Nuclide Analysis Results of Fish and Shellfish <Ocean Area Within 20km Radius of Fukushima Daiichi Nuclear Power Station> Samples collected in the fourth quarter of FY2018

[Measurement results of Sr-90 (half-life approx. 29 years) in fish]

[Measurement result	15 01 3	1-90 (nan-lile approx. 29 years) in lish			
Name of Sample (Region)				Radioactivity Concentration [Bq/kg(Raw)] (Half-life)	
		Place of Sampling (Place No.)	Date of Sampling	Sr-90 *1 (Approx. 29 years)	Reference ^{*1} (Sum of Cs-134 and Cs-137)
Roundnose flounder (whole)	*3	Around 3km Offshore of Fukushima Daiichi NPS (T-S4)	March 7, 2019	0.090	21
Black sea bream (whole)	*2	Around 2km Offshore of Kido River (T-S5)	March 19, 2019	0.22	ND
Black sea bream		Around 2km Offshore of Fukushima Daini NPS(T-S7)	January 22, 2019	2.4	ND
Schlegel's black rockfish(whole)	*3	Around 2km Offshore of Fukushima Daini NPS(T-S7)	February 26, 2019	0.20	9.4
Marbled sole (whole)	*2	Around 10km Offshore of Fukushima Daiichi (T-B3)	March 18, 2019	ND(0.015)	31

^{*1} Cs: Edible parts of fish were used for the measurement. Sr: Whole of fish were used for the measurement.

The sum of Cs-134 and Cs-137 radioactivity concentrations as a standard value (since April 1, 2012) is 100Bq per kg.

^{*}The Sr-90 analysis was conducted by *2KANSO CO., LTD. and by *3Kyushu Environmental Evaluation Association.

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[Measurement results of Tritium (half-life approx. 12 years) in fish] Place of Sampling(Place No.): Around 4km Offshore of Kumagawa (T-S8)

Name of Sample (Region)	Date of Sampling	Tritium concentration (Bq/L)		Tritium concentration (Bq/kg (Raw))		Reference (Sum of Cs-134
		Free Water Tritium	Organically Bound Tritium	Free Water Tritium	Organically Bound Tritium	and Cs-137) (Bq/kg (Raw))
Flatfish (muscle)	January 24, 2019	0.075	ND(0.28)	0.059	ND(0.041)	ND
Flatfish (muscle)	February 7, 2019	0.091	ND(0.27)	0.070	ND(0.043)	ND
Flatfish (muscle)	March 15, 2019	0.091	ND(0.27)	0.070	ND(0.043)	ND

Reference

	Date of Sampling	Tritium concentration (Bq/L)
Around 4km Offshore	January 23, 2019	0.057
of Kumagawa (T-S8)	February 6, 2019	0.069
Seawater	March 15, 2019	0.063

^{*}The sum of Cs-134 and Cs-137 radioactivity concentrations as a standard value (since April 1, 2012) is 100Bq per kg.

^{*}The tritium analysis was conducted by Kyushu Environmental Evaluation Association.

^{*}Edible parts of fish were used for the measurement.

^{*}Free Water Tritium means tritium which is contained in the moisture of fish muscles and the values are compared with tritium concentrations in seawater where fish lives.

Organically Bound Tritium means tritium which is contained in dried fish muscles and the values show tritium concentrations in the vapor generated when dried fish is burned.

^{*}The measurement results are calculated to two significant figures.

^{*}ND, not detected, indicates that a value is less than the detection limit of a radioactive concentration. The detection limit is provided in parenthesis.