DUBAI MUNICIPALITY

بلدية دبي

REF: 812/02/02/1/865

DATE: 11 April 2007

ATTENTION: LAB MANAGER

SUBJECT: 153rd INTER-LABORATORY PROFICIENCY TESTING PROGRAM

We are pleased to present the results of the 153rd Inter-laboratory Proficiency Testing Program involving the determination of Gold in Gold Jewellery alloys-Cupellation Method (Fire Assay). As in previous programs, we have assigned code numbers to participating laboratories in order to protect their identities. For this particular program please contact Dr. Yaser (Tel. No. 3027074) or Eng. Raniah (Tel. No. 3027069) to inform you which code number has been assigned to you.

You are also requested to pay to Dubai Accreditation Center (DAC), an amount of (Dhs 850) in return for your participation in the Inter-laboratory Proficiency Testing Program as per the invoice no.: INV/PT-LB/10 (please note that the governmental laboratories are exempted from participation fees).

We thank you for your participation and we would welcome any comments or suggestions on this and on future programs. Please do not hesitate to contact us if you need any clarification on the report.

Kind Regards

Eng. Lina Qudah
Head of Accreditation Decisions Section

ص.ب : ٦٧ دبي - الإمارات العربية المتحدة - هاتف : ٠٠٩٧١-٤-٢٢١٥٥٥٥ - فاكس : ٠٠٩٧١-٤-٢٢٤٦٦٦٦ - برقياً : بلدية - تلكس : ٤٥٦٨٨ بلدية إي إم
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DUBAI MUNICIPALITY

بلدية دبي

INVOICE NO.: INV/PT-LB/10

DATE: 11 April 2007

PARTICIPANT NAME: _____

FAX NO. : _____

ATTENTION: LABORATORY MANAGER

SUBJECT: INVOICE FOR PARTICIPATION IN INTER-LABORATORY PROFECEINCY TESTING PROGRAM (PTP)

You are hereby requested to pay to Dubai Accreditation Center, Dubai Municipality the participation fee for the Inter-laboratory Proficiency Testing Program having the following details:

PTP No.	153
Details	Determination of Gold in Gold Jewellery alloys-Cupellation Method (Fire Assay
Amount	Dhs 850

You are kindly requested to pay the amount within one month from the date in which the results are posted on our website.

We would like to draw your attention that payment can be made through DCLD counter-ground floor by credit card. Should you intend to pay by cheque please address the cheque to Dubai Municipality. After payment, please submit copies of both the invoice and the receipt to Dubai Accreditation Center (Eng. Raniah Ed Dili in the administration building on the second floor office no. 310).

Best Regard.

ENGR. LINA QUDAH
HEAD OF ACCREDITATION DECISIONS SECTION

Please fill the required information requested in this invoice form before paying the required amount to DCL Counter.

Cc:
- Quality and Support Unit- DAC

DUBAI ACCREDITATION CENTER

10 April 2007

REPORT ON 153rd INTER-LABORATORY PROFICIENCY TESTING PROGRAM DETERMINATION OF GOLD IN GOLD JEWELLERY ALLOYS

1. INTRODUCTION

This document presents the results of the 153rd Inter-Laboratory Proficiency Testing Program conducted during the month of March and the results received during the same month, involving the determination of Gold in Gold Jewellery alloys-Cupellation Method (Fire Assay) according to BS EN ISO 11426:1999.

This program is part of the Inter-laboratory Comparison Programs organized by Dubai Accreditation Center of DM for monitoring the validity of test results of laboratories operating in Dubai as a requirement of the Local Order 52/1990 and ISO/IEC 17011: 2004.

For this inter-laboratory comparison proficiency testing program DAC used an approved subcontractor for the supply of samples. All other activities are undertaken by the Accreditation Decisions Section in DAC with support provided by DAC Advisory Accreditation Committee.

2. EXPERIMENTAL DESIGN

2.1 Participants:

A total of four laboratories participated in this program.

