

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

(Data summarized on June 20)

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 Jun 19, 2013 7:25 AM		Time of Sampling Jun 19, 2013 7:15 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)	3.1	0.05	ND	-	60
Cs-137 (Approx. 30 years)	7.5	0.08	1.9	0.02	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. 1.5Bq/L, Cs-134: Approx. 0.98Bq/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 June 20)

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.)
	May 20, 2013 6:45 AM		May 20, 2013 7:10 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)	0.69	0.01	0.18	0.00	60
Cs-137 (Approx. 30 years)	1.3	0.01	0.37	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.

* 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 June 20)

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. 11km South of Unit 1 & 2 Discharge Channel) (Approx. 23km 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	May 21, 2013 9:50 AM	Time of Sampling	May 21, 2013 7:30 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)	0.074	0.00	0.049	0.00	60
Cs-137 (Approx. 30 years)	0.13	0.00	0.083	0.00	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.

* 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 < Offshore 1/3 >

(Data summarized on June 20)

Place of Sampling (Place No.)	*1 3km Offshore of Odaka Ward (T-14)				*1 3km Offshore of Odaka Ward (T-14)				*2 3km Offshore of Ukedo River (T-D1)				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	May 7, 2013 9:31 AM		May 7, 2013 9:31 AM		May 14, 2013 9:08 AM		May 14, 2013 9:08 AM		May 21, 2013 8:47 AM		May 21, 2013 8:47 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)	0.014	0.00	0.0040	0.00	0.020	0.00	0.020	0.00	0.032	0.00	0.017	0.00	60
Cs-137 (Approx. 30 years)	0.025	0.00	0.0078	0.00	0.040	0.00	0.039	0.00	0.067	0.00	0.029	0.00	90

Place of Sampling (Place No.)	*2 3km Offshore of Fukushima Daiichi NPS (T-D5)				*2 3km Offshore of Fukushima Daini NPS (T-D9)				*1 15km Offshore of Fukushima Daiichi NPS (T-5)				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	May 21, 2013 8:05 AM		May 21, 2013 8:05 AM		May 22, 2013 8:55 AM		May 22, 2013 8:55 AM		May 8, 2013 8:11 AM		May 8, 2013 8:11 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)	0.029	0.00	0.017	0.00	0.017	0.00	0.016	0.00	0.016	0.00	0.0052	0.00	60
Cs-137 (Approx. 30 years)	0.055	0.00	0.035	0.00	0.033	0.00	0.033	0.00	0.031	0.00	0.011	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.

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

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

Nuclides Analysis Result of the Radioactive Materials in the Seawater < Offshore 2/3 >

(Data summarized on June 20)

Place of Sampling (Place No.)	15km Offshore of Fukushima Daiichi NPS (T-5)				3km Offshore of Iwasawa Shore (T-11)				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	May 15, 2013 8:03 AM		May 15, 2013 8:03 AM		May 8, 2013 9:31 AM		May 8, 2013 9:31 AM		May 15, 2013 9:14 AM		May 15, 2013 9:14 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)	0.0046	0.00	0.0059	0.00	0.040	0.00	0.034	0.00	0.042	0.00	0.035	0.00	60
Cs-137 (Approx. 30 years)	0.0095	0.00	0.011	0.00	0.075	0.00	0.064	0.00	0.081	0.00	0.066	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)				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	May 13, 2013 9:58 AM		May 13, 2013 9:58 AM		May 13, 2013 6:06 AM		May 13, 2013 6:06 AM		May 13, 2013 7:26 AM		May 13, 2013 7:26 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)	0.0029	0.00	0.0023	0.00	0.024	0.00	0.016	0.00	0.0025	0.00	ND	-	60
Cs-137 (Approx. 30 years)	0.0072	0.00	0.0052	0.00	0.048	0.00	0.031	0.00	0.0055	0.00	0.0041	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.0.0013Bq/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 3/3 >

(Data summarized on June 20)

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)				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	May 8, 2013 5:26 AM		May 8, 2013 5:26 AM		May 8, 2013 6:29 AM		May 8, 2013 6:29 AM		May 8, 2013 6:00 AM		May 8, 2013 6:00 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)	0.018	0.00	0.014	0.00	0.0094	0.00	0.016	0.00	0.0065	0.00	0.011	0.00	60
Cs-137 (Approx. 30 years)	0.037	0.00	0.028	0.00	0.018	0.00	0.031	0.00	0.016	0.00	0.024	0.00	90

Place of Sampling (Place No.)	Around 1km Offshore of Ota River (T-S1)				Around 3km Offshore of Odaka Ward (T-S2)				/				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	May 9, 2013 5:35 AM		May 9, 2013 5:35 AM		May 9, 2013 6:02 AM		May 9, 2013 6:02 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)	0.013	0.00	0.014	0.00	0.011	0.00	0.011	0.00	/	/	/	/	60
Cs-137 (Approx. 30 years)	0.027	0.00	0.029	0.00	0.024	0.00	0.023	0.00	/	/	/	/	90

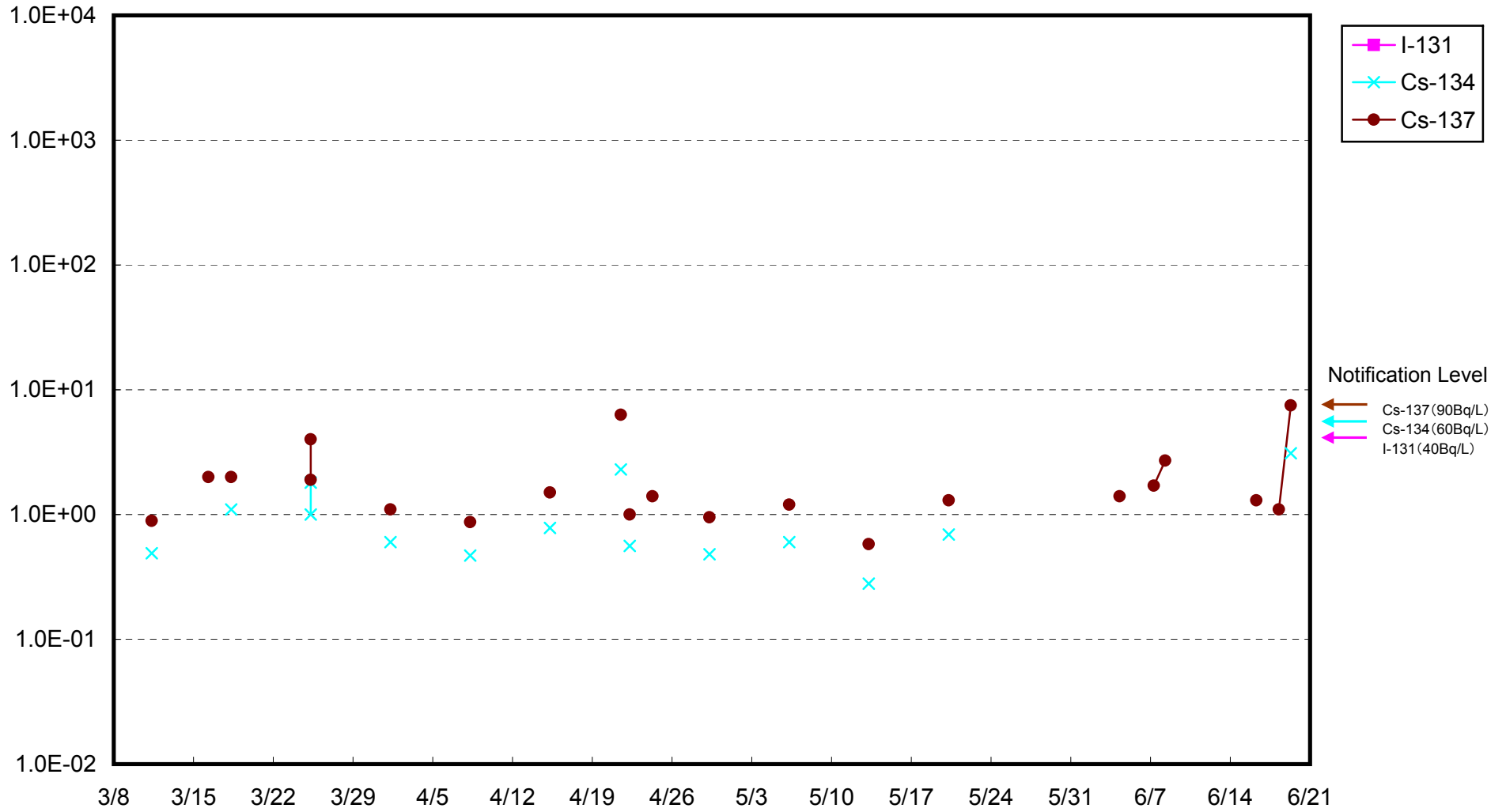
* The density specified by the Reactor Regulation is converted from Bq/cm³ to Bq/L.

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

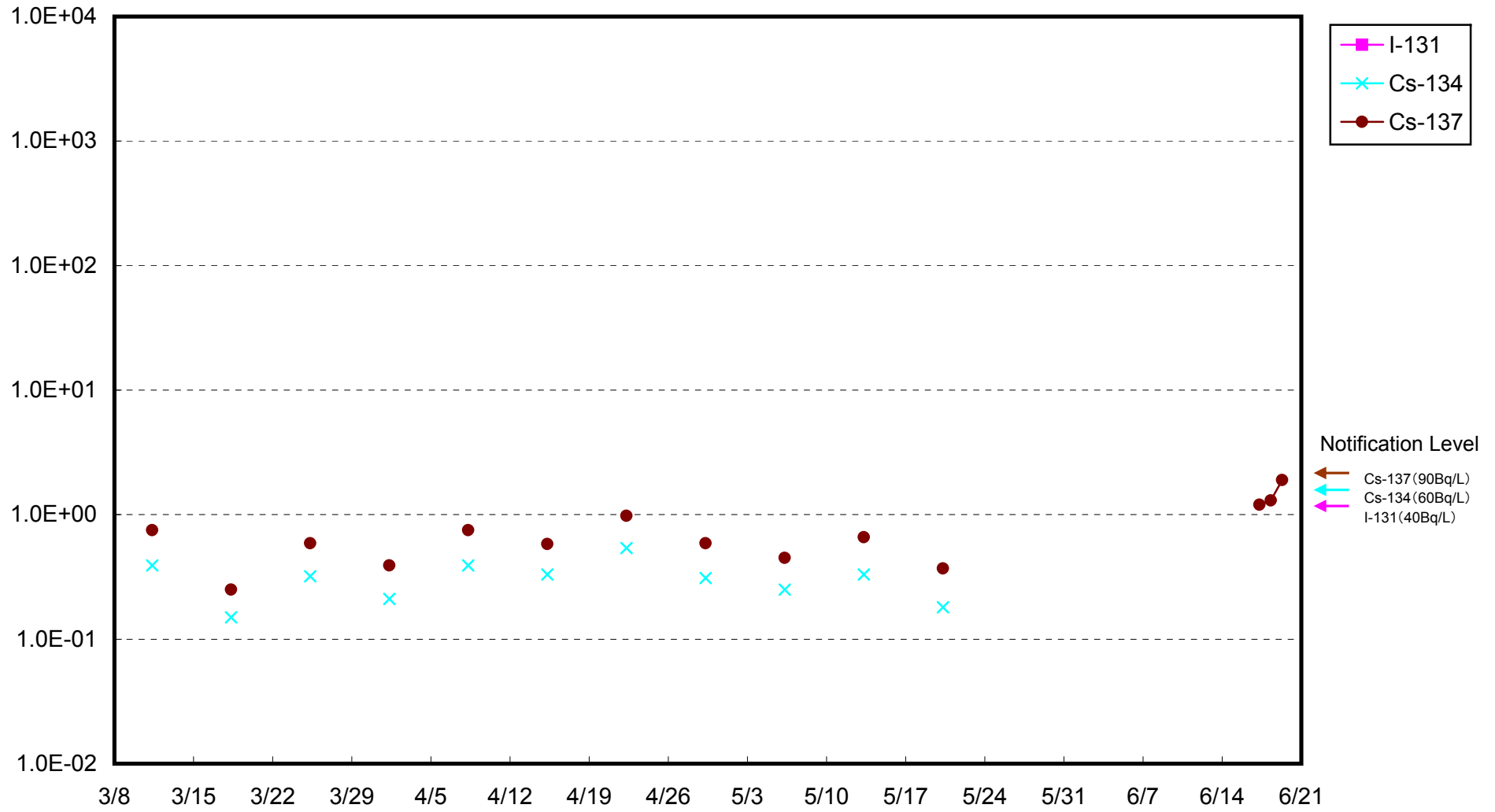
* Analysis results by detail analysis (Phosphomolybdic acid ammonium adsorption sampling method) are noted.

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

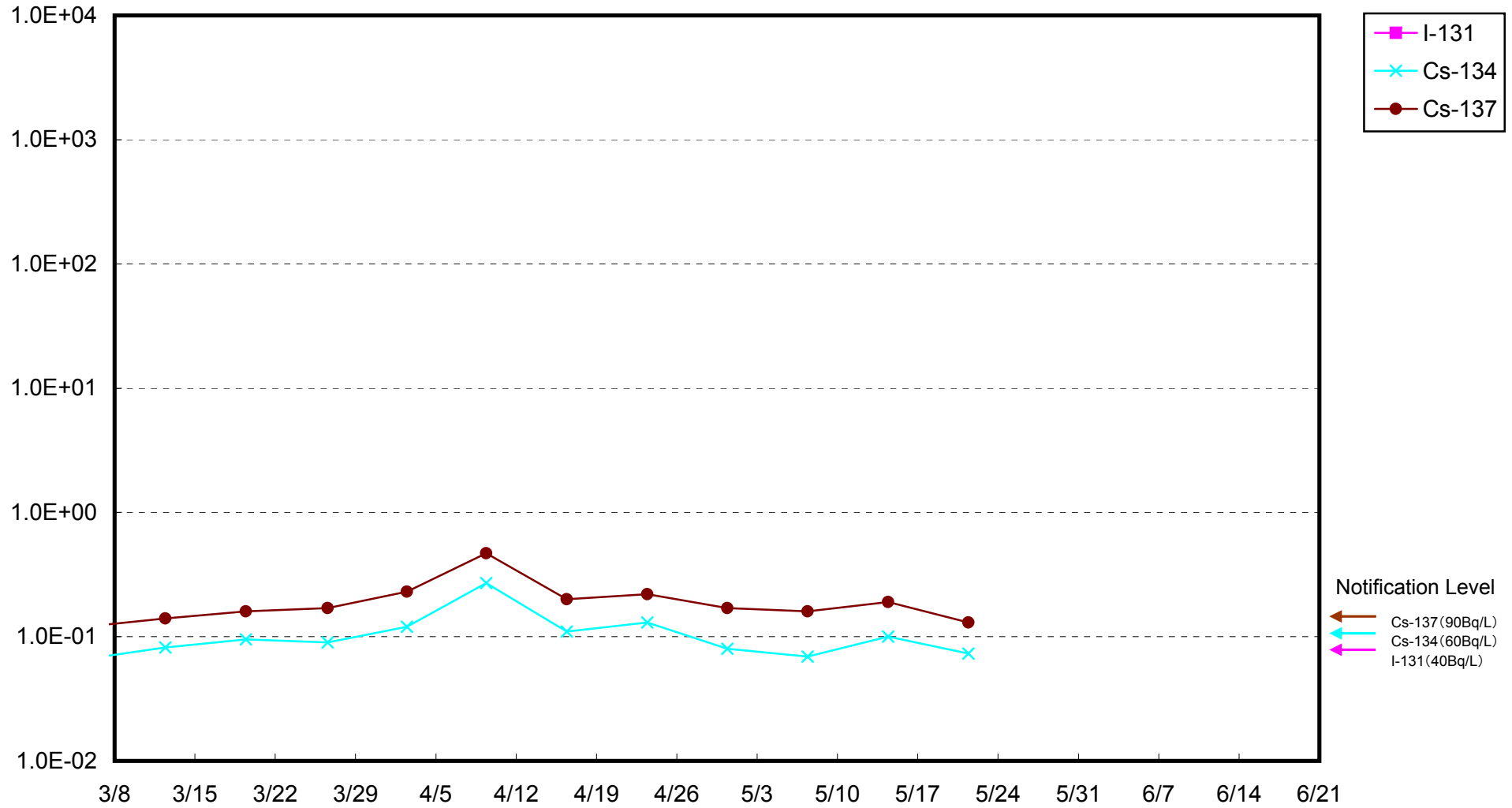
Radioactivity Density of the Seawater at 1F Units 5-6 North Discharge Channel (Bq/L)



