
Total:	2

Accessory Minerals

Category	Counts
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Category	Counts
Unknown RF:	

Porosity

Category	Counts
Intergranular:	59
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	1
Oversized:	12
Intragrannular VRF	
Unknown VRF:	3
Intragrannular MRF	
Intragrannular SRF	
Siltstone RF:	1
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	77

Cement/Overgrowth

Category	Counts
Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	0

Grain Replacement

Category	Counts
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	

Total:	0

Matrix

Clay Cutans:	67
Pore Filling:	16
Total:	83

[a] Rock Fragment

Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-C-051408-8 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 348

Quartz

Category	Counts
Mono Crystalline:	160
Poly Crystalline:	14
Volcanic:	1
Sedimentary:	
Total:	175

Feldspar

Plagioclase:	
Orthoclase:	1
Microcline:	
Total	1

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	7
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	
Unknown SRF:	
Local Siltstone RF:	9
Local Argillaceous RF:	2
Total:	18

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	0

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	
Unknown VRF:	
Total:	0

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Porosity

Category	Counts
Intergranular:	36
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	8
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	44

Cement/Overgrowth

Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	0

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	31
Pore Filling:	79
Total:	110

[a] Rock Fragment

Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-C-051408-9 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 360

Category	Counts
Quartz	
Mono Crystalline:	163
Poly Crystalline:	16
Volcanic:	16
Sedimentary:	3
Total:	198

Feldspar

Plagioclase:	1
Orthoclase:	8
Microcline:	4
Total	13

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	2
Chert:	7
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	
Unknown SRF:	
Total:	10

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	1

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	
Unknown VRF:	
Total:	1

Accessory Minerals

Muscovite:	1
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	

Category	Counts
Porosity	
Intergranular:	9
Intragranular Plagioclase:	1
Intragranular Microcline:	1
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	11

Cement/Overgrowth

Quartz:	
Kaolinte:	2
Fe-Oxide:	
Calcite	
intergranular:	123
oversized:	
Total:	125

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	

Total:	1

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-C-051408-10 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	94
Poly Crystalline:	13
Volcanic:	11
Sedimentary:	2
Total:	120

Feldspar

Plagioclase:	
Orthoclase:	19
Microcline:	4
Total	23

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	8
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	5
Unknown SRF:	
Total:	14

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	1

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	5
Altered VRF:	
Unknown VRF:	
Total:	5

Accessory Minerals

Muscovite:	
Biotite:	

Category	Counts
Porosity	
Intergranular:	38
Intragranular Plagioclase:	
Intragranular Microcline:	1
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	2
Intragrannular VRF	
Unknown VRF:	1
Intragrannular MRF	
Quartz-Rich, Foliated:	2
Intragrannular SRF	
Chert:	4
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	48

Cement/Overgrowth

Quartz:	
Kaolinte:	3
Fe-Oxide:	
Calcite	
intergranular:	122
oversized:	3
Total:	128

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	4
Microcline:	
Plagioclase:	

Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	3
Unknown Highly Dissolved Grain:	4
Total:	7

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	4

Sample Name: GM-C-051408-11 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 351

Category	Counts
Quartz	
Mono Crystalline:	154
Poly Crystalline:	23
Volcanic:	8
Sedimentary:	2
Total:	187

Feldspar

Plagioclase:	2
Orthoclase:	7
Microcline:	1
Total	10

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	3
Chert:	3
Siltstone RF:	10
Sandstone RF:	
Argillaceous Chert:	3
Unknown SRF:	
Total:	19

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	1
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	2

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	
Unknown VRF:	2
Total:	2

Category	Counts
Porosity	
Intergranular:	2
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	7
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Siltstone RF:	4
Sandstone RF:	1
Argillaceous RF:	1
Intragranular Unknown RF:	1
Intragranular Unknown Grain:	
Total:	16

Cement/Overgrowth

Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	104
oversized:	8
Total:	112

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	

Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other	
Unknown RF:	
Total:	0

Matrix	
Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Calcite	
Orthoclase:	2
Microcline:	1
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	3

Sample Name: GM-C-051408-12 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	134
Poly Crystalline:	17
Volcanic:	5
Sedimentary:	5
Total:	161

Feldspar	
Plagioclase:	
Orthoclase:	11
Microcline:	
Total	11

Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	1
Chert:	11
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	7
Unknown SRF:	
Total:	19

Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	2
polygonal:	3
Mica-Rich	
foliated:	
polygonal:	1
Unknown MRF:	
Total:	6

Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	1
Unknown VRF:	

Category	Counts
Porosity	
Intergranular:	95
Intragranular Plagioclase:	
Intragranular Microcline:	1
Intragranular Potassium Feldspar	6
Intragranular Unknown Feldspar:	
Oversized:	5
Intragrannular VRF	
Unknown VRF:	2
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	109

Cement/Overgrowth	
Quartz:	
Kaolinte:	3
Fe-Oxide:	
Calcite	
intergranular:	27
oversized:	
Total:	30

Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	

Total:	1

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Mica:	1
Unknown RF:	
Unknown Grain:	2
Calcite	
Orthoclase:	1
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	1
VRF:	
MRF:	1
Mica:	
Unknown RF:	1
Unknown Grain:	6
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	13

Sample Name: GM-C-051408-13 Sub-unit: Upper Wilcox
Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	160
Poly Crystalline:	13
Volcanic:	15
Sedimentary:	4
Total:	192

Feldspar

Plagioclase:	
Orthoclase:	5
Microcline:	1
Total	6

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	9
Siltstone RF:	2
Sandstone RF:	
Argillaceous Chert:	4
Unknown SRF:	
Total:	15

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	0

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	

Category	Counts
Porosity	
Intergranular:	65
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	
Oversized:	12
Intragrannular VRF	
Unknown VRF:	1
Intragrannular MRF	
Intragrannular SRF	
Chert:	2
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	81

Cement/Overgrowth

Quartz:	
Kaolinte:	5
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	5

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	

Felsitic:	
Altered VRF:	
Unknown VRF:	
Total:	0

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	30
Pore Filling:	21
Total:	51

[a] Rock Fragment

SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-C-051408-14 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	130
Poly Crystalline:	10
Volcanic:	10
Sedimentary:	6
Total:	156

Feldspar

Plagioclase:	
Orthoclase:	21
Microcline:	2
Total	23

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	3
Chert:	5
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	2
Unknown SRF:	
Total:	10

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	4
Mica-Rich	
foliated:	
polygonal:	1
Unknown MRF:	
Total:	6

Category	Counts
Porosity	
Intergranular:	2
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	2

Cement/Overgrowth

Quartz:	
Kaolinte:	
Fe-Oxide:	1
Calcite	
intergranular:	127
oversized:	20
Total:	148

Grain Replacement

Kaolinite	
Orthoclase:	

Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	3
Altered VRF:	
Unknown VRF:	
Total:	3

Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other	
Unknown RF:	
Total:	0

Matrix	
Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	2
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	2

Sample Name: GM-C-051508-1 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	150
Poly Crystalline:	9
Volcanic:	6
Sedimentary:	3
Total:	168

Feldspar	
Plagioclase:	
Orthoclase:	19
Microcline:	1
Total	20

Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	
Chert:	5
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	5
Unknown SRF:	
Total:	11

Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	2
polygonal:	4
Mica-Rich	
foliated:	1
polygonal:	
Unknown MRF:	

Category	Counts
Porosity	
Intergranular:	80
Intragranular Plagioclase:	
Intragranular Microcline:	1
Intragranular Potassium Feldspar	4
Intragranular Unknown Feldspar:	
Oversized:	4
Intragrannular VRF	
Altered VRF:	2
Intragrannular MRF	
Quartz-Rich, Polygonal:	1
Intragrannular SRF	
Chert:	1
Intragranular Unknown RF:	3
Intragranular Unknown Grain:	
Total:	96

Cement/Overgrowth	
Quartz:	
Kaolinte:	2
Fe-Oxide:	7
Calcite	
intergranular:	
oversized:	
Total:	9

Total:	7

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	5
Unknown VRF:	
Total:	6

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	1
Unknown Highly Dissolved Grain:	1
Total:	2

Matrix

Clay Cutans:	
Pore Filling:	31
Total:	31

[a] Rock Fragment

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-C-051508-2
Sample Type: Outcrop

Sub-unit: Upper Wilcox
Total Points Counted: 349

Category	Counts
Quartz	
Mono Crystalline:	105
Poly Crystalline:	19
Volcanic:	6
Sedimentary:	3
Total:	133

Feldspar

Plagioclase:	
Orthoclase:	11
Microcline:	1
Total	12

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	2
Chert:	12
Siltstone RF:	2
Sandstone RF:	
Argillaceous Chert:	15
Unknown SRF:	1
Total:	32

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	

Category	Counts
Porosity	
Intergranular:	1
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	1
Oversized:	
Intragrannular VRF	
Intragrannular MRF	
Siltstone RF:	2
Intragrannular SRF	
Intragranular Unknown RF:	1
Intragranular Unknown Grain:	
Total:	5

Cement/Overgrowth

Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	154

Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	0

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	2
Altered VRF:	
Unknown VRF:	
Total:	2

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

oversized:	7
Total:	161

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	2
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	2
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	4

Sample Name: GM-C-051508-3 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	104
Poly Crystalline:	18
Volcanic:	17
Sedimentary:	2
Total:	141

Feldspar

Plagioclase:	
Orthoclase:	9
Microcline:	
Total	9

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	1
Chert:	41
Siltstone RF:	3
Sandstone RF:	1
Argillaceous Chert:	10
Unknown SRF:	
Evaporitic Quartz with Chalcedony Overgrowth:	1
Total:	57

Metamorphic Rock Fragment (MRF)

Category	Counts
Porosity	
Intergranular:	114
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	4
Intragranular Unknown Feldspar:	
Oversized:	3
Intragrannular VRF	
Lathwork:	1
Intragrannular MRF	
Intragrannular SRF	
Chert:	1
Siltstone RF:	1
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	124

Cement/Overgrowth

Quartz:	
Kaolinte:	3
Fe-Oxide:	

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	1
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	2

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	3
Altered VRF:	5
Unknown VRF:	
Total:	8

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Unknown Highly Dissolved Grain:	6
Total:	6

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Calcite	
intergranular:	
oversized:	
Total:	3

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-C-051608-1 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 348

Category	Counts
Quartz	
Mono Crystalline:	155
Poly Crystalline:	25
Volcanic:	19
Sedimentary:	3
Total:	202

Feldspar

Plagioclase:	
Orthoclase:	4
Microcline:	2
Total	6

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	1
Siltstone RF:	2
Sandstone RF:	
Argillaceous Chert:	2
Unknown SRF:	

Category	Counts
Porosity	
Intergranular:	
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	1
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	1

Total:	5

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	0

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	
Unknown VRF:	
Total:	0

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Cement/Overgrowth

Quartz:	
Kaolinte:	1
Fe-Oxide:	1
Oversized Fe-O:	3
Calcite	
intergranular:	124
oversized:	4
Total:	133

Grain Replacement

Kaolinite:	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	1
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	1

Sample Name: GM-C-051608-2 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 362

Category	Counts
Quartz	
Mono Crystalline:	148
Poly Crystalline:	21
Volcanic:	3
Sedimentary:	8
Total:	180

Feldspar

Plagioclase:	2
Orthoclase:	7
Microcline:	1
Total	10

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	1
Chert:	4
Siltstone RF:	1

Category	Counts
Porosity	
Intergranular:	
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	
Intragrannular VRF	
Intragrannular MRF	
Unknown MRF:	1
Intragrannular SRF	
Intragranular Unknown RF:	

Sandstone RF:	
Argillaceous Chert:	3
Unknown SRF:	
Total:	9

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	1

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	
Unknown VRF:	
Total:	0

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Intragranular Unknown Grain:	
Total:	1

Cement/Overgrowth

Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	131
oversized:	28
Total:	159

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	2
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	2

Sample Name: GM-C-051608-3 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	140
Poly Crystalline:	17
Volcanic:	2
Sedimentary:	2
Total:	161

Feldspar

Plagioclase:	3
Orthoclase:	11
Microcline:	
Unknown Feldspar:	1
Total	15

Sedimentary Rock Fragment (SRF)

Category	Counts
Porosity	
Intergranular:	78
Intragranular Plagioclase:	2
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	
Oversized:	4
Intragrannular VRF	
Altered VRF:	1
Intragrannular MRF	
Quartzofeldspathic:	2
Quartz-Rich, Foliated	2
Intragrannular SRF	
Chert	2

Argillaceous RF[a]:	
Chert:	13
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	6
Unknown SRF:	
Total:	20

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	3
polygonal:	3
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	6

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	2
Unknown VRF:	1
Total:	4

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	45
Total:	45

[a] Rock Fragment

Intragranular Unknown RF:	2
Intragranular Unknown Grain:	
Total:	94

Cement/Overgrowth

Quartz:	
Kaolinte:	1
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	1

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	1
Unknown RF:	1
Unknown Grain:	2
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	4

Sample Name: GM-C-051608-4 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 349

Category	Counts
Quartz	
Mono Crystalline:	176
Poly Crystalline:	17
Volcanic:	2
Sedimentary:	6
Total:	201

Feldspar

Plagioclase:	1
Orthoclase:	4
Microcline:	3

Category	Counts
Porosity	
Intergranular:	97
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	2
Oversized:	8
Intragrannular VRF	
Altered VRF:	1
Intragrannular MRF	
Quartz-Rich, Polygonal:	1

Total	8

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	2
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	4
Unknown SRF:	
Total:	6

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	2
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	3

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	4
Altered VRF:	
Unknown VRF:	
Total:	4

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	2
Total:	2

[a] Rock Fragment

Intragrannular SRF	
Chert:	2
Intragranular Unknown RF:	2
Intragranular Unknown Grain:	
Total:	114

Cement/Overgrowth

Quartz:	
Kaolinte:	3
Fe-Oxide:	2
Calcite	
intergranular:	
oversized:	
Total:	5

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	1
Unknown RF:	
Unknown Grain:	2
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	3
Total:	6

Sample Name: GM-C-051608-5 Sub-unit: Upper Wilcox

Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	179
Poly Crystalline:	23
Volcanic:	2
Sedimentary:	3
Total:	207

Feldspar

Plagioclase:	
Orthoclase:	3

Category	Counts
Porosity	
Intergranular:	96
Intragranular Plagioclase:	
Intragranular Microcline:	1
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	1
Oversized:	
Intragrannular VRF	

Microcline:	7
Total	10

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	7
Siltstone RF:	2
Sandstone RF:	
Argillaceous Chert:	1
Unknown SRF:	
Lengthslow Chalcedony:	1
Total:	11

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	6
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	6

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	2
Altered VRF:	2
Unknown VRF:	2
Total:	6

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Unknown Highly Dissolved Grain:	6
Total:	6

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Intragrannular MRF	
Intragrannular SRF	
Chert:	1
Unknown SRF:	1
Intragranular Unknown RF:	1
Intragranular Unknown Grain:	
Total:	101

Cement/Overgrowth

Quartz:	
Kaolinte:	3
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	3

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: Bailey1C-10474
Sample Type: Core
Sub-unit: Upper Wilcox
Total Points Counted: 345

Category	Counts
Quartz	
Mono Crystalline:	215
Poly Crystalline:	6
Volcanic:	
Sedimentary:	
Total:	221

Category	Counts
Porosity	
Intergranular:	33
Intragranular Plagioclase:	1
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	6
Oversized:	19

Feldspar

Plagioclase:	14
Orthoclase:	2
Microcline:	
Total	16

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	3
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	
Unknown SRF:	
Total:	3

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	5
polygonal:	3
Mica-Rich	
foliated:	1
polygonal:	
Unknown MRF:	
Total:	9

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	
Unknown VRF:	
Total:	0

Accessory Minerals

Muscovite:	1
Biotite:	
Tourmaline:	1
Sphene:	
Zircon:	
Total:	2

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Intragrannular VRF	
Felsitic:	1
Intragrannular MRF	
Quartzofeldspathic:	1
Intragrannular SRF	
Intragranular Unknown RF:	3
Intragranular Unknown Grain:	
Total:	65

Cement/Overgrowth

Quartz:	6
Kaolinte:	5
Fe-Oxide:	2
Calcite	
intergranular:	
oversized:	
Total:	13

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	7
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	9
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	16

Sample Name: Bailey1C-10491 Sub-unit: Upper Wilcox

Sample Type: Core Total Points Counted: 350

Category	Counts	Category	Counts
Quartz		Porosity	
Mono Crystalline:	214	Intergranular:	21
Poly Crystalline:	9	Intragranular Plagioclase:	
Volcanic:	3	Intragranular Microcline:	

Sedimentary:	
Total:	226

Feldspar

Plagioclase:	6
Orthoclase:	2
Microcline:	
Unknown Feldspar	1
Total	9

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	3
Chert:	5
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	2
Unknown SRF:	
Total:	10

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	2
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	1
Total:	3

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	1
Felsitic:	4
Altered VRF:	1
Unknown VRF:	
Total:	6

Accessory Minerals

Muscovite:	1
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	1
Total:	2

Other

Unknown RF:	1
Total:	1

Matrix

Clay Cutans:	
Pore Filling:	9
Total:	9

[a] Rock Fragment

Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	1
Oversized:	4
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Chert:	1
Intragranular Unknown RF:	
Intragranular Unknown Grain:	3
Total:	30

Cement/Overgrowth

Quartz:	25
Kaolinte:	2
Fe-Oxide:	1
Calcite	
intergranular:	17
oversized:	5
Total:	50

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	1
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	3
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	4

Sample Name: Urban1-13896 Sub-unit: Upper Wilcox

Sample Type: Core Total Points Counted: 344

Category	Counts	Category	Counts
Quartz		Porosity	

Mono Crystalline:	206
Poly Crystalline:	7
Volcanic:	1
Sedimentary:	
Total:	214

Feldspar

Plagioclase:	8
Orthoclase:	2
Microcline:	
Total	10

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	2
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	
Unknown SRF:	
Total:	2

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	4
Mica-Rich	
foliated:	2
polygonal:	
Unknown MRF:	
Total:	7

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	
Unknown VRF:	
Total:	1

Accessory Minerals

Muscovite:	2
Biotite:	1
Tourmaline:	
Sphene:	
Zircon:	
Total:	3

Other

Unknown RF:	1
Total:	1

Matrix

Clay Cutans:	
Pore Filling:	6
Total:	6

[a] Rock Fragment

Intergranular:	52
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	7
Oversized:	3
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	1
Intragranular Unknown Grain:	2
Total:	66

Cement/Overgrowth

Quartz:	7
Kaolinte:	
Fe-Oxide:	5
Calcite	
intergranular:	
oversized:	7
Total:	19

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	10
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	5
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	15

Sample Name: Urban1-14097 Sub-unit: Upper Wilcox

Sample Type: Core Total Points Counted: 348

Category	Counts
Quartz	
Mono Crystalline:	184
Poly Crystalline:	14
Volcanic:	5
Sedimentary:	
Total:	203

Feldspar	
Plagioclase:	8
Orthoclase:	
Microcline:	
Total	8

Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	
Chert:	1
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	
Unknown SRF:	
Total:	1

Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	2
polygonal:	4
Mica-Rich	
foliated:	1
polygonal:	
Unknown MRF:	
Total:	7

Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	
Unknown VRF:	
Total:	0

Accessory Minerals	
Muscovite:	3
Biotite:	1
Tourmaline:	
Sphene:	
Zircon:	1
Total:	5

Other	
Unknown RF:	
Total:	0

Matrix	
Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Category	Counts
Porosity	
Intergranular:	35
Intragranular Plagioclase:	3
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	7
Oversized:	27
Intragrannular VRF	
Lathwork:	1
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	1
Intragranular Calcite replacing Feldspar	2
Mica:	2
Total:	78

Cement/Overgrowth	
Quartz:	13
Kaolinte:	
Fe-Oxide:	1
Calcite	
intergranular:	19
oversized:	
Total:	33

Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	1
Unknown Feldspar:	12
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	13

Sample Name: GM-W-051408-1 Sub-unit: Lower Wilcox
Sample Type: Outcrop Total Points Counted: 351

Category	Counts
Quartz	
Mono Crystalline:	123
Poly Crystalline:	14
Volcanic:	16
Sedimentary:	1
Total:	154

Feldspar	
Plagioclase:	1
Orthoclase:	9
Microcline:	7
Unknown Feldspar:	1
Total	18

Sedimentary Rock Fragment (SRF)	
Argillaceous RFa:	
Chert:	6
Siltstone RF:	2
Sandstone RF:	
Argillaceous Chert:	3
Unknown SRF:	
Evaporitic Quartz with Chalcedony Overgrowth:	1
Total:	12

Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	7
Mica-Rich	
foliated:	1
polygonal:	1
Unknown MRF:	
Total:	9

Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	2
Altered VRF:	1
Unknown VRF:	
Total:	3

Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other	
Unknown RF:	
Unknown Highly Dissolved Grain:	8
Total:	8

Matrix	
Clay Cutans:	

Category	Counts
Porosity	
Intergranular:	84
Intragranular Plagioclase:	
Intragranular Microcline:	1
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	1
Oversized:	7
Intragrannular VRF	
Altered VRF:	1
Intragrannular MRF	
Intragrannular SRF	
Argillaceous Chert:	2
Siltstone RF:	1
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	98

Cement/Overgrowth	
Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	29
oversized:	
Total:	29

Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	6
Unknown RF:	
Unknown Grain:	
Siderite:	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	2
SRF:	
VRF:	
MRF:	1
Mica:	
Unknown RF:	
Unknown Grain:	11
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	

Pore Filling:	
Total:	0

Mica:	
Unknown RF:	
Unknown Grain:	
Total:	20

[a] Rock Fragment

Sample Name: GM-W-051508-2 Sub-unit: Lower Wilcox
Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	116
Poly Crystalline:	16
Volcanic:	1
Sedimentary:	
Total:	133

Feldspar	
Plagioclase:	1
Orthoclase:	10
Microcline:	2
Total	13

Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	1
Chert:	21
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	14
Unknown SRF:	
Total:	36

Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	2
Quartz-Rich	
foliated:	1
polygonal:	4
Mica-Rich	
foliated:	2
polygonal:	
Unknown MRF:	
Total:	9

Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	6
Unknown VRF:	
Total:	6

Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other	
Unknown RF:	
Total:	0

Category	Counts
Porosity	
Intergranular:	90
Intragranular Plagioclase:	2
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	3
Intragrannular VRF	
Unknown VRF:	3
Altered VRF:	3
Intragrannular MRF	
Intragrannular SRF	
Chert:	3
Intragranular Unknown RF:	3
Intragranular Unknown Grain:	
Total:	107

Cement/Overgrowth	
Quartz:	
Kaolinte:	6
Fe-Oxide:	13
Calcite	
intergranular:	
oversized:	
Total:	19

Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	1
Unknown RF:	1
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	

Matrix	
Clay Cutans:	
Pore Filling:	25
Total:	25

[a] Rock Fragment

Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	2

Sample Name: GM-W-051508-3 Sub-unit: Lower Wilcox
Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	115
Poly Crystalline:	14
Volcanic:	3
Sedimentary:	2
Total:	134

Feldspar	
Plagioclase:	
Orthoclase:	15
Microcline:	4
Total	19

Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	
Chert:	16
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	6
Unknown SRF:	
Total:	22

Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	2
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	3

Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	5
Unknown VRF:	
Total:	5

Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other	
Unknown RF:	

Category	Counts
Porosity	
Intergranular:	75
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	
Oversized:	13
Intragrannular VRF	
Altered VRF:	3
Intragrannular MRF	
Quartz-Rich, Polygonal:	1
Intragrannular SRF	
Chert:	5
Argillaceous Chert:	3
Intragranular Unknown RF:	1
Intragranular Unknown Grain:	
Total:	102

Cement/Overgrowth	
Quartz:	
Kaolinte:	4
Fe-Oxide:	36
Calcite	
intergranular:	
oversized:	
Total:	40

Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	2
Unknown RF:	
Unknown Grain:	2
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	

Total:	0

Matrix

Clay Cutans:	11
Pore Filling:	8
Total:	19

[a] Rock Fragment

Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	1
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	1
Total:	6

Sample Name: GM-W-051508-4 Sub-unit: Lower Wilcox
Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	140
Poly Crystalline:	7
Volcanic:	1
Sedimentary:	
Total:	148
Feldspar	
Plagioclase:	1
Orthoclase:	7
Microcline:	1
Total	9
Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	1
Chert:	13
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	2
Unknown SRF:	
Total:	17
Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	2
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	3
Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	5
Unknown VRF:	
Total:	6
Accessory Minerals	
Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Category	Counts
Porosity	
Intergranular:	97
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	9
Intragranular Unknown Feldspar:	
Oversized:	4
Intragrannular VRF	
Unknown VRF:	2
Intragrannular MRF	
Quartz-Rich, Foliated:	1
Intragrannular SRF	
Chert:	4
Intragranular Unknown RF:	3
Intragranular Unknown Grain:	1
Total:	121
Cement/Overgrowth	
Quartz:	
Kaolinte:	2
Fe-Oxide:	4
Calcite	
intergranular:	
oversized:	
Total:	6
Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	

Other	
Unknown RF:	1
Total:	1

Matrix	
Clay Cutans:	
Pore Filling:	36
Total:	36

[a] Rock Fragment

Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	3
Total:	3

Sample Name: GM-W-051608-1 Sub-unit: Lower Wilcox
Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	129
Poly Crystalline:	12
Volcanic:	5
Sedimentary:	4
Total:	150

Feldspar	
Plagioclase:	1
Orthoclase:	13
Microcline:	5
Total	19

Sedimentary Rock Fragment (SRF)	
Argillaceous RF[a]:	1
Chert:	11
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	7
Unknown SRF:	
Total:	19

Metamorphic Rock Fragment (MRF)	
Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	2
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	3

Volcanic Rock Fragment (VRF)	
Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	5
Unknown VRF:	
Total:	6

Accessory Minerals	
Muscovite:	2
Biotite:	1
Tourmaline:	
Sphene:	

Category	Counts
Porosity	
Intergranular:	67
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	4
Intragranular Unknown Feldspar:	1
Oversized:	7
Intragrannular VRF	
Altered VRF:	1
Unknown VRF:	3
Intragrannular MRF	
Mica Rich, Foliated:	1
Intragrannular SRF	
Chert	1
Siltstone RF	1
Intragranular Unknown RF:	1
Intragranular Unknown Grain:	6
Total:	93

Cement/Overgrowth	
Quartz:	
Kaolinte:	4
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	
Total:	4

Grain Replacement	
Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	1
Unknown RF:	
Unknown Grain:	1
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	

Zircon:	
Total:	3

Other

Unknown RF:	
Unknown Highly Dissolved Grain:	3
Total:	3

Matrix

Clay Cutans:	
Pore Filling:	47
Total:	47

[a] Rock Fragment

VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	1
Unknown RF:	
Unknown Grain:	
Total:	3

Sample Name: GM-W-051608-2 Sub-unit: Lower Wilcox

Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	113
Poly Crystalline:	25
Volcanic:	4
Sedimentary:	2
Total:	144

Feldspar

Plagioclase:	
Orthoclase:	7
Microcline:	
Total	7

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	30
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	13
Unknown SRF:	
Total:	43

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	0

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	
Altered VRF:	2
Unknown VRF:	6
Total:	8

Accessory Minerals

Category	Counts
Porosity	
Intergranular:	89
Intragranular Plagioclase:	
Intragranular Microcline:	1
Intragranular Potassium Feldspar	2
Intragranular Unknown Feldspar:	
Oversized:	10
Intragrannular VRF	
Unknown VRF:	6
Intragrannular MRF	
Quartzofeldspathic:	1
Intragrannular SRF	
Chert:	5
Argillaceous Chert:	2
Intragranular Unknown RF:	5
Intragranular Unknown Grain:	1
Total:	122

Cement/Overgrowth

Quartz:	
Kaolinte:	1
Fe-Oxide:	1
Calcite	
intergranular:	
oversized:	
Total:	2

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Unknown Highly Dissolved Grain:	4
Total:	4

Matrix

Clay Cutans:	3
Pore Filling:	17
Total:	20

[a] Rock Fragment

Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: GM-W-051608-3 Sub-unit: Lower Wilcox

Sample Type: Outcrop Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	110
Poly Crystalline:	15
Volcanic:	2
Sedimentary:	
Total:	127

Feldspar

Plagioclase:	
Orthoclase:	20
Microcline:	4
Total	24

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	7
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	1
Unknown SRF:	
Total:	8

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	3
Mica-Rich	
foliated:	1
polygonal:	
Unknown MRF:	
Total:	5

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	1
Unknown VRF:	

Category	Counts
Porosity	
Intergranular:	
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	1
Oversized:	
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	1

Cement/Overgrowth

Quartz:	
Kaolinte:	
Fe-Oxide:	27
Calcite	
intergranular:	136
oversized:	8
Total:	171

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	6

Total:	2

Accessory Minerals

Muscovite:	3
Biotite:	
Tourmaline:	
Sphene:	1
Zircon:	
Total:	4

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	2
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	8

Sample Name: GM-W-051608-4 Sub-unit: Lower Wilcox

Sample Type: Outcrop Total Points Counted: 349

Category	Counts
Quartz	
Mono Crystalline:	143
Poly Crystalline:	11
Volcanic:	4
Sedimentary:	1
Total:	159

Feldspar

Plagioclase:	2
Orthoclase:	12
Microcline:	1
Total	15

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	9
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	4
Unknown SRF:	
Total:	13

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	2
polygonal:	4
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	6

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	1

Category	Counts
Porosity	
Intergranular:	56
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	
Oversized:	2
Intragrannular VRF	
Unknown VRF:	3
Felsitic:	3
Intragrannular MRF	
Quartzofeldspathic:	1
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	2
Intragranular Mica:	1
Total:	68

Cement/Overgrowth

Quartz:	
Kaolinte:	1
Fe-Oxide:	66
Calcite	
intergranular:	
oversized:	
Total:	67

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	

Altered VRF:	3
Unknown VRF:	
Total:	4

Accessory Minerals

Muscovite:	3
Biotite:	1
Tourmaline:	
Sphene:	
Zircon:	
Total:	4

Other

Unknown RF:	2
Total:	2

Matrix

Clay Cutans:	6
Pore Filling:	
Total:	6

[a] Rock Fragment

VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	1
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	1
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	3
Total:	5

Sample Name: Burns1-9241 Sub-unit: Lower Wilcox

Sample Type: Core Total Points Counted: 351

Category	Counts
Quartz	
Mono Crystalline:	135
Poly Crystalline:	7
Volcanic:	4
Sedimentary:	
Total:	146

Feldspar

Plagioclase:	7
Orthoclase:	11
Microcline:	6
Total	24

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	3
Chert:	15
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	10
Unknown SRF:	
Total:	29

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	2
Quartz-Rich	
foliated:	
polygonal:	2
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	1
Metamorphosed Chert:	2
Total:	7

Volcanic Rock Fragment (VRF)

Category	Counts
Porosity	
Intergranular:	22
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	3
Oversized:	
Intragrannular VRF	
Lathwork:	4
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	3
Total:	32

Cement/Overgrowth

Quartz:	6
Kaolinte:	36
Fe-Oxide:	1
Calcite	
intergranular:	
oversized:	
Total:	43

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	

Microlitic:	
Lathwork:	6
Felsitic:	6
Altered VRF:	1
Unknown VRF:	
Total:	13

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	55
Total:	55

[a] Rock Fragment

Plagioclase:	
Unknown Feldspar:	2
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	2

Sample Name: Burns1-9297 Sub-unit: Lower Wilcox

Sample Type: Core Total Points Counted: 350

Quartz

Category	Counts
Mono Crystalline:	182
Poly Crystalline:	8
Volcanic:	4
Sedimentary:	1
B	
Total:	195

Feldspar

Category	Counts
Plagioclase:	9
Orthoclase:	1
Microcline:	1
Unknown Feldspar	1
Total	12

Sedimentary Rock Fragment (SRF)

Category	Counts
Argillaceous RF[a]:	4
Chert:	27
Siltstone RF:	1
Sandstone RF:	
Argillaceous Chert:	5
Unknown SRF:	
Total:	37

Metamorphic Rock Fragment (MRF)

Category	Counts
Quartzofeldspathic:	5
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	1
polygonal:	
Unknown MRF:	

Porosity

Category	Counts
Intergranular:	28
Intragranular Plagioclase:	1
Intragranular Microcline:	1
Intragranular Potassium Feldspar	4
Intragranular Unknown Feldspar:	7
Oversized:	
Intragrannular VRF	
Lathwork:	6
Felsitic:	3
Unknown VRF:	2
Intragrannular MRF	
Quartzofeldspathic:	2
Intragrannular SRF	
Argillaceous RF:	1
Intragranular Unknown RF:	4
Intragranular Unknown Grain:	3
Total:	62

Cement/Overgrowth

Quartz:	20
Kaolinte:	3
Fe-Oxide:	4
Calcite	
intergranular:	
oversized:	
Total:	27

Grain Replacement

Total:	6

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	2
Felsitic:	5
Altered VRF:	2
Unknown VRF:	
Total:	9

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Glauconite	1
Total:	1

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	1
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	1

Sample Name: Burns1-9334 Sub-unit: Lower Wilcox

Sample Type: Core Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	173
Poly Crystalline:	15
Volcanic:	5
Sedimentary:	
Total:	193

Feldspar

Plagioclase:	7
Orthoclase:	8
Microcline:	3
Total	18

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	3
Chert:	14
Siltstone RF:	2
Sandstone RF:	
Argillaceous Chert:	9
Unknown SRF:	
Total:	28

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	3
Mica-Rich	
foliated:	

Category	Counts
Porosity	
Intergranular:	33
Intragranular Plagioclase:	1
Intragranular Microcline:	
Intragranular Potassium Feldspar	5
Intragranular Unknown Feldspar:	
Oversized:	5
Intragrannular VRF	
Altered VRF:	1
Lathwortk:	2
Felsitic:	1
Intragrannular MRF	
Intragrannular SRF	
Chert:	3
Intragranular Unknown RF:	
Intragranular Unknown Grain:	1
Total:	52

Cement/Overgrowth

Quartz:	33
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	
oversized:	3

polygonal:	
Unknown MRF:	
Total:	4

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	7
Felsitic:	7
Altered VRF:	3
Unknown VRF:	
Devitrified Glass:	1
Total:	18

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Total:	36

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	1
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	1

Sample Name: Burns 1-9525 Sub-unit: Lower Wilcox

Sample Type: Core Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	191
Poly Crystalline:	7
Volcanic:	1
Sedimentary:	
Total:	199

Feldspar

Plagioclase:	8
Orthoclase:	14
Microcline:	2
Altered Feldspar:	2
Total	26

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	4
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	1
Unknown SRF:	
Total:	5

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	

Category	Counts
Porosity	
Intergranular:	44
Intragranular Plagioclase:	1
Intragranular Microcline:	
Intragranular Potassium Feldspar	7
Intragranular Unknown Feldspar:	2
Oversized:	5
Intragrannular VRF	
Felsitic:	3
Lathwork:	1
Altered VRF:	1
Intragrannular MRF	
Intragrannular SRF	
Chert:	4
Argillaceous Chert:	1
Intragranular Unknown RF:	
Intragranular Unknown Grain:	
Total:	69

Cement/Overgrowth

Quartz:	27
Kaolinte:	12
Fe-Oxide:	1
Calcite	

polygonal:	2
Mica-Rich	
foliated:	1
polygonal:	
Unknown MRF:	
Total:	3

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	1
Felsitic:	3
Altered VRF:	1
Unknown VRF:	
Total:	5

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Total:	0

Matrix

Clay Cutans:	
Pore Filling:	3
Total:	3

[a] Rock Fragment

intergranular:	
oversized:	
Total:	40

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: Burns 1-9614 Sub-unit: Lower Wilcox

