

## Nuclides Analysis Result of the Radioactive Materials in the Seawater < Coast, Fukushima Daiichi Nuclear Power Station >

(Data summarized on February 6)

Place of Sampling	North of Unit 5-6 Discharge Channel at Fukushima Daiichi NPS (Approx. 30m North of Unit 5-6 Discharge Channel)	Around South Discharge Channel of Fukushima Daiichi NPS (Approx. 1.3km South of Unit 1-4 Discharge Channel)			
Time of Sampling	Feb 5, 2013 7:05 AM	Feb 5, 2013 7:45 AM		② Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)	
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)		Scaling Factor (①/②)
I-131 (Approx. 8 days)	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	ND	-	ND	-	60
Cs-137 (Approx. 30 years)	ND	-	ND	-	90

\* The density specified by the Reactor Regulation is converted from Bq/cm<sup>3</sup> to Bq/L.

\* Data of other nuclides is under evaluation.

\* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

\* "ND" indicates that the measurement result is below the detection limit.

I-131: Approx. 0.58Bq/L, Cs-134: Approx. 1.1Bq/L, Cs-137: Approx. 1.4Bq/L

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

## Nuclides Analysis Result of the Radioactive Materials in the Seawater < Coast, Fukushima Daiichi Nuclear Power Station, Remeasurement >

(Data summarized on February 6)

Place of Sampling	North of Unit 5-6 Discharge Channel at Fukushima Daiichi NPS (Approx. 30m North of Unit 5-6 Discharge Channel)	Around South Discharge Channel of Fukushima Daiichi NPS (Approx. 1.3km South of Unit 1-4 Discharge Channel)			
Time of Sampling	Dec 24, 2012 7:50 AM	Dec 24, 2012 8:35 AM		② Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)	
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)		Scaling Factor (①/②)
Cs-134 (Approx. 2 years)	0.20	0.00	0.37		0.01
Cs-137 (Approx. 30 years)	0.34	0.00	0.68	0.01	90

- \* The density specified by the Reactor Regulation is converted from Bq/cm<sup>3</sup> to Bq/L.
- \* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.
- \* Analysis results by detail analysis (Phosphomolybdic acid ammonium adsorption sampling method) are noted.
- \* Analyzed by : Tokyo Electric Power Environmental Engineering Co., Inc.

## Nuclides Analysis Result of the Radioactive Materials in the Seawater < Coast, Fukushima Daiichi Nuclear Power Station, Remeasurement >

(Data summarized on February 6)

Place of Sampling	North of Unit 5-6 Discharge Channel at Fukushima Daiichi NPS (Approx. 30m North of Unit 5-6 Discharge Channel)		Around South Discharge Channel of Fukushima Daiichi NPS (Approx. 1.3km South of Unit 1-4 Discharge Channel)		② Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
	Time of Sampling Dec 31, 2012 7:20 AM		Time of Sampling Dec 31, 2012 7:50 AM		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
Cs-134 (Approx. 2 years)	0.40	0.01	0.54	0.01	60
Cs-137 (Approx. 30 years)	0.62	0.01	0.95	0.01	90

- \* The density specified by the Reactor Regulation is converted from Bq/cm<sup>3</sup> to Bq/L.
- \* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.
- \* Analysis results by detail analysis (Phosphomolybdic acid ammonium adsorption sampling method) are noted.
- \* Analyzed by : Tokyo Electric Power Environmental Engineering Co., Inc.

## Nuclides Analysis Result of the Radioactive Materials in the Seawater < Coast, Fukushima Daini Nuclear Power Station >

(Data summarized on February 6)

Place of Sampling	2F Around the North Discharge Channel (Around Unit 3-4 Discharge Channel) (Approx. 10km from 1F)		Around the North Side of Asamigawa (Approx. 12km South of Unit 1 & 2 Discharge Channel) (Approx. 24km from 1F)		② Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
	Time of Sampling	Dec 25, 2012 10:10 AM	Dec 25, 2012 7:25 AM		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
I-131 (Approx. 8 days)	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	0.076	0.00	0.057	0.00	60
Cs-137 (Approx. 30 years)	0.13	0.00	0.098	0.00	90

\* The density specified by the Reactor Regulation is converted from Bq/cm<sup>3</sup> to Bq/L.

\* Data of other nuclides is under evaluation.

\* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

\* "ND" indicates that the measurement result is below the detection limit.

I-131: Approx. 0.33Bq/L

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

\* As to Cs-134 and Cs-137, analysis results by detail analysis (Phosphomolybdic acid ammonium adsorption sampling method) are noted.

Analyzed by Tokyo Electric Power Environmental Engineering Co., Inc.

## Nuclides Analysis Result of the Radioactive Materials in the Seawater < Coast, Fukushima Daini Nuclear Power Station >

(Data summarized on February 6)

Place of Sampling	2F Around the North Discharge Channel (Around Unit 3-4 Discharge Channel) (Approx. 10km from 1F)		Around the North Side of Asamigawa (Approx. 12km South of Unit 1 & 2 Discharge Channel) (Approx. 24km from 1F)		② Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
	Time of Sampling	Jan 4, 2012 9:50 AM	Time of Sampling	Jan 4, 2012 7:20 AM	
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
I-131 (Approx. 8 days)	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	0.068	0.00	0.066	0.00	60
Cs-137 (Approx. 30 years)	0.12	0.00	0.13	0.00	90

\* The density specified by the Reactor Regulation is converted from Bq/cm<sup>3</sup> to Bq/L.

