

1 **SUPPORTING INFORMATION**

2

3 **Inter-individual, inter-city, and temporal trends of per- and polyfluoroalkyl**
4 **substances in human milk from Swedish mothers between 1972 and 2016**

5

6 Elisabeth Nyberg^{1*}, Raed Awad², Anders Bignert¹, Caroline Ek¹, Gerd Sallsten³, and Jonathan P. Benskin^{2*}

7

8 1. Department of Environmental Research and Monitoring, Swedish Museum of Natural History,
9 Stockholm, Sweden, SE-114 18

10 2. Department of Environmental Science and Analytical Chemistry (ACES), Stockholm University,
11 Stockholm, Sweden, SE-106 91

12 3. Department of Occupational and Environmental Medicine, Sahlgrenska University Hospital and
13 Academy, University of Gothenburg, Gothenburg, Sweden, SE-0530

14

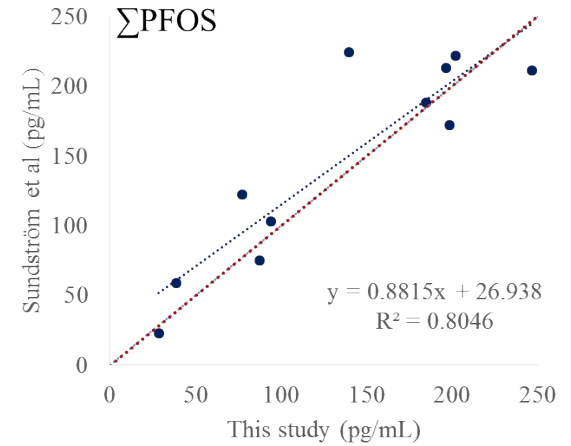
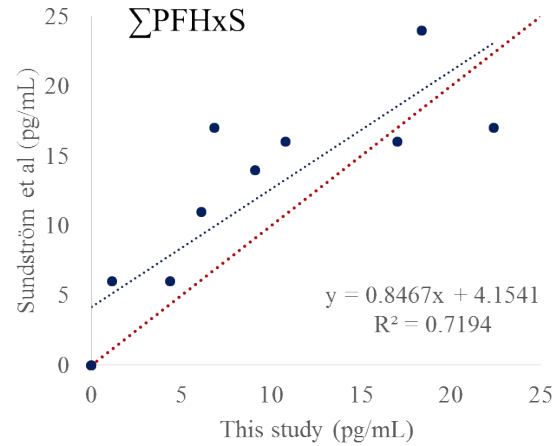
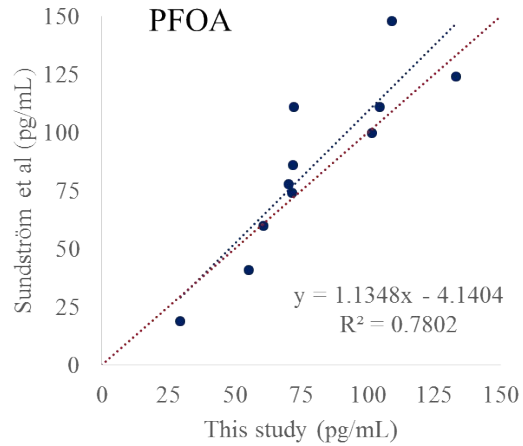
15 *Corresponding authors:

16 Elisabeth.Nyberg@nrm.se

17 Jon.Benskin@aces.su.se

18

19

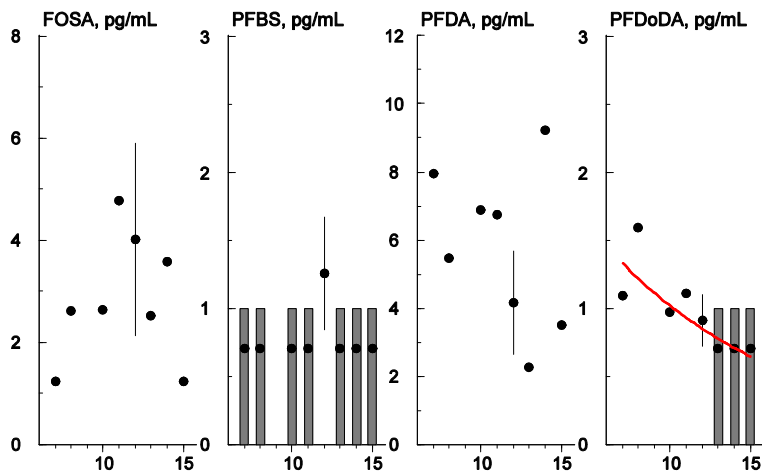


20

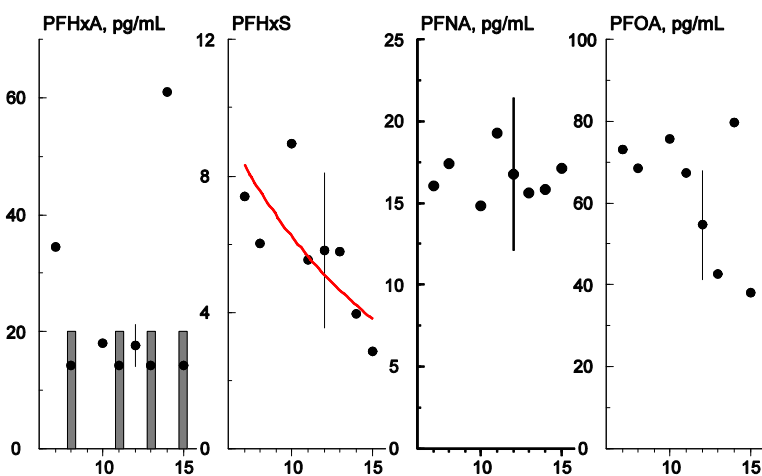
21 **Figure S1.** A comparison of PFOA, ΣPFHxS and ΣPFOS concentrations generated from this study versus Sundström et al. 2011 for
 22 the same samples. ΣPFHxS concentrations for two time points were below limits of quantification in both studies and were replaced
 23 with '0' for this comparison. Blue line represents a linear regression through the two datasets; red lines represent a perfect correlation.

24

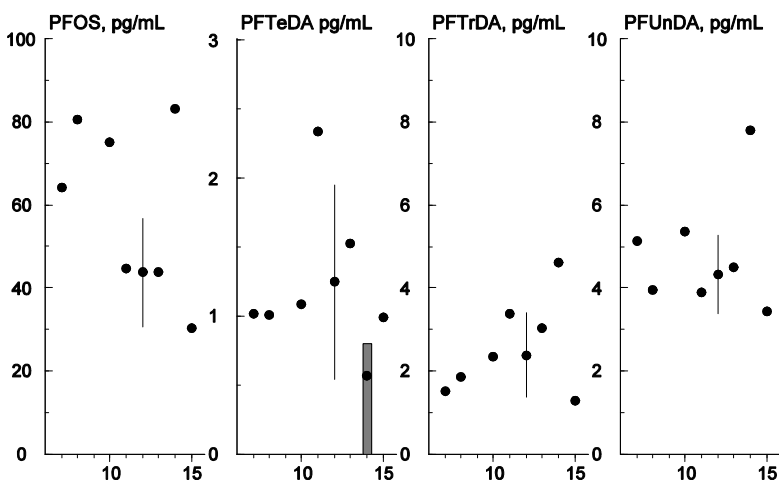
25



26

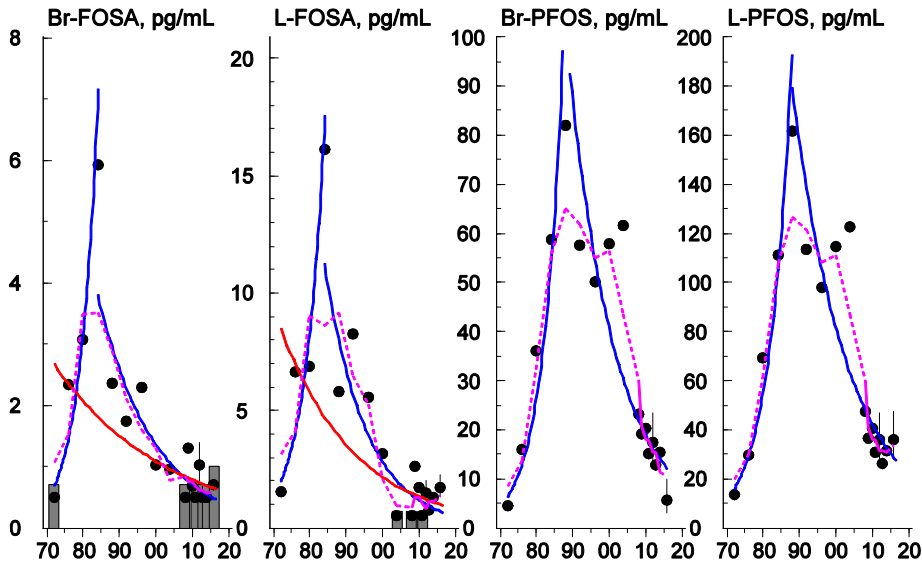


27

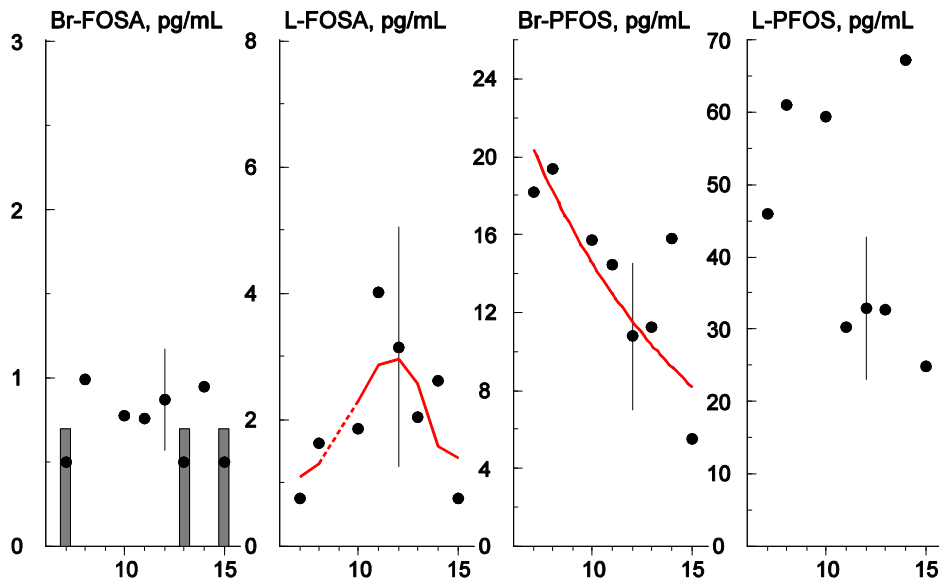


28 **Figure S2.** Temporal trends of FOSA (sum of Br-FOSA and L-FOSA), PFBS, PFDA, PFDoDA,
 29 PFHxA, PFHxS, PFNA, PFOA, PFOS (sum of Br-PFOS and L-PFOS), PFTeDA, PFTrDA and
 30 PFUnDA in pg/mL in human milk from Gothenburg (2007-2015). The red lines represent
 31 significant ($p < 0.05$) linear trends. The grey bars represent years where all values were below LOQ.
 32 Error bars (95 % C.I.) are shown for years where there are individual samples.

