

### Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (1/4) Underground Water Obtained at Bank Protection

Unit: Bq/L

	Underground water observation hole No.0-1	Underground water observation hole No.1		Underground water observation hole No.1-2	Underground water observation hole No.1-3	Underground water observation hole No.1-5	Underground water observation hole No.1-8	Groundwater pumped up from the well point	Underground water observation hole No.2	Underground water observation hole No.2-1	Underground water observation hole No.3
Date of sampling	Aug 29, 2013	Aug 29, 2013	Aug 30, 2013	Aug 29, 2013	Aug 29, 2013	Aug 29, 2013					
Time of sampling	9:50 AM	10:15 AM	11:25 AM	11:42 AM	10:38 AM	11:13 AM					
Cs-134 (Approx. 2 years)	1.4	13	1.0	120	1.3	62					
Cs-137 (Approx.30 years)	3.0	31	2.1	260	3.3	130					
The other γ	Ru-106 (Approx. 370 days)	ND	17	17	ND	4.6	ND				
All β	86	1,400	1,700	680,000	33,000	2,600					
H-3 (Approx. 12 years)	45,000	390,000	390,000	380,000	230,000	24,000					
Sr-90 (Approx. 29 years)	-	-	-	-	-	-					

\* Data announced this time is provided in a thick-frame. The other data was announced on August 30.

\* "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.

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (2/4)  
Underground Water Obtained at Bank Protection

Unit: Bq/L

	Underground water observation hole No.0-1	Underground water observation hole No.0-2 <sup>*1</sup>	Underground water observation hole No.1	Underground water observation hole No.1-2	Underground water observation hole No.1-3 <sup>*1</sup>	Underground water observation hole No.1-5	Underground water observation hole No.1-8	Groundwater pumped up from the well point	Underground water observation hole No.2	Underground water observation hole No.2-1	Underground water observation hole No.3
Date of sampling		Sep 2, 2013	Sep 2, 2013	Sep 2, 2013	Sep 2, 2013	Sep 2, 2013	Sep 2, 2013	Sep 2, 2013			
Time of sampling		9:51 AM	10:07 AM	11:56 AM	10:37 AM	11:16 AM	9:37 AM	9:35 AM			
Cs-134 (Approx. 2 years)		ND(0.47)	1.5	140	10	40	30	ND(1.6)			
Cs-137 (Approx.30 years)		0.75	3.5	300	24	85	63	ND(1.6)			
The other γ	Ru-106 (Approx. 370 days)	ND	11	ND	ND	ND	ND	25			
All β		ND(24)	1,300	590,000	21,000	2,000	1,100	360,000			
H-3 (Approx. 12 years)		Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis			
Sr-90 (Approx. 29 years)		-	-	-	-	-	-	-			

\*1 Analysis results of the underground observation hole No.0-2, No.1-3 and groundwater pumped up from the well point were previously announced.

\* "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.

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (3/4)  
Seawater

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3	1F, Unit 3 Screen (Inside the Silt Fence)
Date of Sampling	/	/	/	/	/	/	/	/	/	/	/
Time of sampling	/	/	/	/	/	/	/	/	/	/	/
Cs-134(Approx. 2 years)	/	/	/	/	/	/	/	/	/	/	/
Cs-137(Approx.30 years)	/	/	/	/	/	/	/	/	/	/	/
All β	/	/	/	/	/	/	/	/	/	/	/
H-3 (Approx. 12 years)	/	/	/	/	/	/	/	/	/	/	/
Sr-90(Approx. 29 years)	/	/	/	/	/	/	/	/	/	/	/

Unit: Bq/L

	1F, Between the water intake channel of Unit 3 and Unit 4	1F, Unit 4 Screen (Inside the Silt Fence)	1F, Around the south discharge channel	1F, Port entrance	1F, East side in the port	1F, West side in the port	1F, North side in the port	1F, South side in the port	North side of the north breakwater*	East side of the port entrance*	South side of the south breakwater*
Date of Sampling	/	/	/	Aug 28, 2013	Aug 28, 2013	Aug 28, 2013	Aug 28, 2013	Aug 28, 2013	Aug 27, 2013	Aug 27, 2013	Aug 27, 2013
Time of sampling	/	/	/	7:21 AM	7:28 AM	7:38 AM	7:35 AM	7:24 AM	8:14 AM	8:20 AM	8:07 AM
Cs-134(Approx. 2 years)	/	/	/	ND(2.0)	ND(1.1)	ND(1.1)	ND(2.1)	1.1	ND(0.66)	ND(0.84)	ND(0.69)
Cs-137(Approx.30 years)	/	/	/	ND(1.6)	1.9	1.6	1.8	3.4	ND(0.49)	ND(0.69)	ND(0.68)
All β	/	/	/	ND(17)	ND(17)	ND(17)	ND(17)	ND(17)	ND(17)	ND(17)	ND(17)
H-3 (Approx. 12 years)	/	/	/	4.0	6.6	5.3	7.3	3.2	ND(2.0)	ND(2.0)	ND(2.0)
Sr-90(Approx. 29 years)	/	/	/	-	-	-	-	-	-	-	-

\* Data announced this time is provided in a thick-frame. The other data was announced on August 29.

