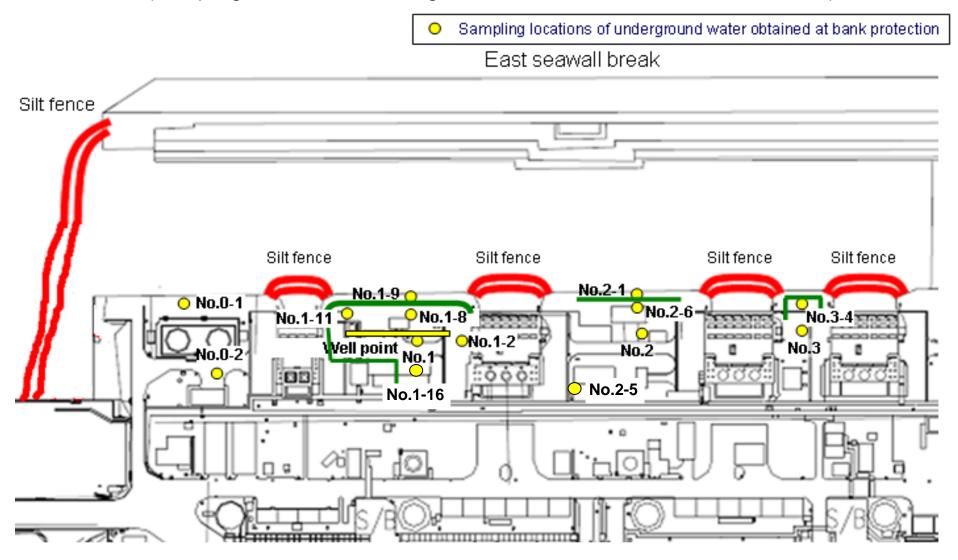
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



 Location where ground improvement work was completed, or being implemented (as of September 2 7)

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (1/6) Underground Water Obtained at Bank Protection

Unit: Bq/L (exclude chloride)

		Underground water observation hole No.0-1	Underground water observation hole No.0-2	Underground water observation hole No.1	Underground water observation hole No.1-2	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.1-16	Groundwater pumped up from the well point
	Date of sampling	/	/	/	/	/	Oct 10, 2013	/		
	Time of sampling						6:25 AM			
	Chloride (unit: ppm)						440			
Cs	s-134 (Approx. 2 years)						9.2			
Cs	s-137 (Approx.30 years)						21			
The other y										
·										
	ΑΙΙ β						71			
ŀ	H-3 (Approx. 12 years)						620			
Sr	r-90 (Approx. 29 years)	/					-			

		Underground water observation hole No.2	Underground water observation hole No.2-1	Underground water observation hole No.2-5	Underground water observation hole No.2-6	Underground water observation hole No.3	Underground water observation hole No.3-3	Underground water observation hole No.3-4
	Date of sampling	Oct 9, 2013	/	/	Oct 9, 2013	/	/	Oct 9, 2013
	Time of sampling	9:40 AM			10:15 AM			10:55 AM
Cs	s-134 (Approx. 2 years)	ND(0.37)			ND(0.48)			0.66
Cs	s-137 (Approx.30 years)	ND(0.46)			ND(0.58)			1.9
The other y								
· ·								
	ΑΙΙ β	130			37			ND(18)
H	H-3 (Approx. 12 years)	800			960			ND(120)
Sr	-90 (Approx. 29 years)	-			-		/	=

^{*} Data announced this time is provided in a thick-frame. The other data was announced on October 10 and 11.

