

Supporting Information

Modular Pressurized Liquid Extraction for Simultaneous Extraction, Clean-up and Fractionation of PCDD/Fs in Soil, Sediment and Sludge Samples

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Table S1. Measured concentrations of PCDD/Fs (pg g^{-1}) in Sediment C using Soxhlet and M-PLE methods with different sample loads and extraction solvents, i.e. DCM/Hp (1/1, v/v) and DEE/Hp (1/2, v/v) were used. The presented concentrations are average of three separate samples. The uncertainty corresponds to half of the 95% confidence interval. The consensus values were taken from the intercalibration study after omitting the outliers.

Congener	Consensus value	Soxhlet value	M-PLE _{DCM/Hp} (1/1, v/v)			M-PLE _{DEE/Hp} (1/2, v/v)		
			2 g sample	4 g sample	8 g sample	2 g sample	4 g sample	8 g sample
2,3,7,8-TCDF	23100 ± 6940	24000 ± 1900	27000 ± 5300	25000 ± 1300	21000 ± 1300	22000 ± 5700	21000 ± 4700	18000 ± 1200
1,2,3,7,8-PeCDF	10200 ± 1930	11000 ± 610	11000 ± 1700	9400 ± 480	8800 ± 360	10000 ± 3700	9500 ± 1800	9500 ± 900
2,3,4,7,8-PeCDF	9300 ± 1810	11000 ± 910	11000 ± 2200	11000 ± 490	9600 ± 560	10000 ± 2800	9200 ± 1900	11000 ± 2400
1,2,3,4,7,8-HxCDF	9400 ± 1620	9900 ± 110	10000 ± 1900	9100 ± 270	9100 ± 540	8600 ± 2000	8900 ± 950	9800 ± 490
1,2,3,6,7,8-HxCDF	2100 ± 410	2200 ± 15	2200 ± 370	2000 ± 140	2100 ± 130	2000 ± 590	2000 ± 290	2200 ± 78
2,3,4,6,7,8-HxCDF	900 ± 310	1200 ± 40	1200 ± 280	1200 ± 100	1100 ± 67	1200 ± 330	1100 ± 200	1300 ± 190
1,2,3,7,8,9-HxCDF	1000 ± 880	1800 ± 110	2000 ± 380	1900 ± 90	1900 ± 45	2000 ± 860	2000 ± 690	2100 ± 250
1,2,3,4,6,7,8-HpCDF	2100 ± 370	2200 ± 130	2100 ± 370	2000 ± 120	2000 ± 29	1900 ± 270	1900 ± 120	2200 ± 74
1,2,3,4,7,8,9-HpCDF	800 ± 150	800 ± 27	800 ± 88	750 ± 13	780 ± 48	760 ± 280	800 ± 170	730 ± 87
OCDF	5700 ± 1470	5100 ± 350	5000 ± 140	4800 ± 220	4500 ± 170	4000 ± 390	4000 ± 280	4700 ± 460
2,3,7,8-TCDD	9 ± 7	7 ± 1	6 ± 1	6 ± 0	6 ± 0	5 ± 1	5 ± 1	5 ± 0
1,2,3,7,8-PeCDD	15 ± 20	8 ± 2	7 ± 0	6 ± 1	7 ± 1	6 ± 1	6 ± 0	6 ± 1
1,2,3,4,7,8-HxCDD	9 ± 4	9 ± 1	8 ± 1	8 ± 1	8 ± 1	7 ± 0	7 ± 2	7 ± 1
1,2,3,6,7,8-HxCDD	14 ± 10	12 ± 2	11 ± 1	11 ± 0	11 ± 0	10 ± 1	10 ± 1	10 ± 2
1,2,3,7,8,9-HxCDD	13 ± 20	8 ± 1	7 ± 0	7 ± 1	6 ± 1	6 ± 1	6 ± 1	7 ± 0
1,2,3,4,6,7,8-HpCDD	140 ± 100	120 ± 20	110 ± 5	100 ± 7	97 ± 9	84 ± 8	84 ± 10	110 ± 5
OCDD	780 ± 300	740 ± 91	660 ± 54	650 ± 100	570 ± 73	520 ± 45	510 ± 30	850 ± 43
TEQs	6800 ± 1700	7600 ± 520	8000 ± 1600	7500 ± 350	6700 ± 390	7000 ± 1900	6600 ± 1300	7100 ± 1000

