

ASG – 06.11.13	
Commodity	Fish (fresh water) (target nos. 36, rec'd 33)
Sample details	As attached
Survey date (year/quarter)	2013 Q3
Previous surveys	2010
% Recoveries outside 60-140 range	Hexachlorobenzene 54% Paraoxon-methyl 54%, 48% Profenofos 55% Quintozene 54% Tecnazene 44%
Residues	p,p'-DDE (4) 0.002mg/kg p,p'-DDT (1) 0.003mg/kg
Outstanding work	None
Analytical Difficulties	None
Specific Points to raise with ASG	
Effect on deliverables	
Conclusions from ASG	
Actions	

PRiF 2013 Q3 Freshwater Fish: residues detected:

PRiF sample ID	AFBI sample ID	Description	Country of origin	Retailer	Compound	Conc (mg/kg)
16196/2013	PL 56723	Salmon fillets	UK	Iceland	DDT (pp-DDE)	0.002
16248/2013	PL 56728	Boneless Scottish salmon fillets	UK	Waitrose	DDT (pp-DDE)	0.002
17999/2013	PL 56879	Boneless salmon fillets	Norway	Tesco	DDT (pp-DDE)	0.002
17079/2013	PL 56935	4 Scottish Lochmuir salmon fillets	UK	Marks and Specers	DDT (pp-DDE)	0.002
17066/2013	PL 56904	Koi	Bangladesh	Tesco	DDT (pp-DDT)	0.003

PRiF 2013 Q3 Freshwater Fish: sample details

PRiF ref no	AFBI ref no	Analytical Batch no.	Producer	Retailer	Food description	% Fat	Commodity type	Organic (Y/N)	Sample state	Country of origin
14920/2013	PL56720	WP 538	Asda Stores	Asda	Smart price salmon fillets	13.8	Raw	N	Fresh	UK
16196/2013	PL56723	WP 538	Iceland Food	Iceland	Salmon fillets	15.4	Raw	N	Fresh	UK
17866/2013	PL56726	WP 538	Asda Stores	Asda	Whole rainbow trout	2.8	Raw	N	Fresh	UK
16248/2013	PL56728	WP 538	Waitrose	Waitrose	Boneless Scottish salmon fillets	4.1	Raw	N	Fresh	UK
16174/2013	PL56730	WP 538	Ghani Win International Ltd	Market Asia	Putu	5.9	Raw	N	Frozen	Burma
15040/2013	PL56767	WP 538	Sainsburys	Sainsburys	River cobbler fillet	1.0	Raw	N	Fresh	Vietnam
16468/2013	PL56770	WP 538	Waitrose	Waitrose	Essential Scottish salmon	3.4	Raw	N	Fresh	UK
16356/2013	PL56771	WP 538	Tesco	Tesco	Skinless and boneless river cobbler fillets	0.4	Raw	N	Fresh	Vietnam
15093/2013	PL56774	WP 539	Tesco	Tesco	Everyday value 4 salmon fillets	8.6	Raw	N	Fresh	Norway
17610/2013	PL56776	WP 539	Asda Stores	Asda	Salmon fillet	5.3	Raw	N	Fresh	Norway
17645/2013	PL56778	WP 539	Morrisons	Morrisons	Savers Atlantic salmon fillets	2.8	Raw	N	Fresh	UK
15660/2013	PL56838	WP 539	Tesco	Tesco	Boneless salmon side	15.4	Raw	N	Fresh	Norway
15614/2013	PL56843	WP 539	Tesco	Tesco	2 boneless salmon fillets	10.4	Raw	N	Fresh	Norway
15514/2013	PL56852	WP 539	Saidowla (PVT) Ent Ltd	Tesco	Koi	7.5	Raw	N	Frozen	Bangladesh
15987/2013	PL56875	WP 539	Sainsburys	Sainsburys	River cobbler fillet	0.9	Raw	N	Fresh	Vietnam
16083/2013	PL56876	WP 539	Morrisons	Morrisons	Atlantic salmon fillets	8.7	Raw	N	Fresh	UK
17999/2013	PL56879	WP 540	Tesco	Tesco	Boneless salmon fillets	16.8	Raw	N	Fresh	Norway
15733/2013	PL56881	WP 540	Asda Stores	Asda	River cobbler	1.2	Raw	N	Fresh	Vietnam
15857/2013	PL56883	WP 540	Tesco	Tesco	Trout fillet	1.8	Raw	N	Fresh	UK
15573/2013	PL56884	WP 540	Asda Stores	Asda	Boneless salmon fillets	10.7	Raw	N	Fresh	UK
17030/2013	PL56888	WP 540	Sainsburys	Sainsburys	2 boneless Scottish salmon fillets	10.2	Raw	N	Fresh	UK
15149/2013	PL56897	WP 540	Asda Stores	Asda	River cobbler	0.4	Raw	N	Fresh	Vietnam
16271/2013	PL56901	WP 540	Tesco	Tesco	River cobbler	0.7	Raw	N	Fresh	Vietnam
16272/2013	PL56902	WP 540	Tesco	Tesco	Tilapia fillet	1.3	Raw	N	Fresh	Ecuador
17066/2013	PL56904	WP 545	Saidowla (PVT) Ent Ltd	Tesco	Koi	6.7	Raw	N	Frozen	Bangladesh

