

ASG – 06.11.13	
Commodity	Fish (fresh water) (target nos. 30, rec'd 30)
Sample details	As attached
Survey date (year/quarter)	2013 Q2
Previous surveys	2010
% Recoveries outside 60-140 range	Paraoxon-methyl 52%, 55% Tecnazene 44%
Residues	Dieldrin (1) 0.002mg/kg p,p'-DDE (1) 0.005mg/kg
Outstanding work	None
Analytical Difficulties	None
Specific Points to raise with ASG	
Effect on deliverables	
Conclusions from ASG	
Actions	

PRiF 2013 Q2 Freshwater Fish: residues detected:

PRiF sample ID	AFBI sample ID	Description	Country of origin	Retailer	Compound	Conc (mg/kg)
15420/2013	PL 56517	Boneless Scottish salmon fillets	UK	Waitrose	Dieldrin DDT (pp-DDE)	0.002 0.005

PRiF 2013 Q2 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
15296/2013	PL56483	WP 528	Tesco	Tesco	Everyday value 4 salmon fillets	12.3	Raw	N	Fresh	Norway
14825/2013	PL56485	WP 528	Aldi	Aldi	The Fishmonger fresh salmon fillets	5.6	Raw	N	Fresh	UK
14229/2013	PL56488	WP 528	Asda Stores	Asda	Salmon fillets	6.7	Raw	N	Fresh	UK
14159/2013	PL56490	WP 528	Waitrose	Waitrose	English rainbow trout fillets	1.8	Raw	N	Fresh	UK
15347/2013	PL56492	WP 528	Tesco	Tesco	Whole rainbow trout	1.8	Raw	N	Fresh	UK
14424/2013	PL56494	WP 528	Co-op	Co-op	Pacific pink salmon	1.2	Raw	N	Frozen	UK
14506/2013	PL56514	WP 528	Tesco	Tesco	Whole rainbow trout	2.0	Raw	N	Fresh	UK
15420/2013	PL56517	WP 528	Waitrose	Waitrose	Boneless Scottish salmon fillets	5.9	Raw	N	Fresh	UK
14800/2013	PL56519	WP 529	Aldi	Aldi	The Fishmonger wild pink salmon fillets	1.6	Raw	N	Frozen	China
14396/2013	PL56521	WP 529	Asda Stores	Asda	Boneless skin on salmon fillets	4.2	Raw	N	Fresh	UK
14673/2013	PL56523	WP 529	Morrisons	Morrisons	Fishmonger boneless salmon fillets	5.5	Raw	N	Fresh	UK
14317/2013	PL56525	WP 529	Sainsburys	Sainsburys	Boneless Scottish salmon fillets	12.2	Raw	N	Fresh	UK
15309/2013	PL56568	WP 529	Tesco	Tesco	Everyday value salmon fillets	5.0	Raw	N	Fresh	Norway
15474/2013	PL56569	WP 529	Royal Greenland	Lidl	Salmon fillet	5.4	Raw	N	Frozen	Germany
14197/2013	PL56571	WP 529	Tesco	Tesco	Trout	1.6	Raw	N	Fresh	UK
14478/2013	PL56576	WP 529	Morrisons	Morrisons	Market deals salmon fillets	4.2	Raw	N	Fresh	UK
15014/2013	PL56599	WP 532	Sainsburys	Sainsburys	2 boneless Scottish salmon fillets	3.8	Raw	N	Fresh	UK
15221/2013	PL56600	WP 532	Tesco	Tesco	Everyday value salmon fillets	5.6	Raw	N	Fresh	Norway

