

## Radioactivity Density of the Seawater in the Port of Fukushima Daiichi NPS &lt; 1/3 &gt;

(Data summarized on December 28)

| Place of Sampling                | Shallow Draft Quay at 1F       |                            |                                |                            | Inside Unit 1-4 Water Intake Canal (North) at 1F |                            |                                |                            | 1F Unit 1 Screen<br>(Outside the Silt Fence) |                            | 1F Unit 1 Screen<br>(Inside the Silt Fence) |                            | Density Limit<br>Specified by the<br>Reactor Regulation<br>(Bq/L)<br>(The density limit in<br>the water outside the<br>surrounding monitored<br>areas is provided in<br>section 6 of Appendix<br>2.) |
|----------------------------------|--------------------------------|----------------------------|--------------------------------|----------------------------|--|----------------------------|--------------------------------|----------------------------|--|----------------------------|---|----------------------------|--|
|                                  | Dec 27, 2012<br>6:31 AM        |                            | N/A                            |                            | Dec 27, 2012<br>6:37 AM                          |                            | N/A                            |                            | Dec 27, 2012<br>6:39 AM                      |                            | Dec 27, 2012<br>6:40 AM                     |                            |  |
| Detected Nuclides<br>(Half-life) | Density of<br>Sample<br>(Bq/L) | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L) | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L)                   | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L) | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L)               | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L)              | Scaling<br>Factor<br>( / ) |  |
| I-131<br>(Approx. 8 days)        | ND                             | -                          | -                              | -                          | ND   | -                          | -                              | -                          | ND   | -                          | ND  | -                          | 40   |
| Cs-134<br>(Approx. 2 years)      | 6.0                            | 0.10                       | -                              | -                          | 10   | 0.17                       | -                              | -                          | 12   | 0.20                       | 13  | 0.22                       | 60   |
| Cs-137<br>(Approx. 30 years)     | 8.9                            | 0.10                       | -                              | -                          | 19   | 0.21                       | -                              | -                          | 23   | 0.26                       | 22  | 0.24                       | 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. 2Bq/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 in the Port of Fukushima Daiichi NPS &lt; 2/3 &gt;

(Data summarized on December 28)

| Place of Sampling                | 1F Unit 2 Screen<br>(Outside the Silt Fence) |                            | 1F Unit 2 Screen<br>(Inside the Silt Fence) |                            | 1F Unit 3 Screen<br>(Outside the Silt Fence) |                            | 1F Unit 3 Screen<br>(Inside the Silt Fence) |                            | 1F Unit 4 Screen<br>(Outside the Silt Fence) |                            | 1F Unit 4 Screen<br>(Inside the Silt Fence) |                            | Density Limit<br>Specified by the<br>Reactor Regulation<br>(Bq/L)<br>(The density limit in<br>the water outside the<br>surrounding monitored<br>areas is provided in<br>section 6 of Appendix<br>2.) |
|----------------------------------|--|----------------------------|---|----------------------------|--|----------------------------|---|----------------------------|--|----------------------------|---|----------------------------|--|
| Time of Sampling                 | Dec 27, 2012<br>6:43 AM                      |                            | Dec 27, 2012<br>6:44 AM                     |                            | Dec 27, 2012<br>6:48 AM                      |                            | Dec 27, 2012<br>6:50 AM                     |                            | Dec 27, 2012<br>6:52 AM                      |                            | Dec 27, 2012<br>6:54 AM                     |                            |  |
| Detected Nuclides<br>(Half-life) | Density of<br>Sample<br>(Bq/L)               | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L)              | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L)               | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L)              | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L)               | Scaling<br>Factor<br>( / ) | Density of<br>Sample<br>(Bq/L)              | Scaling<br>Factor<br>( / ) |  |
| I-131<br>(Approx. 8 days)        | ND   | -                          | ND  | -                          | ND   | -                          | ND  | -                          | ND   | -                          | ND  | -                          | 40   |
| Cs-134<br>(Approx. 2 years)      | 24   | 0.40                       | 30  | 0.50                       | 26   | 0.43                       | 49  | 0.82                       | 28   | 0.47                       | 30  | 0.50                       | 60   |
| Cs-137<br>(Approx. 30 years)     | 44   | 0.49                       | 56  | 0.62                       | 45   | 0.50                       | 77  | 0.86                       | 50   | 0.56                       | 58  | 0.64                       | 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. 10Bq/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 in the Port of Fukushima Daiichi NPS &lt; 3/3 &gt;

(Data summarized on December 28)

| Place of Sampling             | Inside Unit 1-4 Water Intake Canal (South) at 1F |                      | Port Entrance of Fukushima Daiichi NPS |                      | In Front of Unit 6 Water Intake Canal at 1F |                      |                          |                      |                          |                      |                          |                      | Density Limit Specified by the Reactor Regulation (Bq/L)<br>(The density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2.) |
|-------------------------------|--|----------------------|--|----------------------|---|----------------------|--------------------------|----------------------|--------------------------|----------------------|--------------------------|----------------------|--|
| Time of Sampling              | Dec 27, 2012<br>6:58 AM                          |                      | N/A                                    |                      | Dec 27, 2012<br>2:00 PM                     |                      |                          |                      |                          |                      |                          |                      |  |
| 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 ( / ) |  |
| I-131<br>(Approx. 8 days)     | ND   | -                    | -                                      | -                    | ND  | -                    |                          |                      |                          |                      |                          |                      | 40   |
| Cs-134<br>(Approx. 2 years)   | 31   | 0.52                 | -                                      | -                    | ND  | -                    |                          |                      |                          |                      |                          |                      | 60   |
| Cs-137<br>(Approx. 30 years)  | 57   | 0.63                 | -                                      | -                    | 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.

