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SIMONA

LABORATORY REPORT COLLECTION OF THE 26 SAMPLING SITES FROM DRB BASELINE NETWORK

DELIVERABLE 3.3.4

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Authors:

AUSTRIA: Edith Haslinger (AIT), Paul Kinner (AIT), Franko Hummer (UBA), Tanja Knoll (GBA), Sebastian Pfleiderer (GBA), Heinz Reitner (GBA), Barbara Träxler (GBA), Christian Benold (GBA), Gerhard Hobiger (GBA)

BOSNIA and HERZEGOVINA: Ismir Hajdarević (FZZG), Aleksandra Kovačević (JUVS), Jelena Vićanović (JUVS)

BULGARIA: Atanas Hikov (GI-BAS), Irena Peytcheva (GI-BAS), Petyo Filipov (GI-BAS), Zlatka Milalovska (GI-BAS).

CROATIA: Ana Čaić Janković (HGI-CGS), Danijel Ivanišević (HGI-CGS), Ajka Šorša (HGI-CGS), Lidija Galović (HGI-CGS), Đorđa Medić (CW-HV), Jasmina Antolić (CW-HV), Neven Bujas (CW-HV)

CZECH REPUBLIC: Jarmila Halířová (CHMI), Libor Mikl (CHMI), Pavel Stierand (CHMI)

HUNGARY: Zsófia Kovacs (OVF), Katalin Mária Dudás (MATE), Gyozo Jordan (MATE), Zoltan Világosi (Bálint Analitika Ltd.).

MOLDAVIA: Oleg Bogdevich (IC), Igor Nicoară (IGS-ASM)

MONTENEGRO: Neda Dević (GSM)

ROMANIA: Anca-Marina Vijdea (IGR), Veronia Alexe (IGR)

SERBIA: Vladica Cvetković (UB-FMG), Prvoslav Marjanović (JCI), Kristina Sarić (UB-FMG), Dragica Vulić (JCI)

SLOVAKIA: Jarmila Nováková (SGIDS), Anna Gibalová (SGIDS), Zuzana Keršňáková (SGIDS)

SLOVENIA: Meta Dobnikar (GEOZS), Teja Čeru (GEOZS), Kristina Koret (GEOZS)

Responsible(s) of the deliverable: Anca-Marina Vijdea (RO-IGR)

Co-responsible(s) of the deliverable: Gyozo Jordan (HU-MATE)

Contents

1. INTRODUCTION

The present report present the results of the chemical analyses performed on sediment samples collected in two nationale baseline stations per country in SIMONA partner countries. The reasons for selecting the national baseline sediment stations proposed for future sediment monitoring were described in deliverable D.3.2.2 "Table of sampling sites providing details for DRB baseline network". The field sampling campaign was presented in the report D.3.3.3 "Sampling report collection of the 26 sampling sites from DRB baseline network", accompanied by the Field Observation Sheets developed by SIMONA Quality Sampling Protocol (Šorša, A., The SIMONA Project Team. 2019), photographs and maps of the sites.

Suspended, stream/bottom and active floodplain ("top soil" TS, i. e. top layer and "bottom soil" BS i.e. bottom layer) sediments were analysed for the list of hazardous substances described in Appendix 2 of the above mentioned protocol, and in accordance with the analytical standards specified in SIMONA Quality Laboratory Protocol (Čaić Janković, A., Šorša, A., The SIMONA Project Team. 2019).

The samples were firstly analysed in SIMONA Reference Laboratory, Balint Analitika Ltd., in Budapest, Hungary. Then they were sent to the respective countries to be also analysed in an accredited national laboratory, contracted according to the public procurement rules of the DTP.

This reports contains the analysis bulletins, organized on type of analysed matrix: suspended sediment, stream/bottom sediment and active floodplain sediment, from both SIMONA Reference Laboratory and country national accredited laboratories.

The comparions with national and other European thresholds of pollutants in sediments and soils and the interpretation of the results will be part of the Output O.3.4 "DRB baseline network for HSs sediment monitoring".

2. ANALYTICAL METHODOLOGY FOR SEDIMENT SAMPLES' ANALYSES OF BASELINE STATIONS IN SIMONA REFERENCE LABORATORY

In SIMONA partner countries, 26 baseline stations were selected based on criteria described in the report D.3.2.2 TABLE OF SAMPLING SITES FOR DRB BASELINE NETWORK IN SIMONA COUNTRIES, delivered in Period 3.

In period 6 of the project each country sampled the two national baseline stations, collecting:

- Stream/Bottom sediment (vaccum core and/or scoop in small rivers, and Van Venn graber in the Danube)
- Suspended sediment (by barrel method and centrifuge – the last one only in Czech Republic)
- Active floodplain sediment at two level depths: 0- 5cm ("Top soil" or top layer) and 40 – 50 cm ("Bottom soil" or bottom layer), usually by shovel/spade.

All countries kept the collected samples in cool conditions (5° C) and sent them for the chemical analyses of hazardous substances, together with the method standard, to the selected Reference Laboratory of the project, BALINT ANALITIKA in Budapest. Description of the sampling performed at the national Baseline Network Stations can be found in project Deliverable D.3.3.3.

This chapter presents the preparation of the sediment samples in the ReferenceLaboratory, the equipment and the methodological standard.

Sample preparation of SIMONA samples for ICP-MS measurements

Equipment: Milestone UltraWAVE, microwave-assisted sample preparation

Chemicals used:

- Nitric acid (Fischer Chemicals, 67-69%, TraceMetal Grade)
- Hydrochloric acid (Merck, 30%, Suprapur ®)

Method of digestion:

The samples were received in dried and powdered form. 0.125 g (±1%) samples were measured using an analytical scale and put into single-use borosilicate vials. 1.0 ml concentrated nitric acid

and 3.0 ml concentrated hydrochloric acid was added to the samples. The vials were closed by PTFE caps, and put into the Milestone Ultrawave sample preparation device.

The following digestion method was used:

Steps of the method	Time (minutes)	Temperature (°C)
1st step	10	110
2nd step	15	180
3rd step	10	230
4th step	5	230
5th step	cooling	

After the digestion the content of the vials were filtered into 25 ml volumetric flasks. The vials were washed by deionised water, and then the flasks were filled to the marks. The thus obtained solutions were diluted tenfold and the internal standard solution (ISTD) was added to it.
Method of dilution:

- 1 ml solution of the digested sample
- 8,6 ml deionised water
- 0,3 ml concentrated nitric acid
- 0,1 ml ISTD solution (5 ppm Sc, Lu, Rh)

Sample preparation of SIMONA samples for GC-MS measurements

~20g from each sample was measured using an analytical scale into Erlenmeyer flasks. 20 ml acetone was added to the samples and the flasks were placed into ultrasonic bath for 30 minutes. After they were cooled, 20 ml dichloromethane was added and was placed back to ultrasonic bath for 30 minutes again.

The extracts were dried with sodium sulfate and 10 ml sample was evaporated to 1 ml in nitrogene flow. After this preparation the pesticides were measured on GC-MS.

For PAH measurment we applied the same preparation method, but at the end the 1 ml solvent was changed to hexane.

Table 2.1: Table of sediments from SIMONA countries baseline network stations sent for analyses at SIMONA Reference Laboratory (BALINT ANALITIKA Ltd.), in order of sample delivery date.

	Suspended sediment	Bottom sediment	Floodplain sediment	Sample quantity	Components to analyze
Croatia	HR01SS			~5l	PAH(s), pesticides, metals
	HR02SS			~5l	PAH(s), pesticides, metals
		HR01BS		~750g	PAH(s), pesticides, metals
		HR02BS		~750g	PAH(s), pesticides, metals
			HR01FSTS	~750g	PAH(s), pesticides, metals
			HR01FSBS	~750g	PAH(s), pesticides, metals
			HR02FSTS	~750g	PAH(s), pesticides, metals
			HR02FSBS	~750g	PAH(s), pesticides, metals
Austria	AT01SS BARRELL			2*15l	metals ONLY!
	AT01SS BOKSZ			11*3l	PAH(s), pesticides, metals
		AT01BS01		2*~1000g	PAH(s), pesticides, metals
		AT01BS02		2*~1000g	PAH(s), pesticides, metals
			AT01FS1TS	~1000g	PAH(s), pesticides, metals
			AT01FS1BS	~1000g	PAH(s), pesticides, metals
			AT01FS2TS	~2500g	PAH(s), pesticides, metals
			AT01FS2BS	~2500g	PAH(s), pesticides, metals
	AT02SS BARRELL			2*15l	metals ONLY!
	AT02SS BOKSZ			8*3l	PAH(s), pesticides, metals
		AT02BS01		~750g	PAH(s), pesticides, metals
		AT02BS02		~750g	PAH(s), pesticides, metals
			AT02FSTS	~750g	PAH(s), pesticides, metals
			AT02FSBS	~750g	PAH(s), pesticides, metals
Czech Republic	CZ-01-SS			~30l	PAH(s), pesticides, metals
	CZ-01-SS CENTRIFUGED			~70g	PAH(s), pesticides, metals
	CZ-02-SS			~30l	PAH(s), pesticides, metals
	CZ-02-SS CENTRIFUGED			~70g	PAH(s), pesticides, metals
		CZ-01-BS		755g	PAH(s), pesticides, metals
		CZ-02-BS		853g	PAH(s), pesticides, metals
			CZ-01-FS-BS	832g	PAH(s), pesticides, metals
			CZ-01-FS-TS	700g	PAH(s), pesticides, metals
			CZ-02-FS-BS	884g	PAH(s), pesticides, metals
			CZ-02-FS-TS	855g	PAH(s), pesticides, metals
Bulgaria	BG-01-SS			~3l	PAH(s), pesticides, metals
	BG-02-SS			~3l	PAH(s), pesticides, metals
		BG-01-BS		2*~750g	PAH(s), pesticides, metals
		BG-02-BS		2*~750g	PAH(s), pesticides, metals
			BG-01-FS-BS	2*~750g	PAH(s), pesticides, metals
			BG-01-FS-TS	2*~750g	PAH(s), pesticides, metals
			BG-02-FS-BS	2*~750g	PAH(s), pesticides, metals
			BG-02-FS-TS	2*~750g	PAH(s), pesticides, metals
Slovakia	SK01SS			2*~5l	PAH(s), pesticides, metals
	SK02SS			2*~5l	PAH(s), pesticides, metals
		SK01BS		2*~750g	PAH(s), pesticides, metals
		SK02BS		2*~750g	PAH(s), pesticides, metals
			SK01FSTS	2*~750g	PAH(s), pesticides, metals
			SK01FSBS	2*~750g	PAH(s), pesticides, metals
			SK02FSTS	2*~750g	PAH(s), pesticides, metals
			SK02FSBS	2*~750g	PAH(s), pesticides, metals
Bosnia-Herzegovina	SBA02SS/BR			~2l	PAH(s), pesticides, metals
		SBA02BSDR		~750g	PAH(s), pesticides, metals
			SBA02FSSP/BS	~750g	PAH(s), pesticides, metals
			SBA02FSSP/TS	~750g	PAH(s), pesticides, metals
	SBA01SS/BR			~2l	PAH(s), pesticides, metals
		SBA01/BS		~750g	PAH(s), pesticides, metals
			SBA01FSSP/BS	~750g	PAH(s), pesticides, metals
			SBA01FSSP/TS	~750g	PAH(s), pesticides, metals
Republic of Montenegro	ME-01-SS			~2l	PAH(s), pesticides, metals
	ME-02-SS			~2l	PAH(s), pesticides, metals
		ME-01-BS		~800g / 1jar	PAH(s), pesticides, metals
		ME-02-BS		~800g / 1jar	PAH(s), pesticides, metals
			ME-01-FS-TS	~800g / 1jar	PAH(s), pesticides, metals
			ME-01-FS-BS	~800g / 1jar	PAH(s), pesticides, metals
			ME-02-FS-TS	~800g / 1jar	PAH(s), pesticides, metals
			ME-02-FS-BS	~800g / 1jar	PAH(s), pesticides, metals

Table 2.1 contiunued

	Suspended sediment	Bottom sediment	Floodplain sediment	Sample quantity	Components to analyze
Geological Survey of Slovenia		SI/01/BS		~1000g	PAH(s), pesticides, metals
		SI/02/BS		~1000g	PAH(s), pesticides, metals
			SI/01/FS/TS	~1000g	PAH(s), pesticides, metals
			SI/02/FS/TS	~1000g	PAH(s), pesticides, metals
			SI/02/FS/BS	~1000g	PAH(s), pesticides, metals
Hungarian University of Agriculture and Life Sciences (MATE)	HU-01-SS			~30l	PAH(s), pesticides, metals
	HU-02-SS			~30l	PAH(s), pesticides, metals
		HU-01-BS		~750g	PAH(s), pesticides, metals
		HU-02-BS		~750g	PAH(s), pesticides, metals
			HU-01-FS-TS	~1000g	PAH(s), pesticides, metals
			HU-01-FS-BS	~1000g	PAH(s), pesticides, metals
			HU-01-FS-TS	~1000g	PAH(s), pesticides, metals
			HU-01-FS-BS	~1000g	PAH(s), pesticides, metals
Geological Institute of Romania (IGR)	RO/SV-ZM/SS/R 1/2			~5l	PAH(s), pesticides, metals
	RO/SV-ZM/SS/R 2/2			~5l	PAH(s), pesticides, metals
	RO/SI-CL/SS/R			~8l	PAH(s), pesticides, metals
		RO/BZ/BS/L/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/BZ/BS/C/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/BZ/BS/R/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SV-ZM/BS/L/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SV-ZM/BS/C/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SV-ZM/BS/R/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SI-CL/BS/L/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SI-CL/BS/C/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SI-CL/BS/R/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SL/BS/L/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SL/BS/C/r		~1000g / 1 jar	PAH(s), pesticides, metals
		RO/SL/BS/R/r		~1000g / 1 jar	PAH(s), pesticides, metals
Institute of Geology and Seismology (Republic of Moldova)		MD-01-BS		~750g	PAH(s), pesticides, metals
		MD-02-BS		~750g	PAH(s), pesticides, metals
Jaroslav Černi Institute in Serbia		SR-01-BS		~750g	PAH(s), pesticides, metals
		SR-02-BS		~750g	PAH(s), pesticides, metals

3. LABORATORY ANALYZED BASELINE STATIONS IN SIMONA COUNTRIES

3.1 AUSTRIA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF AUSTRIA

The sediments sampled in the two Austrian national baseline stations were analysed at country level in the Laboratory of the Geological Survey of Austria. Only metals could be determined.

Sample preparation was identical to the one performed in SIMONA Reference Laboratory, Balint Analitika.

The measurements were performed with an ICP-MS 7500 (Agilent). Each sample was measured twice, because there was not enough material to measure more often. As reference standards there were used: CRM-TMDW-250 (water) and CRM-84793.180 (ethanol).

3.1.1. Hainburg on Danube

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.1.1.1. Results from BALINT ANALITIKA for 1st Austrian NB sampling point – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
AT01 SS BARREL	15.04.2021	suspended sediment	As	16.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/1
AT01 SS BARREL	15.04.2021	suspended sediment	Cd	0.41	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/1
AT01 SS BARREL	15.04.2021	suspended sediment	Cr	67.5	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/1
AT01 SS BARREL	15.04.2021	suspended sediment	Cu	53.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/1
AT01 SS BARREL	15.04.2021	suspended sediment	Hg	0.54	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/1
AT01 SS BARREL	15.04.2021	suspended sediment	Ni	41.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/1
AT01 SS BARREL	15.04.2021	suspended sediment	Pb	39.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/1
AT01 SS BARREL	15.04.2021	suspended sediment	Zn	287	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/1
AT01 SS BOX	15.04.2021	suspended sediment	As	9.58	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Cd	0.28	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Cr	59.2	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Cu	31.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Hg	0.16	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Ni	31.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Pb	20.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Zn	120	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Anthracene	0.017	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Fluoranthene	0.109	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Benzo(a)pyrene	0.049	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.101	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.034	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.064	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/2
AT01 SS BOX	15.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/2

Table 3.1.1.2. Results from BALINT ANALITIKA for 1st Austrian NB sampling point – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
AT01 BS 01	15.04.2021	bottom sediment	As	8.43	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Cd	0.20	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Cr	41.4	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Cu	20.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Hg	0.36	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Ni	25.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Pb	14.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Zn	95.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Anthracene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Fluoranthene	0.074	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Benzo(a)pyrene	0.033	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.064	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.024	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.038	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/3
AT01 BS 01	15.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/3
AT01 BS 02	15.04.2021	bottom sediment	As	6.88	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Cd	0.18	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Cr	39.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Cu	16.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Hg	0.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Ni	22.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Pb	11.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Zn	79.5	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Anthracene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Fluoranthene	0.061	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Benzo(a)pyrene	0.028	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.053	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.019	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.031	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/4
AT01 BS 02	15.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/4

Table 3.1.1.3. Results from BALINT ANALITIKA for 1st Austrian NB sampling point – active floodplain sediments ("top soil" i.e. top layer TS and"bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
AT01 FS1 TS	15.04.2021	soil	As	6.51	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/5
AT01 FS1 TS	15.04.2021	soil	Cd	0.14	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/5
AT01 FS1 TS	15.04.2021	soil	Cr	33.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/5
AT01 FS1 TS	15.04.2021	soil	Cu	12.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/5
AT01 FS1 TS	15.04.2021	soil	Hg	0.30	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/5
AT01 FS1 TS	15.04.2021	soil	Ni	18.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/5
AT01 FS1 TS	15.04.2021	soil	Pb	11.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/5
AT01 FS1 TS	15.04.2021	soil	Zn	53.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/5
AT01 FS1 TS	15.04.2021	soil	Anthracene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/5
AT01 FS1 TS	15.04.2021	soil	Fluoranthene	0.020	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/5
AT01 FS1 TS	15.04.2021	soil	Benzo(a)pyrene	0.012	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/5
AT01 FS1 TS	15.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.022	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/5
AT01 FS1 TS	15.04.2021	soil	Benzo(g,h,i)perylene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/5
AT01 FS1 TS	15.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.013	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/5
AT01 FS1 TS	15.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/5
AT01 FS1 TS	15.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/5
AT01 FS1 TS	15.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/5
AT01 FS1 TS	15.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/5
AT01 FS1 TS	15.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/5
AT01 FS1 TS	15.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/5
AT01 FS1 BS	15.04.2021	soil	As	6.50	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/6
AT01 FS1 BS	15.04.2021	soil	Cd	0.10	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/6
AT01 FS1 BS	15.04.2021	soil	Cr	30.1	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/6
AT01 FS1 BS	15.04.2021	soil	Cu	9.70	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/6
AT01 FS1 BS	15.04.2021	soil	Hg	1.06	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/6
AT01 FS1 BS	15.04.2021	soil	Ni	16.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/6
AT01 FS1 BS	15.04.2021	soil	Pb	8.86	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/6
AT01 FS1 BS	15.04.2021	soil	Zn	38.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/6
AT01 FS1 BS	15.04.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/6
AT01 FS1 BS	15.04.2021	soil	Fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/6
AT01 FS1 BS	15.04.2021	soil	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/6
AT01 FS1 BS	15.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/6
AT01 FS1 BS	15.04.2021	soil	Benzo(g,h,i)perylene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/6
AT01 FS1 BS	15.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/6
AT01 FS1 BS	15.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/6
AT01 FS1 BS	15.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/6
AT01 FS1 BS	15.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/6
AT01 FS1 BS	15.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/6
AT01 FS1 BS	15.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/6
AT01 FS1 BS	15.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/6
AT01 FS2 TS	15.04.2021	soil	As	5.10	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/7
AT01 FS2 TS	15.04.2021	soil	Cd	0.12	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/7
AT01 FS2 TS	15.04.2021	soil	Cr	30.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/7
AT01 FS2 TS	15.04.2021	soil	Cu	12.5	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/7
AT01 FS2 TS	15.04.2021	soil	Hg	0.34	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/7
AT01 FS2 TS	15.04.2021	soil	Ni	18.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/7
AT01 FS2 TS	15.04.2021	soil	Pb	9.15	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/7
AT01 FS2 TS	15.04.2021	soil	Zn	66.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/7
AT01 FS2 TS	15.04.2021	soil	Anthracene	0.021	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/7
AT01 FS2 TS	15.04.2021	soil	Fluoranthene	0.107	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/7
AT01 FS2 TS	15.04.2021	soil	Benzo(a)pyrene	0.048	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/7
AT01 FS2 TS	15.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.085	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/7
AT01 FS2 TS	15.04.2021	soil	Benzo(g,h,i)perylene	0.058	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/7
AT01 FS2 TS	15.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.052	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/7
AT01 FS2 TS	15.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/7
AT01 FS2 TS	15.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/7
AT01 FS2 TS	15.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/7
AT01 FS2 TS	15.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/7
AT01 FS2 TS	15.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/7
AT01 FS2 TS	15.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/7
AT01 FS2 BS	15.04.2021	soil	As	7.29	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/8
AT01 FS2 BS	15.04.2021	soil	Cd	0.19	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/8
AT01 FS2 BS	15.04.2021	soil	Cr	39.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/8
AT01 FS2 BS	15.04.2021	soil	Cu	17.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/8
AT01 FS2 BS	15.04.2021	soil	Hg	0.34	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/8
AT01 FS2 BS	15.04.2021	soil	Ni	22.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/8
AT01 FS2 BS	15.04.2021	soil	Pb	15.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/8
AT01 FS2 BS	15.04.2021	soil	Zn	90.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/8
AT01 FS2 BS	15.04.2021	soil	Anthracene	0.027	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/8
AT01 FS2 BS	15.04.2021	soil	Fluoranthene	0.214	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/8
AT01 FS2 BS	15.04.2021	soil	Benzo(a)pyrene	0.155	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/8
AT01 FS2 BS	15.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.219	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/8
AT01 FS2 BS	15.04.2021	soil	Benzo(g,h,i)perylene	0.089	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/8
AT01 FS2 BS	15.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.127	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/8
AT01 FS2 BS	15.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/8
AT01 FS2 BS	15.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/8
AT01 FS2 BS	15.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/8
AT01 FS2 BS	15.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/8
AT01 FS2 BS	15.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/8
AT01 FS2 BS	15.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/8

RESULTS FROM THE AUSTRIAN NATIONAL LABORATORY

Table 3.1.1.4. Results from the Austrian laboratory for 1st Austrian NB sampling point – 2 samples of stream/bottom sediment, 2 samples of active floodplain sediment ("top soil" and "bottom soil"), and 1 sample of suspended sediment in sedimentation box

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
AT01 BS 01	23.06.2021	bottom sediment	As				ICP-MS (Agilent)	GCH-2021-014-002
AT01 BS 01	23.06.2021	bottom sediment	Cd	0.21	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-002
AT01 BS 01	23.06.2021	bottom sediment	Cr	51.44	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-002
AT01 BS 01	23.06.2021	bottom sediment	Cu	26.86	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-002
AT01 BS 01	23.06.2021	bottom sediment	Hg	0.20	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-002
AT01 BS 01	23.06.2021	bottom sediment	Ni	32.16	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-002
AT01 BS 01	23.06.2021	bottom sediment	Pb	20.14	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-002
AT01 BS 01	23.06.2021	bottom sediment	Zn	109.14	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-002
AT01 BS 02	23.06.2021	bottom sediment	As				ICP-MS (Agilent)	GCH-2021-014-003
AT01 BS 02	23.06.2021	bottom sediment	Cd	0.21	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-003
AT01 BS 02	23.06.2021	bottom sediment	Cr	45.44	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-003
AT01 BS 02	23.06.2021	bottom sediment	Cu	25.55	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-003
AT01 BS 02	23.06.2021	bottom sediment	Hg	0.15	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-003
AT01 BS 02	23.06.2021	bottom sediment	Ni	28.27	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-003
AT01 BS 02	23.06.2021	bottom sediment	Pb	30.46	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-003
AT01 BS 02	23.06.2021	bottom sediment	Zn	101.33	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-003
AT01 FS1 BS	23.06.2021	soil	As				ICP-MS (Agilent)	GCH-2021-014-005
AT01 FS1 BS	23.06.2021	soil	Cd	0.13	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-005
AT01 FS1 BS	23.06.2021	soil	Cr	42.24	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-005
AT01 FS1 BS	23.06.2021	soil	Cu	17.35	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-005
AT01 FS1 BS	23.06.2021	soil	Hg	0.06	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-005
AT01 FS1 BS	23.06.2021	soil	Ni	24.41	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-005
AT01 FS1 BS	23.06.2021	soil	Pb	13.25	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-005
AT01 FS1 BS	23.06.2021	soil	Zn	48.96	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-005
AT01 FS1 TS	23.06.2021	soil	As				ICP-MS (Agilent)	GCH-2021-014-004
AT01 FS1 TS	23.06.2021	soil	Cd	0.18	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-004
AT01 FS1 TS	23.06.2021	soil	Cr	44.17	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-004
AT01 FS1 TS	23.06.2021	soil	Cu	18.26	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-004
AT01 FS1 TS	23.06.2021	soil	Hg	0.18	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-004
AT01 FS1 TS	23.06.2021	soil	Ni	27.20	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-004
AT01 FS1 TS	23.06.2021	soil	Pb	17.29	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-004
AT01 FS1 TS	23.06.2021	soil	Zn	68.36	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-004
AT01 FS2 BS	23.06.2021	soil	As				ICP-MS (Agilent)	GCH-2021-014-007
AT01 FS2 BS	23.06.2021	soil	Cd	0.24	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-007
AT01 FS2 BS	23.06.2021	soil	Cr	50.12	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-007
AT01 FS2 BS	23.06.2021	soil	Cu	25.95	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-007
AT01 FS2 BS	23.06.2021	soil	Hg	0.09	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-007
AT01 FS2 BS	23.06.2021	soil	Ni	31.02	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-007
AT01 FS2 BS	23.06.2021	soil	Pb	18.70	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-007
AT01 FS2 BS	23.06.2021	soil	Zn	115.76	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-007
AT01 FS2 TS	23.06.2021	soil	As				ICP-MS (Agilent)	GCH-2021-014-006
AT01 FS2 TS	23.06.2021	soil	Cd	0.16	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-006
AT01 FS2 TS	23.06.2021	soil	Cr	44.11	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-006
AT01 FS2 TS	23.06.2021	soil	Cu	17.48	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-006
AT01 FS2 TS	23.06.2021	soil	Hg	0.23	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-006
AT01 FS2 TS	23.06.2021	soil	Ni	24.50	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-006
AT01 FS2 TS	23.06.2021	soil	Pb	14.88	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-006
AT01 FS2 TS	23.06.2021	soil	Zn	81.86	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-006
AT01 SS BOX	23.06.2021	suspended sediment	As				ICP-MS (Agilent)	GCH-2021-014-001
AT01 SS BOX	23.06.2021	suspended sediment	Cd	0.26	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-001
AT01 SS BOX	23.06.2021	suspended sediment	Cr	50.46	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-001
AT01 SS BOX	23.06.2021	suspended sediment	Cu	34.18	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-001
AT01 SS BOX	23.06.2021	suspended sediment	Hg	0.27	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-001
AT01 SS BOX	23.06.2021	suspended sediment	Ni	31.54	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-001
AT01 SS BOX	23.06.2021	suspended sediment	Pb	25.62	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-001
AT01 SS BOX	23.06.2021	suspended sediment	Zn	115.45	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-001

3.1.2. Lavamünd on River Drau (Drava)

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.1.2.1. Results from BALINT ANALITIKA for 2nd Austrian NB sampling point – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
AT02 SS BARREL	27.04.2021	suspended sediment	As	52.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/9
AT02 SS BARREL	27.04.2021	suspended sediment	Cd	0.97	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/9
AT02 SS BARREL	27.04.2021	suspended sediment	Cr	119	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/9
AT02 SS BARREL	27.04.2021	suspended sediment	Cu	106	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/9
AT02 SS BARREL	27.04.2021	suspended sediment	Hg	1.04	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/9
AT02 SS BARREL	27.04.2021	suspended sediment	Ni	71.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/9
AT02 SS BARREL	27.04.2021	suspended sediment	Pb	68.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/9
AT02 SS BARREL	27.04.2021	suspended sediment	Zn	645	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/9
AT02 SS BOX	27.04.2021	suspended sediment	As	22.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Cd	0.36	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Cr	79.4	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Cu	38.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Hg	0.13	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Ni	41.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Pb	29.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Zn	171	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Anthracene	0.016	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Fluoranthene	0.111	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Benzo(a)pyrene	0.046	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.094	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.032	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.06	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/10
AT02 SS BOX	27.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/10

