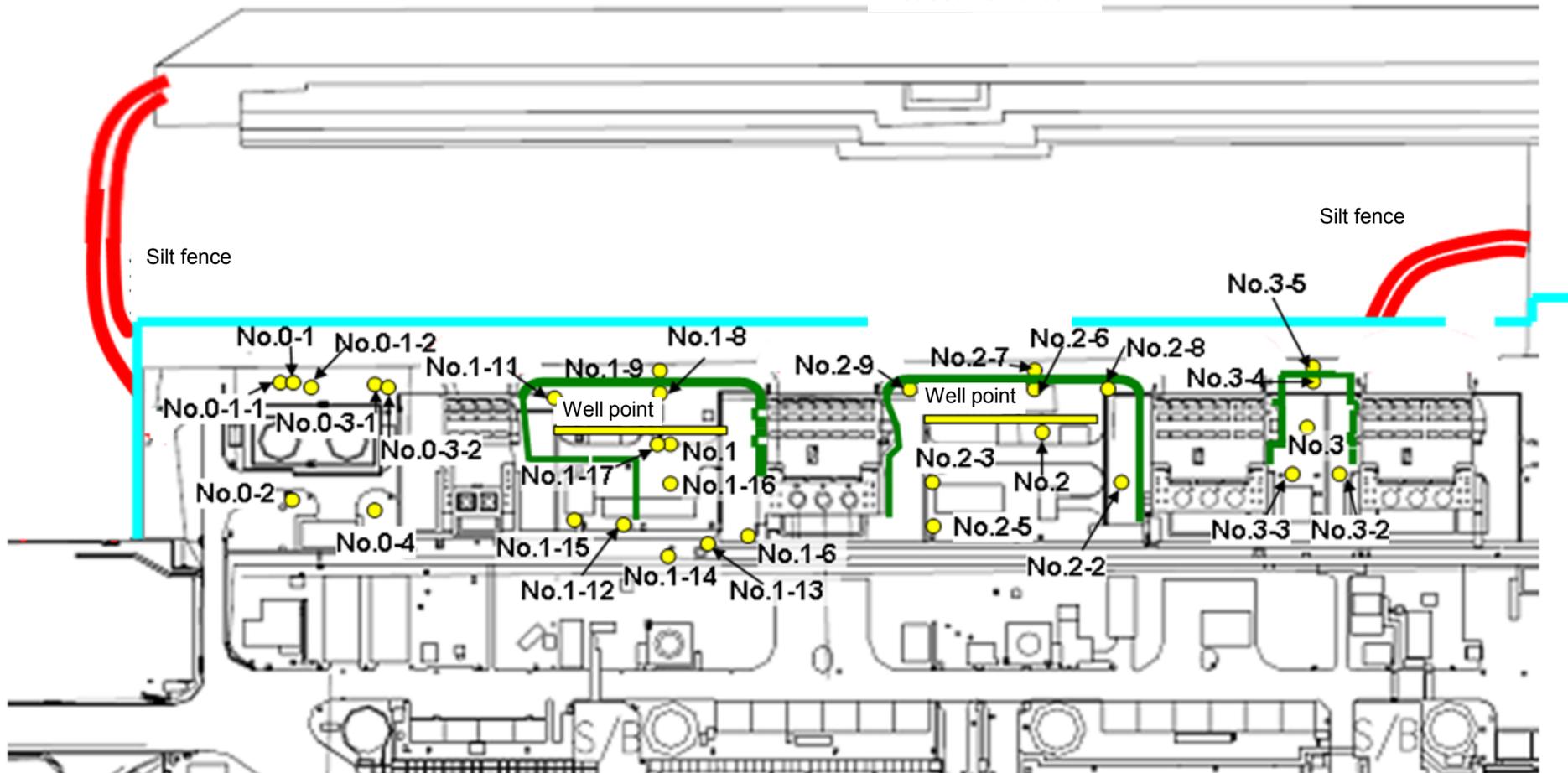


Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)