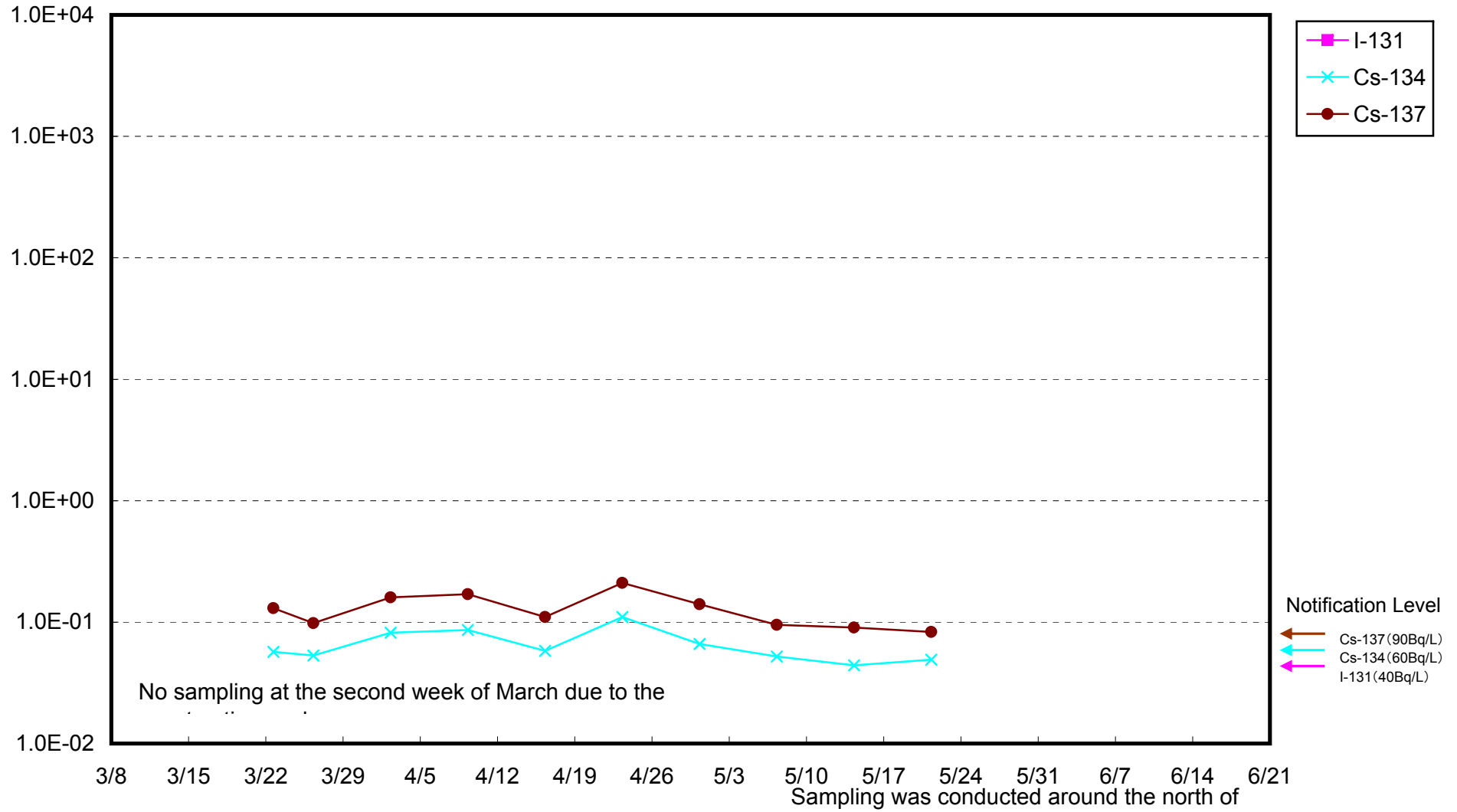
Radioactivity Density of the Seawater at 1F South Discharge Channel (Bq/L)



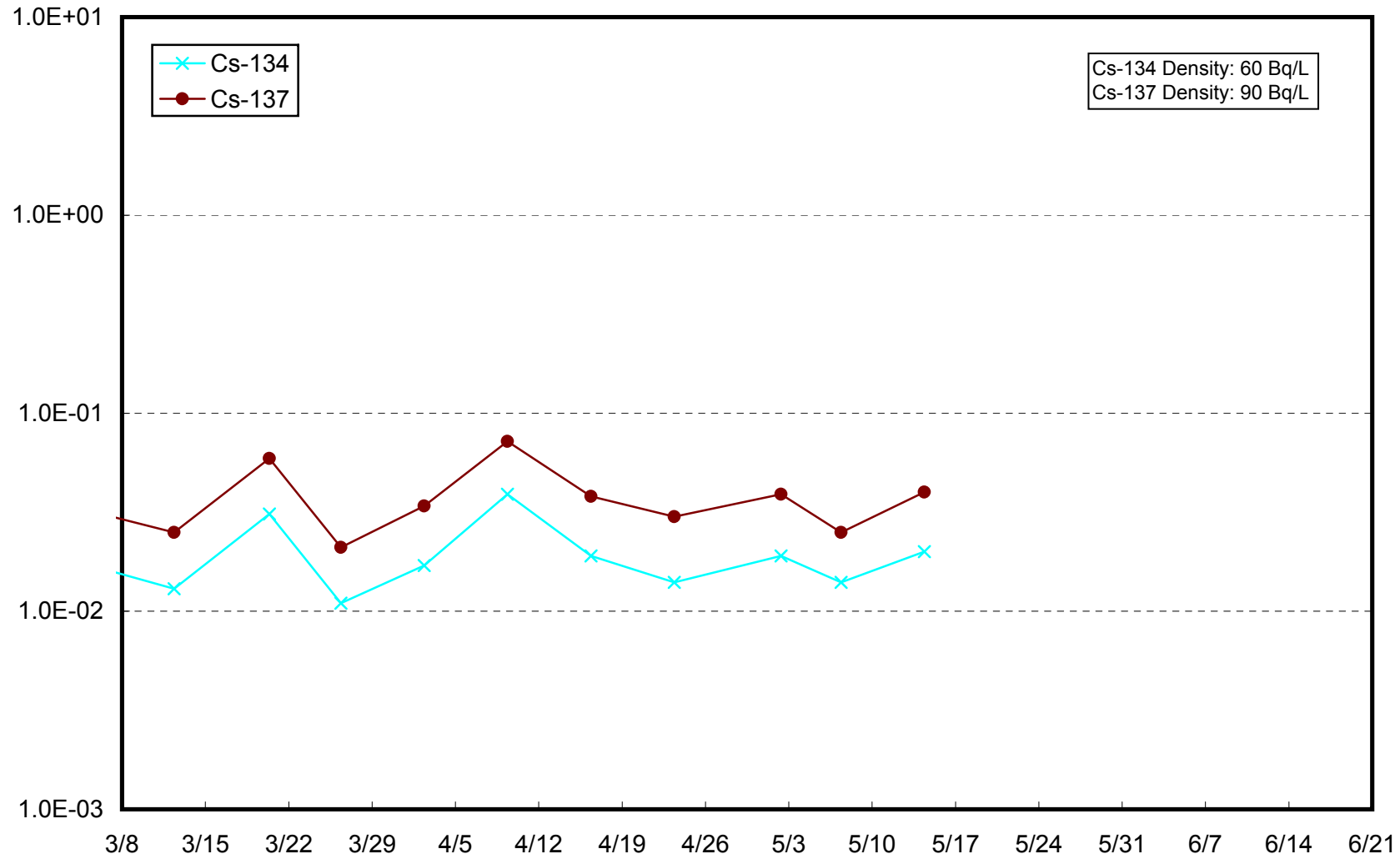
Radioactivity Density of the Seawater at 2F North Discharge Channel (Bq/L)



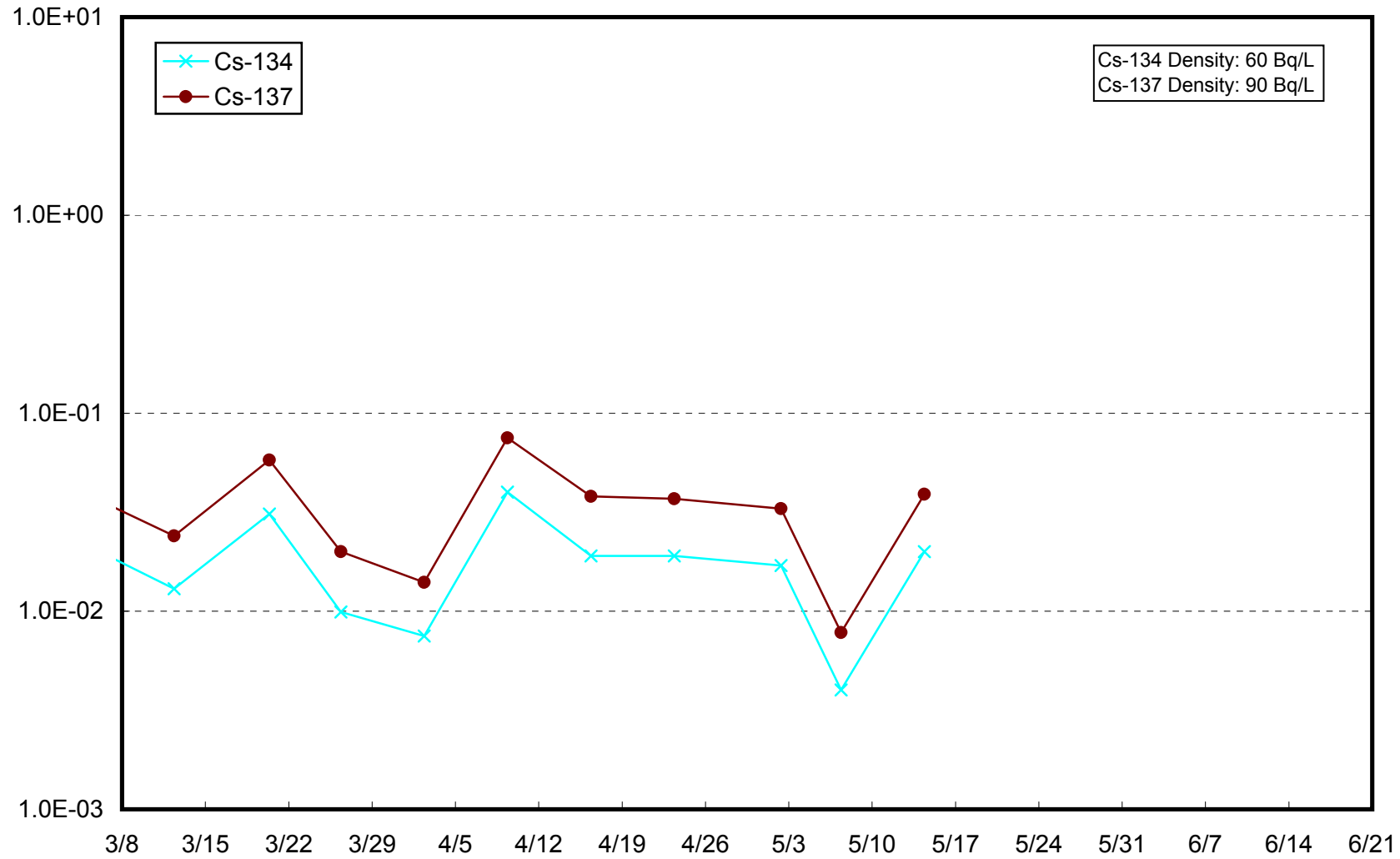
Radioactivity Density of the Seawater Around the South Side of Kitasakogawa (Bq/L)



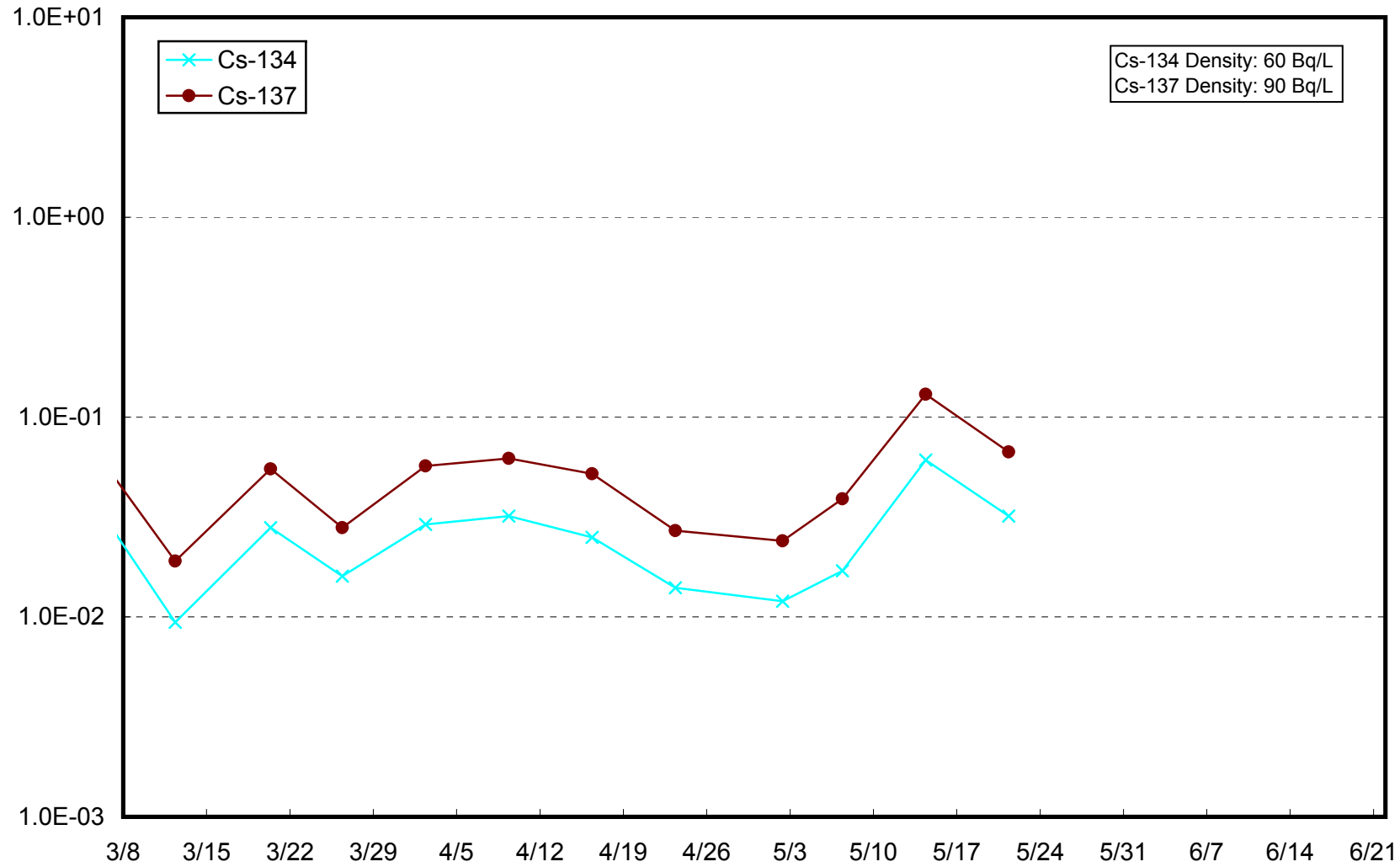
Radioactivity Density of the Seawater at 3km Offshore of Odaka Ward (T-14) Upper Layer (Bq/L)



