MONA OFFSHORE WIND PROJECT

Annex 3.6 to the Applicant's response to Relevant Representation at the Procedural Deadline

NRW Sediment sample analysis proforma in response to NRW RR-11.170

Sediment sample results 2021(A)

Deadline: Procedural Deadline

Application Reference: EN01037

Document Number: MOCNS-J3303-RPS-10225

Document Reference: S_PD_3.6 25

June 2024

F01

Image of an offshore wind farm

www.morganandmona.com/en

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
F01	Examination – Procedural Deadline	RPS	Mona Offshore Wind Ltd	Mona Offshore Wind Ltd	June 2024

Prepared by:

RPS

Prepared for:

Mona Offshore Wind Ltd.

Applicant Information

Instructions:

1. All applicants and laboratories should refer to the most recent guidance on sediment analysis in support of marine licence applications on the Marine Licensing pages of the NRW website
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 NRW PS prior to submission.
4. Worksheets are protected to prevent accidental amendments to calculated values. If amendments are required please consult with NRW PS.
5. Sample IDs used through the data output worksheets should correspond to Sample IDs provided on this worksheet.

Marine licence applicant information:

Applicant:	Mona Offshore Wind Project Ltd
NRW Sample plan reference number:	
Application title:	Mona Offshore Wind Project
Date sampled:	08/08/2021 to 20/09/2021
Sampling location:	South Irish Sea

Dredge area tonnages:

Dredge Area	Dredging tonnages	% total dredged material	Total dredged material
Area i		N/A	0
Area ii		N/A	
Area iii		N/A	
Area iv		N/A	
Area v		N/A	
Area vi		N/A	

NRW PS use only

Sample numbers and locations

Sample ID	Excluded sample (NRW PS use)	Sample location (decimal degrees, WGS84)		Location name (as per sampling plan)	Sampling depth (m)	Dredge area
		Position latitude	Position longitude			
ENV31		-4.026233	53.626050		44	
ENV32		-3.945809	53.615159		47	
ENV33		-3.878836	53.609793		46	
ENV34		-3.794801	53.619212		40	
ENV35		-3.727216	53.614091		43	
ENV36		-4.021932	53.645511		48	
ENV37		-3.974554	53.646695		41	
ENV38		-3.869728	53.649693		43	
ENV39		-3.802648	53.644252		39	
ENV40		-3.735627	53.638769		37	
ENV41		-3.986842	53.675245		46	
ENV42		-3.905544	53.664003		46	
ENV43		-3.848712	53.663338		39	
ENV44		-3.800730	53.664556		38	
ENV45		-3.751438	53.688736		41	
ENV47		-3.927707	53.694905		44	
ENV48		-3.885659	53.699617		45	
ENV49		-3.804220	53.711193		45	
ENV50		-4.027575	53.735202		43	
ENV51		-3.918330	53.734623		42	
ENV52		-3.862174	53.733695		43	
ENV53		-3.993893	53.765049		44	
ENV54		-3.947494	53.746272		41	
ENV55		-3.851001	53.751149		39	
ENV56		-4.001360	53.789757		47	
ENV57		-3.915280	53.799249		38	
ENV59		-3.926187	53.824730		40	
ENV60		-3.975548	53.844607		44	
ENV61		-3.983981	53.869734		41	
ENV63		-4.017032	53.904827		41	

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:	Kenneth Pye Associates Ltd. and Ocean Ecology
Date of analysis:	

