

Reference

Nuclide Analysis Results of Radioactive Materials in Seawater <Coast, Fukushima Daiichi Nuclear Power Station>

(Data summarized on May 14)

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)		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 of Sampling	May 13, 2012 8:30 AM		May 13, 2012 8:15 AM		
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	
I-131 (approx. 8 days)	ND	-	ND	-	40
Cs-134 (approx. 2 years)	ND	-	1.4	0.02	60
Cs-137 (approx. 30 years)	ND	-	2.4	0.03	90

* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm³ 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.

* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.54Bq/L, Cs-134: approx. 1.3Bq/L, Cs-137: approx. 1.6Bq/L

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Nuclide Analysis Results of Radioactive Materials in Seawater <offshore 1/4>

(Data summarized on May 14)

Place of Sampling (No.)	*1				*1				*2				② 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)
	3km Offshore of Odaka Ward (T-14)		3km Offshore of Odaka Ward (T-14)		3km offshore of Ukedo river (T-D1)		3km offshore of Ukedo river (T-D1)						
Time of Sampling	UpperLayer	Lower Layer	UpperLayer	Lower Layer	UpperLayer	Lower Layer	UpperLayer	Lower Layer	UpperLayer	Lower Layer	UpperLayer	Lower Layer	
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (approx. 2 years)	0.049	0.00	0.072	0.00	0.024	0.00	0.034	0.00	0.066	0.00	0.067	0.00	60
Cs-137 (approx. 30 years)	0.068	0.00	0.098	0.00	0.034	0.00	0.046	0.00	0.091	0.00	0.094	0.00	90

Place of Sampling (No.)	*2				*2				*1				② 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)
	3km Offshore of 1F (T-D5)		3km Offshore of 2F (T-D9)		15km Offshore of 1F(T-5)		15km Offshore of 1F(T-5)						
Time of Sampling	UpperLayer	Lower Layer	UpperLayer	Lower Layer	UpperLayer	Lower Layer	UpperLayer	Lower Layer	UpperLayer	Lower Layer	UpperLayer	Lower Layer	
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (approx. 2 years)	0.084	0.00	0.20	0.00	0.071	0.00	0.071	0.00	0.028	0.00	0.026	0.00	60
Cs-137 (approx. 30 years)	0.11	0.00	0.27	0.00	0.096	0.00	0.098	0.00	0.042	0.00	0.039	0.00	90

* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm³ to Bq/L.

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

* Analyzed by : *1 THE GENERAL ENVIRONMENTAL TECHNOS Co., LTD., *2 Tokyo Electric Power Environmental Engineering Co., Inc.

* "ND" means the sampled data is below measurable limit.

Cs-134: approx. ○Bq/L, Cs-137: approx. ○Bq/L

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Nuclide Analysis Results of Radioactive Materials in Seawater <offshore 2/4>

(Data summarized on May 14)

Place of Sampling (No.)	Iwasawa Seashore offshore 3km (T-11)				3km offshore of North of Iwaki City (T-12)				Natsui River offshore 1km (T-17-1)				② 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)
	Upper Layer		Lower Layer		Upper Layer		Lower Layer		Upper Layer		Lower Layer		
Time of Sampling	Apr 07. 2012 8:05 AM		Apr 07. 2012 8:05 AM		Apr 10. 2012 7:20 AM		Apr 10. 2012 7:20 AM		Apr 10. 2012 6:50 AM		Apr 10. 2012 6:50 AM		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (approx. 2 years)	0.19	0.00	0.23	0.00	0.086	0.00	0.080	0.00	0.085	0.00	0.061	0.00	60
Cs-137 (approx. 30 years)	0.26	0.00	0.30	0.00	0.12	0.00	0.11	0.00	0.11	0.00	0.088	0.00	90

Place of Sampling (No.)	3km offshore of Toyoma (T-20)				Around Offshore of Kido River 2km (T-S5)				Around Offshore of Kido River 2km (T-S5)				② 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)
	Upper Layer		Lower Layer		Upper Layer		Lower Layer		Upper Layer		Lower Layer		
Time of Sampling	Apr 10, 2012 6:20 AM		Apr 10, 2012 6:20 AM		Mar 29, 2012 6:50 AM		N/A		Apr 6, 2012 6:33 AM		Apr 6, 2012 6:33 AM		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (approx. 2 years)	0.075	0.00	0.055	0.00	0.13	0.00	-	-	0.20	0.00	0.24	0.00	60
Cs-137 (approx. 30 years)	0.10	0.00	0.073	0.00	0.17	0.00	-	-	0.27	0.00	0.32	0.00	90

* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm³ to Bq/L.

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

* Analyzed by THE GENERAL ENVIRONMENTAL TECHNOS Co., LTD.,

* "ND" means the sampled data is below measurable limit.

Cs-134: approx. ○Bq/L, Cs-137: approx. ○Bq/L

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Nuclide Analysis Results of Radioactive Materials in Seawater <offshore 3/4>

(Data summarized on May 14)

Place of Sampling (No.)	Around Offshore of Kido River 5km (T-S6)				Around Offshore of Kido River 5km (T-S6)								② 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)
	Upper Layer		Lower Layer		Upper Layer		Lower Layer						
Time of Sampling	Mar 29. 2012 7:20 AM		N/A		Apr 10. 2012 6:25 AM		Apr 10. 2012 6:25 AM						
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (approx. 2 years)	0.060	0.00	-	-	0.061	0.00	0.039	0.00					60
Cs-137 (approx. 30 years)	0.079	0.00	-	-	0.085	0.00	0.054	0.00					90

Place of Sampling (No.)													② 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 of Sampling													
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (approx. 2 years)													60
Cs-137 (approx. 30 years)													90

* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm³ to Bq/L.

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

* Analyzed by THE GENERAL ENVIRONMENTAL TECHNOS Co., LTD.,

* "ND" means the sampled data is below measurable limit.

Cs-134: approx. ○Bq/L, Cs-137: approx. ○Bq/L

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Nuclide Analysis Results of Radioactive Materials in Seawater <offshore 4/4>

(Data summarized on May 14)

Place of Sampling (No.)	*2 1F site offshore 1km (T-E1)		*1 2F site offshore 1km (T-H1)		*1 2F site offshore 16km (T-G4)								② 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)
	Upper Layer		Upper Layer		Upper Layer								
Time of Sampling	Mar 23. 2012 10:13 AM		Mar 23. 2012 12:01 PM		Mar 23. 2012 8:17 AM								
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (approx. 2 years)	0.040	0.00	0.064	0.00	0.019	0.00							60
Cs-137 (approx. 30 years)	0.053	0.00	0.085	0.00	0.026	0.00							90

Place of Sampling (No.)													② 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 of Sampling													
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (approx. 2 years)													60
Cs-137 (approx. 30 years)													90

* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm³ to Bq/L.

