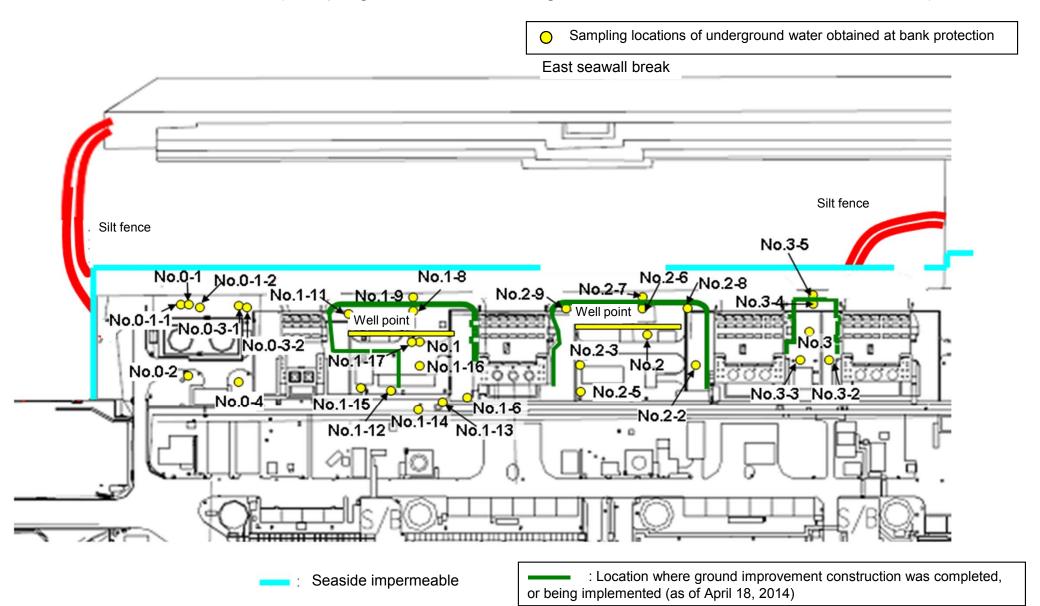
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



## 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 chloric
		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 observati hole No.1-17
	Date of sampling		/	/	/		,	/	/	1	Sep 25, 2014	/	1	/		
	Time of sampling				/		/			/	7:15 AM	/			/	
	Chloride (unit: ppm)						/				18				/	/
C	s-134 (Approx. 2 years)										_					
Cs	s-137 (Approx.30 years)										-					
	Mn-54 (Approx. 310 days)															
The	Co-60 (Approx. 5 years)						/									
other y	Sb-125 (Approx. 3 years)						/									
							/									
	Gross β						/				ND(18)					
ŀ	H-3 (Approx. 12 years)	/			/	/	/		/	/	ND(100)	/	/		/	/
Sr	-90 (Approx. 29 years)	/	/	/	/	/	/	/	/	/	_	/	/	/	/	/
		L	I.	Y		r		Y	1	1		T	1	I.	<b>7</b>	_
		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	/	Sep 24, 2014	Sep 24, 2014	Sep 24, 2014	/	Sep 25, 2014	Sep 26, 2014	Sep 24, 2014	Sep 24, 2014	Sep 24, 2014	Sep 24, 2014	Sep 24, 2014	Sep 24, 2014	Sep 24, 2014	
	Time of sampling		8:43 AM	10:44 AM	9:12 AM		Not sampled	9:37 AM	9:56 AM	10:00 AM	9:13 AM	10:16 AM	10:37 AM	9:42 AM	9:06 AM	
	Chloride (unit: ppm)		-	_	_			900	_	_	_	_	_	_	700	
C	s-134 (Approx. 2 years)		ND(0.42)	-	ND(0.45)			ND(0.37)	ND(0.35)	ND(0.59)	0.77	19	49	5.0	_	
Cs	s-137 (Approx.30 years)		0.53	-	0.63			2.2	0.67	0.99	2.0	50	190	12	-	
	Mn-54 (Approx. 310 days)															
The	Co-60 (Approx. 5 years)															
other γ	Sb-125 (Approx. 3 years)					/										

920

760

5,200

1,200

100,000

9,300

ND(17)

ND(110)

2,400

2,000

3,700

1,600

17

ND(110)

450

ND(110)

390

720

(Note) As of No. 1-9, 2-5, and 3-5,  $\gamma$  was not measured because they are samlpled by sampler. Gross  $\beta$  were measured after filtration for references.