Sample Type: Core Total Points Counted: 348

Category	Counts
Quartz	
Mono Crystalline:	225
Poly Crystalline:	7
Volcanic:	3
Sedimentary:	
Total:	235

Feldspar

Plagioclase:	9
Orthoclase:	7
Microcline:	2
Unknown Feldspar:	1
Total	19

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	8
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	
Unknown SRF:	
Total:	8

Metamorphic Rock Fragment (MRF)

Category	Counts
Porosity	
Intergranular:	30
Intragranular Plagioclase:	2
Intragranular Microcline:	
Intragranular Potassium Feldspar	5
Intragranular Unknown Feldspar:	2
Oversized:	
Intragrannular VRF	
Intragrannular MRF	
Intragrannular SRF	
Chert:	2
Intragranular Unknown RF:	3
Intragranular Unknown Grain:	6
Total:	50

Cement/Overgrowth

Quartz:	15
Kaolinte:	

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	6
Mica-Rich	
foliated:	
polygonal:	2
Unknown MRF:	
Total:	9

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	1
Altered VRF:	
Unknown VRF:	
Total:	1

Accessory Minerals

Muscovite:	1
Biotite:	1
Tourmaline:	
Sphene:	
Zircon:	
Total:	2

Other

Unknown RF:	1
Total:	1

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Fe-Oxide:	1
Calcite	
intergranular:	1
oversized:	6
Total:	23

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	0

Sample Name: Paul 1-9152 Sub-unit: Lower Wilcox

Sample Type: Core Total Points Counted: 347

Category	Counts
Quartz	
Mono Crystalline:	207
Poly Crystalline:	9
Volcanic:	
Sedimentary:	
Total:	216

Feldspar

Plagioclase:	7
Orthoclase:	9
Microcline:	
Total	16

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	
Chert:	4
Siltstone RF:	
Sandstone RF:	1
Argillaceous Chert:	2
Unknown SRF:	

Category	Counts
Porosity	
Intergranular:	32
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	4
Intragranular Unknown Feldspar:	5
Oversized:	3
Intragrannular VRF	
Lathwork:	2
Felsitic:	1
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	
Intragranular Unknown Grain:	2
Intragranular Calcite replacing Feldspar	1
Total:	50

Total:	7

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	1
polygonal:	
Mica-Rich	
foliated:	3
polygonal:	3
Unknown MRF:	1
Total:	8

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	
Felsitic:	3
Altered VRF:	1
Unknown VRF:	
Total:	4

Accessory Minerals

Muscovite:	2
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	2

Other

Unknown RF:	
Glauconite:	1
Total:	1

Matrix

Clay Cutans:	
Pore Filling:	14
Total:	14

[a] Rock Fragment

Cement/Overgrowth

Quartz:	12
Kaolinte:	
Fe-Oxide:	10
Calcite	
intergranular:	3
oversized:	
Total:	25

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	2
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	1
Unknown RF:	
Unknown Grain:	1
Total:	4

Sample Name: Winch St. 4- 9310 Sub-unit: Lower Wilcox

Sample Type: Core Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	208
Poly Crystalline:	5
Volcanic:	6
Sedimentary:	
Total:	219

Feldspar

Plagioclase:	13
Orthoclase:	3
Microcline:	
Total	16

Sedimentary Rock Fragment (SRF)

Argillaceous RF[a]:	1
Chert:	2
Siltstone RF:	

Category	Counts
Porosity	
Intergranular:	33
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar	1
Intragranular Unknown Feldspar:	5
Oversized:	7
Intragrannular VRF	
Felsitic:	1
Intragrannular MRF	
Intragrannular SRF	
Intragranular Unknown RF:	4

Sandstone RF:	
Argillaceous Chert:	
Unknown SRF:	
Total:	3

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	
Quartz-Rich	
foliated:	3
polygonal:	2
Mica-Rich	
foliated:	1
polygonal:	
Unknown MRF:	
Total:	6

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	1
Felsitic:	
Altered VRF:	
Unknown VRF:	
Total:	1

Accessory Minerals

Muscovite:	3
Biotite:	1
Tourmaline:	1
Sphene:	
Zircon:	1
Total:	6

Other

Unknown RF:	1
Total:	1

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Intragranular Unknown Grain:	5
Total:	56

Cement/Overgrowth

Quartz:	10
Kaolinte:	
Fe-Oxide:	2
Calcite	
intergranular:	13
oversized:	2
Total:	27

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	1
Microcline:	
Plagioclase:	
Unknown Feldspar:	10
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	3
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	1
Total:	15

Sample Name: Winch St. 4.-9948 Sub-unit: Upper Wilcox

Sample Type: Core Total Points Counted: 350

Category	Counts
Quartz	
Mono Crystalline:	149
Poly Crystalline:	7
Volcanic:	4
Sedimentary:	2
Total:	162

Feldspar

Plagioclase:	8
Orthoclase:	7
Microcline:	
Unknown Feldspar:	4
Total	19

Sedimentary Rock Fragment (SRF)

Category	Counts
Porosity	
Intergranular:	2
Intragranular Plagioclase:	
Intragranular Microcline:	
Intragranular Potassium Feldspar:	
Intragranular Unknown Feldspar:	6
Oversized:	
Intragrannular VRF	
Lathwork:	1
Intragrannular MRF	
Intragrannular SRF	

Argillaceous RF[a]:	1
Chert:	13
Siltstone RF:	
Sandstone RF:	
Argillaceous Chert:	2
Unknown SRF:	
Total:	16

Metamorphic Rock Fragment (MRF)

Quartzofeldspathic:	1
Quartz-Rich	
foliated:	
polygonal:	
Mica-Rich	
foliated:	
polygonal:	
Unknown MRF:	
Total:	1

Volcanic Rock Fragment (VRF)

Microlitic:	
Lathwork:	2
Felsitic:	1
Altered VRF:	4
Unknown VRF:	
Total:	7

Accessory Minerals

Muscovite:	
Biotite:	
Tourmaline:	
Sphene:	
Zircon:	
Total:	0

Other

Unknown RF:	
Unknown Grain:	1
Total:	1

Matrix

Clay Cutans:	
Pore Filling:	
Total:	0

[a] Rock Fragment

Intragranular Unknown RF:	
Intragranular Unknown Grain:	6
Total:	15

Cement/Overgrowth

Quartz:	
Kaolinte:	
Fe-Oxide:	
Calcite	
intergranular:	120
oversized:	6
Total:	126

Grain Replacement

Kaolinite	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Calcite	
Orthoclase:	1
Microcline:	
Plagioclase:	
Unknown Feldspar:	1
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	1
Fe-O	
Orthoclase:	
Microcline:	
Plagioclase:	
Unknown Feldspar:	
SRF:	
VRF:	
MRF:	
Mica:	
Unknown RF:	
Unknown Grain:	
Total:	3

POINT COUNT PARAMETERS

Symbol	Definition
Qm	Monocrystalline Q
Qpq	Polycrystalline Q
Qc	Chert
Km	Microcline
Ko	Orthoclase
K	Potassium Feldspar (= Km + Ko)
P	Plagioclase Feldspar
Fu	Unknown Feldspar
Lmf	grains
Lmp	grains
Lmqf	grains
Lmu	Unknown metamorphic grains
Lss	sandstone, siltstone, argillitic and
Lvf	Felsitic volcanic lithic grains
Lvl	Lathwork volcanic lithic grains
Lvm	Microlitic volcanic lithic grains
Lva	Altered volcanic lithic grains
Lvu	Unknown volcanic lithic grains
Lu	Unknow lithic grain
Qt	Total quartzose grains (= Qm + Qpc + Qc)
Qtc	Total Quartzose grains excluding chert (= Qm + Qpc)
F	Total Feldspar (= K + P + Fu)
Lm	Total metamorphic grains (= Lmf + Lmp + Lmqf + Lmu)
Lv	Total volcanic grains (= Lvf + Lvl + Lvm + Lva + Lvu)
Ls	Total sedimentary grains (= Lss)
L	Total unstable lithic grains (= Lm + Lv + Ls)
Qp	Total polycrystalline quartz (= Qpq + Qc)
Lt	Total lithic grains (= L + Qp)

Recalculated Parameters

QtFL%Qt	=100Qt/(Qt + F + L)
QtFL%F	=100F/(Qt + F + L)
QtFL%L	=100L/(Qt + F + L)
QmFLt%Qm	=100Qm/(Qm + F + L)
QmFLt%F	=100F/(Qm + F + L)
QmFLt%Lt	=100Lt/(Qm + F + L)
LmLvLs%Lm	=100Lm/(Lm + Lv + Ls)
LmLvLs%Lv	=100Lv/(Lm + Lv + Ls)
LmLvLs%Ls	=100Ls/(Lm + Lv + Ls)
QmPK%Qm	=100Qm/(Qm + P + K)
QmPK%P	=100P/(Qm + P + K)
QmPK%K	=100K/(Qm + P + K)
QmQtc%Qm	=100Qm/(Qm + Qtc)
QtcF%F	=100F/(F + Qtc)
QtcF%Qtc	=100Qtc/(F + Qtc)
PK%P	=100P/(P + K)
KmKo%Km	=100Km/(Km + Ko)
QcQt%Qc	=100Qc/(Qc + Qt)
QcLt%Qc	=100Qc/(Qc + Lt)

RECALCULATED MODAL POINT-COUNT DATA FOR THE WILCOX GROUP SANDSTONES, SOUTH TEXAS

Sample Name	Sample Type *	QtFL%			QmFLt%			LmLvLs%			QmPK%			QmQtc	QtcF%		PK%	KmKo%	QcQt%	QcLt%			
		Qt	F	L	Qm	F	Lt	Lm	Lv	Ls	Qm	P	K	Qm	F	Qtc	P	Km	Qc	Qc	Grain Size (µm)	IGV	Primary Porosity
Upper Wilcox Samples																							
GM-C-051408-1	o	87	7	6	72	7	21	75	17	8	92	4	4	88	7	93	47	75	6	23	219	34	18
GM-C-051408-2	o	91	6	2	78	6	15	50	50	0	93	1	6	90	7	93	9	40	5	29	300	38	27
GM-C-051408-3	o	95	4	2	80	4	16	0	0	100	96	1	3	92	4	96	17	0	7	43	339	38	26
GM-C-051408-5	o	92	5	4	79	5	16	0	75	25	96	0	4	90	5	95	0	13	4	20	347	32	24
GM-C-051408-7	o	93	3	4	79	3	18	0	71	29	97	1	3	88	3	97	20	0	3	17	349	41	17
GM-C-051408-8	o	94	1	6	83	1	16	0	0	100	99	0	1	92	1	99	0	0	4	22	302	42	10
GM-C-051408-9	o	91	7	2	81	7	12	20	20	60	92	1	7	92	7	93	13	38	3	25	408	37	3
GM-C-051408-10	o	77	16	7	60	16	24	30	60	10	79	0	21	89	19	81	0	18	12	40	311	47	11
GM-C-051408-11	o	84	6	10	71	6	23	9	9	83	93	1	6	88	7	94	15	18	3	11	422	30	1
GM-C-051408-12	o	85	9	6	68	9	23	58	25	17	88	0	12	89	11	89	0	5	10	38	172	36	27
GM-C-051408-13	o	95	3	1	82	3	14	0	33	67	96	0	4	93	4	96	0	14	7	48	228	35	19
GM-C-051408-14	o	82	12	6	74	12	15	50	25	25	86	0	14	94	13	87	0	9	4	24	244	37	1
GM-C-051508-1	o	80	11	9	71	11	18	47	47	6	86	0	14	95	13	87	0	8	6	27	162	34	23
GM-C-051508-2	o	86	7	6	62	7	31	0	18	82	90	0	10	86	9	91	0	8	17	47	250	46	0
GM-C-051508-3	o	84	6	10	53	6	41	11	50	39	90	0	10	87	8	92	0	0	27	55	394	33	33
GM-C-051608-1	o	96	3	1	83	3	14	0	0	100	96	0	4	88	3	97	0	29	1	10	450	36	0
GM-C-051608-2	o	92	6	2	78	6	16	50	0	50	93	1	6	88	6	94	17	10	4	22	260	36	0
GM-C-051608-3	o	83	8	9	66	8	26	63	31	6	89	3	7	89	10	90	29	0	12	37	218	35	22
GM-C-051608-4	o	90	5	5	80	5	16	44	56	0	95	1	4	92	5	95	11	38	4	22	204	30	28
GM-C-051608-5	o	86	5	9	73	5	22	38	38	25	94	0	6	89	5	95	0	73	4	16	292	28	27
Bailey 1C-10474	c	81	14	5	77	14	8	91	9	0	92	6	1	97	15	85	83	0	1	13	159	13	10
Bailey 1C-10491	c	91	4	5	84	4	12	25	50	25	96	3	1	96	5	95	75	0	3	27	121	23	6
Urban1-13896	c	85	11	4	81	11	7	88	13	0	95	4	1	97	12	88	73	0	1	11	81	20	15
Urban1-14097	c	83	13	3	77	13	9	88	13	0	94	6	0	93	14	86	100	0	0	4	107	20	11
Mean		88	7	5	75	7	18	35	30	36	93	1	6	91	8	92	21	16	6	26	264	33	15
Std Dev †		5.4	3.9	2.9	8.1	3.9	7.5	31.4	23.2	35.4	4.4	1.9	5.0	3.2	4.5	4.5	30.7	21.9	5.9	13.4	102.3	8.0	10.7
Lower Wilcox Samples																							
GM-W-051408-1	o	80	11	9	68	11	21	56	22	22	88	1	11	91	13	87	5	44	7	26	179	32	24
GM-W-051508-2	o	81	7	12	55	7	38	41	55	5	89	2	9	88	10	90	20	17	22	48	168	38	26
GM-W-051508-3	o	83	10	7	61	10	29	31	69	0	86	0	14	90	13	87	0	20	18	52	149	38	21
GM-W-051508-4	o	82	9	9	69	9	22	29	57	14	89	1	11	95	11	89	6	6	11	43	82	40	28
GM-W-051608-1	o	80	11	8	66	11	23	25	63	13	86	1	14	92	14	86	4	23	11	40	185	34	19
GM-W-051608-2	o	86	4	10	53	4	42	6	82	12	92	0	8	83	7	93	0	10	25	51	199	32	25
GM-W-051608-3	o	80	16	4	66	16	18	71	29	0	81	0	19	88	18	82	0	15	6	27	169	47	0
GM-W-051608-4	o	83	8	9	71	8	21	41	59	0	90	1	9	93	9	91	13	7	8	30	116	37	16
Burns1-9241	c	75	13	12	61	13	26	25	61	14	85	4	10	95	17	83	29	35	15	42	175	34	6
Burns1-9297	c	78	9	13	64	9	27	24	59	18	92	5	3	96	11	89	59	29	14	41	207	16	8
Burns1-9334	c	80	9	11	65	9	26	13	71	16	88	4	8	92	11	89	33	19	12	36	240	20	9
Burns1-9525	c	81	14	5	74	14	12	23	77	0	86	4	10	96	15	85	28	9	5	33	224	25	13
Burns1-9614	c	85	10	5	79	10	11	90	10	0	90	4	6	97	11	89	44	14	4	32	208	14	9
Paul1-9152	c	83	11	6	78	11	12	50	44	6	91	3	6	96	11	89	35	0	3	19	128	20	9
Winch St. 4-9310	c	82	12	5	80	12	8	67	22	11	92	6	2	98	13	87	72	0	1	10	74	17	9
Winch St. 4-9948	c	83	13	5	72	13	15	10	80	10	91	5	5	96	14	86	50	0	8	47	105	35	1
Mean		81	10	8	68	10	22	38	54	9	88	3	9	93	12	88	25	15	11	36	163	30	14
Std Dev †		2.7	2.8	3.0	8.0	2.8	9.6	23.8	22.2	7.4	3.1	2.0	4.3	4.0	2.8	2.8	22.8	12.8	6.9	11.8	49.9	10.0	9.0

* Sample type c is from core and sample type o is from outcrop.

† Std Dev is one standard deviation for the mean.

	Actual		Expected	
	UW	LW	UW	LW
Qm	3941	2535	3795	2681
F	379	384	447	316
Lt	938	795	1016	717
# of Samples	24	16	24	16

χ2 Distribution	52.948
Probability	3.181E-12

[a] The χ2 test compares the actual values of a two or more sets of measurments to their expected values calculated based on the null hypothesis that each of the data sets is the same, and returns a probability (P) that the differences between the two data sets are random. If P<0.05, then at a 95% confidence level the two data sets can be said to be different. If P≥0.05, then the two data sets are statistically the same. Tests where P≥0.05 are marked by bold text.

	Actual		Expected	
	UW	LW	UW	LW
Qt	4601	3025	4469	3157
F	379	384	447	316
L	278	305	342	241
# of Samples	24	16	24	16

χ2 Distribution	63.143
Probability	1.944E-14

[a] The χ2 test compares the actual values of a two or more sets of measurments to their expected values calculated based on the null hypothesis that each of the data sets is the same, and returns a probability (P) that the differences between the two data sets are random. If P<0.05, then at a 95% confidence level the two data sets can be said to be different. If P≥0.05, then the two data sets are statistically the same. Tests where P≥0.05 are marked by bold text.

	Mean	Std Dev	# of Samples	Mean	Std Dev	# of Samples	t Distribution	Probability
QtFL%Qt	87.7%	5.4%	24	81.4%	2.7%	16	4.267	0.000
QtFL%F	7.1%	3.9%	24	10.4%	2.8%	16	2.872	0.007
QtFL%L	5.2%	2.9%	24	8.2%	3.0%	16	3.094	0.004
QmFLt%Qm	74.8%	8.1%	24	67.8%	8.0%	16	2.705	0.010
QmFLt%F	7.1%	3.9%	24	10.4%	2.8%	16	2.872	0.007
QmFLt%Lt	18.1%	7.5%	24	21.8%	9.6%	16	1.375	**0.177**
LmLvLs%Lm	34.8%	31.4%	24	37.5%	23.8%	16	0.294	**0.770**
LmLvLs%Lv	29.5%	23.2%	24	53.7%	22.2%	16	3.275	0.002
LmLvLs%Ls	35.7%	35.4%	24	8.8%	7.4%	16	2.976	0.005
QmPK%Qm	92.5%	4.4%	24	88.5%	3.1%	16	3.234	0.003
QmPK%P	1.3%	1.9%	24	2.5%	2.0%	16	1.882	**0.067**
QmPK%K	6.1%	5.0%	24	9.0%	4.3%	16	1.893	**0.066**
Qm/Qtc	90.8%	3.2%	24	92.9%	4.0%	16	1.786	**0.082**
QtcF%F	8.0%	4.5%	24	12.4%	2.8%	16	3.466	0.001
QtcF%Qtc	92.0%	4.5%	24	87.6%	2.8%	16	3.466	0.001
PK%P	21.2%	30.7%	24	24.9%	22.8%	16	0.408	**0.685**
KmKo%Km	16.5%	21.9%	24	15.5%	12.8%	16	0.162	**0.872**
QcQt%Qc	6.2%	5.9%	24	10.6%	6.9%	16	2.146	0.038
QcLt%Qc	26.3%	13.4%	24	36.0%	11.8%	16	2.354	0.024

[a] The Student's T-test compares the mean values for two sets of data, and returns a probability (P) that the differences between the two data sets are random. If P<0.05, then at a 95% confidence level the two data sets can be said to be different. If P≥0.05, then the two data sets are statistically the same. Tests where P≥0.05 are marked by bold text.

Sample Name: Bailey 1C (Z7)

Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
1 Bailey-1C 72	287	66	0.0851	±0.0265	0.1458	±0.0519	0.0124	±0.0021	0.4846	1319	±301.6	138	±23.0	80	±6.8	80	±6.8
2 Bailey-1C 14	184	60	0.0850	±0.0169	0.1601	±0.0334	0.0137	±0.0008	0.2978	1316	±193.2	151	±14.6	87	±2.7	87	±2.7
3 Bailey-1C 69	817	236	0.0517	±0.0024	0.1056	±0.0052	0.0148	±0.0002	0.2827	274	±53.7	102	±2.4	95	±0.6	95	±0.6
4 Bailey-1C 124	469	172	0.0608	±0.0037	0.1414	±0.0090	0.0169	±0.0003	0.3104	632	±65.0	134	±4.0	108	±1.1	108	±1.1
5 Bailey-1C 25	278	76	0.0884	±0.0116	0.2114	±0.0319	0.0174	±0.0013	0.4926	1390	±126.2	195	±13.4	111	±4.1	111	±4.1
6 Bailey-1C 108	166	67	0.0844	±0.0189	0.2033	±0.0469	0.0175	±0.0010	0.2443	1303	±217.5	188	±19.8	112	±3.1	112	±3.1
7 Bailey-1C 22	419	111	0.0771	±0.0067	0.1973	±0.0185	0.0186	±0.0007	0.3770	1123	±86.7	183	±7.9	119	±2.1	119	±2.1
8 Bailey-1C 111	179	53	0.0820	±0.0202	0.2314	±0.0604	0.0205	±0.0018	0.3368	1246	±240.7	211	±24.9	131	±5.7	131	±5.7
9 Bailey-1C 19	216	89	0.0730	±0.0069	0.2118	±0.0215	0.0210	±0.0008	0.3808	1015	±95.1	195	±9.0	134	±2.6	134	±2.6
10 Bailey-1C 45	386	162	0.0656	±0.0046	0.1992	±0.0151	0.0220	±0.0006	0.3657	792	±73.9	184	±6.4	141	±1.9	141	±1.9
11 Bailey-1C 128	163	74	0.0884	±0.0091	0.3410	±0.0363	0.0280	±0.0007	0.2516	1391	±98.9	298	±13.7	178	±2.4	178	±2.4
12 Bailey-1C 50	412	269	0.0616	±0.0026	0.2739	±0.0189	0.0323	±0.0018	0.7947	659	±45.0	246	±7.5	205	±5.5	205	±5.5
13 Bailey-1C 59	216	81	0.0857	±0.0093	0.4166	±0.0458	0.0353	±0.0007	0.1882	1331	±104.5	354	±16.4	223	±2.3	223	±2.3
14 Bailey-1C 36	573	339	0.0536	±0.0020	0.2628	±0.0164	0.0356	±0.0018	0.8016	355	±42.1	237	±6.6	225	±5.5	225	±5.5
15 Bailey-1C 70	261	117	0.0866	±0.0051	0.4364	±0.0347	0.0365	±0.0019	0.6661	1352	±57.2	368	±12.3	231	±6.0	231	±6.0
16 Bailey-1C 5	361	189	0.0615	±0.0031	0.3168	±0.0189	0.0374	±0.0012	0.5335	655	±54.1	279	±7.3	237	±3.7	237	±3.7
17 Bailey-1C 80	396	165	0.0650	±0.0034	0.3411	±0.0203	0.0381	±0.0011	0.4764	774	±54.9	298	±7.7	241	±3.3	241	±3.3
18 Bailey-1C 94	442	211	0.0678	±0.0051	0.3621	±0.0304	0.0388	±0.0014	0.4442	861	±78.1	314	±11.3	245	±4.5	245	±4.5
19 Bailey-1C 106	391	200	0.0634	±0.0032	0.3438	±0.0182	0.0393	±0.0007	0.3296	723	±53.1	300	±6.9	248	±2.1	248	±2.1
20 Bailey-1C 51	235	143	0.0672	±0.0046	0.3826	±0.0266	0.0413	±0.0006	0.2054	844	±70.7	329	±9.8	261	±1.8	261	±1.8
21 Bailey-1C 27	145	115	0.0665	±0.0066	0.3808	±0.0420	0.0416	±0.0019	0.4229	821	±104.3	328	±15.4	262	±6.0	262	±6.0
22 Bailey-1C 47	91	61	0.0822	±0.0140	0.5398	±0.0959	0.0476	±0.0024	0.2792	1251	±167.0	438	±31.6	300	±7.3	300	±7.3
23 Bailey-1C 123	184	214	0.0605	±0.0037	0.5558	±0.0363	0.0666	±0.0014	0.3242	623	±66.7	449	±11.9	416	±4.3	416	±4.3
24 Bailey-1C 62	195	227	0.0638	±0.0037	0.5983	±0.0379	0.0681	±0.0016	0.3700	734	±62.2	476	±12.0	424	±4.8	424	±4.8
25 Bailey-1C 31	101	172	0.0694	±0.0037	0.7300	±0.0473	0.0763	±0.0028	0.5646	910	±55.1	557	±13.9	474	±8.4	474	±8.4
26 Bailey-1C 11	249	241	0.0788	±0.0039	0.8975	±0.0464	0.0826	±0.0014	0.3238	1166	±48.5	650	±12.4	512	±4.1	512	±4.1
27 Bailey-1C 21	302	361	0.0595	±0.0020	0.7540	±0.0577	0.0920	±0.0063	0.8987	584	±36.4	571	±16.7	567	±18.7	567	±18.7
28 Bailey-1C 135	168	268	0.0800	±0.0077	1.0937	±0.1301	0.0992	±0.0069	0.5877	1196	±94.9	750	±31.5	610	±20.3	610	±20.3
29 Bailey-1C 87	296	528	0.0645	±0.0028	0.9655	±0.0587	0.1086	±0.0046	0.7025	757	±45.6	686	±15.2	665	±13.5	665	±13.5
30 Bailey-1C 122	231	341	0.0711	±0.0040	1.1728	±0.0896	0.1197	±0.0063	0.6839	959	±56.9	788	±20.9	729	±18.0	729	±18.0
31 Bailey-1C 64	264	874	0.0771	±0.0013	1.9098	±0.0474	0.1797	±0.0034	0.7530	1123	±16.3	1084	±8.3	1066	±9.2	1123	±16.3
32 Bailey-1C 73	156	560	0.0774	±0.0019	2.2390	±0.0629	0.2098	±0.0028	0.4837	1131	±24.5	1193	±9.9	1228	±7.6	1131	±24.5
33 Bailey-1C 100	204	587	0.0781	±0.0023	2.0116	±0.0849	0.1868	±0.0057	0.7267	1149	±28.8	1119	±14.3	1104	±15.6	1149	±28.8
34 Bailey-1C 77	185	846	0.0788	±0.0012	2.0599	±0.0503	0.1895	±0.0036	0.7882	1168	±14.9	1136	±8.4	1119	±9.9	1168	±14.9
35 Bailey-1C 82	494	1,284	0.0790	±0.0015	1.9533	±0.0848	0.1794	±0.0070	0.8981	1171	±18.9	1100	±14.6	1064	±19.1	1171	±18.9
36 Bailey-1C 99	728	898	0.0799	±0.0006	2.2205	±0.0798	0.2015	±0.0071	0.9796	1195	±7.1	1188	±12.6	1183	±19.0	1195	±7.1
37 Bailey-1C 28	422	1,510	0.0810	±0.0004	2.5670	±0.0674	0.2299	±0.0059	0.9830	1221	±4.7	1291	±9.6	1334	±15.6	1221	±4.7
38 Bailey-1C 81	83	221	0.0811	±0.0024	1.8352	±0.0774	0.1642	±0.0049	0.7006	1223	±29.6	1058	±13.9	980	±13.4	1223	±29.6
39 Bailey-1C 30	144	506	0.0854	±0.0021	2.1970	±0.0721	0.1865	±0.0040	0.6492	1326	±24.2	1180	±11.4	1102	±10.8	1326	±24.2
40 Bailey-1C 26	494	858	0.0871	±0.0012	2.6026	±0.1651	0.2167	±0.0134	0.9753	1363	±13.5	1301	±23.3	1264	±35.5	1363	±13.5
41 Bailey-1C 132	116	380	0.0905	±0.0033	2.9022	±0.1639	0.2325	±0.0100	0.7616	1436	±34.9	1382	±21.3	1348	±26.2	1436	±34.9
42 Bailey-1C 114	265	1,133	0.0913	±0.0010	3.4663	±0.1157	0.2754	±0.0087	0.9478	1453	±10.1	1520	±13.2	1568	±22.0	1453	±10.1
43 Bailey-1C 104	114	336	0.0916	±0.0026	2.7507	±0.1831	0.2178	±0.0132	0.9078	1459	±26.5	1342	±24.8	1270	±34.8	1459	±26.5
44 Bailey-1C 9	159	764	0.0926	±0.0006	3.5171	±0.0966	0.2755	±0.0074	0.9727	1479	±6.0	1531	±10.9	1569	±18.6	1479	±6.0
45 Bailey-1C 32	107	630	0.0952	±0.0010	3.8300	±0.1087	0.2919	±0.0077	0.9256	1531	±10.1	1599	±11.4	1651	±19.1	1531	±10.1
46 Bailey-1C 34	250	785	0.0958	±0.0009	2.8678	±0.1382	0.2171	±0.0103	0.9798	1544	±9.1	1373	±18.1	1267	±27.1	1544	±9.1
47 Bailey-1C 49	136	576	0.0960	±0.0012	3.1303	±0.1319	0.2364	±0.0095	0.9532	1548	±12.0	1440	±16.2	1368	±24.7	1548	±12.0
48 Bailey-1C 107	239	719	0.0974	±0.0013	3.6113	±0.1120	0.2688	±0.0075	0.9046	1576	±12.4	1552	±12.3	1535	±19.2	1576	±12.4
49 Bailey-1C 4	147	551	0.0987	±0.0040	4.1795	±0.1860	0.3071	±0.0060	0.4364	1600	±37.4	1670	±18.2	1726	±14.7	1600	±37.4
50 Bailey-1C 76	785	1,610	0.1004	±0.0026	3.2539	±0.1205	0.2350	±0.0063	0.7269	1632	±23.6	1470	±14.4	1361	±16.5	1632	±23.6
51 Bailey-1C 18	422	1,730	0.1030	±0.0004	4.2276	±0.1337	0.2977	±0.0094	0.9942	1679	±3.1	1679	±13.0	1680	±23.2	1679	±3.1
52 Bailey-1C 74	97	394	0.1041	±0.0012	4.5713	±0.1572	0.3183	±0.0103	0.9446	1699	±10.4	1744	±14.3	1782	±25.3	1699	±10.4
53 Bailey-1C 46	632	1,902	0.1042	±0.0006	4.4728	±0.0978	0.3114	±0.0066	0.9619	1700	±5.5	1726	±9.1	1748	±16.1	1700	±5.5
54 Bailey-1C 15	258	996	0.1045	±0.0013	3.8657	±0.1850	0.2683	±0.0124	0.9679	1706	±11.1	1607	±19.3	1532	±31.6	1706	±11.1
55 Bailey-1C 10	72	333	0.1048	±0.0021	4.2514	±0.2149	0.2942	±0.0137	0.9183	1711	±18.4	1684	±20.8	1663	±34.0	1711	±18.4
56 Bailey-1C 84	414	892	0.1088	±0.0017	4.5514	±0.1516	0.3033	±0.0090	0.8904	1780	±13.8	1740	±13.9	1708	±22.3	1780	±13.8
57 Bailey-1C 78	305	1,516	0.1101	±0.0028	5.3515	±0.2192	0.3525	±0.0112	0.7756	1801	±23.5	1877	±17.5	1947	±26.7	1801	±23.5
58 Bailey-1C 23	387	940	0.1103	±0.0007	4.3074	±0.2064	0.2833	±0.0135	0.9921	1804	±5.5	1695	±19.7	1608	±33.8	1804	±5.5
59 Bailey-1C 133	181	427	0.1110	±0.0022	3.9641	±0.1900	0.2590	±0.0113	0.9124	1816	±17.8	1627	±19.4	1485	±29.0	1816	±17.8
60 Bailey-1C 134	125	556	0.1118	±0.0021	5.5519	±0.1598	0.3601	±0.0078	0.7536	1829	±17.1	1909	±12.4	1983	±18.5	1829	±17.1
61 Bailey-1C 24	131	551	0.1120	±0.0011	5.6039	±0.2174	0.3628	±0.0136	0.9663	1833	±9.0	1917	±16.7	1995	±32.2	1833	±9.0
62 Bailey-1C 118	265	836	0.1133	±0.0020	5.6972	±0.2552	0.3649	±0.0150	0.9150	1852	±16.3	1931	±19.3	2005	±35.3	1852	±16.3
63 Bailey-1C 119	64	171	0.1140	±0.0034	5.5617	±0.2344	0.3537	±0.0107	0.7167	1865	±26.5	1910	±18.1	1952	±25.4	1865	±26.5
64 Bailey-1C 67	909	3,041	0.1212	±0.0004	5.7354	±0.3547	0.3431	±0.0212	0.9987	1975	±2.8	1937	±26.7	1901	±50.9	1975	±2.8
65 Bailey-1C 53	124	1,516	0.1308	±0.0007	7.1401	±0.1077	0.3958	±0.0056	0.9431	2109	±4.4	2129	±6.7	2150	±13.0	2109	±4.4
66 Bailey-1C 54	125	217	0.1410	±0.0148	6.6139	±0.7720	0.3402	±0.0173	0.4360	2239	±90.8	2061	±51.5	1888	±41.6	2239	±90.8
67 Bailey-1C 37	79	852	0.1785	±0.0008	12.9040	±0.2586	0.5243	±0.0103	0.9757	2639	±3.6	2673	±9.4	2717	±21.7	2639	±3.6

Sample Name: Burns 1 (Z5)

Analysis	U	^{206}Pb	$^{207}Pb^*$	± 2 σ	$^{207}Pb^*$	± 2 σ	$^{206}Pb^*$	± 2 σ	Rho	$^{207}Pb^*$	± 1 σ	$^{207}Pb^*$	± 1 σ	$^{206}Pb^*$	± 1 σ	Best	± 1 σ

Sample Name: Bailey 1C (Z7)

