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Ottawa, ON K1P 6L5  
Canada

55, rue Metcalfe, bureau 600  
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## **SCOPE OF ACCREDITATION**

**Institut national de santé publique du Québec, Centre de toxicologie du Québec  
LABORATOIRE DE TOXICOLOGIE  
945, ave Wolfe 4e étage  
Québec, QC  
G1V 5B3**

Accredited Proficiency Testing Provider No. 613  
(Conforms with requirements of CAN-P-43)

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FIELDS OF TESTING: Toxicology

PROGRAM SPECIALTY AREA: Proficiency Testing Provider

SCOPE ISSUED ON: 2016-11-15

ACCREDITATION VALID TO: 2019-01-30

**Remarque:** La présente portée d'accréditation existe également en français, sous la forme d'un document distinct.

**Note:** This scope of accreditation is also available in French as a separately issued document.

### **PROFICIENCY TESTING PARAMETERS FOR WHICH THE PROVIDER IS ACCREDITED**

#### **Metals:**

**Programme de comparaisons interlaboratoires pour les métaux en milieu biologique/  
Interlaboratory Comparison Program for Metals in Biological Matrices (PCI)**

Analyte / Biological matrix	Concentration range (lower-upper)
Serum Aluminum	0,40-10 µmol/L
Urine Arsenic (Inorganic)	0,30-10 µmol/L
Urine Arsenic (Total)	0,10-20 µmol/L
Blood Cadmium	5,0-150 nmol/L
Urine Cadmium	5,0-150 nmol/L
Urine Chromium	20-1500 nmol/L
Serum Copper	1,0-50 µmol/L
Urine Copper	0,10-20 µmol/L
Urine Fluoride	10-1500 µmol/L
Urine Iodide	0,10-3,1 µmol/L
Blood Lead	0,050-5,0 µmol/L
Urine Lead	0,010-5,0 µmol/L
Serum Manganese	5,0-125 nmol/L
Blood Mercury (inorganic)	5,0-500 nmol/L
Blood Mercury (organic)	5,0-250 nmol/L
Urine Mercury	2,0-1500 nmol/L
Serum Selenium	0,50-5,0 µmol/L
Urine Selenium	0,30-5,0 µmol/L
Serum Zinc	2,0-50 µmol/L
Urine Zinc	1,0-25 µmol/L

**Metals:**

**Programme d'assurance qualité externe multiélément QMEQAS/  
Quebec Multielement External Quality Assessment Scheme (QMEQAS)**

Analyte	Concentration range (lower-upper) Hair (SI units)	Concentration range (lower-upper) Blood (SI units)	Concentration range (lower-upper) Serum (SI units)	Concentration range (lower-upper) Urine (SI units)
Aluminum	0,29-7,5 µmol/g	2,0-11 µmol/L	0,40-10 µmol/L	2,0-11 µmol/L
Antimony	1,6-21 nmol/g	2,0-160 nmol/L	1,0-65 nmol/L	1,0-65 nmol/L
Arsenic	0,80-54 nmol/g	20-530 nmol/L	30-530 nmol/L	0,10-20 µmol/L
Barium	0,35-185 nmol/g	2,0-70 nmol/L	10-210 nmol/L	5,0-300 nmol/L
Beryllium	0,0040-0,12 µmol/g	0,30-2,2 µmol/L	0,20-3,3 µmol/L	0,20-1,6 µmol/L
Bismuth	0,47-24 nmol/g	0,50-140 nmol/L	0,50-140 nmol/L	2,0-235 nmol/L
Cadmium	0,53-90 nmol/g	5,0-150 nmol/L	2,0-150 nmol/L	5,0-150 nmol/L
Chromium	7,6-290 nmol/g	10-190 nmol/L	10-190 nmol/L	20-1500 nmol/L
Cobalt	1,6-170 nmol/g	4,0-165 nmol/L	5,0-130 nmol/L	5,0-250 nmol/L
Copper	0,0030-6,3 µmol/g	2,0-75 µmol/L	1,0-50 µmol/L	0,10-20 µmol/L
Iodine	0,0075-0,080 µmol/g	0,30-1,1 µmol/L	0,010-1,1 µmol/L	0,10-3,1 µmol/L
Lead	0,00020-0,15 µmol/g	0,050-5,0 µmol/L	0,050-1,2 µmol/L	0,010-5,0 µmol/L

