

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

(Data summarized on April 5)

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)		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		Time of Sampling		
	Apr 4, 2013 7:00 AM		Apr 4, 2013 7:25 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	-	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. 0.44Bq/L, Cs-134: Approx. 1.0Bq/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.

## Analysis Result of Pu in the Seawater

### 1. Measurement Result:

( Unit : Bq/L )

Place of Sampling	Date	Pu-238	Pu-239+Pu-240
1F, North of Unit 5-6 Discharge Channel	Mar 5, 2013	N.D. [ $<7.4 \times 10^{-6}$ ]	N.D. [ $<7.6 \times 10^{-6}$ ]
1F, Around South Discharge Channel	Mar 5, 2013	N.D. [ $<7.2 \times 10^{-6}$ ]	$(1.1 \pm 0.29) \times 10^{-5}$
15km Offshore of Fukushima Daiichi NPS, Upper Layer	Mar 6, 2013	N.D. [ $<5.5 \times 10^{-6}$ ]	N.D. [ $<5.1 \times 10^{-6}$ ]
Around 3km Offshore of Ukedo River, Upper Layer	Mar 5, 2013	N.D. [ $<6.4 \times 10^{-6}$ ]	N.D. [ $<6.1 \times 10^{-6}$ ]
3km Offshore of Fukushima Daiichi NPS, Upper Layer	Mar 5, 2013	N.D. [ $<6.0 \times 10^{-6}$ ]	$(6.7 \pm 2.0) \times 10^{-6}$
3km Offshore of Fukushima Daini NPS, Upper Layer	Mar 6, 2013	N.D. [ $<6.5 \times 10^{-6}$ ]	N.D. [ $<6.3 \times 10^{-6}$ ]
The range of the past measurement results obtained in the ocean near Fukushima Daiichi and Daini Nuclear Power Stations (FY2001 - FY2008)*		-	ND $\sim 1.3 \times 10^{-5}$

[ ] shows below the detection limit.

\*: Source "Report on the environmental radioactivity measurement around the Nuclear Power Plant (2008)", Committee on the safety technology of Nuclear Power Plants in Fukushima.

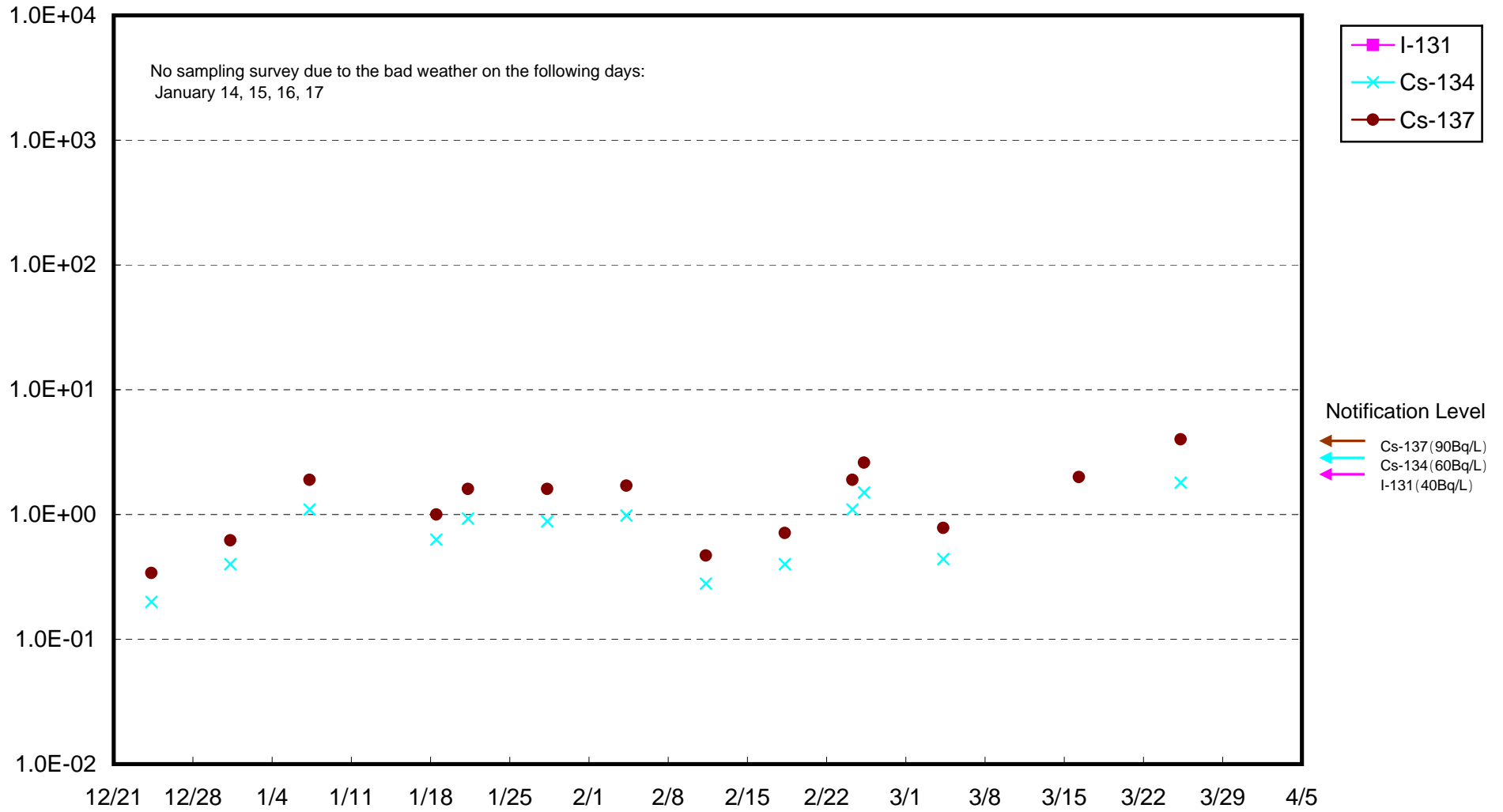
### 2. Analytical Institution: Japan Chemical Analysis Center

### 3. Evaluation:

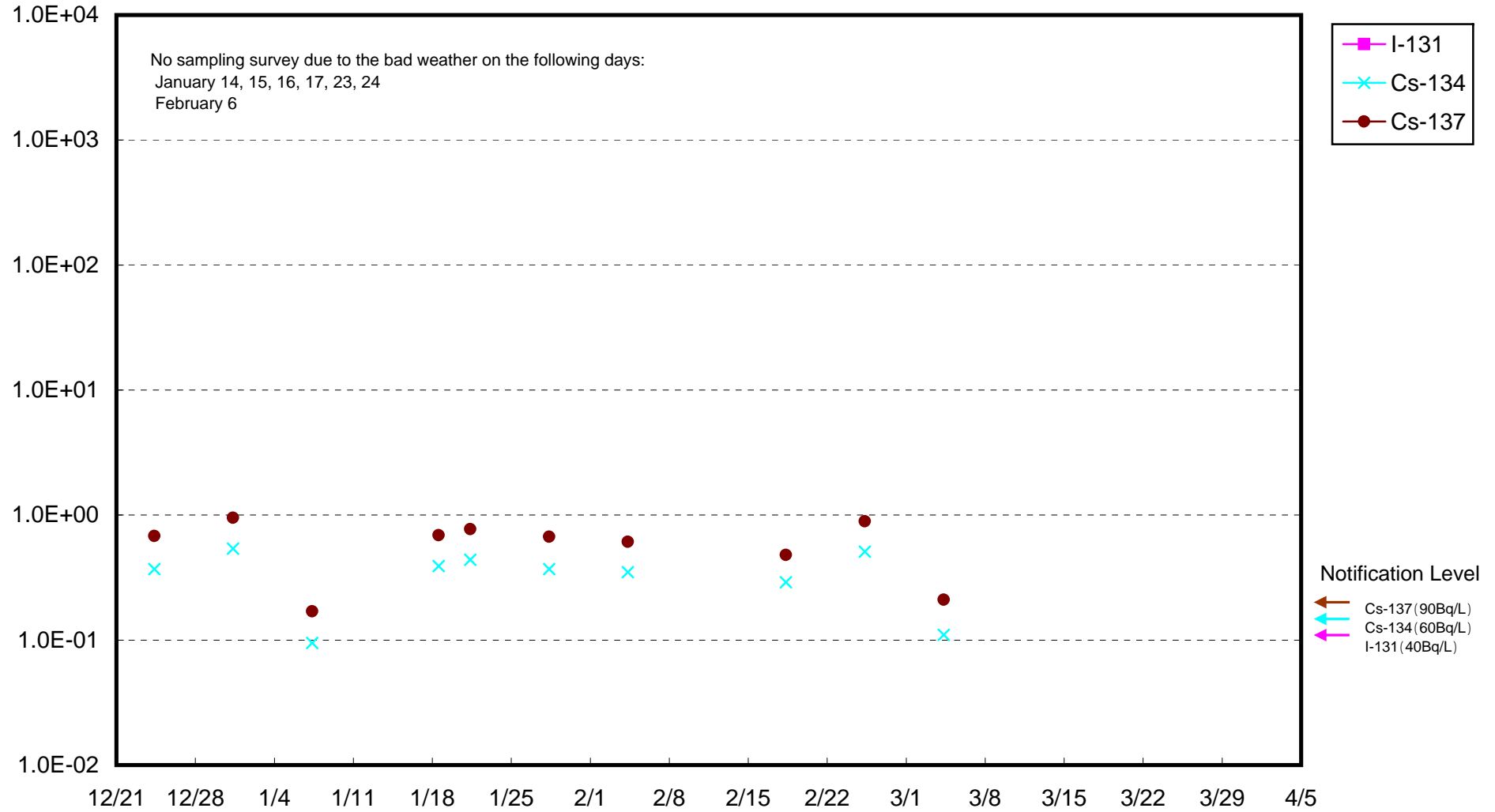
Given that the density level of Pu-239+Pu-240 detected at 1F, Around South Discharge Channel and 3km Offshore of Fukushima Daiichi NPS, Upper Layer on March 5 is within the range of the past density measurements conducted along the seacoasts of 1F and 2F, it cannot be stated with absolute certainty that the presence of these particles is due to the accident.