Table 3.1.2.2. Results from BALINT ANALITIKA for 2nd Austrian NB sampling point – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
AT02 BS 01	27.04.2021	bottom sediment	As	17.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Cd	1.42	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Cr	46.8	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Cu	17.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Hg	0.12	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Ni	20.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Pb	35.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Zn	632	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Fluoranthene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Benzo(a)pyrene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.008	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/11
AT02 BS 01	27.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/11
AT02 BS 02	27.04.2021	bottom sediment	As	11.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Cd	2.02	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Cr	23.1	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Cu	6.83	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Hg	0.14	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Ni	11.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Pb	74.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Zn	816	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Fluoranthene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Benzo(a)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Dicofol		0.005	mg/kg d.m.	EPA 1656A:2000	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/12
AT02 BS 02	27.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/12

Table 3.1.2.3. Results from BALINT ANALITIKA for 2nd Austrian NB sampling point – active floodplain sediments ("top soil" i.e. top layer TS and"bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
AT02 FS-TS	27.04.2021	soil	As	30.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/13
AT02 FS-TS	27.04.2021	soil	Cd	3.00	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/13
AT02 FS-TS	27.04.2021	soil	Cr	43.7	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/13
AT02 FS-TS	27.04.2021	soil	Cu	18.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/13
AT02 FS-TS	27.04.2021	soil	Hg	0.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/13
AT02 FS-TS	27.04.2021	soil	Ni	21.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/13
AT02 FS-TS	27.04.2021	soil	Pb	166	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/13
AT02 FS-TS	27.04.2021	soil	Zn	1300	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/13
AT02 FS-TS	27.04.2021	soil	Anthracene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/13
AT02 FS-TS	27.04.2021	soil	Fluoranthene	0.023	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/13
AT02 FS-TS	27.04.2021	soil	Benzo(a)pyrene	0.013	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/13
AT02 FS-TS	27.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.024	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/13
AT02 FS-TS	27.04.2021	soil	Benzo(g,h,i)perylene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/13
AT02 FS-TS	27.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.013	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/13
AT02 FS-TS	27.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/13
AT02 FS-TS	27.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/13
AT02 FS-TS	27.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/13
AT02 FS-TS	27.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/13
AT02 FS-TS	27.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/13
AT02 FS-TS	27.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/13
AT02 FS-BS	27.04.2021	soil	As	29.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/14
AT02 FS-BS	27.04.2021	soil	Cd	3.62	0.003	mg/kg d.m.	EPA 6020B:2014	21-509/14
AT02 FS-BS	27.04.2021	soil	Cr	40.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-509/14
AT02 FS-BS	27.04.2021	soil	Cu	13.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/14
AT02 FS-BS	27.04.2021	soil	Hg	0.34	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/14
AT02 FS-BS	27.04.2021	soil	Ni	18.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/14
AT02 FS-BS	27.04.2021	soil	Pb	198	0.005	mg/kg d.m.	EPA 6020B:2014	21-509/14
AT02 FS-BS	27.04.2021	soil	Zn	1390	0.1	mg/kg d.m.	EPA 6020B:2014	21-509/14
AT02 FS-BS	27.04.2021	soil	Anthracene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/14
AT02 FS-BS	27.04.2021	soil	Fluoranthene	0.035	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/14
AT02 FS-BS	27.04.2021	soil	Benzo(a)pyrene	0.019	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/14
AT02 FS-BS	27.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.033	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/14
AT02 FS-BS	27.04.2021	soil	Benzo(g,h,i)perylene	0.012	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/14
AT02 FS-BS	27.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.017	0.001	mg/kg d.m.	EPA 8270E:2018	21-509/14
AT02 FS-BS	27.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-509/14
AT02 FS-BS	27.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/14
AT02 FS-BS	27.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/14
AT02 FS-BS	27.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/14
AT02 FS-BS	27.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-509/14
AT02 FS-BS	27.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-509/14

RESULTS FROM THE AUSTRIAN NATIONAL LABORATORY

Table 3.1.2.4. Results from the Austrian laboratory for 2nd Austrian NB sampling point – 2 samples of stream/bottom sediment, 1 sample of active floodplain sediment ("top soil" and "bottom soil") and 1 sample of suspended sediment in the sedimentation box

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
AT02 BS 01	23.06.2021	bottom sediment	As				ICP-MS (Agilent)	GCH-2021-014-009
AT02 BS 01	23.06.2021	bottom sediment	Cd	1.28	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-009
AT02 BS 01	23.06.2021	bottom sediment	Cr	58.77	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-009
AT02 BS 01	23.06.2021	bottom sediment	Cu	22.33	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-009
AT02 BS 01	23.06.2021	bottom sediment	Hg	0.06	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-009
AT02 BS 01	23.06.2021	bottom sediment	Ni	28.41	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-009
AT02 BS 01	23.06.2021	bottom sediment	Pb	43.79	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-009
AT02 BS 01	23.06.2021	bottom sediment	Zn	572.05	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-009
AT02 BS 02	23.06.2021	bottom sediment	As				ICP-MS (Agilent)	GCH-2021-014-010
AT02 BS 02	23.06.2021	bottom sediment	Cd	2.98	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-010
AT02 BS 02	23.06.2021	bottom sediment	Cr	30.31	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-010
AT02 BS 02	23.06.2021	bottom sediment	Cu	11.38	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-010
AT02 BS 02	23.06.2021	bottom sediment	Hg	0.05	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-010
AT02 BS 02	23.06.2021	bottom sediment	Ni	14.16	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-010
AT02 BS 02	23.06.2021	bottom sediment	Pb	80.50	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-010
AT02 BS 02	23.06.2021	bottom sediment	Zn	1446.06	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-010
AT02 FS-BS	23.06.2021	soil	As				ICP-MS (Agilent)	GCH-2021-014-012
AT02 FS-BS	23.06.2021	soil	Cd	3.33	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-012
AT02 FS-BS	23.06.2021	soil	Cr	42.37	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-012
AT02 FS-BS	23.06.2021	soil	Cu	19.70	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-012
AT02 FS-BS	23.06.2021	soil	Hg	0.05	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-012
AT02 FS-BS	23.06.2021	soil	Ni	21.58	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-012
AT02 FS-BS	23.06.2021	soil	Pb	197.73	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-012
AT02 FS-BS	23.06.2021	soil	Zn	1612.25	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-012
AT02 FS-TS	23.06.2021	soil	As				ICP-MS (Agilent)	GCH-2021-014-011
AT02 FS-TS	23.06.2021	soil	Cd	2.85	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-011
AT02 FS-TS	23.06.2021	soil	Cr	51.24	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-011
AT02 FS-TS	23.06.2021	soil	Cu	22.94	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-011
AT02 FS-TS	23.06.2021	soil	Hg	0.05	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-011
AT02 FS-TS	23.06.2021	soil	Ni	26.33	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-011
AT02 FS-TS	23.06.2021	soil	Pb	175.34	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-011
AT02 FS-TS	23.06.2021	soil	Zn	1506.32	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-011
AT02 SS BOX	23.06.2021	suspended sediment	As				ICP-MS (Agilent)	GCH-2021-014-008
AT02 SS BOX	23.06.2021	suspended sediment	Cd	0.42	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-008
AT02 SS BOX	23.06.2021	suspended sediment	Cr	98.45	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-008
AT02 SS BOX	23.06.2021	suspended sediment	Cu	35.01	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-008
AT02 SS BOX	23.06.2021	suspended sediment	Hg	0.08	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-008
AT02 SS BOX	23.06.2021	suspended sediment	Ni	48.37	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-008
AT02 SS BOX	23.06.2021	suspended sediment	Pb	32.21	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-008
AT02 SS BOX	23.06.2021	suspended sediment	Zn	192.70	1	mg/kg d.m.	ICP-MS (Agilent)	GCH-2021-014-008

3.2. BOSNIA AND HERZEGOVINA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF BOSNIA AND HERZEGOVINA

The sediment samples collected in Bosnia and Herzegovina were analysed in SIMONA Reference Laboratory (Balint Analitika from Budapest, Hungary) and, at country level, in the Laboratory of the Federal Institute of Agropedology.

The following analytical standards and equipments were used in the Laboratory of the Federal Institute of Agropedology:

- For As: BAS ISO 20280:2007with a MHS-15 Hydride System, PerkinElmer.
- For Cd: BAS ISO 11047:2000 with a GFAAS-HGA 900, PerkinElmer.
- For Cr, Cu, Ni, Pb and Zn: BAS ISO 11047:2000 with a FAAS-AAnalyst 400, PerkinElmer
- For Hg: dry combustion with a SMS 100 Mercury Analyzer, PerkinElmer
- For PAHs: BAS ISO 18287:2008 with a GC-FID Clarus 500, PerkinElmer
- For Organoclocurated Pesticides: BAS ISO 10382:2004 with a GC-ECD Clarus 500, PerkinElmer

3.2.1. BH-1 (FEDERATION OF B&H) Karanovak on River Spreča

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.2.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Bosnia and Herzegovina– suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SBA01 SS/BR	03.05.2021	suspended sediment	As	9.05	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Cd	0.24	0.003	mg/kg d.m.	EPA 6020B:2014	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Cr	384	0.03	mg/kg d.m.	EPA 6020B:2014	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Cu	31.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Hg	0.33	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Ni	262	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Pb	13.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Zn	89.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Anthracene	0.846	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Fluoranthene	4.16	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Benzo(a)pyrene	1.83	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	4.36	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Benzo(g,h,i)perylene	0.938	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	1.79	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/5
SBA01 SS/BR	03.05.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/5

Table 3.2.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Bosnia and Herzegovina – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SBA01/BS	03.05.2021	bottom sediment	As	8.99	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Cd	0.29	0.003	mg/kg d.m.	EPA 6020B:2014	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Cr	339	0.03	mg/kg d.m.	EPA 6020B:2014	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Cu	26.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Hg	0.48	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Ni	260	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Pb	12.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Zn	72.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Anthracene	0.669	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Fluoranthene	3.86	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Benzo(a)pyrene	1.73	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	3.69	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Benzo(g,h,i)perylene	1.56	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	2.26	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/6
SBA01/BS	03.05.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/6

Table 3.2.1.3. Results from BALINT ANALITIKA for 1st NB sampling point in Bosnia and Herzegovina – active floodplain sediments ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SBA01 FSSP/BS	03.05.2021	soil	As	9.24	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Cd	0.25	0.003	mg/kg d.m.	EPA 6020B:2014	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Cr	481	0.03	mg/kg d.m.	EPA 6020B:2014	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Cu	18.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Hg	1.56	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Ni	312	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Pb	13.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Zn	51.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Anthracene	1.1	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Fluoranthene	5.28	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Benzo(a)pyrene	2.75	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	4.97	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Benzo(g,h,i)perylene	1.71	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Indeno(1,2,3-cd)pyrene	3.18	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/7
SBA01 FSSP/BS	03.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/7
SBA01 FSSP/TS	03.05.2021	soil	As	8.87	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Cd	0.24	0.003	mg/kg d.m.	EPA 6020B:2014	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Cr	541	0.03	mg/kg d.m.	EPA 6020B:2014	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Cu	24.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Hg	0.71	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Ni	374	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Pb	15.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Zn	61.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Anthracene	1.26	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Fluoranthene	6.18	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Benzo(a)pyrene	2.92	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	5.27	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Benzo(g,h,i)perylene	1.74	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Indeno(1,2,3-cd)pyrene	3.19	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/8
SBA01 FSSP/TS	03.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/8

RESULTS FROM THE LABORATORY OF THE FEDERAL INSTITUTE OF AGROPEDOLOGY

Only stream/bottom sediments and active floodplain sediments could be measured in the country laboratory, there was not enough material left for measuring the suspended sediments.

Table 3.2.1.4. Results from the Federal Institute of Agropedology for 1st NB sampling point in Bosnia and Herzegovina – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Used instruments
SBA01/BS	05.08.2021	bottom sediment	As	7.79	0.01	mg/kg d.m.	BAS ISO 20280:2007	MHS-15 Hydride System, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Cd	0.27	0.005	mg/kg d.m.	BAS ISO 11047:2000	GFAAS-HGA 900, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Cr	194.2	0.2	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Cu	29.47	0.3	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Hg	0.255	0.003	mg/kg d.m.	by dry combustion	SMS 100 Mercury Analyzer, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Ni	263.1	0.04	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Pb	15.60	0.02	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Zn	70.77	0.18	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Anthracene	0.697	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Fluoranthene	2.866	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Benzo(a)pyrene	1.77	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	3.114	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Benzo(g,h,i)perylene	1.603	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	1.886	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Dicofol	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Heptachlor	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Heptachlor epoxide	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Hexachlorobenzene	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Hexachloro cyclohexane	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01/BS	05.08.2021	bottom sediment	Quinoxyfen	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer

Table 3.2.1.5. Results from the Federal Institute of Agropedology for 1st NB sampling point in Bosnia and Herzegovina – active floodplain sediments ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Used instruments
SBA01 FSSP/BS	05.08.2021	soil	As	11.44	0.01	mg/kg d.m.	BAS ISO 20280:2007	MHS-15 Hydride System, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Cd	0.23	0.005	mg/kg d.m.	BAS ISO 11047:2000	GFAAS-HGA 900, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Cr	225.0	0.2	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Cu	19.80	0.3	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Hg	0.627	0.003	mg/kg d.m.	by dry combustion	SMS 100 Mercury Analyzer, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Ni	322.7	0.04	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Pb	14.60	0.02	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Zn	48.73	0.18	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Anthracene	0.938	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Fluoranthene	4.81	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Benzo(a)pyrene	2.431	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	4.168	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Benzo(g,h,i)perylene	1.357	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Indeno(1,2,3-cd)pyrene	2.561	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Dicofol	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Heptachlor	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Heptachlor epoxide	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Hexachlorobenzene	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Hexachloro cyclohexane	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/BS	05.08.2021	soil	Quinoxyfen	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	As	8.35	0.01	mg/kg d.m.	BAS ISO 20280:2007	MHS-15 Hydride System, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Cd	0.23	0.005	mg/kg d.m.	BAS ISO 11047:2000	GFAAS-HGA 900, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Cr	212.8	0.2	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Cu	25.67	0.3	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Hg	0.271	0.003	mg/kg d.m.	by dry combustion	SMS 100 Mercury Analyzer, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Ni	401.9	0.04	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Pb	16.90	0.02	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Zn	59.73	0.18	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Anthracene	1.114	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Fluoranthene	5.23	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Benzo(a)pyrene	2.622	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	4.871	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Benzo(g,h,i)perylene	1.444	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Indeno(1,2,3-cd)pyrene	2.774	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Dicofol	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Heptachlor	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Heptachlor epoxide	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Hexachlorobenzene	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Hexachloro cyclohexane	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA01 FSSP/TS	05.08.2021	soil	Quinoxyfen	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer

3.2.2. BH-2 (REPUBLIKA SRPSKA) Rudanka on River Bosna

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.2.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Bosnia and Herzegovina– suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SBA02 SS/BR	30.04.2021	suspended sediment	As	17.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Cd	0.68	0.003	mg/kg d.m.	EPA 6020B:2014	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Cr	202	0.03	mg/kg d.m.	EPA 6020B:2014	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Cu	44.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Hg	0.43	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Ni	170	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Pb	46.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Zn	272	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Anthracene	0.183	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Fluoranthene	0.978	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Benzo(a)pyrene	0.367	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	1.68	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.195	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.354	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/1
SBA02 SS/BR	30.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/1

Table 3.2.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Bosnia and Herzegovina– stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SBA02 BS DR	30.04.2021	bottom sediment	As	12.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Cd	0.27	0.003	mg/kg d.m.	EPA 6020B:2014	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Cr	187	0.03	mg/kg d.m.	EPA 6020B:2014	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Cu	33.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Hg	0.33	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Ni	184	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Pb	23.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Zn	108	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Anthracene	0.08	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Fluoranthene	0.364	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Benzo(a)pyrene	0.136	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.251	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.078	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.135	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/2
SBA02 BS DR	30.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/2

Table 3.2.2.3. Results from BALINT ANALITIKA for 2nd NB sampling point in Bosnia and Herzegovina– active floodplain sediments ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SBA02 FSSP/BS	30.04.2021	soil	As	14.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Cd	0.28	0.003	mg/kg d.m.	EPA 6020B:2014	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Cr	390	0.03	mg/kg d.m.	EPA 6020B:2014	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Cu	24.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Hg	0.40	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Ni	209	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Pb	40.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Zn	115	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Anthracene	0.324	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Fluoranthene	1.73	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Benzo(a)pyrene	0.645	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	1.05	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Benzo(g,h,i)perylene	0.377	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.66	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/3
SBA02 FSSP/BS	30.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/3
SBA02 FSSP/TS	30.04.2021	soil	As	10.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Cd	0.17	0.003	mg/kg d.m.	EPA 6020B:2014	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Cr	438	0.03	mg/kg d.m.	EPA 6020B:2014	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Cu	18.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Hg	0.33	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Ni	230	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Pb	21.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Zn	68.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Anthracene	0.21	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Fluoranthene	1.09	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Benzo(a)pyrene	0.387	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.626	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Benzo(g,h,i)perylene	0.225	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.376	0.001	mg/kg d.m.	EPA 8270E:2018	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-557/4
SBA02 FSSP/TS	30.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-557/4

RESULTS FROM THE LABORATORY OF THE FEDERAL INSTITUTE OF AGROPEDOLOGY

Only stresm/bottom sediments and active floodplain sediments could be measured in the country laboratory, there was not enough material left for measuring the suspended sediments.

Table 3.2.2.4. Results from the Federal Institute of Agropedology for 2nd NB sampling point in Bosnia and Herzegovina– stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Used instruments
SBA02 BS DR	05.08.2021	bottom sediment	As	11.13	0.01	mg/kg d.m.	BAS ISO 20280:2007	MHS-15 Hydride System, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Cd	0.24	0.005	mg/kg d.m.	BAS ISO 11047:2000	GFAAS-HGA 900, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Cr	149.5	0.2	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Cu	35.83	0.3	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Hg	0.102	0.003	mg/kg d.m.	by dry combustion	SMS 100 Mercury Analyzer, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Ni	197.4	0.04	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Pb	23.80	0.02	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Zn	110.2	0.18	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Anthracene	0.093	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Fluoranthene	0.309	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Benzo(a)pyrene	0.123	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.267	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Benzo(g,h,i)perylene	0.069	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.134	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Dicofol	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Heptachlor	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Heptachlor epoxide	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Hexachlorobenzene	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Hexachloro cyclohexane	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 BS DR	05.08.2021	bottom sediment	Quinoxyfen	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer

Table 3.2.2.5. Results from the Federal Institute of Agropedology for 2nd NB sampling point in Bosnia and Herzegovina – active floodplain sediments ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Used instruments
SBA02 FSSP/BS	05.08.2021	soil	As	13.10	0.01	mg/kg d.m.	BAS ISO 20280:2007	MHS-15 Hydride System, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Cd	0.25	0.005	mg/kg d.m.	BAS ISO 11047:2000	GFAAS-HGA 900, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Cr	182.2	0.2	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Cu	29.53	0.3	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Hg	0.130	0.003	mg/kg d.m.	by dry combustion	SMS 100 Mercury Analyzer, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Ni	224.6	0.04	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Pb	41.30	0.02	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Zn	111.8	0.18	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Anthracene	0.27	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Fluoranthene	1.547	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Benzo(a)pyrene	0.627	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.953	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Benzo(g,h,i)perylene	0.384	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Indeno(1,2,3-cd)pyrene	0.638	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Dicofol	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Heptachlor	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Heptachlor epoxide	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Hexachlorobenzene	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Hexachloro cyclohexane	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/BS	05.08.2021	soil	Quinoxyfen	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	As	11.90	0.01	mg/kg d.m.	BAS ISO 20280:2007	MHS-15 Hydride System, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Cd	0.18	0.005	mg/kg d.m.	BAS ISO 11047:2000	GFAAS-HGA 900, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Cr	259.3	0.2	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Cu	21.60	0.3	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Hg	0.064	0.003	mg/kg d.m.	by dry combustion	SMS 100 Mercury Analyzer, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Ni	251.5	0.04	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Pb	22.03	0.02	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Zn	67.50	0.18	mg/kg d.m.	BAS ISO 11047:2000	FAAS-AAnalyst 400, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Anthracene	0.2	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Fluoranthene	0.896	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Benzo(a)pyrene	0.321	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.59	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Benzo(g,h,i)perylene	0.201	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Indeno(1,2,3-cd)pyrene	0.352	0.01	mg/kg d.m.	BAS ISO 18287:2008	GC-FID Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Dicofol	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Heptachlor	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Heptachlor epoxide	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Hexachlorobenzene	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Hexachloro cyclohexane	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer
SBA02 FSSP/TS	05.08.2021	soil	Quinoxyfen	not detected	0.004	mg/kg d.m.	BAS ISO 10382:2004	GC-ECD Clarus 500, PerkinElmer

3.3. BULGARIA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF BULGARIA

The sediment samples collected in Bulgaria were analysed in SIMONA Reference Laboratory (Balint Analitika from Budapest, Hungary) and, at country level, in the Regional Laboratory Stara Zagora (RLSZ) of the Executive Environmental Agency (ExEA) at the Ministry of Environment and Water.

The following analytical standards and equipments were used for **ICP-MS measurements of metals:**

Standard method: EN 16171

Equipment: ICP MS 7500ce Agilent Technologies,

TOPwave-Analyticjena, microwave-assisted sample preparation

Chemicals used: Nitric acid (VWR CHEMICALS, 67-69%, for Trace Metal analysis)

Hydrochloric acid (Sigma –Aldrich 37%)

Method of digestion:

1 g sample was measured using an analytical scale and put into PTFE vials with 1 ml deionised water, 2 ml concentrated nitric acid and 6 ml concentrated hydrochloric acid. The vials were closed by PTFE caps, and put into the TOPwave sample preparation device.

The following digestion steps were applied:

	Time (minutes)	Temperature (°C)
1st step	10	175
2nd step	10	50
3rd step	10 cooling	

After the digestion the content of the vials was filtered into 50 ml volumetric flasks. The vials were washed by deionised water, and then the flasks were filled to the marks. The thus obtained solutions were diluted.

Method of dilution: f=10(Fe,Zn,Cu,Ni,Pb,Cr,As):

- 1 ml solution of the digested sample
- 24 ml deionised water

Method of dilution: f=5(Hg,Cd):

- 2 ml solution of the digested sample

• 8 ml deionised water

Internal standard solution (ISTD) was added online (200 ppb Li, Sc, Ge, Y, In, Tb).

Sample preparation of SIMONA samples for **GC-MS measurements:**

~ 10g sample was measured using an analytical scale directly into PTFE tubes for Microwave extraction. Samples were MW extracted with 40ml mix of Hexane and Acetone (1:1). The extracts were cleaned on prepared Silica/Sodium sulfate columns and with activated Cu (if any S-compounds are present). The final extract volume was reduced to 1ml Toluene with vacuum evaporator and analyzed on GC-MS. The same extract was analyzed two times (for pesticides, and for PAHs).

Calibration by IS; QC with CRMs.

Standard methods: WLM/MW, GC-MS (pesticides); ISO 18287:2006 (PAHs).

3.3.1. Silistra on Danube, old port

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.3.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Bulgaria– suspended sediment (barrel near the Danube right bank in Silistra port)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-01-SS	29.04.2021	suspended sediment	As	23.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Cd	1.09	0.003	mg/kg d.m.	EPA 6020B:2014	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Cr	109.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Cu	82.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Hg	0.35	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Ni	77.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Pb	59.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Zn	234	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Anthracene	0.015	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Fluoranthene	0.057	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Benzo(a)pyrene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.028	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.037	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/2
BG-01-SS	29.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/2

Table 3.3.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Bulgaria– suspended sediment (collected from the ship, 50 m away from Danube right bank, Silistra)

Sample ID	Alternative Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	As	18.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Cd	0.97	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Cr	85.8	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Cu	76.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Hg	0.14	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Ni	63.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Pb	39.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Zn	206	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Anthracene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Fluoranthene	0.086	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Benzo(g,h,i)perylene	0.043	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.039	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/21
RO/SI-CL/SS/R	BG/01/SS/R	21.06.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/21

Table 3.3.1.3. Results from BALINT ANALITIKA for 1st NB sampling point in Bulgaria– stream/bottom sediment (collected near the Danube right bank in Silistra port)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-01-BS	29.04.2021	bottom sediment	As	7.98	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Cd	0.32	0.003	mg/kg d.m.	EPA 6020B:2014	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Cr	43.3	0.03	mg/kg d.m.	EPA 6020B:2014	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Cu	22.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Hg	0.20	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Ni	26.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Pb	18.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Zn	68.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Anthracene	0.025	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Fluoranthene	0.176	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Benzo(a)pyrene	0.06	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.108	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.042	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.063	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/4
BG-01-BS	29.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/4

Table 3.3.1.4. Results from BALINT ANALITIKA for 1st NB sampling point in Bulgaria– stream/bottom sediment (collected from the ship, 50 m away from Danube left bank, Chichiu (L), in the middle of the river (C) and 50 m away from Danube right bank (R), at Silistra)

Sample ID	Alternative Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	As	3.34	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Cd	0.13	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Cr	49.4	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Cu	3.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Hg	0.03	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Ni	21	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Pb	8.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Zn	31.5	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/13
RO/SI-CL/BS/L/r	BG-01-BS-L	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/13
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	As	3.51	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Cd	0.08	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Cr	30.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Cu	2.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Hg	0.07	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Ni	18.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Pb	6.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Zn	27	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/14
RO/SI-CL/BS/C/r	BG-01-BS-C	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/14
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	As	5.59	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Cd	0.38	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Cr	71.5	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Cu	18.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Hg	0.14	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Ni	34.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Pb	16.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Zn	74.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Anthracene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Fluoranthene	0.018	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Benzo(a)pyrene	0.008	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.019	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/15
RO/SI-CL/BS/R/r	BG-01-BS-R	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/15

Table 3.3.1.5. Results from BALINT ANALITIKA for 1st NB sampling point in Bulgaria– active floodplain sediments ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-01-FS-BS	29.04.2021	soil	As	12.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/7
BG-01-FS-BS	29.04.2021	soil	Cd	0.82	0.003	mg/kg d.m.	EPA 6020B:2014	21-551/7
BG-01-FS-BS	29.04.2021	soil	Cr	56.3	0.03	mg/kg d.m.	EPA 6020B:2014	21-551/7
BG-01-FS-BS	29.04.2021	soil	Cu	59.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/7
BG-01-FS-BS	29.04.2021	soil	Hg	0.38	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/7
BG-01-FS-BS	29.04.2021	soil	Ni	33.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/7
BG-01-FS-BS	29.04.2021	soil	Pb	26.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/7
BG-01-FS-BS	29.04.2021	soil	Zn	105	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/7
BG-01-FS-BS	29.04.2021	soil	Anthracene	0.086	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/7
BG-01-FS-BS	29.04.2021	soil	Fluoranthene	0.744	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/7
BG-01-FS-BS	29.04.2021	soil	Benzo(a)pyrene	0.315	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/7
BG-01-FS-BS	29.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.52	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/7
BG-01-FS-BS	29.04.2021	soil	Benzo(g,h,i)perylene	0.189	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/7
BG-01-FS-BS	29.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.32	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/7
BG-01-FS-BS	29.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-551/7
BG-01-FS-BS	29.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/7
BG-01-FS-BS	29.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/7
BG-01-FS-BS	29.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/7
BG-01-FS-BS	29.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/7
BG-01-FS-BS	29.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/7
BG-01-FS-TS	29.04.2021	soil	As	10.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/8
BG-01-FS-TS	29.04.2021	soil	Cd	0.52	0.003	mg/kg d.m.	EPA 6020B:2014	21-551/8
BG-01-FS-TS	29.04.2021	soil	Cr	65.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-551/8
BG-01-FS-TS	29.04.2021	soil	Cu	46.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/8
BG-01-FS-TS	29.04.2021	soil	Hg	0.35	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/8
BG-01-FS-TS	29.04.2021	soil	Ni	39.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/8
BG-01-FS-TS	29.04.2021	soil	Pb	31.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/8
BG-01-FS-TS	29.04.2021	soil	Zn	112	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/8
BG-01-FS-TS	29.04.2021	soil	Anthracene	0.06	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/8
BG-01-FS-TS	29.04.2021	soil	Fluoranthene	0.468	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/8
BG-01-FS-TS	29.04.2021	soil	Benzo(a)pyrene	0.149	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/8
BG-01-FS-TS	29.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.267	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/8
BG-01-FS-TS	29.04.2021	soil	Benzo(g,h,i)perylene	0.1	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/8
BG-01-FS-TS	29.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.162	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/8
BG-01-FS-TS	29.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-551/8
BG-01-FS-TS	29.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/8
BG-01-FS-TS	29.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/8
BG-01-FS-TS	29.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/8
BG-01-FS-TS	29.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/8
BG-01-FS-TS	29.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/8

