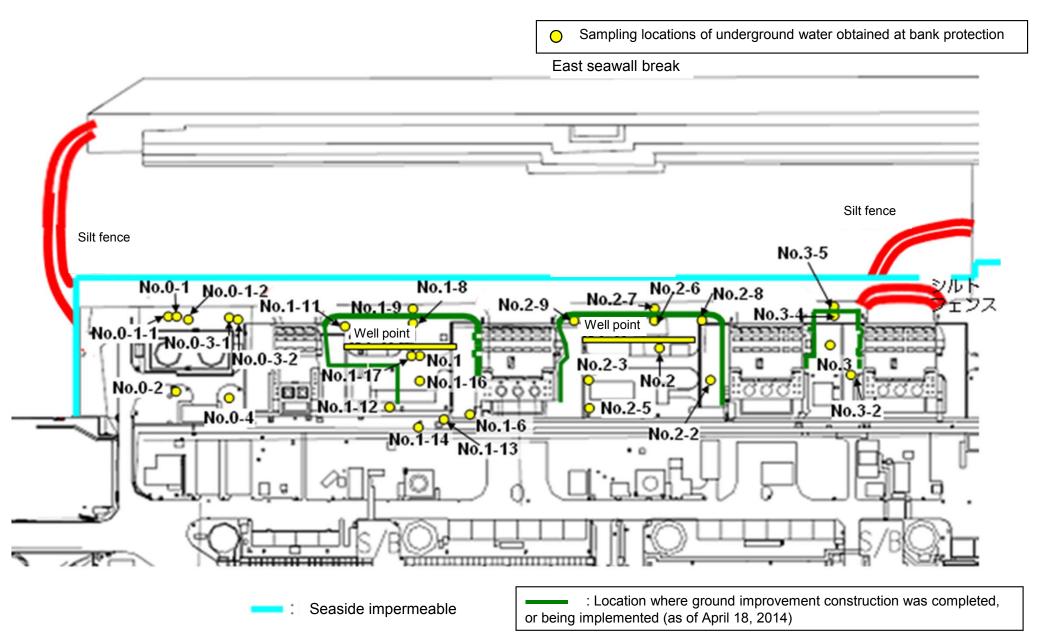
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



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	
	Date of sampling	/	1 /	/	/	/	/	1 /	/	1 /	1 /	1 /	1	1 /	1	
	Time of sampling				/	/				/					/	
	Chloride (unit: ppm)															
C	Cs-134 (Approx. 2 years)															
С	s-137 (Approx.30 years)															
The																
other γ																
	Gross β															
H-3 (Approx. 12 years)		1/			/	/						/			/	
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	ter observation water observation		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.3-4	Underground water observation hole No.3-5
	Date of sampling	/	/	Apr 20, 2014	Apr 20, 2014	Apr 20, 2014	/	/	Apr 20, 2014	Apr 20, 2014	Apr 20, 2014	/	1	1 /
	Time of sampling			9:39 AM	10:50 AM	9:16 AM			9:58 AM	11:20 AM	10:00 AM			
	Chloride (unit: ppm)			-	-	-			900	-	-			
C	Cs-134 (Approx. 2 years)			ND(0.41)	11	N D (0.40)			0.44	ND(0.38)	ND(0.53)			
С	s-137 (Approx.30 years)			ND(0.58)	31	N D (0.54)			1.4	ND(0.50)	0.66			
The														
other y														
	Gross β			280	500	930			930	4,000	110,000			
	H-3 (Approx. 12 years)		/	760	490	940	/		700	1,500	4,900			
Sr-90 (Approx. 29 years)		/		-	-	-			-	-	-			/

^{*} Data announced this time is provided in a thick-frame. The other data was announced on April 21.

