

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

(Data summarized on February 28)

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		
	Feb 27, 2013 7:30 AM		Feb 27, 2013 7:50 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/cm³ 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. 0.43Bq/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.

Nuclides Analysis Result of Radioactive Materials in the Seawater

(Data summarized on February 28)

Place of Sampling (Place No.)	North of Unit 5-6 Discharge Channel at Fukushima Daiichi NPS (Approx. 30m North of Unit 5-6 Discharge Channel) (T-1)		Around South Discharge Channel of Fukushima Daiichi NPS (Approx. 1.3km South of Unit 1-4 Discharge Channel) (T-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.)
	Date of Sampling	Nov 12, 2012		Nov 12, 2012		/	
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	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)	1.5	0.02	ND	-	/	/	90
H-3 (approx. 12yrs)	ND	-	ND	-	/	/	60,000
All α	ND	-	ND	-	/	/	-
All β	ND	-	ND	-	/	/	-
Sr-89 (Approx. 51 days)	ND	-	ND	-	/	/	300
Sr-90 (Approx. 29 years)	0.80	0.03	0.25	0.01	/	/	30

* The density specified by the Reactor Regulation is converted from Bq/cm³ to Bq/L.

* Radioactivity Density " - " means "not applicable".

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

* Nuclide analysis results of I-131, Cs-134, Cs-137 and all β obtained at around South Discharge Channel were announced on November 13.

* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.

I-131: Approx. 0.48Bq/L, Cs-134: Approx. 1.1Bq/L, Cs-137: Approx. 1.3Bq/L,

H-3: Approx. 3.0Bq/L, All α: Approx. 0.10Bq/L, All β: Approx. 26Bq/L, Sr-89: Approx. 0.1Bq/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 of Sr-89 and Sr-90 were done by Japan Chemical Analysis Center.

(Evaluation)

Although Sr-90 was detected supposedly as a result of this accident, it is less than the density limit in the water which is specified by the announcement.

Nuclides Analysis Result of the Radioactive Materials in the Seawater < Offshore 1/2 >

(Data summarized on February 28)

Place of Sampling (Place No.)	3km Offshore of Odaka Ward (T-14)				15km Offshore of Fukushima Daiichi NPS (T-5)				3km Offshore of Iwasawa Shore (T-11)				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	Jan 19, 2013 9:08 AM		Jan 19, 2013 9:08 AM		Jan 18, 2013 8:48 AM		Jan 18, 2013 8:48 AM		Jan 18, 2013 7:40 AM		Jan 18, 2013 7:40 AM		
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	
Cs-134 (Approx. 2 years)	0.041	0.00	0.044	0.00	0.0014	0.00	0.0018	0.00	0.033	0.00	0.034	0.00	60
Cs-137 (Approx. 30 years)	0.070	0.00	0.075	0.00	0.0049	0.00	0.0045	0.00	0.058	0.00	0.057	0.00	90

Place of Sampling (Place No.)	15km Offshore of Iwasawa Shore (T-7)				3km Offshore of Onahama Port (T-18)				5km Offshore of Numanouchi (T-M10)				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	Jan 16, 2013 8:16 AM		Jan 16, 2013 8:16 AM		Jan 16, 2013 11:06 AM		Jan 16, 2013 11:06 AM		Jan 16, 2013 10:06 AM		Jan 16, 2013 10:06 AM		
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	
Cs-134 (Approx. 2 years)	0.0018	0.00	0.0027	0.00	0.016	0.00	0.021	0.00	ND	-	0.0038	0.00	60
Cs-137 (Approx. 30 years)	0.0055	0.00	0.0074	0.00	0.030	0.00	0.038	0.00	0.0040	0.00	0.0072	0.00	90

* The density specified by the Reactor Regulation is converted from Bq/cm³ to Bq/L.

* 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.

Cs-134: Approx.0.0014Bq/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 results by detail analysis (Phosphomolybdic acid ammonium adsorption sampling method) are noted.

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

Nuclides Analysis Result of the Radioactive Materials in the Seawater < Offshore 2/2 >

(Data summarized on February 28)

Place of Sampling (Place No.)	1km Offshore of Nida River (T-13-1)				3km Offshore of Soma (T-22)				5km Offshore of Kashima (T-MA)				Density Limit Specified by the Reactor Regulation (Bq/L)
	Upper Layer		Lower Layer		Upper Layer		Lower Layer		Upper Layer		Lower Layer		
Time of Sampling	Jan 17, 2013 8:34 AM		Jan 17, 2013 8:34 AM		Jan 17, 2013 7:27 AM		Jan 17, 2013 7:27 AM		Jan 17, 2013 7:57 AM		Jan 17, 2013 7:57 AM		(The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	
Cs-134 (Approx. 2 years)	0.026	0.00	0.056	0.00	0.013	0.00	0.029	0.00	0.0069	0.00	0.0086	0.00	
Cs-137 (Approx. 30 years)	0.046	0.00	0.099	0.00	0.024	0.00	0.054	0.00	0.014	0.00	0.016	0.00	90

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

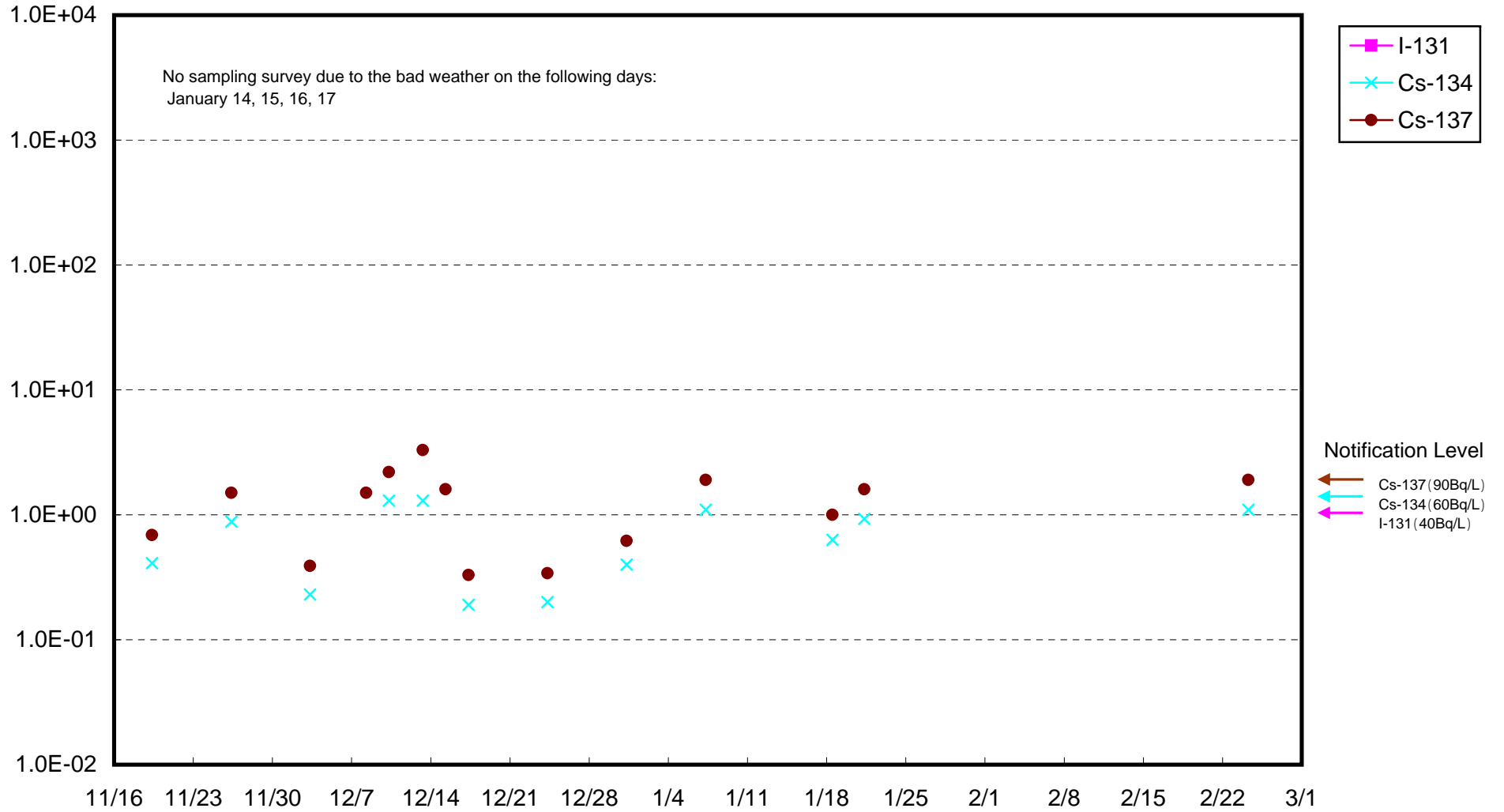
* The density specified by the Reactor Regulation is converted from Bq/cm³ to Bq/L.