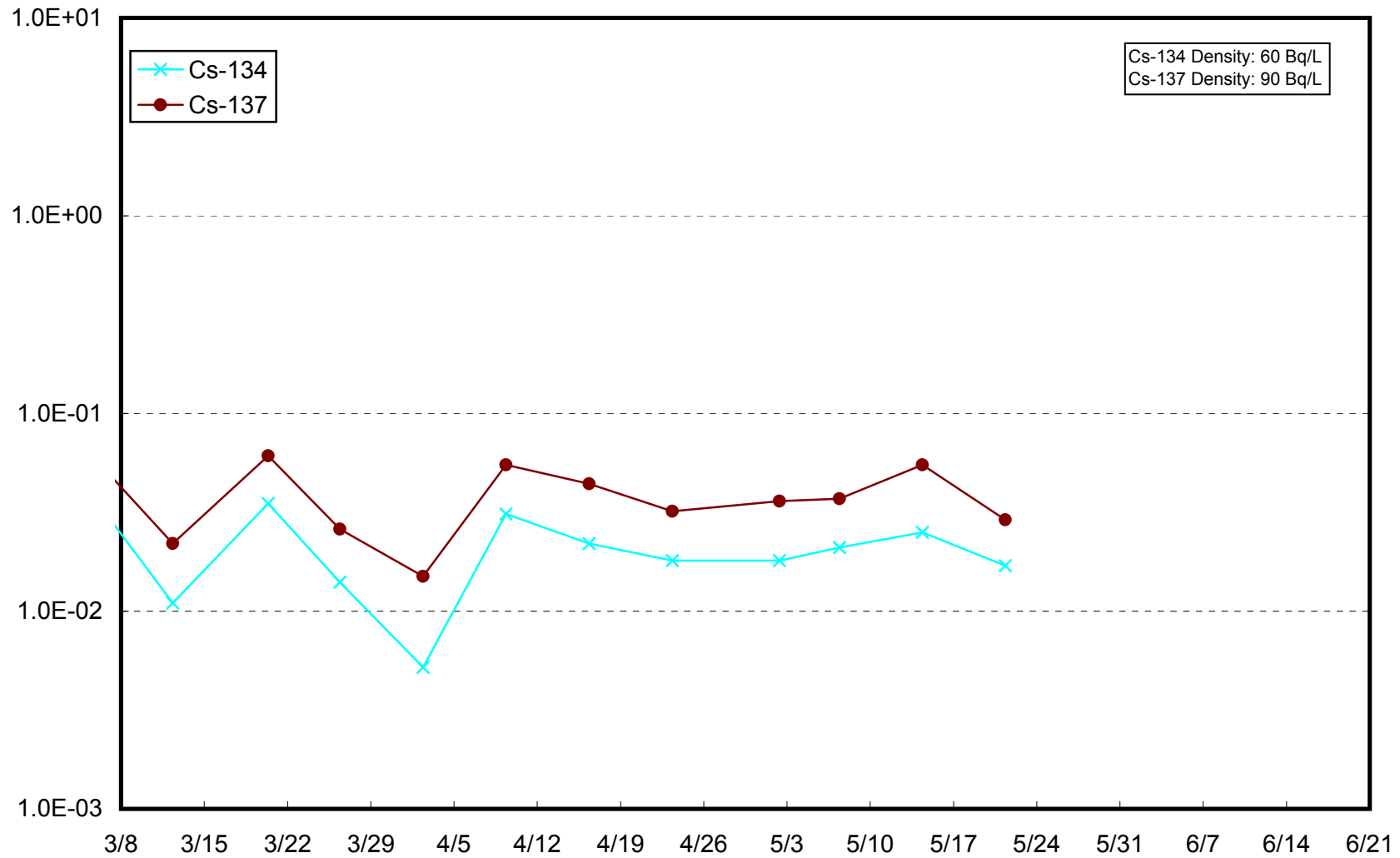
Radioactivity Density of the Seawater at 3km Offshore of Odaka Ward (T-14) Lower Layer (Bq/L)



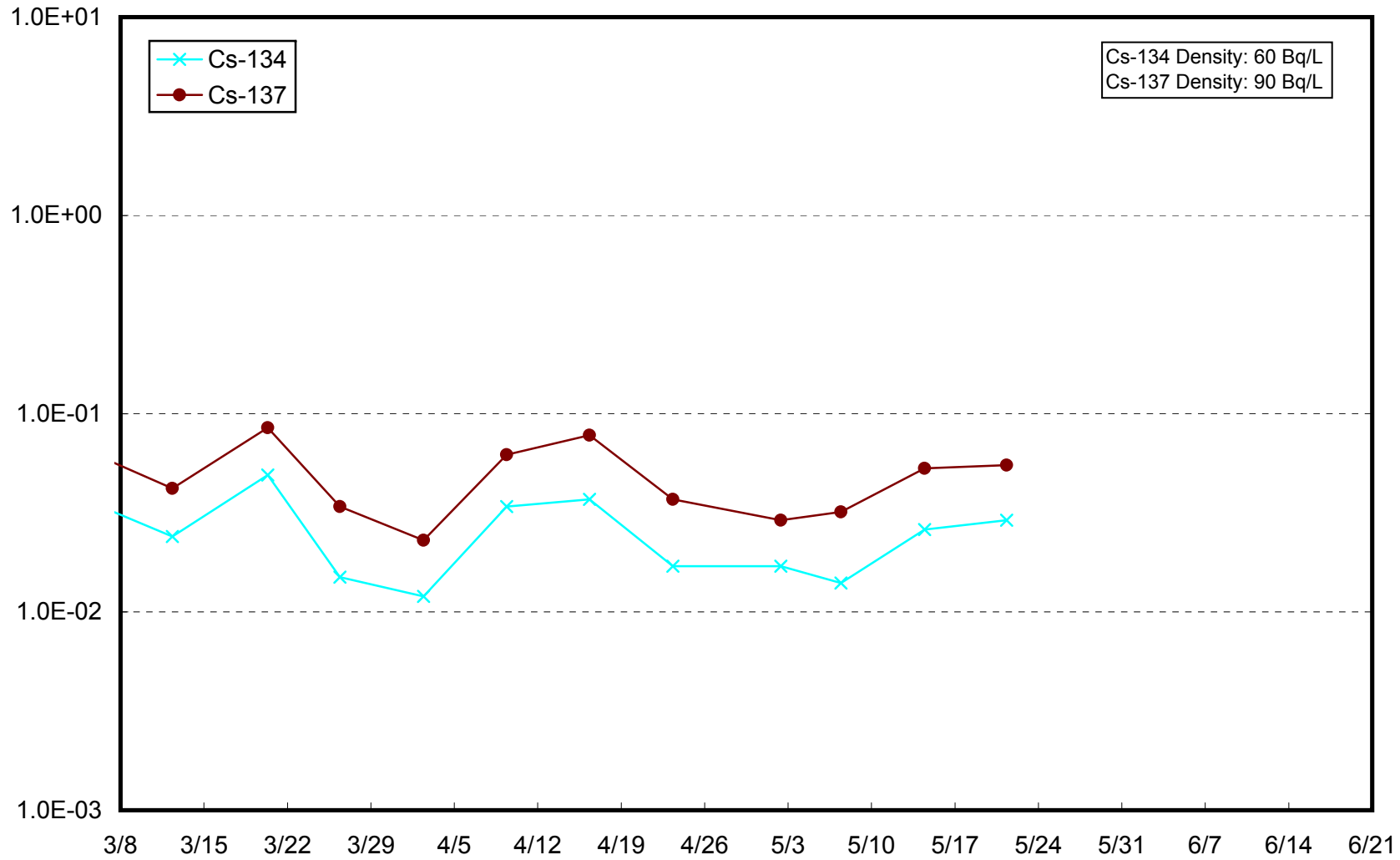
Radioactivity Density of the Seawater at 3km Offshore of Ukedo River (T-D1) Upper Layer (Bq/L)



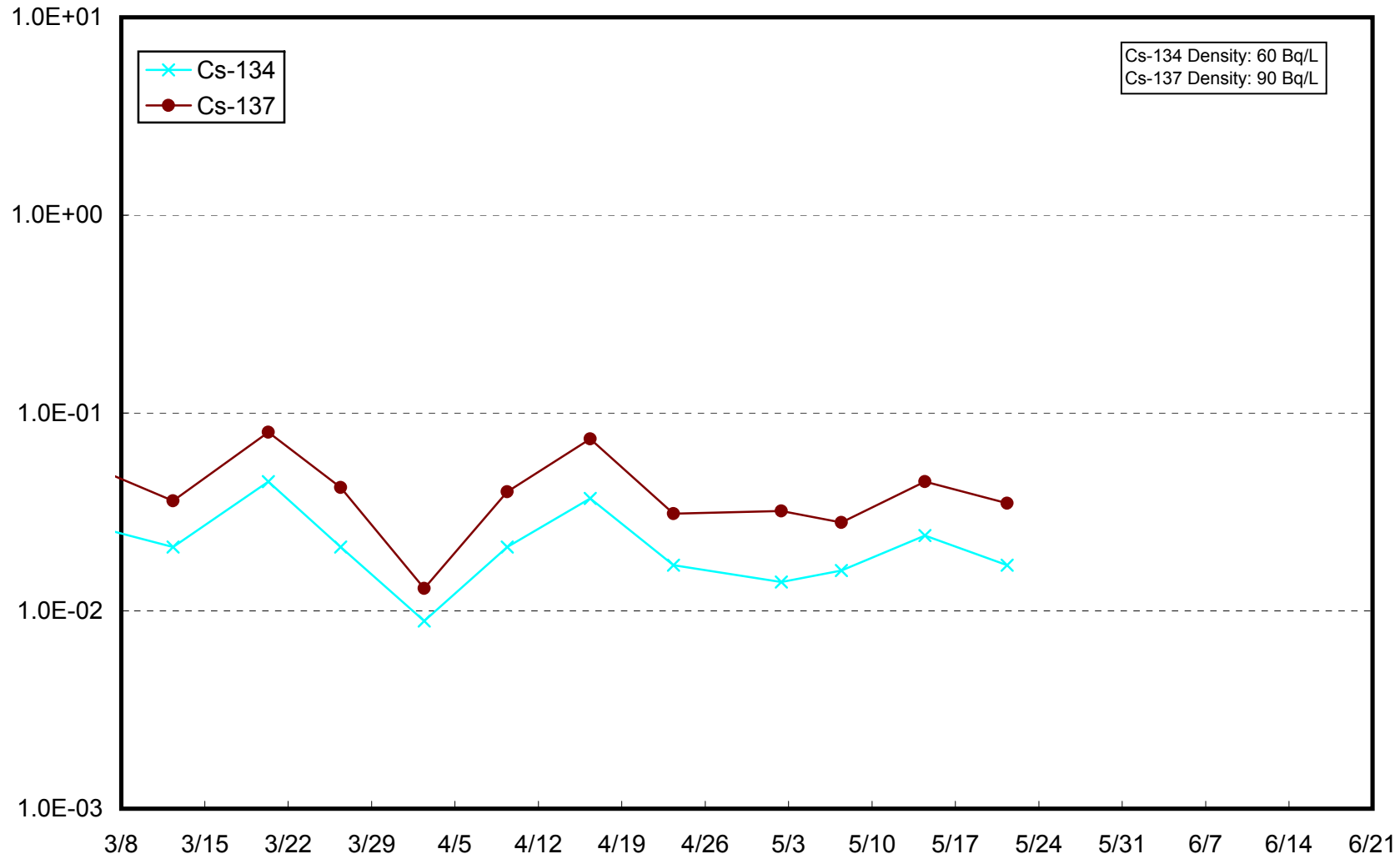
Radioactivity Density of the Seawater at 3km Offshore of Ukedo River (T-D1) Lower Layer (Bq/L)



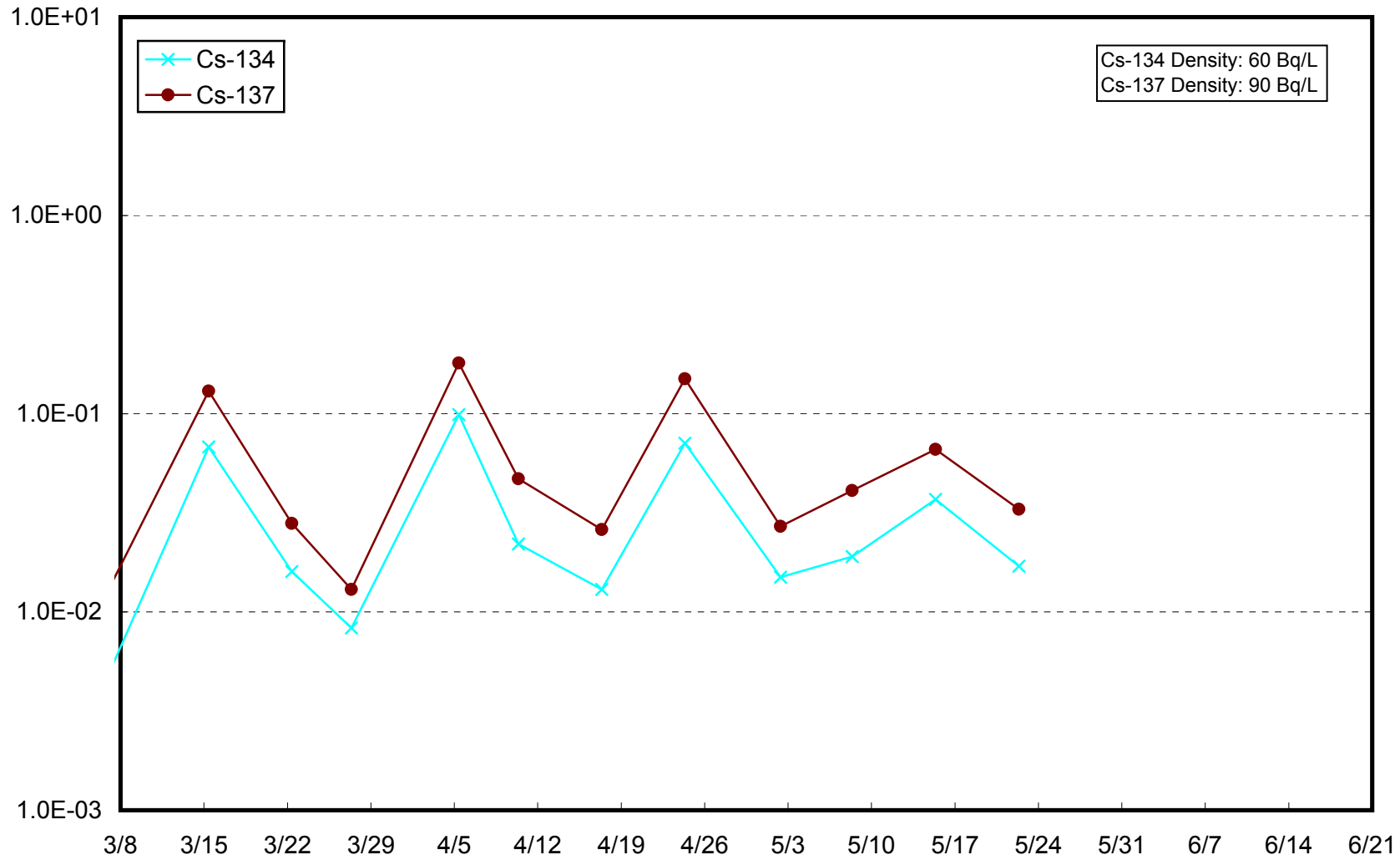
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daiichi NPS (T-D5) Upper Layer (Bq/L)



