PROFICIENCY TESTING GUIDANCE DOCUMENT

August 2025

Overview

Proficiency testing (PT) requirements are set forth in Part 130 of Title 9 of New York Codes, Rules and Regulations (Part 130). Laboratories must maintain compliance with these requirements. The purpose of this document is to summarize the requirements for proficiency testing.

Laboratories will need to maintain the Office of Cannabis Management's (Office) approval to test a given analyte or group of analytes. To maintain Office approval for a given analyte or group of analytes on its permit, a cannabis laboratory shall attain satisfactory performance in at least two (2) of three (3) consecutive scheduled or unscheduled or supplemental proficiency test in which it has participated in an eighteen (18) month period.

Some of the laboratories may wish to expand their scope of testing on its permit. To obtain approval for a given analyte or group of analytes on its permit, a cannabis laboratory shall pass two (2) consecutive scheduled or unscheduled or supplemental proficiency tests. A cannabis laboratory may continue to attempt to obtain satisfactory performances beyond two (2) proficiency tests if the two (2) consecutive satisfactory performances are not obtained.

An unscheduled or supplemental proficiency test shall be at minimum seven (7) days from the close date of the prior scheduled or unscheduled proficiency test. An unscheduled proficiency test may also be a supplemental proficiency test that was unscheduled.

To maintain approval for a given analyte or group of analytes, at least one (1) of the satisfactory proficiency tests in which a cannabis laboratory has participated in an eighteen (18) month period must be less than six (6) months old. Each study will be 6 months apart or 180 days. This will be based on the closed date of one study to the opening date of the other study. Acceptable range is no less than 5 months (150 days) and no more than 7 months (210 days).

General Guidance

- Unless otherwise specified in the instructions from the proficiency testing provider, laboratories shall conduct PT activities in accordance with their normal testing and reporting procedures.
- Laboratories shall ensure that PT samples are equally distributed among trained and qualified personnel for the relevant scope of testing on its permit.
- Approval is based on a given analyte or group of analytes.
    - If a laboratory is approved to use more than one method to test for a given analyte or group of analytes, each method must be challenged with a PT. This standard can be met by alternating which method is challenged between the 2 consecutive studies conducted each year. Alternatively, and if available by the PT provider or supplier, a laboratory can

work with them to create an additional record for your laboratory to enter the additional values (e.g., one result by method A, one result by method B).

- If a laboratory has more than one test instrument in use for compliance testing by an approved method, each instrument must be challenged with a PT. This standard can be met by alternating which test instrument is challenged between the 2 consecutive studies conducted each year (i.e., 2 test instruments) or among the 3 consecutive studies conducted within an 18-month period (i.e., 3 test instruments). If the laboratory has more than 4 test instruments for compliance testing setup a PT schedule over a course of 18-month period, ensuring all instruments have been challenged using a PT.

List of Approved ISO/IEC 17043 Proficiency Tests

A list of ISO/IEC 17043 accredited proficiency test providers (PTP) and the analytes to be proficiency tested are included below. The Office has limited the matrices to hemp or hemp oil for the given analyte or group of analytes. The list is presented in two ways – 1) by PTP, and 2) by analyte or group of analytes.

Unless otherwise approved by the Office in writing, a laboratory must meet the requirements of Part 130. If a laboratory seeks to receive Office approval to deviate from the criteria noted above or use a PTP not listed, the laboratory must show the PTP and PT samples are equivalent or better.

Absolute Standards Inc:

Absolute Standards is a PT provider accredited to ISO/IEC 17043, and it is also an ISO/IEC 17025 accredited laboratory.

- Percent Moisture in Hemp Bud (55237)
- Water Activity: Water Activity (Humidity) in Hemp Bud (55246)
- Mycotoxin: Aflatoxin & Ochratoxin PT in Hemp Bud/Oil (38498/38499)
- Terpenes: Terpenes in Hemp Bud/Oil (38516/38448)
- Heavy Metals: MI Heavy Metals on Hemp/Hemp Oil PT (55251/55252)
- Potency: Total THC in Hemp Bud/Oil (38711/38712) or Florida Total THC - PT HPLC in Hemp Bud/Oil (38495/38496)
- Pesticides: Florida Pesticide PT in Hemp Bud/Oil (38513/38514)
- Solvents: Residual Solvents PT in Hemp Oil/California Residual Solvents PT in Hemp Oil (38651/38462)

Cole Parmer:

Cole Parmer is a PT supplier who sells PT samples from NSI Lab Solutions, which is accredited to both ISO/IEC 17025 and ISO/IEC 17043.