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

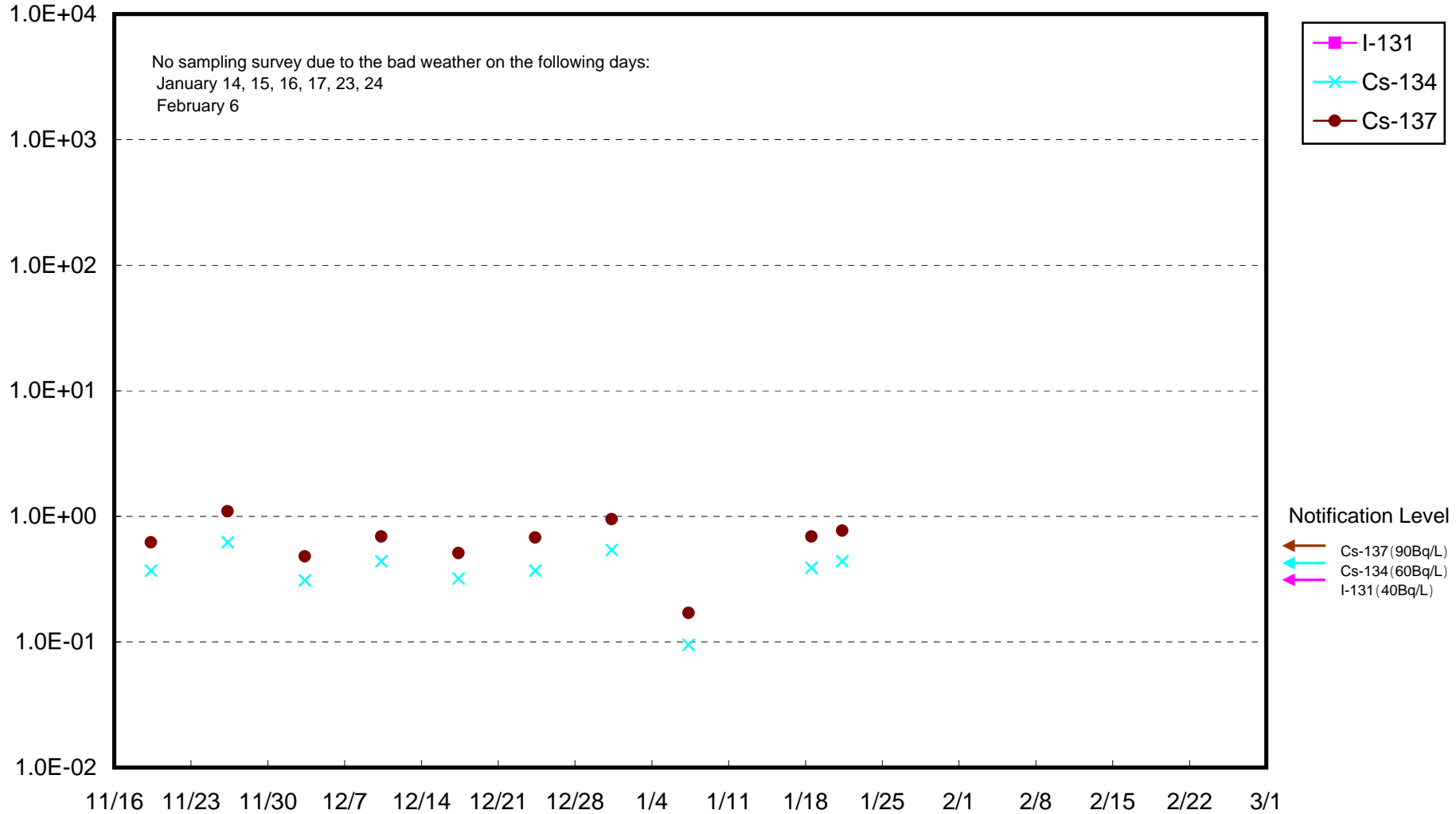
* Analysis results by detail analysis (Phosphomolybdic acid ammonium adsorption sampling method) are noted.

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

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

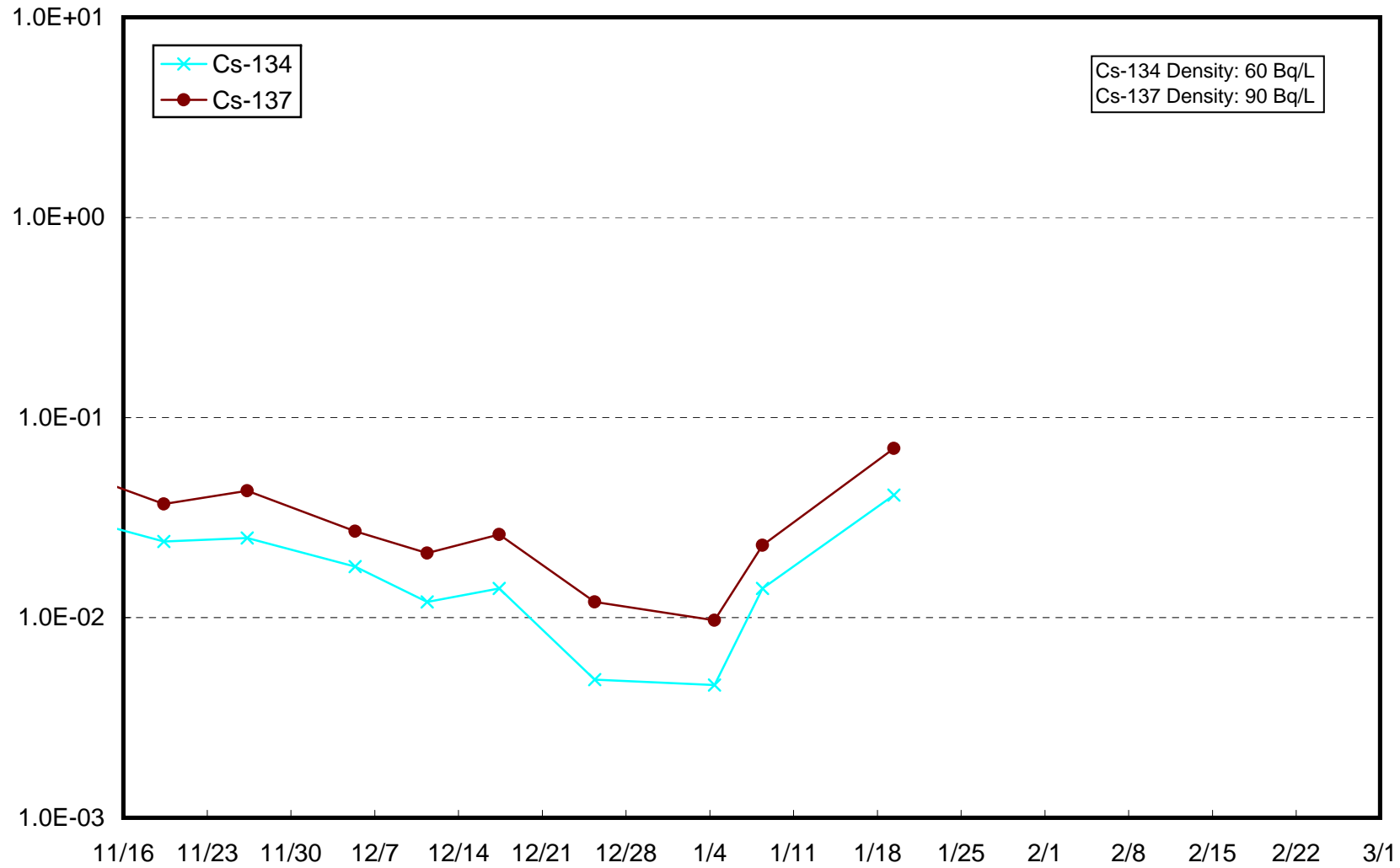


Radioactivity Density of the Seawater at 1F South Discharge Channel (Bq/L)

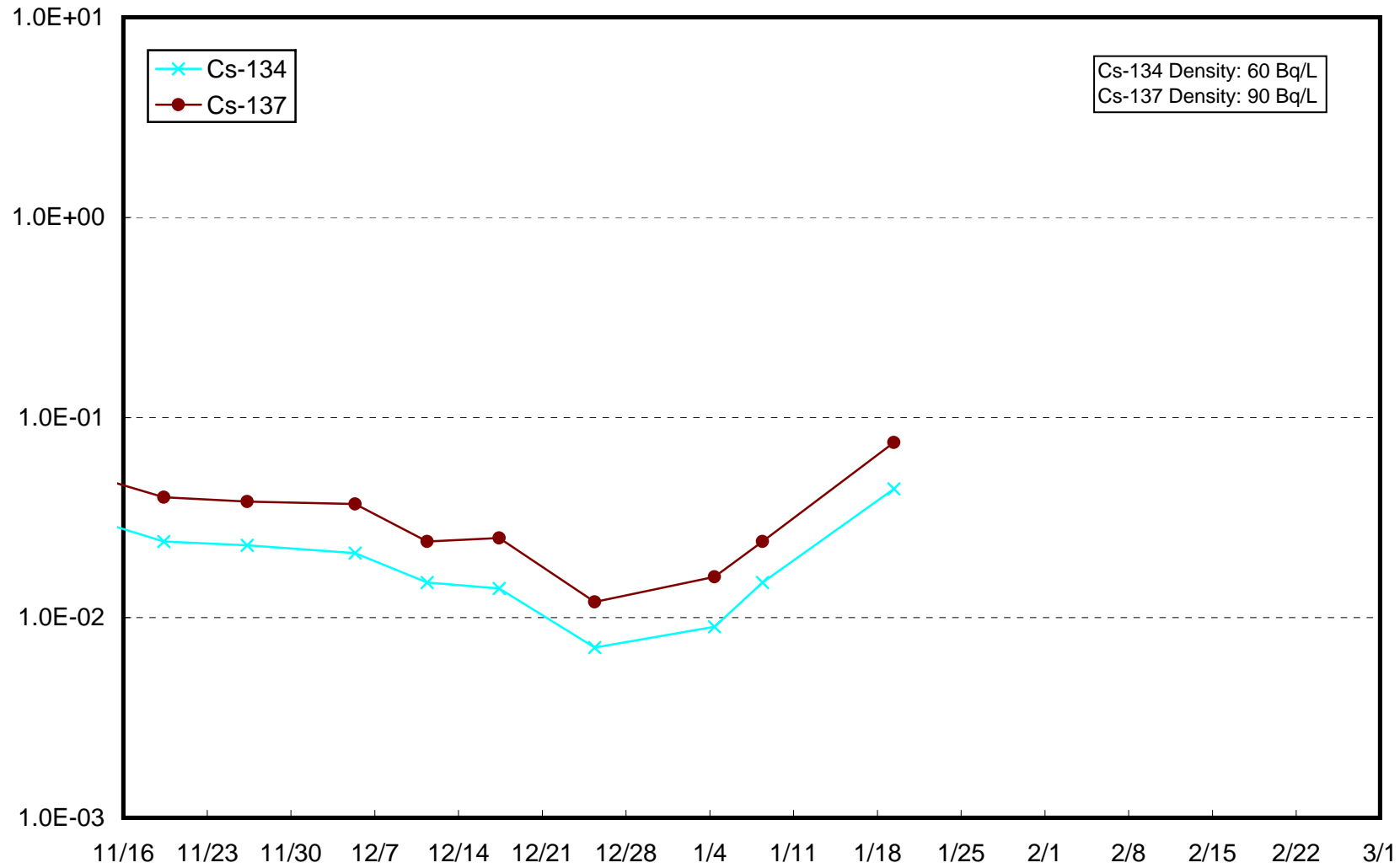


Sampling was conducted at around South Discharge Channel of Fukushima Daiichi NPS (approx. 330m south of Units 1-4 Discharge Channel) until November 25, 2012.

