

PFAS AND SOUTH AUSTRALIA





Australia
New Zealand

South
America

Mexico
& Central
America

USA

Caribbean

Canada

Asia

Europe

Africa



Arafura Sea

Timor Sea

Gulf of Carpentaria

Indian Ocean

Pacific Ocean

NORTHERN TERRITORY

QUEENSLAND

WESTERN AUSTRALIA

SOUTH AUSTRALIA

NEW SOUTH WALES

VICTORIA

TASMANIA

Darwin

Perth

Adelaide

Melbourne

CANBERRA

Brisbane

Sydney

Hobart

Great Australian Bight

Bass Strait

Indian Ocean

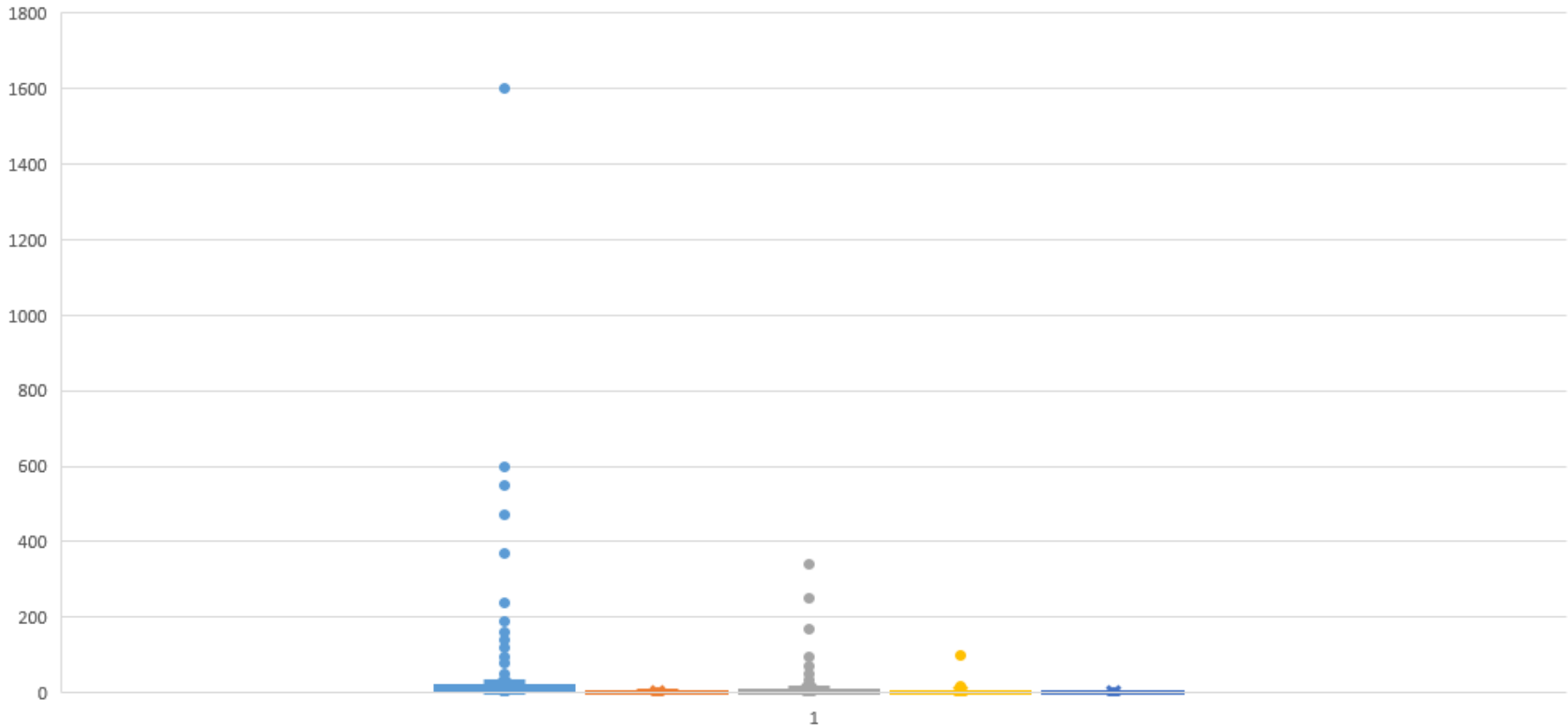
www.freeworldmaps.net

