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

<Location H in Lake Akimoto: Samples collected>

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

<Location H in Lake Akimoto: Site measurement item>

Items	Latitude and longitude of the location		Survey date and time			Water	Sediment				Other	
Locations	Latitude	Longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)	Secchi disk depth (m)
H-1(Surface layer)	37.6575°	140.1264°	2018/5/30	08:40	09:10	17.1	10.0	Sediment	7.5Y 4/2	Plant pieces	13.5	5.0
H-1(Bottom layer)						10.8						

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

Items	Latitude and longitude of the location		Survey date and time		pH	BOD	COD	DO	Electric conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
Locations	Latitude	Longitude	Date	Time (water)		(mg/L)	(mg/L)	(mg/L)	(mS/m)		(mg/L)	(mg/L)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)
H-1(Surface layer)	37.6575°	140.1264°	2018/5/30	08:40	7.3	0.7	2.4	9.7	3.8	0.03	1.2	<1	0.7	N.D.(0.0016)	0.0071	-
H-1(Bottom layer)					7.1	0.8	3.1	9.9	3.6	0.03	1.5	1	1.1	N.D.(0.0014)	0.0043	0.0011

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

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

Items	Latitude and longitude of the location		Survey date and time		pH	Redox potential	Water content	IL	TOC	Soil particle density	Grain size distribution							Cs-134	Cs-137	Sr-90
Locations	Latitude	Longitude	Date	Time (sediment)		E_{NHE} (mV)	(%)	(%)	(mg/g-dry)	(g/cm^3)	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)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
H-1	37.6575°	140.1264°	2018/5/30	09:10	6.8	75	61.0	9.2	17.9	2.581	0.0	0.1	0.2	0.7	52.4	46.6	0.0058	2.0	29	250	1.5

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

<Location H in Lake Akimoto: 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
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	(Bq/kg-wet)
H-1 H-2 H-3	In the lake	37.6575° 37.6616° 37.6653°	140.1264° 140.1226° 140.1329°	2018/5/30	Arthropoda	Malacostraca	Decapoda	Astacidae	*Pacifastacus leniusculus trowbridgii*	Signal crayfish	10	0.88	Imago	-	-	15.9	1.9	14	7.5
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Tribolodon hakonensis*	Japanese dace	12	3.7	Mature fish	Obscure digesta	Viscera removed	43.0	4.0	39	0.74
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Carassius auratus*	Carassius auratus langsdorfii	13	2.1	Mature fish	Obscure digesta	Viscera removed	42.6	2.6	40	1.1
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Cyprinus carpio*	Common carp	1	0.33	Mature fish	Obscure digesta	Viscera removed	31.1	3.1	28	1.1
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Hemibarbus barbus*	Hemibarbus barbus	3	2.2	Mature fish	Obscure digesta	Viscera removed	20.5	1.5	19	1.0
					Vertebrata	Osteichthyes	Salmoniformes	Osmeridae	*Hypomesus nipponensis*	Japanese smelt	47	0.27	Mature fish	-	-	19.7	1.7	18	-
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Salvelinus leucomaenis*	Char	6	1.8	Mature fish	Terrestrial insect,Japanese smelt	Viscera removed	52.1	5.1	47	0.27
					Vertebrata	Osteichthyes	Salmoniformes	Salmonidae	*Oncorhynchus masou masou*	Seema	3	0.62	Immature fish	Terrestrial insect,Japanese smelt,Mont mayfly	Viscera removed	42.5	4.5	38	-
					Vertebrata	Osteichthyes	Perciformes	Centrarchidae	*Micropterus dolomieu*	Small mouth bass	4	0.65	Immature fish	Japanese smelt,Signal crayfish,Mont mayfly	Viscera removed	42.7	3.7	39	-
H-3	Inflowing rivers	37.6653°	140.1329°	2018/5/30	Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Heptageniidae*	Heptageniidae	147	0.013	Larva	-	-	6.1	N.D.(3.0)	6.1	-
					Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Siphlonuridae*	Siphlonuridae									
					Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	*Drunella basalis*	Drunella basalis									
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera japonica*	Ephemera japonica									
					Arthropoda	Insecta	Plecoptera	Perlidae	*Acroneuria sp.*	Acroneuria	86	0.016	Larva	-	-	N.D.	N.D.(2.6)	N.D.(2.5)	-
					Arthropoda	Insecta	Plecoptera	Perlidae	*Calineuria sp.*	Calineuria									
					Arthropoda	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Stenopsyche marmorata	96	0.026	Larva	-	-	2.9	N.D.(1.6)	2.9	-
					Vertebrata	Osteichthyes	Scorpaeniformes	Cottidae	*Cottus pollux*	Japanese fluvial sculpin	16	0.078	Immature fish	Ameletus montanus,Trichoptera,Drunella basalis,Acroneuria,Midge,Ephemeroptera,Simuliidae	Viscera removed	4.1	N.D.(3.9)	4.1	-
					Vertebrata	Amphibia	Anura	Rhacophoridae	*Buergeria buergeri*	Kajika frog	19	0.14	Imago	-	-	69.2	6.2	63	-
					Coarse Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.17	-	-	-	18.5	1.5	17	-
H-4	Within the lake and rivers in the vicinity	37.6551°	140.1181°	2018/5/30	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.015	-	-	-	N.D.	N.D.(2.0)	N.D.(2.2)	-
				2018/5/29	Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Ephemera japonica*	Ephemera japonica	395	0.031	Larva	-	-	14.9	1.9	13	-
					Arthropoda	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii	55	0.052	Larva(Dragonfly larva)	-	-	26.7	2.7	24	-
					Arthropoda	Malacostraca	Decapoda	Palaemonidae	*Palaemon paucidens*	Common prawn	55	0.017	Juvenile,Imago	-	-	13	N.D.(2.2)	13	-
					Mollusca	Gastropoda	Discopoda	Pleuroceridae	*Semisulcospira libertina*	Semisulcospira libertina	30	0.028	Imago	-	Molluscous part	11.3	1.3	10	-
					Vertebrata	Amphibia	Anura	-	-	Frog	280	0.11	Larva(Tadpole)	-	-	25.3	2.3	23	-
					Vertebrata	Amphibia	Anura	Ranidae	*Rana ornativentris*	Montane brown frog	7	0.023	Imago	-	-	16.2	2.2	14	-

*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.