

◦Results of Radioactive Material Monitoring of Aquatic Organisms (Location C along the Uda River)

<Location C along the Uda River: Samples collected>

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

<Location C along the Uda River: Site measurement item>

Items Locations	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	Odor	Contaminants	Water depth (m)	Transparency (cm)
C-1	37.795467°	140.745783°	2013/12/4	8:45	8:52	6.8	6.7	Sand	2.5Y3/3	None	Pebbles, aquatic insects	0.25	>50
C-2	37.771000°	140.727667°		9:43	9:48	5.7	6.1	Sediment with sand	2.5Y3/1	Sediment smell	Pebbles	0.30	>50
C-3	37.779100°	140.804100°		10:36	11:33	7.3	7.9	Sand	2.5Y5/3	None	Pebbles	0.28	>50
C-4	37.769250°	140.844233°		11:22	13:00	8.1	8.3	Sediment with sand	2.5Y5/3	None	Pebbles	0.54	>50
C-5	37.764550°	140.860267°		13:00	13:06	8.4	8.3	Sediment with sand	2.5Y5/3	None	Pebbles	0.54	>50
C-6	37.776450°	140.887483°		13:50	13:56	7.7	7.7	Sand	2.5Y4/1	None	Pebbles	0.37	>50

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

Items Locations	Latitude and longitude of the location		Survey date and time		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electrical (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												
C-1	37.795467°	140.745783°	2013/12/4	8:45	7.3	<0.5	1.6	12.4	10.6	0.06	0.6	<1	0.5	0.011	0.028	—
C-2	37.771000°	140.727667°		9:43	7.2	<0.5	2.8	12.4	8.3	0.04	0.9	8	3.1	0.033	0.073	—
C-3	37.779100°	140.804100°		10:36	7.5	<0.5	1.8	12.2	8.7	0.05	0.8	<1	0.6	0.0098	0.027	—
C-4	37.769250°	140.844233°		11:22	7.6	<0.5	1.7	12.5	8.7	0.05	0.7	<1	0.4	0.0058	0.014	0.0010
C-5	37.764550°	140.860267°		13:00	7.7	<0.5	1.5	12.4	8.8	0.05	0.7	<1	0.3	0.0068	0.018	—
C-6	37.776450°	140.887483°		13:50	7.7	<0.5	1.6	12.9	9.7	0.05	0.8	<1	0.4	0.0065	0.012	—

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

Items Locations	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					Median grain diameter (mm)	Maximum grain diameter (mm)	Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)		
	Latitude	Longitude	Date	Time							Gravel (2-75mm) (%)	Coarse sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm)							Clay (Less than 0.005mm) (%)	
														Silt (0.005-0.075mm) (%)	Silt (%)							
C-1	37.795467°	140.745783°	2013/12/4	8:52	6.9	114	18.4	2.1	<1	2.762	68.3	27.3	2.6	0.8	0.5	0.5	2.4	9.5	160	400	—	
C-2	37.771000°	140.727667°		9:48	6.9	90	30.8	4.0	5	2.794	26.1	19.6	29.1	11.4	5.9	0.71	9.5	270	640	—	—	
C-4	37.769250°	140.844233°		11:33	7.1	121	22.4	1.5	<1	2.748	29.4	32.1	33.3	4.2	0.5	0.5	1.2	19	290	700	0.61	
C-5	37.764550°	140.860267°		13:06	7.0	152	26.6	1.8	2	2.717	18.7	21.3	28.0	13.2	9.1	9.7	0.59	9.5	170	430	—	
C-6	37.776450°	140.887483°		13:56	7.2	142	20.4	1.2	<1	2.756	18.0	39.8	35.5	5.3	0.5	0.9	1.0	19	190	440	—	

Note) N.D. means to be below the detection limit.

< Location C along the Uda River: Analysis items Aquatic organisms >

Location	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note		Cs-134 (Bq/kg-wet)	Cs-137 (Bq/kg-wet)	Sr-90 (Bq/kg-wet)			
	Latitude	Longitude										Growth stage	Stomach contents						
C-6	37.776450°	140.887483°	2013/12/10	Algae/plant	—	—	—	—	Attached algae	—	0.079	—	—	110	250	—			
				Arthropod	Insecta	Trichoptera	Stenoprychidae	<i>Stenopryche marmorata</i>	Stenopryche marmorata	140	0.021	Larva	—	—	29	81	—		
				Arthropod	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes continentalis</i>	Parachauliodes continentalis Weede	16	0.0098	Larva	—	—	9.1	18	—		
				Arthropod	Insecta	Megaloptera	Corydalidae	<i>Prototermes grandis</i>	Prototermes grandis										
				Arthropod	Insecta	Odonata	Gomphidae	<i>Asiagomphus melanocephalus</i>	Asiagomphus melanocephalus	46	0.014	Larva	—	—	21	45	—		
				Arthropod	Insecta	Odonata	Gomphidae	<i>Davidius nanus</i>	Davidius nanus										
				Arthropod	Insecta	Odonata	Gomphidae	<i>Davidius sp.</i>	Davidius										
				Arthropod	Insecta	Odonata	Gomphidae	<i>Onychogomphus viridicostus</i>	Onychogomphus viridicostus										
				Arthropod	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae										
				Arthropod	Insecta	Odonata	Gomphidae	<i>Sinogomphus flavolimbatus</i>	Sinogomphus flavolimbatus										
				Arthropod	Insecta	Odonata	Gomphidae	<i>Stylogomphus suzukii</i>	Stylogomphus suzukii										
				Arthropod	Insecta	Odonata	Libellulidae	<i>Macromia amphigena amphigena</i>	<u>Scarlet Skimmer</u>	482	0.073	Imago	—	—	9.8	24	—		
				Arthropod	Malacostraca	Decapoda	Atyidae	<i>Atyidae</i>	Freshwater shrimp										
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Nipponocypris temminckii</i>	Dark chub	18	0.048	1-year-old fish	Some (details unknown)	—	—	8.0	19	—	
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius</i>	Rhinogobius	10	0.047	Mature fish	—	—	—	25	52	—	
				Coarse particulate organic matters (CPOMs)	—	—	—	—	—	—	—	CPOMs (fallen leaves)	—	0.36	—	—	9.8	23	—

Note 1) When multiple types of aquatic organisms were collected, a sample was prepared by mixing them.

Note 2) For species with stomach contents as indicated in the note column, all stomach contents were removed for conducting the analysis.

Note 3) Underlined names in the English name column indicate species largest in number in the respective samples.

Note 4) A statement in red in the "Growth stage" column shows the age assessed based on squama or otolith.

Note 5) N.D. means to be below the detection limit.