

**GSA DATA REPOSITORY 2016150**

Upper crustal cooling of the Wrangellia Composite Terrane in the northern St.  
Elias Mountains, western Canada

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**TABLE S1. COMPARISON OF NEW AND PREVIOUS DETRITAL ZFT DATA**

Sample	Min <sup>*</sup>	N <sup>†</sup>	Age range (Ma)	Peak ages of distribution components $\pm 1\sigma$ (Ma) [Grain fraction (%)]						
				$\leq 5$ Ma	15–5 Ma	35–15 Ma	60–35 Ma	100–60 Ma	145–100 Ma	>145 Ma
KLD105	Zr	104	187–35	-	-	-	48.9 $\pm$ 4.3 [14]	100.1 $\pm$ 5.4 [86]	-	-
KLD105+K11 <sup>§</sup>	Zr	200	231–30	-	-	-	48.3 $\pm$ 3.5 [12.2]	88.3 $\pm$ 9.3 [50.6]	111.4 $\pm$ 13.4 [30.0]	148.8 $\pm$ 86.1 [7.2]
KLD65	Zr	104	206–39	-	-	-	55.7 $\pm$ [11.9]	84.4 $\pm$ 5.7 [38.5]	113.5 $\pm$ 9.4 [35.2]	156.3 $\pm$ 19.2 [14.3]
KLD65+K5 <sup>§</sup>	Zr	214	262–0.7	2.0 $\pm$ 0.6 [2.3]	-	-	55.1 $\pm$ 3.3 [12.6]	84.1 $\pm$ 4.1 [40.7]	112.5 $\pm$ 6.0 [32.2]	171.9 $\pm$ 11.9 [12.1]
KLD40	Zr	105	192–4	-	7.6 $\pm$ 0.4 [63.6]	-	-	92.7 $\pm$ 5.1 [36.4]	-	-
KLD40+K12 <sup>§</sup>	Zr	205	237–2	-	6.7 $\pm$ 0.3 [69.1]	-	-	88.0 $\pm$ 3.4 [30.9]	-	-

Note: Results of binomial peak-fitting using BINOMFIT (Brandon, 1992, 1996) for samples KLD105, KLD65, KLD40. ZFT:  $\zeta=119.6\pm 5.4 \text{ cm}^2/\text{yr}$  (SF), dosimeter glass: IRMM541.

<sup>\*</sup>Min=Mineral, Zr=Zircon.

<sup>†</sup>N=Number of single-grains dated per sample.

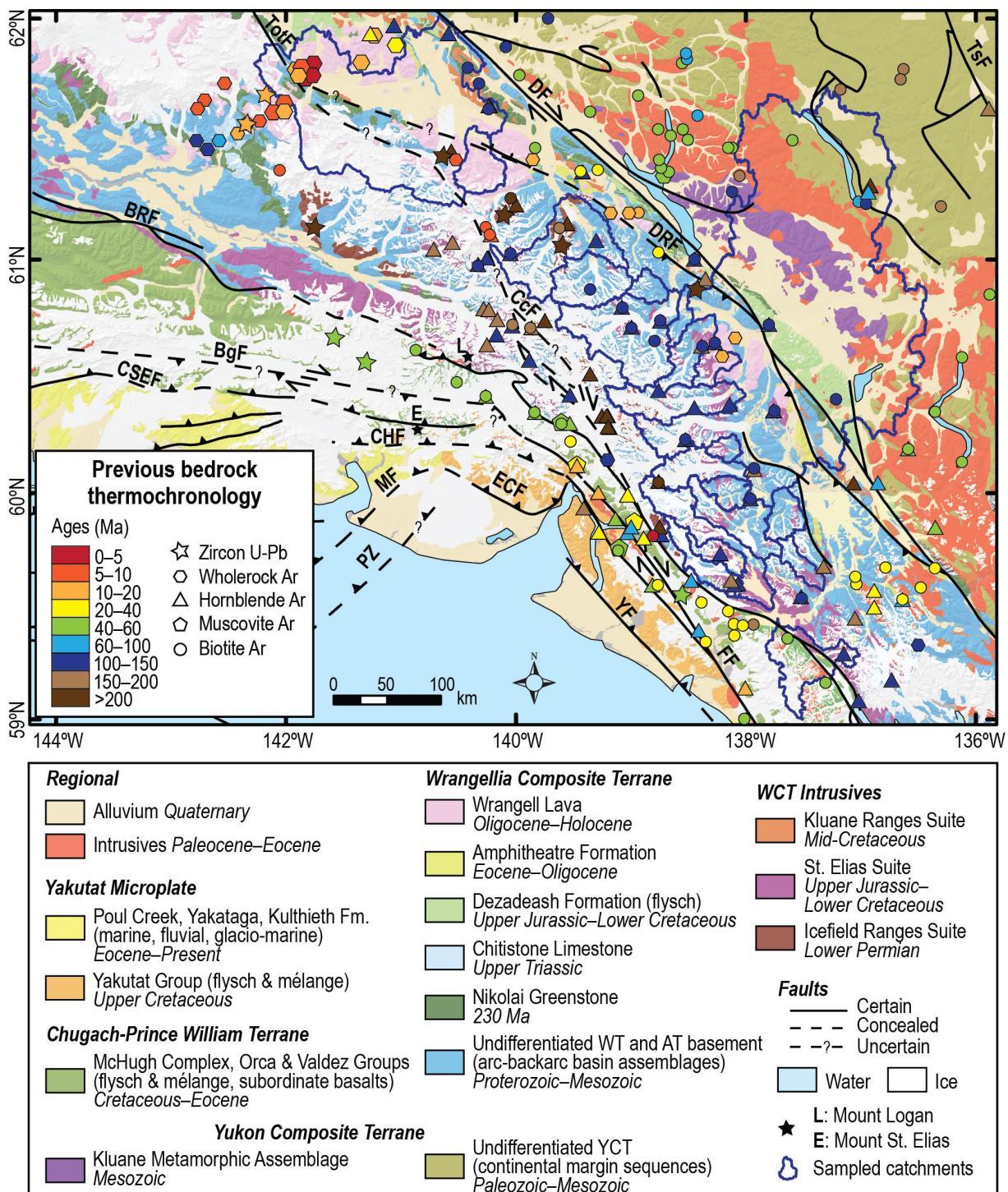
<sup>§</sup>Samples K5, K11, and K12 from Enkelmann et al. (2015) are from the same catchments as KLD65, KLD105, and KLD40, respectively. The samples were combined accordingly for the analyses.

### Text S1 Analytical procedures for zircon and apatite fission-track dating

Zircon and apatite separates were obtained by using standard mineral separation procedures at the University of Tübingen, Germany. Zircons were mounted in Teflon, ground and polished to obtain even internal crystal surfaces, and etched for 16–26 h (detrital samples) and 10–27 h (bedrock samples) at 228 °C in a KOH:NaOH eutectic melt to reveal spontaneous fission tracks. Etching times depend on the radiation damage of individual zircons, which is a function of the cooling age and uranium content (Garver and Kamp, 2002; Garver, 2003). As detrital samples contain zircons with various cooling ages and uranium contents, we etched three mounts for different times. One mount per bedrock sample, 2–3 mounts per detrital sample, and Fish Canyon Tuff standard mounts were covered with uranium-free muscovite detectors and two irradiation packages were irradiated at the FRM-II nuclear reactor (Garching, Germany) and at the radiation center of Oregon State University (USA) to induce  $^{235}\text{U}$  fission. Irradiation packages also held two or three IRMM541 uranium dosimeter glasses, also covered with muscovite detectors, to monitor neutron flux during irradiation. In each irradiation package, four or three standards were included.

Apatites were mounted in epoxy resin, ground, polished, and etched in 5.5 M nitric acid for 20 s to widen the spontaneous fission-tracks. As for zircon samples, the external detector method is applied and mounts were covered with a muscovite detector and prepared for irradiation at Oregon State University. IRMM540 dosimeter glasses as well as Durango standards were included in the irradiation package.

After irradiation of zircon and apatite samples, the detectors were etched in 48% hydrofluoric acid for 25 min to reveal induced fission-tracks. Fission-tracks were counted using a Zeiss AxioImager microscope equipped with an AutoScan stage system at 1000x magnification. For the detrital ZFT samples, 1–3 mounts were used to analyze a representative grain population with regard to different degrees of radiation damage. Per sample, ~100 single grain ages were analyzed using the  $\zeta$ -calibration method (Hurford, 1990). For extraction of detrital age components we used the software BINOMFIT (Brandon, 1992, 1996), which employs binomial peak fitting to the single grain age distribution.



**Figure S1.** Previous higher-temperature chronometer data in the sampled catchments (dark blue outlines) and immediate surrounding. Ar: K-Ar or  $^{40}\text{Ar}/^{39}\text{Ar}$  ages. Chronometer data from Denton and Armstrong (1969), MacKevett (1970), Christopher et al. (1972), Tempelman-Kluit and Wanless (1975), Hudson et al. (1977a, b), Morrison et al. (1979), Silberman et al. (1977), Silberman et al. (1981), Stevens et al. (1982), Dodds and Campbell (1988), Farrar et al. (1988), Gardner et al. (1988), Richter et al. (1990), Sisson et al. (2003), Trop et al. (2012), Gasser et al. (2012), and Beranek et al. (2014). The compilation is not complete but representative. Faults and sources of digital geologic maps as in Figure 4.

## Dataset S1. Single grain zircon fission-track ages

=====ZetaAge Program v. 4.8 (Brandon 8/13/02)=====

**KLD9** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.480E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-2s	Grain Age	--95% CI--
1	2.35E+07	( 94)	7.25E+06	( 29)	4	559 207	123.9	81.4 194.9
2	2.33E+07	( 140)	1.47E+07	( 88)	6	1132 243	61.2	46.2 81.0
3	1.57E+07	( 94)	5.17E+06	( 31)	6	399 143	116.0	77.0 180.2
4	1.47E+07	( 88)	4.17E+06	( 25)	6	322 128	134.4	86.0 218.6
5	1.73E+07	( 138)	4.38E+06	( 35)	8	338 114	150.5	103.8 224.6
6	1.08E+07	( 65)	3.83E+06	( 23)	6	296 122	108.1	66.7 182.3
7	1.27E+07	( 152)	4.67E+06	( 56)	12	360 96	104.1	76.4 144.2
8	1.10E+07	( 44)	4.00E+06	( 16)	4	309 152	105.0	58.6 199.4
9	1.49E+07	( 119)	4.50E+06	( 36)	8	347 115	126.4	86.9 189.0
10	8.14E+06	( 114)	6.93E+06	( 97)	14	535 110	45.3	34.1 60.3
11	1.23E+07	( 98)	4.75E+06	( 38)	8	367 119	98.9	67.6 147.9
12	9.25E+06	( 37)	4.25E+06	( 17)	4	328 157	83.4	46.1 157.9
13	1.28E+07	( 192)	2.53E+06	( 38)	15	195 63	192.2	136.0 279.4
14	2.02E+07	( 121)	5.33E+06	( 32)	6	412 145	144.4	97.7 220.1
15	7.50E+06	( 30)	3.75E+06	( 15)	4	289 147	76.6	40.3 153.3
16	1.11E+07	( 156)	4.00E+06	( 56)	14	309 83	106.9	78.5 147.8
17	1.46E+07	( 102)	9.00E+06	( 63)	7	694 176	62.4	45.2 86.9
18	1.23E+07	( 49)	3.50E+06	( 14)	4	270 142	133.1	73.2 260.9
19	1.44E+07	( 173)	4.25E+06	( 51)	12	328 92	129.8	94.8 181.1
20	9.91E+06	( 109)	3.64E+06	( 40)	11	281 89	104.5	72.4 154.1
21	8.07E+06	( 113)	2.29E+06	( 32)	14	176 62	134.9	90.9 206.4
22	9.42E+06	( 113)	4.92E+06	( 59)	12	379 99	73.7	53.4 102.8
23	1.68E+07	( 67)	5.50E+06	( 22)	4	424 179	116.4	71.5 197.8
24	1.34E+07	( 267)	4.80E+06	( 96)	20	370 76	106.5	83.0 136.6
25	1.82E+07	( 109)	5.67E+06	( 34)	6	437 150	122.7	83.2 185.9
26	1.09E+07	( 131)	3.17E+06	( 38)	12	244 79	131.8	91.7 194.4
27	1.71E+07	( 120)	3.00E+06	( 21)	7	231 100	216.3	136.9 360.9
28	1.76E+07	( 141)	4.88E+06	( 39)	8	376 120	138.2	96.8 202.3
29	1.48E+07	( 59)	9.50E+06	( 38)	4	733 237	59.8	39.2 92.4
30	8.50E+06	( 34)	1.75E+06	( 7)	4	135 99	182.2	81.6 484.7
31	1.24E+07	( 62)	6.80E+06	( 34)	5	525 179	70.1	45.6 109.9
32	1.48E+07	( 59)	4.00E+06	( 16)	4	309 152	140.3	80.6 260.9
33	1.49E+07	( 119)	5.88E+06	( 47)	8	453 132	97.2	69.0 139.3
34	1.50E+07	( 60)	4.50E+06	( 18)	4	347 162	127.1	74.7 228.6
35	1.95E+07	( 78)	6.25E+06	( 25)	4	482 192	119.3	75.7 195.3
36	1.78E+07	( 71)	5.50E+06	( 22)	4	424 179	123.2	76.1 208.8
37	1.03E+07	( 62)	2.67E+06	( 16)	6	206 102	147.3	85.0 273.2
38	1.52E+07	( 91)	6.00E+06	( 36)	6	463 154	97.0	65.5 146.9
39	1.36E+07	( 109)	6.13E+06	( 49)	8	473 135	85.5	60.6 122.4
40	1.21E+07	( 254)	3.90E+06	( 82)	21	301 67	118.4	91.0 154.0
41	1.62E+07	( 243)	5.13E+06	( 77)	15	396 91	120.6	92.1 157.9
42	1.23E+07	( 74)	2.83E+06	( 17)	6	219 105	165.3	97.7 298.2
43	1.60E+07	( 96)	3.83E+06	( 23)	6	296 122	158.9	100.9 262.1
44	9.25E+06	( 37)	4.25E+06	( 17)	4	328 157	83.4	46.1 157.9
45	1.28E+07	( 179)	4.36E+06	( 61)	14	336 86	112.5	83.9 153.1

46	1.50E+07	( 150)	8.00E+06	( 80)	10	617	139	72.0	54.2	95.8
47	1.04E+07	( 52)	4.40E+06	( 22)	5	340	144	90.6	54.4	156.6
48	1.64E+07	( 131)	4.63E+06	( 37)	8	357	117	135.3	93.8	200.5
49	1.14E+07	( 57)	2.20E+06	( 11)	5	170	100	195.4	103.3	411.6
50	1.63E+07	( 65)	6.25E+06	( 25)	4	482	192	99.6	62.3	164.9
51	1.60E+07	( 64)	4.00E+06	( 16)	4	309	152	152.0	87.9	281.3
52	1.08E+07	( 86)	2.75E+06	( 22)	8	212	90	148.9	93.2	249.6
53	1.95E+07	( 78)	5.00E+06	( 20)	4	386	171	148.5	90.8	256.0
54	1.21E+07	( 145)	4.50E+06	( 54)	12	347	95	103.0	75.1	143.6
55	1.30E+07	( 52)	3.25E+06	( 13)	4	251	137	151.8	82.6	303.3
56	9.00E+06	( 36)	3.50E+06	( 14)	4	270	142	98.2	52.2	197.1
57	1.77E+07	( 106)	7.17E+06	( 43)	6	553	169	94.6	66.0	138.2
58	1.90E+07	( 342)	5.50E+06	( 99)	18	424	86	132.0	103.9	167.7
59	8.50E+06	( 51)	4.00E+06	( 24)	6	309	125	81.5	49.5	138.5
60	1.10E+07	( 44)	3.75E+06	( 15)	4	289	147	111.9	61.7	216.4
61	1.10E+07	( 44)	4.50E+06	( 18)	4	347	162	93.5	53.4	172.0
62	1.09E+07	( 87)	6.38E+06	( 51)	8	492	138	65.7	46.0	94.8
63	7.83E+06	( 47)	4.33E+06	( 26)	6	334	130	69.5	42.3	116.9
64	1.82E+07	( 109)	5.00E+06	( 30)	6	386	140	138.7	92.5	215.2
65	1.48E+07	( 59)	4.75E+06	( 19)	4	367	166	118.5	70.3	210.5
66	1.46E+07	( 146)	4.90E+06	( 49)	10	378	108	114.2	82.4	161.2
67	9.50E+06	( 171)	2.11E+06	( 38)	18	163	53	171.5	120.8	250.3
68	1.02E+07	( 203)	5.35E+06	( 107)	20	413	81	72.9	56.8	93.7
69	1.06E+07	( 127)	3.83E+06	( 46)	12	296	87	105.9	75.2	151.8
70	9.83E+06	( 59)	3.50E+06	( 21)	6	270	117	107.4	64.8	186.1
71	1.01E+07	( 81)	5.63E+06	( 45)	8	434	129	69.3	47.6	102.1
72	1.65E+07	( 66)	3.00E+06	( 12)	4	231	131	207.4	113.1	419.6
73	1.20E+07	( 120)	3.70E+06	( 37)	10	285	94	124.1	85.6	184.5
74	1.64E+07	( 82)	4.00E+06	( 20)	5	309	137	156.0	95.7	268.2
75	1.03E+07	( 123)	4.33E+06	( 52)	12	334	93	90.9	65.3	128.2
76	1.19E+07	( 167)	4.79E+06	( 67)	14	369	91	95.7	71.8	129.2
77	1.23E+07	( 98)	4.25E+06	( 34)	8	328	112	110.4	74.4	168.2
78	1.04E+07	( 73)	2.43E+06	( 17)	7	187	90	163.1	96.3	294.5
79	6.17E+06	( 37)	1.33E+06	( 8)	6	103	71	174.0	81.6	431.1
80	1.54E+07	( 215)	5.93E+06	( 83)	14	457	101	99.2	75.9	129.6
81	1.08E+07	( 97)	4.78E+06	( 43)	9	369	112	86.7	60.1	127.2
82	1.32E+07	( 79)	4.17E+06	( 25)	6	322	128	120.8	76.7	197.6
83	7.50E+06	( 75)	2.10E+06	( 21)	10	162	70	136.2	83.7	232.5
84	1.43E+07	( 86)	5.50E+06	( 33)	6	424	147	99.9	66.5	154.1
85	1.12E+07	( 67)	3.00E+06	( 18)	6	231	108	141.7	84.1	253.2
86	1.11E+07	( 233)	3.24E+06	( 68)	21	250	61	130.8	98.6	173.3
87	1.26E+07	( 176)	3.64E+06	( 51)	14	281	79	132.1	96.5	184.1
88	1.37E+07	( 82)	4.50E+06	( 27)	6	347	133	116.2	74.8	186.7
89	1.50E+07	( 120)	5.00E+06	( 40)	8	386	122	114.9	80.1	168.7
90	6.67E+06	( 40)	1.67E+06	( 10)	6	129	79	151.3	75.7	338.8
91	6.70E+06	( 67)	2.10E+06	( 21)	10	162	70	121.8	74.3	209.4
92	1.27E+07	( 684)	4.28E+06	( 231)	54	330	45	113.6	95.4	135.2
93	7.50E+06	( 30)	1.25E+06	( 5)	4	96	82	222.6	88.7	725.5
94	9.50E+06	( 133)	3.79E+06	( 53)	14	292	80	96.3	69.7	135.1
95	1.33E+07	( 80)	4.00E+06	( 24)	6	309	125	127.3	80.4	210.0
96	1.20E+07	( 48)	3.00E+06	( 12)	4	231	131	151.6	80.5	313.1
97	6.88E+06	( 55)	2.88E+06	( 23)	8	222	92	91.6	55.7	156.3
98	1.33E+07	( 53)	4.00E+06	( 16)	4	309	152	126.2	71.8	236.4
99	7.57E+06	( 106)	2.43E+06	( 34)	14	187	64	119.3	80.8	181.1
100	1.46E+07	( 146)	4.20E+06	( 42)	10	324	100	133.0	94.2	192.1
101	9.88E+06	( 79)	4.50E+06	( 36)	8	347	115	84.3	56.3	128.7
102	1.21E+07	( 97)	4.50E+06	( 36)	8	347	115	103.3	70.1	155.9

**KLD13** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.470E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	9.20E+06	( 138)	4.60E+06	( 69)	15	355 86	76.8	57.2 104.2
2	8.17E+06	( 98)	4.08E+06	( 49)	12	316 90	76.8	54.1 110.6
3	6.44E+05	( 29)	3.47E+06	( 156)	45	268 44	7.2	4.7 10.8
4	1.06E+07	( 95)	3.89E+06	( 35)	9	301 101	103.9	70.1 157.8
5	1.45E+07	( 58)	7.25E+06	( 29)	4	560 207	76.7	48.5 124.3
6	4.17E+06	( 25)	1.50E+06	( 9)	6	116 75	105.4	48.3 256.7
7	9.05E+05	( 19)	3.62E+06	( 76)	21	280 65	9.7	5.5 16.2
8	1.70E+07	( 68)	9.25E+06	( 37)	4	715 235	70.6	46.7 108.4
9	1.08E+07	( 54)	6.60E+06	( 33)	5	510 177	62.9	40.1 100.1
10	1.02E+07	( 409)	3.60E+06	( 144)	40	278 47	108.7	88.1 134.1
11	7.33E+06	( 88)	3.92E+06	( 47)	12	303 88	71.9	50.0 104.8
12	6.25E+06	( 50)	2.13E+06	( 17)	8	164 79	112.1	64.1 207.3
13	1.53E+07	( 92)	5.83E+06	( 35)	6	451 152	100.6	67.8 153.1
14	9.17E+06	( 110)	2.75E+06	( 33)	12	213 74	127.3	86.0 193.8
15	1.13E+07	( 68)	6.00E+06	( 36)	6	464 154	72.5	47.9 111.9
16	8.13E+06	( 130)	2.44E+06	( 39)	16	188 60	127.3	88.8 187.0
17	1.63E+07	( 98)	5.17E+06	( 31)	6	399 143	120.7	80.3 187.1
18	8.00E+06	( 80)	4.50E+06	( 45)	10	348 104	68.3	46.9 100.8
19	6.25E+06	( 125)	1.20E+06	( 24)	20	93 38	197.4	128.0 318.6
20	1.03E+07	( 257)	3.24E+06	( 81)	25	250 56	121.1	93.0 157.6
21	1.35E+07	( 54)	4.75E+06	( 19)	4	367 167	108.4	63.8 193.7
22	2.14E+07	( 193)	4.33E+06	( 39)	9	335 107	188.1	133.6 272.1
23	4.38E+06	( 35)	1.13E+06	( 9)	8	87 56	146.8	70.5 346.7
24	5.03E+06	( 181)	2.19E+06	( 79)	36	170 38	87.7	66.4 115.8
25	5.24E+06	( 110)	1.10E+06	( 23)	21	85 35	181.4	116.1 297.4
26	7.33E+06	( 88)	2.25E+06	( 27)	12	174 67	124.4	80.5 199.1
27	1.43E+07	( 57)	5.75E+06	( 23)	4	444 184	94.8	57.8 161.2
28	7.12E+06	( 171)	3.33E+06	( 80)	24	258 58	81.9	61.9 108.2
29	1.38E+07	( 55)	5.25E+06	( 21)	4	406 175	100.1	60.0 174.2
30	7.67E+06	( 138)	2.61E+06	( 47)	18	202 59	112.4	80.4 160.0
31	1.43E+07	( 57)	6.50E+06	( 26)	4	502 196	84.0	52.2 139.2
32	1.11E+07	( 89)	3.25E+06	( 26)	8	251 98	130.5	84.1 210.4
33	1.03E+07	( 62)	5.83E+06	( 35)	6	451 152	68.0	44.4 106.2
34	9.83E+06	( 59)	1.67E+06	( 10)	6	129 80	221.4	114.7 482.4
35	1.25E+07	( 200)	3.88E+06	( 62)	16	299 76	123.4	92.6 166.9
36	1.41E+07	( 141)	4.70E+06	( 47)	10	363 106	114.8	82.2 163.3
37	1.10E+07	( 88)	3.88E+06	( 31)	8	299 107	108.5	71.7 169.1
38	1.00E+05	( 1)	1.50E+06	( 15)	10	116 59	2.9	0.1 16.8
39	9.75E+06	( 39)	5.75E+06	( 23)	4	444 184	65.1	38.1 114.2
40	9.80E+06	( 98)	4.00E+06	( 40)	10	309 98	93.9	64.6 139.3
41	8.29E+06	( 141)	2.12E+06	( 36)	17	164 54	149.3	103.5 221.5
42	1.05E+07	( 295)	2.96E+06	( 83)	28	229 51	135.5	104.7 175.2
43	1.00E+07	( 60)	6.67E+06	( 40)	6	515 163	57.7	38.1 88.4
44	5.00E+06	( 105)	1.71E+06	( 36)	21	132 44	111.5	76.1 167.7
45	1.29E+07	( 168)	5.85E+06	( 76)	13	452 104	84.7	63.7 112.4
46	5.07E+06	( 152)	1.23E+06	( 37)	30	95 31	156.5	109.3 230.4
47	9.56E+06	( 86)	5.67E+06	( 51)	9	438 123	64.8	45.4 93.6
48	7.70E+06	( 231)	1.70E+06	( 51)	30	131 37	172.5	127.4 238.2
49	1.46E+07	( 234)	4.69E+06	( 75)	16	362 84	119.1	90.6 156.4
50	1.63E+07	( 65)	4.50E+06	( 18)	4	348 162	137.3	81.3 245.8
51	1.13E+06	( 9)	1.75E+06	( 14)	8	135 71	25.0	9.5 61.5
52	8.25E+06	( 231)	2.39E+06	( 67)	28	185 45	131.3	98.8 174.4

53	1.65E+07	( 132)	4.25E+06	( 34)	8	328	112	148.0	101.4	222.4
54	6.50E+06	( 195)	1.83E+06	( 55)	30	142	38	135.5	100.3	186.2
55	1.06E+07	( 127)	2.83E+06	( 34)	12	219	75	142.4	97.4	214.4
56	1.30E+07	( 78)	2.33E+06	( 14)	6	180	95	210.1	119.9	400.1
57	1.17E+07	( 176)	3.87E+06	( 58)	15	299	79	116.1	86.1	159.1
58	1.22E+07	( 73)	3.00E+06	( 18)	6	232	108	154.0	91.9	273.7
59	1.01E+07	( 201)	3.45E+06	( 69)	20	267	65	111.2	83.5	147.9
60	1.03E+07	( 41)	4.75E+06	( 19)	4	367	167	82.6	47.2	150.7
61	1.54E+07	( 123)	4.50E+06	( 36)	8	348	116	130.4	89.8	194.7
62	1.77E+07	( 106)	4.00E+06	( 24)	6	309	125	167.8	107.9	272.9
63	6.88E+06	( 55)	2.50E+06	( 20)	8	193	86	105.0	62.4	184.9
64	1.24E+07	( 261)	4.05E+06	( 85)	21	313	68	117.3	90.5	151.9
65	1.05E+07	( 42)	2.00E+06	( 8)	4	155	106	196.8	93.5	482.7
66	6.83E+06	( 82)	2.58E+06	( 31)	12	200	71	101.2	66.5	158.4
67	1.27E+07	( 76)	4.17E+06	( 25)	6	322	128	116.1	73.5	190.3
68	1.23E+07	( 49)	5.50E+06	( 22)	4	425	180	85.3	50.9	148.1
69	9.95E+06	( 199)	1.70E+06	( 34)	20	131	45	221.7	154.7	328.1
70	4.56E+06	( 41)	1.33E+06	( 12)	9	103	58	129.6	67.7	270.8
71	1.28E+07	( 77)	4.17E+06	( 25)	6	322	128	117.6	74.5	192.7
72	1.18E+07	( 47)	4.00E+06	( 16)	4	309	153	111.9	62.9	211.4
73	8.75E+06	( 35)	2.00E+06	( 8)	4	155	106	164.6	76.6	409.4
74	6.25E+06	( 75)	1.83E+06	( 22)	12	142	60	129.9	80.5	219.3
75	1.58E+07	( 63)	4.50E+06	( 18)	4	348	162	133.2	78.6	238.8
76	7.50E+06	( 180)	1.79E+06	( 43)	24	138	42	159.5	114.4	227.8
77	9.50E+06	( 76)	2.50E+06	( 20)	8	193	86	144.5	88.2	249.5
78	5.20E+06	( 52)	1.40E+06	( 14)	10	108	57	140.9	77.9	275.1
79	7.78E+05	( 7)	3.00E+06	( 27)	9	232	89	10.2	3.7	23.6
80	8.72E+06	( 279)	2.44E+06	( 78)	32	188	43	136.3	104.6	177.5
81	1.34E+07	( 67)	3.80E+06	( 19)	5	294	133	134.2	80.4	236.4
82	1.01E+07	( 91)	3.67E+06	( 33)	9	283	98	105.5	70.4	162.2
83	9.00E+06	( 36)	3.75E+06	( 15)	4	290	147	91.6	49.4	180.2
84	6.73E+06	( 74)	2.55E+06	( 28)	11	197	74	101.1	65.0	162.2
85	8.75E+06	( 35)	4.50E+06	( 18)	4	348	162	74.5	41.3	139.7
86	7.71E+06	( 108)	2.86E+06	( 40)	14	221	70	103.4	71.6	152.6
87	1.00E+07	( 60)	2.67E+06	( 16)	6	206	102	142.4	81.9	264.6
88	1.25E+07	( 50)	4.25E+06	( 17)	4	328	157	112.1	64.1	207.3
89	1.88E+06	( 15)	2.10E+07	( 168)	8	1623	255	3.5	1.9	5.9
90	8.34E+06	( 417)	2.46E+06	( 123)	50	190	35	129.5	104.0	161.2
91	6.08E+06	( 146)	1.75E+06	( 42)	24	135	42	132.8	94.0	191.8
92	6.60E+06	( 264)	1.83E+06	( 73)	40	141	33	137.8	104.9	180.7
93	7.58E+06	( 91)	2.92E+06	( 35)	12	225	76	99.5	67.0	151.5
94	7.81E+06	( 250)	2.19E+06	( 70)	32	169	41	136.0	103.0	179.4
95	4.63E+06	( 74)	3.25E+06	( 52)	16	251	70	54.8	37.9	79.7
96	6.25E+05	( 15)	6.17E+06	( 148)	24	477	80	4.0	2.1	6.7
97	8.67E+06	( 52)	2.17E+06	( 13)	6	167	91	151.5	82.5	302.9
98	1.40E+06	( 7)	2.60E+06	( 13)	5	201	110	21.0	7.0	56.0
99	6.22E+06	( 112)	1.78E+06	( 32)	18	137	48	133.5	90.0	204.4
100	1.00E+06	( 9)	3.56E+06	( 32)	9	275	97	11.0	4.6	23.3
101	8.80E+06	( 44)	3.40E+06	( 17)	5	263	126	98.8	55.8	184.5
102	7.29E+06	( 51)	4.14E+06	( 29)	7	320	118	67.5	42.1	110.5
103	6.67E+05	( 8)	2.42E+06	( 29)	12	187	69	10.8	4.2	23.9
104	5.13E+06	( 164)	1.66E+06	( 53)	32	128	35	118.4	86.6	164.6
105	3.33E+05	( 2)	4.00E+06	( 24)	6	309	125	3.5	0.4	13.0
106	3.33E+05	( 2)	2.17E+06	( 13)	6	167	91	6.3	0.7	26.3

**KLD17** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.460E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	9.83E+06	( 59)	6.17E+06	( 37)	6	477 157	61.2	40.0 95.0
2	4.75E+06	( 76)	2.13E+06	( 34)	16	164 56	85.6	56.6 132.3
3	1.23E+07	( 98)	4.00E+06	( 32)	8	310 109	116.8	78.1 180.0
4	4.00E+06	( 16)	1.50E+06	( 6)	4	116 91	100.5	38.2 313.9
5	9.67E+06	( 58)	3.33E+06	( 20)	6	258 114	110.5	66.0 193.9
6	1.00E+07	( 40)	4.75E+06	( 19)	4	368 167	80.5	45.8 147.1
7	1.47E+07	( 103)	5.43E+06	( 38)	7	420 136	103.6	71.0 154.5
8	7.75E+06	( 124)	1.44E+06	( 23)	16	111 46	203.8	131.2 332.4
9	1.13E+07	( 79)	3.29E+06	( 23)	7	254 105	130.7	81.9 217.8
10	2.00E+06	( 12)	3.50E+06	( 21)	6	271 117	22.2	9.9 46.9
11	1.00E+07	( 120)	1.25E+06	( 15)	12	97 49	299.1	177.4 546.1
12	7.50E+06	( 150)	1.50E+06	( 30)	20	116 42	189.5	128.4 290.0
13	2.01E+07	( 141)	6.14E+06	( 43)	7	475 145	125.1	88.7 180.4
14	4.00E+06	( 16)	2.00E+06	( 8)	4	155 106	76.0	31.1 205.4
15	9.33E+06	( 56)	3.17E+06	( 19)	6	245 111	112.2	66.2 200.0
16	5.50E+06	( 44)	1.88E+06	( 15)	8	145 74	111.5	61.5 215.8
17	9.25E+06	( 185)	2.75E+06	( 55)	20	213 58	128.4	94.8 176.8
18	1.99E+07	( 179)	6.11E+06	( 55)	9	473 128	124.3	91.7 171.3
19	1.82E+07	( 218)	3.00E+06	( 36)	12	232 77	228.9	161.6 334.4
20	4.83E+06	( 29)	2.17E+06	( 13)	6	168 91	85.0	43.2 178.3
21	7.64E+06	( 214)	2.43E+06	( 68)	28	188 46	119.8	90.1 159.3
22	1.80E+07	( 72)	7.00E+06	( 28)	4	542 204	98.2	63.0 157.9
23	5.05E+06	( 101)	1.05E+06	( 21)	20	81 35	182.1	114.1 306.1
24	7.94E+06	( 143)	2.94E+06	( 53)	18	228 63	103.2	75.0 144.3
25	4.00E+06	( 24)	2.00E+06	( 12)	6	155 88	76.3	37.0 167.5
26	9.40E+06	( 188)	2.95E+06	( 59)	20	228 60	121.7	90.6 166.0
27	1.85E+07	( 148)	4.13E+06	( 33)	8	319 111	170.3	116.9 256.1
28	1.55E+07	( 62)	6.00E+06	( 24)	4	464 188	98.6	61.0 165.3
29	2.12E+07	( 254)	5.17E+06	( 62)	12	400 102	155.4	116.4 207.3
30	6.25E+06	( 100)	9.38E+05	( 15)	16	73 37	250.3	147.1 460.9
31	1.08E+07	( 65)	3.33E+06	( 20)	6	258 114	123.7	74.6 215.4
32	7.57E+06	( 159)	1.52E+06	( 32)	21	118 42	188.4	129.2 284.1
33	1.01E+07	( 91)	1.78E+06	( 16)	9	138 68	214.3	126.9 389.0
34	8.00E+06	( 40)	2.40E+06	( 12)	5	186 105	126.3	65.8 264.4
35	1.26E+07	( 101)	3.38E+06	( 27)	8	261 100	142.3	92.9 226.2
36	8.83E+06	( 53)	3.83E+06	( 23)	6	297 123	88.1	53.3 150.6
37	7.38E+06	( 118)	1.69E+06	( 27)	16	131 50	165.9	109.3 261.8
38	9.22E+06	( 83)	2.56E+06	( 23)	9	198 82	137.2	86.3 228.1
39	4.50E+06	( 18)	2.25E+06	( 9)	4	174 113	76.1	32.9 192.5
40	8.50E+06	( 136)	4.75E+06	( 76)	16	368 85	68.7	51.5 92.3
41	1.08E+07	( 43)	2.25E+06	( 9)	4	174 113	179.5	88.1 417.1
42	8.44E+06	( 76)	1.89E+06	( 17)	9	146 70	169.2	100.2 304.8
43	9.83E+06	( 59)	4.17E+06	( 25)	6	322 128	90.2	55.9 150.3
44	9.50E+06	( 228)	3.71E+06	( 89)	24	287 61	97.9	75.5 126.9
45	6.00E+06	( 36)	1.83E+06	( 11)	6	142 84	123.9	62.6 269.8
46	2.63E+06	( 21)	3.75E+05	( 3)	8	29 31	253.7	80.2 1280.5
47	7.75E+06	( 62)	4.88E+06	( 39)	8	377 121	61.0	40.3 93.6
48	1.22E+07	( 73)	3.17E+06	( 19)	6	245 111	145.8	87.9 255.6
49	1.01E+07	( 91)	2.89E+06	( 26)	9	224 87	133.2	85.9 214.5
50	7.75E+06	( 31)	3.00E+06	( 12)	4	232 132	98.2	49.6 210.1
51	9.68E+06	( 387)	2.45E+06	( 98)	40	190 39	150.2	118.4 190.4
52	3.50E+06	( 35)	1.40E+06	( 14)	10	108 57	95.2	50.4 191.6

53	8.25E+06	( 66)	2.00E+06	( 16)	8	155	76	156.2	90.5	288.6
54	6.25E+06	( 225)	1.33E+06	( 48)	36	103	30	178.1	130.6	248.3
55	1.30E+07	( 78)	5.00E+06	( 30)	6	387	141	99.3	64.7	156.8
56	1.38E+07	( 110)	4.50E+06	( 36)	8	348	116	116.6	79.8	175.0
57	9.00E+06	( 36)	4.00E+06	( 16)	4	310	153	85.9	46.8	165.8
58	1.18E+07	( 71)	6.67E+06	( 40)	6	516	163	68.1	45.7	103.0
59	1.30E+07	( 52)	4.50E+06	( 18)	4	348	162	110.0	63.8	199.8
60	7.25E+06	( 116)	2.44E+06	( 39)	16	189	60	113.6	78.7	167.7
61	4.00E+06	( 24)	2.33E+06	( 14)	6	181	95	65.6	32.8	137.1
62	9.50E+06	( 38)	1.75E+06	( 7)	4	135	99	202.6	91.8	534.1
63	1.25E+07	( 50)	4.25E+06	( 17)	4	329	158	111.9	64.0	207.0
64	7.11E+06	( 64)	1.56E+06	( 14)	9	120	63	172.7	97.2	332.6
65	1.06E+07	( 148)	2.36E+06	( 33)	14	182	63	170.3	116.9	256.1
66	4.50E+06	( 18)	1.25E+06	( 5)	4	97	83	134.5	49.5	462.5
67	6.70E+06	( 134)	1.90E+06	( 38)	20	147	48	134.4	93.6	198.0
68	8.57E+06	( 180)	3.05E+06	( 64)	21	236	59	107.6	80.6	145.5
69	1.55E+07	( 62)	3.50E+06	( 14)	4	271	143	167.4	93.9	323.0
70	8.17E+06	( 49)	1.67E+06	( 10)	6	129	80	184.2	94.0	406.4
71	7.60E+06	( 152)	3.30E+06	( 66)	20	255	63	88.2	65.8	119.7
72	9.75E+06	( 39)	3.50E+06	( 14)	4	271	143	105.9	56.9	211.3
73	9.50E+06	( 38)	1.00E+06	( 4)	4	77	73	344.9	130.7	1280.3
74	1.32E+07	( 263)	3.35E+06	( 67)	20	259	64	149.1	112.6	197.1
75	1.82E+07	( 109)	5.67E+06	( 34)	6	439	150	122.3	82.9	185.3
76	8.50E+06	( 51)	1.17E+06	( 7)	6	90	66	270.2	125.8	696.6
77	1.03E+07	( 123)	3.08E+06	( 37)	12	239	78	126.8	87.6	188.3
78	1.33E+07	( 80)	4.50E+06	( 27)	6	348	133	113.0	72.7	181.9
79	1.40E+07	( 56)	6.75E+06	( 27)	4	522	200	79.4	49.5	130.8
80	7.60E+06	( 38)	5.20E+06	( 26)	5	402	157	56.1	33.3	96.2
81	1.75E+07	( 105)	3.83E+06	( 23)	6	297	123	173.0	110.4	284.3
82	5.04E+06	( 121)	1.38E+06	( 33)	24	106	37	139.6	94.9	211.7
83	4.50E+06	( 72)	1.19E+06	( 19)	16	92	42	143.9	86.7	252.3
84	8.25E+06	( 33)	2.75E+06	( 11)	4	213	126	113.8	56.8	249.5
85	8.38E+06	( 67)	2.88E+06	( 23)	8	223	92	111.1	68.7	186.9
86	9.81E+06	( 157)	3.63E+06	( 58)	16	281	74	103.6	76.3	142.5
87	3.50E+06	( 14)	5.00E+06	( 20)	4	387	171	27.1	12.6	56.1
88	8.06E+06	( 129)	2.44E+06	( 39)	16	189	60	126.2	88.0	185.4
89	8.10E+06	( 81)	3.10E+06	( 31)	10	240	86	99.8	65.6	156.3
90	1.14E+07	( 57)	1.80E+06	( 9)	5	139	91	236.6	119.0	539.4
91	1.28E+07	( 51)	2.50E+06	( 10)	4	193	120	191.6	98.1	421.5
92	1.18E+07	( 71)	2.00E+06	( 12)	6	155	88	222.1	121.8	447.6
93	8.11E+06	( 73)	2.56E+06	( 23)	9	198	82	120.9	75.3	202.4
94	1.00E+07	( 40)	2.25E+06	( 9)	4	174	113	167.1	81.4	390.6
95	5.13E+06	( 41)	1.50E+06	( 12)	8	116	66	129.4	67.6	270.4
96	1.03E+07	( 72)	3.57E+06	( 25)	7	276	110	109.8	69.3	180.7
97	8.00E+06	( 32)	3.00E+06	( 12)	4	232	132	101.4	51.4	216.2
98	4.50E+06	( 27)	5.00E+05	( 3)	6	39	41	323.9	106.0	1580.8
99	1.16E+07	( 81)	1.14E+06	( 8)	7	88	61	373.1	186.5	875.1
100	1.33E+07	( 53)	3.00E+06	( 12)	4	232	132	166.7	89.3	341.9
101	1.13E+07	( 45)	1.50E+06	( 6)	4	116	91	277.1	122.0	782.1
102	1.50E+07	( 75)	9.20E+06	( 46)	5	712	210	62.6	42.9	92.5
103	1.22E+07	( 73)	4.33E+06	( 26)	6	335	131	107.1	68.0	174.7
104	2.83E+06	( 17)	1.00E+06	( 6)	6	77	61	106.7	41.0	330.6
105	5.50E+06	( 22)	3.75E+06	( 15)	4	290	148	56.2	28.0	116.5
106	7.00E+06	( 63)	2.22E+06	( 20)	9	172	76	119.9	72.1	209.3

**KLD18** (Yukon), modern sand, UC2z (counted by Sarah Falkowski, May 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 4.460E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	RhoI (cm <sup>-2</sup> )	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
	(Ns)	(Ni)					
1	9.25E+06 ( 259)	1.39E+06 ( 39)	28	156 50	174.1	124.7	250.3
2	1.07E+07 ( 192)	1.83E+06 ( 33)	18	206 71	152.7	105.8	228.1
3	7.60E+06 ( 190)	1.36E+06 ( 34)	25	152 52	146.8	102.1	218.1
4	6.43E+06 ( 257)	1.15E+06 ( 46)	40	129 38	146.9	107.5	205.7
5	1.34E+07 ( 187)	2.86E+06 ( 40)	14	320 101	123.1	87.5	177.9
6	1.29E+07 ( 270)	2.24E+06 ( 47)	21	251 73	151.0	110.9	210.4
7	1.22E+07 ( 367)	2.27E+06 ( 68)	30	254 62	141.5	107.8	185.6
8	1.04E+07 ( 292)	1.75E+06 ( 49)	28	196 56	156.6	115.9	216.4
9	1.26E+07 ( 379)	1.87E+06 ( 56)	30	209 56	177.6	134.4	239.4
10	1.42E+07 ( 256)	1.83E+06 ( 33)	18	206 71	202.8	141.8	300.4
11	7.76E+06 ( 194)	1.68E+06 ( 42)	25	188 58	121.7	87.1	174.2
12	1.16E+07 ( 278)	2.08E+06 ( 50)	24	234 66	146.2	108.3	201.8
13	1.53E+07 ( 92)	3.00E+06 ( 18)	6	336 157	133.9	81.0	236.0
14	6.45E+06 ( 129)	1.50E+06 ( 30)	20	168 61	113.2	76.0	174.7
15	6.61E+06 ( 119)	1.33E+06 ( 24)	18	149 61	130.2	84.1	211.2
16	1.70E+07 ( 339)	2.85E+06 ( 57)	20	320 85	156.3	118.2	210.8
17	8.83E+06 ( 353)	1.43E+06 ( 57)	40	160 42	162.7	123.2	219.2
18	1.19E+07 ( 214)	1.72E+06 ( 31)	18	193 69	180.7	124.5	272.3
19	1.12E+07 ( 224)	1.90E+06 ( 38)	20	213 69	154.8	110.0	224.4
20	1.56E+07 ( 312)	2.25E+06 ( 45)	20	252 75	181.8	133.3	254.1
21	1.44E+07 ( 173)	2.83E+06 ( 34)	12	318 109	133.8	92.7	199.4
22	9.17E+06 ( 220)	2.13E+06 ( 51)	24	238 67	113.8	83.8	157.6
23	7.25E+06 ( 290)	1.80E+06 ( 72)	40	202 48	106.0	80.8	139.0
24	1.43E+07 ( 258)	2.44E+06 ( 44)	18	274 83	154.1	112.1	217.2
25	1.08E+07 ( 108)	2.40E+06 ( 24)	10	269 109	118.3	76.0	192.7
26	1.72E+07 ( 155)	2.56E+06 ( 23)	9	286 119	176.2	114.4	285.9
27	8.25E+06 ( 66)	1.38E+06 ( 11)	8	154 91	156.2	83.3	327.8
28	7.17E+06 ( 172)	1.08E+06 ( 26)	24	121 47	173.2	115.2	272.3
29	8.86E+06 ( 186)	1.67E+06 ( 35)	21	187 63	139.7	97.5	206.6
30	1.87E+07 ( 374)	2.85E+06 ( 57)	20	320 85	171.4	128.3	228.7
31	1.65E+07 ( 198)	3.00E+06 ( 36)	12	336 112	144.5	101.5	212.3
32	9.07E+06 ( 272)	1.73E+06 ( 52)	30	194 54	137.7	102.4	189.0
33	1.25E+07 ( 299)	1.33E+06 ( 32)	24	149 53	243.4	170.2	361.2
34	9.40E+06 ( 188)	1.55E+06 ( 31)	20	174 62	159.1	109.1	240.6
35	8.90E+06 ( 178)	1.45E+06 ( 29)	20	163 60	160.9	109.0	247.0
36	1.60E+07 ( 224)	2.43E+06 ( 34)	14	272 93	172.7	120.8	255.3
37	1.25E+07 ( 374)	2.10E+06 ( 63)	30	235 60	155.4	117.6	205.2
38	6.50E+06 ( 104)	1.19E+06 ( 19)	16	133 60	143.4	88.2	247.6
39	1.46E+07 ( 131)	2.89E+06 ( 26)	9	324 126	132.3	87.0	210.1
40	1.11E+07 ( 167)	2.07E+06 ( 31)	15	232 83	141.5	96.6	214.8
41	8.29E+06 ( 199)	1.08E+06 ( 26)	24	121 47	199.9	133.7	312.9
42	9.50E+06 ( 152)	2.13E+06 ( 34)	16	238 81	117.7	81.1	176.2
43	9.08E+06 ( 109)	1.83E+06 ( 22)	12	206 87	130.0	82.4	216.1
44	9.00E+06 ( 81)	2.00E+06 ( 18)	9	224 104	118.1	70.9	209.4
45	8.27E+06 ( 124)	1.80E+06 ( 27)	15	202 77	120.8	79.7	190.7
46	8.00E+06 ( 120)	1.40E+06 ( 21)	15	157 68	149.7	94.5	250.5
47	1.15E+07 ( 207)	2.17E+06 ( 39)	18	243 78	139.6	99.2	201.9
48	1.70E+07 ( 170)	3.00E+06 ( 30)	10	336 122	148.7	101.1	227.1
49	1.43E+07 ( 214)	2.20E+06 ( 33)	15	247 86	170.0	118.2	253.0
50	1.50E+07 ( 210)	1.50E+06 ( 21)	14	168 73	259.6	167.6	426.0
51	9.25E+06 ( 148)	1.56E+06 ( 25)	16	175 70	155.2	101.9	247.4
52	1.26E+07 ( 201)	2.56E+06 ( 41)	16	287 90	129.0	92.3	185.3

