

Study Plan 10/2021

To: FSANI, 10 A-C Clarendon Road, Belfast

Official Controls Services for Shellfish Chemical Contaminants 2021

Results included on the following pages.

Abnormalities or departures from standard conditions: None.

Remarks: None.

Sample condition: Acceptable.

Method used: PAHs (SOP 147), Heavy Metals (SOP 33, 39, 41, 163).

Date of issue of report: 26/05/2021

Table 1: Sample information

Lab Number	Site name/Production Area	Site Identification Ref (SIR)	Species collected	Sample Date
2100372	Middlebank	B1 AFFNI 55	Mussels	25/01/2021
2100562	Killough	K1 AFFNI 18	Oysters	02/02/2021
2100590	Shingle Bay	L3 AFFNI 88	Oysters	03/02/2021
2100948	Fair Green	C11 AFFNI 84	Oysters	17/02/2021
2100949	Ballyedmond	C7 AFFNI 73	Oysters	17/02/2021
2100950	Narrow Water	NW – Wild Fishery	Mussels	17/02/2021
2102053	Paddy's Point	S7 AFFNI 76	Oysters	22/03/2021

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

Table 2: PAH results in pg/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
2100372	15.2	0.67	3.3	0.69	6.4	6.6	<0.50	3.9	<0.50	4.7	<0.50	4.5	2.2	1.9	2.0	2.8	<0.50	2.3	<0.50	<0.50	<0.50
2100562	22.9	0.63	5.4	0.69	11.9	8.7	<0.50	4.3	<0.50	8.1	<0.50	9.0	3.7	3.2	1.5	2.3	<0.50	1.2	<0.50	<0.50	<0.50
2100590	26.4	1.0	10.4	1.1	20.2	15.4	<0.50	5.0	<0.50	11.7	<0.50	8.3	3.1	2.4	1.3	1.4	<0.50	0.55	<0.50	<0.50	<0.50
2100948	25.8	0.65	7.2	0.71	16.6	12.0	<0.50	4.8	<0.50	10.0	<0.50	9.0	3.8	3.3	2.0	2.4	<0.50	0.94	<0.50	<0.50	<0.50
2100949	30.2	0.79	12.0	1.0	23.9	20.1	<0.50	6.6	<0.50	13.5	<0.50	8.3	4.3	2.6	1.8	2.3	<0.50	1.3	<0.50	<0.50	<0.50
2100950	23.6	0.68	7.1	1.1	19.2	16.6	<0.50	6.9	<0.50	7.6	<0.50	6.6	3.2	3.3	2.4	3.0	<0.50	2.1	<0.50	<0.50	<0.50
2102053	21.3	<0.50	4.9	<0.50	11.4	5.7	<0.50	3.3	<0.50	7.9	<0.50	8.8	3.7	2.9	1.3	2.6	<0.50	1.2	<0.50	<0.50	<0.50
LOD (µg/kg)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

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
LOQ (µg/kg)		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
HORRAT _r		1.34	0.48	1.0	0.32	0.32	0.85	0.56	0.57	0.26	0.37	0.3	0.4	0.36	1.09	1.19	0.38	0.55	0.67	1.08	1.27
Uncertainty		0.2	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	0.3	0.49	0.58

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

Lab Number	Lead	Cadmium	Mercury
2100372	0.96	0.21	<0.10
2100562	<0.30	0.34	<0.10
2100590	<0.30	0.22	<0.10
2100948	<0.30	0.34	<0.10
2100949	<0.30	0.32	<0.10
2100950	0.55	<0.20	<0.10
2102053	<0.30	0.33	<0.10
LOD (mg/kg)	0.15	0.10	0.05
LOQ (mg/kg)	0.30	0.20	0.10
HORRATr	0.27	0.16	0.17
Uncertainty	0.09	0.07	0.09