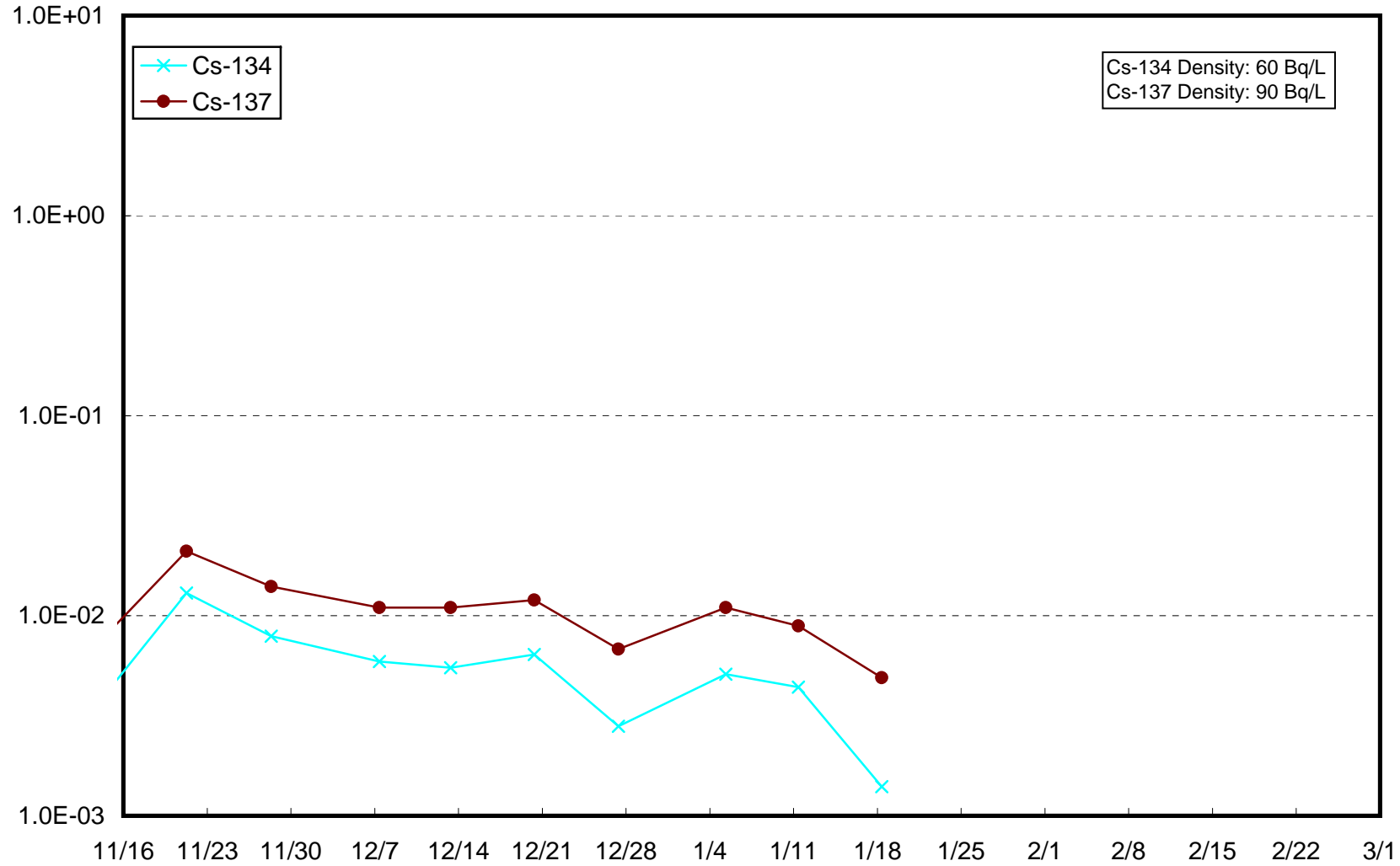
Radioactivity Density of the Seawater at 3km Offshore of Odaka Ward (T-14) Upper Layer (Bq/L)



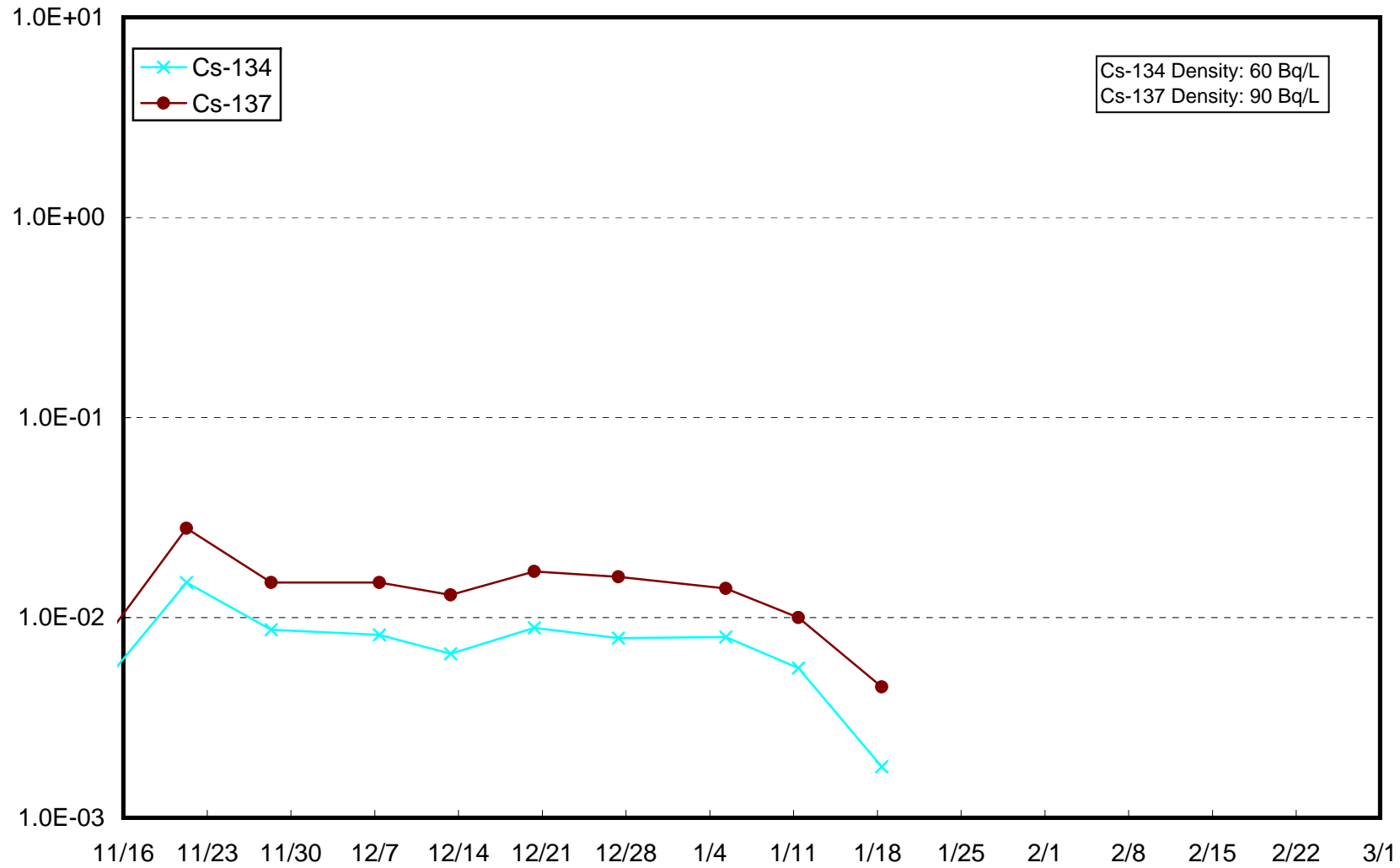
Radioactivity Density of the Seawater at 3km Offshore of Odaka Ward (T-14) Lower Layer (Bq/L)



