

TESTING AND CALIBRATION LABORATORY ACCREDITATION PROGRAM (LAP)

Scope of Accreditation

Accredited Laboratory No. 117

Legal Name of Accredited Laboratory: **Bureau Veritas Canada (2019) Inc.,
formerly known as Maxxam Analytics**

Contact Name: Stephanie Chang

Address: 4606 Canada Way
Burnaby, BC.
V5G 1K5

Telephone: 604 734 7276

Website: www.bvna.com

Email: Burnaby-QualityAssuranc@bureauveritas.com

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| SCC File Number: | 15188 |
| Accreditation Standard(s): | ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories |
| Fields of Testing: | Biological Chemical/Physical Forensic |
| Program Specialty Area: | Agriculture Inputs, Food, Animal Health and Plant Protection (AFAP) Environmental Testing (ET) Forensic Test Method Development and Non-routine Testing (TMDNRT) |
| Initial Accreditation: | 1993-06-08 |
| Most Recent Accreditation: | 2021-08-21 |
| Accreditation Valid to: | 2025-06-08 |

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.

TEST METHOD DEVELOPMENT AND NON ROUTINE TESTING

Note: The laboratory accredited under this PSA has demonstrated that it meets ISO/IEC 17025 requirements for non-routine testing under the following product classification.

Description of activities – chemical analysis:

1. Development and validation of new testing methodology for the screening and determination of chemical compounds in food samples.
2. Development and validation of mass spectral techniques in food samples.

Description of techniques – chemical analysis:

1. GC, GC-MS and GC-MS-MS
2. HPLC, LC-MS and LC-MS-MS

FORENSICS

Description of activities- forensic equine drug testing

1. Screening and confirmatory analysis for drugs and metabolites in equine body fluids, including quantification where required.
2. Testing of known and unknown substances including powders, liquids, dosage forms, feeds, drug administration paraphernalia and other materials for the presence of drugs in horse hair, urine and blood.

Description of techniques - forensic equine drug testing

- a. High-performance liquid chromatography (HPLC)
- b. Immunoassay
- c. Mass spectrometry
- d. Sample preparation, extraction and general chemical tests

ANIMAL AND PLANTS (AGRICULTURE)

Foods and Edible Products (Human and Animal Consumption):

Feeds

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| BBY4SOP-00105 | Determination of 17-a-Methyltestosterone in Feed |
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Food Methods: Proximate Analysis

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| BBY4SOP-00104 | Determination Histamine in Fish |
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Fruits and Vegetables, Processed Foods, Animal Tissue, Meat, Fish, Dairy, Honey, Eggs and Egg Products and Animal Derived Foods

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| BBY4SOP-00048 | Determination of Tetracyclines in Tissue and Animal Derived Foods |
| BBY4SOP-00052 | Determination of Phenol in Honey |
| BBY4SOP-00061 | Determination of Halofuginone in Tissue and Animal Derived Foods |
| BBY4SOP-00066 | Determination of Pesticides in Animal Derived Foods |
| BBY4SOP-00118 | Determination of Herbicides in Food |
| BBY4SOP-00121 | Fumonisin in Grains, Corn Products and Processed Foods |
| BBY7SOP-00011 | Analysis of Metals in Meat, Fruit and Vegetables, Processed Foods and Animal Derived Foods by ICP-MS |
| BBY7SOP-00021 | Digestion of Tissue, Vegetation for Analysis of Heavy Metals |

Microbiological

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| AOAC 2014.05 | Enumeration of Yeast and Moulds in Food using 3M™ Petrifilm™ Rapid Yeast And Mold Count (RYM) Plate |
| Assurance GDS® MPX Top 7 STEC Assay | BioControl Assurance GDS® MPX Top 7 STEC |
| COR1SOP-00019 | Enumeration of Coliforms, Faecal Coliforms and <i>E. coli</i> in Foods by using the MPN Method (Modified MFHPB-19; option of standard 3-tube and 10-tube MPN Method) |
| FDA BAM | BAM FDA Isolation and Identification of <i>Salmonella</i> in Food and Environment Samples |
| MFHPB-10 | Isolation of <i>Escherichia coli</i> O157:H7/NM from foods and environmental surface samples |
| MFHPB-18 | Determination of Aerobic Colony Count in Foods |
| MFHPB-19 | Enumeration of Coliforms, Faecal Coliforms and <i>E. coli</i> in Foods by using the MPN Method |
| MFHPB-20 | Isolation and Identification of <i>Salmonella</i> from Foods and Environmental Samples |
| MFHPB-21 | Enumeration of <i>Staphylococcus aureus</i> in Foods |
| MFHPB-22 | Enumeration of Yeasts and Molds in Foods |
| MFHPB-23 | Enumeration of <i>Clostridium perfringens</i> in Foods |
| MFHPB-29 | VIDAS Detection of <i>Listeria spp.</i> in Food, Environmental Samples |