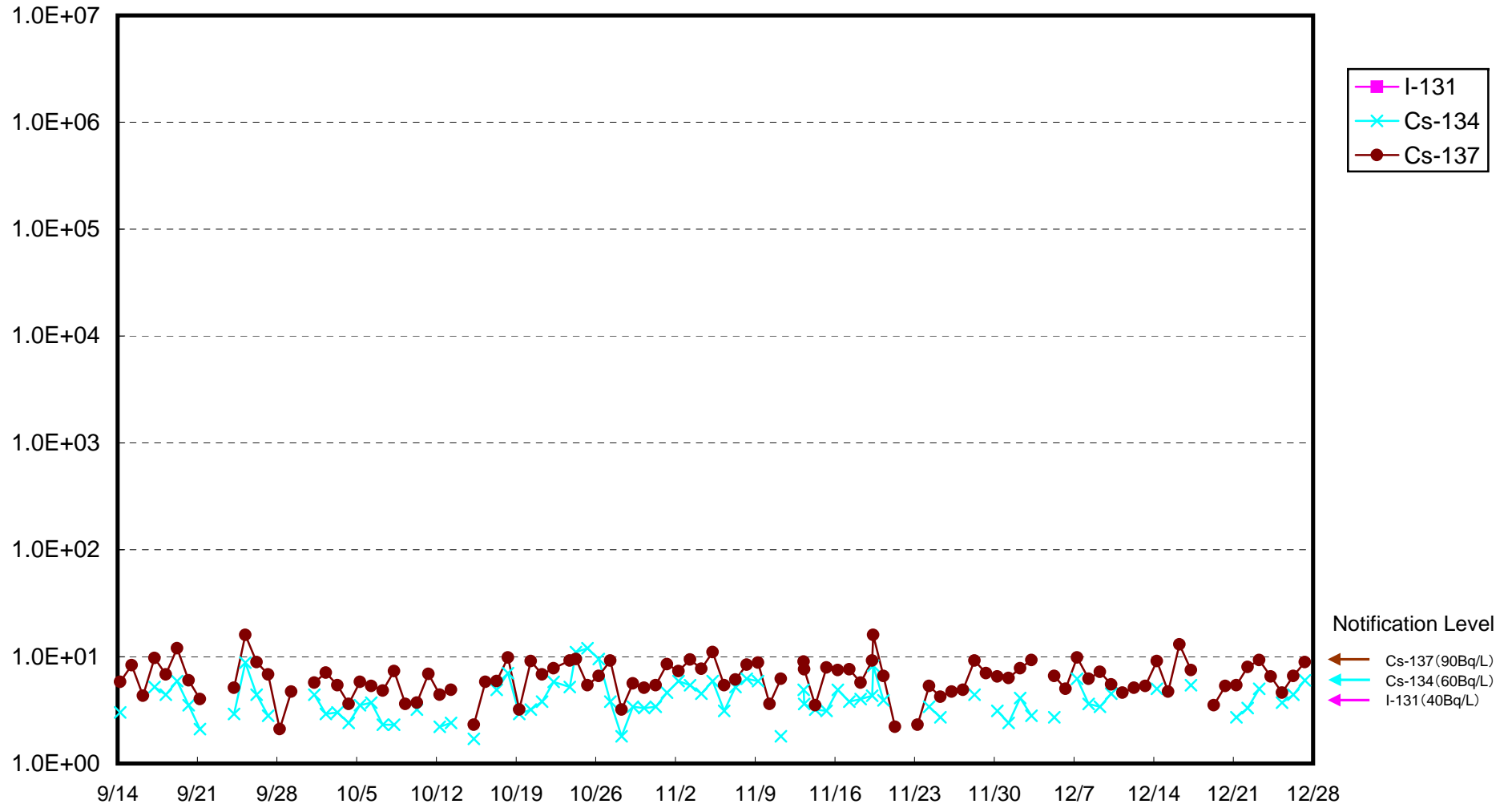
\* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

