This is an explanation from Eurofins Pensacola on how EPA 537 was modified. This information was sent by Scott Martin scott.martin@et.eurofinsus.com on 11/16/2023

Scott also provide the SOP followed when using EPA 537 mod.

a. 537 Mod has a much broader compound list that can be reported, up to 75 compounds. 537.1 reports 18 compounds.
b. Both 537 Mod and 537.1 use solid phase extraction (SPE) for the preparation of water samples. 537.1 uses an SPE chemistry called SDVB (styrene divinyl benzene) which limits the application to longer chain carboxylic acids and sulfonic acids. For 537 Mod we incorporated the use of WAX (weak anion exchange) which enable us to extract a wider variety of PFAS and in more complex matrices than drinking water.
c. 537.1 uses internal standard calibration, much like 8260 or 8270. 537 Mod uses isotope dilution (also known as extracted internal standard) much like EPA 1613 which helps with better precision and accuracy in complex matrices.
d. 537.1 uses 4 surrogate compounds to characterize the recovery of 18 target compounds. 537 Mod uses 25 isotopes that are spiked into the sample and extracted like surrogates, but the recoveries are used to concentration correct the target compound concentrations.
e. 537.1 only uses a single transition mass in the mass spectrometer to identify and quantify target compounds. The is adequate for drinking waters. In 537 Mod we uses two transition masses for more certain identification of target compounds in complex matrices and monitor the ratio of the response of the two transition masses as an additional positive identifier of the target compound.