

Certificate of Analysis

Issuing Laboratory SOCOTEC, Marine Department, Advanced Chemistry and Research, Etwall House, Bretby Business Park, Ashby Road, Burton-upon-Trent DE15 0YZ



Test Report ID MAR02667

Issue Version: 1

Customer: Associated British Ports, Queen Alexandra House, Cargo Road, Cardiff, CF10 4LY

Customer Reference: Cardiff - MMO Analysis

Date Sampled: 08-10-May-25

Date Samples Received: 15-May-25

Test Report Date: 18-Jun-25

Condition of samples: Cold Deviating

Opinions and Interpretations expressed herein are outside the scope of our UKAS accreditation

The results reported relate only to the sample tested

The results apply to the sample as received

Glass jars for samples D1 & G2 were damaged in transit

J Colbourne

Authorised by: Jane Colbourne

Position: Customer Service Specialist



1252

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Issuing Laboratory SOCOTEC, Marine Department, Advanced Chemistry and Research, Etwall House, Bretby Business Park, Ashby Road, Burton-upon-Trent DE15 0YZ

Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	% M/M	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	WSLM59*	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	UKAS/MMO	MMO	MMO	MMO	MMO	MMO	MMO
			Total Organic Carbon	45mm	31.5mm	22.4mm	16mm	11.2mm	8mm
Client Reference:	SOCOTEC Ref:	Matrix	-	-5.5	-5.0	-4.5	-4.0	-3.5	-3.0
A	MAR02667.001	Sediment	2.07	0.00	0.00	0.00	0.00	0.00	0.00
B	MAR02667.002	Sediment	2.39	0.00	0.00	0.00	0.00	0.00	0.00
B1	MAR02667.003	Sediment	2.12	0.00	0.00	0.00	0.00	0.00	0.00
C	MAR02667.004	Sediment	2.34	0.00	0.00	0.00	0.00	0.00	0.00
C1	MAR02667.005	Sediment	2.32	0.00	0.00	0.00	0.00	0.00	0.00
D	MAR02667.006	Sediment	2.40	0.00	0.00	0.00	0.00	0.00	0.00
D1	MAR02667.007	Sediment	2.42	0.00	0.00	0.00	0.00	0.00	0.00
E	MAR02667.008	Sediment	2.35	0.00	0.00	0.00	0.00	0.00	0.00
F1	MAR02667.009	Sediment	2.38	0.00	0.00	0.00	0.00	2.27	1.57
F	MAR02667.010	Sediment	2.45	0.00	0.00	0.00	0.00	0.00	0.00
G1	MAR02667.011	Sediment	2.39	0.00	0.00	0.00	0.00	0.00	0.00
G2	MAR02667.012	Sediment	2.26	0.00	0.00	0.00	0.00	0.00	0.00
G	MAR02667.013	Sediment	2.50	0.00	0.00	0.00	0.00	0.00	0.00
G3	MAR02667.014	Sediment	2.32	0.00	0.00	0.00	0.00	0.00	0.01
H	MAR02667.015	Sediment	2.33	0.00	0.00	0.00	0.00	0.00	0.00
I	MAR02667.016	Sediment	1.96	0.00	0.00	0.00	0.00	0.00	0.00
J	MAR02667.017	Sediment	2.30	0.00	0.00	0.00	0.00	0.00	0.00

* See Report Notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO
			5.6mm	4mm	2.8mm	2mm	1.4mm	1mm	707µm
Client Reference:	SOCOTEC Ref:	Matrix	-2.5	-2.0	-1.5	-1.0	-0.5	0.0	0.5
A	MAR02667.001	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	MAR02667.002	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B1	MAR02667.003	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C	MAR02667.004	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C1	MAR02667.005	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D	MAR02667.006	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D1	MAR02667.007	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E	MAR02667.008	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F1	MAR02667.009	Sediment	0.74	0.70	0.42	0.47	0.57	0.42	0.00
F	MAR02667.010	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G1	MAR02667.011	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G2	MAR02667.012	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G	MAR02667.013	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G3	MAR02667.014	Sediment	0.01	0.01	0.09	0.01	0.02	0.02	0.00
H	MAR02667.015	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
I	MAR02667.016	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
J	MAR02667.017	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* See Report Notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO
			500µm	353.6µm	250µm	176.8µm	125µm	88.39µm	63µm
Client Reference:	SOCOTEC Ref:	Matrix	1.0	1.5	2.0	2.5	3.0	3.5	4.0
A	MAR02667.001	Sediment	0.00	0.02	1.54	3.06	1.55	2.06	3.15
B	MAR02667.002	Sediment	0.00	0.00	0.00	0.00	0.56	1.27	1.35
B1	MAR02667.003	Sediment	0.00	0.00	0.00	0.00	0.00	0.12	1.92
C	MAR02667.004	Sediment	0.00	0.00	0.17	0.57	1.39	2.20	2.51
C1	MAR02667.005	Sediment	0.00	0.00	0.00	0.01	0.72	1.69	1.98
D	MAR02667.006	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.58
D1	MAR02667.007	Sediment	0.00	0.00	0.00	0.00	0.29	1.69	2.04
E	MAR02667.008	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.62
F1	MAR02667.009	Sediment	0.00	0.00	0.00	0.00	0.01	1.11	2.40
F	MAR02667.010	Sediment	0.00	0.00	0.00	0.00	0.02	0.77	1.14
G1	MAR02667.011	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G2	MAR02667.012	Sediment	0.00	0.00	0.00	0.00	0.22	1.31	1.73
G	MAR02667.013	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.85
G3	MAR02667.014	Sediment	0.00	0.00	0.00	0.00	0.00	0.03	1.02
H	MAR02667.015	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.00
I	MAR02667.016	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.86
J	MAR02667.017	Sediment	0.00	0.00	0.00	0.00	0.00	0.00	0.14