15826/2013	PL56906	WP 545	Tesco	Tesco	Whole rainbow trout	7.1	Raw	N	Fresh	UK
15827/2013	PL56907	WP 545	Tesco	Tesco	Tilapia	0.2	Raw	N	Fresh	UK
15946/2013	PL56931	WP 545	Tesco	Tesco Extra	Everyday value 4 salmon fillets	6.6	Raw	N	Fresh	Norway
17079/2013	PL56935	WP 545	Marks & Spencers	Marks & Spencers	4 Scottish Lochmuir salmon fillets	16.2	Raw	N	Fresh	UK
17113/2013	PL56937	WP 545	Sainsburys	Sainsburys	Basics British trout fillets	1.7	Raw	N	Fresh	UK
17666/2013	PL56940	WP 545	Morrisons	Morrisons	Tilapia	1.1	Raw	N	Fresh	UK
17326/2013	PL56970	WP 545	Tesco	Tesco	River cobbler fillets	1.6	Raw	N	Fresh	Vietnam
17443/2013	PL56972	WP 545	Morrisons	Morrisons	Alaskan salmon fillets	0.8	Raw	N	Frozen	Alaska

PRiF 2013 Q3 Freshwater Fish: batch spike recoveries

	WP 538	WP 539	WP 540	WP 545
Analyte name				
Aldrin	87%	71%	69%	90%
alpha-HCH	74%	68%	60%	83%
Azinphos-ethyl	88%	70%	74%	82%
beta-HCH	81%	76%	72%	83%
Bifenthrin	97%	69%	72%	91%
Chlordane, cis-isomer	74%	76%	65%	91%
Chlordane, trans-isomer	74%	71%	70%	91%
¹ Chlordane (sum)	77%	73%	68%	89%
Chlorobenzilate	85%	87%	68%	93%
Chlorpyrifos	88%	74%	75%	87%
Chlorpyrifos-methyl	80%	74%	71%	84%
Cyfluthrin	80%	61%	61%	74%
Cypermethrin	87%	60%	64%	77%
p,p'-DDD (p,p-TDE)	87%	69%	71%	98%
p,p'-DDE	86%	93%	86%	99%
o,p-DDT	83%	67%	74%	89%
p,p-DDT	84%	65%	70%	95%
² DDT (sum)	85%	74%	75%	96%
Deltamethrin	89%	61%	62%	69%
Diazinon	82%	75%	71%	81%
Dieldrin	92%	77%	82%	124%
³ Dieldrin (sum)	90%	74%	76%	107%
Endosulfan, alpha	87%	79%	75%	93%
Endosulfan, beta	100%	80%	79%	89%
Endosulfan sulfate	75%	60%	64%	70%
⁴ Endosulfan (sum)	87%	73%	73%	84%
Endrin	114%	74%	84%	99%
Fenvalerate	92%	70%	71%	85%
Heptachlor	74%	72%	65%	77%
Heptachlor epoxide, cis-	73%	75%	69%	91%
Heptachlor epoxide, trans-	88%	77%	62%	97%
⁵ Heptachlor (sum)	79%	75%	65%	88%
Hexachlorobenzene	69%	68%	54%	71%
Lindane	80%	74%	67%	85%
Methidathion	82%	72%	70%	83%
Methoxychlor	81%	72%	68%	92%
Oxychlordane	83%	74%	68%	86%
Paraoxon-methyl	76%	66%	54%	48%
Parathion	86%	74%	72%	92%
Parathion methyl parent	86%	74%	67%	82%
⁶ Parathion-methyl sum	81%	70%	60%	65%

