

Reg. št. / Ref. No.: 3150-0214/10-0008

Datum izdaje / Issued on: 27. november 2015

Zamenjuje izdajo z dne / Replaces Annex dated: 18. junij 2014

Veljavnost akreditacije je mogoče preveriti na spletni strani SA, www.slo-akreditacija.si.
Information on current accreditation status is available at the SA website, www.slo-akreditacija.si.

PRILOGA K AKREDITACIJSKI LISTINI ***Annex to the accreditation certificate***

LP-090

1 AKREDITIRANI ORGAN / Accredited body

Institut Jožef Stefan

Jamova cesta 39, 1000 Ljubljana

Odsek za znanosti o okolju: Skupina za radiokemijo

2 STANDARD

SIST EN ISO/IEC 17025:2005

3 OBSEG AKREDITACIJE / Scope of accreditation

V okviru te akreditacijske listine Slovenska akreditacija priznava akreditiranemu organu usposobljenost za opravljanje naslednjih dejavnosti: / SA hereby acknowledges the accredited body as being competent for performing the following activities:

3.1 Skrajšan opis obsega akreditacije / A short description of the scope

Področja preskušanja glede na vrsto preskušanja / Testing fields with reference to the type of test:

- kemija, radiokemija, sevanje / chemistry, radiochemistry, radiation

Področja preskušanja glede na vrsto preskušanca / Testing fields with reference to the type of test item:

- okolje in vzorci iz okolja / environment and samples from the environment
- živila / foodstuffs
- kmetijski proizvodi (krma) / agricultural products (fodders)

- biološki vzorci / *biological samples*

Kopija priloge za objavo na spletnem mestu. / Copy of attachment for web publishing.



3.2 Podroben opis obsega akreditacija / Detailed scope of accreditation

3.2.1 Odsek za znanosti o okolju, Skupina za radiokemijo, Jamova cesta 39, 1000 Ljubljana

Tabela 1 / Table 1

Tip obsega: fiksni / Type of scope: fixed Mesto izvajanja: v laboratoriju / Site: in the laboratory Področja preskušanja glede na vrsto preskušanja: radiokemija, sevanje / Testing fields with reference to the type of test: radiochemistry, radiation Področja preskušanja glede na vrsto preskušanca: okolje in vzorci iz okolja; živila; kmetijski proizvodi (krma); biološki vzorci / Testing fields with reference to the type of test item: environment and samples from the environment; foodstuffs; agricultural products (fodders); biological samples				
Št. No.	Oznaka standarda ali nestandardne preskusne metode Reference to standard or non- standard testing method	Naslov standarda ali nestandardne preskusne metode in morebitne navezave na druge standarde ali metode Title of standard or non-standard testing method and eventual relations to other standards or methods	Območje preskušanja; Negotovost rezultata preskušanja (kjer je to pomembno) Range of testing; Uncertainty of the result of testing (where relevant)	Materiali; proizvodi Materials; products
1.	SDN-O2-STC (01) interna metoda, 8. izdaja <i>in-house method, version 8</i>	Določanje stroncija z beta štetjem <i>Determination of strontium by beta counting</i>	^{89/90}Sr minimalna aktivnost <i>minimal detectable activity (MDA): 0,016 Bq</i> - zemlja, sedimenti (glede na suho snov) <i>soil, sediment (on dry matter basis)</i> območje (range): <i>(0,27 - 180) Bq/kg</i> - voda <i>water</i> območje (range): <i>(0,016 - 10,8) Bq/kg</i> - hrana, mleko, krma, sušina (glede na suho snov) <i>foodstuffs, milk, feedstuffs, residue (on dry matter basis)</i> območje (range): <i>(0,032 - 155) Bq/kg</i> - zračni filtri (filter in zračni delci) <i>aerosol filters (filter and air particles)</i> območje (range): <i>(0,16 - 2700) Bq/kg</i> Negotovost rezultata za vse vzorce, odvisna od koncentracije aktivnosti in vrste vzorca. <i>Uncertainty of result for all samples, depending of activity concentrations and matrix.</i> Relativna kombinirana standardna negotovost (u_c) <i>Relative combined standard uncertainty (u_c): od/from: 4,5% do/to: 30%</i> ⁹⁰Sr minimalna aktivnost <i>minimal detectable activity (MDA): 0,062 Bq</i> - zemlja, sedimenti (glede na suho snov) <i>soil, sediment (on dry matter basis)</i> območje (range): <i>(1,04 - 350) Bq/kg</i> - voda <i>water</i>	vzorci iz okolja, živila in krma <i>samples from the environment, foodstuffs and feedstuffs</i>

Kopija priloge za objavo na spletnem mestu. / Copy of attachment for web publishing.

