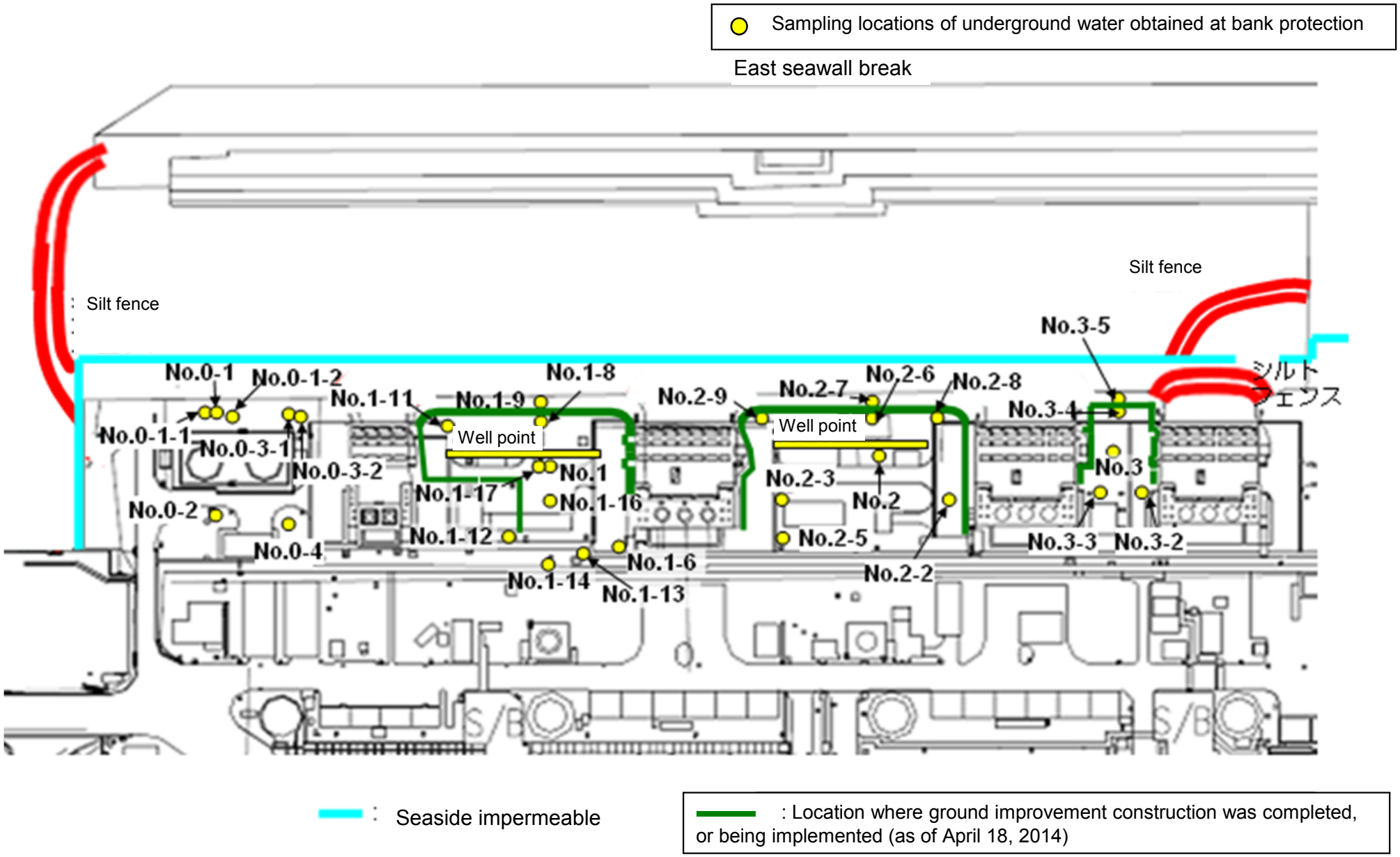
<Reference>
August 11, 2014
Tokyo Electric Power Company