- Filth and Foreign Materials: NSI Lab Solutions CMPT-047 Qualitative Filth/Extraneous Metals (EW-61203-70)
- Aspergillus: NSI Lab Solutions CMPT-031 Qualitative *Aspergillus* Molds in Hemp / NSI Lab Solutions CMPT-033 Qualitative *Aspergillus* Molds in Oil (EW-05000-52/56)

- Salmonella: NSI Lab Solutions CMPT-025 Qualitative *Salmonella* in Hemp / NSI Lab Solutions CMPT-027 Qualitative *Salmonella* in Oil (EW-05000-76/80)
- STEC: NSI Lab Solutions CMPT-028 Qualitative STEC in Hemp / Qualitative STEC in Oil / (EW-05000-85/89)
- TAC: NSI Lab Solutions CMPT-036 Quantitative APC/TVC in Hemp (EW-05000-94)
- TYM: NSI Lab Solutions CMPT-040 Quantitative Yeast/Mold in Hemp (EW-05001-44)
- Moisture: NSI Lab Solutions CMPT-022 Quantitative Moisture in Hemp (EW-61202-25)
- Water Activity: NSI Lab Solutions CMPT-021 Quantitative Water Activity in Hemp (EW-61203-43)
- Mycotoxin: NSI Lab Solutions CMPT-061 Quantitative Mycotoxins in Oil / NSI Lab Solutions CMPT-042 Quantitative Mycotoxins in Hemp (EW-61204-55/59)
- Heavy Metals: NSI Lab Solutions CMPT-020 Quantitative Heavy Metals (EW-61203-00)
- Terpenes: NSI Lab Solutions CMPT-080 Quantitative Terpenes in Oil / NSI Lab Solutions CMPT-024 Quantitative Terpenes in Hemp (EW-61201-99/27)
- Potency: NSI Lab Solutions CMPT-077 Quantitative Potency in Oil / NSI Lab Solutions CMPT-023 Quantitative Potency in Hemp (EW-61201-90/98)
- Solvents: NSI Lab Solutions CMPT-018 Quantitative Residual Solvents in Oil (EW-61203-79)

NSI Lab Solutions:

NSI Lab Solutions is PT provider accredited to ISO/IEC 17043, and it is an accredited ISO/IEC 17025 testing laboratory.

- Filth and Foreign Materials: Foreign Materials (Filth) in Hemp (CMPT-047)
- Aspergillus: Qualitative Aspergillus Molds in Hemp/Hemp Oil (CMPT-031/33)
- Salmonella: Qualitative Salmonella in Hemp/Hemp Oil (CMPT-025/027)
- STEC: Qualitative Shiga Toxin E. coli STEC in Hemp/Hemp Oil (CMPT-028/030)
- TAC: Quantitative Aerobic Plate Count (APC/TVC) in Hemp (CMPT-036)
- TYM: Quantitative Indicators for Yeast/Mold in Hemp (CMPT-040) or Quantitative Yeast and Mold in Hemp (Culture techniques only – CMPT-085)
- Moisture Content: Moisture in Hemp (CMPT-022)
- Water Activity: Water Activity in Hemp (CMPT-021)
- Mycotoxin: Quantitative Mycotoxins in Hemp/Hemp Oil (CMPT-042/061)
- Heavy Metals: Heavy Metals in Hemp (CMPT-020)
- Terpenes: Terpenes in Hemp/Hemp Oil (CMPT-024/080)
- Potency: Potency in Hemp/Hemp Oil (CMPT-023/077)
- Solvents: Residual Solvents in Hemp Oil (CMPT-018)
- Pesticides: Quantitative Pesticides in Hemp/Hemp Oil (CMPT-043/062)

ZEPTOMETRIX:

ZeptoMetrix is a PT supplier who sells PT samples from NSI Lab Solutions, which is accredited to both ISO/IEC 17025 and ISO/IEC 17043.

