○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	○	○	○	○	○	○
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	38.045683°	140.928233°	2014/7/2	—	9:49	—	19.6	Fine sand	5Y4/3	None	—	—
K-2	38.045517°	140.940133°		8:54	9:28	22.3	13.3	Fine sand	5Y4/3	None	15.0	1.4
K-3	38.045833°	140.951800°		—	8:20	—	12.8	Clay with sand	10Y2/1	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	COD	DO	Electrical conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
	Latitude	Longitude	Date	Time		(mg/L)	(mg/L)	(mg/L)	(mS/m)		(mg/L)	(mg/L)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)
K-2 (Surface layer)	38.045517°	140.940133°	2014/7/2	8:54	8.1	1.0	3.1	8.8	3,570	22.04	1.7	10	5.7	0.0058	0.017	—
K-2 (Deep layer)				9:05	8.0	<0.5	1.3	8.4	5,000	32.33	1.1	2	10.3	0.0056	0.018	0.0013

＜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 $E_{N.H.E}$	Water content	IL	TOC	Soil particle density	Grain size distribution								Cs-134	Cs-137	Sr-90
	Latitude	Longitude	Date	Time		(mV)	(%)	(%)	(mg/g-dry)	(g/cm3)	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)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
K-1	38.045683°	140.928233°	2014/7/2	9:49	7.5	157	19.2	1.4	0.8	2.746	0.1	3.6	56.4	35.6	1.8	2.5	0.30	4.75	9.4	26	—
K-2	38.045517°	140.940133°		9:28	7.6	146	31.2	3.2	4.4	2.729	0.0	0.0	0.8	67.4	17.4	14.4	0.11	2	62	170	N.D.(0.16)
K-3	38.045833°	140.951800°		8:20	7.7	-134	49.5	6.3	12.1	2.706	0.0	0.3	0.1	15.1	50.0	34.5	0.019	2	130	350	—

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	Cs-137	Sr-90
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	(Bq/kg-wet)	(Bq/kg-wet)	(Bq/kg-wet)
Surrounding water area off the mouth of the Abukuma River	—	—	—	2014/7/2	Arthropod	Malacostraca	Decapoda	Portunidae	*Portunus trituberculatus*	Japanese blue crab	5	2.2	Imago	—	—	1.1	2.1	0.074
					Mollusca	Cephalopoda	Sepiida	Sepiidae	*Sepia japonika*	Cuttlefish	7	2.3	Imago	—	—	N.D.(0.34)	0.30	0.018
					Chordata	Actinopterygii	Scorpaeniformes	Platycephalidae	*Platycephalus sp.*	Flathead	5	2.8	Mature fish (4-year-old)	Fish	Viscera removed	0.75	2.1	0.035
					Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	*Paralichthys olivaceus*	Bastard halibut	4	4.5	Mature fish (2-year-old)	Empty stomach	Viscera removed	0.56	1.7	N.D.(0.011)
					Chordata	Actinopterygii	Perciformes	Sciaenidae	*Nibea mitsukurii*	Nibe croaker	5	2.4	Mature fish (3,4-year-old)	Fish	Viscera removed	0.56	1.6	0.054
					Vertebrata	Osteichthyes	Zeiformes	Zeidae	*Zeus faber*	John dory	2	2.8	Mature fish	Fish	Viscera removed	1.0	2.5	N.D.(0.012)

*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.