Tip obsega: **fiksni** / Type of scope: **fixed**Mesto izvajanja: **v laboratoriju** / Site: **In the laboratory**Področja preskušanja glede na vrsto preskušanja: **radiokemija, sevanje** / Testing fields with reference to the type of test:
radiochemistry, radiationPodročja preskušanja glede na vrsto preskušanca: **okolje in vzorci iz okolja; živila; kmetijski proizvodi (krma); biološki vzorci /**
Testing fields with reference to the type of test item: environment and samples from the environment; foodstuffs; agricultural products (fodders); biological samples

Št. No.	Oznaka standarda ali nestandardne preskusne metode Reference to standard or non- standard testing method	Naslov standarda ali nestandardne preskusne metode in morebitne navezave na druge standarde ali metode Title of standard or non-standard testing method and eventual relations to other standards or methods	Območje preskušanja; Negotovost rezultata preskušanja (kjer je to pomembno) Range of testing; Uncertainty of the result of testing (where relevant)	Materiali; proizvodi Materials; products
			<p>območje (range): (0,062 - 21) Bq/kg</p> <p>- hrana, mleko, krma, sušina (glede na suho snov) <i>foodstuffs, milk, feedstuffs, residue (on dry matter basis)</i></p> <p>območje (range): (0,125 - 210) Bq/kg</p> <p>- zračni filtri (filter in zračni delci) <i>aerosol filters (filter and air particles)</i></p> <p>območje (range): (0,62 - 5200) Bq/kg</p> <p>Negotovost rezultata za vse vzorce, odvisna od koncentracije aktivnosti in vrste vzorca. <i>Uncertainty of result for all samples, depending of activity concentrations and matrix.</i></p> <p>Relativna kombinirana standardna negotovost (u_c) <i>Relative combined standard uncertainty</i> (u_c): od/from: 3,5% do/to: 30%</p> <p>^{89}Sr</p> <p>minimalna aktivnost <i>minimal detectable activity (MDA): 0,013 Bq</i></p> <p>- zemlja, sedimenti (glede na suho snov) <i>soil, sediment (on dry matter basis)</i></p> <p>območje (range): (0,22 - 280) Bq/kg</p> <p>- voda <i>water</i></p> <p>območje (range): (0,013 - 17) Bq/kg</p> <p>- hrana, mleko, krma, sušina (glede na suho snov) <i>foodstuffs, milk, feedstuffs, residue (on dry matter basis)</i></p> <p>območje (range): (0,026 - 170) Bq/kg</p> <p>- zračni filtri (filter in zračni delci) <i>aerosol filters (filter and air particles)</i></p> <p>območje (range): (0,13 - 4200) Bq/kg</p> <p>Negotovost rezultata za vse vzorce, odvisna od koncentracije aktivnosti in vrste vzorca. <i>Uncertainty of result for all samples, depending of activity concentrations and matrix.</i></p> <p>Relativna kombinirana standardna negotovost (u_c)</p>	

Kopija priloge za objavo na spletnem mestu. / Copy of attachment for web publishing.

