

**Date :** September 21, 2018

**CERTIFICATE OF ANALYSIS – GC PROFILING**

**SAMPLE IDENTIFICATION**

**Internal code :** 18I13-VIS3-1-CC

**Customer identification :** Rose

**Type :** Essential oil

**Source :** *Rosa x damascena*

**Customer :** Visagenics

**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 :** September 19, 2018

Checked and approved by :

---

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

*Note: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia.*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.*

*PHYSICOCHEMICAL DATA*

**Physical aspect:** Faintly yellow liquid  
**Refractive index:** 1.4598 ± 0.0003 (20 °C)

*CONCLUSION*

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

*ALLERGENS*

Allergens (Names as listed by the International Fragrance Association)	Content in oil (% from GC-FID)*
Amyl cinnamal	Not detected
Amylcinnamyl alcohol	Not detected
Benzyl alcohol	Not detected
Cinnamyl alcohol	Not detected
<b>Citral (sum of isomers)</b>	<b>1.04</b>
<b>Eugenol</b>	<b>1.02</b>
Hydroxycitronellal	Not detected
Isoeugenol	Not detected
Benzyl salicylate	Not detected
Cinnamal	Not detected
Coumarin	Not detected
<b>Geraniol</b>	<b>18.98</b>
Hydroxyisohexyl-3-cyclohexene carboxaldehyde	Not detected
Anisyl alcohol	Not detected
Benzyl cinnamate	Not detected
<b>Farnesol (sum of isomers)</b>	<b>2.36</b>
Butylphenyl methylpropional	Not detected
<b>Linalool</b>	<b>1.42</b>
<b>Benzyl benzoate</b>	<b>0.08</b>
<b>Citronellol</b>	<b>24.31</b>
Hexyl cinnamal	Not detected
<b>Limonene</b>	<b>0.04</b>
Methyl 2-octynoate	Not detected
Alpha-siomethyl ionone	Not detected

\*Amount from DB-5 column, unless the peak coeluted. In such a case the DB-Wax percentage has been used to recompute a clean percentage.

ANALYSIS SUMMARY

Identification	DB-5 (%)	DB-WAX (%)	Classe
Acetaldehyde	0.06	0.04	Aliphatic aldehyde
Ethanol	0.90	0.93	Aliphatic alcohol
Dimethylsulfide	0.01	tr	Aliphatic sulfide
2-Butanol	tr		Aliphatic alcohol
Ethyl acetate	0.01*	tr	Aliphatic ester
2-Methyl-3-buten-2-ol	[0.01]*	tr	Aliphatic alcohol
Isobutanol	0.01	0.11*	Aliphatic alcohol
Isovaleral	tr	tr	Aliphatic aldehyde
Penten-3-ol	tr	0.01*	Aliphatic alcohol
Pentanal	0.05	0.06	Aliphatic aldehyde
Acetaldehyde diethyl acetal	0.01		Aliphatic acetal
Isoamyl alcohol	0.03	0.03*	Aliphatic alcohol
2-Methylbutanol	0.03*	0.04	Aliphatic alcohol
Dimethyl disulfide	[0.03]*	0.01*	Aliphatic sulfide
Pentanol	0.02	0.02	Aliphatic alcohol
Prenol	tr	0.01	Aliphatic alcohol
Hexanal	0.02	0.02	Aliphatic aldehyde
3-Methylpentanol	0.01*	0.01	Aliphatic alcohol
(2E)-Hexenal	[0.01]*	[0.03]*	Aliphatic aldehyde
(3Z)-Hexenol	0.04	0.04	Aliphatic alcohol
(2E)-Hexenol	0.01	0.01	Aliphatic alcohol
Hexanol	0.14	0.14	Aliphatic alcohol
Heptanal	0.13	0.14	Aliphatic aldehyde
$\alpha$ -Pinene	0.49	0.49	Monoterpene
Camphene	tr	[0.01]*	Monoterpene
Benzaldehyde	0.05	0.05	Simple phenolic
Sabinene	0.12*	0.02	Monoterpene
$\beta$ -Pinene	[0.12]*	[0.11]*	Monoterpene
Heptanol	0.02	0.02	Aliphatic alcohol
6-Methyl-5-hepten-2-one	0.03	0.03	Aliphatic ketone
Myrcene	0.27	0.27	Monoterpene
6-Methyl-5-hepten-2-ol	0.01	0.01	Aliphatic alcohol
$\alpha$ -Phellandrene	0.01	[0.01]*	Monoterpene
Octanal	0.02	0.01	Aliphatic aldehyde
$\Delta^3$ -Carene	tr	0.01	Monoterpene
$\alpha$ -Terpinene	0.03	0.03	Monoterpene
para-Cymene	0.02	0.02	Monoterpene
Limonene	0.06*	0.04	Monoterpene
$\beta$ -Phellandrene	[0.06]*	0.02	Monoterpene
1,8-Cineole	[0.06]*	[0.03]*	Monoterpenic ether
Benzeneacetaldehyde	0.01	0.01	Simple phenolic
(Z)- $\beta$ -Ocimene	0.03	0.02	Monoterpene
(E)- $\beta$ -Ocimene	0.04	0.04	Monoterpene
$\gamma$ -Terpinene	0.05	0.05	Monoterpene
cis-Linalool oxide (fur.)	0.02	0.02	Monoterpenic alcohol
Octanol	0.01	0.01	Aliphatic alcohol
Terpinolene	0.04	0.03	Monoterpene
Rosefuran	0.02	0.03	Monoterpenic ether