RESULTS FROM THE NATIONAL LABORATORY IN BULGARIA

Table 3.3.1.6. Results from the national laboratory in Bulgaria for 1st NB sampling point in Bulgaria – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-01-BS	16.07.2021	bottom sediment	Naphthalene	<	0.02	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Acenaphthylene	0,023±0,011	0.001	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Acenaphthene	<	0.02	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Fluorene	<	0.02	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Phenanthrene	0,073±0,020	0.002	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Anthracene	0,013±0,003	0.002	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Flouranthene	0,13±0,03	0.002	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Pyrene	0,095±0,040	0.002	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Benzo(a)anthracene	0,044±0,014	0.001	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Chrysene	0,040±0,009	0.001	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Benzo(b)fluoranthene	0,073±0,036	0.001	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Benzo(k)fluoranthene	0,023±0,007	0.001	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Benzo(e)pyrene	0,047±0,019	0.001	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Benzo(a)pyrene	0,064±0,026	0.001	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0,043±0,018	0.003	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Dibenzo(a,h)ahthracene	0,004±0,002	0.003	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	Benzo(g,h,i)perylene	0,036±0,012	0.003	mg/kg d.m.	ISO 18287:2006	3126
BG-01-BS	16.07.2021	bottom sediment	α-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	β-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	γ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	δ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	ε-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Heptachlor	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Heptachlor epoxide-cis	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Heptachlor epoxide-trans	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	2,4'-DDE	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	4,4'-DDE	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	2,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	4,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	2,4'-DDT	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	4,4'-DDT	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Aldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Isodrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Dieldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Endrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	α-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	β-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Pentachlorbenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Hexachlorobenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3126
BG-01-BS	16.07.2021	bottom sediment	Pb	19	4	mg/kg d.m.	EN 16171	3126
BG-01-BS	16.07.2021	bottom sediment	Cd	0.41	0.1	mg/kg d.m.	EN 16171	3126
BG-01-BS	16.07.2021	bottom sediment	Cu	32	5	mg/kg d.m.	EN 16171	3126
BG-01-BS	16.07.2021	bottom sediment	Zn	83	4	mg/kg d.m.	EN 16171	3126
BG-01-BS	16.07.2021	bottom sediment	Ni	33	5	mg/kg d.m.	EN 16171	3126
BG-01-BS	16.07.2021	bottom sediment	Cr	29	4	mg/kg d.m.	EN 16171	3126
BG-01-BS	16.07.2021	bottom sediment	As	7.9	3	mg/kg d.m.	EN 16171	3126
BG-01-BS	16.07.2021	bottom sediment	Fe	17784	4	mg/kg d.m.	EN 16171	3126
BG-01-BS	16.07.2021	bottom sediment	Hg	0.094	0.03	mg/kg d.m.	EN 16171	3126

Table 3.3.1.7. Results from the national laboratory in Bulgaria for 1st NB sampling point in Bulgaria – active floodplain sediment ("bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-01-FS-BS	16.07.2021	soil	Naphthalene	0,043±0,009	0.02	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Acenaphthylene	0,015±0,008	0.001	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Acenaphthene	<	0.02	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Fluorene	<	0.02	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Phenanthrene	0,10±0,03	0.002	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Anthracene	0,025±0,006	0.002	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Flouranthene	0,21±0,06	0.002	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Pyrene	0,16±0,07	0.002	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Benzo(a)anthracene	0,11±0,04	0.001	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Chrysene	0,087±0,021	0.001	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Benzo(b)fluoranthene	0,17±0,08	0.001	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Benzo(k)fluoranthene	0,079±0,025	0.001	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Benzo(e)pyrene	0,097±0,039	0.001	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Benzo(a)pyrene	0,14±0,06	0.001	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Indeno(1,2,3-cd)pyrene	0,11±0,04	0.003	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Dibenzo(a,h)ahthracene	0,019±0,010	0.003	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	Benzo(g,h,i)perylene	0,085±0,030	0.003	mg/kg d.m.	ISO 18287:2006	3127
BG-01-FS-BS	16.07.2021	soil	α-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	β-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	γ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	δ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	ε-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Heptachlor	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Heptachlor epoxide-cis	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Heptachlor epoxide-trans	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	2,4'-DDE	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	4,4'-DDE	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	2,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	4,4'-DDD	0,0013±0,0005	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	2,4'-DDT	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	4,4'-DDT	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Aldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Isodrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Dieldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Endrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	α-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	β-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Pentachlorbenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Hexachlorobenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3127
BG-01-FS-BS	16.07.2021	soil	Pb	31	4	mg/kg d.m.	EN 16171	3127
BG-01-FS-BS	16.07.2021	soil	Cd	0.89	0.1	mg/kg d.m.	EN 16171	3127
BG-01-FS-BS	16.07.2021	soil	Cu	91	5	mg/kg d.m.	EN 16171	3127
BG-01-FS-BS	16.07.2021	soil	Zn	116	4	mg/kg d.m.	EN 16171	3127
BG-01-FS-BS	16.07.2021	soil	Ni	37	5	mg/kg d.m.	EN 16171	3127
BG-01-FS-BS	16.07.2021	soil	Cr	34	4	mg/kg d.m.	EN 16171	3127
BG-01-FS-BS	16.07.2021	soil	As	12	3	mg/kg d.m.	EN 16171	3127
BG-01-FS-BS	16.07.2021	soil	Fe	19934	4	mg/kg d.m.	EN 16171	3127
BG-01-FS-BS	16.07.2021	soil	Hg	0.16	0.03	mg/kg d.m.	EN 16171	3127

Table 3.3.1.8. Results from the national laboratory in Bulgaria for 1st NB sampling point in Bulgaria – active floodplain sediment ("top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-01-FS-TS	16.07.2021	soil	Naphthalene	0,039±0,008	0.02	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Acenaphthylene	0,050±0,025	0.001	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Acenaphthene	<	0.02	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Fluorene	0,023±0,011	0.02	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Phenanthrene	0,30±0,09	0.002	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Anthracene	0,049±0,013	0.002	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Flouranthene	0,40±0,11	0.002	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Pyrene	0,23±0,10	0.002	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Benzo(a)anthracene	0,12±0,04	0.001	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Chrysene	0,10±0,03	0.001	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Benzo(b)fluoranthene	0,16±0,08	0.001	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Benzo(k)fluoranthene	0,055±0,017	0.001	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Benzo(e)pyrene	0,097±0,039	0.001	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Benzo(a)pyrene	0,14±0,05	0.001	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Indeno(1,2,3-cd)pyrene	0,097±0,040	0.003	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Dibenzo(a,h)ahthracene	0,017±0,009	0.003	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	Benzo(g,h,i)perylene	0,077±0,027	0.003	mg/kg d.m.	ISO 18287:2006	3128
BG-01-FS-TS	16.07.2021	soil	α-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	β-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	γ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	δ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	ε-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Heptachlor	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Heptachlor epoxide-cis	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Heptachlor epoxide-trans	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	2,4'-DDE	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	4,4'-DDE	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	2,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	4,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	2,4'-DDT	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	4,4'-DDT	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Aldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Isodrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Dieldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Endrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	α-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	β-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Pentachlorbenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Hexachlorobenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3128
BG-01-FS-TS	16.07.2021	soil	Pb	31	4	mg/kg d.m.	EN 16171	3128
BG-01-FS-TS	16.07.2021	soil	Cd	0.55	0.1	mg/kg d.m.	EN 16171	3128
BG-01-FS-TS	16.07.2021	soil	Cu	55	5	mg/kg d.m.	EN 16171	3128
BG-01-FS-TS	16.07.2021	soil	Zn	110	4	mg/kg d.m.	EN 16171	3128
BG-01-FS-TS	16.07.2021	soil	Ni	44	5	mg/kg d.m.	EN 16171	3128
BG-01-FS-TS	16.07.2021	soil	Cr	38	4	mg/kg d.m.	EN 16171	3128
BG-01-FS-TS	16.07.2021	soil	As	9.7	3	mg/kg d.m.	EN 16171	3128
BG-01-FS-TS	16.07.2021	soil	Fe	22908	4	mg/kg d.m.	EN 16171	3128
BG-01-FS-TS	16.07.2021	soil	Hg	0.13	0.03	mg/kg d.m.	EN 16171	3128

3.3.2. Karantsi on River Yantra

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.3.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Bulgaria– suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-02-SS	29.04.2021	suspended sediment	As	9.35	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Cd	0.28	0.003	mg/kg d.m.	EPA 6020B:2014	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Cr	69.1	0.03	mg/kg d.m.	EPA 6020B:2014	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Cu	29.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Hg	0.16	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Ni	36.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Pb	19.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Zn	103	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Fluoranthene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Benzo(a)pyrene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.012	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/1
BG-02-SS	29.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/1

Table 3.3.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Bulgaria–stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-02-BS	29.04.2021	bottom sediment	As	6.74	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Cd	0.21	0.003	mg/kg d.m.	EPA 6020B:2014	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Cr	43.6	0.03	mg/kg d.m.	EPA 6020B:2014	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Cu	21.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Hg	0.16	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Ni	22.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Pb	13.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Zn	67.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Fluoranthene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Benzo(a)pyrene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/3
BG-02-BS	29.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/3

Table 3.3.2.3. Results from BALINT ANALITIKA for 2nd NB sampling point in Bulgaria– active floodplain sediment ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-02-FS-BS	29.04.2021	soil	As	5.50	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/5
BG-02-FS-BS	29.04.2021	soil	Cd	0.16	0.003	mg/kg d.m.	EPA 6020B:2014	21-551/5
BG-02-FS-BS	29.04.2021	soil	Cr	29.1	0.03	mg/kg d.m.	EPA 6020B:2014	21-551/5
BG-02-FS-BS	29.04.2021	soil	Cu	13.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/5
BG-02-FS-BS	29.04.2021	soil	Hg	0.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/5
BG-02-FS-BS	29.04.2021	soil	Ni	15.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/5
BG-02-FS-BS	29.04.2021	soil	Pb	10.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/5
BG-02-FS-BS	29.04.2021	soil	Zn	46.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/5
BG-02-FS-BS	29.04.2021	soil	Anthracene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/5
BG-02-FS-BS	29.04.2021	soil	Fluoranthene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/5
BG-02-FS-BS	29.04.2021	soil	Benzo(a)pyrene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/5
BG-02-FS-BS	29.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/5
BG-02-FS-BS	29.04.2021	soil	Benzo(g,h,i)perylene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/5
BG-02-FS-BS	29.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/5
BG-02-FS-BS	29.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-551/5
BG-02-FS-BS	29.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/5
BG-02-FS-BS	29.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/5
BG-02-FS-BS	29.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/5
BG-02-FS-BS	29.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/5
BG-02-FS-BS	29.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/5
BG-02-FS-TS	29.04.2021	soil	As	6.91	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/6
BG-02-FS-TS	29.04.2021	soil	Cd	0.24	0.003	mg/kg d.m.	EPA 6020B:2014	21-551/6
BG-02-FS-TS	29.04.2021	soil	Cr	48.2	0.03	mg/kg d.m.	EPA 6020B:2014	21-551/6
BG-02-FS-TS	29.04.2021	soil	Cu	21.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/6
BG-02-FS-TS	29.04.2021	soil	Hg	0.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/6
BG-02-FS-TS	29.04.2021	soil	Ni	24.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/6
BG-02-FS-TS	29.04.2021	soil	Pb	14.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-551/6
BG-02-FS-TS	29.04.2021	soil	Zn	74.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-551/6
BG-02-FS-TS	29.04.2021	soil	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/6
BG-02-FS-TS	29.04.2021	soil	Fluoranthene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/6
BG-02-FS-TS	29.04.2021	soil	Benzo(a)pyrene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/6
BG-02-FS-TS	29.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.012	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/6
BG-02-FS-TS	29.04.2021	soil	Benzo(g,h,i)perylene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/6
BG-02-FS-TS	29.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-551/6
BG-02-FS-TS	29.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-551/6
BG-02-FS-TS	29.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/6
BG-02-FS-TS	29.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/6
BG-02-FS-TS	29.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/6
BG-02-FS-TS	29.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-551/6
BG-02-FS-TS	29.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-551/6

RESULTS FROM THE NATIONAL LABORATORY IN BULGARIA

Table 3.3.2.4. Results from the national laboratory in Bulgaria for 2nd NB sampling point in Bulgaria – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-02-BS	16.07.2021	bottom sediment	Naphthalene	0,022±0,004	0.02	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Acenaphthylene	0,0010±0,0005	0.001	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Acenaphthene	<	0.02	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Fluorene	<	0.02	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Phenanthrene	0,016±0,004	0.002	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Anthracene	0,0020±0,0005	0.002	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Flouranthene	0,013±0,003	0.002	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Pyrene	0,012±0,005	0.002	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Benzo(a)anthracene	0,005±0,002	0.001	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Chrysene	0,006±0,001	0.001	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Benzo(b)fluoranthene	0,011±0,005	0.001	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Benzo(k)fluoranthene	0,004±0,001	0.001	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Benzo(e)pyrene	0,008±0,003	0.001	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Benzo(a)pyrene	0,007±0,003	0.001	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0,006±0,002	0.003	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Dibenzo(a,h)ahthracene	<	0.003	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	Benzo(g,h,i)perylene	0,008±0,003	0.003	mg/kg d.m.	ISO 18287:2006	3123
BG-02-BS	16.07.2021	bottom sediment	α-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	β-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	γ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	δ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	ε-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Heptachlor	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Heptachlor epoxide-cis	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Heptachlor epoxide-trans	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	2,4'-DDE	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	4,4'-DDE	0,0020±0,0006	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	2,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	4,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	2,4'-DDT	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	4,4'-DDT	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Aldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Isodrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Dieldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Endrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	α-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	β-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Pentachlorbenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Hexachlorobenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3123
BG-02-BS	16.07.2021	bottom sediment	Pb	11	4	mg/kg d.m.	EN 16171	3123
BG-02-BS	16.07.2021	bottom sediment	Cd	0.23	0.1	mg/kg d.m.	EN 16171	3123
BG-02-BS	16.07.2021	bottom sediment	Cu	21	5	mg/kg d.m.	EN 16171	3123
BG-02-BS	16.07.2021	bottom sediment	Zn	72	4	mg/kg d.m.	EN 16171	3123
BG-02-BS	16.07.2021	bottom sediment	Ni	22	5	mg/kg d.m.	EN 16171	3123
BG-02-BS	16.07.2021	bottom sediment	Cr	26	4	mg/kg d.m.	EN 16171	3123
BG-02-BS	16.07.2021	bottom sediment	As	5.6	3	mg/kg d.m.	EN 16171	3123
BG-02-BS	16.07.2021	bottom sediment	Fe	17114	4	mg/kg d.m.	EN 16171	3123
BG-02-BS	16.07.2021	bottom sediment	Hg	0.055	0.03	mg/kg d.m.	EN 16171	3123

Table 3.3.2.5. Results from the national laboratory in Bulgaria for 2nd NB sampling point in Bulgaria – active floodplain sediment ("bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-02-FS-BS	16.07.2021	soil	Naphthalene	0,027±0,005	0.02	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Acenaphthylene	<	0.001	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Acenaphthene	<	0.02	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Fluorene	<	0.02	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Phenanthrene	0,010±0,003	0.002	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Anthracene	<	0.002	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Flouranthene	0,007±0,002	0.002	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Pyrene	0,006±0,003	0.002	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Benzo(a)anthracene	0,0034±0,0011	0.001	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Chrysene	0,0035±0,0008	0.001	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Benzo(b)fluoranthene	0,007±0,004	0.001	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Benzo(k)fluoranthene	0,0019±0,0006	0.001	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Benzo(e)pyrene	0,005±0,002	0.001	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Benzo(a)pyrene	0,004±0,002	0.001	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Indeno(1,2,3-cd)pyrene	0,003±0,001	0.003	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Dibenzo(a,h)ahthracene	<	0.003	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	Benzo(g,h,i)perylene	0,004±0,002	0.003	mg/kg d.m.	ISO 18287:2006	3124
BG-02-FS-BS	16.07.2021	soil	α-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	β-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	γ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	δ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	ε-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Heptachlor	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Heptachlor epoxide-cis	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Heptachlor epoxide-trans	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	2,4'-DDE	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	4,4'-DDE	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	2,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	4,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	2,4'-DDT	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	4,4'-DDT	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Aldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Isodrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Dieldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Endrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	α-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	β-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Pentachlorbenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Hexachlorobenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3124
BG-02-FS-BS	16.07.2021	soil	Pb	9.7	4	mg/kg d.m.	EN 16171	3124
BG-02-FS-BS	16.07.2021	soil	Cd	0.23	0.1	mg/kg d.m.	EN 16171	3124
BG-02-FS-BS	16.07.2021	soil	Cu	17	5	mg/kg d.m.	EN 16171	3124
BG-02-FS-BS	16.07.2021	soil	Zn	58	4	mg/kg d.m.	EN 16171	3124
BG-02-FS-BS	16.07.2021	soil	Ni	18	5	mg/kg d.m.	EN 16171	3124
BG-02-FS-BS	16.07.2021	soil	Cr	19	4	mg/kg d.m.	EN 16171	3124
BG-02-FS-BS	16.07.2021	soil	As	4.9	3	mg/kg d.m.	EN 16171	3124
BG-02-FS-BS	16.07.2021	soil	Fe	12951	4	mg/kg d.m.	EN 16171	3124
BG-02-FS-BS	16.07.2021	soil	Hg	0.048	0.03	mg/kg d.m.	EN 16171	3124

Table 3.3.2.6. Results from the national laboratory in Bulgaria for 2nd NB sampling point in Bulgaria – active floodplain sediment ("top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
BG-02-FS-TS	16.07.2021	soil	Naphthalene	0,038±0,008	0.02	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Acenaphthylene	0,0014±0,0007	0.001	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Acenaphthene	<	0.02	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Fluorene	<	0.02	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Phenanthrene	0,018±0,005	0.002	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Anthracene	<	0.002	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Flouranthene	0,011±0,003	0.002	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Pyrene	0,010±0,004	0.002	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Benzo(a)anthracene	0,005±0,002	0.001	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Chrysene	0,006±0,001	0.001	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Benzo(b)fluoranthene	0,011±0,006	0.001	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Benzo(k)fluoranthene	0,003±0,001	0.001	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Benzo(e)pyrene	0,009±0,004	0.001	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Benzo(a)pyrene	0,006±0,003	0.001	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Indeno(1,2,3-cd)pyrene	0,006±0,002	0.003	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Dibenzo(a,h)ahthracene	<	0.003	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	Benzo(g,h,i)perylene	0,008±0,003	0.003	mg/kg d.m.	ISO 18287:2006	3125
BG-02-FS-TS	16.07.2021	soil	α-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	β-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	γ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	δ-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	ε-Hexachloro cyclohexane	<	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Heptachlor	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Heptachlor epoxide-cis	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Heptachlor epoxide-trans	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	2,4'-DDE	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	4,4'-DDE	0,0024±0,0007	0.002	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	2,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	4,4'-DDD	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	2,4'-DDT	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	4,4'-DDT	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Aldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Isodrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Dieldrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Endrine	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	α-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	β-Endosulfane	<	0.003	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Pentachlorbenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Hexachlorobenzene	<	0.001	mg/kg d.m.	WLM /MW,GC/MS/	3125
BG-02-FS-TS	16.07.2021	soil	Pb	14	4	mg/kg d.m.	EN 16171	3125
BG-02-FS-TS	16.07.2021	soil	Cd	0.27	0.1	mg/kg d.m.	EN 16171	3125
BG-02-FS-TS	16.07.2021	soil	Cu	25	5	mg/kg d.m.	EN 16171	3125
BG-02-FS-TS	16.07.2021	soil	Zn	71	4	mg/kg d.m.	EN 16171	3125
BG-02-FS-TS	16.07.2021	soil	Ni	28	5	mg/kg d.m.	EN 16171	3125
BG-02-FS-TS	16.07.2021	soil	Cr	30	4	mg/kg d.m.	EN 16171	3125
BG-02-FS-TS	16.07.2021	soil	As	6.2	3	mg/kg d.m.	EN 16171	3125
BG-02-FS-TS	16.07.2021	soil	Fe	20480	4	mg/kg d.m.	EN 16171	3125
BG-02-FS-TS	16.07.2021	soil	Hg	0.075	0.03	mg/kg d.m.	EN 16171	3125

3.4 CROATIA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF CROATIA

The national laboratory selected to analyse the two national baseline stations for the hazardous substances proposed by SIMONA Quality Sediment Laboratory Protocol (Čaić Janković, A., Šorša, A., 2019) was BIOINSTITUT Ltd. Health and Veterinary Services, based in Čakovec, Rudolf Steiner 7, HR-40000.

Bioinstitut Ltd. is certified with international standards, HRN EN ISO/IEC 17025 and HRN EN ISO/IEC 17020.

In 2005 the laboratory received a certificate from the Croatian Accreditation Agency for 50 different chemical and microbiological testing methods according to the HRN EN ISO/IEC 17025 standard. One year later the certification was expanded to include the area of testing water, and it is currently certified in 112 different testing methods and 4 methods from flexible scope for analyzing food, animal feeding stuffs, wine, waters, waste, soil, environmental samples from the primary production stage and sampling of waters and waste according to the HRN EN ISO/IEC 17025 standard.

To meet market conditions and legislative frameworks, the laboratory is constantly growing. At the moment, it has more than 200 accredited methods according to HRN EN ISO/IEC 17025. The biggest development in recent years has been in the field of pesticides and priority substances.

The Accreditation Certificate Number: 1073 is available at www.akreditacija.hr.

Preparation of analytical samples is done for:

- Soil – using HRN ISO 14869-2:2004 (ISO 14869-2:2002); HRN ISO 11466:2004 (ISO 11466:1995)
- Waste – using HRN EN 13657:2008 (EN 13657:2002); modified HRN EN 12457-4:2005 (EN 12457-4:2002)
- Sludges, sediments – using in-house method SOP-LEK-38c/6c, X. edition, 2020-05-04
- Mineral raw materials – using HRN ISO 14869-2:2004 (ISO 14869-2:2002).

The analytical methods used in the laboratory are:

- ICP OES - inductively coupled plasma atomic emission spectroscopy
- AAS (FIMS) – flow injection mercury system atomic absorption spectrometry
- GC-MS - gas chromatography-mass spectrometry
- GC-MS/MS - Gas chromatography-tandem mass spectrometry
- LC-MS/MS – Liquid chromatography-tandem mass spectrometry

3.4.1. Kumrovec on River Sutla

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.4.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Croatia – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR01 SS	15.04.2021	suspended sediment	As	28.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/1
HR01 SS	15.04.2021	suspended sediment	Cd	0.84	0.003	mg/kg d.m.	EPA 6020B:2014	21-502/1
HR01 SS	15.04.2021	suspended sediment	Cr	75.6	0.03	mg/kg d.m.	EPA 6020B:2014	21-502/1
HR01 SS	15.04.2021	suspended sediment	Cu	72.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/1
HR01 SS	15.04.2021	suspended sediment	Hg	0.37	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/1
HR01 SS	15.04.2021	suspended sediment	Ni	43.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/1
HR01 SS	15.04.2021	suspended sediment	Pb	85.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/1
HR01 SS	15.04.2021	suspended sediment	Zn	335	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/1
HR01 SS	15.04.2021	suspended sediment	Anthracene	0.014	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/1
HR01 SS	15.04.2021	suspended sediment	Fluoranthene	0.076	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/1
HR01 SS	15.04.2021	suspended sediment	Benzo(a)pyrene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/1
HR01 SS	15.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/1
HR01 SS	15.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.024	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/1
HR01 SS	15.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.028	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/1
HR01 SS	15.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-502/1
HR01 SS	15.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/1
HR01 SS	15.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/1
HR01 SS	15.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/1
HR01 SS	15.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/1
HR01 SS	15.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/1

Table 3.4.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Croatia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR01 BS	15.04.2021	bottom sediment	As	9.46	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/3
HR01 BS	15.04.2021	bottom sediment	Cd	0.32	0.003	mg/kg d.m.	EPA 6020B:2014	21-502/3
HR01 BS	15.04.2021	bottom sediment	Cr	36.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-502/3
HR01 BS	15.04.2021	bottom sediment	Cu	11.5	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/3
HR01 BS	15.04.2021	bottom sediment	Hg	0.14	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/3
HR01 BS	15.04.2021	bottom sediment	Ni	17.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/3
HR01 BS	15.04.2021	bottom sediment	Pb	24.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/3
HR01 BS	15.04.2021	bottom sediment	Zn	115	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/3
HR01 BS	15.04.2021	bottom sediment	Anthracene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/3
HR01 BS	15.04.2021	bottom sediment	Fluoranthene	0.018	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/3
HR01 BS	15.04.2021	bottom sediment	Benzo(a)pyrene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/3
HR01 BS	15.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.016	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/3
HR01 BS	15.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.008	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/3
HR01 BS	15.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/3
HR01 BS	15.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-502/3
HR01 BS	15.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/3
HR01 BS	15.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/3
HR01 BS	15.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/3
HR01 BS	15.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/3
HR01 BS	15.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/3

Table 3.4.1.3. Results from BALINT ANALITIKA for 1st NB sampling point in Croatia – active floodplain sediment ("top soil" (top layer) TS and "bottom soil" (bottom layer) BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR01 FS TS	15.04.2021	soil	As	14.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/5
HR01 FS TS	15.04.2021	soil	Cd	0.55	0.003	mg/kg d.m.	EPA 6020B:2014	21-502/5
HR01 FS TS	15.04.2021	soil	Cr	60.3	0.03	mg/kg d.m.	EPA 6020B:2014	21-502/5
HR01 FS TS	15.04.2021	soil	Cu	22.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/5
HR01 FS TS	15.04.2021	soil	Hg	0.36	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/5
HR01 FS TS	15.04.2021	soil	Ni	32.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/5
HR01 FS TS	15.04.2021	soil	Pb	47.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/5
HR01 FS TS	15.04.2021	soil	Zn	173	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/5
HR01 FS TS	15.04.2021	soil	Anthracene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/5
HR01 FS TS	15.04.2021	soil	Fluoranthene	0.049	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/5
HR01 FS TS	15.04.2021	soil	Benzo(a)pyrene	0.024	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/5
HR01 FS TS	15.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.047	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/5
HR01 FS TS	15.04.2021	soil	Benzo(g,h,i)perylene	0.018	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/5
HR01 FS TS	15.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.027	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/5
HR01 FS TS	15.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-502/5
HR01 FS TS	15.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/5
HR01 FS TS	15.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/5
HR01 FS TS	15.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/5
HR01 FS TS	15.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/5
HR01 FS TS	15.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/5
HR01 FS BS	15.04.2021	soil	As	8.53	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/6
HR01 FS BS	15.04.2021	soil	Cd	0.37	0.003	mg/kg d.m.	EPA 6020B:2014	21-502/6
HR01 FS BS	15.04.2021	soil	Cr	40.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-502/6
HR01 FS BS	15.04.2021	soil	Cu	12.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/6
HR01 FS BS	15.04.2021	soil	Hg	0.30	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/6
HR01 FS BS	15.04.2021	soil	Ni	20.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/6
HR01 FS BS	15.04.2021	soil	Pb	27.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/6
HR01 FS BS	15.04.2021	soil	Zn	123	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/6
HR01 FS BS	15.04.2021	soil	Anthracene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/6
HR01 FS BS	15.04.2021	soil	Fluoranthene	0.023	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/6
HR01 FS BS	15.04.2021	soil	Benzo(a)pyrene	0.012	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/6
HR01 FS BS	15.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.024	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/6
HR01 FS BS	15.04.2021	soil	Benzo(g,h,i)perylene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/6
HR01 FS BS	15.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.014	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/6
HR01 FS BS	15.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-502/6
HR01 FS BS	15.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/6
HR01 FS BS	15.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/6
HR01 FS BS	15.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/6
HR01 FS BS	15.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/6
HR01 FS BS	15.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/6

RESULTS FROM THE NATIONAL LABORATORY IN CROATIA

Suspended sediments could not be measured in the Croatian National Laboratory because there was not enough material. Only stream/bottom and active floodplain sediments were measured.