PFAS BLOOD TESTING



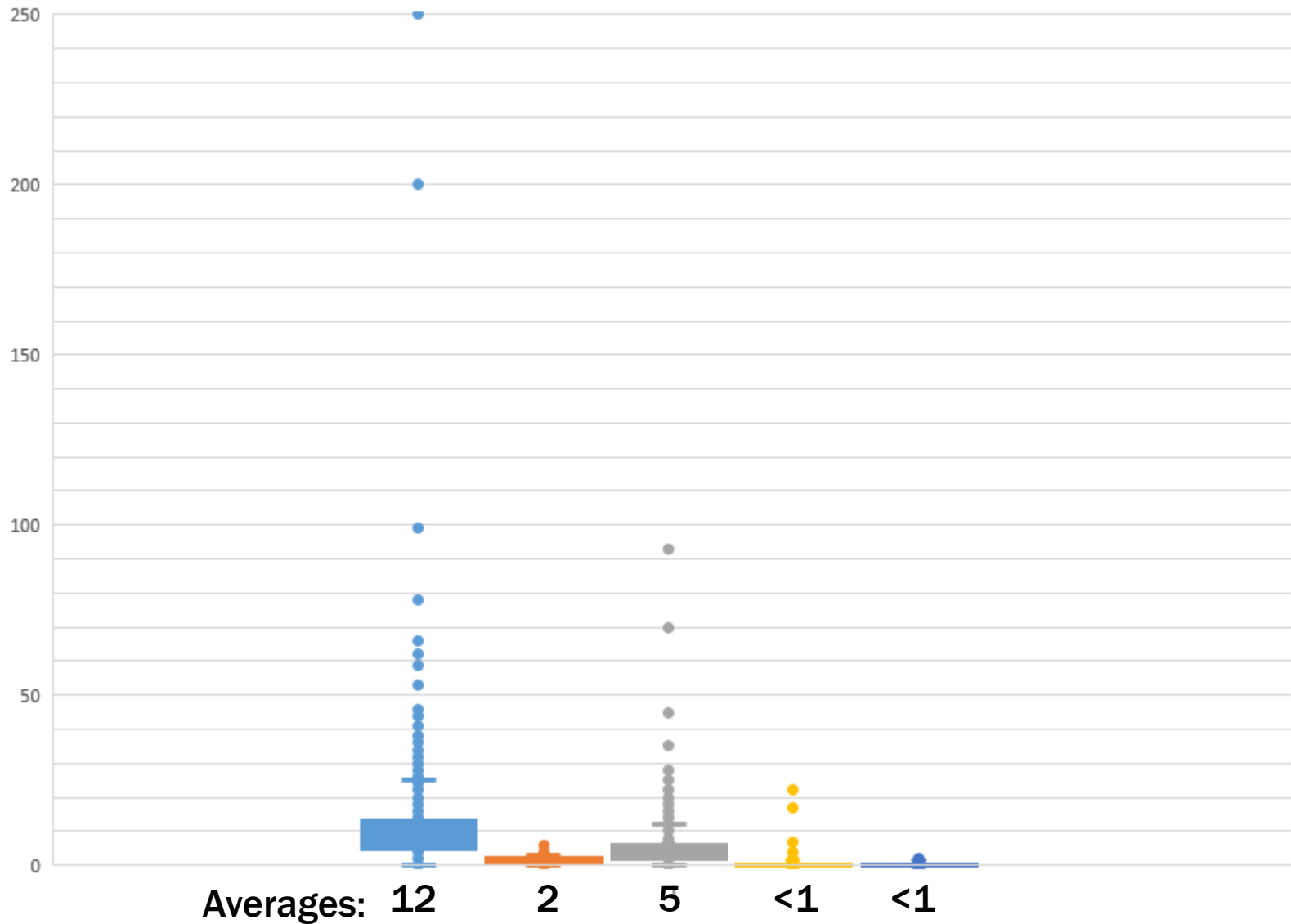
SAMFS minus family data - 691 results

■ PFOS ■ PFOA ■ PFHxS ■ PFHpA ■ PFNA



SAMFS - 596 results

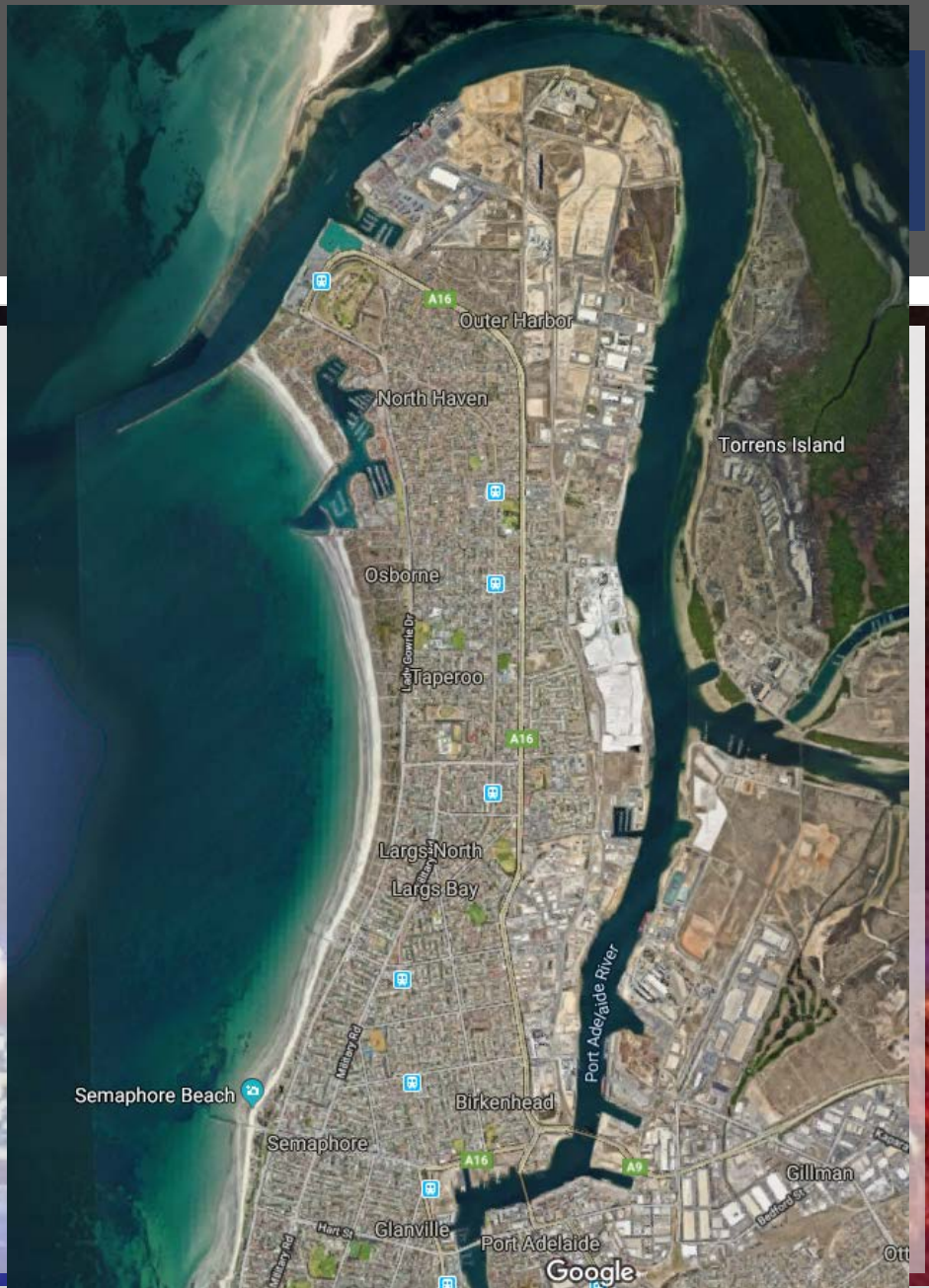
■ PFOS ■ PFOA ■ PFHxS ■ PFHpA ■ PFNA

