

○Results of Radioactive Material Monitoring of Aquatic Organisms (Location 1 off Iwaki City (Hisanohama))

<Locations 1 off the mouthIwaki 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 1 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	—	8:03	37.1738	141.0788	—	17.4	Sand	10Y-3/2	None	Shells	11.0	40.5	
I-2 (Surface layer)	2012/8/31	8:34	37.1998	141.0850	21.0	-	-	-	-	-	11.5	40.5	
I-2 (Deep layer)		9:00	37.1998	141.0850	16.7	16.6	Sand	7.5Y-3/2	None	Shells	-	-	
I-3	—	9:28	37.2328	141.0939	—	17.9	Sand	10Y-3/2	None	Shells	8.5	41.0	

<Location 1 off Iwaki City (Hisanohama): Analysis items Water>

Items 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)
	Water	Sediment	Latitude	Longitude												
I-1	2012/8/31	—	37.1738	141.0788	—	—	—	—	—	—	—	—	—	—	—	—
I-2 (Surface layer)		8:34	37.1998	141.0850	8.1	1.1	0.8	8.0	4,700	33.65	1.1	<1	0.8	0.024	0.041	—
I-2 (Deep layer)		9:00	37.1998	141.0850	8.1	0.8	0.9	8.0	4,730	33.89	1.0	3	0.7	0.0089	0.016	0.0017
I-3		—	9:28	37.2328	141.0939	—	—	—	—	—	—	—	—	—	—	—

<Location 1 off Iwaki City (Hisanohama): Analysis items Sediment>

Items Locations	Survey date and time		Latitude and longitude of the location		pH	Redox potential E _{NHLE} (mV)	Water content (%)	IL (%)	TOC mg/g.dry	Non particle absorptv. (g/cm3)	Grain size distribution							Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)	
	Water	Sediment	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	2012/8/31	8:03	37.1738	141.0788	7.7	90	28.4	2.5	1	2,771	—	—	2.3	89.5	4.0	4.2	0.15	0.850	190	290	—
I-2		9:00	37.1998	141.0850	7.9	125	27.8	2.1	1	2,768	—	—	2.5	84.8	6.6	6.1	0.15	0.850	400	590	ND(<0.16)
I-3		9:28	37.2328	141.0939	7.9	146	27.0	2.0	<1	2,804	—	—	2.8	92.6	2.0	2.6	0.16	0.850	220	400	—

<Location 1 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)	2012/8/31	37.1738 37.1998 37.2328	141.0788 141.0850 141.0939	Vertebrata	Osteichthyes	Perciformes	Polyprionidae	<i>Stereolepis doederleini</i>	Striped jewfish	1	0.40	5.5	9.0	—	Mature fish	Empty stomach
				Pleuronectiformes	Osteichthyes	Zeiformes	Zeidae	<i>Zenopsis nebulosa</i>	Dory	4	0.40	5.2	8.5	—	Mature fish	Empty stomach
				Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	<i>Paralichthys olivaceus</i>	Bastard halibut	4	4.2	9.9	16	0.17	Mature fish	Some (details unknown)
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectiformes	<i>Pleuronectes yokohamae</i>	Marbled sole	7	3.1	20	32	0.25	Mature fish	Empty stomach
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectiformes	<i>Eopsetta grigorjewi</i>	Shotted halibut	4	0.90	10	15	—	Mature fish	Shrimps,crabs
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	<i>Pleuronichthys japonicus</i>	Finespotted flounder	4	0.30	10	15	—	Mature fish	Sandworms, shrimps
				Vertebrata	Osteichthyes	Scorpaeniformes	Triglidae	<i>Lepidotrigla microptera</i>	Searobin	10	1.0	12	17	—	Mature fish	Shrimps,crabs
				Vertebrata	Osteichthyes	Tetraodontiformes	Tetraodontidae	<i>Takifugu poecilonotus</i>	Pufferfish	7	0.90	19	28	—	Mature fish	Shrimps,crabs
				Vertebrata	Chondrichthyes	Carcharhiniformes	Triakidae	<i>Mustelus manazo</i>	Starspotted smooth-hound	2	3.0	16	23	—	Mature fish	Crabs
				Vertebrata	Chondrichthyes	Rajiformes	Rajidae	<i>Okamejei kenojei</i>	Skate	4	1.5	50	76	—	Mature fish	Shrimps,crabs
				Mollusca	Cephalopoda	Decapodiformes	Sepiidae	<i>Sepia sp.</i>	Sepia	23	0.30	2.6	4.8	—	Imago	—
				Echinoderm	Echinoidea	Phyrosomatidae		<i>Glyptocidaris crenularis</i>	Sea urchin	30	1.0	20	30	—	Imago	—
				I-4 (Hisanohama)	37.1547	141.0016	Mollusca	Gastropoda	Archaeogastropoda	Haliotis asinina	<i>Haliotis discus</i>	abalone (shell)	16	0.60	20.0	29.0
							abalone (molluscous part)	2.7	2.4	3.7	—	—				
Echinoderm	Echinoidea	Echinoidea	Strongylocentrotidae				<i>Strongylocentrotus nudus</i>	Northern sea urchin	27	3.1	9.7	16	—	Imago	—	
Brown algae	Phaeophyceae	Laminariales	Lessoniaceae	<i>Eisenia bicyclis</i>	Eisenia	—	1.5	9.9	15	—	—	—	—			