

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	Items latitude and longitude of the location		Survey date and time			Water		Sediment			Other	
	Scheduled latitude	Scheduled longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)	Transparency (m)
L-1	37.8210°	140.9610°	2015/12/10	-	09:45	-	10.3	Silt with sediment	5Y3/2	None	-	-
L-2	37.8155°	140.9763°		08:30	09:20	10.4	10.4	Sand	5Y3/2	None	1.3	>1.3
L-3	37.8217°	140.9765°		08:15	09:32	10.1	9.9	Sand with silt	7.5Y3/1	None	1.3	>1.3

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

Locations	Items 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°	2015/12/10	8:30	8.0	<0.5	2.1	9.1	4720	32.08	1.0	2	0.7	0.0022	0.012	-
L-3	37.8217°	140.9765°		8:15	8.0	<0.5	2.2	9.2	4920	31.70	1.2	5	1.9	0.0029	0.014	-

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

Locations	Items 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/cm ³)	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 (0.005-0.0075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter	Maximum grain diameter			
L-1	37.8210°	140.9610°	2015/12/10	9:45	7.5	47	33.5	2.9	5.8	2.650	6.6	11.3	37.5	21.3	12.9	10.4	0.30	19	32	150	-
L-2	37.8155°	140.9763°		9:20	7.6	64	21.5	1.4	2.5	2.675	0.4	3.0	69.4	25.4	1.0	0.8	0.31	4.8	21	96	N.D.(0.15)
L-3	37.8217°	140.9765°		9:32	7.5	37	27.1	1.5	3.9	2.676	0.3	0.5	43.2	48.0	4.0	4.0	0.23	19	13	61	-

< 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	Note			Radioactive cesium (Bq/kg-wet)		Sr-90 (Bq/kg-wet)			
		Latitude	Longitude										Growth stage	Stomach contents	Measurement	Cs-134	Cs-137				
L-1	Matsukawaura	37.8210°	140.9610°	2015/12/10	Phycophyta	-	-	-	-	Plankton (Planktonic algae)	-	0.017	-	-	-	3.3	16	-			
L-2					Angiospermae	Monocotyledoneae	-	Zosteraceae	<i>Zostera marina</i>	eel grass	-	1.5	-	-	-	-	0.51	2.9	-		
L-2					Arthropod	Malacostraca	Decapoda	Varunidae	-	Hemigrapsus	95	0.21	Imago	-	-	-	-	0.72	3.4	-	
L-3					Mollusca	Bivalvia	Ostreoida	Ostreidae	<i>Crasostrea gigas</i>	Oyster	30	0.45	Imago	-	-	-	-	Molluscan body	0.30	1.6	-
L-3					Mollusca	Bivalvia	Veneroida	Veneridae	<i>Ruditapes philippinarum</i>	Japanese littleneck	197	0.61	Imago	-	-	-	-	Molluscan body	0.61	2.8	-

*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.