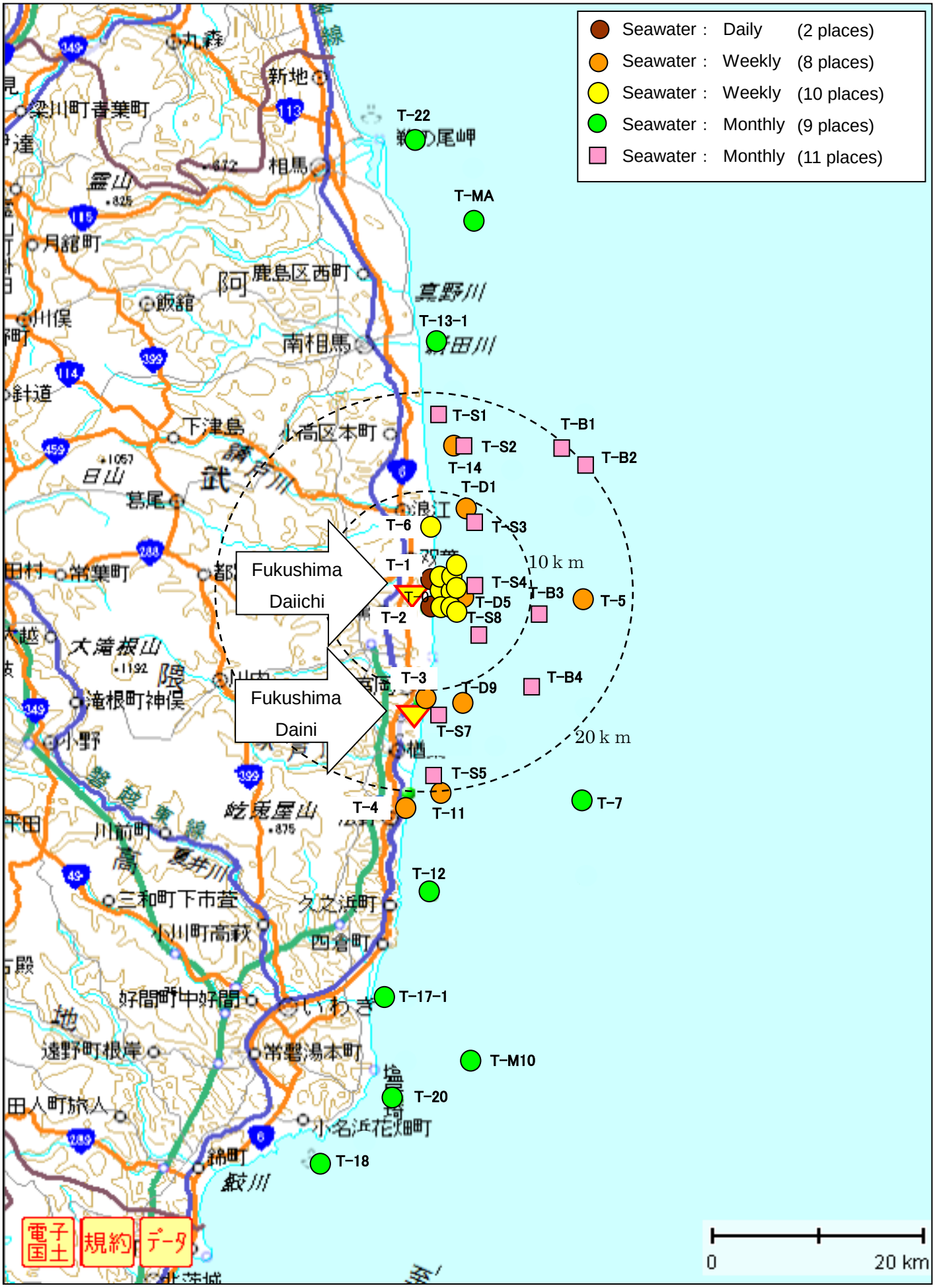


Fig. Sampling places of seawater (Offshore of Fukushima Prefecture)

[Date]

Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater

<In the Port, near Drainage Outlets> (Gross α・Gross β・H-3・Sr・γ)

Place of Sampling	Date and Time of Sampling	Analysis Item					
		Gross α (Bq/L)	Gross β (Bq/L)	H-3 (Bq/L)	Sr-90 (Bq/L)	Cs-134 (Bq/L)	Cs-137 (Bq/L)
Northern Part of Unit 1-4 Water Intake Canal (North of Eastern Wave Breaker), 1F							
North of Unit 5/6 Drainage Outlet ※1 (T-1), 1F							
Near Southern Drainage Outlet ※2 (T-2), 1F							
Concentration Limit Required by Law ※3				6.0E+04	3.0E+01	6.0E+01	9.0E+01

・Half life of each nuclide: H-3 (Approx. 12 years), Sr-90 (Approx. 29 years), Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "$3.1x10^{0}$" and equals 3.1, and "3.1E-01" means "$3.1x10^{-1}$" and equals 0.31.
・Analysis results except for Gross α have already been released.

※1 Approx. 30 m north from Unit 5/6 Drainage Outlet (Sr-90 was analyzed by *[Name of Analysis Laboratory]* .)
※2 Approx. 320 m south from Unit 1-4 Drainage Outlet (Sr-90 was analyzed by *[Name of Analysis Laboratory]* .)
※3 Concentration limit specified by the Regulation Concerning the Security of the Reactor Facilities at the Fukushima Daiichi Nuclear Power Station and the Protection of Specific Nuclear Fuel Material
(the concentration limit in the water outside of surrounding monitored areas in the section 6 of the appendix 1 : Limit specified by the Regulation is converted from Bq/cm^3 to Bq/L in the table.)

