

# Supplemental information for

**“Automated mini-column solid-phase extraction cleanup for rapid analysis of chemical contaminants in foods by low-pressure gas chromatography – tandem mass spectrometry”**

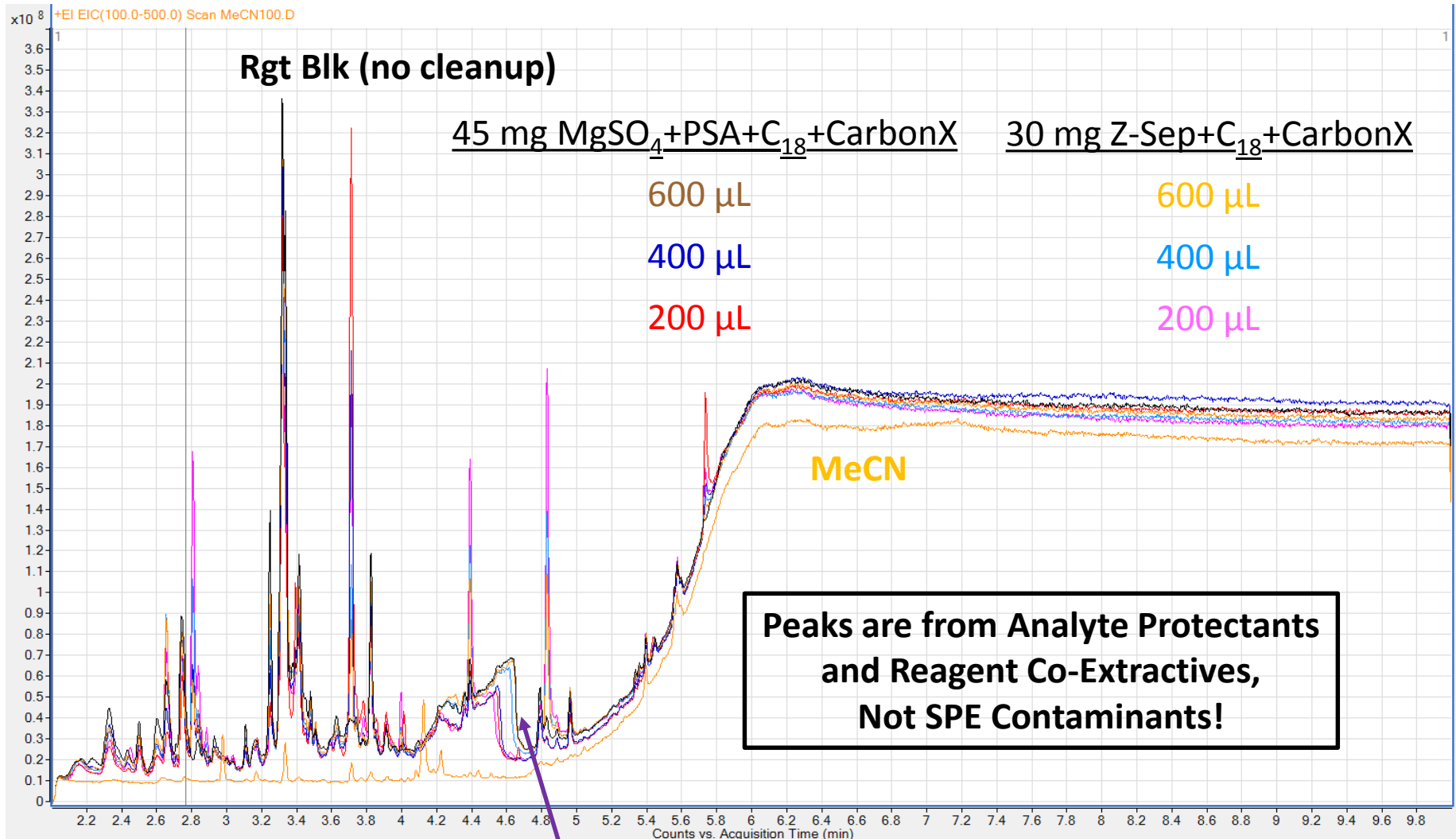
**by Steven J. Lehotay, Lijun Han, and Yelena Sapozhnikova**

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Eastern Regional Research Center  
Wyndmoor, Pennsylvania; USA

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# Automated Mini-SPE of QuEChERS Reagent Blank Extracts

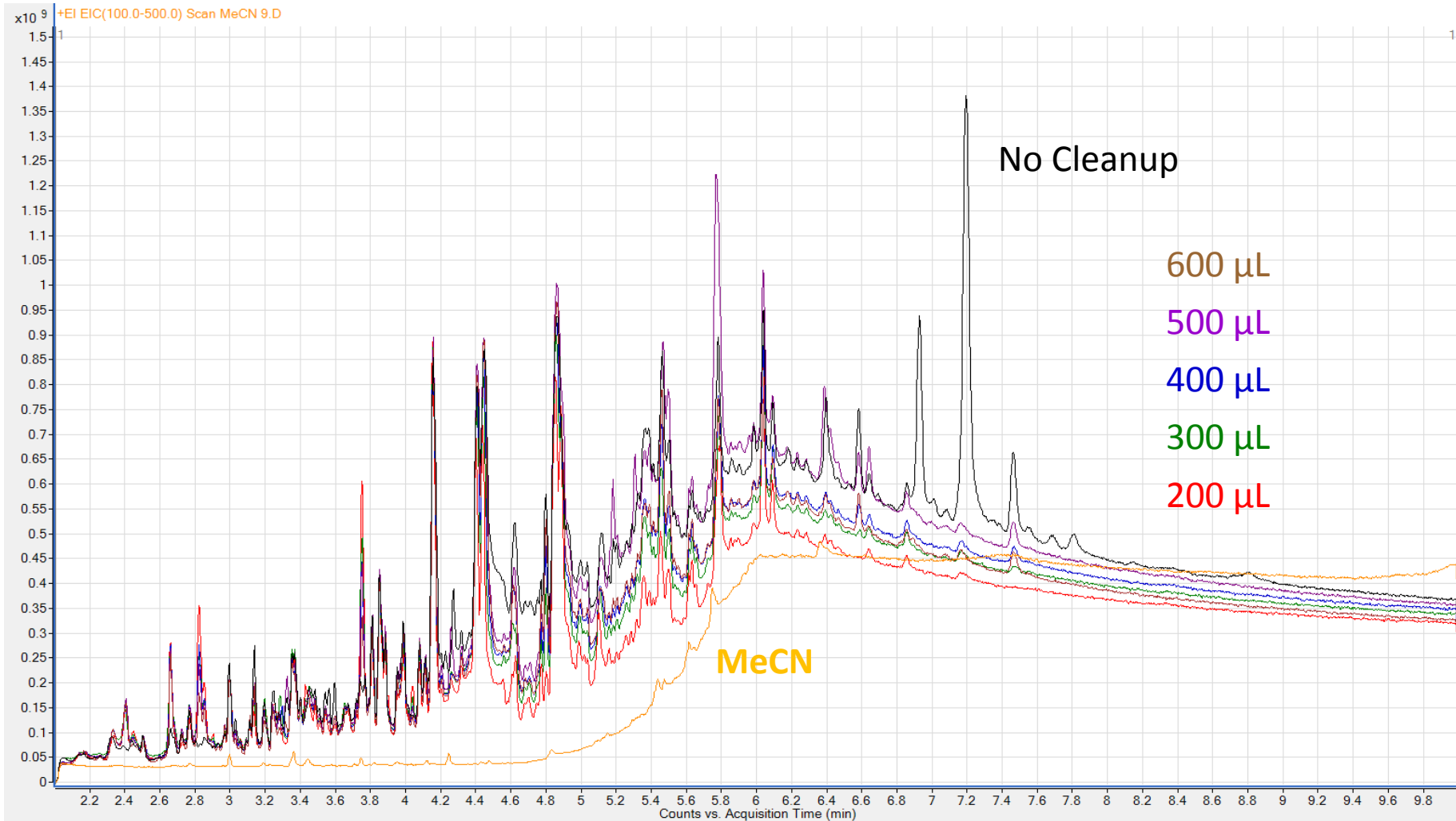
## GC-MS Full Scan $m/z$ 100-500, 1 $\mu\text{L}$ injection including APs



Water in extracts when  $\text{MgSO}_4$  not included in SPE yields worse cleanup

# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Kale Extracts

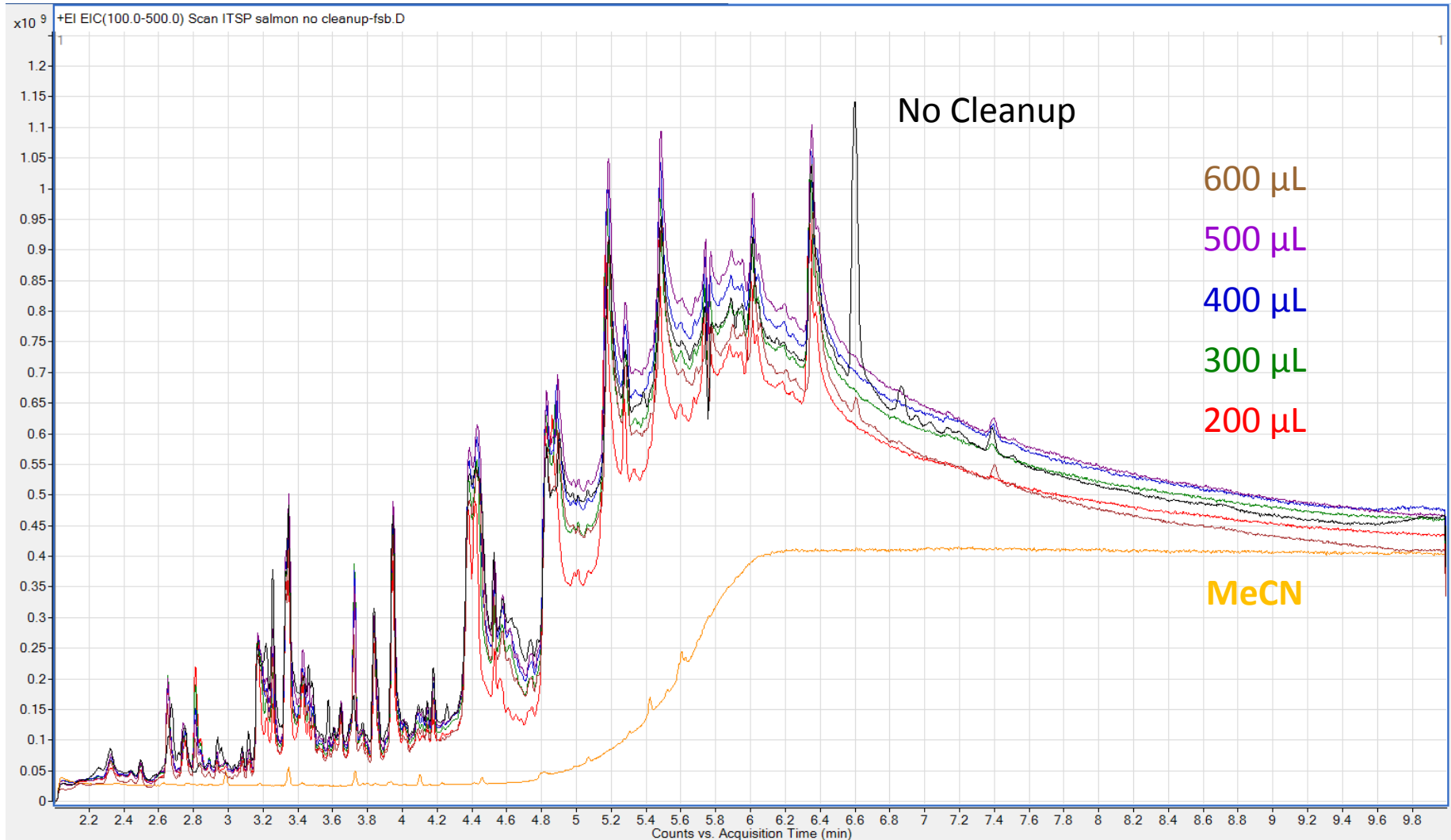
## GC-MS Full Scan $m/z$ 100-500, 1 $\mu\text{L}$ injection including APs



**Conclusion: Not much cleanup, but 200-300  $\mu\text{L}$  is ok**

# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Salmon Extracts

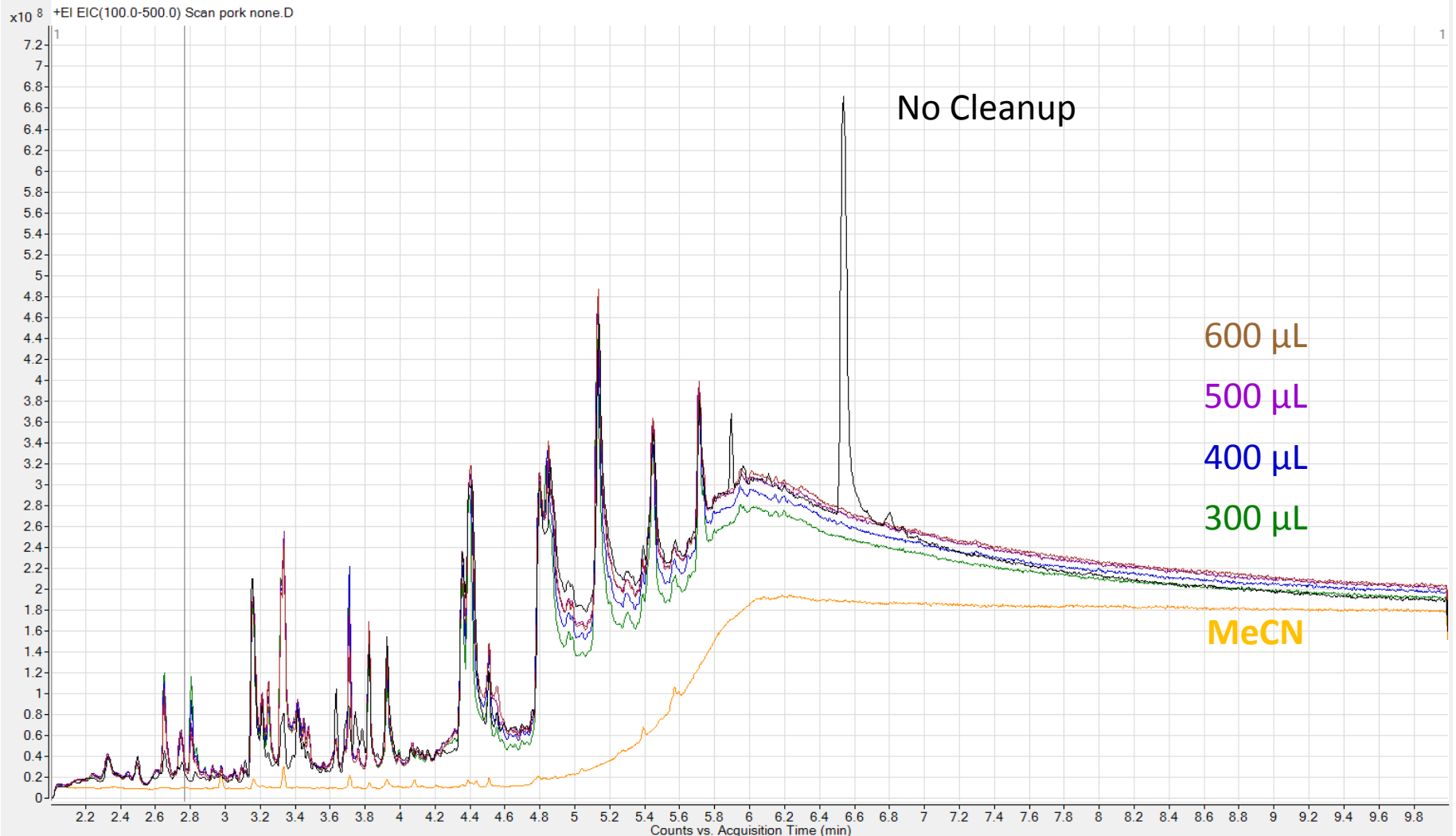
## GC-MS Full Scan $m/z$ 100-500, 1 $\mu$ L injection including APs



**Conclusion: Not much cleanup**

# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Pork Extracts

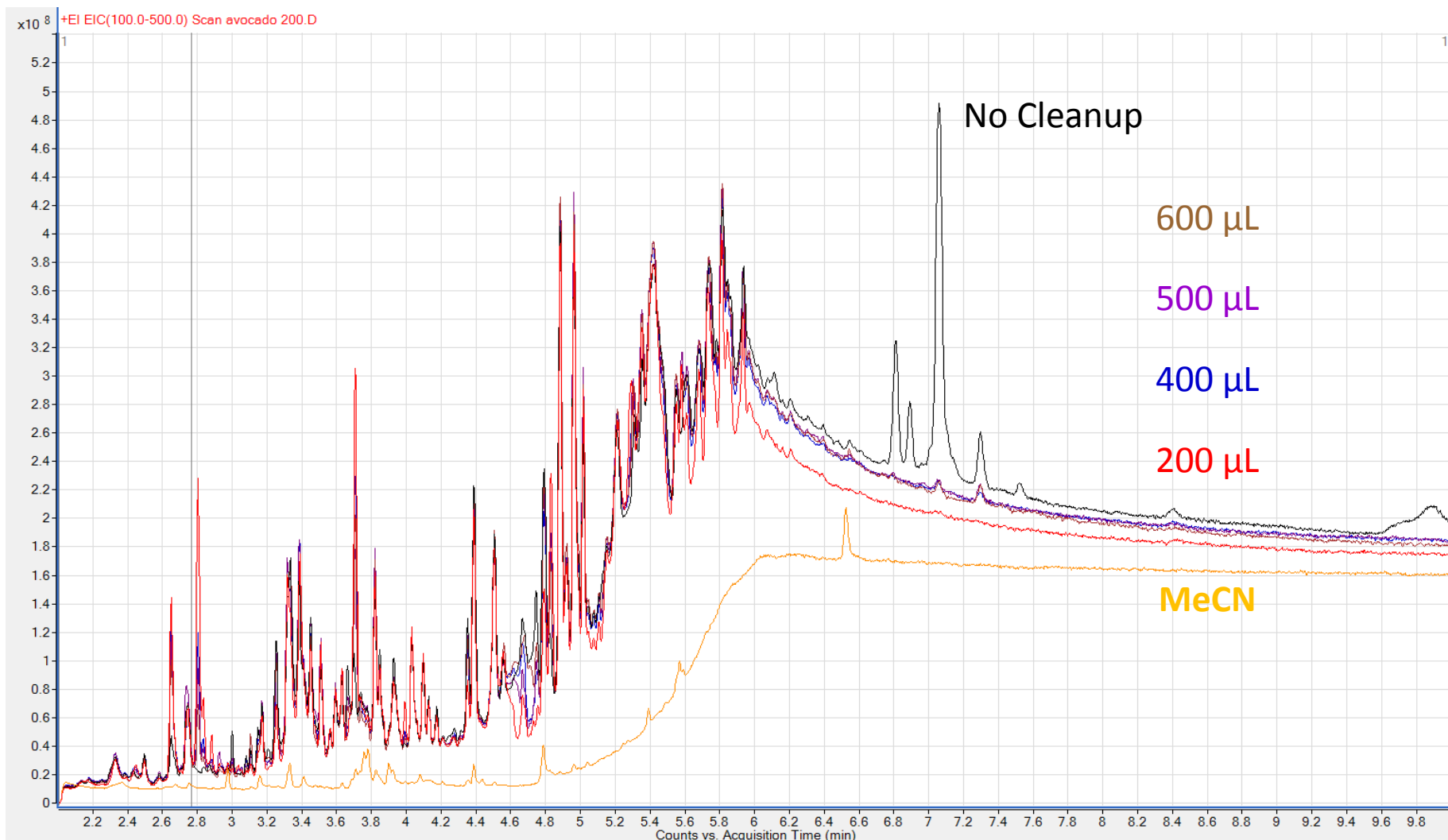
## GC-MS Full Scan *m/z* 100-500, 1 $\mu$ L injection including APs



**Conclusion: Not much cleanup**

# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Avocado Extracts

## GC-MS Full Scan $m/z$ 100-500, 1 $\mu$ L injection including APs

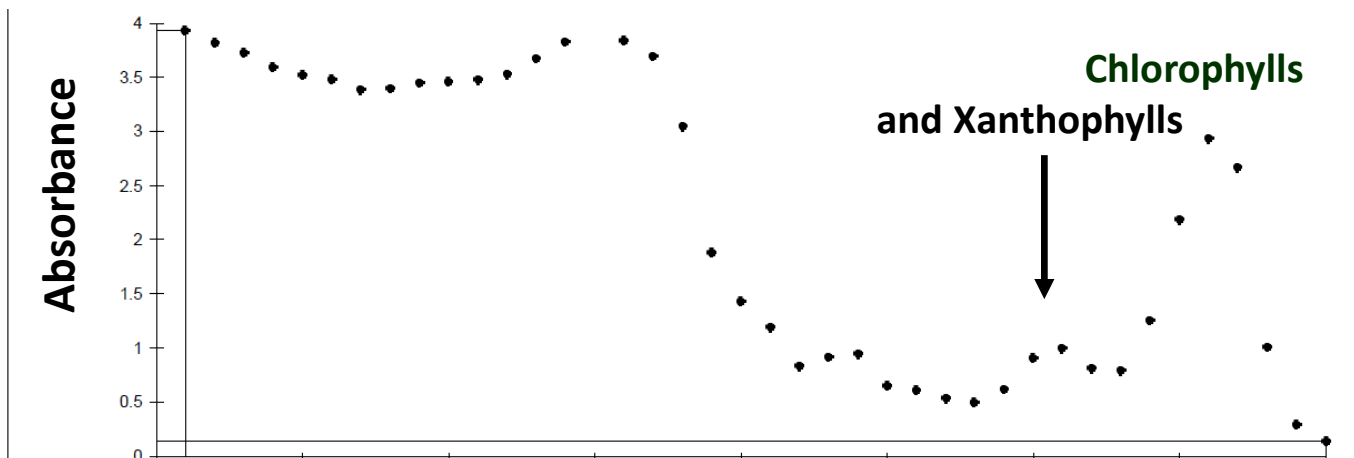


**Conclusion: Not much cleanup**

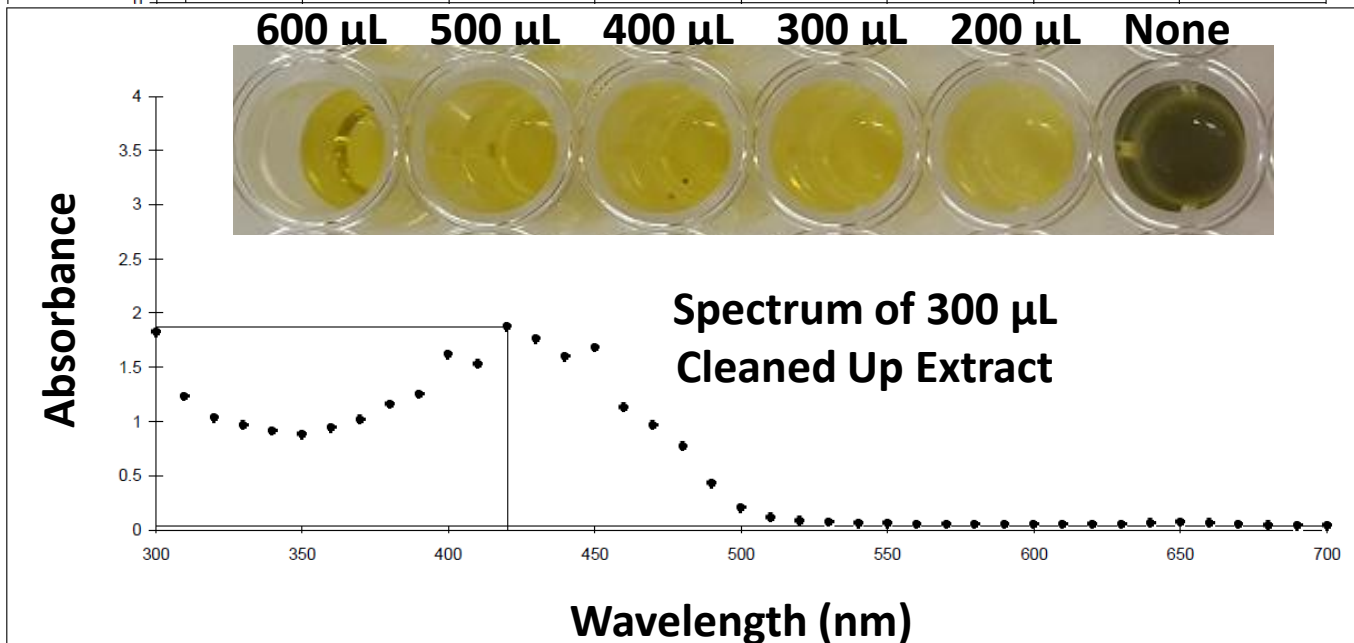
# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Kale Extracts

## UV/Vis Absorbance Results

### Spectrum of Extract before Cleanup



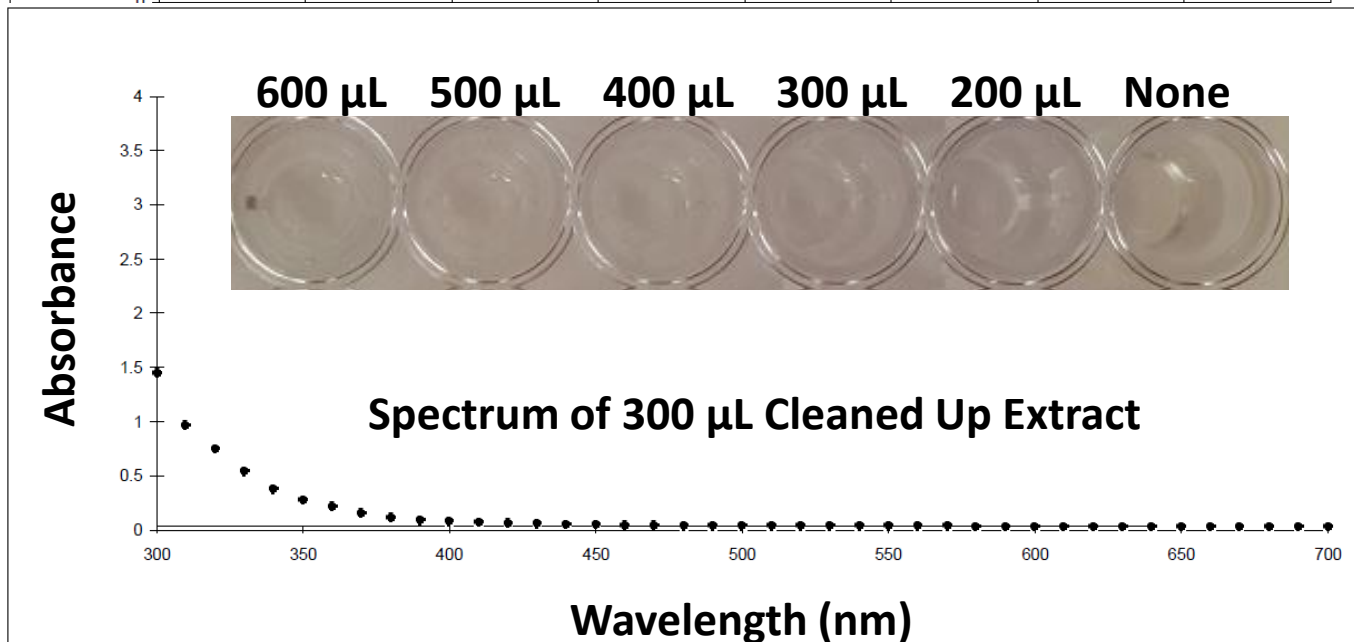
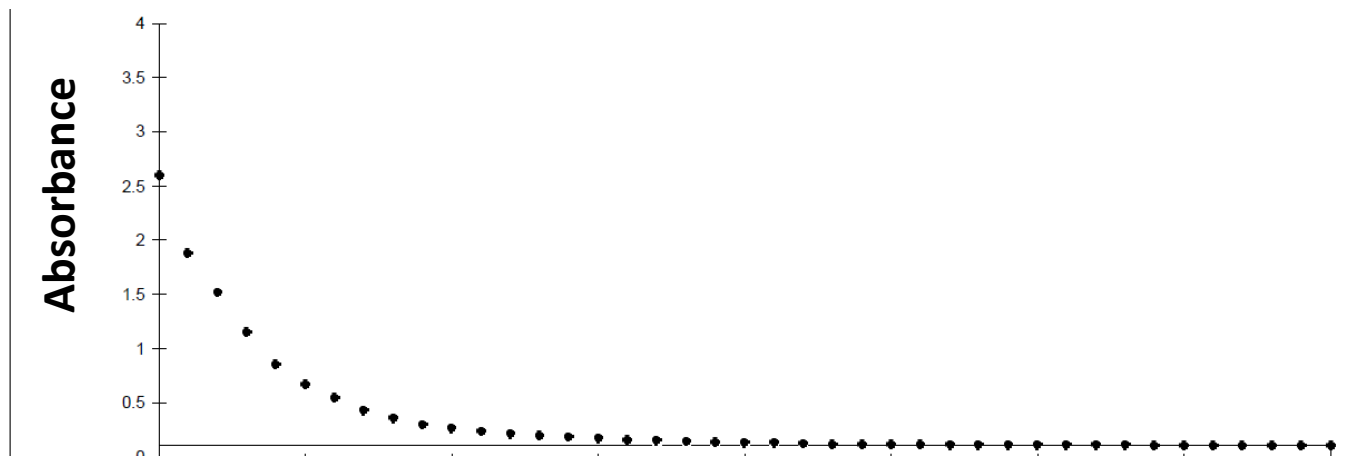
600  $\mu$ L 500  $\mu$ L 400  $\mu$ L 300  $\mu$ L 200  $\mu$ L None



# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Salmon Extracts

## UV/Vis Absorbance Results

### Spectrum of Extract before Cleanup

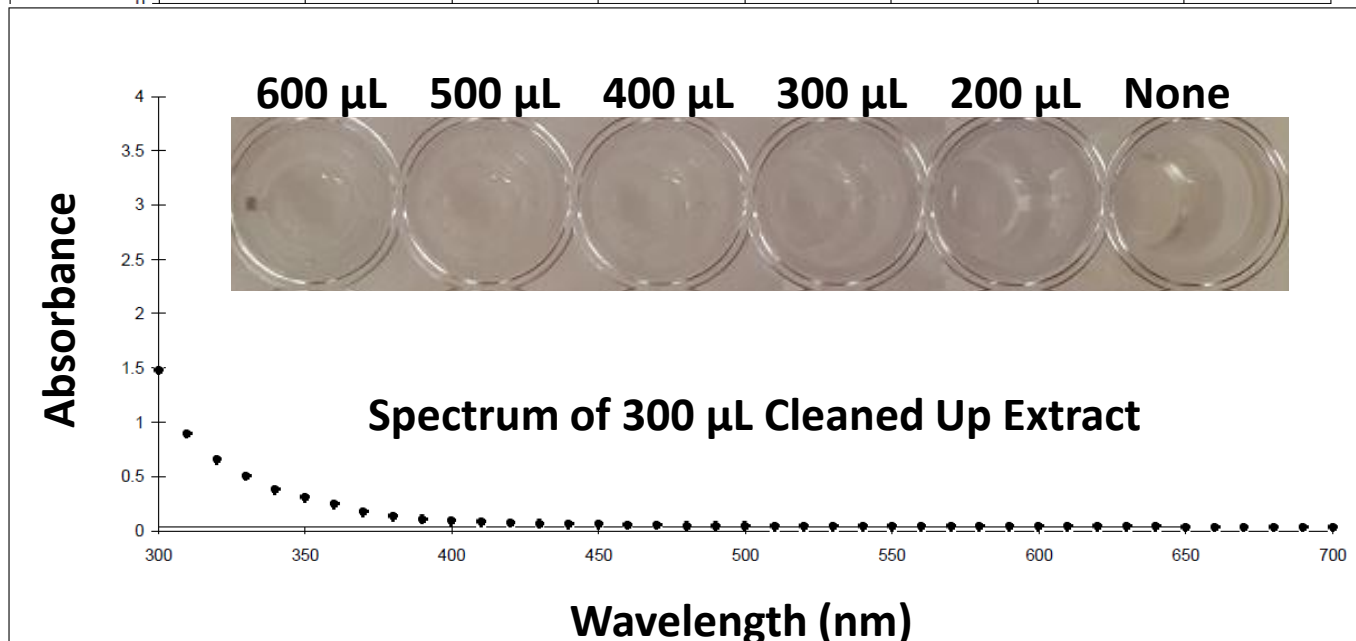
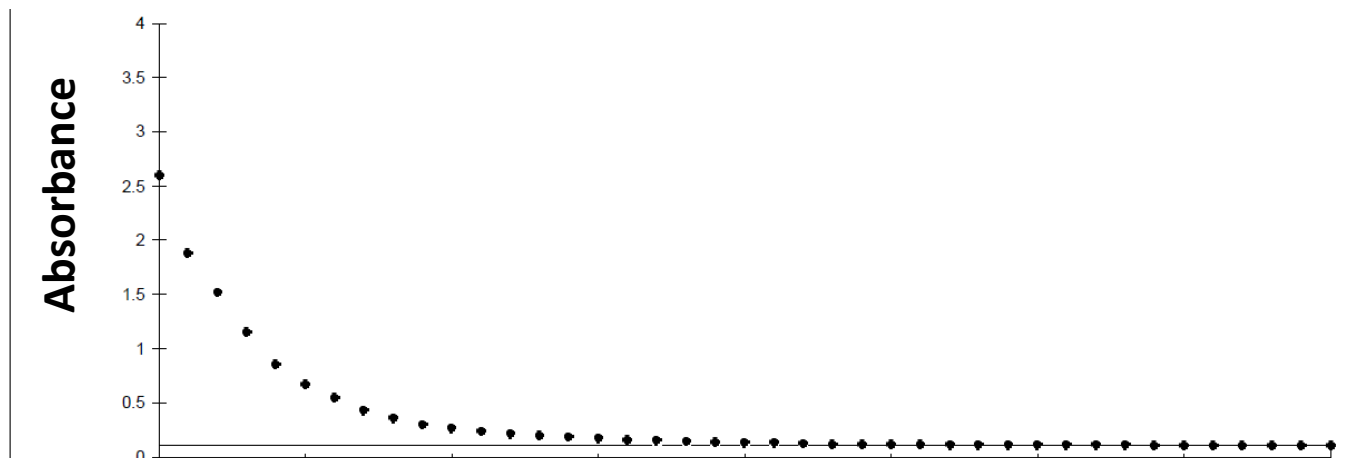




# 45 mg $MgSO_4 + C_{18} + PSA + CarbonX$ Mini-SPE of Salmon Extracts

## UV/Vis Absorbance Results

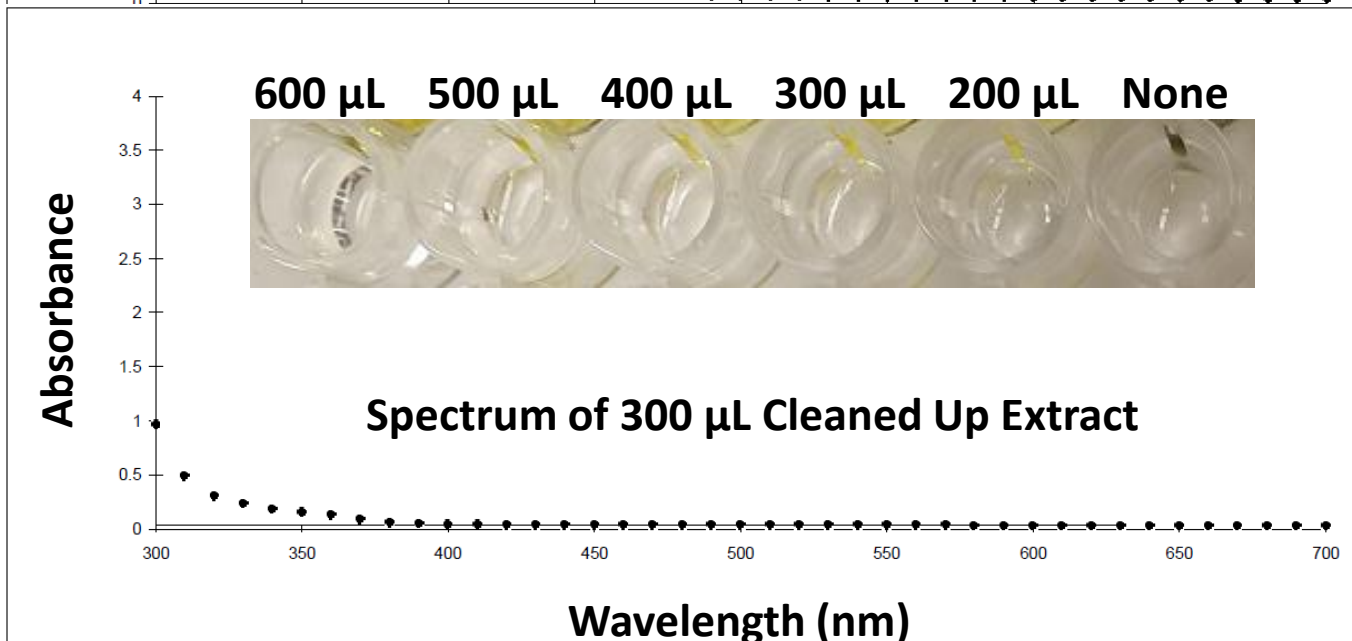
### Spectrum of Extract before Cleanup



# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Pork Extracts

## UV/Vis Absorbance Results

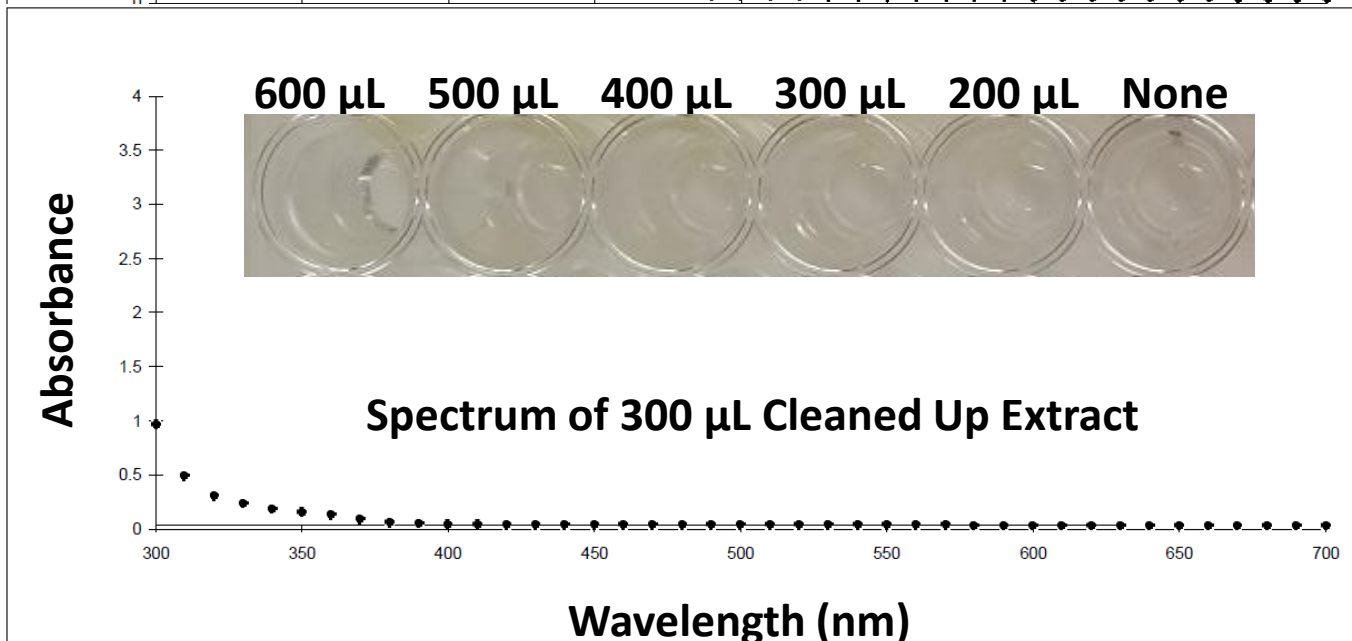
### Spectrum of Extract before Cleanup



# 45 mg MgSO<sub>4</sub>+C<sub>18</sub>+PSA+CarbonX Mini-SPE of QuEChERS Pork Extracts

## UV/Vis Absorbance Results

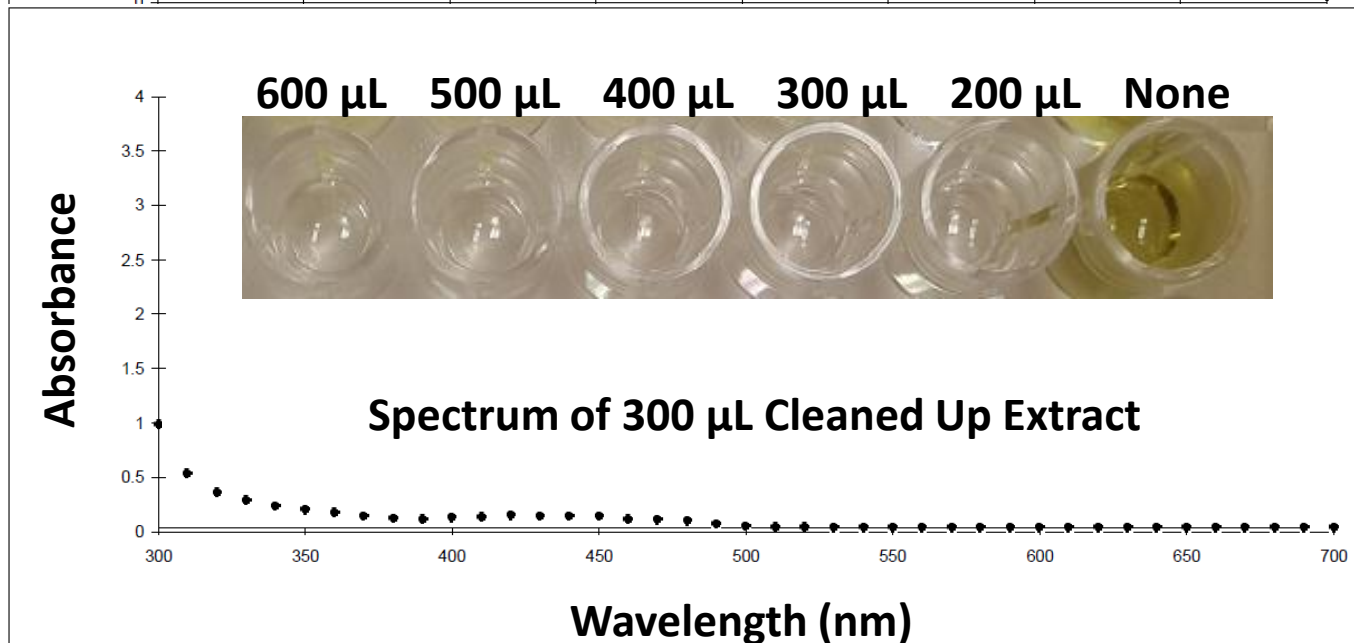
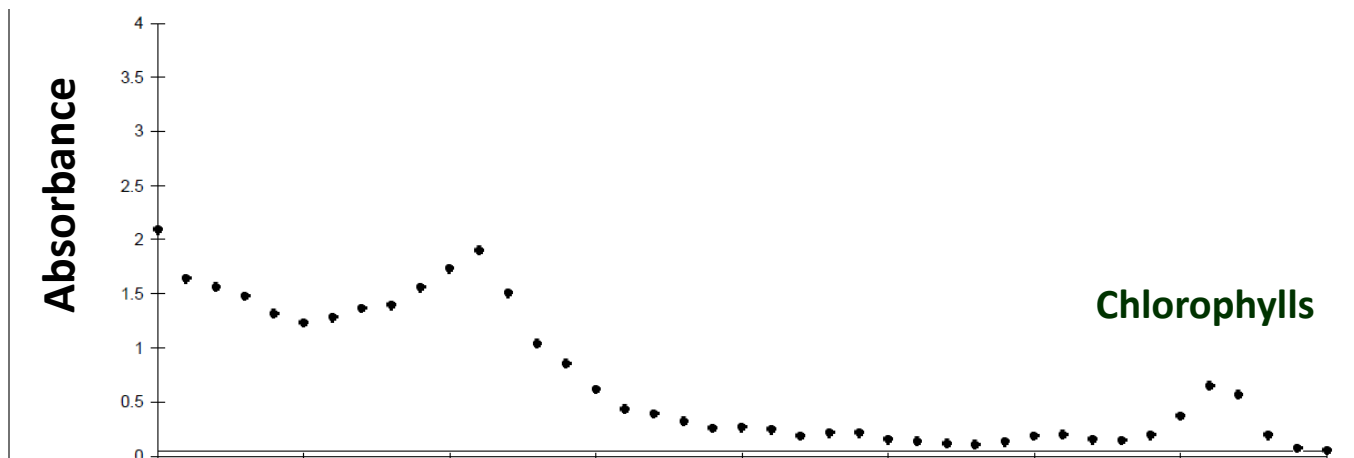
### Spectrum of Extract before Cleanup



# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Avocado Extracts

## UV/Vis Absorbance Results

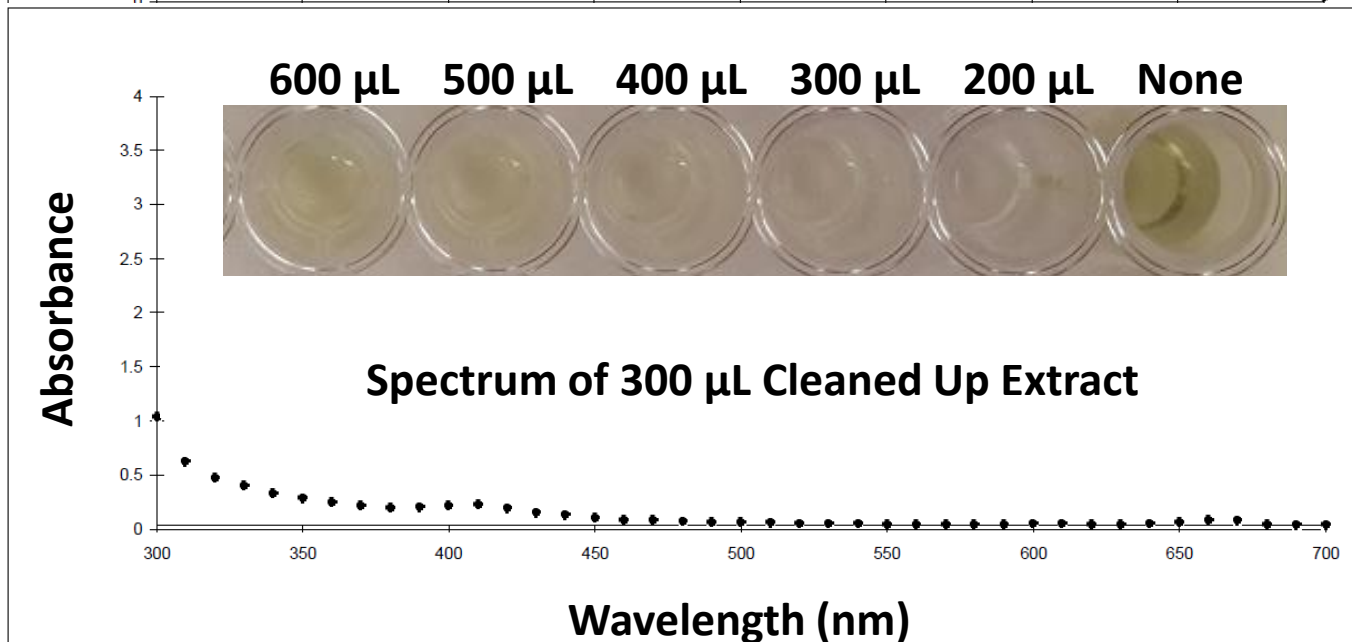
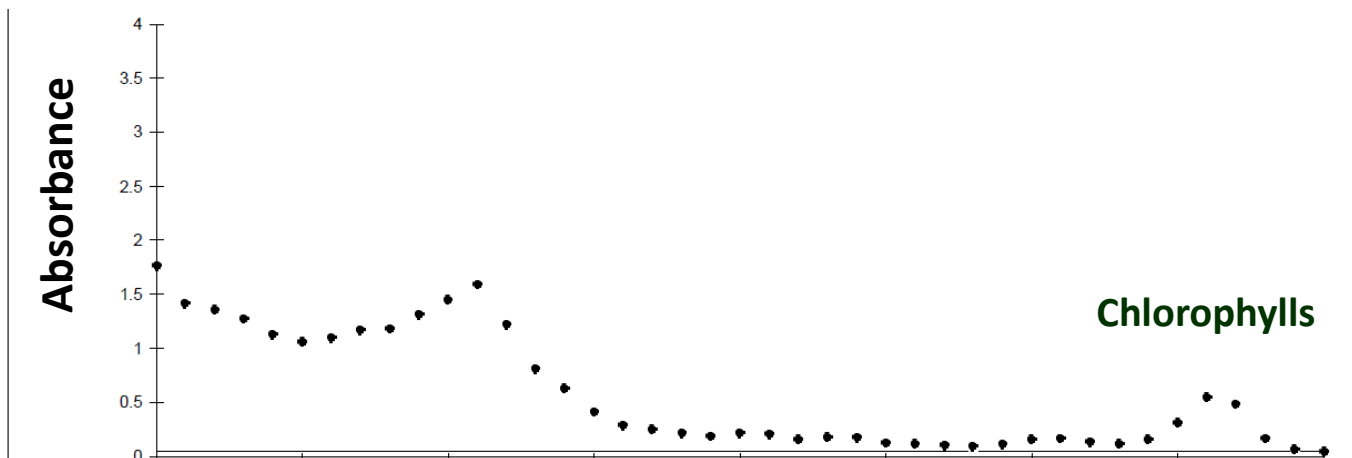
### Spectrum of Extract before Cleanup



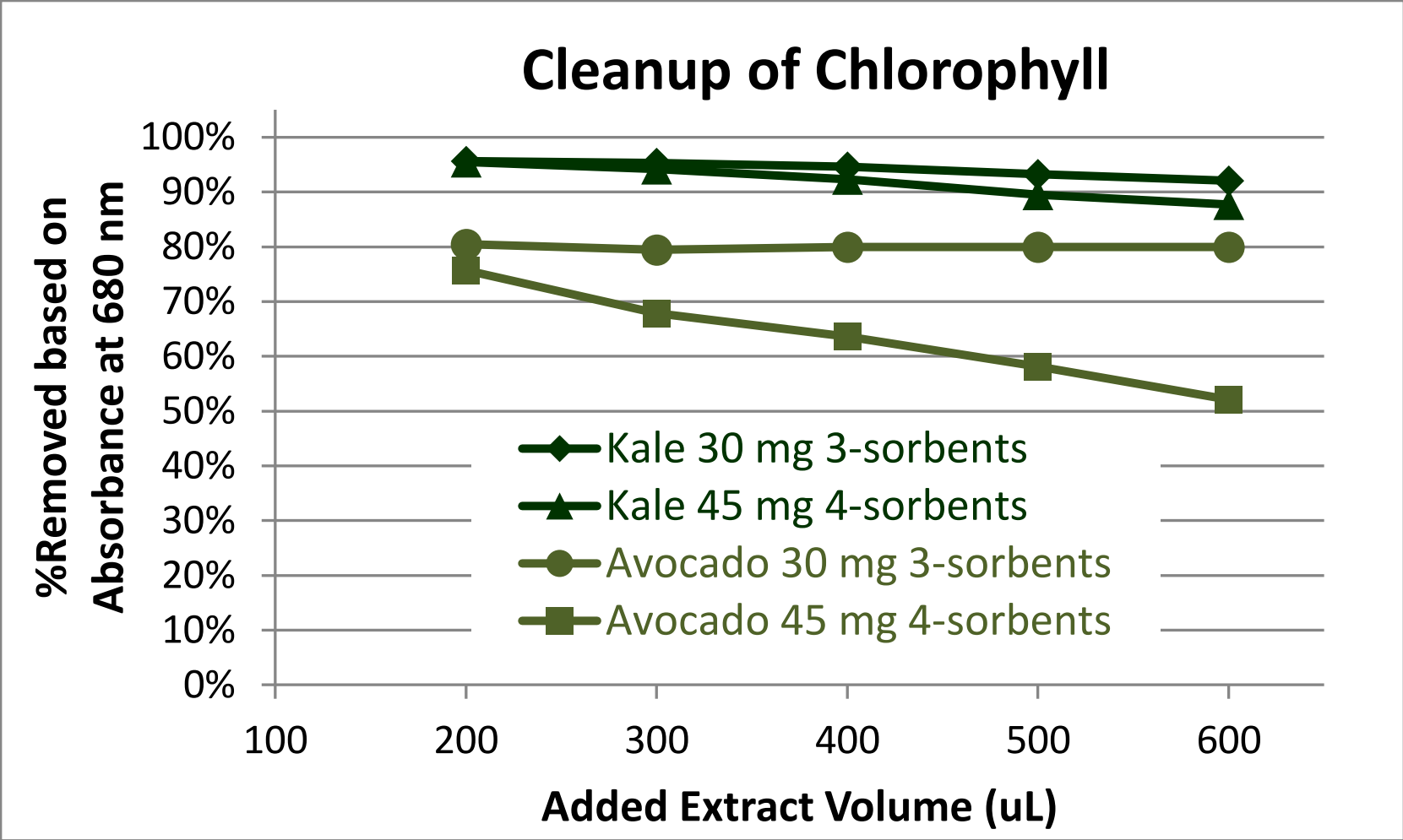
# 45 mg $\text{MgSO}_4 + \text{C}_{18} + \text{PSA} + \text{CarbonX}$ Mini-SPE of Avocado Extracts

## UV/Vis Absorbance Results

### Spectrum of Extract before Cleanup

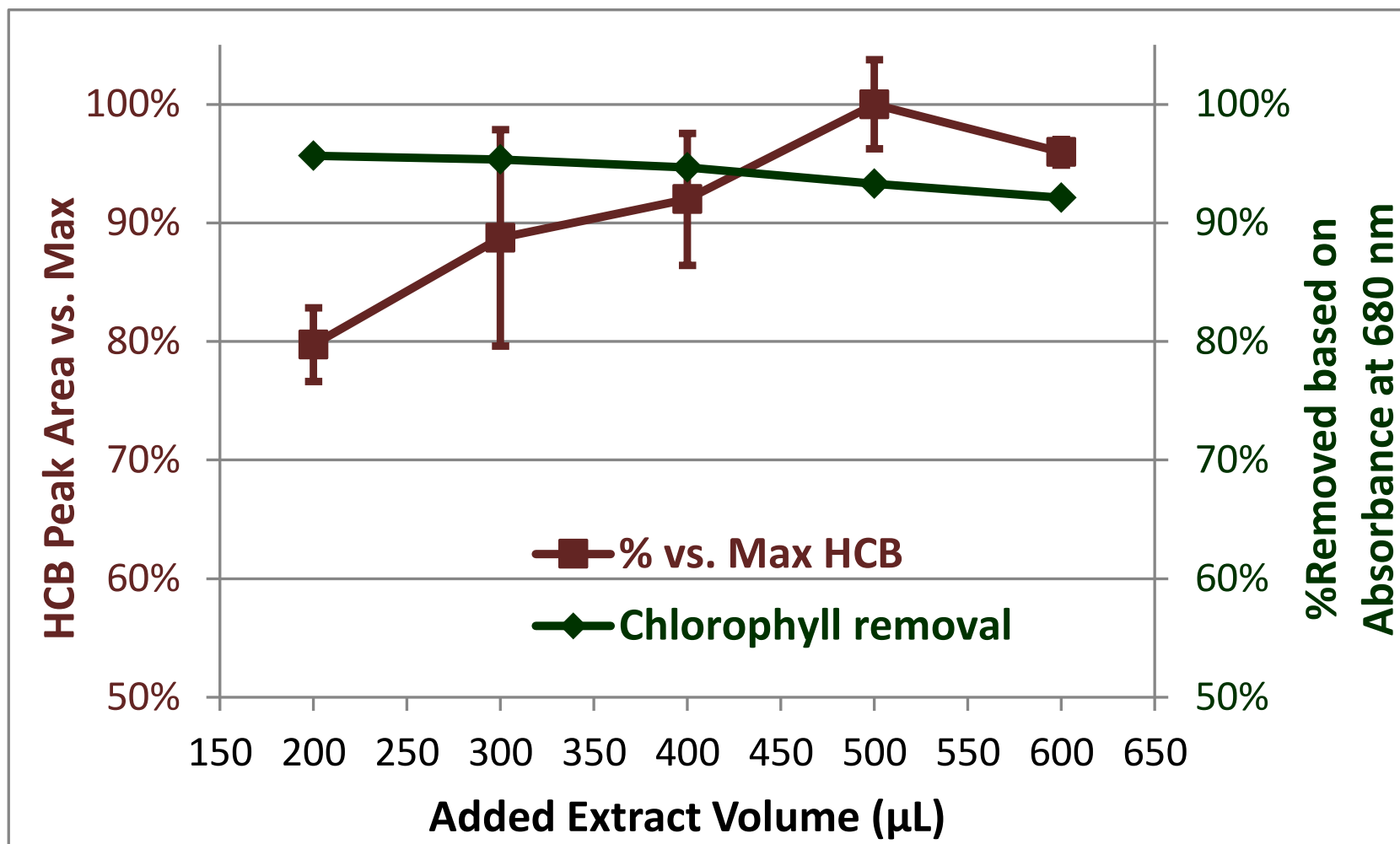


# Comparison of Mini-Cartridges to Remove Chlorophyll



# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Kale Extracts

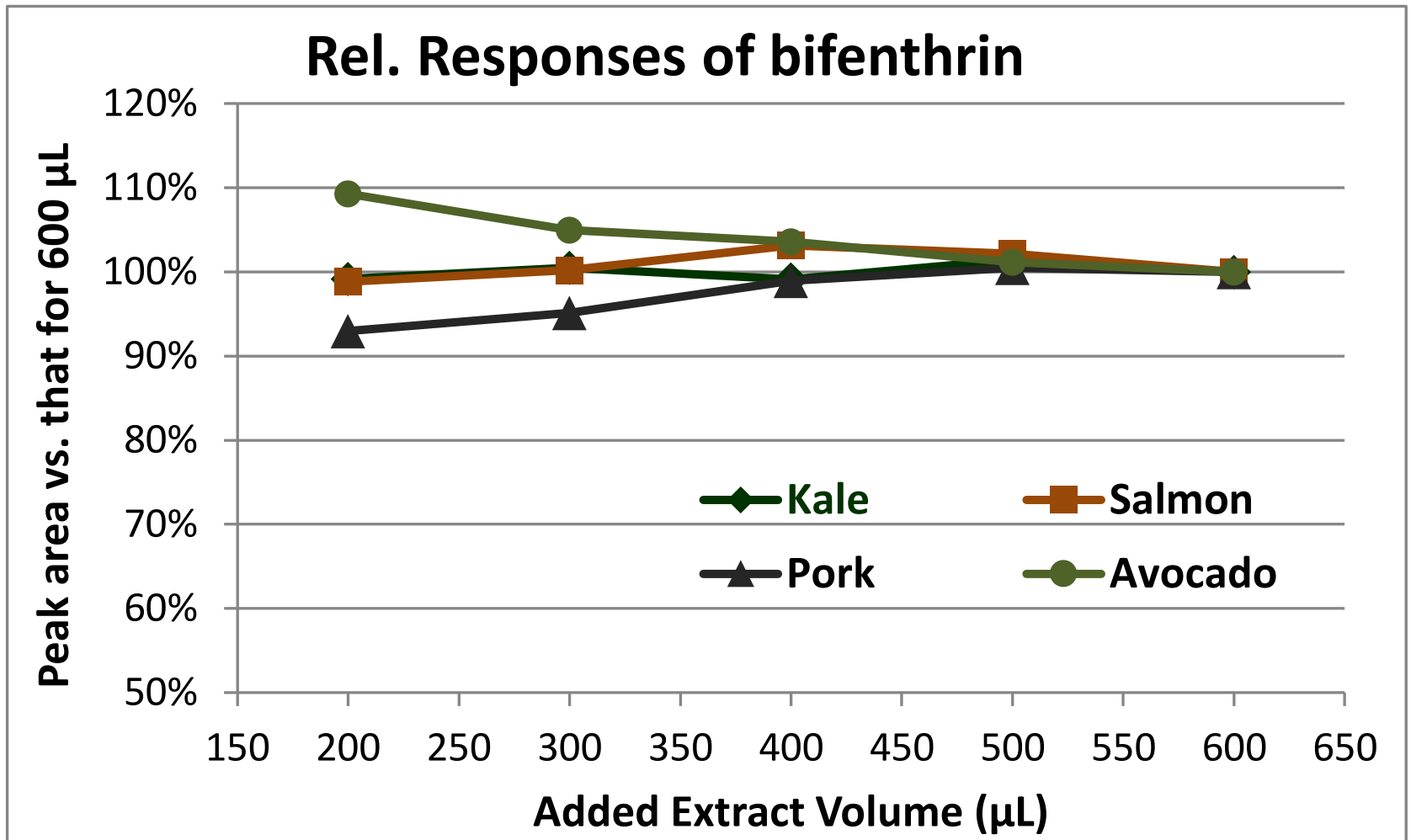
## Chlorophyll Removal and HCB Results vs. Extract Vol. Added