Analysis	U (ppm)	$^{206}Pb/^{204}Pb$ (ppm)	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
		Isotopic Ratios								Apparent Ages (Ma)							
1 Burns-1 11	721	146	0.0538	±0.0045	0.0721	±0.0062	0.0097	±0.0002	0.2068	363	±94.2	71	±2.9	62	±0.5	62	±0.5
2 Burns-1 79	1389	475	0.0490	±0.0023	0.0695	±0.0033	0.0103	±0.0001	0.2118	149	±54.8	68	±1.6	66	±0.3	66	±0.3
3 Burns-1 26	449	112	0.0467	±0.0083	0.0679	±0.0122	0.0105	±0.0003	0.1515	35	±212.2	67	±5.8	68	±0.9	68	±0.9
4 Burns-1 55	118	34	0.0717	±0.0218	0.1054	±0.0325	0.0107	±0.0006	0.1736	978	±309.6	102	±14.9	68	±1.8	68	±1.8
5 Burns-1 18	232	75	0.0530	±0.0088	0.0814	±0.0138	0.0111	±0.0004	0.2287	331	±187.6	79	±6.5	71	±1.4	71	±1.4
6 Burns-1 25	203	62	0.0546	±0.0134	0.0842	±0.0210	0.0112	±0.0005	0.1739	394	±275.3	82	±9.8	72	±1.5	72	±1.5
7 Burns-1 88	1702	721	0.0468	±0.0015	0.0727	±0.0025	0.0113	±0.0001	0.3196	40	±38.2	71	±1.2	72	±0.4	72	±0.4
8 Burns-1 120	456	200	0.0782	±0.0139	0.1230	±0.0226	0.0114	±0.0005	0.2416	1152	±176.9	118	±10.2	73	±1.6	73	±1.6
9 Burns-1 119	795	176	0.0740	±0.0061	0.1170	±0.0100	0.0115	±0.0003	0.3011	1042	±82.5	112	±4.6	73	±0.9	73	±0.9
10 Burns-1 110	213	80	0.0577	±0.0119	0.0922	±0.0191	0.0116	±0.0003	0.1302	519	±225.7	90	±8.9	74	±1.0	74	±1.0
11 Burns-1 124	290	116	0.0502	±0.0103	0.0817	±0.0169	0.0118	±0.0003	0.1105	206	±238.6	80	±7.9	76	±0.9	76	±0.9
12 Burns-1 133	478	220	0.0442	±0.0048	0.0735	±0.0081	0.0121	±0.0002	0.1811	0	±0.0	72	±3.8	77	±0.8	77	±0.8
13 Burns-1 9	186	52	0.0748	±0.0151	0.1251	±0.0256	0.0121	±0.0004	0.1745	1063	±202.8	120	±11.6	78	±1.4	78	±1.4
14 Burns-1 3	344	85	0.0665	±0.0027	0.1113	±0.0052	0.0121	±0.0003	0.5139	822	±41.8	107	±2.4	78	±0.9	78	±0.9
15 Burns-1 33	372	179	0.0519	±0.0074	0.0871	±0.0125	0.0122	±0.0002	0.1160	281	±163.6	85	±5.9	78	±0.6	78	±0.6
16 Burns-1 4	1194	338	0.0501	±0.0019	0.0849	±0.0036	0.0123	±0.0002	0.3946	199	±45.0	83	±1.7	79	±0.7	79	±0.7
17 Burns-1 48	374	120	0.0625	±0.0080	0.1060	±0.0137	0.0123	±0.0003	0.1811	690	±136.0	102	±6.3	79	±0.9	79	±0.9
18 Burns-1 128	249	85	0.0542	±0.0128	0.0921	±0.0218	0.0123	±0.0003	0.1051	379	±265.1	89	±10.1	79	±1.0	79	±1.0
19 Burns-1 92	520	165	0.0583	±0.0053	0.1008	±0.0093	0.0125	±0.0002	0.1547	542	±100.1	98	±4.3	80	±0.6	80	±0.6
20 Burns-1 63	478	206	0.0529	±0.0031	0.0921	±0.0054	0.0126	±0.0002	0.2173	324	±65.5	89	±2.5	81	±0.5	81	±0.5
21 Burns-1 42	177	55	0.0895	±0.0230	0.1573	±0.0416	0.0128	±0.0008	0.2325	1415	±246.1	148	±18.3	82	±2.5	82	±2.5
22 Burns-1 16	709	332	0.0491	±0.0030	0.0872	±0.0054	0.0129	±0.0002	0.1960	154	±71.4	85	±2.5	82	±0.5	82	±0.5
23 Burns-1 57	593	265	0.0455	±0.0035	0.0837	±0.0065	0.0133	±0.0002	0.1584	0	±0.0	82	±3.0	85	±0.5	85	±0.5
24 Burns-1 20	255	90	0.0775	±0.0135	0.1477	±0.0261	0.0138	±0.0004	0.1567	1135	±173.6	140	±11.5	88	±1.2	88	±1.2
25 Burns-1 101	1098	495	0.0482	±0.0025	0.0935	±0.0051	0.0141	±0.0002	0.2884	112	±61.2	91	±2.4	90	±0.7	90	±0.7
26 Burns-1 104	132	58	0.0523	±0.0208	0.1031	±0.0415	0.0143	±0.0009	0.1478	299	±454.0	100	±19.1	92	±2.7	92	±2.7
27 Burns-1 54	918	421	0.0516	±0.0032	0.1037	±0.0067	0.0146	±0.0002	0.2579	267	±71.6	100	±3.1	93	±0.8	93	±0.8
28 Burns-1 52	601	198	0.0455	±0.0041	0.0918	±0.0083	0.0146	±0.0002	0.1394	0	±0.0	89	±3.9	94	±0.6	94	±0.6
29 Burns-1 114	305	135	0.0597	±0.0091	0.1244	±0.0190	0.0151	±0.0003	0.1149	592	±164.9	119	±8.6	97	±0.8	97	±0.8
30 Burns-1 8	838	259	0.0609	±0.0034	0.1274	±0.0116	0.0152	±0.0011	0.7962	635	±59.5	122	±5.2	97	±3.5	97	±3.5
31 Burns-1 44	678	390	0.0479	±0.0035	0.1018	±0.0076	0.0154	±0.0003	0.2713	94	±85.4	98	±3.5	99	±1.0	99	±1.0
32 Burns-1 90	132	62	0.0557	±0.0153	0.1195	±0.0331	0.0155	±0.0006	0.1446	442	±305.2	115	±15.0	99	±2.0	99	±2.0
33 Burns-1 72	133	76	0.0574	±0.0193	0.1235	±0.0417	0.0156	±0.0005	0.0981	508	±369.7	118	±18.9	100	±1.6	100	±1.6
34 Burns-1 70	1072	433	0.0512	±0.0018	0.1112	±0.0044	0.0157	±0.0003	0.4539	251	±40.2	107	±2.0	101	±0.9	101	±0.9
35 Burns-1 122	207	85	0.0724	±0.0090	0.1774	±0.0234	0.0178	±0.0008	0.3230	998	±126.6	166	±10.1	114	±2.4	114	±2.4
36 Burns-1 113	365	123	0.0774	±0.0075	0.2020	±0.0216	0.0189	±0.0009	0.4363	1131	±95.9	187	±9.1	121	±2.8	121	±2.8
37 Burns-1 75	942	592	0.0517	±0.0019	0.1368	±0.0068	0.0192	±0.0006	0.6644	274	±42.8	130	±3.1	122	±2.0	122	±2.0
38 Burns-1 13	148	101	0.0562	±0.0116	0.1787	±0.0373	0.0231	±0.0006	0.1228	459	±229.9	167	±16.1	147	±1.9	147	±1.9
39 Burns-1 82	140	94	0.0514	±0.0105	0.1650	±0.0339	0.0233	±0.0006	0.1212	258	±234.6	155	±14.8	148	±1.8	148	±1.8
40 Burns-1 102	242	184	0.0504	±0.0049	0.1626	±0.0161	0.0234	±0.0005	0.2137	212	±111.9	153	±7.0	149	±1.6	149	±1.6
41 Burns-1 103	250	176	0.0498	±0.0073	0.1672	±0.0245	0.0244	±0.0003	0.0928	184	±170.2	157	±10.7	155	±1.0	155	±1.0
42 Burns-1 21	110	105	0.0621	±0.0111	0.2102	±0.0385	0.0245	±0.0010	0.2309	678	±190.3	194	±16.1	156	±3.3	156	±3.3
43 Burns-1 56	236	171	0.0533	±0.0057	0.1849	±0.0202	0.0251	±0.0006	0.2149	343	±121.0	172	±8.7	160	±1.9	160	±1.9
44 Burns-1 129	352	266	0.0579	±0.0038	0.2053	±0.0138	0.0257	±0.0004	0.2558	524	±71.4	190	±5.8	164	±1.4	164	±1.4
45 Burns-1 30	416	321	0.0541	±0.0036	0.1940	±0.0131	0.0260	±0.0003	0.1807	376	±74.9	180	±5.6	165	±1.0	165	±1.0
46 Burns-1 132	456	384	0.0563	±0.0043	0.2026	±0.0160	0.0261	±0.0006	0.2751	466	±84.3	187	±6.8	166	±1.8	166	±1.8
47 Burns-1 64	206	170	0.0570	±0.0056	0.2091	±0.0209	0.0266	±0.0003	0.1286	491	±109.2	193	±8.8	169	±1.1	169	±1.1
48 Burns-1 35	196	156	0.0537	±0.0049	0.1980	±0.0184	0.0267	±0.0005	0.1910	359	±102.9	183	±7.8	170	±1.5	170	±1.5
49 Burns-1 22	262	150	0.0683	±0.0112	0.2519	±0.0415	0.0267	±0.0006	0.1257	879	±169.2	228	±16.8	170	±1.7	170	±1.7
50 Burns-1 77	297	274	0.0552	±0.0031	0.2068	±0.0121	0.0272	±0.0004	0.2738	420	±62.6	191	±5.1	173	±1.4	173	±1.4
51 Burns-1 83	489	449	0.0525	±0.0016	0.1999	±0.0067	0.0276	±0.0004	0.4696	307	±33.8	185	±2.8	176	±1.4	176	±1.4
52 Burns-1 47	385	231	0.0701	±0.0040	0.2680	±0.0158	0.0277	±0.0004	0.2664	930	±58.3	241	±6.3	176	±1.4	176	±1.4
53 Burns-1 40	253	242	0.0527	±0.0049	0.2016	±0.0192	0.0277	±0.0005	0.1831	316	±106.4	186	±8.1	176	±1.5	176	±1.5
54 Burns-1 19	300	273	0.0542	±0.0043	0.2085	±0.0171	0.0279	±0.0006	0.2583	379	±89.2	192	±7.2	177	±1.9	177	±1.9
55 Burns-1 53	115	81	0.0505	±0.0099	0.1946	±0.0387	0.0280	±0.0008	0.1478	216	±227.6	181	±16.4	178	±2.6	178	±2.6
56 Burns-1 127	198	209	0.0509	±0.0042	0.1966	±0.0167	0.0280	±0.0005	0.1948	237	±96.1	182	±7.1	178	±1.5	178	±1.5
57 Burns-1 94	378	285	0.0576	±0.0027	0.2293	±0.0115	0.0289	±0.0005	0.3179	514	±52.2	210	±4.7	184	±1.4	184	±1.4
58 Burns-1 59	267	227	0.0541	±0.0041	0.2168	±0.0164	0.0290	±0.0004	0.1615	376	±84.2	199	±6.9	185	±1.1	185	±1.1
59 Burns-1 66	426	328	0.0563	±0.0027	0.2270	±0.0113	0.0293	±0.0004	0.2773	464	±53.2	208	±4.7	186	±1.3	186	±1.3
60 Burns-1 91	376	235	0.0578	±0.0035	0.2381	±0.0152	0.0299	±0.0007	0.3450	522	±65.5	217	±6.2	190	±2.1	190	±2.1
61 Burns-1 68	290	276	0.0580	±0.0054	0.2418	±0.0229	0.0303	±0.0005	0.1688	528	±102.2	220	±9.4	192	±1.5	192	±1.5
62 Burns-1 100	277	314	0.0516	±0.0035	0.2216	±0.0157	0.0311	±0.0007	0.3114	267	±77.2	203	±6.5	198	±2.1	198	±2.1
63 Burns-1 37	397	348	0.0499	±0.0030	0.2234	±0.0141	0.0325	±0.0006	0.2746	191	±70.5	205	±5.9	206	±1.8	206	±1.8
64 Burns-1 27	834	700	0.0521	±0.0012	0.2351	±0.0061	0.0328	±0.0004	0.4522	288	±26.5	214	±2.5	208	±1.2	208	±1.2
65 Burns-1 31	344	360	0.0457	±0.0041	0.2082	±0.0189	0.0331	±0.0004	0.1423	0	±0.0	192	±7.9	210	±1.3	210	±1.3
66 Burns-1 130	279	296	0.0508	±0.0038	0.2353	±0.0178	0.0336	±0.0005	0.1947	233	±85.5	215	±7.3	213	±1.5	213	±1.5
67 Burns-1 126	851	918	0.0485	±0.0013	0.2257	±0.0065	0.0337	±0.0004	0.4122	125	±30.8	207	±2.7	214	±1.2	214	±1.2
68 Burns-1 135	259	266	0.0540	±0.0028	0.2539	±0.0134	0.0341	±0.0004	0.2008	371	±58.3	230	±5.4	216	±1.1	216	±1.1
69 Burns-1 58	315	383	0.0518	±0.0039	0.2484	±0.0188	0.0348	±0.0005	0.1825	277	±85.2	225	±7.6	220	±1.5	220	±1.5
70 Burns-1 85	169	276	0.0562	±0.0050	0.3104	±0.0280	0.0401	±0.0005	0.1268	460	±99.0	275	±10.8	253	±1.4	253	±1.4
71 Burns-1 71	262	333	0.0556	±0.0026	0.3806	±0.0184	0.0496	±0.0006	0.2569	438	±51.9	327	±6.8	312	±1.9	312	±1.9
72 Burns-1 74	99	176	0.0668	±0.0081	0.4962	±0.0610	0.0539	±0.0009	0.1368	832	±126.9	409	±20.7	338	±2.8	338	±2.8
73 Burns-1 117	263	496	0.0556	±0.0030	0.4767	±0.0262	0.0621	±0.0008	0.2265	438	±59.5	396	±9.0	389	±2.3	389	±2.3

Sample Name: Bailey 1C (Z7)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
74	Burns-1 10	931	1,324	0.0565	±0.0012	0.5045	±0.0124	0.0647	±0.0009	0.5451	474	±22.9	415	±4.2	404	±2.6	404	±2.6
75	Burns-1 80	244	550	0.0608	±0.0013	0.7069	±0.0189	0.0843	±0.0014	0.6405	634	±22.1	543	±5.6	522	±4.3	522	±4.3
76	Burns-1 99	1032	1,746	0.0891	±0.0025	1.8237	±0.0672	0.1485	±0.0036	0.6536	1406	±26.7	1054	±12.1	893	±10.0	893	±10.0
77	Burns-1 12	191	1,132	0.0718	±0.0012	1.5508	±0.0303	0.1566	±0.0017	0.5700	981	±16.4	951	±6.0	938	±4.9	938	±4.9
78	Burns-1 34	72	398	0.0713	±0.0030	1.6349	±0.0712	0.1663	±0.0019	0.2679	966	±42.8	984	±13.7	992	±5.4	966	±42.8
79	Burns-1 89	354	2,131	0.0796	±0.0005	2.2984	±0.0451	0.2094	±0.0039	0.9515	1187	±6.0	1212	±6.9	1226	±10.4	1187	±6.0
80	Burns-1 81	95	693	0.0797	±0.0028	1.8109	±0.0726	0.1648	±0.0032	0.4779	1190	±34.8	1049	±13.1	983	±8.7	1190	±34.8
81	Burns-1 41	156	936	0.0806	±0.0008	2.1963	±0.0304	0.1977	±0.0019	0.6993	1211	±9.7	1180	±4.8	1163	±5.2	1211	±9.7
82	Burns-1 73	109	750	0.0835	±0.0016	2.5546	±0.1024	0.2219	±0.0078	0.8806	1281	±18.5	1288	±14.6	1292	±20.7	1281	±18.5
83	Burns-1 116	291	2,343	0.0860	±0.0003	2.6012	±0.0269	0.2194	±0.0021	0.9329	1338	±3.6	1301	±3.8	1279	±5.6	1338	±3.6
84	Burns-1 111	232	1,489	0.0879	±0.0009	2.7890	±0.0491	0.2302	±0.0033	0.8262	1379	±9.5	1353	±6.6	1336	±8.8	1379	±9.5
85	Burns-1 131	275	1,904	0.0884	±0.0005	2.4254	±0.0545	0.1990	±0.0044	0.9734	1391	±4.9	1250	±8.1	1170	±11.7	1391	±4.9
86	Burns-1 32	251	1,458	0.0885	±0.0007	2.9025	±0.0470	0.2379	±0.0033	0.8645	1393	±7.8	1383	±6.1	1376	±8.7	1393	±7.8
87	Burns-1 1	574	1,857	0.0888	±0.0004	2.7442	±0.0511	0.2240	±0.0041	0.9700	1401	±4.3	1341	±6.9	1303	±10.7	1401	±4.3
88	Burns-1 39	250	1,440	0.0889	±0.0006	3.1289	±0.0720	0.2553	±0.0056	0.9563	1402	±6.4	1440	±8.9	1466	±14.4	1402	±6.4
89	Burns-1 87	865	2,886	0.0901	±0.0003	3.0691	±0.0434	0.2471	±0.0034	0.9661	1427	±3.5	1425	±5.4	1424	±8.7	1427	±3.5
90	Burns-1 69	535	3,525	0.0902	±0.0004	3.1558	±0.0406	0.2538	±0.0031	0.9353	1429	±4.3	1446	±5.0	1458	±7.9	1429	±4.3
91	Burns-1 105	71	522	0.0914	±0.0010	3.3284	±0.0911	0.2642	±0.0066	0.9106	1454	±10.8	1488	±10.7	1511	±16.8	1454	±10.8
92	Burns-1 50	211	1,014	0.0930	±0.0018	3.2552	±0.0730	0.2538	±0.0027	0.4711	1488	±18.7	1470	±8.7	1458	±6.9	1488	±18.7
93	Burns-1 38	117	613	0.0941	±0.0013	2.7755	±0.0686	0.2140	±0.0043	0.8198	1510	±13.4	1349	±9.2	1250	±11.5	1510	±13.4
94	Burns-1 97	186	1,321	0.0952	±0.0008	3.1685	±0.0585	0.2413	±0.0040	0.8978	1533	±7.7	1450	±7.1	1393	±10.4	1533	±7.7
95	Burns-1 67	1436	8,214	0.0973	±0.0006	3.5320	±0.0555	0.2633	±0.0038	0.9185	1573	±5.8	1534	±6.2	1507	±9.7	1573	±5.8
96	Burns-1 108	1021	4,168	0.0980	±0.0006	3.0470	±0.1430	0.2254	±0.0105	0.9913	1587	±5.8	1419	±17.9	1311	±27.6	1587	±5.8
97	Burns-1 112	253	2,104	0.0981	±0.0004	3.5226	±0.0361	0.2603	±0.0024	0.9002	1589	±4.2	1532	±4.1	1492	±6.1	1589	±4.2
98	Burns-1 96	85	560	0.0983	±0.0041	3.1114	±0.1386	0.2295	±0.0033	0.3238	1593	±39.4	1436	±17.1	1332	±8.7	1593	±39.4
99	Burns-1 123	160	1,523	0.0987	±0.0011	3.5044	±0.0852	0.2576	±0.0056	0.8901	1599	±10.3	1528	±9.6	1477	±14.3	1599	±10.3
100	Burns-1 45	845	6,311	0.0998	±0.0003	3.3697	±0.0538	0.2448	±0.0039	0.9859	1621	±2.5	1497	±6.3	1412	±10.0	1621	±2.5
101	Burns-1 134	392	2,161	0.1007	±0.0006	3.7117	±0.0836	0.2673	±0.0058	0.9690	1637	±5.2	1574	±9.0	1527	±14.8	1637	±5.2
102	Burns-1 61	139	1,058	0.1007	±0.0009	3.9313	±0.0596	0.2830	±0.0034	0.7984	1638	±8.5	1620	±6.1	1606	±8.6	1638	±8.5
103	Burns-1 95	144	1,419	0.1010	±0.0008	4.0103	±0.0553	0.2880	±0.0033	0.8356	1643	±7.0	1636	±5.6	1631	±8.3	1643	±7.0
104	Burns-1 2	186	1,318	0.1010	±0.0040	4.0636	±0.1685	0.2917	±0.0031	0.2593	1643	±37.2	1647	±16.9	1650	±7.8	1643	±37.2
105	Burns-1 93	169	2,022	0.1015	±0.0008	3.8764	±0.0541	0.2770	±0.0032	0.8205	1652	±7.4	1609	±5.6	1576	±8.0	1652	±7.4
106	Burns-1 7	50	423	0.1017	±0.0022	4.0999	±0.1034	0.2923	±0.0037	0.4959	1656	±20.3	1654	±10.3	1653	±9.1	1656	±20.3
107	Burns-1 78	452	3,888	0.1019	±0.0004	3.9870	±0.0512	0.2838	±0.0035	0.9635	1659	±3.2	1632	±5.2	1610	±8.8	1659	±3.2
108	Burns-1 115	213	2,106	0.1022	±0.0006	3.8857	±0.0417	0.2757	±0.0025	0.8576	1665	±5.1	1611	±4.3	1569	±6.4	1665	±5.1
109	Burns-1 107	33	341	0.1032	±0.0041	3.8152	±0.1660	0.2681	±0.0049	0.4184	1683	±36.5	1596	±17.5	1531	±12.4	1683	±36.5
110	Burns-1 29	77	548	0.1034	±0.0014	4.0331	±0.0867	0.2828	±0.0047	0.7672	1686	±12.7	1641	±8.7	1606	±11.7	1686	±12.7
111	Burns-1 51	383	3,173	0.1046	±0.0004	4.3209	±0.0555	0.2997	±0.0037	0.9503	1706	±3.7	1697	±5.3	1690	±9.1	1706	±3.7
112	Burns-1 62	121	1,238	0.1052	±0.0013	4.4736	±0.0754	0.3085	±0.0034	0.6538	1717	±11.7	1726	±7.0	1733	±8.4	1717	±11.7
113	Burns-1 15	147	1,391	0.1054	±0.0006	4.1287	±0.0528	0.2842	±0.0032	0.8855	1721	±5.5	1660	±5.2	1612	±8.1	1721	±5.5
114	Burns-1 24	48	259	0.1163	±0.0042	5.1896	±0.2173	0.3236	±0.0071	0.5222	1900	±32.1	1851	±17.8	1807	±17.2	1900	±32.1
115	Burns-1 17	472	5,284	0.1508	±0.0005	8.2570	±0.0902	0.3970	±0.0041	0.9503	2355	±2.9	2260	±4.9	2155	±9.5	2355	±2.9
116	Burns-1 65	122	1,935	0.1853	±0.0005	14.2230	±0.1443	0.5566	±0.0054	0.9563	2701	±2.4	2765	±4.8	2853	±11.2	2701	±2.4

Sample Name: GM-C-051408-8 (Z9)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
1	C-051408-8 77	697	146	0.0645	±0.0088	0.0696	±0.0095	0.0078	±0.0001	0.1209	759	±143.6	68	±4.5	50	±0.4	50	±0.4
2	C-051408-8 70	319	97	0.0536	±0.0105	0.0586	±0.0117	0.0079	±0.0003	0.1725	354	±222.0	58	±5.6	51	±0.9	51	±0.9
3	C-051408-8 52	2469	498	0.0574	±0.0031	0.0644	±0.0042	0.0081	±0.0003	0.5640	508	±59.9	63	±2.0	52	±1.0	52	±1.0
4	C-051408-8 10	2116	562	0.0541	±0.0012	0.0635	±0.0018	0.0085	±0.0001	0.6030	375	±25.1	63	±0.8	55	±0.5	55	±0.5
5	C-051408-8 97	152	45	0.0599	±0.0185	0.0719	±0.0224	0.0087	±0.0004	0.1352	600	±334.0	71	±10.6	56	±1.2	56	±1.2
6	C-051408-8 65	150	125	0.0568	±0.0122	0.0697	±0.0153	0.0089	±0.0004	0.1946	484	±237.6	68	±7.3	57	±1.2	57	±1.2
7	C-051408-8 86	286	97	0.0533	±0.0158	0.0693	±0.0219	0.0094	±0.0010	0.3524	344	±334.1	68	±10.4	60	±3.3	60	±3.3
8	C-051408-8 26	325	123	0.0519	±0.0079	0.0687	±0.0105	0.0096	±0.0002	0.1399	283	±173.4	67	±5.0	62	±0.7	62	±0.7
9	C-051408-8 45	151	86	0.0715	±0.0204	0.1113	±0.0320	0.0113	±0.0003	0.1016	971	±291.5	107	±14.6	72	±1.1	72	±1.1
10	C-051408-8 47	191	115	0.0655	±0.0116	0.1124	±0.0212	0.0124	±0.0008	0.3329	792	±186.2	108	±9.7	80	±2.5	80	±2.5
11	C-051408-8 106	236	82	0.0761	±0.0163	0.1343	±0.0295	0.0128	±0.0006	0.2253	1098	±214.5	128	±13.2	82	±2.0	82	±2.0
12	C-051408-8 111	584	213	0.0528	±0.0044	0.0933	±0.0081	0.0128	±0.0004	0.3160	318	±93.9	91	±3.8	82	±1.1	82	±1.1
13	C-051408-8 100	164	76	0.0605	±0.0136	0.1178	±0.0267	0.0141	±0.0005	0.1442	622	±242.2	113	±12.1	90	±1.5	90	±1.5
14	C-051408-8 57	276	150	0.0672	±0.0256	0.1323	±0.0507	0.0143	±0.0007	0.1218	844	±395.6	126	±22.7	91	±2.1	91	±2.1
15	C-051408-8 7	704	306	0.0689	±0.0033	0.1436	±0.0079	0.0151	±0.0004	0.4874	895	±49.6	136	±3.5	97	±1.3	97	±1.3
16	C-051408-8 92	695	289	0.0556	±0.0033	0.1188	±0.0080	0.0155	±0.0005	0.4982	438	±65.1	114	±3.6	99	±1.7	99	±1.7
17	C-051408-8 53	147	82	0.0520	±0.0114	0.1127	±0.0252	0.0157	±0.0007	0.1913	285	±251.4	108	±11.5	101	±2.1	101	±2.1
18	C-051408-8 60	NA	49,159	0.0485	±0.0419	0.1081	±0.0936	0.0162	±0.0010	0.0743	125	#####	104	±42.9	103	±3.3	103	±3.3
19	C-051408-8 39	605	347	0.0687	±0.0053	0.1620	±0.0128	0.0171	±0.0003	0.2119	890	±79.8	152	±5.6	109	±0.9	109	±0.9
20	C-051408-8 25	244	162	0.0660	±0.0060	0.1803	±0.0179	0.0198	±0.0008	0.3903	806	±95.8	168	±7.7	126	±2.4	126	±2.4
21	C-051408-8 139	87	63	0.0877	±0.0148	0.2767	±0.0528	0.0229	±0.0020	0.4693	1376	±162.1	248	±21.0	146	±6.5	146	±6.5
22	C-051408-8 143	400	264	0.0558	±0.0029	0.1767	±0.0096	0.0230	±0.0003	0.2674	445	±58.3	165	±4.2	146	±1.1	146	±1.1
23	C-051408-8 85	456	338	0.0500	±0.0023	0.1663	±0.0104	0.0241	±0.0011	0.6934	194	±52.6	156	±4.5	154	±3.3	154	±3.3

Sample Name: Bailey 1C (Z7)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
24	C-051408-8 43	390	408	0.0503	±0.0031	0.1717	±0.0123	0.0247	±0.0009	0.5317	211	±70.3	161	±5.3	157	±3.0	157	±3.0
25	C-051408-8 91	372	350	0.0499	±0.0028	0.1840	±0.0107	0.0267	±0.0004	0.2765	189	±64.9	171	±4.6	170	±1.3	170	±1.3
26	C-051408-8 90	300	343	0.0541	±0.0029	0.2272	±0.0146	0.0304	±0.0011	0.5623	376	±59.8	208	±6.0	193	±3.4	193	±3.4
27	C-051408-8 110	130	122	0.0538	±0.0088	0.2338	±0.0386	0.0315	±0.0008	0.1470	361	±184.2	213	±15.9	200	±2.4	200	±2.4
28	C-051408-8 124	767	884	0.0904	±0.0010	0.4154	±0.0778	0.0333	±0.0062	0.9984	1435	±10.1	353	±27.9	211	±19.4	211	±19.4
29	C-051408-8 19	323	365	0.0869	±0.0025	0.4132	±0.0161	0.0345	±0.0009	0.6718	1359	±27.9	351	±5.8	218	±2.8	218	±2.8
30	C-051408-8 132	286	223	0.0603	±0.0041	0.2894	±0.0240	0.0348	±0.0016	0.5620	615	±74.1	258	±9.5	221	±5.1	221	±5.1
31	C-051408-8 80	1922	677	0.0880	±0.0051	0.4615	±0.0285	0.0381	±0.0008	0.3284	1382	±56.1	385	±9.9	241	±2.4	241	±2.4
32	C-051408-8 128	101	139	0.0655	±0.0099	0.3877	±0.0693	0.0429	±0.0041	0.5337	791	±158.7	333	±25.4	271	±12.7	271	±12.7
33	C-051408-8 116	250	322	0.0673	±0.0032	0.4506	±0.0362	0.0486	±0.0032	0.8107	846	±49.0	378	±12.7	306	±9.7	306	±9.7
34	C-051408-8 31	285	349	0.0597	±0.0018	0.4033	±0.0249	0.0490	±0.0026	0.8710	592	±32.9	344	±9.0	308	±8.1	308	±8.1
35	C-051408-8 35	490	1,316	0.0616	±0.0021	0.5809	±0.0310	0.0684	±0.0028	0.7738	661	±36.2	465	±9.9	426	±8.5	426	±8.5
36	C-051408-8 122	161	358	0.0605	±0.0031	0.6623	±0.0356	0.0795	±0.0012	0.2778	620	±55.7	516	±10.9	493	±3.5	493	±3.5
37	C-051408-8 147	57	263	0.0723	±0.0049	1.1273	±0.0974	0.1131	±0.0060	0.6174	994	±69.1	766	±23.2	691	±17.5	691	±17.5
38	C-051408-8 82	333	707	0.0944	±0.0023	1.5537	±0.0869	0.1193	±0.0060	0.9008	1517	±22.9	952	±17.3	727	±17.3	727	±17.3
39	C-051408-8 78	138	521	0.0739	±0.0015	1.3187	±0.1453	0.1293	±0.0140	0.9826	1040	±20.7	854	±31.8	784	±40.0	784	±40.0
40	C-051408-8 131	1161	4,113	0.0862	±0.0006	1.6215	±0.0724	0.1364	±0.0060	0.9880	1343	±6.7	979	±14.0	824	±17.1	824	±17.1
41	C-051408-8 121	1362	4,095	0.0760	±0.0004	1.4475	±0.0694	0.1381	±0.0066	0.9953	1096	±4.6	909	±14.4	834	±18.7	834	±18.7
42	C-051408-8 142	94	458	0.0666	±0.0713	1.3473	±1.4455	0.1467	±0.0101	0.0639	826	#####	866	±312.6	882	±28.3	882	±28.3
43	C-051408-8 84	45	263	0.0710	±0.0044	1.5826	±0.1056	0.1616	±0.0040	0.3705	958	±63.3	963	±20.8	966	±11.1	958	±63.3
44	C-051408-8 20	351	2,222	0.0735	±0.0005	1.6674	±0.0278	0.1646	±0.0025	0.9021	1026	±7.3	996	±5.3	983	±6.9	1026	±7.3
45	C-051408-8 79	192	1,223	0.0785	±0.0007	1.8484	±0.0232	0.1707	±0.0015	0.7223	1160	±8.6	1063	±4.1	1016	±4.3	1160	±8.6
46	C-051408-8 42	165	1,284	0.0798	±0.0014	2.1969	±0.1382	0.1997	±0.0121	0.9621	1191	±16.9	1180	±22.0	1174	±32.5	1191	±16.9
47	C-051408-8 50	45	397	0.0860	±0.0031	2.7509	±0.1243	0.2320	±0.0064	0.6093	1338	±34.6	1342	±16.8	1345	±16.7	1338	±34.6
48	C-051408-8 71	275	2,194	0.0879	±0.0005	2.5829	±0.0404	0.2130	±0.0031	0.9166	1381	±6.0	1296	±5.7	1245	±8.1	1381	±6.0
49	C-051408-8 55	536	2,924	0.0893	±0.0004	3.1914	±0.1824	0.2591	±0.0148	0.9967	1411	±4.4	1455	±22.1	1485	±37.8	1411	±4.4
50	C-051408-8 24	84	806	0.0899	±0.0011	2.9463	±0.0453	0.2376	±0.0023	0.6434	1424	±11.2	1394	±5.8	1374	±6.1	1424	±11.2
51	C-051408-8 40	557	7,155	0.0908	±0.0003	3.0559	±0.0367	0.2442	±0.0028	0.9485	1442	±3.6	1422	±4.6	1409	±7.2	1442	±3.6
52	C-051408-8 94	146	1,069	0.0911	±0.0007	2.9073	±0.0658	0.2316	±0.0049	0.9370	1448	±7.5	1384	±8.6	1343	±12.9	1448	±7.5
53	C-051408-8 99	161	1,304	0.0914	±0.0007	2.9407	±0.0561	0.2334	±0.0041	0.9127	1454	±7.4	1392	±7.2	1352	±10.6	1454	±7.4
54	C-051408-8 9	159	1,120	0.0917	±0.0017	3.1614	±0.1576	0.2502	±0.0115	0.9240	1460	±18.1	1448	±19.2	1439	±29.7	1460	±18.1
55	C-051408-8 41	1283	14,859	0.0917	±0.0002	3.1546	±0.0375	0.2495	±0.0029	0.9817	1461	±2.1	1446	±4.6	1436	±7.5	1461	±2.1
56	C-051408-8 15	105	939	0.0917	±0.0012	2.9393	±0.0475	0.2324	±0.0021	0.5470	1462	±12.9	1392	±6.1	1347	±5.4	1462	±12.9
57	C-051408-8 140	193	1,474	0.0929	±0.0022	3.0122	±0.0957	0.2351	±0.0049	0.6526	1487	±22.8	1411	±12.1	1361	±12.7	1487	±22.8
58	C-051408-8 96	57	519	0.0935	±0.0018	2.8328	±0.0606	0.2197	±0.0022	0.4613	1498	±17.9	1364	±8.0	1280	±5.7	1498	±17.9
59	C-051408-8 21	240	2,668	0.0947	±0.0049	3.0545	±0.1692	0.2339	±0.0046	0.3562	1522	±48.8	1421	±21.2	1355	±12.1	1522	±48.8
60	C-051408-8 54	245	2,034	0.0964	±0.0010	3.1909	±0.0558	0.2400	±0.0034	0.8148	1556	±9.5	1455	±6.8	1387	±8.9	1556	±9.5
61	C-051408-8 118	274	2,588	0.1021	±0.0003	3.9054	±0.0576	0.2774	±0.0040	0.9748	1663	±3.0	1615	±6.0	1578	±10.1	1663	±3.0
62	C-051408-8 134	156	1,415	0.1022	±0.0007	4.2489	±0.1093	0.3014	±0.0075	0.9626	1665	±6.4	1684	±10.6	1698	±18.5	1665	±6.4
63	C-051408-8 64	47	119	0.1025	±0.0030	4.5808	±0.2996	0.3243	±0.0189	0.8904	1669	±27.5	1746	±27.3	1810	±46.0	1669	±27.5
64	C-051408-8 89	125	766	0.1025	±0.0006	3.9158	±0.1296	0.2770	±0.0090	0.9853	1671	±5.2	1617	±13.4	1576	±22.8	1671	±5.2
65	C-051408-8 13	297	2,643	0.1028	±0.0004	4.0468	±0.0504	0.2854	±0.0034	0.9601	1676	±3.2	1644	±5.1	1618	±8.6	1676	±3.2
66	C-051408-8 75	302	2,499	0.1031	±0.0011	4.1607	±0.0863	0.2927	±0.0051	0.8476	1681	±10.2	1666	±8.5	1655	±12.8	1681	±10.2
67	C-051408-8 18	NA	9,095	0.1038	±0.0010	3.4632	±0.1167	0.2419	±0.0078	0.9587	1694	±8.8	1519	±13.3	1397	±20.3	1694	±8.8
68	C-051408-8 49	498	4,198	0.1042	±0.0003	3.5785	±0.0505	0.2492	±0.0034	0.9756	1700	±2.9	1545	±5.6	1434	±8.8	1700	±2.9
69	C-051408-8 4	73	705	0.1043	±0.0030	3.9624	±0.2965	0.2756	±0.0190	0.9220	1702	±26.7	1627	±30.3	1569	±48.0	1702	±26.7
70	C-051408-8 67	170	1,883	0.1045	±0.0005	4.3635	±0.0900	0.3027	±0.0061	0.9779	1706	±4.0	1705	±8.5	1705	±15.1	1706	±4.0
71	C-051408-8 129	218	1,765	0.1046	±0.0005	4.1524	±0.0532	0.2878	±0.0035	0.9365	1708	±4.1	1665	±5.2	1631	±8.6	1708	±4.1
72	C-051408-8 117	725	6,995	0.1048	±0.0003	4.0952	±0.0495	0.2835	±0.0033	0.9761	1710	±2.4	1653	±4.9	1609	±8.4	1710	±2.4
73	C-051408-8 87	66	555	0.1048	±0.0014	3.9752	±0.1903	0.2751	±0.0126	0.9593	1711	±12.4	1629	±19.4	1567	±31.9	1711	±12.4
74	C-051408-8 145	664	3,717	0.1048	±0.0005	3.6005	±0.0697	0.2491	±0.0047	0.9661	1711	±4.6	1550	±7.7	1434	±12.0	1711	±4.6
75	C-051408-8 102	455	2,801	0.1053	±0.0003	4.0448	±0.0804	0.2787	±0.0055	0.9859	1719	±3.1	1643	±8.1	1585	±13.8	1719	±3.1
76	C-051408-8 63	79	259	0.1057	±0.0114	4.7329	±1.4552	0.3247	±0.0934	0.9359	1727	±99.4	1773	±128.9	1813	±227.4	1727	±99.4
77	C-051408-8 44	277	4,408	0.1059	±0.0004	4.9474	±0.1417	0.3388	±0.0096	0.9899	1730	±3.7	1810	±12.1	1881	±23.1	1730	±3.7
78	C-051408-8 51	68	754	0.1082	±0.0014	4.2629	±0.0965	0.2857	±0.0052	0.8108	1769	±12.1	1686	±9.3	1620	±13.1	1769	±12.1
79	C-051408-8 123	67	677	0.1083	±0.0016	4.5580	±0.0892	0.3052	±0.0038	0.6392	1771	±13.7	1742	±8.1	1717	±9.4	1771	±13.7
80	C-051408-8 133	41	374	0.1085	±0.0018	4.7008	±0.2920	0.3143	±0.0189	0.9656	1774	±14.7	1767	±26.0	1762	±46.2	1774	±14.7
81	C-051408-8 2	107	713	0.1089	±0.0007	4.8883	±0.1571	0.3255	±0.0103	0.9814	1782	±5.6	1800	±13.5	1816	±25.0	1782	±5.6
82	C-051408-8 148	204	1,729	0.1092	±0.0005	3.9296	±0.0659	0.2610	±0.0042	0.9655	1786	±4.0	1620	±6.8	1495	±10.8	1786	±4.0
83	C-051408-8 76	153	48,401	0.1101	±0.0026	4.2112	±0.1145	0.2775	±0.0037	0.4943	1800	±21.5	1676	±11.2	1579	±9.4	1800	±21.5
84	C-051408-8 88	NA	48,296	0.1101	±0.0041	4.5720	±0.3560	0.3012	±0.0205	0.8754	1801	±34.2	1744	±32.4	1697	±50.8	1801	±34.2
85	C-051408-8 69	187	2,033	0.1133	±0.0004	4.5511	±0.0975	0.2914	±0.0062	0.9869	1852	±3.1	1740	±8.9	1649	±15.4	1852	±3.1
86	C-051408-8 101	289	1,323	0.1134	±0.0022	4.6341	±0.1359	0.2964	±0.0064	0.7418	1855	±17.8	1755	±12.2	1673	±16.0	1855	±17.8
87	C-051408-8 14	18	254	0.1156	±0.0057	5.3208	±0.2771	0.3338	±0.0059	0.3404	1889	±44.1	1872	±22.3	1857	±14.3	1889	±44.1
88	C-051408-8 104	119	751	0.1175	±0.0053	5.2405	±0.3237	0.3234	±0.0138	0.6902	1919	±40.1	1859	±26.3	1806	±33.6	1919	±40.1
89	C-051408-8 28	22	331	0.1202	±0.0042	5.8594	±0.2195	0.3537	±0.0051	0.3814	1959	±30.9	1955	±16.2	1952	±12.0	1959	±30.9
90	C-051408-8 8	68	319	0.1203	±0.0049	6.0344	±0.2565	0.3639	±0.0046	0.2992	1960	±36.2	1981	±18.5	2001	±10.9	1960	±36.2
91	C-051408-8 141	5	57	0.1526	±0.0254	8.7070	±1.8113	0.4138	±0.0515	0.5982	2375	±142.1	2308	±94.7	2232	±117.4	2375	±142.1
92	C-051408-8 1	3	39	0.1673	±0.0432	10.6692	±3.0049	0.4624	±0.0521	0.3999	2531	±216.6	2495	±130.7	2450	±114.8	2531	±216.6
93	C-051408-8 119	213	2,413	0.1793	±0.0018	11.9934	±0.2165	0.4850	±0.0072	0.8206	2647	±8.6	2604	±8.5	2549	±15.6	2647	±8.6
94	C-051408-8 72	26	481	0.1952	±0.0021	15.7502	±0.4496	0.5853	±0.0155	0.9294	2786	±8.6	2862	±13.6	2971	±31.6	2786	±8.6

