

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

(Data summarized on September 19)

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 Sep 18, 2013 6:40 AM		Time of Sampling Sep 18, 2013 5:05 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)	ND	-	ND	-	60
Cs-137 (Approx. 30 years)	1.3	0.01	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. 1.3Bq/L, Cs-134: Approx. 1.4Bq/L, Cs-137: Approx. 1.7Bq/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 September 19)

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.)
	Aug 5, 2013 5:55 AM		Aug 5, 2013 5:20 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)	0.14	0.00	0.23	0.00	60
Cs-137 (Approx. 30 years)	0.29	0.00	0.47	0.01	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.

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

(Data summarized on September 19)

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	Aug 6, 2013 10:00 AM		Aug 6, 2013 7:35 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)	0.087	0.00	0.050	0.00	60
Cs-137 (Approx. 30 years)	0.17	0.00	0.096	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.

Nuclides Analysis Result of the Radioactive Materials in the Seawater < Coast, Fukushima Daiichi Nuclear Power Station, Within 20km Radius >

(Data summarized on September 19)

Place of Sampling	South side of the Ukedo Port (Approx. 5.5km north of Unit 5-6 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	Aug 6, 2013 2:40 PM		/		
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)	0.044	0.00	/	/	60
Cs-137 (Approx. 30 years)	0.081	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.

Nuclides Analysis Result of Radioactive Materials in the Seawater <1/3>

(Data summarized on September 19)

Place of Sampling (Place No.)	Around the North Discharge Channel of 2F (T-3) (Around Unit 3-4 Discharge Channel) (Approx. 10km from 1F)	South side of the Ukedo Port (T-6) (Approx. 5.5km north of Unit 5-6 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.)
Date of Sampling	Aug 6, 2013		Aug 6, 2013				
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)	
Cs-134 (Approx. 2 years)	0.087	0.00	0.044	0.00			60
Cs-137 (Approx. 30 years)	0.17	0.00	0.081	0.00			90
H-3 (approx. 12yrs)	0.93	0.00	ND	—			60,000
All β	ND	—	ND	—			—

* 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.

* Nuclide analysis results of Cs-134 and Cs-137 were announced on September 19.

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

H-3: Approx. 0.30Bq/L, All β: Approx. 18Bq/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 <2/3>

(Data summarized on September 19)

Place of Sampling (Place No.)	15km Offshore of Fukushima Daiichi NPS (T-5) Upper Layer		3km Offshore of Ukedo River (T- D1) Upper Layer		3km Offshore of Fukushima Daiichi NPS (T-D5) 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	Aug 7, 2013		Aug 6, 2013		Aug 6, 2013		
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)	
Cs-134 (Approx. 2 years)	*	—	*	—	*	—	60
Cs-137 (Approx. 30 years)	*	—	*	—	*	—	90
H-3 (approx. 12yrs)	ND	—	ND	—	ND	—	60,000
All α	ND	—	ND	—	ND	—	—
All β	ND	—	ND	—	ND	—	—
Sr-90 (Approx. 29 years)	*	—	*	—	*	—	30

* 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.

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

H-3: Approx. 0.37Bq/L, All α: Approx. 1.7Bq/L, All β: Approx. 17Bq/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.

* "*" provided in the "density of sample" column means the sample is under analysis.

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

(Data summarized on September 19)

Place of Sampling (Place No.)	3km Offshore of Fukushima Daini NPS (T-D9) 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	Aug 7, 2013						
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)	
Cs-134 (Approx. 2 years)	*	—					60
Cs-137 (Approx. 30 years)	*	—					90
H-3 (approx. 12yrs)	ND	—					60,000
All α	ND	—					—
All β	ND	—					—
Sr-90 (Approx. 29 years)	*	—					30

* 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.

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

H-3: Approx. 0.37Bq/L, All α: Approx. 1.7Bq/L, All β: Approx. 17Bq/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.

* "*" provided in the "density of sample" column means the sample is under analysis.