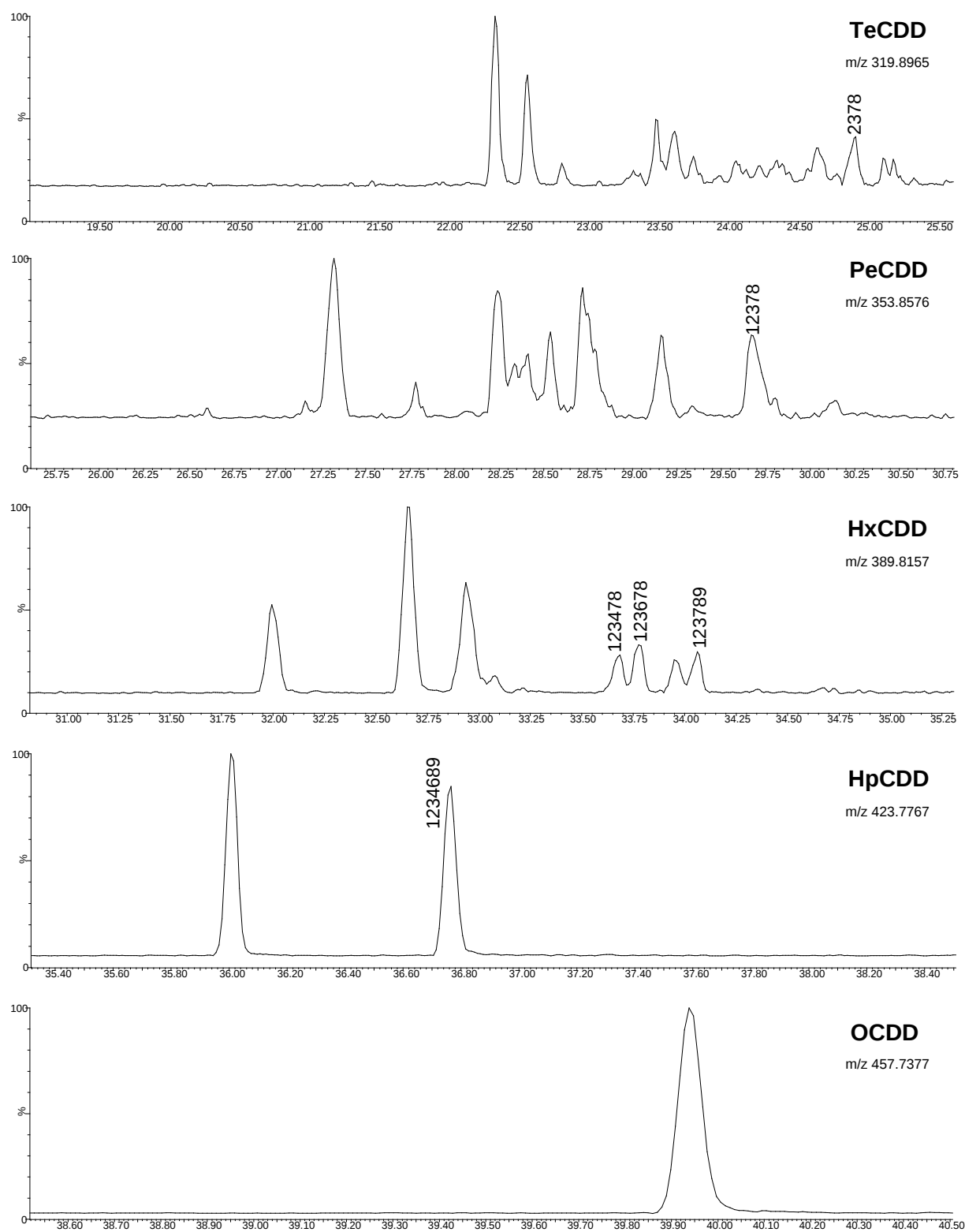


Fig. S1 GC/HRMS chromatograms of 2,3,7,8-substituted tetra- to octa-CDD in Sediment C extracted by M-PLE method.

