POLYCYCLIC AROMATIC HYDROCARBONS IN DRINKING WATER

HPLC METHOD

COLUMN:	SepServe PAH, 125 x 4.6 mm
MOBILE PHASE A:	Water
MOBILE PHASE B:	Acetonitrile
GRADIENT:	60% A for 1 min, then linear gradient to 100% B in 15 min
FLOW RATE:	1.2 mL/min
INJECTION VOLUME:	20 µL
DETECTION:	UV @ 254 nm (0.02 AUFS)

OASIS® HLB EXTRACTION METHOD

Conditions for Oasis® HLB Cartridge, 6 cc, 200 mg
Part Number WAT106202

CONDITION: 5 mL methylene chloride

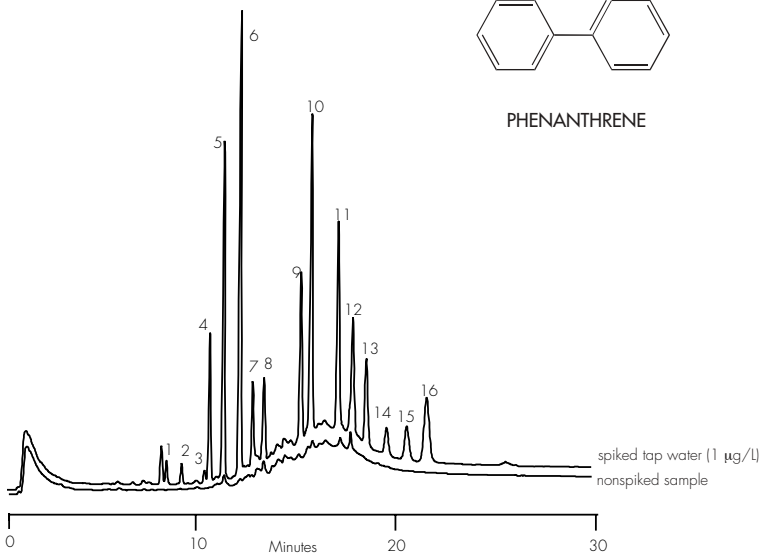
RINSE: 5 mL methanol
RINSE: 5 mL reagent H_2O

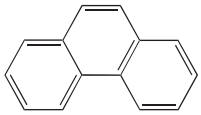
LOAD: 500 mL sample @ 15 mL/min

WASH: 5 mL reagent H_2O

ELUTE: 8 mL methylene chloride (5 mL bottle wash + 3 mL)

EVAPORATE AND RECONSTITUTE: with 1 mL acetonitrile





PHENANTHRENE

COMPOUNDS		% Recovery Tap Water 1.0 µg/L 4 replicates	% Recovery Tap Water 200 ng/L 4 replicates
1.	Naphthalene	66.5	55*
2.	Acenaphthylene	99.2	78*
3.	Acenaphthene	98.4	77*
4.	Fluorene	105	82.4
5.	Phenanthrene	114	94.4
6.	Anthracene	103	83.0
7.	Fluoranthene	115	91.9
8.	Pyrene	117	98.9
9.	Benzo(a)anthracene	102	85.9
10.	Chrysene	105	90.3
11.	Benzo(b)fluoranthene	104	80.1
12.	Benzo(k)fluoranthene	90.9	77.4
13.	Benzo(a)pyrene	94.3	69.8
14.	Dibenzo(g,h,l)perylene	92.1	59.5
15.	Benzoperylene	92.0	65.9
16.	Indenopyrene	92.8	62.3
		RSDs < 5 %	RSDs < 10 %

*result @ 220 nm

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