

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

<Location H in Lake Akimoto: Samples collected>

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

<Location H in Lake Akimoto: 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	Contaminants	Water depth (m)	Secchi disk depth (m)
H-1(Surface layer)	37.6575°	140.1264°	2018/12/1	08:41	08:52	8.5	8.3	Ooze	7.5Y 4/2	Plant pieces	13.0	2.3
H-1(Bottom layer)						8.4						

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

Items Locations	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
	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°	2018/12/1	08:41	6.9	<0.5	3.0	9.9	5.1	0.03	1.2	2	1.5	N.D.(0.0014)	0.014	-
H-1(Bottom layer)					6.9	0.6	3.3	11.4	5.8	0.04	1.5	2	1.7	N.D.(0.0012)	0.0061	0.0012

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 Locations	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
	Latitude	Longitude	Date	Time (sediment)		E <sub>h</sub> (mV)	(%)	(%)	(mg/g-dry)	(g/cm <sup>3</sup> )	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)			
H-1	37.6575°	140.1264°	2018/12/1	08:52	6.8	47	65.1	10.0	32.4	2.550	0.0	0.0	0.1	0.2	52.1	47.6	0.0055	2.0	140	1600	1.2

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 (Bq/kg-wet)
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	
H-1	In the lake	37.6575°	140.1264°	2018/12/1	Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	13	1.9	Mature fish	Obscure digesta	Viscera removed	29.7	1.7	28	-
H-2		37.6616°	140.1226°		Vertebrata	Osteichthyes	Perciformes	Centrarchidae	<i>Micropterus salmoides</i>	Largemouth bass	1	0.18	Immature fish	Empty stomach	Viscera removed	29	N.D.(2.0)	29	-
H-3		37.6653°	140.1329°		Vertebrata	Osteichthyes	Siluriformes	Siluridae	<i>Silurus asotus</i>	Amur catfish	2	1.2	Mature fish	Empty stomach	Viscera removed	28.1	3.1	25	-
H-4	Within the lake and rivers in the vicinity	37.6551°	140.1181°	2018/12/1	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.010	-	-	-	N.D.	N.D.(3.5)	N.D.(3.3)	-
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera japonica</i>	<i>Ephemera japonica</i>	207	0.0096	Larva	-	-	20	N.D.(3.3)	20	-
					Arthropoda	Insecta	Ephemeroptera	Ephemeridae	<i>Ephemera strigata</i>	Mont mayfly									
					Mollusca	Gastropoda	Discopoda	Pleuroceridae	<i>Semisulcospira libertina</i>	<i>Semisulcospira libertina</i>	30	0.025	Imago	-	-	19	N.D.(1.8)	19	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Phoxinus lagowskii steindachneri</i>	Amur Minnow	9	0.027	Immature fish,Mature fish	-	-	3.4	N.D.(1.5)	3.4	-

\*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.