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| MFHPB-30 | Isolation of <i>Listeria monocytogenes</i> and <i>Listeria spp.</i> from Foods and Environmental Samples |
| MFHPB-33 | Enumeration of Total Aerobic Bacteria in food Products and Food Ingredients Using 3M™ Petrifilm™ Aerobic Count Plates |
| MFHPB-34 | Enumeration of <i>E. coli</i> and Coliforms in Food Products and Food Ingredients using 3M™ Petrifilm™ <i>E. coli</i> Count Plates |
| MFHPB-35 | Enumeration of Coliforms in Food Products and Food Ingredients using 3M™ Petrifilm™ Coliform Count Plates |
| MFLP-09 | Enumeration of <i>Enterobacteriaceae</i> Species in Food and Environmental Samples Using 3M Petrifilm <i>Enterobacteriaceae</i> Count Plates |
| MFLP-16 | Detection of <i>Escherichia coli</i> O157:H7 in Foods - Assurance GDS® for <i>E. coli</i> O157:H7 Gene Detection System |
| MFLP-21 | Enumeration of <i>Staphylococcus aureus</i> in Foods and Environmental Samples Using 3M™ Petrifilm™ Staph Express Count (STX) Plates |
| MFLP-25 | Isolation and Identification of <i>Shigella spp.</i> From Foods |
| MFLP-28 | The Qualicon BAX® System Method for the Detection of <i>Listeria monocytogenes</i> in a Variety of Food |
| MFLP-29 | The Qualicon BAX® System for the Detection of <i>Salmonella</i> in Foods and Environmental Surface Samples |
| MFLP-30 | Detection of <i>E. coli</i> O157:H7 in select foods using the BAX® system <i>E. coli</i> O157:H7 MP |
| MFLP-33 | Detection of <i>Listeria monocytogenes</i> in Foods by the VIDAS LMO 2™ Method |
| MFLP-37 | Part 1: Detection of Halophilic <i>Vibrio</i> Species in Seafood Part 2: Detection of <i>Vibrio cholerae</i> |
| MFLP-38 | Detection of <i>Salmonella spp.</i> from All Foods and Selected Environmental Surfaces using IQ-Check™ <i>Salmonella</i> Real-time PCR Test Kit |
| MFLP-39 | Detection of <i>Listeria spp.</i> from Environmental Surfaces and heat processed RTE Meat and Poultry Using iQ-Check™ <i>Listeria spp.</i> Real-Time PCR Test Kit |
| MFLP-42 | Isolation and Enumeration of <i>Bacillus cereus</i> Group in Foods |

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| MFLP-46 | Isolation of Thermophilic <i>Campylobacter</i> from Food |
| MFLP-49 | Detection of <i>Salmonella spp</i> in Food Products and environmental surfaces by the VIDAS® UP Salmonella (SPT) Method |
| MFLP-54 | Detection of <i>Listeria monocytogenes</i> from selected foods using iQ-Check™ <i>Listeria monocytogenes</i> Real-Time PCR Test Kit |
| MFLP-59 | Detection of <i>Listeria spp.</i> in food products and environmental surface samples with VIDAS® UP <i>Listeria</i> (LPT) |
| MFLP-74 | Enumeration of <i>Listeria monocytogenes</i> in Food |
| MFLP-77 | Detection of <i>Listeria spp.</i> in food products and environmental samples by the VIDAS® <i>Listeria</i> species Xpress (LSX) method |
| MFLP-79 | Detection of <i>Listeria spp.</i> in Environmental Surface Samples Using the BAX® System Real-Time PCR Assay for <i>Listeria</i> Genus |
| MLG4 | FSIS Procedure for the Isolation and Identification of <i>Salmonella</i> from Meat, Poultry, Pasteurized egg and Siluriformes (Fish) products and Carcass and Environmental Sponge samples |
| MLG41 | Isolation, Identification of <i>Campylobacter jejuni/coli/lari</i> from Poultry Rinse and Sponge and Raw Product Samples |
| COR1SOP-00089 | USP: Enterobacterial Count in NHP by MPN Method |
| COR1SOP-00093 | USP: Detection and Enumeration for <i>Pseudomonas aeruginosa</i> in NHP |

Natural Health Products

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| BBY4SOP-00150 | Determination of Pesticides in Natural Health Products |
| USP40-NF35 S1. Dietary Supplements Chapters: 2021 | Microbial Enumeration Tests-Nutritional and Dietary Supplements. Total Aerobic Microbial Count by Plate Method |
| USP40-NF35 S1. Dietary Supplements Chapters: 2021 | Microbial Enumeration Tests-Nutritional and Dietary Supplements Total Combined Molds and Yeast Count by Plate Method |

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| USP40-NF35 S1. Dietary Supplements Chapters: 2022 | Microbiological Procedures for absence of specified microorganisms - Nutritional and Dietary Supplements Test for Absence of <i>Staphylococcus aureus</i> |
| USP40-NF35 S1. Dietary Supplements Chapters: 2022 | Microbiological Procedures for absence of specified microorganisms - Nutritional and Dietary Supplements Test for Absence of <i>Salmonella species</i> |
| USP40-NF35 S1. Dietary Supplements Chapters: 2022 | Microbiological Procedures for absence of specified microorganisms - Nutritional and Dietary Supplements Test for Absence of <i>Escherichia coli</i> |

