

### CERTIFICATE OF ANALYSIS

<b>SAMPLE NAME</b>		Backhousia citriodora (Lemon Myrtle)	
<b>FORM</b>		Oil	
<b>CUSTOMER NAME</b>		Buckley & Phillips Aromatics	
<b>CERTIFICATION DATE</b>		08 May 2019	
<b>CUSTOMER REFERENCE</b>		Batch: 01112018-1 ref: 18636	
<b>ARL JOB #</b>	A190965	<b>LAB REF. #</b>	ARL1902494
<b>ANALYSIS</b>	FULL CoA - ISO	<b>METHOD</b>	ARL-TM101-3

TEST	AS 4941 SPECIFICATION	RESULTS	TEST METHOD
Relative Density @ 20°C	0.880 - 0.910	0.888	Ph.Eur.2.2.5
Refractive Index @ 20°C	1.4840 - 1.4910	1.4860	Ph.Eur.2.2.6
Optical Rotation @ 20°C	-1.5° - +1.5°	-0.04	Ph.Eur.2.2.7

TEST	AS 4941 SPECIFICATION	RESULTS	TEST METHOD
	RANGE	Area %	
myrcene	tr - 0.7	0.27	ARL-TM101-3*
2,3-dihydro-1,8-cineole	tr - 0.9	0.23	
6-methyl-5-hepten-2-one	tr - 2.9	0.29	
linalool	tr - 1.0	0.50	
citronellal	tr - 1.0	0.61	
geraniol	0.5 - 2.5	0.82	
exo-iso-citral	tr - 2.0	0.05	
cis-iso-citral	tr - 2.7	1.96	
trans-iso-citral	tr - 4.3	2.98	
neral	≥ 32.0	38.91	
geranial	≥ 44.0	50.05	
Total citral**	≥ 85.0	93.95	

\* Assay by GC (FID detection -area percent report)

\*\* Total citral is the sum of exo-iso-citral, cis-iso-citral, trans-iso-citral, neral and geranial.

tr - denotes trace



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Samantha Morrow  
ANALYTICAL OFFICER



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Ashley Dowell  
MANAGER - ARL



Sample Name: Backhousia citriodora ref 18636

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 Area Percent Report  
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Sorted By : Signal  
 Calib. Data Modified : 5/3/2019 8:51:22 AM  
 Multiplier: : 1.0000  
 Dilution: : 1.0000  
 Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	9.415	VV	0.0208	11.00899	0.27171	myrcene
2	9.926	VV	0.0234	9.32642	0.23019	2,3 di H cineole
3	10.263	BB	0.0196	11.86815	0.29292	methyl heptenone
4	11.872	VV	0.0199	20.37840	0.50296	linalool
5	13.013	MF	0.0126	1.99046	0.04913	exo iso citral
6	13.031	FM	0.0255	24.70808	0.60982	citronellal
7	13.405	VV	0.0201	79.48846	1.96186	cis-iso-citral
8	13.762	BV	0.0195	120.64234	2.97759	trans-iso-citral
9	14.373	VV	0.0237	28.62231	0.70643	nerol
10	14.846	VV	0.0236	33.37978	0.82385	geraniol
11	14.939	VV	0.0255	1576.35925	38.90632	neral
12	15.436	BV	0.0277	2027.83655	50.04928	geranial
13	17.035	VV	0.0222	2.54838	0.06290	b-caryophyllene

Totals : 3948.15756 97.4450

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 \*\*\* End of Report \*\*\*  
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