

DAC in support of Proficiency Testing in member state

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ACCREDITATION



DAC BACKGROUND

DAC was established as centre in May 2005



The centre was Re-structured as a Department in 2008



A regulation No. 2/2010 for accreditation services in Dubai was issued by the Executive council of the Emirates of Dubai.



DAC Memberships



Internationally recognized as a full member & signatory of ILAC MRA.

2008

The first recognized Accreditation Body in the Arab region for the Medical Labs Accreditation

2008



Member in International Accreditation Forum (IAF)

2006



Member in Pacific Accreditation Cooperation (PAC)

2008



Member in Arab Accreditation Centre (ARAC)

2011

Member in Gulf Accreditation Centre (GAC)

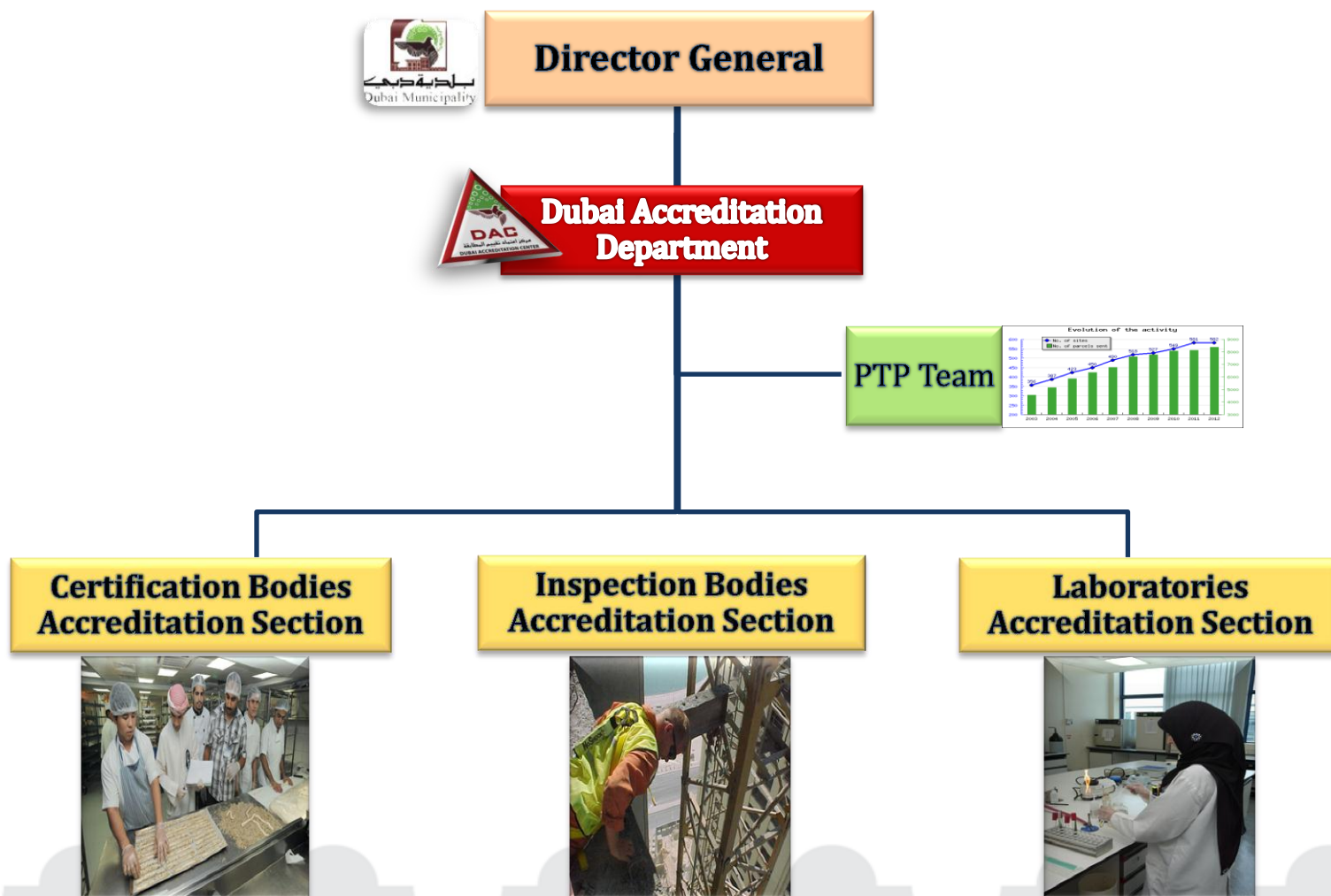
2008



Member in Standards & Metrology Institute for Islamic Countries (SMIIC)