Other

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| BBY4SOP-00032 | Determination of Aminoglycosides in Tissue and Animal Derived Foods |
| BBY4SOP-00033 | Determination of Dithiocarbamates (EBDC) in Fruits and Vegetables, Processed Foods and Animal Derived Foods by CS2 Evolution |
| BBY4SOP-00035 | Determination of Chlorinated Phenols in Tissue and Animal Derived Foods |
| BBY4SOP-00036 | Determination of Fluoroquinolones and Quinolones in Tissue and Animal Derived Food |
| BBY4SOP-00037 | Determination of Synthetic Pyrethrins in Animal Tissue and Animal Derived Foods |
| BBY4SOP-00038 | Determination of Carbamates in Tissue and Animal Derived Foods |
| BBY4SOP-00043 | Determination of Ethylenebisdithiocarbamate (EBDC) in Fruits and Vegetables, Processed Foods and Animal Derived Foods |
| BBY4SOP-00044 | Determination of Daminozide (ALAR) in Fruits and Vegetables, Processed Foods and Animal Derived Foods |
| BBY4SOP-00045 | Determination of Ethylenethiourea in Fruits and Vegetables, Processed Foods and Animal Derived Foods |
| BBY4SOP-00046 | Determination of Coccidiostats in Tissue and Animal Derived Foods |
| BBY4SOP-00047 | Determination of Gestagens in Animal Tissue and Dairy |
| BBY4SOP-00050 | Determination of Sulfonamides in Tissue and Animal Derived Foods |

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| BBY4SOP-00051 | Determination of Amitraz and Metabolites in Fruits and Vegetables, Processed Foods and Animal Derived Foods |
| BBY4SOP-00054 | Determination of Dipyrone Related Residues in Tissue and Animal Derived Foods |
| BBY4SOP-00055 | Determination of Free and Total Residues of Beta Agonists in Tissue and Animal Derived Foods |
| BBY4SOP-00056 | Determination of Virginiamycin in Tissue and Animal Derived Foods |
| BBY4SOP-00059 | Determination of Ceftiofur-Related Residues in Tissue and Animal Derived Foods |
| BBY4SOP-00060 | Determination of Benzimidazoles in Tissue and Animal Derived Foods |
| BBY4SOP-00062 | Determination of Endectocides in Tissue, Feed and Animal Derived Foods |
| BBY4SOP-00063 | Determination of Phenylbutazone in Tissue and Animal Derived Foods |
| BBY4SOP-00064 | Determination of Protein Bound Metabolites of Nitrofurans in Tissue and Animal Derived Foods |
| BBY4SOP-00068 | Determination of Tranquilizers and Carazolol in Tissue and Animal Derived Foods |
| BBY4SOP-00069 | Determination of Morantel and Pyrantel Drug Related Metabolites in Tissue and Animal Derived Foods |
| BBY4SOP-00070 | Determination of Zeranol and Stilbenes in Tissue and Animal Derived Foods |
| BBY4SOP-00079 | Determination of Volatile Pesticides in Tissue |
| BBY4SOP-00080 | Detection of Thyreostats in Animal Tissue, Eggs and Dairy |
| BBY4SOP-00082 | Determination of Triphenylmethane Dyes in Tissue |
| BBY4SOP-00083 | Determination of Carbadox and Olaquinox-Related Metabolites in Tissue |
| BBY4SOP-00084 | Determination of Amphenicols in Tissue and Animal Derived Foods |
| BBY4SOP-00085 | Determination of Bacitracin A in Tissue and Animal Derived Foods |
| BBY4SOP-00086 | Determination of Nitroimidazoles in Tissue and Animal Derived Foods |
| BBY4SOP-00087 | Determination of Aflatoxin in Dairy |
| BBY4SOP-00089 | Determination of Beta Lactams in Animal Tissue and Animal Derived Foods |

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| BBY4SOP-00091 | Determination of Non-Steroidal Anti-Inflammatory Drugs (NSAIDS), Hormones and Corticosteroids in Animal Tissue, Eggs and Dairy |
| BBY4SOP-00092 | Determination of Melamine in Eggs, Dairy and Processed Foods |
| BBY4SOP-00093 | Determination of Bisphenol A in Dairy and Processed Foods |
| BBY4SOP-00094 | Determination of Ochratoxin A in Cereals and Processed Foods |
| BBY4SOP-00095 | Determination of Deoxynivalenol (Vomitoxin) in Cereal and Cereal Products |
| BBY4SOP-00099 | Determination of Macrolides in Tissue and Animal Derived Foods |
| BBY4SOP-00100 | Determination of Trenbolone in Tissue and Animal Derived Foods |
| BBY4SOP-00111 | Aflatoxins in Food and Animal Feed |
| BBY4SOP-00123 | Determination of Pesticides in Process Foods by GCMSMS and LCMSMS |
| BBY4SOP-00128 | Determination of Pesticides in FV Products and Honey by GC/LC |
| BBY4SOP-00129 | Determination of Pesticides in Tissue by GCMSMS and LCMSMS |
| BBY4SOP-00130 | Determination of Tiamulin in Animal Tissue |
| BBY4SOP-00131 | Determination of 3-monochloropropane-1,2-diol (3-MCPD) in Food and Food Ingredients |
| BBY4SOP-00132 | Multi-Residue Determination of Multi-Class Drugs in Urine |
| BBY4SOP-00134 | Determination of Ethyl Carbamate in Alcoholic Beverages |
| BBY4SOP-00135 | Determination of Diquat and Paraquat in Fruit, Vegetables and Processed Foods |
| BBY4SOP-00136 | Determination of Glyphosate and Metabolites in Fruit, Vegetables and Processed Foods |
| BBY4SOP-00137 | Determination of Alternaria Mycotoxins in Beverages and Honey |
| BBY4SOP-00138 | Multi-Residue Determination of Multi-Class Drugs in Animal Tissue and Animal Derived Foods |
| BBY4SOP-00139 | Multi-Residue Determination of Multi-Class Antibiotics in Honey |
| BBY4SOP-00142 | Determination of Steroids and Stilbenes in Fish |
| BBY4SOP-00144 | Multi-Residue Determination of Multi-Class Drugs in Animal Feed and Pre-Feed |