33

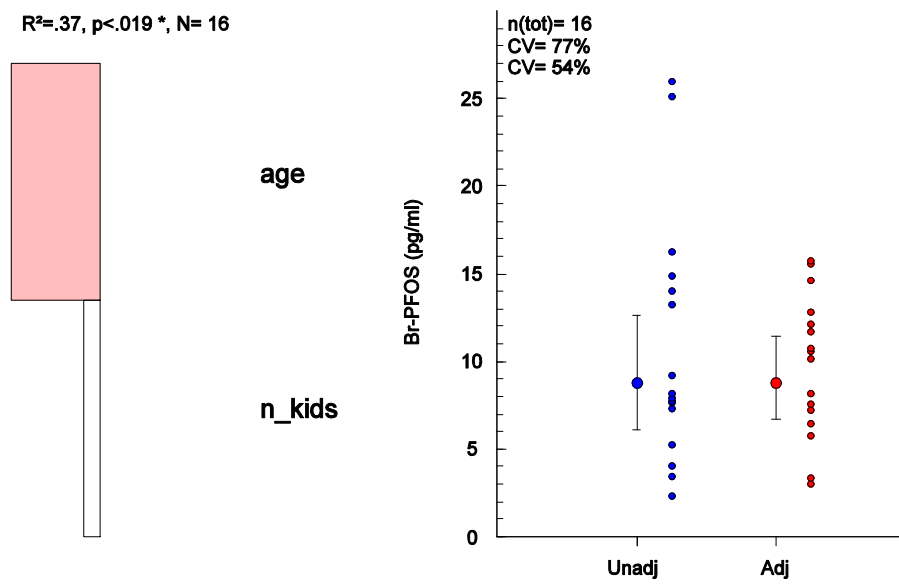


34



35

36 **Figure S3.** Temporal trends of Br-FOSA, L-FOSA, Br-PFOS and L-PFOS in pg/mL in human
 37 milk from Stockholm 1972-2016 (above) and Gothenburg 2007-2015 (below). The lines represent
 38 significant ($p < 0.05$) linear trends (red), non-linear trends (dashed purple) and Change-Point trends
 39 (blue, only for the Stockholm samples). The grey bars represent years where all values were below
 40 LOQ. Error bars (95 % C.I.) are shown for years where there are individual samples.



41
 42 **Figure S4.** The results from the multiple regression in the figure to the left showed that logged Br-
 43 PFOS concentrations in individual samples of mothers milk from Gothenburg 2012 are negatively
 44 correlated with the age of the mother ($p < 0.019$). The Coefficient of Variation (CV) in the figure
 45 to the right decreases from 77% to 54% when the Br-PFOS concentrations are adjusted for age

46 **Table S1.** List of retention times, and monitored ions.

Target	Retention Time (min)	Quant. Ion (m/z)	Qual Ion (m/z)	Standard	Internal Standard	IS Ion	Data quality
L-PFPeA	0.99	263/219	263/169	L-PFPeA	13C-PFPeA	266/222	Quantitative
L-PFHxA	1.78	313/269	313/119	L-PFHxA	13C-PFHxA	315/270	Quantitative
L-PFHpA	2.18	363/319	363/169	L-PFHpA	13C-PFHpA	367/322	Quantitative
L-PFOA	2.49	413/369	413/169	L-PFOA	13C-PFOA	417/372	Quantitative
L-PFNA	2.76	463/419	463/219	L-PFNA	13C-PFNA	468/423	Quantitative
L-PFDA	3.02	513/469	513/269	L-PFDA	13C-PFDA	515/470	Quantitative
L-PFUnDA	3.27	563/519	563/269	L-PFUnDA	13C-PFUnDA	565/520	Quantitative
L-PFDoDA	3.52	613/569	613/169	L-PFDoDA	13C-PFDoA	615/570	Quantitative
L-PFTrDA	3.74	663/619	663/169	L-PFTrDA	13C-PFDoA	615/570	Quantitative
L-PFTeDA	3.97	713/669	713/169	L-PFTeDA	13C-PFDoA	615/570	Quantitative
L-PFPeDA	4.20	763/719	763/169	L-PFTeDA	13C-PFDoA	615/570	Qualitative
L-FHpPA	3.01	441/337	441/148	L-FHpPA	13C-PFNA	468/423	Semi-quantitative
L-PFBS	1.69	298.9/80	298.9/99	L-PFBS	18O-PFHxS	403/84	Quantitative
L-PFHxS	2.92	399/80	399/99 399/119	L-PFHxS	18O-PFHxS	403/84	Quantitative
Br-PFHxS	2.50	399/80	399/99 399/119	L-PFHxS	18O-PFHxS	403/84	Semi-quantitative
L-PFOS	3.07	498.9/80	498.9/99	L-PFOS	13C-PFOS	503/80	Quantitative
Br-PFOS	~2.95	498.9/80	498.9/99	L-PFOS	13C-PFOS	503/80	Semi-quantitative
L-PFDS	3.57	598.9/80	599/99	L-PFDS	13C-PFOS	503/80	Quantitative
Br-PFDS	~3.47	599/80	599/99	L-PFDS	13C-PFOS	503/80	Semi-quantitative
L-FOSA	4.17	498/78	498/478 498/169	L-FOSA	13C-FOSA	506/78	Quantitative
Br-FOSA	4.05	498/78	498/478 498/169	L-FOSA	13C-FOSA	506/78	Semi-quantitative
L-MeFOSAA	3.10	570/419	570/483	L-MeFOSAA	D3-MeFOSAA	573/419	Quantitative
Br-MeFOSAA	3.00	570/419	570/483	L-MeFOSAA	D3-MeFOSAA	573/419	Semi-quantitative
L-EtFOSAA	3.23	584/419	584/526	L-EtFOSAA	D5-EtFOSAA	589/419	Quantitative
Br-EtFOSAA	3.13	584/419	584/526	L-EtFOSAA	D5-EtFOSAA	589/419	Semi-quantitative
Recovery standards							
Target	Retention Time (min)	Quant. Ion (m/z)					
M8-PFOA	2.49	421/376					
M8-PFOS	3.07	506.9/80					

47
48
49
50
51

52 **Table S2.** Mobile phase gradient profile.

LC Gradient Program			LC Flow Rate
Time (min)	Mobile phase A (%)¹	Mobile Phase B (%)²	(mL/min)
0.0	90	10	0.40
0.3	90	10	0.40
4.5	20	80	0.40
4.6	0	100	0.40
7.5	0	100	0.55
9.5	90	10	0.40

53 ¹ Mobile phase A: 90 % water and 10 % acetonitrile containing 2 mM ammonium acetate.

54 ² Mobile phase B: 100 % acetonitrile containing 2 mM ammonium acetate.

55 **Table S3.** The concentration of analytes in unspiked cow milk samples (n=3) and the recovery
 56 from spike-recovery experiment of two level of concentration High concentration spiked and low
 57 concentration spiked. (NS= not spiked, ND= not detected)

Analyte	Mean unfortified concentration (pg/mL; n=3)	Percent recovery \pm SEM (n=4), high spike	Percent recovery \pm SEM (n=4), low spike
PFPeA	85.7	97 \pm 4.4	107 \pm 8.4
PFHxA	35.1	103 \pm 5.5	100 \pm 2.7
PFHpA	2.9	59 \pm 1	63 \pm 2
PFOA	16.9	90 \pm 2.1	96 \pm 3.5
PFNA	2.9	95 \pm 3	95 \pm 1.6
PFDA	1.8	117 \pm 2	115 \pm 0.6
PFUnDA	1.5	118 \pm 2	112 \pm 4.4
PFDoDA	0.5	106 \pm 1.2	106 \pm 2.6
PFTTrDA	1.1	129 \pm 3.5	132 \pm 4.4
PFTeDA	0.6	115 \pm 5.7	123 \pm 3.4
PFPeDA	0.3	N/A	N/A
FHpPA	ND	12 \pm 2.1	9 \pm 1.1
PFBS	0.3	20 \pm 0.6	22 \pm 1.1
L-PFHxS	1.5	97 \pm 1.3	98 \pm 6.7
Br-PFHxS	ND	N/A	N/A
L-PFOS	1.3	99 \pm 3.4	99 \pm 3
Br-PFOS	ND	N/A	N/A
L-PFDS	ND	85 \pm 1.9	84 \pm 1.3
Br-PFDS	ND	N/A	N/A
L-FOSA	1.5	122 \pm 2.2	124 \pm 2.5
Br-FOSA	ND	N/A	N/A
L-MeFOSAA	ND	73 \pm 1.7	73 \pm 3.9
Br-MeFOSAA	ND	N/A	N/A
L-EtFOSAA	ND	94 \pm 1.6	94 \pm 2.2
Br-EtFOSAA	ND	N/A	N/A

58 ND = Not detected

59 N/A= not fortified due to lack of standard

60

61

62 **Table S4.** Mean PFAS concentrations (pg/mL \pm 95% CI) in SRM 1954 (n=3) measured in the
 63 present work compared to Keller et al 2010). (NR= not reported, ND= not detected)

Target	This study	Keller et al
PFPeA	15.8 \pm 23	NR
PFHxA	66.3 \pm 51.9	14-23
PFHpA	12.5 \pm 7.2	NR-14
PFOA	74.3 \pm 3.1	116-810
PFNA	15.7 \pm 7.3	16-104
PFDA	8.3 \pm 4.3	6-127
PFUnDA	3.4 \pm 1.0	7-94
PFDoDA	1.3 \pm 0.5	3-44
PFTTrDA	1.1 \pm 1.0	NR-199
PFTeDA	1.7 \pm 1.5	NR
PFPeDA	0.1 \pm 0.2	NR
FHpPA	0.7 \pm 1	NR
PFBS	3.4 \pm 4.4	ND-7
L-PFHxS	17.7 \pm 4.6	NR
Br-PFHxS	0.7 \pm 1.4	NR
Σ -PFHxS	18.4 \pm 3.4	12-31
L-PFOS	96.8 \pm 17.4	NR
Br-PFOS	85 \pm 39.1	NR
Σ -PFOS	181.7 \pm 56.1	136-189
L-PFDS	0.9 \pm 0.8	NR
Br-PFDS	ND	NR
Σ -PFDS	0.9 \pm 0.8	NR
L-FOSA	2.9 \pm 1.6	NR
Br-FOSA	0.5 \pm 0.8	NR
Σ -FOSA	3.4 \pm 2.2	ND-23
L-MeFOSAA	0.6 \pm 1.2	NR
Br-MeFOSAA	ND	NR
Σ -MeFOSAA	0.6 \pm 1.2	NR
L-EtFOSAA	0.7 \pm 1.1	NR
Br-EtFOSAA	ND	NR
Σ -EtFOSAA	0.7 \pm 1.1	NR

