

◦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)	Transparency (cm)
L-1	37.82103°	140.96093°	2014/9/2	—	10:30	—	20.4	Silt with sand	10Y3/1	Shell fragments	—	—
L-2	37.81558°	140.97628°		8:40	9:57	20.4	20.4	Fine sand	7.5Y3/1	Shell fragments	2.2	2.2 (Drifting to the bottom)
L-3	37.82178°	140.97643°		9:05	10:17	20.4	20.3	Fine sand	10Y3/1	Shell fragments	1.6	1.6 (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	37.81558°	140.97628°	2014/9/2	8:40	8.0	1.1	2.4	7.6	3,890	28.87	1.8	6	1.7	0.0073	0.022	0.0010
L-3	37.82178°	140.97643°		9:05	8.1	1.0	3.0	8.0	3,850	28.92	1.4	5	1.5	0.0061	0.019	—

< 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	37.82103°	140.96093°	2014/9/2	10:30	7.7	181	28.2	2.4	3.3	2.704	8.4	13.5	40.0	18.2	6.6	13.3	0.36	9.5	27	99	—
L-2	37.81558°	140.97628°		9:57	7.8	176	22.0	1.3	2.5	2.723	0.2	1.0	65.0	27.4	2.9	3.5	0.30	4.75	14	68	N.D.(0.21)
L-3	37.82178°	140.97643°		10:17	7.9	184	21.9	0.8	1.4	2.761	0.2	0.8	64.1	32.8	0.7	1.4	0.30	4.75	3.4	10	—

(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	37.82103° 37.81558° 37.82178°	140.96093° 140.97628° 140.97643°	2014/9/2	Algae/plant	—	—	—	—	Plankton	Considerable number	0.011	—	—	—	26	79	—			
					Chlorophyta	Ulvophyceae	Ulvales	Ulvaceae	<i>Ulva pertusa</i>	Ulva pertusa	Considerable number	0.35	—	—	—	—	0.36	0.70	—		
					Angiospermae	Monocotyledonae	Najadales	Zosteraceae	<i>Zostera marina</i>	eel grass	Considerable number	1.3	—	—	—	—	0.13	0.50	—		
					Arthropoda	Malacostraca	Mysida	Mysidae	<i>Mysidae</i>	Mysidae	283	0.33	Imago	—	—	—	—	0.79	2.6	—	
					Arthropod	Malacostraca	Decapoda	Alpheus	<i>Alpheus brevicristatus</i>	Alpheus	24	0.043	Imago	—	—	—	—	N.D.(1.3)	2.2	—	
					Arthropod	Malacostraca	Decapoda	Palaemonidae	<i>Palaemon paucidens</i>	Palaemon	110	0.020	Imago	—	—	—	—	N.D.(2.6)	N.D.(2.1)	—	
					Arthropod	Malacostraca	Malacostraca	Eriocheir	<i>Hemigrapsus sp.</i>	Japanese shore crab	239	0.52	Imago	—	—	—	—	2.1	5.9	—	
					Arthropod	Malacostraca	Decapoda	Portunidae	<i>Charybdis japonica</i>	Shore swimming crab	3	0.12	Imago	—	—	—	—	N.D.(0.79)	1.4	—	
					Mollusca	Bivalvia	Pterioidea	Ostreidae	<i>Crassostrea gigas</i>	Japanese oyster	45	3.2	Imago	—	—	—	—	Molluscan body	0.61	1.9	—
					Mollusca	Bivalvia	Veneridae	Veneridae	<i>Ruditapes philippinarum</i>	Japanese littleneck	68	2.3	Imago	—	—	—	—	Molluscan body	0.83	2.7	—
					Vertebrata	Osteichthyes	Pleuronectiformes	—	<i>Pleuronectiformes</i>	Pleuronectiformes	3	0.023	Immature fish	—	—	—	—	N.D.(1.6)	N.D.(1.4)	—	
					Vertebrata	Osteichthyes	Perciformes	Sparidae	<i>Acanthopagrus schlegelii</i>	Japanese black porgy	11	0.030	Immature fish	—	—	—	—	N.D.(1.3)	2.8	—	
					Vertebrata	Osteichthyes	Perciformes	Pholidae	<i>Pholis crassispina</i>	Pholis crassispina	3	0.0056	Immature fish	—	—	—	—	N.D.(6.9)	N.D.(6.4)	—	
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	Gobiidae	Gobiidae	16	0.038	Immature fish/mature fish	—	—	—	—	N.D.(1.1)	2.2	—	
					Vertebrata	Osteichthyes	Mugiliformes	Mugilidae	<i>Mugil cephalus</i>	Flathead mullet	84	0.47	Immature fish	—	—	—	—	14	44	—	
Vertebrata	Osteichthyes	Mugiliformes	Mugilidae	<i>Liza haematocheilus</i>	Haarder	5	0.014	Immature fish	—	—	—	—	3.9	12	—						

*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.