

○Results of Radioactive Material Monitoring of Aquatic Organisms (Location K off the mouth of the Abukuma River)

< Location K off the mouth of the Abukuma River: Samples collected >

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

< Location K off the mouth of the Abukuma River: Site measurement item >

Items Locations	Survey date and time		Latitude/Longitude		Water temperature	Sediment				Other	
	Water	Sediment	Latitude	Longitude		Property	Color	Odor	Contaminants	Secchi disk depth	Water depth
K-1	-	9.15	38.0383	140.9282	—	24.8	Fine sand	2.5Y-4/4	None	3.1	4.0
K-2 (Surface layer)	8:31	8:55	38.0455	140.9400	26.5	-	-	-	-	3.9	15.0
K-2 (Deep layer)					20.9	21.8	Fine sand	5Y-4/3	None	Sandworm nidus	-
K-3	-	8:13	38.0461	140.9520	—	19.6	Clay with sand	2.5Y-3/2	None	Sandworm nidus	3.6
											20.0

< Location K off the mouth of the Abukuma River Analysis items Water >

Items Locations	Survey date and time	Latitude/Longitude		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)
		Latitude	Longitude												
K-1	-	38.0383	140.9282	—	—	—	—	—	—	—	—	—	—	—	—
K-2 (Surface layer)	8:31	38.0455	140.9400	8.1	1.3	4.9	7.3	3.050	22.51	2.2	3	2.8	0.022	0.034	—
K-2 (Deep layer)				8.1	0.9	2.6	7.0	4.670	33.55	1.5	2	0.9	0.0078	0.015	0.0017
K-3	-	38.0461	140.9520	—	—	—	—	—	—	—	—	—	—	—	—

< Location K off the mouth of the Abukuma River 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 <sup>3</sup> )	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 (Less than 0.005mm) (%)	Clay (%)	Median grain diameter (mm)	Maximum grain diameter (mm)		
K-1	-	38.0383	140.9282	7.8	214	27.9	2.2	<1	2.695	0.1	1.9	60.0	36.4	0.3	1.3	0.29	4.75	45	62
K-2	8:31	38.0455	140.9400	7.7	181	30.9	2.8	1	2.744	—	0.1	2.1	72.2	11.2	14.4	0.13	2	89	150
K-3	-	38.0461	140.9520	7.6	12	42.1	5.7	9	2.701	—	0.1	0.2	14.2	42.6	42.9	0.013	2	660	1,000

< Location K off the mouth of the Abukuma River: 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
K-1 K-2 K-3 (Off the mouth of the Abukuma River)	2012/8/29	38.0383 38.0455 38.0461	140.9282 140.9400 140.9520	Vertebrata	Osteichthyes	Perciformes	Carangidae	<i>Seriola quinqueradiata</i>	Japanese amberjack	2	2.1	4.4	7.2	0.020	Mature fish	Small fish
				Vertebrata	Osteichthyes	Perciformes	Scombridae	<i>Scomber australasicus</i>	Blue mackerel	2	1.0	ND(<1.0)	ND(<0.82)	—	Mature fish	Some (details unknown)
				Vertebrata	Osteichthyes	Perciformes	Carangidae	<i>Trachurus japonicus</i>	Japanese jack mackerel	3	1.3	5.6	8.7	—	Mature fish	Small fish
				Vertebrata	Osteichthyes	Scorpaeniformes	Sebastidae	<i>Sebastes sp.</i>	Sebastes	4	0.9	7.1	12	—	Mature fish	Shrimps
				Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	<i>Paralichthys olivaceus</i>	Bastard halibut	2	3.0	6.1	9.6	0.055	Mature fish	Empty stomach
				Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronichthidae	<i>Pleuronichthys cornutus</i>	Ridged-eye flounder	3	1.0	3.3	5.6	—	Mature fish	Sandworms
				Vertebrata	Osteichthyes	Tetraodontiformes	Tetraodontidae	<i>Takifugu pardalis</i>	Panther puffer	3	0.9	2.1	3.9	—	Mature fish	Empty stomach
				Arthropod	Malacostraca	Decapoda	Portunidae	<i>Portunus trituberculatus</i>	Japanese blue crab	5	1.8	ND(<0.77)	0.95	—	Imago	—