

## 4. Analysis Results of Groundwater Obtained around Fukushima Daiichi NPS (Unit 1-4 Bank Protection) (1/3)

Unit: Bq/L "ND"s below indicate that the measurement results are below the detection limits, and the detection limit of each nuclide is provided in parentheses.

As for No. 1-9,  $\gamma$  was not measured because they are sampled by sampler.  
Gross  $\beta$  was measured after filtration as a reference.

[Groundwater pumped up from the well point between Unit 1 and 2]

Cs-134	: 22	Sampled on	12/22
Cs-137	: 75	Sampled on	12/22
Gross $\beta$	: 1,100,000	Sampled on	12/22
Tritium	: 91,000	Sampled on	12/15

[Groundwater observation hole No.1-9]

Cs-134	: —	Sampled on	12/23
Cs-137	: —	Sampled on	12/23
Gross $\beta$	: ND(21)	Sampled on	12/23
Tritium	: ND(110)	Sampled on	12/21

[Groundwater observation hole No.1-11]

Cs-134	: ND(0.39)	Sampled on	12/22
Cs-137	: 1.1	Sampled on	12/22
Gross $\beta$	: 22	Sampled on	12/22
Tritium	: 11,000	Sampled on	12/15

[Groundwater observation hole No.1-8]

Cs-134	: 18	Sampled on	12/22
Cs-137	: 55	Sampled on	12/22
Gross $\beta$	: 26,000	Sampled on	12/22
Tritium	: 18,000	Sampled on	12/15

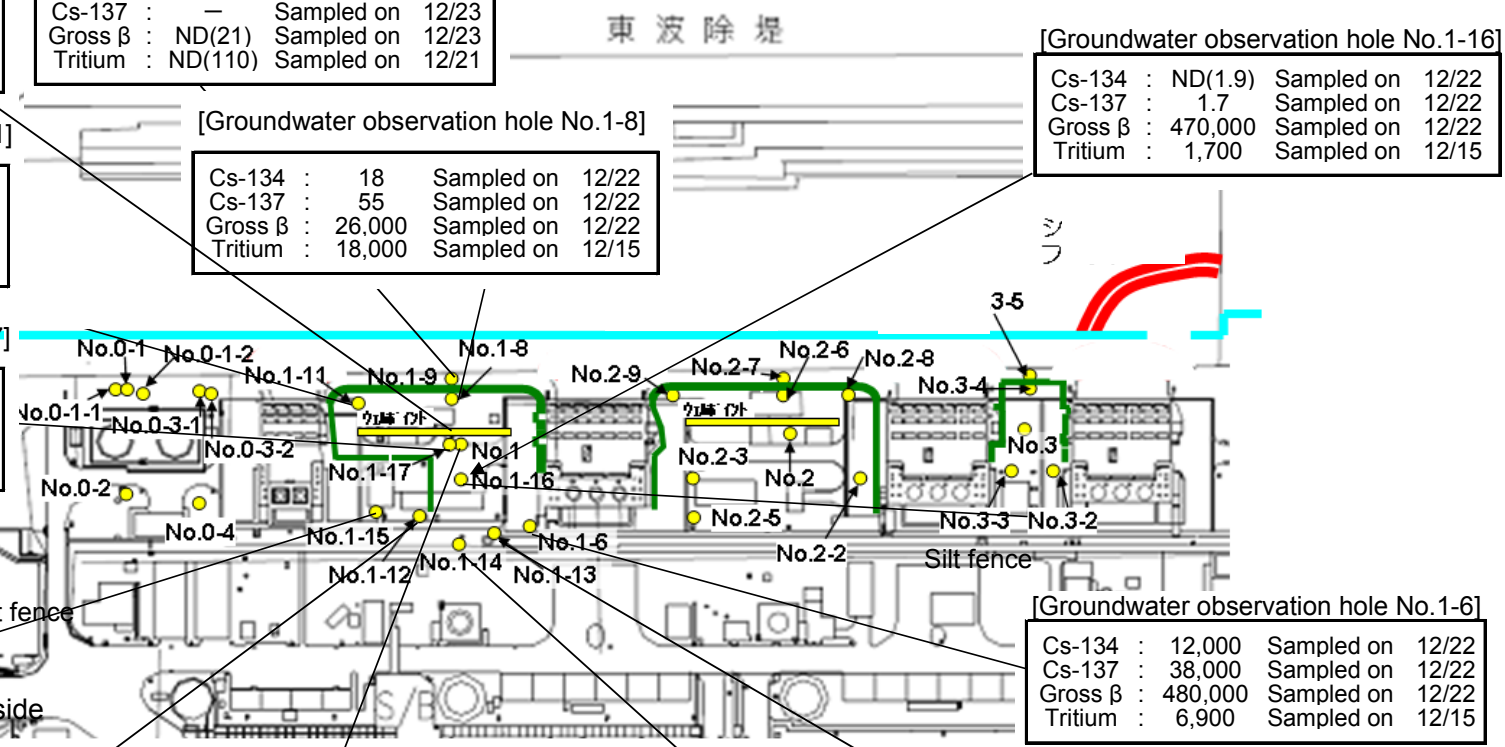
[Groundwater observation hole No.1-17]

