

the temperature of the solutions. The aragonitic muds and the Mg-rich carbonates located laterally in the basin, formed or not in high salinity environments, could act as a source area for the magnesian solutions (enriched in Cl_2Mg). These solutions, when migrating laterally, would substitute the calcite and dolomite to produce a deposition of magnesite. This phenomenon is congruent to the observed decrease in $\delta^{18}\text{O}$. Furthermore, a purely sedimentary magnesite should be heavier in $\delta^{18}\text{O}$ than the dolomite typically formed in evaporitic environments (Kralik and Hoefs 1978).

In summary, the comments of Chayé d'Albissin et al. on the origin of the magnesite ore deposits do not invalidate our hypothesis because they do not respond to the particular features of the magnesite deposit of Eugui.

References

- Guillou, J.J.: Contribution à la métallogénie des magnésites, exemple du Cambrien espagnol. Centre Recherches Petrograph. et Geochim., 459:1–115, 1–12 (1980)
- Kralik, M. and Hoefs, J.: Die Isotopenzusammensetzung der Karbonate in der Magnesiumlagerstätte Eugui (Westpyrenäen). TMPM Tsch. Min. Petro. Mitt. 25:185–193 (1978)
- Lasaga, A.C.: In Kinetics of Geochemical Processes, A.C. Lasaga and R.J. Kirkpatrick (eds.), Reviews in Mineralogy (MSA) 8:69–134 (1981)
- Quemeneur, M.J.: Les gisements de magnésite du Pays Basque: Cadre géologique et sédimentologique; génèse de la magnésite en milieu sédimentaire. Diss. Univ. Paris VI, Unpublished, 249 pp. (1974)
- Shevelev, A.I.: Lithological association of magnesite deposits in dolomite complexes. Transl. from Litol. Polez. Iskop, No 3:131–136 (1978), Plenum Publ. Corp, 379–383 (1979)
- Siegl, W.: Reflections on the Origin of Sparry Magnesite Deposits. In Syngensis and Epigenesis; A. Waschkuhn et al. (eds.), 177–182. Berlin-Heidelberg-New York: Springer 1984

Received: April 11, 1988

Accepted: April 11, 1988

Announcements



If you have not received the Second Circular for the 28th International Geologic Congress to be held in the U.S. in July 1989, write to: 28th IGC, P.O. Box 727, Tulsa, OK 74101 USA

The Third International Archaean Symposium

17–21 September 1990

The Symposium will be held in Perth, Western Australia from 17 to 21 September, 1990. There will be pre- and post-symposium excursions to all the classic Archaean terranes of the Western Australian Shield. All aspects of Archaean geology will be discussed. Enquiries should be addressed to Dr. S. E. Ho, P.O. Box 435, Nedlands, Western Australia 6009.