

Real Data & Fast Tracking Measurement: Sensitivity & Reproducibility Data for more than 230 Compounds

Agilent Pesticides and Environmental
Pollutants Analysis 4.0



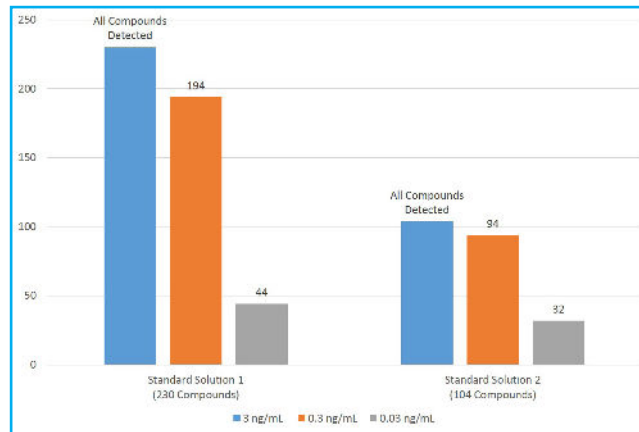
GCMSMS Parameters

Gas Chromatograph	Agilent 7890B Series
Inlet type	Multi mode inlet (MMI)
Liner Type	Double taper, UI inert, no wool (PN 5190-2272)
Injection Mode	Cold Pulsed Splitless (30 psi @ 0.75 min, 40mL/min, 1 min)
Inlet Temperature	75°C (0.1 min), 600°C/min to 325°C (5 min)
Injection Volume	1uL
GC Column	2x HP-5ms UI (15 m x 0.25 mm x 0.25um)
Mobile Phase	Helium (constant flow mode: 1 st column 1.09 mL/min, 2 nd column 1.29 mL/min)
Oven Temperature Program	60°C (1 min), 40°/min to 170°C, 3°C/min to 310°C (3 min)
Total Analysis Time	20.75 min
Transferline Temperature	280°C

Summary (1uL injection)

Mass Spectrometer	Agilent 7010 Series
Ionization mode	EI
Ion Source Temperature	280°C
1st and 2nd Quadrupole Temperature	150°C
Acquisition mode	Multiple reaction monitoring (MRM)
Dwell Time	Set with regards to the number of MRM transitions in time segment to get the final acquisition frequency 5 cycles/s (Hz).
Collision Gas	Nitrogen (1.5mL/min)
Quenching Gas	Helium (4mL/min)

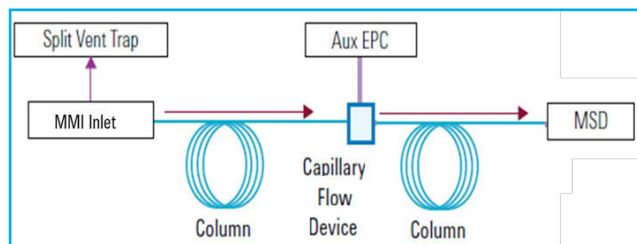
Compounds Detection



Chromatogram



Diagram



List of Compounds MIX 1

		LOQ (ng/mL)
Composés	CAS number	
1,2,3 - Trichlorobenzène	87-61-6	0,3
1,2,3,4 - Tetrachlorobenzène	643-66-2	0,3
1,2,3,5 - Tetrachlorobenzène	634-90-2	0,3
1,2,4 - Trichlorobenzène	120-82-1	0,3
1,2,4,5 - Tetrachlorobenzène	95-94-3	0,3
1,3,5 - Trichlorobenzène	108-70-3	0,3
2,2',3,3',4,4'-Hexachlorobiphenyl = PCB 128	38380-07-3	0,03
2,2',6,6'-Tetrachlorobiphenyl = PCB 54	15968-05-5	0,03
2,3,3',4,4',5,5'-Heptachlorobiphenyl = PCB 189	39635-31-9	0,03
2,3,3',4,4',5-Hexachlorobiphenyl = PCB 156	38380-08-4	0,03
2,3,3',4,4',5-Hexachlorobiphenyl = PCB 157	69782-90-7	0,03
2,3,3',4,4'-Pentachlorobiphenyl = PCB 105	32598-14-4	0,03
2,3',4,4',5,5'-Hexachlorobiphenyl = PCB 167	52663-72-6	0,03
2,3,4,4',5-Pentachlorobiphenyl = PCB 114	74472-37-0	0,03
2',3,4,4',5-Pentachlorobiphenyl = PCB 123	65510-44-3	0,03
2',3,4,5,6'-Pentachlorobiphenyl = PCB 125	56558-18-0	0,3
2,4 - D isopropyl ester	94-11-1	3
2,4 - D methyl ester	1928-38-7	0,03
2,6-Dichlorobenzamide	2008-58-4	0,03
3,3',4,4',5,5'-Hexachlorobiphenyl = PCB 169	32774-16-6	0,03
3,3',4,4',5-Pentachlorobiphenyl = PCB 126	57465-28-8	0,3
3,3',4,4'-Tetrachlorobiphenyl = PCB 77	32598-13-3	0,03
3,3',4-Trichlorobiphenyl = PCB 35	37680-69-6	0,03
3,4,4',5-Tetrachlorobiphenyl = PCB 81	70362-50-4	0,03
Acetochlor	34256-82-1	0,3
Aclonifen	74070-46-5	3
Acrinathrin	101007-06-1	0,3
Alachlor	15972-60-8	0,3
Ametryn	834-12-8	0,3
Amitraz	33089-61-1	0,3
Anthraquinone	84-65-1	0,3
Azaconazole	60207-31-0	0,3
Beflubutamid	113614-08-7	0,3
Benalaxyl	71626-11-4	0,3
Benfluralin	1861-40-1	0,3

Detected at 3 ng/mL
Detected at 3 and 0.3 ng/mL
Detected at 3, 0.3 and 0.03 ng/mL

Benoxacor	98730-04-2	0.3
Bifenox	42576-02-3	3
Bifenthrin	82657-04-3	0.3
Bioallethrin	28434-00-6	3
Bioresmethrin	28434-01-7	3
Biphenyl	92-52-4	0.3
Bitertanol	55179-31-2	0.3
Bromacil	314-40-9	0.3
Bromopropylate	18181-80-1	0.3
Bromoxynil octanoate	1689-99-2	0.3
Bromuconazol	116255-48-2	0.3
Bupirimate	41483-43-6	0.3
Buprofezin	953030-84-7	3
Butralin	33629-47-9	0.3
Buturon	3766-60-7	0.3
Cadusafos	95465-99-9	0.03
Captafol	2425-06-1	3
Carfentrazone-ethyl	128639-02-1	0.3
Chinomethionate	2439-01-2	0.3
Chlordecone	143-50-0	0.3
Chlorfenapyr	122453-73-0	3
Chlorfluazuron	71422-67-8	3
Chlormephos	24934-91-6	0.3
Chloroneb	2675-77-6	0.3
Chlorpropham	101-21-3	0.3
Chorthal-dimethyl (DCPA)	1861-32-1	0.3
Cinidon-ethyl	142891-20-1	0.03
Clethodim	99129-21-2	0.3
Clomazon	81777-89-1	0.03
Cloquintocet-mexyl = Cloquintocet-1-Methylhexyl Ester	99607-70-2	0.3
Coumaphos	56-72-4	0.3
Cyanazine	21725-46-2	0.3

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Detected at 3, 0.3 and 0.03 ng/mL

Cyflufenamide	180409-60-3	3
Cyfluthrin	68359-37-5	3
Cypermethrin	52315-07-8	3
Cyproconazole	94361-06-5	0,3
Cyprodinil	121552-61-2	0,3
d-BHC = HCH delta	319-86-8	0,3
Deltamethrin	52918-63-5	0,3
Demeton-O	8065-48-3	0,3
Demeton-S		3
Demeton-S-methyl	919-86-8	0,3
Demeton-S-methyl-sulfone	17040-19-6	0,3
Desmetryn	1014-69-3	0,3
Dichlobenil	1194-65-6	0,03
Dichlofop methyl	51338-27-3	0,3
Dichlormid	37764-25-3	0,3
Difenoconazole	119446-68-3	0,3
Diflufenican	83164-33-4	0,03
Dimethachlor	50563-36-5	0,3
Dimethenamid	87674-68-8	0,03
Dimethomorph	110488-70-5	0,3
Dimetilan	644-64-4	0,3
Endrin aldehyde	7421-93-4	3
Epoxiconazole	133855-98-8	0,3
Esfenvalerate	66230-04-4	0,3
Ethofumesate	26225-79-6	0,3
Ethrophosphos	13194-48-4	0,3
Etofenprox	80844-07-1	0,3
Famoxadon	131807-57-3	3
Fenarimol	60168-88-9	0,3
Fenbuconazole	114369-43-6	0,3
Fenhexamid	126833-17-8	3
Fenpropathrin	39515-41-8	0,3
Fenpropidin	67306-00-7	3

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Detected at 3, 0.3 and 0.03 ng/mL

Fenpropimorph	67564-91-4	0,3
Fenthion	55-38-9	0,3
Fenvalerate	51630-58-1	0,3
Fipronil	120068-37-3	0,3
Fipronil Desulfinyl	205650-65-3	0,3
Fipronil Sulfone	120068-36-2	0,3
Flonicamid	158062-67-0	0,3
Flucythrinate	70124-77-5	0,3
Flumioxazin	103361-09-7	0,3
Fluoxastrobin	361377-29-9	0,3
Fluquinconazole	136426-54-5	0,03
Flurochloridon	61213-25-0	0,3
Flurprimidol	56425-91-3	0,03
Flusilazole	85509-19-9	0,3
Flutriafol	76674-21-0	0,3
Furalaxyl	57646-30-7	0,3
Furathiocarb	65907-30-4	3
HCH epsilon	6108-10-7	0,3
Heptenophos	23560-59-0	0,03
Hexachlorobutadiene	87-68-3	0,03
Hexaconazole	79983-71-4	0,3
Hexazinone	51235-04-2	0,3
Hexythiazox	78587-05-0	3
I-Cyhalothrin	91465-08-6	0,3
Ioxynil methyl	3336-40-1	0,03
Ioxynil octanoate	3861-47-0	0,3
Iprovalicarb	140923-17-7	0,3
Isazophos	42509-80-8	0,3
Isodrin	465-73-6	0,3
Isafenphos	25311-71-1	0,3
Isopyrazam	881685-58-1	3
Isoxaben	82558-50-7	0,3
Isoxadifen-ethyl	163520-33-0	0,3
Kresoxim-methyl	143390-89-0	0,3

