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

Reference

(Data summarized on December 27)

Place of Sampling (Place No.)	3km Offshore of Takadokobama Shore (T-A)				3km Offshore of Kujihama Shore (T-B)				3km Offshore of Oarai Shore (T-C)				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 10, 2012 10:00 AM		Dec 10, 2012 9:58 AM		Dec 12, 2012 8:02 AM		Dec 12, 2012 8:00 AM		Dec 12, 2012 2:21 PM		Dec 12, 2012 2:19 PM		
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)	
I-131 (Approx. 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	60
Cs-137 (Approx. 30 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	90

Place of Sampling (Place No.)	3km Offshore of Hirai Shore (T-D)				3km Offshore of Hasaki Shore (T-E)				3km Offshore of Isohara Shore (T-Z)				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 11, 2012 2:00 PM		Dec 11, 2012 2:02 PM		Dec 11, 2012 1:49 PM		Dec 11, 2012 1:47 PM		Dec 10, 2012 8:01 AM		Dec 10, 2012 7:59 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)	
I-131 (Approx. 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	60
Cs-137 (Approx. 30 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	90

* The density specified by the Reactor Regulation is converted from Bq/cm^3 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. 1.3Bq/L, Cs-134: Approx.1.3Bq/L, Cs-137: Approx.1.3Bq/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 of Miyagi Prefecture 1/2 >

(Data summarized on December 27)

Place of Sampling (Place No.)	Offshore of Minamisanriku (T-MG0)						Ishinomaki Bay (T-MG1)						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		Middle Layer		Lower Layer		Upper Layer		Middle Layer		Lower Layer		
Time of Sampling	Nov 13, 2012 9:45 AM		Nov 13, 2012 9:55 AM		Nov 13, 2012 9:28 AM		Nov 15, 2012 10:42 AM		Nov 15, 2012 10:38 AM		Nov 15, 2012 10:30 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)	ND	-	ND	-	ND	-	0.0062	0.00	0.0084	0.00	0.0074	0.00	60
Cs-137 (Approx. 30 years)	0.0019	0.00	0.0024	0.00	0.0025	0.00	0.016	0.00	0.016	0.00	0.015	0.00	90

Place of Sampling (Place No.)	Offshore of Kinkasan East (T-MG2)						Offshore of Kinkasan South (T-MG3)						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		Middle Layer		Lower Layer		Upper Layer		Middle Layer		Lower Layer		
Time of Sampling	Nov 15, 2012 8:18 AM		Nov 15, 2012 8:22 AM		Nov 15, 2012 8:10 AM		Nov 15, 2012 9:16 AM		Nov 15, 2012 9:14 AM		Nov 15, 2012 9:06 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)	ND	-	ND	-	ND	-	ND	-	ND	-	0.0015	0.00	60
Cs-137 (Approx. 30 years)	0.0021	0.00	0.0013	0.00	0.0016	0.00	0.0041	0.00	0.0044	0.00	0.0042	0.00	90

* The density specified by the Reactor Regulation is converted from Bq/cm^3 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.0.0018Bq/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. (Since the announcement on June 15, 2012.)
* Analyzed by: THE GENERAL ENVIRONMENTAL TECHNOS Co., LTD.

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

(Data summarized on December 27)

Place of Sampling (Place No.)	Offshore of Shichigahama (T-MG4)						Central Area of Sendai Bay (T-MG5)						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		Middle Layer		Lower Layer		Upper Layer		Middle Layer		Lower Layer		
Time of Sampling	Nov 15, 2012 9:55 AM		Nov 15, 2012 10:03 AM		Nov 15, 2012 9:57 AM		Nov 15, 2012 8:55 AM		Nov 15, 2012 9:14 AM		Nov 15, 2012 9:01 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)	0.0091	0.00	0.010	0.00	0.0098	0.00	0.0047	0.00	0.0031	0.00	0.0032	0.00	60
Cs-137 (Approx. 30 years)	0.018	0.00	0.018	0.00	0.018	0.00	0.0096	0.00	0.0067	0.00	0.0072	0.00	90

Place of Sampling (Place No.)	Offshore of Abukuma River (T-MG6)												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		Middle Layer		Lower Layer		Upper Layer		Middle Layer		Lower Layer		
Time of Sampling	Nov 15, 2012 10:56 AM		Nov 15, 2012 11:07 AM		Nov 15, 2012 11:00 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)	0.010	0.00	0.010	0.00	0.0089	0.00							60
Cs-137 (Approx. 30 years)	0.018	0.00	0.018	0.00	0.016	0.00							90

* The density specified by the Reactor Regulation is converted from Bq/cm^3 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. (Since the announcement on June 15, 2012.)
* Analyzed by: THE GENERAL ENVIRONMENTAL TECHNOS Co., LTD.

Nuclides Analysis Result of Radioactive Materials in the Seawater

(Data summarized on December 27)

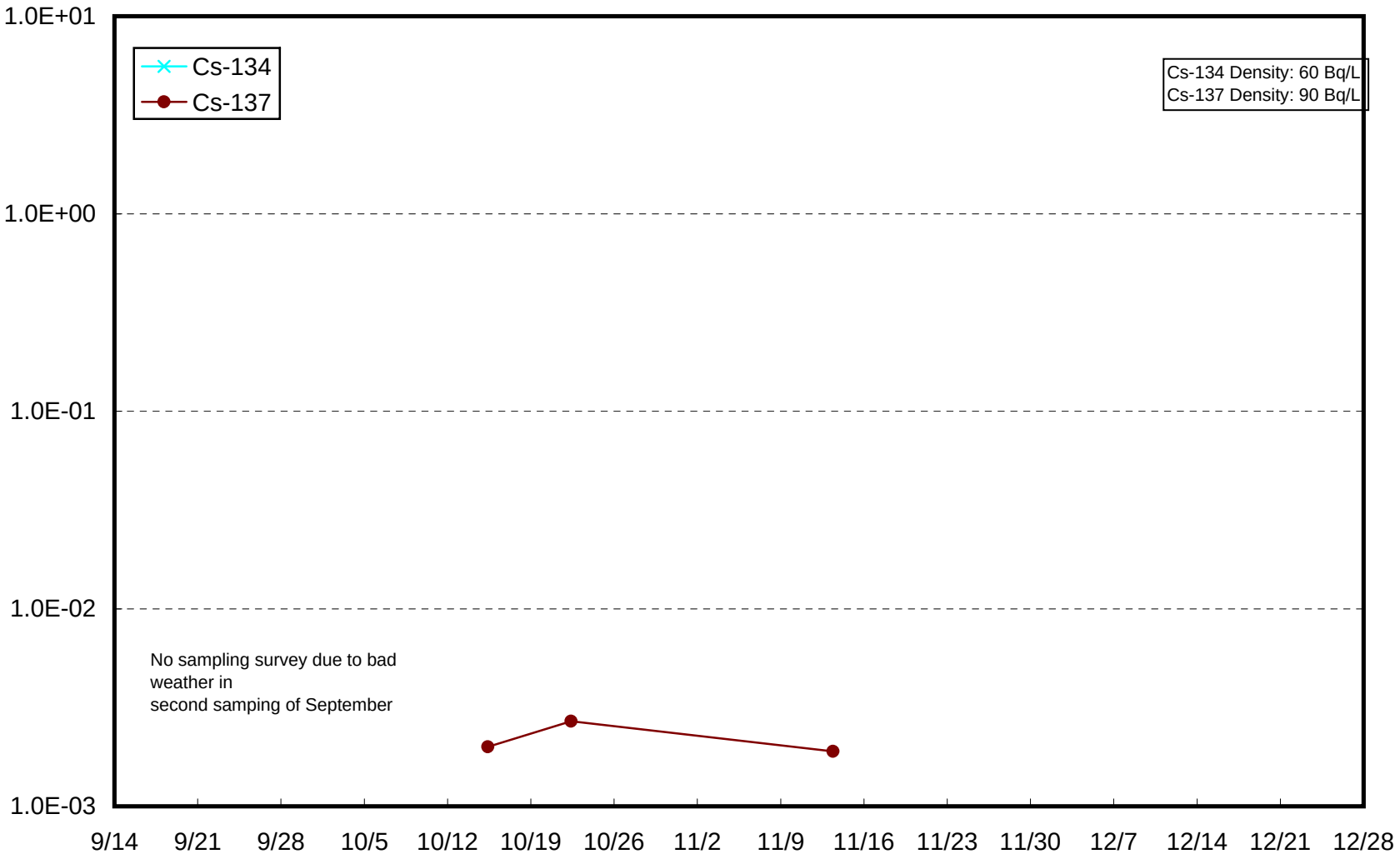
Place of Sampling (Place No.)	Central Area of Sendai Bay (T-MG5) Upper Layer		3km Offshore of Oarai Shore (T-C) Upper Layer				② Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.)
Date of Sampling	Nov 15, 2012		Nov 14, 2012				
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)	
I-131 (Approx. 8 days)	—	—	ND	—			40
Cs-134 (Approx. 2 years)	0.0047	0.00	ND	—			60
Cs-137 (Approx. 30 years)	0.0096	0.00	ND	—			90
Sr-89 (Approx. 51 days)	ND	—	ND	—			300
Sr-90 (Approx. 29 years)	ND	—	ND	—			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.
* Analysis result of I-131, Cs-134, Cs-137 was released on November 22 and December 27
* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.
  I-131: Approx. 1.2Bq/L, Cs-134: Approx.1.1Bq/L, Cs-137: Approx.1.1Bq/L, Sr-89: Approx. 0.02Bq/L, Sr-90: Approx. 0.009Bq/L
  As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detecte
* Sr-89 and Sr-90 was analyzed by: Japan Chemical Analysis Center

