

Preliminary Work

PFAS Background in Three ITSP Cartridges

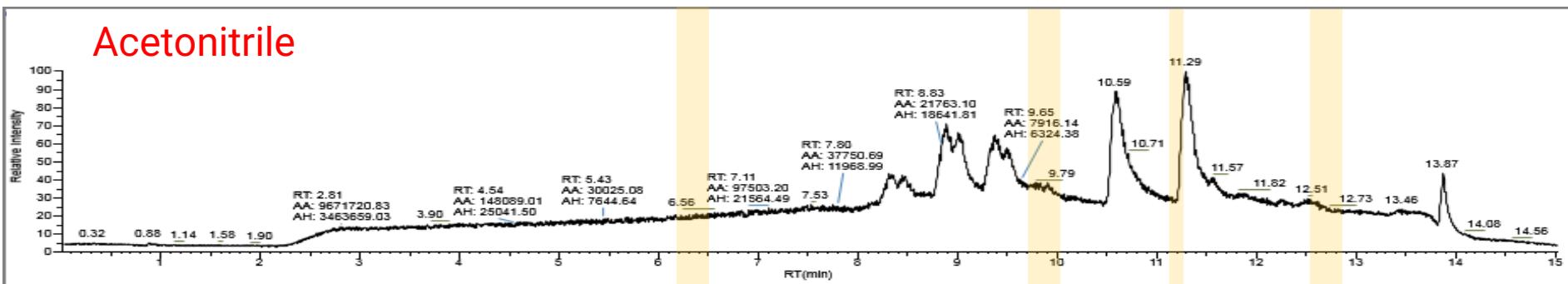
Samples

- QuEChERS GC Blend (MgSO₄/PSA/C18/CarbonX)
- QuEChERS LC Blend (C18/Z-Sep/CarbonX)
- QuEChERS Egg Blend (MgSO₄/PSA/C18/CarbonX/Z-sep)
- Acetonitrile used for elution

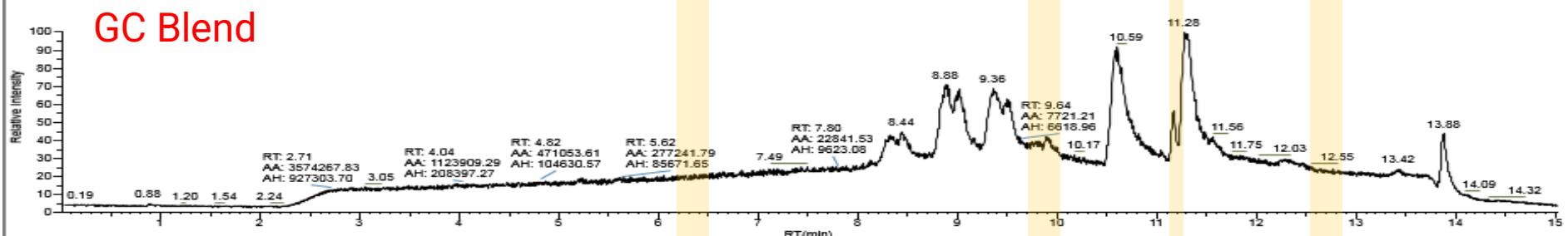
One replicate of each cartridge eluted (ACN) into PP vials (without PTFE caps)

