

Confidential

Report No. CSB 2025-119



Food Chemistry Analytical Unit
CISB
Agri-Food and Biosciences Institute
(AFBI)
Stoney Road
Belfast BT4 3SD

STUDY PLAN 10/2025

To: FSANI

Official Control Services for Shellfish Chemical Contaminants 2025

Results included overleaf.

Abnormalities or departures from standard conditions: None.

Remarks: None.

Sample condition: Acceptable.

Method used:	PAHs	SOP PRL 147
	Heavy Metals	SOP CSD 605

Date of issue of report: 27/05/2025



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Table 1: Sample information.

Lab Number	Site name/Production Area	Site Identification Ref (SIR)	Species collected	Sample Date
2500523	Narrow Water	NW - Wild Fishery	Mussels	28/01/2025
2500617	Middlebank	B1 AFFNI 55	Mussels	03/02/2025
2500665	Killough Harbour	K1 AFFNI 18	Oysters	04/02/2025
2500718	Fair Green	C11 AFFNI 84	Oysters	05/02/2025
2500815	Ballyedmond	C7 AFFNI 73	Oysters	11/02/2025
2501011	Paddy's Point	S7 AFFNI 76	Oysters	17/02/2025
2501012	Shingle Bay	L3 AFFNI 88	Oysters	17/02/2025

Three individual samples per site were collected and combined to make a composite sample for all analyses.



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Table 2: PAH results in $\mu\text{g/kg}$ on a fresh (wet) weight basis

Lab Number	EFSA 4	Naphthalene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	7H-Benzo (c) Fluorene	Benzo (a) Anthracene	Cyclopenta (c,d) Pyrene	Chrysene	5 Methyl Chrysene	Benzo (b) Fluoranthene	Benzo (k) Fluoranthene	Benzo (j) Fluoranthene	Benzo (a) Pyrene	Indeno (123,cd) Pyrene	Dibenzo (a,h) Anthracene	Benzo (ghi) Perylene	Dibenzo (a,l) Pyrene	Dibenzo (a,e) Pyrene	Dibenzo (a,i) Pyrene	Dibenzo (a,h) Pyrene
2500523	18.2	0.80	8.2	1.3	16.5	13.7	<0.50	4.0	<0.50	6.3	<0.50	5.5	2.7	2.6	2.4	2.3	0.69	2.5	<0.50	<0.50	<0.50	<0.50
2500617	12.1	0.74	6.0	1.2	8.9	9.7	<0.50	2.2	<0.50	5.0	<0.50	3.2	1.6	1.4	1.7	1.6	<0.50	2.1	<0.50	<0.50	<0.50	<0.50
2500665	15.0	0.90	4.4	0.79	8.4	6.2	<0.50	2.1	<0.50	6.0	<0.50	5.5	2.5	1.8	1.5	1.3	0.51	1.2	<0.50	<0.50	<0.50	<0.50
2500718	18.4	0.97	7.7	0.75	13.8	9.8	<0.50	2.3	<0.50	7.9	<0.50	6.7	2.8	2.1	1.5	1.5	<0.50	1.4	<0.50	<0.50	<0.50	<0.50
2500815	18.2	0.62	7.5	0.90	14.3	10.4	<0.50	3.0	<0.50	8.5	<0.50	5.1	2.7	1.7	1.7	1.5	0.52	1.8	<0.50	<0.50	<0.50	<0.50

Table 2 continued: PAH results in µg/kg on a fresh (wet) weight basis

Lab number	EFSA 4	Naphthalene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	7H-Benzo (c) Fluorene	Benzo (a) Anthracene	Cyclopenta (c,d) Pyrene	Chrysene	5 Methyl Chrysene	Benzo (b) Fluoranthene	Benzo (k) Fluoranthene	Benzo (j) Fluoranthene	Benzo (a) Pyrene	Indeno (123,cd) Pyrene	Dibenzo (a,h) Anthracene	Benzo (ghi) Perylene	Dibenzo (a,i) Pyrene	Dibenzo (a,e) Pyrene	Dibenzo (a,i) Pyrene	Dibenzo (a,h) Pyrene
2501011	22.3	0.68	8.9	0.74	18.4	11.6	<0.50	2.8	<0.50	11.1	<0.50	6.8	3.7	2.2	1.6	1.8	0.52	2.0	<0.50	<0.50	<0.50	<0.50
2501012	20.6	0.68	8.2	0.83	16.9	11.8	<0.50	2.6	<0.50	9.9	<0.50	6.5	2.7	1.9	1.6	1.3	0.52	1.3	<0.50	<0.50	<0.50	<0.50
LOD (µg/kg)		0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
LOQ (µg/kg)		0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
HORRAT _r		1.34	0.48	1.00	0.32	0.32	0.85	0.56	0.57	0.26	0.37	0.30	0.40	0.36	1.09	1.19	0.38	0.55	0.67	1.08	1.27	0.97
Uncertainty		0.20	0.17	0.19	0.17	0.17	0.38	0.14	0.26	0.20	0.17	0.14	0.18	0.16	0.19	0.29	0.17	0.18	0.30	0.49	0.58	0.44



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Table 3: Metal results for Lead, Cadmium and Mercury, expressed as mg/kg on a fresh (wet) weight basis.

Lab Number	Lead	Cadmium	Mercury
2500523	0.57	<0.20	<0.10
2500617	0.78	<0.20	<0.10
2500665	<0.30	0.25	<0.10
2500718	<0.30	0.40	<0.10
2500815	<0.30	0.31	<0.10
2501011	0.52	0.22	<0.10
2501012	0.34	0.28	<0.10
LOD (mg/kg)	0.15	0.10	0.05
LOQ (mg/kg)	0.30	0.20	0.10
HORRATr	0.23	0.21	0.17
Uncertainty	0.07	0.08	0.09