



Sample:

Client: | Nature's Gift
Sample: | Vetiver (Vetiveria zizanioides)
Batch # | Batch HA58610
CAS Number | 84238-29-9
Type: | Essential Oil

Conclusion:

- No adulterants, diluents, or contaminants were detected via this method.
- Unknown and unidentifiable compounds typical of Vetiver essential oil



X 

Validated By:

Essential Validation Services

747 SW 2nd Ave, Gainesville, FL 32601

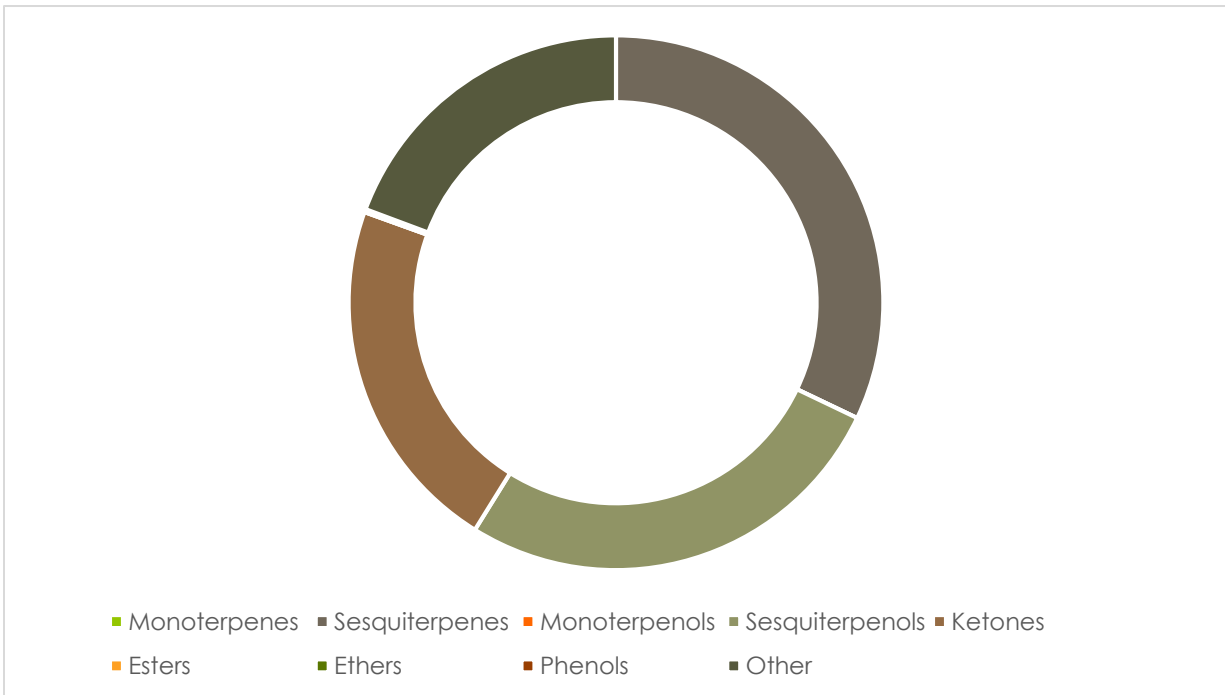
Phone: 317-361-5044 E-mail: Adam@essentialvalidationservices.com

