

# IMMINGHAM EASTERN RO-RO TERMINAL



MMO Results Template - Sediment Analysis – Part 1

Document Reference 9.5

APFP Regulations 2009 – Regulation 5(2)(g)

PINS Reference – TR030007

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## Document Information

Document Information		
<b>Project</b>	Immingham Eastern Ro-Ro Terminal	
<b>Document Title</b>	MMO Results Template - Sediment Analysis – Part 1	
<b>Commissioned by</b>	Associated British Ports	
<b>Document ref</b>	9.5	
<b>APFP Reg 2009</b>	Regulation 5(2)(q)	
<b>Prepared by</b>	Clyde & Co LLP	
<b>Date</b>	<b>Version</b>	<b>Revision Details</b>
12/2022	01 Submission	N/A

## Applicant Information

### Instructions:

- All applicants and laboratories should refer to the most recent guidance on sediment analysis in support of marine licence applications  
[Sediment analysis guidance](#)
- Full information must be provided under each relevant sheet of the workbook. Grey highlighted cells indicate where information can be entered.
- Where information cannot be provided, the applicant should consult with the MMO prior to submission.
- Worksheets are protected to prevent accidental amendments to calculated values. If amendments are required please consult with the MMO.
- Sample IDs used through the data output worksheets should correspond to Sample IDs provided on this worksheet.
- Where more than 6 dredge areas or 30 samples are required, please contact MMO.
- 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
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### 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 1 0.00m		53.629887	-0.174265	Site A	0	Area i
Sample 1 1.00m		53.629887	-0.174265	Site A	1	Area i
Sample 1 2.00m		53.629887	-0.174265	Site A	2	Area i
Sample 1 3.00m		53.629887	-0.174265	Site A	3	Area i
Sample 1 4.00m		53.629887	-0.174265	Site A	4	Area i
Sample 1 4.70m		53.629887	-0.174265	Site A	4.7	Area i
Sample 2 0.00m		53.629478	-0.175049	Site B	0	Area i
Sample 2 1.00m		53.629478	-0.175049	Site B	1	Area i
Sample 2 2.00m		53.629478	-0.175049	Site B	2	Area i
Sample 2 3.00m		53.629478	-0.175049	Site B	3	Area i
Sample 2 3.80m		53.629478	-0.175049	Site B	3.8	Area i
Sample 3 0.00m		53.627831	-0.171065	Site C	0	Area i
Sample 3 1.00m		53.627831	-0.171065	Site C	1	Area i
Sample 3 2.00m		53.627831	-0.171065	Site C	2	Area i
Sample 3 3.10m		53.627831	-0.171065	Site C	3.1	Area i
Sample 4 0.00m		53.627289	-0.173385	Site D	0	Area i
Sample 4 1.00m		53.627289	-0.173385	Site D	1	Area i
Sample 4 2.00m		53.627289	-0.173385	Site D	2	Area i
Sample 4 2.70m		53.627289	-0.173385	Site D	2.7	Area i
Sample 5 0.00m		53.627988	-0.174068	Site E	0	Area i
Sample 5 1.00m		53.627988	-0.174068	Site E	1	Area i
Sample 5 2.00m		53.627988	-0.174068	Site E	2	Area i
Sample 5 3.00m		53.627988	-0.174068	Site E	3	Area i
Sample 5 4.00m		53.627988	-0.174068	Site E	4	Area i
Sample 5 4.70m		53.627988	-0.174068	Site E	4.7	Area i
Sample 6 0.00m		53.628195	-0.176872	Site F	0	Area i
Sample 6 1.00m		53.628195	-0.176872	Site F	1	Area i
Sample 6 2.00m		53.628195	-0.176872	Site F	2	Area i
Sample 6 3.00m		53.628195	-0.176872	Site F	3	Area i
Sample 6 4.10m		53.628195	-0.176872	Site F	4.1	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 <sup>o</sup>	Total Solids (% total sediments)	Organic matter (total organic carbon)
MAR01183.001	Area i	Sample 1 0.00m	Odourless Brown Mud.		57.10	1.8900
MAR01183.002	Area i	Sample 1 1.00m	Odourless Brown Mud.		58.20	2.0700
MAR01183.003	Area i	Sample 1 2.00m	Odourless Brown Mud.		67.70	2.2400
MAR01183.004	Area i	Sample 1 3.00m	Odourless Brown Mud.		60.70	2.7400
MAR01183.005	Area i	Sample 1 4.00m	Brown Sandy Mud with an Earthy Odour.		68.50	2.3200
MAR01183.006	Area i	Sample 1 4.70m	Brown Sandy Mud with an Earthy Odour.		69.50	2.0600
MAR01183.007	Area i	Sample 2 0.00m	Odourless Brown Mud.		55.30	2.0700
MAR01183.008	Area i	Sample 2 1.00m	Odourless Brown Mud.		63.00	2.2600
MAR01183.009	Area i	Sample 2 2.00m	Brown Mud with an Earthy Odour.		73.30	1.0100
MAR01183.010	Area i	Sample 2 3.00m	Brown Mud with an Earthy Odour.		75.70	1.0600
MAR01183.011	Area i	Sample 2 3.80m	Odourless Brown Sandy Mud.		76.50	0.5900
MAR01183.012	Area i	Sample 3 0.00m	Odourless Brown Mud.		55.50	0.4300
MAR01183.013	Area i	Sample 3 1.00m	Odourless Brown Muddy Sand.		74.90	0.1500
MAR01183.014	Area i	Sample 3 2.00m	Odourless Brown Mud.		75.20	0.9400
MAR01183.015	Area i	Sample 3 3.10m	Odourless Brown Gravelly Mud.		87.80	0.6900
MAR01183.016	Area i	Sample 4 0.00m	Odourless Brown Mud with Organic Matter.		54.80	4.3700
MAR01183.017	Area i	Sample 4 1.00m	Odourless Brown Mud with Organic Matter.		41.60	6.7100
MAR01183.018	Area i	Sample 4 2.00m	Odourless Brown Muddy Sandy Gravel.		80.20	0.6600
MAR01183.019	Area i	Sample 4 2.70m	Odourless Brown Gravelly Mud.		87.10	0.8000
MAR01183.020	Area i	Sample 5 0.00m	Odourless Brown Mud.		52.90	2.1500
MAR01183.021	Area i	Sample 5 1.00m	Odourless Brown Mud.		50.50	2.1300
MAR01183.022	Area i	Sample 5 2.00m	Odourless Brown Muddy Sand.		75.40	0.3800
MAR01183.023	Area i	Sample 5 3.00m	Odourless Brown Sandy Mud.		76.10	1.1500
MAR01183.024	Area i	Sample 5 4.00m	Odourless Brown Gravelly Mud.		86.60	0.8800
MAR01183.025	Area i	Sample 5 4.70m	Odourless Brown Gravelly Mud.		87.60	0.8300
MAR01183.026	Area i	Sample 6 0.00m	Odourless Brown Mud.		63.70	1.6500
MAR01183.027	Area i	Sample 6 1.00m	Odourless Brown Mud.		59.00	1.8500
MAR01183.028	Area i	Sample 6 2.00m	Brown Mud with an Earthy Odour.		60.60	1.8700
MAR01183.029	Area i	Sample 6 3.00m	Brown Mud with an Earthy Odour.		55.80	3.1000
MAR01183.030	Area i	Sample 6 4.10m	-Brown Gravelly Muddy Sand with Shell Fragments and Organic Matter.		82.70	0.2900