End

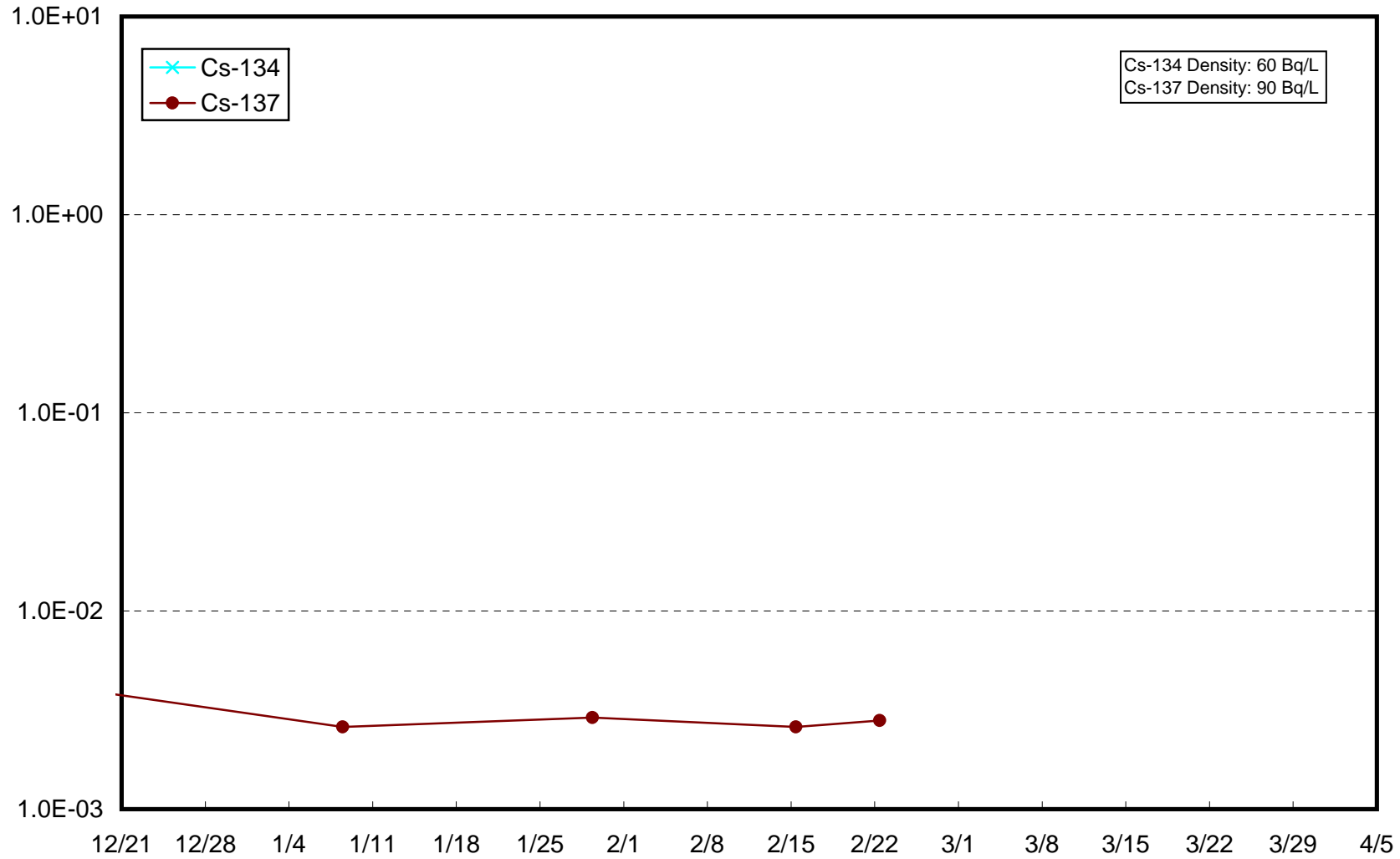
Radioactivity Density of the Seawater at 1F Units 5-6 North Discharge Channel (Bq/L)



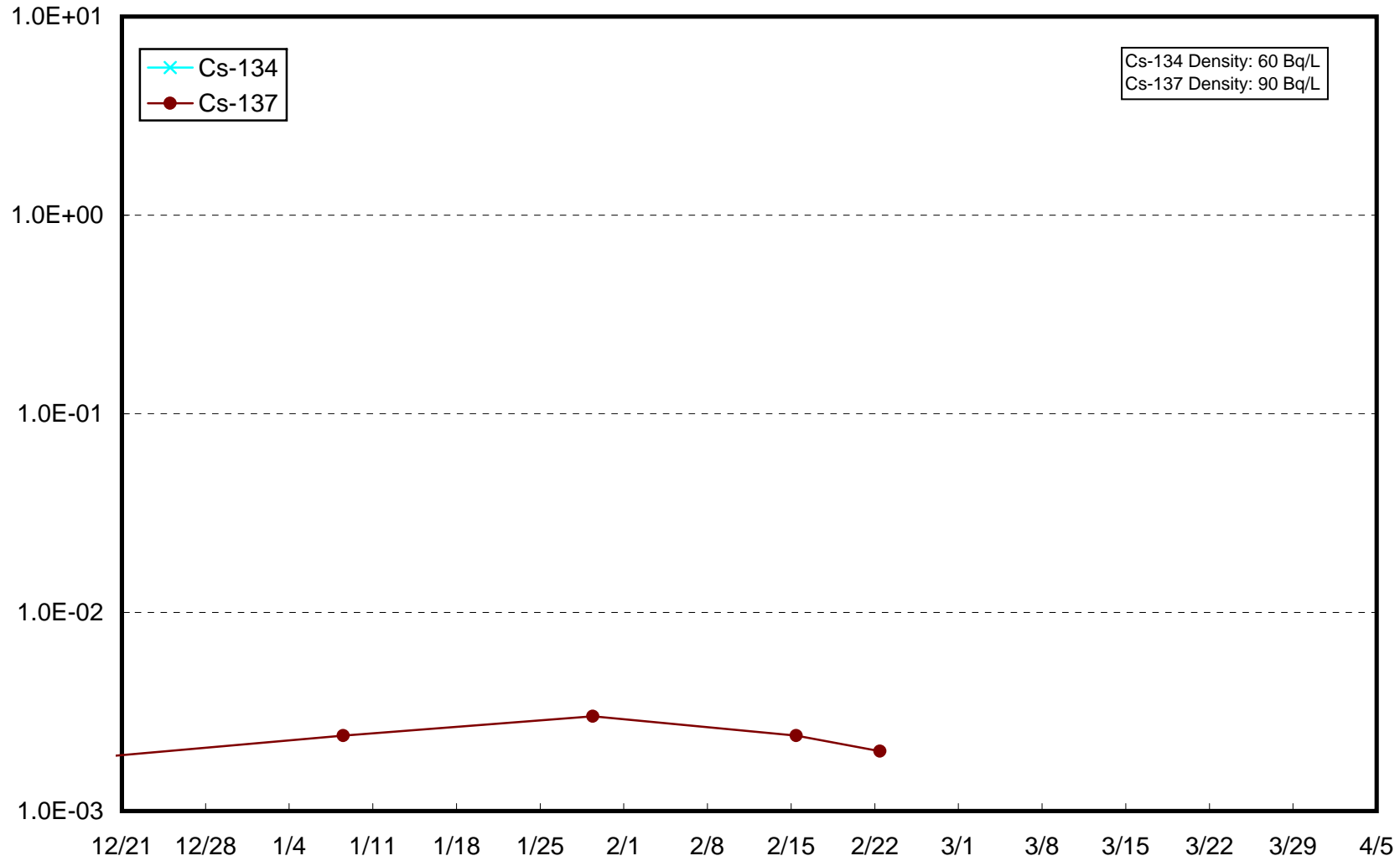
### Radioactivity Density of the Seawater at 1F South Discharge Channel (Bq/L)



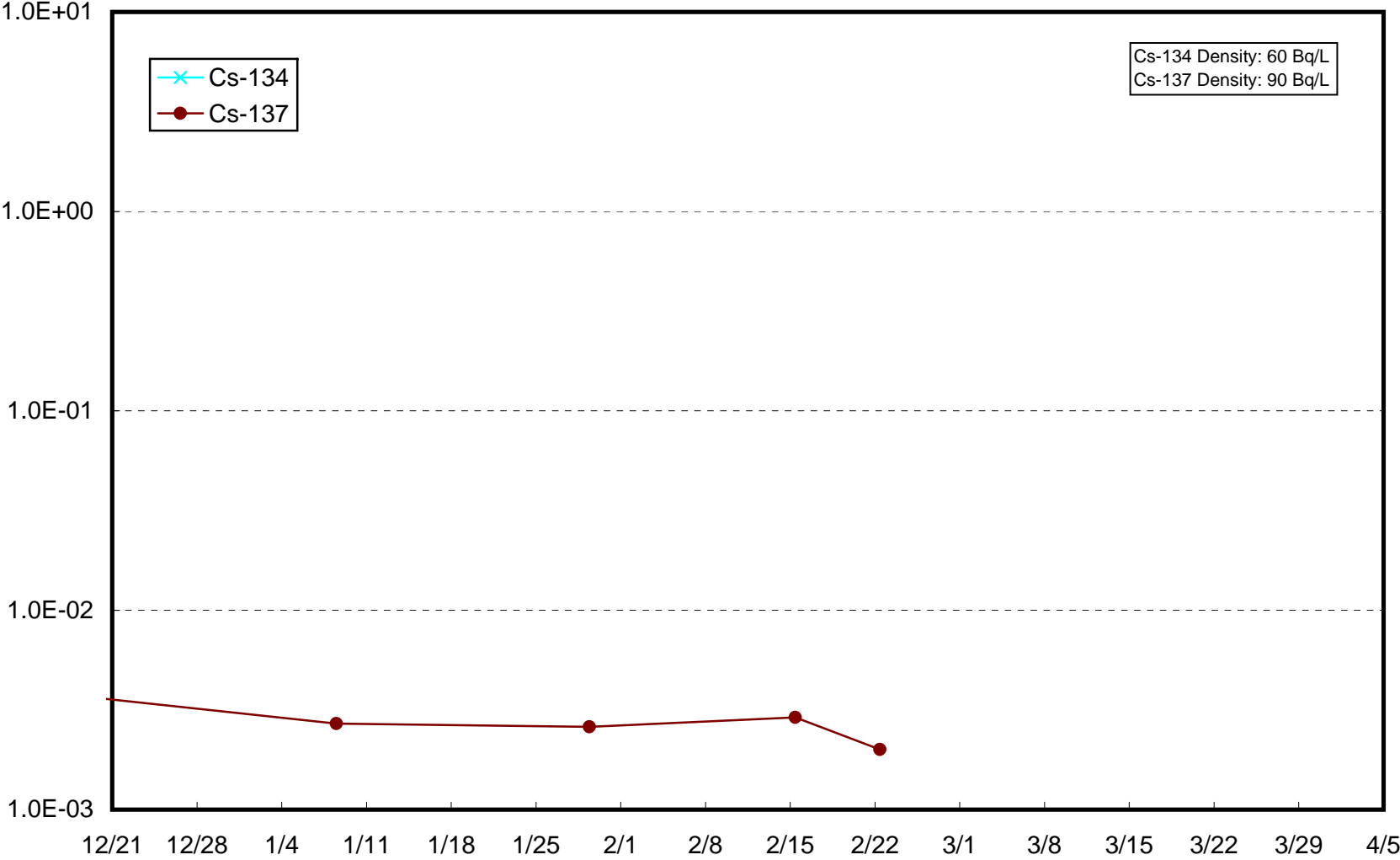
Radioactivity Density of the Seawater at Offshore of Minamisanriku (T-MG0) Upper Layer (Bq/L)