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| BBY4SOP-00145 | Determination of 4-Methylimidazole in Processed Foods |
| BBY4SOP-00146 | Determination of T-2 and HT2 Mycotoxins in Processed Foods |
| BBY4SOP-00147 | Determination of Zearalenone and Related Mycotoxins in Processed Foods |
| BBY4SOP-00149 | Multi-residue determination of Mycotoxins in Processed Foods |
| BBY7SOP-00014 | Determination of Mercury in Tissue Digests |
| BBY4SOP-00151 | Phthalates in Food by LC-MS/MS |
| BBY4SOP-00152 | Determination of Polar Pesticides in Food |

ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY

Environmental:

Microbiological

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| BBY4SOP-00001 | Total and Fecal Coliform and <i>E. coli</i> in Water by Membrane Filtration |
| BBY4SOP-00003 | Heterotrophic Plate Count in Water |
| BBY4SOP-00005 | <i>Pseudomonas aeruginosa</i> Count in Water by Membrane Filtration |
| BBY4SOP-00006 | <i>Enterococcus</i> Count in Water by Membrane Filtration |
| BBY4SOP-00143 | Enumeration of Coliforms and <i>E. coli</i> by MF using Chromocult |

Biological Tissues

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| BBY4SOP-00108 | Determination of Polycyclic Aromatic Hydrocarbons in Tissue by GC/MS |
| BBY7SOP-00002 | Determination of Metals in Environmental Samples Using CRC ICPMS |
| BBY7SOP-00012 | Determination of Hg in Solids, Tissues and Miscellaneous Solids by CVAFS |

Air

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| BBY5SOP-00005 | Analysis of Total Suspended Particulates (TSP), PM2.5, and PM10 in Air [modified from BC Environmental Laboratory Manual Section G and EPA 600/R-94/038B] Particulate > 2.5 microns (gravimetric) |
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| BBY7SOP-00016 | Preparation of Air Filters for Metals Analysis [modified from NIOSH 7303] |
| BBY7SOP-00002 | Determination of Metals in Environmental Samples Using CRC ICPMS [modified from EPA 6020] Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Sodium Strontium Sulphur (Sulfur) Tin Titanium Uranium Vanadium Zinc Zirconium |

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| <p>BBY7SOP-00018</p> | <p>Analysis of Various Sample Types by ICP-OES [EPA 6010] Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Sodium Strontium Sulphur (Sulfur) Tin Titanium Vanadium Zinc Zirconium</p> |
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| <p>BBY8SOP-00027</p> | <p>Determination of Polycyclic Aromatic Hydrocarbons in Air by GC/MS [modified from BC Environmental Laboratory Manual (Preparation) and EPA 8270 (Analysis)]</p> <p>Acenaphthene Acenaphthylene Anthracene Benzo (a) anthracene Benzo(a)pyrene Benzo(b,j)fluoranthene Benzo(e)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenzo (a,h) anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene Perylene Phenanthrene Pyrene</p> |
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| <p>BBY8SOP-00058</p> | <p>VOCs In Air/vapour Using TD Tubes with Analysis by GC/MS [modified from BC Environmental Laboratory Manual Section H]</p> <p>1,1-Dichloroethane 1,1-Dichloroethene 1,1-Dichloropropene 1,1,1-Trichloroethane 1,1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (Ethylene dibromide) 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,3-Trimethylbenzene 1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,3-Butadiene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,3,5-Trimethylbenzene 1,4-Dichlorobenzene 2-Butanone (Methyl ethyl ketone, MEK) 2-Chlorophenol 2-Chlorotoluene 2-Hexanone (Methyl butyl ketone, MBK) 2-Propanol (Isopropyl alcohol) 4-Chlorotoluene (p-Chlorotoluene) 4-isopropyltoluene (p-Cymene) 4-Methyl-2-pentanone (MIBK) Acetone Benzene Bromobenzene Bromodichloromethane Bromoform Bromomethane Carbon Disulphide Carbon tetrachloride Chlorobenzene Chloroethane (Ethyl Chloride)</p> |
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| | <p>Chloroethene (Vinyl chloride) Chloroform cis-1,2-Dichloroethylene cis-1,3-Dichloropropene Dibromochloromethane Dibromomethane Dichlorodifluoromethane (Freon12) Dichloromethane Ethyl Acetate Ethylbenzene Hexachlorobutadiene Isopropanol Isopropylbenzene (Cumene) m,p-Xylene Methyl tert-butyl ether (MTBE) Methylcyclohexane n-Butylbenzene n-Decane n-Hexane n-Propylbenzene Naphthalene o-Xylene sec-Butylbenzene Styrene tert-Butylbenzene Tetrachloroethylene Toluene trans-1,3-Dichloropropene Trichloroethene Trichlorofluoromethane Trichlorotrifluoroethane Volatile Hydrocarbons (VH): C6-C13</p> |
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Soil/Solid/Water/Wastewater

