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	Genera	al items		Radioactive materials								
Locations	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)						
K-1	-	0	-	-	0	-						
K-2	0	0	0	0	0	0						
K-3	-	0	-	-	0	-						

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

	Execution R on the modul of the Abundana River. She measurement tem?													
Items	Latitude and longi	tude of the location	Sı	urvey date and tir	ne	Water		Sediment		Other				
Locations	Scheduled latitude	Scheduled longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)	Transparency (m)		
K-1	38.0457°	140.9282°		-	09:38	-	12.5	Sand	2.5Y3/3	None	-	-		
K-2(Surface layer	38.0455°	140.9401°	2015/12/9	08:50		10.7	13.0	Fine sand	2.5Y3/3	Bivalve mussel	16.8	3.5		
K-2(Deep layer)	38.0455°	140.9401°	2013/12/9	08:35		13.9	15.0	1 life Salid	2.013/3	Divarve musser	10.0	5.5		
K-3	38.0458°	140.9518°		-	09:00	-	13.9	Fine sand with silt	2.5Y3/2	None	-			

<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					BOD	COD	DO	Electrical		TOC	cc	Tanki dia	Cs-134	Cs-137	Sr-90	
Locations	Scheduled latitude	Scheduled longitude	Date	Time (water)	pН	(mg/L)	(mg/L)	(mg/L)	conductivity (mS/m)	Salinity	(mg/L)	(mg/L)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)
K-2(Surface layer	38.0455°	140.9401°	2015/12/9	8:50	8.1	0.7	2.2	10.1	4080	26.22	1.2	4	2.2	0.0020	0.0096	-
K-2(Deep layer)	38.0455°	140.9401°	2013/12/9	8:35	8.0	< 0.5	1.7	8.3	5130	33.64	0.9	6	2.7	0.0023	0.012	0.0017

<		the mouth of the A			y items/Analysis o	of radioactive ma	aterials Sediment	>														
Items Latitude and longitude of the location Survey date and time				ate and time							Grain size distribution											
Lo	ecations	Scheduled latitude	Scheduled longitude	Date	Time (sediment)	рН	Redox potential EN.H.E (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm3)	Gravel (2-75mm) (%)		Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.0075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter	Maximum grain diameter	Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)
	K-1	38.0457°	140.9282°		9:38	7.9	257	25.9	1.8	2.8	2.691	0.0	1.0	52.5	44.2	1.1	1.2	0.26	2.0	16	64	-
	K-2	38.0455°	140.9401°	2015/12/9	9:20	7.5	209	34.7	3.2	3.9	2.719	0.0	0.1	1.3	61.8	24.0	12.8	0.097	2.0	35	130	N.D.(0.15)
	K-3	38.0458°	140.9518°		9:00	7.5	67	51.8	6.3	14.4	2.680	0.0	0.1	0.2	21.1	54.9	23.7	0.035	2.0	70	360	-

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

	Cocation R on the mouth of the Abundania River. Survey herits Aquatic organisms >																		
Location	Sampling point	Sampling point atitude and longitude of the location Sampling Date				Class	Order	Family	Species name	English name	Population	Sample weight	Note				Radioactive cesium (Bq/kg-wet)		
			Longitude	Sampling Date	Division	Ciass	Older	rainiy	Species name	English hame	ropulation	(kg-wet)	Growth stage	Stomach contents	Measurement site	Cs-134	Cs-137	(Bq/kg-wet)	
Surrounding	5				Arthropod	Malacostraca	Decapoda	Portunidae	Portunus trituberculatus	Japanese blue crab	5	1.8	Imago	-	-	N.D.(0.28)	N.D.(0.49)	-	
water area					Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	Paralichthys olivaceus	Bastard halibut	10	2.5	Mature fish (1-year-old)	Empty stomach	Viscera removed	N.D.(0.28)	0.56	-	
off the mouth	of -	-	-	2015/12/9	Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectiformes	Pleuronectes herzensteini	Yellow striped flounder	5	2.7	Mature fish (5-year-old)	Ragworm	Viscera removed	N.D.(0.45)	N.D.(0.44)	-	
the					Vertebrata	Osteichthyes	Perciformes	Triglidae	Lepidotrigla microptera	Searobin	15	2.1	Mature fish (3-year-old)	Shrimp	Viscera removed	N.D.(0.37)	0.41	-	
Abukuma Riv	er				Vertebrata	Osteichthyes	Perciformes	Lateolabracidae	Lateolabrax japonicus	Japanese sea bass	7	3.0	Mature fish (3-year-old)	Shrimp, Fish	Viscera removed	N.D.(0.36)	0.78	-	

- $\ast 1 :$ Organisms were collected in or around the targeted water areas.

- *1: Organisms were conceted in or around the targeteew 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.