

ASG – 24.04.13	
<b>Commodity</b>	Freshwater fish (target nos. 24, rec'd 24)
<b>Sample details</b>	As attached
<b>Survey date (year/quarter)</b>	2013 Q1
<b>Previous surveys</b>	2010
<b>% Recoveries outside 60-140 range</b>	% recovery for each batch as attached. Chromatograms attached for recoveries below 60%.
<b>Residues</b>	See table below for residues detected at or above the reporting level of 0.002mg/kg (0.005mg/kg for pyrethroids) on a whole product basis.
<b>Outstanding work</b>	None
<b>Analytical Difficulties</b>	None
<b>Specific Points to raise with ASG</b>	
<b>Effect on deliverables</b>	
<b>Conclusions from ASG</b>	
<b>Actions</b>	

**Residues detected (mg/kg)**

<b>PRiF ID</b>	<b>Fat content</b>	<b>AFBI ID</b>	<b>Cypermethrin</b>	<b>Dieldrin</b>	<b>pp-DDE</b>	<b>Deltamethrin</b>
14490/2013	7.3	PL 56251	0.003		0.002	
14248/2013	4.6	PL 56261		0.003		
14769/2013	11.6	PL 56372			0.002	
14290/2013	16.6	PL 56375				0.003
14026/2013	3.5	PL 56410		0.003		
14909/2013	13.4	PL 56413			0.002	

**PRiF 2013 Q1 Freshwater Fish Sample Details**

<b>PRiF ref no</b>	<b>AFBI ref no</b>	<b>Analytical Batch no.</b>	<b>Producer</b>	<b>Retailer</b>	<b>Food description</b>	<b>% Fat</b>	<b>Commodity type</b>	<b>Organic (Y/N)</b>	<b>Sample state</b>	<b>Country of origin</b>
14601/2013	PL56249	WP 524	Sainsburys	Sainsburys	Scottish loch trout fillets	5.4	Raw	N	Fresh	Scotland
14090/2013	PL56250	WP 524	Tesco	Tesco	Wild Alaskan salmon	1.0	Raw	N	Frozen	China
14490/2013	PL56251	WP 524	Asda Stores	Asda	Salmon fillets	7.3	Raw	N	Fresh	Norway
14698/2013	PL56253	WP 524	Waitrose	Waitrose	Essentials Scottish salmon fillets	2.1	Raw	N	Fresh	UK
14326/2013	PL56254	WP 524	Morrisons	Morrisons	Fresh salmon fillet	7.9	Raw	N	Fresh	UK
14248/2013	PL56261	WP 524	Morrisons	Morrisons	Rainbow trout	4.6	Raw	N	Fresh	UK
14816/2013	PL56262	WP 524	Tesco	Tesco	Boneless salmon fillets	8.9	Raw	N	Fresh	Norway
14141/2013	PL56263	WP 524	New England Seafood	Sainsburys	Premium Scottish salmon fillets	3.2	Raw	N	Fresh	Scotland
14527/2013	PL56264	WP 527	Sainsburys	Sainsburys	Fresh rainbow trout	5.0	Raw	N	Fresh	Ireland
14417/2013	PL56265	WP 527	Youngs Seafood Ltd	Cooperative	Wild Alaskan pink salmon	1.4	Raw	N	Frozen	China
14583/2013	PL56370	WP 527	Tesco	Tesco	Whole rainbow trout	3.3	Raw	N	Fresh	UK
14050/2013	PL56371	WP 527	Aldi	Aldi	The Fishmonger boneless fresh salmon fillets	11.4	Raw	N	Fresh	UK
14769/2013	PL56372	WP 527	Edinburgh Salmon Co. Ltd	Asda	Salmon fillet	11.6	Raw	N	Fresh	Scotland
14368/2013	PL56373	WP 527	Morrisons	Morrisons	Rainbow trout	1.6	Raw	N	Fresh	UK
14650/2013	PL56374	WP 527	Harbour Salmon Co	Co-op	Salmon fillets	15.5	Raw	N	Fresh	UK