^{* &}quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

^{* &}quot;-" 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**

Underground

hole No.1

Underground

water observation

hole No.1-6

Underground

water observation

hole No.0-4

Underground

water observation

hole No.0-3-2

Underground

water observation

hole No.1-8

Underground

vater observation

hole No.1-9

Underground

water observation

hole No.1-11

Unit: Bq/L (exclude chloride)

Underground

water observation

hole No.1-16

Underground

hole No.1-14

Underground

vater observation

hole No.1-12

				1	1 -	/		4	4				1 -	/	
Date of sampling		//	/] /	/	/	/	/	/	/	/	/	/	/	
	Time of sampling														/
	Chloride (unit: ppm)														
Cs-134 (Approx. 2 years)															
Cs-137 (Approx.30 years)															
The															
other γ											/				
					/										
	Gross β										- 				1/
Н	-3 (Approx. 12 years)			/	/	/		/	/	/	/		/	/	/
Sr-	-90 (Approx. 29 years)				/			/	/	/			/		/
			Groundwater								Groundwater				
		Underground water observation hole No.1-17	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	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.3-4	
	Date of sampling	water observation	the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation	water observation	the well point (between Unit 2	water observation	water observation	water observation	water observation hole No.3-5
	Date of sampling Time of sampling	water observation	the well point (between Unit 1	water observation hole No.2	water observation hole No.2-2*	water observation hole No.2-3	water observation	water observation	water observation hole No.2-7	water observation hole No.2-8	the well point (between Unit 2 and 3)	water observation hole No.3	water observation hole No.3-2	water observation hole No.3-4	water observation hole No.3-5
		water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014	water observation hole No.2-2* Apr 23, 2014	water observation hole No.2-3 Apr 23, 2014	water observation	water observation	water observation hole No.2-7 Apr 23, 2014	water observation hole No.2-8 Apr 23, 2014	the well point (between Unit 2 and 3) Apr 23, 2014	water observation hole No.3 Apr 23, 2014	water observation hole No.3-2 Apr 23, 2014	water observation hole No.3-4 Apr 23, 2014	water observation hole No.3-5 Apr 23, 2014
	Time of sampling	water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014 9:55 AM	water observation hole No.2-2* Apr 23, 2014 11:25 AM	water observation hole No.2-3 Apr 23, 2014	water observation	water observation	water observation hole No.2-7 Apr 23, 2014 10:14 AM	water observation hole No.2-8 Apr 23, 2014 10:36 AM	the well point (between Unit 2 and 3) Apr 23, 2014 10:00 AM	water observation hole No.3 Apr 23, 2014 9:52 AM	water observation hole No.3-2 Apr 23, 2014	water observation hole No.3-4 Apr 23, 2014	water observation hole No.3-5 Apr 23, 2014 10:25 AM
Cs	Time of sampling Chloride (unit: ppm)	water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014 9:55 AM	water observation hole No.2-2* Apr 23, 2014 11:25 AM -	water observation hole No.2-3 Apr 23, 2014 9:33 AM	water observation	water observation	water observation hole No.2-7 Apr 23, 2014 10:14 AM 960	water observation hole No.2-8 Apr 23, 2014 10:36 AM	the well point (between Unit 2 and 3) Apr 23, 2014 10:00 AM	water observation hole No.3 Apr 23, 2014 9:52 AM	water observation hole No.3-2 Apr 23, 2014 11:00 AM -	water observation hole No.3-4 Apr 23, 2014 10:25 AM	water observation hole No.3-5 Apr 23, 2014 10:25 AM 3400
Cs	Time of sampling Chloride (unit: ppm) -134 (Approx. 2 years)	water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014 9:55 AM - ND(0.36)	water observation hole No.2-2* Apr 23, 2014 11:25 AM - 11	water observation hole No.2-3 Apr 23, 2014 9:33 AM - ND(0.44)	water observation	water observation	water observation hole No.2-7 Apr 23, 2014 10:14 AM 960 0.47	water observation hole No.2-8 Apr 23, 2014 10:36 AM - ND(0.36)	the well point (between Unit 2 and 3) Apr 23, 2014 10:00 AM	water observation hole No.3 Apr 23, 2014 9:52 AM - 0.65	water observation hole No.3-2 Apr 23, 2014 11:00 AM - 4.7*1	water observation hole No.3-4 Apr 23, 2014 10:25 AM - 2.5	water observation hole No.3-5 Apr 23, 2014 10:25 AM 3400 28