Pentachloroaniline	79%	69%	64%	81%
Permethrin	90%	67%	71%	90%
Pirimiphos-methyl	86%	78%	68%	91%
Profenofos	69%	63%	55%	68%
Pyrazophos	81%	70%	65%	90%
Quintozene parent	72%	66%	54%	78%
⁷ Quintozenes (sum)	75%	68%	59%	80%
Resmethrin	86%	92%	67%	85%
Tecnazene	61%	61%	49%	68%
Triazophos	83%	62%	65%	79%

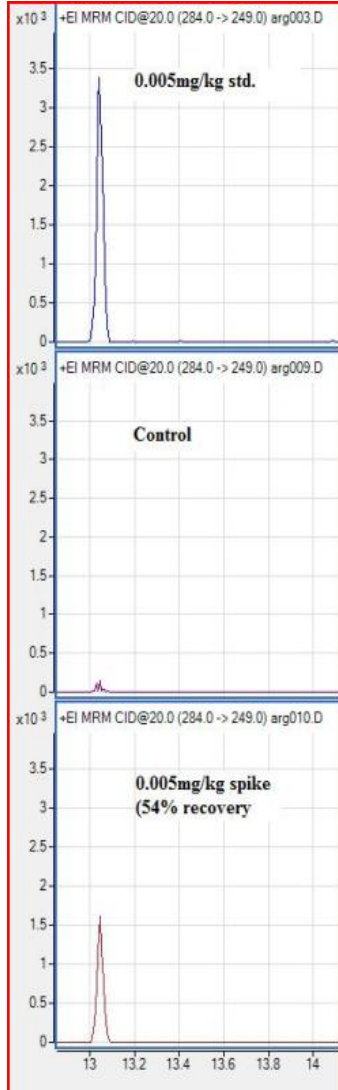
Spiking level = 0.005mg/kg whole product basis

Reporting level = 0.002mg/kg (0.005mg/kg for pyrethroids) whole product basis

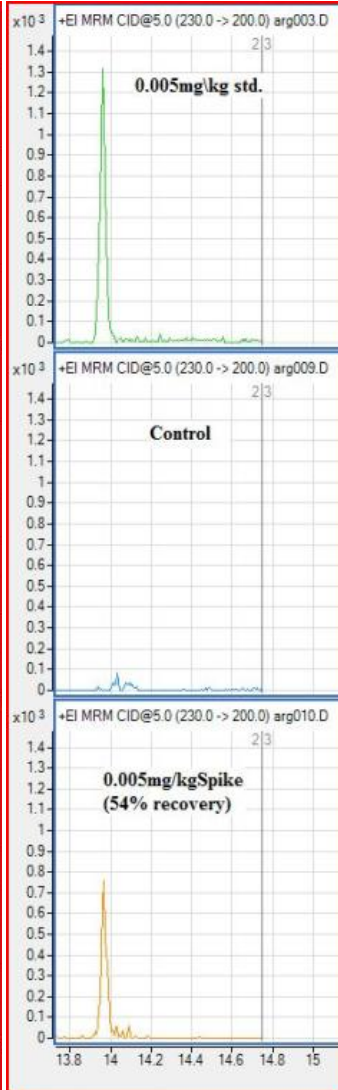
- ¹ Sum of cis and trans isomers and oxychlorane
- ² Sum of op-DDT, pp-DDE, pp-DDT and pp-DDD
- ³ Sum of dieldrin and aldrin
- ⁴ Sum of alpha- and beta-isomers and endosulfan sulphate
- ⁵ Sum of cis- and trans-isomers of heptachlor epoxide and heptachlor
- ⁶ Sum of parathion-methyl and paraoxon methyl
- ⁷ Sum of quintozenes and pentachloro-aniline

