Polymeric Membrane Chlorocarbon Permeabilities Determined by Membrane Introduction Mass Spectrometry (MIMS)

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One of the main classes of subsurface remediation contaminants is chlorocarbons. These materials were used in a wide variety of applications and then dumped in pits or buried in drums that are now corroded and leaking. New methods are needed to monitor and measure their levels during remediation efforts. One promising technique is that of using semipermeable membranes to preconcentrate or semipermeably permit transport of this class of materials for analysis. This paper presents the results from the testing of a number of commercially available as well as in-house produced membranes in a MIMS arrangement for four chlorocarbons.