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

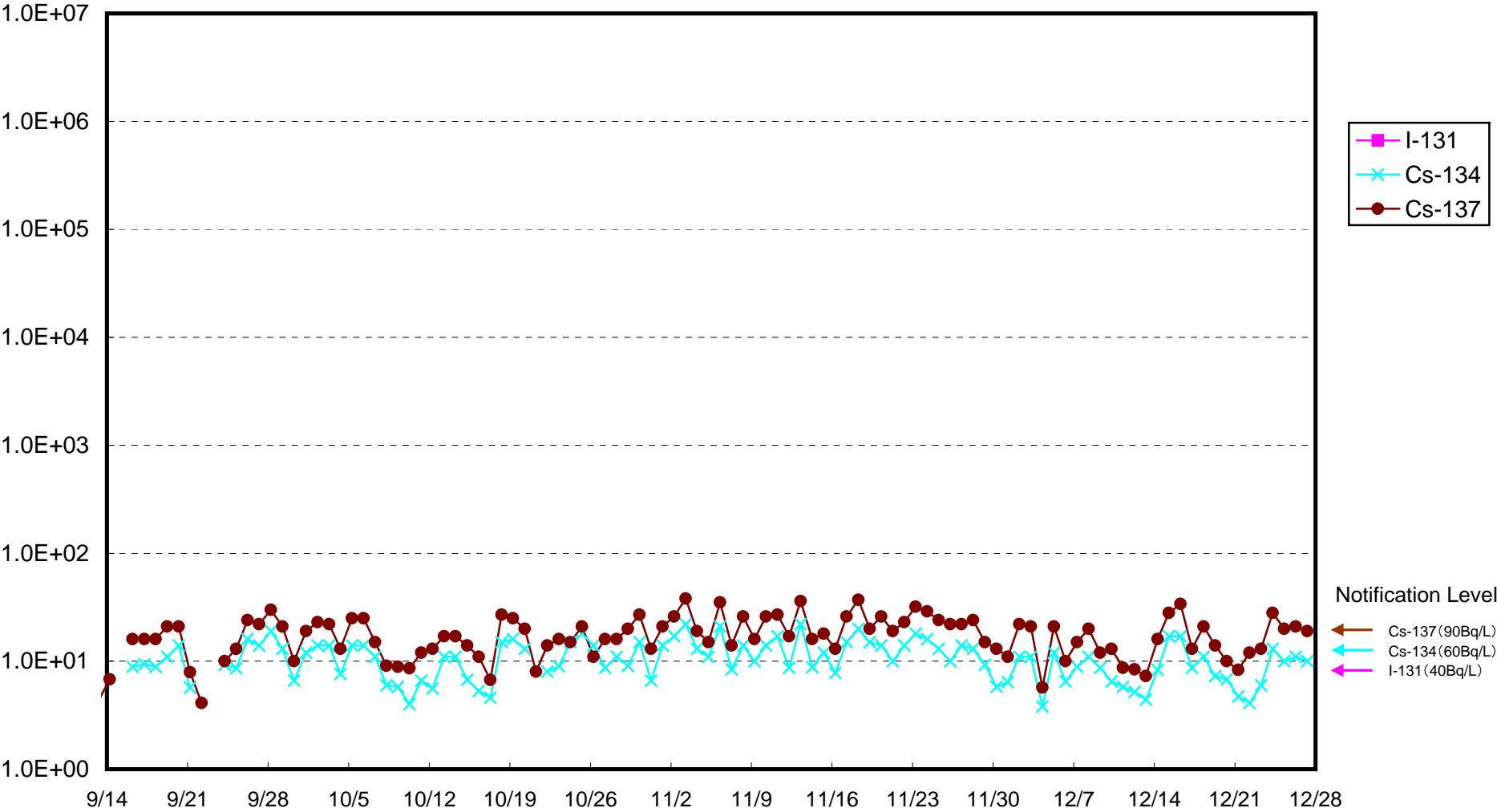
I-131: Approx. 2Bq/L, Cs-134: Approx.3Bq/L, Cs-137: Approx.4Bq/L

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

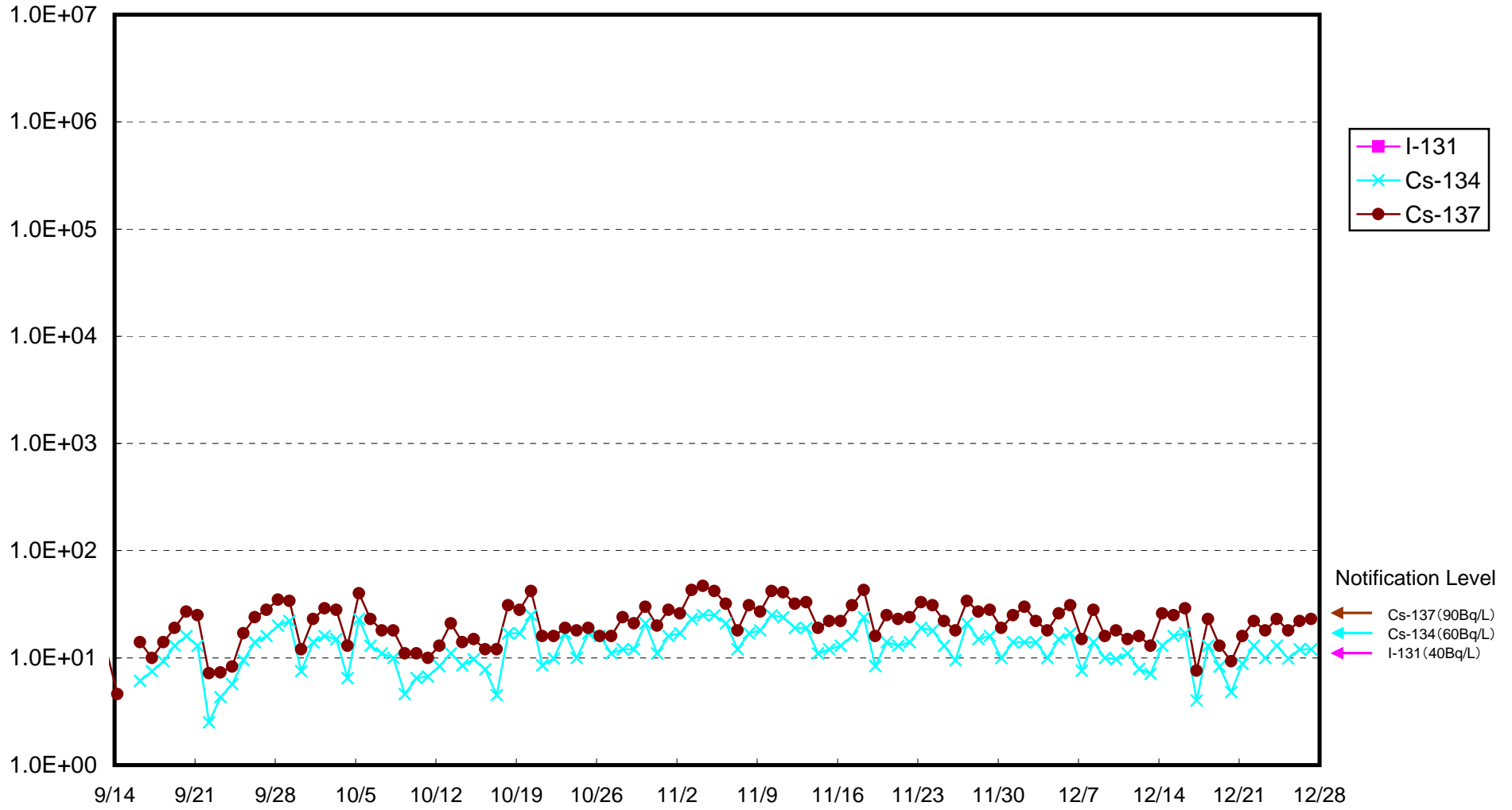
Radioactivity Density of the Seawater in Front of the Shallow Draft Quay at 1F (Bq/L)