* See Report Notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO
			44.2µm	31.3µm	22.1µm	15.6µm	11µm	7.8µm	5.5µm
Client Reference:	SOCOTEC Ref:	Matrix	4.5	5.0	5.5	6.0	6.5	7.0	7.5
A	MAR02667.001	Sediment	4.48	5.36	6.47	9.67	11.97	11.88	10.75
B	MAR02667.002	Sediment	3.00	4.25	5.70	9.62	12.45	12.91	12.19
B1	MAR02667.003	Sediment	3.70	4.61	6.28	9.89	12.99	13.61	12.67
C	MAR02667.004	Sediment	3.91	5.28	6.60	10.23	12.94	12.86	11.47
C1	MAR02667.005	Sediment	3.14	4.56	5.74	9.04	11.90	12.48	11.93
D	MAR02667.006	Sediment	3.82	4.98	5.76	9.61	12.51	13.45	13.10
D1	MAR02667.007	Sediment	3.54	4.71	5.71	9.33	12.31	13.13	12.51
E	MAR02667.008	Sediment	3.93	4.19	5.29	9.37	12.33	13.35	13.08
F1	MAR02667.009	Sediment	3.39	4.38	5.31	8.84	11.39	11.97	11.38
F	MAR02667.010	Sediment	2.06	2.96	4.36	8.39	11.99	13.65	13.64
G1	MAR02667.011	Sediment	0.19	1.50	3.27	10.65	11.30	11.32	12.33
G2	MAR02667.012	Sediment	3.22	4.70	5.97	9.66	12.75	13.50	12.73
G	MAR02667.013	Sediment	3.50	4.60	6.08	9.91	13.23	13.99	13.12
G3	MAR02667.014	Sediment	2.98	3.71	5.01	8.24	11.22	12.55	12.72
H	MAR02667.015	Sediment	0.31	1.95	3.32	11.16	11.68	11.65	12.50
I	MAR02667.016	Sediment	3.25	4.61	5.97	9.47	12.00	12.54	12.19
J	MAR02667.017	Sediment	3.20	4.17	5.01	9.23	12.04	13.19	13.21

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Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO
			3.9µm	2.75µm	1.95µm	1.38µm	0.98µm	0.69µm	0.49µm
Client Reference:	SOCOTEC Ref:	Matrix	8.0	8.5	9.0	9.5	10.0	10.5	11.0
A	MAR02667.001	Sediment	8.41	5.77	3.51	2.15	1.51	1.29	1.24
B	MAR02667.002	Sediment	9.88	6.98	4.41	2.84	2.10	1.89	1.93
B1	MAR02667.003	Sediment	10.05	6.95	4.24	2.60	1.84	1.60	1.56
C	MAR02667.004	Sediment	8.79	5.90	3.55	2.21	1.61	1.41	1.40
C1	MAR02667.005	Sediment	9.80	7.03	4.53	2.97	2.18	1.91	1.93
D	MAR02667.006	Sediment	10.78	7.53	4.51	2.68	1.86	1.65	1.68
D1	MAR02667.007	Sediment	10.10	7.01	4.26	2.61	1.85	1.64	1.64
E	MAR02667.008	Sediment	10.85	7.72	4.76	2.92	2.04	1.78	1.78
F1	MAR02667.009	Sediment	9.21	6.45	3.99	2.51	1.83	1.62	1.62
F	MAR02667.010	Sediment	11.38	8.07	4.97	3.07	2.21	2.00	2.07
G1	MAR02667.011	Sediment	11.56	9.14	6.31	4.32	3.21	2.85	2.94
G2	MAR02667.012	Sediment	10.17	6.99	4.19	2.53	1.78	1.57	1.57
G	MAR02667.013	Sediment	10.44	7.17	4.29	2.57	1.80	1.58	1.56
G3	MAR02667.014	Sediment	10.93	8.07	5.27	3.46	2.53	2.24	2.30
H	MAR02667.015	Sediment	11.57	9.04	6.16	4.15	3.05	2.65	2.65
I	MAR02667.016	Sediment	10.22	7.46	4.85	3.20	2.37	2.10	2.08
J	MAR02667.017	Sediment	11.18	8.07	5.05	3.12	2.22	1.94	1.92

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Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO
			0.34µm	0.24µm	0.17µm	0.12µm	0.09µm	0.06µm	0.04µm
Client Reference:	SOCOTEC Ref:	Matrix	11.5	12.0	12.5	13.0	13.5	14.0	14.5
A	MAR02667.001	Sediment	1.19	1.05	0.81	0.58	0.36	0.14	0.02
B	MAR02667.002	Sediment	1.94	1.74	1.31	0.92	0.54	0.20	0.02
B1	MAR02667.003	Sediment	1.51	1.35	1.05	0.77	0.47	0.19	0.02
C	MAR02667.004	Sediment	1.37	1.25	0.99	0.74	0.46	0.18	0.02
C1	MAR02667.005	Sediment	1.94	1.72	1.26	0.85	0.48	0.17	0.02
D	MAR02667.006	Sediment	1.66	1.46	1.07	0.73	0.42	0.16	0.02
D1	MAR02667.007	Sediment	1.62	1.45	1.10	0.78	0.47	0.18	0.02
E	MAR02667.008	Sediment	1.75	1.56	1.17	0.82	0.48	0.18	0.02
F1	MAR02667.009	Sediment	1.59	1.41	1.07	0.75	0.45	0.17	0.02
F	MAR02667.010	Sediment	2.09	1.89	1.43	1.01	0.59	0.22	0.03
G1	MAR02667.011	Sediment	2.98	2.59	1.77	1.07	0.53	0.17	0.02
G2	MAR02667.012	Sediment	1.55	1.38	1.06	0.77	0.46	0.18	0.02
G	MAR02667.013	Sediment	1.52	1.35	1.04	0.75	0.46	0.18	0.02
G3	MAR02667.014	Sediment	2.32	2.05	1.48	0.97	0.53	0.19	0.02
H	MAR02667.015	Sediment	2.63	2.27	1.58	0.99	0.51	0.18	0.02
I	MAR02667.016	Sediment	2.04	1.79	1.33	0.91	0.53	0.20	0.02
J	MAR02667.017	Sediment	1.87	1.65	1.23	0.86	0.50	0.19	0.02

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		Units	% (at 0.5phi intervals)
		Method No	*SUB_01
		Accreditation	MMO
			<0.04µm
Client Reference:	SOCOTEC Ref:	Matrix	>14.5
A	MAR02667.001	Sediment	0.00
B	MAR02667.002	Sediment	0.00
B1	MAR02667.003	Sediment	0.00
C	MAR02667.004	Sediment	0.00
C1	MAR02667.005	Sediment	0.00
D	MAR02667.006	Sediment	0.00
D1	MAR02667.007	Sediment	0.00
E	MAR02667.008	Sediment	0.00
F1	MAR02667.009	Sediment	0.00
F	MAR02667.010	Sediment	0.00
G1	MAR02667.011	Sediment	0.00
G2	MAR02667.012	Sediment	0.00
G	MAR02667.013	Sediment	0.00
G3	MAR02667.014	Sediment	0.00
H	MAR02667.015	Sediment	0.00
I	MAR02667.016	Sediment	0.00
J	MAR02667.017	Sediment	0.00