170

670

Gross β

H-3 (Approx. 12 years)

Sr-90 (Approx. 29 years)

<sup>\*</sup> Data announced this time is provided in a thick-frame. The other data was announced on September 25, 26 and 27.

<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, except "the other  $\gamma$ "

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

 $<sup>^{\</sup>star}$  The results are for a reference, since the water was highly turbid. (Gross  $\beta$  were measured after filtration.)

<sup>\*2</sup> Not sampled because of a storm warning.

## 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	Sep 28, 2014	41,910	Sep 28, 2014	Sep 28, 2014		Sep 28, 2014				Sep 28, 2014			1		1
	Time of sampling	10:55 AM	10:14 AM	9:39 AM	9:58 AM		9:07 AM		/		6:17 AM		/			/
	Chloride (unit: ppm)	_	_	_	_		_				16					
Cs	s-134 (Approx. 2 years)	17	ND(0.38)	ND(0.45)	ND(0.46)		ND(0.39)				_					
Cs	-137 (Approx.30 years)	57	ND(0.48)	ND(0.58)	ND(0.59)		ND(0.46)				_					
The																
other y																
	Gross β	210	ND(21)	ND(21)	ND(21)		ND(21)				ND(21)					
H	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	Underground	Underground	Underground	Underground	Underground	Underground	Underground	Groundwater pumped up from	Underground	Underground	Underground	Underground	Underground	1
		the well point (between Unit 1 and 2)	water observation hole No.2	water observation hole No.2-2*	water observation hole No.2-3	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	water observation hole No.3-3			
	Date of sampling	(between Unit 1			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	(between Unit 1	hole No.2	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	7
		(between Unit 1	hole No.2 Sep 28, 2014	hole No.2-2* Sep 28, 2014	water observation hole No.2-3 Sep 28, 2014	water observation	water observation	water observation hole No.2-7 Sep 28, 2014	water observation hole No.2-8 Sep 28, 2014	the well point (between Unit 2 and 3) Sep 28, 2014	water observation	water observation	water observation	water observation	water observation	7
-	Time of sampling	(between Unit 1	hole No.2 Sep 28, 2014 9:17 AM	hole No.2-2* Sep 28, 2014 11:32 AM	water observation hole No.2-3 Sep 28, 2014 9:51 AM	water observation	water observation	water observation hole No.2-7 Sep 28, 2014 10:17 AM	water observation hole No.2-8 Sep 28, 2014 10:41 AM	the well point (between Unit 2 and 3) Sep 28, 2014 10:00 AM	water observation	water observation	water observation	water observation	water observation	7
Cs	Time of sampling Chloride (unit: ppm)	(between Unit 1	hole No.2  Sep 28, 2014  9:17 AM	hole No.2-2*  Sep 28, 2014  11:32 AM  —	water observation hole No.2-3 Sep 28, 2014 9:51 AM	water observation	water observation	water observation hole No.2-7 Sep 28, 2014 10:17 AM 850	water observation hole No.2-8 Sep 28, 2014 10:41 AM	the well point (between Unit 2 and 3) Sep 28, 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)	(between Unit 1	hole No.2  Sep 28, 2014  9:17 AM  -  ND(0.46)	hole No.2-2* Sep 28, 2014 11:32 AM —	water observation hole No.2-3  Sep 28, 2014  9:51 AM  -  ND(0.46)	water observation	water observation	water observation hole No.2-7 Sep 28, 2014 10:17 AM 850 0.48	water observation hole No.2-8  Sep 28, 2014  10:41 AM  -  ND(0.35)	the well point (between Unit 2 and 3)  Sep 28, 2014  10:00 AM  ND(0.94)	water observation	water observation	water observation	water observation	water observation	
