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**PRELIMINARY RESULTS OF SEVEN APATITE FISSION-TRACK ANALYSES OF
SAMPLES FROM THE COBBLESTONE CREEK REGION,
CHANDLAR LAKE QUADRANGLE,
NORTH SLOPE, ALASKA**

by

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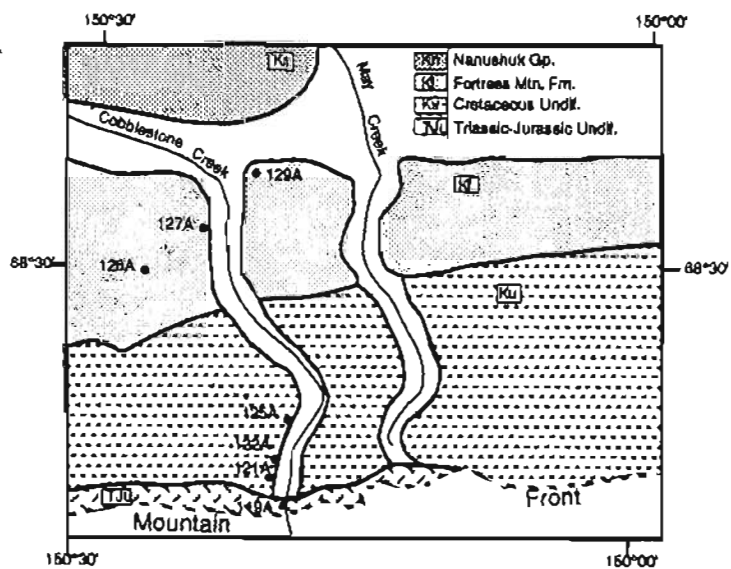


Figure 1: Map showing approximate locations of samples collected for this study.

INTRODUCTION

This is a preliminary report of apatite fission track analysis data of samples from the Cobblestone Creek region of the Chandler Lake Quadrangle, North Slope of Alaska. During 1989, samples were collected along a horizontal traverse following the Cobblestone Creek drainage from Triassic through Albian sediments. Apatite grains were separated from the samples and analyzed in Melbourne Australia at the La Trobe University Fission Track Research Laboratory. Separations and grain-mounts were completed by Geotrack International. All analyses were completed by the author as part of an ongoing PhD project funded in part by the U.S. Minerals Management Service Continental Margins Program.

Each analysis includes two parts: 1) age report; and 2) track length distributions. The age report shows a listing of the individual grain ages, the resulting age and pertinent information used in determining the age. A guide to read the information is as follows:

<u>POS 22A-Tucltu Fm.</u>	-Sample number and unit collected
Irradiation:	-In-house number for grouping samples from the same irradiation package
Crystal	-Number of each grain counted
NS	-Number of spontaneous tracks counted
NI	-Number of induced tracks counted
NA	-Number of area units counted in grain
Ratio	-Ratio of (NS/NI) for each grain
U(ppm)	-Uranium concentration of each grain
RHOs	-Density of spontaneous tracks (per cm ²)
RHOi	-Density of induced tracks (per cm ²)
F.T.Age(Ma)	-Individual grain ages
CHI Squared	-Statistical test for determining multiple grain populations
p(chi squared)	-probability of less than 5% indicates multiple grain populations
Variance of SQR	-Statistical comparison of values of NS or NI for all grains
NS/NI	-Pooled ratio of (NS/NI). Uses total number of spontaneous and induced tracks counted for whole sample. Value used in age calculation if sample is of a single population
Mean Ratio	-Average ratio of (NS/NI) for grains
Pooled Age	-Age calculated using NS/NI(single population)
Mean Age	-Age calculated Using "Mean Ratio" (multiple populations)

The track length distributions for each sample are histograms showing the relative numbers of tracks measured at a particular length, the mean length of the tracks measured, the standard deviation of the tracks measured, and the total number of tracks measured for the sample (N).