**Conclusion: 200 μL extract needed for 80% HCB elution**

# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Extracts

## Recovery vs. Extract Vol. Added

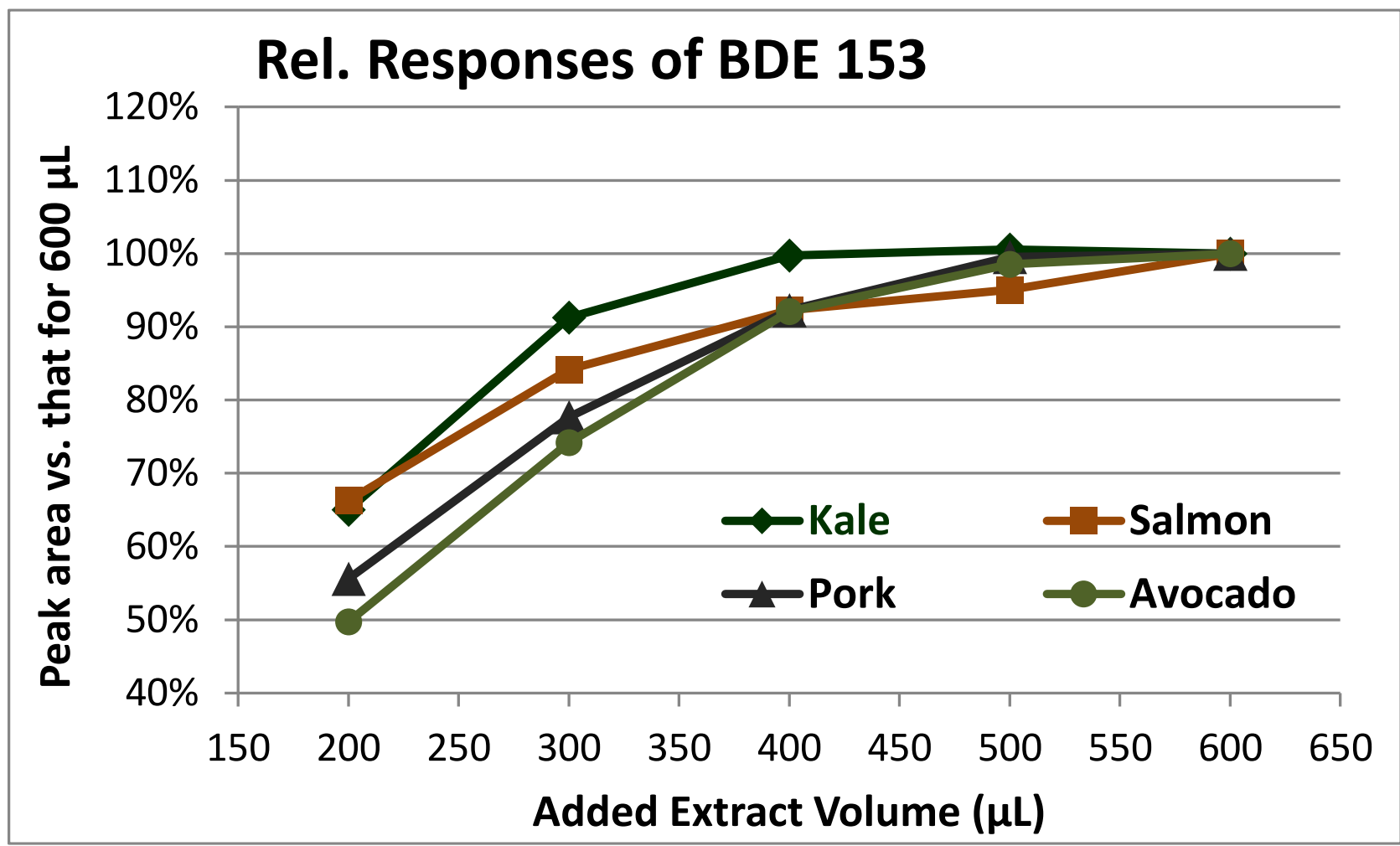


**Conclusion: most analytes were not retained by the sorbents**



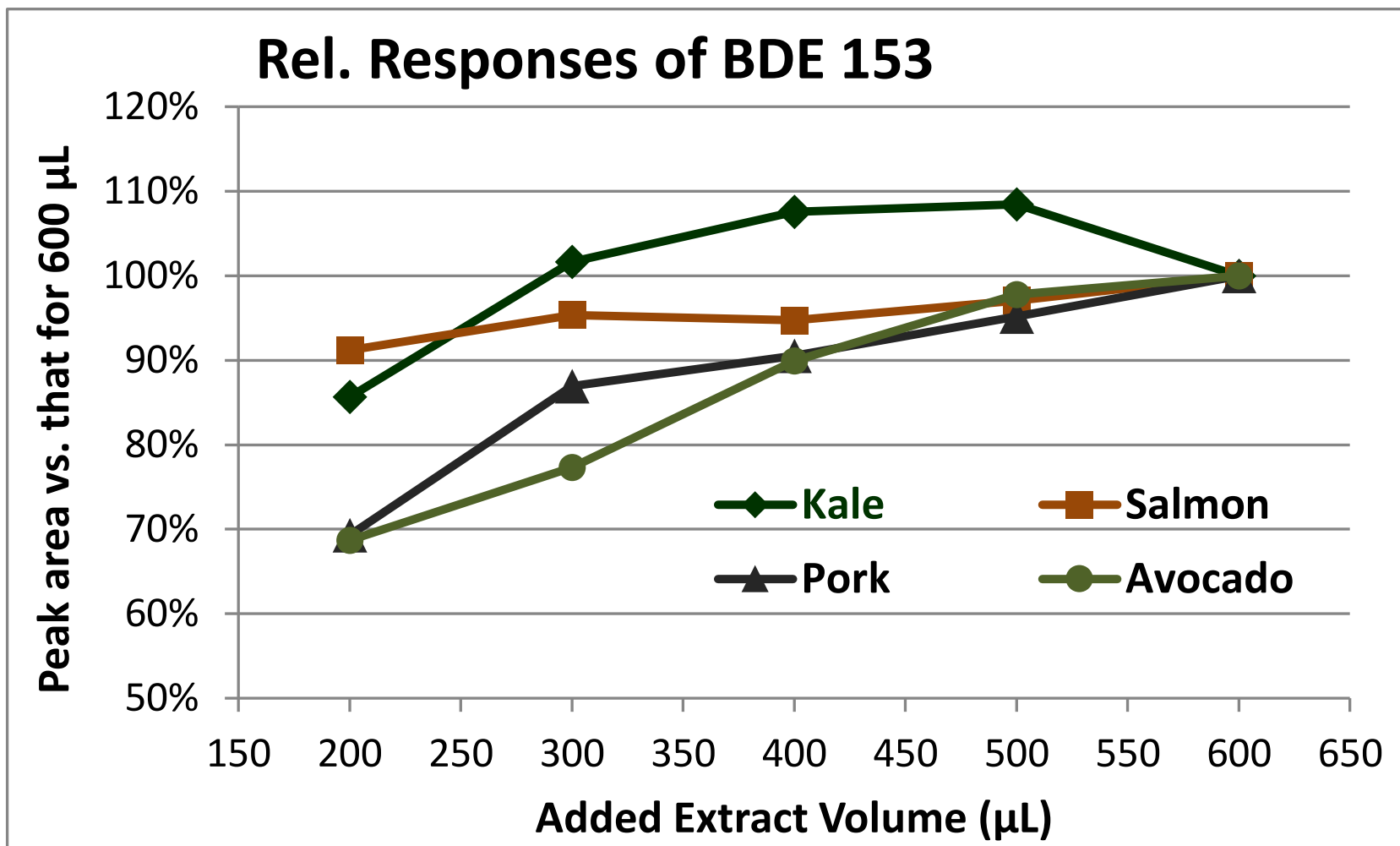
# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Extracts

## Recovery vs. Extract Vol. Added



**Conclusion: 300 µL extract needed for >70% elution of PBDEs**

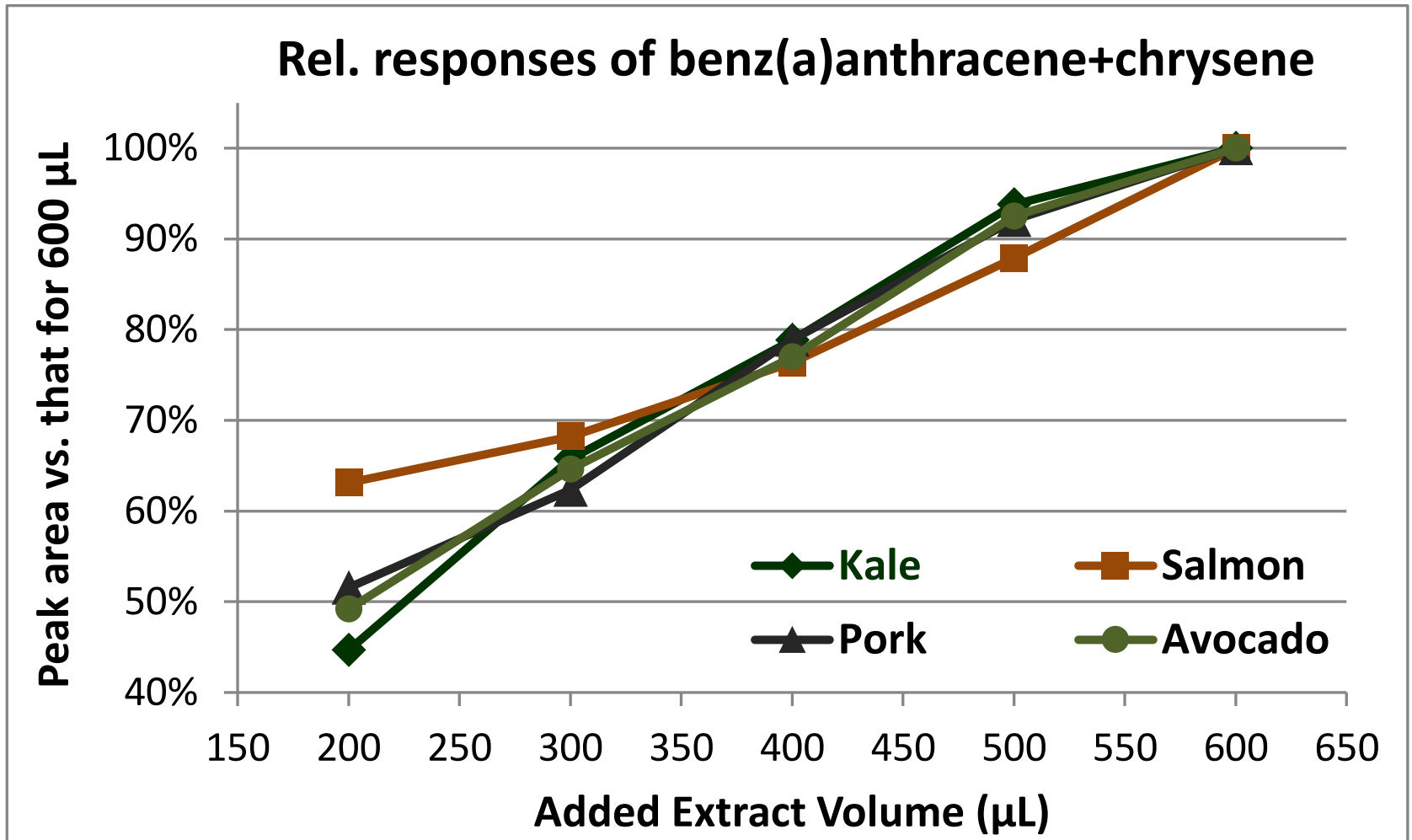
**45 mg MgSO<sub>4</sub>+C<sub>18</sub>+PSA+CarbonX ITSP of QuEChERS Extracts**  
Recovery vs. Extract Vol. Added



**Conclusion: 300 µL extract needed for >70% elution of PBDEs**

# 30 mg C<sub>18</sub>+Z-Sep+CarbonX Mini-SPE of QuEChERS Extracts

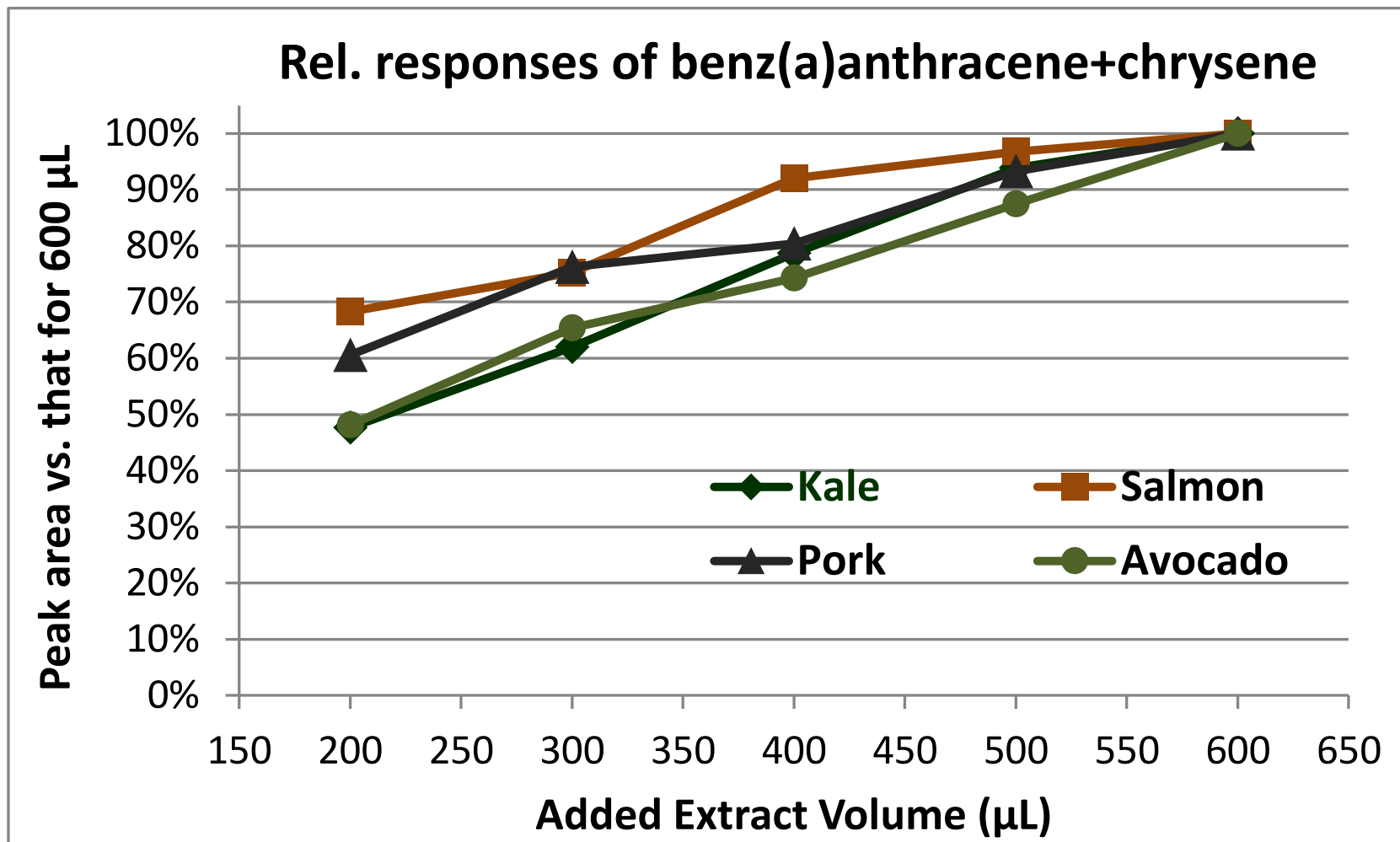
## Recovery vs. Extract Vol. Added



**Conclusion:  $\geq 600$  µL extract needed for full elution of PAHs**

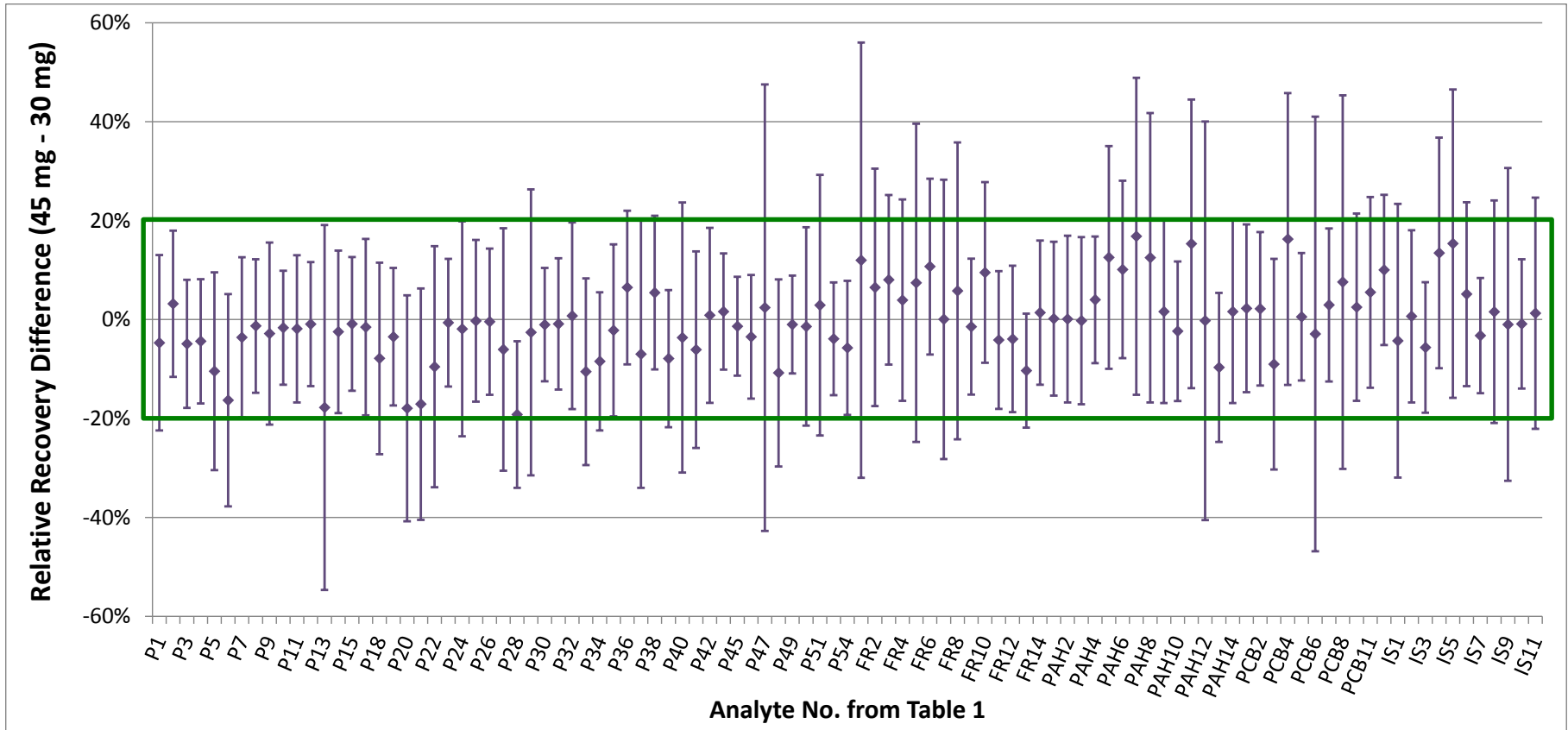
# 45 mg MgSO<sub>4</sub>+C<sub>18</sub>+PSA+CarbonX Mini-SPE of QuEChERS Extracts

## Recovery vs. Extract Vol. Added



**Conclusion: ≥600 µL extract needed for full elution of PAHs**

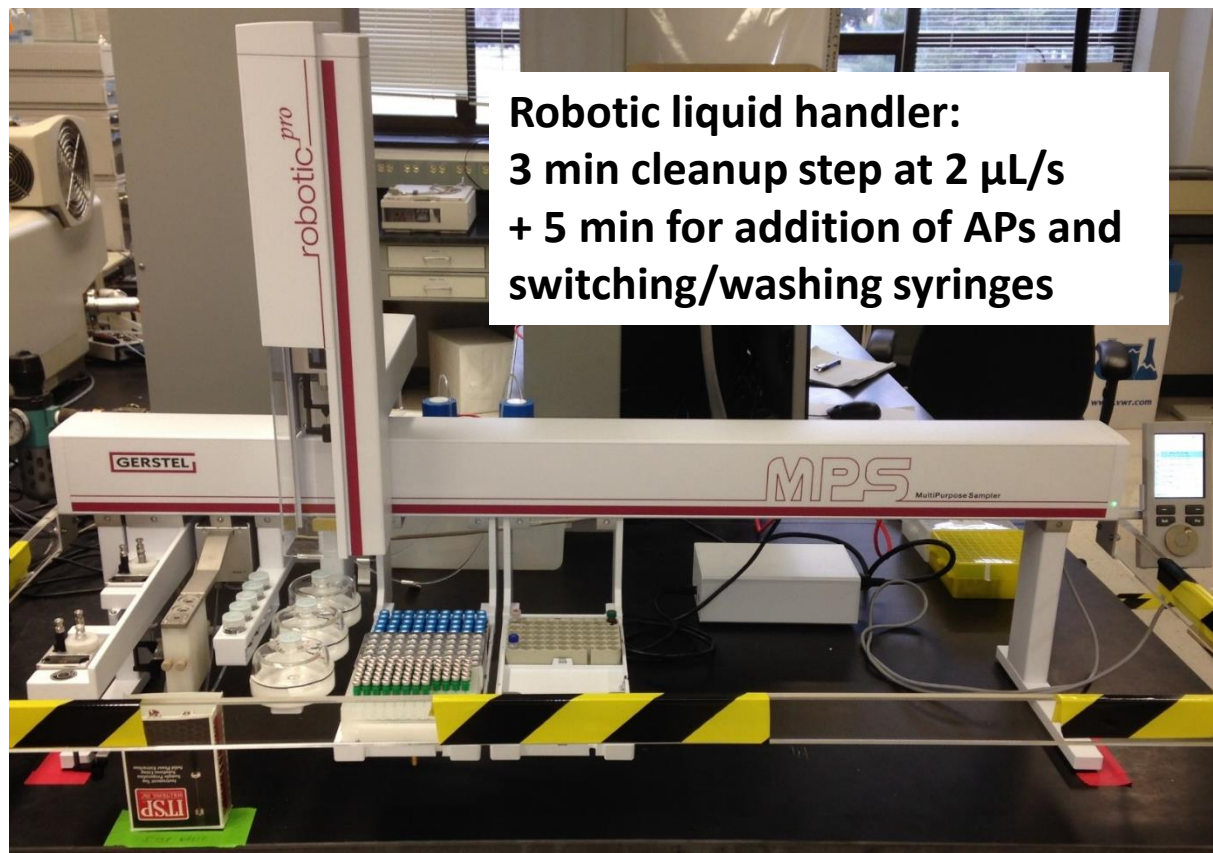
Relative Recovery Differences for the Analytes in Mini-SPE  
for the 300  $\mu$ L Extract Volumes vs. Avg. 600  $\mu$ L Result with  
45 mg mini-cartridge results – 30 mg mini-cartridge results  
(n = 12 for 4 matrices)



**Conclusion: Similar results using either mini-cartridge**

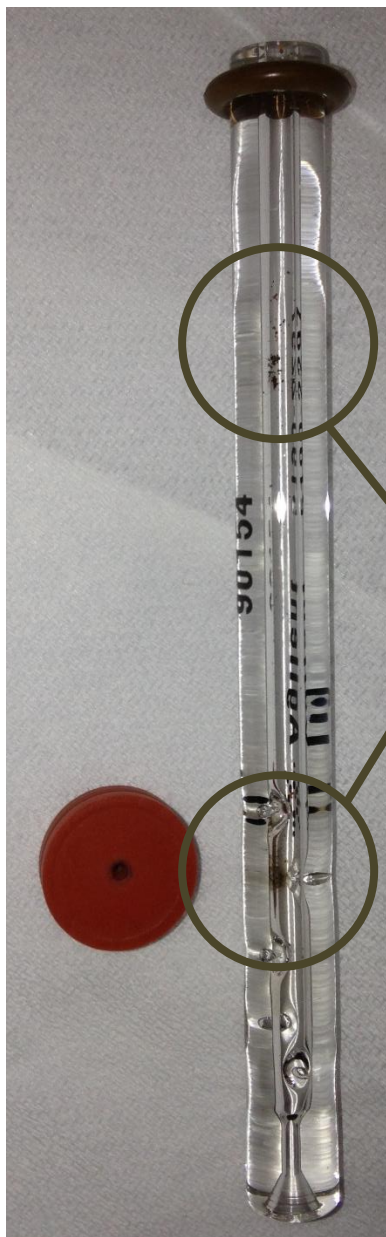
# Validation Experiments

Determine performance results in the use of automated mini-SPE cleanup in the LPGC-MS/MS analysis of pesticides and other contaminants in QuEChERS extracts of 10 different matrices.



**Final extract volumes =  $278 \pm 5 \mu\text{L}$  (n = 255) after 50  $\mu\text{L}$  addition of APs (and/MeCN) solution**

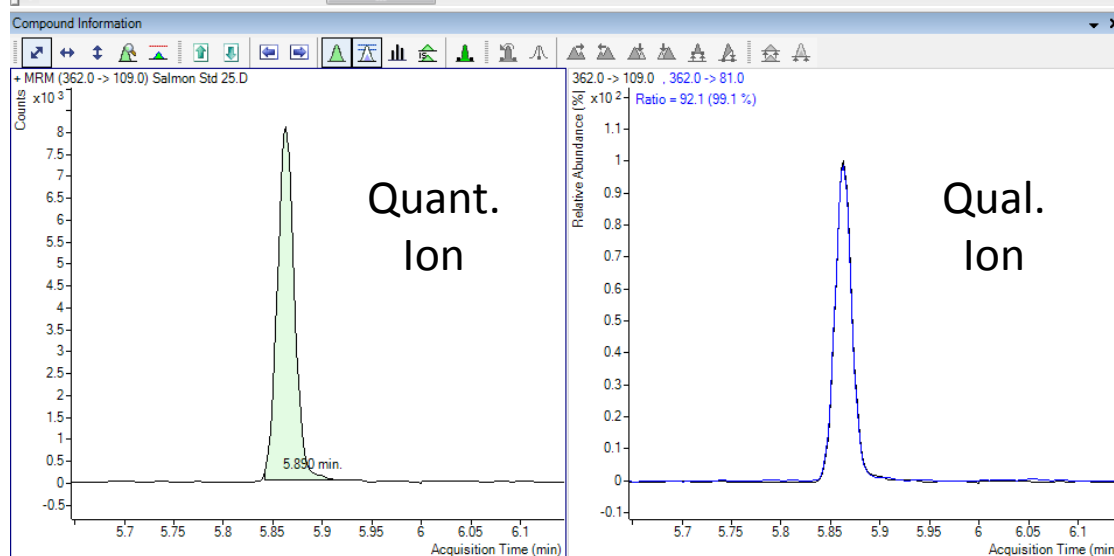
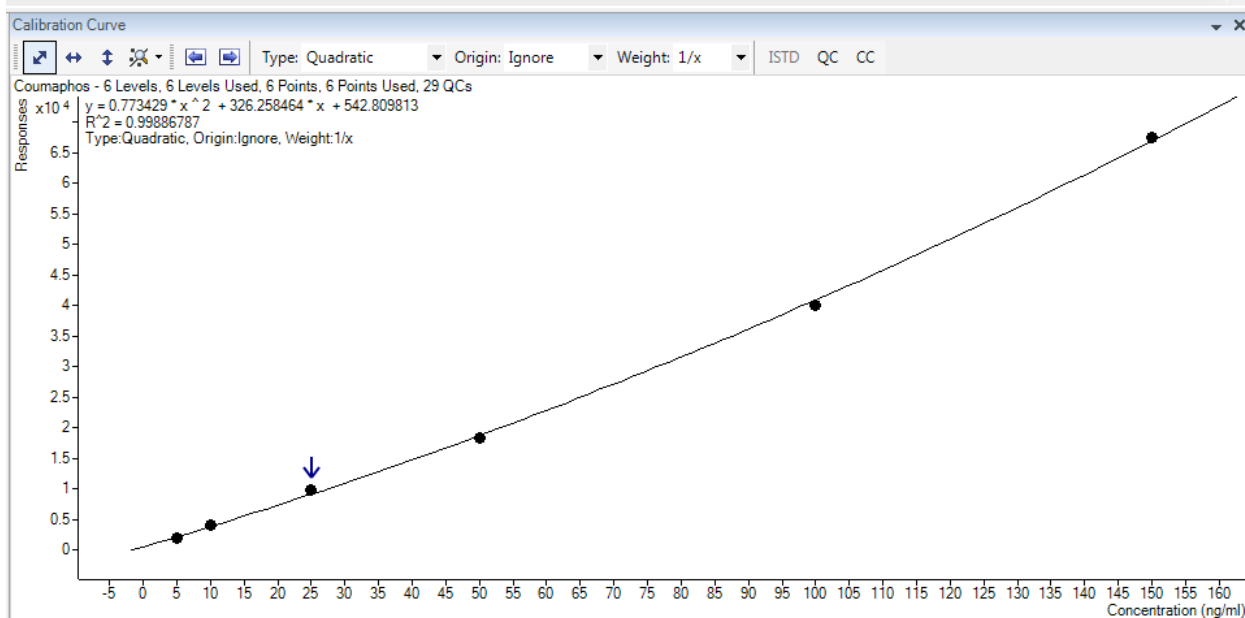
Injection liner and septa after the 5 day experiment including 230 matrix extracts of diverse commodities



A little "dirt" here and there, but the analyte protectants did their job and results still looked great from start to finish.

