KEEPING BRITAIN TRADING

IMMINGHAM EASTERN RO-RO TERMINAL

MMO Results Template - Sediment Analysis – Part 2

Document Reference 9.5

APFP Regulations 2009 – Regulation 5(2(q)

PINS Reference – TR030007

December 2022

Document Information

Document Information		
Project	Immingham Eastern Ro-Ro Terminal	
Document Title	MMO Results Template - Sediment Analysis – Part 2	
Commissioned by	Associated British Ports	
Document ref	9.5	
APFP Reg 2009	Regulation 5(2)(q)	
Prepared by	Clyde & Co LLP	
Date	**Version**	**Revision Details**
12/2022	01 Submission	N/A

Applicant Information

Instructions:

1. All applicants and laboratories should refer to the most recent guidance on sediment analysis in support of marine licence applications
   Sediment analysis guidance
2. Full information must be provided under each relevant sheet of the workbook. Grey highlighted cells indicate where information can be entered.
3. Where information cannot be provided, the applicant should consult with the MMO prior to submission.
4. Worksheets are protected to prevent accidental amendments to calculated values. If amendments are required please consult with the MMO.
5. Sample IDs used through the data output worksheets should correspond to Sample IDs provided on this worksheet.
6 Where more than 6 dredge areas or 30 samples are required, please contact MMO.
7. Macros must be enabled to use this workbook

Marine licence applicant information:

Applicant:	ABP Immingham
Application number:	SAM\2021\00053
Application title:	Immingham Eastern Ro-Ro Terminal
Date sampled:	18/10/2021
Sampling location:	Port of Immingham

Dredge area tonnages:

Dredge Area	Dredging tonnages	% total dredged material	Total dredged material
Area i	250,000	100.00%	250,000
Area ii			
Area iii			
Area iv			
Area v			
Area vi			

MMO use only

Sample numbers and locations

Sample ID	Excluded sample (MMO use)	Sample location (decimal degrees, WGS84)		Location name (as per sampling plan)	Sampling depth (m)	Dredge area
		Position latitude	Position longitude			
Sample 7 0.00m		53.626752	-0.174723	Site G	0	Area i
Sample 7 1.00m		53.626752	-0.174723	Site G	1	Area i
Sample 7 2.00m		53.626752	-0.174723	Site G	2	Area i
Sample 7 3.00m		53.626752	-0.174723	Site G	3	Area i
Sample 7 4.00m		53.626752	-0.174723	Site G	4	Area i
Sample 7 4.80m		53.626752	-0.174723	Site G	4.8	Area i
Sample 8 0.00m		53.628890	-0.173523	Site H	0	Area i
Sample 8 1.00m		53.628890	-0.173523	Site H	1	Area i
Sample 8 2.00m		53.628890	-0.173523	Site H	2	Area i
Sample 8 3.00m		53.628890	-0.173523	Site H	3	Area i
Sample 8 3.65m		53.628890	-0.173523	Site H	3.65	Area i
Sample 9 0.00m		53.628702	-0.174744	Site I	0	Area i
Sample 9 1.00m		53.628702	-0.174744	Site I	1	Area i
Sample 9 2.00m		53.628702	-0.174744	Site I	2	Area i
Sample 9 3.00m		53.628702	-0.174744	Site I	3	Area i
Sample 9 4.00m		53.628702	-0.174744	Site I	4	Area i
Sample 9 4.60m		53.628702	-0.174744	Site I	4.6	Area i
Sample 10 0.00m		53.627773	-0.172237	Site J	0	Area i
Sample 10 1.00m		53.627773	-0.172237	Site J	1	Area i
Sample 10 2.00m		53.627773	-0.172237	Site J	2	Area i
Sample 10 2.60m		53.627773	-0.172237	Site J	2.6	Area i

Physical characteristics data

Instructions:

1. Record the laboratory/contractor responsible for analysis
2. Record the date the samples were analysed.
3. Enter full dataset for each sample in the analysis results table
4. Where copying and pasting entries please use paste values only
5. Where entering multiple Sample IDs please use the pop-up form
   IDs should be separated by a comma

Analysis information:

Laboratory/contractor:	Ocean Ecology Ltd
Date of analysis:	09/11/2021

Physical characteristics analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Visual appearance*	Exempt from chemical analysis▫	Total Solids (% total sediments)	Organic matter (total organic carbon)
MAR01183.031	Area i	Sample 7 0.00m	Odourless Brown Mud.		49.50	1.6600
MAR01183.032	Area i	Sample 7 1.00m	Brown Mud with an Earthy Odour.		63.40	1.7200
MAR01183.033	Area i	Sample 7 2.00m	Brown Mud with an Earthy Odour.		59.70	2.0400
MAR01183.034	Area i	Sample 7 3.00m	Brown Mud with an Earthy Odour.		50.60	4.8700
MAR01183.035	Area i	Sample 7 4.00m	Odourless Brown Mud with Organic Matter.		62.50	2.5500
MAR01183.036	Area i	Sample 7 4.80m	Odourless Brown Mud with Organic Matter.		61.60	2.7200
MAR01183.037	Area i	Sample 8 0.00m	Odourless Brown Gravelly Mud with Organic Matter.		42.90	18.8000
MAR01183.038	Area i	Sample 8 1.00m	Odourless Brown Muddy Sand.		73.50	0.4200
MAR01183.039	Area i	Sample 8 2.00m	Odourless Brown Sandy Mud.		77.60	0.9700
MAR01183.040	Area i	Sample 8 3.00m	Odourless Brown Sandy Mud.		72.90	0.9200
MAR01183.041	Area i	Sample 8 3.65m	Odourless Brown Sandy Mud.		77.40	1.0600
MAR01183.042	Area i	Sample 9 0.00m	Odourless Brown Mud.		52.20	1.9900
MAR01183.043	Area i	Sample 9 1.00m	Odourless Brown Mud.		55.70	2.1000
MAR01183.044	Area i	Sample 9 2.00m	Odourless Brown Mud.		60.60	2.1400
MAR01183.045	Area i	Sample 9 3.00m	Odourless Brown Gravelly Mud.		77.80	0.8800
MAR01183.046	Area i	Sample 9 4.00m	Odourless Brown Mud.		77.00	1.1500
MAR01183.047	Area i	Sample 9 4.60m	Odourless Brown Mud.		78.00	1.2000
MAR01183.048	Area i	Sample 10 0.00m	Brown Mud with Organic Matter and an Anoxic Odour.		53.90	4.3600
MAR01183.049	Area i	Sample 10 1.00m	dourless Brown Gravelly Sandy Mud with Organic Matter.		59.80	6.0300
MAR01183.050	Area i	Sample 10 2.00m	Odourless Brown Sandy Mud.		77.00	0.7400
MAR01183.051	Area i	Sample 10 2.60m	Odourless Grey-Brown Muddy Sandy Gravel.		87.20	0.5500

* **Visual appearance**: Incude a description of what the material looks like and what it contains, e.g. sandy material containing brick fragments, or black silt, or foreign man made matter caught in the sample.

▫ **Exempt from chemical analysis:** enter 'y' where sediment samples contain glacial material or are too coarse and thus exempt from chemical analysis.

-5.5	-5.0	-4.5	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0.0	0.5	1.0
45mm	31.5mm	22.4mm	16mm	11.2mm	8mm	5.6mm	4mm	2.8mm	2mm	1.4mm	1mm	707µm	500µm
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	1.91
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	2.53
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	1.94	0.62	0.10	0.65	0.69	0.44	0.53	0.50	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	1.83	2.51	0.97	2.31	1.51	1.08	0.82	0.72	0.58	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.10	0.14	0.17	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.18	0.22	0.27	0.24	0.26	1.52	0.34
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	9.06	0.00	0.00	3.26	4.83	6.21	4.79	4.34	3.57	3.58	3.38	4.47	6.08

Particle size distribution (% at 0.5 phi intervals)

1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
353.6µm	250µm	176.8µm	125µm	88.39µm	63µm	44.2µm	31.3µm	22.1µm	15.6µm	11µm	7.8µm	5.5µm	3.9µm
0.00	0.00	0.33	4.21	1.75	5.48	10.53	8.90	9.15	6.91	5.70	6.81	7.88	7.37
0.00	0.00	0.84	5.20	5.63	5.95	8.45	8.09	8.82	6.03	5.17	6.38	7.31	6.91
0.00	0.00	0.49	8.74	13.36	13.25	9.79	6.76	6.59	4.76	3.99	4.69	5.31	4.89
4.79	5.06	5.07	8.18	2.54	3.58	5.65	5.86	7.21	7.27	7.22	7.38	7.15	5.82
6.67	6.60	5.74	9.35	2.67	2.62	5.27	5.52	7.29	6.52	6.21	6.19	5.73	4.61
0.52	3.07	3.67	5.64	0.86	1.11	4.96	6.77	9.29	9.16	8.06	7.79	7.60	6.47
0.00	0.00	0.65	4.40	2.97	1.42	3.96	6.23	8.27	6.70	6.58	8.00	8.82	8.08
0.00	0.00	1.17	14.50	28.15	25.16	13.16	5.73	3.20	1.50	1.29	1.03	0.89	0.85
0.00	0.00	0.57	1.41	2.61	11.92	17.10	16.59	13.47	8.72	5.82	4.14	3.11	2.31
0.00	0.00	0.17	0.83	0.29	4.69	10.51	14.37	15.40	10.31	6.96	5.77	5.22	4.41
0.00	0.00	0.00	0.00	0.02	0.54	0.49	3.61	7.00	4.97	5.40	7.62	9.73	10.11
0.00	0.00	0.01	0.74	1.49	0.92	4.74	7.30	9.07	7.77	7.19	8.80	9.88	8.97
0.00	0.00	0.23	3.05	1.17	1.71	7.76	9.63	10.92	8.30	6.67	7.50	8.16	7.31
0.00	0.00	0.16	1.93	0.48	2.99	9.19	9.28	10.21	7.84	6.15	7.11	8.29	7.84
0.00	0.00	0.20	3.23	1.36	1.69	7.19	8.44	9.54	6.85	5.65	6.35	6.85	6.27
0.00	0.00	0.00	0.00	0.00	0.00	0.05	3.35	8.65	7.78	8.70	9.87	10.22	9.17
0.00	0.00	0.00	0.00	0.00	0.00	0.03	1.54	5.80	6.90	7.62	9.73	11.52	10.97
1.42	7.52	5.56	8.68	3.81	2.40	5.52	5.94	7.63	6.82	6.92	7.32	6.96	5.62
4.70	5.40	14.97	19.40	9.35	6.41	5.29	4.78	5.06	4.15	3.60	3.22	2.69	1.96
0.00	0.02	2.86	13.01	18.52	16.28	10.49	8.95	8.09	5.33	3.51	2.48	1.89	1.43
7.58	7.49	4.04	3.37	1.35	1.23	2.04	1.91	2.22	1.84	1.52	1.66	1.85	1.70

