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CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 18B20-PLG21-1-CC
Customer identification : Wintergreen
Type : Essential oil
Source : *Gaultheria procumbens*
Customer : Plant Guru

ANALYSIS

Method: PC-PA-014-17J19 - Analysis of the composition of an essential oil, or other volatile liquid, by FAST GC-FID (in French); identifications validated by GC-MS.
Analyst : Sylvain Mercier, M. Sc., Chimiste
Analysis date : March 01, 2018

Checked and approved by :

_____

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

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This report is digitally signed, it is only considered valid if the digital signature is intact.

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PHYSICOCHEMICAL DATA

Physical aspect: Clear liquid
Refractive index: 1.5348 ± 0.0003 (20 °C)

CONCLUSION

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

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ANALYSIS SUMMARY

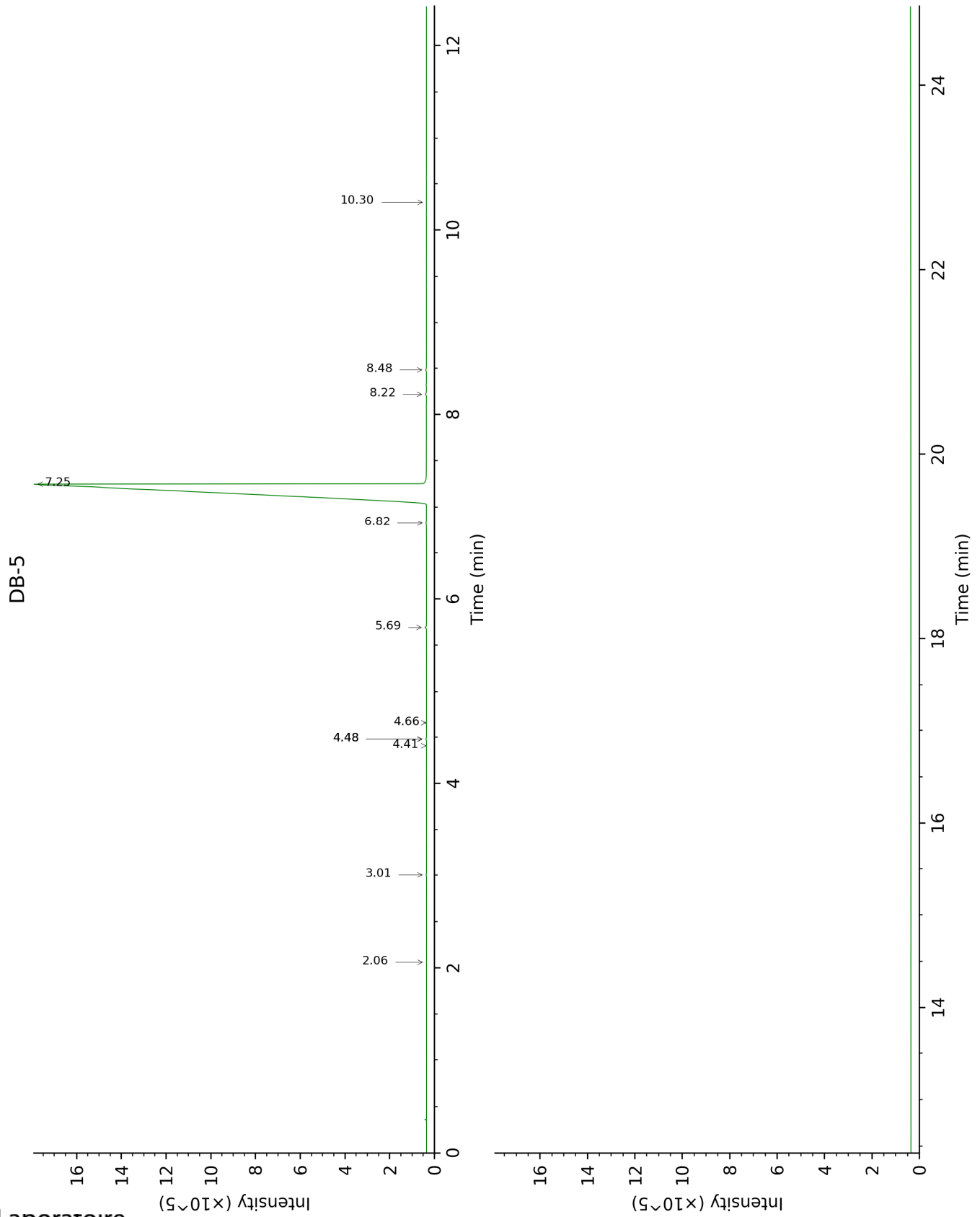| Identification	DB-5 (%)	DB-WAX (%)	Classe
(3Z)-Hexenol	0.01	0.01	Aliphatic alcohol
α-Pinene	0.02	0.02	Monoterpene
para-Cymene	tr		Monoterpene
Limonene	0.03*	0.01	Monoterpene
1,8-Cineole	[0.03]*	0.02	Monoterpenic ether
Benzyl alcohol	0.01		Simple phenolic
Linalool	0.06	0.07	Monoterpenic alcohol
Terpinen-4-ol	0.02	0.03	Monoterpenic alcohol
Methyl salicylate	99.67	99.42	Phenolic ester
Ethyl salicylate	0.05	0.05	Phenolic ester
Safrole	0.04	0.05	Phenylpropanoid
β-Caryophyllene	0.01	tr	Sesquiterpene
Total identified	**99.92%**	**99.68%**	