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

Reference

(Data summarized on September 19)

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	Sep 9, 2013 7:22 AM		Sep 9, 2013 7:22 AM		Sep 11, 2013 7:59 AM		Sep 11, 2013 8:02 AM		Sep 11, 2013 7:44 AM		Sep 11, 2013 7:44 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	-	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	Sep 10, 2013 2:23 PM		Sep 10, 2013 2:24 PM		Sep 10, 2013 1:22 PM		Sep 10, 2013 1:22 PM		Sep 9, 2013 10:05 AM		Sep 9, 2013 10:05 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	-	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/cm³ to Bq/L.

* Data of other nuclides is under evaluation.

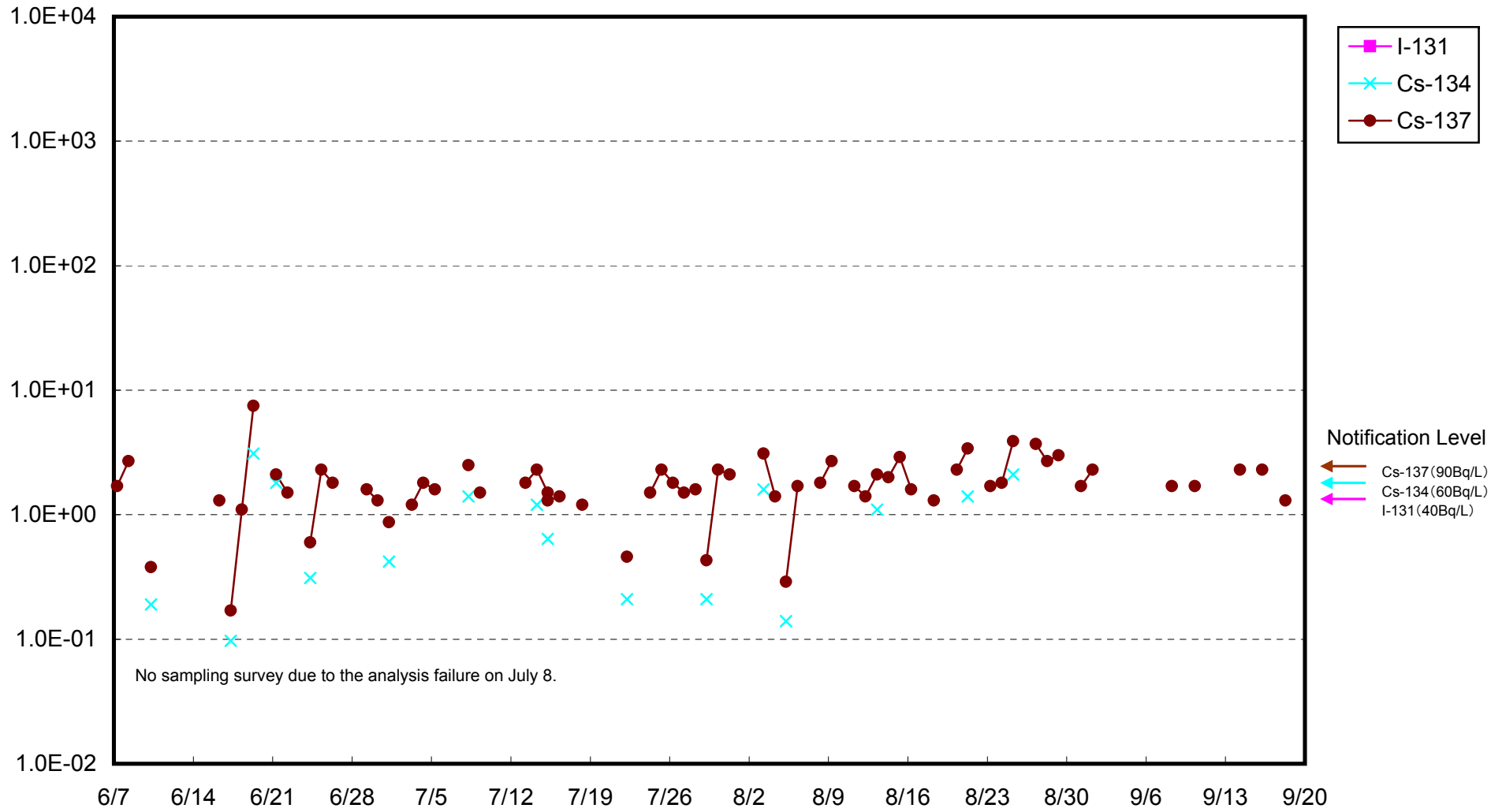
* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

* "ND" indicates that the measurement result is below the detection limit.