^{* &}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 (2/6) Underground Water Obtained at Bank Protection

Unit: Bq/L (exclude chloride)

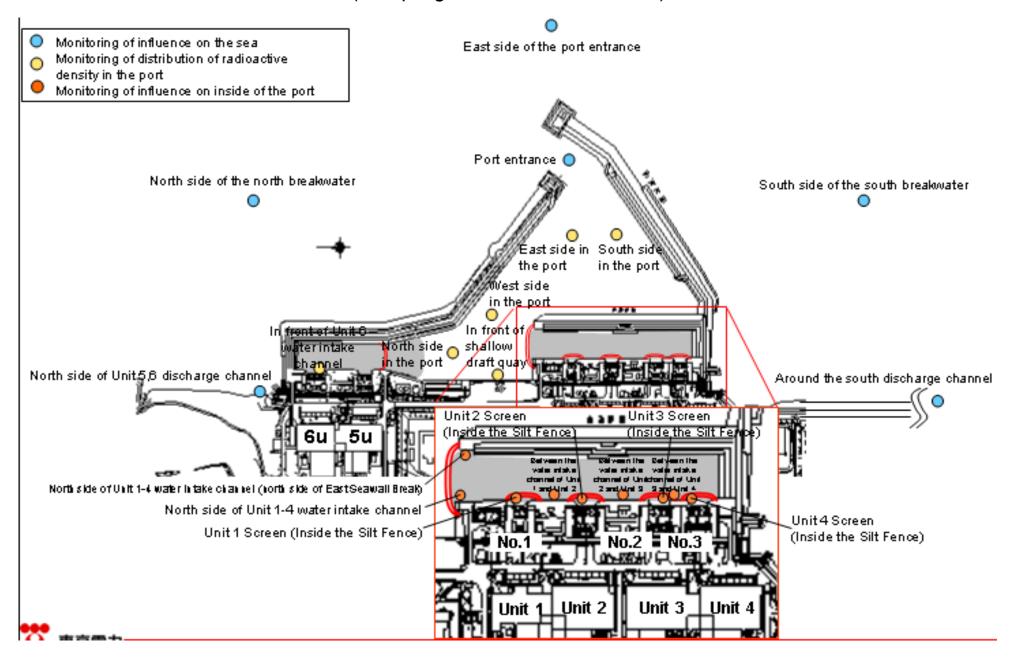
		1		1	1	1	1	1		(exclude chloride)
		Underground water observation hole No.0-1	Underground water observation hole No.0-2	Underground water observation hole No.1	Underground water observation hole No.1-2	Underground water observation hole No.1-8	Underground water observation hole No.1-9	Underground water observation hole No.1-11	Underground water observation hole No.1-16	Groundwater pumped up from the well point
	Date of sampling	Oct 13, 2013	Oct 13, 2013	/	/	/	Oct 13, 2013	/	1	
	Time of sampling	9:50 AM	11:08 AM				5:58 AM			
	Chloride (unit: ppm)						450			
C	s-134 (Approx. 2 years)	2.9	0.61				10			
Cs	s-137 (Approx.30 years)	6.7	1.6				24			
The other y										
	ΑΙΙ β	180	87				120			
ŀ	H-3 (Approx. 12 years)	Under analysis	Under analysis				Under analysis			
Sr	r-90 (Approx. 29 years)	-	-	/	/	/	-	-	-	

		Underground water observation hole No.2	Underground water observation hole No.2-1	Underground water observation hole No.2-5	Underground water observation hole No.2-6	Underground water observation hole No.3	Underground water observation hole No.3-3	Underground water observation hole No.3-4
	Date of sampling	Oct 13, 2013	/	/	Oct 13, 2013	/	/	
	Time of sampling	9:21 AM			10:00 AM			
Cs	s-134 (Approx. 2 years)	ND(0.42)			ND(0.42)			
Cs	s-137 (Approx.30 years)	ND(0.47)			0.61			
The other y								
·								
	ΑΙΙ β	180			50			
H	H-3 (Approx. 12 years)	Under analysis			Under analysis			
Sr	-90 (Approx. 29 years)	-			-		/	

^{* &}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 (Sampling Locations of Seawater)



Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (3/6) Seawater

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3	Screen	Density Limit Specified by the Reactor Regulation	WHO Guidelines for drinking- water quality
Date of Sampling		/		Oct 10, 2013		/	Oct 10, 2013	Oct 10, 2013					
Time of sampling			/	6:10 AM			6:18 AM	6:18 AM					
Cs-134(Approx. 2 years)				89			87	93				60	10
Cs-137(Approx.30 years)				190			200	200				90	10
All β				740			600	400	. /				
H-3 (Approx. 12 years)				2,400			1,400	690				60,000	10,000
Sr-90 (Approx. 29 years)	/	/	/	-			-	-		/		30	10

	1F, Between the water intake channel of Unit 3 and Unit 4	1F, Unit 4 Screen (Inside the Silt Fence)	1F, Around the south discharge channel	1F, Port entrance	1F, East side in the port	1F, West side in the port	1F, North side in the port	1F, South side in the port	North side of the north breakwater	East side of the port entrance	breakwater	Density Limit Specified by the Reactor Regulation	WHO Guidelines for drinking- water quality
Date of Sampling				/			/	/		/	/		
Time of sampling								/	/				
Cs-134(Approx. 2 years)							/		/			60	10
Cs-137(Approx.30 years)								/				90	10
ΑΙΙ β													
H-3 (Approx. 12 years)				/			/	/	/			60,000	10,000
Sr-90 (Approx. 29 years)	/	/	/	/	/	/	/	V	/	/	/	30	10

^{*} Data announced this time is provided in a thick-frame. The other data was announced on October 11.

^{* &}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.

^{*} Density Limit Specified by the Rule for the Installation, Operation, etc. of Commercial Nuclear Power Reactors (the density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2 [the amount is converted from Bg/cm³ to Bg/L]).

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (4/6) Seawater

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3	Screen	Density Limit Specified by the Reactor Regulation	WHO Guidelines for drinking- water quality
Date of Sampling				Oct 13, 2013		/	Oct 13, 2013	Oct 13, 2013					
Time of sampling				5:48 AM			5:54 AM	5:54 AM					
Cs-134(Approx. 2 years)				59			45	34				60	10
Cs-137(Approx.30 years)				140			100	79				90	10
All β				700			740	430					
H-3 (Approx. 12 years)				Under analysis			Under analysis	Under analysis				60,000	10,000
Sr-90 (Approx. 29 years)	/			-			-	-		/		30	10

	1F, Between the water intake channel of Unit 3 and Unit 4	Screen	1F, Around the south discharge channel	1F, Port entrance	1F, East side in the port	1F, West side in the port	1F, North side in the port		North side of the north breakwater	East side of the	South side of the south breakwater	Density Limit Specified by the Reactor Regulation	WHO Guidelines for drinking- water quality
Date of Sampling					/	/	/	/	/	/			
Time of sampling													
Cs-134(Approx. 2 years)												60	10
Cs-137(Approx.30 years)) /											90	10
ΑΙΙ β					/				/				
H-3 (Approx. 12 years)								/			/	60,000	10,000
Sr-90 (Approx. 29 years)		/			V	V	/	/		V	/	30	10

^{* &}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.

^{*} Density Limit Specified by the Rule for the Installation, Operation, etc. of Commercial Nuclear Power Reactors (the density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2 [the amount is converted from Bg/cm³ to Bg/L]).

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (5/6) Seawater

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3	1F, Unit 3 Screen (Inside the Silt Fence)	Density Limit Specified by the Reactor Regulation *	WHO Guidelines for drinking- water quality
Date of Sampling		/	Oct 12, 2013		Oct 12, 2013	/			Oct 12, 2013	Oct 12, 2013			
Time of sampling			6:02 AM		6:30 AM				6:14 AM	6:17 AM			
Cs-134(Approx. 2 years)			2.8		15				78	40		60	10
Cs-137(Approx.30 years)) /		7.4		30				180	77		90	10
ΑΙΙ β			ND(19)		130				590	380			
H-3 (Approx. 12 years)			ND(120)		ND(120)				1,200	720		60,000	10,000
Sr-90 (Approx. 29 years)	/	/	-		-		/	/	-	-	/	30	10

