

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	Survey date and time			Latitude and longitude of the location		Water temperature (degrees C)	Sediment					Other	
	Date	Time (Water)	Time (Sediment)	Latitude	Longitude		Sediment temperature (degrees C)	Property	Color	Odor	Contaminants	Water depth (m)	Transparency (cm)
F-1	2012/10/26	12:07	12:20	37.597533°	140.925167°	15.9	16.0	Sand gravel	2.5Y-3/3	None	Pebbles	0.40	>50
F-2	2012/10/26	11:04	11:17	37.601617°	140.942283°	15.6	16.0	Sand gravel	2.5Y-3/3	None	None	0.45	>50
F-3	2012/10/26	10:20	10:26	37.604517°	140.963617°	14.9	14.7	Sand gravel	2.5Y-3/3	None	Plant	0.35	>50
F-4	2012/10/26	9:50	9:55	37.606967°	140.971983°	15.7	16.0	Sand gravel	2.5Y-3/3	None	Small fish	0.35	>50
F-5	2012/10/26	9:14	9:20	37.602183°	140.986750°	14.5	14.5	Sand gravel	2.5Y-3/3	None	Pebbles	0.20	>50
F-6	2012/10/26	8:44	-	37.595333°	141.012300°	14.7	-	-	-	-	-	0.30	>50

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

Locations	Survey date and time			Latitude and longitude of the location		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electrical conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
	Date	Time (Water)	Time (Sediment)	Latitude	Longitude												
F-1	2012/10/26	12:07	12:20	37.597533°	140.925167°	7.4	<0.5	2.6	10.2	5.9	0.03	1.2	2	1.1	0.32	0.51	-
F-2	2012/10/26	11:04	11:17	37.601617°	140.942283°	7.0	<0.5	2.4	9.8	6.7	0.04	0.9	1	0.8	0.26	0.43	0.0056
F-3	2012/10/26	10:20	10:26	37.604517°	140.963617°	7.3	<0.5	2.3	10.3	6.8	0.04	0.9	1	0.7	0.29	0.46	-
F-4	2012/10/26	9:50	9:55	37.606967°	140.971983°	6.7	<0.5	1.6	9.4	7.4	0.07	0.7	<1	0.4	0.19	0.31	-
F-5	2012/10/26	9:14	9:20	37.602183°	140.986750°	6.9	<0.5	2.1	9.5	8.2	0.04	0.8	2	1.2	0.22	0.36	-
F-6	2012/10/26	8:44	-	37.595333°	141.012300°	6.7	<0.5	3.1	8.6	25.8	0.13	1.3	6	2.8	0.22	0.36	-

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

Locations	Survey date and time			Latitude and longitude of the location		pH	Redox potential E _h (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)	
	Date	Time	Latitude	Longitude	Gravel (2-75mm) (%)							Course sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.075mm) (%)	Clay (<0.005mm) (%)	Median grain diameter (mm)	Maximum grain diameter (mm)					
F-1	2012/10/26	12:07	37.597533°	140.925167°	6.9	387	16.3	1.7	2	2.655	53.0	13.0	20.7	11.1	0.2	2.0	2,400	26.50	2,800	4,700	-	-	-
F-2	2012/10/26	11:04	37.601617°	140.942283°	6.8	422	14.7	0.6	<1	2.658	51.8	32.0	14.8	0.7	0.2	0.5	2,100	19.00	630	1,000	0.30	-	-
F-3	2012/10/26	10:20	37.604517°	140.963617°	6.9	422	17.0	1.2	2	2.629	58.0	27.1	8.9	4.1	0.3	1.6	2,500	26.50	3,900	6,600	-	-	-
F-4	2012/10/26	9:50	37.606967°	140.971983°	6.8	428	17.0	0.6	<1	2.651	41.0	12.7	19.2	3.2	7.3	16.6	1,100	19.00	1,600	2,700	-	-	-
F-5	2012/10/26	9:14	37.602183°	140.986750°	6.9	434	19.3	0.6	<1	2.654	34.8	38.8	23.5	1.7	0.2	1.0	1,400	19.00	680	1,200	-	-	-

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

Location	Sampling Date	Latitude and longitude of the location		Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Cs-134 (Bq/kg-wet)	Cs-137 (Bq/kg-wet)	Sr-90 (Bq/kg-wet)	Note					
		Latitude	Longitude												Growth stage	Stomach contents				
F-1	2012/11/8	37.597533°	140.925167°	Streptophyta	Zygnematales	Zygnematales	Zygnemataceae	<i>Spirogyra</i> sp.	Spirogyra	-	0.035	72	110	-	-	-				
								Arthropod	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	-	-	-	-	-		
								Arthropod	Insecta	Odonata	Calopterygidae	<i>Calopteryx atrata</i>	Calopteryx atrata	-	-	-	-	-		
								Arthropod	Insecta	Odonata	Gomphidae	<i>Antisogomphus maacki</i>	Antisogomphus maacki	-	-	-	-	-		
								Arthropod	Insecta	Odonata	Gomphidae	<i>Davidius nanus</i>	Davidius nanus	-	-	-	-	-		
								Arthropod	Insecta	Odonata	Gomphidae	<i>Davidius</i> sp.	Davidius	-	-	-	-	-		
								Arthropod	Insecta	Odonata	Gomphidae	<i>Nihonogomphus viridis</i>	Nihonogomphus viridis	148	0.030	320	500	-	Larva	-
								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>Stylogomphus suzuki</i>	Stylogomphus suzuki	-	-	-	-	-		
								Arthropod	Insecta	Odonata	Aeshmidae	<i>Boyeria maclachlani</i>	Boyeria maclachlani	-	-	-	-	-		
								Arthropod	Insecta	Megaloptera	Corydalidae	<i>Parachauliodes continentalis</i>	Parachauliodes continentalis Weele	-	-	-	-	-		
								Arthropod	Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis	87	0.037	190	340	-	Larva	-
								Arthropod	Malacostraca	Decapoda	Atyidae	Atyidae	Freshwater shrimp	372	0.060	490	830	-	Adult	-
-	-	-	-	-	CPOM (litter)	-	0.41	640	1,100	-	-	-								
F-2 F-3 F-4 F-5	2012/10/26	37.601617° 140.963617° 37.606967° 140.971983°	140.942283° 140.963617° 140.971983° 140.986750°	Vertebrata	Osteichthyes	Anguilliformes	Anguillidae	<i>Anguilla japonica</i>	Japanese eel	4	1.4	580	980	0.35	Mature fish	-				
	2012/9/12			Vertebrata	Osteichthyes	Osmeriformes	Osmeridae	<i>Plecoglossus altivelis</i>	Sweetfish (natural upstream)	128	1.6	940	1,500	-	Mature fish/Immature fish	-				
	2012/11/25			Vertebrata	Osteichthyes	Osmeriformes	Osmeridae	<i>Plecoglossus altivelis</i>	Sweetfish (natural upstream)	22	0.73	310	550	-	Mature fish	-				
	2012/9/12			Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	2	3.5	740	1,300	3.9	Mature fish	-				
	2012/9/12			Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon</i> sp.	Tribolodon	7	0.12	410	650	-	Immature fish	-				
	2012/11/25			Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon</i> sp.	Tribolodon	13	1.0	160	290	-	Mature fish	-				
2012/9/12	Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	1	0.013	710	1,100	-	Immature fish	-							

Note) The Japanese name of the underlined, indicating that in the sample is the most harvested species.