

Reference

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

(Data summarized on October 10)

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. 330m 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	Oct 9, 2012 8:30 AM	Time of Sampling	Oct 9, 2012 8:10 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.1.1Bq/L, Cs-137: Approx.1.5Bq/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 < Offshore 1/2 >

(Data summarized on October 10)

Place of Sampling (Place No.)	*1 3km Offshore of Odaka Ward (T-14)				*2 3km Offshore of Ukedo River (T-D1)				*2 3km Offshore of Fukushima Daiichi NPS (T-D5)				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	Sep 4, 2012 7:55 AM		Sep 4, 2012 7:55 AM		Sep 10, 2012 8:10 AM		Sep 10, 2012 8:10 AM		Sep 10, 2012 8:25 AM		Sep 10, 2012 8:25 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)	0.010	0.00	0.064	0.00	0.22	0.00	0.056	0.00	0.083	0.00	0.023	0.00	60
Cs-137 (Approx. 30 years)	0.017	0.00	0.097	0.00	0.32	0.00	0.081	0.00	0.13	0.00	0.040	0.00	90

Place of Sampling (Place No.)	*2 3km Offshore of Fukushima Daini NPS (T-D9)				*1 15km Offshore of Fukushima Daiichi NPS (T-5)				*1 3km Offshore of Iwasawa Shore (T-11)				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	Sep 11, 2012 8:10 AM		Sep 11, 2012 8:10 AM		Sep 5, 2012 7:15 AM		Sep 5, 2012 7:15 AM		Sep 5, 2012 8:40 AM		Sep 5, 2012 8:40 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)	0.021	0.00	0.0086	0.00	0.0029	0.00	ND	-	0.16	0.00	0.052	0.00	60
Cs-137 (Approx. 30 years)	0.039	0.00	0.015	0.00	0.0035	0.00	0.0036	0.00	0.25	0.00	0.082	0.00	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.

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

\* "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.

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

(Data summarized on October 10)

Place of Sampling (Place No.)	3km Offshore of Northern Iwaki City (T-12)				1km Offshore of Natsui River (T-17-1)				3km Offshore of Toyoma (T-20)				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	Sep 7, 2012 6:15 AM		Sep 7, 2012 6:15 AM		Sep 7, 2012 6:40 AM		Sep 7, 2012 6:40 AM		Sep 7, 2012 7:00 AM		Sep 7, 2012 7:00 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)	0.061	0.00	0.037	0.00	0.056	0.00	0.026	0.00	0.039	0.00	0.0090	0.00	60
Cs-137 (Approx. 30 years)	0.094	0.00	0.060	0.00	0.090	0.00	0.043	0.00	0.061	0.00	0.013	0.00	90

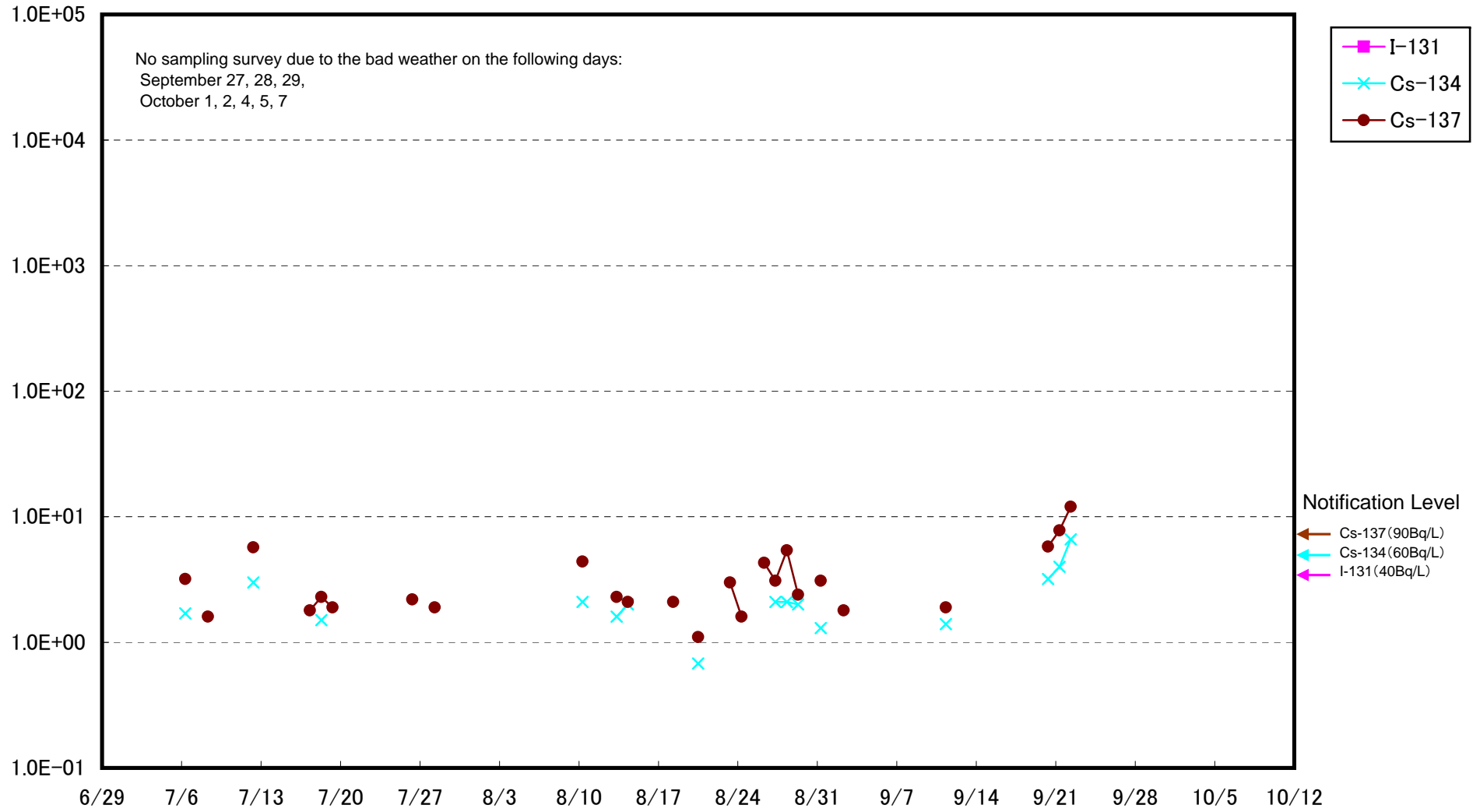
Place of Sampling (Place No.)													② Density Limit Specified by the Reactor Regulation (Bq/L)  (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
	Upper Layer		Lower Layer		Upper Layer		Lower Layer		Upper Layer		Lower Layer		
Time of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

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

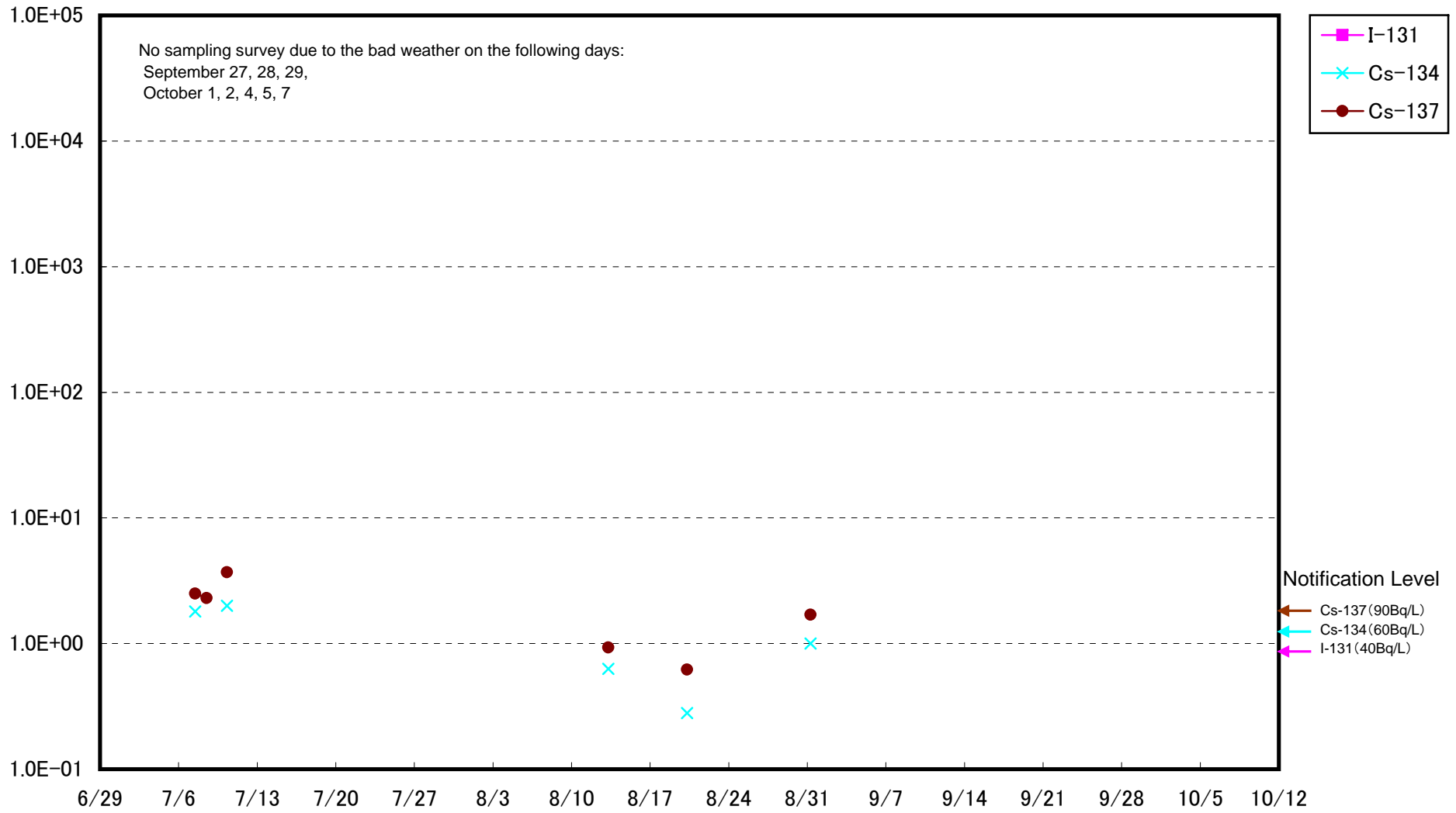
\* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