Sample Name: Bailey 1C (Z7)

Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
		Isotopic Ratios								Apparent Ages (Ma)							

Sample Name: GM-C-051508-1 (Z8)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
		Isotopic Ratios									Apparent Ages (Ma)							
1	C-051508-1 27	515	205	0.0586	±0.0048	0.0881	±0.0078	0.0109	±0.0004	0.3810	551	±89.7	86	±3.7	70	±1.2	70	±1.2
2	C-051508-1 84	318	144	0.0694	±0.0100	0.1059	±0.0160	0.0111	±0.0005	0.2841	909	±149.2	102	±7.3	71	±1.5	71	±1.5
3	C-051508-1 148	481	248	0.0614	±0.0050	0.0937	±0.0083	0.0111	±0.0004	0.3635	653	±88.0	91	±3.8	71	±1.1	71	±1.1
4	C-051508-1 65	776	340	0.0513	±0.0022	0.0785	±0.0042	0.0111	±0.0004	0.5921	253	±49.6	77	±2.0	71	±1.1	71	±1.1
5	C-051508-1 54	220	64	0.0700	±0.0091	0.1084	±0.0160	0.0112	±0.0008	0.4726	929	±133.2	105	±7.3	72	±2.5	72	±2.5
6	C-051508-1 30	158	62	0.0504	±0.0131	0.0788	±0.0206	0.0114	±0.0004	0.1437	211	±300.3	77	±9.7	73	±1.4	73	±1.4
7	C-051508-1 50	236	82	0.0457	±0.0070	0.0722	±0.0117	0.0115	±0.0006	0.3361	0	±0.0	71	±5.5	73	±2.0	73	±2.0
8	C-051508-1 34	117	51	0.0640	±0.0119	0.1045	±0.0236	0.0118	±0.0015	0.5662	741	±196.6	101	±10.8	76	±4.8	76	±4.8
9	C-051508-1 78	294	164	0.0612	±0.0074	0.1034	±0.0135	0.0123	±0.0006	0.3619	646	±130.8	100	±6.2	79	±1.8	79	±1.8
10	C-051508-1 125	127	78	0.0531	±0.0106	0.0912	±0.0186	0.0124	±0.0005	0.2032	334	±226.8	89	±8.7	80	±1.6	80	±1.6
11	C-051508-1 4	232	78	0.0454	±0.0062	0.0813	±0.0114	0.0130	±0.0004	0.2398	0	±0.0	79	±5.4	83	±1.4	83	±1.4
12	C-051508-1 10	260	63	0.0539	±0.0048	0.0965	±0.0092	0.0130	±0.0004	0.3559	366	±100.7	93	±4.3	83	±1.4	83	±1.4
13	C-051508-1 15	321	184	0.0479	±0.0036	0.0941	±0.0074	0.0143	±0.0003	0.3064	93	±89.0	91	±3.4	91	±1.1	91	±1.1
14	C-051508-1 128	383	271	0.0533	±0.0038	0.1054	±0.0078	0.0143	±0.0002	0.2145	341	±81.7	102	±3.6	92	±0.7	92	±0.7
15	C-051508-1 103	175	93	0.0547	±0.0075	0.1094	±0.0154	0.0145	±0.0005	0.2239	398	±153.8	105	±7.0	93	±1.5	93	±1.5
16	C-051508-1 141	151	107	0.0674	±0.0107	0.1374	±0.0226	0.0148	±0.0007	0.2691	852	±165.0	131	±10.1	95	±2.1	95	±2.1
17	C-051508-1 122	239	178	0.0494	±0.0061	0.1032	±0.0129	0.0151	±0.0003	0.1763	167	±143.8	100	±5.9	97	±1.1	97	±1.1
18	C-051508-1 2	312	98	0.0580	±0.0039	0.1227	±0.0088	0.0154	±0.0004	0.3356	528	±74.1	118	±4.0	98	±1.2	98	±1.2
19	C-051508-1 121	210	133	0.0621	±0.0119	0.1321	±0.0264	0.0154	±0.0009	0.2975	679	±204.3	126	±11.9	99	±2.9	99	±2.9
20	C-051508-1 100	275	108	0.0884	±0.0159	0.1887	±0.0364	0.0155	±0.0011	0.3581	1390	±172.7	176	±15.5	99	±3.4	99	±3.4
21	C-051508-1 127	460	318	0.0543	±0.0025	0.1180	±0.0063	0.0158	±0.0004	0.5321	384	±50.7	113	±2.9	101	±1.4	101	±1.4
22	C-051508-1 91	164	112	0.0523	±0.0065	0.1152	±0.0149	0.0160	±0.0005	0.2569	299	±142.5	111	±6.8	102	±1.7	102	±1.7
23	C-051508-1 88	400	202	0.0795	±0.0063	0.1766	±0.0148	0.0161	±0.0005	0.3366	1185	±78.0	165	±6.4	103	±1.4	103	±1.4
24	C-051508-1 1	647	185	0.0507	±0.0016	0.1147	±0.0059	0.0164	±0.0007	0.7837	229	±37.0	110	±2.7	105	±2.1	105	±2.1
25	C-051508-1 147	87	61	0.0766	±0.0167	0.1829	±0.0412	0.0173	±0.0010	0.2476	1110	±217.9	171	±17.7	111	±3.1	111	±3.1
26	C-051508-1 115	354	229	0.0571	±0.0062	0.1409	±0.0159	0.0179	±0.0005	0.2610	497	±119.8	134	±7.1	114	±1.7	114	±1.7
27	C-051508-1 71	83	68	0.0682	±0.0133	0.1720	±0.0343	0.0183	±0.0008	0.2232	874	±201.3	161	±14.9	117	±2.6	117	±2.6
28	C-051508-1 45	250	97	0.0625	±0.0044	0.1610	±0.0130	0.0187	±0.0007	0.4943	691	±74.8	152	±5.7	119	±2.4	119	±2.4
29	C-051508-1 21	430	166	0.0891	±0.0145	0.2338	±0.0400	0.0190	±0.0010	0.3124	1406	±155.6	213	±16.5	122	±3.2	122	±3.2
30	C-051508-1 106	157	126	0.0524	±0.0053	0.1443	±0.0152	0.0200	±0.0006	0.2639	301	±115.8	137	±6.7	128	±1.8	128	±1.8
31	C-051508-1 29	272	186	0.0514	±0.0035	0.1418	±0.0117	0.0200	±0.0010	0.5810	259	±77.2	135	±5.2	128	±3.0	128	±3.0
32	C-051508-1 136	30	30	0.0647	±0.0439	0.1799	±0.1230	0.0202	±0.0018	0.1284	764	±714.6	168	±52.9	129	±5.6	129	±5.6
33	C-051508-1 140	210	191	0.0638	±0.0047	0.1784	±0.0144	0.0203	±0.0007	0.4145	736	±77.8	167	±6.2	129	±2.1	129	±2.1
34	C-051508-1 113	268	220	0.0602	±0.0086	0.1716	±0.0254	0.0207	±0.0007	0.2375	612	±155.1	161	±11.0	132	±2.3	132	±2.3
35	C-051508-1 57	72	49	0.0848	±0.0173	0.2419	±0.0516	0.0207	±0.0013	0.2895	1311	±198.3	220	±21.1	132	±4.0	132	±4.0
36	C-051508-1 137	44	46	0.0639	±0.0244	0.1890	±0.0724	0.0214	±0.0008	0.0936	739	±403.4	176	±30.9	137	±2.4	137	±2.4
37	C-051508-1 46	310	223	0.0563	±0.0048	0.1673	±0.0157	0.0215	±0.0009	0.4312	464	±94.1	157	±6.8	137	±2.8	137	±2.8
38	C-051508-1 105	353	176	0.0590	±0.0052	0.1779	±0.0161	0.0219	±0.0005	0.2545	569	±95.4	166	±7.0	139	±1.6	139	±1.6
39	C-051508-1 58	78	56	0.0784	±0.0081	0.2413	±0.0259	0.0223	±0.0006	0.2580	1158	±102.9	219	±10.6	142	±1.9	142	±1.9
40	C-051508-1 39	45	31	0.0817	±0.0172	0.2533	±0.0547	0.0225	±0.0011	0.2200	1238	±206.5	229	±22.2	143	±3.4	143	±3.4
41	C-051508-1 108	78	77	0.0550	±0.0120	0.1704	±0.0395	0.0225	±0.0017	0.3241	411	±244.8	160	±17.1	143	±5.3	143	±5.3
42	C-051508-1 149	67	77	0.0793	±0.0116	0.2497	±0.0382	0.0228	±0.0010	0.2976	1180	±144.4	226	±15.5	146	±3.3	146	±3.3
43	C-051508-1 126	145	146	0.0505	±0.0065	0.1593	±0.0245	0.0229	±0.0019	0.5389	218	±149.9	150	±10.7	146	±6.0	146	±6.0
44	C-051508-1 44	84	75	0.0510	±0.0173	0.1820	±0.0635	0.0259	±0.0021	0.2293	240	±391.5	170	±27.3	165	±6.5	165	±6.5
45	C-051508-1 73	353	344	0.0627	±0.0017	0.2401	±0.0092	0.0278	±0.0007	0.7015	699	±29.2	219	±3.8	177	±2.3	177	±2.3
46	C-051508-1 131	NA	107	0.0802	±0.0015	0.3127	±0.0067	0.0283	±0.0003	0.4372	1201	±18.9	276	±2.6	180	±0.8	180	±0.8
47	C-051508-1 22	94	102	0.0558	±0.0048	0.2410	±0.0233	0.0313	±0.0013	0.4443	443	±96.4	219	±9.5	199	±4.2	199	±4.2
48	C-051508-1 7	160	94	0.0679	±0.0030	0.3006	±0.0149	0.0321	±0.0007	0.4696	866	±45.5	267	±5.8	204	±2.3	204	±2.3
49	C-051508-1 32	339	407	0.0505	±0.0015	0.2241	±0.0107	0.0322	±0.0012	0.7715	219	±35.1	205	±4.4	204	±3.7	204	±3.7
50	C-051508-1 40	251	280	0.0572	±0.0028	0.2710	±0.0147	0.0344	±0.0008	0.4350	499	±53.7	244	±5.9	218	±2.5	218	±2.5
51	C-051508-1 33	190	224	0.0520	±0.0029	0.2552	±0.0160	0.0356	±0.0011	0.4761	286	±63.1	231	±6.5	225	±3.3	225	±3.3
52	C-051508-1 51	188	273	0.0553	±0.0026	0.2735	±0.0132	0.0359	±0.0004	0.2168	423	±52.6	246	±5.3	227	±1.2	227	±1.2
53	C-051508-1 19	143	150	0.0594	±0.0033	0.3001	±0.0174	0.0367	±0.0007	0.3070	581	±59.8	266	±6.8	232	±2.0	232	±2.0
54	C-051508-1 102	331	425	0.0560	±0.0030	0.2895	±0.0172	0.0375	±0.0010	0.4287	453	±59.7	258	±6.8	237	±3.0	237	±3.0
55	C-051508-1 116	27	44	0.1054	±0.0159	0.5875	±0.1042	0.0404	±0.0038	0.5265	1721	±138.5	469	±33.3	256	±11.7	256	±11.7
56	C-051508-1 66	137	147	0.0584	±0.0067	0.3268	±0.0379	0.0406	±0.0008	0.1787	544	±124.8	287	±14.5	257	±2.6	257	±2.6
57	C-051508-1 99	84	135	0.0718	±0.0057	0.4188	±0.0355	0.0423	±0.0013	0.3694	981	±80.1	355	±12.7	267	±4.1	267	±4.1
58	C-051508-1 62	30	38	0.0990	±0.0161	0.5855	±0.1049	0.0429	±0.0032	0.4137	1605	±152.0	468	±33.6	271	±9.8	271	±9.8
59	C-051508-1 64	253	338	0.0554	±0.0014	0.3302	±0.0105	0.0432	±0.0009	0.6315	428	±27.5	290	±4.0	273	±2.7	273	±2.7
60	C-051508-1 3	44	38	0.0626	±0.0090	0.3900	±0.0573	0.0452	±0.0014	0.2056	694	±153.3	334	±20.9	285	±4.2	285	±4.2
61	C-051508-1 120	80	186	0.0652	±0.0086	0.4771	±0.0645	0.0530	±0.0018	0.2454	782	±137.8	396	±22.2	333	±5.4	333	±5.4
62	C-051508-1 82	265	736	0.0637	±0.0012	0.8748	±0.0471	0.0995	±0.0050	0.9398	733	±19.5	638	±12.8	612	±14.8	612	±14.8
63	C-051508-1 52	89	264	0.0780	±0.0026	1.1032	±0.0637	0.1026	±0.0048	0.8096	1146	±33.7	755	±15.4	630	±14.0	630	±14.0
64	C-051508-1 17	58	206	0.0646	±0.0045	1.0028	±0.0732	0.1126	±0.0024	0.2872	762	±73.7	705	±18.6	688	±6.8	688	±6.8
65	C-051508-1 89	55	220	0.0629	±0.0035	1.0938	±0.0629	0.1260	±0.0020	0.2828	706	±58.7	750	±15.2	765	±5.9	765	±5.9
66	C-051508-1 135	32	176	0.0673	±0.0038	1.1699	±0.0709	0.1261	±0.0028	0.3702	846	±58.6	787	±16.6	766	±8.1	766	±8.1
67	C-051508-1 9	57	175	0.0765	±0.0012	2.2135	±0.0524	0.2098	±0.0036	0.7254	1108	±16.3	1185	±8.3	1228	±9.6	1108	±16.3
68	C-051508-1 92	399	1,496	0.0790	±0.0012	1.9121	±0.0887	0.1756	±0.0077	0.9430	1172	±15.3	1085	±15.5	1043	±21.1	1172	±15.3
69	C-051508-1 20	112	547	0.0792	±0.0009	1.8801	±0.0798	0.1721	±0.0070	0.9595	1178	±11.8	1074	±14.1	1024	±19.3	1178	±11.8

Sample Name: Bailey 1C (Z7)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
70	C-051508-1 13	192	853	0.0828	±0.0007	2.4018	±0.1483	0.2103	±0.0129	0.9918	1265	±7.7	1243	±22.1	1230	±34.3	1265	±7.7
71	C-051508-1 93	50	464	0.0865	±0.0029	2.7727	±0.1469	0.2326	±0.0094	0.7664	1349	±32.9	1348	±19.8	1348	±24.7	1349	±32.9
72	C-051508-1 124	64	562	0.0879	±0.0040	2.4680	±0.1528	0.2036	±0.0084	0.6692	1380	±44.2	1263	±22.4	1195	±22.6	1380	±44.2
73	C-051508-1 130	11	122	0.0894	±0.0071	2.7291	±0.2447	0.2214	±0.0092	0.4620	1413	±76.1	1336	±33.3	1289	±24.2	1413	±76.1
74	C-051508-1 72	95	801	0.0931	±0.0014	3.4394	±0.3008	0.2679	±0.0231	0.9842	1490	±14.6	1513	±34.4	1530	±58.6	1490	±14.6
75	C-051508-1 28	26	172	0.0938	±0.0071	3.4569	±0.2989	0.2672	±0.0111	0.4806	1505	±71.6	1517	±34.0	1526	±28.2	1505	±71.6
76	C-051508-1 80	603	2,558	0.0946	±0.0003	3.5767	±0.1175	0.2742	±0.0090	0.9964	1520	±2.6	1544	±13.0	1562	±22.7	1520	±2.6
77	C-051508-1 47	759	347	0.0949	±0.0007	2.8743	±0.0619	0.2197	±0.0044	0.9373	1526	±7.1	1375	±8.1	1280	±11.7	1526	±7.1
78	C-051508-1 144	213	1,465	0.0982	±0.0038	3.7032	±0.1753	0.2736	±0.0076	0.5827	1589	±35.9	1572	±18.9	1559	±19.1	1589	±35.9
79	C-051508-1 49	135	1,077	0.1029	±0.0008	3.8379	±0.3316	0.2706	±0.0233	0.9964	1676	±6.8	1601	±34.8	1544	±59.1	1676	±6.8
80	C-051508-1 53	120	650	0.1041	±0.0061	3.9201	±0.2453	0.2732	±0.0063	0.3681	1698	±53.6	1618	±25.3	1557	±15.9	1698	±53.6
81	C-051508-1 75	219	2,909	0.1045	±0.0003	4.1063	±0.0412	0.2851	±0.0027	0.9505	1705	±2.9	1656	±4.1	1617	±6.8	1705	±2.9
82	C-051508-1 36	461	2,993	0.1049	±0.0004	4.0246	±0.5303	0.2784	±0.0367	0.9996	1712	±3.3	1639	±53.6	1583	±92.4	1712	±3.3
83	C-051508-1 81	106	1,056	0.1049	±0.0009	3.4795	±0.0588	0.2405	±0.0034	0.8456	1713	±8.3	1523	±6.7	1389	±8.9	1713	±8.3
84	C-051508-1 95	213	2,439	0.1059	±0.0004	5.0346	±0.1390	0.3447	±0.0094	0.9922	1730	±3.2	1825	±11.7	1909	±22.6	1730	±3.2
85	C-051508-1 110	103	495	0.1112	±0.0022	4.9680	±0.3537	0.3242	±0.0222	0.9618	1818	±17.7	1814	±30.1	1810	±54.0	1818	±17.7
86	C-051508-1 94	35	214	0.1398	±0.0166	6.6214	±1.6535	0.3434	±0.0754	0.8797	2225	±102.8	2062	±110.1	1903	±181.0	2225	±102.8

Sample Name: GM-C-051608-5 (Z6)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
1	C-051608-5 37	6806	229	0.0709	±0.0115	0.1005	±0.0186	0.0103	±0.0003	0.3397	955	±165.9	97	±8.6	66	±1.1	66	±1.1
2	C-051608-5 125	954	58,581	0.0830	±0.0096	0.1223	±0.0154	0.0107	±0.0005	0.3923	1269	±113.3	117	±7.0	69	±1.7	69	±1.7
3	C-051608-5 132	1297	62,148	0.0613	±0.0035	0.1020	±0.0067	0.0121	±0.0004	0.5094	650	±60.8	99	±3.1	77	±1.3	77	±1.3
4	C-051608-5 21	2103	196	0.0631	±0.0053	0.1407	±0.0196	0.0162	±0.0018	0.7972	711	±89.4	134	±8.7	103	±5.7	103	±5.7
5	C-051608-5 81	1342	41,999	0.0850	±0.0031	0.1963	±0.0117	0.0167	±0.0008	0.7909	1315	±35.3	182	±5.0	107	±2.5	107	±2.5
6	C-051608-5 128	905	59,841	0.0551	±0.0040	0.1411	±0.0108	0.0186	±0.0004	0.3098	414	±81.3	134	±4.8	119	±1.4	119	±1.4
7	C-051608-5 124	5665	1,304	0.0857	±0.0012	0.2197	±0.0043	0.0186	±0.0002	0.7069	1331	±13.1	202	±1.8	119	±0.7	119	±0.7
8	C-051608-5 18	2052	212	0.0855	±0.0034	0.3200	±0.0201	0.0271	±0.0013	0.7694	1328	±38.8	282	±7.7	173	±4.1	173	±4.1
9	C-051608-5 67	986	52,229	0.0751	±0.0020	0.3040	±0.0122	0.0293	±0.0009	0.7518	1072	±26.5	270	±4.7	186	±2.8	186	±2.8
10	C-051608-5 120	571	60,934	0.0543	±0.0026	0.2223	±0.0112	0.0297	±0.0004	0.2473	383	±54.6	204	±4.6	189	±1.1	189	±1.1
11	C-051608-5 57	485	56,414	0.0646	±0.0106	0.2886	±0.0489	0.0324	±0.0014	0.2542	762	±172.8	257	±19.3	206	±4.3	206	±4.3
12	C-051608-5 140	628	66,763	0.0562	±0.0018	0.2554	±0.0116	0.0329	±0.0011	0.7091	461	±35.5	231	±4.7	209	±3.3	209	±3.3
13	C-051608-5 71	860	49,306	0.0842	±0.0043	0.3889	±0.0251	0.0335	±0.0013	0.6192	1297	±49.2	334	±9.2	212	±4.2	212	±4.2
14	C-051608-5 84	706	41,998	0.0667	±0.0056	0.3461	±0.0314	0.0377	±0.0013	0.3862	827	±87.4	302	±11.9	238	±4.1	238	±4.1
15	C-051608-5 92	501	41,993	0.0577	±0.0014	0.7145	±0.0293	0.0899	±0.0029	0.7932	517	±27.4	547	±8.7	555	±8.6	555	±8.6
16	C-051608-5 82	652	41,999	0.0816	±0.0006	1.2240	±0.0414	0.1088	±0.0036	0.9760	1235	±7.2	812	±9.4	666	±10.4	666	±10.4
17	C-051608-5 80	5445	5,162	0.0918	±0.0003	1.8088	±0.0648	0.1429	±0.0050	0.9966	1463	±2.8	1049	±11.7	861	±14.0	861	±14.0
18	C-051608-5 83	153	41,998	0.0708	±0.0014	1.9822	±0.0743	0.2031	±0.0065	0.8563	951	±19.8	1109	±12.6	1192	±17.4	951	±19.8
19	C-051608-5 34	307	1,177	0.0655	±0.0013	1.5141	±0.0530	0.1677	±0.0040	0.8124	790	±21.1	936	±10.7	999	±11.1	999	±11.1
20	C-051608-5 90	3006	19,393	0.0799	±0.0005	2.1058	±0.0816	0.1912	±0.0072	0.9854	1194	±6.5	1151	±13.3	1128	±19.6	1194	±6.5
21	C-051608-5 134	639	63,302	0.0807	±0.0003	2.5453	±0.0441	0.2286	±0.0039	0.9810	1215	±3.3	1285	±6.3	1327	±10.2	1215	±3.3
22	C-051608-5 69	647	50,768	0.0843	±0.0008	2.5039	±0.0546	0.2153	±0.0042	0.8996	1300	±9.2	1273	±7.9	1257	±11.2	1300	±9.2
23	C-051608-5 32	760	1,051	0.0845	±0.0012	2.1920	±0.1366	0.1882	±0.0098	0.9716	1304	±14.1	1178	±21.7	1111	±26.7	1304	±14.1
24	C-051608-5 47	319	4,162	0.0849	±0.0064	2.0983	±0.2010	0.1793	±0.0102	0.6161	1313	±72.9	1148	±32.9	1063	±27.8	1313	±72.9
25	C-051608-5 27	1070	4,440	0.0862	±0.0007	2.8241	±0.1280	0.2377	±0.0102	0.9838	1342	±7.8	1362	±17.0	1375	±26.6	1342	±7.8
26	C-051608-5 40	985	35,371	0.0875	±0.0005	3.0983	±0.1240	0.2567	±0.0101	0.9881	1372	±5.9	1432	±15.4	1473	±25.9	1372	±5.9
27	C-051608-5 94	81	41,991	0.0904	±0.0034	3.0476	±0.1313	0.2445	±0.0049	0.4642	1434	±36.4	1420	±16.5	1410	±12.6	1434	±36.4
28	C-051608-5 127	366	59,264	0.0915	±0.0011	2.4333	±0.1590	0.1929	±0.0124	0.9833	1456	±11.3	1253	±23.5	1137	±33.4	1456	±11.3
29	C-051608-5 131	209	61,571	0.0919	±0.0006	3.2978	±0.1407	0.2602	±0.0109	0.9887	1466	±6.1	1481	±16.6	1491	±28.0	1466	±6.1
30	C-051608-5 73	521	47,845	0.0931	±0.0005	3.3502	±0.0902	0.2610	±0.0069	0.9835	1490	±4.6	1493	±10.5	1495	±17.6	1490	±4.6
31	C-051608-5 91	244	41,993	0.0940	±0.0006	3.5427	±0.0699	0.2733	±0.0051	0.9439	1509	±6.2	1537	±7.8	1557	±12.8	1509	±6.2
32	C-051608-5 136	401	64,456	0.0954	±0.0010	3.7578	±0.1310	0.2858	±0.0094	0.9489	1535	±10.3	1584	±14.0	1620	±23.6	1535	±10.3
33	C-051608-5 70	4913	1,380	0.0957	±0.0021	2.9304	±0.1219	0.2221	±0.0071	0.8479	1542	±20.5	1390	±15.7	1293	±18.7	1542	±20.5
34	C-051608-5 72	352	48,576	0.0959	±0.0008	3.0395	±0.0511	0.2298	±0.0033	0.8592	1546	±8.1	1418	±6.4	1333	±8.7	1546	±8.1
35	C-051608-5 130	497	60,994	0.0971	±0.0005	2.8177	±0.0943	0.2104	±0.0070	0.9900	1570	±4.4	1360	±12.5	1231	±18.5	1570	±4.4
36	C-051608-5 117	156	62,346	0.0978	±0.0008	3.8371	±0.0824	0.2844	±0.0057	0.9331	1583	±7.2	1601	±8.6	1614	±14.3	1583	±7.2
37	C-051608-5 121	635	60,463	0.0998	±0.0008	3.2648	±0.1274	0.2373	±0.0090	0.9790	1620	±7.4	1473	±15.2	1373	±23.6	1620	±7.4
38	C-051608-5 45	1017	16,469	0.0999	±0.0004	3.1448	±0.1938	0.2283	±0.0139	0.9979	1622	±3.7	1444	±23.7	1326	±36.5	1622	±3.7
39	C-051608-5 89	323	41,994	0.1009	±0.0007	3.5112	±0.3466	0.2523	±0.0248	0.9972	1641	±6.9	1530	±39.0	1450	±63.7	1641	±6.9
40	C-051608-5 137	463	65,033	0.1025	±0.0011	3.9626	±0.0976	0.2804	±0.0062	0.9069	1670	±9.6	1627	±10.0	1594	±15.7	1670	±9.6
41	C-051608-5 9	566	224	0.1028	±0.0032	3.9950	±0.1755	0.2817	±0.0087	0.7013	1676	±28.9	1633	±17.8	1600	±21.8	1676	±28.9
42	C-051608-5 44	2611	13,687	0.1038	±0.0003	3.3335	±0.1147	0.2328	±0.0079	0.9958	1694	±2.9	1489	±13.4	1349	±20.7	1694	±2.9
43	C-051608-5 68	530	51,498	0.1041	±0.0004	4.0384	±0.1097	0.2814	±0.0076	0.9909	1698	±3.4	1642	±11.1	1598	±19.0	1698	±3.4
44	C-051608-5 110	722	4,082	0.1062	±0.0007	4.2094	±0.1683	0.2875	±0.0110	0.9879	1735	±5.7	1676	±16.4	1629	±27.6	1735	±5.7
45	C-051608-5 46	2300	16,260	0.1070	±0.0003	3.8839	±0.4591	0.2633	±0.0309	0.9996	1749	±2.9	1610	±47.7	1507	±78.8	1749	±2.9
46	C-051608-5 96	192	2,342	0.1131	±0.0012	5.1516	±0.1237	0.3303	±0.0067	0.8912	1850	±9.8	1845	±10.2	1840	±16.3	1850	±9.8
47	C-051608-5 122	279	59,993	0.1135	±0.0006	4.1222	±0.0611	0.2634	±0.0037	0.9396	1857	±4.6	1659	±6.1	1507	±9.3	1857	±4.6
48	C-051608-5 106	873	58,249	0.1147	±0.0004	4.9917	±0.0765	0.3155	±0.0047	0.9747	1876	±3.1	1818	±6.5	1768	±11.5	1876	±3.1
49	C-051608-5 108	398	61,206	0.1199	±0.0004	6.2069	±0.1015	0.3755	±0.0060	0.9762	1955	±3.2	2005	±7.1	2055	±14.0	1955	±3.2

Sample Name: Bailey 1C (Z7)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
50	C-051608-5 98	107	8,915	0.1390	±0.0016	7.5792	±0.2102	0.3955	±0.0099	0.9152	2215	±9.7	2182	±12.4	2148	±22.9	2215	±9.7
51	C-051608-5 99	573	1,385	0.1436	±0.0014	7.6909	±0.2193	0.3883	±0.0098	0.9392	2271	±8.4	2196	±12.8	2115	±22.7	2271	±8.4
52	C-051608-5 93	39	41,992	0.1524	±0.0023	8.9932	±0.5365	0.4281	±0.0247	0.9675	2372	±12.9	2337	±27.3	2297	±55.7	2372	±12.9
53	C-051608-5 10	205	173	0.2071	±0.0061	16.4275	±0.6409	0.5753	±0.0146	0.6495	2883	±24.1	2902	±18.7	2929	±29.8	2883	±24.1

