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Matrix	*Analyte*[9]	*PTRL*	*Units*
	Microbiology		
DW	Total Coliform[1,18,19]	P/A	N/A
DW	Fecal Coliform[1,18,19]	P/A	N/A
DW	E.coli[1,18,19]	P/A	N/A
DW	Heterotrophic Plate Count (MF, PP)[2]	2	CFU/mL
DW	Heterotrophic Plate Count (MPN)[3]	2	MPN/mL
DW	E.coli (MF)[2]	2	CFU/100 mL
DW	E.coli (MPN-Multiple Tube)[3]	2	MPN/100 mL
DW	E.coli (MPN-Multiple Well)[3]	2	MPN/100 mL
DW	Fecal Coliform (MF)[2]	2	CFU/100 mL
DW	Fecal Coliform (MPN-Multiple Tube)[3]	2	MPN/100 mL
DW	Fecal Coliform (MPN-Multiple Well)[3]	2	MPN/100 mL
DW	Total Coliform (MF)[2]	2	CFU/100 mL
DW	Total Coliform (MPN-Multiple Tube)[3]	2	MPN/100 mL
DW	Total Coliform (MPN-Multiple Well)[3]	2	MPN/100 mL
DW	Cryptosporidium*	N/A	#oocysts
DW	Giardia*	N/A	#cysts
	Trace Metals		
DW	Aluminum	104	µg/L
DW	Antimony	4.2	µg/L
DW	Arsenic	3.5	µg/L
DW	Barium	420	µg/L
DW	Beryllium	1.7	µg/L
DW	Boron	680	µg/L
DW	Cadmium	1.6	µg/L
DW	Chromium	8.5	µg/L
DW	Chromium (VI)	4.0	µg/L
DW	Copper	45	µg/L
DW	Iron	80	µg/L
DW	Lead	3.5	µg/L
DW	Manganese	34	µg/L
DW	Mercury	0.35	µg/L
DW	Molybdenum	13	µg/L
DW	Nickel	8.5	µg/L
DW	Selenium	8.0	µg/L
DW	Silver	14	µg/L
DW	Thallium	1.4	µg/L
DW	Vanadium	42	µg/L

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DW	Zinc	170	µg/L
DW/NPW	Cobalt[8]	85	µg/L
DW/NPW	Strontium[8]	42	µg/L
DW/NPW	Tin[8]	140	µg/L
DW/NPW	Titanium[8]	51	µg/L
	Nutrients		
DW	Nitrate as N	2.7	mg/L
DW	Nitrate plus Nitrite as N	2.6	mg/L
DW	Nitrite as N	0.34	mg/L
DW	Orthophosphate as P	0.43	mg/L
DW/NPW	Ammonia as N[8]	0.60	mg/L
DW/NPW	Total Kjeldahl-Nitrogen[8]	1.95	mg/L
DW/NPW	Total Phosphorus[8]	0.35	mg/L
	Minerals		
DW	Chloride	17	mg/L
DW	Fluoride	0.90	mg/L
DW	Sulfate	21	mg/L
DW	Potassium	8.5	mg/L
DW	Sodium	11	mg/L
DW	Calcium	26	mg/L
DW	Magnesium	1.7	mg/L
DW	Calcium hardness as $CaCO_3$	64	mg/L
DW	Total Hardness as $CaCO_3$	71	mg/L
DW/NPW	Sulfide[8]	0.20	mg/L
DW/NPW	Residue-total[8]	95	mg/L
	Inorganic Disinfection By-Products		
DW	Bromate	4.9	µg/L
DW	Bromide	42	µg/L
DW	Chlorate	42	µg/L
DW	Chlorite	70	µg/L
	Misc Analytes		
DW	Alkalinity as $CaCO_3$/L	22	mg/L
DW	Asbestos	1	MF/L
DW	Corrosivity (langelier index)	N/A	N/A
DW	Cyanide	0.075	mg/L
DW	Dissolved Organic Carbon (DOC)	1.1	mg/L
DW	Perchlorate	3.2	ug/L
DW	pH	N/A	N/A