<b>PRiF ref no</b>	<b>AFBI ref no</b>	<b>Analytical Batch no.</b>	<b>Producer</b>	<b>Retailer</b>	<b>Food description</b>	<b>% Fat</b>	<b>Commodity type</b>	<b>Organic (Y/N)</b>	<b>Sample state</b>	<b>Country of origin</b>
14290/2013	PL56375	WP 527	Sainsburys	Sainsburys	Boneless Scottish salmon fillets	16.6	Raw	N	Fresh	UK
14865/2013	PL56405	WP 526	Tesco	Tesco	Boneless salmon fillets	9.2	Raw	N	Fresh	Norway
14999/2013	PL56406	WP 526	Marks & Spencers	Marks & Spencers	2 Scottish Lochmuir salmon fillets	12.2	Raw	N	Fresh	UK
14277/2013	PL56407	WP 526	Asda	Asda	Trout	4.4	Raw	N	Fresh	UK
14190/2013	PL56408	WP 526	Sainsburys	Sainsburys	Wild Alaskan salmon fillets	4.0	Raw	N	Frozen	UK
14191/2013	PL56409	WP 526	Tesco	Tesco	Rainbow trout whole	3.9	Raw	N	Fresh	UK
14026/2013	PL56410	WP 526	Morrisons	Morrisons	Rainbow trout	3.5	Raw	N	Fresh	UK
14468/2013	PL56411	WP 527	Waitrose	Waitrose	Boneless Scottish salmon fillets	16.4	Raw	N	Fresh	UK
14909/2013	PL56413	WP 526	Tesco	Tesco	Everyday Value salmon fillets	13.4	Raw	N	Fresh	Norway

## Batch Spike Recoveries

Analyte name	WP 524	WP 526	WP 527
Aldrin	80%	85%	64%
alpha-HCH	73%	78%	73%
Azinphos-ethyl	81%	70%	75%
beta-HCH	83%	88%	81%
Bifenthrin	90%	71%	85%
Chlordane, cis-isomer	85%	89%	85%
Chlordane, trans-isomer	86%	90%	80%
<sup>1</sup> Chlordane (sum)	82%	90%	82%
Chlorobenzilate	107%	102%	64%
Chlorpyrifos	86%	93%	79%
Chlorpyrifos-methyl	78%	83%	79%
Cyfluthrin	71%	87%	76%
Cypermethrin	77%	86%	75%
p,p'-DDD (p,p-TDE)	73%	81%	75%
p,p'-DDE	90%	94%	89%
o,p-DDT	91%	96%	75%
p,p-DDT	77%	90%	73%
<sup>2</sup> DDT (sum)	83%	90%	78%
Deltamethrin	67%	82%	75%
Diazinon	81%	91%	89%
Dieldrin	82%	96%	84%
<sup>3</sup> Dieldrin (sum)	81%	90%	74%
Endosulfan, alpha	80%	96%	88%
Endosulfan, beta	85%	87%	81%
Endosulfan sulfate	65%	69%	68%
<sup>4</sup> Endosulfan (sum)	77%	84%	79%
Endrin	91%	84%	71%
Fenvalerate	89%	95%	84%
Heptachlor	77%	76%	78%
Heptachlor epoxide, cis-	80%	88%	82%
Heptachlor epoxide, trans-	74%	87%	70%
<sup>5</sup> Heptachlor (sum)	77%	84%	77%
Hexachlorobenzene	65%	70%	65%
Lindane	68%	71%	63%
Methodathion	78%	86%	81%
Methoxychlor	86%	91%	75%
Oxychlordane	75%	90%	81%
Paraoxon-methyl	61%	32%	40%
Parathion	86%	89%	71%

	Parathion methyl parent	87%	84%	74%
<sup>6</sup>	Parathion-methyl sum	74%	58%	57%
	Pentachloroaniline	89%	90%	83%
	Permethrin	81%	95%	86%
	Pirimiphos-methyl	77%	86%	60%
	Profenofos	71%	52%	74%
	Pyrazophos	78%	92%	90%
	Quintozene parent	81%	69%	67%
<sup>7</sup>	Quintozene (sum)	85%	80%	75%
	Resmethrin	83%	87%	69%
	Tecnazene	72%	70%	60%
	Triazophos	77%	95%	82%

