

EtG-Proficiency Test 2015

- Registration on website: 06.08.-20.09.2015
- Sample shipment by IRM Zurich: 27.09.2015
- Analysis period: 28.09.-11.11.2015
- Statistics obtained from the BAM 13.11.2015
- Certificates will sent out in December 2015
- 35 inscriptions



EtG - PROFICIENCY TEST 2015

The Society of Hair Testing is ready to launch the 2015 Ethyl glucuronide Proficiency Test exclusively for members of the SoHT. The PT will be shipped end of September 2015 and will consist of three authentic hair samples. As already announced to the members, FAEs are not included in this PT.

Participants are requested to analyze the samples following the routinely used standard procedures without giving the test samples special treatment. Further instructions will be given with the sample delivery. Data evaluation will be performed by the BAM. This will include statistical examination of all results and a z-score analysis. Participants will receive a certificate attesting their participation.

REGISTRATION FORM

DEADLINE FOR REGISTRATION: SEPTEMBER 20th, 2015

Name and Surname:

Institution:

Institution Address:

ZIP:

City:

Country:

Tel:

Fax:

e-mail:

REGISTRATION and FEES: 200 EUROS

I enclose a copy of a bank transfer of Euros in the amount of:

Account name: Society of Hair Testing
IBAN: DE51 7015 0000 0031 2410 11
BIC: SSKMDEMM
Bank: Stadtsparkasse München, Germany

Authorize credit card charges: VISA MasterCard

Amount to charge in Euros:

Name of Cardholder:

Card No.:

Safety code: (see reverse side)

Exp. Date:

Please write it legibly and pay the participation fee within the next 4 weeks!

Signature: _____ Date: _____

BY MAIL, E-MAIL OR FAX TO BE SENT TO:

Christina Hoerberg: christina.hoerberg@polizei.bayern.de AND

Michael Uhl: michael.uhl@polizei.bayern.de

Bayerisches Landeskriminalamt, Maillingerstr. 15, D-80636 München (Germany), FAX: +49 89 1212 3223

Samples

- 3 authentic samples (negative, low and high)
- 100 mg per sample
- Washed and cut
- Homogeneity tested at IRM Zurich
- At least 25 mg recommended for analysis
- Labs should perform analysis according to their routine method



PROFICIENCY TEST	
ETHYL GLUCURONIDE	PT 2015
Instructions	09/2015

A. Introduction	Deadline of result submission: Oct 31st 2015
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Dear Participants,
On behalf of the Society of Hair Testing (SoHT), the Center of Forensic Hair Analysis Zurich is organizing the 8th proficiency test for ethyl glucuronide (EIG) in co-operation with the BAM (Federal Institute for Materials, Research and Testing).

B. Co-operation partners



Federal Institute for Materials Research and Testing (BAM)
Division 1.2 "Organic Chemical Analysis; Reference Materials"
Richard-Wilstätter-Strasse 11
D-12489 Berlin (Germany)
www.bam.de

Being a competence centre for analytical chemistry, the department provides information and advice with respect to all questions of reliability, trueness and precision of analytical methods, and to quality assurance and quality control in the chemical-analytical laboratory. The results of the department's research and development activities are incorporated into international (ISO, CEN) and national (DIN, VDI) standardization and regulation.

C. Contact for request (email preferable)

Organization Delivery of samples Data Reporting Form ↓ Dr. Markus Baumgartner markus.baumgartner@irm.zh.ch Fax: +41 (0)44 835 76 12 Center for Forensic Hair Analysis Kurvenstrasse 17 CH-8006 Zürich Switzerland	EtG Proficiency Testing Supervision Submission of results PT-evaluation Certificates of participation ↓ Dr. Frank Sporkert Frank.Sporkert@chuv.ch Fax: +41 (0)21 314 7329 University Center of Legal Medicine Unit of Forensic Toxicology Chemin de la Vuilleite 4 CH-1000 Lausanne 25 Switzerland
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Statistics

- 32 results submitted
- Lab experiences:
 - > 300 analyses/year: 16 labs
 - 50-300 analyses/year: 7 labs
 - < 50 analyses/year: 9 labs
- Pulverization: 17 labs
- Incubation/extraction: water 28 labs, water and MeOH and/or ACN 3 labs, MeOH 1 lab
- Measurement:
 - LC-MS/MS: 22 labs, GC-MS/MS: 10 labs



