

## Nuclide Analysis Results of the Radioactive Materials in the Air at Fukushima Nuclear Power Stations &lt; 1/2 &gt;

(Data summarized on November 14)

Place of Sampling	The West Gate of Fukushima Daiichi NPS		MP-1 of Fukushima Daini NPS (Reference)				② Density Limit Specified by the Reactor Regulation (Bq/cm <sup>3</sup> ) (Density limit in the air which radiation workers breathe in is specified in section 4 of Appendix 2)
	November 13, 2012 7:00 AM - 12:00 PM		November 13, 2012 10:12 AM - 10:22 AM				
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	
I-131 (Approx. 8 days)	ND	-	ND	-			1E-03
Cs-134 (Approx. 2 years)	ND	-	ND	-			2E-03
Cs-137 (Approx. 30 years)	ND	-	ND	-			3E-03

\* The radioactivity density is the sum of the volatile nuclides density and the particulate nuclides density.

O.OE—O is the same as  $O.O \times 10^{-O}$

Data of other nuclides is under examination.

\* 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.

The detection limits at the west gate of Fukushima Daiichi NPS are as follows: Volatile: I-131: Approx. 9E-8Bq/cm<sup>3</sup>, Cs-134: Approx.2E-7Bq/cm<sup>3</sup>, Cs-137: Approx.3E-7Bq/cm<sup>3</sup> Particulate: I-131: Approx. 6E-8Bq/cm<sup>3</sup>, Cs-134: Approx.1E-7Bq/cm<sup>3</sup>, Cs-137: Approx.2E-7Bq/cm<sup>3</sup> The detection limits at MP-1 of Fukushima Daini MPS are as follows: Volatile: I-131: Approx. 1E-6Bq/cm<sup>3</sup>, Cs-134: Approx.2E-6Bq/cm<sup>3</sup>, Cs-137: Approx.2E-6Bq/cm<sup>3</sup> Particulate: I-131: Approx. 6E-7Bq/cm<sup>3</sup>, Cs-134: Approx.9E-7Bq/cm<sup>3</sup>, Cs-137: Approx.8E-7Bq/cm<sup>3</sup>

## Nuclide Analysis Results of the Radioactive Materials in the Air at Fukushima Nuclear Power Stations &lt; 2/2 &gt;

(Data summarized on November 14)

Place of Sampling	MP-1 at Fukushima Daiichi NPS		MP-3 at Fukushima Daiichi NPS		MP-8 at Fukushima Daiichi NPS		② Density Limit Specified by the Reactor Regulation (Bq/cm <sup>3</sup> ) (Density limit in the air which radiation workers breathe in is specified in section 4 of Appendix 2)
	November 13, 2012 7:47 AM - 12:47 PM		November 13, 2012 8:47 AM - 1:47 PM		November 13, 2012 8:01 AM - 1:01 PM		
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	
I-131 (Approx. 8 days)	ND	-	ND	-	ND	-	1E-03
Cs-134 (Approx. 2 years)	ND	-	ND	-	ND	-	2E-03
Cs-137 (Approx. 30 years)	1.9E-07	0.00	ND	-	ND	-	3E-03

\* The radioactivity density is the sum of the volatile nuclides density and the particulate nuclides density.

O.OE—O is the same as  $O.O \times 10^{-O}$

Data of other nuclides is under examination.

\* 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.

The detection limits are as follows. Volatile: I-131: Approx.  $1E-7$ Bq/cm<sup>3</sup>, Cs-134: Approx. $2E-7$ Bq/cm<sup>3</sup>, Cs-137: Approx. $3E-7$ Bq/cm<sup>3</sup>

Particulate: I-131: Approx.  $7E-8$ Bq/cm<sup>3</sup>, Cs-134: Approx. $1E-7$ Bq/cm<sup>3</sup>, Cs-137: Approx. $2E-7$ Bq/cm<sup>3</sup> 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 Result of Pu in the Air at Fukushima Daiichi Nuclear Power Station

### 1. Result analysis:

(Unit: Bq/cm<sup>3</sup>)

Place of Sampling	Type	Date of Sampling	Pu-238	Pu-239+Pu-240
1F, West Gate	Volatile	June 11, 2012	N.D. [ $<2.2 \times 10^{-9}$ ]	N.D. [ $<1.9 \times 10^{-9}$ ]
	Particulate		N.D. [ $<2.3 \times 10^{-9}$ ]	N.D. [ $<2.0 \times 10^{-9}$ ]

The detection limit is provided in parentheses.