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| BBY6SOP-00010 | <p>Nitrite and Nitrite Plus Nitrate by Automated Colourimetric Method [modified from SM 4500-NO3- I] Nitrate + Nitrite Nitrogen Nitrite</p> |
| BBY6SOP-00017 | <p>Determination of Sulfate by Konelab [modified from SM 4500-SO4 2-] Sulphate</p> |

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| BBY8SOP-00010 | <p>Determination of BTEX in Soil and Waters by Headspace-GC-MS [modified from EPA 5021 and EPA 5035 and EPA 8260]</p> <p>Benzene Ethylbenzene m,p-Xylene Methyl t-butyl ether o-Xylene Styrene Toluene</p> |
| BBY8SOP-00011 | <p>VH Analysis in Soils and Waters by Headspace GC/FID [modified from BC Environmental Laboratory Manual Section D]</p> <p>VH: C6-C10 VPH: C6-C10 – BTEX</p> |
| BBY8SOP-00029 | <p>Extractable Hydrocarbons (Water, Soils, Product, TPH) [modified from BC Environmental Laboratory Manual Section D]</p> <p>Extractable Petroleum Hydrocarbons (EPH): C10-C19 Extractable Petroleum Hydrocarbons (EPH): C19-C32 Total Extractable Hydrocarbons (TEH): C10-C30</p> |
| BBY8SOP-00030 | <p>Determination of CCME (F2-F4) in Water and Soil [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD]</p> <p>F2: C10-C16 F3: C16-C34 F4: C34-C50</p> |
| BBY8SOP-00012 | <p>F1 and LH Analysis for Soils and Waters by Headspace GC/FID [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD]</p> <p>F1: C6-C10 F1-BTEX: C6-C10 – BTEX</p> |

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| <p>BBY8SOP-00054</p> | <p>CP, NCP, HydroxyPhenol in water (MTBE extraction) and soil by GC/MS [modified from BC Environmental Laboratory Manual Section D]</p> <p>2-Chlorophenol 2-Hydroxyphenol (Catechol) 2-Methyl-4,6-dinitrophenol (4,6-Dinitro-o-cresol, DNOC) 2-Methylphenol (o-Cresol) 2-Nitrophenol 2,3-Dichlorophenol 2,3,4-Trichlorophenol 2,3,4,5-Tetrachlorophenol 2,3,4,6-Tetrachlorophenol 2,3,5-Trichlorophenol 2,3,5,6-Tetrachlorophenol 2,3,6-Trichlorophenol 2,4 + 2,5-Dichlorophenol 2,4-Dimethylphenol 2,4-Dinitrophenol 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol 2,6-Dichlorophenol 2,6-Dimethylphenol 3 + 4-Chlorophenol 3 + 4-Methylphenol 3-Hydroxyphenol (Resorcinol) 3,4-Dichlorophenol 3,4-Dimethylphenol 3,4,5-Trichlorophenol 3,5-Dichlorophenol 4-Chloro-3-methylphenol 4-Hydroxyphenol (Hydroquinone) 4-Nitrophenol Pentachlorophenol Phenol</p> |
| <p>BBY8SOP-00060</p> | <p>Determination of Tetraethyllead in Soil and Water by GC/MS [modified from BC Environmental Laboratory Manual Section D and EPA 8000, EPA 8270]</p> <p>Tetraethyl lead</p> |

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| <p>BBY8SOP-00009</p> | <p>Analysis of VOC's in Solids and Waters by Static Headspace GC/MS [modified from EPA 5021 and EPA 8260]</p> <p>1,1-Dichloroethane 1,1-dichloroethylene 1,1-Dichloropropene 1,1,1-Trichloroethane 1,1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2-Trichloropropane 1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113) 1,1,2,2-Tetrachloroethane 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (Ethylene dibromide) 1,2-dichlorobenzene 1,2-dichloroethane 1,2-Dichloropropane 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,3-Trichloropropene 1,2,3-Trimethylbenzene 1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,3-Butadiene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,3,5-Trichlorobenzene 1,3,5-Trimethylbenzene 1,4-dichlorobenzene 2-Butanone 2-Chlorotoluene 4-Methyl-2Pentanone 4-Chlorotoluene (p-Chlorotoluene) 4-isopropyltoluene (p-Cymene) Acetone Benzene Bromobenzene Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chlorodibromomethane</p> |
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| | <p>Chloroethane (Ethyl Chloride) Chloroethene (Vinyl Chloride) Chloroform Chloromethane (Methyl chloride) cis-1,2-Dichloroethylene cis-1,3-Dichloropropene Dibromomethane Dichlorodifluoromethane Dichloromethane Ethylbenzene Ethylene Dibromide Hexachlorobutadiene Hexane Isopropylbenzene (Cumene) m,p-Xylene Methyl t-butyl ether Methylcyclohexane n-Butylbenzene n-Decane n-Propylbenzene Naphthalene o-Xylene Pentachloroethane sec-Butylbenzene Styrene tert-Butylbenzene Tetrachloroethylene Toluene trans-1,2-Dichloroethylene trans-1,3-Dichloropropene Trichloroethylene Trichlorofluoromethane</p> |
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| <p>BBY8SOP-00040</p> | <p>VOC Extra Compounds in Soil and Water by Headspace-GC-MS [BC Environmental Laboratory Manual Section D]</p> <p>1-Butanol (n-Butanol)</p> <p>1-Chlorobutane</p> <p>1,4-Dioxane (p-dioxane)</p> <p>2-Hexanone (Methyl butyl ketone, MBK)</p> <p>2-Propanol (Isopropyl alcohol)</p> <p>Acrolein (Propenal)</p> <p>Acrylonitrile</p> <p>Allyl chloride (3-chloropropene)</p> <p>Alpha-Diisobutylene</p> <p>Beta-Diisobutylene</p> <p>Butylated hydroxytoluene (BHT)</p> <p>Carbon disulfide</p> <p>Chloroprene (2-Chloro-1,3-butadiene)</p> <p>Cyclohexanone</p> <p>Cyclohexene</p> <p>Dicyclopentadiene</p> <p>Ethyl acrylate</p> <p>Ethyl ether</p> <p>Hexachloroethane</p> <p>Isobutanol (2-Methyl-1-propanol)</p> <p>Methyl methacrylate</p> <p>Methylacrylonitrile</p> <p>Tetrabromomethane</p> <p>Tetrahydrofuran (THF)</p> <p>Vinyl acetate</p> |
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Soil/Solid/Waste

