# $\circ \textbf{Results of Radioactive Material Monitoring of Aquatic Organisms (Location K off the mouth of the Abukuma River)}$

<Location K off the mouth of the Abukuma River: Samples collected>

Items	Gene	eral 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	1	0	1	1	0	-						

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

Items	Latitude and longitude of the location		Survey date and time			Water		Sedim		Other		
Locations	Latitude	de Longitude Date		Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C) Property		Color	Contaminants	Water depth (m)	Transparency (cm)
K-1	38.04562°	140.92821°		_	10:15	-	21.5	Fine sand	5Y4/3	None	-	-
K-2	38.04536°	140.94004°	2014/9/16	8:42 9:40		22.5	20.2	Silt with sand	10Y3/2	None	16.6	4.2
 K-3	38.04583°	140 95187°		_	9.15	-	193	Clay with sand	10Y3/1	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		pH	BOD	COD	DO	Electrical conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
Locations	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)	38.04536°	140.94004°	2014/9/16	8:42	8.4	1.2	1.8	9.3	4,640	29.20	1.6	3	2.2	0.0085	0.024	-
K-2 (Deep layer)	38.04330	140.94004	2014/9/10	8:48	8.0	0.6	1.0	4.0	5,200	33.22	1.0	5	3.0	0.0016	0.0086	0.0014

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

Items		Latitude and longitude of the location Sur		Survey de	Survey date and time						Soil particle											
nems	Survey date and time			pH	Redox potential	Water content	IL	TOC		Gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay	Median grain	Maximum grain	Cs-134	Cs-137	Sr-90		
т.	ocations	Latitude	Longitude	Data	Time		E <sub>N.H.E</sub>				density	(2-75mm)	(0.85-2mm)	(0.25-0.85mm)	(0.075-0.25mm)	(0.005-0.075mm)	(Less than 0.005mm)	diameter	diameter			
1.4	scations	Lautude	Longitude	Date	Time		(mV)	(%)	(%)	(mg/g-dry)	(g/cm3)	(%)	(%)	(%)	(%)	(%)	(%)	(mm)	(mm)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
	K-1	38.04562°	140.92821°		10:15	7.1	210	26.4	1.8	1.4	2.744	0.0	0.1	13.8	81.7	0.8	3.6	0.17	2	35	110	-
	K-2	38.04536°	140.94004°	2014/9/16	9:40	7.4	194	36.1	3.3	3.9	2.738	0.0	0.1	1.9	61.8	14.3	21.9	0.11	2	82	300	N.D.(0.17)
	K-3	38.04583°	140.95187°		9:15	7.4	171	49.3	5.8	11.3	2.702	0.0	0.2	0.4	20.4	50.9	28.1	0.024	2	210	660	_

## 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		atitude and longitude of the location		Division	Class	Order	Family	Species name	English name	Population	Sample weig (kg-wet)	nt	Note		Cs-134	Cs-137	Sr-90
	Latitude	Longitude	]								(kg-wei)	Growth stage	Stomach contents	Measurement site	(Bq/kg-wet)	(Bq/kg-wet)	(Bq/kg-wet)
Surrounding water				Arthropod	Malacostraca	Decapoda	Portunidae	Portunus trituberculatus	Japanese blue crab	1	5 3	.5 Imago	-	-	N.D.(0.26)	0.43	0.059
area off the mouth			2014/9/3	Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	Platichthys stellatus	Starry flounder		3 2	1 Mature fish (5-year-old)	-	Viscera removed	0.51	1.4	-
of the Abukuma	_	_	2014/9/5	Vertebrata	Osteichthyes	Pleuronectiformes	Paralichthyidae	Paralichthys olivaceus	Bastard halibut		2 4	.8 Mature fish (4-year-old)	Fish	Viscera removed	0.69	2.2	0.019
River				Vertebrata	Chondrichthyes	Rajiformes	Rajidae	Okamejei kenojei	Skate		5 5	.6 Mature fish	Fish	Viscera removed	0.61	2.0	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.