Table 3.4.1.4. Results from the national laboratory in Croatia for 1st NB sampling point in Croatia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR 01 BS	28.07.2021.	bottom sediment	As	7.51	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Cd	< 0.16	0.003	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Cr	30.65	0.03	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Cu	9.06	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Hg	0.064	0.005	mg/kg d.m.	**HRN EN ISO 12846:2012 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Ni	17.49	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Pb	20.15	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Zn	115.29	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Anthracene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Fluoranthene	0.091	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Benzo(a)pyrene	0.030	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Benzo(b)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Benzo(k)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Benzo(g,h,i)perylene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Indeno(1,2,3-cd)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Dicofol	< 0.005	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/181 - 01-03 modif. (GC-MS/MS)	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Heptachlor	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Heptachlor epoxide	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Hexachlorobenzene	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Hexachloro cyclohexane	<0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11)	21-502/3
HR 01 BS	28.07.2021.	bottom sediment	Quinoxyfen	< 0.002	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/183 - 01-03 modif. (LC-MS/MS)	21-502/3

Methods marked with an asterisk (*) are accredited according to the requirements of the standard HRN EN ISO / IEC 17025: 2017 and specified in the accreditation certificate HAA no. 1073.

Methods marked with two asterisks (**) are from the flexible accreditation area according to the requirements of the standard HRN EN ISO / IEC 17025: 2017.

Table 3.4.1.5. Results from the national laboratory in Croatia for 1st NB sampling point in Croatia– active floodplain sediment, "bottom soil" (bottom layer)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR 01 FS BS	28.07.2021.	soil	As	6.76	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/6
HR 01 FS BS	28.07.2021.	soil	Cd	< 0.16	0.003	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/6
HR 01 FS BS	28.07.2021.	soil	Cr	40.25	0.03	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/6
HR 01 FS BS	28.07.2021.	soil	Cu	13.32	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/6
HR 01 FS BS	28.07.2021.	soil	Hg	0.085	0.005	mg/kg d.m.	**HRN EN ISO 12846:2012 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/6
HR 01 FS BS	28.07.2021.	soil	Ni	22.30	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/6
HR 01 FS BS	28.07.2021.	soil	Pb	40.25	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/6
HR 01 FS BS	28.07.2021.	soil	Zn	125.37	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/6
HR 01 FS BS	28.07.2021.	soil	Anthracene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/6
HR 01 FS BS	28.07.2021.	soil	Fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/6
HR 01 FS BS	28.07.2021.	soil	Benzo(a)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/6
HR 01 FS BS	28.07.2021.	soil	Benzo(b)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/6
HR 01 FS BS	28.07.2021.	soil	Benzo(k)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/6
HR 01 FS BS	28.07.2021.	soil	Benzo(g,h,i)perylene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/6
HR 01 FS BS	28.07.2021.	soil	Indeno(1,2,3-cd)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/6
HR 01 FS BS	28.07.2021.	soil	Dicofol	< 0.005	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/181 - 01-03 modif. (GC-MS/MS)	21-502/6
HR 01 FS BS	28.07.2021.	soil	Heptachlor	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/6
HR 01 FS BS	28.07.2021.	soil	Heptachlor epoxide	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/6
HR 01 FS BS	28.07.2021.	soil	Hexachlorobenzene	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/6
HR 01 FS BS	28.07.2021.	soil	Hexachloro cyclohexane	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11)	21-502/6
HR 01 FS BS	28.07.2021.	soil	Quinoxyfen	< 0.002	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/183 - 01-03 modif. (LC-MS/MS)	21-502/6

Table 3.4.1.6. Results from the national laboratory in Croatia for 1st NB sampling point in Croatia– active floodplain sediment, "top soil" (top layer)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR 01 FS TS	28.07.2021.	soil	As	13.11	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/5
HR 01 FS TS	28.07.2021.	soil	Cd	< 0.16	0.003	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/5
HR 01 FS TS	28.07.2021.	soil	Cr	50.15	0.03	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/5
HR 01 FS TS	28.07.2021.	soil	Cu	30.59	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/5
HR 01 FS TS	28.07.2021.	soil	Hg	0.136	0.005	mg/kg d.m.	**HRN EN ISO 12846:2012 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/5
HR 01 FS TS	28.07.2021.	soil	Ni	35.76	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/5
HR 01 FS TS	28.07.2021.	soil	Pb	50.24	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/5
HR 01 FS TS	28.07.2021.	soil	Zn	201.36	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/5
HR 01 FS TS	28.07.2021.	soil	Anthracene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/5
HR 01 FS TS	28.07.2021.	soil	Fluoranthene	0.086	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/5
HR 01 FS TS	28.07.2021.	soil	Benzo(a)pyrene	0.010	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/5
HR 01 FS TS	28.07.2021.	soil	Benzo(b)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/5
HR 01 FS TS	28.07.2021.	soil	Benzo(k)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/5
HR 01 FS TS	28.07.2021.	soil	Benzo(g,h,i)perylene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/5
HR 01 FS TS	28.07.2021.	soil	Indeno(1,2,3-cd)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/5
HR 01 FS TS	28.07.2021.	soil	Dicofol	< 0.005	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/181 - 01-03 modif. (GC-MS/MS)	21-502/5
HR 01 FS TS	28.07.2021.	soil	Heptachlor	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/5
HR 01 FS TS	28.07.2021.	soil	Heptachlor epoxide	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/5
HR 01 FS TS	28.07.2021.	soil	Hexachlorobenzene	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/5
HR 01 FS TS	28.07.2021.	soil	Hexachloro cyclohexane	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11)	21-502/5
HR 01 FS TS	28.07.2021.	soil	Quinoxyfen	< 0.002	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/183 - 01-03 modif. (LC-MS/MS)	21-502/5

3.4.2. Aljmaš on River Drava

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.4.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Croatia – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR02 SS	15.04.2021	suspended sediment	As	13.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/2
HR02 SS	15.04.2021	suspended sediment	Cd	0.63	0.003	mg/kg d.m.	EPA 6020B:2014	21-502/2
HR02 SS	15.04.2021	suspended sediment	Cr	73.2	0.03	mg/kg d.m.	EPA 6020B:2014	21-502/2
HR02 SS	15.04.2021	suspended sediment	Cu	30.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/2
HR02 SS	15.04.2021	suspended sediment	Hg	0.20	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/2
HR02 SS	15.04.2021	suspended sediment	Ni	49.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/2
HR02 SS	15.04.2021	suspended sediment	Pb	49.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/2
HR02 SS	15.04.2021	suspended sediment	Zn	114	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/2
HR02 SS	15.04.2021	suspended sediment	Anthracene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/2
HR02 SS	15.04.2021	suspended sediment	Fluoranthene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/2
HR02 SS	15.04.2021	suspended sediment	Benzo(a)pyrene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/2
HR02 SS	15.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/2
HR02 SS	15.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.008	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/2
HR02 SS	15.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.013	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/2
HR02 SS	15.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-502/2
HR02 SS	15.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/2
HR02 SS	15.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/2
HR02 SS	15.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/2
HR02 SS	15.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/2
HR02 SS	15.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/2

Table 3.4.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Croatia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR02 BS	15.04.2021	bottom sediment	As	5.18	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/4
HR02 BS	15.04.2021	bottom sediment	Cd	0.28	0.003	mg/kg d.m.	EPA 6020B:2014	21-502/4
HR02 BS	15.04.2021	bottom sediment	Cr	39.6	0.03	mg/kg d.m.	EPA 6020B:2014	21-502/4
HR02 BS	15.04.2021	bottom sediment	Cu	11.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/4
HR02 BS	15.04.2021	bottom sediment	Hg	0.16	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/4
HR02 BS	15.04.2021	bottom sediment	Ni	23.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/4
HR02 BS	15.04.2021	bottom sediment	Pb	15.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/4
HR02 BS	15.04.2021	bottom sediment	Zn	43.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/4
HR02 BS	15.04.2021	bottom sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/4
HR02 BS	15.04.2021	bottom sediment	Fluoranthene	0.014	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/4
HR02 BS	15.04.2021	bottom sediment	Benzo(a)pyrene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/4
HR02 BS	15.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/4
HR02 BS	15.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/4
HR02 BS	15.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.008	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/4
HR02 BS	15.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-502/4
HR02 BS	15.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/4
HR02 BS	15.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/4
HR02 BS	15.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/4
HR02 BS	15.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/4
HR02 BS	15.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/4

Table 3.4.2.3. Results from BALINT ANALITIKA for 2nd NB sampling point in Croatia – active floodplain sediment ("top soil" (top layer) TS and "bottom soil" (bottom layer) BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR02 FS TS	15.04.2021	soil	As	5.76	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/7
HR02 FS TS	15.04.2021	soil	Cd	0.26	0.003	mg/kg d.m.	EPA 6020B:2014	21-502/7
HR02 FS TS	15.04.2021	soil	Cr	35.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-502/7
HR02 FS TS	15.04.2021	soil	Cu	9.46	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/7
HR02 FS TS	15.04.2021	soil	Hg	0.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/7
HR02 FS TS	15.04.2021	soil	Ni	23.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/7
HR02 FS TS	15.04.2021	soil	Pb	12.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/7
HR02 FS TS	15.04.2021	soil	Zn	42.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/7
HR02 FS TS	15.04.2021	soil	Anthracene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/7
HR02 FS TS	15.04.2021	soil	Fluoranthene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/7
HR02 FS TS	15.04.2021	soil	Benzo(a)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/7
HR02 FS TS	15.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/7
HR02 FS TS	15.04.2021	soil	Benzo(g,h,i)perylene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/7
HR02 FS TS	15.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/7
HR02 FS TS	15.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-502/7
HR02 FS TS	15.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/7
HR02 FS TS	15.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/7
HR02 FS TS	15.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/7
HR02 FS TS	15.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/7
HR02 FS TS	15.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/7
HR02 FS BS	15.04.2021	soil	As	6.63	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/8
HR02 FS BS	15.04.2021	soil	Cd	0.30	0.003	mg/kg d.m.	EPA 6020B:2014	21-502/8
HR02 FS BS	15.04.2021	soil	Cr	37.2	0.03	mg/kg d.m.	EPA 6020B:2014	21-502/8
HR02 FS BS	15.04.2021	soil	Cu	11.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/8
HR02 FS BS	15.04.2021	soil	Hg	0.37	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/8
HR02 FS BS	15.04.2021	soil	Ni	24.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/8
HR02 FS BS	15.04.2021	soil	Pb	16.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-502/8
HR02 FS BS	15.04.2021	soil	Zn	44.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-502/8
HR02 FS BS	15.04.2021	soil	Anthracene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/8
HR02 FS BS	15.04.2021	soil	Fluoranthene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/8
HR02 FS BS	15.04.2021	soil	Benzo(a)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/8
HR02 FS BS	15.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/8
HR02 FS BS	15.04.2021	soil	Benzo(g,h,i)perylene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/8
HR02 FS BS	15.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-502/8
HR02 FS BS	15.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-502/8
HR02 FS BS	15.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/8
HR02 FS BS	15.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/8
HR02 FS BS	15.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/8
HR02 FS BS	15.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-502/8
HR02 FS BS	15.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-502/8

RESULTS FROM THE NATIONAL LABORATORY IN CROATIA

Suspended sediments could not be measured in the Croatian National Laboratory because there was not enough material. Only stream/bottom and active floodplain sediments were measured.

Table 3.4.2.4. Results from the national laboratory in Croatia for 2nd NB sampling point in Croatia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR 02 BS	28.07.2021.	bottom sediment	As	5.19	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Cd	< 0.16	0.003	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Cr	35.10	0.03	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Cu	9.18	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Hg	0.094	0.005	mg/kg d.m.	**HRN EN ISO 12846:2012 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Ni	23.84	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Pb	12.10	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Zn	44.90	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Anthracene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Fluoranthene	0.171	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Benzo(a)pyrene	0.305	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Benzo(b)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Benzo(k)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Benzo(g,h,i)perylene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Indeno(1,2,3-cd)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Dicofol	< 0.005	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/181 - 01-03 modif. (GC-MS/MS)	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Heptachlor	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Heptachlor epoxide	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Hexachlorobenzene	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Hexachloro cyclohexane	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11)	21-502/4
HR 02 BS	28.07.2021.	bottom sediment	Quinoxyfen	< 0.002	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/183 - 01-03 modif. (LC-MS/MS)	21-502/4

Methods marked with an asterisk (*) are accredited according to the requirements of the standard HRN EN ISO / IEC 17025: 2017 and specified in the accreditation certificate HAA no. 1073.

Methods marked with two asterisks (**) are from the flexible accreditation area according to the requirements of the standard HRN EN ISO / IEC 17025: 2017.

Table 3.4.2.5. Results from the national laboratory in Croatia for 2nd NB sampling point in Croatia – active floodplain sediment, "bottom soil" (bottom layer)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR 02 FS BS	28.07.2021.	soil	As	5.90	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/8
HR 02 FS BS	28.07.2021.	soil	Cd	< 0.16	0.003	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/8
HR 02 FS BS	28.07.2021.	soil	Cr	39.56	0.03	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/8
HR 02 FS BS	28.07.2021.	soil	Cu	9.03	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/8
HR 02 FS BS	28.07.2021.	soil	Hg	0.063	0.005	mg/kg d.m.	**HRN EN ISO 12846:2012 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/8
HR 02 FS BS	28.07.2021.	soil	Ni	25.77	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/8
HR 02 FS BS	28.07.2021.	soil	Pb	14.09	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/8
HR 02 FS BS	28.07.2021.	soil	Zn	41.75	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/8
HR 02 FS BS	28.07.2021.	soil	Anthracene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/8
HR 02 FS BS	28.07.2021.	soil	Fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/8
HR 02 FS BS	28.07.2021.	soil	Benzo(a)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/8
HR 02 FS BS	28.07.2021.	soil	Benzo(b)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/8
HR 02 FS BS	28.07.2021.	soil	Benzo(k)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/8
HR 02 FS BS	28.07.2021.	soil	Benzo(g,h,i)perylene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/8
HR 02 FS BS	28.07.2021.	soil	Indeno(1,2,3-cd)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/8
HR 02 FS BS	28.07.2021.	soil	Dicofol	< 0.005	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/181 - 01-03 modif. (GC-MS/MS)	21-502/8
HR 02 FS BS	28.07.2021.	soil	Heptachlor	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/8
HR 02 FS BS	28.07.2021.	soil	Heptachlor epoxide	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/8
HR 02 FS BS	28.07.2021.	soil	Hexachlorobenzene	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/8
HR 02 FS BS	28.07.2021.	soil	Hexachloro cyclohexane	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11)	21-502/8
HR 02 FS BS	28.07.2021.	soil	Quinoxyfen	< 0.002	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/183 - 01-03 modif. (LC-MS/MS)	21-502/8

Table 3.4.2.6. Results from the national laboratory in Croatia for 2nd NB sampling point in Croatia – active floodplain sediment, "top soil" (top layer)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HR 02 FS TS	28.07.2021.	soil	As	3.68	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/7
HR 02 FS TS	28.07.2021.	soil	Cd	< 0.16	0.003	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/7
HR 02 FS TS	28.07.2021.	soil	Cr	27.78	0.03	mg/kg d.m.	**HRN EN ISO 11885:2010 preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/7
HR 02 FS TS	28.07.2021.	soil	Cu	7.01	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition(2020-05-04)]	21-502/7
HR 02 FS TS	28.07.2021.	soil	Hg	0.051	0.005	mg/kg d.m.	**HRN EN ISO 12846:2012 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/7
HR 02 FS TS	28.07.2021.	soil	Ni	22.35	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/7
HR 02 FS TS	28.07.2021.	soil	Pb	8.75	0.005	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/7
HR 02 FS TS	28.07.2021.	soil	Zn	35.56	0.1	mg/kg d.m.	**HRN EN ISO 11885:2010 [preparation according to SOP -LEK-38c/6c, X. edition (2020-05-04)]	21-502/7
HR 02 FS TS	28.07.2021.	soil	Anthracene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/7
HR 02 FS TS	28.07.2021.	soil	Fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/7
HR 02 FS TS	28.07.2021.	soil	Benzo(a)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/7
HR 02 FS TS	28.07.2021.	soil	Benzo(b)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/7
HR 02 FS TS	28.07.2021.	soil	Benzo(k)fluoranthene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/7
HR 02 FS TS	28.07.2021.	soil	Benzo(g,h,i)perylene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/7
HR 02 FS TS	28.07.2021.	soil	Indeno(1,2,3-cd)pyrene	< 0.009	0.001	mg/kg d.m.	*HRN EN 15527:2008	21-502/7
HR 02 FS TS	28.07.2021.	soil	Dicofol	< 0.005	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/181 - 01-03 modif. (GC-MS/MS)	21-502/7
HR 02 FS TS	28.07.2021.	soil	Heptachlor	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/7
HR 02 FS TS	28.07.2021.	soil	Heptachlor epoxide	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/7
HR 02 FS TS	28.07.2021.	soil	Hexachlorobenzene	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11) (GC-MS/MS)	21-502/7
HR 02 FS TS	28.07.2021.	soil	Hexachloro cyclohexane	< 0.005	0.005	mg/kg d.m.	Own method: *SOP-LEK-38, 39/01 I. edition (2018-14-11)	21-502/7
HR 02 FS TS	28.07.2021.	soil	Quinoxyfen	< 0.002	0.005	mg/kg d.m.	Own method: SOP-LEK-31-33, 37/183 - 01-03 modif. (LC-MS/MS)	21-502/7

3.5. CZECH REPUBLIC

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF CZECH REPUBLIC

The samples collected in the two national baseline network stations proposed for sediment monitoring in Czech Republic were chemically analyzed in the Laboratory of the State Geological Institute of Dionýz Štúr in Spišská Nová Ves.

Sample preparation of SIMONA samples for ICP-MS measurements

Equipment:

- Microwave Digestion System MARS 6
- EasyPrep™ vessels

Chemicals used:

- Nitric acid (Chemapol, min. 65%)
- Hydrochloric acid (Merck, 37%)

Method of digestion:

The samples were received in dried and powdered form. 0.250 g (±1%) samples were measured using an analytical scale and put into vessels. 2.0 ml concentrated nitric acid and 6.0 ml concentrated hydrochloric acid was added to the samples. The vessels were closed and put into the Mars6 microwave digestion system.

The following digestion method was used:

Steps of the method	Time (minutes)	Temperature (°C)
1st step	15	110
2nd step	15	180
3rd step	10	230
4th step	5	230
5th step	cooling	

After the digestion the content of the vessels were put into 50 ml Falcon test tubes. The vessels were washed by deionised water, and then the tubes were filled to the marks. The thus obtained solutions were diluted tenfold.

Preparation of SIMONA samples for GC-MS analysis

- 5 g of each sample was transfered into 40 ml flasks, added 30 ml mixture of *n*-hexane:acetone (1:1)
- ultrasonic bath (45 min)
- filtration (Na_2SO_4)
- the extracts were evaporated by vacuum rotary evaporator to single-drop of extract, then quantitative transfered to bank and filled with n-hexane.

n-hexane extract of pesticides (heptachlor etc.) undergo hydrolysis with H_2SO_4 p.a. and then measured by GC-ECD.

The laboratory does not analyze Dicofol and Quinoxyfen (from the list of HSs in Simona Sediment Laboratory Protocol)

PAHs were measured by GC-MS.

3.5.1. Lanžhot on Morava River

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.5.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Czech Republic – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-01-SS	28.04.2021	suspended sediment	As	17.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Cd	0.68	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Cr	142	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Cu	45.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Hg	0.38	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Ni	109	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Pb	35.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Zn	362	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Anthracene	0.09	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Fluoranthene	1.13	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Benzo(a)pyrene	0.552	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.405	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.612	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/1
CZ-01-SS	28.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/1
CZ-01_SS centrif	28.04.2021	suspended sediment	As	8.53	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Cd	0.42	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Cr	49.3	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Cu	26.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Hg	0.23	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Ni	27.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Pb	16.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Zn	211	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Anthracene	0.014	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Fluoranthene	0.274	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Benzo(a)pyrene	0.071	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.239	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.093	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.142	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/2
CZ-01_SS centrif	28.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/2

Table 3.5.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Czech Republic – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-01-BS	28.04.2021	bottom sediment	As	6.22	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Cd	0.31	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Cr	42.6	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Cu	17.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Hg	0.24	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Ni	21.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Pb	13.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Zn	114	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Anthracene	0.097	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Fluoranthene	0.86	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Benzo(a)pyrene	0.381	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.708	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.263	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.452	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/5
CZ-01-BS	28.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/5

Table 3.5.1.3. Results from BALINT ANALITIKA for 1st NB sampling point in Czech Republic – active floodplain sediment {"bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-01-FS-BS	28.04.2021	soil	As	6.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Cd	0.35	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Cr	54.5	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Cu	17.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Hg	0.40	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Ni	23.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Pb	15.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Zn	88.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Anthracene	0.072	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Fluoranthene	0.740	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Benzo(a)pyrene	0.339	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.635	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Benzo(g,h,i)perylene	0.254	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.401	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/7
CZ-01-FS-BS	28.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/7
CZ-01-FS-TS	28.04.2021	soil	As	6.82	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Cd	0.37	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Cr	48.7	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Cu	21.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Hg	0.43	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Ni	28.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Pb	16.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Zn	117	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Anthracene	0.091	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Fluoranthene	0.936	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Benzo(a)pyrene	0.426	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.794	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Benzo(g,h,i)perylene	0.321	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.513	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/8
CZ-01-FS-TS	28.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/8

RESULTS FROM THE NATIONAL LABORATORY (SGIDS)

Table 3.5.1.4. Results from the national laboratory (SGIDS) for 1st NB sampling point in Czech Republic – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-01-BS	21.07.2021	bottom sediment	As	7.5	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Cd	0.418	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Cr	50	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Cu	26	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Hg	0.12	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Ni	29	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Pb	17.7	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Zn	134	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Anthracene	<	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Fluoranthene	<	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Benzo(a)pyrene	<	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Benzo(g,h,i)perylene	<	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5464
CZ-01-BS	21.07.2021	bottom sediment	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5464

Table 3.5.1.5. Results from the national laboratory (SGIDS) for 1st NB sampling point in Czech Republic – active floodplain sediment {"bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-01-FS-BS	21.07.2021	soil	As	5.8	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Cd	0.413	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Cr	51	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Cu	22	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Hg	0.11	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Ni	26	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Pb	17	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Zn	80	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Anthracene	0.079	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Fluoranthene	1.181	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Benzo(a)pyrene	0.379	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	1.071	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Benzo(g,h,i)perylene	0.182	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Indeno(1,2,3-cd)pyrene	0.253	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5467
CZ-01-FS-BS	21.07.2021	soil	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5467
CZ-01-FS-TS	21.07.2021	soil	As	6.9	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Cd	0.456	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Cr	59	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Cu	27	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Hg	0.1	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Ni	31	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Pb	18.3	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Zn	108	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Anthracene	0.14	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Fluoranthene	1.365	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Benzo(a)pyrene	0.73	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	1.493	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Benzo(g,h,i)perylene	0.354	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Indeno(1,2,3-cd)pyrene	0.463	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5466
CZ-01-FS-TS	21.07.2021	soil	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5466

3.5.2. Troubky on Bečva River

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.5.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Czech Republic – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-02-SS	28.04.2021	suspended sediment	As	14.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Cd	0.79	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Cr	110	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Cu	47.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Hg	0.42	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Ni	83.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Pb	35.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Zn	228	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Anthracene	0.055	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Fluoranthene	0.868	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	enzo(b)fluoranthene+Benzo(k)fluoranthen	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.328	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.504	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/3
CZ-02-SS	28.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/3
CZ-02-SS centrif	28.04.2021	suspended sediment	As	9.03	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Cd	0.51	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Cr	68.2	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Cu	35.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Hg	0.31	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Ni	38.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Pb	24.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Zn	203	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Anthracene	0.044	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Fluoranthene	0.629	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Benzo(a)pyrene	0.28	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	enzo(b)fluoranthene+Benzo(k)fluoranthen	0.55	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.224	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.333	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/4
CZ-02-SS centrif	28.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/4

Table 3.5.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Czech Republic – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-02-BS	28.04.2021	bottom sediment	As	6.15	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Cd	0.31	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Cr	46.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Cu	22.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Hg	0.23	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Ni	28.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Pb	16.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Zn	87.5	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Anthracene	0.105	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Fluoranthene	1.48	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Benzo(a)pyrene	0.626	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	1.15	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.429	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.734	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/6
CZ-02-BS	28.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/6

Table 3.5.2.3. Results from BALINT ANALITIKA for 2nd NB sampling point in Czech Republic – active floodplain sediment {"bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-02-FS-BS	28.04.2021	soil	As	6.65	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Cd	0.29	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Cr	30.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Cu	13.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Hg	0.27	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Ni	20.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Pb	13.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Zn	65.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Anthracene	0.068	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Fluoranthene	0.790	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Benzo(a)pyrene	0.364	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.657	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Benzo(g,h,i)perylene	0.254	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.402	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/9
CZ-02-FS-BS	28.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/9
CZ-02-FS-TS	28.04.2021	soil	As	3.87	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Cd	0.13	0.003	mg/kg d.m.	EPA 6020B:2014	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Cr	18.8	0.03	mg/kg d.m.	EPA 6020B:2014	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Cu	7.79	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Hg	0.30	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Ni	14.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Pb	7.33	0.005	mg/kg d.m.	EPA 6020B:2014	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Zn	42.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Anthracene	0.228	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Fluoranthene	1.41	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Benzo(a)pyrene	0.590	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.963	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Benzo(g,h,i)perylene	0.330	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.544	0.001	mg/kg d.m.	EPA 8270E:2018	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-546/10
CZ-02-FS-TS	28.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-546/10

RESULTS FROM THE NATIONAL LABORATORY (SGIDS)

Table 3.5.2.4. Results from the national laboratory (SGIDS) for 2nd NB sampling point in Czech Republic – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-02-BS	21.07.2021	bottom sediment	As	6.7	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Cd	0.333	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Cr	56	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Cu	27	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Hg	0.1	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Ni	36	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Pb	19.8	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Zn	91	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Anthracene	0.091	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Fluoranthene	1.069	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Benzo(a)pyrene	0.35	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.658	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Benzo(g,h,i)perylene	0.184	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.215	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5465
CZ-02-BS	21.07.2021	bottom sediment	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5465

Table 3.5.2.5. Results from the national laboratory (SGIDS) for 2nd NB sampling point in Czech Republic – active floodplain sediment ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
CZ-02-FS-BS	21.07.2021	soil	As	5.1	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Cd	0.311	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Cr	33	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Cu	16	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Hg	0.08	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Ni	21	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Pb	14.4	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Zn	57	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Anthracene	0.032	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Fluoranthene	0.574	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Benzo(a)pyrene	0.104	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.277	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Benzo(g,h,i)perylene	0.072	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Indeno(1,2,3-cd)pyrene	0.096	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5469
CZ-02-FS-BS	21.07.2021	soil	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5469
CZ-02-FS-TS	21.07.2021	soil	As	2.4	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Cd	0.104	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Cr	17	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Cu	10	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Hg	0.03	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Ni	15	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Pb	7.3	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Zn	30	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Anthracene	0.06	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Fluoranthene	0.996	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Benzo(a)pyrene	0.268	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.778	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Benzo(g,h,i)perylene	0.192	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Indeno(1,2,3-cd)pyrene	0.251	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5468
CZ-02-FS-TS	21.07.2021	soil	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5468

3.6. HUNGARY

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF HUNGARY

The national laboratory selected in Hungary was the Laboratory of the Department of Environment, Nature Conservation and Waste Management, Hajdú - Bihar County Government Office.

