

# LIST OF SERVICES

2017

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## Notes

*As a "Centre of Excellence in Analytical Science" Labstat's team of scientist are continually expanding and developing new analytical methods. For the latest developments, LOD/LOQ's and questions please contact our Business Development team at [Clientservices@labstat.com](mailto:Clientservices@labstat.com) or Tel: [+1-519-748-5409](tel:+15197485409).*

## E-Liquids

<b>E-Liquids</b>	<b>Test Code</b>	<b>Description</b>
Additives	CAF0-LCUN-EL	Caffeic Acid in E-liquids by HPLC-UV, Full Panel
	CFF0-GCSN-EL	Caffeine in E-liquids by GC-TSD, Full Panel
	GLH0-LCUN-EL	Glycyrrhizic Acid in E-liquids by HPLC-UV, Full Panel
	THE0-LCUN-EL	Theobromine in E-liquids by HPLC-UV, Full Panel
Ammonia	NH30-ICCN-EL	Ammonia in E-liquids by Ion-Chromatography (EC), Full Panel
Aromatic Amines	AMI0-GCNN-EL	Aromatic Amines in E-liquids by GC-MS (NCI), Full Panel
	AMIH-GCNN-EL	Aromatic Amines in E-liquids by GC-MS (NCI), HPHC List
Carbonyls	CAR0-LCUN-EL	Carbonyls in E-liquids by HPLC-UV, Full Panel
	DCA0-SIMN-EL	Carbonyls and Dicarbonyls in E-liquids by GC-MS (SIM), Full Panel
	DCA1-SIMN-EL	Dicarbonyls in E-liquids by GC-MS (SIM), Panel 1
	DCA2-SIMN-EL	Carbonyls in E-liquids by GC-MS (SIM), Panel 2
Composition (Propylene Glycol and Glycerol)	ETH0-GCTN-EL	Ethanol in E-liquids by GC-TCD, Full Panel
	THM0-GCFN-EL	Composition, Nicotine, Menthol, Diethylene Glycol, Ethylene Glycol, Glycidol, Triethylene Glycol, and Triacetin, in E-liquids by GC-FID, Full Panel
	THM0-SIML-EL	Glycidol in E-liquids by GC-MS (SIM)
	THM1-GCFN-EL	Composition, Nicotine, Menthol and Triacetin in E-liquids by GC-FID, Panel 3
	THM2-GCFN-EL	Composition, Nicotine, Glycidol and Triacetin in E-liquids by GC-FID, Panel 2
Flavourings	ARPO-SIMN-EL	Peppermint Oil in E-liquids by GC-MS (SIM), Full Panel
	FLA0-SPMN-EL	Flavourants in E-liquids by GC-MS (SPME), Full Panel
Hydrogen Cyanide	HCN0-CFAN-EL	Hydrogen Cyanide in E-liquids by Continuous Flow Analysis, Full Panel

<b>E-Liquids</b>	<b>Test Code</b>	<b>Description</b>
Metals	HG_0-HGCN-EL	Mercury in E-liquids by Cold Vapor Atomic Absorption Spectroscopy, Full Panel
	MET0-ICPN-EL	Metals in E-liquids by ICP-MS, Full Panel
Moisture	KFW0-KFTN-EL	Water in E-liquids by Karl-Fisher Titration, Full Panel
Nicotine	NCC0-GCSN-EL	Nicotine, Cotinine and Caffeine in E-liquids by GC-TSD, Full Panel
Nicotine Alkaloids	ALK0-GCSN-EL	Alkaloids in E-liquids by GC-TSD, Full Panel
	AA30-CFAN-EL	Nicotine and Sugars (Total and Reducing) in E-liquids by Continuous Flow Analysis, Full Panel
Nicotine Degradation Products	DEG0-LCMN-EL	Nicotine Related Impurities in E-liquids by LC-MS/MS, Full Panel
Nitrogen	NO20-SPHN-EL	Nitrite in E-liquids by Automated Spectrophotometry
	NO30-CFAN-EL	Nitrate in E-liquids by Continuous Flow Analysis, Full Panel
Nitrosamines, Tobacco Specific	TSN0-LCMN-EL	Tobacco Specific Nitrosamines in E-liquids by LC-MS/MS, Full Panel
Nitrosamines, Volatile	VNA0-LCMN-EL	Volatile Nitrosamines in E-liquids by LC-MS/MS, Full Panel
Organic Acids	OAC0-LCUN-EL	Organic Acids in E-liquids by HPLC-UV, Full Panel
	OAC1-LCUN-EL	Benzoic Acid in E-liquids by HPLC-UV
PH	PH_0-PHMN-EL	pH of E-liquids by Electrode, Full Panel
Phenols	PHN0-LCFN-EL	Phenols in E-liquids by HPLC-FLU, Full Panel
Polynuclear Aromatic Hydrocarbons	PAH0-SIMN-EL	Polynuclear Aromatic Hydrocarbons in E-liquids by GC-MS (SIM), Full Panel
	PAH3-SIMN-EL	Benzo(a)pyrene in E-liquids by GC-MS (SIM), Panel 1
Volatiles	ALA0-SIMN-EL	Allyl Alcohol in E-liquids by GC-MS (SIM), Full Panel
	VOLO-SIMN-EL	Volatile Compounds in E-liquids by GC-MS (SIM), Full Panel
Volatiles, Semi-	SVC0-SIMN-EL	Semi-Volatile Compounds in E-liquids by GC-MS (SIM), Full Panel

## E-Cigarette Mainstream Vapour

<b>E-Cigarette Mainstream Vapour</b>	<b>Test Code</b>	<b>Description</b>
Additives	CAF0-LCUL-MV	Caffeic Acid in E-cigarette Aerosol by HPLC-UV, Full Panel - Linear Smoking
	CFF0-GCSL-MV	Caffeine in E-cigarette Aerosol by GC-TSD, Full Panel - Linear Smoking
	EUG0-LCUL-MV	Eugenol in E-cigarette Aerosol by HPLC-UV, Full Panel - Linear Smoking
Ammonia	NH30-ICCL-MV	Ammonia in E-cigarette Aerosol by Ion-Chromatography (EC), Full Panel - Linear Smoking
Aromatic Amines	AMI1-GCNL-MV	Aromatic Amines in E-cigarette Aerosol by GC-MS (NCI), Panel 1 - Linear Smoking
	AMIH-GCNL-MV	Aromatic Amines in E-cigarette Aerosol by GC-MS (NCI), HPHC List - Linear Smoking
Aromatic Amines, Heterocyclic	HAA0-LCML-MV	Heterocyclic Aromatic Amines in E-cigarette Aerosol by LC-MS/MS, Full Panel - Linear Smoking
	HAAH-LCML-MV	Heterocyclic Aromatic Amines in E-cigarette Aerosol by LC-MS/MS, HPHC List - Linear Smoking
Carbonyls	CAR0-LCUL-MV	Carbonyls in E-cigarette Aerosol by HPLC-UV, Full Panel - Linear Smoking
	DCA0-SIML-MV	Carbonyls and Dicarbonyls in E-cigarette Aerosol by GC-MS (SIM), Full Panel - Linear Smoking
	DCA1-SIML-MV	Carbonyls and Dicarbonyls in E-cigarette Aerosol by GC-MS (SIM), Panel 1 - Linear Smoking
	DCA2-SIML-MV	Carbonyls and Dicarbonyls in E-cigarette Aerosol by GC-MS (SIM), Panel 2 - Linear Smoking
Composition	ETH0-GCTL-MV	Ethanol in E-cigarette Aerosol by GC, Full Panel
	THM0-GCCL-MV	NFDAM, Nicotine, Humectants, Menthol, and Triacetin in E-cigarette Aerosol by GC-TCD/FID, Full Panel - Linear Smoking
	THM0-SIML-MV	Glycidol in E-cigarette Aerosol by GC-MS (SIM) - Linear Smoking