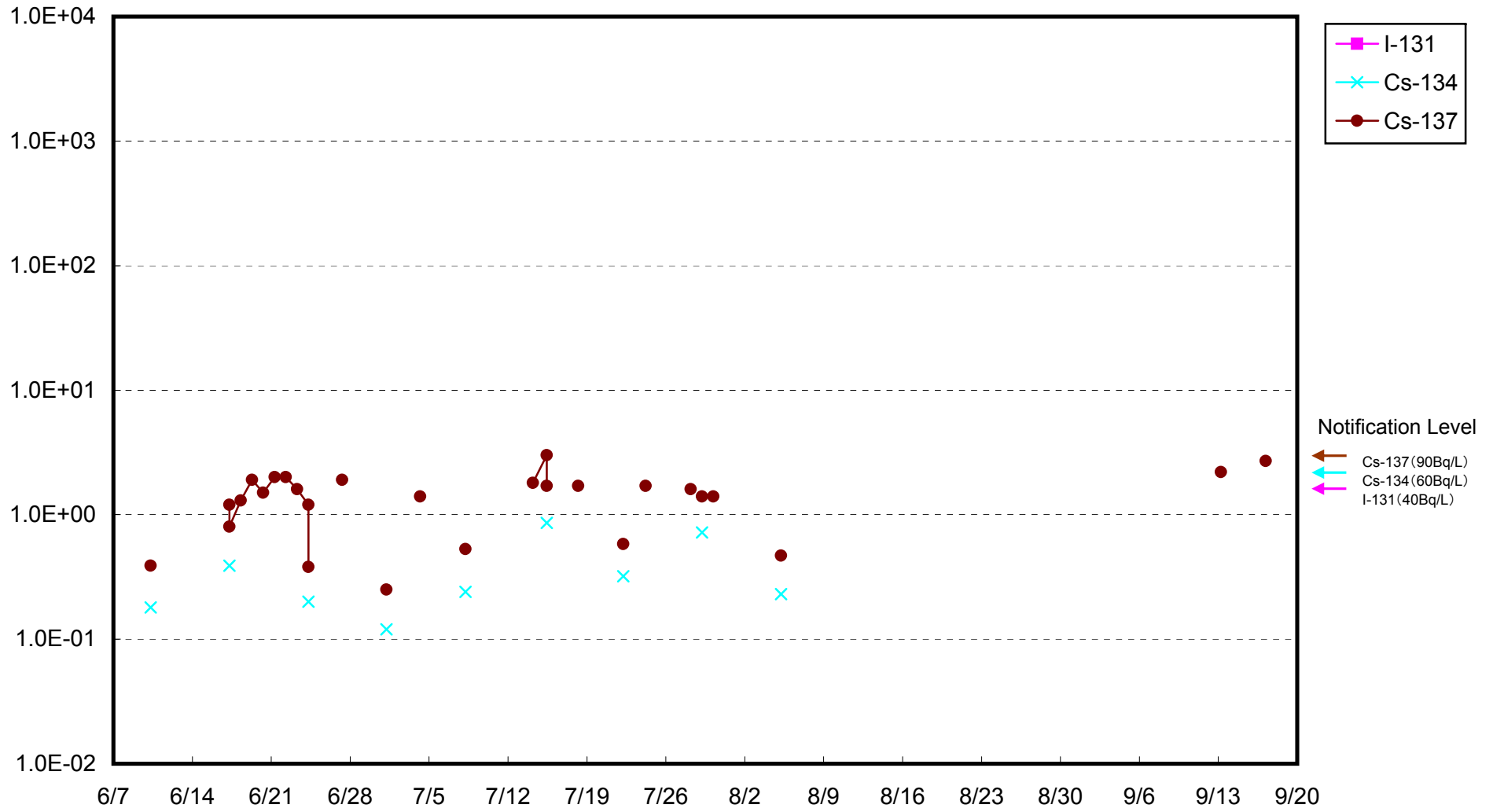
Cs-134: Approx.1.2Bq/L, Cs-137: Approx.1.3Bq/L

