

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	Sediment				Other			
			Water	Sediment		Latitude	Longitude	Sediment temperature	Property	Color	Odor	Contaminants	
K-1	2012/6/28	—	9.28	38.0383	140.9282	18.8	16.5	Fine sand	5Y-3/2	None	Shellfish fry	1.6	5.0
K-2 (Surface layer)		8:45	9.08	38.0455	140.9400	14.5	12.3	Fine sand	5Y-3/2	None	Shellfish fry	5.9	15.4
K-2 (Deep layer)		—	8.25	38.0461	140.9520	-	12.6	Clay with sand	10Y3/1	Faint hydrogen sulfide	Shellfish fry	5.5	20.4
K-3		—	38.0461	140.9520	-	-	-	-	-	-	-	-	-

<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	2012/6/28	—	38.0383	140.9282	-	-	-	-	-	-	-	-	-	-	-		
K-2 (Surface layer)		8:45	38.0455	140.9400		8.1	1.0	3.1	9.6	4,690	29.59	1.3	2	1.3	0.014	0.020	—
K-2 (Deep layer)		—	38.0461	140.9520		7.9	0.6	2.2	6.1	5,140	32.85	1.1	4	4.3	0.034	0.049	0.0052
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 ³	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 (0.005-0.075mm) (%)	Clay (less than 0.005mm) (%)	Median grain diameter (mm)	Maximum grain diameter (mm)		
			Latitude	Longitude							(%)	(%)	(%)	(%)	(%)	(%)	(mm)	(mm)		
K-1	2012/6/28	9.28	38.0383	140.9282	7.5	236	30.9	2.4	<1	2,722	0.1	2.2	80.2	8.3	9.2	0.14	2	110	160	—
K-2		9.08	38.0455	140.9400	7.7	95	30.1	2.1	<1	2,745	0.1	3.7	72.8	12.4	11.0	0.13	2	53	64	ND(<0.22)
K-3		8:25	38.0461	140.9520	7.7	-94	52.8	7.3	11	2,657	0.1	0.4	5.6	53.7	40.2	0.015	2	1,000	1,400	—

<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)	2012/6/28	38.0383 38.0455 38.0461	140.9282 140.9400 140.9520	Vertebrata Vertebrata Vertebrata Vertebrata Vertebrata Vertebrata Arthropod Arthropod	Perciformes Pleuronectiformes Pleuronectiformes Pleuronectiformes Perciformes Pleuronectiformes Decapoda Decapoda	Perciformes Pleuronectiformes Pleuronectiformes Pleuronectiformes Sciaenidae Pleuronectiformes Decapoda	Lateolabracidae Paralichthyidae Pleuronectidae Pleuronectidae Pennahia argentata Kareius bicoloratus Portunidae Ovalipes punctatus	<i>Lateolabrax japonicus</i> <i>Paralichthys olivaceus</i> <i>Pleuronectes yokohamae</i> <i>Kareius bicoloratus</i> <i>Pennahia argentata</i> <i>Gastric contents (Shrimp)</i> <i>Japanese blue crab</i> <i>Ovalipes punctatus</i>	Japanese sea bass Bastard halibut Marbled sole Stone flounder White croaker Gastric contents (Shrimp) Japanese blue crab Ovalipes punctatus	1 3 3 3 7 — 8 9	2.4 2.5 1.4 1.4 2.3 0.11 2.8 1.8	16 15 4.5 15 12 6.6 8.4 3.4	26 23 6.7 25 19 9.5 13 5.0	0.041 — — — — — 0.18 —	Mature fish Mature fish Mature fish Mature fish Mature fish Imago Imago Imago	Small fish Shrimps, small fish Shrimps, sandworms Small fish, sandworms Shrimps — — —