SAMPLE INFORMATION

Fission track ages are typically determined on a minimum of 20 grains of apatite from a single sample and 100 confined tracks are typically measured for each track length distribution. All samples from the section yielded apatite in adequate amounts for 20 individual grains. The samples from the allocthonous Okpikruak Formation yielded grains representing multiple populations so the mean age is presented (shown by a * in table below). The pooled age is presented for the samples for which it was determined that the dated grains represented a single population. Due to young apparent ages, low uranium concentrations, and low yields in some samples, only three samples yielded >100 confined tracks.

Sample No.	Formation	Elevation (m)	Lengths (#)	Mean Length (μm)	Age (Ma)
89 POS 119A	Karen Creek	994	3	14.89	41.0
89 POS 121A	Okpikruak	985	24	11.91	122.2*
89 POS 122A	Okpikruak	1006	72	14.00	81.7*
89 POS 125A	Okpikruak	978	68	13.48	92.09*
89 POS 126A	Fortress Mtn.	762	102	13.68	52.8
89 POS 127A	Fortress Mtn.	793	101	13.53	49.8
89 POS 129A	Fortress Mtn.	674	101	13.64	46.8

TRACK LENGTH DATA

Sample Number	Track Length Range (μm)													
	<5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	>17
119A	0	0	0	0	0	0	0	0	1	0	0	1	1	0
121A	1	0	0	1	0	3	3	4	2	5	3	2	0	0
122A	0	0	0	1	0	0	3	3	7	16	25	14	3	0
125A	1	0	1	1	1	1	4	3	11	11	17	9	8	0
126A	3	2	0	0	0	0	4	3	7	28	29	21	5	0
127A	2	1	0	0	0	2	2	3	19	20	37	11	4	0
129A	0	1	1	1	1	2	6	3	13	21	22	28	1	1

DATA FROM COBBLESTONE CREEK

89POS119A APATITE Karen Creek SS

IRRADIATION GT071

SLIDE NUMBER 3

COUNTED BY: POS

No.	Ns	Ni	Na	RATIO U (ppm)	RHOs	RHOi	F.T. AGE (Ma)	
1	9	40	12	0.225	38.5	8.533E+05	3.793E+06	51.0 ± 18.9
2	5	15	16	0.333	10.8	3.556E+05	1.067E+06	75.4 ± 39.0
3	13	84	16	0.155	60.7	9.245E+05	5.973E+06	35.1 ± 10.5
4	1	11	12	0.091	10.6	9.482E+04	1.043E+06	20.6 ± 21.6
5	5	36	16	0.139	26.0	3.556E+05	2.560E+06	31.5 ± 15.1
6	4	47	18	0.085	30.2	2.528E+05	2.971E+06	19.3 ± 10.1
7	0	6	12	0.000	5.8	0.000E+00	5.689E+05	0.0 ± 0.0
8	2	21	16	0.095	15.2	1.422E+05	1.493E+06	21.6 ± 16.0
9	9	34	16	0.265	24.6	6.400E+05	2.418E+06	59.9 ± 22.5
10	3	22	20	0.136	12.7	1.707E+05	1.252E+06	30.9 ± 19.1
11	3	15	15	0.200	11.6	2.276E+05	1.138E+06	45.3 ± 28.7
12	2	14	9	0.143	18.0	2.528E+05	1.770E+06	32.4 ± 24.5
13	3	18	12	0.167	17.3	2.844E+05	1.707E+06	37.8 ± 23.6
14	1	10	8	0.100	14.4	1.422E+05	1.422E+06	22.7 ± 23.8
15	5	18	18	0.278	11.6	3.161E+05	1.138E+06	62.9 ± 31.8
16	5	11	20	0.455	6.4	2.844E+05	6.258E+05	102.6 ± 55.4
17	2	7	21	0.286	3.9	1.084E+05	3.793E+05	64.7 ± 51.9
18	5	19	12	0.263	18.3	4.741E+05	1.801E+06	59.6 ± 30.0
19	3	21	9	0.143	27.0	3.793E+05	2.655E+06	32.4 ± 20.0
20	5	21	12	0.238	20.2	4.741E+05	1.991E+06	53.9 ± 26.9
	85	470			18.7	3.335E+05	1.844E+06	

