

Table S2: Enrichment (positive values) or depletion (negative values) [%] of individual elements with regard to fault rock units at locations studied. Data are averages calculated from data presented in Table 6.

location	unit	MnO	P ₂ O ₅	TiO ₂	Na ₂ O	K ₂ O	CaO	MgO	Fe ₂ O ₃ ^a	Al ₂ O ₃	SiO ₂	LOI	mass gain
Havelock Creek	PSZ	251.30	117.61	126.88	-21.93	-7.63	587.26	324.56	143.81	40.78	-2.71	489.55	35.12
Gaunt Creek	PSZ	258.65	101.63	115.38	-13.97	118.48	496.81	269.95	151.56	39.77	-2.75	487.03	35.85
	footwall	173.98	106.90	109.15	-13.22	83.23	328.82	248.58	113.60	35.35	-2.21	347.52	26.90
DFDP-1A	hanging-wall	135.35	67.87	69.39	-51.84	119.14	307.65	203.03	71.05	29.55	-2.13	566.55	28.69
	PSZ	31.62	60.35	33.33	-52.22	112.06	49.25	79.97	26.19	15.18	-1.04	318.20	13.47
Waikukupa Thrust	hanging-wall	196.83	-3.82	70.73	40.33	-74.86	230.73	250.43	113.52	24.63	-1.78	347.40	22.41
	PSZ	588.76	77.53	110.50	-44.00	50.08	1796.74	216.16	147.09	36.57	-3.42	719.41	58.58
	footwall	146.97	32.00	83.50	8.09	-2.19	74.89	124.01	85.94	23.48	-1.11	13.84	9.28
Martyr River	hanging-wall	-43.42	26.05	-21.40	-9.39	189.57	-25.18	-43.95	-43.67	-15.12	5.29	128.73	-4.44
	PSZ	-49.46	-1.42	-39.56	-20.16	138.65	-71.32	26.24	-47.15	-33.13	8.31	79.31	-8.54

^a Fe₂O₃ is total Fe content.