Date : August 12, 2019

Certificate of Analysis – GC Profiling

Sample identification

Internal code : 19H05-PTH16-1-DM
Customer identification : Wintergreen- China- W1010588R
Type : Essential oil
Source : *Gaultheria procumbens*
Customer : Plant Therapy

Analysis

Method: PC-PA-014 - Analysis of the composition of an essential oil, or other volatile liquid, by FAST GC-FID (in French); identifications validated by GC-MS.
Analyst : Alexis St-Gelais, M. Sc., chimiste
Analysis date : August 12, 2019

Checked and approved by :

Alexis St-Gelais, M. Sc., chimiste 2013-174

Notes: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia. This report is digitally signed, it is only considered valid if the digital signature is intact. The results only describe the samples that were submitted to the assays.

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PHYSICOCHEMICAL DATA

Physical aspect: Clear liquid
Refractive index: 1.5366 ± 0.0003 (20 °C)

CONCLUSION

No adulterant, contaminant or diluent has been detected using this method.

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Analysis summary – Consolidated contents

New readers of similar reports are encouraged to read table footnotes at least once.

Identification	%	Classe
(3*Z*)-Hexenol	0.01	Aliphatic alcohol
Hexanol	tr	Aliphatic alcohol
para-Cymene	tr	Monoterpene
1,8-Cineole	tr	Monoterpenic ether
Linalool	0.01	Monoterpenic alcohol
Methyl salicylate	99.76	Phenolic ester
Geraniol	0.02	Monoterpenic alcohol
Ethyl salicylate	0.01	Phenolic ester
Consolidated total	**99.81%**	

tr: The compound has been detected below 0.005% of total signal.

Note: no correction factor was applied

About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm is set to prioritize data from the most standard DB-5 column, and smallest values so as to avoid overestimating individual content. This process is semi-automatic. Advanced users are invited to consult the "Full analysis data" table after the chromatograms in this report to access the full untreated data and perform their own calculations if needed.

Unknowns: Unknown compounds' mass spectral data is presented in the "Full analysis data" table. The occurrence of unknown compounds is to be expected in many samples, and does not denote particular problems unless noted otherwise in the conclusion.

This page was intentionally left blank. The following pages present the complete data of the analysis.

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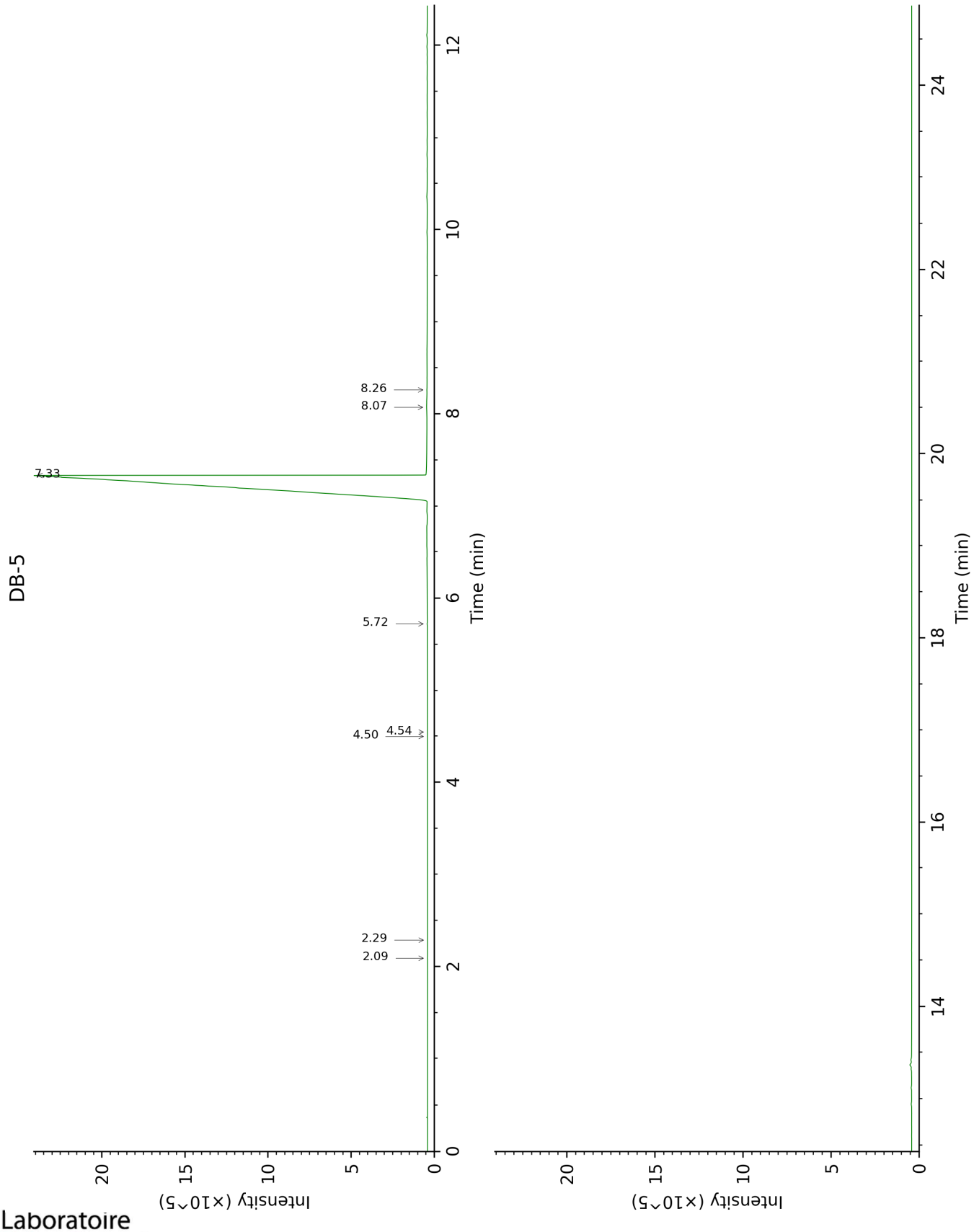

