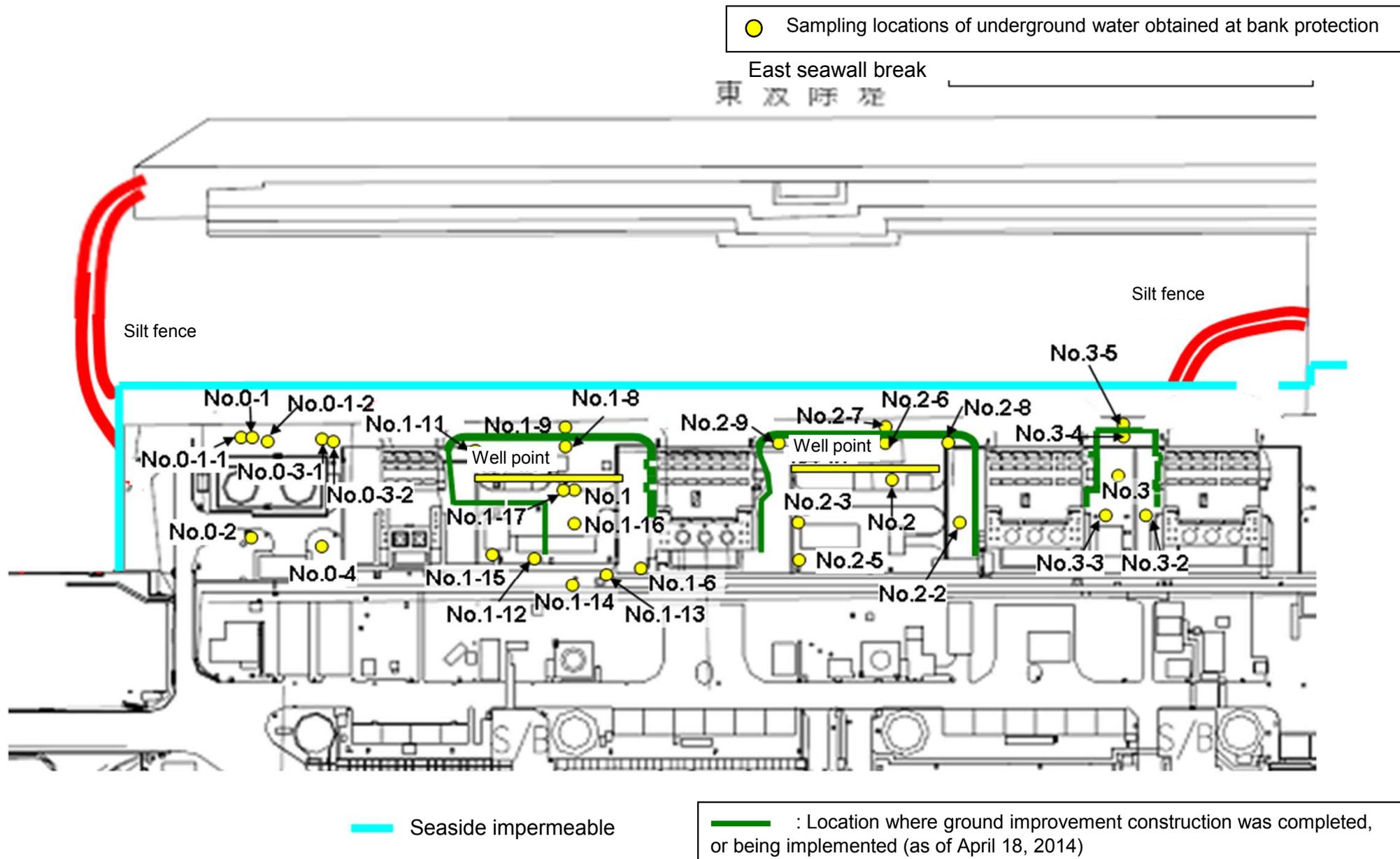


Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



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.1-15	Underground water observation hole No.1-16
Date of sampling										Jul 10, 2014					
Time of sampling										7:10 AM					
Chloride (unit: ppm)										30					
Cs-134 (Approx. 2 years)										1.9					
Cs-137 (Approx.30 years)										4.3					
The other y															
Gross β									22						
H-3 (Approx. 12 years)										ND(110)					
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	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 9, 2014	Jul 9, 2014	Jul 9, 2014		Jul 10, 2014	Jul 11, 2014	Jul 9, 2014	Jul 9, 2014	Jul 9, 2014	Jul 9, 2014	Jul 9, 2014	Jul 9, 2014	Jul 9, 2014
Time of sampling			10:12 AM	11:32 AM	9:37 AM		10:51 AM	9:15 AM	11:04 AM	10:00 AM	10:23 AM	11:20 AM	11:48 AM	10:43 AM	10:15 AM
Chloride (unit: ppm)			-	-	-		-	900	-	-	-	-	-	-	1,000
Cs-134 (Approx. 2 years)			ND(0.47)	7.2	ND(0.47)		ND(0.43)	0.50	ND(0.39)	ND(0.64)	0.70	18	130	3.9	18
Cs-137 (Approx.30 years)			ND(0.54)	20	ND(0.54)		ND(0.52)	1.3	ND(0.48)	ND(0.72)	2.0	54	370	11	55
The other y															
Gross β			180	430	880		2,300	900	4,900	90,000	ND(18)	2,700	8,800	33	87
H-3 (Approx. 12 years)			680	420	950		980	730	1,400	6,800	130	3,700 ^{*1}	3,700	110	ND(110)
Sr-90 (Approx. 29 years)			-	-	-		-	-	-	-	-	-	-	-	-

* Data announced this time is provided in a thick-frame. The other data was announced on June 10, 11, and 12.

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

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

*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	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	Jul 13, 2014	41,833	Jul 13, 2014	Jul 13, 2014		Jul 13, 2014				Jul 13, 2014					
Time of sampling	11:08 AM	10:40 AM	10:06 AM	10:24 AM		9:38 AM				7:10 AM					
Chloride (unit: ppm)	-	-	-	-		-				33					
Cs-134 (Approx. 2 years)	18	ND(0.36)	ND(0.48)	ND(0.38)		ND(0.44)				1.9					
Cs-137 (Approx.30 years)	47	ND(0.47)	ND(0.56)	ND(0.51)		0.56				4.1					
The other γ															
Gross β	160	ND(19)	ND(19)	ND(19)		ND(19)			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*	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 13, 2014	Jul 13, 2014	Jul 13, 2014	Jul 13, 2014		Jul 13, 2014	Jul 13, 2014	Jul 13, 2014					
Time of sampling		10:08 AM	11:12 AM	9:35 AM	9:30 AM		10:30 AM	10:51 AM	10:00 AM					
Chloride (unit: ppm)		-	-	-	-		820	-	-					
