

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

<Location F along the Ota River: Samples collected >

Locations	General items			Radioactive materials		
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
F-1	○	○	○	○	○	○
F-2	○	○	○	○	○	○
F-3	○	○	○	-	○	-
F-4	○	○	○	-	○	-
F-5	○	○	○	-	○	-
F-6	○	-	○	-	-	-

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

Locations	Latitude and longitude of the location		Survey date and time		Water			Sediment			Other	
	Scheduled latitude	Scheduled 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°	2015/12/5	08:07	08:02	9.2	9.2	Sand	2.5Y4/4	None	0.45	>50
F-2	37.6016°	140.9423°		08:58	09:13	9.5	9.5	Sand	2.5Y4/2	None	0.42	>50
F-3	37.6045°	140.9636°		10:07	10:16	9.2	9.3	Sand	2.5Y4/4	None	0.75	>50
F-4	37.6070°	140.9720°		10:50	11:02	10.6	10.7	Sand	2.5Y4/3	None	0.45	>50
F-5	37.6022°	140.9868°		12:33	12:44	10.4	10.3	Sand	2.5Y4/3	None	0.22	>50
F-6	37.5953°	141.0123°		13:24	-	-	9.7	-	-	-	0.59	>50

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

Locations	Latitude and longitude of the location		Survey date and time		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electrical conductivity (m/s/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
	Scheduled latitude	Scheduled longitude	Date	Time (water)												
F-1	37.5975°	140.9252°	2015/12/5	8:07	7.4	<0.5	2.2	11.7	5.4	0.03	0.9	<1	0.7	0.047	0.20	-
F-2	37.6016°	140.9423°		8:58	7.2	0.7	2.0	11.5	6.2	0.04	0.8	<1	0.4	0.034	0.14	0.0046
F-3	37.6045°	140.9636°		10:07	7.3	<0.5	1.8	11.6	6.2	0.04	0.8	<1	0.4	0.028	0.12	-
F-4	37.6070°	140.9720°		10:50	6.9	<0.5	1.4	10.3	6.9	0.04	0.6	2	0.4	0.021	0.093	-
F-5	37.6022°	140.9868°		12:33	7.0	<0.5	1.8	10.8	7.7	0.04	0.8	2	0.8	0.021	0.088	-
F-6	37.5953°	141.0123°		13:24	7.1	<0.5	2.5	11.1	10.6	0.06	1.1	2	1.4	0.021	0.084	-

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

Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential EN.H.E (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm3)	Grain size distribution							Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)	
	Scheduled latitude	Scheduled 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 (0.005-0.0075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter				Maximum grain diameter
F-1	37.5975°	140.9252°	2015/12/5	8:02	6.8	468	17.5	0.7	1.2	2.645	11.2	25.0	55.2	7.4	0.8	0.4	0.65	9.5	480	2100	-
F-2	37.6016°	140.9423°		9:13	6.8	468	12.4	0.5	0.9	2.636	17.7	52.8	28.2	1.0	0.1	0.2	1.2	4.8	220	1000	0.39
F-3	37.6045°	140.9636°		10:16	6.9	463	23.2	0.9	1.7	2.632	1.2	9.3	81.3	6.5	1.1	0.6	0.50	4.8	520	2400	-
F-4	37.6070°	140.9720°		11:02	6.7	483	15.8	0.6	1.5	2.636	7.1	37.0	51.7	3.5	0.4	0.3	0.77	4.8	220	870	-
F-5	37.6022°	140.9868°		12:44	6.6	486	18.5	0.7	1.6	2.642	25.8	24.7	43.9	4.6	0.6	0.4	0.87	19	140	670	-
F-6	37.5953°	141.0123°		13:24	7.1	486	18.5	0.7	1.6	2.642	25.8	24.7	43.9	4.6	0.6	0.4	0.87	19	140	670	-

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

Location	Sampling point	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Growth stage	Note		Radioactive cesium (Bq/kg-wet)		Sr-90 (Bq/kg-wet)
		Latitude	Longitude											Stomach contents	Measurement site	Cs-134	Cs-137	
F-1	-	37.5975°	140.9252°	2015/12/5	Phycophyta	-	-	-	-	Riverbed Deposits (include algae)	-	0.023	-	-	-	77	300	-
					Arthropod	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	Stylogomphus suzukii	31	0.013	Larva (dragonfly larva)	-	-	55	230	-
					Arthropod	Insecta	Odonata	Gomphidae	<i>Meligomphus viridicostus</i>	Onychogomphus viridicostus								
					Arthropod	Insecta	Odonata	Cordulegastriidae	<i>Anotogaster sieboldii</i>	Anotogaster sieboldii								
					Arthropod	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae								
					Arthropod	Insecta	Odonata	Aeshnidae	<i>Boyeria maclachlani</i>	Boyeria maclachlani								
					Arthropod	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena								
					Arthropod	Insecta	Odonata	Gomphidae	-	Davidius								
					Arthropod	Insecta	Odonata	Calopterygidae	<i>Mnais costalis</i>	Mnais costalis								
					Arthropod	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	Asiagomphus melaenops								
					Arthropod	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Common prawn								
					Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp								
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace								
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace (muscular part)								
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace (inner parts)									
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace (bone part)									
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius fluviatilis</i>	R. fluviatilis									
				Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.17	-	-	-	120	490	-	

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

*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 name of the dominant one largest in number is underlined.

*4: Basically, measurement was conducted for all organisms samples. Viscera (stomach and bowels) were removed for the measurement when possible so that undigested food and sediments, etc. in the digestive system would be excluded.

*5: A statement in red in the "Growth stage" column shows the age assessed based on squama or otolith.

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

*7: River bottom materials (incl. algae) are algae, etc. that were scratched off stones with a brush, etc. and may include very fine particles such as inorganic silt and clay.

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

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