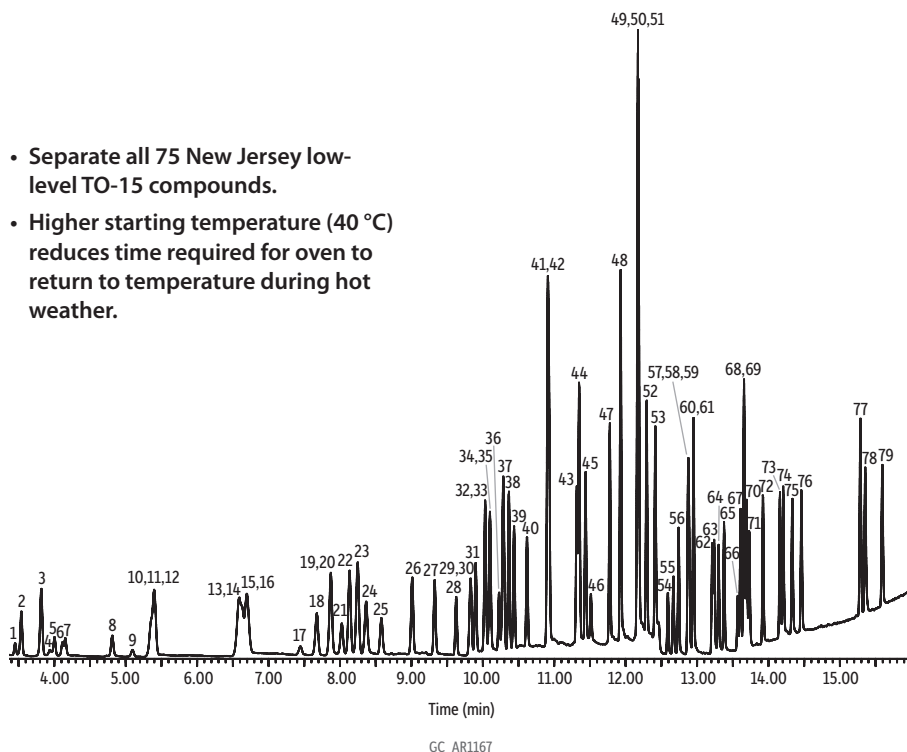


NJ Low Level TO-15 75 Component Mix on Rtx-VMS (60 m, 40 °C start)

- Separate all 75 New Jersey low-level TO-15 compounds.
- Higher starting temperature (40 °C) reduces time required for oven to return to temperature during hot weather.



Peaks	tr (min)
1. Propylene	3.45
2. Dichlorodifluoromethane (Freon 12)	3.54
3. 1,2-Dichlorotetrafluoroethane (Freon 114)	3.82
4. Chloromethane	3.94
5. <i>n</i> -Butane	4.00
6. Vinyl chloride	4.11
7. 1,3-Butadiene	4.15
8. Bromomethane	4.81
9. Chloroethane	5.09
10. Vinyl bromide	5.35
11. <i>n</i> -Pentane	5.39
12. Trichlorofluoromethane (Freon 11)	5.40
13. 1,1-Dichloroethene	6.58
14. Ethanol	6.61
15. Carbon disulfide	6.63
16. 1,1,2-Trichlorotrifluoroethane (Freon 113)	6.69
17. Acrolein	7.45
18. Allyl chloride	7.68
19. Isopropyl alcohol	7.87
20. Methylene chloride	7.87
21. Acetone	8.03
22. <i>trans</i> -1,2-Dichloroethene	8.13
23. Hexane	8.25
24. Methyl <i>tert</i> -butyl ether (MTBE)	8.37
25. Tertiary butanol	8.58
26. 1,1-Dichloroethane	9.01
27. Vinyl acetate	9.32
28. <i>cis</i> -1,2-Dichloroethene	9.63
29. Cyclohexane	9.82
30. Bromochloromethane (IS)	9.84
31. Chloroform	9.90
32. Carbon tetrachloride	10.03
33. Ethyl acetate	10.04
34. 1,1,1-Trichloroethane	10.10
35. Tetrahydrofuran	10.10
36. 2-Butanone (MEK)	10.23
37. Isooctane	10.29
38. Heptane	10.37
39. Benzene	10.44
40. 1,2-Dichloroethane	10.62
41. Trichloroethylene	10.91
42. 1,4-Difluorobenzene (IS)	10.93
43. 1,2-Dichloropropane	11.32
44. Bromodichloromethane	11.35
45. Methyl methacrylate	11.44
46. 1,4-Dioxane	11.51
47. <i>cis</i> -1,3-Dichloropropene	11.78
48. Toluene	11.93
49. 4-Methyl-2-pentanone (MIBK)	12.17
50. Tetrachloroethene	12.18
51. <i>trans</i> -1,3-Dichloropropene	12.18
52. 1,1,2-Trichloroethane	12.30
53. Dibromochloromethane	12.42
54. 1,2-Dibromoethane	12.59
55. 2-Hexanone (MBK)	12.67
56. <i>n</i> -Nonane	12.74
57. Ethylbenzene	12.87
58. Chlorobenzene- <i>d</i> 5 (IS)	12.88
59. Chlorobenzene	12.89
60. <i>m</i> -Xylene	12.95
61. <i>p</i> -Xylene	12.95
62. <i>o</i> -Xylene	13.21
63. Styrene	13.24
64. Bromoform	13.30
65. Cumene	13.38
66. 4-Bromofluorobenzene*	13.57
67. <i>n</i> -Propyl benzene	13.61
68. 1,1,2,2-Tetrachloroethane	13.65
69. 4-Ethyltoluene	13.66
70. 1,3,5-Trimethylbenzene	13.69
71. 2-Chlorotoluene	13.73
72. 1,2,4-Trimethylbenzene	13.93
73. 1,3-Dichlorobenzene	14.16
74. 1,4-Dichlorobenzene	14.21
75. Benzyl chloride	14.34
76. 1,2-Dichlorobenzene	14.46
77. Hexachlorobutadiene	15.29
78. 1,2,4-Trichlorobenzene	15.35
79. Naphthalene	15.60
*Tuning standard	

Column Rtx-VMS, 60 m, 0.25 mm ID, 1.40 µm (cat.# 19916) with MXT low-dead-volume connector kit (cat.# 20536)
Sample TO-14A internal standard/tuning mix (cat.# 34408)
 75 comp TO15 + NJ mix (cat.# 34396)

Diluent: Air @ 50% RH
Conc.: 5 ppbv 250 mL injection
Injection on-column

Oven
Oven Temp.: 40 °C (hold 7 min) to 250 °C at 30 °C/min (hold 2 min)

Carrier Gas He, constant flow
Flow Rate: 2.0 mL/min

Detector MS
Mode: Scan

Scan Program:	Group	Start Time (min)	Scan Range (amu)	Scan Rate (scans/sec)
	1	0.00	35.0 - 226.00	3.8

Transfer Line
Temp.: 250 °C
Analyzer Type: Quadrupole
Source Type: Extractor
Extractor Lens: 6 mm ID
Source Temp.: 230 °C
Quad Temp.: 150 °C
Electron Energy: 70.0 eV
Tune Type: BFB
Ionization Mode: EI
Preconcentrator Markes CIA Advantage
Instrument Agilent 7890B GC & 5977A MSD