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Shuang Yan, Renjie Zhou, He-Cai Niu, Yue-xing Feng, Ai Duc Nguyen, Zhen-hua Zhao, Wu-Bin Yang, Qian Dong, and Jian-xin Zhao, 2019, LA-MC-ICP-MS U-Pb dating of low-U garnets reveals multiple episodes of skarn formation in the volcanic-hosted iron mineralization system, Awulale belt, Central Asia: GSA Bulletin, https://doi.org/10.1130/B35214.1.

Data Repository

Table DR1. U-Pb isotopic data of garnet reference materials (TC-13, QC-04 and DP-16) in four different sessions.

Table DR2. U−Pb isotopic data of garnets from Chagangnuoer, Dunde and Beizhan deposits, western Tianshan, central Asia.

Table DR3. EMPA major element and LA-ICPMS rare earth element analyses of Garnets from Chagangnuoer, Dunde and Beizhan deposits of the Awulale Belt, western Tianshan.

Table DR1. U-Pb isotopic data of garnet reference materials (TC-13, QC-04 and DP-16) in four different sessions.

Session01

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
TC-13-01	26.1	48.9	0.3	51.4	0.3	0.061	0.002	0.19
TC-13-02	42.6	48.2	0.4	50.6	0.4	0.060	0.001	0.43
TC-13-03	21.0	46.5	0.5	48.8	0.5	0.061	0.001	0.28
TC-13-04	39.4	47.1	0.4	49.4	0.4	0.056	0.001	0.42
TC-13-05	45.0	46.9	0.5	49.2	0.5	0.066	0.001	0.38
TC-13-06	20.0	44.6	0.7	46.8	0.7	0.093	0.004	0.67
TC-13-07	36.5	45.5	0.3	47.8	0.3	0.071	0.002	0.22
TC-13-08	23.1	45.8	0.5	48.0	0.6	0.071	0.002	0.40
TC-13-09	47.4	47.3	0.4	49.6	0.4	0.057	0.001	0.56
TC-13-10	19.0	37.1	0.3	38.9	0.3	0.235	0.003	0.55
TC-13-11	53.7	47.4	0.3	49.7	0.3	0.053	0.001	0.07
TC-13-12	32.4	47.6	0.4	49.9	0.4	0.053	0.001	0.46
TC-13-13	36.1	47.0	0.3	49.3	0.3	0.054	0.001	0.31
TC-13-14	19.2	46.1	0.4	48.3	0.4	0.062	0.001	0.50
TC-13-15	16.9	44.0	0.4	46.2	0.4	0.095	0.002	0.19
TC-13-16	40.2	42.6	0.4	44.7	0.4	0.126	0.004	0.63
TC-13-17	50.3	47.5	0.3	49.8	0.3	0.053	0.001	0.23
TC-13-18	23.5	45.7	0.5	47.9	0.5	0.059	0.002	0.72
TC-13-19	34.3	46.9	0.4	49.2	0.4	0.053	0.001	0.56
TC-13-20	39.0	47.8	0.3	50.1	0.3	0.052	0.001	0.12
TC-13-21	44.7	47.8	0.4	50.1	0.4	0.052	0.001	0.06
TC-13-22	38.7	47.6	0.3	49.9	0.3	0.051	0.001	0.47
TC-13-23	49.9	47.7	0.4	50.1	0.4	0.051	0.001	0.32
TC-13-24	50.9	48.4	0.4	50.7	0.4	0.052	0.001	0.18
TC-13-25	34.0	48.7	0.4	51.1	0.4	0.050	0.001	0.20
TC-13-26	38.0	48.1	0.3	50.4	0.3	0.052	0.001	0.51
TC-13-27	15.8	47.5	0.5	49.9	0.5	0.065	0.001	0.73
TC-13-28	31.2	48.8	0.5	51.2	0.5	0.059	0.001	0.39
TC-13-29	16.6	46.8	0.5	49.1	0.5	0.068	0.002	0.51
TC-13-30	37.7	47.5	0.4	49.8	0.4	0.058	0.001	0.48
TC-13-31	47.8	46.8	0.3	49.1	0.3	0.074	0.001	0.42
TC-13-32	17.4	46.5	0.6	48.8	0.6	0.080	0.003	0.59
TC-13-33	30.7	46.7	0.9	49.0	1.0	0.086	0.004	0.76
TC-13-34	40.5	46.7	0.4	49.0	0.4	0.063	0.001	0.60
TC-13-35	18.3	48.2	0.5	50.6	0.6	0.062	0.002	0.68
TC-13-36	20.8	47.9	0.4	50.2	0.4	0.064	0.003	0.74
TC-13-37	37.6	49.1	0.3	51.6	0.3	0.052	0.001	0.04
TC-13-38	54.7	49.0	0.3	51.4	0.3	0.050	0.000	0.12

TC-13-39	33.7	48.9	0.3	51.3	0.3	0.053	0.001	0.63
TC-13-40	32.5	48.7	0.3	51.1	0.3	0.053	0.001	0.06
TC-13-41	31.2	47.9	0.3	50.2	0.4	0.056	0.001	0.54
TC-13-42	47.4	48.5	0.4	50.9	0.4	0.056	0.001	0.48
TC-13-43	40.1	48.3	0.3	50.7	0.3	0.051	0.000	0.07
TC-13-44	44.5	48.5	0.4	50.9	0.4	0.051	0.001	0.73
TC-13-45	52.3	48.2	0.3	50.5	0.4	0.052	0.001	0.42
TC-13-46	43.5	48.1	0.3	50.5	0.3	0.053	0.001	0.13
TC-13-47	46.5	48.3	0.3	50.7	0.3	0.051	0.001	0.28
TC-13-48	51.4	47.4	0.3	49.7	0.3	0.052	0.000	0.03
TC-13-49	51.3	48.6	0.3	51.0	0.3	0.051	0.001	0.34
TC-13-50	27.1	46.3	0.3	48.6	0.4	0.058	0.001	0.38
TC-13-51	35.0	47.3	0.3	49.7	0.4	0.052	0.001	0.27
TC-13-52	48.6	48.6	0.4	51.0	0.4	0.051	0.001	0.42
TC-13-53	36.1	49.0	0.3	51.4	0.3	0.050	0.001	0.06
TC-13-54	25.4	48.2	0.3	50.6	0.4	0.053	0.001	0.16
TC-13-55	19.2	47.3	0.4	49.6	0.4	0.051	0.001	0.35
TC-13-56	54.6	48.4	0.3	50.8	0.3	0.050	0.001	0.43
TC-13-57	50.0	48.0	0.3	50.3	0.3	0.054	0.001	0.27
TC-13-58	43.5	47.6	0.4	50.0	0.4	0.051	0.001	0.31
TC-13-59	45.5	47.4	0.3	49.8	0.4	0.050	0.000	0.05
TC-13-60	38.8	48.7	0.3	51.1	0.3	0.052	0.001	0.15
TC-13-61	55.6	47.6	0.3	49.9	0.4	0.052	0.000	0.00
TC-13-62	46.4	47.8	0.3	50.2	0.3	0.051	0.001	0.47
TC-13-63	32.3	47.1	0.3	49.5	0.3	0.053	0.001	0.23
TC-13-64	17.3	47.0	0.4	49.3	0.5	0.060	0.001	0.49
TC-13-65	35.4	47.1	0.3	49.4	0.3	0.054	0.001	0.62
TC-13-66	42.7	47.9	0.3	50.3	0.3	0.059	0.001	0.36
TC-13-67	42.0	47.5	0.4	49.8	0.4	0.053	0.001	0.36
TC-13-68	39.8	47.8	0.3	50.2	0.3	0.055	0.001	0.06
TC-13-69	54.8	48.1	0.3	50.5	0.3	0.053	0.000	0.34
TC-13-70	20.2	47.7	0.5	50.1	0.5	0.059	0.002	0.68
TC-13-71	16.7	47.8	0.4	50.1	0.4	0.057	0.001	0.51
TC-13-72	19.2	42.1	0.4	44.2	0.4	0.147	0.004	0.56
TC-13-73	39.4	49.0	0.3	51.5	0.3	0.051	0.001	0.64
TC-13-74	20.0	47.1	0.4	49.4	0.4	0.054	0.001	0.32
TC-13-75	25.6	48.0	0.3	50.4	0.3	0.055	0.001	0.64
TC-13-76	40.6	47.4	0.3	49.7	0.3	0.054	0.001	0.37
TC-13-77	45.0	47.3	0.4	49.6	0.4	0.059	0.001	0.59
TC-13-78	21.6	48.4	0.4	50.8	0.4	0.051	0.001	0.70
TC-13-79	31.2	47.5	0.4	49.8	0.4	0.066	0.001	0.48
TC-13-80	43.4	47.0	0.4	49.3	0.4	0.054	0.001	0.29

TC-13-81	38.9	47.2	0.3	49.6	0.3	0.059	0.001	0.59
TC-13-82	19.2	48.2	0.3	50.6	0.3	0.053	0.001	0.39
TC-13-83	33.5	47.2	0.4	49.5	0.4	0.059	0.001	0.37
TC-13-84	17.7	47.7	0.4	50.0	0.4	0.053	0.002	0.68
TC-13-85	24.9	47.1	0.4	49.4	0.5	0.061	0.001	0.26
TC-13-86	17.4	46.6	0.5	48.8	0.5	0.063	0.001	0.51
Analysis spot	**U (ppm)**	**$^{238}U/^{206}Pb$**	**Prop2σ**	**Corr_$^{238}U/^{206}Pb$**	**Corr_Prop2σ**	**$^{207}Pb/^{206}Pb$**	**Prop2σ**	**Rho**
QC-04-01	100.7	47.5	0.3	49.8	0.3	0.050	0.000	0.12
QC-04-02	106.0	47.4	0.3	49.7	0.3	0.050	0.000	0.13
QC-04-03	91.8	46.6	0.3	48.8	0.3	0.051	0.000	0.28
QC-04-04	107.0	46.0	0.3	48.3	0.3	0.051	0.000	0.03
QC-04-05	117.1	46.1	0.3	48.3	0.3	0.050	0.000	0.04
QC-04-06	101.6	47.5	0.3	49.8	0.4	0.055	0.001	0.43
QC-04-07	88.8	46.3	0.4	48.6	0.4	0.053	0.000	0.10
QC-04-08	64.8	46.6	0.3	48.9	0.3	0.053	0.001	0.49
QC-04-09	54.1	45.6	0.3	47.8	0.3	0.056	0.001	0.06
QC-04-10	73.3	46.2	0.3	48.5	0.3	0.050	0.001	0.28
QC-04-11	44.6	45.3	0.4	47.5	0.4	0.060	0.001	0.35
QC-04-12	52.0	45.5	0.4	47.8	0.4	0.051	0.000	0.35
QC-04-13	99.7	45.8	0.3	48.1	0.4	0.050	0.000	0.17
QC-04-14	77.6	45.7	0.3	47.9	0.3	0.051	0.000	0.09
QC-04-15	82.5	45.6	0.3	47.8	0.3	0.051	0.001	0.37
QC-04-16	90.3	46.2	0.3	48.4	0.3	0.050	0.000	0.16
QC-04-17	52.6	45.9	0.2	48.1	0.2	0.050	0.001	0.35
QC-04-18	90.3	46.9	0.3	49.2	0.3	0.051	0.000	0.25
QC-04-19	74.5	46.5	0.3	48.8	0.4	0.050	0.000	0.04
QC-04-20	85.2	47.4	0.4	49.8	0.4	0.051	0.000	0.15
QC-04-21	85.9	46.3	0.3	48.6	0.3	0.050	0.000	0.00
QC-04-22	94.9	46.7	0.3	49.0	0.3	0.051	0.000	0.13
QC-04-23	94.2	46.5	0.4	48.8	0.4	0.050	0.000	0.15
QC-04-24	98.1	47.2	0.4	49.6	0.4	0.050	0.000	0.02
QC-04-25	87.5	47.0	0.4	49.3	0.4	0.050	0.000	0.20
QC-04-26	88.3	46.4	0.4	48.7	0.4	0.051	0.000	0.17
QC-04-27	71.0	46.1	0.4	48.4	0.4	0.051	0.001	0.16
QC-04-28	85.1	47.0	0.3	49.3	0.3	0.050	0.000	0.19
QC-04-29	57.5	46.8	0.3	49.1	0.3	0.054	0.001	0.00
QC-04-30	81.2	46.5	0.3	48.8	0.3	0.051	0.000	0.08
QC-04-31	83.6	47.1	0.3	49.4	0.3	0.051	0.000	0.23
QC-04-32	53.5	46.6	0.2	48.9	0.3	0.054	0.001	0.08
QC-04-33	80.5	47.5	0.4	49.9	0.4	0.050	0.000	0.31
QC-04-34	50.6	46.8	0.2	49.0	0.3	0.051	0.000	0.29
QC-04-35	96.5	47.2	0.3	49.5	0.3	0.052	0.000	0.42

QC-04-36	33.4	47.3	0.3	49.6	0.3	0.050	0.001	0.07
QC-04-37	97.6	47.1	0.3	49.4	0.3	0.050	0.000	0.22
QC-04-38	66.8	47.1	0.3	49.5	0.3	0.050	0.000	0.56
QC-04-39	50.8	46.9	0.4	49.2	0.4	0.050	0.001	0.56
QC-04-40	109.7	47.0	0.3	49.3	0.3	0.051	0.000	0.33
QC-04-41	81.3	47.1	0.3	49.4	0.3	0.050	0.000	0.01
QC-04-42	56.9	46.8	0.3	49.1	0.3	0.052	0.001	0.20
QC-04-43	61.0	46.6	0.3	48.9	0.4	0.050	0.001	0.15
QC-04-44	70.6	46.7	0.4	49.0	0.4	0.082	0.002	0.23
QC-04-45	124.1	46.4	0.4	48.7	0.4	0.055	0.001	0.43
QC-04-46	132.3	46.4	0.4	48.6	0.4	0.054	0.001	0.15
QC-04-47	70.2	46.7	0.2	49.0	0.2	0.053	0.000	0.08
QC-04-48	74.6	45.8	0.3	48.0	0.3	0.052	0.000	0.08
QC-04-49	99.3	47.3	0.3	49.7	0.3	0.054	0.001	0.37
QC-04-50	61.0	47.1	0.3	49.4	0.3	0.052	0.001	0.22
QC-04-51	100.6	46.8	0.3	49.1	0.3	0.050	0.000	0.22
QC-04-52	127.1	46.4	0.3	48.7	0.4	0.051	0.000	0.22
QC-04-53	130.7	44.9	0.3	47.1	0.3	0.070	0.002	0.06
QC-04-54	117.7	46.4	0.3	48.6	0.3	0.051	0.000	0.10
QC-04-55	88.9	47.2	0.3	49.5	0.4	0.051	0.000	0.16
QC-04-56	69.0	46.6	0.3	48.9	0.3	0.050	0.001	0.36
QC-04-57	137.4	47.3	0.4	49.6	0.4	0.051	0.000	0.25
QC-04-58	77.2	46.1	0.3	48.4	0.3	0.050	0.000	0.12
QC-04-59	29.0	45.2	0.4	47.4	0.4	0.055	0.001	0.38
QC-04-60	125.1	46.1	0.3	48.4	0.4	0.050	0.000	0.29
QC-04-61	82.6	46.4	0.4	48.7	0.4	0.055	0.001	0.30
QC-04-62	67.0	45.1	0.3	47.4	0.4	0.051	0.000	0.08
QC-04-63	102.0	45.7	0.3	48.0	0.3	0.050	0.000	0.17

Session02

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
TC-13_01	8.0	50.8	1.7	49.0	1.6	0.072	0.006	0.11
TC-13_02	15.0	52.7	1.6	50.8	1.6	0.066	0.004	0.01
TC-13_03	12.0	52.7	1.7	50.9	1.7	0.077	0.012	0.12
TC-13_04	18.8	51.7	1.6	49.8	1.6	0.068	0.006	0.13
TC-13_05	37.7	52.2	1.6	50.4	1.5	0.060	0.004	0.01
TC-13_06	23.3	49.7	1.6	47.9	1.5	0.061	0.004	0.27
TC-13_07	26.1	50.5	1.5	48.7	1.5	0.069	0.005	0.11
TC-13_08	24.4	51.3	1.6	49.5	1.5	0.061	0.004	0.12
TC-13_09	23.0	50.6	1.5	48.8	1.5	0.057	0.003	0.18
TC-13_10	18.6	51.0	1.6	49.2	1.5	0.064	0.006	0.14
TC-13_11	28.5	51.8	1.6	50.0	1.5	0.070	0.005	0.07