64
 65
 66
 67
 68
 69

70 **Table S5.** PFCA and PFCA-precursor concentrations (pg/mL) in procedural blanks and human milk from Stockholm and Gothenburg

Sample ID	Location	Year	Sample MDL:											
			PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnDA	PFDoDA	PFTTrDA	PFTeDA	PFPeDA	FHppA
161_177	Blank		134	150	<10	45	4	<2	3.2	<1	<0.8	<0.8	<1	<1
178_198	Blank		<80	<20	<10	10	8	<2	<1	<1	<0.8	<0.8	<1	<1
199_215	Blank		<80	<20	<10	7	3	<2	<1	<1	<0.8	<0.8	<1	<1
216_229	Blank		<80	<20	<10	12	<2	<2	1.2	<1	<0.8	<0.8	<1	<1
16_161	Stockholm	2012	<80	<20	<10	35	14	6.1	6.0	1.9	1.9	1.1	<1	17.63
16_162	Stockholm	2012	<80	<20	<10	58	12	2.8	4.7	2.7	4.7	2.8	<1	2.15
16_163	Stockholm	2012	<80	<20	<10	23	3	4.1	2.1	1.7	2.2	3.2	<1	<1
16_164	Stockholm	2012	<80	<20	<10	37	11	3.1	4.0	<1	2.9	<0.8	<1	<1
16_165	Stockholm	2012	<80	<20	<10	92	13	7.7	2.0	1.4	0.82	<0.8	<1	39.98
16_166	Stockholm	2012	<80	<20	13	41	6	4.9	1.9	<1	1.2	2.3	<1	5.41
16_167	Stockholm	2012	<80	56	11	60	16	6.9	2.6	1.0	<0.8	1.5	<1	<1
16_168	Stockholm	2012	<80	<20	<10	42	14	5.7	1.7	<1	<0.8	1.0	<1	1.25
16_169	Stockholm	2012	<80	<20	<10	55	10	3.4	6.2	<1	<0.8	<0.8	<1	<1
16_170	Stockholm	2012	<80	<20	<10	46	17	<2	8.2	1.0	3.0	<0.8	2.23	41.51
16_171	Stockholm	2012	<80	<20	<10	99	14	7.2	3.5	<1	3.0	1.1	<1	<1
16_172	Stockholm	2012	<80	<20	<10	46	18	5.5	3.7	1.0	3.3	<0.8	<1	3.85
16_173	Stockholm	2012	<80	<20	<10	40	15	3.5	3.0	<1	<0.8	<0.8	<1	<1
16_174	Stockholm	2012	<80	<20	<10	44	19	<2	6.8	1.3	5.1	6.6	<1	<1
16_175	Stockholm	2012	<80	<20	<10	32	13	<2	2.2	<1	<0.8	<0.8	<1	<1
16_176	Stockholm	2012	<80	<20	12	102	30	12	5.0	<1	<0.8	1.5	<1	<1
16_177	Stockholm	2012	<80	21	<10	85	23	3.3	4.6	1.3	2.9	<0.8	<1	1.60
16_178	Stockholm	2012	<80	<20	10	53	15	9.4	4.6	<1	2.6	4.1	<1	<1
16_179	Stockholm	2012	<80	<20	<10	36	28	11	8.6	<1	3.4	6.9	<1	<1
16_180	Stockholm	2012	<80	<20	<10	39	17	5.4	2.1	<1	<0.8	2.0	<1	<1
16_181	Gothenburg	2012	<80	24	<10	41	5	3.4	3.1	<1	2.1	1.1	<1	<1
16_182	Gothenburg	2012	<80	36	<10	29	17	6.8	2.7	1.5	1.4	0.93	<1	<1
16_183	Gothenburg	2012	<80	<20	<10	60	16	4.1	5.0	1.1	2.1	0.85	<1	<1
16_184	Gothenburg	2012	<80	<20	11	104	22	2.4	6.7	1.7	2.9	1.0	<1	15.43
16_185	Gothenburg	2012	<80	<20	<10	21	15	2.0	2.9	<1	8.8	2.1	<1	<1
16_186	Gothenburg	2012	<80	<20	<10	103	38	10	4.5	1.0	1.6	5.9	2.13	<1
16_187	Gothenburg	2012	<80	24	<10	60	18	<2	6.9	<1	1.4	<0.8	<1	<1
16_188	Gothenburg	2012	<80	<20	<10	31	5	3.0	1.6	<1	1.1	<0.8	<1	<1
16_189	Gothenburg	2012	<80	28	12	59	13	<2	1.2	<1	1.2	0.8	<1	<1
16_190	Gothenburg	2012	<80	<20	17	28	16	9.4	4.4	<1	1.4	<0.8	<1	<1
16_191	Gothenburg	2012	<80	<20	<10	44	11	3.2	4.5	<1	0.93	<0.8	<1	<1
16_192	Gothenburg	2012	<80	<20	<10	68	10	5.1	3.2	<1	3.5	1.0	<1	<1
16_193	Gothenburg	2012	<80	<20	<10	46	11	<2	6.4	<1	2.7	<0.8	<1	<1
16_194	Gothenburg	2012	<80	<20	<10	32	18	4.0	6.7	<1	3.6	1.0	<1	<1
16_195	Gothenburg	2012	<80	<20	<10	52	19	<2	4.1	<1	1.2	<0.8	<1	<1
16_196	Gothenburg	2012	<80	<20	<10	75	33	7.0	5.1	1.6	2.4	1.8	<1	<1
16_197	Stockholm	2009	<80	<20	<10	69	44	8.1	1.7	<1	<0.8	<0.8	<1	<1
16_198	Stockholm	2009	<80	26	<10	36	51	2.7	5.6	<1	2.1	1.4	<1	<1
16_199	Stockholm	2010	<80	42	<10	96	16	2.3	2.4	2.6	2.3	3.4	<1	<1
16_201	Stockholm	2010	<80	<20	10	54	29	6.7	6.0	1.0	2.5	<0.8	1.12	1.77
16_202	Stockholm	2011	<80	<20	13	73	11	8.0	3.7	1.2	3.9	1.3	<1	<1
16_203	Stockholm	2011	<80	<20	<10	63	7	3.8	4.4	<1	1.3	<0.8	<1	<1

16_204	Stockholm	2013	<80	73	<10	43	13	2.2	8.1	<1	2.0	2.2	<1	<1
16_205	Stockholm	2013	<80	35	<10	39	13	4.1	3.3	<1	3.5	<0.8	<1	<1
16_206	Stockholm	2014	<80	<20	<10	64	28	2.6	5.9	<1	2.3	1.0	<1	<1
16_207	Stockholm	2014	<80	54	<10	35	17	8.1	1.6	<1	<0.8	0.82	<1	<1
16_208	Gothenburg	2007	<80	55	<10	66	12	10	5.1	1.1	2.2	0.91	2.29	<1
16_209	Gothenburg	2007	<80	<20	10	78	21	5.9	5.2	1.1	0.84	1.1	1.20	<1
16_210	Gothenburg	2008	<80	<20	15	65	11	4.0	1.0	2.0	2.3	<0.8	<1	1.29
16_211	Gothenburg	2008	<80	<20	13	69	24	7.0	6.9	1.2	1.4	1.5	<1	<1
16_213	Gothenburg	2010	<80	22	<10	73	12	10	2.6	<1	3.3	1.6	<1	<1
16_214	Gothenburg	2010	<80	<20	12	75	18	3.9	8.1	1.2	1.5	<0.8	<1	<1
16_215	Gothenburg	2011	<80	<20	<10	66	19	6.7	3.9	1.1	3.4	2.3	<1	<1
16_216	Gothenburg	2013	<80	<20	<10	41	16	2.3	4.5	<1	3.0	1.5	<1	<1
16_217	Gothenburg	2014	<80	61	<10	78	16	9.2	7.8	<1	4.6	<0.8	<1	<1
16_218	Gothenburg	2015	<80	<20	<10	33	15	4.3	4.3	<1	1.6	<0.8	<1	<1
16_219	Gothenburg	2015	<80	<20	10	40	19	2.7	2.6	<1	0.94	1.4	<1	<1
16_220	Stockholm	1972	<80	43	<10	29	5	<2	<1	<1	<0.8	1.4	<1	<1
16_221	Stockholm	1976	<80	<20	<10	55	3	2.7	<1	<1	<0.8	1.1	<1	<1
16_222	Stockholm	1980	<80	<20	<10	61	3	<2	1.3	<1	<0.8	<0.8	<1	<1
16_223	Stockholm	1984	<80	80	17	70	9	<2	3.8	1.1	<0.8	<0.8	<1	2.71
16_224	Stockholm	1988	<80	<20	<10	109	15	<2	4.3	<1	2.0	<0.8	<1	<1
16_225	Stockholm	1992	<80	<20	<10	104	8	4.0	3.7	1.1	0.89	1.0	<1	<1
16_226	Stockholm	1996	<80	<20	<10	72	17	7.6	3.7	<1	<0.8	<0.8	<1	<1
16_227	Stockholm	2000	<80	<20	14	133	17	3.8	4.2	<1	1.4	<0.8	<1	<1
16_228	Stockholm	2004	<80	<20	<10	102	26	4.0	5.2	1.0	1.5	<0.8	<1	10.64
16_229	Stockholm	2008	<80	<20	<10	80	26	7.2	5.1	<1	1.0	<0.8	<1	8.22
F31	Stockholm	2016	<80	75	<10	63	16	12	12	3.7	7.0	3.5	<1	2.81
F32	Stockholm	2016	<80	132	<10	76	<2	15	8.3	4.0	6.1	2.0	<1	<1
F33	Stockholm	2016	<80	45	<10	83	11	<2	9.3	<1	5.9	3.1	<1	<1
F34	Stockholm	2016	<80	100	<10	32	18	<2	13	2.2	3.4	5.8	<1	<1
F35	Stockholm	2016	<80	108	<10	23	<5	<2	6.6	2.9	<0.8	<0.8	<1	<1
F36	Stockholm	2016	<80	94	<10	24	10	<2	<1	<1	<0.8	<0.8	<1	<1
F37	Stockholm	2016	<80	130	11	38	<2	<2	<1	3.9	5.1	<0.8	<1	<1
F38	Stockholm	2016	<80	34	<10	3	16	<2	<1	<1	<0.8	3.1	<1	<1
F39	Stockholm	2016	<80	35	<10	46	10	<2	<1	<1	<0.8	<0.8	<1	<1
F40	Stockholm	2016	<80	103	<10	53	9	<2	<1	2.6	2.6	4.2	<1	<1

72 **Table. S6.** Perfluoroalkyl sulfonic acid concentrations (pg/mL) in procedural blanks and human milk from Stockholm and Gothenburg

