
Characterization of Tobacco

Labstat International ULC Test Report



***Prepared for
R.J. Reynolds Tobacco Corporation***

Project Code: M126

Date: December 3, 2009

1	USE OF LABSTAT'S ANALYTICAL REPORTS.....	3
2	ADMINISTRATIVE INFORMATION.....	4
2.1	Quotation Reference	4
2.2	Client Identification	4
2.3	Date of Sample Receipt	4
2.4	Sample Characteristics	4
2.5	Test Article Identification	4
2.6	Special Instructions	5
2.7	Date of Test Report.....	5
3	ACCREDITATION	5
3.1	Scope (refer to appendix A).....	5
3.2	International Recognition of Tests	5
4	ACCEPTANCE OF DATA.....	5
4.1	Overview	5
4.2	Evaluation of Results from Control Materials.....	6
4.3	Identification of Outliers	6
4.3.1	Definition	6
4.3.2	Statistical Criteria	7
5	METHODS.....	7
5.1	General References	7
5.2	Method Deviations.....	8
5.2.1	Alkaloids (Official Method T-301)	8
6	RESULTS	8
6.1	Quality Control.....	8
6.2	Analytical Data	8
6.2.1	Sample Statistic Calculations	8
7	AUTHORIZATION	9

1 Use of Labstat's¹ Analytical Reports²

Labstat International ULC is a recognized centre of analytical excellence related to tobacco and tobacco products. Our clients include major international tobacco manufacturers, various Governments and Government agencies such as the Canadian Federal Department of Health and the Massachusetts Department of Public Health, agricultural interests, university researchers and private research interests. Normally our contractual obligations extend **only** to the provision of data and related reports.

It should be noted³, in this regard, that

All analytical data and reports, provided by Labstat International ULC, are for the exclusive use of the person, partnership, or corporation to whom it is addressed, and neither the data, the report nor the name of the laboratory (Labstat International ULC) nor any member of its staff may be used in connection with the advertising or sale of any product or process without written authorization from the CEO of the company or his designate. Labstat International ULC is not responsible for unauthorized use of test reports.

The following also applies to reported data.

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² *This document may not be reproduced, in whole or in part in any form, without the written consent of the author(s) on behalf of Labstat International ULC.*

³ *Unless superseded by a specific contractual obligation or other written agreement.*

2 Administrative Information⁴

2.1 Quotation Reference

Quotation Number: T2925

Date: October 5, 2009

Recipient's Name: Mr. Joe Keeney

2.2 Client Identification

R.J. Reynolds Tobacco Corporation
950 Reynolds Boulevard
Winston-Salem NC 27102-1487
U.S.A.

2.3 Date of Sample Receipt

The samples to be tested for M126 were received on November 18, 2009 and on November 20, 2009 via UPS.

2.4 Sample Characteristics

The shipment received on November 18, 2009 consisted of 4 tins for each of 2 products. The shipment received on November 20, 2009 consisted of one vial for each of 15 subjects. There was no physical damage to the tins or the vials.

2.5 Test Article Identification

The following sample codes have been used to identify the products associated with the results in each of the tables that are part of this report.

2.5.1 Part 1: Used Snus

Sample ID	Subject #	Visit #
0906125	1	3
0906126	3	3
0906127	5	5
0906128	7	3
0906129	9	3
0906130	11	4
0906131	12	4
0906132	13	2

Sample ID	Subject #	Visit #
0906133	15	2
0906134	18	3
0906135	19	5
0906136	21	5
0906137	24	3
0906138	26	4
0906139	28	2

2.5.2 Part 2: Unused Snus

Sample ID	Sample Description	Lot Number
0906140	Camel SNUS Mellow	D9FJ038
0906141	Camel SNUS Frost	C9TH079

⁴ Provided in accord with International Standard ISO/IEC 17025 "General requirements for the competence of testing and calibration laboratories" Section 5.10

2.6 Special Instructions

The samples were stored in the freezer prior to testing.