● 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 (note)	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								Oct 21					Oct 21	Oct 21	
Time of sampling								9:55 AM					9:35 AM	9:20 AM	
Chloride (unit: ppm)								—					—	—	
Cs-134 (Approx. 2 years)								41,000					79	7.7	
Cs-137 (Approx.30 years)								130,000					250	25	
The other y	Mn-54 (Approx. 310 days)							240					ND	2.5	
	Co-60 (Approx. 5 years)							890					ND	ND	
	Sb-125 (Approx. 3 years)							ND					ND	14	
Gross β							2,800,000					20,000	570,000		
H-3 (Approx. 12 years)							7,400					1,200	3,800		
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 (note)	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(note)
Date of sampling		Oct 19	Oct 19	Oct 19			Oct 19	Oct 19	Oct 19					
Time of sampling		8:59 AM	10:20 AM	9:25 AM			9:43 AM	10:02 AM	10:00 AM					
Chloride (unit: ppm)		—	—	—			430	—	—					
Cs-134 (Approx. 2 years)		ND(0.33)	3.7	ND(0.38)			ND(0.46)	ND(0.38)	ND(0.55)					
Cs-137 (Approx.30 years)		1.1	15	ND(0.45)			0.71	0.72	ND(0.73)					
The other y	Mn-54 (Approx. 310 days)	ND	ND	ND			ND	ND	ND					
	Co-60 (Approx. 5 years)	ND	ND	ND			ND	ND	ND					
	Sb-125 (Approx. 3 years)	ND	ND	ND			ND	ND	ND					
Gross β		150	420	750			600	4,600	100,000					
H-3 (Approx. 12 years)		680	410	740			420	1,200	13000*1					
Sr-90 (Approx. 29 years)		—	—	—			—	—	—					

* Data announced this time is provided in a thick-frame. The other data was announced on October 20, and 22, 2014.

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

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

(Note) As of No. 1-9, 2-5, and 3-5, ywas not measured because they are sampled by sampler. Gross βwere measured after filtration for references.

*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(note)	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	Sb-125 (Approx. 3 years)														
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(note)	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(note)
Date of sampling		Oct 22	Oct 22	Oct 22			Oct 22	Oct 22	Oct 22	Oct 22	Oct 22	Oct 22	Oct 22	Oct 22
Time of sampling		9:03 AM	10:30 AM	9:20 AM			9:37 AM	10:07 AM	10:20 AM	9:47 AM	10:39 AM	11:14 AM	10:06 AM	10:00 AM
Chloride (unit: ppm)		—	—	—			600	—	—	—	—	—	—	770
Cs-134 (Approx. 2 years)		ND(0.43)	4.90	ND(0.44)			0.48	0.68	ND(0.58)	1.10	16	83	3.7	—
Cs-137 (Approx.30 years)		ND(0.54)	15	ND(0.56)			1.4	1.9	0.74	3.1	48.00	270.00	12.00	—
The other γ	Sb-125 (Approx. 3 years)	ND	ND	ND			ND	ND	ND	1.5	ND	ND	ND	—
Gross β		200	400	700			810	4,800	110,000	ND(17)	2,700	6,400	18	46
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, except "the other γ"

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

(Note) As of No. 1-9, 2-5, and 3-5, γ was not measured because they are sampled by sampler. Gross β were measured after filtration for references.

<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)	29 <5/25>	ND	0.61 <3/2>	0.61 [10/13]	0.64 <4/6>	1.3 <9/25>	0.70 <6/29>	13 [8/29]	1.9 [7/8]	11,000 [7/9]	10 [9/2]	1.5 [7/8]	310 [8/5]	67,000 <10/17>
Cs-137 (Approx.30 years)	78 <5/25>	ND	1.5 <3/2>	2.2 <1/12>	1.1 <4/6>	5.1 <9/25>	1.6 <6/29>	31 [8/29]	3.6 [7/8]	22,000 [7/9]	24 [9/2]	3.6 [7/8]	650 [8/5]	200,000 <10/16>
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	1.0 [7/5]	62 [7/5]	ND	ND	ND	700 <10/13>
	Co-60 (Approx. 5 years)	ND	ND	ND	ND	ND	ND	0.50 [7/19]	ND	3.1 [7/8]	ND	ND	ND	3600 <10/13>
	Sb-125 (Approx. 3 years)	ND	ND	ND	ND	ND	ND	1.7 [7/11]	ND	250 [7/15]	1.4 [7/12] [8/28]	ND	12 [8/8]	34 <5/19>
Gross β	300 [8/29] <5/18>	21 [12/7]	24 <6/22>	87 [10/13]	ND	74 <10/9>	44 <6/22>	1,900 [5/24]	4,400 [7/8]	9,300,000 [7/8]	160,000 [8/12] [8/15]	380 [8/19]	56,000 [8/5]	7,800,000 <10/13>
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 <2/6>
Sr-90(Approx. 29 years)	140 [8/8]	7.9 [12/7]	2.6 [11/10]	0.73 [9/2]	1.5 [11/20]	2.3 [12/6]	ND(0.83) [10/27]	1,300 [8/22]	2,300 [6/28]	5,000,000 [7/5]	130,000 [8/8]	200 [7/8]	5,100 [8/22]	1,100,000 <8/4>