Linalool	1.42	1.44	Monoterpenic alcohol
Nonanal	0.09	0.08	Aliphatic aldehyde
<i>cis</i> -Rose oxide	1.05	0.27	Monoterpenic ether
Phenylethyl alcohol	[1.05]*	0.81	Simple phenolic
$\beta$ -Thujone	[1.05]*	0.01	Monoterpenic ketone
<i>trans</i> -para-Mentha-2,8-dien-1-ol	0.01	0.01	Monoterpenic alcohol
<i>cis</i> -para-Menth-2-en-1-ol	0.01	0.02	Monoterpenic alcohol
<i>trans</i> -Rose oxide	0.12	0.12	Monoterpenic ether
<i>cis</i> -para-Mentha-2,8-dien-1-ol	0.01	tr	Monoterpenic alcohol
<i>trans</i> -para-Menth-2-en-1-ol	0.01	0.01	Monoterpenic alcohol
neo-Isopulegol	0.01	0.01	Monoterpenic alcohol
Citronellal	0.06*	0.02	Monoterpenic aldehyde
Nerol oxide	[0.06]*	0.05	Aliphatic ether
Terpinen-4-ol	0.26	0.24	Monoterpenic alcohol
Isogeraniol	0.02	0.01	Monoterpenic aldehyde
$\alpha$ -Terpineol	0.38*	0.44*	Monoterpenic alcohol
Methyl salicylate	[0.38]*	[1.97]*	Phenolic ester
Decanal	0.03	0.02	Aliphatic aldehyde
Nerol	33.58	9.27	Monoterpenic alcohol
Citronellol	[33.58]	23.79*	Monoterpenic alcohol
( <i>Z</i> )-Isogeraniol	0.03	0.04	Monoterpenic alcohol
( <i>E</i> )-Isogeraniol?	0.19	0.16*	Monoterpenic alcohol
Geraniol	18.98	18.92	Monoterpenic alcohol
Geranial	1.04	1.03*	Monoterpenic aldehyde
Citronellyl formate	0.03	0.02	Monoterpenic ester
Neryl formate	0.02	1.01*	Monoterpenic ester
Geranyl formate	0.02	0.01	Monoterpenic ester
Undecanal	0.03	0.03	Aliphatic aldehyde
Methyl geranate	0.06	[0.44]*	Monoterpenic ester
Citronellyl acetate	1.41*	[1.01]*	Monoterpenic ester
Eugenol	[1.41]*	1.02	Phenylpropanoid
Neryl acetate	0.07	0.07	Monoterpenic ester
$\beta$ -Bourbonene	0.09	0.07	Sesquiterpene
Geranyl acetate	0.83	1.12*	Monoterpenic ester
$\beta$ -Elemene	0.07	0.55*	Sesquiterpene
Methyleugenol	1.15	1.16	Phenylpropanoid
$\beta$ -Caryophyllene	0.49	[0.55]*	Sesquiterpene
$\alpha$ -Guaiene	0.26	0.23	Sesquiterpene
6,9-Guaiadiene	0.01	0.01	Sesquiterpene
$\alpha$ -Humulene	0.26	0.27	Sesquiterpene
( <i>E</i> )- $\beta$ -Farnesene	0.02	0.02	Sesquiterpene
$\gamma$ -Muurolene	0.01	0.02	Sesquiterpene
Germacrene D	0.59*	0.62*	Sesquiterpene
Geranyl propionate	[0.59]*	0.01	Monoterpenic ester
$\beta$ -Selinene	0.03	0.03	Sesquiterpene
Unknown	0.04		Unknown
Benzyl tiglate	0.03		Phenolic ester
Aciphyllene	0.07	[0.62]*	Sesquiterpene
$\alpha$ -Muurolene	0.08	[1.03]*	Sesquiterpene
Pentadecane	0.22	0.26	Alkane
$\delta$ -Guaiene	0.26	0.25	Sesquiterpene
(3 <i>E</i> ,6 <i>E</i> )- $\alpha$ -Farnesene	0.10*	[1.12]*	Sesquiterpene