# Coumaphos in salmon after 230 injections of QuEChERS matrix extracts using mini-SPE

## No internal standard needed to still yield $R^2 = 0.999$ calibration curve



25 ng/mL std in salmon extract

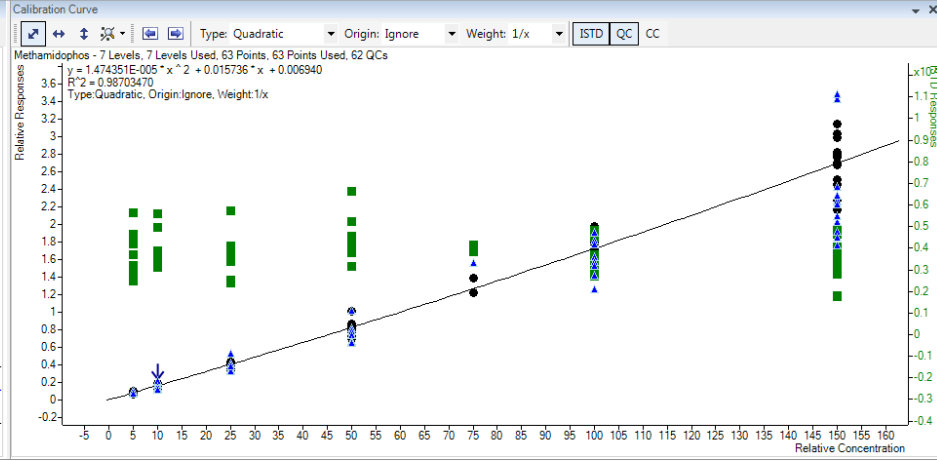
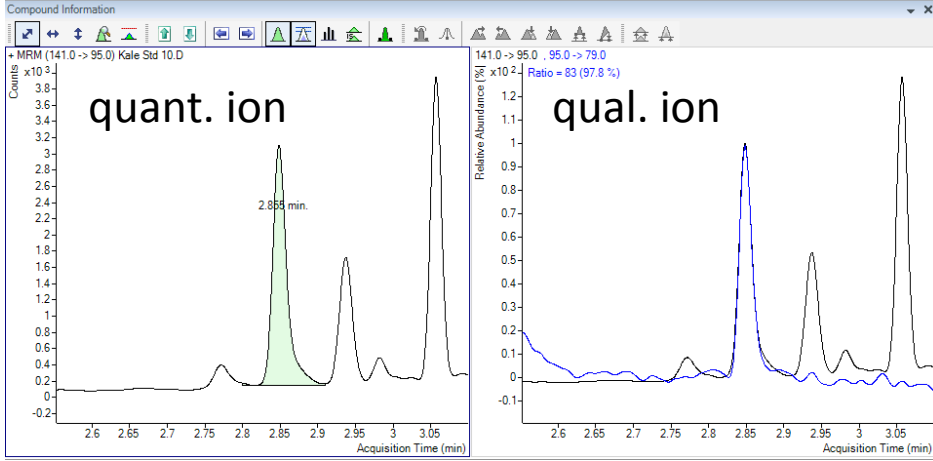


# Methamidophos Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample: Kale Std 10    Sample Type: <All>    Compound: Methamidophos    ISTD: Atrazine-d5

Name	Data File	Type	Level	Acq. Date-Time	Methamidophos Results					Qualifier (95...)		Atrazine-d5 (L)			
					Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area	
Carrot Std 50	Carrot Std 50.D	QC	5	2/23/2016 9:08 PM	50	2.855	23471	0.7438	44.9	90	20451	87	3.993	31555	
Carrot Std 100	Carrot Std 100.D	QC	6	2/23/2016 9:22 PM	100	2.855	61531	1.9166	110.0	110	52894	86	3.993	32104	
Carrot Std 150	Carrot Std 150.D	QC	7	2/23/2016 9:36 PM	150	2.855	54644	2.3325	131.6	88	47117	86	3.993	23427	
Kale Spk 10a	Kale Spk 10a.D	MatrixSpike		2/24/2016 3:21 AM		2.855	3636	0.1258	7.5		2936	81	3.993	28906	
Kale Spk 10b	Kale Spk 10b.D	MatrixSpike		2/24/2016 3:35 AM		2.855	6652	0.1506	9.1		5543	83	3.993	44173	
Kale Spk 10c	Kale Spk 10c.D	MatrixSpike		2/24/2016 3:49 AM		2.855	3474	0.1278	7.6		2911	84	3.993	27197	
Kale Spk 10d	Kale Spk 10d.D	MatrixSpike		2/24/2016 4:02 AM		2.855	15964	0.4024	24.6		13438	84	3.993	39676	
Kale Spk 25a	Kale Spk 25a.D	MatrixSpike		2/24/2016 4:16 AM		2.855	7601	0.2889	17.6		6485	85	3.993	26314	
Kale Spk 25b	Kale Spk 25b.D	MatrixSpike		2/24/2016 4:30 AM		2.855	4799	0.1404	8.4		3840	80	3.993	34180	
Kale Spk 25c	Kale Spk 25c.D	MatrixSpike		2/24/2016 4:44 AM		2.855	23748	0.7074	42.8		19726	83	3.993	33570	
Kale Spk 25d	Kale Spk 25d.D	MatrixSpike		2/24/2016 4:58 AM		2.855	13632	0.3564	21.8		11406	84	3.993	38251	
Kale Spk 50a	Kale Spk 50a.D	MatrixSpike		2/24/2016 5:11 AM		2.855	12337	0.3277	20.0		10251	83	3.993	37648	
Kale Spk 50b	Kale Spk 50b.D	MatrixSpike		2/24/2016 5:25 AM		2.855	19295	0.5220	31.8		16146	84	3.993	36961	
Kale Spk 50c	Kale Spk 50c.D	MatrixSpike		2/24/2016 5:39 AM		2.855	14887	0.5485	33.4		12887	87	3.993	27140	
Kale Spk 50d	Kale Spk 50d.D	MatrixSpike		2/24/2016 5:53 AM		2.855	23866	0.7328	44.3		20105	84	3.993	32569	
Kale Spk 100a	Kale Spk 100a.D	MatrixSpike		2/24/2016 6:07 AM		2.855	32642	1.1923	70.6		27947	86	3.993	27378	
Kale Spk 100b	Kale Spk 100b.D	MatrixSpike		2/24/2016 6:20 AM		2.855	29642	1.2824	75.7		24907	84	3.993	23115	
Kale Spk 100c	Kale Spk 100c.D	MatrixSpike		2/24/2016 6:34 AM		2.855	33923	1.2526	74.0		28634	84	3.993	27082	
Kale Spk 100d	Kale Spk 100d.D	MatrixSpike		2/24/2016 6:48 AM		2.855	53855	1.5988	93.0		45410	84	3.993	33686	
Kale Std 0	Kale Std 0.D	QC	1	2/24/2016 1:44 AM		2.855	371	0.0153	0.5		442	119	3.993	24333	
Kale Std 5	Kale Std 5.D	QC	5	2/24/2016 1:58 AM		2.855	2009	0.0751	4.3		1556	77	3.993	26751	
Kale Std 10	Kale Std 10.D	QC	3	2/24/2016 2:12 AM		2.855	3912	0.1245	7.7		3244	83	3.993	30189	
Kale Std 25	Kale Std 25.D	QC	4	2/24/2016 2:26 AM		2.855	27257	0.3868	23.6		94	23070	85	3.993	70490
Kale Std 50	Kale Std 50.D	QC	5	2/24/2016 2:40 AM		2.855	25164	0.6616	40.1		80	21428	85	3.993	38037

green boxes = atrazine-d5 (IS)  
 black circles = stds in solvent  
 blue triangles = matrix-matched stds

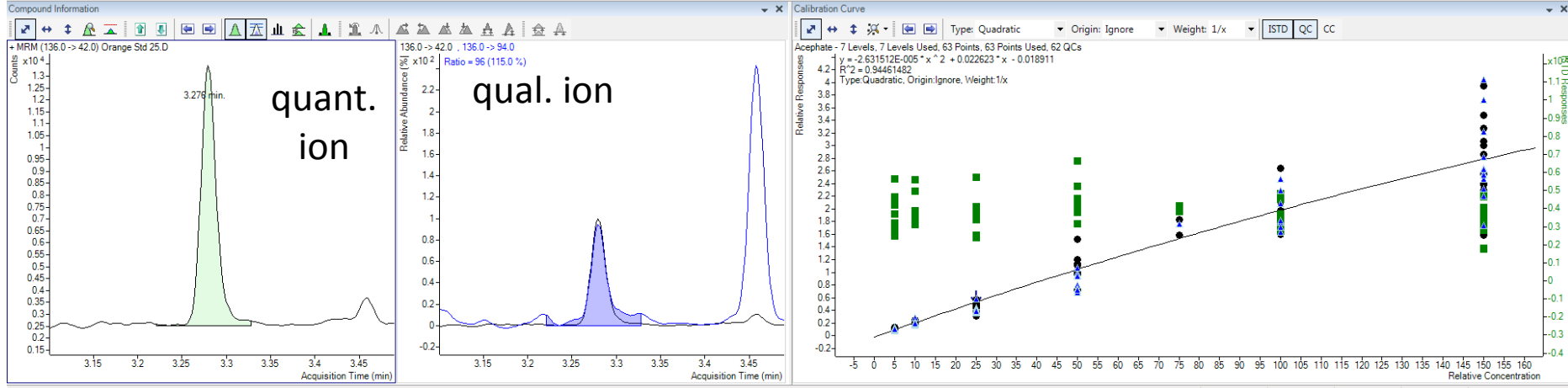


10 ng/mL std in kale

# Acephate Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample				Acephate...		Acephate Results				Qualifier (136...		Atrazine-d5 (L...			
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area	
Olive Std 100	Olive Std 100.D	QC	6	2/24/2016 8:09 PM	100	3.275	53823	2.0869	106.2	106	45639	85	3.993	25791	
Olive Std 150	Olive Std 150.D	QC	7	2/24/2016 8:22 PM	150	3.275	66816	2.6480	141.0	94	57824	87	3.993	25233	
Orange Spk 10a	Orange Spk 10a.D	MatrixSpike		2/24/2016 3:05 PM		3.275	5107	0.1887	9.3		5555	109	3.993	27066	
Orange Spk 10b	Orange Spk 10b.D	MatrixSpike		2/24/2016 3:19 PM		3.276	5778	0.2083	10.2		6236	108	3.993	27740	
Orange Spk 10c	Orange Spk 10c.D	MatrixSpike		2/24/2016 3:32 PM		3.275	5777	0.2225	10.8		5932	103	3.993	25960	
Orange Spk 10d	Orange Spk 10d.D	MatrixSpike		2/24/2016 3:46 PM		3.275	5046	0.2188	10.6		4741	94	3.993	23061	
Orange Spk 25a	Orange Spk 25a.D	MatrixSpike		2/24/2016 4:00 PM		3.275	17704	0.5643	26.6		15446	87	3.993	31370	
Orange Spk 25b	Orange Spk 25b.D	MatrixSpike		2/24/2016 4:14 PM		3.275	14202	0.5085	24.0		12014	85	3.993	27930	
Orange Spk 25c	Orange Spk 25c.D	MatrixSpike		2/24/2016 4:28 PM		3.276	11408	0.4699	22.2		10335	91	3.993	24278	
Orange Spk 25d	Orange Spk 25d.D	MatrixSpike		2/24/2016 4:41 PM		3.275	20277	0.6015	28.4		17249	85	3.993	33709	
Orange Spk 50a	Orange Spk 50a.D	MatrixSpike		2/24/2016 4:55 PM		3.275	30424	1.0811	51.7		26129	86	3.993	28141	
Orange Spk 50b	Orange Spk 50b.D	MatrixSpike		2/24/2016 5:09 PM		3.275	29202	1.0929	52.3		24735	85	3.993	26720	
Orange Spk 50c	Orange Spk 50c.D	MatrixSpike		2/24/2016 5:23 PM		3.275	25982	0.8786	41.7		22815	88	3.993	29574	
Orange Spk 50d	Orange Spk 50d.D	MatrixSpike		2/24/2016 5:37 PM		3.276	22590	0.8528	40.4		19948	88	3.993	26489	
Orange Spk 100a	Orange Spk 100a.D	MatrixSpike		2/24/2016 5:50 PM		3.275	29787	1.6280	80.3		25838	87	3.993	18297	
Orange Spk 100b	Orange Spk 100b.D	MatrixSpike		2/24/2016 6:04 PM		3.275	45417	2.0110	101.8		37996	84	3.993	22584	
Orange Spk 100c	Orange Spk 100c.D	MatrixSpike		2/24/2016 6:18 PM		3.275	52717	1.8631	93.3		45790	87	3.993	28295	
Orange Spk 100d	Orange Spk 100d.D	MatrixSpike		2/24/2016 6:32 PM		3.275	46498	2.0141	102.0		38012	82	3.993	23087	
Orange Std 0	Orange Std 0.D	QC	1	2/24/2016 1:28 PM		3.275	792	0.0279	2.1		1675	212	3.993	28356	
Orange Std 5	Orange Std 5.D	QC	2	2/24/2016 1:42 PM		3.275	3086	0.0898	4.8	97	4832	157	3.993	34357	
Orange Std 10	Orange Std 10.D	QC	3	2/24/2016 1:56 PM		3.275	5851	0.1838	9.1	91	5526	94	3.993	31833	
Orange Std 25	Orange Std 25.D	QC	4	2/24/2016 2:10 PM		25	3.276	13558	0.3795	18.0	72	12880	96	3.993	35723
Orange Std 50	Orange Std 50.D	QC	5	2/24/2016 2:23 PM		50	3.275	16535	0.7298	34.5	69	14580	88	3.993	22657
Orange Std 100	Orange Std 100.D	QC	6	2/24/2016 2:37 PM		100	3.275	58212	1.7201	85.3	85	47993	82	3.993	33842

green boxes = atrazine-d5 (IS)  
 black circles = stds in solvent  
 blue triangles = matrix-matched stds

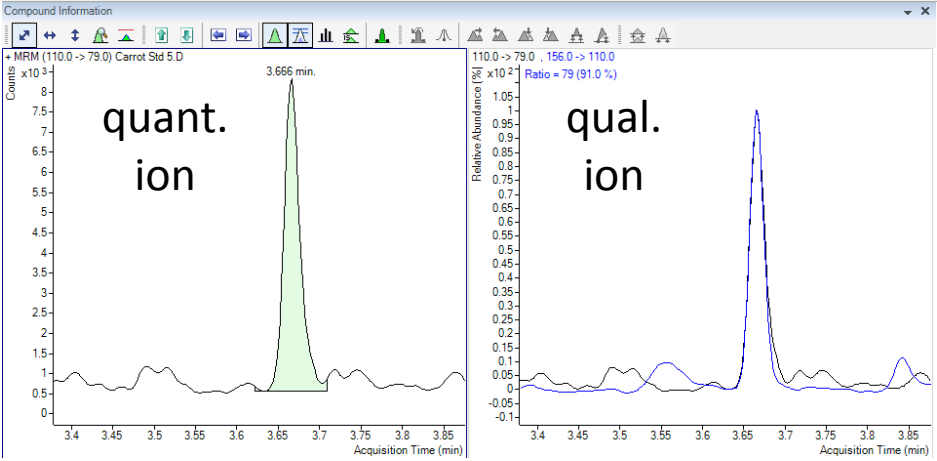


25 ng/mL std in orange

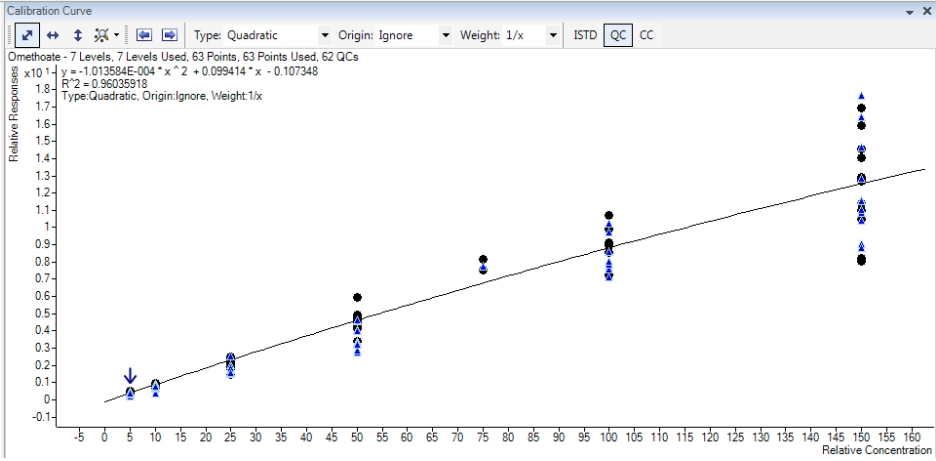
# Omethoate Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample				Omethoa...		Omethoate Results				Qualifier (156...		Atrazine-d5 (L...		
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Carrot Spk 10a	Carrot Spk 10a.D	MatrixSpike		2/23/2016 9:50 PM		3.666	23980	0.6894	8.1		18587	78	3.993	34782
Carrot Spk 10b	Carrot Spk 10b.D	MatrixSpike		2/23/2016 10:03 PM		3.666	31934	1.0520	11.8		26182	82	3.993	30356
Carrot Spk 10c	Carrot Spk 10c.D	MatrixSpike		2/23/2016 10:17 PM		3.666	26126	0.7517	8.7		21878	84	3.993	34754
Carrot Spk 10d	Carrot Spk 10d.D	MatrixSpike		2/23/2016 10:31 PM		3.666	21259	0.8172	9.4		16808	79	3.993	26014
Carrot Spk 25a	Carrot Spk 25a.D	MatrixSpike		2/23/2016 10:45 PM		3.666	41846	1.7612	19.2		35204	84	3.993	23760
Carrot Spk 25b	Carrot Spk 25b.D	MatrixSpike		2/23/2016 10:59 PM		3.666	46256	1.8344	19.9		38758	84	3.993	25216
Carrot Spk 25c	Carrot Spk 25c.D	MatrixSpike		2/23/2016 11:13 PM		3.666	30919	1.5299	16.8		25488	82	3.993	20210
Carrot Spk 25d	Carrot Spk 25d.D	MatrixSpike		2/23/2016 11:26 PM		3.666	39446	1.6743	18.3		33363	85	3.993	23560
Carrot Spk 50a	Carrot Spk 50a.D	MatrixSpike		2/23/2016 11:40 PM		3.666	95842	3.8386	41.4		82329	86	3.993	24968
Carrot Spk 50b	Carrot Spk 50b.D	MatrixSpike		2/23/2016 11:54 PM		3.666	71554	3.2315	34.8		60639	85	3.993	22142
Carrot Spk 50c	Carrot Spk 50c.D	MatrixSpike		2/24/2016 12:08 AM		3.666	253457	5.5575	60.7		215365	85	3.993	45606
Carrot Spk 50d	Carrot Spk 50d.D	MatrixSpike		2/24/2016 12:22 AM		3.666	97598	3.2626	35.2		82521	85	3.993	29914
Carrot Spk 100a	Carrot Spk 100a.D	MatrixSpike		2/24/2016 12:35 AM		3.666	184925	7.6107	85.0		162142	88	3.993	24298
Carrot Spk 100b	Carrot Spk 100b.D	MatrixSpike		2/24/2016 12:49 AM		3.666	541964	11.1126	130.1		470142	87	3.993	48770
Carrot Spk 100c	Carrot Spk 100c.D	MatrixSpike		2/24/2016 1:03 AM		3.666	203909	7.2572	80.7		177348	87	3.993	28097
Carrot Spk 100d	Carrot Spk 100d.D	MatrixSpike		2/24/2016 1:17 AM		3.666	236136	7.0397	78.1		203582	86	3.993	33543
Carrot Std 0	Carrot Std 0.D	QC	1	2/23/2016 8:13 PM		3.666	1302	0.0803	1.9		569	44	3.993	16229
Carrot Std 5	Carrot Std 5.D	QC	2	2/23/2016 8:27 PM		3.666	10683	0.4031	5.2	103	8444	79	3.993	26503
Carrot Std 10	Carrot Std 10.D	QC	3	2/23/2016 8:41 PM		3.666	17239	0.8211	9.4	94	13788	80	3.993	20996
Carrot Std 25	Carrot Std 25.D	QC	4	2/23/2016 8:54 PM		3.666	82564	1.8855	20.5	82	70702	86	3.993	43790
Carrot Std 50	Carrot Std 50.D	QC	5	2/23/2016 9:08 PM		3.666	103769	3.2885	35.4	71	88605	85	3.993	31555
Carrot Std 100	Carrot Std 100.D	QC	6	2/23/2016 9:22 PM		3.666	244262	7.6085	85.0	85	212035	87	3.993	32104
Carrot Std 150	Carrot Std 150.D	QC	7	2/23/2016 9:36 PM		3.666	300828	12.8411	154.6	103	263000	87	3.993	23427
Kale Spk 10a	Kale Spk 10a.D	MatrixSpike		2/24/2016 3:21 AM		3.666	19595	0.6779	8.0		17241	88	3.993	22802

black circles = stds in solvent  
blue triangles = matrix-matched stds



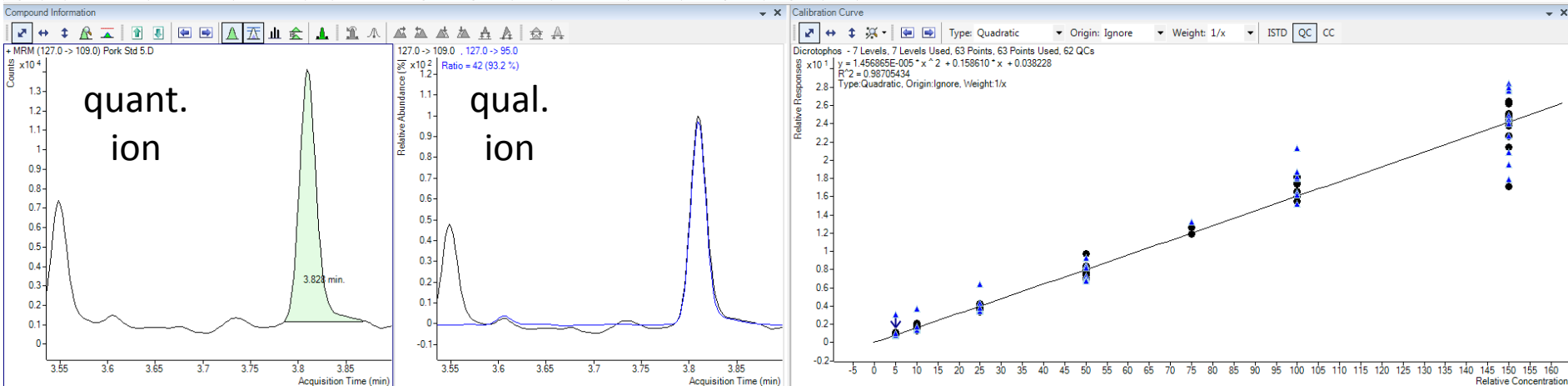
5 ng/mL std in carrot



# Dicrotophos Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample				Dicrotophos				Dicrotophos Results				Qualifier (127-)		Atrazine-d5 (L)	
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area	
Orange Std 150	Orange Std 150.D	QC	7	2/24/2016 2:51 PM	150	3.828	584259	24.0214	149.2	99	260595	45	3.993	24322	
Pork Spk 10a	Pork Spk 10a.D	MatrixSpike		2/26/2016 1:20 PM		3.828	36362	1.4710	9.0		15407	42	3.993	24718	
Pork Spk 10b	Pork Spk 10b.D	MatrixSpike		2/26/2016 1:34 PM		3.828	43939	1.3847	8.5		19487	44	3.993	31732	
Pork Spk 10c	Pork Spk 10c.D	MatrixSpike		2/26/2016 1:48 PM		3.828	35519	1.3298	8.1		15350	43	3.993	26710	
Pork Spk 10d	Pork Spk 10d.D	MatrixSpike		2/26/2016 2:02 PM		3.828	59314	1.5902	9.8		25714	43	3.993	37301	
Pork Spk 25a	Pork Spk 25a.D	MatrixSpike		2/26/2016 2:16 PM		3.828	80625	3.2677	20.3		35735	44	3.993	24673	
Pork Spk 25b	Pork Spk 25b.D	MatrixSpike		2/26/2016 2:29 PM		3.828	78979	3.3353	20.7		34686	44	3.993	23680	
Pork Spk 25c	Pork Spk 25c.D	MatrixSpike		2/26/2016 2:43 PM		3.828	96000	3.4685	21.6		42076	44	3.993	27678	
Pork Spk 25d	Pork Spk 25d.D	MatrixSpike		2/26/2016 2:57 PM		3.828	108872	3.5257	21.9		46206	42	3.993	30880	
Pork Spk 50a	Pork Spk 50a.D	MatrixSpike		2/26/2016 3:11 PM		3.828	208487	6.9528	43.4		90742	44	3.993	29986	
Pork Spk 50b	Pork Spk 50b.D	MatrixSpike		2/26/2016 3:25 PM		3.828	233484	7.3242	45.7		101498	43	3.993	31878	
Pork Spk 50c	Pork Spk 50c.D	MatrixSpike		2/26/2016 3:38 PM		3.828	367678	8.1614	51.0		161669	44	3.993	45051	
Pork Spk 50d	Pork Spk 50d.D	MatrixSpike		2/26/2016 3:52 PM		3.828	198169	6.8791	43.0		87650	44	3.993	28808	
Pork Spk 100a	Pork Spk 100a.D	MatrixSpike		2/26/2016 4:06 PM		3.828	640092	16.0735	100.2		281914	44	3.993	39823	
Pork Spk 100b	Pork Spk 100b.D	MatrixSpike		2/26/2016 4:20 PM		3.828	555336	15.2830	95.3		242533	44	3.993	36337	
Pork Spk 100c	Pork Spk 100c.D	MatrixSpike		2/26/2016 4:34 PM		3.828	334976	14.8246	92.4		146863	44	3.993	22596	
Pork Spk 100d	Pork Spk 100d.D	MatrixSpike		2/26/2016 4:48 PM		3.828	533627	14.8127	92.4		235560	44	3.993	36025	
Pork Std 0	Pork Std 0.D	QC	1	2/26/2016 11:43 AM		3.828	1998	0.0716	0.2		612	31	3.993	27916	
Pork Std 5	Pork Std 5.D	QC	2	2/26/2016 11:57 AM	5	3.828	16554	0.7633	4.6	91	6890	42	3.993	21688	
Pork Std 10	Pork Std 10.D	QC	3	2/26/2016 12:11 PM	10	3.828	32739	1.3862	8.5	85	14164	43	3.993	23617	
Pork Std 25	Pork Std 25.D	QC	4	2/26/2016 12:25 PM	25	3.828	86211	3.4449	21.4	86	37836	44	3.993	25026	
Pork Std 50	Pork Std 50.D	QC	5	2/26/2016 12:39 PM	50	3.828	215532	6.7441	42.1	84	92205	43	3.993	31959	
Pork Std 100	Pork Std 100.D	QC	6	2/26/2016 12:53 PM	100	3.828	684614	17.9721	111.9	112	301446	44	3.993	38093	
Pork Std 150	Pork Std 150.D	QC	7	2/26/2016 1:06 PM	150	3.828	619199	22.6815	140.9	94	273726	44	3.993	27300	

black circles = stds in solvent  
blue triangles = matrix-matched stds



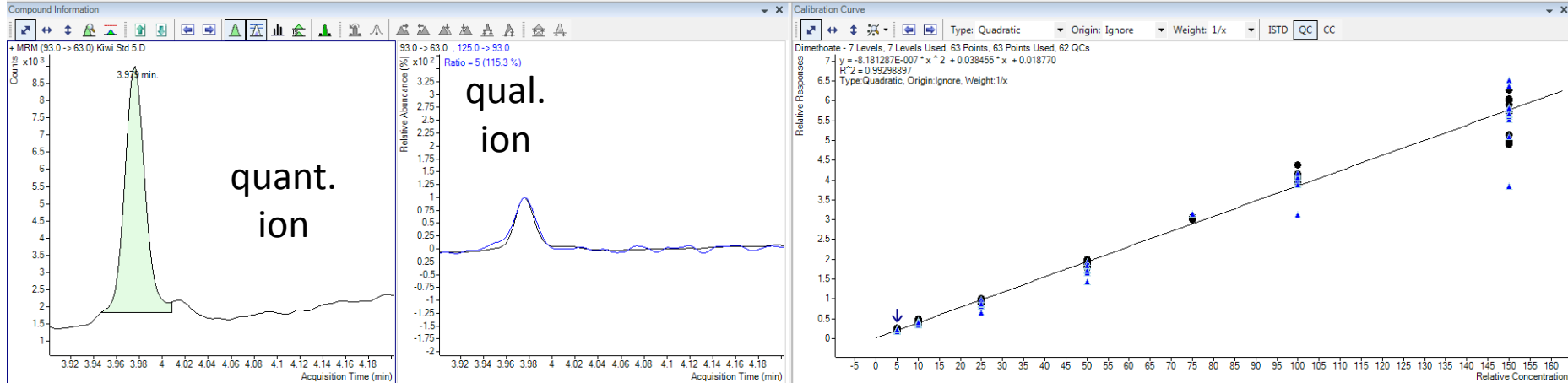
5 ng/mL std in pork

# Dimethoate Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample: Kiwi Std 5    Sample Type: <All>    Compound: Dimethoate    ISTD: Atrazine-d5