<b>E-Cigarette Mainstream Vapour</b>	<b>Test Code</b>	<b>Description</b>
Composition, Carbon Monoxide	COX1-NDIL-MV	Carbon Monoxide in E-cigarette Aerosol using Nondispersive Infrared Detection, Panel 1 - Linear Smoking
	TNC0-GCCL-MV	NFDAM, Nicotine, Carbon Monoxide, Composition, Menthol, Diethylene Glycol, Triethylene glycol, Triacetin in E-cigarette Aerosol by GC-TCD/FID, Full Panel - Linear Smoking
	TNC1-GCCL-MV	NFDAM, Nicotine, Carbon Monoxide, Composition, Menthol and Triacetin in Mainstream Aerosol by GC-TCD/FID, Panel 1 - Linear Smoking
	TNC2-GCCL-MV	NFDAM, Nicotine, Carbon Monoxide, Composition and Triacetin in Mainstream Aerosol by GC-TCD/FID, Panel 2 - Linear Smoking
	TNC3-GCCL-MV	NFDAM, Nicotine and Carbon Monoxide in E-cigarette Aerosol by GC-TCD/FID, Panel 3 - Linear Smoking
Dioxins and Furans	DIO0-SUBL-MV	Chlorinated Dioxins and Furans in E-cigarette Aerosol (Subcontracted), Full Panel - Linear Smoking
Flavourings	ARPO-SIML-MV	Peppermint Oil in E-cigarette Aerosol by GC-MS (SIM), Full Panel - Linear Smoking
	FLA0-SPML-MV	Flavourants in E-cigarette Aerosol by GC-MS (SPME), Full Panel - Linear Smoking
Humectants and Nicotine	THM1-GCCL-MV	Menthol, Nicotine and Composition in E-cigarette Aerosol by GC-TCD/FID, Panel 1 - Linear Smoking
	THM2-GCCL-MV	Nicotine, Particulate Humectants and Water in Mainstream Aerosol by GC-TCD/FID, Panel 2 - Linear Smoking
Hydrazine	HYD0-LCML-MV	Hydrazine in E-cigarette Aerosol by LC-MS/MS, Full Panel - Linear Smoking
Hydrogen Cyanide	HCN0-CFAL-MV	Hydrogen Cyanide in E-cigarette Aerosol by Continuous Flow Analysis, Full Panel - Linear Smoking

E-Cigarette Mainstream Vapour	Test Code	Description
Metals	HG_0-HGCL-MV	Mercury in E-cigarette Aerosol by Cold Vapor Atomic Absorption Spectroscopy, Full Panel - Linear Smoking
	MEQ0-ICPL-MV	Metals in E-cigarette Aerosol by ICP-MS, Full Panel - Linear Smoking
	MEQ1-ICPL-MV	Metals in E-cigarette Aerosol by ICP-MS, Panel 1 - Linear Smoking
	MET0-ICPE-MV	Metals in E-cigarette Aerosol by ICP-MS, Full Panel - Rotary Smoking with Electrostatic Precipitation
	METH-ICPE-MV	Metals in E-cigarette Aerosol by ICP-MS, HPHC List - Rotary Smoking with Electrostatic Precipitation
Nicotine Degradation Products	DEG0-LCML-MV	Nicotine Related Impurities in E-cigarette Aerosol by LC-MS/MS, Full Panel - Linear Smoking
Nitrosamines, Tobacco Specific	TSN0-LCML-MV	Tobacco Specific Nitrosamines in E-cigarette Aerosol by LC-MS/MS, Full Panel - Linear Smoking
	TSNH-LCML-MV	Tobacco Specific Nitrosamines in E-cigarette Aerosol by LC-MS/MS, HPHC List - Linear Smoking
Nitrosamines, Volatile	VNA0-LCML-MV	Volatile Nitrosamines in E-cigarette Aerosol by LC-MS/MS, Full Panel - Linear Smoking
	VNAH-LCML-MV	Volatile Nitrosamines in E-cigarette Aerosol by LC-MS/MS, HPHC List - Linear Smoking
NOX	NOX0-NOXX-MV	Nitrogen Oxides in E-cigarette Aerosol using a Chemiluminescence Analyzer, Full Panel
Organic Acids	OAC0-LCUL-MV	Organic Acids in E-cigarette Aerosol by HPLC-UV, Full Panel - Linear Smoking
	OAC1-LCUL-MV	Benzoic Acid in E-cigarette Aerosol by HPLC-UV, Panel 1 - Linear Smoking
PH	PH_0-PHMS-MV	pH in Mainstream E-cigarette Aerosol by Electrode, Full Panel - Single-Port Smoking
	PHL0-PHML-MV	pH of Mainstream E-cigarette Aerosol by Electrode with Liquid Trap
Phenols	PHE0-LCFL-MV	Phenols in E-cigarette Aerosol by HPLC-FLU, Full Panel - Linear Smoking
	PHN0-LCFL-MV	Phenols in E-cigarette Aerosol by HPLC-FLU, Full Panel - Linear Smoking
	PHNH-LCFL-MV	Catechol, m-cresol, o-cresol, p-cresol, Phenol in E-cigarette Aerosol by HPLC-FLU, HPHC List - Linear Smoking



<b>E-Cigarette Mainstream Vapour</b>	<b>Test Code</b>	<b>Description</b>
Polynuclear Aromatic Hydrocarbons	PAA0-SIML-MV	Polynuclear Aromatic Hydrocarbons and Aza-arenes in E-cigarette Aerosol by GC-MS (SIM), Full Panel - Linear Smoking
	PAH0-SIML-MV	Polynuclear Aromatic Hydrocarbons in E-cigarette Aerosol by GC-MS (SIM), Full Panel - Linear Smoking
	PAH3-SIML-MV	Benzo(a)pyrene in E-cigarette Aerosol by GC-MS (SIM) - Linear Smoking
Radio nucleotides	POL1-SUBL-MV	Polonium-210 in E-cigarette Aerosol (Subcontracted), Panel 1 - Linear Smoking
	U__0-SUBL-MV	Uranium-235 and Uranium-238 in E-cigarette Aerosol (Subcontracted), Full Panel - Linear Smoking
Volatiles	ALAO-SIML-MV	Allyl Alcohol in E-cigarette Aerosol by GC-MS (SIM), Full Panel - Linear Smoking
	VOL0-SIML-MV	Volatile Compounds in E-cigarette Aerosol by GC-MS (SIM), Full Panel - Linear Smoking
	VOL2-SIML-MV	Propylene Oxide in E-cigarette Aerosol by GC-MS (SIM), Panel 2 - Linear Smoking
	VOLA-SIML-MV	Volatile Compounds in E-cigarette Aerosol by GC-MS (SIM), Abbreviated HPHC list - Linear Smoking
	VOLH-SIML-MV	Volatile Compounds in E-cigarette Aerosol by GC-MS (SIM), HPHC List - Linear Smoking
	VON0-TEAL-MV	2-nitropropane in E-cigarette Aerosol by GC-TEA, Full Panel - Linear Smoking
Volatiles, Semi-	SVC0-SIML-MV	Semi-Volatile Compounds in E-cigarette Aerosol by GC-MS (SIM), Full Panel - Linear Smoking
	SVE0-TQUL-MV	Ethyl carbamate in E-cigarette Aerosol by GC-MS (TQU), Full Panel - Linear Smoking

## Liquids and Extracts

Liquids and Extracts	Test Code	Description
Ammonia	NH30-CFAN-LQ	Ammonia in Liquid Extracts by Continuous Flow Analysis
Chloride	CHL0-TTRN-LQ	Chloride in Liquid Extracts by Titration, Full Panel
Flavourings	ARF2-SIML-LQ	Aromatic Flavourants in Liquid Extracts by GC-MS (SIM), Panel 2 - Linear Smoking
	ARP0-SIMN-LQ	Peppermint Oil in Liquids by GC-MS (SIM), Full Panel
Humectants	HUM0-GCFN-LQ	Humectants in Liquid Extracts by GC-FID, Full Panel
Metals	MET0-ICPN-LQ	Metals in Liquid Extracts by ICP-MS, Full Panel
Moisture	KFW0-KFTN-LQ	Water in Liquid Extracts by Karl-Fisher Titration, Full Panel
Nicotine Alkaloids	ALK0-GCSN-LQ	Alkaloids in Liquid Extracts by GC-TSD, Full Panel
Nicotine Alkaloids and Sugars	AA30-CFAN-LQ	Nicotine and Sugars (Total and Reducing) in Liquid Extracts by Continuous Flow Analysis, Full Panel
Nitrogen	NIT0-SUBN-LQ	Total Nitrogen in Liquid Extracts (Subcontracted), Full Panel
	NO21-SPHN-LQ	Nitrite in Liquid Extracts by Automated Spectrophotometry
	NO30-CFAN-LQ	Nitrate in Liquid Extracts by Continuous Flow Analysis
Nitrosamines, Tobacco Specific	TSN0-LCMN-LQ	Tobacco Specific Nitrosamines in Liquid Extracts by LC-MS/MS, Full Panel
	TSN0-TEAN-LQ	Tobacco Specific Nitrosamines in Liquid Extracts by GC-TEA, Full Panel
Osmolarity	OSM0-OSMN-LQ	Osmolarity of Aqueous Tobacco Extracts using an Osmometer
PH	PH_0-PHMN-LQ	pH of Liquid Extracts by Electrode
Phenols	PHN0-LCFN-LQ	Phenols in Liquid Extracts by HPLC-FLU, Full Panel
Volatiles, Semi-	PN_0-SUBN-LQ	Protein Nitrogen in Liquid Extracts (Subcontracted)
	PPH0-LCUN-LQ	Polyphenols and Caffeic Acid in Liquid Extracts by HPLC-UV, Full Panel

