

● 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	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
K-1	○	○	○	○	○	○
K-2	○	○	○	○	○	○
K-3	○	○	○	○	○	○

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

Items	Latitude and longitude of the location		Survey date and time			Water		Sediment				Other	
	Latitude	Longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Odor	Contaminants	Water depth (m)	Secchi disk depth (m)
K-1	38.045717°	140.930000°	—	—	10:55	—	11.2	Sand	2.5Y4/3	None	Shell fragments	—	—
K-2	38.045867°	140.940067°	2013/12/18	9:05	9:54	10.5	11.1	Sand with silt	2.5Y3/3	None	Shellfish, young shell	15.5	6.5
K-3	38.045517°	140.952117°	—	—	8:36	—	11.2	Silt with sand	2.5Y3/3	Faint hydrogen sulfide	Shell fragments	—	—

< Location K off the mouth of the Abukuma River: General survey items/Analysis of radioactive materials Water >

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)
	Latitude	Longitude	Date	Time												
K-2 (Surface layer)	38.045867°	140.940067°	2013/12/18	9:05	8.1	<0.5	1.2	9.4	4.960	32.38	1.0	1	0.4	0.0034	0.0095	—
K-2 (Deep layer)	38.045867°	140.940067°	2013/12/18	9:05	8.1	<0.5	1.7	8.7	5.220	33.25	1.0	7	2.9	0.0093	0.023	0.00088

< Location K off the mouth of the Abukuma River: General survey items/Analysis of radioactive materials Sediment >

Items	Latitude and longitude of the location		Survey date and time		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	Date	Time							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)
											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) (%)					
K-1	38.045717°	140.930000°	2013/12/18	10:55	7.7	172	20.7	1.6	<1	2.747	0	8.8	46.2	38.8	3.3	2.9	0.28	2	34	88	—
K-2	38.045867°	140.940067°	2013/12/18	9:54	7.6	136	42.9	4.2	5	2.716	0	0	1.7	52.9	24.2	21.2	0.094	0.850	180	490	N.D.(<0.20)
K-3	38.045517°	140.952117°	2013/12/18	8:36	7.6	118	53.4	6.5	9	2.703	0	0.2	0.3	13.3	59.7	26.5	0.024	2	240	540	—

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

< Location K off the mouth of the Abukuma River: Survey items Aquatic organisms >

Location	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note		Cs-134 (Bq/kg-wet)	Cs-137 (Bq/kg-wet)	Sr-90 (Bq/kg-wet)
	Latitude	Longitude										Growth stage	Stomach contents			
Surrounding water area off the mouth of the Abukuma River	—	—	2013/12/13	Arthropod	Malacostraca	Decapoda	Portunidae	<i>Ovalipes punctatus</i>	Ovalipes punctatus	10	2.0	Imago	—	0.52	1.7	0.22
				Vertebrata	Osteichthyes	Righteye flounder	Righteye flounder	<i>Kareius bicoloratus</i>	Stone flounder	3	2.5	2-year-old fish	None	1.0	2.1	0.019
				Vertebrata	Osteichthyes	Righteye flounder	Flounder	<i>Paralichthys olivaceus</i>	Flounder	1	3.2	6-year-old fish	Small fish	3.7	9.4	0.055
				Vertebrata	Osteichthyes	Perciformes	Lateolabracidae	<i>Lateolabrax japonicus</i>	Japanese sea bass	1	2.8	5-year-old fish	Some (details unknown)	1.3	2.8	0.056
				Vertebrata	Osteichthyes	Scorpaeniformes	Sebustidae	<i>Sebastes schlegelii</i>	Black rockfish	2	1.7	3-year-old fish	Crustacean fragments	0.52	1.8	N.D.(<0.017)
				Vertebrata	Osteichthyes	Puffer	Thread-sail filefish	<i>Thamnaconus modestus</i>	Filefish	5	1.7	Mature fish	Some (details unknown)	N.D.(<0.55)	0.99	—
				Vertebrata	Cartilage fish	Skate	Skate	<i>Okamejei konojei</i>	Common Skate	5	5.1	Mature fish	None	0.79	2.6	N.D.(<0.019)

Note 1) When multiple types of aquatic organisms were collected, a sample was prepared by mixing them.

Note 2) For species with stomach contents as indicated in the note column, all stomach contents were removed for conducting the analysis.

Note 3) Underlined names in the English name column indicate species largest in number in the respective samples.

Note 4) A statement in red in the "Growth stage" column shows the age assessed based on squama or otolith.

Note 5) N.D. means to be below the detection limit.