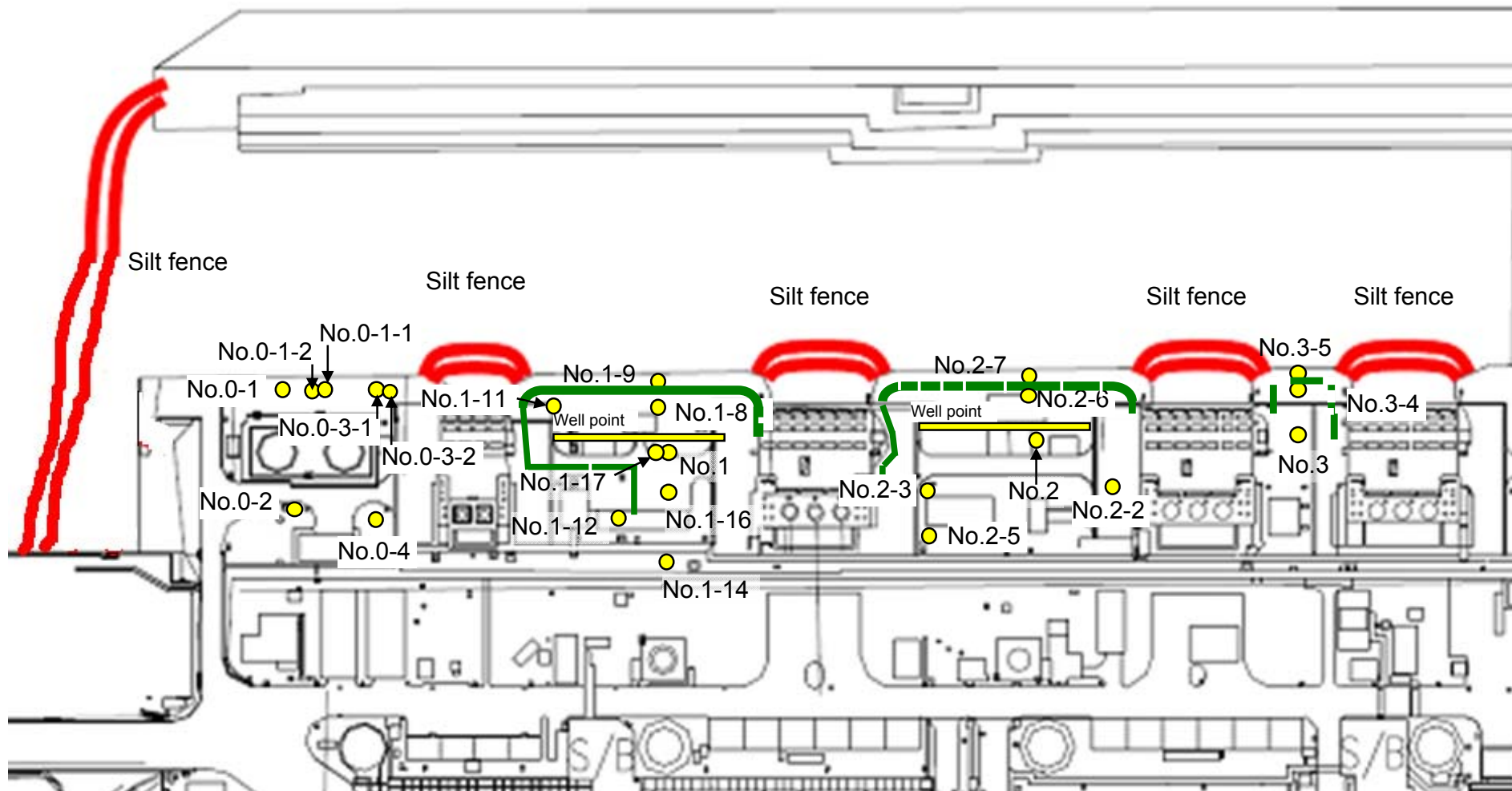


### Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)

● Sampling locations of underground water obtained at bank

East seawall break



— : Location where ground improvement construction was completed, or being implemented (as of December 27)

## Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (1/2) Underground Water Obtained at Bank Protection

Unit: Bq/L (exclude chloride)