γ-Cadinene	[0.10]*	1.97	Sesquiterpene
δ-Cadinene	0.04*	[1.97]*	Sesquiterpene
<i>trans</i> -Calamenene	[0.04]*	0.02	Sesquiterpene
Citronellyl butyrate	0.01	[0.16]*	Monoterpenic ester
α-Elemol	0.05	0.05	Sesquiterpenic alcohol
( <i>E</i> )-Nerolidol	0.11	0.10	Sesquiterpenic alcohol
Caryophyllene oxide	0.05*	15.94*	Sesquiterpenic ether
Caryophyllene oxide isomer	[0.05]*	0.01	Sesquiterpenic ether
Phenylethyl tiglate	0.04	0.03	Phenolic ester
Hexadecane	0.08	0.08	Alkane
10-epi-Cubenol	0.01	0.01	Sesquiterpenic alcohol
10-epi-γ-Eudesmol	0.03	0.04	Sesquiterpenic alcohol
γ-Eudesmol	0.09	5.41*	Sesquiterpenic alcohol
τ-Muurolol	0.04	0.03	Sesquiterpenic alcohol
β-Eudesmol	0.10	0.07*	Sesquiterpenic alcohol
α-Eudesmol	0.12	0.13	Sesquiterpenic alcohol
α-Cadinol	0.06	[0.07]*	Sesquiterpenic alcohol
Unknown	0.03	[23.79]*	Unknown
(8 <i>Z</i> )-Heptadecene	0.27	[1.97]*	Alkene
(2 <i>E</i> ,6 <i>Z</i> )-Farnesol	0.24	0.19	Sesquiterpenic alcohol
Heptadecane	1.89	[1.97]*	Alkane
(2 <i>E</i> ,6 <i>Z</i> )-Farnesal	0.05		Sesquiterpenic aldehyde
(2 <i>E</i> ,6 <i>E</i> )-Farnesol	2.12	3.17*	Sesquiterpenic alcohol
(2 <i>E</i> ,6 <i>E</i> )-Farnesal	0.08	0.08	Sesquiterpenic aldehyde
Benzyl benzoate	0.08	0.07	Phenolic ester
(8 <i>Z</i> )-Octadecene	0.05	0.21*	Alkene
Octadecane	0.18	[0.21]*	Alkane
Hexadecanal	0.01	0.01	Aliphatic aldehyde
(2 <i>E</i> ,6 <i>E</i> )-Farnesyl acetate	0.02		Sesquiterpenic ester
Phenylethyl benzoate	0.07	0.06	Phenolic ester
Nonadecadiene isomer	0.06	0.04	Alkene
(9 <i>Z</i> )-Nonadecene	3.19	[15.94]*	Alkene
Nonadecane	12.74	[15.94]*	Alkane
(9 <i>Z</i> )-Eicosene	0.12	0.11	Alkene
Ethyl palmitate	0.03	0.02	Aliphatic ester
Eicosane	1.06	1.07	Alkane
Octadecanal	0.04	0.04	Aliphatic aldehyde
(10 <i>Z</i> )-Heneicosene	0.15	[5.41]*	Alkene
Phenylethyl geranate	0.16		Monoterpenic ester
1-Heneicosene?	0.15		Alkene
Heneicosane	5.19	[5.41]*	Alkane
Citronellyl caprate	0.04	0.05	Monoterpenic ester
Geranyl caprate	0.02		Monoterpenic ester
Ethyl linoleate	0.03	0.03	Aliphatic ester
Docosane	0.14	0.14	Alkane
1-Tricosene?	0.21	0.20	Alkene
Tricosane	1.22	[3.17]*	Alkane
Geranyl laurate	0.02		Monoterpenic ester
Tetracosane	0.07	0.08	Alkane
1-Pentacosene?	0.04	0.04	Alkene
Pentacosane	0.37	0.34	Alkane
Hexacosane	0.03	0.03	Alkane

