



EPA METHOD 538 COMPOUNDS ON SELECTRA AQUEOUS C18 BY LC/MS/MS

HPLC: Thermo Scientific Dionex UltiMate 3000®LC System

Column: UCT, Selectra®Aqueous C18, 100 x 2.1 mm, 3 µm
(p/n SLAQ100ID21-3UM)

Guard column: UCT, Selectra®Aqueous C18, 10 x 2.0 mm, 3 µm
(p/n SLAQGDC20-3UM)

Column temperature: 40 °C

Column flow rate: 0.300 mL/min

Auto-sampler temperature: 10 °C

Injection volume: 50 µL

Mobile Phase A: 20 mM ammonium formate

Mobile Phase B: MeOH

Gradient program:

Time (min)	A%
0	100
2	100
9	15
12	15
12.1	100
16	100

MS parameters

Instrumentation Thermo Scientific TSQ Vantage tandem MS

Polarity ESI +

Spray voltage 5000 V

Vaporizer temperature 203 °C

Ion transfer capillary temperature 208 °C

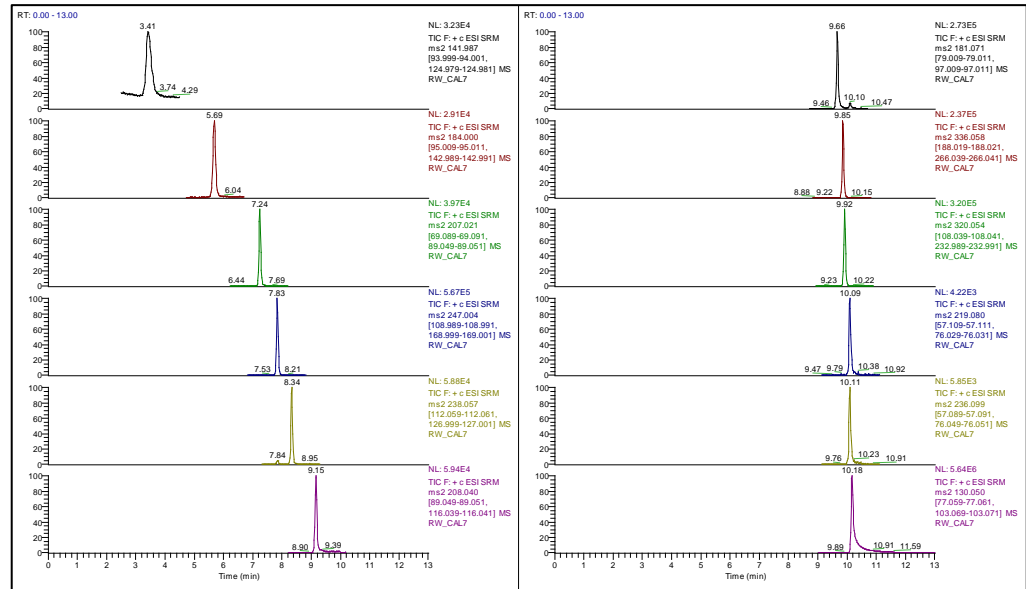
Sheath gas pressure 40 arbitrary units

Auxiliary gas pressure 5 arbitrary units

Q1 and Q3 peak width (FWHM) 0.2 and 1.0 Da

Collision gas and pressure Ar at 1.5 mTorr

Cycle time 1 sec



SRM Transitions				
Analyte	Rt (min)	Precursor	Product 1	Product 2
Methamidophos	3.41	142.0	94.0	125.0
Acephate-d6	5.63	190.0	149.0	98.0
Acephate	5.69	184.0	143.0	95.0
Aldicarb sulfoxide	7.24	207.0	89.1	69.1
Oxydemeton-methyl-d6	7.81	253.0	175.0	115.0
Oxydemeton-methyl	7.83	247.0	169.0	109.0
Dicrotophos	8.34	238.1	112.1	127.0
Aldicarb	9.15	208.0	116.0	89.1
DIMP-d14	9.62	195.1	99.0	80.0
DIMP	9.66	181.1	97.0	79.0
Fenamiphos sulfone	9.85	336.1	266.0	188.0
Fenamiphos sulfoxide	9.92	320.1	233.0	108.0
Thiofanox H ⁺	10.10	219.1	57.1	76.0
Thiofanox NH ₄ ⁺	10.10	236.1	57.1	76.1
Quinoline-d7	10.14	137.1	81.1	109.1
Quinoline	10.18	130.1	77.1	103.1