Cs-134	: ND(0.40)	Sampled on	12/22
Cs-137	: ND(0.52)	Sampled on	12/22
Gross $\beta$	: 64,000	Sampled on	12/22
Tritium	: 32,000	Sampled on	12/15

[Groundwater observation hole No.1-15]

Cs-134	: ND(0.49)	Sampled on	7/10
Cs-137	: 0.88	Sampled on	7/10
Gross $\beta$	: 110	Sampled on	7/10
Tritium	: 5,400	Sampled on	7/10

— : Impermeable wall on the sea side



[Groundwater observation hole No.1-16]

Cs-134	: ND(1.9)	Sampled on	12/22
Cs-137	: 1.7	Sampled on	12/22
Gross $\beta$	: 470,000	Sampled on	12/22
Tritium	: 1,700	Sampled on	12/15

[Groundwater observation hole No.1-6]

Cs-134	: 12,000	Sampled on	12/22
Cs-137	: 38,000	Sampled on	12/22
Gross $\beta$	: 480,000	Sampled on	12/22
Tritium	: 6,900	Sampled on	12/15

[Groundwater observation hole No.1]

Cs-134	: ND(0.42)	Sampled on	12/22
Cs-137	: ND(0.53)	Sampled on	12/22
Gross $\beta$	: 75	Sampled on	12/22
Tritium	: 180,000	Sampled on	12/15

[Groundwater observation hole No.1-14]

Cs-134	: 91	Sampled on	12/22
Cs-137	: 320	Sampled on	12/22
Gross $\beta$	: 19,000	Sampled on	12/22
Tritium	: 13,000	Sampled on	12/15

As for No.1-14,  $\gamma$  was not measured on December 15 because the water was highly turbid. Gross  $\beta$  was measured after filtration as a reference.

[Groundwater observation hole No.1-12]

Cs-134	: 2.0	Sampled on	12/22
Cs-137	: 6.6	Sampled on	12/22
Gross $\beta$	: 160	Sampled on	12/22
Tritium	: 29,000	Sampled on	12/15

[Groundwater observation hole No.1-13]

Cs-134	: 37,000	Sampled on	2/13
Cs-137	: 93,000	Sampled on	2/13
Gross $\beta$	: 260,000	Sampled on	2/13
Tritium	: 16,000	Sampled on	2/13

## 4. Analysis Results of Groundwater Obtained around Fukushima Daiichi NPS (Unit 1-4 Bank Protection) (2/3)



Unit: Bq/L "ND"ns below indicate that the measurement results are below the detection limits, and the detection limit of each nuclide is provided in parentheses.