Physical characteristics analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Visual appearance*	Exempt from chemical analysis▫	Total Solids (% total sediments)
ENV31		ENV31	Gravelly sand with occaisonal cobbles and boulders	y	
ENV32		ENV32	Gravelly sand with shell fragments	y	
ENV33		ENV33	Gravelly sand with shell fragments	y	
ENV34		ENV34	Gravelly sand with shell fragments	y	
ENV35		ENV35	Gravelly sand with faunal burrows and shell fragments	y	
ENV36		ENV36	Gravelly sand with shell fragments		
ENV37		ENV37	Gravelly sand with shell fragments		
ENV38		ENV38	and with shell fragments. Occasional faunal burrows and boulders.		
ENV39		ENV39	Sand with shell fragments		
ENV40		ENV40	Gravelly sand with shell fragments		
ENV41		ENV41	Gravelly sand with shell fragments and occasional burrow	y	
ENV42		ENV42	Gravelly sand. Occasional faunal burrows	y	
ENV43		ENV43	ed sand with shell hash and fragments. Areas of gravelly	y	
ENV44		ENV44	sand with shell hash and fragments. Occasional faunal	y	
ENV45		ENV45	Sand with shell fragments, areas of frequent sand waves	y	
ENV47		ENV47	Gravelly sand with shell fragments		
ENV48		ENV48	Gravelly sand	y	
ENV49		ENV49	Gravelly sand with occasional cobbles.	y	
ENV50		ENV50	lly sand with shell fragments. Burrows and occasional cobbles.		
ENV51		ENV51	Gravelly sand wirth occasional cobbles and boulders		
ENV52		ENV52	Gravelly sand with occasional cobbles.		
ENV53		ENV53	ith areas of high gravel, some shell fragments. Occasion	y	
ENV54		ENV54	Gravelly sand	y	
ENV55		ENV55	Gravelly sand	y	
ENV56		ENV56	ravelly sand with shell fragments and occasional boulde	y	
ENV57		ENV57	d with shell fragments. Occasional rippled sand and faunal burrows.		
ENV59		ENV59	Gravelly sand. Occasional boulders and cobbles		
ENV60		ENV60	Gravelly sand	y	
ENV61		ENV61	Gravelly sand. Occasional boulders	y	
ENV63		ENV63	Sandy gravel with shell fragments		

* **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.

Organic matter (total organic carbon)	-5.5	-5.0	-4.5	-4.0	-3.5	-3.0	-2.5	-2.0	-1.5	-1.0	-0.5	0.0
	45mm	31.5mm	22.4mm	16mm	11.2mm	8mm	5.6mm	4mm	2.8mm	2mm	1.4mm	1mm
	0.00	0.00	0.00	0.00	0.00	3.40	7.50	8.30	6.30	3.40	3.00	4.00
	0.00	0.00	0.00	0.00	5.10	6.50	6.30	6.10	6.50	5.50	4.00	2.80
	0.00	0.00	0.00	0.00	0.00	7.60	5.10	8.10	8.90	7.90	7.30	4.60
	0.00	0.00	0.00	0.00	1.00	4.30	1.60	4.00	4.00	4.70	5.50	3.90
	0.00	0.00	0.00	0.00	0.20	0.40	2.20	2.60	6.10	7.70	9.20	5.70
0.2200	0.00	0.00	0.00	0.00	1.00	4.90	8.10	7.60	8.30	5.20	5.40	5.50
0.2500	0.00	0.00	0.00	0.00	1.90	3.60	2.30	4.90	4.20	5.20	6.60	5.50
0.2400	0.00	0.00	0.00	0.00	3.00	1.40	2.10	3.30	4.70	4.50	5.00	4.60
0.2400	0.00	0.00	0.00	0.00	0.00	0.00	0.70	1.80	4.20	6.90	10.60	10.70
0.2600	0.00	0.00	0.00	0.30	0.00	0.40	0.80	1.50	2.70	3.40	5.20	5.10
	0.00	0.00	0.00	0.00	1.90	6.30	7.00	5.30	5.20	4.00	4.50	4.60
	0.00	0.00	0.00	0.00	1.30	4.80	3.10	3.10	4.10	4.80	5.80	5.20
	0.00	0.00	0.00	0.00	0.00	0.00	0.40	1.10	3.00	6.20	12.60	14.00
	0.00	0.00	0.00	0.00	0.10	0.20	0.30	1.00	3.20	4.80	9.20	9.80
	0.00	0.00	0.00	0.00	0.20	0.70	1.50	2.80	2.50	2.60	3.10	1.90
0.2000	0.00	0.00	0.00	0.40	0.30	10.20	9.10	6.40	6.40	5.10	4.70	3.70
	0.00	0.00	0.00	0.00	2.30	5.60	5.00	3.60	5.70	5.10	4.60	3.10
	0.00	0.00	0.00	0.00	0.00	1.40	0.10	0.70	1.80	2.30	3.70	3.30
0.2400	0.00	0.00	0.00	0.00	1.80	1.50	6.40	6.40	5.60	3.50	5.60	6.10
0.3000	0.00	0.00	0.00	0.00	4.60	6.80	4.80	3.90	6.00	4.60	4.70	3.30
0.2000	0.00	0.00	0.00	0.00	1.80	2.90	2.20	2.30	3.40	3.90	4.30	3.40
	0.00	0.00	0.00	0.00	3.10	5.10	5.40	5.20	4.00	3.20	3.20	3.50
	0.00	0.00	0.00	0.00	2.70	7.10	4.80	6.00	8.10	6.40	5.80	3.70
	0.00	0.00	0.00	0.00	1.60	2.80	4.80	2.80	4.50	4.30	5.00	3.90
	0.00	0.00	0.00	0.00	0.00	2.40	1.20	1.70	3.20	4.00	3.90	4.30
0.1900	0.00	0.00	0.00	0.00	0.00	0.20	1.30	2.50	6.00	7.40	7.50	4.50
0.2000	0.00	0.00	0.00	0.00	3.30	6.80	4.40	3.50	4.90	6.10	5.50	3.50
	0.00	0.00	0.00	1.90	1.00	7.00	6.80	6.80	7.10	5.30	4.60	2.90
	0.00	0.00	0.00	0.00	1.70	7.90	2.70	3.50	4.70	4.50	4.50	2.90
0.1100	0.00	0.00	0.00	0.30	1.70	4.10	3.70	2.70	3.60	3.10	3.50	2.60

