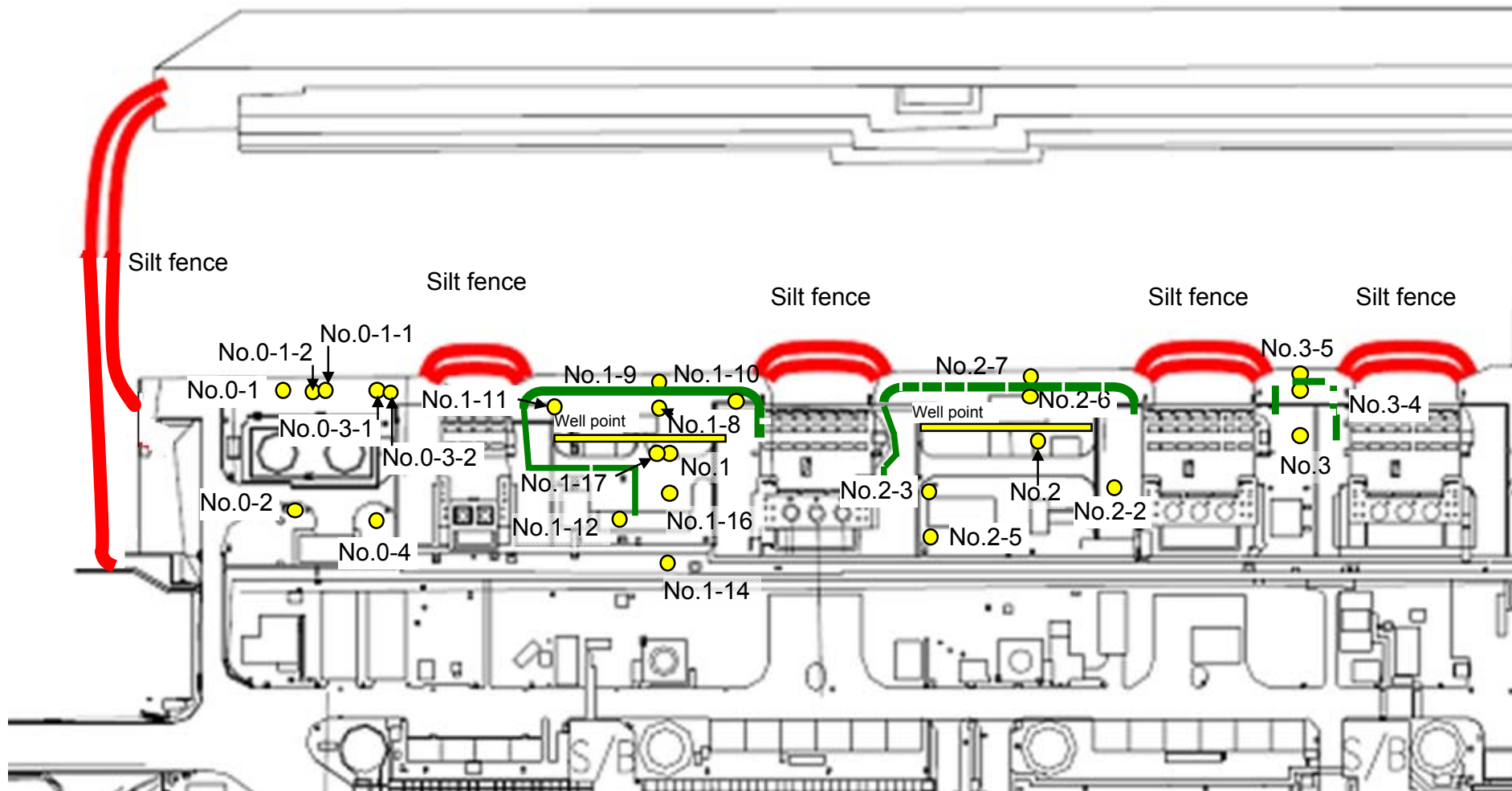


# Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)

● 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 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.1-16 (P)	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	Jan 29, 2014												
Time of sampling	9:30 AM												
Chloride (unit: ppm)	-												
Cs-134 (Approx. 2 years)	ND(0.42)												
Cs-137 (Approx.30 years)	ND(0.52)												
The other γ													
Gross β	ND(18)												
H-3 (Approx. 12 years)	Under analysis												
Sr-90 (Approx. 29 years)	Under analysis												

\* "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.

