

## Nuclide Analysis Results of Seawater <Coast>

Reference

( Data summarized on August 23 )

Place of Sampling	North of Discharge Channel of 5-6u of 1F (approx. 30m north of 5-6u discharge channel)		Around South Discharge Channel of 1F ( approx. 330m south of 1-4u Discharge Channel)				Around North Discharge Channel of 2F ( Around 3,4u Discharge Channel) ( approx. 10 km from 1F )		Around Iwasawa Shore of 2F ( approx. 7 km south of 1,2u Discharge Channel) ( approx. 16 km from 1F )		Density limit by the announcement of Reactor Regulation (Bq/L)  (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
	Time and Date of Sample Collection	10:20 am August 22, 2011	10:05 am August 22, 2011	3:35 pm August 22, 2011	8:20 am August 22, 2011	7:55 am August 22, 2011	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	
I-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (about 2 years)	ND	-	ND	-	ND	-	ND	-	ND	-	60
Cs-137 (about 30 years)	ND	-	ND	-	ND	-	ND	-	ND	-	90

Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm<sup>3</sup> to Bq/L.

Data of other nuclides are under evaluation.

In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

In the case that the data is below measurable limit, "ND" is stated.

Detection limits of the three main nuclides on North of Discharge Channel of 5-6u of 1F and around South Discharge Channel of 1F are as follows:

I-131: approx. 9Bq/L., Cs-134: approx. 21Bq/L, Cs-137: approx. 24Bq/L.

Detection limits of the three main nuclides around North Discharge Channel of 2F and Iwasawa Shore of 2F are as follows:

I-131: approx. 4Bq/L., Cs-134: approx. 6Bq/L, Cs-137: approx. 9Bq/L.

## Results of Nuclide Analysis of Seawater < Offshore 1/3 >

Reference

( Data summarized on August 23)

Place of Sampling	15 km offshore of MinamiSouma City Upper layer		15 km offshore of MinamiSouma City Lower layer		15 km offshore of Ukedo-gawa Upper layer		15 km offshore of Ukedo-gawa Lower layer		15 km offshore of Fukushima Daiichi Upper layer		15 km offshore of Fukushima Daiichi Lower layer		Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	
Time and Date of Sample Collection	Not sampled on August 22, 2011		Not sampled on August 22, 2011		N.A		N.A		N.A		N.A		
Detected Nuclides (Half-life)													
I-131 (about 8 days)	/		/		/		/		/		/		40
Cs-134 (about 2 years)	/		/		/		/		/		/		60
Cs-137 (about 30 years)	/		/		/		/		/		/		90

Place of Sampling	15 km offshore of Fukushima Daini Upper layer		15 km offshore of Fukushima Daini Lower layer		15 km offshore of Iwasawa Shore Upper layer		15 km offshore of Iwasawa Shore Lower layer		15 km offshore of Hirono-machi Upper layer		15 km offshore of Hirono-machi Lower layer		Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	
Time and Date of Sample Collection	N.A		N.A		Not sampled on August 22, 2011		Not sampled on August 22, 2011		Not sampled on August 22, 2011		Not sampled on August 22, 2011		
Detected Nuclides (Half-life)													
I-131 (about 8 days)	/		/		/		/		/		/		40
Cs-134 (about 2 years)	/		/		/		/		/		/		60
Cs-137 (about 30 years)	/		/		/		/		/		/		90

Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm<sup>3</sup> to Bq/L.

## Results of Nuclide Analysis of Seawater < Offshore 2/3 >

Reference

( Data summarized on August 23 )

Place of Sampling	3 km offshore of Haramachiku Upper layer		3 km offshore of Haramachi Ward Lower layer		3 km offshore of Odaka Ward Upper layer		3 km offshore of Odaka Ward Lower layer		3 km offshore of Iwasawa shore Upper layer		3 km offshore of Iwasawa shore Lower layer		Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
	Time and Date of Sample Collection	Not sampled on August 22, 2011		Not sampled on August 22, 2011		Not sampled on August 22, 2011		Not sampled on August 22, 2011		Not sampled on August 22, 2011		Not sampled on August 22, 2011	
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	
I-131 (about 8 days)	/	/	/	/	/	/	/	/	/	/	/	/	40
Cs-134 (about 2 years)	/	/	/	/	/	/	/	/	/	/	/	/	60
Cs-137 (about 30 years)	/	/	/	/	/	/	/	/	/	/	/	/	90

Place of Sampling	8 km offshore of Odaka Ward Upper layer		8 km offshore of Odaka Ward Lower layer		8 km offshore of Iwasawa shore Upper layer		8 km offshore of Iwasawa shore Lower layer		/		/		Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
	Time and Date of Sample Collection	Not sampled on August 22, 2011		Not sampled on August 22, 2011		Not sampled on August 22, 2011		Not sampled on August 22, 2011		/		/	
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	
I-131 (about 8 days)	/	/	/	/	/	/	/	/	/	/	/	/	40
Cs-134 (about 2 years)	/	/	/	/	/	/	/	/	/	/	/	/	60
Cs-137 (about 30 years)	/	/	/	/	/	/	/	/	/	/	/	/	90

Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm<sup>3</sup> to Bq/L.

Data of other nuclides are under evaluation.

In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

In the case that the data is below detective limits (I-131: approx. 4Bq/L., Cs-134: approx. 6Bq/L, Cs-137: approx. 9Bq/L), "ND" is stated.

## Results of Nuclide Analysis of Seawater < Offshore 2/3 >

Reference

( Data summarized on August 23 )

Place of Sampling	3 km offshore of Iwaki Upper layer		3 km offshore of Iwaki Lower layer		3 km offshore of Natsui river Upper layer		3 km offshore of Natsui river Lower layer		3 km offshore of Onahama port Upper layer		3 km offshore of Onahama port Lower layer		Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)	
	Time and Date of Sample Collection	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)		Scaling Factor ( / )
	6:55 am August 22, 2011				6:10 am August 22, 2011			6:10 am August 22, 2011		5:55 am August 22, 2011			5:55 am August 22, 2011	
I-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40	
Cs-134 (about 2 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	60	
Cs-137 (about 30 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	90	

Place of Sampling	3 km offshore of Ena Upper layer		3 km offshore of Ena Lower layer		3 km offshore of Numanouchi Upper layer		3 km offshore of Numanouchi Lower layer		3 km offshore of Toyoma Upper layer		3 km offshore of Toyoma Lower layer		Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)	
	Time and Date of Sample Collection	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)	Scaling Factor ( / )	Density of Sample (Bq/L)		Scaling Factor ( / )
	Not sampled on August 22, 2011				5:55 am August 22, 2011			5:55 am August 22, 2011		5:45 am August 22, 2011			5:45 am August 22, 2011	
I-131 (about 8 days)	/	/	/	/	ND	-	ND	-	ND	-	ND	-	40	
Cs-134 (about 2 years)	/	/	/	/	ND	-	ND	-	ND	-	ND	-	60	
Cs-137 (about 30 years)	/	/	/	/	ND	-	ND	-	ND	-	ND	-	90	

Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm<sup>3</sup> to Bq/L.

Data of other nuclides are under evaluation.

In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

In the case that the data is below detective limits (I-131: approx. 4Bq/L., Cs-134: approx. 6Bq/L, Cs-137: approx. 9Bq/L), "ND" is stated.