Particle size distribution (% at 0.5 phi intervals)

0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
707µm	500µm	353.6µm	250µm	176.8µm	125µm	88.39µm	63µm	44.2µm	31.3µm	22.1µm	15.6µm	11µm
13.80	12.70	12.80	10.70	4.30	1.10	7.00	0.40	0.30	0.40	0.50	0.60	0.90
7.90	9.10	11.90	12.40	6.00	1.30	0.70	0.40	0.30	0.40	0.40	0.60	0.80
7.10	6.00	7.60	9.50	5.20	1.00	0.70	0.60	0.50	0.70	0.70	0.90	1.30
8.40	9.30	12.30	15.60	9.40	2.10	1.10	0.70	0.50	0.70	0.80	1.00	1.40
9.60	7.60	8.70	13.10	10.80	3.40	1.30	0.80	0.50	0.70	0.70	0.90	1.20
18.00	14.00	6.00	3.90	2.40	1.10	0.80	0.40	0.40	0.40	0.50	0.50	0.9
19.10	17.10	9.00	6.50	3.60	1.40	0.90	0.50	0.40	0.40	0.50	0.60	1.00
16.60	16.50	12.20	9.80	5.00	1.00	0.70	0.50	0.30	0.50	0.60	0.70	1.10
19.80	14.20	6.30	4.50	3.50	1.50	1.00	0.60	0.50	0.80	0.90	1.30	1.80
19.50	19.70	12.10	8.80	4.40	1.10	0.70	0.60	0.60	0.80	0.90	1.20	1.60
15.80	14.30	10.30	7.60	3.30	0.60	0.50	0.40	0.30	0.40	0.50	0.60	0.90
15.40	16.90	11.40	6.50	3.70	1.30	0.70	0.60	0.50	0.60	0.70	0.80	1.20
29.70	18.80	8.90	2.70	0.60	0.20	0.20	0.10	0.10	0.10	0.10	0.20	0.20
23.40	24.30	15.40	5.20	1.20	0.30	0.10	0.10	0.10	0.10	0.10	0.10	0.10
14.00	19.10	18.10	14.50	6.60	0.70	0.50	0.40	0.30	0.50	0.60	0.90	1.30
9.80	9.20	10.20	9.50	4.10	0.70	0.50	0.40	0.40	0.40	0.60	0.80	1.10
8.80	12.00	14.30	12.30	5.10	0.80	0.50	0.50	0.40	0.60	0.60	0.90	1.20
9.90	11.40	16.60	20.30	10.80	1.70	0.90	0.70	0.50	0.80	0.90	1.20	1.70
11.70	11.70	13.40	9.60	3.50	1.00	0.90	0.50	0.40	0.70	0.70	0.90	1.30
8.40	9.50	13.20	12.40	5.00	0.80	0.70	0.50	0.40	0.60	0.60	0.80	1.20
9.10	10.30	15.50	17.90	8.50	1.00	0.70	0.60	0.40	0.60	0.70	0.90	1.30
14.60	13.70	12.30	10.10	3.80	0.80	0.90	0.60	0.50	0.70	0.80	1.00	1.30
8.30	8.30	11.10	10.90	4.40	0.80	0.70	0.50	0.40	0.60	0.60	0.80	1.20
9.90	10.20	14.80	15.40	5.90	0.80	0.80	0.60	0.40	0.70	0.70	0.90	1.30
14.80	15.20	16.30	14.50	7.00	1.80	0.90	0.60	0.40	0.50	0.50	0.60	0.90
10.40	13.90	21.40	16.30	4.70	0.80	0.40	2.00	0.10	0.20	0.20	0.20	0.30
6.60	7.70	11.80	16.30	10.40	2.80	1.20	0.50	0.30	0.30	0.30	0.30	0.50
6.30	6.20	10.10	12.20	7.30	2.30	1.20	0.70	0.50	0.60	0.60	0.70	1.00
7.50	7.50	12.40	16.80	10.00	2.60	1.10	0.60	0.40	0.50	0.50	0.70	1.00
5.80	6.80	11.20	22.80	15.60	3.50	1.10	0.50	0.40	0.40	0.50	0.60	0.90

