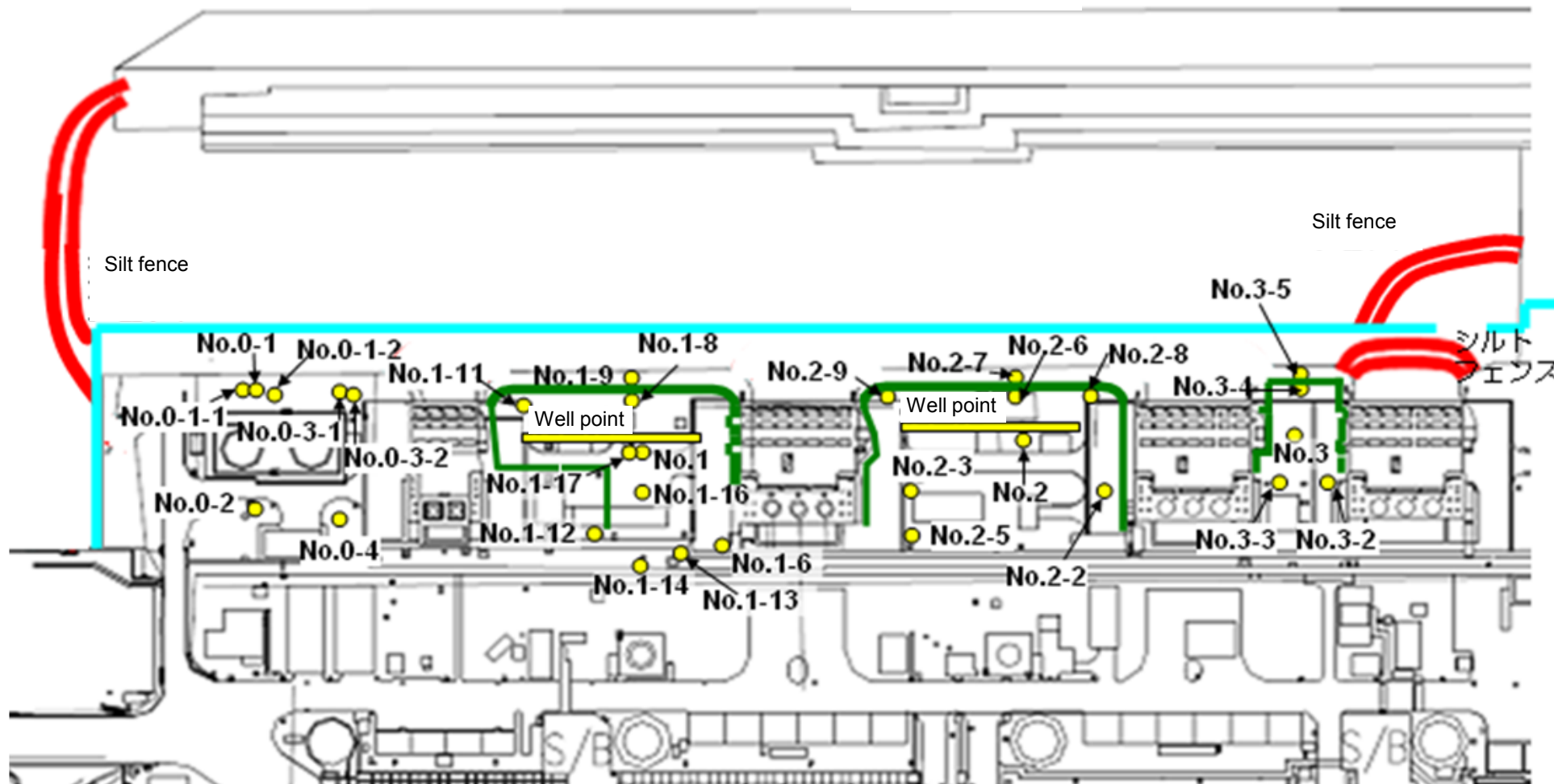


Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)

● 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	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										Jun 12, 2014					
Time of sampling										6:08 AM					
Chloride (unit: ppm)										70					
Cs-134 (Approx. 2 years)										3.4					
Cs-137 (Approx.30 years)										8.6					
The other γ															
Gross β										ND(17)					
H-3 (Approx. 12 years)										ND(100)					
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		Jun 11, 2014	Jun 11, 2014	Jun 11, 2014		Jun 12, 2014	Jun 13, 2014	Jun 11, 2014	Jun 11, 2014	Jun 11, 2014	Jun 11, 2014	Jun 11, 2014	Jun 11, 2014	Jun 11, 2014
Time of sampling		10:10 AM	11:47 AM	9:42 AM		9:26 AM	10:28 AM	10:55 AM	10:00 AM	10:19 AM	11:40 AM	12:06 PM	11:02 AM	11:00 AM
Chloride (unit: ppm)		-	-	-		-	800	-	-	-	-	-	-	1,400
Cs-134 (Approx. 2 years)		ND(0.37)	11	ND(0.37)		ND(0.38)	0.43	ND(0.49)	0.78	0.67	12	50	3.8	27
Cs-137 (Approx.30 years)		ND(0.44)	29	ND(0.48)		ND(0.45)	1.5	ND(0.67)	2.3	2.0	33	140	12	77
The other γ														
Gross β		240	590	910		2,500	760	4,200	100,000	ND(18)	2,700	2,700	33	260
H-3 (Approx. 12 years)		710	490	810		860	550	1,200	6,300 ^{*1}	110	2,800	6,300	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 June 12, 13, and 14.