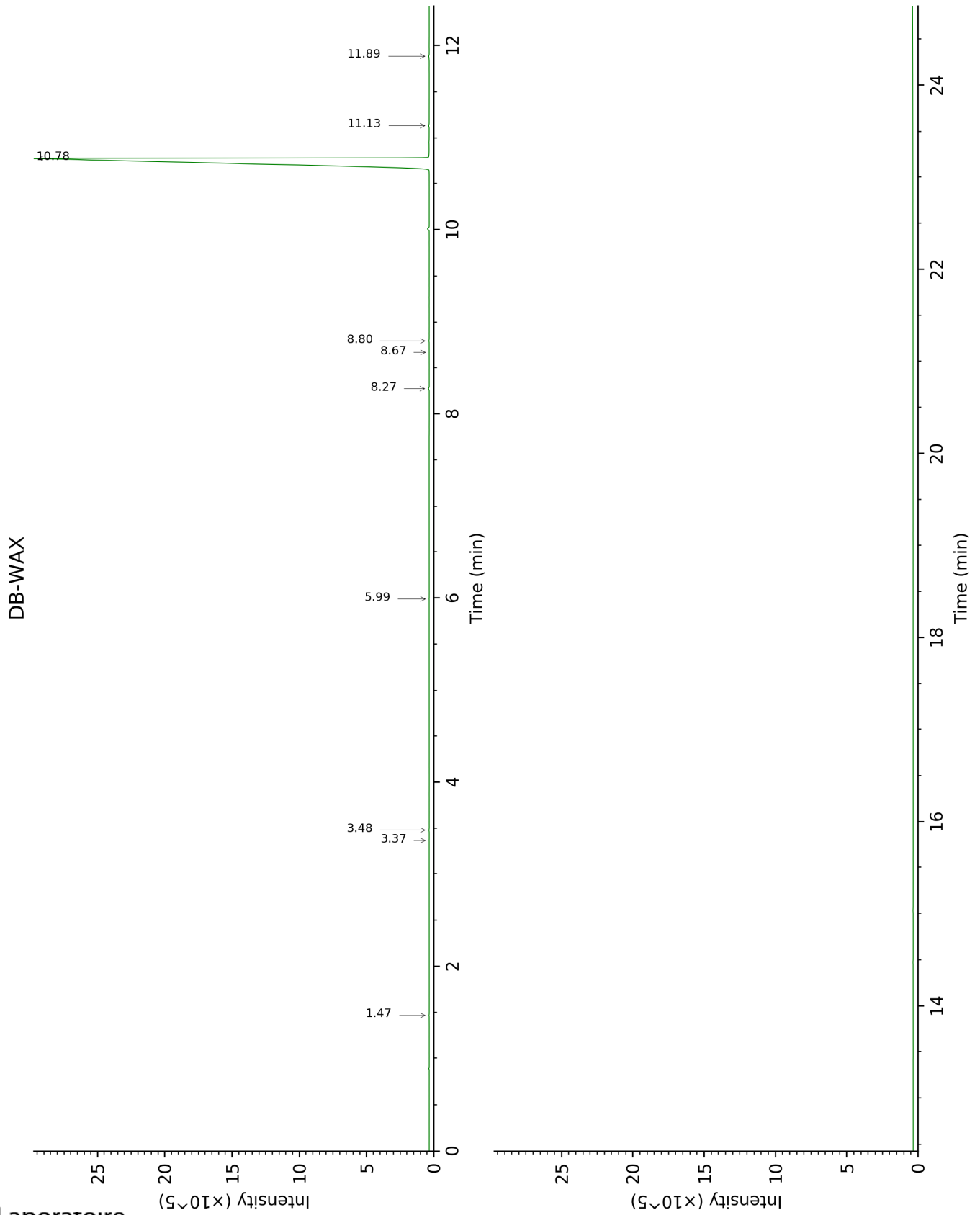*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, not taken account in the identified total

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

Note: no correction factor was applied

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DB-5

Time (min)

Intensity (×10^5)

Time (min)

Intensity (×10^5)

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DB-WAX

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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	2.06	852	0.01	5.99	1347	0.01
α-Pinene	3.01	925	0.02	1.47	994	0.02
para-Cymene	4.41	1017	tr			
Limonene	4.48*	1022	0.03	3.37	1158	0.01
1,8-Cineole	4.48*	1022	[0.03]	3.48	1167	0.02
Benzyl alcohol	4.66	1033	0.01			
Linalool	5.69	1098	0.06	8.27	1515	0.07
Terpinen-4-ol	6.82	1170	0.02	8.80	1555	0.03
Methyl salicylate	7.25	1197	99.67	10.78	1714	99.42
Ethyl salicylate	8.22	1262	0.05	11.13	1744	0.05
Safrole	8.48	1279	0.04	11.89	1808	0.05
β-Caryophyllene	10.30	1406	0.01	8.67	1545	tr
Total identified	**99.92%**			**99.68%**		
Total reported	**99.92%**			**99.68%**		

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, not taken account in the identified total

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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