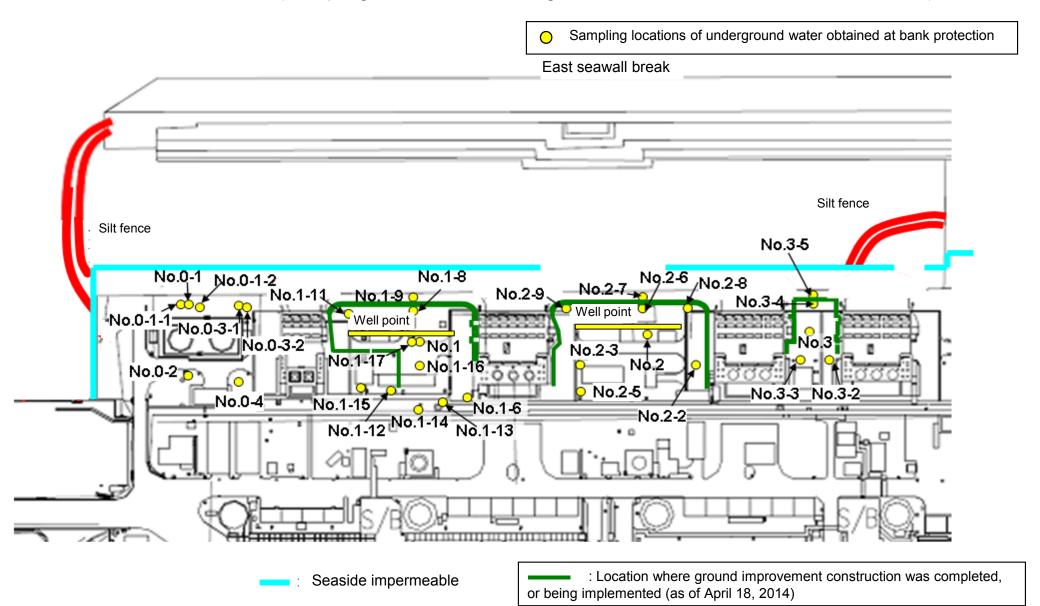
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



## 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	/	/	/	/	/	/	/	/	1	Aug 14, 2014	/	1	1	/	1 /
	Time of sampling						/				6:46 AM					
	Chloride (unit: ppm)										22					
C	s-134 (Approx. 2 years)										3.2					
Cs	s-137 (Approx.30 years)										9.2					
The																
other $\gamma$																
	Gross β										26					
ŀ	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 13, 2014	Aug 13, 2014	Aug 13, 2014	/	Aug 14, 2014	Aug 15, 2014	Aug 13, 2014	Aug 13, 2014	Aug 13, 2014	Aug 13, 2014	Aug 13, 2014	Aug 13, 2014	Aug 13, 2014	
	Time of sampling		10:12 AM	11:40 AM	9:46 AM		9:28 AM	9:15 AM	10:51 AM	10:00 AM	10:15 AM	11:20 AM	11:45 AM	10:40 AM	10:30 AM	
	Chloride (unit: ppm)		-	-	-		-	760	-	-	-	-	-	-	1,200	
C	s-134 (Approx. 2 years)		ND(0.41)	8.3	ND(0.39)		ND(0.38)	0.60	ND(0.39)	ND(0.79)	0.54	21	99	5.1	13	
Cs	s-137 (Approx.30 years)		ND(0.52)	21	ND(0.47)		0.50	1.8	ND(0.56)	ND(0.65)	1.9	63	290	13	32	
	Sb-125 (Approx. 3 years)															
The																
other y																
	Gross β		170	380	830		2,200	950	5,100	110,000	ND(18)	2,500	5,600	46	50	
H	H-3 (Approx. 12 years)	/	860	590	980		930	720	1,700	8,800*1	130	3,400	3,100	ND(120)	130	]
	-90 (Approx. 29 years)	I/	_	_	_	/	_	_	_	_	_	_	_	_	_	1

<sup>\*</sup> Data announced this time is provided in a thick-frame. The other data was announced on August 14, 15, and 16.

<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.

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

<sup>\*</sup> The results obtained in the observation hole No.2-2 are for a reference, since the water was highly turbid. (Undiluted liquid was measured since filtration takes a long time.)

<sup>\*1</sup> 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)