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MCPA-1-butyl-ester	1713-12-8	0,3
MCPA-2-ethylhexyl ester	29450-45-1	0,3
MCPA-butoxyethyl ester	19480-43-4	3
MCPA-ethyl ester	2698-38-6	0,3
MCPA-methyl ester	2436-73-9	0,3
MCPP methyl ester	2786-19-8	0,3
Mecoprop-1-octyl-ester	161922-37-8	0,3
Mecoprop-2,4,4-trimethylpentyl ester	217487-13-3	0,3
Mecoprop-2-ethylhexyl ester	71526-69-7	0,3
Mecoprop-2-octyl ester S1	28473-03-2	0,3
Mecoprop-2-octyl ester S2	28473-03-2	0,3
Mecoprop-m-butoxyethyl ester	23359-62-8	0,3
Mecoprop-n-isobutyl ester S1	4938-72-1	0,3
Mecoprop-n-isobutyl ester S2	4938-72-1	0,3
Mefenacet	73250-68-7	0,3
Mefenpyr-diethyl	135590-91-9	0,3
Mepanipyrim	110235-47-7	0,3
Mepronil	55814-41-0	0,3
Metamitron	41394-05-2	3
Metazachlor	67129-08-2	0,3
Metconazole	125116-23-6	0,3
Metolachlor	51218-45-2	0,3
Metrafenone	220899-03-6	0,3
Metribuzine	21087-64-9	0,3
Mirex	2385-85-5	0,03
Molinate	2212-67-1	0,3
Myclobutanil	88671-89-0	0,3
Naled = Dibrome	300-76-5	3
Napropamide	15299-99-7	0,3
Naptalam	132-66-1	3
Nitrofen	1836-75-5	0,3
Norflurazon	27314-13-2	0,3
Norflurazon desmethyl	23576-24-1	0,3
Nuarimol	63284-71-9	0,3
Ofurace	58810-48-3	0,3

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Oxadiargyl	39807-15-3	3
Oxadiazon	19666-30-9	0,03
Oxadixyl	77732-09-3	0,3
Oxychlorthane Isomer	27304-13-8	0,3
Oxyfluorfen	42874-03-3	3
Paclobutrazol	76738-62-0	0,03
Penconazole	66246-88-6	0,3
Pendimethalin	40487-42-1	0,3
Pentachlorobenzene	608-93-5	0,03
Permethrin I	52645-53-1	3
Permethrin II	52645-53-1	3
Phenothrin	26002-80-2	3
Phorate	298-02-2	0,3
Phosphamidon	13171-21-6	0,3
Pinoxaden	243973-20-8	0,3
Piperonyl butoxide	51-03-6	0,3
Prebane = Terbutrin	886-50-0	0,3
Pretilachlor	51218-49-6	0,3
Prochloraz	67747-09-5	0,3
Profenophos	41198-08-7	0,3
Prometon	1610-18-0	0,03
Prometryne	7287-19-6	0,3
Propachlor	1918-16-7	0,03
Propanil	709-98-8	0,3
Propargite	2312-35-8	3
Propiconazole	60207-90-1	0,3
Pyrazon = Chloridazone	1698-60-8	3
Pyridaben	96489-71-3	0,3
Pyridate	55512-33-9	3
Pyrifenox	88283-41-4	3
Pyrimethanil	53112-28-0	0,3
Pyriproxyfen	95737-68-1	0,3
Quinalphos	13593-03-8	0,3
Quinoclamine	2797-51-5	0,3
Quinoxifen	124495-18-7	0,3
Rotenone	83-79-4	3

Detected at 3 ng/mL

Detected at 3 and 0.3 ng/mL

Detected at 3, 0.3 and 0.03 ng/mL

Sebuthylazin	7286-69-3	0,3
Secbumeton	26259-45-0	0,3
Spiroxamine	118134-30-8	3
Tau-Fluvanilate	102851-06-9	3
Tebuconazol	107534-96-3	0,3
Tebufenpyrad	119168-77-3	0,03
Tebutam	35256-85-0	0,3
Tefluthrin	79538-32-2	0,03
Terbacil	5902-51-2	0,3
Terbumeton	33693-04-8	0,3
Terbumeton-desethyl	30125-64-5	0,3
Terbuthylazine desethyl	30125-63-4	0,3
Tetraconazole	112281-77-3	0,3
Thiaclopid	111988-49-9	3
Thicyclam Hydrogen Oxalate	31895-22-4	0,3
Thiobencarb	28249-77-6	0,3
Thiometon	640-15-3	0,3
Tolyfluanid	731-27-1	0,3
Triallate	2303-17-5	0,3
Tributylphosphate	126-73-8	0,3
Trichlorfon	52-68-6	0,3
Trifluralin	1582-09-8	0,3
Trinexapac-ethyl = Trinexapet	95266-40-3	3
Vamidotion	2275-23-2	3

Detected at 3 ng/mL
Detected at 3 and 0.3 ng/mL
Detected at 3, 0.3 and 0.03 ng/mL

List of Compounds MIX 2

		LOQ (ng/mL)
Composés	CAS number	
Aldrine	309-00-2	0,3
Anilazine	101-05-3	3
Atrazine	1912-24-9	0,3
Azinphos éthyl	2642-71-9	0,3
Azinphos méthyl	86-50-0	0,3
Bromophos éthyl	4824-78-6	0,3
Bromophos méthyl	2104-96-3	0,3
Captan	133-06-2	3
Carbophénothion	786-19-6	3
Chlordane cis	5103-71-9	0,3
Chlordane trans	5103-74-2	0,3
Chlorfenson	80-33-1	0,03
Chlorfenvinphos	470-90-6	0,03
Chlorothalonil	1897-45-6	0,03
Chlorpyriphos éthyl	2921-88-2	0,3
Chlorpyriphos méthyl	5598-13-0	0,3
DDD op'	53-19-0	0,03
DDD pp'	72-54-8	0,03
DDE op'	3424-82-6	0,03
DDE pp'	72-55-9	0,03
DDT op'	789-02-6	0,3
DDT pp'	50-29-3	0,3
Deisopropyl atrazine	1007-28-9	3
Desethyl atrazine	3397-62-4	0,3
Diazinon	333-41-5	0,3
Dichlofenthion	97-17-6	0,3
Dichlofluanid	1085-98-9	0,03
Dichlorvos	62-73-7	0,3
Dicofol 1	115-32-2	3
Dicofol 2	115-32-2	3
Dicrotofos	141-66-2	0,03
Dieldrine	60-57-1	0,3

Detected at 3 ng/mL

Detected at 3 and 0.3 ng/mL

Detected at 3, 0.3 and 0.03 ng/mL

Dimefox	115-26-4	3
Dimethoate	60-51-5	0,3
Disulfoton	298-04-4	0,3
Endosulfan alpha	959-98-8	0,3
Endosulfan béta	33213-65-9	0,3
Endosulfan sulfate	1031-07-8	0,3
Endrin	72-20-8	3
Ethion	563-12-2	0,3
Etrimfos	38260-54-7	0,3
Fenchlorphos (=Ronnel)	299-84-3	0,3
Fenitrothion	122-14-5	0,3
Fenson	80-38-6	0,03
Folpet	133-07-3	0,3
Fonofos	944-22-9	0,3
Formothion	2540-82-1	0,3
HCH alpha	319-84-6	0,03
HCH béta	319-85-7	0,03
HCH gamma (lindane)	58-89-9	0,03
Heptachlore	76-44-8	0,03
Heptachlore epoxyde endo	1024-57-3	0,3
Heptachlore epoxyde exo	28044-83-9	0,3
Hexachlorobenzene	118-74-1	0,03
Imazalil	35554-44-0	0,3
Iodofenphos	18181-70-9	0,3
Iprodione	36734-19-7	0,3
Malaoxon	1634-78-2	3
Malathion	121-75-5	0,03
Methacrifos	62610-77-9	0,03
Methamidophos	10265-92-6	0,3
Méthoxychlore	72-43-5	0,3
Métidathion	950-37-8	0,03
Mevinphos	7786-34-7	0,03
Omethoate	1113-02-6	0,3
Paraoxon-ethyl	311-45-5	3

Detected at 3 ng/mL
Detected at 3 and 0.3 ng/mL
Detected at 3, 0.3 and 0.03 ng/mL