Heptacosane	0.26	0.26	Alkane
Octacosane	0.01	0.01	Alkane
Nonacosane	0.05	0.05	Alkane
Untriacontane	0.01	0.01	Alkane
<b>Total identified</b>	<b>97.67%</b>	<b>96.56%</b>	

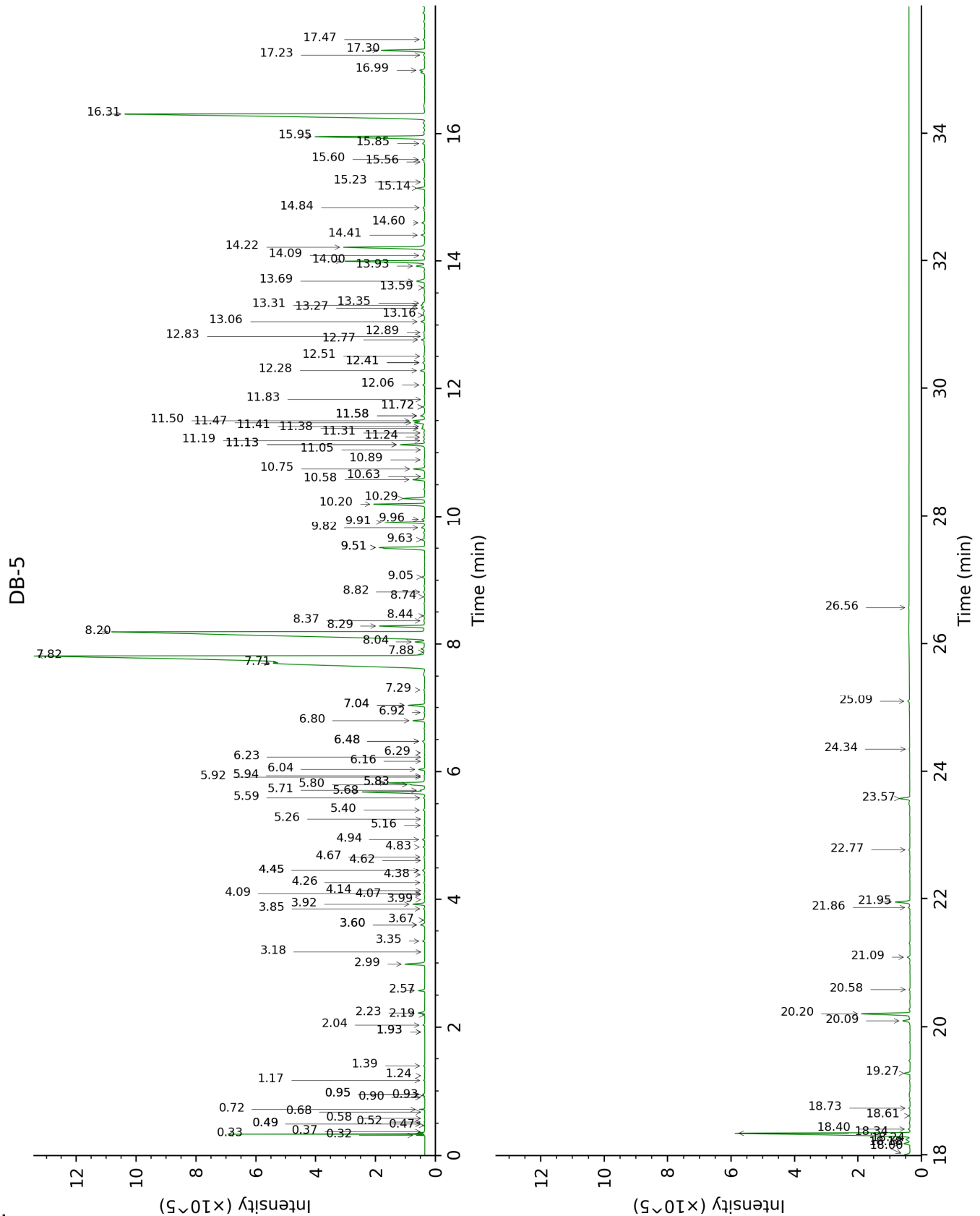
\*: Two or more compounds are coeluting on this column

