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Detrital geochronology of the pre-Mississippian stratigraphy in the NE Brooks Range, Alaska: Insights to the tectonic evolution of northern Laurentia

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Supplementary Materials

SAMPLE DESCRIPTIONS

Reconnaissance scale mapping of the Demarcation Point Quadrangle by Reiser et al. (1980) is the most recent, continuous, and comprehensive geological map available in entire NE Brooks Range. The depositional environments, ages, and contact relationships among these rocks are poorly constrained. For these reasons, we rely on the mapping and unit descriptions of Reiser et al. (1980) from Alaska and of Lane (1991) and Lane et al. (1995; 2015) from Yukon to supplement these data with our own observations from multiple field seasons in the British and Romanzof mountains. All of the samples were collected from map units that are stratigraphically beneath the prominent sub-Mississippian unconformity, which spans most of Arctic Alaska (e.g., Moore et al., 1994). Our samples are generally grouped into two major lithostratigraphic successions exposed in the NE Brooks Range: the Neoproterozoic–middle Cambrian siliciclastic and carbonate units of the Firth River group (Lane et al., 2016) and Neruokpuk Formation (Leffingwell, 1919; Lane, 1991); and a Lower Ordovician–Lower Devonian succession of turbidites herein referred to as the Clarence River group, which includes the Buckland Hills succession of Lane et al. (2016). A summery table (Table DR1) includes sample locations and

type of analysis performed in this study. The age constraints from these units, along with age constraints from other pre-Mississippian units in the NE Brooks Range, are outlined in Table DR2.

Firth River group and Neruokpuk Formation Samples

12JT10 – Map unit of Css of Reiser et al. (1980), east side of the Kongakut River, just below the sub-Mississippian unconformity in the southern British Mountains (N 69.113734, W -141.903452): Very coarse- to fine-grained, subrounded, gray quartz arenite with abundant detrital muscovite and very fine-grained authigenic muscovite occupying the interstitial spaces. Sample is considered part of the Neruokpuk Formation based on its detrital zircon age distributions (see Table DR3), and was collected just below the sub-Mississippian unconformity.

12JT11 – Map unit of pCn of Reiser et al. (1980), east side of the Kongakut River, southern British Mountains (N 69.157950, W 141.864928): Moderately strained, coarse to medium-grained, green, subrounded quartz arenite. Surrounding the quartz grains are weakly developed, but prevalent, strain shadows (Fig. DR1A). Beds along the river are massive, up to a 1 m in thickness, and are tightly folded with north-dipping axial surfaces.

12JT12 – Map unit of pCn of Reiser et al. (1980), west side of the Kongakut River, southern British Mountains (N 69.192398, W 141.868887): Very coarse to fine-grained, subrounded gray lithic arenite, with >5% clay matrix. Sample contains small amounts of coarse-grained (250–800 μm) detrital(?) muscovite, 10-100 μm thick packets of interstitial authigenic muscovite, and occasional feldspar grains (Fig. DR1B). Beds along the river are massive, up to a 1 m in thickness.

12JT13a – Map unit of pCn, Ccp, or Css of Reiser et al. (1980), east side of the Kongakut River, southern British Mountains (N 69.227013, W 141.831267): Moderately-strained, carbonate-cemented, fine- to very fine grained, subrounded, gray lithic arenite, with >5% clay matrix. Outcrop is interbedded with phyllite units which contain coarse-grained (250–800 µm) detrital(?) muscovite. Sample could be part of the Neruokpuk Formation or lower Clarence River group, as it was sampled near the contact.

12JT31 – Map unit pCpa, Old Grungy Mountain of Reiser et al. (1980), east side of the Kongakut River, northern British Mountains (N 69.387220, W 141.535461): Intensely foliated green-grey argillite cut by numerous quartz veins. Sample is considered part of the Firth River group because of its inferd lower stratigraphic position with respect to the Neruokpuk Formation and its along strike correlation to the carbonate units in the northern British mountains.

12JT32 – Map unit of pCn of Reiser et al. (1980) west side of the Kongakut River, northern British Mountains (N 69.424719, W 141.508195): Coarse to medium-grained, subrounded, gray lithic arenite with minor clay matrix. Beds are massive and up to 1 m in thickness.

05LF13 – Map unit of pCn of Reiser et al. (1980) east side of upper Leffingwell Fork of the Aichilik River, southern British Mountains (N 69.185356, W 142.664228): Moderately strained, coarse to very fine-grained, subangular, gray lithic-arenite. Lithic grains are predominantly chert.

11LF13 – Map unit of pCn of Reiser et al. (1980) east side of the Leffingwell Fork of the Aichilik River, southern British Mountains (N 69.263494, W 142.657930): Moderately

strained, coarse- to very fine-grained, angular, green lithic-arenite. Lithic grains are predominantly chert

28LF13 – Map unit of pCn of Reiser et al. (1980) east side of the Leffingwell Fork of the Aichilik River, southern British Mountains (N 69.357533, W 142.858018): Coarse- to fine-grained, rounded, gray quartz arenite with <5% clay matrix. Beds are normally graded (Bouma-A sequence turbidites) and up to 0.5 m thick.

37LF13 – Map unit of pCn of Reiser et al. (1980), west side of the Leffingwell Fork of the Aichilik River, southern British Mountains (N 69.357257, W 142.921486): Coarse- to fine-grained, rounded to, gray lithic arenite with >5% clay matrix. Contains coarse- to medium-grained (250–800 µm) detrital muscovite, and lithic chert fragments.

J1355-617 – Map unit Css of Lane et al., (1995), upper Malcolm River, northern British Mountains in Yukon (N 69.219592, W 140.949294): Carbonate-cemented, medium- to very fine-grained, subrounded, brown quartz arenite. Contains coarse- to medium-grained (250–800 µm) detrital muscovite.

Clarence River Group Samples

12JT22 – Map unit Cp of Reiser et al. (1980), west side of the Kongakut River across from Whale Mountain, southern British Mountains (N 69.279048, W 141.727346): Carbonate-cemented, coarse- to fine -grained, subrounded lithic arenite with a >5% clay matrix. Contains lithic chert and metamorphic rock fragments and abundant fine- and coarse-grained (100-500 µm) detrital muscovite.

12JT23 – Map unit Cp or Cs of Reiser et al. (1980), west side of the Kongakut River across from Whale Mountain, southern British Mountains (N 69.279912, W

141.747478): Coarse- to medium -grained, angular to subangular, lithic or feldspathic arenite. Contains abundant chert, volcanic, and feldspar detrital grains (Fig. DR1C).

12JT24 – Map unit Cp of Reiser et al. (1980), west side of the Kongakut River across from Whale Mountain, southern British Mountains (N 69.279912, W 141.747478): Carbonate-cemented, fine- to very fine -grained, subangular, lithic arenite with a >5% clay matrix. Contains fine- and coarse-grained (100-500 μm) detrital muscovite separated for single-grain, stepwise $^{40}\text{Ar}/^{39}\text{Ar}$ analyses (Table DR6).

12JT35 – Map unit Ovc or Os of Reiser et al. (1980), east side of the Kongakut River, northern British Mountains along Caribou Pass (N 69.469365; W 141.469672): Carbonate-cemented, medium- to very fine-grained, subrounded, lithic arenite with abundant detrital carbonate, opaque minerals, and volcanic rock fragments.

09LF13 – Map unit Ccp or Css of Reiser et al. (1980), east side of the Leffingwell Fork of the Aichilik River, southern British Mountains (N 69.264435, W 142.657912): Moderately-strained, carbonate-cemented, subangular, fine-grained phyllite. Contains Medium- and fine-grained (100-800 μm) detrital muscovite, which occupy anastomosing cleavage domains.

40LF13 – Map unit Cp of Reiser et al. (1980), east side of the Leffingwell Fork of the Aichilik River, southern British Mountains (N 69.375307, W 142.912505): Medium- to very fine -grained, subangular, lithic arenite with abundant detrital muscovite in a >5% clay matrix. Clay matrix composed of authigenic illite or muscovite. Contains coarse- and fine-grained (100-800 μm) detrital muscovite and occasional feldspar minerals.

14BJ27 – Map unit Cp or Css of Reiser et al. (1980), upper Aichilik River, Romanzof Mountains (N 69.117975, W 143.238008): Moderately-strained, carbonate-cemented,

subangular, lithic arenite with abundant coarse- to fine-grained (100-800 μm) detrital muscovite occupying anastomosing cleavage domains (Fig. DR1D).

U–TH–Pb GEOCHRONOLOGIC ANALYSES OF ZIRCON

Detrital zircon grains were extracted from ~2-3 kg of sample by traditional methods of crushing and grinding, followed by separation with a Gemini table, heavy liquids, and a Frantz magnetic separator at West Virginia University. After separation, the grains (generally hundreds of grains) were hand-picked and incorporated into a 2.5 cm epoxy mount together with the standards (see following sections for which standards were used). The mounts were polished using 1,500 grit sandpaper followed by 9 μm and then 3 μm down to a depth of ~20 microns, and then cleaned in 1% HNO_3 and rinsed in water prior to isotopic analysis.

LA-ICPMS: University of California Santa Cruz

Detrital zircon U-Pb geochronology conducted at the University of California Santa Cruz laser ablation inductively coupled plasma mass spectrometry (LA-ICPMS) laboratory (Table DR3) were analyzed using a single-collector Element XR high-resolution magnetic-sector ICP-MS and a Photon Machines Analyte.H 193 nm ArF excimer laser equipped with a Helex 2-volume laser ablation cell. Analytical procedures, tuning parameters, and data reduction techniques closely follow that of Sharman et al. (2013) and Dumitru et al. (2016). Mounted with the separated zircons, the R-33 zircon (419 Ma; Black et al. 2004) was used as a primary standard and Plesovice (337 Ma; Sláma et al., 2008) was used as a secondary standard. Approximate concentrations of U and Th were calibrated relative to the concentrations from WF2 and Mudtank zircon standards (Woodhead and Herdt, 2005). A 26 μm spot diameter was used for all analyses. Each analysis consisted of 30 seconds of integrations with the laser off (for

backgrounds), 30 seconds of integrations with the laser firing, and a 20 second delay to purge the previous sample and prepare for the next analysis.

Software used for data reduction included Iolite 2.2 (Paton et al., 2010), and VisualAge add-ons for Igor Pro, followed by an Excel spreadsheet (see below; Sharman et al., 2013). We used Iolite's exponential detrending algorithm, which calibrates to the observed down-hole fractionation of the standards. Iolite also permits efficient inspection of signal intensities, ratios, and ages as they evolved through the 30 seconds of integrations for each grain. Integration regions were generally resized if: (1) drill-through was observed based on a rapid decrease in total beam prior to the end of the integration; (2) erratic fluctuations of ^{204}Pb compared to values observed in the background-corrected ^{204}Pb signal; or (3) shallow levels within the pit exhibited substantially different ages compared to deeper levels. We did not apply a ^{204}Pb correction because average background-subtracted signals are typically less than a conservatively estimated limit of detection. Instead we utilized the ^{207}Pb -corrected $^{206}\text{Pb}/^{238}\text{U}$ age for $^{206}\text{Pb}/^{238}\text{U}$ ages <1000 Ma. This is calculated using Isoplot (version 4.15; Ludwig, 2012) based on a two-stage model of terrestrial lead isotope evolution to constrain initial Pb abundances (Stacey and Kramers, 1975; Table DR3). Analyses were rejected when the ^{207}Pb common lead correction is $>2\%$ of the uncorrected $^{206}\text{Pb}/^{238}\text{U}$ age, which excludes some grains with erratic fluctuations in $^{207}\text{Pb}/^{235}\text{U}$ apparent age (Dumitru et al., 2016). For grains with $^{206}\text{Pb}/^{238}\text{U}$ ages >1000 Ma, we use uncorrected $^{207}\text{Pb}/^{206}\text{Pb}$ ages because our strategy of truncating integration intervals with detectable spiky, erratic, persistent fluctuations in ^{204}Pb above background greatly reduces the magnitude of any potential ^{204}Pb correction. Analyses with $^{206}\text{Pb}/^{238}\text{U}$ age >600 Ma and with excessive discordance ($>20\%$ discordance or $>5\%$ reverse discordance) or high error ($>10\%$ uncertainty in $^{206}\text{Pb}/^{238}\text{U}$ or $^{207}\text{Pb}/^{206}\text{Pb}$ age) were rejected and not used for interpretation. Zircon

ages <1000 Ma. For each sample, the rejected zircons are formatted with the strikethrough text (Table DR3).

LA-ICPMS: Stockholm University

Detrital zircon U-Pb geochronology for sample 40LF13 was conducted by LA-ICPMS techniques at the Department of Geological Sciences, Stockholm University laboratory (Table DR4) using a Thermo Scientific XSeries-2 single collector quadrupole ICP-MS and a New Wave Research 193UC excimer laser. A 40 µm spot diameter was used for all analyses. Analytical procedures, tuning parameters, and data reduction techniques closely follow that of Beranek et al. (2013). Mounted separately from the separated zircon grains, the Plesovice zircon (337 Ma; Sláma et al., 2008) was used as a primary standard and FC-52 zircon (1100 Ma; Paces and Miller, 1993) was used as a secondary standard. The synthetic glass standard, NIST 610, was used for calibration of U and Th concentrations. Total acquisition time for a single analysis included 50 seconds of integrations with the laser off (for backgrounds), 30 seconds of integrations with the laser firing, and a 50 second delay to purge the previous sample and prepare for the next analysis. The reduction methods, common Pb corrections, and filtering techniques implemented for sample 40LF13 are the same as those from the University of California Santa Cruz. For each sample, the rejected zircons are formatted with the strikethrough text (Table DR4).

Nordsim-laboratory

Twenty-six euhedral grains from sample 40LF13 were analyzed by secondary ion mass spectrometry (SIMS) at the NordSIMS facility, Swedish Museum of Natural History (Table DR5). The analyses were made using a CAMECA IMS 1280 ion-microprobe following the

standardized procedures of Whitehouse et al. (1999) and Whitehouse and Kamber (2005). A 20 μm spot size was used. U-Pb ages were calibrated relative to the 1065 Ma zircon standard 91500 (Wiedenbeck et al. 1995). The ^{207}Pb -corrected $^{206}\text{Pb}/^{238}\text{U}$ age for $^{206}\text{Pb}/^{238}\text{U}$ ages <1200 Ma is calculated using Isoplot (version 4.15; Ludwig, 2012) and based on a two-stage model of terrestrial lead isotope evolution to constrain initial Pb abundances (Stacey and Kramers, 1975; Table DR5).

$^{40}\text{Ar}/^{39}\text{Ar}$ GEOCHRONOLOGIC ANALYSES OF MUSCOVITE

For $^{40}\text{Ar}/^{39}\text{Ar}$ analysis, eight samples were submitted to the Geochronology laboratory at University of Alaska Fairbanks where they were crushed, sieved, washed and hand-picked for muscovite mineral phases. The monitor mineral MMhb-1 (Samson and Alexander, 1987) with an age of 523.2 ± 0.9 Ma (Spell and McDougall, 2003) was used to monitor neutron flux (and calculate the irradiation parameter, J). The samples and standards were wrapped in aluminum foil and loaded into aluminum cans of 2.5 cm diameter and 6 cm height. The samples were irradiated in positions 5c (Sample 12JT13a) and 8b (all other samples) of the uranium enriched research reactor of McMaster University in Hamilton, Ontario, Canada for 20 to 150 megawatt-hours.

Upon their return from the reactor, the samples and monitors were loaded into 2 mm diameter holes in a copper tray that was then loaded in an ultra-high vacuum extraction line. The monitors were fused, and the samples heated and/or fused, using a 6-watt argon-ion laser following the technique described in York et al. (1981), Benowitz et al. (2014) and Martin et al. (2014). Argon purification was achieved using a liquid nitrogen cold trap and a SAES Zr-Al getter at 400° C. The samples were analyzed in a VG-3600 mass spectrometer at the Geophysical

Institute, University of Alaska Fairbanks. The argon isotopes measured were corrected for system blank and mass discrimination, as well as calcium, potassium and chlorine interference reactions following procedures outlined in McDougall and Harrison (1999). Typical full-system 8 min laser blank values (in moles) were generally 2×10^{-16} mol ^{40}Ar , 3×10^{-18} mol ^{39}Ar , 9×10^{-18} mol ^{38}Ar and 2×10^{-18} mol ^{36}Ar , which are 10–50 times smaller than the sample/standard volume fractions. Correction factors for nucleogenic interferences during irradiation were determined from irradiated CaF_2 and K_2SO_4 as follows: $(^{39}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 7.06 \times 10^{-4}$, $(^{36}\text{Ar}/^{37}\text{Ar})_{\text{Ca}} = 2.79 \times 10^{-4}$ and $(^{40}\text{Ar}/^{39}\text{Ar})_{\text{K}} = 0.0297$. Mass discrimination was monitored by running calibrated air shots. The mass discrimination during these experiments was 0.8% per mass unit. While doing our experiments, calibration measurements were made on a weekly–monthly basis to check for changes in mass discrimination with no significant variation seen during these intervals.

The stepwise $^{40}\text{Ar}/^{39}\text{Ar}$ results for each sample are presented in Table DR6 with all ages quoted to the ± 1 sigma level and calculated using the constants of Renne et al. (2010). The integrated age is the age given by the total gas measured and is equivalent to a potassium-argon (K-Ar) age. The spectrum results can be viewed in Figures 7 and 8, and the interpretations are summarized in Table 1 of the manuscript. A plateau age is provided when three or more consecutive gas fractions represent at least 60% of the total gas release and are within two standard deviations of each other (Mean Square Weighted Deviation less than 2.5; see Ludwig, 2012). Pseudo plateau ages (PPA) are reported when two or more consecutive gas fractions represent at 50–60% of the total gas release and are within two standard deviations of each other.

Sample 14BJ27 from the Clarence River group was analyzed, in addition to the stepwise techniques, with single-grain fusion $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology on 14 grains to investigate intra-sample age variability. Argon was extracted by slowly increasing the power of a focused laser until total fusion of the target muscovite grain. These results are reported in Table DR7.

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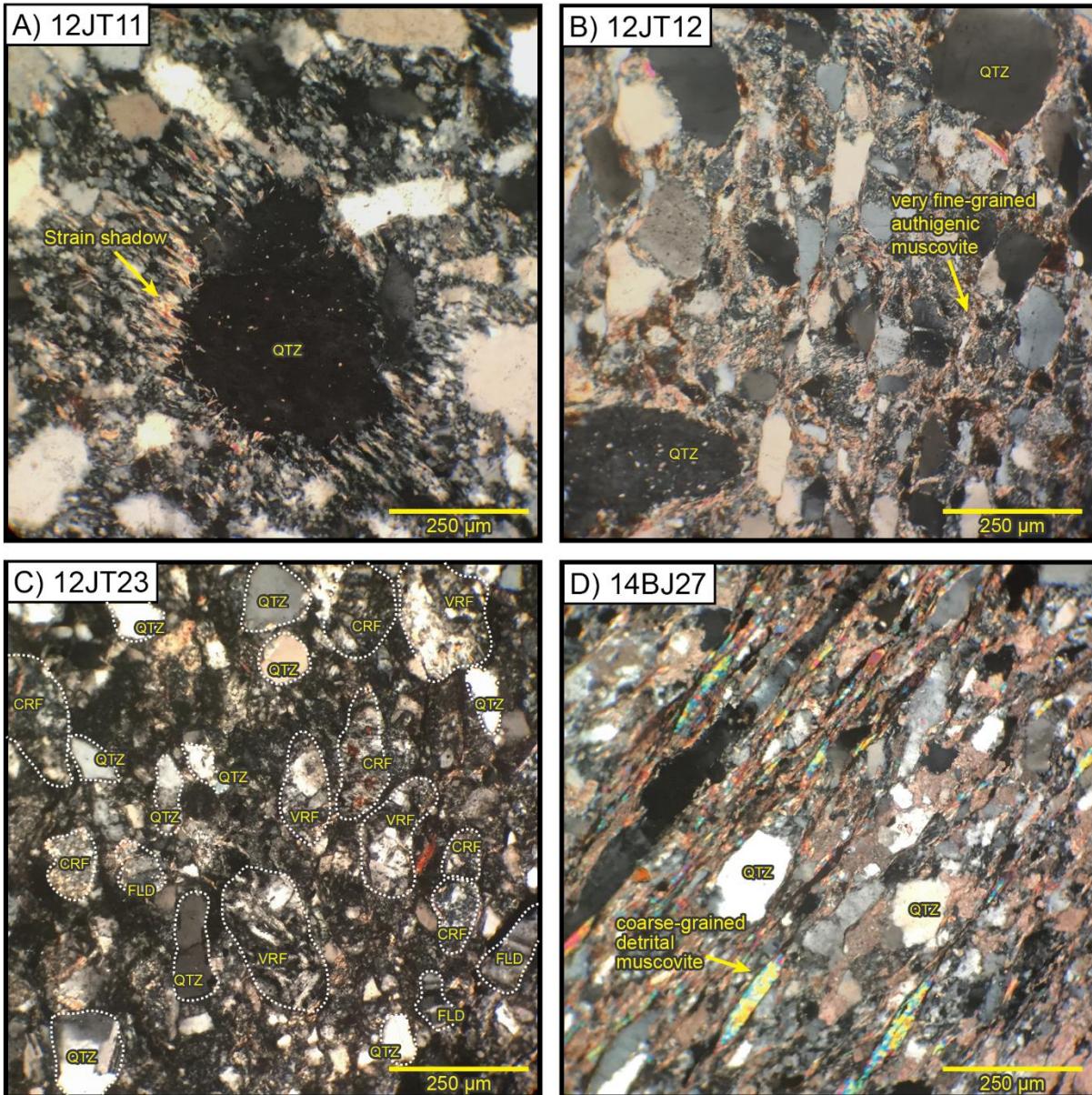


Figure DR1: Photomicrographs from the Neruokpuk Formation and the Clarence River group. (A) Neruokpuk sample 12JT11 strain shadow around a single quartz grain. (B) Neruokpuk sample 12JT12 showing fine-grained authigenic muscovite occupying interstitial spaces between quartz grains. Clarence River group sample 12JT23 showing various compositions of detrital grains, suggesting an immature composition. (D) Clarence river group sample 14BJ27 showing coarse-grained detrital muscovite grains aligned within cleavage domains that surround larger quartz grains. Abbreviations: CRF—chert rock fragment; FLD—feldspar grain; QTZ—quartz grain; VRF—volcanic rock fragments.

TABLE DR1. GEOCHRONOLOGICAL AND FOSSIL AGE CONSTRAINTS OF PRE-MISSISSIPPAN UNITS IN THE NE BROOKS RANGE

Formation/unit	Data localities (see Fig. 2)	Age/Biostratigraphy	Description	Reference
<u>Kikiktat volcanics</u>	1	Neoproterozoic (719.47 ± 0.29 Ma)	U-Pb age on detrital zircons by chemical abrasion–thermal ionization mass spectrometry (TIMS) from a volcanoclastic sample directly overlying basaltic flows of the Kikiktat volcanics	Cox et al., 2015
<u>Nanook Limestone</u>	2	Cambrian–Ordovician	Fossil collections: conodont <i>Clavohamulus densus</i> , trilobite <i>Plethopeltis armatus</i> , trilobite genus <i>Paraplethopeltis</i> , brachiopod and gastropod genera <i>Tcherskidium</i> n. sp. and <i>Eoconchidium</i>	Blodgett et al., 2002; 2002; Strauss et al., 2013
<u>Neruokpuk Formation</u>	3 and 4	Lower–Middle Cambrian	<i>Oldhamia</i> trace fossil assemblages from green and maroon argillite units in the British and Barn mountains of Yukon	Hoffman et al., 1994, Lane and Cecile, 1989
<u>Whale Mountain volcanic rocks</u>	5	Upper Cambrian (Furongian)	Fossil collections: trilobite genera <i>Geragnostus</i> sp., <i>Saratogia</i> sp.; brachiopod genus <i>Billingsella</i> sp.	Dutro et al., 1972
<u>Romanzof chert</u>	6	Middle Ordovician–Llandovery	Fossil collections: graptolite genera <i>Climacograptus</i> sp, cf. <i>hughesi</i> , <i>Retiograptus geinitzianus</i> ?, <i>Orthograptus</i> ?, and <i>Didymograptus</i> ?	Moore and Churkin, 1984
<u>Clarence River group</u>	7	Cambrian(?)	Echinoderm debris	Reiser et al., 1980
	8	Ordovician	Fossil collections: graptolite genera Orthograptus of the O. quadrium-cronatus type	Reiser et al., 1980
	9	Lower Ordovician and Silurian	Fossil collections: graptolite genera <i>Monograptus</i> sp., <i>Didymograptus</i> sp., <i>Goniograptus</i> sp., <i>Tetragraptus</i> sp.	Lane and Cecile, 1989
	10	Ordovician and Silurian	Fossil collections: graptolite genera <i>Monograptus</i> sp., <i>Neodiversograptus</i> sp., <i>Dicellograptus</i> sp., <i>Paraglossograptus</i> sp., <i>Isograptus</i> sp., <i>Didymograptus</i> sp., <i>Goniograptus</i> sp., <i>Tetragraptus</i> sp.	Lenz and Perry, 1972
	11	Pridoli	Fossil collections: graptolite genera <i>Monograptus</i> cf., <i>M. transgrediens praecipuus</i>	Norford, 1997

TABLE DR1. GEOCHRONOLOGICAL AND FOSSIL AGE CONSTRAINTS OF PRE-MISSISSIPPAN UNITS IN THE NE BROOKS RANGE

Formation/unit	Data localities (see Fig. 2)	Age/Biostratigraphy	Description	Reference
<u>Clarence River group</u>	12	Early Devonian(?)	Conodont genus <i>Polygnathus</i> sp., with a Color Alteration Index of 5	Norris, 1986
<u>Ulungarat Formation</u>	13	Middle Devonian	Fossil collections: brachiopod genera <i>Warrenella</i> (?) sp., <i>Goniophoria</i> sp.; trilobite genus <i>Dechenella</i> sp.	Reiser et al., 1980
<u>Devonian plutonic rocks</u>	14 and 15	Late Devonian (380–360 Ma)	Pb-alpha, U–Pb zircon, and U–Pb titanite ages from the Mount Sedgwick pluton in northern Yukon and the Okpilak batholith in Alaska	Sable, 1977; Mortensen and Bell, 1991; Dillon et al., 1987

Sample Name	Latitude	Longitude	Predesignated Map Unit	Analysis
<u>Neruokpuk Formation or Firth River group</u>				
12JT10	N 69.157950	W 141.864928	Css*	U-Pb detrital zircon
12JT11	N 69.192398	W 141.868887	pCn*	U-Pb detrital zircon
12JT12	N 69.227013	W 141.831267	pCn*	40Ar/39Ar muscovite
12JT13a	N 69.387220	W 141.535461	pCn*	40Ar/39Ar muscovite
12JT31	N 69.387220	W 141.535461	pCpa*	U-Pb detrital zircon
12JT32	N 69.424719	W 141.508195	pCn*	U-Pb detrital zircon
05LF13	N 69.185356	W 142.664228	pCn*	U-Pb detrital zircon
11LF13	N 69.263494	W 142.657930	pCn*	U-Pb detrital zircon
28LF13	N 69.357533	W 142.858018	pCn*	U-Pb detrital zircon
37LF13	N 69.357257	W 142.921486	pCn*	U-Pb detrital zircon
J1355-617	N 69.219592	W 140.949294	Css**	U-Pb detrital zircon
<u>Clarence River group</u>				
12JT22	N 69.279048	W 141.727346	Cp*	U-Pb detrital zircon
12JT23	N 69.279912	W 141.747478	Cp*	U-Pb detrital zircon
12JT24	N 69.279912,	W 141.747478	Cp*	40Ar/39Ar muscovite & U-Pb detrital zircon
12JT35	N 69.469365	W 141.469672	Os or Ovc*	U-Pb detrital zircon
09LF13	N 69.264435	W 142.657912	Ccp or Css*	40Ar/39Ar muscovite
40LF13	N 69.375307	W 142.912505	Cp*	40Ar/39Ar muscovite & U-Pb detrital zircon
14BJ27	N 69.117975	W 143.238008	Cp or Css*	40Ar/39Ar muscovite

*Map units designated by Reiser et al. (1980)

**Map units designated by Lane et al. (1995)

Table DR3: U-Th-Pb isotope composition of detrital zircons analyzed at the University of California Santa Cruz

Analysis	U (pmm)	U/Th	206Pb 207Pb	± (%)	error corr.	Isotope ratios				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	Apparent ages (Ma)		Best age (Ma)	± (Ma)	Conc (%)
						207Pb	235U	206Pb	238U			206Pb		207Pb		235U		206Pb	Best age (Ma)	± (Ma)		
Neruokpuk Fm 69.12, -141.90 n=98/99 (Neoproterozoic-Middle Cambrian)																						
12JT10_83	166	1.5	0.0656	0.36	0.2329	0.928	6.7	0.1031	0.49	0.2422	632	29	629	29	664	35	790	120	629	29	80	
12JT10_51	152	2.7	0.0713	0.37	0.1871	1.55	11	0.1565	0.73	0.3128	937	41	936	43	947	44	990	110	936	43	95	
12JT10_87	90	1.3	0.0749	0.41	0.2594	1.73	13	0.1679	0.81	0.3439	1002	45	--	--	1016	48	1060	110	1060	110	95	
12JT10_42	526	3.0	0.0795	0.37	0.2346	2.04	14	0.1853	0.86	0.5088	1095	47	--	--	1127	45	1183	91	1183	91	93	
12JT10_82	307	1.4	0.0863	0.4	0.2583	2.58	17	0.216	1	0.5139	1263	53	--	--	1294	48	1346	89	1346	89	94	
12JT10_34	127	2.0	0.0899	0.43	0.2079	2.9	20	0.234	1.1	0.4211	1358	57	--	--	1386	51	1413	93	1413	93	96	
12JT10_99	143	2.2	0.0899	0.45	0.4009	3.19	22	0.256	1.2	0.2292	1473	61	--	--	1462	52	1418	93	1418	93	104	
12JT10_71	305	2.7	0.09	0.42	0.1301	2.92	20	0.242	1.1	0.6047	1396	58	--	--	1388	51	1424	88	1424	88	98	
12JT10_73	223	2.4	0.0902	0.43	0.2309	2.95	20	0.237	1.1	0.3878	1370	57	--	--	1395	52	1426	88	1426	88	96	
12JT10_45	95	1.0	0.1006	0.49	0.1916	3.77	26	0.271	1.3	0.4589	1543	65	--	--	1581	56	1626	92	1626	92	95	
12JT10_64	66	1.3	0.108	0.54	0.3389	4.52	31	0.309	1.5	0.3978	1742	74	--	--	1730	57	1754	95	1754	95	99	
12JT10_95	67	0.5	0.109	0.55	0.3304	4.73	33	0.314	1.5	0.4424	1759	74	--	--	1774	58	1760	91	1760	91	100	
12JT10_80	242	1.8	0.1082	0.5	0.2696	4.58	30	0.303	1.4	0.583	1707	70	--	--	1745	55	1768	84	1768	84	97	
12JT10_15	48	2.0	0.108	0.54	0.2913	4.82	34	0.321	1.6	0.4941	1797	77	--	--	1781	58	1770	92	1770	92	102	
12JT10_56	114	1.7	0.1093	0.52	0.2696	4.58	31	0.298	1.4	0.48	1681	70	--	--	1746	56	1786	87	1786	87	94	
12JT10_63	112	1.4	0.1099	0.53	0.3334	4.52	31	0.303	1.4	0.4745	1708	72	--	--	1738	54	1792	88	1792	88	95	
12JT10_79	141	0.7	0.1095	0.51	0.2977	4.66	31	0.299	1.4	0.4861	1690	69	--	--	1758	56	1793	85	1793	85	94	
12JT10_47	113	0.9	0.11	0.53	0.3853	4.68	31	0.309	1.4	0.3686	1734	72	--	--	1759	56	1796	87	1796	87	97	
12JT10_43	329	1.9	0.1099	0.5	0.2344	4.58	30	0.304	1.4	0.5625	1711	69	--	--	1746	55	1797	82	1797	82	95	
12JT10_88	240	2.5	0.1106	0.51	0.2038	4.85	32	0.32	1.5	0.663	1790	73	--	--	1790	56	1805	84	1805	84	99	
12JT10_66	195	3.7	0.1109	0.52	0.2894	4.61	31	0.315	1.5	0.4859	1767	72	--	--	1753	56	1808	87	1808	87	98	
12JT10_69	357	2.5	0.1106	0.5	0.1745	4.67	31	0.318	1.5	0.6208	1779	72	--	--	1765	55	1808	83	1808	83	98	
12JT10_25	111	1.7	0.1106	0.53	0.2999	4.69	32	0.304	1.4	0.4067	1716	70	--	--	1767	57	1810	85	1810	85	95	
12JT10_20	137	1.1	0.1112	0.52	0.2346	4.82	32	0.309	1.4	0.5074	1737	72	--	--	1787	55	1813	86	1813	86	96	
12JT10_30	240	1.7	0.1109	0.51	0.2181	4.81	32	0.304	1.4	0.633	1711	69	--	--	1783	56	1816	81	1816	81	94	
12JT10_41	154	1.1	0.111	0.53	0.1523	4.65	31	0.306	1.4	0.482	1724	72	--	--	1759	57	1816	88	1816	88	95	
12JT10_16	101	0.6	0.1112	0.54	0.2412	4.85	33	0.313	1.5	0.4488	1753	72	--	--	1790	57	1818	86	1818	86	96	
12JT10_17	137	1.8	0.1114	0.52	0.2552	4.64	31	0.297	1.4	0.5697	1677	69	--	--	1756	55	1820	85	1820	85	92	