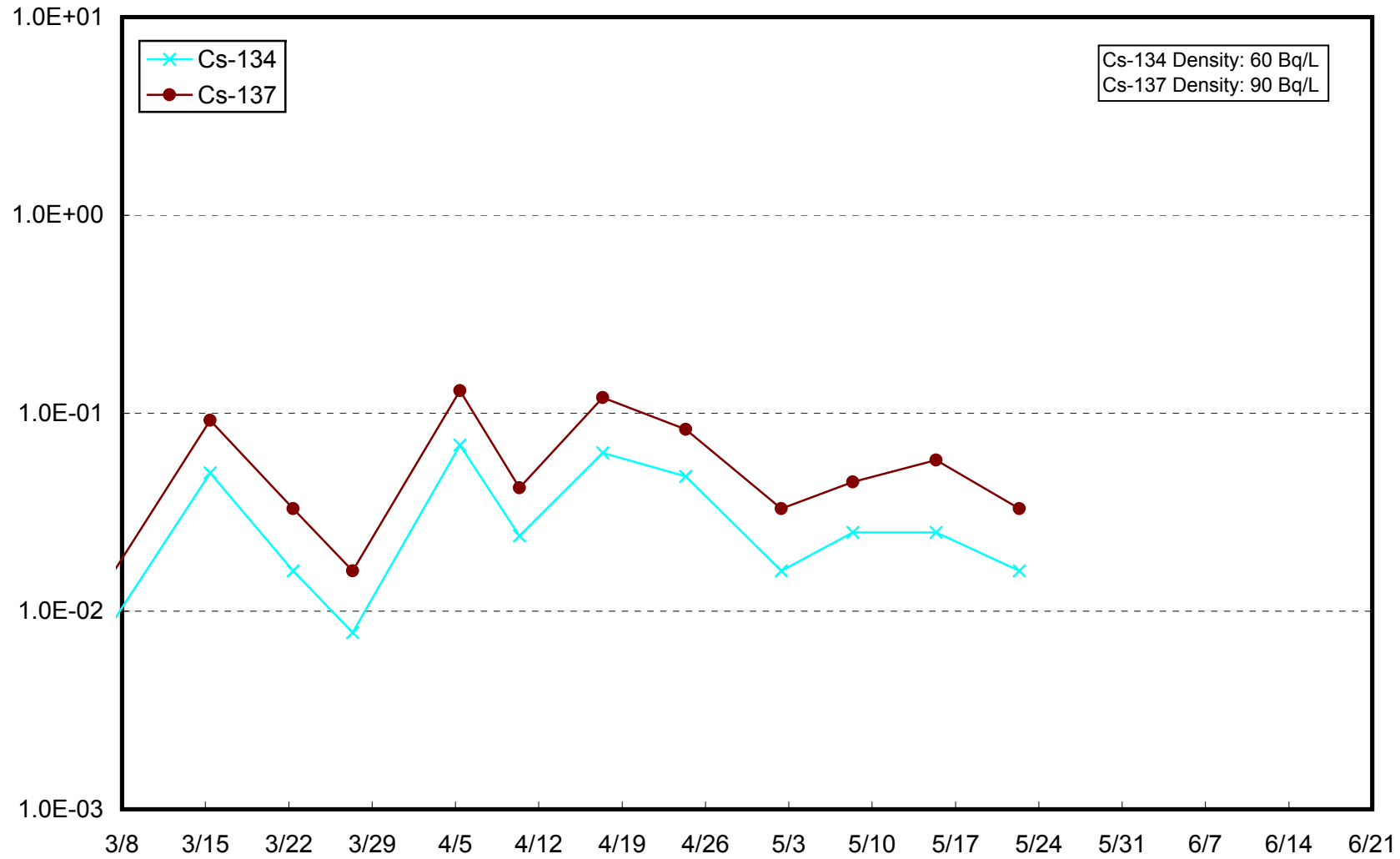
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daiichi NPS (T-D5) Lower Layer (Bq/L)



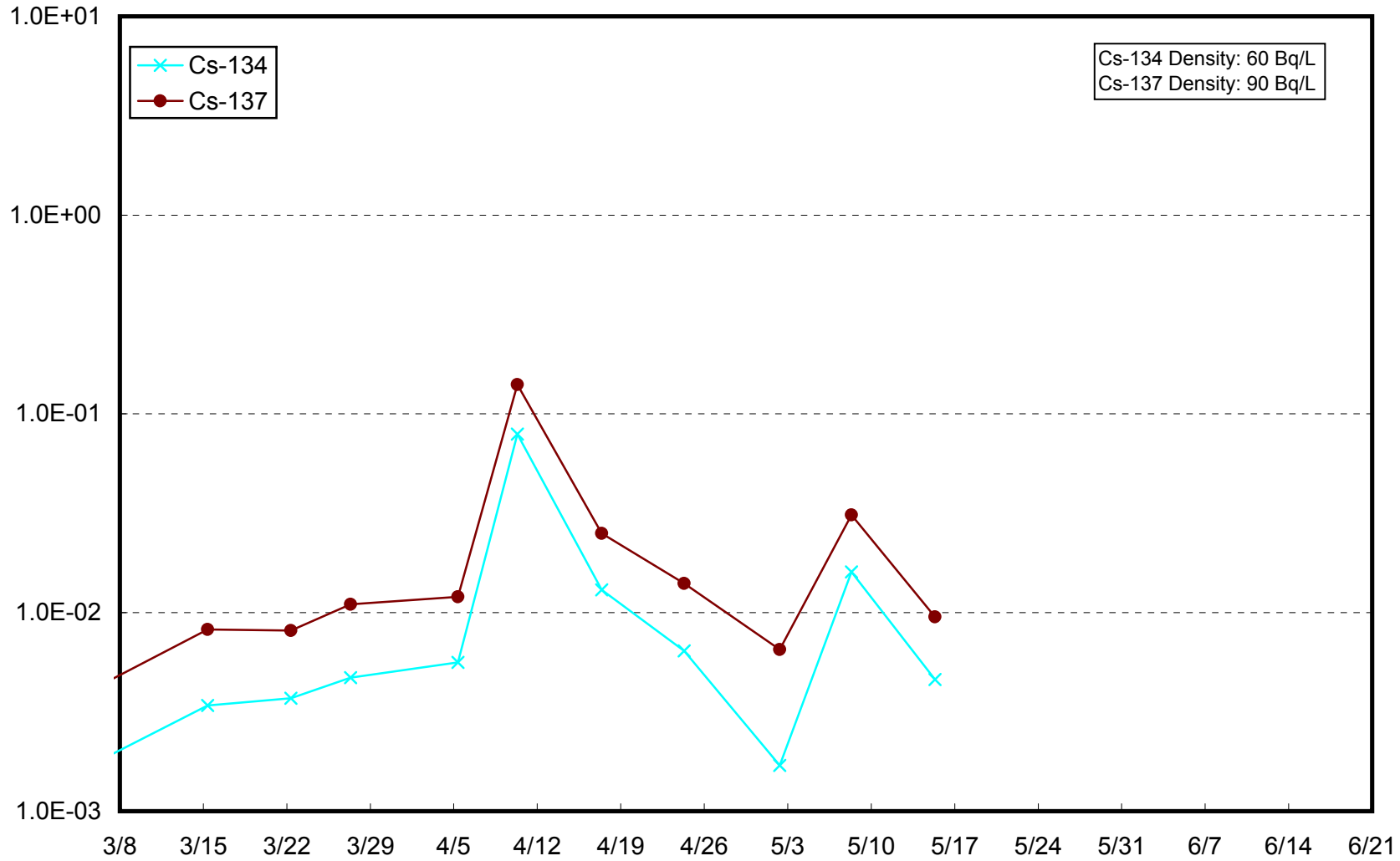
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daini NPS (T-D9) Upper Layer (Bq/L)



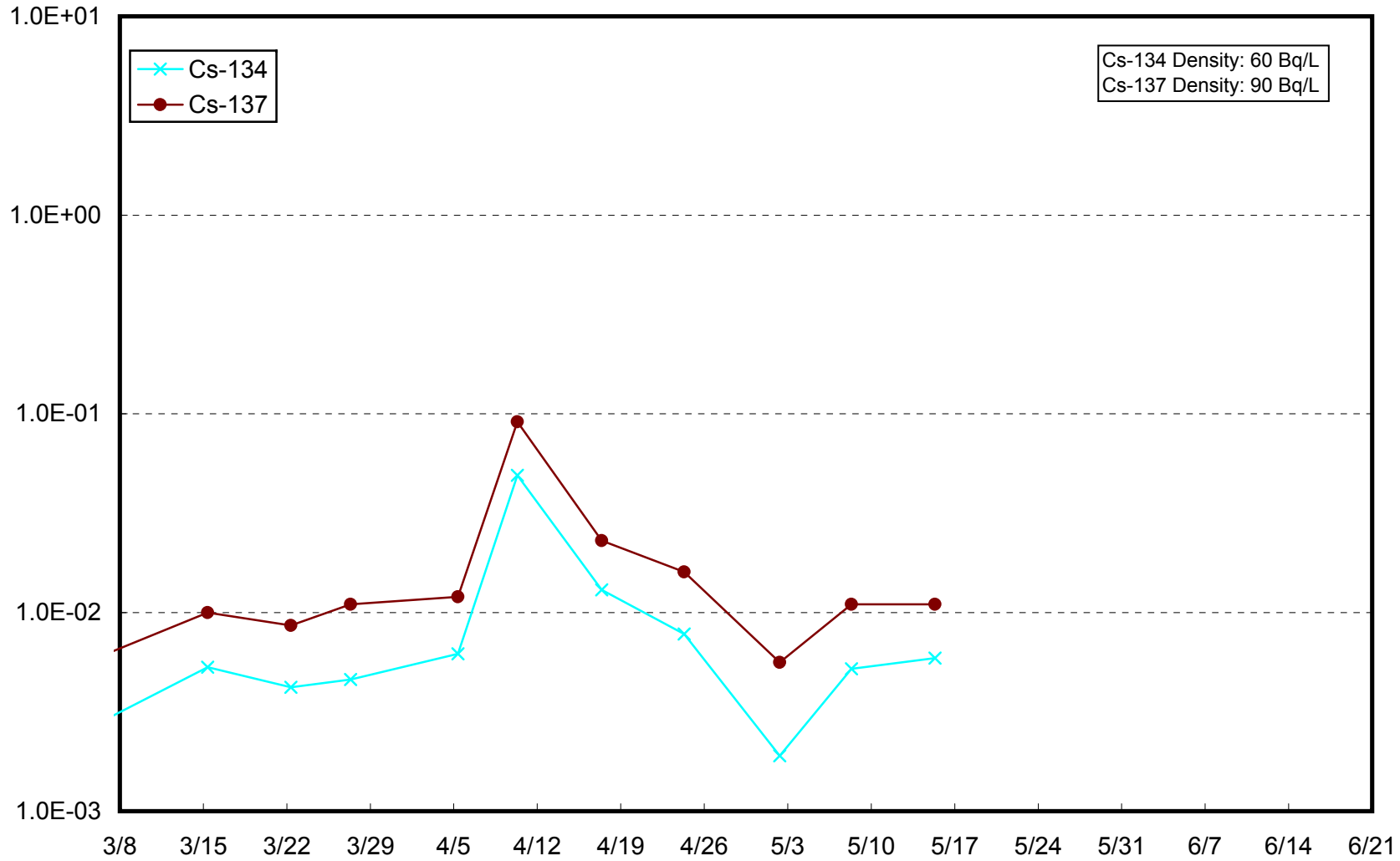
Radioactivity Density of the Seawater at 3km Offshore of Fukushima Daini NPS (T-D9) Lower Layer (Bq/L)



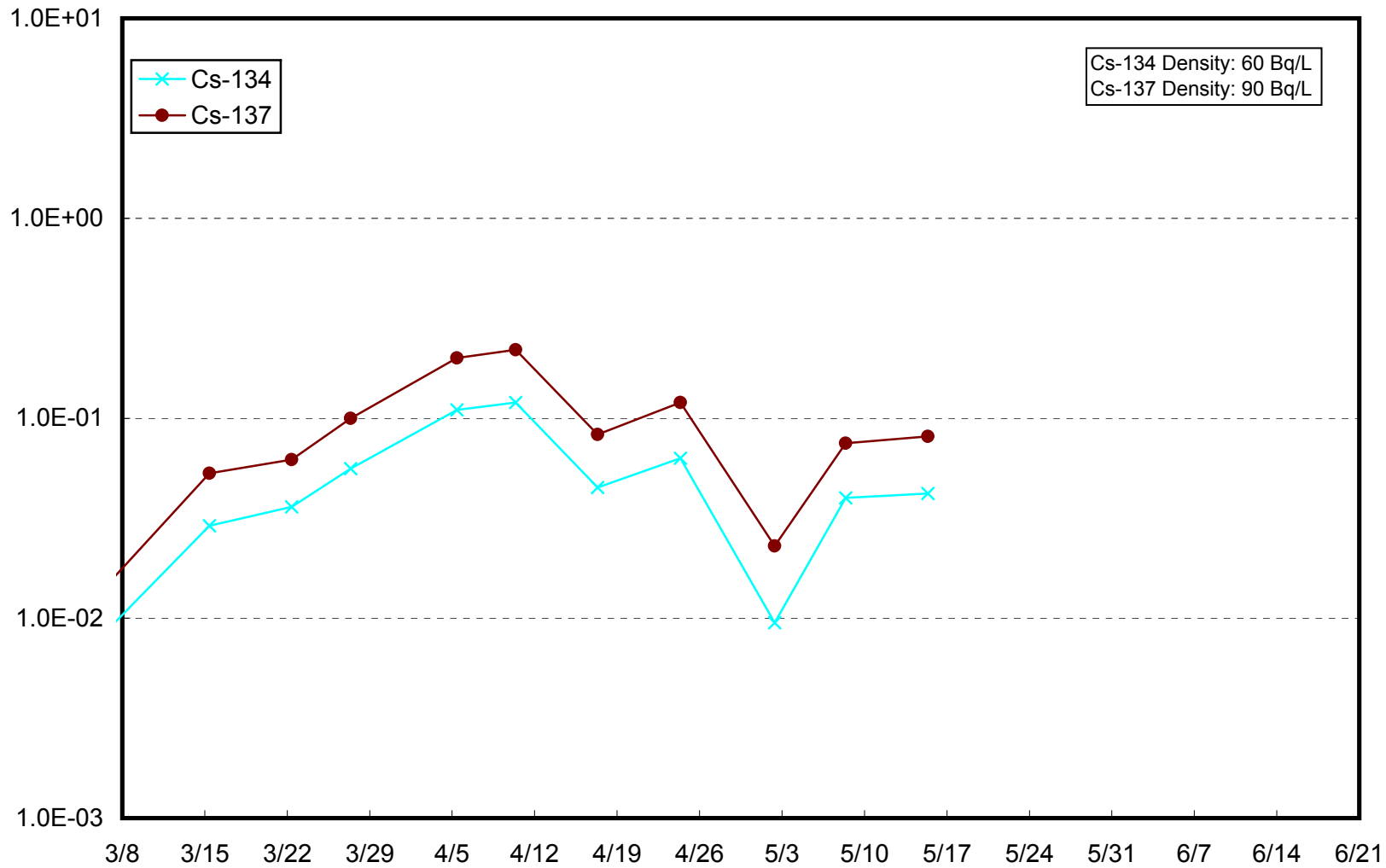
Radioactivity Density of the Seawater at 15km Offshore of Fukushima Daiichi NPS (T-5) Upper Layer (Bq/L)