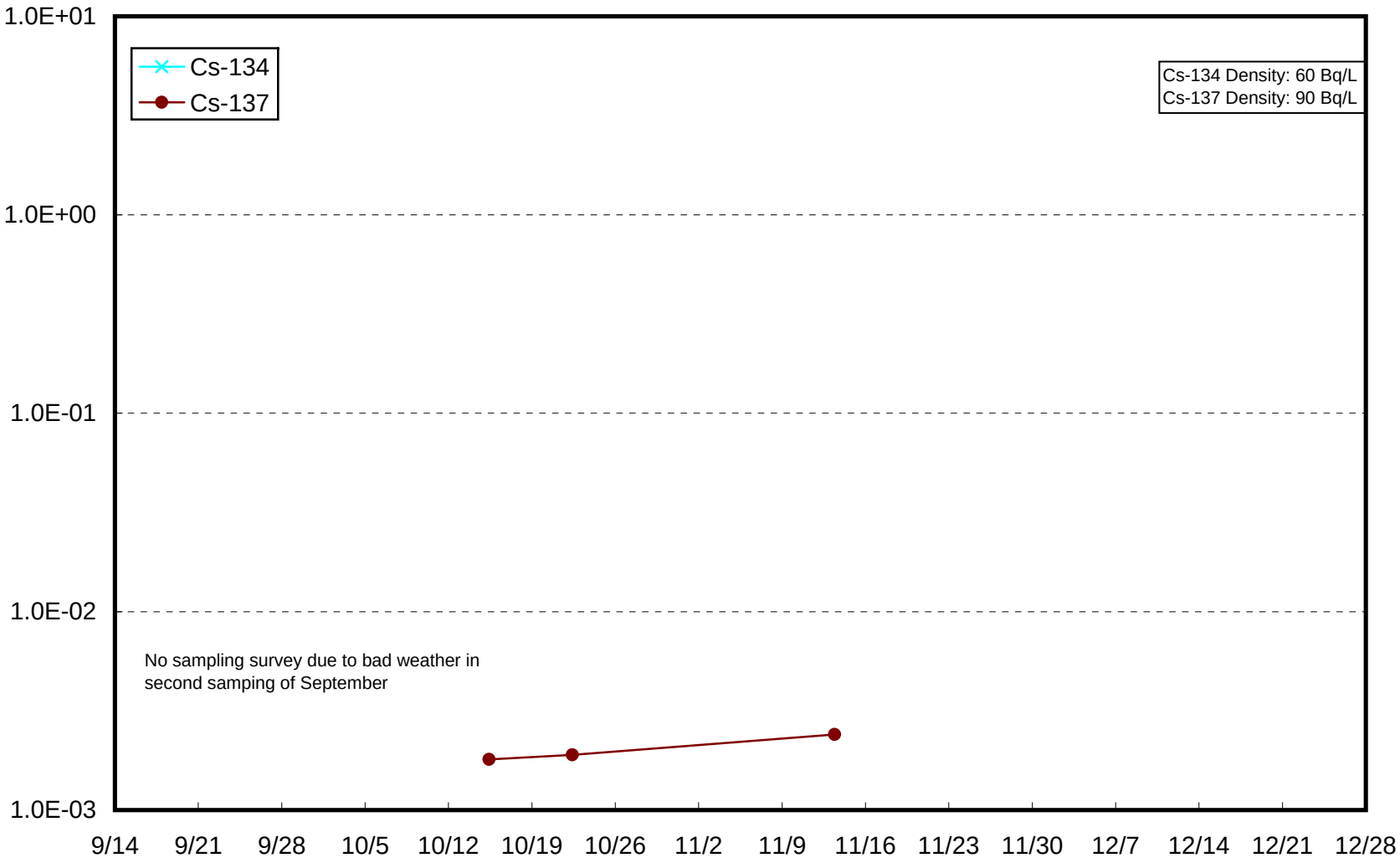
(Evaluation)

Sr-89 and Sr-90 were not detected in the sample collected this time.

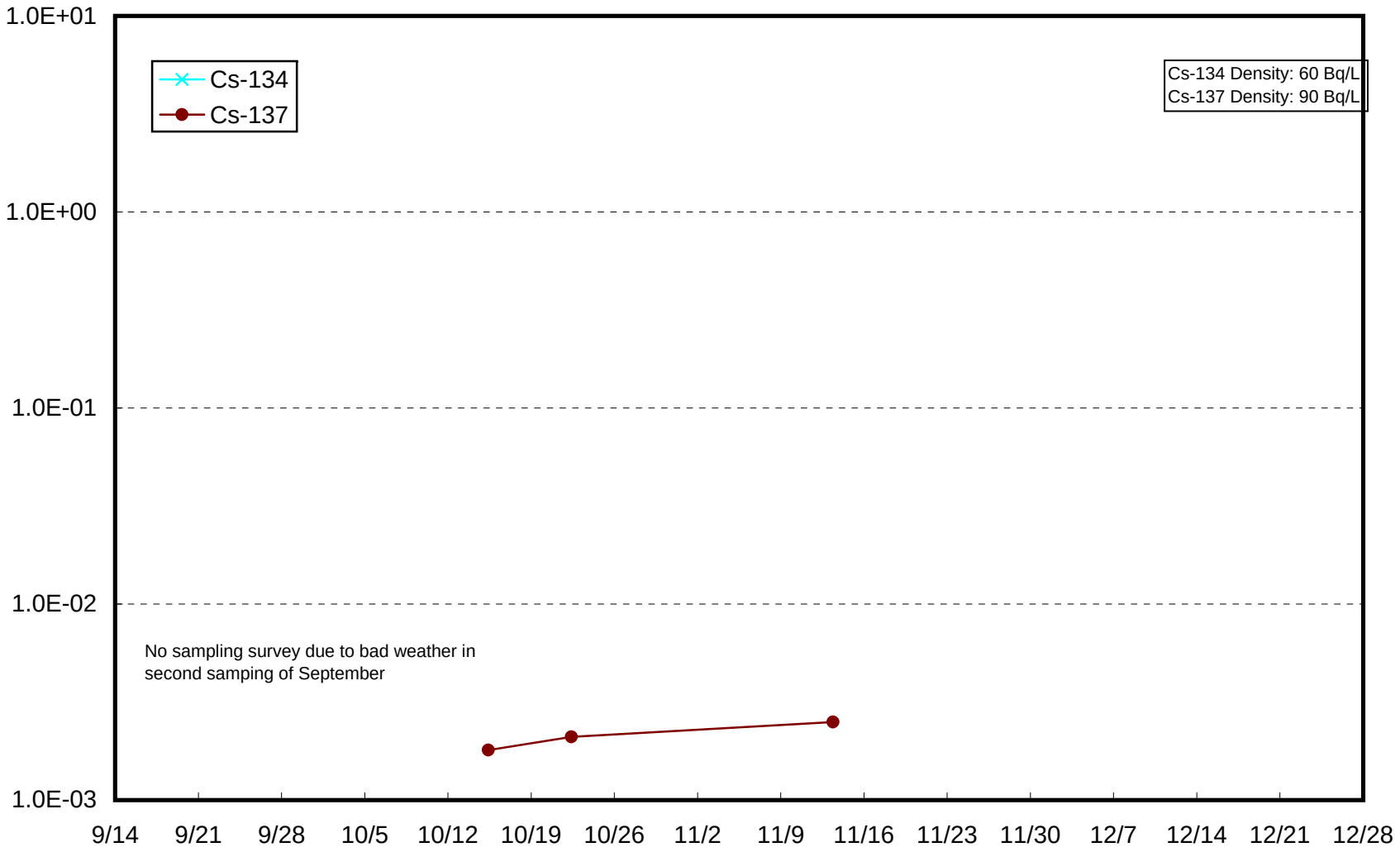
Radioactivity Density of the Seawater at Offshore of Minamisanriku (T-MG0) Upper Layer (Bq/L)



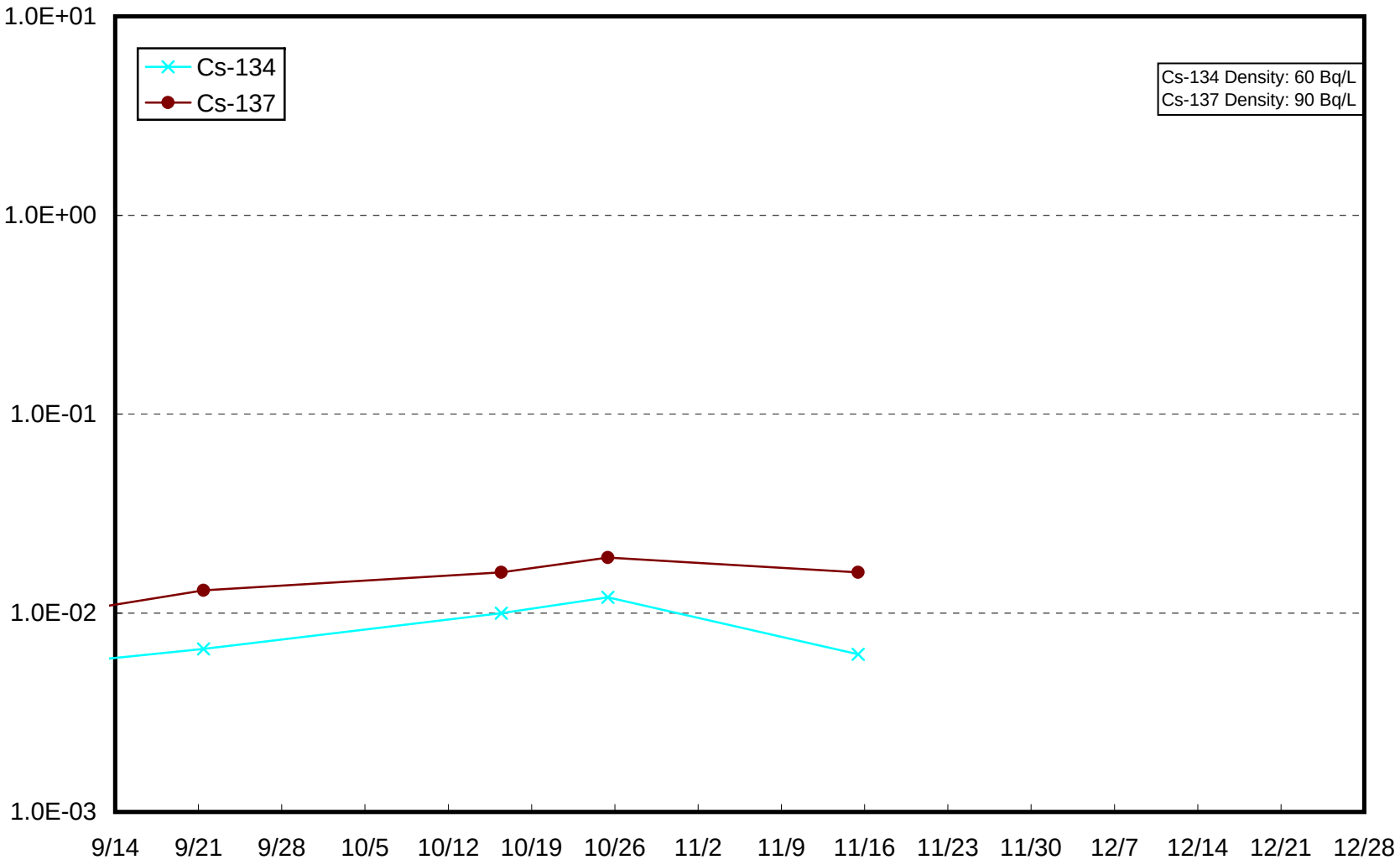
Radioactivity Density of the Seawater at Offshore of Minamisanriku (T-MG0) Middle Layer (Bq/L)