\* **Visual appearance:** Include 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.

<sup>o</sup> **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	0.00	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	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	0.67
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	1.57	3.22	1.67	1.66	1.31	0.93	0.87	0.76	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.03	0.09	0.28	0.26	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.11	0.11	0.13	0.02	1.73
0.00	0.00	0.00	5.81	11.76	6.59	6.59	4.29	4.40	3.63	3.69	3.16	3.46	5.39
0.00	0.00	0.00	0.00	5.10	1.26	1.24	1.45	1.32	0.93	0.97	0.79	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	0.12	2.98
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	0.33	1.55	0.92	1.13	0.89	0.88	0.86	0.00	0.00
0.00	11.42	0.00	5.67	0.00	0.00	0.71	1.04	0.96	0.98	0.88	0.75	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	1.88	2.82	2.45	1.29	1.16	0.75	0.62	0.59	0.01	1.38

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	0.23	3.44	1.56	2.05	7.33	7.91	8.98	7.58	7.52	8.60	9.18	8.13
0.00	0.00	0.14	2.40	1.41	1.34	6.53	8.21	9.59	7.25	6.88	8.12	8.88	8.13
0.00	0.09	0.94	5.86	4.22	5.46	9.94	9.21	9.29	5.83	6.13	6.21	6.21	5.77
0.00	0.00	0.57	6.51	4.31	5.21	9.66	9.34	9.63	6.18	6.32	6.46	6.31	5.71
0.00	0.00	0.94	6.06	1.87	4.77	9.85	9.21	9.93	7.03	6.64	7.15	7.15	6.21
0.00	0.04	2.11	5.24	5.17	4.75	6.13	7.80	8.76	6.19	6.66	7.08	7.16	6.52
0.00	0.00	0.26	4.02	1.83	3.08	8.20	7.87	9.04	7.31	7.21	8.38	8.84	7.69
0.00	0.00	0.41	5.69	4.61	7.33	11.22	10.02	9.59	6.14	5.34	5.80	6.09	5.52
0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64	6.67	5.09	7.79	9.86	10.75	10.25
0.00	0.28	2.06	5.49	1.84	1.89	5.39	8.89	12.23	8.84	6.72	6.55	6.67	6.00
0.01	4.02	23.11	21.61	6.88	1.95	2.73	2.82	4.13	3.72	4.24	4.35	4.00	3.25
0.00	0.00	0.00	0.85	2.12	1.04	4.11	7.10	9.23	7.31	8.74	9.67	9.75	8.62
2.26	7.96	32.30	33.60	13.22	3.24	1.19	0.70	0.65	0.39	0.47	0.44	0.39	0.35
0.00	0.00	0.00	0.05	0.55	0.33	0.86	5.17	9.19	8.33	10.52	10.84	10.09	8.52
0.00	1.13	7.64	6.34	3.22	4.57	2.40	4.64	6.12	4.12	5.45	5.38	5.42	5.23
1.50	8.42	5.53	7.67	2.82	1.23	4.43	5.40	7.62	6.88	7.26	7.46	6.96	5.70
3.43	7.42	4.36	7.70	3.49	1.92	4.78	5.03	6.58	6.29	6.76	7.44	7.41	6.19
7.46	6.18	3.62	3.10	1.13	0.81	1.58	1.77	2.35	1.84	1.87	1.76	1.51	1.22
0.06	2.06	6.78	5.75	4.47	2.55	3.44	4.53	5.72	4.29	4.70	5.24	5.66	5.42
0.00	0.00	0.49	4.19	2.65	1.47	4.91	6.25	8.39	7.42	7.34	8.85	9.56	8.40
0.00	0.00	0.52	4.62	1.60	1.35	6.10	7.28	8.80	7.86	7.53	8.70	9.34	8.26
9.88	17.47	18.15	12.36	9.45	6.59	3.52	2.61	2.65	2.38	2.15	1.84	1.52	1.16
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	4.83	4.29	4.89	8.01	11.06	11.52
0.00	0.43	6.07	6.73	2.68	4.60	2.35	4.90	6.50	4.38	5.89	5.67	6.07	6.17
0.00	1.12	6.76	5.36	2.69	3.73	1.98	4.05	5.29	3.61	4.57	4.60	4.82	4.66
0.00	0.07	1.19	5.54	3.64	7.63	10.71	8.90	8.85	6.42	5.46	6.28	6.86	6.12
0.00	0.00	0.38	6.18	4.50	6.28	10.34	7.92	9.19	5.35	5.92	7.12	7.37	6.57
0.00	0.00	0.22	5.29	4.75	4.50	8.29	8.15	9.61	6.87	6.68	7.83	8.13	7.11
0.00	0.02	0.92	6.47	4.48	6.64	9.16	7.75	8.88	6.81	6.18	6.81	7.14	6.36
4.51	8.22	17.44	18.49	12.05	6.73	3.24	1.99	1.83	1.39	1.35	1.46	1.47	1.30

