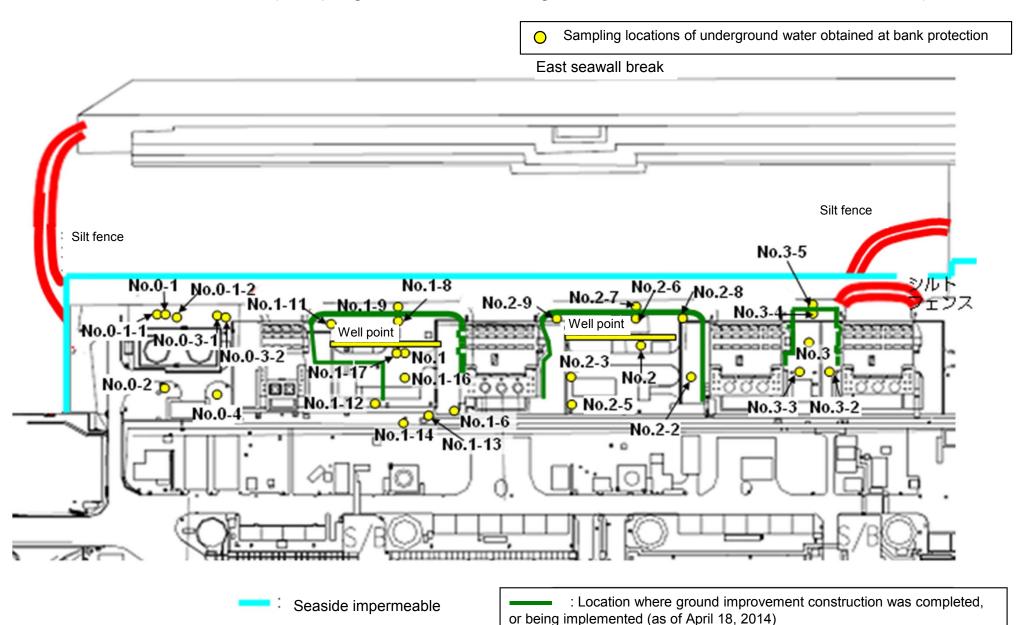
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



