

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

< Location L off Soma City: Samples collected >

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 >

Locations	Latitude and longitude of the location		Survey date and time		Water temperature (degrees C)	Sediment temperature (degrees C)	Sediment			Other	
	Scheduled latitude	Scheduled longitude	Date	Time (water)			Property	Color	Contaminants	Water depth (m)	Transparency (m)
L-1	37.8210°	140.9610°	-	09:55	16.4	Silt with sediment	7.5V3/1	None	-	-	-
L-2	37.8155°	140.9763°	2015/10/28	08:35	16.5	Sand	5V3/2	None	1.6	>1.6	-
L-3	37.8217°	140.9765°	-	08:20	16.7	Sand with silt	7.5V3/1	None	1.7	>1.7	-

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

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)
	Scheduled latitude	Scheduled longitude	Date	Time (water)												
L-2	37.8155°	140.9763°	2015/10/28	8:35	8.1	0.6	1.7	7.6	5100	32.82	1.0	6	1.8	0.0048	0.022	-
L-3	37.8217°	140.9765°	-	8:20	8.1	0.6	1.7	7.7	5090	32.78	1.0	11	2.0	0.0059	0.022	-

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

Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential EN.H.E (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm³)	Grain size distribution						Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)		
	Scheduled latitude	Scheduled 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	Maximum grain diameter			
L-1	37.8210°	140.9610°	-	9:55	7.5	31	38.3	4.6	7.9	2.677	4.5	5.0	14.3	36.5	24.1	15.6	0.13	9.5	34	180	-
L-2	37.8155°	140.9763°	2015/10/28	9:25	7.4	194	20.8	1.0	2.2	2.721	0.1	2.2	74.1	21.1	1.5	1.0	0.30	4.8	13	49	N.D.(0.15)
L-3	37.8217°	140.9765°	-	9:35	7.6	57	26.9	1.5	1.6	2.720	0.0	0.7	55.5	37.2	3.0	3.6	0.27	2.0	17	71	-

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

Location	Sampling point	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species 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	Cs-134	Cs-137	
L-1 L-2 L-3	Matsukawaura	37.8210° 37.8155° 37.8217°	140.9610° 140.9763° 140.9765°	2015/10/22	Phycophyta	-	-	-	Plankton (Planktonic algae)	-	0.018	-	-	-	N.D.(1.9)	4.4	-	
				2015/10/28	Angiosperme	Monocotyledoneae	-	Zosteraceae	<i>Zostera marina</i>	eel grass	-	-	-	-	0.28	1.2	-	
				2015/10/22	Aarthropod	Malacostraca	Decapoda	Varunidae	<i>Crangon affinis</i>	Hemigrapsus	98	0.11	Imago	-	-	N.D.(0.74)	2.3	-
				2015/10/28	Aarthropod	Malacostraca	Decapoda	Crangoniidae	<i>Crangon affinis</i>	Ebjako	76	0.018	Imago	-	-	N.D.(2.5)	N.D.(2.3)	-
				2015/10/22	Mollusca	Bivalvia	Ostroidea	Ostridae	<i>Crassostrea gigas</i>	Oyster	17	0.37	Imago	-	-	Molluscan body	0.39	1.1
				2015/10/22	Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Gymnogobius breunigii</i>	Chestnut goby	100	0.32	Imago	-	-	Molluscan body	0.88	4.7
				2015/10/22	Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Acanthogobius flavimanus</i>	Yellowfin Goby	28	0.071	Immature fish/Mature fish	-	-	N.D.(0.76)	2.5	-
				2015/10/22	Vertebrata	Osteichthyes	Perciformes	Mugilidae	<i>Mugil cephalus cephalus</i>	Flathead mullet	11	0.16	Immature fish	-	-	-	2.4	9.5

*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 square 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.