53	6.43E+06	( 257)	1.48E+06	( 59)	40	165	43	114.9	86.5	155.3
54	8.06E+06	( 145)	1.83E+06	( 33)	18	206	71	115.7	79.2	174.5
55	8.13E+06	( 130)	1.06E+06	( 17)	16	119	57	199.2	121.3	351.4
56	1.63E+07	( 98)	2.67E+06	( 16)	6	299	147	160.0	94.9	290.6
57	1.10E+07	( 66)	1.50E+06	( 9)	6	168	109	189.8	96.2	432.0
58	7.38E+06	( 118)	1.81E+06	( 29)	16	203	75	107.2	71.3	167.1
59	9.63E+06	( 289)	1.90E+06	( 57)	30	213	57	133.5	100.5	180.7
60	8.63E+06	( 259)	1.50E+06	( 45)	30	168	50	151.3	110.4	212.4
61	9.83E+06	( 236)	1.46E+06	( 35)	24	163	55	176.7	124.3	259.5
62	9.77E+06	( 293)	1.27E+06	( 38)	30	142	46	201.7	144.5	290.3
63	1.03E+07	( 246)	2.04E+06	( 49)	24	229	65	132.2	97.3	183.5
64	1.76E+07	( 211)	2.92E+06	( 35)	12	327	110	158.2	110.9	233.1
65	1.67E+07	( 300)	3.06E+06	( 55)	18	343	93	143.5	107.7	195.0
66	8.56E+06	( 137)	2.13E+06	( 34)	16	238	81	106.2	72.9	159.6
67	1.55E+07	( 309)	3.30E+06	( 66)	20	370	91	122.9	93.0	162.3
68	1.63E+07	( 261)	3.44E+06	( 55)	16	385	104	125.1	93.5	170.5
69	1.53E+07	( 490)	2.22E+06	( 71)	32	249	59	180.4	138.8	234.2
70	1.53E+07	( 412)	2.37E+06	( 64)	27	266	67	168.4	127.8	221.5
71	1.06E+07	( 190)	1.61E+06	( 29)	18	181	67	171.6	116.6	262.9
72	1.62E+07	( 146)	3.22E+06	( 29)	9	361	134	132.3	88.9	204.5
73	1.03E+07	( 155)	1.80E+06	( 27)	15	202	77	150.6	100.4	235.7
74	1.07E+07	( 321)	1.80E+06	( 54)	30	202	55	156.2	117.2	212.5
75	1.14E+07	( 273)	2.00E+06	( 48)	24	224	65	149.5	110.2	207.7
76	1.16E+07	( 279)	1.96E+06	( 47)	24	220	64	156.0	114.7	217.2
77	1.09E+07	( 350)	2.59E+06	( 83)	32	291	64	111.0	86.1	143.1
78	1.28E+07	( 345)	2.63E+06	( 71)	27	295	70	127.6	97.5	166.9
79	9.00E+06	( 360)	1.40E+06	( 56)	40	157	42	168.8	127.6	227.8
80	9.87E+06	( 296)	1.80E+06	( 54)	30	202	55	144.2	108.0	196.5
81	1.22E+07	( 365)	2.47E+06	( 74)	30	277	65	129.5	99.5	168.5
82	1.54E+07	( 308)	3.10E+06	( 62)	20	348	89	130.3	98.0	173.2
83	1.56E+07	( 374)	1.92E+06	( 46)	24	215	63	212.6	157.1	295.0
84	1.04E+07	( 280)	1.89E+06	( 51)	27	212	59	144.4	107.2	198.7
85	1.05E+07	( 253)	1.92E+06	( 46)	24	215	63	144.6	105.8	202.6
86	1.29E+07	( 207)	1.94E+06	( 31)	16	217	78	174.9	120.4	263.8
87	1.00E+07	( 300)	1.77E+06	( 53)	30	198	55	148.9	111.3	203.3
88	1.62E+07	( 146)	2.22E+06	( 20)	9	249	110	190.5	120.3	320.4
89	1.04E+07	( 167)	1.13E+06	( 18)	16	126	59	240.9	149.9	414.6
90	2.19E+07	( 219)	3.70E+06	( 37)	10	415	136	155.4	109.9	226.5
91	1.30E+07	( 352)	1.96E+06	( 53)	27	220	61	174.3	130.8	237.1
92	8.83E+06	( 159)	1.83E+06	( 33)	18	206	71	126.8	87.2	190.5
93	1.77E+07	( 106)	3.83E+06	( 23)	6	430	178	121.1	77.2	199.4
94	8.56E+06	( 154)	1.06E+06	( 19)	18	118	54	211.1	132.3	359.1
95	6.80E+06	( 136)	1.45E+06	( 29)	20	163	60	123.3	82.6	191.2
96	1.27E+07	( 203)	2.31E+06	( 37)	16	259	85	144.2	101.7	210.6
97	1.09E+07	( 217)	1.60E+06	( 32)	20	179	63	177.6	123.0	265.8
98	8.43E+06	( 253)	1.27E+06	( 38)	30	142	46	174.5	124.5	252.2
99	1.22E+07	( 110)	1.78E+06	( 16)	9	199	98	179.3	107.0	324.1
100	7.13E+06	( 114)	1.19E+06	( 19)	16	133	60	157.0	97.1	270.1
101	6.10E+06	( 122)	1.50E+06	( 30)	20	168	61	107.1	71.8	165.6
102	1.73E+07	( 276)	2.38E+06	( 38)	16	266	86	190.2	136.0	274.1
103	8.20E+06	( 123)	1.33E+06	( 20)	15	149	66	160.9	100.8	272.4
104	1.03E+07	( 206)	1.35E+06	( 27)	20	151	58	199.3	134.3	309.1

**KLD20** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.450E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	4.67E+06	( 70)	1.20E+06	( 18)	15	93 43	147.3	87.7 262.5
2	9.33E+06	( 112)	3.08E+06	( 37)	12	239 78	115.4	79.3 172.1
3	1.40E+07	( 168)	4.42E+06	( 53)	12	342 94	120.9	88.5 167.9
4	1.38E+07	( 83)	3.50E+06	( 21)	6	271 117	149.8	92.8 254.3
5	3.50E+06	( 63)	6.67E+05	( 12)	18	52 29	197.2	107.2 400.2
6	1.00E+07	( 80)	4.00E+06	( 32)	8	310 109	95.4	62.9 148.7
7	8.92E+06	( 535)	2.75E+06	( 165)	60	213 34	123.6	101.6 150.3
8	8.76E+06	( 219)	2.52E+06	( 63)	25	195 49	132.5	99.9 178.2
9	1.15E+07	( 275)	2.75E+06	( 66)	24	213 53	157.8	119.2 208.8
10	8.90E+06	( 89)	3.20E+06	( 32)	10	248 87	106.1	70.4 164.2
11	7.80E+06	( 273)	2.17E+06	( 76)	35	168 39	136.4	104.4 178.2
12	1.53E+07	( 184)	7.00E+06	( 84)	12	543 119	83.7	63.7 109.8
13	9.64E+06	( 135)	2.50E+06	( 35)	14	194 65	146.6	101.0 219.0
14	7.36E+06	( 81)	2.91E+06	( 32)	11	226 79	96.6	63.7 150.4
15	1.19E+07	( 167)	4.00E+06	( 56)	14	310 83	113.8	83.8 156.9
16	7.58E+06	( 91)	1.83E+06	( 22)	12	142 60	156.7	98.4 261.9
17	1.05E+07	( 158)	3.27E+06	( 49)	15	253 72	122.9	89.0 173.0
18	1.38E+07	( 83)	6.17E+06	( 37)	6	478 157	85.7	57.7 130.0
19	3.70E+06	( 37)	9.00E+05	( 9)	10	70 45	154.6	74.7 363.4
20	9.31E+06	( 149)	3.38E+06	( 54)	16	262 71	105.4	76.9 146.7
21	1.35E+07	( 162)	2.83E+06	( 34)	12	220 75	180.5	125.0 269.1
22	5.22E+06	( 47)	1.00E+06	( 9)	9	78 50	195.5	96.8 451.6
23	5.08E+06	( 61)	1.25E+06	( 15)	12	97 49	153.7	87.4 290.8
24	4.79E+06	( 67)	2.43E+06	( 34)	14	188 64	75.4	49.3 117.5
25	7.83E+06	( 313)	1.60E+06	( 64)	40	124 31	184.8	139.6 244.3
26	9.86E+06	( 69)	2.86E+06	( 20)	7	221 98	131.0	79.4 227.4
27	6.67E+06	( 60)	2.33E+06	( 21)	9	181 78	108.7	65.7 188.2
28	6.50E+06	( 130)	2.30E+06	( 46)	20	178 53	107.9	76.8 154.5
29	1.10E+07	( 66)	4.33E+06	( 26)	6	336 131	96.8	61.0 158.8
30	6.33E+06	( 38)	4.17E+06	( 25)	6	323 128	58.2	34.4 100.7
31	1.08E+07	( 65)	5.00E+06	( 30)	6	388 141	82.8	53.2 132.3
32	9.60E+06	( 96)	2.60E+06	( 26)	10	202 79	140.2	90.8 225.2
33	8.00E+06	( 80)	2.60E+06	( 26)	10	202 79	117.1	74.9 189.9
34	6.38E+06	( 102)	1.13E+06	( 18)	16	87 41	213.4	130.1 372.9
35	4.25E+06	( 34)	6.25E+05	( 5)	8	48 41	250.4	101.2 806.9
36	1.27E+07	( 76)	3.83E+06	( 23)	6	297 123	125.6	78.5 209.8
37	1.54E+07	( 139)	2.67E+06	( 24)	9	207 84	218.4	142.4 351.1
38	9.17E+06	( 55)	5.00E+06	( 30)	6	388 141	70.2	44.3 113.4
39	6.00E+06	( 138)	1.48E+06	( 34)	23	115 39	154.1	105.9 231.2
40	7.34E+06	( 235)	1.78E+06	( 57)	32	138 37	156.8	117.3 213.1
41	4.80E+06	( 48)	2.40E+06	( 24)	10	186 75	76.4	46.1 130.5
42	7.93E+06	( 119)	2.93E+06	( 44)	15	227 69	103.2	72.7 149.5
43	5.03E+06	( 161)	1.25E+06	( 40)	32	97 31	152.9	108.2 221.8
44	9.75E+06	( 39)	2.00E+06	( 8)	4	155 106	182.4	86.0 450.1
45	8.20E+06	( 246)	3.03E+06	( 91)	30	235 50	103.1	79.8 133.1
46	8.89E+06	( 80)	4.11E+06	( 37)	9	319 105	82.7	55.5 125.6
47	1.33E+07	( 53)	4.75E+06	( 19)	4	368 167	106.1	62.3 189.8
48	6.19E+06	( 99)	1.81E+06	( 29)	16	141 52	129.8	85.6 203.7
49	9.05E+06	( 181)	2.75E+06	( 55)	20	213 58	125.5	92.6 172.9
50	9.00E+06	( 36)	4.50E+06	( 18)	4	349 163	76.3	42.5 142.8
51	1.00E+07	( 40)	3.50E+06	( 14)	4	271 143	108.5	58.4 215.8
52	8.89E+06	( 160)	2.67E+06	( 48)	18	207 60	127.0	91.8 179.2

53	4.69E+06	( 150)	2.38E+06	( 76)	32	184	42	75.4	56.5	100.7
54	1.01E+07	( 303)	2.67E+06	( 80)	30	207	47	143.8	110.8	186.4
55	1.16E+07	( 93)	4.13E+06	( 33)	8	320	111	107.5	71.9	165.1
56	8.72E+06	( 157)	2.67E+06	( 48)	18	207	60	124.7	90.0	176.0
57	5.13E+06	( 154)	1.30E+06	( 39)	30	101	32	150.1	105.6	218.9
58	6.38E+06	( 102)	2.00E+06	( 32)	16	155	55	121.4	81.3	186.6
59	1.15E+07	( 69)	5.67E+06	( 34)	6	439	150	77.6	50.9	120.8
60	5.25E+06	( 84)	2.06E+06	( 33)	16	160	55	97.2	64.5	150.1
61	8.71E+06	( 61)	3.43E+06	( 24)	7	266	108	96.9	59.9	162.5
62	3.75E+06	( 60)	1.13E+06	( 18)	16	87	41	126.5	74.4	227.6
63	1.41E+07	( 211)	3.73E+06	( 56)	15	289	78	143.4	106.7	196.1
64	8.52E+06	( 179)	2.43E+06	( 51)	21	188	53	133.7	97.8	186.2
65	8.83E+06	( 53)	2.00E+06	( 12)	6	155	88	166.4	89.2	341.3
66	1.08E+07	( 108)	3.60E+06	( 36)	10	279	93	114.3	78.1	171.7
67	6.00E+06	( 108)	2.50E+06	( 45)	18	194	58	91.7	64.4	133.0
68	1.08E+07	( 227)	3.52E+06	( 74)	21	273	64	116.7	88.6	153.7
69	7.25E+06	( 87)	2.08E+06	( 25)	12	161	64	132.2	84.5	215.3
70	1.63E+07	( 65)	3.75E+06	( 15)	4	291	148	163.7	93.5	308.4
71	1.39E+07	( 111)	4.00E+06	( 32)	8	310	109	132.0	88.9	202.0
72	7.44E+06	( 67)	3.22E+06	( 29)	9	250	92	88.2	56.5	141.5
73	1.58E+07	( 95)	4.17E+06	( 25)	6	323	128	144.2	92.7	233.7
74	9.67E+06	( 58)	2.67E+06	( 16)	6	207	102	137.3	78.7	255.7
75	1.90E+07	( 76)	5.25E+06	( 21)	4	407	176	137.3	84.5	234.3
76	1.06E+07	( 159)	2.87E+06	( 43)	15	222	68	140.7	100.3	201.8
77	1.35E+07	( 81)	4.50E+06	( 27)	6	349	133	114.2	73.5	183.7
78	8.11E+06	( 73)	3.67E+06	( 33)	9	284	99	84.5	55.5	131.7
79	1.14E+07	( 57)	2.60E+06	( 13)	5	202	110	165.4	90.7	328.5
80	7.92E+06	( 95)	2.33E+06	( 28)	12	181	68	129.0	84.4	204.2
81	8.57E+06	( 257)	2.30E+06	( 69)	30	178	43	141.3	107.0	186.6
82	1.10E+07	( 66)	2.33E+06	( 14)	6	181	95	177.7	100.2	341.7
83	6.00E+06	( 60)	1.40E+06	( 14)	10	109	57	161.8	90.6	312.9
84	1.08E+07	( 65)	5.17E+06	( 31)	6	401	143	80.2	51.7	127.3
85	1.18E+07	( 71)	4.83E+06	( 29)	6	375	138	93.4	60.2	149.3
86	1.40E+07	( 84)	3.00E+06	( 18)	6	233	108	176.3	106.3	311.0
87	1.52E+07	( 182)	5.17E+06	( 62)	12	401	102	112.1	83.7	152.1
88	9.64E+06	( 106)	3.00E+06	( 33)	11	233	81	122.3	82.5	186.6
89	1.20E+07	( 144)	4.67E+06	( 56)	12	362	97	98.3	71.8	136.4
90	6.87E+06	( 103)	2.07E+06	( 31)	15	160	57	126.4	84.4	195.4
91	6.50E+06	( 156)	1.75E+06	( 42)	24	136	42	141.3	100.4	203.6
92	7.14E+06	( 157)	2.14E+06	( 47)	22	166	48	127.3	91.7	180.3
93	9.25E+06	( 37)	2.00E+06	( 8)	4	155	106	173.3	81.2	429.2
94	1.48E+07	( 89)	4.17E+06	( 25)	6	323	128	135.2	86.6	219.9
95	5.60E+06	( 28)	3.40E+06	( 17)	5	264	126	63.0	33.5	122.7
96	1.07E+07	( 64)	1.67E+06	( 10)	6	129	80	239.0	124.6	518.3
97	9.00E+06	( 45)	1.60E+06	( 8)	5	124	85	209.9	100.4	512.4
98	7.00E+06	( 28)	1.75E+06	( 7)	4	136	99	149.9	65.5	405.6
99	6.00E+06	( 90)	1.40E+06	( 21)	15	109	47	162.3	101.0	274.3
100	7.13E+06	( 57)	2.13E+06	( 17)	8	165	79	127.2	73.7	233.1
101	1.07E+07	( 107)	2.80E+06	( 28)	10	217	82	145.1	95.6	228.4
102	7.86E+06	( 110)	3.57E+06	( 50)	14	277	78	84.2	59.8	120.1
103	9.00E+06	( 54)	3.50E+06	( 21)	6	271	117	98.0	58.6	170.8

**KLD23** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.440E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	Rho <sub>I</sub> (Ni) (cm <sup>-2</sup> )	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	7.50E+06 ( 45)	1.67E+06 ( 10)	6	129 80	168.9	85.5	374.8
2	9.86E+06 ( 355)	3.14E+06 ( 113)	36	244 46	119.5	95.0	150.2
3	4.86E+06 ( 34)	3.57E+06 ( 25)	7	277 110	52.1	30.2	91.0
4	7.31E+06 ( 117)	2.81E+06 ( 45)	16	218 65	99.1	69.9	143.2
5	9.00E+06 ( 54)	1.83E+06 ( 11)	6	142 84	184.2	96.9	389.3
6	7.12E+06 ( 121)	2.82E+06 ( 48)	17	219 63	96.2	68.5	137.4
7	7.30E+06 ( 73)	3.90E+06 ( 39)	10	303 97	71.6	48.0	108.5
8	3.52E+06 ( 197)	1.07E+06 ( 60)	56	83 22	125.0	93.4	169.8
9	1.18E+07 ( 71)	4.33E+06 ( 26)	6	336 131	103.9	65.8	169.7
10	4.92E+06 ( 59)	1.17E+06 ( 14)	12	91 48	158.9	88.8	307.6
11	1.17E+07 ( 316)	3.67E+06 ( 99)	27	285 58	121.4	95.3	154.5
12	4.50E+06 ( 27)	2.33E+06 ( 14)	6	181 95	73.4	37.5	151.6
13	9.25E+06 ( 37)	3.50E+06 ( 14)	4	272 143	100.3	53.5	200.8
14	1.23E+07 ( 49)	5.00E+06 ( 20)	4	388 172	93.2	54.8	165.6
15	1.02E+07 ( 92)	3.44E+06 ( 31)	9	267 96	112.9	74.8	175.5
16	6.06E+06 ( 103)	1.53E+06 ( 26)	17	119 46	150.1	97.6	240.2
17	9.67E+06 ( 58)	2.33E+06 ( 14)	6	181 95	156.2	87.2	302.8
18	1.04E+07 ( 167)	3.63E+06 ( 58)	16	281 74	109.7	81.1	150.7
19	3.50E+06 ( 21)	1.00E+06 ( 6)	6	78 61	130.9	52.4	396.0
20	6.63E+06 ( 53)	1.88E+06 ( 15)	8	146 74	133.6	75.1	255.1
21	7.25E+06 ( 87)	1.75E+06 ( 21)	12	136 59	156.7	97.3	265.4
22	9.63E+06 ( 77)	2.75E+06 ( 22)	8	214 90	132.7	82.4	223.7
23	5.06E+06 ( 86)	8.82E+05 ( 15)	17	69 35	215.2	125.3	399.3
24	4.44E+06 ( 71)	1.63E+06 ( 26)	16	126 49	103.9	65.8	169.7
25	2.50E+06 ( 15)	1.17E+06 ( 7)	6	91 66	81.0	31.6	235.1
26	4.20E+06 ( 21)	2.60E+06 ( 13)	5	202 110	61.6	29.6	133.9
27	1.30E+07 ( 65)	2.00E+06 ( 10)	5	155 96	242.3	126.4	524.9
28	4.25E+06 ( 17)	1.00E+06 ( 4)	4	78 73	156.9	53.1	636.4
29	7.40E+06 ( 74)	2.00E+06 ( 20)	10	155 69	140.1	85.3	242.3
30	5.00E+06 ( 40)	1.00E+06 ( 8)	8	78 53	186.8	88.2	459.8
31	1.03E+07 ( 93)	2.56E+06 ( 23)	9	198 82	153.1	97.0	252.9
32	5.79E+06 ( 81)	2.00E+06 ( 28)	14	155 58	110.0	71.2	175.7
33	6.60E+06 ( 66)	1.30E+06 ( 13)	10	101 55	190.7	105.9	375.6
34	1.26E+07 ( 201)	4.50E+06 ( 72)	16	349 83	106.2	80.0	140.7
35	1.31E+07 ( 131)	5.10E+06 ( 51)	10	396 111	98.0	70.6	138.3
36	1.09E+07 ( 261)	2.58E+06 ( 62)	24	201 51	159.2	119.3	212.1
37	4.81E+06 ( 77)	1.19E+06 ( 19)	16	92 42	153.2	92.7	267.8
38	2.03E+07 ( 122)	6.17E+06 ( 37)	6	479 157	125.4	86.6	186.3
39	6.24E+06 ( 287)	1.83E+06 ( 84)	46	142 31	129.7	100.2	167.7
40	7.52E+06 ( 218)	2.66E+06 ( 77)	29	206 47	107.7	81.9	141.5
41	1.00E+07 ( 90)	3.22E+06 ( 29)	9	250 92	118.0	77.3	186.0
42	1.07E+07 ( 300)	4.39E+06 ( 123)	28	341 62	93.0	74.1	116.8
43	3.29E+06 ( 46)	9.29E+05 ( 13)	14	72 39	133.7	71.9	269.5
44	5.00E+06 ( 40)	1.75E+06 ( 14)	8	136 71	108.3	58.3	215.5
45	7.00E+06 ( 56)	3.75E+06 ( 30)	8	291 106	71.3	45.1	115.1
46	1.13E+07 ( 203)	3.56E+06 ( 64)	18	276 69	120.8	91.0	162.7
47	9.58E+06 ( 115)	2.58E+06 ( 31)	12	201 72	140.8	94.6	216.5
48	1.55E+07 ( 93)	4.33E+06 ( 26)	6	336 131	135.7	87.7	218.3
49	9.00E+06 ( 54)	2.33E+06 ( 14)	6	181 95	145.6	80.8	283.5
50	8.42E+06 ( 101)	4.08E+06 ( 49)	12	317 91	78.8	55.6	113.2
51	4.00E+06 ( 32)	2.00E+06 ( 16)	8	155 77	76.2	40.9	148.7
52	6.20E+06 ( 124)	1.95E+06 ( 39)	20	151 48	121.0	84.2	178.1

53	2.00E+06	( 12)	2.00E+06	( 12)	6	155	88	38.4	15.8	93.1
54	8.29E+06	( 199)	3.87E+06	( 93)	24	301	63	81.7	62.9	106.0
55	6.57E+06	( 230)	1.80E+06	( 63)	35	140	35	138.3	103.4	184.7
56	6.25E+06	( 150)	1.75E+06	( 42)	24	136	42	135.7	96.2	195.9
57	1.24E+07	( 87)	5.14E+06	( 36)	7	399	133	92.2	62.1	140.0
58	2.12E+07	( 254)	5.83E+06	( 70)	12	453	109	137.5	104.2	181.4
59	9.56E+06	( 86)	3.00E+06	( 27)	9	233	89	121.0	78.2	194.0
60	1.25E+07	( 75)	4.83E+06	( 29)	6	375	139	98.5	63.7	156.9
61	4.75E+06	( 19)	1.75E+06	( 7)	4	136	99	102.2	41.9	287.9
62	4.30E+06	( 43)	1.90E+06	( 19)	10	148	67	86.2	49.5	156.6
63	5.17E+06	( 62)	1.33E+06	( 16)	12	104	51	146.4	84.4	271.5
64	8.88E+06	( 71)	2.88E+06	( 23)	8	223	92	117.2	72.9	196.6
65	4.80E+06	( 192)	1.68E+06	( 67)	40	130	32	108.9	81.4	145.5
66	4.00E+06	( 60)	9.33E+05	( 14)	15	72	38	161.5	90.4	312.4
67	1.44E+07	( 345)	5.25E+06	( 126)	24	408	74	104.3	83.5	130.3
68	1.30E+06	( 13)	1.40E+06	( 14)	10	109	57	35.7	15.4	81.6
69	1.02E+07	( 61)	2.50E+06	( 15)	6	194	99	153.5	87.3	290.3
70	6.10E+06	( 61)	3.10E+06	( 31)	10	241	86	75.2	48.2	119.9
71	9.67E+06	( 87)	4.78E+06	( 43)	9	371	113	77.3	53.2	114.2
72	4.80E+06	( 48)	1.50E+06	( 15)	10	116	59	121.2	67.4	232.9
73	4.83E+06	( 29)	1.33E+06	( 8)	6	104	71	136.1	61.9	344.3
74	1.37E+07	( 137)	3.90E+06	( 39)	10	303	97	133.5	93.4	195.7
75	1.01E+07	( 101)	1.70E+06	( 17)	10	132	63	223.1	134.5	396.1
76	5.58E+06	( 67)	2.75E+06	( 33)	12	214	74	77.5	50.5	121.5
77	7.68E+06	( 215)	2.54E+06	( 71)	28	197	47	115.0	86.8	152.3
78	6.31E+06	( 101)	1.69E+06	( 27)	16	131	50	141.9	92.7	225.5
79	6.24E+06	( 131)	2.10E+06	( 44)	21	163	49	113.4	80.3	163.4
80	7.83E+06	( 47)	3.83E+06	( 23)	6	298	123	77.9	46.6	134.5
81	8.83E+06	( 265)	2.37E+06	( 71)	30	184	44	141.4	107.5	186.0
82	7.08E+06	( 92)	2.92E+06	( 38)	13	227	73	92.3	62.9	138.6
83	6.06E+06	( 97)	2.19E+06	( 35)	16	170	57	105.6	71.3	160.1
84	9.00E+06	( 216)	3.71E+06	( 89)	24	288	62	92.5	71.2	120.1
85	5.42E+06	( 271)	1.84E+06	( 92)	50	143	30	112.1	87.1	144.1
86	6.29E+06	( 283)	2.53E+06	( 114)	45	197	37	94.7	74.8	119.7
87	6.17E+06	( 148)	3.08E+06	( 74)	24	239	56	76.3	57.0	102.1
88	1.06E+07	( 95)	3.56E+06	( 32)	9	276	97	113.0	75.3	174.3
89	6.36E+06	( 178)	1.61E+06	( 45)	28	125	37	150.2	108.2	213.0
90	7.25E+06	( 58)	1.25E+06	( 10)	8	97	60	216.7	112.1	472.8
91	5.07E+06	( 71)	1.64E+06	( 23)	14	128	53	117.2	72.9	196.6
92	5.88E+06	( 94)	2.06E+06	( 33)	16	160	56	108.4	72.6	166.5
93	6.08E+06	( 73)	2.33E+06	( 28)	12	181	68	99.3	63.7	159.5
94	9.10E+06	( 182)	4.50E+06	( 90)	20	349	74	77.2	59.1	100.8
95	2.50E+06	( 30)	1.42E+06	( 17)	12	110	53	67.3	36.2	130.2
96	1.23E+07	( 98)	5.13E+06	( 41)	8	398	124	91.2	62.9	134.8
97	1.33E+06	( 8)	8.33E+05	( 5)	6	65	55	60.6	17.7	235.2
98	1.09E+07	( 87)	4.50E+06	( 36)	8	349	116	92.2	62.1	140.0
99	6.13E+06	( 98)	1.50E+06	( 24)	16	116	47	154.6	98.9	252.3
100	4.21E+06	( 59)	2.29E+06	( 32)	14	177	63	70.5	45.2	112.0
101	5.56E+06	( 50)	2.56E+06	( 23)	9	198	82	82.9	49.9	142.3
102	4.50E+06	( 45)	3.90E+06	( 39)	10	303	97	44.3	28.2	69.8
103	4.70E+06	( 47)	2.80E+06	( 28)	10	217	82	64.2	39.5	106.4
104	5.14E+06	( 108)	2.43E+06	( 51)	21	189	53	80.9	57.6	115.3
105	7.67E+06	( 46)	5.50E+06	( 33)	6	427	148	53.4	33.5	86.2

**KLD25** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.430E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	8.89E+05	( 16)	4.44E+05	( 8)	18	35 24	75.7	31.0 204.4
2	7.62E+05	( 16)	2.86E+05	( 6)	21	22 17	100.1	38.0 312.4
3	3.81E+06	( 61)	1.38E+06	( 22)	16	107 45	105.3	64.1 180.0
4	3.94E+06	( 63)	8.13E+05	( 13)	16	63 34	181.9	100.6 359.2
5	1.39E+06	( 86)	1.06E+06	( 66)	62	83 20	49.9	35.8 69.9
6	7.33E+06	( 198)	3.00E+06	( 81)	27	233 52	93.0	70.8 122.1
7	1.75E+06	( 7)	5.00E+05	( 2)	4	39 49	126.5	25.6 1207.7
8	1.33E+06	( 16)	9.17E+05	( 11)	12	71 42	55.4	24.3 132.0
9	6.43E+05	( 18)	1.43E+05	( 4)	28	11 10	165.7	56.7 667.5
10	4.63E+06	( 37)	7.50E+05	( 6)	8	58 46	227.8	98.4 653.5
11	1.11E+06	( 50)	4.22E+05	( 19)	45	33 15	99.9	58.3 179.4
12	1.25E+06	( 20)	1.13E+06	( 18)	16	87 41	42.5	21.4 85.2
13	1.08E+06	( 43)	1.00E+06	( 40)	40	78 25	41.2	26.2 65.0
14	1.33E+06	( 16)	6.67E+05	( 8)	12	52 36	75.7	31.0 204.4
15	4.54E+06	( 109)	1.13E+06	( 27)	24	87 33	152.7	100.2 241.9
16	4.81E+06	( 77)	2.88E+06	( 46)	16	224 66	64.0	43.9 94.3
17	5.00E+05	( 6)	6.67E+05	( 8)	12	52 36	29.0	8.2 94.1
18	1.25E+06	( 15)	9.17E+05	( 11)	12	71 42	52.0	22.5 125.1
19	6.67E+05	( 4)	5.00E+05	( 3)	6	39 42	50.4	8.7 341.0
20	1.08E+06	( 13)	5.00E+05	( 6)	12	39 31	81.6	29.5 262.1
21	3.52E+06	( 74)	2.86E+06	( 60)	21	222 58	47.2	33.2 67.6
22	1.63E+06	( 13)	7.50E+05	( 6)	8	58 46	81.6	29.5 262.1
23	6.21E+06	( 211)	1.97E+06	( 67)	34	153 38	119.4	89.6 159.0
24	1.30E+06	( 13)	5.00E+05	( 5)	10	39 33	97.3	33.3 348.8
25	7.50E+06	( 75)	4.80E+06	( 48)	10	373 108	59.7	41.1 87.7
26	1.75E+06	( 35)	1.85E+06	( 37)	20	144 47	36.3	22.2 59.2
27	3.29E+06	( 69)	1.33E+06	( 28)	21	104 39	93.7	59.9 151.1
28	4.13E+06	( 66)	1.25E+06	( 20)	16	97 43	125.0	75.4 217.5
29	2.00E+06	( 64)	1.00E+06	( 32)	32	78 27	76.3	49.3 120.5
30	6.50E+06	( 156)	2.46E+06	( 59)	24	191 50	100.7	74.3 138.4
31	1.63E+06	( 39)	1.46E+06	( 35)	24	113 38	42.7	26.4 69.4
32	4.04E+06	( 113)	1.61E+06	( 45)	28	125 37	95.6	67.3 138.3
33	4.50E+06	( 27)	2.17E+06	( 13)	6	168 92	78.9	39.7 166.6
34	1.42E+06	( 17)	1.00E+06	( 12)	12	78 44	54.0	24.5 123.9
35	1.25E+05	( 2)	4.38E+05	( 7)	16	34 25	11.6	1.1 57.5
36	3.92E+06	( 47)	1.08E+06	( 13)	12	84 46	136.3	73.5 274.4
37	9.00E+05	( 36)	1.23E+06	( 49)	40	95 27	28.2	17.8 44.2
38	1.97E+06	( 59)	2.03E+06	( 61)	30	158 41	37.1	25.5 53.9
39	1.50E+06	( 18)	6.67E+05	( 8)	12	52 36	85.0	35.7 226.1
40	2.00E+06	( 12)	6.67E+05	( 4)	6	52 49	111.4	34.9 473.2
41	2.13E+06	( 17)	2.00E+06	( 16)	8	156 77	40.7	19.4 85.9
42	1.86E+06	( 39)	1.33E+06	( 28)	21	104 39	53.3	32.0 89.8
43	7.14E+05	( 20)	7.14E+05	( 20)	28	56 25	38.3	19.6 74.9
44	3.28E+06	( 59)	1.56E+06	( 28)	18	121 45	80.3	50.6 130.8
45	3.50E+06	( 35)	2.40E+06	( 24)	10	187 76	55.7	32.3 97.9
46	2.52E+06	( 53)	9.05E+05	( 19)	21	70 32	105.8	62.1 189.2
47	3.12E+06	( 187)	2.27E+06	( 136)	60	176 31	52.6	41.4 66.8
48	2.42E+06	( 121)	1.58E+06	( 79)	50	123 28	58.6	43.8 78.9
49	2.88E+06	( 23)	5.00E+05	( 4)	8	39 37	210.6	75.1 824.9
50	4.58E+06	( 110)	1.96E+06	( 47)	24	152 44	89.2	63.0 128.4
51	1.40E+06	( 28)	1.10E+06	( 22)	20	86 36	48.7	26.9 89.2
52	1.77E+06	( 85)	1.58E+06	( 76)	48	123 28	42.9	31.1 59.2

53	1.00E+06	( 20)	1.25E+06	( 25)	20	97	39	30.7	16.2	57.5
54	8.33E+05	( 10)	5.00E+05	( 6)	12	39	31	63.1	21.1	211.2
55	4.63E+06	( 37)	1.63E+06	( 13)	8	126	69	107.7	56.6	220.7
56	3.38E+06	( 27)	1.13E+06	( 9)	8	87	57	113.0	52.4	273.1
57	4.11E+06	( 37)	2.11E+06	( 19)	9	164	75	74.1	41.8	136.5
58	1.14E+07	( 91)	4.13E+06	( 33)	8	321	111	104.8	70.0	161.3
59	1.50E+06	( 12)	3.75E+05	( 3)	8	29	31	146.4	41.4	798.2
60	1.33E+06	( 16)	5.83E+05	( 7)	12	45	33	86.2	34.1	248.0
61	4.50E+06	( 81)	2.22E+06	( 40)	18	173	55	77.2	52.4	115.9
62	1.33E+06	( 16)	1.33E+06	( 16)	12	104	51	38.3	18.0	81.7
63	1.71E+06	( 24)	1.50E+06	( 21)	14	117	50	43.8	23.4	82.6
64	2.75E+06	( 33)	8.33E+05	( 10)	12	65	40	124.3	60.8	282.6
65	7.08E+05	( 17)	4.58E+05	( 11)	24	36	21	58.9	26.2	139.0
66	1.38E+06	( 33)	9.58E+05	( 23)	24	75	31	54.8	31.3	97.8
67	6.44E+06	( 58)	7.56E+06	( 68)	9	588	143	32.7	22.6	47.2
68	2.38E+06	( 57)	5.42E+05	( 13)	24	42	23	164.9	90.5	327.6
69	3.83E+06	( 23)	4.00E+06	( 24)	6	311	126	36.8	19.8	67.9
70	1.47E+06	( 22)	8.67E+05	( 13)	15	67	37	64.4	31.3	139.2
71	2.25E+06	( 27)	1.00E+06	( 12)	12	78	44	85.3	42.2	184.9
72	1.04E+07	( 94)	3.00E+06	( 27)	9	233	89	131.9	85.8	210.5
73	2.00E+06	( 48)	1.04E+06	( 25)	24	81	32	73.2	44.4	123.9
74	3.88E+06	( 155)	1.45E+06	( 58)	40	113	30	101.8	75.0	140.2
75	3.40E+06	( 34)	2.70E+06	( 27)	10	210	80	48.2	28.3	83.0
76	7.80E+05	( 39)	6.00E+05	( 30)	50	47	17	49.7	30.2	82.9
77	3.87E+06	( 116)	3.60E+06	( 108)	30	280	54	41.2	31.2	54.3
78	2.25E+06	( 27)	2.42E+06	( 29)	12	188	69	35.7	20.3	62.4
79	7.92E+05	( 19)	7.08E+05	( 17)	24	55	26	42.8	21.1	87.5
80	9.17E+05	( 22)	4.17E+05	( 10)	24	32	20	83.3	38.3	197.2
81	7.78E+05	( 7)	2.22E+05	( 2)	9	17	22	126.5	25.6	1207.7
82	8.75E+05	( 14)	5.00E+05	( 8)	16	39	27	66.4	26.3	182.6
83	4.17E+05	( 5)	1.08E+06	( 13)	12	84	46	15.1	4.1	44.1
84	1.04E+06	( 25)	6.67E+05	( 16)	24	52	26	59.6	30.7	119.4
85	1.83E+06	( 73)	2.10E+06	( 84)	40	163	36	33.3	24.0	46.2
86	1.73E+06	( 26)	1.00E+06	( 15)	15	78	40	66.0	33.9	134.1
87	2.11E+06	( 19)	6.67E+05	( 6)	9	52	41	118.5	46.6	362.4
88	2.03E+06	( 61)	7.33E+05	( 22)	30	57	24	105.3	64.1	180.0
89	2.64E+06	( 132)	4.74E+06	( 237)	50	369	49	21.4	17.0	27.0
90	8.57E+05	( 18)	8.10E+05	( 17)	21	63	30	40.6	19.8	83.6
91	2.00E+06	( 18)	1.11E+06	( 10)	9	86	53	68.4	30.2	165.8
92	2.13E+06	( 32)	4.07E+06	( 61)	15	316	81	20.2	12.7	31.4
93	1.00E+06	( 9)	1.78E+06	( 16)	9	138	68	21.8	8.4	51.8
94	1.45E+06	( 29)	1.00E+06	( 20)	20	78	34	55.4	30.4	103.3
95	4.17E+05	( 5)	8.33E+04	( 1)	12	6	11	170.8	21.5	5673.0
96	7.50E+05	( 6)	7.50E+05	( 6)	8	58	46	38.3	10.3	142.3
97	3.67E+06	( 55)	8.67E+05	( 13)	15	67	37	159.2	87.1	317.0
98	1.50E+06	( 18)	7.50E+05	( 9)	12	58	38	75.8	32.7	191.6
99	6.25E+06	( 25)	6.00E+06	( 24)	4	467	189	39.9	21.9	72.9
100	1.50E+06	( 24)	1.31E+06	( 21)	16	102	44	43.8	23.4	82.6
101	1.39E+06	( 25)	7.22E+05	( 13)	18	56	31	73.1	36.3	155.6
102	2.40E+06	( 36)	2.47E+06	( 37)	15	192	63	37.3	22.9	60.7
103	5.92E+06	( 148)	5.36E+06	( 134)	25	417	73	42.3	32.9	54.4
104	5.00E+05	( 5)	1.20E+06	( 12)	10	93	53	16.3	4.4	48.7
105	1.53E+06	( 46)	1.73E+06	( 52)	30	135	37	33.9	22.3	51.4

**KLD26** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.410E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	3.25E+06	( 13)	2.50E+06	( 10)	4	195 121	49.5	20.1 125.8
2	1.53E+07	( 61)	5.50E+06	( 22)	4	429 181	104.9	63.9 179.4
3	8.17E+06	( 49)	2.17E+06	( 13)	6	169 92	141.6	76.7 284.2
4	7.67E+06	( 46)	4.00E+06	( 24)	6	312 126	72.8	43.7 124.8
5	2.00E+06	( 12)	3.33E+05	( 2)	6	26 33	212.7	51.0 1830.3
6	1.32E+07	( 79)	6.67E+06	( 40)	6	520 164	75.1	50.9 112.9
7	9.00E+06	( 243)	2.26E+06	( 61)	27	176 45	150.6	113.7 202.8
8	5.35E+06	( 107)	3.05E+06	( 61)	20	238 61	66.8	48.4 93.1
9	6.00E+06	( 24)	2.25E+06	( 9)	4	176 114	100.3	45.7 245.3
10	5.25E+06	( 21)	3.00E+06	( 12)	4	234 133	66.4	31.4 148.0
11	7.35E+06	( 147)	2.55E+06	( 51)	20	199 56	109.3	79.2 153.5
12	1.67E+06	( 10)	3.33E+06	( 20)	6	260 115	19.3	8.0 42.8
13	8.40E+06	( 84)	3.70E+06	( 37)	10	289 95	86.2	58.1 130.7
14	7.38E+06	( 59)	2.50E+06	( 20)	8	195 86	111.5	66.7 195.5
15	4.25E+06	( 17)	7.50E+05	( 3)	4	59 63	205.0	62.5 1064.5
16	7.25E+06	( 29)	1.75E+06	( 7)	4	137 100	154.2	67.7 416.0
17	1.65E+07	( 66)	4.75E+06	( 19)	4	371 168	131.0	78.4 231.0
18	6.67E+05	( 4)	1.50E+06	( 9)	6	117 76	17.4	3.8 60.8
19	5.50E+06	( 33)	1.27E+07	( 76)	6	988 228	16.7	10.7 25.3
20	6.77E+06	( 88)	2.69E+06	( 35)	13	210 71	95.4	64.1 145.5
21	4.75E+06	( 38)	2.13E+06	( 17)	8	166 79	84.7	47.0 160.0
22	9.89E+06	( 89)	3.67E+06	( 33)	9	286 99	102.2	68.2 157.5
23	7.25E+06	( 29)	1.00E+06	( 4)	4	78 74	263.2	96.8 1005.8
24	7.58E+06	( 91)	2.17E+06	( 26)	12	169 66	132.2	85.3 212.9
25	9.38E+06	( 75)	3.13E+06	( 25)	8	244 97	113.5	71.8 186.3
26	7.50E+06	( 45)	1.50E+06	( 9)	6	117 76	186.2	91.8 431.5
27	1.33E+06	( 8)	6.67E+05	( 4)	6	52 49	74.8	20.5 339.0
28	2.14E+07	( 107)	7.00E+06	( 35)	5	546 184	115.8	78.7 174.8
29	1.28E+06	( 23)	1.17E+06	( 21)	18	91 39	41.8	22.2 79.3
30	8.83E+06	( 106)	3.08E+06	( 37)	12	241 79	108.6	74.4 162.5
31	1.03E+07	( 205)	4.60E+06	( 92)	20	359 75	84.6	65.2 109.8
32	9.00E+06	( 99)	5.09E+06	( 56)	11	397 106	67.3	48.1 95.3
33	7.38E+06	( 59)	3.38E+06	( 27)	8	263 101	83.0	52.0 136.1
34	4.00E+06	( 32)	3.75E+06	( 30)	8	293 106	40.7	24.0 69.4
35	8.08E+06	( 194)	8.12E+06	( 195)	24	634 93	38.0	30.5 47.3
36	6.60E+06	( 132)	2.90E+06	( 58)	20	226 60	86.5	63.2 120.0
37	1.33E+06	( 8)	8.33E+05	( 5)	6	65 55	60.3	17.7 234.1
38	1.13E+06	( 9)	1.25E+05	( 1)	8	10 16	299.3	47.6 7786.2
39	6.00E+06	( 36)	3.17E+06	( 19)	6	247 112	71.9	40.4 132.8
40	7.17E+06	( 43)	1.17E+06	( 7)	6	91 67	227.0	104.1 592.7
41	5.38E+06	( 43)	1.88E+06	( 15)	8	146 74	108.2	59.5 209.7
42	7.22E+06	( 65)	2.67E+06	( 24)	9	208 84	102.6	63.7 171.3
43	8.81E+06	( 238)	3.67E+06	( 99)	27	286 58	91.2	71.0 117.1
44	1.19E+07	( 83)	2.86E+06	( 20)	7	223 99	156.2	95.9 268.4
45	1.15E+07	( 69)	5.17E+06	( 31)	6	403 144	84.5	54.8 133.7
46	3.83E+06	( 23)	1.17E+06	( 7)	6	91 67	122.8	52.1 338.7
47	1.16E+07	( 116)	5.40E+06	( 54)	10	421 115	81.7	58.8 115.1
48	4.28E+06	( 77)	1.56E+06	( 28)	18	121 46	104.2	67.2 166.8
49	9.00E+06	( 36)	2.00E+06	( 8)	4	156 107	167.6	78.3 416.2
50	6.00E+06	( 72)	2.00E+06	( 24)	12	156 63	113.5	71.1 188.3
51	4.33E+06	( 52)	1.67E+06	( 20)	12	130 58	98.4	58.2 174.1
52	6.67E+05	( 4)	1.33E+06	( 8)	6	104 71	19.5	4.2 71.2