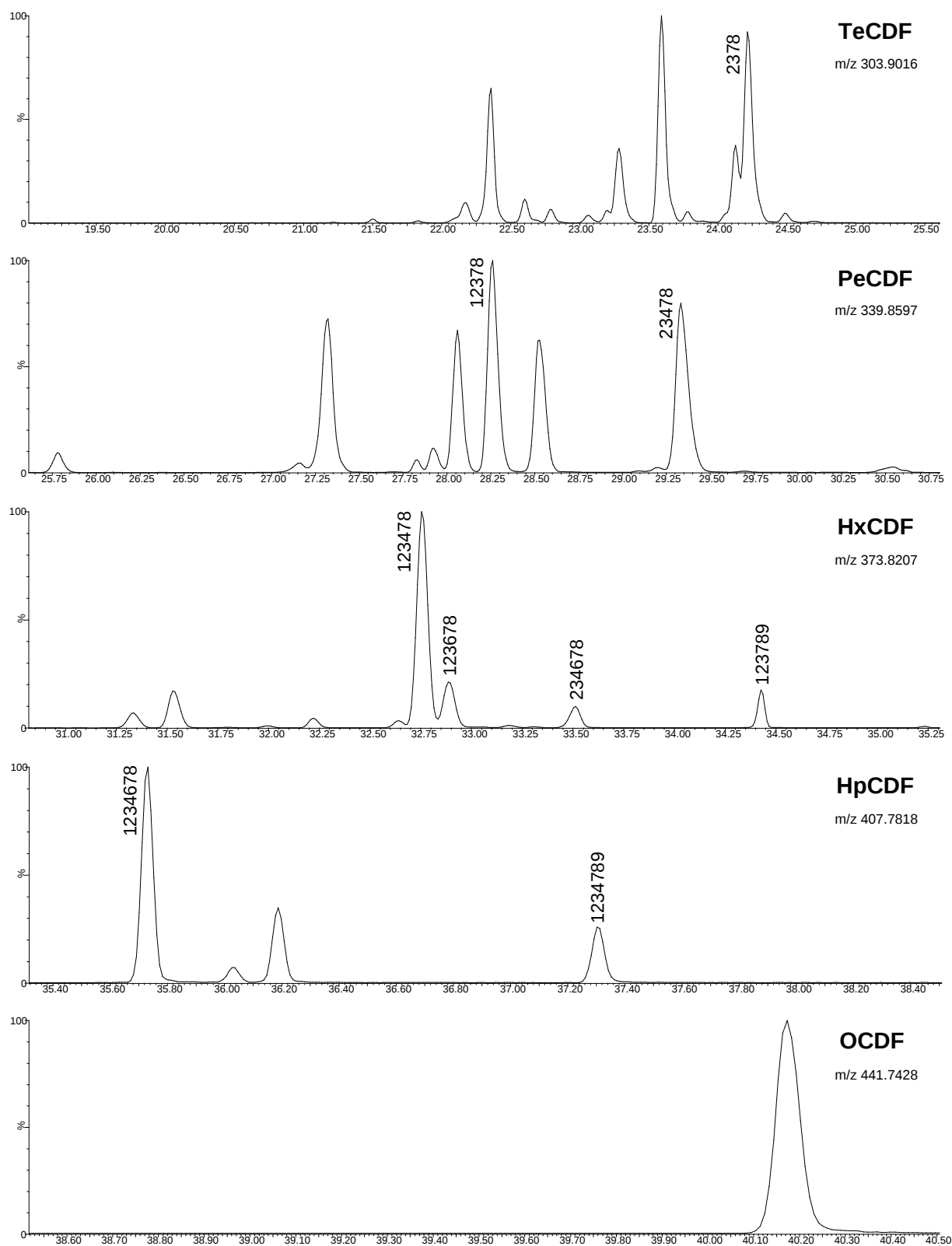


Fig. S2 GC/HRMS chromatograms of 2,3,7,8-substituted tetra- to octa-CDF in Sediment C extracted by M-PLE method.

