

CERTIFICATE OF ANALYSIS

SAMPLE NAME		Eucalyptus Blue Mallee	
FORM		Oil	
CUSTOMER NAME		Buckley & Phillips Aromatics	
CERTIFICATION DATE		04 July 2019	
CUSTOMER REFERENCE		Batch: 18533 Ref: 1200054	
ARL JOB #	A191478	LAB REF. #	ARL1904032
ANALYSIS	GCFID - Area%	METHOD	ARL-TM101

TEST	BP 2018 SPECIFICATION	RESULTS	TEST METHOD
	Area %		
α -pinene	0.05 – 10.0	1.09	ARL-TM101-4*
sabinene	NMT 0.3	0.05	
β -pinene	0.05 – 1.5	1.11	
α -phellandrene	0.05 – 1.5	0.05	
limonene	0.05 – 15.0	0.78	
1,8-cineole	NLT 70.0	83.57	
camphor	NMT 0.1	nd	

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

nd-denotes not detected



.....
Samantha Morrow
ANALYTICAL OFFICER



.....
Ashley Dowell
MANAGER - ARL

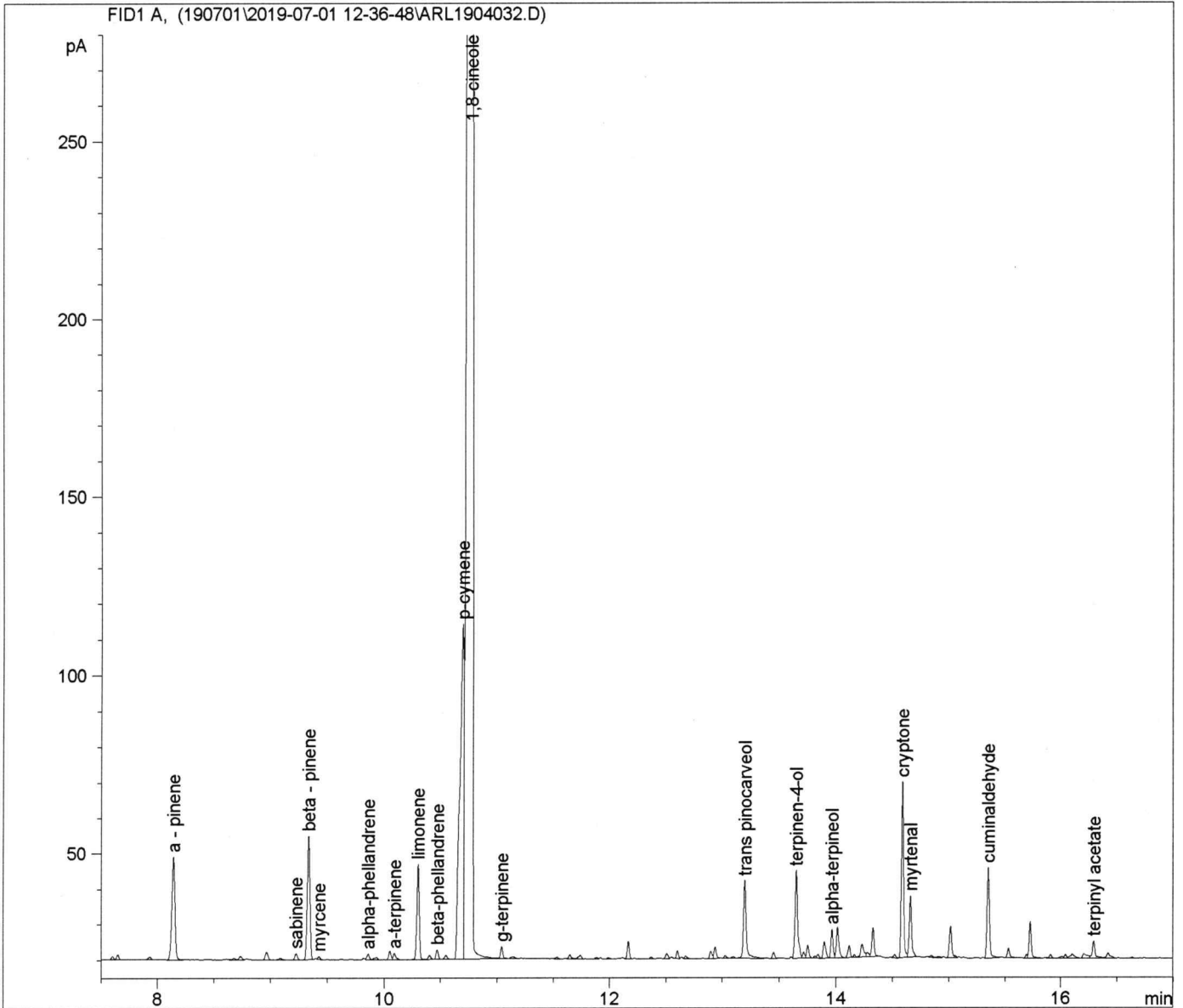
Sample Name: EUCALYPTUS BLUE MALLEE B18533 R1200054

```

=====
Acq. Operator   : Jeanette Balindong           Seq. Line :    20
Acq. Instrument : GC-3                       Location  : Vial 23
Injection Date  : 7/2/2019 12:53:21 AM       Inj       :     1
                                           Inj Volume: 1 µl

Acq. Method     : C:\DATA\GC-3\DATA\190701\2019-07-01 12-36-48\EUC POLYB.M
Last changed    : 3/29/2019 11:22:13 AM by Jeanette Balindong
Analysis Method : C:\DATA\GC-3\METHODS\EUC POLYB.M
Last changed    : 7/3/2019 10:39:54 AM by Regan Barker
                  (modified after loading)

Method Info     : Method to analyse essential oils
  
```



Handwritten signature and date:
 ✓
 07/07/19

Sample Name: EUCALYPTUS BLUE MALLEE B18533 R1200054

=====
 Area Percent Report
 =====

Sorted By : Signal
 Calib. Data Modified : 7/3/2019 10:39:25 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	8.145	BV	0.0293	55.30753	1.08833	a - pinene
2	9.226	VB	0.0247	2.75871	0.05429	sabinene
3	9.336	BB	0.0250	56.53195	1.11242	beta - pinene
4	9.428	VB	0.0237	1.27879	0.02516	myrcene
5	9.862	VV	0.0241	2.48356	0.04887	alpha-phellandrene
6	10.093	VB	0.0252	3.07352	0.06048	a-terpinene
7	10.303	BV	0.0227	39.49261	0.77712	limonene
8	10.473	VB	0.0241	3.99502	0.07861	beta-phellandrene
9	10.698	BV	0.0339	224.41673	4.41601	p-cymene
10	10.775	VV	0.0321	4247.14063	83.57405	1,8-cineole
11	11.045	VB	0.0218	4.66772	0.09185	g-terpinene
12	13.200	BV	0.0257	37.98075	0.74737	trans pinocarveol
13	13.656	VV	0.0244	40.11449	0.78936	terpinen-4-ol
14	13.970	BV	0.0205	10.65038	0.20958	alpha-terpineol
15	14.590	BV	0.0208	67.12350	1.32084	cryptone
16	14.662	VB	0.0232	25.37393	0.49930	myrtenal
17	15.353	BV	0.0238	38.71441	0.76181	cuminaldehyde
18	16.297	VV	0.0261	8.62543	0.16973	terpinyl acetate

Totals : 4869.72967 95.8252

=====
 *** End of Report ***

Handwritten signature and date: 07/07/19