It is an accredited laboratory, located in Debrecen, which used for the SIMONA sample sediments the following standards and equipments:

- For metals:
  - Cd, Co, Cr, Ni, Pb, Cu and Zn – standard MSZ EN 16170:2017, analyzed by ICP-OES method with Thermo Scientific iCAP 6200 equipment.
  - Hg – standards MSZ EN ISO 17852:2008; MSZ 2 1470-50:2006, analyzed with an Analytic Jena equipment for Hg.
- For Polycyclic Aromatic Hydrocarbons:
  - Anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene – standard EPA 8270 E:2018, analyzed by GC-MS method with Thermo Scientific TermoTrace 1310 equipment.
- Pesticides were not measured in the laboratory.

Total Organic Carbon (TOC) was measured by MSZ EN 15936:2013 standard, using the TOC/TN analyzer Analytic Jena, MultiN/C 3100.

3.6.1. Babócsa on Babócsai-Rinya River

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.6.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Hungary – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-01-SS	21.05.2021	suspended sediment	As	521	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Cd	0.27	0.003	mg/kg d.m.	EPA 6020B:2014	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Cr	33.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Cu	20.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Hg	0.33	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Ni	18.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Pb	14.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Zn	84.5	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Anthracene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Fluoranthene	0.033	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Benzo(g,h,i)perylene	0.018	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.032	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/1
HU-01-SS	21.05.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/1

Table 3.6.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Hungary – stream/bottom sediment (0-5 cm)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-01-BS	21.05.2021	bottom sediment	As	17.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Cd	0.03	0.003	mg/kg d.m.	EPA 6020B:2014	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Cr	15.6	0.03	mg/kg d.m.	EPA 6020B:2014	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Cu	1.94	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Hg	0.18	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Ni	1.53	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Pb	1.27	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Zn	8.64	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Benzo(g,h,i)perylene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/3
HU-01-BS	21.05.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/3

Table 3.6.1.3. Results from BALINT ANALITIKA for 1st NB sampling point in Hunagary – active floodplain sediment FS: Floodplain Sediment; TS: Top Soil (0-5cm) and BS: Bottom Soil (45-50 cm)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-01-FS-TS	21.05.2021	soil	As	23.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/5
HU-01-FS-TS	21.05.2021	soil	Cd	0.08	0.003	mg/kg d.m.	EPA 6020B:2014	21-620/5
HU-01-FS-TS	21.05.2021	soil	Cr	13.8	0.03	mg/kg d.m.	EPA 6020B:2014	21-620/5
HU-01-FS-TS	21.05.2021	soil	Cu	4.94	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/5
HU-01-FS-TS	21.05.2021	soil	Hg	0.18	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/5
HU-01-FS-TS	21.05.2021	soil	Ni	5.22	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/5
HU-01-FS-TS	21.05.2021	soil	Pb	4.69	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/5
HU-01-FS-TS	21.05.2021	soil	Zn	26.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/5
HU-01-FS-TS	21.05.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/5
HU-01-FS-TS	21.05.2021	soil	Fluoranthene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/5
HU-01-FS-TS	21.05.2021	soil	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/5
HU-01-FS-TS	21.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/5
HU-01-FS-TS	21.05.2021	soil	Benzo(g,h,i)perylene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/5
HU-01-FS-TS	21.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/5
HU-01-FS-TS	21.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-620/5
HU-01-FS-TS	21.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/5
HU-01-FS-TS	21.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/5
HU-01-FS-TS	21.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/5
HU-01-FS-TS	21.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/5
HU-01-FS-TS	21.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/5
HU-01-FS-BS	21.05.2021	soil	As	7.34	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/6
HU-01-FS-BS	21.05.2021	soil	Cd	0.04	0.003	mg/kg d.m.	EPA 6020B:2014	21-620/6
HU-01-FS-BS	21.05.2021	soil	Cr	11.4	0.03	mg/kg d.m.	EPA 6020B:2014	21-620/6
HU-01-FS-BS	21.05.2021	soil	Cu	2.56	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/6
HU-01-FS-BS	21.05.2021	soil	Hg	0.15	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/6
HU-01-FS-BS	21.05.2021	soil	Ni	3.72	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/6
HU-01-FS-BS	21.05.2021	soil	Pb	2.70	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/6
HU-01-FS-BS	21.05.2021	soil	Zn	13.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/6
HU-01-FS-BS	21.05.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/6
HU-01-FS-BS	21.05.2021	soil	Fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/6
HU-01-FS-BS	21.05.2021	soil	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/6
HU-01-FS-BS	21.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/6
HU-01-FS-BS	21.05.2021	soil	Benzo(g,h,i)perylene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/6
HU-01-FS-BS	21.05.2021	soil	Indeno(1,2,3-cd)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/6
HU-01-FS-BS	21.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-620/6
HU-01-FS-BS	21.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/6
HU-01-FS-BS	21.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/6
HU-01-FS-BS	21.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/6
HU-01-FS-BS	21.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/6
HU-01-FS-BS	21.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/6

RESULTS FROM THE NATIONAL LABORATORY IN HUNGARY

Table 3.6.1.4. Results from the national laboratory for 1st NB sampling point in Hungary – stream/bottom sediment (0-5 cm)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-01-BS	05.11.2021	bottom sediment	As	19	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Cd	0.55	0.1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Cr	2.39	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Cu	<	1.00	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Hg	<	0.10	mg/kg d.m.	MSZ EN ISO 17852:2008; MSZ 2 1470-50:2006 6. fejezet	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Ni	2.49	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Pb	5.8	0.5	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Zn	4.63	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Anthracene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Benzo(a)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Benzo(g,h,i)perylene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00034
HU-01-BS	05.11.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00034

Table 3.6.1.5. Results from the national laboratory for 1st NB sampling point in Hungary – – active floodplain sediment FS: Floodplain Sediment; TS: Top Soil (0-5cm) and BS: Bottom Soil (45-50 cm)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-01-FS-TS	05.11.2021	soil	As	22.3	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Cd	1.54	0.1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Cr	13.7	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Cu	2.44	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Hg	<	0.10	mg/kg d.m.	MSZ EN ISO 17852:2008; MSZ 2 1470-50:2006 6. fejezet	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Ni	6.61	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Pb	4.52	0.5	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Zn	22.5	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Anthracene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Benzo(a)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Benzo(g,h,i)perylene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00031
HU-01-FS-TS	05.11.2021	soil	Indeno(1,2,3-cd)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00031
HU-01-FS-BS	05.11.2021	soil	As	9.4	2	mg/kg	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Cd	0.78	0.1	mg/kg	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Cr	7.53	1	mg/kg	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Cu	<	1.00	mg/kg	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Hg	<	0.10	mg/kg d.m.	MSZ EN ISO 17852:2008; MSZ 2 1470-50:2006 6. fejezet	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Ni	4.78	1	mg/kg	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Pb	2.21	0.5	mg/kg	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Zn	7.55	2	mg/kg	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Anthracene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Benzo(a)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Benzo(g,h,i)perylene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00030
HU-01-FS-BS	05.11.2021	soil	Indeno(1,2,3-cd)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00030

3.6.2. Pocsaj on Berettyó River

Table 3.6.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Hungary – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-02_SS	21.05.2021	suspended sediment	As	15.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Cd	0.38	0.003	mg/kg d.m.	EPA 6020B:2014	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Cr	84.8	0.03	mg/kg d.m.	EPA 6020B:2014	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Cu	35.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Hg	0.15	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Ni	47.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Pb	26.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Zn	114	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Fluoranthene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Benzo(g,h,i)perylene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/2
HU-02_SS	21.05.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/2

Table 3.6.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Hungary – stream/bottom sediment (0-5 cm)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-02-BS	21.05.2021	bottom sediment	As	6.40	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Cd	0.11	0.003	mg/kg d.m.	EPA 6020B:2014	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Cr	25.1	0.03	mg/kg d.m.	EPA 6020B:2014	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Cu	10.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Hg	0.17	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Ni	14.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Pb	8.17	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Zn	36.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Fluoranthene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Benzo(g,h,i)perylene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/4
HU-02-BS	21.05.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/4

Table 3.6.2.3. Results from BALINT ANALITIKA for 2nd NB sampling point in Hungary – active floodplain sediment FS: Floodplain Sediment; TS: Top Soil (0-5cm) and BS: Bottom Soil (45-50 cm)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-02-FS-TS	21.05.2021	soil	As	5.55	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/7
HU-02-FS-TS	21.05.2021	soil	Cd	0.19	0.003	mg/kg d.m.	EPA 6020B:2014	21-620/7
HU-02-FS-TS	21.05.2021	soil	Cr	38.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-620/7
HU-02-FS-TS	21.05.2021	soil	Cu	14.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/7
HU-02-FS-TS	21.05.2021	soil	Hg	0.15	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/7
HU-02-FS-TS	21.05.2021	soil	Ni	20.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/7
HU-02-FS-TS	21.05.2021	soil	Pb	12.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/7
HU-02-FS-TS	21.05.2021	soil	Zn	54.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/7
HU-02-FS-TS	21.05.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/7
HU-02-FS-TS	21.05.2021	soil	Fluoranthene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/7
HU-02-FS-TS	21.05.2021	soil	Benzo(a)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/7
HU-02-FS-TS	21.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/7
HU-02-FS-TS	21.05.2021	soil	Benzo(g,h,i)perylene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/7
HU-02-FS-TS	21.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/7
HU-02-FS-TS	21.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-620/7
HU-02-FS-TS	21.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/7
HU-02-FS-TS	21.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/7
HU-02-FS-TS	21.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/7
HU-02-FS-TS	21.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/7
HU-02-FS-TS	21.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/7
HU-02-FS-BS	21.05.2021	soil	As	3.96	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/8
HU-02-FS-BS	21.05.2021	soil	Cd	0.12	0.003	mg/kg d.m.	EPA 6020B:2014	21-620/8
HU-02-FS-BS	21.05.2021	soil	Cr	43.4	0.03	mg/kg d.m.	EPA 6020B:2014	21-620/8
HU-02-FS-BS	21.05.2021	soil	Cu	11.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/8
HU-02-FS-BS	21.05.2021	soil	Hg	0.13	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/8
HU-02-FS-BS	21.05.2021	soil	Ni	16.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/8
HU-02-FS-BS	21.05.2021	soil	Pb	8.31	0.005	mg/kg d.m.	EPA 6020B:2014	21-620/8
HU-02-FS-BS	21.05.2021	soil	Zn	40.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-620/8
HU-02-FS-BS	21.05.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/8
HU-02-FS-BS	21.05.2021	soil	Fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/8
HU-02-FS-BS	21.05.2021	soil	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/8
HU-02-FS-BS	21.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/8
HU-02-FS-BS	21.05.2021	soil	Benzo(g,h,i)perylene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/8
HU-02-FS-BS	21.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-620/8
HU-02-FS-BS	21.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-620/8
HU-02-FS-BS	21.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/8
HU-02-FS-BS	21.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/8
HU-02-FS-BS	21.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/8
HU-02-FS-BS	21.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-620/8
HU-02-FS-BS	21.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-620/8

RESULTS FROM THE NATIONAL LABORATORY IN HUNGARY

Table 3.6.2.4. Results from the national laboratory for 2nd NB sampling point in Hungary – stream/bottom sediment (0-5cm)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-02-BS	05.11.2021	bottom sediment	As	6.28	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Cd	1.68	0.1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Cr	23.2	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Cu	11.7	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Hg	<	0.10	mg/kg d.m.	MSZ EN ISO 17852:2008; MSZ 2 1470-50:2006 6. fejezet	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Ni	17.5	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Pb	30.2	0.5	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Zn	36.6	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Anthracene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Benzo(a)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Benzo(g,h,i)perylene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00035
HU-02-BS	05.11.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00035

Table 3.6.2.5. Results from the national laboratory for 2nd NB sampling point in Hungary – – active floodplain sediment FS: Floodplain Sediment; TS: Top Soil (0-5cm) and BS: Bottom soil (45-50 cm)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
HU-02-FS-TS	05.11.2021	soil	As	5.07	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Cd	1.97	0.1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Cr	36.9	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Cu	15.3	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Hg	<	0.1	mg/kg d.m.	MSZ EN ISO 17852:2008; MSZ 2 1470-50:2006 6. fejezet	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Ni	24.1	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Pb	10.1	0.5	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Zn	53.9	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Anthracene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Benzo(a)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	enzo(b)fluoranthene+Benzo(k)fluoranthen	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Benzo(g,h,i)perylene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00033
HU-02-FS-TS	05.11.2021	soil	Indeno(1,2,3-cd)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00033
HU-02-FS-BS	05.11.2021	soil	As	4.24	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Cd	1.56	0.1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Cr	28.7	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Cu	11.1	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Hg	<	0.1	mg/kg d.m.	MSZ EN ISO 17852:2008; MSZ 2 1470-50:2006 6. fejezet	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Ni	19.8	1	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Pb	7.48	0.5	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Zn	38.9	2	mg/kg d.m.	MSZ EN 16170:2017 (ICP-OES)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Anthracene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Benzo(a)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	enzo(b)fluoranthene+Benzo(k)fluoranthen	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Benzo(g,h,i)perylene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00032
HU-02-FS-BS	05.11.2021	soil	Indeno(1,2,3-cd)pyrene	<	0.01	mg/kg d.m.	EPA 8270E:2018 (GC-MS)	2021/ÜL00032

3.7. REPUBLIC OF MOLDAVIA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF THE MOLDAVIA REPUBLIC

Only stream/bottom sedimnents were collected from the Republic of Moldavia, at two new changed locations: Beleu Lake in South-East of the country, and Costești Stânca, on Prut River, where there is a dam and an accumulation lake, commonly exploited by Romania at Stânca, respectively by the Republic of Moldavia at Costesti.

The collected samples were analyzed at national level in the laboratory of the Institute of Chemistry in Chisinau.

The following standards have been used:

- For metals: ISO 11047
- For Polycyclic Aromatic Hydrocarbons: EPA 8270E
- For pesticides: ISO 16468

Dicofol and Quinoxyfen are not measured in the laboratory.

3.7.1. Beleu Lake

RESULTS FROM BALINT ANALITIKA

Table 3.7.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in the Republic of Moldavia – stream/bottom sediment

Sample ID	Alternate Sample ID	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
60/21 Beleu Lake	MD-01-BS	bottom sediment	As	<	0.005	mg/kg d.m.	EPA 6020B:2014	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Cd	<	0.003	mg/kg d.m.	EPA 6020B:2014	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Cr	<	0.03	mg/kg d.m.	EPA 6020B:2014	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Cu	<	0.1	mg/kg d.m.	EPA 6020B:2014	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Hg	<	0.005	mg/kg d.m.	EPA 6020B:2014	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Ni	<	0.005	mg/kg d.m.	EPA 6020B:2014	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Pb	0.01	0.005	mg/kg d.m.	EPA 6020B:2014	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Zn	1.64	0.1	mg/kg d.m.	EPA 6020B:2014	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Anthracene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Fluoranthene	0.142	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Benzo(a)pyrene	0.046	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.107	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Benzo(g,h,i)perylene	0.042	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Indeno(1,2,3-cd)pyrene	0.051	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-799/2
60/21 Beleu Lake	MD-01-BS	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-799/2

RESULTS FROM THE NATIONAL LABORATORY IN THE REPUBLIC OF MOLDAVIA

Table 3.7.1.2. Results from the national laboratory for 1st NB sampling point in the Republic of Moldavia – stream/bottom sediment

Sample ID	Alternate Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	As	<	0.005	mg/kg d.m.	ISO 11047:2006	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Cd	0.400	0.005	mg/kg d.m.	ISO 11047:2007	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Cr	3.600	0.05	mg/kg d.m.	ISO 11047:2008	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Cu	6.450	0.1	mg/kg d.m.	ISO 11047:2009	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Hg	<	0.005	mg/kg d.m.	ISO 11047:2010	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Ni	3.650	0.005	mg/kg d.m.	ISO 11047:2011	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Pb	8.790	0.01	mg/kg d.m.	ISO 11047:2012	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Zn	56.140	0.1	mg/kg d.m.	ISO 11047:2013	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Fluorene	0.018	0.001	mg/kg d.m.	EPA 8270E:2013	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Phenanthrene	0.008	0.001	mg/kg d.m.	EPA 8270E:2014	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Anthracene	0.018	0.001	mg/kg d.m.	EPA 8270E:2015	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2016	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Benz[a]anthracene	0.005	0.001	mg/kg d.m.	EPA 8270E:2017	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Fluoranthene	0.118	0.001	mg/kg d.m.	EPA 8270E:2018	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Benzo(a)pyrene	0.038	0.001	mg/kg d.m.	EPA 8270E:2018	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.105	0.001	mg/kg d.m.	EPA 8270E:2018	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Benzo(g,h,i)perylene	0.034	0.001	mg/kg d.m.	EPA 8270E:2018	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.039	0.001	mg/kg d.m.	EPA 8270E:2018	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Dicofol	N/a				60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	ISO 16468:2022	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	ISO 16468:2023	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	ISO 16468:2024	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	ISO 16468:2025	60/21
60/21 Beleu Lake	MD-01-BS	28.05.2021	bottom sediment	Quinoxyfen	N/a				60/21

3.7.2. Costești (Stânca) on River Prut

RESULTS FROM BALINT ANALITIKA

Table 3.7.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in the Republic of Moldavia – stream/bottom sediment

Sample ID	Alternate Sample ID	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
59-21 Costesti Stinca	MD-02-BS	bottom sediment	As	<	0.005	mg/kg d.m.	EPA 6020B:2014	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Cd	<	0.003	mg/kg d.m.	EPA 6020B:2014	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Cr	<	0.03	mg/kg d.m.	EPA 6020B:2014	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Cu	<	0.1	mg/kg d.m.	EPA 6020B:2014	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Hg	<	0.005	mg/kg d.m.	EPA 6020B:2014	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Ni	<	0.005	mg/kg d.m.	EPA 6020B:2014	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Pb	0.02	0.005	mg/kg d.m.	EPA 6020B:2014	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Zn	1.51	0.1	mg/kg d.m.	EPA 6020B:2014	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Anthracene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Fluoranthene	0.087	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Benzo(a)pyrene	0.04	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.096	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Benzo(g,h,i)perylene	0.044	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Indeno(1,2,3-cd)pyrene	0.044	0.001	mg/kg d.m.	EPA 8270E:2018	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-799/1
59-21 Costesti Stinca	MD-02-BS	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-799/1

RESULTS FROM THE NATIONAL LABORATORY IN THE REPUBLIC OF MOLDAVIA

Table 3.7.2.2. Results from the national laboratory for 2nd NB sampling point in the Republic of Moldavia – stream/bottom sediment

Sample ID	Alternate Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	As	<	0.005	mg/kg d.m.	ISO 11047:2006	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Cd	0.05	0.005	mg/kg d.m.	ISO 11047:2007	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Cr	1.10	0.05	mg/kg d.m.	ISO 11047:2008	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Cu	12.50	0.1	mg/kg d.m.	ISO 11047:2009	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Hg	<	0.005	mg/kg d.m.	ISO 11047:2010	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Ni	2.28	0.005	mg/kg d.m.	ISO 11047:2011	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Pb	5.50	0.01	mg/kg d.m.	ISO 11047:2012	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Zn	15.20	0.1	mg/kg d.m.	ISO 11047:2013	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Fluorene	0.080	0.001	mg/kg d.m.	EPA 8270E:2013	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Phenanthrene	0.038	0.001	mg/kg d.m.	EPA 8270E:2014	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Anthracene	0.024	0.001	mg/kg d.m.	EPA 8270E:2015	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Pyrene	0.018	0.001	mg/kg d.m.	EPA 8270E:2016	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Benz[a]anthracene	0.005	0.001	mg/kg d.m.	EPA 8270E:2017	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Fluoranthene	0.066	0.001	mg/kg d.m.	EPA 8270E:2018	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Benzo(a)pyrene	0.025	0.001	mg/kg d.m.	EPA 8270E:2018	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.085	0.001	mg/kg d.m.	EPA 8270E:2018	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.042	0.001	mg/kg d.m.	EPA 8270E:2018	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Dicofol	N/a				59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	ISO 16468:2022	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	ISO 16468:2023	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	ISO 16468:2024	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	ISO 16468:2025	59/21
59/21 Costesti Stinca	MD-02-BS	28.05.2021	bottom sediment	Quinoxyfen	N/a				59/21

3.8. MONTENEGRO

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF MONTENEGRO

The samples collected in the two baseline network stations proposed for sediment monitoring in Montenegro were chemically analyzed in the Centre for Ecotoxicological Research (CETI) in Podgorica.

Only stream/bottom sediments and active floodplain sediments could be measured in the country laboratory, there was not enough material left for measuring the suspended sediments.

List of equipment for preparation and analysis of sediment samples

Sediment sample preparation equipment:

1. Analytical Sieve Shaker, Analysen SIEB-AS 200, Retsch

Humidity determination equipment:

1. Moisture balance, MA40, Sartorius

Equipment for analysis of organic contaminants:

1. Gas chromatograph–tandem mass spectrometer, GCMS/MS, TSQ 9000, Thermo Scientific
2. Gas chromatograph–mass spectrometer, GCMS QP 2010 plus, Shimadzu
3. Gas chromatograph with ECD detector 2010 plus, Shimadzu

Equipment for analysis of chemical elements:

1. Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES), iCAP7400, Thermo
2. Advanced Mercury Analyzer, AMA 254, Altec Ltd.
3. Atomic Absorption Spectrophotometer, AA6800, Shimadzu
4. Microwave Digestion, Speedwave Xpert, Berghof

3.8.1. Gradac on River Ćehotina

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.8.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Montenegro – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
ME-01-SS	12.05.2021	suspended sediment	As	12.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Cd	0.85	0.003	mg/kg d.m.	EPA 6020B:2014	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Cr	50.7	0.03	mg/kg d.m.	EPA 6020B:2014	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Cu	47.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Hg	0.71	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Ni	43.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Pb	30.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Zn	286	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Anthracene	0.012	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Fluoranthene	0.055	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Benzo(g,h,i)perylene	0.025	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.027	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/1
ME-01-SS	12.05.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/1

Table 3.8.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Montenegro – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
ME-01-BS	12.05.2021	bottom sediment	As	5.20	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Cd	0.20	0.003	mg/kg d.m.	EPA 6020B:2014	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Cr	26.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Cu	13.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Hg	0.20	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Ni	21.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Pb	10.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Zn	45.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Fluoranthene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Benzo(g,h,i)perylene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/3
ME-01-BS	12.05.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/3

Table 3.8.1.3. Results from BALINT ANALITIKA for 1st NB sampling point in Montenegro – active floodplain sediment ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
ME-01-FS-TS	12.05.2021	soil	As	5.88	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/5
ME-01-FS-TS	12.05.2021	soil	Cd	0.33	0.003	mg/kg d.m.	EPA 6020B:2014	21-589/5
ME-01-FS-TS	12.05.2021	soil	Cr	34.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-589/5
ME-01-FS-TS	12.05.2021	soil	Cu	18.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/5
ME-01-FS-TS	12.05.2021	soil	Hg	0.21	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/5
ME-01-FS-TS	12.05.2021	soil	Ni	24.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/5
ME-01-FS-TS	12.05.2021	soil	Pb	16.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/5
ME-01-FS-TS	12.05.2021	soil	Zn	60.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/5
ME-01-FS-TS	12.05.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/5
ME-01-FS-TS	12.05.2021	soil	Fluoranthene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/5
ME-01-FS-TS	12.05.2021	soil	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/5
ME-01-FS-TS	12.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/5
ME-01-FS-TS	12.05.2021	soil	Benzo(g,h,i)perylene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/5
ME-01-FS-TS	12.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/5
ME-01-FS-TS	12.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-589/5
ME-01-FS-TS	12.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/5
ME-01-FS-TS	12.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/5
ME-01-FS-TS	12.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/5
ME-01-FS-TS	12.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/5
ME-01-FS-TS	12.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/5
ME-01-FS-BS	12.05.2021	soil	As	6.39	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/6
ME-01-FS-BS	12.05.2021	soil	Cd	0.29	0.003	mg/kg d.m.	EPA 6020B:2014	21-589/6
ME-01-FS-BS	12.05.2021	soil	Cr	38.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-589/6
ME-01-FS-BS	12.05.2021	soil	Cu	17.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/6
ME-01-FS-BS	12.05.2021	soil	Hg	0.20	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/6
ME-01-FS-BS	12.05.2021	soil	Ni	26.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/6
ME-01-FS-BS	12.05.2021	soil	Pb	17.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/6
ME-01-FS-BS	12.05.2021	soil	Zn	49.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/6
ME-01-FS-BS	12.05.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/6
ME-01-FS-BS	12.05.2021	soil	Fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/6
ME-01-FS-BS	12.05.2021	soil	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/6
ME-01-FS-BS	12.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/6
ME-01-FS-BS	12.05.2021	soil	Benzo(g,h,i)perylene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/6
ME-01-FS-BS	12.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/6
ME-01-FS-BS	12.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-589/6
ME-01-FS-BS	12.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/6
ME-01-FS-BS	12.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/6
ME-01-FS-BS	12.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/6
ME-01-FS-BS	12.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/6
ME-01-FS-BS	12.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/6

RESULTS FROM THE NATIONAL LABORATORY IN MONTENEGRO

Table 3.8.1.4. Results from the national laboratory in Montenegro for 1st NB sampling point in Montenegro – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Unit	Standard method applied	Lab ID
ME-01-BS	08.09.2021.	bottom sediment	As	3.1±0.3	mg/kg d.m.	EPA 3051 A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Co	6.2±0.6	mg/kg d.m.	EPA 3051 A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Cd	<0.2	mg/kg d.m.	EPA 3051 A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Cr	15±1	mg/kg d.m.	EPA 3051 A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Cu	25±2	mg/kg d.m.	EPA 3051 A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Total mercury (HgT)	0.063±0.007	mg/kg d.m.	AMA-112*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Ni	20±2	mg/kg d.m.	EPA 3051 A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Pb	8.1±0.8	mg/kg d.m.	EPA 3051 A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Zn	39±4	mg/kg d.m.	EPA 3051 A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Naphtalene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Acenaphtylene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Acenaphtene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Fluorene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Phenanthrene	0.007±0.001	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Anthracene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Pyrene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Benzo(a)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Chrysene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Benzo(a)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Benzo(g,h,i)perylene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Indeno(1,2,3-cd)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Dibenzo(a.h)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Dicofol	<0.0005	mg/kg d.m.	EPA 8080A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Heptachlor	<0.0005	mg/kg d.m.	EPA 8080A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Heptachlor epoxide	<0.0005	mg/kg d.m.	EPA 8080A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Hexachlorobenzene	<0.0005	mg/kg d.m.	EPA 8080A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Hexachloro cyclohexane	<0.0005	mg/kg d.m.	EPA 8080A*	183/05/1
ME-01-BS	08.09.2021.	bottom sediment	Quinoxyfen	<0.01	mg/kg d.m.	EPA 8270D*	183/05/1