## Thermally Heated Product (Heat not Burn) Emissions

<b>Thermally Heated Product Emissions</b>	<b>Test Code</b>	<b>Description</b>
Ammonia	NH3C-ICCL-MH	Ammonia in Mainstream emission by Ion-Chromatography (EC)- Linear Smoking
Aromatic Amines	AMIO-GCNL-MH	Aromatic Amines in Mainstream emission by GC-MS (NCI), Full Panel - Linear Smoking
	AMIA-GCNL-MH	Aromatic Amines in Mainstream emission by GC-MS (NCI), Abbreviated HPHC list - Linear Smoking
	AMIH-GCNL-MH	Aromatic Amines In Mainstream emission by GC-MS (NCI), HPHC List - Linear Smoking
Aromatic Amines, Heterocyclic	HAA0-LCML-MH	Heterocyclic Aromatic Amines in Mainstream emission by LC-MS/MS, Full Panel - Linear Smoking
	HAAH-LCML-MH	Heterocyclic Aromatic Amines in Mainstream emission by LC-MS/MS, HPHC List - Linear Smoking
Carbonyls	CARA-LCUL-MH	Carbonyls in Mainstream emission by HPLC-UV, Abbreviated HPHC list - Linear Smoking
	CARC-LCUL-MH	Carbonyls In Mainstream emission by HPLC-UV, Health Canada List - Linear Smoking
	CARH-LCUL-MH	Carbonyls in Mainstream emission by HPLC-UV, HPHC List - Linear Smoking
	DCA0-SIML-MH	Carbonyls and Dicarbonyls in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
	DCA1-SIML-MH	Carbonyls and Dicarbonyls in Mainstream emission by GC-MS (SIM), Panel 1 - Linear Smoking
	DCA2-SIML-MH	Carbonyls in Mainstream emission by GC-MS (SIM), Panel 2 - Linear Smoking
Dioxins and Furans	DIO0-SUBL-MH	Chlorinated Dioxins and Furans in Mainstream emission (Subcontracted), Full Panel - Linear Smoking

<b>Thermally Heated Product Emissions</b>	<b>Test Code</b>	<b>Description</b>
Flavourings	ARF0-SIML-MH	Aromatic Flavourants In Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
	ARF1-SIML-MH	Menthol and Carvone In Mainstream emission by GC-MS (SIM), Panel 1 - Linear Smoking
	ARF2-SIML-MH	Aromatic Flavourants in Mainstream emission by GC-MS (SIM), Panel 2 - Linear Smoking
	ARF4-SIML-MH	Aromatic Flavourants in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
	ARP0-SIML-MH	Peppermint Oil in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
Humectants, Nicotine and CO	TNC0-GCCL-MH	Tar, Nicotine, Carbon Monoxide, Humectants, Menthol and Triacetin in Mainstream emission by GC-TCD/FID, Full Panel - Linear Smoking
	TNC1-GCCL-MH	Tar, Nicotine, Carbon Monoxide, Menthol, Glycerol, Propylene Glycol, Triacetin in Mainstream emission by GC-TCD/FID, Panel 1 - Linear Smoking
	TNC2-GCCL-MH	Tar, Nicotine, Carbon Monoxide, Glycerol, Glycidol, Propylene Glycol, Triacetin in Mainstream emission by GC-TCD/FID, Panel 2 - Linear Smoking
Humectants	THM4-GCCL-MH	Diethylene Glycol, Glycerol, Menthol, Propylene Glycol, Triacetin in Mainstream emission by GC-TCD/FID, Panel 4 - Linear Smoking(STM)
Humectants and Nicotine	THM0-GCCL-MH	Tar, Nicotine, Humectants, Menthol and Triacetin in Mainstream emission by GC-TCD/FID, Full Panel - Linear Smoking
Humectants and Other Organics	PBO0-SIML-MH	Particulate Bound Organics in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
Hydrazine	HYD0-LCML-MH	Hydrazine in Mainstream emission by LC-MS/MS - Linear Smoking
Hydrogen Cyanide	HCNC-CFAL-MH	Hydrogen Cyanide in Mainstream emission by Continuous Flow Analysis, Health Canada List - Linear Smoking
Menthol	THM5-GCCL-MH	Menthol in Mainstream emission by GC-FID, Panel 5 - Linear Smoking

Thermally Heated Product Emissions	Test Code	Description
Metals	HG_C-HGCL-MH	Mercury in Mainstream emission by Cold Vapor Atomic Absorption Spectroscopy, Health Canada List - Linear Smoking
	METO-ICPE-MH	Metals in Mainstream emission by ICP-MS, Health Canada List - Rotary Smoking with Electrostatic Precipitation
	MET1-ICPE-MH	Metals in Mainstream emission by ICP-MS, Panel 1 - Rotary Smoking with Electrostatic Precipitation
	METC-ICPE-MH	Metals in Mainstream emission by ICP-MS, Health Canada List - Rotary Smoking with Electrostatic Precipitation
	METH-ICPE-MH	Metals in Mainstream emission by ICP-MS-Rotary Smoking with Electrostatic Precipitation
	MEU0-ICPE-MH	Metals in Mainstream emission by ICP-MS using Ultrapure Reagents, Full Panel - Rotary Smoking with Electrostatic Precipitation (HNB)
	MEU1-ICPE-MH	Metals in Mainstream emission by ICP-MS using Ultrapure Reagents, Panel 1 - Rotary Smoking with Electrostatic Precipitation
	MEUC-ICPE-MH	Metals in Mainstream emission by ICP-MS using Ultrapure Reagents, Health Canada List - Rotary Smoking with Electrostatic Precipitation (HNB)
Nicotine Degradation Products	DEG0-LCML-MH	Nicotine Related Impurities in Mainstream emission by LC-MS/MS, Full Panel - Linear Smoking
	DEG1-LCML-MH	Nicotine Related Impurities in Mainstream emission by LC-MS/MS, Panel 1 - Linear Smoking
Nitrosamines, Tobacco Specific	TSN0-LCML-MH	Tobacco Specific Nitrosamines in Mainstream emission by LC-MS/MS, Full Panel - Linear Smoking
	TSNH-LCML-MH	Tobacco Specific Nitrosamines in Mainstream emission by LC-MS/MS, HPHC List - Linear Smoking

Thermally Heated Product Emissions	Test Code	Description
Nitrosamines, Volatile	VNA0-LCML-MH	Volatile Nitrosamines in Mainstream emission by LC-MS/MS, Full Panel - Linear Smoking
	VNAA-LCML-MH	N-nitrosodiethanolamine (NDELA) in Mainstream emission by LC-MS/MS, Abbreviated HPHC list - Linear Smoking
	VNAH-LCML-MH	Volatile Nitrosamines in Mainstream emission by LC-MS/MS, HPHC List - Linear Smoking
NOX	NOXC-NOXX-MH	Nitrogen Oxides in Mainstream emission using a Chemiluminescence Analyzer, Health Canada List
PH	PH_C-PHMS-MH	pH in Mainstream emission by Electrode, Health Canada List - Single-Port Smoking
Phenols	PHN0-LCFL-MH	Phenols in Mainstream emission by HPLC-FLU, Full Panel - Linear Smoking
	PHNH-LCFL-MH	Phenols in Mainstream emission by HPLC-FLU, HPHC List - Linear Smoking
Polynuclear Aromatic Hydrocarbons	PAA0-SIML-MH	Polynuclear Aromatic Hydrocarbons and Aza-arenes in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
	PAH0-SIML-MH	Polynuclear Aromatic Hydrocarbons in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
	PAH3-SIML-MH	Benzo(a)pyrene in Mainstream emission by GC-MS (SIM) - Linear Smoking
	PAHH-SIML-MH	Polynuclear Aromatic Hydrocarbons in Mainstream emission by GC-MS (SIM), HPHC List - Linear Smoking
Radio nucleotides	POLO-SUBL-MH	Polonium-210 and Lead-210 in Mainstream emission (Subcontracted), Full Panel - Linear Smoking
	POL1-SUBL-MH	Polonium-210 in Mainstream emission (Subcontracted), Panel 1 - Linear Smoking
	U__0-SUBL-MH	Uranium-235 and Uranium-238 in Mainstream emission (Subcontracted), Full Panel - Linear Smoking

Thermally Heated Product Emissions	Test Code	Description
Tar Nicotine and CO	COX0-NDIL-MH	Carbon Monoxide and Carbon Dioxide in Mainstream emission using Nondispersive Infrared Detection, Full Panel - Linear Smoking
	COXC-NDIL-MH	Carbon Monoxide in Mainstream emission using Nondispersive Infrared Detection, Health Canada List - Linear Smoking
	SOLO-LCUL-MH	Solanesol in Mainstream emission by HPLC-UV, Full Panel - Linear Smoking
	TNCC-GCCL-MH	Tar, Nicotine and Carbon Monoxide in Mainstream emission by GC-TCD/FID, Health Canada List - Linear Smoking
	TNCH-GCCL-MH	Nicotine and Carbon Monoxide in Mainstream emission by GC-TCD/FID, HPHC List - Linear Smoking(STM)
Volatiles	ALAO-SIML-MH	Allyl Alcohol in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
	VOL0-SIML-MH	Volatile Compounds in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking(default-HNB)
	VOL1-GCML-MH	Volatile Compounds in Mainstream emission by GC-MS, Panel 1 - Linear Smoking
	VOLA-SIML-MH	Volatile Compounds in Mainstream emission by GC-MS (SIM), Abbreviated HPHC list - Linear Smoking
	VOLH-SIML-MH	Volatile Compounds in Mainstream emission by GC-MS (SIM), HPHC List - Linear Smoking
	VONO-TEAL-MH	2-nitropropane in Mainstream emission by GC-TEA, Full Panel - Linear Smoking
Volatiles, Semi-	SVC0-SIML-MH	Semi-Volatile Compounds in Mainstream emission by GC-MS (SIM), Full Panel - Linear Smoking
	SVC1-SIML-MH	Semi-Volatile Compounds in Mainstream emission by GC-MS (SIM), Panel 1 - Linear Smoking
	SVE0-TQUL-MH	Ethyl Carbamate in Mainstream emission by GC-MS (TQU), Full Panel - Linear Smoking

