



GC/MS BATCH NUMBER: CH0103

ESSENTIAL OIL: CLOVE BUD ORGANIC
BOTANICAL NAME: SYZGIUM AROMATICUM
ORIGIN: SRI LANKA

KEY CONSTITUENTS PRESENT IN THIS BATCH OF CLOVE BUD ORGANIC OIL	%
EUGENOL	80.8
EUGENYL ACETATE	9.0
β -CARYOPHYLLENE	7.7

Comments from Robert Tisserand: Classic sweet, spicy odor quality. Two of three key ISO constituents are within range, with beta-caryophyllene marginally high.

Date : July 5, 2017

SAMPLE IDENTIFICATION

Internal code : 17F29-PTH2-1-DM

Customer identification : Clove Bud Organic-Sri Lanka -CH010361R

Type : Essential oil

Source : *Syzygium aromaticum*

Customer : Plant Therapy

ANALYSIS

Method : PC-PA-001-15E06, "Analysis of the composition of a liquid essential oil by GC-FID" (in French).

Analyst : Sylvain Mercier, M. Sc., chimiste

Analysis date : 2017-07-05

Checked and approved by :

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

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IDENTIFIED COMPOUNDS

Identification	Column: BP5			Column: WAX			Molecular Class
	R.T.	R.I.	%	%	R.I.	R.T.	
Furfural	2.21	845	0.02	0.01	1383	6.03	Furan
Linalool	6.69	1109	0.01	0.01	1488	8.10	Monoterp. alcohol
Methyl salicylate	9.28	1202	0.10	0.09	1677	14.86	Phenolic ester
Chavicol	13.17	1289	0.12	0.15	2229	42.03	Phenylpropanoid
α -Cubebene	16.03	1336	0.05	0.05	1411	6.46	Sesquiterpene
Eugenol	18.56*	1374	80.38	80.78	2059	37.15	Phenylpropanoid
α -Copaene	18.56*	1374	[80.38]	0.14	1439	6.94	Sesquiterpene
β -Caryophyllene	20.87	1407	7.65	7.64	1528	9.03	Sesquiterpene
α -Humulene	23.51	1439	0.78	0.78	1584	10.95	Sesquiterpene
δ -Cadinene	29.41	1511	0.09	0.07	1664	14.18	Sesquiterpene
<i>trans</i> -Calamenene	29.79	1517	0.05	0.03	1740	18.06	Sesquiterpene
Eugenyl acetate	31.59	1542	9.01	8.99	2156	40.13	Phenylpropanoid ester
Caryophyllene oxide	33.87	1574	0.45	0.43	1857	25.49	Sesquiterp. ether
Total identified			98.71%	99.17%			

*: Two or more compounds are coeluting on this column

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

Note: no correction factor was applied

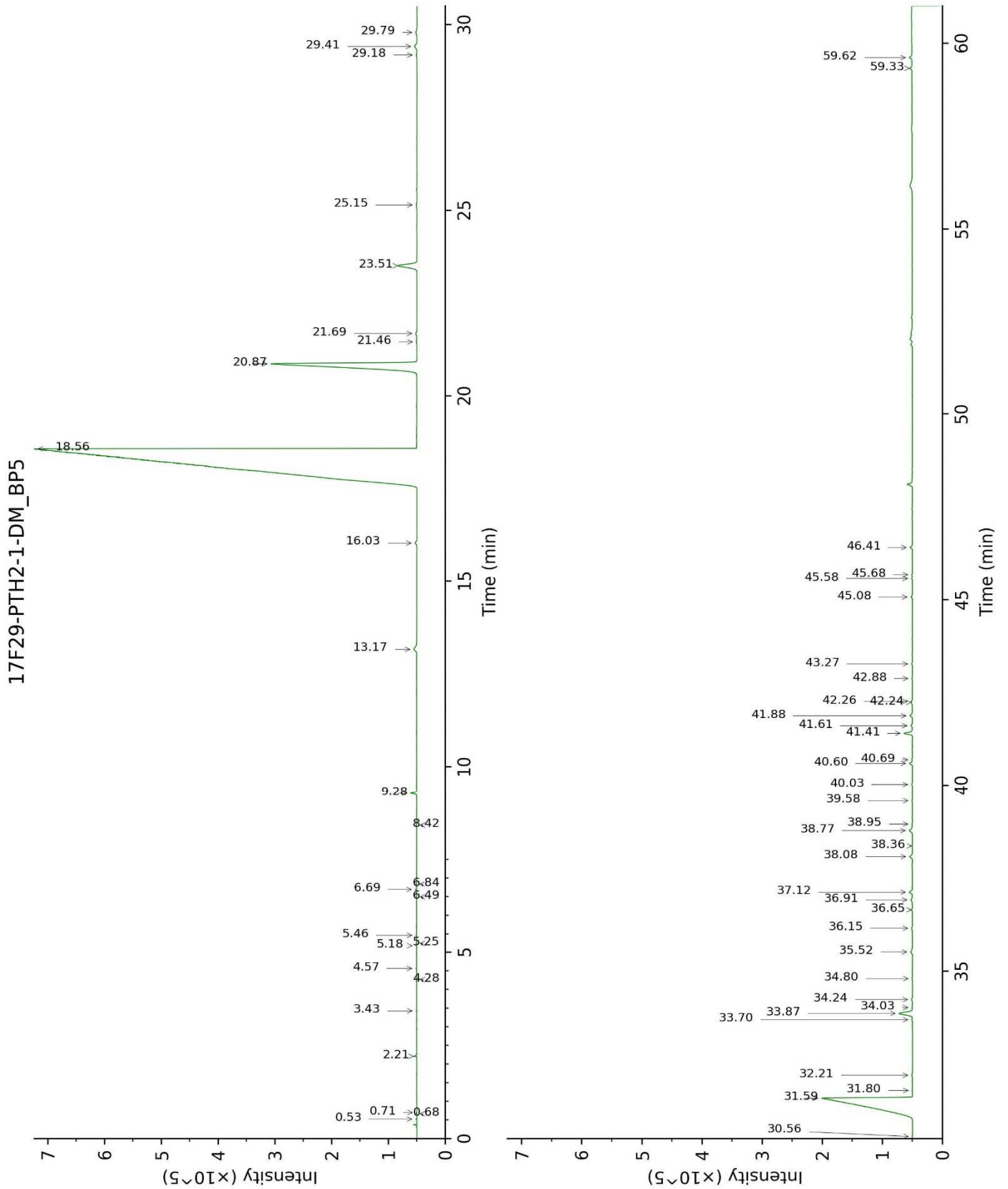
OTHER DATA

Physical aspect : Light yellow-brown liquid

Refractive index : 1.5320 ± 0.0003 (20 °C)

CONCLUSION

No adulterant, contaminant or diluent were detected using this method.



17F29-PTH2-1-DM_WAX

