

Proficiency Testing Participation Key Issues from Laboratory Perspective

Frequently Asked Questions



Green Economy Initiatives Pvt. Ltd.

PROFICIENCY TESTING PROVIDER P-0015

NABL Certificate No. PC-1005

NABL scope can be seen on website www.greenalliance.in

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Frequently Asked Questions

Common Terms-

ISO/IEC 17043-2010 Standard followed for conducting PT Schemes

ISO 13528-2015 Standard followed for PT statistics

PT: **Proficiency Testing**

PTP: **Proficiency Testing Provider**

organization which takes responsibility for all tasks in the development and operation of a proficiency testing schemes

PT Coordinator: **Proficiency Testing Coordinator**

individual(s) with responsibility for organizing and managing all of the activities involved in the operation of a PT schemes

PT Item: **Proficiency Testing Item**

sample, product, artifact, reference material, piece of equipment, measurement standard, data set or other or case study information used for proficiency testing

Types of PT Schemes run by GEIPL

Simultaneous (Quantitative) – In this similar PT Item is sent to all participating laboratories concurrently for testing in a definite time period to quantify the measurand value

Simultaneous (Qualitative) – In this similar PT Item is sent to all participating laboratories concurrently for testing to declare results as present/absent

Simultaneous (Sampling) – In this similar PT Item (Case Study) is given to all participating laboratories and sampling done by them is evaluated as per sampling methods on the basis of sampling sheets, pictures, videos and or other instructions. Sampling is done by lab in and around its own location depending upon nature of case study

Frequently Asked Questions- How my PT performance is reported

For quantitative evaluation- participants performance reported as z-score

Where $|z|$ denotes the absolute value of the z-score. When an outlier is identified the sign of the z-score indicates whether the result is too high (positive z-score) or too low (negative z-score) and how far from assigned value

$ z/z'$ -score	Interpretation	Coding
$ z/z'$ -score ≤ 2.0	Satisfactory result	z-score Normal Black z'-score (z-prime) Dark Blue z^2-score is only indicative $p < 8$ Dark Magenta
$2.01 < z/z'$ -score < 2.99	Questionable result (straggler)	Bold Black
$ z/z'$ -score ≥ 3.0	Unsatisfactory result (Outlier)	Bold Red
No score	See below	--

z' Modified z-score that includes the uncertainty of the assigned value, commonly pronounced as z-prime

Performance scores will not be given for the following:

RNS Results not submitted–Lab may not submit results for a parameter(s) for various reasons- It is not in their scope or they have already covered that parameter(s) or participating only for outlier parameters or as per their plan will participate in parameter(s) in next scheme run or during testing is not confident of the results etc. PT provider in this case do not give score and mark the column as '--'.





RNC Results not considered (Where participants in spite of instructions given- Report results as zero or non-numerical results e.g. <0.1 or >1 , Nil, BDL etc. or even where some results are qualified by any symbol or given with any remarks etc.; these results are not considered for performance evaluation) – PT provider in this case do not give score and mark the column as '--'.

In some cases, performance scores may not be provided or may be provided but with coding and or colour as below:

- \$\$** Where number of participants for one or more measurands in a PT scheme due to 'Results Not submitted' or 'Results Not Considered' or due to removal of blunders are reduced to less than 8, in such a case the uncertainty can be high. Hence, performance evaluation given in terms of z'-score is only indicative and not confirmatory.
- B** Blunder - Obvious odd values by subjecting the data to any one of the following methods (i) Grubbs test or (ii) Results that deviate from the X by more than $\pm 5\sigma_{pt}$ or (iii) Results that deviate from the X by more than 2 times MPE (Maximum Permissible Error) fixed by PT Coordinator for the concerned test or presence of any obvious blunders or erroneous reporting by experience in case of qualitative schemes.