Tip obsega: **fiksni** / Type of scope: **fixed**

Mesto izvajanja: **v laboratoriju** / Site: **In the laboratory**

Področja preskušanja glede na vrsto preskušanja: **radiokemija, sevanje** / Testing fields with reference to the type of test:
radiochemistry, radiation

Področja preskušanja glede na vrsto preskušanca: **okolje in vzorci iz okolja; živila; kmetijski proizvodi (krma); biološki vzorci /**
Testing fields with reference to the type of test item: environment and samples from the environment; foodstuffs; agricultural products (fodders); biological samples

Št. No.	Oznaka standarda ali nestandardne preskusne metode Reference to standard or non- standard testing method	Naslov standarda ali nestandardne preskusne metode in morebitne navezave na druge standarde ali metode Title of standard or non-standard testing method and eventual relations to other standards or methods	Območje preskušanja; Negotovost rezultata preskušanja (kjer je to pomembno) Range of testing; Uncertainty of the result of testing (where relevant)	Materiali; proizvodi Materials; products
			<i>Relative combined standard uncertainty (u_c): od/from: 3,5% do/to: 48%</i>	
2.	SDN-O2-STC (02) interna metoda, 7. izdaja <i>in-house method, version 7</i>	Določanje tritija s tekočinskim scintilacijskim štetjem <i>Determination of tritium activity by liquid scintillation counting</i>	direktna metoda <i>direct method</i> območje (range): $(4,8 - 4,4E+06) \text{ Bq/kg}$ Relativna kombinirana standardna negotovost (u _c) <i>Relative combined standard uncertainty (u_c): od/from: 1,0% do/to: 32%</i> elektroliza <i>electrolytical enrichment</i> območje (range): $(0,13 - 320) \text{ Bq/kg}$ Relativna kombinirana standardna negotovost (u _c) <i>Relative combined standard uncertainty (u_c): od/from: 2,0% do/to: 32%</i>	voda, urin <i>water, urine</i> voda <i>water</i>
3.	SDN-O2-STC (03) interna metoda, 8. izdaja <i>in-house method, version 8</i>	Določanje ¹⁴ C v bazični raztopini <i>Determination of ¹⁴C in alkaline solution</i>	območje (range): $(2,3 - 8000) \text{ Bq/kg}$ Relativna kombinirana standardna negotovost (u _c) <i>Relative combined standard uncertainty (u_c): od/from: 4,0% do/to: 46%</i>	bazična <i>raztopina</i> <i>alkaline solution</i>