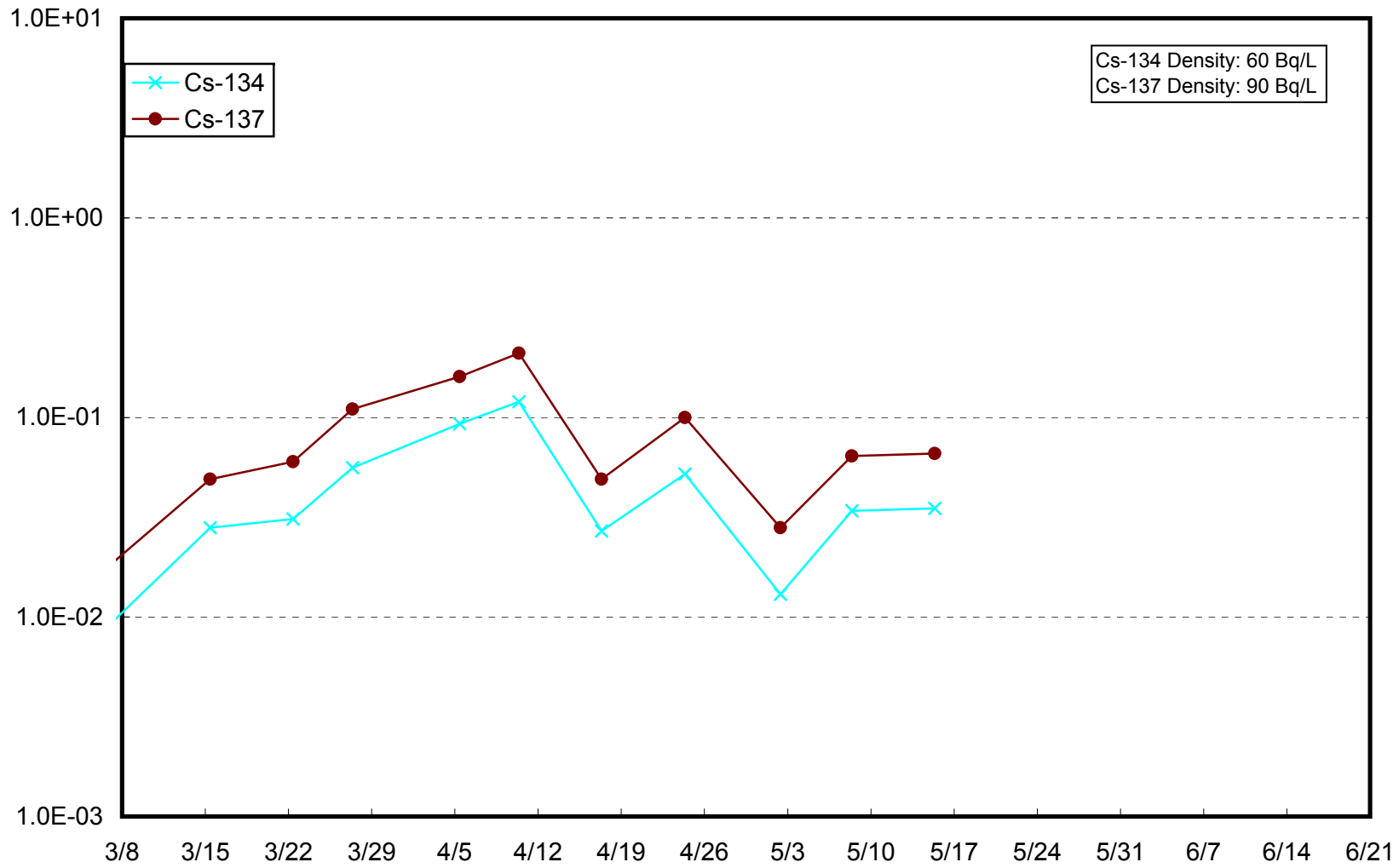
Radioactivity Density of the Seawater at 15km Offshore of Fukushima Daiichi NPS (T-5) Lower Layer (Bq/L)



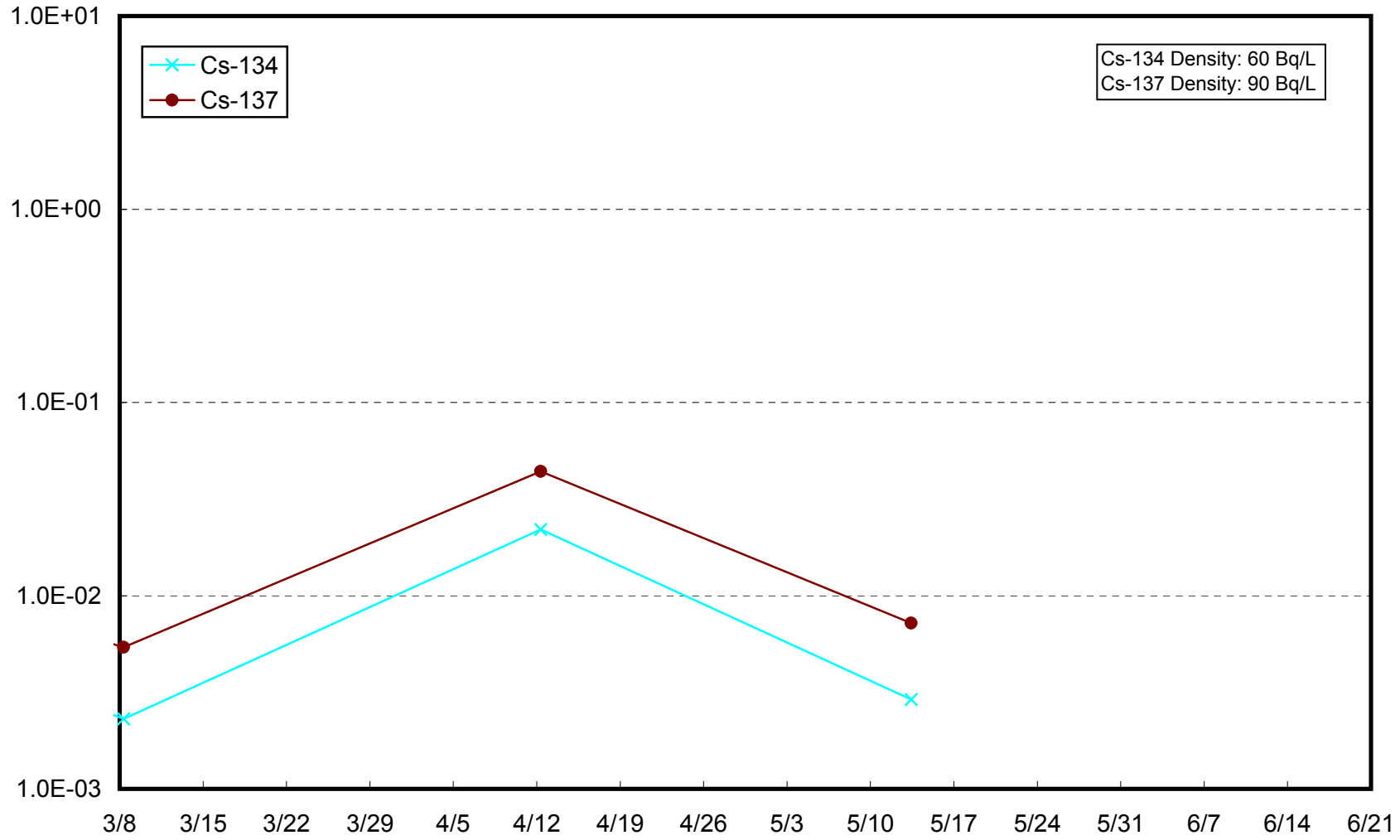
Radioactivity Density of the Seawater at 3km Offshore of Iwasawa Shore (T-11) Upper Layer (Bq/L)



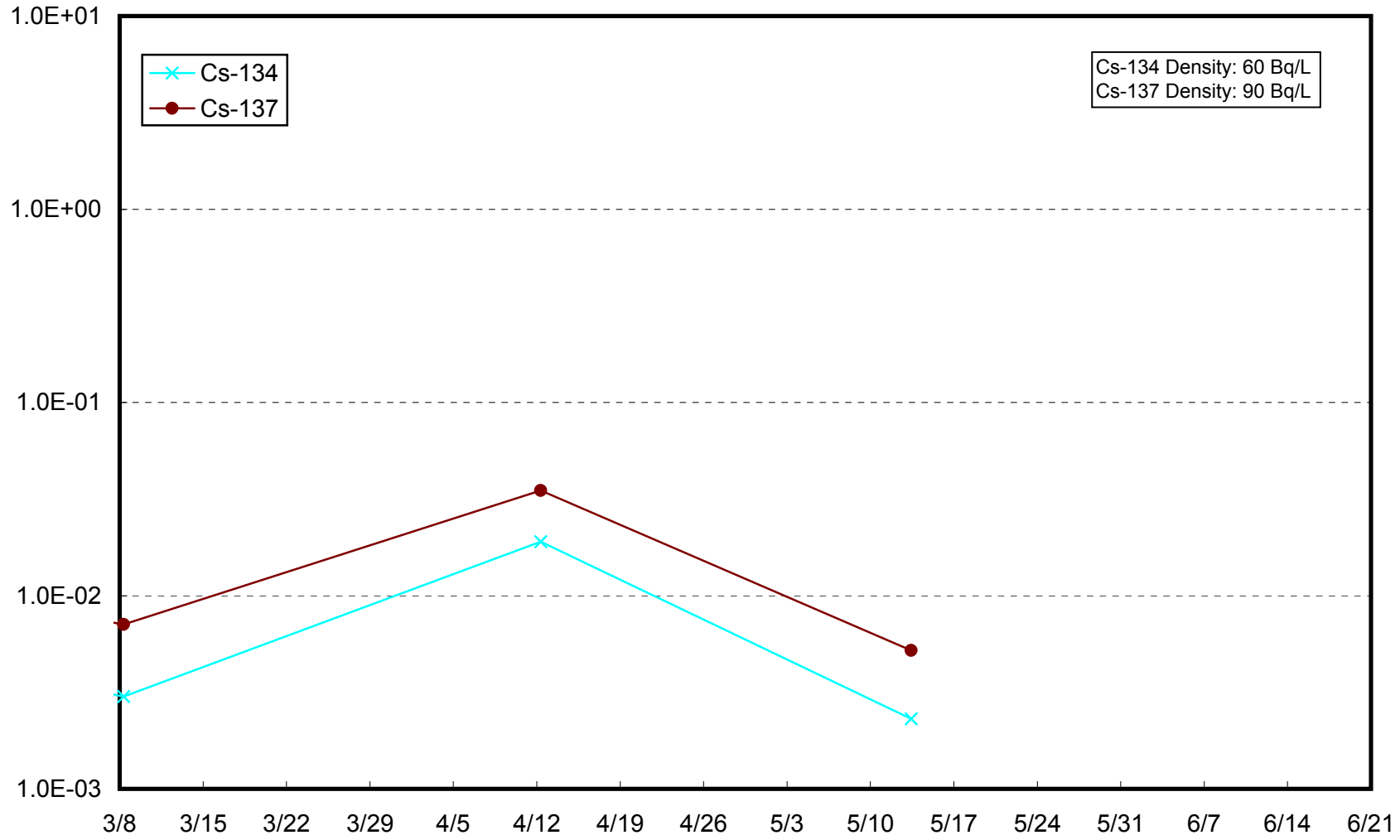
Radioactivity Density of the Seawater at 3km Offshore of Iwasawa Shore (T-11) Lower Layer (Bq/L)



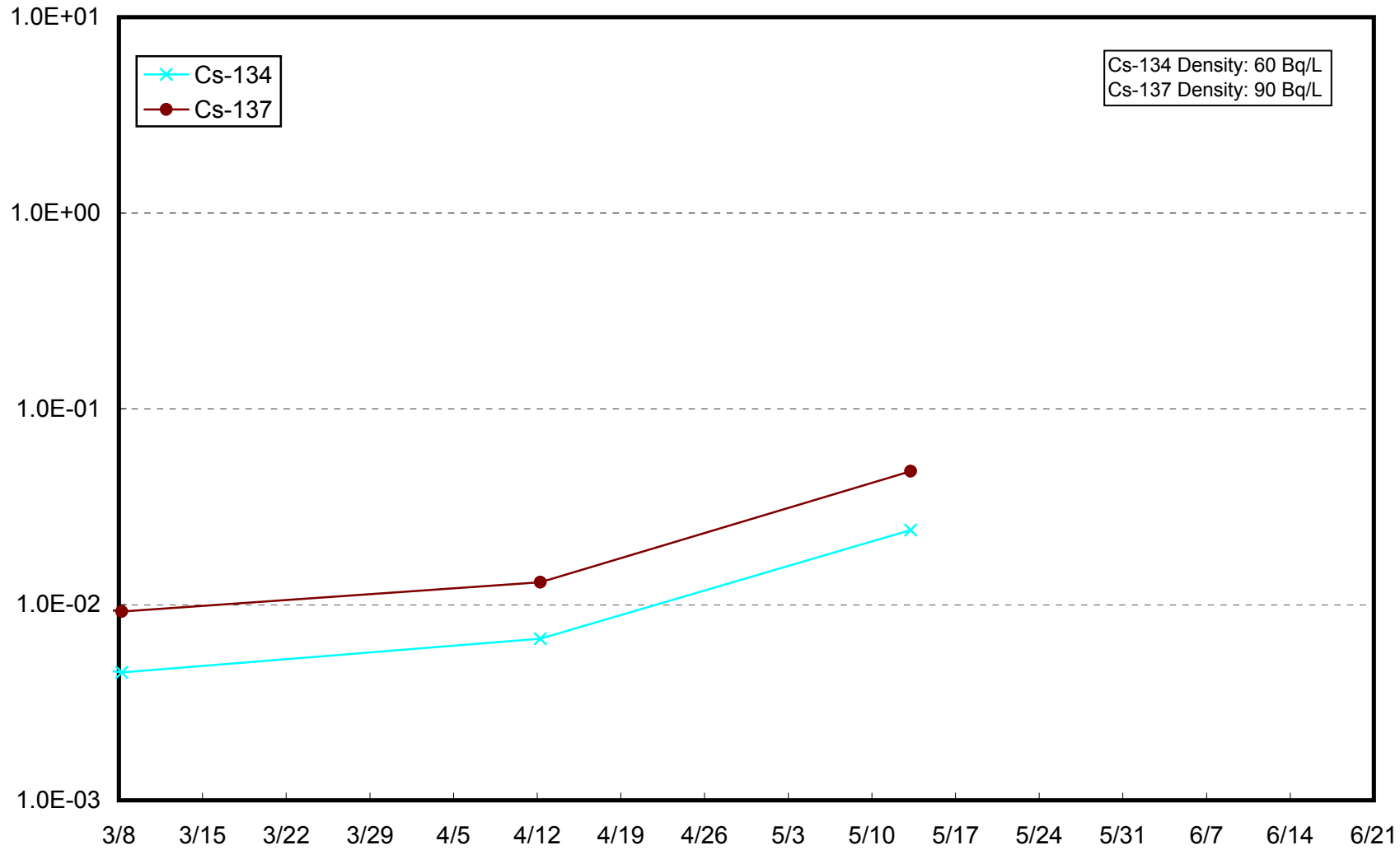
Radioactivity Density of the Seawater at 15km Offshore of Iwasawa Shore (T-7) Upper Layer (Bq/L)



