

Certificate of Analysis



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

Test Report ID	MAR00356
Issue Version	1
Customer	PD Ports, Vulcan Street, Middlesbrough, Cleveland, TS2 1LX
Customer Reference	MMO Sediment Samples
Date Received	01-Aug-19
Date Reported	16-Oct-19
Condition of samples	Cold Satisfactory

A handwritten signature in grey ink, appearing to read 'M. Hubbard'.

Authorised by: Marya Hubbard

Position: Laboratory Manager

Any additional opinions or interpretations found in this report, are outside the scope of UKAS accreditation.

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Results contained herewith only apply to the samples tested

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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	% M/M	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	SOCOTEC Env Chem*	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	UKAS/MMO	MMO	MMO	MMO	MMO	MMO
			Total Organic Carbon	45mm	31.5mm	22.4mm	16mm	11.2mm
Client Reference:	SOCOTEC Ref:	Matrix	-	-5.5	-5.0	-4.5	-4.0	-3.5
A1	MAR00356.001	Sediment	5.40	0.00	0.00	0.00	0.00	0.00
A2	MAR00356.002	Sediment	5.10	0.00	0.00	0.00	0.00	0.00
A4	MAR00356.004	Sediment	5.70	0.00	0.00	0.00	0.00	0.00
B1	MAR00356.005	Sediment	5.54	0.00	0.00	0.00	0.00	0.00
B2	MAR00356.006	Sediment	5.13	0.00	0.00	0.00	0.00	0.00
B3	MAR00356.007	Sediment	5.13	0.00	0.00	0.00	0.00	0.00
B4	MAR00356.008	Sediment	5.23	0.00	0.00	0.00	0.00	0.00
B5	MAR00356.009	Sediment	5.61	0.00	0.00	0.00	0.00	0.00
B6	MAR00356.010	Sediment	6.10	0.00	0.00	0.00	0.00	0.00
C1	MAR00356.011	Sediment	6.00	0.00	0.00	0.00	0.00	0.00
C2	MAR00356.012	Sediment	5.45	0.00	0.00	0.00	0.00	0.00
C3	MAR00356.013	Sediment	5.37	0.00	0.00	0.00	0.00	0.00
C4	MAR00356.014	Sediment	5.96	0.00	0.00	0.00	0.00	0.00
C5	MAR00356.015	Sediment	4.91	0.00	0.00	0.00	0.00	0.00
C6	MAR00356.016	Sediment	5.02	0.00	0.00	0.00	0.00	0.00
C7	MAR00356.017	Sediment	5.93	0.00	0.00	0.00	0.00	0.00
C8	MAR00356.018	Sediment	5.62	0.00	0.00	0.00	0.00	0.00
C9	MAR00356.019	Sediment	6.20	0.00	0.00	0.00	0.00	0.00
C10	MAR00356.020	Sediment	5.49	0.00	0.00	0.00	0.00	0.00
C11	MAR00356.021	Sediment	4.77	0.00	0.00	0.00	0.00	0.00

* See Report Notes

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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO
			8mm	5.6mm	4mm	2.8mm	2mm	1.4mm
Client Reference:	SOCOTEC Ref:	Matrix	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5
A1	MAR00356.001	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
A2	MAR00356.002	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
A4	MAR00356.004	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
B1	MAR00356.005	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
B2	MAR00356.006	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
B3	MAR00356.007	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
B4	MAR00356.008	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
B5	MAR00356.009	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
B6	MAR00356.010	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C1	MAR00356.011	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C2	MAR00356.012	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C3	MAR00356.013	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C4	MAR00356.014	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C5	MAR00356.015	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C6	MAR00356.016	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C7	MAR00356.017	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C8	MAR00356.018	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C9	MAR00356.019	Sediment	0.00	0.02	0.03	0.02	0.02	0.03
C10	MAR00356.020	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
C11	MAR00356.021	Sediment	0.00	0.01	0.00	0.01	0.01	0.02

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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO
			1mm	707µm	500µm	353.6µm	250µm	176.8µm
Client Reference:	SOCOTEC Ref:	Matrix	0.0	0.5	1.0	1.5	2.0	2.5
A1	MAR00356.001	Sediment	0.00	0.00	0.00	0.00	0.31	0.82
A2	MAR00356.002	Sediment	0.00	0.00	0.00	0.00	0.04	0.16
A4	MAR00356.004	Sediment	0.00	0.00	0.00	0.00	0.18	0.90
B1	MAR00356.005	Sediment	0.00	0.00	0.00	0.00	0.16	0.85
B2	MAR00356.006	Sediment	0.00	0.00	0.00	0.09	0.33	1.16
B3	MAR00356.007	Sediment	0.00	0.01	0.36	0.25	1.00	1.33
B4	MAR00356.008	Sediment	0.00	0.00	0.00	0.00	0.22	1.79
B5	MAR00356.009	Sediment	0.00	0.00	0.00	0.00	0.40	1.34
B6	MAR00356.010	Sediment	0.00	0.00	0.00	0.00	0.29	1.98
C1	MAR00356.011	Sediment	0.00	0.01	0.42	0.43	0.98	0.97
C2	MAR00356.012	Sediment	0.00	0.00	0.00	0.00	0.25	0.41
C3	MAR00356.013	Sediment	0.00	0.00	0.00	0.00	0.00	0.90
C4	MAR00356.014	Sediment	0.00	0.00	0.00	0.00	0.08	1.02
C5	MAR00356.015	Sediment	0.00	0.03	1.27	1.17	1.36	2.28
C6	MAR00356.016	Sediment	0.00	0.00	0.00	0.00	0.00	0.64
C7	MAR00356.017	Sediment	0.00	0.03	1.14	0.86	1.07	1.81
C8	MAR00356.018	Sediment	0.00	0.00	0.00	0.00	0.00	0.54
C9	MAR00356.019	Sediment	0.02	0.01	0.78	1.01	0.88	1.59
C10	MAR00356.020	Sediment	0.00	0.01	1.18	1.24	0.98	1.43
C11	MAR00356.021	Sediment	0.02	0.27	1.04	1.29	0.69	2.82

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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO
			125µm	88.39µm	63µm	44.2µm	31.3µm	22.1µm
Client Reference:	SOCOTEC Ref:	Matrix	3.0	3.5	4.0	4.5	5.0	5.5
A1	MAR00356.001	Sediment	4.13	2.39	1.08	6.56	8.94	9.49
A2	MAR00356.002	Sediment	2.67	3.37	0.35	4.19	8.82	9.53
A4	MAR00356.004	Sediment	3.52	3.12	0.60	5.65	8.82	9.32
B1	MAR00356.005	Sediment	3.79	3.93	1.26	6.52	8.88	9.15
B2	MAR00356.006	Sediment	5.17	2.21	2.84	7.99	8.80	9.14
B3	MAR00356.007	Sediment	5.35	5.90	4.65	8.51	8.83	8.48
B4	MAR00356.008	Sediment	5.48	4.45	3.09	7.92	8.96	9.03
B5	MAR00356.009	Sediment	3.87	4.30	1.46	6.69	9.16	9.33
B6	MAR00356.010	Sediment	5.83	4.80	2.95	7.53	8.89	8.92
C1	MAR00356.011	Sediment	5.00	3.73	3.81	8.30	9.17	9.28
C2	MAR00356.012	Sediment	3.84	3.47	1.71	7.59	9.57	10.00
C3	MAR00356.013	Sediment	5.88	3.43	5.19	8.99	9.32	9.40
C4	MAR00356.014	Sediment	4.60	3.40	2.41	7.93	9.61	9.94
C5	MAR00356.015	Sediment	6.29	6.12	3.71	7.35	8.32	8.38
C6	MAR00356.016	Sediment	4.69	2.25	3.71	8.06	9.17	9.89
C7	MAR00356.017	Sediment	7.17	5.73	4.54	8.39	8.84	8.61
C8	MAR00356.018	Sediment	5.74	3.36	4.67	8.76	9.31	9.51
C9	MAR00356.019	Sediment	6.88	4.99	4.14	8.10	8.86	8.74
C10	MAR00356.020	Sediment	6.01	4.39	4.02	8.38	9.42	9.32
C11	MAR00356.021	Sediment	8.86	6.16	6.41	8.24	8.11	7.64

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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO
			15.6µm	11µm	7.8µm	5.5µm	3.9µm	2.75µm
Client Reference:	SOCOTEC Ref:	Matrix	6.0	6.5	7.0	7.5	8.0	8.5
A1	MAR00356.001	Sediment	9.38	9.89	9.93	9.22	7.46	5.40
A2	MAR00356.002	Sediment	9.67	10.80	10.69	9.82	7.99	5.85
A4	MAR00356.004	Sediment	9.32	10.34	10.37	9.58	7.78	5.61
B1	MAR00356.005	Sediment	8.92	9.88	9.76	9.03	7.43	5.45
B2	MAR00356.006	Sediment	8.74	8.82	9.05	8.72	7.21	5.20
B3	MAR00356.007	Sediment	7.72	8.32	8.18	7.56	6.22	4.57
B4	MAR00356.008	Sediment	8.27	8.47	8.58	8.11	6.69	4.92
B5	MAR00356.009	Sediment	8.85	9.63	9.48	8.68	7.05	5.16
B6	MAR00356.010	Sediment	8.44	9.17	8.95	8.12	6.51	4.69
C1	MAR00356.011	Sediment	8.92	9.15	9.15	8.36	6.48	4.38
C2	MAR00356.012	Sediment	9.62	10.08	9.88	8.85	6.90	4.81
C3	MAR00356.013	Sediment	8.86	8.79	8.66	8.01	6.33	4.38
C4	MAR00356.014	Sediment	9.46	9.90	9.75	8.71	6.70	4.55
C5	MAR00356.015	Sediment	7.88	8.25	8.24	7.54	5.97	4.20
C6	MAR00356.016	Sediment	10.26	10.73	10.23	8.87	6.56	4.25
C7	MAR00356.017	Sediment	7.78	8.10	8.06	7.31	5.73	3.98
C8	MAR00356.018	Sediment	9.13	9.29	9.15	8.28	6.41	4.37
C9	MAR00356.019	Sediment	8.35	9.04	8.97	7.94	5.98	3.92
C10	MAR00356.020	Sediment	8.61	8.89	8.33	7.27	5.62	3.94
C11	MAR00356.021	Sediment	7.40	7.94	7.99	7.21	5.46	3.55

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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	% (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
		Accreditation	MMO	MMO	MMO	MMO	MMO
			1.95µm	1.38µm	0.98µm	0.69µm	0.49µm
Client Reference:	SOCOTEC Ref:	Matrix	9.0	9.5	10.0	10.5	11.0
A1	MAR00356.001	Sediment	3.61	2.54	2.02	1.75	1.51
A2	MAR00356.002	Sediment	3.96	2.79	2.20	1.89	1.61
A4	MAR00356.004	Sediment	3.71	2.57	2.03	1.75	1.51
B1	MAR00356.005	Sediment	3.69	2.62	2.10	1.81	1.54
B2	MAR00356.006	Sediment	3.40	2.32	1.83	1.62	1.46
B3	MAR00356.007	Sediment	3.09	2.20	1.76	1.51	1.29
B4	MAR00356.008	Sediment	3.34	2.38	1.91	1.65	1.42
B5	MAR00356.009	Sediment	3.51	2.49	1.99	1.71	1.47
B6	MAR00356.010	Sediment	3.12	2.17	1.72	1.49	1.30
C1	MAR00356.011	Sediment	2.68	1.74	1.36	1.23	1.14
C2	MAR00356.012	Sediment	3.11	2.12	1.67	1.47	1.30
C3	MAR00356.013	Sediment	2.76	1.84	1.45	1.30	1.19
C4	MAR00356.014	Sediment	2.84	1.89	1.50	1.34	1.21
C5	MAR00356.015	Sediment	2.72	1.87	1.50	1.32	1.18
C6	MAR00356.016	Sediment	2.48	1.54	1.18	1.09	1.05
C7	MAR00356.017	Sediment	2.56	1.75	1.40	1.24	1.10
C8	MAR00356.018	Sediment	2.71	1.77	1.37	1.23	1.13
C9	MAR00356.019	Sediment	2.29	1.40	1.05	0.97	0.94
C10	MAR00356.020	Sediment	2.57	1.76	1.39	1.22	1.09
C11	MAR00356.021	Sediment	2.03	1.19	0.89	0.84	0.84