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 235U	206Pb 238U	206Pb 238U	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)
				± (%)	error corr.	207Pb 235U	± (%)				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	206Pb 207Pb	± (Ma)	
12JT10_54	96	0.9	0.1118	0.54	0.2357	4.76	32	0.303	1.4	0.5123	1707	71	--	--	1774	56	1820	86	1820	86	94
12JT10_53	357	2.8	0.1114	0.51	0.3689	4.69	31	0.301	1.4	0.5468	1696	68	--	--	1766	55	1821	82	1821	82	93
12JT10_38	222	0.5	0.1115	0.51	0.2449	4.52	30	0.292	1.4	0.4916	1652	67	--	--	1735	54	1822	84	1822	84	91
12JT10_28	281	3.9	0.1115	0.51	0.2903	4.66	31	0.298	1.4	0.5636	1681	68	--	--	1759	54	1822	84	1822	84	92
12JT10_39	156	1.5	0.1118	0.54	0.2143	4.57	31	0.293	1.4	0.5521	1657	69	--	--	1740	57	1823	89	1823	89	91
12JT10_8	111	1.3	0.1117	0.53	0.2063	4.95	33	0.328	1.5	0.4616	1827	75	--	--	1814	58	1824	86	1824	86	100
12JT10_44	268	1.4	0.112	0.51	0.2464	4.73	31	0.307	1.4	0.556	1723	70	--	--	1770	56	1832	83	1832	83	94
12JT10_40	68	0.8	0.1121	0.56	0.3418	4.64	32	0.297	1.4	0.4252	1673	71	--	--	1755	58	1833	89	1833	89	91
12JT10_7	149	1.3	0.1124	0.53	0.1988	4.87	33	0.319	1.5	0.5299	1787	72	--	--	1794	55	1838	84	1838	84	97
12JT10_96	88	1.3	0.1121	0.55	0.253	5.01	34	0.322	1.5	0.3571	1797	74	--	--	1828	56	1848	93	1848	93	97
12JT10_21	106	1.2	0.1132	0.54	0.2221	4.73	32	0.303	1.4	0.4539	1702	70	--	--	1779	57	1849	88	1849	88	92
12JT10_62	130	2.2	0.1131	0.52	0.2448	4.73	32	0.306	1.4	0.5813	1720	71	--	--	1770	56	1851	85	1851	85	93
12JT10_55	39	0.7	0.1145	0.59	0.3674	4.85	34	0.306	1.5	0.4117	1726	75	--	--	1797	61	1854	99	1854	99	93
12JT10_75	59	1.2	0.115	0.57	0.2248	5.08	35	0.314	1.5	0.5091	1758	74	--	--	1829	59	1882	91	1882	91	93
12JT10_85	199	2.3	0.1158	0.54	0.3197	5.13	34	0.322	1.5	0.5159	1797	74	--	--	1839	57	1893	84	1893	84	95
12JT10_26	253	2.4	0.1164	0.53	0.1182	5.2	34	0.316	1.5	0.5947	1772	70	--	--	1849	56	1899	82	1899	82	93
12JT10_65	54	0.6	0.1171	0.59	0.2348	5.26	37	0.335	1.7	0.5274	1861	79	--	--	1853	61	1903	92	1903	92	98
12JT10_48	251	1.2	0.1168	0.54	0.3647	5.2	34	0.325	1.5	0.5181	1817	76	--	--	1855	57	1904	82	1904	82	95
12JT10_57	107	0.9	0.1172	0.56	0.2996	5.16	35	0.314	1.5	0.4871	1758	72	--	--	1846	58	1906	86	1906	86	92
12JT10_46	75	2.2	0.1172	0.57	0.1488	5.03	35	0.312	1.5	0.5083	1750	72	--	--	1828	61	1911	90	1911	90	92
12JT10_10	158	2.5	0.1172	0.54	0.1721	5.59	37	0.353	1.6	0.593	1946	78	--	--	1915	57	1911	83	1911	83	102
12JT10_94	239	1.3	0.1172	0.54	0.2756	5.41	36	0.333	1.5	0.55	1849	74	--	--	1885	57	1912	81	1912	81	97
12JT10_12	159	1.7	0.1175	0.54	0.2244	5.38	36	0.336	1.5	0.5598	1866	76	--	--	1882	56	1917	85	1917	85	97
12JT10_77	277	1.9	0.1188	0.54	0.2902	5.4	36	0.321	1.5	0.5627	1793	72	--	--	1886	57	1935	82	1935	82	93
12JT10_98	237	0.9	0.1186	0.54	0.2033	5.76	38	0.348	1.6	0.5855	1926	78	--	--	1936	58	1936	85	1936	85	99
12JT10_86	113	2.0	0.1188	0.56	0.2353	5.15	35	0.317	1.5	0.5514	1772	73	--	--	1848	59	1938	85	1938	85	91
12JT10_74	105	1.1	0.1198	0.59	0.1507	5.34	37	0.32	1.5	0.3778	1791	73	--	--	1873	57	1938	85	1938	85	92
12JT10_36	120	2.1	0.1191	0.57	0.3044	4.81	33	0.291	1.5	0.6951	1644	73	--	--	1779	58	1939	87	1939	87	85
12JT10_6	80	0.7	0.1192	0.58	0.35	5.75	39	0.353	1.7	0.3579	1947	79	--	--	1937	58	1940	84	1940	84	100
12JT10_58	1021	1.9	0.1207	0.54	0.1789	5.01	33	0.295	1.4	0.7399	1668	68	--	--	1821	55	1966	80	1966	80	85
12JT10_100	361	0.9	0.1235	0.56	0.257	5.33	35	0.312	1.5	0.6967	1751	72	--	--	1872	56	2004	81	2004	81	87

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 235U	± (%)	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)
				207Pb	± (%)	206Pb 238U	± (%)				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	Best age (Ma)		
12JT10_81	73	1.5	0.1264	0.62	0.3169	5.97	41	0.342	1.7	0.5156	1894	79	--	--	1969	57	2040	84	2040	84	93
12JT10_11	103	1.9	0.1266	0.6	0.2517	6.43	43	0.367	1.7	0.4907	2020	82	--	--	2033	59	2048	82	2048	82	99
12JT10_13	68	0.6	0.1273	0.87	0.0838	5.07	43	0.297	1.6	0.4759	1676	81	--	--	1814	72	2050	130	2050	130	82
12JT10_76	235	4.6	0.1265	0.57	0.3922	6.25	41	0.35	1.6	0.5336	1935	78	--	--	2010	58	2051	81	2051	81	94
12JT10_19	372	2.6	0.1273	0.58	0.3243	6.38	42	0.358	1.7	0.5307	1973	78	--	--	2028	57	2056	80	2056	80	96
12JT10_78	161	1.4	0.128	0.59	0.2349	6.3	42	0.348	1.7	0.6343	1924	79	--	--	2020	59	2069	82	2069	82	93
12JT10_37	157	2.8	0.1299	0.61	0.3628	6.03	40	0.338	1.6	0.4997	1878	78	--	--	1982	56	2098	80	2098	80	90
12JT10_27	51	1.2	0.1367	0.68	0.307	7	48	0.362	1.8	0.4679	1993	82	--	--	2105	61	2179	87	2179	87	91
12JT10_61	319	4.8	0.1377	0.66	0.2495	6.11	41	0.321	1.5	0.3521	1795	74	--	--	1990	59	2192	85	2192	85	82
12JT10_9	110	1.4	0.1399	0.65	0.0952	7.82	52	0.417	2	0.6284	2248	89	--	--	2217	62	2220	81	2220	81	101
12JT10_29	59	0.9	0.1454	0.7	0.1853	8.2	56	0.403	2	0.5893	2184	91	--	--	2253	63	2292	83	2292	83	95
12JT10_4	179	1.3	0.1458	0.66	0.1836	8.59	57	0.437	2	0.6546	2336	91	--	--	2296	59	2294	79	2294	79	102
12JT10_22	248	3.2	0.1454	0.66	0.1723	8.04	53	0.393	1.8	0.6732	2137	84	--	--	2238	60	2295	77	2295	77	93
12JT10_68	156	1.9	0.1477	0.68	0.2237	8.1	54	0.414	1.9	0.6325	2235	87	--	--	2242	61	2318	78	2318	78	96
12JT10_93	64	1.1	0.1473	0.71	0.2761	8.65	59	0.428	2.1	0.5352	2296	93	--	--	2303	63	2319	82	2319	82	99
12JT10_2	117	1.0	0.1482	0.69	0.2346	8.89	59	0.445	2.1	0.6634	2369	93	--	--	2327	62	2323	80	2323	80	102
12JT10_23	108	0.7	0.1486	0.69	0.2408	8.59	58	0.409	1.9	0.6083	2211	88	--	--	2294	60	2326	81	2326	81	95
12JT10_84	78	1.6	0.1486	0.71	0.2904	8.37	57	0.407	1.9	0.4979	2207	88	--	--	2272	60	2327	81	2327	81	95
12JT10_33	119	1.6	0.1488	0.69	0.3006	8.04	54	0.388	1.8	0.5421	2115	85	--	--	2235	60	2339	81	2339	81	90
12JT10_1	100	1.5	0.1499	0.7	0.3381	9.33	62	0.454	2.2	0.6234	2413	95	--	--	2366	62	2342	81	2342	81	103
12JT10_50	132	1.2	0.1504	0.69	0.4098	8.38	56	0.406	1.9	0.5101	2198	85	--	--	2272	60	2345	79	2345	79	94
12JT10_60	299	1.4	0.1524	0.69	0.3028	8.77	58	0.41	1.9	0.6649	2217	87	--	--	2315	58	2371	76	2371	76	94
12JT10_31	131	1.4	0.1541	0.71	0.3263	8.48	57	0.393	1.9	0.5288	2136	85	--	--	2284	60	2395	79	2395	79	89
12JT10_59	84	1.5	0.1542	0.73	0.1705	8.85	60	0.408	1.9	0.6363	2203	89	--	--	2318	63	2397	79	2397	79	92
12JT10_91	312	1.8	0.1626	0.73	0.2646	9.9	65	0.441	2	0.7199	2353	92	--	--	2425	61	2483	77	2483	77	95
12JT10_70	313	3.8	0.1696	0.76	0.2673	10.69	70	0.477	2.2	0.731	2513	96	--	--	2495	61	2554	76	2554	76	98
12JT10_35	273	1.3	0.1713	0.78	0.2065	10.59	70	0.443	2.1	0.7345	2367	94	--	--	2489	63	2569	76	2569	76	92
12JT10_90	169	2.8	0.1717	0.78	0.4275	11.08	73	0.473	2.2	0.6112	2495	97	--	--	2532	60	2570	76	2570	76	97
12JT10_14	111	1.2	0.1721	0.79	0.2994	11.28	75	0.474	2.2	0.6477	2500	96	--	--	2547	61	2576	77	2576	77	97
12JT10_92	229	1.9	0.1739	0.78	0.1006	11.4	75	0.475	2.2	0.7636	2505	96	--	--	2556	60	2592	76	2592	76	97
12JT10_3	168	2.6	0.1745	0.81	0.2387	11.67	78	0.493	2.3	0.5912	2580	100	--	--	2578	62	2599	78	2599	78	99

Analysis	U (ppm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 235U	± (%)	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)	
				207Pb	± (%)	206Pb 238U	± (%)				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	Best age (Ma)			
12JT10_49	211	3.6	0.1754	0.8	0.2711	11.2	74	0.465	2.2	0.6567	2459	95	--	--	2540	61	2608	74	2608	74	94	
12JT10_72	61	1.3	0.1769	0.83	0.1862	11.32	77	0.465	2.2	0.6684	2458	99	--	--	2548	64	2616	77	2616	77	94	
12JT10_24	432	0.6	0.1778	0.8	0.2051	11.16	73	0.444	2.1	0.7896	2370	91	--	--	2535	62	2630	75	2630	75	90	
12JT10_67	102	1.5	0.1827	0.84	0.2735	12.01	80	0.491	2.3	0.6416	2580	100	--	--	2605	62	2674	75	2674	75	96	
12JT10_5	109	1.0	0.1818	0.83	0.3415	12.52	83	0.509	2.4	0.6639	2650	100	--	--	2643	63	2677	73	2677	73	99	
12JT10_52	44	2.6	0.1841	0.88	0.1229	11.81	82	0.464	2.3	0.6966	2454	99	--	--	2583	65	2680	80	2680	80	92	
12JT10_97	54	1.8	0.1829	0.86	0.1719	13.13	90	0.517	2.5	0.706	2680	110	--	--	2685	64	2681	79	2681	79	100	
12JT10_32	84	0.8	0.237	1.1	0.3294	18.7	120	0.565	2.7	0.6297	2890	110	--	--	3026	64	3103	73	3103	73	93	
12JT10_89	1087	2.2	0.1736	0.78	0.325	2.99	20	0.1242	0.58	0.7485	756	33	650	34	1405	49	2591	75	650	34	25	
Neruokpuk Fm 69.16, -141.87 n=89/110																						
(Neoproterozoic-Middle Cambrian)																						
12JT11_67	537	4.0	0.0769	0.35	0.2346	1.76	11	0.1692	0.74	0.4448	1008	41	--	--	1028	41	1115	92	1115	92	90	
12JT11_71	89	2.0	0.0867	0.44	0.3084	2.47	17	0.2059	0.95	0.3556	1205	51	--	--	1260	50	1380	100	1380	100	87	
12JT11_24	101	2.3	0.0906	0.46	0.3298	2.91	20	0.233	1.1	0.2999	1349	55	--	--	1381	53	1420	100	1420	100	95	
12JT11_4	319	3.0	0.0921	0.42	0.2897	3.13	20	0.251	1.1	0.4926	1444	56	--	--	1441	48	1462	86	1462	86	99	
12JT11_45	384	5.8	0.0926	0.41	0.1754	2.91	19	0.229	1	0.5532	1330	53	--	--	1385	48	1474	84	1474	84	90	
12JT11_31	248	1.8	0.0927	0.42	0.2979	3.15	20	0.244	1.1	0.4671	1406	55	--	--	1447	49	1485	88	1485	88	95	
12JT11_68	143	1.4	0.1017	0.48	0.2691	3.57	23	0.257	1.2	0.4469	1477	60	--	--	1543	52	1649	87	1649	87	90	
12JT11_36	271	2.2	0.107	0.48	0.2061	4.52	29	0.302	1.3	0.5256	1704	66	--	--	1735	52	1743	83	1743	83	98	
12JT11_40	76	1.9	0.1093	0.55	0.2759	4.68	32	0.31	1.4	0.4147	1743	69	--	--	1763	55	1790	93	1790	93	97	
12JT11_2	77	1.2	0.1104	0.54	0.1763	4.95	34	0.33	1.5	0.5575	1836	73	--	--	1805	57	1800	90	1800	90	102	
12JT11_1	206	1.7	0.1109	0.5	0.2023	4.94	32	0.324	1.4	0.5321	1810	69	--	--	1805	55	1811	83	1811	83	100	
12JT11_81	273	1.4	0.1109	0.5	0.22	4.46	28	0.295	1.3	0.5783	1664	65	--	--	1721	53	1823	80	1823	80	91	
12JT11_39	102	1.4	0.1126	0.54	0.2722	4.95	33	0.317	1.4	0.4822	1775	70	--	--	1803	56	1826	87	1826	87	97	
12JT11_79	63	1.3	0.1121	0.57	0.1989	4.51	31	0.299	1.4	0.5088	1683	68	--	--	1730	58	1828	91	1828	91	92	
12JT11_26	292	2.4	0.1124	0.5	0.228	4.96	32	0.317	1.4	0.579	1774	67	--	--	1811	54	1833	82	1833	82	97	
12JT11_94	167	1.3	0.112	0.51	0.1549	4.57	29	0.301	1.3	0.5393	1694	66	--	--	1744	55	1837	84	1837	84	92	
12JT11_16	244	1.9	0.113	0.53	0.2755	5.16	34	0.329	1.5	0.5385	1829	72	--	--	1849	56	1842	83	1842	83	99	
12JT11_14	290	2.3	0.1131	0.5	0.239	5.14	33	0.333	1.5	0.6342	1850	71	--	--	1843	54	1846	79	1846	79	100	
12JT11_3	93	1.0	0.1138	0.54	0.205	5.37	35	0.347	1.6	0.4697	1919	75	--	--	1880	55	1847	88	1847	88	104	

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			206Pb 235U	206Pb 238U	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)	
				207Pb (%)	± corr.	206Pb (%)				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	206Pb (Ma)			
12JT11_110	128	2.2	0.1136	0.52	0.1615	4.72	31	0.303	1.4	0.6143	1706	67	--	--	1770	55	1857	83	1857	83	92
12JT11_89	188	1.4	0.1146	0.53	-0.118	4.22	30	0.276	1.4	0.8457	1574	71	--	--	1666	62	1863	84	1863	84	84
12JT11_101	470	3.4	0.1148	0.5	0.2761	4.79	30	0.304	1.3	0.6128	1710	66	--	--	1782	53	1877	77	1877	77	91
12JT11_93	275	8.0	0.1156	0.52	0.338	4.88	31	0.309	1.4	0.5331	1737	66	--	--	1796	53	1888	81	1888	81	92
12JT11_15	127	2.8	0.1165	0.54	0.371	5.36	35	0.336	1.5	0.3248	1866	72	--	--	1876	56	1891	85	1891	85	99
12JT11_57	406	4.0	0.1163	0.51	0.2005	4.95	31	0.311	1.4	0.6046	1748	68	--	--	1809	54	1899	78	1899	78	92
12JT11_109	51	1.7	0.1167	0.6	0.2866	5.14	36	0.32	1.5	0.4842	1785	75	--	--	1837	59	1904	95	1904	95	94
12JT11_99	72	1.3	0.1179	0.58	0.2727	5.11	34	0.317	1.5	0.3899	1773	72	--	--	1836	57	1907	92	1907	92	93
12JT11_37	100	1.0	0.117	0.55	0.2712	5.43	36	0.34	1.5	0.4687	1883	74	--	--	1894	56	1909	88	1909	88	99
12JT11_17	465	4.1	0.1165	0.51	0.2956	5.53	35	0.344	1.5	0.6227	1905	72	--	--	1905	53	1909	78	1909	78	100
12JT11_61	200	2.7	0.1171	0.53	0.355	5.18	33	0.324	1.4	0.486	1809	69	--	--	1847	54	1910	81	1910	81	95
12JT11_27	440	1.9	0.1174	0.54	0.1766	5.42	35	0.334	1.5	0.6223	1856	73	--	--	1890	56	1913	82	1913	82	97
12JT11_73	220	0.6	0.1177	0.53	0.3366	4.87	31	0.309	1.4	0.491	1735	67	--	--	1799	52	1918	81	1918	81	90
12JT11_69	569	4.2	0.1175	0.51	0.2157	4.96	31	0.31	1.4	0.7058	1741	66	--	--	1811	53	1920	79	1920	79	91
12JT11_49	228	3.3	0.1176	0.52	0.3988	5.2	33	0.323	1.4	0.4782	1804	70	--	--	1854	54	1920	80	1920	80	94
12JT11_97	334	1.8	0.1181	0.52	0.0926	5	32	0.308	1.3	0.6782	1734	67	--	--	1821	55	1924	80	1924	80	90
12JT11_46	240	2.2	0.1181	0.53	0.3041	5.09	32	0.314	1.4	0.6182	1762	68	--	--	1833	54	1925	81	1925	81	92
12JT11_13	97	1.0	0.1183	0.62	0.2559	5.63	40	0.349	1.7	0.4848	1931	82	--	--	1916	60	1925	95	1925	95	100
12JT11_70	75	0.4	0.1186	0.56	0.2436	5.02	33	0.314	1.5	0.5916	1761	70	--	--	1826	55	1929	86	1929	86	91
12JT11_75	210	0.6	0.1187	0.54	0.278	4.97	32	0.31	1.4	0.5234	1744	68	--	--	1812	54	1930	82	1930	82	90
12JT11_63	98	1.1	0.1177	0.56	0.2322	5.11	33	0.319	1.4	0.426	1784	69	--	--	1838	56	1930	83	1930	83	92
12JT11_91	136	0.5	0.1189	0.54	0.2675	5.04	32	0.311	1.4	0.4505	1744	67	--	--	1822	54	1936	82	1936	82	90
12JT11_28	800	15.9	0.1188	0.52	0.2127	5.25	33	0.321	1.4	0.7059	1793	69	--	--	1860	53	1936	78	1936	78	93
12JT11_9	111	0.7	0.1195	0.56	0.2415	5.58	36	0.342	1.5	0.4549	1898	72	--	--	1915	57	1945	84	1945	84	98
12JT11_52	73	1.2	0.1207	0.58	0.2216	5.48	36	0.331	1.5	0.5384	1842	73	--	--	1890	57	1958	86	1958	86	94
12JT11_106	423	3.6	0.1208	0.53	0.1974	4.8	30	0.288	1.3	0.7111	1633	63	--	--	1784	54	1972	77	1972	77	83
12JT11_88	104	1.9	0.1244	0.56	0.4402	5.58	35	0.328	1.4	0.4804	1829	71	--	--	1913	54	2024	79	2024	79	90
12JT11_54	122	2.1	0.1282	0.59	0.3441	6.28	40	0.359	1.6	0.4763	1975	77	--	--	2013	56	2073	84	2073	84	95
12JT11_23	65	1.6	0.1284	0.62	0.315	6.83	46	0.382	1.8	0.5492	2080	83	--	--	2083	60	2082	87	2082	87	100
12JT11_80	132	1.3	0.1304	0.6	0.1698	5.88	38	0.335	1.5	0.5438	1862	73	--	--	1961	56	2102	81	2102	81	89
12JT11_78	136	1.2	0.1315	0.6	0.2424	6.14	39	0.343	1.5	0.5531	1899	73	--	--	1991	56	2114	79	2114	79	90

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			206Pb 235U	206Pb 238U	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)	
				207Pb (%)	± corr.	206Pb (%)				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	207Pb (Ma)			
12JT11_66	91	2.1	0.131	0.61	0.2907	5.92	38	0.333	1.5	0.5206	1851	72	--	--	1962	56	2117	82	2117	82	87
12JT11_34	132	3.6	0.1386	0.63	0.1491	7.61	49	0.392	1.7	0.6541	2131	81	--	--	2183	58	2201	78	2201	78	97
12JT11_100	200	1.4	0.1391	0.62	0.0791	7.04	45	0.369	1.6	0.6831	2020	77	--	--	2114	56	2213	78	2213	78	91
12JT11_25	309	3.1	0.1416	0.63	-0.006	7.44	48	0.379	1.7	0.7438	2070	79	--	--	2167	57	2244	77	2244	77	92
12JT11_76	157	3.5	0.142	0.64	0.3247	7.05	45	0.367	1.6	0.5242	2015	78	--	--	2116	57	2250	82	2250	82	90
12JT11_58	220	3.2	0.1449	0.65	0.0445	7.72	50	0.393	1.7	0.6898	2137	79	--	--	2198	58	2289	77	2289	77	93
12JT11_30	522	4.1	0.1473	0.64	0.1503	8.49	54	0.416	1.8	0.7355	2241	82	--	--	2284	56	2314	75	2314	75	97
12JT11_104	192	3.6	0.1471	0.65	0.2219	8.06	52	0.398	1.8	0.648	2162	80	--	--	2234	57	2319	78	2319	78	93
12JT11_42	124	1.2	0.1485	0.68	0.1992	8.12	53	0.402	1.8	0.6412	2181	83	--	--	2243	60	2323	78	2323	78	94
12JT11_72	233	4.2	0.1483	0.66	0.2393	7.73	49	0.385	1.7	0.6252	2099	79	--	--	2199	58	2325	77	2325	77	90
12JT11_51	104	2.9	0.1485	0.67	0.3158	7.93	51	0.392	1.8	0.6065	2131	82	--	--	2221	59	2328	77	2328	77	92
12JT11_56	110	1.5	0.1489	0.68	0.304	8.15	53	0.401	1.8	0.588	2177	84	--	--	2249	59	2332	77	2332	77	93
12JT11_18	257	2.9	0.1493	0.66	0.2834	8.57	54	0.414	1.8	0.6761	2234	83	--	--	2292	59	2333	75	2333	75	96
12JT11_21	247	3.8	0.1492	0.66	0.2745	8.52	54	0.411	1.8	0.6236	2222	82	--	--	2291	58	2334	74	2334	74	95
12JT11_83	452	2.0	0.1494	0.65	0.198	7.85	49	0.389	1.7	0.694	2119	78	--	--	2213	57	2337	74	2337	74	91
12JT11_38	283	2.4	0.1498	0.65	0.2559	8.44	53	0.407	1.8	0.6836	2206	81	--	--	2279	56	2343	72	2343	72	94
12JT11_87	308	3.9	0.1498	0.66	0.3504	7.34	46	0.359	1.6	0.616	1979	74	--	--	2154	56	2345	74	2345	74	84
12JT11_102	343	1.4	0.1521	0.66	0.3194	8.59	54	0.406	1.8	0.6475	2199	80	--	--	2293	57	2371	75	2371	75	93
12JT11_35	154	1.6	0.1521	0.68	0.2664	8.71	56	0.418	1.9	0.5826	2250	84	--	--	2305	58	2371	76	2371	76	95
12JT11_8	295	2.4	0.1532	0.67	0.2629	9.19	58	0.439	1.9	0.6772	2343	86	--	--	2356	58	2381	75	2381	75	98
12JT11_10	403	2.5	0.1571	0.69	-0.146	8.42	55	0.393	1.8	0.8699	2135	82	--	--	2270	59	2422	75	2422	75	88
12JT11_74	102	2.9	0.158	0.72	0.2833	8.72	56	0.409	1.9	0.5811	2207	84	--	--	2307	58	2430	76	2430	76	91
12JT11_64	422	3.1	0.1583	0.69	-0.022	8.08	52	0.374	1.7	0.8364	2049	79	--	--	2241	59	2437	72	2437	72	84
12JT11_65	277	1.5	0.1582	0.7	0.3274	8.75	55	0.405	1.8	0.6839	2192	81	--	--	2313	56	2440	75	2440	75	90
12JT11_48	346	2.8	0.1611	0.7	0.1832	9.35	59	0.423	1.9	0.7366	2278	83	--	--	2372	58	2469	73	2469	73	92
12JT11_44	536	2.6	0.1621	0.7	-0.002	8.6	55	0.383	1.7	0.8715	2092	81	--	--	2293	59	2479	72	2479	72	84
12JT11_86	119	1.8	0.1624	0.73	0.1553	9.11	58	0.419	1.9	0.6203	2253	85	--	--	2348	59	2480	76	2480	76	91
12JT11_85	430	3.6	0.1628	0.71	0.0645	8.9	57	0.405	1.8	0.8271	2188	83	--	--	2327	57	2484	72	2484	72	88
12JT11_29	93	1.9	0.1639	0.75	0.3273	10.65	68	0.465	2.1	0.5215	2458	91	--	--	2488	59	2491	77	2491	77	99
12JT11_53	62	1.2	0.1636	0.79	0.3675	9.63	63	0.43	2	0.4449	2300	91	--	--	2399	61	2496	80	2496	80	92
12JT11_20	166	1.8	0.1642	0.73	0.1672	10.96	70	0.482	2.1	0.6995	2532	93	--	--	2521	59	2499	74	2499	74	101

Analysis	U (ppm)	U/Th	206Pb 207Pb	Isotope ratios			206Pb 235U	± (%)	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)	
				207Pb 207Pb	± (%)	error corr.				206Pb 238U	± (%)	error corr.	206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	
12JT11_5	107	2.7	0.165	0.74	0.3496	10.37	66	0.462	2.1	0.5764	2444	92	--	--	2467	59	2503	76	2503	76	98
12JT11_92	203	1.5	0.1658	0.73	0.2103	9.86	63	0.434	1.9	0.6507	2320	85	--	--	2418	58	2513	75	2513	75	92
12JT11_90	198	2.1	0.1671	0.74	0.3091	9.59	61	0.422	1.9	0.591	2272	85	--	--	2395	58	2523	74	2523	74	90
12JT11_11	130	2.0	0.167	0.75	0.2844	11.02	70	0.479	2.1	0.6171	2520	92	--	--	2521	59	2530	75	2530	75	100
12JT11_108	470	3.2	0.1737	0.76	0.1734	9.84	62	0.412	1.8	0.8069	2222	83	--	--	2422	59	2593	72	2593	72	86
12JT11_19	91	1.1	0.1789	0.82	0.2723	11.9	77	0.478	2.2	0.5254	2515	94	--	--	2595	61	2653	76	2653	76	95
12JT11_22	161	1.6	0.1846	0.81	0.3224	13.24	84	0.514	2.3	0.7101	2673	96	--	--	2698	60	2690	73	2690	73	99
12JT11_96	33	1.8	0.1905	0.92	0.252	12.15	83	0.474	2.3	0.6678	2490	100	--	--	2611	64	2745	81	2745	81	91
12JT11_32	38	3576.4	0.1086	0.59	0.2611	5.69	41	0.379	1.9	0.4929	2070	88	--	--	1925	61	1760	100	1760	100	118
12JT11_98	22	3739.7	0.1067	0.65	0.2138	5.49	44	0.372	2	0.5082	2036	94	--	--	1878	67	1730	110	1730	110	118
12JT11_33	42	1072.9	0.1115	0.56	0.2381	6.16	43	0.399	2	0.5754	2155	90	--	--	1989	61	1814	95	1814	95	119
12JT11_50	11	11344.0	0.1134	0.79	0.2694	6.16	53	0.396	2.3	0.5302	2130	100	--	--	1958	75	1780	130	1780	130	120
12JT11_12	48	12465.3	0.113	0.58	0.378	6.4	44	0.413	2	0.5036	2232	89	--	--	2026	61	1839	93	1839	93	121
12JT11_55	51	6614.0	0.1094	0.55	0.2432	5.99	41	0.403	1.9	0.5293	2187	88	--	--	1975	62	1786	92	1786	92	122
12JT11_95	1291	1.8	0.1318	0.58	0.0607	2.03	13	0.1127	0.52	0.8572	688	30	628	30	1123	45	2116	76	628	30	30
12JT11_60	2035	7.5	0.1117	0.49	-0.097	2	13	0.1314	0.58	0.8245	796	33	749	33	1115	43	1826	78	749	33	41
12JT11_47	1544	2.5	0.1031	0.46	-0.487	1.77	15	0.1232	0.78	0.9598	749	45	712	44	1019	54	1678	84	712	44	42
12JT11_82	638	1.5	0.1422	0.64	-0.015	3.41	23	0.1778	0.83	0.8398	1057	46	--	--	1508	53	2248	77	2248	77	47
12JT11_77	865	3.8	0.1352	0.6	-0.096	3.58	23	0.1972	0.9	0.8665	1159	48	--	--	1550	52	2162	77	2162	77	54
12JT11_6	632	2.5	0.1308	0.58	-0.108	3.93	26	0.2201	0.99	0.8161	1283	53	--	--	1615	53	2107	78	2107	78	61
12JT11_62	531	2.5	0.1444	0.64	-0.467	4.98	37	0.251	1.4	0.9581	1440	70	--	--	1791	64	2281	75	2281	75	63
12JT11_84	984	2.2	0.1038	0.46	-0.083	2.69	17	0.1922	0.85	0.7993	1134	45	--	--	1323	47	1691	82	1691	82	67
12JT11_43	670	2.3	0.1388	0.61	-0.239	5.35	35	0.28	1.3	0.8951	1593	64	--	--	1880	57	2214	74	2214	74	72
12JT11_105	499	2.1	0.1798	0.78	0.2384	8.87	56	0.358	1.6	0.7866	1974	75	--	--	2324	58	2654	72	2654	72	74
12JT11_41	66	4.6	0.181	1.1	0.4206	8.94	71	0.365	2.3	0.6623	1990	110	--	--	2327	76	2611	89	2611	89	76
12JT11_59	560	3.8	0.1341	0.58	-0.138	5.3	35	0.29	1.4	0.914	1640	69	--	--	1865	57	2150	75	2150	75	76
12JT11_107	536	4.9	0.1129	0.5	-0.308	3.91	27	0.253	1.3	0.926	1449	67	--	--	1616	58	1844	79	1844	79	79
12JT11_103	187	1.3	0.1239	0.57	0.3035	4.75	31	0.282	1.3	0.4621	1601	63	--	--	1774	54	2006	80	2006	80	80
12JT11_7	1375	3.5	0.0782	0.34	0.2114	1.85	12	0.1723	0.75	0.6048	1024	41	--	--	1062	41	1152	87	1152	87	89

Neruokpuk Fm (Firth River group?) 69.39, -141.53 n=70/108

Analysis	U (ppm)	U/Th	206Pb 207Pb	Isotope ratios					206Pb 238U	± corr.	206Pb 238U	± corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)		
				207Pb	± (%)	206Pb 235U	± (%)	206Pb 238U					206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	207Pb (Ma)				
(Neoproterozoic-Middle Cambrian)																									
12JT31_108	124	0.9	0.076	0.4	0.2556	1.9	14	0.1786	0.9	0.322	1058	49	--	--	1076	49	1100	100	1100	100	96				
12JT31_78	226	2.3	0.0753	0.37	0.2822	1.95	14	0.1903	0.95	0.3595	1122	51	--	--	1099	48	1070	100	1070	100	105				
12JT31_12	122	13.3	0.0813	0.42	0.2085	2.41	18	0.212	1.1	0.4306	1236	56	--	--	1243	53	1230	100	1230	100	100				
12JT31_103	126	2.0	0.0815	0.41	0.1505	2.38	17	0.211	1	0.3968	1236	55	--	--	1240	51	1250	100	1250	100	99				
12JT31_60	289	4.0	0.0811	0.38	0.203	2.4	17	0.215	1.1	0.4816	1254	55	--	--	1240	50	1228	94	1228	94	102				
12JT31_67	265	1.8	0.0834	0.4	0.2358	2.59	18	0.226	1.1	0.3683	1315	58	--	--	1297	50	1279	96	1279	96	103				
12JT31_59	44	1.5	0.0873	0.52	0.2852	2.68	21	0.228	1.2	0.3555	1320	62	--	--	1319	59	1330	120	1330	120	99				
12JT31_54	253	2.0	0.0888	0.42	0.1356	2.88	20	0.238	1.2	0.5011	1375	61	--	--	1375	52	1399	94	1399	94	98				
12JT31_98	142	1.7	0.0867	0.42	0.273	2.89	20	0.241	1.2	0.3293	1390	62	--	--	1378	55	1359	95	1359	95	102				
12JT31_49	308	4.5	0.0883	0.42	0.2527	3.04	21	0.25	1.2	0.5454	1437	64	--	--	1414	52	1381	92	1381	92	104				
12JT31_23	223	5.0	0.1079	0.5	0.1897	4.93	34	0.332	1.7	0.6673	1847	81	--	--	1807	59	1762	84	1762	84	105				
12JT31_81	484	5.1	0.1081	0.5	0.2889	4.33	30	0.293	1.4	0.4827	1657	71	--	--	1699	56	1767	86	1767	86	94				
12JT31_72	115	2.0	0.1109	0.53	0.2686	5.14	36	0.341	1.7	0.5312	1889	82	--	--	1843	59	1804	89	1804	89	105				
12JT31_101	71	0.7	0.1112	0.55	0.1472	4.96	36	0.32	1.6	0.5039	1788	79	--	--	1814	63	1812	93	1812	93	99				
12JT31_84	217	1.6	0.1107	0.51	0.1541	5.15	36	0.341	1.7	0.6584	1892	82	--	--	1847	60	1813	86	1813	86	104				
12JT31_79	233	2.2	0.111	0.52	0.1956	5.23	36	0.344	1.7	0.5242	1904	82	--	--	1857	60	1816	86	1816	86	105				
12JT31_63	160	3.2	0.1109	0.53	0.3132	5.01	35	0.332	1.7	0.424	1844	80	--	--	1821	59	1817	88	1817	88	101				
12JT31_88	447	1.2	0.1115	0.51	-0.275	4.83	34	0.314	1.6	0.9302	1762	80	--	--	1782	64	1822	84	1822	84	97				
12JT31_95	456	2.5	0.1123	0.52	0.1999	4.43	31	0.286	1.4	0.6843	1622	71	--	--	1720	58	1835	82	1835	82	88				
12JT31_30	58	1.8	0.1122	0.57	0.145	5.35	39	0.339	1.7	0.4883	1880	83	--	--	1877	63	1843	99	1843	99	102				
12JT31_104	90	1.8	0.1135	0.55	0.2677	5.09	36	0.323	1.6	0.495	1804	80	--	--	1832	60	1845	88	1845	88	98				
12JT31_40	73	1.9	0.114	0.57	0.055	5.39	39	0.34	1.8	0.6395	1886	85	--	--	1878	61	1863	91	1863	91	101				
12JT31_44	287	2.0	0.1149	0.53	0.0839	5.6	39	0.352	1.8	0.7138	1942	83	--	--	1914	60	1875	83	1875	83	104				
12JT31_89	128	1.2	0.1147	0.55	0.2793	5.49	39	0.344	1.7	0.4962	1909	82	--	--	1901	60	1878	88	1878	88	102				
12JT31_38	89	2.3	0.1156	0.57	0.0959	5.68	41	0.353	1.9	0.6573	1946	88	--	--	1925	59	1885	88	1885	88	103				
12JT31_77	384	1.4	0.1165	0.53	0.4482	5.66	39	0.358	1.8	0.1835	1970	83	--	--	1923	60	1903	89	1903	89	104				
12JT31_46	114	0.4	0.1171	0.56	0.2394	5.78	41	0.362	1.8	0.5576	1990	87	--	--	1940	60	1909	86	1909	86	104				
12JT31_100	69	1.3	0.1174	0.59	0.1779	4.98	36	0.306	1.6	0.5395	1729	81	--	--	1810	60	1916	90	1916	90	90				
12JT31_33	370	2.8	0.1174	0.54	0.1451	5.95	41	0.365	1.8	0.7583	2004	86	--	--	1967	62	1916	83	1916	83	105				
12JT31_80	131	1.6	0.1176	0.56	0.2181	5.55	39	0.345	1.7	0.494	1909	82	--	--	1908	59	1919	85	1919	85	99				