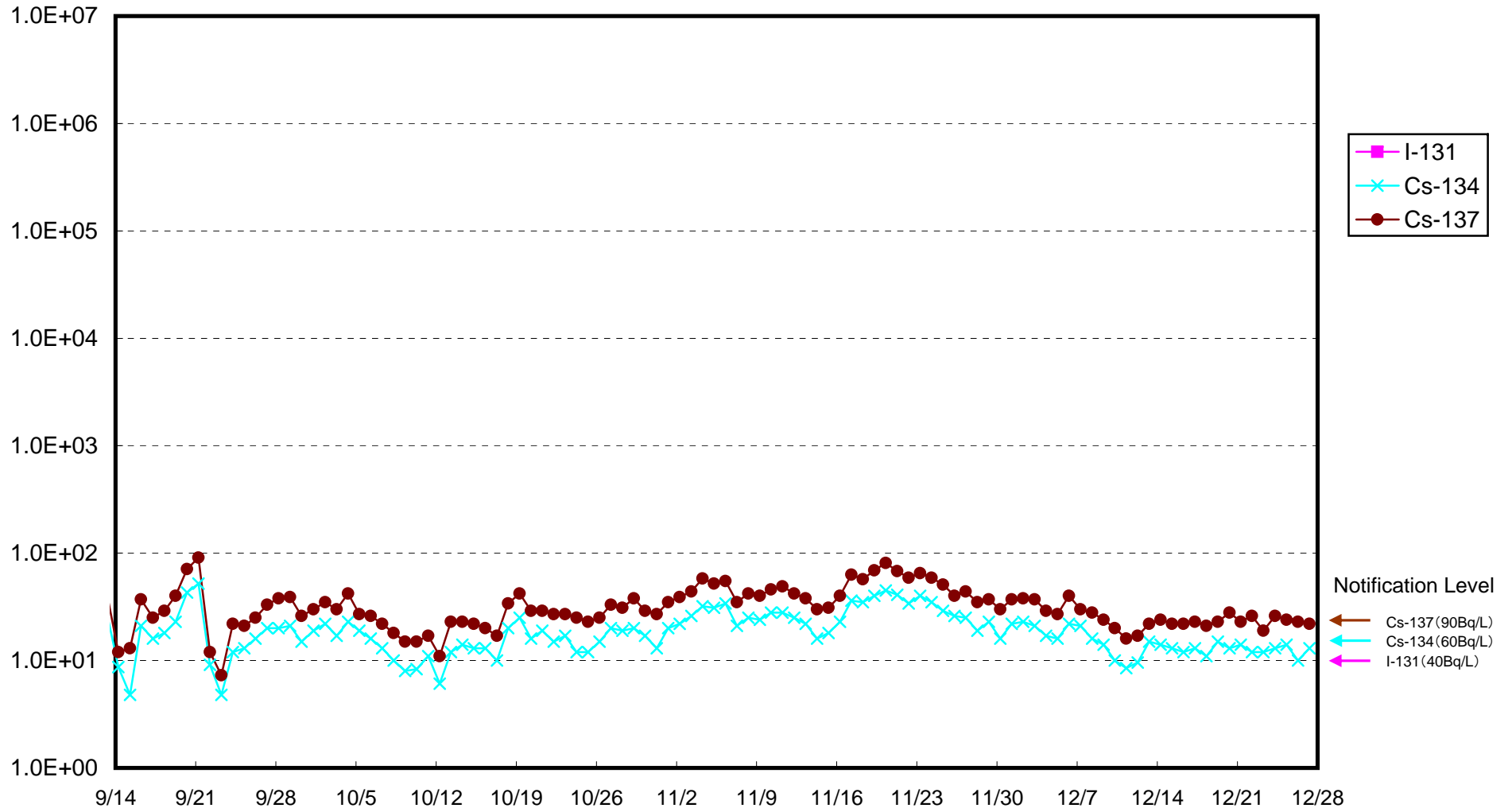
Radioactivity Density of the Seawater at the North of Unit 1-4 Water Intake of Fukushima Daiichi NPS (Bq/ L)