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
5.95	4.04	3.21	2.90	2.63	2.35	2.03	1.65	1.19	0.83	0.49	0.19	0.02	0.00
6.23	4.61	3.95	3.56	3.08	2.64	2.23	1.80	1.30	0.92	0.54	0.21	0.02	0.00
4.62	3.57	3.16	2.87	2.49	2.16	1.86	1.53	1.12	0.78	0.47	0.18	0.02	0.00
4.63	3.58	2.99	2.60	2.25	1.97	1.72	1.45	1.10	0.80	0.49	0.20	0.02	0.00
4.70	3.39	2.78	2.48	2.22	1.98	1.73	1.43	1.06	0.75	0.45	0.18	0.02	0.00
5.12	3.86	3.33	3.01	2.63	2.27	1.94	1.58	1.15	0.81	0.49	0.19	0.02	0.00
5.60	3.87	3.11	2.78	2.49	2.22	1.94	1.59	1.16	0.82	0.49	0.19	0.02	0.00
4.34	3.28	2.78	2.50	2.20	1.91	1.62	1.32	0.98	0.70	0.43	0.17	0.02	0.00
7.98	6.33	6.00	5.48	4.72	4.31	4.07	3.53	2.54	1.69	0.93	0.33	0.04	0.00
4.70	3.66	3.29	3.09	2.80	2.49	2.18	1.81	1.34	0.96	0.58	0.22	0.03	0.00
2.39	1.82	1.65	1.58	1.41	1.20	0.99	0.78	0.57	0.41	0.25	0.10	0.01	0.00
6.55	4.67	3.77	3.31	2.94	2.63	2.33	1.94	1.44	1.02	0.61	0.24	0.03	0.00
0.30	0.28	0.30	0.31	0.27	0.22	0.16	0.12	0.08	0.06	0.04	0.02	0.00	0.00
6.44	4.88	4.31	3.95	3.53	3.19	2.86	2.40	1.75	1.22	0.71	0.27	0.03	0.00
4.18	3.46	3.56	3.50	3.01	2.46	2.00	1.58	1.13	0.79	0.47	0.18	0.02	0.00
4.18	2.95	2.31	1.96	1.78	1.72	1.65	1.44	1.06	0.73	0.42	0.16	0.02	0.00
4.40	2.92	2.17	1.80	1.60	1.52	1.44	1.23	0.89	0.59	0.33	0.12	0.01	0.00
0.93	0.73	0.67	0.63	0.55	0.45	0.36	0.27	0.19	0.14	0.09	0.03	0.00	0.00
4.12	3.37	3.60	3.59	3.04	2.44	1.96	1.55	1.12	0.79	0.47	0.18	0.02	0.00
6.14	4.32	3.54	3.15	2.81	2.57	2.33	1.96	1.43	0.99	0.58	0.22	0.03	0.00
5.98	4.03	3.22	2.90	2.62	2.39	2.15	1.79	1.30	0.90	0.52	0.20	0.02	0.00
0.87	0.68	0.60	0.56	0.52	0.48	0.42	0.35	0.28	0.21	0.14	0.06	0.01	0.00
8.52	6.56	6.70	6.30	5.38	5.03	4.99	4.43	3.13	1.98	1.03	0.34	0.04	0.00
4.94	4.03	4.20	4.18	3.58	2.89	2.32	1.82	1.31	0.93	0.55	0.21	0.03	0.00
3.74	3.19	3.37	3.34	2.86	2.29	1.80	1.39	1.00	0.71	0.43	0.17	0.02	0.00
4.51	3.20	2.70	2.48	2.20	1.92	1.64	1.34	1.00	0.72	0.44	0.17	0.02	0.00
5.03	3.63	2.91	2.47	2.09	1.79	1.53	1.26	0.93	0.67	0.40	0.16	0.02	0.00
5.26	3.62	2.78	2.33	1.98	1.71	1.48	1.23	0.92	0.67	0.41	0.16	0.02	0.00
4.78	3.42	2.76	2.36	2.01	1.77	1.57	1.34	1.01	0.73	0.44	0.17	0.02	0.00
1.06	0.85	0.71	0.63	0.55	0.47	0.40	0.32	0.24	0.18	0.11	0.05	0.01	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 methodological 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)
MAR01183.001	Area i	Sample 1 0.00m	57.1	17.8	0.37	49.4	31.3	0.19	33.2	58.6	163