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

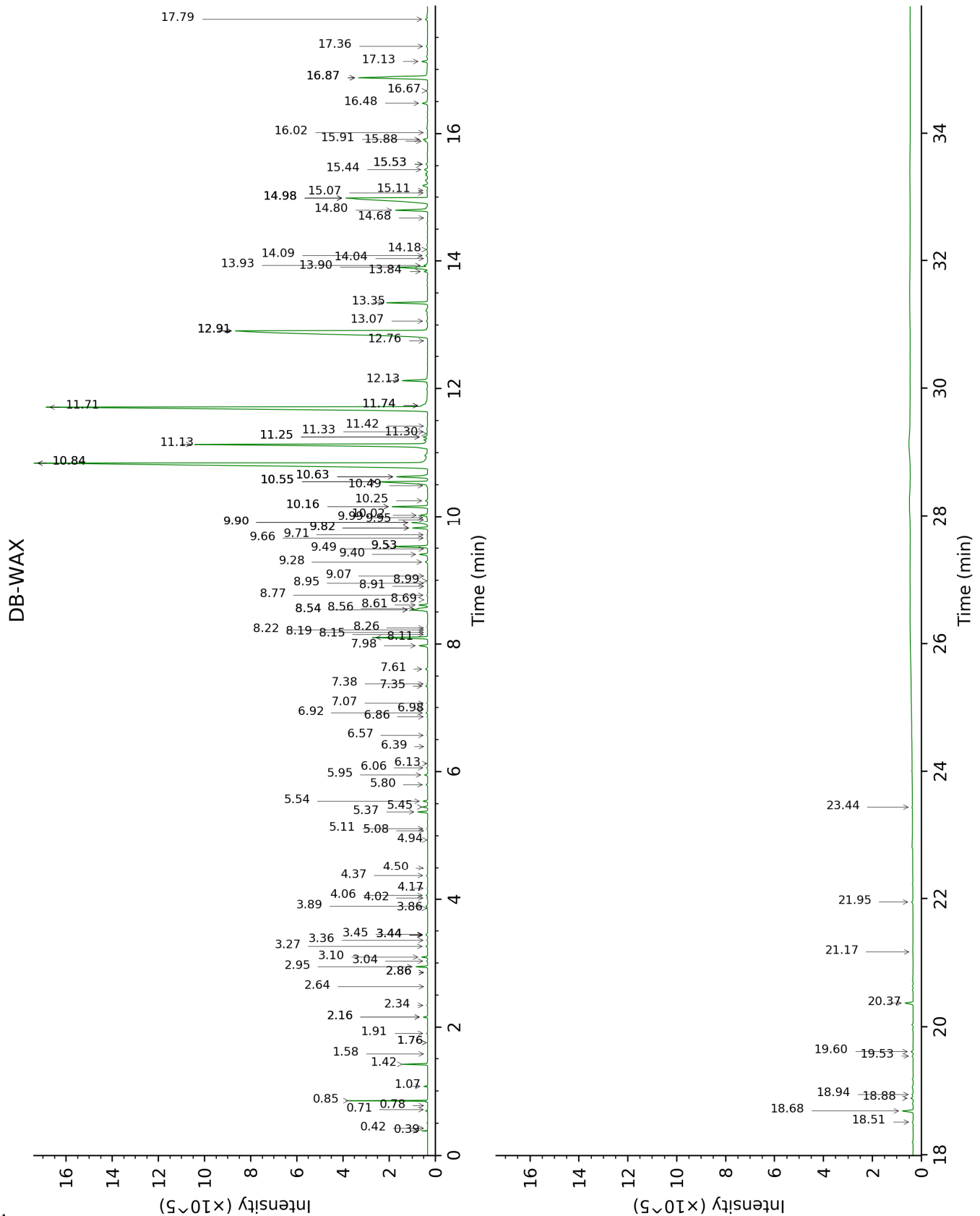
tr: The compound has been detected below 0.005% of total signal.