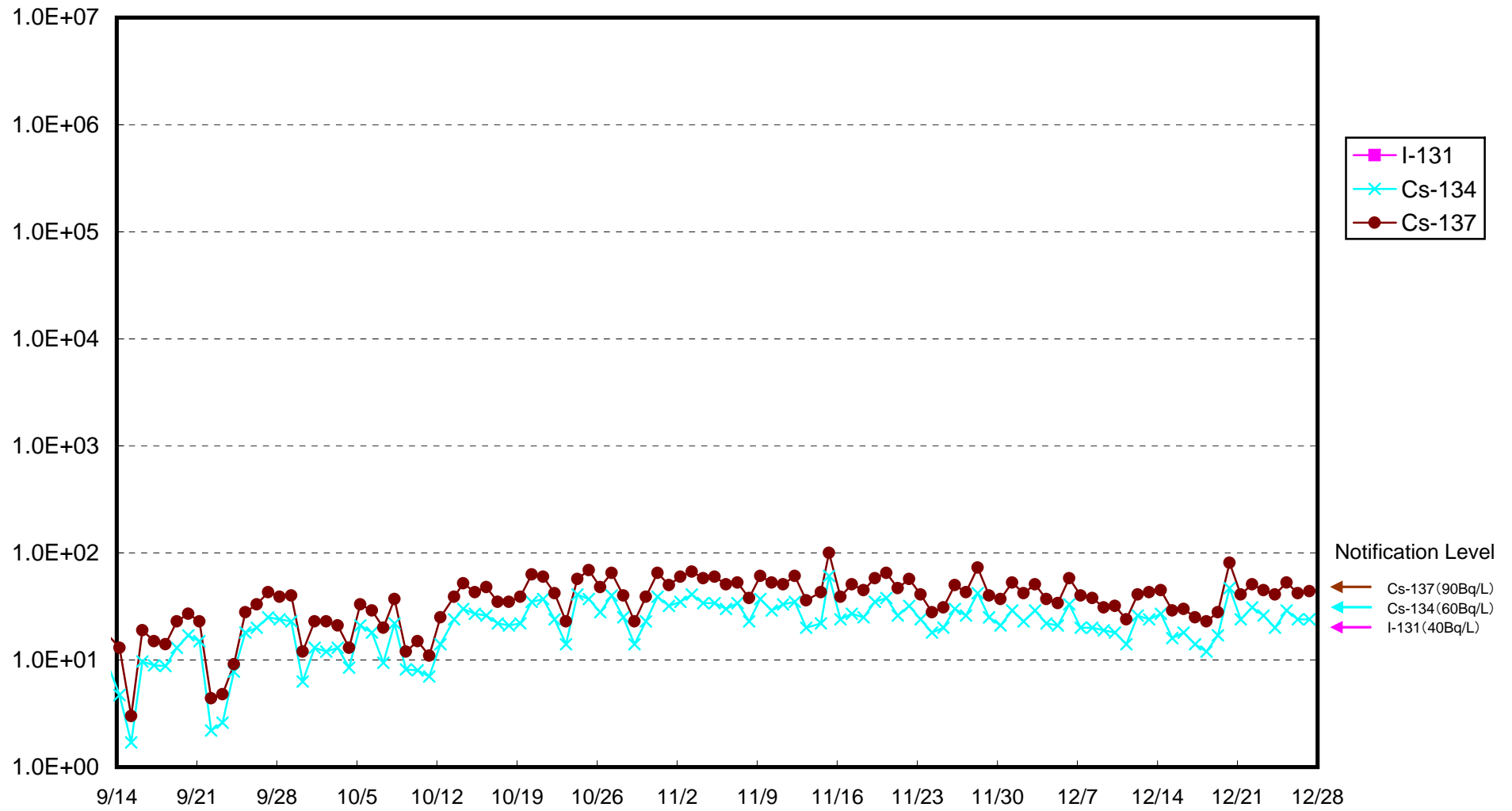
Radioactivity Density of the Seawater at Unit 1 Screen at 1F (Outside the Silt Fence) (Bq/L)



Radioactivity Density of the Seawater at Unit 1 Screen at 1F (Inside the Silt Fence) (Bq/L)