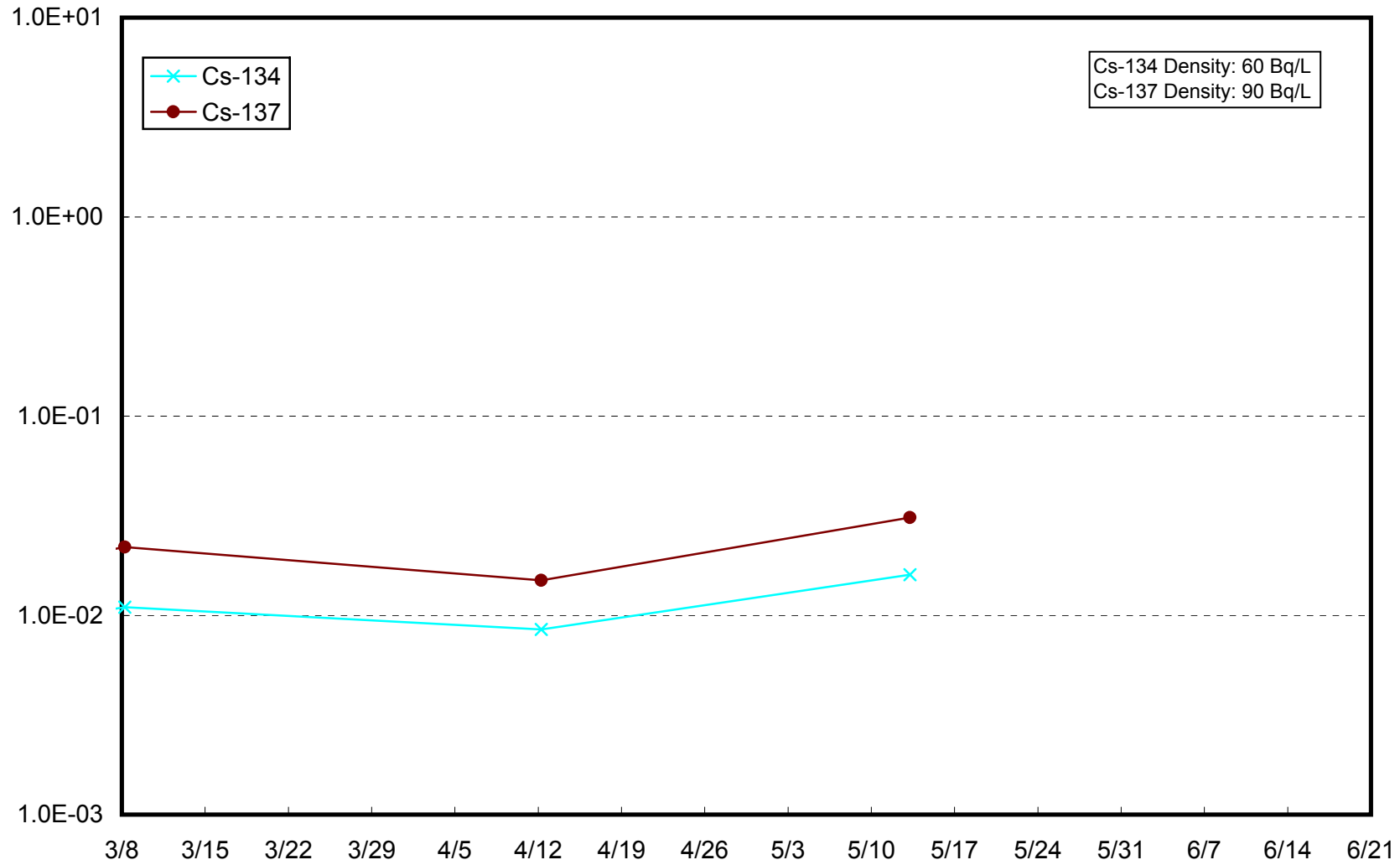
Radioactivity Density of the Seawater at 15km Offshore of Iwasawa Shore (T-7) Lower Layer (Bq/L)



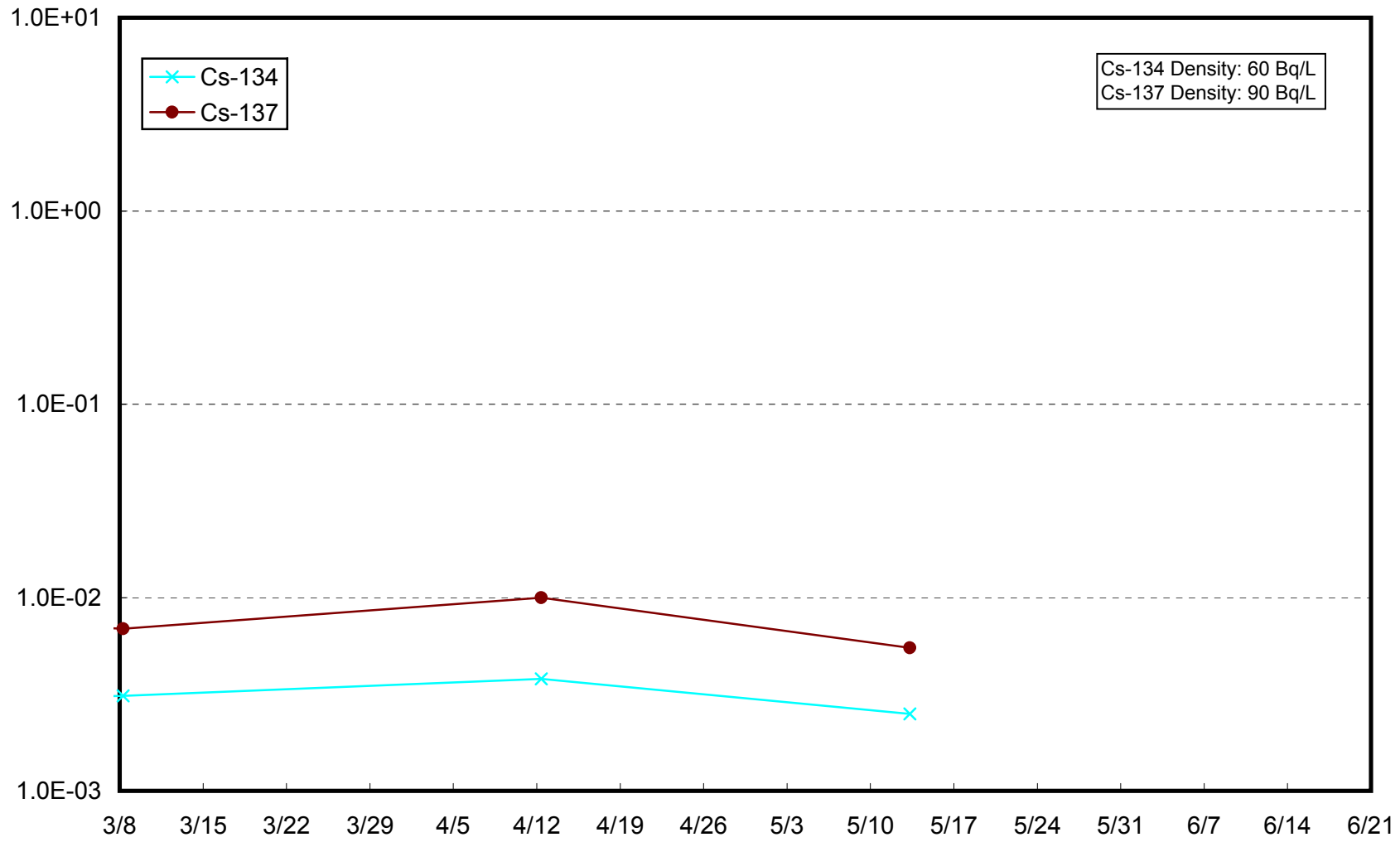
Radioactivity Density of the Seawater at 3km Offshore of Onahama Port (T-18) Upper Layer (Bq/L)



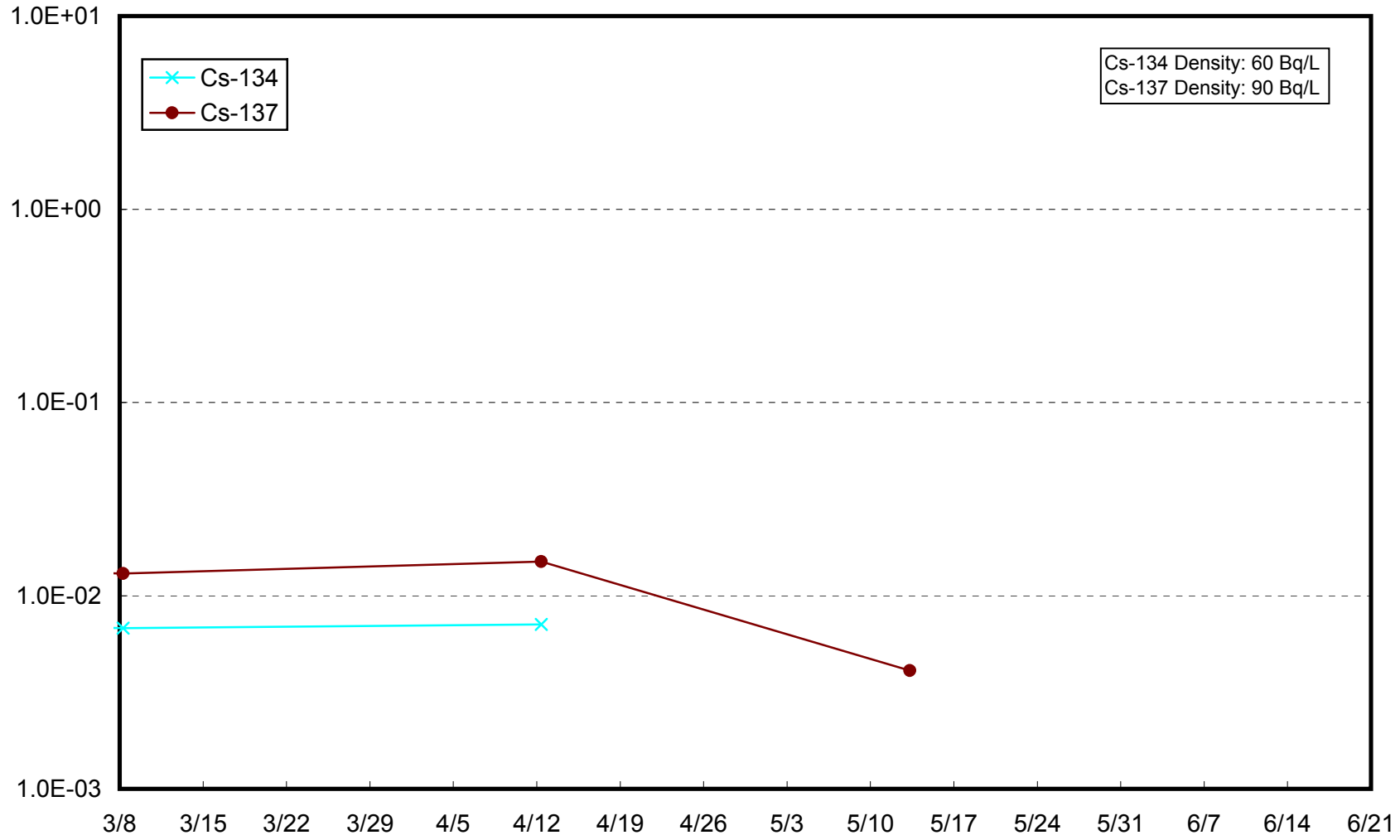
Radioactivity Density of the Seawater at 3km Offshore of Onahama Port (T-18) Lower Layer (Bq/L)



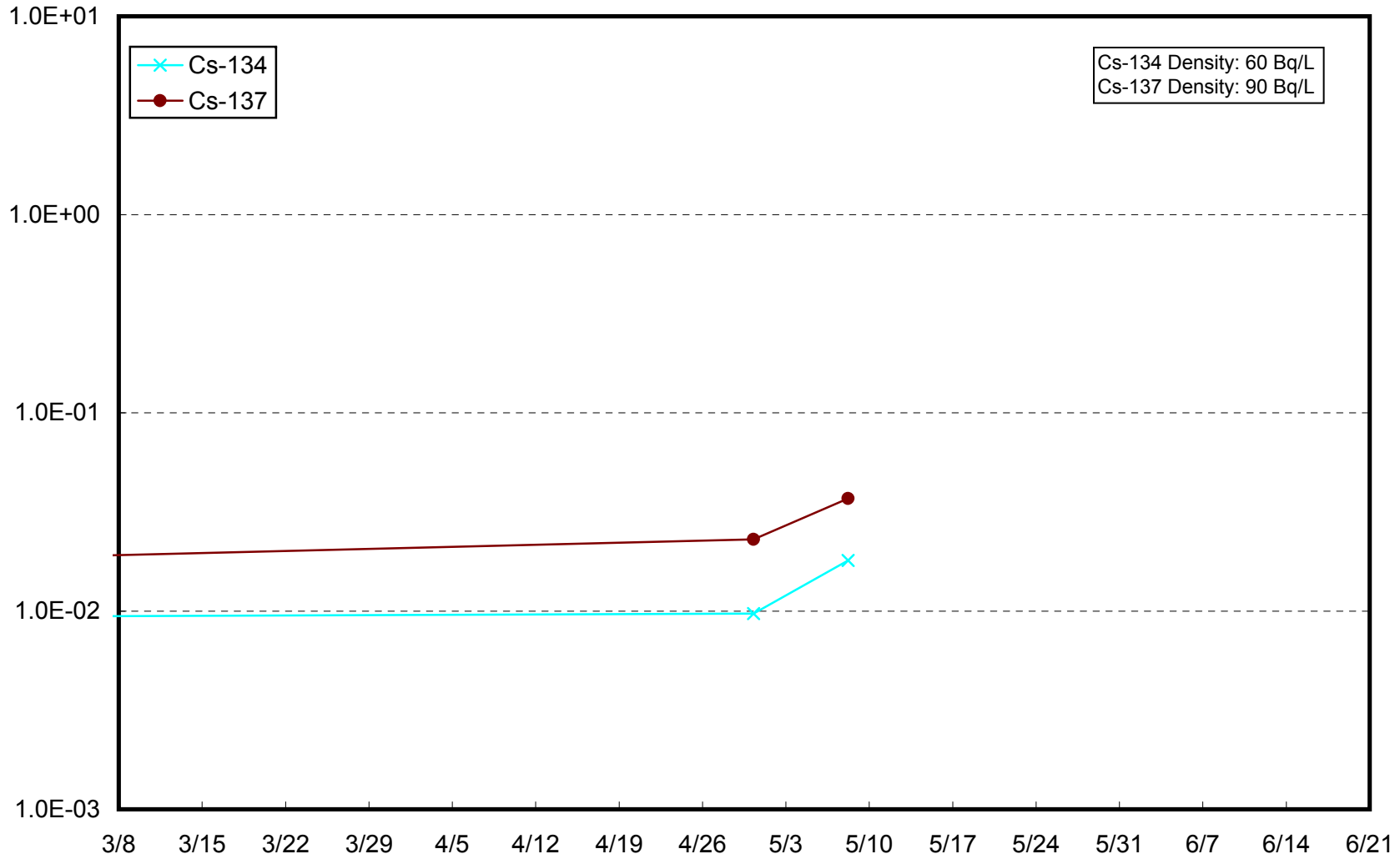
Radioactivity Density of the Seawater at 5km Offshore of Numanouchi (T-M10) Upper Layer (Bq/L)