Sample				Dimethoate	Dimethoate Results					Qualifier (125- Atrazine-d5 (L				
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Kale Std 150	Kale Std 150.D	QC	7	2/24/2016 3:07 AM	150	3.978	143373	5.6506	146.9	98	5537	4	3.993	25373
Kiwi Spk 10a	Kiwi Spk 10a.D	MatrixSpike		2/23/2016 4:43 AM		3.979	13221	0.3427	8.4		621	5	3.993	38579
Kiwi Spk 10b	Kiwi Spk 10b.D	MatrixSpike		2/23/2016 4:58 AM		3.978	12833	0.3525	8.7		565	4	3.993	36410
Kiwi Spk 10c	Kiwi Spk 10c.D	MatrixSpike		2/23/2016 5:13 AM		3.979	10379	0.3418	8.4		493	5	3.993	30368
Kiwi Spk 10d	Kiwi Spk 10d.D	MatrixSpike		2/23/2016 5:29 AM		3.978	14012	0.3721	9.2		565	4	3.993	37655
Kiwi Spk 25a	Kiwi Spk 25a.D	MatrixSpike		2/23/2016 5:44 AM		3.979	32845	0.9202	23.5		1082	3	3.993	36693
Kiwi Spk 25b	Kiwi Spk 25b.D	MatrixSpike		2/23/2016 5:59 AM		3.978	34693	0.9105	23.2		1327	4	3.993	38103
Kiwi Spk 25c	Kiwi Spk 25c.D	MatrixSpike		2/23/2016 6:14 AM		3.979	42009	0.9174	23.4		1697	4	3.993	45790
Kiwi Spk 25d	Kiwi Spk 25d.D	MatrixSpike		2/23/2016 6:29 AM		3.978	36377	0.9025	23.0		1284	4	3.993	40307
Kiwi Spk 50a	Kiwi Spk 50a.D	MatrixSpike		2/23/2016 6:44 AM		3.979	78970	1.8517	47.7		2926	4	3.993	42647
Kiwi Spk 50b	Kiwi Spk 50b.D	MatrixSpike		2/23/2016 6:59 AM		3.978	68028	1.8057	46.5		2484	4	3.993	37674
Kiwi Spk 50c	Kiwi Spk 50c.D	MatrixSpike		2/23/2016 7:14 AM		3.979	70478	1.7888	46.1		2398	3	3.993	39399
Kiwi Spk 50d	Kiwi Spk 50d.D	MatrixSpike		2/23/2016 7:29 AM		3.978	73314	1.8142	46.7		2704	4	3.993	40410
Kiwi Spk 100a	Kiwi Spk 100a.D	MatrixSpike		2/23/2016 7:44 AM		3.979	144412	4.2370	110.0		5310	4	3.993	34084
Kiwi Spk 100b	Kiwi Spk 100b.D	MatrixSpike		2/23/2016 7:59 AM		3.978	339807	4.3677	113.4		12390	4	3.993	77800
Kiwi Spk 100c	Kiwi Spk 100c.D	MatrixSpike		2/23/2016 8:14 AM		3.979	156411	4.2109	109.3		5925	4	3.993	37144
Kiwi Spk 100d	Kiwi Spk 100d.D	MatrixSpike		2/23/2016 8:29 AM		3.978	160110	4.1927	108.8		5693	4	3.993	38188
Kiwi Std 0	Kiwi Std 0.D	QC	1	2/23/2016 2:58 AM		3.978	919	0.0210	0.1		131	14	3.993	43731
Kiwi Std 5	Kiwi Std 5.D	QC	2	2/23/2016 3:13 AM		3.978	3785	0.9372	5.2	103	395	5	3.993	40248
Kiwi Std 10	Kiwi Std 10.D	QC	3	2/23/2016 3:28 AM		3.978	15736	0.3885	9.6	95	698	4	3.993	40501
Kiwi Std 25	Kiwi Std 25.D	QC	4	2/23/2016 3:43 AM		3.979	59080	1.0207	26.1	104	1969	3	3.993	57880
Kiwi Std 50	Kiwi Std 50.D	QC	5	2/23/2016 3:58 AM		3.978	86186	1.9695	50.8	102	3286	4	3.993	43760
Kiwi Std 100	Kiwi Std 100.D	QC	8	2/23/2016 4:13 AM		3.979	143909	3.1749	82.2	110	5426	4	3.993	45295
Kiwi Std 150	Kiwi Std 150.D	QC	7	2/23/2016 4:28 AM		3.978	253167	6.3801	166.0	111	9449	4	3.993	39681

black circles = stds in solvent  
blue triangles = matrix-matched stds

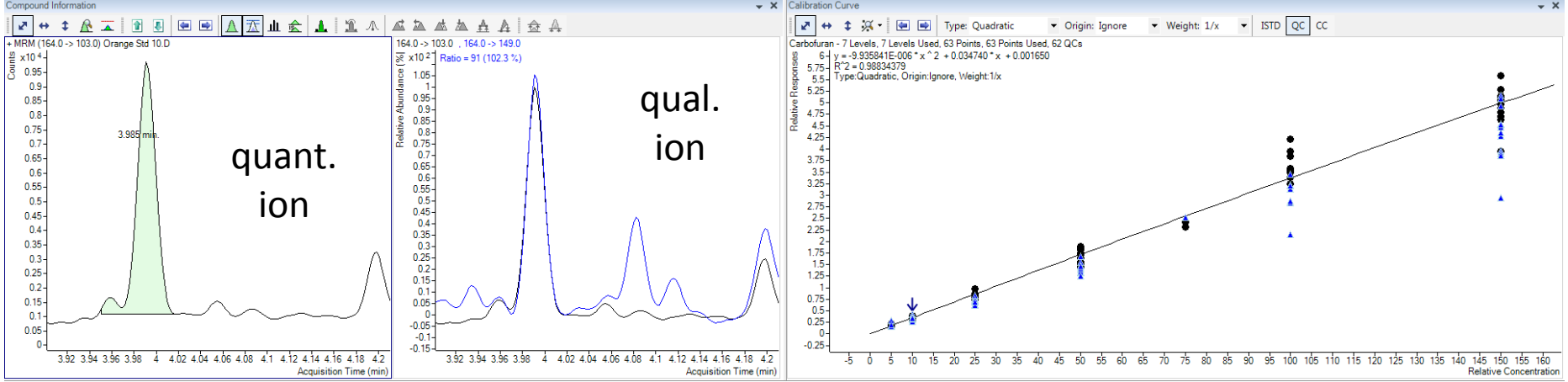


5 ng/mL std in kiwi

# Carbofuran Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample				Carbofuran Results										Qualifier (164...)		Atrazine-d5 (L...)	
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp.	Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area		
Orange Std 10	Orange Std 10.D	QC	10	2/24/2016 1:46 PM	10	3.985	10524	0.3115	9.5	86	3722	31	3.983	31333			

black circles = stds in solvent  
blue triangles = matrix-matched stds

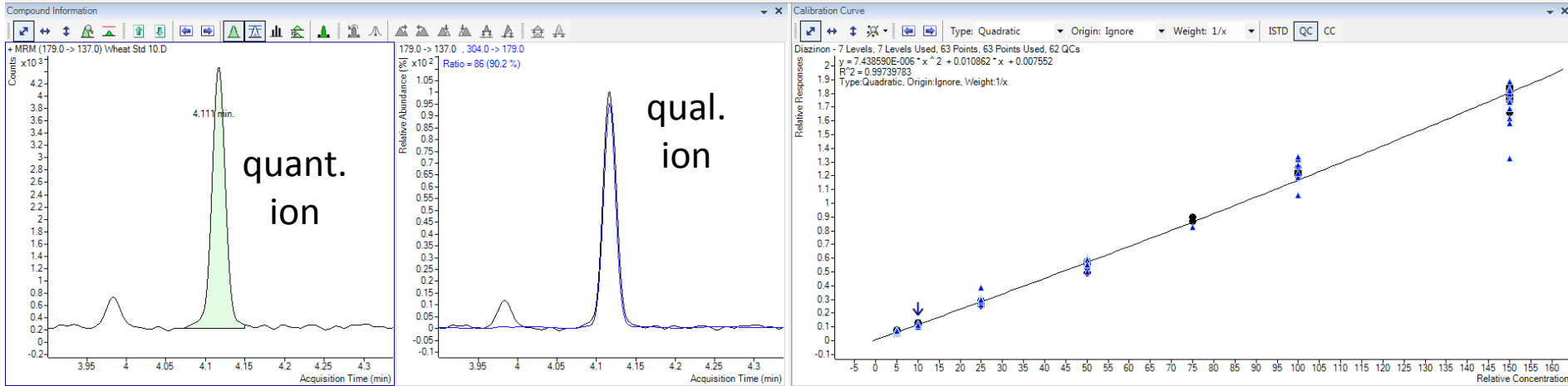


10 ng/mL std in orange

# Diazinon Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample		Sample Type		Compound		ISTD		Diazinon..		Diazinon Results		Qualifier (304..		Atrazine-d5 (L..	
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area	
SO Std 150b W/B	SO Std 150b W/B	Cal	7	2/26/2016 4:11 AM	150	4.111	65894	1.7462	145.6	97	63601	97	3.993	37736	
Wheat Spk 10a	Wheat Spk 10a.D	MatrixSpike		2/25/2016 5:36 PM		4.111	3187	0.1268	10.9		2777	87	3.993	25122	
Wheat Spk 10b	Wheat Spk 10b.D	MatrixSpike		2/25/2016 5:50 PM		4.111	4299	0.1293	11.1		3697	86	3.993	33246	
Wheat Spk 10c	Wheat Spk 10c.D	MatrixSpike		2/25/2016 6:03 PM		4.111	4961	0.1265	10.9		4281	86	3.993	39230	
Wheat Spk 10d	Wheat Spk 10d.D	MatrixSpike		2/25/2016 6:17 PM		4.111	3717	0.1228	10.5		3470	93	3.993	30280	
Wheat Spk 25a	Wheat Spk 25a.D	MatrixSpike		2/25/2016 6:31 PM		4.111	9873	0.2921	25.7		9431	96	3.993	33795	
Wheat Spk 25b	Wheat Spk 25b.D	MatrixSpike		2/25/2016 6:45 PM		4.111	11616	0.2834	25.0		11002	95	3.993	40991	
Wheat Spk 25c	Wheat Spk 25c.D	MatrixSpike		2/25/2016 6:59 PM		4.111	7305	0.3064	27.0		6423	88	3.993	23843	
Wheat Spk 25d	Wheat Spk 25d.D	MatrixSpike		2/25/2016 7:12 PM		4.111	7257	0.2919	25.7		6508	90	3.993	24861	
Wheat Spk 50a	Wheat Spk 50a.D	MatrixSpike		2/25/2016 7:26 PM		4.111	23376	0.5713	50.2		21888	94	3.993	40921	
Wheat Spk 50b	Wheat Spk 50b.D	MatrixSpike		2/25/2016 7:40 PM		4.111	12666	0.5706	50.1		12165	97	3.993	22021	
Wheat Spk 50c	Wheat Spk 50c.D	MatrixSpike		2/25/2016 7:54 PM		4.111	17877	0.6096	53.5		16376	92	3.993	29327	
Wheat Spk 50d	Wheat Spk 50d.D	MatrixSpike		2/25/2016 8:08 PM		4.111	18152	0.5805	51.0		17438	96	3.993	31270	
Wheat Spk 100a	Wheat Spk 100a.D	MatrixSpike		2/25/2016 8:22 PM		4.111	52548	1.2273	104.8		49375	94	3.993	42817	
Wheat Spk 100b	Wheat Spk 100b.D	MatrixSpike		2/25/2016 8:35 PM		4.111	34827	1.2103	103.4		32833	94	3.993	28776	
Wheat Spk 100c	Wheat Spk 100c.D	MatrixSpike		2/25/2016 8:49 PM		4.111	44267	1.2230	104.4		41085	93	3.993	36194	
Wheat Spk 100d	Wheat Spk 100d.D	MatrixSpike		2/25/2016 9:03 PM		4.111	32700	1.2480	106.4		30929	95	3.993	26201	
Wheat Std 0	Wheat Std 0.D	QC	1	2/25/2016 3:59 PM		4.111	501	0.0204	1.2		239	48	3.993	24540	
Wheat Std 5	Wheat Std 5.D	QC	2	2/25/2016 4:13 PM	5	4.111	1820	0.0763	6.3	126	1387	76	3.993	23867	
Wheat Std 10	Wheat Std 10.D	QC	3	2/25/2016 4:27 PM	10	4.111	5221	0.1273	10.9	109	4472	86	3.993	41019	
Wheat Std 25	Wheat Std 25.D	QC	4	2/25/2016 4:40 PM	25	4.111	7410	0.3007	26.5	106	6751	91	3.993	24647	
Wheat Std 50	Wheat Std 50.D	QC	5	2/25/2016 4:54 PM	50	4.111	25091	0.5728	50.3	101	23324	93	3.993	43802	
Wheat Std 100	Wheat Std 100.D	QC	6	2/25/2016 5:08 PM	100	4.111	46591	1.2232	104.4	104	44131	95	3.993	38089	
Wheat Std 150	Wheat Std 150.D	QC	7	2/25/2016 5:22 PM	150	4.111	70329	1.6934	141.5	94	66223	94	3.993	41532	

black circles = stds in solvent  
blue triangles = matrix-matched stds



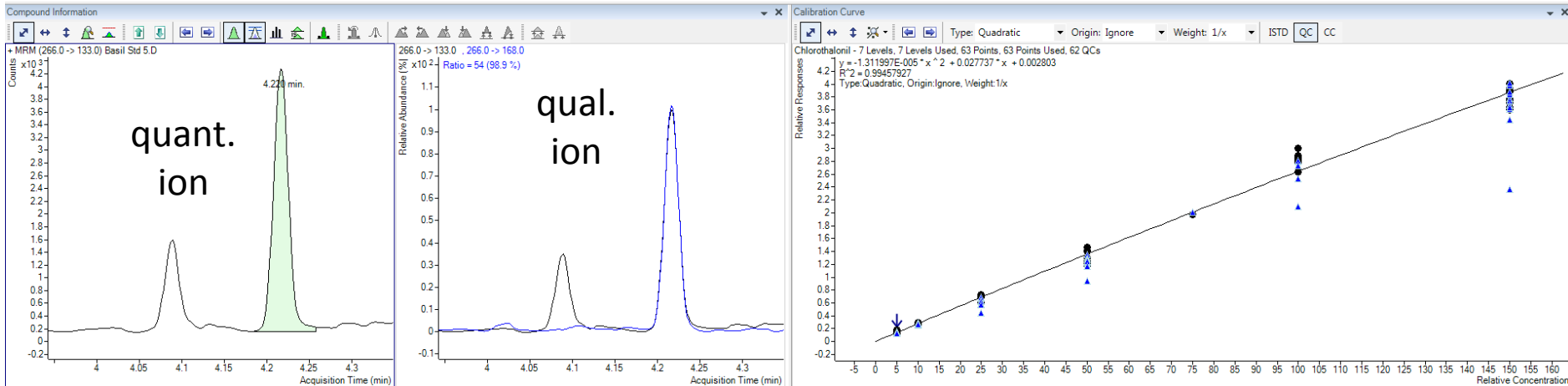
10 ng/mL std in wheat



# Chlorothalonil Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample					Chlorothalonil	Chlorothalonil Results				Qualifier (266..)		Atrazine-d5 (L..)		
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Basil Spk 10d	Basil Spk 10d.D	MatrixSpike		2/25/2016 11:49 PM		4.220	7133	0.1611	5.7		4255	60	3.993	44282
Basil Spk 25a	Basil Spk 25a.D	MatrixSpike		2/26/2016 12:03 AM		4.220	11710	0.4015	14.5		6285	54	3.993	29164
Basil Spk 25b	Basil Spk 25b.D	MatrixSpike		2/26/2016 12:16 AM		4.220	14294	0.4054	14.6		7706	54	3.993	35256
Basil Spk 25c	Basil Spk 25c.D	MatrixSpike		2/26/2016 12:30 AM		4.220	9879	0.3856	13.9		5407	55	3.993	25618
Basil Spk 25d	Basil Spk 25d.D	MatrixSpike		2/26/2016 12:44 AM		4.220	11194	0.4263	15.4		5798	52	3.993	26260
Basil Spk 50a	Basil Spk 50a.D	MatrixSpike		2/26/2016 12:58 AM		4.220	35880	0.7342	26.7		19522	54	3.993	48873
Basil Spk 50b	Basil Spk 50b.D	MatrixSpike		2/26/2016 1:12 AM		4.220	21501	0.8549	31.2		11718	54	3.993	25150
Basil Spk 50c	Basil Spk 50c.D	MatrixSpike		2/26/2016 1:26 AM		4.220	23556	0.8241	30.0		12439	53	3.993	28583
Basil Spk 50d	Basil Spk 50d.D	MatrixSpike		2/26/2016 1:39 AM		4.220	25332	0.8519	31.1		13818	55	3.993	29736
Basil Spk 100a	Basil Spk 100a.D	MatrixSpike		2/26/2016 1:53 AM		4.220	62345	1.8277	68.0		34521	55	3.993	34111
Basil Spk 100b	Basil Spk 100b.D	MatrixSpike		2/26/2016 2:07 AM		4.220	60651	1.8963	70.6		32719	54	3.993	31984
Basil Spk 100c	Basil Spk 100c.D	MatrixSpike		2/26/2016 2:21 AM		4.220	109616	1.9473	72.6		59734	54	3.993	56290
Basil Spk 100d	Basil Spk 100d.D	MatrixSpike		2/26/2016 2:35 AM		4.220	61504	1.8889	70.3		33309	54	3.993	32561
Basil Std 0	Basil Std 0.D	QC	1	2/25/2016 9:31 PM		4.220	721	0.0207	0.6		316	44	3.993	34874
Basil Std 5	Basil Std 5.D	QC	2	2/25/2016 9:44 PM	5	4.220	5164	0.1022	3.6	72	2794	54	3.993	50421
Basil Std 10	Basil Std 10.D	QC	3	2/25/2016 9:58 PM	10	4.220	4666	0.1926	6.9	69	2605	56	3.993	24231
Basil Std 25	Basil Std 25.D	QC	4	2/25/2016 10:12 PM	25	4.220	13034	0.4457	16.1	64	7035	54	3.993	29245
Basil Std 50	Basil Std 50.D	QC	5	2/25/2016 10:26 PM	50	4.220	45050	0.9459	34.6	69	24691	55	3.993	47628
Basil Std 100	Basil Std 100.D	QC	6	2/25/2016 10:40 PM	100	4.220	63723	2.0961	78.4	78	34420	54	3.993	30401
Basil Std 150	Basil Std 150.D	QC	7	2/25/2016 10:54 PM	150	4.220	93056	2.3673	89.0	53	51270	55	3.993	39308
Carrot Spk 10a	Carrot Spk 10a.D	MatrixSpike		2/23/2016 9:50 PM		4.220	8411	0.2418	8.7		4732	56	3.993	34782
Carrot Spk 10b	Carrot Spk 10b.D	MatrixSpike		2/23/2016 10:03 PM		4.220	8604	0.2834	10.2		4638	54	3.993	30356
Carrot Spk 10c	Carrot Spk 10c.D	MatrixSpike		2/23/2016 10:17 PM		4.220	8612	0.2478	8.9		4674	54	3.993	34754
Carrot Spk 10d	Carrot Spk 10d.D	MatrixSpike		2/23/2016 10:31 PM		4.220	6581	0.2530	9.1		3588	55	3.993	26014

black circles = stds in solvent  
blue triangles = matrix-matched stds

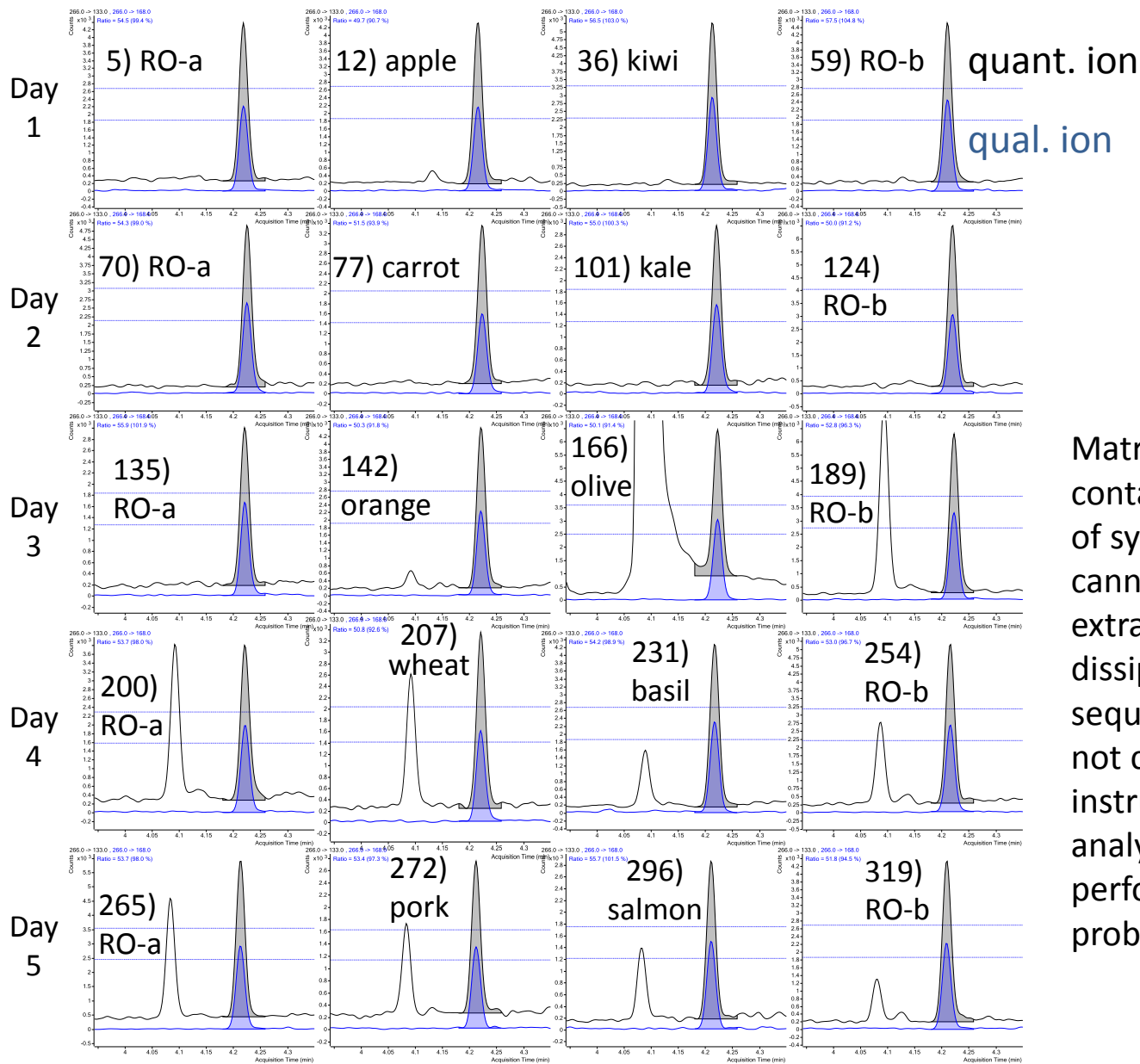


5 ng/mL std in basil



# Chlorothalonil 5 ng/mL calibration standards over the course of 5 days (inj. #)

RO = reagent-only; ion ratios within horizontal lines  $< |\pm 10\%|$  of ref. ratio

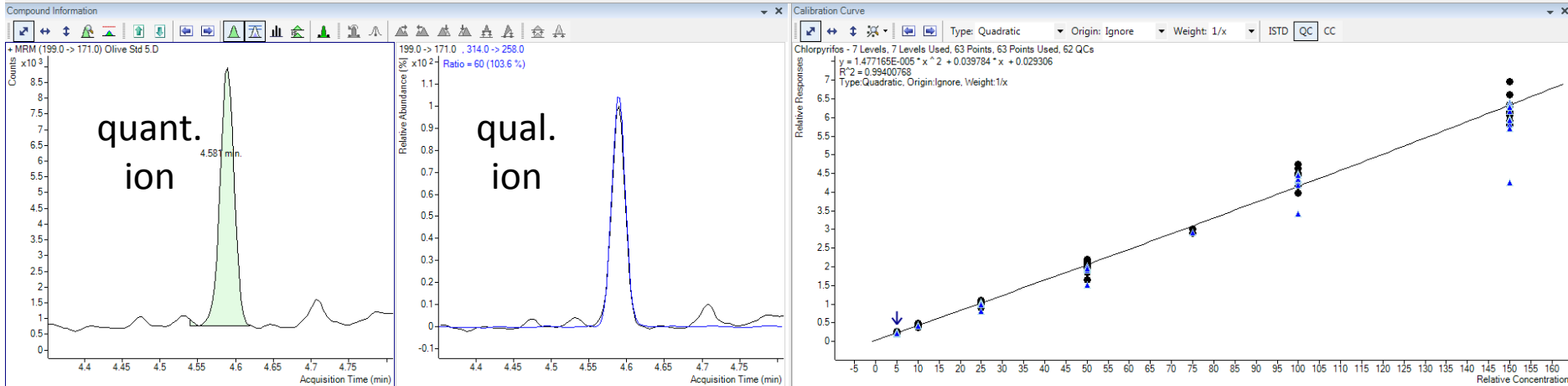


Matrix contamination of system from canned black olive extracts slowly dissipated during sequence, but did not cause instrument or analytical performance problems.

# Chlorpyrifos Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample				Chlorpyrifos		Chlorpyrifos Results				Qualifier (314..		Atrazine-d5 (L		
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Olive Spk 10b	Olive Spk 10b.D	MatrixSpike		2/24/2016 8:50 PM	4.581	13142		0.6518	15.6		7212	55	3.993	20164
Olive Spk 10c	Olive Spk 10c.D	MatrixSpike		2/24/2016 9:04 PM	4.581	10643		0.6344	15.1		6159	58	3.993	16776
Olive Spk 10d	Olive Spk 10d.D	MatrixSpike		2/24/2016 9:18 PM	4.581	18842		0.6844	13.9		10935	58	3.993	32241
Olive Spk 25a	Olive Spk 25a.D	MatrixSpike		2/24/2016 9:31 PM	4.581	26197		1.2132	29.4		14830	57	3.993	21594
Olive Spk 25b	Olive Spk 25b.D	MatrixSpike		2/24/2016 9:45 PM	4.581	22841		1.2178	29.6		12711	56	3.993	18755
Olive Spk 25c	Olive Spk 25c.D	MatrixSpike		2/24/2016 9:59 PM	4.581	31552		1.2570	30.5		18071	57	3.993	25102
Olive Spk 25d	Olive Spk 25d.D	MatrixSpike		2/24/2016 10:13 PM	4.581	29191		1.2037	29.2		17240	59	3.993	24251
Olive Spk 50a	Olive Spk 50a.D	MatrixSpike		2/24/2016 10:27 PM	4.581	83677		2.5228	61.3		48680	58	3.993	33168
Olive Spk 50b	Olive Spk 50b.D	MatrixSpike		2/24/2016 10:41 PM	4.581	91894		2.6533	64.4		51790	56	3.993	34634
Olive Spk 50c	Olive Spk 50c.D	MatrixSpike		2/24/2016 10:54 PM	4.581	84009		2.4850	60.4		48478	58	3.993	33806
Olive Spk 50d	Olive Spk 50d.D	MatrixSpike		2/24/2016 11:08 PM	4.581	88075		2.4645	59.9		50693	58	3.993	35737
Olive Spk 100a	Olive Spk 100a.D	MatrixSpike		2/24/2016 11:22 PM	4.581	99109		5.5373	132.0		56528	57	3.993	17898
Olive Spk 100b	Olive Spk 100b.D	MatrixSpike		2/24/2016 11:36 PM	4.581	102493		5.2609	125.6		58862	57	3.993	19482
Olive Spk 100c	Olive Spk 100c.D	MatrixSpike		2/24/2016 11:50 PM	4.581	182878		5.4194	129.3		104877	57	3.993	33745
Olive Spk 100d	Olive Spk 100d.D	MatrixSpike		2/25/2016 12:03 AM	4.581	125585		5.2857	126.2		72845	58	3.993	23759
Olive Std 0	Olive Std 0.D	QC	1	2/24/2016 7:00 PM	4.581	1724		0.0446	0.4		931	54	3.993	38645
Olive Std 5	Olive Std 5.D	QC	2	2/24/2016 7:13 PM	5	4.581	10796	0.2429	5.4	107	6426	60	3.993	44448
Olive Std 10	Olive Std 10.D	QC	3	2/24/2016 7:27 PM	10	4.581	19941	0.4221	9.8	98	11320	57	3.993	47245
Olive Std 25	Olive Std 25.D	QC	4	2/24/2016 7:41 PM	25	4.581	32157	1.0093	24.4	98	18565	58	3.993	31862
Olive Std 50	Olive Std 50.D	QC	5	2/24/2016 7:55 PM	50	4.581	80754	1.9836	48.3	97	46195	57	3.993	40710
Olive Std 100	Olive Std 100.D	QC	6	2/24/2016 8:09 PM	100	4.581	112098	4.3465	104.5	104	64399	57	3.993	25791
Olive Std 150	Olive Std 150.D	QC	7	2/24/2016 8:22 PM	150	4.581	158235	6.2710	148.7	99	90832	57	3.993	25233
Orange Spk 10a	Orange Spk 10a.D	MatrixSpike		2/24/2016 3:05 PM	4.581	15442		0.5706	13.5		8836	57	3.993	27066
Orange Spk 10b	Orange Spk 10b.D	MatrixSpike		2/24/2016 3:19 PM	4.581	15587		0.5619	13.3		8925	57	3.993	27740

black circles = stds in solvent  
blue triangles = matrix-matched stds

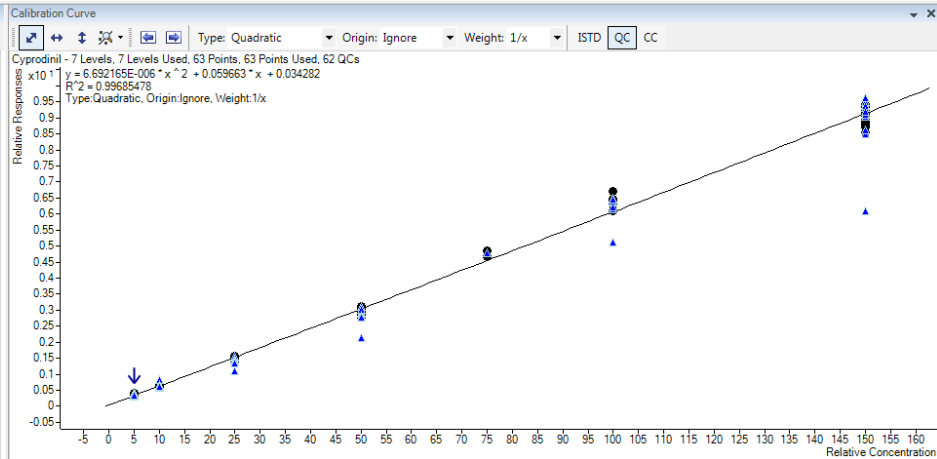
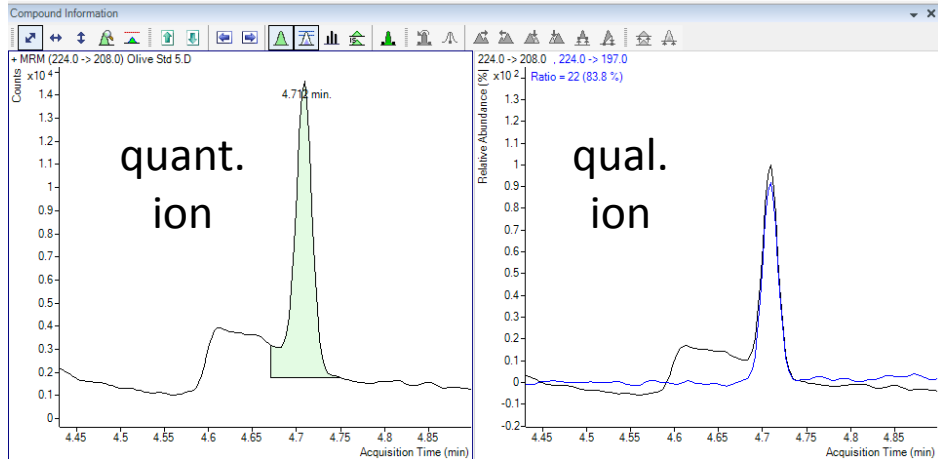