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			206Pb 235U	206Pb 238U	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)	
				207Pb (%)	± corr.	206Pb (%)				206Pb 238U	± corr.	206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)		
12JT31_51	252	1.0	0.1183	0.55	0.1684	5.88	41	0.363	1.8	0.6486	1999	88	--	--	1955	60	1926	85	1926	85	104
12JT31_93	474	4.1	0.1186	0.54	0.1628	5.11	35	0.313	1.5	0.6659	1757	75	--	--	1837	58	1931	83	1931	83	91
12JT31_68	98	0.8	0.1196	0.59	-0.006	4.65	33	0.284	1.4	0.6008	1612	72	--	--	1754	61	1944	89	1944	89	83
12JT31_35	51	1.1	0.1206	0.62	0.1895	6.18	45	0.366	1.9	0.5488	2011	90	--	--	1996	63	1966	94	1966	94	102
12JT31_75	152	1.3	0.122	0.57	0.0555	6.14	43	0.367	1.8	0.6516	2016	87	--	--	1996	62	1988	84	1988	84	101
12JT31_5	684	3.4	0.1235	0.56	-0.071	6.09	43	0.353	1.8	0.8951	1949	86	--	--	1987	62	2006	81	2006	81	97
12JT31_91	151	3.0	0.1264	0.6	-0.064	6.7	48	0.382	1.9	0.7093	2080	89	--	--	2069	64	2042	85	2042	85	102
12JT31_94	368	16.1	0.1263	0.58	0.2017	6.33	44	0.362	1.8	0.6316	1992	84	--	--	2024	58	2050	83	2050	83	97
12JT31_92	113	2.2	0.1365	0.65	0.0136	7.54	54	0.394	2	0.7329	2141	92	--	--	2175	65	2185	82	2185	82	98
12JT31_69	194	1.4	0.141	0.66	-0.033	8.21	57	0.425	2.1	0.7464	2281	95	--	--	2258	64	2244	82	2244	82	102
12JT31_55	171	3.0	0.1448	0.68	0.2015	8.29	57	0.418	2.1	0.5622	2252	94	--	--	2264	64	2283	81	2283	81	99
12JT31_1	94	1.2	0.1459	0.7	-0.067	6.8	54	0.331	1.9	0.8718	1838	94	--	--	2077	73	2290	83	2290	83	80
12JT31_57	166	1.6	0.1457	0.67	0.1208	8.76	61	0.44	2.1	0.6364	2350	95	--	--	2311	62	2292	80	2292	80	103
12JT31_53	311	5.5	0.1472	0.67	0.1657	8.48	58	0.419	2	0.651	2255	93	--	--	2283	62	2311	78	2311	78	98
12JT31_82	77	0.9	0.1486	0.72	0.3144	9.04	63	0.446	2.2	0.4677	2370	100	--	--	2341	63	2319	84	2319	84	102
12JT31_52	252	2.1	0.1517	0.7	0.2417	9.29	64	0.442	2.2	0.6406	2358	97	--	--	2366	63	2367	76	2367	76	100
12JT31_76	147	1.5	0.154	0.72	0.2221	9.24	64	0.44	2.2	0.6093	2350	96	--	--	2361	62	2390	79	2390	79	98
12JT31_58	173	2.5	0.1581	0.73	0.2416	10.02	69	0.462	2.3	0.6486	2450	100	--	--	2434	63	2430	79	2430	79	101
12JT31_85	34	1.6	0.1577	0.82	0.3698	10.18	74	0.468	2.4	0.3582	2470	110	--	--	2452	66	2431	90	2431	90	102
12JT31_32	125	1.4	0.157	0.74	-0.129	9.69	69	0.445	2.3	0.8452	2370	100	--	--	2402	66	2432	79	2432	79	97
12JT31_11	166	2.5	0.1588	0.74	-0.102	10.76	79	0.483	2.7	0.9057	2540	120	--	--	2491	72	2445	77	2445	77	104
12JT31_74	125	2.4	0.1595	0.75	0.2328	10.01	70	0.459	2.3	0.6106	2440	100	--	--	2441	64	2447	78	2447	78	100
12JT31_65	145	1.2	0.1603	0.74	0.1187	9.93	69	0.455	2.2	0.7041	2424	97	--	--	2427	64	2456	79	2456	79	99
12JT31_73	285	2.1	0.161	0.73	0.1887	8.32	58	0.378	1.9	0.8216	2062	89	--	--	2264	63	2466	77	2466	77	84
12JT31_102	101	2.9	0.1617	0.76	0.3295	10.39	72	0.463	2.3	0.5612	2450	100	--	--	2467	63	2468	80	2468	80	99
12JT31_99	222	3.5	0.1623	0.74	0.3147	10.15	70	0.453	2.2	0.6743	2408	99	--	--	2450	65	2479	78	2479	78	97
12JT31_56	80	1.5	0.1638	0.78	0.2456	10.78	75	0.481	2.4	0.6013	2530	100	--	--	2503	66	2494	80	2494	80	101
12JT31_110	60	1.0	0.1704	0.81	0.1881	10.81	77	0.46	2.4	0.6429	2430	100	--	--	2506	67	2556	81	2556	81	95
12JT31_42	140	2.8	0.1705	0.79	0.2727	12.2	85	0.513	2.6	0.705	2670	110	--	--	2623	65	2560	77	2560	77	104
12JT31_34	114	2.3	0.1721	0.8	0.0946	12.13	86	0.506	2.6	0.7997	2630	110	--	--	2611	67	2578	79	2578	79	102
12JT31_48	77	2.7	0.1734	0.81	0.2983	12.04	84	0.498	2.5	0.6993	2610	110	--	--	2605	66	2583	78	2583	78	101

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	± (%)	error corr.	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
				206Pb	207Pb	238U							206Pb*	207Pb	238U	206Pb	207Pb	238U	206Pb	207Pb	
				(ppmm)	(%)	corr.	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)		
12JT31_62	77	1.6	0.1785	0.85	0.2442	11.96	84	0.498	2.5	0.6132	2600	110	--	--	2597	66	2633	78	2633	78	99
12JT31_36	68	2.6	0.1834	0.88	0.2124	13.56	97	0.528	2.7	0.7282	2740	110	--	--	2709	67	2679	81	2679	81	102
12JT31_43	216	1.8	0.1841	0.84	0.2741	13.89	96	0.541	2.7	0.8093	2790	120	--	--	2740	65	2689	75	2689	75	104
12JT31_83	282	3.3	0.1848	0.84	0.3085	13.61	93	0.535	2.6	0.6902	2760	110	--	--	2723	65	2696	76	2696	76	102
12JT31_19	31	1.0	0.1877	0.99	-0.209	14.1	110	0.534	3	0.8055	2750	120	--	--	2720	68	2699	84	2699	84	102
12JT31_50	114	1.2	0.1857	0.86	0.2171	13.86	98	0.54	2.7	0.7732	2780	110	--	--	2737	65	2703	77	2703	77	103
12JT31_39	96	1.1	0.187	0.87	0.2343	14.16	99	0.548	2.8	0.678	2820	120	--	--	2757	66	2716	78	2716	78	104
12JT31_97	32	1.8	0.1903	0.95	0.314	13.63	99	0.513	2.7	0.6705	2670	110	--	--	2724	68	2735	83	2735	83	98
12JT31_28	51	1.1	0.1994	0.95	0.2855	15.7	110	0.561	2.9	0.7215	2870	120	--	--	2859	65	2820	78	2820	78	102
12JT31_20	138	3.8	0.1125	0.53	0.2135	5.49	39	0.353	1.8	0.6237	1950	85	--	--	1900	61	1852	91	1852	91	105
12JT31_31	224	3.0	0.1627	0.74	0.2147	11.47	79	0.502	2.5	0.8248	2620	110	--	--	2560	64	2487	77	2487	77	105
12JT31_29	170	1.5	0.115	0.54	0.2856	5.76	40	0.36	1.8	0.673	1986	87	--	--	1942	60	1883	81	1883	81	105
12JT31_7	79	1.7	0.1135	0.56	0.2085	5.52	39	0.356	1.8	0.5882	1961	86	--	--	1897	60	1856	91	1856	91	106
12JT31_27	86	0.8	0.1179	0.57	0.0616	6.04	44	0.371	1.9	0.6665	2031	90	--	--	1974	64	1920	85	1920	85	106
12JT31_45	112	1.1	0.1653	0.77	0.2678	11.66	82	0.509	2.6	0.7729	2650	110	--	--	2577	68	2505	80	2505	80	106
12JT31_6	184	1.8	0.1109	0.52	0.2462	5.35	37	0.347	1.7	0.6443	1919	83	--	--	1876	60	1812	85	1812	85	106
12JT31_18	122	3.3	0.1638	0.76	0.2251	11.47	80	0.506	2.6	0.729	2640	110	--	--	2561	65	2492	79	2492	79	106
12JT31_25	196	1.6	0.1113	0.52	0.3661	5.36	37	0.35	1.8	0.6823	1930	86	--	--	1877	60	1818	86	1818	86	106
12JT31_24	45	0.5	0.1381	0.68	0.3657	8.26	59	0.436	2.3	0.5395	2330	100	--	--	2262	65	2193	90	2193	90	106
12JT31_26	42	0.6	0.1109	0.61	0.1852	5.22	40	0.348	1.9	0.5422	1921	88	--	--	1872	65	1808	97	1808	97	106
12JT31_17	199	4.4	0.107	0.5	0.2241	4.91	34	0.334	1.7	0.6301	1860	80	--	--	1802	60	1745	88	1745	88	107
12JT31_8	39	1.2	0.1183	0.61	0.0719	6.2	47	0.376	2	0.6315	2050	93	--	--	1996	65	1919	94	1919	94	107
12JT31_15	93	1.6	0.1714	0.8	0.2454	12.53	87	0.532	2.7	0.69	2750	110	--	--	2648	67	2565	78	2565	78	107
12JT31_41	37	2.6	0.0846	0.53	0.3344	2.79	22	0.238	1.3	0.3535	1371	68	--	--	1346	59	1270	120	1270	120	108
12JT31_21	83	1.9	0.174	0.82	0.1525	13.08	92	0.548	2.8	0.7056	2820	110	--	--	2684	67	2595	80	2595	80	109
12JT31_2	41	0.7	0.1105	0.6	0.1445	5.43	41	0.354	1.9	0.5656	1949	89	--	--	1885	65	1786	98	1786	98	109
12JT31_9	51	1.0	0.1709	0.82	0.2452	13.08	93	0.548	2.9	0.6791	2820	120	--	--	2688	66	2568	81	2568	81	110
12JT31_14	46	0.9	0.1083	0.55	0.2233	5.42	40	0.355	1.9	0.562	1952	88	--	--	1881	63	1760	95	1760	95	111
12JT31_64	28	515.6	0.1181	0.66	0.2549	6.51	51	0.405	2.3	0.5983	2180	100	--	--	2034	69	1930	100	1930	100	113
12JT31_96	67	93.7	0.1106	0.54	0.2645	5.99	43	0.386	2	0.6264	2112	95	--	--	1970	63	1810	91	1810	91	117
12JT31_86	97	6413.3	0.1125	0.54	0.1862	6.12	44	0.397	2.1	0.6966	2150	96	--	--	1990	61	1838	87	1838	87	117

Analysis	U (ppm)	U/Th	206Pb 207Pb	Isotope ratios			206Pb 235U	206Pb 238U	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)	
				207Pb (%)	± corr.	206Pb (%)				206Pb 238U	± corr.	206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)		
12JT31_106	95	604.0	0.1126	0.54	0.2457	6.14	44	0.396	2.1	0.6614	2149	95	—	—	1994	61	1837	91	1837	91	117
12JT31_66	1800	2.8	0.1118	0.51	0.1047	1.7	42	0.1114	0.54	0.7106	680	32	638	31	1009	44	1828	82	638	31	35
12JT31_61	1394	4.1	0.1226	0.56	0.3061	2.04	44	0.1223	0.6	0.6695	747	35	692	34	1130	47	1991	82	692	34	35
12JT31_107	1425	1.8	0.1302	0.59	0.1833	2.43	17	0.1344	0.66	0.7382	813	38	747	37	1250	49	2101	81	747	37	36
12JT31_10	68	0.7	0.737	3.4	0.1355	56.3	400	0.553	2.9	0.8853	2830	120	—	—	4103	68	4820	76	4820	76	59
12JT31_3	618	2.9	0.1308	0.6	-0.116	4.03	29	0.22	1.2	0.9161	1285	62	—	—	1630	58	2109	81	2109	81	61
12JT31_70	998	2.0	0.0963	0.44	0.202	2.15	15	0.1639	0.8	0.6094	979	44	948	45	1164	47	1555	88	948	45	63
12JT31_4	255	2.8	0.1272	0.6	-0.16	4.18	33	0.235	1.3	0.9012	1353	70	—	—	1659	65	2051	84	2051	84	66
12JT31_90	462	1.8	0.1053	0.49	-0.02	2.93	22	0.204	1.1	0.8931	1192	61	—	—	1379	57	1713	86	1713	86	70
12JT31_13	546	2.0	0.085	0.4	-0.078	1.84	16	0.159	1.1	0.9412	941	61	934	63	1041	56	1313	92	934	63	71
12JT31_87	52	1.0	0.764	3.5	0.3519	78.1	550	0.746	3.9	0.8702	3580	140	—	—	4433	71	4883	80	4883	80	73
12JT31_22	171	0.6	0.0904	0.45	0.2909	2.28	17	0.184	1.1	0.6985	1088	57	—	—	1198	52	1440	94	1440	94	76
12JT31_47	163	0.9	0.232	1.1	-0.046	14.4	100	0.446	2.4	0.8995	2380	110	—	—	2768	69	3069	73	3069	73	78
12JT31_37	461	1.5	0.1161	0.54	-0.145	4.24	35	0.26	1.7	0.9627	1484	86	—	—	1648	73	1893	83	1893	83	78
12JT31_109	282	1.4	0.1156	0.54	0.0909	4.16	30	0.261	1.3	0.8008	1492	68	—	—	1668	59	1890	84	1890	84	79
12JT31_16	164	0.8	0.1203	0.58	0.2069	4.58	36	0.276	1.7	0.8816	1569	87	—	—	1745	67	1966	84	1966	84	80
Neruokpuk Fm 69.72, -141.51 n=62/100																					
(Neoproterozoic-Middle Cambrian)																					
12JT32_12	66	0.9	0.0741	0.42	0.1461	1.8	14	0.1796	0.94	0.3823	1063	51	--	--	1040	50	1030	120	1030	120	103
12JT32_40	47	2.0	0.0756	0.45	0.2098	1.96	16	0.1844	0.99	0.4619	1091	53	--	--	1087	55	1050	130	1050	130	104
12JT32_8	66	1.5	0.0773	0.45	0.359	2.02	16	0.1878	0.97	0.1485	1108	53	--	--	1115	52	1120	110	1120	110	99
12JT32_71	91	3.7	0.0863	0.45	0.1692	2.81	21	0.241	1.2	0.4929	1388	64	--	--	1356	54	1340	110	1340	110	104
12JT32_69	281	3.1	0.0882	0.42	-0.001	3	21	0.249	1.2	0.6807	1435	64	--	--	1404	53	1381	91	1381	91	104
12JT32_32	20	1.7	0.0923	0.66	0.2838	3.1	28	0.241	1.4	0.4239	1385	72	--	--	1426	68	1410	150	1410	150	98
12JT32_44	91	1.4	0.092	0.48	0.1956	3.25	24	0.259	1.3	0.4455	1483	68	--	--	1463	56	1460	100	1460	100	102
12JT32_84	37	1.2	0.0905	0.54	0.3052	3.37	26	0.268	1.5	0.3972	1534	74	--	--	1496	63	1470	110	1470	110	104
12JT32_33	366	1.3	0.0922	0.43	0.1237	3.43	24	0.269	1.3	0.634	1536	68	--	--	1510	54	1470	88	1470	88	104
12JT32_31	123	0.7	0.1026	0.51	0.1544	3.93	28	0.283	1.5	0.6188	1601	74	--	--	1623	58	1658	92	1658	92	97
12JT32_20	38	0.9	0.1095	0.59	0.2479	4.44	34	0.298	1.6	0.5025	1683	78	--	--	1720	63	1764	98	1764	98	95
12JT32_80	56	1.8	0.1095	0.57	0.2906	4.94	36	0.333	1.7	0.4119	1849	84	--	--	1807	61	1775	95	1775	95	104

Analysis	U (pmm)	U/Th	206Pb 207Pb	± (%)	error corr.	Isotope ratios						206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	Apparent ages (Ma)			Best age (Ma)	± (Ma)	Conc (%)
						207Pb	235U	206Pb	238U	± (%)	error corr.														
12JT32_45	35	0.7	0.1103	0.61	0.2796	5.15	39	0.337	1.8	0.4778		1869	86	--	--	1828	64	1790	100	1790	100	104			
12JT32_26	95	1.8	0.1107	0.55	0.1744	4.92	36	0.323	1.6	0.5612		1801	80	--	--	1803	62	1798	92	1798	92	100			
12JT32_18	128	1.4	0.1099	0.52	0.2389	5.16	36	0.337	1.7	0.6108		1868	81	--	--	1842	60	1798	88	1798	88	104			
12JT32_46	27	1.5	0.1123	0.65	0.244	5.08	39	0.333	1.8	0.588		1846	87	--	--	1813	65	1810	110	1810	110	102			
12JT32_41	32	0.9	0.1127	0.63	0.2172	5.24	41	0.332	1.8	0.5507		1847	85	--	--	1852	66	1840	100	1840	100	100			
12JT32_62	25	0.6	0.1147	0.67	0.3194	5.29	41	0.335	1.9	0.4034		1860	90	--	--	1868	67	1840	110	1840	110	101			
12JT32_87	12	0.8	0.1142	0.78	0.2229	5.38	48	0.345	2.2	0.4659		1890	100	--	--	1847	75	1840	120	1840	120	103			
12JT32_9	193	1.9	0.1133	0.53	0.1952	5.36	37	0.345	1.7	0.6326		1910	83	--	--	1874	60	1844	85	1844	85	104			
12JT32_63	146	1.5	0.113	0.54	0.0918	5.33	37	0.346	1.7	0.6352		1925	86	--	--	1875	62	1846	86	1846	86	104			
12JT32_99	16	0.8	0.1136	0.73	0.2576	5.42	46	0.342	2	0.4642		1899	99	--	--	1861	72	1850	120	1850	120	103			
12JT32_11	135	1.8	0.1145	0.55	0.2806	4.78	34	0.302	1.5	0.5097		1702	76	--	--	1781	58	1868	85	1868	85	91			
12JT32_55	25	0.8	0.115	0.68	0.116	5.55	45	0.345	1.9	0.512		1919	93	--	--	1891	71	1870	100	1870	100	103			
12JT32_43	161	1.5	0.1141	0.54	0.2108	5.49	38	0.349	1.8	0.5831		1932	83	--	--	1899	60	1870	86	1870	86	103			
12JT32_48	39	2.0	0.115	0.61	0.2904	5.64	42	0.351	1.9	0.5127		1934	90	--	--	1921	63	1874	95	1874	95	103			
12JT32_4	53	3.0	0.115	0.6	0.3721	5.61	41	0.353	1.8	0.3818		1948	87	--	--	1917	64	1878	97	1878	97	104			
12JT32_56	62	0.9	0.1141	0.59	0.1514	5.57	41	0.358	1.8	0.5338		1972	86	--	--	1911	64	1882	93	1882	93	105			
12JT32_57	26	1.2	0.1162	0.67	0.2344	5.77	46	0.363	2	0.4461		1993	94	--	--	1936	70	1910	110	1910	110	104			
12JT32_38	266	2.2	0.1182	0.55	-0.032	5.07	38	0.316	1.8	0.8967		1771	87	--	--	1834	65	1923	83	1923	83	92			
12JT32_37	23	0.5	0.1179	0.69	0.1983	5.67	45	0.343	1.9	0.4175		1896	90	--	--	1911	70	1930	110	1930	110	98			
12JT32_85	28	1.0	0.1165	0.65	0.2581	5.76	45	0.356	2	0.5141		1955	93	--	--	1940	66	1930	100	1930	100	101			
12JT32_81	210	1.5	0.1185	0.56	0.2064	5.61	39	0.349	1.7	0.6074		1926	83	--	--	1914	60	1933	85	1933	85	100			
12JT32_29	100	1.4	0.1212	0.58	0.1575	6.05	43	0.363	1.8	0.4913		1996	85	--	--	1984	62	1968	89	1968	89	101			
12JT32_35	54	1.2	0.1217	0.61	0.2571	5.9	43	0.352	1.8	0.5125		1940	86	--	--	1963	63	1971	95	1971	95	98			
12JT32_7	273	3.3	0.1224	0.57	-0.111	5.59	39	0.332	1.6	0.6762		1852	79	--	--	1910	59	1989	80	1989	80	93			
12JT32_14	84	1.5	0.1282	0.62	0.1696	6.9	49	0.386	2	0.6043		2105	91	--	--	2094	62	2076	86	2076	86	101			
12JT32_2	142	1.2	0.1321	0.62	0.287	7.3	51	0.4	2	0.5696		2169	92	--	--	2148	61	2130	81	2130	81	102			
12JT32_17	56	1.2	0.1461	0.71	0.1324	8.88	64	0.441	2.3	0.6864		2350	100	--	--	2321	65	2303	83	2303	83	102			
12JT32_3	174	2.2	0.1482	0.69	0.2266	7.65	53	0.374	1.9	0.677		2047	88	--	--	2189	63	2322	78	2322	78	88			
12JT32_68	14	109.5	0.156	1.1	-0.048	9.47	87	0.435	2.5	0.5701		2320	110	--	--	2331	87	2330	130	2330	130	100			
12JT32_53	131	3.2	0.1487	0.7	0.2391	9.4	66	0.459	2.3	0.6373		2440	100	--	--	2378	64	2331	81	2331	81	105			
12JT32_34	81	3.6	0.1496	0.71	0.2431	9.17	65	0.447	2.3	0.6412		2380	100	--	--	2353	64	2337	79	2337	79	102			

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	± (%)	error corr.	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
				206Pb	207Pb	238U							206Pb*	207Pb	235U	206Pb	207Pb	235U	206Pb	207Pb	
				(ppmm)	(%)	corr.	(Ma)	(%)	corr.	(Ma)	(%)	corr.	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	
12JT32_42	51	1.6	0.151	0.74	0.21	9.63	69	0.463	2.4	0.6082	2450	100	--	--	2399	65	2353	82	2353	82	104
12JT32_92	112	1.5	0.1521	0.72	0.2195	8.17	58	0.39	2	0.6264	2119	92	--	--	2254	64	2368	82	2368	82	89
12JT32_50	60	0.8	0.1528	0.74	0.2248	9.83	70	0.468	2.4	0.647	2470	110	--	--	2422	65	2385	82	2385	82	104
12JT32_75	168	6.8	0.1694	0.8	0.108	10.99	81	0.482	2.6	0.1647	2530	110	--	--	2504	70	2545	76	2545	76	99
12JT32_13	116	2.8	0.1699	0.79	0.2704	11.85	82	0.505	2.5	0.5926	2640	110	--	--	2597	62	2555	79	2555	79	103
12JT32_28	112	1.1	0.1708	0.85	-0.019	9.4	72	0.396	2.2	0.8694	2160	110	--	--	2367	71	2563	82	2563	82	84
12JT32_39	127	1.5	0.1724	0.8	0.3285	11.67	82	0.492	2.6	0.7961	2570	110	--	--	2574	67	2586	80	2586	80	99
12JT32_1	98	1.4	0.1734	0.81	0.3576	12.5	87	0.521	2.6	0.6105	2700	110	--	--	2643	65	2587	78	2587	78	104
12JT32_10	75	1.5	0.1732	0.82	0.2683	12.31	86	0.513	2.6	0.664	2660	110	--	--	2629	66	2591	77	2591	77	103
12JT32_16	84	2.0	0.1749	0.82	0.3632	12.13	84	0.502	2.6	0.6414	2630	110	--	--	2612	66	2608	79	2608	79	101
12JT32_36	69	5.1	0.1768	0.84	0.2233	12.35	87	0.506	2.6	0.7299	2640	110	--	--	2630	65	2621	78	2621	78	101
12JT32_73	26	1.0	0.1795	0.93	0.1921	12.78	97	0.529	3	0.6973	2730	120	--	--	2664	70	2649	86	2649	86	103
12JT32_76	22	2.4	0.1816	0.94	0.1974	13.01	99	0.536	3	0.6057	2750	120	--	--	2669	71	2652	89	2652	89	104
12JT32_47	172	1.9	0.1797	0.83	0.1759	11.94	83	0.48	2.4	0.7511	2530	100	--	--	2597	66	2653	78	2653	78	95
12JT32_5	23	2.0	0.1827	0.94	0.3005	13.35	99	0.532	2.9	0.6145	2740	120	--	--	2693	69	2675	81	2675	81	102
12JT32_6	50	1.6	0.1872	0.9	0.1827	13.9	99	0.534	2.7	0.6833	2750	110	--	--	2745	67	2716	79	2716	79	101
12JT32_49	57	2.3	0.1944	0.93	0.3099	14.6	100	0.547	2.8	0.7057	2820	120	--	--	2783	67	2782	80	2782	80	101
12JT32_65	32	1.9	0.2029	0.99	0.3515	16.4	120	0.587	3.1	0.6584	2970	130	--	--	2893	68	2837	82	2837	82	105
12JT32_22	78	4.6	0.228	1.1	0.4375	19.6	140	0.62	3.2	0.6977	3110	120	--	--	3070	66	3041	73	3041	73	102
12JT32_86	72	1.5	0.1133	0.57	0.2514	5.41	39	0.351	1.8	0.5096	1945	84	--	--	1889	61	1849	89	1849	89	105
12JT32_74	21	0.8	0.184	0.97	0.1362	13.7	100	0.553	3.1	0.7304	2810	120	--	--	2722	70	2671	89	2671	89	105
12JT32_95	54	1.7	0.148	0.72	0.1131	9.38	68	0.462	2.4	0.6992	2440	110	--	--	2368	66	2314	83	2314	83	105
12JT32_59	60	1.7	0.1516	0.73	0.3018	9.77	70	0.472	2.5	0.6753	2490	110	--	--	2405	65	2361	81	2361	81	105
12JT32_25	113	1.7	0.0819	0.42	0.148	2.51	18	0.223	1.1	0.4351	1294	59	--	--	1273	54	1226	98	1226	98	106
12JT32_66	43	2.2	0.1325	0.66	0.3333	7.4	54	0.414	2.2	0.6318	2244	99	--	--	2161	66	2126	87	2126	87	106
12JT32_70	19	0.7	0.1107	0.67	0.2274	5.33	44	0.35	2	0.5381	1925	95	--	--	1846	71	1820	110	1820	110	106
12JT32_79	93	2.6	0.1689	0.8	0.2264	11.94	84	0.52	2.7	0.6839	2700	110	--	--	2598	66	2551	83	2551	83	106
12JT32_94	84	2.6	0.0915	0.48	0.2594	3.34	24	0.268	1.4	0.3933	1528	70	--	--	1481	56	1440	100	1440	100	106
12JT32_24	14	0.9	0.1105	0.75	0.3324	5.28	45	0.342	2	0.3857	1880	97	--	--	1852	74	1770	130	1770	130	106
12JT32_100	56	2.1	0.0895	0.5	0.3513	3.23	24	0.26	1.4	0.2222	1488	69	--	--	1455	58	1400	110	1400	110	106
12JT32_15	114	3.2	0.1143	0.55	0.2071	5.72	40	0.36	1.8	0.4808	1983	85	--	--	1934	60	1865	88	1865	88	106

Analysis	U (ppm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 238U	± corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)			
				207Pb (%)	± corr.	206Pb (%)	± corr.			206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	206Pb (Ma)					
12JT32_89	72	1.6	0.1163	0.57	0.1977	5.92	43	0.368	1.9	0.6122	2016	90	—	—	1957	61	1889	89	1889	89	107		
12JT32_78	59	1.8	0.1731	0.82	0.2573	12.72	90	0.537	2.8	0.7139	2770	120	—	—	2652	67	2595	80	2595	80	107		
12JT32_30	7	0.8	0.164	1.1	0.3621	11.7	100	0.517	3.5	0.695	2640	140	—	—	2551	82	2460	120	2460	120	107		
12JT32_82	71	1.9	0.1136	0.57	0.1443	5.55	40	0.362	1.9	0.5933	1988	89	—	—	1909	61	1850	90	1850	90	107		
12JT32_96	44	2.1	0.0866	0.5	0.2457	2.91	22	0.251	1.4	0.3867	1440	70	—	—	1381	59	1340	110	1340	110	107		
12JT32_72	122	2.3	0.1521	0.71	0.3033	10.06	70	0.485	2.5	0.6616	2550	110	—	—	2437	64	2363	79	2363	79	108		
12JT32_60	116	4.4	0.144	0.69	-4E-04	9.14	67	0.463	2.5	0.8099	2460	110	—	—	2342	67	2278	80	2278	80	108		
12JT32_97	29	1.5	0.1157	0.64	0.2987	5.96	45	0.373	2	0.4211	2042	94	—	—	1961	65	1870	100	1870	100	109		
12JT32_54	29	3006.2	0.1179	0.64	0.1571	6.24	49	0.387	2.2	0.6314	2100	100	—	—	1991	69	1911	96	1911	96	110		
12JT32_64	15	1.5	0.1105	0.74	0.2793	5.15	44	0.342	2	0.384	1890	97	—	—	1819	74	1710	130	1710	130	111		
12JT32_90	13	0.8	0.0885	0.67	0.2864	3.09	29	0.253	1.6	0.4505	1441	82	—	—	1411	70	1290	150	1290	150	112		
12JT32_23	86	391.9	0.0773	0.46	0.3493	2.35	18	0.219	1.2	0.2819	1272	62	—	—	1224	54	1130	120	1130	120	113		
12JT32_21	5	22.5	0.133	1.3	0.3223	7.43	81	0.427	3.5	0.5096	2230	150	—	—	2060	100	1950	180	1950	180	114		
12JT32_61	26	4079.3	0.1036	0.6	0.1371	4.88	39	0.349	2.1	0.5181	1911	97	—	—	1783	69	1660	110	1660	110	115		
12JT32_91	19	4845.4	0.1149	0.66	0.3209	6.21	49	0.398	2.3	0.5893	2150	100	—	—	1997	66	1860	100	1860	100	116		
12JT32_51	10	318.0	0.1106	0.79	0.2928	5.87	53	0.38	2.6	0.4792	2040	110	—	—	1933	79	1730	150	1730	150	118		
12JT32_58	13	1684.3	0.1158	0.76	0.3188	6.66	56	0.419	2.6	0.5586	2230	120	—	—	2036	75	1890	120	1890	120	118		
12JT32_19	15	2127.1	0.1089	0.69	0.2986	5.83	48	0.389	2.4	0.4543	2100	110	—	—	1933	72	1760	120	1760	120	119		
12JT32_52	11	489.3	0.1077	0.73	0.2048	5.48	48	0.383	2.4	0.4882	2070	110	—	—	1885	80	1730	130	1730	130	120		
12JT32_67	8	660.0	0.1109	0.88	0.2919	5.75	56	0.395	2.6	0.4597	2110	120	—	—	1941	83	1750	140	1750	140	121		
12JT32_83	39	844.8	0.1173	0.61	0.2081	6.84	52	0.434	2.4	0.6192	2310	110	—	—	2089	68	1909	95	1909	95	121		
12JT32_27	25	2391.9	0.1081	0.61	0.2771	5.79	46	0.389	2.2	0.4817	2110	100	—	—	1931	67	1740	110	1740	110	121		
12JT32_93	13	246.1	0.105	0.69	0.1013	5.94	54	0.404	2.6	0.6106	2160	120	—	—	1947	82	1710	130	1710	130	126		
12JT32_88	486	2.0	0.1375	0.63	0.2301	4.6	32	0.245	1.2	0.7695	1409	64	—	—	1750	58	2193	79	2193	79	64		
12JT32_98	193	1.6	0.1549	0.73	-0.165	6.84	50	0.318	1.7	0.8516	1781	83	—	—	2076	67	2395	80	2395	80	74		
12JT32_77	274	1.2	0.1538	0.71	0.1477	6.68	47	0.319	1.6	0.7992	1784	80	—	—	2070	61	2385	79	2385	79	75		
Neruokpuk Fm 69.18, -142.66 n=83/98																							
(Neoproterozoic-Middle Cambrian)																							
05LF13_50	229	2.4	0.0787	0.17	0.1947	2.062	9.7	0.1895	0.84	0.6201	1118	46	--	--	1136	32	1165	45	1165	45	96		
05LF13_58	354	3.3	0.0807	0.18	0.1199	2.24	10	0.202	0.9	0.7582	1186	48	--	--	1194	33	1215	43	1215	43	98		