## Mainstream Smoke

Mainstream Smoke	Test Code	Description
Additives	CAF0-LCUL-MS	Caffeic Acid in Mainstream Smoke by HPLC-UV, Full Panel - Linear Smoking
	EUGC-LCUL-MS	Eugenol in Mainstream Smoke by HPLC-UV, Health Canada List - Linear Smoking
	SOR0-LCUL-MS	Potassium Sorbate in Mainstream Smoke by HPLC-UV - Linear Smoking
	SOR0-LCUR-MS	Sorbic Acid in Mainstream Smoke by HPLC-UV, Health Canada List - Rotary Smoking
Ammonia	NH30-ICER-MS	Ammonia in Mainstream Smoke by Ion-Chromatography (EC) Enhanced Method, Full Panel - Rotary Smoking
	NH3C-ICCL-MS	Ammonia in Mainstream Smoke by Ion-Chromatography (EC), Health Canada List - Linear Smoking
	NH3C-ICCR-MS	Ammonia in Mainstream Smoke by Ion-Chromatography (EC), Health Canada List - Rotary Smoking
Aromatic Amines	AMIO-GCML-MS	Aromatic Amines in Mainstream Smoke by GC-MS, Full Panel - Linear Smoking
	AMIO-GCMR-MS	Aromatic Amines in Mainstream Smoke by GC-MS, Full Panel - Rotary Smoking
	AMIO-GCNL-MS	Aromatic Amines in Mainstream Smoke by GC-MS (NCI), Full Panel - Linear Smoking, low-level method.
	AMIA-GCML-MS	Aromatic Amines in Mainstream Smoke by GC-MS, Abbreviated HPHC list - Linear Smoking
	AMIA-GCMR-MS	Aromatic Amines in Mainstream Smoke by GC-MS, Abbreviated HPHC list - Rotary Smoking(default)
	AMIA-GCNL-MS	Aromatic Amines in Mainstream Smoke by GC-MS (NCI), Abbreviated HPHC list - Linear Smoking, low level method
	AMIC-GCMR-MS	Aromatic Amines in Mainstream Smoke by GC-MS, Health Canada List - Rotary Smoking
	AMIH-GCML-MS	Aromatic Amines in Mainstream Smoke by GC-MS, HPHC List - Linear Smoking
	AMIH-GCMR-MS	Aromatic Amines in Mainstream Smoke by GC-MS, HPHC List - Rotary Smoking (default)
	AMIH-GCNL-MS	Aromatic Amines in Mainstream Smoke by GC-MS (NCI), HPHC List - Linear Smoking, low-level method.



Mainstream Smoke	Test Code	Description
Aromatic Amines, Heterocyclic	HAA0-LCML-MS	Heterocyclic Aromatic Amines in Mainstream Smoke by LC-MS/MS, Full Panel - Linear Smoking
	HAAH-LCML-MS	Heterocyclic Aromatic Amines in Mainstream Smoke by LC-MS/MS, HPHC List - Linear Smoking
Carbonyls	CARA-LCUL-MS	Carbonyls in Mainstream Smoke by HPLC-UV, Abbreviated HPHC list - Linear Smoking
	CARC-LCUL-MS	Carbonyls in Mainstream Smoke by HPLC-UV, Health Canada List - Linear Smoking
	CARH-LCUL-MS	Carbonyls in Mainstream Smoke by HPLC-UV, HPHC List - Linear Smoking
	DCA0-SIML-MS	Carbonyls and Dicarbonyls in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking
	DCA1-SIML-MS	Carbonyls and Dicarbonyls in Mainstream Smoke by GC-MS (SIM), Panel 1 - Linear Smoking
	DCA2-SIML-MS	Carbonyls in Mainstream Smoke by GC-MS (SIM), Panel 2 - Linear Smoking
Dioxins and Furans	DIO0-SUBR-MS	Chlorinated Dioxins and Furans in Mainstream Smoke (Subcontracted), Full Panel - Rotary Smoking
Flavourings	ARF0-SIML-MS	Aromatic Flavourants in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking
	ARF1-SIML-MS	Aromatic Flavourants in Mainstream Smoke by GC-MS (SIM), Panel 1 - Linear Smoking
	ARF2-SIML-MS	Aromatic Flavourants in Mainstream Smoke by GC-MS (SIM), Panel 2 - Linear Smoking
	ARF4-SIML-MS	Aromatic Flavourants in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking
	ARPO-SIML-MS	Peppermint Oil in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking

Mainstream Smoke	Test Code	Description
Humectants, Nicotine and CO	THM0-GCCR-MS	Nicotine, Water, Tar and Select Humectants in Mainstream Smoke by GC-TCD/FID, Full Panel - Rotary Smoking
	TNC0-GCCL-MS	Tar, Nicotine, Carbon Monoxide, Humectants, Menthol and Triacetin in Mainstream Smoke by GC-TCD/FID, Full Panel - Linear Smoking
	TNC1-GCCL-MS	Tar, Nicotine, Carbon Monoxide, Menthol, Glycerol, Propylene Glycol, Triacetin in Mainstream Smoke by GC-TCD/FID, Panel 1 - Linear Smoking
	TNC2-GCCL-MS	Tar, Nicotine, Carbon Monoxide, Glycerol, Glycidol, Propylene Glycol, Triacetin in Mainstream Smoke by GC-TCD/FID, Panel 2 - Linear Smoking
Humectants	THM4-GCCL-MS	Diethylene Glycol, Glycerol, Menthol, Propylene Glycol, Triacetin in Mainstream Smoke by GC-TCD/FID, Panel 4 - Linear Smoking (STM)
Humectants and Nicotine	THM0-GCCL-MS	Tar, Nicotine, Humectants, Menthol and Triacetin in Mainstream Smoke by GC-TCD/FID, Full Panel - Linear Smoking
Hydrazine	HYD0-LCML-MS	Hydrazine in Mainstream Smoke by LC-MS/MS - Linear Smoking
	HYD0-LCMR-MS	Hydrazine in Mainstream Smoke by LC-MS/MS, Full Panel - Rotary Smoking
Hydrogen Cyanide	HCNC-CFAL-MS	Hydrogen Cyanide in Mainstream Smoke by Continuous Flow Analysis, Health Canada List - Linear Smoking
Menthol	THM5-GCCL-MS	Menthol in Mainstream Smoke by GC-FID, Panel 5 - Linear Smoking
Metals	HG_C-HGCL-MS	Mercury in Mainstream Smoke by Cold Vapor Atomic Absorption Spectroscopy, Health Canada List - Linear Smoking
	HG_C-HGCR-MS	Mercury in Mainstream Smoke by Cold Vapor Atomic Absorption Spectroscopy, Health Canada List - Rotary Smoking
	MET0-ICPE-MS	Metals in Mainstream Smoke by ICP-MS, Health Canada List - Rotary Smoking with Electrostatic Precipitation
	MET1-ICPE-MS	Metals in Mainstream Smoke by ICP-MS, Panel 1 - Rotary Smoking with Electrostatic Precipitation

Mainstream Smoke	Test Code	Description
	METC-ICPE-MS	Metals in Mainstream Smoke by ICP-MS, Health Canada List - Rotary Smoking with Electrostatic Precipitation
	METH-ICPE-MS	Metals in Mainstream Smoke by ICP-MS, HPHC List - Rotary Smoking with Electrostatic Precipitation
	MEU0-ICPE-MS	Metals in Mainstream Smoke by ICP-MS using Ultrapure Reagents, Full Panel - Rotary Smoking with Electrostatic Precipitation, low level method.
	MEU1-ICPE-MS	Metals in Mainstream Smoke by ICP-MS using Ultrapure Reagents, Panel 1 - Rotary Smoking with Electrostatic Precipitation, low level method.
	MEUC-ICPE-MS	Metals in Mainstream Smoke by ICP-MS using Ultrapure Reagents, Health Canada List - Rotary Smoking with Electrostatic Precipitation, low level method.
	MEUH-ICPE-MS	Metals in Mainstream Smoke by ICP-MS using Ultrapure Reagents, HPHC List - Rotary Smoking with Electrostatic Precipitation, low level method.
Nicotine Degradation Products	DEG0-LCML-MS	Nicotine Related Impurities in Mainstream Smoke by LC-MS/MS, Full Panel - Linear Smoking
	DEG1-LCML-MS	Nicotine Related Impurities in Mainstream Smoke by LC-MS/MS, Panel 1 - Linear Smoking
Nitrosamines, Tobacco Specific	TSN0-LCML-MS	Tobacco Specific Nitrosamines in Mainstream Smoke by LC-MS/MS, Full Panel - Linear Smoking
	TSNC-TEAR-MS	Tobacco Specific Nitrosamines in Mainstream Smoke by GC-TEA, Health Canada List - Rotary Smoking
	TSNH-LCML-MS	Tobacco Specific Nitrosamines in Mainstream Smoke by LC-MS/MS, HPHC List - Linear Smoking