5 ng/mL std in black olive

# Cyprodinil Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample				Cyprodinil			Cyprodinil Results			Qualifier (224)		Atrazine-d5 (L		
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Olive Spk 10b	Olive Spk 10b.D	Matrix Spike		2/24/2016 8:50 PM		4.712	15045	0.7461	11.9		3964	26	3.993	20164
Olive Spk 10c	Olive Spk 10c.D	Matrix Spike		2/24/2016 9:04 PM		4.712	15421	0.9192	14.8		3686	24	3.993	16776
Olive Spk 10d	Olive Spk 10d.D	Matrix Spike		2/24/2016 9:18 PM		4.712	31782	0.9858	15.9		7058	22	3.993	32241
Olive Spk 25a	Olive Spk 25a.D	Matrix Spike		2/24/2016 9:31 PM		4.712	34924	1.6173	26.5		9328	27	3.993	21594
Olive Spk 25b	Olive Spk 25b.D	Matrix Spike		2/24/2016 9:45 PM		4.712	31881	1.6998	27.8		8155	26	3.993	18755
Olive Spk 25c	Olive Spk 25c.D	Matrix Spike		2/24/2016 9:59 PM		4.712	43750	1.7429	28.5		10022	23	3.993	25102
Olive Spk 25d	Olive Spk 25d.D	Matrix Spike		2/24/2016 10:13 PM		4.712	39633	1.6343	26.7		9939	25	3.993	24251
Olive Spk 50a	Olive Spk 50a.D	Matrix Spike		2/24/2016 10:27 PM		4.712	128552	3.8758	63.9		30847	24	3.993	33168
Olive Spk 50b	Olive Spk 50b.D	Matrix Spike		2/24/2016 10:41 PM		4.712	137535	3.9711	65.5		34116	25	3.993	34634
Olive Spk 50c	Olive Spk 50c.D	Matrix Spike		2/24/2016 10:54 PM		4.712	128431	3.7990	62.7		33265	26	3.993	33806
Olive Spk 50d	Olive Spk 50d.D	Matrix Spike		2/24/2016 11:08 PM		4.712	132762	3.7150	61.3		32236	24	3.993	35737
Olive Spk 100a	Olive Spk 100a.D	Matrix Spike		2/24/2016 11:22 PM		4.712	136126	7.6055	125.1		36175	27	3.993	17898
Olive Spk 100b	Olive Spk 100b.D	Matrix Spike		2/24/2016 11:36 PM		4.712	143182	7.3494	121.0		38551	27	3.993	19482
Olive Spk 100c	Olive Spk 100c.D	Matrix Spike		2/24/2016 11:50 PM		4.712	259339	7.6852	126.4		68497	26	3.993	33745
Olive Spk 100d	Olive Spk 100d.D	Matrix Spike		2/25/2016 12:03 AM		4.712	172235	7.2491	119.3		45290	26	3.993	23759
Olive Std 0	Olive Std 0.D	QC	1	2/24/2016 7:00 PM		4.712	2825	0.0731	0.7		486	17	3.993	38645
Olive Std 5	Olive Std 5.D	QC	2	2/24/2016 7:13 PM	5	4.712	18602	0.4185	6.4	129	4052	22	3.993	44449
Olive Std 10	Olive Std 10.D	QC	3	2/24/2016 7:27 PM	10	4.712	39485	0.8358	13.4	134	8188	21	3.993	47245
Olive Std 25	Olive Std 25.D	QC	4	2/24/2016 7:41 PM	25	4.712	45367	1.4239	23.2	93	11668	26	3.993	31862
Olive Std 50	Olive Std 50.D	QC	5	2/24/2016 7:55 PM	50	4.712	119264	2.9296	48.3	97	30805	26	3.993	40710
Olive Std 100	Olive Std 100.D	QC	6	2/24/2016 8:09 PM	100	4.712	167590	6.4981	107.1	107	43999	26	3.993	25791
Olive Std 150	Olive Std 150.D	QC	7	2/24/2016 8:22 PM	150	4.712	237108	9.3968	154.3	103	62286	26	3.993	25233
Orange Spk 10a	Orange Spk 10a.D	Matrix Spike		2/24/2016 3:05 PM		4.712	17739	0.6554	10.4		5026	28	3.993	27066
Orange Spk 10b	Orange Spk 10b.D	Matrix Spike		2/24/2016 3:19 PM		4.712	19142	0.6900	11.0		5033	26	3.993	27740

black circles = stds in solvent  
blue triangles = matrix-matched stds

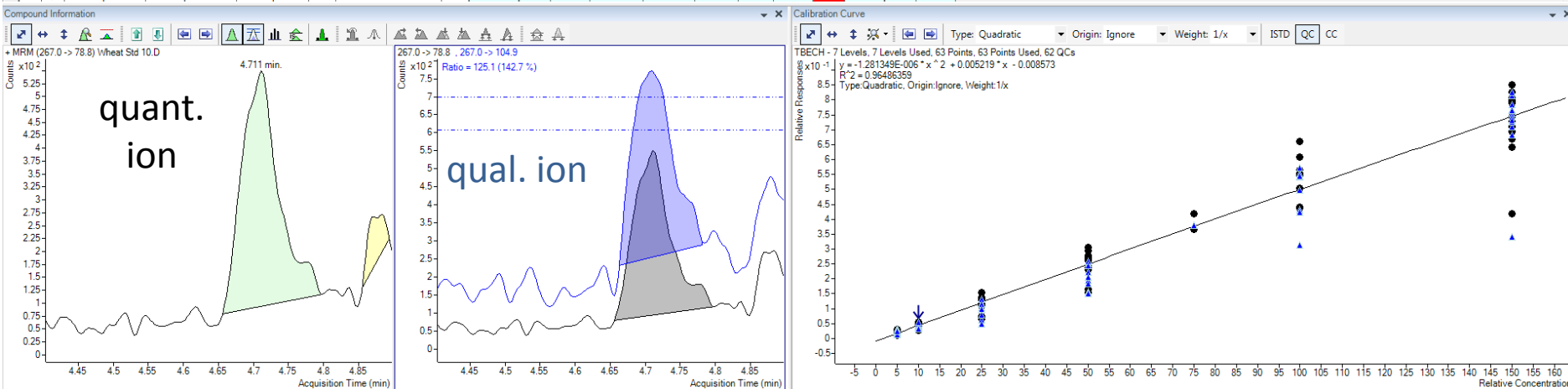


5 ng/mL std in black olive

# TBECH Results (vs. atrazine-d5) – all 325 analyses combined!

Sample				TBECH Results										Qualifier (267...)		Atrazine-d5 (L...)	
Name	Data File	Type	Level	Acq. Date-Time	Vol.	Exp. Conc.	RT	Resp.	Calc. Conc.	Final Conc.	Accuracy	S/N	Area	Ratio	Area	RT	Resp.
SO Std 25a WB	SO Std 25a WB.D	Cal	4	2/25/2016 3:04 PM	1.00	25.0000	4.705	2626	22.6672	22.6672	90.7	4.17	2626	130.5	3426	3.993	24081
SO Std 50a WB	SO Std 50a WB.D	Cal	5	2/25/2016 3:18 PM	1.00	50.0000	4.708	11459	55.5260	55.5260	111.1	31.64	11459	132.5	15188	3.993	41332
SO Std 100a WB	SO Std 100a WB.D	Cal	6	2/25/2016 3:31 PM	1.00	100.0000	4.708	14905	109.5649	109.5649	109.6	27.62	14905	138.8	20691	3.993	27206
SO Std 150a WB	SO Std 150a WB.D	Cal	7	2/25/2016 3:45 PM	1.00	150.0000	4.705	22344	139.4471	139.4471	93.0	153.	22344	128.6	28735	3.993	32185
Wheat Std 0	Wheat Std 0.D	QC	1	2/25/2016 3:59 PM	1.00		4.720	96	2.3968	2.3968		0.67	96	110.9	107	3.993	24540
Wheat Std 5	Wheat Std 5.D	QC	2	2/25/2016 4:13 PM	1.00	5.0000	4.700	349	4.4524	4.4524	89.0	2.69	349	288.3	1007	3.993	23867
Wheat Std 10	Wheat Std 10.D	QC	3	2/25/2016 4:27 PM	1.00	10.0000	4.711	1672	9.4741	9.4741	94.7	3.79	1672	125.1	2092	3.993	41019
Wheat Std 25	Wheat Std 25.D	QC	4	2/25/2016 4:40 PM	1.00	25.0000	4.702	2412	20.5004	20.5004	82.0	4.65	2412	144.4	3484	3.993	24647
Wheat Std 50	Wheat Std 50.D	QC	5	2/25/2016 4:54 PM	1.00	50.0000	4.708	11096	50.8192	50.8192	101.6	95.30	11096	129.9	14410	3.993	43802
Wheat Std 100	Wheat Std 100.D	QC	6	2/25/2016 5:08 PM	1.00	100.0000	4.702	20736	108.8737	108.8737	108.9	92.62	20736	125.5	26017	3.993	38089
Wheat Std 150	Wheat Std 150.D	QC	7	2/25/2016 5:22 PM	1.00	150.0000	4.702	29532	142.9134	142.9134	95.3	Infinity	29532	127.3	37602	3.993	41532
Wheat Spk 10a	Wheat Spk 10a.D	Matrix Spike		2/25/2016 5:36 PM	1.00		4.711	1177	10.6475	10.6475		6.30	1177	99.9	1176	3.993	25122
Wheat Spk 10b	Wheat Spk 10b.D	Matrix Spike		2/25/2016 5:50 PM	1.00		4.711	1886	12.5524	12.5524		10.03	1886	92.8	1751	3.993	33246
Wheat Spk 10c	Wheat Spk 10c.D	Matrix Spike		2/25/2016 6:03 PM	1.00		4.700	1511	9.0429	9.0429		10.82	1511	114.6	1732	3.993	39230
Wheat Spk 10d	Wheat Spk 10d.D	Matrix Spike		2/25/2016 6:17 PM	1.00		4.700	1295	9.8638	9.8638		5.96	1295	134.9	1747	3.993	30280
Wheat Spk 25a	Wheat Spk 25a.D	Matrix Spike		2/25/2016 6:31 PM	1.00		4.702	3210	19.9438	19.9438		5.23	3210	115.8	3717	3.993	33795
Wheat Spk 25b	Wheat Spk 25b.D	Matrix Spike		2/25/2016 6:45 PM	1.00		4.700	4725	23.8700	23.8700		11.53	4725	129.2	6103	3.993	40991
Wheat Spk 25c	Wheat Spk 25c.D	Matrix Spike		2/25/2016 6:59 PM	1.00		4.702	2614	22.7772	22.7772		9.40	2614	115.6	3020	3.993	23843
Wheat Spk 25d	Wheat Spk 25d.D	Matrix Spike		2/25/2016 7:12 PM	1.00		4.702	2836	23.6420	23.6420		7.78	2836	130.8	3711	3.993	24861
Wheat Spk 50a	Wheat Spk 50a.D	Matrix Spike		2/25/2016 7:26 PM	1.00		4.702	9368	46.0295	46.0295		17.74	9368	136.9	12826	3.993	40921
Wheat Spk 50b	Wheat Spk 50b.D	Matrix Spike		2/25/2016 7:40 PM	1.00		4.708	4249	38.9866	38.9866		21.70	4249	147.1	6252	3.993	22021
Wheat Spk 50c	Wheat Spk 50c.D	Matrix Spike		2/25/2016 7:54 PM	1.00		4.705	5964	41.0246	41.0246		38.23	5964	125.7	7498	3.993	29327
Wheat Spk 50d	Wheat Spk 50d.D	Matrix Spike		2/25/2016 8:08 PM	1.00		4.697	6254	40.3694	40.3694		54.62	6254	129.6	8108	3.993	31270
Wheat Spk 100a	Wheat Spk 100a.D	Matrix Spike		2/25/2016 8:22 PM	1.00		4.708	21917	102.2971	102.2971		17.49	21917	133.9	29353	3.993	42817

black circles = stds in solvent  
blue triangles = matrix-matched stds

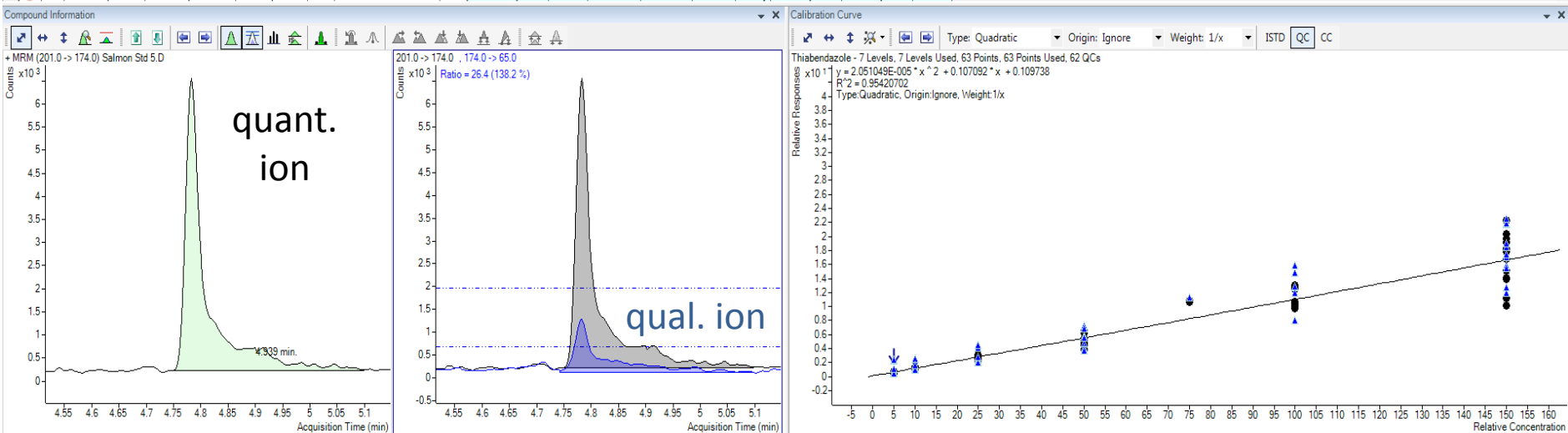


10 ng/mL in wheat grain

# Thiabendazole Results (vs. atrazine-d5) – all 325 analyses combined!

Sample				Thiabendazole	Thiabendazole Results										Qualifier (174)		Atrazine-d5 (L)	
Name	Data File	Type	Level	Acq. Date-Time	Vol.	Exp. Conc.	RT	Resp.	Calc. Conc.	Final Conc.	Accuracy	S/N	Area	Ratio	Area	RT	Resp.	
Pork Spk 10c	Pork Spk 10c.D	MatrixSpike		2/26/2016 1:48 PM	1.00	4.939	16926	4.8882	4.8882		Infinity	16926	22.3	3772	3.993	26710		
Pork Spk 10d	Pork Spk 10d.D	MatrixSpike		2/26/2016 2:02 PM	1.00	4.939	20816	4.1830	4.1830		Infinity	20816	25.0	5197	3.993	37301		
Pork Spk 25a	Pork Spk 25a.D	MatrixSpike		2/26/2016 2:16 PM	1.00	4.939	31536	10.8879	10.8879		Infinity	31536	20.1	6343	3.993	24673		
Pork Spk 25b	Pork Spk 25b.D	MatrixSpike		2/26/2016 2:29 PM	1.00	4.939	34973	12.7357	12.7357		Infinity	34973	19.5	6820	3.993	23680		
Pork Spk 25c	Pork Spk 25c.D	MatrixSpike		2/26/2016 2:43 PM	1.00	4.939	39499	12.2723	12.2723		Infinity	39499	19.7	7780	3.993	27678		
Pork Spk 25d	Pork Spk 25d.D	MatrixSpike		2/26/2016 2:57 PM	1.00	4.939	42438	11.7816	11.7816		Infinity	42438	18.2	7725	3.993	30880		
Pork Spk 50a	Pork Spk 50a.D	MatrixSpike		2/26/2016 3:11 PM	1.00	4.939	82791	24.6405	24.6405		Infinity	82791	19.1	15795	3.993	29866		
Pork Spk 50b	Pork Spk 50b.D	MatrixSpike		2/26/2016 3:25 PM	1.00	4.939	81420	22.7259	22.7259		Infinity	81420	19.5	15888	3.993	31878		
Pork Spk 50c	Pork Spk 50c.D	MatrixSpike		2/26/2016 3:38 PM	1.00	4.939	151193	30.1393	30.1393		Infinity	151193	19.4	29347	3.993	45051		
Pork Spk 50d	Pork Spk 50d.D	MatrixSpike		2/26/2016 3:52 PM	1.00	4.939	83141	25.7975	25.7975		Infinity	83141	18.4	15300	3.993	28808		
Pork Spk 100a	Pork Spk 100a.D	MatrixSpike		2/26/2016 4:06 PM	1.00	4.939	226473	51.5701	51.5701		Infinity	226473	19.1	43200	3.993	38823		
Pork Spk 100b	Pork Spk 100b.D	MatrixSpike		2/26/2016 4:20 PM	1.00	4.939	220809	55.1363	55.1363		Infinity	220809	18.8	41554	3.993	36337		
Pork Spk 100c	Pork Spk 100c.D	MatrixSpike		2/26/2016 4:34 PM	1.00	4.939	116938	46.8791	46.8791		Infinity	116938	18.6	21772	3.993	22596		
Pork Spk 100d	Pork Spk 100d.D	MatrixSpike		2/26/2016 4:48 PM	1.00	4.939	236634	59.6306	59.6306		Infinity	236634	18.9	44788	3.993	36025		
MeCN b PS	MeCN b PS.D	Blank		2/26/2016 5:02 PM	1.00	4.939	753	50.6224	50.6224		Infinity	753	76.5	576	3.993	135		
Salmon Std 0	Salmon Std 0.D	QC	1	2/26/2016 5:15 PM	1.00	4.939	4680	1.0071	1.0071		Infinity	4680	35.0	1637	3.993	21507		
Salmon Std 5	Salmon Std 5.D	QC	2	2/26/2016 5:29 PM	1.00	5.0000	4.939	16081	4.9901	4.9901	99.8	Infinity	16081	26.4	4240	3.993	24845	
Salmon Std 10	Salmon Std 10.D	QC	3	2/26/2016 5:43 PM	1.00	10.0000	4.939	30673	9.6881	9.6881	96.9	Infinity	30673	20.5	6281	3.993	26691	
Salmon Std 25	Salmon Std 25.D	QC	4	2/26/2016 5:57 PM	1.00	25.0000	4.939	73364	25.5773	25.5773	102.3	Infinity	73364	19.2	14060	3.993	25632	
Salmon Std 50	Salmon Std 50.D	QC	5	2/26/2016 6:11 PM	1.00	50.0000	4.939	132996	50.8840	50.8840	101.8	Infinity	132996	18.8	25060	3.993	23698	
Salmon Std 100	Salmon Std 100.D	QC	6	2/26/2016 6:24 PM	1.00	100.0000	4.939	279508	115.1071	115.1071	115.1	Infinity	279508	18.9	52778	3.993	21994	
Salmon Std 150	Salmon Std 150.D	QC	7	2/26/2016 6:38 PM	1.00	150.0000	4.939	483889	157.6043	157.6043	105.1	Infinity	483889	19.1	92396	3.993	27655	
Salmon Spk 10a	Salmon Spk 10a.D	MatrixSpike		2/26/2016 6:52 PM	1.00	4.939	27713	8.2578	8.2578		Infinity	27713	21.2	5870	3.993	27839		
Salmon Spk 10b	Salmon Spk 10b.D	MatrixSpike		2/26/2016 7:06 PM	1.00	4.939	22044	6.2678	6.2678		Infinity	22044	22.7	5009	3.993	28197		

black circles = stds in solvent  
blue triangles = matrix-matched stds

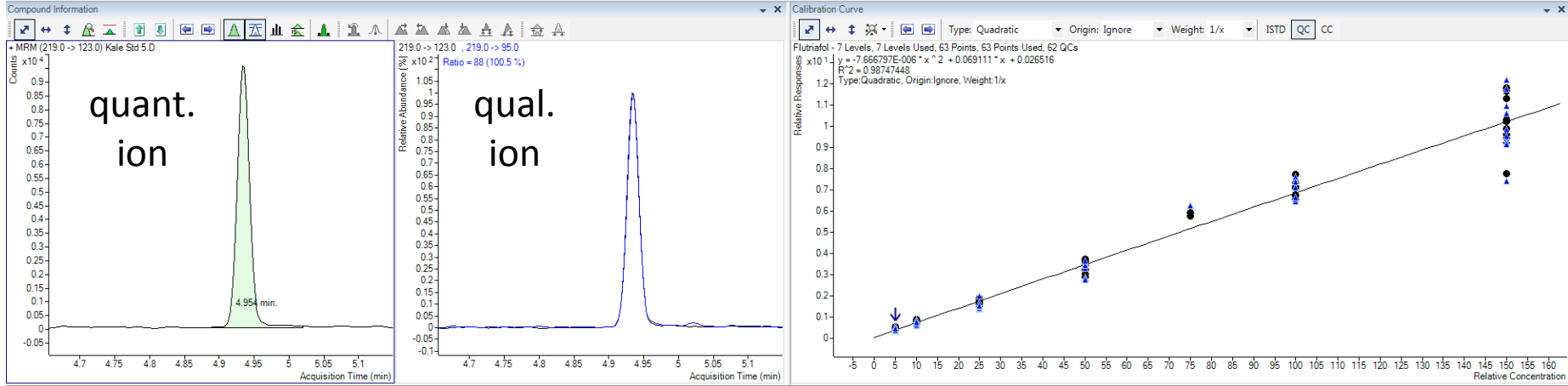


5 ng/mL in salmon

# Flutriafol Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample						Flutriafol		Flutriafol Results				Qualifier (219)		Atrazine-d5 (L)	
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area	
Kale Spk 25b	Kale Spk 25b.D	MatrixSpike		2/24/2016 4:30 AM	4.952	24648		0.7211	10.1		21780	88	3.993	34180	
Kale Spk 25c	Kale Spk 25c.D	MatrixSpike		2/24/2016 4:44 AM	4.952	100952		3.0072	43.3		89345	89	3.993	33570	
Kale Spk 25d	Kale Spk 25d.D	MatrixSpike		2/24/2016 4:58 AM	4.954	63512		1.8504	23.7		56603	89	3.993	38251	
Kale Spk 50a	Kale Spk 50a.D	MatrixSpike		2/24/2016 5:11 AM	4.952	65460		1.7387	24.8		56339	87	3.993	37543	
Kale Spk 50b	Kale Spk 50b.D	MatrixSpike		2/24/2016 5:25 AM	4.954	126653		3.4267	49.5		111594	88	3.993	36951	
Kale Spk 50c	Kale Spk 50c.D	MatrixSpike		2/24/2016 5:39 AM	4.952	84976		3.1274	45.1		74966	88	3.993	27140	
Kale Spk 50d	Kale Spk 50d.D	MatrixSpike		2/24/2016 5:53 AM	4.952	102213		3.1383	45.3		89637	88	3.993	32569	
Kale Spk 100a	Kale Spk 100a.D	MatrixSpike		2/24/2016 6:07 AM	4.954	194351		7.0889	103.5		170291	88	3.993	27378	
Kale Spk 100b	Kale Spk 100b.D	MatrixSpike		2/24/2016 6:20 AM	4.952	157548		6.8159	99.3		137751	87	3.993	23115	
Kale Spk 100c	Kale Spk 100c.D	MatrixSpike		2/24/2016 6:34 AM	4.954	190330		7.0279	102.5		166111	87	3.993	27082	
Kale Spk 100d	Kale Spk 100d.D	MatrixSpike		2/24/2016 6:48 AM	4.952	214727		6.3744	92.8		189743	88	3.993	33686	
Kale Std 0	Kale Std 0.D	QC	1	2/24/2016 1:44 AM	4.952	1519		0.0624	0.5		1260	83	3.993	24333	
Kale Std 5	Kale Std 5.D	QC	2	2/24/2016 1:58 AM	4.954	11797		0.4410	6.0	120	10361	88	3.993	26751	
Kale Std 10	Kale Std 10.D	QC	3	2/24/2016 2:12 AM	4.952	23288		0.7712	10.8	108	19820	85	3.993	30199	
Kale Std 25	Kale Std 25.D	QC	4	2/24/2016 2:26 AM	4.952	106968		1.5175	21.6	87	94423	88	3.993	70490	
Kale Std 50	Kale Std 50.D	QC	5	2/24/2016 2:40 AM	4.954	139295		3.6621	52.9	106	121726	87	3.993	38037	
Kale Std 100	Kale Std 100.D	QC	6	2/24/2016 2:53 AM	4.952	213488		7.6085	111.1	111	187977	88	3.993	28059	
Kale Std 150	Kale Std 150.D	QC	7	2/24/2016 3:07 AM	4.954	269763		10.6318	156.2	104	237892	88	3.993	25373	
Kiwi Spk 10a	Kiwi Spk 10a.D	MatrixSpike		2/23/2016 4:43 AM	4.952	27086		0.7021	9.8		24014	89	3.993	38579	
Kiwi Spk 10b	Kiwi Spk 10b.D	MatrixSpike		2/23/2016 4:58 AM	4.954	26625		0.7313	10.2		23722	89	3.993	36410	
Kiwi Spk 10c	Kiwi Spk 10c.D	MatrixSpike		2/23/2016 5:13 AM	4.952	21915		0.7217	10.1		19470	89	3.993	30368	
Kiwi Spk 10d	Kiwi Spk 10d.D	MatrixSpike		2/23/2016 5:29 AM	4.954	29624		0.7867	11.0		26075	88	3.993	37655	
Kiwi Spk 25a	Kiwi Spk 25a.D	MatrixSpike		2/23/2016 5:44 AM	4.952	60840		1.7045	24.3		52622	86	3.993	35693	
Kiwi Spk 25b	Kiwi Spk 25b.D	MatrixSpike		2/23/2016 5:59 AM	4.954	69089		1.8132	25.9		61302	89	3.993	38103	

black circles = stds in solvent  
blue triangles = matrix-matched stds



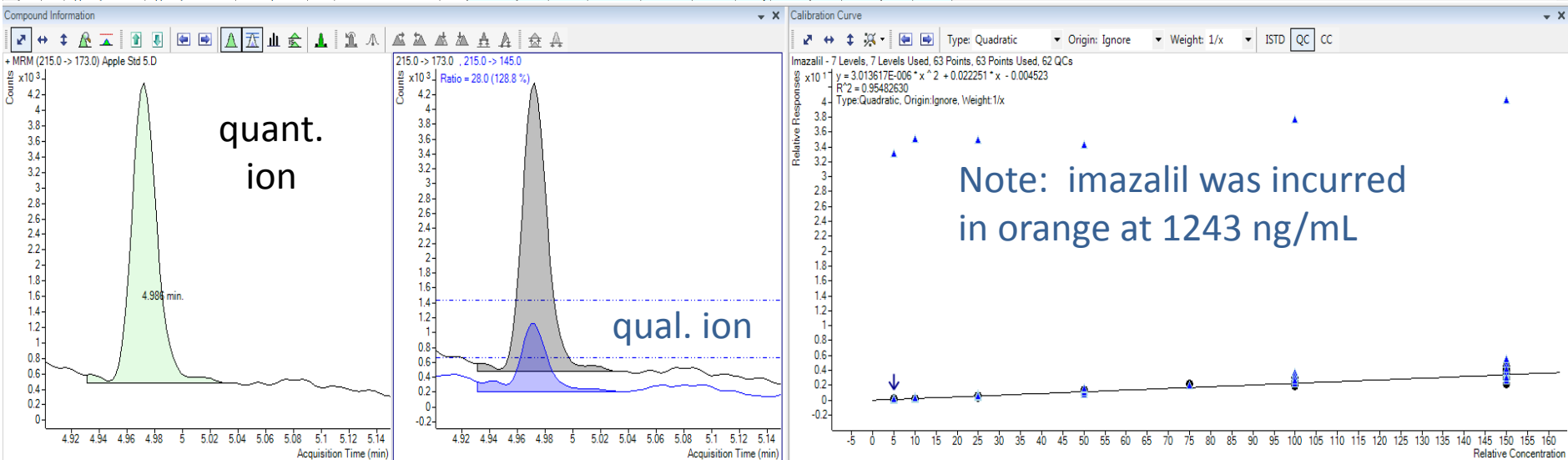
5 ng/mL std in kale



# Imazalil Results (vs. atrazine-d5) – all 325 analyses combined!

Sample										Imazalil										Qualifier (215...)				Atrazine-d5 (L...)			
Name	Data File	Type	Level	Acq. Date-Time	Vol.	Exp. Conc.	RT	Resp.	Calc. Conc.	Final Conc.	Accuracy	S/N	Area	Ratio	Area	RT	Resp.	Area	RT	Resp.							
SO Std 150 AK	SO Std 150 AK.D	Cal	7	2/22/2016 6:26 PM	1.00	150.0000	4.986	67657	170.9072	170.9072	113.9	Infinity	67657	23.1	15598	3.993	17409										
MeCN a AK	MeCN a AK.D	Blank		2/22/2016 6:41 PM	1.00		4.986	1039	141.9139	141.9139	Infinity	Infinity	1039	28.7	298	3.993	323										
Rgt Blk AK	Rgt Blk AK.D	Blank		2/22/2016 6:56 PM	1.00		4.986	561	104.7403	104.7403	Infinity	Infinity	561	62.9	353	3.993	238										
SO Std 0a AK	SO Std 0a AK.D	Blank		2/22/2016 7:11 PM	1.00		4.986	582	0.8515	0.8515	Infinity	Infinity	582	41.5	242	3.993	40363										
SO Std 5a AK	SO Std 5a AK.D	Cal	2	2/22/2016 7:26 PM	1.00	5.0000	4.986	4199	6.0563	6.0563	121.1	Infinity	4199	27.9	1171	3.993	32218										
SO Std 10a AK	SO Std 10a AK.D	Cal	3	2/22/2016 7:41 PM	1.00	10.0000	4.986	8697	10.9338	10.9338	109.3	Infinity	8697	22.3	1941	3.993	36369										
SO Std 25a AK	SO Std 25a AK.D	Cal	4	2/22/2016 7:56 PM	1.00	25.0000	4.986	24268	27.3495	27.3495	109.4	Infinity	24268	23.2	5637	3.993	40027										
SO Std 50a AK	SO Std 50a AK.D	Cal	5	2/22/2016 8:11 PM	1.00	50.0000	4.986	49476	58.7111	58.7111	117.4	Infinity	49476	23.5	11644	3.993	37704										
SO Std 100a AK	SO Std 100a AK.D	Cal	8	2/22/2016 8:26 PM	1.00	75.0000	4.986	83558	97.3270	97.3270	129.8	Infinity	83558	21.4	17920	3.993	38160										
SO Std 150a AK	SO Std 150a AK.D	Cal	7	2/22/2016 8:41 PM	1.00	150.0000	4.986	154804	198.5843	198.5843	132.4	Infinity	154804	22.0	34018	3.993	34150										
Apple Std 0	Apple Std 0.D	QC	1	2/22/2016 8:56 PM	1.00		4.986	975	1.3566	1.3566	Infinity	Infinity	975	41.1	401	3.993	37987										
Apple Std 5	Apple Std 5.D	QC	2	2/22/2016 9:11 PM	1.00	5.0000	4.986	5024	6.5823	6.5823	131.6	Infinity	5024	28.0	1406	3.993	35363										
Apple Std 10	Apple Std 10.D	QC	3	2/22/2016 9:26 PM	1.00	10.0000	4.986	10229	10.5287	10.5287	105.3	Infinity	10229	23.1	2363	3.993	44457										
Apple Std 25	Apple Std 25.D	QC	4	2/22/2016 9:42 PM	1.00	25.0000	4.986	21937	27.0693	27.0693	108.3	Infinity	21937	21.7	4766	3.993	36562										
Apple Std 50	Apple Std 50.D	QC	5	2/22/2016 9:57 PM	1.00	50.0000	4.986	40423	49.5670	49.5670	99.1	Infinity	40423	21.4	8670	3.993	36556										
Apple Std 100	Apple Std 100.D	QC	8	2/22/2016 10:12 PM	1.00	75.0000	4.986	83470	91.0629	91.0629	121.4	Infinity	83470	21.2	17718	3.993	40783										
Apple Std 150	Apple Std 150.D	QC	7	2/22/2016 10:27 PM	1.00	150.0000	4.986	185796	188.9310	188.9310	126.0	Infinity	185796	21.2	39397	3.993	43139										
Apple Spk 10a	Apple Spk 10a.D	MatrixSpike		2/22/2016 10:42 PM	1.00		4.986	10569	10.1919	10.1919	Infinity	Infinity	10569	26.2	2768	3.993	47486										
Apple Spk 10b	Apple Spk 10b.D	MatrixSpike		2/22/2016 10:57 PM	1.00		4.986	8146	8.7945	8.7945	Infinity	Infinity	8146	27.6	2250	3.993	42561										
Apple Spk 10c	Apple Spk 10c.D	MatrixSpike		2/22/2016 11:12 PM	1.00		4.986	9660	9.3349	9.3349	Infinity	Infinity	9660	26.7	2581	3.993	47483										
Apple Spk 10d	Apple Spk 10d.D	MatrixSpike		2/22/2016 11:27 PM	1.00		4.986	10186	10.1485	10.1485	Infinity	Infinity	10186	25.3	2577	3.993	45965										
Apple Spk 25a	Apple Spk 25a.D	MatrixSpike		2/22/2016 11:42 PM	1.00		4.986	20326	22.8189	22.8189	Infinity	Infinity	20326	22.2	4504	3.993	40267										
Apple Spk 25b	Apple Spk 25b.D	MatrixSpike		2/22/2016 11:57 PM	1.00		4.986	21517	21.7513	21.7513	Infinity	Infinity	21517	23.2	4981	3.993	44743										
Apple Spk 25c	Apple Spk 25c.D	MatrixSpike		2/23/2016 12:12 AM	1.00		4.986	21151	22.7845	22.7845	Infinity	Infinity	21151	21.4	4526	3.993	41965										

black circles = stds in solvent  
blue triangles = matrix-matched stds



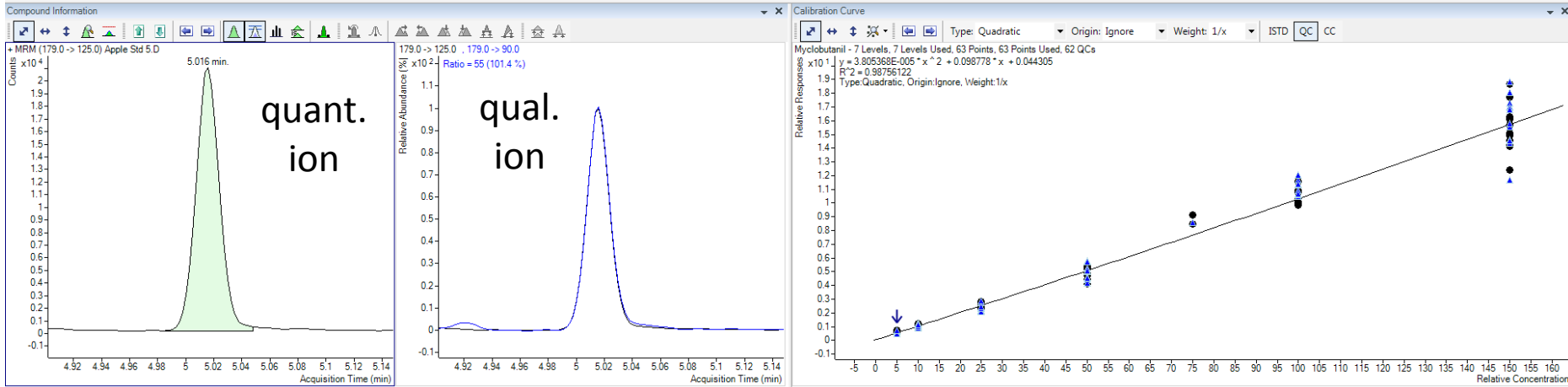
Note: imazalil was incurred in orange at 1243 ng/mL