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 235U	± (%)	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)
				207Pb	± (%)	206Pb 238U	± (%)				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	Best age (Ma)		
05LF13_84	295	4.0	0.0816	0.18	0.3148	2.34	11	0.2101	0.93	0.5004	1229	50	--	--	1226	33	1236	44	1236	44	99
05LF13_85	126	4.1	0.0821	0.19	0.2771	2.51	12	0.224	1	0.4895	1302	53	--	--	1274	34	1247	44	1247	44	104
05LF13_26	67	2.4	0.0887	0.21	0.294	3.04	14	0.246	1.1	0.4696	1419	58	--	--	1416	36	1398	45	1398	45	102
05LF13_87	85	3.0	0.0907	0.21	0.2055	3.23	15	0.261	1.2	0.5188	1495	59	--	--	1463	36	1435	44	1435	44	104
05LF13_43	504	1.8	0.0913	0.19	0.0214	2.72	13	0.2154	0.95	0.8057	1258	51	--	--	1335	34	1454	41	1454	41	87
05LF13_68	107	2.6	0.0917	0.21	0.2915	3.32	16	0.265	1.2	0.5245	1515	60	--	--	1486	36	1460	42	1460	42	104
05LF13_60	178	2.2	0.0921	0.2	0.151	3.12	15	0.245	1.1	0.597	1414	56	--	--	1435	36	1471	43	1471	43	96
05LF13_6	86	2.2	0.0936	0.21	0.2722	3.15	15	0.242	1.1	0.5904	1398	57	--	--	1444	37	1500	43	1500	43	93
05LF13_39	152	1.2	0.1009	0.22	0.3945	4.07	19	0.29	1.3	0.5561	1643	65	--	--	1648	38	1641	41	1641	41	100
05LF13_52	76	4.2	0.1017	0.23	-0.002	3.73	18	0.264	1.2	0.7034	1509	60	--	--	1578	39	1658	43	1658	43	91
05LF13_13	197	2.9	0.1037	0.23	0.0024	4.15	20	0.289	1.3	0.8399	1639	65	--	--	1664	38	1689	40	1689	40	97
05LF13_51	350	2.4	0.1092	0.24	0.0435	3.99	20	0.266	1.2	0.8996	1520	63	--	--	1634	40	1784	40	1784	40	85
05LF13_21	83	1.1	0.1101	0.25	0.1946	4.61	22	0.304	1.4	0.6708	1713	68	--	--	1752	38	1798	42	1798	42	95
05LF13_32	262	1.5	0.1109	0.25	0.226	5.06	24	0.331	1.5	0.7162	1843	72	--	--	1829	41	1815	40	1815	40	102
05LF13_93	148	1.8	0.1117	0.24	0.2434	4.99	23	0.326	1.4	0.5781	1817	70	--	--	1818	39	1828	40	1828	40	99
05LF13_35	117	3.2	0.1118	0.25	0.2405	5.06	24	0.329	1.5	0.6212	1832	72	--	--	1829	39	1828	41	1828	41	100
05LF13_8	42	1.3	0.1124	0.27	0.1911	5.14	25	0.331	1.5	0.5798	1845	72	--	--	1840	41	1839	43	1839	43	100
05LF13_1	70	1.9	0.1124	0.25	0.2178	5.38	25	0.346	1.5	0.6029	1913	74	--	--	1879	40	1840	40	1840	40	104
05LF13_61	100	2.6	0.1126	0.25	0.2899	4.82	22	0.312	1.4	0.5611	1749	67	--	--	1788	39	1841	40	1841	40	95
05LF13_67	79	2.5	0.1135	0.26	0.1203	5.14	25	0.331	1.5	0.7897	1843	74	--	--	1841	42	1852	41	1852	41	100
05LF13_71	87	3.6	0.1145	0.25	0.2637	4.98	23	0.319	1.4	0.7624	1787	70	--	--	1813	40	1870	40	1870	40	96
05LF13_3	185	2.5	0.1149	0.27	-0.312	4.98	27	0.31	1.6	0.9408	1736	78	--	--	1809	47	1876	42	1876	42	93
05LF13_24	75	2.0	0.115	0.26	0.265	4.82	23	0.303	1.4	0.7126	1705	69	--	--	1788	41	1878	42	1878	42	91
05LF13_65	92	2.8	0.1153	0.25	0.1589	5.13	24	0.324	1.4	0.6364	1809	70	--	--	1842	40	1882	40	1882	40	96
05LF13_59	230	2.8	0.1155	0.25	0.2451	5.1	24	0.32	1.4	0.744	1788	69	--	--	1837	39	1887	39	1887	39	95
05LF13_15	92	2.3	0.1154	0.26	0.2129	4.66	22	0.293	1.3	0.6843	1658	65	--	--	1760	39	1888	41	1888	41	88
05LF13_28	48	0.6	0.1158	0.29	0.2708	5.36	26	0.336	1.5	0.4858	1869	73	--	--	1878	41	1888	44	1888	44	99
05LF13_38	49	0.5	0.1164	0.27	0.1259	5.3	25	0.328	1.5	0.6357	1828	72	--	--	1867	41	1896	42	1896	42	96
05LF13_14	178	1.2	0.1161	0.25	0.254	5.6	26	0.348	1.6	0.7232	1924	74	--	--	1915	40	1896	39	1896	39	101
05LF13_72	65	1.3	0.1158	0.26	0.3323	5.72	27	0.36	1.6	0.5497	1984	76	--	--	1934	40	1897	39	1897	39	105
05LF13_7	130	0.6	0.1164	0.25	0.3431	5.65	26	0.349	1.5	0.6328	1932	73	--	--	1925	40	1900	39	1900	39	102

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	± (%)	error corr.	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
				206Pb	207Pb	238U							206Pb*	207Pb	238U	206Pb	207Pb	238U			
				(ppmm)	(%)	corr.	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)			
05LF13_94	128	1.2	0.1165	0.25	0.218	5.47	25	0.342	1.5	0.5861	1897	73	--	--	1899	40	1903	39	1903	39	100
05LF13_45	72	0.7	0.1165	0.27	0.3055	5.31	25	0.33	1.5	0.6046	1837	72	--	--	1872	40	1905	41	1905	41	96
05LF13_92	45	1.0	0.1166	0.27	0.1866	5.36	25	0.337	1.5	0.5555	1872	72	--	--	1881	41	1905	42	1905	42	98
05LF13_49	128	0.6	0.1166	0.26	0.152	5.59	26	0.346	1.5	0.7184	1916	74	--	--	1915	41	1906	40	1906	40	101
05LF13_57	223	2.5	0.1168	0.26	0.0321	5.04	24	0.313	1.4	0.8839	1755	71	--	--	1825	40	1907	39	1907	39	92
05LF13_66	143	2.6	0.117	0.25	0.1839	5.71	26	0.356	1.6	0.6511	1963	75	--	--	1932	40	1909	39	1909	39	103
05LF13_18	282	2.3	0.117	0.25	0.3177	5.18	24	0.321	1.4	0.6558	1792	69	--	--	1850	40	1913	38	1913	38	94
05LF13_2	287	7.0	0.1171	0.25	0.1751	5.43	25	0.335	1.5	0.6862	1863	71	--	--	1890	40	1914	40	1914	40	97
05LF13_4	104	1.3	0.1183	0.26	0.0996	5.28	25	0.321	1.4	0.7073	1794	70	--	--	1867	41	1931	39	1931	39	93
05LF13_100	69	0.8	0.1187	0.27	0.1357	5.79	27	0.356	1.6	0.7072	1964	76	--	--	1945	42	1934	40	1934	40	102
05LF13_78	199	1.2	0.1188	0.25	0.254	5.8	27	0.357	1.6	0.6839	1970	75	--	--	1946	40	1936	38	1936	38	102
05LF13_11	164	0.8	0.1187	0.26	0.1061	5.28	25	0.32	1.4	0.7777	1792	70	--	--	1865	40	1938	38	1938	38	92
05LF13_83	34	1.0	0.1198	0.3	0.1088	5.62	28	0.342	1.6	0.7108	1892	76	--	--	1918	42	1950	45	1950	45	97
05LF13_10	71	2.2	0.1206	0.3	-0.039	5.55	27	0.336	1.5	0.4615	1868	73	--	--	1903	40	1959	43	1959	43	95
05LF13_79	169	5.9	0.1229	0.27	-0.387	5.52	27	0.331	1.5	0.8979	1841	73	--	--	1904	41	2001	39	2001	39	92
05LF13_98	13	1.6	0.1273	0.34	0.1737	6.74	34	0.391	1.8	0.5308	2124	84	--	--	2079	45	2060	48	2060	48	103
05LF13_55	220	1.4	0.1285	0.29	-0.508	6.38	31	0.359	1.6	0.8575	1978	76	--	--	2027	42	2078	40	2078	40	95
05LF13_34	174	1.2	0.129	0.28	0.196	6.94	33	0.389	1.7	0.7844	2118	81	--	--	2104	41	2083	38	2083	38	102
05LF13_69	41	1.1	0.1359	0.33	0.0329	7.12	35	0.383	1.7	0.708	2091	82	--	--	2126	45	2172	42	2172	42	96
05LF13_33	115	1.9	0.1364	0.3	0.1239	7.62	36	0.403	1.8	0.7098	2184	82	--	--	2186	42	2182	38	2182	38	100
05LF13_89	80	2.5	0.1382	0.3	0.0391	7.7	36	0.41	1.8	0.7212	2215	84	--	--	2198	42	2203	38	2203	38	101
05LF13_91	42	1.0	0.1421	0.32	0.2924	8.03	38	0.415	1.9	0.6306	2238	85	--	--	2234	44	2250	40	2250	40	99
05LF13_16	153	2.2	0.1429	0.31	0.0493	8.31	39	0.419	1.9	0.6851	2256	85	--	--	2265	42	2265	38	2265	38	100
05LF13_54	206	1.7	0.1433	0.31	0.1962	7.93	37	0.4	1.8	0.7353	2169	81	--	--	2222	42	2268	37	2268	37	96
05LF13_44	48	1.3	0.1435	0.34	-0.005	8.24	40	0.418	1.9	0.7848	2253	88	--	--	2261	45	2270	40	2270	40	99
05LF13_70	75	0.5	0.1469	0.32	0.2129	8.68	41	0.432	1.9	0.7515	2316	88	--	--	2304	43	2309	38	2309	38	100
05LF13_95	72	1.2	0.1467	0.33	0.3325	8.74	41	0.431	1.9	0.6811	2311	88	--	--	2310	43	2310	38	2310	38	100
05LF13_23	215	2.0	0.1481	0.32	0.2712	8.14	38	0.396	1.8	0.8147	2151	83	--	--	2246	42	2325	36	2325	36	93
05LF13_22	82	1.1	0.1481	0.32	0.3078	9.26	43	0.453	2	0.6117	2412	91	--	--	2363	43	2325	37	2325	37	104
05LF13_27	173	1.7	0.151	0.32	0.1436	8.43	39	0.404	1.8	0.8374	2187	83	--	--	2278	43	2356	37	2356	37	93
05LF13_62	115	1.4	0.1521	0.33	0.1827	7.22	34	0.346	1.5	0.6897	1914	74	--	--	2140	42	2369	38	2369	38	81

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 238U	± corr.	206Pb 238U	± corr.	206Pb 238U	± corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)
				207Pb (%)	235U (%)	206Pb 238U	± corr.							206Pb 238U	± corr.	206Pb 238U	± corr.	207Pb 235U	± corr.	206Pb 207Pb	± corr.			
05LF13_53	134	3.1	0.1525	0.33	0.1811	8.91	41	0.423	1.9	0.6973	2273	84	--	--	2330	42	2374	37	2374	37	96			
05LF13_42	164	1.0	0.1526	0.33	0.3287	9.42	44	0.444	2	0.7361	2370	88	--	--	2380	43	2375	37	2375	37	100			
05LF13_40	127	2.0	0.1529	0.33	0.4051	9.52	44	0.449	2	0.6419	2389	89	--	--	2388	43	2378	37	2378	37	100			
05LF13_82	42	2.0	0.1589	0.37	0.1433	9.78	47	0.452	2.1	0.6925	2404	93	--	--	2415	43	2441	39	2441	39	98			
05LF13_81	84	3.2	0.159	0.41	0.1605	7.68	40	0.359	1.7	0.7864	1979	81	--	--	2198	47	2442	43	2442	43	81			
05LF13_25	298	2.3	0.1588	0.34	0.1386	9.34	43	0.425	1.9	0.8387	2281	85	--	--	2373	43	2443	36	2443	36	93			
05LF13_73	162	2.8	0.1597	0.34	0.1789	8.48	39	0.389	1.7	0.7864	2116	81	--	--	2284	42	2452	36	2452	36	86			
05LF13_47	78	1.5	0.1628	0.35	0.2316	10.32	48	0.459	2	0.6982	2438	91	--	--	2464	44	2483	37	2483	37	98			
05LF13_88	102	1.6	0.1628	0.35	0.0477	9.93	47	0.448	2	0.8647	2387	89	--	--	2429	43	2484	37	2484	37	96			
05LF13_19	96	1.5	0.164	0.36	0.0851	9.92	47	0.435	2	0.7973	2327	88	--	--	2429	44	2497	36	2497	36	93			
05LF13_76	43	1.4	0.1651	0.38	0.207	9.69	47	0.431	2	0.7498	2308	90	--	--	2404	45	2508	39	2508	39	92			
05LF13_99	126	1.1	0.1658	0.36	-0.158	9.66	49	0.422	2	0.9519	2264	93	--	--	2396	48	2514	37	2514	37	90			
05LF13_86	25	1.2	0.168	0.42	0.0926	8.99	46	0.392	1.9	0.7732	2128	86	--	--	2335	47	2540	41	2540	41	84			
05LF13_41	71	2.4	0.1717	0.38	0.1439	11.69	55	0.49	2.2	0.723	2570	94	--	--	2580	43	2576	36	2576	36	100			
05LF13_31	34	1.3	0.1819	0.41	0.2944	12.95	61	0.517	2.3	0.6283	2688	98	--	--	2677	46	2671	38	2671	38	101			
05LF13_20	115	1.4	0.184	0.39	0.2634	12.85	60	0.506	2.3	0.7189	2637	97	--	--	2669	44	2689	36	2689	36	98			
05LF13_77	121	1.4	0.1849	0.39	0.2206	13.28	62	0.527	2.3	0.8278	2730	100	--	--	2700	45	2698	34	2698	34	101			
05LF13_96	112	2.4	0.1886	0.4	0.2442	13.97	65	0.541	2.4	0.7499	2790	100	--	--	2749	44	2729	35	2729	35	102			
05LF13_30	149	2.2	0.1907	0.42	0.0606	12.65	60	0.481	2.2	0.8439	2532	95	--	--	2655	45	2748	36	2748	36	92			
05LF13_37	74	1.0	0.1057	0.25	0.2344	4.98	24	0.338	1.5	0.6518	1876	74	--	--	1814	41	1724	43	1724	43	109			
05LF13_29	51	1.5	0.1118	0.3	0.3018	6.04	31	0.395	1.9	0.7057	2143	87	--	--	1984	46	1824	47	1824	47	117			
05LF13_63	288	1.7	0.1127	0.26	0.5552	1.654	8	0.1063	0.51	0.8291	651	30	609	29	991	31	1844	41	609	29	33			
05LF13_75	620	3.3	0.1366	0.31	-0.546	2.42	13	0.13	0.64	0.9685	787	36	717	36	1246	37	2185	40	717	36	33			
05LF13_12	585	0.9	0.1504	0.32	-0.152	3.64	17	0.1748	0.78	0.8927	1038	43	--	--	1559	38	2351	36	2351	36	44			
05LF13_9	420	2.3	0.2646	0.57	-0.493	9.57	47	0.261	1.2	0.9475	1495	61	--	--	2395	46	3273	34	3273	34	46			
05LF13_74	757	4.7	0.1205	0.26	-0.302	2.73	13	0.1649	0.75	0.9214	984	42	923	42	1337	36	1963	39	923	42	47			
05LF13_56	362	2.0	0.096	0.22	0.2498	2.45	12	0.1828	0.82	0.6702	1082	45	--	--	1259	33	1544	43	1544	43	70			
05LF13_97	206	2.7	0.1678	0.36	-0.114	7.73	37	0.335	1.5	0.9114	1862	74	--	--	2199	43	2535	36	2535	36	73			
05LF13_80	288	3.6	0.1324	0.34	-0.738	5.29	30	0.292	1.4	0.9639	1648	70	--	--	1863	48	2131	44	2131	44	77			
05LF13_48	232	0.9	0.1143	0.33	-0.336	3.98	21	0.251	1.1	0.6083	1442	58	--	--	1621	36	1856	46	1856	46	78			
05LF13_64	85	1.7	0.1807	0.42	-0.152	9.65	50	0.384	1.9	0.9212	2092	87	--	--	2397	49	2659	38	2659	38	79			

Analysis	U (pmm)	U/Th	206Pb 207Pb	± (%)	error corr.	Isotope ratios						206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	Apparent ages (Ma)			Best age (Ma)	± (Ma)	Conc (%)
						207Pb	235U	206Pb	238U	± (%)	error corr.														
05LF13_90	322	1.8	0.1617	0.35	0.0942	7.86	37	0.356	1.6	0.8932		1962	75	—	—	2214	43	2474	36	2474	36	79			
05LF13_5	136	1.5	0.1163	0.26	0.1461	4.26	20	0.265	1.2	0.8622		1517	62	—	—	1686	40	1901	39	1901	39	80			
05LF13_46	441	12.4	0.0531	0.12	0.1908	0.393	1.9	0.0532	0.23	0.3343		334	14	334	14	336	13	329	53	334	14	102			
Neruokpuk Fm 69.26, -142.66 n=90/99																									
(Neoproterozoic-Middle Cambrian)																									
11LF13_59	307	0.9	0.0765	0.35	0.2476	1.93	12	0.1875	0.83	0.4679		1109	46	--	--	1092	43	1102	95	1102	95	101			
11LF13_43	64	4.0	0.0763	0.45	0.3019	2.1	16	0.1964	0.94	0.2687		1156	51	--	--	1143	51	1130	120	1130	120	102			
11LF13_77	169	1.5	0.0788	0.38	0.3217	2.14	14	0.201	0.9	0.361		1181	49	--	--	1160	46	1172	95	1172	95	101			
11LF13_92	97	3.5	0.0843	0.43	0.317	2.36	16	0.2075	0.95	0.4106		1214	51	--	--	1228	50	1292	97	1292	97	94			
11LF13_36	153	2.3	0.0867	0.42	0.3154	2.76	18	0.229	1	0.2933		1329	54	--	--	1347	49	1364	95	1364	95	97			
11LF13_93	531	1.4	0.0915	0.4	0.2046	3.09	20	0.252	1.1	0.6487		1451	57	--	--	1428	49	1454	84	1454	84	100			
11LF13_55	127	0.9	0.1046	0.49	0.1938	4.47	29	0.318	1.4	0.5188		1781	70	--	--	1725	53	1709	88	1709	88	104			
11LF13_53	103	1.7	0.1063	0.5	0.1848	4.52	30	0.315	1.4	0.5655		1764	69	--	--	1734	54	1741	84	1741	84	101			
11LF13_62	38	1.3	0.1098	0.6	0.3651	4.92	35	0.331	1.6	0.4066		1836	79	--	--	1796	60	1790	100	1790	100	103			
11LF13_72	194	2.9	0.1097	0.49	0.2718	4.77	31	0.322	1.4	0.5867		1800	70	--	--	1777	54	1799	81	1799	81	100			
11LF13_74	102	1.3	0.1112	0.53	0.2632	4.9	32	0.326	1.5	0.4941		1818	72	--	--	1801	53	1810	86	1810	86	100			
11LF13_7	275	1.5	0.1112	0.5	0.3044	4.48	29	0.294	1.3	0.5672		1659	65	--	--	1729	53	1816	82	1816	82	91			
11LF13_97	177	1.5	0.1113	0.51	0.299	5.02	32	0.335	1.5	0.5154		1862	72	--	--	1823	54	1821	82	1821	82	102			
11LF13_99	81	2.7	0.1115	0.53	0.2915	4.91	32	0.329	1.5	0.5587		1835	74	--	--	1801	57	1829	89	1829	89	100			
11LF13_64	63	0.7	0.1121	0.55	0.1519	5	34	0.325	1.5	0.5226		1814	74	--	--	1807	58	1832	88	1832	88	99			
11LF13_47	52	1.4	0.1124	0.59	0.103	5.11	36	0.339	1.6	0.5088		1881	77	--	--	1853	63	1837	99	1837	99	102			
11LF13_3	209	1.9	0.1129	0.51	0.3096	5.09	33	0.329	1.5	0.5677		1831	71	--	--	1832	54	1842	80	1842	80	99			
11LF13_51	111	1.2	0.1122	0.53	0.2892	5.14	34	0.333	1.5	0.4861		1851	73	--	--	1838	56	1843	87	1843	87	100			
11LF13_89	36	0.7	0.1131	0.5	0.2996	5.06	32	0.33	1.5	0.5913		1841	70	--	--	1828	53	1844	79	1844	79	100			
11LF13_68	87	0.5	0.1137	0.55	0.225	5.01	33	0.327	1.5	0.4772		1822	72	--	--	1817	57	1848	89	1848	89	99			
11LF13_84	90	1.7	0.1137	0.55	0.3088	4.87	32	0.323	1.5	0.3893		1801	72	--	--	1796	56	1849	87	1849	87	97			
11LF13_45	366	3.2	0.113	0.5	0.1027	5.28	34	0.344	1.5	0.671		1906	72	--	--	1866	54	1849	79	1849	79	103			
11LF13_19	115	1.7	0.1132	0.53	0.2266	5.21	34	0.332	1.5	0.5329		1847	73	--	--	1852	55	1850	85	1850	85	100			
11LF13_58	181	3.1	0.1137	0.52	0.235	5.25	34	0.338	1.5	0.5794		1882	72	--	--	1858	55	1856	83	1856	83	101			
11LF13_17	156	1.6	0.1144	0.52	0.2778	5.49	35	0.354	1.6	0.5473		1952	76	--	--	1906	58	1867	83	1867	83	105			

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	± (%)	error corr.	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
				206Pb	207Pb	206Pb							206Pb*	206Pb	207Pb	206Pb	207Pb	206Pb	207Pb		
				(ppm)	(%)	corr.							(Ma)	238U	(Ma)	235U	(Ma)	207Pb	(Ma)		
11LF13_33	33	1.2	0.1142	0.6	0.3191	5.42	38	0.339	1.7	0.5474	1879	83	--	--	1886	62	1868	96	1868	96	101
11LF13_9	332	4.4	0.1153	0.62	0.2473	5.19	37	0.331	1.6	0.4096	1841	79	--	--	1852	61	1871	96	1871	96	98
11LF13_6	194	1.4	0.1155	0.52	0.177	5.33	34	0.334	1.5	0.5865	1861	72	--	--	1872	55	1886	78	1886	78	99
11LF13_11	63	0.8	0.1168	0.59	0.2962	5.51	37	0.343	1.6	0.4072	1897	77	--	--	1897	58	1895	91	1895	91	100
11LF13_15	113	2.6	0.1166	0.54	0.2205	5.55	36	0.348	1.6	0.5922	1923	76	--	--	1915	56	1900	83	1900	83	101
11LF13_95	53	0.8	0.1182	0.59	0.231	5.43	38	0.342	1.6	0.5608	1888	79	--	--	1883	60	1902	94	1902	94	99
11LF13_1	149	1.0	0.1166	0.53	0.1786	5.54	36	0.346	1.6	0.6141	1912	75	--	--	1905	57	1905	84	1905	84	100
11LF13_91	54	1.2	0.1172	0.57	0.249	5.29	36	0.333	1.6	0.5174	1850	75	--	--	1865	57	1906	91	1906	91	97
11LF13_4	269	1.4	0.1168	0.52	0.3317	5.45	35	0.338	1.5	0.6005	1877	73	--	--	1891	54	1912	80	1912	80	98
11LF13_98	218	1.9	0.1166	0.52	0.3064	5.48	35	0.351	1.6	0.5839	1937	74	--	--	1898	55	1913	81	1913	81	101
11LF13_41	112	1.2	0.1173	0.55	0.1762	5.73	38	0.355	1.6	0.5184	1961	77	--	--	1929	57	1913	84	1913	84	103
11LF13_78	302	3.0	0.1176	0.52	0.2957	5.47	35	0.342	1.5	0.6105	1896	74	--	--	1896	54	1922	80	1922	80	99
11LF13_79	387	2.5	0.1176	0.52	0.096	5.14	33	0.324	1.5	0.7982	1807	72	--	--	1844	55	1923	79	1923	79	94
11LF13_57	57	0.8	0.1197	0.63	0.1421	5.23	37	0.327	1.6	0.5297	1819	76	--	--	1849	59	1925	97	1925	97	94
11LF13_31	53	0.6	0.1186	0.6	0.1562	5.82	40	0.358	1.7	0.5365	1965	80	--	--	1945	61	1929	87	1929	87	102
11LF13_46	71	1.0	0.1181	0.57	0.1897	5.81	39	0.358	1.7	0.5165	1970	78	--	--	1944	59	1938	86	1938	86	102
11LF13_81	40	0.9	0.1224	0.7	0.1332	5.44	41	0.334	1.6	0.4523	1857	77	--	--	1875	65	1960	100	1960	100	95
11LF13_83	49	1.0	0.1198	0.59	0.326	5.6	38	0.34	1.6	0.5072	1888	77	--	--	1919	59	1965	89	1965	89	96
11LF13_29	85	0.9	0.1219	0.58	0.2116	6.22	41	0.371	1.7	0.5552	2037	78	--	--	2004	57	1976	86	1976	86	103
11LF13_35	121	2.2	0.124	0.57	0.3184	6.31	41	0.371	1.7	0.5319	2032	79	--	--	2017	57	2007	85	2007	85	101
11LF13_52	101	0.6	0.1242	0.58	0.2047	6.34	42	0.377	1.7	0.6044	2060	80	--	--	2023	57	2015	85	2015	85	102
11LF13_24	160	2.1	0.1245	0.56	0.2226	6.48	42	0.379	1.7	0.6023	2072	79	--	--	2042	57	2022	77	2022	77	102
11LF13_94	145	1.0	0.1251	0.58	0.2995	5.18	34	0.309	1.4	0.6166	1734	70	--	--	1848	57	2028	81	2028	81	86
11LF13_37	231	2.5	0.1258	0.56	0.3015	6.51	41	0.377	1.7	0.648	2057	79	--	--	2044	55	2044	81	2044	81	101
11LF13_56	295	2.7	0.1263	0.56	0.2689	6.49	41	0.379	1.7	0.6556	2068	78	--	--	2045	56	2046	81	2046	81	101
11LF13_90	44	1.8	0.1288	0.65	0.2718	6.72	46	0.383	1.8	0.4632	2093	85	--	--	2070	60	2072	89	2072	89	101
11LF13_50	80	0.9	0.1295	0.61	0.1754	6.7	44	0.381	1.8	0.5876	2080	82	--	--	2069	59	2076	85	2076	85	100
11LF13_49	445	2.7	0.1281	0.56	0.1474	6.4	42	0.37	1.7	0.8716	2030	82	--	--	2034	57	2077	79	2077	79	98
11LF13_63	582	4.5	0.13	0.57	0.1484	6.11	39	0.347	1.5	0.8194	1919	75	--	--	1989	55	2101	75	2101	75	91
11LF13_75	44	1.5	0.1306	0.66	0.32	6.62	45	0.378	1.8	0.454	2063	84	--	--	2057	59	2113	86	2113	86	98
11LF13_10	394	1.7	0.133	0.58	0.0129	6.79	44	0.372	1.7	0.8731	2042	79	--	--	2083	56	2133	76	2133	76	96

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	± (%)	error corr.	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
				206Pb	207Pb	238U							206Pb*	207Pb	238U	206Pb	207Pb	238U			
				(ppmm)	(%)		(Ma)	(%)		(Ma)	(%)		(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)			
11LF13_76	65	1.6	0.1316	0.64	0.2635	6.72	45	0.373	1.7	0.5088	2041	81	--	--	2075	59	2135	84	2135	84	96
11LF13_21	189	1.3	0.1359	0.61	0.3211	7.91	51	0.419	1.9	0.5742	2258	84	--	--	2218	57	2179	79	2179	79	104
11LF13_88	203	2.7	0.1365	0.61	0.177	7.14	46	0.391	1.7	0.6396	2128	81	--	--	2131	58	2180	76	2180	76	98
11LF13_67	90	1.1	0.1422	0.69	0.2822	7.73	52	0.398	1.9	0.5553	2161	86	--	--	2197	60	2244	85	2244	85	96
11LF13_23	167	1.3	0.1426	0.63	0.1232	8.67	56	0.441	2	0.7004	2357	86	--	--	2304	60	2264	78	2264	78	104
11LF13_70	228	1.0	0.1443	0.64	0.0553	6.72	45	0.342	1.6	0.8799	1902	80	--	--	2077	58	2275	77	2275	77	84
11LF13_73	136	1.5	0.1473	0.66	0.1515	8.59	56	0.432	1.9	0.6445	2315	88	--	--	2292	59	2310	79	2310	79	100
11LF13_61	215	14.8	0.1481	0.66	0.3166	8.79	56	0.442	2	0.6371	2364	90	--	--	2313	58	2319	76	2319	76	102
11LF13_86	127	1.4	0.1481	0.67	0.3525	8.56	55	0.429	1.9	0.5423	2302	87	--	--	2289	58	2329	79	2329	79	99
11LF13_28	46	3.4	0.149	0.72	0.2877	8.95	60	0.439	2.1	0.5444	2339	93	--	--	2331	64	2330	84	2330	84	100
11LF13_8	158	1.9	0.1497	0.67	0.2871	9.12	58	0.445	2	0.6566	2371	88	--	--	2350	59	2340	74	2340	74	101
11LF13_54	97	1.3	0.1505	0.68	0.2977	9.17	59	0.45	2	0.6027	2394	90	--	--	2355	59	2361	78	2361	78	101
11LF13_22	84	0.6	0.1526	0.7	0.1376	9.43	62	0.448	2.1	0.6806	2395	90	--	--	2376	60	2372	77	2372	77	101
11LF13_34	275	2.1	0.1567	0.69	0.2394	9.85	62	0.458	2	0.7218	2426	89	--	--	2419	59	2416	75	2416	75	100
11LF13_5	35	1.4	0.1586	0.77	0.2789	10.06	69	0.465	2.3	0.5834	2460	100	--	--	2439	65	2437	85	2437	85	101
11LF13_2	161	1.2	0.1604	0.72	0.186	10.05	64	0.458	2.1	0.693	2430	91	--	--	2442	58	2457	74	2457	74	99
11LF13_25	117	2.2	0.1682	0.78	-0.268	11.26	75	0.485	2.2	0.702	2543	96	--	--	2531	60	2531	74	2531	74	100
11LF13_100	207	1.7	0.17	0.75	0.3011	11.22	71	0.493	2.2	0.7558	2585	95	--	--	2540	61	2556	72	2556	72	101
11LF13_65	212	4.6	0.1703	0.75	0.3392	11.12	70	0.485	2.1	0.701	2548	94	--	--	2534	59	2561	74	2561	74	99
11LF13_85	43	0.8	0.1705	0.83	0.1784	11.13	76	0.478	2.3	0.6136	2509	99	--	--	2523	64	2567	78	2567	78	98
11LF13_27	272	1.3	0.1716	0.75	0.279	12.17	77	0.515	2.3	0.7592	2678	97	--	--	2618	59	2572	73	2572	73	104
11LF13_16	111	2.0	0.1747	0.78	0.323	12.59	81	0.526	2.4	0.7178	2720	100	--	--	2647	60	2602	73	2602	73	105
11LF13_66	41	1.9	0.1779	0.84	0.226	11.6	78	0.484	2.3	0.6306	2544	98	--	--	2559	63	2627	78	2627	78	97
11LF13_18	47	1.0	0.1791	0.84	0.2644	12.52	83	0.509	2.4	0.6473	2660	100	--	--	2641	63	2638	78	2638	78	101
11LF13_12	58	2.0	0.1782	0.9	0.3328	11.99	85	0.49	2.7	0.6693	2560	120	--	--	2597	67	2639	82	2639	82	97
11LF13_26	318	5.7	0.1793	0.78	0.3025	12.82	81	0.517	2.3	0.757	2690	99	--	--	2666	59	2644	73	2644	73	102
11LF13_69	159	1.3	0.1795	0.8	0.2714	11.53	73	0.478	2.1	0.6718	2518	93	--	--	2573	61	2645	74	2645	74	95
11LF13_48	176	3.7	0.1836	0.81	0.2801	12.63	80	0.51	2.3	0.7325	2657	95	--	--	2657	59	2682	72	2682	72	99
11LF13_60	61	1.6	0.1843	0.84	0.2356	12.96	85	0.522	2.4	0.7255	2710	100	--	--	2672	61	2684	77	2684	77	101
11LF13_71	83	1.9	0.1854	0.84	0.3286	13.15	85	0.522	2.4	0.6607	2710	100	--	--	2686	60	2707	75	2707	75	100
11LF13_30	54	1.3	0.1882	0.87	0.2934	13.94	91	0.536	2.5	0.6683	2770	100	--	--	2747	60	2723	78	2723	78	102