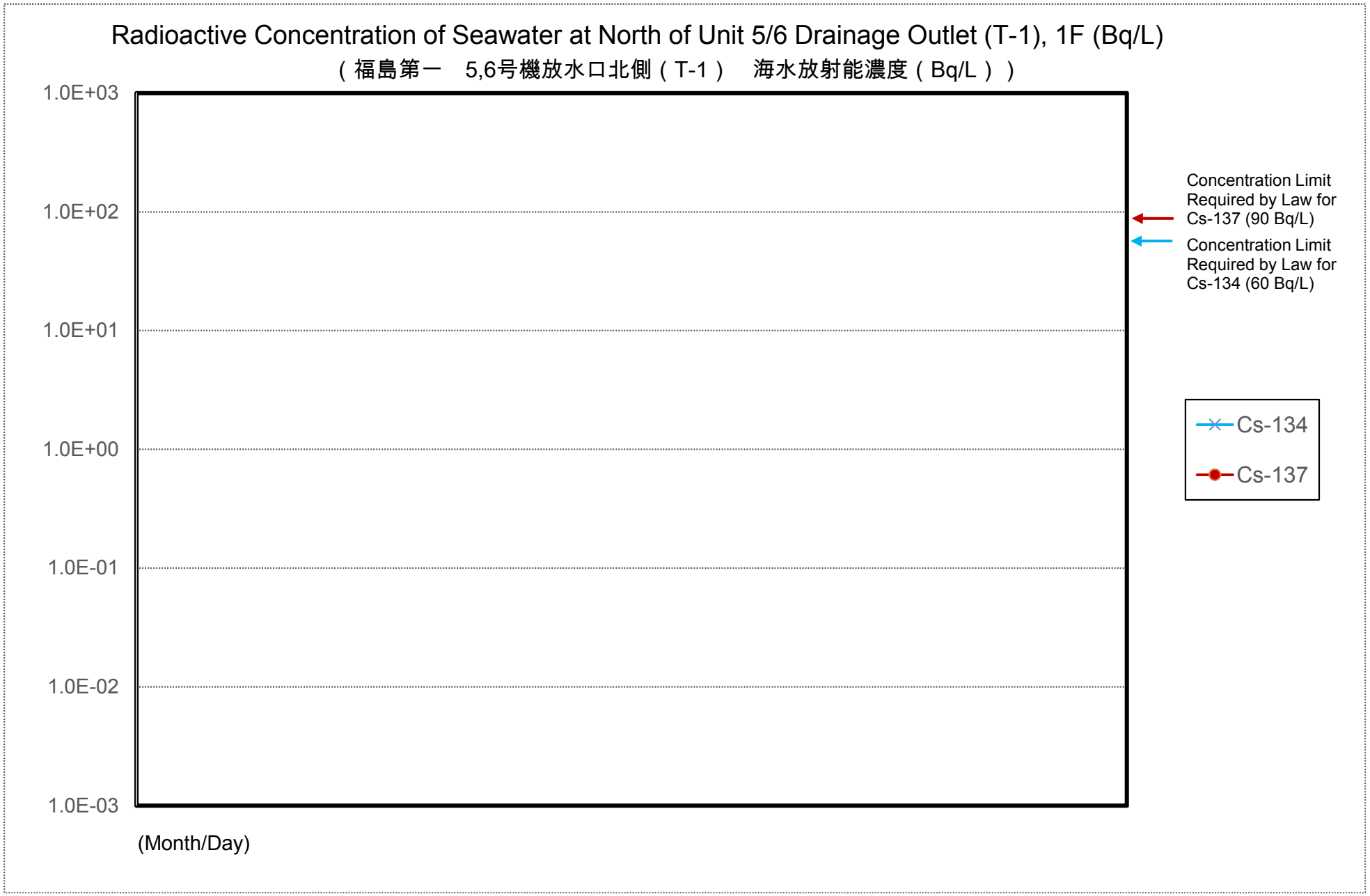
[Date]
Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi D&D Engineering Company

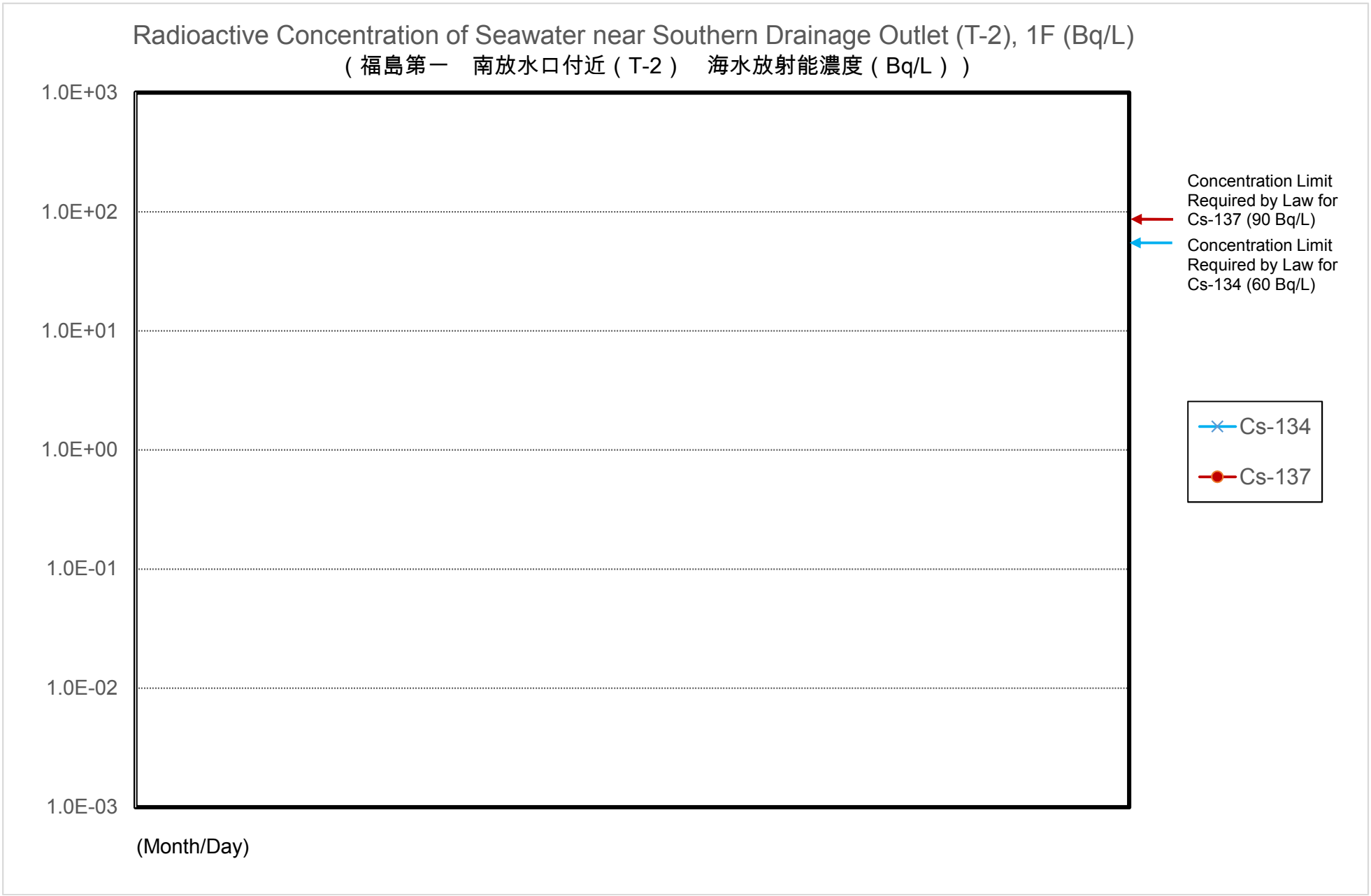
Analysis Results of Seawater
<In the Port, near Drainage Outlets> (Detailed Analysis of Cs)