Table 3.8.1.5. Results from the national laboratory in Montenegro for 1st NB sampling point in Montenegro – active floodplain sediment ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Unit	Standard method applied	Lab ID
ME-01-FS-TS	08.09.2021.	soil	As	4.2±0.4	mg/kg d.m.	EPA 3051 A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Co	7.1±0.7	mg/kg d.m.	EPA 3051 A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Cd	<0.2	mg/kg d.m.	EPA 3051 A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Cr	20±2	mg/kg d.m.	EPA 3051 A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Cu	32±3	mg/kg d.m.	EPA 3051 A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Total mercury (HgT)	0.11±0.01	mg/kg d.m.	AMA-112*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Ni	22±2	mg/kg d.m.	EPA 3051 A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Pb	14±1	mg/kg d.m.	EPA 3051 A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Zn	49±5	mg/kg d.m.	EPA 3051 A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Naphtalene	0.010±0.003	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Acenaphtylene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Acenaphtene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Fluorene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Phenanthrene	0.009±0.001	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Anthracene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Pyrene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Benzo(a)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Chrysene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Benzo(a)pyrene	0.009±0.001	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Benzo(b)fluoranthene	0.014±0.002	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Benzo(k)fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Benzo(g,h,i)perylene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Indeno(1,2,3-cd)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Dibenzo(a.h)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Dicofol	<0.0005	mg/kg d.m.	EPA 8080A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Heptachlor	<0.0005	mg/kg d.m.	EPA 8080A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Heptachlor epoxide	<0.0005	mg/kg d.m.	EPA 8080A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Hexachlorobenzene	<0.0005	mg/kg d.m.	EPA 8080A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Hexachloro cyclohexane	<0.0005	mg/kg d.m.	EPA 8080A*	185/05/1
ME-01-FS-TS	08.09.2021.	soil	Quinoxyfen	<0.01	mg/kg d.m.	EPA 8270D*	185/05/1
ME-01-FS-BS	08.09.2021.	soil	As	6.7±0.7	mg/kg d.m.	EPA 3051 A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Co	7.5±0.8	mg/kg d.m.	EPA 3051 A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Cd	<0.2	mg/kg d.m.	EPA 3051 A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Cr	20±2	mg/kg d.m.	EPA 3051 A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Cu	31±3	mg/kg d.m.	EPA 3051 A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Total mercury (HgT)	0.10±0.01	mg/kg d.m.	AMA-112*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Ni	22±2	mg/kg d.m.	EPA 3051 A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Pb	12±1	mg/kg d.m.	EPA 3051 A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Zn	41±4	mg/kg d.m.	EPA 3051 A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Naphtalene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Acenaphtylene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Acenaphtene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Fluorene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Phenanthrene	0.007±0.001	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Anthracene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Pyrene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Benzo(a)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Chrysene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Benzo(a)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Benzo(g,h,i)perylene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Indeno(1,2,3-cd)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Dibenzo(a.h)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Dicofol	<0.0005	mg/kg d.m.	EPA 8080A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Heptachlor	<0.0005	mg/kg d.m.	EPA 8080A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Heptachlor epoxide	<0.0005	mg/kg d.m.	EPA 8080A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Hexachlorobenzene	<0.0005	mg/kg d.m.	EPA 8080A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Hexachloro cyclohexane	<0.0005	mg/kg d.m.	EPA 8080A*	184/05/1
ME-01-FS-BS	08.09.2021.	soil	Quinoxyfen	<0.01	mg/kg d.m.	EPA 8270D*	184/05/1

3.8.2. Bijelo Polje on River Lim

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.8.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Montenegro – suspended sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
ME-02_SS	12.05.2021	suspended sediment	As	14.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Cd	0.24	0.003	mg/kg d.m.	EPA 6020B:2014	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Cr	65.7	0.03	mg/kg d.m.	EPA 6020B:2014	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Cu	26.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Hg	0.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Ni	43.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Pb	23.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Zn	96.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Fluoranthene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Benzo(g,h,i)perylene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/2
ME-02_SS	12.05.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/2

Table 3.8.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Montenegro – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
ME-02-BS	12.05.2021	bottom sediment	As	12.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Cd	0.13	0.003	mg/kg d.m.	EPA 6020B:2014	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Cr	43.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Cu	18.7	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Hg	0.34	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Ni	29.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Pb	16.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Zn	74.5	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Fluoranthene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Benzo(a)pyrene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Benzo(g,h,i)perylene	0.008	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/4
ME-02-BS	12.05.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/4

Table 3.8.2.3. Results from BALINT ANALITIKA for 2nd NB sampling point in Montenegro – active floodplain sediment ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
ME-02-FS-TS	12.05.2021	soil	As	11.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/7
ME-02-FS-TS	12.05.2021	soil	Cd	0.13	0.003	mg/kg d.m.	EPA 6020B:2014	21-589/7
ME-02-FS-TS	12.05.2021	soil	Cr	43.7	0.03	mg/kg d.m.	EPA 6020B:2014	21-589/7
ME-02-FS-TS	12.05.2021	soil	Cu	18.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/7
ME-02-FS-TS	12.05.2021	soil	Hg	0.30	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/7
ME-02-FS-TS	12.05.2021	soil	Ni	29.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/7
ME-02-FS-TS	12.05.2021	soil	Pb	18.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/7
ME-02-FS-TS	12.05.2021	soil	Zn	75.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/7
ME-02-FS-TS	12.05.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/7
ME-02-FS-TS	12.05.2021	soil	Fluoranthene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/7
ME-02-FS-TS	12.05.2021	soil	Benzo(a)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/7
ME-02-FS-TS	12.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/7
ME-02-FS-TS	12.05.2021	soil	Benzo(g,h,i)perylene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/7
ME-02-FS-TS	12.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/7
ME-02-FS-TS	12.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-589/7
ME-02-FS-TS	12.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/7
ME-02-FS-TS	12.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/7
ME-02-FS-TS	12.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/7
ME-02-FS-TS	12.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/7
ME-02-FS-TS	12.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/7
ME-02-FS-BS	12.05.2021	soil	As	12.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/8
ME-02-FS-BS	12.05.2021	soil	Cd	0.14	0.003	mg/kg d.m.	EPA 6020B:2014	21-589/8
ME-02-FS-BS	12.05.2021	soil	Cr	47.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-589/8
ME-02-FS-BS	12.05.2021	soil	Cu	18.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/8
ME-02-FS-BS	12.05.2021	soil	Hg	0.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/8
ME-02-FS-BS	12.05.2021	soil	Ni	28.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/8
ME-02-FS-BS	12.05.2021	soil	Pb	17.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-589/8
ME-02-FS-BS	12.05.2021	soil	Zn	69.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-589/8
ME-02-FS-BS	12.05.2021	soil	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/8
ME-02-FS-BS	12.05.2021	soil	Fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/8
ME-02-FS-BS	12.05.2021	soil	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/8
ME-02-FS-BS	12.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/8
ME-02-FS-BS	12.05.2021	soil	Benzo(g,h,i)perylene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/8
ME-02-FS-BS	12.05.2021	soil	Indeno(1,2,3-cd)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-589/8
ME-02-FS-BS	12.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-589/8
ME-02-FS-BS	12.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/8
ME-02-FS-BS	12.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/8
ME-02-FS-BS	12.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/8
ME-02-FS-BS	12.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-589/8
ME-02-FS-BS	12.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-589/8

RESULTS FROM THE NATIONAL LABORATORY IN MONTENEGRO

Table 3.8.2.4. Results from the national laboratory in Montenegro for 2nd NB sampling point in Montenegro – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Unit	Standard method applied	Lab ID
ME-02-BS	08.09.2021.	bottom sediment	As	11±1	mg/kg d.m.	EPA 3051 A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Co	8.3±0.8	mg/kg d.m.	EPA 3051 A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Cd	<0.2	mg/kg d.m.	EPA 3051 A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Cr	23±2	mg/kg d.m.	EPA 3051 A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Cu	37±4	mg/kg d.m.	EPA 3051 A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Total mercury (HgT)	0.26±0.03	mg/kg d.m.	AMA-112*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Ni	28±3	mg/kg d.m.	EPA 3051 A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Pb	15±1	mg/kg d.m.	EPA 3051 A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Zn	69±7	mg/kg d.m.	EPA 3051 A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Naphtalene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Acenaphtylene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Acenaphtene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Fluorene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Phenanthrene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Anthracene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Pyrene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Benzo(a)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Chrysene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Benzo(a)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Benzo(g,h,i)perylene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Indeno(1,2,3-cd)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Dibenzo(a.h)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Dicofol	<0.0005	mg/kg d.m.	EPA 8080A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Heptachlor	<0.0005	mg/kg d.m.	EPA 8080A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Heptachlor epoxide	<0.0005	mg/kg d.m.	EPA 8080A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Hexachlorobenzene	<0.0005	mg/kg d.m.	EPA 8080A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Hexachloro cyclohexane	<0.0005	mg/kg d.m.	EPA 8080A*	186/05/1
ME-02-BS	08.09.2021.	bottom sediment	Quinoxyfen	<0.01	mg/kg d.m.	EPA 8270D*	186/05/1

Table 3.8.2.5. Results from the national laboratory in Montenegro for 2nd NB sampling point in Montenegro – active floodplain sediment ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Unit	Standard method applied	Lab ID
ME-02-FS-TS	08.09.2021.	soil	As	10±1	mg/kg d.m.	EPA 3051 A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Co	7.6±0.8	mg/kg d.m.	EPA 3051 A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Cd	<0.2	mg/kg d.m.	EPA 3051 A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Cr	19±2	mg/kg d.m.	EPA 3051 A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Cu	37±4	mg/kg d.m.	EPA 3051 A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Total mercury (HgT)	0.11±0.01	mg/kg d.m.	AMA-112*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Ni	26±3	mg/kg d.m.	EPA 3051 A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Pb	16±2	mg/kg d.m.	EPA 3051 A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Zn	67±7	mg/kg d.m.	EPA 3051 A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Naphtalene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Acenaphtylene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Acenaphtene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Fluorene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Phenanthrene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Anthracene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Pyrene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Benzo(a)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Chrysene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Benzo(a)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Benzo(b)fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Benzo(k)fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Benzo(g,h,i)perylene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Indeno(1,2,3-cd)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Dibenzo(a.h)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Dicofol	<0.0005	mg/kg d.m.	EPA 8080A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Heptachlor	<0.0005	mg/kg d.m.	EPA 8080A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Heptachlor epoxide	<0.0005	mg/kg d.m.	EPA 8080A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Hexachlorobenzene	<0.0005	mg/kg d.m.	EPA 8080A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Hexachloro cyclohexane	<0.0005	mg/kg d.m.	EPA 8080A*	188/05/1
ME-02-FS-TS	08.09.2021.	soil	Quinoxyfen	<0.01	mg/kg d.m.	EPA 8270D*	188/05/1
ME-02-FS-BS	08.09.2021.	soil	As	3.7±0.4	mg/kg d.m.	EPA 3051 A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Co	7.4±0.7	mg/kg d.m.	EPA 3051 A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Cd	<0.2	mg/kg d.m.	EPA 3051 A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Cr	20±2	mg/kg d.m.	EPA 3051 A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Cu	37±4	mg/kg d.m.	EPA 3051 A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Total mercury (HgT)	0.15±0.02	mg/kg d.m.	AMA-112*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Ni	27±3	mg/kg d.m.	EPA 3051 A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Pb	15±1	mg/kg d.m.	EPA 3051 A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Zn	64±6	mg/kg d.m.	EPA 3051 A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Naphtalene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Acenaphtylene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Acenaphtene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Fluorene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Phenanthrene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Anthracene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Pyrene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Benzo(a)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Chrysene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Benzo(a)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Benzo(g,h,i)perylene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Indeno(1,2,3-cd)pyrene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Dibenzo(a.h)anthracene	<0.005	mg/kg d.m.	EPA 8270D*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Dicofol	<0.0005	mg/kg d.m.	EPA 8080A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Heptachlor	<0.0005	mg/kg d.m.	EPA 8080A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Heptachlor epoxide	<0.0005	mg/kg d.m.	EPA 8080A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Hexachlorobenzene	<0.0005	mg/kg d.m.	EPA 8080A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Hexachloro cyclohexane	<0.0005	mg/kg d.m.	EPA 8080A*	187/05/1
ME-02-FS-BS	08.09.2021.	soil	Quinoxyfen	<0.01	mg/kg d.m.	EPA 8270D*	187/05/1

3.9. ROMANIA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF ROMANIA

The laboratory selected by public procurement in Romania in order to analyse the hazardous substances listed in SIMONA Laboratory Protocol was S.C. ALS Life Sciences S.R.L., located in Ploiesti, Romania. Some analyses for SIMONA samples were performed in ALS Divison from Czech Republic. It is accredited by the Association for Accreditation in Romania (RENAR) with the accreditation certificate no. LI 828 ant its Annex 1 dated 11.12.2020.

The analytical methodologies used in the ALS laboratory for SIMONA sample analyses are descriebed bellow.

Sample Preparation

Method name: *Determination of total dry matter by gravimetry and determination of moisture by calculation from measured values*

Standard: CSN ISO 11465, CSN EN 12880, CSN EN 14346:2007

This method is primarily used to determine the dry matter content or moisture in the sample and is used mostly for soil samples and other materials (sludge, waste, building material etc.). The sample is dried to constant mass at 105°C. The drying time is 4 hours at minimum and is notlonger than 24h. If a sample is not dry after this amount of time it is usually a sample which contains oil or another matrix which cannot be dried. In that case there is a consultation with Client Service and the method is cancelled and the calculation of the results is than changed to mg/kg.

The Dry Weight (or moisture) is computed from the difference in weight of the sample before and after the drying process as shown in the equation bellow.

$$X = \left(\frac{m3 - m1}{m2 - m1}\right) * 100$$

X – total dry matter (%)

m1 – weight of the container (g)

m2 – weight of the container with sample before drying (g)

m3 – weight of the container with sample after drying (g)

Preservation of samples: no

Containers: glass jar

Accreditation: Yes

Equipment: Memmert UFE700

Metals

Method name: *Determination of elements by mass spectrometry with inductively coupled plasma and stoichiometric calculations of compounds concentration from measured values*

Standard: US EPA 200.8, CSN EN ISO 17294-2, US EPA 6020A

Principle of method:

- Sample was homogenized and mineralized in hot block by aqua regia prior to analysis.
- Inductively coupled plasma mass spectrometry.
- Ion´s electric signal is measured.
- Plasma discharge occurs the ions type M+ creation.
- Quadrupole electrodes shorten the ions due to their mass.
- Detector measures the electric signal changes and calculates element concentrations on the ppb level.

Matrix: soil, sludge, sediment

Problematic matrix: samples with high content of salts, oil contamination

Amount of sample: 10 g

Minimum amount of sample: 2 g

Preservation of samples: no

Accreditation: Yes

There are 4 digestion groups for metals by ICP-MS.

Equipment: Agilent 5900 SVDV

Method name: *Determination of Mercury by Fluorescence Spectrometry*

Standard: CSN EN ISO 17852, PSA Application Note 025, ISO 16772

Principle of method:

- Sample was homogenized and mineralized in by aqua regia prior to analysis.
- Atomic fluorescence spectroscopy.
- Sample is oxidized by used chemically generated bromine.
- All organic Hg compounds are reduced to Hg.
- Further reaction with stannous chloride causes the generation of Hg vapours, which are measured in gas form by detector.
- Intensity of fluorescence is being measured, Hg concentration calculated.

Matrix: soil, sludge, sediment

Problematic matrix: samples with high content of salts, oil contamination, strongly contaminated

Amount of sample: 10 g

Minimum amount of sample: 2 g

Preservation of samples: no

Accreditation: Yes

Equipment: QuickTrace M-8000

Polycyclic Aromatic Hydrocarbons (PAHs)

Method name: *Determination of semi volatile organic compounds by gas chromatography method with MS or MS/MS detection and calculation of semi volatile organic compounds sums from measured values*

Standard: US EPA 8270, CSN EN 15527, ISO 18287

Principle of method:

- Analytes are extracted from samples into appropriate solvent.
- After concentration purification through glass colons and additional reconcentration is extract analyzed using GC-MS.
- SIM mode is used for analyzing only PAH and GC-MS SCAN mode is used for analysing PCB, OCP, PAH together.
- Quantification is carried out by external standard method with following correction on recovery of internal standard.

Matrix: soil, sludge, sediment, waste, building material

Problematic matrix: asphalt, soil with oil phase

Amount of sample: 50 g

Minimum amount of sample: 10 g

Preservation of samples: no

Accreditation: Yes

Equipment: GC-MS Agilent 8890

Chlorinated compounds (pesticides) and halogenated compounds

Method name: *Determination of organochlorine pesticides and other halogen compounds by gas chromatography method with ECD detection and calculation of organochlorine pesticides and other halogen compounds sums from measured values*

Standard: US EPA 8081

Principle of method:

- Samples are extracted with acetone/hexane, cleaned by SPE (Florisil column) and mercury.
- After cleaning, the extract is concentrated.
- Individual OCPs are determinate by GC/ECD.
- The quantification is based on external calibration standard with correction of recovery of surrogate standard.
- The results are reported in units mg/kg of dry matter.

Matrix: soil, sediments, waste, sealing material

Problematic matrix: wood, asphalt tar

Amount of sample: 50 g (oil)

Minimum amount of sample: 10 g

Preservation of samples: no

Accreditation: Yes

Equipment: Dual GC-ECD Agilent 7890A and Agilent 7890B

3.9.1. Bazias on Danube

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.9.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Romania – stream/bottom sediment, collected 50 m away from the left Danube bank (L) near Bazias, in the center of the river (C) and 50 m away from the right bank (R), near Serbia

Sample ID	Alternative Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	As	5.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Cd	0.40	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Cr	53.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Cu	11.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Hg	0.11	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Ni	33.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Pb	16.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Zn	97.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Anthracene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Fluoranthene	0.021	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Benzo(a)pyrene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.021	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	0.008	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/7
RO/BZ/BS/L/r	RO-01-BS-L	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/7
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	As	5.67	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Cd	0.41	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Cr	58.2	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Cu	11.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Hg	0.08	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Ni	30.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Pb	16.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Zn	95.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Anthracene	0.026	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Fluoranthene	0.12	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Benzo(a)pyrene	0.048	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.098	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	0.033	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.042	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/8
RO/BZ/BS/C/r	RO-01-BS-C	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/8
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	As	14.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Cd	0.80	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Cr	124	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Cu	32.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Hg	0.27	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Ni	88.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Pb	43.6	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Zn	171	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Anthracene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Fluoranthene	0.053	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Benzo(a)pyrene	0.019	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.052	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	0.017	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.023	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/9
RO/BZ/BS/R/r	RO-01-BS-R	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/9

Table 3.9.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Romania – active floodplain sediment on Danube left bank near Bazias ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/01/FS/TS	soil	As	9.23	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/122
RO/01/FS/TS	soil	Cd	0.38	0.003	mg/kg d.m.	EPA 6020B:2014	20-731/122
RO/01/FS/TS	soil	Cr	57.7	0.03	mg/kg d.m.	EPA 6020B:2014	20-731/122
RO/01/FS/TS	soil	Cu	37.4	0.1	mg/kg d.m.	EPA 6020B:2014	20-731/122
RO/01/FS/TS	soil	Hg	<	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/122
RO/01/FS/TS	soil	Ni	28.2	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/122
RO/01/FS/TS	soil	Pb	16.1	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/122
RO/01/FS/TS	soil	Zn	68.8	0.1	mg/kg d.m.	EPA 6020B:2014	20-731/122
RO/01/FS/TS	soil	Anthracene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/122
RO/01/FS/TS	soil	Fluoranthene	0.052	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/122
RO/01/FS/TS	soil	Benzo(a)pyrene	0.026	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/122
RO/01/FS/TS	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.048	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/122
RO/01/FS/TS	soil	Benzo(g,h,i)perylene	0.016	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/122
RO/01/FS/TS	soil	Indeno(1,2,3-cd)pyrene	0.016	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/122
RO/01/FS/TS	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	20-731/122
RO/01/FS/TS	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/122
RO/01/FS/TS	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/122
RO/01/FS/TS	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	20-731/122
RO/01/FS/TS	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/122
RO/01/FS/TS	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	20-731/122
RO/01/FS/BS	soil	As	9.96	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/123
RO/01/FS/BS	soil	Cd	0.24	0.003	mg/kg d.m.	EPA 6020B:2014	20-731/123
RO/01/FS/BS	soil	Cr	60.7	0.03	mg/kg d.m.	EPA 6020B:2014	20-731/123
RO/01/FS/BS	soil	Cu	29.5	0.1	mg/kg d.m.	EPA 6020B:2014	20-731/123
RO/01/FS/BS	soil	Hg	<	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/123
RO/01/FS/BS	soil	Ni	29.2	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/123
RO/01/FS/BS	soil	Pb	14.3	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/123
RO/01/FS/BS	soil	Zn	59.9	0.1	mg/kg d.m.	EPA 6020B:2014	20-731/123
RO/01/FS/BS	soil	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/123
RO/01/FS/BS	soil	Fluoranthene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/123
RO/01/FS/BS	soil	Benzo(a)pyrene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/123
RO/01/FS/BS	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/123
RO/01/FS/BS	soil	Benzo(g,h,i)perylene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/123
RO/01/FS/BS	soil	Indeno(1,2,3-cd)pyrene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/123
RO/01/FS/BS	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	20-731/123
RO/01/FS/BS	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/123
RO/01/FS/BS	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/123
RO/01/FS/BS	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	20-731/123
RO/01/FS/BS	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/123
RO/01/FS/BS	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	20-731/123

RESULTS FROM THE NATIONAL LABORATORY IN ROMANIA

Table 3.9.1.3. Results from the national laboratory in Romania for 1st NB sampling point in Romania – suspended sediment (collected from the ship, 50 m away from Danube left bank near Bazias (L), in the middle of the river (C) and 50 m away from Danube right bank (R) near Serbia)

Sample ID	Alternate Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/BZ/SS/L	RO-01-SS-L	23.08.2021	suspended sediment	As	8.16	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-001
RO/BZ/SS/L	RO-01-SS-L	23.08.2021	suspended sediment	Cd	<0.4	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-001
RO/BZ/SS/L	RO-01-SS-L	23.08.2021	suspended sediment	Cr	13.7	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-001
RO/BZ/SS/L	RO-01-SS-L	23.08.2021	suspended sediment	Cu	15.5	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-001
RO/BZ/SS/L	RO-01-SS-L	23.08.2021	suspended sediment	Hg	0.035	0.01	mg/kg d.m.	ISO 16772	PI2106456-001
RO/BZ/SS/L	RO-01-SS-L	23.08.2021	suspended sediment	Ni	12.8	1	mg/kg d.m.	EPA 3050	PI2106456-001
RO/BZ/SS/L	RO-01-SS-L	23.08.2021	suspended sediment	Pb	10.1	1	mg/kg d.m.	EPA 3050	PI2106456-001
RO/BZ/SS/L	RO-01-SS-L	23.08.2021	suspended sediment	Zn	58.4	3	mg/kg d.m.	EPA 3050	PI2106456-001
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	As	21	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-002
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	Cd	1.32	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-002
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	Cr	65.2	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-002
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	Cu	53.2	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-002
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	Hg	0.152	0.01	mg/kg d.m.	ISO 16772	PI2106456-002
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	Ni	76.1	1	mg/kg d.m.	EPA 3050	PI2106456-002
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	Pb	48.1	1	mg/kg d.m.	EPA 3050	PI2106456-002
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	Zn	239	3	mg/kg d.m.	EPA 3050	PI2106456-002
RO/BZ/SS/C	RO-01-SS-C	23.08.2021	suspended sediment	As	19.1	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-003
RO/BZ/SS/R	RO-01-SS-R	23.08.2021	suspended sediment	Cd	0.92	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-003
RO/BZ/SS/R	RO-01-SS-R	23.08.2021	suspended sediment	Cr	46.8	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-003
RO/BZ/SS/R	RO-01-SS-R	23.08.2021	suspended sediment	Cu	39.6	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-003
RO/BZ/SS/R	RO-01-SS-R	23.08.2021	suspended sediment	Hg	0.118	0.01	mg/kg d.m.	ISO 16772	PI2106456-003
RO/BZ/SS/R	RO-01-SS-R	23.08.2021	suspended sediment	Ni	55.5	1	mg/kg d.m.	EPA 3050	PI2106456-003
RO/BZ/SS/R	RO-01-SS-R	23.08.2021	suspended sediment	Pb	36.6	1	mg/kg d.m.	EPA 3050	PI2106456-003
RO/BZ/SS/R	RO-01-SS-R	23.08.2021	suspended sediment	Zn	173	3	mg/kg d.m.	EPA 3050	PI2106456-003

Table 3.9.1.4. Results from the national laboratory in Romania for 1st NB sampling point in Romania – stream/bottom sediment (collected from the ship, 50 m away from Danube left bank, Bazias (L), in the middle of the river (C) and 50 m away from Danube right bank (R) near Serbia)

Sample ID	Alternative Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	As	9.72	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Cd	0.67	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Cr	39.2	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Cu	54.8	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Hg	0.111	0.01	mg/kg d.m.	ISO 16772	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Ni	40.1	1	mg/kg d.m.	EPA 3050	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Pb	31.9	1	mg/kg d.m.	EPA 3050	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Zn	143	3	mg/kg d.m.	EPA 3050	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Anthracene	0.0138	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Fluoranthene	0.112	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Benzo(a)pyrene	0.0288	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Benzo(b)fluoranthene	0.052	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Benzo(k)fluoranthene	0.015	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Benzo(g,h,i)perylene	0.036	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.025	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Heptachlor epoxide-trans	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Hexachlorocyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Sum of four Hexachloro cyclohexanes	<0.0400	0.04	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-001
RO/BZ/BS/L	RO-01-BS-L	23.08.2021	bottom sediment	Quinoxyfen	not measured		mg/kg d.m.		PI2106414-001
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	As	5.27	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Cd	<0.40	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Cr	28.1	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Cu	22.2	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Hg	0.05	0.01	mg/kg d.m.	ISO 16772	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Ni	32.2	1	mg/kg d.m.	EPA 3050	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Pb	15.2	1	mg/kg d.m.	EPA 3050	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Zn	95.6	3	mg/kg d.m.	EPA 3050	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Anthracene	<0.0100	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Fluoranthene	0.02	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Benzo(a)pyrene	<0.0100	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Benzo(b)fluoranthene	0.01	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Benzo(k)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Benzo(g,h,i)perylene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Heptachlor epoxide-trans	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Hexachlorocyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Sum of four Hexachloro cyclohexanes	<0.0400	0.04	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-002
RO/BZ/BS/C	RO-01-BS-C	23.08.2021	bottom sediment	Quinoxyfen	not measured		mg/kg d.m.		PI2106414-002
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	As	17.4	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Cd	1.04	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Cr	79.6	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Cu	83.0	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Hg	0.188	0.01	mg/kg d.m.	ISO 16772	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Ni	95.5	1	mg/kg d.m.	EPA 3050	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Pb	51.2	1	mg/kg d.m.	EPA 3050	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Zn	217	3	mg/kg d.m.	EPA 3050	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Anthracene	0.0233	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Fluoranthene	0.124	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Benzo(a)pyrene	0.0333	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Benzo(b)fluoranthene	0.064	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Benzo(k)fluoranthene	0.019	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Benzo(g,h,i)perylene	0.041	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.028	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Heptachlor epoxide-trans	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Hexachlorocyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Sum of four Hexachloro cyclohexanes	<0.0400	0.04	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-003
RO/BZ/BS/R	RO-01-BS-R	23.08.2021	bottom sediment	Quinoxyfen	not measured		mg/kg d.m.		PI2106414-003

Table 3.9.1.5. Results from the national laboratory in Romania for 1st NB sampling point in Romania – active floodplain sediment on Danube left bank near Bazias ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/01/FS/TS	soil	As	7.15	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-001
RO/01/FS/TS	soil	Cd	<0.40	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-001
RO/01/FS/TS	soil	Cr	31.5	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-001
RO/01/FS/TS	soil	Cu	41.3	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-001
RO/01/FS/TS	soil	Hg	0.040	0.01	mg/kg d.m.	ISO 16772	PI2101963-001
RO/01/FS/TS	soil	Ni	28.7	1	mg/kg d.m.	EPA 3050	PI2101963-001
RO/01/FS/TS	soil	Pb	16.8	1	mg/kg d.m.	EPA 3050	PI2101963-001
RO/01/FS/TS	soil	Zn	73.0	3	mg/kg d.m.	EPA 3050	PI2101963-001
RO/01/FS/TS	soil	Anthracene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-001
RO/01/FS/TS	soil	Fluoranthene	0.033	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-001
RO/01/FS/TS	soil	Benzo(a)pyrene	0.018	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-001
RO/01/FS/TS	soil	Benzo(b)fluoranthene	0.025	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-001
RO/01/FS/TS	soil	Benzo(k)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-001
RO/01/FS/TS	soil	Benzo(g,h,i)perylene	0.014	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-001
RO/01/FS/TS	soil	Indeno(1,2,3-cd)pyrene	0.015	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-001
RO/01/FS/TS	soil	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-001
RO/01/FS/TS	soil	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-001
RO/01/FS/TS	soil	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-001
RO/01/FS/TS	soil	Heptachlor epoxide-trans	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-001
RO/01/FS/TS	soil	Hexachlorobenzene	<0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-001
RO/01/FS/TS	soil	Hexachlorocyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-001
RO/01/FS/TS	soil	Sum of four Hexachloro cyclohexanes	<0.0400	0.04	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-001
RO/01/FS/TS	soil	Quinoxyfen	not measured		mg/kg d.m.		PI2101963-001
RO/01/FS/BS	soil	As	10.2	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-002
RO/01/FS/BS	soil	Cd	<40	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-002
RO/01/FS/BS	soil	Cr	36.1	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-002
RO/01/FS/BS	soil	Cu	37	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-002
RO/01/FS/BS	soil	Hg	0.023	0.01	mg/kg d.m.	ISO 16772	PI2101963-002
RO/01/FS/BS	soil	Ni	35	1	mg/kg d.m.	EPA 3050	PI2101963-002
RO/01/FS/BS	soil	Pb	15.6	1	mg/kg d.m.	EPA 3050	PI2101963-002
RO/01/FS/BS	soil	Zn	59	3	mg/kg d.m.	EPA 3050	PI2101963-002
RO/01/FS/BS	soil	Anthracene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-002
RO/01/FS/BS	soil	Fluoranthene	0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-002
RO/01/FS/BS	soil	Benzo(a)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-002
RO/01/FS/BS	soil	Benzo(b)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-002
RO/01/FS/BS	soil	Benzo(k)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-002
RO/01/FS/BS	soil	Benzo(g,h,i)perylene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-002
RO/01/FS/BS	soil	Indeno(1,2,3-cd)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-002
RO/01/FS/BS	soil	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-002
RO/01/FS/BS	soil	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-002
RO/01/FS/BS	soil	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-002
RO/01/FS/BS	soil	Heptachlor epoxide-trans	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-002
RO/01/FS/BS	soil	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-002
RO/01/FS/BS	soil	Hexachlorocyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-002
RO/01/FS/BS	soil	Sum of four Hexachloro cyclohexanes	<0.0400	0.0400	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-002
RO/01/FS/BS	soil	Quinoxyfen	not measured		mg/kg d.m.		

