



【 Definite Report 】 Nuclides Analysis Result of the Radioactive Materials in the Air at the Upper Part of Unit 2 Reactor Building < 1/2 >

Place of Sampling	Upper Part of Unit 2 Reactor Building (The Center of the Blow-out Panel, West Side Upper )		Upper Part of Unit 2 Reactor Building (The Center of the Blow-out Panel, West Side Lower )		Upper Part of Unit 2 Reactor Building (The Center of the Blow-out Panel, West Side Upper )		Density Limit in the Air for Workers to Engage in Radiation Related Tasks (Bq/cm <sup>3</sup> )*
Time of Sampling	Feb 9, 2013 9:30 AM - 11:30 AM		Feb 9, 2013 9:30 AM - 11:30 AM		Feb 9, 2013 12:10 AM - 2:10 PM		
Detected Nuclides (Half-life)	Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor ( / )	Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor ( / )	Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor ( / )	
I-131 (Approx. 8 days)	ND	-	ND	-	ND	-	1E-03
Cs-134 (Approx. 2 years)	2.2E-05	0.01	ND	-	ND	-	2E-03
Cs-137 (Approx. 30 years)	3.6E-05	0.01	ND	-	ND	-	3E-03
Nb-95 (Approx. 35 days)	ND	-	ND	-	ND	-	2E-02
Tc-99m (Approx. 6 hrs)	ND	-	ND	-	ND	-	7E-01
Ru-106 (Approx. 370 days)	ND	-	ND	-	ND	-	6E-04
Ag-110m (Approx. 250 days)	ND	-	ND	-	ND	-	3E-03
Sb-125 (Approx. 3 yrs)	9.1E-06	0.00	ND	-	4.8E-06	0.00	6E-03
Te-129 (Approx. 70 mins)	ND	-	ND	-	ND	-	4E-01
Te-129m (Approx. 34 days)	ND	-	ND	-	ND	-	4E-03
I-132 (Approx. 2 hrs)	ND	-	ND	-	ND	-	7E-02
Te-132 (Approx. 78 hrs )	ND	-	ND	-	ND	-	4E-03
I-133 (Approx. 21 hrs)	ND	-	ND	-	ND	-	5E-03
Cs-136 (Approx. 13 days)	ND	-	ND	-	ND	-	1E-02
Ba-140 (Approx. 13 days)	ND	-	ND	-	ND	-	1E-02
La-140 (Approx. 40 hrs)	ND	-	ND	-	ND	-	1E-02

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

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

\* 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.  $2E-6Bq/cm^3$ , Cs-134: Approx.  $5E-6Bq/cm^3$ , Cs-137: Approx.  $6E-6Bq/cm^3$

Particulate: I-131: Approx.  $2E-6Bq/cm^3$ , Cs-134: Approx.  $3E-6Bq/cm^3$ , Cs-137: Approx.  $4E-6Bq/cm^3$

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

【 Definite Report 】 Nuclides Analysis Result of the Radioactive Materials in the Air at the Upper Part of Unit 2 Reactor Building < 2/2 >

Place of Sampling	Upper Part of Unit 2 Reactor Building (The Center of the Blow-out Panel, West Side Lower )						Density Limit in the Air for Workers to Engage in Radiation Related Tasks (Bq/cm <sup>3</sup> )*
Time of Sampling	Feb 9, 2013 12:10 AM - 2:10 PM						
Detected Nuclides (Half-life)	Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor ( / )	Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor ( / )	Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor ( / )	
I-131 (Approx. 8 days)	ND	-					1E-03
Cs-134 (Approx. 2 years)	3.7E-06	0.00					2E-03
Cs-137 (Approx. 30 years)	ND	-					3E-03
Nb-95 (Approx. 35 days)	ND	-					2E-02
Tc-99m (Approx. 6 hrs)	ND	-					7E-01
Ru-106 (Approx. 370 days)	ND	-					6E-04
Ag-110m (Approx. 250 days)	ND	-					3E-03
Sb-125 (Approx. 3 yrs)	ND	-					6E-03
Te-129 (Approx. 70 mins)	ND	-					4E-01
Te-129m (Approx. 34 days)	ND	-					4E-03
I-132 (Approx. 2 hrs)	ND	-					7E-02
Te-132 (Approx. 78 hrs )	ND	-					4E-03
I-133 (Approx. 21 hrs)	ND	-					5E-03
Cs-136 (Approx. 13 days)	ND	-					1E-02
Ba-140 (Approx. 13 days)	ND	-					1E-02
La-140 (Approx. 40 hrs)	ND	-					1E-02

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

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

\* 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.  $2E-6Bq/cm^3$ , Cs-134: Approx.  $5E-6Bq/cm^3$ , Cs-137: Approx.  $6E-6Bq/cm^3$

Particulate: I-131: Approx.  $1E-6Bq/cm^3$ , Cs-137: Approx.  $4E-6Bq/cm^3$

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