3.2.2 Odsek za znanosti o okolju, Skupina za radiokemijo, Brinje 40, 1231 Podgorica

Tabela 2 / Table 2

Tip obsega: fiksni / Type of scope: fixed Mesto izvajanja: v laboratoriju / Site: in the laboratory Področja preskušanja glede na vrsto preskušanja: kemijska / Testing fields with reference to the type of test: chemistry Področja preskušanja glede na vrsto preskušanca: okolje in vzorci iz okolja; živila; kmetijski proizvodi (krma); biološki vzorci / Testing fields with reference to the type of test item: environment and samples from the environment; foodstuffs; agricultural products (fodders); biological samples																																																																																																																		
Št. No.	Oznaka standarda ali nestandardne preskusne metode Reference to standard or non- standard testing method	Naslov standarda ali nestandardne preskusne metode in morebitne navezave na druge standarde ali metode Title of standard or non-standard testing method and eventual relations to other standards or methods	Območje preskušanja; Negotovost rezultata preskušanja (kjer je to pomembno) Range of testing; Uncertainty of the result of testing (where relevant)	Materiali; proizvodi Materials; products																																																																																																														
4.	SDN-O2-K0 (01) interna metoda, 8. izdaja <i>in-house method, version 8</i>	Določanje elementne sestave v vzorcih iz okolja s k ₀ -INAA <i>Determining elemental composition of environmental samples using k₀-INAA</i>	Območje preskušanja Range of testing <table> <thead> <tr> <th></th> <th>Od/From mg/kg</th> <th>Do/To mg/kg</th> <th>Od/From u_c (%)</th> <th>Do/To u_c (%)</th> </tr> </thead> <tbody> <tr> <td>Ag</td> <td>0,1 > 5,0</td> <td>5,0 1E+04</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>As</td> <td>0,1 > 5,0</td> <td>5,0 5E+05</td> <td>3,5 3,5</td> <td>10 4,0</td> </tr> <tr> <td>Au</td> <td>0,001 > 0,050</td> <td>0,050 1E+04</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Br</td> <td>0,5 > 5,0</td> <td>5,0 1E+04</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Ca</td> <td>300 > 1E+04</td> <td>1E+04 3E+05</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Ce</td> <td>0,2 > 10,0</td> <td>10,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Co</td> <td>0,02 > 10,0</td> <td>10,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Cr</td> <td>0,5 > 20,0</td> <td>20,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Cs</td> <td>0,03 > 5,0</td> <td>5,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Eu</td> <td>0,01 > 2,0</td> <td>2,0 1E+02</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Fe</td> <td>20 > 1E+03</td> <td>1E+03 7E+05</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Hf</td> <td>0,05 > 5,0</td> <td>5,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Hg</td> <td>0,2 > 10,0</td> <td>10,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>K</td> <td>100 > 5E+03</td> <td>5E+03 1E+05</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>La</td> <td>0,03 > 5,0</td> <td>5,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Mo</td> <td>1,0 > 10,0</td> <td>10,0 1E+03</td> <td>5,0 4,0</td> <td>30 5,0</td> </tr> <tr> <td>Na</td> <td>1,0 > 1E+03</td> <td>1E+03 1E+05</td> <td>3,5 3,5</td> <td>10 4,0</td> </tr> <tr> <td>Nd</td> <td>0,5 > 10,0</td> <td>10,0 1E+03</td> <td>4,0 4,0</td> <td>20 5,0</td> </tr> <tr> <td>Rb</td> <td>0,6 > 20,0</td> <td>20,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> <tr> <td>Sb</td> <td>0,01 > 5,0</td> <td>5,0 5E+03</td> <td>3,5 3,5</td> <td>10 4,0</td> </tr> <tr> <td>Sc</td> <td>0,005 > 5,0</td> <td>5,0 1E+03</td> <td>3,5 3,5</td> <td>20 4,0</td> </tr> </tbody> </table>		Od/From mg/kg	Do/To mg/kg	Od/From u _c (%)	Do/To u _c (%)	Ag	0,1 > 5,0	5,0 1E+04	3,5 3,5	20 4,0	As	0,1 > 5,0	5,0 5E+05	3,5 3,5	10 4,0	Au	0,001 > 0,050	0,050 1E+04	3,5 3,5	20 4,0	Br	0,5 > 5,0	5,0 1E+04	3,5 3,5	20 4,0	Ca	300 > 1E+04	1E+04 3E+05	3,5 3,5	20 4,0	Ce	0,2 > 10,0	10,0 1E+03	3,5 3,5	20 4,0	