\* Data of other nuclides is under evaluation.

\* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

\* "ND" indicates that the measurement result is below the detection limit.

I-131: Approx. 0.46Bq/L

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

\* As to Cs-134 and Cs-137, analysis results by detail analysis (Phosphomolybdic acid ammonium adsorption sampling method) are noted.

Analyzed by Tokyo Electric Power Environmental Engineering Co., Inc.

## Nuclides Analysis Result of Radioactive Materials in the Seawater < Offshore >

(Data summarized on February 6)

Place of Sampling (Place No.)	3km Offshore of Ukedo River (T-D1)				3km Offshore of Fukushima Daiichi NPS (T-D5)				3km Offshore of Fukushima Daini NPS (T-D9)				② Density Limit Specified by the Reactor Regulation (Bq/L)  (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
	Upper Layer		Lower Layer		Upper Layer		Lower Layer		Upper Layer		Lower Layer		
Time of Sampling	Dec 25, 2012 9:14 AM		Dec 25, 2012 9:14 AM		Dec 25, 2012 9:43 AM		Dec 25, 2012 9:43 AM		Dec 27, 2012 9:27 AM		Dec 27, 2012 9:27 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)	0.0056	0.00	0.012	0.00	0.0084	0.00	0.018	0.00	0.040	0.00	0.056	0.00	60
Cs-137 (Approx. 30 years)	0.014	0.00	0.021	0.00	0.016	0.00	0.031	0.00	0.070	0.00	0.094	0.00	90

Place of Sampling (Place No.)	/				/				/				② Density Limit Specified by the Reactor Regulation (Bq/L)  (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
	Upper Layer		Lower Layer		Upper Layer		Lower Layer		Upper Layer		Lower Layer		
Time of Sampling	/		/		/		/		/		/		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)											
Cs-134 (Approx. 2 years)	/	/	/	/	/	/	/	/	/	/	/	/	60
Cs-137 (Approx. 30 years)	/	/	/	/	/	/	/	/	/	/	/	/	90

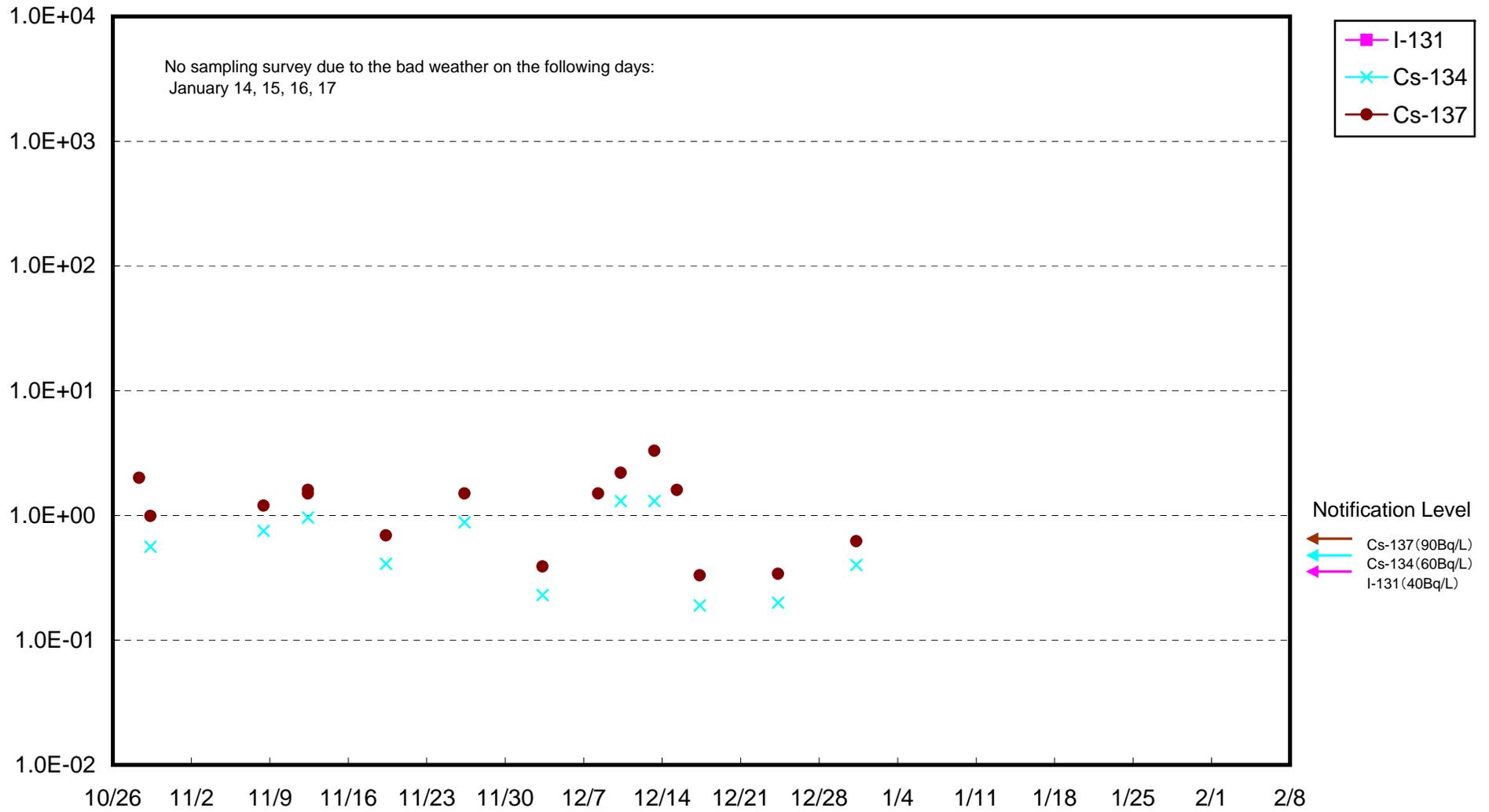
\* The density specified by the Reactor Regulation is converted from Bq/cm<sup>3</sup> to Bq/L.

\* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

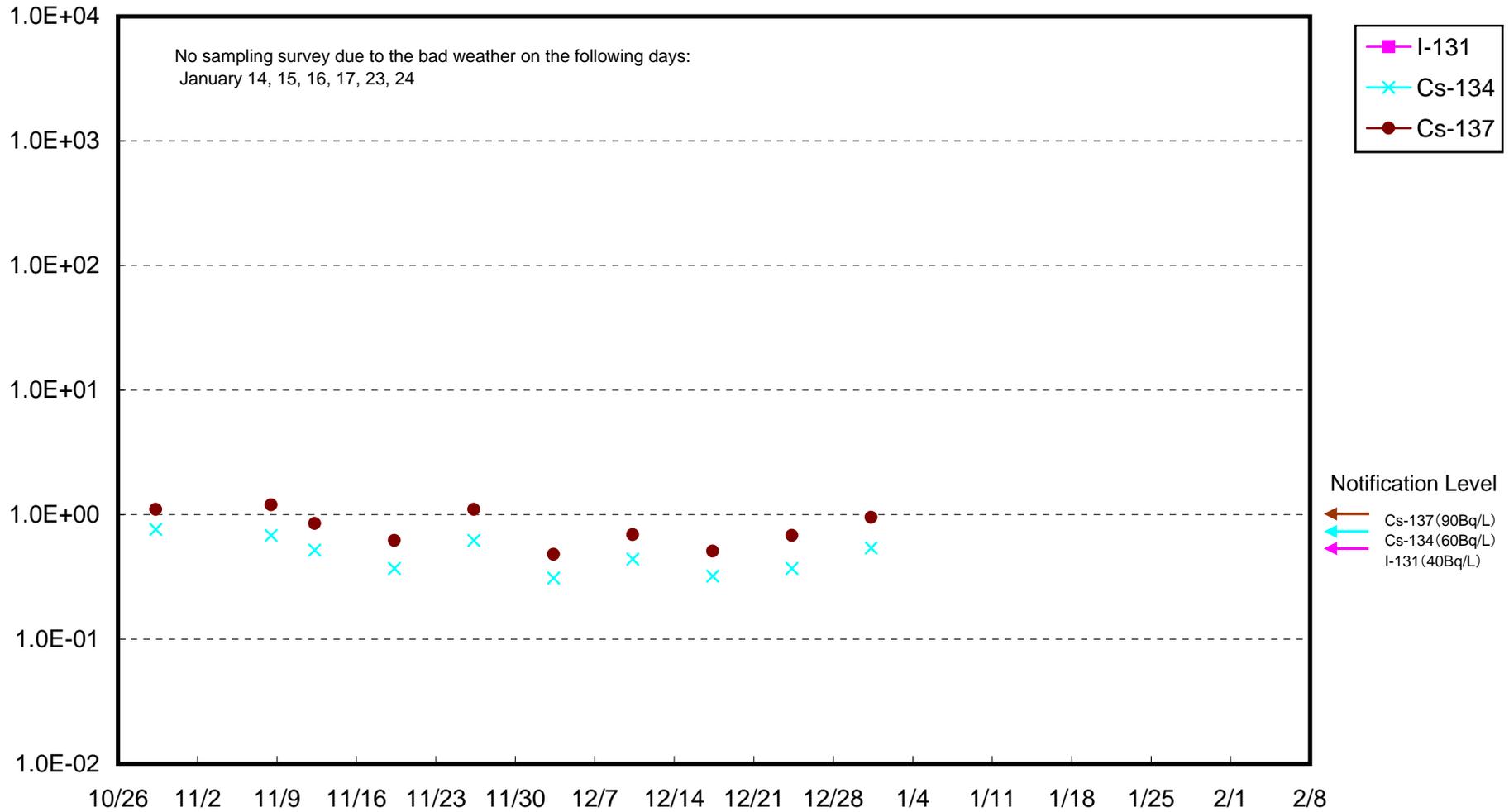
\* Analysis results by detail analysis (Phosphomolybdic acid ammonium adsorption sampling method) are noted.

\* Analyzed by: Tokyo Electric Power Environmental Engineering Co., Inc.

Radioactivity Density of the Seawater at 1F Units 5-6 North Discharge Channel (Bq/L)