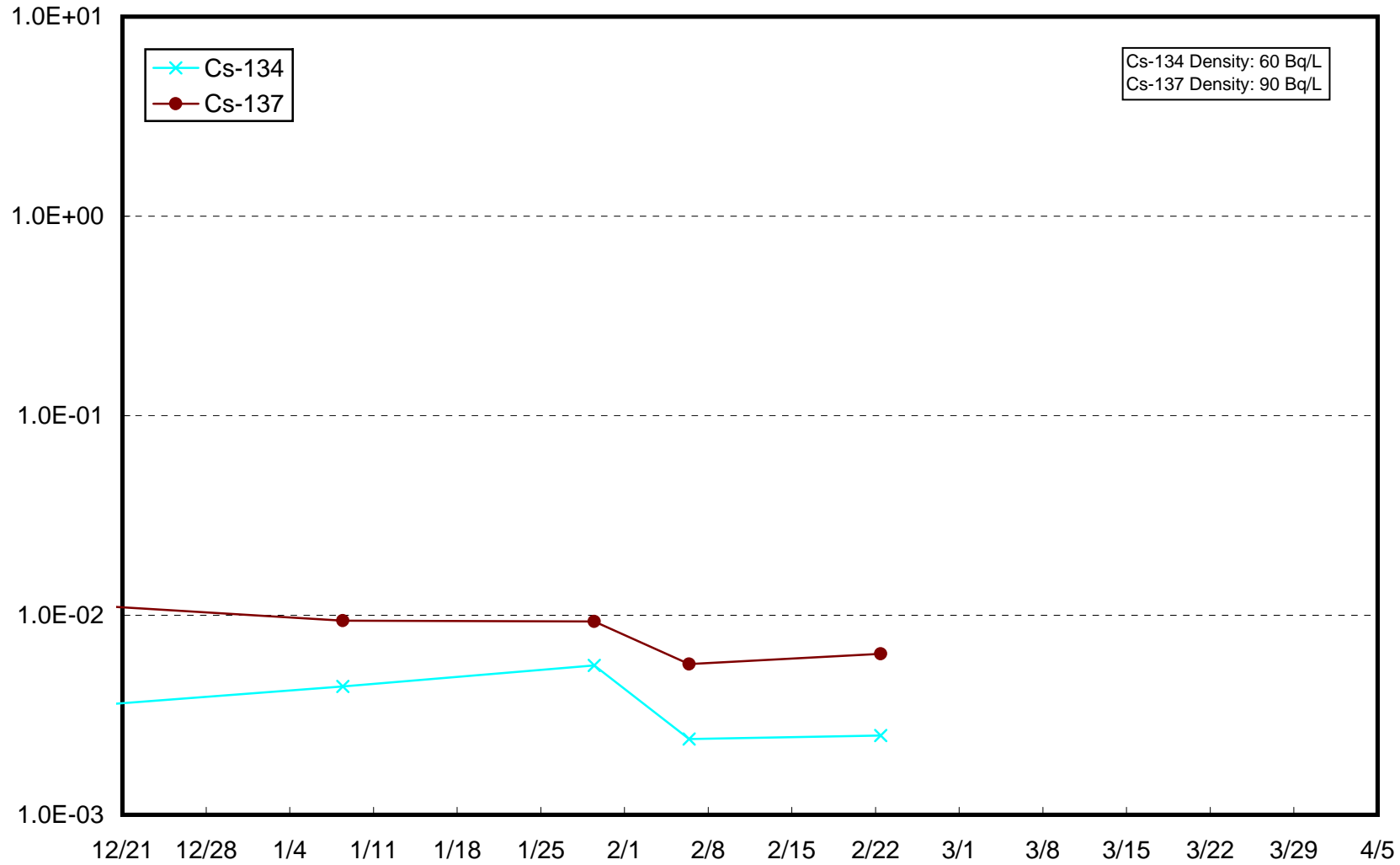
Radioactivity Density of the Seawater at Offshore of Minamisanriku (T-MG0) Middle Layer (Bq/L)



Radioactivity Density of the Seawater at Offshore of Minamisanriku (T-MG0) Lower Layer (Bq/L)

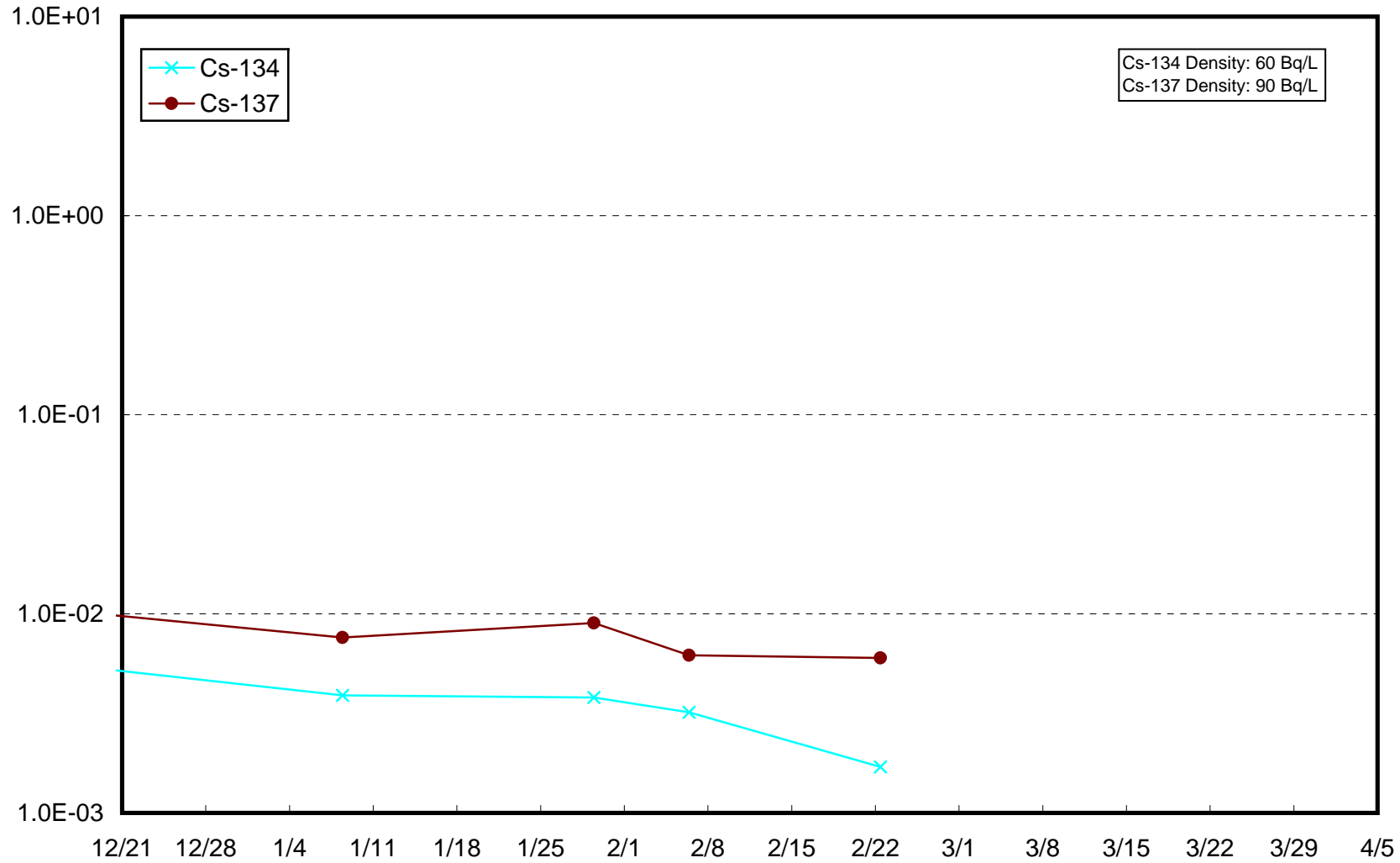


Radioactivity Density of the Seawater in Ishinomaki Bay (T-MG1) Upper Layer (Bq/L)