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

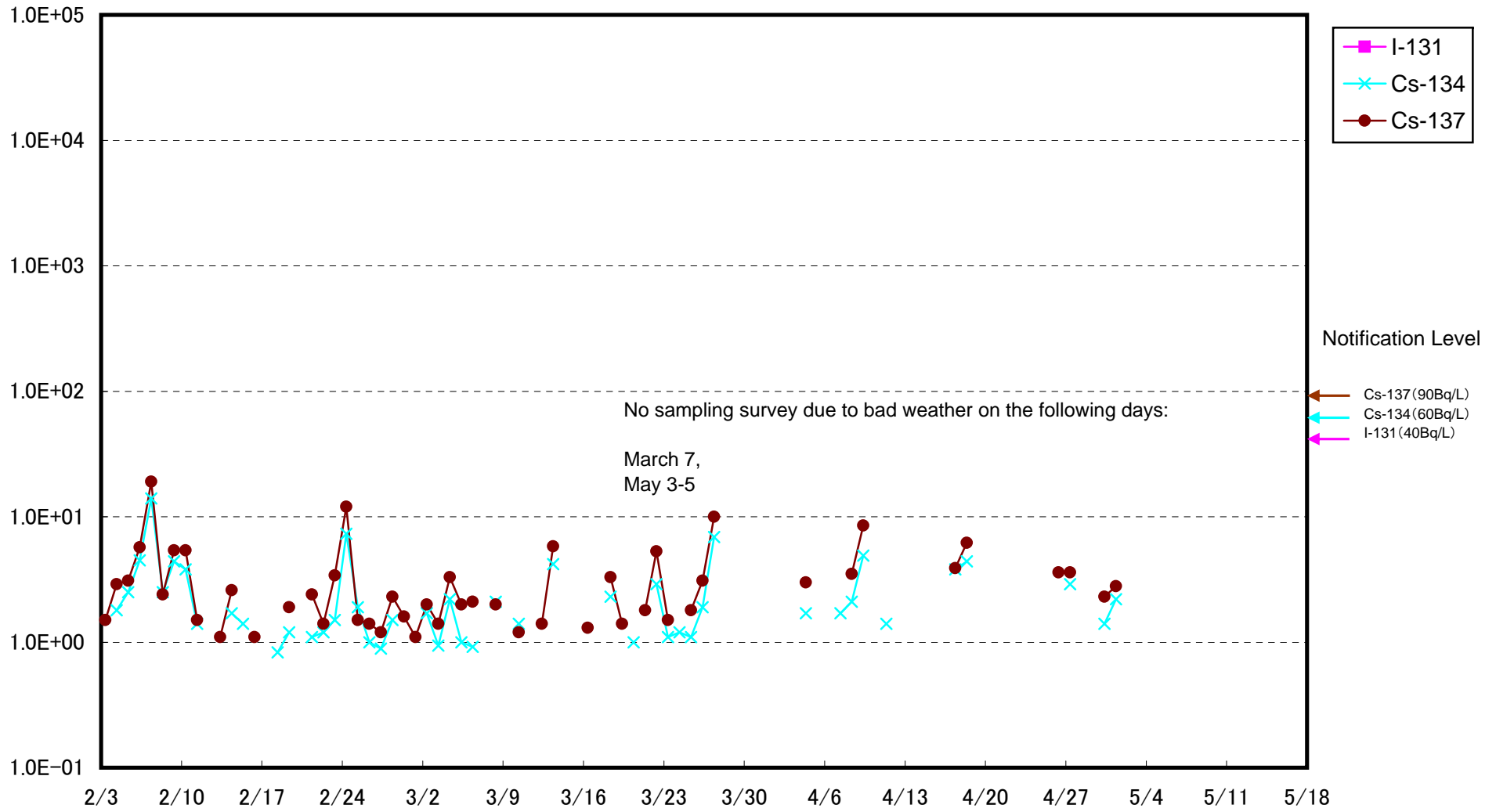
* Analyzed by : *1 THE GENERAL ENVIRONMENTAL TECHNOS Co., LTD., *2 Tokyo Electric Power Environmental Engineering Co., Inc.

* "ND" means the sampled data is below measurable limit.

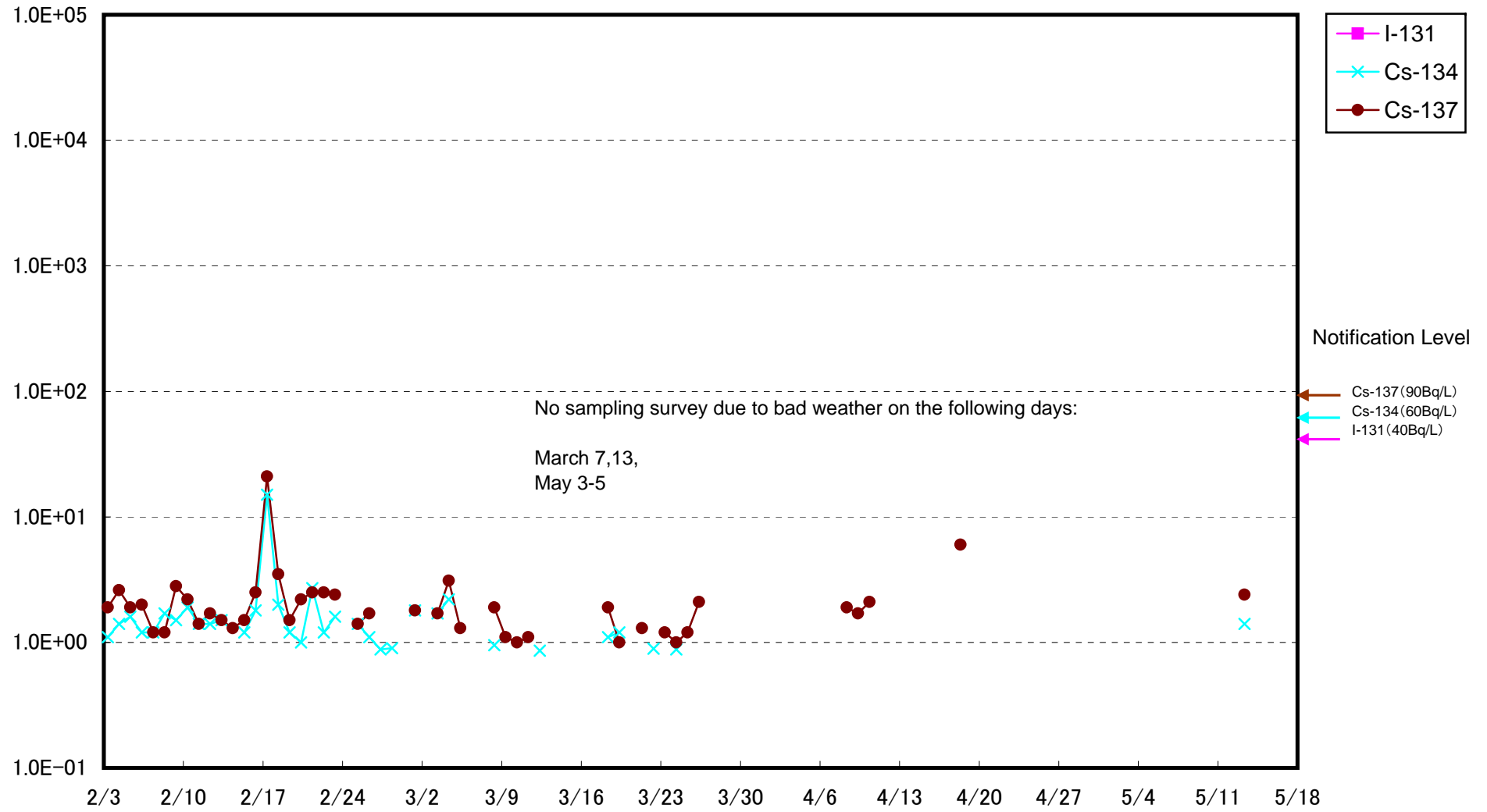
Cs-134: approx. 0Bq/L, Cs-137: approx. 0Bq/L

