

PILBARA/HAMERSLEY PROJECT

REGIONALLY PERSISTENT STROMATOLITE ASSEMBLAGES OF THE TUREE CREEK GROUP

Systematic description of microbialites from the Turee Creek Group, deposited in the aftermath of the Great Oxidation Event, provides an opportunity to understand links between the atmosphere and biosphere during this important period of Earth history. Recent field investigation of a revised Kazput Formation has revealed previously undescribed microbialites from the western end of the Turee Creek Syncline (TCS), a marked expansion of microbialites known from the Hardey Syncline (HS), and chronologically rapid changes in microbialite Forms within the Turee Creek Group. Microbialite assemblages of the Kazput Formation are distinct and regionally persistent. These assemblages include new microbialite Forms that have proven valuable as temporal markers during a targeted regional mapping program of the Hamersley province.

Three stromatolite assemblages have been recognised during regional mapping of the Kazput Formation in the eastern Hamersley province. Microbialite assemblages 2 and 3 share Forms in common between the Turee Creek Syncline (TCS) and Hardey Syncline (HS) localities (see map to right).