8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	>14.5
2.75µm	1.95µm	1.38µm	0.98µm	0.69µm	0.49µm	0.34µm	0.24µm	0.17µm	0.12µm	0.09µm	0.06µm	0.04µm	<0.04µm
5.57	3.80	2.95	2.58	2.30	2.03	1.75	1.44	1.08	0.78	0.48	0.19	0.02	0.00
5.40	3.93	3.21	2.78	2.35	1.99	1.69	1.39	1.04	0.76	0.47	0.19	0.02	0.00
3.67	2.56	2.10	1.89	1.67	1.45	1.24	1.01	0.76	0.55	0.34	0.13	0.02	0.00
3.98	2.43	1.63	1.30	1.19	1.14	1.07	0.92	0.69	0.48	0.29	0.11	0.01	0.00
3.31	2.33	1.86	1.61	1.47	1.40	1.33	1.15	0.86	0.60	0.35	0.14	0.02	0.00
4.73	3.41	2.87	2.55	2.30	2.18	2.08	1.82	1.36	0.95	0.55	0.21	0.02	0.00
6.21	4.45	3.54	3.01	2.55	2.21	1.93	1.62	1.23	0.90	0.55	0.22	0.03	0.00
0.63	0.51	0.62	0.65	0.49	0.29	0.13	0.04	0.01	0.00	0.00	0.00	0.00	0.00
1.81	1.56	1.48	1.44	1.33	1.19	1.02	0.84	0.64	0.48	0.31	0.13	0.02	0.00
3.45	2.76	2.55	2.47	2.27	2.00	1.70	1.39	1.04	0.76	0.47	0.19	0.02	0.00
7.90	6.32	6.24	5.72	4.91	4.66	4.64	4.12	2.89	1.82	0.94	0.31	0.03	0.00
6.71	4.72	3.86	3.50	3.17	2.85	2.51	2.09	1.57	1.13	0.69	0.27	0.03	0.00
5.48	3.97	3.38	3.08	2.73	2.37	2.02	1.66	1.23	0.89	0.55	0.22	0.03	0.00
5.92	4.18	3.49	3.15	2.75	2.37	2.03	1.68	1.26	0.92	0.56	0.22	0.03	0.00
4.91	3.65	3.02	2.65	2.29	1.98	1.68	1.38	1.04	0.76	0.47	0.19	0.02	0.00
7.04	5.49	5.10	4.78	4.26	3.82	3.45	2.97	2.25	1.63	0.99	0.38	0.04	0.00
7.94	5.94	5.77	5.33	4.46	3.93	3.68	3.26	2.46	1.72	1.00	0.37	0.04	0.00
3.99	2.68	1.97	1.61	1.43	1.35	1.27	1.12	0.86	0.63	0.38	0.15	0.02	0.00
1.31	0.88	0.69	0.61	0.55	0.48	0.40	0.33	0.25	0.18	0.11	0.05	0.01	0.00
1.13	0.97	0.90	0.85	0.77	0.67	0.56	0.46	0.35	0.26	0.17	0.07	0.01	0.00
1.24	0.97	0.99	0.97	0.80	0.59	0.41	0.28	0.17	0.11	0.06	0.02	0.00	0.00

Trace metal data

Instructions:

1. Record the laboratory/contractor responsible for trace metal analysis
2. Record the date the samples were analysed.
3. Enter full dataset for each sample in the analysis results table
4. Trace metal analysis results should be reported in mg/kg (ppm) dry weight
5. Enter methdological limit of detection for each trace metal prior to inputting raw data
6. Where analysis outputs are less than the limits of detection please enter text "<LOD"
7. Where copying and pasting entries please use paste values only
8. Where entering multiple Sample IDs please use the pop-up form
   IDs should be separated by a comma

Analysis information:

Laboratory/contractor:	SOCOTEC
Date of analysis:	02/11/2021

Determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total solids (%)	Metals as mg/kg dry weight							
				Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Copper (Cu)	Mercury (Hg)	Nickel (Ni)	Lead (Pb)	Zinc (Zn)
MAR01183.031	Area i	Sample 7 0.00m	49.5	15.3	0.27	39.8	25.2	0.16	27.1	49.9	131
MAR01183.032	Area i	Sample 7 1.00m	63.4	30	0.66	64	38.3	0.25	32.7	65.2	185
MAR01183.033	Area i	Sample 7 2.00m	59.7	37	1.01	92.7	75.3	0.44	42.6	115	265
MAR01183.034	Area i	Sample 7 3.00m	50.6	15.6	0.26	35.2	19.5	0.08	40	23.1	103
MAR01183.035	Area i	Sample 7 4.00m	62.5	16.1	0.28	35.3	17.1	0.06	40.4	20.7	95.6
MAR01183.036	Area i	Sample 7 4.80m	61.6	12.9	0.32	36.8	17.7	0.05	40.2	20.6	91.4
MAR01183.037	Area i	Sample 8 0.00m	42.9	20.2	0.51	16.8	18.4	0.04	23.8	14.6	79.4
MAR01183.038	Area i	Sample 8 1.00m	73.5	5.4	0.19	12.3	13.7	0.03	15.6	8.9	38.1
MAR01183.039	Area i	Sample 8 2.00m	77.6	6.9	0.15	16.5	14.8	0.02	20.9	10.1	42.9
MAR01183.040	Area i	Sample 8 3.00m	72.9	8.2	0.2	28.1	18.9	0.02	33.7	15.4	58.3
MAR01183.041	Area i	Sample 8 3.65m	77.4	9.2	0.27	28.8	20.3	0.02	35.6	16.8	62.4
MAR01183.042	Area i	Sample 9 0.00m	52.2	18	0.35	50.4	30.5	0.19	34.2	63.7	164
MAR01183.043	Area i	Sample 9 1.00m	55.7	24.1	0.36	58.7	35.9	0.2	37.1	71.4	177
MAR01183.044	Area i	Sample 9 2.00m	60.6	24.6	0.43	57.6	35.7	0.22	34.6	73.9	177
MAR01183.045	Area i	Sample 9 3.00m	77.8	8.4	0.19	21.1	17.5	0.02	25.4	13.2	48.8
MAR01183.046	Area i	Sample 9 4.00m	77	9.6	0.28	32	21.3	0.02	40	18.3	69
MAR01183.047	Area i	Sample 9 4.60m	78	10.3	0.23	36.9	23.6	0.02	44.3	19.7	76.6
MAR01183.048	Area i	Sample 10 0.00m	53.9	14.9	0.38	36.9	19.2	0.02	39.3	19.4	97.7
MAR01183.049	Area i	Sample 10 1.00m	59.8	10.4	0.18	11.3	10.4	0.02	13.2	6.9	37.7
MAR01183.050	Area i	Sample 10 2.00m	77	3.3	0.17	13	13.9	0.02	17.3	10.1	39.8
MAR01183.051	Area i	Sample 10 2.60m	87.2	15.1	0.39	14.8	16.8	0.03	30.8	12.9	90.9
Limits of detection (mg/kg dry weight):				0.5	0.04	0.5	0.5	0.01	0.5	0.5	2

Organotin data

Instructions:

1. Record the laboratory/contractor responsible for organotin analysis
2. Record the date the samples were analysed.
3. Enter full dataset for each sample in the analysis results table
4. Organotin analysis results should be reported in mg/kg (ppm) dry weight
5. Enter methdological limit of detection for each organotin prior to inputting raw data
6. Where analysis outputs are less than the limits of detection please enter text "<LOD"
7. Where copying and pasting entries please use paste values only
8. Where entering multiple Sample IDs please use the pop-up form
   IDs should be separated by a comma

Analysis information:

Laboratory/contractor:	SOCOTEC
Date of analysis:	09/11/2021

determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total solids (%)	Organotins as mg/kg dry weight	
				Dibutyltine (DBT)	Tributyltin (TBT)
MAR01183.031	Area i	Sample 7 0.00m	49.5	<LOD	<LOD
MAR01183.032	Area i	Sample 7 1.00m	63.4	0.008	<LOD
MAR01183.033	Area i	Sample 7 2.00m	59.7	<LOD	<LOD
MAR01183.034	Area i	Sample 7 3.00m	50.6	<LOD	<LOD
MAR01183.035	Area i	Sample 7 4.00m	62.5	<LOD	<LOD
MAR01183.036	Area i	Sample 7 4.80m	61.6	<LOD	<LOD
MAR01183.037	Area i	Sample 8 0.00m	42.9	<LOD	<LOD
MAR01183.038	Area i	Sample 8 1.00m	73.5	<LOD	<LOD
MAR01183.039	Area i	Sample 8 2.00m	77.6	<LOD	<LOD
MAR01183.040	Area i	Sample 8 3.00m	72.9	<LOD	<LOD
MAR01183.041	Area i	Sample 8 3.65m	77.4	<LOD	<LOD
MAR01183.042	Area i	Sample 9 0.00m	52.2	<LOD	<LOD
MAR01183.043	Area i	Sample 9 1.00m	55.7	<LOD	0.011
MAR01183.044	Area i	Sample 9 2.00m	60.6	0.012	0.014
MAR01183.045	Area i	Sample 9 3.00m	77.8	<LOD	<LOD
MAR01183.046	Area i	Sample 9 4.00m	77	<LOD	<LOD
MAR01183.047	Area i	Sample 9 4.60m	78	<LOD	<LOD
MAR01183.048	Area i	Sample 10 0.00m	53.9	<LOD	<LOD
MAR01183.049	Area i	Sample 10 1.00m	59.8	<LOD	<LOD
MAR01183.050	Area i	Sample 10 2.00m	77	<LOD	<LOD
MAR01183.051	Area i	Sample 10 2.60m	87.2	<LOD	<LOD
Limits of detection (mg/kg dry weight):				0.005	0.005

Polyaromatic hydrocarbon data

Instructions:

1. Record the laboratory/contractor responsible for PAH analysis
2. Record the date the samples were analysed.
3. Enter full dataset for each sample in the analysis results table
4. Analysis results for individual PAHs should be reported in µg/kg (ppb) dry weight.
   THC should be reported as mg/kg (ppm)
5. Enter methdological limit of detection for each PAH prior to inputting raw data
6. Where analysis outputs are less than the limits of detection please enter text "<LOD"
7. Where copying and pasting entries please use paste values only
8. Where entering multiple Sample IDs please use the pop-up form
   IDs should be separated by a comma

Analysis information:

Laboratory/contractor:	SOCOTEC
Date of analysis:	15/11/2021

determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total Solids (%)	Acenapthene	Acenapthylene	Anthracene	Benz[a]anthracene
MAR01183.031	Area i	Sample 7 0.00m	49.5	58.3	53.4	114	281
MAR01183.032	Area i	Sample 7 1.00m	63.4	62	45.9	193	293
MAR01183.033	Area i	Sample 7 2.00m	59.7	303	125	453	874
MAR01183.034	Area i	Sample 7 3.00m	50.6	9.17	3.95	12.2	29.7
MAR01183.035	Area i	Sample 7 4.00m	62.5	6.3	2.24	7.19	19.4
MAR01183.036	Area i	Sample 7 4.80m	61.6	8.61	2.84	8.89	21.3
MAR01183.037	Area i	Sample 8 0.00m	42.9	6.94	2.52	7.36	15.3
MAR01183.038	Area i	Sample 8 1.00m	73.5	4.9	1.54	5.7	15.2
MAR01183.039	Area i	Sample 8 2.00m	77.6	9.84	3.13	13.3	36.3
MAR01183.040	Area i	Sample 8 3.00m	72.9	24.1	6.86	23.4	67.6
MAR01183.041	Area i	Sample 8 3.65m	77.4	15.7	4.42	17.1	48.9
MAR01183.042	Area i	Sample 9 0.00m	52.2	48.1	28.6	95.3	217
MAR01183.043	Area i	Sample 9 1.00m	55.7	54.1	37.2	121	254
MAR01183.044	Area i	Sample 9 2.00m	60.6	60.9	36.4	121	256
MAR01183.045	Area i	Sample 9 3.00m	77.8	14.9	5.3	19	52.3
MAR01183.046	Area i	Sample 9 4.00m	77	22.1	7.18	18.7	48.8
MAR01183.047	Area i	Sample 9 4.60m	78	21.1	7.29	18.3	55.6
MAR01183.048	Area i	Sample 10 0.00m	53.9	8.26	2.67	7.83	14.1
MAR01183.049	Area i	Sample 10 1.00m	59.8	1.52	<LOD	1.35	2.06
MAR01183.050	Area i	Sample 10 2.00m	77	4.74	2.4	5.94	20.2
MAR01183.051	Area i	Sample 10 2.60m	87.2	2.83	1.2	3.53	7.96
			Limits of detection (µg/kg dry weight):	1	1	1	1

						PAHs as dry weight (µg/kg dry weight)				
Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[e]pyrene	Benzo[k]fluoranthene	C1-Napthalenes	C1-Phenanthrenes	C2-Napthalenes	C3-Napthalenes	Chrysene	Dibenz[a,h]anthracene
453	400	441	419	209	764	489	612	546	291	67.9
429	379	401	376	202	654	407	509	448	268	74
1250	1100	1050	993	601	1250	771	921	823	815	205
35.1	58.3	96.5	96	15.2	242	175	176	137	57.5	14.3
22.5	46.6	77.5	72.4	8.19	161	134	120	108	35.2	9.4
25.2	44.8	80.8	70.6	11.2	168	134	137	121	37.6	8.32
17.6	28	36.9	32.1	10.3	99.8	65.9	77.2	74.2	19.8	4.4
18.3	22	45	41.1	5.05	85.4	93.6	87.2	96.8	22.3	3.43
40.8	49.3	88	79.8	19.2	226	221	190	199	48.4	7.86
91.9	108	238	197	28.9	409	429	391	420	112	25.1
64.7	84.7	165	141	19.9	310	293	260	251	74.2	18
290	280	303	292	145	540	386	424	386	214	53.5
341	344	389	359	184	738	483	583	529	238	68.4
323	316	335	328	169	760	506	600	542	248	46.2
64.3	76	159	137	22.3	313	317	272	265	83.3	14.7
69.2	81.6	184	152	23.3	554	403	400	392	90.1	19.9
74.2	90.8	188	174	25.5	696	459	451	402	97.7	22.6
18.6	33.7	60.8	53.3	7.54	122	122	107	95.9	25.3	6.2
1.59	3.33	5.77	5.77	1.5	10.6	12.2	8.74	7.97	4.55	<LOD
18.8	93	65.2	125	13.8	190	159	127	110	83	11.9
10.6	14.4	33.7	27.6	4.23	50.7	53.7	44.9	45.5	14.3	2.58
1	1	1	1	1	1	1	1	1	1	1

Fluoranthene	Fluorene	Indeno[123-c,d]pyrene	Napthalene	Perylene	Phenanthrene	Pyrene	**Total hydrocarbon content (mg/kg)**
488	90.9	405	301	176	443	504	21.7
536	98.2	390	268	178	431	552	104
1740	376	1110	689	439	1030	1470	180
54.4	26.7	36.9	71.3	1640	149	66.3	6.37
31.4	18.4	22.9	41.3	455	108	40.5	3.06
34.5	22.2	25.3	51	400	106	43.3	6.06
30.3	16.1	18.9	34.7	3280	53.4	38.5	5.47
22.4	10.2	9.5	19.7	7.36	71.3	37.9	28.3
49.1	21.8	21.6	54.4	12.4	161	76.1	36.2
106	66.4	54.8	79.9	27.9	316	152	26.5
71.7	42.7	43.3	65.7	18.4	224	108	32.5
436	72.3	267	209	139	362	433	27.9
484	96.3	335	278	198	455	492	41.4
506	100	306	300	178	477	483	48.1
79.6	38.5	38.9	66.6	20.8	236	121	22.3
92.1	66.6	43.1	177	22.2	333	121	4.36
94.8	82.2	45.3	252	20.6	388	128	7.62
27.7	18.5	16.8	29.4	233	90.1	35.3	2.08
5.85	3.44	1.77	4.58	2280	9.32	7.05	3.85
39.9	9.16	19.7	57.6	4.73	142	49.5	7.85
14	7.25	4.99	13.1	6.23	39.3	29.1	57.8
1	1	1	1	1	1	1	1