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

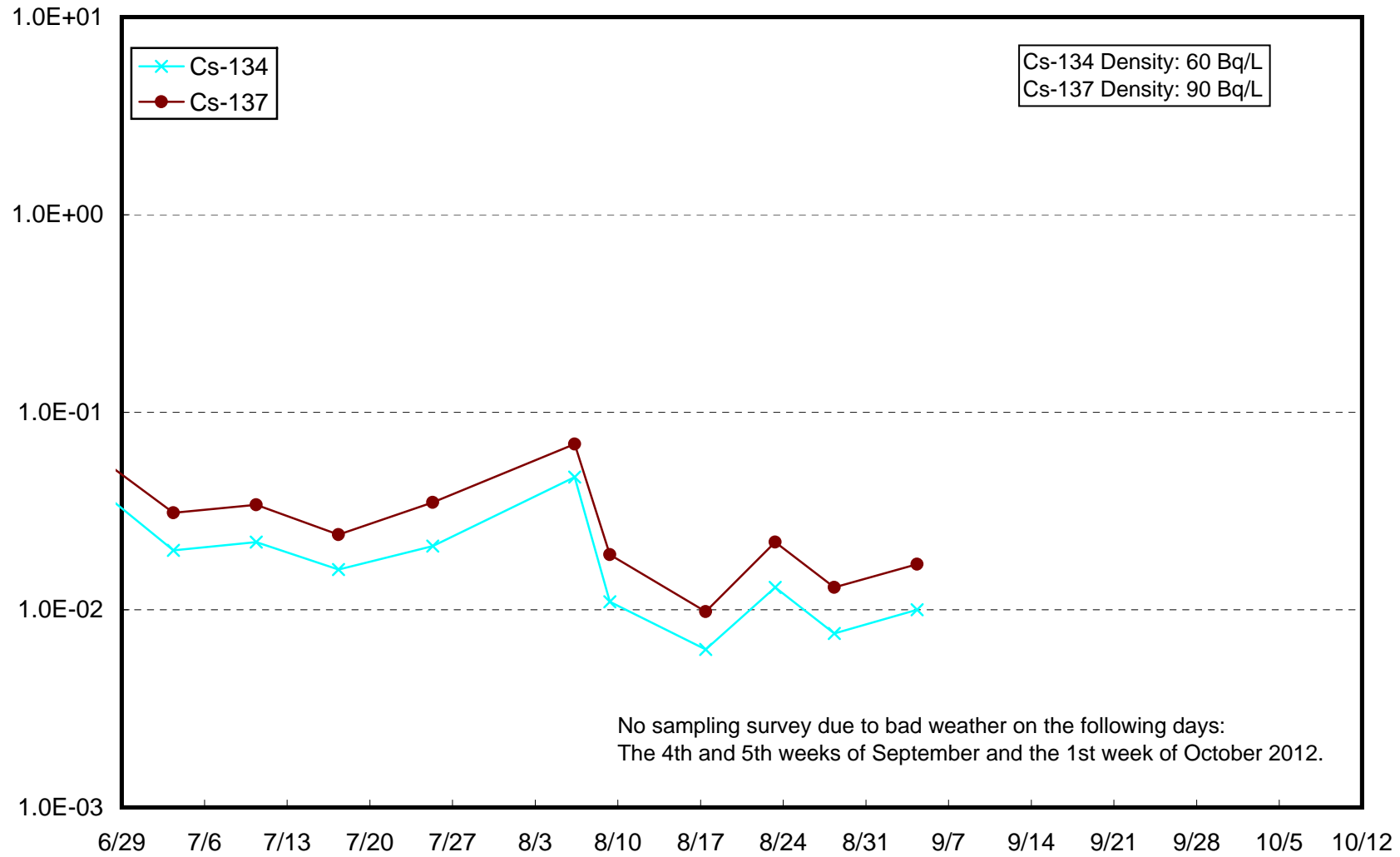
Radioactivity Density of the Seawater at the North of 1F Unit 5-6 Discharge Channel (Bq/L)



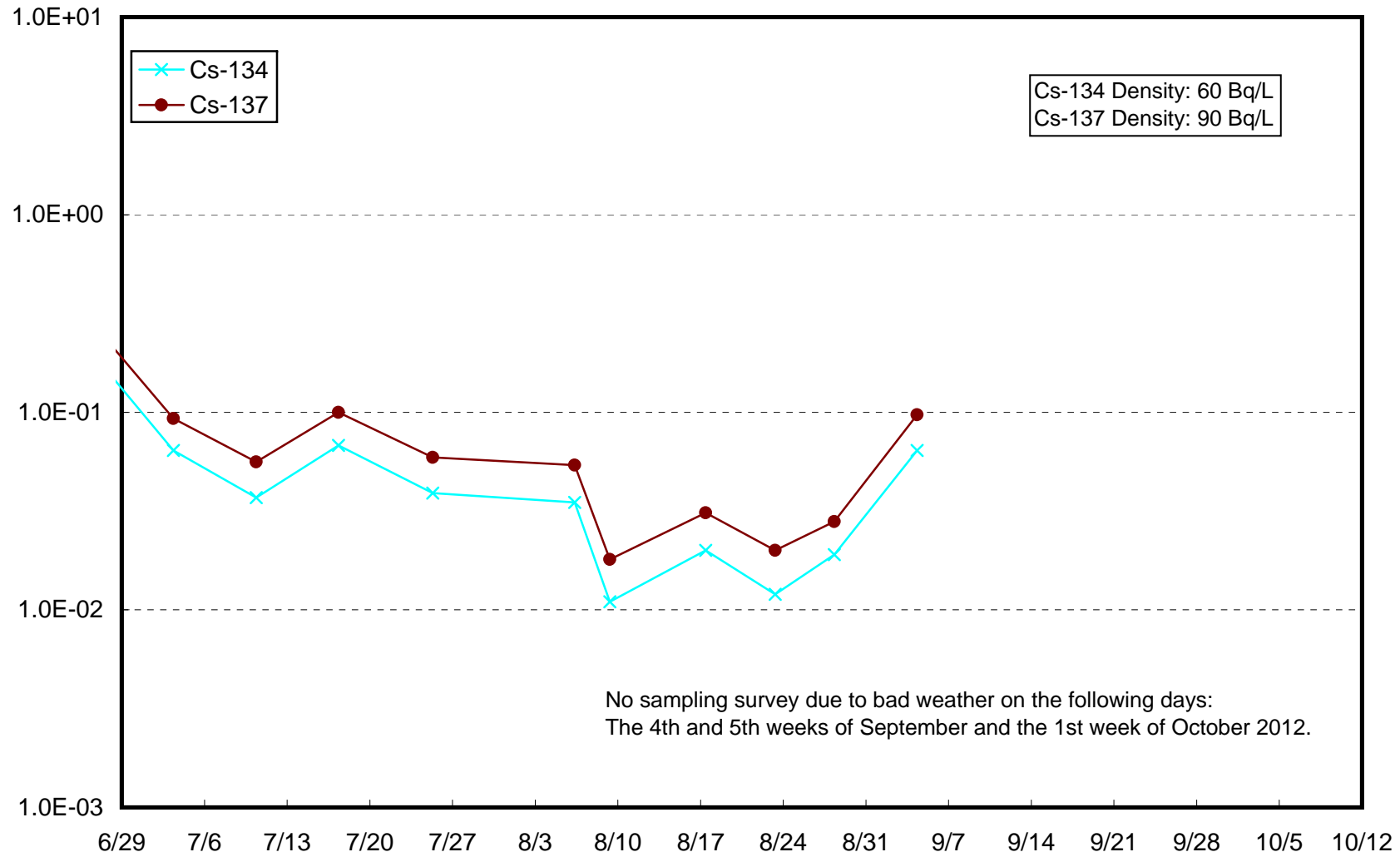
### Radioactivity Density of the Seawater at the North of 1F Unit 5-6 Discharge Channel (Bq/L)