2012

DAC Organization Chart



DAC Vision & Mission



Vision

We Accredit ,, World Recognize

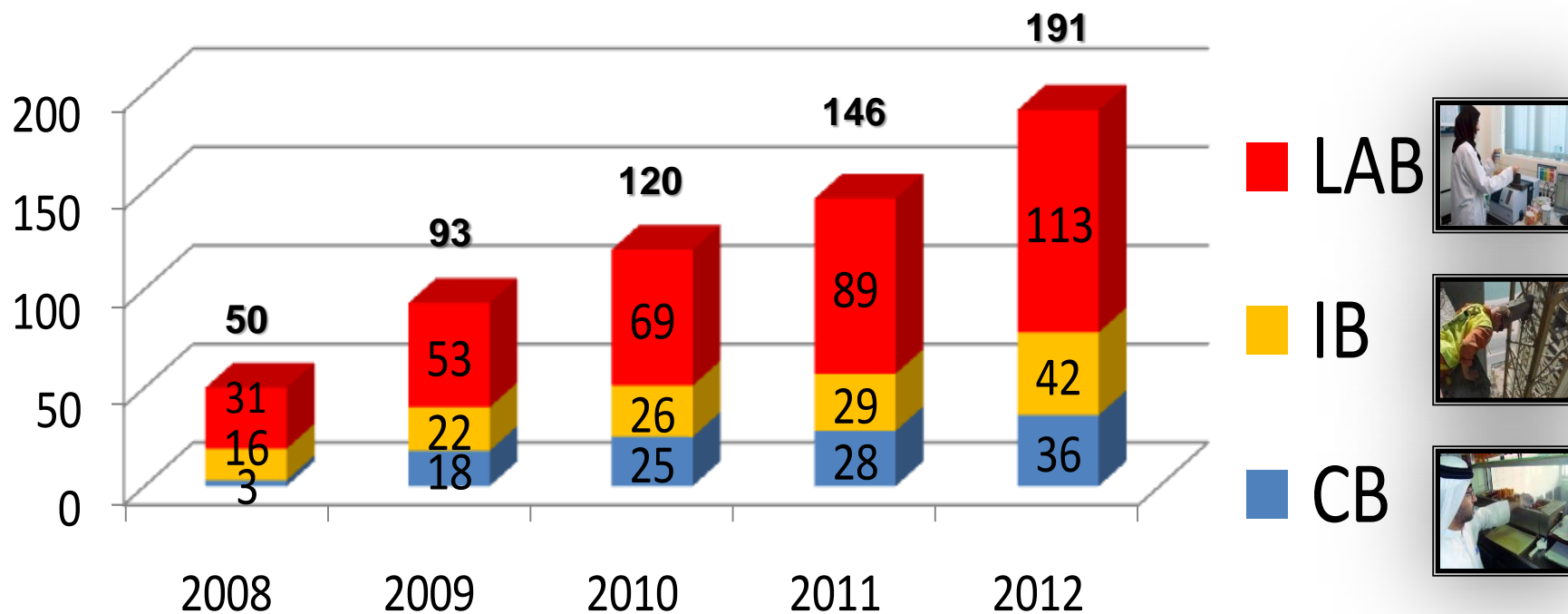


Mission

Enhance Quality And Creditability Of Certification, Inspection, Calibration & Testing Results By Providing Recognized Accreditation, Proficiency Testing And Training Services To Conformity Assessment Bodies.

DAC Services

Accreditation



DAC Services

Training

- Lead Assessor Course,
- Internal Auditor Course,
- Awareness to Accreditation,
- Measurement Uncertainty Course.



