

2025 Drug Analysis (Qualitative) Proficiency Test FTS-25-DRUG2 Summary Report

The Submission Deadline for this test was July 25, 2025

The test was manufactured by FTS at the FTS Laboratory Facility (127 W. Grand River Avenue, Williamston, MI 48895) and all activities were coordinated by Rebecca Smith (rsmith@forsci.com), Proficiency Test Program Manager. Ms. Smith is also authorizing the release of this report. This is the summary report issued on 8/12/25. FTS considers all reports confidential and does not release information regarding participant's results without authorization from that participant.

Summary

Test results were received in 16 of 17 tests distributed (94% response rate). Of the 16 respondents:

Item 1 (Shiitake Mushrooms/No Controlled Substances)

16 of 16 (100%) reported that Item 1 contained No Controlled Substances/Ergosterol.

Item 2 (Psilocybin Mushrooms)

11 of 16 (69%) reported that Item 2 contained Psilocin/Psilocybin.

5 of 16 (31%) reported that Item 2 contained No Controlled Substances.

Manufacturer's Information

All items were produced in the same laboratory area at different times.

Item 1 was produced by grinding Shiitake mushrooms (Dynasty® Dried Black mushrooms, UPC 1115202401) using a coffee grinder. Approximately 1g of mushrooms were weighed using a calibrated Mettler PB1502 balance. The material was packaged into a wax envelope and further packaged into a glassine envelope, sealed and labeled per FTS guidelines.

Item 2 was produced by homogenizing Psilocybin Mushrooms Blue Meanie (A Soothing Seed, San Diego, CA), Psilocybin Mushrooms Tidal Wave (A Soothing Seed, San Diego, CA) and Mindwell Jedi MindF**k Mushrooms (MindWell Mushrooms, San Diego, CA), using a coffee grinder. All strains were internally quality tested and showed the presence of psilocin. The mixture was thoroughly stirred and approximately 1g of mushrooms were weighed using a calibrated Mettler PB1502 balance. The material was packaged into a wax envelope and further packaged into a glassine envelope, sealed and labeled per FTS guidelines.

Both items with matching UTICs were heatsealed together in an AMPAC envelope and further packaged into a 6" x 9" manila envelope, sealed and labeled per FTS guidelines.

Assigned Value

Proficiency tests under ISO 17043:2023 are assessed via comparison of the participant result to the assigned value of a proficiency test item or items. For quantitative tests, FTS determines the assigned value based on statistical methods described in ISO 13528:2022. For qualitative tests, the FTS study coordinator determines the assigned value based on a number of factors, including product source information, internal and/or external pre-distribution laboratory analysis, and consensus of responses (consensus value).

Quality systems and laboratory reporting guidelines vary greatly from laboratory to laboratory, therefore participating laboratories and their accrediting bodies are responsible for the assessment of whether a reported result is an outlying result.

For this proficiency test, the following assigned values are based on source information which was then confirmed by laboratory analysis:

Item 1: No controlled substances

Item 2: Psilocybin/Psilocin

Please examine the questioned samples to identify any controlled substance(s) present.

Items Submitted

Item 1: Sample of questioned material.

Item 2: Sample of questioned material.

3) Indicate all methods used for analysis (select all that apply):

- A) Macro/Microscopic Examinations
- B) Chemical Spot Tests
- C) GC/FID/TEA/ECD
- D) GC/MS
- E) Micro-crystal Tests
- F) SEM/EDS
- G) Thin Layer Chromatography
- H) PLM
- I) HPLC
- J) IR/FTIR Analysis

- K) ICP-MS
- L) CE
- M) HPLC/MS
- N) DART TOF-MS
- O) Raman Spectroscopy

UTIC	Webcode	Indicate all methods used for analysis (select all that apply):
p20252401	W061	GC/MS
p20252402	W061	GC/MS; IR/FTIR Analysis
p20252403	W061	GC/MS; HPLC/MS
p20252405	W028	GC/MS; Chemical Spot Tests
p20252406	W144	Macro/Microscopic Examinations; Chemical Spot Tests; GC/MS
p20252407	W163	IR/FTIR Analysis; Chemical Spot Tests; GC/MS
p20252408	W163	GC/MS; IR/FTIR Analysis; Chemical Spot Tests
p20252409	W163	Chemical Spot Tests; GC/MS; IR/FTIR Analysis
p20252410	W163	GC/MS; IR/FTIR Analysis; Chemical Spot Tests
p20252411	W261	GC/MS; IR/FTIR Analysis
p20252412	W261	GC/MS; IR/FTIR Analysis; Raman Spectroscopy
p20252413	W030	GC/MS; Thin Layer Chromatography; IR/FTIR Analysis
p20252414	W012	Macro/Microscopic Examinations; GC/MS; IR/FTIR Analysis
p20252415	W010	GC/MS
p20252416	W010	Macro/Microscopic Examinations; Chemical Spot Tests; GC/MS; IR/FTIR Analysis
p20252417	W214	Chemical Spot Tests; GC/MS; IR/FTIR Analysis