- Filth and Foreign Materials: Filth/Extraneous Metals (CMPT-047)

- Aspergillus: Qualitative Aspergillus Molds in Hemp/Oil (CMPT-031/33)
- Salmonella: Qualitative Salmonella in Hemp/Oil (CMPT-025/027)
- STEC: Qualitative STEC in Hemp/Oil (CMPT-028/030)
- TAC: Quantitative APC/TVC in Hemp (CMPT-036)
- TYM: Quantitative Yeast/Mold in Hemp (CMPT-040 or CMPT-085 - culture techniques only)
- Moisture: Moisture in Hemp (CMPT-022)
- Water Activity: Water Activity in Hemp (CMPT-021)
- Mycotoxin: Quantitative Mycotoxins in Hemp/Oil (CMPT-042/061)
- Heavy Metals: Heavy Metals in Hemp (CMPT-020)
- Terpenes: Terpenes in Hemp/Oil (CMPT-024/080)
- Potency: Potency in Hemp/Oil (CMPT-023/077)
- Solvents: Residual Solvents in Oil (CMPT-018)
- Pesticides: Quantitative Pesticides in Hemp/Hemp Oil (CMPT-043/062)

S & A Scientific:

S & A Scientific is a PT provider and supplier, which is accredited to ISO/IEC 17043.

- Potency: PT-GNHP-A01 / PT-GNHP-B01
- Mycotoxins: PT-GNHP-CHA03 / PT-GNHP-CHB03
- Pesticides: PT-GNHP-CHA02 / PT-GNHP-CHB02
- Solvents: PT-GNHP-CHB04
- Water activity: PT-GNHP-CHA06 / PT-GNHP-CHB06
- Moisture: PT-GNHP-CHA08
- Filth & Foreign: PT-GNHP-CHA29
- STEC: PT-GNHP-MMA16 / PT-GNHP-MMB16
- Aspergillus: PT-GNHP-MMA24 / PT-GNHP-MMB24
- TAC: PT-GNHP-MTA09 / PT-GNHP-MTB09
- TYM: PT-GNHP-MTA18 / PT-GNHP-MTB18

AOAC:

AOAC is PT supplier and partner selling PT samples from Signature Science, LLC. Signature Science is an ISO/IEC 17043-accredited PT provider.

Table 1: Potency in Hemp or Hemp Oil

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Potency in Hemp / Oil	CMPT-023 / CMPT-077
Cole Parmer	Quantitative Potency in Oil	EW-61201-90
Cole Parmer	Quantitative Potency in Hemp	EW-61201-98
Absolute Standards	Total THC in Hemp Bud / Oil	38711 / 38712

Absolute Standards	Florida Total THC - PT HPLC in Hemp Bud/Oil	38495/38496
NSI Lab Solutions	Potency in Hemp / Oil	CMPT-023 / CMPT-077
S & A Scientific	Potency	PT-GNHP-A01 / PT-GNHP-B01

Table 2: Microbiological Contaminants – Total Yeast and Mold (TYM)

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Quantitative Yeast/Mold in Hemp	CMPT-040
ZeptoMetrix	Quantitative Yeast/Mold in Hemp-culture only	CMPT-085
NSI Lab Solutions	Quantitative Indicators for Yeast/Mold in Hemp	CMPT-040
NSI Lab Solutions	Quantitative Yeast and Mold in Hemp	CMPT-085
Cole Parmer	Quantitative Yeast/Mold in Hemp	EW-05001-44
S & A Scientific	Total Yeast and Mold	PT-GNHP-MTA18 / PT-GNHP-MT B18

Table 3: Microbiological Contaminants – Total Aerobic Count (TAC)

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Quantitative APC/TVC in Hemp	CMPT-036
NSI Lab Solutions	Quantitative Aerobic Plate Count (APC/TVC) in Hemp	CMPT-036
Cole Parmer	Quantitative APC/TVC in Hemp	EW-05000-94
S & A Scientific	Total Aerobic Count	PT-GNHP-MTA09 / PT-GNHP-MTB09

Table 4: Microbiological Contaminants – Shiga Toxin Producing E. coli (STEC)

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
NSI Lab Solutions	Qualitative Shiga Toxin E. coli STEC in Hemp / Oil	CMPT-028 / CMPT-030
Cole Parmer	Qualitative STEC in Hemp	EW-05000-85
Cole Parmer	Qualitative STEC in Oil	EW-05000-89
ZeptoMetrix	Qualitative STEC in Hemp / Oil	CMPT-025 / CMPT-027
S & A Scientific	Shigella toxin-producing E. coli (STEC)	PT-GNHP-MMA16 / PT-GNHP-MMB16