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		Units	% (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
		Accreditation	MMO	MMO	MMO	MMO	MMO
			0.34µm	0.24µm	0.17µm	0.12µm	0.09µm
Client Reference:	SOCOTEC Ref:	Matrix	11.5	12.0	12.5	13.0	13.5
A1	MAR00356.001	Sediment	1.24	0.94	0.63	0.42	0.24
A2	MAR00356.002	Sediment	1.30	0.96	0.63	0.40	0.22
A4	MAR00356.004	Sediment	1.22	0.90	0.58	0.36	0.20
B1	MAR00356.005	Sediment	1.22	0.88	0.55	0.34	0.17
B2	MAR00356.006	Sediment	1.25	1.00	0.72	0.50	0.30
B3	MAR00356.007	Sediment	1.04	0.77	0.51	0.33	0.18
B4	MAR00356.008	Sediment	1.16	0.87	0.58	0.38	0.22
B5	MAR00356.009	Sediment	1.20	0.90	0.61	0.40	0.23
B6	MAR00356.010	Sediment	1.07	0.82	0.56	0.38	0.22
C1	MAR00356.011	Sediment	1.01	0.83	0.62	0.45	0.27
C2	MAR00356.012	Sediment	1.09	0.86	0.61	0.42	0.25
C3	MAR00356.013	Sediment	1.04	0.84	0.62	0.44	0.27
C4	MAR00356.014	Sediment	1.03	0.81	0.57	0.39	0.23
C5	MAR00356.015	Sediment	1.00	0.78	0.55	0.38	0.23
C6	MAR00356.016	Sediment	0.96	0.82	0.64	0.47	0.30
C7	MAR00356.017	Sediment	0.93	0.72	0.51	0.35	0.20
C8	MAR00356.018	Sediment	1.00	0.82	0.62	0.45	0.27
C9	MAR00356.019	Sediment	0.87	0.75	0.58	0.44	0.28
C10	MAR00356.020	Sediment	0.93	0.74	0.54	0.38	0.23
C11	MAR00356.021	Sediment	0.81	0.73	0.60	0.46	0.30

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 Customer Reference MMO Sediment Samples

		Units	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO
			0.06µm	0.04µm	<0.04µm
Client Reference:	SOCOTEC Ref:	Matrix	14.0	14.5	>14.5
A1	MAR00356.001	Sediment	0.09	0.01	0.00
A2	MAR00356.002	Sediment	0.08	0.01	0.00
A4	MAR00356.004	Sediment	0.07	0.01	0.00
B1	MAR00356.005	Sediment	0.06	0.01	0.00
B2	MAR00356.006	Sediment	0.12	0.01	0.00
B3	MAR00356.007	Sediment	0.07	0.01	0.00
B4	MAR00356.008	Sediment	0.08	0.01	0.00
B5	MAR00356.009	Sediment	0.08	0.01	0.00
B6	MAR00356.010	Sediment	0.08	0.01	0.00
C1	MAR00356.011	Sediment	0.11	0.01	0.00
C2	MAR00356.012	Sediment	0.10	0.01	0.00
C3	MAR00356.013	Sediment	0.11	0.01	0.00
C4	MAR00356.014	Sediment	0.09	0.01	0.00
C5	MAR00356.015	Sediment	0.09	0.01	0.00
C6	MAR00356.016	Sediment	0.12	0.01	0.00
C7	MAR00356.017	Sediment	0.08	0.01	0.00
C8	MAR00356.018	Sediment	0.11	0.01	0.00
C9	MAR00356.019	Sediment	0.12	0.01	0.00
C10	MAR00356.020	Sediment	0.09	0.01	0.00
C11	MAR00356.021	Sediment	0.13	0.02	0.00

* See Report Notes

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Customer Reference MMO Sediment Samples

		Units	% M/M	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	SOCOTEC Env Chem*	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	UKAS/MMO	MMO	MMO	MMO	MMO	MMO
			Total Organic Carbon	45mm	31.5mm	22.4mm	16mm	11.2mm
Client Reference:	SOCOTEC Ref:	Matrix	-	-5.5	-5.0	-4.5	-4.0	-3.5
C12	MAR00356.022	Sediment	6.60	0.00	0.00	0.00	0.00	0.00
D1	MAR00356.023	Sediment	4.89	0.00	0.00	0.00	0.00	0.00
D2	MAR00356.024	Sediment	4.24	0.00	0.00	0.00	0.00	0.00
D3	MAR00356.025	Sediment	4.98	0.00	0.00	0.00	0.00	0.00
E1	MAR00356.026	Sediment	2.89	0.00	0.00	0.00	0.00	0.00
E2	MAR00356.027	Sediment	1.41	0.00	0.00	0.00	0.00	0.00
E3	MAR00356.028	Sediment	1.56	0.00	0.00	0.00	0.00	0.00
E4	MAR00356.029	Sediment	2.87	0.00	0.00	0.00	0.00	0.00
E5	MAR00356.030	Sediment	3.23	0.00	0.00	0.00	0.00	0.00
F1	MAR00356.031	Sediment	4.90	0.00	0.00	0.00	0.00	0.00
G1	MAR00356.032	Sediment	5.03	0.00	0.00	0.00	0.00	0.00
G2	MAR00356.033	Sediment	5.32	0.00	0.00	0.00	0.00	0.00
G3	MAR00356.034	Sediment	5.43	0.00	0.00	0.00	0.00	0.00
G4	MAR00356.035	Sediment	5.20	0.00	0.00	0.00	0.00	0.00
G5	MAR00356.036	Sediment	5.65	0.00	0.00	0.00	0.00	0.00
G6	MAR00356.037	Sediment	6.60	0.00	0.00	0.00	0.00	0.00

* See Report Notes

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO
			8mm	5.6mm	4mm	2.8mm	2mm	1.4mm
Client Reference:	SOCOTEC Ref:	Matrix	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5
C12	MAR00356.022	Sediment	0.00	0.02	0.01	0.01	0.02	0.02
D1	MAR00356.023	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
D2	MAR00356.024	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
D3	MAR00356.025	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
E1	MAR00356.026	Sediment	0.00	0.00	0.00	0.07	0.18	0.49
E2	MAR00356.027	Sediment	0.00	0.05	0.00	0.03	0.05	0.04
E3	MAR00356.028	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
E4	MAR00356.029	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
E5	MAR00356.030	Sediment	0.00	0.00	0.05	0.02	0.04	0.07
F1	MAR00356.031	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
G1	MAR00356.032	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
G2	MAR00356.033	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
G3	MAR00356.034	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
G4	MAR00356.035	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
G5	MAR00356.036	Sediment	0.00	0.00	0.00	0.00	0.00	0.00
G6	MAR00356.037	Sediment	0.00	0.00	0.00	0.00	0.00	0.00

* See Report Notes

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

Test Report ID MAR00356
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Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO
			1mm	707µm	500µm	353.6µm	250µm	176.8µm
Client Reference:	SOCOTEC Ref:	Matrix	0.0	0.5	1.0	1.5	2.0	2.5
C12	MAR00356.022	Sediment	0.03	0.00	0.06	0.44	0.25	1.49
D1	MAR00356.023	Sediment	0.00	0.65	1.46	2.46	3.34	7.47
D2	MAR00356.024	Sediment	0.03	1.84	1.68	1.32	3.93	8.96
D3	MAR00356.025	Sediment	0.01	1.01	1.57	1.73	2.37	5.06
E1	MAR00356.026	Sediment	0.91	5.54	5.93	6.67	7.77	23.85
E2	MAR00356.027	Sediment	0.07	0.86	2.23	5.44	10.42	27.76
E3	MAR00356.028	Sediment	0.00	0.05	1.29	2.22	6.93	21.88
E4	MAR00356.029	Sediment	0.00	0.02	1.68	3.79	5.41	17.17
E5	MAR00356.030	Sediment	0.07	0.00	0.00	1.18	2.33	8.55
F1	MAR00356.031	Sediment	0.00	0.22	0.75	1.55	1.27	2.28
G1	MAR00356.032	Sediment	0.00	0.00	0.00	0.00	0.09	0.63
G2	MAR00356.033	Sediment	0.00	0.00	0.00	0.00	0.00	0.28
G3	MAR00356.034	Sediment	0.00	0.00	0.00	0.00	0.08	0.35
G4	MAR00356.035	Sediment	0.00	0.00	0.00	0.00	0.04	0.44
G5	MAR00356.036	Sediment	0.00	0.00	0.00	0.00	0.00	0.18
G6	MAR00356.037	Sediment	0.00	0.00	0.01	0.59	1.48	2.23

* See Report Notes

Certificate of Analysis



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

Test Report ID MAR00356
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 Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO
			125µm	88.39µm	63µm	44.2µm	31.3µm	22.1µm
Client Reference:	SOCOTEC Ref:	Matrix	3.0	3.5	4.0	4.5	5.0	5.5
C12	MAR00356.022	Sediment	8.00	5.50	5.44	8.36	8.75	8.68
D1	MAR00356.023	Sediment	13.95	7.14	4.80	6.51	6.47	6.34
D2	MAR00356.024	Sediment	15.08	7.86	5.49	6.86	6.47	6.07
D3	MAR00356.025	Sediment	13.80	11.00	6.31	7.22	6.77	6.11
E1	MAR00356.026	Sediment	26.62	9.80	2.30	1.37	1.12	1.07
E2	MAR00356.027	Sediment	27.14	11.18	3.00	1.62	1.27	1.22
E3	MAR00356.028	Sediment	29.26	16.84	4.92	2.20	1.99	1.76
E4	MAR00356.029	Sediment	25.34	15.59	5.38	3.11	2.79	2.48
E5	MAR00356.030	Sediment	22.55	12.91	5.24	4.97	5.01	5.10
F1	MAR00356.031	Sediment	9.86	8.01	5.56	7.95	7.95	7.58
G1	MAR00356.032	Sediment	3.12	3.53	0.81	5.18	8.31	9.17
G2	MAR00356.033	Sediment	3.83	1.70	0.74	6.12	8.80	9.46
G3	MAR00356.034	Sediment	3.38	2.22	1.26	6.53	8.60	9.31
G4	MAR00356.035	Sediment	3.18	2.74	0.67	5.81	8.77	9.49
G5	MAR00356.036	Sediment	3.42	2.28	0.93	6.61	9.33	9.72
G6	MAR00356.037	Sediment	4.60	3.05	1.99	7.18	8.73	9.21

