

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	Survey date and time			Latitude and longitude of the location		Water		Sediment				Other	
	Date	Time (Water)	Time (Sediment)	Latitude	Longitude	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Odor	Contaminants	Water depth (m)	Secchi disk depth (m)
L-1	2012/10/30	-	9:34	37.820983°	140.960950°	-	18.2	Silt with fine sand	7.5Y-3/2	None	Shells	1.2	1.2
L-2	2012/10/30	8:16	8:34	37.815517°	140.976333°	17.6	17.9	Fine sand	5Y-3/2	None	Shells	2.0	2.0
L-3	2012/10/30	8:53	9:03	37.821683°	140.976500°	17.5	17.9	Fine sand	7.5Y-3/1	None	Shells	1.6	1.6

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

Locations	Survey date and time		Latitude and longitude of the location		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)
	Date	Time	Latitude	Longitude												
L-2	2012/10/30	8:16	37.815517°	140.976333°	8.0	<0.5	1.6	7.5	5,050	32.39	1.2	4	2.5	0.043	0.072	0.0015
L-3	2012/10/30	8:53	37.821683°	140.976500°	8.0	<0.5	1.5	7.5	5,010	32.34	1.3	3	2.1	0.045	0.073	—

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

Locations	Survey date and time		Latitude and longitude of the location		pH	Redox potential E _{NHE} (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm ³)	Grain size distribution					Median grain diameter (mm)	Maximum grain diameter (mm)	Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)	
	Date	Time	Latitude	Longitude							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) (%)
L-1	2012/10/30	9:34	37.820983°	140.960950°	7.6	149	22.1	1.9	<1	2.715	15.8	15.7	35.6	21.4	5.5	6.0	0.490	19.00	63	100	—
L-2	2012/10/30	8:34	37.815517°	140.976333°	7.9	176	25.9	1.8	<1	2.679	—	0.0	16.9	79.6	0.6	2.9	0.180	2.00	28	47	N.D.<(-0.19)
L-3	2012/10/30	9:03	37.821683°	140.976500°	8.1	180	21.2	0.8	<1	2.745	—	0.8	65.0	31.7	0.3	2.2	0.300	2.00	17	28	—

Note) N.D. means to be below the detection limit.

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

Location	Sampling Date	Latitude and longitude of the location		Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Cs-134 (Bq/kg-wet)	Cs-137 (Bq/kg-wet)	Sr-90 (Bq/kg-wet)	Note		
		Latitude	Longitude												Growth stage	Stomach contents	
L-1 L-2 L-3 (Matsukawana)	2012/10/30	37.820983°	140.960950°	Angiospermae	Monocotyledoneae	Najadales	Zosteraceae	<u>Zostera marina</u>	eel grass	—	0.23	1.5	2.6	—	—	—	
				Chlorophyta	Ulvophyceae	Ulvales	Ulveaceae	<u>Ulva pertusa</u>	Ulva pertusa	—	0.49	N.D.<(-0.32)	N.D.<(-0.47)	—	—	—	
				Arthropod	Malacostraca	Decapoda	Varunidae	<u>Hemigrapsus penicillatus</u>	Hemigrapsus penicillatus	54	0.098	5.2	7.7	—	Adult	—	
				Annelida	Polychaeta	—	—	<u>Polychaeta</u>	polychaetes	209	0.059	2.2	4.2	—	Adult	—	
				Mollusca	Bivalvia	Pterioida	Ostreidae	<u>Crassostrea gigas</u>	Japanese oyster (shell)	Many	2.9	23	37	—	0.73	Adult	—
				Mollusca	Bivalvia	Veneroidea	Veneridae	<u>Ruditapes philippinarum</u>	Japanese oyster (molluscos part)	Many	1.1	N.D.<(-1.1)	N.D.<(-0.83)	—	—	—	
				Mollusca	Bivalvia	Veneroidea	Veneridae	<u>Ruditapes philippinarum</u>	Japanese littleneck (shell)	Many	1.3	0.77	1.1	3.2	—	Adult	—
				Mollusca	Bivalvia	Veneroidea	Veneridae	<u>Ruditapes philippinarum</u>	Japanese littleneck (molluscos part)	Many	0.72	4.7	8.1	—	—		
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<u>Acanthogobius flavimimus</u>	Yellowfin Goby	16	0.19	2.9	4.6	—	—	Mature fish	—
				Vertebrata	Osteichthyes	Mugiliformes	Mugilidae	<u>Mugil cephalus</u>	Flathead mullet	10	0.36	8.8	14	—	—	Immature fish	—

Note 1) The Japanese name of the underlined, indicating that in the sample is the most harvested species.

Note 2) N.D. means to be below the detection limit.