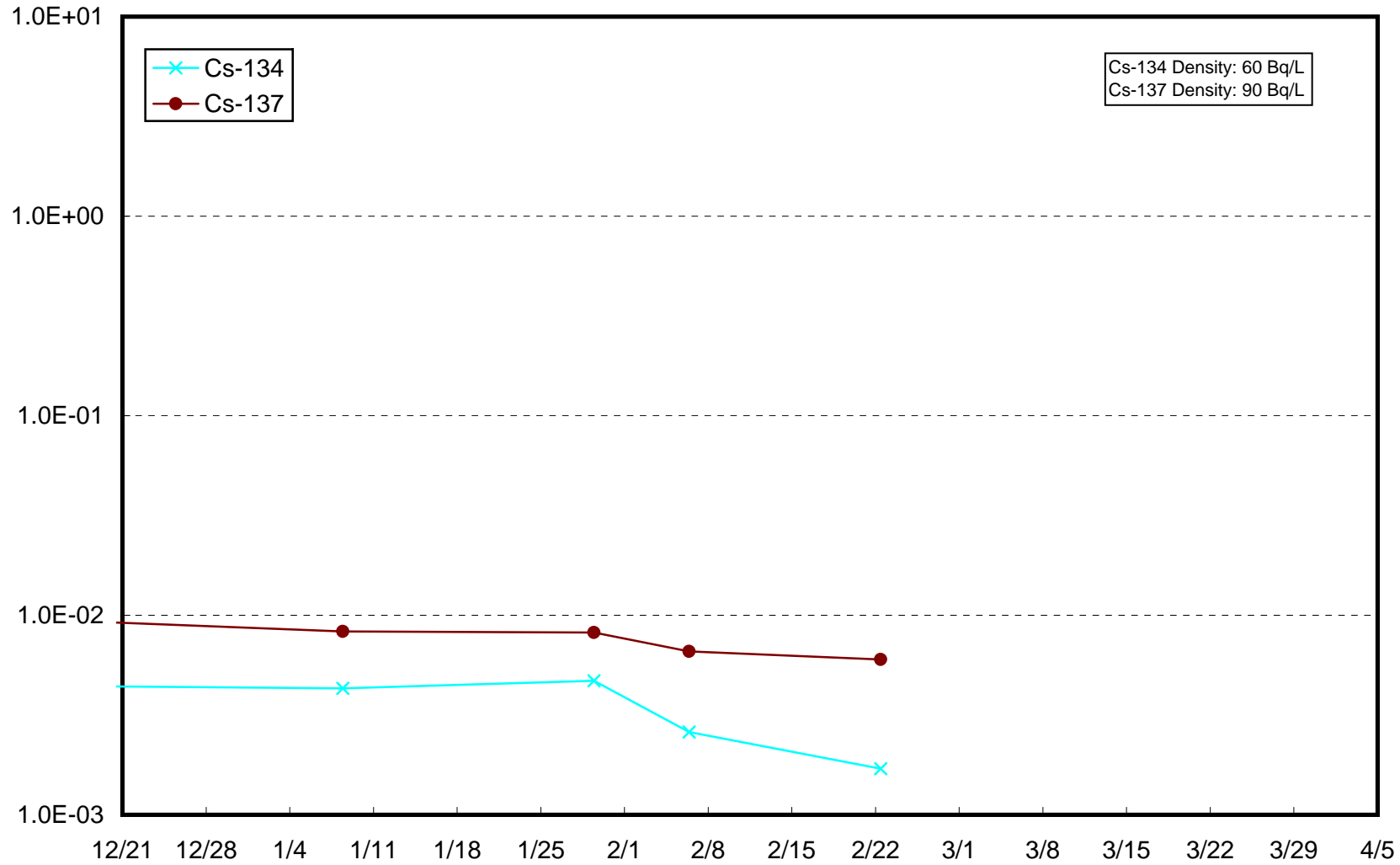




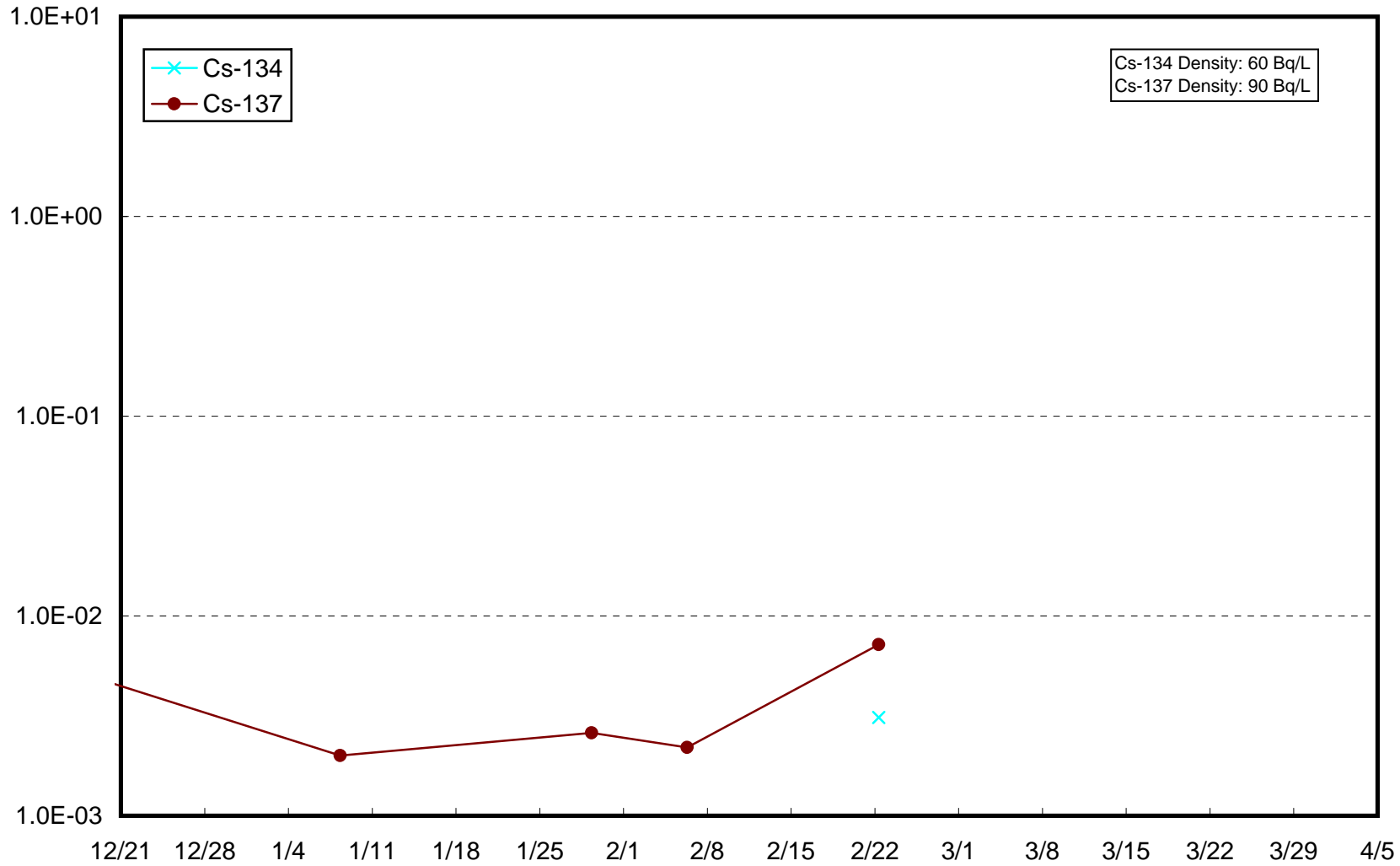
Radioactivity Density of the Seawater in Ishinomaki Bay (T-MG1) Middle Layer (Bq/L)



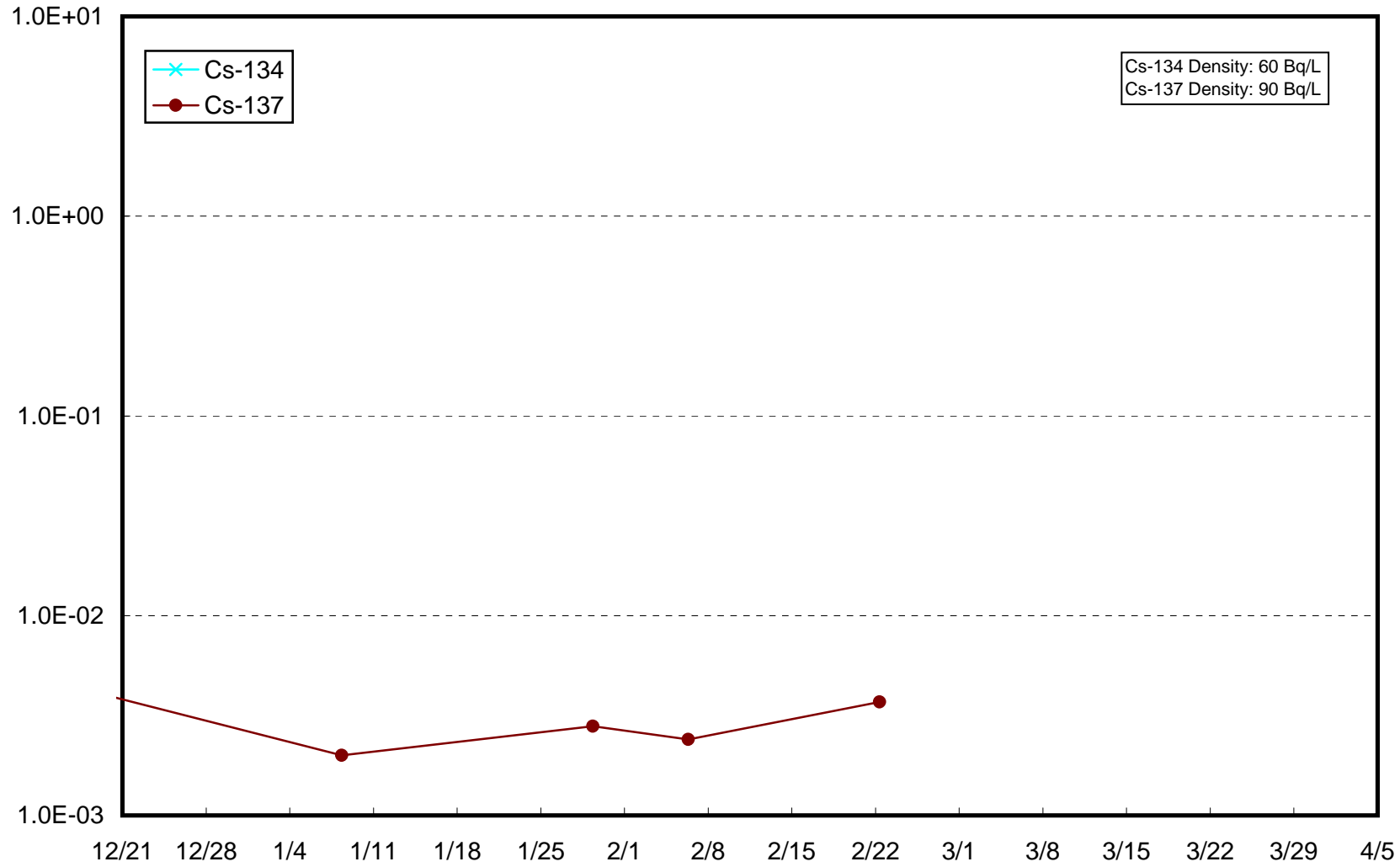
Radioactivity Density of the Seawater in Ishinomaki Bay (T-MG1) Lower Layer (Bq/L)



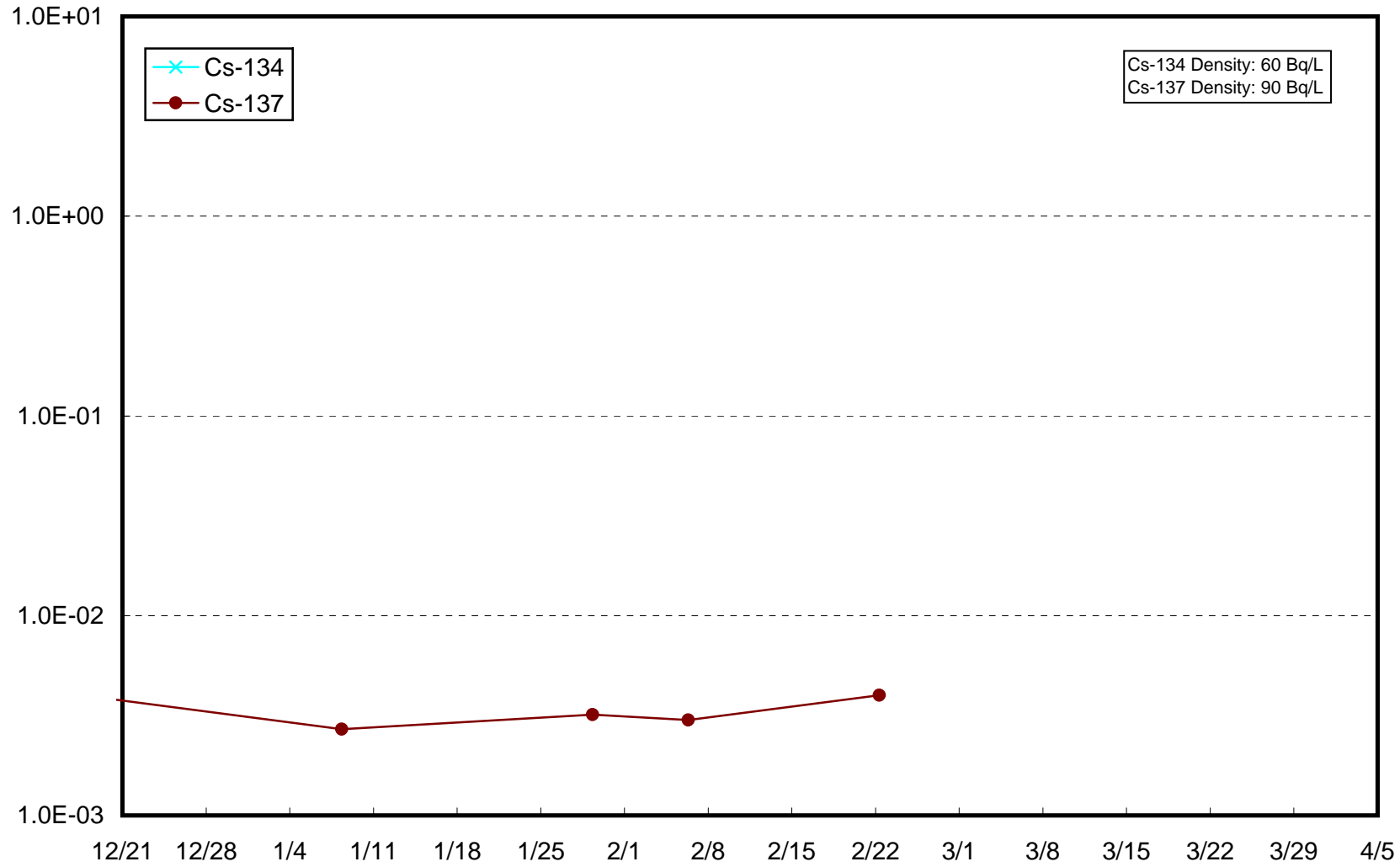
Radioactivity Density of the Seawater at Offshore of Kinkasan East (T-MG2) Upper Layer (Bq/L)