## 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	Underground water observation hole No.1-17
	Date of sampling	/	/	/	/	/	/	/	/	1	1	/	/	/	/	/
	Time of sampling															
	Chloride (unit: ppm)															
Cs	s-134 (Approx. 2 years)															
Cs	-137 (Approx.30 years)															
The																
other y																
	Gross β															
H	I-3 (Approx. 12 years)															
Sr	-90 (Approx. 29 years)		/	/	V	/	/		/		V		/		/	
		Groundwater pumped up from	Underground	Underground	Underground	Underground	Underground	Underground	Underground	Groundwater pumped up from	Underground	Underground	Underground	Understand	Undersoond	
		the well point (between Unit 1 and 2)	water observation hole No.2	water observation hole No.2-2		water observation hole No.2-5	water observation hole No.2-6	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	Underground water observation hole No.3-3	Underground water observation hole No.3-4	Underground water observation hole No.3-5	
	Date of sampling	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	water observation	
	Date of sampling Time of sampling	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	water observation	water observation	water observation	water observation	
		the well point (between Unit 1	water observation hole No.2 Jul 20, 2014	water observation hole No.2-2 Jul 20, 2014	water observation hole No.2-3 Jul 20, 2014	water observation	water observation	water observation hole No.2-7 Jul 20, 2014	water observation hole No.2-8 Jul 20, 2014	the well point (between Unit 2 and 3) Jul 20, 2014	water observation	water observation	water observation	water observation	water observation	-
	Time of sampling	the well point (between Unit 1	water observation hole No.2 Jul 20, 2014 10:12 AM	water observation hole No.2-2 Jul 20, 2014 11:16 AM	water observation hole No.2-3 Jul 20, 2014 9:35 AM	water observation	water observation	water observation hole No.2-7 Jul 20, 2014 10:35 AM	water observation hole No.2-8 Jul 20, 2014 10:55 AM	the well point (between Unit 2 and 3) Jul 20, 2014 10:00 AM	water observation	water observation	water observation	water observation	water observation	
Cs	Time of sampling Chloride (unit: ppm)	the well point (between Unit 1	water observation hole No.2 Jul 20, 2014 10:12 AM	water observation hole No.2-2 Jul 20, 2014 11:16 AM	water observation hole No.2-3 Jul 20, 2014 9:35 AM	water observation	water observation	water observation hole No.2-7 Jul 20, 2014 10:35 AM 850	water observation hole No.2-8 Jul 20, 2014 10:55 AM	the well point (between Unit 2 and 3) Jul 20, 2014 10:00 AM	water observation	water observation	water observation	water observation	water observation	
Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)	the well point (between Unit 1	water observation hole No.2 Jul 20, 2014 10:12 AM - 0.66	water observation hole No.2-2  Jul 20, 2014  11:16 AM  -  8.0	water observation hole No.2-3 Jul 20, 2014 9:35 AM - ND(0.39)	water observation	water observation	water observation hole No.2-7 Jul 20, 2014 10:35 AM 850 0.79	water observation hole No.2-8  Jul 20, 2014  10:55 AM  -  1.3	the well point (between Unit 2 and 3)  Jul 20, 2014  10:00 AM  -  ND(0.75)	water observation	water observation	water observation	water observation	water observation	
Cs Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)	the well point (between Unit 1	water observation hole No.2 Jul 20, 2014 10:12 AM - 0.66	water observation hole No.2-2  Jul 20, 2014  11:16 AM  -  8.0	water observation hole No.2-3 Jul 20, 2014 9:35 AM - ND(0.39)	water observation	water observation	water observation hole No.2-7 Jul 20, 2014 10:35 AM 850 0.79	water observation hole No.2-8  Jul 20, 2014  10:55 AM  -  1.3	the well point (between Unit 2 and 3)  Jul 20, 2014  10:00 AM  -  ND(0.75)	water observation	water observation	water observation	water observation	water observation	
Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)	the well point (between Unit 1	water observation hole No.2 Jul 20, 2014 10:12 AM - 0.66	water observation hole No.2-2  Jul 20, 2014  11:16 AM  -  8.0	water observation hole No.2-3 Jul 20, 2014 9:35 AM - ND(0.39)	water observation	water observation	water observation hole No.2-7 Jul 20, 2014 10:35 AM 850 0.79	water observation hole No.2-8  Jul 20, 2014  10:55 AM  -  1.3	the well point (between Unit 2 and 3)  Jul 20, 2014  10:00 AM  -  ND(0.75)	water observation	water observation	water observation	water observation	water observation	
Cs Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) -137 (Approx.30 years)	the well point (between Unit 1	water observation hole No.2  Jul 20, 2014  10:12 AM  - 0.66  2.1	water observation hole No.2-2  Jul 20, 2014  11:16 AM  -  8.0	water observation hole No.2-3 Jul 20, 2014 9:35 AM - ND(0.39)	water observation	water observation	water observation hole No.2-7 Jul 20, 2014 10:35 AM 850 0.79	water observation hole No.2-8  Jul 20, 2014  10:55 AM  - 1.3 3.4	the well point (between Unit 2 and 3)  Jul 20, 2014  10:00 AM  -  ND(0.75)  1.6	water observation	water observation	water observation	water observation	water observation	
Cs Cs The other y	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) -137 (Approx.30 years)  Gross β	the well point (between Unit 1	water observation hole No.2 Jul 20, 2014 10:12 AM - 0.66	water observation hole No.2-2  Jul 20, 2014  11:16 AM  -  8.0	water observation hole No.2-3 Jul 20, 2014 9:35 AM - ND(0.39)	water observation	water observation	water observation hole No.2-7 Jul 20, 2014 10:35 AM 850 0.79	water observation hole No.2-8  Jul 20, 2014  10:55 AM  -  1.3	the well point (between Unit 2 and 3)  Jul 20, 2014  10:00 AM  -  ND(0.75)	water observation	water observation	water observation	water observation	water observation	
Cs Cs The other y	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) -137 (Approx.30 years)	the well point (between Unit 1	water observation hole No.2  Jul 20, 2014  10:12 AM  - 0.66  2.1	water observation hole No.2-2  Jul 20, 2014  11:16 AM  -  8.0  21	water observation hole No.2-3  Jul 20, 2014  9:35 AM  -  ND(0.39)  ND(0.61)	water observation	water observation	water observation hole No.2-7 Jul 20, 2014 10:35 AM 850 0.79 1.3	water observation hole No.2-8  Jul 20, 2014  10:55 AM  - 1.3 3.4	the well point (between Unit 2 and 3)  Jul 20, 2014  10:00 AM  -  ND(0.75)  1.6	water observation	water observation	water observation	water observation	water observation	