Co	0,02 > 10,0	10,0 1E+03	3,5 3,5	20 4,0	Cr	0,5 > 20,0	20,0 1E+03	3,5 3,5	20 4,0	Cs	0,03 > 5,0	5,0 1E+03	3,5 3,5	20 4,0	Eu	0,01 > 2,0	2,0 1E+02	3,5 3,5	20 4,0	Fe	20 > 1E+03	1E+03 7E+05	3,5 3,5	20 4,0	Hf	0,05 > 5,0	5,0 1E+03	3,5 3,5	20 4,0	Hg	0,2 > 10,0	10,0 1E+03	3,5 3,5	20 4,0	K	100 > 5E+03	5E+03 1E+05	3,5 3,5	20 4,0	La	0,03 > 5,0	5,0 1E+03	3,5 3,5	20 4,0	Mo	1,0 > 10,0	10,0 1E+03	5,0 4,0	30 5,0	Na	1,0 > 1E+03	1E+03 1E+05	3,5 3,5	10 4,0	Nd	0,5 > 10,0	10,0 1E+03	4,0 4,0	20 5,0	Rb	0,6 > 20,0	20,0 1E+03	3,5 3,5	20 4,0	Sb	0,01 > 5,0	5,0 5E+03	3,5 3,5	10 4,0	Sc	0,005 > 5,0	5,0 1E+03	3,5 3,5	20 4,0	tla, sedimenti, minerali, blata čistilnih naprav, <i>soil,</i> <i>sediments,</i> <i>ores,</i> <i>sewage</i> <i>sludge</i>
	Od/From mg/kg	Do/To mg/kg	Od/From u _c (%)	Do/To u _c (%)																																																																																																														
Ag	0,1 > 5,0	5,0 1E+04	3,5 3,5	20 4,0																																																																																																														
As	0,1 > 5,0	5,0 5E+05	3,5 3,5	10 4,0																																																																																																														
Au	0,001 > 0,050	0,050 1E+04	3,5 3,5	20 4,0																																																																																																														
Br	0,5 > 5,0	5,0 1E+04	3,5 3,5	20 4,0																																																																																																														
Ca	300 > 1E+04	1E+04 3E+05	3,5 3,5	20 4,0																																																																																																														
Ce	0,2 > 10,0	10,0 1E+03	3,5 3,5	20 4,0																																																																																																														
Co	0,02 > 10,0	10,0 1E+03	3,5 3,5	20 4,0																																																																																																														
Cr	0,5 > 20,0	20,0 1E+03	3,5 3,5	20 4,0																																																																																																														
Cs	0,03 > 5,0	5,0 1E+03	3,5 3,5	20 4,0																																																																																																														
Eu	0,01 > 2,0	2,0 1E+02	3,5 3,5	20 4,0																																																																																																														
Fe	20 > 1E+03	1E+03 7E+05	3,5 3,5	20 4,0																																																																																																														
Hf	0,05 > 5,0	5,0 1E+03	3,5 3,5	20 4,0																																																																																																														
Hg	0,2 > 10,0	10,0 1E+03	3,5 3,5	20 4,0																																																																																																														
K	100 > 5E+03	5E+03 1E+05	3,5 3,5	20 4,0																																																																																																														
La	0,03 > 5,0	5,0 1E+03	3,5 3,5	20 4,0																																																																																																														
Mo	1,0 > 10,0	10,0 1E+03	5,0 4,0	30 5,0																																																																																																														
Na	1,0 > 1E+03	1E+03 1E+05	3,5 3,5	10 4,0																																																																																																														
Nd	0,5 > 10,0	10,0 1E+03	4,0 4,0	20 5,0																																																																																																														
Rb	0,6 > 20,0	20,0 1E+03	3,5 3,5	20 4,0																																																																																																														
Sb	0,01 > 5,0	5,0 5E+03	3,5 3,5	10 4,0																																																																																																														
Sc	0,005 > 5,0	5,0 1E+03	3,5 3,5	20 4,0																																																																																																														

