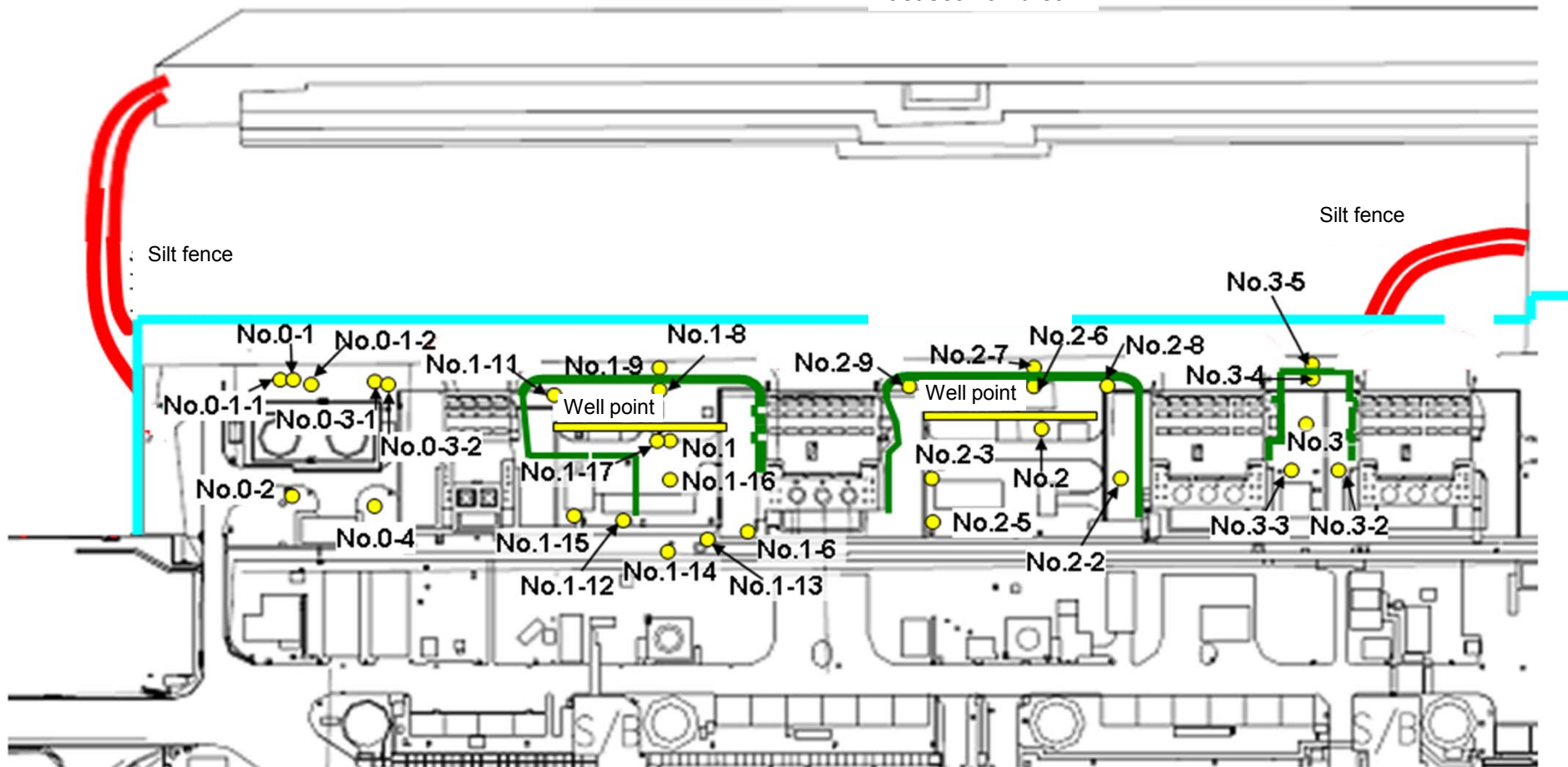


Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)