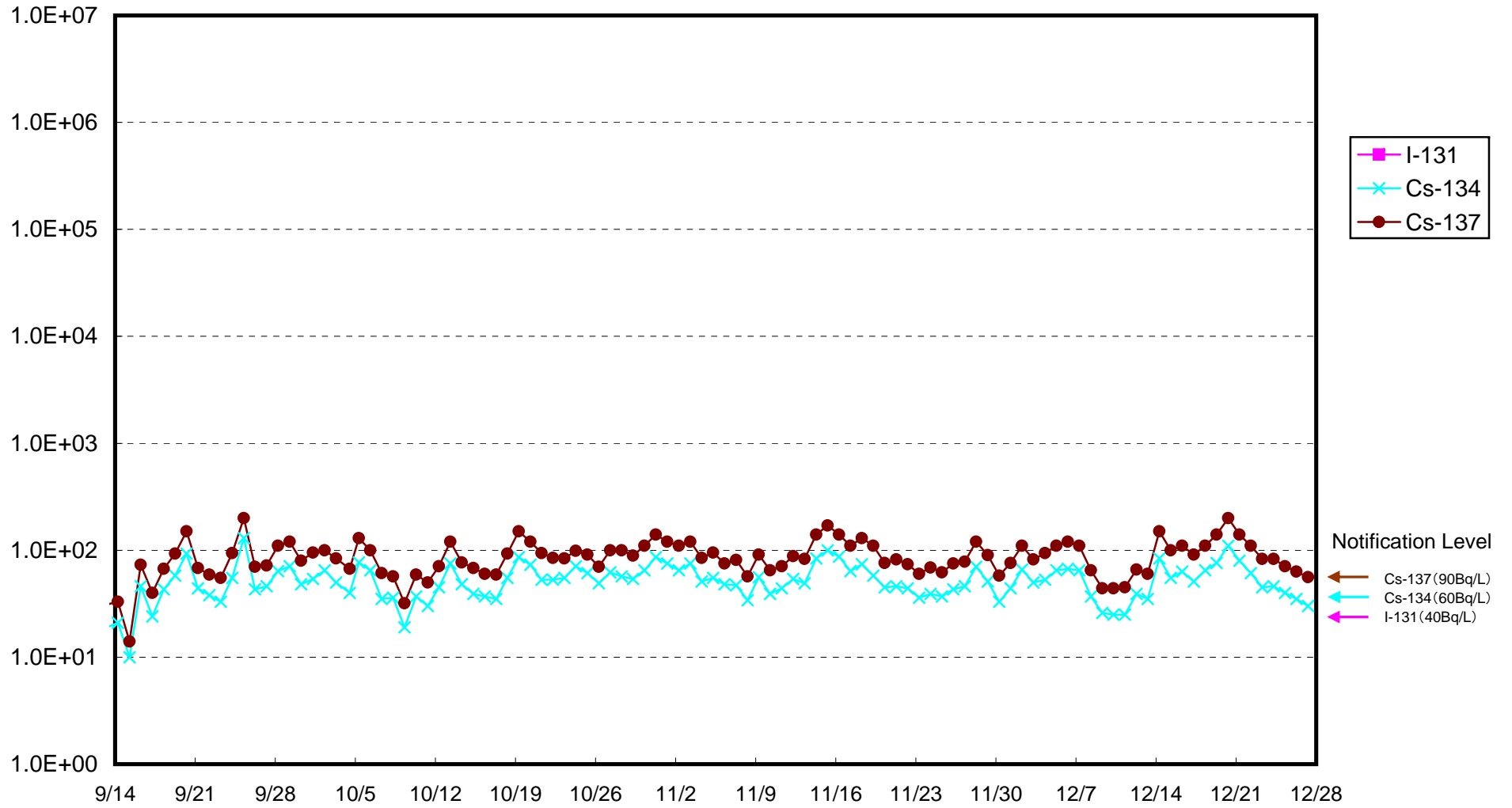


Radioactivity Density of the Seawater at Unit 2 Screen at 1F (Outside the Silt Fence) (Bq/L)