Kopija priloge za objavo na spletnem mestu. / Copy of attachment for publishing.



Tip obsega: **fiksni** / Type of scope: **fixed**

Mesto izvajanja: **v laboratoriju** / Site: **In the laboratory**

Področja preskušanja glede na vrsto preskušanja: **kemija** / Testing fields with reference to the type of test: **chemistry**

Področja preskušanja glede na vrsto preskušanca: **okolje in vzorci iz okolja; živila; kmetijski proizvodi (krma); biološki vzorci / Testing fields with reference to the type of test item: environment and samples from the environment; foodstuffs; agricultural products (fodders); biological samples**

Št. No.	Oznaka standarda ali nestandardne preskusne metode <i>Reference to standard or non- standard testing method</i>	Naslov standarda ali nestandardne preskusne metode in morebitne navezave na druge standarde ali metode <i>Title of standard or non-standard testing method and eventual relations to other standards or methods</i>	Območje preskušanja; Negotovost rezultata preskušanja (kjer je to pomembno) <i>Range of testing; Uncertainty of the result of testing (where relevant)</i>	Materiali; proizvodi <i>Materials; products</i>																																												
			<p>Se 0,5 10,0 3,5 20 > 10,0 1E+03 3,5 4,0 Sm 0,005 5,0 3,5 20 > 5,0 1E+03 3,5 4,0 Sr 50 1E+02 5,0 20 > 1E+02 1E+03 5,0 10 Ta 0,01 1,0 3,5 20 > 1,0 1E+03 3,5 4,0 Tb 0,01 1,0 3,5 20 > 1,0 1E+03 3,5 4,0 Th 0,04 10,0 3,5 20 > 10,0 1E+03 3,5 4,0 U 0,1 10,0 3,5 20 > 10,0 1E+03 3,5 4,0 Yb 0,03 5,0 3,5 20 > 5,0 1E+03 3,5 4,0 Zn 0,8 1E+02 3,5 20 > 1E+02 1E+05 3,5 4,0 Zr 30 1E+02 3,5 20 > 1E+02 1E+04 3,5 5,0</p> <p>Opomba/Note: Negotovost rezultata za vse vzorce, odvisna od koncentracije in vrste vzorca. <i>Uncertainty of result for all samples, depending of concentrations and matrix.</i></p> <p>-----</p> <p>Območje preskušanja Relativna Range of testing kombinirana standardna negotovost (u_c), % <i>Relative combined standard uncertainty (u_c), %</i></p> <table> <thead> <tr> <th>Od/From mg/kg</th><th>Do/To mg/kg</th><th>Od/From u_c (%)</th><th>Do/To u_c (%)</th></tr> </thead> <tbody> <tr> <td>Ag 0,04 > 2,0</td><td>2,0 2E+03</td><td>3,5 3,5</td><td>20 4,0</td></tr> <tr> <td>As 0,03 > 5,0</td><td>5,0 4E+03</td><td>3,5 3,5</td><td>20 4,0</td></tr> <tr> <td>Au 0,001 > 0,050</td><td>0,050 1E+02</td><td>3,5 3,5</td><td>20 4,0</td></tr> <tr> <td>Br 0,05 > 2,0</td><td>2,0 3E+03</td><td>3,5 3,5</td><td>20 4,0</td></tr> <tr> <td>Ca 100 > 5E+03</td><td>5E+03 1E+05</td><td>4,0 4,0</td><td>20 10</td></tr> <tr> <td>Ce 0,05 > 2,0</td><td>2,0 1E+03</td><td>3,5 3,5</td><td>20 4,0</td></tr> <tr> <td>Co 0,01 > 2,0</td><td>2,0 1E+03</td><td>3,5 3,5</td><td>20 4,0</td></tr> <tr> <td>Cr 0,08 > 5,0</td><td>5,0 1E+03</td><td>3,5 3,5</td><td>20 4,0</td></tr> <tr> <td>Cs 0,006 > 1,0</td><td>1,0 1E+02</td><td>3,5 3,5</td><td>20 4,0</td></tr> <tr> <td>Eu 0,002 > 1,0</td><td>1,0 1E+02</td><td>3,5 3,5</td><td>20 4,0</td></tr> </tbody> </table>	Od/From mg/kg	Do/To mg/kg	Od/From u_c (%)	Do/To u_c (%)	Ag 0,04 > 2,0	2,0 2E+03	3,5 3,5	20 4,0	As 0,03 > 5,0	5,0 4E+03	3,5 3,5	20 4,0	Au 0,001 > 0,050	0,050 1E+02	3,5 3,5	20 4,0	Br 0,05 > 2,0	2,0 3E+03	3,5 3,5	20 4,0	Ca 100 > 5E+03	5E+03 1E+05	4,0 4,0	20 10	Ce 0,05 > 2,0	2,0 1E+03	3,5 3,5	20 4,0	Co 0,01 > 2,0	2,0 1E+03	3,5 3,5	20 4,0	Cr 0,08 > 5,0	5,0 1E+03	3,5 3,5	20 4,0	Cs 0,006 > 1,0	1,0 1E+02	3,5 3,5	20 4,0	Eu 0,002 > 1,0	1,0 1E+02	3,5 3,5	20 4,0	biološki vzorci, hrana, goriva, Biological samples, foodstuffs, fuels
Od/From mg/kg	Do/To mg/kg	Od/From u_c (%)	Do/To u_c (%)																																													
Ag 0,04 > 2,0	2,0 2E+03	3,5 3,5	20 4,0																																													
As 0,03 > 5,0	5,0 4E+03	3,5 3,5	20 4,0																																													
Au 0,001 > 0,050	0,050 1E+02	3,5 3,5	20 4,0																																													
Br 0,05 > 2,0	2,0 3E+03	3,5 3,5	20 4,0																																													
Ca 100 > 5E+03	5E+03 1E+05	4,0 4,0	20 10																																													
Ce 0,05 > 2,0	2,0 1E+03	3,5 3,5	20 4,0																																													
Co 0,01 > 2,0	2,0 1E+03	3,5 3,5	20 4,0																																													
Cr 0,08 > 5,0	5,0 1E+03	3,5 3,5	20 4,0																																													
Cs 0,006 > 1,0	1,0 1E+02	3,5 3,5	20 4,0																																													
Eu 0,002 > 1,0	1,0 1E+02	3,5 3,5	20 4,0																																													