	Underground water observation hole No.0-1	Underground water observation hole No.0-1-1	Underground water observation hole No.0-1-2	Underground water observation hole No.0-2	Underground water observation hole No.0-3-1	Underground water observation hole No.0-3-2	Underground water observation hole No.0-4	Underground water observation hole No.1	Underground water observation hole No.1-8	Underground water observation hole No.1-9	Underground water observation hole No.1-11	Underground water observation hole No.1-12	Underground water observation hole No.1-14	Underground water observation hole No.1-16
Date of sampling														
Time of sampling														
Chloride (unit: ppm)														
Cs-134 (Approx. 2 years)														
Cs-137 (Approx.30 years)														
The other γ														
Gross β														
H-3 (Approx. 12 years)														
Sr-90 (Approx. 29 years)														

	Underground water observation hole No.1-17	Groundwater pumped up from the well point (between Unit 1 and 2)	Underground water observation hole No.2	Underground water observation hole No.2-2	Underground water observation hole No.2-3	Underground water observation hole No.2-5	Underground water observation hole No.2-6	Underground water observation hole No.2-7	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3	Underground water observation hole No.3-4	Underground water observation hole No.3-5
Date of sampling			Dec 29, 2013	Dec 29, 2013	Dec 29, 2013			Dec 29, 2013	Dec 29, 2013			
Time of sampling			9:39 AM	11:31 AM	10:40 AM			10:06 AM	10:00 AM			
Chloride (unit: ppm)			-	-	-			675	-			
Cs-134 (Approx. 2 years)			ND(0.39)	9.3	ND(0.46)			0.45	0.69			
Cs-137 (Approx.30 years)			ND(0.48)	21	ND(0.56)			0.99	1.2			
The other γ												
Gross β			390	530	1,100			29	150,000			
H-3 (Approx. 12 years)			660	580	1,300			940	4,900			
Sr-90 (Approx. 29 years)			-	-	-			-	-			

\* Data announced this time is provided in a thick-frame. The other data was announced on December 30.

\* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

\* "-" indicates that the measurement was out of range.

## Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (2/2)

### Underground Water Obtained at Bank Protection

Unit: Bq/L (exclude chloride)

	Underground water observation hole No.0-1	Underground water observation hole No.0-1-1	Underground water observation hole No.0-1-2	Underground water observation hole No.0-2	Underground water observation hole No.0-3-1	Underground water observation hole No.0-3-2	Underground water observation hole No.0-4	Underground water observation hole No.1	Underground water observation hole No.1-8	Underground water observation hole No.1-9	Underground water observation hole No.1-11	Underground water observation hole No.1-12	Underground water observation hole No.1-14	Underground water observation hole No.1-16
Date of sampling														
Time of sampling														
Chloride (unit: ppm)														
Cs-134 (Approx. 2 years)														
Cs-137 (Approx.30 years)														
The other γ														
Gross β														
H-3 (Approx. 12 years)														
Sr-90 (Approx. 29 years)														

	Underground water observation hole No.1-17	Groundwater pumped up from the well point (between Unit 1 and 2)	Underground water observation hole No.2	Underground water observation hole No.2-2	Underground water observation hole No.2-3	Underground water observation hole No.2-5	Underground water observation hole No.2-6	Underground water observation hole No.2-7	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3	Underground water observation hole No.3-4	Underground water observation hole No.3-5 <sup>*1</sup>
Date of sampling			Jan 1, 2014	Jan 1, 2014	Jan 1, 2014			Jan 1, 2014	Jan 1, 2014	Jan 1, 2014	Jan 1, 2014	Jan 1, 2014
Time of sampling			9:28 AM	11:26 AM	10:34 AM			9:58 AM	10:00 AM	9:35 AM	11:58 AM	9:27 AM
Chloride (unit: ppm)			-	-	-			760	-	-	-	110
Cs-134 (Approx. 2 years)			ND(0.46)	11	ND(0.37)			0.57	ND(0.61)	1.4	1.2	-
Cs-137 (Approx.30 years)			ND(0.55)	28	ND(0.53)			1.3	1.3	3.1	3.6	-
The other γ			ND	ND	ND			ND	ND	1.6	ND	-
Gross β			400	510	1,100			39	150,000	ND(19)	ND(19)	ND(19)
H-3 (Approx. 12 years)			Under analysis	Under analysis	Under analysis			Under analysis	Under analysis	Under analysis	Under analysis	Under analysis
Sr-90 (Approx. 29 years)			-	-	-			-	-	-	-	-

\* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

\* "-" indicates that the measurement was out of range.