7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5
7.8μm	5.5μm	3.9μm	2.75μm	1.95μm	1.38μm	0.98μm	0.69μm	0.49μm	0.34μm
1.00	0.90	0.80	0.60	0.40	0.20	0.20	0.70		
1.00	0.90	0.80	0.60	0.40	0.30	0.20	0.80		
1.60	1.60	1.50	1.10	0.70	0.50	0.40	1.50		
1.50	1.50	1.30	0.90	0.60	0.40	0.30	1.20		
1.30	1.30	1.10	0.80	0.50	0.40	0.30	1.00		
0.90	0.90	0.80	0.50	0.30	0.30	0.20	0.70		
1.00	1.00	0.90	0.50	0.30	0.30	0.20	0.70		
1.20	1.20	1.00	0.70	0.50	0.30	0.20	0.90		
1.90	1.70	1.40	1.00	0.60	0.40	0.30	1.30		
1.70	1.70	1.40	1.00	0.60	0.40	0.30	1.30		
1.10	1.10	0.90	0.70	0.40	0.30	0.20	0.90		
1.40	1.40	1.20	0.90	0.60	0.40	0.30	1.20		
0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.20		
0.10	0.10	0.10	0.10	0.10	0.00	0.10	0.20		
1.50	1.40	1.20	0.90	0.60	0.40	0.30	1.10		
1.20	1.20	1.00	0.70	0.40	0.30	0.20	0.90		
1.40	1.40	1.20	0.80	0.50	0.40	0.30	1.10		
1.90	1.80	1.50	1.10	0.70	0.50	0.30	1.30		
1.40	1.30	1.10	0.80	0.50	0.30	0.20	1.00		
1.40	1.30	1.10	0.80	0.60	0.40	0.30	1.10		
1.60	1.60	1.40	1.00	0.70	0.50	0.30	1.30		
1.40	1.20	1.00	0.70	0.40	0.30	0.20	0.90		
1.30	1.30	1.10	0.80	0.50	0.40	0.30	1.10		
1.50	1.50	1.30	0.90	0.60	0.40	0.30	1.30		
1.10	1.00	0.90	0.70	0.40	0.30	0.20	0.80		
0.30	0.30	0.20	0.10	0.10	0.10	0.10	0.40		
0.50	0.50	0.50	0.30	0.20	0.20	0.20	0.50		
1.20	1.20	1.10	0.80	0.60	0.40	0.30	1.10		
1.10	1.10	1.00	0.70	0.50	0.30	0.30	1.00		
0.90	0.90	0.80	0.50	0.30	0.30	0.20	0.70		