53	6.33E+06	( 38)	3.00E+06	( 18)	6	234	109	80.0	44.9	149.0
54	9.00E+06	( 36)	7.00E+06	( 28)	4	546	205	49.0	29.2	83.4
55	9.00E+06	( 45)	6.00E+06	( 30)	5	468	170	57.1	35.3	94.0
56	7.89E+06	( 71)	3.22E+06	( 29)	9	251	93	92.9	59.8	148.4
57	1.50E+06	( 9)	1.00E+06	( 6)	6	78	61	56.8	18.2	193.5
58	1.18E+07	( 282)	4.33E+06	( 104)	24	338	67	102.8	80.7	130.8
59	9.42E+06	( 113)	4.42E+06	( 53)	12	345	95	81.1	58.1	114.7
60	9.08E+06	( 109)	3.75E+06	( 45)	12	293	87	92.0	64.6	133.3
61	1.25E+06	( 10)	2.00E+06	( 16)	8	156	77	24.1	9.7	56.0
62	1.45E+07	( 58)	5.25E+06	( 21)	4	410	177	104.5	62.9	181.3
63	1.22E+06	( 11)	1.44E+06	( 13)	9	113	61	32.4	13.1	78.0
64	4.80E+06	( 24)	6.00E+05	( 3)	5	47	50	286.7	92.4	1422.4
65	5.03E+06	( 201)	1.98E+06	( 79)	40	154	35	96.4	73.3	126.8
66	7.17E+06	( 43)	3.17E+06	( 19)	6	247	112	85.8	49.2	155.9
67	8.10E+06	( 170)	3.95E+06	( 83)	21	308	68	77.8	59.0	102.5
68	9.40E+06	( 94)	5.70E+06	( 57)	10	445	118	62.8	44.8	89.0
69	4.75E+06	( 57)	4.00E+06	( 48)	12	312	90	45.3	30.4	68.0
70	7.22E+06	( 65)	2.00E+06	( 18)	9	156	73	136.1	80.5	243.6
71	8.21E+06	( 115)	5.07E+06	( 71)	14	396	94	61.7	45.6	84.3
72	1.18E+07	( 94)	5.63E+06	( 45)	8	439	131	79.4	55.2	116.0
73	1.21E+07	( 182)	4.47E+06	( 67)	15	348	86	103.1	77.7	138.7
74	2.00E+06	( 18)	2.00E+06	( 18)	9	156	73	38.2	18.8	77.7
75	5.20E+06	( 52)	2.30E+06	( 23)	10	179	74	85.8	51.8	146.8
76	6.70E+06	( 201)	2.30E+06	( 69)	30	179	43	110.2	82.8	146.6
77	8.00E+06	( 128)	2.38E+06	( 38)	16	185	60	127.5	88.5	188.2
78	5.83E+06	( 35)	2.50E+06	( 15)	6	195	99	88.3	47.4	174.1
79	8.00E+06	( 48)	1.67E+06	( 10)	6	130	80	179.1	91.2	395.8
80	5.33E+06	( 96)	3.44E+06	( 62)	18	269	68	59.0	42.5	82.7
81	5.50E+06	( 44)	2.63E+06	( 21)	8	205	89	79.5	46.5	140.8
82	5.89E+06	( 106)	2.61E+06	( 47)	18	204	59	85.7	60.4	123.6
83	5.81E+06	( 93)	2.63E+06	( 42)	16	205	63	84.2	58.0	124.3
84	2.17E+06	( 13)	2.00E+06	( 12)	6	156	88	41.4	17.4	98.9
85	1.00E+07	( 60)	3.17E+06	( 19)	6	247	112	119.2	70.8	211.5
86	3.43E+06	( 48)	1.00E+06	( 14)	14	78	41	129.1	70.8	253.3
87	8.75E+06	( 105)	3.75E+06	( 45)	12	293	87	88.6	62.1	128.7
88	9.53E+06	( 381)	3.00E+06	( 120)	40	234	43	120.2	96.2	150.2
89	5.75E+06	( 46)	3.00E+06	( 24)	8	234	95	72.8	43.7	124.8
90	1.00E+05	( 2)	8.00E+05	( 16)	20	62	31	5.1	0.5	20.4
91	1.10E+06	( 11)	1.20E+06	( 12)	10	94	53	35.1	14.0	86.5
92	5.31E+06	( 191)	1.53E+06	( 55)	36	119	32	131.5	97.2	180.9
93	1.04E+07	( 104)	4.60E+06	( 46)	10	359	106	85.9	60.3	124.4
94	2.00E+06	( 16)	3.75E+05	( 3)	8	29	31	193.2	58.2	1011.6
95	1.10E+07	( 132)	5.33E+06	( 64)	12	416	104	78.5	57.9	107.6
96	1.00E+07	( 90)	3.00E+06	( 27)	9	234	90	126.0	81.7	201.5
97	7.33E+06	( 66)	4.44E+06	( 40)	9	347	109	62.8	41.9	95.6
98	1.03E+07	( 82)	4.50E+06	( 36)	8	351	117	86.5	58.0	131.9
99	6.00E+06	( 54)	2.56E+06	( 23)	9	199	82	89.0	54.0	152.0
100	7.00E+06	( 56)	2.38E+06	( 19)	8	185	84	111.4	65.7	198.5
101	1.33E+06	( 8)	3.83E+06	( 23)	6	299	124	13.5	5.2	30.8
102	3.25E+06	( 26)	3.00E+06	( 24)	8	234	95	41.4	22.9	75.2
103	6.63E+06	( 53)	1.75E+06	( 14)	8	137	72	142.3	78.8	277.4
104	8.83E+06	( 53)	2.67E+06	( 16)	6	208	103	124.9	71.0	233.9
105	7.53E+06	( 113)	1.40E+06	( 21)	15	109	47	201.8	127.3	337.5

**KLD29** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.410E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	3.33E+06	( 20)	7.67E+06	( 46)	6	598 176	16.7	9.3 28.7
2	6.83E+06	( 41)	8.00E+06	( 48)	6	624 180	32.7	21.0 50.6
3	5.60E+06	( 28)	7.40E+06	( 37)	5	577 189	29.0	17.1 48.6
4	2.90E+06	( 29)	4.90E+06	( 49)	10	382 109	22.7	13.8 36.6
5	1.00E+07	( 60)	2.10E+07	( 126)	6	1638 296	18.3	13.2 25.0
6	5.61E+06	( 101)	1.13E+07	( 204)	18	884 127	19.0	14.7 24.5
7	8.00E+06	( 40)	1.80E+06	( 9)	5	140 91	165.9	80.8 387.7
8	1.66E+07	( 83)	1.80E+07	( 90)	5	1404 298	35.3	25.8 48.1
9	6.17E+06	( 37)	1.83E+06	( 11)	6	143 84	126.4	64.0 274.5
10	7.36E+06	( 103)	8.71E+06	( 122)	14	680 125	32.3	24.5 42.6
11	9.80E+06	( 49)	3.20E+06	( 16)	5	250 123	115.6	65.2 217.6
12	8.33E+06	( 125)	7.20E+06	( 108)	15	562 109	44.2	33.6 58.0
13	1.08E+07	( 97)	1.96E+07	( 176)	9	1525 235	21.1	16.2 27.5
14	2.83E+06	( 17)	6.17E+06	( 37)	6	481 158	17.7	9.3 32.0
15	4.13E+06	( 33)	4.88E+06	( 39)	8	380 122	32.4	19.7 52.8
16	8.70E+06	( 235)	1.22E+07	( 329)	27	950 109	27.3	22.6 33.1
17	1.64E+07	( 148)	1.30E+07	( 117)	9	1014 190	48.3	37.3 62.5
18	1.22E+07	( 122)	1.29E+07	( 129)	10	1006 180	36.2	27.8 47.1
19	5.43E+06	( 38)	5.00E+06	( 35)	7	390 131	41.5	25.5 67.6
20	5.14E+06	( 36)	9.86E+06	( 69)	7	769 186	20.0	13.0 30.3
21	9.00E+06	( 72)	6.88E+06	( 55)	8	536 145	50.0	34.7 72.3
22	4.27E+06	( 64)	2.00E+06	( 30)	15	156 57	81.0	52.0 129.6
23	4.83E+06	( 87)	4.17E+06	( 75)	18	325 76	44.3	32.1 61.2
24	5.71E+06	( 80)	8.93E+06	( 125)	14	696 126	24.5	18.2 32.7
25	9.00E+06	( 81)	1.30E+07	( 117)	9	1014 190	26.5	19.7 35.5
26	6.33E+06	( 57)	1.07E+07	( 96)	9	832 171	22.7	16.1 31.9
27	1.93E+07	( 154)	1.29E+07	( 103)	8	1004 200	57.0	43.7 74.2
28	2.93E+06	( 44)	7.73E+06	( 116)	15	603 113	14.6	10.0 20.7
29	7.69E+06	( 123)	1.27E+07	( 203)	16	990 142	23.2	18.2 29.6
30	4.50E+06	( 27)	2.17E+06	( 13)	6	169 92	78.6	39.5 166.0
31	9.38E+06	( 75)	4.25E+06	( 34)	8	332 113	83.8	55.4 129.7
32	2.00E+06	( 24)	3.08E+06	( 37)	12	241 79	24.9	14.2 42.6
33	1.03E+07	( 62)	4.00E+06	( 24)	6	312 126	97.9	60.6 164.0
34	3.80E+06	( 76)	2.15E+06	( 43)	20	168 51	67.3	45.8 100.3
35	4.21E+06	( 101)	8.50E+06	( 204)	24	663 95	19.0	14.7 24.5
36	6.05E+06	( 127)	4.29E+06	( 90)	21	334 71	53.8	40.5 71.4
37	1.11E+07	( 100)	3.67E+06	( 33)	9	286 99	114.8	77.1 175.6
38	6.33E+06	( 57)	7.89E+06	( 71)	9	615 147	30.7	21.3 44.2
39	2.94E+06	( 53)	5.56E+06	( 100)	18	433 88	20.3	14.2 28.6
40	1.60E+07	( 64)	1.20E+07	( 48)	4	936 270	50.9	34.5 75.6
41	5.25E+06	( 42)	6.75E+06	( 54)	8	527 144	29.8	19.4 45.4
42	7.80E+06	( 78)	3.60E+06	( 36)	10	281 93	82.3	55.0 125.9
43	5.36E+06	( 75)	6.00E+06	( 84)	14	468 103	34.1	24.6 47.2
44	8.33E+06	( 50)	1.28E+07	( 77)	6	1001 230	24.9	17.0 36.0
45	7.50E+06	( 90)	1.37E+07	( 164)	12	1066 170	21.1	16.0 27.7
46	5.00E+06	( 35)	1.00E+07	( 70)	7	780 187	19.2	12.4 29.1
47	1.00E+06	( 6)	1.50E+06	( 9)	6	117 76	25.7	7.5 79.9
48	2.00E+06	( 48)	3.38E+06	( 81)	24	263 59	22.7	15.5 32.8
49	3.58E+06	( 215)	4.88E+06	( 293)	60	381 46	28.1	23.0 34.3
50	6.47E+06	( 97)	1.19E+07	( 179)	15	931 142	20.8	16.0 27.0
51	2.78E+06	( 25)	2.11E+06	( 19)	9	165 75	50.1	26.6 96.3
52	5.60E+06	( 28)	1.94E+07	( 97)	5	1513 310	11.1	7.0 17.0

53	4.08E+06	( 49)	3.67E+06	( 44)	12	286	86	42.5	27.7	65.4
54	5.40E+06	( 54)	8.60E+06	( 86)	10	671	146	24.1	16.8	34.2
55	2.67E+06	( 32)	1.33E+06	( 16)	12	104	51	75.8	40.7	148.0
56	4.33E+06	( 26)	8.17E+06	( 49)	6	637	182	20.4	12.1	33.3
57	1.04E+07	( 94)	1.31E+07	( 118)	9	1023	191	30.5	22.9	40.6
58	1.08E+07	( 43)	2.85E+07	( 114)	4	2223	421	14.5	9.9	20.7
59	2.63E+06	( 21)	3.63E+06	( 29)	8	283	104	27.8	15.0	50.2
60	3.94E+06	( 63)	6.75E+06	( 108)	16	527	102	22.3	16.1	30.8
61	3.17E+06	( 38)	5.17E+06	( 62)	12	403	103	23.5	15.2	35.7
62	8.08E+06	( 97)	1.49E+07	( 179)	12	1164	177	20.8	16.0	27.0
63	2.90E+06	( 87)	4.43E+06	( 133)	30	346	61	25.1	18.9	33.3
64	8.00E+06	( 32)	2.65E+07	( 106)	4	2067	406	11.6	7.5	17.3
65	1.24E+07	( 62)	3.20E+06	( 16)	5	250	123	145.8	84.0	270.3
66	6.80E+06	( 34)	6.20E+06	( 31)	5	484	173	41.9	25.0	70.4
67	5.92E+06	( 71)	9.00E+06	( 108)	12	702	137	25.2	18.4	34.3
68	3.44E+06	( 55)	4.81E+06	( 77)	16	375	86	27.3	19.0	39.2
69	3.83E+06	( 23)	8.83E+06	( 53)	6	689	190	16.7	9.7	27.6
70	4.75E+06	( 38)	2.38E+06	( 19)	8	185	84	75.9	42.9	139.4
71	4.50E+06	( 54)	2.33E+06	( 28)	12	182	68	73.3	45.8	120.2
72	5.20E+06	( 52)	1.48E+07	( 148)	10	1154	193	13.5	9.6	18.6
73	9.70E+06	( 291)	4.00E+06	( 120)	30	312	58	92.1	73.1	115.9
74	5.83E+06	( 35)	6.00E+06	( 36)	6	468	156	37.2	22.7	60.9
75	4.17E+06	( 50)	8.75E+06	( 105)	12	683	135	18.3	12.7	25.8
76	2.92E+06	( 35)	2.25E+06	( 27)	12	176	67	49.4	29.1	84.9
77	5.08E+06	( 61)	3.83E+06	( 46)	12	299	88	50.6	34.0	75.9
78	3.00E+06	( 63)	5.05E+06	( 106)	21	394	77	22.8	16.4	31.4
79	1.53E+07	( 92)	3.75E+07	( 225)	6	2925	400	15.7	12.1	20.4
80	6.33E+06	( 76)	3.50E+06	( 42)	12	273	84	68.9	46.7	103.0
81	5.33E+06	( 32)	9.17E+06	( 55)	6	715	193	22.3	13.9	35.1
82	3.78E+06	( 68)	6.94E+06	( 125)	18	542	98	20.8	15.2	28.2
83	3.81E+06	( 61)	5.81E+06	( 93)	16	453	95	25.1	17.8	35.1
84	9.10E+06	( 91)	3.00E+06	( 30)	10	234	85	114.8	75.7	179.7
85	6.04E+06	( 145)	9.38E+06	( 225)	24	731	100	24.7	19.7	31.0
86	2.11E+06	( 19)	6.67E+05	( 6)	9	52	41	118.1	46.4	361.3
87	6.67E+06	( 120)	8.50E+06	( 153)	18	663	109	30.0	23.2	38.8
88	1.20E+06	( 12)	7.00E+05	( 7)	10	55	40	64.8	23.8	194.2
89	3.67E+06	( 33)	6.33E+06	( 57)	9	494	131	22.2	14.0	34.6
90	7.34E+06	( 235)	1.15E+07	( 369)	32	899	98	24.4	20.2	29.4
91	1.09E+07	( 152)	9.50E+06	( 133)	14	741	130	43.6	34.0	56.0
92	7.47E+06	( 112)	1.23E+07	( 184)	15	957	144	23.3	18.1	30.0
93	1.17E+06	( 14)	1.83E+06	( 22)	12	143	60	24.5	11.5	49.7
94	6.00E+06	( 24)	1.15E+07	( 46)	4	897	265	20.0	11.7	33.4
95	1.16E+07	( 58)	1.80E+07	( 90)	5	1404	298	24.7	17.4	34.7
96	6.38E+06	( 51)	1.05E+07	( 84)	8	819	180	23.3	16.1	33.3
97	1.60E+06	( 24)	5.73E+06	( 86)	15	447	97	10.7	6.5	17.0
98	2.93E+06	( 79)	5.22E+06	( 141)	27	407	70	21.5	16.1	28.7
99	7.87E+06	( 189)	3.87E+06	( 93)	24	302	63	77.2	59.3	100.5
100	6.86E+06	( 48)	7.00E+06	( 49)	7	546	156	37.4	24.6	56.9
101	5.83E+05	( 7)	2.08E+06	( 25)	12	163	65	10.9	3.9	25.5
102	4.40E+06	( 22)	9.00E+06	( 45)	5	702	209	18.8	10.7	31.8
103	7.00E+06	( 70)	7.10E+06	( 71)	10	554	132	37.7	26.7	53.2
104	6.00E+06	( 72)	2.00E+06	( 24)	12	156	63	113.5	71.1	188.3
105	4.13E+06	( 33)	7.13E+06	( 57)	8	556	148	22.2	14.0	34.6

**KLD33** (Yukon), modern sand, UC2z (counted by Sarah Falkowski May 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 4.190E+05  
 RELATIVE ERROR (%): 1.57  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	Rho <sub>I</sub> (Ni)	Squares	U+/-2s	Grain Age	Age (Ma)	--95% CI--
1	8.47E+06 ( 254)	1.77E+06 ( 53)	30	211 58	118.7	88.3	162.9
2	1.18E+07 ( 378)	2.28E+06 ( 73)	32	272 64	127.8	98.1	166.3
3	1.09E+07 ( 328)	2.17E+06 ( 65)	30	259 64	124.5	94.2	164.4
4	9.58E+06 ( 115)	1.75E+06 ( 21)	12	209 90	134.9	85.0	226.3
5	1.02E+07 ( 102)	2.10E+06 ( 21)	10	251 108	119.8	75.0	202.0
6	1.55E+07 ( 186)	2.50E+06 ( 30)	12	298 108	152.8	104.2	232.8
7	1.28E+07 ( 204)	2.38E+06 ( 38)	16	283 92	132.7	93.9	192.9
8	1.26E+07 ( 377)	2.40E+06 ( 72)	30	286 68	129.2	99.0	168.4
9	9.24E+06 ( 388)	1.24E+06 ( 52)	42	148 41	183.8	138.0	250.3
10	1.11E+07 ( 311)	2.64E+06 ( 74)	28	315 74	103.9	79.5	135.7
11	1.13E+07 ( 135)	2.33E+06 ( 28)	12	278 105	119.1	79.4	186.1
12	9.63E+06 ( 385)	1.80E+06 ( 72)	40	215 51	131.9	101.1	171.8
13	9.00E+06 ( 189)	1.90E+06 ( 40)	21	227 72	116.9	83.1	169.0
14	6.56E+06 ( 295)	1.56E+06 ( 70)	45	186 45	104.2	79.2	137.0
15	9.63E+06 ( 154)	2.81E+06 ( 45)	16	336 100	85.0	60.8	121.4
16	1.19E+07 ( 215)	2.28E+06 ( 41)	18	272 85	129.7	92.9	185.9
17	1.00E+07 ( 300)	1.73E+06 ( 52)	30	207 57	142.6	106.3	195.3
18	9.10E+06 ( 364)	1.40E+06 ( 56)	40	167 45	160.5	121.3	216.5
19	1.33E+07 ( 200)	2.53E+06 ( 38)	15	302 98	130.1	92.1	189.3
20	1.27E+07 ( 266)	2.86E+06 ( 60)	21	341 88	109.9	83.0	148.1
21	6.03E+06 ( 181)	1.47E+06 ( 44)	30	175 53	102.0	73.3	145.3
22	9.50E+06 ( 380)	1.90E+06 ( 76)	40	227 52	123.4	95.1	160.1
23	1.29E+07 ( 258)	2.15E+06 ( 43)	20	257 78	148.2	107.5	209.7
24	1.10E+07 ( 331)	1.70E+06 ( 51)	30	203 57	160.2	119.5	219.5
25	1.38E+07 ( 248)	2.22E+06 ( 40)	18	265 84	153.0	109.8	219.3
26	1.07E+07 ( 320)	2.27E+06 ( 68)	30	270 66	116.2	88.2	152.9
27	1.89E+07 ( 189)	2.90E+06 ( 29)	10	346 128	160.5	109.0	246.1
28	1.28E+07 ( 255)	2.10E+06 ( 42)	20	251 77	149.9	108.3	213.0
29	1.82E+07 ( 291)	2.31E+06 ( 37)	16	276 91	193.4	137.9	279.8
30	8.63E+06 ( 259)	2.07E+06 ( 62)	30	247 63	103.2	77.3	137.8
31	2.00E+07 ( 240)	2.92E+06 ( 35)	12	348 117	168.9	118.9	248.0
32	9.05E+06 ( 181)	2.00E+06 ( 40)	20	239 75	112.0	79.5	162.1
33	1.47E+07 ( 293)	2.25E+06 ( 45)	20	268 80	160.6	117.6	225.0
34	1.55E+07 ( 309)	3.10E+06 ( 62)	20	370 94	122.9	92.4	163.3
35	1.40E+07 ( 279)	1.80E+06 ( 36)	20	215 71	190.6	135.3	277.3
36	1.43E+07 ( 428)	2.37E+06 ( 71)	30	282 67	148.4	113.9	193.3
37	1.05E+07 ( 189)	1.67E+06 ( 30)	18	199 72	155.3	106.0	236.4
38	1.19E+07 ( 143)	1.67E+06 ( 20)	12	199 88	175.5	110.7	295.6
39	1.13E+07 ( 169)	2.40E+06 ( 36)	15	286 95	116.2	81.1	171.5
40	9.53E+06 ( 286)	1.57E+06 ( 47)	30	187 55	150.3	110.5	209.2
41	2.26E+07 ( 113)	6.00E+06 ( 30)	5	716 260	93.3	62.2	144.8
42	1.19E+07 ( 380)	2.59E+06 ( 83)	32	310 68	113.2	87.9	145.6
43	1.51E+07 ( 136)	2.11E+06 ( 19)	9	252 114	175.6	109.5	300.3
44	6.75E+06 ( 270)	1.23E+06 ( 49)	40	146 42	136.2	100.6	188.7
45	7.30E+06 ( 146)	1.70E+06 ( 34)	20	203 69	106.3	73.1	159.5
46	1.07E+07 ( 214)	1.95E+06 ( 39)	20	233 74	135.6	96.5	196.0
47	1.32E+07 ( 317)	2.88E+06 ( 69)	24	343 83	113.5	86.3	149.1
48	7.06E+06 ( 353)	1.80E+06 ( 90)	50	215 46	97.1	75.8	124.4
49	5.80E+06 ( 116)	1.15E+06 ( 23)	20	137 57	124.4	79.7	204.2
50	1.10E+07 ( 331)	1.93E+06 ( 58)	30	231 61	140.4	105.0	187.6
51	9.26E+06 ( 250)	1.33E+06 ( 36)	27	159 53	171.0	121.0	249.6
52	8.41E+06 ( 227)	1.59E+06 ( 43)	27	190 58	130.5	94.3	185.4

53	8.75E+06	( 140)	1.88E+06	( 30)	16	224	81	115.4	77.8	177.5
54	1.11E+07	( 133)	2.00E+06	( 24)	12	239	97	136.6	88.7	220.8
55	7.93E+06	( 214)	1.70E+06	( 46)	27	203	60	115.2	83.8	162.2
56	9.70E+06	( 262)	2.04E+06	( 55)	27	243	66	118.0	88.2	160.9
57	6.64E+06	( 93)	1.64E+06	( 23)	14	196	81	100.0	63.3	165.7
58	1.13E+07	( 304)	2.26E+06	( 61)	27	270	69	122.9	92.2	163.6
59	8.76E+06	( 184)	1.67E+06	( 35)	21	199	67	129.9	90.6	192.3
60	9.58E+06	( 230)	2.00E+06	( 48)	24	239	69	118.6	86.9	165.6
61	1.14E+07	( 91)	2.38E+06	( 19)	8	283	129	118.1	72.1	205.3
62	6.50E+06	( 78)	1.92E+06	( 23)	12	229	95	84.0	52.5	140.4
63	1.60E+07	( 128)	2.50E+06	( 20)	8	298	132	157.3	98.7	266.1
64	9.70E+06	( 97)	2.10E+06	( 21)	10	251	108	114.0	71.2	192.7
65	1.51E+07	( 301)	3.15E+06	( 63)	20	376	95	117.9	88.7	156.5
66	6.44E+06	( 116)	1.39E+06	( 25)	18	166	66	114.6	74.4	184.6
67	1.11E+07	( 299)	2.59E+06	( 70)	27	309	74	105.6	80.3	138.8
68	9.10E+06	( 273)	1.63E+06	( 49)	30	195	56	137.7	101.7	190.8
69	8.93E+06	( 268)	1.87E+06	( 56)	30	223	60	118.5	88.8	161.2
70	1.30E+07	( 259)	2.45E+06	( 49)	20	292	84	130.8	96.4	181.3
71	7.50E+06	( 90)	9.17E+05	( 11)	12	109	65	199.3	108.3	412.2
72	9.63E+06	( 289)	1.67E+06	( 50)	30	199	56	142.8	105.9	197.0
73	1.52E+07	( 137)	2.89E+06	( 26)	9	345	134	130.0	85.7	206.2
74	1.32E+07	( 263)	2.40E+06	( 48)	20	286	83	135.5	99.7	188.4
75	1.03E+07	( 206)	1.85E+06	( 37)	20	221	72	137.5	97.1	200.8
76	1.20E+07	( 216)	2.28E+06	( 41)	18	272	85	130.3	93.4	186.7
77	1.04E+07	( 156)	1.80E+06	( 27)	15	215	82	142.5	95.0	223.0
78	1.30E+07	( 195)	2.87E+06	( 43)	15	342	104	112.3	80.7	160.2
79	1.58E+07	( 190)	2.67E+06	( 32)	12	318	112	146.5	101.0	220.2
80	5.98E+06	( 239)	1.45E+06	( 58)	40	173	46	102.2	76.6	138.8
81	1.39E+07	( 416)	2.60E+06	( 78)	30	310	71	131.6	101.8	169.9
82	1.74E+07	( 157)	3.89E+06	( 35)	9	464	156	111.0	76.9	165.2
83	2.14E+07	( 171)	3.50E+06	( 28)	8	418	157	150.5	101.3	233.1
84	8.86E+06	( 62)	7.14E+05	( 5)	7	85	73	294.9	124.9	921.8
85	1.46E+07	( 262)	3.72E+06	( 67)	18	444	109	96.7	73.0	128.1
86	1.03E+07	( 124)	1.25E+06	( 15)	12	149	76	202.0	119.6	370.7
87	5.94E+06	( 107)	1.00E+06	( 18)	18	119	56	146.2	89.2	256.0
88	1.33E+07	( 120)	4.33E+06	( 39)	9	517	165	76.4	53.0	112.8
89	1.34E+07	( 402)	2.50E+06	( 75)	30	298	69	132.2	101.9	171.5
90	1.74E+07	( 279)	2.63E+06	( 42)	16	313	97	163.8	118.7	232.2
91	1.24E+07	( 373)	3.23E+06	( 97)	30	386	79	95.3	74.9	121.1
92	9.70E+06	( 194)	2.20E+06	( 44)	20	263	79	109.2	78.7	155.3
93	1.90E+07	( 190)	3.10E+06	( 31)	10	370	132	151.1	103.7	228.6
94	8.93E+06	( 268)	2.03E+06	( 61)	30	243	62	108.5	81.1	144.9
95	1.87E+07	( 336)	3.00E+06	( 54)	18	358	98	153.7	115.4	208.8
96	1.29E+07	( 309)	2.38E+06	( 57)	24	283	75	134.1	101.1	181.3
97	1.14E+07	( 182)	2.25E+06	( 36)	16	268	89	125.0	87.5	184.1
98	1.26E+07	( 251)	1.60E+06	( 32)	20	191	67	192.8	134.1	287.4
99	1.13E+07	( 226)	1.90E+06	( 38)	20	227	73	146.8	104.3	212.8
100	1.29E+07	( 388)	2.70E+06	( 81)	30	322	72	118.3	91.8	152.5
101	9.65E+06	( 193)	1.75E+06	( 35)	20	209	70	136.2	95.2	201.3
102	6.00E+06	( 120)	1.35E+06	( 27)	20	161	62	109.9	72.4	173.8
103	7.89E+06	( 213)	1.19E+06	( 32)	27	141	50	164.0	113.5	245.6
104	1.16E+07	( 232)	1.95E+06	( 39)	20	233	74	146.9	104.8	211.8

**KLD39** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.400E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	1.01E+07	( 202)	3.75E+06	( 75)	20	293 68	101.8	77.1	134.5
2	3.25E+06	( 13)	1.00E+06	( 4)	4	78 74	120.0	38.3	503.7
3	6.33E+06	( 253)	2.70E+06	( 108)	40	211 41	88.8	69.7	113.1
4	1.20E+07	( 48)	5.00E+06	( 20)	4	391 173	90.8	53.2	161.5
5	1.02E+07	( 245)	4.17E+06	( 100)	24	326 66	92.8	72.4	119.0
6	3.00E+06	( 150)	1.16E+06	( 58)	50	91 24	98.1	72.1	135.2
7	8.94E+06	( 143)	5.63E+06	( 90)	16	439 93	60.4	45.7	79.7
8	2.18E+07	( 87)	8.75E+06	( 35)	4	684 230	94.2	63.2	143.7
9	1.16E+07	( 243)	4.33E+06	( 91)	21	339 72	101.1	78.2	130.5
10	8.50E+06	( 68)	3.00E+06	( 24)	8	234 95	107.1	66.8	178.3
11	1.34E+07	( 107)	4.63E+06	( 37)	8	361 119	109.4	75.0	163.6
12	8.81E+06	( 185)	3.38E+06	( 71)	21	264 63	98.5	74.0	131.2
13	6.70E+06	( 134)	2.30E+06	( 46)	20	180 53	110.3	78.6	157.7
14	2.38E+07	( 143)	6.67E+06	( 40)	6	521 164	135.0	94.9	196.7
15	1.12E+07	( 112)	2.10E+06	( 21)	10	164 71	199.7	125.9	334.2
16	7.05E+06	( 148)	2.48E+06	( 52)	21	193 54	107.8	78.3	150.9
17	1.17E+07	( 117)	3.20E+06	( 32)	10	250 88	137.9	93.2	210.7
18	7.25E+06	( 58)	4.63E+06	( 37)	8	361 119	59.6	38.9	92.7
19	1.12E+07	( 224)	3.35E+06	( 67)	20	262 64	126.0	94.8	167.5
20	1.07E+07	( 107)	4.70E+06	( 47)	10	367 107	86.4	60.9	124.5
21	8.15E+06	( 212)	4.04E+06	( 105)	26	316 62	76.6	59.7	98.4
22	7.75E+06	( 93)	2.67E+06	( 32)	12	208 73	109.9	73.2	169.8
23	1.12E+07	( 303)	5.26E+06	( 142)	27	411 70	81.0	65.1	100.8
24	1.37E+07	( 137)	6.30E+06	( 63)	10	492 124	82.6	60.9	113.2
25	9.15E+06	( 183)	3.95E+06	( 79)	20	309 70	87.7	66.5	115.8
26	1.44E+07	( 287)	5.55E+06	( 111)	20	434 83	97.9	77.3	124.0
27	1.41E+07	( 113)	4.13E+06	( 33)	8	322 112	129.3	87.5	196.7
28	1.17E+07	( 164)	3.93E+06	( 55)	14	307 83	112.9	82.9	156.2
29	9.92E+06	( 119)	4.83E+06	( 58)	12	378 99	77.9	56.6	108.7
30	1.76E+07	( 281)	6.25E+06	( 100)	16	488 99	106.3	83.3	135.7
31	1.33E+07	( 53)	4.25E+06	( 17)	4	332 159	117.5	67.6	216.4
32	7.88E+06	( 63)	2.25E+06	( 18)	8	176 82	131.7	77.8	236.2
33	9.00E+06	( 63)	3.43E+06	( 24)	7	268 109	99.3	61.5	166.2
34	7.60E+06	( 114)	3.93E+06	( 59)	15	307 80	73.4	53.2	102.4
35	1.74E+07	( 139)	3.50E+06	( 28)	8	273 103	186.4	124.5	290.0
36	7.22E+06	( 65)	3.78E+06	( 34)	9	295 101	72.6	47.4	113.4
37	1.50E+07	( 90)	6.00E+06	( 36)	6	469 156	94.7	63.9	143.6
38	1.11E+07	( 100)	4.00E+06	( 36)	9	312 104	105.1	71.5	158.5
39	1.04E+07	( 415)	3.50E+06	( 140)	40	273 47	112.2	90.8	138.5
40	1.36E+07	( 122)	4.00E+06	( 36)	9	312 104	128.0	88.1	191.1
41	1.70E+07	( 153)	8.22E+06	( 74)	9	642 150	78.4	58.6	104.8
42	9.28E+06	( 167)	2.11E+06	( 38)	18	165 53	165.5	116.4	241.7
43	1.30E+07	( 104)	8.63E+06	( 69)	8	674 163	57.4	41.9	79.0
44	7.75E+06	( 93)	2.75E+06	( 33)	12	215 75	106.6	71.3	163.8
45	1.21E+07	( 242)	4.15E+06	( 83)	20	324 72	110.2	84.7	143.4
46	7.83E+06	( 141)	3.33E+06	( 60)	18	260 67	89.2	65.6	122.8
47	1.60E+07	( 192)	6.67E+06	( 80)	12	521 117	90.9	69.0	119.6
48	8.38E+06	( 67)	3.00E+06	( 24)	8	234 95	105.5	65.7	175.9
49	7.85E+06	( 157)	3.60E+06	( 72)	20	281 67	82.6	61.7	110.6
50	6.17E+06	( 185)	1.60E+06	( 48)	30	125 36	145.5	105.8	204.2
51	1.28E+07	( 154)	7.50E+06	( 90)	12	586 125	65.0	49.4	85.5
52	1.74E+07	( 244)	4.36E+06	( 61)	14	340 87	151.0	114.0	203.3

53	1.38E+07	( 55)	7.50E+06	( 30)	4	586	213	69.6	44.0	112.6
54	9.63E+06	( 154)	5.19E+06	( 83)	16	405	90	70.4	53.2	93.2
55	8.31E+06	( 349)	4.10E+06	( 172)	42	320	50	77.1	62.9	94.5
56	4.25E+06	( 34)	1.75E+06	( 14)	8	137	72	91.7	48.4	185.0
57	1.34E+07	( 161)	5.08E+06	( 61)	12	397	102	100.1	74.2	136.7
58	1.05E+07	( 84)	4.38E+06	( 35)	8	342	115	91.0	60.9	139.1
59	8.37E+06	( 201)	2.83E+06	( 68)	24	221	54	111.6	83.7	148.7
60	1.16E+07	( 104)	2.44E+06	( 22)	9	191	81	177.4	112.3	294.6
61	5.67E+06	( 68)	3.00E+06	( 36)	12	234	78	71.7	47.4	110.7
62	9.00E+06	( 81)	5.11E+06	( 46)	9	399	118	66.9	46.1	98.4
63	8.00E+06	( 48)	4.17E+06	( 25)	6	326	129	72.8	44.2	123.3
64	9.83E+06	( 59)	5.17E+06	( 31)	6	404	144	72.3	46.2	115.5
65	1.25E+07	( 337)	5.52E+06	( 149)	27	431	72	85.8	69.4	106.2
66	9.67E+06	( 87)	5.22E+06	( 47)	9	408	119	70.4	48.9	102.6
67	8.08E+06	( 97)	4.00E+06	( 48)	12	312	90	76.8	53.9	110.9
68	1.50E+07	( 60)	4.75E+06	( 19)	4	371	168	119.1	70.7	211.2
69	9.25E+06	( 74)	4.00E+06	( 32)	8	313	110	87.7	57.4	137.2
70	1.51E+07	( 121)	3.50E+06	( 28)	8	273	103	162.6	107.9	254.4
71	1.06E+07	( 190)	3.89E+06	( 70)	18	304	73	102.6	77.0	136.6
72	4.94E+06	( 79)	3.56E+06	( 57)	16	278	74	52.8	37.1	75.6
73	1.03E+07	( 82)	4.00E+06	( 32)	8	313	110	97.0	64.1	151.0
74	1.54E+07	( 123)	3.88E+06	( 31)	8	303	108	149.5	100.8	229.2
75	1.25E+07	( 200)	6.81E+06	( 109)	16	532	103	69.7	54.3	89.5
76	7.55E+06	( 151)	1.60E+06	( 32)	20	125	44	177.4	121.4	268.1
77	1.57E+07	( 141)	5.44E+06	( 49)	9	425	122	109.0	78.4	154.1
78	1.32E+07	( 316)	4.12E+06	( 99)	24	322	65	120.6	94.7	153.5
79	1.28E+07	( 77)	7.17E+06	( 43)	6	560	171	68.1	46.4	101.3
80	9.58E+06	( 115)	2.67E+06	( 32)	12	208	73	135.6	91.5	207.3
81	1.25E+07	( 188)	4.27E+06	( 64)	15	333	84	111.3	83.5	150.2
82	1.01E+07	( 101)	3.30E+06	( 33)	10	258	89	115.7	77.8	177.0
83	7.83E+06	( 47)	6.33E+06	( 38)	6	495	160	47.1	30.1	74.3
84	8.60E+06	( 258)	3.47E+06	( 104)	30	271	54	94.0	73.6	119.9
85	1.06E+07	( 85)	3.63E+06	( 29)	8	283	105	110.8	72.3	175.2
86	1.08E+07	( 216)	4.10E+06	( 82)	20	320	71	99.7	76.2	130.3
87	1.45E+07	( 58)	4.25E+06	( 17)	4	332	159	128.4	74.5	235.1
88	8.00E+06	( 144)	3.61E+06	( 65)	18	282	70	84.1	62.4	114.6
89	1.18E+07	( 189)	6.06E+06	( 97)	16	474	97	74.0	57.0	95.9
90	1.01E+07	( 202)	4.05E+06	( 81)	20	316	71	94.4	71.9	123.8
91	1.10E+07	( 88)	5.50E+06	( 44)	8	430	130	76.0	52.4	111.8
92	1.00E+07	( 70)	7.29E+06	( 51)	7	569	160	52.3	36.0	76.6
93	1.75E+07	( 105)	5.83E+06	( 35)	6	456	154	113.5	77.1	171.4
94	1.61E+07	( 129)	8.38E+06	( 67)	8	654	161	73.2	54.1	99.9
95	1.74E+07	( 139)	8.50E+06	( 68)	8	664	162	77.7	57.8	105.5
96	9.58E+06	( 115)	6.42E+06	( 77)	12	501	115	56.9	42.3	77.0
97	1.80E+07	( 108)	4.83E+06	( 29)	6	378	140	140.4	93.1	219.3
98	2.00E+07	( 140)	6.86E+06	( 48)	7	536	155	110.4	79.3	156.7
99	9.17E+06	( 55)	3.00E+06	( 18)	6	234	109	115.2	67.2	208.4
100	1.28E+07	( 77)	9.67E+06	( 58)	6	755	199	50.6	35.5	72.4
101	8.00E+06	( 64)	4.13E+06	( 33)	8	322	112	73.6	47.8	115.8
102	1.46E+07	( 73)	3.20E+06	( 16)	5	250	123	171.0	99.8	314.0

**KLD40** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, May 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.390E+05  
 RELATIVE ERROR (%): 1.57  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	2.00E+06	( 12)	2.00E+06	( 12)	6	156 89	38.1	15.7 92.4
2	2.20E+06	( 11)	7.80E+06	( 39)	5	610 195	10.9	5.0 21.4
3	9.67E+06	( 58)	3.50E+06	( 21)	6	274 118	104.2	62.7 180.7
4	1.31E+07	( 118)	6.89E+06	( 62)	9	539 137	72.2	52.7 100.0
5	9.70E+06	( 97)	2.00E+06	( 20)	10	156 69	181.6	112.6 309.5
6	6.67E+05	( 12)	4.22E+06	( 76)	18	330 76	6.1	3.0 11.2
7	2.00E+07	( 120)	5.33E+06	( 32)	6	417 147	141.2	95.5 215.4
8	1.43E+07	( 129)	7.78E+06	( 70)	9	609 146	70.0	51.9 95.1
9	1.50E+07	( 180)	5.33E+06	( 64)	12	417 105	106.4	79.7 143.9
10	1.18E+07	( 94)	2.25E+06	( 18)	8	176 82	195.1	118.4 342.3
11	1.06E+07	( 159)	4.07E+06	( 61)	15	318 82	98.7	73.2 134.9
12	1.11E+07	( 133)	4.75E+06	( 57)	12	372 99	88.4	64.5 122.9
13	1.71E+06	( 12)	1.09E+07	( 76)	7	850 196	6.1	3.0 11.2
14	1.60E+06	( 16)	8.90E+06	( 89)	10	696 149	6.9	3.8 11.8
15	1.22E+06	( 11)	1.78E+06	( 16)	9	139 69	26.3	11.0 60.0
16	4.00E+06	( 32)	2.39E+07	( 191)	8	1868 276	6.4	4.3 9.4
17	8.57E+05	( 6)	7.00E+06	( 49)	7	548 157	4.8	1.6 10.9
18	8.89E+05	( 8)	3.22E+06	( 29)	9	252 93	10.7	4.2 23.6
19	2.06E+06	( 33)	8.19E+06	( 131)	16	641 114	9.7	6.4 14.2
20	7.50E+05	( 6)	6.25E+06	( 50)	8	489 138	4.7	1.6 10.7
21	9.17E+06	( 55)	5.83E+06	( 35)	6	456 154	59.7	38.4 94.0
22	1.07E+07	( 64)	5.33E+06	( 32)	6	417 147	75.8	49.0 119.8
23	2.71E+06	( 19)	1.14E+07	( 80)	7	894 201	9.1	5.2 15.1
24	5.88E+06	( 94)	1.81E+06	( 29)	16	142 52	122.2	80.3 192.2
25	5.00E+05	( 5)	2.90E+06	( 29)	10	227 84	6.8	2.0 17.2
26	9.33E+05	( 14)	2.40E+06	( 36)	15	188 62	15.0	7.4 28.2
27	4.67E+06	( 56)	2.73E+07	( 327)	12	2132 245	6.6	4.8 8.7
28	1.13E+06	( 45)	4.15E+06	( 166)	40	325 51	10.4	7.3 14.5
29	1.50E+06	( 18)	1.05E+07	( 126)	12	822 148	5.5	3.1 9.0
30	1.04E+06	( 29)	6.32E+06	( 177)	28	495 76	6.3	4.1 9.3
31	9.75E+05	( 39)	5.00E+06	( 200)	40	391 57	7.5	5.1 10.6
32	1.33E+06	( 12)	7.00E+06	( 63)	9	548 139	7.4	3.6 13.6
33	1.72E+06	( 31)	7.61E+06	( 137)	18	596 103	8.7	5.6 12.9
34	2.38E+07	( 95)	5.50E+06	( 22)	4	430 182	162.0	102.0 270.2
35	1.17E+06	( 21)	5.94E+06	( 107)	18	465 91	7.5	4.5 12.1
36	1.58E+07	( 95)	7.33E+06	( 44)	6	574 173	81.8	56.8 119.8
37	3.56E+06	( 32)	3.78E+06	( 34)	9	296 101	35.9	21.4 59.9
38	5.71E+06	( 40)	3.71E+06	( 26)	7	291 113	58.4	34.9 99.7
39	6.69E+06	( 87)	3.77E+06	( 49)	13	295 84	67.4	47.0 97.8
40	1.10E+07	( 165)	4.27E+06	( 64)	15	334 84	97.6	72.9 132.5
41	4.56E+06	( 73)	2.38E+07	( 380)	16	1858 199	7.4	5.7 9.6
42	1.33E+06	( 20)	1.03E+07	( 155)	15	809 132	5.0	2.9 7.9
43	1.23E+07	( 98)	6.63E+06	( 53)	8	518 143	70.2	49.8 100.0
44	1.02E+07	( 306)	3.80E+06	( 114)	30	297 56	101.5	80.4 128.0
45	1.43E+07	( 200)	6.36E+06	( 89)	14	497 106	85.0	65.3 110.8
46	1.10E+07	( 88)	2.50E+06	( 20)	8	196 87	165.0	101.7 282.6
47	7.50E+05	( 6)	3.25E+06	( 26)	8	254 99	9.0	3.0 21.9
48	8.78E+06	( 79)	2.33E+06	( 21)	9	183 79	141.4	87.2 240.7
49	6.88E+06	( 55)	4.50E+06	( 36)	8	352 117	58.0	37.5 91.0
50	1.36E+06	( 57)	5.05E+06	( 212)	42	395 56	10.3	7.5 13.8
51	1.75E+06	( 14)	1.00E+07	( 80)	8	782 176	6.7	3.5 11.9
52	1.83E+06	( 44)	9.04E+06	( 217)	24	707 98	7.8	5.5 10.8

53	1.28E+07	( 269)	4.52E+06	( 95)	21	354	73	106.9	83.3	137.2
54	2.00E+06	( 18)	9.56E+06	( 86)	9	748	162	8.1	4.5	13.4
55	2.10E+06	( 21)	1.09E+07	( 109)	10	853	165	7.4	4.4	11.8
56	1.10E+06	( 11)	4.20E+06	( 42)	10	329	101	10.1	4.6	19.8
57	7.14E+05	( 10)	4.21E+06	( 59)	14	330	86	6.6	3.0	12.8
58	2.20E+06	( 44)	7.85E+06	( 157)	20	614	100	10.7	7.5	15.1
59	1.13E+06	( 18)	3.69E+06	( 59)	16	289	75	11.7	6.5	20.0
60	1.44E+06	( 13)	9.67E+06	( 87)	9	756	163	5.8	2.9	10.3
61	4.67E+05	( 7)	3.13E+06	( 47)	15	245	72	5.8	2.2	12.7
62	1.12E+07	( 67)	5.67E+06	( 34)	6	443	152	74.7	48.9	116.5
63	5.00E+05	( 5)	1.20E+06	( 12)	10	94	53	16.2	4.4	48.4
64	7.38E+06	( 332)	4.73E+06	( 213)	45	370	52	59.2	48.7	72.0
65	1.38E+06	( 11)	1.43E+07	( 114)	8	1115	211	3.7	1.8	6.9
66	3.46E+05	( 9)	1.88E+06	( 49)	26	147	42	7.1	3.0	14.4
67	1.81E+07	( 145)	5.00E+06	( 40)	8	391	124	136.7	96.2	199.0
68	7.78E+05	( 14)	3.83E+06	( 69)	18	300	73	7.8	4.0	13.9
69	1.25E+06	( 10)	6.13E+06	( 49)	8	479	137	7.9	3.5	15.6
70	1.52E+07	( 91)	3.00E+06	( 18)	6	235	109	189.0	114.5	332.1
71	1.08E+07	( 301)	2.82E+06	( 79)	28	221	50	143.3	110.3	186.0
72	9.47E+05	( 18)	5.84E+06	( 111)	19	457	88	6.2	3.5	10.3
73	1.11E+07	( 89)	6.13E+06	( 49)	8	479	137	68.9	48.2	99.8
74	1.38E+07	( 165)	5.75E+06	( 69)	12	450	109	90.6	68.1	121.9
75	2.88E+06	( 46)	1.81E+06	( 29)	16	142	52	60.2	37.1	99.4
76	1.11E+07	( 311)	3.07E+06	( 86)	28	240	52	136.2	105.7	175.3
77	5.83E+05	( 7)	2.67E+06	( 32)	12	209	73	8.5	3.1	19.3
78	4.70E+06	( 127)	2.29E+07	( 619)	27	1794	155	7.9	6.4	9.7
79	1.55E+06	( 31)	5.65E+06	( 113)	20	442	84	10.5	6.8	15.7
80	5.33E+05	( 8)	2.40E+06	( 36)	15	188	62	8.6	3.4	18.6
81	3.06E+06	( 55)	2.78E+07	( 500)	18	2174	206	4.2	3.2	5.7
82	1.17E+07	( 350)	5.17E+06	( 155)	30	404	66	85.6	69.4	105.5
83	6.67E+05	( 8)	6.08E+06	( 73)	12	476	112	4.3	1.7	8.7
84	8.67E+05	( 13)	5.20E+06	( 78)	15	407	93	6.4	3.2	11.5
85	9.00E+06	( 63)	4.57E+06	( 32)	7	358	126	74.6	48.2	118.1
86	1.45E+07	( 87)	8.00E+06	( 48)	6	626	181	68.8	47.9	100.1
87	1.33E+06	( 36)	4.04E+06	( 109)	27	316	61	12.6	8.4	18.6
88	1.85E+06	( 37)	5.75E+06	( 115)	20	450	85	12.3	8.2	18.0
89	1.50E+06	( 9)	9.83E+06	( 59)	6	769	201	5.9	2.5	11.8
90	1.00E+06	( 8)	3.38E+06	( 27)	8	264	101	11.5	4.4	25.6
91	1.70E+06	( 68)	5.75E+06	( 230)	40	450	61	11.3	8.5	15.1
92	2.00E+06	( 12)	5.33E+06	( 32)	6	417	147	14.4	6.7	28.5
93	1.10E+06	( 11)	7.60E+06	( 76)	10	595	137	5.6	2.6	10.5
94	5.56E+05	( 5)	2.44E+06	( 22)	9	191	81	8.9	2.6	23.5
95	6.67E+05	( 8)	1.50E+06	( 18)	12	117	55	17.2	6.4	41.0
96	1.21E+06	( 29)	9.13E+06	( 219)	24	714	99	5.1	3.3	7.5
97	1.30E+06	( 13)	3.10E+06	( 31)	10	243	87	16.1	7.7	31.5
98	2.00E+06	( 18)	7.89E+06	( 71)	9	617	147	9.7	5.4	16.4
99	8.89E+05	( 8)	5.33E+06	( 48)	9	417	121	6.5	2.6	13.6
100	1.09E+06	( 12)	3.27E+06	( 36)	11	256	85	12.8	6.0	25.0
101	3.68E+05	( 7)	2.32E+06	( 44)	19	181	55	6.2	2.3	13.6
102	2.79E+06	( 78)	1.83E+07	( 513)	28	1434	134	5.8	4.5	7.5
103	1.75E+06	( 35)	7.60E+06	( 152)	20	595	98	8.8	5.9	12.8
104	1.67E+06	( 15)	8.00E+06	( 72)	9	626	148	8.0	4.2	14.0
105	6.00E+05	( 12)	3.80E+06	( 76)	20	297	69	6.1	3.0	11.2