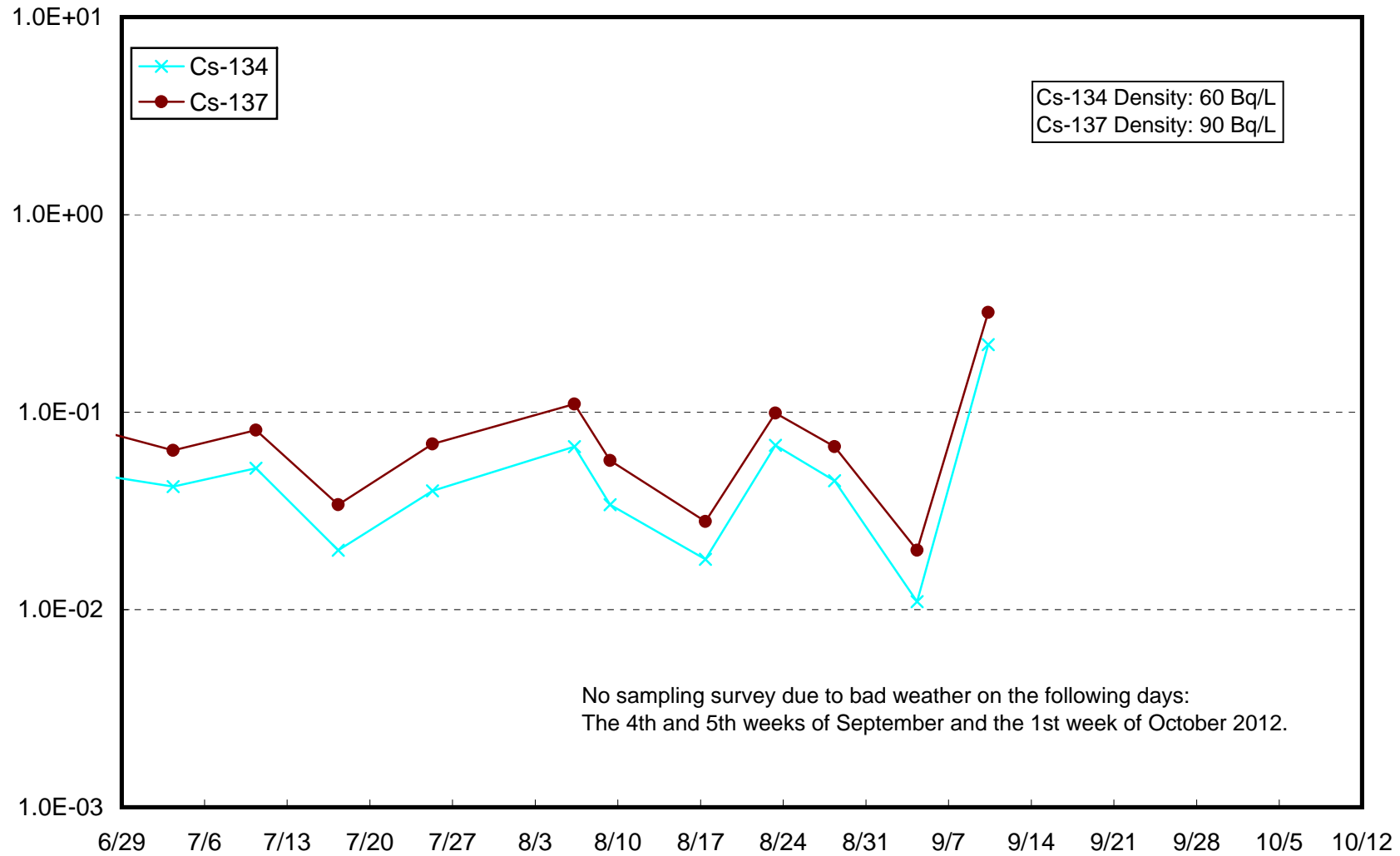
Radioactivity Density of the Seawater at 3km Offshore of Odaka Ward (T-14) Upper Layer (Bq/L)



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

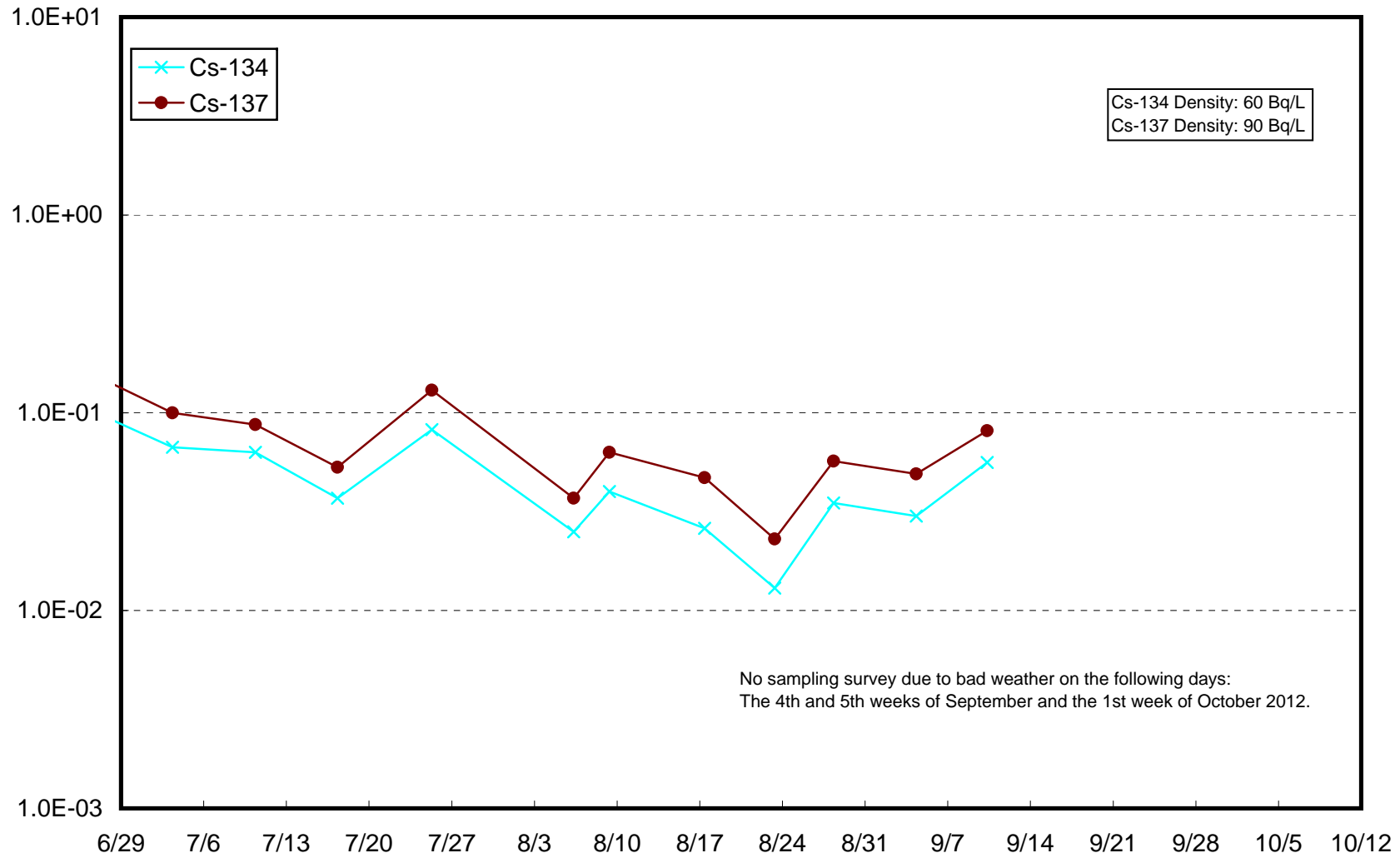


Radioactivity Density of the Seawater at 3km Offshore of Ukedo River (T-D1) Upper Layer (Bq/L)