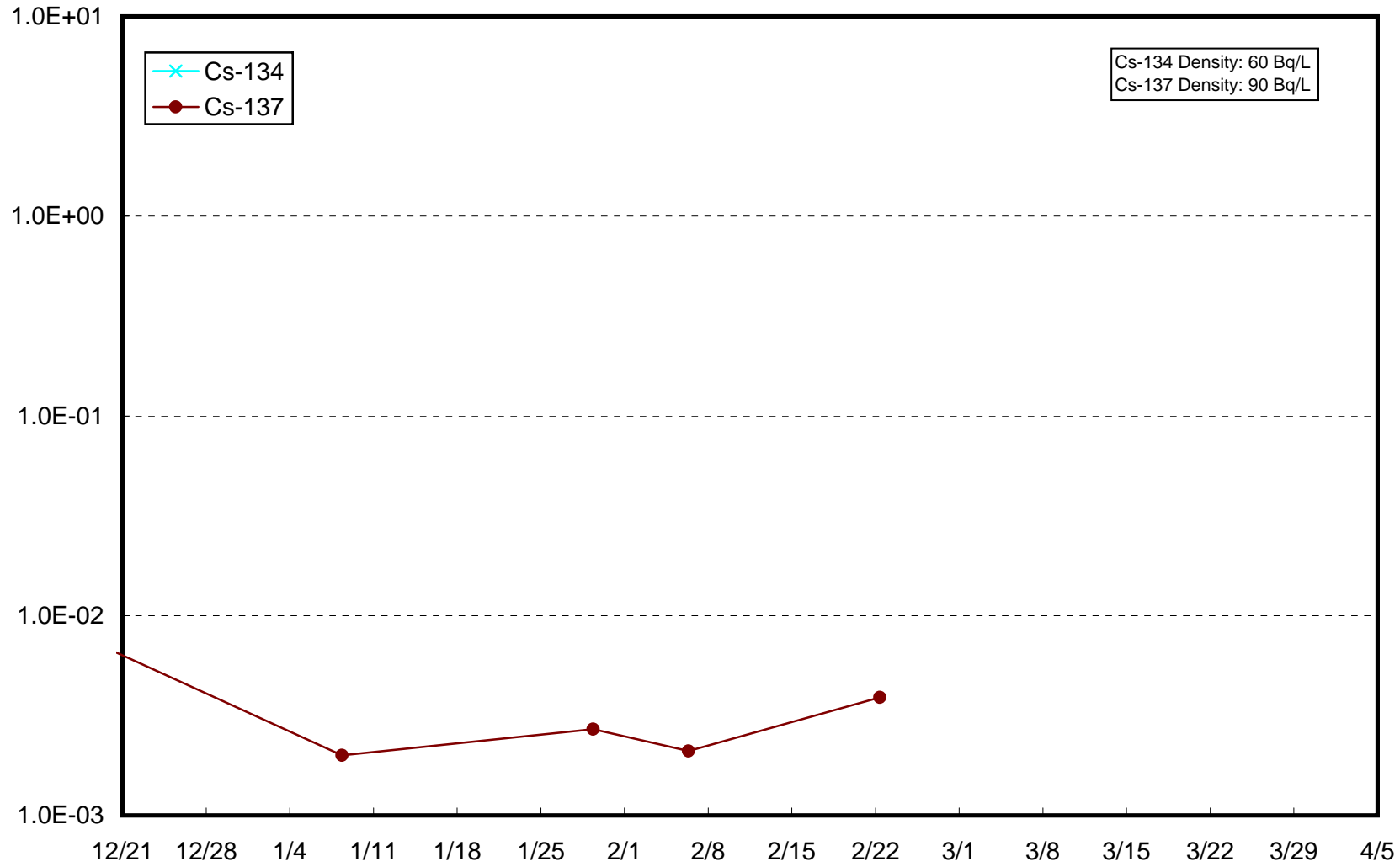
Radioactivity Density of the Seawater at Offshore of Kinkasan East (T-MG2) Middle Layer (Bq/L)



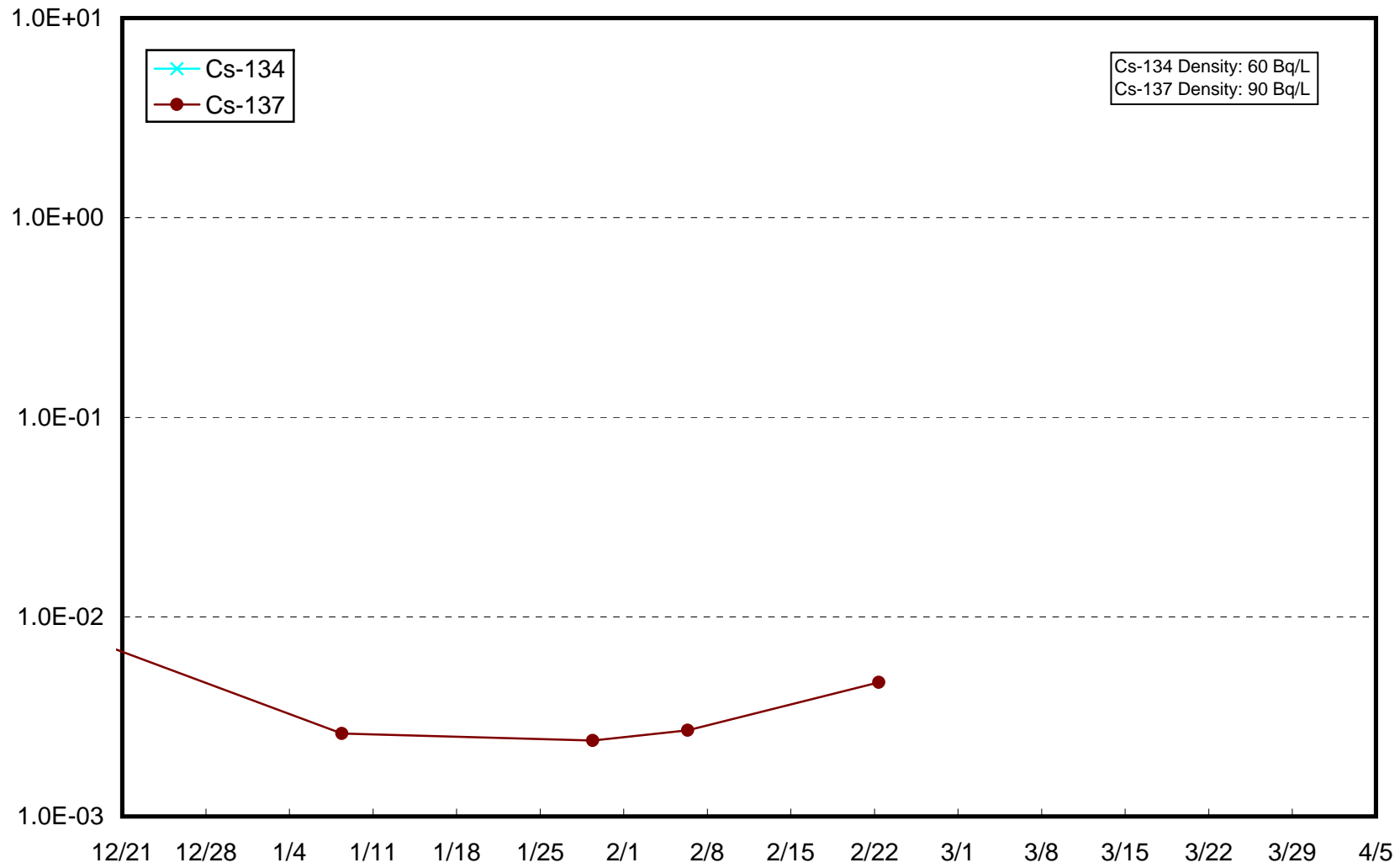
Radioactivity Density of the Seawater at Offshore of Kinkasan East (T-MG2) Lower Layer (Bq/L)



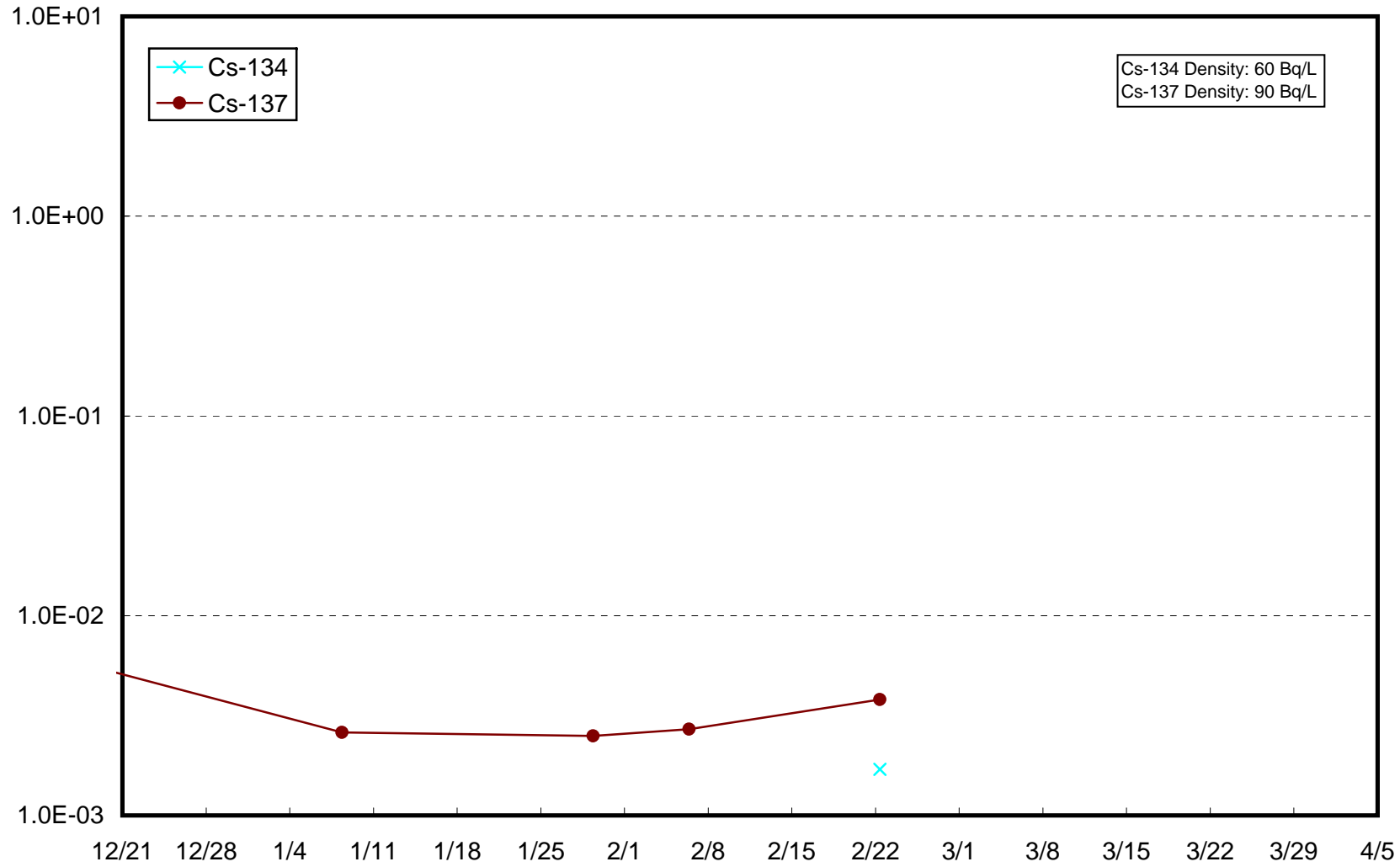
Radioactivity Density of the Seawater at Offshore of Kinkasan South (T-MG3) Upper Layer (Bq/L)



