Collaborative Testing Services, Inc
FORENSIC TESTING PROGRAM

P.O. Box 650820
Sterling, VA 20165-0820
e-mail: forensics@cts-interlab.com
Telephone: +1-571-434-1925
Website: www.cts-forensics.com

Quantitative Drug Analysis - Methamphetamine HCl
Test No. 26-5051 Summary Report

Each sample pack consisted of two items with different concentrations of methamphetamine hydrochloride (HCl), which participants were asked to analyze. Data were returned from 116 participants and are compiled into the following tables:

This report contains the data received from the participants in this test. Since these participants are located in many countries around the world, and it is their option how the samples are to be used (e.g., training exercise, known or blind proficiency testing, research and development of new techniques, etc.), the results compiled in the Summary Report are not intended to be an overview of the quality of work performed in the profession and cannot be interpreted as such. The Summary Comments are included for the benefit of participants to assist with maintaining or enhancing the quality of their results. These comments are not intended to reflect the general state of the art within the profession.

Participant results are reported using a randomly assigned "WebCode". This code maintains participant's anonymity, provides linking of the various report sections, and will change with every report.

Manufacturer's Information

Each sample pack consisted of two items with different concentrations of powdered methamphetamine hydrochloride (HCl) and creatine monohydrate. Participants were asked to analyze each item and report the concentration of methamphetamine HCl in the sample.

SAMPLE PREPARATION: Prior to production, the appropriate amount of methamphetamine HCl and diluent for each item were combined and thoroughly mixed to ensure homogeneity. Each sample was portioned out into the appropriate sample size and placed into a glassine bag which was folded and secured with an item-specific label. The folded glassine bag was placed into a small zip top bag, which was heat sealed, then placed into a pre-labeled envelope.

SAMPLE PACK ASSEMBLY: One of each item was placed into a pre-labeled sample pack envelope.

VERIFICATION: The laboratories that participated in predistribution received additional specimens for duplicate testing of each item to verify uniformity among samples. Predistribution results were consistent with each other and the manufacturer's preparation information. The following methods were used to examine the items: GC/FID, UV-Vis, LC, HPLC.

Item	Preparation Concentration - Methamphetamine HCl	Diluent	Sample Size
1	58%	Creatine monohydrate	500 mg
2	90%	Creatine monohydrate	500 mg

The information presented here details how test samples were prepared, including any design specifications and preparation values. This information does not necessarily represent the results that could or should be obtained. When applicable, statistical analysis, including the calculation of Grand Mean statistics, will be performed on participant data. Final interpretation of the results should be deferred until consensus data is made available in the summary report.

Summary Comments

This test was designed to allow participants to assess their proficiency in the determination of powdered methamphetamine hydrochloride (HCl) concentrations. Each sample pack included two items: Item 1 contained approximately 58% methamphetamine HCl, and Item 2 contained approximately 90% methamphetamine HCl. Refer to the Manufacturer's Information for preparation details.

The results are separated into two tables: reported results (Table 1) and raw analytical data (Table 3). The table of reported results shows the concentration that each participant would report according to their normal reporting procedures (e.g. mean, lowest result, truncated results). The table of raw analytical data shows the results from each determination made by the laboratory to produce their reported results. The majority of the population used the mean of duplicate/several determinations for their quantitative reporting procedures.

The raw data was used to calculate the grand mean and the standard deviation for each item. The grand mean concentration for Item 1 was 57.29% with a standard deviation of 1.720, and the grand mean concentration of Item 2 was 89.69% with a standard deviation of 3.134. If a participant's data was marked with an "X", it was deemed extreme and excluded from the calculations of the grand mean and standard deviation. Of the 116 responding participants, a total of six participants were excluded from the calculations for one or both items. For Item 1, two results fell outside of ±5 STD from the grand mean and two were excluded for exhibiting a large bias. For Item 2, one result fell outside of ±5 STD, two exhibited large biases, and one aberrant result (reported concentration greater than 100%) was removed from the calculations. These statistics are supplied to assist the participants and accrediting bodies in determining the acceptability of the results.

The most utilized methods of analysis among participants were GC/FID, NMR, and UV-Visible spectroscopy.

As a supplemental examination of the raw data, Bivariate Control Analysis was also performed to analyze the measurement of both samples simultaneously. In this analysis, a comparative performance value (CPV) is provided for each participant, which is a unitless ratio indicating the number of standard deviations a participant's results are from the Grand Mean. The closer a participant's CPV is to zero, the more consistent their results are with the other participants' data. For the graphical portion, an ellipse was drawn so that 99% of the time, a randomly selected participant was inside of it. If a participant's data was marked with an "X", it fell outside the 99.5% control limit and the results were excluded from the calculations for this supplemental examination. For more information regarding Bivariate Control Analysis, please see the supplemental section at the end of this report.

Reported Results

What is the concentration of methamphetamine HCl in each of the samples?

TABLE 1

WebCode	Item 1 Reported Concentration (units)	Item 2 Reported Concentration (units)	Uncertainty (k)
Preparation concentration:	**58%**	**90%**	
26BJQN	58 ± 6.3 (%)	91 ± 6.3 (%)	2
274AW3	0.28 ± 0.04 (g)	0.43 ± 0.04 (g)	3
2JPPZ3	57.57 ± 6.70 (percent)	99.12 ± 11.54 (percent)	2
2K7LT3	0.27 ± 0.04 (grams)	0.41 ± 0.04 (grams)	3
2MAHC6	55.5 ± 2.9 (%)	86.3 ± 4.5 (%)	2
2PE32Q	56 ± 3.3 (%)	88 ± 3.3 (%)	2
2V7AKY	55.4 ± 4.3 (%)	87.9 ± 7.1 (%)	2.65
2W3PWV	59.8 ± 4.6 (%)	94.6 ± 4.5 (%)	2
3C7LTZ	57.5 ± 4.7 (%)	90.7 ± 7.0 (%)	2.65
3GKG9X	57.3 ± 5.0 (percent)	90.5 ± 7.0 (percent)	2.65
3M7AKW	58 ± 8 (%)	94 ± 12 (%)	3
3VKVVL	59 ± 3 (%)	92 ± 3 (%)	2
3WWVQV	0.27 ± 0.04 (grams)	0.40 ± 0.05 (grams)	3
3ZV9DK	58.3 ± 2.33 (%)	89.2 ± 3.57 (%)	4 %
46K7FG	56 (%)	83 (%)	
4BU8YY	57.6 ± 4.7 (percent)	91.0 ± 10.7 (percent)	2.65
68NZWX	58.9 ± 5.9 (%)	93.0 ± 5.9 (%)	3
69KGAV	60 ± 8 (%)	97 ± 13 (%)	3

TABLE 1

WebCode	Item 1 Reported Concentration (units)	Item 2 Reported Concentration (units)	Uncertainty (k)
Preparation concentration:	**58%**	**90%**	
6EQA4Q	58.1 ± 4.2 (Percentage)	89.9 ± 4.2 (Percentage)	2
6QFAUT	56 ± 3 (%)	88 ± 3 (%)	2
7J2MLP	56.9 ± 3.8 (wt%)	88.6 ± 5.9 (wt%)	3
7MZYGP	57.7 ± 4.1 (%)	87.5 ± 4.8 (%)	2
7NVGJQ	57.7 ± 1.7 (%)	90.2 ± 1.7 (%)	2
7P3YGL	57.4 ± 2.6 (%)	89.9 ± 2.6 (%)	2
7QVPM2	54 ± 7 (percent)	86 ± 7 (percent)	2
7WPP4G	56.7 ± 4.9 (%)	88.7 ± 7.7 (%)	
87LC9J	58 ± 3 (%)	91 ± 3 (%)	2
8A68AQ	56 ± 3 (%)	89 ± 3 (%)	2
8B2MLM	57.3 ± 2.6 (mg/mL)	90.0 ± 2.6 (mg/mL)	2
8EZYHM	56.2 ± 2.6 (%)	88.2 ± 2.6 (%)	2
8WWNBV	55 ± 6 (%)	89 ± 6 (%)	2
9DMN6G	57.5 ± 1.4 (%)	88.8 ± 1.4 (%)	2
9MBK4W	55.89 ± 6.51 (%)	92.29 ± 10.74 (%)	2
AJMMTB	58.5 ± 2 (percent)	90.1 ± 3.7 (percent)	2
AU72UR	56.98 ± 5.36 (%)	89.38 ± 5.36 (%)	2
BADHFK	58.5 ± 4.2 (Percent)	92.4 ± 4.2 (Percent)	2
BPQQFN	59 ± 8 (%)	95 ± 12 (%)	3
BVT3CL	57.0 ± 1.7 (%)	92.4 ± 1.7 (%)	2