Table 5: Microbiological Contaminants – *Salmonella*

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Qualitative *Salmonella* in Hemp / Oil	CMPT-025 / CMPT-027
NSI Lab Solutions	Qualitative *Salmonella* in Hemp / Oil	CMPT-025 / CMPT-027
Cole Parmer	Qualitative *Salmonella* in Hemp	EW-05000-76
Cole Parmer	Qualitative *Salmonella* in Oil	EW-05000-80

Table 6: Microbiological Contaminants – Aspergillus

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Qualitative Aspergillus Molds in Hemp / Oil	CMPT-031 / CMPT-033
NSI Lab Solutions	Qualitative Aspergillus Molds in Hemp / Oil	CMPT-031 / CMPT-033
Cole Parmer	Qualitative Aspergillus Molds in Hemp	EW-05000-52
Cole Parmer	Qualitative Aspergillus Molds in Oil	EW-05000-56
S & A Scientific	Aspergillus Panel	PT-GNHP-MMA24 / PT-GNHP-MMB24

Table 7: Mycotoxins in Hemp or Hemp Oil

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Quantitative Mycotoxins in Hemp / Oil	CMPT-042 / CMPT-061
NSI Lab Solutions	Quantitative Mycotoxins / Oil	CMPT-042 / CMPT-061
Absolute Standards	Aflatoxin & Ochratoxin PT in Hemp Bud / Oil	38498 / 38499
Cole Parmer	Quantitative Mycotoxins in Oil	EW-61204-55
Cole Parmer	Quantitative Mycotoxins in Hemp	EW-61204-59
S & A Scientific	Mycotoxins	PT-GNHP-CHA03 / PT-GNHP-CHB03

Table 8: Trace / Heavy Metals in Hemp or Hemp Oil

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Heavy Metals in Hemp	CMPT-020
NSI Lab Solutions	Heavy Metals in Hemp Matrix	CMPT-020
Absolute Standards	MI Heavy Metals on Hemp / Oil	55251 / 55252

Cole Parmer	Quantitative Heavy Metals in Hemp	EW-61203-00

Table 9: Water Activity in Hemp

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Water Activity in Hemp	CMPT-021
NSI Lab Solutions	Water Activity in Hemp	CMPT-021
Absolute Standards	Water Activity (Humidity) in Hemp Bud	55246
Cole Parmer	Quantitative Water Activity in Hemp	EW-61203-43
S & A Scientific	Water Activity	PT-GNHP-CHA06 / PT-GNHP-CHB06

Table 10: Moisture Content

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Moisture in Hemp	CMPT-022
NSI Lab Solutions	Moisture in Hemp	CMPT-022
Absolute Standards	Percent Moisture in Hemp Bud	55237
Cole Parmer	Quantitative Moisture in Hemp	EW-61202-25
S & A Scientific	Moisture Analysis	PT-GNHP-CHA08

Table 41: Filth and Foreign Material

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Filth/Extraneous Metals	CMPT-047
NSI Lab Solutions	Foreign Materials (Filth) in Hemp	CMPT-047
Cole Parmer	Qualitative Filth/Extraneous Metals in Hemp	EW-61203-70
S & A Scientific	Filth and Foreign Material	PT-GNHP-CHA29

Table 12: Residual Solvents in Hemp Oil

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Residual Solvents	CMPT-018
NSI Lab Solutions	Residual Solvents in Hemp Oil (Florida List)	CMPT-018
Absolute Standards	Residual Solvents PT in Hemp Oil	38651
Absolute Standards	California Residual Solvents PT in Hemp Oil	38462
Cole Parmer	Quantitative Residual Solvents in Oil	EW-61203-79

S & A Scientific	Residual Solvents	PT-GNHP-CHB04

Table 13: Pesticides in Hemp or Hemp Oil

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
Absolute Standards	Florida Pesticide PT in Hemp Bud / Oil	38513 / 38514
NSI Lab Solutions	Quantitative Pesticides in Hemp / Oil	CMPT-043 / CMPT-062
ZeptoMetrix	Quantitative Pesticides in Hemp / Oil	CMPT-043 / CMPT-062
S & A Scientific	Pesticides	PT-GNHP-CHA02 / PT-GNHP-CHB02

