PAH limits for PNG
Kevin Armstrong
to:
Diana Engeman
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Hide Details
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To: Diana Engeman/R7/USEPA/US@EPA,

2 Attachments

82310 PNA Water 111312.pdf 8270D SIMS Water Reduced Volume 111312.pdf

Diana,
Attached are TestAmerica's current reporting limits and detection limits for both the 8270 SIM and 8310 Methods. TestAmerica believes the 8270 SIM method is preferable because the MS detector (used in 8270 SIM) is far more selective then a UV detector (used in 8310). A UV detector could potentially produce false positives and is susceptible to more matrix interferences which would elevate reporting limits.

TestAmerica's MDL for some analytes is lower by 8310, but the 8270 reporting limits are lower because of the potential false positives and matrix interferences with the 8310 UV detector. We have been running 8310 at PNG to be consistent with most of the historical data, but the lab would prefer switching to 8270 SIM.

Thanks,
Kevin

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TestAmerica Cedar Falls

Analytical Method Information

SW 8310

Water - NonPotable

Analyte	CAS Number	MDL (ug/L)	Reporting Limit (ug/L)
Acenaphthene	83-32-9	0.0220	0.200
Acenaphthylene	208-96-8	0.0870	0.400
Anthracene	120-12-7	0.0100	0.100
Benzo (a) anthracene	56-55-3	0.0200	0.100
Benzo (b) fluoranthene	205-99-2	0.0280	0.100
Benzo (k) fluoranthene	207-08-9	0.00700	0.100
Benzo (a) pyrene	50-32-8	0.00800	0.100
Benzo (g,h,i) perylene	191-24-2	0.00800	0.200
Chrysene	218-01-9	0.00800	0.100
Dibenzo (a,h) anthracene	53-70-3	0.0100	0.100
Fluoranthene	206-44-0	0.0100	0.100
Fluorene	86-73-7	0.0160	0.100
Indeno (1,2,3-cd) pyrene	193-39-5	0.00600	0.100
1-Methylnaphthalene	90-12-0	0.100	0.200
2-Methylnaphthalene	91-57-6	0.100	0.200
Naphthalene	91-20-3	0.0460	0.200
Phenanthrene	85-01-8	0.00500	0.100
Pyrene	129-00-0	0.0170	0.100
Surr: 2-Fluorobiphenyl	321-60-8		

TestAmerica Cedar Falls

Analytical Method Information

SW 8270D

Water - NonPotable

Analyte	CAS Number	MDL (ug/L)	Reporting Limit (ug/L)
Acenaphthene	83-32-9	0.00900	0.100
Acenaphthylene	208-96-8	0.00800	0.100
Anthracene	120-12-7	0.0100	0.100
Benzo (a) anthracene	56-55-3	0.0120	0.100
Benzo (b) fluoranthene	205-99-2	0.0160	0.100
Benzo (k) fluoranthene	207-08-9	0.0140	0.100
Benzo (a) pyrene	50-32-8	0.0150	0.100
Benzo (g,h,i) perylene	191-24-2	0.0110	0.100
Chrysene	218-01-9	0.0160	0.100
Dibenzo (a,h) anthracene	53-70-3	0.0130	0.100
Fluoranthene	206-44-0	0.0120	0.100
Fluorene	86-73-7	0.0130	0.100
Indeno (1,2,3-cd) pyrene	193-39-5	0.0130	0.100
2-Methylnaphthalene	91-57-6	0.0100	0.100
Naphthalene	91-20-3	0.0110	0.100
Phenanthrene	85-01-8	0.0180	0.100
Pyrene	129-00-0	0.00900	0.100
Surr: 2-Fluorobiphenyl	321-60-8		
Surr: Nitrobenzene-d5	4165-60-0		
Surr: Terphenyl-d14	1718-51-0		