TABLE 1

WebCode	Item 1 Reported Concentration (units)	Item 2 Reported Concentration (units)	Uncertainty (k)
Preparation concentration:	**58%**	**90%**	
BXZHJR	62.4 ± 5.9 (%)	94.1 ± 5.9 (%)	3
BYVXVN	59 ± 8 (%)	95 ± 12 (%)	3
C6X83G	58.3 ± 2.5 (%)	89.5 ± 2.5 (%)	2
CB44LG	56.5 ± 2.5 (%)	88.9 ± 2.5 (%)	2
CZ739C	55.4 ± 1.4 (%)	87.5 ± 1.4 (%)	2
D2T2ZF	56.9 ± 2.5 (%)	89.6 ± 2.5 (%)	2
D7NT9D	57 ± 3.3 (%)	89 ± 6.6 (%)	2
D8JCAE	58 ± 3 (%)	90 ± 3 (%)	2
DR8XTG	57.4 ± 4.4 (%)	89.7 ± 6.9 (%)	2
DXDQMC	56 ± 3.7 (%)		2
E33QEC	59 ± 3 (%)	91 ± 3 (%)	2
ELZQT4	103.34 ± 0.08 (ng/ml)	196.36 ± 0.08 (ng/ml)	2
EPDQMA	56.9 ± 2.4 (percent by weight)	89.4 ± 2.4 (percent by weight)	2
EXNT9B	57 ± 4 (%)	88 ± 7 (%)	2
F288CB	57.5 ± 4.6 (%)	89.2 ± 7.2 (%)	2
FXMF29	56.5 ± 1.4 (%)	88.4 ± 1.4 (%)	2
G7W72Q	0.26 ± 0.02 (grams)	0.44 ± 0.03 (grams)	2
GFJ6UG	0.28 ± 0.04 (grams)	0.43 ± 0.06 (grams)	3
H8J6VE	59.1 ± 4.1 (%)	92.5 ± 4.0 (%)	2
H8MPHH	52.3 ± 4.2 (%)	84.1 ± 6.4 (%)	2.65

TABLE 1

WebCode	Item 1 Reported Concentration (units)	Item 2 Reported Concentration (units)	Uncertainty (k)
Preparation concentration:	**58%**	**90%**	
J3QBGE	54.6 ± 5.46 (%)	87.3 ± 8.73 (%)	2
JTZYY7	56 ± 9.5 (%)	88 ± 9.5 (%)	2
KA4T77	57.1 ± 4.6 (%)	88.5 ± 7.1 (%)	2
KC7QED	56 ± 3 (%)	88 ± 3 (%)	2
KKZYY4	56.8 ± 1.4 (%)	89.6 ± 1.4 (%)	2
KQNJ3J	56.5 ± 4.7 (%)	88.0 ± 7.4 (%)	2
KZYLNK	57.7 ± 4.8 (%)	87.5 ± 7.3 (%)	2
L8RF2A	59.7 ± 4.2 (%)	92.8 ± 4.2 (%)	2
L9MY3B	57.8 ± 1.7 (%)	90.6 ± 1.7 (%)	2
LJ6GX3	56.15 ± 5.3 (%)	89.22 ± 8.4 (%)	3
LQ46CL	0.27 ± 0.02 (grams)	0.43 ± 0.03 (grams)	2
MHT4QK	0.27 ± 0.02 (grams)	0.44 ± 0.03 (grams)	2
MKU24Y	57.40 ± 5.00 (%)	89.60 ± 7.80 (%)	3
MP8A3H	57 ± 5 (%)	93 ± 5 (%)	2
MQ3R6J	56 ± 7 (%)	88 ± 7 (%)	95
NCCF6E	54 ± 7 (%)	87 ± 7 (%)	2
NFYMZA	53.1 ± 4.7 (%)	74.9 ± 5.0 (%)	2.571
NG8A3F	0.26 ± 0.04 (grams)	0.41 ± 0.04 (grams)	3
NRA8DB	57 ± 3 (%)	88 ± 3 (%)	2
PBX9JX	57.2 ± 3.9 (%)	89.3 ± 6.1 (%)	3
PJDR2C	60.45 ± 7.42 (%)	92.13 ± 11.31 (%)	2

TABLE 1

WebCode	Item 1 Reported Concentration (units)	Item 2 Reported Concentration (units)	Uncertainty (k)
Preparation concentration:	**58%**	**90%**	
PTHWUT	49.696 (%)	70.280 (%)	
QKF9DC	58 ± 6 (percent)	90 ± 6 (percent)	2
R72ZEU	55.9 ± 3.4 (%)	88.4 ± 3.4 (%)	2
RERLH8	57 ± 4 (%)	90 ± 7 (%)	2
RGVG2A	56.94 ± 5.36 (%)	89.50 ± 5.36 (%)	2
RHA732	57.2 ± 1.7 (%)	89.9 ± 1.7 (%)	2
T9Z2PB	57.4 ± 4.8 (%)	89.4 ± 7.5 (%)	2
TC3Y3N	58.7 ± 5.8 (%)	94.2 ± 5.8 (%)	
TCJT2D	57.7 ± 1.8 (%)	91.0 ± 2.8 (%)	2
TDFC3E	0.26 ± 0.02 (grams)	0.44 ± 0.03 (grams)	2
THL387	47 (%)	80 (%)	
TX4VVC	54.9 ± 2.8 (%)	87.1 ± 4.5 (%)	2
UAQLV8	57.91 ± 5.36 (%)	91.01 ± 5.36 (%)	2, 95.45%
UDAE8A	57 ± 5 (%)	89 ± 5 (%)	2.13
UG9RUY	56.9 ± 1.7 (%)	89.5 ± 1.7 (%)	2
UVT8XY	57.2 ± 2.6 (%)	89.8 ± 2.6 (%)	2
UWMX4D	58.10 ± 4.65 (%)	91.92 ± 7.35 (%)	3
UXXZPC	56.76 ± 1.6% (mg/ml)	87.99 ± 2.2% (mg/ml)	2
VHEWKT	57.2 ± 1.4 (%)	88.8 ± 1.4 (%)	
VJUUDR	56.6 ± 5.6 (%)	89.8 ± 8.9 (%)	3

TABLE 1

WebCode	Item 1 Reported Concentration (units)	Item 2 Reported Concentration (units)	Uncertainty (k)
Preparation concentration:	**58%**	**90%**	
VLXPWV	59.6 ± 4.6 (percentage)	90.2 ± 6.9 (percentage)	2
VMT8XW		90 ± 3.7 (%)	2
VUVG6P	57.64	88.63	
VZFKA7	57.37 ± 5.36 (%)	90.29 ± 5.36 (%)	2
W4DHX4	59.77 ± 6.56 (%)	93.99 ± 10.31 (%)	2
W69ZZ6	57.1 ± 4.6 (Percent %)	89.1 ± 6.8 (Percent %)	2.65
WJNY8R	56.21 ± 2.30 (%)	89.46 ± 3.66 (%)	2
X3WNXU	58 ± 3 (%)	91 ± 3 (%)	2
X3Z9KW	57,17 ± 0,52 (weight%)	90,1 ± 1,0 (weight%)	2
XEANTM	55.66	87.10	
XLDLLZ	56.9 ± 3.0 (%W/W)	90.9 ± 6.0 (%W/W)	2
XZTQM2	60 ± 8 (%)	93 ± 12 (%)	3
Y3UDEW	59.2 ± 4.2 (%)	89.0 ± 4.2 (%)	2
YM3FEL	53.9 ± 2.0 (% by weight)	84.4 ± 2.0 (% by weight)	2
ZE4AW6	56 ± 5 (%)	90 ± 5 (%)	2
ZL236Y	61 ± 8 (%)	99 ± 13 (%)	3
ZXE32R	58.3 ± 2.6 (%)	88.8 ± 2.6 (%)	2