* See Report Notes

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Test Report ID MAR00356
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Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO
			15.6µm	11µm	7.8µm	5.5µm	3.9µm	2.75µm
Client Reference:	SOCOTEC Ref:	Matrix	6.0	6.5	7.0	7.5	8.0	8.5
C12	MAR00356.022	Sediment	8.47	8.85	8.69	7.75	5.87	3.86
D1	MAR00356.023	Sediment	5.83	6.13	6.10	5.53	4.33	3.01
D2	MAR00356.024	Sediment	5.53	5.89	5.52	4.72	3.55	2.41
D3	MAR00356.025	Sediment	5.30	5.64	5.54	5.09	4.12	2.97
E1	MAR00356.026	Sediment	0.99	1.15	1.01	0.80	0.58	0.38
E2	MAR00356.027	Sediment	1.15	1.38	1.24	1.01	0.73	0.47
E3	MAR00356.028	Sediment	1.88	1.96	1.71	1.36	0.97	0.65
E4	MAR00356.029	Sediment	2.55	2.87	2.79	2.43	1.84	1.26
E5	MAR00356.030	Sediment	5.05	5.50	5.33	4.60	3.39	2.19
F1	MAR00356.031	Sediment	6.90	7.19	7.22	6.63	5.26	3.69
G1	MAR00356.032	Sediment	9.25	9.79	10.03	9.61	8.03	5.98
G2	MAR00356.033	Sediment	9.69	10.42	10.55	9.82	7.95	5.70
G3	MAR00356.034	Sediment	9.48	9.71	9.91	9.59	7.98	5.79
G4	MAR00356.035	Sediment	9.52	9.99	10.09	9.54	7.85	5.75
G5	MAR00356.036	Sediment	9.55	10.14	10.10	9.36	7.61	5.54
G6	MAR00356.037	Sediment	9.14	9.76	9.64	8.71	6.84	4.78

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		Units	% (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
		Accreditation	MMO	MMO	MMO	MMO	MMO
			1.95µm	1.38µm	0.98µm	0.69µm	0.49µm
Client Reference:	SOCOTEC Ref:	Matrix	9.0	9.5	10.0	10.5	11.0
C12	MAR00356.022	Sediment	2.26	1.37	1.02	0.93	0.90
D1	MAR00356.023	Sediment	1.93	1.31	1.04	0.92	0.84
D2	MAR00356.024	Sediment	1.53	1.06	0.85	0.75	0.68
D3	MAR00356.025	Sediment	1.97	1.39	1.12	0.97	0.85
E1	MAR00356.026	Sediment	0.26	0.22	0.21	0.20	0.17
E2	MAR00356.027	Sediment	0.30	0.26	0.26	0.24	0.20
E3	MAR00356.028	Sediment	0.42	0.28	0.22	0.21	0.21
E4	MAR00356.029	Sediment	0.78	0.48	0.35	0.31	0.31
E5	MAR00356.030	Sediment	1.28	0.80	0.62	0.58	0.57
F1	MAR00356.031	Sediment	2.37	1.61	1.27	1.13	1.01
G1	MAR00356.032	Sediment	4.13	2.98	2.39	2.03	1.69
G2	MAR00356.033	Sediment	3.75	2.59	2.04	1.76	1.51
G3	MAR00356.034	Sediment	3.77	2.53	1.95	1.71	1.54
G4	MAR00356.035	Sediment	3.90	2.78	2.23	1.92	1.64
G5	MAR00356.036	Sediment	3.73	2.62	2.07	1.78	1.53
G6	MAR00356.037	Sediment	3.06	2.06	1.59	1.37	1.20

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Test Report ID MAR00356
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Customer Reference MMO Sediment Samples

		Units	% (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
		Accreditation	MMO	MMO	MMO	MMO	MMO
			0.34µm	0.24µm	0.17µm	0.12µm	0.09µm
Client Reference:	SOCOTEC Ref:	Matrix	11.5	12.0	12.5	13.0	13.5
C12	MAR00356.022	Sediment	0.84	0.73	0.57	0.43	0.27
D1	MAR00356.023	Sediment	0.73	0.61	0.46	0.34	0.21
D2	MAR00356.024	Sediment	0.58	0.48	0.36	0.26	0.16
D3	MAR00356.025	Sediment	0.70	0.54	0.37	0.26	0.15
E1	MAR00356.026	Sediment	0.13	0.09	0.06	0.04	0.02
E2	MAR00356.027	Sediment	0.15	0.10	0.06	0.04	0.02
E3	MAR00356.028	Sediment	0.20	0.19	0.16	0.13	0.09
E4	MAR00356.029	Sediment	0.31	0.29	0.25	0.20	0.14
E5	MAR00356.030	Sediment	0.54	0.48	0.39	0.31	0.20
F1	MAR00356.031	Sediment	0.87	0.70	0.51	0.36	0.22
G1	MAR00356.032	Sediment	1.30	0.90	0.54	0.30	0.14
G2	MAR00356.033	Sediment	1.21	0.89	0.57	0.35	0.19
G3	MAR00356.034	Sediment	1.34	1.09	0.80	0.57	0.35
G4	MAR00356.035	Sediment	1.32	0.97	0.63	0.40	0.22
G5	MAR00356.036	Sediment	1.24	0.93	0.62	0.40	0.22
G6	MAR00356.037	Sediment	0.98	0.74	0.49	0.32	0.18

* See Report Notes

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		Units	% (at 0.5phi intervals)	% (at 0.5phi intervals)	% (at 0.5phi intervals)
		Method No	*SUB_01	*SUB_01	*SUB_01
		Accreditation	MMO	MMO	MMO
			0.06µm	0.04µm	<0.04µm
Client Reference:	SOCOTEC Ref:	Matrix	14.0	14.5	>14.5
C12	MAR00356.022	Sediment	0.11	0.01	0.00
D1	MAR00356.023	Sediment	0.09	0.01	0.00
D2	MAR00356.024	Sediment	0.07	0.01	0.00
D3	MAR00356.025	Sediment	0.06	0.01	0.00
E1	MAR00356.026	Sediment	0.01	0.00	0.00
E2	MAR00356.027	Sediment	0.01	0.00	0.00
E3	MAR00356.028	Sediment	0.04	0.00	0.00
E4	MAR00356.029	Sediment	0.06	0.01	0.00
E5	MAR00356.030	Sediment	0.08	0.01	0.00
F1	MAR00356.031	Sediment	0.09	0.01	0.00
G1	MAR00356.032	Sediment	0.05	0.01	0.00
G2	MAR00356.033	Sediment	0.07	0.01	0.00
G3	MAR00356.034	Sediment	0.14	0.02	0.00
G4	MAR00356.035	Sediment	0.08	0.01	0.00
G5	MAR00356.036	Sediment	0.08	0.01	0.00
G6	MAR00356.037	Sediment	0.07	0.01	0.00

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		Units	mg/Kg (Dry Weight)							
		Method No	SOCOTEC Env Chem*							
		Limit of Detection	0.5	0.04	0.5	0.5	0.015	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)
A1	MAR00356.001	Sediment	30.1	0.32	44.9	48.5	0.46	32.2	117	183
A2	MAR00356.002	Sediment	29.0	0.30	45.9	48.8	0.43	33.1	120	182
A4	MAR00356.004	Sediment	28.4	0.59	52.2	74.3	0.60	33.9	135	254
B1	MAR00356.005	Sediment	24.5	0.25	37.2	39.7	0.34	26.8	89.7	148
B2	MAR00356.006	Sediment	20.7	0.20	33.2	35.2	0.30	24.1	75.3	128
B3	MAR00356.007	Sediment	31.6	0.30	42.4	43.4	0.38	32.0	106	166
B4	MAR00356.008	Sediment	28.9	0.30	41.3	45.9	0.38	30.6	95.9	168
B5	MAR00356.009	Sediment	33.3	0.30	44.3	46.8	0.47	32.7	113	176
B6	MAR00356.010	Sediment	25.2	0.23	34.3	38.5	0.36	25.0	80.5	134
C1	MAR00356.011	Sediment	26.6	0.20	32.2	35.2	0.35	25.2	83.8	129
C2	MAR00356.012	Sediment	27.4	0.29	35.6	38.4	0.33	27.3	85.3	143
C3	MAR00356.013	Sediment	22.1	0.17	26.2	29.5	0.26	20.8	67.3	112
C4	MAR00356.014	Sediment	29.5	0.24	36.5	38.3	0.34	28.1	88.7	140
C5	MAR00356.015	Sediment	29.2	0.23	35.8	39.9	0.35	27.8	87.0	147
C6	MAR00356.016	Sediment	24.6	0.17	28.6	31.7	0.26	23.2	67.2	120
C7	MAR00356.017	Sediment	24.5	0.24	36.2	38.8	0.45	28.7	78.6	138
C8	MAR00356.018	Sediment	31.7	0.20	34.9	37.4	0.34	28.0	88.8	177
C9	MAR00356.019	Sediment	26.8	0.22	30.5	31.8	0.29	24.2	75.7	143
Certified Reference Material SETOC 774 (% Recovery)			102	94	93	106	98	106	93	104
QC Blank			<0.5	<0.04	<0.5	<0.5	<0.015	<0.5	<0.5	<2

* See Report Notes

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		Units	mg/Kg (Dry Weight)							
		Method No	SOCOTEC Env Chem*							
		Limit of Detection	0.5	0.04	0.5	0.5	0.015	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)
C10	MAR00356.020	Sediment	15.6	0.05	12.7	17.2	0.11	11.7	31.3	100
C11	MAR00356.021	Sediment	25.5	0.19	26.2	30.4	0.25	22.2	68.7	136
C12	MAR00356.022	Sediment	24.1	0.53	50.5	64.4	0.52	34.1	121	254
D1	MAR00356.023	Sediment	30.2	0.42	50.5	58.0	0.50	35.6	127	229
D2	MAR00356.024	Sediment	30.1	0.28	42.7	46.4	0.42	31.2	112	186
D3	MAR00356.025	Sediment	30.6	0.25	41.3	45.2	0.39	31.1	108	182
E1	MAR00356.026	Sediment	32.0	0.27	41.6	45.2	0.45	31.7	111	185
E2	MAR00356.027	Sediment	21.2	0.36	40.7	57.5	0.55	27.4	93.0	178
E3	MAR00356.028	Sediment	14.7	0.07	11.9	15.6	0.11	10.8	29.5	84.1
E4	MAR00356.029	Sediment	31.2	0.42	38.7	35.2	0.33	28.3	85.1	144
E5	MAR00356.030	Sediment	22.5	0.17	22.0	21.9	0.22	18.0	59.0	102
F1	MAR00356.031	Sediment	29.7	0.29	33.4	36.3	0.36	24.6	82.4	160
G1	MAR00356.032	Sediment	24.5	0.15	20.7	23.0	0.20	17.4	59.6	97.0
G2	MAR00356.033	Sediment	17.5	0.09	13.8	16.0	0.21	12.0	36.4	80.0
G3	MAR00356.034	Sediment	23.5	0.17	22.7	26.5	0.24	18.7	56.7	120
G4	MAR00356.035	Sediment	11.8	0.40	33.5	27.3	0.29	17.9	36.4	97.7
G5	MAR00356.036	Sediment	10.5	0.04	8.2	10.8	0.07	7.9	20.2	51.1
G6	MAR00356.037	Sediment	6.9	<0.04	5.4	7.8	0.05	5.2	13.2	35.2
Certified Reference Material SETOC 774 (% Recovery)			100	95	94	94	99	96	95	97
QC Blank			<0.5	<0.04	<0.5	<0.5	<0.015	<0.5	<0.5	<2