PRiF 2013 Q3 Freshwater Fish: batch WP 540 low spike recovery compounds chromatograms

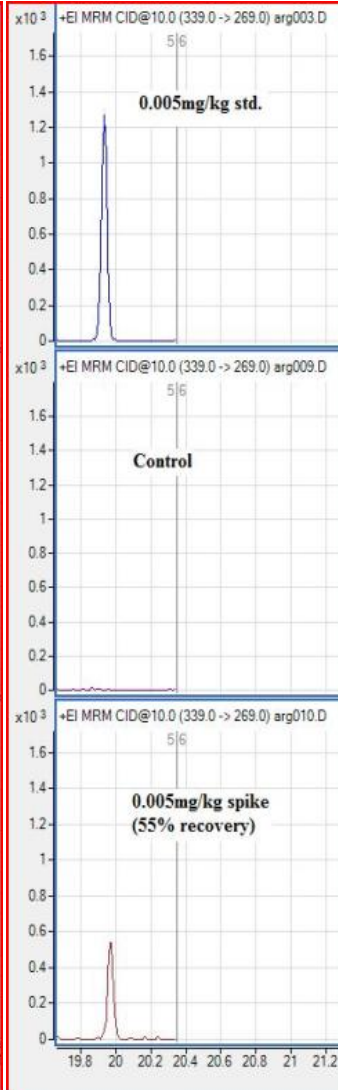
Hexachlorobenzene



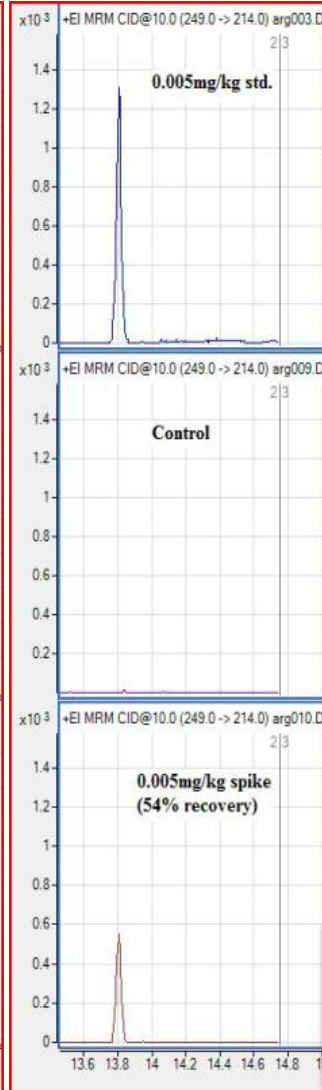
Paraoxon-methyl



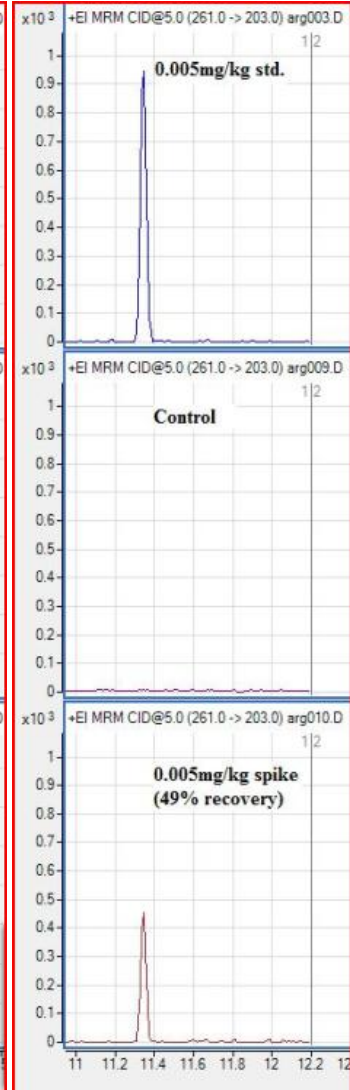