Kopija priloge za objavo na spletnem mestu. / Copy for web publishing.



Tip obsega: **fiksni** / Type of scope: **fixed**

Mesto izvajanja: **v laboratoriju** / Site: **In the laboratory**

Področja preskušanja glede na vrsto preskušanja: **kemija** / Testing fields with reference to the type of test: **chemistry**

Področja preskušanja glede na vrsto preskušanca: **okolje in vzorci iz okolja; živila; kmetijski proizvodi (krma); biološki vzorci / Testing fields with reference to the type of test item: environment and samples from the environment; foodstuffs; agricultural products (fodders); biological samples**

Št. No.	Oznaka standarda ali nestandardne preskusne metode <i>Reference to standard or non- standard testing method</i>	Naslov standarda ali nestandardne preskusne metode in morebitne navezave na druge standarde ali metode <i>Title of standard or non-standard testing method and eventual relations to other standards or methods</i>	Območje preskušanja; Negotovost rezultata preskušanja (kjer je to pomembno) <i>Range of testing; Uncertainty of the result of testing (where relevant)</i>	Materiali; proizvodi <i>Materials; products</i>																																																																																																																																																																																																																		
			<table> <tbody> <tr><td>Fe</td><td>5</td><td>5E+02</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 5E+02</td><td>5E+04</td><td>3,5</td><td>4,0</td></tr> <tr><td>Hf</td><td>0,01</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Hg</td><td>0,05</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>K</td><td>5</td><td>1E+03</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1E+03</td><td>1E+05</td><td>3,5</td><td>4,0</td></tr> <tr><td>La</td><td>0,005</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Mo</td><td>0,1</td><td>5,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 5,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Na</td><td>0,1</td><td>50,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 50,0</td><td>1E+05</td><td>3,5</td><td>4,0</td></tr> <tr><td>Nd</td><td>0,2</td><td>10,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 10,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Rb</td><td>0,2</td><td>10,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 10,0</td><td>2E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Sb</td><td>0,002</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Sc</td><td>0,0005</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Se</td><td>0,05</td><td>5,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 5,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Sm</td><td>0,001</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Sr</td><td>5</td><td>1E+02</td><td>5,0</td><td>20</td></tr> <tr><td></td><td>> 1E+02</td><td>1E+03</td><td>5,0</td><td>10</td></tr> <tr><td>Ta</td><td>0,005</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Tb</td><td>0,005</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Th</td><td>0,01</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>U</td><td>0,01</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Yb</td><td>0,01</td><td>1,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1,0</td><td>1E+02</td><td>3,5</td><td>4,0</td></tr> <tr><td>Zn</td><td>0,2</td><td>1E+02</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 1E+02</td><td>1E+03</td><td>3,5</td><td>4,0</td></tr> <tr><td>Zr</td><td>5</td><td>50,0</td><td>3,5</td><td>20</td></tr> <tr><td></td><td>> 50,0</td><td>1E+03</td><td>3,5</td><td>4,0</td></tr> </tbody> </table> <p>Opomba/Note: Negotovost rezultata za vse vzorce, odvisna od koncentracije in vrste vzorca. <i>Uncertainty of result for all samples, depending of concentrations and matrix.</i></p>	Fe	5	5E+02	3,5	20		> 5E+02	5E+04	3,5	4,0	Hf	0,01	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Hg	0,05	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	K	5	1E+03	3,5	20		> 1E+03	1E+05	3,5	4,0	La	0,005	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Mo	0,1	5,0	3,5	20		> 5,0	1E+02	3,5	4,0	Na	0,1	50,0	3,5	20		> 50,0	1E+05	3,5	4,0	Nd	0,2	10,0	3,5	20		> 10,0	1E+02	3,5	4,0	Rb	0,2	10,0	3,5	20		> 10,0	2E+02	3,5	4,0	Sb	0,002	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Sc	0,0005	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Se	0,05	5,0	3,5	20		> 5,0	1E+02	3,5	4,0	Sm	0,001	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Sr	5	1E+02	5,0	20		> 1E+02	1E+03	5,0	10	Ta	0,005	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Tb	0,005	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Th	0,01	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	U	0,01	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Yb	0,01	1,0	3,5	20		> 1,0	1E+02	3,5	4,0	Zn	0,2	1E+02	3,5	20		> 1E+02	1E+03	3,5	4,0	Zr	5	50,0	3,5	20		> 50,0	1E+03	3,5	4,0	
Fe	5	5E+02	3,5	20																																																																																																																																																																																																																		
	> 5E+02	5E+04	3,5	4,0																																																																																																																																																																																																																		
Hf	0,01	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Hg	0,05	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
K	5	1E+03	3,5	20																																																																																																																																																																																																																		
	> 1E+03	1E+05	3,5	4,0																																																																																																																																																																																																																		
La	0,005	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Mo	0,1	5,0	3,5	20																																																																																																																																																																																																																		
	> 5,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Na	0,1	50,0	3,5	20																																																																																																																																																																																																																		
	> 50,0	1E+05	3,5	4,0																																																																																																																																																																																																																		
Nd	0,2	10,0	3,5	20																																																																																																																																																																																																																		
	> 10,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Rb	0,2	10,0	3,5	20																																																																																																																																																																																																																		
	> 10,0	2E+02	3,5	4,0																																																																																																																																																																																																																		
Sb	0,002	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Sc	0,0005	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Se	0,05	5,0	3,5	20																																																																																																																																																																																																																		
	> 5,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Sm	0,001	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Sr	5	1E+02	5,0	20																																																																																																																																																																																																																		
	> 1E+02	1E+03	5,0	10																																																																																																																																																																																																																		
Ta	0,005	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Tb	0,005	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Th	0,01	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
U	0,01	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Yb	0,01	1,0	3,5	20																																																																																																																																																																																																																		
	> 1,0	1E+02	3,5	4,0																																																																																																																																																																																																																		
Zn	0,2	1E+02	3,5	20																																																																																																																																																																																																																		
	> 1E+02	1E+03	3,5	4,0																																																																																																																																																																																																																		
Zr	5	50,0	3,5	20																																																																																																																																																																																																																		
	> 50,0	1E+03	3,5	4,0																																																																																																																																																																																																																		