Reporting Procedures

TABLE 2

WebCode	Reporting Procedures
26BJQN	The mean of duplicate/several determinations.
274AW3	The mean of duplicate/several determinations.
2JPPZ3	The mean of duplicate/several determinations.
2K7LT3	The mean of duplicate/several determinations.
2MAHC6	The mean of duplicate/several determinations.
2PE32Q	The mean of duplicate/several determinations.
2V7AKY	The mean of duplicate/several determinations.
2W3PWV	The mean of duplicate/several determinations.
3C7LTZ	The mean of duplicate/several determinations.
3GKG9X	The mean of duplicate/several determinations.
3M7AKW	The mean of duplicate/several determinations.
3VKVVL	The mean of duplicate/several determinations.
3WWVQV	The mean of duplicate/several determinations.
3ZV9DK	The mean of duplicate/several determinations.
46K7FG	The mean of duplicate/several determinations.
4BU8YY	The mean of duplicate/several determinations.
68NZWX	The mean of duplicate/several determinations.
69KGAV	The mean of duplicate/several determinations.
6EQA4Q	The mean of duplicate/several determinations.
6QFAUT	Item 1 was mean of 5 integrals and Item 2 was mean of 5 integrals
7J2MLP	The mean of duplicate/several determinations.
7MZYGP	The mean of duplicate/several determinations.
7NVGJQ	The mean of duplicate/several determinations.
7P3YGL	The mean of duplicate/several determinations.
7QVPM2	The mean of duplicate/several determinations.

TABLE 2

WebCode	Reporting Procedures
7WPP4G	The mean of duplicate/several determinations.
87LC9J	The mean of duplicate/several determinations.
8A68AQ	Both Item 1 and Item 2 were the means of 5 integrals.
8B2MLM	The mean of duplicate/several determinations.
8EZYHM	The mean of duplicate/several determinations.
8WWNBV	The mean of duplicate/several determinations.
9DMN6G	The mean of duplicate/several determinations.
9MBK4W	The mean of duplicate/several determinations.
AJMMTB	The mean of duplicate/several determinations.
AU72UR	The mean of duplicate/several determinations.
BADHFK	The mean of duplicate/several determinations.
BPQQFN	The mean of duplicate/several determinations.
BVT3CL	The mean of duplicate/several determinations.
BXZHJR	The mean of duplicate/several determinations.
BYVXVN	The mean of duplicate/several determinations.
C6X83G	The mean of duplicate/several determinations.
CB44LG	The mean of duplicate/several determinations.
CZ739C	The mean of duplicate/several determinations.
D2T2ZF	The mean of duplicate/several determinations.
D7NT9D	The mean of duplicate/several determinations.
D8JCAE	The mean of duplicate/several determinations.
DR8XTG	One determination
DXDQMC	The mean of duplicate/several determinations.
E33QEC	The mean of duplicate/several determinations.
ELZQT4	Single measurement
EPDQMA	The mean of duplicate/several determinations.

TABLE 2

WebCode	Reporting Procedures
EXNT9B	The mean of duplicate/several determinations.
F288CB	The mean of duplicate/several determinations.
FXMF29	The mean of duplicate/several determinations.
G7W72Q	The mean of duplicate/several determinations.
GFJ6UG	The mean of duplicate/several determinations.
H8J6VE	The mean of duplicate/several determinations.
H8MPHH	The mean of duplicate/several determinations.
J3QBGE	The mean of duplicate/several determinations.
JTZYY7	The mean of duplicate/several determinations.
KA4T77	The mean of duplicate/several determinations.
KC7QED	Item 1 was the mean of 5 integrals and Item 2 was the mean of 4 integrals using the NMR
KKZYY4	The mean of duplicate/several determinations.
KQNJ3J	The mean of duplicate/several determinations.
KZYLNK	The mean of duplicate/several determinations.
L8RF2A	The mean of duplicate/several determinations.
L9MY3B	The mean of duplicate/several determinations.
LJ6GX3	The mean of duplicate/several determinations.
LQ46CL	The mean of duplicate/several determinations.
MHT4QK	The mean of duplicate/several determinations.
MKU24Y	The mean of duplicate/several determinations.
MP8A3H	The lowest value of duplicate/several determinations.
MQ3R6J	The mean of duplicate/several determinations.
NCCF6E	The mean of duplicate/several determinations.
NFYMZA	The mean of duplicate/several determinations.
NG8A3F	The mean of duplicate/several determinations.
NRA8DB	Item 1 was a mean of 5 integrals and Item 2 was a mean of 4 integrals

TABLE 2

WebCode	Reporting Procedures
PBX9JX	The mean of duplicate/several determinations.
PJDR2C	The mean of duplicate/several determinations.
PTHWUT	The mean of duplicate/several determinations.
QKF9DC	The mean of duplicate/several determinations.
R72ZEU	The mean of duplicate/several determinations.
RERLH8	Each sample has 2 aliquots tested. Those 2 aliquots are each injected in triplicate. Those triplicate injections are averaged and then 2 aliquot averages are truncated to the near est whole percent.
RGVG2A	The mean of duplicate/several determinations.
RHA732	The mean of duplicate/several determinations.
T9Z2PB	The mean of duplicate/several determinations.
TC3Y3N	The mean of duplicate/several determinations.
TCJT2D	The mean of duplicate/several determinations.
TDFC3E	The mean of duplicate/several determinations.
THL387	The mean of duplicate/several determinations.
TX4VVC	The mean of duplicate/several determinations.
UAQLV8	The mean of duplicate/several determinations.
UDAE8A	The lowest value of duplicate/several determinations.
UG9RUY	The mean of duplicate/several determinations.
UVT8XY	The mean of duplicate/several determinations.
UWMX4D	The mean of duplicate/several determinations.
UXXZPC	The mean of duplicate/several determinations.
VHEWKT	The mean of duplicate/several determinations.
VJUUDR	The mean of duplicate/several determinations.
VLXPWV	single determination
VMT8XW	The mean of duplicate/several determinations.
VUVG6P	The mean of duplicate/several determinations.

TABLE 2

WebCode	Reporting Procedures
VZFKA7	The mean of duplicate/several determinations.
W4DHX4	The mean of duplicate/several determinations.
W69ZZ6	The mean of duplicate/several determinations.
WJNY8R	The mean of duplicate/several determinations.
X3WNXU	The mean of duplicate/several determinations.
X3Z9KW	The mean of duplicate/several determinations.
XEANTM	The mean of duplicate/several determinations.
XLDLLZ	The mean of duplicate/several determinations.
XZTQM2	The mean of duplicate/several determinations.
Y3UDEW	The mean of duplicate/several determinations.
YM3FEL	The mean of duplicate/several determinations.
ZE4AW6	The lowest value of duplicate/several determinations.
ZL236Y	The mean of duplicate/several determinations.
ZXE32R	The mean of duplicate/several determinations.

Response Summary

Participants: **116**

The mean of duplicate/several determinations:	105	(90.5%)
The lowest value of duplicate/several determinations:	3	(2.6%)
Other:	8	(6.9%)
No Reporting Procedure Provided:	0	(0.0%)

Raw Data & Statistical Analysis

List of raw data determinations in percent.

TABLE 3 - Item 1

WebCode	Preparation Concentration : 58%								Mean
26BJQN	58.13	58.22	58.16	58.22					58.18
274AW3	59.47	58.74	58.99						59.07
2JPPZ3	58.59	61.05	53.06						57.57
2K7LT3	58.56	58.50	58.46						58.51
2MAHC6	55.78	55.19							55.49
2PE32Q	54.90	56.20							55.55
2V7AKY	55.06	55.45	55.10	55.69	55.65	55.57			55.42
2W3PWV	59.85	59.05	64.76	59.55	60.40	60.19			60.63
3C7LTZ	57.27	57.64	56.95	57.83	57.03	58.49			57.54
3GKG9X	58.64	56.73	56.82	56.37	58.05	57.15			57.29
3M7AKW	58.29	58.11							58.20
3VKVVL	58.85	59.51	59.91						59.42
3WWVQV	55.72								55.72
3ZV9DK	58.58	57.97							58.28
46K7FG	44.20	41.70	48.50	45.70					45.03 X
4BU8YY	57.62	57.89	56.54	57.60	57.56	58.38			57.60
68NZWX	58.90								58.90
69KGAV	59.82	60.29							60.06
6EQA4Q	57.14	58.16	59.02						58.11
6QFAUT	57.04	56.56	56.73	56.59	56.75				56.74
7J2MLP	57.10	57.00	57.00	56.80					56.98
7MZYGP	57.15	58.25							57.70
7NVGJQ	58.00	57.42							57.71
7P3YGL	57.31	57.33	57.33	57.37	57.38	57.39	57.41	57.47	57.37
7QVPM2	54.73	54.51	55.10						54.78
7WPP4G	56.60	56.80							56.70