<sup>\*</sup> Data announced this time is provided in a thick-frame. The other data was announced on June 21.

<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

<sup>\* &</sup>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**

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	1	1	/	1 /	/	,	/	,	1	1	1	1	/	,	1
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)	V	/			/	/		/						/	/
	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		Jul 23, 2014	Jul 23, 2014	Jul 23, 2014		,	Jul 23, 2014	Jul 23, 2014	Jul 23, 2014	Jul 23, 2014	Jul 23, 2014	Jul 23, 2014	Jul 23, 2014	Jul 23, 2014	
Time of sampling		9:40 AM	10:42 AM	9:15 AM		/	10:03 AM	10:22 AM	10:00 AM	10:07 AM	11:00 AM	11:20 AM	10:25 AM	10:27 AM	
Chloride (unit: ppm)		-	-	-			800	-	-	-	-	-	-	960	
Cs-134 (Approx. 2 years)		ND(0.35)	7.3	ND(0.63)			0.48	ND(0.40)	ND(0.64)	0.76	18	94	5.1 <sup>*1</sup>	33	
Cs-137 (Approx.30 years)		ND(0.43)	22	ND(0.51)			1.5	ND(0.55)	0.86	2.3	51	270	14*1	100	
The															
other y															
Gross β		170	520	840			970	5,800 <sup>*1</sup>	120,000	39	3,000*1	6,500	35 <sup>*1</sup>	330	
H-3 (Approx. 12 years)	1/	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)		-	-	-	<u> </u>	/	-	-	-	-	-	-	-	-	

<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

<sup>\* &</sup>quot;-" indicates that the measurement was out of range.

<sup>\*1</sup> 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')

		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	
C	Cs-134 (Approx. 2 years)		<5/25>	ND		0.61	<3/2>	0.61	[10/13]	0.64	<4/6>	0.82	<1/14>	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]	9,000	<7/21>
Cs-137 (Approx.30 years)		78	<5/25>	ND		1.5	<3/2>	2.2	<1/12>	1.1	<4/6>	2.1	<1/14>	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]	25,000	<7/21>
	Ru-106 (Approx. 370 days)	ND		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	
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		320	<2/13> <2/17>
other \	Co-60 (Approx. 5 years)	ND		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		ND		1.7	[7/11]	ND		250	[7/15]	1.4	(7/12) (8/26)	ND		12	[8/8]	34	<5/19>
	Gross β	300	[8/29] <5/18>	21	[12/7]	24	<6/22>	87	[10/13]	ND		67*1	[12/11]	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]	1,200,000	<7/21>
	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)	*2 110,000	<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]	-	
																													Unit: Bq/L

