The accurate determination of interfacial properties of complex fluids under confinement plays a relevant role in many industrial applications, as for instance enhanced natural gas recovery from non-conventional reservoirs. In the last few years, the increasing interest on development and evaluation of new inhomogeneous media theoretical models has brought remarkable improvements. For instance, the so-called Test-Area method [1] has received great attention for its performance on the calculation of interfacial properties along canonical ensemble Monte Carlo (MC) molecular simulations. In this work, the extension of this method to Grand Canonical ensemble is first stated. This is a very convenient adaptation as it allows performing simulations in the usual laboratory experimental conditions. The method is then applied to estimate wall fluid interfacial tension of a classical Lennard Jones fluid, confined in slit pore geometry between two flat parallel structureless walls. The fluid is assumed to interact with the wall through a 10-4-3 potential [2]. These results have been compared with the results obtained for the same molecular model and geometry from a different approach, the Density Functional Theory in the non-local formulation of the White Bear Version [3] of the Fundamental Measure Theory (FMT) considering the same interacting potentials.