Place of Sampling	Date and Time of Sampling	Analysis Item	
		Cs-134 (Bq/L)	Cs-137 (Bq/L)
Port Entrance (T-0), 1F			
North of Unit 5/6 Drainage Outlet ※1 (T-1), 1F			
Near Southern Drainage Outlet ※2 (T-2), 1F			
Concentration Limit Required by Law ※3		6.0E+01	9.0E+01

・Half life of each nuclide: Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "3.1×10^{0}" and equals 3.1, and "3.1E-01" means "3.1×10^{-1}" and equals 0.31.
・Analysed by *[Name of Analysis Laboratory].*
・Detailed analysis results using the ammonium phosphomolybdate adsorption collection method are shown.

※1 Approx. 30 m north from Unit 5/6 Drainage Outlet
※2 Approx. 320 m south from Unit 1-4 Drainage Outlet
※3 Concentration limit specified by the Regulation Concerning the Security of the Reactor Facilities at the Fukushima Daiichi Nuclear Power Station and the Protection of Specific Nuclear Fuel Material
(the concentration limit in the water outside of surrounding monitored areas in the section 6 of the appendix 1 : Limit specified by the Regulation is converted from Bq/cm^3 to Bq/L in the table.)


Radioactive Concentration of Seawater at North of Unit 5/6 Drainage Outlet (T-1), 1F (Bq/L)
（福島第一　5,6号機放水口北側（T-1）　海水放射能濃度（Bq/L））
1.0E+03
1.0E+02
1.0E+01
1.0E+00
1.0E-01
1.0E-02
1.0E-03
(Month/Day)
Concentration Limit Required by Law for Cs-137 (90 Bq/L)
Concentration Limit Required by Law for Cs-134 (60 Bq/L)
Cs-134
Cs-137


Radioactive Concentration of Seawater near Southern Drainage Outlet (T-2), 1F (Bq/L)
（福島第一　南放水口付近（T-2）　海水放射能濃度（Bq/L））
1.0E+03
1.0E+02
1.0E+01
1.0E+00
1.0E-01
1.0E-02
1.0E-03
(Month/Day)
Concentration Limit Required by Law for Cs-137 (90 Bq/L)
Concentration Limit Required by Law for Cs-134 (60 Bq/L)
Cs-134
Cs-137

[Date]
Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater <1.5 km Offshore of 1F Site> ([H-3・]γ)

Place of Sampling	Date and Time of Sampling	Analysis Item		
		[H-3] [(Bq/L)]	Cs-134 (Bq/L)	Cs-137 (Bq/L)
1.5 km Northern Offshore of 1F Site (T-A1)				
1.5 km Offshore of 1F Site (T-A2)				
1.5 km Southern Offshore of 1F Site (T-A3)				
WHO Guidelines for Drinking-water Quality※1		[1.0E+04]	1.0E+01	1.0E+01

・Seawater is sampled from the surface layer.
・Half life of each nuclide: [H-3 (Approx. 12 years),] Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "3.1×10^{0}" and equals 3.1, and "3.1E-01" means "3.1×10^{-1}" and equals 0.31.

[・Analysis results except for H-3 have already been released.]

※1 Guideline levels for [H-3,]Cs-134 and Cs-137 in WHO Guidelines for Drinking-water Quality

・For the evaluation of the analyis results, please refer to the "Status of the Fukushima Daiichi NPS (Daily Report)" *(in Japanese only)*.
https://www.tepco.co.jp/press/report/

[Date]

Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater <Coastal Waters> (γ)

Place of Sampling	Date and Time of Sampling	Analysis Item	
		Cs-134 (Bq/L)	Cs-137 (Bq/L)
Near Northern Drainage Outlet ※1 (T-3), 2F			
Near Iwasawa Seashore ※2 (T-4), 2F			
South of Ukedo Port ※3 (T-6)			
Concentration Limit Required by Law ※4		6.0E+01	9.0E+01

・Half life of each nuclide: Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "$3.1x10^{0}$" and equals 3.1, and "3.1E-01" means "$3.1x10^{-1}$" and equals 0.31.
・Detailed analysis results using the ammonium phosphomolybdate adsorption collection method are shown.
・Analysed by *[Name of Analysis Laboratory]* .

※1 Near Unit 3/4 Drainage Outlet of the Fukushima Daini NPS (Approx. 10 km from the Fukushima Daiichi NPS)
※2 Approx. 7 km south from Unit 1/2 Drainage Outlet of the Fukushima Daini NPS (Approx. 16 km from the Fukushima Daiichi NPS)
※3 Approx. 5.5 km north from Unit 5/6 Drainage Outlet of the Fukufhima Daiichi NPS
※4 Concentration limit specified by the Regulation Concerning the Security of the Reactor Facilities at the Fukushima Daiichi Nuclear Power Station and the Protection of Specific Nuclear Fuel Material
(the concentration limit in the water outside of surrounding monitored areas in the section 6 of the appendix 1 :
Limit specified by the Regulation is converted from Bq/cm^3 to Bq/L in the table.)

[Date]

Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater <Coastal Waters> (Gross β・H-3・γ)

Place of Sampling	Date and Time of Sampling	Analysis Item			
		Gross β (Bq/L)	H-3 (Bq/L)	Cs-134 (Bq/L)	Cs-137 (Bq/L)
Near Northern Drainage Outlet ※1 (T-3), 2F					
South of Ukedo Port ※2 (T-6)					
Concentration Limit Required by Law ※3			6.0E+04	6.0E+01	9.0E+01

・Half life of each nuclide: H-3 (Approx. 12 years), Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "$3.1x10^{0}$" and equals 3.1, and "3.1E-01" means "$3.1x10^{-1}$" and equals 0.31.
・Analysis results except for gross β and H-3 have already been released.
・Analysed by *[Name of Analysis Laboratory]*.

