Table S1. The concentrations of the targets in the environmental matrix

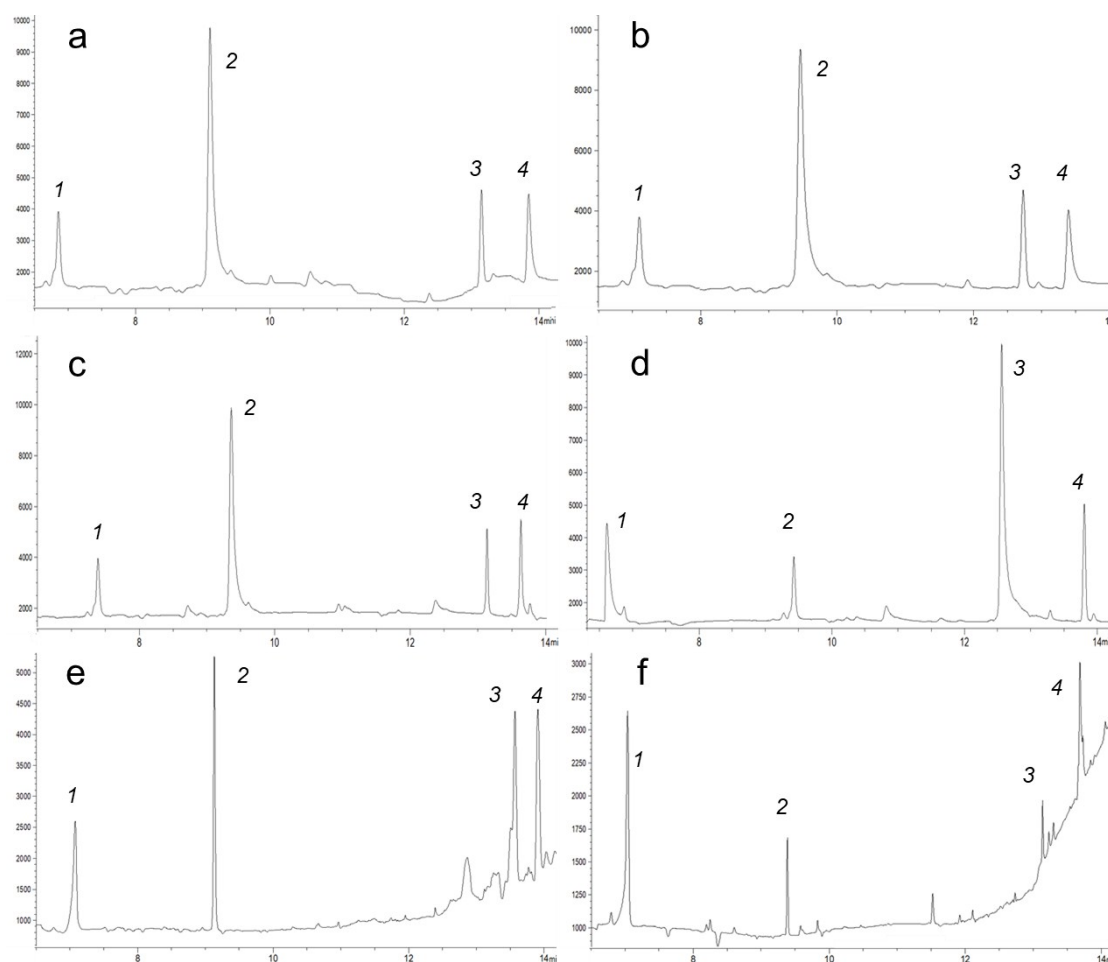| Samples	Concentration (ug L^{-1})			
	Trichloroethylene	Tetrachloroethylene	1,2-Dichlorobenzene	1,2,3,5-Tetrachlorobenzene
Rainwater	0.38	0.21	1.52	0.71
River water	4.44	0.43	4.58	1.15
Underground water	1.59	2.84	1.40	1.23
Sediment	5.46	0.20	ND	0.98
Honey	ND	ND	ND	ND
Juice	ND	ND	ND	ND

"ND" means under the detection limit.

