

◦Results 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-1	○	○	—	—	—	—
L-2	○	○	○	○	○	○
L-3	○	○	○	—	○	—

< 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-1	37.820983°	140.960950°	2014/7/16	—	10:31	—	21.8	Silt	10Y4/1	None	—	—
L-2	37.815517°	140.976333°		9:02	9:52	22.3	22.8	Silt with fine sand	7.5Y4/1	None	1.67	1.67 (Drifting to the bottom)
L-3	37.821683°	140.976500°		9:22	10:12	21.1	22.0	Fine sand	10Y5/1	Asari clams	1.47	1.47 (Drifting to the bottom)

< 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)	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	Date	Time												
L-2	37.815517°	140.976333°	2014/7/16	9:02	8.1	0.5	2.8	7.3	4,050	27.94	1.6	6	1.3	0.012	0.029	0.0012
L-3	37.821683°	140.976500°		9:22	8.1	0.6	2.2	7.6	4,550	29.16	1.3	5	0.8	0.0073	0.021	—

< 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 _{NHE} (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							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-1	37.820983°	140.960950°	2014/7/16	10:31	7.7	53	42.1	4.7	9.8	2.666	0.0	0.2	5.5	42.6	20.1	31.6	0.061	2	140	420	—
L-2	37.815517°	140.976333°		9:52	8.0	40	30.2	2.0	2.8	2.705	0.0	0.2	31.5	53.8	3.9	10.6	0.20	2	130	350	N.D.(0.17)
L-3	37.821683°	140.976500°		10:12	8.2	47	22.1	1.0	0.8	2.744	0.4	0.4	54.4	41.0	0.6	3.2	0.27	9.5	6.9	20	—

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

< Location L off Soma City: Survey items Aquatic organisms >

Location	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Cs-134 (Bq/kg-wet)	Cs-137 (Bq/kg-wet)	Sr-90 (Bq/kg-wet)			
	Latitude	Longitude										Growth stage	Stomach contents	Measurement site						
L-1 L-2 L-3	Matsukawaura	37.820983° 37.815517° 37.821683°	2014/7/16	Algae/plant	—	—	—	—	Plankton(singular plankton)	Considerable number	0.024	—	—	—	68	220	—			
				Angiospermae	Monocotyledoneae	Najadales	Zosteraceae	<i>Zostera marina</i>	Eel grass	Considerable number	2.1	—	—	—	—	0.45	1.2	—		
				Chlorophyta	Ulvoiphyceae	Ulvoales	Ulvoaceae	<i>Ulva pertusa</i>	Ulva pertusa	Considerable number	3.3	—	—	—	—	1.3	3.7	—		
				Arthropoda	Malacostraca	Mysida	Mysidae	<i>Mysidae</i>	Mysidae	Considerable number	0.13	Imago	—	—	—	—	1.2	3.2	—	
				Arthropoda	Malacostraca	Decapoda	Palaemonidae	<i>Palaemonidae</i>	Palaemonidae	55	0.029	Imago	—	—	—	—	N.D.(1.3)	N.D.(1.2)	—	
				Arthropod	Malacostraca	Decapoda	Grapsidae	<i>Eriocheir japonica</i>	Japanese mitten crab	3	0.15	Imago	—	—	—	—	4.2	11	—	
				Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Hemigrapsus sp.</i>	Hemigrapsus	290	0.35	Imago	—	—	—	—	2.7	7.1	—	
				Annelida	Polychaeta	—	—	<i>Polychaeta</i>	Polychaetes	289	0.071	Imago	—	—	—	—	8.8	29	—	
				Mollusca	Bivalvia	Pterioida	Ostreidae	<i>Crassostrea gigas</i>	Japanese oyster	12	0.45	Imago	—	—	—	—	Molluscan body	N.D.(0.34)	0.85	—
				Mollusca	Bivalvia	Veneridae	Veneridae	<i>Ruditapes philippinarum</i>	Japanese littleneck	59	0.39	Imago	—	—	—	—	Molluscan body	0.83	2.1	—
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Acanthogobius flavimanus</i>	Yellowfin Goby	4	0.059	Mature fish	—	—	—	—	1.3	3.4	—	
				Chordata	Actinopterygii	Perciformes	Pholidae	<i>Pholis crassispina</i>	Pholis crassispina	15	0.030	Mature fish	—	—	—	—	N.D.(1.6)	2.1	—	
				Vertebrata	Osteichthyes	Mugiliformes	Mugilidae	<i>Mugil cephalus</i>	Flathead mullet	42	0.16	Immature fish (under 1-year-old)	—	—	—	—	19	54	—	

*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 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: A statement in red in the "Growth stage" column shows the age assessed based on squama or otolith

*6: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40µm-mesh).

*7: 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.

*8: N.D. means to be below the detection limit and figures in parentheses show the detection limit.

*9: Activity concentrations include counting errors, but the details are omitted here.