TABLE 3 - Item 1

WebCode	Preparation Concentration : 58%								Mean
87LC9J	58.96	59.58	58.35						58.96
8A68AQ	56.73	56.46	56.09	56.38	56.45				56.42
8B2MLM	57.53	57.52	57.50	57.50	57.27	57.26	57.26	57.25	57.39
8EZYHM	56.72	56.55	56.63	56.68	55.67	55.76	55.70	55.66	56.17
8WWNBV	57.34	56.02	55.39	55.09					55.96
9DMN6G	56.89	56.99	58.06	58.06					57.50
9MBK4W	60.11	53.30	54.26						55.89
AJMMTB	59.70	57.30	58.50						58.50
AU72UR	56.69	57.28							56.99
BADHFK	59.37	57.61	58.48						58.49
BPQQFN	58.75	58.62							58.69
BVT3CL	57.80	56.21							57.01
BXZHJR	62.40								62.40
BYVXVN	58.13	59.34							58.74
C6X83G	58.15	57.97	58.72	58.35					58.30
CB44LG	56.33	55.95	56.81	57.04					56.53
CZ739C	55.57	55.45	55.53	55.33					55.47
D2T2ZF	57.00	56.91	56.91	56.99					56.95
D7NT9D	58.10	56.20							57.15
D8JCAE	58.70	58.54	57.27						58.17
DR8XTG	57.36								57.36
DXDQMC	55.60	56.20							55.90
E33QEC	60.04	58.99	60.38						59.80
ELZQT4	41.33								41.33 X
EPDQMA	57.30	57.30	56.40	56.50					56.88
EXNT9B	57.84	57.13	57.13	58.22	56.99	57.46			57.46
F288CB	57.75	57.35							57.55
FXMF29	56.12	56.39	56.85	56.77					56.53

TABLE 3 - Item 1

WebCode	Preparation Concentration : 58%						Mean
G7W72Q	56.36	56.39	55.97	55.96			56.17
GFJ6UG	56.98						56.98
H8J6VE	59.33	59.32	58.99	59.16	60.32	59.20	59.38
H8MPHH	52.30	51.80	51.64	52.57	52.73	52.92	52.33
J3QBGE	54.30	54.90					54.60
JTZYY7	55.70	56.10					55.90
KA4T77	57.10	57.11					57.11
KC7QED	57.15	56.89	56.93	56.83	57.04		56.97
KKZYY4	56.75	57.02	56.83	56.59			56.80
KQNJ3J	56.65	56.47					56.56
KZYLNK	56.42	59.04					57.73
L8RF2A	59.23	59.91	59.90				59.68
L9MY3B	57.56	58.19					57.88
LJ6GX3	56.10	56.20					56.15
LQ46CL	55.23	56.01	57.87	57.40			56.63
MHT4QK	56.38	56.15	57.06	57.31			56.73
MKU24Y	58.50	56.48					57.49
MP8A3H	57.00	60.00					58.50
MQ3R6J	57.30	55.61	56.95				56.62
NCCF6E	55.27	54.31	54.19				54.59
NFYMZA	53.60	53.80	50.60	51.00	48.40	61.40	53.13
NG8A3F	56.70	55.10	56.30				56.03
NRA8DB	57.32	57.09	56.94	56.96	57.05		57.07
PBX9JX	57.42	56.99					57.21
PJDR2C	59.82	61.75	59.51	62.92	58.96	59.71	60.45
PTHWUT	49.63	49.93	49.53				49.70
QKF9DC	58.84	59.66	57.57	59.27			58.84
R72ZEU	55.90	55.98					55.94

TABLE 3 - Item 1

WebCode	Preparation Concentration : 58%								Mean	
RERLH8	57.60	57.30	57.20	57.30	57.60	57.50			57.42	
RGVG2A	56.15	57.74							56.95	
RHA732	57.05	57.39							57.22	
T9Z2PB	57.40	57.50							57.45	
TC3Y3N	58.80	58.60	58.70						58.70	
TCJT2D	45.98	46.92							46.45	X
TDFC3E	56.54	56.84	57.66	56.69					56.93	
THL387	46.14	48.61							47.38	X
TX4VVC	54.08	55.64							54.86	
UAQLV8	57.81	58.01							57.91	
UDAE8A	58.00	58.00	58.00	57.00	57.00	57.00			57.50	
UG9RUY	56.60	57.26							56.93	
UVT8XY	57.18	57.19	57.20	57.17	57.19	57.16	57.20	57.16	57.18	
UWMX4D	58.06	58.15							58.11	
UXXZPC	56.18	57.34							56.76	
VHEWKT	57.26	57.34	57.30	57.22					57.28	
VJUUDR	55.90	57.30	56.60						56.60	
VLXPWV	59.61								59.61	
VMT8XW	[No raw data reported.]									
VUVG6P	57.24	57.90	58.18	57.67	57.35	57.50			57.64	
VZFKA7	57.14	57.61							57.38	
W4DHX4	61.10	59.38	58.84						59.77	
W69ZZ6	56.27	56.75	57.76	57.08	57.62	57.30			57.13	
WJNY8R	56.11	56.32							56.22	
X3WNXU	58.40	59.22	58.68						58.77	
X3Z9KW	57.15	57.28	57.07						57.17	
XEANTM	56.97	58.74	55.54	54.44	53.99	54.29			55.66	
XLDLLZ	57.00	56.70							56.85	

TABLE 3 - Item 1

WebCode	Preparation Concentration : 58%								Mean
XZTQM2	59.75	60.03							59.89
Y3UDEW	58.67	60.43	58.61						59.23
YM3FEL	54.36	53.73	54.05	53.78					53.98
ZE4AW6	56.00	57.00							56.50
ZL236Y	61.07	61.21							61.14
ZXE32R	58.26	58.26	58.27	58.28	58.40	58.41	58.45	58.45	58.35

Statistical Analysis for Item 1

Participants 115 [No Response: 1]

Preparation Concentration:	58%	Number of Participants Included:	111
Grand Mean:	57.29	Number of Participants Excluded:	4
Standard Deviation:	1.720	Number of Participants without Raw Data:	1

TABLE 3 - Item 2

WebCode	Preparation Concentration : 90%								Mean
26BJQN	92.58	92.47	90.42	90.41					91.47
274AW3	89.80	94.13	90.69						91.54
2JPPZ3	107.86	88.39	101.13						99.13 X
2K7LT3	93.96	89.62	92.51						92.03
2MAHC6	86.32	86.21							86.27
2PE32Q	88.40	88.20							88.30
2V7AKY	86.57	88.11	87.97	89.00	88.18	87.64			87.91
2W3PWV	93.92	93.97	94.40	94.88	94.67	96.00			94.64
3C7LTZ	90.13	90.56	90.61	90.53	90.85	91.38			90.68
3GKG9X	90.32	90.18	90.53	90.79	90.40	90.70			90.49
3M7AKW	94.30	94.67							94.49
3VKVVL	92.81	92.01	92.36						92.39
3WWVQV	82.93								82.93
3ZV9DK	89.41	88.93							89.17
46K7FG	67.50	65.60							66.55 X
4BU8YY	90.77	90.54	86.35	91.30	91.02	95.97			90.99
68NZWX	93.00								93.00
69KGAV	98.01	95.86							96.94
6EQA4Q	90.15	90.30	89.32						89.92
6QFAUT	89.25	88.85	89.04	88.55	88.71				88.88
7J2MLP	89.00	89.30	88.20	87.90					88.60
7MZYGP	89.05	86.13							87.59
7NVGJQ	89.90	90.66							90.28
7P3YGL	89.73	89.79	89.85	89.88	89.96	90.01	90.09	90.16	89.93
7QVPM2	87.83	86.41	86.60						86.95
7WPP4G	88.50	88.90							88.70
87LC9J	91.11	91.30	91.90						91.44
8A68AQ	89.89	89.57	89.64	89.38	89.47				89.59