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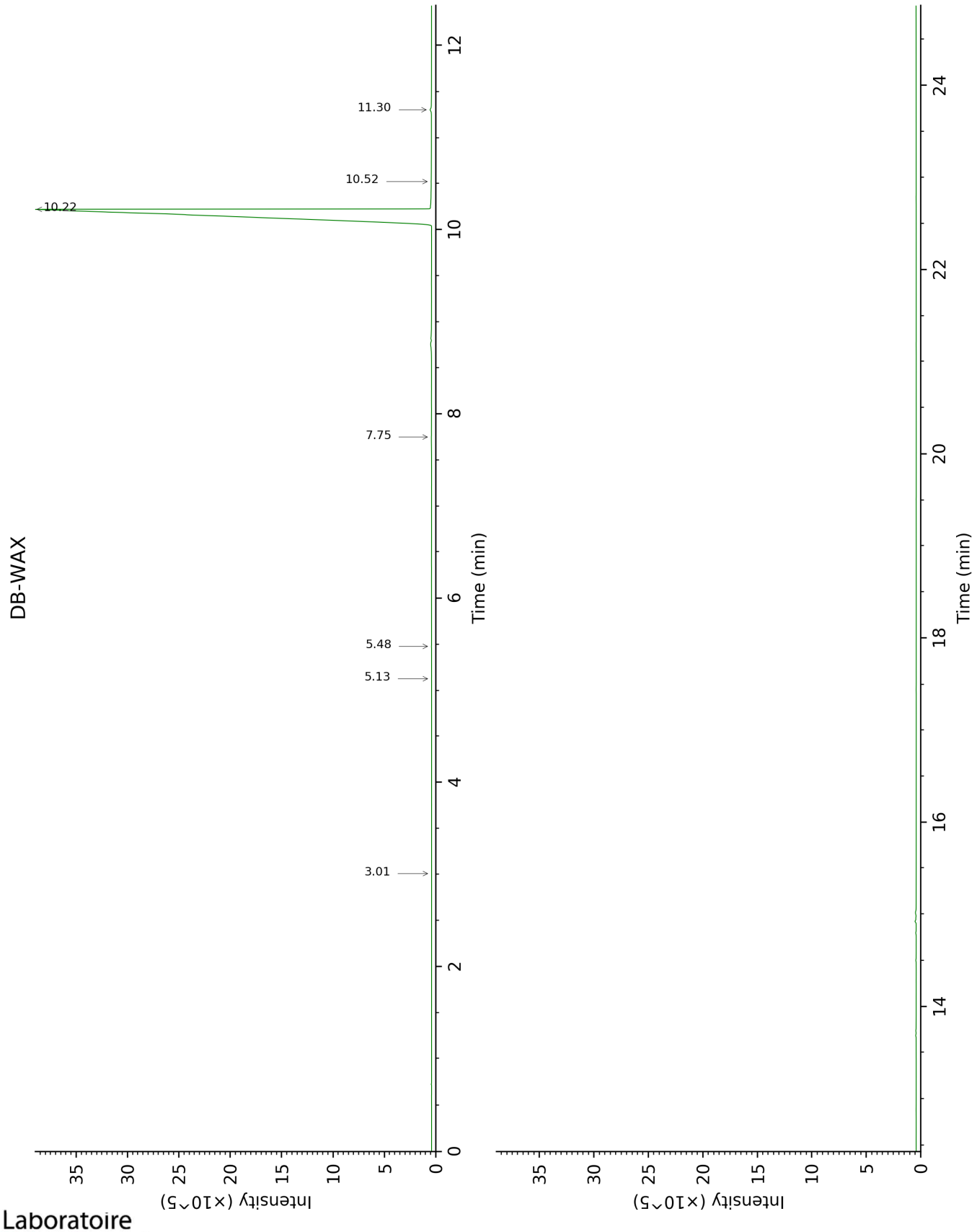

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FULL ANALYSIS DATA

Identification	Column DB-5			Column DB-WAX		
	R.T	R.I	%	R.T	R.I	%
(3*Z*)-Hexenol	2.09	855	0.01	5.48	1350	0.01
Hexanol	2.29	871	tr	5.13	1324	tr
para-Cymene	4.50	1022	tr			
1,8-Cineole	4.54	1025	tr	3.01	1165	tr
Linalool	5.72	1100	0.01	7.75	1519	0.01
Methyl salicylate	7.33	1205	99.76	10.22	1717	99.68
Geraniol	8.07	1256	0.02	11.30	1809	0.17
Ethyl salicylate	8.26	1269	0.01	10.52	1742	0.01
Total identified		**99.81%**			**99.88%**	
Total reported		**99.81%**			**99.88%**	

tr: The compound has been detected below 0.005% of total signal.

Note: no correction factor was applied
R.T.: Retention time (minutes)
R.I.: Retention index

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