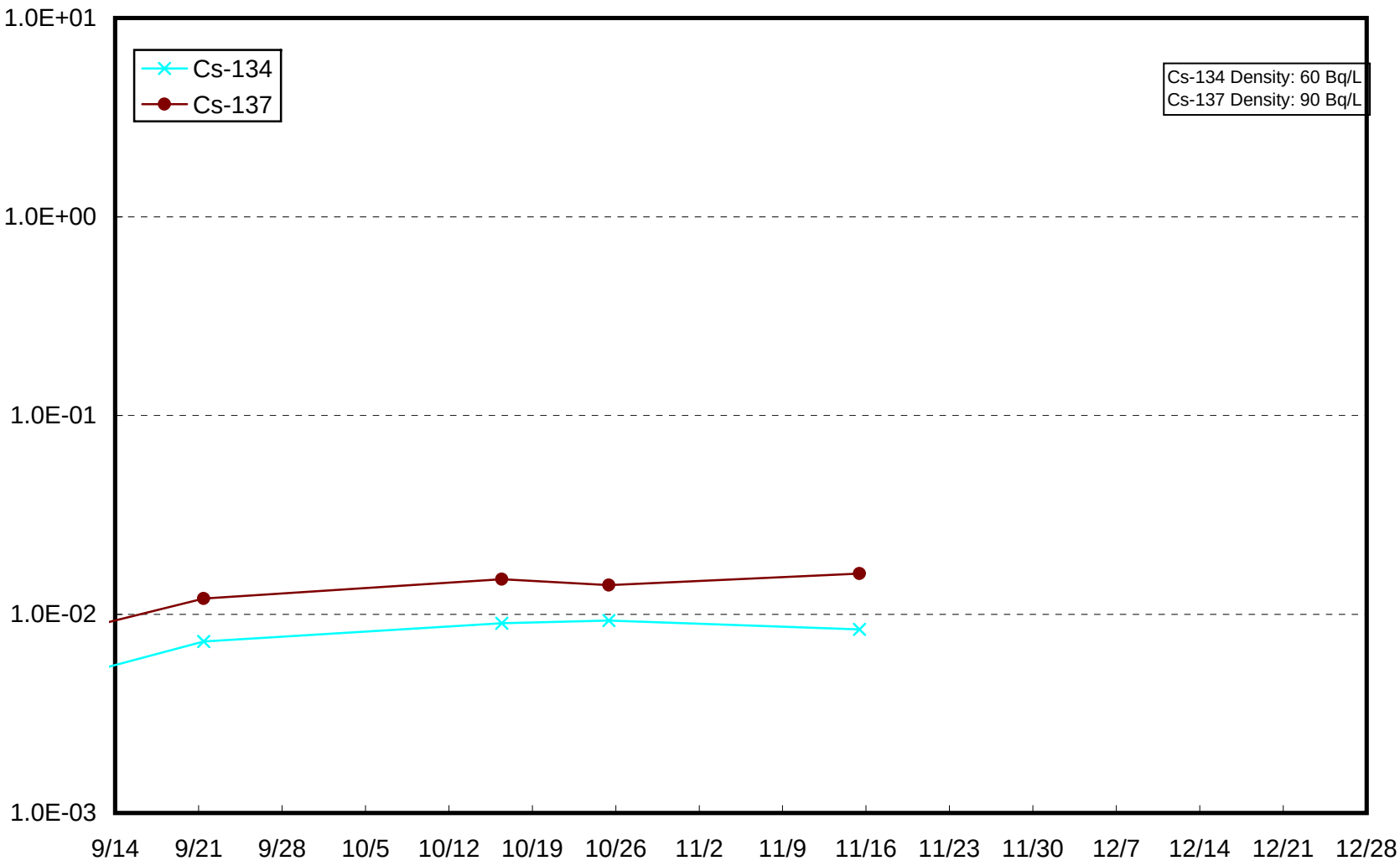
Radioactivity Density of the Seawater at Offshore of Minamisanriku (T-MG0) Lower Layer (Bq/L)



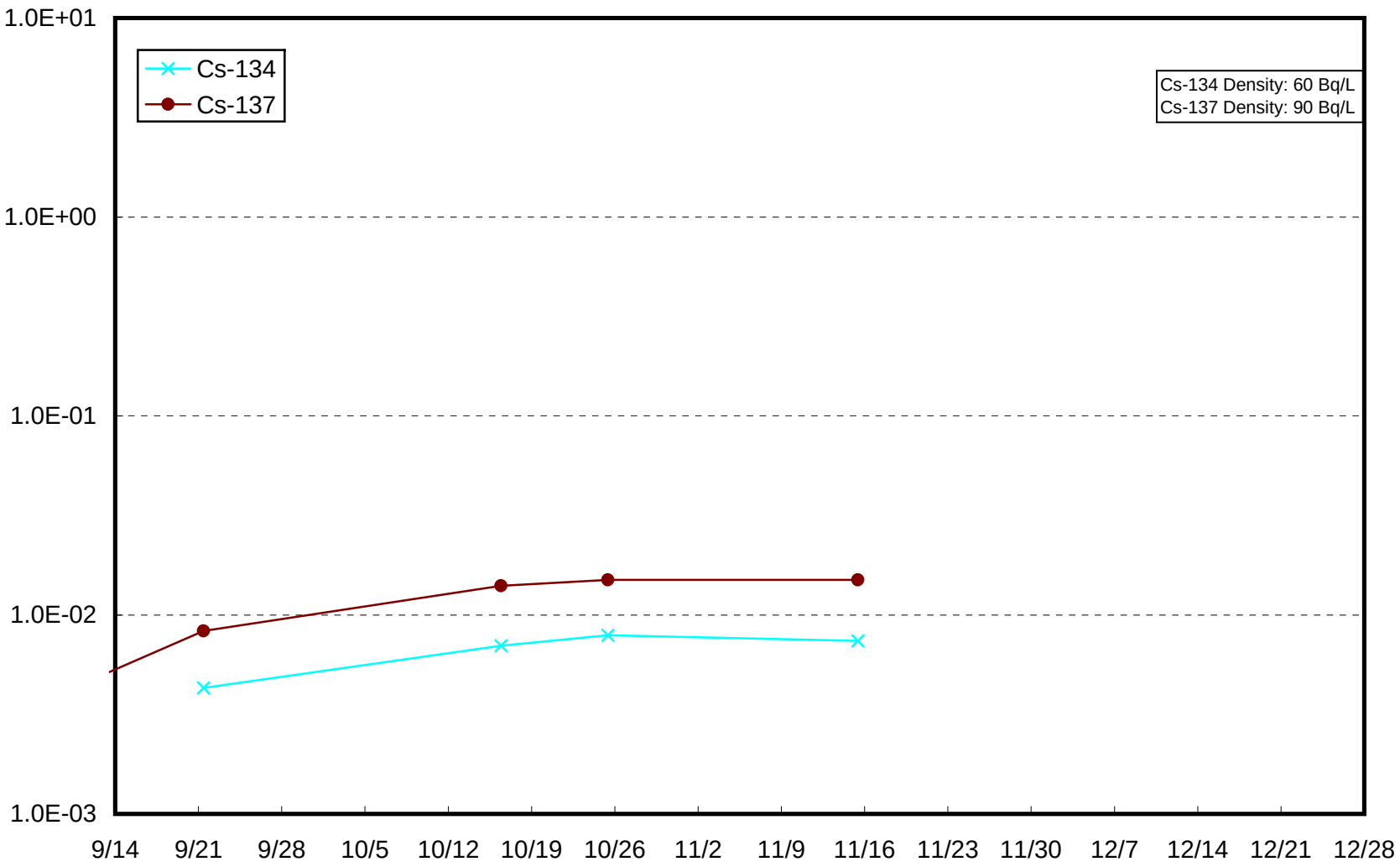
Radioactivity Density of the Seawater in Ishinomaki Bay (T-MG1) Upper Layer (Bq/L)



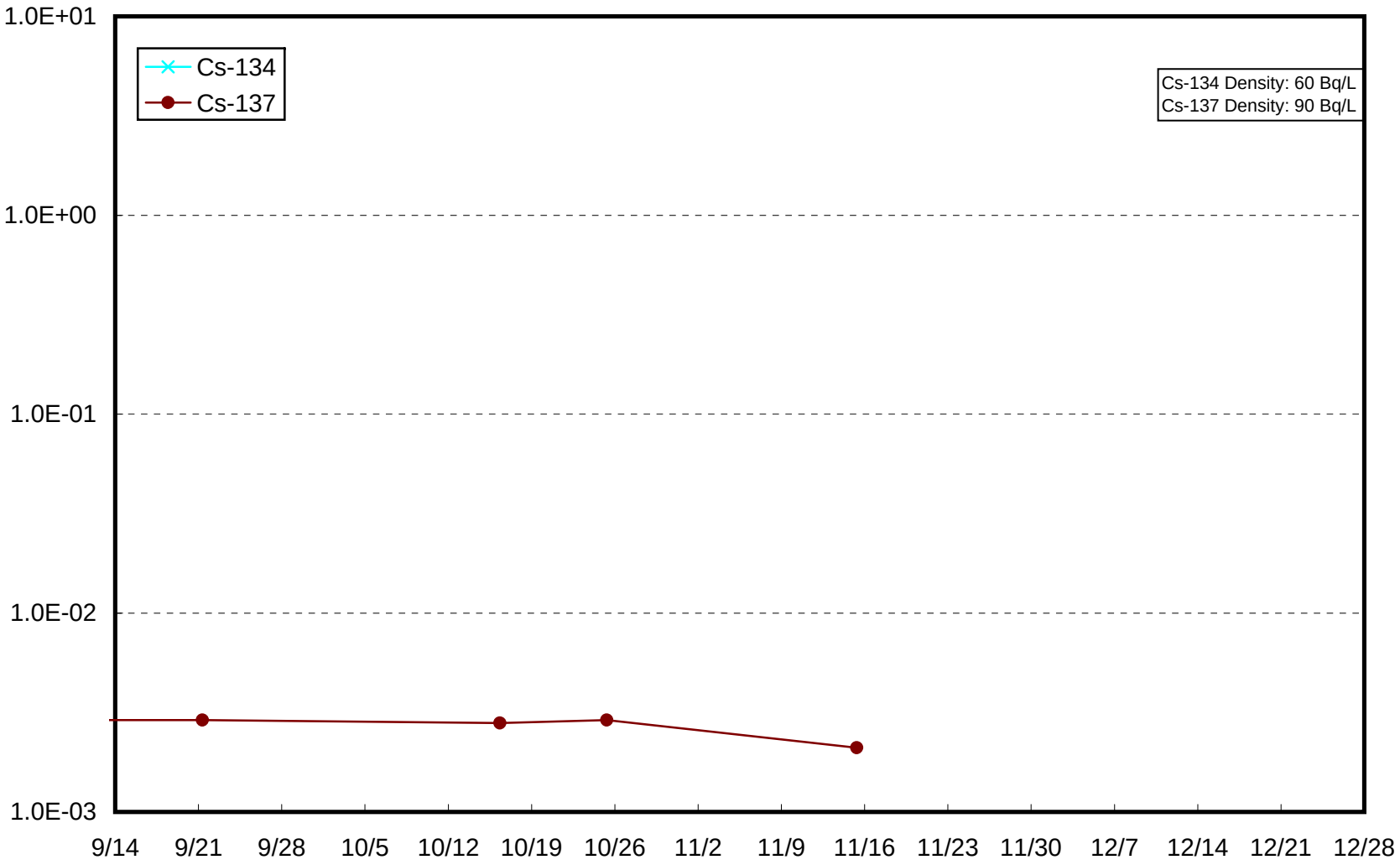
Radioactivity Density of the Seawater in Ishinomaki Bay (T-MG1) Middle Layer (Bq/L)



