GC-ECD Method

Method Information

ECD.M
OC/OP/ON Scan by Steven C. Moser
Environmental/Chemical Laboratory Scientist

GC-uECD/EPC

ODAFF Pesticide Laboratory Residue Section

Method Change History

Operator	Date	Change Information
Keith Keesee	4/19/2012 7:50:04 AM	This method was created at 4/19/2012 7:50:04 AM and based on method C:\HPCHEM\1\METHODS\SCM-135.M
Keith Keesee	4/19/2012 7:50:05 AM	
Keith Keesee	4/19/2012 7:50:21 AM	
Steven C. Moser	4/24/2012 11:32:34 AM	This method was created at 4/24/2012 11:32:34 AM and based on method C:\HPCHEM\1\METHODS\SCM-60.M
Steven C. Moser	4/24/2012 11:32:41 AM	
Steven C. Moser	4/24/2012 11:34:20 AM	
Keith Keesee	5/2/2012 9:18:09 AM	
Keith Keesee	5/2/2012 9:44:21 AM	Adj. Integration Events
Keith Keesee	5/2/2012 9:49:15 AM	Adj. Peak Labels
Keith Keesee	5/2/2012 9:52:55 AM	
Keith Keesee	5/2/2012 11:25:47 AM	This method was created at 5/2/2012 11:25:47 AM and based on method C:\HPCHEM\1\METHODS\ECD.M
Keith Keesee	5/2/2012 11:25:48 AM	
Keith Keesee	5/2/2012 11:39:04 AM	
Keith Keesee	5/2/2012 5:31:22 PM	Adj. Integration Events
Keith Keesee	5/3/2012 3:22:23 PM	Adj. RTs
Keith Keesee	5/3/2012 3:23:49 PM	Adj. RTs
Keith Keesee	5/3/2012 5:36:21 PM	This method was created at 5/3/2012 5:36:21 PM and based on method C:\HPCHEM\1\METHODS\ECD2.M
Keith Keesee	5/3/2012 5:36:23 PM	
Keith Keesee	5/23/2012 12:20:58 PM	Adj. RT
Keith Keesee	6/12/2012 11:37:40 AM	Update EPA 508 RTs
Keith Keesee	6/12/2012 11:50:40 AM	
Keith Keesee	6/12/2012 11:52:32 AM	
Keith Keesee	6/12/2012 3:49:14 PM	
Keith Keesee	6/12/2012 3:54:03 PM	
Keith Keesee	6/12/2012 3:56:47 PM	
Keith Keesee	6/12/2012 4:10:51 PM	
Keith Keesee	6/13/2012 11:18:46 AM	
Keith Keesee	6/13/2012 11:21:14 AM	
Keith Keesee	6/15/2012 9:40:37 AM	
Keith Keesee	6/15/2012 9:47:23 AM	
Keith Keesee	6/15/2012 9:58:14 AM	adjusted Intergration Prams
Keith Keesee	6/15/2012 10:05:02 AM	
Keith Keesee	6/15/2012 10:21:00 AM	updated Calbration Table