### 2. Analytical Institution:

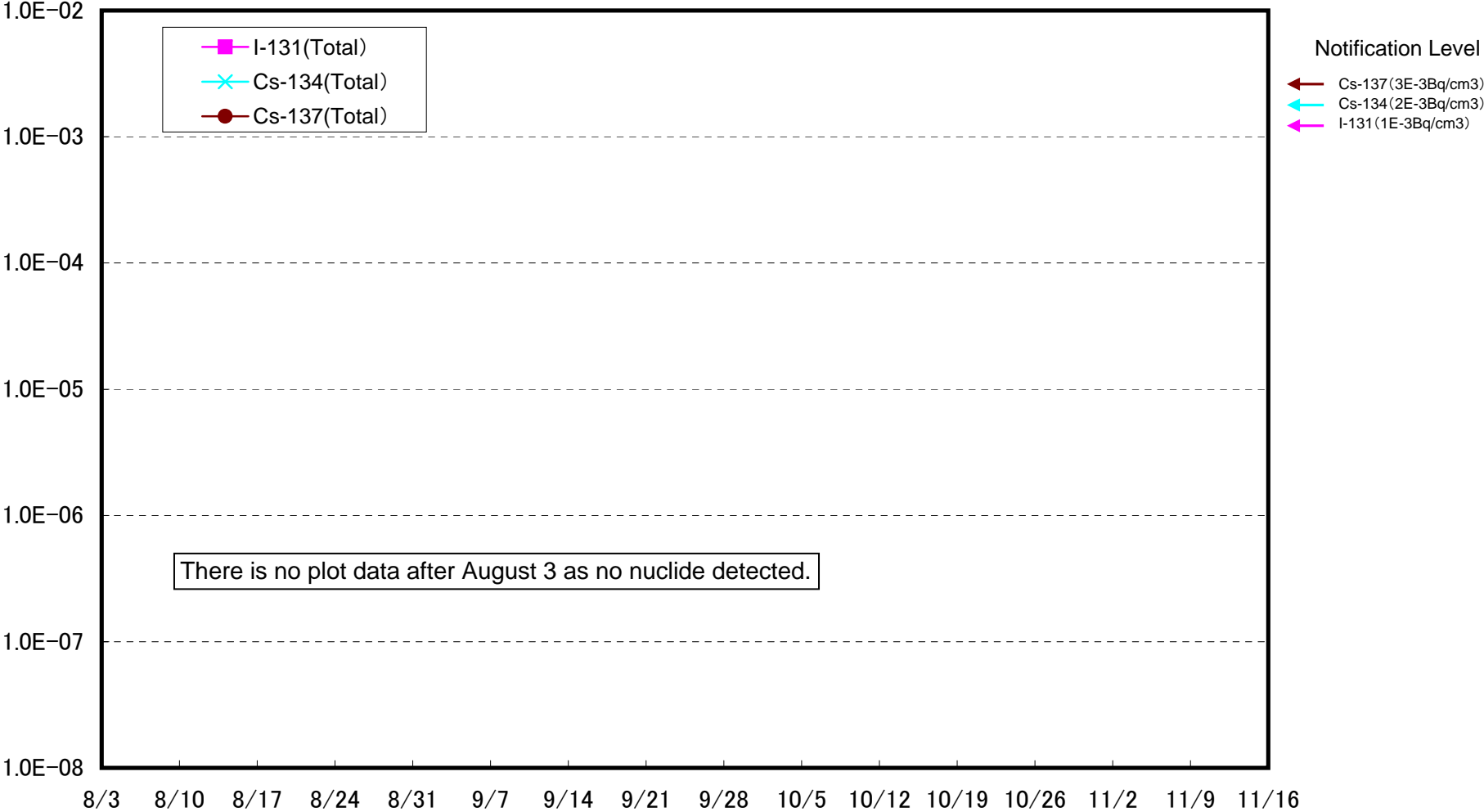
KAKEN Inc.