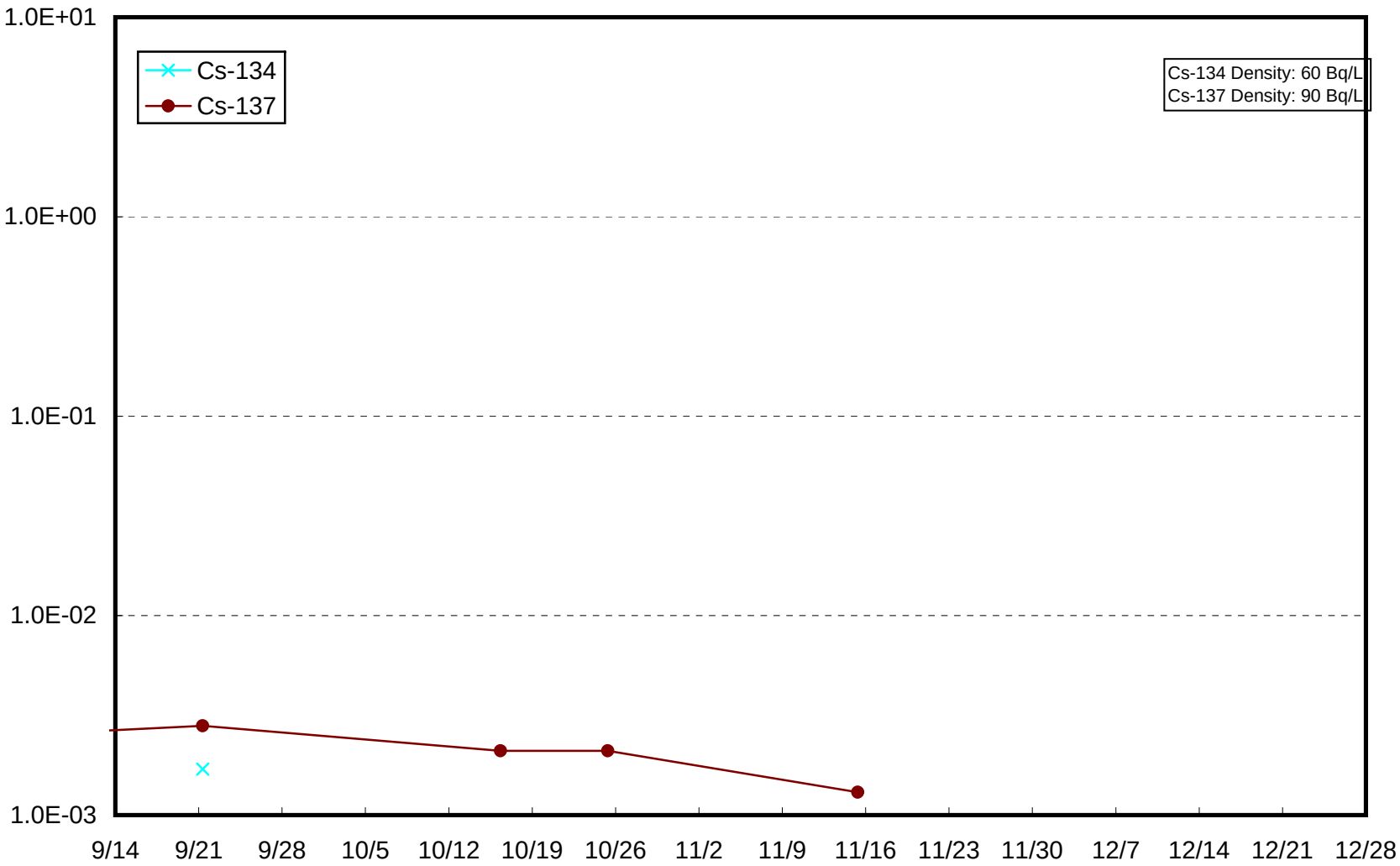
Radioactivity Density of the Seawater in Ishinomaki Bay (T-MG1) Lower Layer (Bq/L)



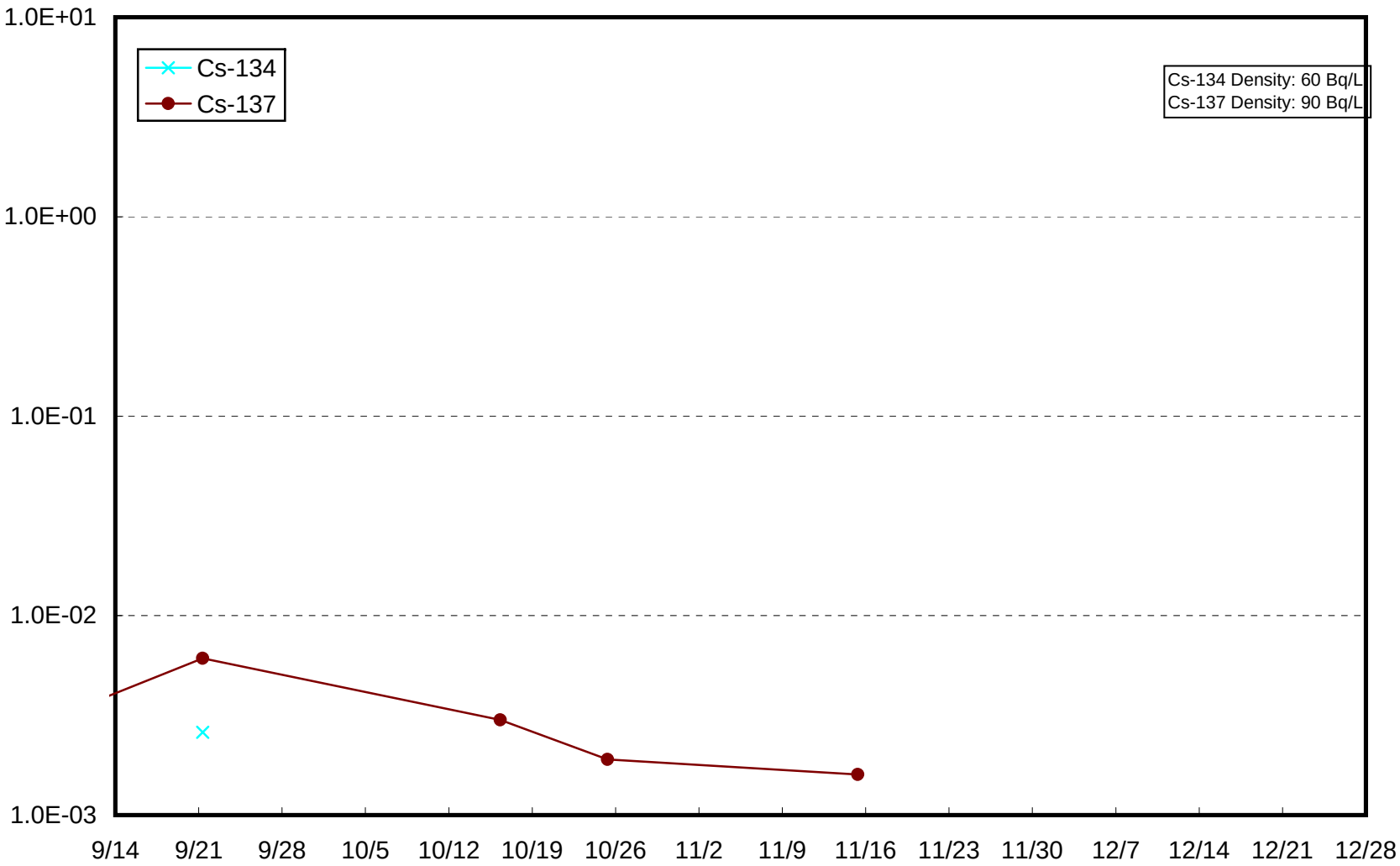
Radioactivity Density of the Seawater at Offshore of Kinkasan East (T-MG2) Upper Layer (Bq/L)