* See Report Notes

Certificate of Analysis



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

Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)	
		Method No	ASC/SOP/301	
		Limit of Detection	0.001	0.001
		Accreditation	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	Dibutyltin (DBT)	Tributyltin (TBT)
A1	MAR00356.001	Sediment	0.012	<0.005
A2	MAR00356.002	Sediment	<0.005	<0.005
A4	MAR00356.004	Sediment	0.011	<0.005
B1	MAR00356.005	Sediment	<0.005	<0.005
B2	MAR00356.006	Sediment	<0.005	<0.005
B3	MAR00356.007	Sediment	<0.005	<0.005
B4	MAR00356.008	Sediment	<0.005	<0.005
B5	MAR00356.009	Sediment	<0.005	<0.005
B6	MAR00356.010	Sediment	<0.005	<0.005
C1	MAR00356.011	Sediment	<0.005	<0.005
Certified Reference Material BCR-646 (% Recovery)			104	91
QC Blank			<0.001	<0.001

* See report notes

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)	
		Method No	ASC/SOP/301	
		Limit of Detection	0.001	0.001
		Accreditation	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	Dibutyltin (DBT)	Tributyltin (TBT)
C2	MAR00356.012	Sediment	<0.005	<0.005
C3	MAR00356.013	Sediment	<0.005	<0.005
C4	MAR00356.014	Sediment	<0.005	<0.005
C5	MAR00356.015	Sediment	<0.005	<0.005
C6	MAR00356.016	Sediment	<0.005	<0.005
C7	MAR00356.017	Sediment	<0.005	<0.005
C8	MAR00356.018	Sediment	<0.005	<0.005
C9	MAR00356.019	Sediment	<0.005	<0.005
C10	MAR00356.020	Sediment	<0.005	<0.005
C11	MAR00356.021	Sediment	<0.005	<0.005
Certified Reference Material BCR-646 (% Recovery)			102	84
QC Blank			<0.001	<0.001

* See report notes

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)	
		Method No	ASC/SOP/301	
		Limit of Detection	0.001	0.001
		Accreditation	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	Dibutyltin (DBT)	Tributyltin (TBT)
C12	MAR00356.022	Sediment	<0.005	<0.005
D1	MAR00356.023	Sediment	<0.005	<0.005
D2	MAR00356.024	Sediment	<0.005	<0.005
D3	MAR00356.025	Sediment	<0.005	<0.005
E1	MAR00356.026	Sediment	<0.005	<0.005
E2	MAR00356.027	Sediment	<0.005	<0.005
E3	MAR00356.028	Sediment	<0.005	<0.005
E4	MAR00356.029	Sediment	<0.005	0.014
E5	MAR00356.030	Sediment	<0.005	<0.005
F1	MAR00356.031	Sediment	<0.005	<0.005
Certified Reference Material BCR-646 (% Recovery)			96	84
QC Blank			<0.001	<0.001

* See report notes

Certificate of Analysis



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

Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)	
		Method No	ASC/SOP/301	
		Limit of Detection	0.001	0.001
		Accreditation	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	Dibutyltin (DBT)	Tributyltin (TBT)
G1	MAR00356.032	Sediment	0.012	0.011
G2	MAR00356.033	Sediment	<0.005	<0.005
G3	MAR00356.034	Sediment	0.020	<0.005
G4	MAR00356.035	Sediment	<0.005	<0.005
G5	MAR00356.036	Sediment	<0.005	<0.005
G6	MAR00356.037	Sediment	0.014	<0.005
Certified Reference Material BCR-646 (% Recovery)			106	91
QC Blank			<0.001	<0.001

* See report notes

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	ACENAPTH	ACENAPHY	ANTHRACN	BAA	BAP	BBF
A1	MAR00356.001	Sediment	279	211	280	604	612	635
A2	MAR00356.002	Sediment	220	191	281	586	599	624
A4	MAR00356.004	Sediment	391	292	443	893	949	966
B1	MAR00356.005	Sediment	256	155	318	714	731	736
B2	MAR00356.006	Sediment	220	190	277	578	549	580
B3	MAR00356.007	Sediment	202	116	259	571	541	584
B4	MAR00356.008	Sediment	203	141	257	564	545	541
B5	MAR00356.009	Sediment	222	151	275	582	570	582
B6	MAR00356.010	Sediment	213	123	297	621	580	554
C1	MAR00356.011	Sediment	206	103	273	547	521	534
Certified Reference Material CRM180013 1941b (% Recovery)			105	116	67	76	67	94
QC Blank			<1	<1	<1	<1	<1	<1

~ Indicates result is for an In-house Reference Material as
no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	BENZGHIP	BEP	BKF	C1N	C1PHEN	C2N
A1	MAR00356.001	Sediment	582	591	297	3850	1670	2810
A2	MAR00356.002	Sediment	566	582	217	3600	1500	2650
A4	MAR00356.004	Sediment	810	850	486	5160	2150	3810
B1	MAR00356.005	Sediment	636	672	414	3940	1750	2940
B2	MAR00356.006	Sediment	519	552	238	4130	1710	3040
B3	MAR00356.007	Sediment	511	547	230	3990	1740	2940
B4	MAR00356.008	Sediment	493	526	244	4120	1720	3000
B5	MAR00356.009	Sediment	523	553	281	4300	1700	3150
B6	MAR00356.010	Sediment	536	563	330	4510	1790	3350
C1	MAR00356.011	Sediment	504	514	209	4120	1720	3090
Certified Reference Material CRM180013 1941b (% Recovery)			79	96	93	77	86	102
QC Blank			<1	<1	<1	<1	<1	<1

~ Indicates result is for an In-house Reference Material as
no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	C3N	CHRYSENE	DBENZAH	FLUORANT	FLUORENE	INDPYR
A1	MAR00356.001	Sediment	2320	578	106	1020	415	424
A2	MAR00356.002	Sediment	2310	526	111	1010	385	371
A4	MAR00356.004	Sediment	3350	882	157	1520	620	655
B1	MAR00356.005	Sediment	2410	702	138	1290	427	457
B2	MAR00356.006	Sediment	2560	564	96.3	1000	400	363
B3	MAR00356.007	Sediment	2610	534	92.4	1010	361	376
B4	MAR00356.008	Sediment	2500	600	92.6	948	381	366
B5	MAR00356.009	Sediment	2520	585	95.0	999	400	356
B6	MAR00356.010	Sediment	2870	625	109	1000	394	391
C1	MAR00356.011	Sediment	2690	610	86.6	953	369	327
Certified Reference Material CRM180013 1941b (% Recovery)			107	99	118	85	65	83
QC Blank			<1	<1	<1	<1	<1	<1

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no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
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Customer Reference MMO Sediment Samples

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	mg/Kg
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/305
		Limit of Detection	1	1	1	1	1
		Accreditation	UKAS/MMO	MMO	UKAS/MMO	UKAS/MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	NAPTH	PERYLENE	PHENANT	PYRENE	THC
A1	MAR00356.001	Sediment	1360	135	1420	1050	975
A2	MAR00356.002	Sediment	1230	129	1380	1010	598
A4	MAR00356.004	Sediment	1790	222	1970	1590	443
B1	MAR00356.005	Sediment	1390	157	1660	1240	484
B2	MAR00356.006	Sediment	1370	115	1520	992	239
B3	MAR00356.007	Sediment	1400	109	1530	985	496
B4	MAR00356.008	Sediment	1420	116	1470	947	571
B5	MAR00356.009	Sediment	1470	123	1510	1010	487
B6	MAR00356.010	Sediment	1580	125	1590	1000	580
C1	MAR00356.011	Sediment	1420	110	1580	936	452
Certified Reference Material CRM180013 1941b (% Recovery)			65	61	81	77	87~
QC Blank			<1	<1	<1	<1	<1

~ Indicates result is for an In-house Reference Material as
no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	ACENAPTH	ACENAPHY	ANTHRACN	BAA	BAP	BBF
C2	MAR00356.012	Sediment	198	147	297	563	525	553
C3	MAR00356.013	Sediment	199	171	278	550	524	547
C4	MAR00356.014	Sediment	181	118	272	530	494	515
C5	MAR00356.015	Sediment	175	93.5	222	458	422	421
C6	MAR00356.016	Sediment	189	146	254	452	440	464
C7	MAR00356.017	Sediment	165	78.4	264	569	528	553
C8	MAR00356.018	Sediment	200	173	298	588	594	598
C9	MAR00356.019	Sediment	196	83.7	236	468	435	449
C10	MAR00356.020	Sediment	184	97.8	264	575	549	553
C11	MAR00356.021	Sediment	173	76.1	213	411	387	379
Certified Reference Material CRM180013 1941b (% Recovery)			93	102	69	70	58	94
QC Blank			<1	<1	<1	<1	<1	<1

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no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		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	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	BENZGHIP	BEP	BKF	C1N	C1PHEN	C2N
C2	MAR00356.012	Sediment	510	547	268	3860	1680	2880
C3	MAR00356.013	Sediment	525	534	243	4170	1790	3040
C4	MAR00356.014	Sediment	499	505	244	3770	1620	2670
C5	MAR00356.015	Sediment	427	446	202	3480	1470	2410
C6	MAR00356.016	Sediment	488	481	189	3970	1640	2900
C7	MAR00356.017	Sediment	501	516	249	3780	1600	2720
C8	MAR00356.018	Sediment	565	580	240	4210	1700	3160
C9	MAR00356.019	Sediment	442	454	208	4150	1680	3150
C10	MAR00356.020	Sediment	543	560	230	4460	1850	3180
C11	MAR00356.021	Sediment	417	426	159	4550	1760	3380
Certified Reference Material CRM180013 1941b (% Recovery)			69	88	83	74	83	101
QC Blank			<1	<1	<1	<1	<1	<1

~ Indicates result is for an In-house Reference Material as
 no Certified Reference Materials are available.
 For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	C3N	CHRYSENE	DBENZAH	FLUORANT	FLUORENE	INDPYR
C2	MAR00356.012	Sediment	2490	621	100	1040	359	377
C3	MAR00356.013	Sediment	2530	560	99.0	956	374	365
C4	MAR00356.014	Sediment	2200	586	83.0	916	317	355
C5	MAR00356.015	Sediment	2040	480	80.6	856	292	297
C6	MAR00356.016	Sediment	2360	503	88.7	804	356	317
C7	MAR00356.017	Sediment	2310	632	91.3	1140	297	372
C8	MAR00356.018	Sediment	2760	613	97.0	1030	372	420
C9	MAR00356.019	Sediment	2580	501	85.1	836	341	307
C10	MAR00356.020	Sediment	2500	624	88.2	1050	330	391
C11	MAR00356.021	Sediment	2730	489	66.9	723	324	261
Certified Reference Material CRM180013 1941b (% Recovery)			106	93	92	81	52	67
QC Blank			<1	<1	<1	<1	<1	<1

~ Indicates result is for an In-house Reference Material as
no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
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Customer Reference MMO Sediment Samples

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	mg/Kg
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/305
		Limit of Detection	1	1	1	1	1
		Accreditation	UKAS/MMO	MMO	UKAS/MMO	UKAS/MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	NAPTH	PERYLENE	PHENANT	PYRENE	THC
C2	MAR00356.012	Sediment	1330	114	1580	1010	510
C3	MAR00356.013	Sediment	1460	107	1540	934	481
C4	MAR00356.014	Sediment	1360	108	1440	908	544
C5	MAR00356.015	Sediment	1390	88.1	1330	829	538
C6	MAR00356.016	Sediment	1330	94.8	1440	818	471
C7	MAR00356.017	Sediment	1320	118	1630	1040	421
C8	MAR00356.018	Sediment	1410	130	1560	1010	586
C9	MAR00356.019	Sediment	1390	88.9	1500	816	524
C10	MAR00356.020	Sediment	1550	117	1580	1010	702
C11	MAR00356.021	Sediment	1520	74.2	1520	735	532
Certified Reference Material CRM180013 1941b (% Recovery)			62	56	78	73	102~
QC Blank			<1	<1	<1	<1	<1