### 3. Evaluation:

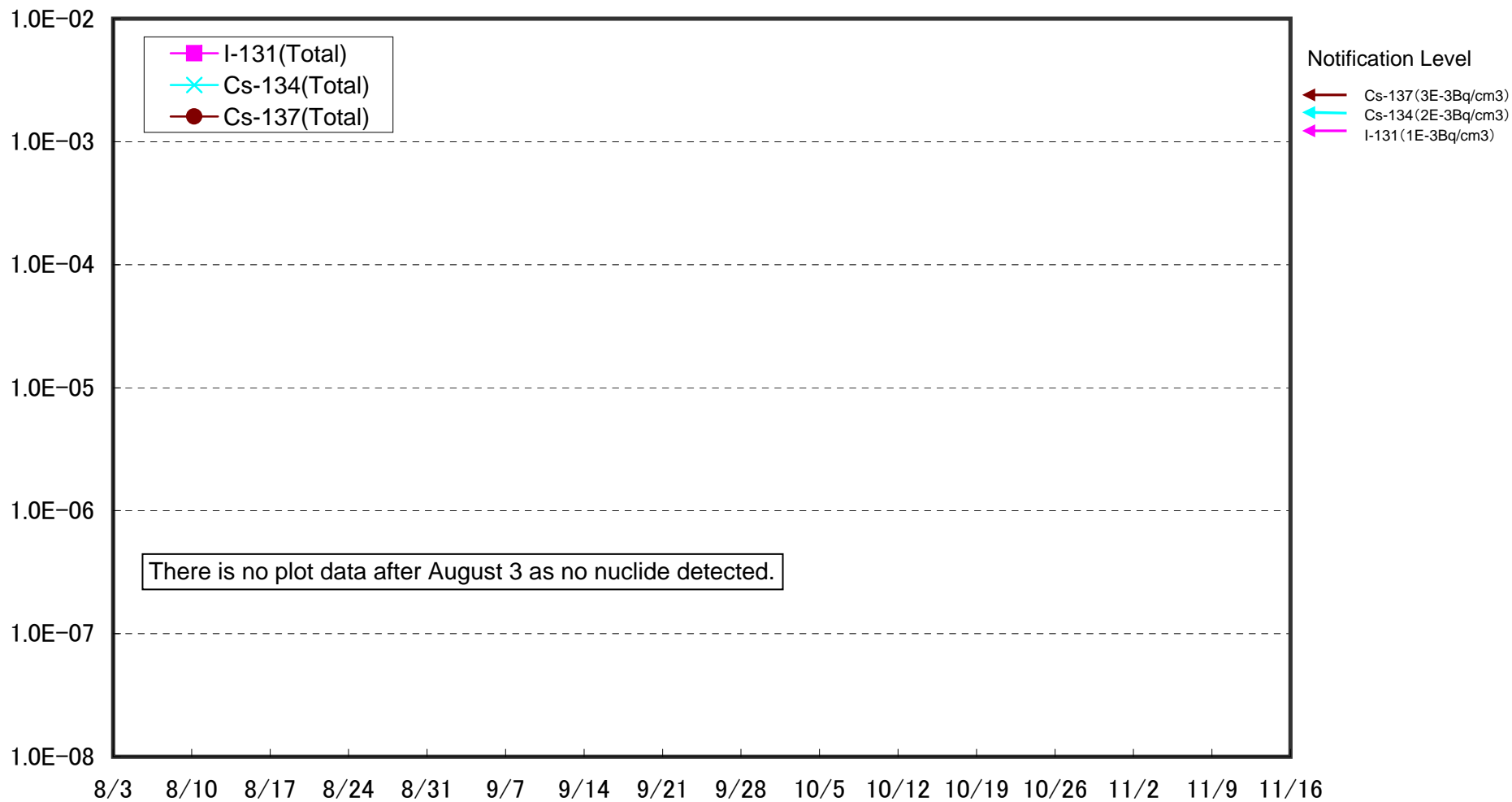
Pu-238 and Pu-239+Pu-240 were not detected in the sample collected this time.