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DW	Residual Free Chlorine	0.37	mg/L
DW	Silica as SiO_2	4.2	mg/L
DW	Conductivity	117	µmhos/cm
DW	Surfactants - MBAS	0.020	mg/L
DW	Total Residual Chlorine	0.40	mg/L
DW	Residue-filterable (TDS)	80	mg/L
DW	Total Organic Carbon (TOC)	1.0	mg/L
DW	Turbidity	0.36	NTU
DW	UV 254	0.038	cm-1
DW/NPW	Acidity as $CaCO_3/L$[8]	585	mg/L
DW/NPW	Residue-nonfilterable (TSS)[8]	12	mg/L
DW/NPW	Total Phenolics[8]	0.16	mg/L
DW/NPW	Biochemical oxygen demand[8]	4.9	mg/L
DW/NPW	Carbonaceous BOD (CBOD)[8]	3.1	mg/L
DW/NPW	Chemical Oxygen Demand (COD)[8]	16	mg/L
DW/NPW	n-Hexane Extractable Material (O&G)[8,14]	8.8	mg/L
DW/NPW	Non-Polar Extractable Material (TPH)[8,15]	7.6	mg/L
	Regulated Volatile Organic Compounds (VOCs)[7]		
DW	Benzene[7,13]	1.2	µg/L
DW	Carbon Tetrachloride[7,13]	1.2	µg/L
DW	Chlorobenzene[7,13]	1.2	µg/L
DW	1,2-Dichlorobenzene (o-Dichlorobenzene)[7,13]	1.2	µg/L
DW	1,4-Dichlorobenzene (p-Dichlorobenzene)[7,13]	1.2	µg/L
DW	1,2-Dichloroethane (Ethylene dichloride)[7,13]	1.2	µg/L
DW	1,1-Dichloroethylene[7,13]	1.2	µg/L
DW	cis-1,2-Dichloroethylene[7,13]	1.2	µg/L
DW	trans-1,2-Dichloroethylene[7,13]	1.2	µg/L
DW	Methylene Chloride (Dichloromethane)[7,13]	1.2	µg/L
DW	1,2-Dichloropropane[7,13]	1.2	µg/L
DW	Ethylbenzene[7,13]	1.2	µg/L
DW	Styrene[7,13]	1.2	µg/L
DW	Tetrachloroethylene (Perchloroethylene)[7,13]	1.2	µg/L
DW	Toluene[7,13]	1.2	µg/L
DW	1,1,1-Trichloroethane[7,13]	1.2	µg/L
DW	1,1,2-Trichloroethane[7,13]	1.2	µg/L
DW	Trichloroethene (Trichloroethylene)[7,13]	1.2	µg/L
DW	1,2,4-Trichlorobenzene[7,13]	1.2	µg/L
DW	Vinyl Chloride (Chloroethene)[7,17]	1.2	µg/L
DW	Xylene (total)[7,13]	1.2	µg/L

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	Low Level Volatile Organic Compounds (VOCs)[16]		
DW	1,2-Dibromo-3-chloropropane (DBCP)[16]	0.06	µg/L
DW	1,2-Dibromoethane (EDB, Ethylene dibromide)[16]	0.03	µg/L
DW	1,2,3-Trichloropropane[16]	0.12	µg/L
	Total Trihalomethanes (TTHMs)[4]		
DW	Bromodichloromethane[4]	4.0	µg/L
DW	Bromoform[4]	4.0	µg/L
DW	Chlorodibromomethane[4]	4.0	µg/L
DW	Chloroform[4]	4.0	µg/L
	Volatile Organic Compounds (VOCs)		
DW	Bromobenzene	1.2	µg/L
DW	Bromochloromethane	1.2	µg/L
DW	Methyl bromide (Bromomethane)	3.0	µg/L
DW	n-Butylbenzene	1.2	µg/L
DW	sec-Butylbenzene	1.2	µg/L
DW	tert-Butylbenzene	1.2	µg/L
DW	Chloroethane (Ethyl chloride)	3.0	µg/L
DW	Methyl chloride (Chloromethane)	3.0	µg/L
DW	2-Chlorotoluene	1.2	µg/L
DW	4-Chlorotoluene	1.2	µg/L
DW	Dibromomethane (Methylene bromide)	1.2	µg/L
DW	1,3-Dichlorobenzene (m-Dichlorobenzene)	1.2	µg/L
DW	Dichlorodifluoromethane (Freon 12)	3.0	µg/L
DW	1,1-Dichloroethane	1.2	µg/L
DW	1,3-Dichloropropane	1.2	µg/L
DW	2,2-Dichloropropane	1.2	µg/L
DW	1,1-Dichloropropene	1.2	µg/L
DW	cis-1,3-Dichloropropene	1.2	µg/L
DW	trans-1,3-Dichloropropylene	1.2	µg/L
DW	Hexachlorobutadiene	3.0	µg/L
DW	Isopropylbenzene	1.2	µg/L
DW	4-Isopropyltoluene (p-Cymene)	1.2	µg/L
DW	Methyl tert-butylether (MTBE)	3.0	µg/L
DW	Naphthalene	1.2	µg/L
DW	n-Propylbenzene	1.2	µg/L
DW	1,1,1,2-Tetrachloroethane	1.2	µg/L
DW	1,1,2,2-Tetrachloroethane	1.2	µg/L
DW	1,2,3-Trichlorobenzene	3.0	µg/L