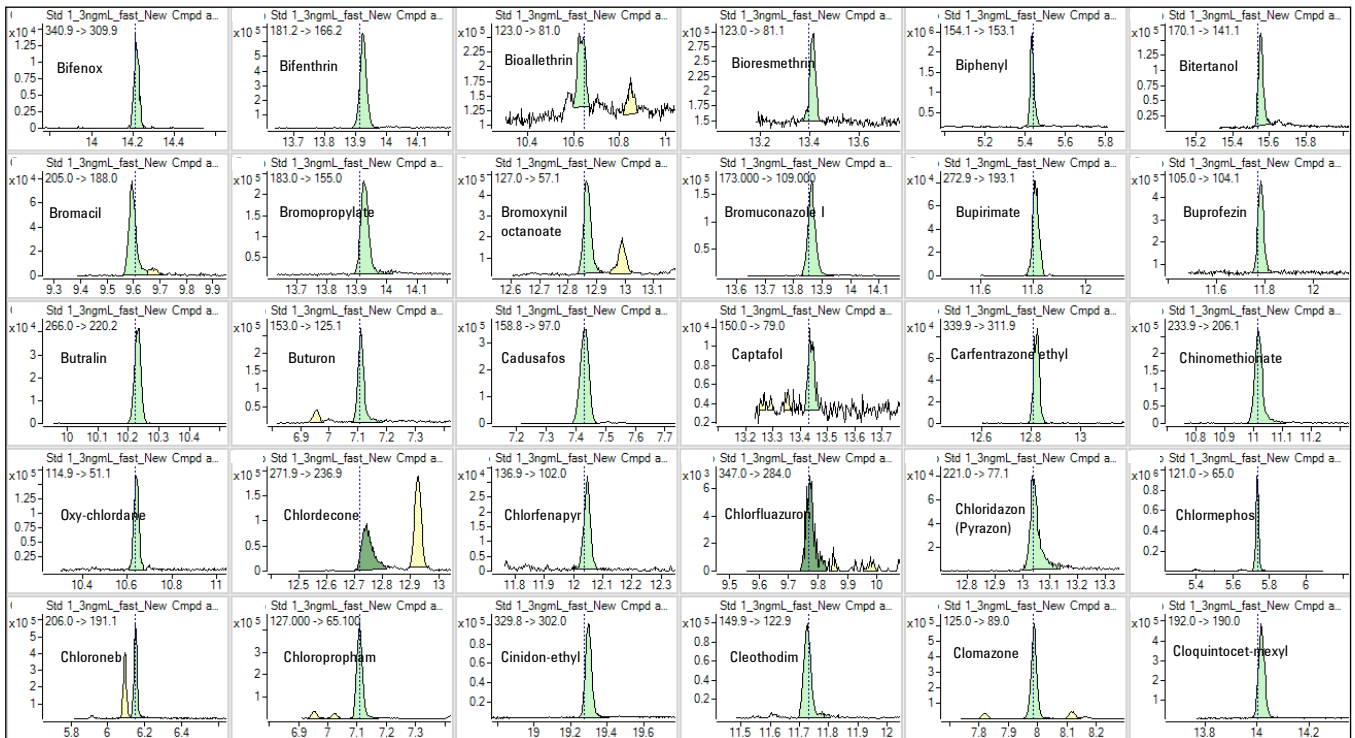
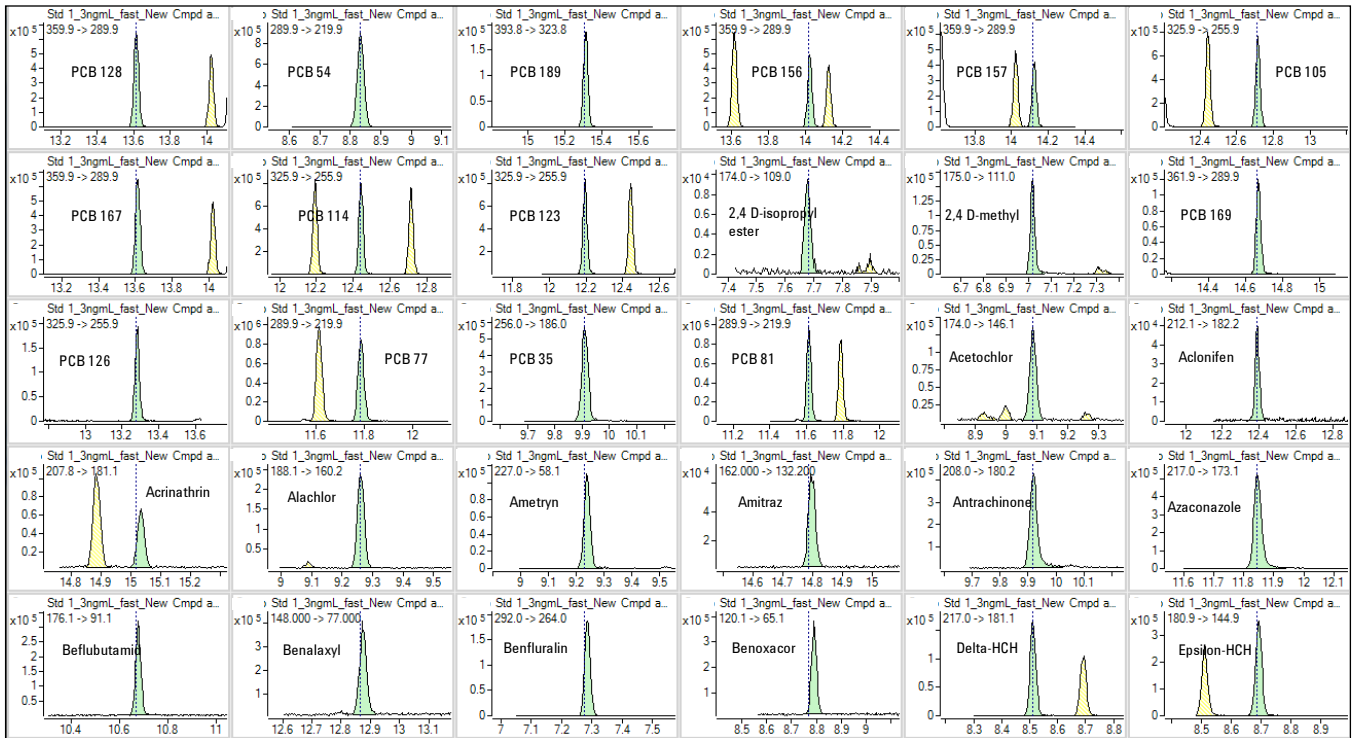
Parathion-ethyl	56-38-2	0,3
Parathion-methyl	298-00-0	0,3
PCB 018	37680-65-2	0,03
PCB 028	7012-37-5	0,03
PCB 031	16606-02-3	0,03
PCB 044	41464-39-5	0,03
PCB 052	35693-99-3	0,03
PCB 101	37680-73-2	0,03
PCB 118	31508-00-6	0,03
PCB 138	35065-28-2	0,3
PCB 149	38380-04-0	0,3
PCB 153	35065-27-1	0,3
PCB 170	35065-30-6	0,03
PCB 180	35065-29-3	0,03
PCB 194	35694-08-7	0,03
PCB 209	2051-24-3	0,03
Pentachloroaniline	527-20-8	0,3
Phosalone	2310-17-0	0,3
Procymidone	32809-16-8	0,3
Propazine	139-40-2	0,03
Propétamphos	31218-83-4	0,3
Propyzamide	23950-58-5	0,3
Pyrazophos	13457-18-6	0,3
Pyrimiphos éthyl	23505-41-1	0,3
Pyrimiphos méthyl	76471-79-9	0,3
Quintozène	82-68-8	0,3
Simazine	122-34-9	0,3
Sulfotep	3689-24-5	0,3
Tecnazène	117-18-0	0,03
Terbufos	13071-79-9	0,3
Terbuthylazine	5915-41-3	0,3
Tetrachlorvinphos	961-11-5	0,3
Tetradifon	116-29-0	0,3
Tetrasul	2227-13-6	0,3
Triadimefon	43121-43-3	0,3
Triadimenol	55219-65-3	3
Triazophos	24017-47-8	0,3
Vinclozolin	50471-44-8	0,3

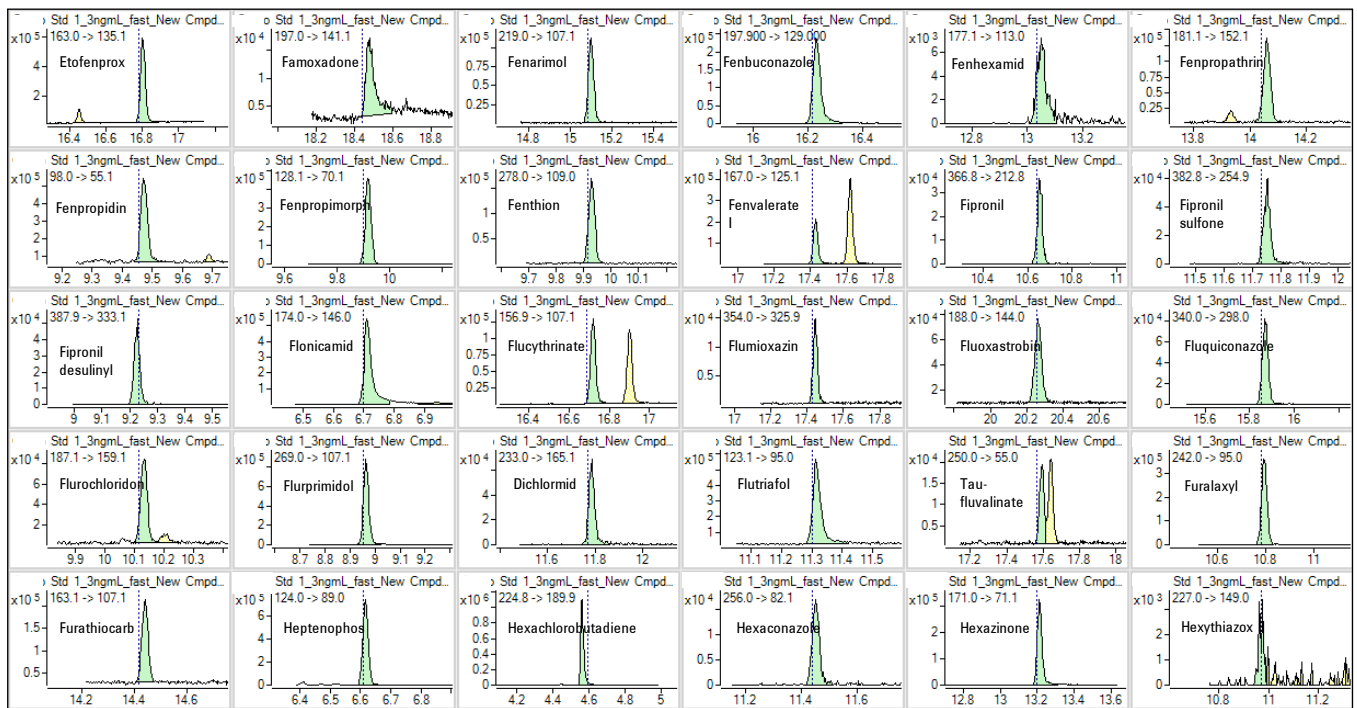
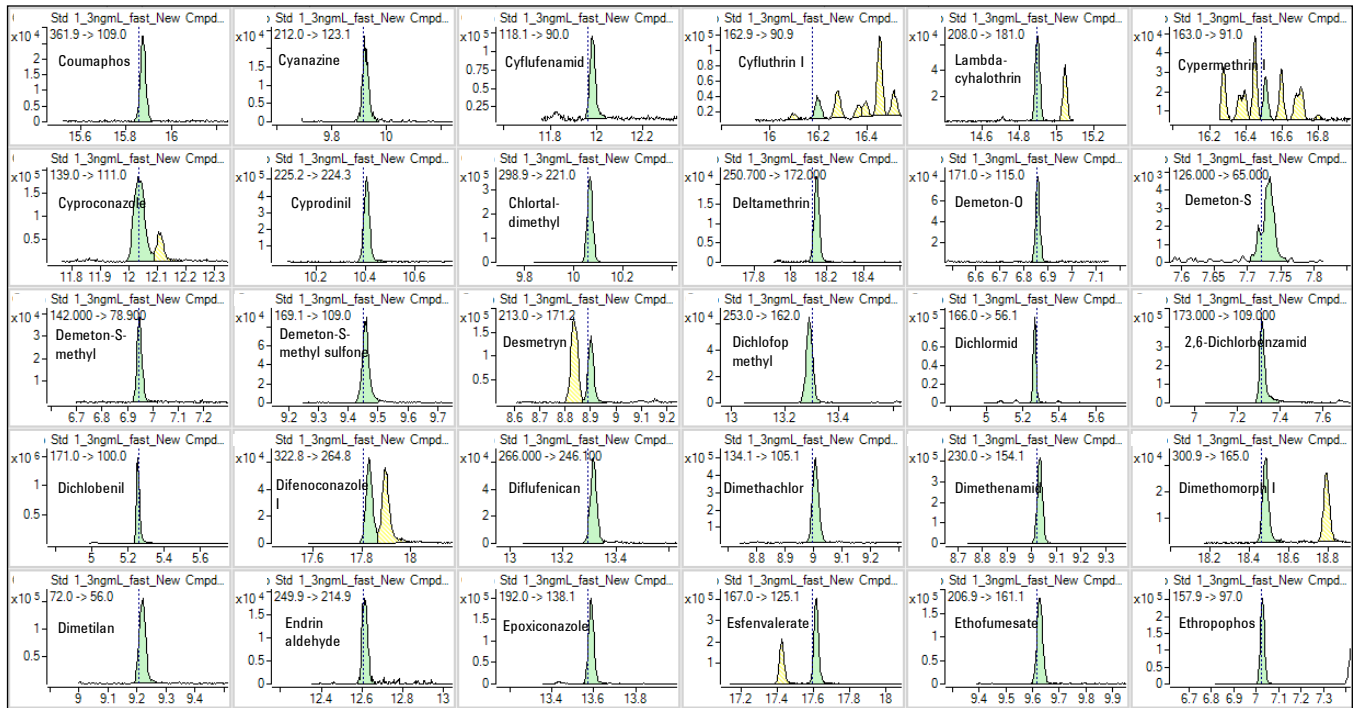
Detected at 3 ng/mL