End

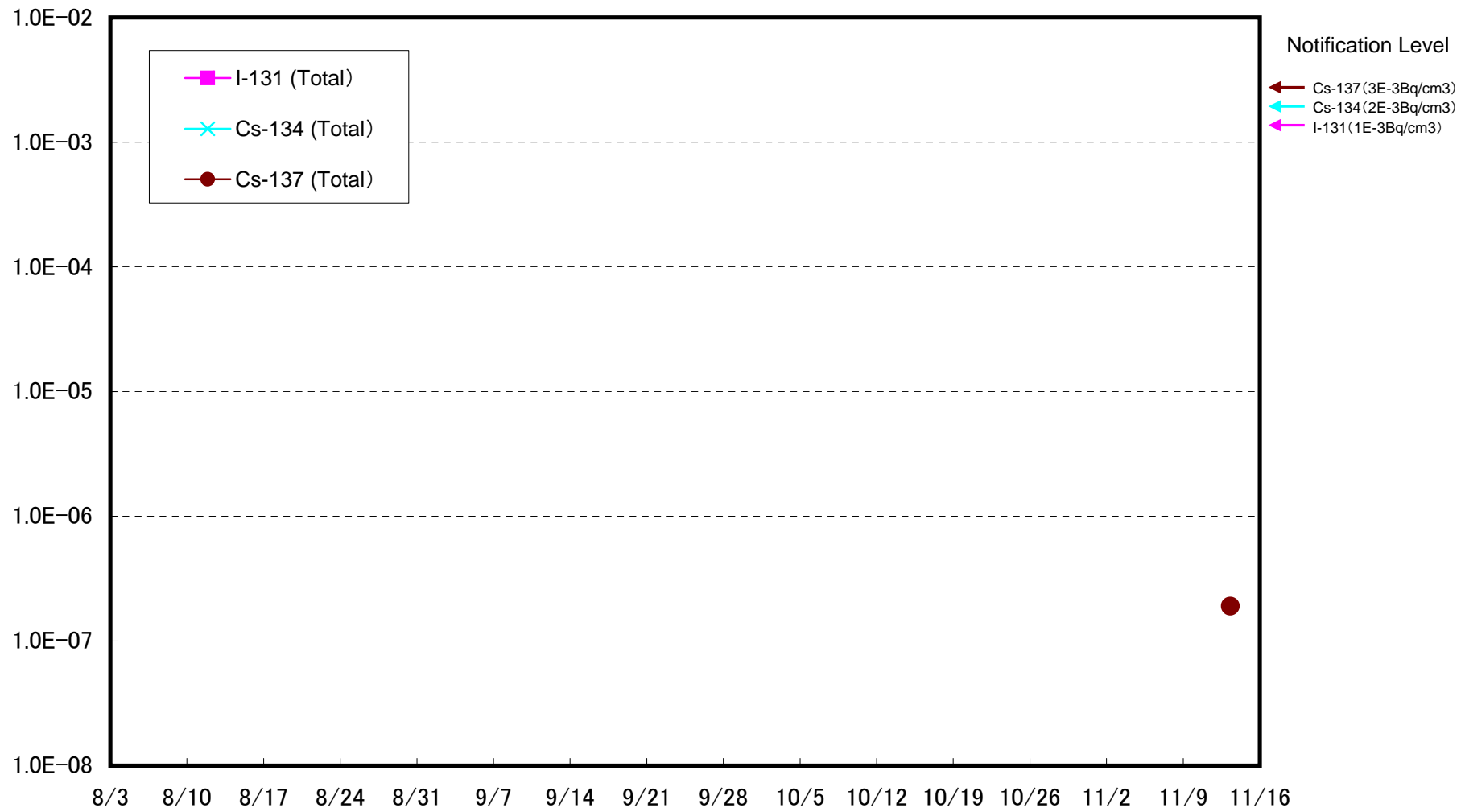
Dust Nuclides Analysis Result: The West Gate of Fukushima Daiichi Nuclear Power Station (Bq/cm<sup>3</sup>)



