

Uranium Analysis Result in the ocean soil

1. Analysis result

(Unit : Bq/kg· Dry soil)

Sampling spot	Date of sampling/ Analyses organization	U-234	U-235	U-238
North of Discharge Channel of 5-6u of 1F	Sep. 12/ Japan Chemical Analysis Center	(1.4±0.15) ×10 ⁰	N.D. [$<1.5 \times 10^{-1}$]	(1.5±0.17) ×10 ⁰
Around South Discharge Channel of 1F	Sep. 15/ Japan Chemical Analysis Center	(2.3±0.21) ×10 ⁰	N.D. [$<1.6 \times 10^{-1}$]	(2.4±0.21) ×10 ⁰
3km offshore of Iwasawa shore		(6.9±0.46) ×10 ⁰	(2.5±0.72) ×10 ⁻¹	(8.1±0.52) ×10 ⁰
3km offshore of Odaka Ward		(3.0±0.26) ×10 ⁰	(2.4±0.66) ×10 ⁻¹	(3.6±0.29) ×10 ⁰
Specific activity of natural uranium(Bq/g)		1.2×10 ⁴	5.7×10 ²	1.2×10 ⁴
Abundance ratio of natural uranium(wt%)		0.0054	0.72	99.3

2. Evaluation

We evaluate uranium detected in these samples are as same level as those exist in the natural environment from the reasons below;

- As natural uranium exist under radioactive equilibrium (radioactive concentration is same for U-234 and U-238) , for the result of all the samples , , and , radioactive concentration for U-234 and U-238 were nearly the same.
- In the case of sample and , abundance ratio of u-235/U-238=0.0073 for U-235 were nearly the same.

[Sample] U-235: 3.1×10^{-6} g/kg· dry soil (0.25Bq/kg· dry soil) , U-238: 6.5×10^{-4} g/kg· dry soil (8.1Bq/kg· dry soil) , U-235/U-238=0.0048

[Sample] U-235: 3.0×10^{-6} g/kg· dry soil (0.24Bq/kg· dry soil) , U-238: 2.9×10^{-4} g/kg· dry soil (3.6Bq/kg· dry soil) , U-235/U-238=0.010

Calculation may differ due to rounding.

End