

<Reference>

Historical Data of Radioactive Density in Groundwater at the East Side of Turbine Buildings

December 6, 2013

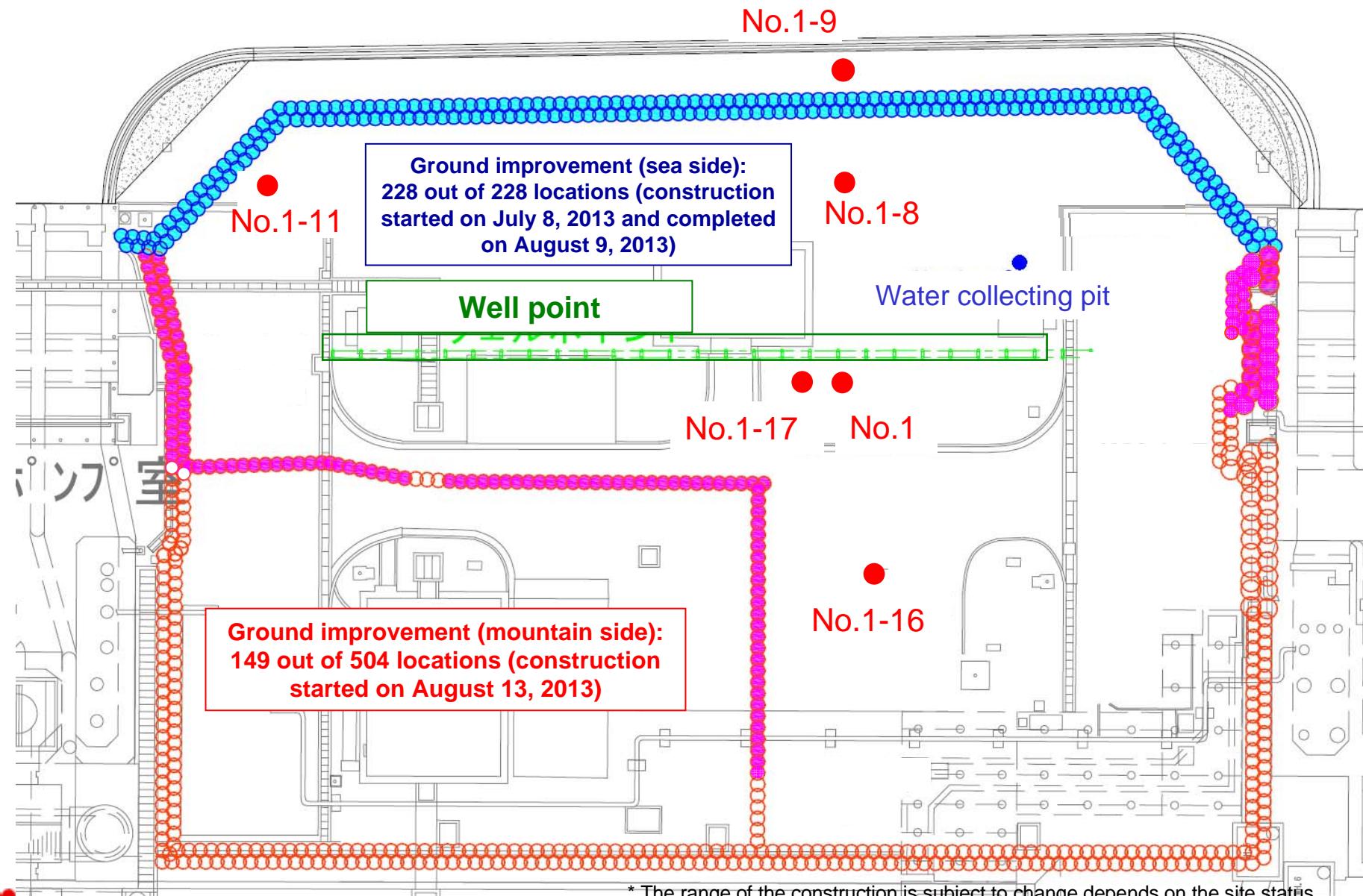