Radioactivity Density of the Seawater at Offshore of Kinkasan South (T-MG3) Middle Layer (Bq/L)

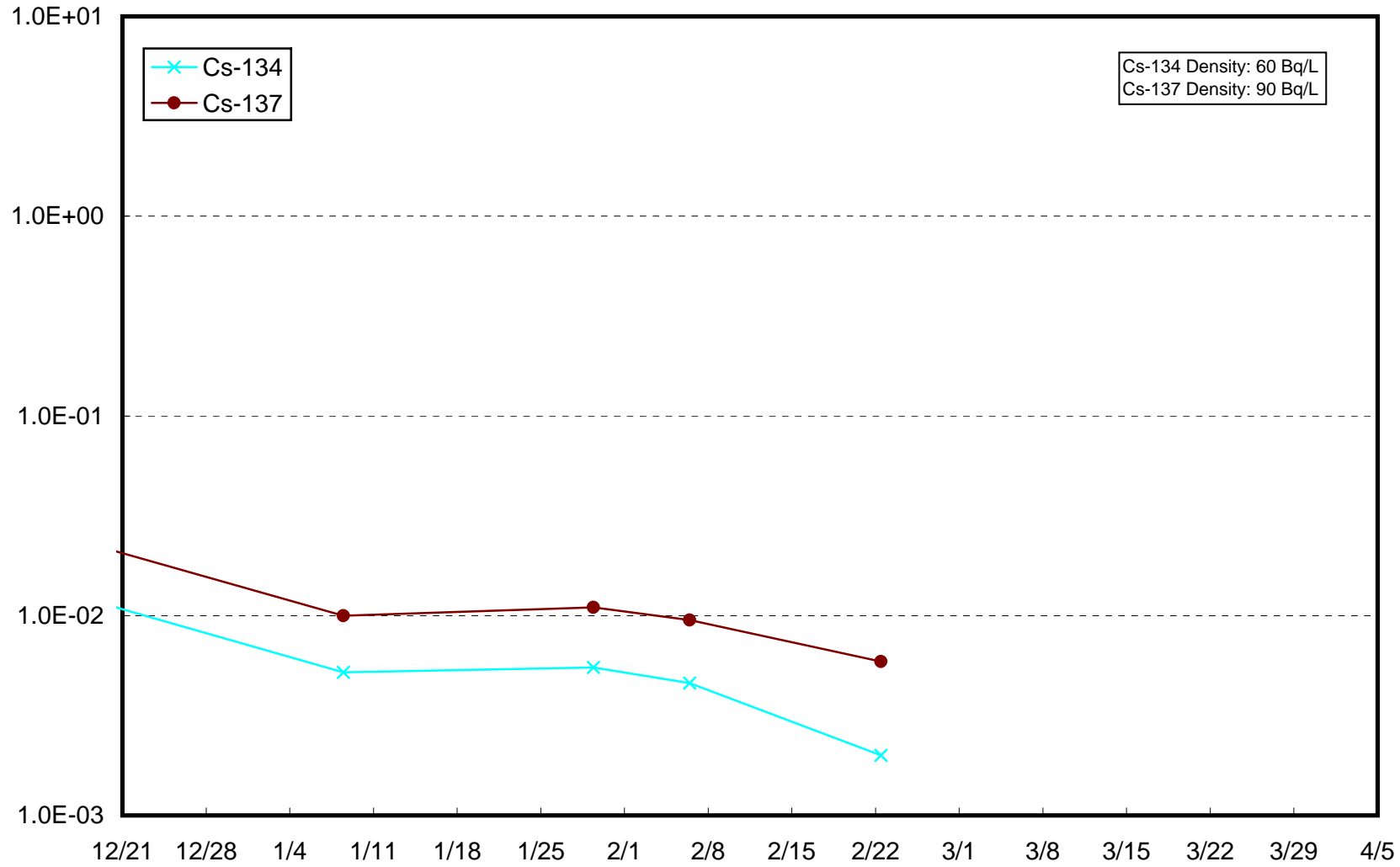


Radioactivity Density of the Seawater at Offshore of Kinkasan South (T-MG3) Lower Layer (Bq/L)