2.2 Samples tested:

The samples, consisted of gold strips approximately 1 gram each, were distributed to all participating laboratories. The test samples were prepared from 4 different gold bars and divided into twenty samples, which were randomly assigned to the four participating laboratories with each participant being given four test gold strips, one from each bar. The samples were designated as Samples 1, 2, 3, and 4 with a unique identification number marked on each sample.

3. CONFIDENTIALITY

All information supplied by a participant as part of a proficiency testing program is treated as confidential. This information will however be made available to the assessor(s) of the participant, and if the need arises, to DAC Advisory Accreditation Committee and peer evaluators from other accreditation bodies on behalf of ILAC. All have signed confidentiality agreements.

Each laboratory is given a Code number to maintain confidentiality of results and to protect their identities. Only the concerned laboratory knows its code number.

4. TEST METHOD

Instructions were given to the participants to test the samples for determination of Gold in Gold Jewellery alloys-Cupellation Method (Fire Assay) as per BS EN ISO 11426:1999.

5. TEST RESULTS

The test results submitted by the participating laboratories are presented in Appendix A. In order to protect the identity of the participating laboratories, each one was assigned a code number. The numbers in the column headings, Lab #, of the tables represents the code numbers for the participating laboratories.

6. EVALUATION OF RESULTS

6.1 METHOD OF ANALYSIS

Please refer to document **DAC-G3-03** Robust Z-Score Analyses for the methodologies of analysis that can be downloaded from our website www.dac.gov.ae

6.2 CALCULATIONS OF Z- SCORES

Appendix B gives the details of the calculation of the Z-Scores from the raw data. The Z-Score analysis is based on an internationally accepted procedure being used by accreditation bodies implementing Inter-laboratory comparison programs.

6.3 OUTLIER RESULTS

After evaluating the Z-Score, the results from all participating laboratories are found within the Z-score limits of ± 3, therefore, all the results are acceptable.

7. APPENDICES

7.1 Appendix A: Raw Data
7.2 Appendix B: Calculation of z-scores and other statistics
7.3 Appendix C: Charts

---- End of Report ---

Appendix A: Raw data

The Average Gold Content, (%)

Lab#	Sample1	Sample2	Sample3	Sample4
Lab 1	750.400	875.000	916.100	999.900
Lab 2	750.500	875.400	916.400	999.800
Lab 3	750.340	875.410	916.460	999.900
Lab 4	750.800	875.500	916.400	999.500

Average Gold Content, (%)

Result#	S1 S2	S3 S4	S1+S3 S2+S4	S1-S3 S2-S4	Between Labs z-score	Within Labs z-score
Lab1-1	750.400	916.100	1666.50	-165.70	-0.6775	-0.6682
Lab1-2	875.000	999.900	1874.90	-124.90	0.6730	0.6650
Lab2-1	750.500	916.400	1666.90	-165.90	-0.6749	-0.6748
Lab2-2	875.400	999.800	1875.20	-124.40	0.6749	0.6813
Lab3-1	750.340	916.460	1666.80	-166.12	-0.6755	-0.6820
Lab3-2	875.410	999.900	1875.31	-124.49	0.6756	0.6784
Lab4-1	750.800	916.400	1667.20	-165.60	-0.6730	-0.6650
Lab4-2	875.500	999.500	1875.00	-124.00	0.6736	0.6944
Lab5-1	750.420	917.600	1668.02	-167.18	-0.6676	-0.7166
Lab5-2	875.720	999.870	1875.59	-124.15	0.6774	0.6895

No. of Results	8	8	8	8
Median	812.90	957.98	1771.05	-145.25
Q 1	750.475	916.400	1666.875	-165.750
Q 3	875.403	999.825	1875.050	-124.468
Inter Q Range	124.928	83.425	208.175	41.283
Normalzd IQR	92.609	61.843	154.320	30.603
Robust CV,%	11.392	6.456	8.713	-21.069
Minimum	750.34	916.10	1666.50	-166.12
Maximum	875.50	999.90	1875.31	-124.00
Range	125.16	83.80	208.81	42.12

Appendix C: Charts