

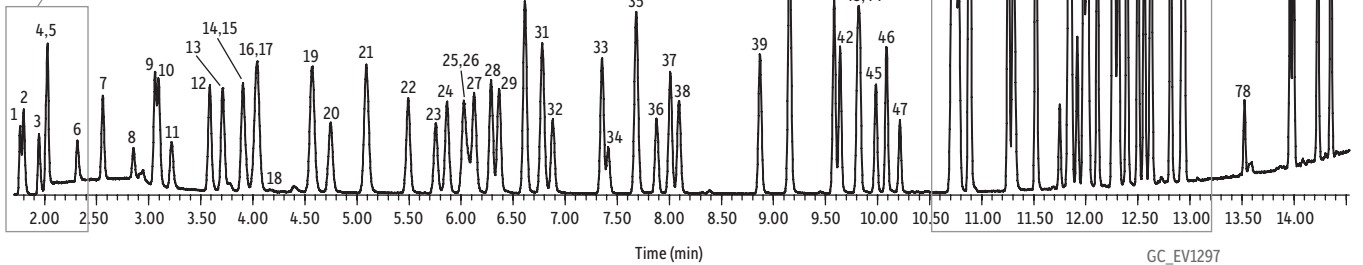
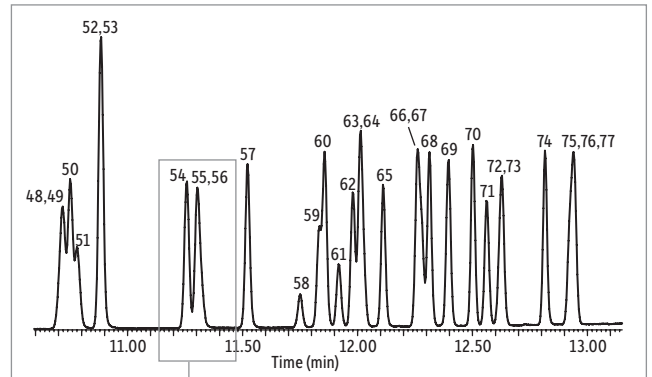
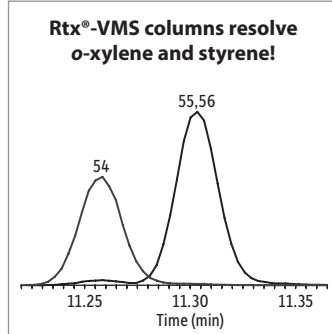
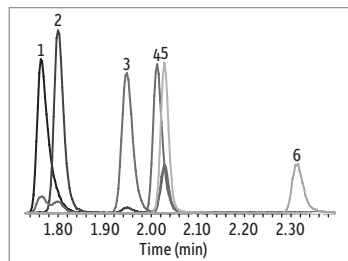
5 ppb Volatiles in Drinking Water on Rtx®-VMS by EPA Method 524.3

- Peaks**
- Dichlorodifluoromethane
 - Chlorodifluoromethane
 - Chloromethane
 - Vinyl chloride
 - 1,3-Butadiene
 - Bromomethane
 - Trichlorofluoromethane
 - Diethyl ether
 - 1,1-Dichloroethene
 - Carbon disulfide
 - Methyl iodide
 - Allyl chloride
 - Methylene chloride
 - trans-1,2-Dichloroethene
 - Methyl acetate
 - MTBE-D3 (SS)
 - MTBE
 - tert-Butyl alcohol (TBA)
 - Diisopropyl ether (DIPE)
 - 1,1-Dichloroethane
 - tert-Butyl ethyl ether (ETBE)
 - cis-1,2-Dichloroethene
 - Bromochloromethane
 - Chloroform
 - Carbon tetrachloride
 - Tetrahydrofuran
 - 1,1,1-Trichloroethane

- 1,1-Dichloropropene
- 1-Chlorobutane
- Benzene
- tert-Amyl methyl ether (TAME)
- 1,2-Dichloroethane
- Trichloroethene
- 1,4-Difluorobenzene
- tert-Amyl ethyl ether (TAE)
- Dibromomethane
- 1,2-Dichloropropane
- Bromodichloromethane
- cis-1,3-Dichloropropene
- Toluene
- Tetrachloroethene
- trans-1,3-Dichloropropene
- 1,1,2-Trichloroethane
- Ethyl methacrylate
- Dibromochloromethane
- 1,3-Dichloropropane
- 1,2-Dibromoethane
- Chlorobenzene-D5
- Chlorobenzene
- Ethylbenzene
- 1,1,1,2-Tetrachloroethane
- m-Xylene

- p-Xylene
- o-Xylene
- Styrene
- Bromoform
- Isopropylbenzene
- 4-Bromofluorobenzene (SS)
- Bromobenzene
- n-Propylbenzene
- 1,1,2,2-Tetrachloroethane
- 2-Chlorotoluene
- 1,3,5-Trimethylbenzene
- 1,2,3-Trichloropropane
- 4-Chlorotoluene
- tert-Butylbenzene
- Pentachloroethane

- 1,2,4-Trimethylbenzene
- sec-Butylbenzene
- 4-Isopropyltoluene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene-D4
- 1,4-Dichlorobenzene
- n-Butylbenzene
- Hexachloroethane
- 1,2-Dichlorobenzene-D4 (SS)
- 1,2-Dichlorobenzene
- 1,2-Dibromo-3-chloropropane
- Hexachlorobutadiene
- 1,2,4-Trichlorobenzene
- Naphthalene
- 1,2,3-Trichlorobenzene



Column Rtx®-VMS, 30 m, 0.25 mm ID, 1.40 µm (cat.# 19915)
Sample 524.3 internal standard/surrogate mix (cat.# 30017)
 524.3 gas calibration mix (cat.# 30014)
 524.3 VOA MegaMix® standard (cat.# 30013)

Diluent: RO water
 Conc.: 5 ng/mL (5 mL sample)
Injection purge and trap split (split ratio 30:1)
 Liner: Premium 1.0mm ID straight inlet liner (cat.# 23333.1)
 Inj. Temp.: 200 °C

Purge and Trap
 Instrument: EST Encon Evolution
 Trap Type: Vocabr 3000
 Purge: 11 min, flow 40 mL/min
 Dry Purge: 1 min, flow 50 mL/min
 Desorb: 1 min @ 260 °C, flow 30.9 mL/min
 Bake: 8 min @ 265 °C
 Interface Connection: injection port
 Transfer Line Temp.: 150 °C

Oven
 Oven Temp: 45 °C (hold 4.5 min) to 100 °C at 12 °C/min to 240 °C at 25 °C/min (hold 1.32 min)

Carrier Gas He, constant flow
Flow Rate: 0.9 mL/min
Detector MS
Mode: Scan
Scan Program:

Group	Start Time (min)	Scan Range (amu)	Scan Rate (scans/sec)
1	1.5	47-300	5.4
2	2.9	35-300	5.19

Transfer Line Temp.: 240 °C
 Analyzer Type: Quadrupole
 Source Temp.: 230 °C
 Quad Temp.: 150 °C
 Electron Energy: 70 eV
 Solvent Delay Time: 1.5 min
 Tune Type: BFB
 Ionization Mode: EI
Instrument Agilent 7890A GC & 5975C MSD
Acknowledgement EST Analytical provided the Centurion robotic autosampler and Encon Evolution P&T concentrator.