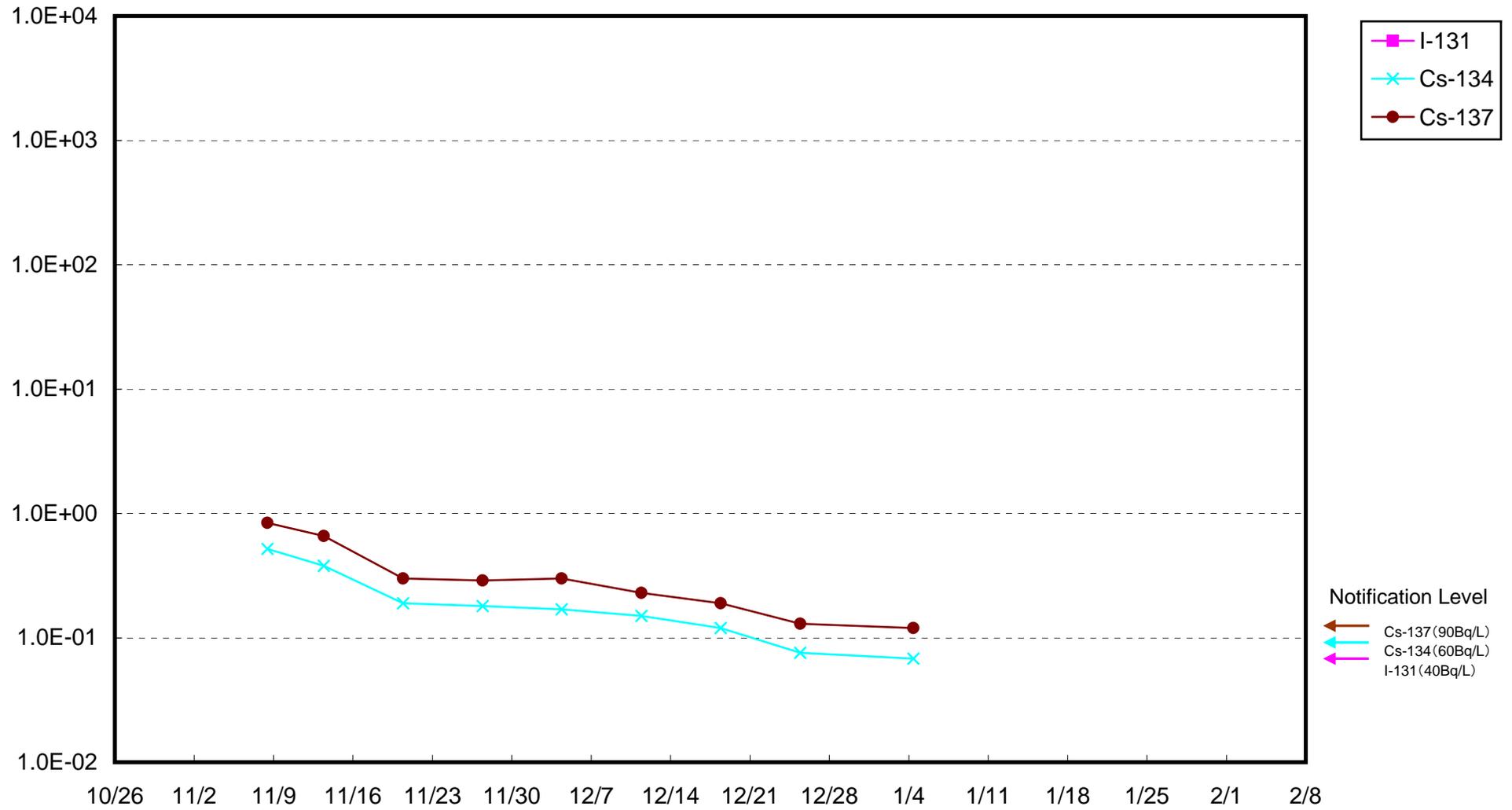


## Radioactivity Density of the Seawater at 1F South Discharge Channel (Bq/L)

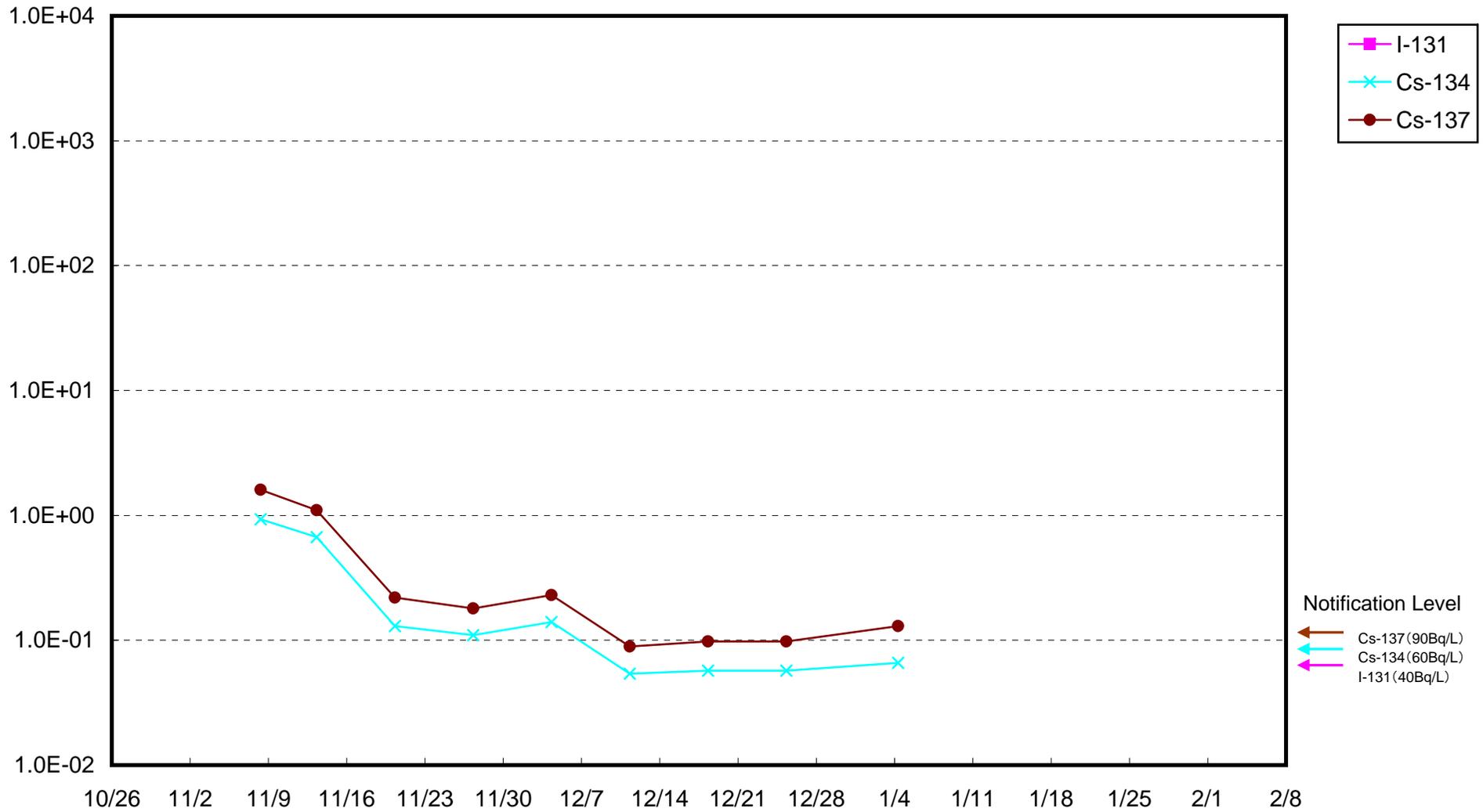


Sampling was conducted at around South Discharge Channel of Fukushima Daiichi NPS  