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 238U	± corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)			
				207Pb (%)	± corr.	235U (%)	238U (%)			206Pb 238U	± corr.	206Pb (Ma)	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)				
11LF13_80	111	1.9	0.1891	0.84	0.3108	13.48	86	0.527	2.4	0.7051	2726	99	--	--	2715	59	2736	72	2736	72	100		
11LF13_42	114	0.8	0.1977	0.88	0.2349	15.33	98	0.569	2.6	0.7303	2900	110	--	--	2833	60	2807	71	2807	71	103		
11LF13_32	62	1.1	0.2107	0.96	0.2393	17	110	0.582	2.7	0.6996	2960	110	--	--	2928	61	2909	73	2909	73	102		
11LF13_87	142	1.5	0.1098	0.5	0.2535	5.11	33	0.342	1.6	0.5788	1893	74	--	--	1833	55	1799	82	1799	82	105		
11LF13_39	85	2.1	0.1687	0.76	0.2653	12.11	79	0.517	2.3	0.6507	2686	99	--	--	2612	61	2548	77	2548	77	105		
11LF13_38	50	0.8	0.1129	0.6	0.2343	5.6	40	0.357	1.8	0.5785	1960	84	--	--	1909	61	1851	94	1851	94	106		
11LF13_44	131	5.3	0.1111	0.51	0.2258	5.37	35	0.35	1.6	0.5662	1932	74	--	--	1877	55	1824	81	1824	81	106		
11LF13_14	217	1.9	0.1116	0.5	0.2498	5.38	34	0.352	1.6	0.6075	1943	73	--	--	1883	56	1822	79	1822	79	107		
11LF13_20	28	1.8	0.136	0.73	0.2061	8.57	64	0.459	2.4	0.5792	2430	110	--	--	2274	69	2153	97	2153	97	113		
11LF13_40	44	2.2	0.1736	0.83	0.2288	14.67	98	0.613	2.9	0.5913	3070	120	--	--	2788	62	2583	79	2583	79	119		
11LF13_82	42	3613.8	0.1085	0.56	0.0629	5.84	42	0.396	2	0.6623	2147	90	--	--	1939	61	1762	95	1762	95	122		
11LF13_96	519	1.3	0.1228	0.54	0.1958	4.48	29	0.274	1.3	0.8595	1557	66	--	--	1725	55	2000	76	2000	76	78		
Neruokpuk Fm 69.36, -142.86 n=27/101																							
(Neoproterozoic-Middle Cambrian)																							
28LF13_72	613	2.4	0.1016	0.47	-0.041	3.37	24	0.243	1.3	0.8527	1399	65	--	--	1498	57	1653	85	1653	85	85		
28LF13_1	45	1.3	0.1097	0.58	0.1831	4.96	37	0.328	1.7	0.4749	1828	82	--	--	1803	63	1793	99	1793	99	102		
28LF13_7	147	1.5	0.1105	0.53	0.258	5.07	35	0.335	1.7	0.4832	1865	79	--	--	1833	59	1808	87	1808	87	103		
28LF13_33	513	1.5	0.1114	0.52	-0.277	4.33	37	0.289	2	0.9612	1610	100	--	--	1657	74	1820	85	1820	85	88		
28LF13_10	56	1.3	0.1154	0.57	0.2625	5.37	39	0.339	1.8	0.5933	1883	86	--	--	1878	60	1873	88	1873	88	101		
28LF13_4	73	0.6	0.1142	0.57	0.2422	5.13	37	0.329	1.7	0.5023	1830	80	--	--	1841	61	1877	89	1877	89	97		
28LF13_9	72	1.3	0.1147	0.57	0.3153	5.5	39	0.347	1.8	0.5113	1918	84	--	--	1893	60	1880	90	1880	90	102		
28LF13_95	285	3.4	0.115	0.53	0.1705	5.59	39	0.353	1.8	0.7596	1944	86	--	--	1916	59	1883	86	1883	86	103		
28LF13_39	321	3.1	0.1158	0.57	0.7298	4.98	35	0.31	1.7	0.5339	1746	80	--	--	1813	60	1884	88	1884	88	93		
28LF13_61	518	3.3	0.1159	0.53	-0.045	4.36	31	0.275	1.4	0.8491	1570	72	--	--	1704	57	1891	82	1891	82	83		
28LF13_29	50	1.1	0.115	0.61	0.3038	5.53	40	0.356	1.8	0.3595	1964	86	--	--	1895	63	1892	94	1892	94	104		
28LF13_6	60	0.5	0.1149	0.58	0.2265	5.51	40	0.347	1.8	0.5435	1922	85	--	--	1903	64	1895	91	1895	91	101		
28LF13_2	87	1.6	0.1167	0.58	0.3746	5.54	39	0.344	1.7	0.4064	1903	83	--	--	1903	61	1902	88	1902	88	100		
28LF13_18	31	3.2	0.1182	0.63	0.3405	5.75	43	0.366	2	0.457	2008	94	--	--	1938	68	1923	97	1923	97	104		
28LF13_19	202	2.4	0.12	0.56	0.2487	5.99	41	0.372	1.8	0.6019	2036	86	--	--	1976	61	1951	83	1951	83	104		
28LF13_16	38	2.0	0.1211	0.64	0.2853	6.23	46	0.373	1.9	0.4124	2040	91	--	--	2010	65	1956	93	1956	93	104		

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 235U	206Pb 238U	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)
				207Pb (%)	± corr.	206Pb (%)	207Pb (%)				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	206Pb (Ma)	Best age (Ma)	
28LF13_64	23	2.3	0.1232	0.77	0.1727	5.25	43	0.316	1.8	0.5001	1763	86	--	--	1861	73	1980	120	1980	120	89
28LF13_8	81	1.2	0.126	0.61	0.2985	6.58	47	0.379	1.9	0.5531	2071	90	--	--	2054	63	2042	88	2042	88	101
28LF13_65	287	1.9	0.127	0.59	-0.155	6.76	49	0.389	2.1	0.9111	2117	98	--	--	2076	65	2057	80	2057	80	103
28LF13_14	42	0.5	0.1443	0.75	0.1395	8.54	63	0.434	2.2	0.5219	2320	100	--	--	2293	68	2268	90	2268	90	102
28LF13_12	124	1.7	0.1458	0.68	0.2804	8.85	62	0.442	2.2	0.6559	2358	98	--	--	2322	64	2296	79	2296	79	103
28LF13_17	425	2.6	0.1472	0.69	0.2622	7.78	54	0.38	1.9	0.6676	2080	87	--	--	2203	63	2315	80	2315	80	90
28LF13_76	136	2.1	0.1515	0.73	-0.231	9.28	69	0.448	2.3	0.8271	2390	100	--	--	2358	69	2362	83	2362	83	101
28LF13_82	154	2.0	0.1688	0.78	0.2143	11.77	82	0.51	2.6	0.7576	2660	110	--	--	2587	65	2546	78	2546	78	104
28LF13_60	180	1.2	0.1711	0.79	0.2439	11.81	82	0.506	2.5	0.7097	2640	110	--	--	2590	65	2570	77	2570	77	103
28LF13_56	105	0.7	0.1726	0.81	0.1663	11.87	85	0.506	2.7	0.793	2640	110	--	--	2592	67	2574	80	2574	80	103
28LF13_13	125	1.2	0.1963	0.92	0.0964	11.24	79	0.414	2.1	0.8154	2233	99	--	--	2542	65	2792	75	2792	75	80
28LF13_24	23	0.4	0.1894	0.95	0.2245	14.5	110	0.567	3.1	0.6963	2890	120	--	--	2776	66	2738	82	2738	82	106
28LF13_22	75	2.2	0.1299	0.64	0.0854	7.22	53	0.409	2.1	0.6295	2215	98	--	--	2142	65	2096	86	2096	86	106
28LF13_63	38	0.9	0.1183	0.64	0.1657	5.94	44	0.371	2	0.5209	2033	92	--	--	1962	68	1919	97	1919	97	106
28LF13_35	116	1.3	0.1155	0.55	0.1431	5.66	40	0.363	1.8	0.5806	1998	86	--	--	1925	61	1885	88	1885	88	106
28LF13_5	112	3.2	0.0745	0.4	0.2217	1.89	14	0.1849	0.93	0.372	1092	51	--	--	1073	50	1030	110	1030	110	106
28LF13_21	133	3.1	0.1426	0.67	0.2173	8.73	61	0.451	2.3	0.6804	2400	100	--	--	2308	63	2263	84	2263	84	106
28LF13_15	38	0.9	0.1102	0.6	0.2524	5.2	39	0.348	1.9	0.4737	1920	89	--	--	1844	65	1810	100	1810	100	106
28LF13_23	112	2.0	0.1174	0.56	0.1426	5.92	42	0.37	1.8	0.6184	2038	88	--	--	1966	62	1920	82	1920	82	106
28LF13_89	45	12.9	0.1225	0.63	0.08	6.45	49	0.385	2.1	0.6781	2096	98	--	--	2041	67	1969	95	1969	95	106
28LF13_91	66	1.8	0.1385	0.67	0.1998	8.34	60	0.439	2.3	0.6281	2340	100	--	--	2268	63	2198	85	2198	85	106
28LF13_52	101	1.5	0.1126	0.55	0.1697	5.55	39	0.359	1.8	0.5863	1978	88	--	--	1902	62	1846	90	1846	90	107
28LF13_90	274	1.6	0.1104	0.51	0.0104	5.27	38	0.351	1.9	0.8694	1935	90	--	--	1870	63	1802	82	1802	82	107
28LF13_85	72	1.5	0.1738	0.83	0.2437	12.65	89	0.537	2.8	0.7009	2780	120	--	--	2654	66	2587	79	2587	79	107
28LF13_99	83	1.4	0.1162	0.57	0.0886	5.95	43	0.372	1.9	0.5468	2039	89	--	--	1965	61	1892	90	1892	90	108
28LF13_54	27	1.7	0.1505	0.78	0.1449	9.9	75	0.482	2.6	0.6418	2530	110	--	--	2414	69	2346	88	2346	88	108
28LF13_62	179	1.4	0.1167	0.55	0.2256	6	42	0.377	1.9	0.5897	2059	88	--	--	1973	59	1909	84	1909	84	108
28LF13_70	135	1.8	0.1736	0.8	0.1543	12.71	90	0.544	2.8	0.8004	2800	120	--	--	2657	66	2593	78	2593	78	108
28LF13_73	61	2.0	0.1514	0.74	0.2195	10.05	72	0.486	2.5	0.6339	2550	110	--	--	2444	66	2359	83	2359	83	108
28LF13_68	139	1.9	0.1156	0.54	-0.028	5.87	43	0.372	2	0.8233	2043	94	--	--	1961	63	1888	85	1888	85	108
28LF13_48	52	1.5	0.1139	0.58	0.1848	5.61	41	0.365	1.9	0.5537	2003	89	--	--	1913	62	1849	91	1849	91	108

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 238U	± corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)	
				207Pb (%)	235U (%)	206Pb 238U	± corr.			206Pb 238U	± corr.	206Pb 238U	± corr.	206Pb* (Ma)	238U (Ma)	207Pb 235U	± corr.	206Pb 207Pb	± corr.		
28LF13_97	69	2.0	0.1173	0.58	0.1881	6.09	44	0.378	1.9	0.5854	2068	91	—	—	1980	61	1909	91	1909	91	108
28LF13_34	93	0.7	0.1197	0.58	0.1782	6.4	46	0.389	2	0.5745	2117	91	—	—	2036	61	1951	89	1951	89	109
28LF13_55	57	4.0	0.0887	0.47	0.0216	3.21	24	0.262	1.4	0.6083	1498	73	—	—	1446	60	1380	110	1380	110	109
28LF13_42	129	2.7	0.1597	0.74	0.2049	11.13	77	0.513	2.6	0.6888	2670	110	—	—	2533	66	2458	79	2458	79	109
28LF13_32	211	2.7	0.1746	0.8	0.3213	13	89	0.549	2.7	0.7055	2830	110	—	—	2681	67	2600	77	2600	77	109
28LF13_26	192	1.9	0.0826	0.4	0.213	2.64	19	0.236	1.2	0.4687	1365	61	—	—	1313	52	1251	97	1251	97	109
28LF13_45	47	2.3	0.1149	0.59	0.2193	5.88	43	0.373	2	0.4968	2047	91	—	—	1950	64	1876	94	1876	94	109
28LF13_80	68	2.2	0.1505	0.72	0.1095	10.01	71	0.49	2.5	0.6519	2570	110	—	—	2434	64	2352	81	2352	81	109
28LF13_36	39	2.5	0.184	0.92	0.0885	14.4	100	0.579	3	0.6266	2940	120	—	—	2768	67	2690	82	2690	82	109
28LF13_96	38	0.9	0.1151	0.62	0.1516	5.84	44	0.372	2	0.6114	2028	95	—	—	1942	65	1852	99	1852	99	110
28LF13_47	72	1.4	0.1142	0.57	0.1765	5.78	42	0.374	2	0.6281	2046	92	—	—	1938	64	1868	91	1868	91	110
28LF13_58	68	2.9	0.1159	0.57	0.1543	5.97	43	0.38	1.9	0.592	2073	91	—	—	1977	62	1892	85	1892	85	110
28LF13_59	68	1.4	0.1218	0.6	0.2479	6.55	47	0.398	2	0.4791	2155	93	—	—	2048	62	1963	89	1963	89	110
28LF13_83	76	2.2	0.1215	0.59	0.1013	6.71	48	0.403	2.1	0.6891	2179	95	—	—	2070	62	1975	88	1975	88	110
28LF13_88	88	2.4	0.1744	0.82	0.171	13.45	95	0.562	2.9	0.6667	2870	120	—	—	2708	65	2597	79	2597	79	111
28LF13_98	151	1.3	0.1161	0.54	0.1828	6.15	43	0.386	2	0.7145	2102	92	—	—	1995	60	1899	83	1899	83	111
28LF13_46	25	2.3	0.1856	0.93	0.1719	14.7	110	0.59	3.2	0.7178	2980	130	—	—	2800	71	2688	85	2688	85	111
28LF13_40	87	1.6	0.1594	0.77	0.0842	11.41	82	0.526	2.8	0.7223	2720	110	—	—	2561	64	2445	80	2445	80	111
28LF13_84	38	1.4	0.1134	0.6	0.2599	5.89	44	0.378	2	0.5206	2063	94	—	—	1954	66	1844	95	1844	95	112
28LF13_81	47	0.9	0.1176	0.6	0.3153	6.22	45	0.39	2.1	0.5492	2120	96	—	—	2005	64	1894	95	1894	95	112
28LF13_71	45	0.8	0.1301	0.66	0.2523	7.75	57	0.438	2.3	0.5699	2340	100	—	—	2194	67	2088	89	2088	89	112
28LF13_57	55	1.2	0.1125	0.57	0.1322	5.85	43	0.378	2	0.5829	2062	91	—	—	1953	63	1839	91	1839	91	112
28LF13_50	244	0.9	0.1128	0.53	0.2503	5.77	40	0.377	1.9	0.5716	2067	90	—	—	1940	60	1840	85	1840	85	112
28LF13_43	96	1.2	0.1173	0.57	0.1967	6.24	45	0.398	2.1	0.6074	2156	95	—	—	2010	63	1919	87	1919	87	112
28LF13_53	87	1.2	0.1729	0.81	0.3995	13.36	93	0.571	2.9	0.6169	2910	120	—	—	2705	65	2587	78	2587	78	112
28LF13_49	120	1.6	0.1494	0.69	0.0413	10.11	71	0.502	2.5	0.7951	2630	110	—	—	2445	63	2337	81	2337	81	113
28LF13_25	91	1.0	0.11	0.54	0.1128	5.53	40	0.369	1.9	0.6252	2021	88	—	—	1898	62	1795	87	1795	87	113
28LF13_31	221	3.3	0.1045	0.49	0.1665	4.98	35	0.35	1.7	0.6507	1934	83	—	—	1815	59	1710	88	1710	88	113
28LF13_41	194	2.6	0.1656	0.78	0.1243	12.25	86	0.551	2.8	0.69	2840	120	—	—	2626	66	2509	79	2509	79	113
28LF13_38	121	2.3	0.1055	0.52	0.1387	4.99	36	0.351	1.8	0.5169	1943	85	—	—	1814	60	1716	90	1716	90	113
28LF13_27	44	0.6	0.1135	0.6	0.1737	5.85	44	0.382	2	0.5212	2093	95	—	—	1953	62	1844	93	1844	93	114

Analysis	U (pmm)	U/Th	206Pb 207Pb	± (%)	error corr.	Isotope ratios						206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
						207Pb 235U	± (%)	206Pb 238U	± (%)	error corr.	206Pb 238U				206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	206Pb 207Pb	± (Ma)		
28LF13_87	69	1.6	0.228	1.1	0.2347	22	160	0.708	3.6	0.6701	3450	130	—	—	3178	69	3034	76	3034	76	3034	76	114	
28LF13_37	31	0.7	0.1248	0.67	0.2692	7.08	53	0.429	2.3	0.4395	2300	100	—	—	2123	67	2022	96	2022	96	2022	96	114	
28LF13_79	96	1.6	0.1491	0.71	0.1704	10.47	75	0.509	2.6	0.7156	2660	110	—	—	2472	65	2337	78	2337	78	2337	78	114	
28LF13_86	43	1.2	0.1101	0.58	0.3127	5.66	41	0.376	2	0.4504	2052	93	—	—	1928	63	1797	96	1797	96	1797	96	114	
28LF13_75	94	1.6	0.1108	0.54	0.2473	5.7	40	0.378	1.9	0.5088	2065	94	—	—	1926	61	1803	89	1803	89	1803	89	115	
28LF13_44	44	2.2	0.1867	0.91	0.1134	15.8	120	0.625	3.3	0.713	3130	130	—	—	2859	71	2712	82	2712	82	2712	82	115	
28LF13_100	94	2.4	0.1464	0.71	0.1269	10.2	73	0.512	2.7	0.6822	2660	120	—	—	2454	68	2299	82	2299	82	2299	82	116	
28LF13_67	104	1.1	0.1103	0.53	0.1362	5.8	41	0.383	1.9	0.6219	2089	90	—	—	1941	61	1799	90	1799	90	1799	90	116	
28LF13_74	10	0.2	0.1159	0.83	0.215	6.19	56	0.397	2.4	0.5203	2140	110	—	—	1964	78	1840	130	1840	130	1840	130	116	
28LF13_93	81	9219.9	0.1119	0.55	0.2875	6.1	44	0.402	2.1	0.6291	2176	94	—	—	1983	63	1826	87	1826	87	1826	87	119	
28LF13_94	17	2417.3	0.11	0.65	0.1892	5.96	49	0.393	2.3	0.6266	2120	110	—	—	1962	72	1770	110	1770	110	1770	110	120	
28LF13_20	19	3454.9	0.1101	0.67	0.2311	6.02	49	0.395	2.3	0.5252	2150	100	—	—	1952	69	1770	110	1770	110	1770	110	121	
28LF13_11	95	98.7	0.111	0.53	0.1709	6.28	45	0.41	2.1	0.6838	2208	96	—	—	2010	63	1813	88	1813	88	1813	88	122	
28LF13_92	17	5206.0	0.1115	0.7	0.1705	6.24	53	0.407	2.4	0.5695	2190	110	—	—	1981	73	1790	120	1790	120	1790	120	122	
28LF13_77	22	7.1	0.1126	0.65	0.2471	6.53	52	0.425	2.4	0.4631	2290	110	—	—	2046	73	1850	110	1850	110	1850	110	124	
28LF13_66	13	1514.4	0.1104	0.73	0.2121	6.4	55	0.428	2.6	0.5495	2290	120	—	—	2009	73	1760	120	1760	120	1760	120	130	
28LF13_3	2617	1.0	0.251	1.2	0.3215	2.39	16	0.0699	0.34	0.5276	436	21	328	22	1239	49	3194	72	328	22	328	22	10	
28LF13_51	747	0.6	0.0998	0.46	0.0646	1.59	11	0.1175	0.6	0.7941	715	34	683	34	963	43	1627	82	683	34	42	34	42	
28LF13_78	59	1.0	0.213	1.9	-0.654	10.4	140	0.317	1.8	0.9142	1767	86	—	—	2272	96	2720	130	2720	130	2720	130	65	
28LF13_69	489	0.8	0.1446	0.66	0.021	5.43	37	0.275	1.4	0.7426	1566	68	—	—	1888	59	2281	79	2281	79	2281	79	69	
28LF13_28	60	1.3	0.1121	0.55	0.2407	5.36	39	0.351	1.8	0.5743	1937	86	—	—	1877	60	1842	93	1842	93	1842	93	105	
12JT11_103	187	1.3	0.1239	0.57	0.3035	4.75	31	0.282	1.3	0.4621	1601	63	—	—	1774	54	2006	80	2006	80	2006	80	80	
12JT11_7	1375	3.5	0.0782	0.34	0.2114	1.85	42	0.1723	0.75	0.6048	1024	44	—	—	1062	41	1152	87	1152	87	1152	87	89	

Clarence River group 69.28, -141.73 n=77/100
(Ordovician-Lower Devonian?)

12JT22_8	327	2.6	0.057	0.16	0.2757	0.567	1.7	0.0721	0.14	0.2683	448.7	8.2	448	9	456	11	495	64	448	9	NA
12JT22_64	227	1.5	0.0555	0.16	0.2813	0.573	1.8	0.0752	0.14	0.2326	467.2	8.8	468	9	460	12	424	66	468	9	NA
12JT22_89	159	1.7	0.0553	0.17	0.2867	0.594	1.9	0.0783	0.17	0.4125	486.4	9.8	487	10	474	12	417	69	487	10	NA
12JT22_13	543	3.1	0.0684	0.19	-0.165	1.267	4.5	0.1333	0.34	0.9104	807	19	804	20	831	20	876	57	804	20	92
12JT22_65	331	2.8	0.0714	0.2	-0.364	1.383	6.4	0.139	0.51	0.9659	836	29	834	30	870	27	969	56	834	30	86

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 238U	± corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)	
				207Pb (%)	± corr.	235U (%)	206Pb 238U			206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	206Pb (Ma)			
12JT22_82	371	4.8	0.0706	0.19	-0.163	1.419	4.4	0.1454	0.32	0.8854	874	18	872	19	895	19	947	54	872	19	92
12JT22_68	286	1.6	0.0712	0.2	0.3175	1.591	4.6	0.1617	0.31	0.4598	966	17	966	17	967	18	964	54	966	17	100
12JT22_12	101	2.1	0.0743	0.24	0.3157	1.705	6.3	0.1657	0.48	0.691	987	27	986	27	1008	24	1045	66	986	27	94
12JT22_57	569	14.0	0.0717	0.19	0.225	1.642	4.7	0.1657	0.32	0.7572	988	18	989	18	986	18	976	54	989	18	101
12JT22_91	190	1.4	0.0717	0.2	0.156	1.634	4.9	0.1663	0.34	0.6324	992	19	992	19	984	19	976	57	992	19	102
12JT22_95	701	0.6	0.0711	0.19	0.3208	1.638	4.6	0.168	0.31	0.538	1001	17	--	--	985	18	960	54	960	54	104
12JT22_98	302	4.4	0.0724	0.2	-0.083	1.694	5	0.1701	0.33	0.691	1013	18	--	--	1006	19	998	56	998	56	102
12JT22_62	401	7.2	0.0738	0.2	-0.171	1.725	5.3	0.1682	0.32	0.3607	1002	18	--	--	1016	19	1029	55	1029	55	97
12JT22_55	239	2.9	0.0737	0.2	0.2487	1.787	5.2	0.1762	0.33	0.4788	1046	18	--	--	1040	19	1031	56	1031	56	101
12JT22_10	330	5.1	0.074	0.2	0.0394	1.755	5.2	0.1705	0.34	0.7869	1015	19	--	--	1028	20	1038	55	1038	55	98
12JT22_37	307	4.9	0.0744	0.2	0.1079	1.749	5.1	0.1701	0.34	0.7011	1012	19	--	--	1027	19	1054	55	1054	55	96
12JT22_20	191	2.4	0.0746	0.2	0.2242	1.895	5.5	0.1838	0.35	0.481	1088	19	--	--	1080	20	1057	55	1057	55	103
12JT22_30	85	0.9	0.0757	0.22	0.1237	1.968	6.3	0.188	0.39	0.5332	1110	21	--	--	1106	21	1079	59	1079	59	103
12JT22_48	187	2.9	0.0757	0.21	0.366	1.857	5.4	0.1761	0.33	0.3115	1046	19	--	--	1066	19	1086	56	1086	56	96
12JT22_93	105	1.3	0.0764	0.22	0.1164	1.965	6.1	0.1887	0.39	0.5339	1114	21	--	--	1104	22	1099	57	1099	57	101
12JT22_51	707	5.1	0.0764	0.2	0.3548	1.854	5.2	0.1761	0.33	0.62	1046	18	--	--	1065	18	1104	52	1104	52	95
12JT22_46	388	2.6	0.0768	0.21	0.2333	1.843	5.4	0.1732	0.35	0.7285	1030	19	--	--	1060	19	1113	54	1113	54	93
12JT22_50	49	1.7	0.0776	0.24	0.1742	1.981	7.8	0.1862	0.58	0.7702	1098	32	--	--	1110	27	1137	63	1137	63	97
12JT22_71	312	1.7	0.0794	0.22	0.192	2.049	6.2	0.1875	0.37	0.4712	1107	20	--	--	1131	20	1175	54	1175	54	94
12JT22_76	33	1.0	0.08	0.27	0.2395	2.041	7.2	0.1877	0.4	0.3224	1108	22	--	--	1128	24	1177	67	1177	67	94
12JT22_92	255	2.5	0.0809	0.22	0.385	2.346	6.7	0.212	0.41	0.5442	1239	22	--	--	1226	20	1219	54	1219	54	102
12JT22_58	67	1.4	0.0848	0.32	-0.22	2.277	9.8	0.1942	0.4	0.554	1145	21	--	--	1192	28	1279	71	1279	71	90
12JT22_52	237	2.1	0.0845	0.23	0.1359	2.496	7.3	0.2137	0.43	0.7402	1248	23	--	--	1272	22	1304	53	1304	53	96
12JT22_54	586	4.5	0.0849	0.22	0.2464	2.755	7.7	0.2345	0.43	0.6343	1358	23	--	--	1344	21	1313	51	1313	51	103
12JT22_16	252	3.7	0.0861	0.23	0.0634	2.839	8.7	0.2395	0.5	0.8071	1386	26	--	--	1368	23	1338	52	1338	52	104
12JT22_78	304	2.1	0.0863	0.23	0.2516	2.844	8	0.2398	0.45	0.5421	1385	23	--	--	1367	21	1345	51	1345	51	103
12JT22_7	138	3.7	0.0869	0.24	0.2443	2.651	8.1	0.2231	0.46	0.5988	1298	24	--	--	1315	23	1354	54	1354	54	96
12JT22_49	531	3.1	0.0871	0.23	0.2993	2.887	8.1	0.2392	0.44	0.64	1382	23	--	--	1379	21	1364	50	1364	50	101
12JT22_38	700	2.6	0.0875	0.23	-0.241	2.611	7.5	0.2152	0.42	0.8926	1257	22	--	--	1303	22	1370	51	1370	51	92
12JT22_18	666	4.2	0.0896	0.24	0.1026	2.923	8.6	0.2351	0.47	0.7796	1362	24	--	--	1387	22	1415	51	1415	51	96
12JT22_3	452	2.4	0.0902	0.24	-0.368	2.667	8.4	0.2127	0.44	0.928	1243	24	--	--	1318	24	1431	52	1431	52	87

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	± (%)	error corr.	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
				206Pb	207Pb	238U							206Pb*	207Pb	206Pb	207Pb	235U	206Pb	207Pb		
				(ppm)	(%)	corr.	(Ma)	(%)	corr.	(Ma)	(%)	corr.	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)		
12JT22_63	667	2.7	0.0907	0.24	0.1604	3.157	8.8	0.2524	0.46	0.7331	1451	24	--	--	1447	22	1440	50	1440	50	101
12JT22_2	783	4.0	0.091	0.24	-0.395	2.857	9	0.2285	0.47	0.7956	1327	25	--	--	1368	24	1444	51	1444	51	92
12JT22_99	353	4.1	0.0914	0.24	-0.068	2.977	8.7	0.2381	0.46	0.8155	1376	24	--	--	1400	22	1454	51	1454	51	95
12JT22_59	140	2.1	0.0915	0.25	0.2095	3.147	9.1	0.2501	0.47	0.5244	1439	24	--	--	1444	22	1455	52	1455	52	99
12JT22_100	259	0.8	0.0923	0.25	0.3231	3.006	8.9	0.2392	0.52	0.7993	1382	27	--	--	1409	23	1474	50	1474	50	94
12JT22_85	318	2.8	0.0924	0.24	0.07	3.202	9.3	0.2526	0.5	0.7793	1451	26	--	--	1456	23	1474	51	1474	51	98
12JT22_23	279	3.2	0.094	0.25	0.3107	3.56	10	0.2731	0.53	0.7351	1556	27	--	--	1542	23	1509	50	1509	50	103
12JT22_74	386	2.6	0.0953	0.25	-0.503	3.056	9.9	0.2328	0.51	0.932	1348	27	--	--	1418	25	1533	50	1533	50	88
12JT22_31	63	2.3	0.0955	0.27	0.2767	3.41	10	0.2574	0.51	0.4231	1477	26	--	--	1509	24	1538	53	1538	53	96
12JT22_56	717	1.7	0.0978	0.26	-0.315	3.89	12	0.2865	0.61	0.9485	1623	31	--	--	1610	25	1581	49	1581	49	103
12JT22_69	154	1.2	0.0988	0.26	0.1559	3.66	11	0.2668	0.55	0.7936	1525	28	--	--	1561	24	1601	50	1601	50	95
12JT22_47	99	1.8	0.0989	0.27	0.1527	3.78	12	0.2755	0.63	0.7516	1570	32	--	--	1587	26	1607	53	1607	53	98
12JT22_33	174	1.1	0.0993	0.27	0.1602	4.1	12	0.2998	0.58	0.6553	1690	29	--	--	1655	24	1612	49	1612	49	105
12JT22_45	209	1.8	0.1001	0.27	0.156	3.38	10	0.2435	0.54	0.7896	1404	28	--	--	1500	24	1626	51	1626	51	86
12JT22_90	490	7.3	0.1003	0.26	0.208	4.02	11	0.2921	0.55	0.7019	1652	27	--	--	1638	23	1629	48	1629	48	101
12JT22_60	339	2.7	0.1015	0.27	0.191	4.07	11	0.2906	0.53	0.5867	1645	27	--	--	1649	23	1651	48	1651	48	100
12JT22_19	91	1.0	0.1021	0.28	0.2651	3.86	11	0.274	0.57	0.6361	1560	29	--	--	1605	24	1660	52	1660	52	94
12JT22_28	287	1.5	0.102	0.27	0.3638	4.06	11	0.2873	0.55	0.6451	1628	28	--	--	1646	23	1662	48	1662	48	98
12JT22_25	273	0.7	0.1038	0.31	0.1172	3.38	14	0.2317	0.72	0.5153	1339	38	--	--	1487	32	1678	47	1678	47	80
12JT22_73	198	2.5	0.1057	0.28	0.1704	4.48	13	0.3072	0.62	0.8273	1726	31	--	--	1726	25	1731	48	1731	48	100
12JT22_32	855	2.7	0.1062	0.28	0.0978	4.38	12	0.2977	0.58	0.8958	1679	29	--	--	1708	24	1734	48	1734	48	97
12JT22_35	358	3.7	0.1066	0.29	0.0791	3.97	13	0.2694	0.65	0.8539	1536	33	--	--	1625	26	1740	49	1740	49	88
12JT22_17	283	1.6	0.1066	0.28	0.1413	4.84	14	0.3271	0.64	0.834	1825	31	--	--	1791	24	1743	48	1743	48	105
12JT22_29	446	4.4	0.107	0.28	0.2556	4.7	13	0.3182	0.6	0.7625	1781	30	--	--	1767	24	1748	48	1748	48	102
12JT22_83	405	2.5	0.1078	0.28	0.0037	4.52	13	0.3055	0.64	0.8943	1719	31	--	--	1734	25	1761	48	1761	48	98
12JT22_22	326	1.6	0.1091	0.29	0.1249	4.86	14	0.3216	0.62	0.8253	1797	30	--	--	1794	25	1785	47	1785	47	101
12JT22_97	86	2.1	0.1098	0.3	0.1556	5.04	15	0.3348	0.67	0.671	1862	32	--	--	1826	25	1796	50	1796	50	104
12JT22_9	554	8.4	0.1109	0.29	0.2797	4.74	13	0.3082	0.58	0.8488	1732	28	--	--	1774	24	1814	47	1814	47	95
12JT22_15	242	2.6	0.1129	0.3	0.0883	5.44	18	0.3471	0.9	0.9307	1917	43	--	--	1884	30	1847	49	1847	49	104
12JT22_27	161	3.1	0.1132	0.3	0.2397	5.13	15	0.3291	0.69	0.7607	1833	34	--	--	1841	25	1851	49	1851	49	99
12JT22_72	146	1.1	0.1168	0.31	0.2649	5.53	16	0.3437	0.67	0.6974	1904	32	--	--	1905	25	1908	48	1908	48	100