** "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.2-2 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')

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	Jun 15, 2014	Jun 15, 2014	Jun 15, 2014	Jun 15, 2014		Jun 15, 2014				Jun 15, 2014					
Time of sampling	11:17 AM	10:46 AM	10:12 AM	10:30 AM		9:44 AM				6:15 AM					
Chloride (unit: ppm)	-	-	-	-		-				60					
Cs-134 (Approx. 2 years)	17	ND(0.36)	ND(0.35)	ND(0.41)		ND(0.38)				7.1					
Cs-137 (Approx.30 years)	47	ND(0.51)	0.56	0.67		ND(0.47)				14					
The other γ															
Gross β	190	ND(18)	ND(18)	ND(18)		ND(18)			29						
H-3 (Approx. 12 years)	Under analysis	Under analysis	Under analysis	Under analysis		Under analysis				Under analysis					
Sr-90 (Approx. 29 years)	-	-	-	-		-				Under analysis					

	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		Jun 15, 2014	Jun 15, 2014	Jun 15, 2014			Jun 15, 2014	Jun 15, 2014	Jun 15, 2014					
Time of sampling		10:00 AM	11:39 AM	9:33 AM			10:25 AM	10:46 AM	9:45 AM					
Chloride (unit: ppm)		-	-	-			750	-	-					
Cs-134 (Approx. 2 years)		ND(0.42)	11	ND(0.35)			0.58	ND(0.37)	1.0					
Cs-137 (Approx.30 years)		ND(0.55)	27	ND(0.46)			1.1	ND(0.47)	3.7					
The other γ														
Gross β		260	500	860			830	4,400 [†]	100,000					
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.

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

* The results obtained 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.)

*† 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')

<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>	ND	13 [8/29]	1.9 [7/8]	11,000 [7/9]	10 [9/2]	1.5 [7/8]	310 [8/5]	6,800 <6/12>
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>	1.4 <1/12>	31 [8/29]	3.6 [7/8]	22,000 [7/9]	24 [9/2]	3.6 [7/8]	650 [8/5]	19,000 <6/12>
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]	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]	860,000 <5/8>
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.1-16	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	Groundwater observation hole No.2-3
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>	3.1 *1 [12/13]	1.3 <6/12>	110 [9/23]	0.88 <2/26>	0.66 [9/1]	15 <2/12>	2.2 <2/26>
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>	5.6 <6/9>	2.8 <4/28>	250 [9/23]	2.5 <2/26>	1.1 [8/29] [9/1]	38 <2/12>	5.5 <2/26>
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	ND	0.4 <6/9>	ND	ND	8.5 <4/28>	ND	ND	0.29 [12/6]
	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	18 <5/29>	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>	4,800 <6/9>	3,100,000 <1/20> <1/30> <2/3>	63,000 <6/12>	700,000 [9/23]	1,700 [7/8]	380 [7/29]	600 <4/16>	1,500 [12/6] <1/8>
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>	43,000 [9/26]	32,000 <1/20>	460,000 [8/19]	1,000 <2/23>	440 [8/26]	660 <1/8>	1,700 [12/6]
Sr-90(Approx. 29 years)	20,000 [12/9]	300 [10/3]	-	18 [10/21]	290 [10/21]	Under analysis	98 [12/9]	1,400,000 [12/9]	9.5 [12/9]	-	54 [5/31]	5.9 [7/25]	320 [12/25]	1,200 [12/6]

Unit: Bq/L

	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)	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]	12 <5/28> <6/11>	73 <5/21>	3.8 <6/11>	64 <1/15>
Cs-137 (Approx.30 years)	110 <5/7>	50 <3/11>	9.0 <2/23>	1.3 <4/9>	0.58 *2 <2/11>	4.7 <4/23>	5.9 [8/8]	2.6 [8/1]	33 <5/28> <6/11>	200 <5/21>	12 <6/11>	170 <1/15> <6/4>
The other γ	Ru-106 (Approx. 370 days)	ND	ND	ND	6.5 *2 <2/11>	ND	ND	ND	ND	ND	ND	-
	Mn-54 (Approx. 310 days)	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	-
	Sb-125 (Approx. 3 years)	74 <5/7>	ND	ND	ND	ND	ND	1.6 <1/1>	ND	ND	ND	-
Gross β	150,000 <2/12>	3,200 [12/5]	1,100 <6/8>	4,300 <6/4>	1,700 *2 <2/7>	240,000 [12/12]	1,400 [7/11]	180 [8/1]	2,800 *2 <5/28>	4,900 <4/30>	33 <6/11>	350 <5/28>
H-3 (Approx. 12 years)	7,900 <4/9>	1,200 [11/24] [11/27]	1,100 <1/19>	1,700 <4/6> <6/8>	13,000 *2 <2/7> <2/11>	6,200 <6/4>	3,200 [2012/12] [12]	460 [8/1]	2,800 <5/14>	8,000 <5/7>	170 [9/18]	170 <1/8>
Sr-90(Approx. 29 years)	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.