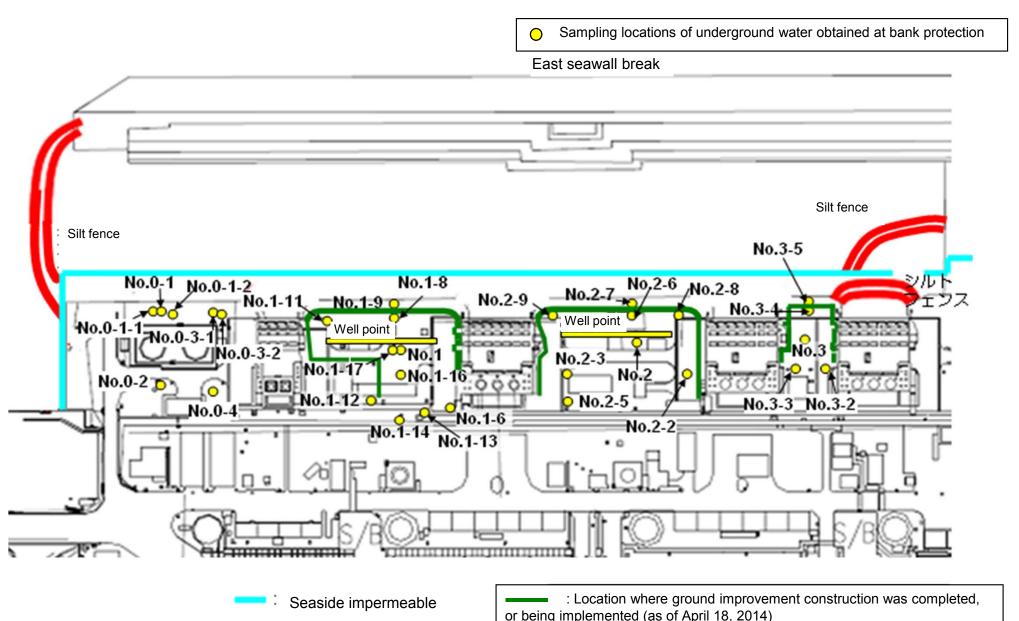
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



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	Jun 26, 2014	/	/	1	1	
	Time of sampling								/		6:40 AM	/				/
	Chloride (unit: ppm)										70					
C	s-134 (Approx. 2 years)										4.0	4.0				
Cs	s-137 (Approx.30 years)										12					
	Mn-54 (Approx. 310 days)										ND					
The																
other γ																
	Gross β										47					
ŀ	H-3 (Approx. 12 years)	/	/	/	/	/		/			ND(110)		/		/	
Sr	r-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 25, 2014	Jun 25, 2014	Jun 25, 2014	/	Jun 26, 2014	Jun 27, 2014	Jun 25, 2014	Jun 25, 2014	Jun 25, 2014	Jun 25, 2014	Jun 25, 2014	Jun 25, 2014	Jun 25, 2014	
	Time of sampling		10:13 AM	11:07 AM	9:31 AM		10:09 AM	10:22 AM	10:46 AM	10:00 AM	10:34 AM	11:52 AM	12:23 PM	11:02 AM	10:55 AM	
	Chloride (unit: ppm)		-	-	-		-	870	-	-	-	-	-	-	1,300	
C	s-134 (Approx. 2 years)		ND(0.37)	9.4	ND(0.45)		ND(0.46)	ND(0.46)	ND(0.40)	0.62	0.96	14	130	3.3	28	
Cs	s-137 (Approx.30 years)		ND(0.48)	27	0.93		0.58	1.4	ND(0.57)	0.91	2.0	36	360	9.9	82	
	Mn-54 (Approx. 310 days)		ND	ND	ND		ND	ND	ND	ND	1.2	ND	ND	ND	ND	
The																
other y						<u> </u>										
	Gross β		250	450	880		2,100	980	4,100	120,000	ND(18)	2,600	4,500	22	67	
H	H-3 (Approx. 12 years)		710	470	950		840	700	1,400	6,700 ^{*1}	ND(110)	3,200*1	6,000	120	ND(110)	
C.	r-90 (Approx. 29 years)	/	-	_	-	/	-	-	_	_	-	-	-	_	-	

^{*} Data announced this time is provided in a thick-frame. The other data was announced on June 26, 27, and 28.