Method Change History

Operator	Date	Change Information
Keith Keesee	7/12/2012 9:16:40 AM	Adj. RT of Permethrin
Keith Keesee	8/2/2012 11:48:11 AM	
Keith Keesee	8/14/2012 9:52:15 AM	
Keith Keesee	8/23/2012 1:03:44 PM	
Keith Keesee	10/24/2012 4:27:19 PM	
elyon	11/1/2012 9:24:52 AM	
Jennifer Bledsoe	5/10/2013 2:33:53 PM	Update RT
Elena Lyon	5/16/2013 1:13:17 PM	
Jennifer Bledsoe	5/30/2013 3:57:24 PM	
Jennifer Bledsoe	6/14/2013 4:08:26 PM	Installed new column Serial #1086027
Jennifer Bledsoe	6/14/2013 4:09:48 PM	
Jennifer Bledsoe	6/17/2013 9:39:12 AM	
Jennifer Bledsoe	6/17/2013 10:01:28 AM	
Jennifer Bledsoe	6/17/2013 4:08:43 PM	
Jennifer Bledsoe	6/18/2013 3:21:31 PM	Updated RT for InCk and EPA Mix after baking column
Jennifer Bledsoe	6/19/2013 9:33:58 AM	
Jennifer Bledsoe	6/27/2013 8:19:37 AM	Updated RTs
Jennifer Bledsoe	6/28/2013 8:10:38 AM	
Jennifer Bledsoe	6/28/2013 9:19:12 AM	Updated RT
Jennifer Bledsoe	6/28/2013 11:47:41 AM	
Jennifer Bledsoe	7/23/2013 3:28:28 PM	This method was created at 7/23/2013 3:28:28 PM and based on method C:\HPCHEM\1\DATA\070213E1\CAPTAN.D\RUN.M
Jennifer Bledsoe	7/23/2013 3:28:30 PM	
Jennifer Bledsoe	8/8/2013 8:27:55 AM	
Jennifer Bledsoe	8/8/2013 8:38:09 AM	
Jennifer Bledsoe	8/8/2013 8:42:44 AM	
Jennifer Bledsoe	8/8/2013 8:47:06 AM	
Jennifer Bledsoe	8/8/2013 8:51:54 AM	
Jennifer Bledsoe	8/8/2013 8:58:04 AM	
Jennifer Bledsoe	8/8/2013 1:47:21 PM	Updated EPA mix cal curve
Laura Esquivel	10/29/2013 3:20:15 PM	
Laura Esquivel	10/30/2013 3:06:16 PM	
Kyle Baker	11/1/2013 12:46:15 PM	
Kyle Baker	11/8/2013 10:09:14 AM	
Kyle Baker	11/15/2013 9:38:39 AM	
Kyle Baker	11/15/2013 10:19:19 AM	
Kyle Baker	11/18/2013 11:48:02 AM	
Kyle Baker	11/18/2013 11:53:32 AM	
Kyle Baker	12/11/2013 11:12:04 AM	
Kyle Baker	12/11/2013 11:14:09 AM	
Kyle Baker	3/18/2014 12:16:01 PM	This method was created at 3/18/2014 12:16:01 PM and based on method C:\HPCHEM\1\DATA\010614E2\505.D\RUN.M
Kyle Baker	3/18/2014 12:16:16 PM	Had to fix method after a power bump. SM
Kyle Baker	3/18/2014 12:17:22 PM	
Kyle Baker	5/5/2014 9:11:52 AM	
Laura Esquivel	5/9/2014 8:43:12 AM	
Kyle Baker	6/23/2014 10:52:37 AM	set split to 25:1 instead of 5:1

Method Change History

Operator	Date	Change Information
Kyle Baker	6/24/2014 3:43:33 PM	Changed split ratio back to 5:1
Jennifer Busey	7/1/2014 3:22:19 PM	
Jennifer Busey	7/2/2014 8:43:59 AM	Updated RT
Jennifer Busey	8/4/2014 1:57:07 PM	
Jennifer Busey	8/14/2014 10:03:42 AM	RT Updated
Jennifer Busey	8/26/2014 8:47:17 AM	
Jennifer Busey	8/26/2014 8:48:25 AM	integrated Diazinon
Yvette Turner	9/24/2014 12:38:32 PM	
Yvette Turner	9/24/2014 12:41:14 PM	
Yvette Turner	10/7/2014 9:16:53 AM	peak integration
Yvette Turner	10/7/2014 9:46:56 AM	
Yvette Turner	10/7/2014 11:15:07 AM	
Yvette Turner	10/7/2014 11:32:22 AM	
Yvette Turner	11/4/2014 8:00:57 AM	update retention times
Yvette Turner	11/4/2014 8:44:00 AM	
Yvette Turner	11/4/2014 9:13:46 AM	
Yvette Turner	2/12/2015 9:26:00 AM	
Yvette Turner	2/12/2015 11:05:31 AM	updated retention times
Yvette Turner	2/12/2015 12:09:54 PM	
Yvette Turner	2/17/2015 8:53:19 AM	Updated retention times
Yvette Turner	3/9/2015 10:44:51 AM	This method was created at 3/9/2015 10:44:51 AM and based on method C:\HPCHEM\1\DATA\022615E1\345.D\RUN.M
Yvette Turner	3/9/2015 10:44:52 AM	

Run Time Checklist

Pre-Run Cmd/Macro: off

Data Acquisition: on

Standard Data Analysis: on

Customized Data Analysis: off

Save GLP Data: on

Post-Run Cmd/Macro: off

Save Method with Data: skipped - no ACQ running

Injection Source and Location

Injection Source: GC Injector

Injection Location: Front

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OVEN
Initial temp: 180 'C (On)
Initial time: 1.50 min
Maximum temp: 350 'C
Equilibration time: 0.50 min
Ramps:

#	Rate	Final temp	Final time
1	30.00	220	2.17
2	30.00	280	0.00
3	40.00	300	5.00
4	0.0(Off)		

Post temp: 180 'C
Post time: 0.00 min
Run time: 12.50 min

FRONT INLET (SPLIT/SPLITLESS)
Mode: Pulsed Split
Initial temp: 230 'C (On)
Pressure: 9.57 psi (On)
Split ratio: 5:1
Pulse pressure: 20.0 psi
Pulse time: 0.50 min
Split flow: 12.5 mL/min
Total flow: 21.4 mL/min
Gas saver: On
Saver flow: 15.0 mL/min
Saver time: 60.00 min
Gas type: Hydrogen

BACK INLET (SPLIT/SPLITLESS)
Mode: Split
Initial temp: 210 'C (On)
Pressure: 5.94 psi (On)
Split ratio: 5.002:1
Split flow: 7.1 mL/min
Total flow: 15.9 mL/min
Gas saver: Off
Gas type: Hydrogen

COLUMN 1
Capillary Column
Model Number: Restek 13324
Rxi-MS
Max temperature: 350 'C
Nominal length: 30.0 m
Nominal diameter: 320.00 um
Nominal film thickness: 0.25 um
Mode: ramped flow
Initial flow: 2.5 mL/min
Initial time: 4.00 min

#	Rate	Final flow	Final time
1	4.40	18.0	0.00
2	9.40	28.0	5.50
3	0.0(Off)		

Post flow: 0.0 mL/min
Nominal init pressure: 9.59 psi
Average velocity: 59 cm/sec
Inlet: Front Inlet
Outlet: Front Detector
Outlet pressure: ambient

COLUMN 2
Capillary Column
Model Number: Restek 13324
Rxi-1MS, 30m x 0.32mm x 0.25um
Max temperature: 350 'C
Nominal length: 30.0 m
Nominal diameter: 320.00 um
Nominal film thickness: 0.25 um
Mode: constant pressure
Pressure: 5.94 psi
Nominal initial flow: 1.4 mL/min
Average velocity: 37 cm/sec
Inlet: Back Inlet
Outlet: Back Detector
Outlet pressure: ambient

FRONT DETECTOR (µECD)
Temperature: 325 'C (On)
Mode: Constant makeup flow
Makeup flow: 135.0 mL/min (On)
Makeup Gas Type: Nitrogen
Electrometer: On

BACK DETECTOR (NPD)
Temperature: 325 'C (On)
Hydrogen flow: 2.0 mL/min (Off)
Air flow: 60.0 mL/min (Off)
Mode: Constant column+makeup flow
Combined flow: 15.0 mL/min
Makeup flow: On
Makeup Gas Type: Nitrogen
Adjust offset: 30.00
Electrometer: On
Bead: Off
Equilibration time: 5.00

SIGNAL 1
Data rate: 50 Hz
Type: front detector
Save Data: On
Zero: 0.0 (Off)
Range: 0
Fast Peaks: Off
Attenuation: 0

SIGNAL 2
Data rate: 20 Hz
Type: back detector
Save Data: Off
Zero: 0.0 (Off)
Range: 0
Fast Peaks: Off
Attenuation: 0

COLUMN COMP 1
Derive from front detector

COLUMN COMP 2
Derive from back detector

POST RUN
Post Time: 0.00 min

TIME TABLE

Time	Specifier	Parameter & Setpoint

GC Injector

Front Injector:

Sample Washes	2
Sample Pumps	3
Injection Volume	1.0 microliters
Syringe Size	10.0 microliters
PostInj Solvent A Washes	3
PostInj Solvent B Washes	1
Viscosity Delay	0 seconds
Plunger Speed	Fast
PreInjection Dwell	0.00 minutes
PostInjection Dwell	0.00 minutes
Sampling Depth	0.0 mm

Back Injector:
No parameters specified

Integration Events

Results will be produced with the enhanced integrator.

