Experimental NELAC PT

Fields of Proficiency Testing with PTRLs

Drinking Water

Effective July 1, 2007

Matrix	EPA Analyte Code	NELAC Analyte Code	Analyte	Conc Range	Acceptance Criteria[2,3,4,5] a	b	c	d	NELAC PTRL[6]
			Misc Analytes						
Drinking Water		1045	Hexavalent Chromium (VI)	5 to 50 µg/L	0.9976	0.0479	0.0491	0.0441	4.5 µg/L
Drinking Water		1620	Corrosivity	-4 to +4 SI units	± 0.4 SI units fixed acceptance limit				Not Applicable
Drinking Water		1710	Dissolved Organic Carbon (DOC)	1.2 to 4.9 mg/l	0.9873	0.0565	0.0643	0.0769	0.93 mg/l
Drinking Water		1895	Perchlorate	4 to 20 µg/L	0.9644	-0.0135	0.0690	-0.0012	3.2 µg/L
Drinking Water		1990	Silica as SiO_2	5 to 50 mg/l	±15% fixed acceptance limit				4.2 mg/l
Drinking Water		2025	Surfactants - MBAS	0.05 to 1.0 mg/l	0.9535	0.0170	0.0721	0.0144	0.028 mg/l
Drinking Water		2060	UV 254 Absorbance	0.02 to 0.7 cm-1	1.0976	-0.0042	0.1097	0.0043	0.0047 cm-1
			VOCs[1]	µg/L					µg/L
Drinking Water		4370	T-amylmethylether (TAME)	5 to 50	±40% fixed acceptance limit				3.0
Drinking Water		4420	Tert-Butyl Alcohol	5 to 50	±40% fixed acceptance limit				3.0
Drinking Water		4770	Ethyl-t-butylether (ETBE)	5 to 50	±40% fixed acceptance limit				3.0
Drinking Water		5180	1,2,3-Trichloropropane[7]	0.2 to 2.0	±40% fixed acceptance limit				0.12
Drinking Water		5185	Trichlorotrifluoroethane (Freon 113)	5 to 50	±40% fixed acceptance limit				3.0
Drinking Water		9375	Di-isopropylether (DIPE)	5 to 50	±40% fixed acceptance limit				3.0
			PAH/Phthalates[1]	µg/L					µg/L
Drinking Water		5500	Acenaphthene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5505	Acenaphthylene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5555	Anthracene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5575	Benzo(a)anthracene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5585	Benzo(b)fluoranthene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5590	Benzo (g,h,i)perylene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5600	Benzo(k)fluoranthene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5670	Butylbenzylphthalate	10 to 50	±60% fixed acceptance limit				4.0
Drinking Water		5855	Chrysene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5895	Dibenz(a,h)anthracene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5925	Di-n-butylphthalate	10 to 50	±60% fixed acceptance limit				4.0
Drinking Water		6070	Diethylphthalate	10 to 50	±60% fixed acceptance limit				4.0
Drinking Water		6135	Dimethylphthalate	10 to 50	±60% fixed acceptance limit				4.0
Drinking Water		6200	Di-n-octylphthalate	10 to 50	±60% fixed acceptance limit				4.0
Drinking Water		6265	Fluoranthene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		6270	Fluorene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		6315	Indeno(1,2,3-cd)pyrene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		5005	Naphthalene	2 to 50	±40% fixed acceptance limit				1.2
Drinking Water		6615	Phenanthrene	1 to 10	±50% fixed acceptance limit				0.50
Drinking Water		6665	Pyrene	1 to 10	±50% fixed acceptance limit				0.50

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			Pesticides[1]	µg/L					µg/L
Drinking Water		7130	Bromacil	2 to 20	±45% fixed acceptance limit				1.1
Drinking Water		7875	Molinate (Ordram)	5 to 50	±45% fixed acceptance limit				2.7
			Herbicides[1]	µg/L					µg/L
Drinking Water		8530	Bentazon	10 to 140	0.9052	-0.1670	0.2369	1.2766	1.5
Drinking Water		8540	Chloramben	20 to 100	±50% fixed acceptance limit				10
Drinking Water		8550	Dacthal diacid (DCPA)	20 to 100	0.8791	-2.7986	0.4470	-0.1212	2.0
Drinking Water		8600	3,5-Dichlorobenzoic acid	10 to 100	±50% fixed acceptance limit				5.0
Drinking Water		8605	Dichloroprop	10 to 100	0.9026	-0.7647	0.1517	0.2149	4.7
Drinking Water		9528	Paraquat	8 to 100	±50% fixed acceptance limit				4.0
			Carbamates	µg/L					µg/L
Drinking Water		7800	Methiocarb	30 to 140	0.9192	1.6720	0.0476	1.8277	22
Drinking Water		8080	Baygon	30 to 140	1.0298	-1.9353	0.0893	0.2199	23

1) For volatile, PAH/Phthalate, pesticide, and herbicide standards, providers must include a minimum number of analytes using the same criteria described in Chapter 2, Appendix B, Section B.1.2.

2) The acceptance criteria found in the EPA's *National Standards for Water Proficiency Testing Studies* are incorporated herein by reference. Acceptance criteria for FoPTs not included in the *National Standards* are presented in this table. Acceptance limits are set at the Mean ± 2 SD (Mean = a*T + b; SD = c*T + d where T is the assigned value).

3) If the lower acceptance limit generated using the criteria contained in this table is less than (<) 10% of the assigned value, the lower acceptance limits are set at 10% of the assigned value.

4) If the lower acceptance limit generated using the criteria contained in this table is greater than (>) 90% of the assigned value, the lower acceptance limits are set at 90% of the assigned value.

5) If the upper acceptance limit generated using the criteria contained in this table is less than (<) 110% of the assigned value, the upper acceptance limits are set at 110% of the assigned value.

6) NELAC Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing NELAC PT samples. These levels are the lowest acceptable results that could be obtained from the lowest spike level for each analyte. The laboratory should report any positive result down to the PTRL. It is recognized that in some cases (especially for analytes that typically exhibit low recovery) the PTRL may be below the standard laboratory reporting limit. However, the laboratory should use a method that is sensitive enough to generate results at the PTRL shown. NELAC PTRLs are also provided as guidance to PT Providers. At a minimum for all analytes with an assigned value equal to "0", the PT Provider should verify that the sample does not contain the analyte at a concentration greater than or equal to the PTRL.

7) The acceptance criteria for 1,2,3-Trichloropropane are technology specific for gas chromatography-electron capture detection.