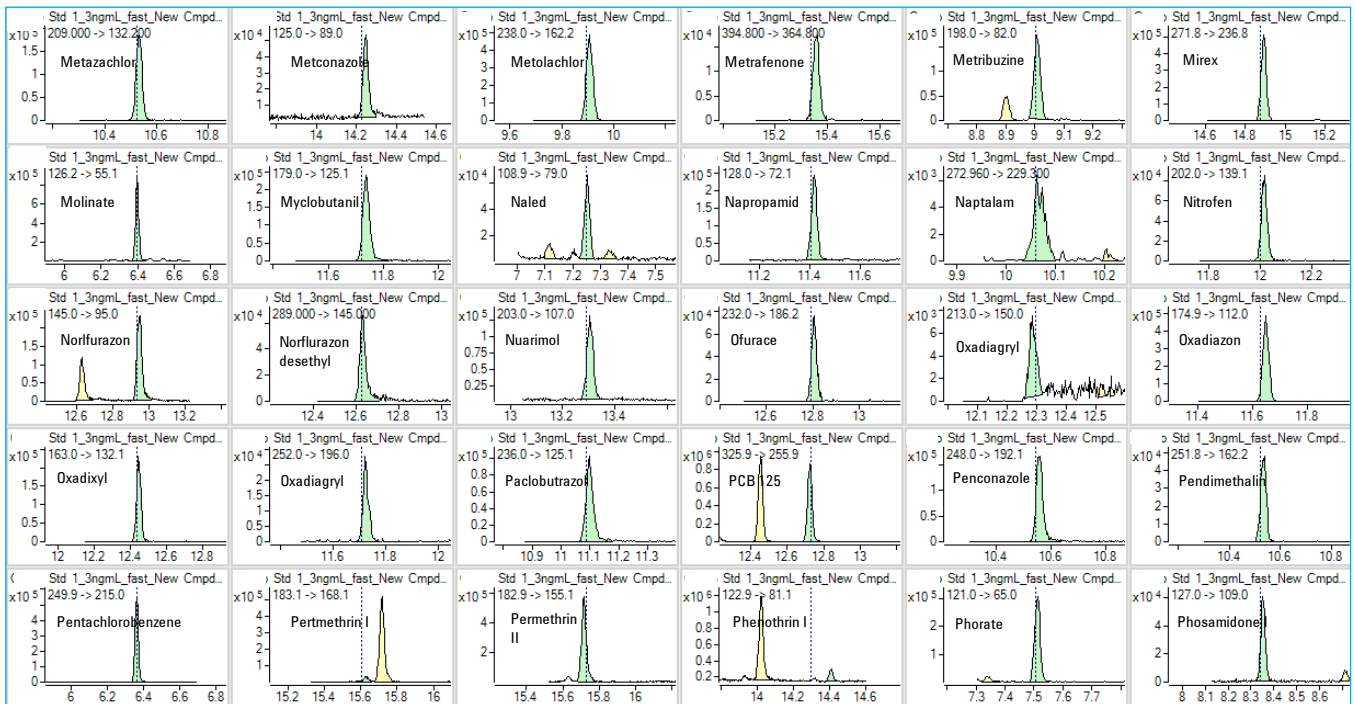
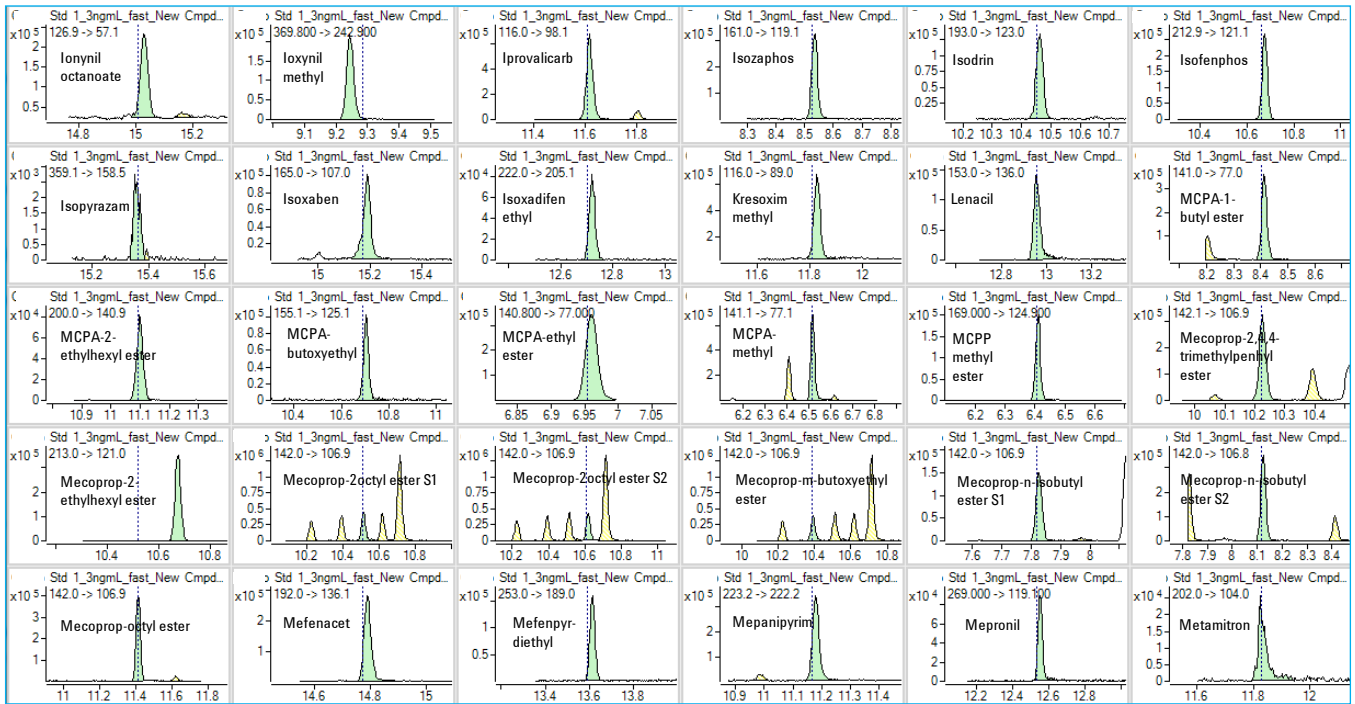
Detected at 3 and 0.3 ng/mL

