

Customer :

LTD PIROSE

**Vazha Pshavali
Avenue 71 Block 2 Office 7
0186 - GEORGIA**

Sample Nature : ESSENTIAL OIL

Botanical name : ROSA sp.

Sample name : PREMIUM ROSE

Batch number : ALAZANI

Origin : GEORGIA

Plant part : FLOWER

Our reference : AV59

Receipt : 01/31/2020

Analysis date : 02/05/2020

Packaging : Transparent flask of 4 ml

Requested analysis : GC simple

Sample storage : 1 year - room temperature

Report validated by :

Daniel Dantin - *Laboratory director*



Report written by :

Brice Orosco - *Analyst technician*

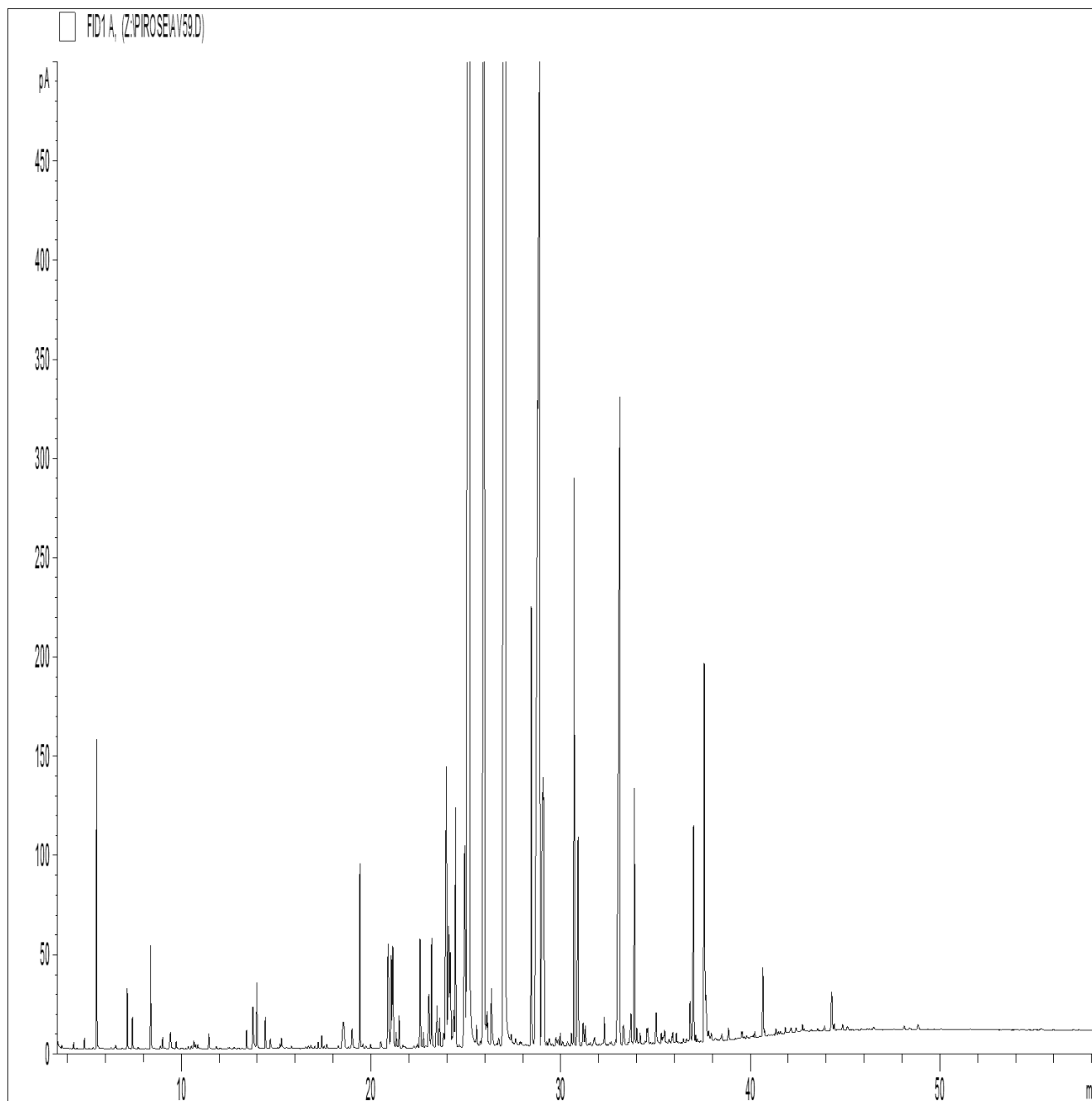


GAS CHROMATOGRAPHY (according to the norm NF ISO 11024)

Analysis conditions :

- . GC/MS Agilent 7890 / 5975 – Column : VF WAX (polaire) 60 m * 0.25 mm * 0.25 µm
- . GC/FID Agilent 6890 – Column : VF WAX (polaire) 60 m * 0.25 mm * 0.25 µm
- . Temperature program : 5 min to 65°C - 5°C/min until 250°C - 18 min to 250°C
- . Carrier gas : He (23 psis/MS – 30 psis/FID)
- . Sample injection / split : 1 µl of 10 % solution in hexane
- . Mass range : 30 to 350 - Oil compounds are identified by a combination of retention times and mass spectra library (our own database and NIST commercial database).
- . Percentages are calculated from GC/FID peaks areas without using corrections factors.

Chromatographic profile :



Identification results : ALAZANY PREMIUM ROSE ESSENTIAL OIL					
Pics	RT (min)	Compound name	%	Bulgaria %	Turkey (%)
1	-	ETHANOL	Nd	< 3	< 4
2	5.54	alpha-PINENE	0.66		
3	19.41	LINALOOL	0.47		
4	20.90	alpha-GUAIENE	0.49		
5	21.07	TERPINENE-4-OL	0.29		
6	21.15	beta-CARYOPHYLLENE	0.44		
7	23.97	HEPTADECANE	1.25	1.0 - 2.5	0.8 - 3
8	24.08	GERMACRENE D	0.56		
9	24.17	1-HEPTADECENE	0.08	0.1 - 0.35	0.08 - 0.35
10	24.45	GERANIAL	0.72		
11	24.94	GERANYL ACETATE	1.05		
12	25.20	CITRONELLOL	24.55	20.0 - 34.0	30 - 49
13	25.97	NEROL	10.85	5.0 - 12.0	3 - 12
14	27.09	GERANIOL	23.88	14.0 - 22.0	6 - 29
15	28.45	PHENYLETHYLIC ALCOHOL	1.27	< 3.5	< 3
16	28.89	NONADECANE	10.31	8.0 - 15.0	6 - 16
17	29.08	9-NONADECENE	2.31	2.3 - 3.7	1 - 4.5
18	30.71	METHYLEUGENOL	1.56	0.8 - 3.0	1 - 6
19	30.91	EICOSANE	0.88		
20	33.12	HENEICOSANE	4.13	3.0 - 5.5	2 - 5.5
21	33.89	EUGENOL	0.73		
22	37.00	TRICOSANE	0.83		
23	37.57	FARNESOL	1.28		
		TOTAL	88.56		