

The IAEA-TERC-2023-01 world wide proficiency test on the determination of anthropogenic and natural radionuclides in water, soil and contaminated surface samples

Laboratory's Final Report Laboratory Code: 37 (CuNo: 13949) Total Pages (with cover): 9



Data Summary Report

for the World Wide Proficiency Test IAEA-TERC-2023-01

Individual Data Summary Report for Laboratory Nr. 37

Participant Information:

Mr. Christos Maramathas teleDOS Laboratories 102 Apostolou Paulou Str. Corinth 20131

Signature

Collaborators:
Ms. Sofia Con. Papadopoulou
(Radioanalytics S.M. P.C.)

Please send back to:

IAEA Reference Materials Group Terrestrial Environment Laboratory NA Environment Laboratories NAEL International Atomic Energy Agency A-2444 Seibersdorf - Austria

Email: Proficiency-Tests.Contact-Point@iaea.org

Tel: + 43 1 2600 28242 Fax: + 43 1 2600 28222 http://nucleus.iaea.org/rpst/

Created on 2023-10-18

Sample 01

Sample Code	Analyte	Measured by	Reported Value	Reported Uncertainty	
1	gross_alpha	alpha	28.6	2.6	
1	gross_beta	beta	18.3	3.4	
1	H-3	beta			
1	Am-241gamma	gamma	22.7	1.3	
1	Co-60	gamma	14.89	0.97	
1	Th-234	gamma			

Values and Uncertainties for Sample 01 (water) in Bq/kg.

Created on 2023-10-18

Sample 02

Sample Code	Analyte	Measured by	Reported Value	Reported Uncertainty	
2	gross_alpha	alpha	17.8	2.9	
2	Ra-226	alpha 6.65		0.62	
2	gross_beta	beta	154	21	
2	Bi-214	gamma	6.10	0.80	
2	Cs-134	gamma	38.5	2.1	
2	Cs-137	gamma	44.6	3.3	
2	Pb-214	gamma	7.28	0.80	
2	Ra-226gamma	gamma	6.82	0.88	
2	Sb-125	gamma	66.1	3.1	

Values and Uncertainties for Sample 02 (water) in Bq/kg.

Created on 2023-10-18

Sample 04

Sample Code Analyte	Measured by	Reported Value	Reported Uncertainty
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Values and Uncertainties for Sample 04 (soil) in Bq/kg. d.m.

Created on 2023-10-18

Sample 05

Sample Code	Analyte	Measured by	Reported Value	Reported Uncertainty	
5	Sr-90	beta	2.60	0.37	
5	Cs-134	gamma	5.59	0.64	

Values and Uncertainties for Sample 05 (surface).

Created on 2023-10-18

Sample 06

Sample Code	Analyte	Measured by	Reported Value	Reported Uncertainty	
6	Cs-134	gamma	8.12	0.92	

Values and Uncertainties for Sample 06 (surface).

Created on 2023-10-18

Sample 07

Sample Code	Analyte	Measured by	Reported Value	Reported Uncertainty	
7	7 Sr-90		5.10	0.70	

Values and Uncertainties for Sample 07 (surface)..

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IAEA-TERC-2023-01 Summary Tables

Labcode:37

Record	Labcode	Sample	Method	Isotope	Activity Value	Activity Uncertainty Coverage Factor k=1	Detection Limit	Unit
Rec. o	37	1	alpha	gross_alpha	28.6	2.6	1.4	[Bq/kg]
Rec. 1	3 7	1	alpha	U-234				[Bq/kg]
Rec. 2	3 7	1	alpha	U-235				[Bq/kg]
Rec. 3	3 7	1	alpha	U-238				[Bq/kg]
Rec. 4	3 7	2	alpha	gross_alpha	17.8	2.9	2.9	[Bq/kg]
Rec. 5	3 7	2	alpha	Po-210				[Bq/kg]
Rec. 6	3 7	2	alpha	Ra-226	6.65	0.62	0.0033	[Bq/kg]
Rec. 7	3 7	1	beta	gross_beta	18.3	3.4	7.8	[Bq/kg]
Rec. 8	3 7	1	beta	Н-3			100	[Bq/kg]
Rec. 9	3 7	2	beta	gross_beta	154	21	7.8	[Bq/kg]
Rec. 10	3 7	2	beta	Pb-210				[Bq/kg]
Rec. 11	3 7	2	beta	Sr-90				[Bq/kg]
Rec. 12	3 7	5	beta	Sr-90	2.60	0.37	0.4	[Bq/sample]
Rec. 13	3 7	7	beta	Sr-90	5.10	0.70	0.10	[Bq/sample]
Rec. 14	3 7	1	gamma	Am-241gamma	22.7	1.3	0.80	[Bq/kg]
Rec. 15	3 7	1	gamma	Co-60	14.89	0.97	3.2	[Bq/kg]
Rec. 16	3 7	1	gamma	Th-234			6.0	[Bq/kg]
Rec. 17	3 7	2	gamma	Bi-214	6.10	0.80	3.3	[Bq/kg]
Rec. 18	3 7	2	gamma	Cs-134	38.5	2.1	1.9	[Bq/kg]
Rec. 19	3 7	2	gamma	Cs-137	44.6	3.3	3.4	[Bq/kg]
Rec. 20	3 7	2	gamma	Pb-214	7.28	0.80	3.1	[Bq/kg]
Rec. 21	3 7	2	gamma	Ra-226gamma	6.82	0.88	3.1	[Bq/kg]
Rec. 22	3 7	2	gamma	Sb-125	66.1	3.1	4.6	[Bq/kg]
Rec. 23	3 7	5	gamma	Cs-134	5.59	0.64	0.10	[Bq/sample]
Rec. 24	3 7	6	gamma	Cs-134	8.12	0.92	0.10	[Bq/sample]

Data submitted: download the final data report

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