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		Units	mg/Kg (Dry Weight)							
		Method No	ICPMSS*							
		Limit of Detection	0.5	0.04	0.5	0.5	0.01	0.5	0.5	2
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Copper (Cu)	Mercury (Hg)	Nickel (Ni)	Lead (Pb)	Zinc (Zn)
A	MAR02667.001	Sediment	14.4	0.37	37.2	34.7	0.30	32.3	67.0	240
B	MAR02667.002	Sediment	13.5	0.29	41.6	28.4	0.23	35.5	67.5	239
B1	MAR02667.003	Sediment	14.2	0.21	38.8	24.7	0.18	33.2	64.0	207
C	MAR02667.004	Sediment	14.2	0.28	40.1	26.5	0.21	34.4	68.9	222
C1	MAR02667.005	Sediment	14.8	0.29	41.4	28.2	0.22	35.2	72.1	231
D	MAR02667.006	Sediment	15.0	0.24	40.4	26.2	0.20	34.7	69.2	216
D1	MAR02667.007	Sediment	15.4	0.28	42.5	27.5	0.20	35.7	72.2	223
E	MAR02667.008	Sediment	13.8	0.26	38.7	27.0	0.17	34.1	64.7	225
F1	MAR02667.009	Sediment	15.3	0.26	36.3	25.1	0.19	31.6	65.2	211
F	MAR02667.010	Sediment	16.5	0.26	44.5	28.0	0.25	38.0	72.1	241
G1	MAR02667.011	Sediment	14.6	0.24	41.5	27.7	0.20	34.6	65.4	215
G2	MAR02667.012	Sediment	14.4	0.26	41.1	25.1	0.19	34.3	65.7	218
G	MAR02667.013	Sediment	13.4	0.22	38.0	23.8	0.17	32.6	59.2	207
G3	MAR02667.014	Sediment	13.1	0.22	37.5	25.1	0.18	33.3	61.2	213
H	MAR02667.015	Sediment	13.2	0.33	37.3	24.3	0.17	33.3	62.6	204
I	MAR02667.016	Sediment	12.4	0.24	39.2	24.6	0.20	33.2	62.9	208
J	MAR02667.017	Sediment	13.9	0.28	41.2	26.5	0.31	35.0	69.5	222
Certified Reference Material SETOC 768 (% Recovery)			93	105	95	98	100	98	103	101
QC Blank			<0.5	<0.04	<0.5	<0.5	<0.01	<0.5	<0.5	<2

* See Report Notes

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Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	
		Method No	ASC/SOP/301	
		Limit of Detection	0.001	0.001
		Accreditation	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	Dibutyltin (DBT)	Tributyltin (TBT)
A	MAR02667.001	Sediment	<0.005	<0.005
B	MAR02667.002	Sediment	<0.005	<0.005
B1	MAR02667.003	Sediment	<0.005	<0.005
C	MAR02667.004	Sediment	<0.005	<0.005
C1	MAR02667.005	Sediment	<0.005	<0.005
D	MAR02667.006	Sediment	<0.005	<0.005
D1	MAR02667.007	Sediment	<0.005	<0.005
E	MAR02667.008	Sediment	<0.005	<0.005
F1	MAR02667.009	Sediment	<0.005	<0.005
F	MAR02667.010	Sediment	<0.005	<0.005
Certified Reference Material BCR-646 (% Recovery)			96	82
QC Blank			<0.001	<0.001

* See Report Notes

Certificate of Analysis



Issuing Laboratory SOCOTEC, Marine Department, Advanced Chemistry and Research, Etwall House, Bretby Business Park, Ashby Road, Burton-upon-Trent DE15 0YZ

Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	
		Method No	ASC/SOP/301	
		Limit of Detection	0.001	0.001
		Accreditation	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	Dibutyltin (DBT)	Tributyltin (TBT)
G1	MAR02667.011	Sediment	<0.005	<0.005
G2	MAR02667.012	Sediment	<0.005	<0.005
G	MAR02667.013	Sediment	<0.005	<0.005
G3	MAR02667.014	Sediment	<0.005	<0.005
H	MAR02667.015	Sediment	<0.005	<0.005
I	MAR02667.016	Sediment	<0.005	<0.005
J	MAR02667.017	Sediment	<0.005	<0.005
Certified Reference Material BCR-646 (% Recovery)			70	70
QC Blank			<0.001	<0.001

* See Report Notes

Certificate of Analysis



Issuing Laboratory SOCOTEC, Marine Department, Advanced Chemistry and Research, Etwall House, Bretby Business Park, Ashby Road, Burton-upon-Trent DE15 0YZ

Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304
		Limit of Detection	1	1	1	1	1	1	1	1
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	ACENAPTH	ACENAPHY	ANTHRACN	BAA	BAP	BBF	BENZGHIP	BEP
A	MAR02667.001	Sediment	109	41.7	146	413	590	698	519	525
B	MAR02667.002	Sediment	54.2	35.8	83.3	244	325	402	322	315
B1	MAR02667.003	Sediment	54.4	37.4	97.2	258	334	425	343	332
C	MAR02667.004	Sediment	62.3	41.6	93.0	260	337	427	337	328
C1	MAR02667.005	Sediment	59.2	41.6	116	298	382	477	375	376
D	MAR02667.006	Sediment	48.3	39.1	115	258	317	402	316	316
D1	MAR02667.007	Sediment	51.8	39.1	107	266	335	430	343	336
E	MAR02667.008	Sediment	55.2	44.1	118	305	379	486	377	378
F1	MAR02667.009	Sediment	67.2	39.2	104	255	316	406	321	321
F	MAR02667.010	Sediment	54.2	42.3	190	244	292	377	298	297
Certified Reference Material Nist 1941b (% Recovery)			65	104	69	64	63	88	79	90
QC Blank			<1	<1	<1	<1	<1	<1	<1	<1

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For full analyte name see method summaries.

