



## 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**

Location Name or Operating as (if applicable):

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<b>SCC File Number:</b>	15188
<b>Accreditation Standard(s):</b>	ISO/IEC 17025:2005
<b>Fields of Testing:</b>	Biological Chemical/Physical Forensic
<b>Program Specialty Area:</b>	Agriculture Inputs, Food, Animal Health and Plant Protection (AFAP) Environmental Testing (ET) Forensic
<b>Initial Accreditation:</b>	1993-06-08
<b>Most Recent Accreditation:</b>	2020-10-05
<b>Accreditation Valid to:</b>	2021-06-08

Testing conducted at:  
8577 Commerce Court,  
Burnaby BC V5A 4N5

Forensics:  
Forensic Equine Drug Testing (Drugs in Horse Hair, Urine and Blood)



**ANIMAL AND PLANTS (AGRICULTURE)**

**Foods and Edible Products: (Human and Animal Consumption)**

**(Feed)**

BBY4SOP-00105	Determination of 17-a-Methyltestosterone in Feed
BBY4SOP-00110	Determination of Avermectins in Feed

**(Food Methods: Proximate Analysis)**

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)**

BBY4SOP-00048	Determination of Tetracyclines in Tissue and Animal Derived Foods
BBY4SOP-00052	Determination of Phenol in Honey
BBY4SOP-00058	Determination of Tetracyclines in Honey
BBY4SOP-00061	Determination of Halofuginone in Tissue and Animal Derived Foods
BBY4SOP-00066	Determination of Pesticides in Animal Derived Foods
BBY4SOP-00076	Determination of Sulfonamide Residues in Animal Derived Foods
BBY4SOP-00118	Determination of Herbicide 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)**

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 Salmonella 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</i> spp. in Food, Environmental Samples
MFHPB-30	Isolation of <i>Listeria monocytogenes</i> and <i>Listeria</i> spp. 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</i> spp. 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</i> spp. from All Foods and Selected Environmental Surfaces using IQ-Check™ <i>Salmonella</i> Real-time PCR Test Kit
MFLP-39	Detection of <i>Listeria</i> spp. from Environmental Surfaces and heat processed RTE Meat and Poultry Using iQ-Check™ <i>Listeria</i> spp. Real-Time PCR Test Kit
MFLP-42	Isolation and Enumeration of <i>Bacillus cereus</i> Group in Foods
MFLP-46	Isolation of Thermophilic <i>Campylobacter</i> from Food
MFLP-49	Detection of <i>Salmonella</i> spp in Food Products and environmental surfaces by the VIDAS® UP <i>Salmonella</i> (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
MFLP-83	Detection of Verotoxins VT 1 And VT 2 from <i>E. coli</i> O157:H7/NM by The Merck Duopath® Verotoxin Kit
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)

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
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)

BBY4SOP-00029	Determination of Free Residues of Beta-Agonists in Tissue and Animal Derived Foods
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 CS <sub>2</sub> 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 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 and Processed 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 Tissue and Dairy
BBY4SOP-00050	Determination of Sulfonamides in Tissue
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 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 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-00067	Determination of Amphenicols in Fish
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-00078	Determination of Emamectin, Ivermectin and Abamectin in Fish
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
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 Animal Derived 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 Grain Products 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 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-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 )**

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)**

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)**

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)
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

BBY7SOP-00018

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
BBY8SOP-00027	Determination of Polycyclic Aromatic Hydrocarbons in Air by GC/MS [modified from BC Environmental Laboratory Manual (Preparation) and EPA 8270 (Analysis)]
	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
BBY8SOP-00058	VOCs In Air/vapour Using TD Tubes with Analysis by GC/MS [modified from BC Environmental Laboratory Manual Section H]
	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)  
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