**KLD65** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, May 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.380E+05  
 RELATIVE ERROR (%): 1.57  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	2.00E+07	( 120)	6.00E+06	( 36)	6	470 156	125.5	86.3 187.6
2	1.13E+07	( 45)	1.10E+07	( 44)	4	862 260	38.9	25.1 60.3
3	8.10E+06	( 81)	3.40E+06	( 34)	10	266 91	90.0	59.8 138.6
4	2.25E+07	( 90)	6.25E+06	( 25)	4	490 195	135.3	86.7 219.8
5	1.14E+07	( 57)	6.00E+06	( 30)	5	470 171	71.9	45.6 115.9
6	9.29E+06	( 65)	6.57E+06	( 46)	7	515 152	53.6	36.2 80.1
7	1.78E+07	( 71)	1.23E+07	( 49)	4	960 275	55.0	37.7 80.9
8	1.87E+07	( 112)	1.15E+07	( 69)	6	901 218	61.6	45.2 84.4
9	2.30E+07	( 138)	1.17E+07	( 70)	6	914 220	74.7	55.7 101.2
10	1.35E+07	( 108)	5.38E+06	( 43)	8	421 128	94.9	66.3 138.5
11	7.00E+06	( 28)	2.50E+06	( 10)	4	196 121	104.9	50.1 242.1
12	1.31E+07	( 157)	4.58E+06	( 55)	12	359 97	107.8	79.0 149.4
13	1.98E+07	( 79)	1.13E+07	( 45)	4	882 263	66.5	45.7 98.2
14	1.25E+07	( 276)	3.64E+06	( 80)	22	285 64	129.7	99.7 168.6
15	2.05E+07	( 123)	6.50E+06	( 39)	6	509 163	118.9	82.7 175.1
16	2.40E+07	( 96)	5.75E+06	( 23)	4	451 186	156.5	99.3 258.2
17	1.07E+07	( 193)	3.17E+06	( 57)	18	248 66	127.7	94.8 174.7
18	1.08E+07	( 129)	5.00E+06	( 60)	12	392 102	81.4	59.6 112.6
19	1.55E+07	( 62)	9.75E+06	( 39)	4	764 244	60.3	39.8 92.5
20	2.24E+07	( 269)	7.67E+06	( 92)	12	601 126	110.2	85.6 141.7
21	1.17E+07	( 245)	2.52E+06	( 53)	21	198 54	173.6	129.1 238.0
22	9.56E+06	( 172)	3.56E+06	( 64)	18	279 70	101.6	75.9 137.6
23	1.23E+07	( 246)	5.95E+06	( 119)	20	466 87	78.2	61.8 99.1
24	9.67E+06	( 116)	3.25E+06	( 39)	12	255 81	112.2	77.8 165.7
25	1.02E+07	( 61)	3.67E+06	( 22)	6	287 121	104.4	63.7 178.6
26	1.13E+07	( 124)	3.82E+06	( 42)	11	299 92	111.4	78.2 162.1
27	1.58E+07	( 190)	5.42E+06	( 65)	12	425 106	110.4	83.0 148.7
28	7.50E+06	( 30)	4.00E+06	( 16)	4	313 155	70.8	37.6 139.1
29	1.91E+07	( 191)	4.00E+06	( 40)	10	313 99	179.1	127.5 258.2
30	1.73E+07	( 104)	7.50E+06	( 45)	6	588 175	87.4	61.2 127.0
31	2.22E+07	( 133)	7.50E+06	( 45)	6	588 175	111.5	79.3 160.1
32	3.20E+07	( 128)	9.75E+06	( 39)	4	764 244	123.7	86.2 181.8
33	1.25E+07	( 125)	2.50E+06	( 25)	10	196 78	187.0	122.1 299.3
34	1.27E+07	( 344)	5.37E+06	( 145)	27	421 71	89.7	72.4 111.1
35	1.08E+07	( 108)	3.90E+06	( 39)	10	306 98	104.5	72.1 154.9
36	4.83E+06	( 29)	3.33E+06	( 20)	6	261 116	55.0	30.1 102.5
37	9.13E+06	( 73)	4.25E+06	( 34)	8	333 114	81.2	53.5 125.9
38	1.56E+07	( 281)	4.44E+06	( 80)	18	348 78	132.1	101.6 171.6
39	6.22E+06	( 56)	1.22E+06	( 11)	9	96 57	189.1	99.8 398.9
40	1.93E+07	( 116)	7.50E+06	( 45)	6	588 175	97.4	68.7 140.7
41	1.40E+07	( 56)	1.05E+07	( 42)	4	823 254	50.6	33.4 77.4
42	1.18E+07	( 94)	3.13E+06	( 25)	8	245 97	141.2	90.7 229.0
43	1.75E+07	( 350)	6.55E+06	( 131)	20	513 91	100.9	81.0 125.6
44	1.97E+07	( 197)	1.02E+07	( 102)	10	799 160	73.1	56.6 94.3
45	1.60E+07	( 64)	8.50E+06	( 34)	4	666 228	71.3	46.4 111.5
46	1.75E+07	( 105)	1.20E+07	( 72)	6	940 223	55.4	40.6 75.9
47	8.30E+06	( 83)	2.00E+06	( 20)	10	157 69	155.5	95.5 267.1
48	1.68E+07	( 101)	3.00E+06	( 18)	6	235 110	209.1	127.4 365.6
49	1.55E+07	( 93)	6.33E+06	( 38)	6	496 161	92.5	63.0 138.7
50	1.08E+07	( 151)	3.64E+06	( 51)	14	285 80	111.8	81.1 156.7
51	1.10E+07	( 99)	8.67E+06	( 78)	9	679 155	48.2	35.5 65.8
52	1.23E+07	( 74)	5.17E+06	( 31)	6	405 145	90.2	58.8 142.0

53	1.05E+07	( 84)	3.50E+06	( 28)	8	274	103	113.0	73.3	180.1
54	1.63E+07	( 147)	3.44E+06	( 31)	9	270	97	177.7	120.8	270.5
55	1.88E+07	( 282)	6.27E+06	( 94)	15	491	102	113.1	88.1	145.0
56	1.80E+07	( 72)	7.75E+06	( 31)	4	607	217	87.8	57.1	138.4
57	1.87E+07	( 112)	7.50E+06	( 45)	6	588	175	94.1	66.2	136.1
58	1.68E+07	( 101)	6.17E+06	( 37)	6	483	159	103.0	70.3	154.5
59	1.44E+07	( 130)	6.44E+06	( 58)	9	505	133	84.8	61.9	117.8
60	1.22E+07	( 110)	6.56E+06	( 59)	9	514	134	70.7	51.1	98.7
61	2.08E+07	( 208)	7.80E+06	( 78)	10	611	139	100.5	76.4	132.2
62	9.08E+06	( 109)	1.83E+06	( 22)	12	144	61	185.2	117.5	306.9
63	9.25E+06	( 37)	5.00E+06	( 20)	4	392	174	69.9	39.8	127.2
64	1.81E+07	( 145)	9.00E+06	( 72)	8	705	167	76.3	57.2	102.8
65	1.47E+07	( 88)	1.00E+07	( 60)	6	784	203	55.7	39.7	78.7
66	1.23E+07	( 147)	5.08E+06	( 61)	12	398	102	91.2	67.3	125.0
67	5.58E+06	( 67)	2.17E+06	( 26)	12	170	66	97.2	61.3	159.3
68	1.45E+07	( 87)	1.02E+07	( 61)	6	797	205	54.1	38.6	76.4
69	1.73E+07	( 173)	4.40E+06	( 44)	10	345	104	147.9	106.2	210.7
70	9.14E+06	( 64)	2.14E+06	( 15)	7	168	85	159.5	91.0	300.8
71	8.00E+06	( 48)	2.50E+06	( 15)	6	196	100	120.1	66.8	230.8
72	8.60E+06	( 86)	2.10E+06	( 21)	10	165	71	153.5	95.3	260.1
73	1.27E+07	( 76)	4.67E+06	( 28)	6	366	137	102.4	65.9	164.0
74	5.88E+06	( 47)	1.50E+06	( 12)	8	118	67	146.3	77.5	302.5
75	3.50E+06	( 14)	3.25E+06	( 13)	4	255	139	40.9	17.9	94.3
76	1.58E+07	( 95)	3.83E+06	( 23)	6	300	124	154.9	98.2	255.6
77	1.30E+07	( 78)	5.17E+06	( 31)	6	405	145	95.0	62.2	149.1
78	1.50E+07	( 90)	2.83E+06	( 17)	6	222	106	197.4	118.2	352.5
79	1.47E+07	( 176)	6.50E+06	( 78)	12	509	116	85.2	64.4	112.7
80	1.42E+07	( 170)	4.42E+06	( 53)	12	346	95	121.0	88.7	168.0
81	1.08E+07	( 65)	5.00E+06	( 30)	6	392	142	81.9	52.6	130.8
82	6.00E+06	( 36)	4.33E+06	( 26)	6	340	132	52.5	30.9	90.6
83	8.75E+06	( 35)	3.00E+06	( 12)	4	235	133	109.4	56.1	231.4
84	1.53E+07	( 214)	5.14E+06	( 72)	14	403	96	111.9	84.6	148.0
85	1.23E+07	( 123)	2.80E+06	( 28)	10	219	82	164.7	109.4	257.6
86	3.00E+07	( 120)	9.00E+06	( 36)	4	705	235	125.5	86.3	187.6
87	1.80E+07	( 180)	9.20E+06	( 92)	10	721	152	74.0	56.7	96.6
88	1.87E+07	( 168)	6.22E+06	( 56)	9	488	131	113.2	83.4	156.1
89	1.85E+07	( 111)	1.17E+07	( 70)	6	914	220	60.2	44.2	82.4
90	1.24E+07	( 62)	5.40E+06	( 27)	5	423	162	86.7	54.6	141.8
91	1.72E+07	( 309)	7.50E+06	( 135)	18	588	103	86.6	69.4	108.0
92	1.04E+07	( 125)	4.58E+06	( 55)	12	359	97	86.0	62.3	120.4
93	1.43E+07	( 228)	6.56E+06	( 105)	16	514	101	82.1	64.1	105.1
94	1.05E+07	( 84)	2.88E+06	( 23)	8	225	93	137.2	86.3	227.8
95	1.43E+07	( 228)	4.63E+06	( 74)	16	362	85	116.0	88.0	152.7
96	9.50E+06	( 38)	4.75E+06	( 19)	4	372	169	75.5	42.7	138.8
97	1.50E+07	( 150)	7.20E+06	( 72)	10	564	134	78.9	59.2	106.1
98	1.59E+07	( 318)	7.25E+06	( 145)	20	568	96	83.0	66.9	103.0
99	1.35E+07	( 108)	6.38E+06	( 51)	8	500	140	80.2	57.1	114.2
100	2.23E+07	( 134)	8.17E+06	( 49)	6	640	183	103.3	74.2	146.4
101	1.60E+07	( 64)	7.75E+06	( 31)	4	607	217	78.1	50.3	124.1
102	1.14E+07	( 114)	5.30E+06	( 53)	10	415	114	81.4	58.4	115.1
103	1.20E+07	( 192)	3.19E+06	( 51)	16	250	70	141.7	104.0	196.9
104	1.53E+07	( 153)	6.30E+06	( 63)	10	494	125	91.9	68.2	125.3

**KLD66** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, May 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.380E+05  
 RELATIVE ERROR (%): 1.57  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	8.13E+06	( 65)	1.50E+06	( 12)	8	118 67	201.2	109.6 407.6
2	1.27E+07	( 76)	6.33E+06	( 38)	6	496 161	75.7	50.8 114.9
3	1.44E+07	( 130)	7.11E+06	( 64)	9	557 140	76.9	56.7 105.6
4	1.50E+06	( 9)	1.00E+06	( 6)	6	78 62	56.5	18.2 192.6
5	9.90E+06	( 99)	6.50E+06	( 65)	10	509 127	57.8	41.9 80.4
6	1.73E+07	( 69)	8.50E+06	( 34)	4	666 228	76.8	50.4 119.5
7	5.17E+06	( 93)	2.72E+06	( 49)	18	213 61	71.9	50.4 103.9
8	1.40E+07	( 84)	6.67E+06	( 40)	6	522 165	79.5	54.1 118.9
9	1.15E+07	( 92)	4.75E+06	( 38)	8	372 121	91.5	62.3 137.3
10	4.20E+06	( 63)	9.33E+05	( 14)	15	73 38	167.9	94.4 323.8
11	7.31E+06	( 95)	3.08E+06	( 40)	13	241 76	89.8	61.6 133.4
12	4.50E+06	( 72)	1.69E+06	( 27)	16	132 51	100.6	64.2 162.9
13	5.63E+06	( 180)	1.84E+06	( 59)	32	144 38	115.2	85.6 157.3
14	7.33E+06	( 88)	1.42E+06	( 17)	12	111 53	193.1	115.4 345.1
15	1.19E+07	( 95)	2.75E+06	( 22)	8	216 91	161.8	101.8 269.8
16	3.33E+06	( 20)	1.67E+06	( 10)	6	131 81	75.3	34.0 180.1
17	1.10E+07	( 264)	3.21E+06	( 77)	24	251 58	128.9	98.6 168.3
18	1.19E+07	( 95)	3.50E+06	( 28)	8	274 103	127.6	83.5 202.0
19	7.59E+06	( 205)	2.56E+06	( 69)	27	200 48	111.8	84.1 148.7
20	1.82E+07	( 91)	1.20E+07	( 60)	5	940 244	57.6	41.1 81.2
21	6.50E+06	( 156)	2.29E+06	( 55)	24	180 49	107.1	78.5 148.5
22	5.14E+06	( 36)	2.57E+06	( 18)	7	202 94	75.5	42.0 141.3
23	5.40E+06	( 54)	2.70E+06	( 27)	10	212 81	75.6	47.0 124.9
24	1.35E+07	( 81)	4.50E+06	( 27)	6	353 135	113.0	72.7 181.7
25	3.86E+06	( 27)	1.57E+06	( 11)	7	123 73	92.2	44.8 206.0
26	1.22E+07	( 73)	6.33E+06	( 38)	6	496 161	72.7	48.6 110.7
27	3.62E+06	( 76)	1.90E+06	( 40)	21	149 47	72.0	48.6 108.4
28	1.33E+07	( 80)	5.67E+06	( 34)	6	444 152	88.9	59.1 137.0
29	2.58E+06	( 31)	5.00E+05	( 6)	12	39 31	190.1	80.5 553.8
30	5.19E+06	( 83)	3.56E+06	( 57)	16	279 74	55.3	39.0 78.9
31	8.50E+06	( 51)	3.67E+06	( 22)	6	287 121	87.5	52.4 151.5
32	1.26E+07	( 101)	6.13E+06	( 49)	8	480 137	78.0	55.1 112.2
33	1.07E+07	( 107)	4.20E+06	( 42)	10	329 102	96.3	67.0 141.1
34	1.24E+07	( 336)	3.52E+06	( 95)	27	276 57	133.0	104.3 169.6
35	5.00E+06	( 30)	3.83E+06	( 23)	6	300 124	49.5	27.9 89.2
36	5.00E+06	( 40)	1.63E+06	( 13)	8	127 69	115.4	61.2 235.1
37	7.43E+06	( 104)	2.57E+06	( 36)	14	202 67	109.0	74.3 163.9
38	1.13E+07	( 45)	5.50E+06	( 22)	4	431 182	77.3	45.7 135.2
39	7.88E+06	( 315)	2.55E+06	( 102)	40	200 40	116.4	91.6 147.8
40	1.09E+07	( 76)	3.57E+06	( 25)	7	280 111	114.5	72.5 187.7
41	8.44E+06	( 76)	2.11E+06	( 19)	9	165 75	149.9	90.6 262.1
42	8.90E+06	( 89)	5.20E+06	( 52)	10	408 113	64.9	45.6 93.3
43	2.13E+06	( 17)	8.75E+05	( 7)	8	69 50	90.8	36.4 259.2
44	5.31E+06	( 85)	1.50E+06	( 24)	16	118 48	133.1	84.4 218.8
45	6.50E+06	( 52)	2.38E+06	( 19)	8	186 85	103.0	60.4 184.5
46	7.50E+06	( 60)	5.25E+06	( 42)	8	411 127	54.2	36.0 82.5
47	7.17E+06	( 43)	2.00E+06	( 12)	6	157 89	134.0	70.4 278.9
48	1.25E+07	( 150)	5.58E+06	( 67)	12	438 107	84.7	63.2 114.9
49	1.78E+07	( 71)	6.00E+06	( 24)	4	470 191	111.4	69.7 185.1
50	6.75E+06	( 81)	2.50E+06	( 30)	12	196 71	101.9	66.6 160.5
51	8.67E+06	( 78)	2.11E+06	( 19)	9	165 75	153.8	93.1 268.6
52	1.05E+07	( 209)	3.85E+06	( 77)	20	302 69	102.3	77.7 134.6

53	1.48E+07	( 89)	7.33E+06	( 44)	6	575	173	76.6	52.9	112.6
54	3.89E+06	( 35)	1.67E+06	( 15)	9	131	66	87.9	47.2	173.3
55	1.18E+07	( 296)	4.36E+06	( 109)	25	342	66	102.5	80.9	129.8
56	5.00E+06	( 20)	7.50E+05	( 3)	4	59	63	239.0	75.0	1215.1
57	9.19E+06	( 239)	2.81E+06	( 73)	26	220	52	123.1	93.5	162.0
58	7.00E+06	( 28)	3.50E+06	( 14)	4	274	144	75.4	38.7	155.1
59	1.28E+07	( 102)	3.75E+06	( 30)	8	294	107	127.9	84.9	199.1
60	9.17E+06	( 55)	4.17E+06	( 25)	6	327	130	83.1	51.2	139.2
61	4.00E+06	( 16)	1.50E+06	( 6)	4	118	92	99.3	37.7	310.1
62	1.04E+07	( 83)	5.13E+06	( 41)	8	402	125	76.6	52.2	114.3
63	7.00E+06	( 70)	3.90E+06	( 39)	10	306	98	68.0	45.4	103.4
64	1.43E+07	( 286)	6.45E+06	( 129)	20	505	90	83.9	66.9	105.1
65	5.15E+06	( 103)	1.90E+06	( 38)	20	149	48	102.3	70.2	152.6
66	7.50E+06	( 45)	4.33E+06	( 26)	6	340	132	65.5	39.7	110.7
67	1.26E+07	( 113)	3.44E+06	( 31)	9	270	97	137.1	92.0	211.0
68	8.75E+06	( 35)	1.00E+06	( 4)	4	78	74	314.6	118.2	1179.0
69	2.10E+07	( 126)	7.33E+06	( 44)	6	575	173	108.1	76.4	156.0
70	1.29E+07	( 129)	4.50E+06	( 45)	10	353	105	108.2	76.8	155.5
71	6.28E+06	( 113)	2.89E+06	( 52)	18	226	63	82.2	58.8	116.6
72	9.63E+06	( 77)	4.50E+06	( 36)	8	353	117	80.9	54.0	123.8
73	1.58E+07	( 285)	6.00E+06	( 108)	18	470	91	99.6	78.5	126.4
74	7.87E+06	( 118)	2.33E+06	( 35)	15	183	62	127.0	86.8	190.8
75	7.50E+06	( 45)	1.33E+06	( 8)	6	104	72	207.7	99.3	507.0
76	8.56E+06	( 77)	2.89E+06	( 26)	9	226	88	111.6	71.1	181.3
77	1.03E+07	( 41)	2.75E+06	( 11)	4	216	127	139.2	71.3	299.9
78	3.50E+06	( 21)	2.33E+06	( 14)	6	183	96	56.8	27.7	120.6
79	6.86E+06	( 192)	1.68E+06	( 47)	28	132	38	153.6	111.6	215.9
80	5.20E+06	( 52)	7.00E+05	( 7)	10	55	40	272.0	126.9	700.6
81	5.25E+06	( 63)	1.58E+06	( 19)	12	124	56	124.5	74.2	220.2
82	1.88E+07	( 75)	4.75E+06	( 19)	4	372	169	147.9	89.4	258.9
83	8.22E+06	( 148)	3.17E+06	( 57)	18	248	66	98.1	72.0	135.7
84	1.29E+07	( 90)	6.14E+06	( 43)	7	481	147	79.2	54.6	116.8
85	7.39E+06	( 133)	2.06E+06	( 37)	18	161	53	135.3	93.8	200.3
86	1.38E+07	( 124)	3.33E+06	( 30)	9	261	95	155.2	104.1	239.3
87	5.33E+06	( 32)	2.17E+06	( 13)	6	170	93	92.6	47.7	192.2
88	1.35E+07	( 54)	3.75E+06	( 15)	4	294	150	134.9	75.9	257.1
89	7.94E+06	( 127)	2.00E+06	( 32)	16	157	55	149.1	101.1	226.9
90	5.05E+06	( 101)	1.95E+06	( 39)	20	153	49	97.8	67.2	145.4
91	7.05E+06	( 141)	3.05E+06	( 61)	20	239	61	87.5	64.4	120.2
92	2.32E+07	( 139)	7.17E+06	( 43)	6	562	171	121.9	86.3	175.8
93	8.67E+06	( 78)	3.00E+06	( 27)	9	235	90	108.9	69.9	175.5
94	8.05E+06	( 161)	2.45E+06	( 49)	20	192	55	123.9	89.8	174.2
95	6.25E+06	( 25)	3.75E+06	( 15)	4	294	150	63.0	32.1	128.6
96	8.00E+06	( 32)	2.00E+06	( 8)	4	157	108	148.6	68.5	372.6
97	1.29E+07	( 103)	2.13E+06	( 17)	8	167	80	225.3	136.0	399.8
98	1.11E+07	( 89)	4.25E+06	( 34)	8	333	114	98.8	66.1	151.4
99	9.00E+06	( 63)	3.71E+06	( 26)	7	291	113	91.5	57.4	150.5
100	1.80E+07	( 72)	4.00E+06	( 16)	4	313	155	168.1	98.0	309.0
101	4.38E+06	( 35)	1.63E+06	( 13)	8	127	69	101.1	52.8	208.3
102	1.03E+07	( 41)	1.25E+06	( 5)	4	98	84	297.3	122.5	942.5
103	1.20E+07	( 108)	2.89E+06	( 26)	9	226	88	155.8	101.6	248.9

**KLD67** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, May 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.360E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	RhoI (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
	(Ns)	(cm <sup>-2</sup> )					
1	1.30E+07 ( 78)	3.33E+06 ( 20)	6	262 116	145.8	89.1	251.3
2	1.44E+07 ( 130)	4.89E+06 ( 44)	9	384 116	111.1	78.7	160.2
3	2.02E+07 ( 101)	7.20E+06 ( 36)	5	566 188	105.5	71.8	159.0
4	1.61E+07 ( 129)	6.50E+06 ( 52)	8	511 142	93.5	67.4	131.7
5	1.12E+07 ( 279)	2.96E+06 ( 74)	25	233 54	141.1	107.8	184.7
6	1.87E+07 ( 262)	6.07E+06 ( 85)	14	477 104	115.7	89.3	149.9
7	6.42E+06 ( 77)	3.17E+06 ( 38)	12	249 81	76.4	51.3	116.0
8	1.96E+07 ( 176)	5.78E+06 ( 52)	9	454 126	127.2	93.2	176.8
9	9.38E+06 ( 75)	1.75E+06 ( 14)	8	138 72	198.7	113.1	379.4
10	1.55E+07 ( 124)	6.63E+06 ( 53)	8	521 143	88.2	63.6	124.2
11	2.53E+07 ( 101)	1.05E+07 ( 42)	4	825 255	90.6	62.8	133.2
12	1.48E+07 ( 89)	7.50E+06 ( 45)	6	590 176	74.7	51.7	109.4
13	1.16E+07 ( 418)	4.89E+06 ( 176)	36	384 59	89.6	73.5	109.1
14	1.35E+07 ( 81)	5.33E+06 ( 32)	6	419 148	95.3	62.8	148.3
15	2.10E+07 ( 84)	7.50E+06 ( 30)	4	590 214	105.3	69.0	165.5
16	1.24E+07 ( 348)	4.14E+06 ( 116)	28	326 61	112.8	89.8	141.6
17	1.99E+07 ( 159)	6.75E+06 ( 54)	8	531 145	110.8	81.1	153.9
18	1.05E+07 ( 84)	2.00E+06 ( 16)	8	157 78	195.1	114.9	355.6
19	1.39E+07 ( 292)	4.86E+06 ( 102)	21	382 76	107.6	84.5	137.0
20	8.30E+06 ( 83)	4.30E+06 ( 43)	10	338 103	72.9	49.9	108.0
21	1.93E+07 ( 135)	1.27E+07 ( 89)	7	1000 214	57.3	43.2	76.0
22	1.97E+07 ( 118)	1.03E+07 ( 62)	6	812 207	71.9	52.5	99.5
23	1.18E+07 ( 142)	4.33E+06 ( 52)	12	341 95	102.8	74.5	144.2
24	1.33E+07 ( 106)	3.88E+06 ( 31)	8	305 109	128.3	85.8	198.0
25	2.15E+07 ( 129)	7.83E+06 ( 47)	6	616 180	103.3	73.7	147.6
26	1.98E+07 ( 119)	1.07E+07 ( 64)	6	839 210	70.3	51.5	96.8
27	2.63E+07 ( 105)	1.10E+07 ( 44)	4	865 261	89.9	62.9	131.0
28	1.72E+07 ( 103)	9.00E+06 ( 54)	6	708 193	72.0	51.4	102.1
29	1.24E+07 ( 174)	3.36E+06 ( 47)	14	264 77	138.9	100.5	196.0
30	1.78E+07 ( 89)	6.80E+06 ( 34)	5	535 183	98.5	65.9	150.9
31	1.32E+07 ( 79)	6.33E+06 ( 38)	6	498 161	78.4	52.8	118.8
32	2.08E+07 ( 166)	5.00E+06 ( 40)	8	393 124	155.5	110.1	225.2
33	1.20E+07 ( 72)	9.33E+06 ( 56)	6	734 197	48.7	33.9	70.4
34	9.38E+06 ( 75)	4.50E+06 ( 36)	8	354 118	78.6	52.3	120.4
35	1.43E+07 ( 57)	2.75E+06 ( 11)	4	216 128	191.9	101.4	404.2
36	1.78E+07 ( 71)	8.50E+06 ( 34)	4	668 229	78.7	51.8	122.3
37	1.10E+07 ( 44)	5.75E+06 ( 23)	4	452 187	72.1	42.8	125.1
38	1.51E+07 ( 121)	4.38E+06 ( 35)	8	344 116	129.7	88.9	194.7
39	2.13E+07 ( 170)	8.38E+06 ( 67)	8	658 162	95.7	71.8	129.0
40	1.04E+07 ( 104)	5.40E+06 ( 54)	10	425 116	72.7	51.9	103.1
41	1.27E+07 ( 76)	3.33E+06 ( 20)	6	262 116	142.1	86.7	245.3
42	1.35E+07 ( 54)	1.20E+07 ( 48)	4	943 273	42.6	28.4	64.3
43	7.13E+06 ( 57)	1.50E+06 ( 12)	8	118 67	176.3	95.1	360.0
44	2.75E+07 ( 165)	7.67E+06 ( 46)	6	603 178	134.7	97.0	191.0
45	1.24E+07 ( 112)	8.67E+06 ( 78)	9	681 155	54.4	40.3	73.6
46	1.37E+07 ( 82)	5.50E+06 ( 33)	6	432 150	93.6	62.0	144.7
47	1.33E+07 ( 80)	5.33E+06 ( 32)	6	419 148	94.1	62.0	146.6
48	1.27E+07 ( 76)	3.83E+06 ( 23)	6	301 125	123.9	77.4	206.9
49	1.12E+07 ( 67)	4.33E+06 ( 26)	6	341 133	96.9	61.1	158.9
50	1.49E+07 ( 134)	7.78E+06 ( 70)	9	611 147	72.3	53.8	98.1
51	1.02E+07 ( 215)	4.48E+06 ( 94)	21	352 73	86.2	66.6	111.4
52	7.83E+06 ( 94)	3.17E+06 ( 38)	12	249 81	93.2	63.5	139.7

53	8.80E+06	( 176)	3.25E+06	( 65)	20	256	64	102.0	76.5	137.8
54	7.50E+06	( 60)	4.25E+06	( 34)	8	334	114	66.6	43.2	104.7
55	1.56E+07	( 78)	1.32E+07	( 66)	5	1038	257	44.8	31.8	63.2
56	1.63E+07	( 343)	7.19E+06	( 151)	21	565	94	85.7	69.3	105.8
57	1.55E+07	( 62)	6.25E+06	( 25)	4	491	195	93.3	58.1	155.0
58	2.33E+07	( 93)	1.00E+07	( 40)	4	786	248	87.6	60.1	130.4
59	8.56E+06	( 231)	3.63E+06	( 98)	27	285	58	88.8	69.0	114.2
60	6.00E+06	( 120)	2.05E+06	( 41)	20	161	50	110.1	76.9	161.0
61	7.17E+06	( 86)	1.75E+06	( 21)	12	138	59	153.0	95.0	259.3
62	1.93E+07	( 116)	8.67E+06	( 52)	6	681	189	84.2	60.3	119.1
63	1.09E+07	( 87)	4.75E+06	( 38)	8	373	121	86.3	58.5	129.9
64	4.72E+06	( 85)	1.06E+06	( 19)	18	83	38	166.8	101.7	290.1
65	2.17E+07	( 130)	8.67E+06	( 52)	6	681	189	94.2	68.0	132.6
66	1.03E+07	( 93)	5.11E+06	( 46)	9	402	119	76.3	53.2	111.2
67	1.69E+07	( 152)	6.89E+06	( 62)	9	542	138	92.4	68.5	126.4
68	8.30E+06	( 166)	2.20E+06	( 44)	20	173	52	141.5	101.4	202.0
69	7.17E+06	( 86)	2.17E+06	( 26)	12	170	66	124.1	79.7	200.4
70	1.24E+07	( 224)	4.17E+06	( 75)	18	328	76	112.1	85.2	147.5
71	1.87E+07	( 168)	5.00E+06	( 45)	9	393	117	140.1	100.7	199.2
72	2.01E+07	( 241)	1.00E+07	( 120)	12	786	145	75.8	59.8	96.0
73	1.75E+07	( 210)	5.33E+06	( 64)	12	419	105	123.4	93.1	165.9
74	1.52E+07	( 213)	8.57E+06	( 120)	14	674	125	67.0	52.7	85.3
75	2.25E+07	( 90)	9.50E+06	( 38)	4	747	242	89.2	60.6	134.1
76	2.46E+07	( 221)	8.67E+06	( 78)	9	681	155	106.4	81.1	139.6
77	1.03E+07	( 82)	3.63E+06	( 29)	8	285	105	106.3	69.2	168.4
78	1.80E+07	( 144)	5.50E+06	( 44)	8	432	130	123.0	87.5	176.5
79	8.50E+06	( 51)	5.50E+06	( 33)	6	432	150	58.4	37.1	93.5
80	6.25E+06	( 125)	2.00E+06	( 40)	20	157	50	117.5	82.0	172.1
81	1.36E+07	( 109)	8.38E+06	( 67)	8	658	162	61.5	45.0	84.8
82	9.20E+06	( 92)	4.10E+06	( 41)	10	322	101	84.6	58.1	125.5
83	1.04E+07	( 146)	5.29E+06	( 74)	14	416	97	74.5	56.0	100.1
84	7.71E+06	( 108)	3.14E+06	( 44)	14	247	74	92.5	64.8	134.5
85	1.69E+07	( 236)	8.00E+06	( 112)	14	629	120	79.5	62.4	101.2
86	1.19E+07	( 215)	3.00E+06	( 54)	18	236	64	149.3	110.8	205.1
87	1.63E+07	( 326)	6.55E+06	( 131)	20	515	91	93.7	75.1	117.0
88	1.48E+07	( 178)	1.00E+07	( 120)	12	786	145	56.1	43.8	71.9
89	1.72E+07	( 155)	7.56E+06	( 68)	9	594	145	86.0	64.3	116.2
90	1.77E+07	( 106)	6.33E+06	( 38)	6	498	161	104.9	72.1	156.3
91	1.20E+07	( 120)	4.40E+06	( 44)	10	346	104	102.7	72.3	148.6
92	1.29E+07	( 103)	8.75E+06	( 70)	8	688	165	55.7	40.7	76.6
93	1.15E+07	( 69)	8.00E+06	( 48)	6	629	182	54.4	37.1	80.4
94	1.66E+07	( 199)	5.50E+06	( 66)	12	432	107	113.1	84.6	151.1
95	1.58E+07	( 142)	7.56E+06	( 68)	9	594	145	78.8	58.7	107.0
96	1.28E+07	( 153)	3.92E+06	( 47)	12	308	90	122.3	88.0	173.5
97	1.40E+07	( 140)	8.80E+06	( 88)	10	692	149	60.1	45.4	79.6
98	1.52E+07	( 137)	8.67E+06	( 78)	9	681	155	66.3	49.5	88.7
99	1.88E+07	( 150)	6.88E+06	( 55)	8	540	146	102.7	75.1	142.6
100	8.56E+06	( 154)	3.39E+06	( 61)	18	266	68	95.2	70.4	130.3
101	1.02E+07	( 163)	4.25E+06	( 68)	16	334	81	90.4	67.8	121.9
102	6.67E+06	( 80)	2.50E+06	( 30)	12	197	71	100.3	65.5	158.1
103	5.30E+06	( 53)	2.10E+06	( 21)	10	165	71	94.8	56.6	165.6

**KLD78** (Yukon), modern sand, UC2z (counted by Sarah Falkowski, May 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 4.090E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	2.60E+06	( 13)	9.20E+06	( 46)	5	1125 332	7.0	3.4 13.0
2	3.80E+06	( 38)	8.10E+06	( 81)	10	990 222	11.5	7.6 17.1
3	2.05E+06	( 39)	4.79E+06	( 91)	19	586 124	10.5	7.0 15.4
4	1.33E+07	( 159)	9.08E+06	( 109)	12	1110 215	35.5	27.4 46.1
5	3.13E+05	( 5)	1.88E+06	( 30)	16	229 83	4.2	1.2 10.6
6	2.03E+06	( 61)	6.60E+06	( 198)	30	807 117	7.5	5.5 10.1
7	5.71E+05	( 12)	1.14E+06	( 24)	21	140 57	12.3	5.6 25.4
8	1.17E+06	( 7)	2.50E+06	( 15)	6	306 156	11.5	3.9 29.7
9	2.79E+06	( 67)	6.54E+06	( 157)	24	800 130	10.4	7.7 14.0
10	7.50E+05	( 9)	1.58E+06	( 19)	12	194 88	11.7	4.6 26.8
11	8.75E+05	( 21)	1.96E+06	( 47)	24	239 70	11.0	6.2 18.6
12	1.11E+06	( 10)	1.89E+06	( 17)	9	231 111	14.5	5.9 33.2
13	6.13E+06	( 49)	8.38E+06	( 67)	8	1024 251	17.9	12.1 26.2
14	5.00E+05	( 4)	1.25E+06	( 10)	8	153 94	10.0	2.2 33.9
15	1.50E+06	( 12)	4.38E+06	( 35)	8	535 180	8.5	4.0 16.5
16	7.10E+06	( 71)	1.68E+07	( 168)	10	2054 323	10.4	7.7 13.9
17	8.67E+05	( 13)	2.40E+06	( 36)	15	293 98	8.9	4.3 17.0
18	1.67E+05	( 1)	8.33E+05	( 5)	6	102 87	5.4	0.1 43.6
19	3.08E+06	( 37)	4.58E+06	( 55)	12	560 151	16.5	10.5 25.4
20	1.63E+06	( 13)	2.38E+06	( 19)	8	290 132	16.8	7.6 35.7
21	2.29E+06	( 16)	5.14E+06	( 36)	7	629 209	10.9	5.6 20.1
22	1.94E+06	( 35)	4.67E+06	( 84)	18	570 125	10.2	6.7 15.3
23	2.33E+06	( 70)	4.50E+06	( 135)	30	550 96	12.7	9.3 17.1
24	3.00E+06	( 24)	9.88E+06	( 79)	8	1207 273	7.5	4.5 11.9
25	2.33E+06	( 14)	1.83E+06	( 11)	6	224 132	31.0	13.1 75.4
26	8.50E+05	( 17)	1.65E+06	( 33)	20	202 70	12.6	6.6 23.3
27	2.71E+06	( 65)	5.13E+06	( 123)	24	627 114	12.9	9.4 17.6
28	7.50E+05	( 15)	2.45E+06	( 49)	20	300 86	7.5	3.9 13.6
29	3.65E+06	( 73)	1.06E+07	( 212)	20	1296 182	8.5	6.4 11.2
30	4.29E+05	( 6)	1.00E+06	( 14)	14	122 64	10.6	3.3 29.0
31	7.50E+05	( 12)	1.38E+06	( 22)	16	168 71	13.4	6.0 28.1
32	7.50E+05	( 9)	1.25E+06	( 15)	12	153 78	14.8	5.7 35.7
33	2.75E+06	( 55)	7.50E+06	( 150)	20	917 152	9.0	6.4 12.3
34	4.00E+05	( 4)	1.20E+06	( 12)	10	147 83	8.4	1.9 26.9
35	3.17E+06	( 95)	6.20E+06	( 186)	30	758 114	12.5	9.6 16.3
36	6.67E+05	( 8)	2.50E+06	( 30)	12	306 111	6.6	2.6 14.6
37	1.11E+05	( 1)	2.00E+06	( 18)	9	244 114	1.5	0.0 8.6
38	5.42E+06	( 65)	1.27E+07	( 152)	12	1548 255	10.5	7.7 14.1
39	4.00E+06	( 24)	4.50E+06	( 27)	6	550 211	21.7	12.0 39.1
40	2.22E+05	( 2)	1.67E+06	( 15)	9	204 104	3.5	0.4 14.0
41	3.54E+06	( 46)	7.38E+06	( 96)	13	903 186	11.7	8.0 16.8
42	6.25E+04	( 1)	1.25E+06	( 20)	16	153 68	1.4	0.0 7.6
43	2.89E+06	( 26)	9.78E+06	( 88)	9	1195 257	7.3	4.5 11.3
44	3.60E+06	( 72)	1.06E+07	( 212)	20	1296 182	8.3	6.3 11.1
45	5.00E+05	( 7)	1.71E+06	( 24)	14	210 85	7.2	2.6 17.1
46	4.50E+06	( 36)	8.50E+06	( 68)	8	1039 253	13.0	8.4 19.7
47	2.40E+06	( 24)	4.90E+06	( 49)	10	599 171	12.0	7.0 19.9
48	8.00E+05	( 12)	3.07E+06	( 46)	15	375 111	6.4	3.1 12.2
49	5.38E+06	( 43)	1.14E+07	( 91)	8	1391 294	11.6	7.8 16.8
50	4.88E+06	( 78)	1.14E+07	( 182)	16	1391 210	10.5	7.9 13.9
51	4.93E+06	( 69)	1.03E+07	( 144)	14	1257 213	11.7	8.6 15.7
52	9.33E+05	( 14)	1.33E+06	( 20)	15	163 72	17.2	8.0 35.6

53	7.33E+06	( 44)	8.33E+06	( 50)	6	1019	288	21.5	14.0	32.9
54	4.21E+06	( 80)	1.12E+07	( 212)	19	1364	192	9.3	7.0	12.2
55	2.75E+05	( 11)	6.00E+05	( 24)	40	73	30	11.3	5.0	23.8
56	4.00E+06	( 40)	7.40E+06	( 74)	10	905	212	13.2	8.8	19.7
57	5.83E+05	( 7)	1.17E+06	( 14)	12	143	75	12.4	4.2	32.3
58	2.47E+06	( 37)	3.67E+06	( 55)	15	448	121	16.5	10.5	25.4
59	7.00E+06	( 42)	1.50E+07	( 90)	6	1834	390	11.4	7.7	16.6
60	1.30E+06	( 13)	1.30E+06	( 13)	10	159	87	24.4	10.4	57.1
61	4.70E+06	( 47)	1.01E+07	( 101)	10	1235	248	11.4	7.9	16.2
62	9.17E+05	( 11)	4.33E+06	( 52)	12	530	147	5.2	2.4	10.0
63	6.25E+04	( 1)	1.56E+06	( 25)	16	191	76	1.1	0.0	6.0
64	3.13E+06	( 94)	5.23E+06	( 157)	30	640	104	14.7	11.2	19.2
65	4.17E+06	( 25)	3.17E+06	( 19)	6	387	176	32.0	17.0	61.6
66	2.92E+06	( 35)	8.33E+06	( 100)	12	1019	206	8.6	5.6	12.7
67	2.59E+05	( 7)	1.78E+06	( 48)	27	217	63	3.6	1.4	7.9
68	8.75E+05	( 35)	2.65E+06	( 106)	40	324	64	8.1	5.3	11.9
69	2.67E+05	( 4)	1.00E+06	( 15)	15	122	62	6.7	1.6	20.5
70	6.80E+06	( 68)	1.22E+07	( 122)	10	1491	274	13.6	10.0	18.5
71	2.00E+05	( 4)	1.10E+06	( 22)	20	134	57	4.6	1.1	13.1
72	1.04E+06	( 25)	3.08E+06	( 74)	24	377	88	8.3	5.0	13.2
73	1.15E+06	( 46)	2.33E+06	( 93)	40	284	59	12.1	8.3	17.4
74	2.30E+06	( 46)	4.25E+06	( 85)	20	520	114	13.2	9.0	19.2
75	5.00E+05	( 12)	1.33E+06	( 32)	24	163	57	9.2	4.3	18.3
76	2.33E+06	( 56)	4.04E+06	( 97)	24	494	101	14.1	10.0	19.8
77	3.50E+05	( 14)	6.50E+05	( 26)	40	79	31	13.2	6.3	26.1
78	1.43E+05	( 4)	3.93E+05	( 11)	28	48	28	9.1	2.1	30.0
79	6.07E+05	( 17)	1.57E+06	( 44)	28	192	58	9.5	5.1	16.9
80	8.75E+05	( 14)	9.38E+05	( 15)	16	115	58	22.8	10.2	50.6
81	1.27E+07	( 152)	3.00E+07	( 360)	12	3667	403	10.3	8.4	12.8
82	1.21E+06	( 17)	3.00E+06	( 42)	14	367	113	10.0	5.3	17.8
83	3.33E+05	( 8)	9.58E+05	( 23)	24	117	48	8.6	3.3	19.7
84	5.83E+05	( 14)	1.79E+06	( 43)	24	219	67	8.0	4.0	14.8
85	3.57E+06	( 50)	1.04E+07	( 145)	14	1266	214	8.4	6.0	11.7
86	1.07E+06	( 16)	2.47E+06	( 37)	15	302	99	10.6	5.5	19.5
87	7.50E+05	( 9)	1.17E+06	( 14)	12	143	75	15.8	6.0	38.9
88	8.31E+06	( 133)	3.63E+06	( 58)	16	443	117	55.8	40.7	77.4
89	9.29E+06	( 130)	3.93E+06	( 55)	14	480	130	57.5	41.7	80.4
90	2.10E+06	( 21)	3.60E+06	( 36)	10	440	146	14.3	7.9	25.1
91	6.00E+05	( 9)	6.67E+05	( 10)	15	81	50	22.0	7.9	60.0
92	8.00E+05	( 8)	4.00E+05	( 4)	10	49	46	47.8	13.1	218.4
93	3.75E+06	( 75)	2.25E+06	( 45)	20	275	82	40.6	27.7	60.2
94	3.50E+06	( 42)	6.25E+06	( 75)	12	764	177	13.7	9.1	20.2
95	4.47E+06	( 85)	9.58E+06	( 182)	19	1171	177	11.4	8.7	15.0
96	1.40E+06	( 21)	4.53E+06	( 68)	15	554	135	7.6	4.4	12.5
97	3.10E+06	( 62)	6.00E+06	( 120)	20	733	136	12.6	9.1	17.3
98	7.50E+05	( 9)	1.67E+06	( 20)	12	204	90	11.1	4.4	25.3
99	4.12E+06	( 70)	7.18E+06	( 122)	17	877	161	14.0	10.3	19.0
100	4.50E+05	( 9)	1.85E+06	( 37)	20	226	74	6.0	2.5	12.6
101	2.56E+06	( 46)	8.50E+06	( 153)	18	1039	171	7.4	5.2	10.3
102	2.92E+06	( 35)	6.67E+06	( 80)	12	815	183	10.7	7.0	16.1
103	2.50E+06	( 75)	8.67E+05	( 26)	30	106	41	69.9	44.4	114.0
104	4.20E+05	( 21)	9.80E+05	( 49)	50	120	34	10.5	6.0	17.8