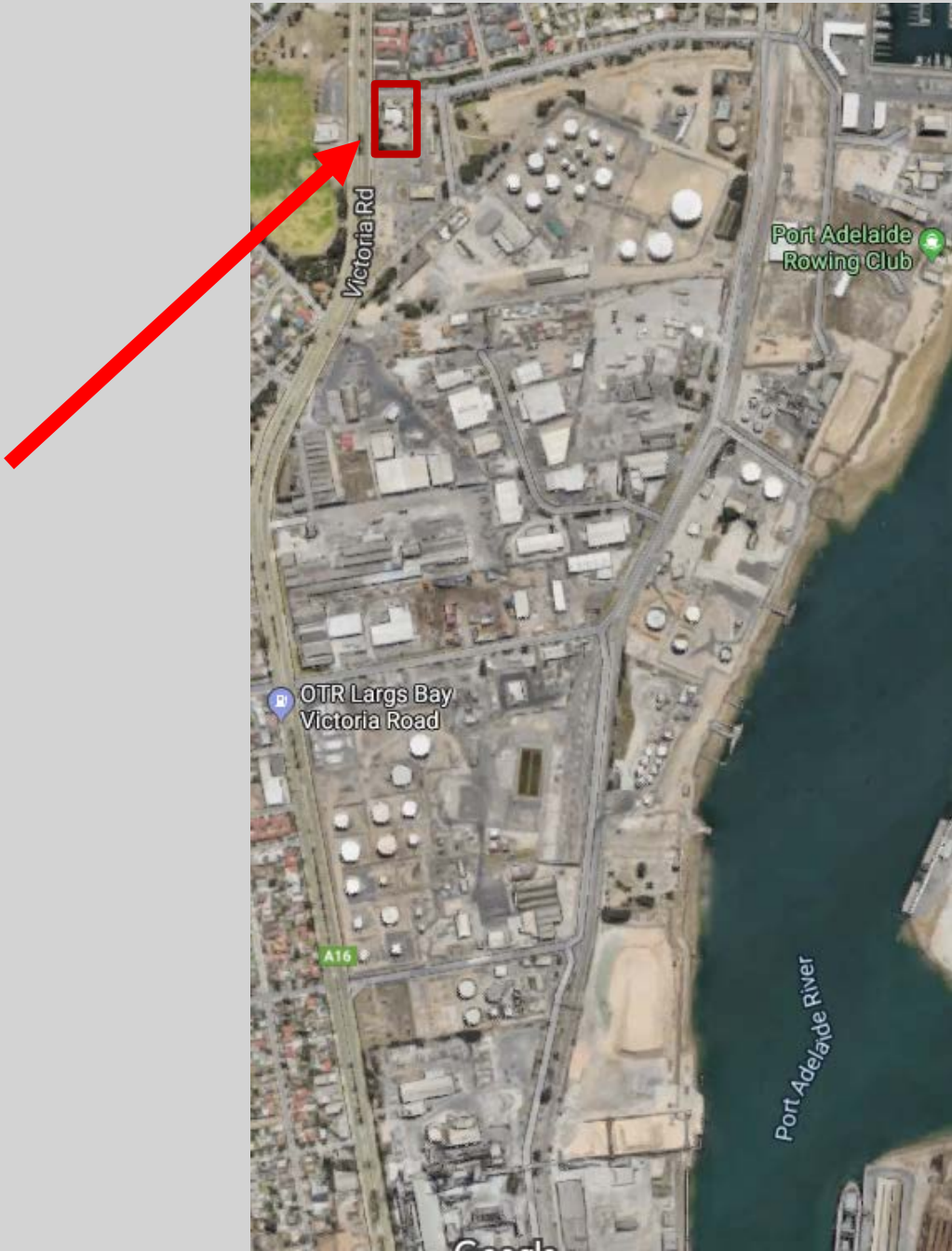


Australian Study used by the Australian Federal Department of Health showing the 95th percentile values

	PFOS (ppb)	PFOA (ppb)
0-4 years	13	9
5-15 years	18	8
16-30 years	20	8
31-45 years	25	8
46-60 years	29	8
61+ years	37	10