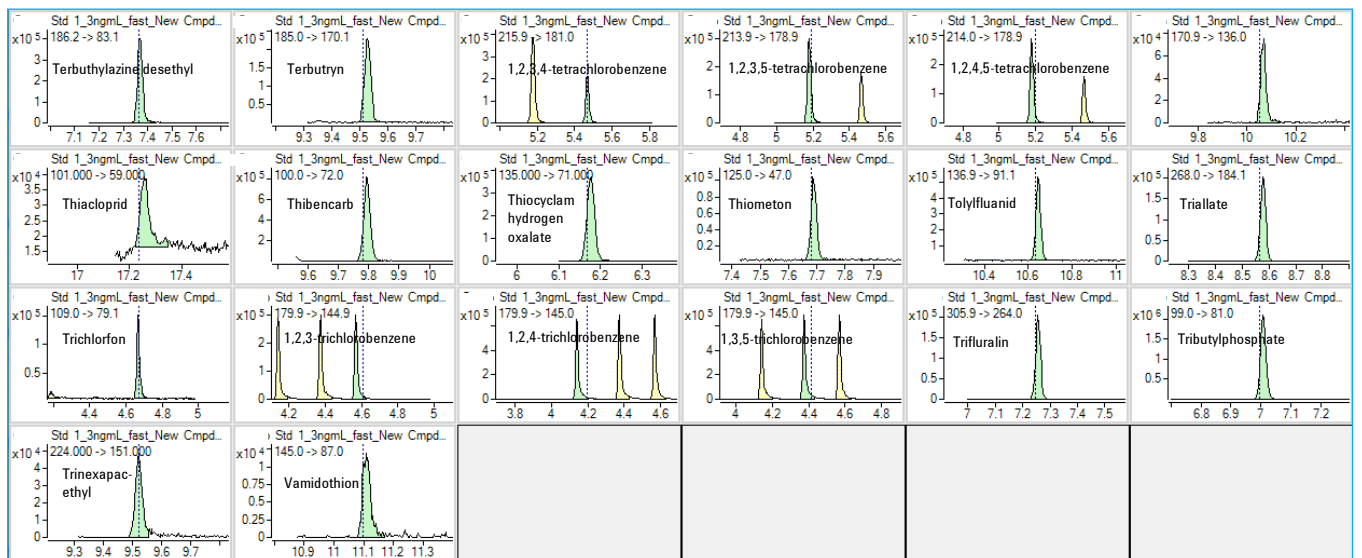
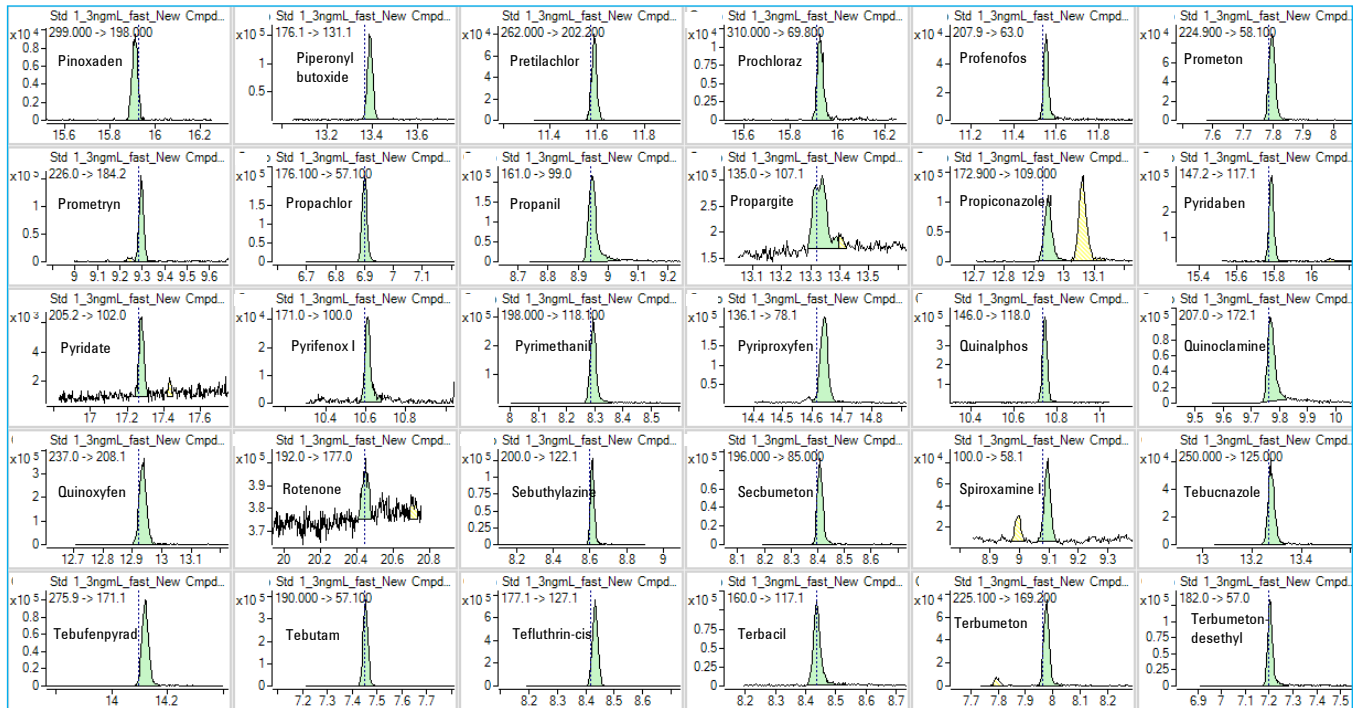
Detected at 3, 0.3 and 0.03 ng/mL