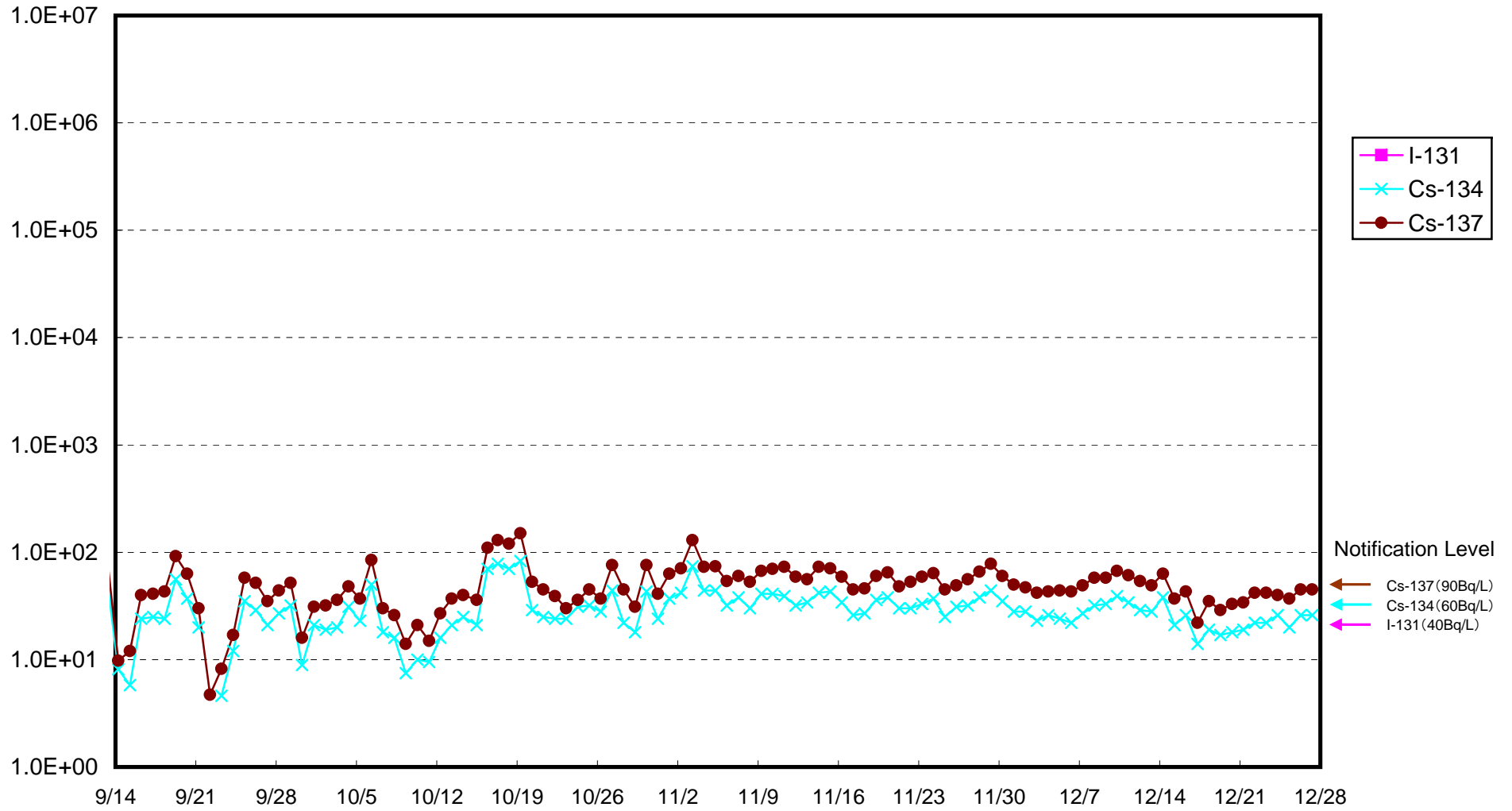




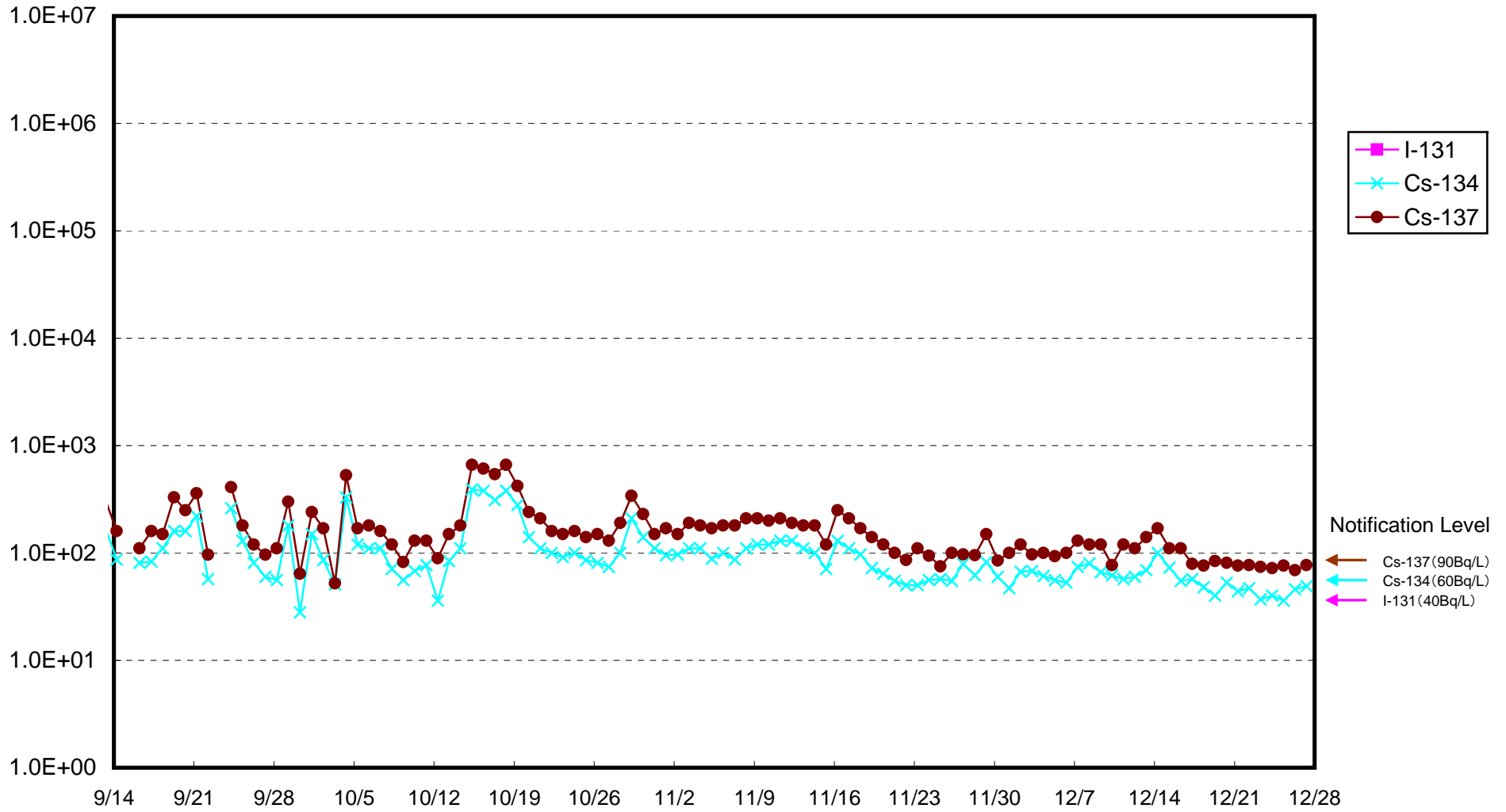
Radioactivity Density of the Seawater at Unit 2 Screen at 1F (Inside the Silt Fence) (Bq/L)



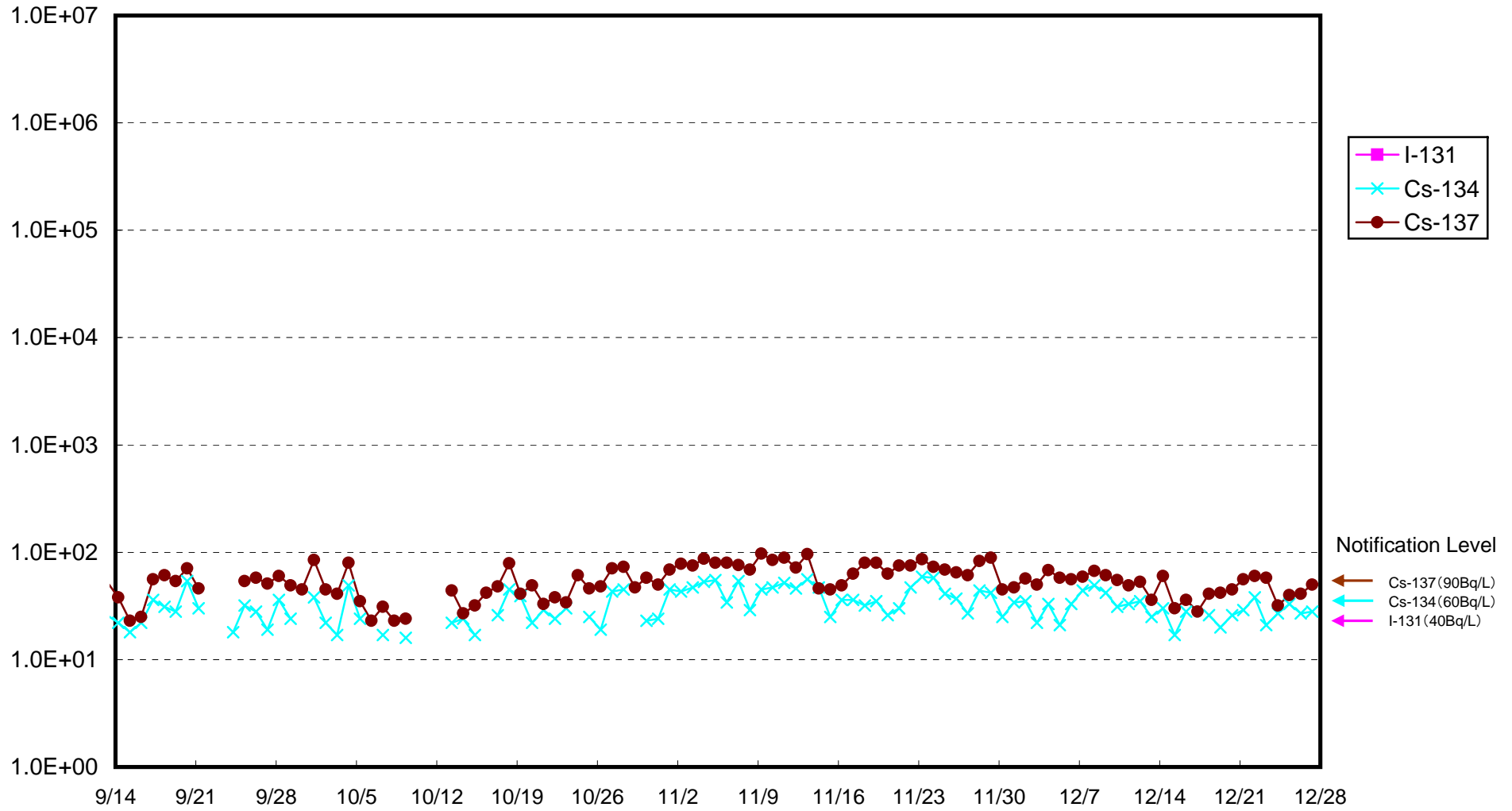
Radioactivity Density of the Seawater at Unit 3 Screen at 1F (Outside the Silt Fence) (Bq/L)