\* "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.

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (4/4)  
Seawater

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3	1F, Unit 3 Screen (Inside the Silt Fence)
Date of Sampling	Sep 2, 2013	Sep 2, 2013	Sep 2, 2013		Sep 2, 2013	Sep 2, 2013			Sep 2, 2013	Sep 2, 2013	Sep 2, 2013
Time of sampling	6:00 AM	5:50 AM	5:49 AM		6:17 AM	5:57 AM			6:01 AM	6:03 AM	6:06 AM
Cs-134(Approx. 2 years)	ND(1.1)	ND(3.2)	ND(1.9)		4.8	24			15	10	17
Cs-137(Approx.30 years)	ND(1.4)	2.4	ND(2.5)		11	50			36	24	32
All $\beta$	ND(16)	ND(19)	ND(19)		180	540			300	300	220
H-3 (Approx. 12 years)	Under analysis	Under analysis	Under analysis		Under analysis	Under analysis			Under analysis	Under analysis	Under analysis
Sr-90(Approx. 29 years)	-	-	-		-	-			-	-	-

Unit: Bq/L

	1F, Between the water intake channel of Unit 3 and Unit 4	1F, Unit 4 Screen (Inside the Silt Fence)	1F, Around the south discharge channel	1F, Port entrance	1F, East side in the port	1F, West side in the port	1F, North side in the port	1F, South side in the port	North side of the north breakwater*	East side of the port entrance*	South side of the south breakwater*
Date of Sampling	Sep 2, 2013	Sep 2, 2013	Sep 2, 2013								
Time of sampling	6:08 AM	6:12 AM	5:20 AM								
Cs-134(Approx. 2 years)	9.8	16	ND(1.4)								
Cs-137(Approx.30 years)	22	28	ND(1.3)								
All $\beta$	250	230	ND(21)								
H-3 (Approx. 12 years)	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.

<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.0-2	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.1-8	Groundwater pumped up from the well point (notch tank)
Cs-134 (Approx. 2 years)	1.4 [8/29]	ND	13 [8/29]	1.9 [7/8]	11,000 [7/9]	10 [9/2]	1.5 [7/8]	310 [8/5]	26 [8/26]	1.5 [8/19]
Cs-137 (Approx.30 years)	3.0 [8/29]	0.75 [9/2]	31 [8/29]	3.6 [7/8]	22,000 [7/9]	24 [9/2]	3.6 [7/8]	650 [8/5]	58 [8/26]	3.4 [8/19]
The other y	Ru-106 (Approx. 370 days)	ND	26 [5/24]	7.9 [7/8]	160 [8/15]	17 [7/22] [8/8]	3.1 [8/8]	ND	ND	25 [9/2]
	Mn-54 (Approx. 310 days)	ND	ND	1.0 [7/5]	62 [7/5]	ND	ND	ND	0.52 [8/26]	ND
	Co-60 (Approx. 5 years)	ND	0.50 [7/19]	ND	3.1 [7/8]	ND	ND	ND	ND	ND
	Sb-125 (Approx. 3 years)	ND	1.7 [7/11]	ND	250 [7/15]	1.4 [7/12] [8/26]	ND	12 [8/8]	ND	ND
All β	300 [8/22]	ND	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]	1,200 [8/26]	360,000 [9/2]
H-3 (Approx. 12 years)	42,000 [8/22]	Under analysis	500,000 [5/24] [6/7]	630,000 [7/8]	400,000 [8/22]	290,000 [7/12]	98,000 [7/11]	72,000 [8/15]	950 [8/20]	460,000 [8/19]
Sr-90(Approx. 29 years)	Under analysis	Under analysis	1,200 [6/7]	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	-