Cs-134 (Approx. 2 years)		ND(0.37)	7.3	ND(0.37)	-		0.75	ND(0.37)	ND(0.73)					
Cs-137 (Approx.30 years)		ND(0.50)	21	ND(0.48)	-		1.5	ND(0.48)	0.90					
The other γ														
Gross β		230	460	860	33,000		880	4,900	110,000					
H-3 (Approx. 12 years)		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.

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

* The results obtained in the observation hole No.2-5 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.)

<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>	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]	8,800 <7/3>
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]	24,000 <7/3>
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	320 <2/13> <2/17>
	Co-60 (Approx. 5 years)	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	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]	1,100,000 <7/10>
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 <2/6>
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 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>	88 *2 <2/27>	ND *1	3.1 [12/13]	1.4 <7/7>	110.00 [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>	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>
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	0.65 <7/3>	ND	ND	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	ND	24 <6/16>	2.1 [11/25]	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>	8,200 <7/7>	110 <7/10>	3,100,000 <1/20> <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 [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]	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	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>	0.47 <4/9>	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>	64 <1/15>
Cs-137 (Approx.30 years)	5.5 <2/26>	110 <5/7>	50 <3/11>	9.0 <2/23>	1.3 *2 <4/9>	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>	170 <1/15> <6/4>
The other γ	Ru-106 (Approx. 370 days)	ND	ND	ND	ND *2	6.5 <2/11>	ND	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	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>	1,700 <2/7>	240,000 [12/12]	1,400 [7/11]	180 *2 [8/1]	2,800 <5/28> <7/2>	8900 <7/2>	33 <6/11> <7/9>	350 <5/28>
H-3 (Approx. 12 years)	1,700 [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>	6,800 <7/2>	3,200 [2012 12/12]	460 [8/1]	3,500 <7/2>	8,000 <5/7>	170 [9/18]	170 <1/8>
Sr-90(Approx. 29 years)	1,200 [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	-

● 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.