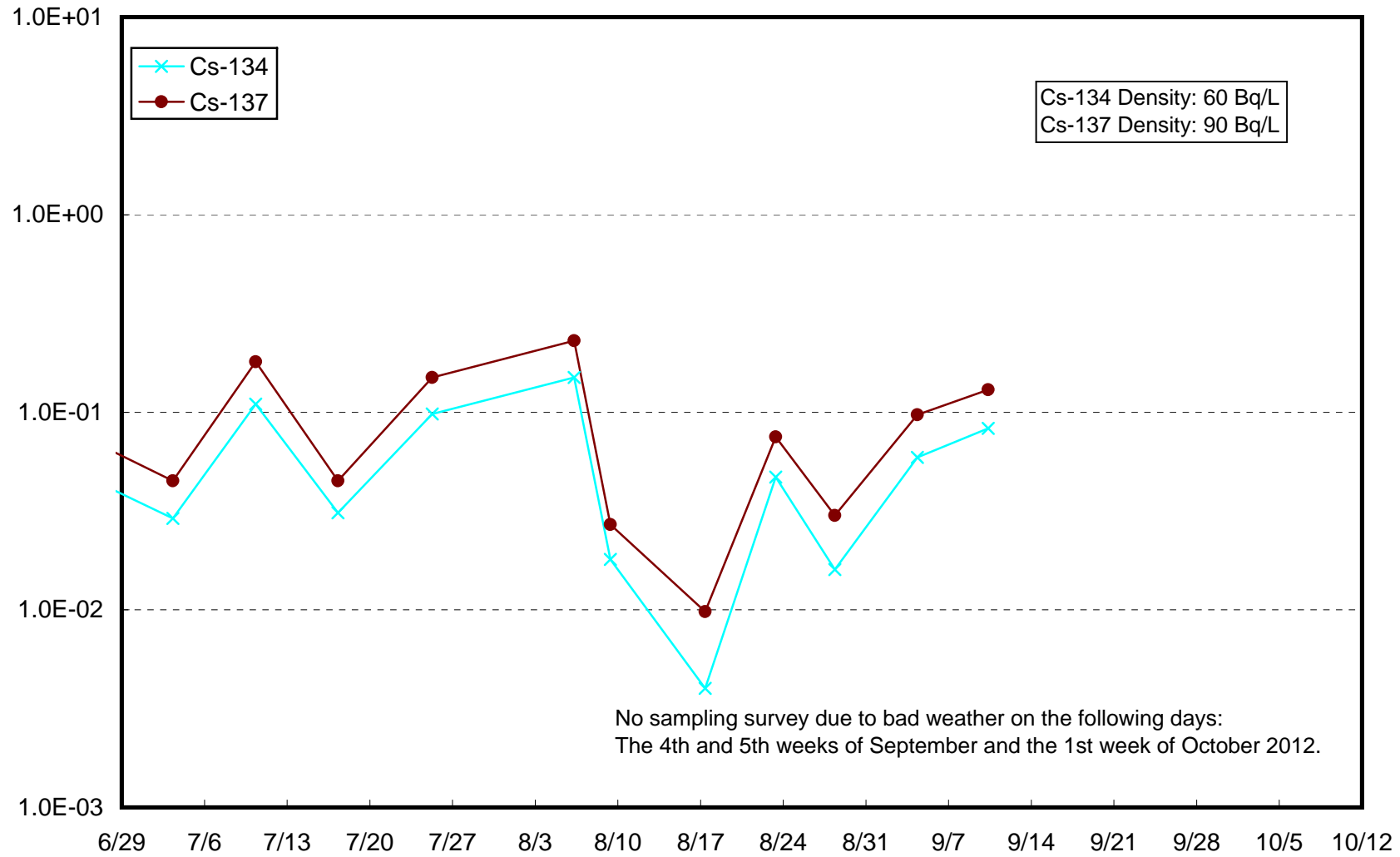




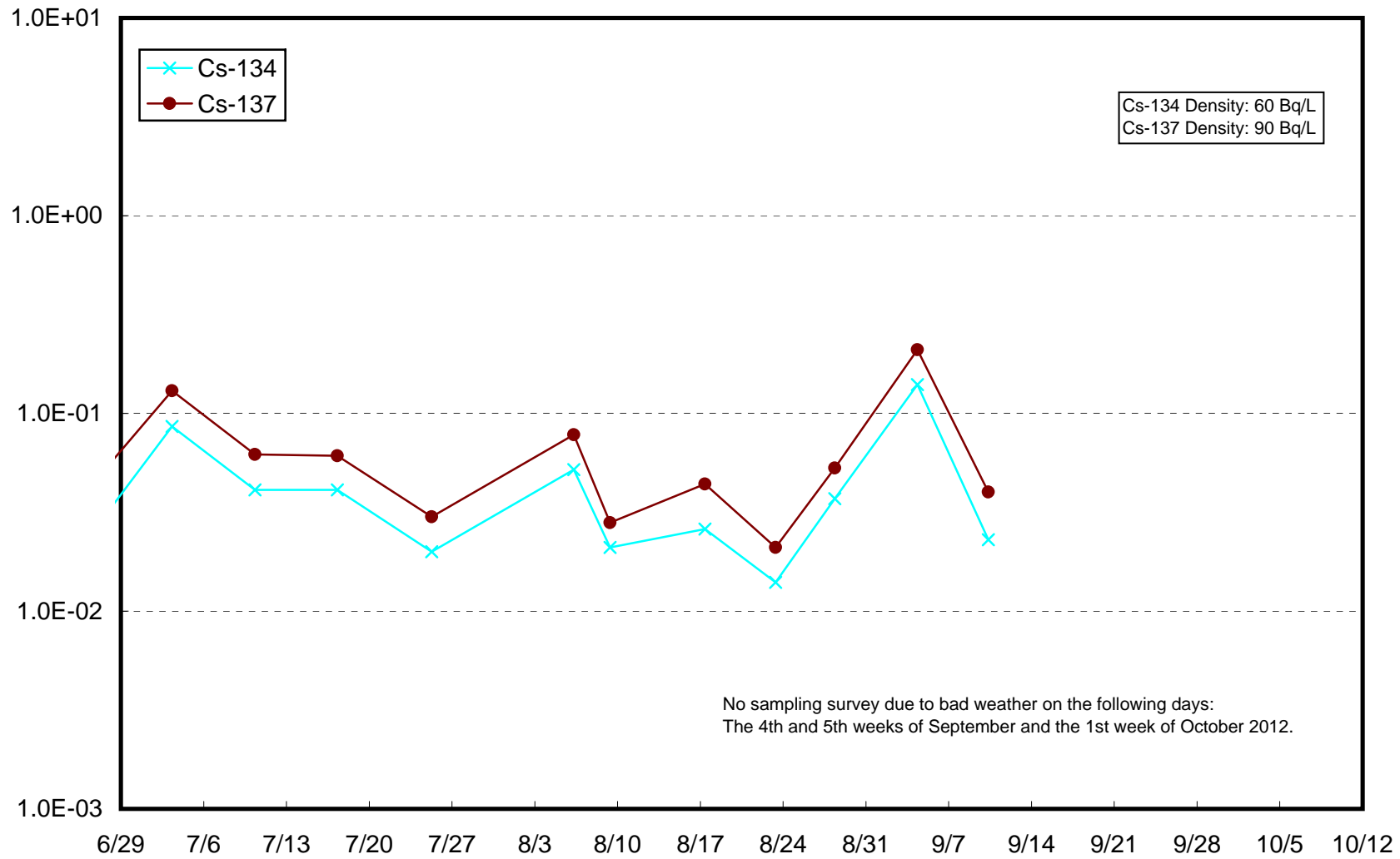
Radioactivity Density of the Seawater at 3km Offshore of Ukedo River (T-D1) Lower Layer (Bq/L)



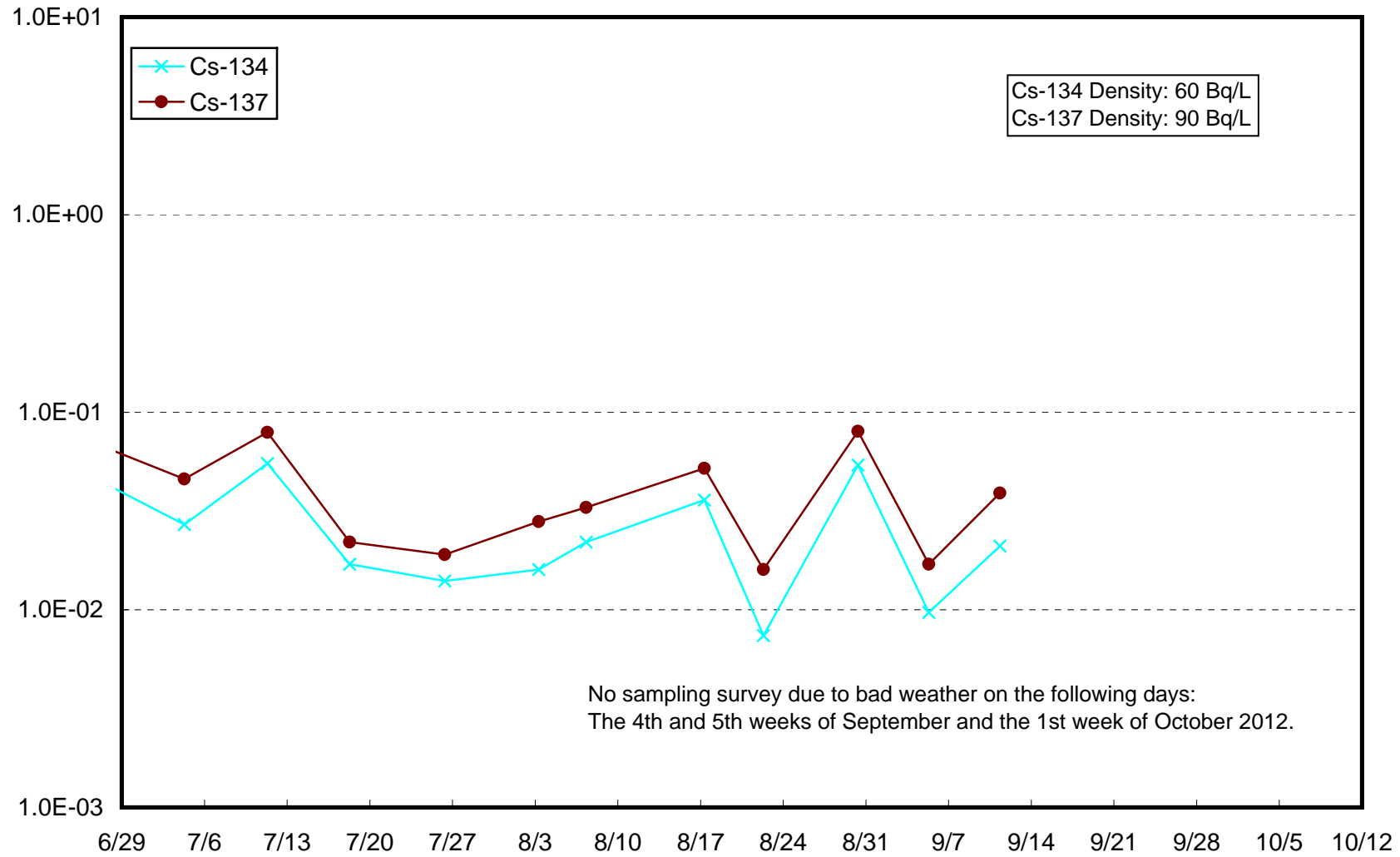
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daiichi NPS (T-D5) Upper Layer (Bq/L)