Sample Name: GM-W-051408-1 (Z4)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
1	W-051408-8 69	721	52,053	0.0756	±0.0054	0.1817	±0.0145	0.0174	±0.0006	0.4245	1086	±72.2	170	±6.2	111	±1.9	111	±1.9
2	W-051408-8 132	1687	51,928	0.0528	±0.0013	0.1487	±0.0049	0.0204	±0.0004	0.6634	318	±28.1	141	±2.2	130	±1.4	130	±1.4
3	W-051408-8 104	408	51,186	0.0945	±0.0049	0.2834	±0.0219	0.0218	±0.0012	0.7394	1518	±49.0	253	±8.7	139	±3.9	139	±3.9
4	W-051408-8 101	1161	51,181	0.0500	±0.0008	0.1707	±0.0049	0.0247	±0.0006	0.8068	197	±19.6	160	±2.1	158	±1.8	158	±1.8
5	W-051408-8 14	1702	866	0.0754	±0.0041	0.2624	±0.0306	0.0253	±0.0021	0.8762	1078	±55.1	237	±12.3	161	±6.7	161	±6.7
6	W-051408-8 24	863	55,264	0.0603	±0.0016	0.2611	±0.0083	0.0314	±0.0005	0.5110	614	±29.4	236	±3.3	199	±1.6	199	±1.6
7	W-051408-8 43	282	51,244	0.0625	±0.0041	0.3449	±0.0258	0.0400	±0.0014	0.4861	693	±69.8	301	±9.8	253	±4.5	253	±4.5
8	W-051408-8 68	330	52,145	0.0901	±0.0035	0.5875	±0.0586	0.0473	±0.0043	0.9195	1428	±37.4	469	±18.8	298	±13.3	298	±13.3
9	W-051408-8 90	366	51,191	0.0757	±0.0013	0.8078	±0.0200	0.0774	±0.0014	0.7384	1087	±16.7	601	±5.6	481	±4.2	481	±4.2
10	W-051408-8 39	576	9,638	0.0825	±0.0052	1.0947	±0.1058	0.0962	±0.0069	0.7520	1258	±62.2	751	±25.6	592	±20.2	592	±20.2
11	W-051408-8 73	393	51,686	0.0650	±0.0012	0.9554	±0.0508	0.1066	±0.0053	0.9428	775	±18.6	681	±13.2	653	±15.5	653	±15.5
12	W-051408-8 63	184	399	0.0645	±0.0011	0.9777	±0.1089	0.1100	±0.0077	0.9868	757	±18.2	692	±27.9	673	±22.5	673	±22.5
13	W-051408-8 49	1175	11,715	0.0731	±0.0003	1.4470	±0.0741	0.1436	±0.0072	0.9973	1016	±3.8	909	±15.4	865	±20.3	865	±20.3
14	W-051408-8 40	1634	51,998	0.0869	±0.0003	1.7317	±0.0651	0.1445	±0.0054	0.9969	1358	±2.9	1020	±12.1	870	±15.2	870	±15.2
15	W-051408-8 71	310	51,869	0.0766	±0.0013	1.7187	±0.0620	0.1627	±0.0052	0.8875	1111	±16.6	1016	±11.6	972	±14.4	1111	±16.6
16	W-051408-8 107	147	50,805	0.0858	±0.0016	3.0696	±0.1667	0.2593	±0.0132	0.9414	1335	±17.7	1425	±20.8	1487	±33.8	1335	±17.7
17	W-051408-8 121	850	8,422	0.0879	±0.0003	2.5310	±0.0322	0.2087	±0.0025	0.9621	1381	±3.3	1281	±4.6	1222	±6.7	1381	±3.3
18	W-051408-8 103	694	51,184	0.0883	±0.0003	3.2682	±0.0821	0.2684	±0.0067	0.9927	1390	±2.9	1474	±9.8	1532	±16.9	1390	±2.9
19	W-051408-8 80	385	51,332	0.0889	±0.0003	3.1174	±0.0888	0.2544	±0.0072	0.9922	1402	±3.4	1437	±10.9	1461	±18.4	1402	±3.4
20	W-051408-8 131	707	51,609	0.0890	±0.0004	2.7978	±0.0539	0.2279	±0.0043	0.9774	1405	±3.9	1355	±7.2	1323	±11.2	1405	±3.9
21	W-051408-8 52	188	51,536	0.0914	±0.0011	3.6514	±0.1027	0.2897	±0.0074	0.9107	1455	±11.0	1561	±11.2	1640	±18.5	1455	±11.0
22	W-051408-8 55	502	51,984	0.0924	±0.0005	3.2396	±0.0898	0.2543	±0.0069	0.9797	1476	±5.3	1467	±10.7	1461	±17.7	1476	±5.3
23	W-051408-8 67	374	52,329	0.0933	±0.0008	3.0189	±0.0836	0.2346	±0.0062	0.9541	1495	±7.8	1412	±10.6	1358	±16.1	1495	±7.8
24	W-051408-8 45	184	50,741	0.0944	±0.0007	3.6493	±0.0638	0.2804	±0.0044	0.9033	1516	±7.1	1560	±7.0	1593	±11.1	1516	±7.1
25	W-051408-8 113	253	49,650	0.0982	±0.0009	4.0695	±0.1821	0.3006	±0.0131	0.9765	1590	±9.0	1648	±18.2	1694	±32.5	1590	±9.0
26	W-051408-8 72	154	3,131	0.0993	±0.0019	4.2913	±0.4751	0.3133	±0.0327	0.9852	1612	±17.6	1692	±45.6	1757	±80.3	1612	±17.6
27	W-051408-8 98	77	51,175	0.1009	±0.0013	4.1998	±0.1665	0.3020	±0.0113	0.9459	1640	±11.9	1674	±16.3	1701	±28.0	1640	±11.9
28	W-051408-8 77	432	51,379	0.1015	±0.0006	3.7506	±0.0697	0.2681	±0.0047	0.9554	1651	±5.1	1582	±7.4	1531	±12.1	1651	±5.1
29	W-051408-8 20	162	54,929	0.1019	±0.0025	4.0492	±0.2276	0.2881	±0.0145	0.8962	1660	±23.1	1644	±22.9	1632	±36.2	1660	±23.1
30	W-051408-8 76	849	14,029	0.1031	±0.0004	4.4443	±0.4495	0.3126	±0.0313	0.9994	1681	±3.2	1721	±41.9	1753	±76.9	1681	±3.2
31	W-051408-8 42	572	51,495	0.1036	±0.0003	3.4585	±0.1171	0.2421	±0.0081	0.9951	1690	±3.1	1518	±13.3	1398	±21.1	1690	±3.1
32	W-051408-8 125	426	49,701	0.1038	±0.0007	3.8606	±0.0938	0.2698	±0.0063	0.9652	1693	±5.9	1605	±9.8	1540	±16.0	1693	±5.9
33	W-051408-8 93	124	959	0.1040	±0.0037	3.5326	±0.2216	0.2465	±0.0111	0.8176	1696	±32.8	1535	±24.8	1420	±28.8	1696	±32.8
34	W-051408-8 99	265	51,177	0.1042	±0.0004	4.0563	±0.0527	0.2823	±0.0035	0.9610	1701	±3.3	1646	±5.3	1603	±8.8	1701	±3.3
35	W-051408-8 41	1385	9,797	0.1043	±0.0010	3.4495	±0.1896	0.2399	±0.0128	0.9838	1701	±9.1	1516	±21.6	1386	±33.3	1701	±9.1
36	W-051408-8 130	643	51,291	0.1044	±0.0002	4.3941	±0.2215	0.3054	±0.0153	0.9990	1703	±2.1	1711	±20.8	1718	±37.9	1703	±2.1
37	W-051408-8 17	632	54,678	0.1048	±0.0003	4.8635	±0.1589	0.3367	±0.0109	0.9958	1710	±2.7	1796	±13.8	1871	±26.4	1710	±2.7
38	W-051408-8 65	268	4,048	0.1048	±0.0018	4.4905	±0.1890	0.3107	±0.0116	0.9151	1711	±15.6	1729	±17.5	1744	±28.5	1711	±15.6
39	W-051408-8 134	236	52,564	0.1053	±0.0008	3.5757	±0.0838	0.2464	±0.0055	0.9469	1719	±6.9	1544	±9.3	1420	±14.1	1719	±6.9
40	W-051408-8 127	548	50,337	0.1054	±0.0003	3.9533	±0.0893	0.2721	±0.0061	0.9909	1721	±2.8	1625	±9.2	1551	±15.4	1721	±2.8
41	W-051408-8 74	581	51,594	0.1054	±0.0003	4.6164	±0.1942	0.3175	±0.0133	0.9969	1722	±3.0	1752	±17.6	1778	±32.5	1722	±3.0
42	W-051408-8 81	310	51,316	0.1057	±0.0007	5.0277	±0.1014	0.3451	±0.0066	0.9472	1726	±5.9	1824	±8.5	1911	±15.8	1726	±5.9
43	W-051408-8 100	137	51,179	0.1062	±0.0020	4.4522	±0.1104	0.3040	±0.0048	0.6336	1735	±17.6	1722	±10.3	1711	±11.8	1735	±17.6
44	W-051408-8 119	211	48,495	0.1066	±0.0006	4.1388	±0.0754	0.2816	±0.0049	0.9533	1742	±5.0	1662	±7.4	1599	±12.3	1742	±5.0
45	W-051408-8 120	127	48,303	0.1072	±0.0012	4.2130	±0.0651	0.2851	±0.0030	0.6825	1752	±10.3	1677	±6.3	1617	±7.5	1752	±10.3
46	W-051408-8 105	226	51,188	0.1072	±0.0007	4.4415	±0.1635	0.3004	±0.0109	0.9852	1753	±5.8	1720	±15.3	1693	±26.9	1753	±5.8
47	W-051408-8 94	76	1,312	0.1087	±0.0019	4.8368	±0.1339	0.3228	±0.0063	0.7772	1778	±15.7	1791	±11.6	1803	±15.5	1778	±15.7
48	W-051408-8 22	432	55,096	0.1095	±0.0006	4.3493	±0.0702	0.2881	±0.0043	0.9364	1791	±5.2	1703	±6.7	1632	±10.9	1791	±5.2
49	W-051408-8 23	818	55,180	0.1101	±0.0004	5.1500	±0.1580	0.3392	±0.0103	0.9930	1801	±3.3	1844	±13.0	1883	±24.8	1801	±3.3
50	W-051408-8 106	230	23,333	0.1102	±0.0017	5.3995	±0.2219	0.3554	±0.0135	0.9305	1802	±13.7	1885	±17.6	1960	±32.2	1802	±13.7
51	W-051408-8 115	393	4,007	0.1103	±0.0009	4.1802	±0.0704	0.2749	±0.0039	0.8710	1804	±7.5	1670	±6.9	1566	±9.9	1804	±7.5
52	W-051408-8 15	953	11,030	0.1112	±0.0003	4.4606	±0.1617	0.2910	±0.0104	0.9973	1818	±2.4	1724	±15.0	1647	±26.0	1818	±2.4
53	W-051408-8 13	350	57,352	0.1179	±0.0016	6.1449	±0.2215	0.3782	±0.0126	0.9288	1924	±12.0	1997	±15.7	2068	±29.5	1924	±12.0
54	W-051408-8 38	205	52,500	0.1201	±0.0013	5.0996	±0.2903	0.3081	±0.0172	0.9817	1957	±9.7	1836	±24.2	1731	±42.3	1957	±9.7
55	W-051408-8 60	121	52,731	0.1237	±0.0014	5.5560	±0.0823	0.3258	±0.0032	0.6625	2010	±9.8	1909	±6.4	1818	±7.8	2010	±9.8
56	W-051408-8 5	490	61,357	0.1250	±0.0019	6.7548	±0.1997	0.3920	±0.0099	0.8586	2029	±13.4	2080	±13.1	2132	±23.0	2029	±13.4
57	W-051408-8 2	108	2,025	0.1295	±0.0065	7.2147	±0.4307	0.4042	±0.0123	0.5371	2091	±43.9	2138	±26.6	2188	±28.3	2091	±43.9
58	W-051408-8 50	597	51,237	0.1320	±0.0003	7.6133	±0.1546	0.4184	±0.0084	0.9916	2124	±2.3	2186	±9.1	2253	±19.1	2124	±2.3
59	W-051408-8 27	79	55,515	0.1345	±0.0037	7.6494	±0.2812	0.4126	±0.0101	0.6662	2157	±23.9	2191	±16.5	2227	±23.0	2157	±23.9
60	W-051408-8 26	115	55,431	0.1355	±0.0103	7.1503	±0.7850	0.3826	±0.0302	0.7200	2171	±66.4	2130	±48.9	2089	±70.4	2171	±66.4
61	W-051408-8 3	50	1,064	0.1551	±0.0234	9.5901	±1.6246	0.4486	±0.0305	0.4328	2402	±128.1	2396	±77.9	2389	±68.0	2402	±128.1
62	W-051408-8 25	24	55,348	0.1647	±0.0030	11.9284	±0.2710	0.5254	±0.0072	0.6027	2504	±15.2	2599	±10.6	2722	±15.2	2504	±15.2

Sample Name: Bailey 1C (Z7)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
63	W-051408-8 6	388	60,856	0.1734	±0.0074	10.9051	±0.6520	0.4561	±0.0190	0.6990	2591	±35.7	2515	±27.8	2422	±42.1	2591	±35.7
64	W-051408-8 18	194	54,761	0.1831	±0.0005	13.7073	±0.3954	0.5431	±0.0156	0.9946	2681	±2.5	2730	±13.6	2796	±32.5	2681	±2.5

Sample Name: GM-W-051508-3 (Z3)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
1	W-051508-3 95	506	223	0.0558	±0.0062	0.0721	±0.0082	0.0094	±0.0003	0.2383	446	±123.1	71	±3.9	60	±0.8	60	±0.8
2	W-051508-3 65	1617	374	0.0677	±0.0149	0.1002	±0.0231	0.0107	±0.0008	0.3091	858	±228.0	97	±10.7	69	±2.4	69	±2.4
3	W-051508-3 121	522	206	0.0625	±0.0056	0.1106	±0.0105	0.0128	±0.0004	0.3109	690	±96.1	107	±4.8	82	±1.2	82	±1.2
4	W-051508-3 134	413	248	0.0515	±0.0045	0.0932	±0.0103	0.0131	±0.0009	0.5968	265	±101.3	91	±4.8	84	±2.7	84	±2.7
5	W-051508-3 23	768	90	0.0592	±0.0049	0.1089	±0.0113	0.0133	±0.0008	0.6054	573	±89.5	105	±5.2	85	±2.7	85	±2.7
6	W-051508-3 92	200	101	0.0718	±0.0130	0.1448	±0.0267	0.0146	±0.0005	0.1985	981	±183.9	137	±11.8	94	±1.7	94	±1.7
7	W-051508-3 17	958	361	0.0631	±0.0038	0.1307	±0.0106	0.0150	±0.0008	0.6766	710	±63.2	125	±4.7	96	±2.6	96	±2.6
8	W-051508-3 34	174	81	0.0624	±0.0075	0.1299	±0.0162	0.0151	±0.0005	0.2810	689	±127.4	124	±7.3	97	±1.7	97	±1.7
9	W-051508-3 75	266	109	0.0742	±0.0102	0.1619	±0.0232	0.0158	±0.0006	0.2863	1048	±138.4	152	±10.1	101	±2.1	101	±2.1
10	W-051508-3 126	732	261	0.0585	±0.0017	0.1335	±0.0063	0.0165	±0.0006	0.7770	550	±32.4	127	±2.8	106	±1.9	106	±1.9
11	W-051508-3 133	847	540	0.0527	±0.0026	0.1233	±0.0097	0.0170	±0.0011	0.7857	314	±55.6	118	±4.4	109	±3.3	109	±3.3
12	W-051508-3 130	181	118	0.0816	±0.0260	0.1968	±0.0638	0.0175	±0.0010	0.1819	1236	±312.6	182	±27.1	112	±3.3	112	±3.3
13	W-051508-3 53	262	68	0.0724	±0.0062	0.1749	±0.0162	0.0175	±0.0006	0.3714	998	±87.2	164	±7.0	112	±1.9	112	±1.9
14	W-051508-3 120	51	24	0.0601	±0.0429	0.1462	±0.1049	0.0176	±0.0014	0.1072	609	±770.9	139	±46.5	113	±4.3	113	±4.3
15	W-051508-3 39	585	229	0.0593	±0.0030	0.1458	±0.0088	0.0178	±0.0006	0.5635	579	±54.4	138	±3.9	114	±1.9	114	±1.9
16	W-051508-3 87	321	205	0.0691	±0.0158	0.1703	±0.0397	0.0179	±0.0008	0.1919	900	±235.9	160	±17.2	114	±2.5	114	±2.5
17	W-051508-3 122	282	190	0.0593	±0.0086	0.1467	±0.0219	0.0179	±0.0007	0.2478	578	±157.5	139	±9.7	115	±2.1	115	±2.1
18	W-051508-3 55	224	116	0.0530	±0.0051	0.1315	±0.0138	0.0180	±0.0008	0.4039	329	±109.2	125	±6.2	115	±2.4	115	±2.4
19	W-051508-3 115	86	80	0.0735	±0.0147	0.1964	±0.0411	0.0194	±0.0012	0.2907	1027	±202.6	182	±17.5	124	±3.7	124	±3.7
20	W-051508-3 69	541	329	0.0510	±0.0034	0.1368	±0.0103	0.0194	±0.0007	0.4873	243	±76.0	130	±4.6	124	±2.3	124	±2.3
21	W-051508-3 36	190	101	0.0575	±0.0066	0.1614	±0.0193	0.0204	±0.0007	0.2788	510	±126.6	152	±8.5	130	±2.1	130	±2.1
22	W-051508-3 119	122	97	0.0611	±0.0127	0.1746	±0.0368	0.0207	±0.0006	0.1417	641	±224.3	163	±15.9	132	±2.0	132	±2.0
23	W-051508-3 104	209	138	0.0616	±0.0078	0.1784	±0.0227	0.0210	±0.0004	0.1519	662	±134.7	167	±9.8	134	±1.3	134	±1.3
24	W-051508-3 58	42	27	0.0443	±0.0314	0.1335	±0.0948	0.0218	±0.0014	0.0931	0	±0.0	127	±42.5	139	±4.6	139	±4.6
25	W-051508-3 33	105	35	0.0635	±0.0154	0.1933	±0.0502	0.0221	±0.0021	0.3661	726	±256.2	179	±21.4	141	±6.6	141	±6.6
26	W-051508-3 112	512	352	0.0558	±0.0030	0.1697	±0.0101	0.0221	±0.0005	0.4106	443	±60.1	159	±4.4	141	±1.7	141	±1.7
27	W-051508-3 13	199	117	0.0629	±0.0088	0.1925	±0.0278	0.0222	±0.0008	0.2395	705	±148.9	179	±11.8	142	±2.4	142	±2.4
28	W-051508-3 20	237	101	0.0654	±0.0103	0.2040	±0.0324	0.0226	±0.0004	0.1049	786	±165.8	189	±13.7	144	±1.2	144	±1.2
29	W-051508-3 1	921	283	0.0554	±0.0026	0.1730	±0.0106	0.0226	±0.0009	0.6462	429	±52.3	162	±4.6	144	±2.8	144	±2.8
30	W-051508-3 37	148	69	0.0732	±0.0188	0.2411	±0.0633	0.0239	±0.0014	0.2166	1019	±259.5	219	±25.9	152	±4.3	152	±4.3
31	W-051508-3 32	1069	442	0.0506	±0.0012	0.1682	±0.0064	0.0241	±0.0007	0.7869	222	±27.1	158	±2.8	154	±2.3	154	±2.3
32	W-051508-3 71	194	94	0.0703	±0.0108	0.2385	±0.0377	0.0246	±0.0008	0.2143	938	±158.1	217	±15.4	157	±2.6	157	±2.6
33	W-051508-3 124	168	124	0.0636	±0.0126	0.2158	±0.0431	0.0246	±0.0006	0.1260	728	±210.1	198	±18.0	157	±1.9	157	±1.9
34	W-051508-3 88	230	128	0.0572	±0.0066	0.1983	±0.0246	0.0251	±0.0012	0.3767	500	±126.7	184	±10.4	160	±3.7	160	±3.7
35	W-051508-3 128	145	88	0.0958	±0.0155	0.3340	±0.0569	0.0253	±0.0014	0.3201	1544	±151.7	293	±21.7	161	±4.3	161	±4.3
36	W-051508-3 42	435	265	0.0588	±0.0031	0.2081	±0.0119	0.0257	±0.0006	0.3800	559	±57.5	192	±5.0	163	±1.7	163	±1.7
37	W-051508-3 129	460	436	0.0541	±0.0038	0.1995	±0.0147	0.0268	±0.0006	0.3200	374	±78.5	185	±6.2	170	±2.0	170	±2.0
38	W-051508-3 48	581	467	0.0548	±0.0027	0.2028	±0.0106	0.0268	±0.0004	0.3056	405	±55.7	187	±4.5	171	±1.3	171	±1.3
39	W-051508-3 66	344	295	0.0554	±0.0024	0.2071	±0.0103	0.0271	±0.0007	0.4857	428	±48.5	191	±4.3	172	±2.1	172	±2.1
40	W-051508-3 111	591	276	0.0573	±0.0022	0.2150	±0.0113	0.0272	±0.0009	0.6615	502	±43.2	198	±4.7	173	±3.0	173	±3.0
41	W-051508-3 26	1619	1,057	0.0503	±0.0012	0.1934	±0.0078	0.0279	±0.0009	0.8229	208	±26.5	180	±3.3	177	±2.9	177	±2.9
42	W-051508-3 135	257	376	0.0558	±0.0058	0.2262	±0.0238	0.0294	±0.0005	0.1467	446	±115.8	207	±9.9	187	±1.4	187	±1.4
43	W-051508-3 45	335	263	0.0545	±0.0040	0.2238	±0.0187	0.0298	±0.0012	0.4965	390	±81.5	205	±7.8	189	±3.9	189	±3.9
44	W-051508-3 74	316	312	0.0580	±0.0032	0.2478	±0.0169	0.0310	±0.0013	0.5947	530	±60.1	225	±6.9	197	±3.9	197	±3.9
45	W-051508-3 85	219	223	0.0592	±0.0050	0.2572	±0.0227	0.0315	±0.0009	0.3147	573	±91.2	232	±9.2	200	±2.7	200	±2.7
46	W-051508-3 29	267	177	0.0799	±0.0075	0.3478	±0.0354	0.0316	±0.0012	0.3840	1193	±92.7	303	±13.3	200	±3.9	200	±3.9
47	W-051508-3 24	76	36	0.0617	±0.0163	0.2693	±0.0722	0.0317	±0.0015	0.1801	664	±282.4	242	±28.9	201	±4.8	201	±4.8
48	W-051508-3 97	347	332	0.0514	±0.0033	0.2262	±0.0159	0.0319	±0.0009	0.3909	259	±74.2	207	±6.6	202	±2.7	202	±2.7
49	W-051508-3 116	76	59	0.0877	±0.0104	0.3992	±0.0547	0.0330	±0.0022	0.4942	1376	±114.6	341	±19.9	209	±7.0	209	±7.0
50	W-051508-3 108	282	209	0.0744	±0.0133	0.3498	±0.0643	0.0341	±0.0015	0.2341	1051	±180.1	305	±24.2	216	±4.6	216	±4.6
51	W-051508-3 3	73	45	0.0777	±0.0082	0.3725	±0.0420	0.0348	±0.0013	0.3416	1139	±105.4	322	±15.5	220	±4.2	220	±4.2
52	W-051508-3 132	291	319	0.0534	±0.0028	0.2623	±0.0202	0.0356	±0.0020	0.7365	348	±59.0	236	±8.1	225	±6.3	225	±6.3
53	W-051508-3 110	146	84	0.0651	±0.0054	0.3201	±0.0270	0.0356	±0.0006	0.2141	779	±86.6	282	±10.4	226	±2.0	226	±2.0
54	W-051508-3 28	563	615	0.0542	±0.0021	0.2790	±0.0196	0.0373	±0.0022	0.8368	380	±43.3	250	±7.8	236	±6.8	236	±6.8
55	W-051508-3 6	40	27	0.0872	±0.0219	0.4596	±0.1198	0.0382	±0.0027	0.2693	1366	±241.7	384	±41.7	242	±8.3	242	±8.3
56	W-051508-3 30	355	269	0.0531	±0.0021	0.2845	±0.0122	0.0389	±0.0007	0.4258	332	±43.9	254	±4.8	246	±2.2	246	±2.2
57	W-051508-3 54	487	473	0.0505	±0.0018	0.2735	±0.0149	0.0393	±0.0016	0.7645	220	±40.5	246	±5.9	248	±5.1	248	±5.1
58	W-051508-3 5	143	95	0.0683	±0.0075	0.3773	±0.0429	0.0401	±0.0011	0.2486	876	±114.0	325	±15.8	253	±3.5	253	±3.5
59	W-051508-3 70	205	186	0.0523	±0.0045	0.2935	±0.0265	0.0407	±0.0012	0.3150	297	±97.9	261	±10.4	257	±3.6	257	±3.6
60	W-051508-3 89	401	210	0.0578	±0.0027	0.3409	±0.0252	0.0428	±0.0024	0.7702	521	±51.8	298	±9.5	270	±7.5	270	±7.5
61	W-051508-3 103	66	72	0.0690	±0.0066	0.6886	±0.0743	0.0723	±0.0035	0.4532	900	±99.2	532	±22.3	450	±10.6	450	±10.6
62	W-051508-3 11	397	385	0.0803	±0.0065	1.0864	±0.1032	0.0981	±0.0049	0.5287	1205	±79.4	747	±25.1	603	±14.5	603	±14.5
63	W-051508-3 68	170	280	0.0580	±0.0018	0.7882	±0.0321	0.0985	±0.0026	0.6431	531	±34.2	590	±9.1	606	±7.6	606	±7.6
64	W-051508-3 38	492	635	0.0627	±0.0005	0.8687	±0.0237	0.1005	±0.0026	0.9473	698	±9.3	635	±6.4	617	±7.6	617	±7.6

Sample Name: Bailey 1C (Z7)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
65	W-051508-3 78	355	1,176	0.0592	±0.0008	0.9144	±0.0274	0.1120	±0.0030	0.8847	575	±15.2	659	±7.3	684	±8.6	684	±8.6
66	W-051508-3 49	102	334	0.0694	±0.0044	1.1777	±0.1331	0.1231	±0.0115	0.8290	911	±65.1	790	±31.0	748	±33.1	748	±33.1
67	W-051508-3 52	269	579	0.0643	±0.0037	1.1108	±0.0729	0.1254	±0.0041	0.4995	750	±60.0	759	±17.5	762	±11.8	762	±11.8
68	W-051508-3 2	18	42	0.0827	±0.0095	1.5400	±0.2628	0.1350	±0.0170	0.7379	1263	±112.5	946	±52.5	816	±48.3	816	±48.3
69	W-051508-3 106	182	1,128	0.0769	±0.0010	2.3159	±0.0689	0.2183	±0.0059	0.9013	1120	±12.9	1217	±10.6	1273	±15.5	1120	±12.9
70	W-051508-3 93	27	149	0.0783	±0.0065	1.7203	±0.1573	0.1593	±0.0062	0.4251	1155	±82.1	1016	±29.4	953	±17.2	1155	±82.1
71	W-051508-3 127	504	2,957	0.0803	±0.0011	2.3629	±0.1163	0.2133	±0.0101	0.9626	1205	±13.1	1231	±17.6	1246	±26.8	1205	±13.1
72	W-051508-3 86	131	1,180	0.0821	±0.0010	2.5366	±0.0424	0.2241	±0.0026	0.6889	1247	±11.9	1283	±6.1	1304	±6.8	1247	±11.9
73	W-051508-3 40	75	474	0.0838	±0.0016	2.7992	±0.0968	0.2421	±0.0069	0.8246	1289	±19.0	1355	±12.9	1398	±17.9	1289	±19.0
74	W-051508-3 99	161	1,406	0.0900	±0.0007	2.9724	±0.0374	0.2396	±0.0023	0.7684	1425	±7.7	1401	±4.8	1385	±6.0	1425	±7.7
75	W-051508-3 81	363	1,128	0.0937	±0.0004	2.7464	±0.0407	0.2127	±0.0030	0.9542	1501	±4.2	1341	±5.5	1243	±8.0	1501	±4.2
76	W-051508-3 22	249	1,811	0.0947	±0.0005	3.9075	±0.2130	0.2992	±0.0162	0.9958	1522	±4.7	1615	±22.0	1687	±40.3	1522	±4.7
77	W-051508-3 91	233	1,866	0.0958	±0.0005	3.5969	±0.2027	0.2722	±0.0153	0.9951	1544	±5.3	1549	±22.4	1552	±38.7	1544	±5.3
78	W-051508-3 90	152	1,365	0.1015	±0.0010	4.1595	±0.3095	0.2973	±0.0219	0.9916	1651	±8.9	1666	±30.5	1678	±54.5	1651	±8.9
79	W-051508-3 56	591	3,276	0.1035	±0.0003	3.5390	±0.0704	0.2479	±0.0049	0.9867	1688	±3.0	1536	±7.9	1428	±12.6	1688	±3.0
80	W-051508-3 100	163	2,012	0.1042	±0.0006	4.4177	±0.1003	0.3074	±0.0068	0.9725	1701	±4.9	1716	±9.4	1728	±16.7	1701	±4.9
81	W-051508-3 101	883	6,347	0.1046	±0.0005	4.0577	±0.1667	0.2814	±0.0115	0.9936	1707	±4.3	1646	±16.7	1598	±28.9	1707	±4.3
82	W-051508-3 44	785	6,134	0.1090	±0.0003	4.9544	±0.1016	0.3297	±0.0067	0.9909	1782	±2.5	1812	±8.7	1837	±16.2	1782	±2.5
83	W-051508-3 4	124	996	0.1104	±0.0006	5.0309	±0.0944	0.3304	±0.0059	0.9509	1806	±5.3	1825	±8.0	1840	±14.3	1806	±5.3
84	W-051508-3 10	97	577	0.1142	±0.0031	5.8841	±0.3049	0.3737	±0.0164	0.8475	1867	±24.8	1959	±22.5	2047	±38.5	1867	±24.8
85	W-051508-3 76	144	989	0.1232	±0.0027	5.9450	±0.2057	0.3500	±0.0094	0.7757	2003	±19.4	1968	±15.0	1935	±22.4	2003	±19.4
86	W-051508-3 80	52	236	0.1849	±0.0020	13.0866	±0.2835	0.5134	±0.0097	0.8729	2697	±8.7	2686	±10.2	2671	±20.7	2697	±8.7

Sample Name: GM-W-051608-4 (Z2)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
1	W-051608-4 26	573	324	0.0529	±0.0032	0.1120	±0.0081	0.0153	±0.0006	0.5721	327	±67.6	108	±3.7	98	±2.0	98	±2.0
2	W-051608-4 106	164	194	0.0556	±0.0135	0.1186	±0.0296	0.0155	±0.0009	0.2369	437	±269.7	114	±13.4	99	±2.9	99	±2.9
3	W-051608-4 133	184	197	0.0538	±0.0062	0.1156	±0.0140	0.0156	±0.0006	0.2921	364	±130.5	111	±6.4	100	±1.7	100	±1.7
4	W-051608-4 128	236	255	0.0617	±0.0085	0.1337	±0.0194	0.0157	±0.0007	0.3186	664	±147.1	127	±8.7	101	±2.3	101	±2.3
5	W-051608-4 72	979	456	0.0546	±0.0018	0.1201	±0.0098	0.0160	±0.0012	0.9124	395	±37.4	115	±4.4	102	±3.8	102	±3.8
6	W-051608-4 90	58	66	0.0690	±0.0336	0.1524	±0.0750	0.0160	±0.0012	0.1488	899	±501.5	144	±33.0	102	±3.7	102	±3.7
7	W-051608-4 152	289	308	0.0551	±0.0182	0.1219	±0.0408	0.0161	±0.0009	0.1710	414	±368.5	117	±18.5	103	±2.9	103	±2.9
8	W-051608-4 109	408	282	0.0529	±0.0049	0.1227	±0.0119	0.0168	±0.0005	0.2837	323	±105.5	118	±5.4	108	±1.5	108	±1.5
9	W-051608-4 153	97	49,262	0.0732	±0.0192	0.1731	±0.0459	0.0171	±0.0007	0.1480	1021	±265.6	162	±19.9	110	±2.1	110	±2.1
10	W-051608-4 28	303	220	0.0531	±0.0089	0.1311	±0.0224	0.0179	±0.0005	0.1779	334	±190.9	125	±10.1	114	±1.7	114	±1.7
11	W-051608-4 130	164	260	0.0629	±0.0075	0.1564	±0.0234	0.0180	±0.0016	0.5996	706	±127.2	148	±10.3	115	±5.1	115	±5.1
12	W-051608-4 107	373	176	0.0779	±0.0060	0.1940	±0.0160	0.0181	±0.0005	0.3599	1145	±76.3	180	±6.8	115	±1.7	115	±1.7
13	W-051608-4 36	57	38	0.0786	±0.0235	0.2015	±0.0616	0.0186	±0.0011	0.2005	1162	±296.9	186	±26.0	119	±3.6	119	±3.6
14	W-051608-4 13	339	191	0.0483	±0.0077	0.1324	±0.0233	0.0199	±0.0015	0.4334	113	±187.4	126	±10.5	127	±4.8	127	±4.8
15	W-051608-4 52	64	49	0.0707	±0.0206	0.2013	±0.0653	0.0207	±0.0029	0.4405	948	±297.9	186	±27.6	132	±9.3	132	±9.3
16	W-051608-4 91	180	558	0.0653	±0.0107	0.1888	±0.0315	0.0210	±0.0007	0.2011	783	±171.9	176	±13.5	134	±2.2	134	±2.2
17	W-051608-4 41	81	67	0.0495	±0.0130	0.1434	±0.0383	0.0210	±0.0010	0.1841	173	±306.6	136	±17.0	134	±3.3	134	±3.3
18	W-051608-4 125	45	75	0.0894	±0.0330	0.2664	±0.1005	0.0216	±0.0016	0.2007	1413	±353.4	240	±40.3	138	±5.2	138	±5.2
19	W-051608-4 55	320	229	0.0562	±0.0043	0.1695	±0.0142	0.0219	±0.0007	0.4024	460	±84.8	159	±6.1	140	±2.3	140	±2.3
20	W-051608-4 70	403	324	0.0483	±0.0031	0.1530	±0.0120	0.0229	±0.0010	0.5803	116	±75.4	145	±5.3	146	±3.3	146	±3.3
21	W-051608-4 123	573	620	0.0517	±0.0026	0.1643	±0.0096	0.0231	±0.0007	0.5252	270	±57.1	154	±4.2	147	±2.2	147	±2.2
22	W-051608-4 39	129	125	0.0544	±0.0087	0.1754	±0.0289	0.0234	±0.0010	0.2587	388	±178.7	164	±12.5	149	±3.1	149	±3.1
23	W-051608-4 110	251	210	0.0703	±0.0046	0.2301	±0.0162	0.0237	±0.0007	0.3900	938	±66.6	210	±6.7	151	±2.1	151	±2.1
24	W-051608-4 157	95	128	0.0571	±0.0107	0.1955	±0.0377	0.0248	±0.0011	0.2359	497	±206.2	181	±16.0	158	±3.5	158	±3.5
25	W-051608-4 145	68	146	0.0711	±0.0280	0.2446	±0.0995	0.0250	±0.0025	0.2460	961	±402.5	222	±40.6	159	±7.8	159	±7.8
26	W-051608-4 143	309	49,290	0.0576	±0.0037	0.2128	±0.0141	0.0268	±0.0004	0.2511	514	±70.3	196	±5.9	171	±1.4	171	±1.4
27	W-051608-4 42	123	110	0.0534	±0.0264	0.2026	±0.1006	0.0275	±0.0014	0.0995	347	±558.8	187	±42.5	175	±4.3	175	±4.3
28	W-051608-4 44	273	331	0.0519	±0.0045	0.2003	±0.0177	0.0280	±0.0005	0.1906	282	±99.4	185	±7.5	178	±1.5	178	±1.5
29	W-051608-4 18	133	93	0.0653	±0.0075	0.2567	±0.0330	0.0285	±0.0017	0.4594	785	±119.9	232	±13.3	181	±5.3	181	±5.3
30	W-051608-4 81	132	218	0.0555	±0.0054	0.2317	±0.0240	0.0303	±0.0011	0.3381	434	±108.4	212	±9.9	192	±3.3	192	±3.3
31	W-051608-4 136	335	49,150	0.0660	±0.0040	0.2951	±0.0197	0.0325	±0.0008	0.3919	805	±64.1	263	±7.7	206	±2.6	206	±2.6
32	W-051608-4 142	353	1,087	0.0487	±0.0026	0.2189	±0.0137	0.0326	±0.0010	0.4956	133	±63.7	201	±5.7	207	±3.1	207	±3.1
33	W-051608-4 29	268	297	0.0525	±0.0022	0.2442	±0.0129	0.0337	±0.0010	0.5871	309	±48.7	222	±5.3	214	±3.3	214	±3.3
34	W-051608-4 139	202	420	0.0605	±0.0058	0.2985	±0.0314	0.0358	±0.0016	0.4165	621	±103.1	265	±12.3	227	±4.9	227	±4.9
35	W-051608-4 3	183	180	0.0598	±0.0057	0.2996	±0.0306	0.0364	±0.0014	0.3651	595	±103.1	266	±12.0	230	±4.2	230	±4.2
36	W-051608-4 35	438	492	0.0490	±0.0020	0.2561	±0.0124	0.0379	±0.0010	0.5492	148	±47.6	231	±5.0	240	±3.1	240	±3.1
37	W-051608-4 113	261	536	0.0549	±0.0022	0.3389	±0.0145	0.0448	±0.0007	0.3487	407	±44.8	296	±5.5	282	±2.1	282	±2.1
38	W-051608-4 168	116	282	0.0564	±0.0041	0.3540	±0.0265	0.0455	±0.0008	0.2273	468	±80.7	308	±9.9	287	±2.4	287	±2.4
39	W-051608-4 30	77	174	0.0493	±0.0109	0.3104	±0.0692	0.0457	±0.0011	0.1124	160	±259.2	274	±26.8	288	±3.5	288	±3.5
40	W-051608-4 165	131	292	0.0668	±0.0043	0.4303	±0.0287	0.0467	±0.0008	0.2620	832	±67.0	363	±10.2	294	±2.5	294	±2.5
41	W-051608-4 105	23	100	0.0951	±0.0195	0.6300	±0.1339	0.0481	±0.0027	0.2613	1530	±193.2	496	±41.7	303	±8.2	303	±8.2
42	W-051608-4 101	356	1,104	0.0533	±0.0010	0.3667	±0.0093	0.0499	±0.0008	0.6696	340	±21.3	317	±3.5	314	±2.6	314	±2.6
43	W-051608-4 132	234	1,513	0.0579	±0.0018	0.5745	±0.0207	0.0720	±0.0012	0.4649	524	±35.1	461	±6.7	448	±3.6	448	±3.6
44	W-051608-4 167	137	739	0.0597	±0.0030	0.6732	±0.0413	0.0818	±0.0028	0.5618	592	±55.0	523	±12.5	507	±8.4	507	±8.4