Cs	Time of sampling Chloride (unit: ppm) -134 (Approx. 2 years) -137 (Approx.30 years)	water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014 9:55 AM - ND(0.36) 0.48	water observation hole No.2-2* Apr 23, 2014 11:25 AM - 11 27	water observation hole No.2-3 Apr 23, 2014 9:33 AM - ND(0.44) ND(0.52)	water observation	water observation	water observation hole No.2-7 Apr 23, 2014 10:14 AM 960 0.47 1.5	water observation hole No.2-8 Apr 23, 2014 10:36 AM - ND(0.36) 0.57	the well point (between Unit 2 and 3) Apr 23, 2014 10:00 AM - 2.0 ^{*1} 4.7 ^{*1}	water observation hole No.3 Apr 23, 2014 9:52 AM - 0.65 1.8	water observation hole No.3-2 Apr 23, 2014 11:00 AM - 4.7'1 12'1	water observation hole No.3-4 Apr 23, 2014 10:25 AM - 2.5 6.7	water observation hole No.3-5 Apr 23, 2014 10:25 AM 3400 28 77
Cs	Time of sampling Chloride (unit: ppm) -134 (Approx. 2 years) -137 (Approx.30 years)	water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014 9:55 AM - ND(0.36) 0.48	water observation hole No.2-2* Apr 23, 2014 11:25 AM - 11 27	water observation hole No.2-3 Apr 23, 2014 9:33 AM - ND(0.44) ND(0.52)	water observation	water observation	water observation hole No.2-7 Apr 23, 2014 10:14 AM 960 0.47 1.5	water observation hole No.2-8 Apr 23, 2014 10:36 AM - ND(0.36) 0.57	the well point (between Unit 2 and 3) Apr 23, 2014 10:00 AM - 2.0 ^{*1} 4.7 ^{*1}	water observation hole No.3 Apr 23, 2014 9:52 AM - 0.65 1.8	water observation hole No.3-2 Apr 23, 2014 11:00 AM - 4.7'1 12'1	water observation hole No.3-4 Apr 23, 2014 10:25 AM - 2.5 6.7	water observation hole No.3-5 Apr 23, 2014 10:25 AM 3400 28 77
Cs Cs The	Time of sampling Chloride (unit: ppm) -134 (Approx. 2 years) -137 (Approx.30 years)	water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014 9:55 AM - ND(0.36) 0.48	water observation hole No.2-2* Apr 23, 2014 11:25 AM - 11 27	water observation hole No.2-3 Apr 23, 2014 9:33 AM - ND(0.44) ND(0.52)	water observation	water observation	water observation hole No.2-7 Apr 23, 2014 10:14 AM 960 0.47 1.5	water observation hole No.2-8 Apr 23, 2014 10:36 AM - ND(0.36) 0.57	the well point (between Unit 2 and 3) Apr 23, 2014 10:00 AM - 2.0 ^{*1} 4.7 ^{*1}	water observation hole No.3 Apr 23, 2014 9:52 AM - 0.65 1.8	water observation hole No.3-2 Apr 23, 2014 11:00 AM - 4.7'1 12'1	water observation hole No.3-4 Apr 23, 2014 10:25 AM - 2.5 6.7	water observation hole No.3-5 Apr 23, 2014 10:25 AM 3400 28 77
Cs Cs The	Time of sampling Chloride (unit: ppm) -134 (Approx. 2 years) -137 (Approx.30 years)	water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014 9:55 AM - ND(0.36) 0.48	water observation hole No.2-2* Apr 23, 2014 11:25 AM - 11 27	water observation hole No.2-3 Apr 23, 2014 9:33 AM - ND(0.44) ND(0.52)	water observation	water observation	water observation hole No.2-7 Apr 23, 2014 10:14 AM 960 0.47 1.5	water observation hole No.2-8 Apr 23, 2014 10:36 AM - ND(0.36) 0.57	the well point (between Unit 2 and 3) Apr 23, 2014 10:00 AM - 2.0 ^{*1} 4.7 ^{*1}	water observation hole No.3 Apr 23, 2014 9:52 AM - 0.65 1.8	water observation hole No.3-2 Apr 23, 2014 11:00 AM - 4.7'1 12'1	water observation hole No.3-4 Apr 23, 2014 10:25 AM - 2.5 6.7	water observation hole No.3-5 Apr 23, 2014 10:25 AM 3400 28 77
Cs Cs The other y	Time of sampling Chloride (unit: ppm) -134 (Approx. 2 years) -137 (Approx.30 years) Sb-125 (Approx. 3 years)	water observation	the well point (between Unit 1	water observation hole No.2 Apr 23, 2014 9:55 AM - ND(0.36) 0.48 ND	water observation hole No.2-2* Apr 23, 2014 11:25 AM - 11 27 ND	water observation hole No.2-3 Apr 23, 2014 9:33 AM - ND(0.44) ND (0.52) ND	water observation	water observation	water observation hole No.2-7 Apr 23, 2014 10:14 AM 960 0.47 1.5 ND	water observation hole No.2-8 Apr 23, 2014 10:36 AM - ND(0.36) 0.57 ND	the well point (between Unit 2 and 3) Apr 23, 2014 10:00 AM - 2.0*1 4.7*1 ND	water observation hole No.3 Apr 23, 2014 9:52 AM - 0.65 1.8 1.6	water observation hole No.3-2 Apr 23, 2014 11:00 AM - 4.7*1 ND	water observation hole No.3-4 Apr 23, 2014 10:25 AM - 2.5 6.7 ND	Apr 23, 2014 10:25 AM 3400 28 77 ND