	1F, Between the water intake channel of Unit 3 and Unit 4	Screen	1F, Around the south discharge channel		1F, East side in the port	1F, West side in the port	1F, North side in the port	,	North side of the north breakwater	East side of the	South side of the south breakwater	Density Limit Specified by the Reactor Regulation *	WHO Guidelines for drinking- water quality
Date of Sampling				Oct 12, 2013	/		/	/	/				
Time of sampling				8:50 AM									
Cs-134(Approx. 2 years)				1.9								60	10
Cs-137(Approx.30 years) /			4.1						/		90	10
ΑΙΙ β				ND(17)				/	/				
H-3 (Approx. 12 years)				7.9								60,000	10,000
Sr-90 (Approx. 29 years)	/		V	-	/	V	V	V	V	/	/	30	10

^{*} Data announced this time is provided in a thick-frame. The other data was announced on October 12.

^{* &}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.

^{*} Density Limit Specified by the Rule for the Installation, Operation, etc. of Commercial Nuclear Power Reactors (the density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2 [the amount is converted from Bg/cm³ to Bg/L]).

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (6/6) Seawater

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3	0010011	Density Limit Specified by the Reactor Regulation	WHO Guidelines for drinking- water quality
Date of Sampling		/	Oct 13, 2013		Oct 13, 2013				Oct 13, 2013	Oct 13, 2013	/		
Time of sampling			5:44 AM		6:24 AM				6:05 AM	6:08 AM			
Cs-134(Approx. 2 years)			ND(2.3)		12				58	23		60	10
Cs-137(Approx.30 years)) /		3.9		26				130	51		90	10
ΑΙΙ β			ND(19)		90				560	310			
H-3 (Approx. 12 years)			Under analysis		Under analysis				Under analysis	Under analysis		60,000	10,000
Sr-90(Approx. 29 years)	/		-		=		/	/	-	-	/	30	10

	1F, Between the water intake channel of Unit 3 and Unit 4	Screen	1F, Around the south discharge channel		1F, East side in the port	1F, West side in the port	1F, North side in the port		North side of the north breakwater	East side of the	South side of the south breakwater	Density Limit Specified by the Reactor Regulation *	WHO Guidelines for drinking- water quality
Date of Sampling				Oct 13, 2013	/		/	/	/				
Time of sampling				8:42 AM									
Cs-134(Approx. 2 years)				ND(2.3)	/							60	10
Cs-137(Approx.30 years) /			2.2						/		90	10
ΑΙΙ β				ND(16)									
H-3 (Approx. 12 years)				Under analysis								60,000	10,000
Sr-90 (Approx. 29 years)	/		/	-	/	V	V	V	V	/	/	30	10

^{* &}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.

^{*} Density Limit Specified by the Rule for the Installation, Operation, etc. of Commercial Nuclear Power Reactors (the density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2 [the amount is converted from Bq/cm³ to Bq/L]).

<Reference> The Highest Dose Until the Previous Measurement (Groundwater Obtained at Bank Protection)