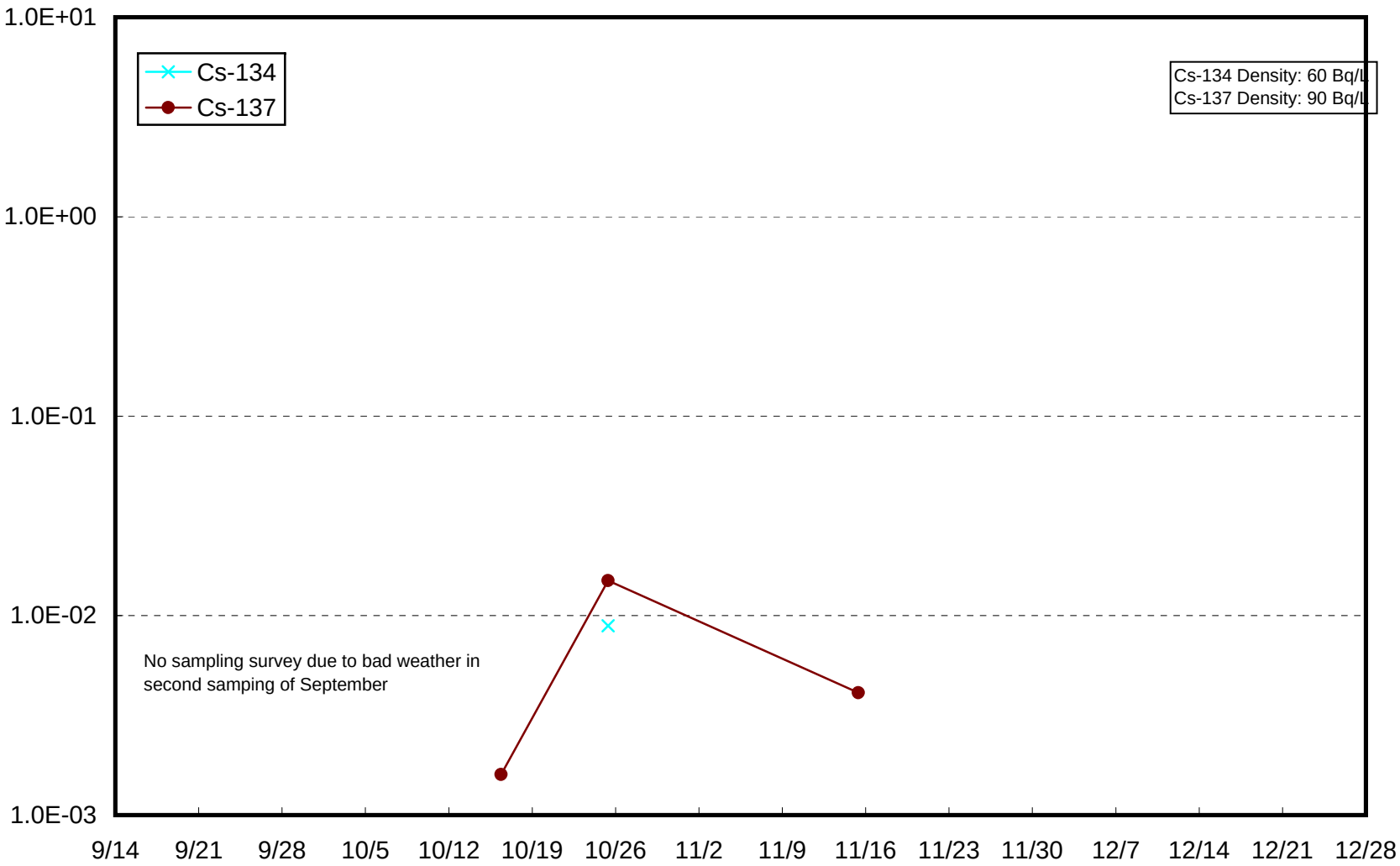
Radioactivity Density of the Seawater at Offshore of Kinkasan East (T-MG2) Middle Layer (Bq/L)



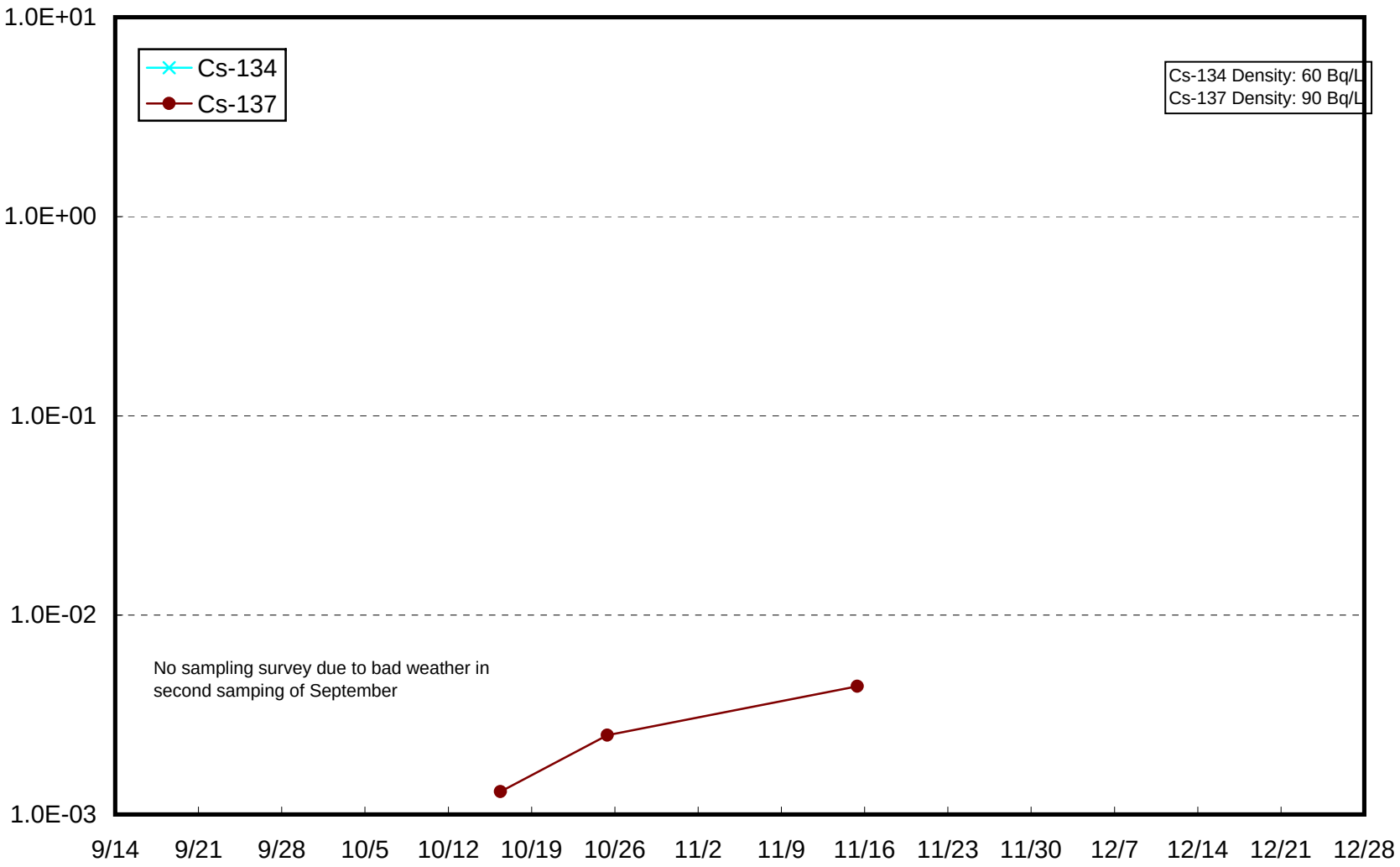
Radioactivity Density of the Seawater at Offshore of Kinkasan East (T-MG2) Lower Layer (Bq/L)



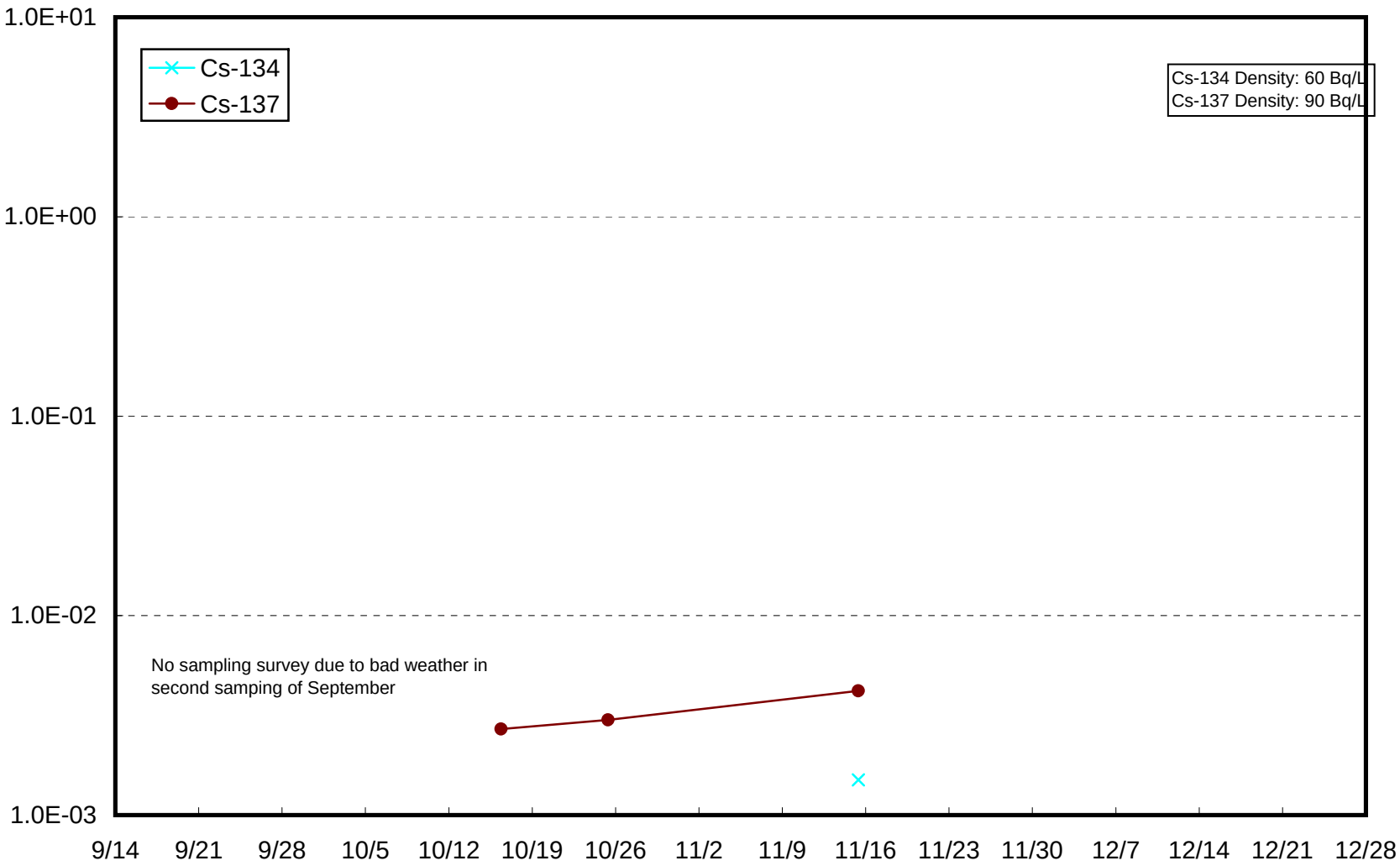
Radioactivity Density of the Seawater at Offshore of Kinkasan South (T-MG3) Upper Layer (Bq/L)



