**S2 Fig.** Carbon number vs. nominal mass plot of crude oil (left) and the DCM 1 extract of the VSW seawater control (right). Each m/z value with an assigned elemental formula is represented by a dot on the figure. The size of each dot corresponds to relative peak height. Components in parent oil are plotted in grey as reference. Color bar indicates ratio of total heteroatoms to carbon atoms (NSO:C).