\*1 The results obtained in the observation hole No3-5 are just for reference, since the water was highly turbid.

\*2 The results of "the other γ" obtained on January 1 have been added in the chart on January 6, 2014.

<Reference> The Highest Dose Until the Previous Measurement (Groundwater Obtained at Bank Protection)

Unit: Bq/L

	Groundwater observation hole No.0-1	Groundwater observation hole No.0-1-1	Groundwater observation hole No.0-1-2	Groundwater observation hole No.0-2	Groundwater observation hole No.0-3-1	Groundwater observation hole No.0-3-2	Groundwater observation hole No.0-4	Groundwater observation hole No.1	Groundwater observation hole No.1-1*	Groundwater observation hole No.1-2*	Groundwater observation hole No.1-3*	Groundwater observation hole No.1-4*	Groundwater observation hole No.1-5*
Cs-134 (Approx. 2 years)	7.6 [12/15]	ND	ND	0.61 [10/13]	0.44 [11/24]	0.41 [12/26]	ND	13 [8/29]	1.9 [7/8]	11,000 [7/9]	10 [9/2]	1.5 [7/8]	310 [8/5]
Cs-137 (Approx.30 years)	17 [12/15] [12/29]	0.58 [12/7]	0.51 [11/17]	1.6 [10/13]	0.86 [11/20]	0.91 [12/26]	0.49 [12/1]	31 [8/29]	3.6 [7/8]	22,000 [7/9]	24 [9/2]	3.6 [7/8]	650 [8/5]
The other y	Ru-106 (Approx. 370 days)	ND	ND	ND	ND	ND	ND	26 [5/24]	7.9 [7/8]	160 [8/15]	17 [7/22] [8/8]	3.1 [8/8]	ND
	Mn-54 (Approx. 310 days)	ND	ND	ND	ND	ND	ND	ND	1.0 [7/5]	62 [7/5]	ND	ND	ND
	Co-60 (Approx. 5 years)	ND	ND	ND	ND	ND	ND	0.50 [7/19]	ND	3.1 [7/8]	ND	ND	ND
	Sb-125 (Approx. 3 years)	ND	ND	ND	ND	ND	ND	1.7 [7/11]	ND	250 [7/15]	1.4 [7/12] [8/26]	ND	12 [8/8]
Gross β	300 [8/22]	21 [12/7]	21 [11/10]	87 [10/13]	ND	67 <sup>2</sup> [12/11]	29 [12/29]	1,900 [5/24]	4,400 [7/8]	900,000 [7/5] [7/9]	160,000 [8/12] [8/15]	380 [8/19]	56,000 [8/5]
H-3 (Approx. 12 years)	45,000 [8/29]	18,000 [12/7]	74,000 [12/15]	3,100 [12/22]	ND	69,000 [12/17] <sup>*2</sup> [12/19] <sup>*1</sup> [12/26]	20,000 [12/1] [12/8] [12/15]	500,000 [5/24] [6/7]	630,000 [7/8]	430,000 [9/16]	290,000 [7/12]	98,000 [7/11]	72,000 [8/15]
Sr-90(Approx. 29 years)	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	1,200 [6/7]	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis