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)
				207Pb	206Pb	206Pb					206Pb*	206Pb	207Pb	207Pb	206Pb	206Pb	207Pb	207Pb	206Pb		
				(%)	(%)	(%)					(%)	(Ma)									
12JT22_43	680	2.2	0.1206	0.31	0.1151	5.29	16	0.3166	0.66	0.9247	1772	32	--	--	1864	26	1964	47	1964	47	90
12JT22_77	190	2.5	0.1229	0.32	0.3421	6.36	18	0.3777	0.71	0.6413	2065	33	--	--	2027	25	2000	46	2000	46	103
12JT22_61	372	3.0	0.1295	0.34	0.1622	6.92	20	0.3869	0.73	0.86	2109	34	--	--	2100	25	2092	46	2092	46	101
12JT22_80	401	1.3	0.1744	0.45	0.3157	11.38	32	0.4738	0.89	0.8082	2501	39	--	--	2555	26	2600	43	2600	43	96
12JT22_40	371	1.2	0.1835	0.48	0.0803	13.44	38	0.53	1	0.8819	2741	43	--	--	2711	27	2684	43	2684	43	102
12JT22_81	229	1.5	0.1865	0.49	0.291	14.04	39	0.547	1	0.8003	2811	43	--	--	2752	27	2711	43	2711	43	104
12JT22_24	193	2.4	0.1938	0.51	0.0422	14.27	44	0.535	1.2	0.9229	2757	52	--	--	2764	31	2774	44	2774	44	99
12JT22_53	56	2.5	0.2033	0.54	-0.092	15.75	49	0.561	1.2	0.8965	2866	50	--	--	2859	31	2852	44	2852	44	100
12JT22_6	152	2.6	0.25	0.66	-0.147	19.1	65	0.553	1.4	0.9615	2834	57	--	--	3046	32	3185	42	3185	42	89
12JT22_75	64	1.2	0.285	0.75	0.3071	28.38	81	0.723	1.4	0.7652	3506	53	--	--	3432	28	3391	41	3391	41	103
12JT22_5	528	2.7	0.0818	0.22	-0.511	2.538	8	0.2238	0.45	0.9133	1302	24	--	--	1280	23	1240	52	1240	52	105
12JT22_96	81	1.4	0.1839	0.49	0.0228	13.8	41	0.551	1.1	0.8686	2827	46	--	--	2735	29	2690	43	2690	43	105
12JT22_88	323	3.5	0.0873	0.23	0.1595	3	8.5	0.2505	0.48	0.6935	1441	25	--	--	1407	22	1367	51	1367	51	105
12JT22_87	202	2.4	0.085	0.23	0.2634	2.788	8	0.2401	0.46	0.5711	1387	24	--	--	1352	21	1315	52	1315	52	105
12JT22_84	129	3.8	0.1146	0.31	0.1671	5.79	17	0.3662	0.73	0.7205	2012	34	--	--	1945	26	1874	48	1874	48	107
12JT22_86	184	1.0	0.0954	0.26	0.1975	3.84	12	0.2917	0.64	0.7396	1650	32	--	--	1599	26	1534	51	1534	51	108
12JT22_79	323	1.7	0.106	0.28	0.2871	4.89	14	0.3359	0.63	0.7346	1866	31	--	--	1800	24	1733	48	1733	48	108
12JT22_4	340	1.9	0.1009	0.26	0.1509	4.43	13	0.3171	0.61	0.8156	1775	30	--	--	1717	24	1640	49	1640	49	108
12JT22_11	663	4.0	0.0907	0.24	-0.146	3.44	11	0.2743	0.62	0.9733	1561	32	--	--	1543	25	1441	49	1441	49	108
12JT22_1	103	1.6	0.1008	0.27	0.0854	4.45	13	0.3186	0.64	0.734	1782	31	--	--	1720	25	1638	50	1638	50	109
12JT22_34	196	2.3	0.0743	0.48	-0.08	0.167	1.5	0.0159	0.11	0.6952	1014	6.7	98	7	155	13	880	120	98	7	11
12JT22_41	3312	6.8	0.062	0.17	0.2458	0.427	1.3	0.04951	0.099	0.5451	311.5	6.1	308	6	361.2	8.9	674	56	308	6	46
12JT22_39	1612	2.7	0.0785	0.3	0.0489	1.262	4.7	0.1178	0.31	0.2835	717	18	704	18	824	21	1108	58	704	18	64
12JT22_42	94	3.1	0.0809	0.29	0.1729	1.642	9.6	0.1476	0.81	0.8799	889	46	874	47	976	37	1205	71	874	47	72
12JT22_44	2233	5.1	0.0777	0.21	0.2406	1.535	4.4	0.1426	0.28	0.4749	859	15	848	16	944	17	1137	52	848	16	75
12JT22_21	342	3.2	0.0916	0.26	-0.806	2.47	13	0.1918	0.71	0.9832	1126	38	--	--	1239	38	1456	55	1456	55	77
12JT22_36	1534	17.1	0.0781	0.22	-0.274	1.581	4.9	0.1469	0.28	0.5772	884	16	873	16	959	18	1141	50	873	16	76
12JT22_70	467	1.6	0.1134	0.39	-0.755	3.95	17	0.2513	0.53	0.9433	1444	27	--	--	1607	24	1821	39	1821	39	79
12JT22_14	1501	10.7	0.0704	0.18	-0.137	1.527	4.5	0.157	0.32	0.9473	940	18	940	19	943	19	939	54	940	19	100
12JT22_67	1067	2.3	0.0784	0.2	0.3511	2.108	5.9	0.1946	0.36	0.7204	1146	19	--	--	1151	19	1156	52	1156	52	99
12JT22_94	245	1.4	0.1403	0.62	-0.828	7.11	42	0.3613	0.81	0.9418	1986	38	--	--	2073	36	2164	55	2164	55	92

Analysis	U (pmm)	U/Th	206Pb 207Pb	± (%)	error corr.	Isotope ratios						206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	Apparent ages (Ma)			Best age (Ma)	± (Ma)	Conc (%)
						207Pb	235U	206Pb	238U	± (%)	error corr.														
12JT22_26	1141	5.1	0.0811	0.21	-0.302	2.044	6.7	0.1816	0.43	0.9491		1075	23	-	-	1127	23	1223	51	1223	51	88			
12JT22_66	259	1.8	0.197	2.4	-0.968	21.8	580	0.432	5	0.9992		2100	160	-	-	2280	140	2580	150	2580	150	81			
Clarence River group 69.28, -141.75 n=96/109 (Ordovician-Lower Devonian?)																									
12JT23_100	371	1.9	0.0557	0.29	0.2268	0.455	3.2	0.0596	0.28	0.2638		373	17	372	17	380	22	410	110	372	17	NA			
12JT23_99	731	1.9	0.0557	0.27	0.2714	0.458	3.1	0.0597	0.28	0.2525		374	17	373	17	384	21	440	110	373	17	NA			
12JT23_108	247	1.4	0.0557	0.3	0.2382	0.468	3.4	0.06	0.28	0.1828		375	17	375	17	388	24	400	110	375	17	NA			
12JT23_105	592	1.6	0.0545	0.28	0.3173	0.465	3.3	0.061	0.28	0.1844		382	17	382	17	389	23	380	110	382	17	NA			
12JT23_110	447	3.7	0.0554	0.28	0.1927	0.477	3.3	0.0615	0.29	0.2352		385	17	384	18	397	23	430	110	384	18	NA			
12JT23_66	263	2.2	0.0586	0.36	0.1784	0.498	3.8	0.0627	0.3	0.1996		392	18	390	18	406	25	480	120	390	18	NA			
12JT23_46	367	1.6	0.0537	0.29	0.2853	0.466	3.3	0.0627	0.3	0.1805		392	18	392	18	389	23	350	110	392	18	NA			
12JT23_92	486	1.7	0.055	0.28	0.2145	0.5	3.5	0.0635	0.3	0.2307		397	18	397	18	411	23	390	110	397	18	NA			
12JT23_94	327	1.7	0.0556	0.3	0.1134	0.502	3.6	0.0639	0.3	0.2843		399	18	399	18	416	24	400	110	399	18	NA			
12JT23_104	423	2.6	0.0544	0.27	0.3254	0.488	3.4	0.0645	0.3	0.2326		403	18	403	18	404	23	380	110	403	18	NA			
12JT23_98	555	4.8	0.0557	0.28	0.2777	0.508	3.5	0.0652	0.3	0.1668		407	18	407	18	417	23	430	110	407	18	NA			
12JT23_96	837	1.8	0.0553	0.26	0.1739	0.51	3.4	0.0652	0.3	0.4055		408	18	407	18	418	23	420	110	407	18	NA			
12JT23_106	79	3.5	0.0582	0.43	0.2206	0.531	4.6	0.066	0.34	0.1893		412	20	410	21	428	31	460	150	410	21	NA			
12JT23_107	131	2.8	0.0567	0.36	0.1979	0.523	4.1	0.066	0.32	0.1686		413	19	411	20	428	27	470	130	411	20	NA			
12JT23_97	319	1.7	0.0547	0.3	0.2965	0.502	3.6	0.0662	0.32	0.1427		413	19	413	20	411	24	380	110	413	20	NA			
12JT23_26	137	2.2	0.0517	0.31	0.1593	0.498	3.9	0.0664	0.32	0.2624		414	19	416	20	406	26	280	120	416	20	NA			
12JT23_27	621	1.9	0.0547	0.27	0.2233	0.518	3.5	0.0664	0.31	0.2668		414	19	415	19	424	24	390	110	415	19	NA			
12JT23_28	401	2.0	0.0531	0.27	0.1646	0.507	3.6	0.0665	0.31	0.2435		415	19	416	19	415	24	320	110	416	19	NA			
12JT23_77	498	1.7	0.0547	0.27	0.1908	0.512	3.5	0.0664	0.31	0.2679		415	19	415	19	420	24	380	110	415	19	NA			
12JT23_29	173	2.5	0.0535	0.33	0.2845	0.503	3.9	0.0668	0.32	0.1218		417	19	418	20	415	27	300	120	418	20	NA			
12JT23_88	148	4.2	0.0519	0.33	0.1846	0.484	3.9	0.0671	0.32	0.1921		418	20	420	20	402	26	300	130	420	20	NA			
12JT23_58	748	1.3	0.0557	0.27	0.2446	0.504	3.4	0.067	0.31	0.2278		418	19	418	19	415	23	420	110	418	19	NA			
12JT23_55	383	1.7	0.0537	0.28	0.2297	0.498	3.5	0.0673	0.32	0.2342		420	19	421	20	409	24	350	110	421	20	NA			
12JT23_18	842	1.7	0.0553	0.26	0.2958	0.498	3.3	0.0673	0.31	0.1756		420	19	420	19	411	23	420	110	420	19	NA			
12JT23_2	343	2.0	0.0584	0.31	0.2684	0.553	3.9	0.0677	0.31	0.0908		422	19	421	19	448	26	500	110	421	19	NA			
12JT23_73	421	1.8	0.0556	0.28	0.1643	0.532	3.7	0.0677	0.32	0.286		422	19	422	20	433	25	410	110	422	20	NA			

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			error corr.	207Pb 235U	± (%)	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
				206Pb	207Pb	238U							206Pb*	207Pb	238U	206Pb	207Pb	238U	206Pb	207Pb	238U
				(pmm)	(%)	(%)							(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)
12JT23_44	472	1.5	0.0554	0.28	0.2322	0.524	3.7	0.0678	0.32	0.3517	423	19	423	20	425	24	430	110	423	20	NA
12JT23_90	543	5.6	0.0571	0.28	0.2709	0.544	3.7	0.0678	0.32	0.1477	423	19	422	20	440	24	480	110	422	20	NA
12JT23_1	623	1.8	0.0555	0.27	0.2358	0.543	3.7	0.0681	0.31	0.244	424	19	425	19	440	24	420	110	425	19	NA
12JT23_103	123	2.2	0.0541	0.33	0.3073	0.515	4	0.0681	0.33	0.2221	425	20	425	20	421	26	380	120	425	20	NA
12JT23_56	337	3.3	0.0578	0.3	0.1101	0.536	3.8	0.0681	0.32	0.3824	425	19	423	20	435	25	500	110	423	20	NA
12JT23_53	254	1.6	0.0572	0.32	0.1504	0.538	3.9	0.0684	0.32	0.2582	426	20	426	20	435	25	470	120	426	20	NA
12JT23_5	763	1.3	0.0542	0.26	0.2088	0.516	3.5	0.0683	0.32	0.2882	426	19	427	20	422	23	390	110	427	20	NA
12JT23_79	171	1.8	0.0539	0.31	0.2019	0.519	3.9	0.0686	0.33	0.203	428	20	429	20	425	26	360	120	429	20	NA
12JT23_89	201	1.5	0.0543	0.31	0.173	0.528	4	0.0688	0.33	0.239	428	20	430	20	430	26	380	120	430	20	NA
12JT23_68	387	1.4	0.0559	0.29	0.2257	0.531	3.7	0.0687	0.32	0.2346	428	19	428	20	430	24	420	110	428	20	NA
12JT23_60	182	2.2	0.055	0.32	0.1995	0.508	3.8	0.0688	0.33	0.1861	429	20	429	20	417	26	410	120	429	20	NA
12JT23_57	96	2.8	0.0559	0.38	0.3771	0.52	4.2	0.0691	0.35	0.0474	430	21	430	21	421	29	390	140	430	21	NA
12JT23_80	186	1.7	0.0574	0.33	0.3143	0.551	4.1	0.069	0.33	0.1021	430	20	429	20	445	27	460	120	429	20	NA
12JT23_81	425	1.1	0.0569	0.29	0.0937	0.53	3.7	0.0689	0.32	0.317	430	19	429	20	432	24	480	110	429	20	NA
12JT23_63	664	1.7	0.0545	0.27	0.2644	0.508	3.5	0.0693	0.32	0.271	432	19	432	20	416	23	370	110	432	20	NA
12JT23_64	285	1.5	0.055	0.35	0.2923	0.518	4.1	0.0695	0.34	0.1157	433	20	433	21	425	28	380	130	433	21	NA
12JT23_87	392	1.6	0.0559	0.29	0.1615	0.528	3.7	0.0694	0.33	0.3386	433	20	432	20	430	25	420	110	432	20	NA
12JT23_48	178	2.9	0.056	0.33	0.2532	0.547	4.1	0.0696	0.33	0.1315	434	20	433	20	440	27	410	120	433	20	NA
12JT23_50	726	1.0	0.0541	0.26	0.1961	0.532	3.6	0.0697	0.32	0.3055	434	19	435	20	432	24	370	110	435	20	NA
12JT23_102	838	1.7	0.056	0.27	0.2172	0.543	3.7	0.0697	0.32	0.2749	434	19	434	20	441	24	450	110	434	20	NA
12JT23_74	326	2.0	0.0552	0.28	0.2862	0.549	3.8	0.0701	0.33	0.1971	437	20	437	20	443	25	410	110	437	20	NA
12JT23_95	290	1.6	0.0554	0.3	0.2517	0.552	3.9	0.0703	0.33	0.2123	438	20	438	20	444	26	430	110	438	20	NA
12JT23_69	160	3.7	0.0555	0.33	0.3493	0.546	4.1	0.0706	0.34	0.0497	440	21	440	21	442	26	420	120	440	21	NA
12JT23_42	321	1.8	0.053	0.29	0.235	0.517	3.7	0.0707	0.33	0.1699	440	20	442	20	421	24	320	110	442	20	NA
12JT23_82	503	1.5	0.0554	0.28	0.2112	0.525	3.6	0.0713	0.33	0.2431	444	20	444	20	429	24	410	110	444	20	NA
12JT23_10	678	1.6	0.0545	0.26	0.1961	0.514	3.5	0.0713	0.33	0.3593	444	20	445	20	420	23	380	110	445	20	NA
12JT23_25	192	1.8	0.0545	0.32	0.3576	0.553	4.1	0.0717	0.34	0.1306	446	21	447	21	447	26	380	120	447	21	NA
12JT23_24	296	3.4	0.0538	0.28	0.1598	0.545	3.9	0.0716	0.34	0.2794	446	20	447	21	442	26	350	110	447	21	NA
12JT23_21	512	1.6	0.0558	0.28	0.2361	0.552	3.8	0.0716	0.33	0.2051	446	20	446	20	448	25	430	110	446	20	NA
12JT23_33	571	2.8	0.0561	0.28	0.274	0.551	3.8	0.0717	0.33	0.1219	446	20	446	20	445	25	430	110	446	20	NA
12JT23_41	720	2.8	0.0543	0.27	0.1406	0.538	3.7	0.0716	0.33	0.3921	446	20	447	20	437	24	370	100	447	20	NA

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios				206Pb 235U	206Pb 238U	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)
				207Pb (%)	± corr.	206Pb (%)	207Pb 238U				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	206Pb (Ma)	Best age (Ma)	
12JT23_12	250	2.5	0.0559	0.31	0.2222	0.531	3.8	0.0722	0.34	0.1878	449	21	449	21	432	25	420	120	449	21	NA
12JT23_59	570	3.1	0.0567	0.28	0.3344	0.553	3.8	0.0723	0.33	0.1266	450	20	450	20	446	24	460	110	450	20	NA
12JT23_75	250	4.3	0.0547	0.31	0.2769	0.556	4.1	0.0724	0.35	0.1491	451	21	451	21	449	26	370	110	451	21	NA
12JT23_30	285	3.0	0.0554	0.29	0.244	0.576	4	0.0728	0.34	0.2154	453	20	453	21	460	26	420	110	453	21	NA
12JT23_40	178	1.7	0.0546	0.34	0.3888	0.542	4.1	0.0727	0.35	0.0393	454	21	453	21	442	27	380	120	453	21	NA
12JT23_91	218	3.0	0.0604	0.33	0.3203	0.631	4.6	0.0731	0.35	0.1995	454	21	452	21	497	29	580	120	452	21	NA
12JT23_67	245	3.2	0.0579	0.3	0.1951	0.576	4.1	0.0732	0.34	0.2548	455	21	454	21	461	26	490	110	454	21	NA
12JT23_39	131	3.1	0.0547	0.33	0.1275	0.546	4.3	0.0734	0.35	0.307	456	21	457	21	441	27	390	120	457	21	NA
12JT23_72	133	2.9	0.0535	0.33	0.1168	0.554	4.4	0.0733	0.35	0.2642	456	21	458	21	444	28	340	120	458	21	NA
12JT23_3	237	3.4	0.0559	0.3	0.224	0.57	4.1	0.0733	0.35	0.1067	456	21	456	21	459	27	420	110	456	21	NA
12JT23_37	337	2.4	0.0554	0.29	0.1976	0.551	3.9	0.0733	0.35	0.2919	456	21	456	21	445	25	420	110	456	21	NA
12JT23_20	153	2.3	0.056	0.34	0.2817	0.548	4.2	0.0737	0.35	0.1125	458	21	458	21	444	27	410	120	458	21	NA
12JT23_23	367	4.6	0.0536	0.27	0.3088	0.556	3.9	0.0737	0.34	0.1262	458	21	460	21	448	25	340	110	460	21	NA
12JT23_65	459	2.3	0.0551	0.27	0.2654	0.549	3.8	0.0736	0.34	0.2186	458	21	458	21	444	25	400	110	458	21	NA
12JT23_49	84	5.1	0.0579	0.43	0.2344	0.621	5.5	0.0751	0.37	0.1269	467	22	466	23	483	35	440	150	466	23	NA
12JT23_45	117	3.8	0.0576	0.37	0.2674	0.595	4.7	0.075	0.37	0.1172	467	22	465	23	475	31	470	130	465	23	NA
12JT23_6	857	2.0	0.0576	0.27	0.2061	0.587	3.9	0.0751	0.35	0.3297	467	21	466	21	469	26	510	110	466	21	NA
12JT23_8	650	2.4	0.0572	0.28	0.1819	0.576	3.9	0.0755	0.35	0.2662	469	21	469	21	461	25	480	110	469	21	NA
12JT23_14	253	2.2	0.0551	0.31	0.3098	0.558	4	0.076	0.36	0.0779	472	21	473	22	450	27	420	120	473	22	NA
12JT23_70	407	1.7	0.0556	0.28	0.2819	0.582	4	0.0759	0.35	0.2356	472	21	472	21	466	26	420	110	472	21	NA
12JT23_85	627	2.9	0.0552	0.27	0.2662	0.563	3.8	0.0763	0.35	0.2575	474	21	475	21	454	25	430	110	475	21	NA
12JT23_38	654	1.6	0.0569	0.28	0.1629	0.589	4	0.0765	0.36	0.3133	475	21	475	22	472	26	490	110	475	22	NA
12JT23_61	629	1.6	0.0573	0.28	0.2522	0.578	4	0.0767	0.36	0.2641	476	21	476	22	464	25	480	110	476	22	NA
12JT23_15	193	2.9	0.0578	0.32	0.3012	0.584	4.3	0.0768	0.37	0.1498	477	22	476	23	470	27	510	120	476	23	NA
12JT23_13	201	3.4	0.057	0.33	0.272	0.585	4.3	0.0768	0.37	0.1826	477	22	477	23	469	27	480	120	477	23	NA
12JT23_54	466	2.0	0.0551	0.28	0.229	0.58	4	0.0769	0.36	0.275	478	22	479	22	465	26	400	110	479	22	NA
12JT23_17	426	2.3	0.0533	0.27	0.1935	0.548	3.8	0.0771	0.36	0.298	479	21	481	22	444	24	340	110	481	22	NA
12JT23_62	776	2.9	0.0557	0.27	0.1898	0.577	3.9	0.0776	0.36	0.3982	482	22	482	22	463	25	430	110	482	22	NA
12JT23_31	88	3.0	0.055	0.4	0.2991	0.587	4.9	0.0778	0.38	0.0136	483	23	484	23	466	31	350	140	484	23	NA
12JT23_9	626	3.6	0.0556	0.28	0.214	0.575	4	0.0778	0.36	0.3806	483	22	484	22	460	26	420	110	484	22	NA
12JT23_51	533	2.0	0.0549	0.27	0.1241	0.595	4.1	0.0779	0.36	0.3779	484	22	485	22	473	26	390	110	485	22	NA

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	± (%)	error corr.	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)	
				207Pb	206Pb	206Pb*							206Pb	206Pb*	207Pb	206Pb	207Pb	206Pb	207Pb			
				(%)	(%)	(%)							(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)			
12JT23_83	261	2.8	0.0556	0.3	0.2357	0.605	4.3	0.0803	0.38	0.2103	498	23	499	23	479	27	420	120	499	23	NA	
12JT23_16	385	1.4	0.0591	0.31	0.2469	0.72	5.1	0.0923	0.43	0.2233	569	26	569	26	548	30	550	120	569	26	NA	
12JT23_78	47	2.0	0.0597	0.47	0.286	0.834	7.7	0.0968	0.51	0.2223	595	30	596	31	605	40	540	150	596	31	NA	
12JT23_84	41	2.1	0.0637	0.48	0.4087	0.849	7.6	0.0999	0.53	0.1658	614	31	611	32	611	42	590	150	611	32	104	
12JT23_93	475	2.1	0.0626	0.3	0.2423	0.95	6.5	0.1052	0.49	0.2605	644	29	644	29	675	34	700	100	644	29	92	
12JT23_86	892	30.0	0.078	0.35	0.0896	1.98	13	0.1878	0.89	0.8036	1109	48	--	--	1105	46	1146	93	1146	93	97	
12JT23_32	177	3.2	0.1121	0.52	0.1539	5.04	34	0.326	1.5	0.5561	1817	73	--	--	1826	57	1827	85	1827	85	99	
12JT23_47	30	0.6	0.1866	0.91	0.324	13.82	95	0.533	2.6	0.5619	2750	110	--	--	2738	67	2723	82	2723	82	101	
12JT23_109	284	3.4	0.0631	0.36	0.2987	0.494	3.7	0.0564	0.27	0.1373	353	16	349	17	406	25	690	120	349	17	NA	
12JT23_11	905	22.7	0.07	0.32	0.0482	1.395	9.3	0.1504	0.7	0.6218	904	40	902	41	886	40	934	98	902	41	97	
12JT23_36	960	1.5	0.0566	0.3	0.2185	0.513	3.7	0.067	0.32	0.3304	418	19	417	20	419	25	460	120	417	20	91	
12JT23_7	1136	2.2	0.0553	0.26	0.162	0.518	3.5	0.0696	0.32	0.3568	434	19	434	20	424	23	420	110	434	20	103	
12JT23_34	1261	2.0	0.0547	0.27	0.2781	0.485	3.3	0.0652	0.32	0.4551	407	19	407	20	401	23	380	110	407	20	107	
12JT23_4	1664	1.7	0.0568	0.26	0.233	0.522	3.4	0.0669	0.31	0.3757	417	19	417	19	426	23	480	100	417	19	87	
12JT23_35	1737	3.6	0.0782	0.37	0.3724	0.478	3.2	0.0458	0.22	0.4878	288	14	279	13	396	22	1149	95	279	13	25	
12JT23_71	1946	87.5	0.0553	0.28	0.3792	0.323	2.2	0.0419	0.2	0.1711	264	12	263	12	285	18	410	110	263	12	64	
12JT23_43	2721	6.2	0.0552	0.26	0.1903	0.451	3	0.0587	0.27	0.5205	368	17	367	17	378	21	420	100	367	17	88	
12JT23_76	208	0.8	0.0999	0.47	0.1248	4.28	29	0.303	1.4	0.6625	1706	74	--	--	1692	55	1621	87	1621	87	105	
12JT23_52	44	1.6	0.0606	0.45	0.3072	0.866	7.5	0.1012	0.53	0.2163	621	34	621	32	626	41	540	150	624	32	115	
12JT23_101	34	3.2	0.0647	0.47	0.3129	1.33	11	0.1494	0.78	0.1659	896	43	902	46	847	51	690	150	902	46	130	
12JT23_19	113	2.8	0.0856	0.55	0.2523	0.904	7.2	0.0791	0.38	0.1338	490	23	473	23	647	39	1280	130	473	23	NA	
Clarence River group 69.28, -141.75 n=14/25																						
(Ordovician-Lower Devonian?)																						
12JT24_8	328	1.7	0.1162	0.3	-0.449	5.68	17	0.3515	0.75	0.9717	1941	36	--	--	1926	28	1898	47	1898	47	102	
12JT24_17	135	0.8	0.1169	0.31	0.327	5.43	15	0.3383	0.65	0.6189	1879	31	--	--	1889	24	1911	48	1911	48	98	
12JT24_12	137	0.9	0.1172	0.31	0.2502	5.44	16	0.3369	0.64	0.5636	1872	31	--	--	1892	24	1912	47	1912	47	98	
12JT24_6	215	1.1	0.1175	0.31	0.322	5.66	16	0.3491	0.66	0.5462	1930	31	--	--	1925	25	1920	47	1920	47	101	
12JT24_18	187	0.8	0.1177	0.31	0.0966	5.36	16	0.3311	0.7	0.876	1843	34	--	--	1876	26	1921	47	1921	47	96	
12JT24_25	95	0.9	0.1195	0.33	0.0539	5.07	16	0.3091	0.61	0.6056	1737	31	--	--	1830	26	1948	50	1948	50	89	
12JT24_1	233	1.1	0.1216	0.32	0.2473	6.19	17	0.3699	0.7	0.6116	2029	33	--	--	2003	25	1978	47	1978	47	103	

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)		
				207Pb	206Pb	206Pb					206Pb*	207Pb	206Pb	207Pb	206Pb	207Pb	206Pb	207Pb	206Pb				
				235U	238U	238U					(Ma)	238U	(Ma)	235U	(Ma)	207Pb	(Ma)	207Pb	(Ma)				
12JT24_15	87	1.0	0.1255	0.34	0.2397	6.28	18	0.3636	0.71	0.5285	2000	34	--	--	2016	26	2034	47	2034	47	98		
12JT24_4	193	1.3	0.1364	0.36	0.0641	7.35	21	0.3906	0.75	0.7263	2126	35	--	--	2155	26	2181	46	2181	46	97		
12JT24_14	430	1.0	0.151	0.39	0.1651	9.4	26	0.4519	0.84	0.7196	2403	37	--	--	2377	26	2357	44	2357	44	102		
12JT24_24	221	2.1	0.1589	0.42	-0.223	9.33	28	0.4245	0.86	0.8873	2281	38	--	--	2370	28	2443	45	2443	45	93		
12JT24_5	344	1.6	0.1617	0.42	0.2955	10.43	29	0.4683	0.88	0.6785	2476	38	--	--	2474	26	2474	44	2474	44	100		
12JT24_2	382	2.0	0.1676	0.44	-0.033	11.04	32	0.4768	0.95	0.9217	2512	42	--	--	2525	27	2535	43	2535	43	99		
12JT24_11	183	1.3	0.1859	0.48	0.2899	13.75	39	0.538	1	0.752	2775	43	--	--	2733	26	2706	43	2706	43	103		
12JT24_13	89	0.3	0.1109	0.3	0.1625	5.33	16	0.3495	0.69	0.6357	1933	33	--	--	1874	25	1813	48	1813	48	107		
12JT24_3	1208	1.6	0.1332	0.35	-0.567	3.09	11	0.1669	0.41	0.9762	994	23	917	25	1426	26	2139	45	917	25	43		
12JT24_20	749	0.7	0.1611	0.43	0.7668	5.58	16	0.2522	0.57	0.8489	1449	29	--	--	1914	25	2467	46	2467	46	59		
12JT24_16	1121	4.1	0.1297	0.35	-0.887	4.47	24	0.248	1.1	0.9962	1421	56	--	--	1705	47	2092	48	2092	48	68		
12JT24_9	945	2.1	0.1467	0.38	-0.588	5.66	24	0.283	4	0.9907	1602	50	--	--	1915	35	2308	44	2308	44	69		
12JT24_10	1113	3.8	0.1461	0.38	-0.789	5.7	19	0.2839	0.68	0.9869	1609	34	--	--	1934	29	2300	45	2300	45	70		
12JT24_7	407	0.9	0.2165	0.58	-0.834	12.6	64	0.419	1.8	0.9946	2232	79	--	--	2606	49	2955	43	2955	43	76		
12JT24_21	1136	1.8	0.1136	0.3	-0.862	4.01	14	0.2538	0.64	0.9947	1456	34	--	--	1621	35	1857	48	1857	48	78		
12JT24_19	1022	6.8	0.1388	0.36	-0.729	6.25	22	0.3262	0.83	0.9873	1818	40	--	--	2005	31	2211	46	2211	46	82		
12JT24_23	133	1.6	0.1777	0.47	-0.032	11.94	35	0.4878	0.96	0.8835	2560	42	--	--	2597	28	2633	44	2633	44	97		
12JT24_22	3	0.9	0.289	3.7	0.0456	27.4	770	0.7	16	0.7205	2960	510	--	--	2780	240	3230	210	3230	210	92		
Clarence River group 69.47, -141.47 n=63/76																							
(Ordovician-Lower Devonian?)																							
12JT35_55	315	0.6	0.0592	0.14	0.1881	0.582	2.8	0.071	0.32	0.4679	442	19	440	19	465	18	576	52	440	19	NA		
12JT35_38	50	0.7	0.066	0.22	0.1492	0.653	3.5	0.0718	0.34	0.4789	447	20	441	21	508	21	770	71	441	21	NA		
12JT35_46	152	0.5	0.058	0.16	-0.049	0.58	2.9	0.0722	0.32	0.4107	449	20	448	19	462	18	519	55	448	19	NA		
12JT35_88	36	0.5	0.0596	0.31	0.1437	0.594	4	0.0724	0.35	0.208	450	21	449	21	472	26	520	110	449	21	NA		
12JT35_57	7	4.3	0.0585	0.41	0.2469	0.607	4.8	0.073	0.38	0.2168	454	23	453	23	478	30	510	130	453	23	NA		
12JT35_2	87	3.1	0.0587	0.17	0.1804	0.591	3	0.0729	0.33	0.3457	454	20	452	20	472	19	533	64	452	20	NA		
12JT35_62	343	1.1	0.059	0.14	0.1542	0.595	2.8	0.073	0.32	0.3758	454	19	453	19	474	18	564	52	453	19	NA		
12JT35_69	429	0.6	0.0587	0.14	-0.275	0.599	2.8	0.0734	0.32	0.6465	456	19	455	19	476	18	548	50	455	19	NA		
12JT35_34	142	0.3	0.0587	0.18	0.1539	0.593	3.3	0.0754	0.4	0.6612	468	24	467	24	471	21	542	66	467	24	NA		
12JT35_26	547	1.3	0.0586	0.14	0.3021	0.613	2.9	0.0755	0.34	0.4038	469	20	468	21	485	18	549	53	468	21	NA		

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			207Pb 235U	± (%)	error corr.	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)
				206Pb	207Pb	238U							206Pb*	207Pb	235U	206Pb	207Pb	238U	207Pb	235U	
				(pmm)	(%)	corr.	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)
12JT35_44	155	3.6	0.0563	0.14	0.0314	0.591	2.9	0.0757	0.34	0.4938	471	20	470	21	471	18	455	57	470	21	NA
12JT35_89	31	2.8	0.0604	0.25	0.3159	0.637	3.7	0.0763	0.36	0.2302	474	21	472	22	500	23	569	86	472	22	NA
12JT35_43	585	0.3	0.0592	0.13	0.272	0.632	3	0.0772	0.34	0.4469	479	20	478	21	498	18	571	49	478	21	NA
12JT35_42	375	0.8	0.0571	0.13	0.1691	0.621	2.9	0.0779	0.35	0.4	483	21	483	21	490	18	497	50	483	21	NA
12JT35_15	67	0.8	0.0618	0.19	0.2285	0.66	3.4	0.078	0.35	0.248	484	21	481	21	515	21	655	68	481	21	NA
12JT35_85	221	1.2	0.0576	0.14	0.1365	0.634	3.1	0.0786	0.35	0.4165	488	21	487	21	498	19	517	52	487	21	NA
12JT35_41	295	2.6	0.0583	0.14	0.2693	0.636	3	0.0789	0.35	0.2814	490	21	489	21	500	19	538	51	489	21	NA
12JT35_12	42	0.0	0.0585	0.23	0.1992	0.636	3.7	0.0793	0.37	0.2979	492	22	491	22	498	22	515	86	491	22	NA
12JT35_87	83	0.9	0.0557	0.16	0.2065	0.61	3.1	0.0793	0.35	0.1876	492	21	493	21	483	19	422	64	493	21	NA
12JT35_21	25	3.3	0.0582	0.25	0.2816	0.627	3.6	0.0796	0.36	0.0609	493	21	493	22	489	23	477	88	493	22	NA
12JT35_61	178	0.4	0.0575	0.15	0.2668	0.627	3	0.0795	0.35	0.2854	493	21	493	21	494	19	511	56	493	21	NA
12JT35_8	52	0.6	0.0593	0.2	0.2754	0.656	3.5	0.0796	0.36	0.1705	494	22	492	22	510	21	570	74	492	22	NA
12JT35_35	289	0.7	0.0587	0.14	0.2342	0.647	3.1	0.0797	0.35	0.3294	494	21	493	21	506	19	549	53	493	21	NA
12JT35_25	20	0.2	0.0596	0.32	0.1286	0.663	4.5	0.0804	0.39	0.3341	499	23	497	24	509	27	520	110	497	24	NA
12JT35_18	215	1.0	0.0587	0.16	0.2283	0.653	3.3	0.0805	0.36	0.2902	499	22	498	22	510	20	554	61	498	22	NA
12JT35_99	526	0.4	0.059	0.13	0.0865	0.66	3.1	0.0804	0.36	0.6176	499	22	497	22	514	19	570	50	497	22	NA
12JT35_30	48	1.0	0.0599	0.23	0.1248	0.654	4.2	0.0798	0.46	0.6201	501	27	493	28	512	26	561	83	493	28	NA
12JT35_23	108	1.7	0.0563	0.2	0.3191	0.628	3.3	0.0814	0.37	0.165	504	22	505	22	495	21	451	79	505	22	NA
12JT35_24	67	0.4	0.0624	0.25	0.0078	0.714	4.5	0.0811	0.41	0.6405	505	25	499	25	542	26	671	87	499	25	NA
12JT35_100	112	0.3	0.0573	0.15	0.2031	0.64	3.1	0.0814	0.36	0.3306	505	21	504	22	501	19	490	58	504	22	NA
12JT35_6	115	0.9	0.0576	0.17	0.1105	0.648	3.3	0.0814	0.37	0.409	505	22	504	22	507	20	507	65	504	22	NA
12JT35_3	773	0.8	0.0576	0.13	0.2521	0.653	3.1	0.0815	0.36	0.4699	505	22	505	22	510	19	515	50	505	22	NA
12JT35_58	60	0.0	0.0564	0.18	0.1916	0.633	3.3	0.0817	0.37	0.2881	506	22	507	22	497	20	446	68	507	22	NA
12JT35_91	84	0.6	0.0663	0.21	0.1196	0.76	3.9	0.0816	0.37	0.3243	506	22	500	22	571	23	797	67	500	22	NA
12JT35_70	144	4.6	0.0571	0.15	0.2095	0.645	3.1	0.0817	0.36	0.2861	506	21	506	22	505	19	493	55	506	22	NA
12JT35_16	158	6.0	0.0572	0.15	0.136	0.654	3.2	0.0818	0.37	0.5093	507	22	507	22	510	19	495	55	507	22	NA
12JT35_14	617	0.8	0.0575	0.13	0.2074	0.65	3	0.0818	0.36	0.4643	507	22	507	22	509	19	507	49	507	22	NA
12JT35_31	135	0.2	0.0571	0.16	0.2736	0.641	3.2	0.0819	0.36	0.2628	508	22	508	22	502	20	481	61	508	22	NA
12JT35_10	52	0.1	0.058	0.19	0.418	0.655	3.4	0.0822	0.37	-0.005	509	22	509	22	512	21	505	71	509	22	NA
12JT35_93	62	0.1	0.0606	0.19	0.1987	0.68	3.6	0.0821	0.39	0.5273	509	23	507	24	527	21	608	65	507	24	NA
12JT35_78	14	2.9	0.0588	0.37	0.0624	0.644	4.8	0.0822	0.41	0.2792	510	25	508	25	499	30	470	120	508	25	NA