Tokyo Electric Power Company



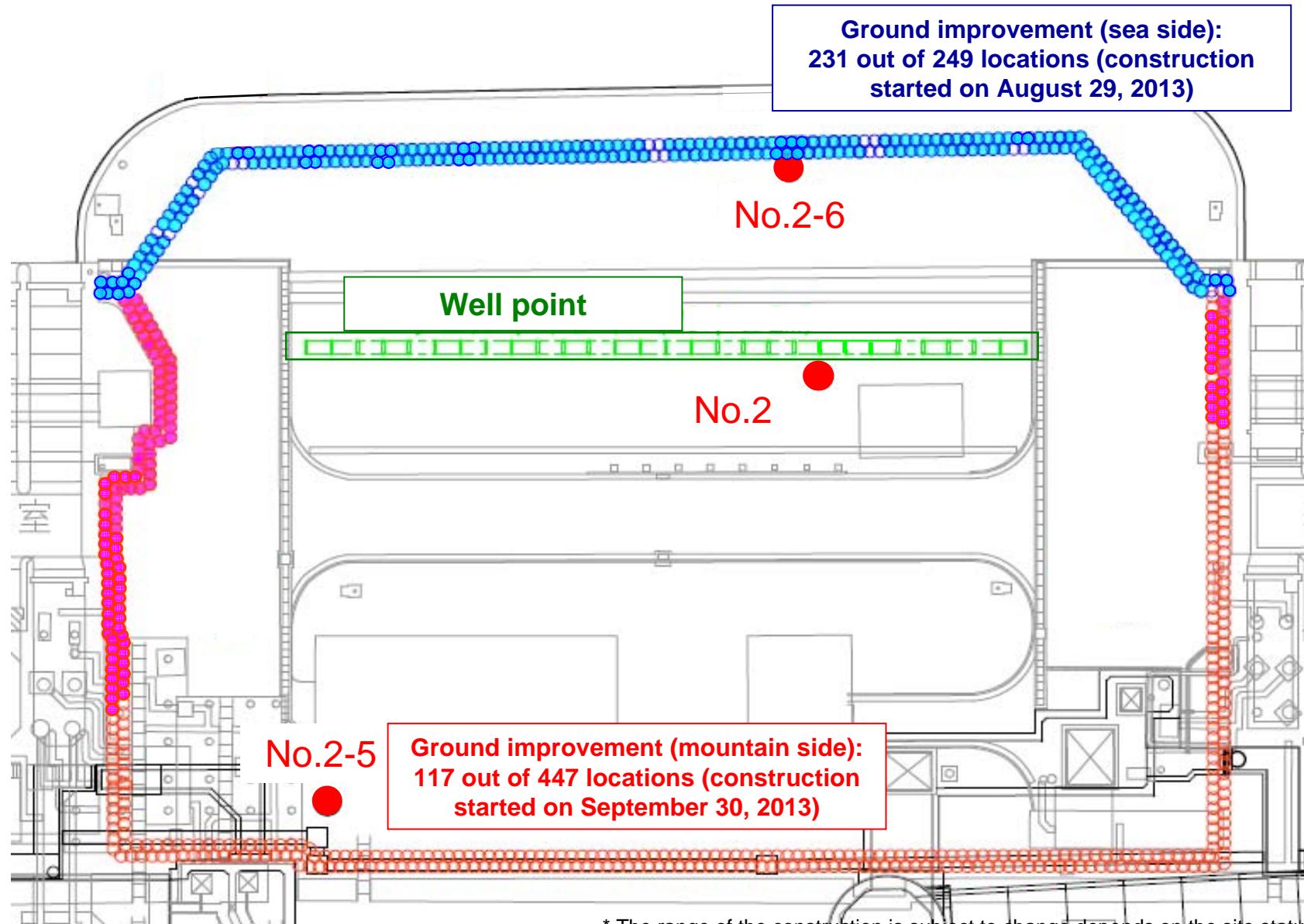
東京電力



Progress Status of Ground Improvement Construction between Unit 1 and 2 (As of the Morning on December 6)