Sample Name: Bailey 1C (Z7)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
45	W-051608-4 94	11	90	0.0691	±0.0363	0.8909	±0.4887	0.0936	±0.0148	0.2887	900	±541.6	647	±131.2	577	±43.7	577	±43.7
46	W-051608-4 86	187	693	0.0677	±0.0018	0.9001	±0.0393	0.0965	±0.0033	0.7916	858	±27.7	652	±10.5	594	±9.8	594	±9.8
47	W-051608-4 17	85	245	0.0614	±0.0029	0.9566	±0.0494	0.1130	±0.0022	0.3805	654	±51.2	682	±12.8	690	±6.4	690	±6.4
48	W-051608-4 138	31	450	0.0879	±0.0099	1.6743	±0.1978	0.1381	±0.0047	0.2894	1381	±108.7	999	±37.6	834	±13.4	834	±13.4
49	W-051608-4 65	45	229	0.0680	±0.0024	1.7392	±0.0810	0.1854	±0.0056	0.6523	870	±36.6	1023	±15.0	1096	±15.3	870	±36.6
50	W-051608-4 67	108	748	0.0721	±0.0025	1.9684	±0.1198	0.1979	±0.0098	0.8172	990	±35.7	1105	±20.5	1164	±26.5	990	±35.7
51	W-051608-4 53	37	310	0.0807	±0.0027	2.3231	±0.0966	0.2087	±0.0052	0.5965	1215	±32.8	1219	±14.8	1222	±13.8	1215	±32.8
52	W-051608-4 22	254	1,820	0.0853	±0.0005	2.7691	±0.0576	0.2353	±0.0047	0.9662	1323	±5.2	1347	±7.8	1362	±12.3	1323	±5.2
53	W-051608-4 15	193	1,139	0.0866	±0.0008	3.1757	±0.0835	0.2660	±0.0066	0.9394	1352	±8.7	1451	±10.2	1520	±16.7	1352	±8.7
54	W-051608-4 16	136	921	0.0881	±0.0007	2.7749	±0.1099	0.2285	±0.0089	0.9818	1384	±7.2	1349	±14.8	1327	±23.3	1384	±7.2
55	W-051608-4 112	22	400	0.0902	±0.0057	3.3950	±0.2458	0.2728	±0.0096	0.4879	1431	±60.3	1503	±28.4	1555	±24.4	1431	±60.3
56	W-051608-4 24	274	1,441	0.0910	±0.0009	2.4972	±0.2848	0.1991	±0.0226	0.9963	1446	±9.3	1271	±41.3	1170	±60.8	1446	±9.3
57	W-051608-4 99	242	3,183	0.0914	±0.0004	3.5738	±0.1666	0.2834	±0.0131	0.9952	1456	±4.3	1544	±18.5	1609	±33.0	1456	±4.3
58	W-051608-4 127	314	2,587	0.0920	±0.0003	3.6660	±0.1448	0.2890	±0.0114	0.9965	1468	±3.1	1564	±15.8	1636	±28.4	1468	±3.1
59	W-051608-4 25	91	725	0.0936	±0.0026	3.6500	±0.1257	0.2828	±0.0057	0.5858	1500	±26.4	1561	±13.7	1606	±14.3	1500	±26.4
60	W-051608-4 88	85	836	0.0941	±0.0015	3.0674	±0.0960	0.2363	±0.0064	0.8666	1511	±14.7	1425	±12.0	1368	±16.7	1511	±14.7
61	W-051608-4 12	225	2,467	0.0959	±0.0006	3.9765	±0.1742	0.3006	±0.0131	0.9914	1547	±5.4	1629	±17.8	1694	±32.4	1547	±5.4
62	W-051608-4 154	107	2,223	0.0964	±0.0015	3.2480	±0.0928	0.2443	±0.0058	0.8277	1556	±15.1	1469	±11.1	1409	±15.0	1556	±15.1
63	W-051608-4 34	61	549	0.0968	±0.0091	3.1844	±0.8813	0.2387	±0.0621	0.9402	1563	±88.4	1453	±106.9	1380	±161.6	1563	±88.4
64	W-051608-4 4	122	569	0.0989	±0.0011	3.3608	±0.1936	0.2465	±0.0139	0.9807	1603	±10.5	1495	±22.5	1420	±36.0	1603	±10.5
65	W-051608-4 75	504	13,131	0.1002	±0.0003	4.2179	±0.0676	0.3054	±0.0048	0.9815	1627	±2.9	1678	±6.6	1718	±11.9	1627	±2.9
66	W-051608-4 60	264	2,140	0.1017	±0.0005	4.2467	±0.1584	0.3027	±0.0112	0.9905	1656	±4.7	1683	±15.3	1705	±27.7	1656	±4.7
67	W-051608-4 100	208	3,853	0.1018	±0.0006	4.6581	±0.1216	0.3320	±0.0085	0.9768	1656	±5.2	1760	±10.9	1848	±20.5	1656	±5.2
68	W-051608-4 140	1095	46,864	0.1032	±0.0002	4.0172	±0.0777	0.2823	±0.0054	0.9922	1683	±2.2	1638	±7.9	1603	±13.6	1683	±2.2
69	W-051608-4 129	685	11,303	0.1052	±0.0003	4.3840	±0.2678	0.3022	±0.0184	0.9991	1718	±2.4	1709	±25.2	1702	±45.6	1718	±2.4
70	W-051608-4 82	222	3,565	0.1059	±0.0012	5.0222	±0.1947	0.3438	±0.0128	0.9598	1731	±10.0	1823	±16.4	1905	±30.7	1731	±10.0
71	W-051608-4 97	237	4,132	0.1068	±0.0008	3.7308	±0.2456	0.2533	±0.0166	0.9936	1746	±6.8	1578	±26.4	1455	±42.6	1746	±6.8
72	W-051608-4 57	57	246	0.1102	±0.0083	5.4838	±0.6070	0.3610	±0.0294	0.7360	1802	±68.1	1898	±47.5	1987	±69.7	1802	±68.1
73	W-051608-4 2	334	3,279	0.1562	±0.0004	9.2847	±0.1574	0.4311	±0.0072	0.9864	2415	±2.4	2367	±7.8	2311	±16.2	2415	±2.4
74	W-051608-4 23	190	1,491	0.1653	±0.0014	9.9777	±0.7187	0.4377	±0.0313	0.9927	2511	±7.3	2433	±33.2	2340	±70.2	2511	±7.3

Sample Name: Urban 1 (Z10)

	Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
			Isotopic Ratios								Apparent Ages (Ma)							
1	Urban-1 89	277	72	0.0755	±0.0098	0.1295	±0.0172	0.0124	±0.0003	0.2009	1081	±130.5	124	±7.7	80	±1.1	80	±1.1
2	Urban-1 95	329	93	0.0858	±0.0058	0.2329	±0.0212	0.0197	±0.0012	0.6725	1335	±65.0	213	±8.7	126	±3.8	126	±3.8
3	Urban-1 86	1637	238	0.0666	±0.0016	0.2182	±0.0069	0.0238	±0.0005	0.6450	824	±25.3	200	±2.9	151	±1.5	151	±1.5
4	Urban-1 83	328	103	0.0772	±0.0052	0.2847	±0.0202	0.0267	±0.0006	0.2919	1128	±67.5	254	±8.0	170	±1.7	170	±1.7
5	Urban-1 109	728	218	0.0725	±0.0037	0.2705	±0.0180	0.0271	±0.0012	0.6512	1000	±51.2	243	±7.2	172	±3.7	172	±3.7
6	Urban-1 3	848	39	0.0762	±0.0030	0.2875	±0.0129	0.0274	±0.0005	0.4463	1099	±40.1	257	±5.1	174	±1.7	174	±1.7
7	Urban-1 108	320	159	0.0639	±0.0039	0.2583	±0.0170	0.0293	±0.0007	0.3565	739	±65.1	233	±6.9	186	±2.2	186	±2.2
8	Urban-1 117	353	107	0.0861	±0.0026	0.4551	±0.0189	0.0383	±0.0011	0.6889	1340	±29.1	381	±6.6	243	±3.4	243	±3.4
9	Urban-1 67	234	86	0.1049	±0.0039	0.5762	±0.0322	0.0398	±0.0017	0.7534	1713	±33.8	462	±10.4	252	±5.2	252	±5.2
10	Urban-1 34	583	242	0.0844	±0.0066	0.4862	±0.0461	0.0418	±0.0022	0.5556	1302	±76.5	402	±15.7	264	±6.8	264	±6.8
11	Urban-1 14	311	35	0.1101	±0.0148	0.7083	±0.1034	0.0467	±0.0027	0.3905	1801	±122.2	544	±30.7	294	±8.2	294	±8.2
12	Urban-1 30	97	47	0.0991	±0.0080	0.7096	±0.0610	0.0519	±0.0015	0.3450	1607	±75.2	544	±18.1	326	±4.7	326	±4.7
13	Urban-1 142	531	331	0.0732	±0.0018	0.5249	±0.0247	0.0520	±0.0021	0.8453	1020	±25.5	428	±8.2	327	±6.3	327	±6.3
14	Urban-1 81	173	102	0.0751	±0.0023	0.6754	±0.0306	0.0652	±0.0022	0.7431	1071	±30.4	524	±9.3	407	±6.6	407	±6.6
15	Urban-1 110	275	544	0.0791	±0.0006	2.1000	±0.0426	0.1926	±0.0036	0.9293	1174	±7.4	1149	±7.0	1136	±9.8	1174	±7.4
16	Urban-1 41	179	255	0.0800	±0.0017	1.9258	±0.0555	0.1745	±0.0034	0.6781	1198	±20.9	1090	±9.6	1037	±9.4	1198	±20.9
17	Urban-1 94	360	487	0.0870	±0.0028	3.0169	±0.1154	0.2515	±0.0052	0.5370	1361	±31.1	1412	±14.6	1446	±13.3	1361	±31.1
18	Urban-1 36	86	177	0.0902	±0.0019	3.0217	±0.0912	0.2431	±0.0052	0.7047	1429	±20.4	1413	±11.5	1403	±13.4	1429	±20.4
19	Urban-1 93	107	271	0.0905	±0.0018	3.3029	±0.0839	0.2647	±0.0041	0.6085	1436	±19.2	1482	±9.9	1514	±10.4	1436	±19.2
20	Urban-1 39	137	368	0.0913	±0.0014	3.0894	±0.0923	0.2453	±0.0063	0.8549	1453	±14.8	1430	±11.5	1414	±16.2	1453	±14.8
21	Urban-1 16	214	370	0.0929	±0.0009	3.4681	±0.1293	0.2708	±0.0097	0.9629	1486	±9.5	1520	±14.7	1545	±24.6	1486	±9.5
22	Urban-1 150	80	360	0.0939	±0.0022	3.0868	±0.0818	0.2385	±0.0027	0.4283	1506	±22.6	1429	±10.2	1379	±7.0	1506	±22.6
23	Urban-1 126	101	289	0.0968	±0.0015	4.0825	±0.0953	0.3059	±0.0052	0.7309	1563	±14.9	1651	±9.5	1721	±12.9	1563	±14.9
24	Urban-1 98	140	464	0.1000	±0.0015	3.2241	±0.1175	0.2338	±0.0078	0.9106	1624	±14.0	1463	±14.1	1354	±20.3	1624	±14.0
25	Urban-1 125	152	200	0.1021	±0.0051	3.5568	±0.1928	0.2527	±0.0054	0.3970	1663	±46.1	1540	±21.5	1452	±14.0	1663	±46.1
26	Urban-1 119	83	203	0.1028	±0.0019	3.6284	±0.2701	0.2559	±0.0185	0.9701	1676	±16.7	1556	±29.6	1469	±47.4	1676	±16.7
27	Urban-1 59	255	1,404	0.1056	±0.0007	4.5873	±0.1087	0.3151	±0.0071	0.9550	1724	±6.5	1747	±9.9	1766	±17.5	1724	±6.5
28	Urban-1 13	884	90	0.1086	±0.0012	4.4844	±0.1279	0.2995	±0.0078	0.9169	1776	±10.4	1728	±11.8	1689	±19.4	1776	±10.4
29	Urban-1 84	234	720	0.1098	±0.0009	4.2541	±0.1229	0.2811	±0.0078	0.9608	1795	±7.3	1685	±11.9	1597	±19.6	1795	±7.3
30	Urban-1 71	268	533	0.1135	±0.0014	4.3147	±0.2608	0.2757	±0.0163	0.9800	1856	±10.9	1696	±24.9	1570	±41.3	1856	±10.9
31	Urban-1 137	178	610	0.1137	±0.0007	4.6689	±0.4183	0.2978	±0.0266	0.9974	1860	±5.8	1762	±37.5	1680	±66.1	1860	±5.8
32	Urban-1 106	152	463	0.1164	±0.0011	5.6761	±0.1787	0.3536	±0.0106	0.9535	1902	±8.5	1928	±13.6	1952	±25.3	1902	±8.5
33	Urban-1 123	242	446	0.1194	±0.0019	5.3957	±0.1951	0.3278	±0.0106	0.8942	1947	±14.5	1884	±15.5	1828	±25.7	1947	±14.5
34	Urban-1 43	77	196	0.1217	±0.0022	6.5334	±0.1932	0.3894	±0.0091	0.7919	1981	±16.1	2050	±13.0	2120	±21.2	1981	±16.1
35	Urban-1 8	421	128	0.1243	±0.0009	6.8834	±0.1916	0.4017	±0.0108	0.9676	2019	±6.2	2097	±12.3	2177	±24.9	2019	±6.2
36	Urban-1 100	90	227	0.1358	±0.0022	7.8438	±0.2457	0.4188	±0.0113	0.8614	2175	±13.9	2213	±14.1	2255	±25.7	2175	±13.9

Sample Name: Bailey 1C (Z7)

Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
37 Urban-1 103	147	219	0.1412	±0.0072	7.8132	±0.5522	0.4013	±0.0195	0.6874	2242	±44.4	2210	±31.8	2175	±44.8	2242	±44.4
38 Urban-1 120	224	518	0.1428	±0.0038	7.5521	±0.2681	0.3837	±0.0090	0.6626	2261	±22.9	2179	±15.9	2093	±21.0	2261	±22.9
39 Urban-1 139	58	109	0.1471	±0.0091	7.8068	±0.5802	0.3848	±0.0160	0.5578	2313	±52.9	2209	±33.4	2099	±37.1	2313	±52.9
40 Urban-1 116	347	607	0.1531	±0.0245	7.9668	±1.7305	0.3774	±0.0553	0.6751	2381	±136.5	2227	±98.0	2064	±129.5	2381	±136.5
41 Urban-1 128	115	294	0.1707	±0.0013	9.4563	±0.5025	0.4018	±0.0211	0.9894	2565	±6.4	2383	±24.4	2177	±48.6	2565	±6.4
42 Urban-1 141	175	1,065	0.1757	±0.0007	11.7336	±0.1808	0.4843	±0.0072	0.9658	2613	±3.3	2583	±7.2	2546	±15.6	2613	±3.3
43 Urban-1 96	134	232	0.1935	±0.0105	13.2151	±1.0945	0.4954	±0.0311	0.7576	2772	±44.3	2695	±39.1	2594	±67.0	2772	±44.3
44 Urban-1 65	94	156	0.2212	±0.0059	16.4718	±0.5244	0.5401	±0.0093	0.5394	2990	±21.6	2905	±15.2	2784	±19.4	2990	±21.6
45 Urban-1 91	94	59	0.2603	±0.0100	24.5110	±1.5361	0.6829	±0.0338	0.7894	3249	±30.3	3289	±30.6	3356	±64.7	3249	±30.3

Sample Name: Winch State 4 (Z1)

Analysis	U (ppm)	$^{206}Pb/^{204}Pb$	$^{207}Pb^*/^{206}Pb^*$	± 2 σ abs	$^{207}Pb^*/^{235}U$	± 2 σ abs	$^{206}Pb^*/^{238}U$	± 2 σ abs	Rho	$^{207}Pb^*/^{206}Pb^*$	± 1 σ abs	$^{207}Pb^*/^{235}U$	± 1 σ abs	$^{206}Pb^*/^{238}U$	± 1 σ abs	Best Age	± 1 σ abs
1 Winch St-4 135	280	79	0.0909	±0.0621	0.1989	±0.1398	0.0159	±0.0026	0.2362	1444	±650.7	184	±59.2	102	±8.4	102	±8.4
2 Winch St-4 78	78	43	0.0933	±0.0167	0.2376	±0.0457	0.0185	±0.0013	0.3648	1495	±169.4	216	±18.8	118	±4.1	118	±4.1
3 Winch St-4 145	310	132	0.0650	±0.0047	0.1687	±0.0129	0.0188	±0.0004	0.2957	775	±76.8	158	±5.6	120	±1.3	120	±1.3
4 Winch St-4 88	319	99	0.0929	±0.0077	0.2556	±0.0351	0.0200	±0.0022	0.7963	1486	±78.7	231	±14.2	127	±6.9	127	±6.9
5 Winch St-4 136	329	148	0.0572	±0.0052	0.1671	±0.0156	0.0212	±0.0004	0.2230	499	±100.4	157	±6.8	135	±1.4	135	±1.4
6 Winch St-4 54	392	152	0.0607	±0.0037	0.2085	±0.0139	0.0249	±0.0007	0.4134	629	±65.4	192	±5.8	159	±2.2	159	±2.2
7 Winch St-4 60	197	87	0.0694	±0.0053	0.2539	±0.0236	0.0265	±0.0014	0.5646	912	±78.9	230	±9.6	169	±4.4	169	±4.4
8 Winch St-4 91	217	108	0.0650	±0.0037	0.2796	±0.0172	0.0312	±0.0007	0.3705	775	±60.2	250	±6.8	198	±2.2	198	±2.2
9 Winch St-4 124	446	305	0.0548	±0.0012	0.2406	±0.0114	0.0318	±0.0013	0.8853	405	±24.7	219	±4.7	202	±4.2	202	±4.2
10 Winch St-4 89	41	44	0.0889	±0.0219	0.3915	±0.1132	0.0319	±0.0048	0.5239	1403	±235.8	335	±41.3	203	±15.1	203	±15.1
11 Winch St-4 55	286	220	0.0596	±0.0029	0.2778	±0.0150	0.0338	±0.0008	0.4132	589	±53.4	249	±6.0	214	±2.4	214	±2.4
12 Winch St-4 132	157	125	0.0538	±0.0034	0.2710	±0.0183	0.0365	±0.0009	0.3778	364	±70.3	244	±7.3	231	±2.9	231	±2.9
13 Winch St-4 118	228	285	0.0592	±0.0028	0.3789	±0.0202	0.0464	±0.0011	0.4618	575	±51.4	326	±7.4	292	±3.5	292	±3.5
14 Winch St-4 57	237	275	0.0573	±0.0015	0.4913	±0.0202	0.0622	±0.0020	0.7684	502	±28.9	406	±6.9	389	±6.0	389	±6.0
15 Winch St-4 4	129	142	0.0620	±0.0014	0.5866	±0.0209	0.0687	±0.0019	0.7666	673	±24.5	469	±6.7	428	±5.7	428	±5.7
16 Winch St-4 49	256	413	0.0566	±0.0013	0.6141	±0.0201	0.0787	±0.0019	0.7229	475	±25.0	486	±6.3	489	±5.6	489	±5.6
17 Winch St-4 8	80	126	0.0675	±0.0087	0.7592	±0.1023	0.0815	±0.0033	0.2964	854	±133.7	574	±29.5	505	±9.7	505	±9.7
18 Winch St-4 38	143	217	0.0750	±0.0046	0.8773	±0.0645	0.0848	±0.0034	0.5530	1068	±61.6	640	±17.4	525	±10.2	525	±10.2
19 Winch St-4 123	184	591	0.0739	±0.0008	1.5226	±0.0393	0.1495	±0.0035	0.8981	1038	±11.5	940	±7.9	898	±9.7	898	±9.7
20 Winch St-4 127	67	258	0.0978	±0.0045	2.0754	±0.1686	0.1539	±0.0103	0.8256	1583	±42.9	1141	±27.8	923	±28.8	923	±28.8
21 Winch St-4 47	64	178	0.0708	±0.0024	1.6140	±0.0627	0.1652	±0.0032	0.4966	953	±34.5	976	±12.2	986	±8.8	986	±8.8
22 Winch St-4 43	170	902	0.0781	±0.0005	2.2858	±0.1053	0.2122	±0.0097	0.9883	1150	±7.0	1208	±16.3	1240	±25.7	1150	±7.0
23 Winch St-4 70	125	575	0.0805	±0.0016	2.1599	±0.1592	0.1945	±0.0138	0.9641	1210	±19.3	1168	±25.6	1146	±37.3	1210	±19.3
24 Winch St-4 110	95	264	0.0881	±0.0082	3.1676	±0.3769	0.2609	±0.0193	0.6209	1384	±89.6	1449	±45.9	1494	±49.3	1384	±89.6
25 Winch St-4 143	60	198	0.0884	±0.0042	2.6946	±0.2008	0.2210	±0.0127	0.7735	1392	±45.3	1327	±27.6	1287	±33.6	1392	±45.3
26 Winch St-4 149	106	579	0.0890	±0.0018	3.4182	±0.0963	0.2787	±0.0053	0.6784	1403	±19.8	1509	±11.1	1585	±13.4	1403	±19.8
27 Winch St-4 56	405	1,523	0.0908	±0.0004	2.5436	±0.0729	0.2031	±0.0057	0.9873	1443	±4.3	1285	±10.4	1192	±15.4	1443	±4.3
28 Winch St-4 107	63	346	0.0915	±0.0016	3.2355	±0.2167	0.2563	±0.0166	0.9675	1458	±16.1	1466	±26.0	1471	±42.6	1458	±16.1
29 Winch St-4 46	158	966	0.0924	±0.0007	3.6537	±0.1283	0.2869	±0.0099	0.9787	1475	±6.8	1561	±14.0	1626	±24.7	1475	±6.8
30 Winch St-4 15	472	1,325	0.0939	±0.0048	3.5082	±0.4536	0.2709	±0.0321	0.9175	1507	±48.6	1529	±51.1	1545	±81.5	1507	±48.6
31 Winch St-4 105	366	1,302	0.0996	±0.0008	3.4052	±0.0839	0.2479	±0.0058	0.9420	1617	±7.7	1506	±9.7	1427	±14.9	1617	±7.7
32 Winch St-4 5	24	86	0.1004	±0.0110	3.2487	±0.8715	0.2347	±0.0575	0.9133	1631	±101.5	1469	±104.1	1359	±150.1	1631	±101.5
33 Winch St-4 26	132	723	0.1016	±0.0016	4.2720	±0.2825	0.3051	±0.0196	0.9704	1653	±14.8	1688	±27.2	1716	±48.4	1653	±14.8
34 Winch St-4 11	145	757	0.1022	±0.0012	4.2126	±0.2151	0.2991	±0.0149	0.9744	1664	±10.6	1676	±21.0	1687	±36.9	1664	±10.6
35 Winch St-4 101	192	1,167	0.1039	±0.0006	4.2943	±0.2666	0.2997	±0.0185	0.9958	1696	±5.3	1692	±25.6	1690	±45.9	1696	±5.3
36 Winch St-4 10	83	379	0.1047	±0.0023	4.4999	±0.6552	0.3119	±0.0449	0.9885	1708	±20.3	1731	±60.5	1750	±110.3	1708	±20.3
37 Winch St-4 30	234	1,358	0.1047	±0.0005	4.3921	±0.4164	0.3041	±0.0288	0.9987	1710	±4.5	1711	±39.2	1712	±71.2	1710	±4.5
38 Winch St-4 23	87	413	0.1055	±0.0144	4.9711	±0.7901	0.3416	±0.0281	0.5167	1724	±125.0	1814	±67.2	1894	±67.4	1724	±125.0
39 Winch St-4 22	195	1,418	0.1073	±0.0004	4.9210	±0.0747	0.3327	±0.0049	0.9691	1754	±3.4	1806	±6.4	1851	±11.8	1754	±3.4
40 Winch St-4 82	66	288	0.1083	±0.0027	5.1863	±0.2933	0.3474	±0.0177	0.8996	1771	±22.6	1850	±24.1	1922	±42.3	1771	±22.6
41 Winch St-4 18	27	106	0.1086	±0.0117	5.2257	±0.5861	0.3489	±0.0106	0.2701	1776	±98.5	1857	±47.8	1929	±25.3	1776	±98.5
42 Winch St-4 121	145	1,020	0.1088	±0.0009	5.2398	±0.2029	0.3493	±0.0132	0.9759	1779	±7.7	1859	±16.5	1931	±31.5	1779	±7.7
43 Winch St-4 44	48	388	0.1090	±0.0050	5.1134	±1.0646	0.3403	±0.0691	0.9750	1783	±42.2	1838	±88.4	1888	±166.1	1783	±42.2
44 Winch St-4 53	209	1,293	0.1107	±0.0006	5.4277	±0.1625	0.3556	±0.0105	0.9847	1811	±4.7	1889	±12.8	1961	±24.9	1811	±4.7
45 Winch St-4 137	718	685	0.1136	±0.0007	4.5843	±0.1391	0.2928	±0.0087	0.9815	1857	±5.2	1746	±12.6	1655	±21.7	1857	±5.2
46 Winch St-4 130	39	159	0.1146	±0.0203	5.3775	±1.0534	0.3404	±0.0285	0.4280	1873	±159.6	1881	±83.9	1888	±68.6	1873	±159.6
47 Winch St-4 32	741	5,129	0.1148	±0.0003	4.5017	±0.0501	0.2844	±0.0031	0.9789	1877	±2.0	1731	±4.6	1614	±7.8	1877	±2.0
48 Winch St-4 115	540	782	0.1172	±0.0026	5.5366	±0.1773	0.3427	±0.0080	0.7324	1914	±19.6	1906	±13.8	1900	±19.3	1914	±19.6
49 Winch St-4 68	182	373	0.1273	±0.0142	6.7343	±1.6166	0.3836	±0.0815	0.8856	2062	±98.3	2077	±106.1	2093	±190.0	2062	±98.3
50 Winch St-4 134	1282	1,114	0.1694	±0.0026	10.9436	±0.4171	0.4686	±0.0164	0.9166	2552	±12.8	2518	±17.7	2477	±35.9	2552	±12.8
51 Winch St-4 86	2	22	0.1842	±0.0479	13.1069	±5.0897	0.5160	±0.1489	0.7433	2691	±214.6	2687	±183.2	2682	±316.7	2691	±214.6
52 Winch St-4 104	1	15	0.2187	±0.0573	16.0091	±4.9075	0.5309	±0.0844	0.5187	2971	±211.2	2877	±146.5	2745	±177.7	2971	±211.2

KOLMOGOROV-SMIRNOV (K-S*) TEST RESULTS

All Grain Ages

Sample Ages	Lower Wilcox	Upper Wilcox	Z1†	Z2†	Z3†	Z4†	Z5†	Z6§	Z7§	Z8§	Z9§
Lower Wilcox											
Upper Wilcox	0.008										
Z1†	0.005	**0.199**									
Z2†	**0.523**	0.038	0.004								
Z3†	0.002	0.000	0.000	**0.065**							
Z4†	0.000	0.000	**0.138**	0.000	0.000						
Z5†	0.006	0.000	0.000	0.013	0.030	0.000					
Z6§	0.001	**0.099**	**0.900**	0.001	0.000	0.008	0.000				
Z7§	0.001	**0.264**	**0.679**	0.015	0.000	0.001	0.000	**0.379**			
Z8§	0.001	0.000	0.000	**0.101**	**0.303**	0.000	**0.445**	0.000	0.000		
Z9§	0.016	**0.622**	**0.309**	0.010	0.000	0.014	0.000	**0.642**	**0.395**	0.000	
Z10§	0.001	0.025	**0.267**	0.001	0.000	**0.336**	0.000	**0.103**	0.046	0.000	0.045

Grains <350 Ma

Lower Wilcox											
Upper Wilcox	**0.421**										
Z1†	**0.524**	**0.215**									
Z2†	**0.245**	0.033	**0.937**								
Z3†	**0.732**	**0.122**	**0.891**	**0.719**							
Z4†	**0.638**	**0.301**	**0.999**	**0.944**	**0.929**						
Z5†	0.011	**0.085**	0.036	0.001	0.002	**0.081**					
Z6§	**0.974**	**0.906**	**0.563**	**0.713**	**0.798**	**0.471**	**0.604**				
Z7§	0.046	**0.349**	**0.543**	**0.408**	**0.152**	**0.912**	0.011	**0.189**			
Z8§	0.048	**0.600**	**0.181**	**0.068**	**0.094**	**0.229**	**0.354**	**0.691**	**0.196**		
Z9§	0.031	**0.312**	**0.023**	0.003	0.007	**0.056**	**0.221**	**0.526**	**0.043**	**0.185**	
Z10§	**0.079**	0.030	**0.311**	**0.160**	**0.123**	**0.532**	0.041	**0.187**	**0.452**	0.004	0.025

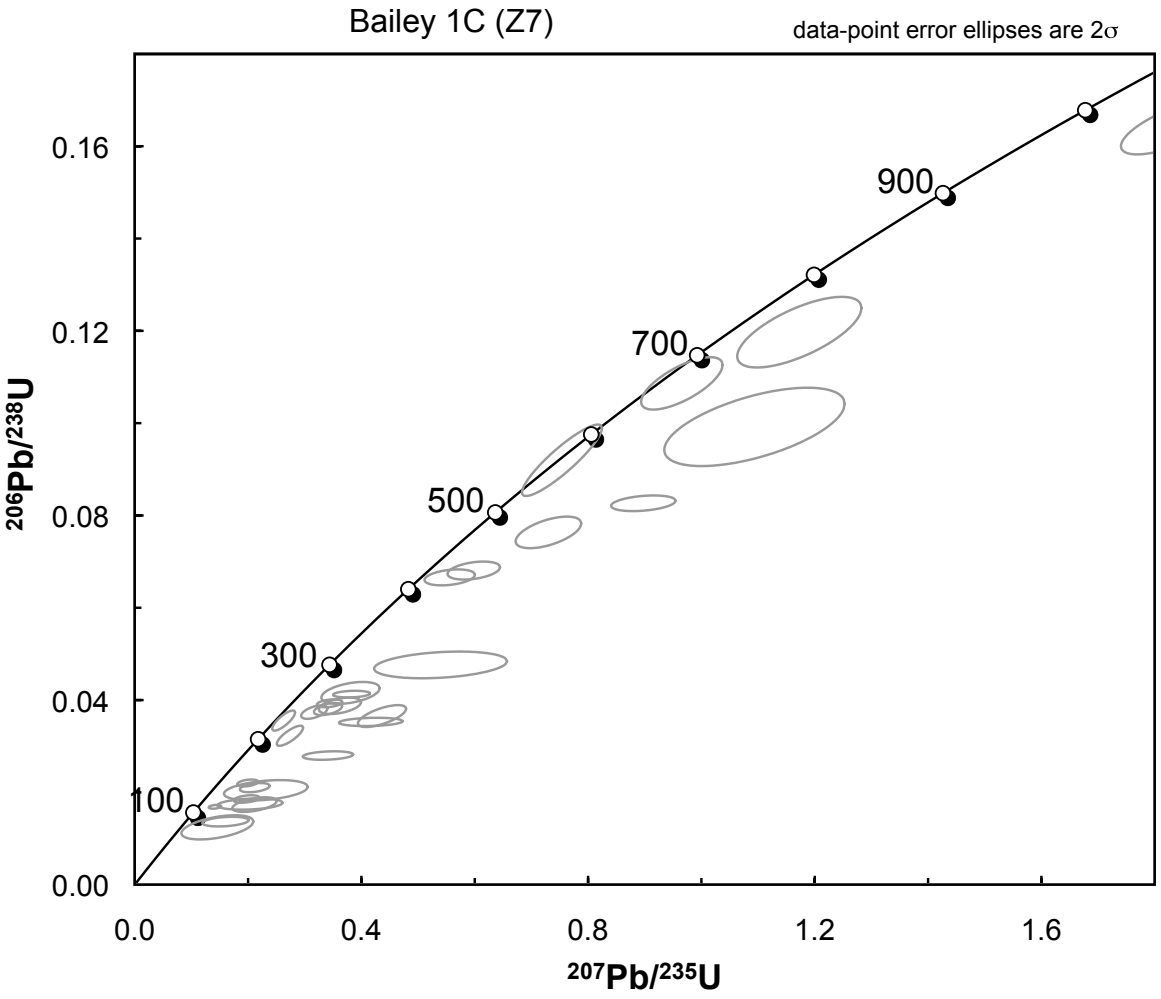
Grains >350 Ma

Lower Wilcox											
Upper Wilcox	**0.706**										
Z1†	**0.748**	**0.949**									
Z2†	**0.380**	**0.144**	**0.197**								
Z3†	**0.126**	**0.124**	**0.364**	**0.540**							
Z4†	0.013	**0.052**	**0.561**	0.003	0.016						
Z5†	**0.096**	0.020	**0.066**	**0.888**	**0.180**	0.000					
Z6§	**0.982**	**0.832**	**0.786**	**0.890**	**0.163**	0.035	**0.534**				
Z7§	**0.684**	**0.640**	**0.813**	**0.606**	**0.892**	0.032	**0.350**	**0.599**			
Z8§	**0.530**	**0.311**	**0.235**	**1.000**	**0.990**	0.022	**0.781**	**0.754**	**0.677**		
Z9§	**0.307**	**0.813**	**0.984**	0.036	**0.091**	**0.581**	0.010	**0.294**	**0.383**	**0.248**	
Z10§	0.002	0.016	**0.100**	0.002	0.019	**0.074**	0.000	**0.023**	0.013	0.003	0.018

* The K-S test compares the age distribution of two detrital zircon samples and determines a probability (P) that the differences between the two samples are due to random chance. If P<0.05 then the two samples are considered to be different at the 95% confidence level. Comparisons where P≥0.05 are marked by bold text.

† Lower Wilcox samples.

§ Upper Wilcox samples.