~ Indicates result is for an In-house Reference Material as
no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
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Customer Reference MMO Sediment Samples

		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	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	ACENAPTH	ACENAPHY	ANTHRACN	BAA	BAP	BBF
C12	MAR00356.022	Sediment	217	125	292	656	650	646
D1	MAR00356.023	Sediment	150	66.2	230	367	347	315
D2	MAR00356.024	Sediment	297	64.2	486	1150	1100	879
D3	MAR00356.025	Sediment	148	175	216	379	339	386
E1	MAR00356.026	Sediment	225	79.2	213	342	332	311
E2	MAR00356.027	Sediment	47.7	22.3	57.5	75.3	62.7	47.5
E3	MAR00356.028	Sediment	52.9	20.8	51.8	81.0	68.1	57.2
E4	MAR00356.029	Sediment	66.2	33.3	93.4	149	132	115
E5	MAR00356.030	Sediment	105	45.7	125	242	231	196
F1	MAR00356.031	Sediment	182	150	463	954	910	737
Certified Reference Material CRM180013 1941b (% Recovery)			65	96	69	65	60	85
QC Blank			<1	<1	<1	<1	<1	<1

~ Indicates result is for an In-house Reference Material as
no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	BENZGHIP	BEP	BKF	C1N	C1PHEN	C2N
C12	MAR00356.022	Sediment	589	624	287	5330	2070	3820
D1	MAR00356.023	Sediment	380	405	129	5270	1890	3700
D2	MAR00356.024	Sediment	733	808	525	4920	1960	3430
D3	MAR00356.025	Sediment	341	388	162	4090	1510	2880
E1	MAR00356.026	Sediment	332	345	139	3770	1380	2690
E2	MAR00356.027	Sediment	82.9	93.5	24.0	2200	693	1510
E3	MAR00356.028	Sediment	90.6	97.3	21.6	2140	635	1420
E4	MAR00356.029	Sediment	157	165	52.5	2600	916	1790
E5	MAR00356.030	Sediment	263	268	83.8	3910	1370	2760
F1	MAR00356.031	Sediment	686	688	366	4660	2010	3410
Certified Reference Material CRM180013 1941b (% Recovery)			76	91	96	76	80	113
QC Blank			<1	<1	<1	<1	<1	<1

~ Indicates result is for an In-house Reference Material as
no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		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	MMO	MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	C3N	CHRYSENE	DBENZAH	FLUORANT	FLUORENE	INDPYR
C12	MAR00356.022	Sediment	3060	683	115	1260	412	432
D1	MAR00356.023	Sediment	2860	406	66.1	608	300	200
D2	MAR00356.024	Sediment	2700	1020	162	2200	333	646
D3	MAR00356.025	Sediment	2350	418	67.2	662	318	223
E1	MAR00356.026	Sediment	2280	362	55.6	602	366	203
E2	MAR00356.027	Sediment	1150	101	13.8	109	106	25.2
E3	MAR00356.028	Sediment	1050	101	12.9	122	108	29.7
E4	MAR00356.029	Sediment	1410	217	23.3	184	135	71.1
E5	MAR00356.030	Sediment	2220	276	43.8	367	207	129
F1	MAR00356.031	Sediment	2870	834	140	1780	349	555
Certified Reference Material CRM180013 1941b (% Recovery)			110	91	102	83	50	71
QC Blank			<1	<1	<1	<1	<1	<1

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 no Certified Reference Materials are available.
 For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	mg/Kg
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/305
		Limit of Detection	1	1	1	1	1
		Accreditation	UKAS/MMO	MMO	UKAS/MMO	UKAS/MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	NAPTH	PERYLENE	PHENANT	PYRENE	THC
C12	MAR00356.022	Sediment	1840	147	1810	1160	752
D1	MAR00356.023	Sediment	1780	63.9	1590	651	515
D2	MAR00356.024	Sediment	1700	233	2450	1920	378
D3	MAR00356.025	Sediment	1370	66.0	1360	654	598
E1	MAR00356.026	Sediment	1340	76.8	1200	637	507
E2	MAR00356.027	Sediment	711	6.86	573	135	287
E3	MAR00356.028	Sediment	706	10.0	544	148	72.5
E4	MAR00356.029	Sediment	914	20.1	731	212	124
E5	MAR00356.030	Sediment	1390	39.0	1110	407	381
F1	MAR00356.031	Sediment	1570	199	1870	1600	544
Certified Reference Material CRM180013 1941b (% Recovery)			66	58	82	76	98~
QC Blank			<1	<1	<1	<1	<1

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For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	ACENAPTH	ACENAPHY	ANTHRACN	BAA	BAP	BBF
G1	MAR00356.032	Sediment	252	255	365	688	681	713
G2	MAR00356.033	Sediment	241	243	311	561	586	616
G3	MAR00356.034	Sediment	241	207	321	610	626	633
G4	MAR00356.035	Sediment	231	136	275	590	608	643
G5	MAR00356.036	Sediment	200	129	273	556	563	582
G6	MAR00356.037	Sediment	887	3780	1200	987	778	734
Certified Reference Material CRM180013 1941b (% Recovery)			64	95	70	66	60	87
QC Blank			<1	<1	<1	<1	<1	<1

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For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		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	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	BENZGHIP	BEP	BKF	C1N	C1PHEN	C2N
G1	MAR00356.032	Sediment	645	652	340	3270	1570	2300
G2	MAR00356.033	Sediment	604	596	259	4040	1770	2880
G3	MAR00356.034	Sediment	637	624	284	4430	1850	3280
G4	MAR00356.035	Sediment	626	611	260	4090	1700	3040
G5	MAR00356.036	Sediment	588	569	264	3970	1750	2970
G6	MAR00356.037	Sediment	648	727	310	7830	4550	5460
Certified Reference Material CRM180013 1941b (% Recovery)			73	92	79	75	80	105
QC Blank			<1	<1	<1	<1	<1	<1

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 no Certified Reference Materials are available.
 For full analyte name see method summaries

Certificate of Analysis



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Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		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	MMO	MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO	UKAS/MMO
Client Reference:	SOCOTEC Ref:	Matrix	C3N	CHRYSENE	DBENZAH	FLUORANT	FLUORENE	INDPYR
G1	MAR00356.032	Sediment	1820	676	108	1440	422	479
G2	MAR00356.033	Sediment	2310	620	102	1050	434	424
G3	MAR00356.034	Sediment	2740	671	108	1130	430	432
G4	MAR00356.035	Sediment	2580	597	104	1110	390	437
G5	MAR00356.036	Sediment	2440	578	102	995	364	432
G6	MAR00356.037	Sediment	3200	1050	140	1860	3000	479
Certified Reference Material CRM180013 1941b (% Recovery)			101	88	97	83	52	71
QC Blank			<1	<1	<1	<1	<1	<1

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 For full analyte name see method summaries

Certificate of Analysis



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Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	mg/Kg
		Method No	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/303/304	ASC/SOP/305
		Limit of Detection	1	1	1	1	1
		Accreditation	UKAS/MMO	MMO	UKAS/MMO	UKAS/MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	NAPTH	PERYLENE	PHENANT	PYRENE	THC
G1	MAR00356.032	Sediment	1280	161	1460	1370	366
G2	MAR00356.033	Sediment	1390	132	1600	1080	284
G3	MAR00356.034	Sediment	1520	137	1730	1120	223
G4	MAR00356.035	Sediment	1400	130	1570	1070	498
G5	MAR00356.036	Sediment	1370	118	1540	988	260
G6	MAR00356.037	Sediment	1940	150	5830	2540	498
Certified Reference Material CRM180013 1941b (% Recovery)			63	61	83	75	104~
QC Blank			<1	<1	<1	<1	<1

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Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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/302	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	0.00008
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 101	PCB 105	PCB 110	PCB 118	PCB 128	PCB 138	PCB 141	PCB 149
A1	MAR00356.001	Sediment	0.00071	0.00027	0.00062	0.00063	0.00013	0.00079	0.00011	0.00050
A2	MAR00356.002	Sediment	0.00072	0.00027	0.00064	0.00067	0.00013	0.00084	0.00010	0.00049
A4	MAR00356.004	Sediment	0.00087	0.00035	0.00084	0.00085	0.00017	0.00096	0.00011	0.00067
B1	MAR00356.005	Sediment	0.00067	0.00031	0.00061	0.00062	0.00011	0.00081	0.00014	0.00046
B2	MAR00356.006	Sediment	0.00056	0.00023	0.00051	0.00060	0.00013	0.00067	<0.00008	0.00041
B3	MAR00356.007	Sediment	0.00074	0.00021	0.00059	0.00059	0.00014	0.00111	0.00024	0.00080
B4	MAR00356.008	Sediment	0.00060	0.00022	0.00054	0.00055	0.00008	0.00062	<0.00008	0.00042
B5	MAR00356.009	Sediment	0.00063	0.00025	0.00060	0.00060	0.00012	0.00077	<0.00008	0.00047
B6	MAR00356.010	Sediment	0.00052	0.00020	0.00053	0.00056	0.00010	0.00064	<0.00008	0.00038
C1	MAR00356.011	Sediment	0.00053	0.00021	0.00054	0.00057	0.00010	0.00071	0.00011	0.00039
Certified Reference Material SRM 1941b (% Recovery)			78	80	89	84	80	104	107~	73
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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no Certified Reference Materials are available.