		Groundwater observation ho No.1-8			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
(	S-134 (Approx. 2 years)	47 [11/2	5) 170	[9/3]	-	1.1 <1/13>	74 [10/21	37,000 <2/13>	88 <sup>*2</sup> <2/27>	ND *1	3.1 [12/13]	1.4 <7/7>	110 [9/23]	0.88 <2/26>	0.66 [9/1]	15 <2/12>
(	s-137 (Approx.30 years)	110 [11/2	380	[9/3]	-	3.4 <4/28>	170 [10/21	93,000 <2/13>	230 *2 <2/27>	0.88 <7/10>	6.5 <6/26>	2.8 <4/28>	250 [9/23]	2.5 <2/26>	1.1 [8/29] (9/1)	38 <2/12>
	Ru-106 (Approx. 370 days)	ND	ND		-	ND	5.4 [10/28	ND	ND	ND	9.2 [10/28]	5.5 <4/21> <5/1>	25 [9/2]	ND	ND	ND
The	Mn-54 (Approx. 310 days)	12 <2/3	· ND		-	ND	ND	ND	0.65 <7/3> <7/14>	ND	ND	ND	8.5 <4/28>	ND	ND	ND
other	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	ND
	Sb-125 (Approx. 3 years)	ND	ND		-	ND	61 [10/21	ND	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>	9,300 <7/14>	110 <7/10>	3,100,000 <1/30> <2/3>	99,000 <6/30>	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	2 (11/14)	270,000 <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]	32,000 <1/20>	460,000 [8/19]	1,000 <2/23>	440 [8/26]	660 <1/8>
	Sr-90(Approx. 29 years)	20,000 [12/9	300	[10/3]	-	18 [10/21]	290 [10/21	Under analysis	98 [12/9]	Under analysis	1,400,000 [12/9]	9.5 [12/9]	-	54 [5/31]	5.9 [7/25]	320 [12/25]

																											Unit: Bq/L	
		Groundwater observation hole No.2-3		observation hole observatio		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*		idwater ition hole .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		2.0	<4/23>	3.5	[7/25]	1.2	(7/25) (8/8)	18	<7/2> <7/9>	180	<7/2>	3.9	<6/18> <7/9>	86	<7/16>	
	Cs-137 (Approx.30 years)	5.5	<2/26>	110	<5/7>	50	<3/11>	9.0	<2/23>	3.4 *2	<7/20>	0.58	<2/11>	4.7	<4/23>	5.9	[8/8]	2.6	[8/1]	54	<7/9>	500	<7/2>	12	<6/11>	250	<7/16>	
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND *2		6.5	<2/11>	ND		ND		ND		ND		ND		ND		-		
Th	Mn-54 (Approx. 310 days)	0.29	[12/6]	0.95	<6/4>	ND		ND		ND		ND		ND		ND		ND		ND		ND		0.54	[10/30]	-		
othe	Y Co-60 (Approx. 5 years)	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ı		
	Sb-125 (Approx. 3 years)	ND		74	<5/7>	ND		ND		ND		ND		ND		1.6	<1/1>	ND		ND		ND		ND		-		
	Gross β	1,500	(12/6) <1/8>	150,000	<2/12>	3,200	[12/5]	1,300	<6/20>	5,300 *2	<7/2> <7/6> <7/16>	1,700	<2/7>	240,000	[12/12]	1,400	[7/11]	180 180	[8/1]	2,800	<5/28> <7/2> <7/16>	8900	<7/2>	33	<6/11> <7/9>	510	<7/16>	
	H-3 (Approx. 12 years)		[12/6]	7,900	<4/9>	1,200	(11/24) (11/27)	1,100	<1/19>	1,700*2	<4/6> <6/8>	13,000	<2/7> <2/11>	7,100	<7/17>	3,200	(2012 12/12)	460	[8/1]	3,700	<7/9>	8,000	<5/7>	170	[9/18]	170	<1/8>	
	Sr-90(Approx. 29 years)		[12/6]	Under analysis		Under analysis	•	ND(1.4)	[11/21]	Under analysis		Under analysis	•	=	•	8.3	(2012 12/12)	4.4	[7/23]	Under analysis		-	•	ND		-		

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

<sup>\*1</sup> 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.)

 $<sup>^{\</sup>star}$  "ND" indicates that the measurement result is below the detection limit.

<sup>\*</sup> 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.