Default Integration Event Table "Event"

Event	Value	Time
Initial Slope Sensitivity	1.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.700	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_TCD"

Event	Value	Time
Initial Slope Sensitivity	100.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_ADC"

Event	Value	Time
Initial Slope Sensitivity	20.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_FID"

Event	Value	Time
Initial Slope Sensitivity	50.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_FPD"

Event	Value	Time
Initial Slope Sensitivity	50.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_uECD"

Event	Value	Time
Initial Slope Sensitivity	146.460	Initial
Initial Peak Width	0.030	Initial
Initial Area Reject	12.000	Initial
Initial Height Reject	6.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_ECD"

Event	Value	Time
Initial Slope Sensitivity	100.000	Initial
Initial Peak Width	0.080	Initial
Initial Area Reject	1.000	Initial
Initial Height Reject	1.000	Initial
Initial Shoulders	OFF	Initial

Detector Default Integration Event Table "Event_NPD"

Event	Value	Time
Initial Slope Sensitivity	500.000	Initial
Initial Peak Width	0.040	Initial
Initial Area Reject	0.010	Initial
Initial Height Reject	0.100	Initial
Initial Shoulders	OFF	Initial

Signal Specific Integration Event Table "Event_ECD1A"

Event	Value	Time
Initial Slope Sensitivity	2000.000	Initial
Initial Peak Width	0.005	Initial
Initial Area Reject	100.000	Initial
Initial Height Reject	50.000	Initial
Initial Shoulders	DROP	Initial
Integration	OFF	0.000
Integration	ON	1.000
Integration	OFF	9.000

Apply Manual Integration Events: No

Advanced Baseline : Yes

Calibration Table

Calib. Data Modified : 2/17/2015 8:50:10 AM

Calculate : External Standard
Based on : Peak Height

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.000 min

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Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.000 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : compound name not specified
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: Yes, even for non-identified peaks

Curve Type : Linear (some peaks differ, see below)
Origin : Ignored (some peaks differ, see below)
Weight : Equal (some peaks differ, see below)

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: No Update

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: ECD1 A,

RetTime [min]	Sig	Lvl		Amount [ng/ul]	Height	Amt/Height	Ref	Grp	Name
1.027	1	1	1	4.42000e-1	1424.56201	3.10271e-4			Clopyralid m.e.
1.295	1	1	1	2.12000e-1	439.90289	4.81925e-4			Dicamba m.e.
1.366	1	1	1	1.00000	1945.69043	5.13956e-4			Methomyl
1.710	1	1	1	4.48000e-1	313.02985	1.43117e-3			2,4-D
1.812	1	1	1	1.00000e-1	5868.43701	1.70403e-5			TCMX
2.058	1	1	1	1.00000e-2	4696.91211	2.12906e-6			alpha-BHC
			2	5.00000e-2	6.63500e4	7.53580e-7			
			3	1.00000e-1	1.86725e5	5.35547e-7			
			4	2.50000e-1	6.40414e5	3.90372e-7			
2.168	1	1	1	1.00000e-2	1624.33362	6.15637e-6			beta-BHC
			2	5.00000e-2	1.29239e4	3.86880e-6			
			3	1.00000e-1	3.41054e4	2.93209e-6			
			4	2.50000e-1	1.94642e5	1.28441e-6			
2.246	1	1	1	1.82000e-1	959.13055	1.89755e-4			PCP m.e.
2.326	1	1	1	1.00000e-2	4390.62061	2.27758e-6			Lindane
			2	5.00000e-2	6.35680e4	7.86559e-7			
			3	1.00000e-1	1.85113e5	5.40211e-7			
			4	2.50000e-1	6.33512e5	3.94626e-7			
2.368	1	1	1	1.00000e-2	3810.67017	2.62421e-6			delta-BHC
			2	5.00000e-2	5.41755e4	9.22926e-7			
			3	1.00000e-1	1.79098e5	5.58354e-7			
			4	2.50000e-1	5.75522e5	4.34388e-7			
2.384	1	1	1	2.08000e-1	986.20221	2.10910e-4			2,4,5-T m.e.
2.569	1	1	1	5.00000e-2	41.58520	1.20235e-3			Diazinon
2.596	1	1	1	1.00000e-1	1616.67700	6.18553e-5			PCNB
2.601	1	1	1	7.98000e-1	4760.92773	1.67614e-4			Parathion Methyl
2.639	1	1	1	9.99000e-1	1.02025e4	9.79172e-5			Chlorothalonil
2.671	1	1	1	5.00000e-2	24.21532	2.06481e-3			Disulfoton
2.722	1	1	1	1.89200e-1	28.40828	6.66003e-3			Dinoseb m.e.
2.835	1	1	1	5.53500e-1	251.76421	2.19849e-3			Reldan
2.936	1	1	1	2.30400e-1	1053.45227	2.18709e-4			Picloram m.e.
2.986	1	1	1	5.00000e-2	168.08116	2.97475e-4			Methyl Parathion
3.050	1	1	1	1.00200	3852.64917	2.60081e-4			Vinclozolin
3.067	1	1	1	1.00000e-2	3353.19849	2.98223e-6			Heptachlor
			2	5.00000e-2	4.44843e4	1.12399e-6			
			3	1.00000e-1	1.34210e5	7.45101e-7			
			4	2.50000e-1	5.42166e5	4.61113e-7			
3.300	1	1	1	5.00000e-2	125.14570	3.99534e-4			Malathion
3.319	1	1	1	1.00000e-1	1.21988e4	8.19752e-6			Prodiamine
3.364	1	1	1	1.56000e-1	3414.49756	4.56875e-5			Chlorpyrifos
3.421	1	1	1	1.00000e-2	4408.12842	2.26854e-6			Aldrin