^{* &}quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

^{* &}quot;-" 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)

															L (exclude t
	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	Underg water obs hole No
Date of sampling	Jun 29, 2014	Jun 29, 2014	Jun 29, 2014	Jun 29, 2014	/	Jun 29, 2014	/	1	1	Jun 29, 2014	/	1	1	1	
Time of sampling	10:39 AM	11:00 AM	10:25 AM	10:44 AM		9:56 AM				7:05 AM	/	/			
Chloride (unit: ppm)	-	-	-	-		-		/		40		/			
Cs-134 (Approx. 2 years)	17	ND(0.37)	ND(0.59)	ND(0.37)		0.70 ^{*1}				2.5					
Cs-137 (Approx.30 years)	48	ND(0.45)	ND(0.51)	0.59		1.6 ^{*1}				6.6					
															/
The															
other y															
Gross β	220	ND(17)	ND(17)	ND(17)		ND(17)				ND(17)					
H-3 (Approx. 12 years)	Under analysis	Under analysis	Under analysis	Under analysis	/	Under analysis		/	1/	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		Jun 29, 2014	Jun 29, 2014	Jun 29, 2014	/	/	Jun 29, 2014	Jun 29, 2014	Jun 29, 2014	/	/	/	/	/	
Time of sampling		10:16 AM	11:56 AM	9:47 AM		/	10:38 AM	11:01 AM	10:00 AM			/			
Chloride (unit: ppm)		-	-	-			840	-	-						
Cs-134 (Approx. 2 years)		ND(0.45)	8.7	ND(0.41)			0.66	ND(0.39)	0.73						
Cs-137 (Approx.30 years)		0.53	24	ND(0.52)			1.9	ND(0.52)	1.6						
The															
other y															
	7					<u> </u>					<u> </u>				
Gross β		250	460	840			980	4,900 ^{*1}	110,000						
H-3 (Approx. 12 years)	1/	Under analysis	Under analysis	Under analysis	/		Under analysis	Under analysis	Under analysis						
Sr-90 (Approx. 29 years)	/	_	-	-	/	/	-	-	_	/	/	/	/	/	1

^{* &}quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

 $^{^{\}star}$ "-" 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')

Unit: Bq/L

		Groun observa No.		observa	ndwater ation hole 0-1-1	observa	dwater tion hole 0-1-2	Ground observati No.		observa	dwater tion hole 0-3-1		dwater tion hole)-3-2		dwater tion hole .0-4	Ground observat No	ion hole	Ground observat No.	ion hole	Ground observat No.	ion hole	Ground observati No.	tion hole	Ground observat No.	tion hole	Ground observat No.	ion hole	Ground observat No.	
C	s-134 (Approx. 2 years)	29	<5/25>	ND		0.61	<3/2>	0.61	[10/13]	0.64	<4/6>	0.82	<1/14>	0.47	<6/22>	13	[8/29]	1.9	[7/8]	11,000	[7/9]	10	[9/2]	1.5	[7/8]	310	[8/5]	7,400	<6/16>
С	s-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]	20,000	<6/16>
	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 y	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]	890,000	<6/19>
	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>
5	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]	-	

		Groundwater observation hol No.1-8	Groundwater observation hol 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
C	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>	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>
С	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>	6.5 <6/26>	2.8 <4/28>	250 [9/23]	2.5 <2/26>	1.1 (8/29) (9/1)	38 <2/12>	5.5 <2/26>
	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	ND
The	Mn-54 (Approx. 310 days)	12 <2/3	ND	-	ND	ND	ND	0.4 <6/9>	ND	ND	8.5 <4/28>	ND	ND	ND	0.29 [12/6]
other y	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	ND
	Sb-125 (Approx. 3 years)	ND	ND	-	ND	61 [10/21]	ND	ND	24 <6/16>	2.1 [11/25]	ND	ND	ND	ND	ND
	Gross β	59,000 <2/3	2,100*2 [11/1]	78 *2 <1/27>	2,300 [12/26]	1,100 <5/5>	260,000 <2/12> <2/13>	4,800 <6/9>	<1/20> 3,100,000 <1/30> <2/3>	70,000 <6/26>	1,900,000 [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 <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]
5	Gr-90(Approx. 29 years)	20,000 [12/9	300 [10/3	ı –	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.2-7		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	
С	Cs-134 (Approx. 2 years)		<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)	14	<6/25>	130	<6/25>	3.9	<6/18>	64	<1/15>
C	s-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]	36	<6/25>	360	<6/25>	12	<6/11>	170	<1/15> <6/4>
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		6.5	<2/11>	ND		ND		ND		ND		ND		ND		-	
The	Mn-54 (Approx. 310 days)	0.95	<6/4>	ND		ND		ND		ND		ND		ND		ND		ND		ND		0.54	[10/30]	-	
other y	Co-60 (Approx. 5 years)	ND		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		ND		-	
	Gross β	150,000	<2/12>	3,200	[12/5]	1,300	<6/20>	4,400	<6/15> <6/22>	1,700	<2/7>	240,000	[12/12]	1,400	[7/11]	180	[8/1]	2,800	<5/28>	4,900	<4/30>	33	<6/11>	350	<5/28>
ŀ	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>	*2 13,000	<2/7> <2/11>	6,300	<6/11> <6/15> <6/18>	3,200	[2012/12/ 12]	460	[8/1]	2,800	<5/14> <6/11>	8,000	<5/7>	170	[9/18]	170	<1/8>
	Sr-90(Approx. 29 years)			Under analysis		, ,	[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.
 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.)

^{* &}quot;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.