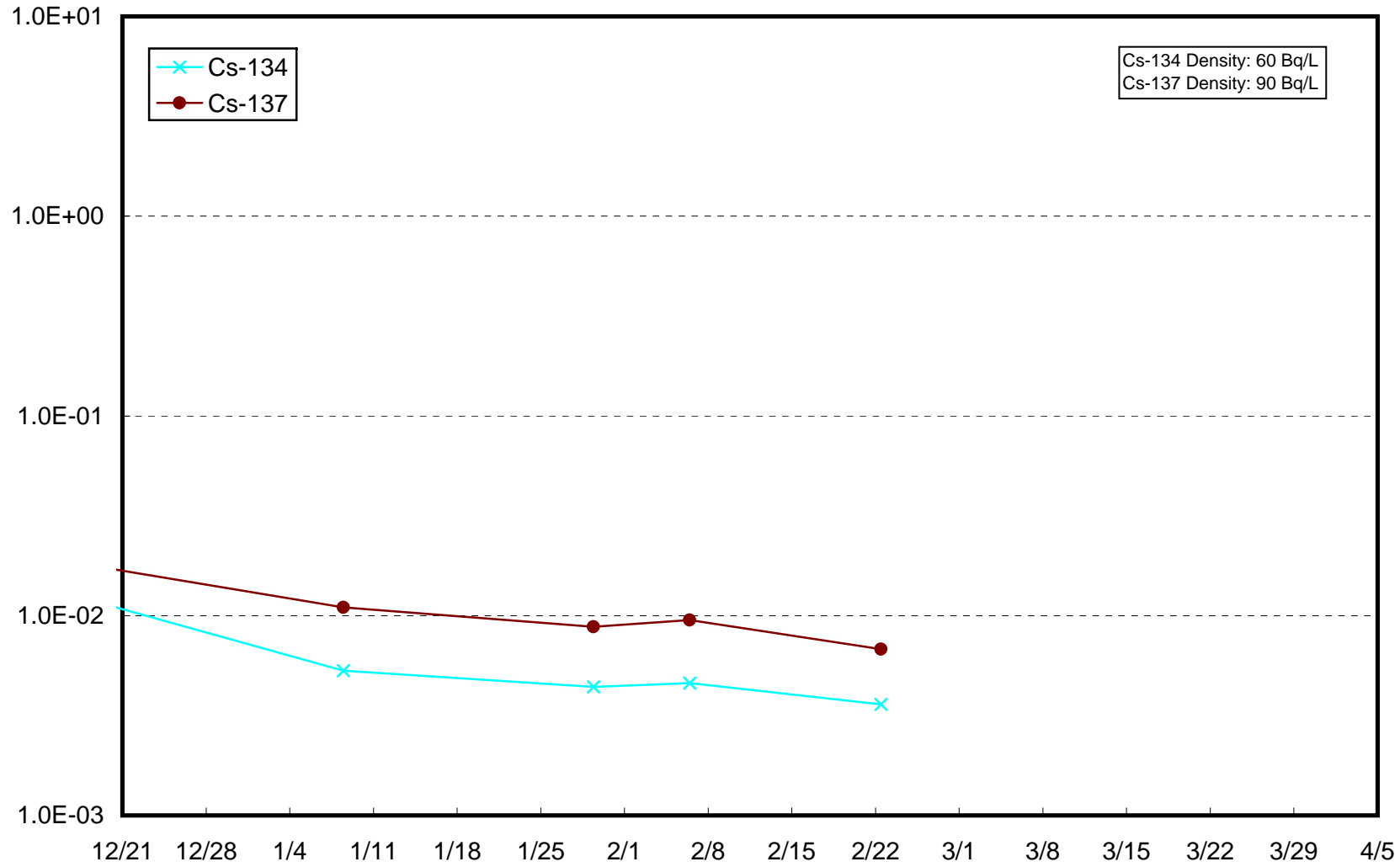




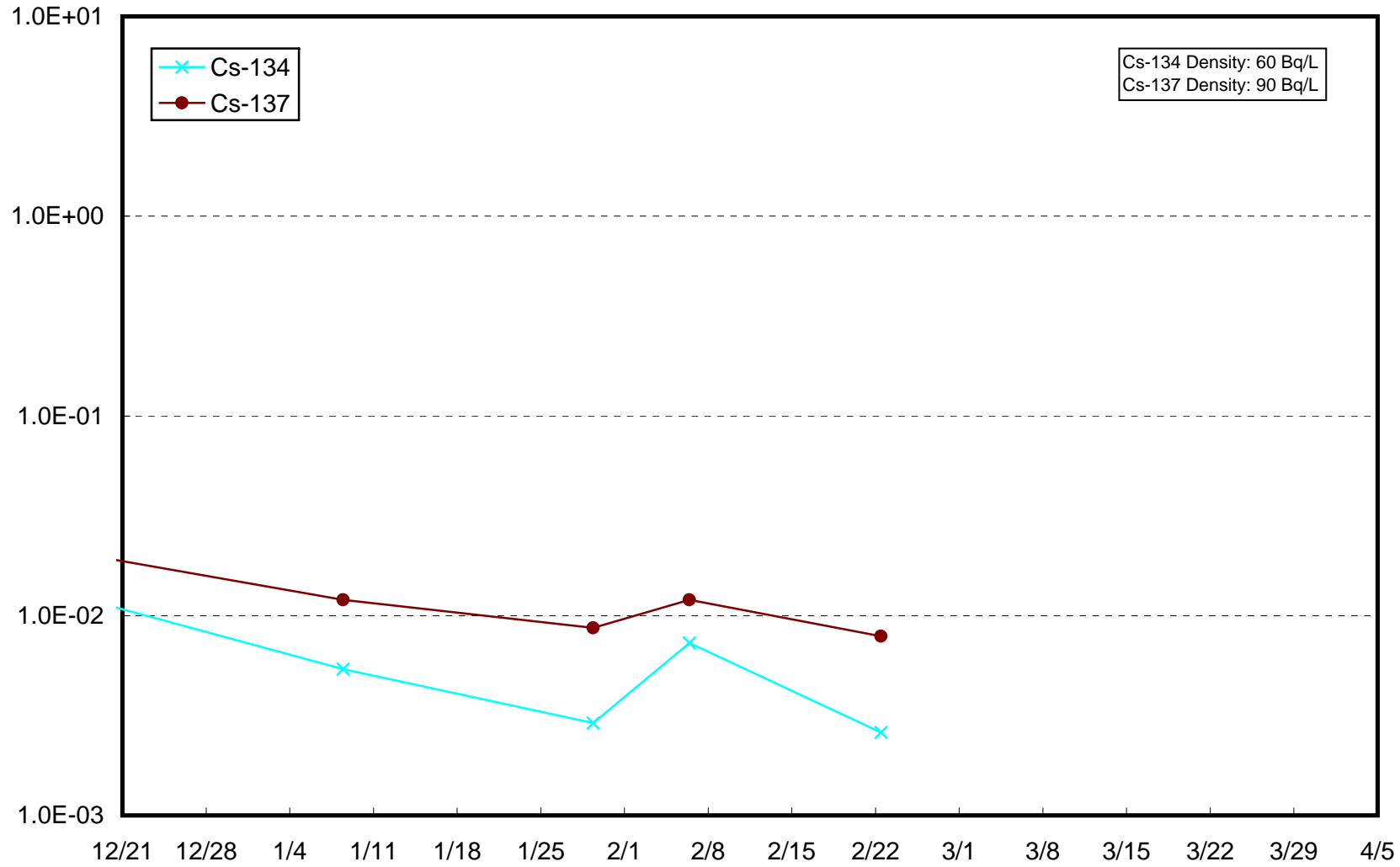
Radioactivity Density of the Seawater at Offshore of Shichigahama (T-MG4) Upper Layer (Bq/L)



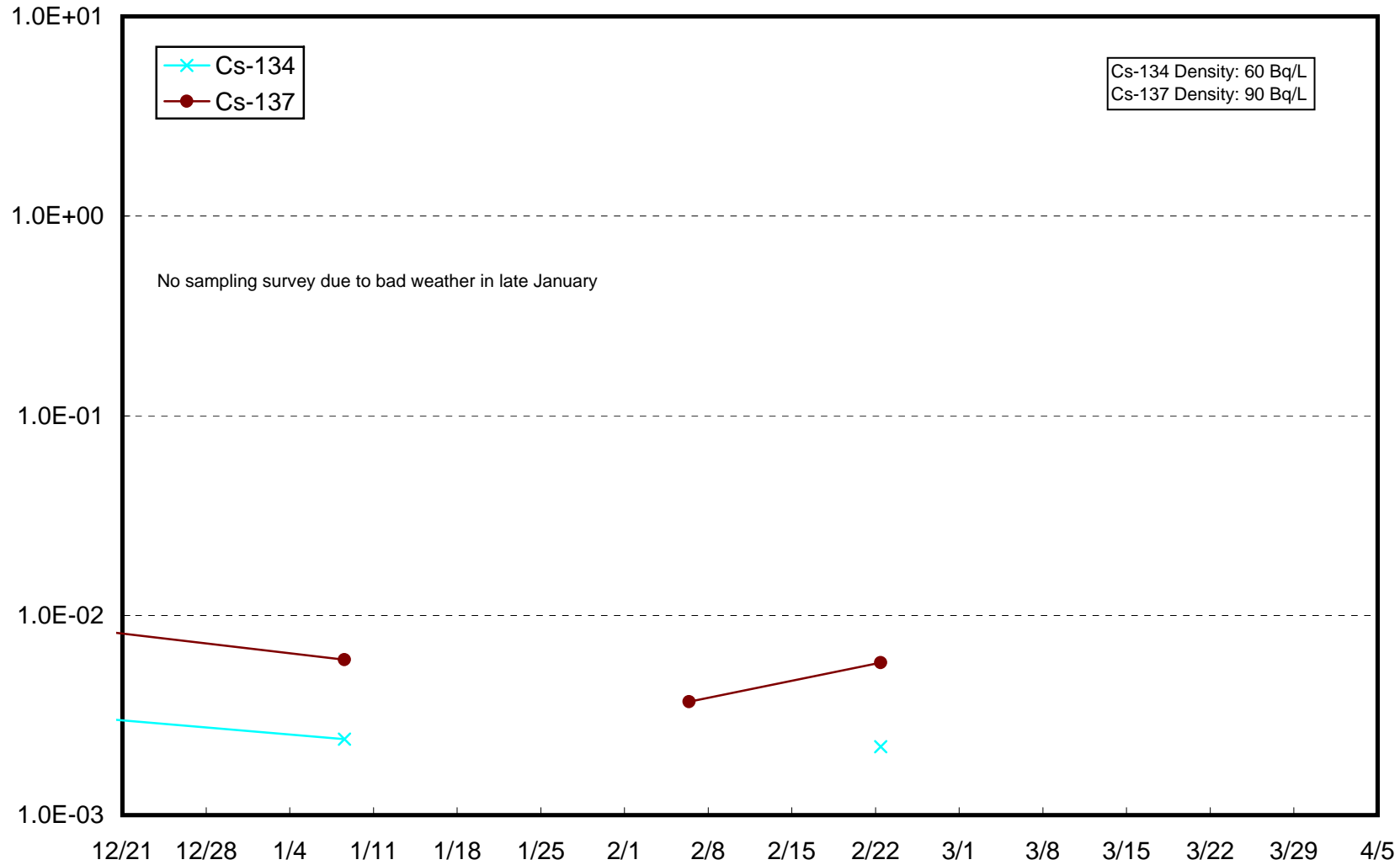
Radioactivity Density of the Seawater at Offshore of Shichigahama (T-MG4) Middle Layer (Bq/L)



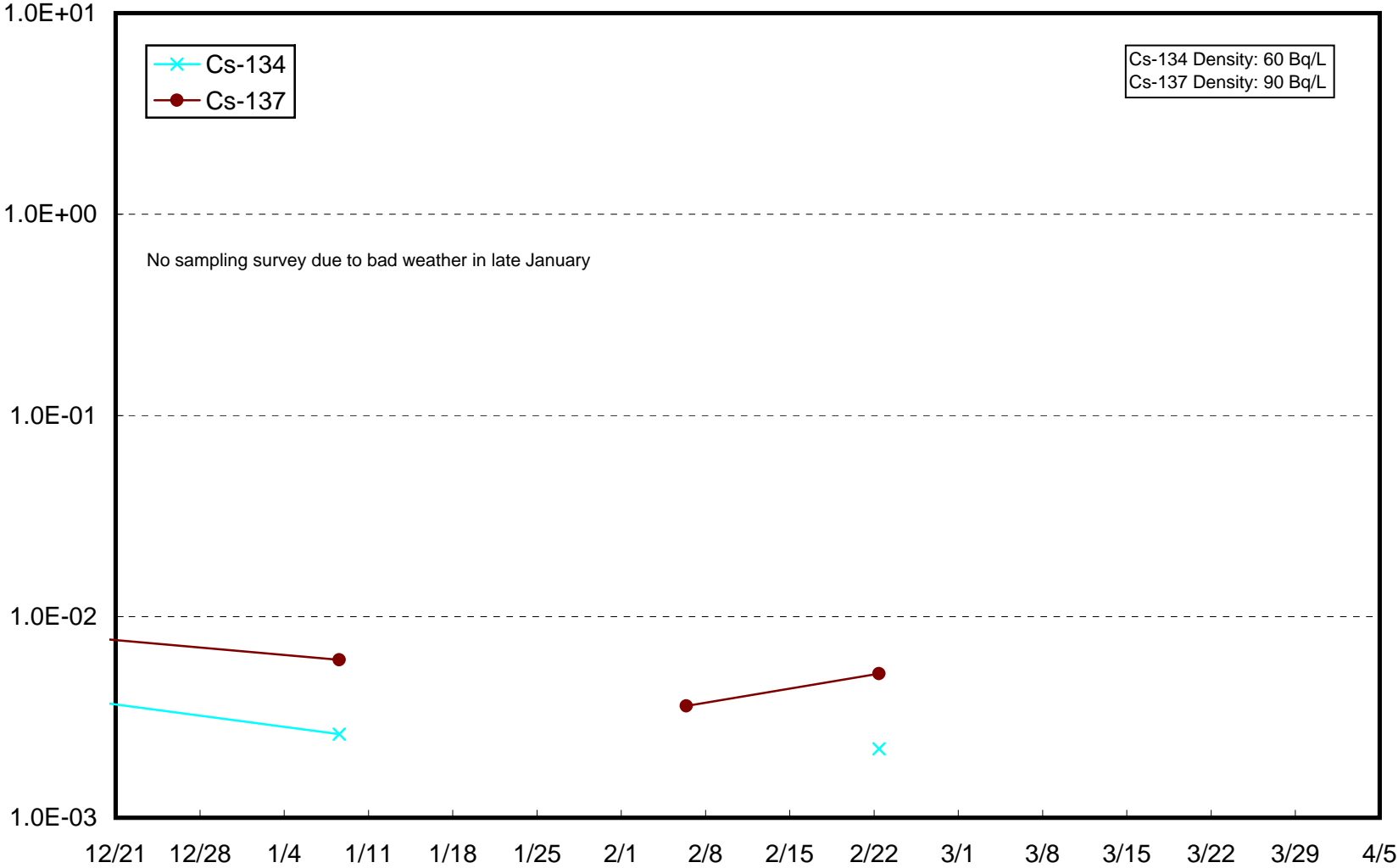
Radioactivity Density of the Seawater at Offshore of Shichigahama (T-MG4) Lower Layer (Bq/L)