PT Programs

Proficiency Testing Program (PTP)



Year	Programs
1992	Construction Materials
1999	Gold test
2000	Field density
2001	Waste Water
2008	Drinking Water

PT Programs



Year	Programs
2009	Steel bar
2010	Calibration of Mass
2011	Temperature Calibration
2012	Electrical Calibration
2013	Pressure Calibration
	Dimensional Calibration

PT Programs



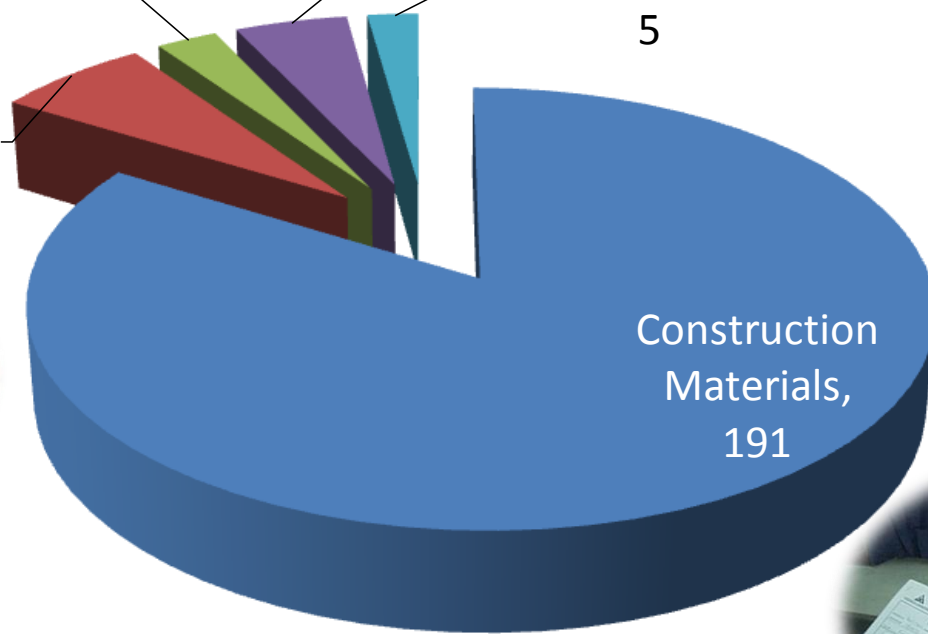
Calibration,
6



Environment,
11

Drinking
Water
5

Gold testing,
15



PT Programs

More than **230** PTPs were conducted by DAC since **1992**

Year	No. of PT Programs	No. of Participants
2008	12	257
2009	14	301
2010	15	369
2011	11	252
2012	12	335

Participation Statistics

2007 - 2012

No. of participant	COUNTRY	No.
1545	UAE	1
118	QATAR	2
46	OMAN	3
20	BAHRAIN	4
4	SAUDI ARABIA	5
1	KUWAIT	6
1	EGYPT	7



PTP Process

Accreditation Department Proficiency Testing Program for 2013

Month	PTP #	Sample Description	Test Name	Test Method	Participation Fee (UAE DHS)
<input type="checkbox"/> Jan.	229	Cemented Sand	California Bearing Ratio	BS 1377:1990: PART 4 : T 7 AMD 13925: 2002	1000
<input type="checkbox"/> Feb.	230	Crystal Pressure Calibrator with LP Port: - 100-250 kPa and HP: 0-20,000 kPa	Pressure Calibration New	Participants will be instructed to calibrate the artifact(s) using their standard calibration procedures	1200
<input type="checkbox"/> Feb.	231	Carbon Steel Bars for Reinforcement of Concrete	Steel Tensile Strength Tests	BS 4449:1997	1000
<input type="checkbox"/> Mar.	232	Clayee Sand	Liquid Limit; Plastic Limit; Plasticity Index	BS 1377, P2 :1990 CL.4.3/4.4/4.5/5 Amd 9027:96	1000
<input type="checkbox"/> Mar.	233	Gold Bars	Determination of Gold in Jewellery	BS EN ISO 11426: 1999 - Cupellation Method (Fire Assay)	1000
<input type="checkbox"/> Apr.	234	Sand and Crushed Rock	Sand Equiviliant	ASTD D-2419:2002	1000
<input type="checkbox"/> May	235	Standard Weights	Mass Calibration	Comparison against standard weights of OMIL - 101	1200
<input type="checkbox"/> June	236	Coarse Crushed Rock	Ten Percent Fines Value (TFV)	BS 812 : Part 111: 1990	1000
<input type="checkbox"/> Jul.	237	Concrete	Chloride & Sulphate in Concrete	BS 1881; Part 124; 1988	1000
<input type="checkbox"/> Aug.	238	CRM Samples (Environmental Testing)	TSS/TDS/BOD/COD/ Oil & Grease & Metals	APHA-AWWA-WEF 20th Ed 1998 Standard Method for Examination of Water and Waste Water	1500
<input type="checkbox"/> Sep.	239	Coarse Crushed Rock	Flakiness / Elongation	BS 812: 1990: P 105 SEC. 105.1, SEC.105.2	1000
<input type="checkbox"/> Oct.	240	Gauge Block Set	Dimentional / Length New	Participants will be instructed to calibrate the artifact(s) using their standard calibration procedures	1200
<input type="checkbox"/> Nov.	241	CRM Samples (Drinking Water Testing)	Chemical Analysis of Drinking Water	APHA or any other appropriate standard test method	1700
<input type="checkbox"/> Dec.	242	Cemented Sand	Dry Density - Moisture Content Relationship	BS 1377: 1990: PART 4 : CL. 3.5, Amd 13925:2002	1000