(approx. 330m south of Units 1-4 Discharge Channel) until November 25, 2012.

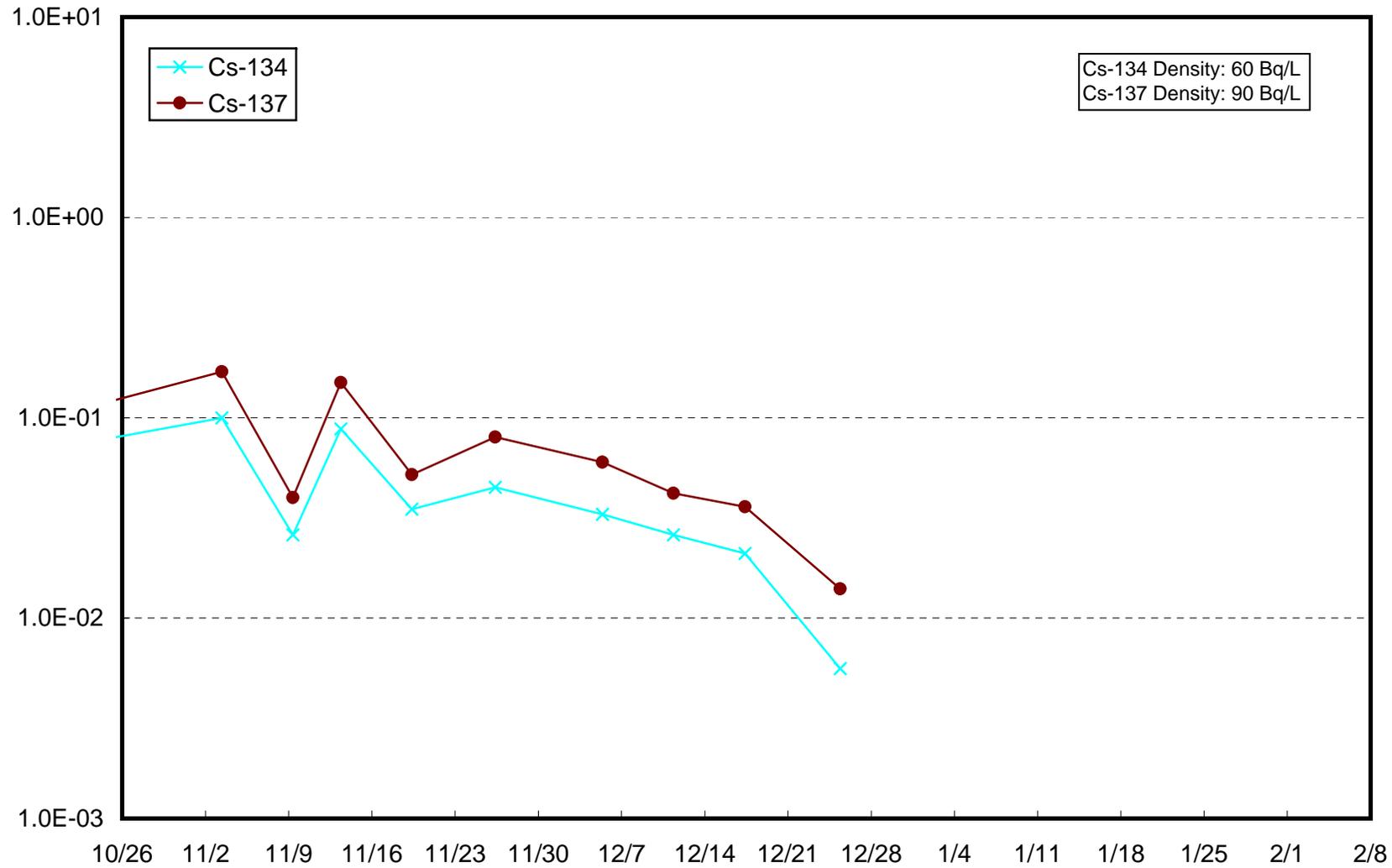
Radioactivity Density of the Seawater at 2F North Discharge Channel (Bq/L)