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										Aug 7, 2014					
Time of sampling										7:10 AM					
Chloride (unit: ppm)										31					
Cs-134 (Approx. 2 years)										2.9					
Cs-137 (Approx.30 years)										7.1					
The other γ: Sb-125 (Approx. 3 years)										ND					
The other γ															
The other γ															
The other γ															
Gross β										ND(17)					
H-3 (Approx. 12 years)										ND(110)					
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		Aug 6, 2014	Aug 6, 2014	Aug 6, 2014	Aug 7, 2014	Aug 7, 2014	Aug 8, 2014	Aug 6, 2014	Aug 6, 2014	Aug 6, 2014	Aug 6, 2014	Aug 6, 2014	Aug 6, 2014	Aug 6, 2014
Time of sampling		10:02 AM	11:15 AM	9:35 AM	8:55 AM	8:56 AM	9:30 AM	10:50 AM	10:00 AM	10:27 AM	11:30 AM	11:53 AM	10:45 AM	10:10 AM
Chloride (unit: ppm)		-	-	-	-	-	1,000	-	-	-	-	-	-	1,160
Cs-134 (Approx. 2 years)		ND(0.41)	6.7	ND(0.38)	-*2	ND(0.34)	0.70	ND(0.37)	ND(0.62)	0.76	22	150	4.1	22
Cs-137 (Approx.30 years)		0.82	24	ND(0.44)	-*2	0.65	2.1	0.64	ND(0.69)	1.8	63	380	12	110
The other γ: Sb-125 (Approx. 3 years)		ND	ND	ND	-*2	ND	ND	ND	ND	1.1	ND	ND	ND	ND
The other γ														
The other γ														
The other γ														
Gross β		170	380	850	19,000	2,000	1,000	5,100	110,000	ND(17)	3,000	7,000	18	150
H-3 (Approx. 12 years)		820	550	840	1,300	870	710	1,700	7,500	ND(110)	3,200	3,100	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 August 7, 8, and 9.
* "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. (Undiluted liquid was measured since filtration takes a long time.)

*2 Cs-134: 1,100Bq/L, Cs-137: 3,200Bq/L, Sb-125: 52Bq/L (Since water was highly turbid and it takes long time to filtrate, undiluted liquid was measured as a reference.)

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	Aug 10, 2014	41,861	Aug 10, 2014	Aug 10, 2014		Aug 10, 2014				Aug 10, 2014					
Time of sampling	10:44 AM	10:11 AM	9:35 AM	9:54 AM		9:04 AM				7:18 AM					
Chloride (unit: ppm)	-	-	-	-		-				33					
Cs-134 (Approx. 2 years)	18	ND(0.52)	ND(0.42)	ND(0.42)		ND(0.43)				ND(1.2)					
Cs-137 (Approx.30 years)	58	ND(0.46)	ND(0.58)	ND(0.56)		ND(0.57)				5.7					
The other γ															
The other γ															
The other γ															
The other γ															
Gross β	170	ND(19)	ND(19)	ND(19)		ND(19)				110					
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		Aug 10, 2014	Aug 10, 2014	Aug 10, 2014			Aug 10, 2014	Aug 10, 2014	Aug 10, 2014					
Time of sampling		9:58 AM	11:26 AM	9:28 AM			10:15 AM	10:38 AM	10:00 AM					
Chloride (unit: ppm)		-	-	-			800	-	-					
Cs-134 (Approx. 2 years)		ND(0.40)	8.6	ND(0.40)			0.83	ND(0.41)	ND(0.59)					
Cs-137 (Approx.30 years)		ND(0.52)	20	ND(0.54)			2.0	ND(0.47)	ND(0.71)					
The other γ														
The other γ														
The other γ														
The other γ														
Gross β		220	380	900			750	5,300	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.)

<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〕	11,000 <8/4> <8/7>
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〕	32,000 <8/4>
The other γ: 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 other γ: 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>
The other γ: 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>
The other γ: 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> <8/4> <8/7>
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 <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〕	590,000 <2/13>

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	30 <7/28>	1.4 <7/7>	110 〔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>	86 <7/28>	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	ND	9.2 〔10/28〕	5.5 <4/21> <5/1>	25 〔9/2〕	ND	ND	ND
The other γ: Mn-54 (Approx. 310 days)	12 <2/3>	ND	-	ND	ND	ND	1.1 <8/7>	ND	1.7 <8/4>	ND	8.5 <4/28>	ND	ND	ND
The other γ: 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
The other γ: 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>	14,000 <8/4>	110 <7/10>	3,100,000 <1/20> <1/30> <2/3>	240,000 <8/7>	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)	35,000 <2/17>	300 〔10/3〕	—	22 <1/9>	290 〔10/21〕	160,000 <2/12>	770 <3/10>	Under analysis	2,700,000 <2/13>	620 <3/10>	—	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>	1.3 <7/20>	ND	2.0 <4/23>	3.5 〔7/25〕	1.2 〔7/25〕 〔8/8〕	22 <8/6>	180 <7/2>	5.1 <7/23>	100 <7/30>
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〕	63 <8/6>	500 <7/2>	14 <7/23>	310 <7/30>
The other γ: Ru-106 (Approx. 370 days)	ND	ND	ND	ND	ND*2	6.5 <2/11>	ND	ND	ND	ND	ND	ND	-
The other γ: 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〕	-
The other γ: Co-60 (Approx. 5 years)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
The other γ: 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>	5,800*2 <7/23>	1,700 <2/7>	240,000 〔12/12〕	1,400 〔7/11〕	180*2 〔8/1〕	3,000 <7/23> <8/6>	8900 <7/2>	35 <7/23>	510 <7/16>
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> <8/6>	13,000 <2/7> <2/11>	7,500 <7/30>	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)	1,200 〔12/6〕	Under analysis	Under analysis	ND(1.4) 〔11/21〕	3,900 <3/30>	1,200 <2/11>	-	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.