Method: C:\HPCHEM\1\METHODS\ECD.M of 3/9/2015 10:44:52 AM

RetTime [min]	Sig	Lvl	Amount [ng/ul]	Height	Amt/Height	Ref	Grp	Name
		2	5.00000e-2	6.02076e4	8.30460e-7			
		3	1.00000e-1	1.69816e5	5.88873e-7			
		4	2.50000e-1	5.87971e5	4.25191e-7			
3.624	1	5	5.00000e-1	309.82510	1.61381e-3			Dacthal
3.704	1	1	1.00000	311.89117	3.20625e-3			
3.789	1	1	1.00000e-2	3742.91211	2.67172e-6			Fipronil
		2	5.00000e-2	4.59729e4	1.08760e-6			
		3	1.00000e-1	1.33987e5	7.46341e-7			
		4	2.50000e-1	5.15816e5	4.84669e-7			
3.791	1	1	1.00000e-1	496.72495	2.01319e-4			Isofenphos
3.824	1	1	9.88000e-1	2367.17725	4.17375e-4			Captan
3.867	1	1	1.54000	8397.45996	1.83389e-4			Pendimethalin
4.028	1	1	1.96000	261.18826	7.50417e-3			Pirimiphos Methyl
4.063	1	1	1.00000e-2	4995.58008	2.00177e-6			g-chlordane
		2	5.00000e-2	7.46090e4	6.70160e-7			
		3	1.00000e-1	1.95738e5	5.10887e-7			
		4	2.50000e-1	6.40596e5	3.90262e-7			
4.230	1	1	1.00000e-2	4896.07666	2.04245e-6			Endosulfan I
		2	5.00000e-2	6.99753e4	7.14538e-7			
		3	1.00000e-1	1.89318e5	5.28212e-7			
		4	2.50000e-1	6.05361e5	4.12977e-7			
4.260	1	1	1.00000e-2	5996.03906	1.66777e-6			alpha-chlordane
		2	5.00000e-2	9.27057e4	5.39341e-7			
		3	1.00000e-1	2.40732e5	4.15400e-7			
		4	2.50000e-1	6.99314e5	3.57493e-7			
4.448	1	1	1.00000e-2	5544.26660	1.80367e-6			p,p'-DDE
		2	5.00000e-2	9.07221e4	5.51134e-7			
		3	1.00000e-1	2.27711e5	4.39153e-7			
		4	2.50000e-1	7.06875e5	3.53669e-7			
4.481	1	1	1.00000e-2	7179.67969	1.39282e-6			Dieldrin
		2	5.00000e-2	1.15595e5	4.32545e-7			
		3	1.00000e-1	2.90734e5	3.43957e-7			
		4	2.50000e-1	7.75615e5	3.22325e-7			
4.500	1	1	1.00000	0.00000	0.00000			Myclobutanil
4.618	1	1	1.00000e-1	2.62434e4	3.81048e-6			Oxadiazon
4.619	1	1	4.00000e-1	1219.73291	3.27941e-4			Oxyfluorfen
4.649	1	1	1.00000e-2	3986.19043	2.50866e-6			Endrin
		2	5.00000e-2	5.70391e4	8.76592e-7			
		3	1.00000e-1	1.57978e5	6.33000e-7			
		4	2.50000e-1	5.75816e5	4.34166e-7			
4.670	1	1	1.00000e-2	4006.11938	2.49618e-6			Endosulfan II
		2	5.00000e-2	5.87382e4	8.51235e-7			
		3	1.00000e-1	1.70815e5	5.85429e-7			
		4	2.50000e-1	5.87546e5	4.25499e-7			
4.784	1	1	1.00000e-2	4378.14014	2.28407e-6			p,p'-DDD
		2	5.00000e-2	6.55576e4	7.62688e-7			
		3	1.00000e-1	1.86131e5	5.37256e-7			
		4	2.50000e-1	6.29412e5	3.97196e-7			
4.802	1	1	1.00000e-2	3762.21533	2.65801e-6			Endrin Aldehyde
		2	5.00000e-2	5.21170e4	9.59380e-7			
		3	1.00000e-1	1.47239e5	6.79168e-7			
		4	2.50000e-1	5.41579e5	4.61613e-7			
4.966	1	1	1.00000e-2	225.96364	4.42549e-5			Ethion
5.032	1	1	1.00000e-2	764.87964	1.30740e-5			Endosulfan Sulfate
		2	5.00000e-2	7335.86182	6.81583e-6			
		3	1.00000e-1	2.23881e4	4.46666e-6			
		4	2.50000e-1	1.47013e5	1.70053e-6			
5.162	1	1	1.00000e-2	1596.64819	6.26312e-6			p,p' - DDT
		2	5.00000e-2	2.21308e4	2.25929e-6			
		3	1.00000e-1	8.04960e4	1.24230e-6			
		4	2.50000e-1	4.77851e5	5.23176e-7			
5.375	1	1	1.00000e-2	5404.40430	1.85034e-6			Endrin Ketone
		2	5.00000e-2	8.71220e4	5.73908e-7			
		3	1.00000e-1	2.38645e5	4.19032e-7			
		4	2.50000e-1	6.95434e5	3.59488e-7			