TABLE 3 - Item 2

WebCode	Preparation Concentration : 90%								Mean
8B2MLM	90.35	90.34	90.33	90.28	89.94	89.73	89.71	89.68	90.05
8EZYHM	88.61	89.00	89.09	88.63	87.51	87.43	87.56	87.59	88.18
8WWNBV	87.45	88.51	89.72	90.72					89.10
9DMN6G	88.61	88.98	89.02	88.83					88.86
9MBK4W	97.76	90.99	88.12						92.29
AJMMTB	92.70	88.40	89.20						90.10
AU72UR	89.35	89.42							89.39
BADHFK	91.59	92.67	92.83						92.36
BPQQFN	94.84	95.34							95.09
BVT3CL	92.18	92.74							92.46
BXZHJR	94.10								94.10
BYVXVN	94.97	95.30							95.14
C6X83G	89.68	89.27	89.64	89.58					89.54
CB44LG	88.18	87.75	89.81	90.02					88.94
CZ739C	87.49	88.43	87.09	87.12					87.53
D2T2ZF	89.46	89.22	90.06	89.78					89.63
D7NT9D	87.94	90.69	87.81	87.57					88.50
D8JCAE	90.56	90.66	90.98						90.73
DR8XTG	89.74								89.74
DXDQMC	[No raw data reported.]								
E33QEC	92.28	91.83	91.41						91.84
ELZQT4	78.54								78.54
EPDQMA	88.90	88.90	89.80	89.40					89.25
EXNT9B	87.31	87.80	88.00	87.60	87.73	87.87			87.72
F288CB	88.37	89.99							89.18
FXMF29	88.47	88.49	88.34	88.60					88.48
G7W72Q	90.45	90.18	89.58	89.80					90.00
GFJ6UG	87.37								87.37

TABLE 3 - Item 2

WebCode	Preparation Concentration : 90%						Mean
H8J6VE	93.11	92.40	92.40	92.53	92.47	92.70	92.60
H8MPHH	84.05	84.19	83.96	84.12	83.85	84.22	84.07
J3QBGE	87.00	87.50					87.25
JTZYY7	88.70	87.90					88.30
KA4T77	88.49	88.54					88.52
KC7QED	89.02	88.96	88.50	88.89			88.84
KKZYY4	90.27	89.79	88.94	89.49			89.62
KQNJ3J	87.96	88.20					88.08
KZYLNK	87.53	87.55					87.54
L8RF2A	93.18	92.45	92.68				92.77
L9MY3B	90.54	90.75					90.65
LJ6GX3	90.13	88.30					89.22
LQ46CL	90.84	90.76	89.30	89.57			90.12
MHT4QK	91.13	91.32	91.61	90.83			91.22
MKU24Y	89.19	90.01					89.60
MP8A3H	94.00	93.00					93.50
MQ3R6J	88.42	88.39	88.65				88.49
NCCF6E	87.57	87.78	88.20				87.85
NFYMZA	77.70	79.60	80.00	69.30	70.50	72.60	74.95
NG8A3F	92.30	87.30	90.40				90.00
NRA8DB	88.60	87.76	88.40	88.47			88.31
PBX9JX	90.26	88.34					89.30
PJDR2C	92.11	87.80	93.84	90.54	95.30	93.19	92.13
PTHWUT	71.17	69.90	69.77				70.28 X
QKF9DC	90.18	90.10	90.77	90.08			90.29
R72ZEU	88.47	88.41					88.44
RERLH8	91.30	90.80	90.70	91.30	90.80	91.80	91.12
RGVG2A	89.00	90.01					89.51

TABLE 3 - Item 2

WebCode	Preparation Concentration : 90%								Mean
RHA732	89.97	89.88							89.93
T9Z2PB	89.10	89.78							89.44
TC3Y3N	94.20	94.50	94.10						94.27
TCJT2D	72.84	73.43							73.14 X
TDFC3E	89.88	89.24	91.04	89.88					90.01
THL387	80.55	78.77							79.66
TX4VVC	87.91	86.27							87.09
UAQLV8	90.78	91.25							91.02
UDAE8A	89.00	89.00	89.00	90.00	90.00	90.00			89.50
UG9RUY	89.71	89.44							89.58
UVT8XY	89.00	89.10	89.69	89.27	90.39	90.55	90.40	90.32	89.84
UWMX4D	91.61	92.22							91.92
UXXZPC	88.81	87.18							88.00
VHEWKT	89.54	88.98	88.43	88.47					88.86
VJUUDR	89.80	89.50	90.10						89.80
VLXPWV	90.21								90.21
VMT8XW	92.20	87.20							89.70
VUVG6P	87.73	88.16	88.86	88.76	89.57	88.72			88.63
VZFKA7	90.57	90.02							90.30
W4DHX4	94.72	93.94	93.30						93.99
W69ZZ6	89.11	88.92	88.74	89.01	89.37	89.17			89.05
WJNY8R	88.47	90.44							89.46
X3WNXU	91.33	91.13	91.38						91.28
X3Z9KW	90.06	89.78	90.39						90.08
XEANTM	89.32	89.45	87.08	84.91	85.60	86.26			87.10
XLDLLZ	92.20	89.70							90.95
XZTQM2	92.13	93.54							92.84
Y3UDEW	87.23	89.73	89.93						88.96

TABLE 3 - Item 2

WebCode	Preparation Concentration : 90%								Mean
YM3FEL	84.53	84.55	84.52	84.36					84.49
ZE4AW6	90.00	90.00							90.00
ZL236Y	99.06	98.90							98.98
ZXE32R	88.67	88.70	88.78	88.87	88.92	88.96	88.97	89.00	88.86

Statistical Analysis for Item 2

Participants 115 [No Response: 1]

Preparation Concentration:	90%	Number of Participants Included:	111
Grand Mean:	89.69	Number of Participants Excluded:	4
Standard Deviation:	3.134	Number of Participants without Raw Data:	1

TABLE 3 - Response Summary

Response Summary	Item 1	Item 2
Preparation Concentration	**58%**	**90%**
Grand Mean:	57.29	89.69
Standard Deviation:	1.720	3.134
Number of Participants Included:	111	111
Number of Participants Excluded:	4	4

Method of Analysis

TABLE 4

WebCode	GC	GC/MS	GC/FID	LC	LC/MS	NMR	Other
26BJQN				✓			
274AW3		✓					
2JPPZ3							UV-VIS
2K7LT3		✓					
2MAHC6				✓			LC/UV
2PE32Q						✓	
2V7AKY			✓				
2W3PWV							UV-Vis Spectophotometry
3C7LTZ			✓				Weight Measurement (Analytical Balance)
3GKG9X			✓				weight measurement
3M7AKW			✓				
3VKVVL				✓			
3WWVQV		✓					
3ZV9DK		✓					
46K7FG		✓					
4BU8YY			✓				
68NZWX							UV-Vis
69KGAV			✓				
6EQA4Q							UV-Vis
6QFAUT						✓	
7J2MLP			✓				
7MZYGP		✓					
7NVGJQ						✓	
7P3YGL			✓				
7QVPM2				✓			UV
7WPP4G			✓				
87LC9J							HPLC
8A68AQ						✓	
8B2MLM			✓				
8EZYHM			✓				
8WWNBV			✓				
9DMN6G			✓				
9MBK4W							UV-Vis
AJMMTB						✓	

TABLE 4

WebCode	GC	GC/MS	GC/FID	LC	LC/MS	NMR	Other
AU72UR						✓	
BADHFK							UV-Vis
BPQQFN			✓				
BVT3CL						✓	
BXZHJR							UV-Vis
BYVXVN			✓				
C6X83G						✓	
CB44LG						✓	
CZ739C			✓				
D2T2ZF						✓	
D7NT9D					✓	✓	
D8JCAE							LC Diode Array Detector (LCDAD)
DR8XTG							UV
DXDQMC						✓	
E33QEC							HPLC
ELZQT4							LC-MS/MS
EPDQMA		✓				✓	FTIR
EXNT9B				✓			
F288CB							LC/UV/MS
FXMF29			✓				
G7W72Q			✓				
GFJ6UG		✓					
H8J6VE							UV-Vis Spectroscopy
H8MPHH			✓				
J3QBGE							UPLC
JTZYY7						✓	
KA4T77							LCUVMS
KC7QED							NMR
KKZYY4			✓				
KQNJ3J				✓			
KZYLNK				✓			
L8RF2A							UV-Vis
L9MY3B						✓	
LJ6GX3			✓				
LQ46CL			✓				
MHT4QK			✓				