Fig S1. The chromatograms of real environmental samples spiked four VOCs with lowest concentration of linearity: rainwater (a), river water (b), underground water (c), sediment (d), juice (e), and honey (f). The order of the four peaks: trichloroethylene (1), tetrachloroethylene (2), 1,2-dichlorobenzene (3) and 1,2,3,5-
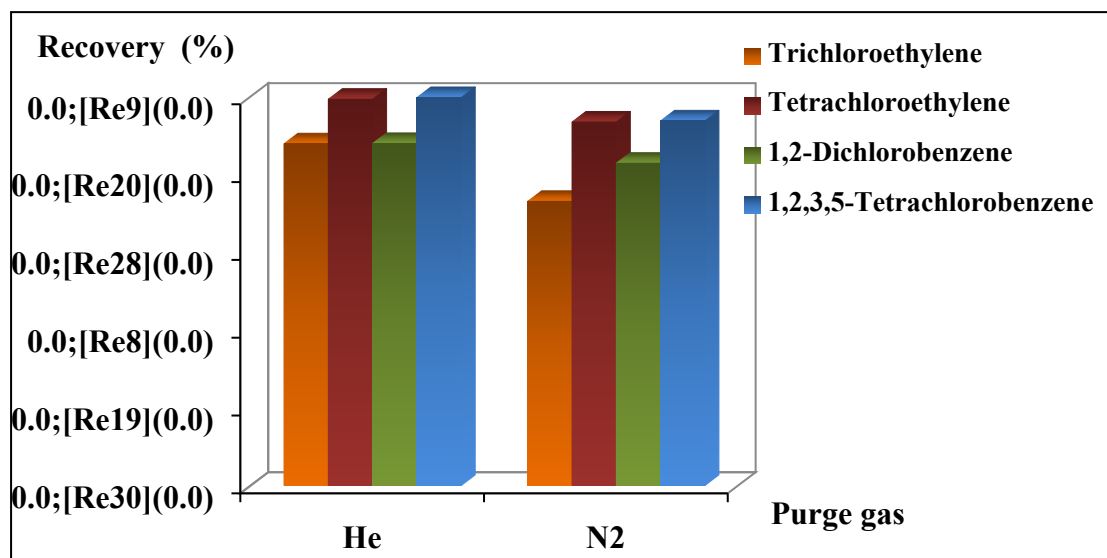
tetrachlorobenzene (4).

Fig S2. Optimization of gas type. Conditions: HLB cartridges; sample volume, 20 mL; sample concentration, 0.1 mg mL^{-1}; purge time, 45 min; pH=1; salinity, 20%; 40 ^{o}C; elution solvent: *n*-hexane: acetone=10:1, 10 mL; purge gas, N$_2$ or He, 0.2 L/min.
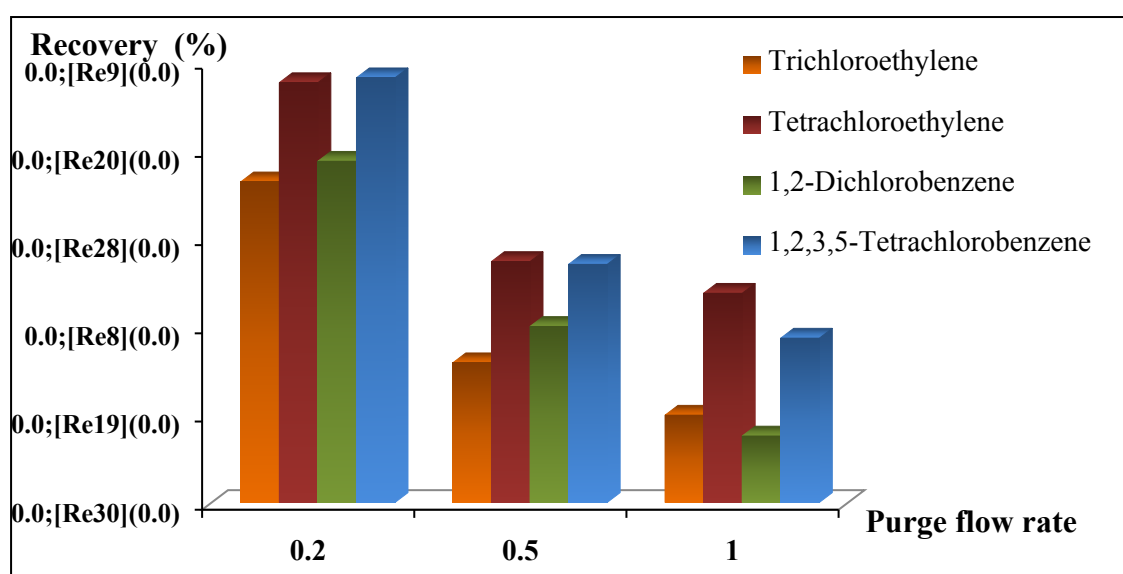