15071/2013	PL56604	WP 532	Tesco	Tesco	Boneless salmon fillet	5.1	Raw	N	Fresh	Norway
15110/2013	PL56606	WP 532	Asda Stores	Asda	Boneless british rainbow trout fillets	2.7	Raw	N	Fresh	UK
15137/2013	PL56608	WP 532	Waitrose	Waitrose	Whole salmon side	15.6	Raw	N	Fresh	UK
15179/2013	PL56610	WP 532	Morrisons	Morrisons	Savers salmon fillets	5.0	Raw	N	Fresh	UK
17815/2013	PL56628	WP 532	Morrisons	Morrisons	Rainbow Trout	1.0	Raw	N	Fresh	UK
17767/2013	PL56629	WP 532	Tesco	Tesco	2 skinless boneless river cobbler fillets	0.5	Raw	N	Fresh	Vietnam
17828/2013	PL56633	WP 533	Sainsburys	Sainsburys	Scottish salmon	6.5	Raw	N	Fresh	UK
17592/2013	PL56635	WP 533	Asda Stores	Asda	Rainbow Trout	2.3	Raw	N	Fresh	UK
17733/2013	PL56636	WP 533	Sainsburys	Sainsburys	Scottish salmon fillets	15.5	Raw	N	Fresh	UK
17712/2013	PL56639	WP 533	Morrisons	Morrisons	Fishmonger salmon fillet	5.6	Raw	N	Fresh	UK
17719/2013	PL56640	WP 533	Morrisons	Morrisons	Rainbow trout fillet	6.7	Raw	N	Fresh	UK
17881/2013	PL56642	WP 533	Asda Stores	Asda	Boneless skin on salmon fillets	13.6	Raw	N	Fresh	UK

PRiF 2013 Q2 Freshwater Fish: batch spike recoveries

	WP 528	WP 529	WP 532	WP 533
Analyte name				
Aldrin	65%	97%	85%	87%
alpha-HCH	72%	87%	64%	72%
Azinphos-ethyl	63%	88%	73%	71%
beta-HCH	81%	93%	77%	80%
Bifenthrin	75%	90%	82%	89%
Chlordane, cis-isomer	81%	88%	85%	92%
Chlordane, trans-isomer	77%	82%	79%	88%
¹ Chlordane (sum)	78%	90%	83%	85%
Chlorobenzilate	106%	137%	105%	86%
Chlorpyrifos	80%	96%	79%	79%
Chlorpyrifos-methyl	75%	94%	74%	73%
Cyfluthrin	64%	101%	85%	66%
Cypermethrin	66%	93%	83%	72%
p,p'-DDD (p,p-TDE)	71%	82%	74%	74%
p,p'-DDE	78%	91%	83%	97%
o,p-DDT	75%	81%	97%	85%
p,p-DDT	70%	72%	99%	91%
² DDT (sum)	73%	82%	88%	87%
Deltamethrin	66%	87%	71%	79%
Diazinon	86%	99%	79%	78%
Dieldrin	71%	88%	99%	90%
³ Dieldrin (sum)	68%	93%	92%	89%
Endosulfan, alpha	83%	93%	89%	94%
Endosulfan, beta	80%	101%	91%	80%
Endosulfan sulfate	60%	77%	65%	66%
⁴ Endosulfan (sum)	74%	90%	82%	80%
Endrin	96%	99%	70%	67%
Fenvalerate	80%	87%	99%	90%
Heptachlor	76%	85%	82%	82%
Heptachlor epoxide, cis-	81%	88%	74%	93%
Heptachlor epoxide, trans-	80%	100%	87%	87%
⁵ Heptachlor (sum)	79%	91%	81%	87%
Hexachlorobenzene	68%	76%	64%	70%
Lindane	64%	78%	64%	62%
Methidathion	71%	100%	85%	80%
Methoxychlor	86%	89%	101%	98%
Oxychlordane	76%	99%	84%	76%
Paraoxon-methyl	65%	52%	55%	61%

Parathion	79%	84%	60%	77%
Parathion methyl parent	74%	73%	60%	71%
⁶ Parathion-methyl sum	69%	63%	58%	66%
Pentachloroaniline	82%	107%	84%	88%
Permethrin	81%	90%	89%	83%
Pirimiphos-methyl	87%	90%	74%	72%
Profenofos	60%	66%	86%	66%
Pyrazophos	81%	107%	81%	84%
Quintozene parent	68%	72%	60%	64%
⁷ Quintozene (sum)	75%	89%	72%	76%
Resmethrin	83%	81%	86%	80%
Tecnazene	62%	73%	44%	61%
Triazophos	68%	114%	88%	78%