TABLE 4

WebCode	GC	GC/MS	GC/FID	LC	LC/MS	NMR	Other
MKU24Y		✓	✓				
MP8A3H			✓				
MQ3R6J				✓			UV/Vis
NCCF6E				✓			
NFYMZA		✓					
NG8A3F		✓					
NRA8DB						✓	
PBX9JX			✓				
PJDR2C							UV-Vis
PTHWUT							HPLC-DAD
QKF9DC			✓				
R72ZEU							UV-Vis
RERLH8			✓				
RGVG2A						✓	
RHA732						✓	
T9Z2PB							LC/UV
TC3Y3N					✓		
TCJT2D						✓	
TDFC3E	✓						
THL387					✓		
TX4VVC							LCUV
UAQLV8						✓	
UDAE8A			✓				
UG9RUY						✓	
UVT8XY			✓				
UWMX4D		✓					
UXXZPC				✓			
VHEWKT			✓				
VJUUDR			✓				
VLXPWV							UV
VMT8XW						✓	
VUVG6P				✓			
VZFKA7						✓	
W4DHX4							UV-Vis
W69ZZ6			✓				Analytical Balance
WJNY8R				✓			

TABLE 4

WebCode	GC	GC/MS	GC/FID	LC	LC/MS	NMR	Other
X3WNXU							HPLC-DAD
X3Z9KW						✓	
XEANTM				✓			
XLDLLZ				✓			
XZTQM2			✓				FTIR
Y3UDEW							UV-Vis
YM3FEL						✓	
ZE4AW6			✓				
ZL236Y			✓				
ZXE32R			✓				

Response Summary Participants: **116**

Method:	GC	GC/MS	GC/FID	LC	LC/MS	NMR	UV-Vis
Participants:	1	12	37	14	3	25	22
Percent:	0.9%	10.3%	31.9%	12.1%	2.6%	21.6%	19.0%

Additional Comments

TABLE 5

WebCode	Additional Comments
3GKG9X	Item 1: 0.4947 ± 0.0014 gram of powder, found to contain Methamphetamine HCl (Schedule II), 57.3 ± 5.0% pure. (Methods: WM and GC-FID) Item 2: 0.4911 ± 0.0014 gram of powder, found to contain Methamphetamine HCl (Schedule II), 90.5 ± 7.0% pure. [Methods: WM and GC-FID] Measurement uncertainty of weight and purity measurements is reported at a 95.45% level of confidence. Methods: Weight Measurement (WM) and Gas Chromatography-Flame Ionization Detection (GC-FID) Dates of testing: 5/21/2026 - 5/26/2026.
6QFAUT	creatine observed but not reported in Item 1
7MZYGP	Calculations were completed for the Methamphetamine Hydrochloride conversion per PT instructions.
7P3YGL	Each Item % purity determined from 12 replicate injections, the two highest and two lowest are excluded from the 8 entries for Question 2 (above)
7WPP4G	Item 1 contain : 56.7% Methamphetamine HCl. Item 2 contain : 88.7 % Methamphetamine HCl.
8A68AQ	Possible creatinine and other impurities detected in both samples, not reported.
8EZYHM	12 injections made up the average. The lowest two and highest two values for each item were excluded from question 2 above.
AU72UR	Methamphetamine quantitation is performed by taking two extracts of the sample and performing NMR analysis on the samples. The two extracts must fall within 2.5% of one another, and an average of the two samples is reported as the concentration.
DXDQMC	Item 2 could not be quantitated because of an instrumental problem. Methamphetamine was identified.
EPDQMA	NMR- 80 MHz
LQ46CL	The average of the raw data percentages is used to determine the amount of methamphetamine HCL in each item with a uncertainty of 6%.
PBX9JX	The result of methamphetamine in base form were quantified using GC-FID and calculate by applying salt to base ratio and the result are : Item 1 : 57.2% Item 2 : 89.3%
RERLH8	The item is first confirmed on GCMS for the presence of methamphetamine and then run as previously stated on our GCFID for quantitation. Each sample has 2 aliquots tested. Those 2 aliquot are each injected intriplicate. Those triplicate injections are averaged and then the 2 aliquot averages are truncated to the nearest whole percent (to the ones place).
THL387	Average Base purities: Item 1 = 38.06%. Item 2 = 63.99%.
VMT8XW	Item 1 could not be quantitated due to an instrument problem. Methamphetamine was identified.
VZFKA7	Per procedure, sample was confirmed to contain Methamphetamine prior to quantitative analysis.
X3Z9KW	Items 1 and 2 were also measured by HPLC-(HILIC)-DAD technique. The results are: for Item1: 57,0±3,4 weight % methamphetamine-HCl. for Item2: 90,7±5,1 weight % methamphetamine-HCl.

Supplemental: Hotelling T-Squared Bivariate Control Analysis

Hotelling T-Squared Bivariate Control Analysis is used in many other industries to examine results. Although not typically used in forensic science, CTS is presenting an introduction to this type of statistical data analysis. A laboratory may choose to delve deeper in a participant's results by studying both sets of statistics available in this report. The statistics presented in Table 3 (Raw Data) of this report examine the results of each item independently of each other. However, because the same materials are chosen for both samples, there should be a correlation of measurement performance between the two samples. A bivariate analysis technique judges measurement performance on both samples simultaneously, represented as an ellipse. For each participant, the mean of Item 1 (x-axis) is plotted against the mean of Item 2 (y-axis). The horizontal and vertical cross-hairs are the grand means for each Item. When 20 or more participants are included in the statistics, an ellipse is drawn so that 99% of the time a randomly selected participant will be included inside.

When considering your participant's position on the plot relative to the ellipse, remember that, generally speaking, if a participant's plotted point falls on the major axis outside of the ellipse, the participant is consistent in its measurements between the two samples but exhibits an offset from the grand mean (systematic difference). If a plotted point falls to the side of the ellipse, it indicates possible differences in the way that the participant tested the two samples or differences in sample behavior (consistency difference). The two-sample plot enables you to see which sample, if either, is "extreme" and to ascertain the nature of the "extreme" data.

Systematic Difference

Bias is illustrated in the control ellipse on the two sample plot. If a particular analysis/sample combination did not show bias, the control ellipse would become a circle. Differences in procedures, conditions, instrumentation and sample preparation all contribute to the bias of a participant. When these differences become too large, a participant may receive a Data Flag. When the test results for both samples are both high or low compared to the group, a participant has a fixed set of factors on which to focus to identify a cause. Furthermore, since additional testing on similar samples should produce similar high or low results, it is possible to determine that a systematic error has been successfully corrected.

Consistency Difference

The participant's results indicate that there are differences in the way the two samples were tested (the plotted point falls to the side of the ellipse). This type of error may be attributed to the analyst deviating from the procedure when testing one of the samples or a material interaction occurrence with the instrument or room conditions. The inconsistency is reflected in the Comparative Performance Values (CPV) for the two samples, such as a +1.5 CPV for Item 1 and a -2.2 CPV for Item 2. CPV is the number of standard deviations a value is from the grand mean.

Key for Data Flags

Data Flag	Statistically Included/Excluded	Explanation
*	Included	Results fall outside 99% ellipse, but within a 99.5% control limit (ellipse) that is calculated.
X	Excluded	Results fall outside 99.5% control limit.
M	Excluded	Data is missing for at least one item.