Total Ion Chromatograms

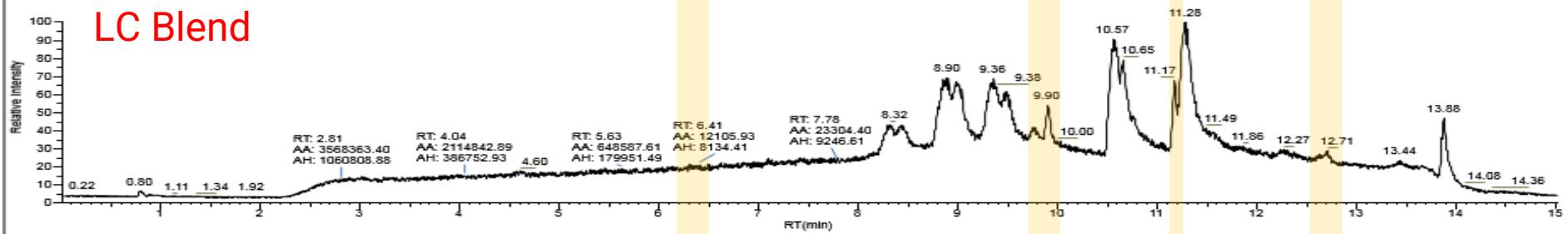
Acetonitrile



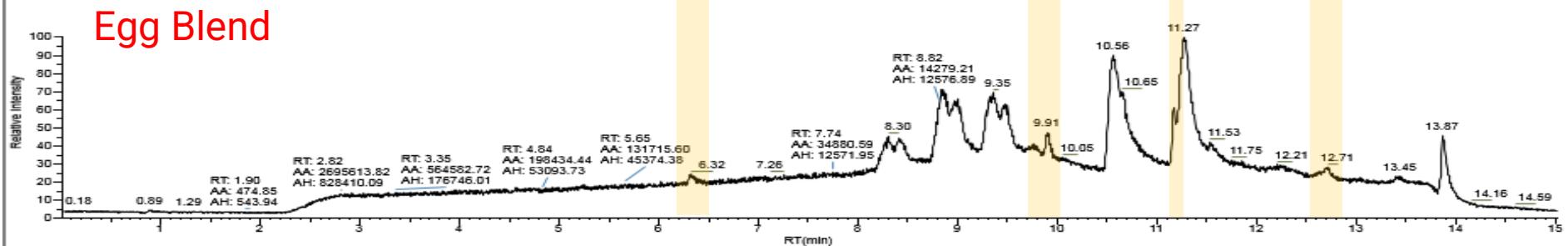
GC Blend

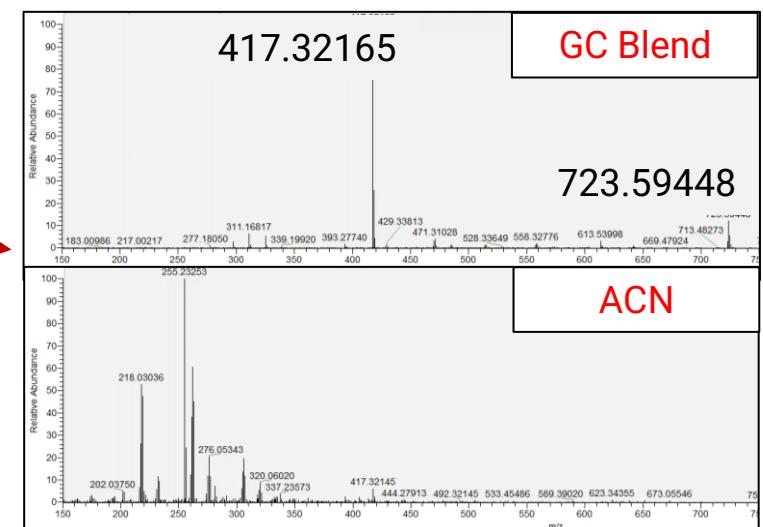