Cs Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)	(between Unit 1	hole No.2  Sep 28, 2014  9:17 AM  -  ND(0.46)	hole No.2-2* Sep 28, 2014 11:32 AM —	water observation hole No.2-3  Sep 28, 2014  9:51 AM  -  ND(0.46)	water observation	water observation	water observation hole No.2-7 Sep 28, 2014 10:17 AM 850 0.48	water observation hole No.2-8  Sep 28, 2014  10:41 AM  -  ND(0.35)	the well point (between Unit 2 and 3)  Sep 28, 2014  10:00 AM  ND(0.94)	water observation	water observation	water observation	water observation	water observation	
Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)	(between Unit 1	hole No.2  Sep 28, 2014  9:17 AM  -  ND(0.46)	hole No.2-2* Sep 28, 2014 11:32 AM —	water observation hole No.2-3  Sep 28, 2014  9:51 AM  -  ND(0.46)	water observation	water observation	water observation hole No.2-7 Sep 28, 2014 10:17 AM 850 0.48	water observation hole No.2-8  Sep 28, 2014  10:41 AM  -  ND(0.35)	the well point (between Unit 2 and 3)  Sep 28, 2014  10:00 AM  ND(0.94)	water observation	water observation	water observation	water observation	water observation	
Cs Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)	(between Unit 1	hole No.2  Sep 28, 2014  9:17 AM  -  ND(0.46)	hole No.2-2* Sep 28, 2014 11:32 AM —	water observation hole No.2-3  Sep 28, 2014  9:51 AM  -  ND(0.46)	water observation	water observation	water observation hole No.2-7 Sep 28, 2014 10:17 AM 850 0.48	water observation hole No.2-8  Sep 28, 2014  10:41 AM  -  ND(0.35)	the well point (between Unit 2 and 3)  Sep 28, 2014  10:00 AM  ND(0.94)	water observation	water observation	water observation	water observation	water observation	
Cs Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)	(between Unit 1	hole No.2  Sep 28, 2014  9:17 AM  -  ND(0.46)	hole No.2-2* Sep 28, 2014 11:32 AM —	water observation hole No.2-3  Sep 28, 2014  9:51 AM  -  ND(0.46)	water observation	water observation	water observation hole No.2-7 Sep 28, 2014 10:17 AM 850 0.48	water observation hole No.2-8  Sep 28, 2014  10:41 AM  -  ND(0.35)	the well point (between Unit 2 and 3)  Sep 28, 2014  10:00 AM  ND(0.94)	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) s-137 (Approx.30 years)	(between Unit 1	hole No.2  Sep 28, 2014  9:17 AM  -  ND(0.46)  ND(0.56)	hole No.2-2* Sep 28, 2014 11:32 AM	water observation hole No.2-3  Sep 28, 2014  9:51 AM  -  ND(0.46)  ND(0.58)	water observation	water observation	water observation hole No.2-7 Sep 28, 2014 10:17 AM 850 0.48 0.96	water observation hole No.2-8  Sep 28, 2014  10:41 AM  -  ND(0.35)  ND(0.51)	the well point (between Unit 2 and 3)  Sep 28, 2014  10:00 AM  -  ND(0.94)  1.8	water observation	water observation	water observation	water observation	water observation	

<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, except "the other  $\gamma$ "

(Note) As of No. 1-9, 2-5, and 3-5,  $\gamma$  was not measured because they are samlpled by sampler. Gross  $\beta$  were measured after filtation for references.

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

 $<sup>^{\</sup>star}$  The results are for a reference, since the water was highly turbid. (Gross  $\beta$  were measured after filtration.)