12.0	12.5	13.0	13.5	14.0	14.5	>14.5
0.24μm	0.17μm	0.12μm	0.09μm	0.06μm	0.04μm	<0.04μm

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:	Kenneth Pye Associates Ltd. and Ocean Ecology
Date of analysis:	

Determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Metals as mg/kg dry weight							
			Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Copper (Cu)	Mercury (Hg)	Nickel (Ni)	Lead (Pb)	Zinc (Zn)
ENV36		ENV36	22.8	0.11	15.2	8.2	0.05	15.4	10	31.7
ENV37		ENV37	14.4	0.08	12.1	6.3	0.05	12.1	11.8	32.7
ENV38		ENV38	15.2	0.06	10.3	5.9	0.05	9.2	14.2	29.6
ENV39		ENV39	16	0.07	9.1	6.2	0.05	9.2	12.9	25.5
ENV40		ENV40	13.6	0.06	11.1	6.2	0.09	9.2	13.2	28.1
ENV47		ENV47	14.8	0.04	14.1	7	0.05	13.5	10.6	30.3
ENV50		ENV50	17.1	0.04	13.6	6.9	0.05	12.9	14.3	32.9
ENV51		ENV51	12.5	0.07	14	6.7	0.05	11.9	12.2	29.8
ENV52		ENV52	13.7	0.07	15.6	6.7	0.06	12.7	14.7	35.4
ENV57		ENV57	12.5	<LOD	7.1	5.1	0.04	7	8	18.5
ENV59		ENV59	18.8	0.06	13.1	7.9	0.04	11.4	15.6	25.2
ENV63		ENV63	9.9	0.05	9.4	6.3	0.07	8.3	10	27.2
Limits of detection (mg/kg dry weight):			1	0.04	0.5	2	0.01	0.5	2	3

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:	N/A
Date of analysis:	N/A

Determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Organotins as mg/kg dry weight	
			Dibutyltine (DBT)	Tributyltin (TBT)

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:	Kenneth Pye Associates Ltd. and Ocean Ecology
Date of analysis:	

Determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Acenapthene	Acenapthylene
ENV36		ENV36	<LOD	<LOD
ENV37		ENV37	<LOD	<LOD
ENV38		ENV38	<LOD	<LOD
ENV39		ENV39	<LOD	<LOD
ENV40		ENV40	<LOD	<LOD
ENV47		ENV47	<LOD	<LOD
ENV50		ENV50	<LOD	<LOD
ENV51		ENV51	<LOD	<LOD
ENV52		ENV52	<LOD	<LOD
ENV57		ENV57	<LOD	<LOD
ENV59		ENV59	<LOD	<LOD
ENV63		ENV63	<LOD	<LOD
Limits of detection (µg/kg dry weight):			1	1

Anthracene	Benz[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[e]pyrene	Benzo[k]fluoranthene	C1-Napthalenes
<LOD	3.01	3.6	8.1	6.29	5.85	2.41	8.14
<LOD	2.99	3.78	7.45	6.08	5.87	3.01	6.5
<LOD	3.99	5.1	10.1	8.05	7.81	4.15	8.12
<LOD	4.23	5.55	10.3	8.29	8.35	3.31	8.48
1.39	6.38	8.18	14.1	11.9	11.8	5.85	11.4
<LOD	1.85	2.31	4.84	3.94	3.88	2.15	4.17
<LOD	3.39	4.09	10.1	7.27	6.65	2.8	8.33
<LOD	4.28	4.99	10.4	7.8	7.7	4.05	7.99
<LOD	3.74	4.93	9.5	7.58	7.61	3.78	7
<LOD	2.07	1.47	2.73	2.95	1.91	<LOD	5.48
<LOD	1.66	1.84	3.53	3.45	2.93	2.07	3.34
<LOD	2.17	2.55	5.31	4.17	4.04	2.18	9.99
1	1	1	1	1	1	1	1