For qualitative evaluation - participants are assessed as per section-11 ISO 13528:2015. Where satisfactory performance is based on the participants reporting the same result as the assigned result the scoring is done as colour coding of **green (satisfactory)** if it exactly matches the assigned value or **red (unsatisfactory)** otherwise

For sampling schemes participants performance reported in terms of “**Overall Performance Index**’

$OPI \leq 0.75$	Unsatisfactory	
$0.75 < OPI \leq 1.50$	Questionable	
$1.50 < OPI \leq 2.25$	Satisfactory	
$2.25 < OPI \leq 3.00$	Good	

DIFFERENCE BETWEEN PT AND INTER-LABORATORY COMPARISON

In **inter-laboratory comparison** one of the participating laboratory run the scheme and evaluate test results including their own **whereas in proficiency testing** an independent organization **who is not participating in the schemes** run the PT scheme and evaluate laboratories performance.

Green Economy Initiatives is a PT provider.

It runs PT schemes covering accredited parameters, non-accredited parameters as well as both accredited parameters and non-accredited parameters

See scope under NABL accreditation as per as per ISO/IEC 17043 2010 PT on our website www.greenalliance.in

GEIPL identifies non-accredited parameters and or non accredited PT scheme and issues separate reports for non accredited parameters in line with NABL-133 requirements.

Frequently Asked Questions

If I have done ILC should I do PT for that parameters?

Inter-laboratory comparison (ILC) is an **additional tool to ensure validity of results** and **not a replacement for PT**.

See NABL-163 for further clarifications.

ILC may be additionally required e.g.

- To ensure effectiveness of corrective actions taken in case of an outlier in PT
- For method validation
- Where no PT schemes are available

How to Choose among accredited PT Provider

There may be two or more PT Providers in an area which one I should use?

Without any argument a lab will choose a PT provider whose schemes costs low. The only trap here is a PT Providers may charge less by reducing the number of parameters in a scheme too much and splitting the schemes without any technical justification and or operational issues.

It makes sense in choosing a scheme with relevant parameters and completing schemes in one go to save your own time. **You can see where you pay low overall.**

**Overall GEIPL provides one of the most customer friendly Scheme Costs
In addition, we have great deals for our regular customers**

See next slide for more information-

Other than Costs while choosing a PT provider look into

Range of scope and parameters covered (GEIPL provides PT schemes in water, wastewater (effluent), food, air, noise, stack, soil, waste, building materials, minerals, fertilizers..... Scope thus providing you a kind of **one stop shop experience**)

Timeline- Most of the schemes run by GEIPL are completed in **60-90 Days** period. In case there are any changes/ extension participants are updated

Retention Benefits- GEIPL provides attractive discounts to existing customers.

Participation in Outliers is free except where mentioned If you have an outlier in a PT schemes in a parameter, you have to re-participate, we provide re-participation for the outlier parameter free

Most important – GEIPL has sound technical back-up to help you in accreditation process by providing regular support in case of outliers or helping in improving competence of your personnel through trainings.

Advantages of Participating in PT schemes with GEIPL

- Overall **lowest costs with maximum parameters** scheme wise among all PT Providers with attractive discount options
- No Hidden Costs- as for transportation etc.
- No costs for re-participation for outlier parameters
- Easy changeover from one to other scheme is allowed till dispatch of samples and other customer friendly policies
- **A wide range of scope. The schemes are aligned as per NABL-120 and product protocols**
- Minimum **Turnaround Time: 60-90 Days**
- Assistance in planning PT calendar
- Guidance in root cause analysis
- Regular feedbacks are taken from customers for improvement
- Low-cost trainings or free webinars are conducted to help improve competence
- Paperless work including online payments

What to do if I have an outlier ?

In case of an outlier, you have to do root cause analysis, take corrective action and identify improvements or risks as in line with **ISO/IEC-17025-2017**. Outlier in PT is not a negative issue, rather the purpose of entire exercise is to help you identify the problem areas and thus help improve your performance. The root cause and corrective action is to be completed within 1 month as per NABL 163. At the time of next assessment, NABL assessors shall verify whether the participating laboratory has taken the necessary corrective action or not.