TC-13_12	25.7	51.4	1.6	49.6	1.5	0.067	0.004	0.37
TC-13_13	16.5	52.1	1.6	50.2	1.5	0.059	0.003	0.12
TC-13_14	34.5	53.2	1.6	51.3	1.5	0.058	0.002	0.09
TC-13_15	26.2	50.4	1.5	48.6	1.5	0.063	0.003	0.22
TC-13_16	28.2	51.2	1.5	49.4	1.5	0.060	0.005	0.14
TC-13_17	29.1	51.5	1.6	49.7	1.5	0.058	0.003	0.17
TC-13_18	32.1	51.3	1.5	49.5	1.5	0.062	0.005	0.04
TC-13_19	26.3	50.8	1.5	49.0	1.5	0.058	0.003	0.05
TC-13_20	20.8	50.6	1.6	48.8	1.5	0.063	0.005	0.11
TC-13_21	25.1	50.7	1.5	48.9	1.5	0.063	0.005	0.08
TC-13_22	25.8	51.9	1.6	50.1	1.5	0.058	0.003	0.09
TC-13_23	27.1	51.2	1.5	49.4	1.5	0.058	0.003	0.07
TC-13_24	15.3	51.3	1.6	49.5	1.5	0.065	0.004	0.09
TC-13_25	35.4	52.4	1.6	50.6	1.5	0.059	0.003	0.20
TC-13_26	47.8	51.8	1.5	50.0	1.5	0.059	0.004	0.03
TC-13_27	47.1	52.4	1.6	50.6	1.5	0.054	0.002	0.07
TC-13_28	43.1	52.4	1.6	50.6	1.5	0.058	0.003	0.16
TC-13_29	25.6	51.4	1.6	49.6	1.5	0.056	0.003	0.20
TC-13_30	26.8	52.8	1.6	51.0	1.5	0.056	0.003	0.11
TC-13_31	31.8	52.0	1.6	50.1	1.5	0.057	0.002	0.22
TC-13_32	46.2	52.7	1.6	50.9	1.5	0.053	0.002	0.02
TC-13_33	17.2	51.4	1.6	49.6	1.6	0.065	0.004	0.02
TC-13_34	34.1	34.0	1.0	32.8	1.0	0.324	0.005	0.13
TC-13_35	36.0	49.9	1.5	48.1	1.4	0.096	0.004	0.03
TC-13_36	41.7	52.5	1.5	50.7	1.5	0.055	0.002	0.01
TC-13_37	40.4	51.4	1.5	49.6	1.5	0.054	0.002	0.10
TC-13_38	26.4	51.2	1.5	49.4	1.5	0.059	0.003	0.04
TC-13_39	39.8	52.0	1.6	50.2	1.5	0.057	0.002	0.04
TC-13_40	29.6	51.5	1.5	49.7	1.5	0.057	0.002	0.01
TC-13_41	34.6	52.1	1.5	50.2	1.5	0.056	0.002	0.02
TC-13_42	32.1	51.4	1.5	49.6	1.5	0.060	0.003	0.20
TC-13_43	33.6	52.2	1.6	50.4	1.5	0.057	0.003	0.01
TC-13_44	31.6	52.2	1.6	50.4	1.5	0.058	0.003	0.27
TC-13_45	35.5	51.9	1.5	50.1	1.5	0.056	0.002	0.13
TC-13_46	33.8	52.4	1.6	50.5	1.5	0.052	0.002	0.00
TC-13_47	26.7	52.7	1.6	50.9	1.5	0.055	0.003	0.10

Analysis spot	**U (ppm)**	**$^{238}U/^{206}Pb$**	**Prop2σ**	**Corr_$^{238}U/^{206}Pb$**	**Corr_Prop2σ**	**$^{207}Pb/^{206}Pb$**	**Prop2σ**	**Rho**
DP-16_01	0.7	3.3	0.3	3.2	0.2	0.776	0.028	0.13
DP-16_02	1.1	3.9	0.3	3.8	0.2	0.743	0.018	0.08
DP-16_03	2.2	12.0	0.5	11.6	0.5	0.282	0.015	0.47
DP-16_04	2.3	7.8	0.3	7.5	0.3	0.574	0.012	0.17
DP-16_05	2.9	10.9	0.4	10.5	0.4	0.416	0.011	0.19

DP-16_06	1.9	3.3	0.3	3.2	0.3	0.770	0.014	0.02
DP-16_07	1.8	5.6	0.2	5.4	0.2	0.702	0.013	0.04
DP-16_08	0.5	4.9	0.2	4.7	0.2	0.736	0.026	0.10
DP-16_09	1.3	6.7	0.5	6.5	0.4	0.534	0.017	0.21
DP-16_10	2.0	5.7	0.2	5.5	0.2	0.670	0.014	0.28
DP-16_11	3.8	13.3	0.4	12.8	0.4	0.250	0.011	0.22
DP-16_12	0.9	3.2	0.2	3.1	0.1	0.809	0.018	0.02
DP-16_13	2.9	4.6	0.4	4.4	0.4	0.753	0.014	0.29
DP-16_14	3.5	7.0	0.3	6.7	0.2	0.598	0.010	0.36
DP-16_15	0.5	3.4	0.4	3.3	0.3	0.765	0.022	0.04
DP-16_16	0.6	8.4	0.4	8.1	0.4	0.488	0.022	0.03
DP-16_17	4.5	15.0	0.5	14.5	0.5	0.130	0.013	0.35
DP-16_18	7.1	14.7	0.5	14.2	0.4	0.158	0.007	0.09
DP-16_19	0.3	3.5	0.3	3.3	0.3	0.773	0.041	0.01
DP-16_20	3.8	9.2	0.3	8.8	0.3	0.455	0.010	0.05
DP-16_21	1.3	4.6	0.2	4.4	0.2	0.780	0.015	0.28
DP-16_22	5.6	15.3	0.5	14.8	0.5	0.101	0.010	0.55
DP-16_23	4.6	14.3	0.5	13.8	0.5	0.162	0.006	0.17
DP-16_24	0.7	3.1	0.1	3.0	0.1	0.788	0.017	0.14
DP-16_25	0.7	4.0	0.3	3.8	0.3	0.748	0.023	0.12
DP-16_26	2.6	8.4	0.3	8.1	0.3	0.569	0.011	0.05
DP-16_27	3.5	5.6	0.2	5.4	0.2	0.717	0.010	0.13
DP-16_28	0.7	5.7	0.3	5.5	0.3	0.724	0.023	0.26
DP-16_29	1.4	3.7	0.2	3.6	0.2	0.765	0.013	0.09
DP-16_30	0.7	5.3	0.2	5.1	0.2	0.694	0.017	0.18
DP-16_31	0.5	4.8	0.4	4.6	0.4	0.710	0.026	0.03
DP-16_32	2.3	10.5	0.4	10.1	0.4	0.443	0.014	0.24
DP-16_33	1.2	9.8	0.5	9.4	0.5	0.510	0.018	0.01
DP-16_34	3.1	14.1	0.5	13.6	0.5	0.211	0.010	0.21
DP-16_35	1.8	13.4	0.5	13.0	0.5	0.191	0.012	0.28

Session03

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
TC-13_01	29.1	51.4	1.1	49.6	1.1	0.057	0.003	0.20
TC-13_02	37.1	51.7	1.1	49.9	1.1	0.053	0.002	0.05
TC-13_03	35.5	51.9	1.1	50.1	1.1	0.055	0.002	0.03
TC-13_04	37.8	52.2	1.1	50.4	1.1	0.055	0.002	0.02
TC-13_05	17.6	51.1	1.2	49.3	1.2	0.063	0.004	0.27
TC-13_06	21.6	51.5	1.2	49.7	1.2	0.076	0.009	0.01
TC-13_07	27.7	52.4	1.2	50.6	1.1	0.055	0.003	0.09
TC-13_08	18.3	51.2	1.2	49.5	1.1	0.061	0.004	0.05
TC-13_09	38.4	53.4	1.1	51.6	1.1	0.053	0.002	0.08

TC-13_10	27.0	52.4	1.2	50.6	1.1	0.061	0.004	0.03
TC-13_11	29.4	51.4	1.1	49.6	1.1	0.061	0.003	0.07
TC-13_12	18.9	51.7	1.3	49.9	1.2	0.065	0.004	0.03
TC-13_13	38.2	51.1	1.1	49.4	1.1	0.059	0.002	0.07
TC-13_14	31.9	52.9	1.1	51.0	1.1	0.057	0.002	0.00
TC-13_15	23.3	51.9	1.2	50.1	1.1	0.058	0.003	0.07
TC-13_16	16.9	51.5	1.2	49.7	1.2	0.074	0.004	0.01
TC-13_17	30.6	52.5	1.1	50.7	1.1	0.061	0.003	0.19
TC-13_18	16.3	49.8	1.2	48.1	1.1	0.097	0.005	0.00
TC-13_19	38.2	49.5	1.1	47.8	1.0	0.097	0.003	0.04
TC-13_20	29.2	52.6	1.1	50.8	1.1	0.057	0.003	0.18
TC-13_21	27.9	51.8	1.2	50.1	1.1	0.058	0.002	0.03
TC-13_22	28.3	52.1	1.1	50.3	1.1	0.056	0.002	0.03
TC-13_23	15.5	50.8	1.2	49.1	1.2	0.062	0.004	0.14
TC-13_24	37.7	49.9	1.1	48.2	1.0	0.091	0.002	0.23
TC-13_25	28.4	43.7	1.0	42.2	0.9	0.194	0.006	0.42
TC-13_26	31.3	51.7	1.1	49.9	1.1	0.068	0.003	0.08
TC-13_27	20.3	51.4	1.1	49.6	1.1	0.059	0.003	0.04
TC-13_28	33.9	53.0	1.1	51.2	1.1	0.056	0.002	0.03
TC-13_29	16.9	51.9	1.2	50.1	1.2	0.063	0.004	0.26
TC-13_30	40.6	52.5	1.1	50.7	1.1	0.059	0.003	0.05
TC-13_31	28.3	52.1	1.1	50.3	1.1	0.058	0.002	0.00
TC-13_32	32.3	51.7	1.1	49.9	1.1	0.063	0.003	0.18
TC-13_33	15.3	50.5	1.2	48.8	1.2	0.063	0.003	0.03
TC-13_34	29.4	52.1	1.1	50.3	1.1	0.061	0.004	0.06
TC-13_35	17.4	50.4	1.2	48.7	1.2	0.069	0.005	0.20
TC-13_36	23.3	50.1	1.1	48.4	1.1	0.060	0.002	0.05
TC-13_37	18.9	50.7	1.2	48.9	1.1	0.061	0.003	0.07
TC-13_38	33.7	50.2	1.1	48.5	1.0	0.064	0.003	0.04
TC-13_39	14.3	49.7	1.2	48.0	1.1	0.073	0.007	0.11
TC-13_40	32.5	51.0	1.1	49.3	1.1	0.056	0.002	0.10
TC-13_41	31.5	50.8	1.1	49.0	1.1	0.064	0.002	0.01
TC-13_42	15.9	43.4	1.2	41.9	1.1	0.159	0.011	0.62
TC-13_43	17.1	51.9	1.2	50.1	1.2	0.061	0.004	0.02
TC-13_44	12.4	50.7	1.3	48.9	1.2	0.060	0.004	0.36
TC-13_45	37.1	51.6	1.1	49.8	1.1	0.055	0.002	0.06
TC-13_46	14.5	47.1	1.1	45.4	1.1	0.118	0.005	0.05
TC-13_47	18.0	50.6	1.2	48.9	1.1	0.067	0.005	0.06
TC-13_48	38.1	52.3	1.1	50.5	1.1	0.054	0.002	0.07
TC-13_49	29.1	51.2	1.1	49.4	1.1	0.064	0.009	0.06

Analysis spot	**U (ppm)**	**$^{238}U/^{206}Pb$**	**Prop2σ**	**Corr_$^{238}U/^{206}Pb$**	**Corr_Prop2σ**	**$^{207}Pb/^{206}Pb$**	**Prop2σ**	**Rho**
DP-16_01	3.8	13.5	0.3	13.0	0.3	0.201	0.008	0.49

DP-16_02	2.3	13.7	0.5	13.2	0.5	0.193	0.012	0.45
DP-16_03	1.8	6.7	0.3	6.5	0.3	0.575	0.014	0.45
DP-16_04	2.6	6.4	0.2	6.2	0.2	0.649	0.011	0.07
DP-16_05	0.8	1.5	0.1	1.5	0.1	0.867	0.011	0.03
DP-16_06	0.6	5.4	0.2	5.2	0.2	0.657	0.021	0.03
DP-16_07	0.9	4.2	0.2	4.1	0.2	0.680	0.015	0.09
DP-16_08	0.9	5.9	0.5	5.7	0.5	0.639	0.018	0.22
DP-16_09	1.2	8.9	0.5	8.6	0.5	0.499	0.018	0.00
DP-16_10	0.3	5.3	0.4	5.1	0.4	0.625	0.030	0.22
DP-16_11	0.9	2.0	0.2	1.9	0.2	0.837	0.013	0.16
DP-16_12	2.4	11.8	0.3	11.3	0.3	0.282	0.011	0.03
DP-16_13	3.1	14.3	0.4	13.8	0.4	0.164	0.012	0.53
DP-16_14	1.9	5.0	0.1	4.9	0.1	0.686	0.010	0.21
DP-16_15	1.5	9.3	0.4	9.0	0.4	0.424	0.015	0.11
DP-16_16	5.4	14.2	0.4	13.7	0.4	0.168	0.008	0.57
DP-16_17	3.5	14.0	0.5	13.5	0.4	0.163	0.012	0.76
DP-16_18	2.0	11.1	0.5	10.7	0.5	0.313	0.015	0.66
DP-16_19	2.3	7.9	0.3	7.7	0.3	0.566	0.013	0.12
DP-16_20	8.8	12.0	0.3	11.6	0.3	0.342	0.010	0.70
DP-16_21	3.5	13.3	0.5	12.8	0.4	0.202	0.011	0.66
DP-16_22	4.1	7.9	0.2	7.7	0.2	0.509	0.009	0.38
DP-16_23	2.2	5.5	0.3	5.3	0.3	0.622	0.017	0.57
DP-16_24	3.0	2.7	0.1	2.6	0.1	0.793	0.009	0.39
DP-16_25	0.9	7.6	0.4	7.3	0.4	0.517	0.022	0.02
DP-16_26	1.2	1.9	0.1	1.9	0.1	0.835	0.011	0.14
DP-16_27	3.8	13.5	0.4	13.1	0.4	0.245	0.010	0.23
DP-16_28	3.9	12.4	0.4	11.9	0.4	0.321	0.011	0.38
DP-16_29	3.8	12.3	0.5	11.9	0.5	0.259	0.014	0.68
DP-16_30	1.9	5.7	0.2	5.5	0.2	0.624	0.011	0.05
DP-16_31	2.2	5.0	0.1	4.9	0.1	0.660	0.009	0.04
DP-16_32	1.1	1.2	0.0	1.2	0.0	0.858	0.008	0.21
DP-16_33	1.9	9.8	0.4	9.4	0.4	0.407	0.017	0.11
DP-16_34	2.7	13.0	0.4	12.5	0.4	0.251	0.012	0.10
DP-16_35	3.1	13.4	0.3	12.9	0.3	0.199	0.008	0.21
DP-16_36	4.4	4.0	0.1	3.9	0.1	0.732	0.008	0.16
DP-16_37	2.0	7.0	0.3	6.8	0.3	0.521	0.015	0.37
DP-16_38	2.7	14.4	0.4	13.9	0.4	0.149	0.008	0.24
DP-16_39	1.0	1.6	0.0	1.5	0.0	0.839	0.010	0.19
DP-16_40	0.8	2.2	0.1	2.2	0.1	0.830	0.014	0.04
DP-16_41	0.7	2.4	0.2	2.3	0.2	0.785	0.015	0.17
DP-16_42	2.1	6.6	0.3	6.4	0.3	0.611	0.013	0.54
DP-16_43	1.1	7.9	0.3	7.6	0.3	0.559	0.018	0.19

Session04

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
TC-13_01	41.8	39.4	1.0	37.9	0.9	0.266	0.003	0.77
TC-13_02	24.8	50.8	1.2	48.9	1.2	0.055	0.001	0.17
TC-13_03	22.7	50.7	1.2	48.8	1.2	0.054	0.001	0.19
TC-13_04	19.9	51.1	1.2	49.3	1.2	0.054	0.000	0.27
TC-13_05	24.2	51.3	1.2	49.4	1.2	0.060	0.001	0.34
TC-13_06	16.6	49.7	1.2	47.9	1.2	0.077	0.001	0.31
TC-13_07	30.3	51.1	1.3	49.3	1.2	0.067	0.001	0.10
TC-13_08	37.2	51.4	1.2	49.6	1.2	0.062	0.001	0.25
TC-13_09	15.8	50.0	1.2	48.2	1.2	0.077	0.002	0.10
TC-13_10	37.4	51.6	1.2	49.7	1.2	0.054	0.001	0.20
TC-13_11	16.2	43.0	1.1	41.5	1.0	0.189	0.002	0.41
TC-13_12	13.3	51.8	1.3	50.0	1.2	0.064	0.001	0.23
TC-13_13	20.3	51.9	1.3	50.0	1.2	0.054	0.001	0.18
TC-13_14	22.4	52.2	1.3	50.3	1.2	0.054	0.001	0.41
TC-13_15	23.2	52.2	1.3	50.3	1.2	0.054	0.001	0.33
TC-13_16	23.8	52.1	1.2	50.2	1.2	0.056	0.001	0.19
TC-13_17	24.4	52.0	1.2	50.1	1.2	0.054	0.000	0.14
TC-13_18	24.7	52.1	1.3	50.2	1.2	0.055	0.001	0.18
TC-13_19	23.0	51.9	1.3	50.0	1.2	0.053	0.001	0.08
TC-13_20	20.7	38.6	1.0	37.1	0.9	0.272	0.003	0.83
TC-13_21	15.0	53.8	1.3	51.9	1.3	0.058	0.001	0.12
TC-13_22	21.2	53.0	1.3	51.0	1.2	0.055	0.001	0.08
TC-13_23	31.9	52.5	1.3	50.6	1.2	0.053	0.000	0.16
TC-13_24	22.2	52.2	1.3	50.3	1.2	0.055	0.000	0.06
TC-13_25	42.5	52.4	1.3	50.5	1.2	0.051	0.000	0.12
TC-13_26	31.9	52.2	1.3	50.3	1.2	0.053	0.001	0.22
TC-13_27	46.2	53.0	1.3	51.0	1.2	0.052	0.000	0.14
TC-13_28	22.2	53.2	1.3	51.3	1.2	0.052	0.000	0.05
TC-13_29	30.3	52.5	1.3	50.6	1.2	0.053	0.000	0.41
TC-13_30	45.2	51.9	1.3	50.0	1.2	0.063	0.001	0.06
TC-13_31	31.0	40.3	1.0	38.8	0.9	0.248	0.001	0.28
TC-13_32	21.4	53.2	1.3	51.2	1.2	0.062	0.001	0.31
TC-13_33	20.4	53.2	1.3	51.3	1.3	0.062	0.002	0.34
TC-13_34	28.0	40.1	1.0	38.6	0.9	0.238	0.003	0.71
TC-13_35	29.4	52.0	1.3	50.1	1.2	0.058	0.001	0.46
TC-13_36	27.2	52.2	1.3	50.3	1.2	0.055	0.001	0.08