Sample ID	Location	sampling	PFBS	L-PFHxS	Br-PFHxS	L-PFOS80	L-PFOS99	Br-PFOS80	BrPFOS99	L-PFDS	Br-PFDS
		date									
161_177	Blank		<1	1.2	<0.8	103	109	<0.5	<0.5	<0.5	<0.5
178_198	Blank		<1	<0.8	<0.8	<0.5	0.74	<0.5	<0.5	<0.5	<0.5
199_215	Blank		<1	<0.8	<0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
216_229	Blank		<1	<0.8	<0.8	0.98	<0.5	<0.5	<0.5	<0.5	<0.5
16_161	Stockholm	2012	<1	19	<0.8	53	59	27	4.2	1.01	<0.5
16_162	Stockholm	2012	1.1	14	<0.8	58	48	26	2.2	<0.5	<0.5
16_163	Stockholm	2012	<1	7.2	<0.8	37	28	7.0	1.6	<0.5	<0.5
16_164	Stockholm	2012	<1	1.3	<0.8	30	33	5.8	0.9	<0.5	<0.5
16_165	Stockholm	2012	<1	4.6	<0.8	17	19	6.8	<0.5	<0.5	<0.5
16_166	Stockholm	2012	<1	8.8	<0.8	38	36	8.9	10	<0.5	<0.5
16_167	Stockholm	2012	<1	1.9	<0.8	11	10	10	0.7	<0.5	<0.5
16_168	Stockholm	2012	<1	25	<0.8	23	21	21	1.4	0.54	<0.5
16_169	Stockholm	2012	<1	7.5	<0.8	50	65	25	2.1	<0.5	<0.5
16_170	Stockholm	2012	<1	10	<0.8	62	77	35	14	<0.5	<0.5
16_171	Stockholm	2012	<1	8.4	<0.8	55	68	49	8.5	<0.5	<0.5
16_172	Stockholm	2012	<1	5.6	<0.8	56	45	16	3.3	<0.5	<0.5
16_173	Stockholm	2012	<1	1.2	<0.8	29	33	11	1.1	<0.5	<0.5
16_174	Stockholm	2012	<1	3.6	<0.8	69	84	13	2.9	<0.5	<0.5
16_175	Stockholm	2012	<1	2.1	<0.8	19	31	10	<0.5	<0.5	<0.5
16_176	Stockholm	2012	<1	19	<0.8	76	80	29	7.7	<0.5	<0.5
16_177	Stockholm	2012	<1	12	<0.8	34	44	14	0.6	0.52	<0.5
16_178	Stockholm	2012	<1	7.1	<0.8	19	20	3.7	1.4	<0.5	<0.5
16_179	Stockholm	2012	<1	0.9	<0.8	37	37	11	2.9	<0.5	<0.5
16_180	Stockholm	2012	<1	<0.8	<0.8	14	16	15	<0.5	<0.5	<0.5
16_181	Gothenburg	2012	<1	6.2	<0.8	13	13	4.0	0.7	<0.5	<0.5
16_182	Gothenburg	2012	1.3	6.9	<0.8	9.2	20	12	2.2	<0.5	<0.5
16_183	Gothenburg	2012	<1	10	<0.8	40	32	26	2.4	<0.5	<0.5
16_184	Gothenburg	2012	3.2	13	<0.8	54	58	21	5.7	<0.5	<0.5
16_185	Gothenburg	2012	2.0	2.6	<0.8	28	38	13	2.3	<0.5	<0.5
16_186	Gothenburg	2012	1.8	8.5	<0.8	62	91	47	3.6	<0.5	<0.5
16_187	Gothenburg	2012	<1	4.2	<0.8	13	26	18	<0.5	<0.5	<0.5
16_188	Gothenburg	2012	1.1	2.2	<0.8	6.9	13	6.2	0.7	<0.5	<0.5
16_189	Gothenburg	2012	<1	<0.8	1.2	20	27	26	3.6	<0.5	<0.5
16_190	Gothenburg	2012	<1	1.5	<0.8	39	19	8.9	1.6	<0.5	<0.5
16_191	Gothenburg	2012	2.2	2.8	<0.8	33	16	7.7	<0.5	<0.5	<0.5
16_192	Gothenburg	2012	<1	14	<0.8	20	39	12	2.9	<0.5	<0.5
16_193	Gothenburg	2012	<1	1.1	<0.8	24	12	16	<0.5	<0.5	<0.5
16_194	Gothenburg	2012	<1	4.9	<0.8	39	43	14	1.2	<0.5	<0.5
16_195	Gothenburg	2012	<1	3.2	<0.8	42	57	36	16	<0.5	<0.5
16_196	Gothenburg	2012	2.2	1.0	<0.8	58	51	22	11	<0.5	<0.5
16_197	Stockholm	2009	3.6	8.5	<0.8	30	47	35	1.1	<0.5	<0.5
16_198	Stockholm	2009	<1	8.5	<0.8	36	35	16	5.9	<0.5	<0.5
16_199	Stockholm	2010	<1	5.7	<0.8	39	35	31	3.4	0.52	<0.5
16_201	Stockholm	2010	<1	7.4	<0.8	45	44	13	5.2	<0.5	<0.5
16_202	Stockholm	2011	<1	7.8	<0.8	37	16	11	6.2	<0.5	<0.5
16_203	Stockholm	2011	<1	11	<0.8	39	34	16	4.8	<0.5	<0.5

16_204	Stockholm	2013	<1	3.2	<0.8	35	11	15	2.7	<0.5	<0.5
16_205	Stockholm	2013	1.7	8.6	<0.8	22	38	8.7	3.0	<0.5	<0.5
16_206	Stockholm	2014	2.9	9.1	<0.8	38	26	24	3.0	<0.5	<0.5
16_207	Stockholm	2014	2.4	4.8	<0.8	29	32	19	4.0	<0.5	<0.5
16_208	Gothenburg	2007	<1	2.1	<0.8	58	51	27	3.8	<0.5	<0.5
16_209	Gothenburg	2007	<1	12	<0.8	39	36	31	11	<0.5	<0.5
16_210	Gothenburg	2008	<1	<0.8	4.0	71	57	27	13	<0.5	<0.5
16_211	Gothenburg	2008	<1	6.9	<0.8	60	57	29	8.5	<0.5	<0.5
16_213	Gothenburg	2010	<1	4.9	<0.8	36	32	28	7.9	<0.5	<0.5
16_214	Gothenburg	2010	<1	12	<0.8	95	75	26	1.4	<0.5	<0.5
16_215	Gothenburg	2011	<1	5.0	<0.8	36	25	23	5.4	<0.5	<0.5
16_216	Gothenburg	2013	<1	2.9	<0.8	24	41	21	1.9	<0.5	<0.5
16_217	Gothenburg	2014	<1	3.4	<0.8	60	75	28	3.7	<0.5	<0.5
16_218	Gothenburg	2015	<1	2.8	<0.8	31	18	9.2	3.4	<0.5	<0.5
16_219	Gothenburg	2015	<1	1.8	<0.8	24	27	8.6	0.9	<0.5	<0.5
16_220	Stockholm	1972	<1	<0.8	<0.8	20	7	8.3	<0.5	0.83	<0.5
16_221	Stockholm	1976	2.0	<0.8	2.9	16	43	23	2.8	<0.5	<0.5
16_222	Stockholm	1980	5.7	4.4	<0.8	60	78	33	6.6	<0.5	<0.5
16_223	Stockholm	1984	3.5	1.2	<0.8	122	101	77	6.9	<0.5	<0.5
16_224	Stockholm	1988	<1	9.9	0.9	150	173	96	19	0.67	<0.5
16_225	Stockholm	1992	2.5	6.1	<0.8	114	113	88	24	<0.5	<0.5
16_226	Stockholm	1996	2.7	14	2.6	94	102	46	11	<0.5	<0.5
16_227	Stockholm	2000	1.5	17	1.7	123	106	73	16	2.01	<0.5
16_228	Stockholm	2004	<1	21	1.8	117	127	67	14	<0.5	<0.5
16_229	Stockholm	2008	<1	11	<0.8	47	48	30	3.1	<0.5	<0.5
F31	Stockholm	2016	<1	6.8	2.2	61	50	11	<0.5	3.27	<0.5
F32	Stockholm	2016	4.5	5.8	2.3	21	34	20	6.7	<0.5	<0.5
F33	Stockholm	2016	<1	7.9	<0.8	43	43	13	<0.5	<0.5	<0.5
F34	Stockholm	2016	11	4.7	<0.8	55	61	18	9.2	<0.5	<0.5
F35	Stockholm	2016	6.6	13	<0.8	46	48	16	<0.5	<0.5	<0.5
F36	Stockholm	2016	5.1	11	<0.8	45	61	13	3.3	<0.5	<0.5
F37	Stockholm	2016	21	<0.8	4.0	34	28	4.3	2.5	<0.5	<0.5
F38	Stockholm	2016	8.0	6.5	<0.8	29	17	1.6	<0.5	<0.5	<0.5
F39	Stockholm	2016	<1	<0.8	<0.8	28	19	3.4	<0.5	<0.5	<0.5
F40	Stockholm	2016	8.9	8.5	<0.8	22	30	15	<0.5	<0.5	<0.5

73
74
75
76

77 **Table. S7.** PFOS-precursor concentrations (pg/mL) in procedural blanks and human milk from Stockholm and Gothenburg

Sample ID	Location	sampling	L-FOSA	Br-FOSA	L-MeFOSAA	Br-MeFOSAA	L-EtFOSAA	Br-EtFOSAA
		date						
		MDL:	0.7	0.7	5	5	5	5
161_177	Blank		<0.7	<0.7	<5	<5	<5	<5
178_198	Blank		8.2	<0.7	<5	<5	<5	<5
199_215	Blank		1.1	<0.7	<5	<5	<5	<5
216_229	Blank		1.2	1.1	<5	<5	<5	<5
16_161	Stockholm	2012	1.1	0.73	<5	<5	<5	<5
16_162	Stockholm	2012	3.1	1.7	<5	<5	<5	<5
16_163	Stockholm	2012	3.1	1.5	<5	<5	<5	<5
16_164	Stockholm	2012	0.89	0.84	<5	<5	<5	<5
16_165	Stockholm	2012	1.5	<0.7	<5	<5	<5	<5
16_166	Stockholm	2012	1.0	1.0	<5	<5	<5	<5
16_167	Stockholm	2012	1.5	0.75	<5	<5	<5	<5
16_168	Stockholm	2012	0.85	<0.7	<5	<5	<5	<5
16_169	Stockholm	2012	0.90	<0.7	<5	<5	<5	<5
16_170	Stockholm	2012	3.4	<0.7	<5	<5	<5	<5
16_171	Stockholm	2012	2.6	1.5	<5	<5	<5	<5
16_172	Stockholm	2012	0.82	<0.7	<5	<5	<5	<5
16_173	Stockholm	2012	1.6	1.4	<5	<5	<5	<5
16_174	Stockholm	2012	4.4	3.8	<5	<5	<5	<5
16_175	Stockholm	2012	1.9	0.90	<5	<5	<5	<5
16_176	Stockholm	2012	1.4	1.8	<5	<5	<5	<5
16_177	Stockholm	2012	<0.7	<0.7	<5	<5	<5	<5
16_178	Stockholm	2012	2.7	2.4	<5	<5	<5	<5
16_179	Stockholm	2012	1.9	2.7	<5	<5	7.5	<5
16_180	Stockholm	2012	<0.7	1.4	<5	<5	<5	<5
16_181	Gothenburg	2012	2.8	<0.7	<5	<5	<5	<5
16_182	Gothenburg	2012	3.7	1.0	<5	<5	<5	<5
16_183	Gothenburg	2012	<0.7	<0.7	<5	<5	<5	<5
16_184	Gothenburg	2012	4.6	<0.7	<5	<5	<5	<5
16_185	Gothenburg	2012	15	<0.7	<5	<5	<5	<5
16_186	Gothenburg	2012	6.4	<0.7	<5	<5	<5	<5
16_187	Gothenburg	2012	2.6	1.5	<5	<5	<5	<5
16_188	Gothenburg	2012	1.8	0.78	<5	<5	<5	<5
16_189	Gothenburg	2012	1.4	<0.7	<5	<5	<5	<5
16_190	Gothenburg	2012	<0.7	<0.7	<5	<5	<5	<5
16_191	Gothenburg	2012	2.6	2.3	<5	<5	<5	<5
16_192	Gothenburg	2012	2.1	1.8	<5	<5	<5	<5
16_193	Gothenburg	2012	<0.7	<0.7	<5	<5	<5	<5
16_194	Gothenburg	2012	4.9	1.0	<5	<5	<5	<5
16_195	Gothenburg	2012	<0.7	<0.7	<5	<5	<5	<5
16_196	Gothenburg	2012	0.86	0.90	<5	<5	<5	<5
16_197	Stockholm	2009	2.7	0.84	<5	<5	<5	<5
16_198	Stockholm	2009	2.5	2.0	<5	<5	<5	<5
16_199	Stockholm	2010	1.3	0.94	<5	<5	<5	<5
16_201	Stockholm	2010	2.4	<0.7	<5	<5	<5	<5
16_202	Stockholm	2011	<0.7	<0.7	<5	<5	<5	<5
16_203	Stockholm	2011	<0.7	<0.7	<5	<5	<5	<5

