

Sample Information

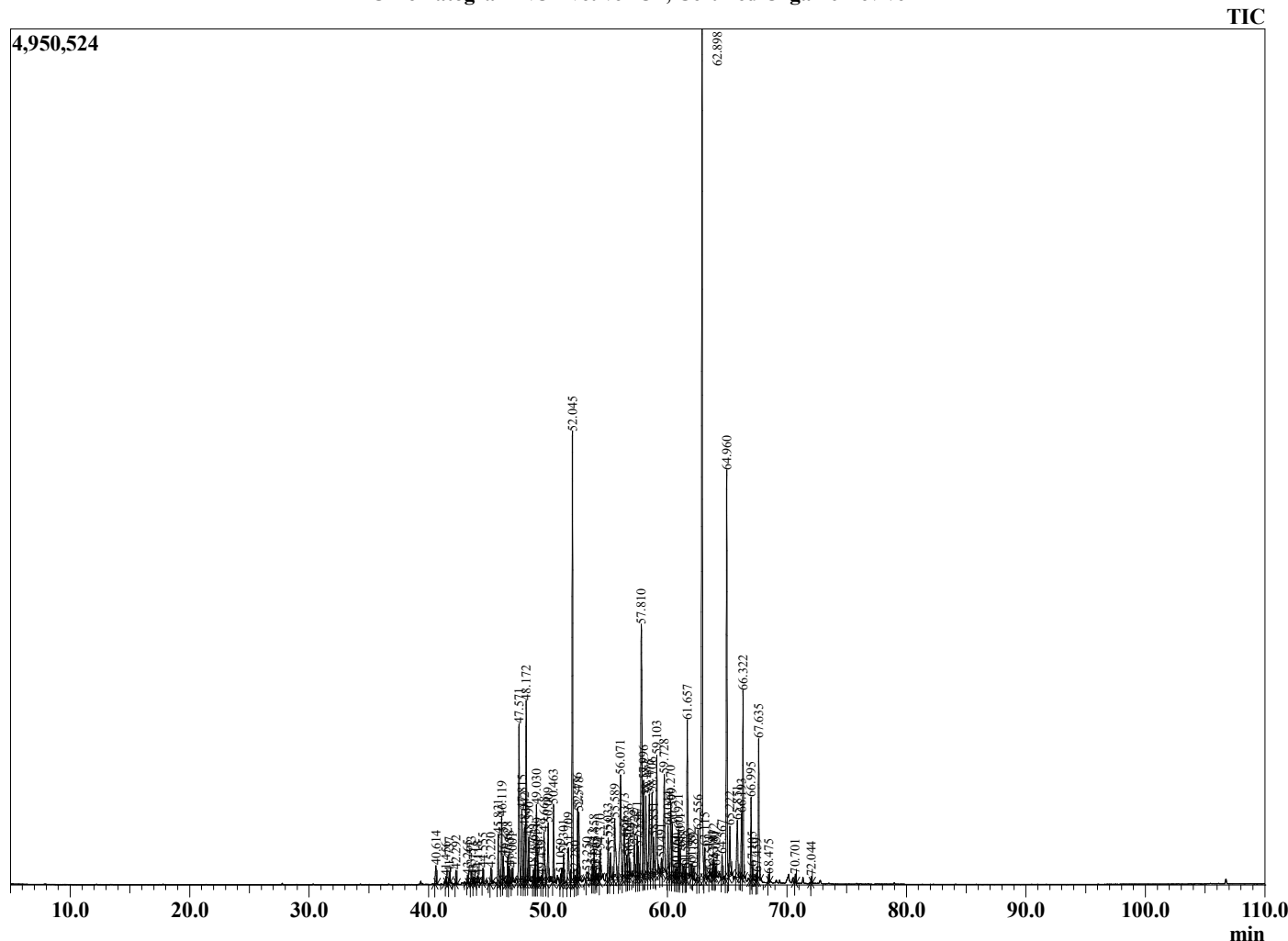
Analyzed by : Dr. Robert S. Pappas
 Analyzed : 12/7/2022 11:01:50 PM
 Sample Type : Essential Oil
 Sample Name : NOP Vetiver Oil, Certified Organic Revive
 Sample ID : 7C
 Injection Volume : 0.10
 Instrument ID: : GC-4