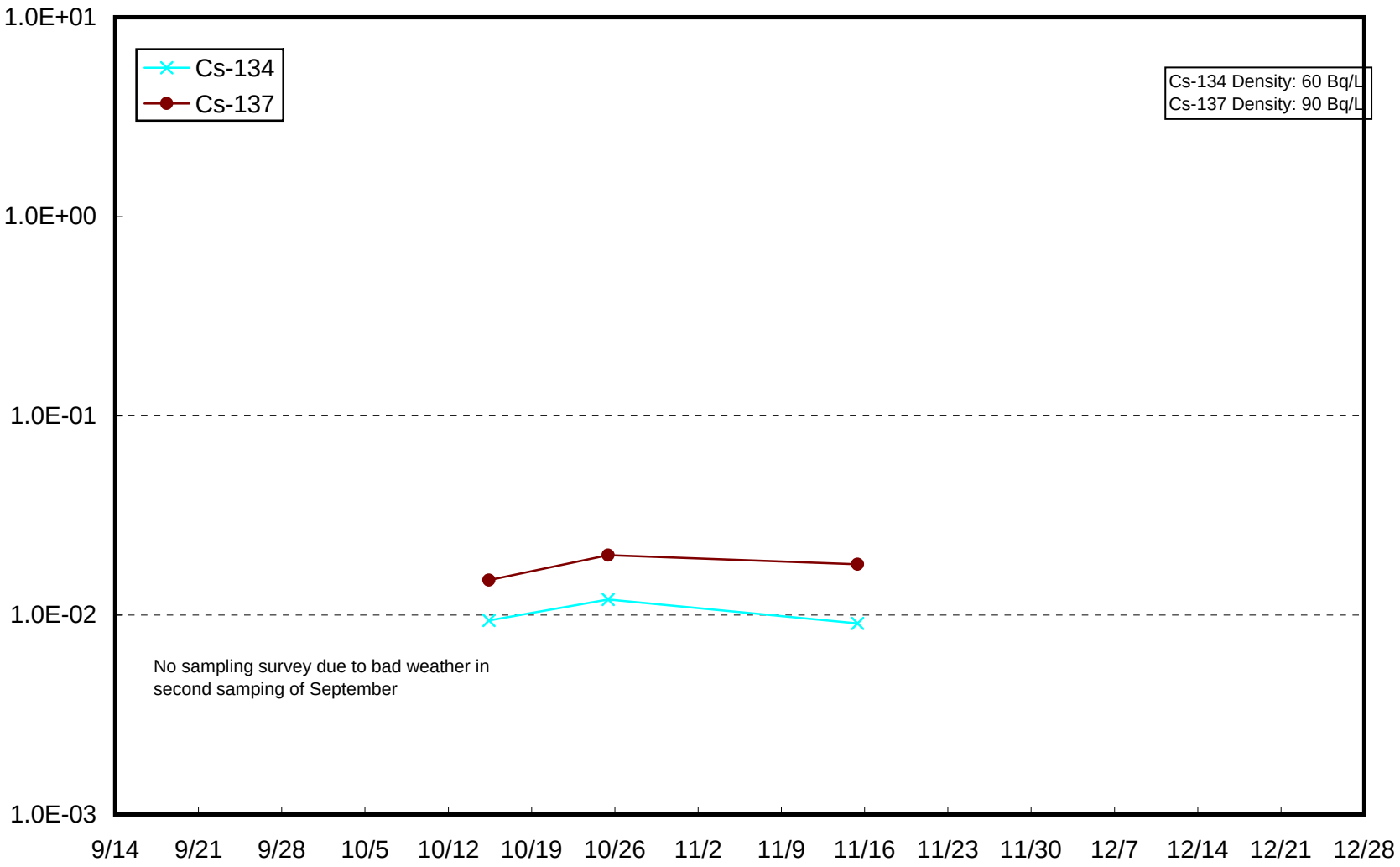
Radioactivity Density of the Seawater at Offshore of Kinkasan South (T-MG3) Middle Layer (Bq/L)



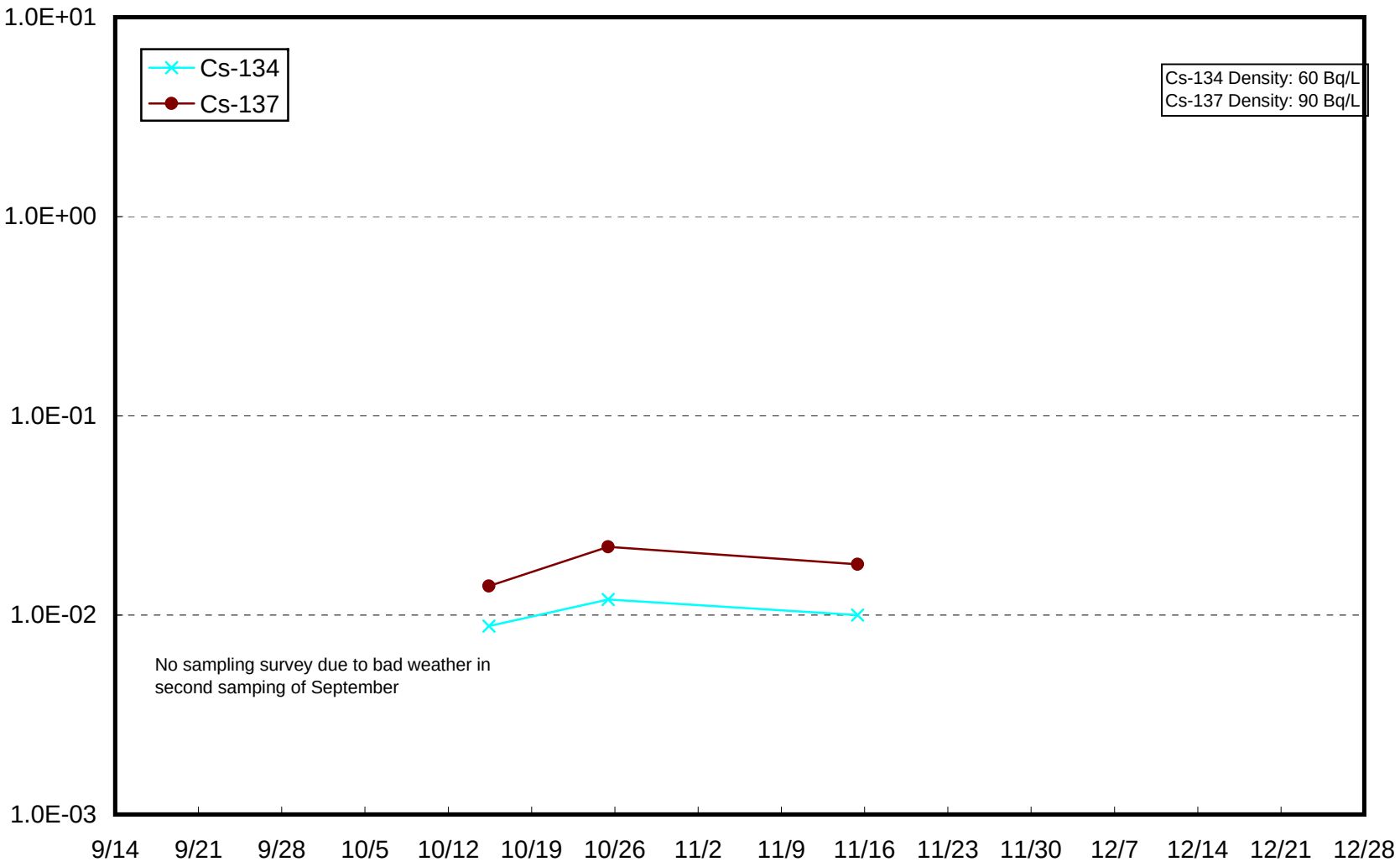
Radioactivity Density of the Seawater at Offshore of Kinkasan South (T-MG3) Lower Layer (Bq/L)



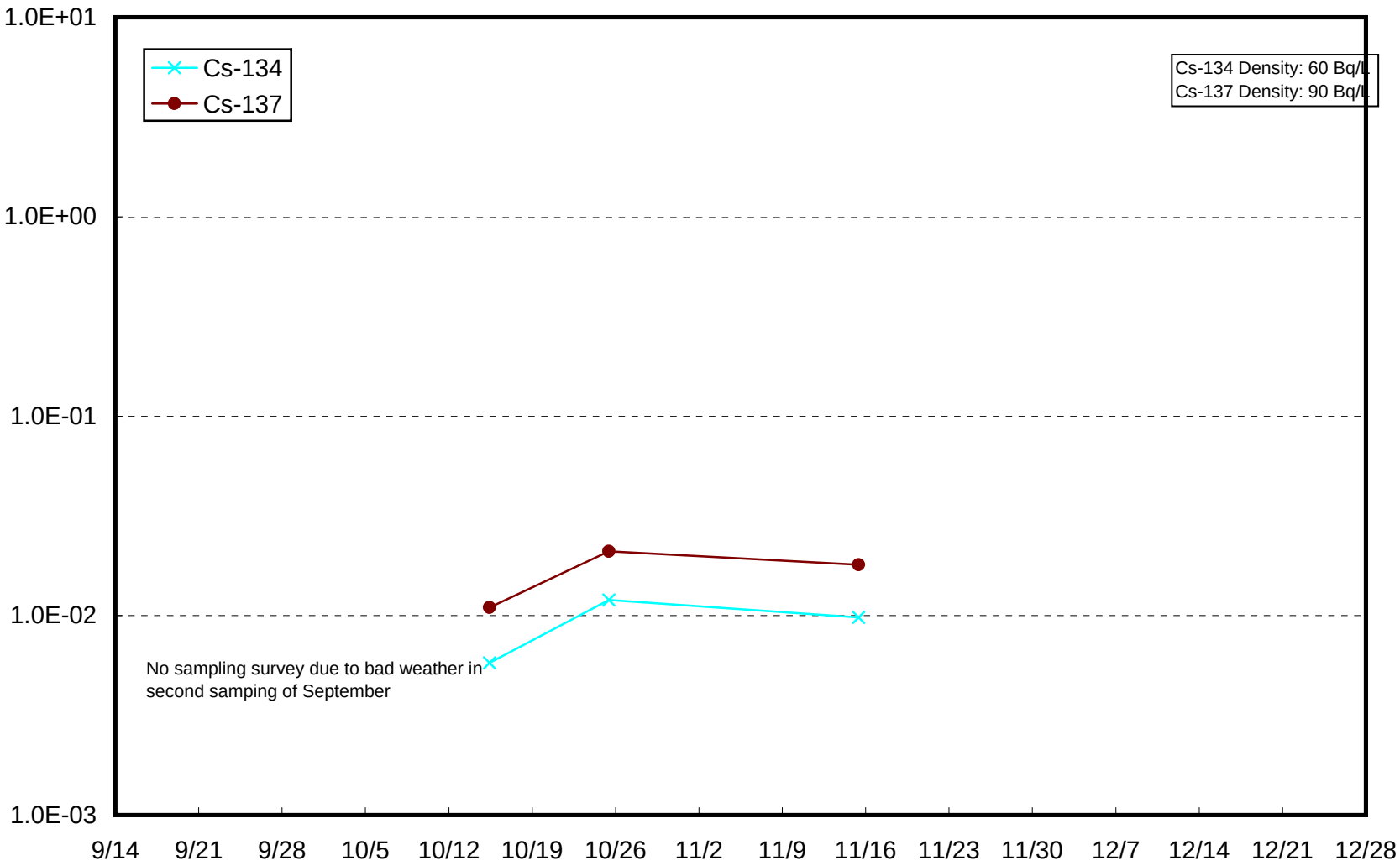
Radioactivity Density of the Seawater at Offshore of Shichigahama (T-MG4) Upper Layer (Bq/L)