Unit: Bq/L

			Ground observati No.0	ion hole	Ground observati No.	tion hole	Ground observati No	ion hole	Ground observat No.	ion hole	observa	dwater tion hole .1-2	Ground observat No.	tion hole	observa	dwater tion hole .1-4		dwater tion hole 1-5	observa	idwater ition hole .1-8		dwater tion hole .1-9	observa	ndwater ation hole .1-11	observa	ndwater ation hole .1-16	pumped the we	dwater I up from ell point n tank)
	Cs-134	(Approx. 2 years)	3.0	[9/29]	ND		13	[8/29]	1.9	[7/8]	11,000	[7/9]	10	[9/2]	1.5	[7/8]	310	(8/5)	31	[9/16]	170	(9/3)	0.55	[10/7]	[1/1]	[10/3]	110	[9/23]
	Cs-137	(Approx.30 years)	5.9	[10/6]	0.93	(9/15)	31	[8/29]	3.6	[7/8]	22,000	[7/9]	24	[9/2]	3.6	[7/8]	650	(8/5)	67	(9/16)	380	[9/3]	2.0	[10/10]	[1/3]	[10/10]	250	[9/23]
	Ru-1	106 (Approx. 370 days)	ND		ND		26	[5/24]	7.9	[7/8]	160	(8/15)	17	(7/22) (8/8)	3.1	(8/8)	ND		ND		ND		ND		ND		25	[9/2]
Th	me Mn-	-54 (Approx. 310 days)	ND		ND		ND		1.0	[7/5]	62	[7/5]	ND		ND		ND		0.76	(9/16)	ND		ND		ND		ND	
othe	er γ Co	o-60 (Approx. 5 years)	ND		ND		0.50	[7/19]	ND		3.1	[7/8]	ND		ND		ND		ND		ND		ND		[1/0]	[10/7]	ND	
	Sb-	-125 (Approx. 3 years)	ND		ND		1.7	[7/11]	ND		250	(7/15)	1.4	(7/12) (8/26)	ND		12	(8/8)	ND		ND		ND		ND		ND	
		All β	300	[8/22]	(2/6)	[9/22]	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)	2,100	(9/16)	600	(9/8)	72	[10/3]	(1/18)	(10/10)	700,000	(9/23)
	H-3 (A	approx. 12 years)	45,000	[8/29]	ND		500,000	(5/24) (6/7)	630,000	[7/8]	57,000	[10/3]	290,000	[7/12]	98,000	(7/11)	72,000	(8/15)	2100	[9/23]	770	[10/1]	85000	[9/13]	43000	[9/26]	460,000	(8/19)
	Sr-90(A	Approx. 29 years)	Under analysis		Under analysis		1,200	[6/7]	Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis	i	-	

		observa	dwater tion hole 0.2		dwater tion hole 2-1	Ground observati No.2	ion hole	observa	dwater tion hole 2-6	observa	ndwater ation hole o.3	Ground observat No.	ion hole	Ground observat No.	ion hole
C	s-134 (Approx. 2 years)	0.50	[7/9]	0.66	[9/1]	3.7	[9/29]	0.42	[9/22]	3.5	[7/25]	1.2	(7/25) (8/8)	1.0	[9/25]
Cs	s-137 (Approx.30 years)	1.2	(7/11) (8/1)	1.1	(8/29) (9/1)	10	[9/29]	0.6	(9/22) (9/29)	5.9	(8/8)	2.6	(8/1)	1.9	[10/9]
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND		ND		ND	
The	Mn-54 (Approx. 310 days)	ND		ND		0.77	[9/29]	ND		ND		ND		ND	
other y	Co-60 (Approx. 5 years)	ND		ND		ND		ND		ND		ND		ND	
	Sb-125 (Approx. 3 years)	ND		ND		26	[9/29]	ND		1.1	[9/5]	ND		ND	
	All β	1,700	[7/8]	380	[7/29]	46000	[9/29]	37	[10/9]	1,400	[7/11]	180	[8/1]	ND	
ŀ	H-3 (Approx. 12 years)	850	[6/26]	440	(8/26)	1500	(9/29)	910	(10/6)	3,200	[2012/12/ 12]	460	[8/1]	170	(9/18)
S	3r-90(Approx. 29 years)	54	[5/31]	Under analysis		Under analysis		Under analysis		8.3	(2012/12/ 12)	Under analysis		Under analysis	

 $^{^{*}1}$ Although we previously announced the analysis result of γ and all β on September 29, we have reanalyze the sample.

The analysis result of No.2-5 is the reference value, since we could not sample groundwater by a regular procedure.

^{* &}quot;ND" indicates that the measurement result is below the detection limit.

^{*} Date of sampling is provided in parentheses.