Area of basic unit = 8.789E-07 cm²

CHI SQUARED = 13.827 WITH 19 DEGREES OF FREEDOM

P(chi squared) = 79.4 %

CORRELATION COEFFICIENT = 0.824

VARIANCE OF SQR(Ns) = 0.64

VARIANCE OF SQR(Ni) = 2.54

Ns/Ni = 0.181 ± 0.021

MEAN RATIO = 0.190 ± 0.023

Ages calculated using a zeta of 352.7 ± 3.9 for SRM612 glass

RHO D = 1.290E+06cm⁻²; ND = 2030

POOLED AGE = 41.0 ± 4.9 Ma

MEAN AGE = 43.0 ± 5.4 Ma

89POS121A APATITE Okpikruak Fm.

IRRADIATION GT071
 SLIDE NUMBER 5
 COUNTED BY: POS

No.	Ns	Ni	Na	RATIO	U (ppm)	RHOs	RHOi	F.T. AGE (Ma)
1	16	43	21	0.372	23.7	8.669E+05	2.330E+06	84.1 ± 24.7
2	36	46	25	0.783	21.3	1.638E+06	2.094E+06	175.6 ± 39.3
3	26	50	16	0.520	36.1	1.849E+06	3.556E+06	117.2 ± 28.5
4	9	32	21	0.281	17.6	4.876E+05	1.734E+06	63.7 ± 24.1
5	12	20	16	0.600	14.4	8.533E+05	1.422E+06	135.1 ± 49.4
6	8	16	24	0.500	7.7	3.793E+05	7.585E+05	112.8 ± 48.9
7	1	27	20	0.037	15.6	5.689E+04	1.536E+06	8.4 ± 8.6
8	6	10	20	0.600	5.8	3.413E+05	5.689E+05	135.1 ± 69.8
9	9	23	15	0.391	17.7	6.827E+05	1.745E+06	88.4 ± 34.8
10	139	103	50	1.350	23.8	3.163E+06	2.344E+06	299.9 ± 39.7
11	5	7	28	0.714	2.9	2.032E+05	2.844E+05	160.5 ± 94.1
12	99	161	54	0.615	34.4	2.086E+06	3.392E+06	138.4 ± 18.0
13	10	15	20	0.667	8.7	5.689E+05	8.533E+05	149.9 ± 61.3
14	3	9	20	0.333	5.2	1.707E+05	5.120E+05	75.4 ± 50.3
15	1	3	16	0.333	2.2	7.111E+04	2.133E+05	75.4 ± 87.1
16	18	38	12	0.474	36.6	1.707E+06	3.603E+06	106.9 ± 30.7
17	14	18	25	0.778	8.3	6.372E+05	8.192E+05	174.6 ± 62.4
18	29	48	49	0.604	11.3	6.734E+05	1.115E+06	136.0 ± 32.2
19	9	23	16	0.391	16.6	6.400E+05	1.636E+06	88.4 ± 34.8
20	12	24	16	0.500	17.3	8.533E+05	1.707E+06	112.8 ± 40.0
	462	716			17.1	1.086E+06	1.683E+06	

Area of basic unit = 8.789E-07 cm⁻²

CHI SQUARED = 66.233 WITH 19 DEGREES OF FREEDOM

P(chi squared) = 0.0 %

CORRELATION COEFFICIENT = 0.878

VARIANCE OF SQR(Ns) = 7.24

VARIANCE OF SQR(Ni) = 6.53

Ns/Ni = 0.645 ± 0.038

MEAN RATIO = 0.542 ± 0.059

Ages calculated using a zeta of 352.7 ± 3.9 for SRM612 glass

RHO D = 1.290E+06cm⁻²; ND = 2030

POOLED AGE = 145.1 ± 9.4 Ma

MEAN AGE = 122.2 ± 13.6 Ma

89POS122A APATITE Okpikruak Fm.

