Perflourinated Alkyl substance (PFAS) have become a widespread contaminant in the environment. PFAS are used to make items like clothing and non-stick cookware more resistant to things like water, heat, oil, and stains. PFAS can bioaccumulate and biomagnify in various species. Mussels are an indicator species of water quality because they filter out pollutants from water. By doing so, mussels accumulate the contaminants in the water. If contaminants like PFAs are found in mussels it can give us an idea if other species have been impacted. It can also be a concern for human consumption because PFAS have been identified as potential carcinogens. This study aims to validate a method to extract and analyze the concentration of various PFAS in mussels collected from various bays around the Puget Sound Region. The method involved used solvent extraction of homogenized whole mussel tissue coupled with liquid chromatography tandem mass spectrometry analysis (LC-MS/MS). Nine different PFASs commonly identified in various environmental samples were analyzed in this study. Spike and recovery experiments show between 16% to 169% recovery. PFAS showed up in mussel samples that were not spiked. The longest chained PFAS had the lowest percent recoveries which were between 16% and 103% while the shorter chained PFAS were between 12% and over 100% which may be the result of the method used. Shorter chained PFAS are shown to extract better with this method. These results show that this method requires more adjustments to gain better recoveries before it is used on real samples.