Bailey 1C (Z7)
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0.12
0.08
0.04
0.00
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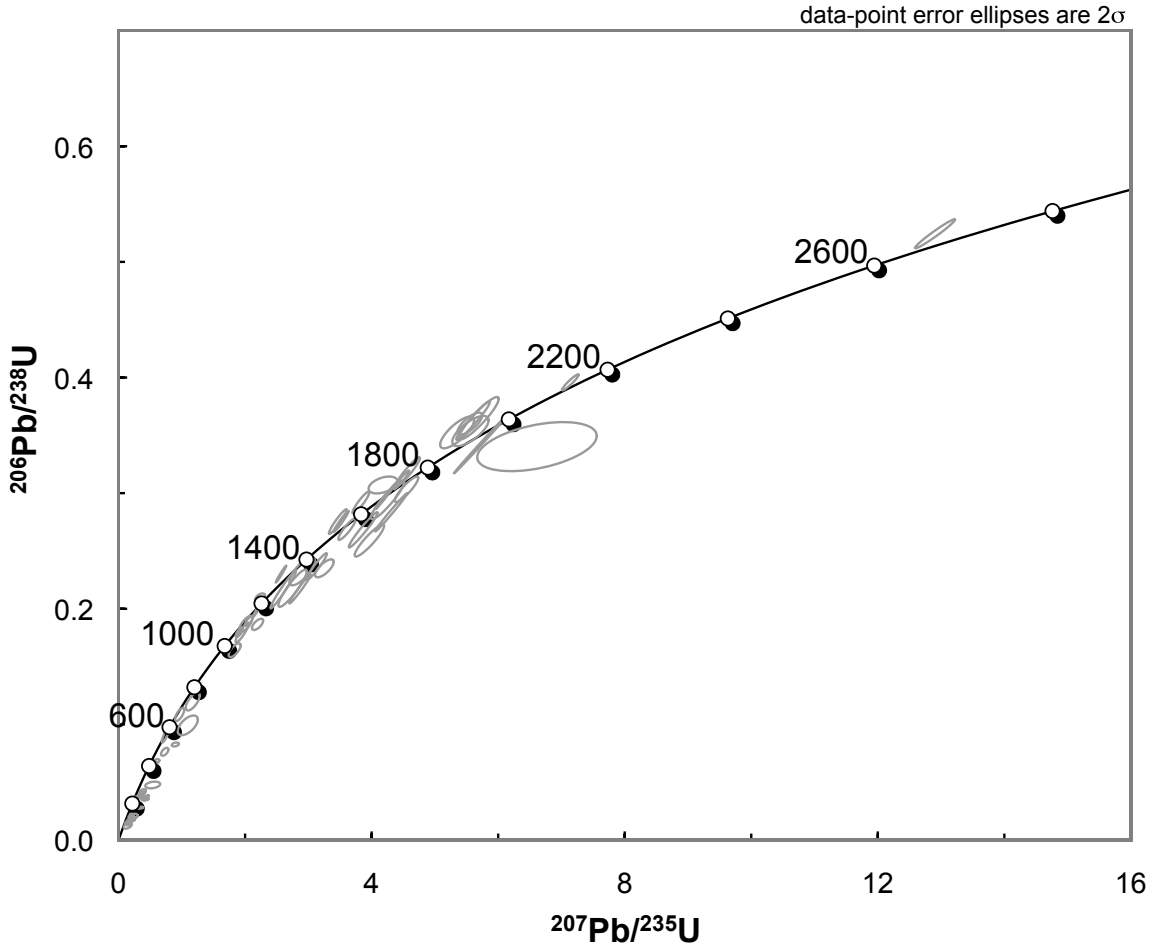
100
300
500
700
900
0.0
0.4
0.8
1.2
1.6
207Pb/235U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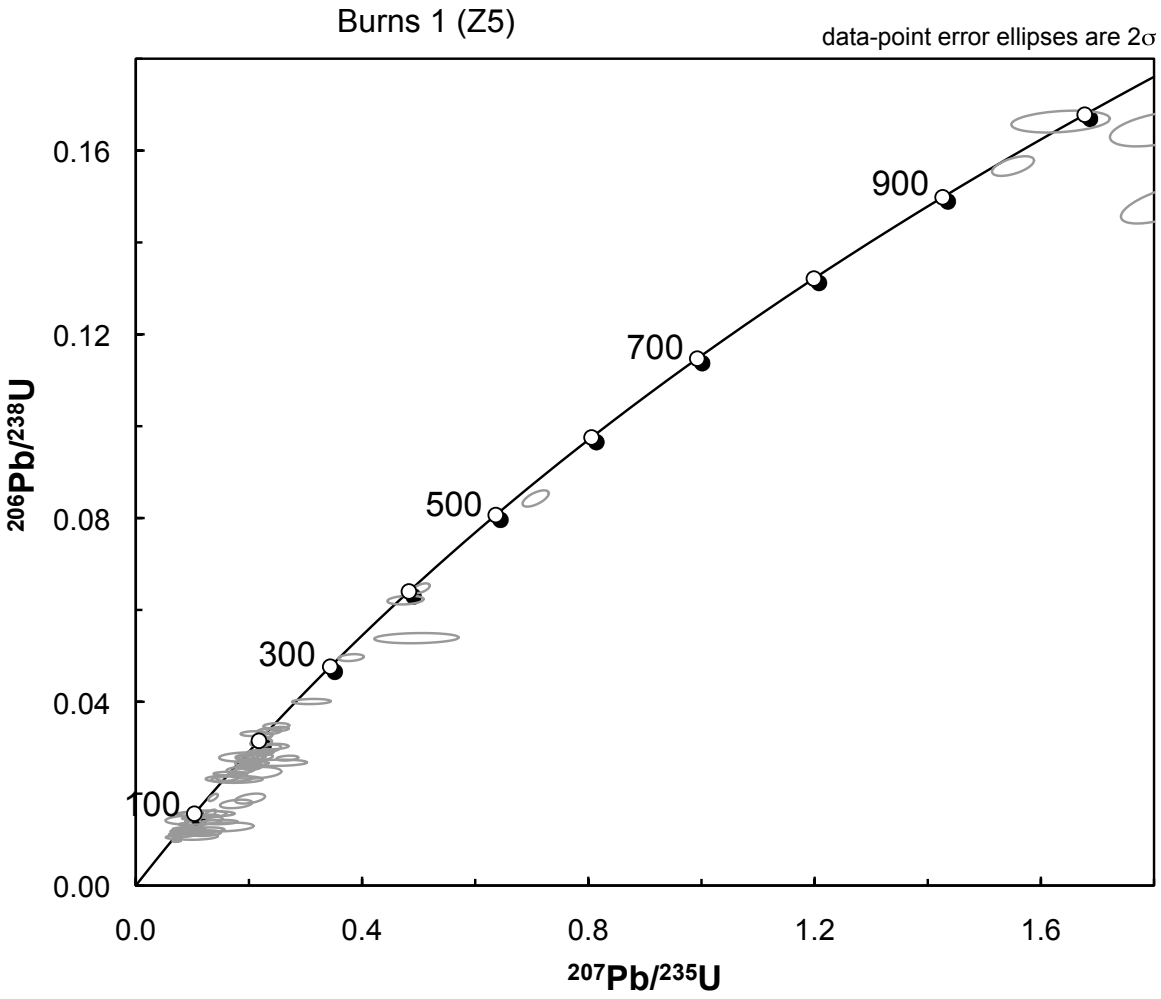
0.4
0.2
0.0
206Pb/238U
600
1000
1400
1800
2200
2600
0
4
8
12
16
207Pb/235U


Burns 1 (Z5)
data-point error ellipses are 2σ
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0.12
0.08
0.04
0.00
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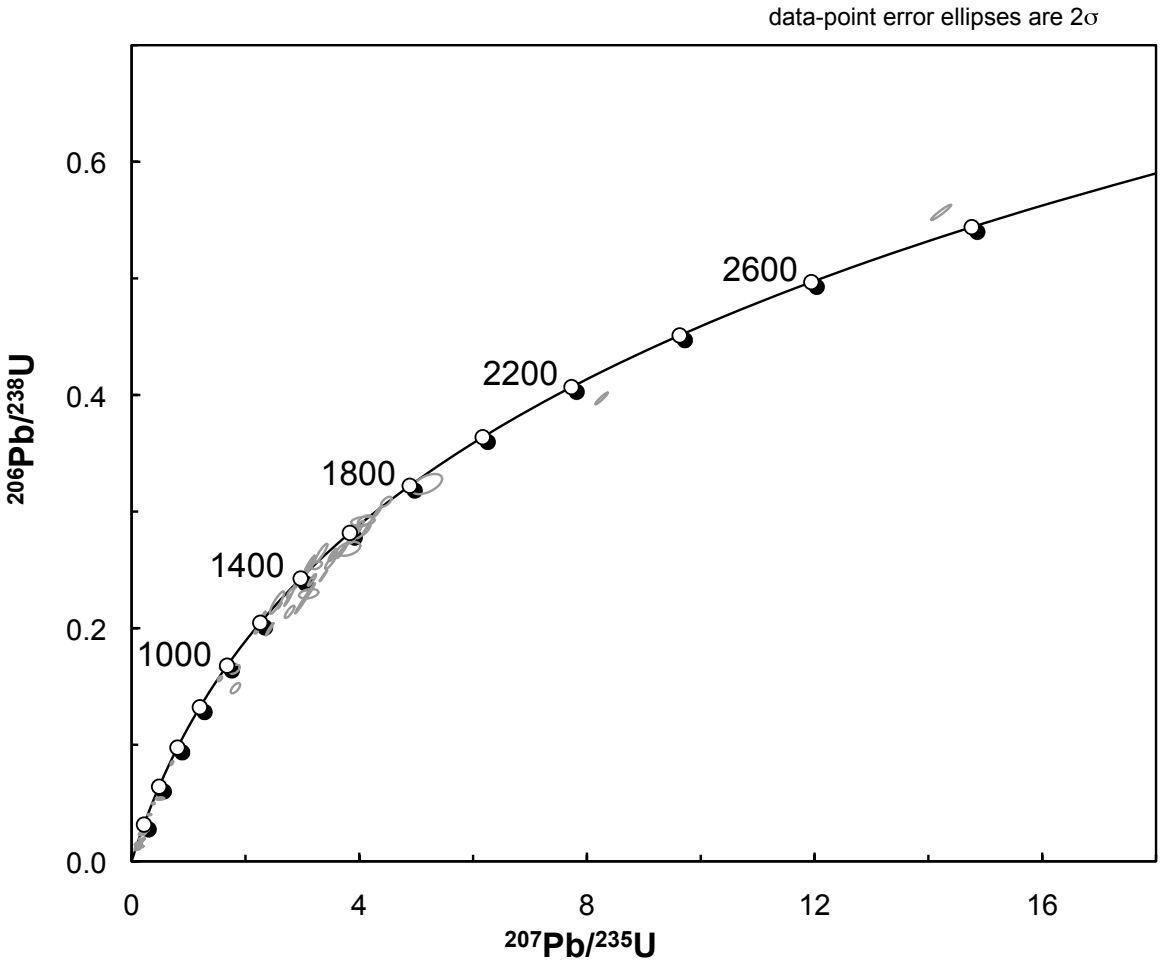
700
500
300
100
0.0
0.4
0.8
1.2
1.6
207Pb/235U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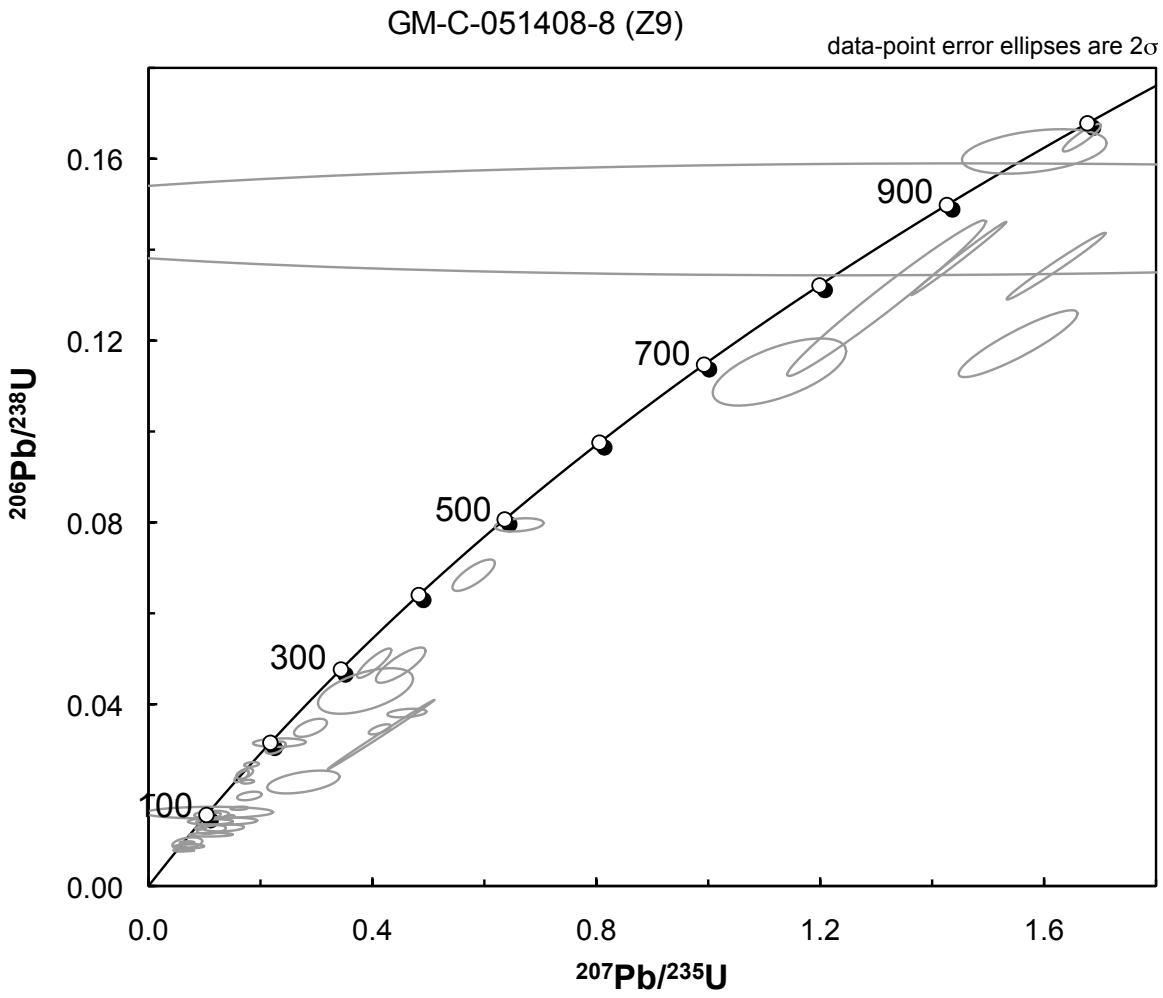
0.4
0.2
0.0
206Pb/238U
2600
2200
1800
1400
1000
0
4
8
12
16
207Pb/235U


GM-C-051408-8 (Z9)
data-point error ellipses are 2σ
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0.12
0.08
0.04
0.00
206Pb/238U
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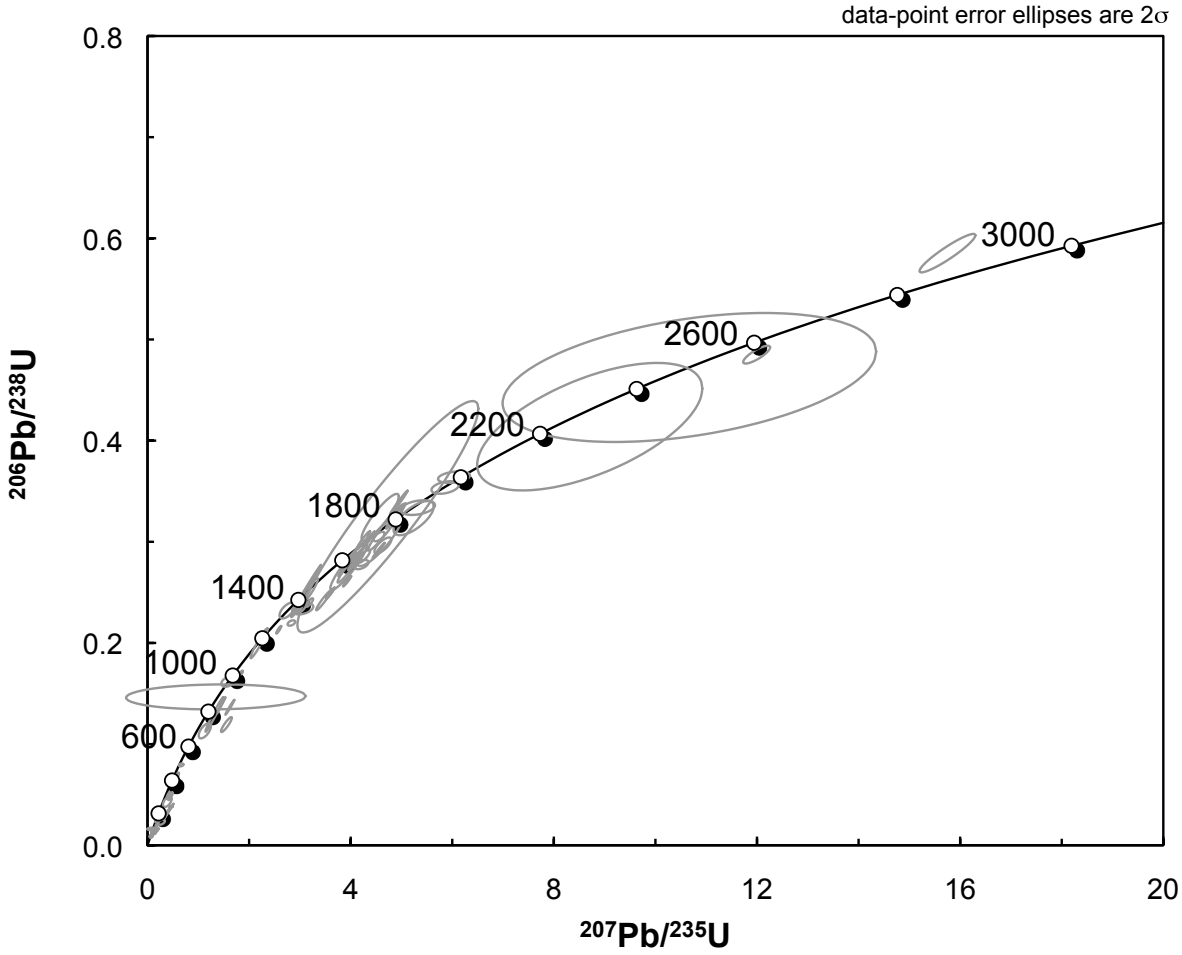
700
500
300
100
0.0
0.4
0.8
1.2
1.6
207Pb/235U


data-point error ellipses are 2σ
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0.6
0.4
0.2
0.0
206Pb/238U
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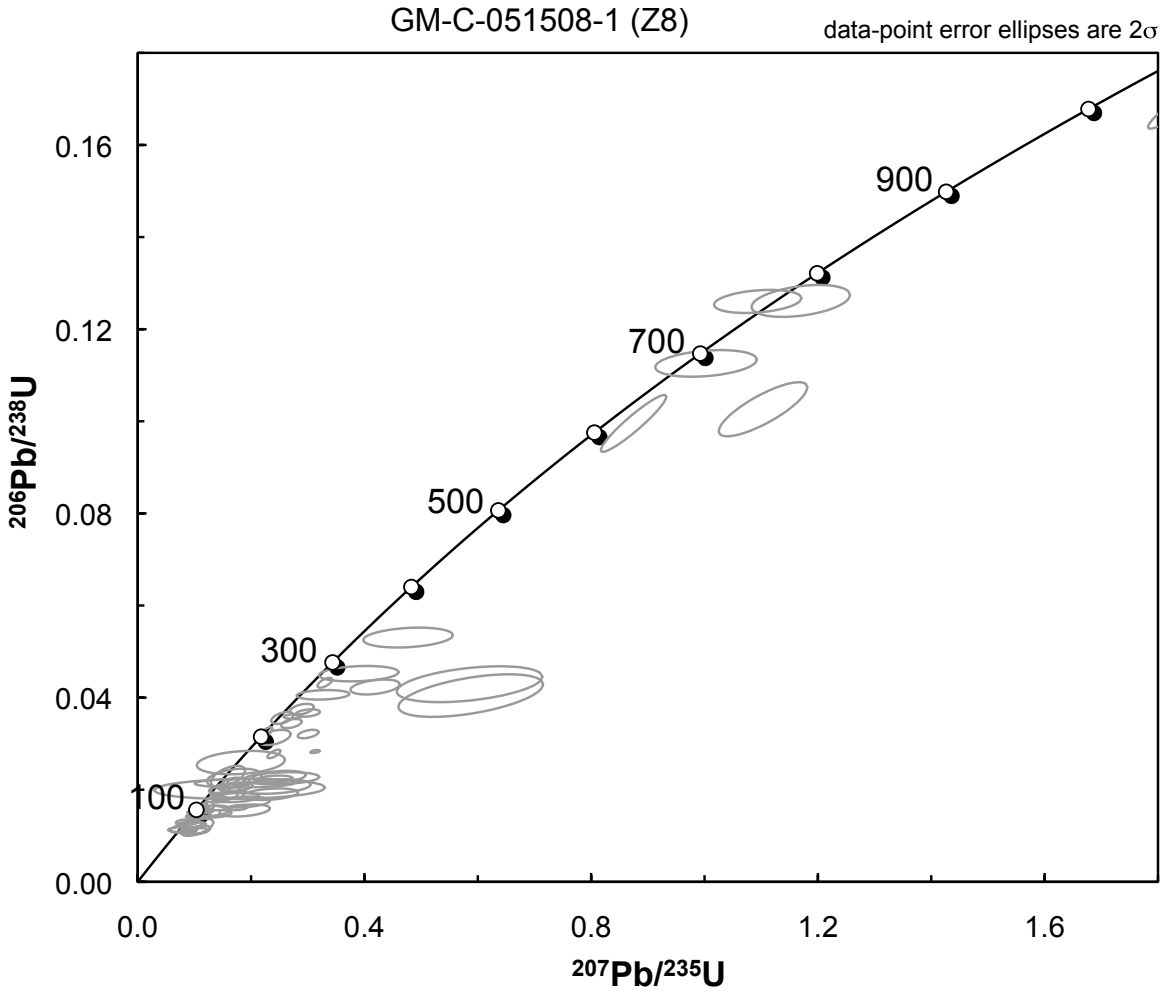
2600
2200
1800
1400
1000
600
0
4
8
12
16
20
207Pb/235U


GM-C-051508-1 (Z8)
data-point error ellipses are 2σ
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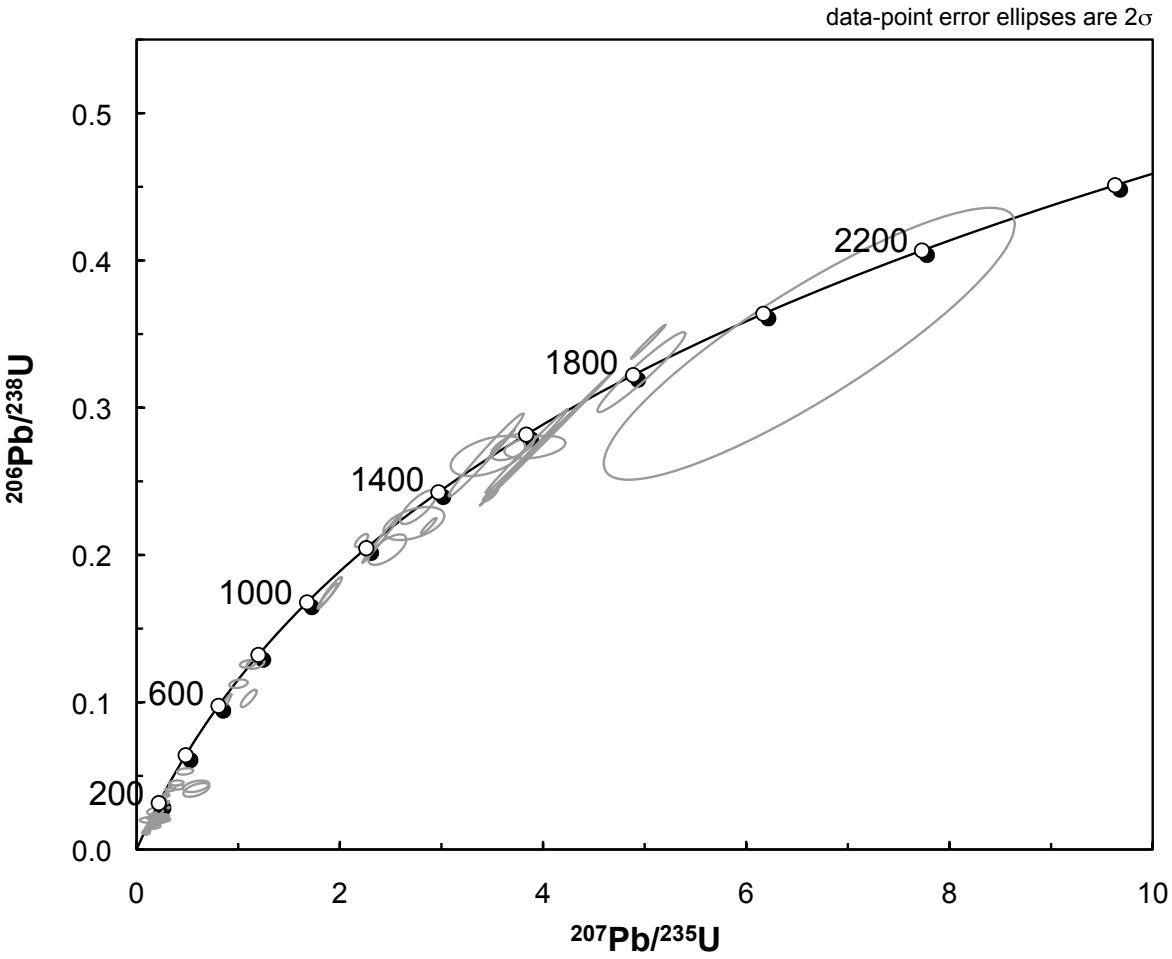
0.12
0.08
0.04
0.00
206Pb/238U
900
700
500
300
100
0.0
0.4
0.8
1.2
1.6
207Pb/235U


data-point error ellipses are 2σ
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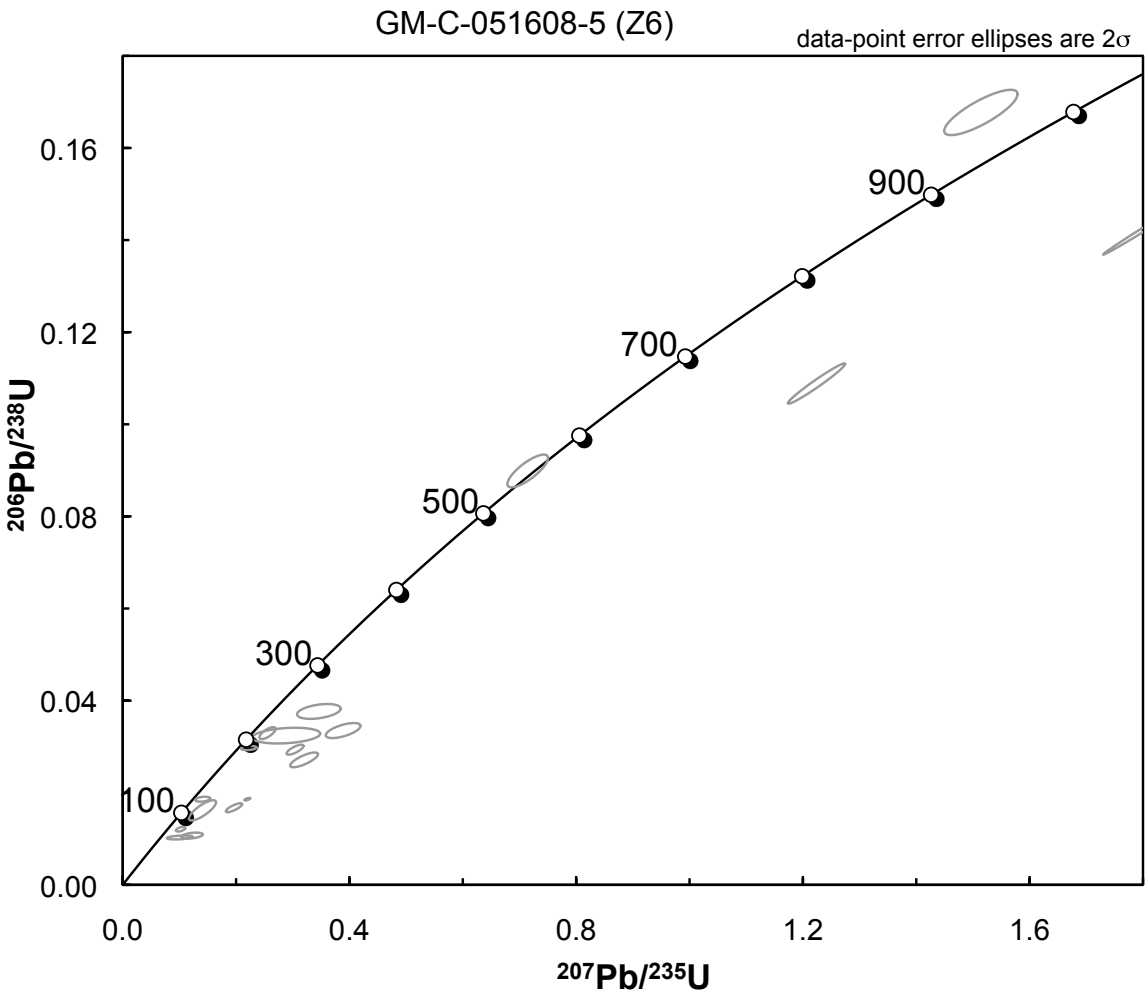
0.4
0.3
0.2
0.1
0.0
206Pb/238U
2200
1800
1400
1000
600
200
0
2
4
6
8
10
207Pb/235U


GM-C-051608-5 (Z6)
data-point error ellipses are 2σ
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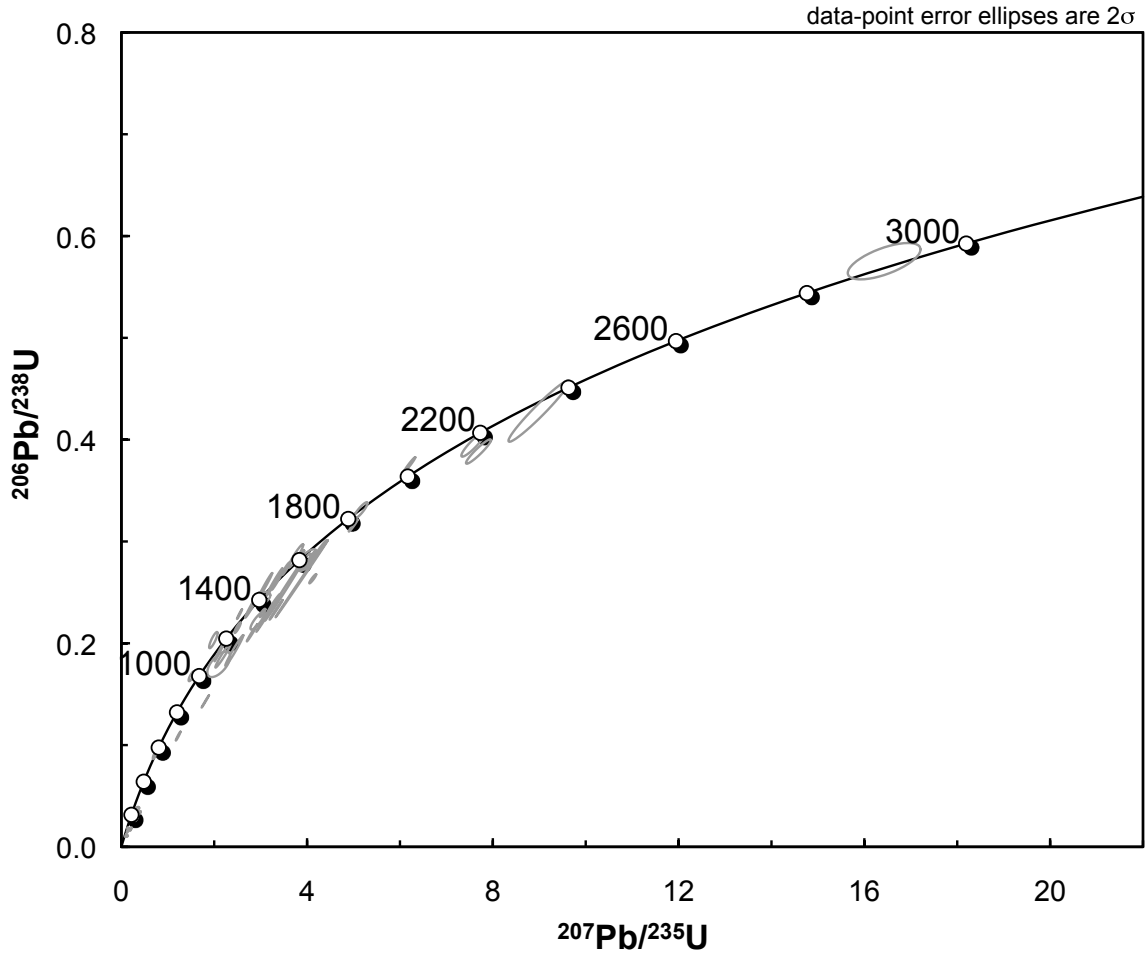
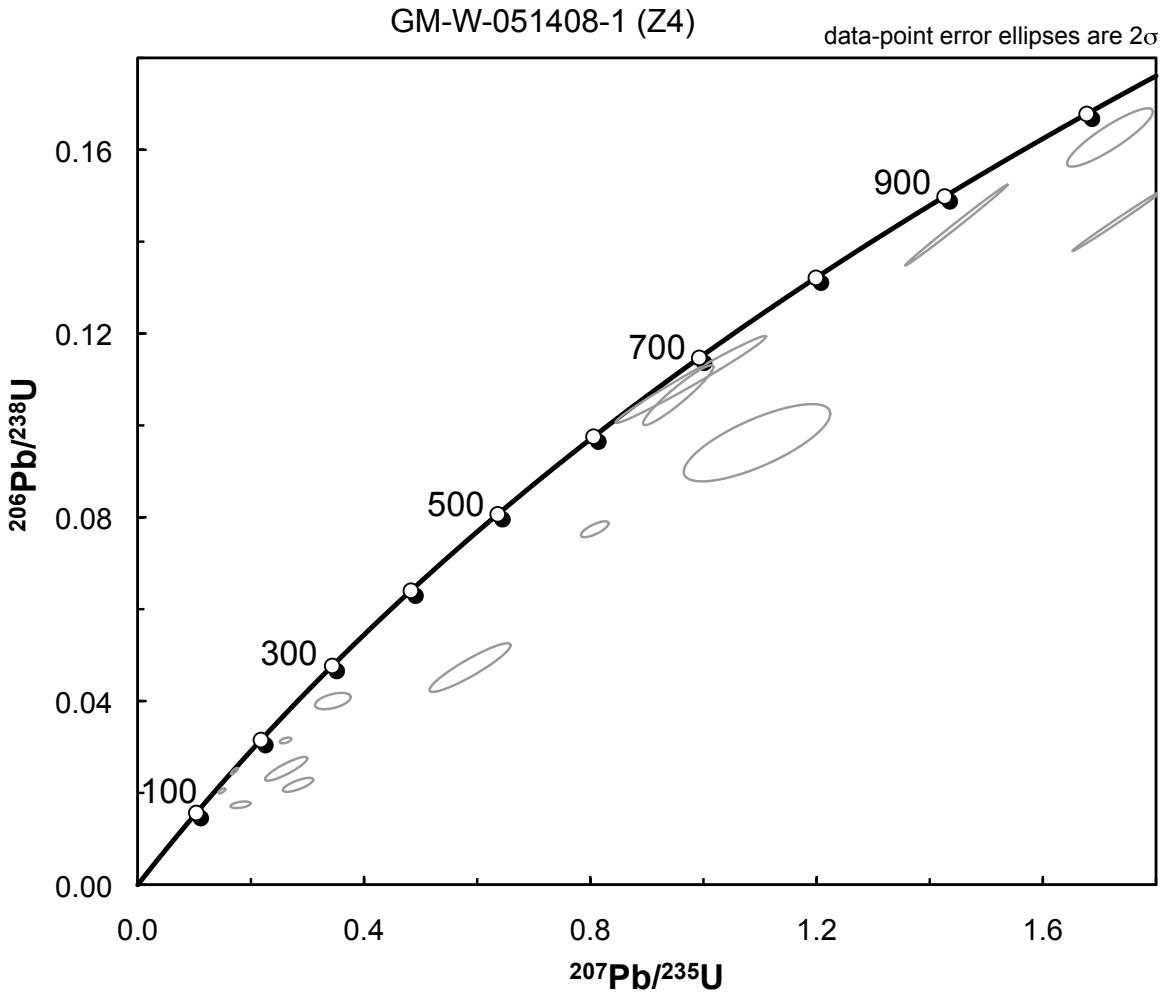
0.12
0.08
0.04
0.00
206Pb/238U
100
300
500
700
900
0.0
0.4
0.8
1.2
1.6
207Pb/235U


data-point error ellipses are 2σ
0.8
0.6
0.4
0.2
0.0
206Pb/238U
1000
1400
1800
2200
2600
3000
0
4
8
12
16
20
207Pb/235U