**[Groundwater observation hole No.0-1-2]**

Cs-134	: ND(0.41)	Sampled on	12/21
Cs-137	: ND(0.57)	Sampled on	12/21
Gross β	: ND(19)	Sampled on	12/21
Tritium	: 9,600	Sampled on	12/14

**[Groundwater observation hole No.0-3-1]**

Cs-134	: ND(0.37)	Sampled on	12/21
Cs-137	: ND(0.54)	Sampled on	12/21
Gross β	: ND(19)	Sampled on	12/21
Tritium	: ND(100)	Sampled on	12/14

**[Groundwater observation hole No.3-5]**

Cs-134	: —	Sampled on	12/24
Cs-137	: —	Sampled on	12/24
Gross β	: 44	Sampled on	12/24
Tritium	: ND(100)	Sampled on	12/17

**[Groundwater observation hole No.0-3-2]**

Cs-134	: ND(0.45)	Sampled on	12/22
Cs-137	: ND(0.52)	Sampled on	12/22
Gross β	: 53	Sampled on	12/22
Tritium	: 14,000	Sampled on	12/18

As for No. 3-5, γ was not measured because they are sampled by sampler. Gross β was measured after filtration as a reference.

**[Groundwater observation hole No.3-4]**

Cs-134	: 2.8	Sampled on	12/24
Cs-137	: 11	Sampled on	12/24
Gross β	: 29	Sampled on	12/24
Tritium	: ND(100)	Sampled on	12/17

**[Groundwater observation hole No.0-1-1]**

Cs-134	: ND(0.46)	Sampled on	12/7
Cs-137	: 0.58	Sampled on	12/7
Gross β	: 21	Sampled on	12/7
Tritium	: 18,000	Sampled on	12/7

As for No.0-1, γ was not measured on December 21 because the water was highly turbid. Gross β was measured after filtration as a reference.

**[Groundwater observation hole No.0-1]**

Cs-134	: —	Sampled on	12/21
Cs-137	: —	Sampled on	12/21
Gross β	: 190	Sampled on	12/21
Tritium	: 1,400	Sampled on	12/14

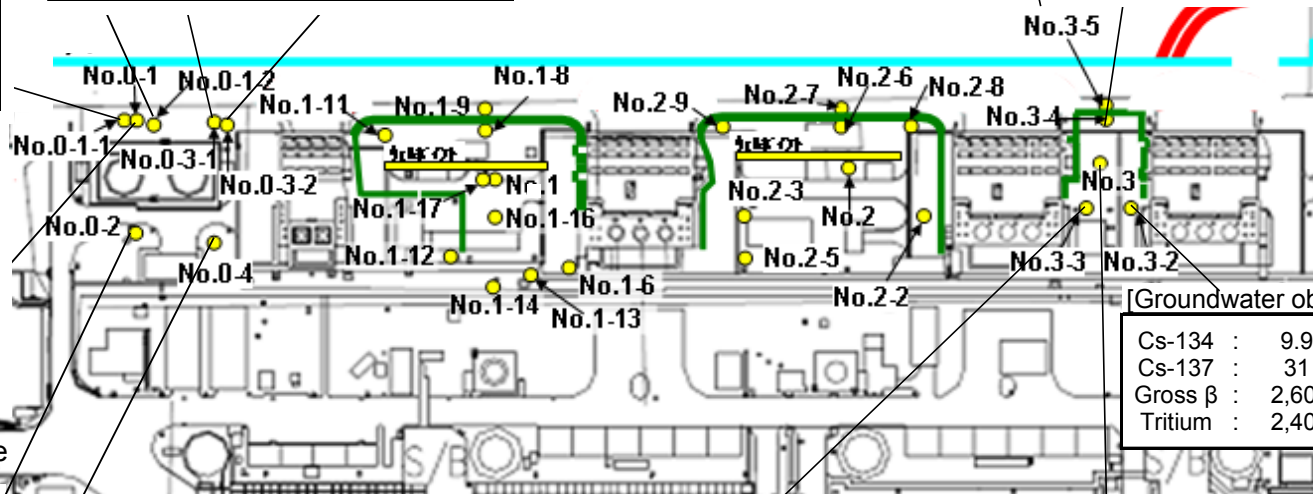
— : Impermeable wall on the sea side

**[Groundwater observation hole No.0-2]**

Cs-134	: ND(0.34)	Sampled on	12/21
Cs-137	: ND(0.42)	Sampled on	12/21
Gross β	: 19	Sampled on	12/21
Tritium	: 340	Sampled on	12/14