Peak Report TIC

R.Time	Name	Area%
40.614	alpha-ylangene	0.33
41.456	2-epi-alpha-Funebrene	0.08
41.737	unidentified	0.14
42.292	Nigritene	0.19
43.265	Acora-3,7(14)-diene	0.09
43.573	beta-Funebrene	0.19
43.773	beta-Maaliene	0.09
44.118	beta-Cedrene	0.16
44.555	beta-Copaene	0.19
45.220	Guaia-6,9-diene	0.24
45.831	Prezizaene	0.71
46.119	Khusimene	0.98
46.251	unidentified	0.33
46.628	unidentified	0.38
46.758	unidentified	0.31
47.001	unidentified	0.20
47.571	alpha-Amorphene	2.40
47.815	alpha-Vetispiene	1.14
48.042	delta-Selinene	1.28
48.172	beta-Vetispiene	2.66
48.390	Isoledene	0.63
48.776	gamma-Muurolene	0.18
48.931	unidentified	0.36
49.030	delta-Amorphene	1.22
49.139	unidentified	0.42
49.439	beta-Himachalene	0.09
49.668	Nootkatene	0.98
50.009	unidentified	1.02
50.463	gamma-Vetivenene	1.13
51.059	Selina-4(15),7(11)-diene	0.13
51.301	alpha-Calacorene	0.43
51.709	Elemol	0.94
52.045	beta-Vetivenene	6.74
52.280	Laurene	0.13
52.476	unidentified	1.19
52.578	unidentified	1.16
53.250	unidentified	0.25
53.712	unidentified	0.20
53.858	unidentified	0.43
53.965	unidentified	0.11
54.132	unidentified	0.11
54.370	unidentified	0.44
55.033	Khusimone	0.63
55.228	Khusimone isomer	0.46
55.589	unidentified	1.58
56.071	unidentified	2.73
56.373	unidentified	1.09
56.584	gamma-Eudesmol	0.35
56.726	Epicubenol	0.67
56.824	unidentified	0.24
57.222	1,7-diepi-alpha-Cedrenal	0.53
57.471	unidentified	0.81
57.555	epi-alpha-Muurolol	0.44
57.810	alpha-cadinol	5.87
57.996	Epimer B Cyclocopacamphan-12-ol	1.81
58.187	Epimer A Cyclocopacamphan-12-ol	1.45
58.475	trans-Isovalencenol	1.50
58.706	Zizanal	1.74
58.831	beta-bisabolol	0.72
59.103	unidentified	2.21
59.491	Caryophyllene oxide	0.22
59.728	unidentified	1.90

Chromatogram NOP Vetiver Oil, Certified Organic Revive



Comments:

The analysis of this Vetiver batch sample meets the expected chemical profile for authentic essential oil of *Vetiveria zizanioides*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.

R.Time	Name	Area%
60.044	epi-Zizanal	0.87
60.270	Juniper camphor	1.28
60.399	unidentified	0.89
60.661	unidentified	0.12
60.760	unidentified	0.21
60.921	unidentified	0.74
61.071	unidentified	0.53
61.353	unidentified	0.22
61.522	beta-epi-Santalene	0.13
61.657	Vetiselinenol	3.06
61.992	Zizanol	0.20
62.189	Oplopanone	0.16
62.556	Zizanol	0.90
62.898	Khusimol	15.31
63.115	unidentified	0.55
63.511	unidentified	0.07
63.780	unidentified	0.14
63.872	unidentified	0.33
64.051	unidentified	0.14
64.567	cis-Isovalencenol	0.38
64.960	trans-Isovalencenol	6.45
65.222	unidentified	0.93
65.851	unidentified	1.30
66.193	unidentified	0.94
66.322	beta-Vetivone	2.76
66.995	unidentified	1.26
67.105	unidentified	0.17
67.459	unidentified	0.10
67.635	alpha-Vetivone	2.28
68.475	unidentified	0.10
70.701	unidentified	0.10
72.044	unidentified	0.08
		100.00