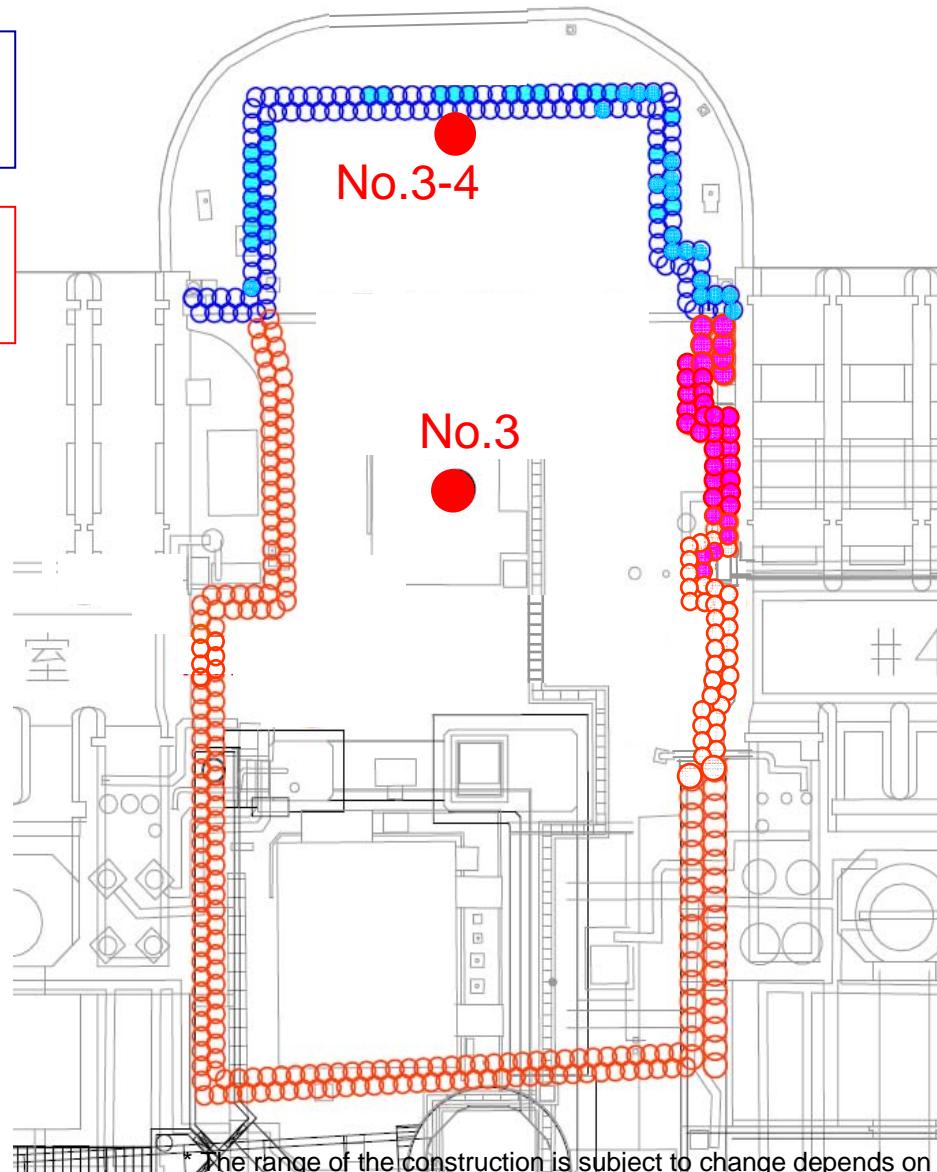
Progress Status of Ground Improvement Construction between Unit 2 and 3 (As of the Morning on December 6)



Progress Status of Ground Improvement Construction between Unit 3 and 4 (As of the Morning on December 6)

Ground improvement (sea side):
47 out of 132 locations (construction started on August 23, 2013)

