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STRONTIUM ISOTOPIC STUDY OF A BASALT-RHYODACITE CONTACT, ROBIN HOOD QUARRY, NORTHERN OREGON

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We report the Sr isotopic composition for a rhyodacite intrusive into Wanapum basalt at the Robin Hood Quarry, northern Oregon. Four samples of rhyodacite and seven Wanapum basalt samples were taken from the quarry in the fall of 1982 (collected by H. A. Wollenberg). The petrology and chemistry of the rocks is given in Brookins and others (1984) and the reader is referred to this source for detail. Samples were taken at the contact for both rocks and removed from the contact into both rocks. The data are given in Table 1. All $^{87}\text{Sr}/^{86}\text{Sr}$ data are normalized to

$^{86}\text{Sr}/^{88}\text{Sr} = 0.1194$. Replicate runs on Eimer and Amend standard SrCO_3 yielded $^{87}\text{Sr}/^{86}\text{Sr} = 0.7080_5$.

REFERENCE

Brookins, D. G., Murphy, M. T., Wollenberg, H. A., and Flexser, S., (1984) Geochemical studies of Columbia River basalts, *in* Scientific basis for nuclear waste management VII, G. L. McVay, ed.: New York, Elsevier Science Publishing Company (in press).

TABLE 1. Sr isotopic data: rhyodacite dike intrusive into Wanapum Basalt, Robin Hood Quarry, Oregon.

Sample	Sample	Location	Distance ¹	$^{87}\text{Sr}/^{86}\text{Sr}$
RQ-1	rhyodacite	45°19'36"N, 121°34'16"W	2.2	0.7042
RQ-2	rhyodacite	45°19'36"N, 121°34'16"W	1.6	0.7039
RQ-3	rhyodacite	45°19'36"N, 121°34'16"W	0.8	0.7039
RQ-4a	rhyodacite	45°19'36"N, 121°34'16"W	at contact	0.7043
RQ-5	basalt	45°19'36"N, 121°34'16"W	at contact	0.7052
RQ-6	basalt	45°19'36"N, 121°34'16"W	0.3	0.7052
RQ-7	basalt	45°19'36"N, 121°34'16"W	0.9	0.7050
RQ-8	basalt	45°19'36"N, 121°34'16"W	1.4	0.7051
RQ-9	basalt	45°19'36"N, 121°34'16"W	1.6	0.7057
RQ-10	basalt	45°19'36"N, 121°34'16"W	2.7	0.7051
RQ-11	basalt	45°19'36"N, 121°34'16"W	5.2	0.7051

¹Distance from contact given in meters.