PAHs as dry weight (µg/kg dry weight)							
C1-Phenanthrenes	C2-Napthalenes	C3-Napthalenes	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[123-c,d]pyrene
7.76	6.98	6.05	4.9	1.38	5.2	1.06	6.67
5.95	5.34	4.29	4.46	1.27	4.97	1.09	6.87
8.07	7.12	5.34	5.46	1.51	6.57	1.22	9.12
8.24	7.08	5.57	5.98	1.85	6.93	1.3	9.78
11.6	9.62	8.66	7.71	2.64	10	1.76	14.2
4.07	3.46	2.58	2.94	<LOD	3.09	<LOD	4.4
8.58	7.17	5.55	5.71	1.58	6.42	1.56	8.21
9.23	6.73	6.45	5.31	1.73	6.9	1.34	9.35
7.08	6.01	4.96	5	1.54	6.18	1.14	9.05
13.6	8.57	11.4	3.36	<LOD	2.57	<LOD	1.73
3.86	2.96	2.67	3.43	<LOD	2.81	<LOD	3.37
6.24	8	6.15	2.87	<LOD	3.42	<LOD	4.52
1	1	1	1	1	1	1	1

Napthalene	Perylene	Phenanthrene	Pyrene	**Total hydrocarbon content (mg/kg)**
2.86	1.33	6.38	4.71	92.68
2.68	1.43	4.78	4.39	83.2
3.23	1.87	5.85	5.95	108.63
3.49	1.98	6.26	6.29	113.26
4.6	2.75	8.87	9.72	163.13
1.67	<LOD	3.07	2.8	51.22
3.39	1.64	7.3	5.34	105.08
3.2	1.9	6.44	6.08	111.87
2.74	1.47	5.22	5.72	100.25
1.44	<LOD	7.71	3.07	70.06
1.31	<LOD	2.97	2.8	45
3.09	<LOD	4.4	3.11	72.21
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:	Kenneth Pye Associates Ltd. and Ocean Ecology
Date of analysis:	

Determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	2,2',4,5,5'-Pentachlorobiphenyl CB101	2,3,3',4,4'-Pentachlorobiphenyl CB105
ENV36		ENV36	<LOD	<LOD
ENV37		ENV37	<LOD	<LOD
ENV38		ENV38	<LOD	<LOD
ENV39		ENV39	<LOD	<LOD
ENV40		ENV40	0.0001	0.00019
ENV47		ENV47	<LOD	<LOD
ENV50		ENV50	<LOD	<LOD
ENV51		ENV51	<LOD	<LOD
ENV52		ENV52	<LOD	<LOD
ENV57		ENV57	<LOD	<LOD
ENV59		ENV59	<LOD	<LOD
ENV63		ENV63	<LOD	<LOD
Limits of detection (mg/kg dry weight):			0.00008	0.00008

2,3,3',4',6-Pentachlorobiphenyl CB110	2,3',4,4',5-Pentachlorobiphenyl CB118	2,2',3,3',4,4'-Hexachlorobiphenyl CB128	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
<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
0.00012	0.0001	<LOD	0.00018	<LOD	<LOD	0.0001	0.00018
<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

PCBs as mg/kg dry weight							
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	2,2',3,4',5,5',6-Heptachlorobiphenyl CB187	2,2',3,3',4,4',5,5'-Octachlorobiphenyl CB194
<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
0.00016	0.00013	0.00012	<LOD	0.00011	<LOD	0.00019	0.00011
<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

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
<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	0.00016
<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

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:	Kenneth Pye Associates Ltd. and Ocean Ecology
Date of analysis:	

Determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Organochlorine pesticides as mg/kg dry weight							
			alpha-hexachlorocyclohexane (AHCH)	beta-hexachlorocyclohexane (BHCH)	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)
ENV36		ENV36	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV37		ENV37	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV38		ENV38	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV39		ENV39	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV40		ENV40	<LOD	<LOD	<LOD	<LOD	<LOD	0.0004	0.0002	0.0002
ENV47		ENV47	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV50		ENV50	<LOD	<LOD	<LOD	0.0002	<LOD	<LOD	<LOD	<LOD
ENV51		ENV51	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV52		ENV52	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV57		ENV57	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV59		ENV59	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD
ENV63		ENV63	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<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 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:	
Date of analysis:	

Determinand analysis outputs:

Laboratory sample number	Dredge Area	Sample ID(s)	Brominated flame retardants as mg/kg dry weight											
			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)	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)