3 ng/mL MIX 1

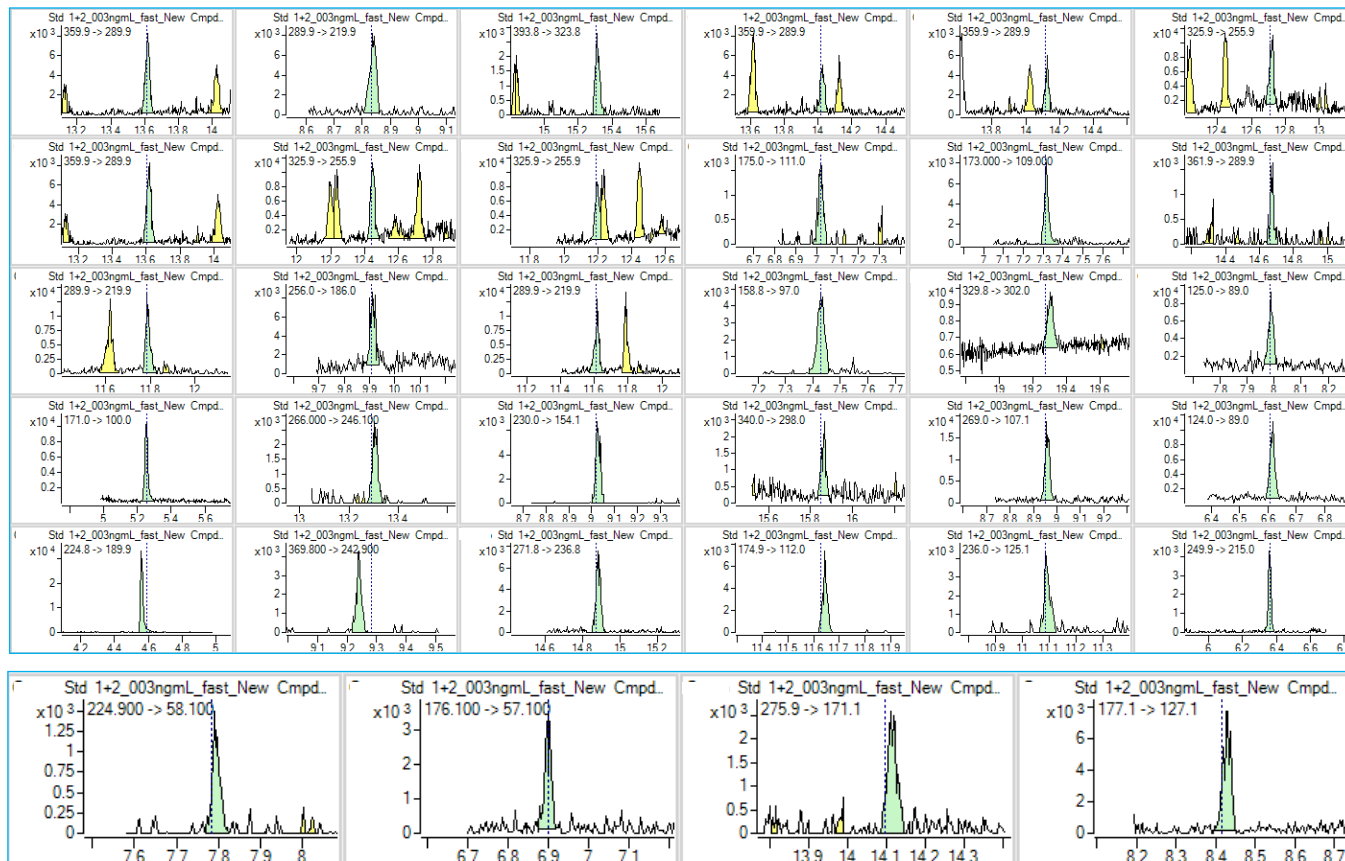




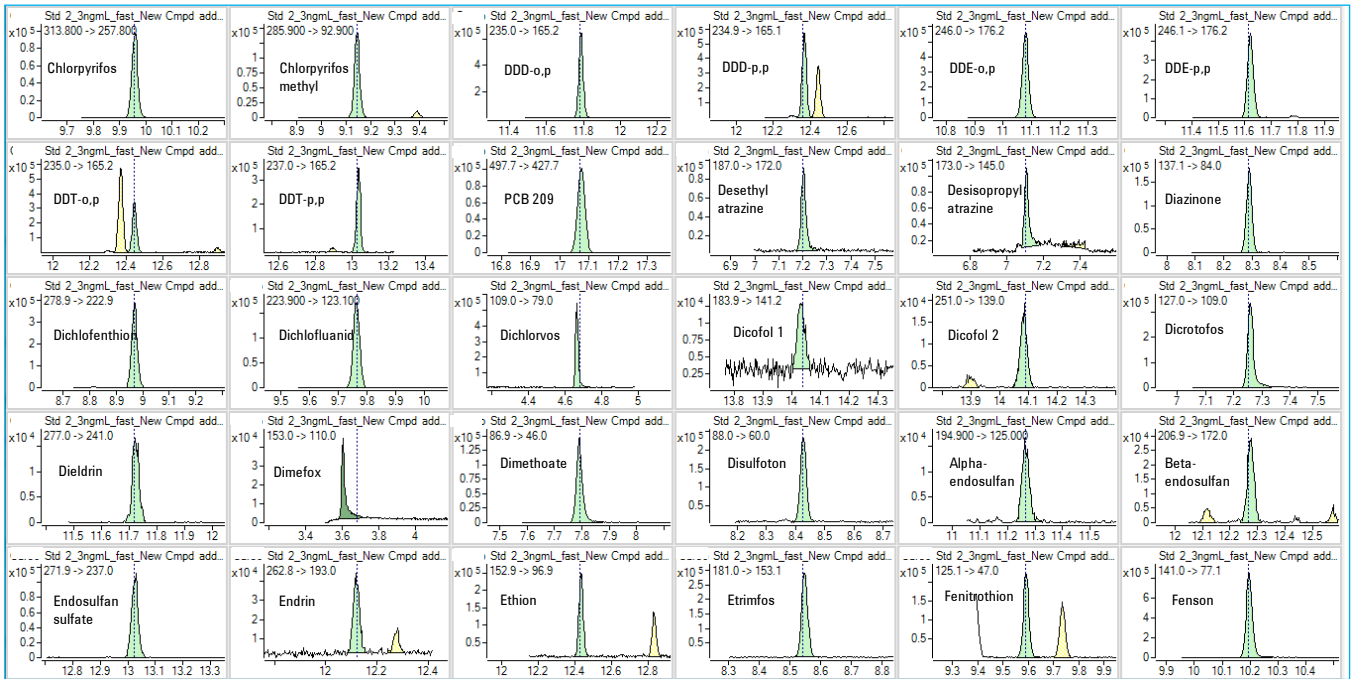
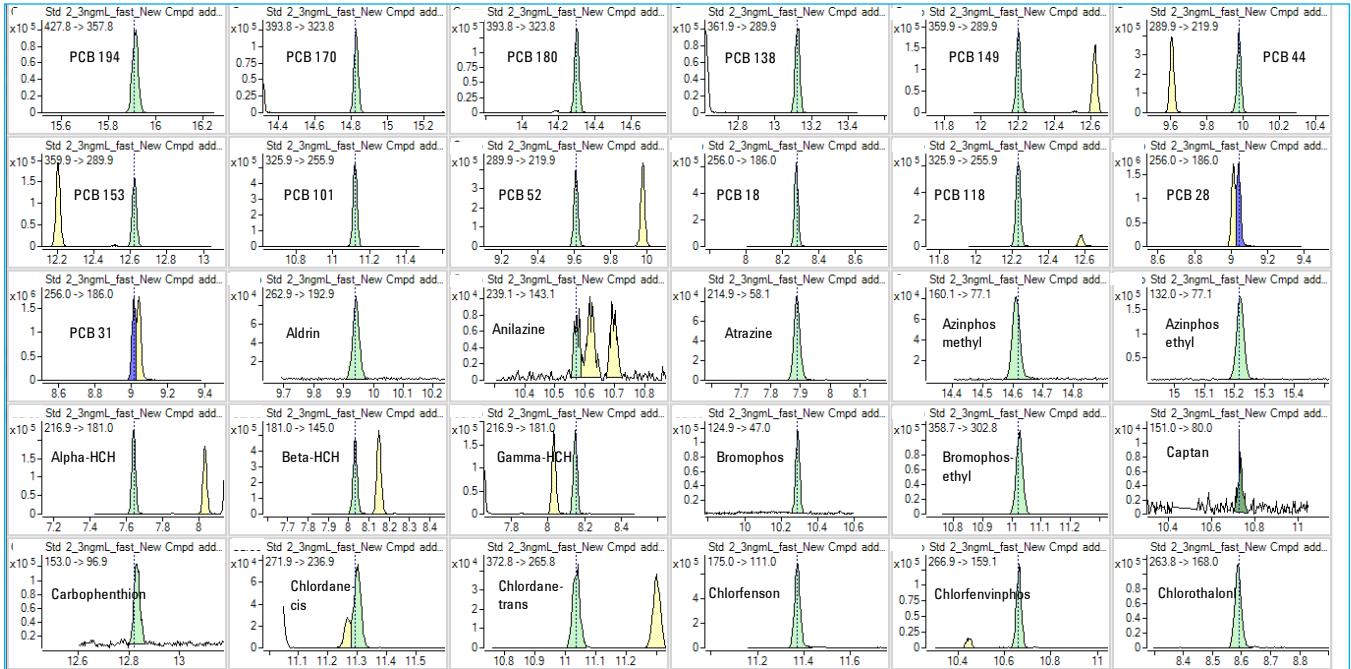


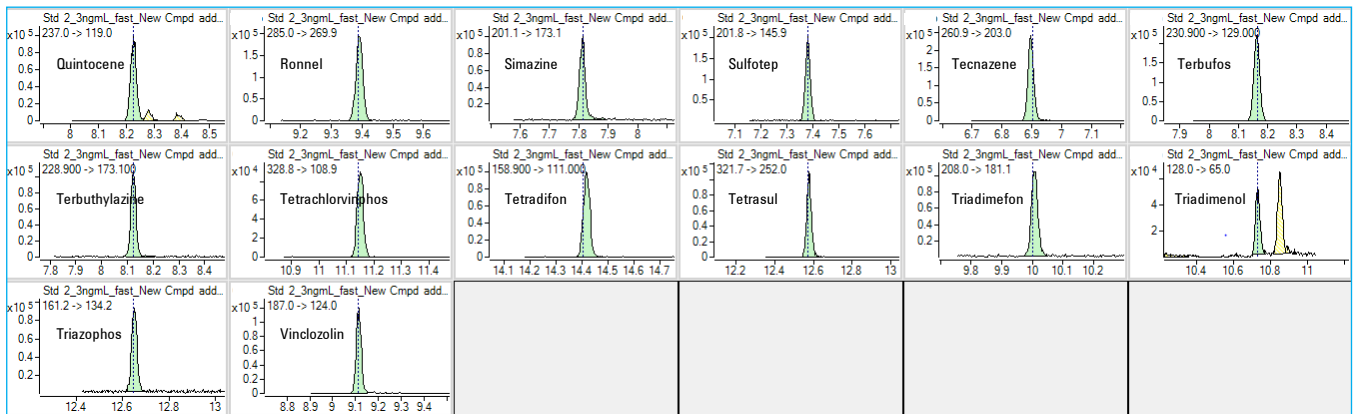
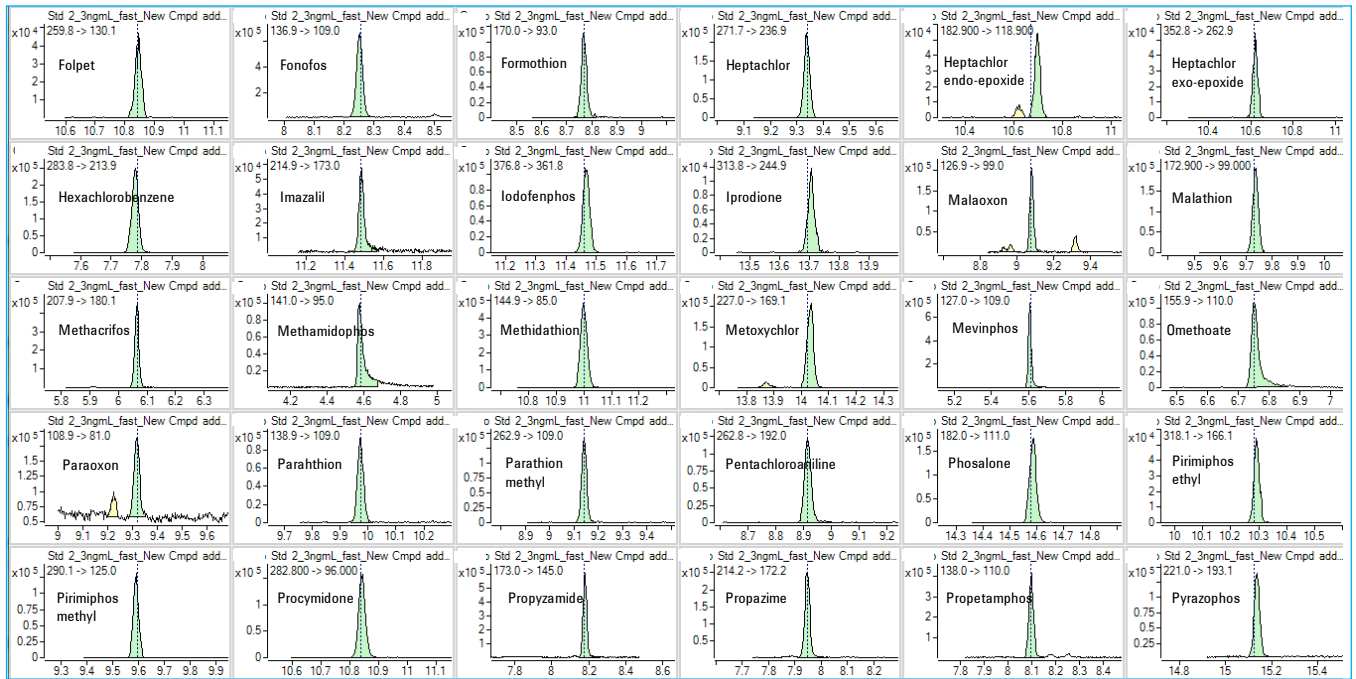