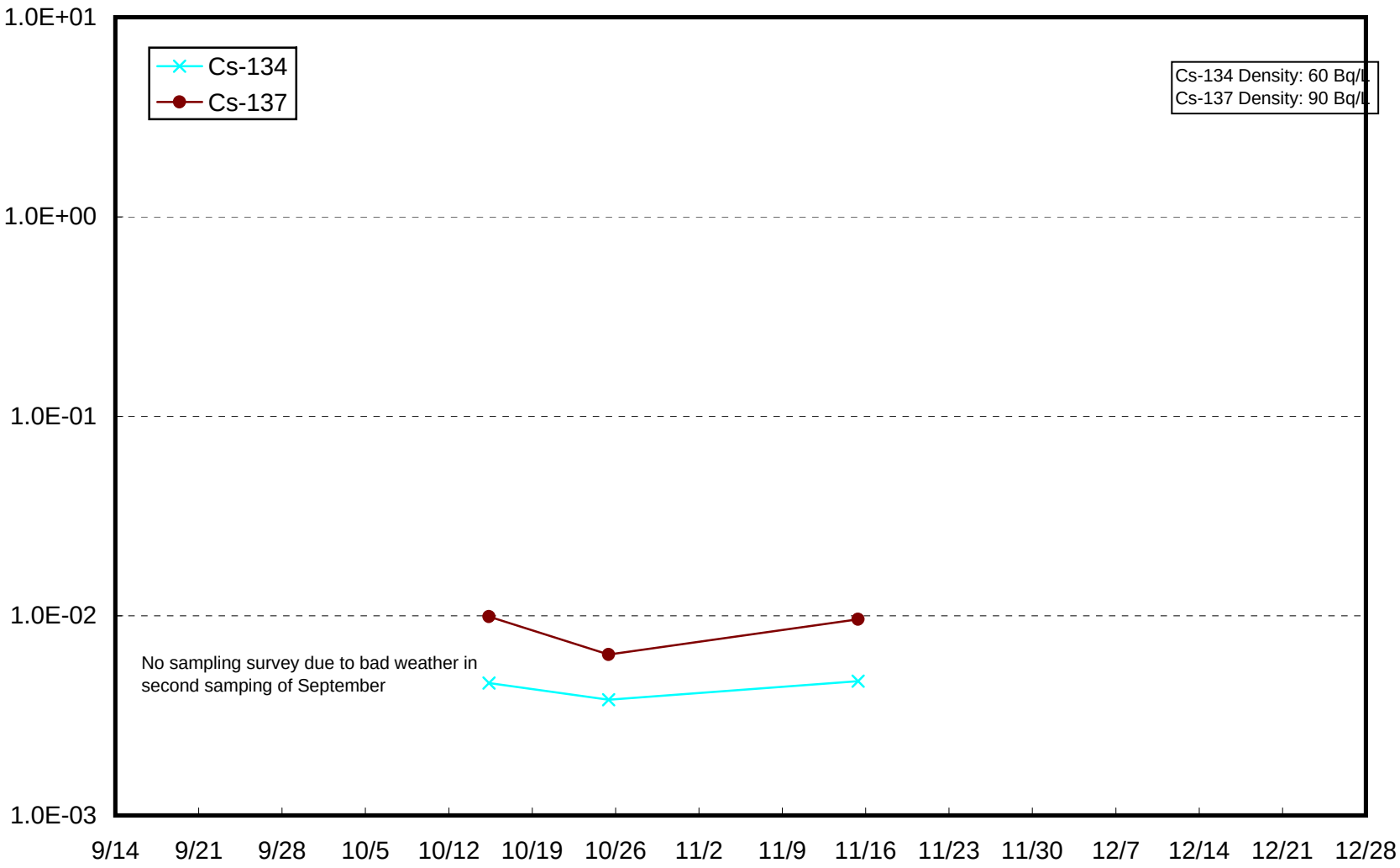
Radioactivity Density of the Seawater at Offshore of Shichigahama (T-MG4) Middle Layer (Bq/L)



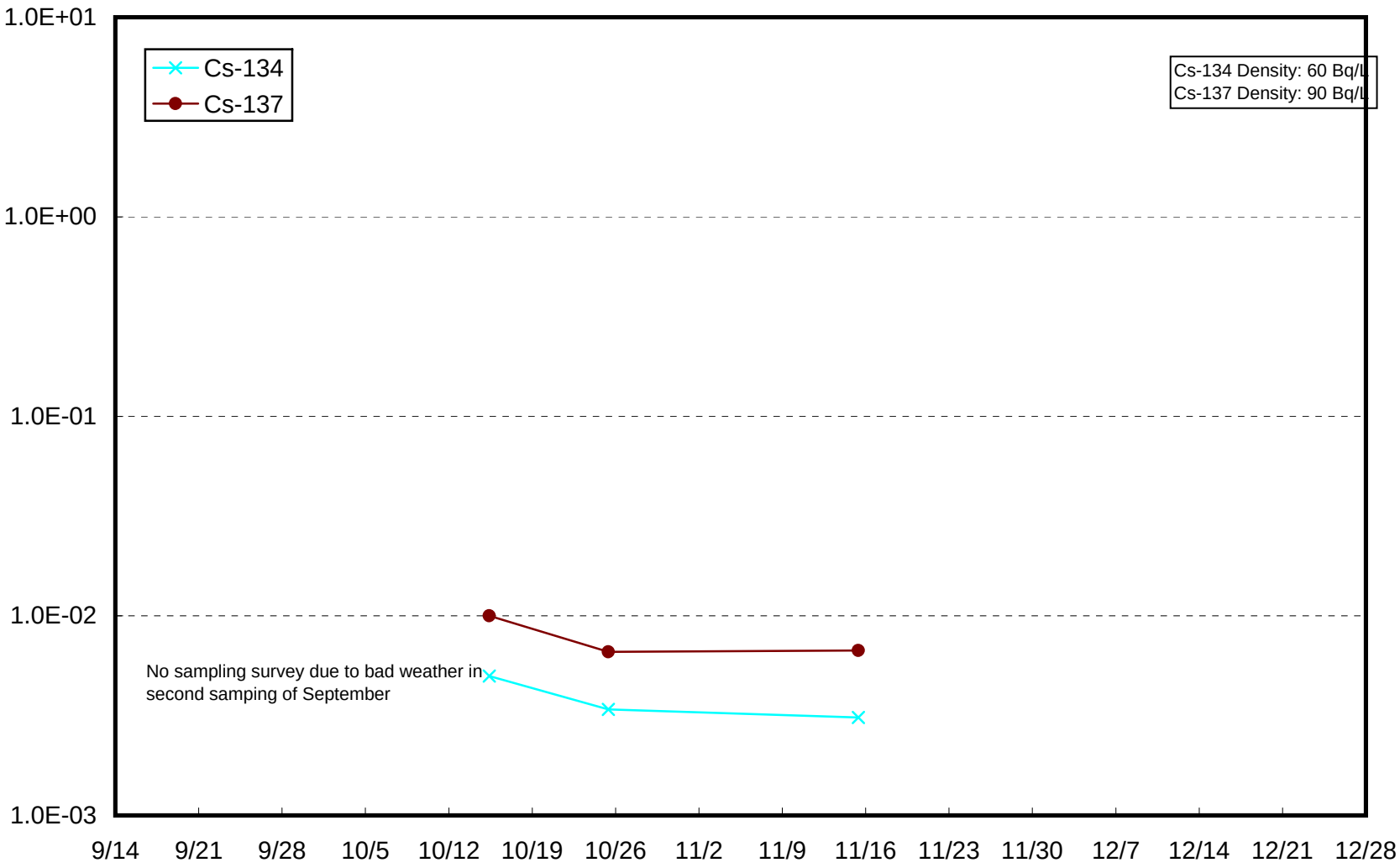
Radioactivity Density of the Seawater at Offshore of Shichigahama (T-MG4) Lower Layer (Bq/L)



