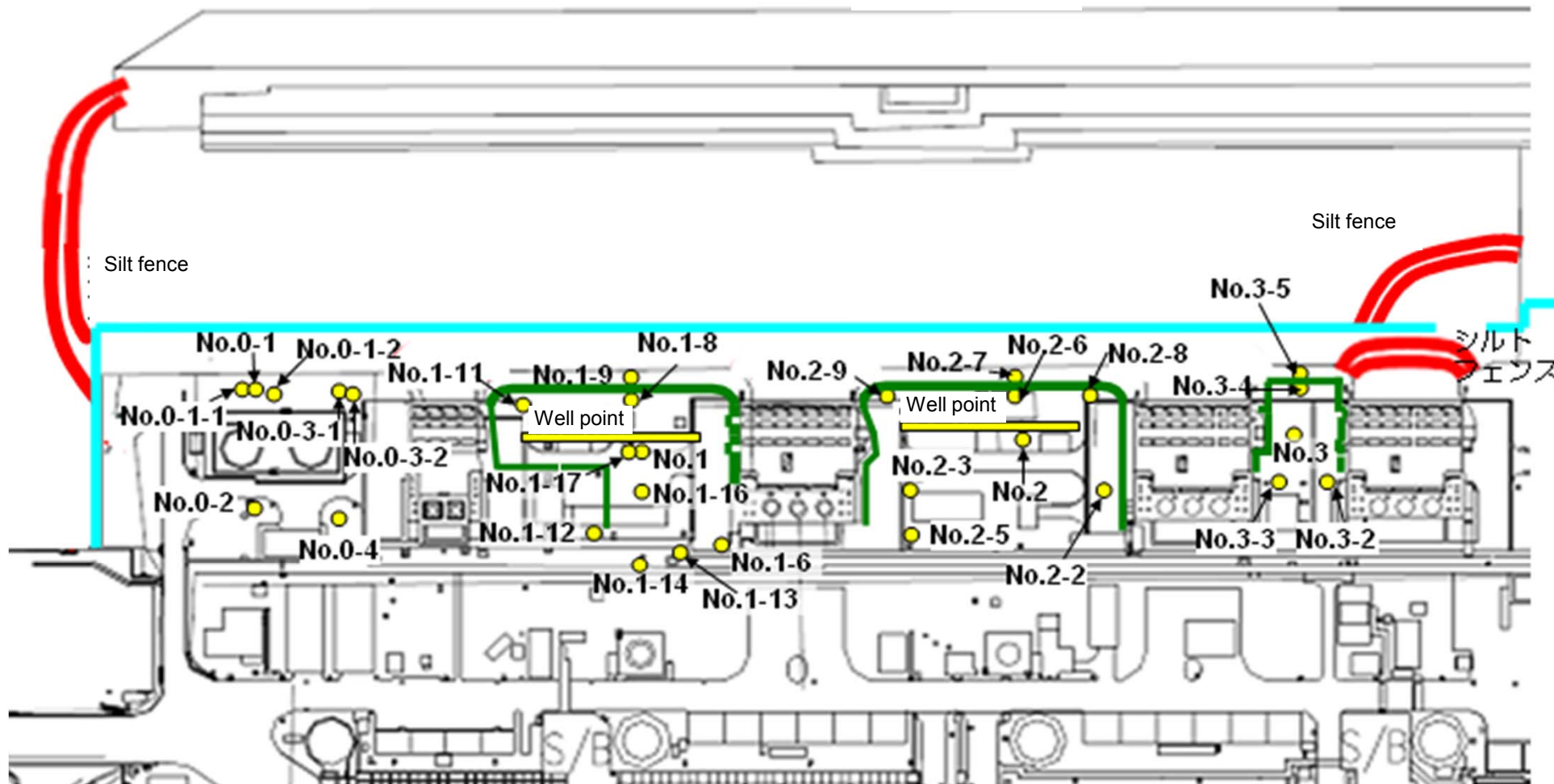


Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)

● Sampling locations of underground water obtained at bank protection

East seawall break



— Seaside impermeable

— : Location where ground improvement construction was completed, or being implemented (as of April 18, 2014)

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.0-1-2	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.1-6	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	Underground water observation hole No.1-17
Date of sampling															
Time of sampling															
Chloride (unit: ppm)															
Cs-134 (Approx. 2 years)															
Cs-137 (Approx.30 years)															
The other y															
Gross β															
H-3 (Approx. 12 years)															
Sr-90 (Approx. 29 years)															