0.3 ng/mL MIX 1

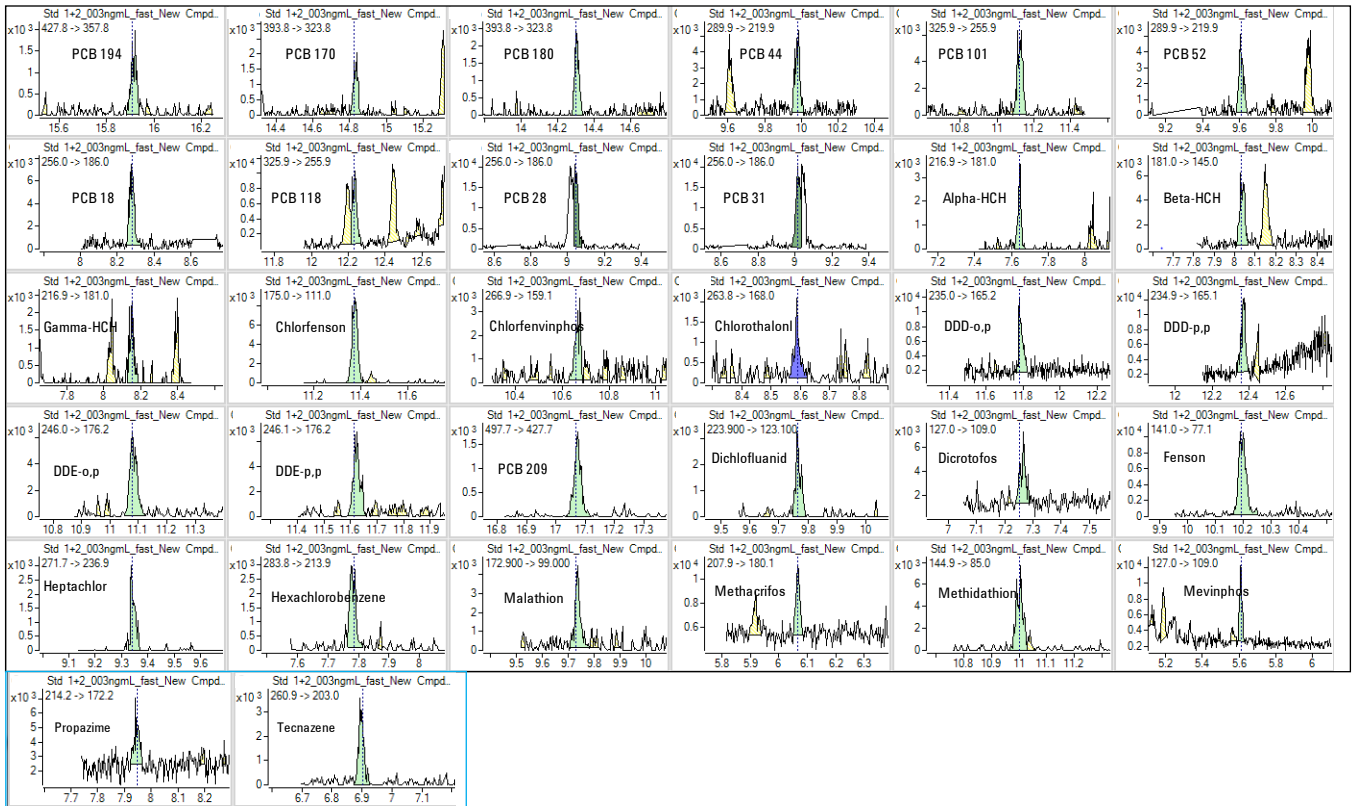


3 ng/mL MIX 2

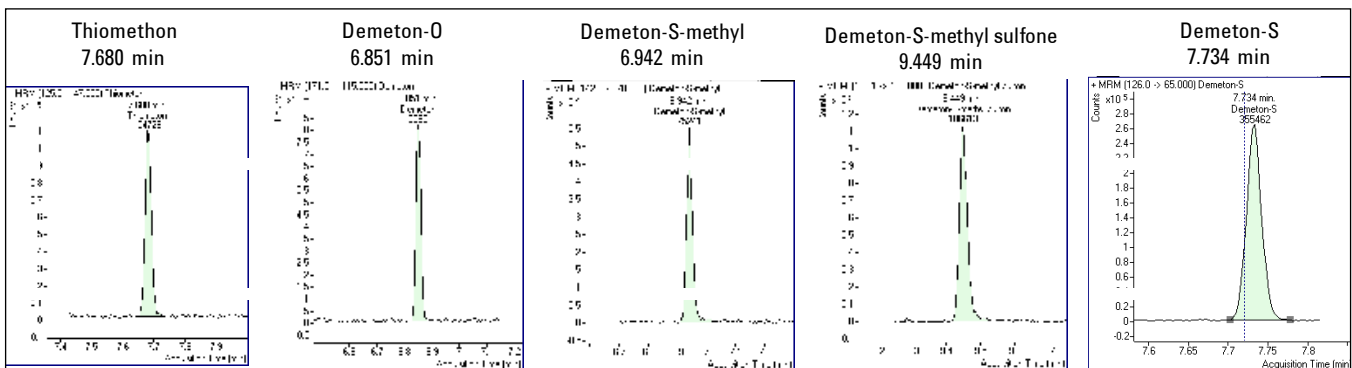




0.3 ng/mL MIX 2

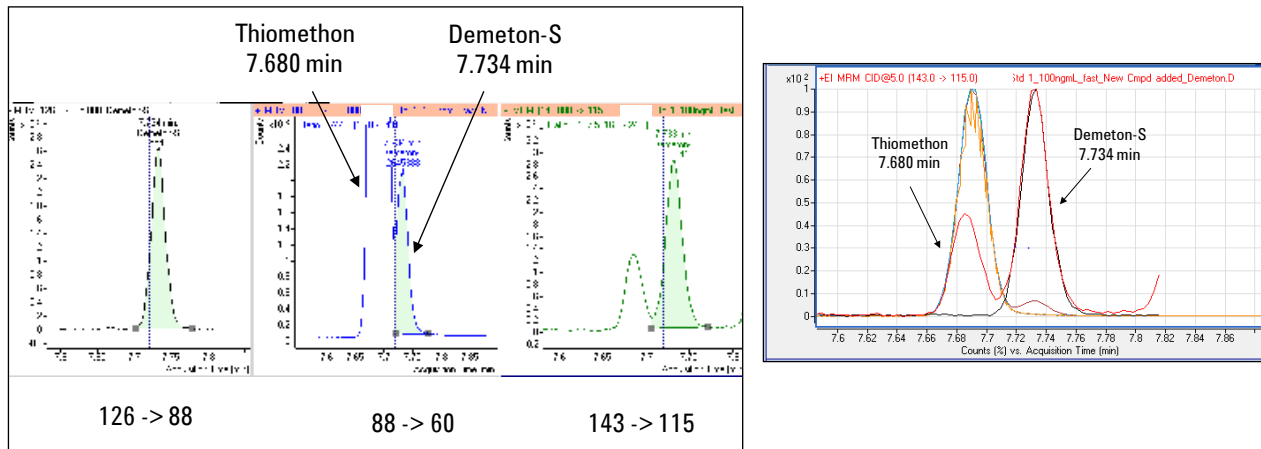


Additional Notes



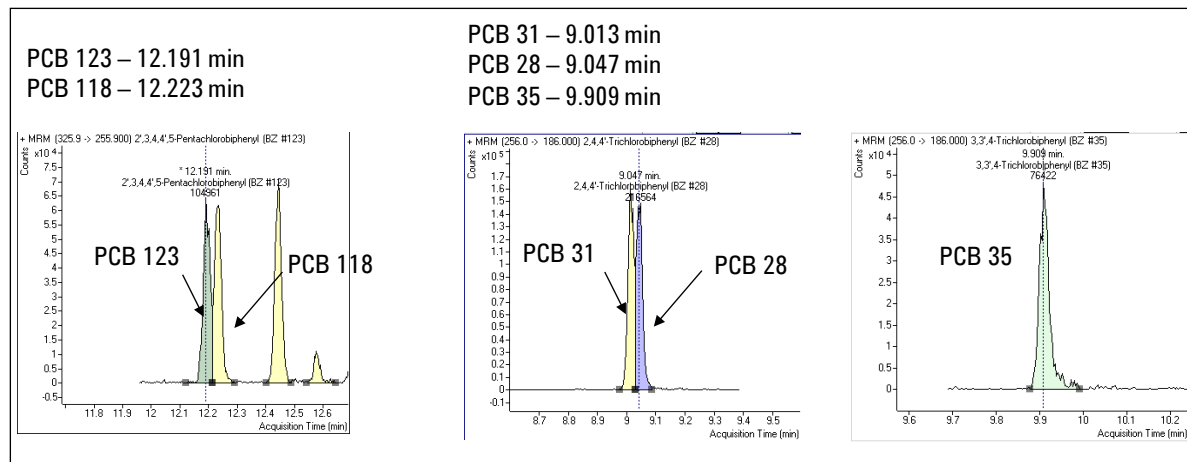
✓ Coelution of Thiomethon, Demeton-O, Demeton- S, Demeton- S-metyl and Demeton-S-methyl sulfone? -> No co-elution

✓ Overlaid MRM transitions for Thiomethon and Demton-S -> No Co-elution



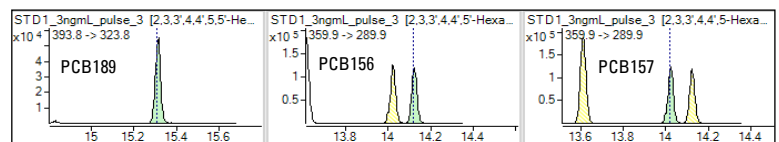
✓ Coelution of PCB 31 & 35 and PCB 118 & 123?

- PCB 31 & 35 -> No co-elution
- PCB 118 & 123 -> Partly separated (possible to integrate as two different compounds)



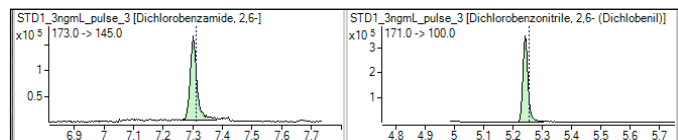
✓ Coelution of PCB189, PCB 156 & PCB 157?

PCB 189 – RT 15.312 min
 PCB 156 – 14.028 min
 PCB 157 – RT 14.129 min



✓ 2,6-dichlorobenzamide & 2,6-dichlorobenzonitrile ?

2,6-dichlorobenzamide – RT 7.302 min
 2,6-dichlorobenzonitrile (Dichlobenil) – RT 5.249 min



REPRODUCIBILITY

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
2,2',3,3',4,4'-Hexachlorobiphenyl (BZ #128)	4	9
2,2',6,6'-Tetrachlorobiphenyl (BZ #54)	4	7
2,3,3',4,4',5,5'-Heptachlorobiphenyl (BZ #189)	3	9
2,3,3',4,4',5-Hexachlorobiphenyl (BZ #156)	4	9
2,3,3',4,4',5'-Hexachlorobiphenyl (BZ #157)	3	9
2,3,3',4,4'-Pentachlorobiphenyl (BZ #105)	3	8
2,3',4,4',5,5'-Hexachlorobiphenyl (BZ #167)	4	9
2,3,4,4',5-Pentachlorobiphenyl (BZ #114)	3	8
2',3,4,4',5-Pentachlorobiphenyl (BZ #123)	3	8
2,4-D-isopropyl ester	5	10
2,4-D-methyl	3	8
3,3',4,4',5,5'-Hexachlorobiphenyl (BZ #169)	3	9
3,3',4,4',5-Pentachlorobiphenyl (BZ #126)	5	9
3,3',4,4'-Tetrachlorobiphenyl (BZ #77)	4	8
3,3',4-Trichlorobiphenyl (BZ #35)	3	9
3,4,4',5-Tetrachlorobiphenyl (BZ #81)	3	8
Acetochlor	6	9
Aclonifen	3	10
Acrinathrin	13	9
Alachlor	3	9
Ametryn	4	9
Amitraz	9	10
Anthraquinone	4	9
Azaconazole	4	9
Beflubutamid	9	10
Benalaxyl	7	10
Benfluralin	4	9