**[Groundwater observation hole No.0-4]**

Cs-134	: ND(0.36)	Sampled on	12/21
Cs-137	: ND(0.52)	Sampled on	12/21
Gross β	: ND(19)	Sampled on	12/21
Tritium	: 24,000	Sampled on	12/14



**[Groundwater observation hole No.3-2]**

Cs-134	: 9.9	Sampled on	12/24
Cs-137	: 31	Sampled on	12/24
Gross β	: 2,600	Sampled on	12/24
Tritium	: 2,400	Sampled on	12/17

**[Groundwater observation hole No.3-3]**

Cs-134	: 62	Sampled on	12/24
Cs-137	: 210	Sampled on	12/24
Gross β	: 3,100	Sampled on	12/24
Tritium	: 1,600	Sampled on	12/17

**[Groundwater observation hole No.3]**

Cs-134	: —	Sampled on	12/24
Cs-137	: —	Sampled on	12/24
Gross β	: ND(19)	Sampled on	12/24
Tritium	: ND(100)	Sampled on	12/17

As for No.3, γ was not measured on December 24 because the water was highly turbid. Gross β was measured after filtration as a reference.

# 4. Analysis Results of Groundwater Obtained around Fukushima Daiichi NPS (Unit 1-4 Bank Protection) (3/3)



Unit: Bq/L "ND"s below indicate that the measurement results are below the detection limits, and the detection limit of each nuclide is provided in parentheses.

**[Groundwater observation hole No.2-9]**

Cs-134	: ND(0.43)	Sampled on	11/12
Cs-137	: ND(0.51)	Sampled on	11/12
Gross β	: 3,700	Sampled on	11/12
Tritium	: 13,000	Sampled on	2/11

**[Groundwater pumped up from the well point between Unit 2 and 3]**

Cs-134	: ND(0.39)	Sampled on	12/24
Cs-137	: ND(0.52)	Sampled on	12/24
Gross β	: 41,000	Sampled on	12/24
Tritium	: 1,300	Sampled on	12/21

**[Groundwater observation hole No.2-6]**

Cs-134	: ND(0.36)	Sampled on	12/23
Cs-137	: ND(0.51)	Sampled on	12/23
Gross β	: 520	Sampled on	12/23
Tritium	: 810	Sampled on	12/16

