

Date : 2026-07-08

CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 26F25-PTH03

Customer Identification : Frankincense Serrata ORGANIC - India - F50119

Type : Essential Oil

Source : *Boswellia serrata*

Customer : Plant Therapy

Checked and approved by:

Sylvain Mercier, M. Sc., Chimiste 2014-005

Notes: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia.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. The compliance status of the sample is provided to facilitate the reading of the report. The client remains ultimately responsible for reviewing the results presented within this report and to establish compliance of the tested batch against relevant quality criteria.

GAS CHROMATOGRAPHIC ANALYSIS

Method : PC-MAT-014 - Analysis of the composition of an essential oil or other volatile liquide by FAST GC-FID

✖ISO

Results : See analysis summary (next page)

Analyst : Sylvain Mercier, M. Sc., Chimiste 2014-005

Date : 2026-06-29

PHYSICOCHEMICAL DATA

Refractive index : 1.4575 ± 0.0003 (20 °C)

Method : PC-MAT-016 - Measure of the refractive index of a liquid.

Analyst : Cindy Caron B. Sc.

Date : 2026-06-26

CONCLUSION

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

ANALYSIS SUMMARY - CONSOLIDATED CONTENTS

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

Identification	%	Class
Hashishene	0.02	Monoterpene
α -Thujene	71.87	Monoterpene
α -Pinene	8.98	Monoterpene
Thujadiene isomer	0.04	Monoterpene
Camphene	0.02	Monoterpene
3,7,7-Trimethylcyclohepta-1,3,5-triene	0.01	Monoterpene
Sabinene	3.58	Monoterpene
β -Pinene	0.96	Monoterpene
Unknown	0.02	Monoterpene
Myrcene	0.51	Monoterpene
<i>trans</i> -Carane?	0.02	Monoterpene
α -Phellandrene	1.80	Monoterpene
Δ^3 -Carene	3.75	Monoterpene
1,4-Cineole	0.06	Monoterpenic ether
α -Terpinene	0.26	Monoterpene
<i>meta</i> -Cymene	0.02	Monoterpene
Carvomenthene	0.06	Aliphatic alcohol
<i>para</i> -Cymene	2.34	Monoterpene
Limonene	2.06	Monoterpene
β -Phellandrene	0.31	Monoterpene
1,8-Cineole	0.16	Monoterpenic ether
Unknown	0.02	Unknown
(<i>Z</i>)- β -Ocimene	0.02	Monoterpene
(<i>E</i>)- β -Ocimene	0.02	Monoterpene
Unknown	0.03	Unknown
γ -Terpinene	0.55	Monoterpene
<i>para</i> -Cymenene	0.01	Monoterpene
Terpinolene	0.20	Monoterpene
Linalool	0.40	Monoterpenic alcohol
β -Thujone	0.01	Monoterpenic ketone
Terpinen-4-ol	0.47	Monoterpenic alcohol
α -Terpineol	0.01	Monoterpenic alcohol
Methylchavicol	0.66	Phenylpropanoid
Linalyl acetate	0.08	Monoterpenic ester
Bornyl acetate	tr	Monoterpenic ester
Carvacrol	0.02	Monoterpenic alcohol
β -Bourbonene	0.02	Sesquiterpene
β -Elemene	0.03	Sesquiterpene
Methyleugenol	0.04	Phenylpropanoid
β -Ylangene	0.03	Sesquiterpene

<i>cis</i> - α -Bergamotene	0.02	Sesquiterpene
β -Caryophyllene	0.12	Sesquiterpene
<i>trans</i> - α -Bergamotene	0.09	Sesquiterpene
δ -Cadinene	0.01	Sesquiterpene
<i>meta</i> -Camphorene	0.03	Diterpene
<i>para</i> -Camphorene	0.02	Diterpene
Consolidated total	99.78	