2.7 Date of Test Report

December 3, 2009

3 Accreditation

3.1 Scope (refer to appendix A)

Labstat International ULC has been accredited by the Standards Council of Canada to International Standard ISO/IEC 17025 "General requirements for the competence of testing and calibration laboratories" with a scope that includes all of the mandated tobacco-related Health Canada methods (see Tobacco Reporting Regulations dated 26 June 2000, Canada Gazette Part II, Vol. 134, No. 15 Schedules 1, 2 and 3 pages 1780 – 1785). The testing included in this report is within the scope of this accreditation, unless otherwise noted in Section 5.



Accredited LAB 368

(SCC Accreditation & Design Mark is an Official Mark of the Standards Council of Canada, used under license)

3.2 International Recognition of Tests

Our accrediting organization, Standards Council of Canada, is one of a number of such member bodies participating in a global mutual recognition agreement (MRA), known as the ILAC (International Laboratory Accreditation Cooperation) Arrangement. The arrangement, effective January 31, 2001, requires acceptance of technical test data from accredited laboratories by member bodies in numerous international economies.

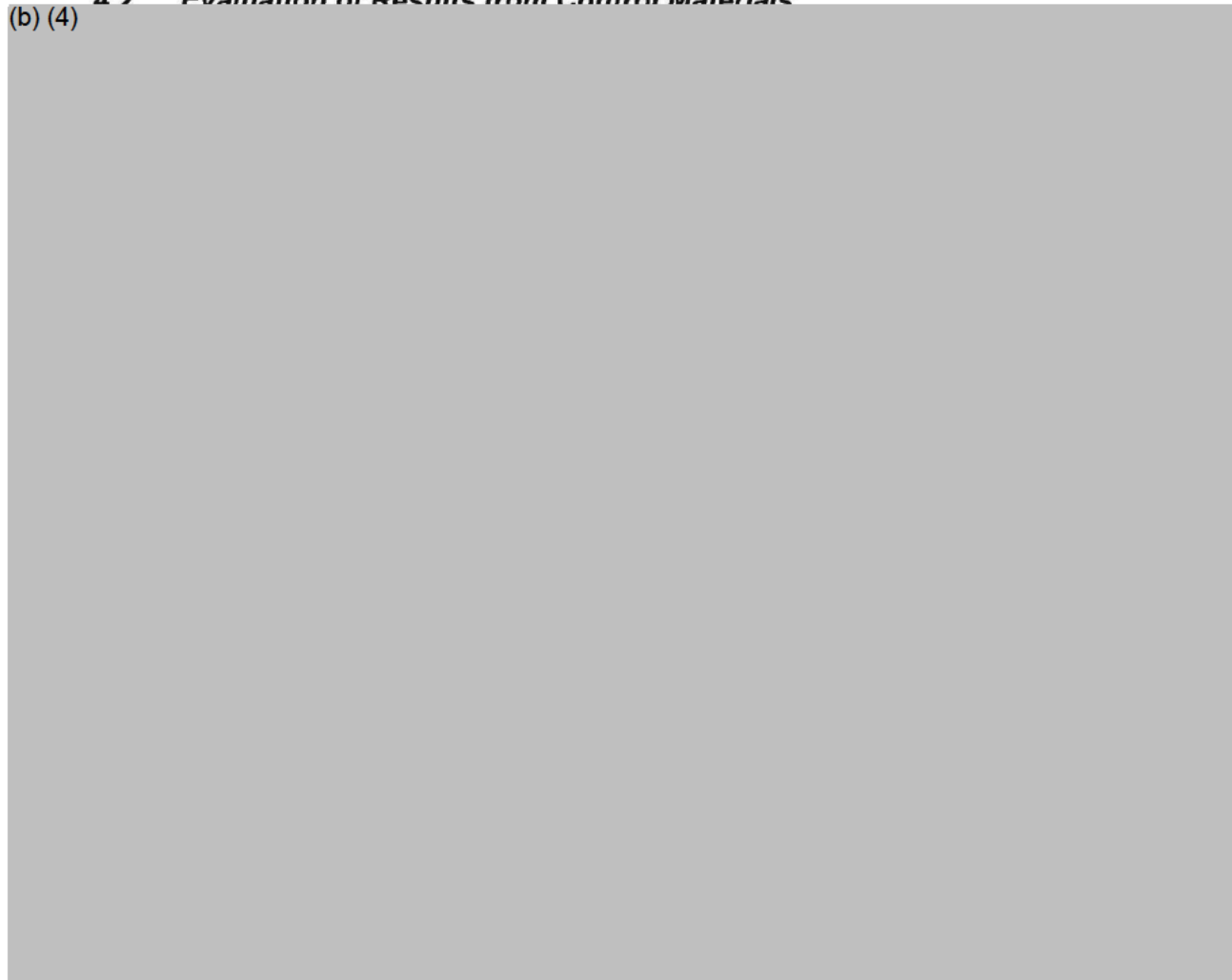
4 Acceptance of Data

4.1 Overview

In most cases, data are evaluated in two stages. The first consists of a comparison of results for control materials with certified values or Labstat's historical in-house database. If the control results are acceptable and there are three (3) or more samples per analysis brand, then the data obtained from the analysis of samples is subjected to an outlier test. Values identified as outliers are then scrutinized for an assignable cause and, if one is found, the value is removed from the data set. If none is found, the value is assumed to be a legitimate member of the data set and included in all subsequent calculations.

4.2 Evaluation of Results from Control Materials

(b) (4)

**4.3 Identification of Outliers⁶****4.3.1 Definition**

An outlying observation, or "outlier," is one that appears to deviate markedly from other members of the sample in which it occurs. In this case, there are two alternatives:

1. An outlying observation may be merely an extreme manifestation of the random variability inherent in the data. If this is true, the value is retained and processed in the same manner as the other observations in the sample.

⁵ A minimum of 30 results is normally required for the purpose of this comparison.

⁶ The term "outlier" has been defined in International Standard ISO 3534-1 (1993) entitled "Statistics - Vocabulary and symbols - Part 1: Probability and general statistical terms" Section 2.64