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.1-15	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
Cs-134 (Approx. 2 years)	47 [11/25]	170 [9/3]	-	1.1 <1/13>	74 [10/21]	37,000 <2/13>	130 <10/18>	ND	30 <7/28>	1.4 <7/7>	110 [9/23]	0.88 <2/26>	0.66 [9/1]	15 <2/12>
Cs-137 (Approx.30 years)	110 [11/25]	380 [9/3]	-	3.4 <4/28>	170 [10/21]	93,000 <2/13>	390 <10/20>	0.88 <7/10>	86 <7/28>	3.0 <9/29>	250 [9/23]	2.5 <2/26>	1.1 [8/29] [9/1]	38 <2/12>
The other γ	Ru-106 (Approx. 370 days)	ND	ND	-	ND	5.4 [10/28]	ND	ND	9.2 [10/28]	5.5 <4/21> <5/1>	25 [9/2]	ND	ND	ND
	Mn-54 (Approx. 310 days)	12 <2/3>	ND	-	ND	ND	2.1 <9/8>	ND	11 <8/25>	ND	8.5 <4/28>	ND	ND	ND
	Co-60 (Approx. 5 years)	1.3 <2/3>	ND	-	ND	0.51 [10/24]	ND	0.44 <5/29>	ND	0.9 [11/7]	0.61 [11/25]	0.61 <6/9>	ND	ND
	Sb-125 (Approx. 3 years)	ND	ND	-	ND	61 [10/21]	ND	ND	24 <6/16>	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>	29,000 <10/3>	110 <7/10>	3,100,000 <1/20> <1/30> <2/3>	1,200,000 <10/9>	1,900,000 [9/23]	1,700 [7/8]	380 [7/29]	600 <4/16>
H-3 (Approx. 12 years)	33,000 <6/2>	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>	74,000 <7/10>	43,000 [9/26]	160,000 <10/13> <10/16>	460,000 [8/19]	1,000 <2/23>	440 [8/26]	660 <1/8>
Sr-90(Approx. 29 years)	35,000 <2/17>	300 [10/3]	-	170 <8/4>	290 [10/21]	160,000 <2/12>	13,000 <8/4>	Under analysis	2,700,000 <2/13>	170,000 <8/4>	-	54 [5/31]	5.9 [7/25]	320 [12/25]

Unit: Bq/L

	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 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)	2.2 <2/26>	41 <5/7>	17 <3/11>	3.5 <2/23>	1.3 <7/20>	ND	2.2 <9/7>	3.5 [7/25]	1.2 [7/25] [8/8]	23 <8/27>	180 <7/2>	5.1 <7/23>	100 <7/30>
Cs-137 (Approx.30 years)	5.5 <2/26>	110 <5/7>	50 <3/11>	9.0 <2/23>	3.4 <7/20>	0.58 *2 <2/11>	5.7 <9/7>	5.9 [8/8]	2.6 [8/1]	68 <9/3>	500 <7/2>	16 <8/27>	310 <7/30>
The other γ	Ru-106 (Approx. 370 days)	ND	ND	ND	ND	ND	6.5 *2 <2/11>	ND	ND	ND	ND	ND	-
	Mn-54 (Approx. 310 days)	0.29 [12/6]	0.95 <6/4>	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	ND	ND	-
	Sb-125 (Approx. 3 years)	ND	74 <5/7>	ND	ND	ND	ND	ND	1.6 <1/1>	ND	ND	ND	-
Gross β	1,500 [12/6] <1/8>	150,000 <2/12>	3,200 [12/5]	1,300 <6/20>	5,800 <7/23>	1,700 <2/7>	240,000 [12/12]	1,400 [7/11]	180 [8/1]	3,100 <8/20> <8/28>	8,900 <7/2>	46 <8/13>	510 <7/16>
H-3 (Approx. 12 years)	1,700 [12/6]	7,900 <4/9>	1,900 <8/10>	1,100 <1/19>	1,700 <4/6> <8/6> <8/13>	13,000 *2 <2/7> <2/11>	12,000 <10/12> <10/15>	3,200 [Dec 12, 2012]	460 [8/1]	3,700 <7/9>	8,000 <5/7>	170 [9/18]	170 <1/8>
Sr-90(Approx. 29 years)	1,200 [12/6]	34,000 <5/7>	Under analysis	ND(1.4) [11/21]	3,900 <3/30>	1,200 *2 <2/11>	-	8.3 [Dec 12, 2012]	4.4 [7/23]	2000 <4/18>	3,600 <4/30>	ND	200 <5/28>

● 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 for the ground improvement.

(Note) As of No. 1-9, 2-5, and 3-5, since September 17, γ was not measured because they are sampled by sampler. Gross β were measured after filtration for references.