5 ng/mL std in apple

# Myclobutanil Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample				Mylobut...	Myclobutanil Results				Qualifier (179)		Atrazine-d5 (L			
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Apple Spk 10a	Apple Spk 10a.D	Matrix Spike		2/22/2016 10:42 PM		5.016	54169	1.1407	11.1		29895	55	3.993	47486
Apple Spk 10b	Apple Spk 10b.D	Matrix Spike		2/22/2016 10:57 PM		5.016	45987	1.0805	10.4		25059	54	3.993	42561
Apple Spk 10c	Apple Spk 10c.D	Matrix Spike		2/22/2016 11:12 PM		5.016	51251	1.0794	10.4		28246	55	3.993	47483
Apple Spk 10d	Apple Spk 10d.D	Matrix Spike		2/22/2016 11:27 PM		5.016	52916	1.1512	11.2		28827	54	3.993	45965
Apple Spk 25a	Apple Spk 25a.D	Matrix Spike		2/22/2016 11:42 PM		5.016	104321	2.5907	25.5		56383	54	3.993	40267
Apple Spk 25b	Apple Spk 25b.D	Matrix Spike		2/22/2016 11:57 PM		5.016	117436	2.6247	25.9		63961	54	3.993	44743
Apple Spk 25c	Apple Spk 25c.D	Matrix Spike		2/23/2016 12:12 AM		5.016	111269	2.6515	26.1		60318	54	3.993	41965
Apple Spk 25d	Apple Spk 25d.D	Matrix Spike		2/23/2016 12:27 AM		5.016	113244	2.6845	26.5		62192	55	3.993	42185
Apple Spk 50a	Apple Spk 50a.D	Matrix Spike		2/23/2016 12:42 AM		5.016	204487	5.0392	49.6		111620	55	3.993	40579
Apple Spk 50b	Apple Spk 50b.D	Matrix Spike		2/23/2016 1:28 AM		5.016	172190	4.8783	48.0		93988	55	3.993	35298
Apple Spk 50c	Apple Spk 50c.D	Matrix Spike		2/23/2016 1:13 AM		5.016	150781	4.8035	47.3		81820	54	3.993	31390
Apple Spk 50d	Apple Spk 50d.D	Matrix Spike		2/23/2016 1:28 AM		5.016	211374	4.8138	47.4		115200	55	3.993	43910
Apple Spk 100a	Apple Spk 100a.D	Matrix Spike		2/23/2016 1:43 AM		5.016	445676	11.2499	108.9		242664	54	3.993	39616
Apple Spk 100b	Apple Spk 100b.D	Matrix Spike		2/23/2016 1:58 AM		5.016	411005	10.8567	105.2		222137	54	3.993	37857
Apple Spk 100c	Apple Spk 100c.D	Matrix Spike		2/23/2016 2:13 AM		5.016	552201	11.5877	112.0		301094	55	3.993	47654
Apple Spk 100d	Apple Spk 100d.D	Matrix Spike		2/23/2016 2:28 AM		5.016	496913	11.7729	113.8		272073	55	3.993	42208
Apple Std 0	Apple Std 0.D	QC	1	2/22/2016 8:56 PM		5.016	5620	0.1479	1.0		3180	57	3.993	37987
Apple Std 5	Apple Std 5.D	QC	2	2/22/2016 9:11 PM	5	5.016	24508	0.6359	6.6	132	13546	55	3.993	35363
Apple Std 10	Apple Std 10.D	QC	3	2/22/2016 9:26 PM	10	5.016	48736	1.0962	10.6	106	26208	54	3.993	44457
Apple Std 25	Apple Std 25.D	QC	4	2/22/2016 9:42 PM	25	5.016	100522	2.7494	27.1	108	56005	56	3.993	36562
Apple Std 50	Apple Std 50.D	QC	5	2/22/2016 9:57 PM	50	5.016	184761	5.0542	49.8	100	100667	54	3.993	36556
Apple Std 100	Apple Std 100.D	QC	8	2/22/2016 10:12 PM	75	5.016	350386	8.5916	83.8	112	192994	55	3.993	40783
Apple Std 150	Apple Std 150.D	QC	7	2/22/2016 10:27 PM	150	5.016	780333	18.0889	171.4	114	425136	54	3.993	43139
Basil Spk 10a	Basil Spk 10a.D	Matrix Spike		2/25/2016 11:07 PM		5.016	49037	1.1701	11.3		26888	55	3.993	41909

black circles = stds in solvent  
blue triangles = matrix-matched stds



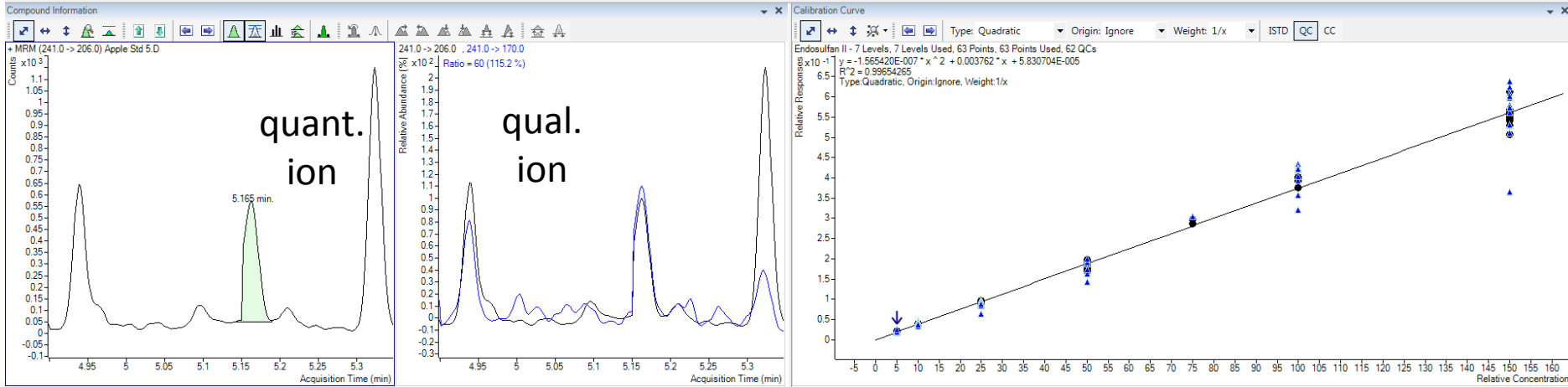
5 ng/mL std in apple



# Endosulfan II Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample		Endosulfan II	Endosulfan II Results		Qualifier (241.0)		Atrazine-d5 (170.0)							
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Apple Spk 10a	Apple Spk 10a.D	MatrixSpike		2/22/2016 10:42 PM		5.165	1746	0.0368	9.8		1099	63	3.993	47486
Apple Spk 10b	Apple Spk 10b.D	MatrixSpike		2/22/2016 10:57 PM		5.165	1718	0.0404	10.7		914	53	3.993	42561
Apple Spk 10c	Apple Spk 10c.D	MatrixSpike		2/22/2016 11:12 PM		5.165	1758	0.0370	9.8		955	54	3.993	47483
Apple Spk 10d	Apple Spk 10d.D	MatrixSpike		2/22/2016 11:27 PM		5.165	1680	0.0366	9.7		971	58	3.993	45965
Apple Spk 25a	Apple Spk 25a.D	MatrixSpike		2/22/2016 11:42 PM		5.165	4292	0.1066	28.4		2177	51	3.993	40267
Apple Spk 25b	Apple Spk 25b.D	MatrixSpike		2/22/2016 11:57 PM		5.165	4442	0.0993	26.4		2449	55	3.993	44743
Apple Spk 25c	Apple Spk 25c.D	MatrixSpike		2/23/2016 12:12 AM		5.165	3868	0.0922	24.5		2123	55	3.993	41965
Apple Spk 25d	Apple Spk 25d.D	MatrixSpike		2/23/2016 12:27 AM		5.165	3898	0.0924	24.6		2240	57	3.993	42185
Apple Spk 50a	Apple Spk 50a.D	MatrixSpike		2/23/2016 12:42 AM		5.165	7673	0.1891	50.4		4382	57	3.993	40579
Apple Spk 50b	Apple Spk 50b.D	MatrixSpike		2/23/2016 12:57 AM		5.165	6649	0.1884	50.2		3651	55	3.993	35298
Apple Spk 50c	Apple Spk 50c.D	MatrixSpike		2/23/2016 1:13 AM		5.165	5720	0.1822	48.5		2998	52	3.993	31390
Apple Spk 50d	Apple Spk 50d.D	MatrixSpike		2/23/2016 1:28 AM		5.165	7980	0.1817	48.4		4699	59	3.993	43910
Apple Spk 100a	Apple Spk 100a.D	MatrixSpike		2/23/2016 1:43 AM		5.165	15958	0.4028	107.6		8777	55	3.993	39616
Apple Spk 100b	Apple Spk 100b.D	MatrixSpike		2/23/2016 1:58 AM		5.165	14911	0.3939	105.1		8056	54	3.993	37857
Apple Spk 100c	Apple Spk 100c.D	MatrixSpike		2/23/2016 2:13 AM		5.165	19566	0.4106	109.6		10548	54	3.993	47654
Apple Spk 100d	Apple Spk 100d.D	MatrixSpike		2/23/2016 2:28 AM		5.165	16667	0.3949	105.4		9183	55	3.993	42208
Apple Std 0	Apple Std 0.D	QC	1	2/22/2016 3:56 PM		5.165	53	0.0014	0.4		72	72	3.993	37987
Apple Std 5	Apple Std 5.D	QC	2	2/22/2016 3:11 PM		5.165	633	0.0106	5.0	99	400	63	3.993	33093
Apple Std 10	Apple Std 10.D	QC	3	2/22/2016 3:26 PM		5.165	1964	0.0442	11.7	117	1042	53	3.993	44457
Apple Std 25	Apple Std 25.D	QC	4	2/22/2016 3:42 PM		5.165	3578	0.0979	26.0	104	1956	55	3.993	36562
Apple Std 50	Apple Std 50.D	QC	5	2/22/2016 3:57 PM		5.165	7182	0.1966	52.1	104	3855	54	3.993	36566
Apple Std 100	Apple Std 100.D	QC	6	2/22/2016 10:12 PM		5.165	12430	0.3048	81.3	108	7025	57	3.993	40783
Apple Std 150	Apple Std 150.D	QC	7	2/22/2016 10:27 PM		5.165	26905	0.6237	166.9	111	14588	54	3.993	43139
Basil Spk 10a	Basil Spk 10a.D	MatrixSpike		2/25/2016 11:07 PM		5.165	1341	0.0320	8.5		967	72	3.993	41909

black circles = stds in solvent  
blue triangles = matrix-matched stds

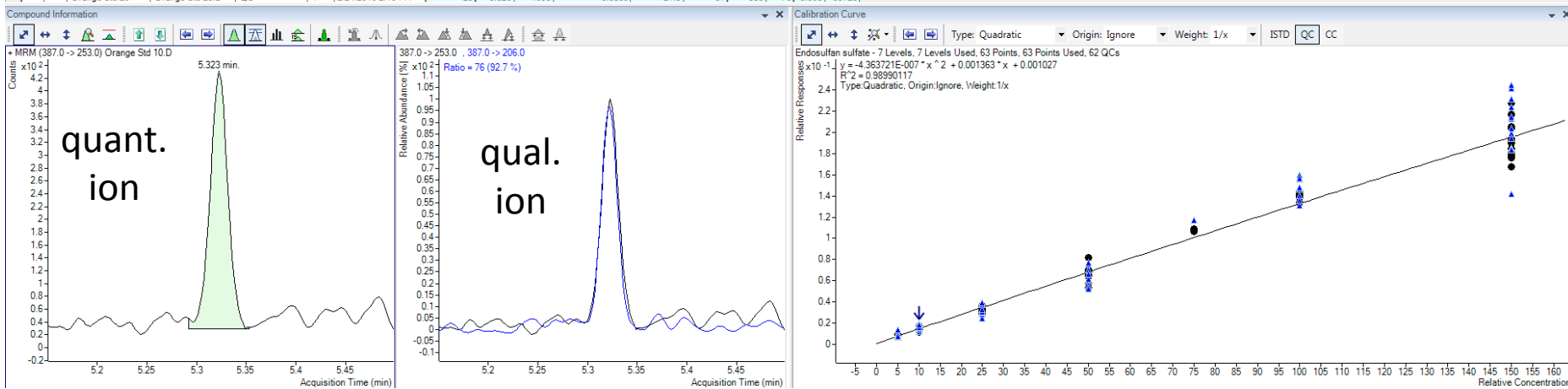


5 ng/mL std in apple

# Endosulfan Sulfate Results (vs. atrazine-d5 IS) – all 325 analyses combined!

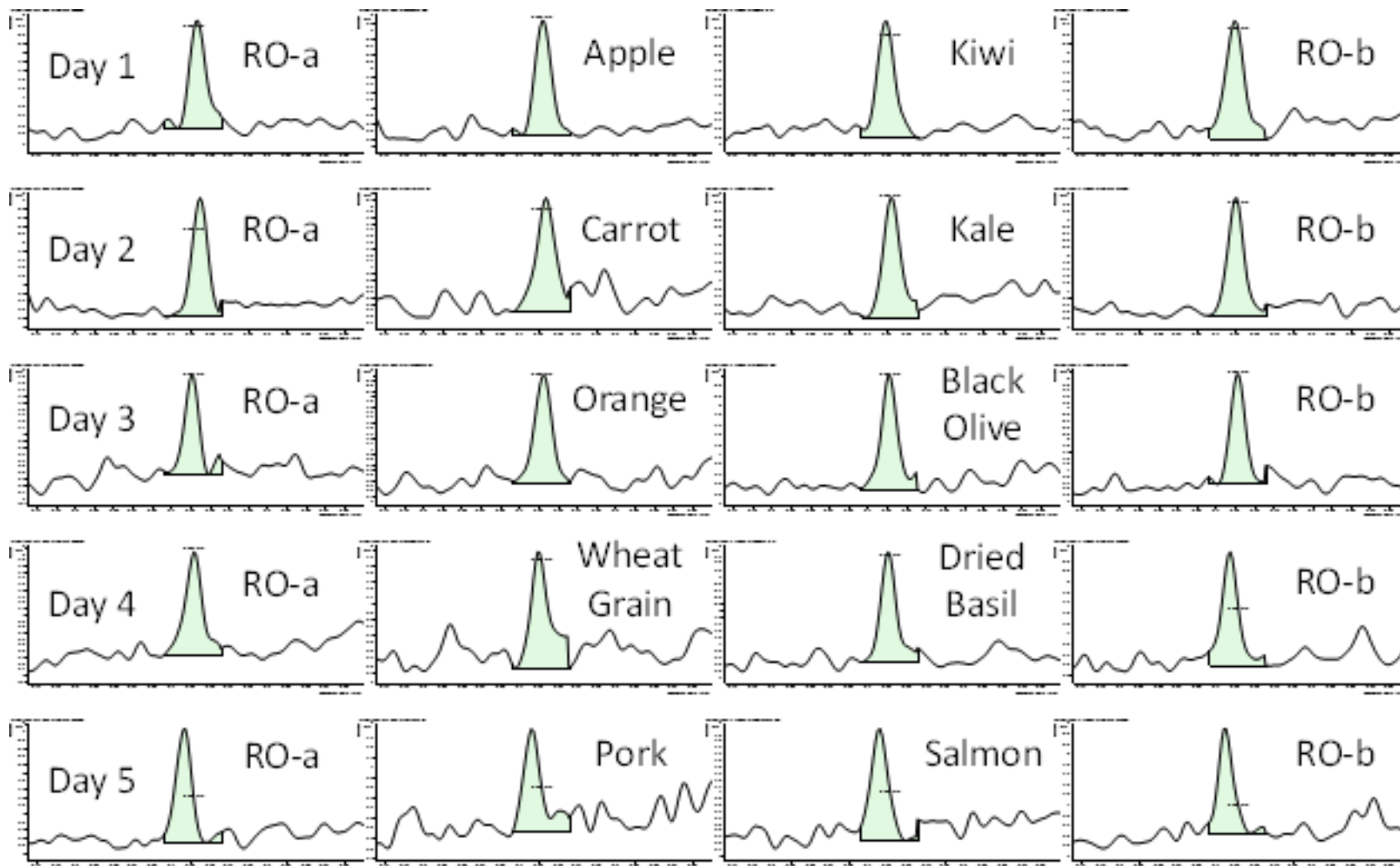
Sample				Endosulfan sulfate Results				Qualifier (387)				Atrazine-d5 (L)			
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area	
Orange Std 10	Orange Std 10.D	QC	10	2/24/2016 1:56 PM	10	5.323	508	0.0160	11.0	110	385	76	3.993	31833	
Orange Std 25	Orange Std 25.D	QC	25	2/24/2016 2:10 PM	25	5.323	1090	0.0305	21.8	87	833	76	3.993	35723	

black circles = stds in solvent  
blue triangles = matrix-matched stds



10 ng/mL std in orange

## Endosulfan sulfate 5 ng/mL reagent-only and matrix-matched calibration standards



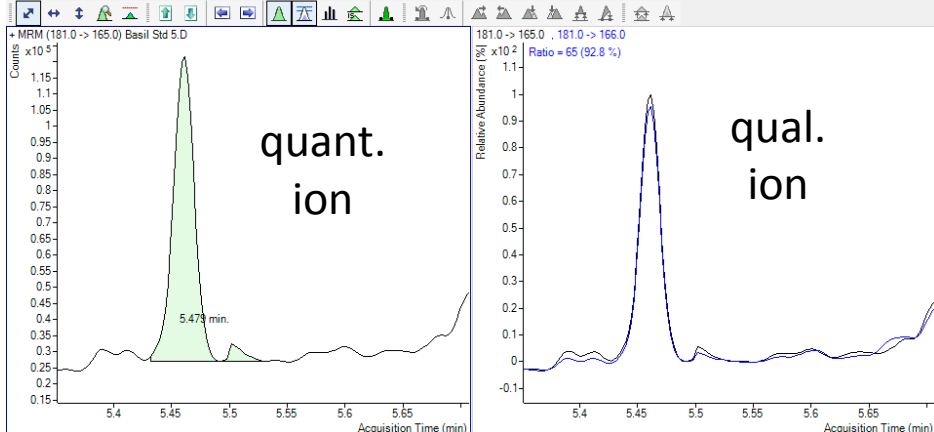
LOQ  $\approx$  2 ng/mL in all matrices; even after 325 injections, including 230 food extracts

# Bifenthrin Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample				Bifenthrin		Bifenthrin Results				Qualifier (181)		Atrazine-d5 (L)		
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Basil Spk 10b	Basil Spk 10b.D	MatrixSpike		2/25/2016 11:21 PM	5.478	199844		3.9821	11.6		134597	67	3.993	50185
Basil Spk 10c	Basil Spk 10c.D	MatrixSpike		2/25/2016 11:35 PM	5.479	209340		4.4649	13.0		142950	68	3.993	46796
Basil Spk 10d	Basil Spk 10d.D	MatrixSpike		2/25/2016 11:49 PM	5.479	190392		4.2995	12.5		130381	68	3.993	44282
Basil Spk 25a	Basil Spk 25a.D	MatrixSpike		2/26/2016 12:03 AM	5.479	258684		8.8700	25.7		181419	70	3.993	29164
Basil Spk 25b	Basil Spk 25b.D	MatrixSpike		2/26/2016 12:16 AM	5.479	314324		8.9195	25.8		218962	70	3.993	35256
Basil Spk 25c	Basil Spk 25c.D	MatrixSpike		2/26/2016 12:30 AM	5.478	238814		9.3222	27.0		166028	70	3.993	25618
Basil Spk 25d	Basil Spk 25d.D	MatrixSpike		2/26/2016 12:44 AM	5.479	279545		10.6452	30.9		195977	70	3.993	26260
Basil Spk 50a	Basil Spk 50a.D	MatrixSpike		2/26/2016 12:58 AM	5.479	727185		14.8792	43.2		506446	70	3.993	48873
Basil Spk 50b	Basil Spk 50b.D	MatrixSpike		2/26/2016 1:12 AM	5.479	507358		20.1732	58.9		354625	70	3.993	25150
Basil Spk 50c	Basil Spk 50c.D	MatrixSpike		2/26/2016 1:26 AM	5.479	521687		18.2518	53.2		363985	70	3.993	28583
Basil Spk 50d	Basil Spk 50d.D	MatrixSpike		2/26/2016 1:39 AM	5.478	565931		19.0320	55.5		400053	71	3.993	29736
Basil Spk 100a	Basil Spk 100a.D	MatrixSpike		2/26/2016 1:53 AM	5.479	12651		37.0898	109.9		876472	69	3.993	34111
Basil Spk 100b	Basil Spk 100b.D	MatrixSpike		2/26/2016 2:07 AM	5.479	12053		37.6845	111.7		845838	70	3.993	31984
Basil Spk 100c	Basil Spk 100c.D	MatrixSpike		2/26/2016 2:21 AM	5.479	21562		38.3068	113.6		15078	70	3.993	56290
Basil Spk 100d	Basil Spk 100d.D	MatrixSpike		2/26/2016 2:35 AM	5.479	13750		42.2305	125.7		958857	70	3.993	32561
Basil Std 0	Basil Std 0.D	QC	1	2/25/2016 9:31 PM	5.479	13123		0.3763	1.2		10274	78	3.993	34874
Basil Std 5	Basil Std 5.D	QC	2	2/25/2016 9:44 PM	5.479	125170		2.4825	7.3	145	81884	65	3.993	50421
Basil Std 10	Basil Std 10.D	QC	3	2/25/2016 9:58 PM	5.479	115471		4.7655	13.8	138	79589	69	3.993	24231
Basil Std 25	Basil Std 25.D	QC	4	2/25/2016 10:12 PM	5.478	287413		9.8276	28.5	114	200906	70	3.993	29245
Basil Std 50	Basil Std 50.D	QC	5	2/25/2016 10:26 PM	5.479	893327		18.7563	54.7	109	625677	70	3.993	47628
Basil Std 100	Basil Std 100.D	QC	6	2/25/2016 10:40 PM	5.479	13448		44.2361	132.0	132	946920	70	3.993	30401
Basil Std 150	Basil Std 150.D	QC	7	2/25/2016 10:54 PM	5.479	18756		47.7173	142.9	95	13103	70	3.993	39308
Carrot Spk 10a	Carrot Spk 10a.D	MatrixSpike		2/23/2016 9:50 PM	5.479	133104		3.8268	11.1		91902	69	3.993	34782
Carrot Spk 10b	Carrot Spk 10b.D	MatrixSpike		2/23/2016 10:03 PM	5.478	156939		5.1699	15.0		107993	69	3.993	30356

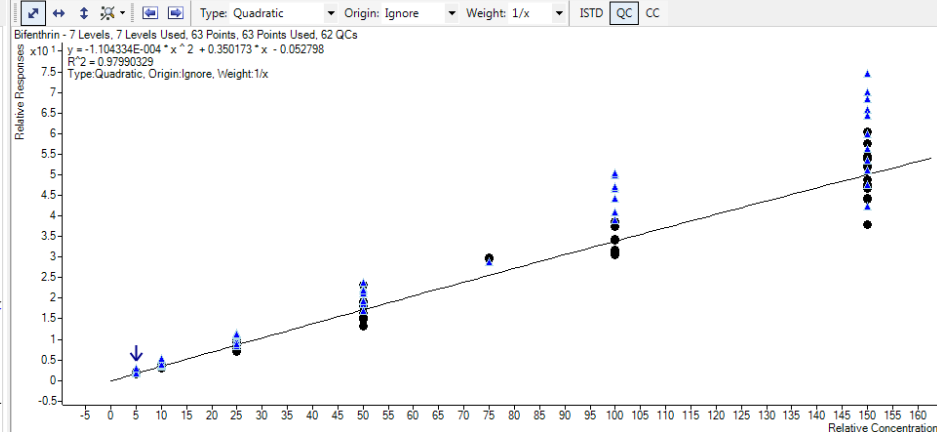
black circles = stds in solvent  
blue triangles = matrix-matched stds

Compound Information



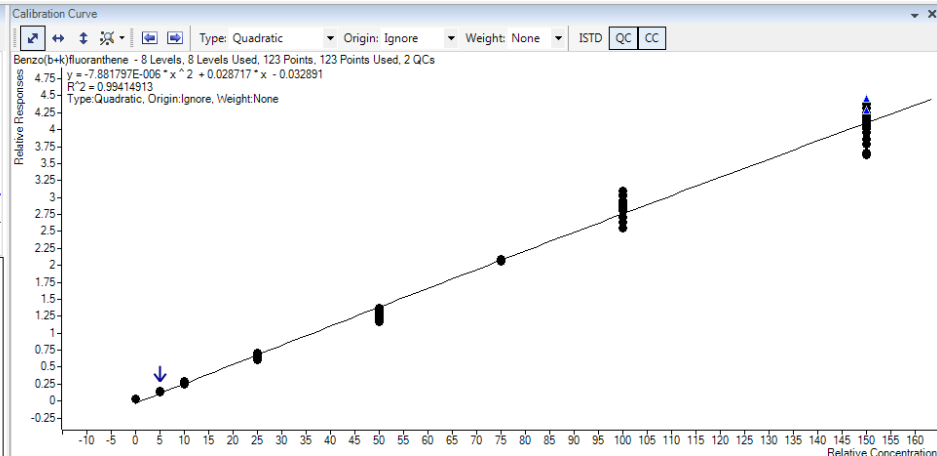
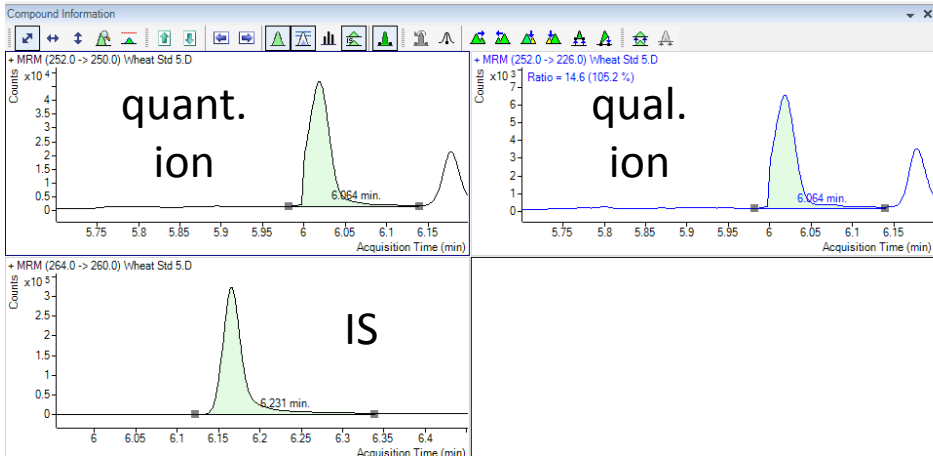
5 ng/mL std in basil