**(Soil/Solid/Water/Wastewater)**

BBY6SOP-00010	Nitrite and Nitrite Plus Nitrate by Automated Colourimetric Method [modified from SM 4500-NO3- I] Nitrate + Nitrite Nitrogen Nitrite
BBY6SOP-00017	Determination of Sulfate by Konelab [modified from SM 4500-SO4 2- ] Sulphate
BBY8SOP-00010	Determination of BTEX in Soil and Waters by Headspace-GC-MS [modified from EPA 5021 and EPA 5035 and EPA 8260] Benzene Ethylbenzene m,p-Xylene Methyl t-butyl ether o-Xylene Styrene Toluene
BBY8SOP-00011	VH Analysis in Soils and Waters by Headspace GC/FID [modified from BC Environmental Laboratory Manual Section D] VH: C6-C10 VPH: C6-C10 - BTEX
BBY8SOP-00029	Extractable Hydrocarbons (Water, Soils, Product, TPH) [modified from BC Environmental Laboratory Manual Section D] Extractable Petroleum Hydrocarbons (EPH): C10-C19 Extractable Petroleum Hydrocarbons (EPH): C19-C32 Total Extractable Hydrocarbons (TEH): C10-C30
BBY8SOP-00030	Determination of CCME (F2-F4) in Water and Soil [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD] F2: C10-C16 F3: C16-C34 F4: C34-C50
BBY8SOP-00012	F1 and LH Analysis for Soils and Waters by Headspace GC/FID [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD] F1: C6-C10 F1-BTEX: C6-C10 - BTEX
BBY8SOP-00054	CP, NCP, HydroxyPhenol in water (MTBE extraction) and soil by GC/MS [modified from BC Environmental Laboratory Manual Section D] 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

BBY8SOP-00060 Determination of Tetraethyllead in Soil and Water by GC/MS  
[modified from BC Environmental Laboratory Manual Section D and  
EPA 8000, EPA 8270]

BBY8SOP-00009 Analysis of VOC's in Solids and Waters by Static Headspace  
GC/MS [modified from EPA 5021 and EPA 8260]

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  
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
BBY8SOP-00040	VOC Extra Compounds in Soil and Water by Headspace-GC-MS [BC Environmental Laboratory Manual Section D]
	1-Butanol (n-Butanol)
	1-Chlorobutane
	1,4-Dioxane (p-dioxane)
	2-Hexanone (Methyl butyl ketone, MBK)
	2-Propanol (Isopropyl alcohol)
	Acrolein (Propenal)
	Acrylonitrile
	Allyl chloride (3-chloropropene)
	Alpha-Diisobutylene
	Beta-Diisobutylene
	Butylated hydroxytoluene (BHT)
	Carbon disulfide
	Chloroprene (2-Chloro-1,3-butadiene)
	Cyclohexanone
	Cyclohexene
	Dicyclopentadiene
	Ethyl acrylate
	Ethyl ether
	Hexachloroethane
	Isobutanol (2-Methyl-1-propanol)
	Methyl methacrylate
	Methylacrylonitrile
	Tetrabromomethane
	Tetrahydrofuran (THF)
	Vinyl acetate
<b>(Soil/Solid/Waste)</b>	
BBY6SOP-00042	Determination of Flash Point by SetaFlash Closed Tester [modified from ASTM D3828]
	Flashpoint
BBY6SOP-00043	Determination of Free Liquid [modified from EPA 9095]
	Free Liquid
BBY7SOP-00004	Digestion of Soil, Sediment and Sludge for Total Recoverable Metals [modified from BC Environmental Laboratory Manual Section C]



BBY7SOP-00012	Determination of Hg in Solids, Tissues and Miscellaneous Solids by CVAFS [modified from EPA 245.7 and BC Environmental Laboratory Manual Section C] Mercury
BBY7SOP-00018	Analysis of Various Sample Types by ICP-OES [modified from EPA 6010 and BC Environmental Laboratory Manual Section B] 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
BBY8SOP-00003	Gravimetric Heavy Hydrocarbon-CCME F4G in Soils by AME [CCME CWS PETROLEUM HYDROCARBONS IN SOIL - TIER 1 METHOD] F4: Gravimetric
BBY8SOP-00006	Total Oil and Grease in Soils by Sonification Extraction-Dichloromethane [modified from BC Environmental Laboratory Manual Section D] Total Oil and Grease
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]