For checking effectiveness of corrective action ensure validity of results as given in 7.7.1 of ISO/IEC 17025-2017- Use of quality control samples / control charts / testing of Blind samples / repeat testing immediately followed by participation in PT again for outlier parameter i.e. $|z/z' \text{-score}| \geq 3.0$ or conducting ILC in case of a straggler i.e. $2.01 < |z/z' \text{-score}| < 2.99$

Frequently Asked Questions

Why I should participate in PT regularly

- It is a mandatory requirement as per clause 7.7.2 of ISO/IEC 17025-2017
- **Key Requirements as per NABL 163**
 - Applicant laboratory shall satisfactorily participate in at least one PT schemes/ EQA prior to gaining accreditation in each discipline applied
 - The laboratories are encouraged to participate in PT schemes up to subgroup level.
 - Frequency of PT Participation shall be sufficient to ensure that major sub-groups, analyte and materials/matrices in the scope of accreditation are covered over a two-year period (irrespective of the size of the scope of accreditation).
 - **The assessment team may not be deputed for areas (groups and/or subgroups) where laboratories have satisfactorily participated in sufficient number of PT schemes.**
 - Satisfactory participation in PT is necessary for significant enhancement of scope such as addition of discipline (including groups).
 - Apart from the above defined minimum requirements, laboratory shall also abide by the PT participation required by the respective Regulators, NABL & regional bodies like APAC.

Requirements for additional PT activity-

- a) The number and nature of technical deficiencies identified during an assessment;
- b) Due to the number and nature of laboratory documented nonconforming work;
- c) Due to receipt of complaints by laboratories which are of technical nature/ directly affecting the results;
- d) Due to poor performance in previous proficiency testing participation;
- e) Due to changes in laboratories technical personnel

When to register for PT Scheme

- ❑ PT schemes by PT providers may not match labs audit cycle, therefore register in time so that you have at least some results available at the time of audit

- ❑ You can work out your PT Plan in line with PT Calendars released by PT provider for better execution of your Plan. **WE PROVIDE OPPERTUNITY WITH ATTRACTIVE DISCOUNTS TO REGISTER IN ONE GO FOR FULL YEAR SAVING YOUR TIME AND MONEY**

- ❑ PT schemes need some minimum number of participants to run as such sometime these may have to be extended. Therefore, don't worry if results of a schemes are not available at the time of audit. As long as you have a plan, have registered for the schemes its good to go except if you are a lab going for accreditation for first time.

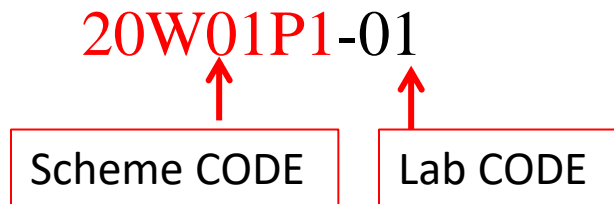
- ❑ **Registration closure Date is over can I participate:** Please mail Scheme code number from PT calendar in which you want to participate PT. Some time registration is accepted even after registration closure date (1) If schemes is extended or there is change in schedule (2) If sample preparation or material procurement has not started (3) Extra samples are available. The decision of PT provider for this kind of appeal is final.

Frequently Asked Questions

How to communicate with PT Provider

We prefer **you email your issues** to avoid any confusion/ clarity. Do not seek clarifications on phone. (WE ARE NOT RESPONSIBLE FOR TELEPHONIC CLARIFICATIONS UNLESS CONFIRMED IN WRITING) We will respond you in maximum 48 hours except sometime due to unavoidable circumstances it may extend to 72 hours. **If no reply to email is their WhatsApp / message your issue at +91-8872061900** **NOTE: We do not acknowledge test results submitted by participants, We will contact you after due date if your results are not received.**

When communicating please inform PT Scheme and lab name or PT Scheme and lab Code



Scheme code is given on PT Calendar. Lab code is given in the letter which is sent with the sample

Frequently Asked Questions

When I will get my PT Item for testing ?