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

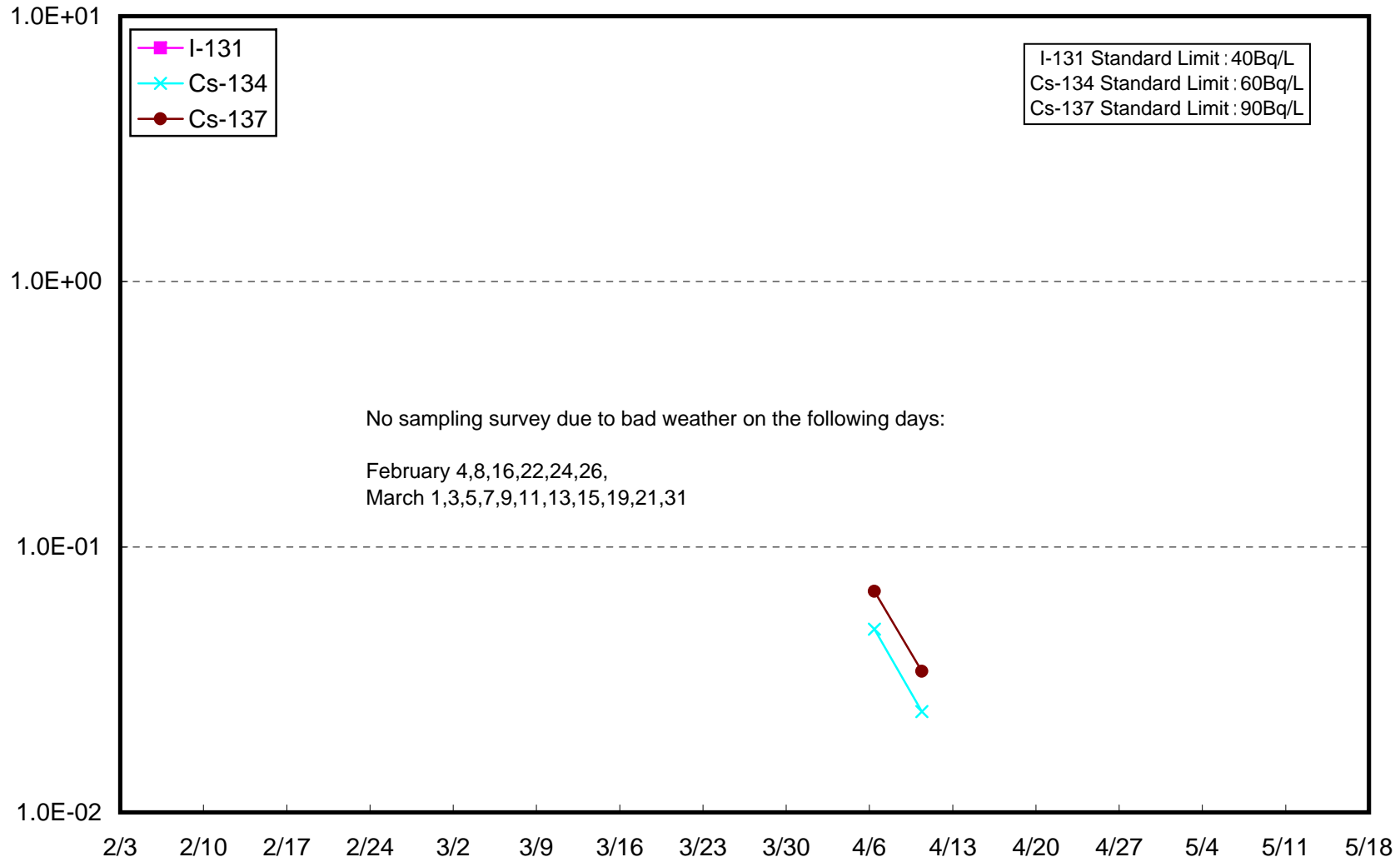
Radioactivity Density of Seawater at North of 1F5-6 Discharge Channel (Bq/L)



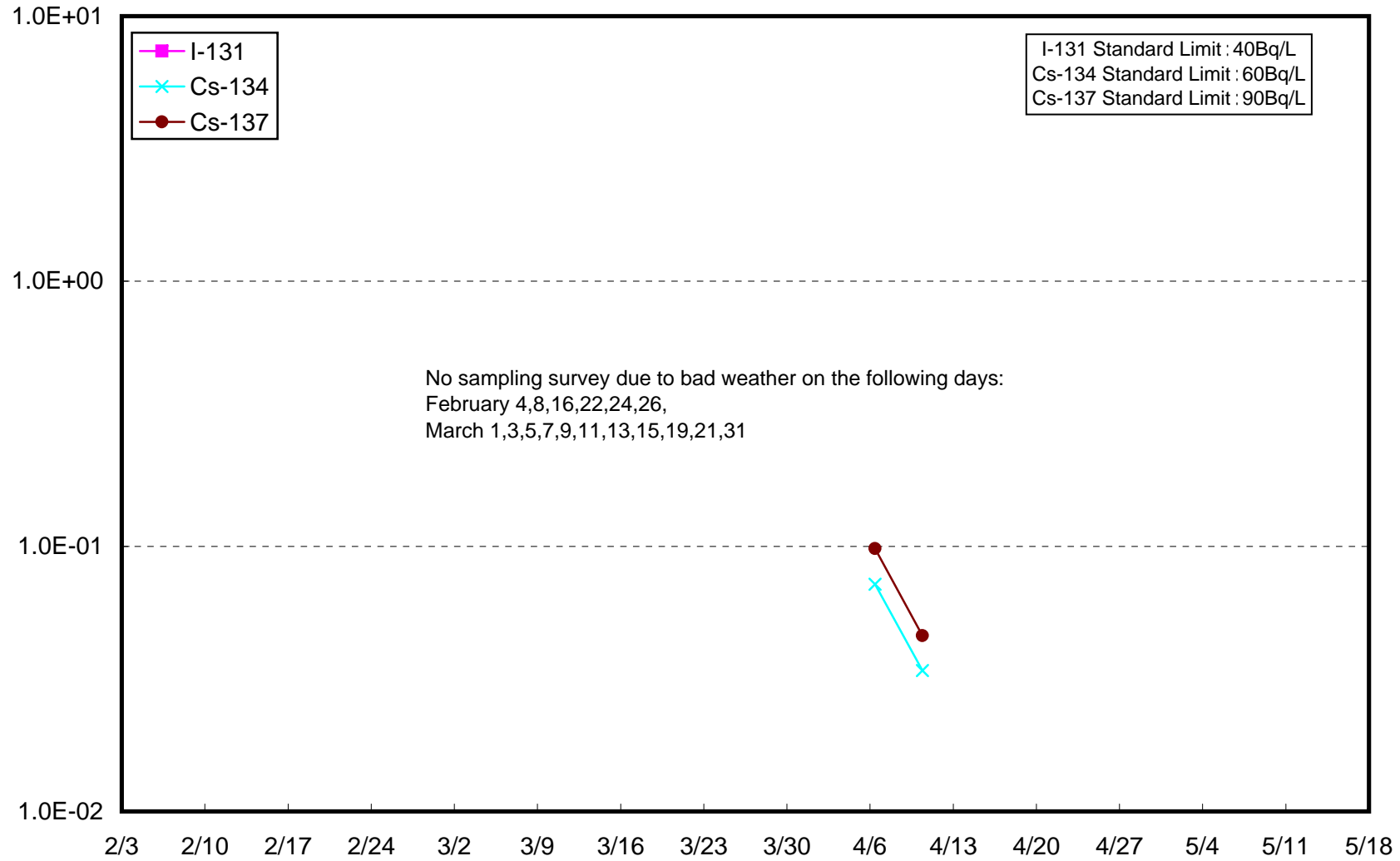
Radioactivity Density of Seawater at South Discharge Channel of 1F (Bq/L)