**KLD85** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, May 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.340E+05  
 RELATIVE ERROR (%): 1.57  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
 SIZE OF COUNTER SQUARE (cm<sup>-2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age (Ma)	--95% CI--
1	1.98E+07	( 119)	7.83E+06	( 47)	6	618 180	95.1 67.5 136.3
2	1.23E+07	( 86)	7.43E+06	( 52)	7	586 163	62.3 43.7 89.8
3	6.70E+06	( 67)	7.00E+06	( 70)	10	552 133	36.2 25.5 51.4
4	9.75E+06	( 39)	1.10E+07	( 44)	4	868 262	33.5 21.2 52.8
5	8.17E+06	( 49)	7.33E+06	( 44)	6	578 174	42.1 27.4 64.7
6	1.44E+07	( 144)	4.90E+06	( 49)	10	386 111	110.2 79.4 155.8
7	9.50E+06	( 38)	6.00E+06	( 24)	4	473 192	59.6 35.0 103.9
8	6.40E+06	( 32)	6.60E+06	( 33)	5	521 181	36.7 21.8 61.5
9	1.02E+07	( 61)	5.17E+06	( 31)	6	407 146	74.0 47.4 118.0
10	7.63E+06	( 61)	3.38E+06	( 27)	8	266 102	84.8 53.3 138.8
11	7.25E+06	( 29)	2.00E+06	( 8)	4	158 108	134.1 61.0 339.1
12	1.32E+07	( 132)	3.90E+06	( 39)	10	308 98	126.7 88.4 186.0
13	9.89E+06	( 89)	5.11E+06	( 46)	9	403 119	72.8 50.6 106.4
14	1.01E+07	( 101)	3.90E+06	( 39)	10	308 98	97.2 66.8 144.5
15	7.17E+06	( 43)	3.33E+06	( 20)	6	263 116	80.7 46.7 144.8
16	2.07E+07	( 124)	5.17E+06	( 31)	6	407 146	149.3 100.7 228.9
17	2.10E+07	( 126)	8.33E+06	( 50)	6	657 186	94.7 67.9 134.2
18	1.21E+07	( 121)	5.10E+06	( 51)	10	402 113	89.2 63.9 126.3
19	9.00E+06	( 36)	9.00E+06	( 36)	4	710 236	37.8 23.1 61.7
20	9.39E+06	( 169)	4.11E+06	( 74)	18	324 76	85.7 64.3 114.0
21	8.25E+06	( 66)	4.13E+06	( 33)	8	325 113	75.2 49.0 118.0
22	9.78E+06	( 176)	3.61E+06	( 65)	18	285 71	101.7 76.2 137.4
23	1.00E+07	( 80)	6.13E+06	( 49)	8	483 138	61.5 42.6 89.7
24	1.49E+07	( 119)	6.50E+06	( 52)	8	513 142	86.0 61.7 121.7
25	1.33E+07	( 53)	3.50E+06	( 14)	4	276 145	140.8 78.0 274.4
26	5.78E+06	( 52)	1.00E+06	( 9)	9	79 51	212.3 106.0 487.1
27	1.69E+07	( 118)	6.86E+06	( 48)	7	541 156	92.4 65.7 132.1
28	1.57E+07	( 94)	8.67E+06	( 52)	6	683 190	68.1 48.1 97.5
29	1.90E+07	( 152)	8.38E+06	( 67)	8	660 162	85.3 63.7 115.6
30	7.67E+06	( 69)	5.56E+06	( 50)	9	438 124	52.1 35.7 76.5
31	1.40E+07	( 56)	7.25E+06	( 29)	4	572 211	72.6 45.7 118.0
32	1.50E+07	( 60)	8.50E+06	( 34)	4	670 229	66.4 43.0 104.4
33	1.35E+07	( 81)	2.67E+06	( 16)	6	210 104	187.6 110.3 342.7
34	1.23E+07	( 74)	1.02E+07	( 61)	6	802 206	45.8 32.2 65.4
35	1.12E+07	( 67)	6.83E+06	( 41)	6	539 168	61.6 41.2 93.2
36	9.33E+06	( 112)	4.33E+06	( 52)	12	342 95	81.0 57.9 114.9
37	9.06E+06	( 145)	5.69E+06	( 91)	16	449 95	60.0 45.5 79.1
38	6.63E+06	( 53)	5.25E+06	( 42)	8	414 128	47.6 31.2 73.2
39	1.20E+07	( 239)	4.40E+06	( 88)	20	347 75	101.8 78.5 131.9
40	1.59E+07	( 222)	6.86E+06	( 96)	14	541 111	86.8 67.3 112.0
41	1.22E+07	( 122)	6.90E+06	( 69)	10	544 132	66.6 49.2 90.9
42	1.26E+07	( 151)	4.58E+06	( 55)	12	361 98	103.1 75.4 143.1
43	1.07E+07	( 150)	5.64E+06	( 79)	14	445 101	71.4 53.6 95.0
44	1.54E+07	( 123)	7.50E+06	( 60)	8	591 153	77.2 56.3 107.0
45	8.89E+06	( 80)	5.11E+06	( 46)	9	403 119	65.5 45.1 96.4
46	8.80E+06	( 132)	2.20E+06	( 33)	15	174 60	149.4 101.9 225.7
47	8.14E+06	( 114)	4.14E+06	( 58)	14	327 86	74.0 53.6 103.4
48	1.30E+07	( 52)	6.75E+06	( 27)	4	532 204	72.4 44.8 119.9
49	1.26E+07	( 126)	7.10E+06	( 71)	10	560 134	66.9 49.6 90.8
50	9.70E+06	( 97)	5.30E+06	( 53)	10	418 115	68.9 48.9 98.3
51	1.61E+07	( 145)	6.56E+06	( 59)	9	517 135	92.4 67.9 127.3
52	7.83E+06	( 47)	2.33E+06	( 14)	6	184 97	125.0 68.5 245.8

53	5.10E+06	( 107)	4.19E+06	( 88)	21	330	71	45.9	34.3	61.7
54	1.38E+07	( 83)	5.67E+06	( 34)	6	447	153	91.6	61.0	140.9
55	1.43E+07	( 114)	9.25E+06	( 74)	8	729	171	58.1	43.0	79.0
56	1.43E+07	( 114)	6.88E+06	( 55)	8	542	147	78.0	56.1	109.7
57	1.56E+07	( 140)	7.11E+06	( 64)	9	561	141	82.3	60.9	112.5
58	9.10E+06	( 191)	4.14E+06	( 87)	21	327	71	82.4	63.1	107.8
59	1.69E+07	( 135)	7.88E+06	( 63)	8	621	157	80.6	59.4	110.6
60	9.64E+06	( 106)	4.45E+06	( 49)	11	351	100	81.4	57.6	116.7
61	1.30E+07	( 78)	4.83E+06	( 29)	6	381	141	100.8	65.4	160.2
62	7.78E+06	( 70)	4.56E+06	( 41)	9	359	112	64.3	43.2	97.0
63	1.99E+07	( 279)	6.36E+06	( 89)	14	501	107	117.3	91.0	151.1
64	1.86E+07	( 279)	7.13E+06	( 107)	15	563	110	97.8	77.0	124.3
65	1.70E+07	( 136)	7.25E+06	( 58)	8	572	151	88.2	64.5	122.1
66	1.25E+07	( 100)	6.63E+06	( 53)	8	522	144	71.0	50.5	101.1
67	1.00E+07	( 60)	2.50E+06	( 15)	6	197	100	148.7	84.4	281.6
68	1.00E+07	( 40)	2.50E+06	( 10)	4	197	122	148.1	74.0	331.7
69	2.08E+07	( 104)	9.00E+06	( 45)	5	710	212	86.9	60.8	126.2
70	9.75E+06	( 195)	4.25E+06	( 85)	20	335	73	86.1	65.8	112.7
71	1.70E+07	( 153)	6.11E+06	( 55)	9	482	130	104.4	76.4	144.9
72	1.74E+07	( 87)	8.20E+06	( 41)	5	647	202	79.8	54.6	118.7
73	1.40E+07	( 56)	7.25E+06	( 29)	4	572	211	72.6	45.7	118.0
74	2.10E+07	( 126)	9.33E+06	( 56)	6	736	197	84.6	61.4	118.2
75	1.47E+07	( 88)	7.83E+06	( 47)	6	618	180	70.5	49.0	102.8
76	1.25E+07	( 100)	4.50E+06	( 36)	8	355	118	104.2	70.8	157.0
77	1.47E+07	( 147)	6.00E+06	( 60)	10	473	123	92.1	67.9	126.6
78	1.12E+07	( 179)	5.19E+06	( 83)	16	409	90	81.0	61.5	106.5
79	9.11E+06	( 82)	2.56E+06	( 23)	9	202	83	133.1	83.6	221.4
80	7.56E+06	( 68)	2.67E+06	( 24)	9	210	85	106.1	66.2	176.7
81	1.93E+07	( 77)	1.25E+07	( 50)	4	986	279	58.1	40.2	84.7
82	1.27E+07	( 191)	5.27E+06	( 79)	15	415	94	90.7	68.8	119.5
83	5.11E+06	( 92)	3.28E+06	( 59)	18	258	68	58.8	42.0	83.0
84	1.18E+07	( 94)	9.13E+06	( 73)	8	720	169	48.6	35.4	67.0
85	1.25E+07	( 150)	5.33E+06	( 64)	12	421	106	88.1	65.4	120.1
86	1.46E+07	( 131)	4.22E+06	( 38)	9	333	108	129.0	89.7	190.3
87	1.34E+07	( 121)	5.56E+06	( 50)	9	438	124	90.9	65.0	129.2
88	1.09E+07	( 217)	5.50E+06	( 110)	20	434	84	74.2	58.0	94.9
89	1.26E+07	( 101)	4.88E+06	( 39)	8	384	123	97.2	66.8	144.5
90	1.98E+07	( 79)	1.25E+07	( 50)	4	986	279	59.6	41.3	86.7
91	5.80E+06	( 58)	3.20E+06	( 32)	10	252	89	68.2	43.7	108.6
92	9.81E+06	( 157)	5.38E+06	( 86)	16	424	92	68.7	52.0	90.6
93	1.01E+07	( 81)	5.00E+06	( 40)	8	394	125	76.2	51.7	114.3
94	1.24E+07	( 198)	3.50E+06	( 56)	16	276	74	132.4	98.3	181.5
95	7.75E+06	( 62)	4.13E+06	( 33)	8	325	113	70.7	45.8	111.4
96	1.03E+07	( 82)	6.75E+06	( 54)	8	532	145	57.3	40.2	82.3
97	1.40E+07	( 56)	8.00E+06	( 32)	4	631	222	65.9	42.0	105.1
98	9.25E+06	( 37)	2.50E+06	( 10)	4	197	122	137.2	68.0	309.0
99	9.40E+06	( 94)	4.00E+06	( 40)	10	315	100	88.3	60.6	131.3
100	9.00E+06	( 108)	4.08E+06	( 49)	12	322	92	82.9	58.7	118.7
101	1.61E+07	( 129)	4.50E+06	( 36)	8	355	118	134.0	92.5	199.6
102	1.30E+07	( 104)	3.75E+06	( 30)	8	296	108	129.6	86.1	201.5
103	1.61E+07	( 129)	4.00E+06	( 32)	8	315	111	150.5	102.2	228.9
104	1.20E+07	( 120)	3.10E+06	( 31)	10	244	87	144.6	97.3	221.9
105	9.00E+06	( 162)	3.50E+06	( 63)	18	276	70	96.6	71.9	131.5

**KLD105** (Yukon), modern sand, TU11z (counted by Sarah Falkowski, April 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.330E+05  
 RELATIVE ERROR (%): 1.57  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	8.75E+06	( 175)	4.10E+06	( 82)	20	324 72	80.0	60.7 105.5
2	1.23E+07	( 49)	4.25E+06	( 17)	4	336 161	107.5	61.4 199.2
3	6.75E+06	( 27)	2.50E+06	( 10)	4	197 122	100.4	47.7 232.6
4	7.17E+06	( 43)	1.83E+06	( 11)	6	145 86	144.7	74.5 310.8
5	1.87E+07	( 112)	7.17E+06	( 43)	6	566 173	97.6	68.3 142.2
6	1.18E+07	( 71)	5.67E+06	( 34)	6	448 153	78.4	51.6 121.7
7	8.67E+06	( 104)	2.75E+06	( 33)	12	217 75	117.8	79.4 180.0
8	8.75E+06	( 105)	3.17E+06	( 38)	12	250 81	103.5	71.1 154.2
9	1.01E+07	( 242)	3.04E+06	( 73)	24	240 57	123.7	94.0 162.7
10	1.24E+07	( 223)	4.44E+06	( 80)	18	351 79	104.2	79.6 136.4
11	6.00E+06	( 48)	2.50E+06	( 20)	8	197 87	89.8	52.6 159.8
12	1.45E+07	( 116)	6.50E+06	( 52)	8	513 143	83.8	60.0 118.6
13	1.02E+07	( 61)	2.83E+06	( 17)	6	224 107	133.5	77.8 243.6
14	1.04E+07	( 52)	3.40E+06	( 17)	5	269 129	114.0	65.5 210.3
15	5.42E+06	( 130)	1.58E+06	( 38)	24	125 41	127.8	88.9 188.6
16	1.05E+07	( 42)	7.00E+06	( 28)	4	553 208	56.4	34.3 94.5
17	6.67E+06	( 40)	2.00E+06	( 12)	6	158 90	123.8	64.5 259.1
18	2.00E+07	( 80)	8.25E+06	( 33)	4	652 226	90.9	60.1 140.8
19	1.08E+07	( 43)	3.00E+06	( 12)	4	237 134	133.0	69.8 276.8
20	8.00E+06	( 32)	2.75E+06	( 11)	4	217 128	108.2	53.8 237.9
21	7.63E+06	( 61)	3.00E+06	( 24)	8	237 96	95.1	58.8 159.6
22	1.53E+07	( 92)	5.33E+06	( 32)	6	421 148	107.6	71.6 166.3
23	7.50E+06	( 45)	4.17E+06	( 25)	6	329 131	67.6	40.7 115.0
24	9.88E+06	( 79)	4.25E+06	( 34)	8	336 115	87.1	57.8 134.4
25	1.60E+07	( 240)	6.27E+06	( 94)	15	495 103	95.6	74.2 123.2
26	1.03E+07	( 82)	4.38E+06	( 35)	8	346 117	87.9	58.7 134.5
27	9.83E+06	( 118)	4.83E+06	( 58)	12	382 101	76.5	55.5 106.6
28	9.75E+06	( 39)	6.50E+06	( 26)	4	513 200	56.4	33.6 96.5
29	3.88E+06	( 31)	1.75E+06	( 14)	8	138 73	82.8	43.1 168.5
30	6.00E+06	( 24)	4.50E+06	( 18)	4	355 166	50.2	26.2 98.0
31	1.08E+07	( 43)	4.00E+06	( 16)	4	316 156	100.3	55.9 190.8
32	1.18E+07	( 47)	3.00E+06	( 12)	4	237 134	145.1	76.9 300.2
33	1.03E+07	( 103)	4.20E+06	( 42)	10	332 102	92.0	63.8 135.0
34	1.15E+07	( 46)	4.75E+06	( 19)	4	375 170	90.6	52.4 163.7
35	1.55E+07	( 62)	3.75E+06	( 15)	4	296 151	153.3	87.3 289.8
36	8.63E+06	( 69)	2.75E+06	( 22)	8	217 92	117.1	72.1 198.7
37	1.25E+07	( 75)	6.67E+06	( 40)	6	527 166	70.5	47.5 106.2
38	9.22E+06	( 83)	3.44E+06	( 31)	9	272 97	100.2	65.9 156.7
39	1.16E+07	( 104)	4.56E+06	( 41)	9	360 112	95.1	65.9 140.1
40	7.60E+06	( 76)	3.20E+06	( 32)	10	253 89	89.0	58.4 139.1
41	1.03E+07	( 62)	8.17E+06	( 49)	6	645 184	47.7	32.3 70.9
42	5.38E+06	( 129)	2.67E+06	( 64)	24	211 53	75.8	55.8 104.0
43	1.38E+07	( 55)	4.00E+06	( 16)	4	316 156	127.9	73.0 239.0
44	5.70E+06	( 171)	2.17E+06	( 65)	30	171 43	98.7	73.9 133.5
45	7.33E+06	( 88)	3.58E+06	( 43)	12	283 86	76.9	52.9 113.5
46	4.70E+06	( 47)	1.50E+06	( 15)	10	118 60	116.7	64.8 224.6
47	4.13E+06	( 33)	2.13E+06	( 17)	8	168 80	72.7	39.6 139.3
48	8.63E+06	( 69)	2.75E+06	( 22)	8	217 92	117.1	72.1 198.7
49	9.50E+06	( 190)	3.25E+06	( 65)	20	257 64	109.5	82.4 147.6
50	7.00E+06	( 42)	1.67E+06	( 10)	6	132 81	155.2	78.0 346.2
51	1.07E+07	( 171)	4.00E+06	( 64)	16	316 79	100.2	74.9 135.8
52	8.60E+06	( 43)	7.00E+06	( 35)	5	553 186	46.3	29.0 74.5

53	8.50E+06	( 34)	3.25E+06	( 13)	4	257	140	97.5	50.7	201.4
54	5.80E+06	( 29)	1.40E+06	( 7)	5	111	81	152.3	66.8	411.0
55	7.25E+06	( 29)	6.50E+06	( 26)	4	513	200	42.1	23.9	74.3
56	1.20E+07	( 216)	4.44E+06	( 80)	18	351	79	101.0	77.1	132.3
57	7.20E+06	( 72)	3.40E+06	( 34)	10	269	92	79.5	52.3	123.3
58	8.25E+06	( 66)	3.75E+06	( 30)	8	296	108	82.5	53.0	131.7
59	6.00E+06	( 36)	6.50E+06	( 39)	6	513	164	34.9	21.5	56.3
60	8.25E+06	( 33)	3.50E+06	( 14)	4	276	145	88.0	46.3	178.1
61	1.10E+07	( 165)	3.93E+06	( 59)	15	311	81	104.8	77.6	143.7
62	9.50E+06	( 57)	8.17E+06	( 49)	6	645	184	43.9	29.4	65.6
63	1.10E+07	( 88)	5.50E+06	( 44)	8	434	131	75.1	51.9	110.5
64	1.15E+07	( 46)	4.25E+06	( 17)	4	336	161	101.0	57.3	188.0
65	1.08E+07	( 162)	3.93E+06	( 59)	15	311	81	102.9	76.1	141.2
66	7.75E+06	( 31)	1.50E+06	( 6)	4	118	93	188.6	79.8	549.6
67	5.60E+06	( 28)	2.00E+06	( 10)	5	158	98	104.1	49.7	240.2
68	6.00E+06	( 36)	5.17E+06	( 31)	6	408	146	43.8	26.4	73.2
69	6.83E+06	( 41)	2.17E+06	( 13)	6	171	93	117.3	62.4	238.6
70	9.83E+06	( 59)	7.83E+06	( 47)	6	619	181	47.3	31.7	71.0
71	8.67E+06	( 104)	3.75E+06	( 45)	12	296	88	86.7	60.7	126.0
72	6.25E+06	( 25)	5.25E+06	( 21)	4	415	179	44.9	24.2	84.2
73	1.33E+07	( 80)	3.33E+06	( 20)	6	263	117	148.8	91.1	256.1
74	5.75E+06	( 23)	2.25E+06	( 9)	4	178	115	95.0	42.9	233.4
75	1.29E+07	( 116)	4.44E+06	( 40)	9	351	111	108.6	75.5	159.7
76	7.00E+06	( 28)	7.00E+06	( 28)	4	553	208	37.7	21.5	66.1
77	1.00E+07	( 80)	2.38E+06	( 19)	8	188	85	156.4	94.9	272.9
78	1.33E+07	( 106)	6.25E+06	( 50)	8	494	140	79.6	56.5	113.9
79	1.34E+07	( 267)	5.30E+06	( 106)	20	419	82	94.4	74.1	120.1
80	9.13E+06	( 73)	3.25E+06	( 26)	8	257	100	105.0	66.7	171.2
81	8.50E+06	( 34)	2.75E+06	( 11)	4	217	128	114.8	57.6	251.2
82	1.42E+07	( 85)	4.83E+06	( 29)	6	382	141	109.6	71.5	173.3
83	5.75E+06	( 23)	1.25E+06	( 5)	4	99	84	167.7	64.4	561.5
84	9.50E+06	( 57)	6.50E+06	( 39)	6	513	164	55.0	36.0	84.9
85	1.04E+07	( 83)	3.13E+06	( 25)	8	247	98	123.9	79.0	202.2
86	6.75E+06	( 54)	2.00E+06	( 16)	8	158	78	125.6	71.6	235.0
87	5.50E+06	( 22)	1.00E+06	( 4)	4	79	75	198.5	70.3	782.1
88	1.06E+07	( 53)	5.80E+06	( 29)	5	458	169	68.6	43.0	112.0
89	1.27E+07	( 76)	5.00E+06	( 30)	6	395	144	94.9	61.7	150.0
90	9.83E+06	( 59)	4.67E+06	( 28)	6	369	139	79.0	49.8	128.8
91	6.75E+06	( 27)	3.00E+06	( 12)	4	237	134	84.0	41.6	182.1
92	9.25E+06	( 37)	6.00E+06	( 24)	4	474	192	58.0	33.9	101.3
93	1.30E+07	( 78)	7.83E+06	( 47)	6	619	181	62.4	43.0	91.7
94	7.25E+06	( 58)	1.75E+06	( 14)	8	138	73	153.6	85.7	297.7
95	1.13E+07	( 45)	2.50E+06	( 10)	4	197	122	166.1	84.0	368.6
96	1.00E+07	( 40)	3.50E+06	( 14)	4	276	145	106.5	57.3	211.9
97	7.67E+06	( 46)	2.17E+06	( 13)	6	171	93	131.4	70.7	265.0
98	9.40E+06	( 94)	3.40E+06	( 34)	10	269	92	103.5	69.5	158.1
99	8.75E+06	( 70)	2.50E+06	( 20)	8	197	87	130.4	79.1	226.2
100	1.03E+07	( 82)	2.50E+06	( 20)	8	197	87	152.4	93.5	262.1
101	7.25E+06	( 29)	2.25E+06	( 9)	4	178	115	119.4	55.9	286.7
102	1.15E+07	( 46)	8.75E+06	( 35)	4	691	233	49.5	31.3	79.2
103	6.25E+06	( 50)	2.00E+06	( 16)	8	158	78	116.4	65.9	219.0
104	1.17E+07	( 70)	3.83E+06	( 23)	6	303	125	113.7	70.6	190.8

**KLD106** (Yukon), modern sand, TU11z (counted by Sarah Falkowski 5 April 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.320E+05  
 RELATIVE ERROR (%): 1.57  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	9.67E+06	( 58)	3.00E+06	( 18)	6	237 111	119.9	70.3	216.2
2	1.10E+07	( 66)	3.67E+06	( 22)	6	290 123	111.9	68.6	190.3
3	8.17E+06	( 98)	3.33E+06	( 40)	12	264 83	91.7	63.1	136.1
4	7.71E+06	( 54)	4.43E+06	( 31)	7	350 125	65.4	41.4	105.2
5	1.15E+07	( 46)	4.50E+06	( 18)	4	356 166	95.3	54.6	174.8
6	9.89E+06	( 89)	4.78E+06	( 43)	9	378 115	77.6	53.5	114.5
7	1.46E+07	( 117)	5.38E+06	( 43)	8	425 130	101.8	71.4	148.0
8	7.50E+06	( 60)	2.63E+06	( 21)	8	208 90	106.6	64.3	184.4
9	1.40E+07	( 84)	8.00E+06	( 48)	6	633 183	65.7	45.6	95.8
10	9.19E+06	( 147)	4.38E+06	( 70)	16	346 83	78.8	58.9	106.4
11	1.24E+07	( 224)	5.17E+06	( 93)	18	409 86	90.1	69.7	116.5
12	1.14E+07	( 57)	7.40E+06	( 37)	5	585 192	57.9	37.7	90.1
13	4.00E+06	( 24)	2.83E+06	( 17)	6	224 107	53.0	27.4	105.1
14	1.23E+07	( 49)	7.00E+06	( 28)	4	554 208	65.6	40.6	108.5
15	1.21E+07	( 97)	2.63E+06	( 21)	8	208 90	171.2	107.1	288.5
16	9.00E+06	( 54)	3.67E+06	( 22)	6	290 123	91.7	55.3	158.2
17	9.88E+06	( 79)	5.13E+06	( 41)	8	405 127	72.3	49.1	108.2
18	8.40E+06	( 42)	4.00E+06	( 20)	5	316 140	78.6	45.4	141.3
19	1.75E+07	( 105)	7.50E+06	( 45)	6	593 177	87.4	61.3	126.9
20	7.50E+06	( 105)	2.50E+06	( 35)	14	198 67	112.1	76.1	169.3
21	1.42E+07	( 213)	5.13E+06	( 77)	15	406 93	103.3	78.5	135.8
22	1.33E+07	( 106)	4.88E+06	( 39)	8	386 123	101.7	70.1	150.8
23	1.27E+07	( 76)	5.83E+06	( 35)	6	461 156	81.4	54.0	125.2
24	9.25E+06	( 74)	5.50E+06	( 44)	8	435 131	63.2	43.0	94.0
25	5.00E+06	( 30)	3.00E+06	( 18)	6	237 111	62.5	33.9	119.0
26	1.28E+07	( 154)	6.17E+06	( 74)	12	488 114	77.9	58.3	104.1
27	1.04E+07	( 166)	4.31E+06	( 69)	16	341 83	90.2	67.8	121.3
28	8.50E+06	( 68)	3.00E+06	( 24)	8	237 96	105.7	66.0	176.1
29	1.55E+07	( 62)	2.50E+06	( 10)	4	198 122	227.1	118.1	493.6
30	1.39E+07	( 97)	5.43E+06	( 38)	7	429 139	95.5	65.2	142.9
31	1.35E+07	( 108)	9.13E+06	( 73)	8	722 170	55.6	41.0	76.0
32	1.72E+07	( 86)	6.40E+06	( 32)	5	506 178	100.5	66.5	155.9
33	8.83E+06	( 106)	3.50E+06	( 42)	12	277 85	94.5	65.7	138.5
34	1.00E+07	( 40)	6.25E+06	( 25)	4	494 196	60.0	35.7	103.3
35	1.37E+07	( 82)	4.50E+06	( 27)	6	356 136	113.3	73.0	182.1
36	9.15E+06	( 119)	3.69E+06	( 48)	13	292 84	92.8	66.0	132.7
37	1.24E+07	( 99)	5.25E+06	( 42)	8	415 128	88.3	61.1	129.9
38	9.78E+06	( 176)	3.72E+06	( 67)	18	294 72	98.4	74.0	132.5
39	1.40E+07	( 112)	4.00E+06	( 32)	8	316 111	130.5	87.9	199.7
40	8.67E+06	( 52)	2.67E+06	( 16)	6	211 104	120.8	68.6	226.7
41	1.40E+07	( 56)	5.25E+06	( 21)	4	415 180	99.5	59.7	173.1
42	1.65E+07	( 99)	5.67E+06	( 34)	6	448 153	108.8	73.3	165.7
43	1.02E+07	( 102)	4.40E+06	( 44)	10	348 105	86.8	60.6	126.7
44	5.90E+06	( 413)	1.97E+06	( 138)	70	156 27	111.9	90.5	138.3
45	5.00E+06	( 30)	3.33E+06	( 20)	6	264 117	56.3	31.0	104.6
46	7.39E+06	( 133)	1.83E+06	( 33)	18	145 50	150.0	102.4	226.6
47	1.20E+07	( 48)	6.00E+06	( 24)	4	475 192	74.9	45.2	127.9
48	5.94E+06	( 95)	3.31E+06	( 53)	16	262 72	67.3	47.7	96.1
49	1.05E+07	( 42)	6.25E+06	( 25)	4	494 196	63.0	37.7	107.9
50	6.25E+06	( 25)	2.00E+06	( 8)	4	158 109	115.5	51.4	296.2
51	8.32E+06	( 208)	4.84E+06	( 121)	25	383 71	64.5	50.7	82.1
52	7.81E+06	( 164)	3.52E+06	( 74)	21	279 65	82.9	62.2	110.5

53	8.17E+06	( 49)	3.50E+06	( 21)	6	277	120	87.2	51.6	153.1
54	9.29E+06	( 65)	2.57E+06	( 18)	7	203	95	134.2	79.4	240.2
55	8.80E+06	( 44)	5.00E+06	( 25)	5	396	157	66.0	39.7	112.6
56	7.07E+06	( 106)	2.07E+06	( 31)	15	164	58	127.5	85.2	196.8
57	1.16E+07	( 58)	2.60E+06	( 13)	5	206	112	164.9	90.6	327.3
58	8.75E+06	( 105)	4.33E+06	( 52)	12	343	95	75.8	53.9	107.8
59	1.01E+07	( 91)	2.89E+06	( 26)	9	229	89	130.4	84.1	210.0
60	1.94E+07	( 97)	3.20E+06	( 16)	5	253	125	223.3	132.7	404.2
61	9.20E+06	( 92)	5.70E+06	( 57)	10	451	120	60.7	43.2	86.0
62	1.31E+07	( 196)	4.20E+06	( 63)	15	332	84	116.3	87.4	157.1
63	9.50E+06	( 57)	3.00E+06	( 18)	6	237	111	117.9	69.0	212.7
64	9.00E+06	( 72)	5.25E+06	( 42)	8	415	128	64.4	43.5	96.6
65	1.07E+07	( 64)	5.83E+06	( 35)	6	461	156	68.6	44.9	106.8
66	1.40E+07	( 56)	2.50E+06	( 10)	4	198	122	205.5	106.0	449.6
67	1.63E+07	( 65)	5.25E+06	( 21)	4	415	180	115.3	70.1	198.6
68	1.07E+07	( 64)	1.67E+06	( 10)	6	132	81	234.3	122.1	508.2
69	1.02E+07	( 61)	3.00E+06	( 18)	6	237	111	126.0	74.2	226.5
70	1.48E+07	( 178)	5.33E+06	( 64)	12	422	106	104.1	78.0	140.9
71	1.67E+07	( 100)	5.17E+06	( 31)	6	409	146	120.3	80.2	186.3
72	7.38E+06	( 59)	3.63E+06	( 29)	8	287	106	76.2	48.3	123.4
73	5.25E+06	( 21)	3.00E+06	( 12)	4	237	134	65.4	31.0	145.9
74	5.33E+06	( 32)	3.83E+06	( 23)	6	303	125	52.3	29.7	93.5
75	8.88E+06	( 71)	4.25E+06	( 34)	8	336	115	78.3	51.5	121.5
76	7.50E+06	( 30)	1.00E+06	( 4)	4	79	75	268.3	99.1	1022.4
77	1.53E+07	( 244)	4.00E+06	( 64)	16	316	79	141.7	106.3	188.7
78	1.17E+07	( 164)	5.50E+06	( 77)	14	435	100	79.7	60.0	105.9
79	8.33E+06	( 50)	2.33E+06	( 14)	6	185	97	132.5	73.0	259.3
80	9.00E+06	( 54)	5.50E+06	( 33)	6	435	151	61.4	39.2	97.8
81	1.65E+07	( 66)	9.50E+06	( 38)	4	752	243	65.2	43.2	99.9
82	1.28E+07	( 179)	4.36E+06	( 61)	14	345	89	109.8	81.8	149.4
83	1.22E+07	( 61)	8.00E+06	( 40)	5	633	200	57.3	37.9	87.7
84	1.83E+07	( 73)	6.75E+06	( 27)	4	534	204	101.0	64.5	163.4
85	9.17E+06	( 55)	2.33E+06	( 14)	6	185	97	145.5	80.9	283.1
86	1.18E+07	( 47)	4.50E+06	( 18)	4	356	166	97.4	55.9	178.2
87	2.34E+07	( 117)	5.80E+06	( 29)	5	459	170	150.1	99.9	233.6
88	1.62E+07	( 97)	5.83E+06	( 35)	6	461	156	103.6	70.0	157.2
89	1.22E+07	( 73)	2.00E+06	( 12)	6	158	90	223.4	122.7	449.6
90	1.45E+07	( 58)	4.50E+06	( 18)	4	356	166	119.9	70.3	216.2
91	2.58E+07	( 103)	1.00E+07	( 40)	4	791	250	96.4	66.5	142.6
92	1.88E+07	( 75)	4.50E+06	( 18)	4	356	166	154.5	92.4	274.3
93	2.44E+07	( 195)	6.13E+06	( 49)	8	485	139	148.3	108.4	207.1
94	1.91E+07	( 286)	4.60E+06	( 69)	15	364	88	153.9	116.9	202.6
95	2.05E+07	( 82)	6.00E+06	( 24)	4	475	192	127.2	80.5	209.7
96	1.42E+07	( 85)	4.00E+06	( 24)	6	316	128	131.8	83.6	216.8
97	1.98E+07	( 79)	6.00E+06	( 24)	4	475	192	122.6	77.4	202.5
98	2.43E+07	( 97)	6.25E+06	( 25)	4	494	196	144.3	92.9	233.6
99	1.47E+07	( 88)	4.67E+06	( 28)	6	369	139	117.2	76.3	186.3
100	1.38E+07	( 83)	6.83E+06	( 41)	6	541	169	75.9	51.7	113.3
101	1.73E+07	( 156)	7.78E+06	( 70)	9	615	148	83.6	62.7	112.5
102	1.78E+07	( 107)	5.33E+06	( 32)	6	422	149	124.7	83.8	191.3
103	1.88E+07	( 75)	5.00E+06	( 20)	4	396	175	139.4	85.0	240.8

**KLD110** (Yukon), modern sand, UC2z (counted by Sarah Falkowski 4 July 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 3.820E+05  
 RELATIVE ERROR (%): 1.57  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	5.80E+06	( 58)	3.00E+05	( 3)	10	39 42	407.4	142.1 1896.3
2	6.71E+06	( 47)	5.71E+06	( 40)	7	748 236	26.8	17.2 41.9
3	2.56E+06	( 23)	4.56E+06	( 41)	9	596 186	12.8	7.3 21.9
4	2.07E+06	( 31)	3.87E+06	( 58)	15	506 133	12.2	7.6 19.2
5	1.90E+06	( 19)	6.40E+06	( 64)	10	838 210	6.8	3.8 11.5
6	1.50E+06	( 12)	4.50E+06	( 36)	8	589 196	7.7	3.6 15.0
7	3.33E+06	( 20)	2.12E+07	( 127)	6	2771 498	3.6	2.1 5.8
8	2.80E+06	( 14)	5.20E+06	( 26)	5	681 265	12.4	5.9 24.4
9	4.80E+06	( 72)	7.07E+06	( 106)	15	925 182	15.5	11.3 21.1
10	5.63E+05	( 9)	1.00E+06	( 16)	16	131 65	12.9	5.0 30.8
11	3.50E+06	( 21)	6.33E+06	( 38)	6	829 268	12.7	7.0 22.1
12	8.75E+05	( 7)	2.88E+06	( 23)	8	376 156	7.1	2.5 16.7
13	9.52E+05	( 20)	1.81E+06	( 38)	21	237 77	12.1	6.6 21.2
14	3.55E+06	( 71)	6.40E+06	( 128)	20	838 150	12.7	9.3 17.1
15	3.00E+06	( 18)	7.50E+06	( 45)	6	982 293	9.2	5.0 16.1
16	2.13E+06	( 17)	2.38E+06	( 19)	8	311 141	20.4	10.0 41.4
17	2.35E+07	( 94)	3.75E+06	( 15)	4	491 250	140.3	81.9 260.8
18	3.59E+06	( 115)	7.66E+06	( 245)	32	1002 132	10.7	8.4 13.7
19	6.35E+06	( 127)	1.80E+06	( 36)	20	236 78	79.8	55.0 119.2
20	2.30E+06	( 46)	6.15E+06	( 123)	20	805 147	8.6	5.9 12.1
21	1.67E+06	( 35)	3.19E+06	( 67)	21	418 102	12.0	7.7 18.2
22	1.60E+06	( 16)	6.80E+06	( 68)	10	890 217	5.4	2.9 9.4
23	1.11E+06	( 10)	8.89E+05	( 8)	9	116 80	28.4	10.1 82.8
24	3.86E+06	( 54)	9.86E+06	( 138)	14	1290 223	9.0	6.4 12.3
25	1.00E+06	( 9)	2.11E+06	( 19)	9	276 125	10.9	4.3 25.1
26	7.70E+06	( 154)	1.90E+07	( 379)	20	2480 266	9.3	7.5 11.5
27	1.25E+06	( 5)	2.00E+06	( 8)	4	262 180	14.4	3.7 49.3
28	3.15E+06	( 63)	6.70E+06	( 134)	20	877 154	10.7	7.8 14.6
29	2.46E+06	( 59)	6.44E+06	( 155)	24	845 138	8.7	6.3 11.8
30	2.21E+06	( 53)	5.33E+06	( 128)	24	698 125	9.5	6.7 13.1
31	1.88E+07	( 113)	8.33E+05	( 5)	6	109 93	482.3	211.2 1446.4
32	1.65E+07	( 99)	2.33E+06	( 14)	6	305 161	158.0	91.1 299.4
33	5.19E+06	( 83)	9.56E+06	( 153)	16	1252 206	12.4	9.4 16.5
34	2.93E+06	( 79)	6.26E+06	( 169)	27	819 128	10.7	8.1 14.2
35	2.25E+06	( 18)	3.25E+06	( 26)	8	425 166	15.8	8.2 29.9
36	7.50E+05	( 6)	1.63E+06	( 13)	8	213 116	10.7	3.3 29.7
37	7.20E+06	( 36)	1.74E+07	( 87)	5	2277 492	9.5	6.2 14.1
38	6.88E+05	( 11)	1.31E+06	( 21)	16	172 74	12.0	5.2 25.9
39	1.25E+06	( 30)	4.96E+06	( 119)	24	649 120	5.8	3.7 8.7
40	1.33E+07	( 93)	9.14E+06	( 64)	7	1197 300	33.1	23.8 46.3
41	2.27E+06	( 34)	7.87E+06	( 118)	15	1030 192	6.6	4.4 9.7
42	3.17E+06	( 38)	5.00E+06	( 60)	12	654 170	14.5	9.4 22.1
43	1.15E+07	( 46)	7.50E+05	( 3)	4	98 105	325.4	111.6 1557.2
44	4.63E+06	( 37)	1.45E+07	( 116)	8	1898 357	7.3	4.9 10.6
45	8.94E+06	( 143)	1.67E+07	( 267)	16	2184 276	12.2	9.8 15.3
46	1.50E+06	( 6)	1.20E+07	( 48)	4	1571 454	2.9	1.0 6.7
47	6.33E+06	( 76)	1.92E+06	( 23)	12	251 104	74.7	46.6 125.1
48	6.43E+05	( 9)	2.36E+06	( 33)	14	309 107	6.3	2.6 13.3
49	1.67E+05	( 1)	1.17E+06	( 7)	6	153 112	3.7	0.1 25.4
50	1.32E+07	( 79)	1.13E+07	( 68)	6	1483 361	26.5	18.9 37.2
51	1.83E+06	( 66)	4.92E+06	( 177)	36	644 99	8.5	6.3 11.4
52	1.67E+06	( 10)	1.17E+06	( 7)	6	153 112	32.3	11.2 100.3

53	2.00E+06	( 12)	3.50E+06	( 21)	6	458	198	13.1	5.8	27.7
54	3.21E+06	( 154)	7.06E+06	( 339)	48	924	104	10.4	8.4	12.8
55	4.50E+06	( 81)	1.38E+07	( 249)	18	1811	236	7.5	5.7	9.7
56	1.00E+06	( 4)	5.00E+05	( 2)	4	65	83	43.9	6.5	486.4
57	6.44E+06	( 58)	2.44E+07	( 220)	9	3200	442	6.0	4.4	8.1
58	1.00E+07	( 40)	1.30E+07	( 52)	4	1702	473	17.6	11.3	27.0
59	1.08E+07	( 65)	1.50E+06	( 9)	6	196	128	160.4	81.2	366.5
60	1.30E+07	( 130)	3.50E+06	( 35)	10	458	154	84.0	57.7	126.0
61	6.78E+06	( 122)	1.18E+07	( 212)	18	1542	217	13.2	10.3	16.7
62	4.25E+06	( 68)	1.03E+07	( 164)	16	1342	213	9.5	7.0	12.7
63	1.62E+07	( 97)	1.50E+06	( 9)	6	196	128	237.8	123.2	532.4
64	4.67E+06	( 28)	9.50E+06	( 57)	6	1243	330	11.2	6.9	17.9
65	2.00E+06	( 12)	3.33E+06	( 20)	6	436	193	13.8	6.1	29.4
66	3.53E+06	( 141)	7.10E+06	( 284)	40	929	114	11.4	9.1	14.2
67	1.10E+07	( 88)	8.75E+05	( 7)	8	115	84	275.2	132.2	696.6
68	1.29E+06	( 31)	3.46E+06	( 83)	24	453	100	8.6	5.4	13.0
69	1.89E+06	( 68)	3.94E+06	( 142)	36	516	88	10.9	8.1	14.7
70	1.33E+06	( 8)	5.83E+06	( 35)	6	764	257	5.3	2.1	11.5
71	2.00E+06	( 18)	1.78E+06	( 16)	9	233	115	25.6	12.4	53.7
72	8.75E+06	( 140)	4.06E+06	( 65)	16	532	132	49.0	36.2	66.9
73	4.29E+05	( 9)	1.95E+06	( 41)	21	256	80	5.1	2.1	10.5
74	2.00E+06	( 16)	8.38E+06	( 67)	8	1096	269	5.5	2.9	9.5
75	5.40E+06	( 81)	1.13E+07	( 169)	15	1475	231	11.0	8.3	14.5
76	1.15E+07	( 69)	6.67E+05	( 4)	6	87	82	368.9	145.4	1338.6
77	4.75E+06	( 38)	2.25E+06	( 18)	8	295	137	47.8	26.8	89.2
78	1.33E+06	( 20)	4.20E+06	( 63)	15	550	139	7.3	4.1	12.2
79	1.47E+07	( 176)	8.33E+05	( 10)	12	109	67	384.3	209.9	801.7
80	1.00E+06	( 12)	4.75E+06	( 57)	12	622	165	4.9	2.3	9.1
81	2.63E+06	( 63)	6.04E+06	( 145)	24	791	133	9.9	7.2	13.4
82	1.62E+06	( 73)	3.98E+06	( 179)	45	521	79	9.3	7.0	12.5
83	4.80E+06	( 24)	1.76E+07	( 88)	5	2304	495	6.3	3.8	9.9
84	1.66E+07	( 133)	6.63E+06	( 53)	8	867	239	57.0	41.2	80.0
85	1.13E+06	( 9)	1.38E+06	( 11)	8	180	106	18.7	6.8	49.5
86	7.47E+06	( 112)	2.67E+05	( 4)	15	35	33	588.1	238.3	2032.6
87	5.04E+06	( 121)	1.21E+06	( 29)	24	158	58	94.2	62.7	146.8
88	1.30E+06	( 26)	2.05E+06	( 41)	20	268	84	14.5	8.5	24.2
89	1.25E+06	( 15)	2.92E+06	( 35)	12	382	129	9.8	5.0	18.4
90	7.75E+06	( 31)	5.00E+05	( 2)	4	65	83	322.0	89.4	2500.3
91	1.80E+07	( 108)	1.33E+06	( 8)	6	175	120	295.8	149.2	694.2
92	2.00E+06	( 8)	3.25E+06	( 13)	4	425	232	14.2	5.0	36.5
93	7.42E+06	( 89)	2.04E+07	( 245)	12	2672	351	8.3	6.4	10.8
94	1.00E+07	( 160)	8.13E+05	( 13)	16	106	58	272.1	157.7	518.6
95	2.90E+06	( 29)	4.10E+06	( 41)	10	537	167	16.2	9.7	26.6
96	1.00E+06	( 5)	6.20E+06	( 31)	5	812	290	3.8	1.1	9.6
97	1.93E+06	( 27)	1.93E+06	( 27)	14	252	97	22.8	12.9	40.4
98	3.21E+06	( 77)	6.96E+06	( 167)	24	911	144	10.6	7.9	14.0
99	8.50E+06	( 34)	1.25E+07	( 50)	4	1636	463	15.5	9.7	24.5

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm^2): 3.800E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm^2): 119.60 5.40

SIZE OF COUNTER SQUARE (cm^2): 1.000E-06

#### ----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rhos (Ns) (cm^-2)	RhoI (Ni) (cm^-2)	Squares	U+/-2s	Grain Age	--95% CI--
100	1.52E+07 ( 91)	2.72E+07 ( 163)	6	3575 570	12.7	9.7 16.7
101	8.17E+06 ( 49)	2.22E+07 ( 133)	6	2917 513	8.4	5.9 11.7
102	1.53E+07 ( 61)	2.60E+07 ( 104)	4	3421 678	13.3	9.5 18.5
103	1.11E+07 ( 111)	2.10E+06 ( 21)	10	276 119 118.3	74.3	198.8

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm^2): 3.810E+05

RELATIVE ERROR (%): 1.57

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 50.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>-2</sup>): 119.60 5.40  
SIZE OF COUNTER SQUARE (cm<sup>-2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rhos (cm <sup>-2</sup> )	RhoI (cm <sup>-2</sup> )	Squares	U+/-2s	Grain Age (Ma)	--95% CI--
104	1.47E+07 ( 88)	3.12E+07 ( 187)	6	4090 611	10.7	8.2 14.1

## Dataset S2. Single grain apatite fission-track ages

=====ZetaAge Program v. 4.8 (Brandon 8/13/02)=====

**KLD\_9** Kluane detrital UC03A- (Counted by Eva Enkelmann 28 Nov 2014)

EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 7.856E+05

RELATIVE ERROR (%): 1.80

EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00

ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00

SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+-2s	Grain Age	Age (Ma)	--95% CI--
1	1.58E+06	( 19)	1.42E+06	( 17)	12	27 13	103.1	51.0	209.9
2	8.50E+05	( 34)	4.75E+05	( 19)	40	9 4	163.9	91.6	302.3
3	8.89E+05	( 8)	2.22E+05	( 2)	9	4 5	343.1	73.8	2860.6
4	2.00E+06	( 24)	1.33E+06	( 16)	12	25 13	137.7	70.7	275.6
5	1.00E+06	( 30)	6.00E+05	( 18)	30	11 5	152.8	83.1	289.3
6	1.24E+06	( 26)	9.52E+05	( 20)	21	18 8	119.7	64.6	224.9
7	1.04E+06	( 26)	6.40E+05	( 16)	25	12 6	149.0	77.6	295.3
8	1.08E+06	( 43)	6.75E+05	( 27)	40	13 5	146.3	88.8	245.1
9	1.07E+06	( 15)	9.29E+05	( 13)	14	18 10	106.4	47.5	241.0
10	7.00E+05	( 14)	9.00E+05	( 18)	20	17 8	72.2	33.2	152.4
11	9.05E+05	( 19)	1.05E+06	( 22)	21	20 8	80.0	41.0	154.0
12	7.60E+05	( 38)	6.60E+05	( 33)	50	13 4	106.2	65.0	174.2
13	2.56E+06	( 64)	1.88E+06	( 47)	25	36 10	125.4	84.9	186.5
14	7.08E+05	( 17)	1.00E+06	( 24)	24	19 8	65.8	33.1	126.9
15	5.00E+05	( 15)	5.67E+05	( 17)	30	11 5	81.7	38.0	172.7
16	1.37E+06	( 41)	1.37E+06	( 41)	30	26 8	92.4	58.5	145.7
17	9.58E+05	( 23)	3.33E+05	( 8)	24	6 4	258.9	114.4	657.9
18	4.50E+05	( 18)	6.25E+05	( 25)	40	12 5	66.9	34.3	126.8
19	6.60E+05	( 33)	7.60E+05	( 38)	50	15 5	80.4	48.9	131.2
20	1.22E+06	( 11)	7.78E+05	( 7)	9	15 11	143.5	51.5	430.7
21	9.50E+05	( 19)	8.50E+05	( 17)	20	16 8	103.1	51.0	209.9
22	1.05E+06	( 22)	1.14E+06	( 24)	21	22 9	84.8	45.4	157.1
23	2.35E+06	( 47)	1.45E+06	( 29)	20	28 10	148.8	92.2	244.2
24	6.33E+05	( 19)	5.00E+05	( 15)	30	10 5	116.6	56.5	244.9
25	1.50E+06	( 45)	7.67E+05	( 23)	30	15 6	179.0	106.9	308.3
26	3.67E+05	( 11)	3.67E+05	( 11)	30	7 4	92.4	36.5	232.7
27	8.67E+05	( 13)	6.67E+05	( 10)	15	13 8	119.5	48.8	301.4
28	3.67E+05	( 11)	3.00E+05	( 9)	30	6 4	112.4	42.7	303.6
29	1.21E+06	( 29)	4.58E+05	( 11)	24	9 5	238.7	117.8	523.2
30	6.33E+05	( 19)	9.00E+05	( 27)	30	17 7	65.3	34.3	121.3
31	2.50E+05	( 5)	2.00E+05	( 4)	20	4 4	114.5	25.0	561.5
32	7.75E+05	( 31)	9.50E+05	( 38)	40	18 6	75.6	45.5	124.3
33	1.65E+06	( 33)	1.40E+06	( 28)	20	27 10	108.7	63.9	186.0
34	2.33E+06	( 35)	1.47E+06	( 22)	15	28 12	146.0	83.8	260.0
35	1.08E+06	( 43)	2.50E+05	( 10)	40	5 3	383.7	194.9	837.3
36	1.08E+06	( 26)	9.58E+05	( 23)	24	18 8	104.3	57.4	190.4
37	7.25E+05	( 29)	9.25E+05	( 37)	40	18 6	72.6	43.1	121.0
38	1.67E+06	( 25)	8.00E+05	( 12)	15	15 9	189.8	93.1	410.7
39	1.04E+06	( 26)	1.24E+06	( 31)	25	24 8	77.7	44.3	134.7
40	8.52E+05	( 23)	9.63E+05	( 26)	27	18 7	81.9	44.7	148.6
41	1.08E+06	( 43)	1.23E+06	( 49)	40	23 7	81.2	52.7	124.6
42	9.00E+05	( 45)	9.00E+05	( 45)	50	17 5	92.4	59.8	142.6
43	3.75E+05	( 6)	1.00E+06	( 16)	16	19 9	35.4	11.2	93.3
44	1.50E+06	( 30)	1.95E+06	( 39)	20	37 12	71.3	42.8	117.4
45	4.00E+05	( 16)	4.50E+05	( 18)	40	9 4	82.3	39.3	169.8
46	1.57E+06	( 33)	1.48E+06	( 31)	21	28 10	98.3	58.5	165.4
47	1.65E+06	( 33)	1.85E+06	( 37)	20	35 12	82.5	50.1	135.2