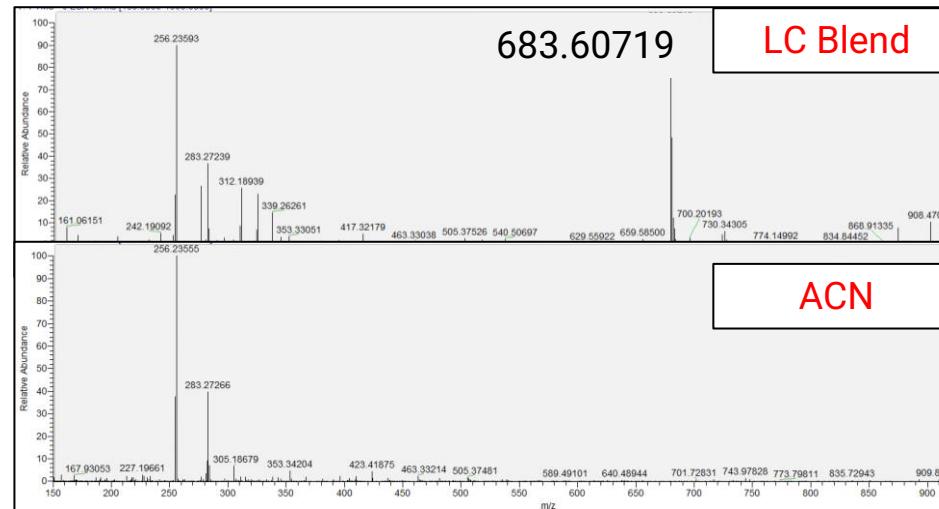
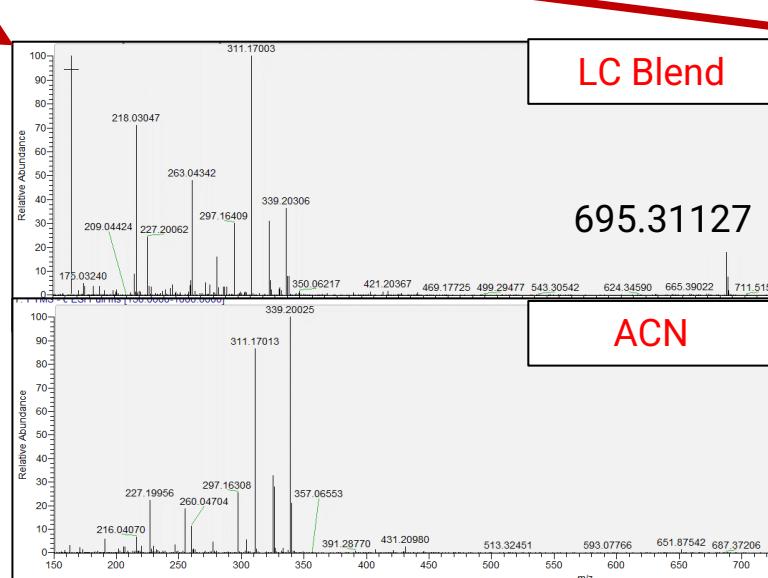
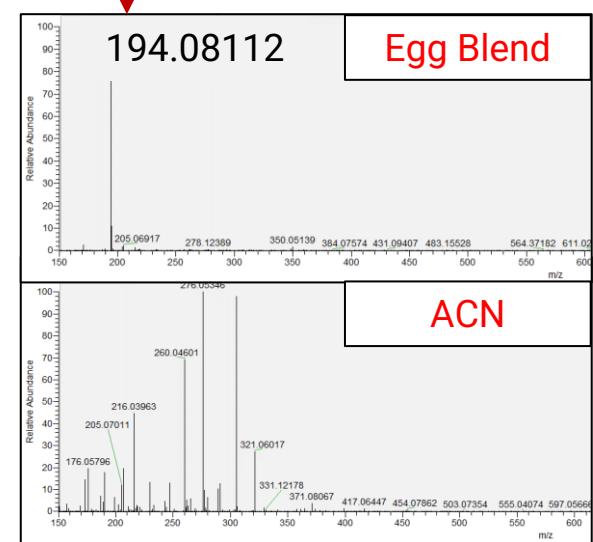
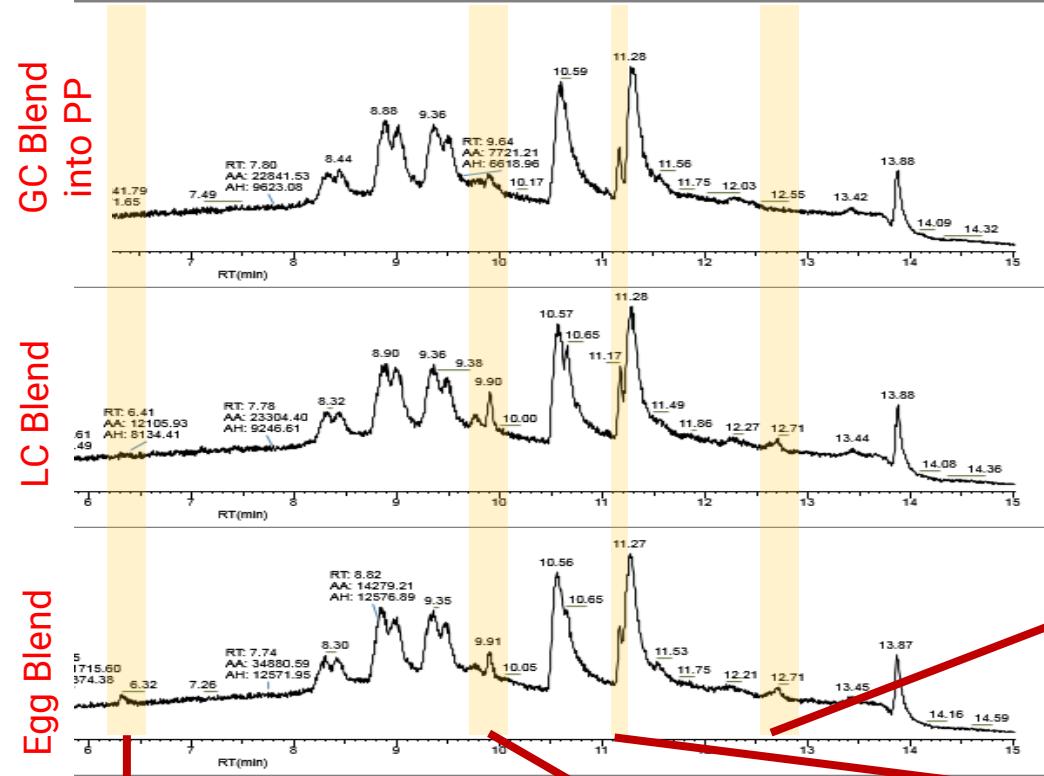