2. The observation may be the result of gross deviation from prescribed experimental procedure or an error in calculating or recording the numerical value. In such cases, an investigation must be carried out. When the experimenter is clearly aware that a gross deviation from prescribed experimental procedure has taken place, the resultant observation is discarded (assignable cause) without recourse to a statistical test. A statistical test may always be used to support a judgment that a physical reason does actually exist for an outlier, or the statistical criterion may be used routinely as a basis to initiate action to find a physical cause.

4.3.2 Statistical Criteria

There are a number of criteria for testing outliers. In all of these, the doubtful observation is included in the calculation of the numerical value of a sample criterion (or statistic) that is then compared with a critical value. The critical value is that which would be exceeded by chance with some specified (small) probability on the assumption that all the observations did indeed constitute a random sample from a single parent population, distribution or universe. The specified small probability is called the "significance level" and can be thought of as the risk of erroneously rejecting a good observation. A level of significance of 0.02 has been chosen in conjunction with the statistical test and tables described in ASTM E178-02⁷.

Significant departures from the expected results (i.e. "outliers") are viewed seriously, requiring an investigation for an assignable cause. This is a documented procedure that, at a minimum, consists of the following steps:

- Review of all associated calculations to ensure that arithmetic errors have not been made
- Review of linearity range for any standards
- Assessment of instrument status
- Review of reagents, columns, standards etc. to ensure that contamination or decomposition has not occurred
- Review of sample preparation and handling procedures as they relate to the result in question

If the outlier is present in the analyte data and an assignable cause is found, the test result is removed from the data set but recorded in the quality control section of the laboratory's record of test results for that project. The analysis must then be repeated. If the outlier is present in the ancillary⁸ data and an assignable cause is found, the test result is not removed, but rather the outlying observation is replaced by the designation "AC" (Assignable Cause). If this investigation fails to determine an assignable cause, the test result is assumed to be a legitimate member of the data set and is included in all subsequent calculations.