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
DP-16_01	0.4	7.6	0.3	7.3	0.3	0.562	0.008	0.77
DP-16_02	0.3	7.8	0.3	7.5	0.3	0.519	0.016	0.81
DP-16_03	0.3	6.4	0.2	6.1	0.2	0.633	0.007	0.48

DP-16_04	0.3	9.1	0.4	8.7	0.4	0.436	0.017	0.93
DP-16_05	1.1	2.9	0.2	2.8	0.1	0.791	0.005	0.84
DP-16_06	0.3	7.5	0.2	7.2	0.2	0.537	0.009	0.75
DP-16_07	0.7	3.3	0.1	3.2	0.1	0.774	0.003	0.07
DP-16_08	0.3	7.8	0.3	7.5	0.3	0.505	0.009	0.82
DP-16_09	0.3	5.4	0.2	5.2	0.2	0.670	0.008	0.68
DP-16_10	1.7	8.3	0.3	8.0	0.3	0.521	0.012	0.95
DP-16_11	0.3	4.7	0.3	4.5	0.3	0.672	0.011	0.89
DP-16_12	0.9	4.5	0.2	4.3	0.2	0.736	0.008	0.91
DP-16_13	0.5	9.1	0.3	8.7	0.3	0.446	0.011	0.92
DP-16_14	0.7	9.2	0.9	8.8	0.9	0.405	0.025	0.98
DP-16_15	0.4	6.2	0.2	5.9	0.2	0.644	0.008	0.74
DP-16_16	0.6	2.1	0.1	2.1	0.1	0.829	0.003	0.55
DP-16_17	0.3	9.3	0.4	9.0	0.4	0.399	0.015	0.89
DP-16_18	0.9	4.5	0.3	4.3	0.3	0.666	0.014	0.98
DP-16_19	2.4	12.8	0.3	12.3	0.3	0.272	0.004	0.74
DP-16_20	0.3	5.9	0.2	5.6	0.2	0.614	0.010	0.87
DP-16_21	0.3	4.9	0.1	4.7	0.1	0.703	0.004	0.30
DP-16_22	2.6	6.9	0.2	6.6	0.2	0.547	0.006	0.85
DP-16_23	2.3	12.2	0.4	11.7	0.4	0.296	0.012	0.93
DP-16_24	2.5	6.3	0.2	6.1	0.2	0.614	0.008	0.90
DP-16_25	5.5	14.5	0.4	14.0	0.4	0.175	0.009	0.96
DP-16_26	6.1	6.8	0.2	6.6	0.2	0.576	0.006	0.96
DP-16_27	3.1	9.0	0.3	8.7	0.3	0.467	0.008	0.94
DP-16_28	4.2	12.0	0.3	11.5	0.3	0.325	0.008	0.95
DP-16_29	5.7	6.6	0.3	6.4	0.3	0.582	0.012	0.98
DP-16_30	0.4	3.5	0.1	3.4	0.1	0.742	0.004	0.41

Note: Prop2σ means propagated double standard error. Corr_$^{238}U/^{206}Pb$ means corrected $^{238}U/^{206}Pb$ and Corr_Prop2σ represents corrected propagated double standard error. Rho represents the correlation coefficient between $^{238}U/^{206}Pb$ ratio and $^{207}Pb/^{206}Pb$ ratio. Uncertainty propagation follows the method suggested by Horstwood et al. (2016). Normalization of $^{206}Pb/^{238}U$ ratios follows the calibration methods suggested by Chew et al. (2014)

Chew, D.M., Petrus, J.A., and Kamber, B.S., 2014, U-Pb LA-ICPMS dating using accessory mineral standards with variable common Pb: Chemical Geology, v. 363, no. 1, p. 185–199.

Horstwood, M.S.A., Kosler, J., Gehrels, G., Jackson, S.E., Mclean, N.M., Paton, C., Pearson, N.J., Sircombe, K., Sylvester, P., and Vermeesch, P., 2016, Community-Derived Standards for LA-ICP-MS U-(Th-)Pb Geochronology – Uncertainty Propagation, Age Interpretation and Data Reporting: Geostandards & Geoanalytical Research, v. 40, no. 3, p. 311–332.

Table DR2. U−Pb isotopic data of garnets from Chagangnuoer, Dunde and Beizhan deposits, western Tianshan, central Asia.

Chagangnuoer deposit

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
CG2801_01	0.37	12.7	0.6	12.2	0.6	0.39	0.03	0.21
CG2801_02	0.75	10.4	0.4	10.1	0.4	0.45	0.03	0.05
CG2801_03	0.54	16.6	0.9	16.0	0.9	0.22	0.04	0.02
CG2801_04	0.46	13.2	0.6	12.7	0.6	0.39	0.03	0.38
CG2801_05	0.95	10.0	0.4	9.7	0.4	0.48	0.02	0.03
CG2801_06	0.78	9.4	0.3	9.0	0.3	0.49	0.02	0.24
CG2801_07	1.06	18.2	0.7	17.5	0.7	0.15	0.02	0.13
CG2801_08	1.08	19.5	0.7	18.7	0.7	0.12	0.01	0.09
CG2801_09	0.74	6.8	0.2	6.6	0.2	0.56	0.02	0.30
CG2801_10	0.62	13.8	0.6	13.3	0.6	0.30	0.02	0.02
CG2801_11	0.88	14.7	1.1	14.1	1.0	0.21	0.03	0.09
CG2801_12	0.78	3.9	0.3	3.8	0.2	0.66	0.02	0.38
CG2801_13	0.51	4.4	0.4	4.2	0.4	0.65	0.02	0.45
CG2801_14	0.88	15.4	0.9	14.9	0.8	0.19	0.02	0.07
CG2801_15	0.69	16.2	1.1	15.6	1.1	0.17	0.03	0.13
CG2801_16	0.72	17.1	0.9	16.5	0.9	0.16	0.03	0.11
CG2801_17	0.67	19.6	0.9	18.9	0.9	0.13	0.04	0.23
CG2801_18	0.58	18.0	0.9	17.3	0.8	0.14	0.02	0.07
CG2801_19	0.75	18.7	0.8	18.0	0.8	0.12	0.01	0.10
CG2801_20	0.86	18.1	0.8	17.4	0.8	0.13	0.02	0.03
CG2801_21	0.66	13.5	1.0	13.0	0.9	0.31	0.03	0.06
CG2801_22	0.53	17.4	0.7	16.8	0.7	0.15	0.02	0.04
CG2801_23	0.53	15.5	0.9	14.9	0.9	0.22	0.04	0.00
CG2801_24	0.74	9.7	0.4	9.3	0.4	0.47	0.02	0.19
CG2801_25	0.58	14.1	0.8	13.6	0.8	0.26	0.02	0.15
CG2801_26	0.50	17.1	1.1	16.5	1.1	0.16	0.03	0.04
CG2801_27	0.55	17.3	1.0	16.7	1.0	0.12	0.02	0.08
CG2801_28	0.69	14.1	0.6	13.6	0.6	0.30	0.02	0.05
CG2801_29	0.74	19.3	0.9	18.6	0.9	0.12	0.02	0.05
CG2801_30	0.55	8.7	0.7	8.4	0.7	0.49	0.05	0.04
CG2801_31	0.69	3.0	0.2	2.9	0.2	0.77	0.04	0.08
CG2801_32	0.77	5.6	0.2	5.4	0.2	0.66	0.02	0.08
CG2801_33	0.73	13.5	0.5	13.0	0.5	0.33	0.02	0.01
CG2801_34	0.54	6.8	0.2	6.6	0.2	0.60	0.02	0.13
CG2801_35	0.54	12.8	1.1	12.3	1.1	0.27	0.03	0.38
CG2801_36	0.48	14.6	1.0	14.1	0.9	0.24	0.03	0.03
CG2801_37	0.43	5.9	0.3	5.7	0.3	0.63	0.02	0.24
CG2801_38	0.69	18.6	0.9	17.9	0.8	0.12	0.02	0.23

CG2801_39	0.78	3.8	0.2	3.7	0.2	0.69	0.01	0.35
CG2801_40	0.81	8.1	0.3	7.8	0.3	0.55	0.02	0.05
CG2801_41	0.79	12.8	0.5	12.3	0.5	0.34	0.02	0.02
CG2801_42	0.88	14.3	0.5	13.8	0.5	0.29	0.02	0.03
CG2801_43	0.79	8.2	0.3	7.9	0.3	0.53	0.02	0.20
CG2801_44	0.91	18.6	0.9	17.9	0.8	0.09	0.01	0.14
CG2801_45	1.17	18.1	0.6	17.4	0.6	0.15	0.01	0.16
CG2801_46	1.15	17.2	0.6	16.6	0.6	0.17	0.01	0.09
CG2801_47	0.98	16.0	0.8	15.4	0.8	0.21	0.02	0.35
CG2801_48	1.02	12.8	0.4	12.3	0.4	0.35	0.02	0.00
CG2801_49	0.90	17.2	0.6	16.5	0.6	0.16	0.01	0.04
CG2801_50	0.94	13.6	0.5	13.0	0.5	0.30	0.01	0.14
CG2801_51	0.95	18.0	0.7	17.3	0.7	0.11	0.01	0.12
CG2801_52	0.77	18.2	0.8	17.5	0.8	0.12	0.01	0.06
CG2801_53	1.35	12.3	0.6	11.9	0.5	0.35	0.02	0.36
CG2801_54	1.89	12.9	0.6	12.4	0.6	0.35	0.02	0.45
CG2801_55	0.82	12.3	1.0	11.8	1.0	0.31	0.03	0.36
CG2801_56	0.91	14.0	1.1	13.5	1.0	0.27	0.03	0.48
CG2801_57	0.94	12.3	0.9	11.9	0.8	0.32	0.03	0.28
CG2801_58	1.15	13.0	0.8	12.5	0.8	0.31	0.02	0.64
CG2801_59	1.21	13.8	0.7	13.3	0.7	0.29	0.02	0.63
CG2801_60	1.27	15.9	0.8	15.3	0.8	0.20	0.02	0.59
CG2801_61	1.14	12.3	0.5	11.8	0.5	0.37	0.02	0.38

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
11CG11-2_01	0.17	16.5	0.8	15.9	0.8	0.23	0.02	0.84
11CG11-2_02	0.15	16.9	0.7	16.3	0.7	0.21	0.01	0.79
11CG11-2_03	0.18	14.4	0.6	13.9	0.6	0.30	0.01	0.73
11CG11-2_04	0.21	18.6	0.8	17.9	0.7	0.14	0.02	0.79
11CG11-2_05	0.21	15.4	0.5	14.8	0.5	0.28	0.01	0.73
11CG11-2_06	0.17	15.6	0.5	15.0	0.5	0.26	0.01	0.77
11CG11-2_07	0.16	17.2	0.6	16.6	0.6	0.19	0.02	0.82
11CG11-2_08	0.14	9.1	0.3	8.8	0.3	0.51	0.01	0.42
11CG11-2_09	0.16	6.8	0.4	6.6	0.4	0.59	0.02	0.90
11CG11-2_10	0.19	16.3	0.6	15.7	0.6	0.25	0.01	0.76
11CG11-2_11	0.20	12.9	0.4	12.4	0.4	0.36	0.01	0.71
11CG11-2_12	0.16	10.7	0.3	10.3	0.3	0.45	0.01	0.29
11CG11-2_13	0.15	14.0	0.4	13.5	0.4	0.31	0.01	0.60
11CG11-2_14	0.15	17.0	0.6	16.4	0.6	0.21	0.02	0.84
11CG11-2_15	0.16	15.8	0.6	15.2	0.6	0.24	0.02	0.89
11CG11-2_16	0.15	12.9	0.4	12.4	0.4	0.36	0.01	0.50
11CG11-2_17	0.14	17.1	0.6	16.5	0.5	0.20	0.01	0.62

11CG11-2_18	0.13	11.0	0.5	10.6	0.5	0.44	0.02	0.77
11CG11-2_19	0.17	15.2	0.6	14.6	0.6	0.28	0.01	0.72
11CG11-2_20	0.20	18.4	0.6	17.7	0.6	0.16	0.01	0.83
11CG11-2_21	0.19	17.4	0.6	16.8	0.6	0.18	0.01	0.83
11CG11-2_22	0.23	18.1	0.8	17.5	0.7	0.15	0.02	0.89
11CG11-2_23	0.23	14.0	0.4	13.5	0.4	0.31	0.01	0.77
11CG11-2_24	0.29	9.4	0.7	9.1	0.6	0.48	0.02	0.91
11CG11-2_25	0.30	15.6	0.6	15.0	0.5	0.24	0.01	0.87
11CG11-2_26	0.45	15.5	0.8	14.9	0.7	0.24	0.02	0.97
11CG11-2_27	0.63	19.7	0.5	19.0	0.5	0.10	0.01	0.82
11CG11-2_28	0.66	19.3	0.5	18.6	0.5	0.12	0.00	0.79
11CG11-2_29	0.62	20.0	0.5	19.2	0.5	0.08	0.00	0.74
11CG11-2_30	0.15	9.7	0.3	9.3	0.3	0.49	0.01	0.50
11CG11-2_31	0.13	18.4	1.1	17.7	1.0	0.17	0.02	0.78
11CG11-2_32	0.26	18.1	0.5	17.5	0.5	0.16	0.01	0.73
11CG11-2_33	0.27	17.8	0.5	17.1	0.5	0.19	0.01	0.63
11CG11-2_34	0.25	10.5	0.3	10.1	0.3	0.45	0.01	0.76
11CG11-2_35	0.33	15.4	0.4	14.8	0.4	0.26	0.00	0.46
11CG11-2_36	0.63	18.2	0.5	17.5	0.5	0.15	0.01	0.83
11CG11-2_37	0.71	16.0	0.4	15.5	0.4	0.24	0.00	0.81
11CG11-2_38	0.64	17.4	0.5	16.8	0.4	0.19	0.01	0.82
11CG11-2_39	0.69	13.5	0.6	13.0	0.6	0.33	0.02	0.97
11CG11-2_40	0.71	20.6	0.5	19.9	0.5	0.08	0.00	0.75
11CG11-2_41	1.02	16.4	0.4	15.8	0.4	0.23	0.00	0.63
11CG11-2_42	1.00	16.6	0.4	16.0	0.4	0.21	0.01	0.87
11CG11-2_43	0.77	17.3	0.7	16.7	0.7	0.17	0.02	0.95
11CG11-2_44	0.90	18.3	0.5	17.6	0.5	0.14	0.01	0.91
11CG11-2_45	1.15	18.0	0.5	17.3	0.5	0.16	0.01	0.86
11CG11-2_46	1.00	15.0	0.4	14.4	0.4	0.28	0.01	0.82
11CG11-2_47	0.99	19.4	0.5	18.7	0.5	0.11	0.00	0.69
11CG11-2_48	0.31	12.5	0.7	12.1	0.6	0.36	0.02	0.92
11CG11-2_49	0.37	14.9	0.4	14.3	0.4	0.30	0.01	0.80
11CG11-2_50	0.71	18.9	0.5	18.2	0.5	0.14	0.01	0.88
11CG11-2_51	0.72	8.7	0.3	8.3	0.3	0.52	0.01	0.86
11CG11-2_52	0.82	14.0	0.5	13.5	0.5	0.31	0.01	0.94
11CG11-2_53	0.94	11.9	0.3	11.5	0.3	0.39	0.01	0.80
11CG11-2_54	1.14	19.0	0.5	18.3	0.5	0.12	0.00	0.65
11CG11-2_55	1.00	20.3	0.5	19.6	0.5	0.08	0.00	0.30
11CG11-2_56	0.89	20.3	0.5	19.6	0.5	0.07	0.00	0.73
11CG11-2_57	0.97	20.2	0.5	19.5	0.5	0.08	0.00	0.54
11CG11-2_58	0.56	19.6	0.5	18.8	0.5	0.10	0.00	0.55
11CG11-2_59	0.98	17.7	0.4	17.0	0.4	0.19	0.00	0.20