IRRADIATION GT071
 SLIDE NUMBER 6
 COUNTED BY: POS

No.	Ns	Ni	Na	RATIO	U (ppm)	RHOs	RHOi	F.T. AGE (Ma)
1	19	54	20	0.352	31.2	1.081E+06	3.072E+06	79.6 ± 21.3
2	4	24	48	0.167	5.8	9.482E+04	5.689E+05	37.8 ± 20.4
3	0	3	50	0.000	0.7	0.000E+00	6.827E+04	0.0 ± 0.0
4	5	21	18	0.238	13.5	3.161E+05	1.327E+06	53.9 ± 26.9
5	47	137	28	0.343	56.5	1.910E+06	5.567E+06	77.6 ± 13.3
6	46	154	30	0.299	59.3	1.745E+06	5.841E+06	67.6 ± 11.5
7	5	7	16	0.714	5.1	3.556E+05	4.978E+05	160.5 ± 94.1
8	15	8	90	1.875	1.0	1.896E+05	1.011E+05	413.0 ± 181.1
9	7	53	30	0.132	20.4	2.655E+05	2.010E+06	30.0 ± 12.1
10	0	20	80	0.000	2.9	0.000E+00	2.844E+05	0.0 ± 0.0
11	17	76	72	0.224	12.2	2.686E+05	1.201E+06	50.7 ± 13.7
12	2	4	40	0.500	1.2	5.689E+04	1.138E+05	112.8 ± 97.7
13	38	123	30	0.309	47.4	1.441E+06	4.665E+06	69.9 ± 13.1
14	4	16	35	0.250	5.3	1.300E+05	5.201E+05	56.6 ± 31.7
15	20	156	49	0.128	36.8	4.644E+05	3.622E+06	29.1 ± 6.9
16	20	53	18	0.377	34.0	1.264E+06	3.350E+06	85.3 ± 22.5
17	10	20	35	0.500	6.6	3.251E+05	6.502E+05	112.8 ± 43.8
18	9	24	36	0.375	7.7	2.844E+05	7.585E+05	84.8 ± 33.2
19	50	126	16	0.397	91.0	3.556E+06	8.960E+06	89.6 ± 15.1
20	48	207	30	0.232	79.7	1.820E+06	7.851E+06	52.5 ± 8.5
21	2	11	28	0.182	4.5	8.127E+04	4.470E+05	41.2 ± 31.7
	368	1297			18.8	5.240E+05	1.847E+06	

Area of basic unit = 8.789E-07 cm-2

CHI SQUARED = 64.129 WITH 20 DEGREES OF FREEDOM

P(chi squared) = 0.0 %

CORRELATION COEFFICIENT = 0.891

VARIANCE OF SQR(Ns) = 4.93

VARIANCE OF SQR(Ni) = 15.63

Ns/Ni = 0.284 ± 0.017

MEAN RATIO = 0.362 ± 0.084

Ages calculated using a zeta of 352.7 ± 3.9 for SRM612 glass

RHO D = 1.290E+06cm-2; ND = 2030

POOLED AGE = 64.2 ± 4.1 Ma

MEAN AGE = 81.7 ± 19.1 Ma

89POS125A APATITE Okpikruak Fm.