Table 14: Terpenoids or Terpenes in Hemp or Hemp Oil

Proficiency Test Provider or Supplier	Name of Proficiency Test Study	Catalog Number or Equivalent
ZeptoMetrix	Terpenes in Hemp / Oil	CMPT-024 / CMPT-080
NSI Lab Solutions	Terpenes in Hemp / Oil	CMPT-024 / CMPT-080
Absolute Standards	Terpenes in Hemp Bud / Oil	38516 / 38448
Cole Parmer	Quantitative Terpenes in Oil	EW-61201-99
Cole Parmer	Quantitative Terpenes in Hemp	EW-61202-27

PT Study Frequency by Provider or Supplier

A cannabis laboratory can choose between participating in a regular or an express study. Contact the provider or supplier directly to obtain a schedule of PT study dates and to get the costs to participate in scheduled and express or “quick turnaround” PT studies.

Table 15: Proficiency Test Study Types & Frequency

Proficiency Test Provider or Supplier	Study Type(s) and Frequency	
ZeptoMetrix	Supplies NSI studies that are opened twice per year (semi-annually).	Express studies are available throughout the year.
NSI Lab Solutions	Studies are opened twice per year (semi-annually).	Express studies are available throughout the year.
Absolute Standards	Some studies are offered on a regular basis.	“Quick Turn Around” (QTA) are available throughout the year.
Cole Parmer	Supplies the NSI studies that are opened twice per year (semi-annually).	Express studies are available throughout the year.
AOAC	Studies are opened twice per year (semi-annually)	Not applicable

S & A Scientific	Studies are opened twice per year (semi-annually)	Express studies are available throughout the year.

Proficiency Test Performance

The proficiency test provider or supplier must provide the results of the proficiency test directly to the Office by emailing labs@ocm.ny.gov. Unsatisfactory proficiency test performance will be handled in accordance with 9 NYCRR § 130.9 (a) and (b).

A laboratory must receive a passing score from the PTP for a single analyte study such as filth & foreign material, water activity and moisture content.

For each microbiological analyte, the laboratory must pass the PT study overall regardless of the number of samples included as part of the study.

For a multi-analyte PT study such as pesticides, residual solvents and terpenes, the laboratory will pass if the criteria in Table 16 are met.

Table 16: Criteria for Passing Multi-Analyte PT Studies

Group of Analytes	Number of Spiked Analytes	Score
Potency	≤10 analytes	100% - Pass each analyte spiked
Metals	≤10 analytes	100%
Mycotoxins	≤10 analytes	100%
Residual Solvents	≤10 analytes	100%
	>10	80% - Pass 80% of the total number spiked
Pesticides	≤10 analytes	100%
	>10	80%
Terpenes	≤10 analytes >10	100% 80%

References

The NELAC Institute (TNI) 2003 Standards - The NELAC Institute (TNI) (nelac-institute.org)

The NELAC Institute (TNI) 2016 Standards - The NELAC Institute (TNI) (nelac-institute.org)

U.S. Environmental Protection Agency (EPA) - 40 CFR 141.24 (f)(17)(i)(B)

May 2023 PT Guide.pdf (wadsworth.org)

Oregon Health Authority, Public Health Division, Chapter 333, Division 64, Accreditation of Laboratories

Revision Record

02/27/24 – First presentation of PT providers and suppliers was organized to be alphabetically. They are not listed alphabetically in the Tables.

07/11/24 – Provided clarifying language under Guidance section. Provided clarifying language under Unsatisfactory PT Performance section for long analyte list PTs – pesticides and residual solvents. Added a Reference section.

07/21/25 – Removed Emerald Scientific as a PT supplier since they no longer service. Collaborative Testing was removed due to no longer offering Hemp PTs. SPEX, a PT supplier, was renamed to ZeptoMetrix. Updated Table 15 for all PTPs showing year-round and semi-annual studies. Removed the "Express PT" part numbers from Cole Parmer due to redundancy. Added pesticide and additional total yeast and mold NSI PTs provided by ZeptoMetrix and NSI. Updated naming conventions of the study names and updated any out-of-date study/part numbers. Removed oil matrix option from water activity and moisture content PTs. Included clarifying language that PTs must be received no greater than 7 months from the prior study. Added AOAC and S & A Scientific as another PTP in Table 15.