Profenofos



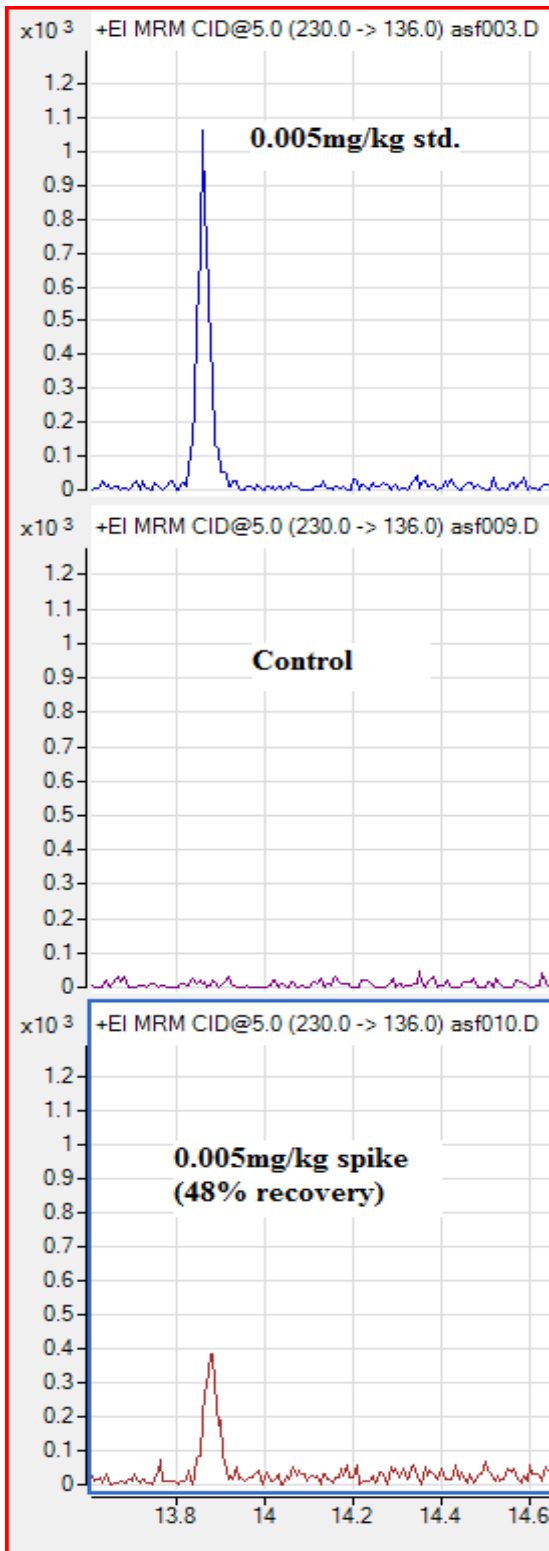
Quintozene



Tecnazene



PRiF Q3 Freshwater Fish: paraoxon-methyl chromatograms in batch WP 545



PRiF Q3 Freshwater Fish: signal to noise ratio for paraoxon-methyl in the spike in batch WP 545