Mainstream Smoke	Test Code	Description
Nitrosamines, Volatile	VNA0-LCML-MS	Volatile Nitrosamines in Mainstream Smoke by LC-MS/MS, Full Panel - Linear Smoking
	VNA0-LCMR-MS	Volatile Nitrosamines in Mainstream Smoke by LC-MS/MS, Full Panel - Rotary Smoking
	VNAA-LCML-MS	N-nitrosodiethanolamine (NDELA) in Mainstream Smoke by LC-MS/MS, Abbreviated HPHC list - Linear Smoking
	VNAA-LCMR-MS	N-nitrosodiethanolamine (NDELA) in Mainstream Smoke by LC-MS/MS, Abbreviated HPHC list - Rotary Smoking
	VNAH-LCML-MS	Volatile Nitrosamines in Mainstream Smoke by LC-MS/MS, HPHC List - Linear Smoking
	VNAH-LCMR-MS	Volatile Nitrosamines in Mainstream Smoke by LC-MS/MS, HPHC List - Rotary Smoking
NOX	NOXC-NOXX-MS	Nitrogen Oxides in Mainstream Smoke using a Chemiluminescence Analyzer, Health Canada List
Particulate Bound Organics	PBO0-SIML-MS	Particulate Bound Organics by GC-MS (SIM) - Linear Smoking
PH	PH_C-PHMS-MS	pH in Mainstream Smoke by Electrode, Health Canada List - Single-Port Smoking
Phenols	PHEC-LCFL-MS	Phenols in Mainstream Smoke by HPLC-FLU, Health Canada List - Linear Smoking
	PHN0-LCFL-MS	Phenols in Mainstream Smoke by HPLC-FLU, Full Panel - Linear Smoking
	PHNH-LCFL-MS	Phenols in Mainstream Smoke by HPLC-FLU, HPHC List - Linear Smoking
Polynuclear Aromatic Hydrocarbons	BAPC-LCFL-MS	Benzo(a)pyrene in Mainstream Smoke by HPLC-FLU, Health Canada List - Linear Smoking
	PAA0-SIML-MS	Polynuclear Aromatic Hydrocarbons and Aza-arenes in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking
	PAA0-SIMR-MS	Polynuclear Aromatic Hydrocarbons and Aza-arenes in Mainstream Smoke by GC-MS (SIM), Full Panel - Rotary Smoking
	PAH0-SIML-MS	Polynuclear Aromatic Hydrocarbons in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking
	PAH0-SIMR-MS	Polynuclear Aromatic Hydrocarbons in Mainstream Smoke by GC-MS (SIM), Full Panel - Rotary Smoking
	PAH3-SIML-MS	Benzo(a)pyrene in Mainstream Smoke by GC-MS (SIM) - Linear Smoking

Mainstream Smoke	Test Code	Description
	PAH3-SIMR-MS	Benzo(a)pyrene in Mainstream Smoke by GC-MS (SIM) - Rotary Smoking (default)
	PAHH-SIML-MS	Polynuclear Aromatic Hydrocarbons in Mainstream Smoke by GC-MS (SIM), HPHC List - Linear Smoking (HNB Product Only)
	PAHH-SIMR-MS	Polynuclear Aromatic Hydrocarbons in Mainstream Smoke by GC-MS (SIM), HPHC List - Rotary Smoking (Conventional Product Only)
Radio nucleotides	POLO-SUBL-MS	Polonium-210 and Lead-210 in Mainstream Smoke (Subcontracted), Full Panel - Linear Smoking
	POL1-SUBL-MS	Polonium-210 in Mainstream Smoke (Subcontracted), Panel 1 - Linear Smoking
	U__0-SUBL-MS	Uranium-235 and Uranium-238 in Mainstream Smoke (Subcontracted), Full Panel - Linear Smoking
Tar Nicotine and CO	COX0-NDIL-MS	Carbon Monoxide and Carbon Dioxide in Mainstream Smoke using Nondispersive Infrared Detection, Full Panel - Linear Smoking
	COX2-NDIL-MS	Carbon Dioxide* in Mainstream Smoke using Nondispersive Infrared Detection, Panel 2 - Linear Smoking
	COXC-NDIL-MS	Carbon Monoxide in Mainstream Smoke using Nondispersive Infrared Detection, Health Canada List - Linear Smoking
	FNIO-GCML-MS	Free-base Nicotine in Mainstream Smoke by GC-MS - Linear Smoking
	SOLO-LCUL-MS	Solanesol in Mainstream Smoke by HPLC-UV, Full Panel - Linear Smoking
	TNCC-GCCL-MS	Tar, Nicotine and Carbon Monoxide in Mainstream Smoke by GC-TCD/FID, Health Canada List - Linear Smoking
	TNCC-GCCR-MS	Tar, Nicotine and Carbon Monoxide in Mainstream Smoke by GC-TCD/FID, Health Canada List - Rotary Smoking (STM)
	TNCH-GCCL-MS	Nicotine and Carbon Monoxide in Mainstream Smoke by GC-TCD/FID, HPHC List - Linear Smoking(STM)
	TNFC-GCCL-MS	Tar, Nicotine, Carbon Monoxide and Filter Efficiency in Mainstream Smoke by GC-TCD/FID, Health Canada List - Linear Smoking(STM)

Mainstream Smoke	Test Code	Description
Volatiles	ALAO-SIML-MS	Allyl Alcohol in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking
	VOL0-GCML-MS	Volatile Compounds in Mainstream Smoke by GC-MS, Full Panel - Linear Smoking
	VOL0-GCMR-MS	Volatile Compounds in Mainstream Smoke by GC-MS, Full Panel - Rotary Smoking
	VOL0-SIML-MS	Volatile Compounds in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking(default-HNB)
	VOL1-GCML-MS	Volatile Compounds in Mainstream Smoke by GC-MS, Panel 1 - Linear Smoking
	VOL1-GCMR-MS	Volatile Compounds in Mainstream Smoke by GC-MS, Panel 1 - Rotary Smoking(STM)
	VOL1-SIML-MS	Volatile Compounds in Mainstream Smoke by GC-MS (SIM), Panel 1 - Linear Smoking
	VOLA-GCML-MS	Volatile Compounds in Mainstream Smoke by GC-MS, Abbreviated HPHC list - Linear Smoking
	VOLA-GCMR-MS	Volatile Compounds in Mainstream Smoke by GC-MS, Abbreviated HPHC list - Rotary Smoking
	VOLA-SIML-MS	Volatile Compounds in Mainstream Smoke by GC-MS (SIM), Abbreviated HPHC list - Linear Smoking
	VOLC-GCMR-MS	Volatile Compounds in Mainstream Smoke by GC-MS, Health Canada List - Rotary Smoking
	VOLH-GCML-MS	Volatile Compounds in Mainstream Smoke by GC-MS, HPHC List - Linear Smoking
	VOLH-GCMR-MS	Volatile Compounds in Mainstream Smoke by GC-MS, HPHC List - Rotary Smoking
	VOLH-SIML-MS	Volatile Compounds in Mainstream Smoke by GC-MS (SIM), HPHC List - Linear Smoking
	VONO-TEAL-MS	2-nitropropane in Mainstream Smoke by GC-TEA, Full Panel - Linear Smoking
	VONO-TEAR-MS	2-nitropropane in Mainstream Smoke by GC-TEA, Full Panel - Rotary Smoking

Mainstream Smoke	Test Code	Description
Volatiles, Semi-	AAAH-SIMR-MS	Acetamide and Acrylamide in Mainstream Smoke by GC-MS (SIM), HPHC List - Rotary Smoking
	SVC0-GCML-MS	Semi-Volatile Compounds in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking
	SVC0-GCMR-MS	Semi-Volatile Compounds in Mainstream Smoke by GC-MS, Full Panel - Rotary Smoking
	SVC0-SIML-MS	Semi-Volatile Compounds in Mainstream Smoke by GC-MS (SIM), Full Panel - Linear Smoking, low-level method.
	SVC1-GCML-MS	Semi-Volatile Compounds in Mainstream Smoke by GC-MS, Panel 1 - Linear Smoking
	SVC1-SIML-MS	Semi-Volatile Compounds in Mainstream Smoke by GC-MS (SIM), Panel 1 - Linear Smoking, low-level method.
	SVCC-GCMR-MS	Semi-Volatile Compounds in Mainstream Smoke by GC-MS, Health Canada List - Rotary Smoking
	SVCH-GCMR-MS	Semi-Volatile Compounds in Mainstream Smoke by GC-MS, HPHC List - Rotary Smoking
	SVE0-TQUL-MS	Ethyl Carbamate in Mainstream Smoke by GC-MS (TQU), Full Panel - Linear Smoking
	SVE0-TQUR-MS	Ethyl Carbamate in Mainstream Smoke by GC-MS (TQU), Full Panel - Rotary Smoking

