



Swiss Confederation

CH-3003 Bern, EZV, OZD/ZEMK

Registered item

KW QUIMICA GERMANA S.A.C.
Calle Las Fafbricas Mz. B Lote 20A
Urb. La Villa
Norma Ortiz Aguirre
Chorrillos (Lima 09), Lima
Perù

Reference initials/file initials: 073.4/TC174-2016
Person responsible: Steeve Humbert
Berne, 13 July 2016

Round robin ISO/TC 174

Dear participant,

Thank You for having registered your laboratory for participating to the Round robin ISO/TC 174 organized as decided during our last meeting in Pforzheim. This proficiency testing covers the following ISO-methods:

- ISO 11494
- ISO 15093
- ISO 15096

The aim of this proficiency testing program is to get information about the performance of the methods as well as to get a compilation of some analytical data to fix the conditions for the planed extension of scope regarding ISO 15093 and ISO 15096 (from 999 up to 999.9). New emission lines proposed for this matter will be checked through this exercise. A statistical evaluation of the program will be presented during our next meeting in Geneva.

We would like to insist on the following: the ISO-methods are likely to deviate from yours, **please follow strictly the ISO-procedures**, especially regarding samples and standards preparation and dilutions. The list of elements to be measured and the corresponding recommended emission's lines to be used are defined in the Excel form you receive separately per e-mail and made for returning your results. All mentioned elements must be measured. If some lines are not applicable by your instrument, you can also use some others and specify the lines used in the form. Using from one up to three lines is possible for each element.

Here are the information about your participation:

Lab code	14
Sample	ISO 11494 (Platinum)
	x ISO 15093 (Gold)
	x ISO 15096 (Silver)

Central office for precious metals control
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Please specify your lab code in the excel form and your results (4 replicates) for the methods you are registered for. The results form must be returned per e-mail to steve.humbert@ezv.admin.ch until Thursday the 1st September 2016. Results sent after this date will not be evaluated.

Important information

Needing information or precisions about the last version of the standard

If you need to get further information or precisions about the last version of one of the standards to perform this round robin analyses, feel free to contact stefan.zorn@agosi.de.

Precision about the way to prepare the calibration solution in the norm 15093

According to the last comment from Laureline Château of the Company Pourquery DMP, France, and member of the TC 174, regarding the way to prepare the calibration solution in the norm 15093, we would like to give a precision:

*The adding of the silver must not be performed during the step 5.4 of the norm, preparing of the acid stock solution, but **directly as a nitrate during the preparation of the calibration solution according to the step 7.2.** The end concentration of the silver in the calibration solution should be 10 mg/l.*

Material compensation

As a reception's confirmation and in order to cover the material provided for the round robin, we kindly request you to send fine metals compensation to the following address directly after having received your sample and reference material:

AGOSI
Allgemeine Gold- und Silberscheideanstalt AG
z. Hd. Stefan Zorn
Kanzlerstr. 17
75175 Pforzheim
Deutschland

Quantity of fine metals to return if applicable:

11494	1.2 g Platinum
15093*	5.0 g Gold
15096*	5.0 g Silver

* covering both sample and reference material

If you require any further information, please do not hesitate to contact me.

Yours sincerely,



Steve Humbert
Head of Procedures and Technology
Central office for precious metals control

Each participant received a "lab code" used to anonymize the results. This identifying code will not be published and may only allow the participant to check its results in the present report.

The samples were provided by METALOR SA (Gold sample), AGOSI Allgemeine Gold- und Silberscheideanstalt AG (Silver sample) and the Swiss precious metals control (Platinum sample). For Gold and Silber, reference material has also been supplied in order to insure same conditions for performing the analyses.

2 Participants

Here is the list of the laboratories having participated:

Laboratory	Country
National Jewelry Quality Supervision & Inspection Center	China
Shenzhen Shoujian Testing	China
LABORATOIRE CRT COOKSON CLAL	France
LABORATOIRE SCL de Paris	France
POURQUERY DMP	France
AGOSI Allgemeine Gold- und Silberscheideanstalt AG	Germany
C.HAFNER GmbH + Co. KG	Germany
FEM Forschungsinstitut Edelmetalle + Metallchemie	Germany
EUROLAB SRL	Italy
UNOERRE Industries S.p.A.	Italy
KW QUIMICA GERMANA S.A.C.	Perù
ARGOR-HERAEUS SA	Switzerland
METALOR Technologies SA	Switzerland
Zentralamt für Edelmetallkontrolle	Switzerland
LONDON ASSAY OFFICE	UK

Please note that not all participants performed every methods: each one had to register for the method(s) which one(s) it had would like to participate.

3 Collecting of the data

The analyses were performed during the weeks 32 to 35. All participants returned their results on time using the Excel form. The data of the form received were all collected in three different matrixes: one for each method considered. The data were systematically classified in different categories: "Comments, Information & Answers to Check Questions", "Measurements - detail by emission lines", "Measurements - average by element" and "Results of the main element". Some of the data were not considered in this report that aims to overview the most important values and information but the matrixes will be given to the Chairman of the group for further investigation.

Due to many comments about difficulties to perform the methods as described in the norms, we decided to let some degree of freedom in the way to perform the analyses. Some of the comments collected are already in this report but we asked all participants to send further comments with referencing on the different points of the norms. This comments are considered separately and may be used during the meeting as a base of discussion to adapt the norms.