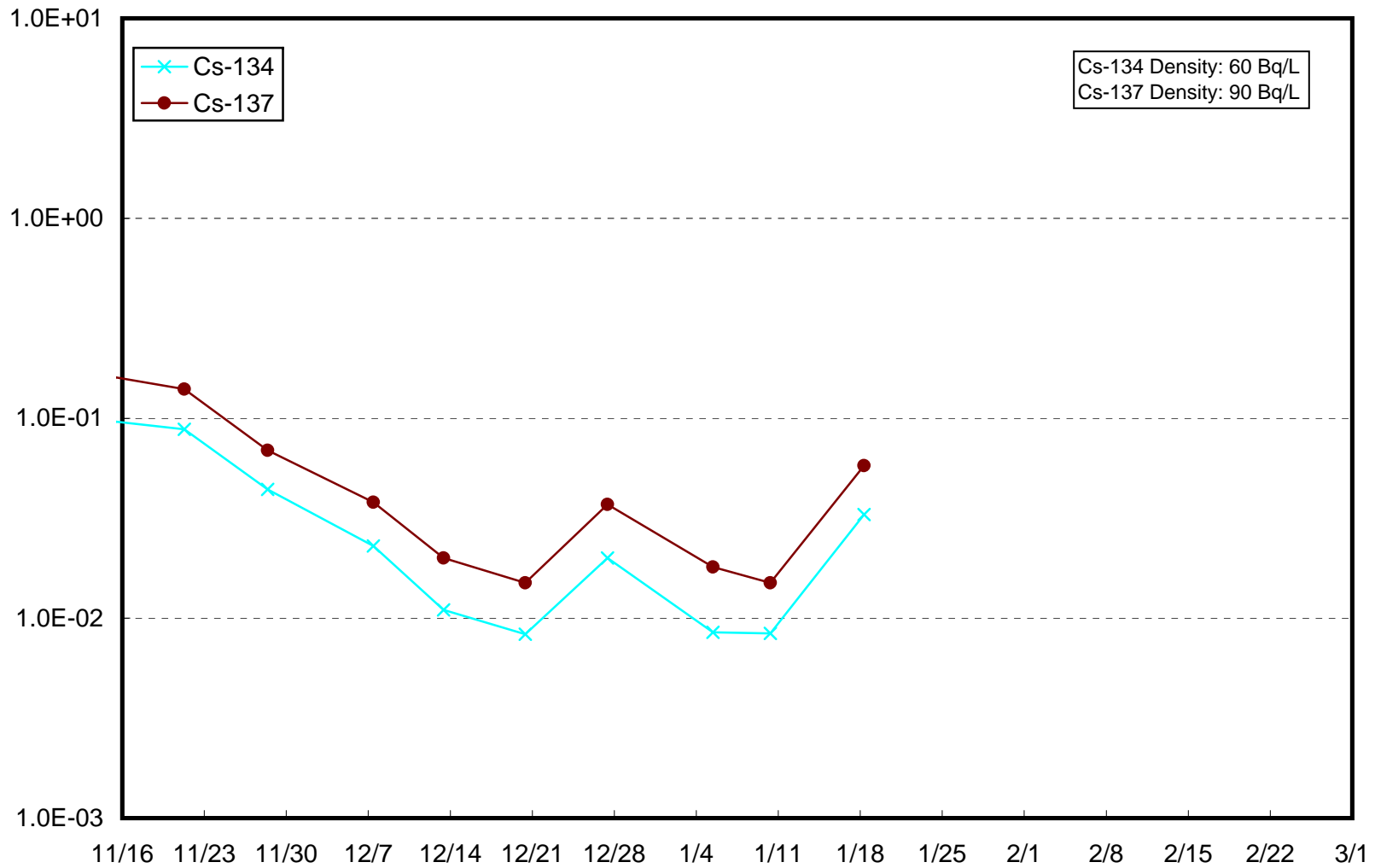
Radioactivity Density of the Seawater at 15km Offshore of Fukushima Daiichi NPS (T-5) Upper Layer (Bq/L)



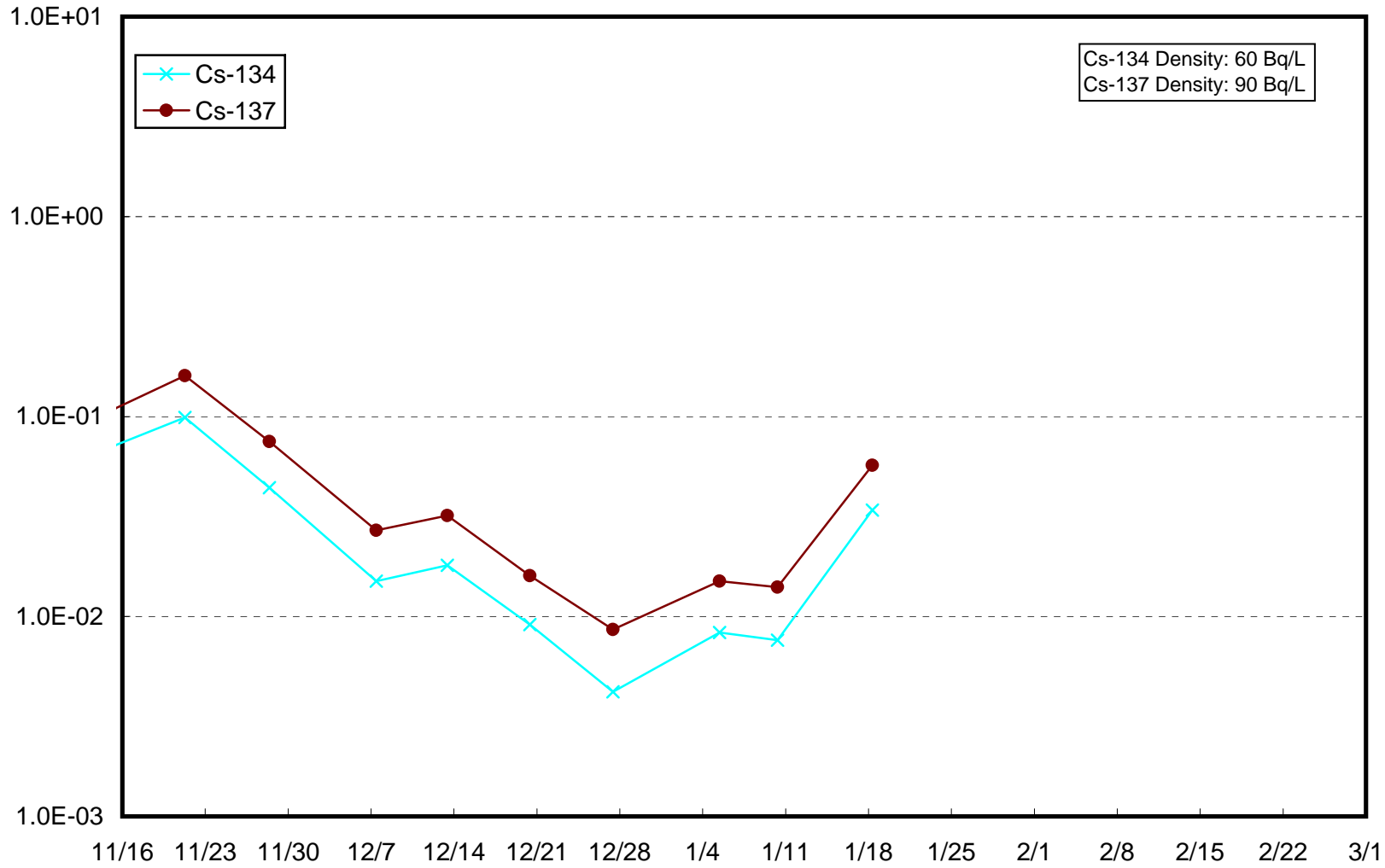
Radioactivity Density of the Seawater at 15km Offshore of Fukushima Daiichi NPS (T-5) Lower Layer (Bq/L)



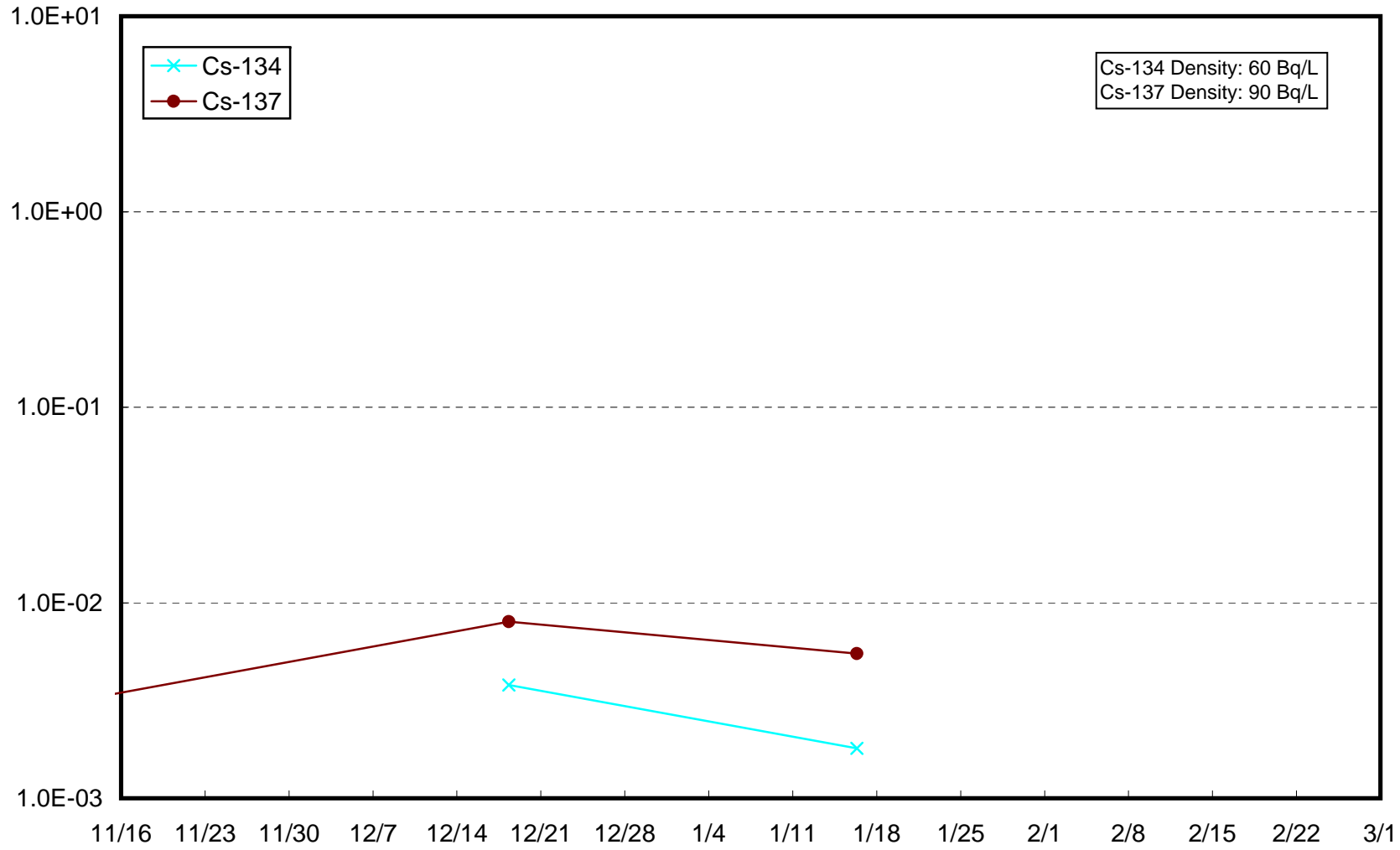
Radioactivity Density of the Seawater at 3km Offshore of Iwasawa Shore (T-11) Upper Layer (Bq/L)