IRRADIATION GT071

SLIDE NUMBER 7

COUNTED BY: POS

No.	Ns	Ni	Na	RATIO U (ppm)	RHOs	RHOi	F.T. AGE (Ma)	
1	12	21	12	0.571	20.2	1.138E+06	1.991E+06	128.7 ± 46.7
2	10	8	27	1.250	3.4	4.214E+05	3.371E+05	278.3 ± 132.2
3	1	3	28	0.333	1.2	4.064E+04	1.219E+05	75.4 ± 87.1
4	18	46	40	0.391	13.3	5.120E+05	1.308E+06	88.4 ± 24.7
5	44	160	30	0.275	61.6	1.669E+06	6.068E+06	62.3 ± 10.7
6	9	33	14	0.273	27.2	7.314E+05	2.682E+06	61.7 ± 23.3
7	19	73	24	0.260	35.1	9.007E+05	3.461E+06	58.9 ± 15.2
8	52	155	30	0.335	59.7	1.972E+06	5.879E+06	75.9 ± 12.3
9	4	15	25	0.267	6.9	1.820E+05	6.827E+05	60.4 ± 34.0
10	8	30	16	0.267	21.7	5.689E+05	2.133E+06	60.4 ± 24.1
11	4	13	30	0.308	5.0	1.517E+05	4.930E+05	69.6 ± 39.8
12	8	17	45	0.471	4.4	2.023E+05	4.298E+05	106.2 ± 45.6
13	11	9	24	1.222	4.3	5.215E+05	4.267E+05	272.2 ± 122.5
14	6	52	63	0.115	9.5	1.084E+05	9.391E+05	26.2 ± 11.3
15	1	3	30	0.333	1.2	3.793E+04	1.138E+05	75.4 ± 87.1
16	9	51	40	0.176	14.7	2.560E+05	1.451E+06	40.0 ± 14.5
17	52	180	49	0.289	42.4	1.207E+06	4.180E+06	65.4 ± 10.4
18	10	52	30	0.192	20.0	3.793E+05	1.972E+06	43.6 ± 15.1
19	10	13	35	0.769	4.3	3.251E+05	4.226E+05	172.7 ± 72.8
20	9	42	30	0.214	16.2	3.413E+05	1.593E+06	48.6 ± 17.9
21	70	281	56	0.249	58.0	1.422E+06	5.709E+06	56.4 ± 7.7
	367	1257		21.4	6.159E+05	2.109E+06		

Area of basic unit = 8.789E-07 cm²

CHI SQUARED = 46.668 WITH 20 DEGREES OF FREEDOM

P(chi squared) = 0.1 %

CORRELATION COEFFICIENT = 0.968

VARIANCE OF SQR(Ns) = 4.09

VARIANCE OF SQR(Ni) = 16.88

Ns/Ni = 0.292 ± 0.017

MEAN RATIO = 0.408 ± 0.068

Ages calculated using a zeta of 352.7 ± 3.9 for SRM612 glass

RHO D = 1.290E+06cm⁻²; ND = 2030

POOLED AGE = 66.1 ± 4.2 Ma

MEAN AGE = 92.1 ± 15.4 Ma

89POS126A APATITE Fortress Mtn. Fm.

IRRADIATION GT071

SLIDE NUMBER 8

COUNTED BY: POS

No.	Ns	Ni	Na	RATIO	U (ppm)	RHOs	RHOi	F.T. AGE (Ma)
1	69	367	40	0.188	106.0	1.963E+06	1.044E+07	42.6 ± 5.7
2	1	2	70	0.500	0.3	1.625E+04	3.251E+04	112.8 ± 138.1
3	17	121	35	0.140	39.9	5.526E+05	3.933E+06	31.9 ± 8.3
4	21	120	27	0.175	51.4	8.849E+05	5.057E+06	39.7 ± 9.4
5	4	8	40	0.500	2.3	1.138E+05	2.276E+05	112.8 ± 69.1
6	7	50	20	0.140	28.9	3.982E+05	2.844E+06	31.8 ± 12.8
7	10	39	72	0.256	6.3	1.580E+05	6.163E+05	58.1 ± 20.6
8	22	68	45	0.324	17.5	5.562E+05	1.719E+06	73.2 ± 18.0
9	12	47	60	0.255	9.0	2.276E+05	8.913E+05	57.8 ± 18.8
10	28	105	36	0.267	33.7	8.849E+05	3.319E+06	60.4 ± 12.9
11	32	164	60	0.195	31.6	6.068E+05	3.110E+06	44.2 ± 8.6
12	115	393	35	0.293	129.7	3.738E+06	1.278E+07	66.2 ± 7.2
13	3	18	24	0.167	8.7	1.422E+05	8.533E+05	37.8 ± 23.6
14	47	187	18	0.251	120.0	2.971E+06	1.182E+07	56.9 ± 9.4
15	0	8	48	0.000	1.9	0.000E+00	1.896E+05	0.0 ± 0.0
16	23	70	40	0.329	20.2	6.542E+05	1.991E+06	74.3 ± 18.0
17	107	462	60	0.232	89.0	2.029E+06	8.761E+06	52.5 ± 5.8
18	5	20	35	0.250	6.6	1.625E+05	6.502E+05	56.6 ± 28.3
19	3	13	60	0.231	2.5	5.689E+04	2.465E+05	52.3 ± 33.5
20	7	25	60	0.280	4.8	1.327E+05	4.741E+05	63.4 ± 27.1
	533	2287			29.9	6.852E+05	2.940E+06	