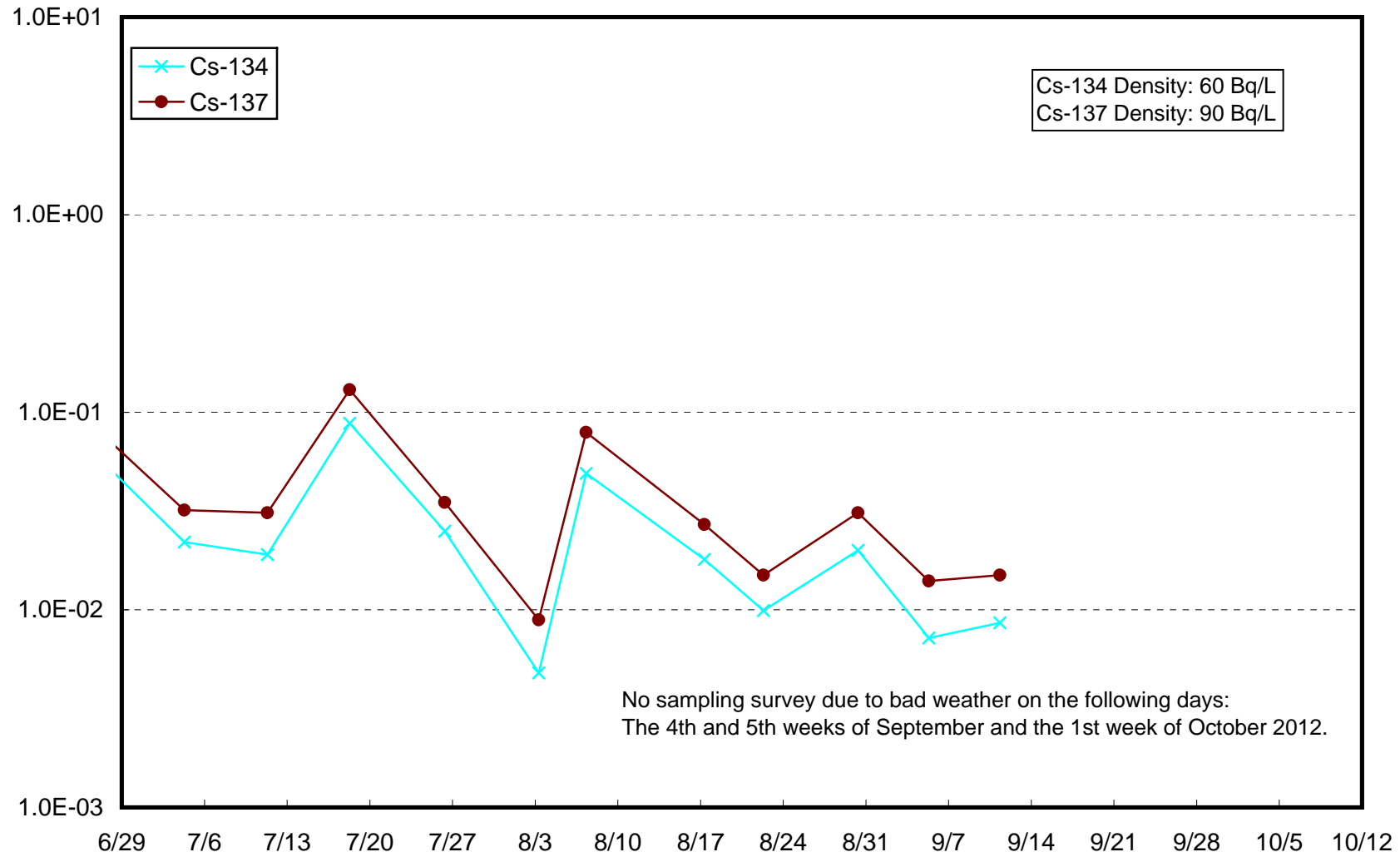
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daiichi NPS (T-D5) Lower Layer (Bq/L)



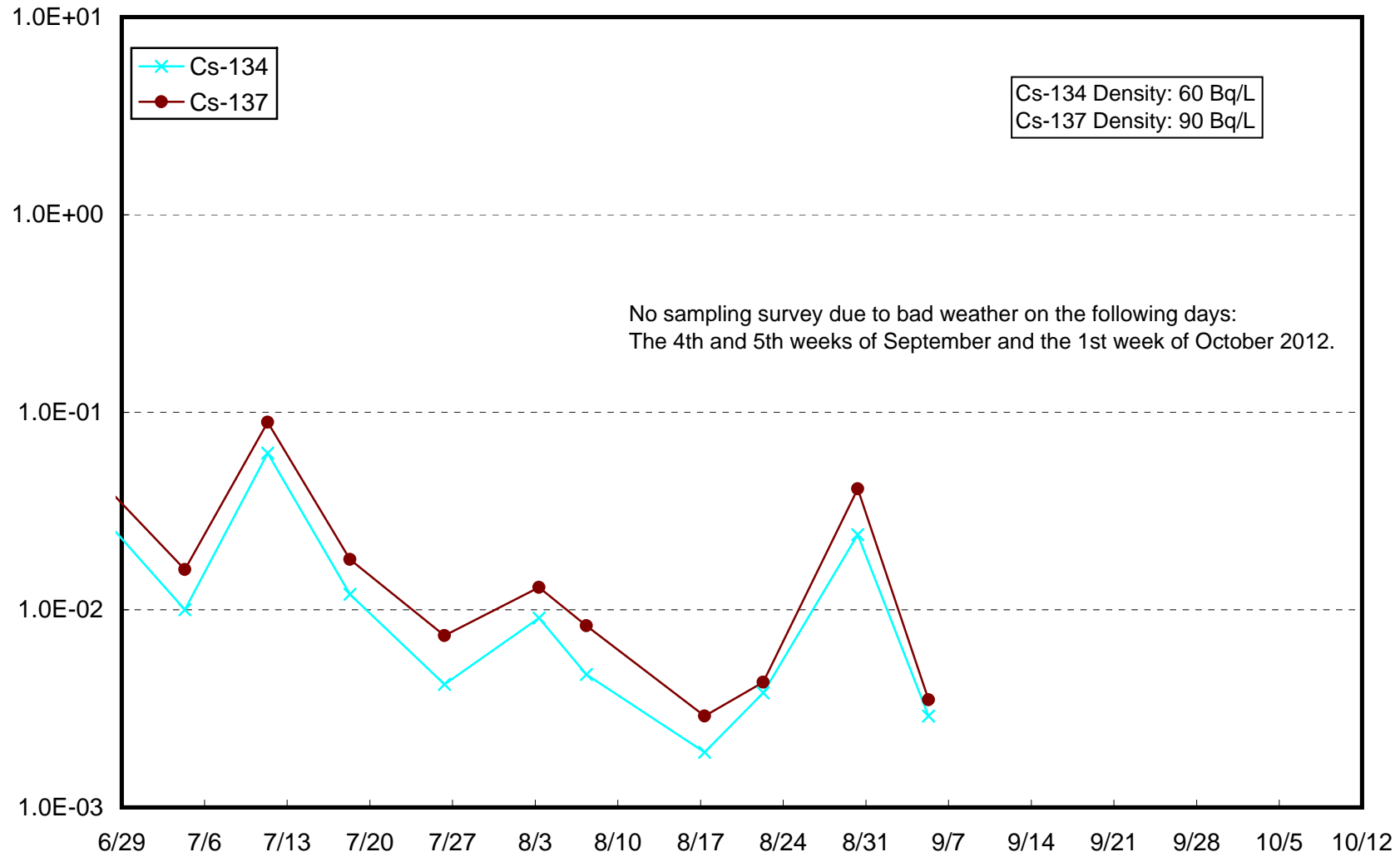
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daini NPS (T-D9) Upper Layer (Bq/L)



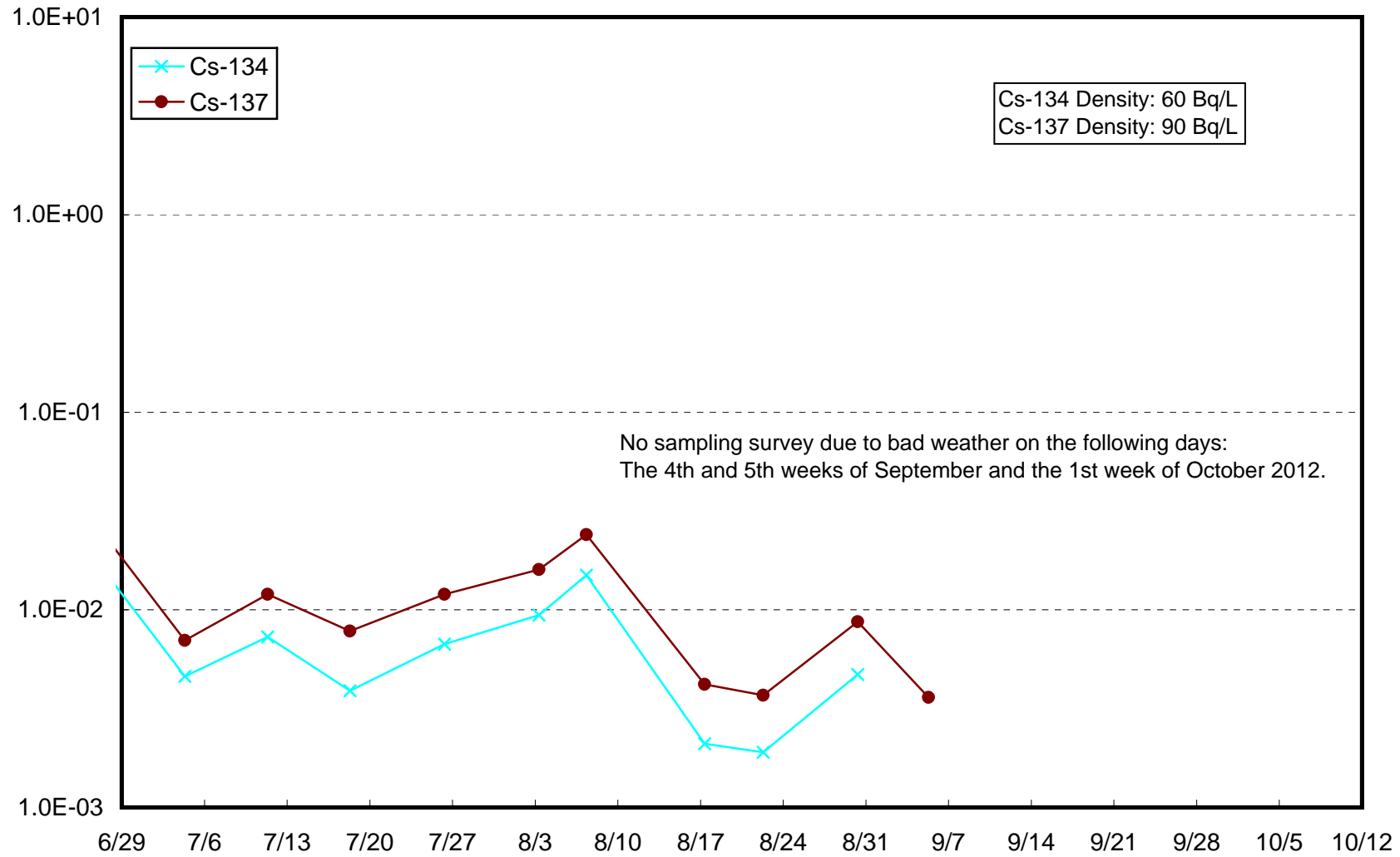
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daini NPS (T-D9) Lower Layer (Bq/L)