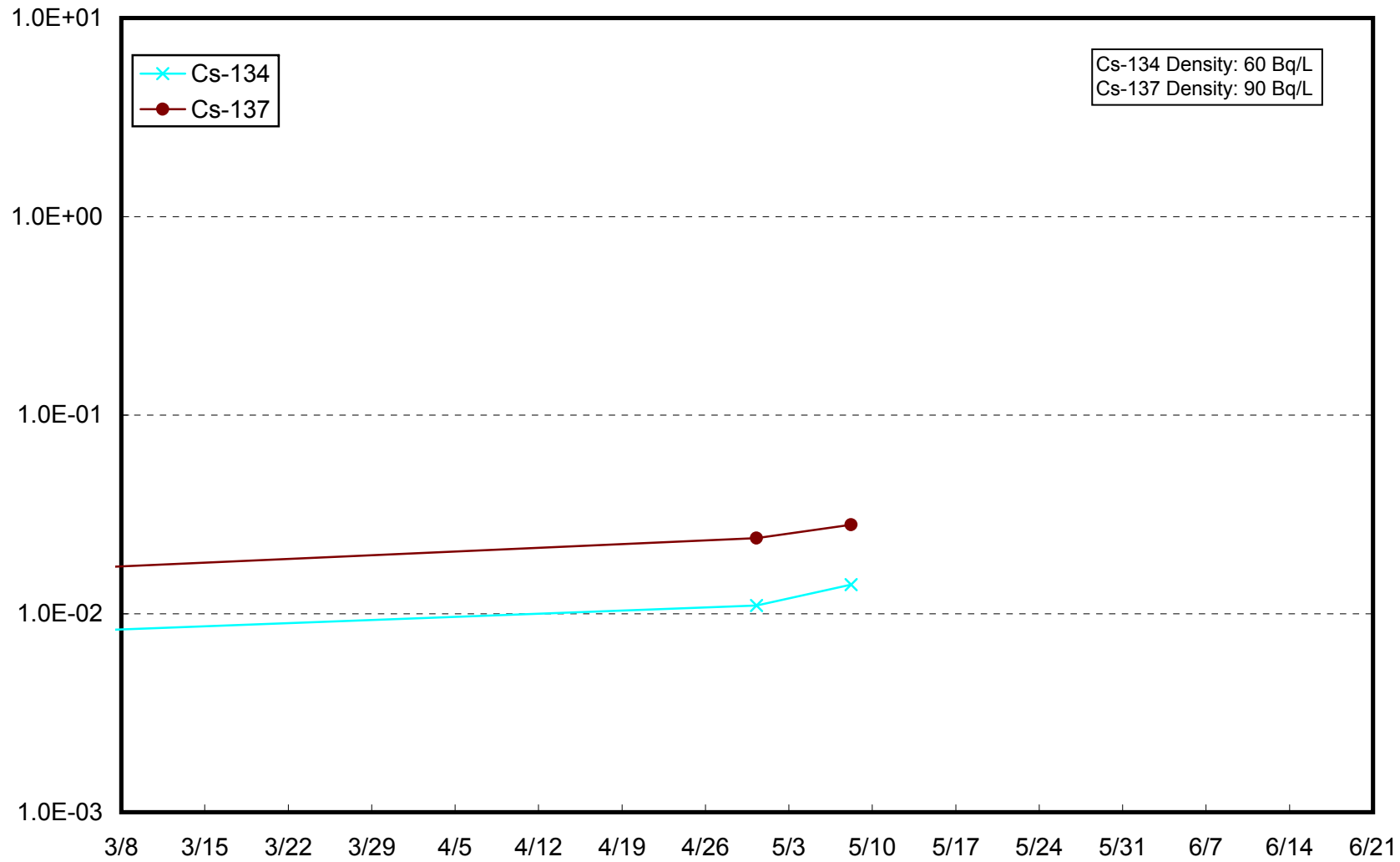
Radioactivity Density of the Seawater at 5km Offshore of Numanouchi (T-M10) Lower Layer (Bq/L)



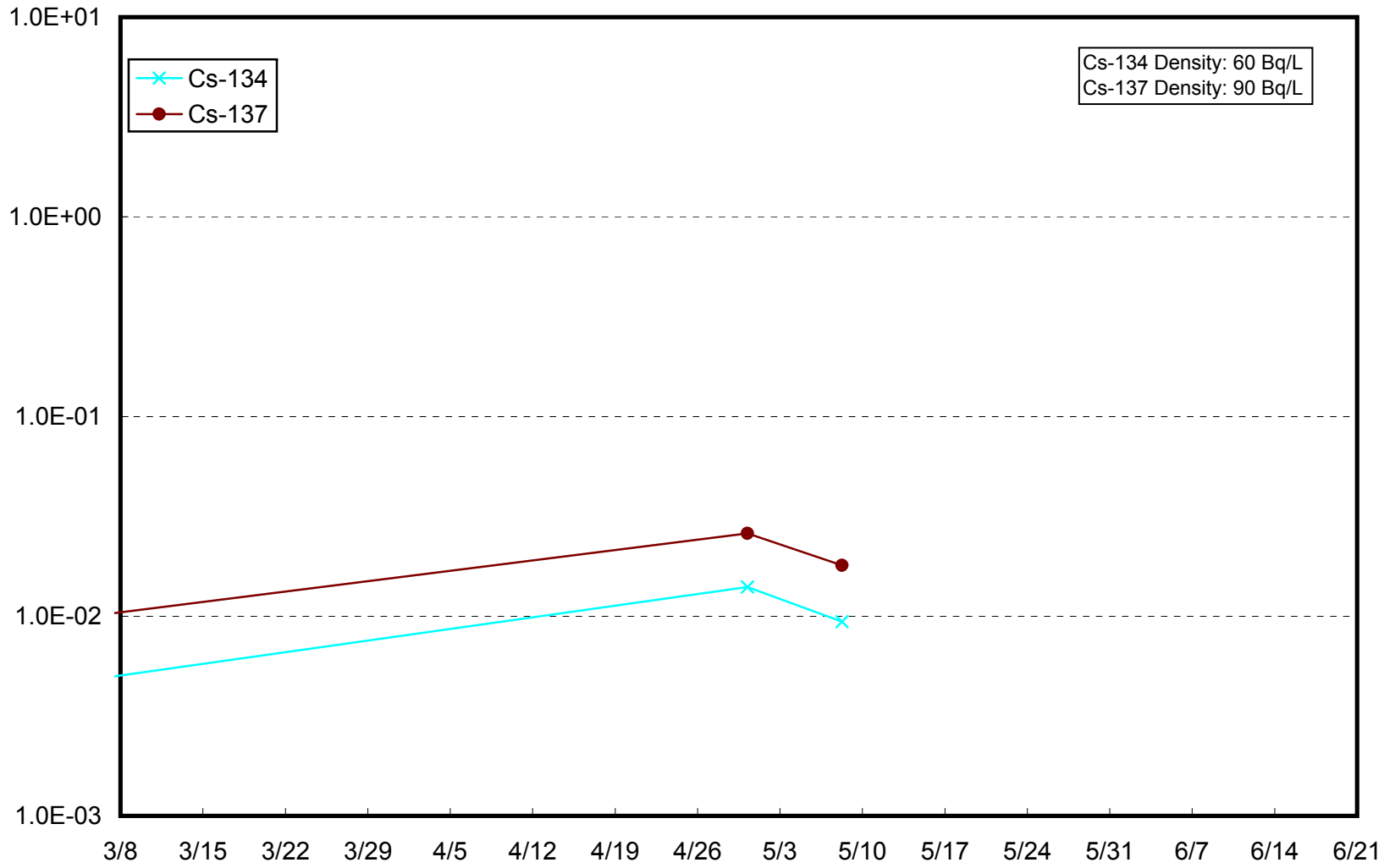
Radioactivity Density of the Seawater at 1km Offshore of Nida River (T-13-1) Upper Layer (Bq/L)



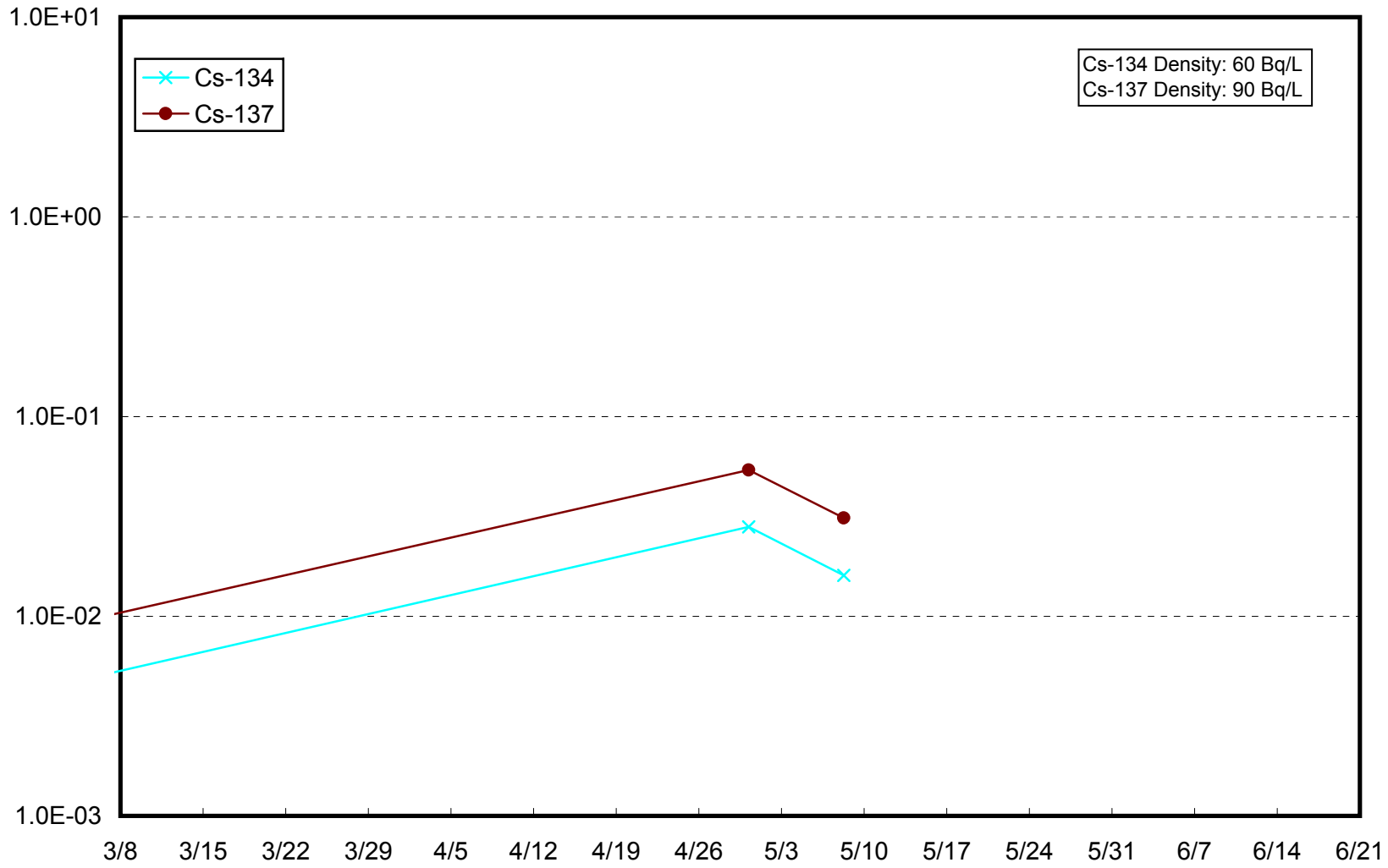
Radioactivity Density of the Seawater at 1km Offshore of Nida River (T-13-1) Lower Layer (Bq/L)



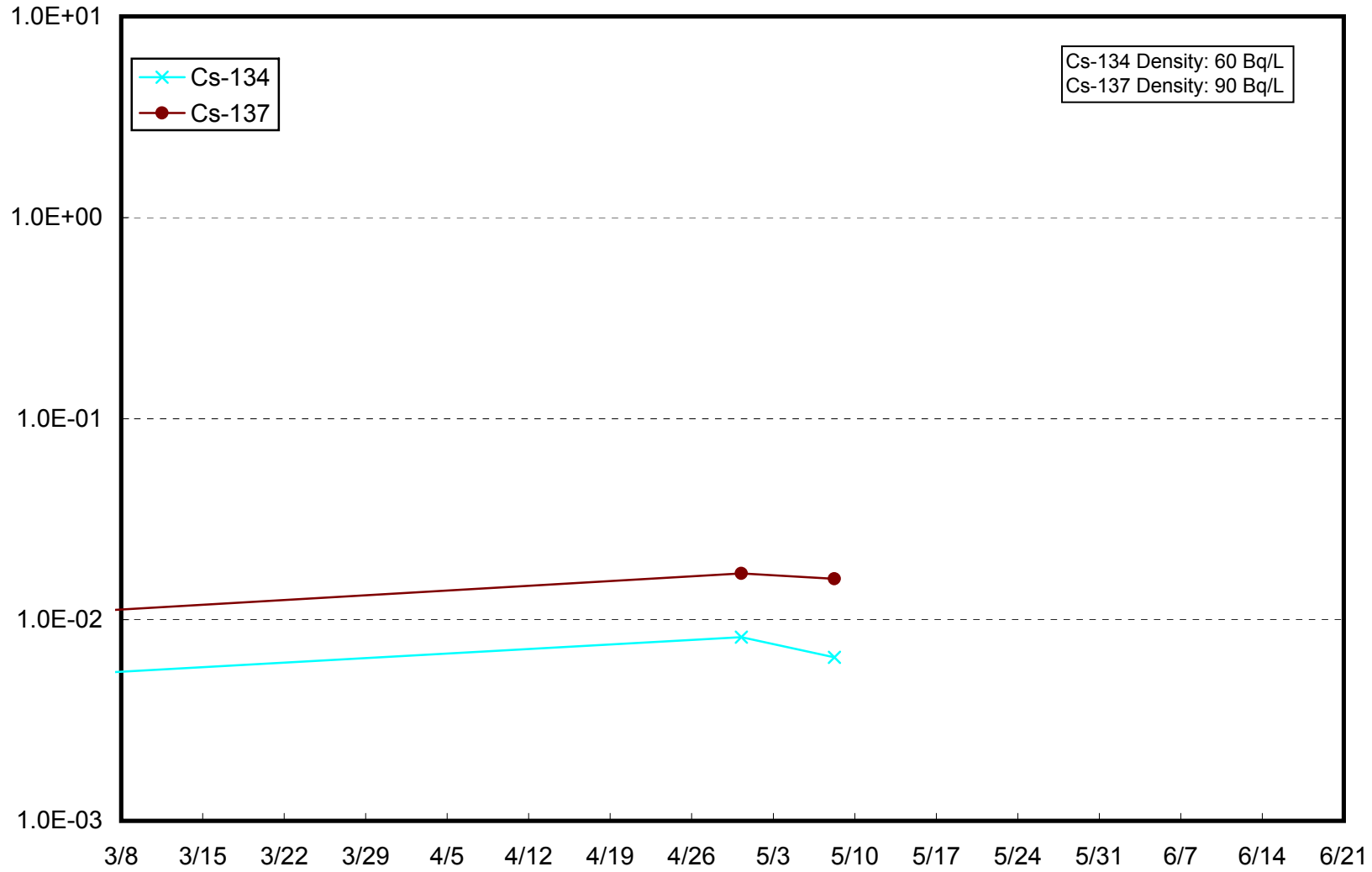
Radioactivity Density of the Seawater at 3km Offshore of Soma (T-22) Upper Layer (Bq/L)



