



Fig. 3S. (a) Transmitted light microphotograph (//N) of the hydromagnesite $[Mg_5(CO_3)_4(OH)_2 \cdot 4H_2O]$ -hydroxalcite $[Mg_6Al_2(OH)_{16}CO_3 \cdot 4H_2O]$ and lizardite bearing nodules in the carbonatized and silicified serpentinite (CS-Srp). Red points mark areas of interest studied via EDS. (b and c) Back-scattered Electron Images (BSE) of the areas of interest studied. (d-e) EDS data from the marked areas and, (f) comparison of the elemental variance in these areas. (g) Whole-rock X-Ray diffraction (XRD) pattern obtained from the studied nodule.