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

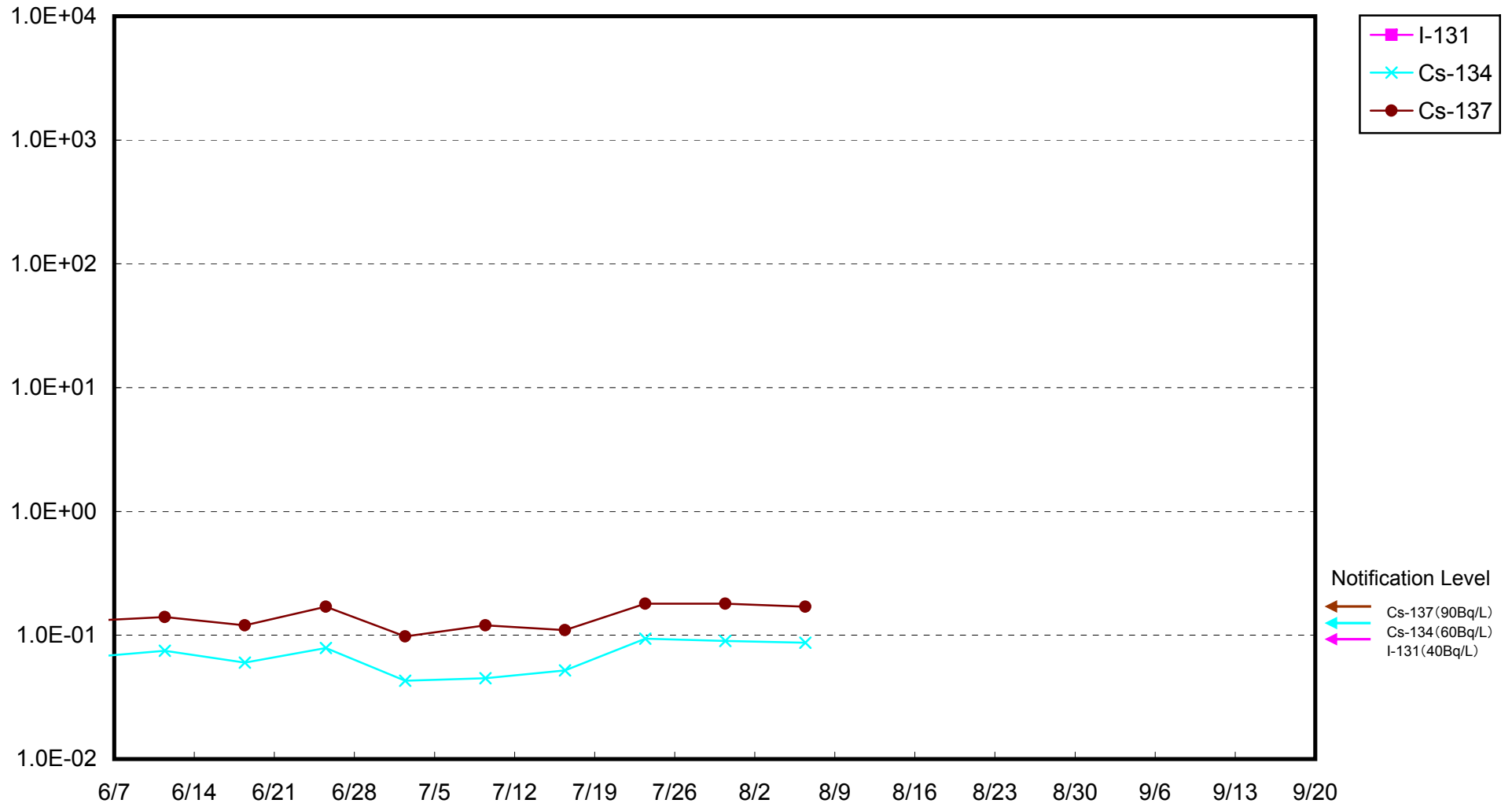
Radioactivity Density of the Seawater at 1F Units 5-6 North Discharge Channel (Bq/L)