																L (exclude ci
		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	Undergrow water observable No.1
	Date of sampling	Aug 17, 2014	41,868	Aug 17, 2014	Aug 17, 2014	/	Aug 17, 2014	/	1	1	Aug 17, 2014	/	1	/	1	
	Time of sampling	11:03 AM	10:20 AM	9:44 AM	10:04 AM		9:11 AM		/		6:55 AM	/			/	
	Chloride (unit: ppm)	-	-	-	-		-				23					
Cs	s-134 (Approx. 2 years)	22	ND(0.44)	ND(0.39)	ND(0.45)		ND(0.36)				2.2					
Cs	s-137 (Approx.30 years)	59	ND(0.51)	ND(0.51)	ND(0.56)		ND(0.50)				7.3					/
The															/	/
other y																
	Gross β	210	ND(17)	17	ND(17)		26				ND(17)					
H	H-3 (Approx. 12 years)	Under analysis	Under analysis	Under analysis	Under analysis		Under analysis				Under analysis				/	/
Sr	-90 (Approx. 29 years)	-	-	-	-		-		/		-	/	/	/	/	/
Time of sampling  Chloride (unit: ppm)  Cs-134 (Approx. 2 years)  Cs-137 (Approx.30 years)  The other γ  Gross β  H-3 (Approx. 12 years)  Sr-90 (Approx. 29 years)  Date of sampling  Time of sampling  Chloride (unit: ppm)  Cs-134 (Approx. 2 years)  Cs-137 (Approx.30 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 17, 2014	Aug 17, 2014	Aug 17, 2014	/	,	Aug 17, 2014	Aug 17, 2014	Aug 17, 2014	/	1	1	1	/	1
	Time of sampling		9:52 AM	11:16 AM	9:27 AM			10:11 AM	10:30 AM	10:00 AM						
	Chloride (unit: ppm)		-	-	-			850	-	-						
Cs	s-134 (Approx. 2 years)		ND(0.60)	5.7	ND(0.40)			ND(0.45)	ND(0.36)	ND(0.60)						
Cs	s-137 (Approx.30 years)		ND(0.51)	20	ND(0.56)			1.3	ND(0.48)	1.1						
other y																
	Gross β		210	360	850			810	5,700	100,000						
F	H-3 (Approx. 12 years)		Under analysis	Under analysis	Under analysis		/	Under analysis	Under analysis	Under analysis					/	
Sr	-90 (Approx. 29 years)	<u> </u>	-	-	-	/	/	_	-	_	/	/	/	/		

<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.

 $<sup>^{\</sup>star}$  "-" indicates that the measurement was out of range.

<sup>\*</sup> The results obtained in the observation hole No.2-2 are for a reference, since the water was highly turbid. ( $\gamma$  and Gross  $\beta$  will be measured after filtration. If filtration takes a long time,  $\gamma$  will not be measured.)

			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*		dwater tion hole .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]	12,000	<8/12>
C	Ss-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]	34,000	<8/12>
	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*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]	1,400,000	<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	
	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>
		-		-			<u> </u>	•		•		•		•		•		•		•		•		•		•		•	Unit: Bq/

		observa	dwater tion hole .1-8	Groundwater observation hole No.1-9	Groundwater observation hole No.1-10	Groundwater observation hol- No.1-11			Groundwa observation No.1-13	n hole	Groundwater observation hole No.1-14	obs	Groundwater servation hole No.1-15	Ground observati No.1	on hole	Groun observa No.	tion hole	Ground pumped the well (between and	up from I point n Unit 1	observa	dwater tion hole o.2		ndwater ation hole .2-1	observa	ndwater ation hole 0.2-2
(	S-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	> N	ID *1	30	<7/28>	1.4	<7/7>	110	[9/23]	0.88	<2/26>	0.66	[9/1]	15	<2/12>
C	s-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	> 0.8	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>
	Ru-106 (Approx. 370 days)	ND		ND	=	ND	5.4	[10/28]	ND		ND	N	ID	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	-	ND	ND		ND		1.1 <8/7>	N	ID	3.3	<8/14>	ND		8.5	<4/28>	ND		ND		ND	
other	Co-60 (Approx. 5 years)	1.3	<2/3>	ND	=	ND	0.51	[10/24]	ND		0.44 <5/29	> N	ID	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	N	ID	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>		:2/12> :2/13>	22,000 <8/14	> 11	10 <7/10>	3,100,000	<1/20> <1/30> <2/3>	280,000	<8/12>	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 <1/27>	85,000 [9/13	440,000	[10/31]	88,000 <2	:2/12>	23,000 <2/13	> 74,0	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:	- Un	der lysis	2,700,000	<2/13>	620	<3/10>	-		54	[5/31]	5.9	[7/25]	320	[12/25]

																												Unit: Bq/L
			observa	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		dwater tion hole .3-5
	Cs-134 (Approx. 2 year	ars)	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 ye	ars)	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>
	Ru-106 (Approx. 3	70 days)	ND		ND		ND		ND		ND *2	2	6.5	<2/11>	ND		ND		ND		ND		ND		ND		-	
Th	Mn-54 (Approx. 3	10 days)	0.29	[12/6]	0.95	<6/4>	ND		ND		ND		ND		ND		ND		ND		ND		ND		0.54	[10/30]	-	
othe	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 *2	<7/23>	1,700	<2/7>	240,000	[12/12]	1,400	[7/11]	180	[8/1]	3,000	<7/23> <8/6>	8900	<7/2>	46	<8/13>	510	<7/16>
	H-3 (Approx. 12 year	rs)	1,700	[12/6]	7,900	<4/9>	1,900	<8/10>	1,100	<1/19>	1,700*2	<4/6> <8/6>	13,000	<2/7> <2/11>	8,300	<8/10>	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 year	rs)	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		-	

<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.