16_204	Stockholm	2013	1.1	<0.7	<5	<5	<5	<5
16_205	Stockholm	2013	<0.7	<0.7	<5	<5	<5	<5
16_206	Stockholm	2014	1.0	<0.7	<5	<5	<5	<5
16_207	Stockholm	2014	1.7	<0.7	<5	<5	<5	<5
16_208	Gothenburg	2007	<0.7	<0.7	<5	<5	<5	<5
16_209	Gothenburg	2007	1.0	<0.7	<5	<5	<5	<5
16_210	Gothenburg	2008	2.1	1.5	<5	<5	<5	<5
16_211	Gothenburg	2008	1.2	<0.7	<5	<5	<5	<5
16_213	Gothenburg	2010	1.3	<0.7	<5	<5	<5	<5
16_214	Gothenburg	2010	2.4	1.1	<5	<5	<5	<5
16_215	Gothenburg	2011	4.0	0.76	<5	<5	<5	<5
16_216	Gothenburg	2013	2.0	<0.7	<5	<5	<5	<5
16_217	Gothenburg	2014	2.6	1.0	<5	<5	<5	<5
16_218	Gothenburg	2015	1.0	<0.7	<5	<5	<5	<5
16_219	Gothenburg	2015	<0.7	<0.7	<5	<5	<5	<5
16_220	Stockholm	1972	1.5	<0.7	<5	<5	10	<5
16_221	Stockholm	1976	6.7	2.3	<5	<5	<5	<5
16_222	Stockholm	1980	6.9	3.1	<5	<5	<5	<5
16_223	Stockholm	1984	16.0	5.9	<5	<5	<5	<5
16_224	Stockholm	1988	5.8	2.4	<5	<5	72	<5
16_225	Stockholm	1992	8.3	1.8	<5	<5	<5	<5
16_226	Stockholm	1996	5.6	2.3	<5	<5	<5	<5
16_227	Stockholm	2000	3.2	1.0	<5	<5	<5	<5
16_228	Stockholm	2004	<0.7	1.0	<5	<5	<5	<5
16_229	Stockholm	2008	<0.7	<0.7	<5	<5	<5	<5
F31	Stockholm	2016	<0.7	<0.7	<5	<5	<5	<5
F32	Stockholm	2016	<0.7	<0.7	<5	<5	<5	<5
F33	Stockholm	2016	<0.7	<0.7	<5	<5	<5	<5
F34	Stockholm	2016	<0.7	<0.7	<5	<5	<5	<5
F35	Stockholm	2016	4.0	<0.7	<5	<5	<5	<5
F36	Stockholm	2016	<0.7	<0.7	<5	<5	<5	<5
F37	Stockholm	2016	2.6	<0.7	<5	<5	<5	<5
F38	Stockholm	2016	<0.7	<0.7	<5	<5	<5	<5
F39	Stockholm	2016	<0.7	<0.7	<5	<5	<5	<5
F40	Stockholm	2016	2.2	<0.7	<5	<5	<5	<5

78
79
80
81

82 **Table S8.** Upper bounds estimated daily intake (EDIs) for individual and sum (Σ) PFASs in units of ng/kg bw/d.

Sample	City	Year	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnDA	PFDoDA	PFTrDA	PFTeDA	PFPeDA	FHpPA	PFBS	L-PFHxS	Br-PFHxS	L-PFOS	Br-PFOS	L-PFDS	Br-PFDS	L-FOSA	Br-FOSA	L-MeFOSAA	Br-MeFOSAA	L-EtFOSAA	Br-EtFOSAA	Σ PFASs
16_161	STHM	'12	0.0	1.2	0.61	3.0	1.2	0.52	0.52	0.16	0.16	0.09	0.06	1.51	0.06	1.63	0.05	4.6	2.3	0.09	0.0	0.10	0.06	0.0	0.0	0.30	0.0	18
16_162	STHM	'12	0.0	1.2	0.61	5.0	1.1	0.24	0.40	0.23	0.41	0.24	0.06	0.18	0.09	1.19	0.05	5.0	2.3	0.03	0.0	0.26	0.14	0.0	0.0	0.30	0.0	19
16_163	STHM	'12	0.0	1.2	0.61	2.0	0.3	0.35	0.18	0.15	0.19	0.28	0.06	0.06	0.06	0.61	0.05	3.2	0.60	0.03	0.0	0.27	0.13	0.0	0.0	0.30	0.0	11
16_164	STHM	'12	0.0	1.2	0.61	3.2	1.0	0.27	0.34	0.06	0.25	0.05	0.06	0.06	0.06	0.11	0.05	2.6	0.50	0.03	0.0	0.08	0.07	0.0	0.0	0.30	0.0	11
16_165	STHM	'12	0.0	1.2	0.61	7.9	1.2	0.66	0.17	0.12	0.07	0.05	0.06	3.43	0.06	0.39	0.05	1.4	0.59	0.03	0.0	0.13	0.04	0.0	0.0	0.30	0.0	18
16_166	STHM	'12	0.0	1.2	1.12	3.5	0.5	0.42	0.16	0.06	0.10	0.20	0.06	0.46	0.06	0.76	0.05	3.3	0.76	0.03	0.0	0.08	0.08	0.0	0.0	0.30	0.0	13
16_167	STHM	'12	0.0	4.8	0.90	5.2	1.3	0.59	0.22	0.09	0.05	0.13	0.06	0.06	0.06	0.16	0.05	1.0	0.83	0.03	0.0	0.13	0.06	0.0	0.0	0.30	0.0	16
16_168	STHM	'12	0.0	1.2	0.61	3.6	1.2	0.49	0.15	0.06	0.05	0.08	0.06	0.11	0.06	2.18	0.05	2.0	1.8	0.05	0.0	0.07	0.04	0.0	0.0	0.30	0.0	14
16_169	STHM	'12	0.0	1.2	0.61	4.7	0.9	0.29	0.53	0.06	0.05	0.05	0.06	0.06	0.06	0.64	0.05	4.3	2.2	0.03	0.0	0.08	0.04	0.0	0.0	0.30	0.0	16
16_170	STHM	'12	0.0	1.2	0.61	3.9	1.5	0.12	0.70	0.09	0.26	0.05	0.19	3.56	0.06	0.87	0.05	5.4	3.0	0.03	0.0	0.29	0.04	0.0	0.0	0.30	0.0	22
16_171	STHM	'12	0.0	1.2	0.61	8.5	1.2	0.61	0.30	0.06	0.26	0.09	0.06	0.06	0.06	0.72	0.05	4.8	4.2	0.03	0.0	0.22	0.13	0.0	0.0	0.30	0.0	24
16_172	STHM	'12	0.0	1.2	0.61	3.9	1.5	0.47	0.32	0.09	0.28	0.05	0.06	0.33	0.06	0.48	0.05	4.8	1.4	0.03	0.0	0.07	0.04	0.0	0.0	0.30	0.0	16
16_173	STHM	'12	0.0	1.2	0.61	3.4	1.3	0.30	0.26	0.06	0.05	0.05	0.06	0.06	0.06	0.10	0.05	2.5	0.93	0.03	0.0	0.14	0.12	0.0	0.0	0.30	0.0	12
16_174	STHM	'12	0.0	1.2	0.61	3.7	1.6	0.12	0.58	0.11	0.44	0.56	0.06	0.06	0.06	0.31	0.05	5.9	1.1	0.03	0.0	0.38	0.32	0.0	0.0	0.30	0.0	18
16_175	STHM	'12	0.0	1.2	0.61	2.8	1.1	0.12	0.19	0.06	0.05	0.05	0.06	0.06	0.06	0.18	0.05	1.7	0.88	0.03	0.0	0.16	0.08	0.0	0.0	0.30	0.0	10
16_176	STHM	'12	0.0	1.2	1.1	8.7	2.6	1.01	0.43	0.06	0.05	0.13	0.06	0.06	0.06	1.63	0.05	6.5	2.5	0.03	0.0	0.12	0.15	0.0	0.0	0.30	0.0	27
16_177	STHM	'12	0.0	1.8	0.61	7.3	2.0	0.28	0.40	0.11	0.25	0.05	0.06	0.14	0.06	1.02	0.05	2.9	1.2	0.04	0.0	0.04	0.04	0.0	0.0	0.30	0.0	19
16_178	STHM	'12	0.0	1.2	0.88	4.5	1.3	0.80	0.40	0.06	0.22	0.35	0.06	0.06	0.06	0.61	0.05	1.7	0.31	0.03	0.0	0.23	0.21	0.0	0.0	0.30	0.0	13
16_179	STHM	'12	0.0	1.2	0.61	3.1	2.4	0.93	0.74	0.06	0.29	0.59	0.06	0.06	0.06	0.08	0.05	3.2	0.94	0.03	0.0	0.16	0.23	0.0	0.0	0.65	0.0	15
16_180	STHM	'12	0.0	1.2	0.61	3.3	1.5	0.46	0.18	0.06	0.05	0.17	0.06	0.06	0.06	0.05	0.05	1.2	1.3	0.03	0.0	0.04	0.12	0.0	0.0	0.30	0.0	11
16_181	GBRG	'12	0.0	2.0	0.61	3.5	0.5	0.29	0.27	0.06	0.18	0.09	0.06	0.06	0.06	0.53	0.05	1.1	0.3	0.03	0.0	0.24	0.04	0.0	0.0	0.30	0.0	10
16_182	GBRG	'12	0.0	3.1	0.61	2.5	1.5	0.58	0.23	0.13	0.12	0.08	0.06	0.06	0.11	0.59	0.05	0.79	1.1	0.03	0.0	0.32	0.09	0.0	0.0	0.30	0.0	12
16_183	GBRG	'12	0.0	1.2	0.61	5.2	1.4	0.35	0.43	0.09	0.18	0.07	0.06	0.06	0.06	0.86	0.05	3.5	2.2	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	17
16_184	GBRG	'12	0.0	1.2	0.93	8.9	1.8	0.21	0.58	0.14	0.24	0.09	0.06	1.32	0.27	1.10	0.05	4.6	1.8	0.03	0.0	0.40	0.04	0.0	0.0	0.30	0.0	24
16_185	GBRG	'12	0.0	1.2	0.61	1.8	1.2	0.17	0.25	0.06	0.75	0.18	0.06	0.06	0.17	0.23	0.05	2.4	1.2	0.03	0.0	1.26	0.04	0.0	0.0	0.30	0.0	12
16_186	GBRG	'12	0.0	1.2	0.61	8.8	3.3	0.89	0.38	0.09	0.14	0.51	0.18	0.06	0.15	0.73	0.05	5.3	4.0	0.03	0.0	0.55	0.04	0.0	0.0	0.30	0.0	27
16_187	GBRG	'12	0.0	2.1	0.61	5.1	1.6	0.12	0.59	0.06	0.12	0.05	0.06	0.06	0.06	0.36	0.05	1.1	1.6	0.03	0.0	0.22	0.13	0.0	0.0	0.30	0.0	14
16_188	GBRG	'12	0.0	1.2	0.61	2.7	0.5	0.25	0.14	0.06	0.09	0.05	0.06	0.06	0.10	0.19	0.05	0.59	0.53	0.03	0.0	0.15	0.07	0.0	0.0	0.30	0.0	8