● 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										Nov 13					
Time of sampling										7:08 AM					
Chloride (unit: ppm)										20					
Cs-134 (Approx. 2 years)										—					
Cs-137 (Approx.30 years)										—					
The other γ															
Gross β										ND(18)					
H-3 (Approx. 12 years)										ND(110)					
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		Nov 12	Nov 12	Nov 12		Nov 13	Nov 14	Nov 12	Nov 12	Nov 12	Nov 12	Nov 12	Nov 12	Nov 12
Time of sampling		8:57 AM	10:35 AM	9:32 AM		9:00 AM	8:35 AM	10:12 AM	10:00 AM	9:45 AM	10:45 AM	11:13 AM	10:07 AM	9:15 AM
Chloride (unit: ppm)		—	—	—		—	850	—	—	—	—	—	—	700
Cs-134 (Approx. 2 years)		ND(0.39)	3.0	ND(0.53)		ND(0.39)	ND(0.39)	ND(0.43)	ND(0.43)	—	11	43	2.7	—
Cs-137 (Approx.30 years)		0.51	8	ND(0.53)		ND(0.53)	1.0	ND(0.51)	0.65	—	44	140	11	—
The other γ														
Gross β		110	410	710		1,900	1,000	3,700	37,000	ND(21)	2,500	3,700	42	28
H-3 (Approx. 12 years)		640	450	890		900	690	1,100	3,500	130	2,200	1,700	ND(110)	ND(110)
Sr-90 (Approx. 29 years)		—	—	—		—	—	—	—	—	—	—	—	—

* Data announced this time is provided in a thick-frame. The other data was announced on November 13, 14 and 15, 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 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.

*γ was not measured because the water was highly turbid. (Gross β were measured after filtration as references.)

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	Nov 16	Nov 16	Nov 16	Nov 16		Nov 16				Nov 16					
Time of sampling	10:39 AM	9:56 AM	9:21 AM	9:40 AM		8:48 AM				7:33 AM					
Chloride (unit: ppm)	—	—	—	—		—				23					
Cs-134 (Approx. 2 years)	22	ND(0.34)	ND(0.38)	ND(0.44)		ND(0.41)				—					
Cs-137 (Approx.30 years)	60	ND(0.51)	ND(0.56)	ND(0.56)		ND(0.55)				—					
The other γ															
Gross β	190	ND(19)	ND(19)	ND(19)		ND(19)			ND(19)						
H-3 (Approx. 12 years)	Under analysis	Under analysis	Under analysis	Under analysis		Under analysis				Under analysis					
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		Nov 16	Nov 16	Nov 16			Nov 16	Nov 16	Nov 16					
Time of sampling		9:01 AM	10:55 AM	9:37 AM			10:04 AM	10:26 AM	10:00 AM					
Chloride (unit: ppm)		—	—	—			800	—	—					
Cs-134 (Approx. 2 years)		ND(0.37)	ND(2.6)	ND(0.44)			ND(0.42)	ND(0.39)	ND(0.48)					
Cs-137 (Approx.30 years)		ND(0.58)	4.2	ND(0.52)			0.6	ND(0.51)	ND(0.58)					
The other γ														
Gross β		85	280	670			1100	3,700	36,000					
H-3 (Approx. 12 years)		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 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	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	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>	920 <11/13>	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>	3000 <11/13>	2.5 <2/26>	1.1 [8/29] [9/1]	38 <2/12>
The other y	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	110 <11/13>	ND	ND	ND
	Co-60 (Approx. 5 years)	1.3 <2/3>	ND	-	ND	0.51 [10/24]	ND	0.44 <5/29>	0.9 [11/7]	0.61 [11/25]	0.61 <6/9>	ND	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> <2/3>	1,200,000 <10/9>	3,200,000 <11/13>	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 <10/16> <11/2>	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 y	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] <11/6>	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>	13,000 <10/19> <10/26> <10/29>	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 of 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.