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

Note: no correction factor was applied

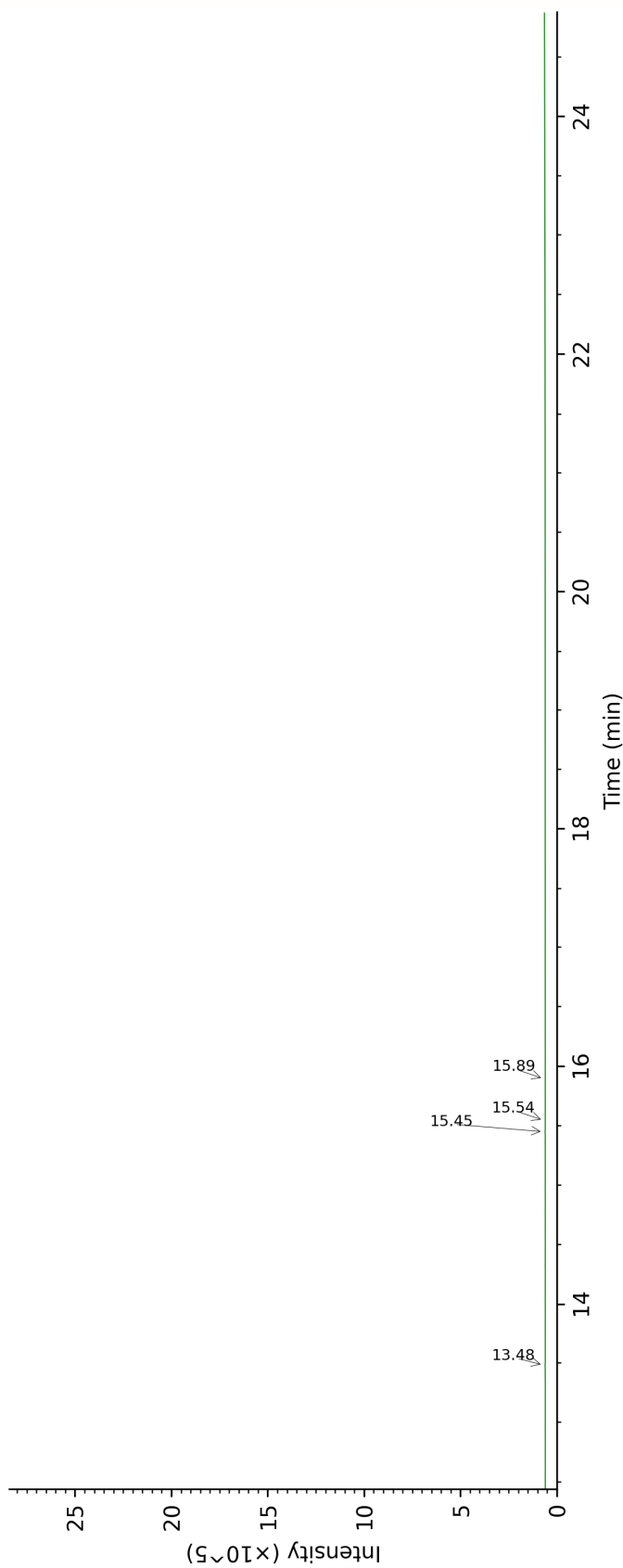
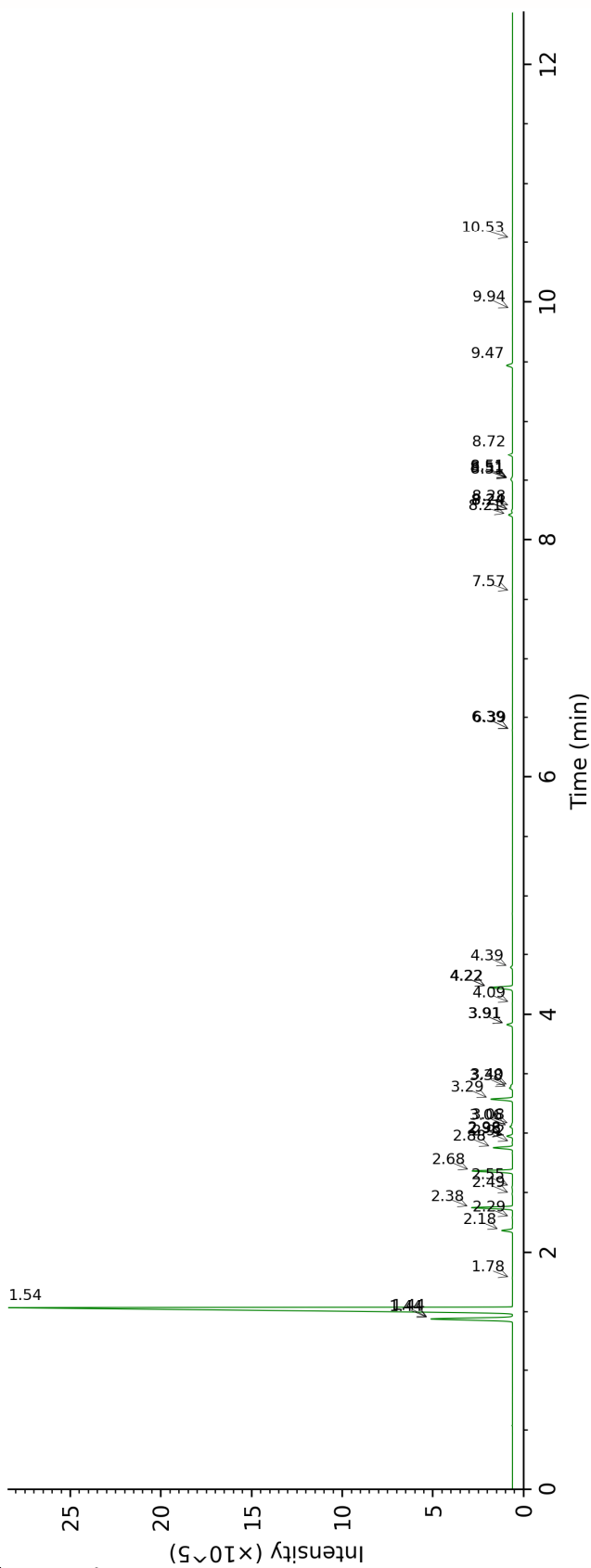
About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm 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.