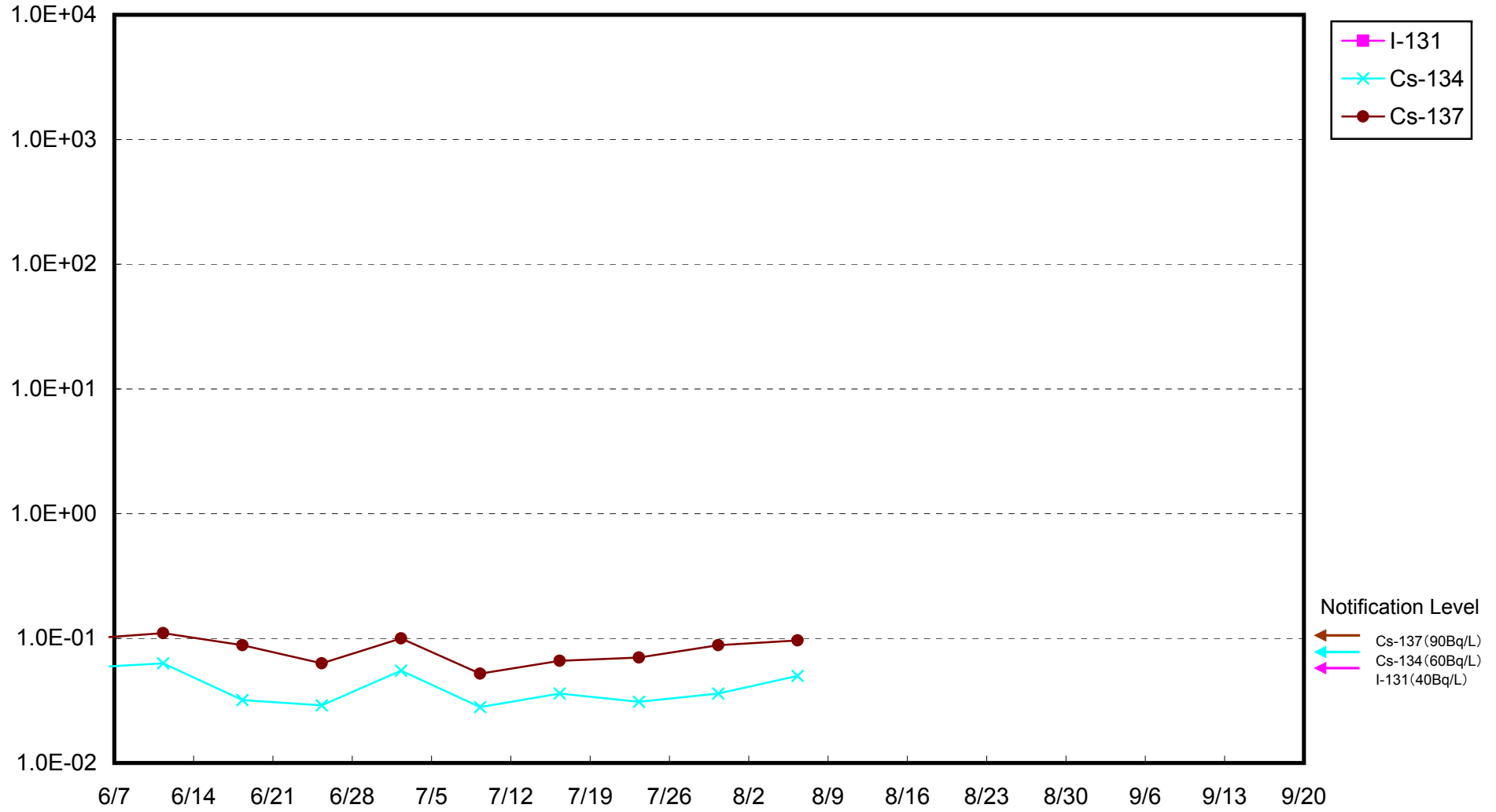
Radioactivity Density of the Seawater at 1F South Discharge Channel (Bq/L)



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 South Side of the Ukedo Port (Bq/L)