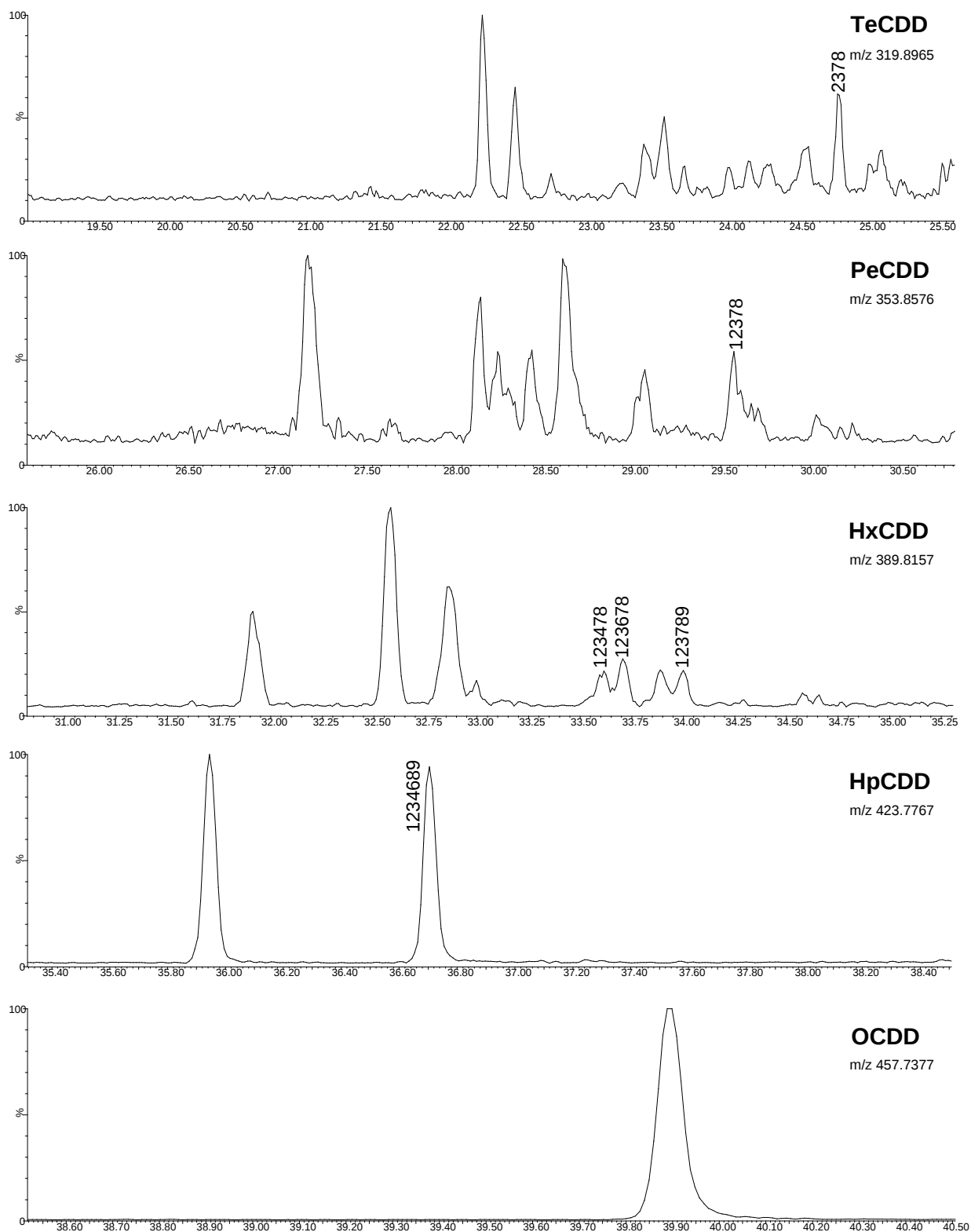


Fig. S3 GC/HRMS chromatograms of 2,3,7,8-substituted tetra- to octa-CDD in Sediment C extracted by Soxhlet method.

