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WHOLE-ROCK Rb-Sr AGE OF THE JUAN TABO SERIES, SANDIA MOUNTAINS, NEW MEXICO

D. G. BROOKINS
A. MAJUMDAR

Department of Geology, University of New Mexico, Albuquerque, NM 87131
Department of Geology, Louisiana State University, Baton Rouge, LA 70803

We report the preliminary Rb-Sr whole-rock date for the metamorphic rocks of the Juan Tabo Series, Sandia Mountains, New Mexico (tables 1, 2). These rocks are intruded by the 1.44 B.Y.B.P. Sandia granite (Brookins and Majumdar, 1982) and were subjected to metamorphic event(s) prior to 1.44 B.Y.B.P. as well as a thermal event at about 1.3–1.4 B.Y.B.P. (Brookins, 1974; Brookins and Shaffiqullah, 1975; Brookins and Majumdar, 1982).

ANALYTICAL PROCEDURES

The Rb and Sr contents and $^{87}\text{Sr}/^{86}\text{Sr}$ ratios were determined by isotope dilution. Rb and Sr concentrations are precise to $\pm 0.2\%$ (two sigma) and the $^{87}\text{Sr}/^{86}\text{Sr}$ ratios are precise to ± 0.0001 . Four runs on Eimer and Amend

SrCO_3 yielded $^{87}\text{Sr}/^{86}\text{Sr} = 0.7080_3$ (two sigma) during the period when the samples were run. All Sr isotopic data were normalized to $^{86}\text{Sr}/^{88}\text{Sr} = 0.1194$. The decay constant for ^{87}Rb was taken as $1.42 \times 10^{-11}/\text{y}$, and standard least-squares analysis was used to calculate the isochron shown in figure 1.

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TABLE 1. Sample locations and whole-rock data.


Sample	W. longitude	N. latitude	$^{87}\text{Sr}/^{86}\text{Sr}$	Rb(ppm)	Sr(ppm)	$^{87}\text{Rb}/^{86}\text{Sr}$
609	106°29'45"	36°16'25"	0.7047	2.0	275.5	0.02
624	106°29'13"	36°16'07"	0.7863	159.72	131.95	3.53
639	106°28'45"	35°15'50"	0.7280	95.0	282.3	0.97
642	106°28'43"	35°16'07"	0.7517	116.1	171.8	1.97
644	106°28'53"	35°16'02"	0.8319	178.7	94.6	5.54
663	106°29'08"	35°15'38"	0.7192	47.81	249.4	0.56
667	106°28'48"	35°15'56"	0.7384	109.28	206.97	1.53

TABLE 2. Brief sample descriptions.

Sample	Description
609	Amphibolite
624	Quartz-muscovite-sillimanite-biotite schist
639	Quartz-muscovite schist
642	Quartz-muscovite schist
644	Quartz-muscovite schist
663	Hornblende-biotite schist
667	Quartz-muscovite schist

REFERENCES

- Brookins, D. G. (1974) Radiometric age determinations from the Sandia granite, New Mexico—summary and interpretation: *Isochron/West*, no. 10, p. 11–14.
- Brookins, D. G., and Majumdar, A. (1982) The Sandia granite, New Mexico—biotite metamorphic and whole-rock Rb-Sr ages: *Isochron/West*, no. 33, p. 19–20.
- Brookins, D. G., and Shafiqullah, M. (1975) K-Ar ages for pegmatitic and metamorphic muscovites, Sandia Mountains, New Mexico: *Isochron/West*, no. 12, p. 9–10.

Figure 1 on following page. 

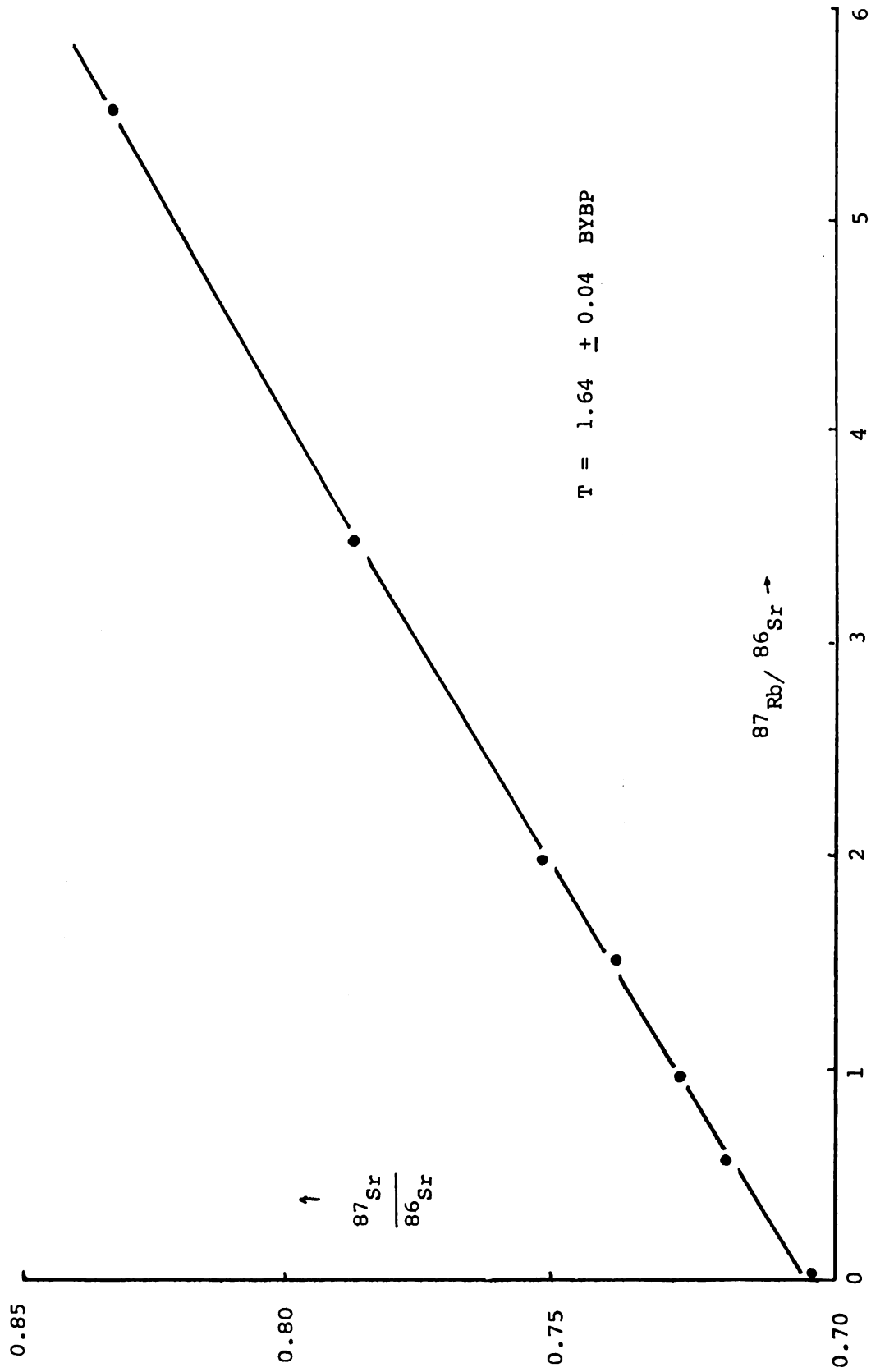


FIGURE 1. Rb-Sr whole-rock isochron, Juan Tabo Series.