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios			error corr.	207Pb 235U	± (%)	206Pb 238U	± (%)	error corr.	Apparent ages (Ma)						Best age (Ma)	± (Ma)	Conc (%)		
				206Pb	207Pb	238U							206Pb*	207Pb	238U	206Pb	207Pb	238U	206Pb	207Pb	238U		
				(pmm)	(%)	corr.							(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	(Ma)	
12JT35_11	322	0.5	0.0601	0.14	-0.008	0.684	3.3	0.0824	0.37	0.5089	510	22	509	22	529	19	601	52	509	22	NA		
12JT35_77	35	0.2	0.0584	0.23	0.261	0.66	3.7	0.0824	0.38	0.2765	511	23	510	23	516	23	526	81	510	23	NA		
12JT35_73	54	0.0	0.0562	0.25	0.0341	0.65	4.1	0.0824	0.39	0.35	511	23	511	24	506	25	475	96	511	24	NA		
12JT35_52	189	0.7	0.0602	0.15	0.2203	0.69	3.3	0.0825	0.37	0.3062	511	22	509	22	533	20	608	52	509	22	NA		
12JT35_27	8	2.1	0.0588	0.39	0.2325	0.675	5.3	0.0824	0.42	0.1821	512	25	510	26	511	32	470	130	510	26	NA		
12JT35_47	98	0.8	0.0571	0.16	0.2485	0.652	3.2	0.083	0.37	0.3077	514	22	514	22	508	20	481	59	514	22	NA		
12JT35_97	18	4.1	0.0559	0.27	0.241	0.65	4.1	0.0839	0.4	0.1919	519	24	521	24	507	25	408	97	521	24	NA		
12JT35_17	106	0.5	0.0569	0.19	0.1365	0.655	3.5	0.0839	0.39	0.4676	519	23	520	24	512	22	465	75	520	24	NA		
12JT35_63	139	2.3	0.06	0.16	0.1108	0.697	3.4	0.0839	0.38	0.4516	519	23	518	23	536	21	599	56	518	23	NA		
12JT35_39	7	0.1	0.0646	0.52	-0.009	0.783	7.9	0.085	0.56	0.4475	523	33	521	34	547	44	580	150	521	34	NA		
12JT35_49	323	0.5	0.0567	0.13	0.1805	0.659	3.1	0.0844	0.38	0.4354	523	22	523	23	513	19	491	49	523	23	NA		
12JT35_66	217	0.9	0.0576	0.14	0.2316	0.683	3.3	0.0866	0.38	0.3937	535	23	536	23	528	19	518	54	536	23	NA		
12JT35_92	292	2.5	0.057	0.14	0.2956	0.683	3.3	0.0874	0.4	0.5848	540	24	541	24	529	20	493	53	541	24	NA		
12JT35_36	19	0.1	0.059	0.27	0.1496	0.707	4.3	0.0888	0.42	0.2759	548	25	548	25	540	25	527	93	548	25	NA		
12JT35_4	186	0.3	0.0595	0.18	-0.008	0.729	4.2	0.0895	0.43	0.6953	552	26	552	26	554	24	581	68	552	26	NA		
12JT35_65	44	0.1	0.0718	0.32	-0.112	0.88	5.4	0.0897	0.41	0.4006	554	24	545	24	634	29	900	89	545	24	NA		
12JT35_90	106	1.0	0.0679	0.29	0.0531	0.855	5.5	0.0908	0.52	0.6488	560	31	554	31	628	31	909	85	554	31	NA		
12JT35_28	31	2.0	0.0571	0.26	0.1585	0.686	4.8	0.092	0.63	0.433	561	36	569	38	527	29	474	94	569	38	NA		
12JT35_71	34	0.3	0.0601	0.23	0.0458	0.755	4.7	0.0917	0.46	0.5427	565	27	565	28	569	26	589	80	565	28	NA		
12JT35_60	39	1.4	0.0558	0.21	-0.065	0.723	4.2	0.0919	0.42	0.3755	566	25	569	25	548	24	437	78	569	25	NA		
12JT35_13	157	1.9	0.0633	0.19	-0.293	0.887	7	0.1014	0.67	0.9073	621	39	620	40	643	39	717	63	620	40	87		
12JT35_1	231	0.8	0.0845	0.19	-0.01	2.35	11	0.2013	0.89	0.6627	1182	48	--	--	1228	34	1304	44	1304	44	91		
12JT35_45	204	0.1	0.0622	0.2	0.7018	0.693	3.5	0.0798	0.36	0.267	495	21	492	22	534	21	655	64	492	22	NA		
12JT35_54	51	1.2	0.2036	0.7	-0.096	2.79	19	0.0981	0.56	0.8151	603	33	493	32	1343	52	2842	57	493	32	17		
12JT35_95	7	0.1	0.126	1	0.0785	1.71	18	0.0969	0.67	0.4209	593	39	546	38	939	65	1820	160	546	38	30		
12JT35_84	1790	0.7	0.0627	0.14	0.2729	0.33	1.5	0.0381	0.17	0.4839	241	10	237	10	289	12	698	47	237	10	NA		
12JT35_83	347	0.1	0.0699	0.22	0.3608	0.613	3.2	0.0635	0.3	0.428	398	18	389	18	484	20	910	64	389	18	NA		
12JT35_68	8	0.2	0.088	0.62	0.1292	1.073	9.2	0.0898	0.53	0.4157	553	34	534	34	708	43	1230	140	534	34	45		
12JT35_20	4	0.1	0.0933	0.61	0.3821	1.89	15	0.1503	0.94	0.3495	900	52	875	54	1047	53	1380	140	875	54	63		
12JT35_48	12	0.1	0.0769	0.57	0.2105	1.19	13	0.123	1.3	0.5869	732	74	736	76	727	59	950	150	736	76	77		
12JT35_37	6	0.0	0.0606	0.45	0.2977	0.726	5.9	0.0859	0.46	0.0822	531	27	530	28	554	34	580	140	530	28	91		

Analysis	U (pmm)	U/Th	206Pb 207Pb	Isotope ratios					206Pb 238U	± (%)	error corr.	Apparent ages (Ma)								Best age (Ma)	± (Ma)	Conc (%)
				207Pb 235U	± (%)	206Pb 238U	± (%)	error corr.				206Pb 238U	± (Ma)	206Pb* 238U	± (Ma)	207Pb 235U	± (Ma)	206Pb 207Pb	± (Ma)	Best age (Ma)	± (Ma)	
12JT35_74	277	1.2	0.06	0.18	0.244	0.53	2.7	0.064	0.3	0.501	400	18	397	18	431	18	597	64	397	18	NA	
12JT35_56	406	0.9	0.0681	0.17	-0.221	0.692	3.4	0.0744	0.34	0.7522	462	20	456	20	534	21	864	51	456	20	NA	
12JT35_50	95	0.7	0.0735	0.28	0.2217	0.745	4.9	0.0746	0.44	0.5273	463	26	454	26	562	27	986	68	454	26	NA	
12JT35_22	20	0.9	0.0736	0.46	-0.013	0.772	5.8	0.076	0.38	0.345	472	23	462	23	571	33	940	120	462	23	NA	

Age uncertainties are reported at the 2-sigma level.

206Pb*/238U age calculated using the 207Pb correction of Ludwig (2012), assuming an initial Pb composition of Stacey and Kramers (1975) two-stage model

Best age is determined using a 1000 Ma cutoff between 206Pb*/238U and 206Pb/207Pb ages

Concordance is based on 206Pb/238U age / 206Pb/207Pb age, with 100% = concordant.

Concordance is not reported for 206Pb*/238U ages <600 Ma because of large uncertainty in 206Pb/207Pb age.

Table DR4: LA-ICP-MS U-Th-Pb isotope composition of detrital zircons analyzed at Stockholm University

Analysis	Isotope ratios										Apparent ages (Ma)										Best age (Ma)	\pm (Ma)	Conc (%)
	206Pb	U	U/Th	206Pb	\pm	207Pb	\pm	206Pb	\pm	error	206Pb	\pm	206Pb*	\pm	207Pb	\pm	206Pb	\pm	207Pb	\pm			
	204Pb	(ppm)		207Pb	(%)	235U	(%)	238U	(%)	corr.	238U	(Ma)	238U	(Ma)	235U	(Ma)	207Pb	(Ma)					
Clarence River group 69.37, -142.91 n=47/120																							
(Ordovician-Lower Devonian?)																							
40LF13-87	6865.75	655	2.0	0.0551	0.47	0.457	4.8	0.0608	0.29	0.5197	380	17	380	18	382	33	400	190	380	18	NA		
40LF13-113	287	151	1.3	0.0524	0.57	0.497	6.3	0.0693	0.34	0.2852	432	20	434	21	419	43	300	210	434	21	NA		
40LF13-65	946	76	2.6	0.06	0.64	0.64	7	0.0756	0.26	0.18	472	16	468	16	499	45	600	240	468	16	NA		
40LF13-76	136.067	304	6.5	0.0709	0.61	1.28	15	0.1366	0.66	0.3767	825	37	821	39	841	58	960	170	821	39	86		
40LF13-49	7468	376	1.6	0.0736	0.61	1.42	13	0.1421	0.42	0.48	856	24	850	25	900	52	1030	170	850	25	83		
40LF13-51	37717	632	12.0	0.0741	0.61	1.44	13	0.1445	0.49	0.71	870	28	863	29	903	54	1050	160	863	29	82		
40LF13-63	1501	187	5.7	0.0705	0.59	1.44	13	0.1484	0.51	0.61	892	29	890	30	905	56	930	170	890	30	96		
40LF13-9	13532	38	1.6	0.0748	0.64	1.57	14	0.1502	0.43	0.33	902	24	896	26	958	55	1090	170	896	26	82		
40LF13-57	13328	637	14.5	0.0741	0.62	1.57	14	0.1522	0.48	0.48	913	27	908	29	955	56	1040	170	908	29	87		
40LF13-119	1080.83	295	4.0	0.0738	0.73	1.63	22	0.1523	0.76	0.7234	913	42	909	45	972	73	1020	190	909	45	89		
40LF13-93	25064	248	1.4	0.0715	0.6	1.49	14	0.153	0.69	0.4102	918	39	916	41	926	58	950	170	916	41	96		
40LF13-37	24671	438	5.9	0.0707	0.61	1.53	14	0.1544	0.45	0.28	926	25	925	27	939	55	930	180	925	27	99		
40LF13-78	832.471	117	2.0	0.0727	0.65	1.53	18	0.1562	0.75	0.2973	936	41	933	44	944	65	1000	170	933	44	93		
40LF13-36	4682	872	2.2	0.0745	0.66	1.61	16	0.1571	0.73	0.46	940	41	936	43	975	61	1080	200	936	43	87		
40LF13-89	284.737	48	1.0	0.076	0.69	1.7	18	0.1607	0.79	0.2031	963	44	955	46	1003	69	1080	190	955	46	88		
40LF13-70	18726	191	2.4	0.0746	0.66	1.65	16	0.163	0.55	0.52	973	30	970	33	993	57	1040	170	970	33	93		
40LF13-6	554	27	3.2	0.0718	0.67	1.62	16	0.1627	0.52	0.38	971	29	971	31	979	65	940	200	971	31	103		
40LF13-62	13473	463	591.9	0.0742	0.61	1.67	15	0.1634	0.45	0.62	975	25	972	27	997	56	1040	170	972	27	94		
40LF13-61	1155	310	2.0	0.0772	0.67	1.71	16	0.1641	0.54	0.29	979	30	973	32	1015	57	1110	170	973	32	88		
40LF13-22	12937	215	1.6	0.0758	0.69	1.65	17	0.1648	0.63	0.42	983	35	979	37	1001	63	1090	190	979	37	90		
40LF13-118	1620.1	144	3.4	0.072	0.63	1.65	17	0.1641	0.74	0.4988	979	41	979	43	985	65	980	190	979	43	100		
40LF13-24	2421	155	1.6	0.0737	0.67	1.65	16	0.1654	0.47	0.2	986	26	985	28	989	62	1030	190	985	28	96		
40LF13-16	2040	771	1.6	0.095	0.8	2.71	28	0.213	1.3	0.94	1243	68	--	--	1325	79	1530	150	1530	150	81		
40LF13-29	20218	123	2.2	0.0985	0.82	3.12	29	0.2277	0.76	0.73	1322	40	--	--	1433	72	1600	160	1600	160	83		
40LF13-120	42.066	379	2.1	0.0997	0.84	3.13	32	0.231	1.1	0.6307	1340	56	--	--	1437	76	1610	150	1610	150	83		
40LF13-80	3079.4	88	1.1	0.0993	0.82	3.22	36	0.243	1.3	0.7844	1405	67	--	--	1456	83	1610	150	1610	150	87		
40LF13-21	5883	179	1.4	0.1005	0.84	3.76	34	0.2706	0.76	0.33	1543	38	--	--	1581	71	1620	160	1620	160	95		

Analysis	Isotope ratios										Apparent ages (Ma)											
	206Pb	U	U/Th	206Pb	±	207Pb	±	206Pb	±	error	206Pb	±	206Pb*	±	207Pb	±	206Pb	±	Best age	±	Conc	
	204Pb	(pmM)		207Pb	(%)	235U	(%)	238U	(%)	corr.	238U	(Ma)	238U	(Ma)	235U	(Ma)	207Pb	(Ma)	(Ma)	(Ma)	(%)	
40LF13-20	3505	334	1.9	0.1006	0.85	3.89	36	0.2811	0.79	0.46	1596	40	--	--	1607	74	1630	150	1630	150	98	
40LF13-67	1362	100	1.9	0.1007	0.84	3.45	33	0.248	1.1	0.73	1427	55	--	--	1508	77	1650	170	1650	170	86	
40LF13-91	17539.3	381	1.6	0.1021	0.83	3.92	36	0.277	1.3	0.6316	1573	64	--	--	1616	77	1670	150	1670	150	94	
40LF13-68	15760	305	1.2	0.1035	0.87	3.81	34	0.2685	0.88	0.32	1533	45	--	--	1594	71	1680	160	1680	160	91	
40LF13-74	11558	160	3.4	0.1032	0.89	4	37	0.2762	0.96	0.3	1571	49	--	--	1632	76	1680	160	1680	160	94	
40LF13-114	1538.44	68	1.8	0.1036	0.94	4.22	46	0.296	1.5	0.564	1679	79	--	--	1680	88	1680	160	1680	160	100	
40LF13-23	5556	503	1.7	0.1045	0.87	3.86	36	0.273	1.2	0.73	1556	60	--	--	1606	73	1700	150	1700	150	92	
40LF13-71	5892	62	1.4	0.1054	0.89	4.33	40	0.3001	0.84	0.47	1691	42	--	--	1696	77	1720	160	1720	160	98	
40LF13-88	14092.5	135	1.6	0.1066	0.89	4.31	43	0.295	1.4	0.3923	1664	68	--	--	1696	84	1750	150	1750	150	95	
40LF13-59	3002	177	1.8	0.1078	0.91	4.02	37	0.2767	0.93	0.51	1574	47	--	--	1648	72	1750	160	1750	160	90	
40LF13-4	9465	58	1.9	0.1091	0.89	4.6	41	0.3055	0.87	0.57	1718	43	--	--	1746	74	1790	150	1790	150	96	
40LF13-90	3476.58	205	0.9	0.1095	0.89	4.53	43	0.306	1.4	0.684	1722	69	--	--	1736	80	1790	150	1790	150	96	
40LF13-115	1051.69	74	1.6	0.1112	1	4.45	52	0.296	1.7	0.6174	1686	74	--	--	1726	98	1800	170	1800	170	94	
40LF13-104	99431	427	4.8	0.1112	0.89	4.77	46	0.316	1.5	0.677	1768	76	--	--	1778	82	1820	150	1820	150	97	
40LF13-56	2446	150	0.7	0.1138	0.94	4.05	38	0.26	1.1	0.73	1487	54	--	--	1643	75	1850	150	1850	150	80	
40LF13-86	16323.5	157	3.1	0.1133	0.93	4.67	48	0.298	1.4	0.2753	1679	67	--	--	1759	82	1850	150	1850	150	91	
40LF13-54	14911	105	5.4	0.114	1	4.72	44	0.299	1	0.09	1688	50	--	--	1767	79	1870	150	1870	150	90	
40LF13-43	2914	106	1.1	0.1163	0.96	4.87	43	0.3031	0.83	0.46	1710	42	--	--	1793	75	1900	150	1900	150	90	
40LF13-82	3408.33	133	1.6	0.1165	0.95	4.81	50	0.308	1.4	0.4405	1730	69	--	--	1789	82	1900	150	1900	150	91	
40LF13-58	7436	125	2.5	0.1219	0.99	5.25	46	0.3174	0.93	0.39	1776	46	--	--	1859	76	1980	150	1980	150	90	
40LF13-2	4804	45	1.8	0.0934	0.8	3.26	31	0.2557	0.93	0.68	1467	47	--	--	1466	73	1490	150	1490	150	98	
40LF13-107	39153.7	704	3.9	0.0919	0.8	2.97	33	0.23	1.1	0.8313	1332	57	--	--	1401	74	1460	150	1460	150	91	
40LF13-75	1925	140	1.0	0.1004	0.89	3.86	35	0.2817	0.87	0.01	1608	48	--	--	1610	81	1620	170	1620	170	99	
40LF13-77	3603.59	519	2.5	0.0896	0.74	2.39	27	0.201	0.95	0.6377	1184	53	--	--	1244	67	1420	150	1420	150	83	
40LF13-7	2913	44	2.5	0.0932	0.82	2.99	28	0.2354	0.73	0.48	1361	38	--	--	1407	75	1500	160	1500	160	91	
40LF13-39	1720	75	2.2	0.0918	0.81	3.01	29	0.236	0.72	0.52	1365	38	--	--	1414	75	1470	160	1470	160	93	
40LF13-13	3686	47	3.2	0.0887	0.73	2.92	26	0.2397	0.76	0.54	1384	40	--	--	1389	64	1420	160	1420	160	97	
40LF13-18	6089	639	3.2	0.0896	0.75	2.87	28	0.239	1.1	0.75	1378	58	--	--	1369	74	1410	160	1410	160	98	
40LF13-84	4882.32	191	3.3	0.082	0.69	2.21	23	0.1953	0.87	0.2925	1150	47	--	--	1180	70	1260	150	1260	150	91	
40LF13-30	10363	188	3.8	0.0895	0.73	2.96	27	0.2399	0.8	0.59	1385	42	--	--	1395	68	1420	170	1420	170	98	

Analysis	Isotope ratios										Apparent ages (Ma)											
	206Pb	U	U/Th	206Pb	±	207Pb	±	206Pb	±	error	206Pb	±	206Pb*	±	207Pb	±	206Pb	±	Best age	±	Conc	
	204Pb	(pmm)		207Pb	(%)	235U	(%)	238U	(%)	corr.	238U	(Ma)	238U	(Ma)	235U	(Ma)	207Pb	(Ma)	(Ma)	(Ma)	(%)	
40LF13_97	20514	317	2.2	0.0819	0.69	2.24	22	0.1942	0.9	0.4368	1144	48	—	—	1189	71	1250	150	1250	150	92	
40LF13_53	1739	114	0.8	0.0976	0.93	3.3	32	0.2469	0.87	0.21	1439	45	—	—	1476	76	1580	190	1580	190	91	
40LF13_3	10103	224	6.6	0.0828	0.69	1.97	18	0.1744	0.56	0.69	1036	31	—	—	1103	63	1270	160	1270	160	82	
40LF13_45	1126	64	2.2	0.0828	0.82	2.07	21	0.1808	0.63	0.31	1074	25	—	—	1143	72	1320	170	1320	170	81	
40LF13_94	72364	541	3.6	0.0808	0.67	2.07	19	0.1921	0.88	0.503	1132	48	—	—	1139	66	1220	160	1220	160	93	
40LF13_33	15087	425	2.5	0.0777	0.63	2.01	18	0.188	0.57	0.61	1110	31	—	—	1121	61	1140	150	1140	150	97	
40LF13_41	20845	438	5.6	0.0808	0.66	2.21	19	0.1994	0.54	0.42	1172	29	—	—	1186	57	1210	160	1210	160	97	
40LF13_47	42044	529	2.1	0.08	0.65	2.11	19	0.1893	0.5	0.45	1117	27	—	—	1149	61	1190	160	1190	160	94	
40LF13_35	9914	551	2.7	0.0778	0.63	2.06	18	0.19	0.53	0.6	1121	29	—	—	1133	60	1160	160	1160	160	97	
40LF13_5	1205	30	2.9	0.0851	0.75	2.5	23	0.2129	0.61	0.15	1244	32	—	—	1274	65	1300	180	1300	180	96	
40LF13_102	10006.4	547	3.3	0.08	0.64	1.99	19	0.1805	0.8	0.4794	1069	44	—	—	1111	63	1220	170	1220	170	88	
40LF13_50	8354	351	3.2	0.0784	0.66	1.86	17	0.1745	0.5	0.42	1036	27	—	—	1068	62	1170	170	1170	170	89	
40LF13_100	3302.78	244	1.4	0.0778	0.63	1.88	18	0.1744	0.77	0.508	1036	42	—	—	1070	65	1140	170	1140	170	91	
40LF13_49	17248	132	2.4	0.0767	0.7	1.87	18	0.1787	0.52	0.3	1059	29	—	—	1081	62	1120	170	1120	170	95	
40LF13_83	1480.17	66	2.3	0.0784	0.69	1.95	21	0.1804	0.85	0.2435	1071	45	—	—	1104	65	1160	180	1160	180	92	
40LF13_73	688	40	1.9	0.0774	0.73	1.95	20	0.1806	0.67	0.33	1069	36	—	—	1088	69	1150	190	1150	190	93	
40LF13_95	2126	75	1.2	0.077	0.73	1.86	20	0.1755	0.8	0.334	1042	44	—	—	1073	65	1110	190	1110	190	94	
40LF13_10	14468	150	1.2	0.1212	0.97	5.38	46	0.3239	0.84	0.65	1808	41	—	—	1882	76	1980	150	1980	150	91	
40LF13_108	15023	63	2.7	0.11	4	5.02	56	0.327	1.5	0.4767	1825	71	—	—	1820	89	1830	150	1830	150	100	
40LF13_99	7792	66	2.7	0.114	0.96	5.13	50	0.328	1.6	0.4947	1828	78	—	—	1837	84	1850	160	1850	160	99	
40LF13_1	2307	29	2.4	0.1167	0.97	5.24	47	0.3296	0.99	0.36	1835	48	—	—	1856	75	1900	140	1900	140	97	
40LF13_46	1288	93	2.3	0.129	1.1	6.05	56	0.345	4	0.48	1911	50	—	—	1978	80	2080	160	2080	160	92	
40LF13_66	8549	352	1.5	0.207	1.6	12.6	120	0.446	1.7	0.75	2375	75	—	—	2644	87	2880	130	2880	130	82	
40LF13_55	71268	659	1.4	0.219	1.7	13.8	120	0.46	1.4	0.86	2436	62	—	—	2735	85	2990	130	2990	130	81	
40LF13_85	6987.6	108	4.1	0.185	1.6	11.9	130	0.467	2.5	0.6967	2470	110	—	—	2602	88	2700	140	2700	140	91	
40LF13_14	6584	29	0.9	0.185	1.5	12.5	110	0.492	1.4	0.6	2576	60	—	—	2638	82	2700	130	2700	130	95	
40LF13_98	2019.64	59	1.6	0.188	1.5	13.5	130	0.526	2.5	0.6137	2720	100	—	—	2714	93	2720	130	2720	130	100	
40LF13_96	3852.69	133	1.9	0.193	1.6	13.9	130	0.532	2.4	0.5564	2750	99	—	—	2738	91	2760	140	2760	140	100	
40LF13_105	885.917	155	1.0	0.0591	0.56	0.802	9.2	0.0988	0.49	0.4823	607	29	792	24	598	51	570	190	792	24	106	
40LF13_81	1024.08	298	4.6	0.0798	0.68	1.25	15	0.1166	0.72	0.713	710	42	792	24	819	64	1180	170	792	24	60	

Analysis	Isotope ratios										Apparent ages (Ma)												
	206Pb	U	U/Th	206Pb	±	207Pb	±	206Pb	±	error	206Pb	±	206Pb*	±	207Pb	±	206Pb	±	Best age	±	Conc		
	204Pb	(pmm)		207Pb	(%)	235U	(%)	238U	(%)	corr.	238U	(Ma)	238U	(Ma)	235U	(Ma)	207Pb	(Ma)	(Ma)	(Ma)	(%)		
40LF13_110	203.199	503	4.2	0.0617	0.57	0.99	11	0.1171	0.56	0.5201	713	32	792	24	694	55	650	190	792	24	110		
40LF13_116	2256.6	150	1.3	0.0643	0.89	1.08	14	0.1255	0.95	0.0844	761	54	792	24	754	57	680	290	792	24	112		
40LF13_92	8736.25	792	2.7	0.0717	0.59	1.24	12	0.1278	0.63	0.7512	775	36	792	24	819	53	970	170	792	24	80		
40LF13_15	17648	224	12.1	0.0723	0.59	1.31	11	0.1319	0.4	0.6	798	23	792	24	854	52	1000	160	792	24	80		
40LF13_32	11296	414	4.0	0.179	1.4	11.8	100	0.475	1.2	0.69	2504	54	--	--	2590	82	2650	130	2650	130	94		
40LF13_25	212531	1050	5.0	0.19	1.5	10.7	110	0.408	2.2	0.96	2200	100	--	--	2484	97	2740	130	2740	130	80		
40LF13_19	6879	1328	3.8	0.1094	0.9	4.46	40	0.304	1	0.67	1711	49	--	--	1727	71	1790	140	1790	140	96		
40LF13_38	17683	1092	3.9	0.1131	0.91	4.68	42	0.3001	0.97	0.71	1691	48	--	--	1766	72	1850	150	1850	150	91		
40LF13_111	27467	421	2.7	0.0859	0.74	3.27	35	0.277	1.3	0.711	1576	65	--	--	1474	76	1340	160	1340	160	118		
40LF13_109	731.667	69	2.2	0.0924	0.89	3.33	40	0.278	1.6	0.54	1581	79	--	--	1500	88	1460	160	1460	160	108		
40LF13_79	841.416	612	0.7	0.18	1.5	6.63	76	0.276	1.6	0.7575	1572	78	--	--	2057	93	2650	140	2650	140	59		
40LF13_17	8083	1362	2.9	0.0941	0.76	3.21	28	0.2483	0.72	0.69	1429	37	--	--	1457	68	1510	150	1510	150	95		
40LF13_11	392	21	1.3	0.126	1.1	4	38	0.232	0.72	0.19	1345	38	--	--	1631	76	2030	160	2030	160	66		
40LF13_48	2632	1433	1.8	0.156	1.3	4.57	43	0.2149	0.63	0.76	1255	33	--	--	1739	78	2390	100	2390	100	53		
40LF13_44	7827	1056	2.7	0.0922	0.75	2.59	24	0.2042	0.76	0.85	1197	41	--	--	1296	67	1470	150	1470	150	81		
40LF13_72	1393	628	1.1	0.1008	0.84	2.9	26	0.211	0.67	0.36	1234	36	--	--	1382	67	1630	160	1630	160	76		
40LF13_101	435.67	419	8.3	0.143	1.5	3.41	52	0.1655	0.82	0.8085	987	45	898	49	1480	110	2230	180	898	49	44		
40LF13_60	556	84	1.0	0.0828	0.76	1.9	18	0.1681	0.49	0.33	1001	27	--	--	1079	67	1290	190	1290	190	78		
40LF13_106	22516	543	5.3	0.07	0.62	1.66	18	0.1711	0.76	0.5968	1018	42	--	--	993	65	930	170	930	170	109		
40LF13_26	2091	843	3.6	0.0958	0.85	2.44	23	0.1887	0.82	0.47	1114	45	--	--	1259	74	1560	180	1560	180	71		
40LF13_117	1465.17	71	2.5	0.0716	0.67	1.69	19	0.1792	0.83	0.5894	1062	45	--	--	1010	69	960	190	960	190	111		
40LF13_42	4261	887	1.3	0.0797	0.66	1.73	15	0.1575	0.47	0.55	943	26	932	28	1017	57	1190	160	932	28	79		
40LF13_103	4398.25	160	1.4	0.0688	0.57	1.46	14	0.1547	0.72	0.5095	927	40	929	42	919	61	880	180	929	42	105		
40LF13_34	82558	768	4.9	0.0766	0.63	1.54	14	0.1472	0.41	0.46	885	23	876	25	946	55	1120	160	876	25	79		
40LF13_112	2426.87	322	2.0	0.0681	0.61	1.45	15	0.1537	0.71	0.5009	924	41	924	42	917	63	860	170	924	42	107		
40LF13_64	1379	329	4.8	0.0803	0.68	1.48	13	0.1367	0.37	0.36	826	21	812	23	923	55	1210	160	812	23	68		
40LF13_31	2183	572	0.8	0.0969	0.81	1.8	17	0.137	0.63	0.79	827	36	796	37	1044	60	1560	150	796	37	53		
40LF13_27	63	1855	0.7	0.097	1.4	1.05	32	0.0648	0.54	0.9	404	33	383	32	680	120	1490	210	383	32	27		
40LF13_69	4581	1226	2.9	0.0577	0.48	0.53	5	0.0668	0.18	0.52	418	11	415	11	428	31	520	180	415	11	80		
40LF13_52	2199	1842	16.5	0.0783	0.63	1.68	15	0.1569	0.43	0.67	939	24	930	26	1000	56	1150	160	930	26	82		

Analysis	Isotope ratios										Apparent ages (Ma)												
	206Pb	U	U/Th	206Pb	±	207Pb	±	206Pb	±	error	206Pb	±	206Pb*	±	207Pb	±	206Pb	±	Best age	±	Conc		
	204Pb	(pmM)		207Pb	(%)	235U	(%)	238U	(%)	corr.	238U	(Ma)	238U	(Ma)	235U	(Ma)	207Pb	(Ma)	(Ma)	(Ma)	(%)		
40LF13-28	206	172	1.7	0.158	1.5	0.92	11	0.0414	0.41	0.88	261	25	226	23	660	59	2420	160	226	23	11		
40LF13-12	409	55	1.1	0.114	1.4	0.77	18	0.0473	0.68	0.94	297	42	275	39	572	99	1880	240	275	39	16		
40LF13-8	993	159	1.2	0.089	1.3	0.83	12	0.0712	0.3	0.29	443	18	425	19	602	61	1290	260	425	19	34		

Age uncertainties are reported at the 2-sigma level.

206Pb*/238U age calculated using the 207Pb correction of Ludwig (2012), assuming an initial Pb composition of Stacey and Kramers (1975) two-stage model

Best age is determined using a 1000 Ma cutoff between 206Pb*/238U and 206Pb/207Pb ages

Concordance is based on 206Pb/238U age / 206Pb/207Pb age, with 100% = concordant.

Concordance is not reported for 206Pb*/238U ages <600 Ma because of large uncertainty in 206Pb/207Pb age.