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

u	nit:	Bq/

																													Unit: Bq/
		observa	ndwater ation hole .0-1	observa	ndwater ation hole 0-1-1	observa	ndwater ation hole 0-1-2	observa	ndwater ation hole 5.0-2	observ	ndwater ation hole .0-3-1	observa	dwater tion hole 0-3-2	observa	dwater ition hole .0-4	observa	dwater tion hole p.1	Ground observat No.	tion hole	Ground observat No.1	ion hole	Ground observati No.1	ion hole	Groun observa No.	tion hole	Ground observat No.	tion hole	Ground observat No.	ion hole
C	Cs-134 (Approx. 2 years)	29	<5/25>	ND		0.61	<3/2>	0.61	[10/13]	0.64	<4/6>	1.3	<9/25>	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]	12,000	<8/12> <9/22>
С	Cs-137 (Approx.30 years)		<5/25>	ND		1.5	<3/2>	2.2	<1/12>	1.1	<4/6>	5.1	<9/25>	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]	34,000	<8/12> <9/22>
	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	[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]	1,400,000	<8/12>
	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]	690,000	<5/12>
	•											1	•				,		•						,				Unit: Bq/l
		I		1		I		1		1		I		1		I		1				Ground	dwater	1				I	

		Ground observat No.	tion hole	Groundwater observation hole No.1-9	Groundwater observation hole No.1-10	Groundwate observation h No.1-11		Groundw observation No.1-1	n hole	Ground observat No.1	ion hole	Groun observa No.		Ground observati No.	ion hole	Ground observat No.1	ion hole	observa	dwater tion hole 1-17	pumped the we (betwee	ll point	observa	dwater tion hole p.2	observa	ndwater ation hole .2-1	observa	ndwater ation hole 0.2-2
	Cs-134 (Approx. 2 years)	47	[11/25]	170 (9/3)	-	1.1 <1/1	3>	74 (	[10/21]	37,000	<2/13>	88 *2	<2/27>	ND		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 <4/2	28>	170 (	(10/21)	93,000	<2/13>	230 *2	<2/27>	0.88	<7/10>	86	<7/28>	2.8	<4/28> <9/8>	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	ī	ND		ND		ND		2.1	<9/8>	ND		11	<8/25>	ND		8.5	<4/28>	ND		ND		ND	
other	Y Co-60 (Approx. 5 years)	1.3	<2/3>	ND	i	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	i	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>	28,000	<9/22>	110	<7/10>	3,100,000	<1/20> <1/30> <2/3>	840,000	<9/22>	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 <sup>*2</sup> [11/14]	270,000*2 <1/27>	85,000 (9/	(3)	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]	-	67 <6/	9>	290 (	[10/21]	160,000	<2/12>	4,100	<6/9>	Under a	analysis	2,700,000	<2/13>	29,000	<6/9>	-		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		tion hole	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		observa	dwater tion hole .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		2.2	<9/7>	3.5	[7/25]	1.2	(7/25) (8/8)	23	<8/27>	180	<7/2>	5.1	<7/23>	100	<7/30>
C	Cs-137 (Approx.30 years)	5.5	<2/26>	110	<5/7>	50	<3/11>	9.0	<2/23>	3.4	<7/20>	0.58*2	<2/11>	5.7	<9/7>	5.9	[8/8]	2.6	[8/1]	68	<9/3>	500	<7/2>	16	<8/27>	310	<7/30>
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND		6.5*2	<2/11>	ND		ND		ND		ND		ND		ND		i)	
The	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]	-	
other	Co-60 (Approx. 5 years)	ND		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>	5,800	<7/23>	1,700	<2/7>	240,000	[12/12]	1,400	[7/11]	180	[8/1]	3,100	/20><8/28	8,900	<7/2>	46	<8/13>	510	<7/16>
	H-3 (Approx. 12 years)	1,700	[12/6]	7,900	<4/9>	1,900	<8/10>	1,100	<1/19>	1,700	<4/6> <8/6> <8/13>	*2 13,000	<2/7> <2/11>	9,300	<9/21>	3,200	[Dec. 12, 2012]	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]	34,000	<5/7>	Under	analysis	ND(1.4)	[11/21]	3,900	<3/30>	1,200	<2/11>	-		8.3	(Dec. 12, 2012)	4.4	[7/23]	2,000	<4/18>	3,600	<4/30>	ND		200	<5/28>

<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.

(Note) As of No. 1-9, 2-5, and 3-5, since September 17, γwas not measured because they are sampled by sampler. Gross β were measured after filtation for references.