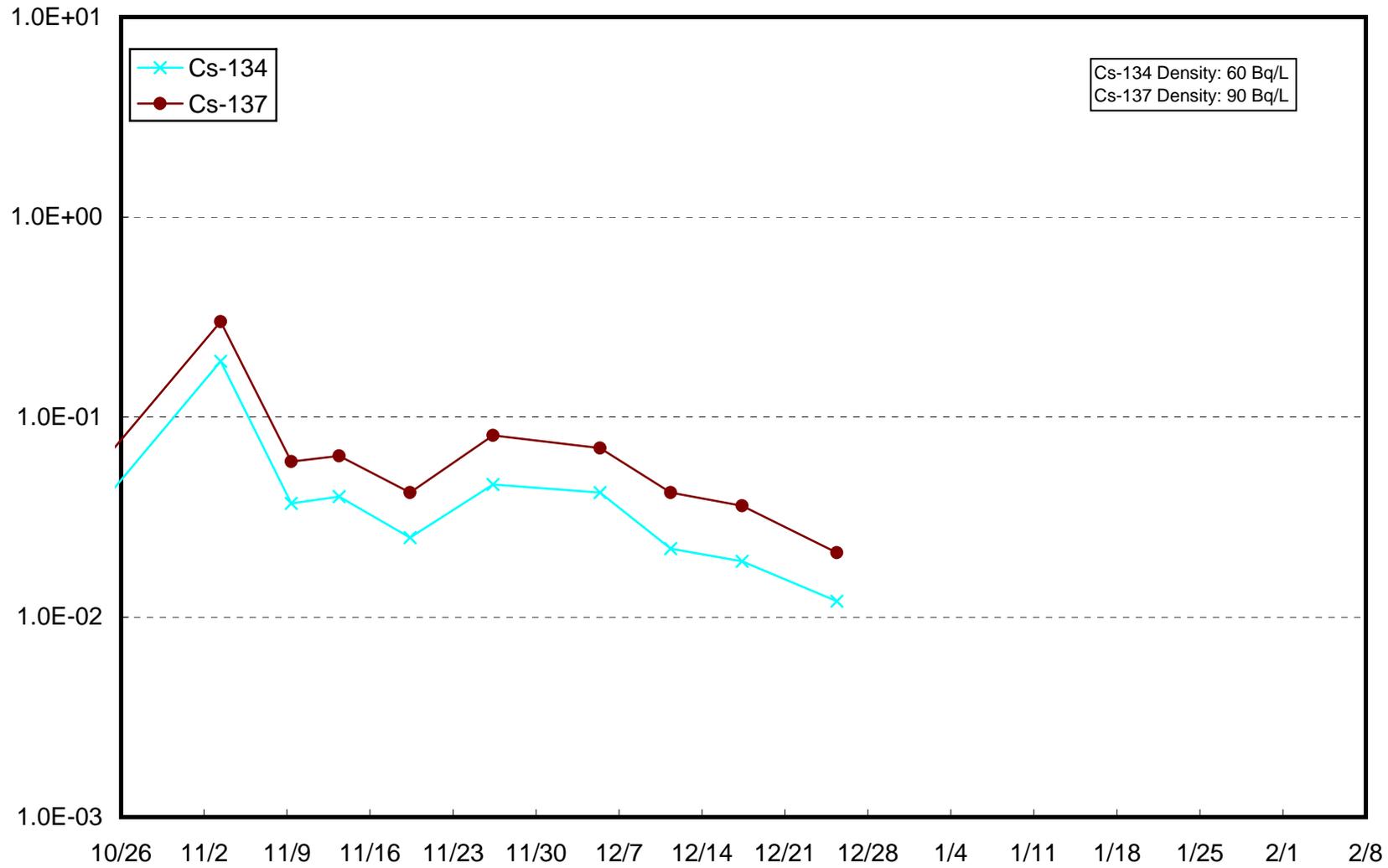
Radioactivity Density of the Seawater at Around the North of Asamigawa (Bq/L)