Ground improvement (mountain side):
36 out of 273 locations (construction started on October 19, 2013)



Groundwater observation hole No.0-1 (Bq/L)

Sampling date	2013/8/8	2013/8/8 (Remeasurement)	2013/8/10	2013/8/15	2013/8/22	2013/8/29	2013/9/1	2013/9/8	2013/9/15	2013/9/22	2013/9/29	2013/10/6	2013/10/13	2013/10/20	2013/10/27	2013/11/3
Sampling time	2:15 PM	2:15 PM	9:35 AM	10:52 AM	9:41 AM	9:50 AM	11:03 AM	12:02 PM	9:52 AM	10:25 AM	9:54 AM	9:45 AM	9:50 AM	9:37 AM	9:50 AM	9:47 AM
Cs-134	0.61		0.66	0.39	ND (0.42)	1.4	0.80	0.92	1.7	2.1	3.0	2.3	2.9	5.1	2.4	3.5
Cs-137	1.6		1.2	1.1	0.64	3.0	2.1	2.4	4.4	4.6	5.8	5.9	6.7	9.5	5.8	8.8
Ru-106	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mn-54	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Co-60	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sb-125	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gross β	210		290	210	300	86	160	79	170	120	170	160	180	130	61	110
H-3	23,000	23,000	34,000	35,000	42,000	45,000	38,000	30,000	20,000	19,000	19,000	16,000	19,000	11,000	8,600	26,000
Sr-90	Under measurement		-	-	-	-	-	-	-	-	-	-	-	-	-	-

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

Groundwater observation hole No.0-1-2 (Bq/L)

Sampling date	2013/11/10	2013/11/17	2013/11/24	2013/12/1	Sampling date	2013/11/10	2013/11/17	2013/11/24	2013/12/1
Sampling time	10:04 AM	9:42 AM	9:47 AM	9:47 AM	Sampling time	12:42 PM	10:02 AM	10:11 AM	10:07 AM
Cs-134	6.3	5.3	5.9	6.5	Cs-134	ND (0.42)	ND (0.40)	ND (0.37)	ND (0.42)
Cs-137	14	12	13	16	Cs-137	ND (0.52)	0.51	ND (0.44)	ND (0.46)
Ru-106	ND	ND	ND	ND	Ru-106	ND	ND	ND	ND
Mn-54	ND	ND	ND	ND	Mn-54	ND	ND	ND	ND
Co-60	ND	ND	ND	ND	Co-60	ND	ND	ND	ND
Sb-125	ND	ND	ND	ND	Sb-125	ND	ND	ND	ND
Gross β	80	93	97	89	Gross β	21	ND (18)	ND (21)	ND (17)
H-3	31,000	28,000	26,000	Under measurement	H-3	36,000	48,000	64,000	Under measurement
Sr-90	-	-	-	-	Sr-90	Under measurement	-	-	-

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

Groundwater observation hole No.0-2 (Bq/L)

Sampling date	2013/9/2	2013/9/8	2013/9/15	2013/9/22	2013/9/29	2013/10/6	2013/10/13	2013/10/20	2013/10/27	2013/11/3	2013/11/10	2013/11/17	2013/11/24	2013/12/1
Sampling time	9:51 AM	12:35 PM	10:32 AM	11:15 AM	10:52 AM	11:20 AM	11:08 AM	11:04 AM	10:40 AM	10:37 AM	11:03 AM	10:42 AM	11:47 AM	11:52 AM
Cs-134	ND (0.47)	ND (0.46)	ND (0.42)	ND (0.45)	ND (0.39)	ND (0.34)	0.61	ND (0.41)	ND (0.42)	ND (0.44)	0.46	ND (0.39)	0.59	ND (0.41)
Cs-137	0.75	0.67	0.93	ND (0.55)	ND (0.46)	0.52	1.6	0.76	0.58	0.72	0.80	ND (0.54)	1.4	0.49
Ru-106	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mn-54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Co-60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sb-125	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gross β	ND (24)	ND (17)	19	37	24	28	87	ND (15)	22	ND (17)	ND (17)	ND (18)	ND (21)	ND (17)
H-3	ND (120)	ND (130)	ND (120)	ND (120)	ND (120)	ND (110)	ND (120)	ND (130)	ND (120)	ND (120)	ND (110)	130	260	Under measurement
Sr-90	Under measurement	-	-	-	-	-	-	-	-	-	-	-	-	-