11CG11-2_60	0.91	20.0	0.5	19.3	0.5	0.09	0.00	0.43
11CG11-2_61	0.91	17.1	0.5	16.5	0.5	0.20	0.01	0.88
11CG11-2_62	1.08	19.5	0.5	18.8	0.5	0.11	0.00	0.71
11CG11-2_63	1.18	15.2	0.4	14.7	0.4	0.27	0.00	0.40
11CG11-2_64	1.16	16.3	0.4	15.7	0.4	0.23	0.00	0.76
11CG11-2_65	0.97	15.7	0.5	15.2	0.5	0.25	0.01	0.90
11CG11-2_66	0.91	18.4	0.5	17.7	0.5	0.15	0.01	0.90
11CG11-2_67	0.85	9.9	0.4	9.5	0.4	0.47	0.02	0.97
11CG11-2_68	0.91	17.3	0.5	16.7	0.5	0.19	0.01	0.85
11CG11-2_69	0.93	13.7	0.5	13.2	0.5	0.33	0.02	0.95
11CG11-2_70	0.73	18.8	0.5	18.1	0.5	0.13	0.01	0.71
11CG11-2_71	0.83	19.6	0.5	18.9	0.5	0.10	0.01	0.80
11CG11-2_72	0.26	18.0	0.6	17.3	0.6	0.18	0.01	0.76
11CG11-2_73	0.14	5.8	0.2	5.6	0.2	0.64	0.01	0.07
11CG11-2_74	0.16	8.2	0.2	7.9	0.2	0.55	0.01	0.03
11CG11-2_75	0.16	10.5	0.5	10.1	0.5	0.44	0.02	0.88
11CG11-2_76	0.15	17.8	0.6	17.1	0.5	0.18	0.01	0.68
11CG11-2_77	0.14	16.3	0.7	15.7	0.7	0.24	0.01	0.77
11CG11-2_78	0.15	15.2	0.5	14.6	0.5	0.28	0.01	0.69
11CG11-2_79	0.16	17.5	0.6	16.9	0.6	0.20	0.01	0.69
11CG11-2_80	0.19	17.5	0.5	16.8	0.5	0.18	0.01	0.70
11CG11-2_81	0.25	18.4	0.5	17.7	0.5	0.16	0.00	0.42
11CG11-2_82	0.25	13.7	0.4	13.2	0.4	0.33	0.01	0.63
11CG11-2_83	0.27	10.2	0.4	9.9	0.4	0.46	0.01	0.76
11CG11-2_84	0.26	12.4	0.5	11.9	0.4	0.38	0.01	0.81
11CG11-2_85	0.17	16.0	0.7	15.4	0.7	0.24	0.02	0.93
11CG11-2_86	0.15	18.5	0.8	17.8	0.8	0.15	0.01	0.74

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
11CG15-20_01	1.05	18.4	0.8	17.7	0.8	0.154	0.003	0.59
11CG15-20_02	1.03	18.8	0.8	18.1	0.8	0.143	0.003	0.34
11CG15-20_03	1.00	20.1	0.9	19.4	0.9	0.095	0.002	0.36
11CG15-20_04	1.05	20.3	0.9	19.5	0.9	0.068	0.002	0.33
11CG15-20_05	0.95	19.7	0.9	19.0	0.9	0.097	0.002	0.04
11CG15-20_06	1.03	20.7	0.9	20.0	0.9	0.081	0.001	0.81
11CG15-20_07	0.98	20.1	0.9	19.4	0.9	0.079	0.002	0.56
11CG15-20_08	0.98	19.3	0.9	18.6	0.8	0.102	0.002	0.85
11CG15-20_09	0.78	18.5	1.2	17.8	1.2	0.127	0.022	0.97
11CG15-20_10	0.65	19.7	0.9	18.9	0.9	0.098	0.003	0.23
11CG15-20_11	0.61	18.1	0.8	17.4	0.8	0.158	0.003	0.03
11CG15-20_12	0.73	19.3	0.9	18.6	0.8	0.109	0.002	0.17
11CG15-20_13	0.72	16.2	0.7	15.6	0.7	0.232	0.003	0.45

11CG15-20_14	0.86	19.3	0.9	18.6	0.8	0.114	0.002	0.23
11CG15-20_15	0.85	18.1	0.8	17.4	0.8	0.160	0.002	0.29
11CG15-20_16	0.87	20.7	0.9	19.9	0.9	0.066	0.003	0.70
11CG15-20_17	0.51	20.0	0.9	19.3	0.9	0.081	0.004	0.71
11CG15-20_18	0.67	18.1	0.8	17.5	0.8	0.172	0.002	0.18
11CG15-20_19	0.81	18.8	0.9	18.1	0.8	0.137	0.004	0.60
11CG15-20_20	0.88	19.4	0.9	18.7	0.8	0.104	0.002	0.78
11CG15-20_21	0.61	17.7	0.9	17.0	0.9	0.162	0.016	0.94
11CG15-20_22	0.65	16.4	0.8	15.8	0.7	0.213	0.004	0.49
11CG15-20_23	0.49	19.2	0.9	18.5	0.9	0.121	0.008	0.78
11CG15-20_24	0.45	20.6	0.9	19.9	0.9	0.077	0.004	0.71
11CG15-20_25	0.82	21.1	0.9	20.4	0.9	0.067	0.002	0.73
11CG15-20_26	0.68	18.6	0.9	17.9	0.8	0.175	0.004	0.53
11CG15-20_27	0.75	19.2	0.9	18.5	0.9	0.114	0.004	0.78
11CG15-20_28	0.76	19.8	0.9	19.0	0.9	0.095	0.003	0.54
11CG15-20_29	0.50	20.2	0.9	19.4	0.9	0.074	0.004	0.54
11CG15-20_30	0.44	19.9	0.9	19.2	0.9	0.086	0.006	0.84
11CG15-20_31	0.48	19.4	0.9	18.7	0.9	0.106	0.004	0.67
11CG15-20_32	0.42	18.8	0.9	18.1	0.8	0.114	0.005	0.62
11CG15-20_33	0.40	16.9	0.8	16.2	0.7	0.213	0.006	0.29
11CG15-20_34	0.57	17.8	0.8	17.2	0.8	0.180	0.005	0.71
11CG15-20_35	0.92	18.6	0.9	17.9	0.8	0.145	0.003	0.09
11CG15-20_36	0.65	16.8	0.8	16.2	0.7	0.190	0.003	0.38
11CG15-20_37	0.68	18.9	0.9	18.2	0.8	0.094	0.004	0.41
11CG15-20_38	0.66	17.5	0.8	16.8	0.8	0.152	0.005	0.54
11CG15-20_39	0.56	14.2	0.7	13.7	0.6	0.290	0.007	0.67
11CG15-20_40	0.49	19.0	0.9	18.3	0.8	0.096	0.004	0.58
11CG15-20_41	0.46	16.9	0.8	16.3	0.7	0.187	0.003	0.35
11CG15-20_42	0.46	17.9	0.8	17.2	0.8	0.141	0.003	0.41
11CG15-20_43	0.58	17.0	0.8	16.4	0.8	0.198	0.004	0.31
11CG15-20_44	0.97	17.4	0.8	16.7	0.8	0.186	0.002	0.46
11CG15-20_45	0.87	17.6	0.8	17.0	0.8	0.191	0.004	0.63
11CG15-20_46	0.54	19.9	0.9	19.1	0.9	0.082	0.003	0.61
11CG15-20_47	0.61	18.7	0.8	18.0	0.8	0.124	0.004	0.61
11CG15-20_48	0.75	19.6	0.9	18.8	0.8	0.085	0.002	0.23
11CG15-20_49	1.20	19.8	0.9	19.1	0.9	0.088	0.001	0.45
11CG15-20_50	1.10	19.0	0.9	18.3	0.8	0.110	0.002	0.17
11CG15-20_51	0.92	19.3	0.9	18.6	0.9	0.111	0.003	0.60
11CG15-20_52	0.56	20.1	0.9	19.4	0.9	0.079	0.006	0.88
11CG15-20_53	0.83	20.6	0.9	19.8	0.9	0.059	0.003	0.76
11CG15-20_54	0.59	20.7	0.9	20.0	0.9	0.062	0.002	0.47
11CG15-20_55	0.54	18.4	0.8	17.7	0.8	0.160	0.003	0.65

11CG15-20_56	0.63	19.8	0.9	19.1	0.9	0.088	0.003	0.55
11CG15-20_57	0.59	19.9	0.9	19.2	0.9	0.064	0.002	0.43
11CG15-20_58	0.82	19.6	0.9	18.9	0.9	0.072	0.003	0.69
11CG15-20_59	0.90	19.4	0.9	18.7	0.8	0.090	0.003	0.37
11CG15-20_60	0.78	18.3	0.8	17.6	0.8	0.134	0.004	0.44
11CG15-20_61	0.80	18.4	0.8	17.7	0.8	0.136	0.002	0.41
11CG15-20_62	1.13	19.8	0.9	19.1	0.9	0.082	0.002	0.42
11CG15-20_63	0.90	16.4	0.8	15.8	0.7	0.211	0.003	0.33
11CG15-20_64	0.57	18.5	0.9	17.9	0.8	0.118	0.004	0.69
11CG15-20_65	0.74	17.2	0.8	16.6	0.7	0.160	0.002	0.45
11CG15-20_66	0.85	18.3	0.8	17.6	0.8	0.132	0.004	0.66
11CG15-20_67	0.75	17.9	0.8	17.2	0.8	0.128	0.002	0.34
11CG15-20_68	0.50	17.1	0.8	16.4	0.8	0.165	0.003	0.20
11CG15-20_69	0.66	18.3	0.8	17.6	0.8	0.119	0.003	0.31
11CG15-20_70	0.63	19.3	0.9	18.6	0.9	0.075	0.002	0.33
11CG15-20_71	0.73	19.6	0.9	18.8	0.8	0.097	0.003	0.47
11CG15-20_72	0.77	17.1	0.8	16.4	0.8	0.174	0.003	0.40
11CG15-20_73	0.76	16.2	0.7	15.6	0.7	0.219	0.003	0.48
11CG15-20_74	0.81	18.9	0.9	18.2	0.8	0.095	0.004	0.62
11CG15-20_75	0.66	16.5	0.8	15.9	0.7	0.200	0.006	0.71
11CG15-20_76	0.43	18.8	0.9	18.2	0.8	0.114	0.003	0.63

Dunde deposit

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
13DD-03_01	2.40	20.6	0.3	21.7	0.3	0.065	0.003	0.55
13DD-03_02	2.65	19.5	0.3	20.5	0.3	0.078	0.003	0.77
13DD-03_03	3.21	18.1	0.6	19.1	0.6	0.132	0.015	0.88
13DD-03_04	2.92	17.7	0.4	18.6	0.4	0.137	0.012	0.91
13DD-03_05	3.84	7.3	0.5	7.7	0.6	0.502	0.024	0.98
13DD-03_06	2.04	4.5	0.4	4.7	0.4	0.618	0.020	0.98
13DD-03_07	2.62	14.2	0.4	14.9	0.5	0.275	0.011	0.85
13DD-03_08	2.49	7.9	0.6	8.3	0.6	0.507	0.020	0.96
13DD-03_09	3.16	7.8	0.4	8.2	0.4	0.516	0.018	0.97
13DD-03_10	4.10	14.9	0.3	15.7	0.4	0.232	0.011	0.88
13DD-03_11	2.88	12.1	0.6	12.7	0.6	0.355	0.017	0.90
13DD-03_12	4.03	3.2	0.6	3.4	0.6	0.610	0.029	0.99
13DD-03_13	2.22	20.6	0.3	21.6	0.3	0.056	0.002	0.57
13DD-03_14	2.32	20.7	0.4	21.7	0.4	0.063	0.003	0.49
13DD-03_15	6.19	19.9	0.4	20.9	0.4	0.068	0.004	0.83
13DD-03_16	1.99	18.5	0.4	19.4	0.5	0.107	0.009	0.83
13DD-03_17	2.46	10.4	0.4	10.9	0.5	0.387	0.017	0.96
13DD-03_18	2.52	19.3	0.3	20.3	0.3	0.105	0.006	0.55

13DD-03_19	3.12	19.4	0.3	20.4	0.3	0.098	0.008	0.79
13DD-03_20	0.81	17.4	0.5	18.3	0.6	0.125	0.005	0.44
13DD-03_21	4.82	19.9	0.3	20.9	0.3	0.079	0.008	0.79
13DD-03_22	1.46	12.6	0.9	13.2	1.0	0.275	0.020	0.92
13DD-03_23	4.23	19.5	0.3	20.5	0.3	0.113	0.008	0.79
13DD-03_24	4.48	5.9	0.7	6.2	0.7	0.535	0.029	0.99
13DD-03_25	3.61	15.7	0.5	16.5	0.5	0.237	0.017	0.92
13DD-03_26	3.44	19.7	0.2	20.7	0.2	0.081	0.003	0.76
13DD-03_27	2.46	19.2	0.3	20.1	0.3	0.101	0.007	0.59
13DD-03_28	3.78	18.8	0.3	19.8	0.3	0.117	0.005	0.65
13DD-03_29	3.13	6.2	0.3	6.5	0.3	0.579	0.010	0.94
13DD-03_30	3.89	20.2	0.3	21.2	0.3	0.079	0.002	0.48
13DD-03_31	3.68	4.7	0.6	5.0	0.6	0.579	0.024	0.98
13DD-03_32	4.29	19.9	0.4	20.9	0.4	0.084	0.007	0.78
13DD-03_33	4.38	19.9	0.4	20.9	0.4	0.080	0.007	0.79
13DD-03_34	3.64	18.1	0.3	19.0	0.3	0.131	0.008	0.82
13DD-03_35	3.57	18.7	0.3	19.6	0.3	0.114	0.006	0.85
13DD-03_36	2.85	19.6	0.4	20.6	0.4	0.078	0.008	0.88
13DD-03_37	3.44	15.4	0.3	16.2	0.3	0.234	0.010	0.88
13DD-03_38	3.16	17.7	0.3	18.6	0.3	0.146	0.006	0.76
13DD-03_39	2.82	18.0	0.3	18.9	0.3	0.150	0.008	0.71
13DD-03_40	3.33	9.6	0.5	10.0	0.5	0.449	0.021	0.97
13DD-03_41	2.57	18.7	0.2	19.7	0.3	0.067	0.002	0.62
13DD-03_42	4.09	16.5	0.4	17.3	0.4	0.191	0.012	0.93
13DD-03_43	2.82	19.7	0.3	20.7	0.3	0.065	0.002	0.62
13DD-03_44	2.66	20.5	0.3	21.5	0.3	0.066	0.003	0.46
13DD-03_45	3.71	19.3	0.2	20.3	0.3	0.063	0.002	0.62
13DD-03_46	2.11	19.3	0.4	20.3	0.4	0.114	0.004	0.56
13DD-03_47	2.29	20.3	0.4	21.3	0.4	0.074	0.005	0.62
13DD-03_48	3.17	19.5	0.3	20.5	0.3	0.063	0.002	0.55
13DD-03_49	1.77	19.5	0.3	20.5	0.3	0.070	0.004	0.66
13DD-03_50	1.92	19.6	0.4	20.6	0.4	0.065	0.003	0.28
13DD-03_51	2.77	3.4	0.4	3.6	0.4	0.669	0.012	0.95
13DD-03_52	2.67	19.3	0.3	20.3	0.3	0.062	0.003	0.58
13DD-03_53	3.25	18.8	0.3	19.8	0.3	0.083	0.006	0.74
13DD-03_54	2.47	19.5	0.2	20.5	0.3	0.072	0.003	0.45
13DD-03_55	3.66	20.7	0.3	21.7	0.3	0.060	0.003	0.73
13DD-03_56	2.44	19.9	0.3	20.9	0.3	0.059	0.002	0.47
13DD-03_57	2.86	20.1	0.3	21.1	0.3	0.066	0.004	0.59
13DD-03_58	4.39	19.4	0.3	20.4	0.3	0.080	0.005	0.66
13DD-03_59	2.87	19.6	0.4	20.5	0.4	0.071	0.002	0.22
13DD-03_60	1.53	16.3	0.6	17.2	0.7	0.155	0.016	0.87

13DD-03_61	4.84	17.6	0.6	18.5	0.6	0.085	0.012	0.93

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
13DD-04_01	1.82	2.49	0.22	2.41	0.21	0.73	0.04	0.24
13DD-04_02	0.34	1.72	0.22	1.65	0.21	0.77	0.02	0.15
13DD-04_03	0.74	7.04	0.33	6.79	0.32	0.56	0.02	0.18
13DD-04_04	3.51	12.48	0.44	12.04	0.42	0.27	0.01	0.20
13DD-04_05	2.15	3.45	0.44	3.33	0.42	0.66	0.02	0.60
13DD-04_06	1.43	10.41	0.45	10.04	0.44	0.42	0.02	0.18
13DD-04_07	1.41	10.49	0.46	10.12	0.45	0.43	0.02	0.04
13DD-04_08	1.88	12.77	0.47	12.32	0.46	0.37	0.01	0.15
13DD-04_09	1.57	13.30	0.48	12.83	0.46	0.33	0.01	0.02
13DD-04_10	0.75	6.60	0.48	6.36	0.46	0.55	0.02	0.36
13DD-04_11	1.13	13.39	0.48	12.91	0.47	0.33	0.01	0.19
13DD-04_12	1.18	11.55	0.52	11.14	0.50	0.42	0.02	0.14
13DD-04_13	1.80	12.97	0.52	12.51	0.50	0.26	0.02	0.13
13DD-04_14	1.77	14.04	0.53	13.55	0.51	0.28	0.01	0.33
13DD-04_15	2.41	11.04	0.54	10.65	0.52	0.41	0.02	0.47
13DD-04_16	1.41	10.62	0.54	10.24	0.52	0.43	0.02	0.39
13DD-04_17	1.40	9.64	0.55	9.30	0.53	0.44	0.03	0.06
13DD-04_18	2.35	10.40	0.55	10.03	0.53	0.37	0.03	0.01
13DD-04_19	2.63	13.16	0.55	12.69	0.53	0.33	0.02	0.58
13DD-04_20	1.37	5.15	0.56	4.97	0.54	0.62	0.05	0.03
13DD-04_21	3.26	16.78	0.56	16.19	0.54	0.19	0.01	0.22
13DD-04_22	1.70	14.49	0.57	13.98	0.55	0.28	0.01	0.04
13DD-04_23	2.63	16.18	0.58	15.61	0.56	0.22	0.01	0.12
13DD-04_24	1.08	13.42	0.58	12.95	0.56	0.32	0.02	0.20
13DD-04_25	1.14	10.92	0.58	10.53	0.56	0.40	0.03	0.06
13DD-04_26	2.20	16.61	0.61	16.03	0.59	0.21	0.01	0.32
13DD-04_27	2.68	17.09	0.61	16.49	0.59	0.17	0.01	0.34
13DD-04_28	2.25	17.18	0.62	16.58	0.60	0.20	0.01	0.01
13DD-04_29	2.25	17.64	0.62	17.01	0.60	0.15	0.01	0.18
13DD-04_30	2.48	17.70	0.63	17.08	0.60	0.18	0.01	0.07
13DD-04_31	2.23	14.99	0.63	14.46	0.61	0.27	0.01	0.47
13DD-04_32	2.46	14.04	0.63	13.55	0.61	0.32	0.01	0.52
13DD-04_33	1.20	15.63	0.63	15.07	0.61	0.22	0.01	0.32
13DD-04_34	2.08	16.31	0.64	15.74	0.62	0.21	0.01	0.13
13DD-04_35	2.30	17.45	0.64	16.84	0.62	0.16	0.01	0.30
13DD-04_36	2.26	18.90	0.64	18.24	0.62	0.13	0.01	0.00
13DD-04_37	1.66	14.90	0.64	14.38	0.62	0.25	0.01	0.36
13DD-04_38	1.46	16.45	0.65	15.87	0.63	0.23	0.01	0.06
13DD-04_39	1.09	14.47	0.65	13.96	0.63	0.23	0.01	0.16