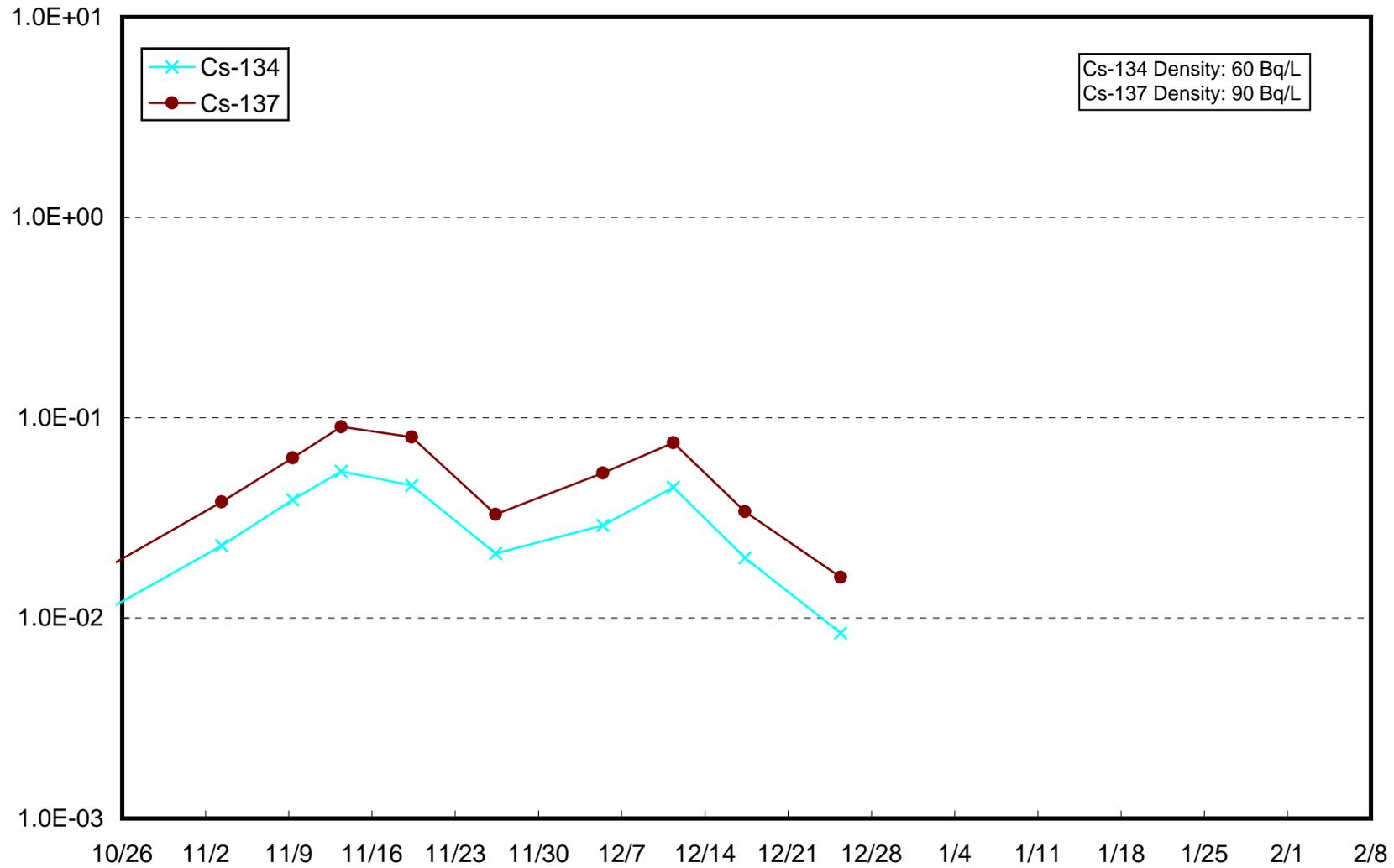
Radioactivity Density of the Seawater at 3km Offshore of Ukedo River (T-D1) Upper Layer (Bq/L)



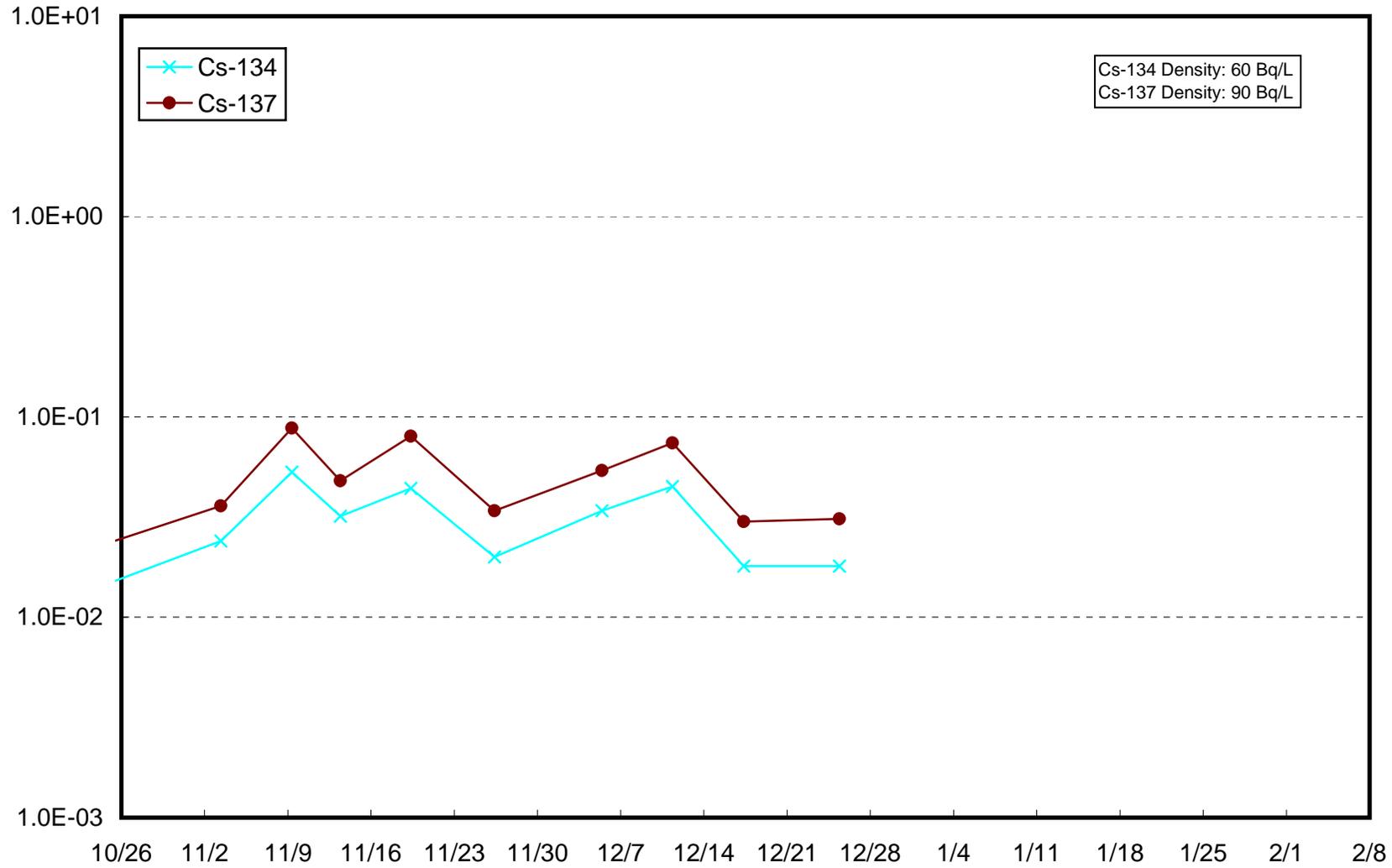
Radioactivity Density of the Seawater at 3km Offshore of Ukedo River (T-D1) Lower Layer (Bq/L)