Bivariate Control Analysis

WebCode	Data Flag	Item 1			Item 2		
		Participant Mean	Difference from Grand Mean	CPV	Participant Mean	Difference from Grand Mean	CPV
26BJQN		58.18	0.904	0.52	91.47	1.679	0.57
274AW3		59.07	1.791	1.03	91.54	1.751	0.59
2JPPZ3	X	57.57	0.291	0.16	99.13	9.338	3.01
2K7LT3		58.51	1.232	0.71	92.03	2.239	0.75
2MAHC6		55.49	-1.791	-1.05	86.27	-3.524	-1.09
2PE32Q		55.55	-1.726	-1.01	88.30	-1.489	-0.44
2V7AKY		55.42	-1.856	-1.09	87.91	-1.877	-0.57
2W3PWV		60.63	3.357	1.95	94.64	4.852	1.58
3C7LTZ		57.54	0.259	0.14	90.68	0.888	0.32
3GKG9X		57.29	0.018	0.00	90.49	0.698	0.26
3M7AKW		58.20	0.924	0.53	94.49	4.696	1.53
3VKVVL		59.42	2.148	1.24	92.39	2.605	0.86
3WWVQV		55.72	-1.556	-0.91	82.93	-6.859	-2.16
3ZV9DK		58.28	0.999	0.57	89.17	-0.619	-0.16
46K7FG	X	45.03	-12.251	-7.13	66.55	-23.239	-7.38
4BU8YY		57.60	0.323	0.18	90.99	1.203	0.42
68NZWX		58.90	1.624	0.94	93.00	3.211	1.06
69KGAV		60.06	2.779	1.61	96.94	7.146	2.31
6EQA4Q		58.11	0.830	0.48	89.92	0.134	0.08
6QFAUT		56.74	-0.540	-0.32	88.88	-0.908	-0.26
7J2MLP		56.98	-0.301	-0.18	88.60	-1.189	-0.35
7MZYGP		57.70	0.424	0.24	87.59	-2.199	-0.67
7NVGJQ		57.71	0.434	0.25	90.28	0.491	0.19
7P3YGL		57.37	0.098	0.05	89.93	0.145	0.08
7QVPM2		54.78	-2.496	-1.46	86.95	-2.842	-0.87

WebCode	Data Flag	Item 1 Participant Mean	Item 1 Difference from Grand Mean	Item 1 CPV	Item 2 Participant Mean	Item 2 Difference from Grand Mean	Item 2 CPV
7WPP4G		56.70	-0.576	-0.34	88.70	-1.089	-0.31
87LC9J		58.96	1.688	0.97	91.44	1.648	0.56
8A68AQ		56.42	-0.854	-0.50	89.59	-0.198	-0.03
8B2MLM		57.39	0.110	0.06	90.05	0.256	0.11
8EZYHM		56.17	-1.104	-0.65	88.18	-1.611	-0.48
8WWNBV		55.96	-1.316	-0.77	89.10	-0.690	-0.19
9DMN6G		57.50	0.224	0.12	88.86	-0.929	-0.26
9MBK4W		55.89	-1.386	-0.81	92.29	2.501	0.83
AJMMTB		58.50	1.224	0.71	90.10	0.311	0.13
AU72UR		56.99	-0.291	-0.18	89.39	-0.404	-0.10
BADHFK		58.49	1.209	0.70	92.36	2.574	0.85
BPQQFN		58.69	1.409	0.81	95.09	5.301	1.72
BVT3CL		57.01	-0.271	-0.16	92.46	2.671	0.88
BXZHJR		62.40	5.124	2.97	94.10	4.311	1.41
BYVXVN		58.74	1.459	0.84	95.14	5.346	1.74
C6X83G		58.30	1.022	0.59	89.54	-0.246	-0.05
CB44LG		56.53	-0.743	-0.44	88.94	-0.849	-0.24
CZ739C		55.47	-1.806	-1.06	87.53	-2.256	-0.69
D2T2ZF		56.95	-0.323	-0.19	89.63	-0.159	-0.02
D7NT9D		57.15	-0.126	-0.08	88.50	-1.288	-0.38
D8JCAE		58.17	0.894	0.51	90.73	0.945	0.33
DR8XTG		57.36	0.084	0.04	89.74	-0.049	0.02
DXDQMC	M	55.90	-1.376	-0.81			
E33QEC		59.80	2.528	1.46	91.84	2.051	0.69
ELZQT4	X	41.33	-15.946	-9.28	78.54	-11.249	-3.56
EPDQMA		56.88	-0.401	-0.24	89.25	-0.539	-0.14
EXNT9B		57.46	0.186	0.10	87.72	-2.070	-0.63

WebCode	Data Flag	Item 1 Participant Mean	Item 1 Difference from Grand Mean	Item 1 CPV	Item 2 Participant Mean	Item 2 Difference from Grand Mean	Item 2 CPV
F288CB		57.55	0.274	0.15	89.18	-0.612	-0.16
FXMF29		56.53	-0.743	-0.44	88.48	-1.314	-0.39
G7W72Q		56.17	-1.106	-0.65	90.00	0.214	0.10
GFJ6UG		56.98	-0.296	-0.18	87.37	-2.419	-0.74
H8J6VE		59.38	2.109	1.22	92.60	2.813	0.93
H8MPHH		52.33	-4.949	-2.88	84.07	-5.724	-1.79
J3QBGE		54.60	-2.676	-1.56	87.25	-2.539	-0.78
JTZYY7		55.90	-1.376	-0.81	88.30	-1.489	-0.44
KA4T77		57.11	-0.171	-0.11	88.52	-1.274	-0.37
KC7QED		56.97	-0.307	-0.19	88.84	-0.948	-0.27
KKZYY4		56.80	-0.478	-0.28	89.62	-0.166	-0.02
KQNJ3J		56.56	-0.716	-0.42	88.08	-1.709	-0.51
KZYLNK		57.73	0.454	0.26	87.54	-2.249	-0.68
L8RF2A		59.68	2.402	1.39	92.77	2.982	0.98
L9MY3B		57.88	0.599	0.34	90.65	0.856	0.31
LJ6GX3		56.15	-1.126	-0.66	89.22	-0.574	-0.15
LQ46CL		56.63	-0.648	-0.38	90.12	0.329	0.14
MHT4QK		56.73	-0.551	-0.33	91.22	1.434	0.49
MKU24Y		57.49	0.214	0.12	89.60	-0.189	-0.03
MP8A3H		58.50	1.224	0.71	93.50	3.711	1.22
MQ3R6J		56.62	-0.656	-0.39	88.49	-1.302	-0.38
NCCF6E		54.59	-2.686	-1.57	87.85	-1.939	-0.59
NFYMZA	*	53.13	-4.142	-2.42	74.95	-14.839	-4.70
NG8A3F		56.03	-1.242	-0.73	90.00	0.211	0.10
NRA8DB		57.07	-0.203	-0.12	88.31	-1.483	-0.44
PBX9JX		57.21	-0.071	-0.05	89.30	-0.489	-0.12
PJDR2C		60.45	3.169	1.84	92.13	2.341	0.78

WebCode	Data Flag	Item 1 Participant Mean	Item 1 Difference from Grand Mean	Item 1 CPV	Item 2 Participant Mean	Item 2 Difference from Grand Mean	Item 2 CPV
PTHWUT	X	49.70	-7.579	-4.41	70.28	-19.508	-6.19
QKF9DC		58.84	1.561	0.90	90.29	0.496	0.19
R72ZEU		55.94	-1.331	-0.78	88.44	-1.346	-0.40
RERLH8		57.42	0.141	0.08	91.12	1.328	0.46
RGVG2A		56.95	-0.331	-0.20	89.51	-0.284	-0.06
RHA732		57.22	-0.056	-0.04	89.93	0.136	0.08
T9Z2PB		57.45	0.174	0.09	89.44	-0.347	-0.08
TC3Y3N		58.70	1.424	0.82	94.27	4.478	1.46
TCJT2D	X	46.45	-10.826	-6.30	73.14	-16.654	-5.28
TDFC3E		56.93	-0.343	-0.21	90.01	0.221	0.10
THL387	*	47.38	-9.900	-5.76	79.66	-10.133	-3.20
TX4VVC		54.86	-2.416	-1.41	87.09	-2.699	-0.83
UAQLV8		57.91	0.634	0.36	91.02	1.226	0.42
UDAE8A		57.50	0.224	0.12	89.50	-0.289	-0.06
UG9RUY		56.93	-0.346	-0.21	89.58	-0.214	-0.04
UVT8XY		57.18	-0.095	-0.06	89.84	0.051	0.05
UWMX4D		58.11	0.829	0.48	91.92	2.126	0.71
UXXZPC		56.76	-0.516	-0.31	88.00	-1.794	-0.54
VHEWKT		57.28	0.004	0.00	88.86	-0.934	-0.27
VJUUDR		56.60	-0.676	-0.40	89.80	0.011	0.04
VLXPWV		59.61	2.334	1.35	90.21	0.421	0.17
VMT8XW	M				89.70	-0.089	0.00
VUVG6P		57.64	0.364	0.21	88.63	-1.155	-0.34
VZFKA7		57.38	0.099	0.05	90.30	0.506	0.19
W4DHX4		59.77	2.498	1.45	93.99	4.198	1.37
W69ZZ6		57.13	-0.146	-0.09	89.05	-0.735	-0.20
WJNY8R		56.22	-1.061	-0.62	89.46	-0.334	-0.07

