Geol. Bull. Univ. Peshawar, 1985, Vol. 18, p. 201

STRUCTURAL CONTROL AND GENESIS OF THE FLUORSPAR DEPOSIT NEAR DILBAND AND THE SURROUNDING AREAS

REPLY :

There is always a need to bridge the gap between field observations of mineral deposits and the theoretical models that have been used to describe their formation. The critic's contentions are mostly used on presumptions devoid of any concrete physical data. The crustal adjustment involved in the Syntaxial belt has been extraordinarily complex and involved the interaction of many small crustal fragments. However, the geometry of the major structures, all of which are compressional, indicates that the convergence is roughly to the southwest. This corresponds closely with that postulated by me. There is no evidence that the direction has changed markedly since the beginning of Himalayan orogeny. On the contrary, the major structures are best explained by a more or less consistant convergence in (approx) S55°W direction. The differential displacement has been taken along the Chaman Fault by a combination of overthrusting and right lateral strike-slip displacement. These, and all other structures resulting from the plate convergence during Himalayan orogeny, are the western continuation of the Mobile Belt in Baluchistan. Not surprisingly, the rocks exposed along the Syntaxial Belt appear to be almost entirely of oceanic or island arc affinities.

The critic also relates the origin of Dilband Flourspar to hydrothermal activity by referring to Schcheglov (1969). I believe he needs to collect sufficient data, before making sweeping statement. There are no igneous rocks in the vicinity of Dilband which could be related as potential source of mineralizing solutions. The fluid-inclusions in the Dilband samples were studied by a British consultant of the Baluchistan Development Authority, who communicated the laboratory studies to me. Temperature range given by him and the studies (Smith, 1954) confirm my belief that these deposits cannot be characterized as hydrothermal.

REFERENCES

Schcheglov, A.D., 1969. Main features of endogenous metallogeny of southern part of West Pakistan. G.S.P. Mem. 7.

Smith, F.G., 1954. Some consideration regarding liquid inclusion as geologic thermometers. Econ. Geology 49, 331—332.

N. A. DURRANI House No. 11, Street No. 6, F-8/3, Islamabad.