Please Select and Tick **v** on the Scheme in which your Lab is interested to Participate

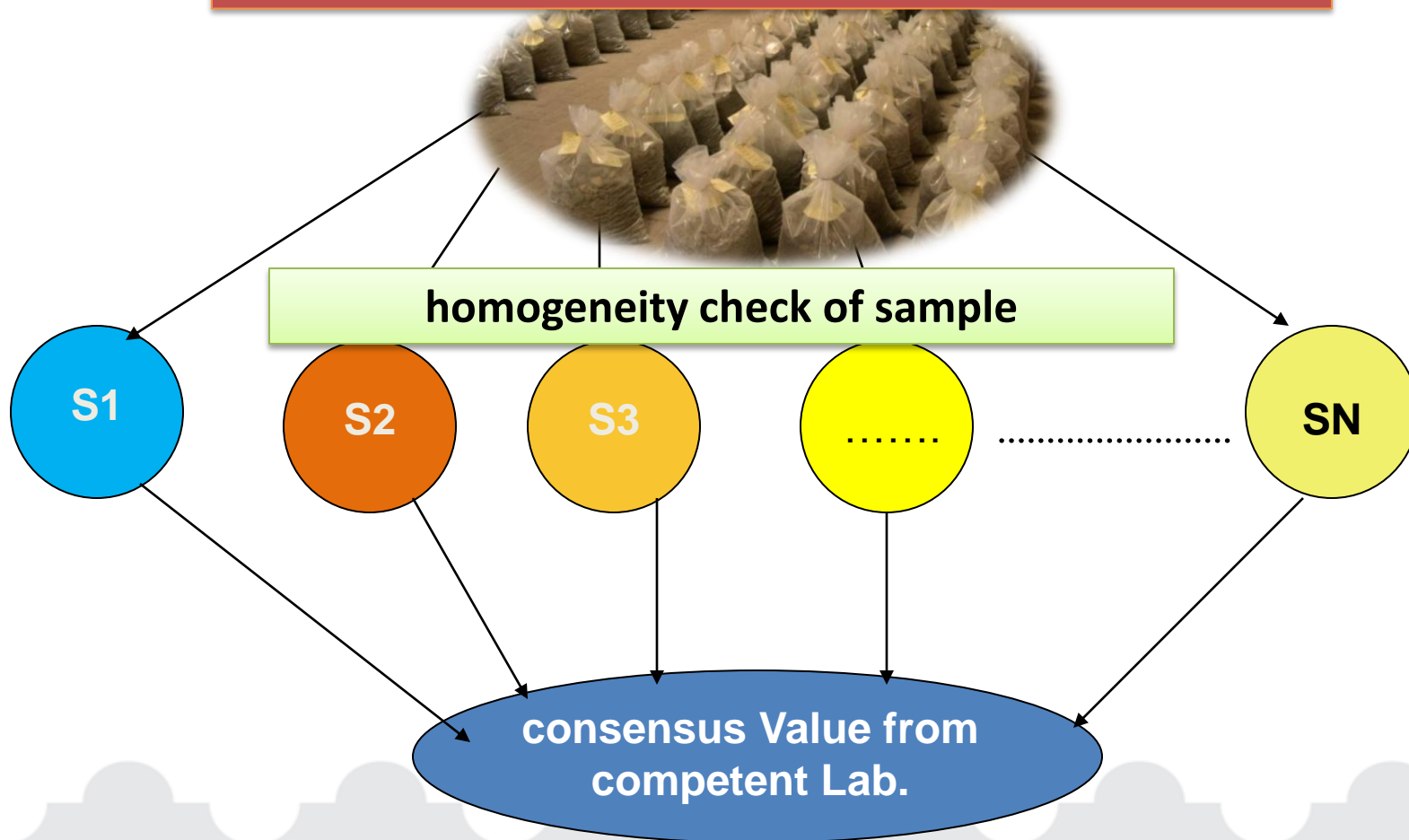


Planning

Preparation of
Plan &
Publishing on
Website

Type of PT sample

Bulk of material established to use as testing material



Type of PT sample

Certified Reference Materials (CRM)
with known-value are distributed

homogeneity is ensured by the supplier.



Type of PT sample

Artifact with calibration certificate

Stability:

recalibration at least at the start and at the end of the circulation



PT Results Analysis

To define DAC policy in organizing, conducting and analyzing the Inter-Laboratory Proficiency Testing Program (PTP) based on ISO 13528 Standard

DUBAI ACCREDITATION CENTER – DUBAI MUNICIPALITY



GUIDANCE FOR STATISTICAL EVALUATION OF INTERLABORATORY PROFICIENCY TESTING PROGRAM

DAC-G5
September 2012

APPROVED :	Director, Dubai Accreditation Department
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REVISION HISTORY			
ISSUE NO.	REV. NO.	DETAILS	DATE
0	0	Draft For Comments	24-08-2009
1	1	Issue for Use	31-08-2009
2	1	Revised the guidance	13-04-2008
3	1	Re-issued to reflect the new DAC organizational structure	15-06-2008
3	2	Revised due to changing only the ID number of the document from DAC-G3-03 to DAC-G5 as a result of document review of internal procedure "control of documents"	02-08-2011
3	3	Revised to include Measurement Audit for Calibration Laboratories (point 7) and Calibration Inter-laboratory Comparisons / Measurement Audits (point 8). All changes are marked in teal color and italic font.	06-09-2012

PT Results Analysis

Testing Laboratory

The statistical analysis and Z – Score calculations of the participant's results are based on
ISO 13528:2005