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DW	Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	3.0	µg/L
DW	1,2,3-Trichloropropane	1.2	µg/L
DW	1,2,4-Trimethylbenzene	1.2	µg/L
DW	1,3,5-Trimethylbenzene	1.2	µg/L
	Pesticides		
DW	Alachlor	1.1	µg/L
DW	Aldrin	0.08	µg/L
DW	Atrazine	1.1	µg/L
DW	Butachlor	1.1	µg/L
DW	Chlordane (tech.)	1.1	µg/L
DW	Dieldrin	0.28	µg/L
DW	Endrin	0.14	µg/L
DW	Heptachlor	0.11	µg/L
DW	Heptachlor epoxide	0.11	µg/L
DW	Hexachlorobenzene	0.22	µg/L
DW	Hexachlorocyclopentadiene	0.49	µg/L
DW	gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	0.11	µg/L
DW	Methoxychlor	1.1	µg/L
DW	Metolachlor	1.1	µg/L
DW	Metribuzin	1.0	µg/L
DW	Propachlor (Ramrod)	0.55	µg/L
DW	Simazine	1.1	µg/L
DW	Toxaphene (Chlorinated Camphene)	1.1	µg/L
DW	Trifluralin (Treflan)	0.55	µg/L
	Carbamates & Vydate		
DW	Aldicarb (Temik)	11	µg/L
DW	Aldicarb Sulfone	11	µg/L
DW	Aldicarb Sulfoxide	11	µg/L
DW	Carbaryl (Sevin)	11	µg/L
DW	Carbofuran (Furaden)	8.3	µg/L
DW	3-Hydroxycarbofuran	12	µg/L
DW	Methomyl (Lannate)	12	µg/L
DW	Oxamyl	11	µg/L
	Chlorinated Acid Herbicides		
DW	Acifluorfen	5.0	µg/L
DW	2,4-D	5.0	µg/L
DW	2,4-DB	10	µg/L

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Matrix	*Analyte*[9]	*PTRL*	*Units*
DW	Dalapon	5.0	µg/L
DW	Dicamba	10	µg/L
DW	Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	3.1	µg/L
DW	Pentachlorophenol	0.50	µg/L
DW	Picloram	5.0	µg/L
DW	Silvex (2,4,5-TP)	5.0	µg/L
DW	2,4,5-T	5.0	µg/L
	Other Herbicides		
DW	Diquat	4.0	µg/L
DW	Endothall	40	µg/L
DW	Glyphosate	300	µg/L
	Haloacetic acids		
DW	Bromochloroacetic Acid	3.0	µg/L
DW	Dibromoacetic Acid[5]	3.0	µg/L
DW	Dichloroacetic Acid[5]	3.0	µg/L
DW	Bromoacetic Acid[5]	3.0	µg/L
DW	Chloroacetic Acid[5]	6.0	µg/L
DW	Trichloroacetic Acid (TCAA)[5]	3.0	µg/L
	Adipate/Phthalate		
DW	bis(2-Ethylhexyl)adipate	2.5	µg/L
DW	Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl) phthalate, DEHP)	2.4	µg/L
	PCBs in Water[6]		
DW	Decachlorobiphenyl (BZ-209)[6]	0.05	µg/L
DW	PCB Aroclor Identification[6]	N/A	N/A
	PAH		
DW	Benzo(a)pyrene	0.02	µg/L
	Dioxin		
DW	2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	11	pg/L
	Radiochemistry		
DW/NPW	Gross Alpha[12]	3.0	pCi/L
DW/NPW	Gross Beta[12]	3.0	pCi/L
DW/NPW	Iodine-131[12]	2.1	pCi/L

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Matrix	***Analyte[9]***	***PTRL***	***Units***
DW/NPW	Radium-226[12]	0.86	pCi/L
DW/NPW	Radium-228[12]	0.88	pCi/L
DW/NPW	Natural Uranium[12]	1.2	pCi/L
DW/NPW	Uranium (mass)[12]	1.8	ug/L
DW/NPW	Strontium-89[12]	3.8	pCi/L
DW/NPW	Strontium-90[12]	1.4	pCi/L
DW/NPW	Tritium[12]	760	pCi/L
	Gamma Emitters		
DW/NPW	Barium-133[10,12]	6.4	pCi/L
DW/NPW	Cesium-134[10,11,12]	6.6	pCi/L
DW/NPW	Cesium-137[10,11,12]	16	pCi/L
DW/NPW	Cobalt-60[10,12]	7.2	pCi/L
DW/NPW	Zinc-65[10,12]	25	pCi/L

*) Identifies New Field of Proficiency Testing.

