

○Results of Radioactive Material Monitoring of Aquatic Organisms (Location E in Lake Hayama)

<Location E in Lake Hayama: Samples collected>

Items Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
E-1 (Surface layer)	○	—	○	—	—	—
E-1 (Bottom layer)	○	○	○	○	○	○
E-2	—	○	—	—	○	—
E-3	—	○	—	—	○	—

<Location E in Lake Hayama: Site measurement item>

Items Locations	Survey date and time		Latitude and longitude of the location		Water	Sediment					Other		
	Water	Sediment	Latitude	Longitude	Water temperature	Sediment temperature	Property	Color	Odor	Contaminants	Secchi disk depth	Water depth	
E-1 (Surface layer)	2012/8/23	9:48	10:05	37.7342	140.8094	27.6	—	—	—	—	3.2	4.8	
E-1 (Bottom layer)		-	-	-	-	26.2	23.7	Ooze	10YR-4/2	None	Humic matters	—	—
E-2		-	12:16	37.7261	140.8213	—	27.8	Sand gravel	2.5Y-4/2	None	Plant	2.5	4.2
E-3		-	11:40	37.7293	140.8309	—	24.9	Sediment with gravel	10YR-4/1	None	Plant	2.6	3.1

<Location E in Lake Hayama: Analysis items Water>

Items 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)
	Latitude	Longitude														
E-1 (Surface layer)	2012/8/23	9:48	37.7342	140.8094	7.8	1.6	4.6	8.4	6.8	0.03	2.1	2	1.9	0.056	0.090	—
E-1 (Bottom layer)					7.5	1.6	4.5	8.3	7.1	0.04	2.0	3	2.7	0.078	0.12	0.0019
E-2		-	37.7261	140.8213	—	—	—	—	—	—	—	—	—	—	—	—
E-3		-	37.7293	140.8309	—	—	—	—	—	—	—	—	—	—	—	—

<Location E in Lake Hayama: Analysis items Sediment>

Items Locations	Survey date and time		Latitude and longitude of the location		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	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)					
E-1	2012/8/23	10:05	37.7342	140.8094	6.7	141	77.3	27.7	91	2.320	—	0.0	0.1	6.9	48.4	44.6	0.0078	2	19,000	30,000	14
E-2		12:16	37.7261	140.8213	6.6	157	46.3	8.0	46	2.611	21.4	15.2	14.9	13.2	17.5	17.8	0.28	19	2,400	3,800	—
E-3		11:40	37.7293	140.8309	6.5	131	54.6	8.6	17	2.609	13.7	8.5	11.8	13.6	28.8	23.6	0.058	19	3,000	4,700	—

<Location E in Lake Hayama: Analysis 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
E-4	2012/8/29	37.7370	140.8056	Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Oncorhynchus masou</i>	Yamame trout	4	0.030	92	140	—	Immature fish	—
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius flumineus</i>	Rhinogobius flumineus	261	0.10	100	160	—	Mature fish	—
	Arthropod			Insecta	Ephemeroptera	Isonychiidae	<i>Isonychia japonica</i>	Isonychia japonica	192	0.045	180	270	—	Non-adult	—	
	Arthropod			Insecta	Calopterygidae	<i>Calopteryx cornelia</i>	Calopteryx cornelia									
	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>Gomphidae</i>	Gomphidae								
	Arthropod			Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena								
	Arthropoda			Insecta	Neuroptera	Corydalidae	<i>Parachauliodes japonicus</i>	Parachauliodes japonicus								
	Arthropod			Insecta	Megaloptera	Corydalidae	<i>Protohermes grandis</i>	Protohermes grandis								
	Arthropod			Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	<i>Stenopsyche marmorata</i>								
	Arthropod			Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche sauteri</i>	Parastenopsyche sauteri								
	Streptophyta			Zygnematophyceae	Zygnematales	Zygnemataceae	<i>Spirogyra sp.</i>	Spirogyra	—	0.55	52	80	—	—	—	
	—			—	—	—	—	CPOM (litter)	—	0.51	290	450	—	—	—	
E-1 E-2 E-3	2012/8/29	37.7342	140.8094	Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	2	2.4	780	1,200	0.49	Mature fish	Some (details unknown)
		37.7261	140.8213	Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus salmoides</i>	Largemouth bass	2	1.3	590	900	—	Mature fish	Some (details unknown)
		37.7293	140.8309	Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus dolomieu</i>	Small mouth bass	5	3.0	1,700	2,600	2.1	Mature fish	Some (details unknown)
				Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	<i>Salvelinus leucomaenis</i>	Char	1	0.30	620	970	—	Mature fish	Some (details unknown)
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Cyprinus carpio</i>	Common carp	1	0.40	150	230	—	Mature fish	Some (details unknown)
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Carassius auratus</i>	Carassius auratus langsdorfii	2	2.2	330	510	1.2	Mature fish	Some (details unknown)
Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	Many	0.60	210	330	—	Mature fish	—				