# OResults of Radioactive Material Monitoring of Aquatic Organisms (Location K off the mouth of the Abukuma River)

<location k="" m<="" off="" th="" the=""><th>outh of the Abukum</th><th>na River: Samples c</th><th>ollected&gt;</th><th></th><th></th><th></th></location>	outh of the Abukum	na River: Samples c	ollected>			
Items	Genera	al items		Radioactiv	e materials	
Locations	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
K-3	0	0	0	0	0	0

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

Items		longitude of the ation		Survey date and time		Water		Sedi	ment		Ot	ther
Locations	Latitude	Longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	e Sediment temperature (degrees C) Propert		Color	Contaminants	Water depth (m)	Secchi disk depth (m)
K-3(Surface layer)	38.0458°	140.9518°	2021/10/25	08:32	08:46	18.5	18.9	Sand with silt	5Y3/2	Shell fragments	20.5	6.5
K-3(Bottom layer)	38.0458	140.9318	2021/10/23	08:15	08:40	19.3		Sand with shi	515/2		20.5	0.5

## <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		рН	BOD	COD	DO	Electric conductivity	Salinity	TOC	SS	Turbidity	Cs-134	Cs-137	Sr-90
Locations	Latitude	Longitude	Date	Time (water)		(mg/L)	(mg/L)	(mg/L)	(mS/m)		(mg/L)	(mg/L)	(FNU)	(Bq/L)	(Bq/L)	(Bq/L)
K-3(Surface layer)	38.0458°	140.9518°	2021/10/25	08:32	8.0	0.5	1.5	7.7	4900	31.99	1.0	2	1.2	N.D.(0.0014)	0.0038	-
K-3(Bottom layer)	38.0438	140.9318	2021/10/25	08:15	8.0	<0.5	1.7	7.9	4900	33.60	1.1	4	1.5	N.D.(0.0015)	0.0046	0.00084

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: General survey items/Analysis of radioactive materials Sediment>

Items	Latitude and longitude of the location		Survey date and time		Survey data and time						Grain size distribution										
nems					pH	Redox potential	Water content	IL	TOC	Soil particle	Gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay	Median grain	Maximum	Cs-134	Cs-137	Sr-90
Locations	Latitude Lo	Longituda	Dete	Time (sediment)		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	grain diameter			
Locations		Longitude	Date	Time (sediment)		(mV)	(%)	(%)	(mg/g-dry)	(g/cm <sup>3</sup> )	(%)	(%)	(%)	(%)	(%)	(%)	(mm)	(mm)	(Bq/kg-dry)	(Bq/kg-dry)	(Bq/kg-dry)
K-3	38.0458°	140.9518°	2021/10/25	08:46	7.7	239	32.9	4.5	8.6	2.668	0.0	0.0	0.7	33.0	51.9	14.4	0.050	2.0	6.3	160	N.D.(0.12)

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: Analysis items Aquatic organisms>

Locations	Sampling point	t Latitude and longitude of the		Sampling date	Division	Class	Order	Family	Scientific name	English name	Population	Sample weight	ı Note			Radioactive cesium (Bq/kg-wet)			Sr-90
	1 51	Latitude	Longitude	1 5				,		5		(kg-wet)	Growth stage	Stomach contents	Measurement site	Total	Cs-134	Cs-137	(Bq/kg-wet)
Surrounding water area	Sea area in front of the Abukuma	_	_	2021/10/25	Vertebrata	Osteichthyes	Scorpaeniformes	Platycephalidae	Platycephalus sp.	Flathead	1	0.46	Mature fish	Mantis shrimp	Viscera removed	0.41	N.D.(0.24)	0.41	-
off the mouth of the Abukuma River	of the Abukuma River Estuary			2021/10/23	Vertebrata	Osteichthyes	Pleuronectiformes	Pleuronectidae	Pleuronectes yokohamae	Marbled sole	2	0.21	Immature fish	Empty stomach	Viscera removed	N.D.	N.D.(0.30)	N.D.(0.30)	-

\*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 English 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: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40µm-mesh).

\*6: 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.

\*7: N.D. means to be below the detection limit and figures in parentheses show the detection limit.

\*8: Activity concentrations include counting errors, but the details are omitted here.