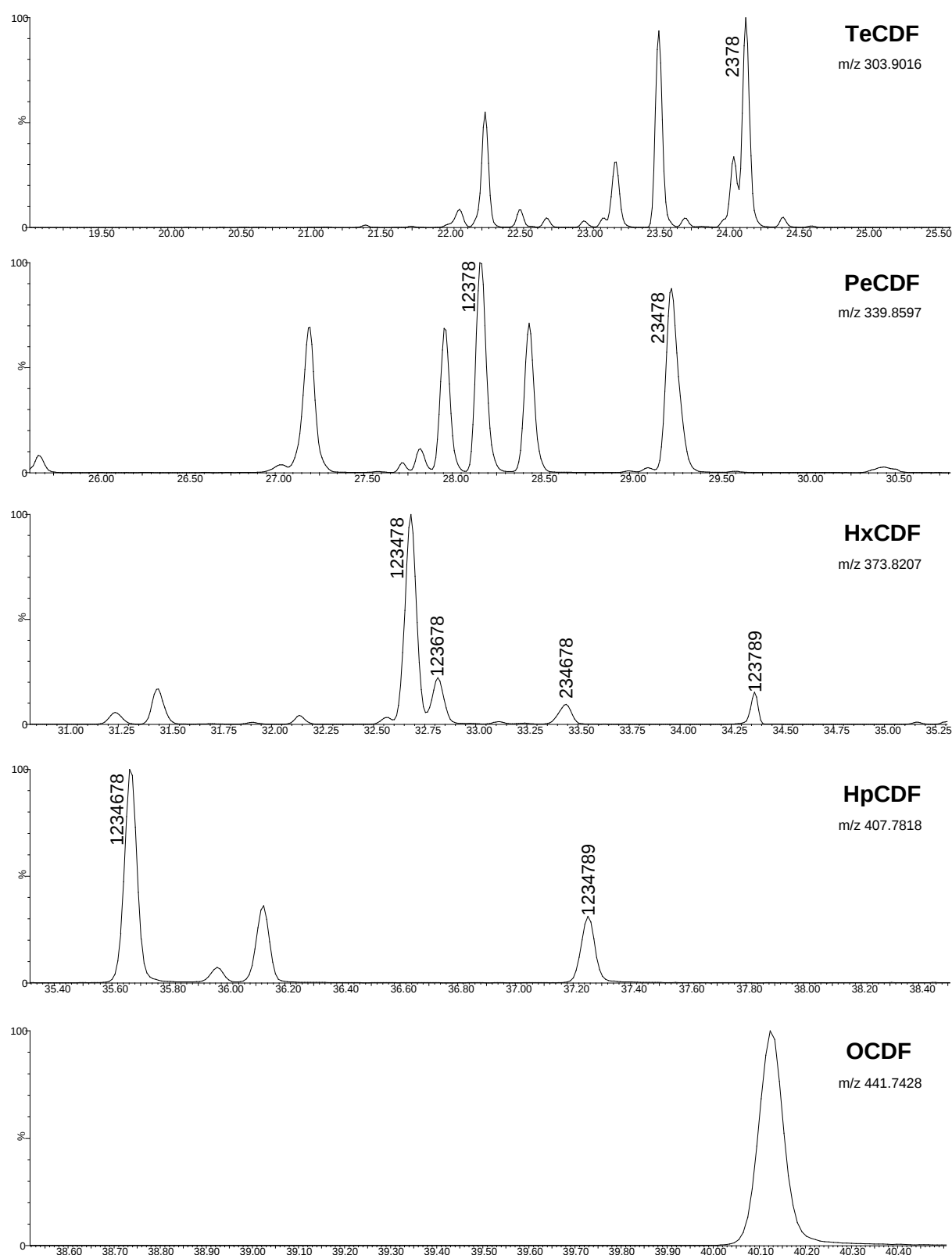


Fig. S4 GC/HRMS chromatograms of 2,3,7,8-substituted tetra- to octa-CDF in Sediment C extracted by Soxhlet method.