Polychlorinated biphenyl data

Instructions:

1. Record the laboratory/contractor responsible for PCB analysis
2. Record the date the samples were analysed.
3. Enter full dataset for each sample in the analysis results table
4. Analysis results should be reported in mg/kg (ppm) dry weight.
5. Enter methdological limit of detection for each PCB prior to inputting raw data
6. Where analysis outputs are less than the limits of detection please enter text "<LOD"
7. ICES 7 PCBs are highlighted in bold
8. Where copying and pasting entries please use paste values only
9. Where entering multiple Sample IDs please use the pop-up form
   IDs should be separated by a comma

Analysis information:

Laboratory/contractor:	SOCOTEC
Date of analysis:	04/11/2021

determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total Solids (%)	2,2',4,5,5'-Pentachlorobiphenyl CB101	2,3,3',4,4'-Pentachlorobiphenyl CB105	2,3,3',4',6-Pentachlorobiphenyl CB110	2,3',4,4',5-Pentachlorobiphenyl CB118	2,2',3,3',4,4'-Hexachlorobiphenyl CB128
MAR01183.031	Area i	Sample 7 0.00m	49.5	0.00059	0.00018	0.00069	0.00055	0.00014
MAR01183.032	Area i	Sample 7 1.00m	63.4	0.00158	0.00051	0.00185	0.00117	0.00018
MAR01183.033	Area i	Sample 7 2.00m	59.7	0.00405	0.00119	0.00419	0.00318	0.00078
MAR01183.034	Area i	Sample 7 3.00m	50.6	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.035	Area i	Sample 7 4.00m	62.5	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.036	Area i	Sample 7 4.80m	61.6	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.037	Area i	Sample 8 0.00m	42.9	0.00055	0.00052	0.00052	0.00049	0.00042
MAR01183.038	Area i	Sample 8 1.00m	73.5	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.039	Area i	Sample 8 2.00m	77.6	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.040	Area i	Sample 8 3.00m	72.9	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.041	Area i	Sample 8 3.65m	77.4	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.042	Area i	Sample 9 0.00m	52.2	0.0006	0.00018	0.00073	0.00055	0.00015
MAR01183.043	Area i	Sample 9 1.00m	55.7	0.00085	0.00031	0.00107	0.00084	0.0002
MAR01183.044	Area i	Sample 9 2.00m	60.6	0.00093	0.0003	0.00116	0.00071	0.00022
MAR01183.045	Area i	Sample 9 3.00m	77.8	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.046	Area i	Sample 9 4.00m	77	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.047	Area i	Sample 9 4.60m	78	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.048	Area i	Sample 10 0.00m	53.9	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.049	Area i	Sample 10 1.00m	59.8	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.050	Area i	Sample 10 2.00m	77	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.051	Area i	Sample 10 2.60m	87.2	<LOD	<LOD	<LOD	<LOD	<LOD
		Limits of detection (mg/kg dry weight):		0.00008	0.00008	0.00008	0.00008	0.00008

PCBs as mg/kg dry weight										
2,2',3,4,4',5'-Hexachlorobiphenyl CB138	2,2',3,4,5,5'-Hexachlorobiphenyl CB141	2,2',3,4',5',6-Hexachlorobiphenyl CB149	2,2',3,5,5',6-Hexachlorobiphenyl CB151	2,2',4,4',5,5'-Hexachlorobiphenyl CB153	2,3,3',4,4',5-Hexachlorobiphenyl CB156	2,3,3',4,4',6-Hexachlorobiphenyl CB158	2,2',3,3',4,4',5-Heptachlorobiphenyl CB170	2,2',5- Trichlorobiphenyl CB18	2,2',3,4,4',5,5'-Heptachlorobiphenyl CB180	2,2',3,4,4',5',6-Heptachlorobiphenyl CB183
0.00076	<LOD	0.00066	0.00017	0.00075	<LOD	<LOD	0.00021	0.00027	0.00063	0.00011
0.00228	0.00034	0.00166	0.0006	0.00198	0.00021	0.0003	0.00063	0.00094	0.00159	0.00036
0.00451	0.0007	0.00359	0.00095	0.00414	0.00042	0.00048	0.00121	0.00298	0.00352	0.00075
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.00052	0.00054	0.00058	0.00041	0.0006	0.0004	0.00031	0.00041	0.00026	0.00052	0.00034
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.00097	0.00017	0.0007	0.00023	0.00071	<LOD	0.00008	0.0002	0.0003	0.00059	0.00016
0.00144	0.00015	0.00089	0.00023	0.00125	0.00009	0.0002	0.0003	0.00034	0.00097	0.00023
0.00124	0.00022	0.00099	0.00029	0.00129	0.00013	0.00021	0.00032	0.00043	0.00095	0.00021
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008