4) Other methods used (if none, please enter "N/A"):

UTIC	Webcode	Other methods used
p20252402	W061	Other method used: LCMS/MS (TQD)
p20252406	W144	Item -1: QuEChERS
p20252414	W012	UV-vis spectroscopy
p20252415	W010	GC-IR

5) **Item 1**

What controlled substance(s) or controlled substance analog(s), if any, were identified in the questioned material from Item 1? Note: Please answer this question regardless of the legal status of the substance in your jurisdiction.

UTIC	Webcode	Item 1
What controlled substance(s) or controlled substance analog(s), if any, were identified in the questioned material from Item 1?		
p20252401	W061	Nil
p20252402	W061	No Prohibited drug found
p20252403	W061	No dangerous drugs detected.
p20252405	W028	No controlled substances were identified.
p20252406	W144	No controlled substances were found.
p20252407	W163	No controlled substances were found.
p20252408	W163	No controlled substances were detected in this item.
p20252409	W163	No controlled substances or controlled substance analog(s) were detected.
p20252410	W163	No controlled substance/s was detected.
p20252411	W261	Ergosterols
p20252412	W261	Ergosterol
p20252413	W030	No controlled substances were detected
p20252414	W012	No controlled substances were indicated
p20252415	W010	No controlled substances detected
p20252416	W010	No Controlled Substances
p20252417	W214	No controlled substances

6) **Item 2**

What controlled substance(s) or controlled substance analog(s), if any, were identified in the questioned material from Item 2? Note: Please answer this question regardless of the legal status of the substance in your jurisdiction.

UTIC	Webcode	Item 2
What controlled substance(s) or controlled substance analog(s), if any, were identified in the questioned material from Item 2?		
p20252401	W061	Nil
p20252402	W061	Item found to contain psilocin and also found presence of psilocybin
p20252403	W061	Psilocin detected.

UTIC	Webcode	Item 2 What controlled substance(s) or controlled substance analog(s), if any, were identified in the questioned material from Item 2?
p20252405	W028	Psilocyn
p20252406	W144	No controlled substances were found.
p20252407	W163	No controlled substances were found.
p20252408	W163	Psilocin and/or one of its esters were identified in this item.
p20252409	W163	No controlled substances or controlled substance analog(s) were detected.
p20252410	W163	No controlled substance/s was detected.
p20252411	W261	Psilocyn
p20252412	W261	Psilocyn
p20252413	W030	Psilocin
p20252414	W012	Psilocyn
p20252415	W010	Psilocin and/or psilocybin
p20252416	W010	Psilocin and/or Psilocybin
p20252417	W214	Psilocin

7) How would you state your findings in a report? (Use the same wording as you would to submit a report to the lead investigator and/or court). In order to maintain confidentiality, please refrain from including identifying information specific to your laboratory.

UTIC	Webcode	How would you state your findings in a report? (Use the same wording as you would to submit a report to the lead investigator and/or court).
p20252401	W061	No prohibited substance detected.
p20252402	W061	Item 1: No Prohibited drug found Item 2: Item found to contain psilocin and also found presence of psilocybin
p20252403	W061	Psilocin detected. Refer to Note. Note: Laboratory testing of exhibits containing psilocin have typically shown a concentration of less than 1% w/w. Purity determination of psilocin can be undertaken by the laboratory on request. The concentration of psilocin in exhibits may decrease over time.
p20252405	W028	Item 1: Controlled substances were not detected in item weighing 1.00 gram(s) (+/- 0.05 gram) net weight. Item 2: Analysis identified Psilocyn, a schedule I controlled substance weighing 1.03 gram(s) (+/- 0.05 gram) net weight