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Benoxacor	3	9
BHC-delta	4	8
BHC-epsilon	3	11
Bifenox	4	11
Bifenthrin	7	10
Bioallethrin	11	9
Bioresmethrin	12	10
Biphenyl	1	6
Bitertanol I	10	7
Bromacil	7	9
Bromopropylate	7	9
Bromoxynil octanoate	6	10
Bromuconazole I	6	9
Bupirimate	7	11
Buprofezin	2	9
Butralin	3	9
Buturon	13	7
Cadusafos	8	9
Captafol	N/A	14
Carfentrazone-ethyl	7	10
Chinomethionate	3	9
Chlordane-oxy	4	8
Chlordecone	3	8
Chlorfenapyr	4	9
Chlorfluazuron	21	9
Chloridazon (Pyrazon)	8	10
Chlormephos	2	7

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Chloroneb	4	7
Chlorpropham	13	7
Cinidon-ethyl	13	10
Cleothodim	4	7
Clomazone	2	9
Cloquintocet-mexyl	6	10
Coumaphos	18	10
Cyanazine	10	11
Cyflufenamid	4	9
Cyfluthrin	16	10
Cyhalothrin (lambda)	8	10
Cypermethrin	7	10
Cyproconazole	6	9
Cyprodinil	5	9
DCPA (Dacthal, Chlorthal-dimethyl)	2	8
Deltamethrin	18	8
Demeton-O	5	8
Demeton-S-methyl	8	8
Demeton-S-methyl sulfon	10	10
Desmetryn	3	9
Dichlofop methyl	5	10
Dichlormid	3	7
Dichlorobenzamide, 2,6-	4	9
Dichlorobenzonitrile, 2,6- (Dichlobenil)	4	6
Difenoconazole I	10	10
Diflufenican	8	10
Dimethachlor	5	9

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Dimethenamid	5	9
Dimethomorph I	12	9
Dimetilan	6	9
Endrin aldehyde	5	7
Epoxiconazole	7	10
Esfenvalerate	6	10
Ethofumesate	2	9
Ethopropho	6	9
Etofenprox	21	10
Famoxadone	7	8
Fenarimol	12	9
Fenbuconazole	5	9
Fenhexamid	10	6
Fenpropathrin	5	9
Fenpropidin	6	8
Fenpropimorph	3	9
Fenthion	3	9
Fenvalerate I	6	10
Fipronil	5	10
Fipronil sulfone	7	10
Fipronyl desulfinyl	8	10
Fonicamid	5	9
Flucythrinate I	9	9
Flumioxazin	5	10
Fluoxastrobin	8	12
Fluquinconazole	5	10
Flurochloridone	6	9
Flurprimidol	6	9

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Flusilazole	8	12
Flutriafol	7	9
Fluvalinate-tau I	8	9
Furalaxyl	5	9
Furathiocarb	8	9
Heptenophos	5	8
Hexachlorobutadiene	5	4
Hexaconazole	7	9
Hexazinone	10	10
Hexythiazox	8	10
Ioxynil octanoate	7	10
Iprovalicarb I	3	9
Isazofos (Miral, Isazophos)	3	9
Isodrin	4	8
Isofenphos	6	10
Isopyrazam	13	11
Isoxaben	4	13
isoxadifen-ethyl	8	9
Kresoxim-methyl	3	9
Lenacil	7	10
MCPA-1-butyl-ester	3	9
MCPA-2-ethylhexyl-ester	6	10
MCPA-butoxyethyl	6	9
MCPA-methyl	2	8
Mecoprop-2,4,4-trimethylpenthyl-ester	3	9
Mecoprop-2-ethylhexyl ester	6	10
Mecoprop-2-octyl-ester S1	4	9
Mecoprop-2-octyl-ester S2	6	9

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Mecoprop-m-butoxyethyl-ester	4	10
Mecoprop-n-isobutyl-ester S1	2	9
Mecoprop-n-isobutyl-ester S2	2	8
Mecoprop--octyl-ester	4	10
Mefenacet	10	10
Mefenpyr-diethyl	6	10
Mepanipyrim	5	10
Mepronil	9	9
Metamitron	6	10
Metazachlor	4	9
Metconazole	9	8
Metolachlor	4	9
Metrafenone	7	10
Metribuzin	5	9
Mirex	5	8
Molinate	2	8
Myclobutanil	5	10
Naled	7	14
Napropamide	5	10
Nitrofen	3	9
Norflurazon	8	10
Norflurazon-Desmethyl	5	10
Nuarimol	7	10
Ofurace	7	10
Oxadialargyl	6	12
Oxadiazon	2	9
Oxadixyl	6	10
Oxyfluorfen	6	10

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Paclobutrazol	12	9
PCB 125	3	8
Penconazole	5	9
Pendimethalin (Penoxaline)	4	10
Pentachlorobenzene	5	6
Permethrin I	17	10
Permethrin II (trans)	9	10
Phenothrin I	N/A	9
Phorate	2	8
Phosphamidon I	7	8
Pinoxaden	12	8
Piperonyl butoxide	11	10
Pretilachlor	6	10
Prochloraz	14	8
Profenofos	6	8
Prometon	4	9
Prometryn	5	9
Propachlor	3	8
Propanil (DCPA)	7	9
Propargite	5	9
Propiconazole I	4	10
Pyridaben	10	10
Pyridate	16	11
Pyrifenoxy I	3	9
Pyrimethanil	4	8
Pyriproxyfen	5	10
Quinalphos	5	9
Quinoclamine	7	10

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Quinoxyfen	3	10
Rotenone	N/A	8
Sebuthylazine	3	8
Secbumeton	8	9
Spiroxamine I	6	8
Tebuconazole	7	10
Tebufenpyrad	8	11
Tebutam	3	8
Tefluthrin, cis-	2	9
Terbacil	7	9
Terbumeton	6	9
Terbumeton-desethyl	8	9
Terbutylazine-desethyl	3	9
Terbutryn	3	9
Tetrachlorobenzene, 1,2,3,4-	5	5
Tetrachlorobenzene, 1,2,3,5-	5	5
Tetrachlorobenzene, 1,2,4,5-	5	5
Tetraconazole	6	8
Thiobencarb (Benthiocarb)	4	9
Thiometon	4	8
Tolyfluanid	3	9
Triallate	3	8
Trichlorfon	3	6
Trichlorobenzene, 1,2,3-	5	4
Trichlorobenzene, 1,2,4-	5	4
Trichlorobenzene, 1,3,5-	5	4
Trifluralin	3	9
Tri-n-butyl phosphate	11	9
Trinexapac-ethyl	10	9
Vamidotion	14	9

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (BZ #194)	3	2
2,2',3,3',4,4',5-Heptachlorobiphenyl (BZ #170)	4	2
2,2',3,4,4',5,5'-Heptachlorobiphenyl (BZ #180)	3	2
2,2',3,4,4',5'-Hexachlorobiphenyl (BZ #138)	4	3
2,2',3,4',5',6-Hexachlorobiphenyl (BZ #149)	4	2
2,2',3,5'-Tetrachlorobiphenyl (BZ #44)	2	2
2,2',4,4',5,5'-Hexachlorobiphenyl (BZ #153)	4	2
2,2',4,5,5'-Pentachlorobiphenyl (BZ #101)	4	2
2,2',5,5'-Tetrachlorobiphenyl (BZ #52)	3	2
2,2',5-Trichlorobiphenyl (BZ #18)	3	2
2,3',4,4',5-Pentachlorobiphenyl (BZ #118)	3	2
2,4,4'-Trichlorobiphenyl (BZ #28)	5	5
2,4',5-Trichlorobiphenyl (BZ #31)	6	4
Aldrin	3	2
Anilazine	N/A	8
Atrazine	2	2
Azinphos methyl	3	2
Azinphos-ethyl	4	2
HCH-alpha	3	2
HCH-beta	3	2
HCH-gamma	3	2
Bromophos	1	2
Bromophos-ethyl	5	2
Captan	N/A	5
Carbophenothion	5	1
Chlordane-cis (alpha)	3	2
Chlordane-trans (gamma)	6	2

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Chlorfenson	3	2
Chlorfenvinphos	5	1
Chlorothalonil	4	2
Chlorpyrifos	1	2
Chlorpyrifos-methyl	1	3
DDD-o,p'	3	2
DDD-p,p'	2	3
DDE-o,p'	3	2
DDE-p,p'	3	2
DDT-o,p'	4	2
DDT-p,p'	3	4
Decachlorobiphenyl (BZ #209)	5	3
Desethyl atrazine	2	2
Desiopropyl atrazine	1	3
Diazinon	3	2
Dichlofenthion	3	2
Dichlofluamid	2	2
Dichlorvos	1	2
Dicofol 1	10	3
Dicofol 2	11	7
Dicrotofos	4	1
Dieldrin	8	2
Dimefox	2	2
Dimethoate	3	1
Disulfoton	2	1
Endosulfan I (alpha isomer)	5	3
Endosulfan II (beta isomer)	8	2

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Endosulfan sulfate	1	2
Endrin	6	2
Ethion	2	1
Etrimfos	0	2
Fenitrothion	3	2
Fenson	2	2
Folpet	10	6
Fonofos	2	2
Formothion	2	3
Heptachlor	1	2
Heptachlor endo-epoxide (isomer A)	4	2
Heptachlor exo-epoxide (isomer B)	4	2
Hexachlorobenzene	2	2
Imazalil	8	6
Iodofenphos	3	2
Iprodione	6	2
Malaaxon	4	3
Malathion	1	2
Methacrifos	2	1
Methamidophos	4	1
Methidathion	1	1
Methoxychlor, p,p'-	2	3
Mevinphos	2	1
Omethoate	6	2
Paraoxon	3	2
Parathion	4	2
Parathion-methyl	2	3

AREA (n = 5)	RSD (%)	
	3 ng/mL	100 ng/mL
Pentachloroaniline	4	2
Phosalone	3	2
Pirimiphos-ethyl	3	1
Pirimiphos-methyl	3	2
Procymidone	3	2
Pronamide (Propyzamide)	1	2
Propazine	2	2
Propetamphos	1	1
Pyrazophos	2	2
Quintocene	3	2
Ronnel (Fenchlorphos)	2	2
Simazine	5	1
Sulfotep	2	1
Tecnazene (TCNB)	2	2
Terbufos	1	5
Terbutylazine	2	2
Tetrachlorvinphos, E-isomer	3	2
Tetradifon	3	2
Tetrasul	4	2
Triadimefon	4	1
Triadimenol	5	2
Triazophos	6	2
Vinclozolin	4	2

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