

40 mL of Electronic Cigarette Vapor Collected on a Thermal Desorption Tube and Analyzed on Rtx®-VMS

Peaks	ts (min)	Match Quality	Vapor	Blank*	Region	Peaks	ts (min)	Match Quality	Vapor	Blank*	Region
1. Nitrogen/oxygen	0.685	100	x	x	Red	41. Propylene glycol	7.737	100	x		Green
2. Carbon dioxide	1.063	100	x	x	Red	42. <i>m</i> -Xylene	8.048	100	x		Green
3. Propene	1.200	100	x		Red	43. <i>p</i> -Xylene	8.048	100	x		Green
4. Formaldehyde	1.227	100	x		Red	44. <i>o</i> -Xylene	8.530	100	x		Green
5. Sulfur dioxide	1.313	90	x		Red	45. Styrene	8.597	100	x		Green
6. Chloromethane	1.380	100	x		Red	46. Unidentified	9.158		x		Green
7. Water	1.453	100	x	x	Red	47. Octamethylcyclotetrasiloxane	9.218	91	x		Green
8. Acetaldehyde	1.672	100	x		Red	48. 4-Methyl-1-(1-methylethyl)cyclohexene	9.371	95	x		Green
9. Methanol	1.715	100	x	x	Red	49. Unidentified	9.639		x		Green
10. Unidentified	1.885		x		Red	50. Unidentified	9.852		x		Green
11. Ethanol	2.270	100	x		Red	51. Unidentified	9.932		x		Green
12. Unidentified	2.331		x		Red	52. Unidentified	10.121		x		Green
13. Unidentified	2.410		x		Red	53. Unidentified	10.219		x		Green
14. Acrolein	2.581	100	x		Red	54. Trimethylpyrazine	10.468	80	x		Green
15. Propanal	2.629	100	x		Red	55. Benzaldehyde	10.657	100	x		Green
16. Methylene chloride	2.770	100	x	x	Red	56. Unidentified	10.858		x		Green
17. Acetone	2.843	100	x		Red	57. Unidentified	11.120		x		Green
18. Unidentified	2.892		x		Red	58. Unidentified	11.187		x		Green
19. Hexane	2.928	100	x		Red	59. Acetylpyrazine	11.541	93	x		Green
20. Acetonitrile	3.160	100	x	x	Red	60. Decamethylcyclopentasiloxane	11.620	91	x		Green
21. Unidentified	3.544		x		Orange	61. Phenol	11.870	94	x		Green
22. Unidentified	3.842		x		Orange	62. Unidentified	12.272		x		Green
23. Trimethylsilanol	3.928	100	x		Orange	63. 1,1'-Oxybis-2-propanol	12.333	90	x		Green
24. Unidentified	4.092		x		Orange	64. Glycerin	12.748	100	x		Blue
25. Unidentified	4.159		x		Orange	65. Unidentified	13.327		x		Blue
26. Unidentified	4.245		x		Orange	66. Dodecamethylcyclohexasiloxane	13.979	94	x		Blue
27. Unidentified	4.354		x		Orange	67. Nicotine	15.862	100	x		Blue
28. Benzene	4.452	100	x	x	Orange	68. Tetradecamethylhexasiloxane	16.082	91	x		Blue
29. Unidentified	4.519		x		Orange	69. Unidentified	16.326		x		Blue
30. Acetic acid	5.055	86	x		Orange	70. Unidentified	16.460		x		Blue
31. Unidentified	5.141		x		Orange	71. Myosmine	17.216	94	x		Blue
32. Unidentified	5.647		x		Orange	72. Nicotyrine	17.807	90	x		Blue
33. Unidentified	5.756		x		Orange	73. Unidentified	18.002		x		Blue
34. 1-Hydroxy-2-propanone	6.073	80	x		Orange	74. 2,3'-Dipyridyl	18.618	94	x		Blue
35. Unidentified	6.165		x		Orange	75. Unidentified	18.721		x		Blue
36. Unidentified	6.220		x		Orange	76. Unidentified	19.294		x		Blue
37. Toluene	6.280	100	x	x	Orange	77. Unidentified	19.611		x		Blue
38. Hexamethylcyclotrisiloxane	6.506	91	x		Orange	78. Unidentified	20.093		x		Blue
39. Unidentified	7.231		x		Orange	79. Unidentified	20.190		x		Blue
40. Unidentified	7.530		x		Orange	80. Unidentified	20.269		x		Blue
						81. Unidentified	20.501		x		Blue
						82. Unidentified	20.855		x		Blue