1) Laboratories analyzing qualitative sample sets for more than one method in a particular study shall obtain a unique ten-sample set for each method reported.

2) These limits are for quantitative methods using membrane filtration (MF) or pour-plate (PP) techniques.

3) These limits are for quantitative methods using most probable number (MPN) techniques.

4) Laboratories seeking or maintaining accreditation for DW TTHMs must meet PT requirements for all 4 TTHM FoPTs in the given study, by method.

5) Laboratories seeking or maintaining accreditation for DW HAA5 must meet PT requirements for 4 out of 5 HAA5 FoPTs in the given study, by method.

6) One sample in every study, containing one Aroclor, selected at random from among the Aroclors listed (1016, 1221, 1232, 1242, 1248, 1254 or 1260) for the analysis of PCBs as decachlorobiphenyl. Laboratories must analyze and report results for all Aroclors in an individual PT study. Incorrect identification or quantitation of one Aroclor will result in failure for the group.

7) Unless a fixed limit is specified, the acceptance limits for regulated volatiles are ±20% at ≥ 10ug/L or ±40% at < 10ug/L and ±40% for Vinyl Chloride.

8) Laboratories seeking to obtain or maintain accreditation for these analytes in the DW matrix must successfully perform a PT in the Non-Potable Water Matrix, also known as a WP study.

9) All FoPTs must meet the design, verification, homogeneity, stability, and acceptance limits described in 40 CFR Part 141, V3 of the TNI Standard, and the TNI FoPT Tables.

10) Laboratories seeking or maintaining accreditation for Gamma (Photon) Emitters must meet PT requirements for all Gamma Emitter analytes in the FoPT in a given PT study, by technology/method (Barium-133, Cesium-134, Cesium-137, Cobalt-60, Zinc-65).

11) Laboratories seeking or maintaining accreditation for Radioactive Cesium must meet PT requirements for both Radioactive Cesium analytes in the FoPT in a given PT study, by technology/method (Cesium-134, Cesium-137).

12) Laboratories seeking to obtain or maintain accreditation for these analytes in the NPW matrix must successfully perform a PT in the Drinking Water Matrix, also known as a WS study.

13) These 20 VOCs constitute the USEPA's Group 1 VOCs. Laboratories seeking or maintaining accreditation for Group 1 VOCs must analyze and report results for all 20 Group 1 VOCs in a given study. Not Acceptable results for ≥ 5 compounds results in a Failure for all 20 compounds.

14) n-Hexane Extractable Material (HEM) per solvent extraction followed by gravimetric or infrared spectrometric analysis (Oil & Grease).

15) non-Polar Extractable Material per solvent extraction and Silica Gel Treated (SGT) followed by gravimetric or infrared spectrometric analysis (Total Petroleum Hydrocarbons).

16) The Low Level Analytes are specifically intended for technologies/methods that can achieve the listed PTRL. Laboratories analyzing routine environmental samples using technologies/methods that can achieve the listed PTRLs must analyze the Low Level Analyte PT samples.

17) Laboratories seeking or maintaining accreditation for Vinyl Chloride must also seek or maintain accreditation for the Group 1 VOCs.

18) The ten-sample set which is provided to the participant laboratories shall contain bacteria that produces the following results when analyzed:

- Positive results for total coliforms, fecal coliforms and E. coli.
- Positive results for total coliforms and negative results for fecal coliforms and E. coli.
- Negative results for total coliforms, fecal coliforms and E. coli.
- These limits are for Presence-Absence only.

19) The ten-sample set shall be assigned lot numbers and randomly composed of samples as follows:

- Two to four samples containing an aerogenic strain of Escherichia which will ensure positive results for total coliforms, fecal coliforms and E. coli when analyzed by any of the USEPA approved methods.

- Two to four samples containing an aerogenic strain of Enterobacter species and/or other microorganism which will ensure positive results for total coliforms and negative results for the fecal coliforms and E. coli when analyzed by any of the USEPA approved methods.
- One or two samples containing Pseudomonas species and/or other microorganism which will ensure negative results for total coliforms, fecal coliforms and E. coli when analyzed by any of the USEPA approved methods.
- One or two samples which do not contain any microorganisms which ensure negative results for total coliforms, fecal coliforms and E. coli when analyzed by any of the USEPA approved methods.