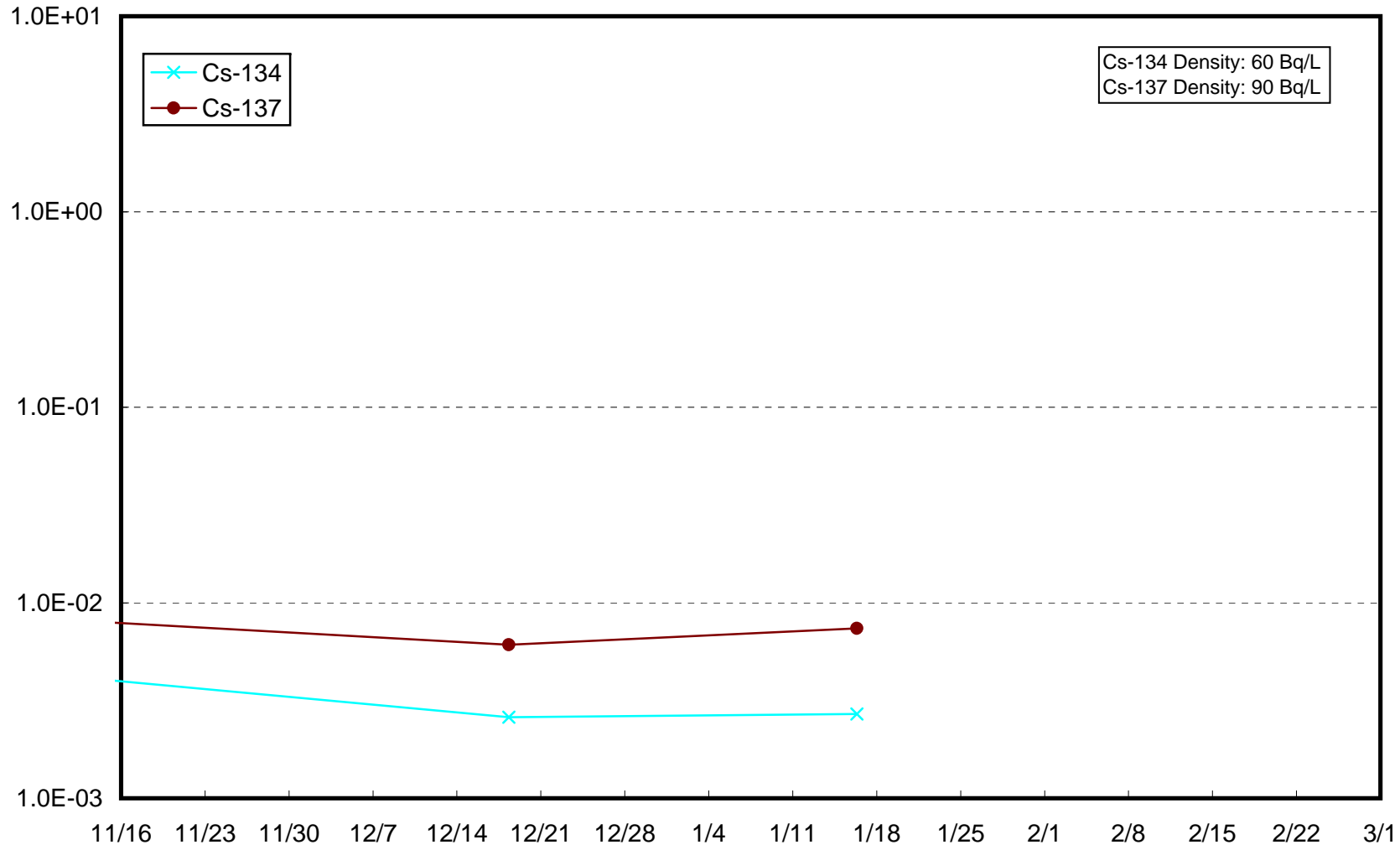
Radioactivity Density of the Seawater at 3km Offshore of Iwasawa Shore (T-11) Lower Layer (Bq/L)



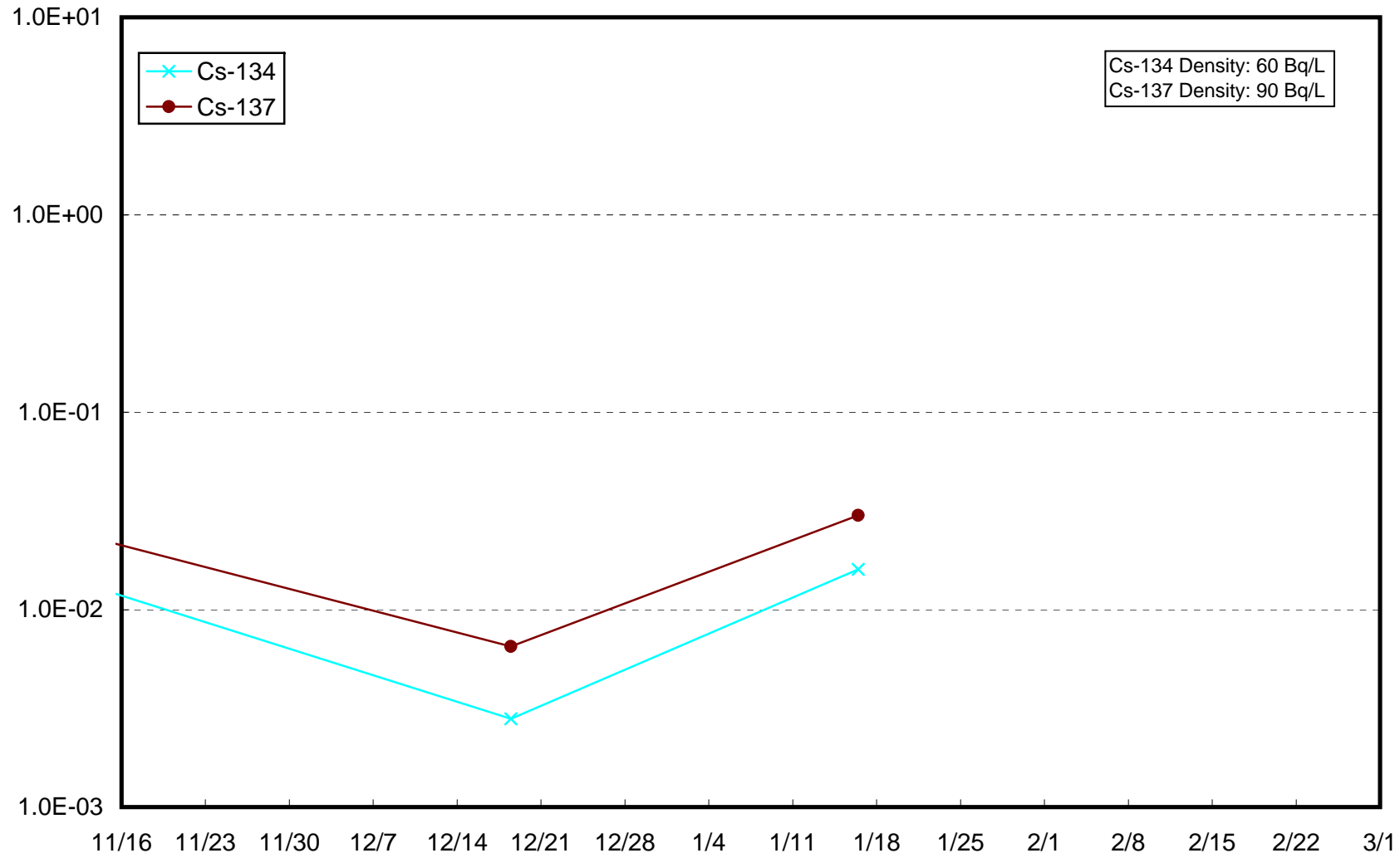
Radioactivity Density of the Seawater at 15km Offshore of Iwasawa Shore (T-7) Upper Layer (Bq/L)