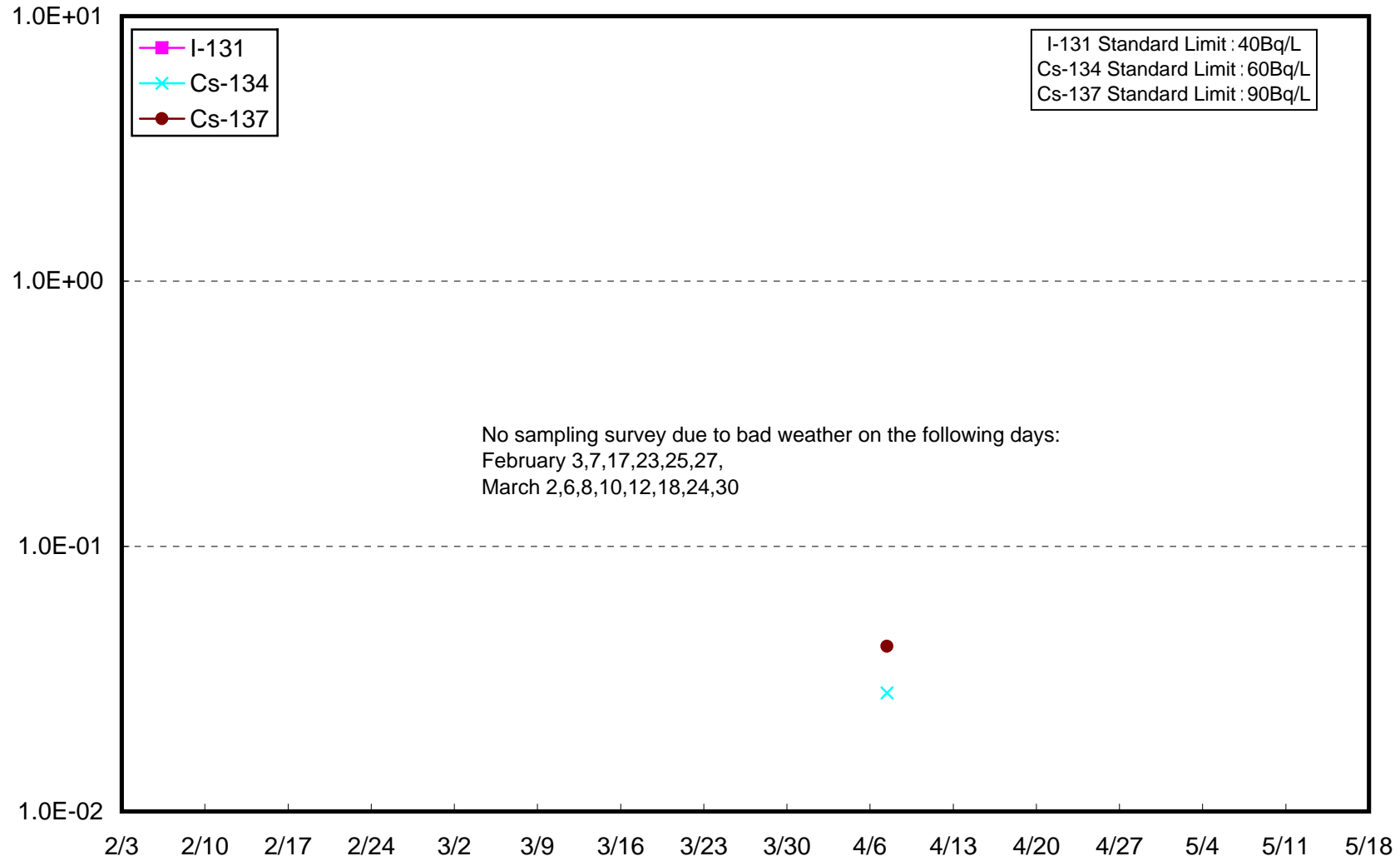
Radioactivity Density of Seawater at Odaka District Offshore 3km (T-14) Upper Layer (Bq/L)



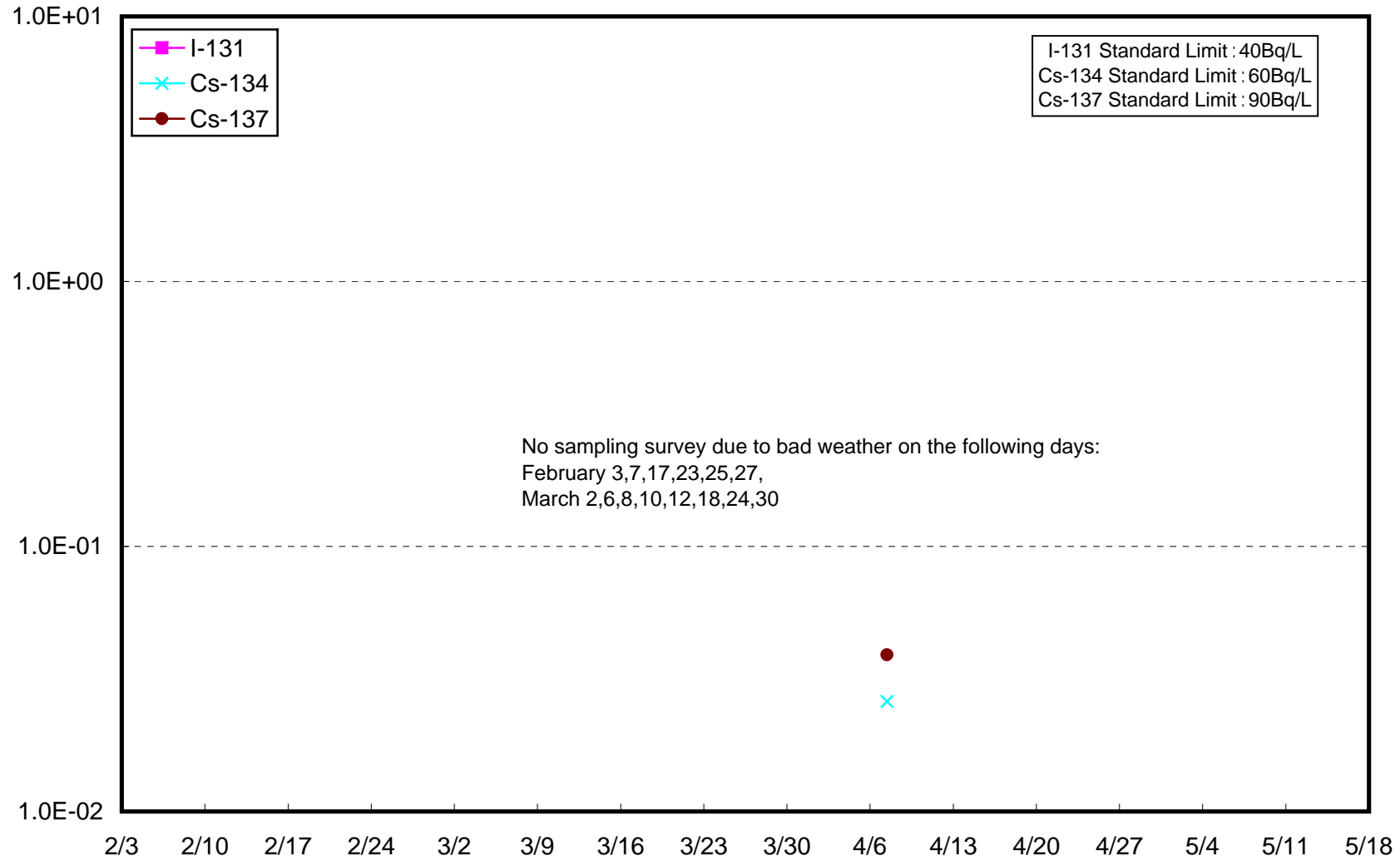
Radioactivity Density of Seawater at Odaka District Offshore 3km (T-14) Lower Layer (Bq/L)