13DD-04_40	1.45	16.81	0.65	16.21	0.63	0.20	0.01	0.11
13DD-04_41	2.39	16.13	0.65	15.56	0.63	0.23	0.01	0.49
13DD-04_42	2.17	15.24	0.65	14.71	0.63	0.25	0.02	0.47
13DD-04_43	2.14	17.30	0.66	16.69	0.64	0.18	0.01	0.26
13DD-04_44	2.04	15.3	0.7	14.8	0.6	0.246	0.017	0.40
13DD-04_45	2.26	16.2	0.7	15.7	0.6	0.212	0.014	0.50
13DD-04_46	2.31	18.2	0.7	17.6	0.6	0.130	0.009	0.13
13DD-04_47	2.36	18.7	0.7	18.1	0.6	0.138	0.009	0.10
13DD-04_48	2.32	13.4	0.7	12.9	0.6	0.306	0.016	0.53
13DD-04_49	2.45	16.1	0.7	15.5	0.6	0.249	0.016	0.18
13DD-04_50	1.87	14.5	0.7	14.0	0.7	0.275	0.015	0.52
13DD-04_51	1.69	17.2	0.7	16.6	0.7	0.203	0.013	0.34
13DD-04_52	0.70	13.3	0.7	12.8	0.7	0.183	0.023	0.12
13DD-04_53	1.82	17.7	0.7	17.1	0.7	0.194	0.011	0.16
13DD-04_54	2.27	15.7	0.7	15.2	0.7	0.256	0.018	0.17
13DD-04_55	1.43	17.8	0.7	17.2	0.7	0.163	0.012	0.38
13DD-04_56	1.48	15.3	0.7	14.7	0.7	0.266	0.015	0.24
13DD-04_57	2.30	18.2	0.7	17.6	0.7	0.146	0.010	0.44
13DD-04_58	1.35	13.2	0.7	12.8	0.7	0.315	0.020	0.64
13DD-04_59	1.76	17.5	0.7	16.8	0.7	0.205	0.016	0.01
13DD-04_60	1.58	13.0	0.7	12.6	0.7	0.297	0.021	0.56
13DD-04_61	2.02	18.1	0.7	17.5	0.7	0.154	0.011	0.41
13DD-04_62	2.38	16.08	0.72	15.51	0.70	0.24	0.01	0.62
13DD-04_63	1.33	18.15	0.72	17.51	0.70	0.13	0.01	0.21
13DD-04_64	1.84	15.29	0.72	14.75	0.70	0.27	0.02	0.24
13DD-04_65	2.32	17.76	0.73	17.14	0.70	0.17	0.01	0.53
13DD-04_66	0.79	17.06	0.73	16.46	0.70	0.22	0.02	0.10
13DD-04_67	1.33	18.25	0.73	17.60	0.71	0.16	0.01	0.06
13DD-04_68	0.87	9.19	0.74	8.87	0.72	0.41	0.03	0.06
13DD-04_69	1.22	13.81	0.74	13.33	0.72	0.25	0.02	0.01
13DD-04_70	3.26	19.80	0.75	19.10	0.72	0.12	0.01	0.15
13DD-04_71	1.22	18.18	0.76	17.54	0.73	0.17	0.02	0.12
13DD-04_72	2.01	14.97	0.76	14.44	0.74	0.29	0.02	0.36
13DD-04_73	0.89	18.21	0.76	17.57	0.74	0.17	0.01	0.02
13DD-04_74	2.03	12.66	0.77	12.21	0.74	0.32	0.02	0.73
13DD-04_75	2.39	16.3	0.8	15.7	0.7	0.198	0.018	0.56
13DD-04_76	1.77	19.0	0.8	18.3	0.8	0.159	0.018	0.10
13DD-04_77	1.29	18.7	0.8	18.0	0.8	0.121	0.012	0.32
13DD-04_78	0.71	12.9	0.8	12.4	0.8	0.251	0.029	0.01
13DD-04_79	2.51	9.8	0.8	9.4	0.8	0.428	0.019	0.72
13DD-04_80	0.98	19.3	0.9	18.6	0.8	0.124	0.011	0.31
13DD-04_81	0.92	18.52	0.86	17.87	0.83	0.15	0.02	0.14

13DD-04_82	2.05	15.46	0.86	14.91	0.83	0.20	0.02	0.23
13DD-04_83	0.98	10.25	0.89	9.88	0.86	0.41	0.03	0.45
13DD-04_84	2.56	11.79	0.93	11.38	0.90	0.31	0.03	0.16
13DD-04_85	1.33	13.02	0.93	12.56	0.90	0.31	0.02	0.31
13DD-04_86	1.54	9.43	0.98	9.10	0.94	0.40	0.03	0.63

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
13DD-05_01	1.63	7.06	0.45	6.81	0.43	0.56	0.02	0.37
13DD-05_02	2.67	9.79	0.78	9.45	0.75	0.41	0.03	0.83
13DD-05_03	3.16	10.62	0.65	10.24	0.63	0.41	0.03	0.20
13DD-05_04	2.38	10.88	0.53	10.50	0.51	0.43	0.03	0.10
13DD-05_05	2.24	11.49	0.44	11.09	0.42	0.39	0.01	0.10
13DD-05_06	1.83	11.70	0.55	11.28	0.53	0.37	0.02	0.12
13DD-05_07	2.65	12.12	0.62	11.69	0.60	0.35	0.02	0.54
13DD-05_08	1.80	12.27	0.56	11.84	0.54	0.39	0.02	0.00
13DD-05_09	3.07	12.44	0.45	12.00	0.43	0.39	0.01	0.25
13DD-05_10	2.35	12.77	0.51	12.32	0.49	0.37	0.02	0.01
13DD-05_11	1.31	13.02	0.78	12.56	0.75	0.31	0.02	0.41
13DD-05_12	2.16	13.59	0.57	13.11	0.55	0.34	0.01	0.19
13DD-05_13	2.16	14.20	0.69	13.70	0.66	0.28	0.02	0.02
13DD-05_14	1.39	14.71	0.65	14.19	0.63	0.28	0.02	0.09
13DD-05_15	3.21	14.75	0.80	14.23	0.78	0.26	0.02	0.72
13DD-05_16	2.99	14.90	0.58	14.38	0.56	0.27	0.01	0.28
13DD-05_17	1.76	14.95	0.56	14.42	0.54	0.27	0.01	0.14
13DD-05_18	1.44	14.95	0.60	14.42	0.58	0.29	0.01	0.01
13DD-05_19	2.43	15.13	0.62	14.60	0.60	0.26	0.01	0.33
13DD-05_20	1.31	15.15	0.71	14.62	0.69	0.23	0.01	0.05
13DD-05_21	2.65	15.27	0.70	14.73	0.67	0.28	0.02	0.10
13DD-05_22	1.81	15.36	0.76	14.82	0.73	0.25	0.02	0.19
13DD-05_23	3.11	15.41	0.62	14.86	0.60	0.24	0.01	0.04
13DD-05_24	2.21	15.87	0.83	15.31	0.80	0.23	0.03	0.09
13DD-05_25	1.72	16.37	0.59	15.79	0.57	0.23	0.01	0.12
13DD-05_26	3.30	16.39	0.67	15.82	0.65	0.19	0.01	0.67
13DD-05_27	3.10	16.56	0.69	15.97	0.66	0.21	0.01	0.17
13DD-05_28	1.42	16.78	0.99	16.19	0.95	0.21	0.03	0.32
13DD-05_29	2.02	16.78	0.59	16.19	0.57	0.22	0.01	0.05
13DD-05_30	3.59	16.92	0.57	16.32	0.55	0.20	0.01	0.01
13DD-05_31	3.02	16.95	0.75	16.35	0.72	0.21	0.02	0.16
13DD-05_32	1.96	16.98	0.75	16.38	0.72	0.17	0.01	0.13
13DD-05_33	1.70	17.04	0.61	16.44	0.59	0.19	0.01	0.03
13DD-05_34	1.69	17.30	0.81	16.69	0.78	0.18	0.01	0.04
13DD-05_35	1.78	17.33	1.20	16.72	1.16	0.16	0.02	0.52

13DD-05_36	2.14	17.36	0.63	16.75	0.61	0.19	0.01	0.07
13DD-05_37	2.18	17.42	0.70	16.81	0.67	0.19	0.01	0.08
13DD-05_38	1.87	17.48	0.83	16.87	0.80	0.14	0.02	0.11
13DD-05_39	1.96	17.67	0.81	17.04	0.78	0.16	0.01	0.52
13DD-05_40	2.42	17.67	0.78	17.04	0.75	0.15	0.01	0.18
13DD-05_41	1.79	17.89	0.74	17.26	0.71	0.14	0.01	0.02
13DD-05_42	3.10	17.99	0.78	17.35	0.75	0.15	0.01	0.55
13DD-05_43	2.91	17.99	0.81	17.35	0.78	0.14	0.02	0.57
13DD-05_44	2.47	18.0	0.9	17.4	0.9	0.147	0.017	0.04
13DD-05_45	3.39	18.1	0.6	17.4	0.6	0.152	0.008	0.15
13DD-05_46	3.27	18.1	0.6	17.4	0.6	0.135	0.009	0.00
13DD-05_47	2.97	18.3	0.7	17.7	0.6	0.154	0.009	0.22
13DD-05_48	2.48	18.3	0.7	17.7	0.7	0.135	0.011	0.28
13DD-05_49	1.96	18.3	0.7	17.7	0.7	0.149	0.014	0.23
13DD-05_50	1.28	18.4	0.8	17.7	0.8	0.137	0.013	0.03
13DD-05_51	2.60	18.4	0.8	17.8	0.8	0.113	0.011	0.05
13DD-05_52	3.92	18.5	0.7	17.8	0.7	0.120	0.009	0.16
13DD-05_53	1.71	18.5	0.7	17.9	0.7	0.155	0.013	0.03
13DD-05_54	4.47	18.7	0.9	18.0	0.8	0.160	0.016	0.44
13DD-05_55	2.27	18.7	0.8	18.0	0.8	0.138	0.015	0.32
13DD-05_56	2.06	18.7	0.8	18.1	0.7	0.127	0.008	0.09
13DD-05_57	3.07	18.8	0.6	18.1	0.6	0.122	0.006	0.02
13DD-05_58	5.13	18.8	0.6	18.1	0.6	0.142	0.007	0.13
13DD-05_59	2.84	19.0	0.8	18.3	0.7	0.129	0.010	0.33
13DD-05_60	2.94	19.0	0.8	18.3	0.7	0.117	0.010	0.12
13DD-05_61	1.72	19.0	0.9	18.4	0.8	0.112	0.009	0.18
13DD-05_62	3.11	19.16	0.77	18.48	0.74	0.14	0.01	0.05
13DD-05_63	2.97	19.16	0.73	18.48	0.71	0.14	0.01	0.01
13DD-05_64	2.04	19.19	0.70	18.52	0.68	0.14	0.01	0.02
13DD-05_65	5.39	19.31	0.63	18.62	0.61	0.12	0.01	0.18
13DD-05_66	3.54	19.50	0.65	18.81	0.62	0.10	0.01	0.05
13DD-05_67	2.80	19.65	0.69	18.95	0.67	0.15	0.01	0.01
13DD-05_68	2.37	19.84	0.83	19.14	0.80	0.14	0.02	0.02
13DD-05_69	3.32	19.96	0.72	19.26	0.69	0.10	0.01	0.03
13DD-05_70	1.54	20.00	0.76	19.29	0.73	0.09	0.02	0.00
13DD-05_71	1.43	20.04	0.76	19.33	0.74	0.10	0.01	0.05
13DD-05_72	3.04	20.04	0.76	19.33	0.74	0.10	0.01	0.01
13DD-05_73	2.53	20.08	0.73	19.37	0.70	0.09	0.01	0.23
13DD-05_74	3.62	20.09	0.69	19.38	0.66	0.08	0.01	0.07
13DD-05_75	3.09	20.1	0.8	19.4	0.8	0.090	0.007	0.26
13DD-05_76	2.68	20.1	0.7	19.4	0.7	0.092	0.009	0.04
13DD-05_77	1.62	20.2	0.8	19.5	0.7	0.081	0.009	0.06

13DD-05_78	1.59	20.2	0.8	19.5	0.8	0.094	0.012	0.13
Beizhan deposit								
Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
13BZ-07_01	0.64	13.32	0.50	12.86	0.48	0.31	0.02	0.25
13BZ-07_02	1.04	15.60	0.46	15.06	0.45	0.20	0.01	0.15
13BZ-07_03	1.31	13.33	0.39	12.87	0.38	0.28	0.01	0.03
13BZ-07_04	1.12	14.73	0.59	14.22	0.57	0.27	0.01	0.32
13BZ-07_05	1.87	10.64	0.41	10.27	0.39	0.41	0.01	0.03
13BZ-07_06	1.79	15.06	0.52	14.54	0.50	0.22	0.02	0.04
13BZ-07_07	1.21	15.95	0.51	15.40	0.49	0.16	0.01	0.06
13BZ-07_08	1.51	16.23	0.50	15.67	0.48	0.18	0.01	0.11
13BZ-07_09	2.47	7.88	0.27	7.61	0.26	0.54	0.01	0.11
13BZ-07_10	3.44	16.21	0.45	15.65	0.43	0.21	0.01	0.14
13BZ-07_11	15.40	18.73	0.60	18.08	0.58	0.16	0.01	0.27
13BZ-07_12	2.73	14.45	0.44	13.95	0.42	0.29	0.01	0.23
13BZ-07_13	5.09	17.60	0.43	16.99	0.42	0.17	0.01	0.13
13BZ-07_14	7.33	17.54	0.49	16.94	0.48	0.18	0.01	0.18
13BZ-07_15	5.51	17.34	0.39	16.74	0.38	0.18	0.01	0.12
13BZ-07_16	4.75	16.31	0.59	15.75	0.57	0.25	0.01	0.51
13BZ-07_17	3.03	13.97	0.39	13.49	0.38	0.34	0.01	0.01
13BZ-07_18	3.24	7.31	0.22	7.06	0.21	0.56	0.01	0.16
13BZ-07_19	2.73	13.40	0.54	12.94	0.52	0.31	0.01	0.22
13BZ-07_20	4.03	15.02	0.45	14.50	0.44	0.26	0.01	0.19
13BZ-07_21	2.63	10.21	0.87	9.86	0.84	0.41	0.01	0.09
13BZ-07_22	4.69	9.91	0.72	9.57	0.69	0.40	0.02	0.80
13BZ-07_23	2.73	14.25	0.43	13.75	0.41	0.30	0.01	0.00
13BZ-07_24	2.67	14.81	0.42	14.30	0.40	0.28	0.01	0.07
13BZ-07_25	2.05	15.13	0.80	14.61	0.77	0.27	0.03	0.20
13BZ-07_26	1.80	13.59	0.57	13.12	0.55	0.31	0.02	0.09
13BZ-07_27	2.21	11.27	0.41	10.89	0.39	0.40	0.01	0.39
13BZ-07_28	2.07	12.89	0.40	12.44	0.38	0.33	0.01	0.32
13BZ-07_29	1.91	15.50	0.48	14.97	0.46	0.25	0.02	0.01
13BZ-07_30	3.19	12.94	0.37	12.49	0.36	0.36	0.01	0.19
13BZ-07_31	2.78	13.26	0.33	12.81	0.32	0.34	0.01	0.17
13BZ-07_32	3.61	9.99	0.28	9.65	0.27	0.47	0.01	0.20
13BZ-07_33	4.83	12.64	0.32	12.21	0.31	0.36	0.01	0.06
13BZ-07_34	2.42	8.10	0.20	7.82	0.19	0.51	0.01	0.36
13BZ-07_35	2.41	18.90	0.50	18.25	0.48	0.14	0.01	0.16
13BZ-07_36	3.53	18.63	0.45	17.98	0.44	0.16	0.01	0.17
13BZ-07_37	4.69	19.54	0.46	18.86	0.44	0.10	0.00	0.24
13BZ-07_38	2.29	16.23	0.42	15.67	0.41	0.24	0.01	0.23
13BZ-07_39	4.23	17.73	0.44	17.12	0.43	0.16	0.01	0.19