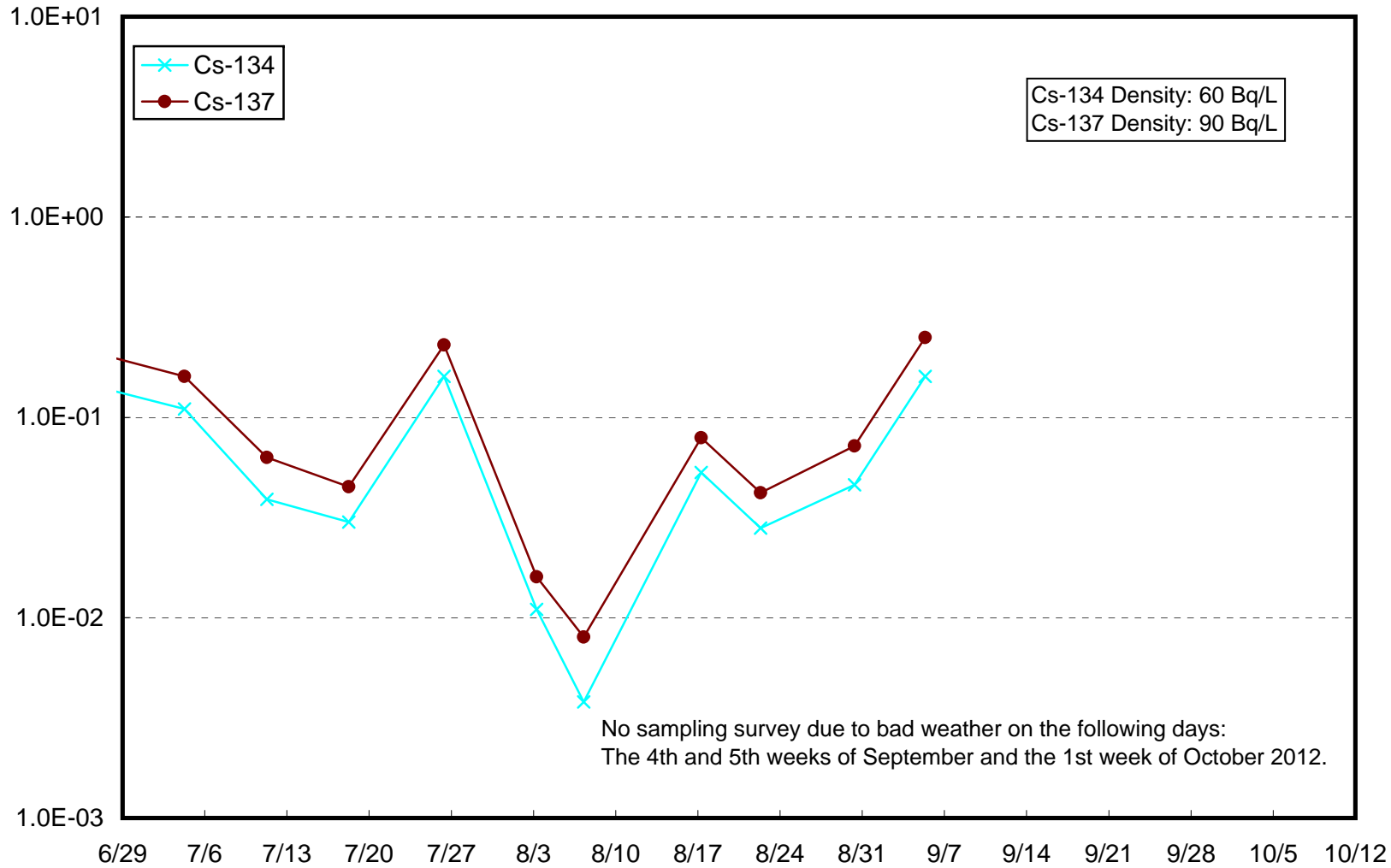
Radioactivity Density of the Seawater at 15km Offshore of Fukushima Daiichi NPS (T-5) Upper Layer (Bq/L)



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

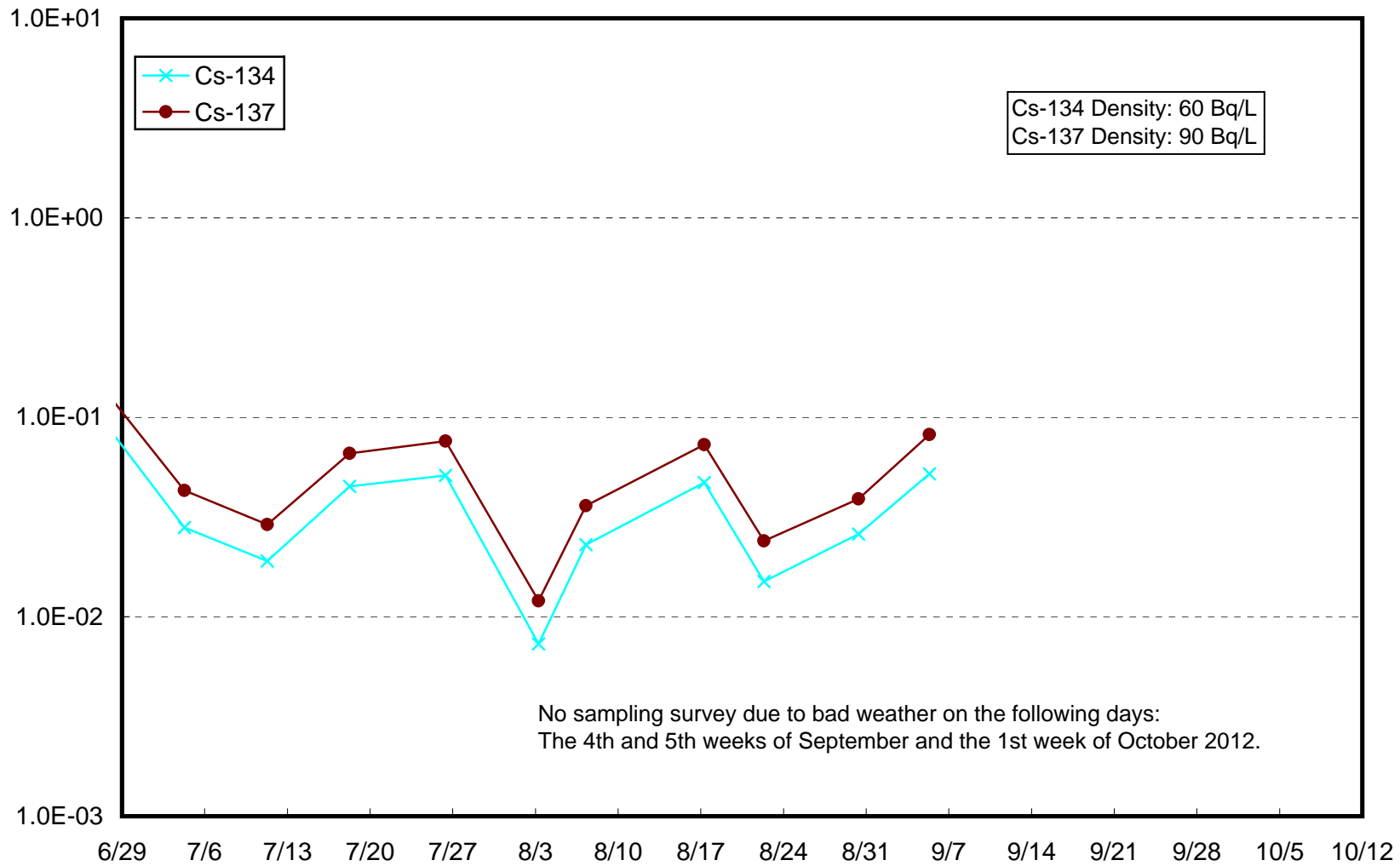


Radioactivity Density of the Seawater at 3km Offshore of Iwasawa Shore (T-11) Upper Layer (Bq/L)