	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	Underground water observation hole No.2-8	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3	Underground water observation hole No.3-2	Underground water observation hole No.3-3	Underground water observation hole No.3-4	Underground water observation hole No.3-5
Date of sampling		May 18, 2014	May 18, 2014	May 18, 2014			May 18, 2014	May 18, 2014	May 18, 2014					
Time of sampling		10:18 AM	11:47 AM	9:53 AM			10:40 AM	10:57 AM	10:00 AM					
Chloride (unit: ppm)		-	-	-			820	-	-					
Cs-134 (Approx. 2 years)		ND(0.41)	11	ND(0.44)			0.52	ND(0.48)	ND(0.59)					
Cs-137 (Approx.30 years)		ND(0.55)	28	0.71			1.0	ND(0.58)	0.89					
The other y														
Gross β		290	520	890			1,000	3,800	110,000					
H-3 (Approx. 12 years)		740	400	900			810	1,300	5700 ^{*1}					
Sr-90 (Approx. 29 years)		-	-	-			-	-	-					

* Data announced this time is provided in a thick-frame. The other data was announced on May 19.

** "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 highest measurement value (compared to the previous values provided in the handouts published in 'Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection')

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.0-1-2	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.1-6	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	Underground water observation hole No.1-17
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)															

	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	Underground water observation hole No.2-8	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3	Underground water observation hole No.3-2	Underground water observation hole No.3-3	Underground water observation hole No.3-4	Underground water observation hole No.3-5
Date of sampling		May 21, 2014	May 21, 2014	May 21, 2014			May 21, 2014	May 21, 2014	May 21, 2014	May 21, 2014	May 21, 2014	May 21, 2014	May 21, 2014	May 21, 2014
Time of sampling		11:25 AM	12:53 PM	10:55 AM			11:48 AM	12:08 PM	10:00 AM	10:35 AM	11:40 AM	12:03 PM	11:05 AM	10:50 AM
Chloride (unit: ppm)		-	-	-			1,000	-	-	-	-	-	-	2200
Cs-134 (Approx. 2 years)		ND(0.45)	10	ND(0.48)			ND(0.40)	ND(0.45)	0.99	0.53	10	73 ^{*1}	2.8	20
Cs-137 (Approx.30 years)		ND(0.57)	29	1.1			1.6	ND(0.54)	2.3	1.9	26	200 ^{*1}	7.4	58
The other γ														
Gross β		280	520	900			1,000	3,800	96,000	ND(18)	2,700 ^{*1}	3,600	ND(18)	130
H-3 (Approx. 12 years)		Under analysis	Under analysis	Under analysis			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.

* The results obtained on in the observation hole No.2-2 are for a reference, since the water was highly turbid. (γ and Gross β will be measured after filtration. If filtration takes a long time, γ will not be measured.)

*1 The highest measurement value (compared to the previous values provided in the handouts published in 'Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection')