## Sidestream Smoke

Sidestream Smoke	Test Code	Description
Additives	EUG0-LCUL-SS	Eugenol in Sidestream Smoke by HPLC-UV, Full Panel - Linear Smoking
Ammonia	NH30-ICEL-SS	Ammonia in Sidestream Smoke by Ion-Chromatography (EC) Enhanced Method, Full Panel - Linear Smoking
	NH3C-ICCL-SS	Ammonia in Sidestream Smoke by Ion-Chromatography (EC), Health Canada List - Linear Smoking
Aromatic Amines	AMIC-GCML-SS	Aromatic Amines in Sidestream Smoke by GC-MS, Health Canada List - Linear Smoking
Carbonyls	CARC-LCUL-SS	Carbonyls in Sidestream Smoke by HPLC-UV, Health Canada List - Linear Smoking
Hydrogen Cyanide	HCNC-CFAL-SS	Hydrogen Cyanide in Sidestream Smoke by Continuous Flow Analysis, Health Canada List - Linear Smoking
Metals	HG_C-HGCL-SS	Mercury in Sidestream Smoke by Cold Vapor Atomic Absorption Spectroscopy, Health Canada List - Linear Smoking
	META-ICPL-SS	Metals in Sidestream Smoke by ICP-MS, Abbreviated HPHC list - Linear Smoking
	METC-ICPL-SS	Metals in Sidestream Smoke by ICP-MS, Health Canada List - Linear Smoking
Nitrosamines, Tobacco Specific	TSNO-LCML-SS	Tobacco Specific Nitrosamines in Sidestream Smoke by LC-MS/MS, Full Panel - Linear Smoking
	TSNC-TEAL-SS	Tobacco Specific Nitrosamines in Sidestream Smoke by GC-TEA, Health Canada List - Linear Smoking
NOX	NOXC-NOXS-SS	Nitrogen Oxides in Sidestream Smoke using a Chemiluminescence Analyzer, Health Canada List
PH	PH_0-PHMS-SS	pH in Sidestream Smoke by Electrode, Full Panel - Single-Port Smoking
Phenols	PHEC-LCFL-SS	Phenols in Sidestream Smoke by HPLC-FLU, Health Canada List - Linear Smoking
	PHN0-LCFL-SS	Phenols in Sidestream Smoke by HPLC-FLU, Full Panel - Linear Smoking



Sidestream Smoke	Test Code	Description
Polynuclear Aromatic Hydrocarbons	BAPC-SIML-SS	Benzo[a]pyrene in Sidestream Smoke by GC-MS (SIM), Health Canada List - Linear Smoking
	PAH0-SIML-SS	Polynuclear Aromatic Hydrocarbons in Sidestream Smoke by GC-MS (SIM), Full Panel - Linear Smoking
Radio nucleotides	POL0-SUBL-SS	Polonium-210 and Lead-210 in Sidestream Smoke (Subcontracted), Full Panel - Linear Smoking
	POL1-SUBL-SS	Polonium-210 in Sidestream Smoke (Subcontracted), Panel 1 - Linear Smoking
Tar Nicotine and CO	COX0-NDIL-SS	Carbon Monoxide, Carbon Dioxide in Sidestream Smoke using Nondispersive Infrared Detection, Full Panel - Linear Smoking
	COX2-NDIL-SS	Carbon Dioxide* in Sidestream Smoke using Nondispersive Infrared Detection, Panel 2 - Linear Smoking
	COXC-NDIL-SS	Carbon Monoxide in Sidestream Smoke using Nondispersive Infrared Detection, Health Canada List - Linear Smoking
	TNCC-GCCL-SS	Tar and Nicotine in Sidestream Smoke by GC-TCD/FID, Health Canada List - Linear Smoking
Volatiles	VOLC-GCML-SS	Volatile Compounds in Sidestream Smoke by GC-MS, Health Canada List - Linear Smoking
Volatiles, Semi-	SVCC-GCML-SS	Semi-Volatile Compounds in Sidestream Smoke by GC-MS, Health Canada List - Linear Smoking

## Tobacco Products

<b>Tobacco Products</b>	<b>Test Code</b>	<b>Description</b>
Additives	COU0-LCMN-WT	Coumarin in Tobacco Products by LC-MS/MS
	EUGC-LCUN-WT	Eugenol in Tobacco Products by HPLC-UV, Health Canada List
	GLH0-LCUN-WT	Glycyrrhizic Acid in Tobacco Products by HPLC-UV, Full Panel
	PROC-GCFN-WT	Sodium Propionate in Tobacco Products by GC-FID, Health Canada List
	SORC-LCUN-WT	Sorbic Acid in Tobacco Products by HPLC-UV, Health Canada List
	THE0-LCUN-WT	Theobromine in Tobacco Products by HPLC-UV, Full Panel
Aflatoxins	AFL0-LCMN-WT	Aflatoxin B1 in Tobacco Products by LC-MS/MS, Full Panel
Ammonia	NH30-CFAN-WT	Ammonia in Tobacco Products by Continuous Flow Analysis
	NH30-ICEN-WT	Ammonia in Tobacco Products by Ion-Chromatography (EC) Enhanced Method, Full Panel
	NH3C-ICCN-WT	Ammonia in Tobacco Products by Ion-Chromatography (EC), Health Canada List
Aromatic Amines	AM10-GCMN-WT	Aromatic Amines in Tobacco Products by GC-MS, Full Panel
Carbonyls	CAR0-LCUN-WT	Carbonyls in Tobacco Products by HPLC-UV, Full Panel
	CARA-LCUN-WT	Carbonyls in Tobacco Products by HPLC-UV, Abbreviated HPHC list
	CARH-LCUN-WT	Carbonyls in Tobacco Products by HPLC-UV, HPHC List
	DCA0-SIMN-WT	Carbonyls in Tobacco Products by GC-MS (SIM), Full Panel
	DCA1-SIMN-WT	Carbonyls in Tobacco Products by GC-MS (SIM), Panel 1
Chloride	CHL0-TTRN-WT	Chloride in Tobacco Products by Titration, Full Panel

<b>Tobacco Products</b>	<b>Test Code</b>	<b>Description</b>
Flavourings	ARF0-SIMN-WT	Aromatic Flavourants in Tobacco Products by GC-MS (SIM), Full Panel
	ARF1-SIMN-WT	Menthol and Carvone in Tobacco Products by GC-MS (SIM), Full Panel
	ARF4-SIMN-WT	Aromatic Flavourants in Tobacco Products by GC-MS (SIM), Panel 4
	ARPO-SIMN-WT	Peppermint Oil in Tobacco Products
	EFLO-SIMN-WT	Ethyl salicylate and Methyl salicylate in Tobacco Products by GC-MS (SIM)
	FLA0-SPML-WT	Flavourants in tobacco products by SPME GC/MS
Humectants	HUM0-GCFN-WT	Humectants and Menthol in Tobacco Products by GC-FID, Full Panel
	HUMC-GCFN-WT	Humectants in Tobacco Products by GC-FID, Health Canada List
	TRIC-GCFN-WT	Triacetin in Tobacco Products by GC-FID, Health Canada List
Menthol	HUM1-GCFN-WT	Menthol in Tobacco Products by GC-FID, Panel 1
Metals	MET0-AESN-WT	Metals in Tobacco Products by ICP-AES, Full Panel
	META-AESN-WT	Metals in Tobacco Products by ICP-AES, Abbreviated HPHC list
	METC-AESN-WT	Metals in Tobacco Products by ICP-AES, Health Canada List
	METH-AESN-WT	Metals in Tobacco Products by ICP-AES, HPHC List
	MTM0-AESN-WT	Macroelements in Tobacco Products by ICP-AES, Full Panel
Microbiology	ACC0-SUBN-WT	Total Aerobic Colony Count in Tobacco Products (Subcontracted)
	YMC0-SUBN-WT	Total Yeast and Mould Count in Tobacco Products (Subcontracted)
Moisture	KFW0-KFTN-WT	Water in Tobacco Products by Karl-Fisher Titration
	MOI0-GCTN-WT	Water in Tobacco Products by GC-TCD, Full Panel
	MOI0-OVEN-WT	Moisture in Tobacco Products using an Oven (AOAC966.02 Method - 99.5°C)
	MOI1-OVEN-WT	Moisture in Tobacco Products using an Oven (Modified Method - 110°C)