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| <p>BBY7SOP-00004</p> | <p>Digestion of Soil, Sediment and Sludge for Total Recoverable Metals [modified from BC Environmental Laboratory Manual Section C]</p> |
| <p>BBY7SOP-00012</p> | <p>Determination of Hg in Solids, Tissues and Miscellaneous Solids by CVAFS [modified from EPA 245.7 and BC Environmental Laboratory Manual Section C]</p> <p>Mercury</p> |

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| <p>BBY7SOP-00018</p> | <p>Analysis of Various Sample Types by ICP-OES [modified from EPA 6010 and BC Environmental Laboratory Manual Section B]</p> <p>Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Silver Sodium Strontium Tin Titanium Vanadium Zinc Zirconium</p> |
| <p>BBY8SOP-00003</p> | <p>Gravimetric Heavy Hydrocarbon-CCME F4G in Soils by AME [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD] F4: Gravimetric</p> |
| <p>BBY8SOP-00006</p> | <p>Total Oil and Grease in Soils by Sonification Extraction-Dichloromethane [modified from BC Environmental Laboratory Manual Section D] Total Oil and Grease</p> |

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| BBY8SOP-00007 | Mineral Oil and Grease in Solid Samples by Sonification Extraction [modified from BC Environmental Laboratory Manual Section D] Mineral Oil and Grease |
| BBY8SOP-00008 | Waste Oil Quantification in Solids, Liquids by Petroleum Ether Extraction [BC Environmental Laboratory Manual Section D] Waste Oil Content |
| BBY8SOP-00017 | Determination of Moisture Content in Solid Samples [modified from BC Environment Laboratory Manual] Percent Moisture |

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| <p>BBY8SOP-00022</p> | <p>Determination of Polycyclic Aromatic Hydrocarbons in Soil by GC/MS [modified from BC Environmental Laboratory Manual Section D]</p> <p>1-Methylnaphthalene 2-Chloronaphthalene 2-Methylnaphthalene 3-Methylcholanthrene 4-Nitropyrene 7,12-Dimethylbenz(a)anthracene 9,10-Anthraquinone Acenaphthene Acenaphthylene Acridine Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(c)phenanthrene Benzo(e)pyrene Benzo(g,h,i)perylene Benzo(j)fluoranthene Benzo(k)fluoranthene Chrysene Dibenzo(a,e)pyrene Dibenzo(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3 - cd)pyrene N-Methylaniline Naphthalene Perylene Phenanthrene Pyrene Quinoline</p> |
| <p>BBY8SOP-00050</p> | <p>Determination of Tributyltin in Soil and Sediment by GC-MS [modified from RESTEK CORP APPLICATION NOTE# 59550]</p> <p>Tributyltin Dibutyltin</p> |

Water/Wastewater/Soil Extract/Soil Leachate

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| BBY0SOP-00003 | Determination of pH in Waters, Leachates and Extracts by pH Meter [modified from SM 4500-H+ B] pH |
| BBY0SOP-00006 | Determination of Conductivity in Waters, Leachates and Extracts by Meter [modified from SM 2510 B] Conductivity (25°C) |
| AB SOP-00007 | Ammonia-Nitrogen by Automated Phenate Colorimetric method [modified from EPA 350.1] Ammonia |
| BBY6SOP-00011 | Determination of Chloride by Konelab [modified from SM 4500-CL- E and BC Environmental Laboratory Manual Section B] Chloride |
| BBY6SOP-00013 | Ortho-, Total Dissolved, and Total Phosphate by Automated Method [modified from SM 4500-P E] Phosphate Total Dissolved Phosphorus Total Phosphorus |
| BBY6SOP-00016 | Determination of Total and Total Dissolved Nitrogen by Automated Method [modified from SM 4500-N C] Total Dissolved Nitrogen Total Nitrogen |
| BBY6SOP-00021 | Determination of Apparent Colour in Water Samples [modified from SM 2120 B] Apparent Colour |
| BBY6SOP-00024 | Chemical Oxygen Demand (COD) by Closed Reflux, Colorimetric Method [modified from SM 5220 D] COD |
| BBY6SOP-00025 | Determination of pH in Saturated Paste Extract [modified from SM 4500-H+ B] pH |
| BBY6SOP-00026 | pH, Conductivity, Salinity, Alkalinity (Total, Phenolphthalein) in Water [modified from SM 2320 B, SM 2510 B, SM 4500-H+ B] Alkalinity (pH 4.5) Conductivity (25°C) PH |