48	7.33E+05	( 22)	1.10E+06	( 33)	30	21	7	61.9	34.3	108.9
49	1.00E+06	( 9)	7.78E+05	( 7)	9	15	11	118.0	39.5	367.8
50	9.64E+05	( 27)	5.36E+05	( 15)	28	10	5	164.6	85.4	330.6
51	1.19E+06	( 19)	5.00E+05	( 8)	16	10	7	214.9	91.7	559.3
52	1.75E+05	( 7)	3.25E+05	( 13)	40	6	3	50.5	16.9	133.9
53	1.50E+06	( 45)	1.03E+06	( 31)	30	20	7	133.5	83.0	217.5
54	4.64E+05	( 13)	4.29E+05	( 12)	28	8	5	100.0	42.2	237.6
55	9.25E+05	( 37)	9.00E+05	( 36)	40	17	6	95.0	58.5	154.2
56	6.00E+05	( 30)	6.40E+05	( 32)	50	12	4	86.7	51.0	146.8
57	2.27E+06	( 34)	2.33E+06	( 35)	15	45	15	89.8	54.4	147.8
58	6.67E+05	( 10)	7.33E+05	( 11)	15	14	8	84.2	32.1	216.0
59	1.05E+06	( 21)	9.50E+05	( 19)	20	18	8	102.0	52.4	199.4
60	5.33E+05	( 16)	7.67E+05	( 23)	30	15	6	64.6	31.9	126.9
61	5.00E+05	( 20)	5.50E+05	( 22)	40	11	4	84.1	43.6	160.7
62	1.00E+06	( 15)	2.60E+06	( 39)	15	50	16	35.9	18.3	66.2
63	7.62E+05	( 16)	7.62E+05	( 16)	21	15	7	92.4	43.4	196.0
64	2.56E+06	( 23)	1.33E+06	( 12)	9	25	14	174.9	84.6	382.3
65	1.14E+06	( 24)	1.57E+06	( 33)	21	30	10	67.5	38.1	117.2
66	1.89E+06	( 17)	2.78E+06	( 25)	9	53	21	63.2	32.0	121.0
67	2.25E+06	( 9)	1.75E+06	( 7)	4	33	24	118.0	39.5	367.8
68	6.00E+05	( 30)	5.00E+05	( 25)	50	10	4	110.6	63.1	195.4
69	3.20E+05	( 8)	4.40E+05	( 11)	25	8	5	67.7	23.6	182.3
70	6.50E+05	( 13)	4.00E+05	( 8)	20	8	5	148.4	57.8	408.1
71	3.00E+05	( 12)	5.25E+05	( 21)	40	10	4	53.3	23.8	112.3
72	1.44E+06	( 13)	8.89E+05	( 8)	9	17	12	148.4	57.8	408.1

**KLD\_13** Kluane detrital UC03A- (Counted by Eva Enkelmann 30 Nov 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 7.556E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Grain Age (Ma)	--95% CI--
1	4.50E+05	( 45)	4.90E+05	( 49)	100	10 3	81.7	53.3	124.8
2	1.29E+05	( 9)	2.86E+05	( 20)	70	6 3	40.6	16.1	92.0
3	6.00E+05	( 15)	9.60E+05	( 24)	25	19 8	55.9	27.2	110.3
4	7.14E+05	( 10)	8.57E+05	( 12)	14	17 10	74.4	28.8	185.9
5	2.20E+06	( 44)	1.90E+06	( 38)	20	38 12	102.8	65.2	162.6
6	1.79E+05	( 5)	2.86E+05	( 8)	28	6 4	56.4	14.4	191.3
7	1.47E+06	( 44)	1.57E+06	( 47)	30	31 9	83.3	54.0	128.2
8	1.60E+05	( 8)	6.20E+05	( 31)	50	12 4	23.4	9.2	51.2
9	1.28E+06	( 23)	7.22E+05	( 13)	18	14 8	155.7	76.4	332.1
10	3.50E+05	( 14)	5.75E+05	( 23)	40	11 5	54.5	25.9	109.7
11	1.33E+05	( 4)	4.33E+05	( 13)	30	9 5	28.2	6.5	88.6
12	2.86E+05	( 20)	3.29E+05	( 23)	70	7 3	77.5	40.4	146.7
13	3.44E+05	( 11)	4.69E+05	( 15)	32	9 5	65.6	27.2	151.4
14	5.80E+05	( 29)	4.20E+05	( 21)	50	8 4	122.2	67.7	224.4
15	9.60E+05	( 48)	8.40E+05	( 42)	50	17 5	101.5	65.8	157.0
16	4.50E+05	( 18)	6.50E+05	( 26)	40	13 5	61.9	31.9	116.6
17	3.60E+05	( 18)	5.60E+05	( 28)	50	11 4	57.5	29.9	107.0
18	2.20E+05	( 11)	3.00E+05	( 15)	50	6 3	65.6	27.2	151.4
19	7.00E+05	( 35)	8.60E+05	( 43)	50	17 5	72.5	45.1	115.7
20	4.40E+05	( 22)	4.40E+05	( 22)	50	9 4	88.9	47.1	167.5
21	8.33E+05	( 25)	7.67E+05	( 23)	30	15 6	96.5	52.7	177.2
22	2.33E+05	( 7)	5.33E+05	( 16)	30	11 5	39.6	13.6	100.0
23	2.57E+05	( 9)	5.71E+05	( 20)	35	11 5	40.6	16.1	92.0
24	1.42E+06	( 17)	9.17E+05	( 11)	12	18 11	136.2	60.8	319.1
25	2.03E+06	( 61)	1.87E+06	( 56)	30	37 10	96.8	66.3	141.5
26	2.22E+05	( 4)	5.56E+05	( 10)	18	11 7	36.6	8.2	123.1
27	2.86E+05	( 6)	4.76E+05	( 10)	21	9 6	54.1	16.0	161.2
28	2.25E+05	( 9)	2.00E+05	( 8)	40	4 3	99.7	34.4	293.5
29	1.06E+06	( 53)	1.18E+06	( 59)	50	23 6	80.0	54.1	117.7
30	5.50E+05	( 11)	7.50E+05	( 15)	20	15 8	65.6	27.2	151.4
31	2.86E+05	( 6)	2.86E+05	( 6)	21	6 4	88.9	23.9	326.7
32	1.94E+06	( 68)	1.86E+06	( 65)	35	37 9	93.0	65.2	132.6
33	3.40E+05	( 17)	6.00E+05	( 30)	50	12 4	50.8	26.2	94.4
34	1.13E+06	( 34)	1.10E+06	( 33)	30	22 8	91.6	55.1	152.1
35	1.28E+06	( 51)	1.45E+06	( 58)	40	29 8	78.3	52.7	115.9
36	3.75E+05	( 15)	5.25E+05	( 21)	40	10 5	63.8	30.6	129.0
37	2.33E+05	( 14)	4.50E+05	( 27)	60	9 3	46.5	22.4	91.2
38	2.00E+05	( 4)	4.00E+05	( 8)	20	8 5	45.5	9.9	165.1
39	3.50E+05	( 14)	7.00E+05	( 28)	40	14 5	44.9	21.7	87.4
40	1.75E+06	( 14)	1.25E+06	( 10)	8	25 15	123.6	51.5	308.2
41	4.00E+05	( 24)	6.00E+05	( 36)	60	12 4	59.6	33.9	102.2
42	1.50E+05	( 6)	5.75E+05	( 23)	40	11 5	23.8	7.8	58.8
43	1.81E+06	( 38)	1.43E+06	( 30)	21	28 10	112.3	68.0	187.1
44	2.80E+05	( 14)	4.00E+05	( 20)	50	8 4	62.6	29.2	129.3
45	3.60E+05	( 18)	4.40E+05	( 22)	50	9 4	73.0	36.9	141.7
46	5.25E+05	( 21)	5.25E+05	( 21)	40	10 5	88.9	46.3	170.2
47	3.13E+05	( 5)	5.63E+05	( 9)	16	11 7	50.2	13.1	163.3
48	1.00E+05	( 4)	2.75E+05	( 11)	40	5 3	33.3	7.6	109.0
49	5.83E+05	( 7)	4.17E+05	( 5)	12	8 7	123.1	34.1	482.6
50	8.33E+05	( 10)	5.00E+05	( 6)	12	10 8	146.0	48.9	481.5
51	1.33E+05	( 4)	3.00E+05	( 9)	30	6 4	40.5	8.9	141.1

52	7.78E+05	( 7)	1.00E+06	( 9)	9	20	13	69.6	22.0	206.9
53	1.75E+05	( 7)	3.25E+05	( 13)	40	6	4	48.5	16.3	128.8
54	2.34E+06	( 117)	5.80E+05	( 29)	50	12	4	350.0	234.1	540.4
55	4.29E+05	( 15)	2.86E+05	( 10)	35	6	4	132.2	56.1	326.2
56	1.10E+06	( 33)	7.67E+05	( 23)	30	15	6	126.9	72.7	225.4
57	1.17E+06	( 21)	1.39E+06	( 25)	18	28	11	74.9	39.9	138.6
58	4.00E+05	( 16)	9.25E+05	( 37)	40	18	6	38.8	20.1	71.0
59	1.19E+06	( 25)	4.29E+05	( 9)	21	9	6	241.3	111.2	579.2
60	1.00E+06	( 40)	1.13E+06	( 45)	40	22	7	79.1	50.4	123.6
61	2.67E+05	( 8)	3.67E+05	( 11)	30	7	4	65.1	22.7	175.5
62	6.33E+05	( 19)	4.67E+05	( 14)	30	9	5	120.0	57.5	257.0
63	1.30E+06	( 39)	1.03E+06	( 31)	30	21	7	111.6	68.0	184.3
64	1.56E+05	( 5)	6.88E+05	( 22)	32	14	6	20.8	6.0	54.9
65	2.67E+05	( 4)	4.00E+05	( 6)	15	8	6	60.2	12.4	247.1
66	2.00E+05	( 5)	8.00E+05	( 20)	25	16	7	22.9	6.6	61.2
67	5.75E+05	( 23)	7.00E+05	( 28)	40	14	5	73.2	40.3	131.2
68	9.50E+05	( 38)	8.50E+05	( 34)	40	17	6	99.3	61.0	162.1
69	1.50E+05	( 6)	3.75E+05	( 15)	40	7	4	36.3	11.4	97.0
70	1.27E+06	( 38)	1.83E+06	( 55)	30	36	10	61.7	39.6	94.7
71	2.47E+06	( 74)	2.03E+06	( 61)	30	40	10	107.7	75.7	153.5
72	9.67E+05	( 29)	1.03E+06	( 31)	30	21	7	83.3	48.5	142.3
73	1.50E+06	( 18)	6.67E+05	( 8)	12	13	9	196.2	82.7	514.8
74	5.83E+05	( 7)	7.50E+05	( 9)	12	15	10	69.6	22.0	206.9
75	4.80E+05	( 24)	6.20E+05	( 31)	50	12	4	69.1	38.8	121.0
76	3.40E+05	( 17)	5.00E+05	( 25)	50	10	4	60.8	30.8	116.4
77	3.25E+05	( 13)	4.75E+05	( 19)	40	9	4	61.2	27.7	129.6
78	4.58E+05	( 11)	7.50E+05	( 18)	24	15	7	54.8	23.3	121.3
79	7.50E+05	( 12)	1.25E+05	( 2)	16	2	3	486.3	118.4	3669.5
80	2.03E+06	( 61)	1.53E+06	( 46)	30	30	9	117.6	79.0	176.0
81	7.25E+05	( 29)	9.75E+05	( 39)	40	19	6	66.3	39.5	109.7
82	5.00E+05	( 20)	6.50E+05	( 26)	40	13	5	68.6	36.3	127.2
83	1.25E+06	( 20)	7.50E+05	( 12)	16	15	8	146.7	69.0	326.7
84	3.50E+05	( 14)	5.00E+05	( 20)	40	10	4	62.6	29.2	129.3
85	1.73E+06	( 52)	2.17E+06	( 65)	30	43	11	71.3	48.5	104.1
86	1.07E+06	( 32)	1.37E+06	( 41)	30	27	8	69.6	42.4	112.9
87	1.20E+06	( 36)	1.10E+06	( 33)	30	22	8	96.9	58.8	159.9
88	3.33E+06	( 40)	2.92E+06	( 35)	12	58	20	101.5	63.0	164.1
89	8.80E+05	( 22)	1.12E+06	( 28)	25	22	8	70.1	38.2	126.4
90	4.40E+05	( 22)	4.20E+05	( 21)	50	8	4	93.1	49.0	177.1
91	2.00E+05	( 7)	3.71E+05	( 13)	35	7	4	48.5	16.3	128.8
92	1.08E+06	( 13)	9.17E+05	( 11)	12	18	11	104.7	43.6	255.9
93	5.50E+05	( 22)	7.25E+05	( 29)	40	14	5	67.7	37.0	121.4
94	3.75E+05	( 15)	4.50E+05	( 18)	40	9	4	74.3	34.9	155.1
95	5.50E+05	( 22)	7.25E+05	( 29)	40	14	5	67.7	37.0	121.4
96	3.75E+05	( 6)	1.00E+06	( 16)	16	20	10	34.1	10.7	89.8
97	2.60E+05	( 26)	4.50E+05	( 45)	100	9	3	51.7	30.5	85.2
98	6.25E+05	( 25)	4.25E+05	( 17)	40	8	4	130.0	67.9	255.0
99	8.00E+05	( 24)	1.57E+06	( 47)	30	31	9	45.7	26.7	76.0
100	1.33E+05	( 4)	1.67E+05	( 5)	30	3	3	71.8	14.2	324.7
101	4.50E+05	( 18)	6.25E+05	( 25)	40	12	5	64.3	33.0	122.0
102	2.20E+05	( 11)	3.80E+05	( 19)	50	8	3	52.0	22.2	113.7
103	5.75E+05	( 23)	7.00E+05	( 28)	40	14	5	73.2	40.3	131.2
104	9.00E+05	( 9)	1.20E+06	( 12)	10	24	14	67.1	24.9	171.5

**KLD\_18** Kluane detrital UC03A- (Counted by Eva Enkelmann 24 Nov 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 7.456E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Grain Age (Ma)	--95% CI--
1	1.79E+06	( 43)	8.33E+05	( 20)	24	17	7	186.4	108.3 332.5
2	1.75E+05	( 7)	4.25E+05	( 17)	40	9	4	36.8	12.7 91.7
3	2.00E+05	( 10)	8.00E+05	( 40)	50	16	5	22.3	9.8 44.8
4	3.00E+04	( 3)	1.90E+05	( 19)	100	4	2	14.6	2.6 47.3
5	4.00E+05	( 12)	9.33E+05	( 28)	30	19	7	38.1	17.5 76.5
6	2.23E+06	( 67)	1.33E+06	( 40)	30	27	8	146.1	97.7 221.3
7	5.00E+05	( 25)	5.80E+05	( 29)	50	12	4	75.8	42.6 133.5
8	3.75E+05	( 15)	7.50E+05	( 30)	40	15	5	44.3	22.0 84.3
9	3.89E+05	( 7)	2.78E+05	( 5)	18	6	5	121.5	33.7 476.5
10	5.00E+06	( 30)	4.33E+06	( 26)	6	87	34	101.1	57.9 177.2
11	4.67E+05	( 14)	4.67E+05	( 14)	30	9	5	87.8	38.9 197.1
12	9.38E+05	( 15)	9.38E+05	( 15)	16	19	10	87.8	40.1 191.3
13	1.50E+05	( 15)	5.60E+05	( 56)	100	11	3	23.8	12.4 42.3
14	4.20E+05	( 21)	1.04E+06	( 52)	50	21	6	35.8	20.4 60.1
15	1.75E+05	( 7)	1.00E+06	( 40)	40	20	6	15.7	5.8 34.8
16	5.00E+05	( 15)	9.00E+05	( 27)	30	18	7	49.1	24.2 95.0
17	5.00E+05	( 10)	6.00E+05	( 12)	20	12	7	73.4	28.4 183.5
18	2.25E+05	( 9)	5.50E+05	( 22)	40	11	5	36.4	14.6 81.2
19	6.60E+05	( 33)	1.66E+06	( 83)	50	33	7	35.1	22.7 53.1
20	6.00E+04	( 6)	1.90E+05	( 19)	100	4	2	28.4	9.1 72.3
21	6.00E+04	( 6)	1.40E+05	( 14)	100	3	1	38.3	11.9 104.1
22	1.50E+06	( 27)	4.44E+05	( 8)	18	9	6	287.5	130.3 718.5
23	6.60E+05	( 33)	7.40E+05	( 37)	50	15	5	78.4	47.5 128.4
24	4.70E+05	( 47)	2.10E+05	( 21)	100	4	2	193.9	114.7 339.6
25	4.20E+05	( 21)	7.80E+05	( 39)	50	16	5	47.6	26.5 82.5
26	4.44E+05	( 4)	7.78E+05	( 7)	9	16	11	51.1	10.8 195.7
27	2.40E+05	( 12)	4.00E+05	( 20)	50	8	4	53.1	23.6 113.0
28	2.67E+05	( 8)	5.67E+05	( 17)	30	11	5	41.9	15.5 101.0
29	4.00E+04	( 1)	5.60E+05	( 14)	25	11	6	7.1	0.1 41.4
30	2.00E+05	( 5)	4.40E+05	( 11)	25	9	5	40.7	10.9 124.3
31	1.78E+06	( 16)	4.44E+05	( 4)	9	9	8	334.4	112.9 1310.7
32	2.20E+05	( 11)	6.00E+05	( 30)	50	12	4	32.6	14.6 66.2
33	2.80E+05	( 7)	1.60E+05	( 4)	25	3	3	150.3	39.2 683.1

**KLD\_20** Kluane detrital UC03A- (Counted by Eva Enkelmann 28 Nov 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 7.356E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Grain Age (Ma)	--95% CI--
1	6.00E+05	( 18)	1.00E+06	( 30)	30	20 7	52.3	27.4	96.3
2	1.13E+06	( 34)	9.33E+05	( 28)	30	19 7	104.9	61.9	178.9
3	9.17E+05	( 11)	1.08E+06	( 13)	12	22 12	73.5	29.8	176.2
4	2.80E+05	( 7)	3.60E+05	( 9)	25	7 5	67.8	21.4	201.6
5	1.73E+06	( 52)	1.43E+06	( 43)	30	29 9	104.5	68.5	160.0
6	3.50E+05	( 14)	3.75E+05	( 15)	40	8 4	80.9	36.2	178.5
7	4.75E+05	( 19)	5.75E+05	( 23)	40	12 5	71.7	36.9	136.9
8	3.00E+04	( 3)	3.70E+05	( 37)	100	8 2	7.4	1.4	22.3
9	7.50E+05	( 30)	6.75E+05	( 27)	40	14 5	96.1	55.3	167.4
10	1.00E+05	( 2)	9.50E+05	( 19)	20	19 9	9.8	1.0	38.0
11	8.89E+05	( 8)	6.67E+05	( 6)	9	14 11	114.4	35.2	394.3
12	2.33E+06	( 21)	7.78E+05	( 7)	9	16 12	252.5	106.1	690.4
13	2.07E+06	( 62)	3.00E+06	( 90)	30	61 13	59.8	42.5	83.5
14	2.75E+06	( 44)	1.13E+06	( 18)	16	23 11	208.5	119.4	380.8
15	2.00E+06	( 12)	1.67E+06	( 10)	6	34 21	103.5	41.3	265.0
16	1.20E+05	( 3)	1.20E+05	( 3)	25	2 3	86.6	11.7	620.3
17	4.00E+05	( 12)	6.67E+05	( 20)	30	14 6	52.4	23.2	111.5
18	1.33E+06	( 16)	1.25E+06	( 15)	12	25 13	92.3	42.9	199.0
19	5.80E+05	( 29)	8.80E+05	( 44)	50	18 5	57.3	34.5	93.4
20	1.57E+06	( 47)	1.23E+06	( 37)	30	25 8	109.7	70.0	173.1
21	3.67E+05	( 11)	1.53E+06	( 46)	30	31 9	21.0	9.7	40.8
22	5.67E+05	( 17)	2.00E+05	( 6)	30	4 3	238.3	92.2	723.4
23	7.00E+05	( 14)	4.50E+05	( 9)	20	9 6	133.3	54.4	346.0
24	1.55E+06	( 62)	1.65E+06	( 66)	40	34 8	81.4	56.6	116.8
25	1.75E+06	( 70)	1.88E+06	( 75)	40	38 9	80.9	57.5	113.5
26	5.60E+05	( 28)	9.20E+05	( 46)	50	19 6	53.0	31.8	86.3
27	1.03E+06	( 31)	1.47E+06	( 44)	30	30 9	61.2	37.3	98.9
28	3.20E+05	( 16)	5.00E+05	( 25)	50	10 4	55.8	27.7	107.9
29	2.50E+06	( 15)	1.67E+06	( 10)	6	34 21	128.8	54.7	317.8
30	2.67E+06	( 16)	1.50E+06	( 9)	6	31 20	152.0	64.1	386.4
31	3.25E+05	( 13)	6.75E+05	( 27)	40	14 5	42.1	19.8	83.7
32	1.97E+06	( 59)	2.57E+06	( 77)	30	52 12	66.5	46.5	94.5
33	3.25E+05	( 13)	1.25E+06	( 50)	40	25 7	22.8	11.3	42.3
34	4.44E+05	( 8)	6.11E+05	( 11)	18	12 7	63.4	22.1	170.9
35	3.25E+05	( 13)	1.43E+06	( 57)	40	29 8	20.0	10.0	36.7
36	1.00E+06	( 20)	9.50E+05	( 19)	20	19 9	91.1	46.3	179.4
37	1.50E+05	( 6)	7.25E+05	( 29)	40	15 5	18.4	6.1	44.1
38	8.00E+04	( 4)	1.06E+06	( 53)	50	22 6	6.8	1.7	17.9
39	3.00E+05	( 12)	2.50E+05	( 10)	40	5 3	103.5	41.3	265.0
40	2.25E+05	( 9)	1.75E+05	( 7)	40	4 3	110.6	37.0	345.0
41	2.00E+05	( 8)	3.50E+05	( 14)	40	7 4	50.0	18.1	126.1
42	6.25E+05	( 25)	1.03E+06	( 41)	40	21 7	53.1	30.9	89.0
43	1.96E+06	( 49)	1.92E+06	( 48)	25	39 11	88.4	58.2	134.2
44	6.25E+05	( 10)	6.88E+05	( 11)	16	14 8	78.9	30.1	202.5
45	3.75E+05	( 15)	3.75E+05	( 15)	40	8 4	86.6	39.6	188.7
46	1.11E+06	( 31)	1.04E+06	( 29)	28	21 8	92.5	54.0	158.5
47	4.64E+05	( 13)	8.57E+05	( 24)	28	17 7	47.3	22.0	95.9
48	2.25E+05	( 9)	4.25E+05	( 17)	40	9 4	46.4	18.1	108.6
49	1.08E+06	( 13)	6.67E+05	( 8)	12	14 9	139.1	54.1	382.9
50	3.33E+05	( 10)	4.00E+05	( 12)	30	8 5	72.4	28.0	181.0
51	1.04E+06	( 26)	1.64E+06	( 41)	25	33 10	55.2	32.3	92.0

52	1.33E+06	( 20)	1.20E+06	( 18)	15	24	11	96.0	48.4	191.5
53	3.00E+05	( 6)	6.00E+05	( 12)	20	12	7	44.0	13.4	124.4
54	8.25E+05	( 33)	4.50E+05	( 18)	40	9	4	157.2	86.7	294.9
55	2.25E+05	( 9)	3.25E+05	( 13)	40	7	4	60.4	22.7	151.0
56	4.50E+05	( 9)	6.50E+05	( 13)	20	13	7	60.4	22.7	151.0
57	6.00E+05	( 12)	1.30E+06	( 26)	20	27	10	40.4	18.5	82.2
58	2.93E+06	( 44)	2.07E+06	( 31)	15	42	15	122.4	75.8	199.8
59	1.95E+06	( 39)	1.55E+06	( 31)	20	32	11	108.6	66.2	179.5
60	6.00E+05	( 18)	9.00E+05	( 27)	30	18	7	58.0	30.0	108.7
61	8.50E+05	( 34)	1.13E+06	( 45)	40	23	7	65.6	40.7	104.5
62	3.33E+05	( 6)	6.67E+05	( 12)	18	14	8	44.0	13.4	124.4
63	4.38E+05	( 7)	1.88E+05	( 3)	16	4	4	194.6	46.2	1116.9
64	2.75E+05	( 11)	9.00E+05	( 36)	40	18	6	26.9	12.2	53.3
65	1.60E+05	( 8)	5.20E+05	( 26)	50	11	4	27.1	10.5	60.8
66	3.50E+05	( 14)	4.75E+05	( 19)	40	10	4	64.1	29.7	133.9
67	6.00E+05	( 18)	9.33E+05	( 28)	30	19	7	56.0	29.1	104.2
68	8.40E+05	( 21)	7.20E+05	( 18)	25	15	7	100.8	51.3	199.6
69	5.60E+05	( 14)	3.20E+05	( 8)	25	7	4	149.5	59.4	406.9
70	1.00E+06	( 30)	7.33E+05	( 22)	30	15	6	117.6	65.9	213.0
71	7.67E+05	( 23)	9.33E+05	( 28)	30	19	7	71.3	39.2	127.8
72	1.33E+06	( 32)	1.58E+06	( 38)	24	32	10	73.1	44.2	119.7
73	6.67E+04	( 2)	5.00E+05	( 15)	30	10	5	12.4	1.3	49.8
74	1.60E+06	( 64)	1.35E+06	( 54)	40	28	8	102.4	70.3	149.8
75	1.20E+06	( 12)	1.30E+06	( 13)	10	27	14	80.0	33.4	188.7
76	1.25E+05	( 5)	5.50E+05	( 22)	40	11	5	20.3	5.9	53.4
77	2.43E+06	( 97)	1.93E+06	( 77)	40	39	9	108.8	79.9	148.7
78	3.60E+05	( 18)	4.40E+05	( 22)	50	9	4	71.0	35.9	138.0
79	3.07E+06	( 46)	2.07E+06	( 31)	15	42	15	127.8	79.7	207.9
80	6.67E+05	( 14)	5.71E+05	( 12)	21	12	7	100.7	43.5	236.5
81	1.07E+06	( 16)	1.13E+06	( 17)	15	23	11	81.6	38.6	170.6
82	3.50E+05	( 7)	1.50E+05	( 3)	20	3	3	194.6	46.2	1116.9
83	1.67E+05	( 5)	5.67E+05	( 17)	30	12	6	26.2	7.4	72.1
84	9.00E+05	( 27)	8.00E+05	( 24)	30	16	7	97.3	54.2	175.4
85	2.14E+05	( 3)	1.14E+06	( 16)	14	23	12	17.0	3.0	56.9
86	1.31E+06	( 21)	1.56E+06	( 25)	16	32	13	72.9	38.8	135.0
87	2.78E+05	( 10)	1.94E+05	( 7)	36	4	3	122.5	42.6	374.6
88	3.00E+05	( 15)	2.80E+05	( 14)	50	6	3	92.7	41.9	205.7
89	1.50E+05	( 6)	5.25E+05	( 21)	40	11	5	25.3	8.2	63.5
90	1.13E+06	( 17)	1.73E+06	( 26)	15	35	14	56.9	28.9	108.3
91	2.20E+05	( 11)	4.00E+05	( 20)	50	8	4	48.1	20.7	104.2
92	1.50E+05	( 3)	1.10E+06	( 22)	20	22	9	12.4	2.3	39.5
93	2.75E+06	( 44)	3.25E+06	( 52)	16	66	18	73.4	48.0	111.6
94	4.00E+05	( 8)	6.50E+05	( 13)	20	13	7	53.8	19.2	138.3
95	7.14E+05	( 15)	7.62E+05	( 16)	21	16	8	81.3	37.5	174.3

**KLD\_23** Kluane detrital UC03A- (Counted by Eva Enkelmann 25 Nov 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 7.256E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Grain Age	Age (Ma)	--95% CI--
1	8.00E+04	( 4)	3.40E+05	( 17)	50	7 3	20.8	4.9	61.8
2	3.25E+05	( 13)	1.20E+06	( 48)	40	25 7	23.5	11.6	43.6
3	2.00E+05	( 4)	1.45E+06	( 29)	20	30 11	12.3	3.0	33.7
4	9.50E+05	( 19)	1.80E+06	( 36)	20	37 12	45.4	24.5	80.8
5	0.00E+00	( 0)	4.33E+05	( 13)	30	9 5	4.7	0.2	28.2
6	3.33E+05	( 5)	2.13E+06	( 32)	15	44 16	13.8	4.1	34.7
7	8.33E+04	( 2)	4.58E+05	( 11)	24	9 6	16.6	1.7	71.3
8	2.25E+05	( 9)	8.25E+05	( 33)	40	17 6	23.7	9.9	50.0
9	2.92E+05	( 7)	2.83E+06	( 68)	24	59 14	9.0	3.4	19.2
10	4.64E+05	( 13)	1.50E+06	( 42)	28	31 10	26.8	13.1	50.4
11	7.78E+05	( 7)	2.78E+06	( 25)	9	57 23	24.4	8.8	57.1
12	6.00E+04	( 3)	8.20E+05	( 41)	50	17 5	6.6	1.2	19.7
13	6.00E+04	( 3)	6.40E+05	( 32)	50	13 5	8.4	1.6	25.7
14	4.00E+05	( 10)	2.84E+06	( 71)	25	59 14	12.3	5.6	23.6
15	2.50E+05	( 7)	6.79E+05	( 19)	28	14 6	32.1	11.2	78.3
16	5.00E+04	( 1)	1.35E+06	( 27)	20	28 11	3.6	0.1	19.3
17	3.67E+05	( 11)	1.03E+06	( 31)	30	21 8	30.7	13.8	62.1
18	2.00E+05	( 8)	1.30E+06	( 52)	40	27 7	13.4	5.4	28.0
19	4.17E+05	( 25)	3.73E+06	( 224)	60	77 11	9.6	6.1	14.6
20	1.00E+05	( 3)	8.00E+05	( 24)	30	17 7	11.2	2.1	35.3
21	2.75E+06	( 22)	1.75E+06	( 14)	8	36 19	133.2	65.7	279.7
22	1.25E+05	( 5)	2.08E+06	( 83)	40	43 10	5.3	1.6	12.6
23	4.06E+05	( 13)	1.22E+06	( 39)	32	25 8	28.8	14.0	54.7
24	3.33E+05	( 5)	2.13E+06	( 32)	15	44 16	13.8	4.1	34.7
25	6.50E+05	( 13)	1.15E+06	( 23)	20	24 10	48.7	22.6	99.4
26	1.33E+06	( 20)	3.67E+06	( 55)	15	76 21	31.4	17.7	52.9
27	5.00E+04	( 2)	4.50E+05	( 18)	40	9 4	10.2	1.1	39.8
28	3.33E+04	( 2)	6.17E+05	( 37)	60	13 4	5.0	0.5	18.0
29	2.00E+05	( 8)	2.15E+06	( 86)	40	44 10	8.1	3.3	16.5
30	3.00E+05	( 12)	7.50E+05	( 30)	40	16 6	34.6	16.0	68.9
31	6.75E+05	( 27)	8.00E+05	( 32)	40	17 6	72.2	41.6	124.0
32	4.38E+05	( 7)	1.13E+06	( 18)	16	23 11	33.8	11.8	83.4
33	1.20E+05	( 3)	2.56E+06	( 64)	25	53 13	4.2	0.8	12.3
34	1.40E+05	( 7)	9.80E+05	( 49)	50	20 6	12.5	4.7	27.2
35	5.75E+05	( 23)	2.50E+06	( 100)	40	52 10	19.9	12.0	31.3
36	6.67E+04	( 2)	3.00E+05	( 9)	30	6 4	20.2	2.0	91.7
37	1.57E+05	( 11)	1.26E+06	( 88)	70	26 6	10.9	5.2	20.2
38	4.64E+05	( 13)	1.29E+06	( 36)	28	27 9	31.2	15.1	59.8
39	3.93E+05	( 11)	1.82E+06	( 51)	28	38 11	18.7	8.7	36.0
40	2.00E+05	( 6)	2.30E+06	( 69)	30	48 12	7.7	2.7	17.1
41	4.64E+05	( 13)	1.82E+06	( 51)	28	38 11	22.1	10.9	40.8
42	8.00E+04	( 2)	1.20E+06	( 30)	25	25 9	6.1	0.7	22.6
43	3.75E+05	( 15)	9.25E+05	( 37)	40	19 6	35.0	17.7	64.8
44	1.60E+05	( 8)	6.60E+05	( 33)	50	14 5	21.1	8.3	45.9
45	4.40E+05	( 22)	9.60E+05	( 48)	50	20 6	39.5	22.6	66.3
46	8.75E+05	( 14)	6.88E+05	( 11)	16	14 8	108.2	45.9	261.2
47	5.00E+05	( 12)	2.54E+06	( 61)	24	53 14	17.1	8.3	31.7
48	1.83E+05	( 11)	7.50E+05	( 45)	60	16 5	21.2	9.8	41.2
49	3.75E+05	( 15)	2.80E+06	( 112)	40	58 11	11.6	6.2	19.8
50	2.67E+05	( 8)	1.80E+06	( 54)	30	37 10	12.9	5.2	26.9
51	1.00E+05	( 2)	1.40E+06	( 28)	20	29 11	6.6	0.7	24.3

52	1.90E+05	( 8)	2.45E+06	( 103)	42	51	10	6.8	2.8	13.7
53	1.04E+06	( 26)	4.96E+06	( 124)	25	103	19	18.1	11.3	27.7
54	1.00E+05	( 4)	1.73E+06	( 69)	40	36	9	5.2	1.3	13.4
55	6.00E+05	( 18)	3.37E+06	( 101)	30	70	14	15.4	8.7	25.5
56	6.75E+05	( 27)	9.25E+05	( 37)	40	19	6	62.5	36.6	105.2
57	5.00E+04	( 2)	3.50E+05	( 14)	40	7	4	13.1	1.4	53.3
58	6.33E+05	( 19)	1.53E+06	( 46)	30	32	9	35.6	19.6	61.6
59	1.00E+05	( 3)	9.00E+05	( 27)	30	19	7	10.0	1.9	31.0
60	4.40E+05	( 22)	3.84E+06	( 192)	50	79	12	9.9	6.0	15.4
61	2.75E+05	( 11)	1.00E+06	( 40)	40	21	7	23.9	10.9	46.8
62	3.75E+05	( 15)	1.28E+06	( 51)	40	26	7	25.4	13.2	45.6
63	3.33E+05	( 8)	1.92E+06	( 46)	24	40	12	15.2	6.1	32.0
64	1.33E+05	( 2)	3.33E+05	( 5)	15	7	6	35.8	3.3	206.8
65	3.33E+04	( 2)	6.83E+05	( 41)	60	14	4	4.5	0.5	16.1
66	4.33E+05	( 13)	8.33E+05	( 25)	30	17	7	44.8	21.0	90.2
67	5.50E+05	( 22)	1.23E+06	( 49)	40	25	7	38.7	22.2	64.8
68	8.33E+04	( 2)	1.04E+06	( 25)	24	22	9	7.4	0.8	27.6
69	4.00E+05	( 12)	3.73E+06	( 112)	30	77	15	9.3	4.6	16.7
70	3.00E+05	( 12)	2.78E+06	( 111)	40	57	11	9.4	4.7	16.9
71	6.25E+04	( 1)	2.50E+05	( 4)	16	5	5	23.7	0.4	213.7
72	0.00E+00	( 0)	3.50E+05	( 7)	20	7	5	8.9	0.3	59.4
73	2.50E+05	( 6)	1.58E+06	( 38)	24	33	11	13.9	4.7	32.3
74	1.43E+06	( 57)	2.93E+06	( 117)	40	60	11	41.8	29.8	57.8
75	3.33E+04	( 1)	1.13E+06	( 34)	30	23	8	2.9	0.1	15.1
76	4.00E+04	( 2)	2.40E+05	( 12)	50	5	3	15.2	1.6	64.1
77	6.67E+04	( 2)	7.67E+05	( 23)	30	16	7	8.0	0.9	30.2
78	4.00E+04	( 2)	7.40E+05	( 37)	50	15	5	5.0	0.5	18.0
79	2.38E+05	( 10)	1.55E+06	( 65)	42	32	8	13.4	6.1	25.9
80	4.25E+05	( 17)	2.93E+06	( 117)	40	60	11	12.6	7.0	20.9
81	5.00E+04	( 4)	3.00E+05	( 24)	80	6	3	14.8	3.6	41.6
82	3.21E+05	( 9)	1.07E+06	( 30)	28	22	8	26.1	10.8	55.6
83	1.80E+05	( 9)	4.20E+05	( 21)	50	9	4	37.1	14.8	83.5
84	4.00E+05	( 8)	1.60E+06	( 32)	20	33	12	21.8	8.5	47.5
85	1.02E+05	( 5)	1.37E+06	( 67)	49	28	7	6.6	2.0	15.7
86	5.00E+05	( 18)	1.61E+06	( 58)	36	33	9	26.8	14.8	45.8
87	5.50E+05	( 22)	4.50E+05	( 18)	40	9	4	104.1	53.5	204.8
88	4.64E+05	( 13)	2.46E+06	( 69)	28	51	12	16.3	8.2	29.5
89	1.33E+05	( 4)	5.33E+05	( 16)	30	11	5	22.1	5.2	66.4
90	3.33E+04	( 2)	9.00E+05	( 54)	60	19	5	3.4	0.4	12.1
91	6.67E+04	( 2)	2.33E+05	( 7)	30	5	4	25.8	2.5	127.8
92	8.33E+04	( 5)	9.33E+05	( 56)	60	19	5	7.9	2.4	19.0
93	1.23E+06	( 49)	1.38E+06	( 55)	40	28	8	76.2	50.8	113.9
94	4.33E+05	( 13)	2.43E+06	( 73)	30	50	12	15.5	7.8	27.8
95	8.25E+05	( 33)	1.63E+06	( 65)	40	34	8	43.6	27.7	67.1
96	4.40E+05	( 22)	7.40E+05	( 37)	50	15	5	51.1	28.6	88.5
97	8.00E+04	( 2)	4.80E+05	( 12)	25	10	6	15.2	1.6	64.1
98	4.83E+05	( 29)	1.07E+06	( 64)	60	22	6	39.0	24.1	61.1
99	1.88E+05	( 15)	3.31E+06	( 265)	80	68	9	4.9	2.7	8.2
100	3.75E+05	( 15)	2.25E+06	( 90)	40	47	10	14.4	7.7	24.9
101	4.00E+05	( 8)	7.50E+05	( 15)	20	16	8	46.1	16.8	114.3
102	1.00E+05	( 4)	2.75E+05	( 11)	40	6	3	32.0	7.3	104.7
103	3.50E+05	( 14)	1.88E+06	( 75)	40	39	9	16.2	8.4	28.6
104	2.60E+05	( 13)	2.32E+06	( 116)	50	48	9	9.7	5.0	17.1
105	1.96E+06	( 49)	3.72E+06	( 93)	25	77	16	45.2	31.2	64.5

**KLD\_26** Kluane detrital UC03A- (Counted by Eva Enkelmann 24 Nov 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 7.056E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Grain Age	Age (Ma)	--95% CI--
1	7.50E+04	( 3)	4.25E+05	( 17)	40	9 4	15.4	2.8	50.9
2	1.00E+05	( 5)	2.60E+05	( 13)	50	6 3	32.7	9.0	95.5
3	8.33E+04	( 2)	6.67E+05	( 16)	24	14 7	11.1	1.2	44.3
4	3.00E+04	( 3)	2.30E+05	( 23)	100	5 2	11.4	2.1	36.0
5	2.00E+04	( 2)	8.00E+04	( 8)	100	2 1	22.1	2.2	104.0
6	4.00E+04	( 2)	6.00E+04	( 3)	50	1 1	56.8	4.7	469.3
7	1.00E+05	( 5)	2.40E+05	( 12)	50	5 3	35.4	9.6	105.5
8	4.00E+04	( 2)	4.00E+04	( 2)	50	1 1	83.1	6.1	1061.5
9	0.00E+00	( 0)	1.60E+05	( 8)	50	3 2	7.6	0.3	48.8
10	1.29E+05	( 9)	1.86E+05	( 13)	70	4 2	57.9	21.8	144.9
11	4.00E+04	( 2)	8.00E+04	( 4)	50	2 2	43.2	3.8	285.4
12	0.00E+00	( 0)	3.33E+04	( 2)	60	1 1	34.5	1.1	430.6
13	3.33E+05	( 5)	1.80E+06	( 27)	15	38 15	15.9	4.7	40.7
14	3.33E+04	( 1)	3.67E+05	( 11)	30	8 5	8.6	0.2	52.1
15	5.00E+04	( 2)	8.25E+05	( 33)	40	18 6	5.4	0.6	19.8
16	6.67E+04	( 2)	1.33E+05	( 4)	30	3 3	43.2	3.8	285.4
17	5.00E+04	( 5)	7.00E+04	( 7)	100	1 1	60.0	14.9	215.1
18	1.00E+05	( 6)	6.33E+05	( 38)	60	13 4	13.5	4.6	31.4
19	2.00E+04	( 1)	1.20E+05	( 6)	50	3 2	15.5	0.3	113.9
20	8.00E+04	( 4)	1.58E+06	( 79)	50	34 8	4.4	1.1	11.3
21	5.00E+04	( 3)	1.52E+06	( 91)	60	32 7	2.9	0.6	8.3
22	2.86E+04	( 2)	1.00E+05	( 7)	70	2 2	25.1	2.4	124.3
23	1.00E+04	( 1)	8.00E+04	( 8)	100	2 1	11.7	0.2	77.5
24	1.80E+05	( 9)	1.40E+05	( 7)	50	3 2	106.1	35.5	331.2
25	1.15E+06	( 46)	2.33E+06	( 93)	40	49 10	41.3	28.3	59.3
26	5.00E+04	( 1)	6.00E+05	( 12)	20	13 7	7.9	0.2	47.0
27	2.50E+05	( 10)	2.00E+06	( 80)	40	43 10	10.6	4.8	20.2
28	8.57E+04	( 6)	7.57E+05	( 53)	70	16 4	9.7	3.3	22.0
29	3.00E+05	( 6)	1.35E+06	( 27)	20	29 11	18.9	6.3	45.8
30	2.50E+04	( 1)	1.75E+05	( 7)	40	4 3	13.4	0.3	92.4
31	4.00E+04	( 2)	6.00E+05	( 30)	50	13 5	6.0	0.6	22.0
32	2.00E+04	( 1)	1.00E+05	( 5)	50	2 2	18.6	0.4	147.8
33	2.50E+04	( 1)	2.50E+05	( 10)	40	5 3	9.4	0.2	58.5
34	4.00E+04	( 4)	3.00E+04	( 3)	100	1 1	109.2	18.8	719.7
35	2.00E+04	( 1)	4.40E+05	( 22)	50	9 4	4.3	0.1	23.5
36	1.20E+06	( 48)	1.70E+06	( 68)	40	36 9	58.8	39.7	86.3
37	1.20E+05	( 12)	7.70E+05	( 77)	100	16 4	13.2	6.4	24.1
38	6.67E+04	( 2)	6.33E+05	( 19)	30	13 6	9.4	1.0	36.4
39	3.33E+04	( 2)	2.00E+05	( 12)	60	4 2	14.8	1.5	62.3
40	1.00E+04	( 1)	1.50E+05	( 15)	100	3 2	6.3	0.1	36.2
41	3.33E+04	( 2)	1.83E+05	( 11)	60	4 2	16.1	1.6	69.3
42	1.40E+05	( 14)	1.44E+06	( 144)	100	31 5	8.2	4.3	14.1
43	2.00E+04	( 1)	1.80E+05	( 9)	50	4 2	10.5	0.2	66.7
44	1.00E+04	( 1)	1.00E+05	( 10)	100	2 1	9.4	0.2	58.5
45	3.00E+04	( 3)	9.60E+05	( 96)	100	20 4	2.7	0.5	7.9
46	8.33E+04	( 5)	1.50E+05	( 9)	60	3 2	46.9	12.2	152.6
47	2.00E+04	( 1)	2.60E+05	( 13)	50	6 3	7.3	0.2	42.7
48	5.00E+04	( 1)	4.50E+05	( 9)	20	10 6	10.5	0.2	66.7
49	1.67E+05	( 3)	1.50E+06	( 27)	18	32 12	9.7	1.8	30.1
50	8.00E+04	( 4)	1.40E+05	( 7)	50	3 2	48.4	10.2	185.4
51	4.00E+04	( 2)	2.00E+05	( 10)	50	4 3	17.7	1.8	78.1

52	1.10E+05	( 11)	3.70E+05	( 37)	100	8	3	25.1	11.4	49.6
53	1.20E+05	( 12)	5.30E+05	( 53)	100	11	3	19.1	9.2	35.8
54	3.00E+05	( 15)	2.26E+06	( 113)	50	48	9	11.2	6.0	19.1
55	1.00E+04	( 1)	5.00E+04	( 5)	100	1	1	18.6	0.4	147.8
56	6.67E+05	( 8)	5.00E+05	( 6)	12	11	8	109.8	33.8	378.7
57	1.00E+05	( 3)	9.00E+05	( 27)	30	19	7	9.7	1.8	30.1
58	4.00E+04	( 2)	6.00E+04	( 3)	50	1	1	56.8	4.7	469.3
59	0.00E+00	( 0)	3.00E+05	( 12)	40	6	4	5.0	0.2	30.0
60	4.00E+05	( 12)	5.00E+05	( 15)	30	11	5	66.7	28.5	151.4
61	0.00E+00	( 0)	5.00E+04	( 5)	100	1	1	12.4	0.4	90.7
62	1.67E+04	( 1)	5.17E+05	( 31)	60	11	4	3.1	0.1	16.2
63	0.00E+00	( 0)	1.33E+05	( 4)	30	3	3	15.8	0.5	125.5
64	2.00E+04	( 1)	2.00E+05	( 10)	50	4	3	9.4	0.2	58.5
65	7.50E+04	( 3)	7.75E+05	( 31)	40	16	6	8.5	1.6	25.9
66	2.67E+05	( 4)	3.13E+06	( 47)	15	67	19	7.4	1.9	19.5
67	1.00E+05	( 5)	8.00E+04	( 4)	50	2	2	102.9	22.4	506.6
68	7.50E+04	( 3)	1.25E+05	( 5)	40	3	2	51.0	7.8	253.0
69	2.00E+05	( 6)	5.67E+05	( 17)	30	12	6	30.0	9.5	78.0
70	6.67E+04	( 2)	3.00E+05	( 9)	30	6	4	19.6	2.0	89.2
71	3.00E+04	( 3)	2.50E+05	( 25)	100	5	2	10.5	1.9	32.8
72	2.25E+05	( 9)	4.75E+05	( 19)	40	10	5	39.9	15.8	91.3
73	8.00E+04	( 2)	2.40E+05	( 6)	25	5	4	29.2	2.7	154.1