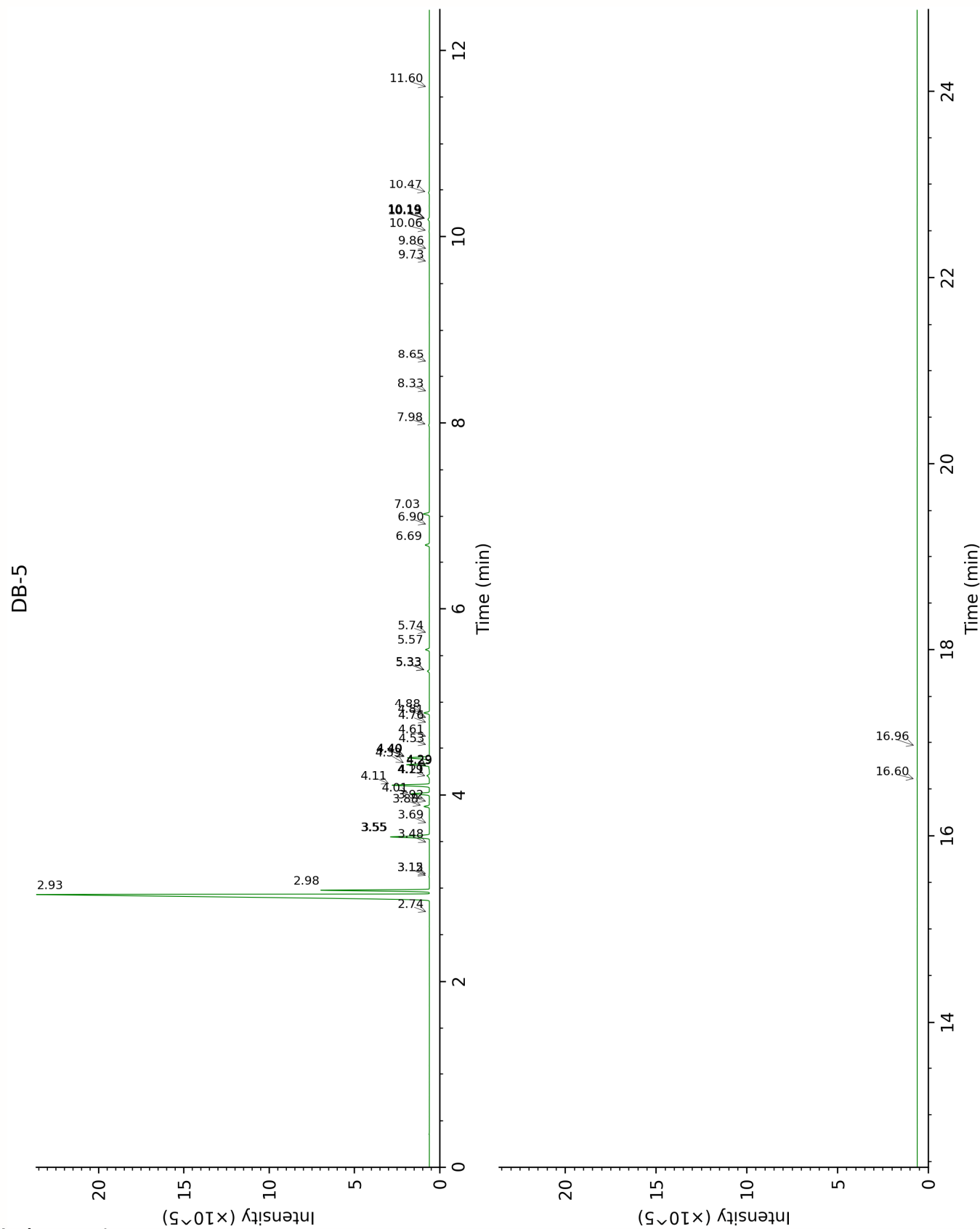
Unknowns: Unknown compounds' mass spectral data is presented in the "Full analysis data" table. The occurrence of unknown compounds is to be expected in many samples, and does not denote particular problems unless noted otherwise in the conclusion.

Bracketed value ([xx]): A bracketed percent value indicate that two or more compound percentage could not be solved due to coelution.