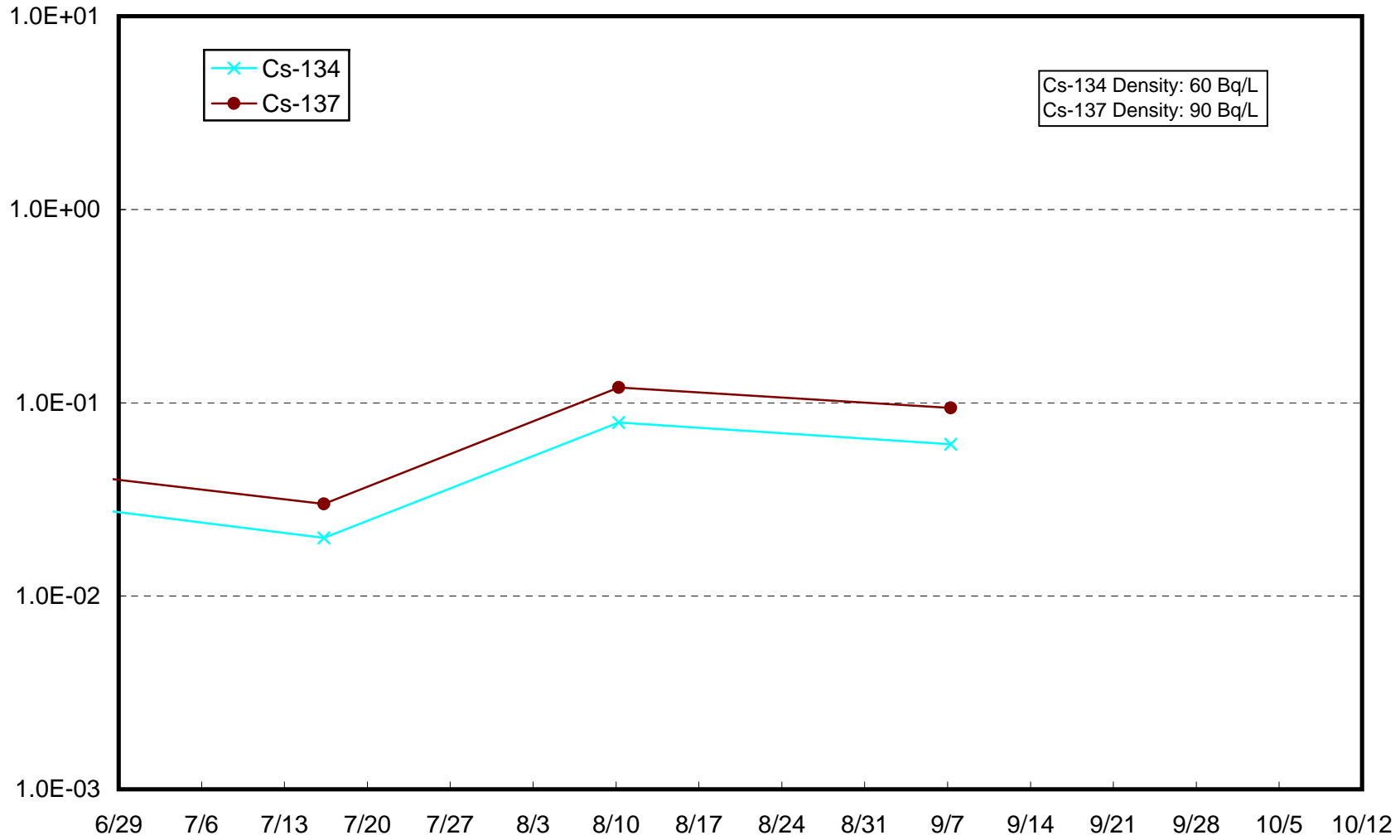




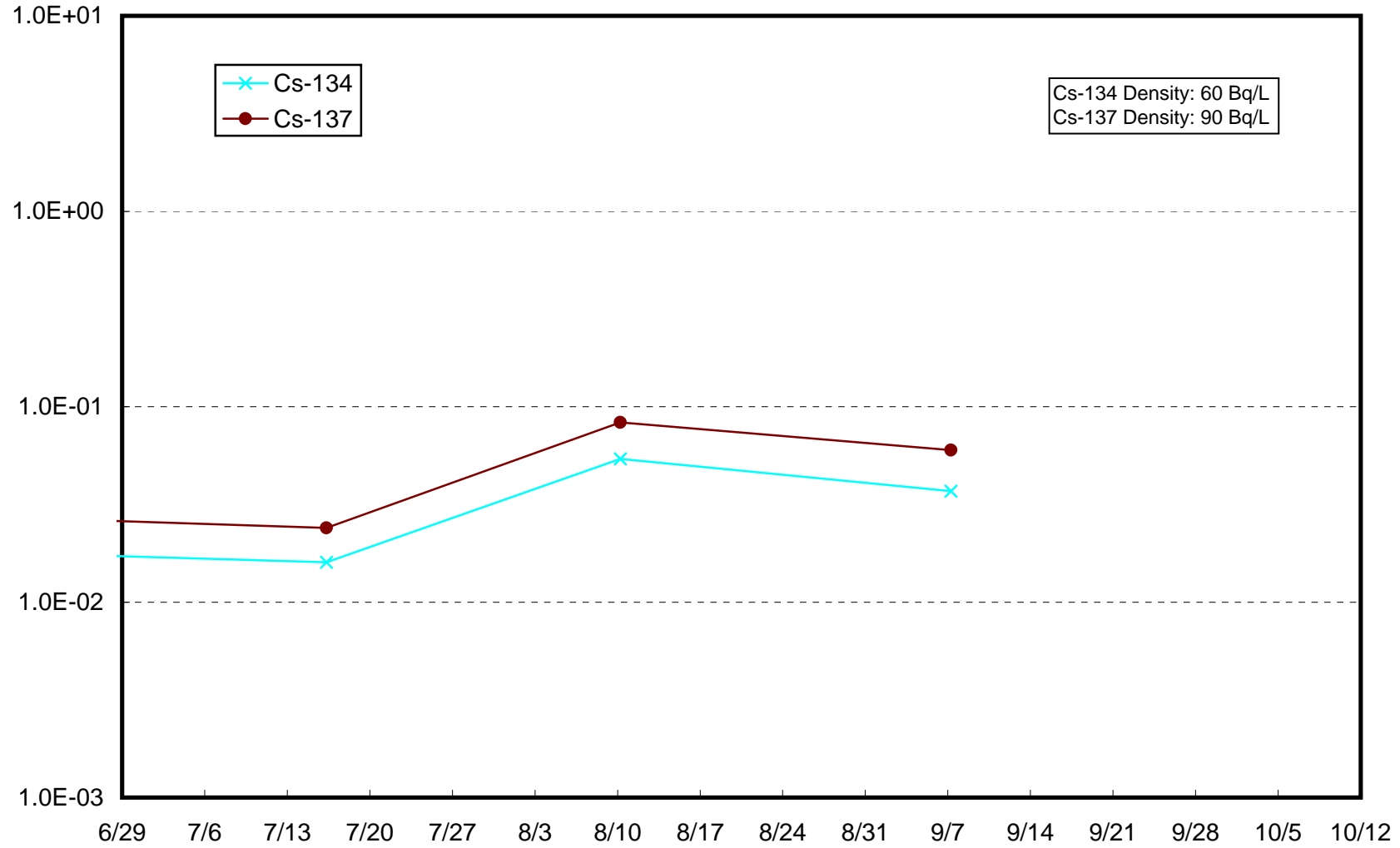
Radioactivity Density of the Seawater at 3km Offshore of Iwasawa Shore (T-11) Lower Layer (Bq/L)



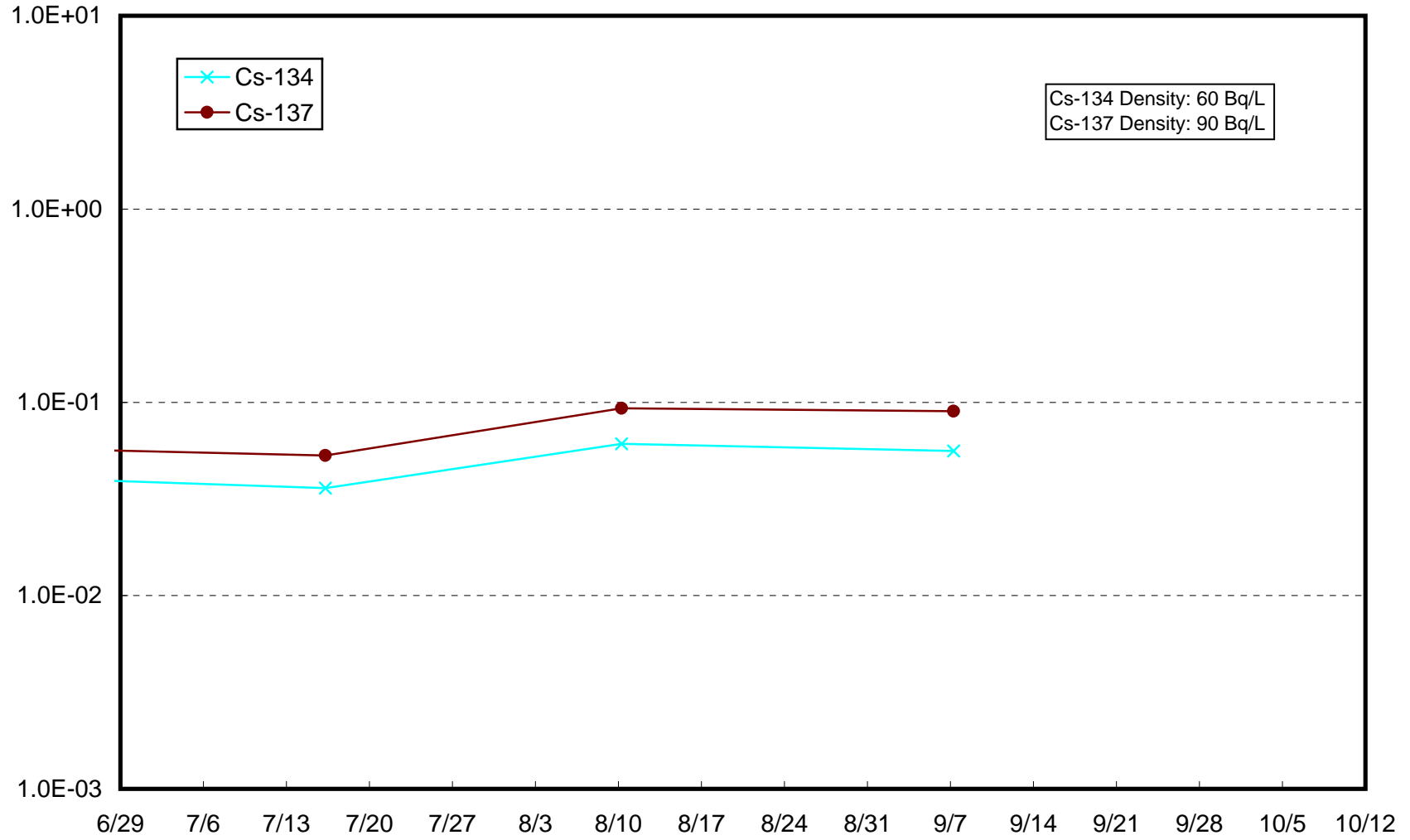
Radioactivity Density of the Seawater at 3km Offshore of North of Iwaki City(T-12) Upper Layer (Bq/L)