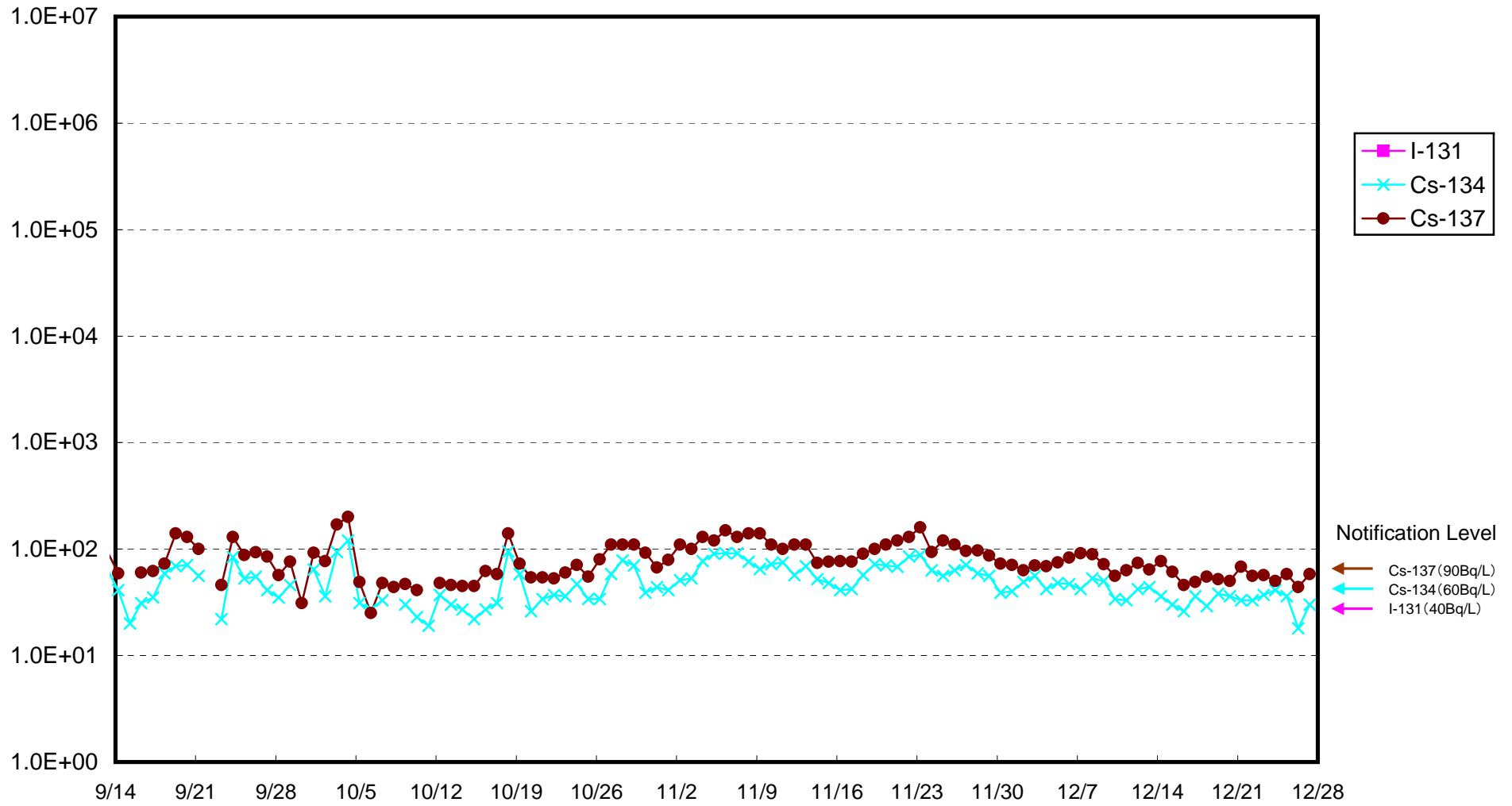
Radioactivity Density of the Seawater at Unit 3 Screen at 1F (Inside the Silt Fence) (Bq/L)



Radioactivity Density of the Seawater at Unit 4 Screen at 1F (Outside the Silt Fence) (Bq/L)



Radioactivity Density of the Seawater at Unit 4 Screen at 1F (Inside the Silt Fence) (Bq/L)



Radioactivity Density of the Seawater at the South of Unit 1-4 Water Intake of Fukushima Daiichi NPS (Bq/ L)