<Reference> The Highest Dose Until the Previous Measurement* (Seawater)

Unit: Bq/L

	Unit 5,6	th side of discharge annel	,	ont of Unit 6 ake channel	,	n front of draft quay	Unit 1-4 w		Unit 1-4 channel of Eas	rth side of water intake (north side t Seawall reak)	(Inside	: 1 Screen e the Silt nce)	water inta of Unit 1		water into	ween the ake channel and Unit 2 r layer)	(Inside	2 Screen e the Silt nce)	water inta of Unit 2	ween the ike channel and Unit 3 ce layer)	water inta of Unit 2	ween the ake channel and Unit 3 r layer)	(Inside	3 Screen the Silt nce)
Cs-134(Approx. 2 years)	1.8	[6/21]	2.4	[8/19]	5.3	[8/5]	54	(9/10)	32	[10/11]	73	[10/10]	87	[10/10]	93	[10/10]	370	[10/9]	46	[10/11]	3.5	[8/20]	350	[7/15]
Cs-137(Approx.30 years)	3.3	[6/26]	4.7	[8/19]	8.6	[8/5]	110	[9/10]	73	[10/11]	170	[10/10]	200	[10/10]	200	[10/10]	830	[10/9]	110	[10/11]	9.8	[8/20]	770	[7/15]
ΑΙΙ β	ND		46	(8/19)	40	[7/3]	1,100	(8/15)	320	[8/12]	710	[10/10]	740	(8/15)	450	[7/16]	1700	[10/9]	480	[10/7]	85	[8/20]	1,000	[7/15]
H-3 (Approx. 12 years)	8.6	[6/26]	24	[8/19]	340	[6/26]	4,700	[8/15]	460	(7/15)	2,500	[8/12]	2,600	[8/15]	1,600	[9/1]	1,900	[10/9]	1,200	[10/7]	-		410	[9/2]
Sr-90 (Approx. 29 years)	5.8	[6/26]	-		7.4	[6/26]	Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		-		Under analysis	

Unit: Bq/L

	water intal of Unit 3 a		water into	tween the ake channel and Unit 4 er layer)	(Insid	it 4 Screen le the Silt ence)	south c	ound the discharge annel	1F, Po	rt entrance	-	side in the ort	1F, West			n side in the port		n side in the port	North sid			of the port	South side of the south breakwater
Cs-134(Approx. 2 years)	22	[8/12]	4.8	[8/20]	62	(9/16)	ND		2.7	[10/11]	2.9	[8/19]	2.6	[8/19]	2.3	[10/3]	2.1	[8/19]	ND		ND		ND
Cs-137(Approx.30 years)	45	[8/12]	7.7	[8/20]	140	(9/16)	3.0	[7/15]	7.3	[10/11]	6.6	[8/19]	6.5	[8/19]	4.7	[8/19]	4.6	[8/19]	ND		1.4	[10/8]	ND
ΑΙΙ β	390	[8/12]	57	[8/20]	360	[10/7]	ND		69	[8/19]	74	[8/19]	60	[7/4]	69	[8/19]	79	[8/19]	ND		ND		ND
H-3 (Approx. 12 years)	650	[8/12]	-		400	/12) [10/	ND		68	(8/19)	67	(8/19)	59	[8/19]	52	(8/19)	60	(8/19)	4.7	[8/14]	3.6	(9/18)	ND
Sr-90 (Approx. 29 years)	Under analysis		-		Under analysis		0.36	[6/26]	3.5	[6/20]	Under analysis		Under analysis		-		-		-		-		-

^{*} The highest result announced in "Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection" or the other handouts is provided.

As for "1F, North side of Unit 1-4 water intake channel", the data is obtained since January 14, 2013. For the other locations, the data is obtained since June 14.

[Reference] Standard values

	Cs-134	Cs-137	H-3	Sr-90
Density Limit Specified by the Rule for the Installation, Operation, etc. of Commercial Nuclear Power Reactors (the density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2)	60	90	60,000	30
WHO Guidelines for drinking-water quality	10	10	10,000	10

^{* &}quot;ND" indicates that the measurement result is below the detection limit.

^{*} Date of sampling is provided in parentheses.

^{* &}quot;-" indicates that the measurement was out of range.