※1 Near Unit 3/4 Drainage Outlet of the Fukushima Daini NPS (Approx. 10 km from the Fukushima Daiichi NPS)
※2 Approx. 5.5 km north from Unit 5/6 Drainage Outlet of the Fukufhima Daiichi NPS
※3 Concentration limit specified by the Regulation Concerning the Security of the Reactor Facilities at the Fukushima Daiichi Nuclear Power Station and the Protection of Specific Nuclear Fuel Material
(the concentration limit in the water outside of surrounding monitored areas in the section 6 of the appendix 1 : Limit specified by the Regulation is converted from Bq/cm^3 to Bq/L in the table.)

[Date]

Tokyo Electric Power Company Holdings, Inc.

Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater <Offshore> (Gross β・H-3・γ)

Place of Sampling	Date and Time of Sampling	Analysis Item			
		Gross β (Bq/L)	H-3 (Bq/L)	Cs-134 ※1 (Bq/L)	Cs-137 ※1 (Bq/L)
Surface at 15 km Offshore of 1F Site (T-5)					
Surface at 3 km Offshore of Ukedo River (T-D1)					
Surface at 3 km Offshore of 1F Site (T-D5)					
Surface at 3 km Offshore of 2F Site (T-D9)					
Concentration Limit Required by Law ※2			6.0E+04	6.0E+01	9.0E+01

・Half life of each nuclide: H-3 (Approx. 12 years), Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "$3.1x10^{0}$" and equals 3.1, and "3.1E-01" means "$3.1x10^{-1}$" and equals 0.31.
・Analysis results except for gross β and H-3 have already been released.

※1 Analysed by *[Name of Analysis Laboratory]* .

※2 Concentration limit specified by the Regulation Concerning the Security of the Reactor Facilities at the Fukushima Daiichi Nuclear Power Station and the Protection of Specific Nuclear Fuel Material
(the concentration limit in the water outside of surrounding monitored areas in the section 6 of the appendix 1 : Limit specified by the Regulation is converted from Bq/cm^3 to Bq/L in the table.)

[Date]
Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater <Offshore> (Gross α・Gross β・H-3・Sr・γ)

Place of Sampling	Date and Time of Sampling	Analysis item					
		Gross α (Bq/L)	Gross β (Bq/L)	H-3 (Bq/L)	Sr-90 ※1 (Bq/L)	Cs-134 ※2 (Bq/L)	Cs-137 ※2 (Bq/L)
Surface at 15 km Offshore of 1F Site (T-5)							
Surface at 3 km Offshore of Ukedo River (T-D1)							
Surface at 3 km Offshore of 1F Site (T-D5)							
Surface at 3 km Offshore of 2F Site (T-D9)							
Concentration Limit Required by Law ※3				6.0E+04	3.0E+01	6.0E+01	9.0E+01

・Half life of each nuclide: H-3 (Approx. 12 years), Sr-90 (Approx. 29 years), Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "3.1×10^{0}" and equals 3.1, and "3.1E-01" means "3.1×10^{-1}" and equals 0.31.
・Analysis results except for gross α, gross β, H-3 and Sr-90 have already been released.
※1 Analysed by *[Name of Analysis Laboratory]* .
※2 Analysed by *[Name of Analysis Laboratory]* .
※3 Concentration limit specified by the Regulation Concerning the Security of the Reactor Facilities at the Fukushima Daiichi Nuclear Power Station and the Protection of Specific Nuclear Fuel Material
(the concentration limit in the water outside of surrounding monitored areas in the section 6 of the appendix 1 : Limit specified by the Regulation is converted from Bq/cm^3 to Bq/L in the table.)

[Date]

Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater <Offshore> (γ) Weekly

Place of Sampling		Date and Time of Sampling	Analysis Item	
			Cs-134 (Bq/L)	Cs-137 (Bq/L)
3 km Offshore of Odaka Ward ※1 (T-14)	Surface			
	Bottom			
3 km Offshore of Ukedo River ※2 (T-D1)	Surface			
	Bottom			
3 km Offshore of 1F Site ※2 (T-D5)	Surface			
	Bottom			
3 km Offshore of 2F Site ※2 (T-D9)	Surface			
	Bottom			
15 km Offshore of 1F Site ※2 (T-5)	Surface			
	Bottom			
3 km Offshore of Iwasawa Seashore ※2 (T-11)	Surface			
	Bottom			
Concentration Limit Required by Law ※3			6.0E+01	9.0E+01

・Half life of each nuclide: Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "3.1×10^{0}" and equals 3.1, and "3.1E-01" means "3.1×10^{-1}" and equals 0.31.
・Detailed analysis results using the ammonium phosphomolybdate adsorption collection method are shown.
(starting from the publication on May 14, 2012).

※1 Analysed by *[Name of Analysis Laboratory].*

※2 Analysed by *[Name of Analysis Laboratory].*

※3 Concentration limit specified by the Regulation Concerning the Security of the Reactor Facilities at the Fukushima Daiichi Nuclear Power Station and the Protection of Specific Nuclear Fuel Material
(the concentration limit in the water outside of surrounding monitored areas in the section 6 of the appendix 1 : Limit specified by the Regulation is converted from Bq/cm^3 to Bq/L in the table.)

[Date]

Tokyo Electric Power Company Holdings, Inc.

Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater <Offshore> (γ) Monthly

Place of Sampling		Date and Time of Sampling	Analysis Item	
			Cs-134 (Bq/L)	Cs-137 (Bq/L)
15 km Offshore of Iwasawa Seashore ※1 (T-7)	Surface			
	Bottom			
3 km Offshore of Onahama Port ※1 (T-18)	Surface			
	Bottom			
5 km Offshore of Numanouchi ※1 (T-M10)	Surface			
	Bottom			
3 km Offshore of Northern Part of Iwaki City ※1 (T-12)	Surface			
	Bottom			
1 km Offshore of Natsui River ※1 (T-17-1)	Surface			
	Bottom			
3 km Offshore of Toyoma ※1 (T-20)	Surface			
	Bottom			
1 km Offshore of Niida River ※1 (T-13-1)	Surface			
	Bottom			
3 km Offshore of Soma ※1 (T-22)	Surface			
	Bottom			
5 km Offshore of Kashima ※1 (T-MA)	Surface			
	Bottom			
Around 1 km Offshore of Ota River ※2 (T-S1)	Surface			
	Bottom			
Around 3 km Offshore of Ukedo River ※1 (T-S3)	Surface			
	Bottom			
Around 3 km Offshore of 1F Site ※1 (T-S4)	Surface			
	Bottom			
Around 2 km Offshore of Kido River ※1 (T-S5)	Surface			
	Bottom			
Around 2 km Offshore of 2F Site ※1 (T-S7)	Surface			
	Bottom			
Around 4 km Offshore of Kuma River ※1 (T-S8)	Surface			
	Bottom			
Around 15 km Offshore of Odaka Ward ※1 (T-B1)	Surface			
	Bottom			
Around 18 km Offshore of Ukedo River ※1 (T-B2)	Surface			
	Bottom			
Around 10 km Offshore of 1F Site ※1 (T-B3)	Surface			
	Bottom			
Around 10 km Offshore of 2F Site ※1 (T-B4)	Surface			
	Bottom			
Concentration Limit Required by Law ※3			6.0E+01	9.0E+01

・Half life of each nuclide: Cs-134 (Approx. 2 years), Cs-137 (Approx. 30 years)

・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).

・"-" indicates that the item was not included in the measurement or the sampling was stopped.

・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "$3.1x10^{0}$" and equals 3.1, and "3.1E-01" means "$3.1x10^{-1}$" and equals 0.31.

・Detailed analysis results using the ammonium phosphomolybdate adsorption collection method are shown (starting from the publication on May 14, 2012).

※1 Analysed by *[Name of Analysis Laboratory]*.

※2 Analysed by *[Name of Analysis Laboratory]*.

※3 Concentration limit specified by the Regulation Concerning the Security of the Reactor Facilities at the Fukushima Daiichi Nuclear Power Station and the Protection of Specific Nuclear Fuel Material
(the concentration limit in the water outside of surrounding monitored areas in the section 6 of the appendix 1 : Limit specified by the Regulation is converted from Bq/cm^3 to Bq/L in the table.)

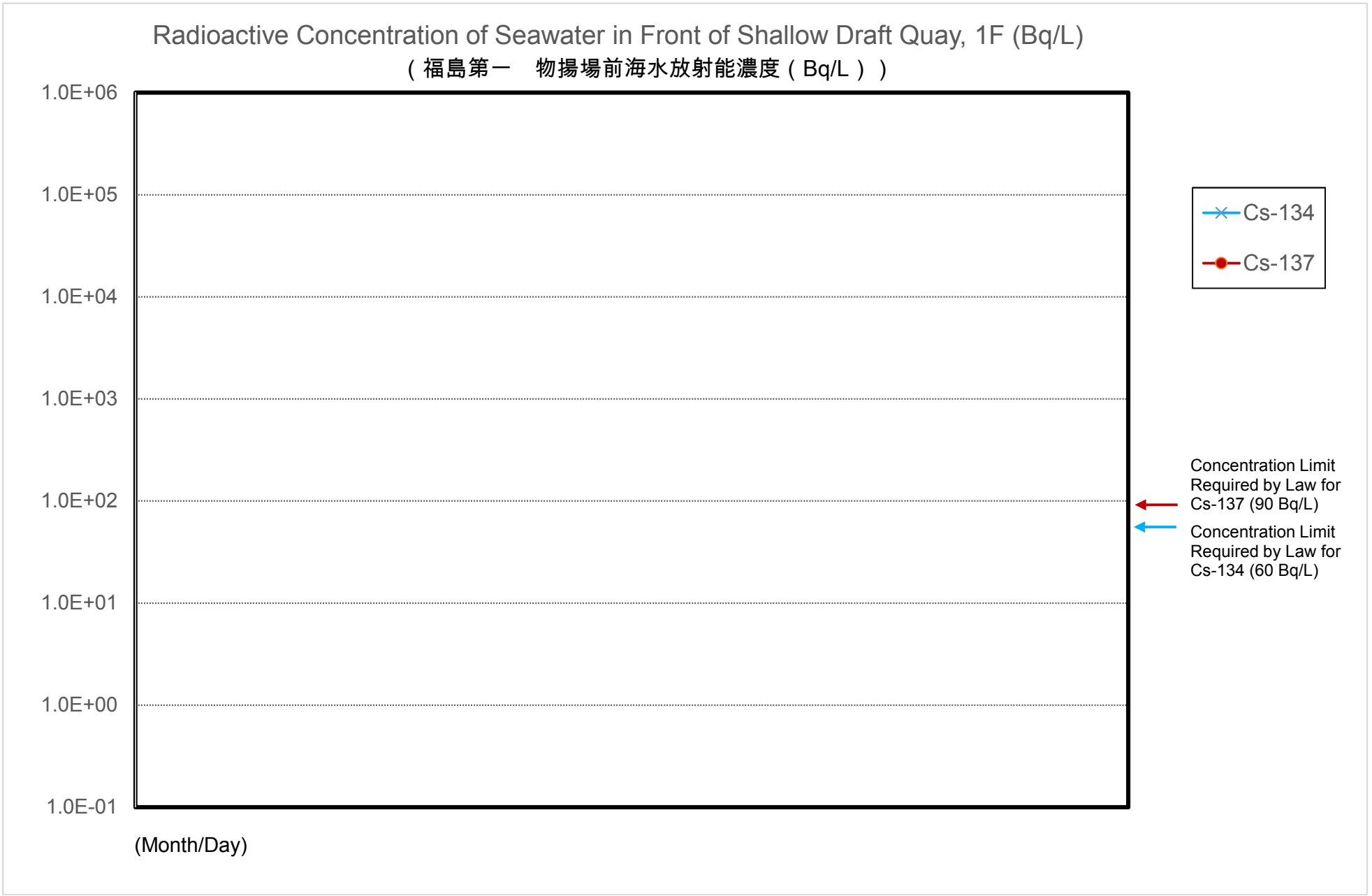
[Date]
Tokyo Electric Power Company Holdings, Inc.
Fukushima Daiichi D&D Engineering Company

Analysis Results of Seawater (Pu)