Note: no correction factor was applied

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







FULL ANALYSIS DATA

Identification	Column DB-5			Column DB-WAX		
	R.T	R.I	%	R.T	R.I	%
Acetaldehyde	0.32	497	0.06	0.39	664	0.04
Ethanol	0.33	497	0.90	0.85	904	0.93
Dimethylsulfide	0.37	503	0.01	0.42	710	tr
2-Butanol	0.47	594	tr			
Ethyl acetate	0.49*	606	0.01	0.71	864	tr
2-Methyl-3-buten-2-ol	0.49*	606	[0.01]	1.58	1012	tr
Isobutanol	0.52	618	0.01	2.16*	1070	0.11
Isovaleral	0.58	639	tr	0.78	886	tr
Penten-3-ol	0.68	674	tr	2.86*	1131	0.01
Pentanal	0.72	689	0.05	1.07	940	0.06
Acetaldehyde diethyl acetal	0.90	724	0.01			
Isoamyl alcohol	0.93	728	0.03	3.44*	1176	0.03
2-Methylbutanol	0.95*	731	0.03	3.45	1177	0.04
Dimethyl disulfide	0.95*	731	[0.03]	1.76*	1030	0.01
Pentanol	1.17	764	0.02	4.02	1219	0.02
Prenol	1.24	775	tr	4.94	1284	0.01
Hexanal	1.39	797	0.02	1.91	1045	0.02
3-Methylpentanol	1.93*	845	0.01	5.08	1294	0.01
(2E)-Hexenal	1.93*	845	[0.01]	3.44*	1176	[0.03]
(3Z)-Hexenol	2.04	854	0.04	5.80	1346	0.04
(2E)-Hexenol	2.19	868	0.01	6.13	1369	0.01
Hexanol	2.22	870	0.14	5.45	1321	0.14
Heptanal	2.57	900	0.13	3.10	1150	0.14
α-Pinene	2.99	928	0.49	1.42	996	0.49
Camphene	3.18	941	tr	1.76*	1030	[0.01]
Benzaldehyde	3.35	952	0.05	7.35	1458	0.05
Sabinene	3.60*	970	0.12	2.34	1088	0.02
β-Pinene	3.60*	970	[0.12]	2.16*	1070	[0.11]
Heptanol	3.67	974	0.02	6.86	1422	0.02
6-Methyl-5-hepten-2-one	3.85	986	0.03	5.11	1297	0.03
Myrcene	3.92	991	0.27	2.95	1138	0.27
6-Methyl-5-hepten-2-ol	3.99	996	0.01	6.98	1431	0.01
α-Phellandrene	4.07	1001	0.01	2.86*	1131	[0.01]
Octanal	4.09	1002	0.02	4.50	1253	0.01
Δ3-Carene	4.14	1005	tr	2.64	1114	0.01
α-Terpinene	4.26	1013	0.03	3.04	1145	0.03
para-Cymene	4.38	1021	0.02	4.17	1230	0.02
Limonene	4.45*	1025	0.06	3.26	1163	0.04
β-Phellandrene	4.45*	1025	[0.06]	3.36	1170	0.02
1,8-Cineole	4.45*	1025	[0.06]	3.44*	1176	[0.03]
Benzeneacetaldehyde	4.62	1036	0.01	8.91	1576	0.01
(Z)-β-Ocimene	4.67	1039	0.03	3.86	1207	0.02
(E)-β-Ocimene	4.83	1049	0.04	4.06	1222	0.04
γ-Terpinene	4.94	1056	0.05	3.89	1210	0.05