Area of basic unit = 8.789E-07 cm²

CHI SQUARED = 24.210 WITH 19 DEGREES OF FREEDOM

P(chi squared) = 18.8 %

CORRELATION COEFFICIENT = 0.972

VARIANCE OF SQR(Ns) = 8.59

VARIANCE OF SQR(Ni) = 34.79

Ns/Ni = 0.233 ± 0.011

MEAN RATIO = 0.249 ± 0.025

Ages calculated using a zeta of 352.7 ± 3.9 for SRM612 glass

RHO D = 1.290E+06cm⁻²; ND = 2030

POOLED AGE = 52.8 ± 2.9 Ma

MEAN AGE = 56.3 ± 5.9 Ma

89POS127A APATITE Fortress Mtn. Fm.

IRRADIATION GT071

SLIDE NUMBER 9

COUNTED BY: POS

No.	Ns	Ni	Na	RATIO	U (ppm)	RHOs	RHOi	F.T. AGE (Ma)
1	84	374	60	0.225	72.0	1.593E+06	7.092E+06	50.9 ± 6.3
2	27	108	50	0.250	25.0	6.144E+05	2.458E+06	56.6 ± 12.3
3	12	47	40	0.255	13.6	3.413E+05	1.337E+06	57.8 ± 18.8
4	13	71	40	0.183	20.5	3.698E+05	2.020E+06	41.5 ± 12.6
5	34	139	48	0.245	33.5	8.059E+05	3.295E+06	55.4 ± 10.7
6	0	14	70	0.000	2.3	0.000E+00	2.276E+05	0.0 ± 0.0
7	40	167	50	0.240	38.6	9.102E+05	3.800E+06	54.3 ± 9.6
8	6	55	24	0.109	26.5	2.844E+05	2.607E+06	24.8 ± 10.7
9	47	201	36	0.234	64.5	1.485E+06	6.353E+06	53.0 ± 8.7
10	19	104	32	0.183	37.6	6.756E+05	3.698E+06	41.4 ± 10.4
11	41	132	25	0.311	61.0	1.866E+06	6.008E+06	70.3 ± 12.7
12	13	69	12	0.188	66.4	1.233E+06	6.542E+06	42.7 ± 13.0
13	5	26	42	0.192	7.2	1.354E+05	7.043E+05	43.6 ± 21.3
14	3	22	16	0.136	15.9	2.133E+05	1.564E+06	30.9 ± 19.1
15	3	19	63	0.158	3.5	5.418E+04	3.431E+05	35.8 ± 22.3
16	3	16	56	0.188	3.3	6.095E+04	3.251E+05	42.5 ± 26.8
17	9	41	32	0.220	14.8	3.200E+05	1.458E+06	49.7 ± 18.4
18	24	121	48	0.198	29.1	5.689E+05	2.868E+06	45.0 ± 10.1
19	6	32	60	0.188	6.2	1.138E+05	6.068E+05	42.5 ± 18.9
20	3	24	36	0.125	7.7	9.482E+04	7.585E+05	28.4 ± 17.4
	392	1782			24.5	5.310E+05	2.414E+06	