LC Blend



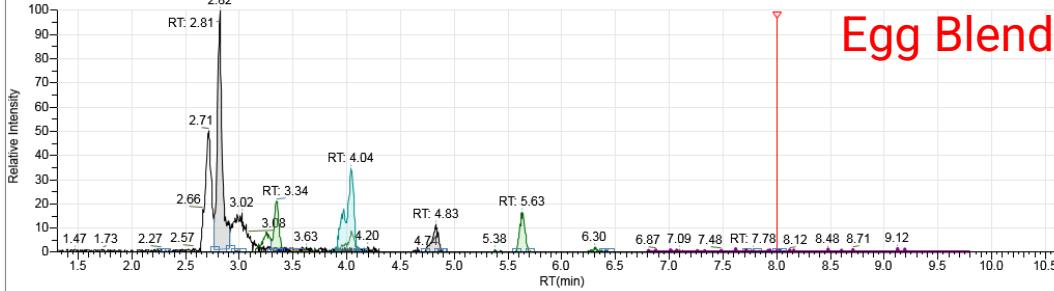
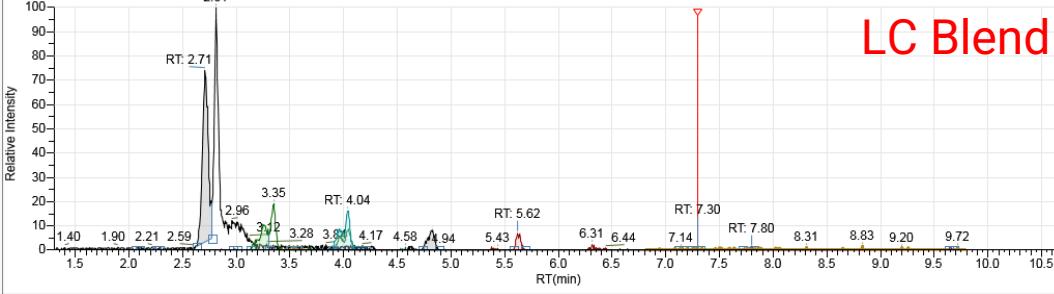
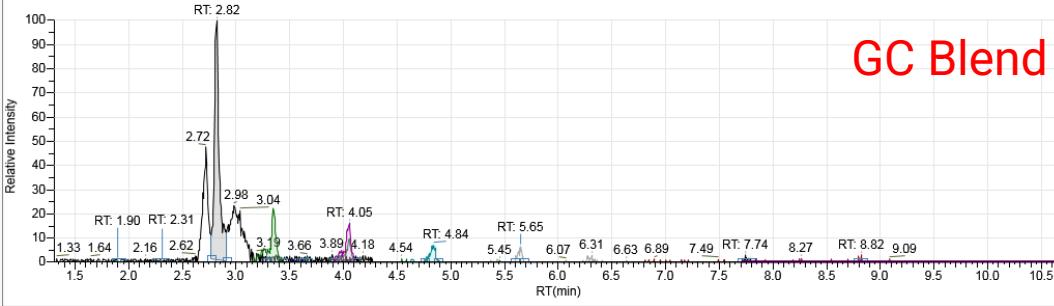
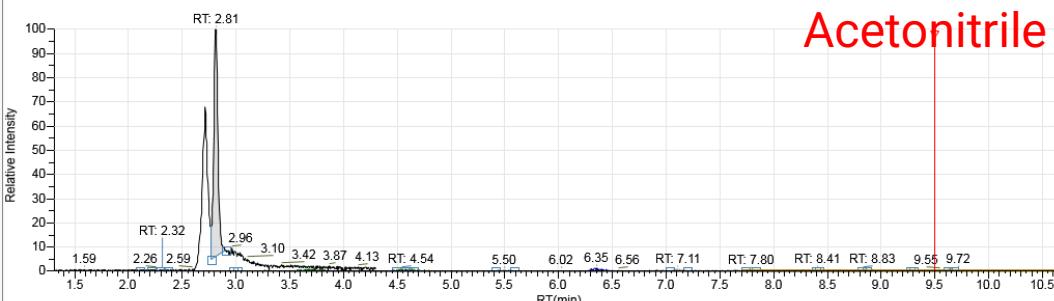
Egg Blend