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 151	PCB 153	PCB 156	PCB 158	PCB 170	PCB 18	PCB 180
A1	MAR00356.001	Sediment	0.00017	0.00083	0.00008	0.00012	0.00016	0.00166	0.00037
A2	MAR00356.002	Sediment	0.00013	0.00091	<0.00008	0.00012	0.00017	0.00137	0.00041
A4	MAR00356.004	Sediment	0.00019	0.00122	0.00010	0.00015	0.00019	0.00115	0.00046
B1	MAR00356.005	Sediment	0.00012	0.00077	0.00009	0.00011	0.00016	0.00143	0.00036
B2	MAR00356.006	Sediment	0.00012	0.00078	<0.00008	0.00010	0.00013	0.00099	0.00035
B3	MAR00356.007	Sediment	0.00033	0.00136	0.00009	0.00017	0.00028	0.00092	0.00061
B4	MAR00356.008	Sediment	0.00011	0.00072	<0.00008	<0.00008	0.00011	0.00232	0.00030
B5	MAR00356.009	Sediment	0.00013	0.00073	<0.00008	0.00009	0.00012	0.00145	0.00035
B6	MAR00356.010	Sediment	0.00011	0.00068	<0.00008	0.00010	0.00011	0.00095	0.00032
C1	MAR00356.011	Sediment	0.00011	0.00069	<0.00008	0.00015	0.00012	0.00091	0.00035
Certified Reference Material SRM 1941b (% Recovery)			105~	85	70	109~	82	73	78
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 183	PCB 187	PCB 194	PCB 28	PCB 31	PCB 44	PCB 47
A1	MAR00356.001	Sediment	<0.00008	0.00029	0.00013	0.00123	0.00162	0.00063	0.00024
A2	MAR00356.002	Sediment	<0.00008	0.00029	0.00012	0.00113	0.00138	0.00062	0.00016
A4	MAR00356.004	Sediment	0.00011	0.00032	0.00015	0.00103	0.00136	0.00051	0.00015
B1	MAR00356.005	Sediment	<0.00008	0.00025	0.00011	0.00113	0.00145	0.00059	0.00017
B2	MAR00356.006	Sediment	<0.00008	0.00019	0.00008	0.00082	0.00101	0.00041	0.00013
B3	MAR00356.007	Sediment	0.00014	0.00041	0.00014	0.00071	0.00089	0.00039	0.00012
B4	MAR00356.008	Sediment	<0.00008	0.00018	<0.00008	0.00175	0.00220	0.00076	0.00023
B5	MAR00356.009	Sediment	0.00008	0.00025	0.00009	0.00111	0.00135	0.00057	0.00016
B6	MAR00356.010	Sediment	<0.00008	0.00020	<0.00008	0.00074	0.00097	0.00036	0.00012
C1	MAR00356.011	Sediment	0.00008	0.00021	0.00011	0.00078	0.00097	0.00044	0.00014
Certified Reference Material SRM 1941b (% Recovery)			59	84	70	55	92	74	110~
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008
		Accreditation	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 49	PCB 52	PCB 66
A1	MAR00356.001	Sediment	0.00066	0.00087	0.00050
A2	MAR00356.002	Sediment	0.00057	0.00080	0.00049
A4	MAR00356.004	Sediment	0.00056	0.00084	0.00052
B1	MAR00356.005	Sediment	0.00054	0.00079	0.00046
B2	MAR00356.006	Sediment	0.00042	0.00061	0.00041
B3	MAR00356.007	Sediment	0.00039	0.00058	0.00037
B4	MAR00356.008	Sediment	0.00075	0.00101	0.00053
B5	MAR00356.009	Sediment	0.00056	0.00078	0.00048
B6	MAR00356.010	Sediment	0.00040	0.00059	0.00037
C1	MAR00356.011	Sediment	0.00041	0.00055	0.00039
Certified Reference Material SRM 1941b (% Recovery)			86	79	73
QC Blank			<0.00008	<0.00008	<0.00008

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 no Certified Reference Materials are available.

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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/302	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	0.00008
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 101	PCB 105	PCB 110	PCB 118	PCB 128	PCB 138	PCB 141	PCB 149
C2	MAR00356.012	Sediment	0.00061	0.00023	0.00059	0.00051	0.00011	0.00072	<0.00008	0.00039
C3	MAR00356.013	Sediment	0.00057	0.00020	0.00049	0.00051	0.00009	0.00063	0.00008	0.00044
C4	MAR00356.014	Sediment	0.00065	0.00027	0.00059	0.00044	0.00010	0.00075	0.00012	0.00039
C5	MAR00356.015	Sediment	0.00047	0.00019	0.00044	0.00038	0.00010	0.00054	0.00009	0.00030
C6	MAR00356.016	Sediment	0.00050	0.00020	0.00047	0.00045	<0.00008	0.00060	0.00010	0.00035
C7	MAR00356.017	Sediment	0.00050	0.00015	0.00049	0.00045	<0.00008	0.00056	0.00009	0.00035
C8	MAR00356.018	Sediment	0.00058	0.00022	0.00056	0.00049	0.00009	0.00060	<0.00008	0.00036
C9	MAR00356.019	Sediment	0.00044	0.00020	0.00041	0.00051	0.00010	0.00057	0.00010	0.00032
C10	MAR00356.020	Sediment	0.00056	0.00019	0.00053	0.00052	<0.00008	0.00060	<0.00008	0.00042
C11	MAR00356.021	Sediment	0.00041	0.00013	0.00040	0.00033	<0.00008	0.00048	<0.00008	0.00027
Certified Reference Material SRM 1941b (% Recovery)			78	87	86	84	73	109	123~	73
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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no Certified Reference Materials are available.

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 151	PCB 153	PCB 156	PCB 158	PCB 170	PCB 18	PCB 180
C2	MAR00356.012	Sediment	0.00013	0.00077	0.00008	0.00011	0.00014	0.00133	0.00036
C3	MAR00356.013	Sediment	0.00012	0.00081	<0.00008	0.00011	0.00020	0.00114	0.00059
C4	MAR00356.014	Sediment	0.00012	0.00077	<0.00008	0.00013	0.00012	0.00141	0.00033
C5	MAR00356.015	Sediment	0.00010	0.00060	0.00008	0.00011	0.00010	0.00125	0.00024
C6	MAR00356.016	Sediment	<0.00008	0.00062	<0.00008	0.00009	0.00009	0.00088	0.00028
C7	MAR00356.017	Sediment	0.00009	0.00059	<0.00008	0.00012	0.00010	0.00128	0.00029
C8	MAR00356.018	Sediment	0.00011	0.00062	<0.00008	0.00012	0.00012	0.00159	0.00032
C9	MAR00356.019	Sediment	0.00010	0.00057	<0.00008	0.00010	0.00013	0.00104	0.00020
C10	MAR00356.020	Sediment	0.00009	0.00070	<0.00008	0.00011	0.00010	0.00156	0.00026
C11	MAR00356.021	Sediment	0.00009	0.00048	<0.00008	<0.00008	0.00008	0.00150	0.00022
Certified Reference Material SRM 1941b (% Recovery)			119~	86	75	119~	81	75	74
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 183	PCB 187	PCB 194	PCB 28	PCB 31	PCB 44	PCB 47
C2	MAR00356.012	Sediment	<0.00008	0.00020	0.00012	0.00100	0.00131	0.00048	0.00016
C3	MAR00356.013	Sediment	0.00010	0.00038	0.00032	0.00084	0.00102	0.00038	0.00015
C4	MAR00356.014	Sediment	0.00008	0.00022	0.00010	0.00113	0.00145	0.00044	0.00017
C5	MAR00356.015	Sediment	<0.00008	0.00017	<0.00008	0.00089	0.00110	0.00047	0.00017
C6	MAR00356.016	Sediment	<0.00008	0.00020	<0.00008	0.00070	0.00091	0.00039	0.00010
C7	MAR00356.017	Sediment	<0.00008	0.00017	<0.00008	0.00103	0.00131	0.00054	0.00015
C8	MAR00356.018	Sediment	<0.00008	0.00017	<0.00008	0.00123	0.00154	0.00056	0.00017
C9	MAR00356.019	Sediment	<0.00008	0.00014	<0.00008	0.00074	0.00094	0.00035	0.00010
C10	MAR00356.020	Sediment	<0.00008	0.00017	<0.00008	0.00119	0.00145	0.00062	0.00017
C11	MAR00356.021	Sediment	<0.00008	0.00013	<0.00008	0.00104	0.00131	0.00046	0.00014
Certified Reference Material SRM 1941b (% Recovery)			59	79	73	59	95	73	109~
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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

Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008
		Accreditation	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 49	PCB 52	PCB 66
C2	MAR00356.012	Sediment	0.00052	0.00078	0.00042
C3	MAR00356.013	Sediment	0.00043	0.00062	0.00036
C4	MAR00356.014	Sediment	0.00056	0.00081	0.00044
C5	MAR00356.015	Sediment	0.00044	0.00062	0.00035
C6	MAR00356.016	Sediment	0.00036	0.00052	0.00032
C7	MAR00356.017	Sediment	0.00049	0.00075	0.00043
C8	MAR00356.018	Sediment	0.00059	0.00082	0.00044
C9	MAR00356.019	Sediment	0.00038	0.00056	0.00032
C10	MAR00356.020	Sediment	0.00056	0.00082	0.00043
C11	MAR00356.021	Sediment	0.00049	0.00069	0.00034
Certified Reference Material SRM 1941b (% Recovery)			88	80	73
QC Blank			<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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/302	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	0.00008
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 101	PCB 105	PCB 110	PCB 118	PCB 128	PCB 138	PCB 141	PCB 149
C12	MAR00356.022	Sediment	0.00053	0.00017	0.00046	0.00040	<0.00008	0.00055	0.00009	0.00035
D1	MAR00356.023	Sediment	0.00043	0.00013	0.00033	0.00024	<0.00008	0.00041	<0.00008	0.00029
D2	MAR00356.024	Sediment	0.00037	0.00032	0.00038	0.00039	0.00025	0.00047	0.00018	0.00034
D3	MAR00356.025	Sediment	0.00036	0.00015	0.00038	0.00027	<0.00008	0.00046	<0.00008	0.00029
E1	MAR00356.026	Sediment	0.00034	0.00010	0.00029	0.00022	<0.00008	0.00026	<0.00008	0.00019
E2	MAR00356.027	Sediment	0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
E3	MAR00356.028	Sediment	0.00014	<0.00008	0.00009	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008
E4	MAR00356.029	Sediment	0.00018	<0.00008	0.00012	0.00011	<0.00008	<0.00008	<0.00008	<0.00008
E5	MAR00356.030	Sediment	0.00019	<0.00008	0.00015	0.00011	<0.00008	0.00016	<0.00008	0.00013
F1	MAR00356.031	Sediment	0.00037	0.00015	0.00036	0.00035	<0.00008	0.00045	<0.00008	0.00022
Certified Reference Material SRM 1941b (% Recovery)			78	75	90	87	82	103	115~	78
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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no Certified Reference Materials are available.

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 151	PCB 153	PCB 156	PCB 158	PCB 170	PCB 18	PCB 180
C12	MAR00356.022	Sediment	0.00011	0.00066	<0.00008	0.00011	<0.00008	0.00119	0.00021
D1	MAR00356.023	Sediment	0.00012	0.00044	<0.00008	<0.00008	<0.00008	0.00135	0.00016
D2	MAR00356.024	Sediment	0.00019	0.00046	0.00026	0.00028	0.00026	0.00080	0.00030
D3	MAR00356.025	Sediment	<0.00008	0.00049	<0.00008	0.00010	<0.00008	0.00064	0.00017
E1	MAR00356.026	Sediment	<0.00008	0.00031	<0.00008	<0.00008	<0.00008	0.00114	0.00012
E2	MAR00356.027	Sediment	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	0.00069	<0.00008
E3	MAR00356.028	Sediment	<0.00008	0.00009	<0.00008	<0.00008	<0.00008	0.00065	<0.00008
E4	MAR00356.029	Sediment	<0.00008	0.00011	<0.00008	<0.00008	<0.00008	0.00075	<0.00008
E5	MAR00356.030	Sediment	<0.00008	0.00017	<0.00008	<0.00008	<0.00008	0.00077	<0.00008
F1	MAR00356.031	Sediment	<0.00008	0.00050	<0.00008	<0.00008	0.00009	0.00066	0.00019
Certified Reference Material SRM 1941b (% Recovery)			114~	81	76	125~	73	72	70
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 183	PCB 187	PCB 194	PCB 28	PCB 31	PCB 44	PCB 47
C12	MAR00356.022	Sediment	<0.00008	0.00016	0.00009	0.00087	0.00120	0.00046	0.00020
D1	MAR00356.023	Sediment	<0.00008	<0.00008	<0.00008	0.00091	0.00105	0.00044	0.00013
D2	MAR00356.024	Sediment	0.00020	0.00023	0.00026	0.00053	0.00069	0.00029	0.00012
D3	MAR00356.025	Sediment	<0.00008	0.00013	<0.00008	0.00052	0.00062	0.00030	0.00008
E1	MAR00356.026	Sediment	<0.00008	0.00010	<0.00008	0.00091	0.00109	0.00039	0.00012
E2	MAR00356.027	Sediment	<0.00008	<0.00008	<0.00008	0.00043	0.00052	0.00020	<0.00008
E3	MAR00356.028	Sediment	<0.00008	<0.00008	<0.00008	0.00044	0.00050	0.00019	<0.00008
E4	MAR00356.029	Sediment	<0.00008	<0.00008	<0.00008	0.00052	0.00063	0.00023	0.00008
E5	MAR00356.030	Sediment	<0.00008	<0.00008	<0.00008	0.00051	0.00063	0.00025	<0.00008
F1	MAR00356.031	Sediment	<0.00008	0.00012	<0.00008	0.00051	0.00063	0.00024	0.00008
Certified Reference Material SRM 1941b (% Recovery)			54	72	71	52	88	65	113~
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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

Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008
		Accreditation	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 49	PCB 52	PCB 66
C12	MAR00356.022	Sediment	0.00049	0.00066	0.00036
D1	MAR00356.023	Sediment	0.00043	0.00065	0.00033
D2	MAR00356.024	Sediment	0.00029	0.00042	0.00025
D3	MAR00356.025	Sediment	0.00027	0.00043	0.00023
E1	MAR00356.026	Sediment	0.00043	0.00057	0.00032
E2	MAR00356.027	Sediment	0.00020	0.00029	0.00010
E3	MAR00356.028	Sediment	0.00020	0.00030	0.00013
E4	MAR00356.029	Sediment	0.00024	0.00033	0.00017
E5	MAR00356.030	Sediment	0.00025	0.00037	0.00016
F1	MAR00356.031	Sediment	0.00029	0.00043	0.00024
Certified Reference Material SRM 1941b (% Recovery)			83	77	69
QC Blank			<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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Test Report ID MAR00356
 Issue Version 1
 Customer Reference MMO Sediment Samples

		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/302	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	0.00008
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 101	PCB 105	PCB 110	PCB 118	PCB 128	PCB 138	PCB 141	PCB 149
G1	MAR00356.032	Sediment	0.00357	0.00130	0.00351	0.00317	0.00070	0.00370	0.00057	0.00188
G2	MAR00356.033	Sediment	0.00095	0.00028	0.00078	0.00080	0.00016	0.00096	0.00012	0.00052
G3	MAR00356.034	Sediment	0.00072	0.00029	0.00071	0.00069	0.00013	0.00090	0.00015	0.00044
G4	MAR00356.035	Sediment	0.00074	0.00027	0.00065	0.00062	0.00012	0.00081	0.00015	0.00048
G5	MAR00356.036	Sediment	0.00070	0.00026	0.00066	0.00072	0.00017	0.00086	0.00014	0.00051
G6	MAR00356.037	Sediment	0.00082	0.00036	0.00080	0.00084	0.00019	0.00099	0.00013	0.00062
Certified Reference Material SRM 1941b (% Recovery)			79	78	94	82	69	99	123~	77
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 151	PCB 153	PCB 156	PCB 158	PCB 170	PCB 18	PCB 180
G1	MAR00356.032	Sediment	0.00046	0.00382	0.00044	0.00065	0.00053	0.00183	0.00117
G2	MAR00356.033	Sediment	0.00018	0.00111	0.00011	0.00014	0.00019	0.00252	0.00042
G3	MAR00356.034	Sediment	0.00011	0.00091	0.00010	<0.00008	0.00018	0.00184	0.00047
G4	MAR00356.035	Sediment	0.00015	0.00097	<0.00008	0.00013	0.00018	0.00134	0.00043
G5	MAR00356.036	Sediment	0.00015	0.00100	0.00011	0.00015	0.00018	0.00132	0.00052
G6	MAR00356.037	Sediment	0.00020	0.00109	0.00011	0.00012	0.00022	0.00151	0.00046
Certified Reference Material SRM 1941b (% Recovery)			107~	84	74	122~	85	77	76
QC Blank			<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 183	PCB 187	PCB 194	PCB 28	PCB 31	PCB 44	PCB 47
G1	MAR00356.032	Sediment	0.00025	0.00056	0.00030	0.00151	0.00191	0.00137	0.00027
G2	MAR00356.033	Sediment	0.00010	0.00026	0.00014	0.00186	0.00249	0.00088	0.00027
G3	MAR00356.034	Sediment	0.00011	0.00027	0.00010	0.00138	0.00172	0.00077	0.00022
G4	MAR00356.035	Sediment	0.00010	0.00025	0.00013	0.00109	0.00138	0.00065	0.00020
G5	MAR00356.036	Sediment	0.00009	0.00030	0.00011	0.00105	0.00131	0.00057	0.00017
G6	MAR00356.037	Sediment	0.00011	0.00031	0.00016	0.00130	0.00173	0.00062	0.00015
Certified Reference Material SRM 1941b (% Recovery)			56	80	75	58	95	70	109~
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.

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)	mg/Kg (Dry Weight)
		Method No	ASC/SOP/302	ASC/SOP/302	ASC/SOP/302
		Limit of Detection	0.00008	0.00008	0.00008
		Accreditation	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	PCB 49	PCB 52	PCB 66
G1	MAR00356.032	Sediment	0.00101	0.00228	0.00088
G2	MAR00356.033	Sediment	0.00089	0.00135	0.00066
G3	MAR00356.034	Sediment	0.00069	0.00100	0.00057
G4	MAR00356.035	Sediment	0.00061	0.00087	0.00050
G5	MAR00356.036	Sediment	0.00055	0.00080	0.00050
G6	MAR00356.037	Sediment	0.00056	0.00097	0.00058
Certified Reference Material SRM 1941b (% Recovery)			84	75	72
QC Blank			<0.00008	<0.00008	<0.00008

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Certificate of Analysis



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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)							
		Method No	ASC/SOP/302							
		Limit of Detection	0.0001							
		Accreditation	MMO							
Client Reference:	SOCOTEC Ref:	Matrix	AHCH	BHCH	GHCH	DIELDRIN	HCB	PPTDE	PPDDE	PPDDT
A1	MAR00356.001	Sediment	0.00028	<0.00010	0.00027	0.00029	0.00196	0.00110	0.00092	0.00022
A2	MAR00356.002	Sediment	<0.00010	<0.00010	<0.00010	0.00035	0.00157	0.00116	0.00074	0.00033
A4	MAR00356.004	Sediment	<0.00010	<0.00010	0.00015	0.00033	0.00135	0.00142	0.00106	0.00030
B1	MAR00356.005	Sediment	<0.00010	<0.00010	<0.00010	0.00034	0.00177	0.00112	0.00073	0.00060
B2	MAR00356.006	Sediment	<0.00010	<0.00010	<0.00010	0.00029	0.00186	0.00115	0.00070	0.00021
B3	MAR00356.007	Sediment	<0.00010	<0.00010	<0.00010	0.00033	0.00194	0.00108	0.00073	0.00020
B4	MAR00356.008	Sediment	<0.00010	<0.00010	<0.00010	0.00035	0.00162	0.00095	0.00064	<0.00010
B5	MAR00356.009	Sediment	<0.00010	<0.00010	<0.00010	0.00027	0.00129	0.00102	0.00082	0.00013
B6	MAR00356.010	Sediment	<0.00010	<0.00010	<0.00010	0.00024	0.00109	0.00103	0.00067	0.00015
C1	MAR00356.011	Sediment	<0.00010	<0.00010	<0.00010	0.00024	0.00137	0.00129	0.00065	0.00017
Certified Reference Material SRM 1941b (% Recovery)			98~	87~	111~	94~	128	69	88	107~
QC Blank			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010

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For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)							
		Method No	ASC/SOP/302							
		Limit of Detection	0.0001							
		Accreditation	MMO							
Client Reference:	SOCOTEC Ref:	Matrix	AHCH	BHCH	GHCH	DIELDRIN	HCB	PPTDE	PPDDE	PPDDT
C2	MAR00356.012	Sediment	<0.00010	<0.00010	<0.00010	0.00024	0.00122	0.00118	0.00074	0.00025
C3	MAR00356.013	Sediment	<0.00010	<0.00010	<0.00010	0.00024	0.00123	0.00090	0.00065	<0.00010
C4	MAR00356.014	Sediment	<0.00010	<0.00010	<0.00010	0.00021	0.00141	0.00109	0.00060	<0.00010
C5	MAR00356.015	Sediment	<0.00010	<0.00010	<0.00010	0.00014	0.00106	0.00083	0.00049	<0.00010
C6	MAR00356.016	Sediment	<0.00010	<0.00010	<0.00010	0.00021	0.00149	0.00121	0.00064	0.00061
C7	MAR00356.017	Sediment	<0.00010	<0.00010	<0.00010	0.00025	0.00100	0.00105	0.00065	0.00012
C8	MAR00356.018	Sediment	<0.00010	<0.00010	0.00011	0.00027	0.00108	0.00204	0.00062	0.00389
C9	MAR00356.019	Sediment	<0.00010	<0.00010	<0.00010	0.00018	0.00097	0.00100	0.00065	<0.00010
C10	MAR00356.020	Sediment	<0.00010	<0.00010	<0.00010	0.00017	0.00112	0.00097	0.00062	0.00019
C11	MAR00356.021	Sediment	<0.00010	<0.00010	<0.00010	0.00018	0.00105	0.00076	0.00049	0.00013
Certified Reference Material SRM 1941b (% Recovery)			104~	85~	103~	95~	140	76	97	101~
QC Blank			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010

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no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)							
		Method No	ASC/SOP/302							
		Limit of Detection	0.0001							
		Accreditation	MMO							
Client Reference:	SOCOTEC Ref:	Matrix	AHCH	BHCH	GHCH	DIELDRIN	HCB	PPTDE	PPDDE	PPDDT
C12	MAR00356.022	Sediment	0.00020	<0.00010	0.00025	0.00019	0.00109	0.00092	0.00061	0.00038
D1	MAR00356.023	Sediment	<0.00010	<0.00010	<0.00010	0.00014	0.00060	0.00071	0.00033	0.00023
D2	MAR00356.024	Sediment	<0.00010	0.00014	<0.00010	0.00034	0.00045	0.00080	0.00050	0.00044
D3	MAR00356.025	Sediment	<0.00010	<0.00010	<0.00010	0.00017	0.00080	0.00091	0.00052	<0.00010
E1	MAR00356.026	Sediment	<0.00010	<0.00010	<0.00010	0.00021	0.00868	0.00048	0.00034	0.00012
E2	MAR00356.027	Sediment	<0.00010	<0.00010	<0.00010	<0.00010	0.00020	0.00012	<0.00010	<0.00010
E3	MAR00356.028	Sediment	<0.00010	<0.00010	<0.00010	<0.00010	0.00018	0.00018	<0.00010	<0.00010
E4	MAR00356.029	Sediment	<0.00010	<0.00010	<0.00010	<0.00010	0.00028	0.00024	0.00020	<0.00010
E5	MAR00356.030	Sediment	<0.00010	<0.00010	<0.00010	<0.00010	0.00030	0.00033	0.00023	<0.00010
F1	MAR00356.031	Sediment	<0.00010	<0.00010	<0.00010	0.00020	0.00108	0.00082	0.00045	0.00024
Certified Reference Material SRM 1941b (% Recovery)			103~	88~	109~	110~	130	63	87	98~
QC Blank			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010