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 oxychlordane

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

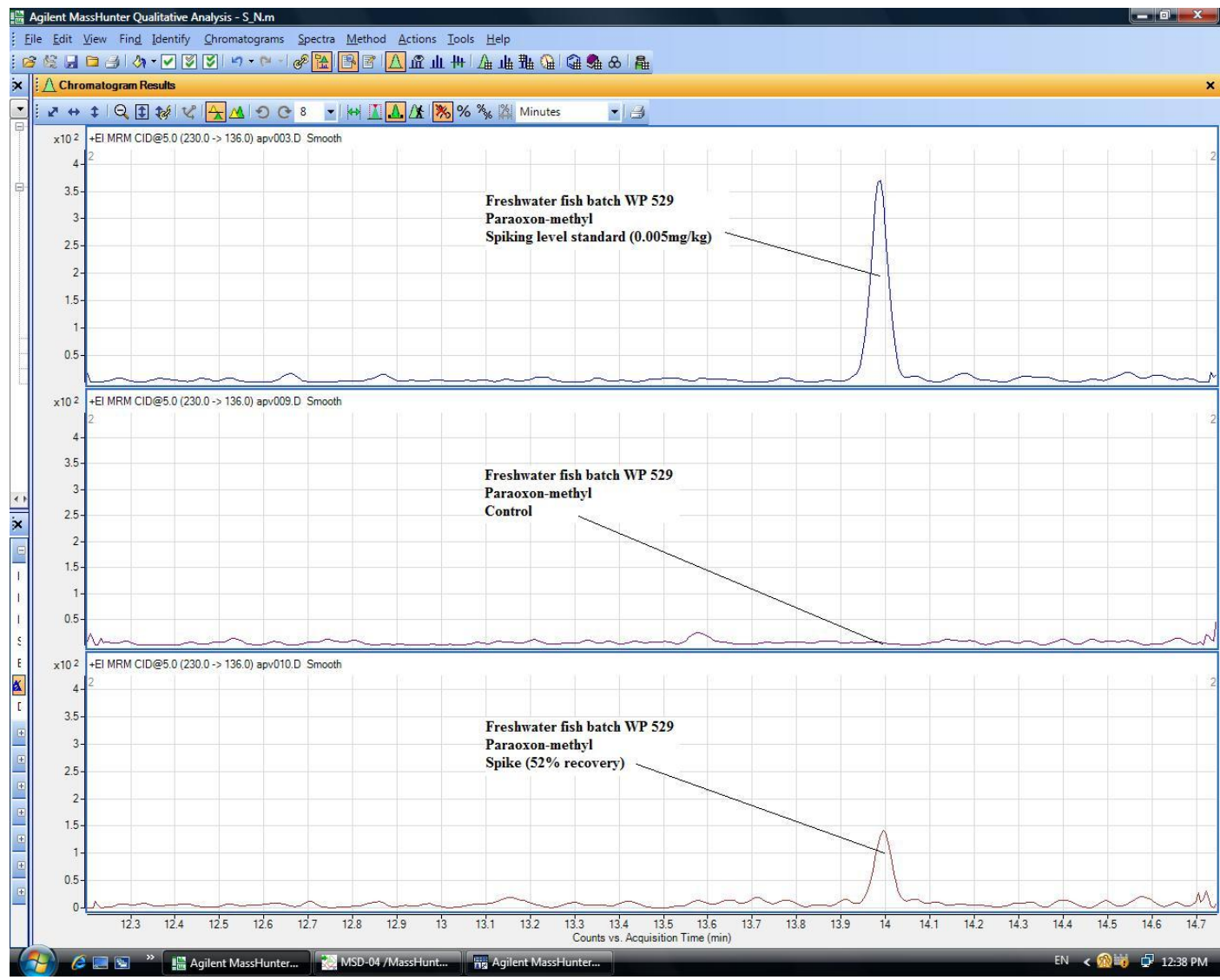
⁵ Sum of cis- and trans-isomers of heptachlor epoxide and heptachlor