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RetTime [min]	Sig	Lvl	Amount [ng/ul]	Height	Amt/Height	Ref	Grp	Name
5.593	1	1	1.00000e-2	629.91046	1.58753e-5			Methoxychlor
		2	5.00000e-2	5438.36963	9.19393e-6			
		3	1.00000e-1	1.57111e4	6.36493e-6			
		4	2.50000e-1	1.05376e5	2.37246e-6			
5.656	1	1	1.41500e-1	2847.39185	4.96946e-5			Bifenthrin
5.807	1	1	5.00000e-2	66.15516	7.55799e-4			Azinphos-methyl
5.937	1	1	1.00000	0.00000	0.00000			Cyhalothrin I
5.990	1	1	1.00000	0.00000	0.00000			Cyhalothrin II
6.067	1	1	9.90000e-1	8787.55176	1.12659e-4			Fenarimol
6.237	1	1	3.90310e-1	1106.82239	3.52640e-4		1	Permethrin I
6.279	1	1	6.09690e-1	1728.93262	3.52640e-4		1	Permethrin II
6.433	1	1	6.97664e-2	1259.81897	5.53781e-5		2	Cyfluthrin I
6.465	1	1	1.04845e-3	18.93254	5.53781e-5		2	Cyfluthrin II
6.492	1	1	7.37328e-2	1331.44360	5.53781e-5		2	Cyfluthrin III
6.506	1	1	9.54524e-2	1723.64868	5.53781e-5		2	Cyfluthrin IV
6.506	1	1	1.00000	3.02487e5	3.30593e-6			Boscalid
6.535	1	1	7.86939e-3	20.49156	3.84031e-4		3	Cypermethrin I
6.566	1	1	4.72971e-2	123.15967	3.84031e-4		3	Cypermethrin II
6.593	1	1	4.48335e-2	116.74443	3.84031e-4		3	Cypermethrin III&IV
6.714	1	1	1.00000e-1	1.59947e4	6.25205e-6			DCBP
6.906	1	1	1.00000e-1	8955.77441	1.11660e-5			Fenvalerate I
6.920	1	1	1.00000e-1	0.00000	0.00000			Esfenvalerate I
6.971	1	1	1.00000e-1	8317.79492	1.20224e-5			Fenvalerate II
6.992	1	1	1.00000e-1	0.00000	0.00000			Esfenvalerate II
7.013	1	1	1.00000e-1	230.02556	4.34734e-4			Deltamethrin

More compound-specific settings:

Compound: Clopyralid m.e.
- Curve Type : Linear
- Origin : Forced

Compound: Dicamba m.e.
- Curve Type : Linear
- Origin : Forced

Compound: 2,4-D
- Curve Type : Linear
- Origin : Forced

Compound: TCMX
- Time Window : From 1.774 min To 1.854 min
- Curve Type : Linear
- Origin : Forced

Compound: alpha-BHC
- Time Window : From 2.047 min To 2.087 min
- Curve Type : Power
- Origin : Connected
- Calibration Level Weights:/
  - Level 1 : 1
  - Level 2 : 1
  - Level 3 : 1
  - Level 4 : 1