MAR01183.002	Area i	Sample 1 1.00m	58.2	26.5	0.46	60.6	36.5	0.23	35.2	69.3	191
MAR01183.003	Area i	Sample 1 2.00m	67.7	41.3	0.81	73.8	55	0.4	40.6	90.1	228
MAR01183.004	Area i	Sample 1 3.00m	60.7	62	0.87	113	69.6	0.5	54.8	140	324
MAR01183.005	Area i	Sample 1 4.00m	68.5	43.7	1.06	98.4	78.5	0.54	49.4	130	314
MAR01183.006	Area i	Sample 1 4.70m	69.5	34.6	1.2	77.9	71	0.47	43	110	279
MAR01183.007	Area i	Sample 2 0.00m	55.3	30.5	0.46	56.7	36.4	0.26	34.4	70.9	186
MAR01183.008	Area i	Sample 2 1.00m	63	43.4	0.99	75.8	56.1	0.44	39.9	94.7	250
MAR01183.009	Area i	Sample 2 2.00m	73.3	10.1	0.21	37	22.2	0.04	42.1	19.4	70.5
MAR01183.010	Area i	Sample 2 3.00m	75.7	9.7	0.25	30.1	21.8	0.01	38.2	16.5	65.8
MAR01183.011	Area i	Sample 2 3.80m	76.5	5	0.19	14.1	13.3	<LOD	20.8	9.7	40.8
MAR01183.012	Area i	Sample 3 0.00m	55.5	5.6	0.13	16.4	14.9	0.03	17.4	16.3	52
MAR01183.013	Area i	Sample 3 1.00m	74.9	2.4	0.08	8.4	10.1	<LOD	14.6	6.1	31.1
MAR01183.014	Area i	Sample 3 2.00m	75.2	5.2	0.2	20.4	19.2	0.01	28.4	15	57.5
MAR01183.015	Area i	Sample 3 3.10m	87.8	6.4	0.24	22.1	13.8	0.04	26.9	10.4	48.8
MAR01183.016	Area i	Sample 4 0.00m	54.8	13.8	0.33	37.5	18.9	0.03	41.3	19.7	93.2
MAR01183.017	Area i	Sample 4 1.00m	41.6	16.8	0.37	35.2	18.6	0.03	41.7	18.1	99.7
MAR01183.018	Area i	Sample 4 2.00m	80.2	6.6	0.23	14.2	21.5	0.02	24.7	9	60
MAR01183.019	Area i	Sample 4 2.70m	87.1	6.5	0.21	19	13.7	0.02	22	9.3	44.2
MAR01183.020	Area i	Sample 5 0.00m	52.9	17.7	0.38	49.7	32.7	0.13	35.2	62.8	167
MAR01183.021	Area i	Sample 5 1.00m	50.5	19.1	0.42	58.5	33	0.14	38.2	67.6	178
MAR01183.022	Area i	Sample 5 2.00m	75.4	4	0.17	9	9.7	0.01	11.6	6.9	35.2
MAR01183.023	Area i	Sample 5 3.00m	76.1	12	0.24	28.6	22.6	0.02	36.3	18	66.8
MAR01183.024	Area i	Sample 5 4.00m	86.6	7.8	0.18	19.2	14.9	0.03	24	13.3	45.8
MAR01183.025	Area i	Sample 5 4.70m	87.6	13.6	0.22	19.7	17	0.03	25.8	10.5	49.5
MAR01183.026	Area i	Sample 6 0.00m	63.7	16.4	0.3	43.8	29	0.14	30	48.7	129
MAR01183.027	Area i	Sample 6 1.00m	59	27	0.53	55.6	34.5	0.2	29.7	59.6	176
MAR01183.028	Area i	Sample 6 2.00m	60.6	37.8	1.04	79.6	55	0.42	36.1	86.8	221
MAR01183.029	Area i	Sample 6 3.00m	55.8	24.9	0.7	72.1	48.9	0.32	43.7	102	214
MAR01183.030	Area i	Sample 6 4.10m	82.7	7	0.36	11.3	9.4	0.04	15.9	9.1	43.8
<b>Limits of detection (mg/kg dry weight):</b>				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 methodological 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: 02/11/2021

### determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total solids (%)	Organotins as mg/kg dry weight	
				Dibutyltine (DBT)	Tributyltin (TBT)
MAR01183.001	Area i	Sample 1 0.00m	57.1	<LOD	<LOD
MAR01183.002	Area i	Sample 1 1.00m	58.2	0.013	0.016
MAR01183.003	Area i	Sample 1 2.00m	67.7	0.013	<LOD
MAR01183.004	Area i	Sample 1 3.00m	60.7	0.012	<LOD
MAR01183.005	Area i	Sample 1 4.00m	68.5	<LOD	<LOD
MAR01183.006	Area i	Sample 1 4.70m	69.5	<LOD	<LOD
MAR01183.007	Area i	Sample 2 0.00m	55.3	0.013	<LOD
MAR01183.008	Area i	Sample 2 1.00m	63	0.012	<LOD
MAR01183.009	Area i	Sample 2 2.00m	73.3	<LOD	<LOD
MAR01183.010	Area i	Sample 2 3.00m	75.7	<LOD	<LOD
MAR01183.011	Area i	Sample 2 3.80m	76.5	<LOD	<LOD
MAR01183.012	Area i	Sample 3 0.00m	55.5	<LOD	<LOD
MAR01183.013	Area i	Sample 3 1.00m	74.9	<LOD	<LOD
MAR01183.014	Area i	Sample 3 2.00m	75.2	<LOD	<LOD
MAR01183.015	Area i	Sample 3 3.10m	87.8	<LOD	<LOD
MAR01183.016	Area i	Sample 4 0.00m	54.8	<LOD	<LOD
MAR01183.017	Area i	Sample 4 1.00m	41.6	<LOD	<LOD
MAR01183.018	Area i	Sample 4 2.00m	80.2	<LOD	<LOD
MAR01183.019	Area i	Sample 4 2.70m	87.1	<LOD	<LOD
MAR01183.020	Area i	Sample 5 0.00m	52.9	<LOD	<LOD
MAR01183.021	Area i	Sample 5 1.00m	50.5	<LOD	<LOD
MAR01183.022	Area i	Sample 5 2.00m	75.4	<LOD	<LOD
MAR01183.023	Area i	Sample 5 3.00m	76.1	<LOD	<LOD
MAR01183.024	Area i	Sample 5 4.00m	86.6	<LOD	<LOD
MAR01183.025	Area i	Sample 5 4.70m	87.6	<LOD	<LOD
MAR01183.026	Area i	Sample 6 0.00m	63.7	<LOD	<LOD
MAR01183.027	Area i	Sample 6 1.00m	59	0.013	0.012
MAR01183.028	Area i	Sample 6 2.00m	60.6	<LOD	<LOD
MAR01183.029	Area i	Sample 6 3.00m	55.8	<LOD	<LOD
MAR01183.030	Area i	Sample 6 4.10m	82.7	<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 methodological 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: 08/11/2021

### determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total Solids (%)				
				Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene
MAR01183.001	Area i	Sample 1 0.00m	57.1	60.1	39	114	251
MAR01183.002	Area i	Sample 1 1.00m	58.2	54.3	34.9	111	230
MAR01183.003	Area i	Sample 1 2.00m	67.7	150	71.8	255	588
MAR01183.004	Area i	Sample 1 3.00m	60.7	173	104	321	675
MAR01183.005	Area i	Sample 1 4.00m	68.5	235	120	399	813
MAR01183.006	Area i	Sample 1 4.70m	69.5	351	139	516	977
MAR01183.007	Area i	Sample 2 0.00m	55.3	101	61.6	194	384
MAR01183.008	Area i	Sample 2 1.00m	63	144	68	275	551
MAR01183.009	Area i	Sample 2 2.00m	73.3	21.4	8.33	20.8	62.2
MAR01183.010	Area i	Sample 2 3.00m	75.7	17.8	5.57	17.6	54.7
MAR01183.011	Area i	Sample 2 3.80m	76.5	12.4	4.47	13.9	47.2
MAR01183.012	Area i	Sample 3 0.00m	55.5	23.9	15.6	44.8	125
MAR01183.013	Area i	Sample 3 1.00m	74.9	1.07	<LOD	1.74	4.2
MAR01183.014	Area i	Sample 3 2.00m	75.2	10.8	4.27	12.8	61.9
MAR01183.015	Area i	Sample 3 3.10m	87.8	8.09	2.91	11.3	31.2
MAR01183.016	Area i	Sample 4 0.00m	54.8	7.6	1.99	7.32	14.6
MAR01183.017	Area i	Sample 4 1.00m	41.6	5.22	1.03	4.33	8.69
MAR01183.018	Area i	Sample 4 2.00m	80.2	10.6	3.58	12.3	32
MAR01183.019	Area i	Sample 4 2.70m	87.1	10.5	2.62	12.5	32.3
MAR01183.020	Area i	Sample 5 0.00m	52.9	46.4	28.9	224	230
MAR01183.021	Area i	Sample 5 1.00m	50.5	59.9	36.3	94.8	242
MAR01183.022	Area i	Sample 5 2.00m	75.4	3.16	1.13	4.18	11.1
MAR01183.023	Area i	Sample 5 3.00m	76.1	31.7	10.6	24.6	86.7
MAR01183.024	Area i	Sample 5 4.00m	86.6	14.1	3.75	12.5	29.4
MAR01183.025	Area i	Sample 5 4.70m	87.6	10.3	3.21	9.38	24.5
MAR01183.026	Area i	Sample 6 0.00m	63.7	46.5	33.2	93.8	236
MAR01183.027	Area i	Sample 6 1.00m	59	60.5	38.6	133	287
MAR01183.028	Area i	Sample 6 2.00m	60.6	181	97.8	344	755
MAR01183.029	Area i	Sample 6 3.00m	55.8	14.1	5.27	15.8	34.6
MAR01183.030	Area i	Sample 6 4.10m	82.7	<LOD	<LOD	<LOD	4.73
Limits of detection (µg/kg dry weight):				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 methodological 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: 03/11/2021