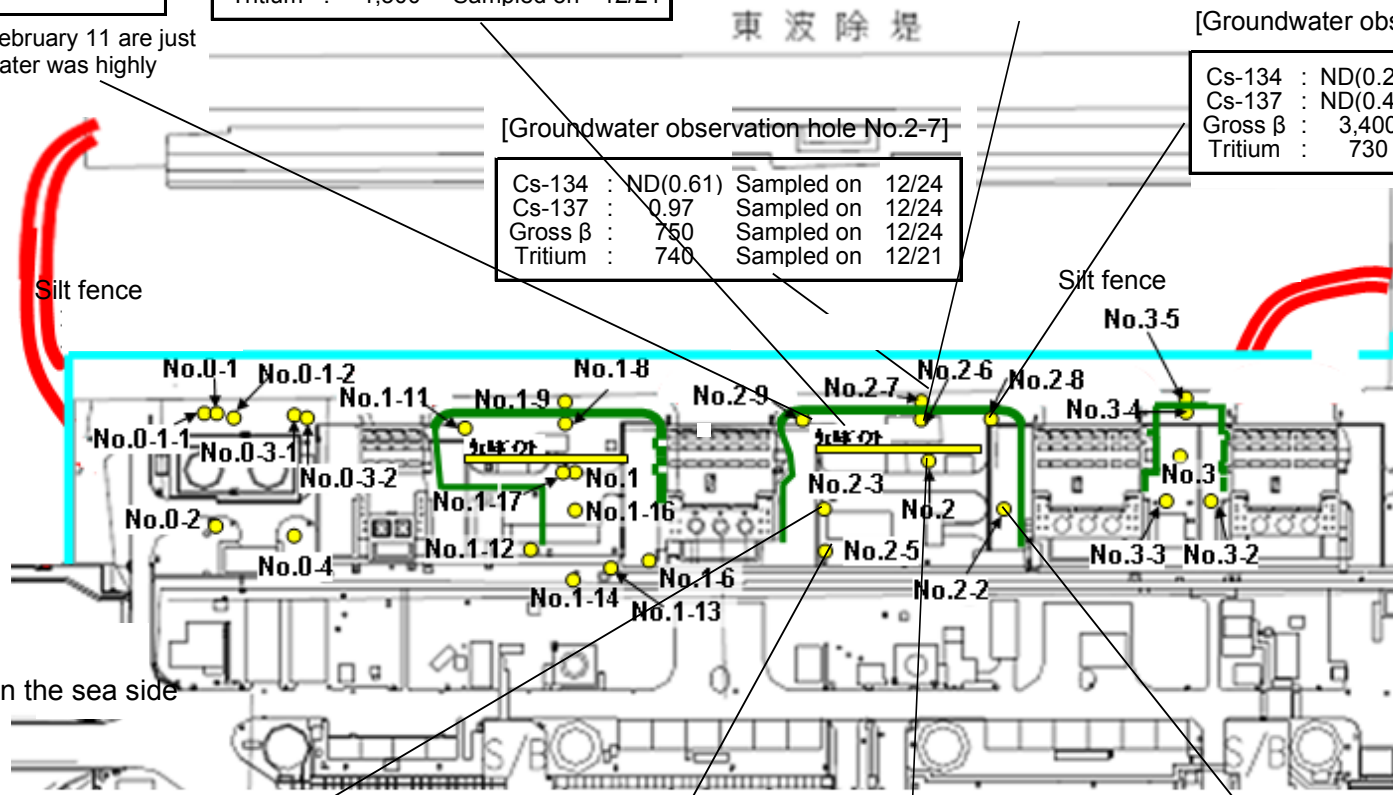
\* The results obtained on February 11 are just for a reference, since the water was highly turbid.

**[Groundwater observation hole No.2-8]**

Cs-134	: ND(0.29)	Sampled on	12/24
Cs-137	: ND(0.46)	Sampled on	12/24
Gross β	: 3,400	Sampled on	12/24
Tritium	: 730	Sampled on	12/21

**[Groundwater observation hole No.2-7]**

Cs-134	: ND(0.61)	Sampled on	12/24
Cs-137	: 0.97	Sampled on	12/24
Gross β	: 750	Sampled on	12/24
Tritium	: 740	Sampled on	12/21



Silt fence

Silt fence

— : Impermeable wall on the sea side

— : Improved ground (April 18,

As for No. 2-5, γ was not measured because they are sampled by sampler. Gross β was measured after filtration as a reference.

**[Groundwater observation hole No.2-2]**

Cs-134	: 2.7	Sampled on	12/24
Cs-137	: 13	Sampled on	12/24
Gross β	: 360	Sampled on	12/24
Tritium	: 330	Sampled on	12/21

**[Groundwater observation hole No.2-3]**

Cs-134	: ND(0.59)	Sampled on	12/24
Cs-137	: ND(0.40)	Sampled on	12/24
Gross β	: 350	Sampled on	12/24
Tritium	: 940	Sampled on	12/21

**[Groundwater observation hole No.2-5]**

Cs-134	: —	Sampled on	12/3
Cs-137	: —	Sampled on	12/3
Gross β	: 4,000	Sampled on	12/3
Tritium	: 600	Sampled on	12/3

**[Groundwater observation hole No.2]**

Cs-134	: ND(0.59)	Sampled on	12/24
Cs-137	: ND(0.48)	Sampled on	12/24
Gross β	: 110	Sampled on	12/24
Tritium	: 560	Sampled on	12/21