<i>cis</i> -Linalool oxide (fur.)	5.16	1070	0.02	6.57	1401	0.02
Octanol	5.26	1076	0.01	8.19	1521	0.01
Terpinolene	5.40	1085	0.04	4.37	1244	0.03
Rosefuran	5.59	1097	0.02	6.06	1364	0.03
Linalool	5.68	1103	1.42	8.10	1515	1.44
Nonanal	5.71	1105	0.09	5.95	1356	0.08
<i>cis</i> -Rose oxide	5.80†	1110	1.05	5.37	1315	0.27
Phenylethyl alcohol	5.83*†	1112	[1.05]	12.13	1845	0.81
β-Thujone	5.83*†	1112	[1.05]	6.39	1388	0.01
<i>trans</i> -para-Mentha-2,8-dien-1-ol	5.92	1118	0.01	9.07	1589	0.01
<i>cis</i> -para-Menth-2-en-1-ol	5.94	1119	0.01	8.15	1518	0.02
<i>trans</i> -Rose oxide	6.04	1126	0.12	5.54	1327	0.12
<i>cis</i> -para-Mentha-2,8-dien-1-ol	6.16	1134	0.01	9.49	1623	tr
<i>trans</i> -para-Menth-2-en-1-ol	6.23	1138	0.01	8.99	1583	0.01
neo-Isopulegol	6.30	1142	0.01	8.26	1526	0.01
Citronellal	6.48*	1154	0.06	7.07	1438	0.02
Nerol oxide	6.48*	1154	[0.06]	6.92	1426	0.05
Terpinen-4-ol	6.80	1174	0.26	8.61	1554	0.24
Isogeraniol	6.92	1183	0.02	8.22	1524	0.01
α-Terpineol	7.04*	1190	0.38	9.82*	1649	0.44
Methyl salicylate	7.04*	1190	[0.38]	10.55*†	1709	[1.97]
Decanal	7.29	1206	0.03	7.38	1461	0.02
Nerol	7.71†	1234	33.58	11.13	1758	9.27
Citronellol	7.82†	1242	[33.58]	10.84*	1734	23.79
( <i>Z</i> )-Isogeraniol	7.88	1246	0.03	11.30	1773	0.04
( <i>E</i> )-Isogeraniol?	8.04	1256	0.19	11.25*	1768	0.16
Geraniol	8.20	1267	18.98	11.71	1808	18.92
Geranial	8.29	1273	1.04	10.16*	1677	1.03
Citronellyl formate	8.37	1278	0.03	8.95	1580	0.02
Neryl formate	8.44	1284	0.02	9.53*	1626	1.01
Geranyl formate	8.74	1304	0.02	9.95	1660	0.01
Undecanal	8.82	1309	0.03	8.77	1566	0.03
Methyl geranate	9.05	1325	0.06	9.82*	1649	[0.44]
Citronellyl acetate	9.51*	1358	1.41	9.53*	1626	[1.01]
Eugenol	9.51*	1358	[1.41]	14.80	2093	1.02
Neryl acetate	9.63	1366	0.07	10.25	1684	0.07
β-Bourbonene	9.82	1380	0.09	7.61	1478	0.07
Geranyl acetate	9.91	1386	0.83	10.63*	1716	1.12
β-Elemene	9.96	1390	0.07	8.54*	1548	0.55
Methyleugenol	10.20	1406	1.15	13.35	1956	1.16
β-Caryophyllene	10.29	1413	0.49	8.54*	1548	[0.55]
α-Guaiene	10.58	1435	0.26	8.56	1550	0.23
6,9-Guaiadiene	10.63	1439	0.01	8.69	1560	0.01
α-Humulene	10.75	1448	0.26	9.40	1616	0.27
( <i>E</i> )-β-Farnesene	10.89	1458	0.02	9.66	1637	0.02
γ-Murolene	11.05	1470	0.01	9.71	1641	0.02
Germacrene D	11.13*	1476	0.59	9.90*	1656	0.62