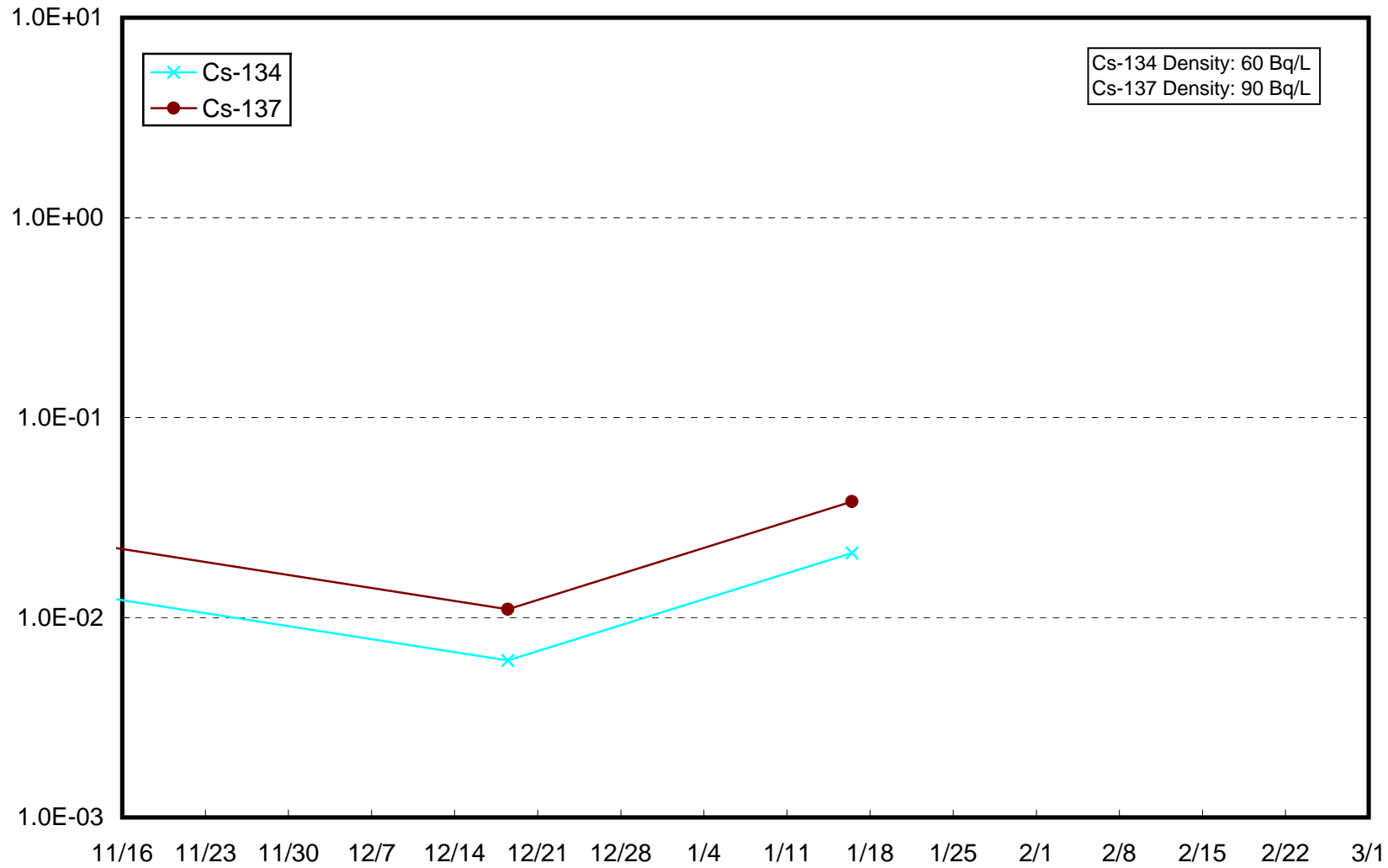
Radioactivity Density of the Seawater at 15km Offshore of Iwasawa Shore (T-7) Lower Layer (Bq/L)



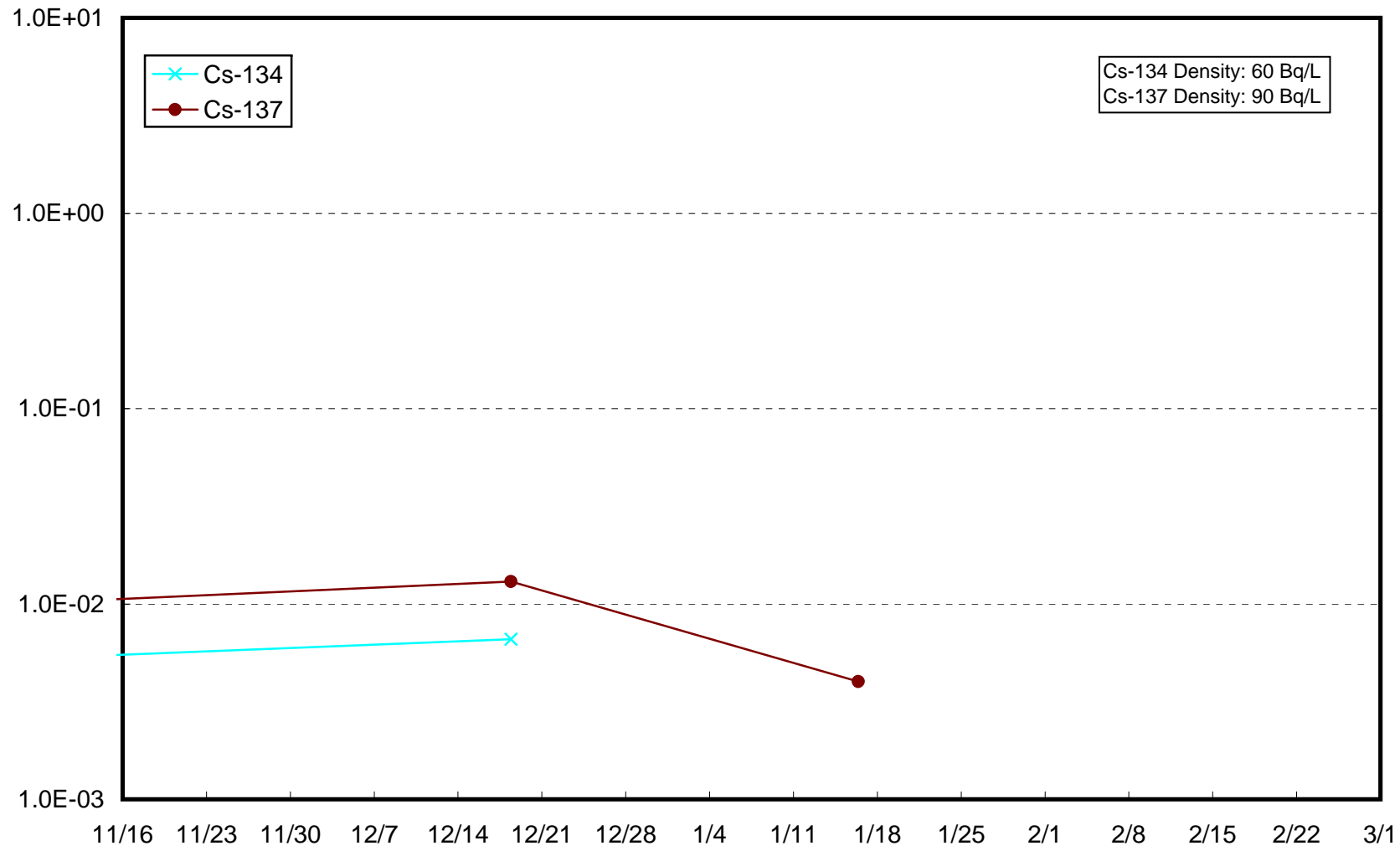
Radioactivity Density of the Seawater at 3km Offshore of Onahama Port (T-18) Upper Layer (Bq/L)



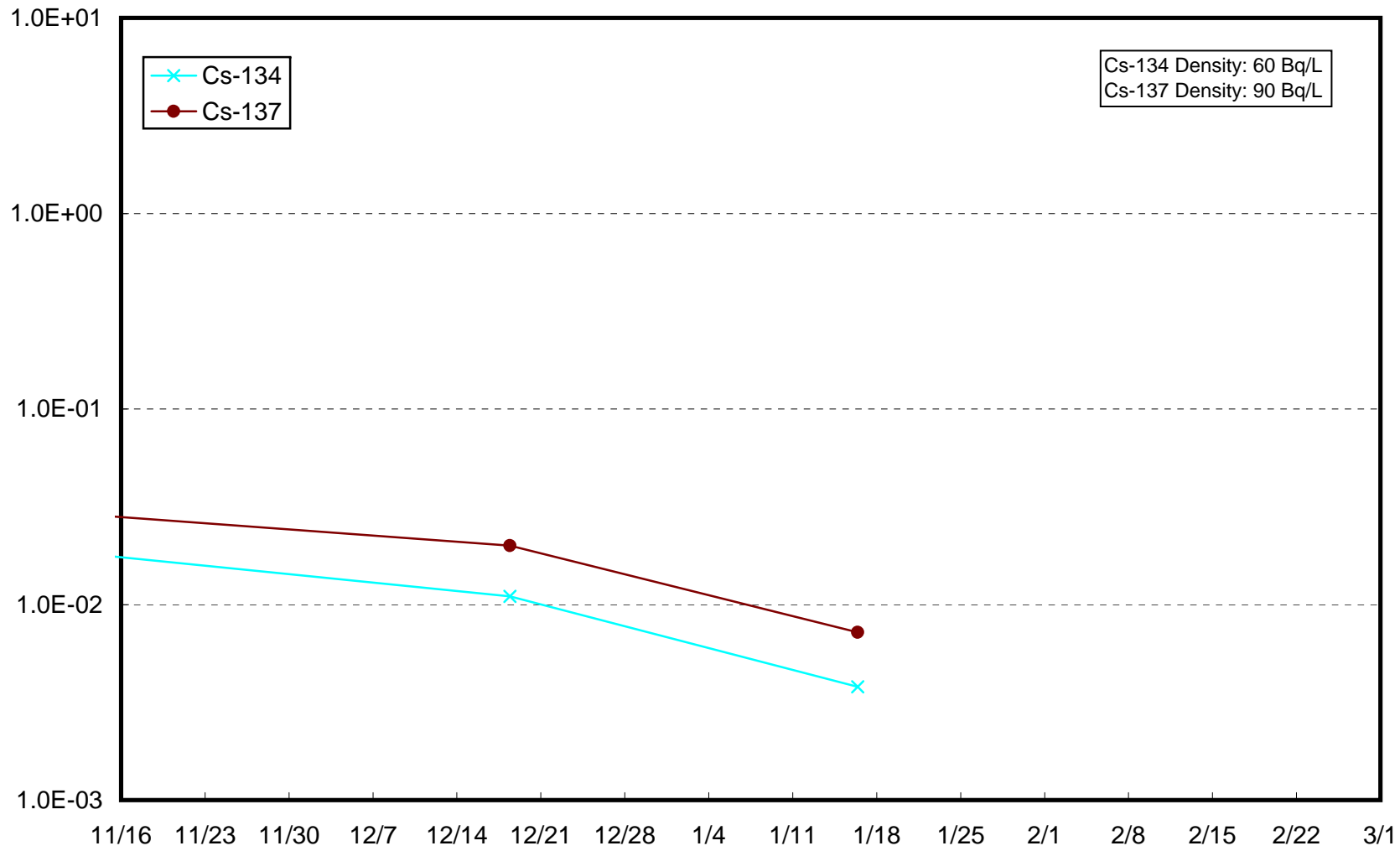
Radioactivity Density of the Seawater at 3km Offshore of Onahama Port (T-18) Lower Layer (Bq/L)



