

of pyrite-pyrrhotine-marcasite, and later of arsenopyrite, chalcopyrite, and sphalerite accompanied by silicification and dolomitization of the sediments. Although there are some mineralogical differences (notably the absence of hematite), the mineralization is similar to other mineral occurrences in Jersey, and especially to the mineralization found within small carbonate veins cutting the North-West granite at Douet de la Mer (Iser, 1980).

The main vein at Le Pulec consists of sphalerite and ferroan dolomite, followed by polymetallic mineralization from fluids rich in lead, copper, iron, silver, and antimony. This mineral assemblage appears to be unique in Jersey both for the amount of argentian tetrahedrite and the presence of other antimony-bearing minerals. The only other antimony-bearing minerals recorded from Jersey, bindheimite and jamesonite, are from quartz veins from the nearby L'Etacq granite quarries (Mourant, 1978).

Antimony- (and silver-) bearing mineralization occurs, however, elsewhere in the Channel Islands, and work currently in progress shows that the ores from the Hope Silver Mine on the island of Sark also contain a number of antimony minerals in addition to the antimony-bearing plumbian tennantite described by Bishop, Criddle, and Clark (1977). It is hoped that future studies will allow a comparison of the antimony-bearing mineral occurrences of the Channel Islands with those found within the Armorican Massif described by Chauris (1977).

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#### REFERENCES

- Adams (C. J. D.), 1976. *J. Geol. Soc. Lond.* **132**, 233-50.  
 Bishop (A. C.), Criddle (A. J.), and Clark (A. M.), 1977. *Mineral. Mag.* **41**, 59-63.  
 Chauris (L.), 1977. *Mineral. Deposita*, **12**, 353-71.  
 Duncumb (P.) and Jones (E. M.), 1969. Tube Invest. Res. Lab. Report No. 260.  
 Henson (F. A.), 1956. *Geol. Mag.* **93**, 473-84.  
 Howell (S.), 1977. Unpublished report. Société Jersiaise.  
 Iser (R. A.), 1980. *Ann. Bull. Soc. Jersiaise*. In press.  
 — Stanley (C. J.), and Vaughan (D. J.), 1979. *Mineral. Mag.* **43**, 389-95.  
 Kretschmar (U.) and Scott (S. D.), 1976. *Canad. Mineral.* **14**, 364-86.  
 Mourant (A. E.), 1978. The minerals of Jersey. Société Jersiaise. 24 pp.  
 — and Warren (J. P.), 1934. *Rep. Trans. Soc. Guernes.* **12**, 73-88.  
 Ogier (E. F.), 1871. *Rapport sur les mines de plomb du Pulec*. Jersey. 8 pp.  
 Sweatman (T. R.) and Long (J. V. P.), 1969. *J. Petrol.* **10**, 332-79.  
 Teilhard de Chardin (P.) and Pelletier (F.), 1911. *Ann. Bull. Soc. Jersiaise*. **7**, 99-111.  
 Williams (B.), 1871. *Report on the Jersey silver-lead mine*. Jersey. 4 pp.

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#### ADDENDUM

This appears to be the first authentic occurrence of native antimony in the U.K. Garby (1848) referred to its doubtful occurrence in the antimony mines of north Cornwall; recently (Stanley, in prep.), it has been identified in specimens from the Pengenna Mine, Cornwall, and also from Hannaford, Devon. Native antimony commonly occurs as inclusions (< 5  $\mu$ m) in galena from

Lake District localities (Stanley, 1979; Stanley and Vaughan, in press).

#### REFERENCES

- Garby (J.), 1848. *Trans. R. Geol. Soc. Cornwall*, **7**, 72-92.  
 Stanley (C. J.), 1979. Unpubl. Ph.D. thesis, University of Aston in Birmingham.