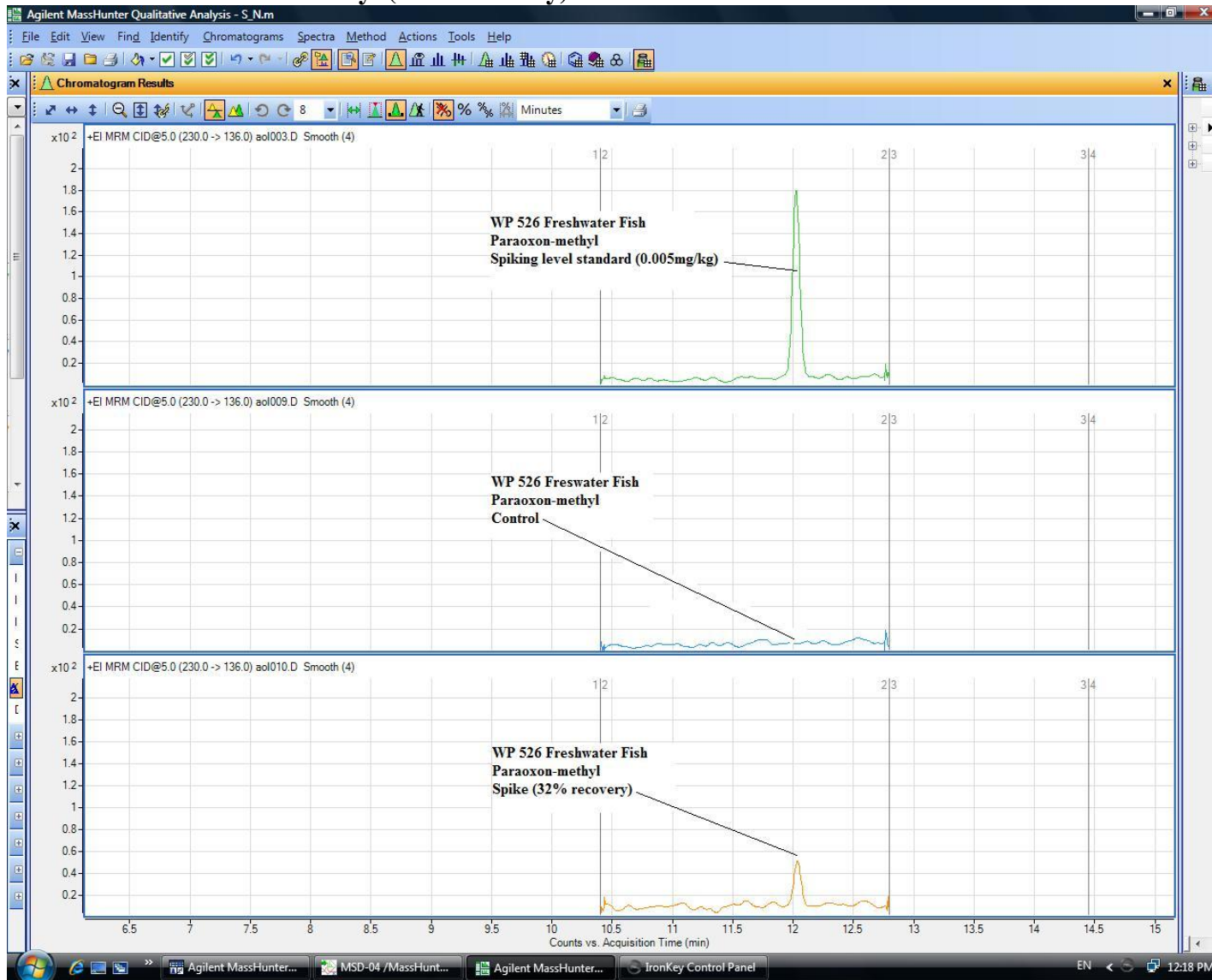
Spiking level = 0.005mg/kg whole product basis

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

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

## Low recovery chromatograms:

### Batch WP 526 Paraoxon-methyl (32% recovery)



# Batch WP 526 Profenofos (52% recovery)