UTIC	Webcode	How would you state your findings in a report? (Use the same wording as you would to submit a report to the lead investigator and/or court).																			
		<p>Item 1</p> <p>In the solid material received, the presence of the restricted drugs included in the scope of the approved screening method in the Controlled Substances Section was neither identified nor detected. (*)</p> <p>*Forensic testing accredited by ANAB, under ISO/IEC 17025:2017 (the scope can be consulted at the address http://search.anab.org)</p> <p>Item-2</p> <p>The received paper wrapping contains 1.01 grams of plant material, in which the presence of restricted drugs included in the scope of the approved scrutiny method in the Controlled Substances Section was not identified. (*)</p> <p>(*) Forensic testing accredited by ANAB, under ISO/IEC 17025:2017 (the scope can be consulted at http://search.anab.org).</p>																			
p20252406	W144	<p>Item 1: Starch: Not controlled</p> <p>Item 2: Negative: Not controlled</p>																			
p20252407	W163	<table border="1"> <thead> <tr> <th>Item (Unique Reference)</th><th>Description on Opening</th><th>Quantity</th><th>Drug</th><th>Legal Status</th></tr> </thead> <tbody> <tr> <td>FTS-25- DRUG2</td><td>A) One small greaseproof paper envelope sealed with a label marked 'FTS FORENSIC TESTING SERVICES' 'FTS-25-DRUG2' 'Item 1' p20252409'. This envelope contained one greaseproof paper fold which contained a beige coloured powder.</td><td>1.02 grams</td><td>NO CONTROLLED DRUGS DETECTED</td><td>Not Controlled</td></tr> <tr> <td>FTS-25- DRUG2</td><td>B) One small greaseproof paper envelope sealed with a label marked 'FTS FORENSIC TESTING SERVICES' 'FTS-25-DRUG2' 'Item 2' 'p20252409'. This envelope contained a folded paper package which contained pale brown fragmented material.</td><td>1.03 grams</td><td>PSILOCIN and/or one of its esters</td><td>Class A</td></tr> </tbody> </table>					Item (Unique Reference)	Description on Opening	Quantity	Drug	Legal Status	FTS-25- DRUG2	A) One small greaseproof paper envelope sealed with a label marked 'FTS FORENSIC TESTING SERVICES' 'FTS-25-DRUG2' 'Item 1' p20252409'. This envelope contained one greaseproof paper fold which contained a beige coloured powder.	1.02 grams	NO CONTROLLED DRUGS DETECTED	Not Controlled	FTS-25- DRUG2	B) One small greaseproof paper envelope sealed with a label marked 'FTS FORENSIC TESTING SERVICES' 'FTS-25-DRUG2' 'Item 2' 'p20252409'. This envelope contained a folded paper package which contained pale brown fragmented material.	1.03 grams	PSILOCIN and/or one of its esters	Class A
Item (Unique Reference)	Description on Opening	Quantity	Drug	Legal Status																	
FTS-25- DRUG2	A) One small greaseproof paper envelope sealed with a label marked 'FTS FORENSIC TESTING SERVICES' 'FTS-25-DRUG2' 'Item 1' p20252409'. This envelope contained one greaseproof paper fold which contained a beige coloured powder.	1.02 grams	NO CONTROLLED DRUGS DETECTED	Not Controlled																	
FTS-25- DRUG2	B) One small greaseproof paper envelope sealed with a label marked 'FTS FORENSIC TESTING SERVICES' 'FTS-25-DRUG2' 'Item 2' 'p20252409'. This envelope contained a folded paper package which contained pale brown fragmented material.	1.03 grams	PSILOCIN and/or one of its esters	Class A																	
p20252408	W163																				

UTIC	Webcode	How would you state your findings in a report? (Use the same wording as you would to submit a report to the lead investigator and/or court).
p20252409	W163	<p>Item 1- One heat-sealed plastic pouch with 'FTS' hand-written in black ink to one face enclosing one paper envelope labelled 'FTS Forensic Testing Services, FTS-25-DRUG2, item 1, p20252407' holding one folded paper wrap containing beige lumpy powder with brown flecks.</p> <p><u>Weight</u>= 1.02 grams. <u>Drug</u>: NEGATIVE, <u>Legal status</u>: Not Controlled. Starch indicated</p> <p>Item 2- One heat-sealed plastic pouch with 'FTS' hand-written in black ink to one face enclosing one paper envelope labelled 'FTS Forensic Testing Services, FTS-25-DRUG2, Item 2, p20252407' holding one folded paper wrap containing beige/brown powder.</p> <p><u>Weight</u> = 1.04 grams, <u>Drug</u>: NEGATIVE, <u>Legal status</u>: Not Controlled. Starch indicated</p>
p20252410	W163	After examining the item, it was concluded it is not subject to control.
p20252411	W261	<p>Item 1: Did not detect any substance listed in schedule of medicine and related substance control or Drug and Drug trafficking</p> <p>Item 2: Exhibit material contains Psilocyn and is listed in Part III of schedule 2 of Drug and Drug Trafficking</p>
p20252412	W261	<p>Item 1: Did not detect any substance listed in schedule of medicine and related substance control or Drug and Drug trafficking</p> <p>Item 2: Exhibit material contains Psilocyn and is listed in Part III of schedule 2 of Drug and Drug Trafficking</p>
p20252413	W030	<p>Evidence Item #001: One sealed envelope labelled "FTS-25-DRUG2 Item 1 p20252413" containing pieces of a light tan solid substance</p> <p>The above item (1.01 grams net weight +/- 0.05 grams at a coverage probability of 99.73%) was found to contain No Detectable Controlled Substance.</p> <p>Evidence Item #002: One sealed envelope labelled "FTS-25-DRUG2 Item 2 p20252413" containing pieces of a tan solid substance</p> <p>The above item (1.02 grams net weight +/- 0.05 grams at a coverage probability of 99.73%) was found to contain Psilocin, Schedule I.</p>