13BZ-07_40	1.61	14.77	0.46	14.26	0.44	0.28	0.01	0.12
13BZ-07_41	3.32	16.00	0.41	15.45	0.40	0.23	0.01	0.07
13BZ-07_42	1.52	15.75	0.45	15.21	0.43	0.29	0.01	0.35
13BZ-07_43	5.47	18.73	0.46	18.08	0.44	0.15	0.01	0.03
13BZ-07_44	2.58	16.8	0.5	16.2	0.5	0.211	0.008	0.02
13BZ-07_45	3.77	17.0	0.4	16.4	0.4	0.176	0.006	0.13
13BZ-07_46	5.00	18.2	0.5	17.6	0.4	0.146	0.008	0.11
13BZ-07_47	3.26	14.5	0.4	14.0	0.4	0.278	0.010	0.29
13BZ-07_48	1.41	9.1	0.2	8.8	0.2	0.518	0.012	0.06
13BZ-07_49	3.24	12.6	0.3	12.2	0.3	0.380	0.008	0.26
13BZ-07_50	2.60	7.5	0.2	7.3	0.2	0.559	0.009	0.15
13BZ-07_51	2.04	7.2	0.2	6.9	0.2	0.567	0.009	0.49
13BZ-07_52	2.33	16.0	0.6	15.4	0.6	0.226	0.012	0.09
13BZ-07_53	1.93	13.0	0.5	12.5	0.4	0.333	0.014	0.05
13BZ-07_54	2.40	12.3	0.8	11.9	0.7	0.352	0.019	0.70
13BZ-07_55	4.20	18.6	0.5	18.0	0.5	0.117	0.007	0.32
13BZ-07_56	3.16	15.0	0.5	14.5	0.5	0.235	0.011	0.34
13BZ-07_57	3.44	13.2	0.3	12.7	0.3	0.359	0.009	0.17
13BZ-07_58	4.48	15.8	0.5	15.3	0.5	0.244	0.013	0.33
13BZ-07_59	2.86	16.9	0.4	16.3	0.4	0.204	0.007	0.11
13BZ-07_60	3.91	18.5	0.4	17.8	0.4	0.156	0.006	0.08
13BZ-07_61	2.16	18.0	0.5	17.4	0.5	0.171	0.009	0.09
13BZ-07_62	2.02	15.29	0.42	14.76	0.41	0.26	0.01	0.10
13BZ-07_63	2.11	18.11	0.49	17.49	0.48	0.17	0.01	0.29
13BZ-07_64	1.62	16.67	0.53	16.09	0.51	0.19	0.01	0.06
13BZ-07_65	1.98	15.08	0.45	14.56	0.44	0.27	0.01	0.07
13BZ-07_66	2.58	16.50	0.44	15.93	0.42	0.24	0.01	0.11
13BZ-07_67	2.26	8.93	0.29	8.62	0.28	0.48	0.01	0.43
13BZ-07_68	3.83	16.81	0.45	16.23	0.44	0.24	0.01	0.07
13BZ-07_69	15.23	19.10	0.40	18.44	0.39	0.12	0.00	0.04
13BZ-07_70	2.06	12.64	0.56	12.21	0.54	0.37	0.01	0.09
13BZ-07_71	2.17	14.41	0.52	13.91	0.50	0.33	0.01	0.03
13BZ-07_72	3.54	15.53	0.41	14.99	0.40	0.25	0.01	0.11
13BZ-07_73	6.19	15.59	0.36	15.05	0.35	0.23	0.01	0.41
13BZ-07_74	3.34	14.27	0.45	13.77	0.43	0.28	0.01	0.33
13BZ-07_75	2.67	12.7	0.6	12.3	0.5	0.346	0.032	0.05
13BZ-07_76	3.85	9.9	0.5	9.6	0.5	0.467	0.030	0.12
13BZ-07_77	7.30	15.6	0.5	15.1	0.5	0.240	0.012	0.78
13BZ-07_78	4.92	18.4	0.4	17.8	0.4	0.160	0.008	0.31
13BZ-07_79	3.98	13.35	0.43	12.89	0.41	0.32	0.01	0.28
13BZ-07_80	3.96	15.87	0.50	15.33	0.49	0.23	0.02	0.07
13BZ-07_81	3.47	13.77	0.85	13.30	0.82	0.28	0.03	0.04

13BZ-07_82	3.65	15.38	0.45	14.85	0.43	0.27	0.01	0.22
13BZ-07_83	2.02	12.97	0.71	12.52	0.68	0.32	0.02	0.03
13BZ-07_84	3.75	14.22	0.45	13.73	0.43	0.30	0.01	0.28
13BZ-07_85	3.97	14.73	0.59	14.22	0.57	0.24	0.01	0.51
13BZ-07_86	5.22	15.55	0.41	15.02	0.40	0.25	0.01	0.28
13BZ-07_87	3.20	15.29	0.51	14.76	0.50	0.24	0.01	0.37
13BZ-07_88	3.26	13.32	0.41	12.86	0.39	0.32	0.01	0.15
13BZ-07_89	2.16	14.12	0.36	13.64	0.35	0.32	0.01	0.18
13BZ-07_90	9.10	13.11	0.40	12.65	0.38	0.40	0.01	0.12
13BZ-07_91	3.78	16.75	0.51	16.17	0.49	0.22	0.01	0.38
13BZ-07_92	2.06	14.27	0.53	13.77	0.51	0.29	0.01	0.03
13BZ-07_93	3.06	13.74	0.53	13.26	0.51	0.34	0.02	0.08
13BZ-07_94	4.58	13.26	0.44	12.81	0.42	0.32	0.01	0.52
13BZ-07_95	4.91	14.99	0.43	14.48	0.41	0.27	0.01	0.35
13BZ-07_96	4.07	15.27	0.47	14.74	0.45	0.24	0.01	0.19
13BZ-07_97	4.30	13.95	0.58	13.47	0.56	0.29	0.01	0.53
13BZ-07_98	2.61	17.01	0.46	16.42	0.45	0.22	0.01	0.07
13BZ-07_99	2.60	15.27	0.49	14.74	0.47	0.27	0.01	0.00
13BZ-07_100	3.24	15.63	0.54	15.09	0.52	0.24	0.01	0.30
13BZ-07_101	1.60	11.93	0.56	11.52	0.54	0.35	0.02	0.02
13BZ-07_102	0.87	8.92	0.41	8.61	0.39	0.52	0.02	0.10
13BZ-07_103	1.91	12.99	0.42	12.54	0.41	0.34	0.02	0.26
13BZ-07_104	2.03	14.71	0.45	14.20	0.44	0.28	0.01	0.11
13BZ-07_105	2.48	13.07	0.36	12.62	0.35	0.33	0.01	0.12
13BZ-07_106	3.88	16.64	0.44	16.07	0.43	0.21	0.01	0.06
13BZ-07_107	2.27	13.30	0.64	12.84	0.61	0.37	0.03	0.08
13BZ-07_108	3.66	17.01	0.46	16.42	0.45	0.21	0.01	0.24
13BZ-07_109	3.75	17.49	0.43	16.88	0.41	0.17	0.01	0.10
13BZ-07_110	3.92	17.15	0.50	16.56	0.48	0.21	0.02	0.19
13BZ-07_111	3.24	15.46	0.62	14.92	0.60	0.26	0.02	0.17
13BZ-07_112	4.38	15.63	0.51	15.09	0.50	0.23	0.01	0.04
13BZ-07_113	2.82	10.52	0.48	10.15	0.46	0.42	0.02	0.21
13BZ-07_114	3.69	14.20	0.42	13.71	0.41	0.28	0.01	0.20
13BZ-07_115	2.76	13.81	0.59	13.34	0.57	0.29	0.01	0.38
13BZ-07_116	2.46	10.72	0.34	10.35	0.33	0.42	0.01	0.19
13BZ-07_117	3.38	13.55	0.51	13.08	0.50	0.32	0.02	0.40
13BZ-07_118	2.12	6.72	0.24	6.49	0.24	0.57	0.01	0.06
13BZ-07_119	3.18	15.75	0.47	15.21	0.45	0.26	0.01	0.11
13BZ-07_120	6.44	15.38	0.40	14.85	0.39	0.26	0.01	0.29
13BZ-07_121	2.34	14.35	0.45	13.85	0.44	0.25	0.01	0.26
13BZ-07_122	2.66	11.0	0.4	10.6	0.4	0.397	0.014	0.36
13BZ-07_123	2.71	13.4	0.5	13.0	0.5	0.302	0.014	0.54

13BZ-07_124	2.01	12.0	0.4	11.6	0.4	0.364	0.013	0.36
13BZ-07_125	6.27	16.9	0.4	16.4	0.4	0.151	0.005	0.29

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
13BZ-08_01	0.48	8.14	0.50	7.86	0.49	0.53	0.02	0.15
13BZ-08_02	0.93	7.35	0.42	7.10	0.40	0.54	0.02	0.43
13BZ-08_03	0.88	6.92	0.37	6.68	0.36	0.58	0.02	0.26
13BZ-08_04	1.24	7.95	0.32	7.68	0.31	0.52	0.01	0.12
13BZ-08_05	0.80	6.08	0.16	5.87	0.16	0.62	0.01	0.33
13BZ-08_06	1.10	9.91	0.36	9.57	0.35	0.45	0.02	0.09
13BZ-08_07	1.18	11.10	0.41	10.72	0.39	0.41	0.02	0.20
13BZ-08_08	0.71	4.27	0.27	4.13	0.26	0.66	0.02	0.43
13BZ-08_09	0.75	9.56	0.36	9.23	0.34	0.48	0.02	0.02
13BZ-08_10	0.77	4.74	0.29	4.58	0.28	0.65	0.02	0.03
13BZ-08_11	0.59	5.85	0.44	5.65	0.43	0.59	0.02	0.25
13BZ-08_12	1.47	7.63	0.42	7.36	0.40	0.50	0.02	0.72
13BZ-08_13	0.45	5.76	0.26	5.56	0.25	0.61	0.02	0.03
13BZ-08_14	0.44	3.41	0.15	3.30	0.15	0.71	0.02	0.12
13BZ-08_15	0.22	1.76	0.09	1.70	0.09	0.80	0.02	0.18
13BZ-08_16	0.38	2.68	0.12	2.59	0.12	0.76	0.02	0.03
13BZ-08_17	0.95	5.62	0.50	5.42	0.49	0.59	0.03	0.11
13BZ-08_18	0.72	7.95	0.39	7.68	0.38	0.54	0.02	0.14
13BZ-08_19	0.89	5.69	0.18	5.50	0.18	0.63	0.02	0.11
13BZ-08_20	1.06	7.41	0.21	7.16	0.20	0.59	0.02	0.49
13BZ-08_21	1.11	8.78	0.34	8.48	0.33	0.51	0.02	0.06
13BZ-08_22	0.59	5.15	0.22	4.97	0.21	0.64	0.02	0.04
13BZ-08_23	0.67	4.69	0.24	4.53	0.23	0.67	0.02	0.14
13BZ-08_24	0.73	2.14	0.06	2.07	0.06	0.78	0.01	0.01
13BZ-08_25	2.11	12.84	0.35	12.39	0.33	0.33	0.01	0.11
13BZ-08_26	1.07	7.07	0.40	6.83	0.38	0.58	0.02	0.02
13BZ-08_27	1.50	9.25	0.42	8.93	0.40	0.48	0.02	0.25
13BZ-08_28	1.14	7.64	0.37	7.38	0.36	0.54	0.02	0.17
13BZ-08_29	0.96	10.92	0.51	10.54	0.49	0.42	0.02	0.02
13BZ-08_30	0.65	7.49	0.25	7.23	0.24	0.59	0.02	0.12
13BZ-08_31	0.99	9.51	0.35	9.18	0.34	0.47	0.02	0.20
13BZ-08_32	0.52	4.84	0.20	4.67	0.20	0.66	0.02	0.17
13BZ-08_33	1.44	9.92	0.33	9.58	0.32	0.47	0.02	0.04
13BZ-08_34	0.95	5.81	0.29	5.61	0.28	0.61	0.02	0.18
13BZ-08_35	0.87	5.29	0.26	5.10	0.25	0.64	0.02	0.15
13BZ-08_36	0.78	6.37	0.49	6.15	0.47	0.59	0.02	0.16
13BZ-08_37	0.61	6.90	0.30	6.66	0.29	0.61	0.03	0.02
13BZ-08_38	0.74	6.38	0.28	6.16	0.27	0.59	0.02	0.20

13BZ-08_39	1.16	8.99	0.32	8.68	0.31	0.50	0.02	0.02
13BZ-08_40	0.78	5.18	0.27	5.00	0.26	0.62	0.02	0.08
13BZ-08_41	1.68	6.48	0.24	6.26	0.24	0.60	0.01	0.11
13BZ-08_42	0.73	7.46	0.26	7.20	0.25	0.57	0.02	0.14
13BZ-08_43	1.04	8.00	0.28	7.72	0.27	0.53	0.02	0.01
13BZ-08_44	1.24	9.1	0.4	8.8	0.4	0.473	0.019	0.15
13BZ-08_45	1.32	9.9	0.4	9.5	0.3	0.447	0.013	0.01
13BZ-08_46	0.88	6.9	0.4	6.6	0.4	0.568	0.017	0.24
13BZ-08_47	1.22	7.0	0.3	6.7	0.3	0.559	0.017	0.08
13BZ-08_48	0.78	3.8	0.2	3.7	0.2	0.705	0.019	0.23
13BZ-08_49	0.95	6.7	0.2	6.5	0.2	0.590	0.017	0.32
13BZ-08_50	1.21	7.8	0.3	7.5	0.3	0.529	0.015	0.18
13BZ-08_51	1.11	9.0	0.4	8.7	0.3	0.497	0.015	0.05
13BZ-08_52	1.48	7.7	0.3	7.5	0.2	0.539	0.012	0.05
13BZ-08_53	0.90	5.5	0.2	5.4	0.2	0.639	0.016	0.20
13BZ-08_54	0.84	5.8	0.5	5.6	0.5	0.572	0.019	0.32
13BZ-08_55	0.96	2.4	0.1	2.3	0.1	0.756	0.012	0.17
13BZ-08_56	0.57	1.8	0.1	1.7	0.1	0.761	0.013	0.33
13BZ-08_57	0.82	2.9	0.2	2.8	0.2	0.727	0.014	0.06
13BZ-08_58	1.37	4.5	0.2	4.3	0.2	0.684	0.015	0.09
13BZ-08_59	1.69	8.2	0.3	7.9	0.3	0.504	0.014	0.26
13BZ-08_60	1.21	5.2	0.2	5.0	0.2	0.626	0.016	0.14
13BZ-08_61	0.89	3.6	0.4	3.5	0.3	0.667	0.017	0.20
13BZ-08_62	1.19	7.99	0.45	7.71	0.43	0.50	0.02	0.59
13BZ-08_63	1.69	7.63	0.41	7.37	0.40	0.52	0.02	0.42
13BZ-08_64	1.15	7.89	0.32	7.61	0.31	0.52	0.02	0.38
13BZ-08_65	1.33	7.19	0.25	6.94	0.24	0.56	0.02	0.20
13BZ-08_66	1.32	7.08	0.29	6.84	0.28	0.54	0.02	0.11
13BZ-08_67	0.93	2.62	0.10	2.53	0.09	0.75	0.01	0.19
13BZ-08_68	1.28	7.39	0.36	7.14	0.34	0.54	0.02	0.05
13BZ-08_69	0.86	4.93	0.17	4.76	0.17	0.67	0.02	0.32
13BZ-08_70	0.88	5.62	0.22	5.42	0.21	0.62	0.02	0.18
13BZ-08_71	1.01	5.72	0.28	5.52	0.27	0.62	0.02	0.00
13BZ-08_72	0.64	5.52	0.34	5.33	0.32	0.61	0.02	0.32
13BZ-08_73	0.87	5.62	0.22	5.42	0.22	0.64	0.02	0.10
13BZ-08_74	0.77	3.37	0.15	3.25	0.14	0.73	0.01	0.19
13BZ-08_75	0.55	3.1	0.1	3.0	0.1	0.743	0.018	0.20
13BZ-08_76	0.49	3.3	0.2	3.2	0.2	0.706	0.015	0.10
13BZ-08_77	0.60	5.8	0.2	5.6	0.2	0.638	0.021	0.21
13BZ-08_78	0.81	2.5	0.2	2.4	0.2	0.729	0.015	0.11
13BZ-08_79	1.14	6.80	0.31	6.57	0.29	0.59	0.02	0.20
13BZ-08_80	0.91	7.66	0.33	7.40	0.32	0.54	0.02	0.21