⁶ Sum of parathion-methyl and paraoxon methyl

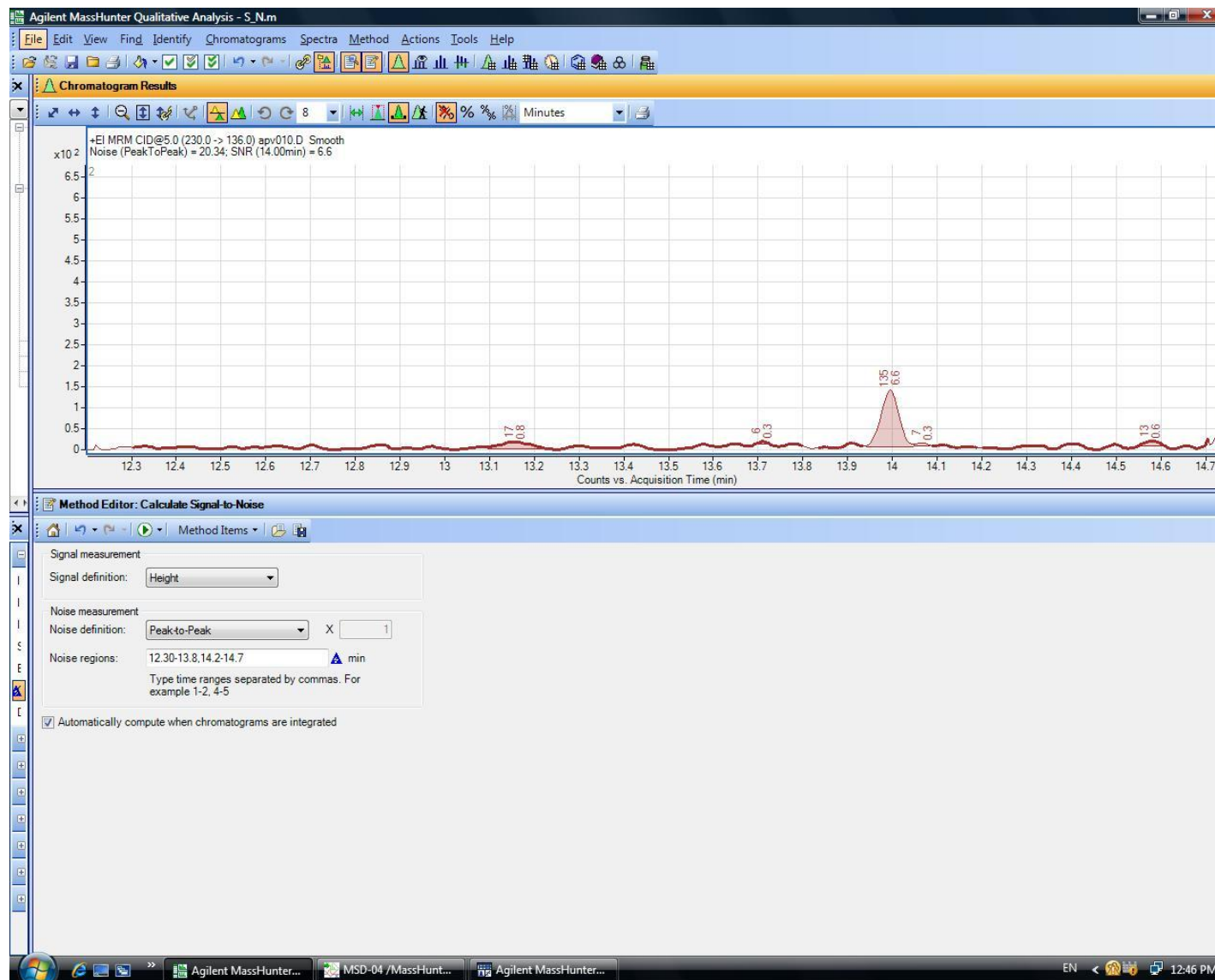
⁷ Sum of quintozene and pentachloro-analine

PRiF 2013 Q2 Freshwater Fish: low spike recovery compounds chromatograms:

Batch WP 529 Paraoxon-methyl (52% recovery)



PRiF 2013 Q2 Freshwater Fish: signal to noise ratio for paraoxon-methyl in the spike in batch WP 529



Batch WP 532 Tecnazene (44% recovery)

