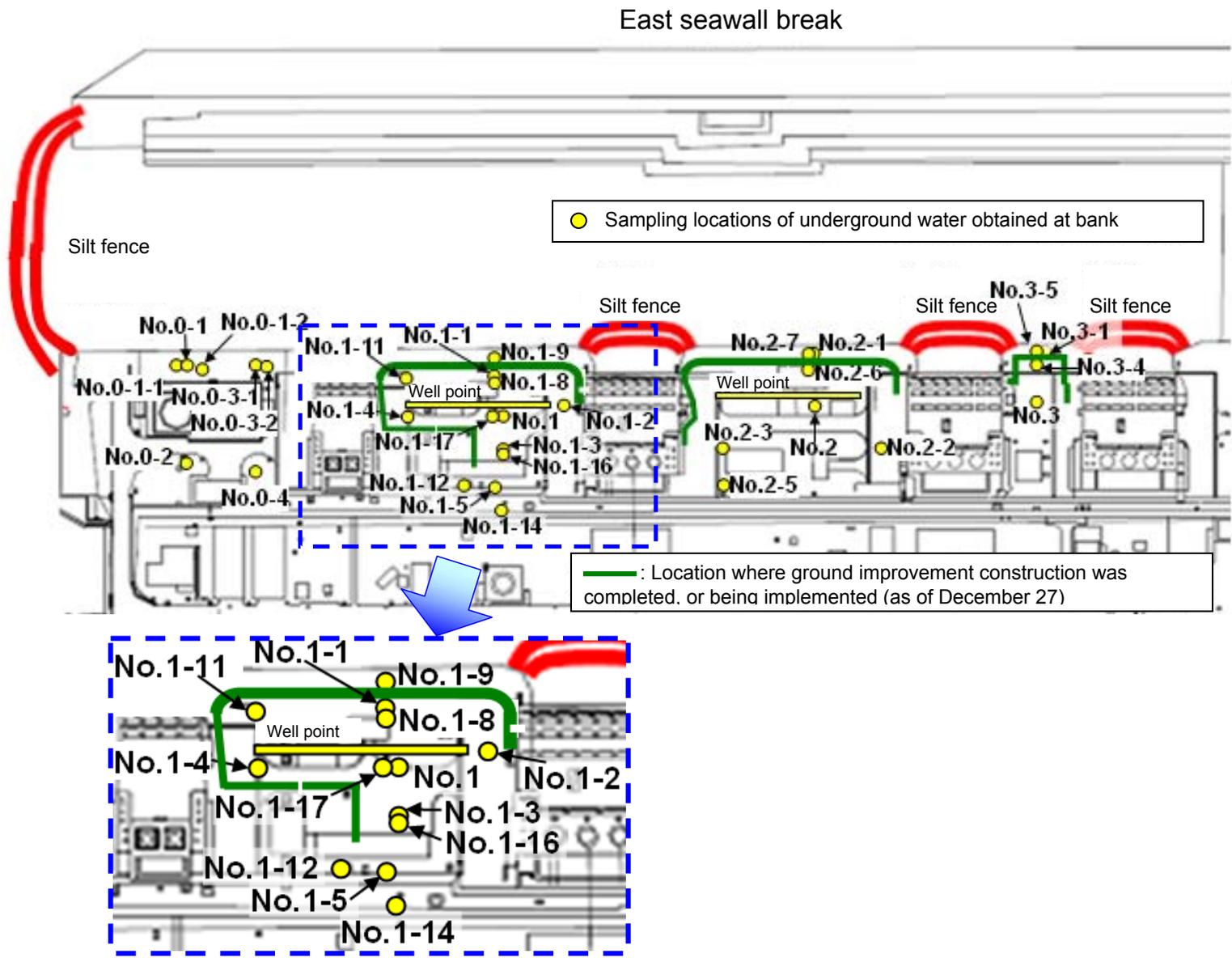


Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



(Note) Location of the observation hole No. 0-1-1 was changed on February 5, 2014.

