TABLE 1. Sr AND Nd ISOTOPIC AND GEOCHEMICAL DATA FOR SELECTED BARANOF ISLAND SAMPLES

Sample number	Sample type	Lat (°N)	Long (°W)	Concentration* (ppm)		Ratio $^{87}Rb/^{86}Sr$	Measured† $^{87}Sr/^{86}Sr$	Initial§ $^{87}Sr/^{86}Sr$	Concentration# (ppm)		Ratio $^{147}Sm/^{144}Nd$	Measured $^{143}Nd/^{144}Nd$	Initial $^{143}Nd/^{144}Nd$	ε_{Nd}**
				Rb	Sr				Sm	Nd				
KP13-01A	Host	57.1572	135.5250	29	262	0.322	0.705323 ± 6	0.705090	3.48	10.55	0.1426	0.512728 ± 6	0.512680	2.1
KP13-01C	Enclave	57.1572	135.5250	12	265	0.128	0.705204 ± 5	0.705112	4.65	19.32	0.1456	0.512701 ± 5	0.512652	1.6
KP13-02A	Host	57.1659	135.4847	48	231	0.602	0.705800 ± 6	0.705365	3.22	14.31	0.1359	0.512645 ± 6	0.512600	0.5
KP13-02B	Enclave	57.1659	135.4847	32	252	0.363	0.705646 ± 6	0.705384	3.82	14.53	0.1591	0.512655 ± 5	0.512603	0.6
KP13-02C	Enclave	57.1659	135.4847	39	244	0.465	0.705743 ± 9	0.705408	3.75	14.43	0.1571	0.512658 ± 6	0.512606	0.7
CP13-03A	Host	56.7398	134.8312	61	434	0.406	0.704832 ± 6	0.704539	3.48	20.36	0.1033	0.512768 ± 4	0.512734	3.1
CP13-03C	Enclave	56.7403	134.8312	59	326	0.523	0.704592 ± 6	0.704214	2.86	14.41	0.1200	0.512801 ± 5	0.512761	3.7
CP13-03D	Enclave	56.7403	134.8303	67	392	0.497	0.704555 ± 6	0.704196	2.74	13.38	0.1239	0.512824 ± 6	0.512783	4.1
CP13-07A	Host	56.7013	134.8856	74	367	0.582	0.705283 ± 6	0.704863	1.81	8.40	0.1302	0.512737 ± 6	0.512694	2.4
CP13-07D	Enclave	56.7013	134.8856	55	721	0.220	0.703699 ± 6	0.703540	4.94	29.70	0.1005	0.512996 ± 5	0.512962	7.6
CP13-09A	Host	56.7180	134.9541	66	342	0.560	0.704804 ± 6	0.704400	2.17	9.89	0.1325	0.512816 ± 4	0.512772	3.9
CP13-09C	Enclave	56.7180	134.9541	49	336	0.425	0.704689 ± 6	0.704382	1.84	8.85	0.1258	0.512810 ± 5	0.512768	3.8
CP13-12A	Host	56.7151	134.9752	69	329	0.611	0.704734 ± 7	0.704293	1.83	8.33	0.1329	0.512827 ± 8	0.512783	4.1
CP13-12C	Enclave	56.7151	134.9752	66	346	0.548	0.704507 ± 6	0.704111	0.94	2.86	0.1997	0.512853 ± 5	0.512787	4.2

Notes: Decay constants used were 4.88×10^9 yr and 1.06×10^{11} yr for Rb-Sr and Sm-Nd systematics, respectively.

*Concentrations from X-ray fluorescence (XRF) analyses obtained at Washington State GeoAnalytical laboratory. Values for Rb and Sr are considered accurate to 5% above 1–3 ppm.

†Errors on $^{87}Sr/^{86}Sr$ and $^{143}Nd/^{144}Nd$ measurements are 2σ absolute standard errors that refer to the last significant figures. The mean $^{87}Sr/^{86}Sr$ value for the NBS987 standard over the analytical period was 0.71023 ± 0.00001. The $^{87}Sr/^{86}Sr$ sample ratios were corrected for mass fractionation using the exponential correction factor based on $^{88}Sr/^{86}Sr = 8.375209$ and adjusted for the accepted isotopic composition for NBS987 of $^{87}Sr/^{86}Sr = 0.710248$. Nd and Sm data were corrected for analytical fractionation based on $^{146}Nd/^{144}Nd = 0.7219$, $^{152}Sm/^{147}Sm = 1.783078$, $^{144}Sm/^{147}Sm = 0.206700$, and $^{155}Gd/^{152}Gd = 0.013510$. The mean $^{143}Nd/^{144}Nd$ value for repeated analyses of the Ames Nd standard over the study period was 0.51208 ± 0.00001 (2σ).

§Initial $^{87}Sr/^{86}Sr$ and $^{143}Nd/^{144}Nd$ values were calculated at 50.8 Ma using elemental concentrations determined by XRF and isotope dilution methods, respectively.

#Errors (±2σ) on concentrations determined by isotope dilution methods were less than 0.5% for Nd and 0.4% for Sm.

**ε_{Nd} was calculated at 50.8 Ma assuming the present-day uniform reservoir composition $^{143}Nd/^{144}Nd_{(CHUR)} = 0.512638$ and $^{147}Sm/^{144}Nd_{(CHUR)} = 0.1967$, where CHUR indicated chondritic uniform reservoir.