*See report notes

MAR02667

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304
		Limit of Detection	1	1	1	1	1	1	1	1
		Accreditation	UKAS/MMO	MMO	MMO	MMO	MMO	MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	BKF*	C1N	C1PHEN	C2N	C3N	CHRYSENE*	DBENZAH	FLUORANT
A	MAR02667.001	Sediment	481	434	401	347	234	563	129	710
B	MAR02667.002	Sediment	295	342	322	280	195	360	79.0	466
B1	MAR02667.003	Sediment	306	367	352	302	209	392	84.8	490
C	MAR02667.004	Sediment	299	381	338	317	225	383	79.1	496
C1	MAR02667.005	Sediment	352	384	417	303	210	443	77.8	570
D	MAR02667.006	Sediment	299	326	335	261	179	388	69.6	484
D1	MAR02667.007	Sediment	313	351	351	281	194	393	76.0	517
E	MAR02667.008	Sediment	358	361	382	292	195	452	85.9	575
F1	MAR02667.009	Sediment	304	342	346	274	186	386	74.3	488
F	MAR02667.010	Sediment	284	347	320	291	197	363	66.6	480
Certified Reference Material Nist 1941b (% Recovery)			80	72	79	101	103	89	103	80
QC Blank			<1	<1	<1	<1	<1	<1	<1	<1

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For full analyte name see method summaries.

*See report notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304
		Limit of Detection	1	1	1	1	1	1
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	FLUORENE	INDPYR	NAPTH	PERYLENE	PHENANT	PYRENE
A	MAR02667.001	Sediment	172	545	268	203	522	599
B	MAR02667.002	Sediment	113	337	186	129	349	367
B1	MAR02667.003	Sediment	122	335	195	139	381	376
C	MAR02667.004	Sediment	134	354	188	140	369	382
C1	MAR02667.005	Sediment	124	372	216	202	420	446
D	MAR02667.006	Sediment	108	315	180	137	372	371
D1	MAR02667.007	Sediment	113	343	191	152	385	395
E	MAR02667.008	Sediment	117	385	196	154	426	443
F1	MAR02667.009	Sediment	108	334	182	137	374	371
F	MAR02667.010	Sediment	126	304	183	124	379	362
Certified Reference Material Nist 1941b (% Recovery)			46	75	56	62	78	70
QC Blank			<1	<1	<1	<1	<1	<1

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For full analyte name see method summaries.

*See report notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304
		Limit of Detection	1	1	1	1	1	1	1	1
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	ACENAPTH	ACENAPHY	ANTHRACN	BAA	BAP	BBF	BENZGHIP	BEP
G1	MAR02667.011	Sediment	45.2	31.7	153	211	255	323	258	256
G2	MAR02667.012	Sediment	59.5	47.7	125	296	372	469	364	365
G	MAR02667.013	Sediment	55.1	42.3	107	286	352	452	341	350
G3	MAR02667.014	Sediment	50.9	36.4	101	234	278	354	265	278
H	MAR02667.015	Sediment	50.5	38.9	87.7	237	296	383	299	302
I	MAR02667.016	Sediment	48.5	37.6	91.0	234	297	372	289	293
J	MAR02667.017	Sediment	63.5	57.4	122	337	402	487	369	379
Certified Reference Material Nist 1941b (% Recovery)			65	108	67	66	65	91	81	93
QC Blank			<1	<1	<1	<1	<1	<1	<1	<1

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For full analyte name see method summaries.

*See report notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304
		Limit of Detection	1	1	1	1	1	1	1	1
		Accreditation	UKAS/MMO	MMO	MMO	MMO	MMO	MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	BKF*	C1N	C1PHEN	C2N	C3N	CHRYSENE*	DBENZAH	FLUORANT
G1	MAR02667.011	Sediment	244	295	287	229	140	316	57.1	418
G2	MAR02667.012	Sediment	345	390	396	313	210	448	82.9	583
G	MAR02667.013	Sediment	334	351	360	284	196	428	80.2	544
G3	MAR02667.014	Sediment	264	307	309	247	167	346	64.4	480
H	MAR02667.015	Sediment	282	322	326	270	190	352	69.9	453
I	MAR02667.016	Sediment	274	301	296	243	170	343	66.0	441
J	MAR02667.017	Sediment	368	362	364	303	214	461	84.9	628
Certified Reference Material Nist 1941b (% Recovery)			79	69	81	102	102	90	116	80
QC Blank			<1	<1	<1	<1	<1	<1	<1	<1

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For full analyte name see method summaries.

*See report notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304
		Limit of Detection	1	1	1	1	1	1
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	FLUORENE	INDPYR	NAPTH	PERYLENE	PHENANT	PYRENE
G1	MAR02667.011	Sediment	97.0	264	162	111	351	325
G2	MAR02667.012	Sediment	126	370	207	156	445	438
G	MAR02667.013	Sediment	118	325	180	142	401	420
G3	MAR02667.014	Sediment	106	283	165	117	369	362
H	MAR02667.015	Sediment	112	309	161	129	337	347
I	MAR02667.016	Sediment	105	303	159	121	318	339
J	MAR02667.017	Sediment	134	351	181	153	401	486
Certified Reference Material Nist 1941b (% Recovery)			49	81	57	65	76	70
QC Blank			<1	<1	<1	<1	<1	<1

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Test Report ID MAR02667
 Issue Version 1
 Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	MMO*	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 101	PCB 105	PCB 110	PCB 118	PCB 128	PCB 138	PCB 141
A	MAR02667.001	Sediment	0.00249	0.00102	0.00381	0.00289	0.00096	0.00423	0.00059
B	MAR02667.002	Sediment	0.00256	0.00118	0.00429	0.00371	0.00080	0.00391	0.00085
Certified Reference Material Nist 1941b (% Recovery)			81	85	94	93	108	85	108~
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

~ Indicates result is for an In-house Reference Material as no Certified Reference Materials are available.

*See report notes

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Issuing Laboratory SOCOTEC, Marine Department, Advanced Chemistry and Research, Etwall House, Bretby Business Park, Ashby Road, Burton-upon-Trent DE15 0YZ

Test Report ID MAR02667
 Issue Version 1
 Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 149	PCB 151	PCB 153	PCB 156	PCB 158	PCB 170	PCB 18
A	MAR02667.001	Sediment	0.00284	0.00089	0.00423	0.00038	0.00060	0.00129	0.00251
B	MAR02667.002	Sediment	0.00334	0.00112	0.00482	0.00045	0.00057	0.00155	0.00250
Certified Reference Material Nist 1941b (% Recovery)			73	104~	100	80	102	104	71
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

~ Indicates result is for an In-house Reference Material as no Certified Reference Materials are available.

*See report notes

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Test Report ID MAR02667
 Issue Version 1
 Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	MMO*	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 180	PCB 183	PCB 187	PCB 194	PCB 28	PCB 31	PCB 44
A	MAR02667.001	Sediment	0.00293	0.00072	0.00200	0.00083	0.00601	0.00468	0.00248
B	MAR02667.002	Sediment	0.00346	0.00075	0.00189	0.00090	0.00642	0.00495	0.00272
Certified Reference Material Nist 1941b (% Recovery)			84	72	84	137	70	74	89
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

~ Indicates result is for an In-house Reference Material as no Certified Reference Materials are available.