5 Methods

5.1 General References

Test methods for the analysis of processed tobacco are referenced in the table(s) below and were practiced as written unless otherwise indicated (see "Method Deviations").

⁷ ASTM Designation: E178-02. *Standard Practice for Dealing with Outlying Observations*

⁸ Data, which are related, but not normally required as part of the reporting process (e.g. puff counts, TPM, cigarette weights etc.). Outliers in the analyte data that have an assignable cause are always repeated.

OFFICIAL METHODS FOR THE COLLECTION OF DATA ON CONSTITUENTS⁹

Item	Constituent	Official Method
1.	(a) Nicotine (b) Nor nicotine (c) Anabasine (d) Myosmine (e) Anatabine	Official Method T-301, <i>Determination of Alkaloids in Whole Tobacco</i>

5.2 Method Deviations

5.2.1 Alkaloids (Official Method T-301)

(b) (4)

6 Results

6.1 Quality Control

The control results for the variables of interest were acceptable as defined in section 4.2. Consequently it is reasonable to assume that the values determined for the test samples are reflective of the characteristics of the products as received and tested as described in the Methods Section.

6.2 Analytical Data

Individual results and the corresponding sample statistics may be found on the compact disk (CD) that accompanies this report. The data file has been labeled *M126_wt_dataCF.xls*.

6.2.1 Sample Statistic Calculations

In cases where a sample result is below the limit of detection (LOD), the value zero (0) is used in the sample statistic calculation. In cases where a sample result is between the LOD and the limit of quantification (LOQ), the average of the LOD and the LOQ is used in the sample statistic calculation.

⁹ Canadian Tobacco Reporting Regulations: 2000-01-19 *Canada Gazette Part II, Vol. 134, No. 15* Part 3: Emissions from Designated Tobacco Products. Test method numbers refer to Health Canada methodologies which have been posted by Health Canada on the internet at site http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/legislation/reg/indust/index_e.html

7 Authorization

This report has been reviewed by me and is certified, to the best of my knowledge, to be a true and accurate description of the procedures, protocols and test methods used to arrive at the data and/or findings that accompany this report.

Dated: December 3, 2009

A handwritten signature in black ink, appearing to read 'AM', is written over a horizontal line.

Andrew Masters, Ph.D.
Vice-President, Science & Technology
Labstat International ULC

Appendix A

Scope of Accreditation



Standards Council of Canada
Conseil canadien des normes

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SCOPE OF ACCREDITATION

LABSTAT INTERNATIONAL ULC
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Accredited Laboratory No. 368
(Conforms with requirements of CAN-P-4E (ISO/IEC 17025:2005))

CONTACT: Mr. Lucian Hirtie
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CLIENTS SERVED: All interested parties

FIELDS OF TESTING: Biological, Chemical/Physical

ISSUED ON: 2008-10-06

VALID TO: 2012-01-22

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.

ANIMAL AND PLANTS (AGRICULTURE)

Agricultural products: (except food and chemicals)

Tobacco

AOAC 966.02	Moisture in Tobacco
ASTM E2187	Standard Test Method for Measuring the Ignition Strength of Cigarettes
ISO 10315	Cigarettes – Determination of Nicotine in Smoke Condensates Gas-Chromatographic Method
ISO 10362-1	Cigarettes – Determination of Water in Smoke Condensates – Part 1:

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Page 1 of 6

Report prepared by Labstat International ULC

Standards Council of Canada Accredited Laboratory No. 368

	Gas-Chromatographic Method
ISO 15592-2	Fine-cut Tobacco and smoking articles made from it – Methods of sampling, conditioning and analysis – Part 2: Atmosphere for conditioning and testing
ISO 15592-3	Fine-cut Tobacco and smoking articles made from it – Methods of sampling, conditioning and analysis – Part 3: Determination of total particulate matter of smoking articles using a routine analytical smoking machine, preparation for the determination of water and nicotine, and calculation of nicotine-free dry particulate matter
ISO 3308	Routine Analytical Cigarette-Smoking Machine- Definitions and Standard Conditions
ISO 3402	Tobacco and Tobacco Products – Atmosphere for Conditioning and Testing
ISO 4387	Cigarettes – Determination of Total and Nicotine-Free Dry Particulate Matter Using a Routine Analytical Smoking Machine
ISO 6565	Tobacco and Tobacco Products – Draw Resistance of Cigarettes and Pressure Drop of Filter Rods-Standard Conditions and Measurement
ISO 8454	Cigarettes – Determination of Carbon Monoxide in the Vapour Phase of Cigarette Smoke – NDIR method
TMS-118	Determination of Volatile Nitrosamines in Mainstream Tobacco Smoke
TMS-120	Determination of Selected Polynuclear Aromatic Hydrocarbons (PAHs) in Mainstream Tobacco Smoke
TMS-124	Determination of Vinyl Chloride, 1,3-Butadiene, Isoprene, Acrylonitrile, Benzene, Toluene, Styrene and Acetamide in Mainstream Tobacco Smoke (Expanded List)
TMS-127	Determination of Selected Polynuclear Aromatic Hydrocarbons (PAHs) And Aza-Arenes in the Particulate Phase of Mainstream Tobacco Smoke
TMS-128	Determination of Aromatic Amines in Mainstream Tobacco smoke (Expanded list: Aniline, o-Toluidine, m-Toluidine, p-Toluidine, o-Anisidine, 1- and 2-Aminonaphthalene and 3- and 4-Aminobiphenyl)
TMS-132	Determination of Gas Phase and Particulate Phase Free Radicals in Mainstream Tobacco Smoke
TMS-133	Determination of Selected Heterocyclic Aromatic Amines (HAAs) in Mainstream Tobacco Smoke
TMS-135	Determination of Tobacco Specific Nitrosamines in Mainstream Tobacco Smoke by Liquid Chromatography-Tandem Mass Spectrometry
TMS-137	Determination of Acetamide and Acrylamide in Mainstream Tobacco Smoke
TSS-219	Determination of Selected Polynuclear Aromatic Hydrocarbons (PAHs) in Sidestream Tobacco Smoke
TSS-222	Determination of Sidestream Tobacco Smoke pH
TWT-303	Determination of Carbonyls in Tobacco Samples
TWT-320	Determination of 1- and 2- Aminonaphthalene and 3- and 4-Aminobiphenyl in Tobacco Samples
TWT-321	

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Page 2 of 6

Standards Council of Canada Accredited Laboratory No. 369

	Determination Of Nicotine Alkaloids And Reducing Sugars In Tobacco Samples
TWT-324	Determination of Nicotine in Tobacco Samples (CDC method)
TWT-332	Determination of Volatile Nitrosamines in Tobacco Samples
TWT-333	Determination of Tobacco Specific Nitrosamines in Tobacco Samples by Liquid Chromatography-Tandem Mass Spectrometry
TWT-334	Determination of Chloride in Tobacco Samples
TWT-335	Determination of Selected Polycyclic Aromatic Hydrocarbons (PAHs) in Tobacco Samples
TWT-336	Determination of Acrylamide in Tobacco Samples by Liquid Chromatography – Tandem Mass Spectrometry
TWT-337	Determination of 1,3-Butadiene and Benzene in Tobacco Samples

(Health Canada Tobacco Reporting Regulations Official Methods)