<b>Tobacco Products</b>	<b>Test Code</b>	<b>Description</b>
Nicotine Alkaloids	ALKA-GCSN-WT	Nicotine in Tobacco Products by GC-TSD, Abbreviated HPHC list
	ALKC-GCSN-WT	Alkaloids in Tobacco Products by GC-TSD, Health Canada List
	ALKH-GCSN-WT	Alkaloids in Tobacco Products by GC-TSD, HPHC List
	NICO-GCFN-WT	Nicotine in Tobacco Products by GC-FID, Full Panel
	PONO-LCMN-WT	Pseudooxynicotine in Tobacco Products by LC-MS/MS, Full Panel
	PONO-ULMN-WT	Pseudooxynicotine in Tobacco Products by UPLC-MS/MS, Full Panel
Nicotine Alkaloids and Sugars	AA30-CFAN-WT	Nicotine and Sugars (Total and Reducing) in Tobacco Products by Continuous Flow Analysis, Full Panel
	RSNO-CFAN-WT	Nicotine and Reducing Sugars in Tobacco Products by Continuous Flow Analysis, Full Panel
	TSU0-CFAN-WT	Total Sugars in Tobacco Products by Continuous Flow Analysis, Full Panel
Nitrogen	NIT0-SUBN-WT	Total Nitrogen in Tobacco Products (Subcontracted)
	NO20-SPHN-WT	Nitrite in Tobacco Products by Spectrophotometry
	NO21-SPHN-WT	Nitrite in Tobacco Products by Automated Spectrophotometry
	PN_0-SUBN-WT	Protein Nitrogen in Tobacco Products (Subcontracted)
	NO3C-CFAN-WT	Nitrate in Tobacco Products by Continuous Flow Analysis, Health Canada List
Nitrosamines, Tobacco Specific	TSNO-LCMN-WT	Tobacco Specific Nitrosamines in Tobacco Products by LC-MS/MS, Full Panel
	TSNC-TEAN-WT	Tobacco Specific Nitrosamines in Tobacco Products by GC-TEA, Health Canada List
	TSNH-LCMN-WT	Tobacco Specific Nitrosamines in Tobacco Products by LC-MS/MS, HPHC List
Nitrosamines, Volatile	VN30-LCMN-WT	N-nitrosodibenzylamine (NDBzA) in Tobacco Products by LC-MS/MS, Full Panel
	VNA0-LCMN-WT	Volatile Nitrosamines in Tobacco Products by LC-MS/MS, Full Panel
	NSA0-LCMN-WT	N-nitrososarcosine (NSAR) in Tobacco Products by LC-MS/MS

<b>Tobacco Products</b>	<b>Test Code</b>	<b>Description</b>
	VN20-LCMN-WT	Volatile Nitrosamines in Tobacco Products by LC-MS/MS, Full Panel
	VNAH-LCMN-WT	Volatile Nitrosamines in Tobacco Products by LC-MS/MS, HPHC List
Organic Acids	OAC0-LCUN-WT	Benzoic Acid in whole tobacco by HPLC-UV, Full Panel
PH	PH_C-PHMN-WT	pH of Tobacco Products by Electrode, Health Canada List
Phenols	PHN0-LCFN-WT	Phenols in Tobacco Products by HPLC-FLU, Full Panel
Physical Measurements	WA_0-SUBN-WT	Water Activity in Tobacco Products (Subcontracted)
Polynuclear Aromatic Hydrocarbons	BAPC-LCFN-WT	Benzo(a)pyrene in Tobacco Products by HPLC-FLU, Health Canada List
	NSP1-SIMN-WT	Benzo(a)pyrene in Tobacco Products by GC-MS (SIM)
	PAH0-SIMN-WT	Polynuclear Aromatic Hydrocarbons in Tobacco Products by GC-MS (SIM), Full Panel
	PAH3-SIMN-WT	Benzo(a)pyrene in Tobacco Products by GC-MS (SIM), Panel 1
	PAHH-SIMN-WT	Polynuclear Aromatic Hydrocarbons in Tobacco Products by GC-MS (SIM), HPHC List
Polyphenols and Caffeic Acid	PPH0-LCUN-WT	Polyphenols and Caffeic Acid in Tobacco Products by HPLC-UV, Full Panel
Radio nucleotides	POLO-SUBN-WT	Polonium-210 and Lead-210 in Tobacco Products (Subcontracted), Full Panel
	POL1-SUBN-WT	Polonium-210 in Tobacco Products (Subcontracted)
	U__0-SUBN-WT	Uranium-235 and Uranium-238 in Tobacco Products (Subcontracted)
Volatiles	VOLO-GCMN-WT	Volatile Compounds in Tobacco Products by GC-MS, Full Panel
Volatiles, Semi-	ACR0-LCMN-WT	Acrylamide in Tobacco Products by LC-MS/MS, Full Panel
	SVE0-SIMN-WT	Ethyl Carbamate in Tobacco Products by GC-MS (SIM), Full Panel

## Toxicology

<b>Toxicology</b>	<b>Test Code</b>	<b>Description</b>
Ames Reverse Mutagenicity (TA98, TA100, TA102, TA1535, TA1537, YG1021, YG1024, YG1026, and YG1029 Revertants)	AME0-STYL-MV	In Vitro ames reverse mutagenicity (+S9, -S9) on E-Cigarette Aerosol
	AME0-STYN-EL	In Vitro ames reverse mutagenicity (+S9, -S9) on E-Liquids
	AME0-STYL-MH	In Vitro ames reverse mutagenicity (+S9, -S9) on Mainstream Emissions from Thermally Heated Products
	AME0-STYN-WT	In Vitro ames reverse mutagenicity (+S9, -S9) on Tobacco Products
	AME0-STYL-MS	In Vitro ames reverse mutagenicity (+S9, -S9) on Mainstream Smoke
Mouse Lymphoma Assay (MLA)	MLA0-MLCL-MV	Mouse Lymphoma Assay using Mouse Lymphoma Cells (L5178Y/tk+/- 3.7.2C) on E-Cigarette Aerosol
	MLA0-MLCN-EL	Mouse Lymphoma Assay using Mouse Lymphoma Cells (L5178Y/tk+/- 3.7.2C) on E-Liquids
	MLA0-MLCL-MH	Mouse Lymphoma Assay using Mouse Lymphoma Cells (L5178Y/tk+/- 3.7.2C) on Mainstream Emissions from Thermally Heated Products
	MLA0-MLCN-WT	Mouse Lymphoma Assay using Mouse Lymphoma Cells (L5178Y/tk+/- 3.7.2C) on Tobacco Products
	MLA0-MLCR-MS	Mouse Lymphoma Assay using Mouse Lymphoma Cells (L5178Y/tk+/- 3.7.2C) on Mainstream Smoke
Micronucleus Assay	MN_0-CHOL-MV	In Vitro Micronucleus Assay using Chinese Hamster Ovary Cells on E-Cigarette Aerosol
	MN_0-CHON-EL	In Vitro Micronucleus Assay using Chinese Hamster Ovary Cells on E-Liquids
	MN_0-CHOL-MH	In Vitro Micronucleus Assay using Chinese Hamster Ovary Cells on Mainstream Emissions from Thermally Heated Products
	MN_0-CHON-WT	In Vitro Micronucleus Assay using Chinese Hamster Ovary Cells on Tobacco Products
	MN_0-CHOL-MS	In Vitro Micronucleus Assay using Chinese Hamster Ovary Cells on Mainstream Smoke

<b>Toxicology</b>	<b>Test Code</b>	<b>Description</b>
Neutral Red Uptake Assay (NRU)	NRU0-CHOL-MV	In Vitro Neutral Red Uptake Assay (NRU) on E-Cigarette Aerosol
	NRU0-CHON-EL	In Vitro Neutral Red Uptake Assay (NRU) on E-Liquids
	NRU0-CHOL-MH	In Vitro Neutral Red Uptake Assay (NRU) on Mainstream Emissions from Thermally Heated Products
	NRU0-CHON-WT	In Vitro Neutral Red Uptake Assay (NRU) on Tobacco Products
	NRU0-CHOR-MS	In Vitro Neutral Red Uptake Assay (NRU) on Mainstream Smoke
In Vitro Sister Chromatid Exchange (SCE)	SCE0-CHOL-MV	In Vitro Sister Chromatid Exchange using Chinese Hamster Ovary Cells on E-Cigarette Aerosol
	SCE0-CHON-EL	In Vitro Sister Chromatid Exchange using Chinese Hamster Ovary Cells on E-Liquids
	SCE0-CHOL-MH	In Vitro Sister Chromatid Exchange using Chinese Hamster Ovary Cells on Mainstream Emissions from Thermally Heated Products
	SCE0-CHON-WT	In Vitro Sister Chromatid Exchange using Chinese Hamster Ovary Cells on Tobacco Products
	SCE0-CHOR-MS	In Vitro Sister Chromatid Exchange using Chinese Hamster Ovary Cells on Mainstream Smoke
Urine Mutagenicity	UM_0- STYL-BF	Urine Mutagenicity on Urine