Place of Sampling	Date and Time of Sampling	Analysis Item	
		Pu-238 (Bq/L)	Pu-239+Pu-240 (Bq/L)
Northern Part of Unit 1-4 Water Intake Canal (North of Eastern Wave Breaker) ※1, 1F			
North of Unit 5/6 Drainage Outlet ※2 (T-1), 1F			
Near Southern Drainage Outlet ※2 (T-2), 1F			
Surface at 15 km Offshore of 1F Site ※1 (T-5)			
Surface at 3 km Offshore of Ukedo River ※1 (T-D1)			
Surface at 3 km Offshore of 1F Site ※1 (T-D5)			
Surface at 3 km Offshore of 2F Site ※1 (T-D9)			
Range of past measurement values in the sea near 1F and 2F Sites (From FY2001 to FY2010) ※3		—	ND～1.3E-05

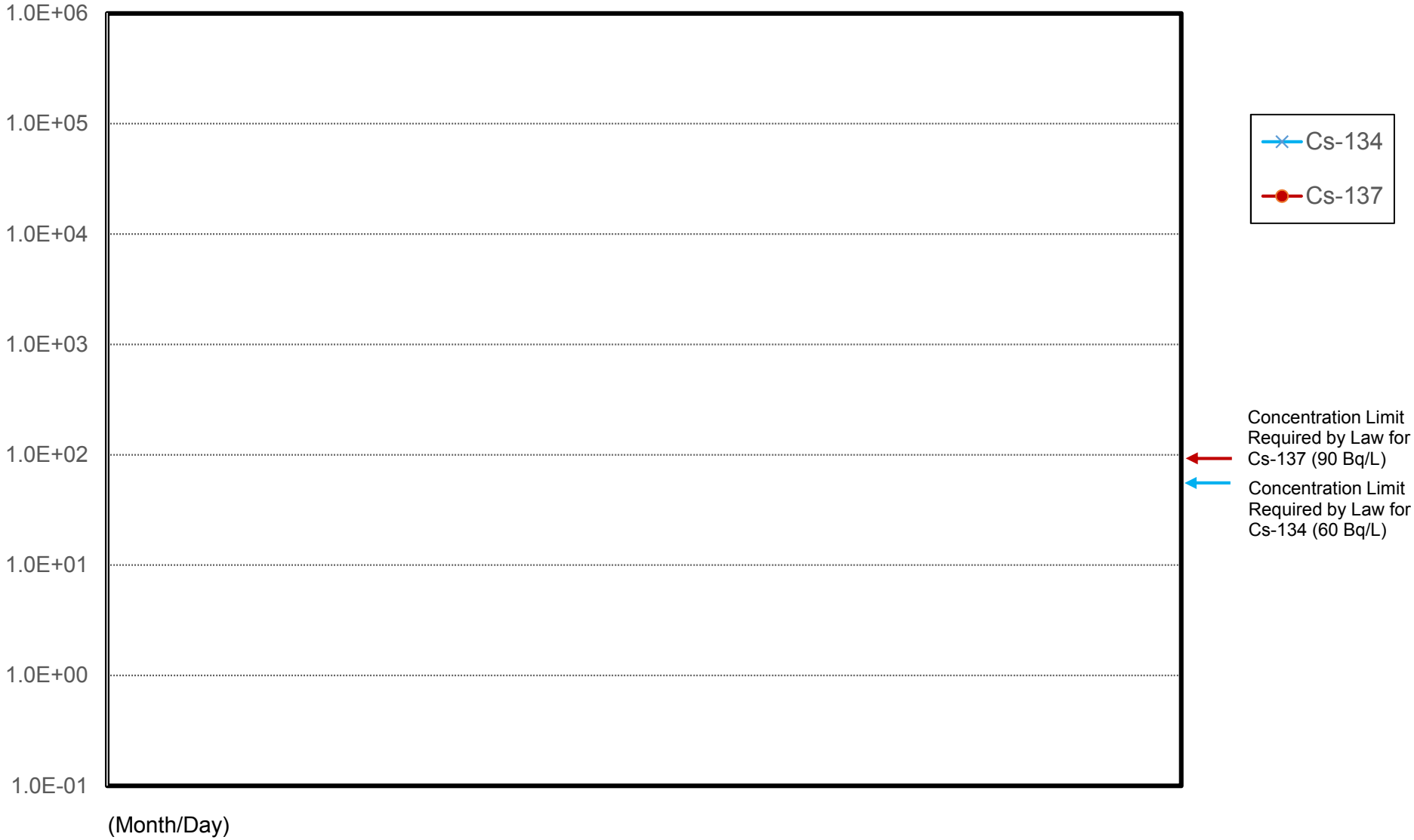
・Half life of each nuclide: Pu-238 (Approx. 88 years), Pu-239 (Approx. 24,000 years), Pu-240 (Approx. 6,600 years)
・Inequality sign (<: less than) indicates that measurement result is less than the detection limit (ND).
・"-" indicates that the item was not included in the measurement or the sampling was stopped.
・Values are expressed in exponential notation. For example, "3.1E+01" means "3.1×10^{1}" and equals 31.
Similarly, "3.1E+00" means "3.1×10^{0}" and equals 3.1, and "3.1E-01" means "3.1×10^{-1}" and equals 0.31.
・Analyses are conducted once in six months at the sampling places above except for the northern part of Unit 1-4 Water Intake Canal (north of Eastern Wave Breaker) at 1F.

※1 Analysed by *[Name of Analysis Laboratory]*.
※2 Analysed by *[Name of Analysis Laboratory]*.
※3 Source: "FY2011 Report on the Results of Radioactivity Measurements in the Environment Surrounding the Nuclear Power Stations" (Liaison Committee on the Technology for Securing Safety of the Nuclear Power Stations in Fukushima Prefecture)


Radioactive Concentration of Seawater in Front of Shallow Draft Quay, 1F (Bq/L)
（福島第一　物揚場前海水放射能濃度（Bq/L））
1.0E+06
1.0E+05
1.0E+04
1.0E+03
1.0E+02
1.0E+01
1.0E+00
1.0E-01
(Month/Day)
Cs-134
Cs-137
Concentration Limit Required by Law for Cs-137 (90 Bq/L)
Concentration Limit Required by Law for Cs-134 (60 Bq/L)