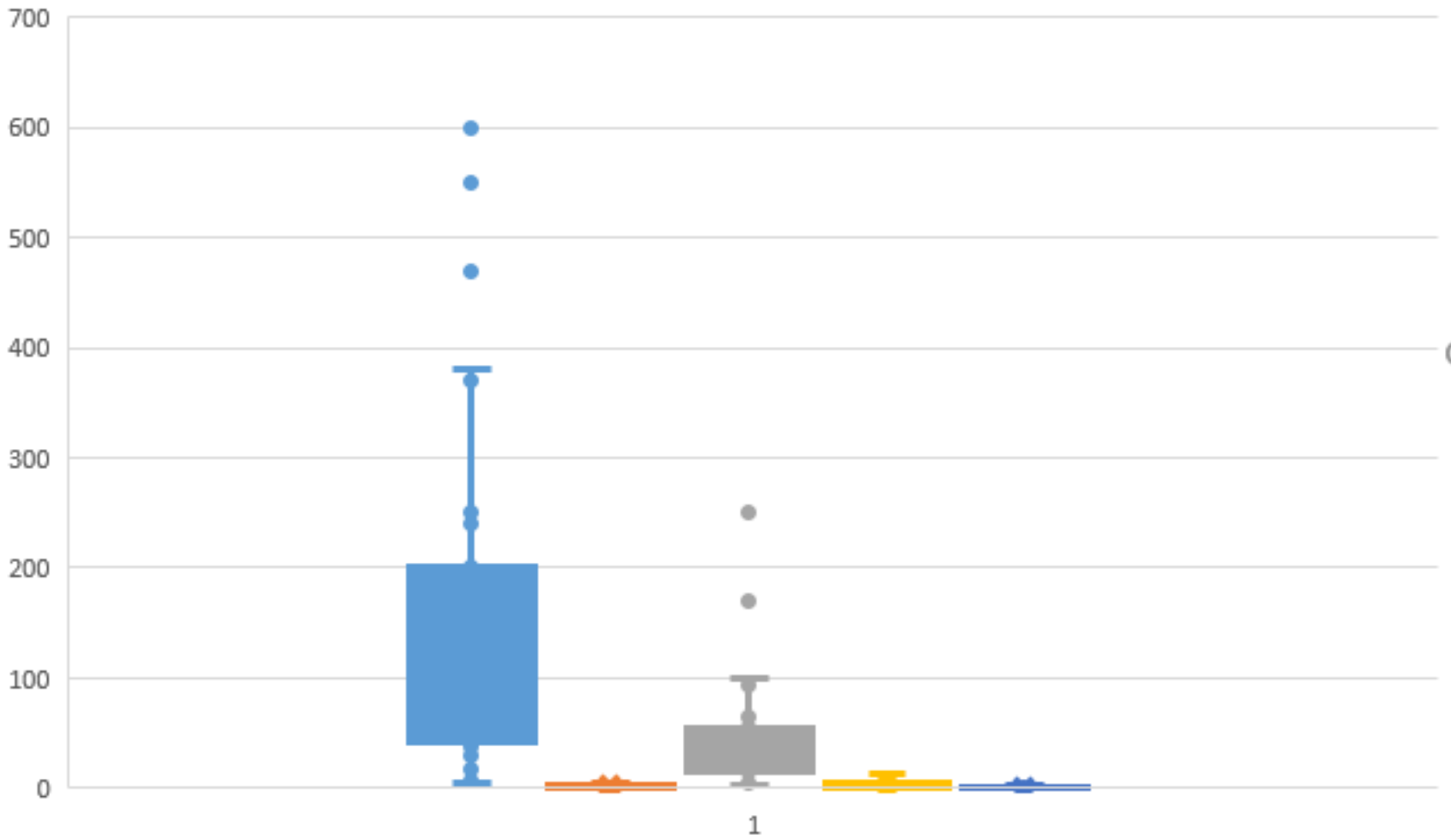
PFAS BLOOD TESTING - CLUSTER STATION





Largs Station

■ PFOS ■ PFOA ■ PFHxS ■ PFHpA ■ PFNA



EXPOSURE PATHWAYS

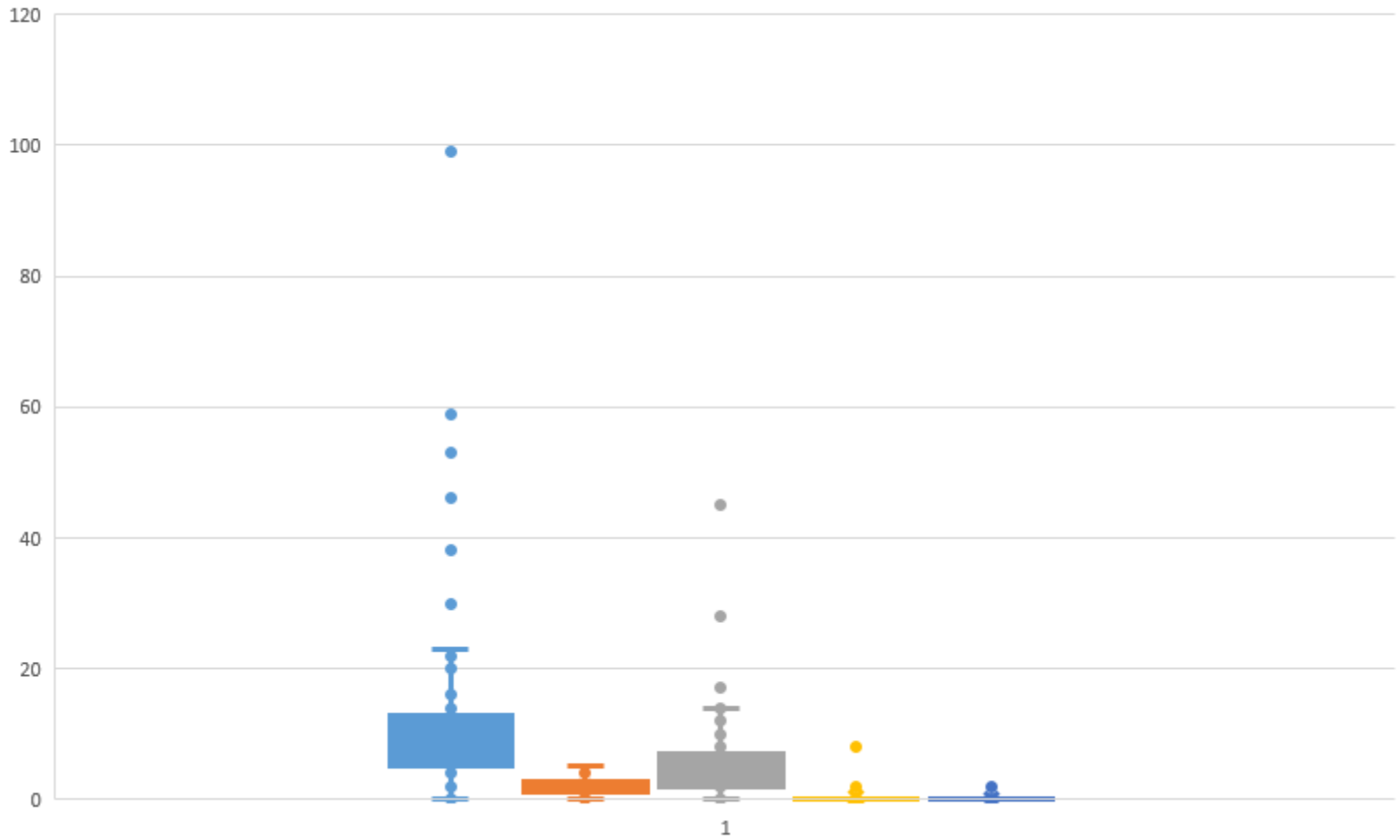


Sample type	Concentration Range
Soil	2.3 - 126 ppb
Dust	340 - 4,400 ppb
Tap Water (Drinking Water)	<0.01 ppb
Fruit	0.6 - 11.8 ppb
Foliage	5 - 310 ppb
Egg yolk (not white)	338 - 1,800 ppb
Fire appliance	0.02 - 0.07 ppb
Gallantry (Fire Vessel)	<0.01 - 3,280 ppb
Groundwater (not accessible to FF's)	0.02 - 220 ppb



