The Main Injector Neutrino Oscillation Search (MINOS) long baseline experiment has been taking beam data since 2005, having accumulated $4.2 \times 10^{20}$ protons-on-target to date. MINOS utilizes the most powerful neutrino beam currently in operation, measuring it in two locations: a Near detector at Fermilab, close to beam production, and a Far detector, 735 km downstream, in Northern Minnesota. Although the measurement of oscillations between active neutrino flavours is the primary goal of MINOS, important contributions can be extracted from studies of neutral current neutrino interactions in the detectors. The several million neutrinos per year observed at the Near detector may improve the existing body of knowledge of neutrino cross-sections and the Near-Far comparison of the observed energy spectrum for neutral current events constrains exotic models such as oscillations into sterile neutrinos. This poster outlines the MINOS capabilities of observing neutral current neutrino interactions, describes the employed methodology for event selection and shows preliminary results obtained with an exposure of $2.46 \times 10^{20}$ protons-on-target. Comparisons with 3-flavour and 4-flavour neutrino oscillation models are shown. An outlook on the expected improvements as MINOS accumulates more data is also presented.