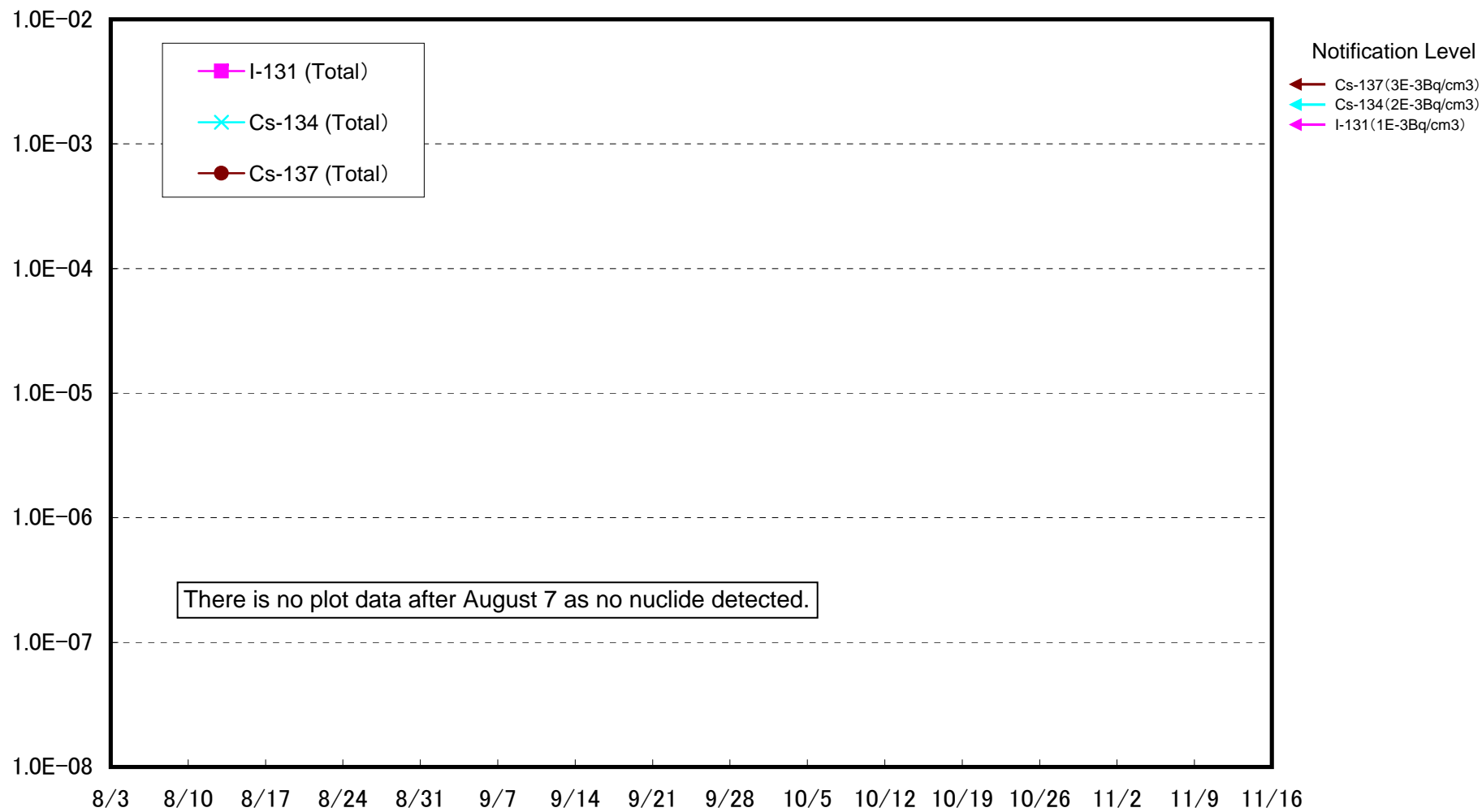
(Reference) Dust Nuclides Analysis Results of MP-1 at Fukushima Daini NPS (Bq/cm<sup>3</sup>)



### Dust Nuclides Analysis Result: MP-1 at Fukushima Daiichi NPS (Bq/cm<sup>3</sup>)



### Dust Nuclides Analysis Result: MP-3 at Fukushima Daiichi NPS (Bq/cm<sup>3</sup>)



Dust Nuclides Analysis Result: MP-8 at Fukushima Daiichi NPS (Bq/cm<sup>3</sup>)