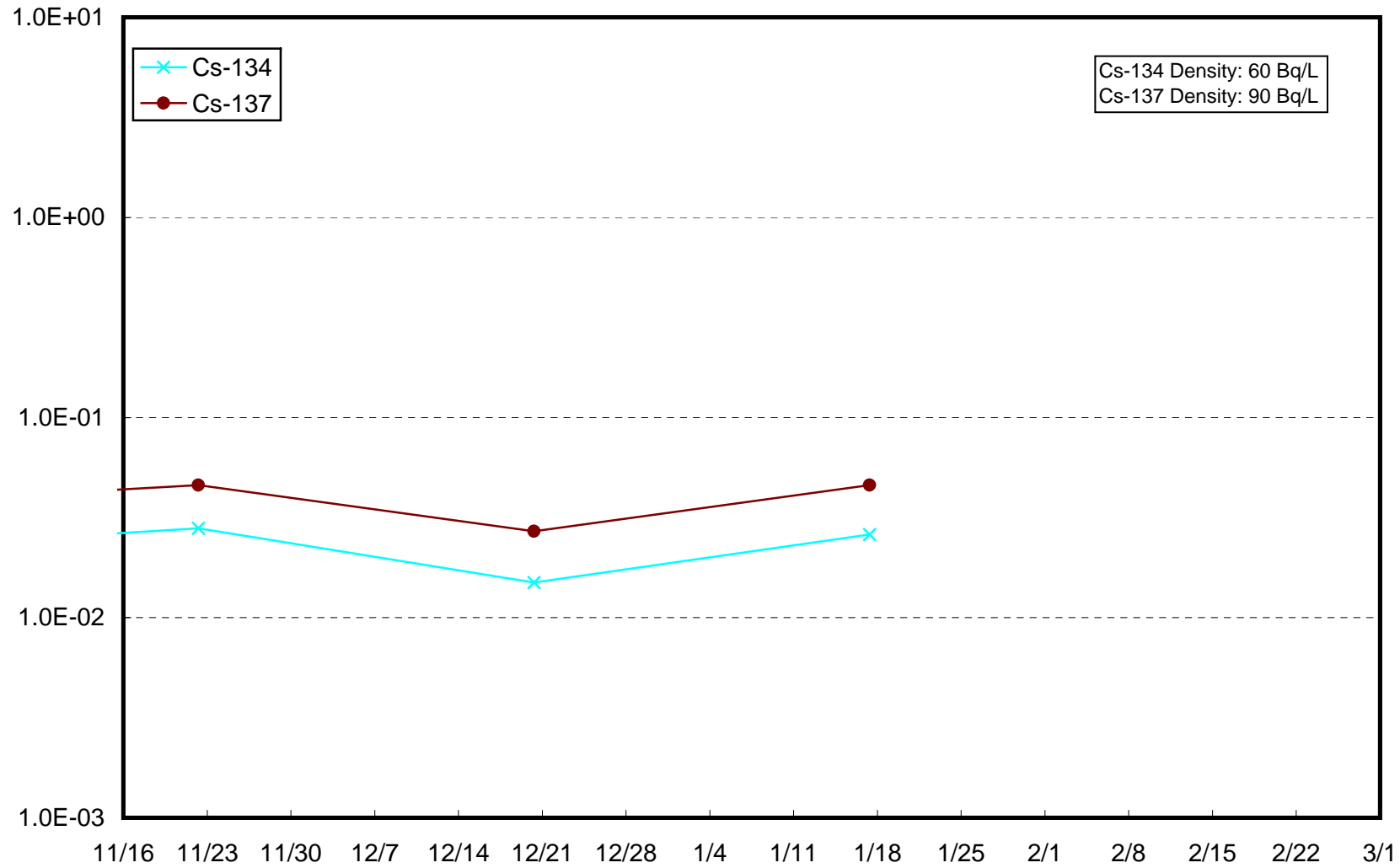
Radioactivity Density of the Seawater at 5km Offshore of Numanouchi (T-M10) Upper Layer (Bq/L)



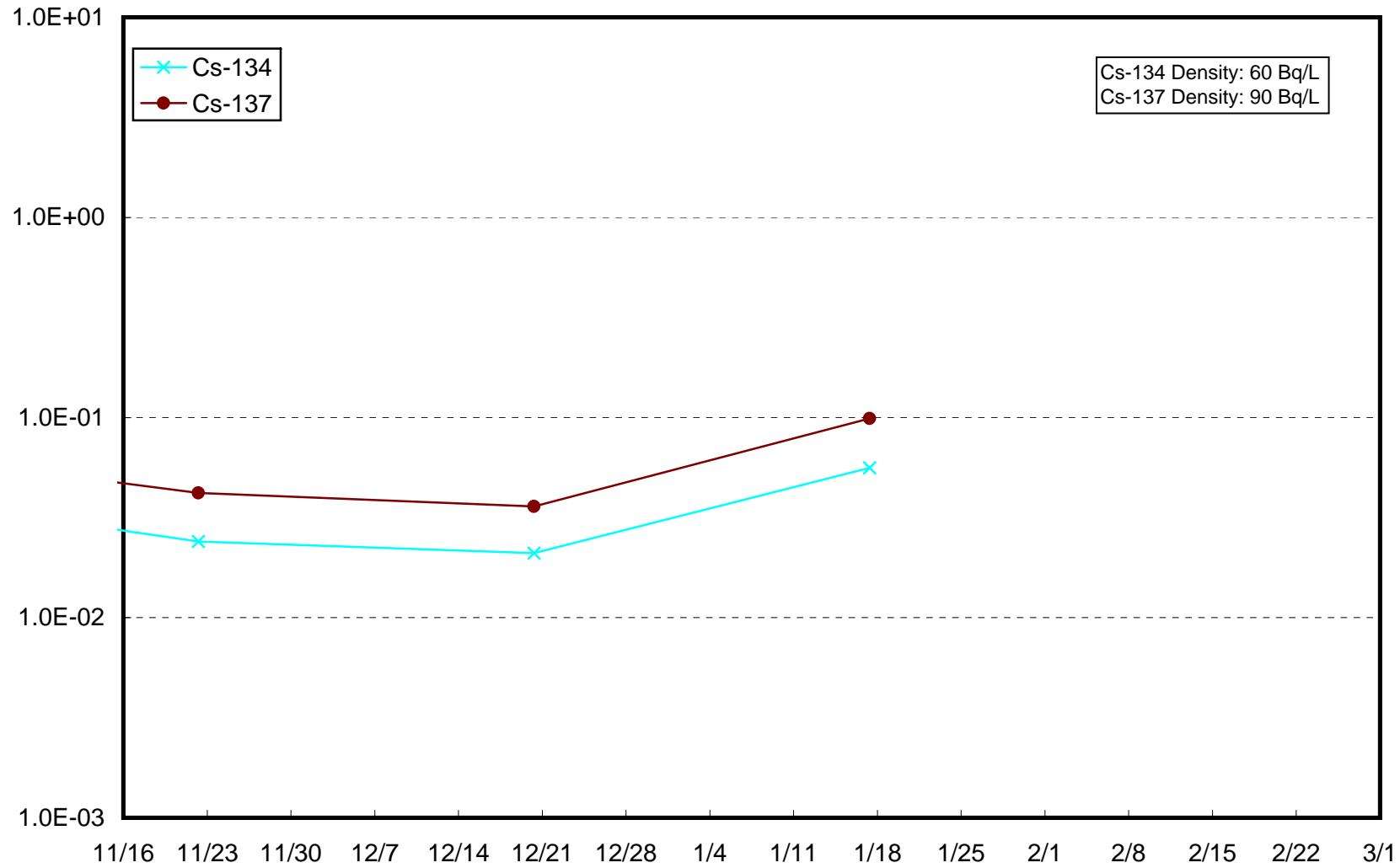
Radioactivity Density of the Seawater at 5km Offshore of Numanouchi (T-M10) Lower Layer (Bq/L)



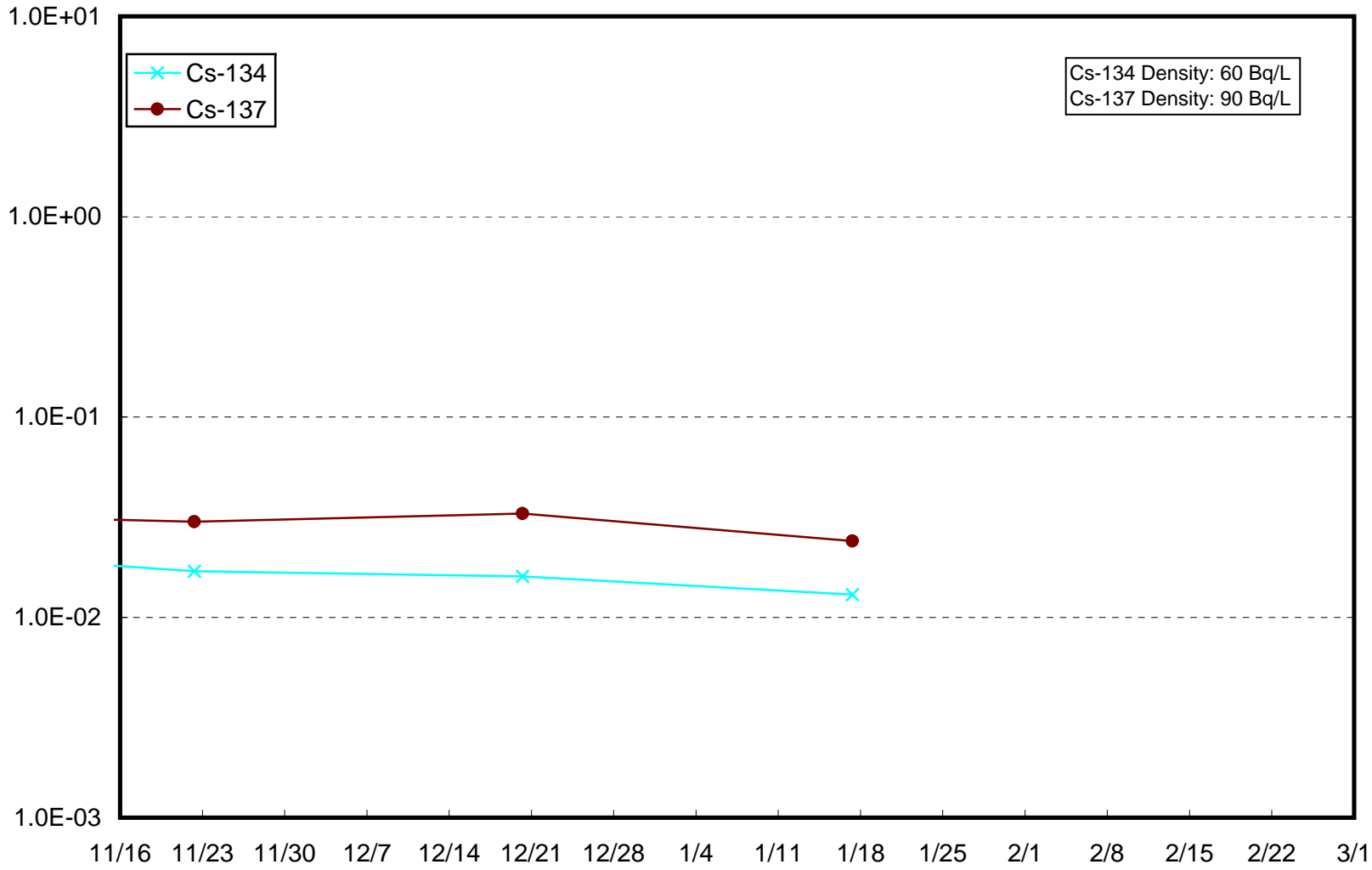
Radioactivity Density of the Seawater at 1km Offshore of Nida River (T-13-1) Upper Layer (Bq/L)