Kopija priloge za objavo na spletnem mestu. / Copy of annex for web publishing.

Opombe / Notes:

- V vseh točkah podrobatega obsega akreditacije, pri katerih v rubriki "**Območje** preskušanja; **Negotovost** rezultata preskušanja" ni navedenih podatkov, veljajo določila posameznih standardov oziroma nestandardnih preskusnih metod, ki se na to nanašajo.
In all columns of the scope of accreditation where the cells under "Range of measurement, testing; Uncertainty of the result of testing" are empty, the provisions of the relevant standards or non-standard testing methods should apply.
- V točkah podrobatega obsega akreditacije, pri katerih v rubriki "**Oznaka** standarda" ni navedena letnica izdaje standarda, se sklic nanaša na zadnjo (veljavno) izdajo standarda, kar jamči interni sistem sledenja in prilaganja laboratorija spremembam.
In those columns of the scope of accreditation where the cells under "Reference" do not specify the year of issue of the standard, the latest (valid) standard should apply. This is assured by internal laboratory system of follow-up and adaptation to changes.

Kopija priloge za objavo na spletnem mestu. Za podpisani original kontaktirajte info@slo-akreditacija.si

Copy of attachment for web publishing. Order signed original at
info@slo-akreditacija.si

Direktor / Director
dr. Boštjan Godec

Kopija priloge za objavo na spletnem mestu. / Copy of attachment for web publishing.