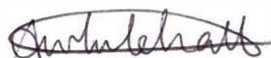


CERTIFICATE OF ANALYSIS

SAMPLE NAME		Frankinsense serrata	
FORM		Oil	
CUSTOMER NAME		Buckley & Phillips Aromatics	
CERTIFICATION DATE		26 June 2019	
CUSTOMER REFERENCE		Batch: BO-19-0011 ref: 1200053	
ARL JOB #	A191376	LAB REF. #	ARL1903796
ANALYSIS	GCFID - Area%	METHOD	ARL-TM101

TEST	RESULTS	TEST METHOD
	Area %	
α -thujene	69.80	ARL-TM101-4*
α -pinene	4.94	
camphene	0.07	
sabinene	5.86	
β -pinene	0.36	
myrcene	1.01	
α -phellandrene	3.09	
delta-3-carene	3.62	
α -terpinene	0.48	
limonene	2.02	
β -phellandrene	0.54	
cis- β -ocimene	0.57	
p-cymene	1.82	
trans- β -ocimene	0.03	
γ -terpinene	0.91	
terpinolene	0.32	
linalool	0.08	
terpinen-4-ol	0.43	
methyl chavicol	1.84	
α -copaene	0.09	
β -bourbonene	0.34	

* Assay by GC (FID detection –area percent report)



.....
Anastasia Whitehall
LABORATORY ASSISTANT



.....
Ashley Dowell
MANAGER - ARL

Sample Name: FRANKINSENSE BO-19-0011 ref 1200053

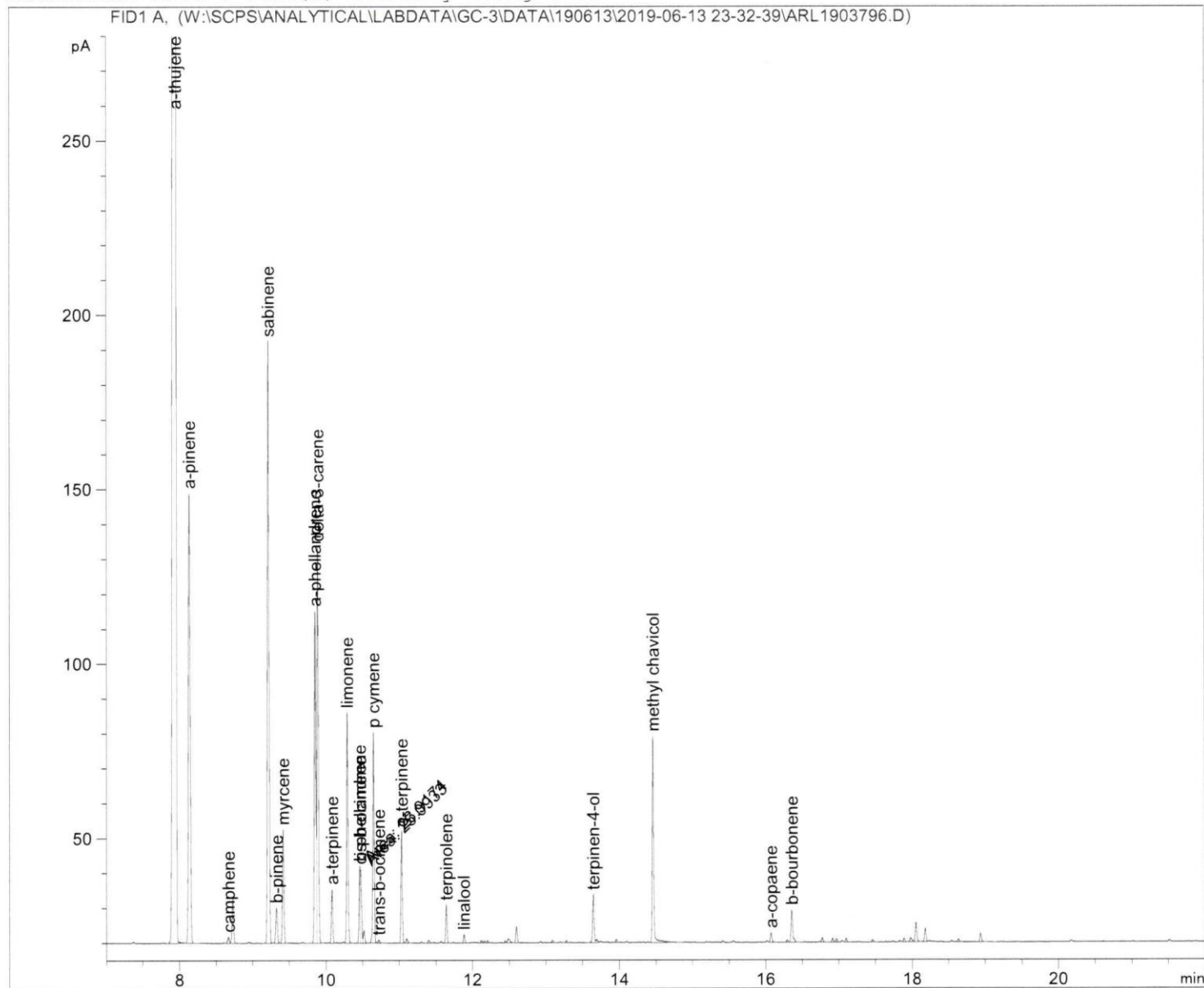
```

=====
Acq. Operator   : Regan Barker                      Seq. Line : 15
Acq. Instrument : GC-3                            Location  : Vial 16
Injection Date  : 14/06/2019 9:25:31 AM           Inj       : 1
                                                    Inj Volume: 1.000 µl

Acq. Method     : C:\DATA\GC-3\DATA\190613\2019-06-13 23-32-39\FRANKINCENSE.M
Last changed    : 14/05/2019 10:35:02 PM by bl
Analysis Method  : W:\SCPS\ANALYTICAL\LABDATA\GC-3\METHODS\INGREDIENT WAREHOUSE
                  FRANKINCENSE.M
Last changed    : 26/06/2019 10:16:09 AM
                  (modified after loading)
Method Info     : Method to analyse essential oils
=====