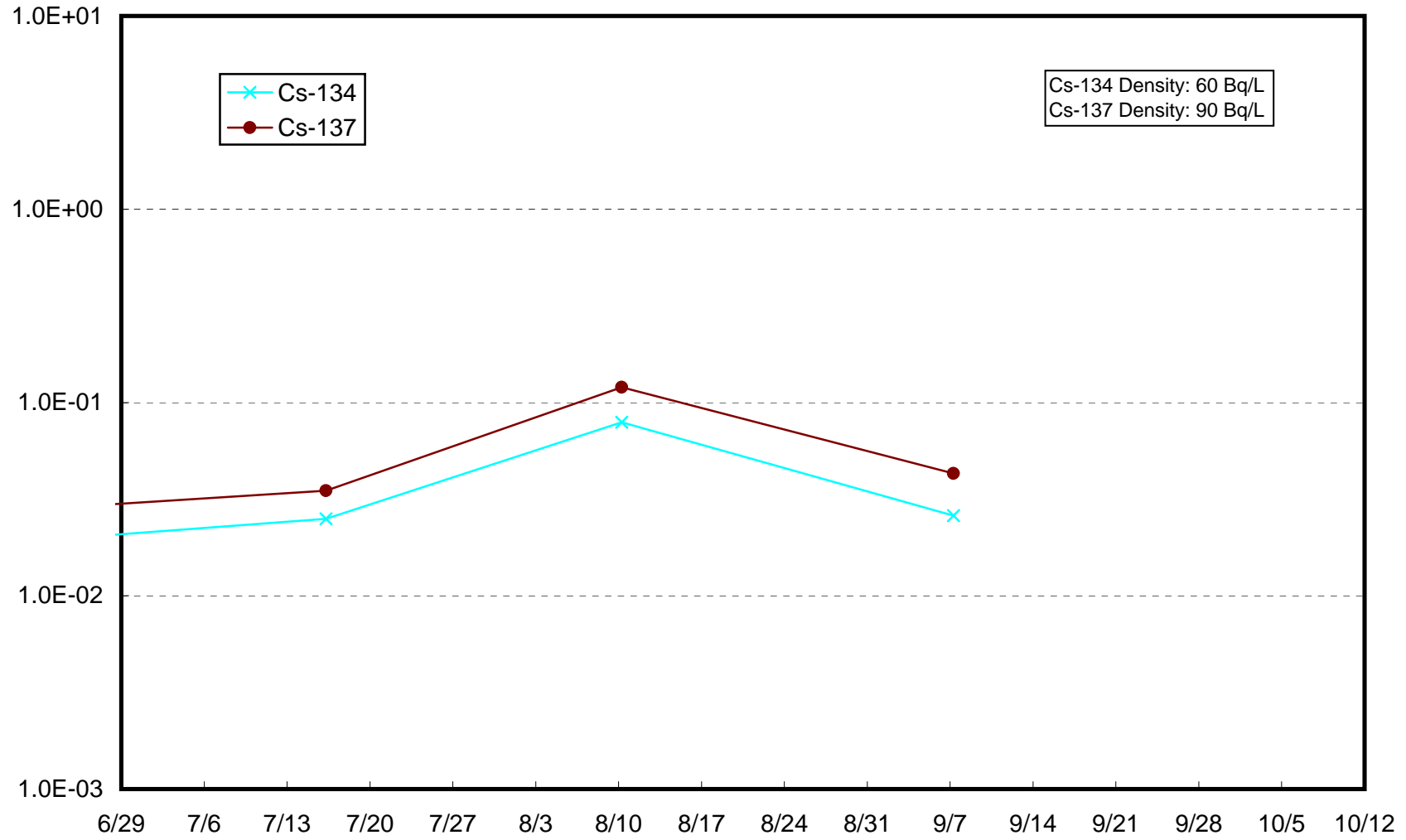
Radioactivity Density of the Seawater at 3km Offshore of North of Iwaki City(T-12) Lower Layer (Bq/L)



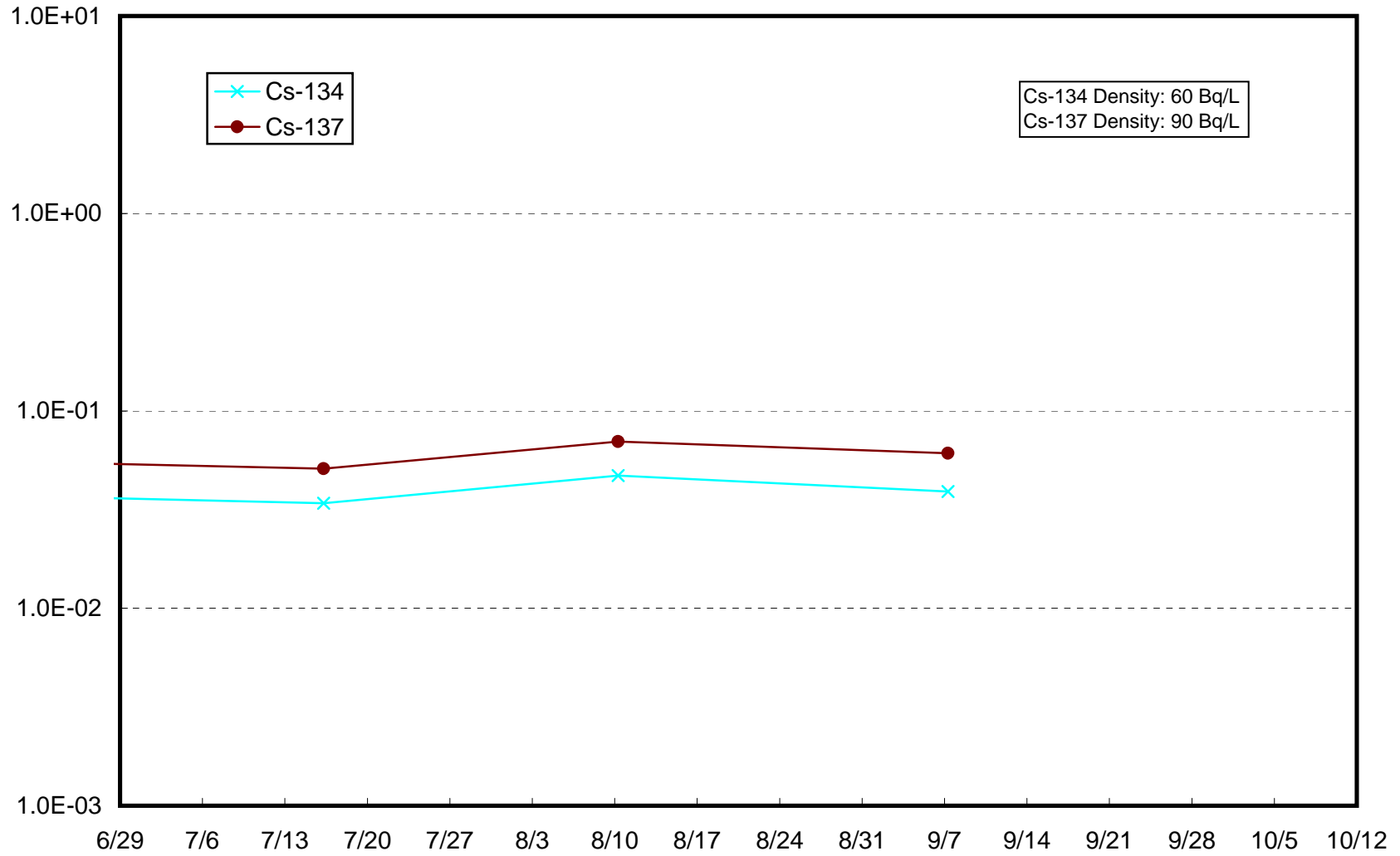
Radioactivity Density of the Seawater at 1km Offshore of Natsui River (T-17-1) Upper Layer (Bq/L)



Radioactivity Density of the Seawater at 1km Offshore of Natsui River (T-17-1) Lower Layer (Bq/L)



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



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