PROFICIENCY TEST	
ETG	PT 2015
Result form	Oct 31 st 2015

ETHYL GLUCURONIDE PROFICIENCY TEST 2015

1 Laboratory experience

1.1 Previous participation in inter-laboratory comparisons?

YES NO

1.2 The method used is validated?

YES NO

1.3 Forensic Lab accreditation for this analysis?

YES NO

1.4 Number of analyzed samples ETG in hair per year?

< 50 50-300 > 300

2 Quantification

2.1 Hair ETG concentration determined according to your routinely performed method

Your Lab Code	ETG concentration in pg/mg		
	HEIG 15/1-A	HEIG 15/1-B	HEIG 15/1-C

3 Measurement conditions

3.1 Sample amount per analysis [mg - average]

Average sample amount in mg		
HEIG 15/1-A	HEIG 15/1-B	HEIG 15/1-C

EtG-Results

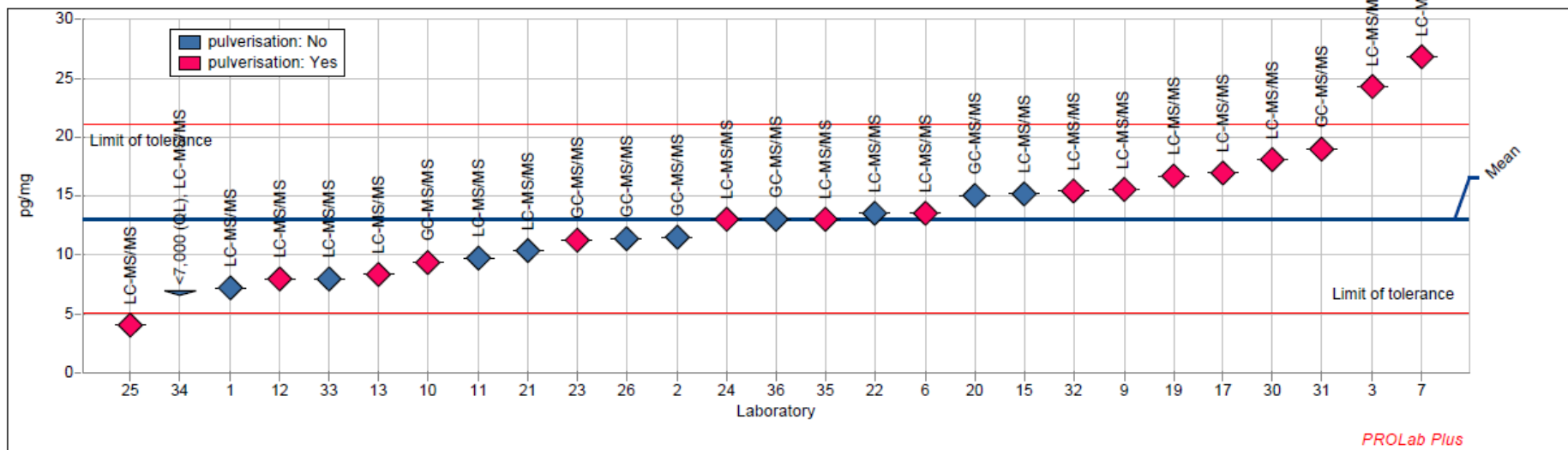
- Data treatment according to ISO-5725-5 (with PROLab Plus software)
- Acceptance criteria: Horwitz Z-score ≤ 2 (robust mean of results for all samples)

Summary results

SAMPLE A



Sample:	HEtG 15/1-A	Assigned value:	13,064 pg/mg (Empirical value)
Measurand:	EtG	Target s.d.:	4,015 pg/mg (Horwitz function)
Statistical method:	ISO 5725-5	Rel. target s.d.:	30,73%
No. of laboratories:	26	Reproducibility s.d.:	4,522 pg/mg
No. of measurement values:	26	Rel. reproducibility s.d.:	34,61%
		Range of tolerance:	5,035 - 21,094 pg/mg ($ Z\text{-Score} <= 2,000$)



19.11.2015



Assigned value **A: 13.1 pg/mg** (accepted range **5.0 – 21.1 pg/mg**)

Target SD: 30.7 %

5 labs were not able to detect EtG in this sample

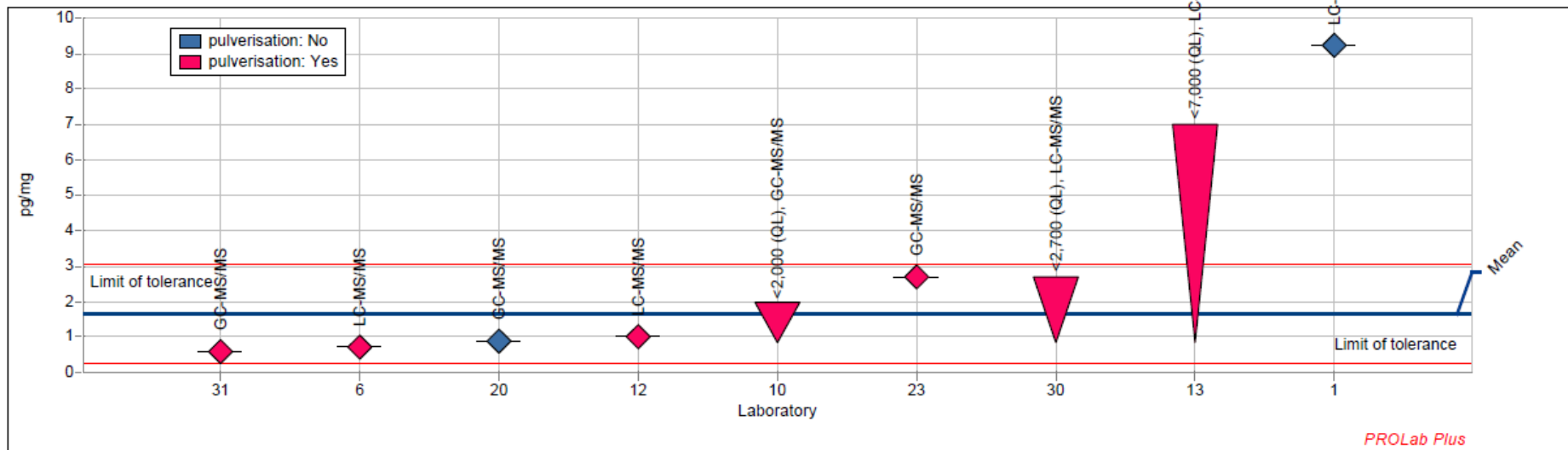
26 of 32 results within the tolerance criteria