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.0-1-1	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.1-8	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
Date of sampling														
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)														

	Underground water observation hole No.1-17	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	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3	Underground water observation hole No.3-4	Underground water observation hole No.3-5
Date of sampling			Feb 2, 2014	Feb 2, 2014	Feb 2, 2014			Feb 2, 2014	Feb 2, 2014			
Time of sampling			10:44 AM	11:57 AM	10:02 AM			11:10 AM	10:00 AM			
Chloride (unit: ppm)			-	-	-			780	-			
Cs-134 (Approx. 2 years)			ND(0.34)	14	ND(0.45)			ND(0.39)	ND(0.94)			
Cs-137 (Approx.30 years)			ND(0.44)	34	0.84			1.1	1.5			
The other γ												
Gross β			320	460	1,100			190	170,000			
H-3 (Approx. 12 years)			840	500	950			860	4,600			
Sr-90 (Approx. 29 years)			-	-	-			-	-			

* Data announced this time is provided in a thick-frame. The other data was announced on February 3.

* "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 (2/2) Underground Water Obtained at Bank Protection

Unit: Bq/L (exclude chloride)

	Underground water observation hole No.0-1*	Underground water observation hole No.0-1-1	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.1-8	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
Date of sampling														
Time of sampling														
Chloride (unit: ppm)														
Cs-134 (Approx. 2 years)														
Cs-137 (Approx.30 years)														
The other y														
Gross β														
H-3 (Approx. 12 years)														
Sr-90 (Approx. 29 years)														

	Underground water observation hole No.1-17	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	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3*	Underground water observation hole No.3-4	Underground water observation hole No.3-5
Date of sampling			Feb 5, 2014	Feb 5, 2014	Feb 5, 2014			Feb 5, 2014	Feb 5, 2014	Feb 5, 2014	Feb 5, 2014	Feb 5, 2014
Time of sampling			9:41 AM	10:51 AM	9:09 AM			10:05 AM	10:30 AM	10:37 AM	10:15 AM	10:10 AM
Chloride (unit: ppm)			-	-	-			780	-	-	-	180 ^{*1}
Cs-134 (Approx. 2 years)			ND(0.34)	13	ND(0.46)			0.56	8:52 PM	ND(0.56)	1.2	32
Cs-137 (Approx.30 years)			ND(0.46)	30	ND(0.54)			1.5	1.2	1.0	3.6	82
The other y												
Gross β			350	450	1,200			170	130,000	ND(18)	ND(18)	22
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)			-	-	-			-	-	-	-	-

* "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.

*1 The highest dose among the results previously announced in the "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 (1/3)
Underground Water Obtained at Bank Protection

Unit: Bq/L

		Groundwater observation hole No.1		Groundwater observation hole No.1	Groundwater observation hole No.1-1	Groundwater observation hole No.2	Groundwater observation hole No.3
Date of sampling		Jun 14, 2013		Jun 21, 2013	Jun 28, 2013	Jun 21, 2013	Jun 21, 2013
Time of sampling		2:29 PM	2:29 PM	9:01 AM	4:40 PM	5:44 PM	5:01 PM
Cs-134 (Approx. 2 years)		ND(0.37)	ND(0.37)	ND (0.36)	ND(0.41)	ND (0.32)	1.7
Cs-137 (Approx.30 years)		ND(0.43)	0.51	0.53	ND(0.51)	ND (0.37)	2.9
The other γ	Mn-54 (Approx. 310 days)	ND	ND	ND	0.52	ND	ND
	Ru-106 (Approx. 370 days)	18	19	16	ND	ND	ND
Gross α		ND(10)	ND(10)	-	-	-	-
Gross β		1,200	1,300	1,500	3,000	53	ND(17)
H-3 (Approx. 12 years)		450,000	440,000	430,000	430,000	560	1,600
Sr-90 (Approx. 29 years)		1,100	1,100	950	2,300	42	0.22

* Data announced this time is provided in a thick-frame. The other data was announced in June 2013 and on January 15, 2014.

