

○Results of Radioactive Material Monitoring of Aquatic Organisms (Location I off Iwaki City (Hisanohama))

<Locations I off Iwaki City (Hisanohama): Samples collected>

Items Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
I-1	—	○	—	—	○	—
I-2 (Surface layer)	○	—	—	—	—	—
I-2 (Deep layer)	○	○	○	○	○	○
I-3	—	○	—	—	○	—

<Location I off Iwaki City(Hisanohama): Site measurement item>

Items Locations	Survey date and time		Latitude and longitude of the location		Water	Sediment					Other	
	Water	Sediment	Latitude	Longitude	Water temperature	Sediment temperature	Property	Color	Odor	Contaminants	Secchi disk depth	Water depth
I-1	—	11:45	37.1738	141.0788	-	11.9	Sand	10Y3/2	None	Shell fragments	17.0	41.4
I-2 (Surface layer)	2012/7/6	8:30	37.1998	141.0850	18.3	—	—	—	—	—	17.0	—
I-2 (Deep layer)					11.0	11.5	Sand	10Y3/2	None	Shell fragments	—	41.3
I-3	—	12:37	37.2328	141.0939	-	11.4	Sand	5Y3/2	None	Shell fragments	17.0	41.6

<Location I off Iwaki City(Hisanohama): Analysis items Water>

Items Locations	Survey date and time		Latitude and longitude of the location		pH	BOD	COD	DO	Electrical conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
	Latitude	Longitude	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mS/m)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)					
I-1	—	37.1738	141.0788	-	-	-	-	-	-	-	-	-	-	-	-	-
I-2 (Surface layer)	2012/7/6	8:30	37.1998	141.0850	8.1	<0.5	1.5	9.3	5,220	33.59	1.1	<1	0.4	0.0063	0.011	—
I-2 (Deep layer)					8.0	<0.5	1.4	8.4	5,270	34.14	1.1	<1	0.4	0.013	0.023	0.0018
I-3	—	37.2328	141.0939	-	-	-	-	-	-	-	-	-	-	-	-	-

<Location I off Iwaki City(Hisanohama): Analysis items Sediment>

Items 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							Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)	
	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) (%)	Median grain diameter (mm)	Maximum grain diameter (mm)					
I-1	11:45	37.1738	141.0788	8.0	1	28.9	2.4	1	2.758	0.4	0.2	1.6	78.4	6.7	12.7	0.15	9.5	640	1,100	—	
I-2	2012/7/6	12:04	37.1998	141.0850	8.0	-78	26.3	2.1	<1	2.767	—	0.5	1.8	86.8	1.6	9.3	0.15	2	310	470	ND(<0.17)
I-3		12:37	37.2328	141.0939	8.1	-80	26.1	2.6	1	2.745	—	0.8	3.2	83.5	1.6	10.9	0.16	2	150	230	—

<Location I off Iwaki City(Hisanohama): Analysis 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
I-1 I-2 I-3 (Hisanohama)	2012/7/6	37.1738	141.0788	Vertebrata	Perciformes	Perciformes	Sparidae	<i>Eynnys japonica</i>	Temminck and Schlegel	2	1.1	4.0	6.3	—	Mature fish	Crqabs
				Vertebrata	Zeiformes	Zeiformes	Zeidae	<i>Zeus faber</i>	John dory	2	1.6	4.3	6.6	—	Mature fish	Small fish
				Vertebrata	Scorpaeniformes	Scorpaeniformes	Hexagrammidae	<i>Hexagrammos otakii</i>	Fat greenling	7	4.3	120	170	0.36	Mature fish	Loliginid, crabs, hermit crabs
				Vertebrata	Pleuronectiformes	Pleuronectiformes	Paralichthyidae	<i>Paralichthys olivaceus</i>	Flounder	5	3.5	3.0	4.6	0.022	Mature fish	Loliginid, smll fish
				Vertebrata	Pleuronectiformes	Pleuronectiformes	Pleuronectiformes	<i>Pleuronectes yokohamae</i>	Marbled sole	5	3.1	26	40	—	Mature fish	Crabs, sandworms
				Vertebrata	Scorpaeniformes	Scorpaeniformes	Triglidae	<i>Chelidichthys spinosus</i>	Gurnard	1	0.60	14	21	—	Mature fish	Crabs, small fish
				Vertebrata	Carcharhiniformes	Carcharhiniformes	Triakidae	<i>Mustelus manazo</i>	Starspotted smooth-hound	2	2.5	19	32	—	Mature fish	Crabs, echiuroid
				Vertebrata	Rajiformes	Rajiformes	Rajidae	<i>Okamejei kenojei</i>	Common Skete	4	3.2	86	130	—	Mature fish	Crabs, shrimps
				—	—	-	-	—	Gastric contents (Crabs)	—	0.30	14	21	—	—	—
I-4 (Hisanohama)	37.1547	141.0016	Echinoderm	Echinoidea	Echinoidea	Haliotis asinina	<i>Glyptocidaris crenularis</i>	Tugaruuni	60	2.4	39	58	—	Imago	—	
			Mollusca	Archaeogastropoda	Archaeogastropoda	Haliotis asinina	<i>Haliotis discus</i>	Abalone(shell)	8	1.3	10	14	—	Imago	—	
							Abalone(molluscan body)	0.40		5.0	7.7	—				
			Echinoderm	Echinoidea	Echinoidea	Strongylocentrotidae	<i>Strongylocentrotus nudus</i>	Northern sea urchin	18	2.9	8.3	13	—	Imago	—	
			Phaeophyta	Fucales	Fucales	Sargassaceae	<i>Sargassum horneri</i>	Sargassum horneri	—	3.5	13	20	—	—	—	
Brown algae	Laminariales	Laminariales	Lessoniaceae	<i>Eisenia bicyclis</i>	Eisenia bicyclis	—	2.8	8.6	13	—	—	—				