Calibration Curve



# Benzo(b+k)fluoranthene (vs. benzo(a)pyrene-d12 IS) – all 325 analyses combined!

Sample		Sample Type		Compound		ISTD		Qualifier (252.0 -> 226.0) Res...		Benzo(a)pyrene-d12 (ISTD)...				
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	Calc. Conc.	Accuracy	S/N	Area	Ratio	RT	Area
SO Std 100a w/B	SO Std 100a w/B...	Cal	6	2/25/2016 3:31 PM	100.0	6.064	1936972	112.6	112.6	Infinity	279131	14.4	6.231	624903
SO Std 150a w/B	SO Std 150a w/B...	Cal	7	2/25/2016 3:45 PM	150.0	6.064	3035832	160.8	107.2	Infinity	437294	14.4	6.231	693060
Wheat Std 0	Wheat Std 0 D	Cal	1	2/25/2016 3:59 PM	0.0								6.231	693060
Wheat Std 5	Wheat Std 5 D	Cal	2	2/25/2016 4:13 PM	5.0	6.064	82796	6.3	125.2	Infinity	12084	14.6	6.231	569034
Wheat Std 10	Wheat Std 10 D	Cal	3	2/25/2016 4:27 PM	10.0	6.064	293664	10.8	108.1	Infinity	42073	14.3	6.231	1061756
Wheat Std 25	Wheat Std 25 D	Cal	4	2/25/2016 4:40 PM	25.0	6.064	418094	24.8	99.3	Infinity	60457	14.5	6.231	619127
Wheat Std 50	Wheat Std 50 D	Cal	5	2/25/2016 4:54 PM	50.0	6.064	1564800	47.6	95.1	Infinity	227514	14.5	6.231	1190053
Wheat Std 100	Wheat Std 100 D	Cal	6	2/25/2016 5:08 PM	100.0	6.064	2959694	104.3	104.3	Infinity	428522	14.5	6.231	1028953
Wheat Std 150	Wheat Std 150 D	Cal	7	2/25/2016 5:22 PM	150.0	6.064	4508028	138.5	92.3	Infinity	649652	14.4	6.231	1188690
Wheat Spk 10a	Wheat Spk 10a D	Matrix Spike		2/25/2016 5:36 PM		6.064	47831	13.8		Infinity			6.231	132607
Wheat Spk 10b	Wheat Spk 10b D	Matrix Spike		2/25/2016 5:50 PM		6.064	55259	13.1		Infinity			6.231	161655
Wheat Spk 10c	Wheat Spk 10c D	Matrix Spike		2/25/2016 6:03 PM		6.064	70466	12.8		Infinity	10507	14.9	6.231	211725
Wheat Spk 10d	Wheat Spk 10d D	Matrix Spike		2/25/2016 6:17 PM		6.064	49995	13.0		Infinity			6.231	147366
Wheat Spk 25a	Wheat Spk 25a D	Matrix Spike		2/25/2016 6:31 PM		6.064	121877	29.2		Infinity	17673	14.5	6.231	152481
Wheat Spk 25b	Wheat Spk 25b D	Matrix Spike		2/25/2016 6:45 PM		6.064	169398	28.5		Infinity	24432	14.4	6.231	217599
Wheat Spk 25c	Wheat Spk 25c D	Matrix Spike		2/25/2016 6:59 PM		6.064	114582	28.1		Infinity	16959	14.8	6.231	149044
Wheat Spk 25d	Wheat Spk 25d D	Matrix Spike		2/25/2016 7:12 PM		6.064	93860	28.8		Infinity	13579	14.5	6.231	119124
Wheat Spk 50a	Wheat Spk 50a D	Matrix Spike		2/25/2016 7:26 PM		6.064	336425	55.7		Infinity	48392	14.4	6.231	218013
Wheat Spk 50b	Wheat Spk 50b D	Matrix Spike		2/25/2016 7:40 PM		6.064	180299	57.3		Infinity	26029	14.4	6.231	113565
Wheat Spk 50c	Wheat Spk 50c D	Matrix Spike		2/25/2016 7:54 PM		6.064	231220	55.9		Infinity	34338	14.9	6.231	149433
Wheat Spk 50d	Wheat Spk 50d D	Matrix Spike		2/25/2016 8:08 PM		6.064	233703	55.9		Infinity	33808	14.5	6.231	150866
Wheat Spk 100a	Wheat Spk 100a D	Matrix Spike		2/25/2016 8:22 PM		6.064	825055	121.8		Infinity	119013	14.4	6.231	246358
Wheat Spk 100b	Wheat Spk 100b D	Matrix Spike		2/25/2016 8:35 PM		6.064	481118	124.3		Infinity	69170	14.4	6.231	140834
Wheat Spk 100c	Wheat Spk 100c D	Matrix Spike		2/25/2016 8:49 PM		6.064	781689	121.1		Infinity	112560	14.4	6.231	234811

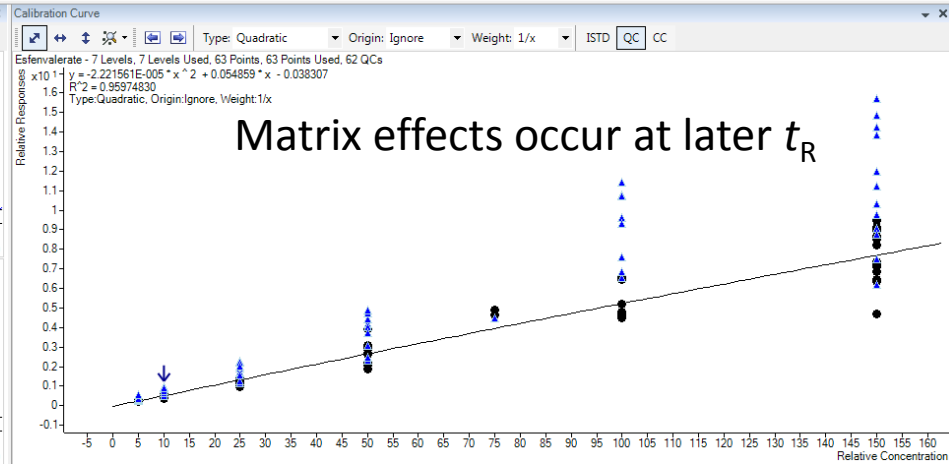
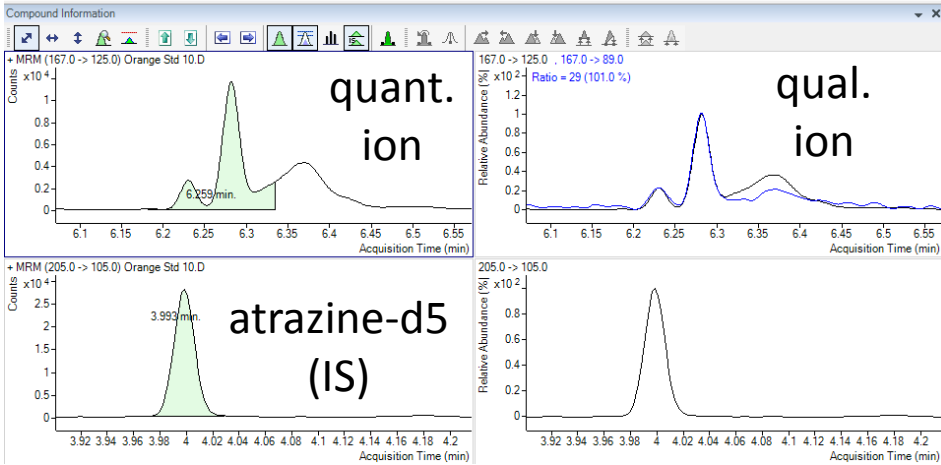


5 ng/mL std in wheat grain

# (Es)fenvalerate Results (vs. atrazine-d5 IS) – all 325 analyses combined!

Sample		Sample Type: <All>		Compound: Esfenvalerate		ISTD: Atrazine-d5								
Name	Data File	Type	Level	Acq. Date-Time	Exp. Conc.	RT	Area	ISTD Resp. Ratio	Calc. Conc.	Accuracy	Area	Ratio	RT	Area
Olive Std 100	Olive Std 100.D	QC	6	2/24/2016 8:09 PM	100	6.259	248420	9.6322	191.1	191	72009	29	3.993	25791
Olive Std 150	Olive Std 150.D	QC	7	2/24/2016 8:22 PM	150	6.259	349170	13.8378	286.1	191	100387	29	3.993	25233
Orange Spk 10a	Orange Spk 10a.D	MatrixSpike		2/24/2016 3:05 PM		6.259	22523	0.8321	16.0		5875	26	3.993	27066
Orange Spk 10b	Orange Spk 10b.D	MatrixSpike		2/24/2016 3:19 PM		6.259	23044	0.8307	15.9		6380	28	3.993	27740
Orange Spk 10c	Orange Spk 10c.D	MatrixSpike		2/24/2016 3:32 PM		6.259	23669	0.9118	17.4		6340	27	3.993	25960
Orange Spk 10d	Orange Spk 10d.D	MatrixSpike		2/24/2016 3:46 PM		6.259	19765	0.8571	16.4		5882	30	3.993	23061
Orange Spk 25a	Orange Spk 25a.D	MatrixSpike		2/24/2016 4:00 PM		6.259	55591	1.7721	33.5		16341	29	3.993	31370
Orange Spk 25b	Orange Spk 25b.D	MatrixSpike		2/24/2016 4:14 PM		6.259	56016	2.0056	37.8		16096	29	3.993	27930
Orange Spk 25c	Orange Spk 25c.D	MatrixSpike		2/24/2016 4:28 PM		6.259	48337	1.9910	37.6		14201	29	3.993	24278
Orange Spk 25d	Orange Spk 25d.D	MatrixSpike		2/24/2016 4:41 PM		6.259	61739	1.8315	34.6		18103	29	3.993	33709
Orange Spk 50a	Orange Spk 50a.D	MatrixSpike		2/24/2016 4:55 PM		6.259	109309	3.8843	73.7		31245	29	3.993	28141
Orange Spk 50b	Orange Spk 50b.D	MatrixSpike		2/24/2016 5:09 PM		6.259	99846	3.7368	70.8		28779	29	3.993	26720
Orange Spk 50c	Orange Spk 50c.D	MatrixSpike		2/24/2016 5:23 PM		6.259	110988	3.7533	71.2		31963	29	3.993	29574
Orange Spk 50d	Orange Spk 50d.D	MatrixSpike		2/24/2016 5:37 PM		6.259	97928	3.6970	70.1		29405	30	3.993	26489
Orange Spk 100a	Orange Spk 100a.D	MatrixSpike		2/24/2016 5:50 PM		6.259	141594	7.7385	151.0		40646	29	3.993	18297
Orange Spk 100b	Orange Spk 100b.D	MatrixSpike		2/24/2016 6:04 PM		6.259	171594	7.5981	148.1		49731	29	3.993	22584
Orange Spk 100c	Orange Spk 100c.D	MatrixSpike		2/24/2016 6:18 PM		6.259	193961	6.8550	132.8		56368	29	3.993	28295
Orange Spk 100d	Orange Spk 100d.D	MatrixSpike		2/24/2016 6:32 PM		6.259	176785	7.6574	149.3		51517	29	3.993	23087
Orange Std 0	Orange Std 0.D	QC	1	2/24/2016 1:28 PM		6.259	549	0.0194	1.1		1041	24	3.993	28356
Orange Std 5	Orange Std 5.D	QC	2	2/24/2016 1:42 PM	5	6.259	13151	0.3828	7.7	154	3179	24	3.993	34357
Orange Std 10	Orange Std 10.D	QC	3	2/24/2016 1:56 PM	10	6.259	24199	0.7602	14.6	146	7132	29	3.993	31833
Orange Std 25	Orange Std 25.D	QC	4	2/24/2016 2:10 PM	25	6.259	56971	1.5668	29.6	118	16233	29	3.993	35723
Orange Std 50	Orange Std 50.D	QC	5	2/24/2016 2:23 PM	50	6.259	70276	3.1018	58.6	117	19968	28	3.993	22657

black circles = stds in solvent  
blue triangles = matrix-matched stds



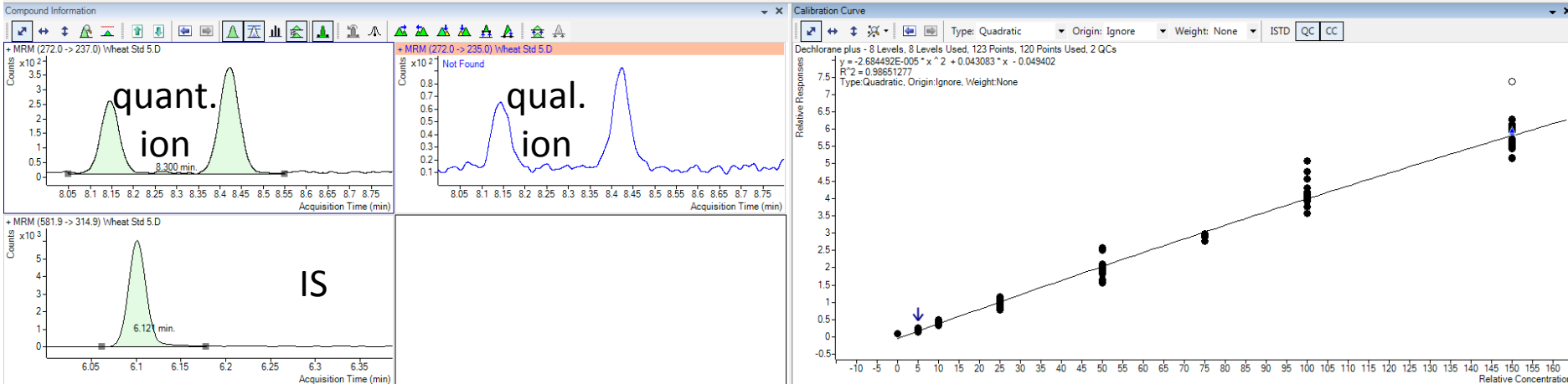
10 ng/mL std in orange

a ghost peak occurs in orange 1 injection later

# Dechlorane Plus Results (vs. FBDE 126 IS) – all 325 analyses combined!

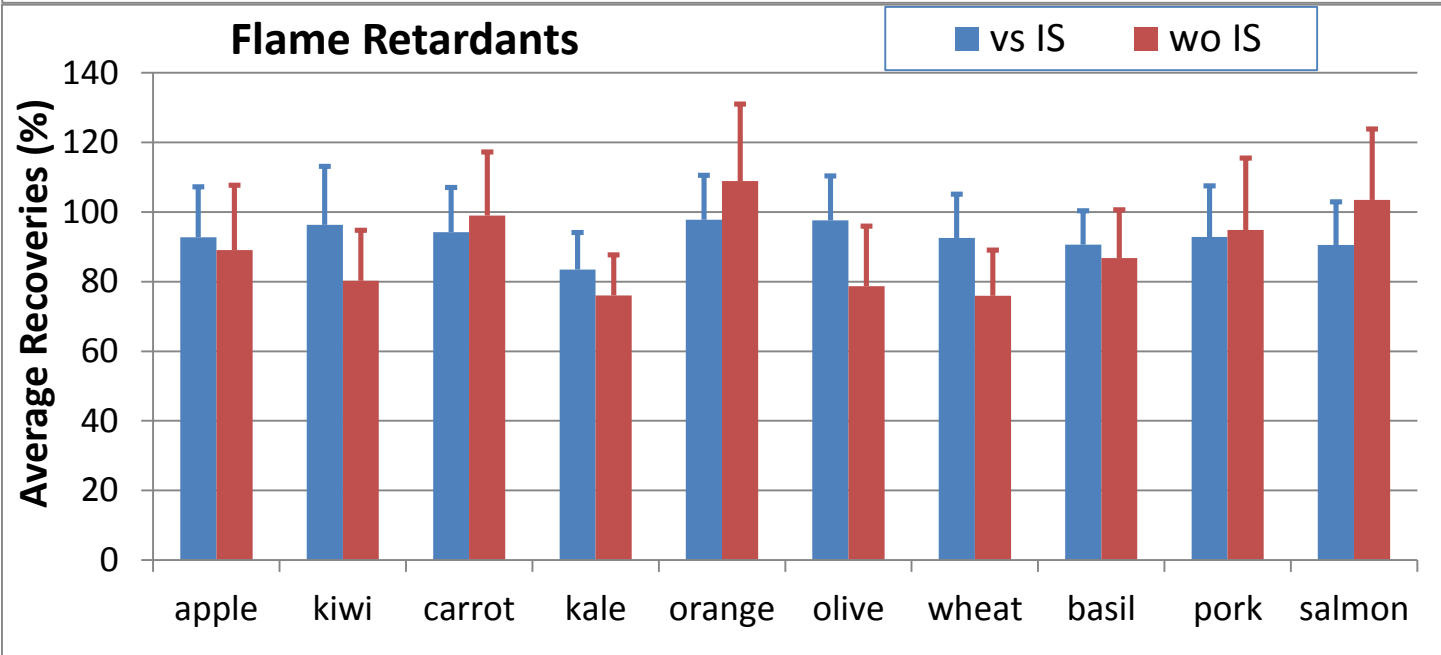
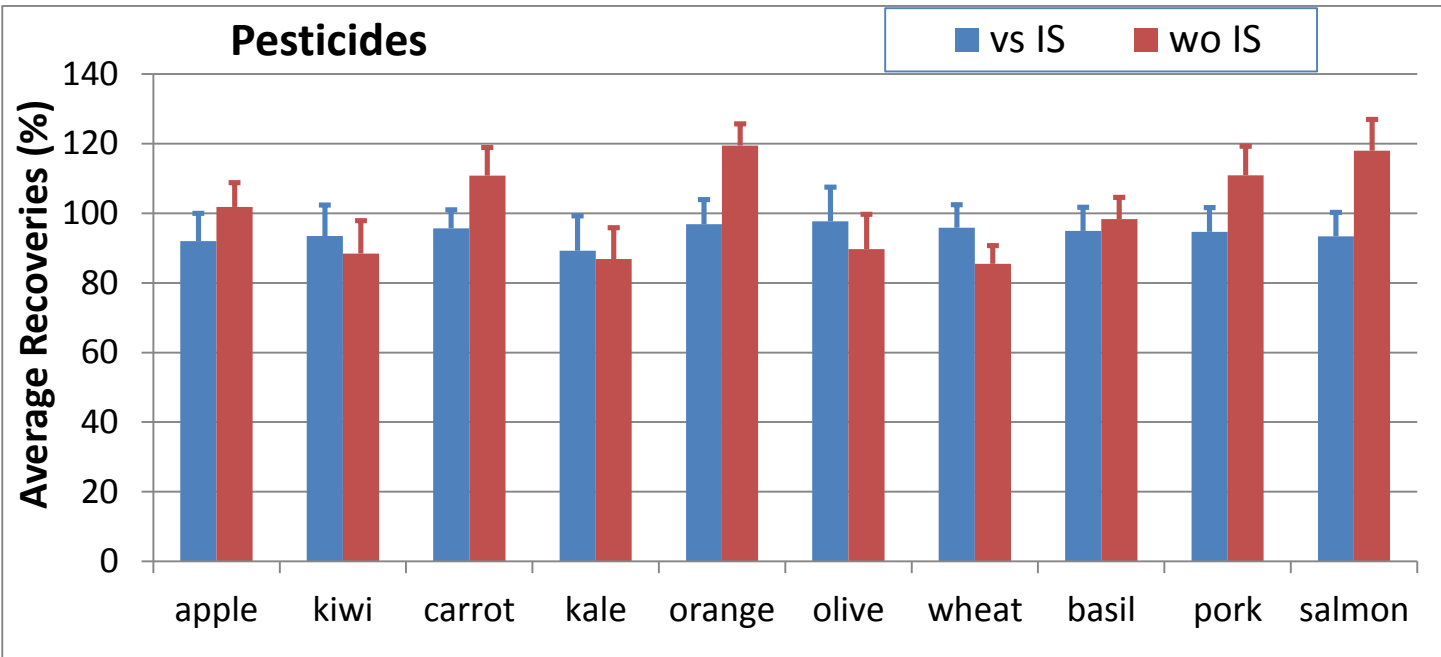
Sample: Wheat Std 5				Sample Type: <All>				Compound: Dechlorane plus				ISTD: FBDE 126				
Name	Data File	Type	Level	Acq. Date-Time	Dechlorane plus M.L.				Dechlorane plus Results				Qualifier (272.0 -> 235.0) Res.		FBDE 126 (ISTD) Results	
					Exp. Conc.	RT	Area	Calc. Conc.	Accuracy	S/N	Area	Ratio	RT	Area		
SO Std 100a W/B	SO Std 100a W/B	Cal	6	2/25/2016 3:31 PM	100.0	8.300	41527	115.6	115.6	Infinity	8225	19.8	6.121	9082		
SO Std 150a W/B	SO Std 150a W/B	Cal	7	2/25/2016 3:45 PM	150.0	8.300	58046	153.6	102.4	Infinity	11728	20.2	6.121	9783		
Wheat Std 0	Wheat Std 0.D	Cal	1	2/25/2016 3:59 PM	0.0								6.121	8343		
Wheat Std 5	Wheat Std 5.D	Cal	2	2/25/2016 4:13 PM	5.0	8.300	2063	6.8	135.9	Infinity			6.121	8520		
Wheat Std 10	Wheat Std 10.D	Cal	3	2/25/2016 4:27 PM	10.0	8.300	7756	11.4	114.2	Infinity	1608	20.7	6.121	17664		
Wheat Std 25	Wheat Std 25.D	Cal	4	2/25/2016 4:40 PM	25.0	8.300	10484	27.2	108.6	Infinity	2181	20.8	6.121	9523		
Wheat Std 50	Wheat Std 50.D	Cal	5	2/25/2016 4:54 PM	50.0	8.300	42590	49.7	99.3	Infinity	8531	20.0	6.121	21040		
Wheat Std 100	Wheat Std 100.D	Cal	6	2/25/2016 5:08 PM	100.0	8.300	78508	115.0	115.0	Infinity	15726	20.0	6.121	17250		
Wheat Std 150	Wheat Std 150.D	Cal	7	2/25/2016 5:22 PM	150.0	8.300	130511	159.7	106.5	Infinity	26530	20.3	6.121	21235		
Wheat Spk 10a	Wheat Spk 10a.D	MatrixSpike		2/25/2016 5:36 PM		8.300	3735	12.1		Infinity			6.121	7964		
Wheat Spk 10b	Wheat Spk 10b.D	MatrixSpike		2/25/2016 5:50 PM		8.300	4466	11.3		Infinity	1017	22.8	6.121	10259		
Wheat Spk 10c	Wheat Spk 10c.D	MatrixSpike		2/25/2016 6:03 PM		8.300	5940	11.1		Infinity	1314	22.1	6.121	13912		
Wheat Spk 10d	Wheat Spk 10d.D	MatrixSpike		2/25/2016 6:17 PM		8.300	4331	11.5		Infinity	1003	23.2	6.121	9809		
Wheat Spk 25a	Wheat Spk 25a.D	MatrixSpike		2/25/2016 6:31 PM		8.300	9536	22.4		Infinity	1996	20.9	6.121	10590		
Wheat Spk 25b	Wheat Spk 25b.D	MatrixSpike		2/25/2016 6:45 PM		8.300	13918	25.6		Infinity	2908	20.9	6.121	13440		
Wheat Spk 25c	Wheat Spk 25c.D	MatrixSpike		2/25/2016 6:59 PM		8.300	8867	27.1		Infinity	1820	20.5	6.121	8085		
Wheat Spk 25d	Wheat Spk 25d.D	MatrixSpike		2/25/2016 7:12 PM		8.300	7767	25.3		Infinity	1640	21.1	6.121	7588		
Wheat Spk 50a	Wheat Spk 50a.D	MatrixSpike		2/25/2016 7:26 PM		8.300	31155	51.2		Infinity	6322	20.3	6.121	14926		
Wheat Spk 50b	Wheat Spk 50b.D	MatrixSpike		2/25/2016 7:40 PM		8.300	14057	51.7		Infinity	2992	21.3	6.121	6669		
Wheat Spk 50c	Wheat Spk 50c.D	MatrixSpike		2/25/2016 7:54 PM		8.300	17368	48.3		Infinity	3538	20.4	6.121	8827		
Wheat Spk 50d	Wheat Spk 50d.D	MatrixSpike		2/25/2016 8:08 PM		8.300	18843	48.9		Infinity	3874	20.6	6.121	9457		
Wheat Spk 100a	Wheat Spk 100a.D	MatrixSpike		2/25/2016 8:22 PM		8.300	64886	101.8		Infinity	13133	20.2	6.121	16006		
Wheat Spk 100b	Wheat Spk 100b.D	MatrixSpike		2/25/2016 8:35 PM		8.300	35795	103.5		Infinity	7285	20.4	6.121	8680		
Wheat Spk 100c	Wheat Spk 100c.D	MatrixSpike		2/25/2016 8:49 PM		8.300	54251	105.0		Infinity	11049	20.4	6.121	12985		

black circles = stds in solvent  
blue triangles = matrix-matched stds

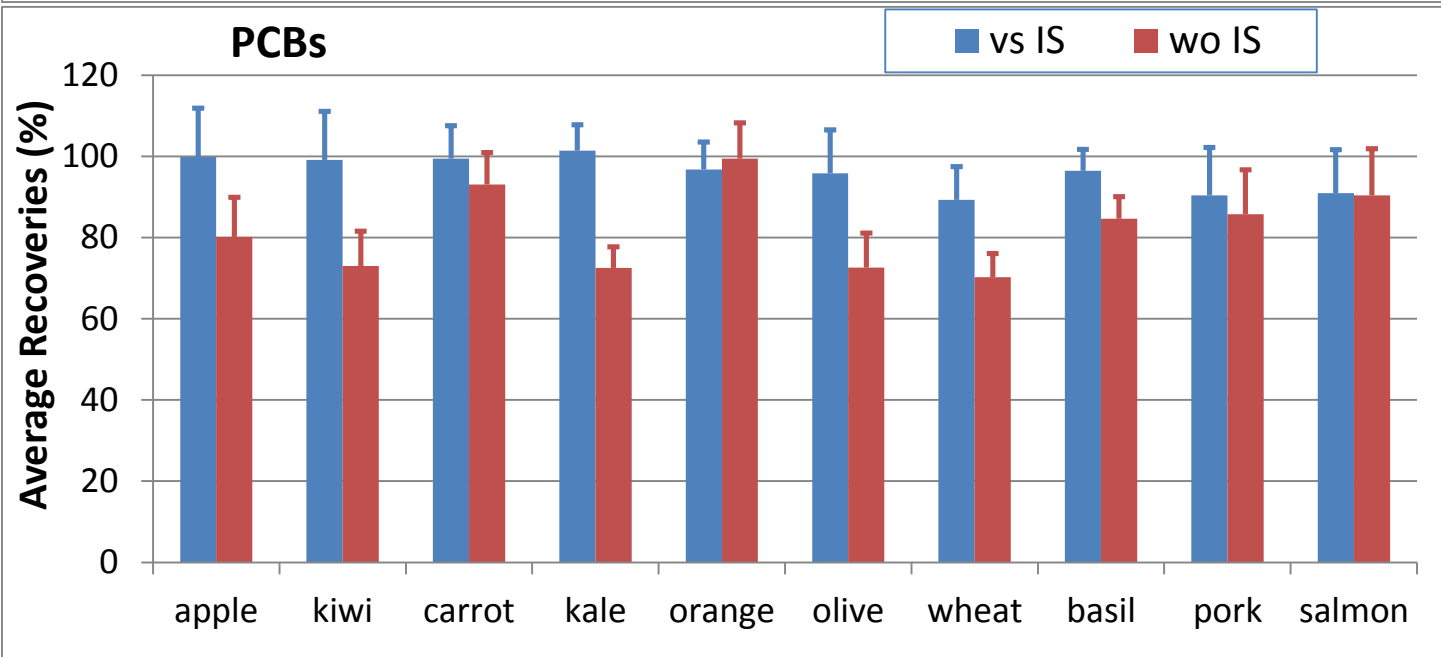
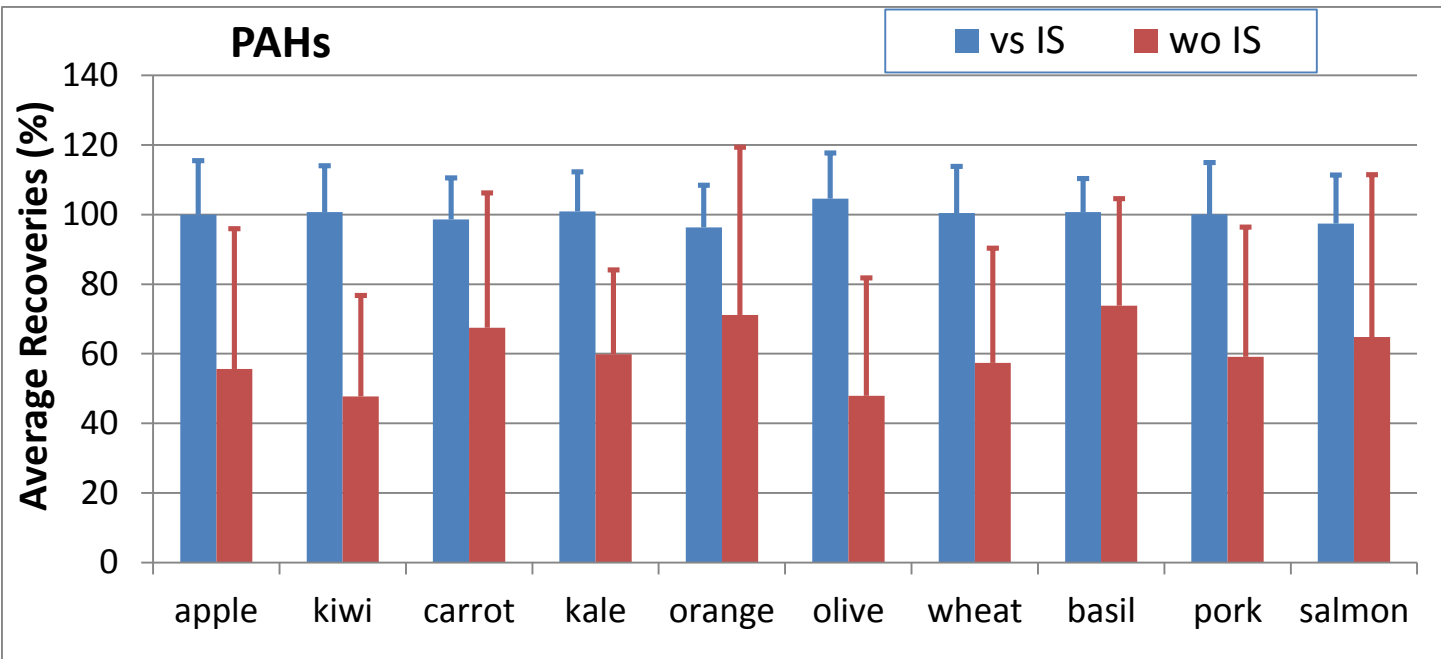


5 ng/mL std in wheat grain









Numbers correspond to analytes listed in Table 1