<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 [*]	Groundwater observation hole No.1-6
Cs-134 (Approx. 2 years)	23 <5/4>	0.61 <3/2>	ND	0.61 [10/13]	0.64 <4/6>	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]	6,300 <3/31>
Cs-137 (Approx.30 years)	61 <5/4>	1.5 <3/2>	0.51 [11/17]	2.2 <1/12>	1.1 <4/6>	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]	16,000 <3/31>
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	ND
	Mn-54 (Approx. 310 days)	ND	ND	ND	ND	ND	0.64 <2/20>	ND	ND	1.0 [7/5]	62 [7/5]	ND	ND	320 <2/13> <2/17>
	Co-60 (Approx. 5 years)	ND	ND	ND	ND	ND	ND	0.50 [7/19]	ND	3.1 [7/8]	ND	ND	ND	830 <2/20>
	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]	ND
Gross β	300 [8/22]	21 [12/7]	21 [11/10]	87 [10/13]	ND	67 ^{*1} [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]	860,000 <5/8>
H-3 (Approx. 12 years)	45,000 [8/29]	18,000 [12/7]	74,000 [12/15] <1/19>	6,800 <2/16>	ND	76,000 <2/6>	56,000 <2/23>	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]	110,000 <2/6>
Sr-90(Approx. 29 years)	140 [8/8]	Under analysis	Under analysis	0.73 [9/2]	Under analysis	Under analysis	Under analysis	1,300 [8/22]	2,300 [6/28]	5,000,000 [7/5]	130,000 [8/8]	200 [7/8]	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.1-13	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)	Groundwater observation hole No.2	Groundwater observation hole No.2-1 [*]	Groundwater observation hole No.2-2	Groundwater observation hole No.2-3
Cs-134 (Approx. 2 years)	47 [11/25]	170 [9/3]	-	1.1 <1/13>	74 [10/21]	37,000 <2/13>	88 ^{**} <2/27>	3.1 ^{*1} [12/13]	1.2 [12/5]	110 [9/23]	0.88 <2/26>	0.66 [9/1]	15 <2/12>	2.2 <2/26>
Cs-137 (Approx.30 years)	110 [11/25]	380 [9/3]	-	3.4 <4/28>	170 [10/21]	93,000 <2/13>	230 ^{**} <2/27>	4.7 <2/17>	2.8 <4/28>	250 [9/23]	2.5 <2/26>	1.1 [8/29] [9/1]	38 <2/12>	5.5 <2/26>
The other γ	Ru-106 (Approx. 370 days)	ND	ND	-	5.4 [10/28]	ND	ND	9.2 [10/28]	5.5 <4/21>	25 [9/2]	ND	ND	ND	ND
	Mn-54 (Approx. 310 days)	12 <2/3>	ND	-	ND	ND	ND	ND	ND	8.5 <4/28>	ND	ND	ND	0.29 [12/6]
	Co-60 (Approx. 5 years)	1.3 <2/3>	ND	-	ND	0.51 [10/24]	ND	0.9 [11/7]	0.61 [11/25]	ND	ND	ND	ND	ND
	Sb-125 (Approx. 3 years)	ND	ND	-	ND	61 [10/21]	ND	ND	16 <5/15>	2.1 [11/25]	ND	ND	ND	ND
Gross β	59,000 <2/3>	2,100 ^{*2} [11/17]	78 ^{*2} <1/27>	2,300 [12/26]	1,100 <5/5>	260,000 <2/12> <2/13>	3,900 <5/19>	3,100,000 <1/20> <1/30> <2/3>	8,700 <4/28>	700,000 [9/23]	1,700 [7/8]	380 [7/29]	600 <4/16>	1,500 [12/6]
H-3 (Approx. 12 years)	19,000 <5/12>	860 ^{*2} [11/14]	270,000 ^{*2} <1/27>	85,000 [9/13]	440,000 [10/31]	88,000 <2/12>	23,000 <2/13>	43,000 [9/26]	32,000 <1/20>	460,000 [8/19]	1,000 <2/23>	440 [8/26]	660 <1/8>	1,700 [12/6]
Sr-90(Approx. 29 years)	1,300 [9/16]	170 [9/3]	-	17 [9/13]	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	-	54 [5/31]	5.9 [7/25]	Under analysis	Under analysis

Unit: Bq/L

	Groundwater observation hole No.2-5	Groundwater observation hole No.2-6	Groundwater observation hole No.2-7	Groundwater observation hole No.2-8	Groundwater observation hole No.2-9	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.3-2	Groundwater observation hole No.3-3	Groundwater observation hole No.3-4	Groundwater observation hole No.3-5
Cs-134 (Approx. 2 years)	41 <5/7>	17 <3/11>	3.5 <2/23>	0.47 <4/9>	-	2.0 <4/23>	3.5 [7/25]	1.2 [7/25] [8/8]	11 <5/14>	53 <5/14>	3.3 <5/14>	64 <1/15>
Cs-137 (Approx.30 years)	110 <5/7>	50 <3/11>	9.0 <2/23>	1.3 <4/9>	0.58 ^{*2} <2/11>	4.7 <4/23>	5.9 [8/8]	2.6 [8/1]	29 <5/14>	140 <4/30> <5/14>	9.4 <5/14>	170 <1/15>
The other γ	Ru-106 (Approx. 370 days)	ND	ND	ND	6.5 ^{*2} <2/11>	ND	ND	ND	ND	ND	ND	-
	Mn-54 (Approx. 310 days)	0.94 <1/8>	ND	ND	ND	ND	ND	ND	ND	ND	0.54 [10/30]	-
	Co-60 (Approx. 5 years)	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-
	Sb-125 (Approx. 3 years)	74 <5/7>	ND	ND	ND	-	ND	1.6 <1/1>	ND	ND	ND	-
Gross β	150,000 <2/12>	3,200 [12/5]	1,000 <5/14>	4,200 <4/9> <4/27>	1,700 ^{*2} <2/7>	240,000 [12/12]	1,400 [7/11]	180 [8/1]	2,600 ^{*2} <5/14>	4,900 <4/30>	28 <4/30>	300 <4/2>
H-3 (Approx. 12 years)	7,900 <4/9>	1,200 [11/24] [11/27]	1,100 <1/19>	1,700 <4/6>	13,000 ^{*2} <2/7>	5,600 <5/14>	3,200 [2012/12] [12]	460 [8/1]	2,800 <5/14>	8,000 <5/7>	170 [9/18]	170 <1/8>
Sr-90(Approx. 29 years)	Under analysis	Under analysis	Under analysis	-	-	-	8.3 [2012/12] [12]	4.4 [7/23]	Under analysis	-	ND	-

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

*1 Analysis result of pumped water.

*2 The results are for a reference, since the water was highly turbid. (γ and Gross β were measured after filtration.)

* "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.