Compound: beta-BHC
- Time Window : From 2.151 min To 2.181 min
- Curve Type : Power
- Origin : Connected

Compound: PCP m.e.
- Curve Type : Linear
- Origin : Forced

Compound: Lindane

Time Window : From 2.315 min To 2.348 min
Curve Type : Power
Origin : Connected

Compound: delta-BHC
Time Window : From 2.353 min To 2.380 min
Curve Type : Power
Origin : Connected

Compound: 2,4,5-T m.e.
Time Window : From 2.378 min To 2.396 min
Curve Type : Linear
Origin : Forced

Compound: Diazinon
Curve Type : Linear
Origin : Forced

Compound: PCNB
Time Window : From 2.574 min To 2.625 min
Curve Type : Linear
Origin : Forced

Compound: Parathion Methyl
Curve Type : Linear
Origin : Forced

Compound: Chlorothalonil
Curve Type : Linear
Origin : Forced

Compound: Disulfoton
Curve Type : Linear
Origin : Forced

Compound: Dinoseb m.e.
Curve Type : Linear
Origin : Forced

Compound: Reldan
Curve Type : Linear
Origin : Forced

Compound: Picloram m.e.
Curve Type : Linear
Origin : Forced

Compound: Methyl Parathion
Time Window : From 2.971 min To 2.989 min
Curve Type : Linear
Origin : Forced

Compound: Vinclozolin
Curve Type : Linear
Origin : Forced

Compound: Heptachlor
Time Window : From 3.053 min To 3.084 min
Curve Type : Linear
Origin : Connected

Compound: Malathion
Curve Type : Linear
Origin : Forced

Compound: Chlorpyrifos
Time Window : From 3.354 min To 3.382 min
Curve Type : Linear

```
  Origin                    : Forced

Compound: Aldrin
  Time Window               : From 3.404 min To 3.438 min
  Curve Type                : Linear
  Origin                    : Connected

Compound: Dacthal
  Time Window               : From 3.616 min To 3.641 min
  Curve Type                : Linear
  Origin                    : Forced
  Calibration Level Weights:/
    Level 5                 : 1

Compound:
  Time Window               : From 3.696 min To 3.716 min
  Curve Type                : Linear
  Origin                    : Forced

Compound: Fipronil
  Time Window               : From 3.771 min To 3.807 min
  Curve Type                : Linear
  Origin                    : Connected

Compound: Isofenphos
  Time Window               : From 3.785 min To 3.802 min
  Curve Type                : Linear
  Origin                    : Forced

Compound: Captan
  Curve Type                : Linear
  Origin                    : Forced

Compound: Pendimethalin
  Curve Type                : Linear
  Origin                    : Forced

Compound: Pirimiphos Methyl
  Time Window               : From 4.009 min To 4.048 min
  Curve Type                : Linear
  Origin                    : Forced

Compound: g-chlordane
  Curve Type                : Linear
  Origin                    : Connected
  Calibration Level Weights:/
    Level 1                 : 1
    Level 2                 : 1
    Level 3                 : 1
    Level 4                 : 1

Compound: Endosulfan I
  Time Window               : From 4.209 min To 4.243 min
  Curve Type                : Linear
  Origin                    : Forced

Compound: alpha-chlordane
  Time Window               : From 4.246 min To 4.281 min
  Curve Type                : Linear
  Origin                    : Connected
  Calibration Level Weights:/
    Level 1                 : 1
    Level 2                 : 1
    Level 3                 : 1
    Level 4                 : 1

Compound: p,p'-DDE
  Time Window               : From 4.426 min To 4.455 min
```

```
    Curve Type                : Linear
    Origin                    : Connected

  Compound: Dieldrin
    Time Window               : From 4.465 min To 4.503 min
    Curve Type                : Linear
    Origin                    : Forced

  Compound: Oxyfluorfen
    Curve Type                : Linear
    Origin                    : Forced

  Compound: Endrin
    Time Window               : From 4.633 min To 4.658 min
    Curve Type                : Quadratic
    Origin                    : Connected

  Compound: Endosulfan II
    Time Window               : From 4.658 min To 4.680 min
    Curve Type                : Quadratic
    Origin                    : Connected

  Compound: p,p'-DDD
    Time Window               : From 4.775 min To 4.795 min
    Curve Type                : Linear
    Origin                    : Connected

  Compound: Endrin Aldehyde
    Time Window               : From 4.791 min To 4.815 min
    Curve Type                : Quadratic
    Origin                    : Connected

  Compound: Ethion
    Time Window               : From 4.941 min To 4.969 min
    Curve Type                : Linear
    Origin                    : Forced

  Compound: Endosulfan Sulfate
    Time Window               : From 5.023 min To 5.075 min
    Curve Type                : Quadratic
    Origin                    : Connected

  Compound: p,p' - DDT
    Time Window               : From 5.146 min To 5.191 min
    Curve Type                : Linear
    Origin                    : Connected
    Calibration Level Weights:/
      Level 1                 : 1
      Level 2                 : 1
      Level 3                 : 1
      Level 4                 : 1

  Compound: Endrin Ketone
    Curve Type                : Quadratic
    Origin                    : Connected
    Calibration Level Weights:/
      Level 1                 : 1
      Level 2                 : 1
      Level 3                 : 1
      Level 4                 : 1

  Compound: Methoxychlor
    Curve Type                : Quadratic
    Origin                    : Connected
    Calibration Level Weights:/
      Level 1                 : 1
      Level 2                 : 1
      Level 3                 : 1
```