$|z| \leq 2$ Satisfactory

$2 < |z| < 3$ Questionable

← Warning level

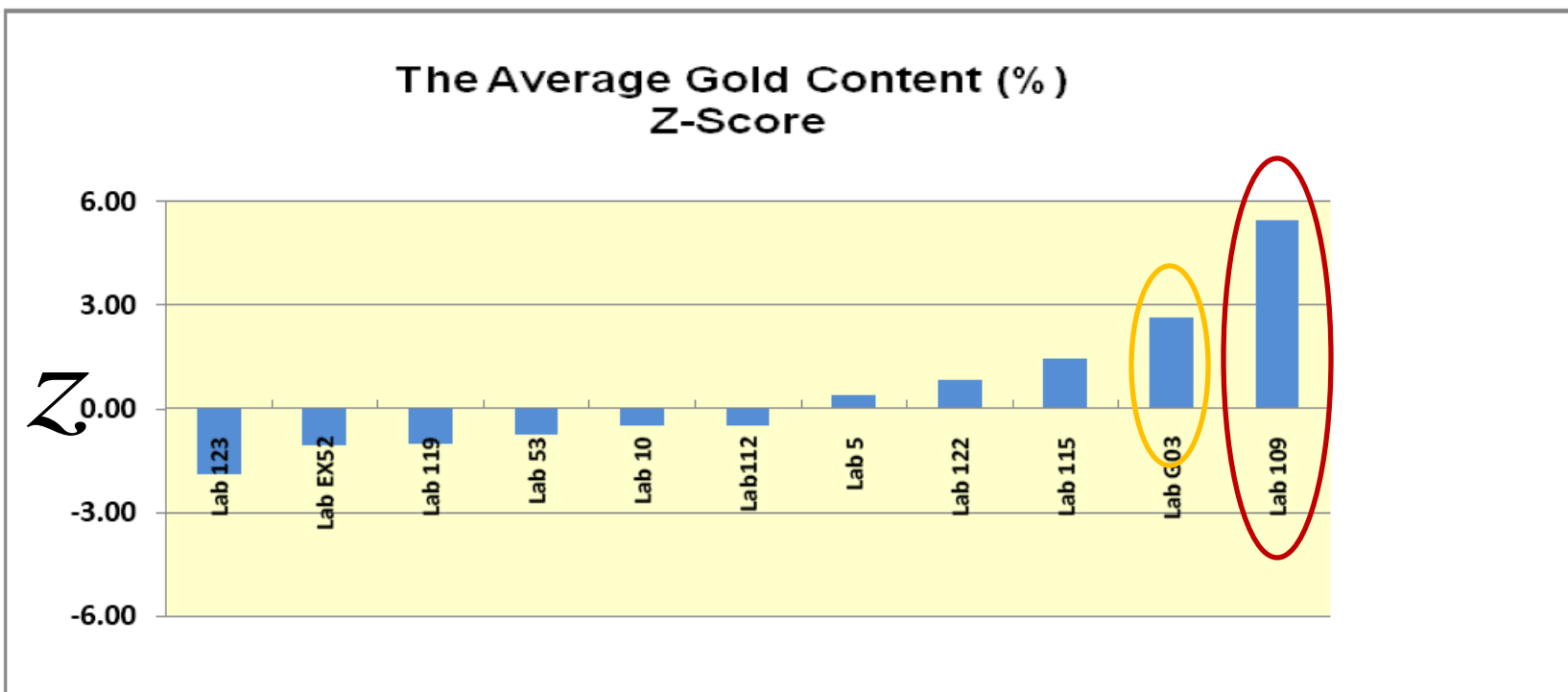
$|z| \geq 3$ Unsatisfactory

← Outlier

Interlaboratory comparison

Graphical Presentation of Results

The Average Gold Content (%)

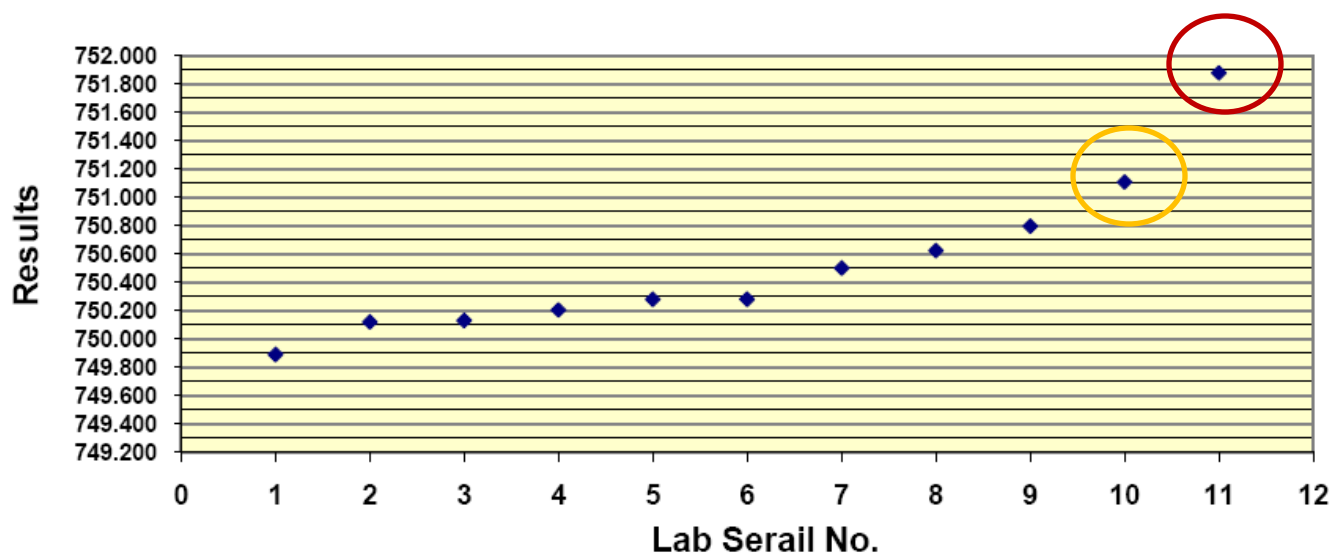


Test	Labs outside the z-scores ± 3
gold in gold jewellery alloys	Lab 109

Graphical Presentation of Results

The Average Gold Content (%) X-Y Scatter

X axis Lab No
y axis result



Target value	750.404
Low Acceptable	749.591
High Acceptable	751.217
Acceptable Range	749.591 - 751.217