Sampling date	2013/11/20	2013/11/24	2013/12/1
Sampling time	12:44 PM	11:02 AM	10:37 AM
Cs-134	ND (0.42)	0.44	ND (0.44)
Cs-137	0.86	0.76	0.83
Ru-106	ND	ND	ND
Mn-54	ND	ND	ND
Co-60	ND	ND	ND
Sb-125	ND	ND	ND
Gross β	ND (21)	ND (21)	ND (17)
H-3	ND (120)	ND (120)	Under measurement
Sr-90	Under measurement	-	-

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

Groundwater observation hole No.0-3-1 (Bq/L)

Sampling date	2013/10/27	2013/11/3	2013/11/10	2013/11/17	2013/11/24	2013/12/1
Sampling time	12:25 PM	12:00 PM	12:10 PM	11:35 AM	12:55 PM	1:08 PM
Cs-134	ND (0.38)	ND (0.41)	ND (0.44)	ND (0.40)	ND (0.37)	ND (0.36)
Cs-137	ND (0.49)	ND (0.53)	0.48	ND (0.52)	ND (0.48)	0.49
Ru-106	ND	ND	ND	ND	ND	ND
Mn-54	ND	ND	ND	ND	ND	ND
Co-60	ND	ND	ND	ND	ND	ND
Sb-125	ND	ND	ND	ND	ND	ND
Gross β	ND (19)	ND (17)	ND (17)	ND (18)	ND (21)	ND (17)
H-3	13,000	17,000	19,000	16,000	15,000	Under measurement
Sr-90	Under measurement	-	-	-	-	-

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

Groundwater observation hole No.3-4 (Bq/L)

Sampling date	2013/9/12	2013/9/18	2013/9/25	2013/10/2	2013/10/9	2013/10/17	2013/10/23	2013/10/30	2013/11/6	2013/11/13	2013/11/20	2013/11/27	2013/12/4
Sampling time	1:20 PM	10:16 AM	1:03 PM	11:12 AM	10:55 AM	11:40 AM	11:35 AM	11:19 AM	10:50 AM	10:50 AM	12:57 PM	11:14 AM	10:48 AM
Cs-134	0.52	0.72	1.0	0.68	0.66	0.96	1.0	1.8	1.4	1.5	1.3	1.7	1.1
Cs-137	1.3	1.8	1.1	1.3	1.9	2.2	2.3	3.8	3.6	3.6	3.0	4.3	3.4
Ru-106	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mn-54	ND	ND	ND	ND	ND	ND	ND	0.54	0.54	ND	ND	ND	ND
Co-60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sb-125	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gross β	ND (17) ND	ND (18) ND	ND (18) ND	ND (18) ND	ND (15) ND	ND (17) ND	ND (17) ND	ND (18) ND	ND (17) ND	ND (21) ND	ND (18) ND	ND (18) Under measurement	ND (18) ND
H-3	ND (110)	170	130	160	(120)	(130)	(120)	(130)	(120)	(120)	(120)	(120)	(120)
Sr-90	- Under measurement	-	-	-	-	-	-	-	-	-	-	-	-

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

* Since the water of No.3-5 obtained on November 23 and 27 was highly turbid, only chloride, Gross β and tritium were analyzed as a reference.

Groundwater observation hole No.3-5 (Bq/L)

Sampling date	2013/11/23	2013/11/27
Sampling time	10:35 AM	11:36 AM
Cs-134	-	-
Cs-137	-	-
Ru-106	-	-
Mn-54	-	-
Co-60	-	-
Sb-125	-	-
Gross β	22' ND (120)	35' Under measurement *
H-3	ND (120)	-
Sr-90	-	-

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.