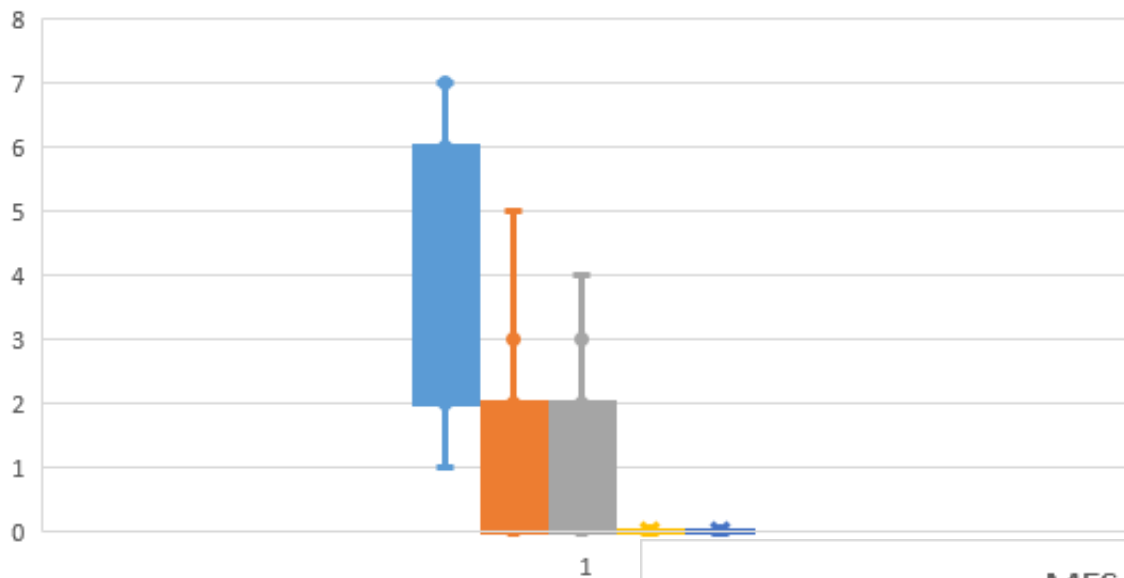
MFS Retirees - 100 results

■ PFOS ■ PFOA ■ PFHxS ■ PFHpA ■ PFNA



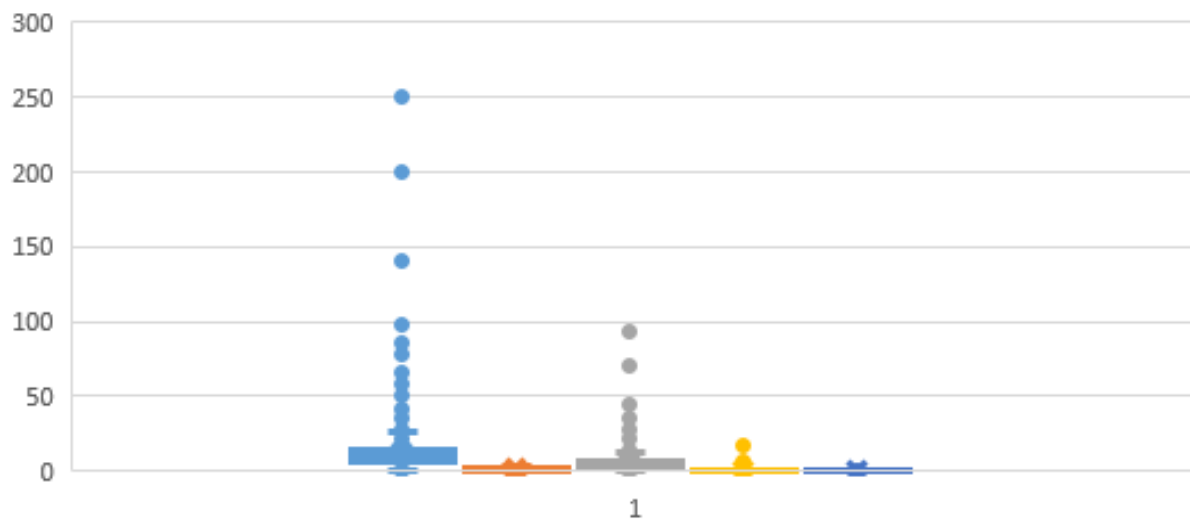
MFS - Females (18 results)

■ PFOS ■ PFOA ■ PFHxS ■ PFHpA ■ PFNA



MFS - Males - 623 results

■ PFOS ■ PFOA ■ PFHxS ■ PFHpA ■ PFNA



REMOVAL FROM YOUR BODY



Firefighter 1

Date	PFOS	PFOA	PFHxS	PFHpA	PFNA
November 2018	170	2	43	3	1
May 2019	19	1	20	<1	<1

Firefighter 2

Date	PFOS	PFOA	PFHxS	PFHpA	PFNA
December 2018	380	2	93	7	1
May 2019	430	3	95	7	1

WHERE TO FROM HERE



Further fire appliance testing and decontamination

Soil washing trial at Edinburgh RAAF Base

Mental health

PPC testing

Further studies

PhD – exposure pathways for firefighters and blood levels

Thanks to Dr G Verrall, SPARC and Mr D Springer, Envirolab

Thank You!