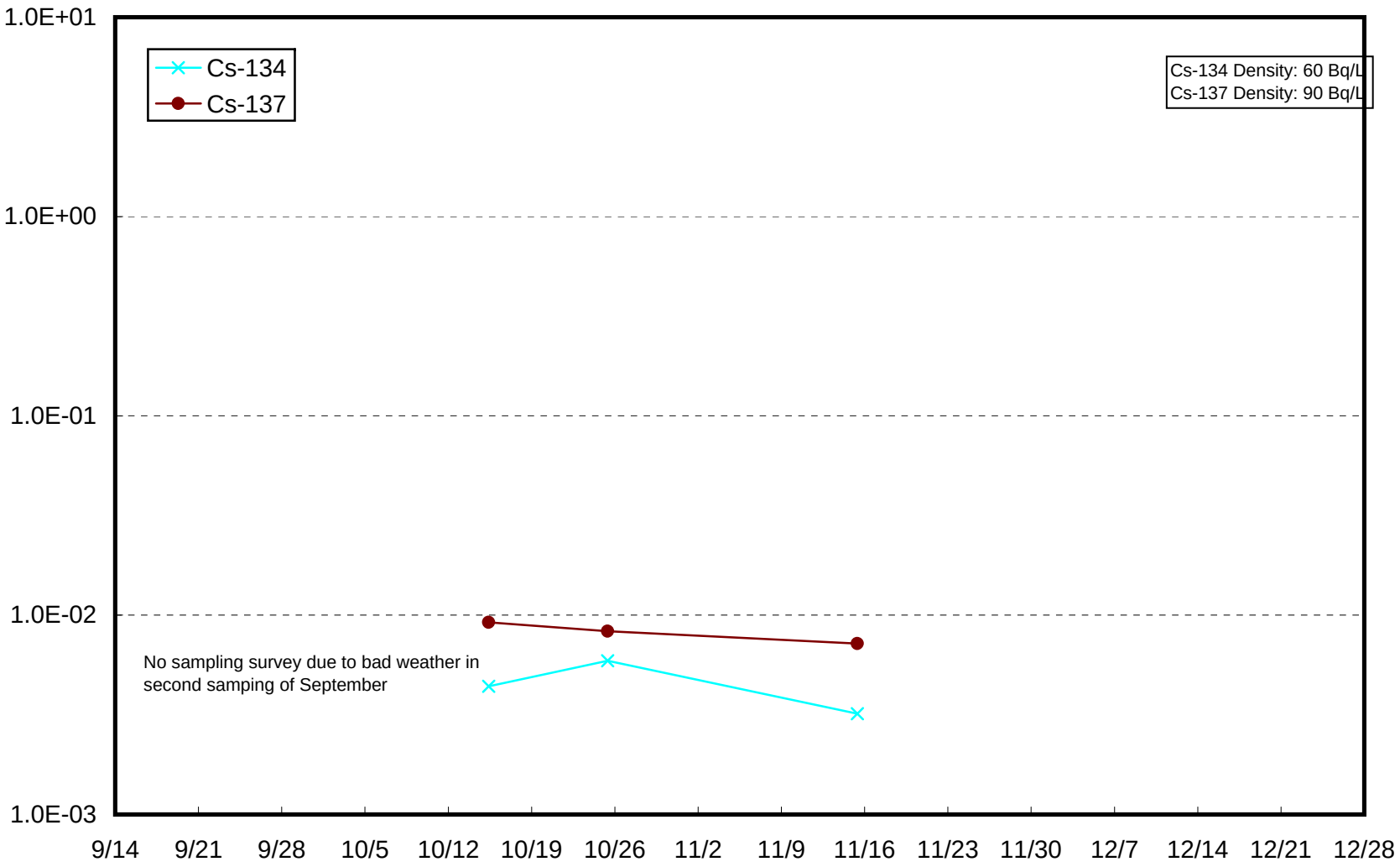
Radioactivity Density of the Seawater in the Central Area of Sendai Bay (T-MG5) Upper Layer (Bq/L)



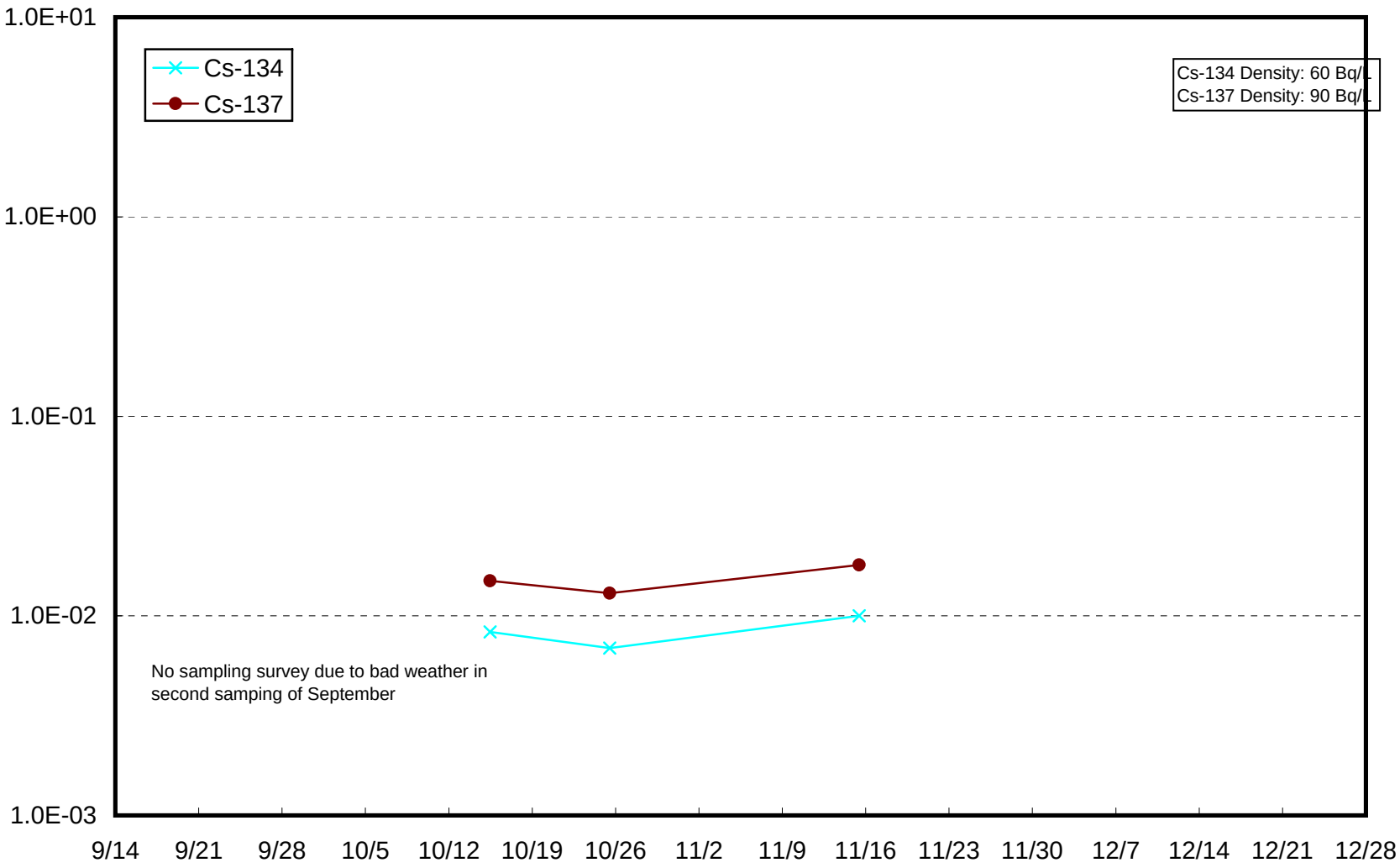
Radioactivity Density of the Seawater in the Central Area of Sendai Bay (T-MG5) Middle Layer (Bq/L)



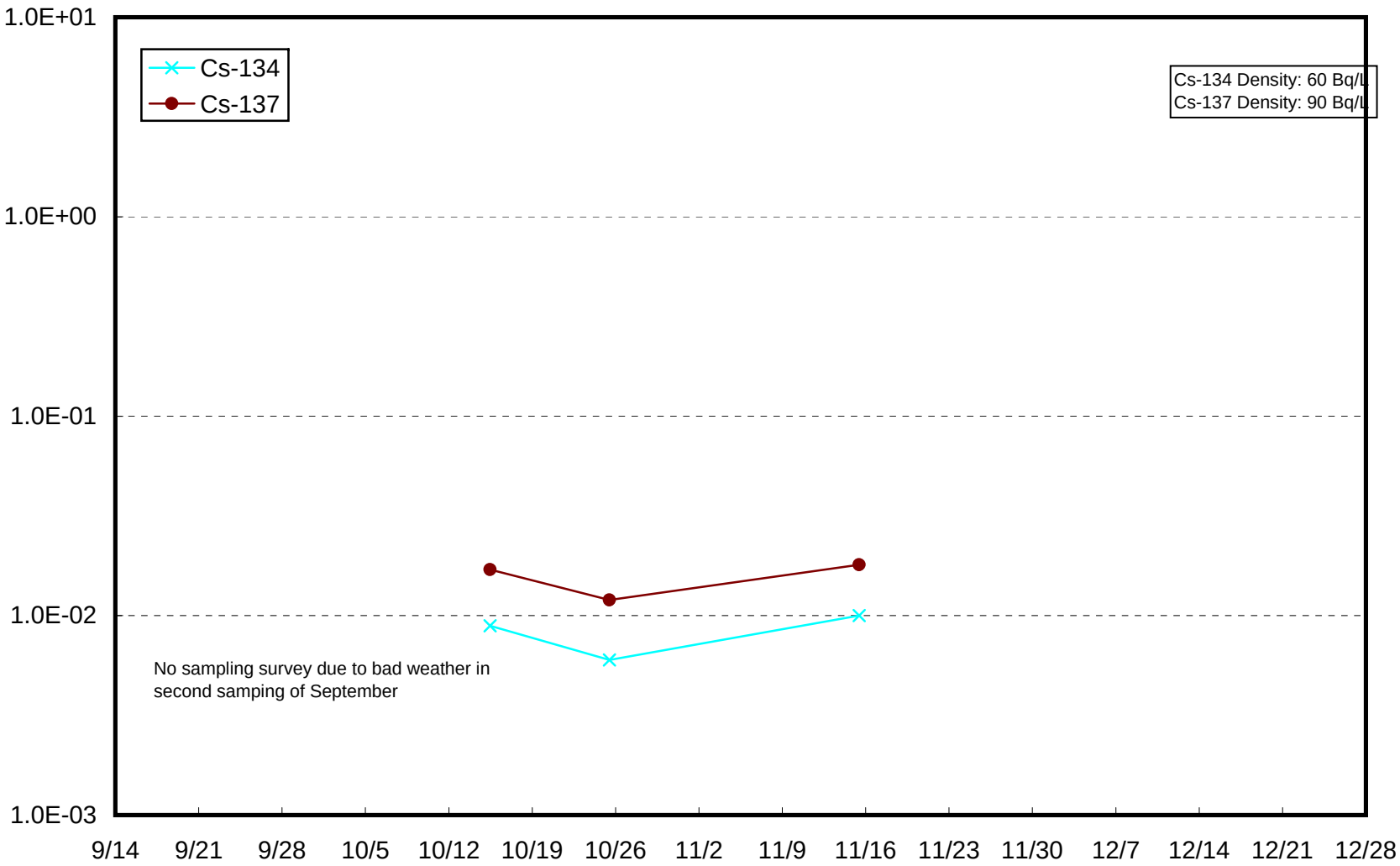
Radioactivity Density of the Seawater in the Central Area of Sendai Bay (T-MG5) Lower Layer (Bq/L)



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)