Please check PT calendar and see **Date of Closure of registration.**

PT samples are dispatched normally between 20-40 days after date of closure of registration

Product	Scheme Type	Scheme Description	Test Methods	PT Scheme Code	Scheme Duration	
					Registration Closes	Report Release
HONEY F01- Simultaneous (Quantitative Qualitative) Acidity (as formic acid), Ash, Specific gravity, Moisture, Optical Density, Total reducing sugar / Sucrose, Fructose-Glucose ratio / Fiehe's test / Hydroxy Methyl Furfural (HMF)			IS / FSSAI / AOAC Methods Range in line with protocol (IS / FSSAI / Codex) requirements	2020F01P1 M	30.01.20	30.04.20
				2020F01P2	30.06.20	30.09.20
				2021F01P1	30.01.21	30.04.21
				2021F01P2	30.06.21	30.09.21

When I will get my Report?

Please check PT calendar and see Date of Report release

Reports are provided mostly ± 10 days from **Date of Report Release** (Some time due to holidays etc. or other unavoidable circumstances there may be delays), participants are informed **PLEASE CHECK YOUR PAYMENT IS CLEAR**

Frequently Asked Questions: What are steps in PT Scheme operation

- **Registration Closes:** 00.00.00
- **PT Provider checks registrations, confirm number of participants and issue reminder for payments if payments are not made:** @05th Day
- **PT Provider informs participants “ schemes is being run” if sufficient participants are there or extend the schemes if minimum number of labs (8) are not there and inform the participants about changed schedule** @08th Day
- **If schemes is run PT provider prepares samples** @15th Day
- **Samples tested for Homogeneity** @ 20th Day
- **Samples are dispatched to participants** @30th Day
- **Samples reach participants** @45th Day
- **Participants test samples and sent report back to PT Provider** @60th Day
- **PT Provider sent Draft Result Sheet to participants** @70th Day
- **PT Provider sent Final Report to participants** @90th Day

This is for tentative idea only

There may be changes in timeline due to holidays or any other unavoidable circumstances. The participants are updated

What if PT Scheme is postponed by PT provider

In line with NABL 163 registration in PT scheme and availability of results by the time of audit is mandatory

1. For a new applicant lab or
2. If there is substantial addition of scope- substantial means adding new discipline

Other than that for a running laboratory if **a laboratory has done registration and made payment as per its PT Plan, it is sufficient for compliance.**

NABL well understands that PT schemes can get postponed due to non-availability of participants or other reasons beyond control including operational problems. Lab is also providing PT plan and “Plan’ can change so as far as lab is demonstrating its positive intent by registration and making payment; postponement of a schemes by PT provider is not a NC on lab.

Please read Terms and Conditions for further clarification- PT scheme can be run earlier/postponed or two schemes may be merged; A parameter can be removed/added in a scheme or range of testing may be varied at the time of running; This may be due to operational reasons; new developments; due to nature of product or matrix; homogeneity or stability issues and or reasons beyond control. **We plan to complete the schemes by all means in 18 Months from the date of closure of registration or shall refund the amount.**

Frequently Asked Questions: What is Draft Result Sheet ?

Draft Result Sheet is summary of results of all participating labs against lab code given.