Extracted Ion Chromatograms (PFAS)

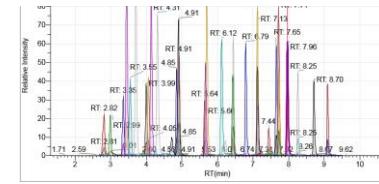
For reference: 25ppb STD



*on separate relative intensity scales

Target Compounds	RT	ACN	GC Blend	LC Blend	Egg Blend
PFBA	2.81	13.545	-12.975	-19.907	-24.981
PPPeA	3.35	N/F	2.577	2.72	1.788
PFHxA	4.06	N/F	3.329	6.465	1.485
PFHpA	4.85	N/F	1.212	1.302	0.457
PFOA	5.67	N/F	0.678	1.689	0.281
PFNA	6.43	0.261	N/F	N/F	N/F
PFDA	7.12	N/F	N/F	N/F	N/F
PFUdA	7.73	N/F	N/F	N/F	N/F
PFDoA	8.26	0.118	0.087	0.088	0.098
PFTrDA	8.71	N/F	N/F	N/F	N/F
PFTeA	9.1	0.258	0.257	N/F	N/F
PFBS	3.45	N/F	N/F	0.059	N/F
PPPeS	4.14	N/F	N/F	N/F	N/F
PFHxS	4.91	N/F	N/F	N/F	N/F
PFHpS	5.7	N/F	N/F	N/F	N/F
PFOS	6.45	N/F	N/F	N/F	N/F
PFNS	7.12	N/F	N/F	N/F	N/F
PFDS	7.71	N/F	N/F	N/F	N/F
NaDONA	4.92	N/F	N/F	N/F	N/F
HFPO-DA	4.26	N/F	N/F	N/F	N/F
9CI-PF3ONS	6.79	N/F	N/F	N/F	N/F
11CI-PF30UDs	7.96	N/F	N/F	N/F	N/F
PFMPA	2.99	0.096	0.071	0.114	N/F
PFMBA	3.54	N/F	0.364	0.2	0.108
PFEESA	3.71	N/F	N/F	N/F	N/F
NFDHA	3.92	N/F	N/F	N/F	N/F
4:2FTS	4	N/F	N/F	N/F	N/F
6:2FTS	5.65	N/F	N/F	N/F	N/F
8:2FTS	7.13	N/F	N/F	N/F	N/F
NEtFOSAA	7.73	N/F	N/F	N/F	N/F
NMeFOSAA	8.25	N/F	N/F	N/F	N/F
FHxSA	6.12	N/F	N/F	N/F	N/F
FOSA	7.65	N/F	N/F	N/F	N/F
FBSA	4.31	N/F	N/F	N/F	N/F

> 1ng/mL (external calibration)



*concentrations in ng mL⁻¹