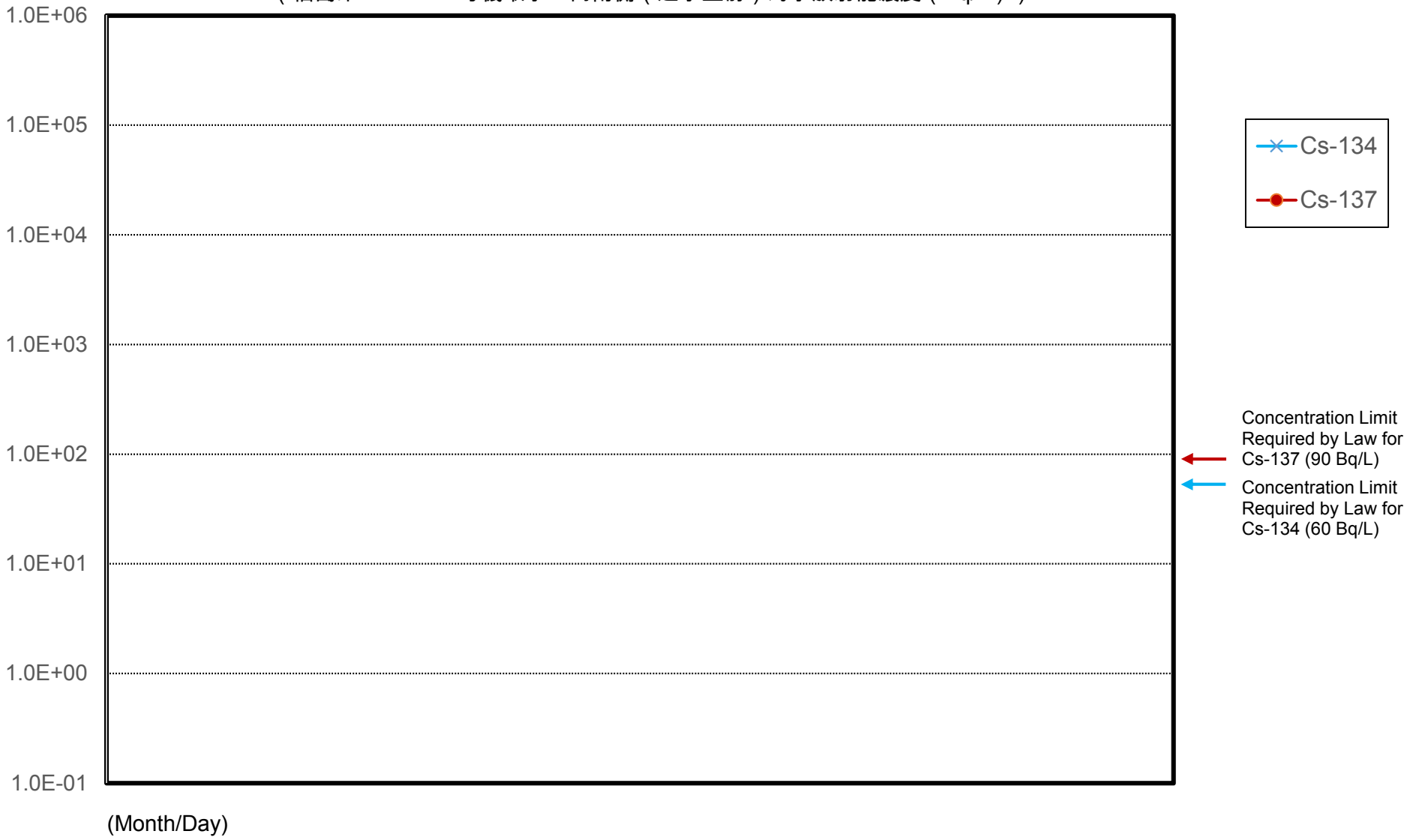
Radioactive Concentration of Seawater at Northern Part Unit 1-4 Water Intake Canal (North of Eastern Wave Breaker), 1F (Bq/L)