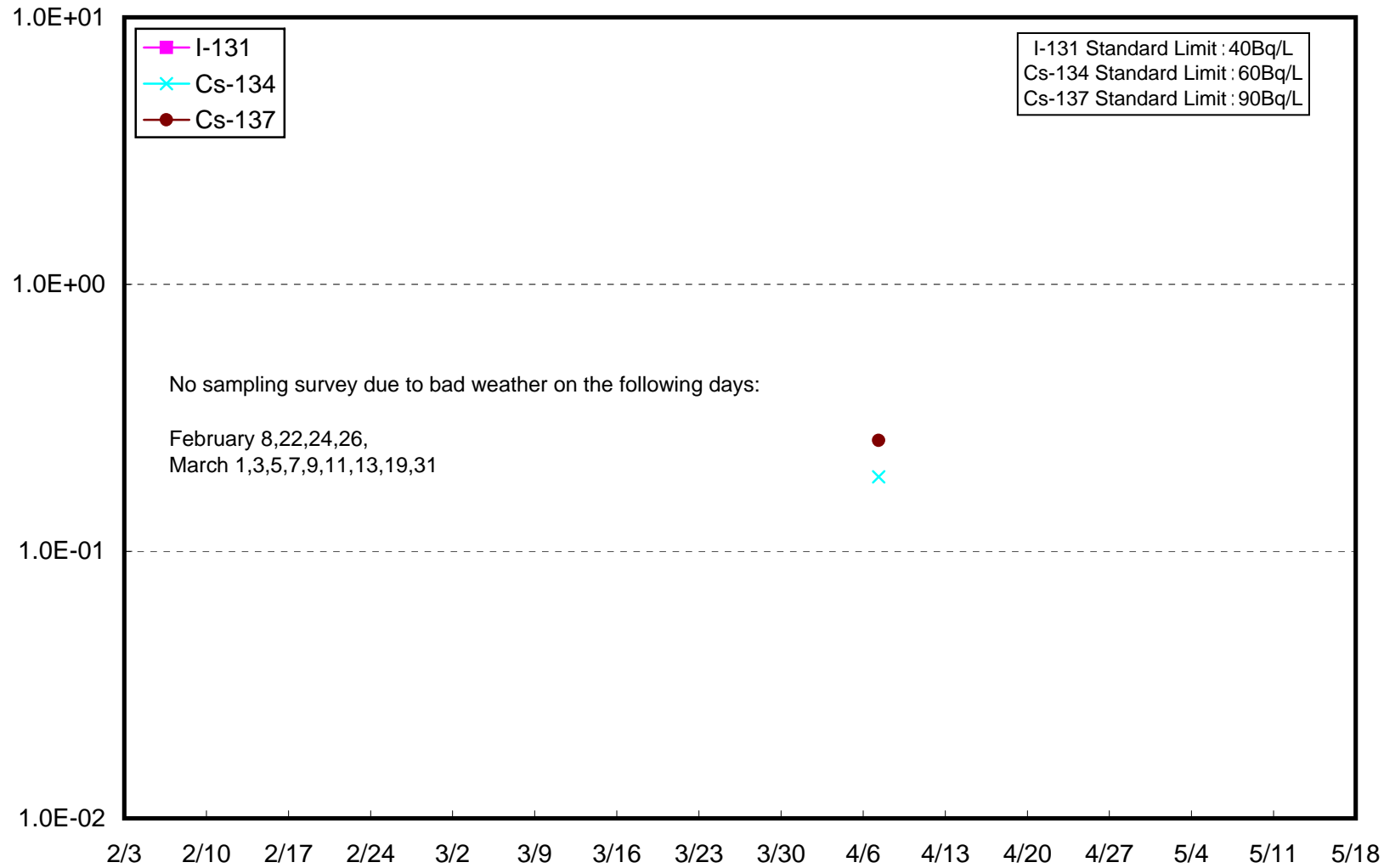
Radioactivity Density of Seawater at Fukushima Daiichi Offshore 15km (T-5) Upper Layer (Bq/L)



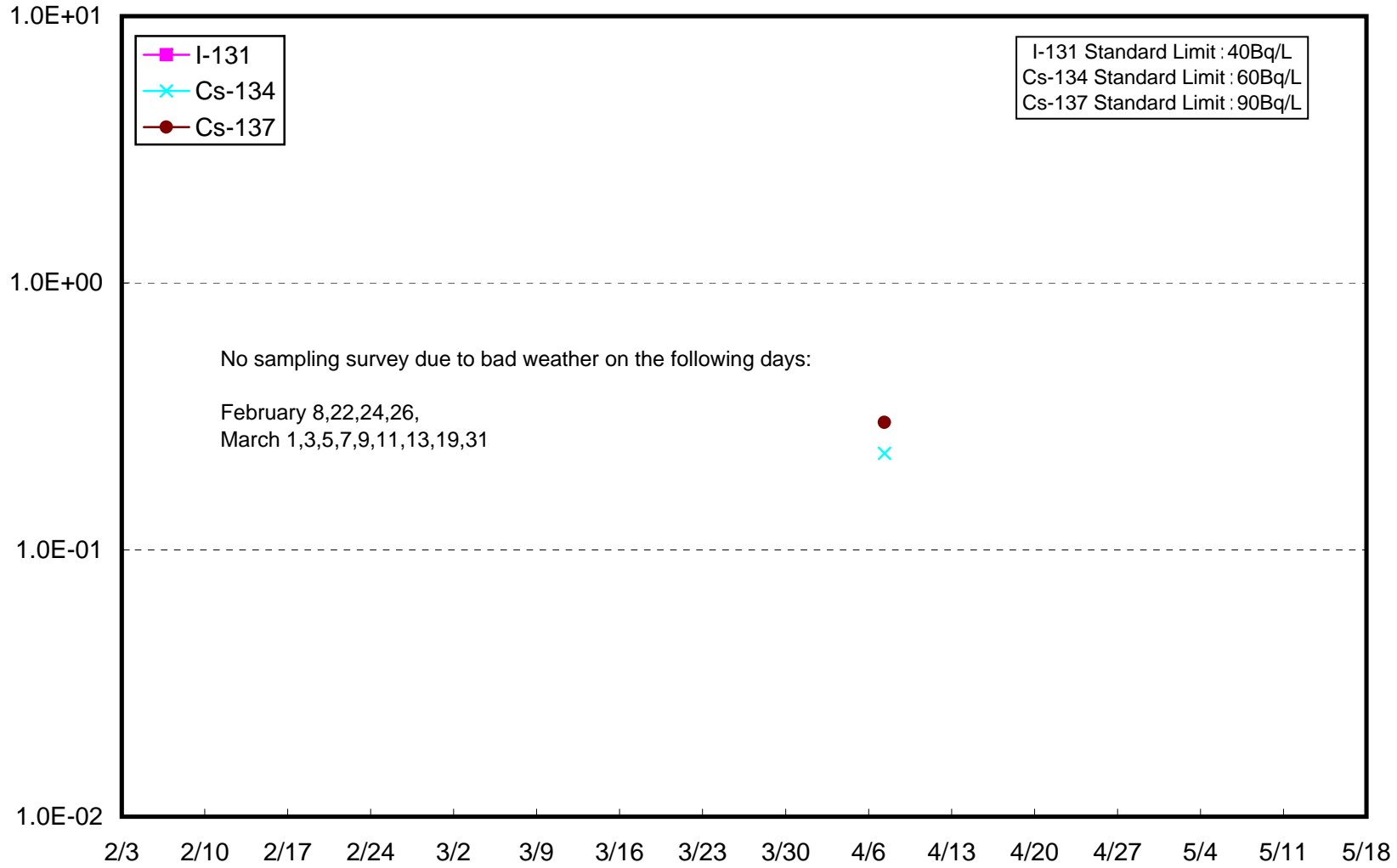
Radioactivity Density of Seawater at Fukushima Daiichi Offshore 15km (T-5) Lower Layer (Bq/L)