* "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 (2/3)
Underground Water Obtained at Bank Protection

Unit: Bq/L

	Groundwater observation hole No.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.2	Groundwater observation hole No.2-1	Groundwater observation hole No.3	Groundwater observation hole No.3-1
Date of sampling	Jul 25, 2013	Jul 5, 2013	Jul 12, 2013	Jul 8, 2013	Jul 31, 2013		Jul 25, 2013		Jul 23, 2013
Time of sampling	1:15 PM	12:10 PM	12:20 PM	3:30 PM	1:05 PM		11:28 AM		11:10 AM
Cs-134 (Approx. 2 years)	ND(0.42)	99	ND(0.66)	1.5	21		ND(0.42)		1.1
Cs-137 (Approx.30 years)	ND(0.55)	210	1.4	3.6	44		0.69		2.2
The other γ	Mn-54 (Approx. 310 days)	ND	62	ND	ND		ND		ND
	Co-60 (Approx. 5 years)	ND	1.2	ND	ND		ND		ND
	Ru-106 (Approx. 370 days)	12	95	16	ND		ND		ND
	Sb-125 (Approx. 3 years)	ND	35	1.4	ND		ND		ND
Gross β	1,400	900,000	92,000	330	1,200		ND(17)		ND(19)
H-3 (Approx. 12 years)	430,000	380,000	290,000	69,000	28,000		120		290
Sr-90(Approx. 29 years)	1,100	5,000,000	91,000	200	910		5.9		4.4

* Data announced this time is provided in a thick-frame. The other data was announced in July, August 2013 and on January 15, 2014.

* "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 (3/3)
Underground Water Obtained at Bank Protection

Unit: Bq/L

	Groundwater observation hole No.0-1	Groundwater observation hole No.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	Groundwater observation hole No.2	Groundwater observation hole No.2-1	Groundwater observation hole No.3	Groundwater observation hole No.3-1
Date of sampling	Aug 8, 2013	Aug 22, 2013	Aug 8, 2013	Aug 8, 2013	Aug 8, 2013	Aug 22, 2013	Aug 20, 2013					
Time of sampling	2:15 PM	10:58 AM	1:38 PM	12:18 PM	11:00 AM	12:00 PM	9:40 AM					
Cs-134 (Approx. 2 years)	0.61	ND(0.57)	200	ND(0.55)	0.55	91	21					
Cs-137 (Approx.30 years)	1.6	0.66	450	1.0	1.2	190	45					
The other γ	Ru-106 (Approx. 370 days)	ND	7.9	ND	17	3.1	ND	ND				
	Sb-125 (Approx. 3 years)	ND	ND	170	ND	ND	ND	ND				
Gross β	210	1,500	880,000	150,000	170	6,200	1,100					
H-3 (Approx. 12 years)	23,000	430,000	170,000	240,000	76,000	28,000	950					
Sr-90(Approx. 29 years)	140	1,300	4,000,000	130,000	95	5,100	610					

* Data announced this time is provided in a thick-frame. The other data was announced in August 2013 and on January 15, 2014.

* "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.0-1-1	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*
Cs-134 (Approx. 2 years)	7.6 [12/15]	ND	ND	0.61 [10/13]	0.44 [11/24]	0.82 <1/14>	ND	13 [8/29]	1.9 [7/8]	11,000 [7/9]	10 [9/2]	1.5 [7/8]	310 [8/5]
Cs-137 (Approx.30 years)	19 *3 <1/26>	0.58 [12/7]	0.51 [11/17]	2.2 <1/12>	0.86 [11/20]	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]
The other γ	Ru-106 (Approx. 370 days)	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
	Mn-54 (Approx. 310 days)	ND	ND	ND	ND	0.56 <1/27>	ND	ND	1.0 [7/5]	62 [7/5]	ND	ND	ND
	Co-60 (Approx. 5 years)	ND	ND	ND	ND	ND	ND	0.50 [7/19]	ND	3.1 [7/8]	ND	ND	ND
	Sb-125 (Approx. 3 years)	ND	ND	ND	ND	ND	ND	1.7 [7/11]	ND	250 [7/15]	1.4 [7/12] [8/26]	ND	12 [8/8]
Gross β	300 [8/22]	21 [12/7]	21 [11/10]	87 [10/13]	ND	67*2 [12/11]	29 [12/29]	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]
H-3 (Approx. 12 years)	45,000 [8/29]	18,000 [12/7]	74,000 [12/15] <1/19>	6,400 <1/26>	ND	73,000 <1/14> <1/16> <1/23> <1/27>	48,000 <1/26>	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]
Sr-90(Approx. 29 years)	Under analysis	Under analysis	Under analysis	0.73 [9/2]	Under analysis	Under analysis	Under analysis	1,300 [8/22]	Under analysis	Under analysis	Under analysis	Under analysis	5,100 [8/22]