T-101	Determination of Ammonia in Mainstream Tobacco Smoke
T-102	Determination of 1- and 2- Aminonaphthalene and 3- and 4- Aminobiphenyl in Mainstream Tobacco Smoke
T-103	Determination of Benzo[a]pyrene in Mainstream Tobacco Smoke
T-104	Determination of Selected Carbonyls in Mainstream Tobacco Smoke
T-105	Determination of Eugenol in Mainstream Tobacco Smoke
T-106	Determination of Filter Efficiency in Mainstream Tobacco Smoke
T-107	Determination of Hydrogen Cyanide in Mainstream Tobacco Smoke
T-108	Determination of Mercury in Mainstream Tobacco Smoke
T-109	Determination of Ni, Pb, Cd, Cr, As and Se in Mainstream Tobacco Smoke
T-110	Determination of Oxides of Nitrogen in Mainstream Tobacco Smoke
T-111	Determination of Nitrosamines in Mainstream Tobacco Smoke
T-112	Determination of Pyridine, Quinoline and Styrene in Mainstream Tobacco Smoke
T-113	Determination of Mainstream Tobacco Smoke pH
T-114	Determination of Phenolic Compounds in Mainstream Tobacco Smoke
T-115	Determination of Tar, Nicotine and Carbon Monoxide in Mainstream Tobacco Smoke
T-116	Determination of 1,3- Butadiene, Isoprene, Acrylonitrile, Benzene and Toluene in Mainstream Tobacco Smoke
T-201	Determination of Ammonia in Sidestream Tobacco Smoke
T-202	Determination of 1- and 2- Aminonaphthalene and 3- and 4- Aminobiphenyl in Sidestream Tobacco Smoke
T-203	Determination of Benzo[a]pyrene in Sidestream Tobacco Smoke
T-203A	Determination of Benzo[a]pyrene in Sidestream Tobacco Smoke (GC/MS)
T-204	Determination of Selected Carbonyls in Sidestream Tobacco Smoke
T-205	Determination of Hydrogen Cyanide in Sidestream Tobacco Smoke
T-206	Determination of Mercury in Sidestream Tobacco Smoke
T-207	Determination of Toxic Trace Metals in Sidestream Smoke

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Page 3 of 6

Standards Council of Canada Accredited Laboratory No. 368

T-208	Determination of Oxides of Nitrogen in Sidestream Tobacco Smoke
T-209	Determination of Nitrosamines in Sidestream Tobacco Smoke
T-210	Determination of Pyridine and Quinoline in Sidestream Tobacco Smoke
T-211	Determination of Phenolic Compounds in Sidestream Tobacco Smoke
T-212	Determination of "Tar" and Nicotine in Sidestream Tobacco Smoke
T-213	Determination of 1,3 Butadiene, Isoprene, Acrylonitrile, Benzene, Toluene and Styrene in Sidestream Tobacco Smoke
T-214	Determination of Carbon Monoxide (CO) in Sidestream Tobacco Smoke
T-301	Determination of Alkaloids in Whole Tobacco
T-302	Determination of Ammonia in Whole Tobacco
T-304	Determination of Humectants in Whole Tobacco
T-306	Determination of Ni, Pb, Cd, Cr, As, Se and Hg in Whole Tobacco
T-307	Determination of Benzo[a]pyrene in Whole Tobacco
T-308	Determination of Nitrate from Whole Tobacco
T-309	Determination of Nitrosamines in Whole Tobacco
T-310	Determination of Whole Tobacco pH
T-311	Determination of Triacetin in Whole Tobacco
T-312	Determination of Sodium Propionate in Whole Tobacco
T-313	Determination of Sorbic Acid in Whole Tobacco
T-314	Determination of Eugenol in Whole Tobacco
T-401	Preparation of Cigarettes from Packaged Leaf Tobacco for Testing
T-402	Preparation of Cigarettes, Cigarette Tobacco, Cigars, Kreteks, Bidis, Packaged Leaf Tobacco, Pipe Tobacco and Smokeless Tobacco for testing

(Microbiology Tests)