Underground

hole No.0-1

Underground

water observation

hole No.0-1-2

Underground

hole No.0-2

Underground

water observation

hole No.0-3-1

^{* &}quot;-" 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')

	Ba/	

		Groundwate observation h No.0-1		observa	idwater ition hole 0-1-1	observa	ndwater ation hole 0-1-2	Groun observa No	tion hole	observa	idwater ition hole 0-3-1	observa	idwater ition hole 0-3-2	Groun observa No.	tion hole	observa	dwater ition hole o.1	observa	ndwater ation hole .1-1*	Groundwater observation hole No.1-2		Groundwater observation hole No.1-3*		Groundwater observation hole No.1-4*		Unit: Bq/L Groundwater observation hole No.1-5	
	Cs-134 (Approx. 2 years)	12 <4/2		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]
С	Cs-137 (Approx.30 years)	33 <4/2	20>	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) (7/22)	3.6	[7/8]	650	[8/5]
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND		ND		ND		26	[5/24]	7.9	[7/8]	160	[8/15]	17	(8/8)	3.1	[8/8]	ND	
The	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		ND	
other y	Co-60 (Approx. 5 years)	ND		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		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 ^{*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]
	H-3 (Approx. 12 years)	45,000 (8/2	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]
;	Sr-90(Approx. 29 years)	140 [8/	/8)	Under analysis		Under analysis		0.73	[9/2]	Under		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
		Groundwate observation h No.1-6		observa	idwater ition hole .1-8	observa	ndwater ation hole a.1-9	Groun observa No.	tion hole		idwater ition hole 1-11	observa	dwater ition hole 1-12	Groun observa No.	tion hole	observa	dwater ition hole 1-14	observa	ndwater ition hole 1-16	observa	ndwater ation hole .1-17	the we (between	dwater I up from ell point en Unit 1 d 2)	observa	ndwater ation hole lo.2	observa	dwater tion hole 2-1
C	Cs-134 (Approx. 2 years)	6,300 <3/3	31>	47	[11/25]	170	[9/3]	-		1.1	<1/13>	74	[10/21]	37,000	<2/13>	88 *2	2 <2/27>	3.1 *1	[12/13]	1.2	[12/5]	110	[9/23]	0.88	<2/26>	0.66	[9/1]
С	Cs-137 (Approx.30 years)	16,000 <3/3	31>	110	[11/25]	380	[9/3]	-		2.8	<1/13>	170	[10/21]	93,000	<2/13>	230 *2	2 <2/27>	4.7	<2/17>	1.5	<3/10>	250	[9/23]	2.5	<2/26>	1.1	(8/29) (9/1)
	Ru-106 (Approx. 370 days)	ND		ND		ND		-		ND		5.4	[10/28]	ND		ND		9.2	[10/28]	5.5	<4/21>	25	[9/2]	ND		ND	
The	Mn-54 (Approx. 310 days)	320 <2/-		12	<2/3>	ND		-		ND		ND		ND		ND		ND		ND		5.9	<3/3>	ND		ND	
