

**OResults of Radioactive Material Monitoring of Aquatic Organisms (Location O along the Tomioka River)**

<Location O along the Tomioka River: Samples collected>

Locations	Items	General items		Radioactive materials			
		Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
O-1		○	○	○	○	○	○
O-2		○	○	○	-	○	-

<Location O along the Tomioka River: Site measurement item>

Locations	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)
O-1		37.3547°	140.9780°	2024/12/8	12:30	12:30	8.8	8.1	Sand sediment	7.5Y5/3	Plant pieces	0.57	>50
O-2		37.3624°	140.9612°		14:30	14:30	7.6	7.3	Sand	7.5Y6/3	None	0.35	>50

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

Locations	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)												
O-1		37.3547°	140.9780°	2024/12/8	12:30	7.5	0.6	1.6	12.2	9.5	0.05	0.8	1	0.7	N.D.(0.0017)	0.0080	0.0011
O-2		37.3624°	140.9612°		14:30	7.6	0.8	1.6	12.2	8.9	0.05	0.7	3	0.7	N.D.(0.0014)	0.013	-

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

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

Locations	Items	Latitude and longitude of the location		Survey date and time		pH	Redox potential E <sub>NHE</sub> (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm <sup>3</sup> )	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)
												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)
O-1		37.3547°	140.9780°	2024/12/8	12:30	7.3	450	59.7	10.5	48.0	2.480	11.4	28.9	12.6	7.1	26.1	13.9	0.36	4.8	6.4	510	0.42
O-2		37.3624°	140.9612°		14:30	7.6	472	22.3	2.3	3.2	2.710	17.9	15.2	41.3	17.1	3.7	4.8	0.49	9.5	-	-	-

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

<Location O along the Tomioka 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	
O-1	The main stream of the Tomioka River	37.3547°	140.9780°	2024/12/8	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.015	-	-	-	530	N.D.(14)	530	-
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<i>Stenopsyche marmorata</i>	260	0.063	Larva	-	-	140	N.D.(4.5)	140	-
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Macrobrachium japonicum</i>	Freshwater Prawn	1	0.0093	Juvenile	-	-	10	N.D.(3.1)	10	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	11	0.083	Immature fish	-	-	26	N.D.(3.1)	26	-
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	1	0.029	Immature fish	-	-	6.8	N.D.(1.6)	6.8	-
					Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	81	N.D.(2.5)	81	-
O-2	The main stream of the Tomioka River	37.3624°	140.9612°	2024/12/8	Algae/plant	-	-	-	-	Riverbed Deposits (Include algae)	-	0.022	-	-	-	618.9	8.9	610	-
					Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria uenoi</i>	<i>Kamimuria uenoi</i> Kohno	276	0.026	Larva	-	-	7.0	N.D.(1.4)	7.0	-
					Arthropoda	Insecta	Plecoptera	Perlidae	<i>Oyamia lugubris</i>	<i>Oyamia lugubris</i>									
					Arthropoda	Insecta	Plecoptera	Perlidae	<i>Kamimuria tibialis</i>	<i>Kamimuria tibialis</i>									
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	49	0.27	Immature fish	-	-	20	N.D.(1.2)	20	-
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	11	0.15	Immature fish	-	-	29	N.D.(1.5)	29	-
Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	45	N.D.(1.5)	45	-					

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

\*4: Basically, measurement was conducted for all organism 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: 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 such as inorganic silt and clay.

\*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.