It is only for crosschecking the data entered as per result sheets submitted by participants for the schemes

It is submitted only to verify that data read and entered by PT provider is correct and there are no readings or typing errors on part of PT provider. The data values are however rounded to the decimal points as per standard practice laid down by IS e.g if reporting decimal point (DP) asked is 2 and lab report results as 23.445, then it is recorded 23.45 and if lab reports as 23.444 then it is recorded as 23.44

No requests for any change in results are accepted except if there are typing and reading errors at the end of PT provider

Frequently Asked Questions: My Results not reported by PT provider

This may happen if-

RNS- Results Not Submitted by lab or submitted after due date

RNC- Results Not Considered - For results reported as zero or non numerical results e.g. <0.1 or >1 or even where some results are qualified by * (or any other symbol) and given with any remarks etc. ; in these cases it is not possible to allocate a performance score and participants should assess their performance based on assigned value and satisfactory range given -No score given

THEREFORE REPORT RESULTS STRICTLY AS ASKED BY PT PROVIDER. DON'T CHANGE REPORTING FORMAT; DON'T CHANGE UNITS OF REPORTING

Frequently Asked Questions:

PT provider has informed that it has dispatched PT Item, but I have not received ?

- PT provider ensures that samples reached maximum in 10 days depending on distance or otherwise informed
- In case you do not receive samples even after 6-7 days from date of dispatch. **Immediately inform PT provider**

Please take care of following like situations at your end till PT provider reverts-

- Many times quality manager has not informed other lab people about PT participation. Samples is received in lab and sent for routine testing.
- The corresponding person in the lab has left, PT samples are received but new person does not know anything about PT Participation. Sample is lying unattended in lab

WE SPECIFICALLY MARK ON PACKETS OR SAMPLES– “PT ITEM or PT SAMPLE”

Frequently Asked Questions:

I am not receiving any information from PT provider ?

Send an email giving PT scheme code and lab name and mobile number. By the time PT provider reverts check -

- While filling registration form type email ids so that there is no error
- Two-Three email ids are asked at time of registration, Please provide email id of persons who will be involved in testing or are looking after PT Participation.
- Sometime lab gives email id of persons who are not checking mails regularly or are in field most of the time or are not directly involved in activity.

Confidentiality

- Identity of participants is kept confidential by unique coding. Participants may be given the same code number in different PT scheme by chance. GEIPL has a continuing obligation to identify and report any actual or potential conflicts of interest arising during the performance of this schemes. If an actual or potential organizational conflict of interest is identified, GEIPL will immediately make a full disclosure to the appropriate parties.
- The information provided by participants to PT providers is kept confidential:
 - When PT provider is required by law or authorized by contractual arrangements to release confidential information, the consent of participating laboratory is taken, unless prohibited by law.
 - As per NABL-181 Issue-2 Dated 5.2.18 the records of PT schemes participation shall be accessible to NABL if so desired by it. PT provides relevant information to NABL every quarter or so.
 - Participants can also be asked to waive of confidentiality within the PT scheme for the purpose of discussion and mutual assistance or as required due to very nature of PT scheme
 - PT provider shall share data with organizations providing recognition e.g. NABL as part of its audit or assessment requirements.
 - PT provider may also use data and experience from operation of PT schemes for the purpose of further developments including, but not be limited to, use for research publications or conferences, however, identity of participants shall be kept confidential
 - The identity of any subcontractor used is not disclosed in report to ensure confidentiality.

- **Use of reports:** The report is strictly for use by participant laboratory for (i) to monitor its performance and, if applicable, to improve the laboratory's activities and or (ii) to show to the laboratory's customers, regulatory authorities and organizations providing recognition as part of audit or assessment requirements. PT report in part or whole shall not be given by participant laboratory to anybody for any reason other than stated above without taking the permission of PT coordinator in writing.
- If recipient is not the intended individual or organization for the report, it has been sent to you by mistake. Do not circulate the report or its contents further and inform to **greeneconomyipl@gmail.com**

Frequently Asked Questions

PT Calendars and registration form and NABL scope are available on our website www.greenalliance.in

You can send us a message with your email id, lab name and area in which PT is required for emailing you latest PT Calendars and registration forms.

Contacts:

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THANK YOU