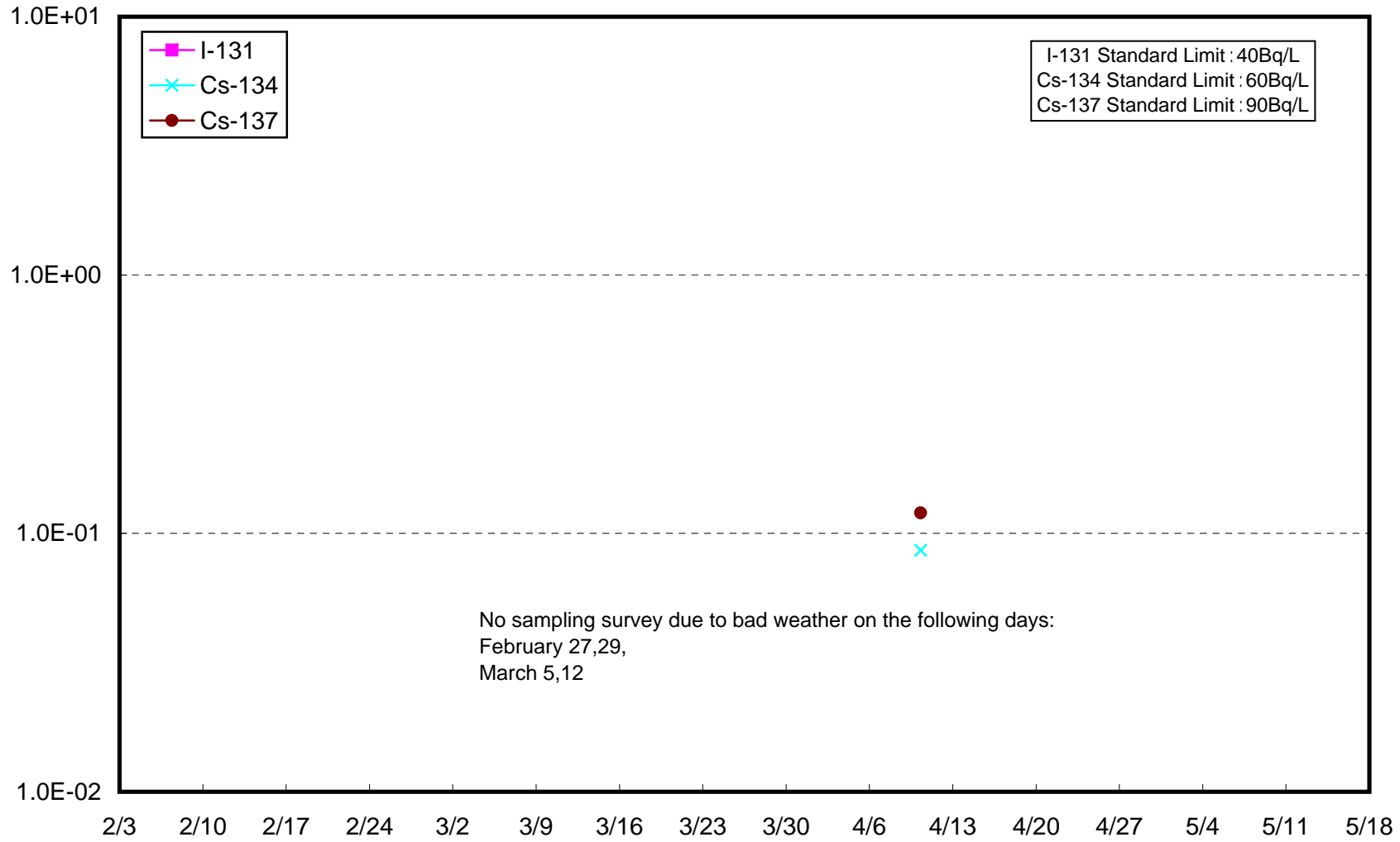
Radioactivity Density of Seawater at Iwasawa Offshore 3km (T-11) Upper Layer (Bq/L)



