Table 9 Comparison of elemental abundances between the southern Kukalak Valley (KL050001 to KL050014) and the entire Kukalak Valley-Ranger Fault 2005 'background sandstone' sample set

Element	Average all sandstone samples (n=91)	Average KL050001 to KL050014 (n=13)	Comments
U_ppm	0.56	1.14	2 x background
U_G950_ppb	144.82	554.23	4 x background
Th_ppm	2.57	1.45	half background
UtoTh	0.34	0.97	3 x background
Au_ppb	0.61	0.62	
Pt_ppb	0.50	0.50	
Pd_ppb	0.54	0.54	
Ag_ppm	0.03	0.03	
SiO2_%_calc	98.45	98.54	same: consistent matrix
TiO2_%	0.02	0.02	
Al2O3_%	0.58	0.59	same: consistent matrix
Fe2O3_%	0.50	0.41	same: consistent matrix
MnO_%	0.00	0.00	
MgO_%	0.03	0.02	
CaO_%	0.01	0.02	
Na2O_%	0.01	0.01	
K2O_%	0.03	0.02	
P2O5_%	0.01	0.01	same: consistent matrix
LOI_%	0.35	0.36	
S_ppm	28.57	13.85	half background; oxidised
Cu_ppm	1.55	4.96	3 x background
Co_ppm	0.38	0.58	1.5 x background
Ni_ppm	1.23	2.02	2 x background
Pb_ppm	1.16	2.37	2 x background
Zn_ppm	2.57	3.38	1.5 x background
Cr_ppm	9.34	11.73	
V_ppm	3.65	3.46	
Mo_ppm	0.58	0.70	
Li_ppm	1.31	1.50	
As_ppm	0.45	0.48	
Ba_ppm	5.66	3.54	
Be_ppm	0.12	0.05	
B_ppm	16.92	12.31	
Se_ppm	1.00	1.00	
Rb_ppm	0.92	0.62	
Sr_ppm	5.07	1.63	third background; feldspar destruction?
Zr_ppm	28.60	16.79	half background; dissolution of zircon?
Nb_ppm	0.33	0.32	
Sn_ppm	0.18	0.20	
Ta_ppm	0.04	0.03	
W_ppm	0.27	0.17	
Bi_ppm	0.03	0.04	
La_ppm	3.33	1.26	
Ce_ppm	6.58	2.66	
Pr_ppm	0.71	0.30	
Nd_ppm	2.57	1.10	
Sm_ppm	0.50	0.27	
Eu_ppm	0.06	0.04	
Gd_ppm	0.48	0.37	
Tb_ppm	0.07	0.07	
Dy_ppm	0.38	0.44	
Ho_ppm	0.07	0.09	
Er_ppm	0.21	0.26	
Tm_ppm	0.03	0.03	
Lu_ppm	0.03	0.04	
Y_ppm	1.93	2.39	
Hf_ppm	0.86	0.50	
Pb_G950_ppb	275.14	1046.85	3 x background
Pb7/Pb6	0.68	0.73	same
Pb8/Pb6	1.65	1.41	same
RUI	2.97	8.13	3 x background
La/Lu_(LREE_vs_HREE)	130.83	45.50	third background
Gd/La_(Mid REE)	0.22	0.32	1.5 x background
TOTAL_REE_(inc_Y-Hf)	17.81	9.83	half background; consistent with part zircon
MgO/Fe2O3	0.07	0.06	same: consistent matrix