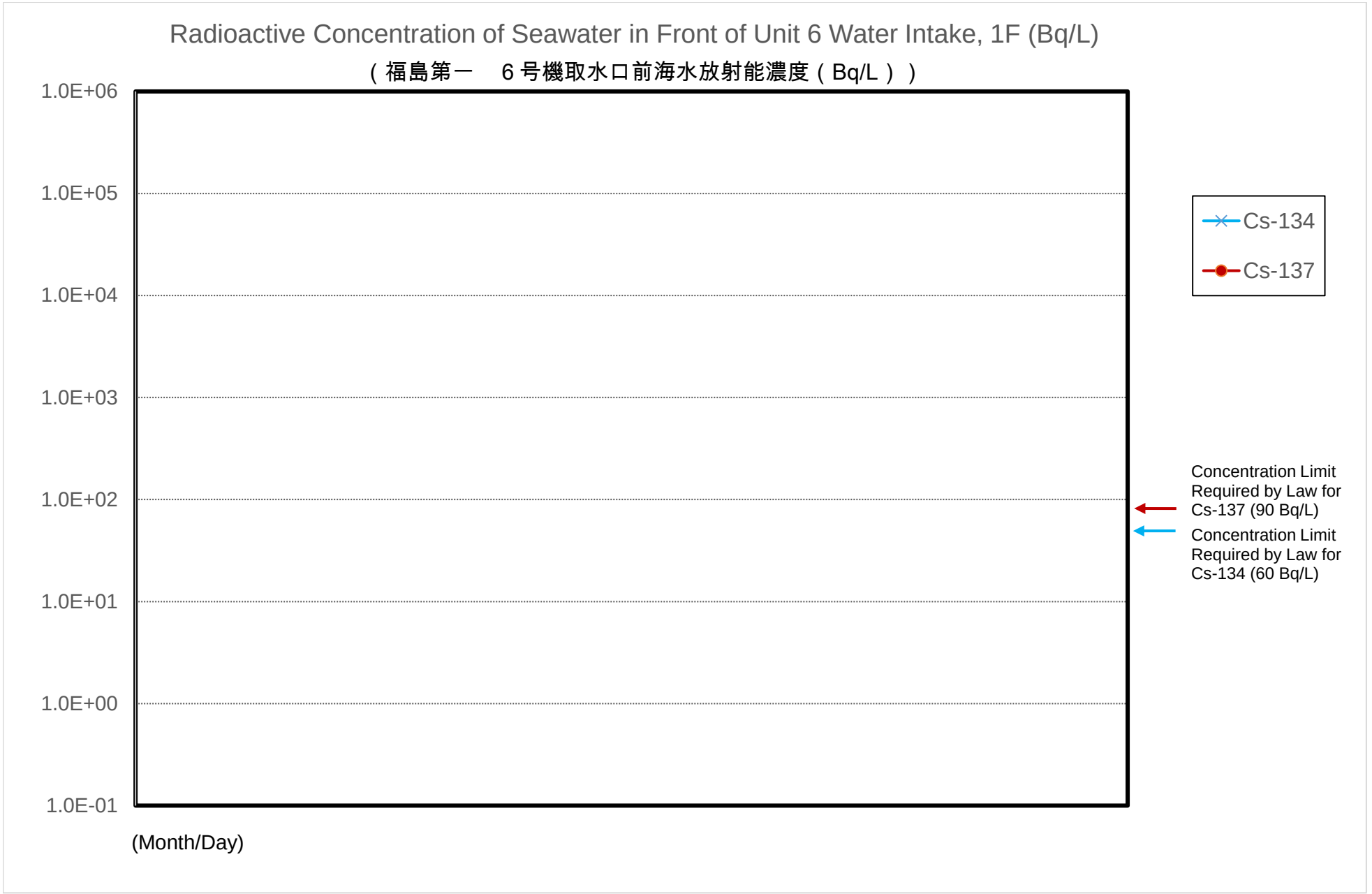
（福島第一　１～4号機取水口内北側（東波除堤北側）海水放射能濃度（Bq/L））

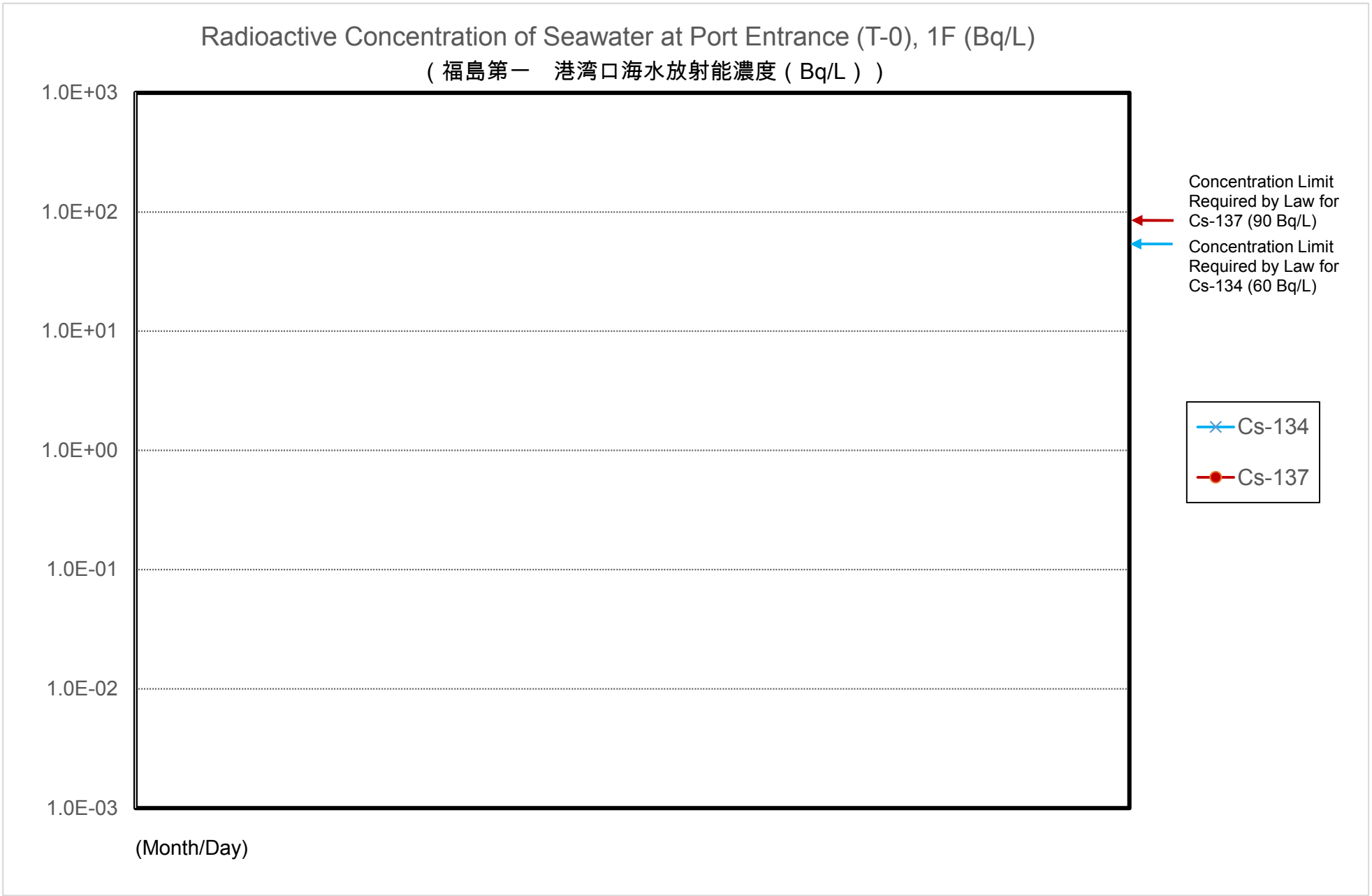


Radioactive Concentration of Seawater at Southern Part Unit 1-4 Water Intake Canal (In Front of the Impermeable Wall), 1F (Bq/L)

（福島第一　１～4号機取水口内南側（遮水壁前）海水放射能濃度（Bq/L））




Radioactive Concentration of Seawater in Front of Unit 6 Water Intake, 1F (Bq/L)
（福島第一　6号機取水口前海水放射能濃度（Bq/L））
1.0E+06
1.0E+05
1.0E+04
1.0E+03
1.0E+02
1.0E+01
1.0E+00
1.0E-01
(Month/Day)
Cs-134
Cs-137
Concentration Limit Required by Law for Cs-137 (90 Bq/L)
Concentration Limit Required by Law for Cs-134 (60 Bq/L)


Radioactive Concentration of Seawater at Port Entrance (T-0), 1F (Bq/L)
（福島第一　港湾口海水放射能濃度（Bq/L））
1.0E+03
1.0E+02
1.0E+01
1.0E+00
1.0E-01
1.0E-02
1.0E-03
(Month/Day)
Concentration Limit Required by Law for Cs-137 (90 Bq/L)
Concentration Limit Required by Law for Cs-134 (60 Bq/L)
Cs-134
Cs-137