Level 4 : 1

Compound: Bifenthrin
Curve Type : Linear
Origin : Forced

Compound: Azinphos-methyl
Curve Type : Linear
Origin : Forced

Compound: Cyhalothrin II
Curve Type : Linear
Origin : Forced

Compound: Fenarimol
Curve Type : Linear
Origin : Forced

Compound: Permethrin I
Time Window : From 6.223 min To 6.251 min
Curve Type : Linear
Origin : Forced

Compound: Permethrin II
Time Window : From 6.265 min To 6.291 min
Curve Type : Linear
Origin : Forced

Compound: Cyfluthrin I
Time Window : From 6.423 min To 6.441 min
Curve Type : Linear
Origin : Forced

Compound: Cyfluthrin II
Time Window : From 6.454 min To 6.475 min
Curve Type : Linear
Origin : Forced

Compound: Cyfluthrin III
Time Window : From 6.484 min To 6.500 min
Curve Type : Linear
Origin : Forced

Compound: Cyfluthrin IV
Time Window : From 6.499 min To 6.514 min
Curve Type : Linear
Origin : Forced

Compound: Cypermethrin I
Time Window : From 6.524 min To 6.550 min
Curve Type : Linear
Origin : Forced

Compound: Cypermethrin II
Time Window : From 6.551 min To 6.578 min
Curve Type : Linear
Origin : Forced

Compound: Cypermethrin III&IV
Time Window : From 6.580 min To 6.598 min
Curve Type : Linear
Origin : Forced

Compound: DCBP
Curve Type : Linear
Origin : Forced

Compound: Deltamethrin

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```
      Curve Type                : Linear
      Origin                    : Forced

    Group summary :

      Group 1 ( Permethrin ) :
        Group members:
           Permethrin I with retention time 6.237 min
           Permethrin II with retention time 6.279 min
        Group Amount Calculation:
          Level 1 with amount 1.00000 ng/ul
      Group 2 ( Cyfluthrin ) :
        Group members:
           Cyfluthrin I with retention time 6.433 min
           Cyfluthrin II with retention time 6.465 min
           Cyfluthrin III with retention time 6.492 min
           Cyfluthrin IV with retention time 6.506 min
        Group Amount Calculation:
          Level 1 with amount 0.24000 ng/ul
      Group 3 ( Cypermethrin ) :
        Group members:
           Cypermethrin I with retention time 6.535 min
           Cypermethrin II with retention time 6.566 min
           Cypermethrin III&IV with retention time 6.593 min
        Group Amount Calculation:
          Level 1 with amount 0.10000 ng/ul

    24 Warnings or Errors (10 first messages follow) :

    Warning : Curve requires more calibration points., (Methomyl)
    Warning : Zero or negative calibration curve slope, (Cyhalothrin II)
    Warning : Curve requires more calibration points., (Boscalid)
    Warning : Overlapping peak time windows at 2.368 min, signal 1
    Warning : Overlapping peak time windows at 2.569 min, signal 1
    Warning : Overlapping peak time windows at 2.596 min, signal 1
    Warning : Overlapping peak time windows at 3.05 min, signal 1
    Warning : Overlapping peak time windows at 3.3 min, signal 1
    Warning : Overlapping peak time windows at 3.789 min, signal 1
    Warning : Overlapping peak time windows at 4.028 min, signal 1

    ================================================================
                              Peak Sum Table
    ================================================================

    ***No Entries in table***
    ================================================================
```