*See report notes

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Test Report ID MAR02667
 Issue Version 1
 Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 47	PCB 49	PCB 52	PCB 66
A	MAR02667.001	Sediment	0.00100	0.00238	0.00276	0.00533
B	MAR02667.002	Sediment	0.00111	0.00254	0.00274	0.00552
Certified Reference Material Nist 1941b (% Recovery)			112~	93	89	124
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008

~ Indicates result is for an In-house Reference Material as no Certified Reference Materials are available.

*See report notes

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Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	MMO*	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 101	PCB 105	PCB 110	PCB 118	PCB 128	PCB 138	PCB 141
B1	MAR02667.003	Sediment	0.00312	0.00167	0.00463	0.00377	0.00113	0.00485	0.00084
C	MAR02667.004	Sediment	0.00251	0.00124	0.00413	0.00307	0.00095	0.00435	0.00078
C1	MAR02667.005	Sediment	0.00234	0.00123	0.00395	0.00299	0.00077	0.00378	0.00093
D	MAR02667.006	Sediment	0.00235	0.00099	0.00362	0.00294	0.00077	0.00385	0.00072
D1	MAR02667.007	Sediment	0.00281	0.00143	0.00444	0.00361	0.00103	0.00459	0.00102
E	MAR02667.008	Sediment	0.00351	0.00144	0.00513	0.00430	0.00103	0.00509	0.00071
F1	MAR02667.009	Sediment	0.00231	0.00104	0.00376	0.00309	0.00064	0.00359	0.00065
F	MAR02667.010	Sediment	0.00230	0.00113	0.00371	0.00289	0.00084	0.00397	0.00082
G1	MAR02667.011	Sediment	0.00266	0.00106	0.00428	0.00339	0.00078	0.00411	0.00084
G2	MAR02667.012	Sediment	0.00272	0.00126	0.00438	0.00299	0.00080	0.00414	0.00088
Certified Reference Material Nist 1941b (% Recovery)			86	101	92	79	147	94	105~
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

~ Indicates result is for an In-house Reference Material as no Certified Reference Materials are available.

*See report notes

Certificate of Analysis

Issuing Laboratory SOCOTEC, Marine Department, Advanced Chemistry and Research, Etwall House, Bretby Business Park, Ashby Road, Burton-upon-Trent DE15 0YZ



Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	MMO*	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 149	PCB 151	PCB 153	PCB 156	PCB 158	PCB 170	PCB 18
B1	MAR02667.003	Sediment	0.00347	0.00124	0.00597	0.00071	0.00108	0.00190	0.00319
C	MAR02667.004	Sediment	0.00327	0.00093	0.00491	0.00042	0.00064	0.00154	0.00264
C1	MAR02667.005	Sediment	0.00317	0.00088	0.00489	0.00043	0.00058	0.00157	0.00250
D	MAR02667.006	Sediment	0.00314	0.00085	0.00439	0.00040	0.00056	0.00154	0.00262
D1	MAR02667.007	Sediment	0.00349	0.00106	0.00544	0.00050	0.00080	0.00183	0.00312
E	MAR02667.008	Sediment	0.00409	0.00102	0.00560	0.00056	0.00092	0.00173	0.00414
F1	MAR02667.009	Sediment	0.00343	0.00100	0.00450	0.00036	0.00063	0.00161	0.00231
F	MAR02667.010	Sediment	0.00318	0.00086	0.00482	0.00030	0.00061	0.00146	0.00240
G1	MAR02667.011	Sediment	0.00339	0.00104	0.00461	0.00052	0.00069	0.00166	0.00296
G2	MAR02667.012	Sediment	0.00353	0.00101	0.00542	0.00042	0.00071	0.00149	0.00318
Certified Reference Material Nist 1941b (% Recovery)			74	103~	102	96	78	116	66
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

~ Indicates result is for an In-house Reference Material as no Certified Reference Materials are available.

*See report notes

Certificate of Analysis



Issuing Laboratory SOCOTEC, Marine Department, Advanced Chemistry and Research, Etwall House, Bretby Business Park, Ashby Road, Burton-upon-Trent DE15 0YZ

Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 180	PCB 183	PCB 187	PCB 194	PCB 28	PCB 31	PCB 44
B1	MAR02667.003	Sediment	0.00417	0.00102	0.00225	0.00125	0.00625	0.00486	0.00316
C	MAR02667.004	Sediment	0.00354	0.00086	0.00220	0.00092	0.00627	0.00470	0.00249
C1	MAR02667.005	Sediment	0.00343	0.00073	0.00172	0.00086	0.00601	0.00472	0.00245
D	MAR02667.006	Sediment	0.00358	0.00066	0.00200	0.00087	0.00601	0.00471	0.00252
D1	MAR02667.007	Sediment	0.00376	0.00076	0.00203	0.00088	0.00672	0.00536	0.00317
E	MAR02667.008	Sediment	0.00398	0.00082	0.00249	0.00109	0.00748	0.00617	0.00340
F1	MAR02667.009	Sediment	0.00335	0.00054	0.00162	0.00081	0.00558	0.00430	0.00225
F	MAR02667.010	Sediment	0.00332	0.00073	0.00197	0.00105	0.00606	0.00449	0.00246
G1	MAR02667.011	Sediment	0.00375	0.00066	0.00196	0.00106	0.00620	0.00501	0.00271
G2	MAR02667.012	Sediment	0.00361	0.00073	0.00185	0.00102	0.00666	0.00514	0.00304
Certified Reference Material Nist 1941b (% Recovery)			88	69	88	97	75	83	97
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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*See report notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 47	PCB 49	PCB 52	PCB 66
B1	MAR02667.003	Sediment	0.00124	0.00281	0.00340	0.00567
C	MAR02667.004	Sediment	0.00108	0.00230	0.00260	0.00512
C1	MAR02667.005	Sediment	0.00099	0.00221	0.00256	0.00494
D	MAR02667.006	Sediment	0.00106	0.00238	0.00262	0.00517
D1	MAR02667.007	Sediment	0.00119	0.00281	0.00333	0.00583
E	MAR02667.008	Sediment	0.00127	0.00316	0.00399	0.00611
F1	MAR02667.009	Sediment	0.00092	0.00213	0.00239	0.00485
F	MAR02667.010	Sediment	0.00104	0.00220	0.00262	0.00523
G1	MAR02667.011	Sediment	0.00106	0.00247	0.00292	0.00534
G2	MAR02667.012	Sediment	0.00115	0.00269	0.00314	0.00551
Certified Reference Material Nist 1941b (% Recovery)			113~	102	93	109
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	MMO*	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 101	PCB 105	PCB 110	PCB 118	PCB 128	PCB 138	PCB 141
G	MAR02667.013	Sediment	0.00249	0.00116	0.00376	0.00307	0.00063	0.00359	0.00090
G3	MAR02667.014	Sediment	0.00263	0.00126	0.00380	0.00267	0.00065	0.00350	0.00078
H	MAR02667.015	Sediment	0.00261	0.00123	0.00395	0.00331	0.00083	0.00381	0.00083
I	MAR02667.016	Sediment	0.00236	0.00098	0.00353	0.00288	0.00059	0.00360	0.00066
J	MAR02667.017	Sediment	0.00315	0.00147	0.00435	0.00328	0.00086	0.00448	0.00103
Certified Reference Material Nist 1941b (% Recovery)			82	84	99	74	75	92	117~
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 149	PCB 151	PCB 153	PCB 156	PCB 158	PCB 170	PCB 18
G	MAR02667.013	Sediment	0.00325	0.00090	0.00473	0.00032	0.00056	0.00145	0.00255
G3	MAR02667.014	Sediment	0.00327	0.00080	0.00495	0.00032	0.00070	0.00153	0.00370
H	MAR02667.015	Sediment	0.00370	0.00116	0.00473	0.00036	0.00079	0.00154	0.00259
I	MAR02667.016	Sediment	0.00308	0.00090	0.00391	0.00029	0.00047	0.00118	0.00280
J	MAR02667.017	Sediment	0.00366	0.00108	0.00565	0.00047	0.00082	0.00167	0.00348
Certified Reference Material Nist 1941b (% Recovery)			86	115~	97	56	68	94	89
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 180	PCB 183	PCB 187	PCB 194	PCB 28	PCB 31	PCB 44
G	MAR02667.013	Sediment	0.00349	0.00070	0.00180	0.00085	0.00605	0.00438	0.00246
G3	MAR02667.014	Sediment	0.00351	0.00080	0.00183	0.00076	0.00639	0.00497	0.00270
H	MAR02667.015	Sediment	0.00368	0.00066	0.00201	0.00080	0.00573	0.00408	0.00269
I	MAR02667.016	Sediment	0.00339	0.00072	0.00156	0.00070	0.00577	0.00445	0.00237
J	MAR02667.017	Sediment	0.00433	0.00078	0.00202	0.00082	0.00667	0.00518	0.00295
Certified Reference Material Nist 1941b (% Recovery)			96	54	89	71	70	86	87
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008	0.00008
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 47	PCB 49	PCB 52	PCB 66
G	MAR02667.013	Sediment	0.00100	0.00228	0.00264	0.00492
G3	MAR02667.014	Sediment	0.00107	0.00245	0.00290	0.00488
H	MAR02667.015	Sediment	0.00106	0.00234	0.00283	0.00474
I	MAR02667.016	Sediment	0.00098	0.00229	0.00257	0.00482
J	MAR02667.017	Sediment	0.00120	0.00284	0.00350	0.00560
Certified Reference Material Nist 1941b (% Recovery)			112~	96	93	93
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)							
		Method No	ASC/SOP/302							
		Limit of Detection	0.0001							
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	MMO*	UKAS/MMO	MMO*
Client Reference:	SOCOTEC Ref:	Matrix	AHCH	BHCH	GHCH	DIELDRIN	HCB	PPTDE	PPDDE	PPDDT
A	MAR02667.001	Sediment	<0.0001	<0.0001	<0.0001	0.0003	0.0004	0.0010	0.0004	0.0001
B	MAR02667.002	Sediment	<0.0001	<0.0001	<0.0001	0.0002	0.0004	0.0010	0.0006	<0.0001
Certified Reference Material Nist 1941b (% Recovery)			116~	62~	64~	116~	95	129	112	50~
QC Blank			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

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For full analyte name see method summaries.

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)							
		Method No	ASC/SOP/302							
		Limit of Detection	0.0001							
		Accreditation	MMO*	UKAS/MMO	MMO*	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	MMO*
Client Reference:	SOCOTEC Ref:	Matrix	AHCH	BHCH	GHCH	DIELDRLN	HCB	PPTDE	PPDDE	PPDDT
B1	MAR02667.003	Sediment	0.0001	0.0001	<0.0001	0.0006	0.0005	0.0018	0.0008	<0.0001
C	MAR02667.004	Sediment	<0.0001	<0.0001	<0.0001	0.0004	0.0004	0.0010	0.0006	<0.0001
C1	MAR02667.005	Sediment	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	0.0012	0.0004	0.0001
D	MAR02667.006	Sediment	<0.0001	<0.0001	<0.0001	0.0004	0.0005	0.0010	0.0005	<0.0001
D1	MAR02667.007	Sediment	<0.0001	<0.0001	<0.0001	0.0003	0.0004	0.0013	0.0005	0.0003
E	MAR02667.008	Sediment	<0.0001	<0.0001	<0.0001	0.0002	0.0004	0.0013	0.0005	<0.0001
F1	MAR02667.009	Sediment	<0.0001	<0.0001	<0.0001	0.0004	0.0004	0.0014	0.0005	<0.0001
F	MAR02667.010	Sediment	<0.0001	<0.0001	<0.0001	0.0005	0.0004	0.0012	0.0005	<0.0001
G1	MAR02667.011	Sediment	<0.0001	<0.0001	<0.0001	0.0003	0.0004	0.0011	0.0006	0.0004
G2	MAR02667.012	Sediment	<0.0001	<0.0001	<0.0001	0.0004	0.0004	0.0013	0.0006	<0.0001
Certified Reference Material Nist 1941b (% Recovery)			106~	46~	46~	97~	122	102	116	66~
QC Blank			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

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For full analyte name see method summaries.