16_189	GBRG	'12	0.0	2.4	1.00	5.1	1.1	0.12	0.11	0.06	0.10	0.07	0.06	0.06	0.06	0.05	0.10	1.7	2.2	0.03	0.0	0.12	0.04	0.0	0.0	0.30	0.0	15
16_190	GBRG	'12	0.0	1.2	1.44	2.4	1.3	0.81	0.38	0.06	0.12	0.05	0.06	0.06	0.13	0.05	3.3	0.8	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	13	
16_191	GBRG	'12	0.0	1.2	0.61	3.8	0.9	0.28	0.38	0.06	0.08	0.05	0.06	0.06	0.18	0.24	0.05	2.8	0.7	0.03	0.0	0.23	0.20	0.0	0.0	0.30	0.0	12
16_192	GBRG	'12	0.0	1.2	0.61	5.8	0.9	0.44	0.28	0.06	0.30	0.09	0.06	0.06	0.06	1.24	0.05	1.7	1.1	0.03	0.0	0.18	0.16	0.0	0.0	0.30	0.0	15
16_193	GBRG	'12	0.0	1.2	0.61	3.9	1.0	0.12	0.55	0.06	0.23	0.05	0.06	0.06	0.06	0.09	0.05	2.1	1.4	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	12
16_194	GBRG	'12	0.0	1.2	0.61	2.8	1.5	0.34	0.57	0.06	0.30	0.09	0.06	0.06	0.06	0.42	0.05	3.3	1.2	0.03	0.0	0.42	0.09	0.0	0.0	0.30	0.0	14
16_195	GBRG	'12	0.0	1.2	0.61	4.5	1.6	0.12	0.35	0.06	0.10	0.05	0.06	0.06	0.06	0.28	0.05	3.6	3.1	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	16
16_196	GBRG	'12	0.0	1.2	0.61	6.4	2.9	0.60	0.44	0.14	0.20	0.16	0.06	0.06	0.19	0.09	0.05	5.0	1.9	0.03	0.0	0.07	0.08	0.0	0.0	0.30	0.0	20
16_197	STHM	'09	0.0	1.2	0.61	5.9	3.7	0.70	0.14	0.06	0.05	0.05	0.06	0.06	0.31	0.73	0.05	2.6	3.0	0.03	0.0	0.23	0.07	0.0	0.0	0.30	0.0	20
16_198	STHM	'09	0.0	2.2	0.61	3.1	4.4	0.23	0.48	0.06	0.18	0.12	0.06	0.06	0.06	0.73	0.05	3.1	1.4	0.03	0.0	0.22	0.17	0.0	0.0	0.30	0.0	18
16_199	STHM	'10	0.0	3.6	0.61	8.2	1.4	0.19	0.21	0.22	0.20	0.29	0.06	0.06	0.06	0.49	0.05	3.4	2.7	0.04	0.0	0.11	0.08	0.0	0.0	0.30	0.0	22
16_201	STHM	'10	0.0	1.2	0.88	4.6	2.5	0.57	0.51	0.09	0.21	0.05	0.10	0.15	0.06	0.64	0.05	3.8	1.1	0.03	0.0	0.20	0.04	0.0	0.0	0.30	0.0	17
16_202	STHM	'11	0.0	1.2	1.10	6.2	1.0	0.68	0.32	0.10	0.33	0.11	0.06	0.06	0.06	0.67	0.05	3.2	0.9	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	16
16_203	STHM	'11	0.0	1.2	0.61	5.4	0.6	0.32	0.37	0.06	0.11	0.05	0.06	0.06	0.06	0.93	0.05	3.3	1.4	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	15
16_204	STHM	'13	0.0	6.3	0.61	3.7	1.1	0.19	0.69	0.06	0.17	0.19	0.06	0.06	0.06	0.27	0.05	3.0	1.3	0.03	0.0	0.09	0.04	0.0	0.0	0.30	0.0	18
16_205	STHM	'13	0.0	3.0	0.61	3.3	1.2	0.35	0.28	0.06	0.30	0.05	0.06	0.06	0.14	0.73	0.05	1.9	0.7	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	13
16_206	STHM	'14	0.0	1.2	0.61	5.5	2.4	0.22	0.51	0.06	0.20	0.08	0.06	0.06	0.24	0.78	0.05	3.3	2.0	0.03	0.0	0.08	0.04	0.0	0.0	0.30	0.0	18
16_207	STHM	'14	0.0	4.6	0.61	3.0	1.4	0.70	0.13	0.06	0.05	0.07	0.06	0.06	0.20	0.41	0.05	2.5	1.6	0.03	0.0	0.15	0.04	0.0	0.0	0.30	0.0	16
16_208	GBRG	'07	0.0	4.7	0.61	5.6	1.0	0.85	0.44	0.09	0.19	0.08	0.20	0.06	0.06	0.18	0.05	5.0	2.3	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	22
16_209	GBRG	'07	0.0	1.2	0.88	6.7	1.8	0.51	0.44	0.10	0.07	0.10	0.10	0.06	0.06	0.99	0.05	3.3	2.7	0.03	0.0	0.09	0.04	0.0	0.0	0.30	0.0	19
16_210	GBRG	'08	0.0	1.2	1.25	5.6	0.9	0.34	0.09	0.17	0.20	0.05	0.06	0.11	0.06	0.05	0.34	6.1	2.3	0.03	0.0	0.18	0.13	0.0	0.0	0.30	0.0	19
16_211	GBRG	'08	0.0	1.2	1.13	5.9	2.1	0.60	0.59	0.10	0.12	0.12	0.06	0.06	0.06	0.59	0.05	5.1	2.5	0.03	0.0	0.10	0.04	0.0	0.0	0.30	0.0	21
16_213	GBRG	'10	0.0	1.9	0.61	6.3	1.0	0.85	0.22	0.06	0.28	0.14	0.06	0.06	0.06	0.42	0.05	3.1	2.4	0.03	0.0	0.11	0.04	0.0	0.0	0.30	0.0	18
16_214	GBRG	'10	0.0	1.2	1.00	6.5	1.5	0.33	0.70	0.11	0.13	0.05	0.06	0.06	0.06	1.02	0.05	8.2	2.2	0.03	0.0	0.21	0.09	0.0	0.0	0.30	0.0	24
16_215	GBRG	'11	0.0	1.2	0.61	5.6	1.7	0.58	0.33	0.10	0.29	0.20	0.06	0.06	0.06	0.43	0.05	3.1	2.0	0.03	0.0	0.34	0.07	0.0	0.0	0.30	0.0	17
16_216	GBRG	'13	0.0	1.2	0.61	3.5	1.3	0.19	0.39	0.06	0.26	0.13	0.06	0.06	0.06	0.25	0.24	2.1	1.8	0.03	0.0	0.17	0.04	0.0	0.0	0.30	0.0	13
16_217	GBRG	'14	0.0	5.2	0.61	6.7	1.4	0.79	0.67	0.06	0.40	0.05	0.06	0.06	0.06	0.29	0.05	5.1	2.4	0.03	0.0	0.22	0.08	0.0	0.0	0.30	0.0	25
16_218	GBRG	'15	0.0	1.2	0.61	2.9	1.3	0.37	0.36	0.06	0.14	0.05	0.06	0.06	0.06	0.24	0.05	2.7	0.8	0.03	0.0	0.08	0.04	0.0	0.0	0.30	0.0	11
16_219	GBRG	'15	0.0	1.2	0.86	3.4	1.7	0.23	0.22	0.06	0.08	0.12	0.06	0.06	0.06	0.15	0.05	2.1	0.7	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	12
16_220	STHM	'72	0.0	3.7	0.61	2.5	0.5	0.12	0.06	0.06	0.05	0.12	0.06	0.06	0.06	0.05	0.05	1.7	0.7	0.07	0.0	0.13	0.04	0.0	0.0	0.87	0.0	12
16_221	STHM	'76	0.0	1.2	0.61	4.7	0.3	0.23	0.06	0.06	0.05	0.09	0.06	0.06	0.17	0.05	0.25	1.4	1.9	0.03	0.0	0.57	0.20	0.0	0.0	0.30	0.0	12
16_222	STHM	'80	0.0	1.2	0.61	5.2	0.3	0.12	0.11	0.06	0.05	0.05	0.06	0.06	0.49	0.37	0.05	5.2	2.9	0.03	0.0	0.59	0.26	0.0	0.0	0.30	0.0	18
16_223	STHM	'84	0.0	6.9	1.4	6.0	0.8	0.12	0.33	0.09	0.05	0.05	0.06	0.23	0.30	0.10	0.05	10	6.6	0.03	0.0	1.38	0.51	0.0	0.0	0.30	0.0	36

