

Results of Radioactive Material Monitoring of Aquatic Organisms (Location F along the Ota River)

<Location F along the Ota River: Samples collected>

Items Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
F-1	○	○	○	○	○	○

<Location F along the Ota River: Site measurement item>

Items	Latitude and longitude of the location		Survey date and time			Water	Sediment				Other	
	Latitude	Longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)	Transparency (cm)
F-1	37.5975°	140.9252°	2021/10/22	08:28	08:46	15.7	15.8	Sand	10YR5/4	None	0.33	>50

<Location F along the Ota River: General survey items/Analysis of radioactive materials Water>

Items	Latitude and longitude of the location		Survey date and time		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electric conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
	Latitude	Longitude	Date	Time (water)												
F-1	37.5975°	140.9252°	2021/10/22	08:28	7.4	<0.5	2.3	10.3	5.2	0.03	0.9	<1	0.9	0.0022	0.077	0.0023

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

<Location F along the Ota River: General survey items/Analysis of radioactive materials Sediment>

Items	Latitude and longitude of the location		Survey date and time		pH	Redox potential E _{NHE} (mV)	Water content (%)	IL	TOC (mg/g-dry)	Soil particle density (g/cm ³)	Grain size distribution							Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)	
	Latitude	Longitude	Date	Time (sediment)							Gravel (2.75mm)	Coarse sand (0.85-2mm)	Medium sand (0.25-0.85mm)	Fine sand (0.075-0.25mm)	Silt (0.005-0.075mm)	Clay (Less than 0.005mm)	Median grain diameter (mm)	Maximum grain diameter (mm)			
F-1	37.5975°	140.9252°	2021/10/22	08:46	7.5	484	17.8	0.8	1.0	2.645	23.0	36.7	27.7	4.5	4.3	3.8	1.1	9.5	8.0	230	0.20

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

<Location F along the Ota River: Analysis items Aquatic organisms>

Locations	Sampling point	Latitude and longitude of the location		Sampling date	Division	Class	Order	Family	Scientific name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium (Bq/kg-wet)			Sr-90 (Bq/kg-wet)		
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137			
F-1	The main stream of the Ota River	37.5975°	140.9252°	2021/10/21	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.014	-	-	-	54	N.D.(7.8)	54	-		
					Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	Oyamia lugubris	124	0.032	Larva	-	-	13	N.D.(3.4)	13	-		
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	228	0.045	Larva	-	-	75	N.D.(5.2)	75	-		
					Arthropoda	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	98	0.029	Larva(Dragonfly larva)	-	-	27	N.D.(3.7)	27	-		
					Arthropoda	Insecta	Odonata	Cordulegastridae	<i>Anotogaster sieboldii</i>	Anotogaster sieboldii											
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	Stylogomphus suzukii											
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Melligomphus viridicostus</i>	Melligomphus viridicostus											
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae											
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	Davidius											
					Arthropoda	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	Asiagomphus melaenops											
					Arthropoda	Insecta	Odonata	Aeshnidae	<i>Boyeria macchlani</i>	Boyeria macchlani											
					Arthropoda	Malacostraca	Decapoda	Palaeomonidae	<i>Palaeomon paucidens</i>	Common prawn			35	0.049	Juvenile,Imago	-	-	78	N.D.(5.0)	78	-
					Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel			2	0.31	Mature fish	Obscure digesta		84.6	2.6	82	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace			4	0.11	Immature fish	-	-	125.5	5.5	120	-
F-5	The main stream of the Ota River	37.6022°	140.9868°	2021/10/20	Vertebrata	Amphibia	Anura	Ranidae	<i>Rana japonica</i>	Japanese brown frog	8	0.095	Imago	-	-	54	N.D.(2.8)	54	-		
					Vertebrata	Amphibia	Anura	Glandirana	<i>Glandirana rugosa</i>	Wrinkled frog											
					Arthropoda	Malacostraca	Decapoda	Cambaridae	<i>Procambarus clarkii</i>	Red swamp crawfish	3	0.028	Imago	-	-	30	N.D.(4.5)	30	-		
					Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	<i>Cottus reini</i>	Sculpin	8	0.13	Immature fish	-	-	34	N.D.(2.4)	34	-		
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	5	0.11	Immature fish,Mature fish	-	-	36.0	2.0	34	-		
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	<i>Plecoglossus altivelis altivelis</i>	Sweetfish	8	0.30	Immature fish,Mature fish	-	-	154.8	4.8	150	-		

*1: Organisms were collected in or around the targeted water area

*2: When multiple types of aquatic organisms were collected, a sample was prepared by mixing them.

*3: For a sample made of multiple types of aquatic organisms, the English name of the dominant one largest in number is underlined.

*4: Basically, measurement was conducted for all organisms sampled. Viscera (stomach and bowels) were removed for the measurement.

⁴ Basically, measurement was conducted for all organism samples. Viscera (stomach and bowels) were removed for the measurement.

*5: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40µm-mesh)

*6: River bottom materials (incl. algae) are algae, etc. that were scratched off stones with a brush, etc. and may include very fine particles.

*7: N.D. means to be below the detection limit and figures in parentheses show the detection limit.

*8: Activity concentrations include counting errors, but the details are omitted here.