GM-W-051408-1 (Z4)
data-point error ellipses are 2σ
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0.08
0.04
0.00
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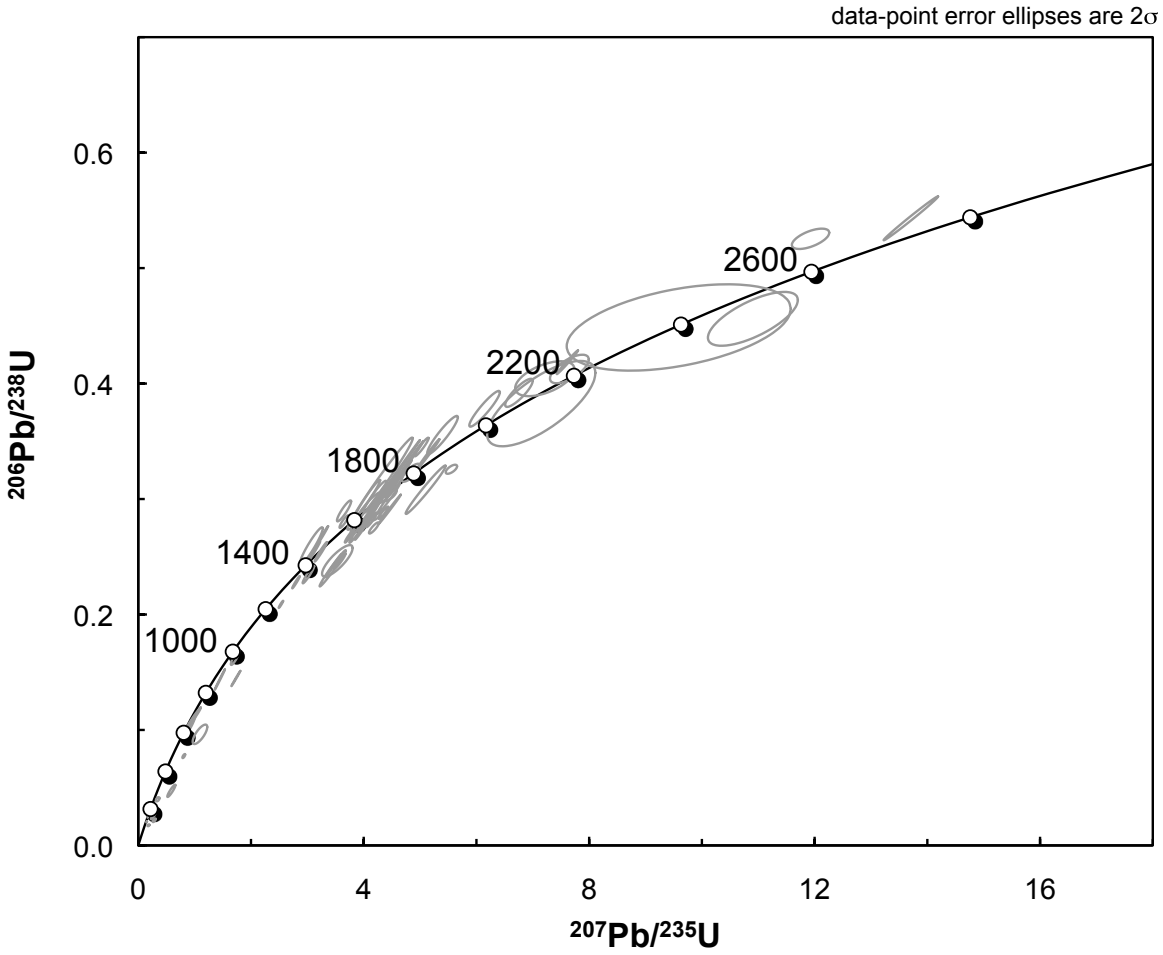
100
300
500
700
900
0.0
0.4
0.8
1.2
1.6
207Pb/235U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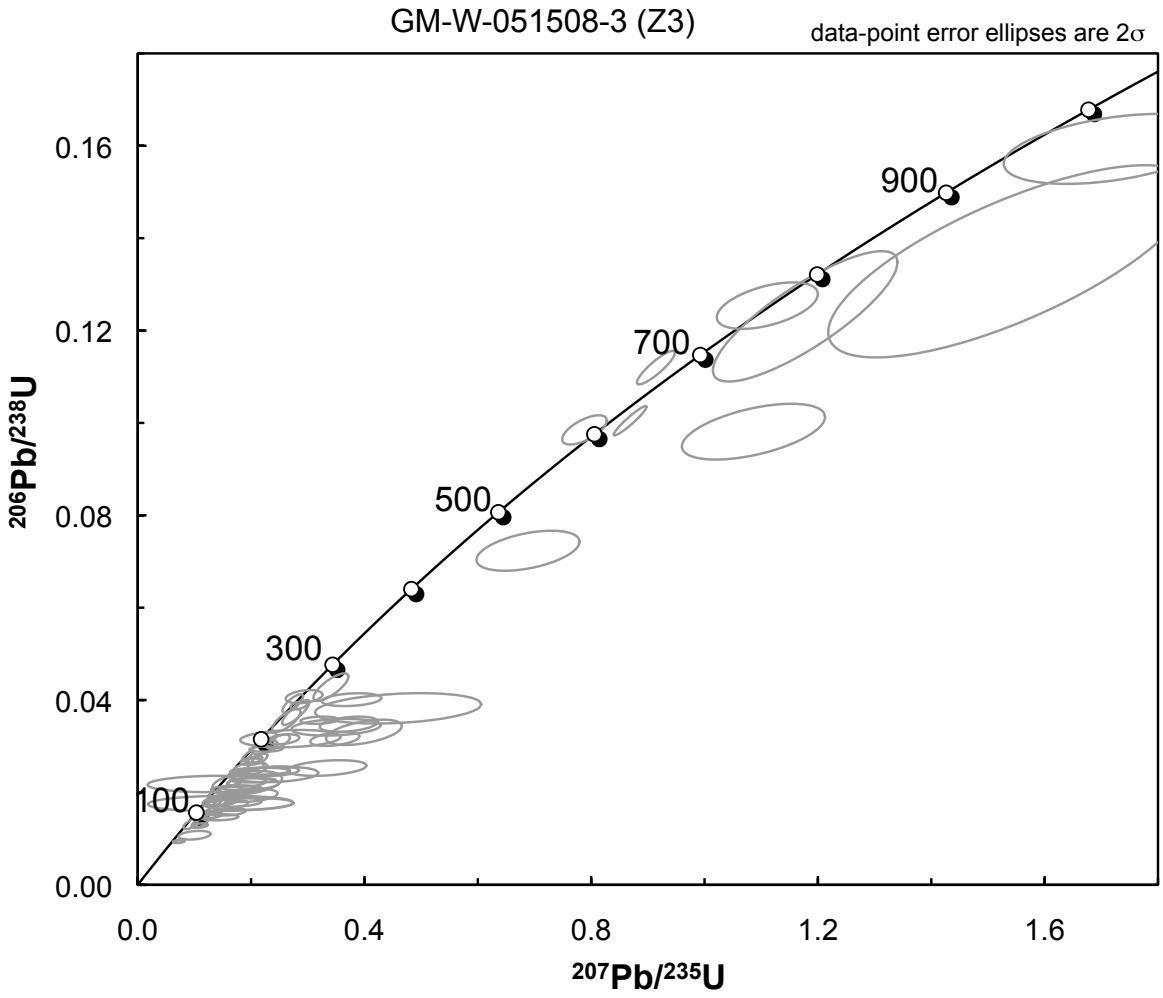
1400
1800
2200
2600
0
4
8
12
16
207Pb/235U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data-point error ellipses are 2σ
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0.12
0.08
0.04
0.00
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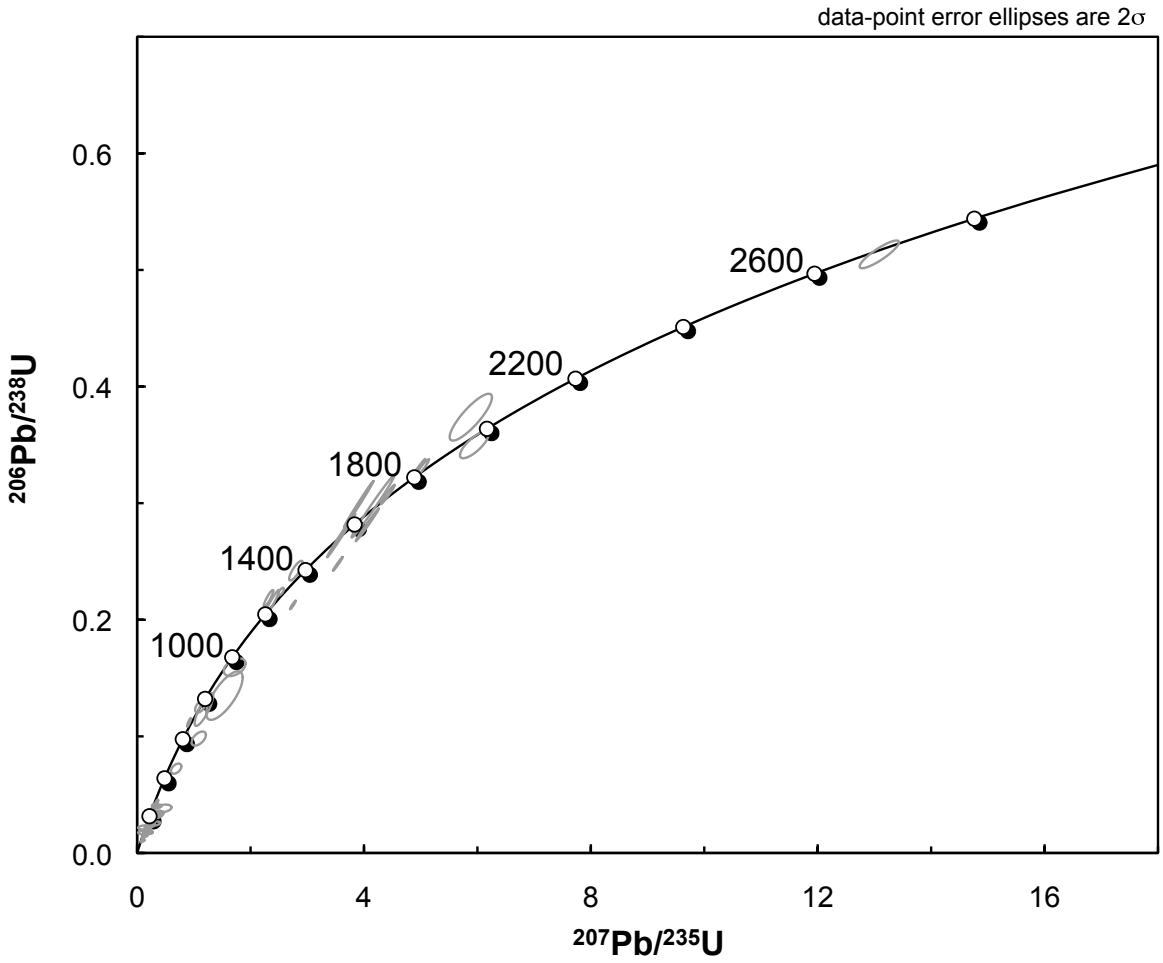
900
700
500
300
100
0.0
0.4
0.8
1.2
1.6
207Pb/235U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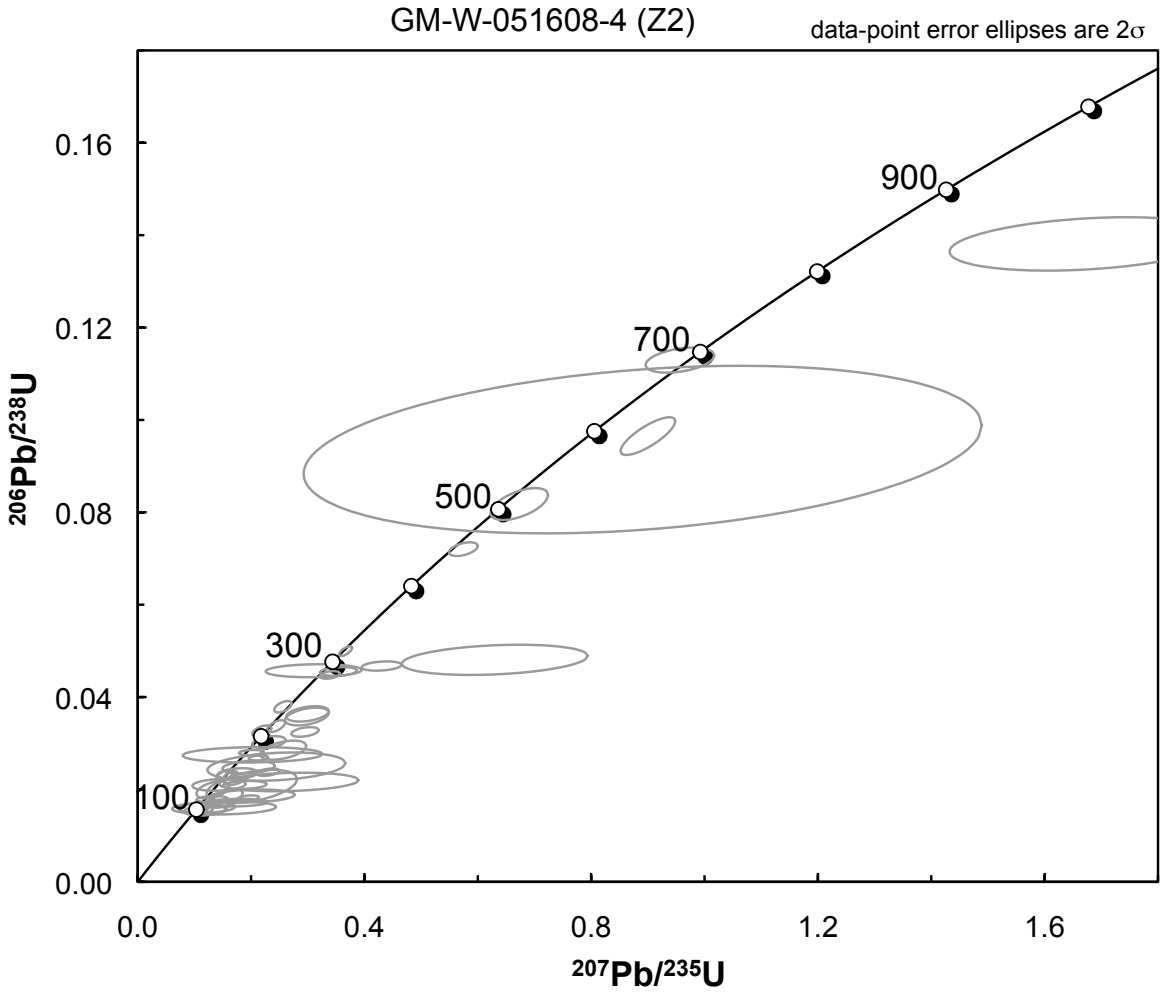
0.6
0.4
0.2
0.0
206Pb/238U
2600
2200
1800
1400
1000
0
4
8
12
16
207Pb/235U


GM-W-051608-4 (Z2)
data-point error ellipses are 2σ
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0.12
0.08
0.04
0.00
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900
700
500
300
100
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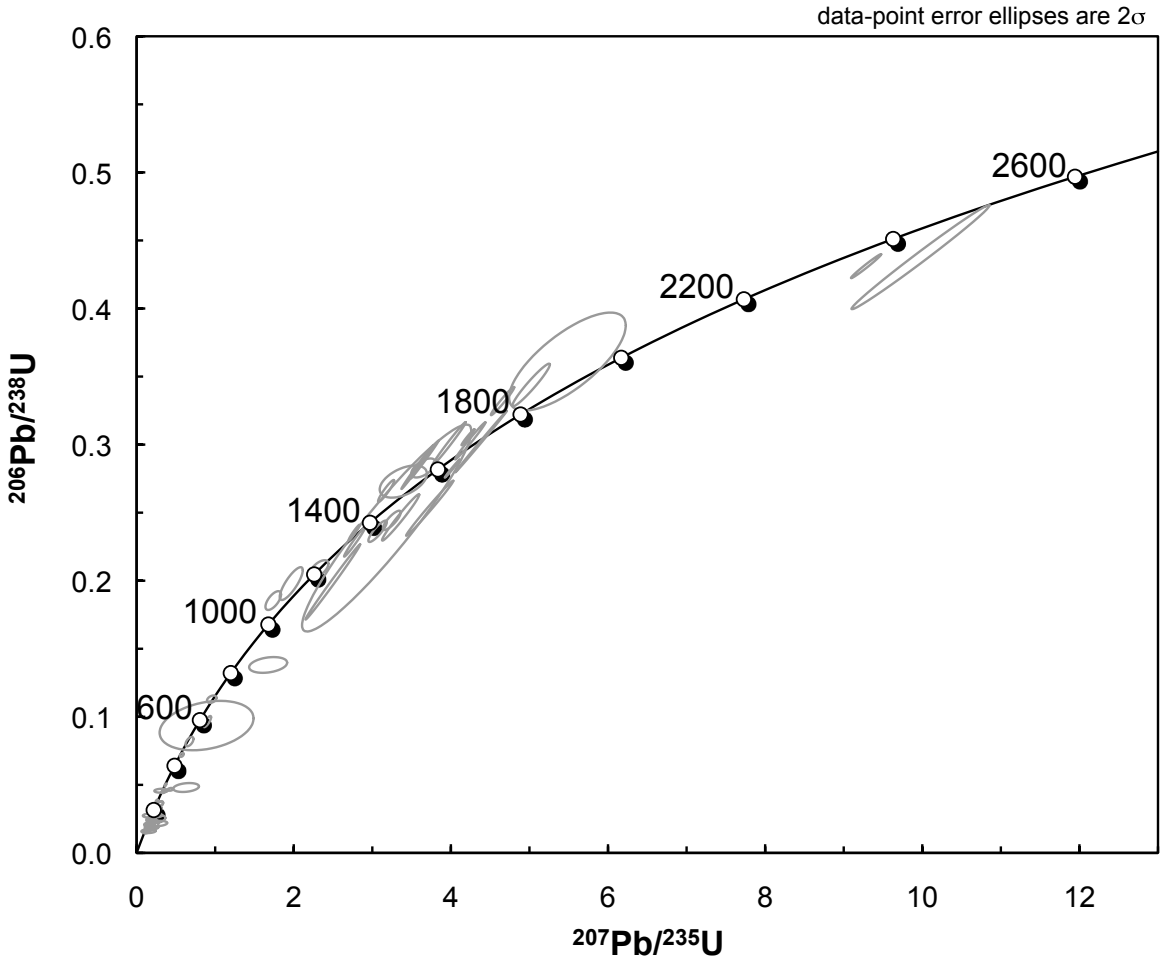
0.4
0.8
1.2
1.6
207Pb/235U


data-point error ellipses are 2σ
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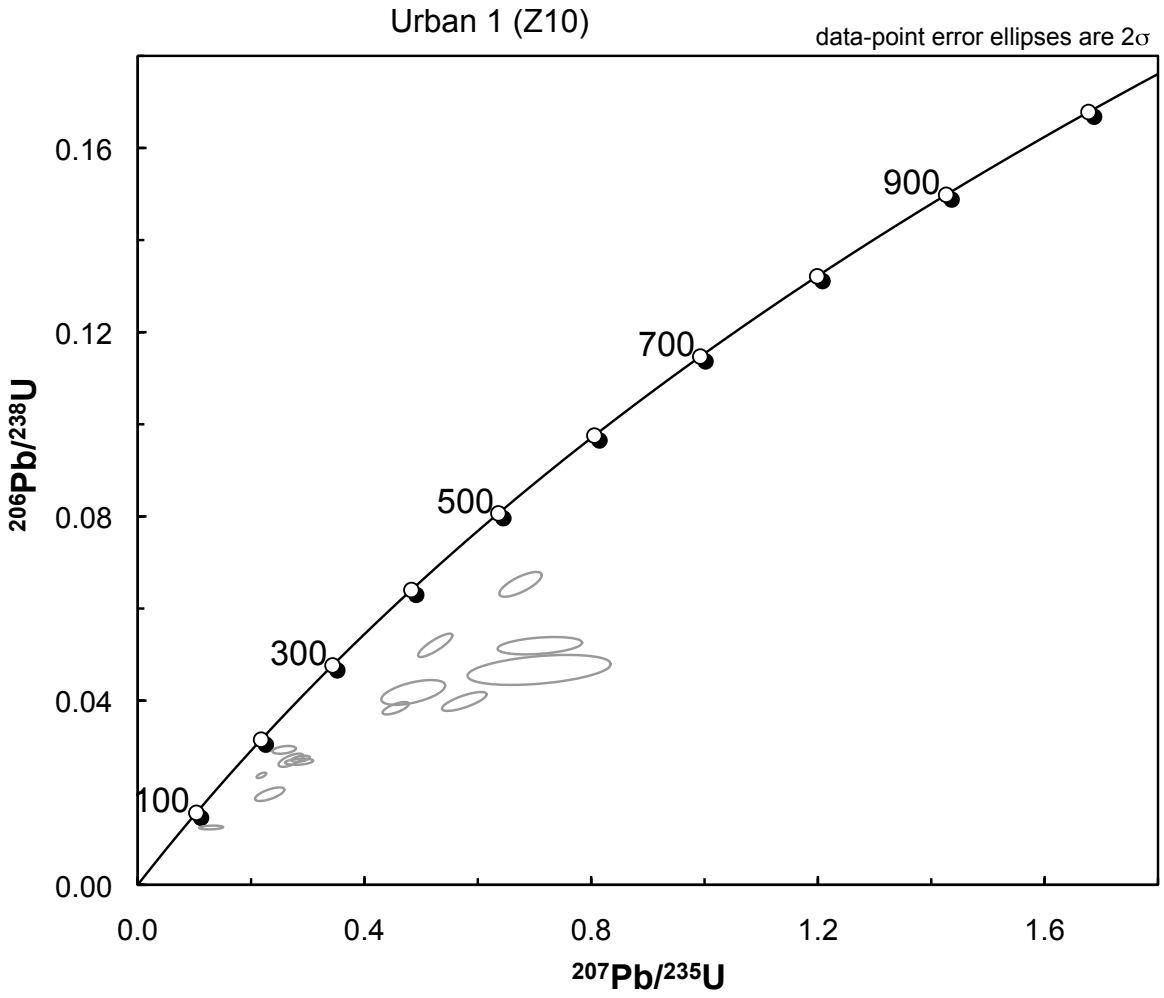
0.5
0.4
0.3
0.2
0.1
0.0
206Pb/238U
2600
2200
1800
1400
1000
600
0
2
4
6
8
10
12
207Pb/235U


Urban 1 (Z10)
data-point error ellipses are 2σ
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0.12
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0.04
0.00
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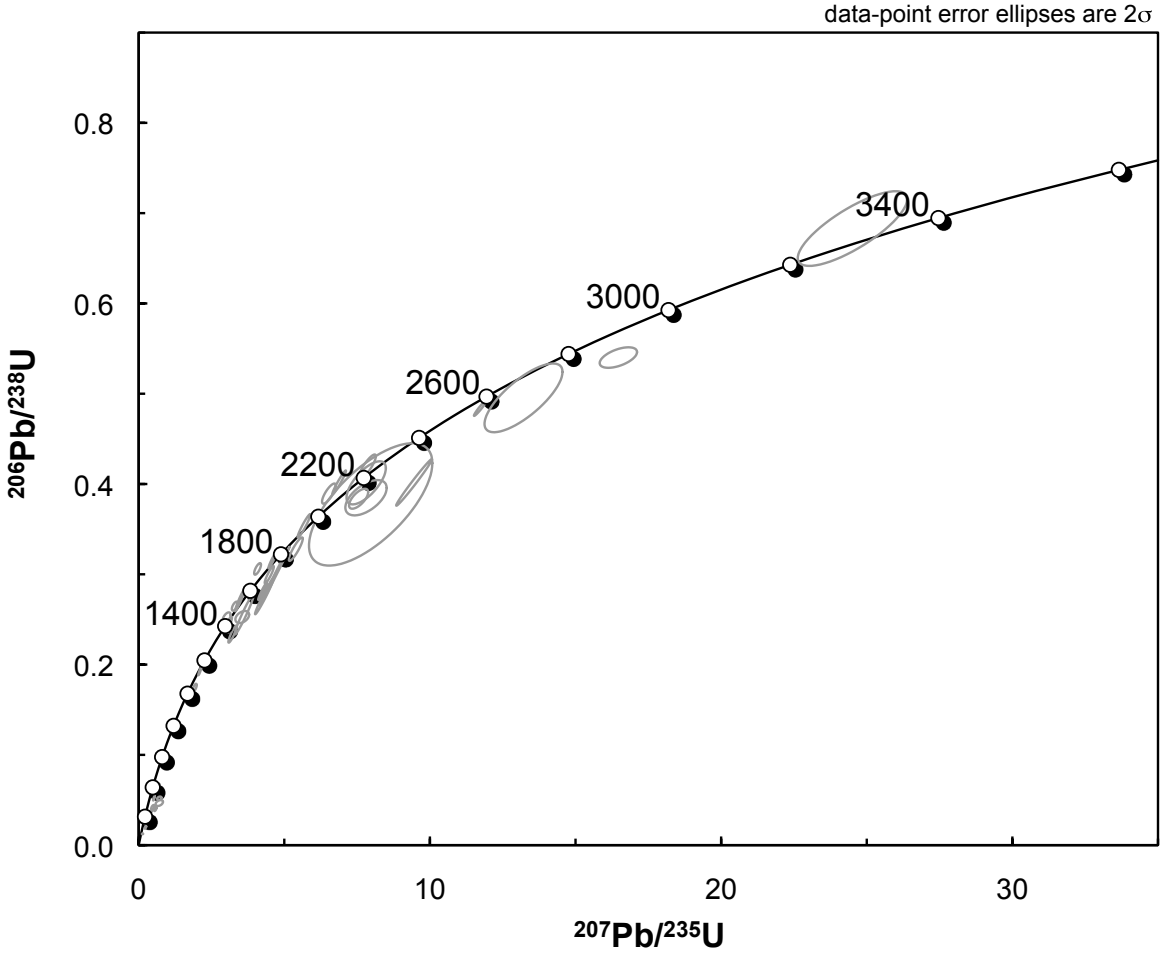
100
300
500
700
900
0.0
0.4
0.8
1.2
1.6
207Pb/235U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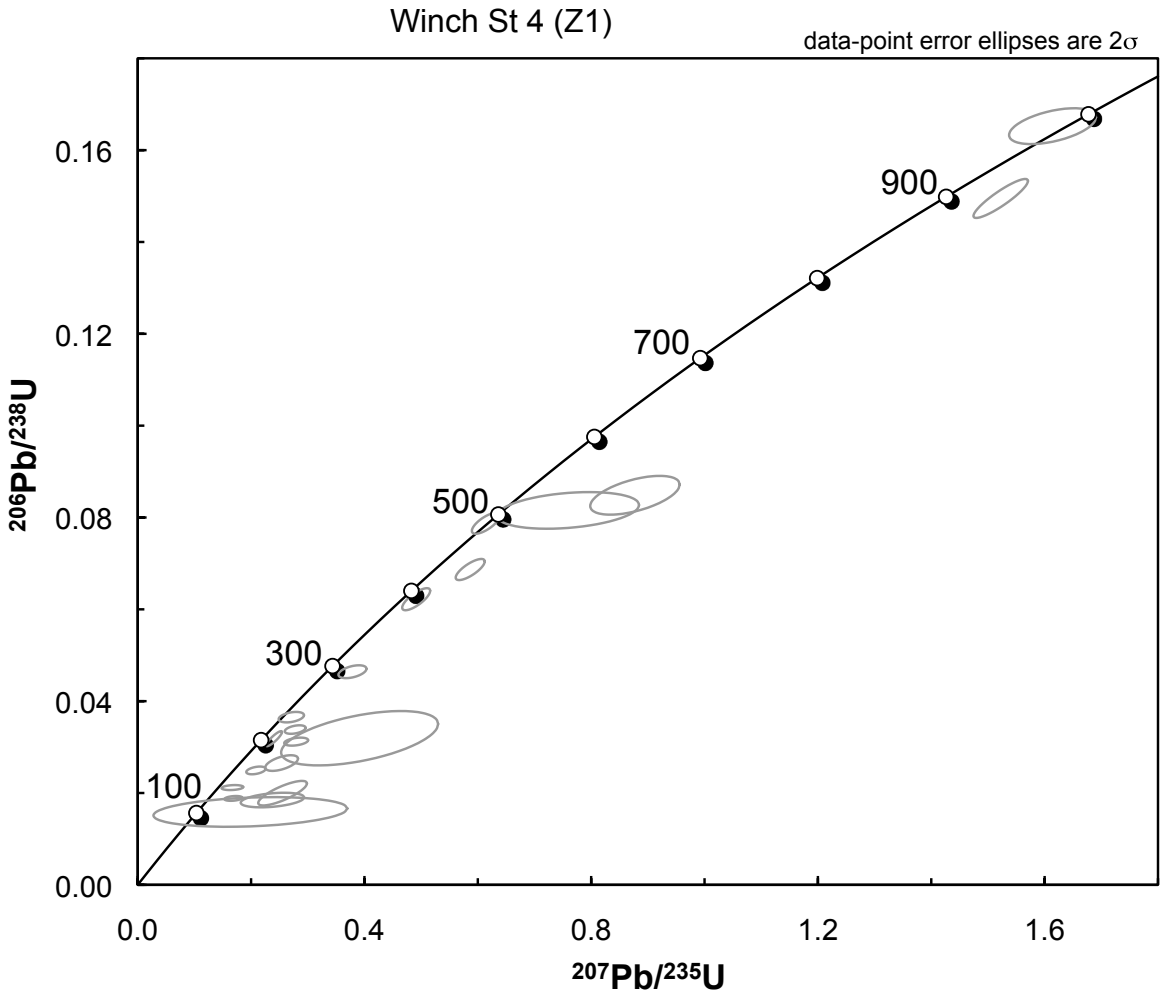
0.8
0.6
0.4
0.2
0.0
206Pb/238U
1400
1800
2200
2600
3000
3400
0
10
20
30
207Pb/235U


Winch St 4 (Z1)
data-point error ellipses are 2σ
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0.12
0.08
0.04
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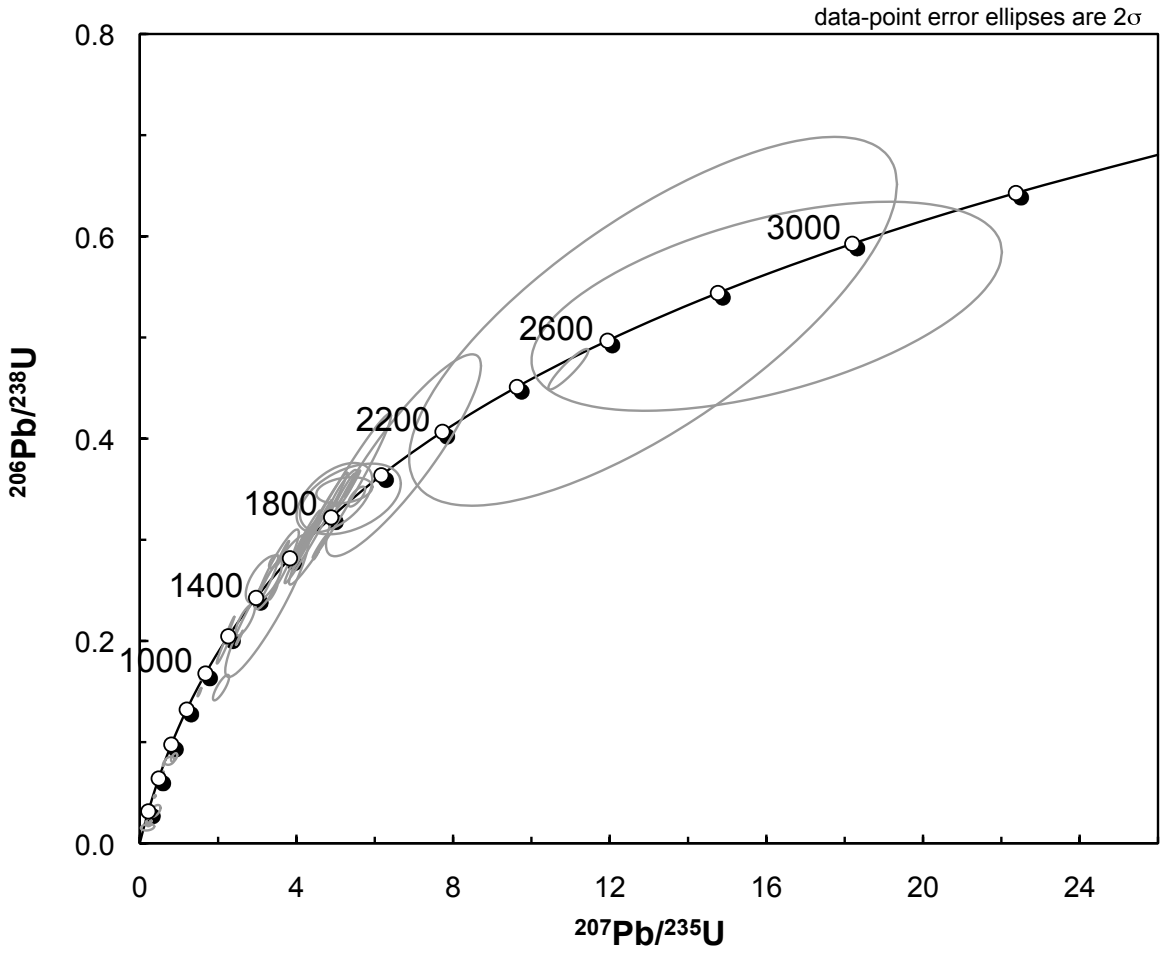
900
700
500
300
100
0.0
0.4
0.8
1.2
1.6
207Pb/235U


data-point error ellipses are 2σ
0.8
0.6
0.4
0.2
0.0
206Pb/238U
3000
2600
2200
1800
1400
1000
0
4
8
12
16
20
24
207Pb/235U