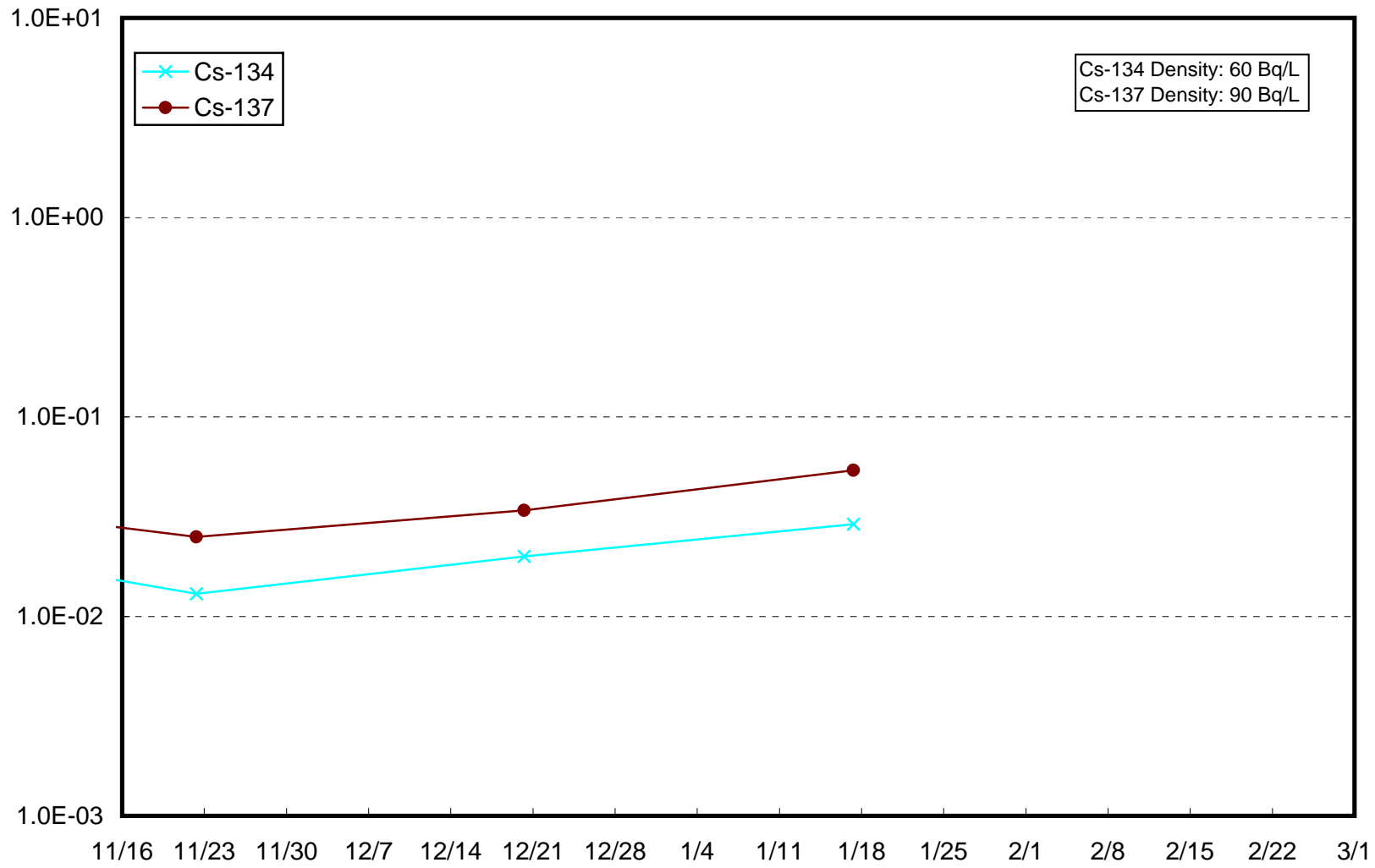
Radioactivity Density of the Seawater at 1km Offshore of Nida River (T-13-1) Lower Layer (Bq/L)



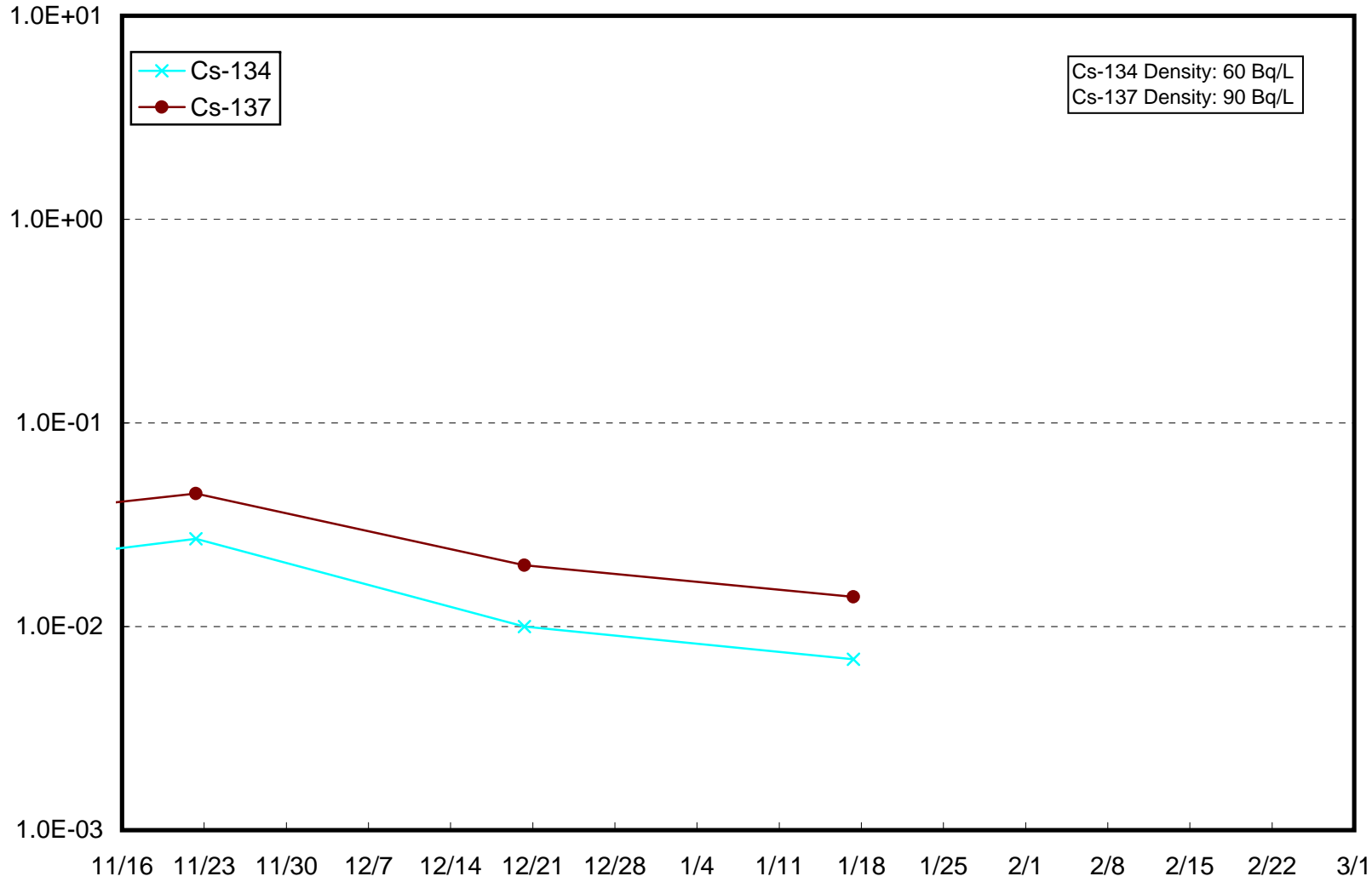
Radioactivity Density of the Seawater at 3km Offshore of Soma (T-22) Upper Layer (Bq/L)



Radioactivity Density of the Seawater at 3km Offshore of Soma (T-22) Lower Layer (Bq/L)



Radioactivity Density of the Seawater at 5km Offshore of Kashima (T-MA) Upper Layer (Bq/L)



Radioactivity Density of the Seawater at 5km Offshore of Kashima (T-MA) Lower Layer (Bq/L)