Table DR5: SIMS U-Th-Pb isotope composition of detrital zircons analyzed at the Nordsim-laboratory

Analysis	Corrected isotope ratios												Corrected apparent ages						207-corr. age					
	U (ppm)	Th/U	Pb (ppm)	f206Pb	238U 206Pb	± 1s	207Pb 206Pb	± 1s	207Pb 235U	± 1s	206Pb 238U	± 1s	error corr.	207Pb 206Pb	± 1s	207Pb 235U	± 1s	206Pb 238U	± 1s	206Pb* 238U	± 1s	Best age (Ma)	± (Ma)	Conc
40LF13																								
Clarence River group 69.37, -142.91 n=21/26 (Ordovician-Lower Devonian?)																								
n5021-25	534.2	0.192	40.9984	{0.00}	14.6228	0.69	0.0564	0.61	0.5319	0.92	0.0684	0.69	0.7511	468.5	13.3	433.1	3.237	426.43	2.84	425.86	2.882	425.856	2.88	NA
n5021-14	420.5	1.007	41.1595	{0.18}	14.2242	0.68	0.0564	0.69	0.5468	0.97	0.0703	0.68	0.7016	468.5	15.3	442.9	3.499	437.98	2.89	437.55	2.937	437.551	2.94	NA
n5021-17	168.6	0.465	14.3359	{0.21}	14.1796	0.68	0.056	1.09	0.545	1.29	0.0705	0.68	0.5259	454.1	24.1	441.7	4.613	439.31	2.87	439.1	2.929	439.104	2.93	NA
n5021-16	252.1	0.17	19.8019	{0.07}	14.1616	0.68	0.0564	0.89	0.5488	1.11	0.0706	0.68	0.6076	466.7	19.5	444.2	4.017	439.85	2.88	439.47	2.93	439.472	2.93	NA
n5021-34	550.9	0.21	43.5014	{0.01}	14.1394	0.8	0.055	0.7	0.5368	1.06	0.0707	0.8	0.752	414	15.5	436.3	3.758	440.52	3.39	440.88	3.444	440.9	3.44	NA
n5021-06	257.8	0.08	45.5845	{0.10}	6.20263	0.72	0.0719	0.52	1.5973	0.89	0.1612	0.72	0.8106	981.9	10.5	969.2	5.55	963.56	6.43	962.77	6.717	962.774	6.72	98
n5021-04	148.2	0.339	28.0588	{0.00}	6.17915	0.69	0.0704	0.78	1.5713	1.04	0.1618	0.69	0.6609	940.6	15.9	959	6.46	966.96	6.16	968.09	6.469	968.09	6.47	103
n5021-19	369.4	0.144	67.1204	{0.00}	6.13403	0.68	0.0712	0.43	1.601	0.8	0.163	0.68	0.842	964	8.82	970.6	5.03	973.57	6.11	973.98	6.388	973.984	6.39	101
n5021-02	166.1	0.205	30.8846	{0.00}	6.1094	0.73	0.0725	0.75	1.6362	1.04	0.1637	0.73	0.6955	999.9	15.1	984.2	6.594	977.21	6.58	976.2	6.894	976.202	6.89	98
n5021-03	250.4	0.136	46.0032	{0.00}	6.06	0.69	0.0721	0.6	1.6407	0.91	0.165	0.69	0.7535	989	12.1	986	5.767	984.59	6.27	984.4	6.572	984.398	6.57	100
n5021-01	73.66	0.634	16.7343	{0.00}	5.58325	0.68	0.0752	0.91	1.8578	1.13	0.1791	0.68	0.5977	1075	18.1	1066	7.509	1062.1	6.64	1061.5	7.027	1061.46	7.03	99
n5021-04	174.9	0.498	40.0458	0.72	5.45251	1.08	0.0878	1.23	2.0688	2.1	0.1821	1.07	0.512	1255	34.8	1139	14.45	1078.3	10.7	1068.6	11.51	1068.64	11.5	86
n5021-11	132.4	0.595	34.3028	{0.17}	4.84547	0.75	0.0799	0.62	2.2746	0.97	0.2064	0.75	0.7719	1195	12.2	1204	6.886	1209.5	8.29	--	--	1195.38	12.2	101
n5021-12	59.38	0.841	16.4337	{0.88}	4.83275	0.69	0.0816	0.9	2.327	1.13	0.2069	0.69	0.6046	1235	17.6	1221	8.084	1212.4	7.58	--	--	1235.03	17.6	98
n5021-07	269.7	0.2	72.2963	{0.06}	4.26726	0.72	0.0858	0.39	2.7711	0.82	0.2343	0.72	0.8792	1333	7.49	1348	6.1	1357.2	8.78	--	--	1332.83	7.49	102
n5021-15	206	0.357	65.1931	{0.04}	3.78336	0.75	0.0934	0.4	3.4037	0.85	0.2643	0.75	0.8798	1496	7.64	1505	6.703	1511.9	10.1	--	--	1495.9	7.64	101
n5021-10	179	0.471	58.0713	{0.04}	3.80295	0.7	0.0943	0.48	3.4176	0.85	0.263	0.7	0.8255	1513	9	1508	6.68	1504.9	9.4	--	--	1513.37	9	99
n5021-22	909.1	0.987	315.693	{0.03}	4.14046	0.68	0.0992	0.19	3.3042	0.7	0.2415	0.68	0.9623	1610	3.56	1482	5.491	1394.6	8.48	--	--	1609.54	3.56	87
n5021-21	208.1	0.195	70.2409	{0.01}	3.43046	0.69	0.1012	0.36	4.0681	0.77	0.2915	0.69	0.8861	1647	6.63	1648	6.323	1649.1	9.98	--	--	1646.52	6.63	100
n5021-08	178.4	0.225	62.2295	{0.00}	3.36408	0.88	0.1057	0.65	4.3306	1.09	0.2973	0.88	0.8049	1726	11.9	1699	9.057	1677.7	13	--	--	1725.82	11.9	97
n5021-18	98.78	0.479	66.3032	{0.04}	1.97387	0.69	0.1882	0.32	13.148	0.76	0.5066	0.69	0.9082	2727	5.21	2690	7.173	2642.2	14.9	--	--	2726.74	5.21	97
n5021-20	384.3	0.402	26.1069	4.11	16.779	4.06	0.0864	2.92	0.4277	6.41	0.0571	1.03	0.1602	382.7	136	361.6	19.7	358.27	3.58	358	4.39	358.005	4.39	NA
n5021-23	2051	0.292	181.145	2.5	13.1973	2.03	0.0813	1.27	0.6309	3.8	0.0739	1.98	0.5204	672	68	496.7	15.05	459.48	8.79	456.16	9.279	456.156	9.28	NA
n5021-09	243.7	0.293	29.0056	{0.25}	9.92921	0.7	0.0656	0.82	0.9103	1.07	0.1007	0.7	0.6471	792.1	17.1	657.2	5.212	618.59	4.1	614.56	4.219	614.563	4.22	NA
n5021-24e	173.5	0.63	29.6011	{0.07}	7.83384	1.33	0.0742	0.86	1.3063	1.58	0.1277	1.33	0.8391	1047	17.2	848.5	9.132	774.45	9.69	765.39	9.953	765.394	9.95	NA
n5021-13	141.5	0.35	85.1451	{0.07}	2.31508	0.71	0.2535	0.25	15.096	0.75	0.432	0.71	0.9412	3207	4	2821	7.162	2314.5	13.7	--	--	3206.57	4	72

Age uncertainties are reported at the 1-sigma level.

207-corrected 206Pb*/238U age calculated using the 207Pb correction of Ludwig (2012), assuming an initial Pb composition of Stacey and Kramers (1975) two-stage mode

Best age is determined using a 1000 Ma cutoff between 207 corrected 206Pb/238U and 206Pb/207Pb ages

Concordance is based on 206Pb/238U age / 206Pb/207Pb age, with 100% = concordant.

Concordance is not reported for 206Pb/238U ages <600 Ma because of large uncertainty in 206Pb/207Pb age.

Table DR6: Stepwise 40Ar/39Ar isotope composition of muscovite analyzed at the University of Alaska Fairbanks

Neruokpuk Fm (early-middle Cambrian) Smaples

12JT13A **69.23** **-141.83**

Weighted average of J from standards = 3.869e-03 +/- 2.644e-05

L.Power (mW)	Cumulative	Age	±	40Ar/39Ar	±	37Ar/39Ar	±	36Ar/39Ar	±	%Atm.	Ca/K	±	Cl/K	±	40*/39K	±	
		39Ar	(Ma)	(Ma)	meas.	(%)	meas.	(%)	meas.	(%)	40Ar	meas.	(%)	meas.	(%)	meas.	(%)
1250	0.0197	320.21	9.99	53.41837	1.199	0.57285	0.01385	0.01104	0.00426	6.02322	1.05152	0.02543	0.00184	0.00029	50.19327	1.708	
1500	0.0513	383.98	8.73	62.93955	1.415	0.03971	0.00226	0.00547	0.00226	2.56597	0.07286	0.00416	0.00095	0.00019	61.29732	1.548	
1750	0.3112	403.11	7.28	65.19665	1.309	0.00639	0.0004	0.00156	0.0003	0.70754	0.01172	0.00073	0.00021	0.00006	64.70615	1.305	
2000	0.3429	398.08	8.3	64.46249	1.296	0.00668	0.00256	0.00212	0.00246	0.97176	0.01226	0.00469	0.00023	0.0002	63.80696	1.482	
2500	0.4351	405.77	10.33	65.26705	1.822	0.00285	0.00106	0.00019	0.00117	0.08444	0.00523	0.00195	0.00021	0.00012	65.18239	1.853	
3000	0.5198	404.55	9.29	65.21331	1.642	0.00302	0.00168	0.00074	0.00099	0.33515	0.00554	0.00309	0.00063	0.00016	64.96528	1.665	
4000	0.839	404.66	7.59	65.37231	1.365	0.00206	0.0003	0.00121	0.00024	0.54765	0.00378	0.00055	0.00047	0.00009	64.98485	1.36	
5000	0.9258	408.63	9.13	66.14311	1.622	0.00439	0.0011	0.00141	0.00095	0.62961	0.00806	0.00201	0.00062	0.00015	65.69735	1.641	
9000	1	405.75	9.64	66.05637	1.694	0.00474	0.00135	0.00287	0.00135	1.28225	0.0087	0.00248	0.00041	0.00011	65.18027	1.73	
Integrated	NA	402.29	4.28	65.07973	0.625	0.01634	0.00036	0.00167	0.00026	0.75452	0.02998	0.00067	0.00043	0.00004	64.55996	0.626	

12JT12 **69.21** **-141.85**

Weighted average of J from standards = 2.552e-03 +/- 1.290e-05

L.Power (mW)	Cumulative	Age	±	40Ar/39Ar	±	37Ar/39Ar	±	36Ar/39Ar	±	%Atm.	Ca/K	±	Cl/K	±	40*/39K	±	
		39Ar	(Ma)	(Ma)	meas.	(%)	meas.	(%)	meas.	(%)	40Ar	meas.	(%)	meas.	(%)	meas.	(%)
500	0.0033	1619.51	800.31	603.566	412.6	-0.37142	1.51956	0.11062	0.59655	5.4211	-0.68133	2.78672	0.28427	0.23894	570.6683	427.5	
750	0.0087	6820.17	888.73	16910.15568	8534	-0.23958	0.82984	0.17091	0.39572	0.29878	-0.43951	1.52213	0.72563	0.37878	16856.75	8507	
1000	0.0152	5603.6	790.16	8346.9325	3831	-0.18762	0.58919	-0.14799	0.24816	-0.52374	-0.3442	1.08079	0.29422	0.15674	8389.507	3850	
1250	0.0234	4404.05	535.08	4049.13861	1315	-0.02915	0.46053	-0.24431	0.25612	-1.7829	-0.05349	0.84498	0.07736	0.06763	4121.216	1340	
1500	0.0395	3138.12	282.09	1854.54956	350.4	0.13124	0.2669	0.03719	0.10986	0.59198	0.24083	0.48981	0.04556	0.03707	1843.712	349.9	
1750	0.0669	852.25	87.5	210.00748	20.17	-0.01861	0.13546	-0.09125	0.06946	-12.84136	-0.03415	0.24854	-0.01373	0.01616	236.9387	30.53	
2000	0.1102	372.46	67.74	85.66562	4.968	0.0349	0.10114	-0.01463	0.0587	-5.05189	0.06403	0.18559	-0.00707	0.01141	89.96437	18.11	
2500	0.2048	304.85	24.57	77.4225	2.522	0.02952	0.05007	0.01751	0.01988	6.6829	0.05416	0.09188	-0.00065	0.00514	72.22223	6.328	
3000	0.3279	341.54	18.48	84.31936	2.109	0.00769	0.02934	0.00854	0.0149	2.99216	0.01412	0.05384	0.00076	0.00403	81.76802	4.856	
4000	0.5464	423	13.46	102.40705	2.044	0.00933	0.02229	-0.00436	0.01038	-1.25882	0.01711	0.04089	-0.00193	0.00229	103.6668	3.7	
5000	0.8444	432.67	9.05	107.92189	1.251	-0.00008	0.01348	0.00527	0.00737	1.44445	-0.00015	0.02474	0.00215	0.00158	106.3337	2.502	
9000	1	749.5	18.59	204.08624	5.418	0.02821	0.02564	0.00668	0.01	0.96556	0.05177	0.04705	-0.00019	0.00353	202.0903	6.126	
Integrated	NA	1086.33	11.01	324.2262	3.513	0.00929	0.01466	0.00015	0.00685	0.0137	0.01705	0.02689	0.00767	0.00174	324.1542	4.055	

37LF13

69.36 -142.92

Weighted average of J from standards = 2.552e-03 +/- 1.290e-05

L.Power (mW)	Cumulative 39Ar	Age (Ma)	± (Ma)	40Ar/39Ar meas.	± (%)	37Ar/39Ar meas.	± (%)	36Ar/39Ar meas.	± (%)	%Atm.	Ca/K meas.	± (%)	Cl/K meas.	± (%)	40*/39K meas.	± (%)
300	0.0028	964.7	305.85	338.35877	125	0.24518	0.32707	0.20635	0.18196	18.01676	0.44994	0.60033	-0.01132	0.03238	277.4212	113.6
500	0.0107	1191.43	124.93	391.02303	50.97	0.09062	0.09897	0.08079	0.07466	6.10371	0.16629	0.18161	-0.01901	0.01225	367.1517	52.62
750	0.0359	1680.19	47.09	626.61827	25.66	-0.01214	0.02922	0.07768	0.02752	3.66358	-0.02228	0.05362	-0.00788	0.00296	603.6278	26.01
1000	0.08	2173.58	28.48	918.59537	20.26	-0.00776	0.02178	0.00481	0.01458	0.15484	-0.01424	0.03996	-0.0016	0.00162	917.1384	20.69
1250	0.1484	2337.02	31.1	1048.55519	24.17	-0.1052	0.06373	0.02379	0.02024	0.6714	-0.19301	0.11692	0.00061	0.00219	1041.408	24.74
1500	0.2468	2470.03	19.9	1151.82654	16.98	0.00497	0.00816	0.00205	0.0053	0.05255	0.00911	0.01497	-0.0003	0.0008	1151.196	17.04
1750	0.373	2543.69	12.69	1216.58198	11.26	0.00109	0.00471	0.00331	0.00399	0.08041	0.002	0.00865	-0.00135	0.00076	1215.575	11.32
2000	0.5701	2542.39	11.31	1214.71634	10.05	-0.00203	0.00336	0.00092	0.00285	0.02232	-0.00373	0.00616	-0.00075	0.00062	1214.414	10.08
2500	0.6418	2518.57	25.41	1192.11588	22.18	-0.00489	0.00982	-0.0042	0.00857	-0.10415	-0.00897	0.01802	-0.00165	0.00135	1193.324	22.35
3000	0.7124	2519.99	24.83	1194.4757	21.76	0.05342	0.01025	-0.00026	0.00687	-0.0067	0.09802	0.0188	-0.00211	0.00229	1194.571	21.86
4000	0.7633	2493.85	42.67	1168.81183	36.75	-0.00741	0.02052	-0.00999	0.01219	-0.2525	-0.0136	0.03766	-0.0041	0.00149	1171.727	37.02
5000	0.8385	2497.92	27.47	1172.45674	23.66	0.01464	0.01924	-0.00957	0.0096	-0.24134	0.02687	0.03531	-0.0025	0.0014	1175.269	23.89
9000	1	2213.88	13.38	946.21915	9.873	-0.00959	0.00786	-0.00189	0.00364	-0.05883	-0.01759	0.01442	-0.00003	0.00101	946.7397	9.937
Integrated	NA	2418.16	9.4	1108.62244	5.424	-0.00362	0.0054	0.00397	0.00246	0.10581	-0.00663	0.0099	-0.00143	0.0004	1107.417	5.467

J1355-617

69.22 -140.96

Weighted average of J from standards = 2.552e-03 +/- 1.290e-05

L.Power (mW)	Cumulative 39Ar	Age (Ma)	± (Ma)	40Ar/39Ar meas.	± (%)	37Ar/39Ar meas.	± (%)	36Ar/39Ar meas.	± (%)	%Atm.	Ca/K meas.	± (%)	Cl/K meas.	± (%)	40*/39K meas.	± (%)
300	0.0119	3458.63	122.43	2321.41507	184.5	0.01542	0.08792	0.14396	0.04093	1.83249	0.02829	0.16133	0.0609	0.0114	2278.871	181.5
500	0.0288	2853.38	97.49	1551.10766	105	-0.09852	0.06385	0.11502	0.03779	2.19177	-0.18076	0.11714	0.05957	0.00788	1516.976	103.3
750	0.0729	1149.56	25.83	368.3193	10.28	0.27838	0.03078	0.06314	0.01432	5.06017	0.51088	0.0565	0.03504	0.00288	349.7223	10.63
1000	0.1369	804.83	13.34	227.39017	4.083	0.02439	0.01575	0.02287	0.00746	2.9716	0.04475	0.02891	0.01366	0.00193	220.608	4.534
1250	0.2185	928.22	14.46	265.65263	4.96	-0.00247	0.01296	0.00545	0.00621	0.60668	-0.00454	0.02378	0.00656	0.00141	264.011	5.261
1500	0.3483	1365.58	14	444.9106	6.422	0.00103	0.00735	0.00243	0.00347	0.16126	0.0019	0.01349	0.00169	0.00086	444.1638	6.493
1750	0.4322	1197.45	13.04	368.05256	4.803	-0.00844	0.01578	-0.00566	0.00901	-0.45426	-0.01548	0.02896	0.00252	0.00177	369.6924	5.509
2000	0.5268	1483.13	12.69	498.45203	6.119	-0.00852	0.0098	-0.00709	0.00444	-0.4205	-0.01563	0.01798	0.00151	0.00178	500.5152	6.282
2500	0.6698	1607.07	14.33	562.31926	7.51	-0.00797	0.00734	-0.00596	0.00339	-0.31296	-0.01462	0.01346	0.00035	0.00078	564.0461	7.599
3000	0.7618	1533.5	12	524.28648	5.99	0.00512	0.01032	-0.00523	0.00383	-0.29496	0.00939	0.01894	0.00045	0.00091	525.8051	6.113
4000	0.8597	1513.12	13.34	513.88416	6.506	-0.00094	0.01141	-0.00552	0.00537	-0.31753	-0.00173	0.02093	-0.0011	0.00091	515.4857	6.716
5000	0.9681	1747.84	12.57	642.36088	7.106	-0.0068	0.01095	0.00209	0.00425	0.09611	-0.01248	0.0201	0.00015	0.00105	641.7107	7.21

9000	1	1661.48	49.37	597.54691	26.82	0.09344	0.03293	0.01428	0.0148	0.70475	0.17147	0.06043	0.0046	0.004	593.3454	26.99
Integrated	NA	1497.82	7.19	509.70986	2.456	0.01228	0.00392	0.00633	0.00187	0.36663	0.02254	0.0072	0.00541	0.00044	507.8159	2.509

Clarence River group (Ordovician-Lower Devonian?) Smaps

12JT24 69.28 -141.75

Weighted average of J from standards = 2.552e-03 +/- 1.290e-05

L.Power (mW)	Cumulative	Age	±	40Ar/39Ar	±	37Ar/39Ar	±	36Ar/39Ar	±	%Atm.	Ca/K	±	Cl/K	±	40*/39K	±
	39Ar	(Ma)	(Ma)	meas.	(%)	meas.	(%)	meas.	(%)	40Ar	meas.	(%)	meas.	(%)	meas.	(%)
300	0.0088	2515.5	23.11	1201.69233	19.29	0.10832	0.02861	0.03768	0.0231	0.92585	0.19877	0.0525	0.01487	0.00263	1190.628	20.3
500	0.0262	159.91	13.74	46.34279	0.846	0.12311	0.01746	0.03373	0.01083	21.49637	0.22591	0.03205	0.00735	0.00097	36.36062	3.264
750	0.0657	175.55	5.6	41.26508	0.491	0.10065	0.00738	0.00391	0.00425	2.78203	0.1847	0.01354	0.00513	0.0007	40.09105	1.342
1000	0.1315	266.22	3.29	64.24004	0.349	0.21559	0.00437	0.00628	0.00256	2.86456	0.39563	0.00802	0.0041	0.00026	62.38049	0.83
1250	0.2181	391.25	2.54	95.6962	0.414	0.50521	0.00611	0.00247	0.00186	0.71892	0.92731	0.01121	0.00164	0.00032	95.01265	0.687
1500	0.3049	417.03	3.12	102.18777	0.597	0.88318	0.0107	0.00091	0.00207	0.19052	1.62153	0.01965	0.0017	0.0003	102.0271	0.854
1750	0.3834	427.24	4.39	103.95041	0.815	1.22978	0.01418	-0.00244	0.003	-0.78995	2.25843	0.02607	0.00231	0.00037	104.8327	1.21
2000	0.4518	420.65	3.61	103.34382	0.67	1.44857	0.01275	0.00175	0.00248	0.38469	2.66065	0.02344	0.00242	0.00032	103.0221	0.993
2500	0.5282	422.09	4.18	103.69194	0.948	1.78087	0.01828	0.00177	0.0022	0.36371	3.27177	0.03363	0.00331	0.00025	103.4153	1.149
3000	0.6037	411.02	3.22	100.85195	0.645	1.03541	0.00899	0.00203	0.00203	0.50922	1.90123	0.01652	0.00227	0.00024	100.3823	0.879
4000	0.702	515.42	2.62	129.51304	0.583	0.04882	0.00262	-0.00084	0.00164	-0.19508	0.08959	0.00481	0.00062	0.00018	129.7404	0.759
5000	0.7976	530.54	3.32	134.13874	0.775	0.03375	0.00316	-0.00007	0.00196	-0.01841	0.06194	0.0058	0.00054	0.00029	134.1369	0.968
9000	1	585.37	2.3	150.78829	0.653	0.05422	0.00148	0.0013	0.0008	0.25188	0.09949	0.00271	0.001	0.00012	150.3846	0.693
Integrated	NA	483.78	2.38	121.24043	0.225	0.57079	0.00211	0.00217	0.00064	0.49026	1.04774	0.00388	0.00211	0.00008	120.6651	0.294

09LF13 69.27 -142.66

Weighted average of J from standards = 2.552e-03 +/- 1.290e-05

L.Power (mW)	Cumulative	Age	±	40Ar/39Ar	±	37Ar/39Ar	±	36Ar/39Ar	±	%Atm.	Ca/K	±	Cl/K	±	40*/39K	±
	39Ar	(Ma)	(Ma)	meas.	(%)	meas.	(%)	meas.	(%)	40Ar	meas.	(%)	meas.	(%)	meas.	(%)
300	0.0017	156.82	191.23	88.43796	19	0.43686	0.24279	0.17878	0.15593	59.71627	0.80183	0.44576	0.04587	0.02911	35.62514	45.36
500	0.0032	354.42	185.3	414.00764	77.99	0.21412	0.3233	1.11284	0.26159	79.4311	0.39295	0.59339	0.00729	0.0377	85.16359	49.05
750	0.0072	346.26	72.71	99.71511	8.496	0.59234	0.09498	0.05672	0.06041	16.76501	1.08732	0.17443	-0.00025	0.01128	83.00788	19.16
1000	0.0151	317.97	90	113.28026	5.146	1.37815	0.08649	0.12801	0.07826	33.30012	2.53118	0.159	-0.00471	0.00714	75.6116	23.34
1250	0.0322	461.97	15.91	115.4099	2.278	0.4475	0.02834	0.00323	0.01304	0.79557	0.82136	0.05203	0.00328	0.00389	114.4985	4.469
1500	0.0515	460.01	17.94	114.53848	2.788	0.01394	0.02396	0.0019	0.01421	0.49053	0.02557	0.04396	0.00263	0.00325	113.9482	5.034
1750	0.085	463.79	9.78	115.93303	0.826	0.00412	0.01311	0.00303	0.00888	0.77111	0.00755	0.02405	0.0019	0.00156	115.0099	2.751

2000	0.1487	465.04	6.48	115.92671	1.321	0.00679	0.00614	0.00181	0.00428	0.46128	0.01246	0.01127	0.00091	0.00083	115.363	1.825
2500	0.5022	456.41	2.49	113.22081	0.663	0.00097	0.0018	0.00086	0.00076	0.2232	0.00179	0.0033	0.00068	0.00021	112.9386	0.698
3000	0.6329	462.44	2.87	114.65743	0.579	0.00343	0.00326	-0.00001	0.0019	-0.0023	0.0063	0.00598	0.00083	0.0004	114.6307	0.807
4000	0.8054	457.45	3.26	113.18677	0.728	-0.00033	0.00203	-0.00025	0.00187	-0.06408	-0.00061	0.00372	0.00038	0.00027	113.2296	0.915
5000	0.9349	453.17	3.41	112.12498	0.658	-0.00107	0.00298	0.00021	0.00234	0.05523	-0.00197	0.00546	0.00037	0.00035	112.0333	0.953
9000	1	451.77	5.29	113.31269	0.882	0.00756	0.00655	0.00556	0.00404	1.45038	0.01388	0.01202	0.00051	0.00063	111.6406	1.478
Integrated	NA	455.52	2.62	113.9384	0.325	0.02393	0.00159	0.00414	0.00112	1.07193	0.04391	0.00291	0.00077	0.0002	112.6896	0.461

40LF13 69.38 -142.91

Weighted average of J from standards = 2.552e-03 +/- 1.290e-05

L.Power (mW)	Cumulative	Age	±	40Ar/39Ar	±	37Ar/39Ar	±	36Ar/39Ar	±	%Atm.	Ca/K	±	Cl/K	±	40*/39K	±
	39Ar	(Ma)	(Ma)	meas.	(%)	meas.	(%)	meas.	(%)	40Ar	meas.	(%)	meas.	(%)	meas.	(%)
300	0.0014	388.72	77.86	115.35378	17.54	-0.37574	0.18991	0.07085	0.05291	18.18179	-0.68925	0.34828	-0.06542	0.03118	94.33106	21.01
500	0.0051	302.78	30.23	86.41989	4.833	-0.15123	0.0618	0.04968	0.02268	17.00843	-0.27745	0.11336	-0.02012	0.01331	71.68892	7.775
750	0.018	289.95	9.19	74.51792	1.481	-0.03504	0.0197	0.02058	0.00648	8.16893	-0.06429	0.03615	-0.00336	0.00413	68.40164	2.347
1000	0.0483	341.01	5.12	85.61713	0.95	-0.01637	0.00803	0.01339	0.00336	4.62579	-0.03003	0.01474	-0.00221	0.00134	81.62739	1.344
1250	0.0891	401.5	3.47	97.69264	0.755	-0.01194	0.00653	-0.00044	0.00191	-0.13062	-0.02191	0.01198	-0.0018	0.00099	97.78968	0.943
1500	0.1511	419.82	3.46	102.92471	0.843	-0.01602	0.00359	0.00034	0.00148	0.09911	-0.02939	0.00659	-0.00098	0.00067	102.7919	0.95
1750	0.2531	427.86	2.12	105.04168	0.506	-0.00367	0.0025	0.00003	0.00098	0.00747	-0.00673	0.00459	-0.00018	0.00042	105.0039	0.584
2000	0.3871	436.6	1.31	107.48511	0.314	-0.00325	0.00174	0.00011	0.00062	0.03159	-0.00597	0.0032	-0.00002	0.00031	107.4212	0.364
2500	0.583	436.15	1.77	107.59678	0.475	-0.00311	0.00113	0.00092	0.00044	0.25179	-0.00571	0.00208	0.00036	0.00023	107.296	0.491
3000	0.6999	434.59	1.97	106.89616	0.489	-0.00443	0.00241	0.00001	0.00082	0.00181	-0.00813	0.00442	-0.00032	0.00035	106.8642	0.546
4000	0.7952	435.52	3.29	107.84393	0.864	-0.00438	0.00293	0.00234	0.00102	0.64175	-0.00803	0.00537	-0.00039	0.00048	107.122	0.911
5000	0.8552	434.78	2.64	107.2692	0.58	-0.01161	0.00456	0.00108	0.00151	0.2998	-0.02131	0.00838	-0.00134	0.00069	106.9171	0.731
9000	1	437.45	1.95	107.66128	0.523	-0.00459	0.00165	-0.00009	0.00045	-0.02368	-0.00842	0.00302	-0.00032	0.00031	107.6567	0.54
Integrated	NA	427.64	2.07	105.39693	0.19	-0.00722	0.0009	0.00143	0.00032	0.40131	-0.01324	0.00166	-0.00056	0.00016	104.9438	0.211

14JB27 69.27 -142.66

Weighted average of J from standards = 3.107e-03 +/- 8.884e-06

L.Power (mW)	Cumulative	Age	±	40Ar/39Ar	±	37Ar/39Ar	±	36Ar/39Ar	±	%Atm.	Ca/K	±	Cl/K	±	40*/39K	±
	39Ar	(Ma)	(Ma)	meas.	(%)	meas.	(%)	meas.	(%)	40Ar	meas.	(%)	meas.	(%)	meas.	(%)
300	0.0004	53.68	959.14	114.84144	76.91	-0.53091	1.02887	0.35544	0.64215	91.5197	-0.97378	1.88641	0.03664	0.08129	9.73273	176.5
500	0.0009	495.82	608.92	194.44896	116.9	-1.32435	1.07553	0.31223	0.4767	47.51183	-2.42773	1.96976	-0.01014	0.05384	101.9517	143.2
750	0.0019	308.12	321.88	88.2614	29.13	-0.30494	0.44824	0.09532	0.2231	31.95326	-0.5594	0.82211	0.00615	0.02981	60.02586	68.22
1000	0.0061	368.94	77.66	81.88084	5.858	-0.07164	0.09376	0.02946	0.05486	10.64424	-0.13145	0.17202	0.00837	0.00688	73.13501	17.03
1250	0.0174	497.93	32.65	103.40061	3.975	-0.0374	0.04099	0.0031	0.02234	0.88883	-0.06863	0.07521	0.00527	0.00303	102.4494	7.688

1500	0.0361	481.78	19.88	98.72939	1.918	-0.01541	0.01932	0.00012	0.0143	0.03635	-0.02828	0.03545	0.00022	0.00175	98.66274	4.64
1750	0.0877	479.3	7.81	99.41472	1.239	-0.00833	0.00757	0.0044	0.00456	1.30772	-0.01528	0.01389	0.00083	0.00067	98.08477	1.821
2000	0.212	476.7	3.83	97.3561	0.671	-0.00184	0.00342	-0.00052	0.00198	-0.15654	-0.00338	0.00627	0.00029	0.00023	97.47862	0.891
2500	0.6059	473.97	1.56	96.86885	0.295	0.00003	0.00126	-0.00002	0.00071	-0.0052	0.00006	0.00231	0.00037	0.0001	96.84419	0.362
3000	0.677	467.34	6.01	96.07133	1.025	-0.00207	0.00533	0.00249	0.00322	0.76496	-0.00379	0.00978	-0.00036	0.00047	95.30681	1.392
4000	0.7719	469.16	4.34	95.69016	0.706	-0.0109	0.00471	-0.00023	0.00242	-0.071	-0.02001	0.00864	-0.00015	0.00035	95.72764	1.006
5000	0.8157	477.53	7.79	96.50584	0.942	-0.0121	0.00761	-0.00406	0.00522	-1.24123	-0.0222	0.01396	0.00084	0.0007	97.67279	1.813
9000	1	471.49	2.53	96.23921	0.371	-0.00401	0.00171	-0.0002	0.00154	-0.06022	-0.00735	0.00314	0.00026	0.00021	96.26718	0.588
Integrated	NA	473.06	1.88	96.85517	0.217	-0.00531	0.00145	0.00065	0.00088	0.19958	-0.00974	0.00267	0.00038	0.00012	96.63186	0.339

Table DR7: Single-grain total fusion $40\text{Ar}/39\text{Ar}$ isotope composition of muscovite analyzed at the University of Alaska Fairbanks

14JB27

69.27 -142.66

Weighted average of J from standards = $3.107\text{e-}03 \pm 8.884\text{e-}06$

Grain #	Age (Ma)	\pm (Ma)	40Ar/39Ar meas.	\pm abs.	37Ar/39Ar meas.	\pm abs.	36Ar/39Ar meas.	\pm abs.	%Atm. 40Ar	Ca/K meas.	\pm abs.	Cl/K meas.	\pm abs.	$40^*/39\text{K}$ meas.	\pm abs.
1	480.42	0.84	99.44526	0.18983	-0.00156	0.00158	0.00362	0.00019	1.07697	-0.00286	0.00289	0.00053	0.00003	98.34477	0.1959
2*	471.79	6.71	104.98345	1.21648	-0.01182	0.02411	0.02915	0.00369	8.2087	-0.02169	0.04424	0.00221	0.00069	96.33761	1.5575
3	480.94	1.36	99.48791	0.27891	-0.00628	0.0039	0.00335	0.00053	0.99688	-0.01152	0.00716	0.00053	0.00011	98.4663	0.31747
4*	472.61	3.67	107.26563	0.71276	-0.02762	0.01148	0.03622	0.00189	9.98271	-0.05068	0.02105	0.00041	0.0003	96.52899	0.85177
5*	468.44	5.61	101.70489	1.05137	-0.02394	0.03114	0.02068	0.00287	6.0113	-0.04392	0.05713	0.00002	0.00059	95.56157	1.3007
6	496.4	7.32	105.02431	0.56668	-0.0089	0.02709	0.00983	0.00552	2.76735	-0.01633	0.04971	0.00113	0.00081	102.0884	1.72237
7	480.68	1.62	100.69176	0.34646	0.00195	0.00182	0.00764	0.00056	2.24176	0.00357	0.00334	0.00045	0.00017	98.40559	0.37742
8	521.16	4.81	109.91415	0.89915	-0.00517	0.0092	0.00653	0.00248	1.7553	-0.00949	0.01689	0.00171	0.00089	107.95525	1.14795
9	489.87	2.46	105.17606	0.31772	0.00146	0.00632	0.01554	0.00165	4.36627	0.00268	0.0116	0.00109	0.00042	100.55549	0.5767
10	440.65	2.43	90.85636	0.3596	-0.00846	0.00979	0.0056	0.00144	1.82134	-0.01553	0.01796	0.00054	0.00045	89.17186	0.55362
11	464.27	1.61	95.82278	0.34113	-0.00132	0.00249	0.00405	0.00054	1.24955	-0.00243	0.00456	0.00054	0.00015	94.59601	0.37244
12	490.73	1.45	102.87943	0.26861	0.00455	0.0042	0.00708	0.00072	2.03427	0.00835	0.00771	0.00067	0.00017	100.75781	0.33894
13	461.96	3.55	97.28589	0.7556	-0.00042	0.00451	0.01081	0.00126	3.28414	-0.00077	0.00828	0.00044	0.00029	94.06213	0.82043
14*	474.68	7.28	105.39561	1.03268	-0.0014	0.05547	0.02828	0.00474	7.93031	-0.00258	0.10178	0.00074	0.00266	97.00997	1.69239

*Single-grain total fusion age used in weighted mean age calculation presented in manuscript (Fig. 7)