NELAC PT for Accreditation Fields of Proficiency Testing with PTRLs Drinking Water Effective October 1, 2007 Acceptance Criteria 1,2,3,4 NELAC PTRL⁵ NELAC Matrix EPA Analyte Conc Range Analyte Analyte b d а Code Code pCi/L (except as noted) pCi/L Radiochemistry Drinking Water 0001 2830 Gross Alpha 7 to 75 1.4802 1.1366 3.0 0.8586 0.1610 **Drinking Water** 0002 2840 Gross Beta 8 to 75 0.8508 2.9725 0.0571 2.9372 3.0 **Drinking Water** 8000 2.1 2875 | Iodine-131 3 to 30 0.9711 0.8870 0.0624 0.6455 Drinking Water 0012 2965 Radium-226 0.9253 0.3175 0.0942 0.0988 0.86 1 to 20 **Drinking Water** Radium-228 0.9243 0.2265 0.3788 0.88 0013 2970 2 to 20 0.1105 **Drinking Water** 0014 3055 Natural Uranium 2 to 70 0.9568 0.0773 0.0668 0.2490 1.2 **Drinking Water** 0014 3 to 104 ug/L 1.8 ug/L 3055 Uranium (mass) 0.9568 0.1153 0.0668 0.3716 **Drinking Water** 0009 2995 Strontium-89 10 to 70 0.9648 0.1591 0.0379 2.6203 3.8 Drinking Water 0010 3005 Strontium-90 3 to 45 0.9369 0.2279 0.0902 0.5390 1.4 **Drinking Water** 0011 3030 Tritium 1000 to 24000 0.9883 -46.4776 0.0532 38.8382 760 Gamma Emitters⁶ **Drinking Water** 0007 2765 Barium-133 10 to 100 0.9684 -0.1424 0.0503 1.0737 6.4 Cesium-134⁷ **Drinking Water** 2800 10 to 100 0.9369 0.0845 0.0482 0.9306 6.6 0005 **Drinking Water** 2805 Cesium-137⁷ 20 to 240 0.2624 0.0347 1.5185 16 0006 1.0225 Drinking Water 0003 2815 Cobalt-60 10 to 120 0.0335 1.3315 1.0257 0.3051 7.2 3070 Zinc-65 **Drinking Water** 0004 30 to 360 1.0495 0.1245 0.0530 1.8271 25

	NEL.	AC PT for Accreditation	n								
Fields of Proficiency Testing with PTRLs Drinking Water Effective October 1, 2007											
						1) Acceptance limits are set at the Mea	ean ± 2 SD				
(Mean = $a*T + b$; SD = $c*T + d$ where T											
2) If the lower acceptance limit generat	ited using the criteria contained in the	is table is less than (<) 10% of the	assigned valu	ue, the lower acceptance limits are set							
at 10% of the assigned value.											
3) 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.											
4) If the upper acceptance limit general	ated using the criteria contained in th	is table is less than (<) 110% of the	e assigned va	alue, the upper acceptance limits are s	et .						
at 110% of the assigned value.											
5) NELAC Proficiency Testing Reporting											
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 t	than or equal to the PTRL.										
C) Laboratoria condiza a maintainina	NELAD accorditation for Commo (Chatan) Emittana must maat NELA	C DT requires	and for all Common Emitter							
6) Laboratories seeking or maintaining NELAP accreditation for Gamma (Photon) Emitters must meet NELAC PT requirements for all Gamma Emitter analytes in the Fields of Proficiency Testing in a given PT study, by technology/method (Barium-133, Cesium-134, Cesium-137, Cobalt-60, Zinc-65).											
analytes in the Fields of Proficiency Te	ssung in a given PT study, by techno	nogy/method (bandin-153, Cesium	1-134, Cesium	1-137, Gubail-ou, Zilic-ob).							
7) Laboratorios socking or maintaining	NEL AD accreditation for Padioactiv	O Cosium must moot NELAC DT	roquiromonto f	for both Padioactive Cosium							
7) Laboratories seeking or maintaining NELAP accreditation for Radioactive Cesium must meet NELAC PT requirements for both Radioactive Cesium analytes in the Fields of Proficiency Testing in a given PT study, by technology/method (Cesium-134, Cesium-137).											
analytes in the Fields of Fibricieficy Te	samy in a given FT study, by techno	Cesium-134, Cesium	11-131).								
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