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| BBY6SOP-00027 | Determination of Turbidity in Water Samples [modified from SM 2130 B] Turbidity |
| BBY6SOP-00028 | Determination of pH in Soil Leachate [modified from BC Environmental Laboratory Manual Section B] pH |
| BBY6SOP-00029 | Specific Conductance in Satpaste and 1:5 DI Leach by Conductivity Cell [modified from SM 2510 B] Conductivity |
| BBY6SOP-00030 | Satpaste Extract Preparation for Saturation Percent, Salinity Analyses [modified from BC Environmental Laboratory Manual Section B] Percent Saturation Saturated Paste |
| BBY6SOP-00033 | Determination of Total Dissolved Solids in Waters and Wastewaters [modified from SM 2540 C] Total Dissolved Solids |
| BBY6SOP-00034 | Determination of Total Suspended Solids in Waters and Wastewaters [modified from SM 2540 D] Total Suspended Solids |
| BBY6SOP-00035 | Determination of Total Solids and Total Solids Fixed in Waters [modified from SM 2540 A] Fixed Solids Total Solids (TS) |
| BBY6SOP-00037 | Determination of Total Acidity pH 8.3, Acidity to pH 4.5, in Waters [modified from SM 2310 B] Acidity |
| BBY6SOP-00045 | Total and Carbonaceous BOD, DO, and pH Analysis [modified from SM 5210 B] BOD (5 day) CBOD (5 day) |
| BBY6SOP-00048 | Determination of Fluoride in Waters, Soil Extracts, Leachates by ISE [modified from BC MOE ENVIRONMENTAL MANAGEMENT ACT HAZARDOUS WASTE REGULATION (EMA/HWR) SCHEDULE 4, PART 2 (Preparation) and SM 4500-F- C (Analysis)] Fluoride |

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| BBY6SOP-00057 | Determination of True Colour in Water Samples by Konelab [modified from SM 2120 C] True Colour |
| BBY7SOP-00001 | Determination of Metals in Solids by ICPMS [modified from EPA 6020] Antimony Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Manganese Mercury Molybdenum Nickel Selenium Silver Thallium Tin Vanadium Uranium Zinc Zirconium |
| BBY7SOP-00005 | Procedure for the Preparation of Solids and Soil using TCLP [EPA 1311] |
| BBY7SOP-00009 | Procedure for the Preparation of Leachates Using BC MLEP [modified from BC MOE ENVIRONMENTAL MANAGEMENT ACT HAZARDOUS WASTE REGULATION (EMA/HWR) SCHEDULE 4, PART 2] |

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| <p>BBY8SOP-00021</p> | <p>Determination of Polycyclic Aromatic Hydrocarbons in Waters by GC/MS [modified from BC Environmental Laboratory Manual Section D]</p> <p>1-Methylnaphthalene 2-Chloronaphthalene 2-Methylnaphthalene 3-Methylcholanthrene 4-Nitropyrene 7,12-Dimethylbenz(a)anthracene 9,10-Anthraquinone Acenaphthene Acenaphthylene Acridine Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b,j)fluoranthene Benzo(c)phenanthrene Benzo(e)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Dibenzo(a,e)pyrene Dibenzo(a,h)anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)pyrene N-Methylaniline Naphthalene Perylene Phenanthrene Pyrene Quinoline</p> |
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| <p>BBY7SOP-00018</p> | <p>Analysis of Various Sample Types by ICP-OES [modified from EPA 6010]</p> <ul style="list-style-type: none"> Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Silicon Silver Sodium Strontium Sulphur (Sulfur) Tin Titanium Vanadium Zinc Zirconium |
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| <p>BBY7SOP-00002</p> | <p>Determination of Metals in Environmental Samples Using CRC ICPMS [modified from EPA 6020 and BC Environmental Laboratory Manual Section C]</p> <ul style="list-style-type: none"> Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Cesium Chromium Cobalt Copper Gold Iron Lanthanum Lead Lithium Magnesium Manganese Mercury Molybdenum Nickel Palladium Phosphorus Platinum Potassium Rubidium Selenium Silicon Silver Sodium Strontium Sulphur (Sulfur) Tellurium Thallium Thorium Tin Titanium |
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| | <p>Tungsten Uranium Vanadium Zinc Zirconium</p> |
| BBY7SOP-00003 | <p>Digestion of Aqueous Samples for Metals by ICPMS or ICP-OES [modified from EPA 6020 and BC Environmental Laboratory Manual Section C]</p> |
| AB SOP-00084 | <p>Mercury in Water, Leachates and Liquids by Bromination and Cold Vapour [modified from BC Environmental Laboratory Manual Section C) Mercury</p> |
| BBY7SOP-00022 | <p>Determination of Ultra-Low Level Mercury in Water by CVAFS [modified from EPA 1631] Mercury</p> |
| BBY8SOP-00004 | <p>Oil and Grease in Water Samples by Hexane Extraction and Gravimetry [modified from BC Environmental Laboratory Manual Section D] Mineral Oil and Grease Total Oil and Grease</p> |
| BBY8SOP-00059 | <p>Determination of Tributyltin in Water by GC-MS [modified from RESTEK CORP LIT. CAT#59550] Dibutyltin Tributyltin</p> |