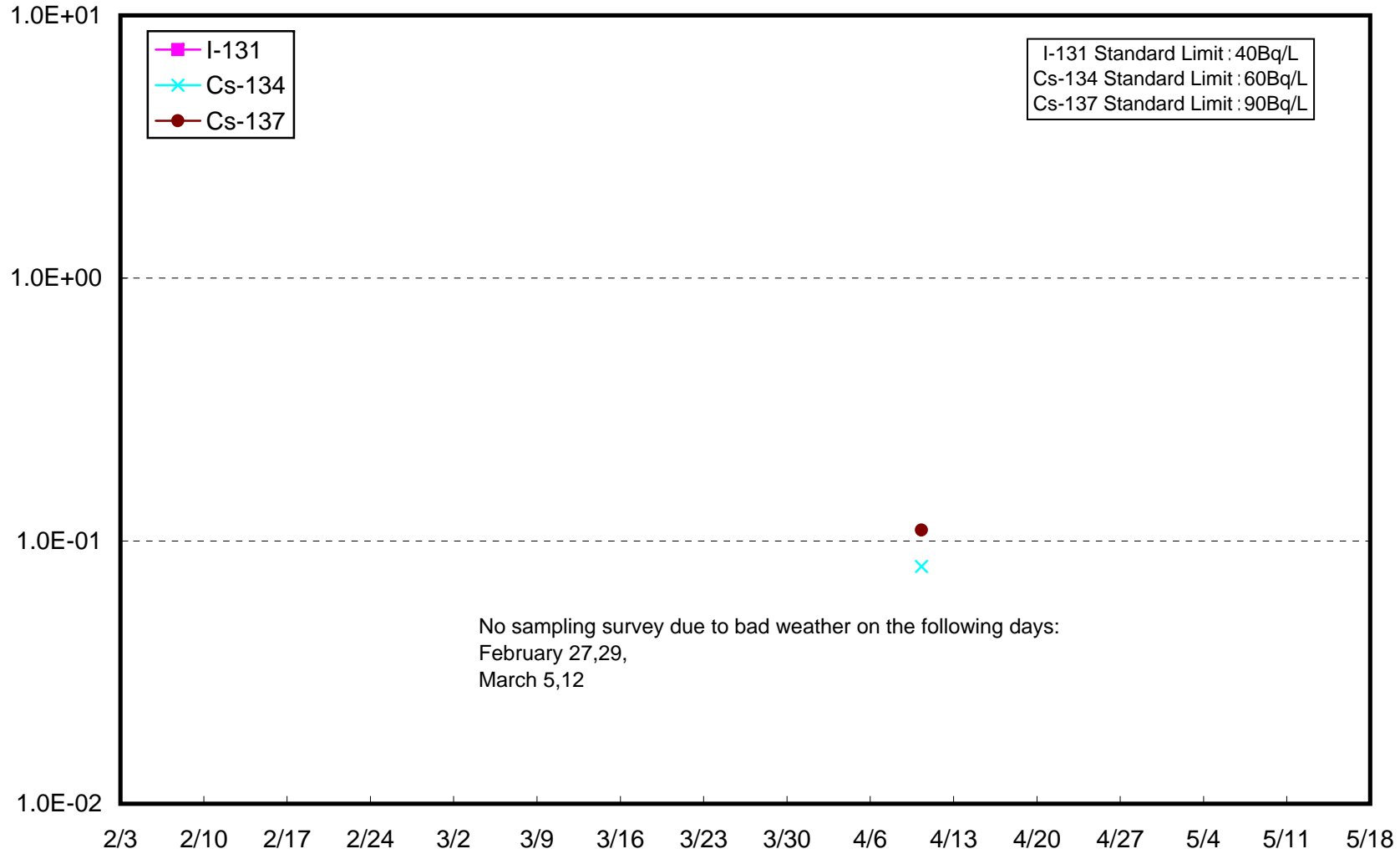
Radioactivity Density of Seawater at Iwasawa Offshore 3km (T-11) Lower Layer (Bq/L)



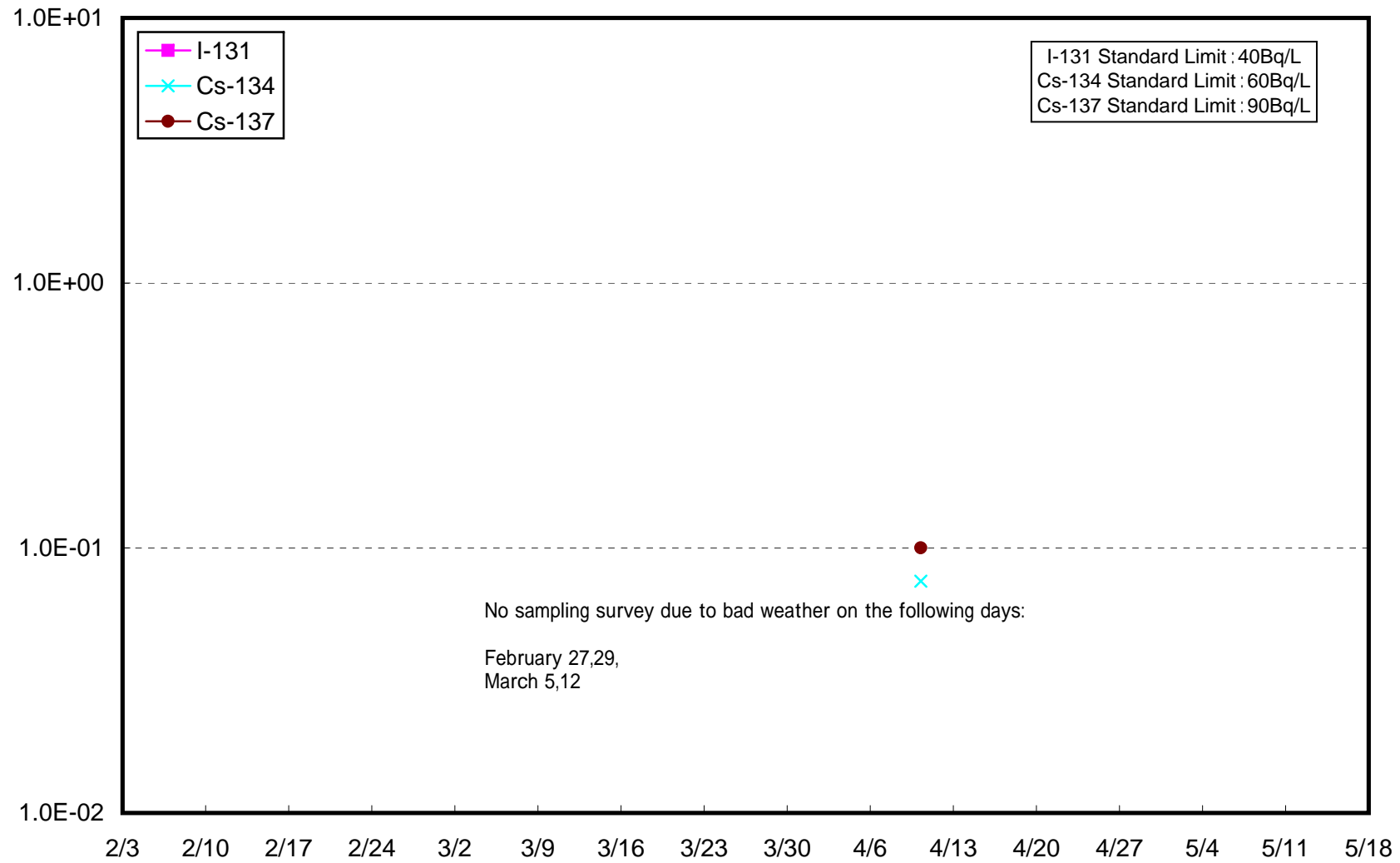
Radioactivity Density of Seawater at Northern Iwaki Offshore 3km (T-12) Upper Layer (Bq/L)