### 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
MAR01183.001	Area i	Sample 1 0.00m	57.1	0.00067	0.00015	0.00086	0.00058	0.00013
MAR01183.002	Area i	Sample 1 1.00m	58.2	0.00096	0.00024	0.0014	0.00115	0.0002
MAR01183.003	Area i	Sample 1 2.00m	67.7	0.00199	0.00048	0.0024	0.00178	0.00035
MAR01183.004	Area i	Sample 1 3.00m	60.7	0.00406	0.00106	0.00496	0.00329	0.00098
MAR01183.005	Area i	Sample 1 4.00m	68.5	0.00483	0.00115	0.00531	0.00485	0.00091
MAR01183.006	Area i	Sample 1 4.70m	69.5	0.00382	0.00083	0.00409	0.00322	0.00053
MAR01183.007	Area i	Sample 2 0.00m	55.3	0.00107	0.0003	0.00138	0.001	0.00026
MAR01183.008	Area i	Sample 2 1.00m	63	0.00242	0.00084	0.00296	0.0023	0.00074
MAR01183.009	Area i	Sample 2 2.00m	73.3	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.010	Area i	Sample 2 3.00m	75.7	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.011	Area i	Sample 2 3.80m	76.5	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.012	Area i	Sample 3 0.00m	55.5	0.0001	<LOD	0.00014	0.00012	<LOD
MAR01183.013	Area i	Sample 3 1.00m	74.9	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.014	Area i	Sample 3 2.00m	75.2	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.015	Area i	Sample 3 3.10m	87.8	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.016	Area i	Sample 4 0.00m	54.8	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.017	Area i	Sample 4 1.00m	41.6	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.018	Area i	Sample 4 2.00m	80.2	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.019	Area i	Sample 4 2.70m	87.1	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.020	Area i	Sample 5 0.00m	52.9	0.00057	0.00022	0.00069	0.0005	0.0001
MAR01183.021	Area i	Sample 5 1.00m	50.5	0.00065	0.00023	0.00079	0.00047	0.00016
MAR01183.022	Area i	Sample 5 2.00m	75.4	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.023	Area i	Sample 5 3.00m	76.1	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.024	Area i	Sample 5 4.00m	86.6	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.025	Area i	Sample 5 4.70m	87.6	<LOD	<LOD	<LOD	<LOD	<LOD
MAR01183.026	Area i	Sample 6 0.00m	63.7	0.00055	0.00019	0.00074	0.00057	0.0001
MAR01183.027	Area i	Sample 6 1.00m	59	0.00105	0.00032	0.00113	0.00076	0.0002
MAR01183.028	Area i	Sample 6 2.00m	60.6	0.00357	0.00122	0.00402	0.00314	0.00071
MAR01183.029	Area i	Sample 6 3.00m	55.8	0.00171	0.00053	0.00181	0.00133	0.00024
MAR01183.030	Area i	Sample 6 4.10m	82.7	<LOD	<LOD	<LOD	<LOD	<LOD
Limits of detection (mg/kg dry weight):				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 methodological 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: 03/11/2021

### determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Total Solids (%)	alpha-hexachlorocyclohexane (AHCH)
MAR01183.001	Area i	Sample 1 0.00m	57.1	<LOD
MAR01183.002	Area i	Sample 1 1.00m	58.2	<LOD
MAR01183.003	Area i	Sample 1 2.00m	67.7	0.0002
MAR01183.004	Area i	Sample 1 3.00m	60.7	0.0003
MAR01183.005	Area i	Sample 1 4.00m	68.5	0.0002
MAR01183.006	Area i	Sample 1 4.70m	69.5	0.0002
MAR01183.007	Area i	Sample 2 0.00m	55.3	<LOD
MAR01183.008	Area i	Sample 2 1.00m	63	0.0003
MAR01183.009	Area i	Sample 2 2.00m	73.3	<LOD
MAR01183.010	Area i	Sample 2 3.00m	75.7	<LOD
MAR01183.011	Area i	Sample 2 3.80m	76.5	<LOD
MAR01183.012	Area i	Sample 3 0.00m	55.5	<LOD
MAR01183.013	Area i	Sample 3 1.00m	74.9	<LOD
MAR01183.014	Area i	Sample 3 2.00m	75.2	<LOD
MAR01183.015	Area i	Sample 3 3.10m	87.8	<LOD
MAR01183.016	Area i	Sample 4 0.00m	54.8	<LOD
MAR01183.017	Area i	Sample 4 1.00m	41.6	<LOD
MAR01183.018	Area i	Sample 4 2.00m	80.2	<LOD
MAR01183.019	Area i	Sample 4 2.70m	87.1	<LOD
MAR01183.020	Area i	Sample 5 0.00m	52.9	<LOD
MAR01183.021	Area i	Sample 5 1.00m	50.5	<LOD
MAR01183.022	Area i	Sample 5 2.00m	75.4	<LOD
MAR01183.023	Area i	Sample 5 3.00m	76.1	<LOD
MAR01183.024	Area i	Sample 5 4.00m	86.6	<LOD
MAR01183.025	Area i	Sample 5 4.70m	87.6	<LOD
MAR01183.026	Area i	Sample 6 0.00m	63.7	<LOD
MAR01183.027	Area i	Sample 6 1.00m	59	0.0002
MAR01183.028	Area i	Sample 6 2.00m	60.6	0.0002
MAR01183.029	Area i	Sample 6 3.00m	55.8	0.0002
MAR01183.030	Area i	Sample 6 4.10m	82.7	<LOD
Limits of detection (mg/kg dry weight):				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 methodological 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)
MAR01184.001	Area i	Sample 1 0.00m	57.1	0.000199	0.0000408	0.000245	0.000115
MAR01184.002	Area i	Sample 1 1.00m	58.2	0.000552	0.0000858	0.000516	0.000233
MAR01184.003	Area i	Sample 1 2.00m	67.7	0.0000299	<LOD	0.0000313	<LOD
MAR01184.004	Area i	Sample 1 3.00m	60.7	<LOD	<LOD	0.0000327	<LOD
MAR01184.005	Area i	Sample 1 4.00m	68.5	<LOD	<LOD	<LOD	<LOD
MAR01184.006	Area i	Sample 1 4.70m	69.5	<LOD	<LOD	<LOD	<LOD
MAR01184.007	Area i	Sample 2 0.00m	55.3	0.000134	0.0000494	0.000241	0.0000803
MAR01184.008	Area i	Sample 2 1.00m	63	0.000024	<LOD	0.0000272	<LOD
MAR01184.009	Area i	Sample 2 2.00m	73.3	<LOD	<LOD	<LOD	<LOD
MAR01184.010	Area i	Sample 2 3.00m	75.7	<LOD	<LOD	<LOD	<LOD
MAR01184.011	Area i	Sample 2 3.80m	76.5	<LOD	<LOD	<LOD	<LOD
MAR01184.012	Area i	Sample 3 0.00m	55.5	0.0000297	<LOD	0.000035	0.0000206
MAR01184.013	Area i	Sample 3 1.00m	74.9	<LOD	<LOD	<LOD	<LOD
MAR01184.014	Area i	Sample 3 2.00m	75.2	<LOD	<LOD	<LOD	<LOD
MAR01184.015	Area i	Sample 3 3.10m	87.8	<LOD	<LOD	<LOD	<LOD
MAR01184.016	Area i	Sample 4 0.00m	54.8	<LOD	<LOD	<LOD	<LOD
MAR01184.017	Area i	Sample 4 1.00m	41.6	<LOD	<LOD	<LOD	<LOD
MAR01184.018	Area i	Sample 4 2.00m	80.2	<LOD	<LOD	<LOD	<LOD
MAR01184.019	Area i	Sample 4 2.70m	87.1	<LOD	<LOD	<LOD	<LOD
MAR01184.020	Area i	Sample 5 0.00m	52.9	0.000267	0.0000538	0.000327	0.000174
MAR01184.021	Area i	Sample 5 1.00m	50.5	0.000543	0.000141	0.000705	0.000342
MAR01184.022	Area i	Sample 5 2.00m	75.4	<LOD	<LOD	<LOD	<LOD
MAR01184.023	Area i	Sample 5 3.00m	76.1	<LOD	<LOD	<LOD	<LOD
MAR01184.024	Area i	Sample 5 4.00m	86.6	<LOD	<LOD	<LOD	<LOD
MAR01184.025	Area i	Sample 5 4.70m	87.6	<LOD	<LOD	<LOD	<LOD
MAR01184.026	Area i	Sample 6 0.00m	63.7	0.000265	0.0000448	0.000276	0.000149
MAR01184.027	Area i	Sample 6 1.00m	59	0.000819	0.000305	0.00159	0.000533
MAR01184.028	Area i	Sample 6 2.00m	60.6	0.0000472	<LOD	0.0000615	<LOD
MAR01184.029	Area i	Sample 6 3.00m	55.8	<LOD	<LOD	<LOD	<LOD
MAR01184.030	Area i	Sample 6 4.10m	82.7	<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)
0.000474	0.0000824	0.0818	0.000348	0.00172	0.000232	0.000103	0.0018
0.00131	0.000127	0.0843	0.000962	0.00427	0.000534	0.000277	0.00439
0.000148	<LOD	0.0014	0.000127	0.000277	0.0000357	0.0000245	0.000295
0.0000836	<LOD	0.000361	0.000144	0.000337	0.0000484	0.0000358	0.000368
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000109	<LOD	<LOD	<LOD	<LOD	<LOD
0.000543	0.0000654	0.0455	0.000448	0.00197	0.000208	0.00012	0.00183
0.000212	<LOD	0.000556	0.000104	0.000241	0.000033	<LOD	0.00026
<LOD	<LOD	0.000687	<LOD	0.0000371	<LOD	<LOD	0.0000289
<LOD	<LOD	0.000137	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000148	<LOD	<LOD	<LOD	<LOD	<LOD
0.0000645	<LOD	0.0129	0.0000488	0.000204	0.0000311	<LOD	0.000199
<LOD	<LOD	0.000143	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000195	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000102	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000139	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.000397	0.0000861	0.062	0.00027	0.0015	0.000174	0.0000954	0.00177
0.000406	0.0000813	0.0795	0.000317	0.00164	0.000179	0.000217	0.00375
<LOD	<LOD	0.000364	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000203	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000109	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	0.000129	<LOD	<LOD	<LOD	<LOD	<LOD
0.000487	0.0000725	0.0717	0.00033	0.00161	0.000197	0.0000986	0.00169
0.00217	0.000162	0.0688	0.00112	0.00523	0.000546	0.000516	0.0082
0.000113	<LOD	0.00142	0.0000737	0.000412	0.0000412	0.000034	0.000475
<LOD	0.0000237	0.000225	<LOD	<LOD	<LOD	<LOD	<LOD
<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
0.00002	0.00002	0.0001	0.00002	0.00002	0.00002	0.00002	0.00002