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| <p>BBY8SOP-00025</p> | <p>Chlorinated Phenols in Water (DCM extraction) by GC/MS [modified from BC Environmental Laboratory Manual Section D]</p> <ul style="list-style-type: none"> 2-Chlorophenol 2,3-Dichlorophenol 2,3,4-Trichlorophenol 2,3,4,5-Tetrachlorophenol 2,3,4,6-tetrachlorophenol 2,3,5-Trichlorophenol 2,3,5,6-Tetrachlorophenol 2,3,6-Trichlorophenol 2,4 + 2,5-Dichlorophenol 2,4,5-Trichlorophenol 2,4,6-trichlorophenol 2,6-Dichlorophenol 3 + 4-Chlorophenol 3,4-Dichlorophenol 3,4,5-Trichlorophenol 3,5-Dichlorophenol 4-Chloro-3-Methylphenol Pentachlorophenol |
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Seawater

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| <p>BBY7SOP-00002</p> | <p>Determination of Metals in Environmental Samples Using CRC ICPMS [modified from EPA 6020]</p> <p>Aluminum Antimony Arsenic Barium Beryllium Bismuth Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Lithium Magnesium Manganese Molybdenum Nickel Phosphorus Potassium Selenium Silicon Silver Sodium Strontium Sulphur (Sulfur) Tellurium Tin Thallium Titanium Uranium Vanadium Zinc Zirconium</p> |
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Soil/Soild – Toxicology

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| <p>BBY2SOP-00010</p> | <p><i>Chironomids dilutus</i> 10-Day Survival and Growth Test [EPS 1/RM/32] <i>Chironomids</i> (10d)</p> |
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| BBY2SOP-00011 | <i>Hyalella azteca</i> 14-Day Survival and Growth Test [EPS 1/RM/33] <i>Hyalella azteca</i> (14d) |
| BBY2SOP-00012 | Marine or Estuarine Amphipod 10 Day Survival and Reburial Test [EPS 1/RM/26 and EPS 1/RM/35] Marine Amphipods (10d) |
| BBY2SOP-00014 | Microtox - Acute Solid Phase Analysis [EPS 1/RM/42] Microtox IC50 |
| BBY2SOP-00030 | <i>Neanthes arenaceodentata</i> Survival and Growth Test <i>Neanthes</i> (20d) |
| BBY2SOP-00032 | Bivalve Larval Development Sediment Test [PUGET SOUND ESTUARY PROGRAM 1995 B] Bivalves (48hr) |
| BBY2SOP-00062 | Echinoderm Embryo / Larval Development Test [EPS 1/RM/58] Echinoid Larval Development (48hr) |

Water – Toxicology

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| BBY2SOP-00001 | <i>Ceriodaphnia dubia</i> Chronic Survival and Reproduction Test [EPS 1/RM/21] <i>Ceriodaphnia dubia</i> (7d) |
| BBY2SOP-00002 | Fathead Minnow 7 Day Survival and Growth Test [EPS 1/RM/22] Fathead Minnow (7d) |
| BBY2SOP-00004 | Rainbow Trout Acute Survival Test (Environment Canada) [EPS 1/RM/13 and EPS 1/RM/9] Single Concentration (96hr) Trout LC50 (96hr) |
| BBY2SOP-00006 | <i>Pseudokirchneriella Subcapitata</i> 72H Growth Inhibition Test [EPS 1/RM/25] <i>Pseudokirchneriella subcapitata</i> (72hr) |
| BBY2SOP-00007 | <i>Daphnia magna</i> 48 Hour Acute Test [EPS 1/RM/11 and EPS 1/RM/14] <i>Daphnia</i> LC50 (48hr) <i>Daphnia</i> Single Concentration (48hr) |
| BBY2SOP-00009 | Echinoid 20 Minute Fertilization Test [EPS 1/RM/27] Echinoderm Fertilization (20 min) |

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| BBY2SOP-00053 | <i>Lemna minor</i> 7 Day Growth Inhibition Test [EPS 1/RM/37] <i>Lemna minor</i> (7d) |
| BBY2SOP-00061 | Rainbow Trout Acute Survival Test with pH Stabilization [EPS 1/RM/50] Single Concentration (96hr) - pH Stabilization Trout LC50 (96hr) - pH Stabilization |

Number of Scope Listings: 137

Number of TMDNRT Techniques: 2

Number of Forensic Techniques: 4

Notes:

(Medical Gases Piping Systems)

The Medical Gas Piping System inspection portion of Bureau Veritas’ scope of accreditation has recently been transferred to SCC’s Inspection Body program. A scope listing may be found at: <https://www.scc.ca/en/accreditation/programs/inspection-bodies/directory>

RG_FORENSIC: *SCC Requirements and Guidance for the Accreditation for Forensic Testing Laboratories*

All laboratory standard operating procedures are developed in house.
This document forms part of the Certificate of Accreditation issued by the Standards Council of Canada (SCC). The original version is available in the Directory of Accredited Laboratories on the SCC website at www.scc.ca.

Elias Rafoul
Vice-President, Accreditation Services
Publication on: 2021-08-23