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.1-14	Groundwater observation hole No.1-16	Groundwater observation hole No.1-17	Groundwater pumped up from the well point (between Unit 1 and 2)
Cs-134 (Approx. 2 years)	47 [11/25]	170 [9/3]	-	1.1 <1/13>	74 [10/21]	1.2 [11/14]	3.1 *2 [12/13]	1.2 [12/5]	110 [9/23]
Cs-137 (Approx.30 years)	110 [11/25]	380 [9/3]	-	2.8 <1/13>	170 [10/21]	2.3 [11/21]	3.4 [10/10]	0.66 [12/12]	250 [9/23]
The other γ	Ru-106 (Approx. 370 days)	ND	-	ND	5.4 [10/28]	ND	9.2 [10/28]	4.1 [12/12]	25 [9/2]
	Mn-54 (Approx. 310 days)	12 <2/3>	ND	-	ND	ND	ND	ND	0.92 <1/27> <2/3>
	Co-60 (Approx. 5 years)	1.3 <2/3>	ND	-	ND	0.51 [10/24]	ND	0.9 [11/7]	0.61 [11/25]
	Sb-125 (Approx. 3 years)	ND	ND	-	ND	61 [10/21]	ND	11 [12/5]	2.1 [11/25]
Gross β	59,000 <2/3>	2,100 [11/17]	78 *4 <1/27>	2,300 [12/26]	730 [10/21]	440 <1/30>	3,100,000 <1/20> <1/30> <2/3>	130 [12/2] [12/23]	700,000 [9/23]
H-3 (Approx. 12 years)	12,000 <1/6>	860 [11/14]	270,000 *4 <1/27>	85,000 [9/13]	440,000 [10/31]	16,000 <1/30>	43,000 [9/26]	32,000 <1/20>	460,000 [8/19]
Sr-90(Approx. 29 years)	1,300 [9/16]	170 [9/3]	-	17 [9/13]	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.2-2	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 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.3-4	Groundwater observation hole No.3-5
Cs-134 (Approx. 2 years)	0.50 [7/9]	0.66 [9/1]	14 <2/2>	0.84 <1/5>	13 <1/8>	0.56 [10/30]	1.5 <1/12>	1.1 [12/12]	3.5 [7/25]	1.2 [7/25] [8/8]	1.9 <1/8>	64 <1/15>
Cs-137 (Approx.30 years)	1.2 [7/11] [8/1]	1.1 [8/29] [9/1]	34 <1/29>	2.6 <1/5>	30 <1/8>	0.71 <1/30>	3.6 <1/12>	2.4 [12/7]	5.9 [8/8]	2.6 [8/1]	4.3 [11/27]	170 <1/15>
The other γ	Ru-106 (Approx. 370 days)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	Mn-54 (Approx. 310 days)	ND	ND	ND	0.29 [12/6]	0.94 <1/8>	ND	ND	ND	ND	0.54 [10/30]	-
	Co-60 (Approx. 5 years)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-
	Sb-125 (Approx. 3 years)	ND	ND	ND	ND	26 *1 [9/29]	ND	ND	ND	1.6 <1/1>	ND	-
Gross β	1,700 [7/8]	380 [7/29]	540 <1/29>	1,500 [12/6]	46,000 *1 [9/29]	3,200 [12/5]	270 [12/20]	240,000 [12/12]	1,400 [7/11]	180 [8/1]	ND	69 <1/29>
H-3 (Approx. 12 years)	870 [12/8]	440 [8/26]	660 <1/8>	1,700 [12/6]	6,300 [12/4]	1,200 [11/24] [11/27]	1,100 <1/17>	5,100 [12/6]	3,200 [2012/12] [12]	460 [8/1]	170 [9/18]	170 <1/8>
Sr-90(Approx. 29 years)	54 [5/31]	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	-	8.3 [2012/12] [12]	Under analysis	ND	-

● Since some samples are still under analysis, the highest dose of the Strontium-90 is among those previously announced.

*1 The analysis result of No.2-5 obtained on September 29 is the reference value, since we could not sample groundwater by a regular procedure.

*2 Analysis result of pumped water.

*3 The results are for a reference, since the water was highly turbid. (γ and Gross β were measured after filtration.)

*4 The results are for a reference, since the water was highly turbid. (γ and Gross β were measured after filtration. If filtration takes a long time, γ will not be analyzed.)

* "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.