**KLD\_27** Kluane detrital UC03A- (Counted by Eva Enkelmann 23 Nov 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.956E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Age (Ma)	--95% CI--
1	1.00E+06	( 30)	8.33E+05	( 25)	30	18 7	98.1	55.9	173.3
2	9.33E+05	( 14)	2.07E+06	( 31)	15	45 16	37.4	18.3	71.8
3	5.00E+04	( 5)	2.50E+05	( 25)	100	5 2	16.9	4.9	43.7
4	1.40E+05	( 7)	2.78E+06	( 139)	50	60 10	4.2	1.6	8.8
5	7.22E+05	( 26)	4.11E+06	( 148)	36	89 15	14.5	9.1	22.1
6	1.20E+05	( 12)	9.20E+05	( 92)	100	20 4	10.9	5.4	19.7
7	6.50E+05	( 13)	1.00E+06	( 20)	20	22 10	53.6	24.4	112.3
8	6.00E+04	( 6)	8.00E+05	( 80)	100	17 4	6.3	2.2	14.1
9	1.10E+05	( 11)	5.20E+05	( 52)	100	11 3	17.6	8.2	33.8
10	7.00E+04	( 7)	2.30E+05	( 23)	100	5 2	25.4	9.1	60.2
11	3.33E+04	( 1)	1.00E+05	( 3)	30	2 2	29.9	0.5	333.6
12	1.00E+05	( 3)	5.33E+05	( 16)	30	12 6	16.1	2.9	53.8
13	2.50E+05	( 25)	8.30E+05	( 83)	100	18 4	24.9	15.2	39.2
14	8.33E+04	( 5)	4.17E+05	( 25)	60	9 4	16.9	4.9	43.7
15	1.13E+05	( 9)	2.63E+05	( 21)	80	6 2	35.6	14.2	80.0
16	1.33E+05	( 2)	1.93E+06	( 29)	15	42 15	6.1	0.7	22.5
17	1.20E+05	( 6)	1.72E+06	( 86)	50	37 8	5.9	2.1	13.0
18	2.60E+05	( 26)	8.30E+05	( 83)	100	18 4	25.9	15.9	40.5
19	2.78E+05	( 5)	1.00E+06	( 18)	18	22 10	23.4	6.6	63.7
20	5.00E+04	( 5)	1.90E+05	( 19)	100	4 2	22.2	6.3	59.8
21	6.67E+04	( 4)	1.50E+05	( 9)	60	3 2	37.3	8.2	130.0
22	3.33E+05	( 2)	3.33E+05	( 2)	6	7 9	81.9	6.0	1047.6
23	7.00E+05	( 14)	2.90E+06	( 58)	20	63 17	20.0	10.2	36.1
24	4.50E+05	( 9)	2.00E+06	( 40)	20	43 14	18.8	7.9	38.8
25	2.50E+05	( 3)	3.33E+05	( 4)	12	7 7	62.3	9.0	355.6
26	6.67E+05	( 6)	1.22E+06	( 11)	9	26 16	45.3	13.6	131.4
27	2.14E+05	( 3)	9.29E+05	( 13)	14	20 11	19.8	3.5	68.9
28	6.00E+04	( 6)	3.80E+05	( 38)	100	8 3	13.3	4.5	31.0
29	4.33E+05	( 13)	2.53E+06	( 76)	30	55 13	14.2	7.2	25.6
30	0.00E+00	( 0)	2.33E+05	( 14)	60	5 3	4.2	0.1	24.8
31	6.00E+04	( 3)	4.60E+05	( 23)	50	10 4	11.2	2.1	35.5
32	1.67E+06	( 25)	3.33E+06	( 50)	15	72 20	41.2	24.4	67.6
33	1.33E+05	( 4)	1.90E+06	( 57)	30	41 11	6.0	1.5	15.6
34	1.00E+05	( 5)	1.80E+05	( 9)	50	4 3	46.3	12.0	150.5
35	2.50E+05	( 3)	1.00E+06	( 12)	12	22 12	21.4	3.7	76.0
36	3.00E+06	( 12)	4.50E+06	( 18)	4	97 45	55.0	24.1	119.6
37	3.13E+04	( 1)	3.44E+05	( 11)	32	7 4	8.5	0.2	51.4
38	8.52E+05	( 23)	1.22E+06	( 33)	27	26 9	57.3	32.1	100.2
39	7.14E+05	( 10)	4.29E+05	( 6)	14	9 7	134.5	45.0	444.5
40	4.00E+05	( 8)	4.50E+05	( 9)	20	10 6	73.0	24.5	210.6
41	4.67E+05	( 14)	2.63E+06	( 79)	30	57 13	14.7	7.6	26.0
42	4.00E+04	( 4)	2.10E+05	( 21)	100	5 2	16.2	3.9	46.4
43	5.67E+05	( 17)	4.00E+06	( 120)	30	86 16	11.8	6.6	19.5
44	1.00E+04	( 1)	3.70E+05	( 37)	100	8 3	2.5	0.1	13.2
45	7.00E+05	( 21)	4.43E+06	( 133)	30	96 17	13.1	7.8	20.7
46	4.00E+04	( 4)	3.50E+05	( 35)	100	8 3	9.7	2.4	26.3
47	4.44E+05	( 4)	4.44E+05	( 4)	9	10 9	81.9	15.3	428.2
48	1.88E+05	( 3)	2.81E+06	( 45)	16	61 18	5.8	1.1	17.1
49	1.20E+05	( 6)	4.80E+05	( 24)	50	10 4	21.0	6.9	51.6
50	8.00E+04	( 4)	4.00E+05	( 20)	50	9 4	17.0	4.1	49.1
51	7.67E+05	( 23)	1.80E+06	( 54)	30	39 11	35.2	20.5	58.0

52	6.11E+05	( 11)	1.22E+06	( 22)	18	26	11	41.4	18.0	88.2
53	2.75E+05	( 11)	7.00E+05	( 28)	40	15	6	32.6	14.5	66.8
54	8.00E+04	( 4)	6.40E+05	( 32)	50	14	5	10.7	2.6	29.0
55	1.00E+05	( 3)	5.00E+05	( 15)	30	11	5	17.2	3.1	58.1
56	2.29E+05	( 16)	2.83E+06	( 198)	70	61	9	6.7	3.7	11.1
57	4.50E+05	( 9)	3.50E+05	( 7)	20	8	6	104.6	35.0	326.7
58	2.00E+05	( 8)	1.15E+06	( 46)	40	25	7	14.6	5.8	30.6
59	9.00E+05	( 36)	9.50E+05	( 38)	40	20	7	77.6	47.9	125.5
60	3.33E+05	( 3)	2.22E+05	( 2)	9	5	6	119.7	14.1	1333.0
61	3.10E+05	( 31)	8.90E+05	( 89)	100	19	4	28.7	18.4	43.6
62	1.45E+06	( 29)	1.70E+06	( 34)	20	37	13	70.0	41.1	118.0
63	3.50E+05	( 7)	1.10E+06	( 22)	20	24	10	26.6	9.5	63.3
64	6.40E+05	( 32)	2.06E+06	( 103)	50	44	9	25.7	16.6	38.4
65	1.60E+05	( 8)	5.40E+05	( 27)	50	12	4	24.7	9.6	55.1
66	6.25E+05	( 25)	2.70E+06	( 108)	40	58	11	19.2	11.8	29.7
67	1.00E+05	( 5)	4.20E+05	( 21)	50	9	4	20.1	5.8	53.3
68	5.00E+05	( 10)	1.60E+06	( 32)	20	35	12	26.0	11.3	53.5
69	1.40E+06	( 28)	3.70E+06	( 74)	20	80	19	31.2	19.4	48.7
70	8.00E+05	( 24)	7.33E+05	( 22)	30	16	7	89.2	48.1	166.2
71	8.13E+05	( 13)	3.69E+06	( 59)	16	80	21	18.3	9.1	33.5
72	1.25E+05	( 5)	5.50E+05	( 22)	40	12	5	19.2	5.5	50.6
73	1.00E+05	( 5)	1.60E+05	( 8)	50	3	2	51.9	13.2	176.3
74	2.86E+04	( 2)	4.00E+05	( 28)	70	9	3	6.3	0.7	23.3
75	5.00E+05	( 10)	1.85E+06	( 37)	20	40	13	22.5	9.9	45.6
76	1.60E+05	( 4)	3.60E+05	( 9)	25	8	5	37.3	8.2	130.0
77	2.00E+05	( 4)	3.00E+05	( 6)	20	6	5	55.4	11.4	227.8
78	1.33E+05	( 4)	5.33E+05	( 16)	30	12	6	21.2	5.0	63.6
79	2.00E+04	( 2)	2.80E+05	( 28)	100	6	2	6.3	0.7	23.3
80	1.25E+06	( 20)	2.81E+06	( 45)	16	61	18	36.7	20.4	63.1
81	2.50E+05	( 10)	1.13E+06	( 45)	40	24	7	18.5	8.2	36.8
82	4.50E+05	( 18)	2.43E+06	( 97)	40	52	11	15.4	8.7	25.5
83	5.00E+04	( 2)	3.25E+05	( 13)	40	7	4	13.5	1.4	55.8
84	1.00E+05	( 10)	2.40E+05	( 24)	100	5	2	34.6	14.6	74.2
85	9.00E+05	( 45)	1.82E+06	( 91)	50	39	8	40.7	27.8	58.7
86	1.87E+06	( 28)	4.80E+06	( 72)	15	104	25	32.1	19.9	50.1
87	7.33E+05	( 11)	1.67E+06	( 25)	15	36	14	36.5	16.1	76.1
88	2.17E+05	( 13)	3.50E+05	( 21)	60	8	3	51.1	23.4	106.0
89	2.17E+05	( 13)	3.50E+05	( 21)	60	8	3	51.1	23.4	106.0
90	7.22E+05	( 13)	8.33E+05	( 15)	18	18	9	71.2	31.2	159.1
91	5.60E+05	( 14)	6.40E+05	( 16)	25	14	7	71.8	32.5	156.0
92	7.50E+04	( 3)	6.75E+05	( 27)	40	15	6	9.6	1.8	29.7
93	3.00E+04	( 3)	1.60E+05	( 16)	100	3	2	16.1	2.9	53.8
94	6.33E+06	( 57)	6.44E+06	( 58)	9	139	37	80.5	54.9	118.0
95	6.00E+05	( 24)	1.45E+06	( 58)	40	31	8	34.2	20.2	55.6
96	5.00E+04	( 5)	7.00E+04	( 7)	100	2	1	59.1	14.7	212.1
97	2.38E+05	( 19)	3.88E+05	( 31)	80	8	3	50.5	26.9	91.8
98	4.00E+04	( 4)	2.70E+05	( 27)	100	6	2	12.6	3.1	35.0
99	8.33E+05	( 15)	8.89E+05	( 16)	18	19	9	76.9	35.5	164.9
100	8.57E+04	( 3)	4.00E+05	( 14)	35	9	5	18.4	3.3	63.0
101	2.75E+05	( 11)	3.25E+05	( 13)	40	7	4	69.5	28.2	166.7
102	1.20E+05	( 6)	7.20E+05	( 36)	50	16	5	14.0	4.7	32.9
103	4.50E+05	( 18)	5.25E+05	( 21)	40	11	5	70.4	35.4	137.9
104	2.40E+06	( 48)	2.40E+06	( 48)	20	52	15	81.9	53.8	124.6
105	0.00E+00	( 0)	2.00E+05	( 8)	40	4	3	7.5	0.3	48.1
106	8.13E+05	( 13)	6.25E+05	( 10)	16	13	8	105.9	43.2	267.6
107	1.15E+06	( 23)	7.00E+05	( 14)	20	15	8	133.4	66.4	278.8

**KLD\_29** Kluane detrital UC03A- (Counted by Eva Enkelmann 20 Nov 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.756E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Age (Ma)	--95% CI--
1	1.70E+05	( 17)	5.70E+05	( 57)	100	13 3	24.0	13.0	41.6
2	5.00E+05	( 7)	1.64E+06	( 23)	14	36 15	24.7	8.8	58.4
3	2.00E+05	( 6)	1.07E+06	( 32)	30	24 8	15.3	5.1	36.3
4	1.75E+05	( 7)	1.30E+06	( 52)	40	29 8	11.0	4.1	23.8
5	1.60E+05	( 8)	1.08E+06	( 54)	50	24 7	12.1	4.9	25.1
6	4.00E+05	( 16)	2.18E+06	( 87)	40	48 10	14.8	8.0	25.3
7	2.50E+05	( 10)	1.35E+06	( 54)	40	30 8	15.0	6.7	29.4
8	5.60E+05	( 28)	1.82E+06	( 91)	50	40 9	24.7	15.5	37.9
9	1.67E+05	( 10)	1.20E+06	( 72)	60	27 6	11.3	5.1	21.6
10	4.00E+05	( 12)	2.27E+06	( 68)	30	50 12	14.3	6.9	26.3
11	3.17E+05	( 19)	8.50E+05	( 51)	60	19 5	29.9	16.6	51.3
12	2.40E+05	( 6)	2.44E+06	( 61)	25	54 14	8.1	2.8	18.1
13	6.67E+04	( 2)	3.33E+05	( 10)	30	7 5	17.0	1.7	74.8
14	1.70E+05	( 17)	6.90E+05	( 69)	100	15 4	19.8	10.9	33.9
15	1.20E+05	( 6)	7.00E+05	( 35)	50	16 5	14.0	4.7	32.9
16	3.50E+05	( 35)	1.75E+06	( 175)	100	39 6	16.1	10.8	23.1
17	1.00E+05	( 5)	3.80E+05	( 19)	50	8 4	21.5	6.1	58.1
18	2.00E+05	( 4)	1.00E+06	( 20)	20	22 10	16.5	4.0	47.7
19	7.50E+04	( 3)	1.43E+06	( 57)	40	32 8	4.4	0.8	13.0
20	5.25E+05	( 42)	1.80E+06	( 144)	80	40 7	23.4	16.1	33.1
21	2.20E+05	( 11)	4.20E+05	( 21)	50	9 4	42.1	18.2	90.4
22	3.00E+05	( 15)	1.98E+06	( 99)	50	44 9	12.2	6.5	21.0
23	4.00E+04	( 2)	5.60E+05	( 28)	50	12 5	6.1	0.7	22.7
24	7.67E+05	( 23)	3.23E+06	( 97)	30	72 15	19.1	11.5	30.1
25	5.00E+04	( 2)	1.33E+06	( 53)	40	29 8	3.2	0.4	11.5
26	2.50E+05	( 4)	5.00E+05	( 8)	16	11 8	40.7	8.8	147.8
27	1.67E+04	( 1)	1.00E+05	( 6)	60	2 2	14.9	0.3	109.1
28	6.00E+04	( 3)	2.40E+05	( 12)	50	5 3	20.8	3.6	73.8
29	1.25E+05	( 5)	6.50E+05	( 26)	40	14 6	15.8	4.6	40.7
30	1.25E+05	( 2)	3.13E+05	( 5)	16	7 6	33.4	3.0	192.8
31	1.00E+05	( 4)	3.75E+05	( 15)	40	8 4	21.9	5.2	66.7
32	8.13E+05	( 13)	2.88E+06	( 46)	16	64 19	22.8	11.2	42.5
33	8.33E+04	( 5)	2.83E+05	( 17)	60	6 3	24.0	6.8	66.2
34	3.33E+04	( 1)	6.67E+04	( 2)	30	1 2	42.5	0.7	726.6
35	6.67E+04	( 4)	8.17E+05	( 49)	60	18 5	6.8	1.7	17.8
36	1.20E+05	( 6)	6.80E+05	( 34)	50	15 5	14.4	4.8	34.0
37	4.20E+05	( 21)	2.66E+06	( 133)	50	59 10	12.7	7.6	20.1
38	3.54E+05	( 17)	6.44E+05	( 31)	48	14 5	43.9	22.7	81.4
39	1.00E+05	( 9)	9.11E+05	( 82)	90	20 5	8.9	3.9	17.5
40	2.50E+04	( 1)	2.50E+05	( 10)	40	6 3	9.0	0.2	56.1
41	1.11E+05	( 9)	3.09E+05	( 25)	81	7 3	29.1	11.8	63.6
42	1.00E+05	( 3)	1.03E+06	( 31)	30	23 8	8.1	1.5	24.8
43	3.33E+04	( 1)	5.00E+05	( 15)	30	11 6	6.1	0.1	34.6
44	1.00E+06	( 6)	5.83E+06	( 35)	6	130 44	14.0	4.7	32.9
45	4.00E+05	( 16)	9.00E+05	( 36)	40	20 7	35.7	18.4	65.5
46	5.00E+05	( 6)	2.75E+06	( 33)	12	61 21	14.9	5.0	35.1
47	9.33E+05	( 14)	2.40E+06	( 36)	15	53 18	31.3	15.5	59.0
48	7.50E+04	( 3)	6.50E+05	( 26)	40	14 6	9.7	1.8	30.1
49	9.50E+05	( 19)	3.50E+06	( 70)	20	78 19	21.8	12.3	36.5
50	9.38E+05	( 15)	2.69E+06	( 43)	16	60 18	28.1	14.4	51.1
51	8.89E+05	( 16)	1.94E+06	( 35)	18	43 15	36.7	18.9	67.6

52	4.60E+05	( 23)	2.78E+06	( 139)	50	62	11	13.3	8.1	20.7
53	3.33E+04	( 2)	3.33E+04	( 2)	60	1	1	79.6	5.8	1019.8
54	1.60E+05	( 8)	1.50E+06	( 75)	50	33	8	8.7	3.6	17.7
55	6.00E+05	( 9)	8.00E+05	( 12)	15	18	10	60.0	22.3	153.6
56	9.33E+05	( 14)	5.33E+06	( 80)	15	118	27	14.1	7.3	24.9
57	6.00E+05	( 30)	1.10E+06	( 55)	50	24	7	43.6	26.9	69.1
58	8.00E+04	( 4)	4.60E+05	( 23)	50	10	4	14.4	3.5	40.7
59	2.67E+05	( 8)	1.80E+06	( 54)	30	40	11	12.1	4.9	25.1
60	8.25E+05	( 33)	4.80E+06	( 192)	40	107	16	13.8	9.2	20.0
61	6.50E+05	( 26)	1.68E+06	( 67)	40	37	9	31.1	18.9	49.4
62	5.63E+05	( 9)	2.75E+06	( 44)	16	61	18	16.6	7.0	33.9
63	1.79E+05	( 5)	9.29E+05	( 26)	28	21	8	15.8	4.6	40.7
64	1.33E+05	( 4)	8.67E+05	( 26)	30	19	8	12.7	3.1	35.4
65	2.17E+05	( 13)	1.17E+06	( 70)	60	26	6	15.0	7.5	27.1
66	8.33E+05	( 25)	2.03E+06	( 61)	30	45	12	32.9	19.7	52.9
67	4.00E+05	( 12)	1.87E+06	( 56)	30	41	11	17.3	8.4	32.3
68	6.00E+05	( 9)	3.27E+06	( 49)	15	73	21	14.9	6.3	30.2
69	1.80E+05	( 9)	1.14E+06	( 57)	50	25	7	12.8	5.5	25.7
70	1.20E+05	( 12)	2.50E+05	( 25)	100	6	2	38.6	17.6	79.0
71	2.75E+05	( 11)	1.03E+06	( 41)	40	23	7	21.7	9.9	42.5
72	8.21E+05	( 23)	3.04E+06	( 85)	28	67	15	21.7	13.0	34.6
73	3.50E+05	( 14)	2.45E+06	( 98)	40	54	11	11.5	6.0	20.1
74	6.00E+05	( 30)	2.64E+06	( 132)	50	59	10	18.2	11.8	27.2
75	2.00E+05	( 6)	9.67E+05	( 29)	30	21	8	16.9	5.6	40.5
76	1.33E+05	( 4)	4.00E+05	( 12)	30	9	5	27.3	6.3	87.5
77	2.25E+05	( 9)	2.08E+06	( 83)	40	46	10	8.8	3.8	17.3
78	1.40E+05	( 7)	9.20E+05	( 46)	50	20	6	12.4	4.6	27.1
79	2.00E+05	( 12)	8.33E+05	( 50)	60	19	5	19.4	9.3	36.5
80	3.00E+05	( 30)	7.60E+05	( 76)	100	17	4	31.6	19.9	48.7
81	2.50E+05	( 25)	1.43E+06	( 143)	100	32	5	14.1	8.7	21.5
82	3.20E+05	( 16)	1.26E+06	( 63)	50	28	7	20.5	10.9	35.6
83	2.00E+04	( 1)	1.40E+05	( 7)	50	3	2	12.8	0.3	88.5
84	1.67E+05	( 5)	3.33E+05	( 10)	30	7	5	40.5	10.7	127.4
85	9.33E+05	( 28)	3.37E+06	( 101)	30	75	15	22.3	14.0	34.0
86	7.25E+05	( 29)	3.85E+06	( 154)	40	85	14	15.1	9.7	22.5
87	4.00E+05	( 16)	1.25E+06	( 50)	40	28	8	25.7	13.6	45.6
88	5.50E+05	( 22)	1.95E+06	( 78)	40	43	10	22.7	13.4	36.6
89	1.50E+05	( 6)	1.35E+06	( 54)	40	30	8	9.1	3.1	20.6
90	4.00E+05	( 20)	2.08E+06	( 104)	50	46	9	15.5	9.0	25.0
91	4.20E+05	( 21)	1.92E+06	( 96)	50	43	9	17.6	10.3	28.3
92	1.53E+06	( 46)	6.30E+06	( 189)	30	140	21	19.5	13.8	27.0
93	5.25E+05	( 21)	2.45E+06	( 98)	40	54	11	17.2	10.1	27.7
94	3.00E+04	( 3)	2.90E+05	( 29)	100	6	2	8.7	1.6	26.7
95	5.00E+04	( 2)	2.65E+06	( 106)	40	59	12	1.6	0.2	5.6
96	6.50E+05	( 26)	2.25E+06	( 90)	40	50	11	23.2	14.3	36.1
97	1.94E+05	( 7)	7.50E+05	( 27)	36	17	6	21.1	7.6	48.7
98	9.00E+04	( 9)	3.80E+05	( 38)	100	8	3	19.2	8.1	39.8
99	2.75E+05	( 11)	1.53E+06	( 61)	40	34	9	14.6	6.8	27.7
100	2.20E+05	( 11)	1.72E+06	( 86)	50	38	8	10.4	4.9	19.3
101	1.00E+05	( 3)	1.07E+06	( 32)	30	24	8	7.9	1.5	24.0
102	2.00E+05	( 8)	9.00E+05	( 36)	40	20	7	18.0	7.1	38.9
103	4.00E+05	( 12)	1.30E+06	( 39)	30	29	9	24.8	11.7	47.9

**KLD\_33** Kluane detrital UC03A- (Counted by Eva Enkelmann 1 Dec 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 6.355E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Grain Age	Age (Ma)	--95% CI--
1	3.00E+04	( 3)	1.90E+05	( 19)	100	4 2	12.4	2.3	40.3
2	2.50E+05	( 3)	8.33E+04	( 1)	12	2 3	204.1	18.1	6729.2
3	1.20E+05	( 6)	2.80E+05	( 14)	50	7 3	32.7	10.2	88.9
4	2.86E+04	( 2)	2.00E+05	( 14)	70	5 2	11.5	1.2	46.7
5	1.43E+04	( 1)	1.14E+05	( 8)	70	3 2	10.6	0.2	69.9
6	5.00E+04	( 5)	1.80E+05	( 18)	100	4 2	21.4	6.1	58.3
7	4.00E+04	( 4)	3.40E+05	( 34)	100	8 3	9.2	2.3	24.8
8	0.00E+00	( 0)	1.40E+05	( 7)	50	3 2	7.8	0.3	52.1
9	4.29E+04	( 3)	2.00E+05	( 14)	70	5 2	16.8	3.0	57.6
10	3.00E+04	( 3)	2.00E+05	( 20)	100	5 2	11.8	2.1	38.0
11	3.00E+04	( 3)	2.70E+05	( 27)	100	6 2	8.8	1.6	27.2
12	2.80E+05	( 7)	5.20E+05	( 13)	25	12 7	40.9	13.7	108.5
13	1.40E+05	( 14)	6.30E+05	( 63)	100	15 4	16.9	8.6	30.2
14	6.00E+04	( 6)	9.70E+05	( 97)	100	23 5	4.8	1.7	10.5
15	4.00E+04	( 2)	1.60E+05	( 8)	50	4 3	19.9	1.9	93.7
16	1.30E+05	( 13)	3.90E+05	( 39)	100	9 3	25.3	12.3	47.9
17	1.00E+05	( 4)	5.25E+05	( 21)	40	12 5	14.8	3.6	42.4
18	0.00E+00	( 0)	7.50E+04	( 3)	40	2 2	19.5	0.6	179.8
19	1.33E+05	( 4)	4.67E+05	( 14)	30	11 6	22.1	5.2	68.2
20	8.00E+04	( 8)	2.90E+05	( 29)	100	7 3	21.0	8.2	46.5
21	6.00E+04	( 6)	4.60E+05	( 46)	100	11 3	10.0	3.4	23.0
22	2.50E+05	( 25)	6.30E+05	( 63)	100	15 4	29.9	18.0	48.1
23	2.38E+05	( 5)	8.10E+05	( 17)	21	19 9	22.6	6.4	62.3
24	1.00E+04	( 1)	2.10E+05	( 21)	100	5 2	4.1	0.1	22.3
25	1.43E+04	( 1)	8.57E+04	( 6)	70	2 2	14.0	0.3	102.7
26	0.00E+00	( 0)	6.00E+05	( 12)	20	14 8	4.5	0.2	27.1
27	2.80E+05	( 14)	2.22E+06	( 111)	50	52 10	9.6	5.0	16.6
28	4.10E+05	( 41)	1.45E+06	( 145)	100	34 6	21.3	14.6	30.3
29	2.00E+04	( 2)	2.20E+05	( 22)	100	5 2	7.3	0.8	27.8
30	1.11E+05	( 2)	3.89E+05	( 7)	18	9 7	22.6	2.2	112.1
31	5.00E+04	( 2)	1.50E+05	( 6)	40	4 3	26.3	2.5	139.0
32	1.00E+05	( 4)	3.25E+05	( 13)	40	8 4	23.8	5.5	74.6
33	3.33E+04	( 1)	5.00E+05	( 15)	30	12 6	5.7	0.1	32.6
34	2.40E+05	( 6)	1.04E+06	( 26)	25	25 10	17.7	5.8	43.1
35	5.71E+04	( 4)	3.86E+05	( 27)	70	9 3	11.5	2.8	32.0
36	3.40E+05	( 34)	7.20E+05	( 72)	100	17 4	35.6	22.9	54.1
37	6.00E+04	( 3)	4.20E+05	( 21)	50	10 4	11.2	2.1	36.0
38	1.00E+05	( 4)	3.50E+05	( 14)	40	8 4	22.1	5.2	68.2
39	1.90E+05	( 19)	6.40E+05	( 64)	100	15 4	22.5	12.6	37.7
40	7.50E+04	( 3)	4.50E+05	( 18)	40	11 5	13.1	2.4	42.9
41	3.00E+04	( 3)	3.10E+05	( 31)	100	7 3	7.6	1.4	23.3
42	1.20E+05	( 3)	3.04E+06	( 76)	25	72 17	3.1	0.6	9.0
43	2.00E+05	( 8)	1.03E+06	( 41)	40	24 8	14.9	5.9	31.7
44	1.10E+05	( 11)	6.90E+05	( 69)	100	16 4	12.1	5.7	22.8
45	4.00E+05	( 12)	9.67E+05	( 29)	30	23 8	31.3	14.5	62.7
46	1.50E+05	( 3)	5.50E+05	( 11)	20	13 8	21.3	3.7	77.3
47	6.00E+04	( 3)	4.60E+05	( 23)	50	11 4	10.3	1.9	32.5
48	2.50E+04	( 1)	2.25E+05	( 9)	40	5 3	9.4	0.2	60.1
49	1.43E+04	( 1)	1.29E+05	( 9)	70	3 2	9.4	0.2	60.1
50	1.00E+05	( 4)	3.50E+05	( 14)	40	8 4	22.1	5.2	68.2
51	4.00E+04	( 4)	6.50E+05	( 65)	100	15 4	4.8	1.2	12.4

52	1.20E+05	( 6)	3.20E+05	( 16)	50	8	4	28.7	9.0	75.6
53	1.67E+05	( 5)	3.33E+05	( 10)	30	8	5	38.1	10.1	119.9
54	1.25E+05	( 5)	9.00E+05	( 36)	40	21	7	10.7	3.2	26.7
55	0.00E+00	( 0)	2.00E+05	( 6)	30	5	4	9.2	0.3	63.7
56	7.50E+04	( 3)	2.75E+05	( 11)	40	6	4	21.3	3.7	77.3
57	3.70E+05	( 37)	1.19E+06	( 119)	100	28	5	23.4	15.7	34.1
58	6.00E+04	( 3)	4.40E+05	( 22)	50	10	4	10.7	2.0	34.1
59	3.00E+05	( 12)	3.25E+05	( 13)	40	8	4	69.2	28.9	163.3
60	1.80E+05	( 9)	7.60E+05	( 38)	50	18	6	18.1	7.6	37.5
61	1.60E+05	( 8)	1.10E+06	( 55)	50	26	7	11.1	4.5	23.1
62	1.00E+05	( 5)	4.80E+05	( 24)	50	11	5	16.1	4.7	41.9
63	3.00E+05	( 3)	1.40E+06	( 14)	10	33	17	16.8	3.0	57.6
64	0.00E+00	( 0)	2.40E+05	( 12)	50	6	3	4.5	0.2	27.1
65	3.17E+05	( 19)	1.50E+06	( 90)	60	35	8	16.0	9.1	26.3
66	1.00E+06	( 9)	3.44E+06	( 31)	9	81	29	22.1	9.1	46.9
67	1.00E+05	( 5)	1.60E+05	( 8)	50	4	3	47.4	12.1	161.3
68	5.00E+04	( 2)	9.75E+05	( 39)	40	23	7	4.1	0.5	14.9
69	3.75E+05	( 15)	4.75E+05	( 19)	40	11	5	59.3	28.0	122.4
70	1.20E+05	( 12)	5.30E+05	( 53)	100	13	3	17.2	8.3	32.3
71	1.40E+05	( 7)	4.40E+05	( 22)	50	10	4	24.3	8.6	57.9
72	6.80E+05	( 68)	1.42E+06	( 142)	100	34	6	36.1	26.9	48.4
73	2.40E+05	( 12)	1.34E+06	( 67)	50	32	8	13.6	6.6	25.1
74	1.00E+05	( 3)	1.67E+05	( 5)	30	4	3	45.9	7.0	228.3
75	1.20E+05	( 6)	7.40E+05	( 37)	50	17	6	12.5	4.2	29.2
76	5.00E+04	( 2)	9.25E+05	( 37)	40	22	7	4.4	0.5	15.8
77	7.00E+04	( 7)	5.40E+05	( 54)	100	13	3	10.0	3.7	21.5
78	1.29E+05	( 9)	7.71E+05	( 54)	70	18	5	12.7	5.4	25.6
79	7.50E+04	( 3)	5.75E+05	( 23)	40	14	6	10.3	1.9	32.5
80	1.00E+04	( 1)	1.70E+05	( 17)	100	4	2	5.0	0.1	28.2
81	2.00E+05	( 6)	6.00E+05	( 18)	30	14	7	25.5	8.1	65.7
82	2.50E+04	( 1)	1.75E+05	( 7)	40	4	3	12.0	0.2	83.3
83	1.00E+05	( 5)	3.40E+05	( 17)	50	8	4	22.6	6.4	62.3
84	2.00E+04	( 2)	2.50E+05	( 25)	100	6	2	6.4	0.7	24.1
85	3.67E+05	( 11)	6.67E+05	( 20)	30	16	7	41.6	17.9	90.1
86	5.63E+05	( 9)	1.81E+06	( 29)	16	43	16	23.6	9.7	50.6
87	0.00E+00	( 0)	2.33E+05	( 7)	30	6	4	7.8	0.3	52.1
88	1.75E+05	( 7)	2.75E+05	( 11)	40	6	4	48.1	15.7	134.1
89	3.33E+04	( 1)	1.33E+05	( 4)	30	3	3	20.7	0.4	187.6
90	1.00E+06	( 12)	2.00E+06	( 24)	12	47	19	37.8	17.1	77.9
91	1.60E+05	( 4)	4.00E+05	( 10)	25	9	6	30.8	6.9	103.7
92	1.67E+05	( 5)	5.33E+05	( 16)	30	13	6	24.0	6.7	66.9
93	6.60E+05	( 33)	1.74E+06	( 87)	50	41	9	28.6	18.5	43.0
94	8.00E+04	( 4)	3.00E+05	( 15)	50	7	4	20.6	4.8	62.8
95	4.00E+04	( 2)	2.00E+05	( 10)	50	5	3	16.0	1.6	70.3

**KLD\_39** Kluane detrital UC03A- (Counted by Eva Enkelmann 18 July 2015)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 5.899E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Grain Age (Ma)	--95% CI--
1	1.28E+06	( 51)	1.08E+06	( 43)	40	27 8	82.3	53.9	126.4
2	1.90E+06	( 38)	1.85E+06	( 37)	20	47 15	71.4	44.2	115.2
3	2.40E+06	( 48)	1.15E+06	( 23)	20	29 12	143.7	86.3	246.8
4	8.00E+05	( 40)	6.20E+05	( 31)	50	16 6	89.5	54.7	147.6
5	1.00E+06	( 20)	8.00E+05	( 16)	20	20 10	86.6	42.8	178.0
6	1.07E+06	( 32)	8.00E+05	( 24)	30	20 8	92.4	52.9	163.5
7	2.31E+06	( 37)	1.31E+06	( 21)	16	33 14	121.6	69.8	218.0
8	4.75E+05	( 19)	1.43E+06	( 57)	40	36 10	23.4	13.1	39.7
9	2.20E+05	( 11)	9.40E+05	( 47)	50	24 7	16.5	7.6	32.0
10	6.67E+05	( 20)	4.33E+05	( 13)	30	11 6	106.2	50.7	231.3
11	7.00E+05	( 21)	6.67E+05	( 20)	30	17 8	73.0	37.7	141.3
12	6.75E+05	( 27)	1.68E+06	( 67)	40	43 10	28.2	17.3	44.6
13	3.11E+06	( 28)	2.56E+06	( 23)	9	65 27	84.4	47.0	153.0
14	3.25E+06	( 13)	5.00E+06	( 20)	4	127 56	45.5	20.7	95.4
15	8.33E+05	( 10)	6.67E+05	( 8)	12	17 12	86.5	31.0	250.0
16	9.33E+05	( 14)	4.00E+05	( 6)	15	10 8	158.7	58.6	498.4
17	4.50E+05	( 9)	9.00E+05	( 18)	20	23 11	35.2	13.8	81.5
18	7.50E+05	( 30)	5.75E+05	( 23)	40	15 6	90.4	50.9	162.5
19	1.89E+06	( 17)	4.44E+05	( 4)	9	11 11	282.1	96.1	1112.4
20	4.67E+05	( 14)	2.67E+05	( 8)	30	7 5	120.2	47.7	328.3
21	2.33E+05	( 7)	3.00E+05	( 9)	30	8 5	54.4	17.2	162.1
22	5.00E+05	( 10)	2.00E+05	( 4)	20	5 5	168.5	50.2	721.8
23	3.00E+05	( 24)	1.55E+06	( 124)	80	39 7	13.6	8.3	21.1
24	2.38E+06	( 38)	2.13E+06	( 34)	16	54 19	77.6	47.6	126.9
25	5.00E+05	( 15)	3.00E+05	( 9)	30	8 5	114.6	47.5	295.3
26	3.50E+05	( 7)	3.00E+05	( 6)	20	8 6	80.7	23.4	287.4
27	3.00E+05	( 15)	8.60E+05	( 43)	50	22 7	24.5	12.6	44.7
28	4.75E+05	( 19)	3.00E+05	( 12)	40	8 4	109.2	50.8	245.5
29	2.85E+06	( 57)	2.55E+06	( 51)	20	65 18	77.6	52.3	115.5
30	7.33E+05	( 22)	6.33E+05	( 19)	30	16 7	80.3	41.6	156.4
31	8.75E+05	( 14)	6.25E+05	( 10)	16	16 10	96.7	40.3	241.9
32	4.20E+05	( 21)	4.00E+05	( 20)	50	10 5	73.0	37.7	141.3
33	5.75E+05	( 23)	3.25E+05	( 13)	40	8 5	121.8	59.7	260.7
34	5.50E+05	( 22)	7.00E+05	( 28)	40	18 7	54.8	29.8	98.9
35	7.50E+05	( 12)	5.00E+05	( 8)	16	13 9	103.3	39.3	289.3
36	2.20E+05	( 11)	8.80E+05	( 44)	50	22 7	17.6	8.1	34.3
37	4.76E+05	( 10)	4.76E+05	( 10)	21	12 7	69.5	26.0	184.6
38	1.25E+05	( 5)	1.18E+06	( 47)	40	30 9	7.6	2.3	18.6
39	6.67E+05	( 4)	1.83E+06	( 11)	6	47 28	26.0	5.9	85.3
40	1.03E+06	( 41)	8.00E+05	( 32)	40	20 7	88.8	54.7	145.5
41	5.67E+05	( 17)	8.00E+05	( 24)	30	20 8	49.5	24.9	95.5
42	5.00E+04	( 5)	1.30E+05	( 13)	100	3 2	27.4	7.5	79.9
43	3.00E+05	( 9)	3.00E+05	( 9)	30	8 5	69.5	24.5	195.9
44	3.65E+06	( 73)	2.55E+06	( 51)	20	65 18	99.2	68.5	144.7
45	1.00E+06	( 30)	7.33E+05	( 22)	30	19 8	94.4	52.9	171.3
46	1.60E+05	( 8)	1.00E+06	( 50)	50	25 7	11.4	4.6	23.8
47	1.40E+05	( 7)	2.20E+05	( 11)	50	6 3	44.7	14.6	124.5
48	5.00E+04	( 2)	5.50E+05	( 22)	40	14 6	6.8	0.7	25.8
49	5.00E+05	( 10)	6.00E+05	( 12)	20	15 9	58.1	22.5	145.6
50	6.67E+05	( 20)	8.33E+05	( 25)	30	21 8	55.8	29.4	104.1
51	4.67E+06	( 42)	2.33E+06	( 21)	9	59 26	137.8	80.3	244.1

52	2.44E+06	( 22)	1.67E+06	( 15)	9	42	22	101.4	50.6	209.3
53	5.25E+05	( 21)	4.75E+05	( 19)	40	12	5	76.7	39.4	150.3
54	1.33E+05	( 4)	2.00E+05	( 6)	30	5	4	47.0	9.7	193.7
55	2.22E+06	( 20)	1.67E+06	( 15)	9	42	22	92.3	45.2	192.9
56	1.00E+06	( 16)	6.25E+05	( 10)	16	16	10	110.2	47.5	270.2
57	1.25E+05	( 5)	4.50E+05	( 18)	40	11	5	19.8	5.6	54.1
58	4.25E+05	( 17)	3.75E+05	( 15)	40	10	5	78.6	37.1	168.3
59	4.25E+05	( 17)	3.75E+05	( 15)	40	10	5	78.6	37.1	168.3
60	7.67E+05	( 23)	5.33E+05	( 16)	30	14	7	99.4	50.6	200.6
61	5.50E+05	( 11)	2.90E+06	( 58)	20	74	19	13.4	6.3	25.5
62	6.00E+05	( 12)	5.50E+05	( 11)	20	14	8	75.7	30.7	188.1
63	3.35E+06	( 67)	3.70E+06	( 74)	20	94	22	63.0	44.5	88.9
64	4.56E+06	( 41)	4.44E+06	( 40)	9	113	36	71.3	45.0	112.8
65	1.37E+06	( 41)	8.67E+05	( 26)	30	22	9	109.0	65.4	185.3
66	1.13E+06	( 45)	6.25E+05	( 25)	40	16	6	124.3	75.0	210.9
67	6.00E+05	( 12)	1.00E+06	( 20)	20	25	11	42.0	18.7	89.6
68	2.25E+05	( 9)	4.25E+05	( 17)	40	11	5	37.2	14.5	87.3
69	1.65E+06	( 33)	1.50E+06	( 30)	20	38	14	76.4	45.2	129.4
70	1.50E+05	( 3)	7.50E+05	( 15)	20	19	10	14.5	2.6	49.3
71	3.67E+05	( 11)	4.67E+05	( 14)	30	12	6	54.9	22.5	129.1
72	2.40E+06	( 48)	1.50E+06	( 30)	20	38	14	110.7	69.0	180.5
73	8.80E+05	( 22)	1.00E+06	( 25)	25	25	10	61.3	32.9	112.8
74	1.57E+06	( 47)	1.20E+06	( 36)	30	31	10	90.5	57.5	143.6
75	1.12E+06	( 28)	1.00E+06	( 25)	25	25	10	77.8	43.8	138.7
76	7.00E+05	( 21)	3.67E+05	( 11)	30	9	6	131.2	61.2	299.7
77	1.02E+06	( 51)	6.40E+05	( 32)	50	16	6	110.2	69.7	176.9
78	6.25E+05	( 25)	1.13E+06	( 45)	40	29	9	38.8	22.8	64.5
79	1.00E+06	( 9)	1.22E+06	( 11)	9	31	18	57.1	20.9	150.2
80	1.00E+06	( 16)	4.38E+05	( 7)	16	11	8	155.8	61.8	443.9
81	1.75E+05	( 7)	5.75E+05	( 23)	40	15	6	21.6	7.7	51.1
82	2.56E+06	( 23)	2.22E+06	( 20)	9	57	25	79.8	42.0	152.7
83	6.00E+05	( 18)	4.33E+05	( 13)	30	11	6	95.7	44.6	211.6
84	4.00E+05	( 12)	2.67E+05	( 8)	30	7	5	103.3	39.3	289.3
85	5.50E+05	( 22)	7.75E+05	( 31)	40	20	7	49.5	27.3	88.0
86	1.20E+06	( 18)	9.33E+05	( 14)	15	24	12	89.0	42.1	192.5
87	1.00E+06	( 25)	5.60E+05	( 14)	25	14	7	123.0	62.1	254.9
88	1.25E+06	( 25)	9.00E+05	( 18)	20	23	11	96.1	50.6	186.4
89	3.22E+06	( 29)	2.11E+06	( 19)	9	54	24	105.5	57.5	198.5
90	2.50E+06	( 50)	1.75E+06	( 35)	20	44	15	99.0	63.1	156.8
91	2.00E+06	( 40)	1.35E+06	( 27)	20	34	13	102.5	61.6	173.4
92	1.45E+06	( 29)	3.85E+06	( 77)	20	98	23	26.4	16.5	40.8
93	1.28E+06	( 51)	1.43E+06	( 57)	40	36	10	62.3	41.8	92.4
94	1.38E+06	( 11)	1.00E+06	( 8)	8	25	17	94.9	35.1	269.7
95	7.67E+05	( 23)	1.03E+06	( 31)	30	26	9	51.8	28.8	91.4
96	7.00E+05	( 14)	7.50E+05	( 15)	20	19	10	65.0	29.1	143.5
97	6.33E+05	( 19)	1.03E+06	( 31)	30	26	9	42.8	22.8	77.9
98	2.47E+06	( 74)	1.77E+06	( 53)	30	45	12	96.8	67.2	140.3
99	2.44E+06	( 39)	1.69E+06	( 27)	16	43	16	100.0	59.9	169.5
100	2.33E+05	( 7)	3.67E+05	( 11)	30	9	6	44.7	14.6	124.5
101	5.50E+06	( 22)	1.75E+06	( 7)	4	44	33	212.7	89.9	582.2
102	1.73E+06	( 52)	1.20E+06	( 36)	30	31	10	100.0	64.3	157.3
103	7.50E+05	( 15)	8.50E+05	( 17)	20	22	10	61.5	28.6	130.1
104	1.17E+06	( 35)	1.10E+06	( 33)	30	28	10	73.7	44.5	122.1
105	5.33E+05	( 16)	5.00E+05	( 15)	30	13	6	74.1	34.4	160.1
106	2.56E+06	( 41)	2.13E+06	( 34)	16	54	19	83.7	51.9	135.7