BBY8SOP-00017	Waste Oil Content Determination of Moisture Content in Solid Samples [modified from BC Environment Laboratory Manual] Percent Moisture
BBY8SOP-00022	Determination of Polycyclic Aromatic Hydrocarbons in Soil by GC/MS [modified from BC Environmental Laboratory Manual Section D] 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
BBY8SOP-00050	Determination of Tributyltin in Soil and Sediment by GC-MS [modified from RESTEK CORP APPLICATION NOTE# 59550] Tributyltin Dibutyltin

**(Water/Wastewater/Soil Extract/Soil Leachate)**

BBY0SOP-00003	Determination of pH in Waters, Leachates and Extracts by pH Meter [modified from SM 4500-H+ B] pH
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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
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]



BBY6SOP-00034	Total Dissolved Solids 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
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]
BBY8SOP-00021	Determination of Polycyclic Aromatic Hydrocarbons in Waters by GC/MS [modified from BC Environmental Laboratory Manual Section D] 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
BBY7SOP-00018	Analysis of Various Sample Types by ICP-OES [modified from EPA 6010] 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

BBY7SOP-00002

Determination of Metals in Environmental Samples Using CRC  
ICPMS [modified from EPA 6020 and BC Environmental Laboratory  
Manual Section C]

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
	Tungsten
	Uranium
	Vanadium
	Zinc
	Zirconium
BBY7SOP-00003	Digestion of Aqueous Samples for Metals by ICPMS or ICP-OES [modified from EPA 6020 and BC Environmental Laboratory Manual Section C]
AB SOP-00084	Mercury in Water, Leachates and Liquids by Bromination and Cold Vapour [modified from BC Environmental Laboratory Manual Section C)
BBY7SOP-00022	Mercury Determination of Ultra-Low Level Mercury in Water by CVAFS [modified from EPA 1631]
BBY8SOP-00004	Mercury Oil and Grease in Water Samples by Hexane Extraction and Gravimetry [modified from BC Environmental Laboratory Manual Section D]
BBY8SOP-00059	Mineral Oil and Grease Total Oil and Grease Determination of Tributyltin in Water by GC-MS [modified from RESTEK CORP LIT. CAT#59550]
BBY8SOP-00025	Dibutyltin Tributyltin Chlorinated Phenols in Water (DCM extraction) by GC/MS [modified from BC Environmental Laboratory Manual Section D] 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

**(Seawater)**

BBY7SOP-00002      Determination of Metals in Environmental Samples Using CRC  
ICPMS [modified from EPA 6020]  
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

**(Soil / Solid – Toxicology)**

BBY2SOP-00010	Chironomids dilutus 10-Day Survival and Growth Test [EPS 1/RM/32] Chironomids (10d)
BBY2SOP-00011	Hyalella azteca 14-Day Survival and Growth Test [EPS 1/RM/33] Hyalella azteca (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	Neanthes arenaceodentata Survival and Growth Test Neanthes (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)**

BBY2SOP-00001	Ceriodaphnia dubia Chronic Survival and Reproduction Test [EPS 1/RM/21] Ceriodaphnia dubia (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	Pseudokirchneriella Subcapitata 72H Growth Inhibition Test [EPS 1/RM/25] Pseudokirchneriella subcapitata (72hr)
BBY2SOP-00007	Daphnia magna 48 Hour Acute Test [EPS 1/RM/11 and EPS 1/RM/14] Daphnia LC50 (48hr) Daphnia Single Concentration (48hr)
BBY2SOP-00009	Echinoid 20 Minute Fertilization Test [EPS 1/RM/27] Echinoderm Fertilization (20 min)
BBY2SOP-00053	Lemna minor 7 Day Growth Inhibition Test [EPS 1/RM/37] Lemna minor (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

## **FORENSICS**

### **Forensic Equine Drug Testing**

#### Description of Activities:

#### **(Drugs in Horse Hair, Urine and Blood)**

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, using in-house validated methods incorporating the following techniques:

#### Techniques for which laboratory is accredited:

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

#### **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>

**ISO/IEC 17025:2005:** General Requirements for the Competence of Testing and Calibration Laboratories

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

**BBY2SOP:** Laboratory Standard Operating Procedures.

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](http://www.scc.ca).

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Publication on: 2020-10-19