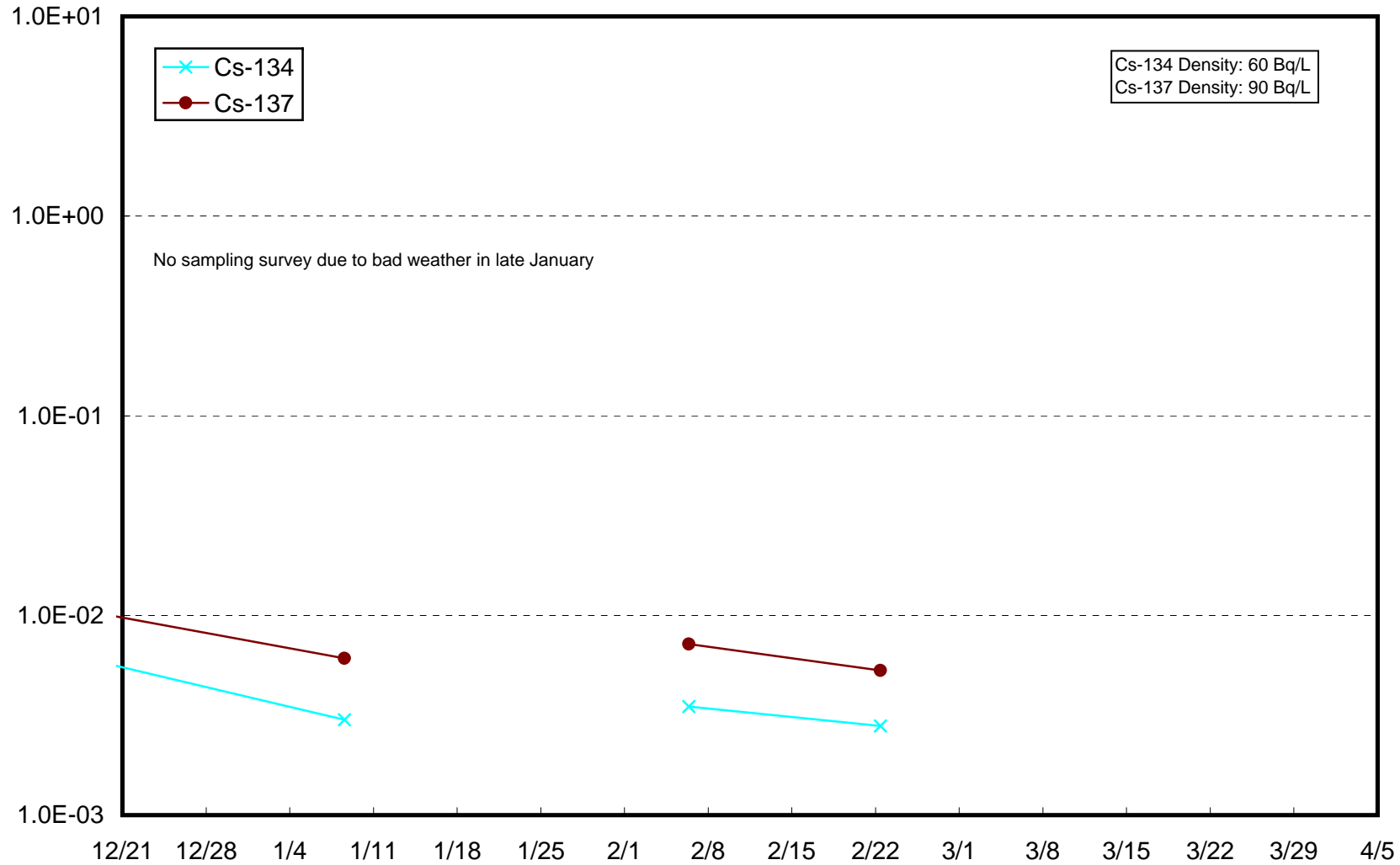
Radioactivity Density of the Seawater in the Central Area of Sendai Bay (T-MG5) Upper Layer (Bq/L)



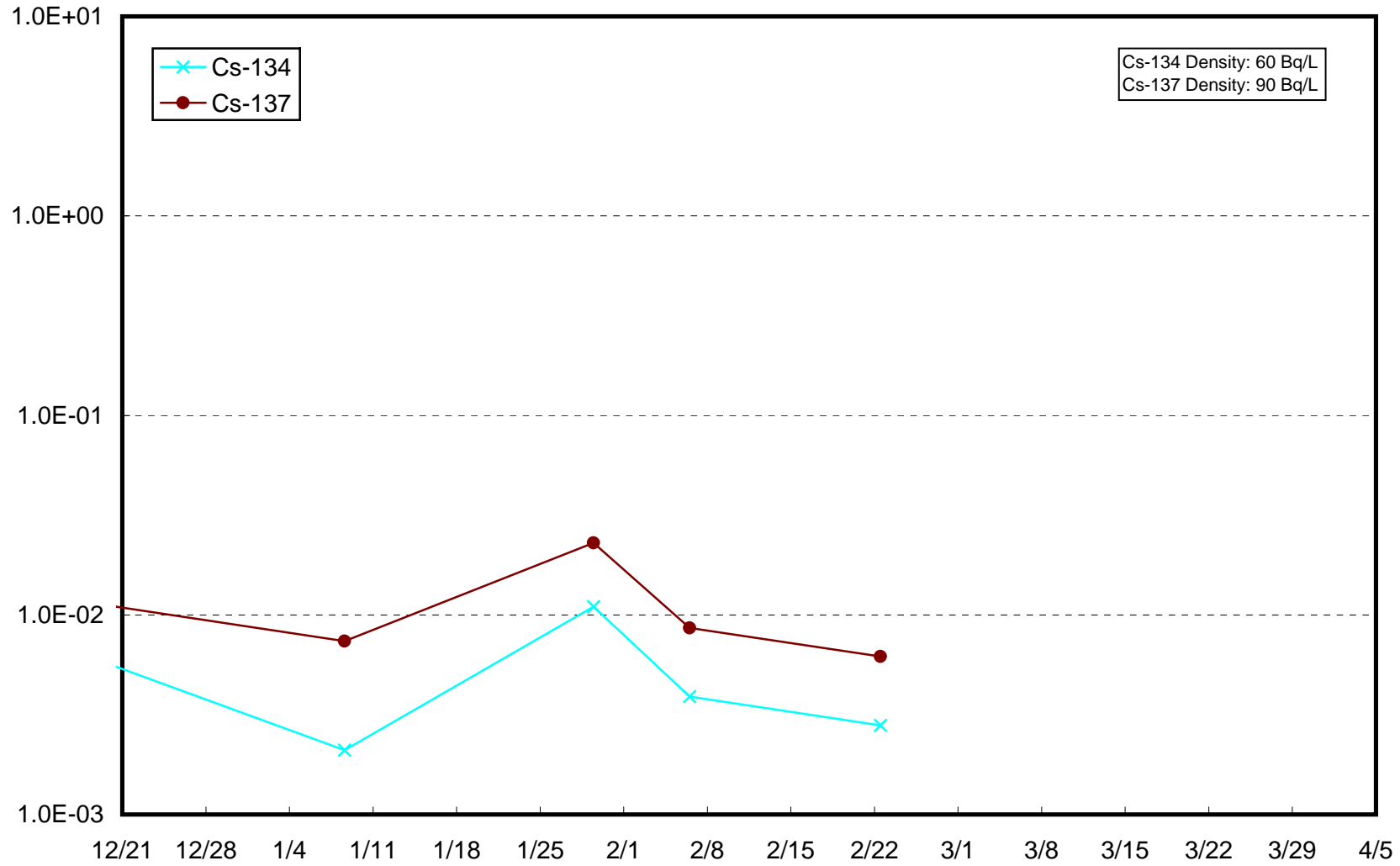
Radioactivity Density of the Seawater in the Central Area of Sendai Bay (T-MG5) Middle Layer (Bq/L)



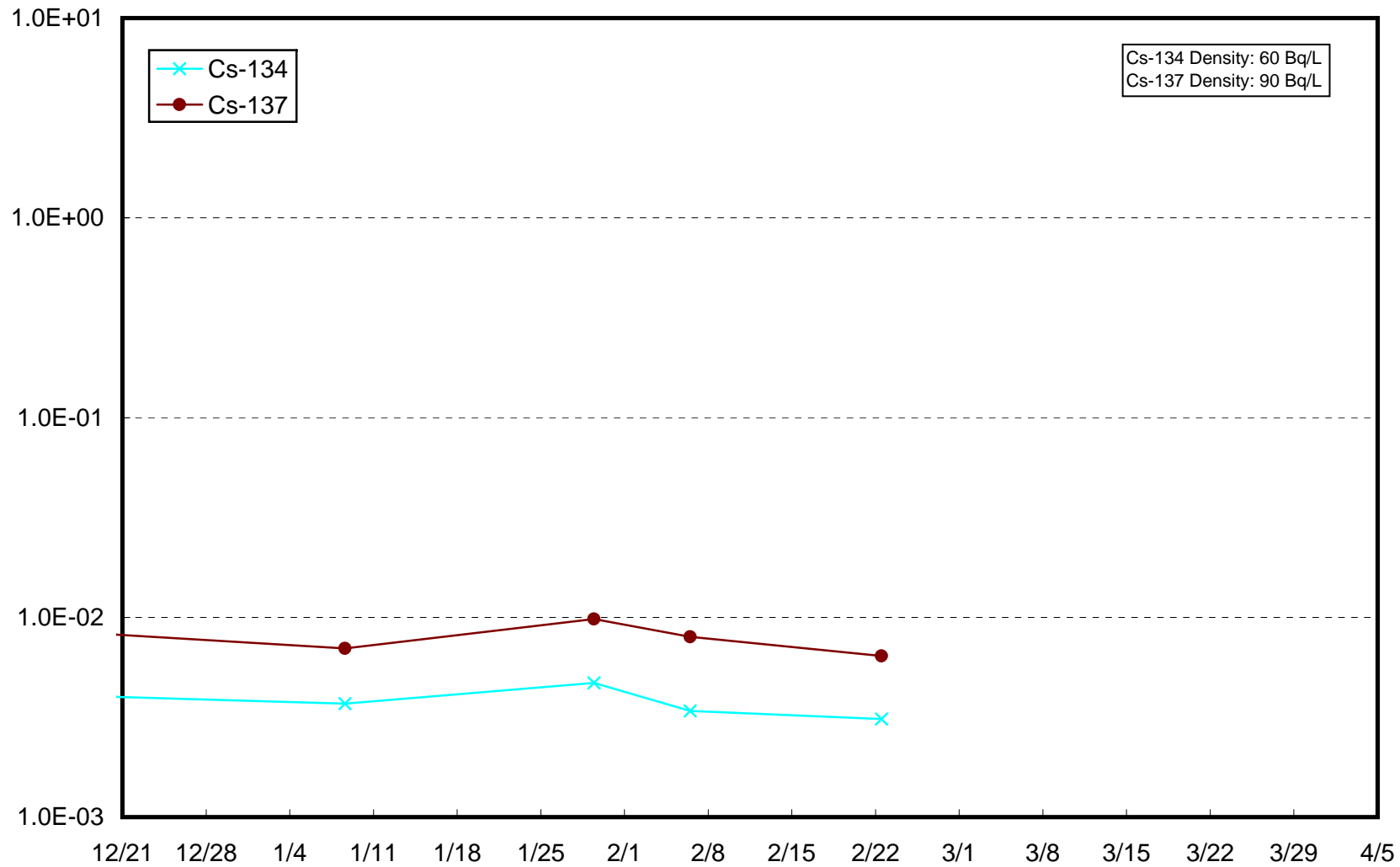
Radioactivity Density of the Seawater in the Central Area of Sendai Bay (T-MG5) Lower Layer (Bq/L)



Radioactivity Density of the Seawater at Offshore of Abukuma River (T-MG6) Upper Layer (Bq/L)



Radioactivity Density of the Seawater at Offshore of Abukuma River (T-MG6) Middle Layer (Bq/L)





Radioactivity Density of the Seawater at Offshore of Abukuma River (T-MG6) Lower Layer (Bq/L)