**KLD\_40** Kluane detrital UC03A- (Counted by Eva Enkelmann 26 Nov 2014)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 5.847E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	Rho <sub>S</sub> (cm <sup>-2</sup> )	(Ns)	Rho <sub>I</sub> (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Grain Age	Age (Ma)	--95% CI--
1	7.50E+04	( 3 )	3.00E+05	( 12 )	40	8 4	18.0	3.1	63.9
2	9.00E+05	( 36 )	3.25E+05	( 13 )	40	8 5	187.6	98.5	383.0
3	8.50E+05	( 17 )	5.00E+05	( 10 )	20	13 8	116.0	50.7	281.8
4	2.00E+04	( 2 )	4.50E+05	( 45 )	100	12 3	3.3	0.4	11.8
5	2.00E+06	( 18 )	1.44E+06	( 13 )	9	37 20	94.9	44.2	209.7
6	1.22E+06	( 11 )	3.33E+05	( 3 )	9	9 9	240.3	66.7	1282.4
7	5.00E+04	( 2 )	3.00E+05	( 12 )	40	8 4	12.3	1.3	51.7
8	1.10E+06	( 22 )	1.15E+06	( 23 )	20	30 12	66.0	35.1	123.4
9	1.92E+06	( 23 )	1.42E+06	( 17 )	12	36 17	92.8	47.7	184.5
10	6.00E+04	( 3 )	2.40E+05	( 12 )	50	6 3	18.0	3.1	63.9
11	1.94E+06	( 31 )	1.94E+06	( 31 )	16	50 18	68.9	40.6	116.9
12	0.00E+00	( 0 )	3.13E+05	( 25 )	80	8 3	1.9	0.1	11.0
13	6.50E+05	( 13 )	3.50E+05	( 7 )	20	9 7	126.1	47.5	370.3
14	1.70E+06	( 51 )	8.67E+05	( 26 )	30	22 9	134.1	82.5	223.5
15	3.33E+05	( 10 )	2.33E+05	( 7 )	30	6 4	97.6	33.9	299.5
16	1.38E+06	( 11 )	1.50E+06	( 12 )	8	38 22	63.3	25.3	155.5
17	5.00E+04	( 2 )	9.25E+05	( 37 )	40	24 8	4.0	0.4	14.5
18	6.67E+04	( 2 )	2.33E+05	( 7 )	30	6 4	20.8	2.0	103.2
19	5.50E+05	( 11 )	4.50E+05	( 9 )	20	12 8	83.9	31.8	227.3
20	1.00E+05	( 4 )	1.50E+05	( 6 )	40	4 3	46.6	9.6	192.0
21	3.33E+04	( 1 )	4.33E+05	( 13 )	30	11 6	6.0	0.1	35.4
22	5.83E+05	( 7 )	1.17E+06	( 14 )	12	30 16	34.9	11.8	91.2
23	1.67E+04	( 1 )	5.17E+05	( 31 )	60	13 5	2.5	0.1	13.4
24	1.15E+06	( 46 )	5.00E+05	( 20 )	40	13 6	156.7	91.6	278.6
25	8.75E+05	( 14 )	3.13E+05	( 5 )	16	8 7	187.4	65.6	654.3
26	1.25E+05	( 5 )	5.75E+05	( 23 )	40	15 6	15.4	4.5	40.4
27	0.00E+00	( 0 )	2.75E+05	( 11 )	40	7 4	4.5	0.2	27.6
28	5.00E+04	( 2 )	3.00E+05	( 12 )	40	8 4	12.3	1.3	51.7
29	9.25E+05	( 37 )	7.25E+05	( 29 )	40	19 7	87.7	52.6	147.5
30	0.00E+00	( 0 )	5.00E+05	( 15 )	30	13 7	3.3	0.1	19.3
31	2.00E+05	( 4 )	2.50E+05	( 5 )	20	6 5	55.6	11.0	252.7
32	1.33E+05	( 4 )	1.60E+06	( 48 )	30	41 12	6.0	1.5	15.8
33	0.00E+00	( 0 )	8.00E+05	( 24 )	30	21 8	2.0	0.1	11.5
34	3.33E+04	( 1 )	3.00E+05	( 9 )	30	8 5	8.7	0.2	55.4
35	7.50E+05	( 6 )	6.25E+05	( 5 )	8	16 14	82.2	21.1	335.7
36	2.86E+04	( 2 )	7.14E+04	( 5 )	70	2 2	28.9	2.6	167.2
37	6.00E+04	( 3 )	5.00E+05	( 25 )	50	13 5	8.7	1.6	27.2
38	5.50E+05	( 22 )	4.50E+05	( 18 )	40	12 5	84.0	43.2	165.6
39	8.00E+05	( 24 )	6.33E+05	( 19 )	30	16 7	86.8	45.7	167.0
40	5.00E+04	( 1 )	5.00E+05	( 10 )	20	13 8	7.8	0.2	48.6
41	8.00E+04	( 4 )	3.80E+05	( 19 )	50	10 4	15.0	3.6	43.8
42	6.67E+04	( 1 )	6.00E+05	( 9 )	15	15 10	8.7	0.2	55.4
43	2.00E+04	( 1 )	3.40E+05	( 17 )	50	9 4	4.6	0.1	26.0
44	3.25E+05	( 13 )	1.75E+05	( 7 )	40	4 3	126.1	47.5	370.3
45	7.50E+04	( 3 )	6.75E+05	( 27 )	40	17 7	8.1	1.5	25.0
46	1.00E+05	( 4 )	3.00E+05	( 12 )	40	8 4	23.7	5.4	75.8
47	1.25E+04	( 1 )	7.00E+05	( 56 )	80	18 5	1.4	0.0	7.2
48	2.00E+04	( 2 )	3.10E+05	( 31 )	100	8 3	4.8	0.5	17.6
49	1.60E+06	( 32 )	1.25E+06	( 25 )	20	32 13	88.0	50.7	154.4
50	6.00E+04	( 6 )	4.20E+05	( 42 )	100	11 3	10.1	3.4	23.4
51	6.00E+04	( 3 )	5.60E+05	( 28 )	50	14 5	7.8	1.4	24.0

52	1.00E+05	( 2)	6.00E+05	( 12)	20	15	9	12.3	1.3	51.7
53	1.00E+05	( 3)	6.00E+05	( 18)	30	15	7	12.0	2.2	39.5
54	1.00E+05	( 3)	8.33E+05	( 25)	30	21	9	8.7	1.6	27.2
55	2.78E+06	( 25)	1.44E+06	( 13)	9	37	20	131.1	65.2	277.8
56	1.80E+06	( 45)	1.72E+06	( 43)	25	44	13	72.1	46.4	112.0
57	3.00E+05	( 9)	8.00E+05	( 24)	30	21	8	26.2	10.6	57.7
58	2.50E+05	( 10)	3.00E+05	( 12)	40	8	4	57.6	22.3	144.3
59	9.50E+05	( 19)	1.25E+06	( 25)	20	32	13	52.6	27.3	98.9
60	4.20E+05	( 21)	4.20E+05	( 21)	50	11	5	68.9	35.9	132.1
61	6.67E+04	( 2)	2.00E+05	( 6)	30	5	4	24.2	2.3	128.0
62	1.00E+05	( 5)	2.80E+05	( 14)	50	7	4	25.2	7.0	72.4
63	7.00E+05	( 14)	9.50E+05	( 19)	20	24	11	51.0	23.6	106.6
64	6.00E+04	( 3)	3.20E+05	( 16)	50	8	4	13.5	2.4	45.3
65	4.80E+05	( 12)	4.00E+05	( 10)	25	10	6	82.4	32.8	211.5
66	4.80E+05	( 12)	4.00E+05	( 10)	25	10	6	82.4	32.8	211.5
67	4.00E+05	( 12)	3.00E+05	( 9)	30	8	5	91.3	35.6	243.8
68	2.13E+06	( 34)	9.38E+05	( 15)	16	24	12	154.2	82.6	303.4
69	1.33E+05	( 8)	3.17E+05	( 19)	60	8	4	29.4	11.0	69.5
70	5.00E+05	( 15)	2.33E+05	( 7)	30	6	4	145.0	56.7	417.0
71	5.00E+05	( 10)	8.00E+05	( 16)	20	21	10	43.4	17.5	100.8
72	6.50E+05	( 13)	5.00E+05	( 10)	20	13	8	89.1	36.4	225.7
73	1.25E+05	( 5)	9.00E+05	( 36)	40	23	8	9.9	2.9	24.6
74	8.33E+04	( 5)	3.17E+05	( 19)	60	8	4	18.6	5.3	50.3
75	4.00E+04	( 1)	3.60E+05	( 9)	25	9	6	8.7	0.2	55.4
76	2.78E+06	( 25)	2.44E+06	( 22)	9	63	27	78.2	42.4	145.0
77	2.10E+06	( 42)	2.20E+06	( 44)	20	56	17	65.8	42.1	102.7
78	3.00E+05	( 15)	3.40E+05	( 17)	50	9	4	60.9	28.3	129.0
79	4.56E+06	( 41)	3.44E+06	( 31)	9	88	32	90.9	55.8	149.6
80	1.00E+05	( 3)	4.67E+05	( 14)	30	12	6	15.4	2.7	53.0
81	4.29E+05	( 15)	4.00E+05	( 14)	35	10	5	73.8	33.3	164.0
82	5.00E+05	( 20)	5.00E+05	( 20)	40	13	6	68.9	35.2	134.4
83	0.00E+00	( 0)	5.20E+05	( 13)	25	13	7	3.8	0.1	22.7
84	4.29E+04	( 3)	5.14E+05	( 36)	70	13	4	6.1	1.1	18.3
85	8.33E+04	( 2)	4.17E+05	( 10)	24	11	7	14.7	1.5	64.7
86	2.86E+04	( 2)	3.86E+05	( 27)	70	10	4	5.5	0.6	20.4
87	2.50E+04	( 1)	4.00E+05	( 16)	40	10	5	4.9	0.1	27.8
88	1.00E+05	( 2)	4.00E+05	( 8)	20	10	7	18.3	1.8	86.3
89	4.00E+04	( 2)	3.80E+05	( 19)	50	10	4	7.8	0.8	30.2
90	7.50E+04	( 3)	2.00E+05	( 8)	40	5	4	26.8	4.4	107.4
91	5.00E+04	( 5)	4.20E+05	( 42)	100	11	3	8.5	2.5	20.8
92	5.00E+04	( 2)	2.25E+05	( 9)	40	6	4	16.3	1.6	74.0
93	4.00E+04	( 2)	2.40E+05	( 12)	50	6	3	12.3	1.3	51.7
94	6.00E+04	( 3)	3.00E+05	( 15)	50	8	4	14.4	2.6	48.8
95	4.75E+05	( 19)	4.75E+05	( 19)	40	12	6	68.9	34.6	137.0
96	2.00E+04	( 1)	7.00E+05	( 35)	50	18	6	2.3	0.0	11.8
97	4.00E+04	( 1)	4.00E+05	( 10)	25	10	6	7.8	0.2	48.6
98	7.14E+04	( 5)	3.14E+05	( 22)	70	8	3	16.1	4.7	42.5
99	3.20E+05	( 16)	3.80E+05	( 19)	50	10	4	58.2	28.0	118.8
100	1.25E+05	( 5)	4.75E+05	( 19)	40	12	6	18.6	5.3	50.3
101	4.00E+04	( 4)	3.00E+05	( 30)	100	8	3	9.6	2.4	26.2
102	5.00E+04	( 1)	3.00E+05	( 6)	20	8	6	12.9	0.3	94.5
103	5.50E+05	( 11)	4.50E+05	( 9)	20	12	8	83.9	31.8	227.3
104	7.75E+05	( 31)	4.50E+05	( 18)	40	12	5	117.8	64.3	222.9
105	2.00E+04	( 1)	2.80E+05	( 14)	50	7	4	5.6	0.1	32.5

**KLD\_65** Kluane detrital UC03A- (Counted by Eva Enkelmann 15 July 2015)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 5.795E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Grain Age (Ma)	--95% CI--
1	2.40E+05	( 24)	2.90E+05	( 29)	100	8	3	56.7	31.6 100.4
2	3.29E+05	( 23)	2.57E+05	( 18)	70	7	3	87.0	45.1 170.5
3	1.35E+06	( 54)	7.75E+05	( 31)	40	20	7	118.3	75.0 190.0
4	2.00E+05	( 10)	6.00E+04	( 3)	50	2	2	217.2	58.6 1180.0
5	3.75E+05	( 9)	5.42E+05	( 13)	24	14	8	47.6	17.9 119.2
6	3.33E+05	( 10)	5.67E+05	( 17)	30	15	7	40.5	16.5 92.8
7	5.80E+05	( 29)	4.40E+05	( 22)	50	11	5	89.7	50.0 163.4
8	3.81E+05	( 8)	2.86E+05	( 6)	21	7	6	90.3	27.8 312.6
9	2.33E+05	( 14)	4.17E+05	( 25)	60	11	4	38.5	18.4 76.5
10	4.64E+05	( 13)	1.43E+05	( 4)	28	4	3	213.7	68.5 877.5
11	4.90E+05	( 49)	4.60E+05	( 46)	100	12	4	72.7	47.7 111.1
12	3.20E+05	( 8)	1.60E+05	( 4)	25	4	4	133.3	36.7 595.2
13	3.60E+05	( 36)	3.00E+05	( 30)	100	8	3	81.8	49.1 137.2
14	1.00E+05	( 10)	7.00E+04	( 7)	100	2	1	96.7	33.6 296.9
15	1.03E+06	( 31)	7.33E+05	( 22)	30	19	8	95.8	54.0 173.3
16	5.10E+05	( 51)	3.10E+05	( 31)	100	8	3	111.8	70.4 180.4
17	3.30E+05	( 33)	2.40E+05	( 24)	100	6	3	93.6	53.8 165.0
18	4.33E+05	( 13)	3.33E+05	( 10)	30	9	5	88.3	36.0 223.7
19	3.20E+05	( 16)	5.20E+05	( 26)	50	13	5	42.3	21.1 81.4
20	1.00E+05	( 6)	8.33E+04	( 5)	60	2	2	81.5	20.9 332.8
21	4.25E+05	( 17)	4.25E+05	( 17)	40	11	5	68.3	32.8 141.7
22	6.00E+05	( 18)	2.33E+05	( 7)	30	6	4	171.8	69.9 482.1
23	5.90E+05	( 59)	3.50E+05	( 35)	100	9	3	114.5	74.4 179.0
24	2.00E+05	( 20)	3.20E+05	( 32)	100	8	3	42.9	23.2 77.0
25	5.00E+05	( 25)	5.20E+05	( 26)	50	13	5	65.7	36.4 118.0
26	1.81E+06	( 29)	9.38E+05	( 15)	16	24	12	130.7	68.4 261.3
27	1.36E+06	( 68)	1.48E+06	( 74)	50	38	9	62.8	44.5 88.5
28	3.67E+05	( 33)	3.44E+05	( 31)	90	9	3	72.7	43.2 122.4
29	4.20E+05	( 21)	3.20E+05	( 16)	50	8	4	89.3	44.6 182.3
30	2.67E+05	( 16)	1.00E+05	( 6)	60	3	2	177.6	67.6 547.8
31	1.50E+05	( 6)	2.50E+05	( 10)	40	6	4	41.5	12.3 124.0
32	8.15E+05	( 22)	5.56E+05	( 15)	27	14	7	99.6	49.7 205.6
33	4.30E+05	( 43)	3.00E+05	( 30)	100	8	3	97.5	60.0 160.7
34	3.80E+05	( 19)	1.80E+05	( 9)	50	5	3	142.0	62.1 354.2
35	1.87E+06	( 56)	1.93E+06	( 58)	30	50	13	66.0	44.9 96.9
36	1.37E+06	( 41)	2.00E+06	( 60)	30	52	13	46.8	30.6 70.7
37	2.40E+05	( 12)	4.00E+04	( 2)	50	1	1	376.2	91.0 2982.0
38	5.00E+05	( 25)	8.20E+05	( 41)	50	21	7	41.8	24.3 70.2
39	1.65E+06	( 33)	1.25E+06	( 25)	20	32	13	89.9	52.0 157.3
40	4.17E+05	( 25)	4.83E+05	( 29)	60	13	5	59.0	33.1 104.0
41	4.40E+05	( 22)	2.80E+05	( 14)	50	7	4	106.6	52.5 224.3
42	6.00E+05	( 18)	1.10E+06	( 33)	30	28	10	37.5	19.8 68.2
43	3.90E+05	( 39)	4.50E+05	( 45)	100	12	3	59.3	37.6 92.9
44	7.50E+05	( 15)	3.50E+05	( 7)	20	9	7	143.8	56.2 413.4
45	6.20E+05	( 31)	3.60E+05	( 18)	50	9	4	116.8	63.7 220.9
46	2.75E+05	( 11)	2.00E+05	( 8)	40	5	4	93.2	34.5 265.1
47	6.00E+05	( 18)	3.67E+05	( 11)	30	9	6	110.8	50.0 258.3
48	1.40E+05	( 7)	1.80E+05	( 9)	50	5	3	53.5	16.9 159.3
49	2.56E+06	( 41)	1.50E+06	( 24)	16	39	16	115.9	68.8 200.1
50	4.00E+05	( 16)	3.00E+05	( 12)	40	8	4	90.6	40.5 208.8
51	2.67E+05	( 8)	1.67E+05	( 5)	30	4	4	107.7	31.6 413.6

52 3.67E+05 (-11) 3.33E+05 (-10) 30 9 5 75.0 29.0 195.6

**KLD\_67** Kluane detrital UC03A- (Counted by Eva Enkelmann 15 July 2015)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 5.743E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Grain Age (Ma)	--95% CI--
1	2.00E+05	( 10)	2.00E+05	( 10)	50	5	3	67.7	25.4 179.8
2	5.40E+05	( 27)	5.40E+05	( 27)	50	14	5	67.7	38.3 119.6
3	2.00E+05	( 6)	2.00E+05	( 6)	30	5	4	67.7	18.2 249.8
4	2.50E+05	( 4)	1.88E+05	( 3)	16	5	5	89.0	15.3 591.7
5	1.37E+06	( 41)	5.67E+05	( 17)	30	15	7	161.2	90.5 301.3
6	3.25E+05	( 13)	5.25E+05	( 21)	40	14	6	42.2	19.3 87.7
7	3.00E+06	( 18)	2.17E+06	( 13)	6	57	31	93.2	43.5 206.0
8	7.57E+05	( 53)	5.43E+05	( 38)	70	14	5	94.1	61.0 146.5
9	6.40E+05	( 32)	7.40E+05	( 37)	50	19	6	58.6	35.4 96.5
10	2.67E+05	( 8)	1.00E+05	( 3)	30	3	3	173.5	43.4 983.5
11	8.25E+05	( 33)	6.00E+05	( 24)	40	16	6	92.7	53.4 163.6
12	1.40E+05	( 7)	1.60E+05	( 8)	50	4	3	59.4	18.3 185.4
13	3.40E+05	( 17)	6.00E+04	( 3)	50	2	2	359.5	110.5 1783.6
14	3.80E+05	( 38)	3.70E+05	( 37)	100	10	3	69.5	43.1 112.2
15	2.20E+05	( 11)	2.00E+05	( 10)	50	5	3	74.3	28.8 193.8
16	1.72E+06	( 31)	7.22E+05	( 13)	18	19	10	159.1	81.9 329.6
17	3.00E+05	( 9)	6.33E+05	( 19)	30	17	8	32.5	12.8 74.4
18	2.29E+05	( 16)	3.71E+05	( 26)	70	10	4	41.9	20.9 80.7
19	3.00E+05	( 12)	2.00E+05	( 8)	40	5	4	100.6	38.2 281.9
20	4.60E+05	( 23)	3.00E+05	( 15)	50	8	4	103.1	51.9 211.8
21	3.80E+05	( 19)	4.00E+05	( 20)	50	10	5	64.4	32.5 126.5
22	2.60E+05	( 13)	8.00E+04	( 4)	50	2	2	211.8	67.9 870.2
23	2.50E+05	( 25)	3.10E+05	( 31)	100	8	3	54.7	31.0 95.5
24	3.25E+05	( 13)	1.75E+05	( 7)	40	5	3	123.9	46.7 363.9
25	3.00E+05	( 18)	2.17E+05	( 13)	60	6	3	93.2	43.5 206.0
26	6.00E+05	( 9)	3.33E+05	( 5)	15	9	7	119.7	36.7 449.5
27	2.25E+05	( 9)	2.75E+05	( 11)	40	7	4	55.6	20.3 146.3
28	1.20E+05	( 6)	1.40E+05	( 7)	50	4	3	58.3	16.2 199.7
29	2.00E+05	( 3)	4.00E+05	( 6)	15	10	8	34.8	5.5 157.5
30	2.67E+05	( 8)	1.67E+05	( 5)	30	4	4	106.7	31.3 410.0
31	1.00E+05	( 7)	7.14E+04	( 5)	70	2	2	93.7	26.0 370.1
32	3.00E+05	( 12)	4.25E+05	( 17)	40	11	5	48.1	20.9 106.0
33	2.40E+05	( 12)	2.80E+05	( 14)	50	7	4	58.2	24.6 134.6
34	4.30E+05	( 43)	4.40E+05	( 44)	100	11	3	66.2	42.4 103.0
35	3.40E+05	( 17)	3.20E+05	( 16)	50	8	4	71.9	34.2 151.3
36	4.50E+05	( 18)	5.25E+05	( 21)	40	14	6	58.1	29.2 114.1
37	9.00E+04	( 9)	6.00E+04	( 6)	100	2	1	100.4	32.3 339.6
38	6.25E+05	( 25)	4.00E+05	( 16)	40	10	5	105.1	54.3 209.9
39	1.80E+05	( 18)	1.60E+05	( 16)	100	4	2	76.0	36.7 158.7
40	4.60E+05	( 23)	1.20E+05	( 6)	50	3	2	250.8	102.3 739.6
41	1.12E+06	( 28)	3.60E+05	( 9)	25	9	6	205.8	96.3 491.2
42	4.60E+05	( 23)	3.80E+05	( 19)	50	10	5	81.7	42.7 158.2
43	4.20E+05	( 42)	3.20E+05	( 32)	100	8	3	88.6	54.7 144.8
44	8.00E+05	( 24)	5.00E+05	( 15)	30	13	7	107.5	54.5 219.7
45	6.00E+05	( 6)	8.00E+05	( 8)	10	21	14	51.2	14.6 165.7
46	1.23E+06	( 37)	1.03E+06	( 31)	30	27	10	80.7	48.8 134.2
47	1.50E+05	( 6)	2.50E+05	( 10)	40	7	4	41.1	12.2 122.9
48	4.00E+06	( 36)	6.22E+06	( 56)	9	163	44	43.7	27.9 67.4
49	6.00E+05	( 18)	5.33E+05	( 16)	30	14	7	76.0	36.7 158.7
50	2.80E+05	( 14)	3.80E+05	( 19)	50	10	5	50.1	23.2 104.7
51	2.80E+05	( 14)	2.00E+05	( 10)	50	5	3	94.1	39.2 235.6

52	2.50E+05	( 10)	2.50E+05	( 10)	40	7	4	67.7	25.4	179.8
53	3.00E+05	( 15)	3.20E+05	( 16)	50	8	4	63.5	29.3	136.5
54	3.00E+05	( 30)	3.10E+05	( 31)	100	8	3	65.5	38.3	111.7
55	2.63E+05	( 21)	3.38E+05	( 27)	80	9	3	52.8	28.4	96.6
56	6.00E+05	( 18)	4.00E+05	( 12)	30	10	6	100.8	46.3	228.4
57	6.00E+05	( 30)	2.20E+05	( 11)	50	6	3	181.3	89.7	398.3
58	6.00E+05	( 18)	2.33E+05	( 7)	30	6	4	170.3	69.3	477.9
59	3.00E+05	( 12)	1.75E+05	( 7)	40	5	3	114.5	42.2	340.8
60	2.80E+05	( 28)	4.30E+05	( 43)	100	11	3	44.3	26.4	72.7
61	5.00E+05	( 15)	5.33E+05	( 16)	30	14	7	63.5	29.3	136.5
62	1.33E+05	( 8)	6.67E+04	( 4)	60	2	2	132.1	36.3	590.1
63	2.70E+05	( 27)	4.70E+05	( 47)	100	12	4	39.1	23.3	63.9
64	2.33E+05	( 7)	2.67E+05	( 8)	30	7	5	59.4	18.3	185.4
65	3.40E+05	( 17)	3.60E+05	( 18)	50	9	4	64.0	31.0	131.0
66	1.23E+06	( 49)	1.75E+06	( 70)	40	46	11	47.5	32.2	69.4
67	4.00E+05	( 16)	6.50E+05	( 26)	40	17	7	41.9	20.9	80.7
68	7.00E+05	( 14)	1.00E+06	( 20)	20	26	12	47.6	22.2	98.5
69	1.00E+06	( 15)	1.47E+06	( 22)	15	38	16	46.4	22.3	93.0
70	2.50E+05	( 10)	2.00E+05	( 8)	40	5	4	84.2	30.1	243.6
71	5.40E+05	( 27)	4.20E+05	( 21)	50	11	5	86.8	47.4	161.0
72	3.00E+05	( 15)	1.80E+05	( 9)	50	5	3	111.6	46.3	287.7
73	3.20E+05	( 16)	2.60E+05	( 13)	50	7	4	83.0	37.6	186.7
74	3.67E+05	( 11)	3.00E+05	( 9)	30	8	5	82.4	31.2	223.4
75	6.25E+05	( 10)	3.75E+05	( 6)	16	10	8	111.3	37.2	369.2
76	6.00E+05	( 18)	1.00E+06	( 30)	30	26	10	40.9	21.4	75.3
77	1.80E+05	( 9)	5.60E+05	( 28)	50	15	6	22.1	9.1	47.6
78	2.60E+05	( 13)	3.20E+05	( 16)	50	8	4	55.2	24.4	121.6
79	5.00E+04	( 2)	1.50E+05	( 6)	40	4	3	23.8	2.2	125.7
80	1.67E+05	( 5)	3.33E+05	( 10)	30	9	5	34.5	9.1	108.4
81	2.75E+05	( 11)	4.00E+05	( 16)	40	10	5	46.8	19.6	106.6
82	3.40E+05	( 17)	3.80E+05	( 19)	50	10	5	60.7	29.6	122.7
83	3.80E+05	( 19)	2.40E+05	( 12)	50	6	4	106.3	49.4	239.1
84	1.43E+05	( 10)	2.29E+05	( 16)	70	6	3	42.7	17.2	99.0
85	2.50E+05	( 25)	2.80E+05	( 28)	100	7	3	60.5	33.8	107.3
86	2.75E+05	( 11)	3.50E+05	( 14)	40	9	5	53.4	21.9	125.7
87	1.70E+05	( 17)	1.30E+05	( 13)	100	3	2	88.1	40.5	196.4
88	1.67E+06	( 10)	2.00E+06	( 12)	6	52	30	56.6	21.9	141.8
89	7.20E+05	( 18)	2.80E+05	( 7)	25	7	5	170.3	69.3	477.9
90	2.57E+05	( 18)	2.14E+05	( 15)	70	6	3	81.0	38.7	171.9
91	1.60E+05	( 8)	4.00E+05	( 20)	50	10	5	27.5	10.4	64.3
92	6.00E+04	( 3)	2.20E+05	( 11)	50	6	3	19.2	3.3	69.9
93	1.38E+06	( 22)	1.31E+06	( 21)	16	34	15	70.9	37.2	135.0
94	2.40E+05	( 12)	3.20E+05	( 16)	50	8	4	51.0	22.0	114.1
95	5.25E+05	( 21)	7.75E+05	( 31)	40	20	7	46.1	25.1	82.4
96	2.00E+05	( 4)	4.00E+05	( 8)	20	10	7	34.6	7.5	125.9
97	8.67E+05	( 26)	7.33E+05	( 22)	30	19	8	79.8	43.6	147.4

**KLD\_85** Kluane detrital UC03A- (Counted by Eva Enkelmann 18 July 2015)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 5.640E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Grain Age (Ma)	--95% CI--
1	1.10E+06	( 22)	8.00E+05	( 16)	20	21 11	91.0	45.9	184.7
2	7.67E+05	( 23)	4.00E+05	( 12)	30	11 6	126.0	60.8	276.7
3	4.40E+05	( 22)	3.20E+05	( 16)	50	9 4	91.0	45.9	184.7
4	1.53E+06	( 46)	1.03E+06	( 31)	30	27 10	98.2	61.2	160.0
5	2.22E+05	( 4)	7.78E+05	( 14)	18	21 11	19.6	4.6	60.6
6	3.33E+04	( 2)	3.83E+05	( 23)	60	10 4	6.2	0.7	23.5
7	1.25E+05	( 5)	2.00E+05	( 8)	40	5 4	42.1	10.7	143.3
8	3.33E+04	( 2)	1.83E+05	( 11)	60	5 3	12.9	1.3	55.5
9	6.17E+06	( 37)	4.00E+06	( 24)	6	106 43	102.0	59.7	177.8
10	8.00E+04	( 2)	4.80E+05	( 12)	25	13 7	11.8	1.2	49.9
11	6.67E+04	( 4)	3.33E+05	( 20)	60	9 4	13.8	3.3	39.8
12	0.00E+00	( 0)	3.75E+05	( 15)	40	10 5	3.2	0.1	18.6
13	3.25E+06	( 65)	1.70E+06	( 34)	20	45 15	126.2	82.5	196.8
14	9.00E+04	( 9)	3.40E+05	( 34)	100	9 3	17.9	7.5	37.6
15	1.20E+05	( 6)	5.40E+05	( 27)	50	14 6	15.1	5.0	36.7
16	1.33E+05	( 4)	1.33E+05	( 4)	30	4 3	66.5	12.4	349.4
17	5.00E+04	( 1)	3.50E+05	( 7)	20	9 7	10.7	0.2	73.9
18	1.20E+05	( 6)	4.00E+05	( 20)	50	11 5	20.4	6.6	51.6
19	8.00E+04	( 4)	2.60E+05	( 13)	50	7 4	21.1	4.9	66.3
20	0.00E+00	( 0)	3.60E+05	( 18)	50	10 4	2.6	0.1	15.2
21	8.60E+05	( 43)	3.60E+05	( 18)	50	10 4	156.9	89.4	287.9
22	2.15E+06	( 43)	9.00E+05	( 18)	20	24 11	156.9	89.4	287.9
23	7.00E+06	( 28)	6.75E+06	( 27)	4	180 69	68.9	39.2	121.2
24	5.67E+05	( 17)	2.00E+05	( 6)	30	5 4	183.5	70.8	561.7
25	2.33E+05	( 7)	3.00E+05	( 9)	30	8 5	52.0	16.4	155.1
26	6.67E+04	( 2)	3.67E+05	( 11)	30	10 6	12.9	1.3	55.5
27	2.50E+04	( 1)	2.50E+05	( 10)	40	7 4	7.5	0.2	46.8
28	1.25E+05	( 5)	1.50E+05	( 6)	40	4 3	55.7	13.4	215.5
29	2.50E+04	( 1)	2.25E+05	( 9)	40	6 4	8.4	0.2	53.4
30	4.00E+04	( 2)	5.40E+05	( 27)	50	14 6	5.3	0.6	19.7
31	1.56E+06	( 25)	1.38E+06	( 22)	16	37 15	75.4	40.9	139.9
32	2.75E+05	( 11)	1.40E+06	( 56)	40	37 10	13.3	6.2	25.3
33	3.00E+05	( 12)	3.00E+05	( 12)	40	8 5	66.5	27.4	160.8
34	1.00E+05	( 5)	3.40E+05	( 17)	50	9 4	20.1	5.7	55.3
35	5.00E+04	( 2)	1.25E+05	( 5)	40	3 3	27.9	2.5	161.3
36	5.50E+05	( 11)	3.00E+05	( 6)	20	8 6	119.9	41.4	391.6
37	2.40E+05	( 6)	4.80E+05	( 12)	25	13 7	33.8	10.3	95.6
38	5.11E+06	( 46)	2.67E+06	( 24)	9	71 29	126.4	76.0	216.0
39	8.00E+04	( 4)	1.80E+05	( 9)	50	5 3	30.3	6.7	105.6
40	6.22E+06	( 56)	1.89E+06	( 17)	9	50 24	215.1	124.7	392.4
41	6.00E+04	( 3)	6.60E+05	( 33)	50	18 6	6.4	1.2	19.4
42	6.00E+06	( 24)	3.25E+06	( 13)	4	86 47	121.5	60.0	258.8
43	3.33E+04	( 2)	5.67E+05	( 34)	60	15 5	4.2	0.5	15.3
44	1.20E+05	( 6)	6.40E+05	( 32)	50	17 6	12.8	4.3	30.3
45	6.00E+04	( 6)	2.20E+05	( 22)	100	6 2	18.6	6.0	46.2
46	1.00E+05	( 5)	2.60E+05	( 13)	50	7 4	26.2	7.2	76.4
47	4.29E+04	( 3)	2.00E+05	( 14)	70	5 3	14.9	2.6	51.2
48	3.75E+06	( 15)	4.50E+06	( 18)	4	120 56	55.6	26.1	116.1
49	4.00E+06	( 36)	3.00E+06	( 27)	9	80 31	88.4	52.3	151.0
50	1.05E+06	( 21)	6.00E+05	( 12)	20	16 9	115.2	54.7	255.9
51	7.50E+04	( 3)	4.00E+05	( 16)	40	11 5	13.1	2.3	43.7

52	3.33E+04	( 1)	2.33E+05	( 7)	30	6	5	10.7	0.2	73.9
53	5.00E+05	( 6)	8.33E+05	( 10)	12	22	14	40.4	12.0	120.7
54	0.00E+00	( 0)	3.25E+05	( 13)	40	9	5	3.7	0.1	21.9
55	2.33E+06	( 21)	1.89E+06	( 17)	9	50	24	81.9	41.3	164.7
56	2.00E+05	( 5)	5.20E+05	( 13)	25	14	8	26.2	7.2	76.4
57	1.25E+06	( 20)	1.75E+06	( 28)	16	47	18	47.7	25.4	87.3
58	3.60E+06	( 108)	2.50E+06	( 75)	30	66	15	95.5	70.5	130.0
59	5.00E+04	( 2)	3.00E+05	( 12)	40	8	5	11.8	1.2	49.9
60	5.00E+04	( 2)	3.50E+05	( 14)	40	9	5	10.2	1.1	41.5
61	9.33E+05	( 14)	1.00E+06	( 15)	15	27	14	62.1	27.8	137.3
62	3.00E+04	( 3)	2.90E+05	( 29)	100	8	3	7.2	1.3	22.3
63	6.67E+05	( 12)	1.67E+05	( 3)	18	4	5	252.3	71.7	1329.8
64	4.00E+04	( 4)	2.80E+05	( 28)	100	7	3	9.9	2.4	27.3
65	0.00E+00	( 0)	3.00E+05	( 30)	100	8	3	1.6	0.1	8.7
66	8.33E+04	( 5)	2.67E+05	( 16)	60	7	4	21.3	6.0	59.4
67	1.20E+05	( 3)	3.20E+05	( 8)	25	9	6	25.8	4.3	103.7
68	1.00E+04	( 1)	3.00E+05	( 30)	100	8	3	2.5	0.1	13.4
69	1.00E+05	( 10)	3.70E+05	( 37)	100	10	3	18.3	8.0	37.0
70	2.00E+05	( 4)	4.50E+05	( 9)	20	12	8	30.3	6.7	105.6
71	6.67E+04	( 2)	4.00E+05	( 12)	30	11	6	11.8	1.2	49.9
72	0.00E+00	( 0)	5.00E+05	( 5)	10	13	11	9.9	0.3	72.6
73	1.33E+05	( 4)	4.33E+05	( 13)	30	12	6	21.1	4.9	66.3
74	8.57E+04	( 6)	3.00E+05	( 21)	70	8	3	19.4	6.3	48.8
75	6.67E+04	( 2)	2.00E+05	( 6)	30	5	4	23.3	2.2	123.5
76	7.50E+04	( 3)	3.50E+05	( 14)	40	9	5	14.9	2.6	51.2
77	1.33E+06	( 12)	1.33E+06	( 12)	9	35	20	66.5	27.4	160.8
78	5.24E+05	( 11)	9.52E+04	( 2)	21	3	3	337.0	79.7	2739.7
79	6.00E+04	( 3)	3.40E+05	( 17)	50	9	4	12.3	2.2	40.7
80	1.00E+05	( 3)	3.00E+05	( 9)	30	8	5	23.0	3.9	88.7
81	6.33E+05	( 19)	1.90E+06	( 57)	30	51	13	22.4	12.5	38.0
82	7.50E+04	( 3)	5.00E+05	( 20)	40	13	6	10.5	1.9	33.7
83	2.50E+06	( 50)	1.35E+06	( 27)	20	36	14	122.3	75.5	202.7
84	1.30E+06	( 26)	6.80E+06	( 136)	20	181	32	12.8	8.0	19.5
85	2.22E+05	( 2)	3.33E+05	( 3)	9	9	9	45.5	3.7	377.8
86	0.00E+00	( 0)	3.00E+05	( 12)	40	8	5	4.0	0.1	24.0
87	5.00E+06	( 20)	2.25E+06	( 9)	4	60	39	145.4	64.3	360.5
88	3.22E+06	( 29)	3.44E+06	( 31)	9	92	33	62.2	36.2	106.5
89	4.00E+04	( 2)	4.40E+05	( 22)	50	12	5	6.5	0.7	24.7
90	0.00E+00	( 0)	2.00E+05	( 6)	30	5	4	8.2	0.3	56.5
91	5.00E+04	( 2)	1.75E+05	( 7)	40	5	3	20.1	1.9	99.6
92	1.40E+05	( 7)	7.00E+05	( 35)	50	19	6	13.6	5.0	30.5
93	8.00E+04	( 8)	3.60E+05	( 36)	100	10	3	15.1	6.0	32.4
94	4.00E+04	( 4)	4.40E+05	( 44)	100	12	4	6.3	1.6	16.7
95	4.00E+04	( 1)	5.20E+05	( 13)	25	14	8	5.8	0.1	34.2
96	9.00E+04	( 9)	4.20E+05	( 42)	100	11	3	14.5	6.1	29.8
97	8.00E+04	( 4)	2.20E+05	( 11)	50	6	3	24.9	5.6	81.6
98	7.00E+04	( 7)	9.40E+05	( 94)	100	25	5	5.1	1.9	10.7
99	7.78E+05	( 7)	5.56E+05	( 5)	9	15	13	92.1	25.5	363.6
100	0.00E+00	( 0)	3.40E+05	( 17)	50	9	4	2.8	0.1	16.2
101	7.50E+04	( 3)	3.75E+05	( 15)	40	10	5	13.9	2.5	47.1
102	5.33E+05	( 16)	3.00E+05	( 9)	30	8	5	116.8	49.2	298.3
103	3.67E+06	( 33)	2.00E+06	( 18)	9	53	25	120.9	66.6	227.3
104	4.00E+06	( 16)	2.75E+06	( 11)	4	73	43	96.0	42.2	227.8
105	2.50E+04	( 1)	3.00E+05	( 12)	40	8	5	6.3	0.1	37.6

**KLD\_105** Kluane detrital UC03A- (Counted by Eva Enkelmann 16 July 2015)  
 EFFECTIVE TRACK DENSITY FOR FLUENCE MONITOR (tracks/cm<sup>2</sup>): 5.276E+05  
 RELATIVE ERROR (%): 1.80  
 EFFECTIVE URANIUM CONTENT OF MONITOR (ppm): 15.00  
 ZETA FACTOR AND STANDARD ERROR (yr cm<sup>2</sup>): 237.00 5.00  
 SIZE OF COUNTER SQUARE (cm<sup>2</sup>): 1.000E-06

----- GRAIN AGES IN ORIGINAL ORDER -----

Grain no.	RhoS (cm <sup>-2</sup> )	(Ns)	RhoI (cm <sup>-2</sup> )	(Ni)	Squares	U+/-s	Age	Grain Age (Ma)	--95% CI--
1	6.00E+05	( 18)	3.00E+05	( 9)	30	9	6	122.7	53.1 308.7
2	4.67E+05	( 14)	2.00E+05	( 6)	30	6	4	142.1	52.4 447.6
3	1.00E+06	( 9)	2.22E+05	( 2)	9	6	8	260.3	57.9 2238.8
4	4.44E+05	( 8)	2.78E+05	( 5)	18	8	7	98.1	28.8 377.6
5	8.33E+05	( 25)	6.00E+05	( 18)	30	17	8	86.0	45.3 166.9
6	6.00E+05	( 9)	6.00E+05	( 9)	15	17	11	62.2	21.9 175.5
7	3.50E+05	( 14)	4.50E+05	( 18)	40	13	6	48.6	22.3 102.8
8	1.00E+06	( 9)	8.89E+05	( 8)	9	25	17	69.8	24.0 206.3
9	2.75E+05	( 11)	5.00E+04	( 2)	40	1	2	315.8	74.6 2594.0
10	2.00E+05	( 3)	3.33E+05	( 5)	15	9	8	38.2	5.8 190.1
11	4.00E+05	( 12)	4.33E+05	( 13)	30	12	7	57.5	24.0 135.9
12	3.21E+05	( 9)	4.29E+05	( 12)	28	12	7	46.9	17.4 120.2
13	4.80E+05	( 24)	4.00E+05	( 20)	50	11	5	74.5	39.5 141.8
14	4.67E+05	( 14)	2.00E+05	( 6)	30	6	4	142.1	52.4 447.6
15	9.17E+05	( 11)	2.50E+05	( 3)	12	7	8	217.2	60.2 1167.8
16	1.00E+05	( 1)	3.00E+05	( 3)	10	9	9	22.7	0.4 254.6
17	1.67E+05	( 5)	3.00E+05	( 9)	30	9	6	35.1	9.1 114.5
18	5.00E+05	( 15)	5.00E+05	( 15)	30	14	7	62.2	28.4 135.9
19	7.78E+05	( 7)	5.56E+05	( 5)	9	16	13	86.2	23.9 340.8
20	5.00E+05	( 15)	1.67E+05	( 5)	30	5	4	181.1	64.4 628.4
21	4.67E+05	( 14)	1.67E+05	( 5)	30	5	4	169.3	59.3 593.2
22	4.38E+05	( 7)	5.00E+05	( 8)	16	14	10	54.6	16.9 170.5
23	4.00E+05	( 6)	2.00E+05	( 3)	15	6	6	120.8	26.6 730.1
24	2.00E+05	( 6)	5.33E+05	( 16)	30	15	7	23.8	7.5 62.8
25	7.00E+05	( 28)	5.00E+05	( 20)	40	14	6	86.7	47.3 162.0
26	5.50E+05	( 11)	4.50E+05	( 9)	20	13	8	75.7	28.7 205.5
27	2.75E+05	( 11)	7.50E+04	( 3)	40	2	2	217.2	60.2 1167.8
28	4.00E+05	( 12)	2.33E+05	( 7)	30	7	5	105.3	38.8 313.8
29	4.00E+05	( 4)	2.00E+05	( 2)	10	6	7	119.5	17.9 1252.7
30	4.33E+05	( 13)	2.67E+05	( 8)	30	8	5	100.0	38.9 276.9
31	8.89E+05	( 16)	2.78E+05	( 5)	18	8	7	192.8	69.6 663.4
32	1.00E+05	( 4)	2.00E+05	( 8)	40	6	4	31.8	6.9 115.7
33	4.00E+05	( 8)	3.50E+05	( 7)	20	10	7	70.9	22.6 227.6
34	1.00E+06	( 20)	4.50E+05	( 9)	20	13	8	136.1	60.1 337.8
35	5.50E+05	( 11)	4.00E+05	( 8)	20	11	8	84.9	31.4 241.8
36	1.70E+05	( 17)	4.00E+04	( 4)	100	1	1	252.8	86.0 1003.6
37	1.05E+06	( 21)	8.00E+05	( 16)	20	23	11	81.3	40.6 166.2
38	5.00E+05	( 8)	4.38E+05	( 7)	16	12	9	70.9	22.6 227.6
39	6.00E+05	( 18)	3.00E+05	( 9)	30	9	6	122.7	53.1 308.7
40	3.00E+05	( 9)	4.67E+05	( 14)	30	13	7	40.3	15.3 99.0
41	5.83E+05	( 7)	5.83E+05	( 7)	12	17	12	62.2	18.7 205.7
42	9.00E+05	( 27)	4.67E+05	( 14)	30	13	7	118.8	60.7 244.3
43	7.33E+05	( 11)	6.00E+05	( 9)	15	17	11	75.7	28.7 205.5
44	4.75E+05	( 19)	4.50E+05	( 18)	40	13	6	65.6	32.7 132.1
45	8.00E+05	( 12)	8.00E+05	( 12)	15	23	13	62.2	25.6 150.5
46	8.00E+05	( 16)	4.50E+05	( 9)	20	13	8	109.3	46.0 279.4
47	1.14E+05	( 8)	7.14E+04	( 5)	70	2	2	98.1	28.8 377.6
48	3.17E+05	( 19)	2.67E+05	( 16)	60	8	4	73.7	36.0 152.7
49	6.00E+04	( 3)	4.00E+04	( 2)	50	1	1	91.0	10.7 1035.4
50	5.00E+05	( 10)	5.50E+05	( 11)	20	16	9	56.7	21.6 145.9
51	5.00E+05	( 15)	3.67E+05	( 11)	30	10	6	84.4	36.5 202.2

52	1.19E+06	( 19)	8.75E+05	( 14)	16	25	13	84.0	40.2	180.5
53	4.67E+05	( 14)	3.67E+05	( 11)	30	10	6	78.8	33.4	191.0
54	4.80E+05	( 12)	1.08E+06	( 27)	25	31	12	27.9	12.8	56.5
55	2.78E+05	( 5)	2.22E+05	( 4)	18	6	6	77.1	16.8	382.5
56	8.33E+05	( 25)	6.00E+05	( 18)	30	17	8	86.0	45.3	166.9
57	9.50E+05	( 19)	4.00E+05	( 8)	20	11	8	145.1	61.7	380.9
58	4.80E+05	( 12)	4.80E+05	( 12)	25	14	8	62.2	25.6	150.5
59	1.40E+05	( 7)	6.00E+04	( 3)	50	2	2	140.2	33.2	820.2
60	1.50E+05	( 3)	5.00E+05	( 10)	20	14	9	19.4	3.3	72.5
61	6.00E+05	( 15)	3.20E+05	( 8)	25	9	6	115.1	46.4	311.8
62	3.67E+05	( 11)	3.33E+05	( 10)	30	9	6	68.3	26.4	178.3
63	7.67E+05	( 23)	4.33E+05	( 13)	30	12	7	109.1	53.5	233.7
64	4.67E+05	( 14)	3.33E+05	( 10)	30	9	6	86.5	36.0	216.7
65	6.00E+05	( 15)	4.80E+05	( 12)	25	14	8	77.5	34.0	180.5
66	4.33E+05	( 13)	2.67E+05	( 8)	30	8	5	100.0	38.9	276.9
67	2.50E+05	( 3)	5.00E+05	( 6)	12	14	11	32.0	5.1	144.8
68	4.44E+05	( 4)	1.00E+06	( 9)	9	28	18	28.3	6.2	98.9
69	1.70E+06	( 34)	1.15E+06	( 23)	20	33	14	91.6	52.6	162.5
70	7.00E+05	( 28)	3.25E+05	( 13)	40	9	5	132.4	67.1	277.4
71	5.50E+05	( 22)	4.25E+05	( 17)	40	12	6	80.2	40.9	160.4
72	8.00E+05	( 24)	2.67E+05	( 8)	30	8	5	182.4	80.9	466.1
73	4.20E+05	( 21)	2.40E+05	( 12)	50	7	4	107.9	51.2	239.7
74	9.00E+05	( 18)	5.50E+05	( 11)	20	16	9	100.9	45.6	235.6
75	1.00E+05	( 3)	6.67E+04	( 2)	30	2	2	91.0	10.7	1035.4
76	6.80E+05	( 17)	5.20E+05	( 13)	25	15	8	81.0	37.3	180.7
77	1.93E+06	( 58)	1.83E+06	( 55)	30	52	14	65.6	44.6	96.6
78	5.50E+05	( 11)	4.50E+05	( 9)	20	13	8	75.7	28.7	205.5
79	1.00E+05	( 5)	4.00E+04	( 2)	50	1	1	147.9	25.5	1462.7
80	2.50E+05	( 10)	7.50E+04	( 3)	40	2	2	198.0	53.4	1082.7
81	4.75E+05	( 19)	3.50E+05	( 14)	40	10	5	84.0	40.2	180.5
82	5.00E+05	( 25)	3.00E+05	( 15)	50	9	4	102.9	52.6	209.4
83	4.00E+05	( 20)	4.40E+05	( 22)	50	13	5	56.6	29.3	108.4
84	5.00E+05	( 15)	1.67E+05	( 5)	30	5	4	181.1	64.4	628.4
85	2.00E+06	( 18)	2.33E+06	( 21)	9	66	29	53.4	26.8	104.9
86	4.25E+05	( 17)	5.00E+05	( 20)	40	14	6	53.0	26.1	106.1
87	4.00E+05	( 12)	2.00E+05	( 6)	30	6	4	122.2	43.3	394.0
88	4.40E+05	( 11)	4.00E+05	( 10)	25	11	7	68.3	26.4	178.3
89	3.00E+05	( 15)	1.60E+05	( 8)	50	5	3	115.1	46.4	311.8
90	5.75E+05	( 23)	2.75E+05	( 11)	40	8	5	128.4	60.9	290.6
91	8.00E+05	( 8)	4.00E+05	( 4)	10	11	11	121.5	33.4	544.1
92	8.89E+05	( 8)	1.00E+06	( 9)	9	28	18	55.5	18.6	160.4
93	8.00E+05	( 16)	3.00E+05	( 6)	20	9	7	161.9	61.6	500.6
94	6.67E+05	( 14)	3.81E+05	( 8)	21	11	7	107.6	42.7	294.4
95	2.40E+05	( 12)	6.00E+04	( 3)	50	2	2	236.3	67.1	1251.7
96	7.50E+05	( 15)	3.50E+05	( 7)	20	10	7	131.0	51.2	377.4
97	3.00E+05	( 3)	7.00E+05	( 7)	10	20	15	27.5	4.5	116.4
98	1.40E+06	( 28)	1.00E+06	( 20)	20	28	13	86.7	47.3	162.0

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