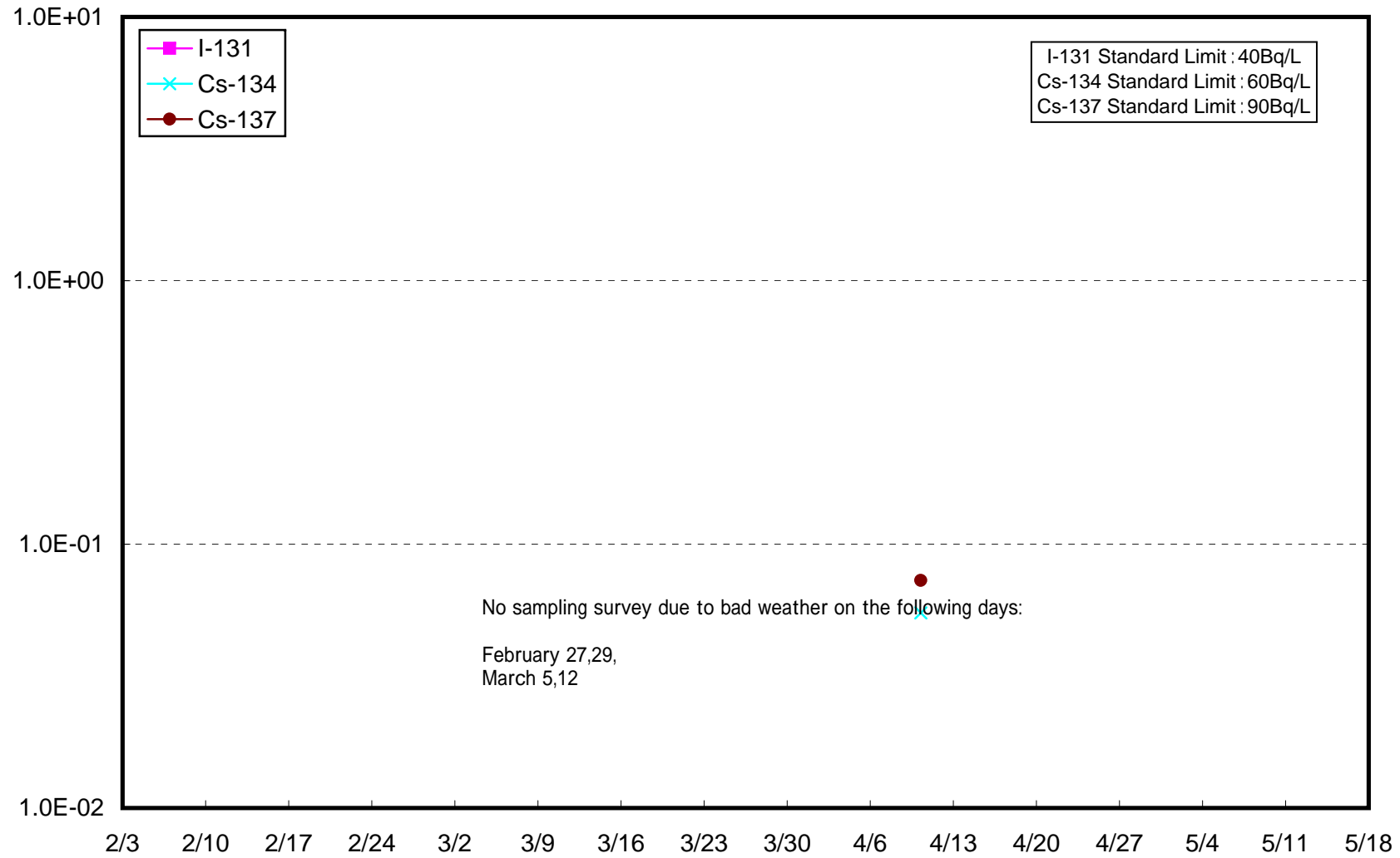
Radioactivity Density of Seawater at Northern Iwaki Offshore 3km (T-12) Lower Layer (Bq/L)



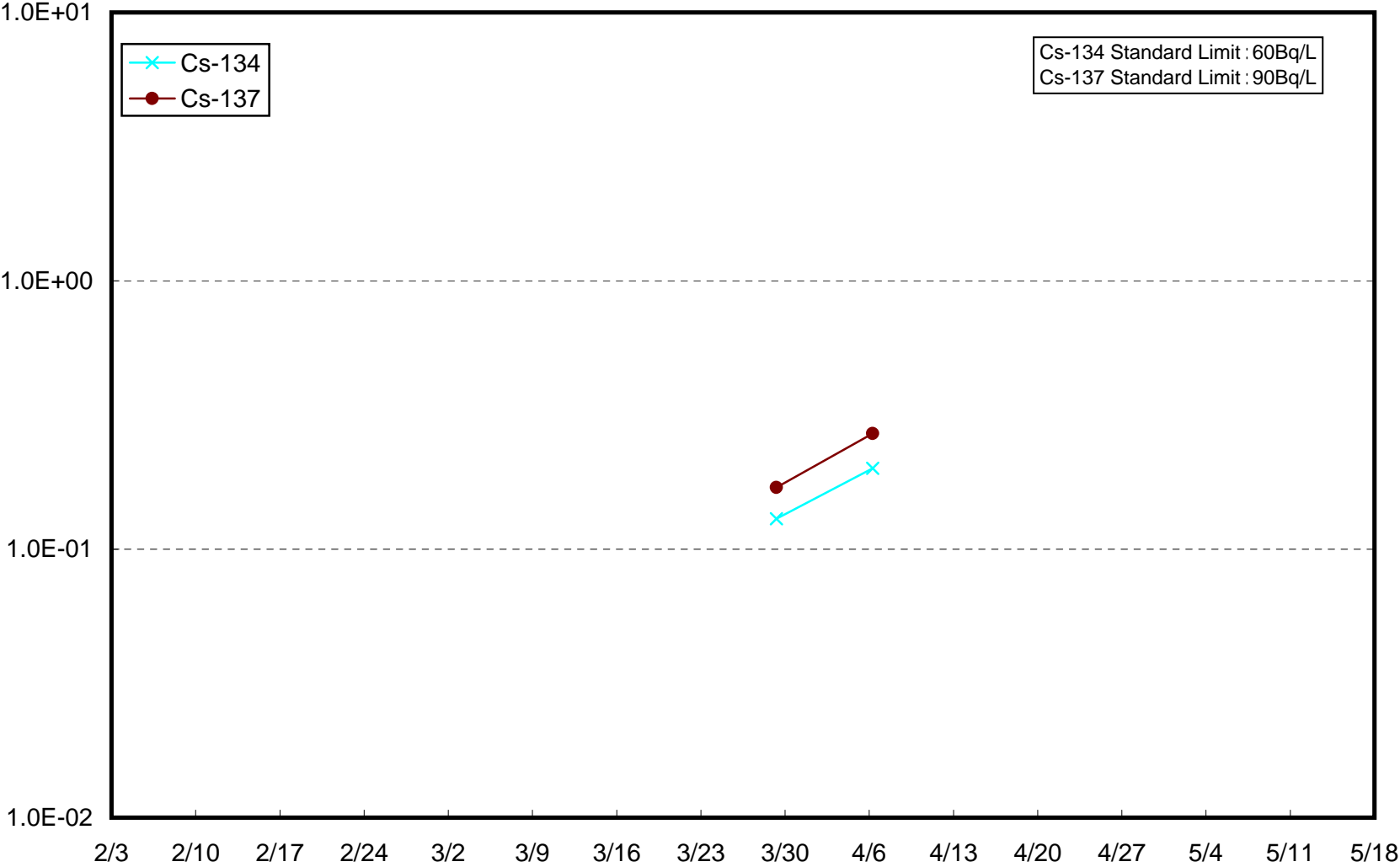
Radioactivity Density of Seawater at Toyoma Offshore 3km (T-20) Upper Layer (Bq/L)



Radioactivity Density of Seawater at Toyoma Offshore 3km (T-20) Lower Layer (Bq/L)



Radioactivity Density of Seawater at Kido River Offshore 2km (T-S5) Upper Layer (Bq/L)



Radioactivity Density of Seawater at Kido River Offshore 2km (T-S5) Lower Layer (Bq/L)

