

OResults of Radioactive Material Monitoring of Aquatic Organisms (Location H in Lake Akimoto)

< Location H in Lake Akimoto: Samples collected >

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

< Location H in Lake Akimoto: Site measurement item >

Locations	Survey date and time			Latitude and longitude of the location		Water	Sediment					Other	
	Date	Time (Water)	Time (Sediment)	Latitude	Longitude	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Odor	Contaminants	Water depth (m)	Secchi disk depth (m)
H-1	2012/10/23	14:15	14:30	37.657533°	140.126433°	13.6	13.4	Ooze	2.5Y-4/1	None	None	10.5	3.0
H-2	2012/10/23	-	14:40	37.661550°	140.122550°	-	13.5	Ooze	2.5Y-4/1	None	Plant	5.5	2.9
H-3	2012/10/23	13:00	13:39	37.665333°	140.132933°	13.9	6.6	Ooze	2.5Y-4/2	None	Some plant pieces	10.5	3.4
H-4	2012/10/23	-	14:48	37.65067°	140.118050°	-	9.6	Ooze	2.5Y-4/1	None	Plant	10.6	3.4
H-5	2012/10/23	8:45	-	37.652333°	140.156833°	13.9	13.5	Ooze	2.5Y-4/2	None	Plant	9.2	4.5

< Location H in Lake Akimoto: General survey items/Analysis of radioactive materials Water >

Locations	Survey date and time		Latitude and longitude of the location		pH	BOD	COD	DO	Electrical conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
	Date	Time	Latitude	Longitude	(mg/L)	(mg/L)	(mg/L)	(mS/m)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)
H-1 (Surface layer)	2012/10/23	14:15	37.657533°	140.126433°	7.1	<0.5	3.2	9.0	5.4	0.04	1.5	2	1.3	0.016	0.026	—
H-1 (Deep layer)	2012/10/23	14:15	37.657533°	140.126433°	7.1	0.6	3.4	9.0	5.4	0.05	1.8	2	1.3	0.066	0.11	—
H-3 (Surface layer)	2012/10/23	13:00	37.665333°	140.132933°	7.2	0.8	3.9	9.5	5.5	0.06	1.7	2	1.3	0.017	0.030	—
H-3 (Deep layer)	2012/10/23	13:00	37.665333°	140.132933°	6.5	0.5	3.6	5.6	4.7	0.06	1.2	2	2.1	0.050	0.086	0.0019
H-5 (Surface layer)	2012/10/23	8:45	37.652333°	140.156833°	7.1	1.0	4.2	9.0	5.5	0.03	1.9	2	1.4	0.024	0.038	—
H-5 (Deep layer)	2012/10/23	8:45	37.652333°	140.156833°	7.2	0.7	3.8	9.1	5.5	0.03	1.5	2	1.3	0.027	0.045	—

< Location H in Lake Akimoto: General survey items/Analysis of radioactive materials Sediment >

Locations	Survey date and time		Latitude and longitude of the location		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)
	Date	Time	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) (%)					
H-1	2012/10/23	14:30	37.657533°	140.126433°	6.9	76	59.6	6.5	19	2.608	—	0.1	4.1	31.3	32.2	32.3	0.025	2.00	410	680	—
H-2	2012/10/23	14:40	37.661550°	140.122550°	6.8	80	75.6	13.2	45	2.472	0.1	0.2	0.3	0.4	46.6	52.4	0.004	4.75	270	480	—
H-3	2012/10/23	13:39	37.665333°	140.132933°	6.6	73	63.9	11.6	37	2.531	—	—	8.6	37	55.3	36.0	0.010	2.00	1,100	1,900	1.5
H-4	2012/10/23	14:48	37.65067°	140.118050°	6.7	50	68.9	8.9	21	2.575	0.5	0.1	0.1	0.3	42.8	56.2	0.004	9.50	450	760	—
H-5	2012/10/23	—	37.652333°	140.156833°	6.4	62	64.1	11.0	33	2.403	—	0.1	0.2	11.2	48.6	39.9	0.012	2.00	1,000	1,700	—

< Location H in Lake Akimoto: 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		
H-1 H-2 H-3 H-4	2012/10/23	37.657533° 37.661550° 37.665333° 37.65067°	140.126433° 140.122550° 140.132933° 140.118050°	Streptophyta	Zygnematophyta	Zygnematales	Zygnemataceae	<u>Spirogyra</u> sp.	Spirogyra	—	0.18	17	33	—	—	—	—	
				Angiospermae	Monocotyledonae	Hydrocharitales	Hydrocharitaceae	<u>Elodea nuttallii</u>	Western Waterweed	—	0.34	5.9	9.7	—	—	—	—	—
				Arthropod	Malacostraca	Decapoda	Astacidae	<u>Pacifastacus leniusculus trowbridgii</u>	Signal crayfish	52	3.5	53	91	12	Adult	—	—	—
				Vertebrata	Osteichthyes	Osmeriformes	Osmeridae	<u>Hypomesus nipponensis</u>	Japanese smelt	68	0.34	25	46	—	Mature fish	—	—	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<u>Carassius auratus</u>	Carassius auratus langsdorffii	2	1.7	45	75	—	Mature fish	Some (details unknown)	—	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<u>Cyprinus carpio</u>	Common carp	2	3.1	21	33	1.1	Mature fish	Some (details unknown)	—	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<u>Hemibarbus barbus</u>	Hemibarbus barbus	1	0.36	59	100	—	Mature fish	Some (details unknown)	—	—
				Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<u>Tribolodon hakonensis</u>	Japanese dace	4	0.60	76	130	—	Mature fish	Some (details unknown)	—	—
				Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<u>Micropterus dolomieu</u>	Small mouth bass	15	2.7	140	240	1.6	Mature fish	Some (details unknown)	—	—
				—	—	—	—	—	—	—	—	—	2.1	18	30	—	—	—

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