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no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	mg/Kg (Dry Weight)							
		Method No	ASC/SOP/302							
		Limit of Detection	0.0001							
		Accreditation	MMO							
Client Reference:	SOCOTEC Ref:	Matrix	AHCH	BHCH	GHCH	DIELDRIN	HCB	PPTDE	PPDDE	PPDDT
G1	MAR00356.032	Sediment	0.00011	<0.00010	0.00134	0.00047	0.00190	0.00120	0.00094	0.00025
G2	MAR00356.033	Sediment	0.00012	<0.00010	0.00016	0.00033	0.00199	0.00125	0.00094	0.00024
G3	MAR00356.034	Sediment	<0.00010	<0.00010	0.00010	0.00025	0.00182	0.00129	0.00086	0.00060
G4	MAR00356.035	Sediment	<0.00010	<0.00010	0.00014	0.00029	0.00146	0.00157	0.00078	0.00107
G5	MAR00356.036	Sediment	<0.00010	<0.00010	<0.00010	0.00029	0.00152	0.00129	0.00090	0.00024
G6	MAR00356.037	Sediment	<0.00010	<0.00010	0.00020	0.00059	0.00323	0.00140	0.00082	0.00081
Certified Reference Material SRM 1941b (% Recovery)			110~	86~	120~	96~	142	71	99	103~
QC Blank			<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010

~ Indicates result is for an In-house Reference Material as
no Certified Reference Materials are available.
For full analyte name see method summaries

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_02	*SUB_02	*SUB_02	*SUB_02	*SUB_02	*SUB_02	*SUB_02
		Limit of Detection	0.02	0.02	0.02	0.02	0.02	0.02	0.02
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	BDE17	BDE28	BDE47	BDE66	BDE85	BDE99	BDE100
A1	MAR00356.001	Sediment	0.405	0.293	2.570	0.325	0.172	3.340	0.466
A2	MAR00356.002	Sediment	0.422	0.307	2.490	0.330	0.155	3.110	0.409
A4	MAR00356.004	Sediment	0.926	0.701	4.170	0.707	0.278	4.930	0.598
B1	MAR00356.005	Sediment	0.462	0.325	2.640	0.322	0.155	3.030	0.420
B2	MAR00356.006	Sediment	0.359	0.250	2.020	0.268	0.126	2.470	0.328
B3	MAR00356.007	Sediment	0.311	0.226	1.940	0.237	0.121	2.370	0.321
B4	MAR00356.008	Sediment	0.345	0.265	2.170	0.256	0.133	2.740	0.367
B5	MAR00356.009	Sediment	0.448	0.365	2.710	0.387	0.186	3.500	0.440
B6	MAR00356.010	Sediment	0.440	0.364	2.550	0.353	0.159	3.040	0.404
C1	MAR00356.011	Sediment	0.289	0.212	1.890	0.230	0.114	2.380	0.353
C2	MAR00356.012	Sediment	0.320	0.246	2.170	0.319	0.154	2.920	0.370
C3	MAR00356.013	Sediment	0.328	0.270	2.150	0.312	0.152	2.810	0.365
C4	MAR00356.014	Sediment	0.314	0.249	2.110	0.279	0.143	2.690	0.369
C5	MAR00356.015	Sediment	0.288	0.227	1.810	0.238	0.115	2.190	0.322
C6	MAR00356.016	Sediment	0.395	0.346	2.440	0.354	0.161	2.950	0.402
C7	MAR00356.017	Sediment	0.222	0.164	1.470	0.183	0.105	1.960	0.283
C8	MAR00356.018	Sediment	0.265	0.206	1.820	0.238	0.132	2.500	0.363
C9	MAR00356.019	Sediment	0.196	0.144	1.380	0.164	0.094	1.860	0.258
C10	MAR00356.020	Sediment	0.252	0.202	1.720	0.225	0.119	2.230	0.307
C11	MAR00356.021	Sediment	0.158	0.120	1.130	0.128	0.082	1.580	0.237
C12	MAR00356.022	Sediment	0.292	0.251	1.720	0.252	0.108	2.060	0.289
D1	MAR00356.023	Sediment	0.118	0.080	0.769	0.081	0.041	0.904	0.143
D2	MAR00356.024	Sediment	0.089	0.059	0.501	0.055	0.029	0.554	0.082
D3	MAR00356.025	Sediment	0.146	0.113	1.040	0.116	0.064	1.340	0.222
E1	MAR00356.026	Sediment	0.332	0.242	1.490	0.174	0.079	1.520	0.244
E2	MAR00356.027	Sediment	<0.02	<0.02	0.104	<0.02	<0.02	0.099	0.020
E3	MAR00356.028	Sediment	0.027	<0.02	0.171	<0.02	<0.02	0.194	0.035
E4	MAR00356.029	Sediment	0.035	0.024	0.234	0.025	<0.02	0.243	0.042
E5	MAR00356.030	Sediment	0.056	0.038	0.398	0.041	0.023	0.455	0.080
F1	MAR00356.031	Sediment	0.204	0.129	1.230	0.130	0.078	1.540	0.258
G1	MAR00356.032	Sediment	0.478	0.336	2.590	0.368	0.164	3.310	0.448
G2	MAR00356.033	Sediment	0.433	0.295	2.470	0.322	0.149	3.150	0.412

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		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)
		Method No	*SUB_02	*SUB_02	*SUB_02	*SUB_02	*SUB_02	*SUB_02	*SUB_02
		Limit of Detection	0.02	0.02	0.02	0.02	0.02	0.02	0.02
		Accreditation	MMO	MMO	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	BDE17	BDE28	BDE47	BDE66	BDE85	BDE99	BDE100
G3	MAR00356.034	Sediment	0.388	0.269	2.290	0.284	0.127	2.760	0.410
G4	MAR00356.035	Sediment	0.334	0.235	2.050	0.286	0.121	2.520	0.354
G5	MAR00356.036	Sediment	0.334	0.222	2.130	0.250	0.123	2.730	0.398
G6	MAR00356.037	Sediment	0.462	0.317	2.530	0.331	0.149	3.160	0.445

Certificate of Analysis



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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)
		Method No	*SUB_02	*SUB_02	*SUB_02	*SUB_02	*SUB_02
		Limit of Detection	0.02	0.02	0.02	0.02	0.1
		Accreditation	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	BDE138	BDE153	BDE154	BDE183	BDE209
A1	MAR00356.001	Sediment	<0.02	0.618	0.359	0.555	148
A2	MAR00356.002	Sediment	<0.02	0.595	0.334	0.600	148
A4	MAR00356.004	Sediment	<0.02	0.968	0.466	0.753	182
B1	MAR00356.005	Sediment	<0.02	0.550	0.336	0.613	104
B2	MAR00356.006	Sediment	<0.02	0.462	0.276	0.456	120
B3	MAR00356.007	Sediment	<0.02	0.436	0.264	0.395	125
B4	MAR00356.008	Sediment	<0.02	0.488	0.285	0.400	104
B5	MAR00356.009	Sediment	<0.02	0.703	0.354	0.473	121
B6	MAR00356.010	Sediment	<0.02	0.570	0.328	0.531	156
C1	MAR00356.011	Sediment	<0.02	0.455	0.284	0.431	88.4
C2	MAR00356.012	Sediment	<0.02	0.624	0.322	0.841	117
C3	MAR00356.013	Sediment	<0.02	0.526	0.301	0.473	93.8
C4	MAR00356.014	Sediment	<0.02	0.487	0.310	0.436	159
C5	MAR00356.015	Sediment	<0.02	0.400	0.257	0.344	71.0
C6	MAR00356.016	Sediment	<0.02	0.528	0.319	0.520	120
C7	MAR00356.017	Sediment	<0.02	0.390	0.244	0.297	62.0
C8	MAR00356.018	Sediment	<0.02	0.460	0.291	0.380	87.9
C9	MAR00356.019	Sediment	<0.02	0.356	0.211	0.389	58.8
C10	MAR00356.020	Sediment	<0.02	0.444	0.248	0.583	106
C11	MAR00356.021	Sediment	<0.02	0.361	0.199	0.446	77.4
C12	MAR00356.022	Sediment	<0.02	0.369	0.234	0.247	97.9
D1	MAR00356.023	Sediment	<0.02	0.152	0.115	0.118	28.6
D2	MAR00356.024	Sediment	<0.02	0.091	0.064	0.090	24.1
D3	MAR00356.025	Sediment	<0.02	0.214	0.154	0.142	49.9
E1	MAR00356.026	Sediment	<0.02	0.273	0.191	0.392	23.4
E2	MAR00356.027	Sediment	<0.02	<0.02	<0.02	<0.02	3.81
E3	MAR00356.028	Sediment	<0.02	0.035	0.027	0.022	5.31
E4	MAR00356.029	Sediment	<0.02	0.038	0.032	0.032	4.85
E5	MAR00356.030	Sediment	<0.02	0.076	0.059	0.057	27.9
F1	MAR00356.031	Sediment	<0.02	0.277	0.207	0.252	73.2
G1	MAR00356.032	Sediment	<0.02	0.581	0.367	0.444	274
G2	MAR00356.033	Sediment	<0.02	0.617	0.358	0.544	160

Certificate of Analysis



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Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

		Units	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)	µg/Kg (Dry Weight)
		Method No	*SUB_02	*SUB_02	*SUB_02	*SUB_02	*SUB_02
		Limit of Detection	0.02	0.02	0.02	0.02	0.1
		Accreditation	MMO	MMO	MMO	MMO	MMO
Client Reference:	SOCOTEC Ref:	Matrix	BDE138	BDE153	BDE154	BDE183	BDE209
G3	MAR00356.034	Sediment	<0.02	0.617	0.358	0.544	160
G4	MAR00356.035	Sediment	<0.02	0.456	0.300	0.447	130
G5	MAR00356.036	Sediment	<0.02	0.474	0.318	0.470	133
G6	MAR00356.037	Sediment	<0.02	0.629	0.363	0.615	407

Certificate of Analysis



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Test Report ID MAR00356

Issue Version 1

Customer Reference MMO Sediment Samples

REPORT NOTES

Method Code	Sample ID	The following information should be taken into consideration when using the data contained within this report
All	MAR00356.003	Sample MAR00356.003 - A3 was not suitable for testing as the sample comprised of large stones
*SUB_01	MAR00356.001-037	Analysis was conducted by an approved subcontracted laboratory.
SOCOTEC Env Chem*	MAR00356.001-037	Analysis was conducted by an internal SOCOTEC laboratory. UKAS accredited analysis by this laboratory is under UKAS number 1252.
ASC/SOP/301	MAR00356.001-037	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	MAR00356.001-037	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 above acceptable limits. However 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. These circumstances should be taken into consideration when utilising the data.
ASC/SOP/303/304	MAR00356.001-037	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.

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	Handling Time Exceeded	N/A	N/A
D3	Sample Contaminated through Damaged Packaging	N/A	N/A
D4	Sample Contaminated through Sampling	N/A	N/A
D5	Inappropriate Container/Packaging	N/A	N/A
D6	Damaged in Transit	N/A	N/A
D7	Insufficient Quantity of Sample	N/A	N/A
D8	Inappropriate Headspace	N/A	N/A
D9	Retained at Incorrect Temperature	N/A	N/A
D10	Lack of Date & Time of Sampling	N/A	N/A
D11	Insufficient Sample Details	N/A	N/A
D12	Sample integrity compromised or not suitable for analysis	N/A	N/A

Certificate of Analysis



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

Test Report ID MAR00356
Issue Version 1
Customer Reference MMO Sediment Samples

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 800°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.
Total Hydrocarbon Content (THC)	Wet Sediment	Ultra-violet fluorescence spectroscopy
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.

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	Diben[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		