

OResults 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	○	○	○	○	○	○
K-3	—	○	—	—	○	—

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

Items Locations	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	Contaminants	Water depth (m)	Secchi disk depth (m)
K-1	38.0456°	140.9285°	2014/12/11	—	9:17	—	13.1	Fine sand	5Y3/2	None	—	—
K-2	38.0456°	140.9403°		8:05	8:30	11.2	12.5	Fine sand	7.5Y3/1	Shellfish fry	17.1	4.7
K-3	38.0459°	140.9520°		—	8:52	—	12.7	Gravel with silt	10Y3/1	None	—	—

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

Items locations	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)	38.0456°	140.9403°	2014/12/11	8:05	8.1	<0.5	1.5	9.4	4.620	29.60	0.9	2	1.5	0.0028	0.010	—
K-2 (Deep layer)				8:10	8.0	<0.5	1.5	8.5	5.100	33.51	0.9	5	1.3	0.0032	0.010	0.00096

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

Items Locations	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)
K-1	38.0456°	140.9285°	2014/12/11	9:17	7.7	196	21.7	1.4	0.7	2.751	0.0	6.2	59.3	28.6	2.0	3.9	0.36	2	14	49	—
K-2	38.0456°	140.9403°		8:30	7.6	194	33.1	2.9	1.8	2.723	0.0	0.0	1.4	67.6	10.2	20.8	0.12	2	33	98	N.D.(0.20)
K-3	38.0459°	140.9520°		8:52	7.6	34	47.0	6.9	12.4	2.679	0.0	0.1	0.2	25.7	35.6	38.4	0.018	2	130	420	—

Note) N.D. means to be below the detection limit and figures in parentheses show 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	Measurement site			
Surrounding water area of the mouth of the Abukuma River	—	—	2014/12/11	Chordata	Actinopterygii	Scorpaeniformes	Platycephalidae	<i>Platycephalus sp.</i>	Flathead	1	0.47	Mature fish (3-year-old)	Fish	Viscera removed	0.52	2.8	—
				Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	<i>Paralichthys olivaceus</i>	Bastard halibut	1	3.7	Mature fish (6-year-old)	Empty stomach	Viscera removed	1.5	4.9	N.D.(0.019)
				Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Acanthogobius flavimanus</i>	Yellowfin Goby	2	0.025	Mature fish (1-year-old)	Gammaridea	Viscera removed	N.D.(1.8)	2.6	—

*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.