16_224	STHM	'88	0.0	1.2	0.61	9.4	1.3	0.12	0.37	0.06	0.17	0.05	0.06	0.06	0.06	0.85	0.08	13	8.3	0.06	0.0	0.50	0.20	0.0	0.0	6.20	0.0	42
16_225	STHM	'92	0.0	1.2	0.61	8.9	0.7	0.34	0.32	0.09	0.08	0.09	0.06	0.06	0.21	0.52	0.05	9.7	7.6	0.03	0.0	0.71	0.15	0.0	0.0	0.30	0.0	32
16_226	STHM	'96	0.0	1.2	0.61	6.2	1.4	0.65	0.32	0.06	0.05	0.05	0.06	0.06	0.23	1.23	0.22	8.1	3.9	0.03	0.0	0.48	0.20	0.0	0.0	0.30	0.0	25
16_227	STHM	'00	0.0	1.2	1.2	11	1.5	0.32	0.36	0.06	0.12	0.05	0.06	0.06	0.13	1.43	0.15	11	6.3	0.17	0.0	0.27	0.09	0.0	0.0	0.30	0.0	36
16_228	STHM	'04	0.0	1.2	0.61	8.7	2.2	0.34	0.45	0.09	0.13	0.05	0.06	0.91	0.06	1.76	0.15	10	5.8	0.03	0.0	0.04	0.08	0.0	0.0	0.30	0.0	33
16_229	STHM	'08	0.0	1.2	0.61	6.9	2.2	0.62	0.44	0.06	0.08	0.05	0.06	0.70	0.06	0.96	0.05	4.0	2.6	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	21
F31	STHM	'16	0.0	6.4	0.61	5.4	1.4	1.0	1.0	0.31	0.60	0.30	0.06	0.24	0.06	0.58	0.19	5.2	0.9	0.28	0.0	0.04	0.04	0.0	0.0	0.30	0.0	25
F32	STHM	'16	0.0	11	0.61	6.5	0.1	1.3	0.71	0.34	0.52	0.17	0.06	0.06	0.38	0.50	0.19	1.8	1.7	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	27
F33	STHM	'16	0.0	3.9	0.61	7.1	0.9	0.12	0.79	0.06	0.50	0.27	0.06	0.06	0.06	0.68	0.05	3.7	1.1	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	20
F34	STHM	'16	0.0	8.5	0.61	2.7	1.5	0.12	1.15	0.19	0.29	0.50	0.06	0.06	0.91	0.40	0.05	4.7	1.5	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	24
F35	STHM	'16	0.0	9.3	0.61	2.0	0.1	0.12	0.56	0.25	0.05	0.05	0.06	0.06	0.56	1.15	0.05	3.9	1.4	0.03	0.0	0.35	0.04	0.0	0.0	0.30	0.0	21
F36	STHM	'16	0.0	8.1	0.61	2.0	0.8	0.12	0.06	0.06	0.05	0.05	0.06	0.06	0.44	0.92	0.05	3.8	1.2	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	19
F37	STHM	'16	0.0	11.1	0.94	3.3	0.1	0.12	0.06	0.33	0.44	0.05	0.06	0.06	1.78	0.05	0.34	2.9	0.4	0.03	0.0	0.22	0.04	0.0	0.0	0.30	0.0	23
F38	STHM	'16	0.0	2.9	0.61	0.2	1.4	0.12	0.06	0.06	0.05	0.26	0.06	0.06	0.69	0.56	0.05	2.5	0.1	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	10
F39	STHM	'16	0.0	3.0	0.61	4.0	0.8	0.12	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.05	0.05	2.4	0.3	0.03	0.0	0.04	0.04	0.0	0.0	0.30	0.0	12
F40	STHM	'16	0.0	8.8	0.61	4.5	0.8	0.12	0.06	0.22	0.23	0.36	0.06	0.06	0.76	0.73	0.05	1.9	1.3	0.03	0.0	0.18	0.04	0.0	0.0	0.30	0.0	21

83
84
85
86

87 **Table S9.** Lower bounds estimated daily intake (EDIs) for individual and sum (Σ) PFASs in units of ng/kg bw/d.

Sample	City	Year	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnDA	PFDoDA	PFTTrDA	PFTeDA	PFPeDA	FHpPA	PFBS	L-PFHxS	Br-PFHxS	L-PFOS	Br-PFOS	L-PFDS	Br-PFDS	L-FOSA	Br-FOSA	L-MeFOSAA	Br-MeFOSAA	L-EtFOSAA	Br-EtFOSAA	Σ PFASs
16_161	STHM	'12	0.00	0.00	0.00	2.98	1.18	0.52	0.52	0.16	0.16	0.09	0.00	1.51	0.00	1.63	0.00	4.56	2.33	0.09	0.00	0.10	0.06	0.00	0.00	0.00	0.00	15.9
16_162	STHM	'12	0.00	0.00	0.00	5.01	1.05	0.24	0.40	0.23	0.41	0.24	0.00	0.18	0.09	1.19	0.00	5.00	2.25	0.00	0.00	0.26	0.14	0.00	0.00	0.00	0.00	16.7
16_163	STHM	'12	0.00	0.00	0.00	1.97	0.29	0.35	0.18	0.15	0.19	0.28	0.00	0.00	0.00	0.61	0.00	3.19	0.60	0.00	0.00	0.27	0.13	0.00	0.00	0.00	0.00	8.2
16_164	STHM	'12	0.00	0.00	0.00	3.16	0.98	0.27	0.34	0.00	0.25	0.00	0.00	0.00	0.00	0.11	0.00	2.57	0.50	0.00	0.00	0.08	0.07	0.00	0.00	0.00	0.00	8.3
16_165	STHM	'12	0.00	0.00	0.00	7.88	1.15	0.66	0.17	0.12	0.07	0.00	0.00	3.43	0.00	0.39	0.00	1.43	0.59	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	16.0
16_166	STHM	'12	0.00	0.00	1.12	3.52	0.50	0.42	0.16	0.00	0.10	0.20	0.00	0.46	0.00	0.76	0.00	3.26	0.76	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.00	11.4
16_167	STHM	'12	0.00	4.76	0.90	5.15	1.33	0.59	0.22	0.09	0.00	0.13	0.00	0.00	0.00	0.16	0.00	0.95	0.83	0.00	0.00	0.13	0.06	0.00	0.00	0.00	0.00	15.3
16_168	STHM	'12	0.00	0.00	0.00	3.61	1.17	0.49	0.15	0.00	0.00	0.08	0.00	0.11	0.00	2.18	0.00	1.96	1.77	0.05	0.00	0.07	0.00	0.00	0.00	0.00	0.00	11.6
16_169	STHM	'12	0.00	0.00	0.00	4.74	0.86	0.29	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	4.28	2.17	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	13.6
16_170	STHM	'12	0.00	0.00	0.00	3.93	1.47	0.00	0.70	0.09	0.26	0.00	0.19	3.56	0.00	0.87	0.00	5.35	3.03	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	19.7
16_171	STHM	'12	0.00	0.00	0.00	8.52	1.24	0.61	0.30	0.00	0.26	0.09	0.00	0.00	0.00	0.72	0.00	4.75	4.21	0.00	0.00	0.22	0.13	0.00	0.00	0.00	0.00	21.1
16_172	STHM	'12	0.00	0.00	0.00	3.95	1.52	0.47	0.32	0.09	0.28	0.00	0.00	0.33	0.00	0.48	0.00	4.78	1.39	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	13.7
16_173	STHM	'12	0.00	0.00	0.00	3.45	1.26	0.30	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	2.49	0.93	0.00	0.00	0.14	0.12	0.00	0.00	0.00	0.00	9.1
16_174	STHM	'12	0.00	0.00	0.00	3.74	1.63	0.00	0.58	0.11	0.44	0.56	0.00	0.00	0.00	0.31	0.00	5.91	1.12	0.00	0.00	0.38	0.32	0.00	0.00	0.00	0.00	15.1
16_175	STHM	'12	0.00	0.00	0.00	2.77	1.15	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	1.66	0.88	0.00	0.00	0.16	0.08	0.00	0.00	0.00	0.00	7.1
16_176	STHM	'12	0.00	0.00	1.07	8.72	2.60	1.01	0.43	0.00	0.00	0.13	0.00	0.00	0.00	1.63	0.00	6.49	2.50	0.00	0.00	0.12	0.15	0.00	0.00	0.00	0.00	24.8
16_177	STHM	'12	0.00	1.79	0.00	7.29	1.97	0.28	0.40	0.11	0.25	0.00	0.00	0.14	0.00	1.02	0.00	2.87	1.17	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.3
16_178	STHM	'12	0.00	0.00	0.88	4.52	1.25	0.80	0.40	0.00	0.22	0.35	0.00	0.00	0.00	0.61	0.00	1.65	0.31	0.00	0.00	0.23	0.21	0.00	0.00	0.00	0.00	11.4
16_179	STHM	'12	0.00	0.00	0.00	3.05	2.43	0.93	0.74	0.00	0.29	0.59	0.00	0.00	0.00	0.08	0.00	3.21	0.94	0.00	0.00	0.16	0.23	0.00	0.00	0.65	0.00	13.3
16_180	STHM	'12	0.00	0.00	0.00	3.33	1.46	0.46	0.18	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	1.22	1.25	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	8.2
16_181	GBRG	'12	0.00	2.04	0.00	3.47	0.46	0.29	0.27	0.00	0.18	0.09	0.00	0.00	0.00	0.53	0.00	1.07	0.34	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	9.0
16_182	GBRG	'12	0.00	3.09	0.00	2.45	1.47	0.58	0.23	0.13	0.12	0.08	0.00	0.00	0.11	0.59	0.00	0.79	1.07	0.00	0.00	0.32	0.09	0.00	0.00	0.00	0.00	11.1
16_183	GBRG	'12	0.00	0.00	0.00	5.15	1.40	0.35	0.43	0.09	0.18	0.07	0.00	0.00	0.00	0.86	0.00	3.46	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.2
16_184	GBRG	'12	0.00	0.00	0.93	8.89	1.85	0.21	0.58	0.14	0.24	0.09	0.00	1.32	0.27	1.10	0.00	4.61	1.78	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	22.4
16_185	GBRG	'12	0.00	0.00	0.00	1.84	1.24	0.17	0.25	0.00	0.75	0.18	0.00	0.00	0.17	0.23	0.00	2.39	1.15	0.00	0.00	1.26	0.00	0.00	0.00	0.00	0.00	9.6
16_186	GBRG	'12	0.00	0.00	0.00	8.84	3.27	0.89	0.38	0.09	0.14	0.51	0.18	0.00	0.15	0.73	0.00	5.34	4.01	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00	25.1
16_187	GBRG	'12	0.00	2.09	0.00	5.12	1.57	0.00	0.59	0.00	0.12	0.00	0.00	0.00	0.00	0.36	0.00	1.10	1.55	0.00	0.00	0.22	0.13	0.00	0.00	0.00	0.00	12.9
16_188	GBRG	'12	0.00	0.00	0.00	2.67	0.47	0.25	0.14	0.00	0.09	0.00	0.00	0.00	0.10	0.19	0.00	0.59	0.53	0.00	0.00	0.15	0.07	0.00	0.00	0.00	0.00	5.2