PT Results Analysis

Calibration Laboratory

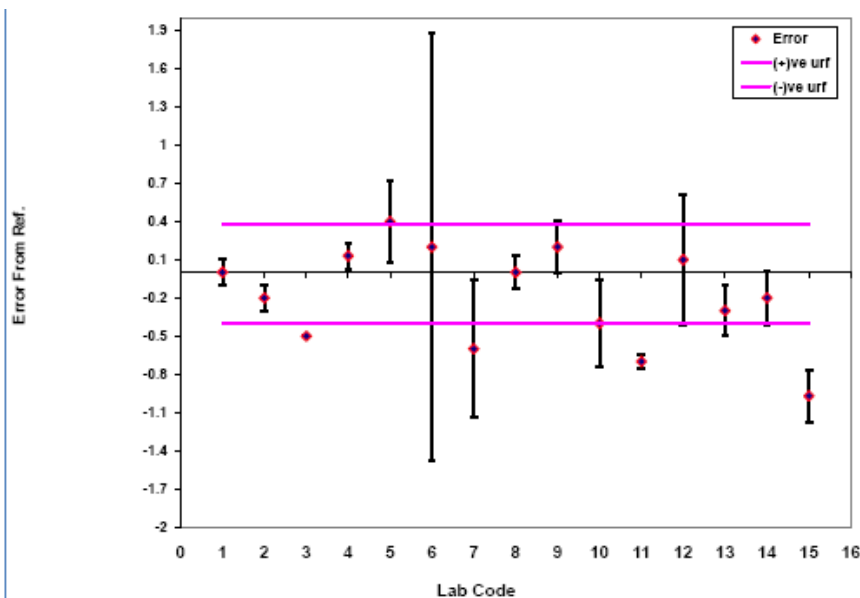
The statistical analysis and E_n no. calculations

*For a result to be acceptable the
 E_n ratio (no.) should be between -1 and +1*

Graphical Presentation of Results

100 °C

Lab	Reference Lab			Participant Lab			Central	Error
	Reading	(+)ve u_{rf}	(-)ve u_{rf}	Reading	u_{lab}	E_n		
Lab G04	100.3	0.4	-0.4	100.3	0.10	0.00	0	0
Lab 30	100.3	0.4	-0.4	100.1	0.10	-0.52	0	-0.2
Lab 1	100.3	0.4	-0.4	99.8	0.00	-1.33	0	-0.5
Lab 8	100.3	0.4	-0.4	100.43	0.10	0.33	0	0.13
Lab EX53	100.3	0.4	-0.4	100.7	0.32	0.81	0	0.4
Lab 116	100.3	0.4	-0.4	100.5	1.68	0.12	0	0.2
Lab 75	100.3	0.4	-0.4	99.7	0.54	-0.91	0	-0.6
Lab 87	100.3	0.4	-0.4	100.3	0.13	0.00	0	0
Lab 25	100.3	0.4	-0.4	100.5	0.20	0.47	0	0.2
Lab 49	100.3	0.4	-0.4	99.9	0.34	-0.79	0	-0.4
Lab 47	100.3	0.4	-0.4	99.6	0.05	-1.85	0	-0.7
Lab107	100.3	0.4	-0.4	100.4	0.51	0.16	0	0.1
Lab 98	100.3	0.4	-0.4	100	0.20	-0.71	0	-0.30
Lab 97	100.3	0.4	-0.4	100.1	0.21	-0.47	0	-0.20
Lab 36	100.3	0.4	-0.4	99.33	0.21	-2.26	0	-0.97



DAC Policy

All Labs are required to participate in PTP as per DAC -REQ-01

Minimum amount of participation in PTP defines in relevant technical requirement(s)

DAC conducts PTP for various scopes as per ISO/ IEC 17043 & ILAC-P9

Publish PT plan/reports and approved providers on DAC website



Thanks for Listening



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