## Product Physical Properties

Group	Test Code	Description
Ignition Propensity	IP_0-MANN-CG	Ignition Propensity of Cigarettes Determined by Manual Measurement
Moisture	KFW0-KFTN-CG	Water in Cigarettes by Karl-Fisher Titration
Physical Measurements	PHY0-DTSN-CG	Physical Properties of Cigarettes using a Physical Properties Measuring Instrument, Full Panel
	PHY0-MANN-CG	Physical Properties of Cigarettes Determined by Manual Measurement, Full Panel
	PHY1-DTSN-CG	Tip Ventilation of Cigarettes using a Physical Properties Measuring Instrument
	PHY1-MANN-CG	Physical Properties of Cigarettes Determined by Manual Measurement, Panel 1
	PHY2-DTSN-CG	Pressure Drop of Cigarettes using a Physical Properties Measuring Instrument (Open and/or Closed)
	PHY2-MANN-CG	Weight of Conditioned Tobacco
	PHY3-PDIN-CG	Pressure Drop of Cigarette Filters using a Physical Properties Measuring Instrument, Full Panel

## Paper and Casing Solutions

Group	Test Code	Description
Physical Properties	PHY0-APTN-PA	Air Permeability of Cigarette Paper using an Air Permeability Testing Instrument
Metals	MTM0-AESN-PA	Macroelements in Cigarette Paper by ICP-AES, Full Panel
Casing Solutions	GLH0-LCUN-WT	Glycyrrhizic Acid in Tobacco Products by HPLC-UV, Full Panel
	THE0-LCUN-WT	Theobromine in Tobacco Products by HPLC-UV, Full Panel

## Other Tests

Group	Test Code	Description
Pyrolysis	PYRO-PYRN-SB	Decomposition products by pyrolysis, open GC-MS scan



## Analyte Lists

Analyte lists are specific to a test code, and listed below are the full panels available. Availability may vary with the matrix being analyzed.

As a "Centre of Excellence in Analytical Science" Labstat's team of scientist are continually expanding and developing new analytical methods. For the latest developments, LOD/LOQ's and questions please contact our Business Development team at [Clientservices@labstat.com](mailto:Clientservices@labstat.com) or Tel: [+1-519-748-5409](tel:+15197485409).

### Aromatic Amines

Aniline, o-anisidine, m-toluidine, o-toluidine, p-toluidine, 1-aminonaphthalene, 2-aminonaphthalene, 3-aminobiphenyl, 4-aminobiphenyl, 2,5-dimethylaniline, 2,6-dimethylaniline, benzidine

### Amines (heterocyclic)

2-amino-6-methyldipyrido[1,2-a:3',2'-d]imidazole (Glu-P-1), 2-aminopyrido[1,2-A:3',2'-D]imidazole (Glu-P-2), 1-methyl-9H-pyrido[3,4-b]indole (harman), 2-amino-3-methyl-3H-imidazo[4,5-f]quinoline (IQ), 2-amino-3-methyl-9H-pyrido[2,3-b]indole (MeAαC), 2-amino-3,4-dimethyl-3H-imidazo[4,5-f]quinoline (MeIQ), 2-amino-3, 8-dimethylimidazo [4,5-f] quinoxaline (MeIQx), 9H-pyrido[3,4-b]indole (norharman), 2-amino-1-methyl-6-phenylimidazo[4,5-b]pyridine (PhIP), 3-amino-1,4-dimethyl-5H-pyrido[4,3-b] indole (Trp-P-1), 3-amino-1-methyl-5H-pyrido[4,3-b] indole (Trp-P-2), 2-amino-9H-pyrido[2,3-b]indole (AαC)

### Carbonyls (GC-MS)

2,3-butanedione, 2,3-heptanedione, 2,3-hexanedione, 2,3-pentanedione, acetaldehyde, acetone, propionaldehyde, glycolaldehyde, glyoxal, isobutyraldehyde, methylglyoxal, 3-buten-2-one, acetoin, acrolein, butyraldehyde, crotonaldehyde, formaldehyde, methyl ethyl ketone

### Carbonyls (DNPH)

Acetaldehyde, acetone, acrolein, butyraldehyde, crotonaldehyde, formaldehyde, methyl ethyl ketone , propionaldehyde

### Composition (E-liquids and Vapour)

Carbon monoxide, accumulated mass, water, nicotine, NFDAM, ethylene glycol, diethylene glycol, triethylene glycol, triacetin, glycerol, menthol, nicotine, propylene glycol, glycidol

## Flavours (Targeted List)

Menthol load, carvone, menthofuran, pulegone,  $\delta$ -decalactone, (-)-terpinen-4-ol, germacrene D, viridiflorol,  $\delta$ -dodecalactone, limonene, l-menthone, menthone isomer, menthyl acetate, neomenthol, menthol

Pulegone, menthofuran, carvone,  $\gamma$ -decalactone,  $\gamma$ -terpinene, WS-23,  $\alpha$ -terpineol,  $\delta$ -decalactone,  $\beta$ -damascenone,  $\beta$ -damascone, WS-3,  $\alpha$ -terpinene, germacrene D, viridiflorol, (-)-terpinen-4-ol,  $\delta$ -dodecalactone

methyl salicylate, ethyl salicylate

## Humectants

Glycerol, propylene glycol, triethylene glycol, diethylene glycol, triacetin

## Metals

Arsenic, chromium, cadmium, lead, nickel, selenium, beryllium, cobalt, copper, molybdenum, titanium, tungsten, aluminium, manganese, iron, silver, zirconium, tin, zinc, strontium, gold

calcium, phosphorus, potassium, sodium, magnesium

Mercury

## Nicotine Alkaloids

anabasine, anatabine, myosmine, nicotine, nornicotine

pseudooxynicotine (Enol), pseudooxynicotine (Ketone)

free nicotine

## Nicotine Degradation Products

nicotine-N-oxide, cotinine, nornicotine, anatabine, myosmine, anabasine,  $\beta$ -nicotyrine, nicotine

## Nitrosamines, Tobacco Specific

4-[methyl(nitroso)amino]-1-(3-pyridinyl)-1-butanone (NNK), N-nitrosoanabasine (NAB), N-nitrosoanatabine (NAT), N-nitrosornicotine (NNN)

## Nitrosamines, Volatile

N-nitroso-dimethylamine (NDMA), N-nitrosopyrrolidine (NPYR), N-nitroso-N-methylethylamine (NEMA), N-nitrosodibutylamine (NDBA), N-nitrosomorpholine (NMOR), N-nitrosodiisopropylamine (NDiPA), N-nitrosodiethanolamine (NDELA), N-nitrosodiethylamine (NDEA), 1-nitrosopiperidine (NPIP), N-nitrosodipropylamine (NDPA)

N-nitrosodibenzylamine (NDBzA)

N-nitrososarcosine (NSAR)

### Organic Acids

acetic acid, benzoic acid, formic acid, glycolic acid, lactic acid, oxalic acid

### Particulate Bound Organics

propylene glycol, menthol, nicotine, acrylamide, diethylene glycol, phenol, triacetin, glycerol

### Phenols

catechol, hydroquinone, m-cresol, o-cresol, p-cresol, phenol, resorcinol

### Polyphenols

chlorogenic acid, caffeic acid, rutin, scopoletin

### Polynuclear Aromatic Hydrocarbons

Naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthylene, acenaphthene, fluorene, benzo(g,h,i)perylene, benzo(c)phenanthrene, cyclopenta(c,d)pyrene, benz(j)aceanthrylene, benzo(b)fluoranthene, benzo(k)fluoranthene, benz(j)aceanthrylene, benzo(a)pyrene, benzo(e)pyrene, perylene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, 5-methylchrysene, benzo(a)anthracene, dibenz(a,l)pyrene, dibenz(a,e)pyrene

### Polynuclear Aromatic Hydrocarbons and Aza-arenes

5-methylchrysene, 7H-dibenz(c,g)carbazole, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(j)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)acridine, dibenz(a,j)acridine, dibenz(a,h)anthracene, dibenz(a,e)pyrene, dibenz(a,h)pyrene, dibenz(a,i)pyrene, dibenz(a,l)pyrene, indeno(1,2,3-cd)pyrene

### Tar Nicotine and CO

TAR, water, nicotine, carbon monoxide, filter nicotine, TPM

### Volatiles

2-nitropropane

Allyl alcohol

Vinyl chloride, propylene oxide, ethylene oxide, furan, nitromethane, vinyl acetate, acetamide (PP), styrene (PP), 1,3-butadiene, isoprene, acrylonitrile, benzene, styrene, toluene, ethylbenzene, isoprene

#### Volatiles, Semi-

Acetamide, acrylamide, benzo(b)furan, nitrobenzene, pyridine, quinoline, styrene, 2-vinylpyridine, 3-vinylpyridine, 4-vinylpyridine