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DB-WAX





FULL ANALYSIS DATA

Hashishene	Column DB-WAX			Column DB-5		
	1.44*	990.9	[9.00]	2.74	916.7	0.02
α-Thujene	1.54	1001.1	71.89	2.93	930.1	71.87
α-Pinene	1.44*	990.9	[9.00]	2.98	933.2	8.98
Thujadiene isomer	2.49	1095.3	0.05	3.12	942.8	0.04
Camphene	1.78	1025.5	0.02	3.15	944.4	0.02
3,7,7-Trimethylcyclohepta-1,3,5-triene	2.98*	1133.3	[0.52]	3.48	966.8	0.01
Sabinene	2.38	1084.4	3.58	3.55*	971.8	[4.55]
β-Pinene	2.18	1065.4	0.96	3.55*	971.8	[4.55]
Unknown FRAG CXLV [m/z 93, 79 (62), 121 (40), 67 (35), 91 (34), 107 (34), 94 (23)... 136 (12)]	2.92	1129.1	0.03	3.69	981.0	0.02
Myrcene	2.98*	1133.3	[0.52]	3.88	993.8	0.51
trans-Carane?	2.29	1076.1	0.03	3.92	996.7	0.02
α-Phellandrene	2.88	1125.8	1.75	4.01	1003.0	1.80
Δ3-Carene	2.68	1110.5	3.75	4.11	1009.0	3.75
1,4-Cineole	3.08	1141.1	0.05	4.19	1014.5	0.06
α-Terpinene	3.06	1139.5	0.26	4.21	1015.4	0.26
meta-Cymene	4.22*	1227.5	[2.39]	4.29*	1020.7	[0.08]
Carvomenthene	2.55	1099.9	0.06	4.29*	1020.7	[0.08]
para-Cymene	4.22*	1227.5	[2.39]	4.33	1022.9	2.34
Limonene	3.29	1157.5	2.06	4.40*	1027.5	[2.56]
β-Phellandrene	3.38	1164.8	0.31	4.40*	1027.5	[2.56]
1,8-Cineole	3.40	1166.3	0.16	4.40*	1027.5	[2.56]
Unknown BOSA IV [m/z 67, 93 (70), 82 (70), 121 (42), 107 (39), 91 (33), 79 (28)...]				4.53	1035.8	0.02
(Z)-β-Ocimene	3.91*	1205.2	[0.57]	4.61	1041.2	0.02
(E)-β-Ocimene	4.09	1218.1	0.02	4.76	1050.8	0.02
Unknown BOFR IV [m/z 109, 45 (67), 41 (40), 67 (39), 81 (33), 79 (27), 95 (24), 91 (23), 82 (21), 55 (21), 93 (20)...]				4.81	1053.9	0.03
γ-Terpinene	3.91*	1205.2	[0.57]	4.88	1058.1	0.55
para-Cymenene	6.39*	1385.1	[0.02]	5.34*	1086.9	[0.21]
Terpinolene	4.39	1239.7	0.20	5.34*	1086.9	[0.21]

Linalool	8.21	1518.1	0.40	5.57	1101.6	0.40
β -Thujone	6.39*	1385.1	[0.02]	5.74	1112.5	0.01
Terpinen-4-ol	8.72	1556.8	0.47	6.69	1173.8	0.47
α -Terpineol	9.94	1652.3	0.01	6.90	1187.7	0.01
Methylchavicol	9.47	1615.1	0.66	7.03	1195.7	0.66
Linalyl acetate	8.24*	1520.7	[0.11]	7.98	1259.4	0.08
Bornyl acetate				8.33	1283.1	tr
Carvacrol	15.54	2156.9	0.02	8.65	1304.5	0.02
β -Bourbonene	7.56	1470.0	0.02	9.73	1381.0	0.02
β -Elemene	8.51*	1540.8	[0.24]	9.86	1390.4	0.03
Methyleugenol	13.48	1957.7	0.04	10.06	1404.5	0.04
β -Ylangene	8.24*	1520.7	[0.11]	10.18*	1413.9	[0.19]
<i>cis</i> - α -Bergamotene	8.28	1523.5	0.02	10.18*	1413.9	[0.19]
β -Caryophyllene	8.51*	1540.8	[0.24]	10.18*	1413.9	[0.19]
<i>trans</i> - α -Bergamotene	8.51*	1540.8	[0.24]	10.47	1435.3	0.09
δ -Cadinene	10.53	1700.4	0.02	11.60	1520.9	0.01
<i>meta</i> -Camphorene	15.45	2147.6	0.03	16.60	1951.3	0.03
<i>para</i> -Camphorene	15.89	2192.2	0.02	16.96	1985.3	0.02
Total reported		99.73%			99.85%	

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, only the first one is taken into account in the consolidated total

†: Peaks apexes were resolved, but peaks overlapped and were summed for analysis

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