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)							
		Method No	ASC/SOP/302							
		Limit of Detection	0.0001							
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	AHCH	BHCH	GHCH	DIELDRIN	HCB	PPTDE	PPDE	PPDDT
G	MAR02667.013	Sediment	<0.0001	<0.0001	<0.0001	0.0004	0.0004	0.0010	0.0005	0.0002
G3	MAR02667.014	Sediment	<0.0001	<0.0001	<0.0001	<0.0001	0.0003	0.0010	0.0004	<0.0001
H	MAR02667.015	Sediment	<0.0001	<0.0001	<0.0001	0.0002	0.0003	0.0010	0.0005	0.0001
I	MAR02667.016	Sediment	<0.0001	<0.0001	<0.0001	<0.0001	0.0003	0.0009	0.0004	<0.0001
J	MAR02667.017	Sediment	<0.0001	<0.0001	<0.0001	0.0003	0.0003	0.0010	0.0004	0.0002
Certified Reference Material Nist 1941b (% Recovery)			108~	100~	112~	92~	106	47	71	54
QC Blank			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

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For full analyte name see method summaries.

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Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308
		Limit of Detection	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	BDE17	BDE28	BDE47	BDE66	BDE85	BDE99	BDE100	BDE138
A	MAR02667.001	Sediment	<0.00005	<0.00005	0.00045	0.00006	<0.00005	0.00032	0.00007	<0.00005
B	MAR02667.002	Sediment	<0.00005	<0.00005	0.00044	0.00011	0.00006	0.00037	0.00012	0.00005
B1	MAR02667.003	Sediment	<0.00005	<0.00005	0.00034	0.00006	<0.00005	0.00026	0.00007	<0.00005
C	MAR02667.004	Sediment	<0.00005	<0.00005	0.00038	0.00006	<0.00005	0.00034	0.00007	<0.00005
C1	MAR02667.005	Sediment	<0.00005	<0.00005	0.00047	0.00009	<0.00005	0.00042	0.00008	<0.00005
D	MAR02667.006	Sediment	<0.00005	<0.00005	0.00033	0.00006	<0.00005	0.00031	0.00007	<0.00005
D1	MAR02667.007	Sediment	<0.00005	<0.00005	0.00037	0.00007	<0.00005	0.00036	0.00008	<0.00005
E	MAR02667.008	Sediment	<0.00005	<0.00005	0.00041	0.00007	<0.00005	0.00038	0.00009	<0.00005
F1	MAR02667.009	Sediment	<0.00005	<0.00005	0.00032	0.00006	<0.00005	0.00026	0.00005	<0.00005
F	MAR02667.010	Sediment	<0.00005	<0.00005	0.00035	0.00006	<0.00005	0.00026	<0.00005	<0.00005
Certified Reference Material Quasimeme SED56 (% Recovery)			79~	97	99	87~	93~	91~	109	88~
QC Blank			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308
		Limit of Detection	0.00005	0.00005	0.00005	0.0001
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	BDE153	BDE154	BDE183	BDE209
A	MAR02667.001	Sediment	0.00008	0.00006	<0.00005	0.0309
B	MAR02667.002	Sediment	0.00009	0.00009	<0.00005	0.0309
B1	MAR02667.003	Sediment	<0.00005	0.00006	<0.00005	0.0254
C	MAR02667.004	Sediment	0.00005	0.00007	0.00005	0.0247
C1	MAR02667.005	Sediment	0.00009	0.00008	<0.00005	0.0425
D	MAR02667.006	Sediment	<0.00005	<0.00005	<0.00005	0.0226
D1	MAR02667.007	Sediment	0.00009	0.00007	0.00007	0.0343
E	MAR02667.008	Sediment	0.00008	0.00006	0.00007	0.0305
F1	MAR02667.009	Sediment	<0.00005	0.00006	<0.00005	0.0248
F	MAR02667.010	Sediment	<0.00005	<0.00005	<0.00005	0.0242
Certified Reference Material Quasimeme SED56 (% Recovery)			100~	84~	81	67
QC Blank			<0.00005	<0.00005	<0.00005	<0.0003*

* See Report Notes

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Issuing Laboratory SOCOTEC, Marine Department, Advanced Chemistry and Research, Etwall House, Bretby Business Park, Ashby Road, Burton-upon-Trent DE15 0YZ

Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308
		Limit of Detection	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	BDE17	BDE28	BDE47	BDE66	BDE85	BDE99	BDE100	BDE138
G1	MAR02667.011	Sediment	<0.00005	<0.00005	0.00031	0.00006	<0.00005	0.00022	<0.00005	<0.00005
G2	MAR02667.012	Sediment	<0.00005	<0.00005	0.00035	0.00006	<0.00005	0.00034	0.00007	<0.00005
G	MAR02667.013	Sediment	<0.00005	<0.00005	0.00036	0.00006	<0.00005	0.00033	0.00006	<0.00005
G3	MAR02667.014	Sediment	<0.00005	<0.00005	0.00030	0.00005	<0.00005	0.00027	0.00006	<0.00005
H	MAR02667.015	Sediment	0.00006	<0.00005	0.00046	0.00008	<0.00005	0.00039	0.00009	<0.00005
I	MAR02667.016	Sediment	0.00006	0.00007	0.00051	0.00010	<0.00005	0.00042	0.00010	<0.00005
J	MAR02667.017	Sediment	<0.00005	<0.00005	0.00052	0.00008	<0.00005	0.00042	0.00010	<0.00005
Certified Reference Material Quasimeme SED56 (% Recovery)			62~	87	78	68~	80~	59	104	72~
QC Blank			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005

* See Report Notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308	ASC/SOP/308
		Limit of Detection	0.00005	0.00005	0.00005	0.0001
		Accreditation	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	BDE153	BDE154	BDE183	BDE209
G1	MAR02667.011	Sediment	0.00006	0.00006	<0.00005	0.0190
G2	MAR02667.012	Sediment	0.00006	0.00005	<0.00005	0.0238
G	MAR02667.013	Sediment	0.00007	0.00006	0.00006	0.0292
G3	MAR02667.014	Sediment	<0.00005	0.00006	<0.00005	0.0202
H	MAR02667.015	Sediment	0.00008	0.00006	0.00007	0.0325
I	MAR02667.016	Sediment	0.00008	0.00009	0.00007	0.0330
J	MAR02667.017	Sediment	0.00007	0.00007	0.00009	0.0374
Certified Reference Material Quasimeme SED56 (% Recovery)			137	64~	98	66
QC Blank			<0.00005	<0.00005	<0.00005	<0.0005*

* See Report Notes

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Test Report ID MAR02667
Issue Version 1
Customer Reference Cardiff - MMO Analysis