Geranyl propionate	11.13*	1476	[0.59]	11.42	1783	0.01
β-Selinene	11.19	1480	0.03	9.99	1663	0.03
Unknown [m/z 43, 58 (75), 57 (58), 71 (55), 41 (41), 59 (31)...]	11.24	1484	0.04			
Benzyl tiglate	11.31	1489	0.03			
Aciphyllene	11.38	1495	0.07	9.90*	1656	[0.62]
α-Muurolene	11.41	1497	0.08	10.16*	1677	[1.03]
Pentadecane	11.47	1501	0.22	7.98	1505	0.26
δ-Guaiene	11.50	1504	0.26	10.02	1666	0.25
(3E,6E)-α-Farnesene	11.58*	1510	0.10	10.63*	1716	[1.12]
γ-Cadinene	11.58*	1510	[0.10]	10.49†	1704	1.97
δ-Cadinene	11.72*	1521	0.04	10.55*†	1709	[1.97]
trans-Calamenene	11.72*	1521	[0.04]	11.33	1775	0.02
Citronellyl butyrate	11.83	1530	0.01	11.25*	1768	[0.16]
α-Elemol	12.06	1548	0.05	14.09	2025	0.05
(E)-Nerolidol	12.28	1565	0.11	13.84	2001	0.10
Caryophyllene oxide	12.41*	1575	0.05	12.91*	1915	15.94
Caryophyllene oxide isomer	12.41*	1575	[0.05]	12.76	1901	0.01
Phenylethyl tiglate	12.51	1583	0.04	15.07	2120	0.03
Hexadecane	12.77	1604	0.08	9.28	1606	0.08
10-epi-Cubenol	12.83	1608	0.01	14.04	2021	0.01
10-epi-γ-Eudesmol	12.89	1613	0.03	14.18	2034	0.04
γ-Eudesmol	13.06	1627	0.09	14.98*	2112	5.41
τ-Muurolol	13.16	1636	0.04	15.10	2124	0.03
β-Eudesmol	13.27	1644	0.10	15.52*	2166	0.07
α-Eudesmol	13.31	1648	0.12	15.44	2158	0.13
α-Cadinol	13.35	1651	0.06	15.52*	2166	[0.07]
Unknown [m/z 67, 81 (85), 82 (64), 95 (62), 96 (48), 55 (44), 68 (43)...]	13.59	1671	0.03	10.84*	1734	[23.79]
(8Z)-Heptadecene	13.69	1679	0.27	10.55*†	1709	[1.97]
(2E,6Z)-Farnesol	13.92	1699	0.24	16.48	2264	0.19
Heptadecane	14.00	1705	1.89	10.55*†	1709	[1.97]
(2E,6Z)-Farnesal	14.09	1713	0.05			
(2E,6E)-Farnesol	14.22	1724	2.12	16.87*	2306	3.17
(2E,6E)-Farnesal	14.41	1741	0.08	15.88	2203	0.08
Benzyl benzoate	14.60	1757	0.08	18.88	2529	0.07
(8Z)-Octadecene	14.84	1778	0.05	11.74*	1810	0.21
Octadecane	15.14	1804	0.18	11.74*	1810	[0.21]
Hexadecanal	15.24	1813	0.01	14.68	2082	0.01
(2E,6E)-Farnesyl acetate	15.56	1843	0.02			
Phenylethyl benzoate	15.60	1846	0.07	19.60	2614	0.06
Nonadecadiene isomer	15.85	1869	0.06	13.07	1929	0.04
(9Z)-Nonadecene	15.95	1878	3.19	12.91*	1915	[15.94]
Nonadecane	16.31	1911	12.74	12.91*	1915	[15.94]
(9Z)-Eicosene	16.99	1976	0.12	13.93	2010	0.11
Ethyl palmitate	17.23	1998	0.03	16.02	2216	0.02

Eicosane	17.30	2006	1.06	13.90	2008	1.07
Octadecanal	17.47	2022	0.04	16.67	2284	0.04
(10Z)-Heneicosene	18.00	2075	0.15	14.98*	2112	[5.41]
Phenylethyl geranate	18.18	2093	0.16			
1-Heneicosene?	18.24	2099	0.15			
Heneicosane	18.34	2109	5.19	14.98*	2112	[5.41]
Citronellyl caprate	18.40	2116	0.04	17.36	2359	0.05
Geranyl caprate	18.61	2137	0.02			
Ethyl linoleate	18.73	2149	0.03	18.51	2486	0.03
Docosane	19.27	2205	0.14	15.91	2205	0.14
1-Tricosene?	20.09	2294	0.21	17.13	2334	0.20
Tricosane	20.20	2307	1.22	16.87*	2306	[3.17]
Geranyl laurate	20.58	2349	0.02			
Tetracosane	21.09	2406	0.07	17.79	2405	0.08
1-Pentacosene?	21.86	2496	0.04	18.94	2536	0.04
Pentacosane	21.95	2506	0.37	18.68	2506	0.34
Hexacosane	22.77	2606	0.03	19.53	2605	0.03
Heptacosane	23.57	2707	0.26	20.37	2706	0.26
Octacosane	24.34	2806	0.01	21.17	2806	0.01
Nonacosane	25.09	2907	0.05	21.95	2906	0.05
Untriacontane	26.56	3107	0.01	23.44	3106	0.01
<b>Total identified</b>			<b>97.67%</b>			<b>96.56%</b>
<b>Total reported</b>			<b>97.73%</b>			<b>96.56%</b>

\*: Two or more compounds are coeluting on this column

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