<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]	0.82 <1/14>	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)	19*3 <1/26>	0.58 [12/7]	0.51 [11/17]	2.2 <1/12>	0.86 [11/20]	2.1 <1/14>	1.4 <1/12>	31 [8/29]	3.6 [7/8]	22,000 [7/9]	24 [9/2]	3.6 [7/8]	650 [8/5]
The other γ	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	0.56 <1/27>	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*2 [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] <1/19>	5,600 <1/19>	ND	73,000 <1/14> <1/16> <1/23>	46,000 <1/12> <1/19>	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	0.73 [9/2]	Under analysis	Under analysis	Under analysis	1,300 [8/22]	Under analysis	Under analysis	Under analysis	Under analysis	5,100 [8/22]

Unit: Bq/L

	Groundwater observation hole No.1-8	Groundwater observation hole No.1-9	Groundwater observation hole No.1-10	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]	-	1.1 <1/13>	74 [10/21]	1.2 [11/14]	3.1*2 [12/13]	1.2 [12/5]	110 [9/23]	
Cs-137 (Approx.30 years)	110 [11/25]	380 [9/3]	-	2.8 <1/13>	170 [10/21]	2.3 [11/21]	3.4 [10/10]	0.66 [12/12]	250 [9/23]	
The other γ	Ru-106 (Approx. 370 days)	ND	ND	-	5.4 [10/28]	ND	9.2 [10/28]	4.1 [12/12]	25 [9/2]	
	Mn-54 (Approx. 310 days)	9.7 [12/16]	ND	-	ND	ND	ND	ND	0.92 <1/27>	
	Co-60 (Approx. 5 years)	0.78 <1/27>	ND	-	ND	0.51 [10/24]	ND	0.9 [11/7]	0.61 [11/25]	ND
	Sb-125 (Approx. 3 years)	ND	ND	-	ND	61 [10/21]	ND	11 [12/5]	2.1 [11/25]	ND
Gross β	39,000 <1/6>	2,100 [11/17]	78*4 <1/27>	2,300 [12/26]	730 [10/21]	410 <1/16>	3,100,000 <1/20>	130 [12/2] [12/23]	700,000 [9/23]	
H-3 (Approx. 12 years)	12,000 <1/6>	860 [11/14]	270,000*4 <1/27>	85,000 [9/13]	440,000 [10/31]	14,000 <1/23>	43,000 [9/26]	32,000 <1/20>	460,000 [8/19]	
Sr-90(Approx. 29 years)	1,300 [9/16]	170 [9/3]	Under analysis	17 [9/13]	Under analysis	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	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]	13 <1/15>	0.84 <1/5>	13 <1/8>	0.56 [10/30]	1.5 <1/12>	1.1 [12/12]	3.5 [7/25]	1.2 [7/25] [8/8]	1.9 <1/8>	64 <1/15>
Cs-137 (Approx.30 years)	1.2 [7/11] [8/1]	1.1 [8/29] [9/1]	31 <1/15>	2.6 <1/5>	30 <1/8>	0.61 [10/13]	3.6 <1/12>	2.4 [12/7]	5.9 [8/8]	2.6 [8/1]	4.3 [11/27]	170 <1/15>
The other γ	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]	0.94 <1/8>	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*1 [9/29]	ND	ND	ND	1.6 <1/1>	ND	ND
Gross β	1,700 [7/8]	380 [7/29]	530 [12/29]	1,500 [12/6]	46,000*1 [9/29]	3,200 [12/5]	270 [12/20]	240,000 [12/12]	1,400 [7/11]	180 [8/1]	ND	68 <1/22>
H-3 (Approx. 12 years)	870 [12/8]	440 [8/26]	660 <1/8>	1,700 [12/6]	6,300 [12/4]	1,200 [11/24] [11/27]	1,100 <1/17>	5,100 [12/6]	3,200 [2012/12/12]	460 [8/1]	170 [9/18]	170 <1/8>
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	ND	-

● Since some samples are still under analysis, the highest dose of the Strontium-90 is among those previously announced

\*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.

\*3 The results obtained on in the observation hole No.0-1 are for a reference, since the water was highly turbid. (γ and Gross β were measured after filtration.)

\*4 The results obtained on in the observation hole No.1-10 are for a reference, since the water was highly turbid. (γ and Gross β were measured after filtration. If filtration takes a long time, γ will not be analyzed.

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

\* Date of sampling is provided in parentheses. ( ) : 2013, < > : 2014

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