```

Additional Info : Peak(s) manually integrated



Area Percent Report

```

=====
Sorted By       : Signal
Calib. Data Modified : 26/06/2019 10:16:39 AM
Multiplier:     : 1.0000
Dilution:       : 1.0000
Use Multiplier & Dilution Factor with ISTDs
=====

```

64/3
26/6/19

Sample Name: FRANKINSENSE BO-19-0011 ref 1200053

Signal 1: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	7.952	BB	0.0319	3079.48560	69.8011	a-thujene
2	8.141	BB	0.0272	217.92886	4.9397	a-pinene
3	8.672	VV	0.0276	3.07609	0.0697	camphene
4	9.222	BV	0.0240	258.68433	5.8635	sabinene
5	9.330	VV	0.0250	16.09560	0.3648	b-pinene
6	9.420	VV	0.0215	44.58000	1.0105	myrcene
7	9.857	BV	0.0222	136.42218	3.0922	a-phellandrene
8	9.895	VV	0.0219	159.55470	3.6165	delta-3-carene
9	10.086	VV	0.0213	20.96838	0.4753	a-terpinene
10	10.296	VB	0.0212	89.00726	2.0175	limonene
11	10.468	MF	0.0181	23.91742	0.5421	b-phellandrene
12	10.473	FM	0.0198	25.09327	0.5688	cis-b-ocimene
13	10.655	BV	0.0211	80.40296	1.8225	p cymene
14	10.725	VB	0.0270	1.45833	0.0331	trans-b-ocimene
15	11.037	BV	0.0196	39.96872	0.9059	g-terpinene
16	11.645	VV	0.0206	14.19007	0.3216	terpinolene
17	11.886	BB	0.0214	3.31104	0.0750	linalool
18	13.651	BV	0.0216	19.04211	0.4316	terpinen-4-ol
19	14.462	VV	0.0210	81.05567	1.8372	methyl chavicol
20	16.076	VB	0.0236	4.08309	0.0925	a-copaene
21	16.358	VB	0.0251	15.20703	0.3447	b-bourbonene

Totals : 4333.53272 98.2259

*** End of Report ***

ykp
26/6/19