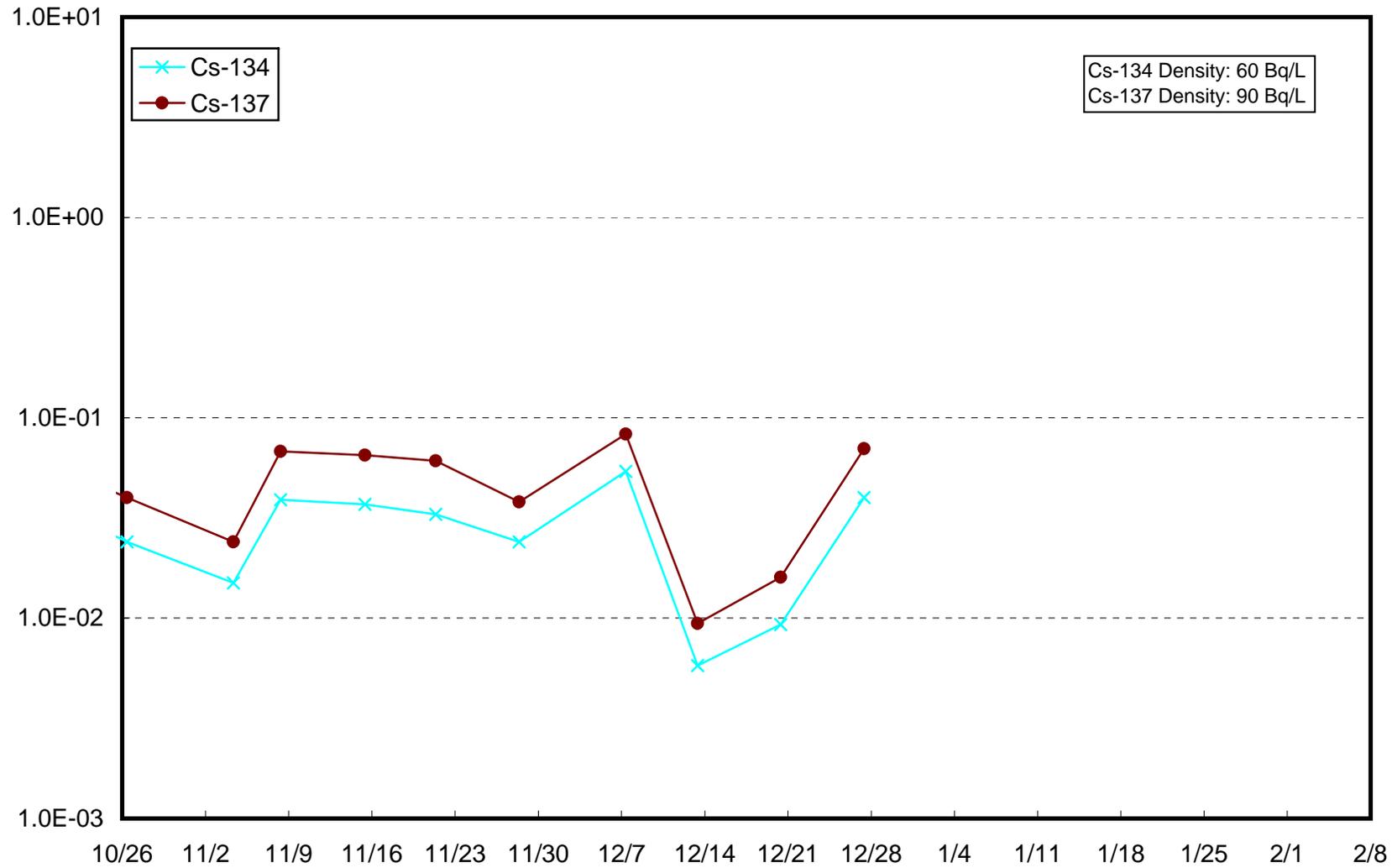
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daiichi NPS (T-D5) Upper Layer (Bq/L)



Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daiichi NPS (T-D5) Lower Layer (Bq/L)



Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daini NPS (T-D9) Upper Layer (Bq/L)



Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daini NPS (T-D9) Lower Layer (Bq/L)