3.9.2. Sulina on Danube

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.9.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Romania – stream/bottom sediment collected from the ship, near Sulina, 50 m away from the left Danube bank (L), in the center of the river (C) and 50 m away from the right bank (R)

Sample ID	Alternative Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	As	4.06	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Cd	0.10	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Cr	20.7	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Cu	3.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Hg	0.03	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Ni	19.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Pb	8.05	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Zn	30.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Anthracene	0.106	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Fluoranthene	0.389	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Benzo(a)pyrene	0.137	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.24	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	0.077	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.095	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/16
RO/SL/BS/L/r	RO-02-BS-L	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/16
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	As	3.32	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Cd	0.09	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Cr	23.3	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Cu	2.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Hg	0.02	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Ni	13.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Pb	6.28	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Zn	25.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/17
RO/SL/BS/C/r	RO-02-BS-C	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/17
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	As	2.85	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Cd	0.15	0.003	mg/kg d.m.	EPA 6020B:2014	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Cr	45	0.03	mg/kg d.m.	EPA 6020B:2014	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Cu	4.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Hg	0.05	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Ni	18.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Pb	7.13	0.005	mg/kg d.m.	EPA 6020B:2014	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Zn	31.2	0.1	mg/kg d.m.	EPA 6020B:2014	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Anthracene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Benzo(a)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Benzo(g,h,i)perylene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<	0.001	mg/kg d.m.	EPA 8270E:2018	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-765/18
RO/SL/BS/R/r	RO-02-BS-R	21.06.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-765/18

Table 3.9.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Romania – active floodplain sediment on Danube right bank near Sulina ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/02/FS/TS	soil	As	9.71	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/124
RO/02/FS/TS	soil	Cd	0.45	0.003	mg/kg d.m.	EPA 6020B:2014	20-731/124
RO/02/FS/TS	soil	Cr	59.8	0.03	mg/kg d.m.	EPA 6020B:2014	20-731/124
RO/02/FS/TS	soil	Cu	39.3	0.1	mg/kg d.m.	EPA 6020B:2014	20-731/124
RO/02/FS/TS	soil	Hg	0.08	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/124
RO/02/FS/TS	soil	Ni	33.3	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/124
RO/02/FS/TS	soil	Pb	26.7	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/124
RO/02/FS/TS	soil	Zn	101.0	0.1	mg/kg d.m.	EPA 6020B:2014	20-731/124
RO/02/FS/TS	soil	Anthracene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/124
RO/02/FS/TS	soil	Fluoranthene	0.105	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/124
RO/02/FS/TS	soil	Benzo(a)pyrene	0.051	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/124
RO/02/FS/TS	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.103	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/124
RO/02/FS/TS	soil	Benzo(g,h,i)perylene	0.044	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/124
RO/02/FS/TS	soil	Indeno(1,2,3-cd)pyrene	0.038	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/124
RO/02/FS/TS	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	20-731/124
RO/02/FS/TS	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/124
RO/02/FS/TS	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/124
RO/02/FS/TS	soil	Hexachlorobenzene	0.001	0.005	mg/kg d.m.	EPA 8270E:2018	20-731/124
RO/02/FS/TS	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/124
RO/02/FS/TS	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	20-731/124
RO/02/FS/BS	soil	As	11.2	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/125
RO/02/FS/BS	soil	Cd	0.65	0.003	mg/kg d.m.	EPA 6020B:2014	20-731/125
RO/02/FS/BS	soil	Cr	73.0	0.03	mg/kg d.m.	EPA 6020B:2014	20-731/125
RO/02/FS/BS	soil	Cu	46.4	0.1	mg/kg d.m.	EPA 6020B:2014	20-731/125
RO/02/FS/BS	soil	Hg	0.2	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/125
RO/02/FS/BS	soil	Ni	39.1	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/125
RO/02/FS/BS	soil	Pb	29.7	0.005	mg/kg d.m.	EPA 6020B:2014	20-731/125
RO/02/FS/BS	soil	Zn	105	0.1	mg/kg d.m.	EPA 6020B:2014	20-731/125
RO/02/FS/BS	soil	Anthracene	0.043	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/125
RO/02/FS/BS	soil	Fluoranthene	0.342	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/125
RO/02/FS/BS	soil	Benzo(a)pyrene	0.122	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/125
RO/02/FS/BS	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.234	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/125
RO/02/FS/BS	soil	Benzo(g,h,i)perylene	0.074	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/125
RO/02/FS/BS	soil	Indeno(1,2,3-cd)pyrene	0.073	0.001	mg/kg d.m.	EPA 8270E:2018	20-731/125
RO/02/FS/BS	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	20-731/125
RO/02/FS/BS	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/125
RO/02/FS/BS	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/125
RO/02/FS/BS	soil	Hexachlorobenzene	0.002	0.005	mg/kg d.m.	EPA 8270E:2018	20-731/125
RO/02/FS/BS	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	20-731/125
RO/02/FS/BS	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	20-731/125

RESULTS FROM THE NATIONAL LABORATORY IN ROMANIA

Table 3.9.2.3. Results from the national laboratory in Romania for 2nd NB sampling point in Romania – suspended sediment collected from the ship, near Sulina, 50 m away from Danube left bank (L), in the middle of the river (C) and 50 m away from Danube right bank (R)

Sample ID	Alternate Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/SL/SS/L	RO-02-SS-L	23.08.2021	suspended sediment	As	12	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-019
RO/SL/SS/L	RO-02-SS-L	23.08.2021	suspended sediment	Cd	0.48	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-019
RO/SL/SS/L	RO-02-SS-L	23.08.2021	suspended sediment	Cr	48.5	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-019
RO/SL/SS/L	RO-02-SS-L	23.08.2021	suspended sediment	Cu	46.4	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-019
RO/SL/SS/L	RO-02-SS-L	23.08.2021	suspended sediment	Hg	0.498	0.01	mg/kg d.m.	ISO 16772	PI2106456-019
RO/SL/SS/L	RO-02-SS-L	23.08.2021	suspended sediment	Ni	50	1	mg/kg d.m.	EPA 3050	PI2106456-019
RO/SL/SS/L	RO-02-SS-L	23.08.2021	suspended sediment	Pb	25	1	mg/kg d.m.	EPA 3050	PI2106456-019
RO/SL/SS/L	RO-02-SS-L	23.08.2021	suspended sediment	Zn	117	3	mg/kg d.m.	EPA 3050	PI2106456-019
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	As	12.4	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-020
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	Cd	0.41	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-020
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	Cr	44.9	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-020
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	Cu	43.2	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-020
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	Hg	0.09	0.01	mg/kg d.m.	ISO 16772	PI2106456-020
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	Ni	47.1	1	mg/kg d.m.	EPA 3050	PI2106456-020
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	Pb	23.3	1	mg/kg d.m.	EPA 3050	PI2106456-020
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	Zn	104	3	mg/kg d.m.	EPA 3050	PI2106456-020
RO/SL/SS/C	RO-02-SS-C	23.08.2021	suspended sediment	As	11.8	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-020
RO/SL/SS/R	RO-02-SS-R	23.08.2021	suspended sediment	Cd	0.48	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-021
RO/SL/SS/R	RO-02-SS-R	23.08.2021	suspended sediment	Cr	48.8	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-021
RO/SL/SS/R	RO-02-SS-R	23.08.2021	suspended sediment	Cu	47.4	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106456-021
RO/SL/SS/R	RO-02-SS-R	23.08.2021	suspended sediment	Hg	0.106	0.01	mg/kg d.m.	ISO 16772	PI2106456-021
RO/SL/SS/R	RO-02-SS-R	23.08.2021	suspended sediment	Ni	49.5	1	mg/kg d.m.	EPA 3050	PI2106456-021
RO/SL/SS/R	RO-02-SS-R	23.08.2021	suspended sediment	Pb	24.9	1	mg/kg d.m.	EPA 3050	PI2106456-021
RO/SL/SS/R	RO-02-SS-R	23.08.2021	suspended sediment	Zn	116	3	mg/kg d.m.	EPA 3050	PI2106456-021

Table 3.9.2.4. Results from the national laboratory in Romania for 2nd NB sampling point in Romania – stream/bottom sediment sediment collected from the ship, near Sulina, 50 m away from Danube left bank (L), in the middle of the river (C) and 50 m away from Danube right bank (R)

Sample ID	Alternative Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	As	3.91	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Cd	<0.40	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Cr	17.7	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Cu	3.1	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Hg	0.014	0.01	mg/kg d.m.	ISO 16772	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Ni	22.3	1	mg/kg d.m.	EPA 3050	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Pb	7.8	1	mg/kg d.m.	EPA 3050	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Zn	28.6	3	mg/kg d.m.	EPA 3050	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Anthracene	<0.0100	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Benzo(a)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Benzo(b)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Benzo(k)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Benzo(g,h,i)perylene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Heptachlor epoxide-trans	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Hexachlorocyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Sum of four Hexachloro cyclohexanes	<0.0400	0.04	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-019
RO/SL/BS/L	RO-02-BS-L	23.08.2021	bottom sediment	Quinoxyfen	not measured		mg/kg d.m.		PI2106414-019
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	As	3.37	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Cd	<0.40	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Cr	11.8	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Cu	1.7	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Hg	<0.010	0.01	mg/kg d.m.	ISO 16772	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Ni	16.2	1	mg/kg d.m.	EPA 3050	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Pb	6	1	mg/kg d.m.	EPA 3050	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Zn	18.6	3	mg/kg d.m.	EPA 3050	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Anthracene	<0.0100	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Benzo(a)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Benzo(b)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Benzo(k)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Benzo(g,h,i)perylene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Heptachlor epoxide-trans	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Hexachlorocyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Sum of four Hexachloro cyclohexanes	<0.0400	0.04	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-020
RO/SL/BS/C	RO-02-BS-C	23.08.2021	bottom sediment	Quinoxyfen	not measured		mg/kg d.m.		PI2106414-020
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	As	2.6	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Cd	<0.40	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Cr	19.6	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Cu	5.0	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Hg	0.015	0.01	mg/kg d.m.	ISO 16772	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Ni	17.1	1	mg/kg d.m.	EPA 3050	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Pb	6.4	1	mg/kg d.m.	EPA 3050	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Zn	23.7	3	mg/kg d.m.	EPA 3050	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Anthracene	<0.0100	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Benzo(a)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Benzo(b)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Benzo(k)fluoranthene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Benzo(g,h,i)perylene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Heptachlor epoxide-trans	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Hexachlorocyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Sum of four Hexachloro cyclohexanes	<0.0400	0.04	mg/kg d.m.	EPA8081; ISO 10382	PI2106414-021
RO/SL/BS/R	RO-02-BS-R	23.08.2021	bottom sediment	Quinoxyfen	not measured		mg/kg d.m.		PI2106414-021

Table 3.9.2.5. Results from the national laboratory in Romania for 2nd NB sampling point in Romania – active floodplain sediment on Danube right bank, near Sulina ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
RO/02/FS/TS	soil	As	8.47	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-015
RO/02/FS/TS	soil	Cd	<0.40	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-015
RO/02/FS/TS	soil	Cr	44.6	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-015
RO/02/FS/TS	soil	Cu	49.5	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-015
RO/02/FS/TS	soil	Hg	0.122	0.01	mg/kg d.m.	ISO 16772	PI2101963-015
RO/02/FS/TS	soil	Ni	43.1	1	mg/kg d.m.	EPA 3050	PI2101963-015
RO/02/FS/TS	soil	Pb	31	1	mg/kg d.m.	EPA 3050	PI2101963-015
RO/02/FS/TS	soil	Zn	122	3	mg/kg d.m.	EPA 3050	PI2101963-015
RO/02/FS/TS	soil	Anthracene	<0.010	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-015
RO/02/FS/TS	soil	Fluoranthene	0.126	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-015
RO/02/FS/TS	soil	Benzo(a)pyrene	0.062	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-015
RO/02/FS/TS	soil	Benzo(b)fluoranthene	0.086	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-015
RO/02/FS/TS	soil	Benzo(k)fluoranthene	0.031	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-015
RO/02/FS/TS	soil	Benzo(g,h,i)perylene	0.052	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-015
RO/02/FS/TS	soil	Indeno(1,2,3-cd)pyrene	0.049	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-015
RO/02/FS/TS	soil	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-015
RO/02/FS/TS	soil	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-015
RO/02/FS/TS	soil	Heptachlor epoxide-cis	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-015
RO/02/FS/TS	soil	Heptachlor epoxide-trans	<0.010	0.01		EPA8081; ISO 10382	PI2101963-015
RO/02/FS/TS	soil	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-015
RO/02/FS/TS	soil	Hexachloro cyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-015
RO/02/FS/TS	soil	Sum of four Hexachloro cyclohexanes	<0.0400	0.04		EPA8081; ISO 10382	PI2101963-015
RO/02/FS/TS	soil	Quinoxyfen	not measured		mg/kg d.m.		
RO/02/FS/BS	soil	As	10.8	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-016
RO/02/FS/BS	soil	Cd	0.46	0.4	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-016
RO/02/FS/BS	soil	Cr	45.3	0.5	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-016
RO/02/FS/BS	soil	Cu	57.9	1	mg/kg d.m.	ISO 11885:2007;EPA 6010: EPA 200.7	PI2101963-016
RO/02/FS/BS	soil	Hg	0.214	0.01	mg/kg d.m.	ISO 16772	PI2101963-016
RO/02/FS/BS	soil	Ni	41.4	1	mg/kg d.m.	EPA 3050	PI2101963-016
RO/02/FS/BS	soil	Pb	31.2	1	mg/kg d.m.	EPA 3050	PI2101963-016
RO/02/FS/BS	soil	Zn	11	3	mg/kg d.m.	EPA 3050	PI2101963-016
RO/02/FS/BS	soil	Anthracene	0.032	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-016
RO/02/FS/BS	soil	Fluoranthene	0.303	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-016
RO/02/FS/BS	soil	Benzo(a)pyrene	0.119	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-016
RO/02/FS/BS	soil	Benzo(b)fluoranthene	0.183	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-016
RO/02/FS/BS	soil	Benzo(k)fluoranthene	0.057	0.01		EPA 8270: ISO 18287	PI2101963-016
RO/02/FS/BS	soil	Benzo(g,h,i)perylene	0.092	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-016
RO/02/FS/BS	soil	Indeno(1,2,3-cd)pyrene	0.095	0.01	mg/kg d.m.	EPA 8270: ISO 18287	PI2101963-016
RO/02/FS/TS	soil	Dicofol	<0.030	0.03	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-016
RO/02/FS/BS	soil	Heptachlor	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-016
RO/02/FS/BS	soil	Heptachlor epoxide-cis	<0.010	0.01		EPA8081; ISO 10382	PI2101963-016
RO/02/FS/BS	soil	Heptachlor epoxide-trans	<0.010	0.01		EPA8081; ISO 10382	PI2101963-016
RO/02/FS/BS	soil	Hexachlorobenzene	<0.0050	0.005	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-016
RO/02/FS/BS	soil	Hexachloro cyclohexane Alpha	<0.010	0.01	mg/kg d.m.	EPA8081; ISO 10382	PI2101963-016
RO/02/FS/BS	soil	Sum of four Hexachloro cyclohexanes	<0.0400	0.0400		EPA8081; ISO 10382	PI2101963-016
RO/02/FS/BS	soil	Quinoxyfen	not measured		mg/kg d.m.		

3.10. SERBIA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF SERBIA

The laboratory of "Jaroslav Černi Institute" in Serbia was selected for analyzing the sampled sediments of the two national baselines stations (Novi Sad and Ram, both on Danube).

The following standards were used:

- For heavy metals (As, Cd, Cr, Cu, Hg, Ni, Pb nad Zn): DMJĆ-003, based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A I B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 – Microwave-assisted acid digestion of sediments, sludges soils and oils.

- For PAHs: DMJČ-001, based on ISO 18287:2006

- For Organoclorurated Pesticides: DMJČ-001, based on ISO 18287:2006.

3.10.1. Novi Sad on Danube

RESULTS FROM BALINT ANALITIKA

Only stream/bottom sediments were collected and analysed.

Table 3.10.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Serbia – stream/bottom sediment

Sample ID	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SR-01-BS	bottom sediment	As	3.76	0.005	mg/kg d.m.	EPA 6020B:2014	21-301/14
SR-01-BS	bottom sediment	Cd	0.14	0.003	mg/kg d.m.	EPA 6020B:2014	21-301/14
SR-01-BS	bottom sediment	Cr	20.3	0.03	mg/kg d.m.	EPA 6020B:2014	21-301/14
SR-01-BS	bottom sediment	Cu	5.66	0.1	mg/kg d.m.	EPA 6020B:2014	21-301/14
SR-01-BS	bottom sediment	Hg	0.04	0.005	mg/kg d.m.	EPA 6020B:2014	21-301/14
SR-01-BS	bottom sediment	Ni	11.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-301/14
SR-01-BS	bottom sediment	Pb	8.40	0.005	mg/kg d.m.	EPA 6020B:2014	21-301/14
SR-01-BS	bottom sediment	Zn	51.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-301/14
SR-01-BS	bottom sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/14
SR-01-BS	bottom sediment	Fluoranthene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/14
SR-01-BS	bottom sediment	Benzo(a)pyrene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/14
SR-01-BS	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/14
SR-01-BS	bottom sediment	Benzo(g,h,i)perylene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/14
SR-01-BS	bottom sediment	Indeno(1,2,3-cd)pyrene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/14
SR-01-BS	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-301/14
SR-01-BS	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-301/14
SR-01-BS	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-301/14
SR-01-BS	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-301/14
SR-01-BS	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-301/14
SR-01-BS	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-301/14

RESULTS FROM THE NATIONAL LABORATORY OF "JAROSLAV ČERNI INSTITUTE" IN SERBIA

Table 3.10.1.2. Results from the national laboratory in Serbia for 1st NB sampling point in Serbia – stream/bottom sediment

Sample ID	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Note	Test Laboratory ID
SR-01-BS	bottom sediment	As	<10	10	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-016
SR-01-BS	bottom sediment	Cd	<1	1	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-016
SR-01-BS	bottom sediment	Cr	25.5	3	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-016
SR-01-BS	bottom sediment	Cu	58.9	3	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-016
SR-01-BS	bottom sediment	Hg	<1	1	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-016
SR-01-BS	bottom sediment	Ni	24.6	1	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-016
SR-01-BS	bottom sediment	Pb	17.5	2	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-016
SR-01-BS	bottom sediment	Zn	287.9	1	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-016
SR-01-BS	bottom sediment	Anthracene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Fluoranthene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Benzo(a)pyrene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Benzo(g,h,i)perylene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Indeno(1,2,3-cd)pyrene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Dicofol			mg/kg d.m.			
SR-01-BS	bottom sediment	Heptachlor	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Heptachlor epoxide	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Hexachlorobenzene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Hexachloro cyclohexane	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-016
SR-01-BS	bottom sediment	Quinoxyfen			mg/kg d.m.			

3.10.2. Ram on Danube

RESULTS FROM BALINT ANALITIKA

Only stream/bottom sediments were collected and analysed.

Table 3.10.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Serbia – stream/bottom sediment

Sample ID	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SR-02-BS	bottom sediment	As	12.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-301/11
SR-02-BS	bottom sediment	Cd	0.54	0.003	mg/kg d.m.	EPA 6020B:2014	21-301/11
SR-02-BS	bottom sediment	Cr	109	0.03	mg/kg d.m.	EPA 6020B:2014	21-301/11
SR-02-BS	bottom sediment	Cu	27.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-301/11
SR-02-BS	bottom sediment	Hg	0.12	0.005	mg/kg d.m.	EPA 6020B:2014	21-301/11
SR-02-BS	bottom sediment	Ni	71.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-301/11
SR-02-BS	bottom sediment	Pb	29.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-301/11
SR-02-BS	bottom sediment	Zn	129	0.1	mg/kg d.m.	EPA 6020B:2014	21-301/11
SR-02-BS	bottom sediment	Anthracene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/11
SR-02-BS	bottom sediment	Fluoranthene	0.053	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/11
SR-02-BS	bottom sediment	Benzo(a)pyrene	0.012	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/11
SR-02-BS	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.032	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/11
SR-02-BS	bottom sediment	Benzo(g,h,i)perylene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/11
SR-02-BS	bottom sediment	Indeno(1,2,3-cd)pyrene	0.012	0.001	mg/kg d.m.	EPA 8270E:2018	21-301/11
SR-02-BS	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-301/11
SR-02-BS	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-301/11
SR-02-BS	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-301/11
SR-02-BS	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-301/11
SR-02-BS	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-301/11
SR-02-BS	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-301/11

RESULTS FROM THE NATIONAL LABORATORY OF "JAROSLAV ČERNI INSTITUTE" IN SERBIA

Table 3.10.2.2. Results from the national laboratory in Serbia for 2nd NB sampling point in Serbia – stream/bottom sediment

Sample ID	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Note	Test Laboratory ID
SR-02-BS	bottom sediment	As	<10	10	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-024
SR-02-BS	bottom sediment	Cd	1.2	1	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-024
SR-02-BS	bottom sediment	Cr	46.5	3	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-024
SR-02-BS	bottom sediment	Cu	26.4	3	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-024
SR-02-BS	bottom sediment	Hg	<1	1	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-024
SR-02-BS	bottom sediment	Ni	63.4	1	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-024
SR-02-BS	bottom sediment	Pb	44.2	2	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-024
SR-02-BS	bottom sediment	Zn	139.1	1	mg/kg d.m.	DMJČ-003	Based on EPA Method 6010C:2007 SMEWW 21 st metoda 3120 A i B i 3030 F,H, EPA method 3051 A, Recision 1, February 2007 - Microwaave assisted acid digestion of sediments, sludges soils and oils	20-04-024
SR-02-BS	bottom sediment	Anthracene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Fluoranthene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Benzo(a)pyrene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Benzo(g,h,i)perylene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Indeno(1,2,3-cd)pyrene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Dicofol			mg/kg d.m.			
SR-02-BS	bottom sediment	Heptachlor	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Heptachlor epoxide	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Hexachlorobenzene	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Hexachloro cyclohexane	<0.01	0.01	mg/kg d.m.	DMJČ-001	Based on ISO 18287:2006	20-04-024
SR-02-BS	bottom sediment	Quinoxyfen			mg/kg d.m.			

3.11. SLOVAKIA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF SLOVAKIA

The samples collected in the two national baseline network stations for sediment monitoring in Slovakia were chemically analyzed in the Laboratory of the State Geological Institute of Dionýz Štúr in Spišská Nová Ves.

Sample preparation of SIMONA samples for ICP-MS measurements

Equipment:

- Microwave Digestion System MARS 6
- EasyPrep™ vessels

Chemicals used:

- Nitric acid (Chemapol, min. 65%)
- Hydrochloric acid (Merck, 37%)

Method of digestion:

The samples were received in dried and powdered form. 0.250 g (±1%) samples were measured using an analytical scale and put into vessels. 2.0 ml concentrated nitric acid and 6.0 ml concentrated hydrochloric acid was added to the samples. The vessels were closed and put into the Mars6 microwave digestion system.

The following digestion method was used:

Steps of the method	Time (minutes)	Temperature (°C)
1st step	15	110
2nd step	15	180
3rd step	10	230
4th step	5	230
5th step	cooling	

After the digestion the content of the vessels were put into 50 ml Falcon test tubes. The vessels were washed by deionised water, and then the tubes were filled to the marks. The thus obtained solutions were diluted tenfold.

Preparation of SIMONA samples for GC-MS analysis

- 5 g of each sample was transfered into 40 ml flasks, added 30 ml mixture of *n*-hexane:acetone (1:1)
- ultrasonic bath (45 min)
- filtration (Na_2SO_4)
- the extracts were evaporated by vacuum rotary evaporator to single-drop of extract, then quantitative transfered to bank and filled with n-hexane.

n-hexane extract of pesticides (heptachlor etc.) undergo hydrolysis with H_2SO_4 p.a. and then measured by GC-ECD.

The laboratory does not analyze Dicofol and Quinoxyfen (from the list of HSs in Simona Sediment Laboratory Protocol).

PAHs were measured by GC-MS.

