

Productivity and Environmental Conditions Following the Permian-Triassic Mass Extinction: Lower Triassic Rocks from the Western Canada Sedimentary Basin

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- Trace element analysis and determination of %TOC and %TIC from sedimentary rocks deposited in the Western Canada Sedimentary Basin during and following the Permian-Triassic mass extinction suggest the following:
 - Primary productivity collapsed at the Permian-Triassic boundary, but recovered rapidly, within a few 10's of thousands of years.
 - Primary productivity remained robust through much of the remainder of the Early Triassic based on high %TOC values and elevated levels of Cu, Ni and Zn compared to World Shale averages.
 - Widespread anoxic conditions in deep water environments was likely the result of high levels of primary productivity.
 - High rates of primary productivity likely resulted in stresses that limited recovery to a narrow habitable zone along northwestern Pangea during the Early Triassic