16_189	GBRG	'12	0.00	2.39	1.00	5.08	1.13	0.00	0.11	0.00	0.10	0.07	0.00	0.00	0.00	0.10	1.67	2.24	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	14.0
16_190	GBRG	'12	0.00	0.00	1.44	2.36	1.33	0.81	0.38	0.00	0.12	0.00	0.00	0.00	0.13	0.00	3.31	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.6
16_191	GBRG	'12	0.00	0.00	0.00	3.77	0.95	0.28	0.38	0.00	0.08	0.00	0.00	0.00	0.18	0.24	0.00	2.81	0.66	0.00	0.00	0.23	0.20	0.00	0.00	0.00	0.00	9.8
16_192	GBRG	'12	0.00	0.00	0.00	5.82	0.86	0.44	0.28	0.00	0.30	0.09	0.00	0.00	0.00	1.24	0.00	1.73	1.07	0.00	0.00	0.18	0.16	0.00	0.00	0.00	0.00	12.1
16_193	GBRG	'12	0.00	0.00	0.00	3.90	0.96	0.00	0.55	0.00	0.23	0.00	0.00	0.00	0.09	0.00	2.07	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.2
16_194	GBRG	'12	0.00	0.00	0.00	2.77	1.53	0.34	0.57	0.00	0.30	0.09	0.00	0.00	0.00	0.42	0.00	3.34	1.23	0.00	0.00	0.42	0.09	0.00	0.00	0.00	0.00	11.1
16_195	GBRG	'12	0.00	0.00	0.00	4.49	1.64	0.00	0.35	0.00	0.10	0.00	0.00	0.00	0.00	0.28	0.00	3.56	3.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.5
16_196	GBRG	'12	0.00	0.00	0.00	6.41	2.86	0.60	0.44	0.14	0.20	0.16	0.00	0.00	0.19	0.09	0.00	4.95	1.87	0.00	0.00	0.07	0.08	0.00	0.00	0.00	0.00	18.0
16_197	STHM	'09	0.00	0.00	0.00	5.90	3.74	0.70	0.14	0.00	0.00	0.00	0.00	0.00	0.31	0.73	0.00	2.56	3.01	0.00	0.00	0.23	0.07	0.00	0.00	0.00	0.00	17.4
16_198	STHM	'09	0.00	2.24	0.00	3.08	4.37	0.23	0.48	0.00	0.18	0.12	0.00	0.00	0.00	0.73	0.00	3.06	1.38	0.00	0.00	0.22	0.17	0.00	0.00	0.00	0.00	16.2
16_199	STHM	'10	0.00	3.59	0.00	8.19	1.41	0.19	0.21	0.22	0.20	0.29	0.00	0.00	0.00	0.49	0.00	3.35	2.65	0.04	0.00	0.11	0.08	0.00	0.00	0.00	0.00	21.0
16_201	STHM	'10	0.00	0.00	0.88	4.59	2.48	0.57	0.51	0.09	0.21	0.00	0.10	0.15	0.00	0.64	0.00	3.82	1.10	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	15.3
16_202	STHM	'11	0.00	0.00	1.10	6.24	0.96	0.68	0.32	0.10	0.33	0.11	0.00	0.00	0.00	0.67	0.00	3.15	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.6
16_203	STHM	'11	0.00	0.00	0.00	5.38	0.62	0.32	0.37	0.00	0.11	0.00	0.00	0.00	0.00	0.93	0.00	3.31	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.5
16_204	STHM	'13	0.00	6.30	0.00	3.65	1.11	0.19	0.69	0.00	0.17	0.19	0.00	0.00	0.00	0.27	0.00	2.97	1.31	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	16.9
16_205	STHM	'13	0.00	3.03	0.00	3.32	1.15	0.35	0.28	0.00	0.30	0.00	0.00	0.00	0.14	0.73	0.00	1.88	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.9
16_206	STHM	'14	0.00	0.00	0.00	5.51	2.42	0.22	0.51	0.00	0.20	0.08	0.00	0.00	0.24	0.78	0.00	3.28	2.03	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	15.4
16_207	STHM	'14	0.00	4.62	0.00	2.99	1.43	0.70	0.13	0.00	0.00	0.07	0.00	0.00	0.20	0.41	0.00	2.46	1.64	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	14.8
16_208	GBRG	'07	0.00	4.71	0.00	5.63	0.99	0.85	0.44	0.09	0.19	0.08	0.20	0.00	0.00	0.18	0.00	4.95	2.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.6
16_209	GBRG	'07	0.00	0.00	0.88	6.65	1.77	0.51	0.44	0.10	0.07	0.10	0.10	0.00	0.00	0.99	0.00	3.32	2.66	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	17.7
16_210	GBRG	'08	0.00	0.00	1.25	5.59	0.90	0.34	0.09	0.17	0.20	0.00	0.00	0.11	0.00	0.00	0.34	6.05	2.33	0.00	0.00	0.18	0.13	0.00	0.00	0.00	0.00	17.7
16_211	GBRG	'08	0.00	0.00	1.13	5.91	2.08	0.60	0.59	0.10	0.12	0.12	0.00	0.00	0.00	0.59	0.00	5.11	2.45	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	18.9
16_213	GBRG	'10	0.00	1.88	0.00	6.29	1.00	0.85	0.22	0.00	0.28	0.14	0.00	0.00	0.00	0.42	0.00	3.06	2.41	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	16.7
16_214	GBRG	'10	0.00	0.00	1.00	6.45	1.54	0.33	0.70	0.11	0.13	0.00	0.00	0.00	0.00	1.02	0.00	8.18	2.19	0.00	0.00	0.21	0.09	0.00	0.00	0.00	0.00	21.9
16_215	GBRG	'11	0.00	0.00	0.00	5.64	1.66	0.58	0.33	0.10	0.29	0.20	0.00	0.00	0.00	0.43	0.00	3.08	2.01	0.00	0.00	0.34	0.07	0.00	0.00	0.00	0.00	14.7
16_216	GBRG	'13	0.00	0.00	0.00	3.54	1.34	0.19	0.39	0.00	0.26	0.13	0.00	0.00	0.00	0.25	0.24	2.08	1.77	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	10.4
16_217	GBRG	'14	0.00	5.22	0.00	6.72	1.36	0.79	0.67	0.00	0.40	0.00	0.00	0.00	0.00	0.29	0.00	5.11	2.40	0.00	0.00	0.22	0.08	0.00	0.00	0.00	0.00	23.3
16_218	GBRG	'15	0.00	0.00	0.00	2.87	1.28	0.37	0.36	0.00	0.14	0.00	0.00	0.00	0.00	0.24	0.00	2.65	0.78	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	8.8
16_219	GBRG	'15	0.00	0.00	0.86	3.44	1.66	0.23	0.22	0.00	0.08	0.12	0.00	0.00	0.00	0.15	0.00	2.06	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.6
16_220	STHM	'72	0.00	3.68	0.00	2.53	0.45	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	1.73	0.71	0.07	0.00	0.13	0.00	0.00	0.00	0.87	0.00	10.3
16_221	STHM	'76	0.00	0.00	0.00	4.74	0.27	0.23	0.00	0.00	0.00	0.09	0.00	0.00	0.17	0.00	0.25	1.38	1.93	0.00	0.00	0.57	0.20	0.00	0.00	0.00	0.00	9.8
16_222	STHM	'80	0.00	0.00	0.00	5.21	0.28	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.49	0.37	0.00	5.17	2.86	0.00	0.00	0.59	0.26	0.00	0.00	0.00	0.00	15.3
16_223	STHM	'84	0.00	6.86	1.42	6.01	0.79	0.00	0.33	0.09	0.00	0.00	0.00	0.23	0.30	0.10	0.00	10.44	6.57	0.00	0.00	1.38	0.51	0.00	0.00	0.00	0.00	35.0

16_224	STHM	'88	0.00	0.00	0.00	9.35	1.28	0.00	0.37	0.00	0.17	0.00	0.00	0.00	0.00	0.85	0.08	12.86	8.26	0.06	0.00	0.50	0.20	0.00	0.00	6.20	0.00	40.2
16_225	STHM	'92	0.00	0.00	0.00	8.95	0.66	0.34	0.32	0.09	0.08	0.09	0.00	0.00	0.21	0.52	0.00	9.74	7.57	0.00	0.00	0.71	0.15	0.00	0.00	0.00	0.00	29.4
16_226	STHM	'96	0.00	0.00	0.00	6.18	1.42	0.65	0.32	0.00	0.00	0.00	0.00	0.23	1.23	0.22	8.06	3.92	0.00	0.00	0.48	0.20	0.00	0.00	0.00	0.00	22.9	
16_227	STHM	'00	0.00	0.00	1.24	11.41	1.49	0.32	0.36	0.00	0.12	0.00	0.00	0.13	1.43	0.15	10.55	6.26	0.17	0.00	0.27	0.09	0.00	0.00	0.00	0.00	34.0	
16_228	STHM	'04	0.00	0.00	0.00	8.71	2.22	0.34	0.45	0.09	0.13	0.00	0.00	0.91	0.00	1.76	0.15	10.05	5.76	0.00	0.00	0.00	0.08	0.00	0.00	0.00	30.7	
16_229	STHM	'08	0.00	0.00	0.00	6.85	2.23	0.62	0.44	0.00	0.08	0.00	0.00	0.70	0.00	0.96	0.00	4.01	2.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.5	
F31	STHM	'16	0.00	6.41	0.00	5.39	1.36	1.04	1.04	0.31	0.60	0.30	0.00	0.24	0.00	0.58	0.19	5.19	0.90	0.28	0.00	0.00	0.00	0.00	0.00	0.00	23.8	
F32	STHM	'16	0.00	11.32	0.00	6.52	0.00	1.26	0.71	0.34	0.52	0.17	0.00	0.00	0.38	0.50	0.19	1.78	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.4	
F33	STHM	'16	0.00	3.86	0.00	7.07	0.91	0.00	0.79	0.00	0.50	0.27	0.00	0.00	0.00	0.68	0.00	3.71	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.9	
F34	STHM	'16	0.00	8.53	0.00	2.73	1.53	0.00	1.15	0.19	0.29	0.50	0.00	0.00	0.91	0.40	0.00	4.70	1.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.4	
F35	STHM	'16	0.00	9.26	0.00	2.01	0.00	0.00	0.56	0.25	0.00	0.00	0.00	0.00	0.56	1.15	0.00	3.92	1.35	0.00	0.00	0.35	0.00	0.00	0.00	0.00	19.4	
F36	STHM	'16	0.00	8.09	0.00	2.04	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.92	0.00	3.83	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.3	
F37	STHM	'16	0.00	11.15	0.94	3.27	0.00	0.00	0.00	0.33	0.44	0.00	0.00	0.00	1.78	0.00	0.34	2.90	0.37	0.00	0.00	0.22	0.00	0.00	0.00	0.00	21.7	
F38	STHM	'16	0.00	2.93	0.00	0.24	1.38	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.69	0.56	0.00	2.47	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.7	
F39	STHM	'16	0.00	2.99	0.00	3.98	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.37	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.5	
F40	STHM	'16	0.00	8.82	0.00	4.52	0.80	0.00	0.00	0.22	0.23	0.36	0.00	0.00	0.76	0.73	0.00	1.90	1.28	0.00	0.00	0.18	0.00	0.00	0.00	0.00	19.8	