Summary results

SAMPLE B



Sample:	HtEG 15/1-B	Assigned value:	1,656 pg/mg (Empirical value)
Measurand:	EtG	Target s.d.:	0,694 pg/mg (Horwitz function)
Statistical method:	ISO 5725-5	Rel. target s.d.:	41,94%
No. of laboratories:	6	Reproducibility s.d.:	1,586 pg/mg
No. of measurement values:	6	Rel. reproducibility s.d.:	95,77%
		Range of tolerance:	0,267 - 3,044 pg/mg ($ Z\text{-Score} \leq 2,000$)

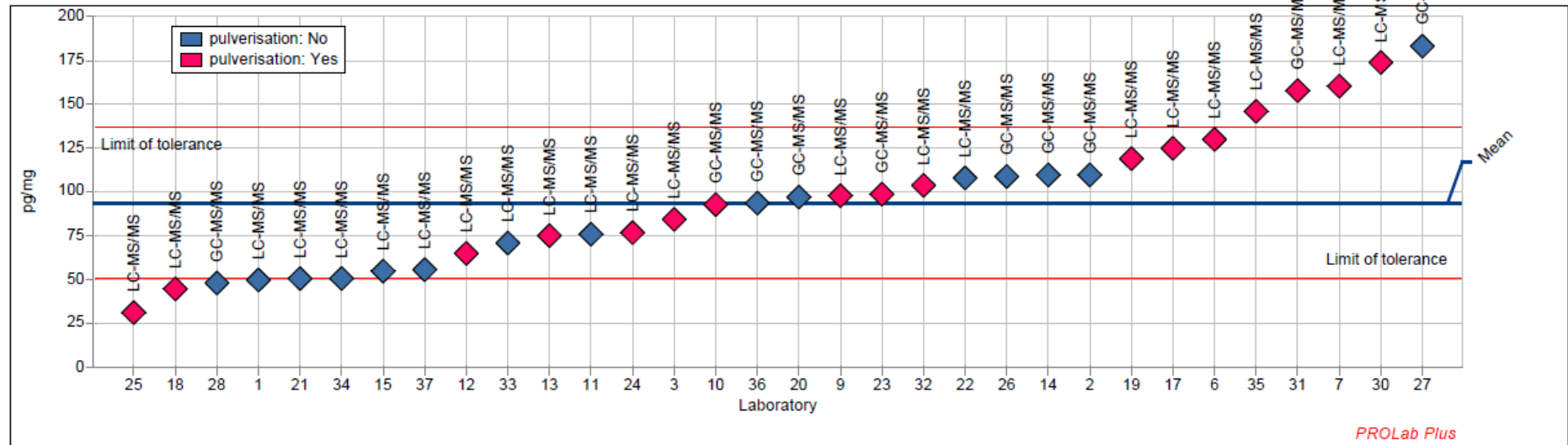


SAMPLE C



Summary results

Sample:	HEtG 15/1-C	Assigned value:	93,798 pg/mg (Empirical value)
Measurand:	EtG	Target s.d.:	21,425 pg/mg (Horwitz function)
Statistical method:	ISO 5725-5	Rel. target s.d.:	22,84%
No. of laboratories:	32	Reproducibility s.d.:	41,544 pg/mg
No. of measurement values:	32	Rel. reproducibility s.d.:	44,29%
		Range of tolerance:	50,948 - 136,648 pg/mg ($ Z\text{-Score} \leq 2,000$)



19.11.2015

PROLab
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Assigned value **C: 93.8 pg/mg** (accepted range **50.9 – 137 pg/mg**)

24 of 32 results within the tolerance criteria

Organization of next EtG PT test

- 2 test rounds previewed in April/May and October/November 2016
- Data treatment will be provided by BAM (Germany) with PROLab Plus
- Feedback concerning forms are welcome (registration, instructions, results) – email to frank.sporkert@chuv.ch