

The work reported here was carried out in the Khaira laboratory of Physics and in the Geological Laboratory, University College of Science, Calcutta. The authors wish to express their gratitude to Prof. S. N. Bose, F.R.S. and Prof. N. N. Chatterjee, Head of the Department of Geology, for many discussions and the interest with which they have followed the work.

## REFERENCE

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SERPENTINE-LIMESTONE CONTACT AT TALERI MOHAMMAD JAN,  
ZHOB VALLEY, WEST PAKISTAN—A CORRECTION

S. A. BILGRAMI, *Pakistan Chrome Mines Limited,*  
*Hindubagh, West Pakistan.*

In an earlier paper (Bilgrami, 1960) a serpentine-limestone contact at Taleri Mohammad Jan has been described in some detail. The field work for that paper was done during the summer of 1952. Since then several mining companies have carried out extensive prospecting operations for chromite, asbestos and vesuvianite. These mining operations have exposed many of the contact areas to a depth of about fifty feet. In these quarry faces new sections have been exposed and show a different relationship between the rock types than was inferred from the observations on the surface. It is now clear that what was taken to be a stoped limestone block is actually a part of a dolerite dike altered to rodingite at its contact with the serpentine where vesuvianite, clinocllore, grossularite and diopside have also been developed. On the surface the dike rock (B.18) is earthy-yellow in color, is very fine-grained and effervesces with dilute HCl. In thin section this rock is composed of almost equal amounts of vesuvianite, grossularite and clinocllore with minor calcite, prehnite and ore grains. Ten feet vertically below the surface the same dike rock is medium-grained and dark-colored. In thin section the rock is composed of pale-green chlorite, pink garnet, magnetite, a few crystals of spinel and a little kaolinite. Chlorite is pale-green in color, shows one set of well-developed cleavages and has a bleached appearance in parts. Most of the chlorite appears to have formed by the alteration of garnet. Spinel in colorless crystal aggregates occurs in patches. Rarely unaltered crystals of colorless augite occur as phenocrysts.

A chemical analysis of the surface rodingite (B.18) is given in Table I with comparisons. It shows higher  $\text{SiO}_2$  and  $\text{MgO}$  and lower  $\text{Al}_2\text{O}_3$ , total iron and alkalis as compared with the type rodingite (Marshall, 1911).

TABLE I. CHEMICAL COMPOSITION OF TALERI RODINGITE WITH COMPARISONS

	1	2	3		1	2	3
SiO <sub>2</sub>	37.69	37.04	33.95	CaO	27.55	27.35	26.95
Al <sub>2</sub> O <sub>3</sub>	14.29	15.15	19.91	Na <sub>2</sub> O	0.03	0.18	0.15
TiO <sub>2</sub>	0.06	0.58	0.42	K <sub>2</sub> O	0.01	0.02	
Fe <sub>2</sub> O <sub>3</sub>	1.14	1.81	1.28	H <sub>2</sub> O	4.81	4.04	4.85
FeO	4.07	6.98	6.98	H <sub>2</sub> O	0.07	0.21	
MgO	8.90	6.70	5.23	F	0.01	—	—
MnO	0.12	0.13	0.28	CO <sub>2</sub>	1.37	—	—
					100.14	100.28	99.94

1. Rodingite, Taleri Mohammad Jan. Anal. R. K. Phillips.
2. Rodingite, Pastoki, Hindubagh. Anal. R. A. Howie. (Bilgrami and Howie, 1960, Table I).
3. Rodingite, Roding River, Nelson, New Zealand (Marshall, 1911).

As a whole the analysis shows close similarity to the Pastoki rodingite described earlier by Bilgrami and Howie (1961).

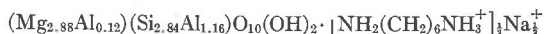
It is suggested that the solutions responsible for the alteration of dolerite dike to rodingite also promoted the development of vesuvianite, clinocllore and grossularite.

## REFERENCES

- BILGRAMI, S. A. (1960) Serpentine-limestone contact at Taleri Mohammad Jan, Zhob Valley, West Pakistan. *Am. Mineral.* **45**, 1008-1019.
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## ERRATA

Due to an oversight, the formula within the abstract of the article, "The crystal structure of a hexamethylene-diamine-vermiculite complex," *Am. Mineral.* **48**, page 261, 1963, is incorrect and should read as follows:



DONALD HAASE