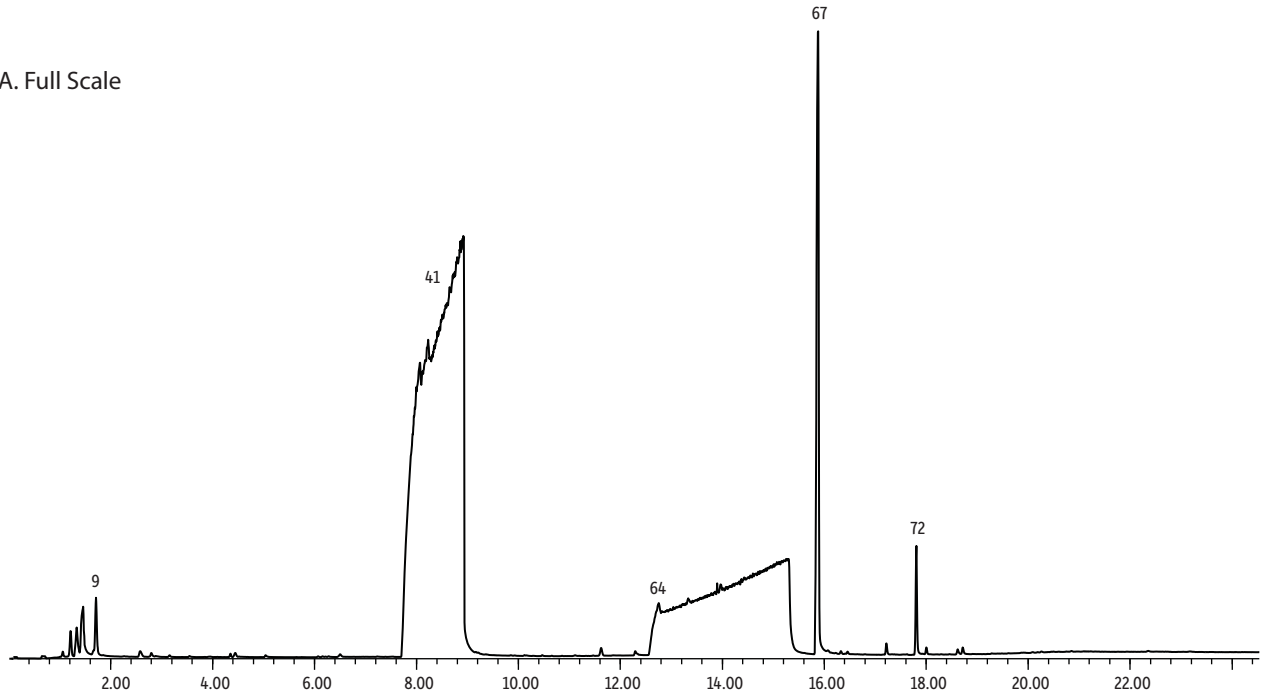
*The concentrations of these compounds in e-cigarette vapor were too close to blank and/or laboratory air concentrations to definitively state they were emitted from the e-cigarettes.

Column Rtx®-VMS, 30 m, 0.25 mm ID, 1.40 µm (cat.# 19915)
Sample
Conc.: One 40 mL puff of electronic cigarette vapor drawn via a gas-tight syringe to replicate vaping
Injection Direct
Oven
Oven Temp.: 35 °C (hold 1 min) to 250 °C at 11 °C/min (hold 4 min)
Carrier Gas He, constant flow
Flow Rate: 2.0 mL/min @ 35 °C
Detector MS
Mode: Scan
Scan Program:

Group	Start Time (min)	Scan Range (amu)	Scan Rate (scans/sec)
1	0	15-550	5.2

Transfer Line Temp.: 250 °C
Analyzer Type: Quadrupole
Source Type: Extractor
Extractor Lens: 6mm ID
Source Temp.: 230 °C
Quad Temp.: 150 °C
Electron Energy: 70 eV
Tune Type: BFB
Ionization Mode: EI
Preconcentrator Markes UNITY™
Instrument Agilent 7890B GC & 5977A MSD
Acknowledgement Markes

A. Full Scale



B. Baseline Magnification