13BZ-08_81	0.63	3.33	0.17	3.22	0.16	0.72	0.02	0.07
13BZ-08_82	0.50	5.23	0.22	5.05	0.22	0.67	0.02	0.15
13BZ-08_83	0.92	8.53	0.58	8.24	0.56	0.51	0.02	0.35
13BZ-08_84	0.70	3.33	0.16	3.22	0.15	0.72	0.01	0.04
13BZ-08_85	1.04	4.79	0.18	4.62	0.18	0.62	0.02	0.27
13BZ-08_86	1.08	3.13	0.24	3.03	0.23	0.70	0.01	0.41
13BZ-08_87	0.88	4.56	0.18	4.40	0.17	0.66	0.01	0.01
13BZ-08_88	1.32	5.08	0.24	4.91	0.23	0.65	0.02	0.06
13BZ-08_89	0.82	6.36	0.32	6.14	0.31	0.61	0.02	0.19
13BZ-08_90	0.59	5.11	0.25	4.93	0.24	0.68	0.03	0.28
13BZ-08_91	0.50	3.14	0.22	3.04	0.21	0.73	0.02	0.12
13BZ-08_92	0.43	6.73	0.29	6.50	0.28	0.61	0.02	0.17
13BZ-08_93	0.59	5.78	0.43	5.58	0.42	0.62	0.03	0.10
13BZ-08_94	1.31	6.14	0.27	5.93	0.26	0.60	0.01	0.16
13BZ-08_95	0.30	4.22	0.18	4.08	0.17	0.70	0.02	0.12
13BZ-08_96	0.38	3.62	0.30	3.50	0.29	0.69	0.02	0.03
13BZ-08_97	0.66	6.45	0.28	6.23	0.27	0.60	0.02	0.20

Analysis spot	U (ppm)	$^{238}U/^{206}Pb$	Prop2σ	Corr_$^{238}U/^{206}Pb$	Corr_Prop2σ	$^{207}Pb/^{206}Pb$	Prop2σ	Rho
13BZ-15_01	1.46	9.30	0.48	8.98	0.46	0.45	0.02	0.11
13BZ-15_02	2.26	12.42	0.40	11.99	0.39	0.33	0.01	0.02
13BZ-15_03	1.35	13.23	0.51	12.76	0.49	0.31	0.02	0.46
13BZ-15_04	1.64	8.63	0.26	8.33	0.25	0.53	0.01	0.12
13BZ-15_05	1.53	9.92	0.27	9.57	0.26	0.47	0.01	0.30
13BZ-15_06	1.37	7.10	0.25	6.85	0.24	0.56	0.01	0.01
13BZ-15_07	1.04	8.13	0.24	7.84	0.24	0.52	0.01	0.34
13BZ-15_08	1.38	6.39	0.29	6.17	0.28	0.58	0.02	0.56
13BZ-15_09	1.25	9.46	0.34	9.13	0.33	0.47	0.02	0.02
13BZ-15_10	1.58	8.22	0.36	7.94	0.35	0.53	0.02	0.03
13BZ-15_11	1.03	8.61	0.40	8.30	0.39	0.50	0.02	0.09
13BZ-15_12	1.11	11.76	0.58	11.35	0.56	0.37	0.02	0.18
13BZ-15_13	1.13	6.29	0.44	6.07	0.42	0.59	0.02	0.65
13BZ-15_14	2.44	9.47	0.56	9.14	0.55	0.46	0.02	0.72
13BZ-15_15	0.96	8.38	0.62	8.08	0.60	0.50	0.02	0.44
13BZ-15_16	1.12	7.67	0.55	7.40	0.53	0.57	0.02	0.01
13BZ-15_17	1.47	6.95	0.41	6.71	0.39	0.54	0.02	0.22
13BZ-15_18	0.72	4.29	0.37	4.14	0.36	0.69	0.02	0.08
13BZ-15_19	0.88	12.56	0.66	12.12	0.64	0.40	0.03	0.34
13BZ-15_20	1.14	13.14	0.54	12.68	0.52	0.38	0.02	0.51
13BZ-15_21	1.21	8.70	0.91	8.39	0.88	0.47	0.02	0.58
13BZ-15_22	0.74	6.13	0.72	5.92	0.69	0.56	0.02	0.39
13BZ-15_23	1.43	9.77	0.31	9.42	0.30	0.47	0.01	0.04

13BZ-15_24	1.07	5.88	0.59	5.68	0.57	0.58	0.02	0.37
13BZ-15_25	1.70	9.48	0.45	9.15	0.43	0.49	0.02	0.37
13BZ-15_26	2.29	10.95	0.48	10.57	0.46	0.40	0.02	0.41
13BZ-15_27	1.33	8.08	0.53	7.80	0.51	0.52	0.02	0.28
13BZ-15_28	1.21	8.19	0.42	7.90	0.41	0.51	0.02	0.36
13BZ-15_29	0.92	8.61	0.62	8.31	0.60	0.50	0.02	0.39
13BZ-15_30	1.96	7.40	0.34	7.14	0.33	0.55	0.01	0.25
13BZ-15_31	1.22	7.82	0.30	7.55	0.29	0.55	0.01	0.21
13BZ-15_32	2.62	8.04	0.25	7.76	0.24	0.55	0.01	0.05
13BZ-15_33	1.82	5.78	0.37	5.58	0.35	0.63	0.02	0.29
13BZ-15_34	2.48	9.84	0.84	9.50	0.81	0.45	0.02	0.62
13BZ-15_35	0.79	7.87	0.87	7.60	0.84	0.49	0.03	0.62
13BZ-15_36	0.94	13.09	0.48	12.63	0.46	0.37	0.02	0.02
13BZ-15_37	2.44	14.14	0.44	13.65	0.42	0.31	0.01	0.29
13BZ-15_38	1.34	9.63	0.76	9.30	0.73	0.48	0.03	0.65
13BZ-15_39	2.18	6.54	0.24	6.31	0.24	0.59	0.01	0.38
13BZ-15_40	2.94	14.31	0.43	13.80	0.41	0.31	0.01	0.15
13BZ-15_41	2.99	13.11	0.58	12.65	0.56	0.35	0.02	0.47
13BZ-15_42	3.08	13.48	0.36	13.00	0.35	0.34	0.01	0.54
13BZ-15_43	2.21	11.93	0.46	11.51	0.44	0.39	0.02	0.28
13BZ-15_44	1.65	11.0	0.3	10.7	0.3	0.443	0.011	0.04
13BZ-15_45	2.15	13.9	0.4	13.4	0.4	0.332	0.011	0.13
13BZ-15_46	2.95	17.4	0.6	16.8	0.6	0.197	0.014	0.29
13BZ-15_47	2.09	15.5	0.6	15.0	0.6	0.234	0.013	0.49
13BZ-15_48	2.71	15.4	0.5	14.8	0.5	0.268	0.010	0.11
13BZ-15_49	2.95	14.9	0.5	14.4	0.5	0.254	0.011	0.57
13BZ-15_50	1.95	15.1	0.5	14.6	0.5	0.303	0.012	0.20
13BZ-15_51	1.85	14.6	0.5	14.1	0.5	0.276	0.013	0.34
13BZ-15_52	0.85	15.8	0.6	15.2	0.6	0.265	0.015	0.23
13BZ-15_53	1.37	14.3	0.5	13.8	0.5	0.298	0.014	0.14
13BZ-15_54	1.02	13.0	0.5	12.5	0.5	0.304	0.015	0.17
13BZ-15_55	1.19	12.2	0.4	11.8	0.4	0.362	0.013	0.02
13BZ-15_56	1.96	14.0	0.5	13.5	0.5	0.301	0.012	0.30
13BZ-15_57	3.49	12.5	0.4	12.0	0.4	0.356	0.013	0.66
13BZ-15_58	1.78	9.1	0.3	8.8	0.3	0.492	0.012	0.07
13BZ-15_59	3.17	13.7	0.4	13.2	0.4	0.296	0.010	0.06
13BZ-15_60	3.74	11.0	0.6	10.6	0.5	0.406	0.019	0.84
13BZ-15_61	2.80	15.4	0.5	14.8	0.5	0.265	0.012	0.23
13BZ-15_62	2.04	10.36	0.34	10.00	0.33	0.45	0.01	0.05
13BZ-15_63	1.64	10.85	0.49	10.47	0.48	0.40	0.01	0.53
13BZ-15_64	3.45	14.84	0.44	14.32	0.42	0.29	0.01	0.25
13BZ-15_65	2.21	8.44	0.24	8.14	0.23	0.55	0.01	0.42

13BZ-15_66	1.82	11.76	0.42	11.35	0.40	0.38	0.01	0.19
13BZ-15_67	0.64	6.22	0.31	6.00	0.30	0.63	0.02	0.15
13BZ-15_68	0.66	5.85	0.68	5.64	0.66	0.58	0.03	0.48
13BZ-15_69	1.25	10.32	0.49	9.96	0.47	0.46	0.02	0.41
13BZ-15_70	0.95	5.65	0.24	5.45	0.23	0.63	0.02	0.08
13BZ-15_71	2.27	15.92	0.46	15.36	0.44	0.24	0.01	0.29
13BZ-15_72	1.60	12.55	0.44	12.11	0.43	0.36	0.01	0.26
13BZ-15_73	1.15	12.59	0.43	12.15	0.41	0.35	0.01	0.01
13BZ-15_74	1.02	9.72	0.41	9.38	0.39	0.44	0.02	0.31
13BZ-15_75	1.77	7.7	0.2	7.4	0.2	0.577	0.012	0.08
13BZ-15_76	1.45	9.5	0.4	9.2	0.4	0.482	0.015	0.17
13BZ-15_77	1.16	8.0	0.4	7.7	0.4	0.515	0.017	0.05
13BZ-15_78	1.06	11.5	0.4	11.1	0.4	0.394	0.016	0.01
13BZ-15_79	0.81	7.15	0.28	6.90	0.27	0.57	0.02	0.09
13BZ-15_80	0.68	5.43	0.35	5.24	0.34	0.60	0.02	0.05
13BZ-15_81	1.19	7.39	0.22	7.13	0.22	0.57	0.01	0.15
13BZ-15_82	0.73	4.52	0.39	4.37	0.38	0.65	0.02	0.21
13BZ-15_83	0.68	5.67	0.27	5.47	0.26	0.62	0.02	0.10
13BZ-15_84	0.53	6.98	0.38	6.74	0.37	0.57	0.02	0.07
13BZ-15_85	0.83	7.81	0.34	7.54	0.32	0.56	0.02	0.15
13BZ-15_86	0.72	8.70	0.41	8.39	0.39	0.51	0.02	0.21
13BZ-15_87	0.65	9.45	0.44	9.12	0.42	0.48	0.02	0.19
13BZ-15_88	1.82	13.91	1.01	13.42	0.97	0.34	0.03	0.32
13BZ-15_89	1.15	10.36	0.37	10.00	0.35	0.47	0.02	0.11
13BZ-15_90	0.49	7.52	0.37	7.25	0.36	0.58	0.02	0.01
13BZ-15_91	3.20	15.53	0.68	14.98	0.65	0.27	0.02	0.71
13BZ-15_92	2.05	12.00	0.36	11.58	0.35	0.41	0.01	0.06
13BZ-15_93	1.76	10.43	0.37	10.06	0.36	0.43	0.01	0.27

Table DR3. EMPA major element and LA-ICPMS rare earth element analyses of Garnets from Chagangnuoer, Dunde and Beizhan deposits of the Awulale Belt, western Tianshan.

Chagangnuoer deposit

Sample No.	CG2801-1	CG2801-2	CG2801-3	CG2801-4	CG2801-5	CG2801-6	CG2801-7	11CG11-2-1	11CG11-2-2	11CG11-2-3	11CG11-2-4	11CG11-2-5	11CG11-2-6	11CG11-2-7	11CG15-20-1	11CG15-20-2	11CG15-20-3	11CG15-20-4	11CG15-20-5	11CG15-20-6
Oxide weight (wt.%)																				
SiO_2	37.448	37.618	37.447	37	37.021	37.331	37.241	36.59	37.71	37.98	34.82	35.18	38.38	30.46	38.24	36.66	29.56	37.12	36.88	34.38
TiO_2	0.149	0.196	0.192	0.212	0.344	0.378	0.072	0.16	0.16	0.13	0.13	0.12	0.15	0.20	0.11	0.10	0.15	0.18	0.10	0.18
Al_2O_3	10.301	10.865	10.124	10.446	9.887	10.006	8.81	8.38	8.68	7.93	8.81	7.54	8.34	10.07	8.63	7.33	10.48	9.70	8.97	9.07
FeO^T	16.12	14.94	16.06	15.43	15.84	15.04	16.93	17.35	17.28	17.11	16.92	16.92	16.68	16.84	17.07	17.26	16.26	17.07	17.53	17.05
MnO	0.74	0.70	0.68	0.63	0.71	0.62	0.52	0.63	0.62	0.71	0.65	0.78	0.66	0.64	0.58	0.58	0.60	0.59	0.57	0.59
MgO	0.10	0.11	0.08	0.11	0.09	0.11	0.08	0.06	0.06	0.05	0.04	0.04	0.04	0.05	0.10	0.06	0.10	0.11	0.07	0.10
CaO	34.98	35.25	34.79	34.94	34.85	34.89	34.90	34.76	34.18	33.73	34.35	32.82	34.77	34.59	34.30	34.44	34.30	34.73	35.33	34.83
Total	99.84	99.69	99.39	98.78	98.75	98.40	98.56	97.92	98.69	97.65	95.72	93.40	99.02	92.84	99.02	96.43	91.44	99.51	99.46	96.20
Number of ions on the basis of 24O																				
Si	2.97	2.98	2.98	2.96	2.97	3.00	3.00	2.98	3.03	3.08	2.91	3.00	3.07	2.66	3.06	3.03	2.62	2.96	2.96	2.87
Ti	0.01	0.01	0.01	0.01	0.02	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Al	0.96	1.01	0.95	0.99	0.94	0.95	0.84	0.80	0.82	0.76	0.87	0.76	0.79	1.04	0.81	0.71	1.10	0.91	0.85	0.89
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.99	0.92	0.99	0.96	0.99	0.94	1.06	1.10	1.08	1.08	1.10	1.12	1.04	1.14	1.06	1.11	1.12	1.06	1.09	1.11
Fe^{2+}	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08
Mn	0.05	0.05	0.05	0.04	0.05	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04
Mg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ca	2.97	2.99	2.97	3.00	3.00	3.00	3.01	3.03	2.94	2.93	3.08	3.00	2.98	3.24	2.94	3.05	3.26	2.97	3.03	3.11
Garnet end-members normative calculation																				
Grossular	46.83	49.95	46.53	48.26	46.05	47.61	42.25	40.31	41.19	39.27	42.08	38.28	41.11	45.27	41.38	37.41	47.14	44.03	41.77	42.50
Andradite	48.36	45.32	48.69	47.03	48.67	47.21	53.57	55.02	54.09	55.88	53.35	56.67	54.26	49.95	54.00	58.13	48.26	51.11	53.84	52.70

Almandine	2.41	2.22	2.42	2.31	2.38	2.26	2.55	2.61	2.65	2.65	2.58	2.69	2.51	2.55	2.60	2.62	2.48	2.57	2.60	2.56
Pyrope	0.37	0.43	0.32	0.40	0.34	0.42	0.29	0.21	0.23	0.21	0.17	0.17	0.14	0.21	0.38	0.23	0.37	0.43	0.28	0.39
Spessartine	1.60	1.50	1.48	1.37	1.54	1.35	1.12	1.38	1.37	1.59	1.42	1.79	1.43	1.40	1.29	1.27	1.31	1.28	1.23	1.27
Ca-Ti Gt	0.43	0.57	0.56	0.62	1.02	1.15	0.22	0.48	0.48	0.40	0.39	0.37	0.48	0.57	0.34	0.34	0.44	0.53	0.29	0.52
Rare earth elements																				
La	0.03	0.02	0.02	0.02	0.04	0.03	0.03	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.03	0.02	0.03	0.06	0.03	0.02
Ce	0.56	0.39	0.35	0.41	0.67	0.49	0.46	0.05	0.05	0.06	0.07	0.05	0.11	0.14	0.97	0.81	0.79	0.83	0.76	0.65
Pr	0.32	0.22	0.20	0.24	0.39	0.30	0.29	0.02	0.04	0.03	0.02	0.04	0.06	0.09	0.57	0.53	0.51	0.47	0.46	0.42
Nd	4.77	3.34	3.00	3.72	6.00	4.54	4.44	0.48	0.58	0.52	0.52	0.75	0.92	1.31	8.09	7.44	7.25	7.29	6.96	6.02
Sm	3.57	2.50	2.25	2.81	4.52	3.43	3.37	1.00	1.28	1.29	0.98	1.15	1.66	2.28	4.89	4.26	4.21	4.17	3.90	3.95
Eu	1.66	1.16	1.05	1.17	1.94	1.40	1.29	0.46	0.49	0.51	0.43	0.48	0.68	1.08	1.60	1.56	1.53	1.65	1.42	1.44
Gd	3.99	2.79	2.51	3.22	5.14	3.94	3.92	3.15	3.54	3.41	2.89	2.83	4.40	4.81	4.53	4.23	4.03	4.17	4.24	3.68
Tb	0.67	0.47	0.42	0.52	0.84	0.63	0.62	0.67	0.65	0.63	0.54	0.57	0.75	0.86	0.67	0.63	0.59	0.62	0.55	0.56
Dy	4.15	2.90	2.61	3.32	5.32	4.06	4.02	4.56	4.21	4.04	3.72	3.57	4.21	5.47	3.69	3.08	3.21	3.47	3.40	2.94
Ho	0.83	0.58	0.52	0.67	1.06	0.82	0.81	0.93	0.86	0.87	0.74	0.72	0.70	1.02	0.76	0.75	0.67	0.71	0.69	0.66
Er	2.27	1.59	1.43	1.94	3.06	2.40	2.45	2.50	2.34	2.45	2.36	2.07	1.41	2.45	1.91	1.80	1.95	1.82	1.87	1.70
Tm	0.32	0.22	0.20	0.26	0.42	0.32	0.33	0.32	0.32	0.33	0.30	0.25	0.14	0.30	0.27	0.24	0.22	0.25	0.24	0.22
Yb	2.11	1.48	1.33	1.97	3.04	2.45	2.60	1.87	1.92	2.10	1.97	1.64	0.65	1.39	1.53	1.29	1.43	1.58	1.39	1.40
Lu	0.31	0.22	0.19	0.27	0.43	0.34	0.35	0.26	0.26	0.32	0.28	0.25	0.07	0.18	0.19	0.20	0.21	0.21	0.22	0.22
ΣREE	26	18	16	21	33	25	25	16	17	17	15	14	16	21	30	27	27	27	26	24
Y/Ho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(La/Sm)N	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.001	0.002	0.004	0.001	0.002	0.006	0.003	0.004	0.003	0.005	0.010	0.005	0.004
(Gd/Yb)N	1.56	1.56	1.56	1.35	1.40	1.33	1.25	1.39	1.53	1.34	1.22	1.43	5.63	2.86	2.45	2.72	2.33	2.18	2.52	2.18
(La/Yb)N	0.010	0.010	0.010	0.008	0.008	0.008	0.007	0.001	0.001	0.003	0.001	0.001	0.017	0.006	0.016	0.013	0.017	0.029	0.017	0.012
δEu	1.35	1.35	1.35	1.19	1.23	1.17	1.09	0.80	0.71	0.74	0.78	0.81	0.77	1.00	1.04	1.13	1.14	1.21	1.07	1.16