other y	Co-60 (Approx. 5 years)	830 <2/2		1.3	<2/3>	ND		-		ND		0.51	[10/24]	ND		ND		0.9	[11/7]	0.61	[11/25]	ND		ND		ND	
	Sb-125 (Approx. 3 years)	ND		ND		ND		-		ND		61	[10/21]	ND		ND		13	<4/17>	2.1	[11/25]	ND		ND		ND	
	Gross β	770,000 <3/2	27>	59,000	<2/3>	2,100		78 *2	<1/27>	2,300	[12/26]	730	[10/21]	260,000	<2/12> <2/13>	1,800	<3/31>	3,100,000	<1/20> <1/30> <2/3>	6,700	<4/21>	700,000	[9/23]	1,700	[7/8]	380	[7/29]
	H-3 (Approx. 12 years)	*2 110,000 <2/	/6>	13,000	<3/31>	860	[11/14]	*2 270,000	<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]
;	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]
																									Unit: Bq/L		
		Groundwate observation h No.2-2		observa	idwater ition hole i.2-3	observa	ndwater ation hole 1.2-5	Groun observa No.	tion hole	observa	idwater ition hole .2-7	observa	dwater tion hole .2-8	Groun observa No.	tion hole	the we (between	idwater I up from ell point en Unit 2 d 3)	observa	ndwater ution hole o.3	observa	ndwater ation hole .3-1*	observa	dwater ition hole .3-4	observa	ndwater ation hole 5.3-5		
	Cs-134 (Approx. 2 years)	15 <2/	12>	2.2	<2/26>	25	<2/12>	17	<3/11>	3.5	<2/23>	0.47	<4/9>	-		1.2	<3/9>	3.5	[7/25]	1.2	(7/25) (8/8)	3.9	<4/18>	2.7	<4/16>	64	<1/15>
С	Cs-137 (Approx.30 years)	38 <2/	12>	5.5	<2/26>	62	<2/12>	50	<3/11>	9.0	<2/23>	1.3	<4/9>	0.58 *2	<2/11>	3.1	<3/9>	5.9	[8/8]	2.6	[8/1]	11	<4/18>	7	<4/16>	170	<1/15>
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND		ND		6.5	<2/11>	ND		ND		ND		ND		ND		-	
The	Mn-54 (Approx. 310 days)	ND		0.29	[12/6]	0.94	<1/8>	ND		ND		ND		-		ND		ND		ND		ND		0.54	[10/30]	-	
other y	Co-60 (Approx. 5 years)	ND		ND		ND		ND		ND		ND		-		ND		ND		ND		ND		ND		-	
	Sb-125 (Approx. 3 years)	ND		ND		30	<2/12> <4/9>	ND		ND		ND		-		ND		1.6	<1/1>	ND		ND		ND		-	
	Gross β	600 <4/	16>	1,500	[12/6]	150,000	<2/12>	3,200	[12/5]	930	<4/20>	4,200	<4/9>	1,700*2	<2/7>	240,000	[12/12]	1,400	(7/11)	180	[8/1]	2,200	<4/18>	19	<4/16>	300	<4/2>
	H-3 (Approx. 12 years)	660 <1/	/8>	1,700	[12/6]	7,900	<4/9>	1,200	(11/24) (11/27)	1,100	<1/17>	1,700	<4/6>	*2 13,000		5,100	[12/6]	3,200	(2012/12/ 12)	460	[8/1]	2,500	<4/18>	170	[9/18]	170	<1/8>

[2012/12/

[7/23]

ND

Under

Under

Under

analysis

Under

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

Sr-90(Approx. 29 years)

^{*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.)

 $^{^{\}star}$ "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.