UTIC	Webcode	How would you state your findings in a report? (Use the same wording as you would to submit a report to the lead investigator and/or court).
p20252414	W012	<p>I hereby certify that the following items:</p> <p>Sealed manila envelope labeled "FTS ... FTS-25-DRUG2 UTIC p20252414" containing the heat-sealed plastic bag (heat-sealed into two sections) containing:</p> <p>Item 1] tan powder in the paper fold in the taped glassine envelope labeled "FTS ... FTS-25-DRUG2 Item 1 p20252414" in the heat-sealed section (1). Item 2] brown finely ground organic matter in the paper fold in the taped glassine envelope labeled "FTS ... FTS-25-DRUG2 Item 2 p20252414" in the heat-sealed section (2).</p> <p>Have been examined with the following results:</p> <p>No controlled substances were indicated in Item 1. NOTE: The contents of the paper fold were weighed and tested. The weight of the tested powder was 1.01 grams.</p> <p>Item 2 was found to contain Psilocyn, a Class C controlled substance. NOTE: The contents of the paper fold were weighed and tested. The weight of the tested organic matter was 1.01 grams.</p>
p20252415	W010	<p>Apparent mushroom material from bindle 1 of 2, net weight of 1.031 +/- 0.008 grams, no controlled substances detected.</p> <p>Apparent mushroom material from bindle 2 of 2, net weight of 1.025 +/- 0.008 grams, contains psilocin and/or psilocybin.</p>
p20252416	W010	<p>Beige powder with brown and white flecks from Item #1, net weight of 1.041 ± 0.006 grams, contains NO CONTROLLED SUBSTANCES.</p> <p>Green/brown plant material from Item #2, net weight of 1.045 ± 0.006 grams, contains PSILOCIN and/or PSILOCYBIN.</p>
p20252417	W214	<p>Item 1 - A white packet labelled "Item 1 P20252417" which held a translucent plastic packet containing an off white powder Total Amount = 1.01g, Analytical Result - No controlled substances</p> <p>Item 2 - A white packet labelled "Item 2 P20252417" which held a translucent plastic packet containing a brown fungal material Total Amount = 1.00g, Analytical Result - Psilocin Class A</p>

8) How long did it take to complete this test (in hours)? Please report actual analytical hours only.

9) Did you find this test to be a fair test of the process of the examination and interpretation of controlled substances?

A) Yes

B) No

UTIC	Webcode	How long did it take to complete this test (in hours)? Please report actual analytical hours only.	Did you find this test to be a fair test of the process of the examination and interpretation of controlled substances?
p20252401	W061	8	No
p20252402	W061	8hrs	Yes
p20252403	W061	2	Yes
p20252405	W028	5	Yes
p20252406	W144	8	Yes
p20252407	W163	3 hours	Yes
p20252408	W163	2.5	Yes
p20252409	W163	1	Yes
p20252410	W163	About 3 hours	Yes
p20252411	W261	64 hrs	Yes
p20252412	W261	120 hrs	Yes
p20252413	W030	Approximately 8 hours	Yes
p20252414	W012	3	Yes
p20252415	W010	approximately 3	Yes
p20252416	W010	8	Yes
p20252417	W214	1	Yes

10) How would you change the aspects of the test (i.e. scenario, test samples, question sections, report format) to improve a future version of this test? Comments and suggestions are welcome.

Additionally, this question is a means to provide you with an opportunity to explain or include information about your findings or interpretation, as needed. In order to maintain confidentiality, please refrain from including identifying information specific to your laboratory.

UTIC	Webcode	How would you change the aspects of the test (i.e. scenario, test samples, question sections, report format) to improve a future version of this test? Comments and suggestions are welcome.	FTS Response
p20252401	W061	Minor issue from my perspective is having two samples that both came back as no prohibited substance (assuming my results are correct). With both negative, this had me second guessing myself, even though I followed the routine procedures.	
p20252403	W061	This proficiency test ignited an interesting discussion in our laboratory about our reporting limits and limits of detection. We detected low levels of psilocin in item 2 of this test, and in a real evidentiary case we would typically quantitate the psilocin to determine whether we report it or not. In the case of this proficiency trial, we have elected to report it without quantitation as we have two sub-samples detecting psilocin, and the remaining quantity of sample is small.	Thank you for clarifying your results.
p20252409	W163	Item 1- Appears to contain a possible type of sugar alcohol, Xylitol/Mannitol were present in the GCMS data but unable to get confirmation for either.	
p20252411	W261	Physical characteristics of the sample should be specified	Thank you for the suggestion.
p20252412	W261	best test	