Manganese	1,8-275 nmol/g	50-900 nmol/L	5,0-125 nmol/L	5,0-180 nmol/L
Mercury	2,4-50 nmol/g	5,0- 500 nmol/L	5,0-50 nmol/L	2,0-1500 nmol/L
Molybdenum	0,52-21 nmol/g	11-150 nmol/L	3,2-150 nmol/L	100-10400 nmol/L
Nickel	1,7-260 nmol/g	30-200 nmol/L	26-500 nmol/L	10-1000 nmol/L
Platinum	0,25-2,6 nmol/g	0,50-25 nmol/L	0,50-5,0 nmol/L	3,0-25 nmol/L
Selenium	0,0075-0,13 µmol/g	0,70-10 µmol/L	0,50-5,0 µmol/L	0,30-5,0 µmol/L
Silver	0,46-38 nmol/g	3,0-70 nmol/L	5,0-45 nmol/L	10-100 nmol/L
Tellurium	0,78-16 nmol/g	16-90 nmol/L	20-90 nmol/L	4,0-390 nmol/L
Thallium	0,095-2,5 nmol/g	1,0-70 nmol/L	0,20-48 nmol/L	1,0-390 nmol/L
Thorium	8,5-44 nmol/g	1,0-21 nmol/L	0,10-21 nmol/L	0,050-2,1 nmol/L
Tin	25-130 nmol/g	5,0-250 nmol/L	20-80 nmol/L	2,0-1500 nmol/L
Uranium	0,12-8,4 nmol/g	0,22-4,2 nmol/L	0,45-4,2 nmol/L	0,30-20 nmol/L
Vanadium	3,9-40 nmol/g	1,0-98 nmol/L	1,0-39 nmol/L	10-580 nmol/L
Zinc	0,030-23 µmol/g	20-220 µmol/L	2,0-50 µmol/L	1,0-25 µmol/L

**Organic Contaminants:**

**Programme de comparaisons interlaboratoires "AMAP Ring Test" pour les polluants organiques persistants dans le sérum humain/  
AMAP Ring Test for Persistent Organic Pollutants in Human Serum**

**CONGENERS OF POLYCHLORINATED BIPHENYLS (microgram/L)**

Analyte	Concentration range (lower-upper)
PCB IUPAC # 28	0,20 - 1,0
PCB IUPAC # 74	0,10 - 0,80
PCB IUPAC # 99	0,10 - 1,0
PCB IUPAC # 105	0,050 - 0,50
PCB IUPAC # 118	0,10 - 1,0
PCB IUPAC # 138	0,10 - 2,0
PCB IUPAC # 153	0,10 - 2,0
PCB IUPAC # 170	0,10 - 1,0
PCB IUPAC # 180	0,10 - 2,0

**BROMINATED FLAME RETARDANTS (microgram/L)**

Analyte	Concentration range (lower-upper)
PBDE IUPAC # 28	0,050 - 1,0
PBDE IUPAC # 47	0,10 - 2,0
PBDE IUPAC # 99	0,050 - 1,0
PBDE IUPAC # 100	0,050 - 1,0
PBDE IUPAC # 153	0,050 - 1,0
PBDE IUPAC # 154	0,050 - 1,0
PBDE IUPAC # 183	0,10 - 1,0

PBDE IUPAC # 209	0,10 - 2,0
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**CHLORINATED PESTICIDES (microgram/L)**

Analyte	Concentration range (lower-upper)
Beta-HCH	0,10 - 2,0
Dieldrin	0,050 - 2,0
Gamma-HCH	0,050 - 2,0
Heptachlor	0,050 - 2,0
Heptachlor epoxide	0,050 - 2,0
Hexachlorobenzene (HCB)	0,10 - 2,0
Oxychlorane	0,10 - 2,0
p,p'-DDE	0,50 - 10
p,p'-DDT	0,10 - 2,0
Toxaphene Parlar # 26	0,020 - 0,50
Toxaphene Parlar # 50	0,020 - 0,50
Trans-nonachlor	0,10 - 5,0

**PERFLUORINATED COMPOUNDS (microgram/L)**

Analyte	Concentration range (lower-upper)
PFH <sub>x</sub> A	0,50 - 10
PFH <sub>x</sub> S	0,50 - 25
PFNA	0,20 - 5,0
PFOA	0,50 - 30
PFOS	1,0 - 200
PFUdA	0,20 - 5,0

**Notes:**

**CAN-P-43:** Conformity assessment-General requirements for proficiency testing (ISO/IEC 17043)

**Partner File #** 35270

**Partner:** BNQ-EL

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Chantal Guay, ing., P. Eng.  
 Vice President, Accreditation  
 Services

Date: 2016-11-15

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