Unit: Bq/L

	Groundwater observation hole No.1-8	Groundwater observation hole No.1-9	Groundwater observation hole No.1-11	Groundwater observation hole No.1-12	Groundwater observation hole No.1-14	Groundwater observation hole No.1-16	Groundwater observation hole No.1-17	Groundwater pumped up from the well point (between Unit 1 and 2)
Cs-134 (Approx. 2 years)	47 [11/25]	170 [9/3]	0.94 [10/31]	74 [10/21]	1.2 [11/14]	3.1 <sup>2</sup> [12/13]	<u>1.2</u> [12/5]	110 [9/23]
Cs-137 (Approx.30 years)	110 [11/25]	380 [9/3]	2.2 [12/2]	170 [10/21]	2.3 [11/21]	3.4 [10/10]	0.66 [12/12]	250 [9/23]
The other y	Ru-106 (Approx. 370 days)	ND	ND	ND	5.4 [10/28]	ND	9.2 [10/28]	4.1 [12/12]
	Mn-54 (Approx. 310 days)	9.7 [12/16]	ND	ND	ND	ND	ND	0.83 [12/30]
	Co-60 (Approx. 5 years)	0.63 [12/23]	ND	ND	0.51 [10/24]	ND	0.9 [11/7]	0.61 [11/25]
	Sb-125 (Approx. 3 years)	ND	ND	ND	61 [10/21]	ND	11 [12/5]	2.1 [11/25]
Gross β	31,000 [12/16]	2,100 [11/17]	2,300 [12/26]	730 [10/21]	290 [12/30]	2,100,000 [12/26] [12/30]	130 [12/2] [12/23]	700,000 [9/23]
H-3 (Approx. 12 years)	11,000 [12/23]	860 [11/14]	85,000 [9/13]	440,000 [10/31]	11,000 [11/25]	43,000 [9/26]	21,000 [12/26]	460,000 [8/19]
Sr-90(Approx. 29 years)	Under analysis	Under analysis	Under analysis	Under analysis [10/21]	Under analysis	Under analysis	Under analysis	-

Unit: Bq/L

	Groundwater observation hole No.2	Groundwater observation hole No.2-1*	Groundwater observation hole No.2-2	Groundwater observation hole No.2-3	Groundwater observation hole No.2-5 <sup>1</sup>	Groundwater observation hole No.2-6	Groundwater observation hole No.2-7	Groundwater pumped up from the well point (between Unit 2 and 3)	Groundwater observation hole No.3	Groundwater observation hole No.3-1*	Groundwater observation hole No.3-4	Groundwater observation hole No.3-5
Cs-134 (Approx. 2 years)	0.50 [7/9]	0.66 [9/1]	11 [12/25]	ND	5.2 [12/4]	0.56 [10/30]	1.3 [11/21]	1.1 [12/12]	3.5 [7/25]	1.2 [7/25] [8/8]	1.8 [10/30]	29 [12/18]
Cs-137 (Approx.30 years)	1.2 [7/11] [8/1]	1.1 [8/29] [9/1]	26 [12/25]	1.2 [12/25]	12 [12/4]	0.61 [10/13]	3.1 [11/21]	<u>2.4</u> [12/7]	5.9 [8/8]	2.6 [8/1]	<u>4.3</u> [11/27]	74 [12/18]
The other y	Ru-106 (Approx. 370 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	Mn-54 (Approx. 310 days)	ND	ND	ND	0.29 [12/6]	0.87 [12/4]	ND	ND	ND	ND	0.54 [10/30]	-
	Co-60 (Approx. 5 years)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	Sb-125 (Approx. 3 years)	ND	ND	ND	ND	26 [9/29]	ND	ND	ND	1.5 [12/25]	ND	-
Gross β	1,700 [7/8]	380 [7/29]	530 [12/29]	1,500 [12/6]	46,000 [9/29]	3,200 [12/5]	270 [12/20]	240,000 [12/12]	1,400 [7/11]	180 [8/1]	ND	43 [12/18]
H-3 (Approx. 12 years)	870 [12/8]	440 [8/26]	560 [12/25]	1,700 [12/6]	6,300 [12/4]	1,200 [11/24] [11/27]	1,000 [11/21] [12/4]	5,100 [12/6]	3,200 [2012/12/12]	460 [8/1]	170 [9/18]	160 [12/18]
Sr-90(Approx. 29 years)	54 [5/31]	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	-	8.3 [2012/12/12]	Under analysis	Under analysis	-

\*1 The analysis result of No.2-5 obtained on September 29 is the reference value, since we could not sample groundwater by a regular procedure

\*2 Analysis result of pumped water.

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

\* Date of sampling is provided in parentheses.

\* "\*" is provided next to the name of the holes where the sampling could not be performed due to the chemical injection of ground improvement.

The underlined part was corrected on January 10, 2014.