

OResults of Radioactive Material Monitoring of Aquatic Organisms (Location L off Soma City)

<Location L off Soma City: Samples collected>

Items Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
L-2	○	○	○	○	○	○

<Location L off Soma City: 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)
L-2	37.8155°	140.9763°	2018/10/17	11:38	12:00	19.9	19.7	Sand with silt	7.5Y3/2	Juvenile shellfish,Shell fragments	1.3	>1.3

<Location L off Soma City: General survey items/Analysis of radioactive materials Water>

Items Locations	Latitude and longitude of the location		Survey date and time		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electric 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	Date	Time (water)												
L-2	37.8155°	140.9763°	2018/10/17	11:38	8.0	1.1	1.8	8.0	4720	31.81	1.1	2	0.9	N.D.(0.0015)	0.0097	0.0010

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

<Location L off Soma City: General survey items/Analysis of radioactive materials Sediment>

Items Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential E _{SHE} (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)
	Latitude	Longitude	Date	Time (sediment)							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)			
L-2	37.8155°	140.9763°	2018/10/17	12:00	7.8	222	19.6	1.2	1.7	2.723	0.2	0.7	61.5	32.5	1.5	3.6	0.28	4.8	1.7	22	N.D.(0.15)

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

<Location L off Soma City: 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		
L-1 L-2 L-3	Matsukawaura Lagoon	37.8210° 37.8155° 37.8217°	140.9610° 140.9763° 140.9765°	2018/10/21	Algae/plant	-	-	-	-	Plankton (Planktonic algae)	-	0.021	-	-	-	4.4	N.D.(1.7)	4.4	-	
				2018/10/23	Mollusca	Bivalvia	Ostreoida	Ostreidae	Crassostrea gigas	Oyster	9	0.16	Imago	-	-	Molluscosus part	1.5	N.D.(0.41)	1.5	-
					Mollusca	Bivalvia	Veneroida	Veneridae	Ruditapes philippinarum	Japanese littleneck	30	0.14	Imago	-	-	Molluscosus part	0.51	N.D.(0.43)	0.51	-
				2018/10/20	Vertebrata	Osteichthyes	Scorpaeniformes	Hexagrammidae	Hexagrammos otakii	Fat greenling	1	0.066	Immature fish	Shellfish	Viscera removed	N.D.	N.D.(1.5)	N.D.(1.4)	-	
					Vertebrata	Osteichthyes	Scorpaeniformes	Hexagrammidae	Hexagrammos agrammus	Hexagrammos agrammus	1	0.046	Immature fish	Empty stomach	Viscera removed	N.D.	N.D.(1.6)	N.D.(1.6)	-	
					Vertebrata	Osteichthyes	Scorpaeniformes	Scorpaenidae	Sebastes cheni	Rockfish	2	0.11	Immature fish	Empty stomach	Viscera removed	1.2	N.D.(1.1)	1.2	-	
					2018/10/21	Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	Kareius bicoloratus	Stone flounder	2	0.016	Immature fish	-	-	1.9	N.D.(1.8)	1.9	-
				Vertebrata		Osteichthyes	Perciformes	Gobiidae	Acanthogobius flavimanus	Yellowfin Goby	58	0.47	Immature fish,Mature fish	-	-	1.5	N.D.(1.4)	1.5	0.027	
				Vertebrata		Osteichthyes	Perciformes	Mugilidae	Chelon affinis	Chelon affinis	2	0.079	Immature fish	-	-	3.5	N.D.(0.99)	3.5	-	
				Vertebrata		Osteichthyes	Perciformes	Mugilidae	Mugil cephalus cephalus	Flathead mullet	12	0.27	Immature fish	-	-	10.93	0.93	10	-	

*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.