2,2',3,4',5,5',6-Heptachlorobiphenyl CB187	2,2',3,3',4,4',5,5'-Octachlorobiphenyl CB194	2,4,4'-Trichlorobiphenyl CB28	2,4',5-Trichlorobiphenyl CB31	2,2',3,5'-Tetrachlorobiphenyl CB44	2,2',4,4'-Tetrachlorobiphenyl CB47	2,2',4,5'-Tetrachlorobiphenyl CB49	2,2',5,5'-Tetrachlorobiphenyl CB52	2,3',4,4'-Tetrachlorobiphenyl CB66
0.00041	0.00016	0.00074	0.00058	0.00045	0.00017	0.00036	0.00061	0.00056
0.00108	0.00044	0.00211	0.0017	0.00124	0.0005	0.00112	0.00182	0.00169
0.00216	0.00086	0.00471	0.00447	0.00316	0.00129	0.00353	0.0048	0.0042
<LOD	<LOD	0.00011	0.00012	<LOD	<LOD	<LOD	0.00011	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.00046	0.00034	0.00048	0.00055	0.0005	0.0003	0.00042	0.00052	0.00063
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.0004	0.00018	0.00073	0.00057	0.00043	0.00017	0.0004	0.0007	0.00063
0.00056	0.0002	0.00104	0.00085	0.00054	0.00023	0.00052	0.00088	0.00085
0.00066	0.00023	0.00114	0.00076	0.00061	0.00028	0.00061	0.00099	0.00101
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008

Organochlorine data

Instructions:

1. Record the laboratory/contractor responsible for analysis
2. Record the date the samples were analysed.
3. Enter full dataset for each sample in the analysis results table
4. Analysis results should be reported in mg/kg (ppm) dry weight.
5. Enter methdological limit of detection for each Organochlorine prior to inputting raw data
6. Where analysis outputs are less than the limits of detection please enter text "<LOD"
7. Where copying and pasting entries please use paste values only
8. Where entering multiple Sample IDs please use the pop-up form
   IDs should be separated by a comma

Analysis information:

Laboratory/contractor:	SOCOTEC
Date of analysis:	04/11/2021

determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total Solids (%)	alpha-hexachlorocyclohexane (AHCH)	beta-hexachlorocyclohexane (BHCH)
MAR01183.031	Area i	Sample 7 0.00m	49.5	<LOD	<LOD
MAR01183.032	Area i	Sample 7 1.00m	63.4	0.0001	0.0001
MAR01183.033	Area i	Sample 7 2.00m	59.7	0.0002	0.0005
MAR01183.034	Area i	Sample 7 3.00m	50.6	<LOD	<LOD
MAR01183.035	Area i	Sample 7 4.00m	62.5	<LOD	<LOD
MAR01183.036	Area i	Sample 7 4.80m	61.6	<LOD	<LOD
MAR01183.037	Area i	Sample 8 0.00m	42.9	0.0001	0.0005
MAR01183.038	Area i	Sample 8 1.00m	73.5	<LOD	<LOD
MAR01183.039	Area i	Sample 8 2.00m	77.6	<LOD	<LOD
MAR01183.040	Area i	Sample 8 3.00m	72.9	<LOD	<LOD
MAR01183.041	Area i	Sample 8 3.65m	77.4	<LOD	<LOD
MAR01183.042	Area i	Sample 9 0.00m	52.2	<LOD	<LOD
MAR01183.043	Area i	Sample 9 1.00m	55.7	<LOD	<LOD
MAR01183.044	Area i	Sample 9 2.00m	60.6	<LOD	<LOD
MAR01183.045	Area i	Sample 9 3.00m	77.8	<LOD	<LOD
MAR01183.046	Area i	Sample 9 4.00m	77	<LOD	<LOD
MAR01183.047	Area i	Sample 9 4.60m	78	<LOD	<LOD
MAR01183.048	Area i	Sample 10 0.00m	53.9	<LOD	<LOD
MAR01183.049	Area i	Sample 10 1.00m	59.8	<LOD	<LOD
MAR01183.050	Area i	Sample 10 2.00m	77	<LOD	<LOD
MAR01183.051	Area i	Sample 10 2.60m	87.2	<LOD	<LOD
Limits of detection (mg/kg dry weight):				0.0001	0.0001

Organochlorine pesticides as mg/kg dry weight					
gamma-hexachlorocyclohexane (GHCH)	Dieldrin	Hexachlorobenzene (HCB)	1,1-Dichloro-2,2-bis(p-chlorophenyl) ethylene (PPDDE)	Dichlorodiphenyltrichloro ethane (PPDDT)	1,1-dichloro-2,2-bis(p-chlorophenyl)ethane (PPTDE)
<LOD	0.0008	0.0006	0.0014	0.003	0.0075
0.0003	0.0029	0.001	0.003	0.0092	0.0169
0.0001	0.0118	0.0006	0.0096	0.0092	0.0382
<LOD	0.0002	0.0001	0.0001	0.0004	0.0007
<LOD	<LOD	<LOD	<LOD	0.0002	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.0004	0.0012	0.0004	0.0007	0.0004	0.0032
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.0001	0.0005	0.0005	0.0016	0.0021	0.0079
0.0003	0.001	0.0007	0.0018	0.0005	0.0088
0.0003	0.0011	0.0007	0.002	0.002	0.0116
<LOD	<LOD	<LOD	<LOD	<LOD	0.0002
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Brominated flame retardant data

Instructions:

1. Record the laboratory/contractor responsible for analysis
2. Record the date the samples were analysed.
3. Enter full dataset for each sample in the analysis results table
4. Analysis results should be reported in mg/kg (ppm) dry weight.
5. Enter methdological limit of detection for each BDE prior to inputting raw data
6. Where analysis outputs are less than the limits of detection please enter text "<LOD"
7. Where copying and pasting entries please use paste values only
8. Where entering multiple Sample IDs please use the pop-up form
   IDs should be separated by a comma

Analysis information:

Laboratory/contractor:	Cefas
Date of analysis:	11/04/2022

determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total Solids (%)	2,2′,4,4′,6-penta-bromodiphenyl ether (BDE100)	Hexabromodiphenyl ether (BDE138)	2,2′,4,4′,5,5′-hexa-bromodiphenyl ether (BDE153)	2,2′,4,4′,5,6′-hexa-bromodiphenyl ether (BDE154)
MAR01184.031	Area i	Sample 7 0.00m	49.5	0.000219	0.000044	0.000241	0.00012
MAR01184.032	Area i	Sample 7 1.00m	63.4	0.0000944	0.0000251	0.0000955	0.0000383
MAR01184.033	Area i	Sample 7 2.00m	59.7	<LOD	<LOD	<LOD	<LOD
MAR01184.034	Area i	Sample 7 3.00m	50.6	<LOD	<LOD	<LOD	<LOD
MAR01184.035	Area i	Sample 7 4.00m	62.5	<LOD	<LOD	<LOD	<LOD
MAR01184.036	Area i	Sample 7 4.80m	61.6	<LOD	<LOD	<LOD	<LOD
MAR01184.037	Area i	Sample 8 0.00m	42.9	0.0000886	<LOD	0.0000501	<LOD
MAR01184.038	Area i	Sample 8 1.00m	73.5	<LOD	<LOD	<LOD	<LOD
MAR01184.039	Area i	Sample 8 2.00m	77.6	<LOD	<LOD	<LOD	<LOD
MAR01184.040	Area i	Sample 8 3.00m	72.9	<LOD	<LOD	<LOD	<LOD
MAR01184.041	Area i	Sample 8 3.65m	77.4	<LOD	<LOD	<LOD	<LOD
MAR01184.042	Area i	Sample 9 0.00m	52.2	0.000316	0.0000535	0.000319	0.000198
MAR01184.043	Area i	Sample 9 1.00m	55.7	0.000538	0.0000787	0.000526	0.000283
MAR01184.044	Area i	Sample 9 2.00m	60.6	0.000544	0.0000906	0.000531	0.000287
MAR01184.045	Area i	Sample 9 3.00m	77.8	0.0000364	<LOD	0.0000466	0.0000253
MAR01184.046	Area i	Sample 9 4.00m	77	<LOD	<LOD	<LOD	<LOD
MAR01184.047	Area i	Sample 9 4.60m	78	<LOD	<LOD	<LOD	<LOD
MAR01184.048	Area i	Sample 10 0.00m	53.9	<LOD	<LOD	<LOD	<LOD
MAR01184.049	Area i	Sample 10 1.00m	59.8	<LOD	<LOD	<LOD	<LOD
MAR01184.050	Area i	Sample 10 2.00m	77	<LOD	<LOD	<LOD	<LOD
MAR01184.051	Area i	Sample 10 2.60m	87.2	<LOD	<LOD	<LOD	<LOD
			Limits of detection (mg/kg dry weight):	0.00002	0.00002	0.00002	0.00002

Brominated flame retardants as mg/kg dry weight							
2,2´,4-tri-bromodiphenylether (BDE17)	2,2′,3,4,4′,5′,6-heptabromodiphenyl ether (BDE183)	2,2',3,3',4,4',5,5',6,6'-decabrominated diphenyl ether (BDE 209)	2,4,4'-tribromodiphenyl ether (BDE28)	2,2′,4,4′-Tetrabromodiphenyl ether (BDE47)	2,3',4,4'-Tetrabromodiphenyl ether (BDE66)	2,2',3,4,4'-Pentabromodiphenyl ether (BDE85)	2,2',4,4',5-pentabromodiphenyl ether (BDE99)
0.000496	0.000089	0.0609	0.000324	0.00171	0.000199	0.0000971	0.00169
0.000286	0.0000201	0.00751	0.000134	0.000711	0.0000825	0.0000509	0.000709
<LOD	<LOD	0.000337	<LOD	0.0000334	<LOD	<LOD	0.0000301
<LOD	<LOD	0.000115	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000132	<LOD	<LOD	<LOD	<LOD	<LOD
0.000123	<LOD	0.00576	0.0000892	0.000368	<LOD	0.0000663	0.000364
<LOD	<LOD	0.000103	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.0015	<LOD	<LOD	<LOD	<LOD	<LOD
0.000564	0.000105	0.0954	0.000378	0.00177	0.000218	0.000109	0.00186
0.001	0.000208	0.0908	0.000681	0.00343	0.000402	0.000218	0.00378
0.000874	0.000108	0.0768	0.000649	0.00316	0.000367	0.000209	0.00358
<LOD	<LOD	0.00167	<LOD	0.0000808	<LOD	<LOD	0.000195
<LOD	<LOD	0.000622	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000219	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000211	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000192	<LOD	<LOD	<LOD	<LOD	<LOD
0.00002	0.00002	0.0001	0.00002	0.00002	0.00002	0.00002	0.00002