REPORT NOTES

Method Code	Sample ID	The following information should be taken into consideration when using the data contained within this report
*SUB_01	MAR02667.001-017	Analysis was conducted by an approved subcontracted laboratory.
WSLM59*	MAR02667.001-017	Analysis was conducted by an internal SOCOTEC laboratory. UKAS accredited analysis by this laboratory is under UKAS number 1252.
ICPMSS*	MAR02667.001-017	Analysis was conducted by an internal SOCOTEC laboratory. UKAS accredited analysis by this laboratory is under UKAS number 1252.
ASC/SOP/301	MAR02667.001-017	The matrix of this sample has been found to interfere with the result for this test. The sample has therefore been diluted, but in doing so, the detection limit for this test has been elevated.
ASC/SOP/302	MAR02667.001-004	The Primary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. The remaining data gives the Laboratory confidence that the test has performed satisfactorily and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation, where applicable, from the affected analytes (PCB105, PCB194, PPTDE, PPDDT) . These circumstances should be taken into consideration when utilising the data.
ASC/SOP/302	MAR02667.005-012	The Primary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. The remaining data gives the Laboratory confidence that the test has performed satisfactorily and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation, where applicable, from the affected analytes (PCB128, PCB149, AHCH, GHCH, PPTDE, PPDDT) . These circumstances should be taken into consideration when utilising the data.
ASC/SOP/302	MAR02667.013-017	The Primary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. The remaining data gives the Laboratory confidence that the test has performed satisfactorily and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation, where applicable, from the affected analytes (PCB118) . These circumstances should be taken into consideration when utilising the data.
ASC/SOP/303/304	MAR02667.001-017	Benzo[k]fluoranthene is known to coelute with Benzo[j]fluoranthene and these peaks can not be resolved. It is believed Benzo[j]fluoranthene is present in these samples therefore it is suggested that the Benzo[k]fluoranthene results should be taken as a Benzo[k]fluoranthene (inc. Benzo[j]fluoranthene). Benzo[j]fluoranthene is not UKAS accredited. This should be taken into consideration when utilising the data.
ASC/SOP/303/304	MAR02667.001-017	Chrysene is known to coelute with Triphenylene and these peaks can not be resolved in the PAHSED UKAS accredited method. Chrysene and Triphenylene are resolved for MMO but this is currently not UKAS accredited therefore Chrysene is reported without this accreditation.
ASC/SOP/308	MAR02667.011-017	The Primary process control data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with one or more target analytes falling outside acceptable limits. The remaining data gives the Laboratory confidence that the test has performed satisfactorily and that the validity of the data may not have been significantly affected. However in line with our QMS policy we have removed accreditation, where applicable, from the affected analytes (BDE28, BDE47, BDE209) . These circumstances should be taken into consideration when utilising the data.
ASC/SOP/308	MAR02667.001-017	The Primary process control blank data associated with this Test has not wholly met the requirements of the Laboratory Quality Management System QMS with BDE209 falling above acceptable reporting limits. The remaining data gives the Laboratory confidence that the test has performed satisfactorily and that the validity of the data may not have been significantly affected. However in line with our QMS policy the report limit for this compound has been raised and samples have been blank subtracted.

DEVIATING SAMPLE STATEMENT

Deviation Code	Deviation Definition	Sample ID	Deviation Details. The following information should be taken into consideration when using the data contained within this report
D1	Holding Time Exceeded	N/A	N/A
D2	Sample Contaminated through Damaged Packaging	N/A	N/A
D3	Sample Contaminated through Sampling	N/A	N/A
D4	Inappropriate Container/Packaging	N/A	N/A
D5	Damaged in Transit	MAR02667.007 & 012	Glass jar damaged in transit. Sample tranfered to suitable container on arrival.
D6	Insufficient Quantity of Sample	N/A	N/A
D7	Inappropriate Headspace	N/A	N/A
D8	Retained at Incorrect Temperature	N/A	N/A
D9	Lack of Date & Time of Sampling	N/A	N/A
D10	Insufficient Sample Details	N/A	N/A
D11	Sample integrity compromised or not suitable for analysis	N/A	N/A

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Test Report ID MAR02667
Issue Version 1
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Method	Sample and Fraction Size	Method Summary
Particle Size Analysis	Wet Sediment	Wet and dry sieving followed by laser diffraction analysis.
Total Organic Carbon (TOC)	Air dried	Carbonate removal and sulphurous acid/combustion at 1600°C/NDIR.
Metals	Air dried	Aqua-regia extraction followed by ICP analysis.
Organotins	Wet Sediment	Solvent extraction and derivatisation followed by GC-MS analysis.
Polyaromatic Hydrocarbons (PAH)	Wet Sediment	Solvent extraction and clean up followed by GC-MS analysis.
Polychlorinated Biphenyls (PCBs)	Air dried and sieved to <2mm	Solvent extraction and clean up followed by GC-MS-MS analysis.
Organochlorine Pesticides (OCPs)	Air dried and sieved to <2mm	Solvent extraction and clean up followed by GC-MS-MS analysis.
Brominated Flame Retardants (PBDEs)	Air dried and sieved to <2mm	Solvent extraction and clean up followed by GC-MS-MS analysis.

Analyte Definitions					
Analyte Abbreviation	Full Analyte name	Analyte Abbreviation	Full Analyte name	Analyte Abbreviation	Full Analyte name
ACENAPTH	Acenaphthene	C2N	C2-naphthalenes	THC	Total Hydrocarbon Content
ACENAPHY	Acenaphthylene	C3N	C3-naphthalenes	AHCH	alpha-Hexachlorocyclohexane
ANTHRACN	Anthracene	CHRYSENE	Chrysene	BHCH	beta-Hexachlorocyclohexane
BAA	Benzo[a]anthracene	DBENZAH	Dibenzo[ah]anthracene	GHCH	gamma-Hexachlorocyclohexane
BAP	Benzo[a]pyrene	FLUORANT	Fluoranthene	DIELDRIN	Dieldrin
BBF	Benzo[b]fluoranthene	FLUORENE	Fluorene	HCB	Hexachlorobenzene
BEP	Benzo[e]pyrene	INDPYR	Indeno[1,2,3-cd]pyrene	PPDDE	p,p'-Dichlorodiphenyldichloroethylene
BENZGHIP	Benzo[ghi]perylene	NAPTH	Naphthalene	PPDDT	p,p'-Dichlorodiphenyltrichloroethane
BKF	Benzo[k]fluoranthene	PERYLENE	Perylene	PPTDE	p,p'-Dichlorodiphenyldichloroethane
C1N	C1-naphthalenes	PHENANT	Phenanthrene		
C1PHEN	C1-phenanthrene	PYRENE	Pyrene		

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