3.11.1. Chalmová on River Nitra

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.11.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Slovakia – suspended sediment

Sample ID	Sampling date	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK 01 SS	29.04.2021	suspended sediment	As	106	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Cd	0.33	0.003	mg/kg d.m.	EPA 6020B:2014	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Cr	32.6	0.03	mg/kg d.m.	EPA 6020B:2014	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Cu	24.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Hg	3.86	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Ni	14.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Pb	16.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Zn	167	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Anthracene	0.093	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Fluoranthene	0.579	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Benzo(a)pyrene	0.192	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.157	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.257	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/1
SK 01 SS	29.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/1

Table 3.11.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Slovakia – stream/bottom sediment

Sample ID	Sampling date	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK 01 BS	29.04.2021	bottom sediment	As	117	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Cd	0.26	0.003	mg/kg d.m.	EPA 6020B:2014	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Cr	30.1	0.03	mg/kg d.m.	EPA 6020B:2014	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Cu	25.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Hg	7.76	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Ni	14.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Pb	16.2	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Zn	130	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Anthracene	0.015	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Fluoranthene	0.166	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Benzo(a)pyrene	0.071	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.157	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Benzo(g,h,i)perylene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/3
SK 01 BS	29.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/3

Table 3.11.1.3. Results from BALINT ANALITIKA for 1st NB sampling point in Slovakia – active floodplain sediment ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Sampling date	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK 01 FS TS	29.04.2021	soil	As	13.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/5
SK 01 FS TS	29.04.2021	soil	Cd	0.14	0.003	mg/kg d.m.	EPA 6020B:2014	21-559/5
SK 01 FS TS	29.04.2021	soil	Cr	22.4	0.03	mg/kg d.m.	EPA 6020B:2014	21-559/5
SK 01 FS TS	29.04.2021	soil	Cu	11.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/5
SK 01 FS TS	29.04.2021	soil	Hg	1.20	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/5
SK 01 FS TS	29.04.2021	soil	Ni	10.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/5
SK 01 FS TS	29.04.2021	soil	Pb	13.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/5
SK 01 FS TS	29.04.2021	soil	Zn	65.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/5
SK 01 FS TS	29.04.2021	soil	Anthracene	0.050	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/5
SK 01 FS TS	29.04.2021	soil	Fluoranthene	0.316	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/5
SK 01 FS TS	29.04.2021	soil	Benzo(a)pyrene	0.099	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/5
SK 01 FS TS	29.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.182	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/5
SK 01 FS TS	29.04.2021	soil	Benzo(g,h,i)perylene	0.067	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/5
SK 01 FS TS	29.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.101	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/5
SK 01 FS TS	29.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-559/5
SK 01 FS TS	29.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/5
SK 01 FS TS	29.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/5
SK 01 FS TS	29.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/5
SK 01 FS TS	29.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/5
SK 01 FS TS	29.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/5
SK 01 FS BS	29.04.2021	soil	As	20.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/6
SK 01 FS BS	29.04.2021	soil	Cd	0.15	0.003	mg/kg d.m.	EPA 6020B:2014	21-559/6
SK 01 FS BS	29.04.2021	soil	Cr	27.7	0.03	mg/kg d.m.	EPA 6020B:2014	21-559/6
SK 01 FS BS	29.04.2021	soil	Cu	11.9	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/6
SK 01 FS BS	29.04.2021	soil	Hg	2.50	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/6
SK 01 FS BS	29.04.2021	soil	Ni	13.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/6
SK 01 FS BS	29.04.2021	soil	Pb	14.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/6
SK 01 FS BS	29.04.2021	soil	Zn	62.6	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/6
SK 01 FS BS	29.04.2021	soil	Anthracene	0.025	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/6
SK 01 FS BS	29.04.2021	soil	Fluoranthene	0.160	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/6
SK 01 FS BS	29.04.2021	soil	Benzo(a)pyrene	0.061	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/6
SK 01 FS BS	29.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.116	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/6
SK 01 FS BS	29.04.2021	soil	Benzo(g,h,i)perylene	0.039	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/6
SK 01 FS BS	29.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.064	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/6
SK 01 FS BS	29.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-559/6
SK 01 FS BS	29.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/6
SK 01 FS BS	29.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/6
SK 01 FS BS	29.04.2021	soil	Hexachlorobenzene	0.006	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/6
SK 01 FS BS	29.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/6
SK 01 FS BS	29.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/6

RESULTS FROM THE NATIONAL LABORATORY IN SLOVAKIA (SGIDS)

Table 3.11.1.4. Results from the national laboratory in Slovakia for 1st NB sampling point in Slovakia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK-01-BS	24.06.2021	bottom sediment	As	104	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Cd	0.271	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Cr	31	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Cu	24	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Hg	8	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Ni	19	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Pb	21.5	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Zn	104	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Anthracene	0.054	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Fluoranthene	0.282	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Benzo(a)pyrene	0.079	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.116	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Benzo(g,h,i)perylene	0.022	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.037	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5460
SK-01-BS	24.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5460

Table 3.11.1.5. Results from the national laboratory in Slovakia for 1st NB sampling point in Slovakia – active floodplain sediment ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK-01-FS-BS	24.06.2021	soil	As	21.3	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Cd	0.271	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Cr	30	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Cu	17	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Hg	2.11	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5458
SK-01-FS-BS	24.06.2021	soil	Ni	16	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Pb	16.1	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Zn	56	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Anthracene	0.014	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Fluoranthene	0.183	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Benzo(a)pyrene	0.036	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.085	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Benzo(g,h,i)perylene	0.026	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Indeno(1,2,3-cd)pyrene	0.026	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5458
SK-01-FS-BS	24.06.2021	soil	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5458
SK-01-FS-BS	24.06.2021	soil	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5458
SK-01-FS-BS	24.06.2021	soil	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5458
SK-01-FS-BS	24.06.2021	soil	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5458
SK-01-FS-TS	24.06.2021	soil	As	15.6	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Cd	0.167	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Cr	27	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Cu	16	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Hg	1.13	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5462
SK-01-FS-TS	24.06.2021	soil	Ni	13	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Pb	16.8	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Zn	65	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Anthracene	0.011	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Fluoranthene	0.228	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Benzo(a)pyrene	0.062	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.146	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Benzo(g,h,i)perylene	0.035	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Indeno(1,2,3-cd)pyrene	0.045	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5462
SK-01-FS-TS	24.06.2021	soil	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5462
SK-01-FS-TS	24.06.2021	soil	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5462
SK-01-FS-TS	24.06.2021	soil	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5462
SK-01-FS-TS	24.06.2021	soil	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5462

3.11.2. Jaklovce (Ružín reservoir tributary) on River Hnilec

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Table 3.11.2.1. Results from BALINT ANALITIKA for 2nd B sampling point in Slovakia – suspended sediment

Sample ID	Sampling date	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK 02 SS	29.04.2021	suspended sediment	As	45.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Cd	0.51	0.003	mg/kg d.m.	EPA 6020B:2014	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Cr	42.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Cu	217	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Hg	0.69	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Ni	25.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Pb	50.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Zn	301	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Anthracene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Fluoranthene	0.062	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Benzo(a)pyrene	0.029	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	nd	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Benzo(g,h,i)perylene	0.026	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Indeno(1,2,3-cd)pyrene	0.038	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/2
SK 02 SS	29.04.2021	suspended sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/2

Table 3.11.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Slovakia – stream/bottom sediment

Sample ID	Sampling date	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK 02 BS	29.04.2021	bottom sediment	As	66.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Cd	0.41	0.003	mg/kg d.m.	EPA 6020B:2014	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Cr	62.0	0.03	mg/kg d.m.	EPA 6020B:2014	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Cu	424	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Hg	1.10	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Ni	27.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Pb	73.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Zn	267	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Anthracene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Fluoranthene	0.075	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Benzo(a)pyrene	0.035	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.074	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Benzo(g,h,i)perylene	0.039	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.048	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/4
SK 02 BS	29.04.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/4

Table 3.11.2.3. Results from BALINT ANALITIKA for 2nd NB sampling point in Slovakia – active floodplain sediment ("top soil" i.e. top layer TS and "bottom soil" i.e. bottom layer BS)

Sample ID	Sampling date	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK 02 FS TS	29.04.2021	soil	As	61.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/7
SK 02 FS TS	29.04.2021	soil	Cd	0.43	0.003	mg/kg d.m.	EPA 6020B:2014	21-559/7
SK 02 FS TS	29.04.2021	soil	Cr	50.8	0.03	mg/kg d.m.	EPA 6020B:2014	21-559/7
SK 02 FS TS	29.04.2021	soil	Cu	304	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/7
SK 02 FS TS	29.04.2021	soil	Hg	1.23	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/7
SK 02 FS TS	29.04.2021	soil	Ni	24.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/7
SK 02 FS TS	29.04.2021	soil	Pb	111	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/7
SK 02 FS TS	29.04.2021	soil	Zn	220	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/7
SK 02 FS TS	29.04.2021	soil	Anthracene	0.045	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/7
SK 02 FS TS	29.04.2021	soil	Fluoranthene	0.405	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/7
SK 02 FS TS	29.04.2021	soil	Benzo(a)pyrene	0.210	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/7
SK 02 FS TS	29.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.370	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/7
SK 02 FS TS	29.04.2021	soil	Benzo(g,h,i)perylene	0.132	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/7
SK 02 FS TS	29.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.214	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/7
SK 02 FS TS	29.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-559/7
SK 02 FS TS	29.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/7
SK 02 FS TS	29.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/7
SK 02 FS TS	29.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/7
SK 02 FS TS	29.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/7
SK 02 FS TS	29.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/7
SK 02 FS BS	29.04.2021	soil	As	82.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/8
SK 02 FS BS	29.04.2021	soil	Cd	0.51	0.003	mg/kg d.m.	EPA 6020B:2014	21-559/8
SK 02 FS BS	29.04.2021	soil	Cr	44.4	0.03	mg/kg d.m.	EPA 6020B:2014	21-559/8
SK 02 FS BS	29.04.2021	soil	Cu	549	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/8
SK 02 FS BS	29.04.2021	soil	Hg	1.65	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/8
SK 02 FS BS	29.04.2021	soil	Ni	20.5	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/8
SK 02 FS BS	29.04.2021	soil	Pb	96.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-559/8
SK 02 FS BS	29.04.2021	soil	Zn	237	0.1	mg/kg d.m.	EPA 6020B:2014	21-559/8
SK 02 FS BS	29.04.2021	soil	Anthracene	0.037	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/8
SK 02 FS BS	29.04.2021	soil	Fluoranthene	0.450	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/8
SK 02 FS BS	29.04.2021	soil	Benzo(a)pyrene	0.219	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/8
SK 02 FS BS	29.04.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.384	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/8
SK 02 FS BS	29.04.2021	soil	Benzo(g,h,i)perylene	0.143	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/8
SK 02 FS BS	29.04.2021	soil	Indeno(1,2,3-cd)pyrene	0.227	0.001	mg/kg d.m.	EPA 8270E:2018	21-559/8
SK 02 FS BS	29.04.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-559/8
SK 02 FS BS	29.04.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/8
SK 02 FS BS	29.04.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/8
SK 02 FS BS	29.04.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/8
SK 02 FS BS	29.04.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-559/8
SK 02 FS BS	29.04.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-559/8

RESULTS FROM THE NATIONAL LABORATORY IN SLOVAKIA (SGIDS)

Table 3.11.2.4. Results from the national laboratory in Slovakia for 2nd NB sampling point in Slovakia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK-02-BS	24.06.2021	bottom sediment	As	60.7	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Cd	0.561	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Cr	51	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Cu	380	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Hg	0.88	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Ni	27	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Pb	82.2	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Zn	236	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Anthracene	0.064	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Fluoranthene	0.658	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Benzo(a)pyrene	0.201	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.429	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Benzo(g,h,i)perylene	0.086	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.093	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5461
SK-02-BS	24.06.2021	bottom sediment	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5461

Table 3.11.2.5. Results from the national laboratory in Slovakia for 2nd NB sampling point in Slovakia – active floodplain sediment ("bottom soil" i.e. bottom layer BS and "top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration mesured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SK-02-FS-BS	24.06.2021	soil	As	87.5	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Cd	0.646	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Cr	45	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Cu	644	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Hg	4.14	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5459
SK-02-FS-BS	24.06.2021	soil	Ni	24	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Pb	125	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Zn	237	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Anthracene	0.055	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Fluoranthene	0.649	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Benzo(a)pyrene	0.13	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.264	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Benzo(g,h,i)perylene	0.067	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Indeno(1,2,3-cd)pyrene	0.112	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5459
SK-02-FS-BS	24.06.2021	soil	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5459
SK-02-FS-BS	24.06.2021	soil	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5459
SK-02-FS-BS	24.06.2021	soil	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5459
SK-02-FS-BS	24.06.2021	soil	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5459
SK-02-FS-TS	24.06.2021	soil	As	63	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Cd	0.757	0.05	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Cr	81	1	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Cu	336	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Hg	1.84	0.01	mg/kg d.m.	Own method: IP č. 1.12 (AAS: AMA-254)	21-5463
SK-02-FS-TS	24.06.2021	soil	Ni	38	2	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Pb	136.7	0.5	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Zn	209	3	mg/kg d.m.	Own method: IP č. 2.24 (ICP-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Anthracene	0.024	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Fluoranthene	0.396	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Benzo(a)pyrene	0.137	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.256	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Benzo(g,h,i)perylene	0.083	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Indeno(1,2,3-cd)pyrene	0.108	0.01	mg/kg d.m.	Own method: IP č. 6.3 (GC-MS)	21-5463
SK-02-FS-TS	24.06.2021	soil	Heptachlor	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5463
SK-02-FS-TS	24.06.2021	soil	Heptachlor epoxide	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5463
SK-02-FS-TS	24.06.2021	soil	Hexachlorobenzene	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5463
SK-02-FS-TS	24.06.2021	soil	Hexachloro cyclohexane	<	0.01	mg/kg d.m.	Own method: IP č. 6.2 (GC-ECD)	21-5463

3.12. SLOVENIA

ANALYTICAL METHODOLOGIES IN THE NATIONAL LABORATORY OF SLOVENIA

The laboratory selected in Slovenia for analyzing the sediment samples collected from the two national baseline network stations for sediment monitoring is the National Laboratory of Health, Environmnet and Food (NLZOH), located in Maribor.

The analytical methods for HSs detection used in NLZOH are described below.

For heavy metals:

- dried sediment sample was extracted with aqua regia in hot block system under reflux conditions for 2 hours
- the extract was made up to known volume with 1% nitric acid
- the trace elements were determined with ICP-MS method
- for quality assurance, in parallel with the samples, there were prepared and measured blank sample and certified reference material

For Hg the EPA 7473 standard was used:

- solid sample is dried, thermally and chemically decomposed within the decomposition furnace
- the mecury is traped on amalgamator
- the amalgamator is than heated to release mercury vapor
- the mercury vapors are carried through absorbance cell of the instrument
- absorbance is measured at 253,7 nm as a function of mercury concentration
- for quality assurance, in parallel with the samples, there were prepared and measured blank sample and certified reference material

For PAHs:

Five grams of sample are taken for analysis and after addition of internal standard and extraction solvents (mixture of hexane and dichloromethane), the sample is extracted using Vortex shaker (for 2 min) and sonication (for 5 min). After centrifugation the extract is decanted and the extraction steps are repeated twice. The concentrated combined extract is ourified on the Alimina/silica gel column and PSA SPE column. The eluate is concentrated under a gantle stream of nitrogen, transferred a vial and analysed by GC-MS (SIM mode).

For pesticides:

Five grams of sample are taken for analysis and after addition of water, internal standard and extraction solvents (mixture of acetone and methanol), the sample is extracted using Vortex shaker (for 2 min). After centrifugation (10 min/4700 rpm) the extract is transferred to a reservoir of a funnal-shaped SPE column filled with Lichrolut EN polymeric SPE sorbent. The eluate is concentrated under a gantle stream of nitrogen, transferred a vial and analysed by GC-MS (SIM mode).

For organochlorine pesticides:

Determination of organochlorine pesticides in sediment samples was performed by gas chromatography with electron capture detection using dual column chromatography according to accredited modified method ISO 10382.

After pretreatment, the sediment samples were extracted with hexane-acetone mixture. Interferences co-extracted from the samples were clean-up by column chromatography on partially deactivated Florisil.

Elemental sulfur was removed from the extract by treatment with copper powder.

3.12.1. Jevnica on River Sava

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Only stream/bottom sediments and active floodplain sediments ("top soil" i.e. top layer TS) could be sampled at this Slovenian station on Sava, at Jevnica.

Table 3.12.1.1. Results from BALINT ANALITIKA for 1st NB sampling point in Slovenia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SI/01/BS	17.05.2021	bottom sediment	As	5.73	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Cd	0.14	0.003	mg/kg d.m.	EPA 6020B:2014	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Cr	24.1	0.03	mg/kg d.m.	EPA 6020B:2014	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Cu	11.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Hg	0.18	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Ni	15.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Pb	11.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Zn	54.3	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Anthracene	0.002	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Fluoranthene	0.016	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Benzo(a)pyrene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.015	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Benzo(g,h,i)perylene	0.006	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.009	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/444
SI/01/BS	17.05.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/444

Table 3.12.1.2. Results from BALINT ANALITIKA for 1st NB sampling point in Slovenia – active floodplain sediment ("top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SI/01/FS/TS	17.05.2021	soil	As	6.52	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/446
SI/01/FS/TS	17.05.2021	soil	Cd	0.14	0.003	mg/kg d.m.	EPA 6020B:2014	21-731/446
SI/01/FS/TS	17.05.2021	soil	Cr	23.2	0.03	mg/kg d.m.	EPA 6020B:2014	21-731/446
SI/01/FS/TS	17.05.2021	soil	Cu	9.76	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/446
SI/01/FS/TS	17.05.2021	soil	Hg	0.12	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/446
SI/01/FS/TS	17.05.2021	soil	Ni	14.0	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/446
SI/01/FS/TS	17.05.2021	soil	Pb	11.1	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/446
SI/01/FS/TS	17.05.2021	soil	Zn	54.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/446
SI/01/FS/TS	17.05.2021	soil	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/446
SI/01/FS/TS	17.05.2021	soil	Fluoranthene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/446
SI/01/FS/TS	17.05.2021	soil	Benzo(a)pyrene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/446
SI/01/FS/TS	17.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.008	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/446
SI/01/FS/TS	17.05.2021	soil	Benzo(g,h,i)perylene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/446
SI/01/FS/TS	17.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/446
SI/01/FS/TS	17.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-731/446
SI/01/FS/TS	17.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/446
SI/01/FS/TS	17.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/446
SI/01/FS/TS	17.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/446
SI/01/FS/TS	17.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/446
SI/01/FS/TS	17.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/446

RESULTS FROM THE NATIONAL LABORATORY IN SLOVENIA

Table 3.12.1.3. Results from the national laboratory in Slovenia for 1st NB sampling point in Slovenia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SI/01/BS	05.08.2021.	bottom sediment	Cd	0.13	0.01	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Hg	0.09	0.003	mg/kg d.m.	EPA 7473: 2007, MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Pb	13	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Ni	18	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Zn	53	5	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Cr	14	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Cu	11	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	As	4.9	1	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Dicofol	< 70	0.03	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Quinoxyfen	< 30	0.005	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Anthracene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Benzo(a)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Benzo(b)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Benzo(g,h,i)perylene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Benzo(k)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Indeno(1,2,3-cd)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	alpha-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	beta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	delta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	gama-HCH (Lindan)	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Heptachlor	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	cis-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	trans-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76041
SI/01/BS	05.08.2021.	bottom sediment	Heksachlorobenzene (HCB)	< 0.005	0.003	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76041

Table 3.12.1.4. Results from the national laboratory in Slovenia for 1st NB sampling point in Slovenia – active floodplain sediment ("top soil" i.e. top layer TS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SI/01/FS/TS	05.08.2021.	floodplain sediment	Cd	0.12	0.01	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Hg	0.091	0.003	mg/kg d.m.	EPA 7473: 2007, MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Pb	11	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Ni	16	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Zn	< 50	5	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Cr	11	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Cu	9.8	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	As	5.2	1	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Dicofol	< 70	0.03	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Quinoxyfen	< 30	0.005	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Anthracene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Benzo(a)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Benzo(b)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Benzo(g,h,i)perylene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Benzo(k)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Indeno(1,2,3-cd)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	alpha-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	beta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	delta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	gama-HCH (Lindan)	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Heptachlor	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	cis-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	trans-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76040
SI/01/FS/TS	05.08.2021.	floodplain sediment	Heksachlorobenzene (HCB)	< 0.005	0.003	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76040

3.12.2. Medno on River Sava

RESULTS FROM SIMONA REFERENCE LABORATORY (BALINT ANALITIKA)

Stream/bottom sediments and active floodplain sediments ("top soil" i.e. top layer TS and"bottom soil" i.e. bottom layer BS) were collected from this second Slovenian sampling station on Sava, at Medno.

Table 3.12.2.1. Results from BALINT ANALITIKA for 2nd NB sampling point in Slovenia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SI/02/BS	17.05.2021	bottom sediment	As	7.87	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Cd	0.15	0.003	mg/kg d.m.	EPA 6020B:2014	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Cr	34.3	0.03	mg/kg d.m.	EPA 6020B:2014	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Cu	14.5	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Hg	0.22	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Ni	22.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Pb	40.9	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Zn	67.0	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Anthracene	0.001	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Fluoranthene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Benzo(a)pyrene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Benzo(g,h,i)perylene	0.004	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Indeno(1,2,3-cd)pyrene	0.005	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/445
SI/02/BS	17.05.2021	bottom sediment	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/445

Table 3.12.2.2. Results from BALINT ANALITIKA for 2nd NB sampling point in Slovenia – active floodplain sediments ("top soil" i.e. top layer TS and"bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SI/02/FS/TS	17.05.2021	soil	As	7.42	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/447
SI/02/FS/TS	17.05.2021	soil	Cd	0.18	0.003	mg/kg d.m.	EPA 6020B:2014	21-731/447
SI/02/FS/TS	17.05.2021	soil	Cr	38.9	0.03	mg/kg d.m.	EPA 6020B:2014	21-731/447
SI/02/FS/TS	17.05.2021	soil	Cu	14.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/447
SI/02/FS/TS	17.05.2021	soil	Hg	0.20	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/447
SI/02/FS/TS	17.05.2021	soil	Ni	21.7	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/447
SI/02/FS/TS	17.05.2021	soil	Pb	24.8	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/447
SI/02/FS/TS	17.05.2021	soil	Zn	75.1	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/447
SI/02/FS/TS	17.05.2021	soil	Anthracene	0.007	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/447
SI/02/FS/TS	17.05.2021	soil	Fluoranthene	0.039	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/447
SI/02/FS/TS	17.05.2021	soil	Benzo(a)pyrene	0.018	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/447
SI/02/FS/TS	17.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.011	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/447
SI/02/FS/TS	17.05.2021	soil	Benzo(g,h,i)perylene	0.015	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/447
SI/02/FS/TS	17.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.015	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/447
SI/02/FS/TS	17.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-731/447
SI/02/FS/TS	17.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/447
SI/02/FS/TS	17.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/447
SI/02/FS/TS	17.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/447
SI/02/FS/TS	17.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/447
SI/02/FS/TS	17.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/447
SI/02/FS/BS	17.05.2021	soil	As	8.55	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/448
SI/02/FS/BS	17.05.2021	soil	Cd	0.15	0.003	mg/kg d.m.	EPA 6020B:2014	21-731/448
SI/02/FS/BS	17.05.2021	soil	Cr	36.7	0.03	mg/kg d.m.	EPA 6020B:2014	21-731/448
SI/02/FS/BS	17.05.2021	soil	Cu	15.8	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/448
SI/02/FS/BS	17.05.2021	soil	Hg	0.24	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/448
SI/02/FS/BS	17.05.2021	soil	Ni	25.3	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/448
SI/02/FS/BS	17.05.2021	soil	Pb	19.4	0.005	mg/kg d.m.	EPA 6020B:2014	21-731/448
SI/02/FS/BS	17.05.2021	soil	Zn	64.4	0.1	mg/kg d.m.	EPA 6020B:2014	21-731/448
SI/02/FS/BS	17.05.2021	soil	Anthracene	0.003	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/448
SI/02/FS/BS	17.05.2021	soil	Fluoranthene	0.034	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/448
SI/02/FS/BS	17.05.2021	soil	Benzo(a)pyrene	0.014	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/448
SI/02/FS/BS	17.05.2021	soil	Benzo(b)fluoranthene+Benzo(k)fluoranthene	0.022	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/448
SI/02/FS/BS	17.05.2021	soil	Benzo(g,h,i)perylene	0.01	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/448
SI/02/FS/BS	17.05.2021	soil	Indeno(1,2,3-cd)pyrene	0.013	0.001	mg/kg d.m.	EPA 8270E:2018	21-731/448
SI/02/FS/BS	17.05.2021	soil	Dicofol	<	0.005	mg/kg d.m.	EPA 1656A:2000	21-731/448
SI/02/FS/BS	17.05.2021	soil	Heptachlor	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/448
SI/02/FS/BS	17.05.2021	soil	Heptachlor epoxide	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/448
SI/02/FS/BS	17.05.2021	soil	Hexachlorobenzene	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/448
SI/02/FS/BS	17.05.2021	soil	Hexachloro cyclohexane	<	0.005	mg/kg d.m.	EPA 8081B:2007	21-731/448
SI/02/FS/BS	17.05.2021	soil	Quinoxyfen	<	0.005	mg/kg d.m.	EPA 8270E:2018	21-731/448

RESULTS FROM THE NATIONAL LABORATORY IN SLOVENIA

Table 3.12.2.3. Results from the national laboratory in Slovenia for 2nd NB sampling point in Slovenia – stream/bottom sediment

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SI/02/BS	05.08.2021.	bottom sediment	Cd	0.16	0.01	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Hg	0.13	0.003	mg/kg d.m.	EPA 7473: 2007, MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Pb	19	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Ni	25	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Zn	65	5	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Cr	16	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Cu	16	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	As	6.8	1	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Dicofol	< 70	0.03	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Quinoxyfen	< 30	0.005	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Anthracene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Benzo(a)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Benzo(b)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Benzo(g,h,i)perylene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Benzo(k)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Indeno(1,2,3-cd)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	alpha-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	beta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	delta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	gama-HCH (Lindan)	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Heptachlor	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	cis-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	trans-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76043
SI/02/BS	05.08.2021.	bottom sediment	Heksachlorobenzene (HCB)	< 0.005	0.003	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76043

Table 3.12.2.4 Results from the national laboratory in Slovenia for 2nd NB sampling point in Slovenia – active floodplain sediments ("top soil" i.e. top layer TS and"bottom soil" i.e. bottom layer BS)

Sample ID	Date of reception	Sample type	Component tested	Concentration measured	Lower limit of measurement	Unit	Standard method applied	Lab ID
SI/02/FS/TS	05.08.2021.	floodplain sediment	Cd	0.15	0.01	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Hg	0.13	0.003	mg/kg d.m.	EPA 7473: 2007, MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Pb	23	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Ni	26	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Zn	74	5	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Cr	17	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Cu	17	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	As	6.3	1	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Dicofol	< 70	0.03	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Quinoxyfen	< 30	0.005	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Anthracene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Benzo(a)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Benzo(b)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Benzo(g,h,i)perylene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Benzo(k)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Fluoranthene	0.014	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Indeno(1,2,3-cd)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	alpha-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	beta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	delta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	gama-HCH (Lindan)	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Heptachlor	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	cis-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	trans-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76045
SI/02/FS/TS	05.08.2021.	floodplain sediment	Heksachlorobenzene (HCB)	< 0.005	0.003	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76045
SI/02/FS/BS	05.08.2021.	floodplain sediment	Cd	0.16	0.01	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Hg	0.11	0.003	mg/kg d.m.	EPA 7473: 2007, MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Pb	21	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Ni	29	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Zn	66	5	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Cr	18	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Cu	17	2	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	As	7.4	1	mg/kg d.m.	ISO 17294-2:2016, modified (1) MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Dicofol	< 70	0.03	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Quinoxyfen	< 30	0.005	µg/kg d.m.	ND-IV-NLZOH-OKAMB-92, edition 10, MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Anthracene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Benzo(a)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Benzo(b)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Benzo(g,h,i)perylene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Benzo(k)fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Fluoranthene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Indeno(1,2,3-cd)pyrene	< 0.01	0.005	mg/kg d.m.	SIST EN 15527:2009, modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	alpha-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	beta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	delta-HCH	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	gama-HCH (Lindan)	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Heptachlor	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	cis-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	trans-Heptachlorepoxide	< 0.01	0.005	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76042
SI/02/FS/BS	05.08.2021.	floodplain sediment	Heksachlorobenzene (HCB)	< 0.005	0.003	mg/kg d.m.	ISO 10382:2002 modif., MB	21/76042

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