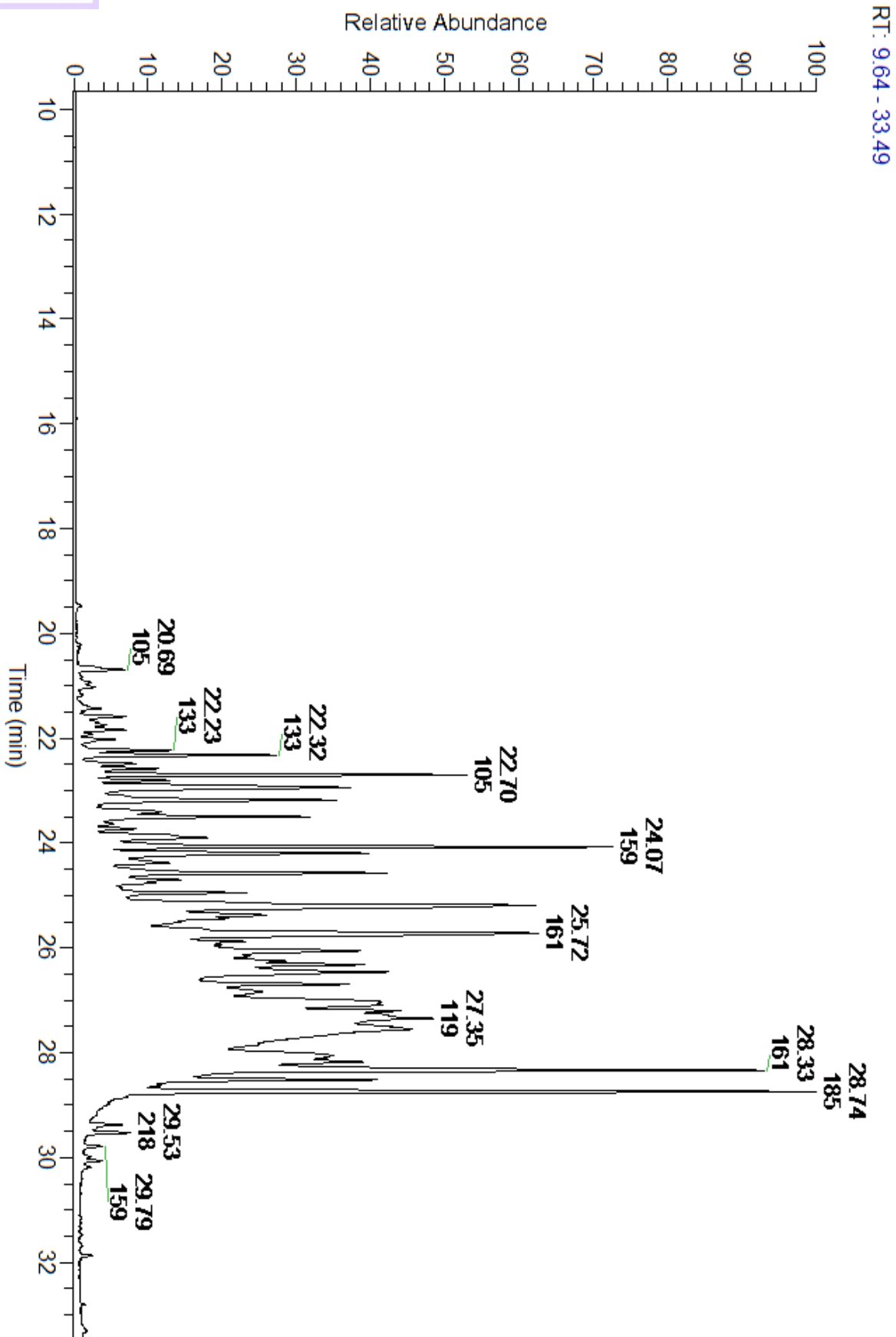
Summary of Analyses

A fresh sample of Vetiver (Vetiveria zizanioides) Essential Oil (10 uL in .5 to .5 mL Hexane + ETOH) was prepared and analyzed via split injection GC/EI-MS.

Main Compounds	Percentages
beta-Vetivone	7.16%
Khusimol	6.71%
beta-Eudesmol	6.64%
alpha-Cadinol	6.03%
alpha-Vetivone	5.96%
beta-Vetivenene	4.43%
Nootkatene	3.64%
UK Vetiver	3.05%
gamma-Murolene	2.93%
beta-Vetivenene isomer I	2.85%
beta-Vetivenene isomer I	2.63%
epi-Zizanone	2.59%
delta-Amorphene	2.57%

Monoterpenes	Sesquiterpenes	Monoterpenols	Sesquiterpenols	Ketones
0.00%	24.72%	0.00%	20.60%	16.68%
Esters	Ethers	Aldehydes	Phenols	Other
0.00%	0.14%	0.00%	0.00%	14.87%





Total Percentage		62.66%				
Peak Number	RT	Area %	Compound Name	RI	Chemical Family	
1	20.22	0.03%	alpha-Cubebene	1355.71	Sesquiterpene	
2	20.69	0.52%	12-Norisoziza-5-ene	1365.50	Norsesquiterpene	
3	21.03	0.19%	beta-Elemene	1388.30	Sesquiterpene	
4	21.32	0.02%	diepi-alpha-Cedrene	1400.10	Sesquiterpene	
5	21.43	0.24%	6-epi-Nigritene			
6	21.59	0.44%	Prezizaene			
7	22.32	1.57%	alpha-Acoradiene	1463.00	Sesquiterpene	
8	22.48	0.49%	beta-Acoradiene	1475.00	Sesquiterpene	
9	22.58	0.66%	Vetivenene isomer			
10	22.70	2.93%	gamma-Murolene	1478.86	Sesquiterpene	
11	22.81	0.70%	alpha-Vetispirene	1490.10	Sesquiterpene	
12	22.94	3.64%	Nootkatene	1504.50	Sesquiterpene	
13	23.18	2.57%	delta-Amorphene	1509.00	Sesquiterpene	
14	23.29	0.02%	gamma-Cadinene	1515.29	Sesquiterpene	
15	23.40	0.86%	delta-Cadinene	1524.14	Sesquiterpene	
16	23.50	1.79%	Zonarene	1527.00	Sesquiterpene	
17	23.63	0.14%	Kessane	1528.00	Sesquiterpene Ether	
18	23.73	0.28%	UK Sesquiterpene			
19	23.90	1.71%	UK Vetiver			
20	24.07	4.43%	beta-Vetivenene	1570.05	Sesquiterpene	
21	24.20	2.85%	beta-Vetivenene isomer I	1573.30	Sesquiterpene	
22	24.38	0.72%	UK Vetiver			
23	24.58	2.63%	beta-Vetivenene isomer II	1585.30	Sesquiterpene	
24	24.70	0.53%	UK Vetiver			
25	24.76	0.28%	UK Vetiver			
26	24.95	0.97%	Khusimone	1604.00	Normonoterpene Ketone	
27	25.19	6.64%	beta-Eudesmol	1647.86	Sesquiterpenol	
28	25.19	Co-Eluting	1-epi-Cubenol	1628.00	Sesquiterpenol	
29	25.37	1.64%	UK Vetiver			
30	25.72	6.03%	alpha-Cadinol	1655.00	Sesquiterpenol	
31	26.05	2.59%	epi-Zizanone	1667.53	Sesquiterpene Ketone	
32	26.25	1.11%	UK Vetiver			
33	26.32	1.85%	UK Vetiver			
34	26.46	3.05%	UK Vetiver			
35	26.46	Co-Eluting	Junipercamphor	1693.10	Sesquiterpene Ketone	
36	26.69	1.22%	Vetiselinenol	1716.00	Sesquiterpenol	
37	27.55	6.71%	Khusimol	1735.00	Sesquiterpenol	
38	28.33	7.16%	beta-Vetivone	1814.00	Sesquiterpene Ketone	
39	28.52	1.84%	UK Vetiver			
40	28.74	5.96%	alpha-Vetivone	1822.00	Sesquiterpene Ketone	