Unit: Bq/L

	Groundwater observation hole No.2	Groundwater observation hole No.2-1	Groundwater observation hole No.3	Groundwater observation hole No.3-1
Cs-134 (Approx. 2 years)	0.50 [7/9]	0.66 [9/1]	3.5 [7/25]	1.2 [7/25] [8/8]
Cs-137 (Approx.30 years)	1.2 [7/11] [8/1]	1.1 [8/29] [9/1]	5.9 [8/8]	2.6 [8/1]
The other y	Ru-106 (Approx. 370 days)	ND	ND	ND
	Mn-54 (Approx. 310 days)	ND	ND	ND
	Co-60 (Approx. 5 years)	ND	ND	ND
	Sb-125 (Approx. 3 years)	ND	ND	ND
All β	1,700 [7/8]	380 [7/29]	1,400 [7/11]	180 [8/1]
H-3 (Approx. 12 years)	850 [6/26]	440 [8/26]	3,200 [2012/12/12]	460 [8/1]
Sr-90(Approx. 29 years)	54 [5/31]	Under analysis	8.3 [2012/12/12]	Under analysis

\* "ND" indicates that the measurement result is below the detection limit.

\* Date of sampling is provided in parentheses.

<Reference> The Highest Dose Until the Previous Measurement\* (Seawater)

Unit: Bq/L

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen (Inside the Silt Fence)	1F, Between the water intake channel of Unit 2 and Unit 3 (surface layer)	1F, Between the water intake channel of Unit 2 and Unit 3 (lower layer)	1F, Unit 3 Screen (Inside the Silt Fence)
Cs-134(Approx. 2 years)	1.8 [6/21]	2.4 [8/19]	5.3 [8/5]	35 [8/29]	16 [8/12]	24 [8/12] [8/19]	27 [8/11]	13 [8/29]	26 [8/19]	21 [8/12]	3.5 [8/20]	350 [7/15]
Cs-137(Approx.30 years)	3.3 [6/26]	4.7 [8/19]	8.6 [8/5]	81 [8/13]	33 [8/12]	51 [8/12]	64 [8/27]	25 [8/29]	52 [8/19]	37 [8/12]	9.8 [8/20]	770 [7/15]
All β	ND	46 [8/19]	40 [7/3]	1,100 [8/15]	320 [8/12]	700 [8/12]	740 [8/15]	450 [7/16]	490 [8/19]	410 [8/12]	85 [8/20]	1,000 [7/15]
H-3 (Approx. 12 years)	8.6 [6/26]	24 [8/19]	340 [6/26]	4,700 [8/15]	460 [7/15]	2,500 [8/12]	2,600 [8/15]	1,200 [8/4] [8/29]	820 [8/19]	720 [8/12]	-	380 [8/12]
Sr-90(Approx. 29 years)	5.8 [6/26]	-	7.4 [6/26]	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	-	Under analysis

Unit: Bq/L

	1F, Between the water intake channel of Unit 3 and Unit 4 (surface layer)	1F, Between the water intake channel of Unit 3 and Unit 4 (lower layer)	1F, Unit 4 Screen (Inside the Silt Fence)	1F, Around the south discharge channel	1F, Port entrance	1F, East side in the port	1F, West side in the port	1F, North side in the port	1F, South side in the port	North side of the north breakwater	East side of the port entrance	South side of the south breakwater
Cs-134(Approx. 2 years)	22 [8/12]	4.8 [8/20]	46 [7/8]	ND	1.6 [8/19]	2.9 [8/19]	2.6 [8/19]	ND	2.1 [8/19]	ND	ND	ND
Cs-137(Approx.30 years)	45 [8/12]	7.7 [8/20]	93.0 [7/8]	3.0 [7/15]	4.7 [8/19]	6.6 [8/19]	6.5 [8/19]	4.7 [8/19]	4.6 [8/19]	ND	ND	ND
All β	390 [8/12]	57 [8/20]	310 [8/12]	ND	69 [8/19]	74 [8/19]	60 [7/4]	69 [8/19]	79 [8/19]	ND	ND	ND
H-3 (Approx. 12 years)	650 [8/12]	-	400 [8/12]	ND	68 [8/19]	67 [8/19]	59 [8/19]	52 [8/19]	60 [8/19]	4.7 [8/14]	ND	ND
Sr-90(Approx. 29 years)	Under analysis	-	Under analysis	0.36 [6/26]	3.5 [6/20]	Under analysis	Under analysis	-	-	-	-	-

\* The highest result announced in "Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection" or the other handouts is provided.

As for "1F, North side of Unit 1-4 water intake channel", the data is obtained since January 14, 2013. For the other locations, the data is obtained since June 14.

\* "ND" indicates that the measurement result is below the detection limit.

\* Date of sampling is provided in parentheses.

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