Fig S3. Optimization of purge flow rate. Conditions: HLB cartridges; sample volume, 20 mL; sample concentration, 0.1 mg mL^{-1}; purge time, 45 min; pH=1; salinity, 40%; 40 ℃; elution solvent: *n*-hexane: acetone=10:1, 10 mL; purge gas, N$_2$, 0.2, 0.5, and 1.0 L/min.
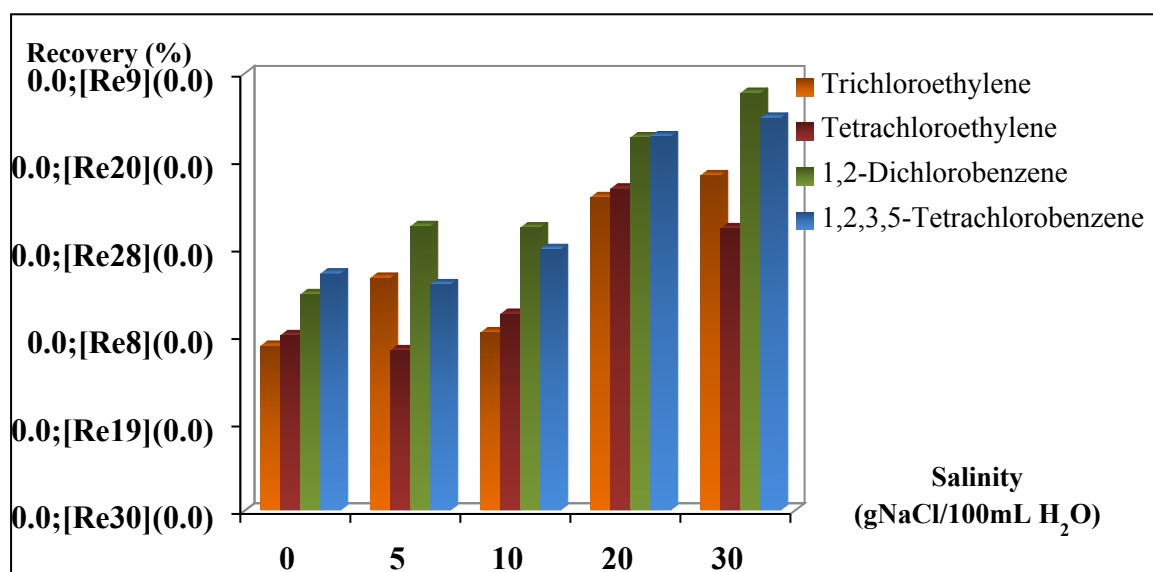
Fig S4. Effect of NaCl addition on the recoveries. Conditions: HLB cartridges; sample volume, 10 mL; sample concentration, 0.1 mg L^{-1}; purge gas, N$_2$, 0.2 L/min; purge time, 45 min; pH=1; 40 ºC; elution solvent: *n*-hexane: acetone=10:1, 10 mL; salinity, 0%, 5%, 10%, 20%, 30%.

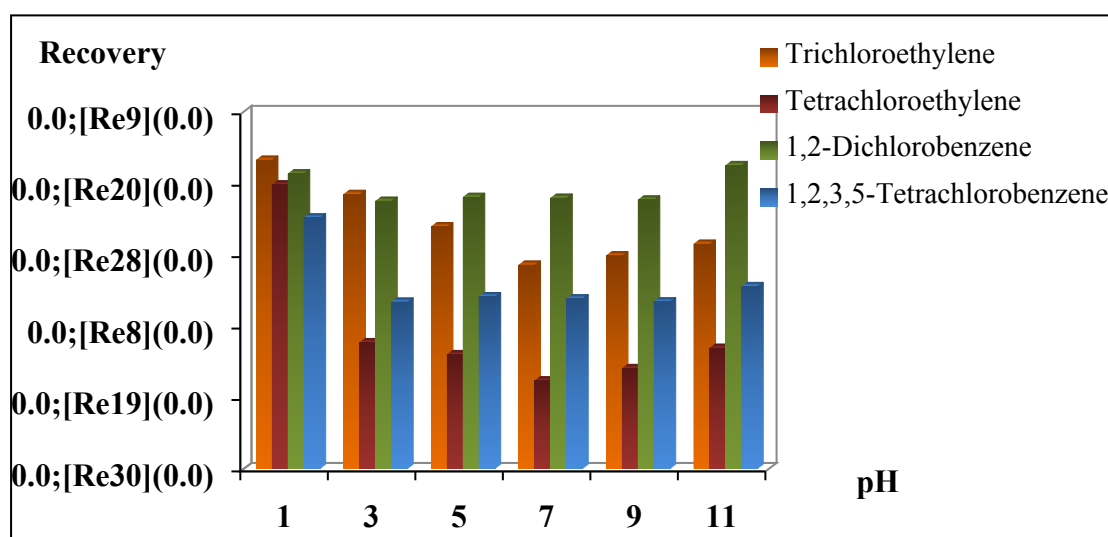Fig S5. Optimization of pH. Conditions: HLB cartridges; sample volume, 10 mL; sample concentration, 0.1 mg L^{-1}; purge gas, N$_2$, 0.2 L/min; purge time, 45 min; 40 ºC; elution solvent: *n*-hexane: acetone=10:1, 10 mL; salinity, 20%; pH=1, 3, 5, 7, 9, 11.