Area of basic unit = 8.789E-07 cm-2

CHI SQUARED = 14.344 WITH 19 DEGREES OF FREEDOM

P(chi squared) = 76.3 %

CORRELATION COEFFICIENT = 0.986

VARIANCE OF SQR(Ns) = 5.12

VARIANCE OF SQR(Ni) = 16.69

Ns/Ni = 0.220 ± 0.012

MEAN RATIO = 0.191 ± 0.015

Ages calculated using a zeta of 352.7 ± 3.9 for SRM612 glass

RHO D = 1.290E+06cm-2; ND = 2030

POOLED AGE = 49.8 ± 3.0 Ma

MEAN AGE = 43.4 ± 3.5 Ma

89POS129A APATTTE Fortress Mtn. Fm.

IRRADIATION GT071
 SLIDE NUMBER 10
 COUNTED BY: POS

No.	Ns	Ni	Na	RATIO	U (ppm)	RHOs	RHOi	F.T. AGE (Ma)
1	16	62	45	0.258	15.9	4.045E+05	1.568E+06	58.4 ± 16.5
2	60	256	40	0.234	73.9	1.707E+06	7.282E+06	53.1 ± 7.7
3	31	90	32	0.344	32.5	1.102E+06	3.200E+06	77.9 ± 16.3
4	37	209	24	0.177	100.6	1.754E+06	9.908E+06	40.1 ± 7.2
5	6	22	36	0.273	7.1	1.896E+05	6.953E+05	61.7 ± 28.5
6	3	32	70	0.094	5.3	4.876E+04	5.201E+05	21.3 ± 12.9
7	4	37	42	0.108	10.2	1.084E+05	1.002E+06	24.5 ± 12.9
8	11	46	30	0.239	17.7	4.172E+05	1.745E+06	54.2 ± 18.2
9	2	8	18	0.250	5.1	1.264E+05	5.057E+05	56.6 ± 44.8
10	14	108	42	0.130	29.7	3.793E+05	2.926E+06	29.4 ± 8.4
11	5	22	32	0.227	7.9	1.778E+05	7.822E+05	51.5 ± 25.5
12	20	164	45	0.122	42.1	5.057E+05	4.147E+06	27.7 ± 6.6
13	40	163	25	0.245	75.3	1.820E+06	7.418E+06	55.6 ± 9.9
14	5	29	48	0.172	7.0	1.185E+05	6.874E+05	39.1 ± 19.0
15	59	327	49	0.180	77.1	1.370E+06	7.593E+06	40.9 ± 5.9
16	2	13	35	0.154	4.3	6.502E+04	4.226E+05	34.9 ± 26.5
17	7	69	35	0.101	22.8	2.276E+05	2.243E+06	23.0 ± 9.2
18	34	185	40	0.184	53.4	9.671E+05	5.262E+06	41.7 ± 7.8
19	60	243	42	0.247	66.8	1.625E+06	6.583E+06	55.9 ± 8.2
20	139	605	50	0.230	139.8	3.163E+06	1.377E+07	52.1 ± 5.1
	555	2690			39.8	8.096E+05	3.924E+06	

Area of basic unit = 8.789E-07 cm-2

CHI SQUARED = 28.893 WITH 19 DEGREES OF FREEDOM

P(chi squared) = 6.8 %

CORRELATION COEFFICIENT = 0.978

VARIANCE OF SQR(Ns) = 7.69

VARIANCE OF SQR(Ni) = 32.40

Ns/Ni = 0.206 ± 0.010

MEAN RATIO = 0.199 ± 0.015

Ages calculated using a zeta of 352.7 ± 3.9 for SRM612 glass

RHO D = 1.290E+06cm-2; ND = 2030

POOLED AGE = 46.8 ± 2.5 Ma

MEAN AGE = 45.0 ± 3.6 Ma

CONFINED TRACK LENGTH DISTRIBUTIONS