Dunde deposit

Sample No.	13DD-03-01	13DD-03-02	13DD-03-03	13DD-03-04	13DD-03-05	13DD-03-06	13DD-03-07	13DD-04-01	13DD-04-02	13DD-04-03	13DD-04-04	13DD-04-05	13DD-04-06	13DD-04-07	13DD-05-01	13DD-05-03	13DD-05-04	13DD-05-05	13DD-05-06	13DD-05-07
Oxide weight (wt.%)																				
SiO_2	38.81	40.65	36.40	33.51	36.70	38.54	38.35	38.09	37.70	37.62	36.37	33.03	37.32	37.91	38.25	38.28	37.64	37.88	38.29	37.98
TiO_2	0.25	0.24	0.24	0.23	0.24	0.27	0.26	0.28	0.31	0.37	0.32	0.34	0.37	0.38	0.22	0.19	0.14	0.24	0.20	0.27
Al_2O_3	14.24	12.33	14.67	13.54	14.26	14.72	13.64	13.54	11.66	11.92	10.62	11.04	11.68	12.01	14.59	14.61	14.25	13.31	14.74	13.82
FeO^T	10.68	10.78	10.44	10.47	10.67	11.00	10.83	11.28	13.23	12.76	12.74	12.72	13.15	12.52	10.03	9.73	10.90	10.81	10.30	10.71
MnO	1.55	1.40	1.37	1.28	1.34	1.49	1.47	0.69	0.67	0.64	1.07	0.68	0.63	0.84	1.31	1.33	1.37	1.09	1.30	1.25
MgO	0.26	0.22	0.28	0.26	0.30	0.31	0.27	0.37	0.21	0.21	0.20	0.21	0.21	0.20	0.29	0.30	0.28	0.25	0.25	0.24
CaO	34.22	33.97	34.25	32.93	34.16	34.58	34.20	35.68	35.30	35.65	33.39	32.14	35.44	35.52	34.32	35.12	34.68	35.02	34.84	34.41
Total	100.01	99.58	97.65	92.21	97.67	100.91	99.02	99.92	99.07	99.17	94.70	90.16	98.79	99.37	99.01	99.54	99.26	98.59	99.90	98.68
Number of ions on the basis of 24O																				
Si	3.01	3.16	2.91	2.85	2.93	2.97	3.01	2.97	2.99	2.98	3.02	2.89	2.97	2.99	3.00	2.99	2.96	3.00	2.98	2.99
Ti	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02
Al	1.30	1.13	1.38	1.36	1.34	1.34	1.26	1.25	1.09	1.11	1.04	1.14	1.10	1.12	1.35	1.34	1.32	1.24	1.35	1.28
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.64	0.65	0.65	0.69	0.66	0.66	0.66	0.68	0.82	0.79	0.82	0.87	0.81	0.77	0.61	0.59	0.67	0.66	0.62	0.66
Fe^{2+}	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.06	0.06	0.05	0.04	0.05	0.05	0.05	0.05
Mn	0.10	0.09	0.09	0.09	0.09	0.10	0.10	0.05	0.05	0.04	0.08	0.05	0.04	0.06	0.09	0.09	0.09	0.07	0.09	0.08
Mg	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.04	0.02	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Ca	2.85	2.83	2.93	3.01	2.92	2.85	2.88	2.98	3.00	3.02	2.97	3.02	3.02	3.00	2.88	2.94	2.92	2.97	2.90	2.91
Garnet end-members normative calculation																				
Grossular	62.43	59.40	63.75	62.09	62.66	62.42	61.27	61.09	54.25	55.53	52.23	53.60	54.41	55.92	64.55	65.36	62.47	61.46	64.48	62.17
Andradite	30.91	34.25	29.93	31.67	30.92	30.79	32.10	33.58	40.61	39.23	41.32	40.75	40.42	38.46	29.29	28.72	31.53	32.93	29.72	31.80
Almandine	1.60	1.64	1.57	1.64	1.61	1.63	1.63	1.65	1.96	1.88	1.98	2.07	1.94	1.84	1.51	1.43	1.62	1.60	1.53	1.61
Pyrope	0.99	0.86	1.06	1.02	1.16	1.19	1.04	1.38	0.78	0.79	0.78	0.86	0.79	0.76	1.12	1.11	1.05	0.93	0.93	0.93

Spessartine	3.37	3.07	2.98	2.90	2.93	3.20	3.20	1.47	1.44	1.36	2.41	1.59	1.35	1.78	2.85	2.83	2.95	2.33	2.78	2.71
Ca-Ti Gt	0.69	0.74	0.67	0.68	0.66	0.72	0.75	0.80	0.92	1.09	1.00	1.06	1.08	1.14	0.61	0.54	0.38	0.70	0.54	0.77
Rare earth elements																				
La	1.88	3.24	1.61	1.37	1.51	1.79	1.63	1.91	2.82	2.75	1.32	3.35	2.38	2.25	1.68	0.85	1.20	1.60	2.83	1.79
Ce	22.16	28.21	18.52	15.32	17.66	19.92	18.00	16.20	28.65	19.63	11.06	17.49	23.43	18.43	11.40	6.57	12.86	14.67	23.17	16.12
Pr	7.23	7.74	5.58	4.77	5.27	5.98	5.33	3.83	8.39	4.07	2.97	4.31	5.90	5.87	2.88	1.66	4.00	3.32	6.08	4.01
Nd	61.94	56.68	40.46	37.46	38.82	43.17	41.60	24.65	64.56	21.04	21.36	32.13	33.05	32.39	17.51	11.76	31.99	19.15	36.62	26.57
Sm	26.17	21.64	14.81	16.43	13.98	14.48	16.26	10.08	21.35	6.71	9.04	12.89	10.13	10.29	5.21	3.45	12.19	6.14	9.30	9.38
Eu	8.79	7.46	6.98	6.45	7.06	7.67	6.86	6.18	9.01	6.14	6.61	6.40	7.23	6.85	7.97	5.61	6.08	8.43	7.70	7.15
Gd	31.14	21.36	16.01	18.93	15.19	15.87	17.10	9.74	12.29	6.08	9.26	11.13	9.16	8.74	6.34	3.58	9.74	5.62	8.76	9.01
Tb	4.58	2.91	2.40	2.83	2.31	2.53	2.52	1.44	1.61	0.83	1.34	1.53	1.43	1.44	1.02	0.63	1.31	0.98	1.44	1.42
Dy	24.57	16.49	14.44	16.53	13.86	15.30	14.75	7.88	8.39	4.67	7.82	8.84	7.98	8.34	6.97	4.12	7.12	6.37	7.93	8.61
Ho	4.87	3.47	3.12	3.45	3.10	3.17	2.98	1.37	1.55	0.78	1.56	1.57	1.39	1.42	1.52	0.81	1.32	1.27	1.54	1.74
Er	13.45	9.97	8.45	9.75	8.89	9.55	9.30	3.73	4.00	2.12	3.71	4.71	3.89	3.76	4.88	2.43	4.11	3.76	4.89	5.46
Tm	1.89	1.45	1.27	1.46	1.32	1.40	1.39	0.54	0.62	0.31	0.55	0.64	0.59	0.56	0.73	0.45	0.54	0.59	0.67	0.83
Yb	11.16	9.06	7.96	9.22	8.08	8.35	8.83	3.40	4.29	1.87	3.32	4.36	3.64	3.59	5.42	2.89	3.96	4.29	4.54	5.52
Lu	1.52	1.30	1.10	1.34	1.11	1.20	1.23	0.48	0.58	0.29	0.44	0.57	0.51	0.49	0.82	0.41	0.54	0.57	0.68	0.88
ΣREE	221	191	143	145	138	150	148	91	168	77	80	110	111	104	74	45	97	77	116	98
Y/Ho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(La/Sm)N	0.05	0.10	0.07	0.05	0.07	0.08	0.06	0.12	0.09	0.26	0.09	0.17	0.15	0.14	0.21	0.16	0.06	0.17	0.20	0.12
(Gd/Yb)N	2.31	1.95	1.66	1.70	1.56	1.57	1.60	2.37	2.37	2.69	2.31	2.11	2.08	2.02	0.97	1.03	2.04	1.08	1.59	1.35
(La/Yb)N	0.12	0.26	0.14	0.11	0.13	0.15	0.13	0.40	0.47	1.05	0.29	0.55	0.47	0.45	0.22	0.21	0.22	0.27	0.45	0.23
δEu	0.94	1.06	1.39	1.12	1.48	1.55	1.26	1.91	1.70	2.94	2.21	1.63	2.29	2.21	4.24	4.88	1.70	4.39	2.61	2.38

Beizhan deposit

Sample No.	13BZ-07-01	13BZ-07-02	13BZ-07-03	13BZ-07-04	13BZ-07-05	13BZ-07-06	13BZ-07-07	13BZ-08-02	13BZ-08-03	13BZ-08-04	13BZ-08-05	13BZ-08-06	13BZ-15-01	13BZ-15-03	13BZ-15-04	13BZ-15-05	13BZ-15-06
Oxide weight (wt.%)																	
SiO_2	38.14	37.78	38.36	38.29	37.90	37.36	37.68	38.24	38.47	38.27	34.15	38.35	37.65	36.06	37.56	38.56	37.76
TiO_2	0.43	0.51	0.39	1.11	0.42	0.60	0.76	0.72	0.30	0.27	0.44	0.44	1.58	1.59	1.71	0.20	1.19
Al_2O_3	13.40	12.03	14.29	15.05	13.40	12.53	12.48	14.73	14.74	14.51	12.41	16.25	15.60	14.91	15.82	16.51	14.09
FeO^T	8.73	7.23	10.29	11.63	11.12	8.41	9.64	10.43	9.46	6.90	7.78	7.83	6.63	8.27	10.33	0.00	0.00
MnO	0.86	0.64	0.80	0.89	0.76	0.59	0.62	0.68	0.86	0.91	0.78	0.77	0.88	0.69	0.70	0.78	0.78
MgO	0.38	0.33	0.47	0.57	0.44	0.25	0.43	0.39	0.35	0.34	2.97	0.42	0.49	0.45	0.49	0.14	0.37
CaO	35.67	36.02	35.92	35.78	35.75	35.90	35.77	35.96	35.88	35.63	29.84	35.22	35.48	35.73	36.10	36.86	36.16
Total	97.59	94.53	100.52	103.32	99.78	95.64	97.37	101.15	100.07	96.82	88.36	99.29	98.30	97.70	102.70	93.04	90.35
Number of ions on the basis of 24O																	
Si	2.99	2.99	3.00	2.99	2.98	2.96	2.98	2.99	2.98	2.97	2.92	2.99	2.93	2.87	2.93	2.95	2.93
Ti	0.03	0.03	0.02	0.07	0.02	0.04	0.05	0.04	0.02	0.02	0.03	0.03	0.09	0.10	0.10	0.01	0.07
Al	1.24	1.12	1.32	1.38	1.24	1.17	1.16	1.36	1.34	1.32	1.25	1.49	1.43	1.40	1.45	1.49	1.29
Cr	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.06	0.02	0.00	0.04	0.00	0.00	0.00
Fe^{3+}	0.63	0.72	0.53	0.44	0.63	0.72	0.68	0.51	0.58	0.63	0.63	0.42	0.47	0.49	0.40	0.49	0.62
Fe^{2+}	0.05	0.05	0.04	0.03	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.03	0.04	0.04	0.03	0.04	0.05
Mn	0.06	0.04	0.05	0.06	0.05	0.04	0.04	0.04	0.06	0.06	0.06	0.05	0.06	0.05	0.05	0.05	0.05
Mg	0.04	0.04	0.06	0.07	0.05	0.03	0.05	0.05	0.04	0.04	0.38	0.05	0.06	0.05	0.06	0.02	0.04
Ca	3.00	3.05	3.01	2.99	3.01	3.05	3.03	3.01	2.97	2.96	2.73	2.94	2.96	3.05	3.02	3.02	3.00
Garnet end-members normative calculation																	
Grossular	62.07	57.25	66.95	69.47	62.10	58.42	58.63	67.90	65.94	64.06	54.14	72.87	68.28	66.49	71.11	72.25	62.14
Andradite	31.56	36.79	26.97	22.02	31.45	35.78	34.48	25.57	28.44	30.38	27.24	20.41	22.47	23.04	19.66	23.88	30.04
Almandine	1.51	1.70	1.27	1.05	1.50	1.70	1.62	1.23	1.40	1.52	1.47	1.02	1.14	1.15	0.96	1.19	1.49
Pyrope	1.41	1.22	1.75	2.11	1.61	0.94	1.58	1.45	1.30	1.27	11.76	1.58	1.83	1.66	1.82	0.49	1.36

Spessartine	1.81	1.34	1.68	1.86	1.61	1.25	1.30	1.43	1.81	1.92	1.75	1.66	1.86	1.47	1.46	1.62	1.62
Ca-Ti Gt	1.27	1.54	1.17	3.27	1.23	1.77	2.27	2.12	0.85	0.75	1.22	1.25	4.41	4.51	4.89	0.57	3.34
Rare earth elements																	
La	1.61	0.72	4.75	5.69	2.73	2.75	2.67	0.98	0.46	0.97	0.49	0.46	0.88	0.31	0.46	1.06	1.33
Ce	12.80	10.63	41.04	39.50	35.59	38.39	34.88	10.25	4.09	9.65	4.94	4.58	8.37	4.13	5.04	10.58	16.66
Pr	2.68	3.42	8.68	6.32	11.68	12.78	11.10	3.16	1.41	2.64	1.75	1.68	3.49	1.72	2.13	3.85	6.40
Nd	15.46	24.51	44.95	23.51	81.89	83.25	78.30	21.34	10.65	15.24	13.17	13.07	29.81	17.64	21.97	34.55	53.31
Sm	8.07	6.93	10.62	7.59	19.55	18.07	20.73	5.43	3.95	2.94	5.07	4.91	15.07	10.01	12.04	16.40	22.43
Eu	4.03	8.64	8.32	4.63	17.78	16.86	16.38	3.36	2.53	2.83	4.23	2.87	4.37	2.74	3.84	6.19	6.60
Gd	11.79	5.05	7.76	11.45	11.00	10.47	15.66	4.13	4.13	2.45	5.43	5.80	22.32	16.21	17.67	21.52	27.89
Tb	2.28	0.67	1.30	2.10	1.28	1.26	2.22	0.66	0.68	0.44	0.95	0.95	4.47	3.50	3.69	3.86	5.19
Dy	15.65	3.95	7.44	14.60	6.10	6.35	13.60	3.82	4.81	2.76	5.67	6.12	32.72	26.42	27.33	26.20	34.44
Ho	3.54	0.73	1.33	3.32	0.92	1.02	2.61	0.71	0.98	0.51	0.99	1.03	7.73	5.95	6.04	5.57	7.11
Er	10.85	2.10	3.63	10.10	2.46	2.55	7.75	1.96	2.84	1.40	2.65	2.87	27.70	19.39	19.62	17.90	21.90
Tm	1.66	0.30	0.48	1.57	0.32	0.38	1.13	0.25	0.39	0.21	0.38	0.39	4.84	2.79	3.05	2.74	3.44
Yb	11.00	2.31	3.19	10.07	2.19	2.42	7.08	1.50	2.33	1.34	2.16	2.74	37.08	20.33	21.70	18.98	22.63
Lu	1.38	0.29	0.44	1.34	0.29	0.35	0.99	0.26	0.34	0.19	0.29	0.38	6.11	3.17	3.37	3.04	3.52
ΣREE	103	70	144	142	194	197	215	58	40	44	48	48	205	134	148	172	233
Y/Ho	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
(La/Sm)N	0.13	0.07	0.29	0.48	0.09	0.10	0.08	0.12	0.08	0.21	0.06	0.06	0.04	0.02	0.02	0.04	0.04
(Gd/Yb)N	0.89	1.81	2.01	0.94	4.15	3.57	1.83	2.28	1.47	1.52	2.08	1.75	0.50	0.66	0.67	0.94	1.02
(La/Yb)N	0.11	0.22	1.07	0.41	0.89	0.81	0.27	0.47	0.14	0.52	0.16	0.12	0.02	0.01	0.02	0.04	0.04
δEu	1.26	4.46	2.80	1.52	3.71	3.75	2.78	2.17	1.92	3.22	2.46	1.64	0.73	0.66	0.80	1.01	0.81