T-501	Bacterial Reverse Mutation Assay for Mainstream Tobacco Smoke
T-502	Neutral Red Uptake Assay for Mainstream Tobacco Smoke
T-503	In Vitro Micronucleus Assay for Mainstream Tobacco Smoke
TBA-504	<i>In vitro</i> Sister Chromatid Exchange (SCE) Assay for Mainstream Tobacco Smoke

(Other: Measures of Exposure)

TME-001	Determination of Nicotine, Cotinine and Caffeine in Physiological Fluid Samples
TME-002	Determination of Creatinine in Urine
TME-003	Determination of 3-Hydroxycotinine in Physiological Fluid Samples
TME-004	<i>Salmonella Typhimurium</i> Reverse Mutation Assay: Microsuspension Method For Testing Urine Mutagenicity
TME-005	Determination of Nicotine and its Major Metabolites in Urine by Liquid Chromatography – Tandem Mass Spectrometry

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Page 4 of 8

Standards Council of Canada Accredited Laboratory No. 368

TME-006	Determination of S-Phenylmercapturic Acid (S-PMA) in Urine by Liquid Chromatography – Tandem Mass Spectrometry
TME-007	Determination of 8-Hydroxy-2'-Deoxyguanosine (8-OHdG) in Urine by Liquid Chromatography – Tandem Mass Spectrometry
TME-008	Determination of 1-Hydroxypyrene (1-HOP) in Urine by Liquid Chromatography – Tandem Mass Spectrometry
TME-009	Determination of 4-(Methyl-Nitrosamino)-1-(3-Pyridyl)-1-Butanol (NNAL) and its Glucuronides in Urine by Liquid Chromatography – Tandem Mass Spectrometry
TME-010	Determination of 1,3-Butadiene Urinary Metabolites by Liquid Chromatography – Tandem Mass Spectrometry
TME-011	Determination of 3-Hydroxypropylmercapturic Acid (3-HPMA) in Urine by Liquid Chromatography – Tandem Mass Spectrometry
TME-012	Determination of Selected Arylamines in Urine by Gas Chromatography – Mass Spectrometry (GC-MS)

Notes:

AOAC: Association of Official Analytical Chemists

ASTM: American Society for Testing and Materials

CAN-P-4E (ISO/IEC 17025): General Requirements for the Competence of Testing and Calibration Laboratories (ISO/IEC 17025-2005)

CDC: Centers for Disease Control and Prevention

ISO: International Organization for Standardization

T: Health Canada Tobacco Reporting Regulations Official Methods

TBA: Test Method, Biological Activity

TME: Test Method, Measures of Exposure

TMS: Test method, Mainstream Smoke

TSS: Test method, Sidestream Smoke

TWT: Test method, Whole Tobacco

P. Paladino, P. Eng., Director, Conformity Assessment

Date: 2008-10-06

Number of Scope Listings: 93
SCC 1003-15/420

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Page 5 of 6



Project Identifier: M126

Page 16 of 17

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Partner File #0

Partner: None

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Page 6 of 6

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Appendix B

“Raw” Data and Summary Statistics (See Enclosed CD)

Use of Labstat's¹ Analytical Reports²

Labstat International ULC is a recognized centre of analytical excellence related to tobacco and tobacco products. Our clients include major international tobacco manufacturers, various Governments and Government agencies such as the Canadian Federal Department of Health and the Massachusetts Department of Public Health, agricultural interests, university researchers and private research interests. Normally our contractual obligations extend **only** to the provision of data and related reports.