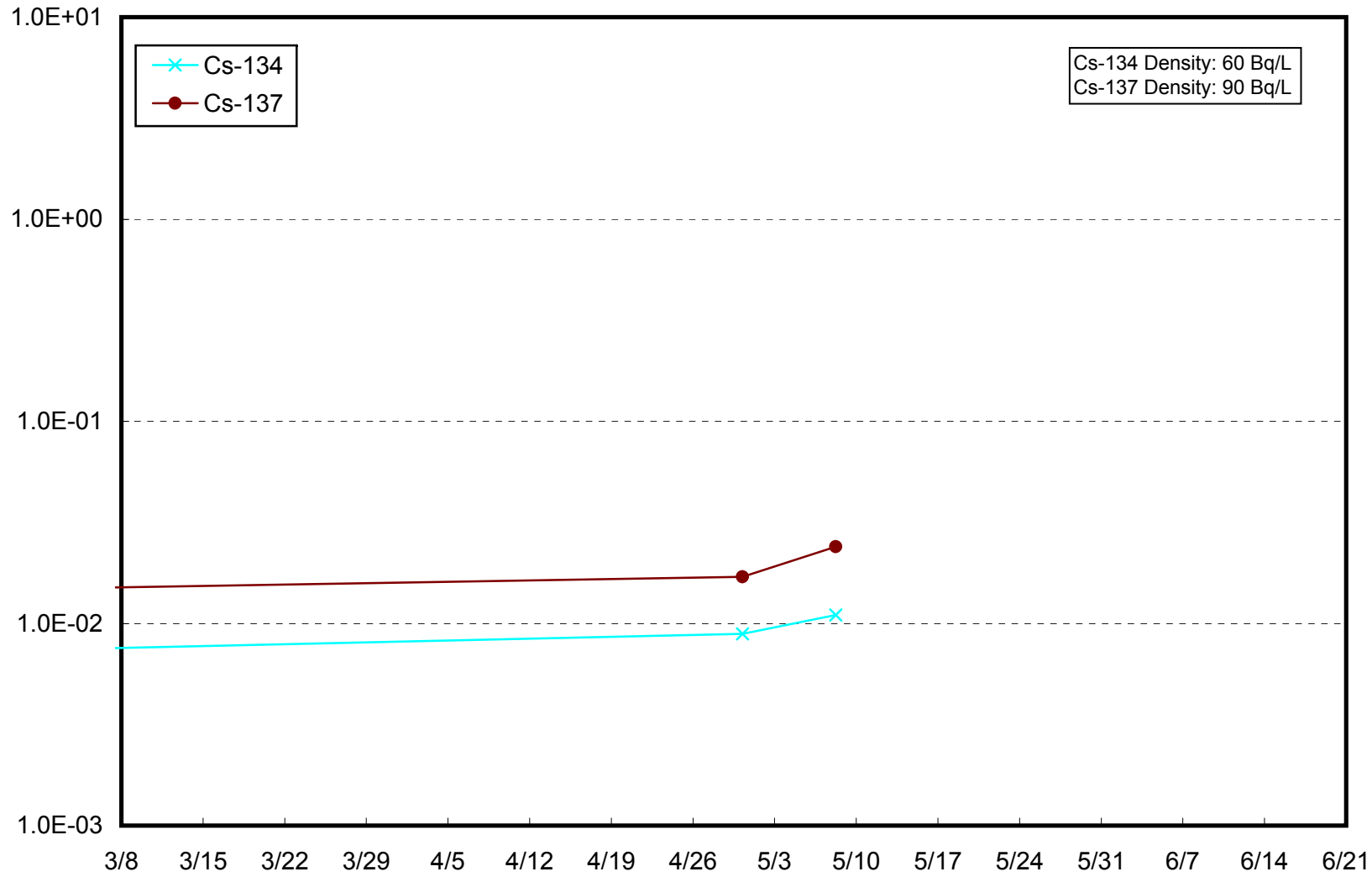
Radioactivity Density of the Seawater at 3km Offshore of Soma (T-22) Lower Layer (Bq/L)



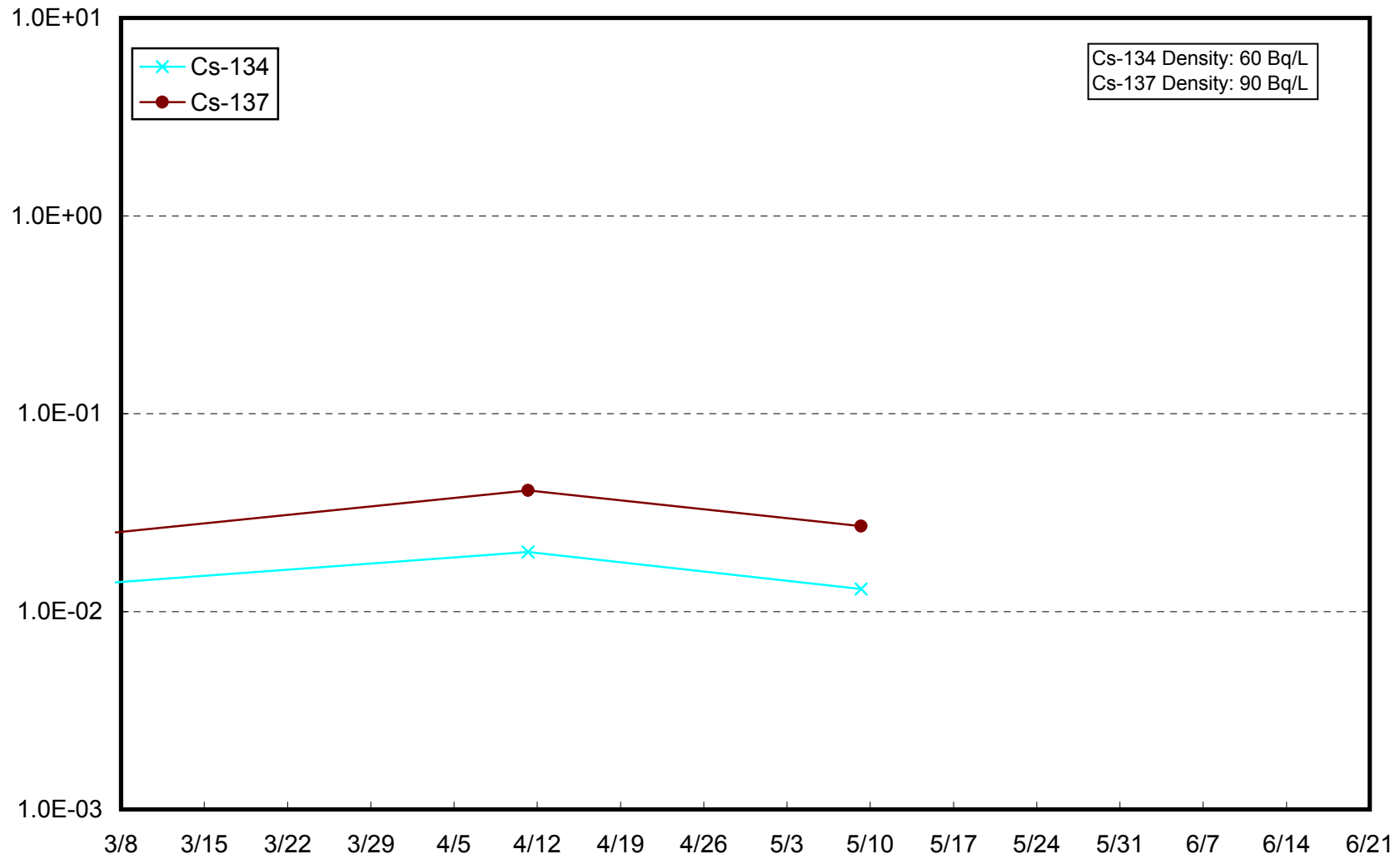
Radioactivity Density of the Seawater at 5km Offshore of Kashima (T-MA) Upper Layer (Bq/L)



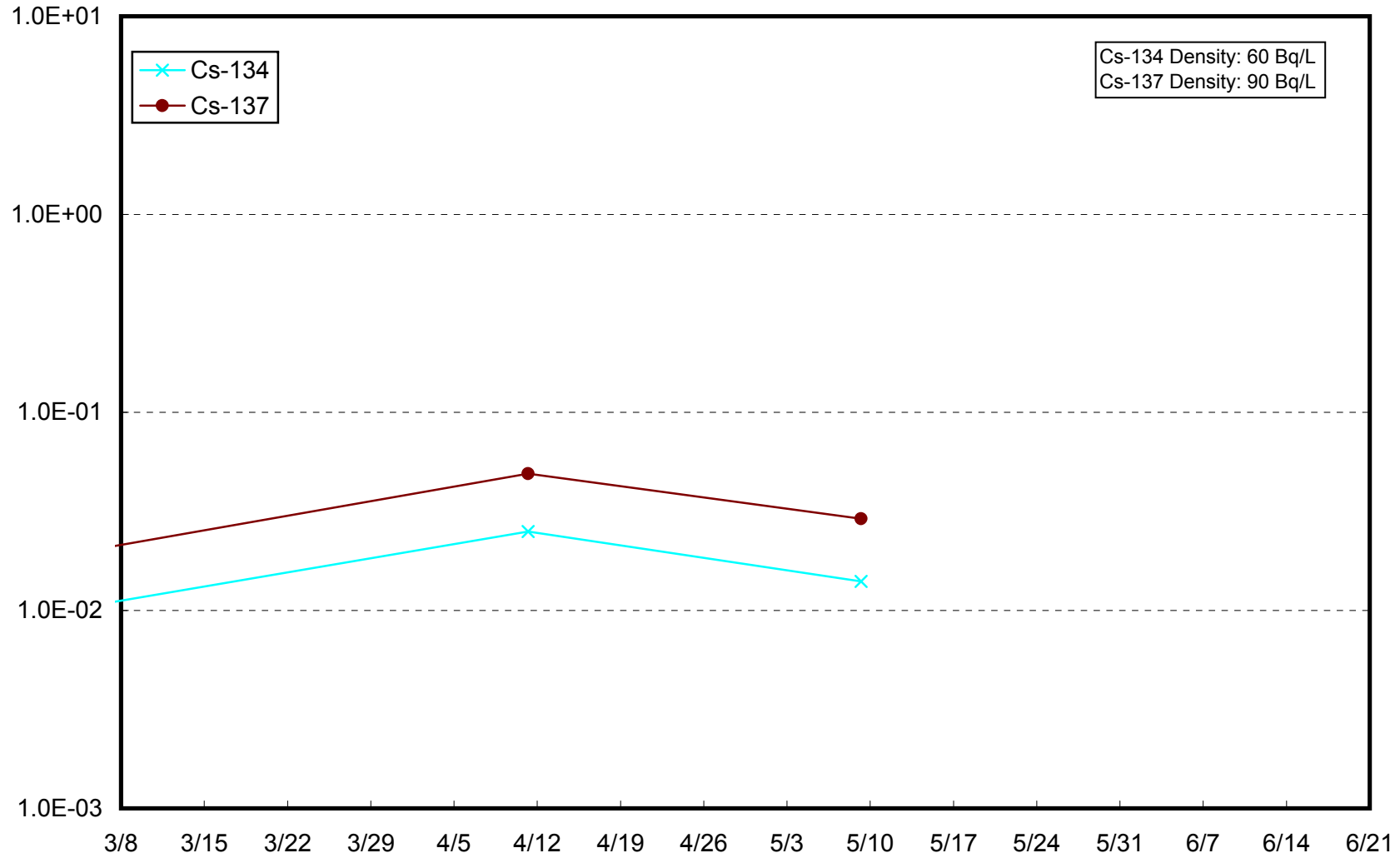
Radioactivity Density of the Seawater at 5km Offshore of Kashima (T-MA) Lower Layer (Bq/L)



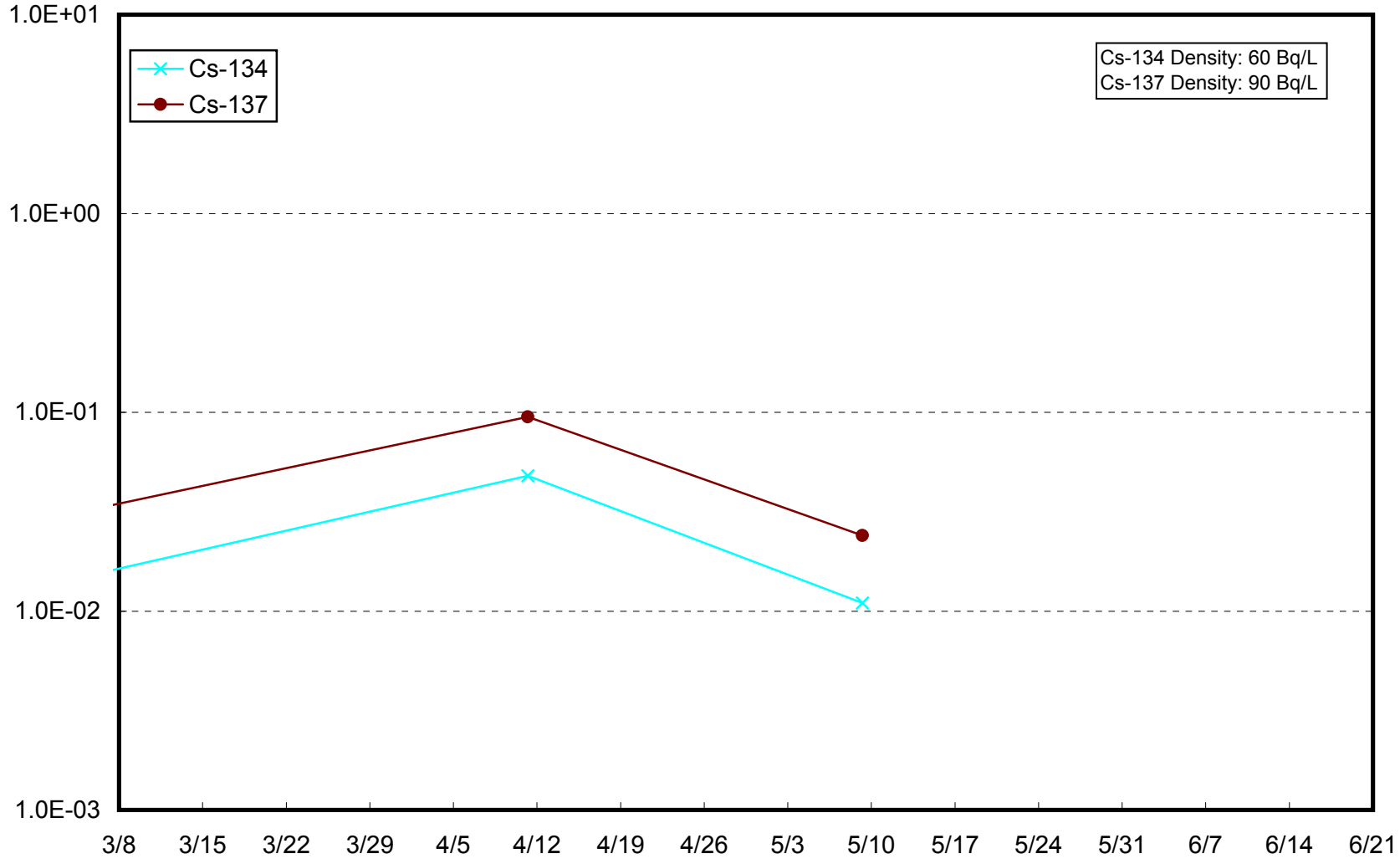
Radioactivity Density of the Seawater Around 1km Offshore of Ota River (T-S1) Upper Layer (Bq/L)



Radioactivity Density of the Seawater Around 1km Offshore of Ota River (T-S1) Lower Layer (Bq/L)



Radioactivity Density of the Seawater Around 3km Offshore of Odaka Ward (T-S2) Upper Layer (Bq/L)



Radioactivity Density of the Seawater Around 3km Offshore of Odaka Ward (T-S2) Lower Layer (Bq/L)