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Part 1: Used Snus

Sample ID	Subject #	Visit #
0906125	1	3
0906126	3	3
0906127	5	5
0906128	7	3
0906129	9	3
0906130	11	4
0906131	12	4
0906132	13	2
0906133	15	2
0906134	18	3
0906135	19	5
0906136	21	5
0906137	24	3
0906138	26	4
0906139	28	2

Part 2: Unused Snus

Sample ID	Sample Description	Lot Number
0906140	Camel SNUS Mellow	D9FJ038
0906141	Camel SNUS Frost	C9TH079



Limits of Detection (LOD) and Limits of Quantification (LOQ) Determined for Selected Constituents in Processed Tobacco

Health Canada Method	Analyte	Units	Processed Tobacco	
			LOD	LOQ
Tobacco alkaloids				
T-301	Nicotine	µg/pouch	45.0	150
T-301	Nornicotine	µg/pouch	9.00	30.0
T-301	Anabasine	µg/pouch	9.00	30.0
T-301	Myosmine	µg/pouch	9.00	30.0
T-301	Anatabine	µg/pouch	9.00	30.0

Abbreviations: BDL, below detection limit; NQ, below quantitation limit; N/A, not applicable

Date of last review: July 30, 2009

NOTE: The above limits referred to samples processed as required by the referenced Health Canada Method (ie. either "as received" or "dried"). Corrections for the moisture content, determined independently, must be applied where applicable in order to convert the "as received" limits to limits expressed on a "dry weight" basis.

*NOTE: The LOD and LOQ are based on the lowest standard used for calibration of the instruments as referenced in the Health Canada Method.

LOD Definition: The limit of detection (LOD) for a particular analyte is a statistically defined decision point that, with a specified probability, measured results falling at or above this point are interpreted to indicate an analyte concentration greater than zero within the sample.

LOQ Definition: The limit of quantification for a particular analyte is another statistically defined decision point that results falling at or above this point can be assigned a statistically significant numerical value with an associated level of precision. Values falling between the LOD and LOQ are interpreted as a positive but not quantifiable result for the analyte in question.

Table 1: **Nicotine and Nicotine Related Contents of Processed Tobacco**
(‘Pouch’ Basis)

Sample ID	Nicotine [µg/pouch]	Nornicotine [µg/pouch]	Anabasine [µg/pouch]	Myosmine [µg/pouch]	Anatabine [µg/pouch]
0906125	5626	96.5	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	47.3
0906126	6212	126	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	61.2
0906127	3967	72.3	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	40.9
0906128	6622	110	33.8	< 30.0 but ≥ 9.00	63.2
0906129	6624	116	31.8	< 30.0 but ≥ 9.00	66.2
0906130	5768	98.4	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	57.7
0906131	5099	83.4	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	50.1
0906132	3446	67.6	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	36.6
0906133	4988	101	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	54.7
0906134	5623	109	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	50.2
0906135	4072	77.4	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	38.3
0906136	1457	44.5	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00
0906137	1984	47.7	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00
0906138	5563	103	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	53.0
0906139	5961	96.2	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	60.6

Table 1: **Nicotine and Nicotine Related Contents of Processed Tobacco**
('Pouch' Basis)

Sample ID	Nicotine [µg/pouch]	Nornicotine [µg/pouch]	Anabasine [µg/pouch]	Myosmine [µg/pouch]	Anatabine [µg/pouch]
0906140	8378	113	38.7	< 30.0 but ≥ 9.00	67.1
0906140	7514	100	34.3	< 30.0 but ≥ 9.00	62.4
0906140	8567	103	38.6	< 30.0 but ≥ 9.00	69.0
Average	8153	106	37.2	NQ	66.1
Std. Dev.	561	7	2.5	NQ	3.4
L. Limit (95%)	6759	88	31.0	N/A	57.7
U. Limit (95%)	9547	123	43.4	N/A	74.6
0906141	6150	98.5	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	54.9
0906141	7424	104	34.9	< 30.0 but ≥ 9.00	67.6
0906141	6357	83.0	< 30.0 but ≥ 9.00	< 30.0 but ≥ 9.00	56.7
Average	6644	95.1	NQ	NQ	59.7
Std. Dev.	684	10.8	NQ	NQ	6.9
L. Limit (95%)	4946	68.3	N/A	N/A	42.6
U. Limit (95%)	8342	121.9	N/A	N/A	76.9

Glossary of Abbreviations

NQ: Below the Limit of Quantification

N/A: Not Applicable