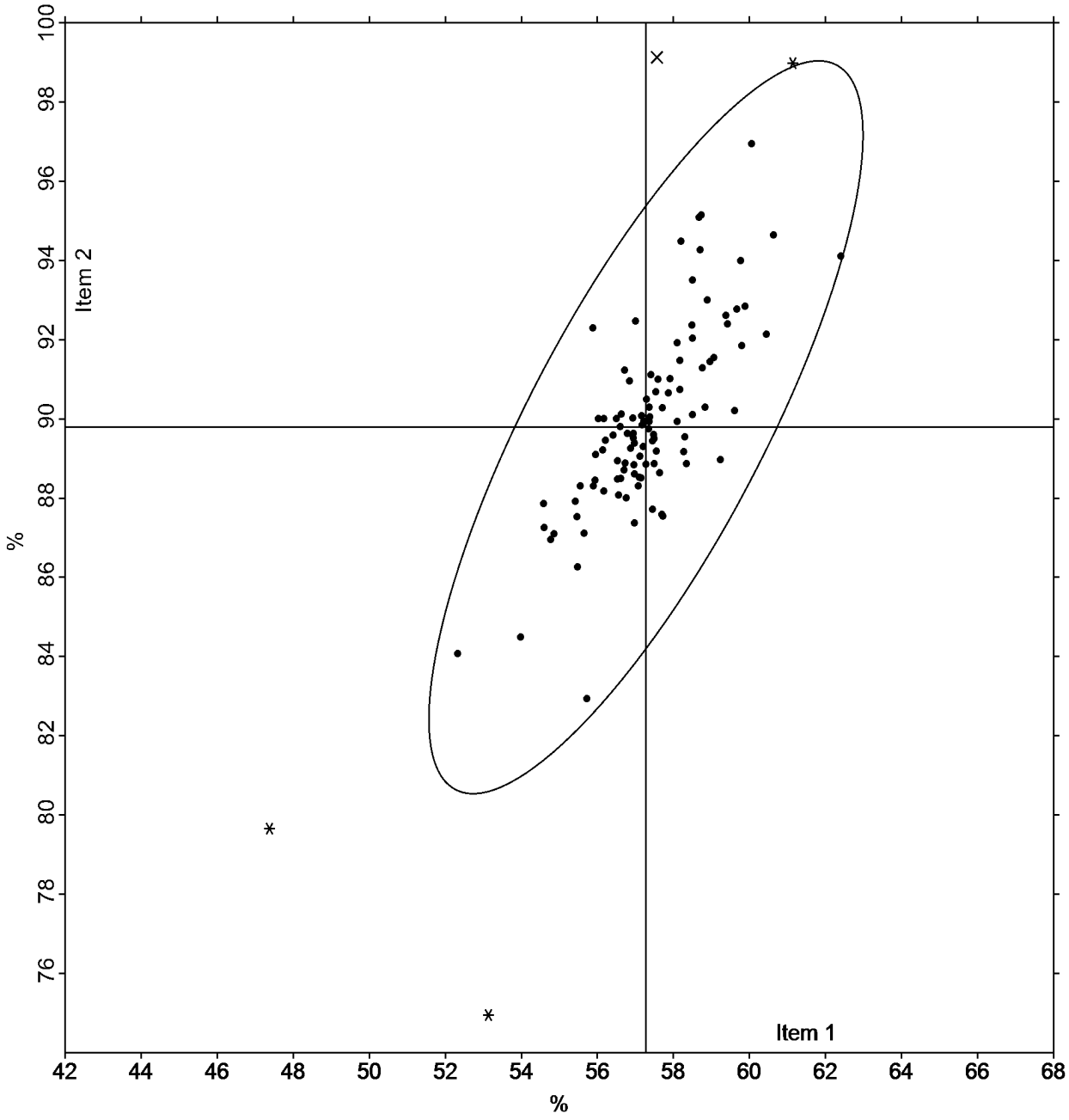
WebCode	Data Flag	Item 1 Participant Mean	Item 1 Difference from Grand Mean	Item 1 CPV	Item 2 Participant Mean	Item 2 Difference from Grand Mean	Item 2 CPV
X3WNXU		58.77	1.491	0.86	91.28	1.491	0.51
X3Z9KW		57.17	-0.109	-0.07	90.08	0.288	0.12
XEANTM		55.66	-1.614	-0.95	87.10	-2.685	-0.82
XLDLLZ		56.85	-0.426	-0.25	90.95	1.161	0.40
XZTQM2		59.89	2.614	1.51	92.84	3.046	1.00
Y3UDEW		59.23	1.959	1.13	88.96	-0.825	-0.23
YM3FEL		53.98	-3.296	-1.92	84.49	-5.299	-1.66
ZE4AW6		56.50	-0.776	-0.46	90.00	0.211	0.10
ZL236Y	*	61.14	3.864	2.24	98.98	9.191	2.97
ZXE32R		58.35	1.072	0.62	88.86	-0.930	-0.26

Response Summary	Item 1	Item 2	Participants: **116**
Preparation Concentration	**58%**	**90%**	
Grand Mean	57.28	89.79	
Standard Deviation	1.836	2.974	

Participants Included: 109 Participants Excluded: 5 Participants without Raw Data for Both Items: 2

Bivariate Control Analysis

Item 1 Grand Mean: 57.28 Item 2 Grand Mean: 89.79



*Not all participants marked as outliers (X) are seen on the graph above due to having mean values that are outside of the x-axis or y-axis percentage ranges.

-End of Report-
(Appendix may follow)

Collaborative Testing Services ~ Forensic Testing Program

Test No. 26-5051: Quantitative Drug Analysis - Methamphetamine HCl

DATA MUST BE SUBMITTED BY **June 29, 2026, 11:59 p.m. EDT** TO BE INCLUDED IN THE REPORT

Participant Code: U1234A WebCode: ZJH4XV

The Accreditation Release section can be accessed by using the "Continue to Final Submission" button above. This information can be entered at any time prior to submitting to CTS.

Test Description:
Investigators have submitted two powdered methamphetamine HCl samples from separate cases to be quantitatively examined. Using your laboratory's procedures, analyze each sample and report the quantitative determination of methamphetamine HCl present in the samples.

-Please follow your laboratory's policies and procedures for sample homogenization.

Items Submitted (Sample Pack DQ1):
Items 1 & 2: Powdered methamphetamine HCl samples

1a.) What is the concentration of methamphetamine HCl in each of the samples? (Results should be reported using your laboratory reporting criteria for decimal places, uncertainty, and units.)

	Reported Concentration	Uncertainty (k=)	Units
Item 1:		±	( )
Item 2:		±	( )

1b.) Are the values listed above:

- ○ The mean of duplicate / several determinations?
- ○ The lowest value of duplicate / several determinations?
- ○ Other? (Specify):

2.) Please list your raw data determinations below in percent of methamphetamine HCl. (Results not reported in % will be excluded from statistical calculations.) For the purposes of data submission, express results below in the HCl salt form. If your laboratory typically reports the base form, you may do so in the additional comments.

Item 1 (%)	**Item 2** (%)

3.) What methods were used to quantitatively examine the items?

- ☐ GC
- ☐ GC/MS
- ☐ GC/FID
- ☐ LC
- ☐ LC/MS
- ☐ Other (specify):
- ☐ NMR

4.) Additional Comments

Note: *Please use appropriate punctuation to indicate the end of sentences, sections, and statements in the free-form space below. Extra spacing and returns used for separation within your text will not transfer and may cause your information to be illegible in the Summary Report. The use of lists and tabular formats to deliver information is also cautioned against, as these do not transfer.*

RELEASE OF DATA TO ACCREDITATION BODIES

The Accreditation Release is accessed by pressing the "Continue to Final Submission" button online and can be completed at any time prior to submission to CTS.

CTS submits external proficiency test data directly to ANAB and/or A2LA. Please select one of the following statements to ensure your data is handled appropriately.

○ This participant's data is intended for submission to ANAB and/or A2LA. (Accreditation Release section below must be completed.)
○ This participant's data is **not** intended for submission to ANAB and/or A2LA.

Have the laboratory's designated individual complete the following steps
only if your laboratory is accredited in this testing/calibration discipline
by one or more of the following Accreditation Bodies.

Step 1: Provide the applicable Accreditation Certificate Number(s) for your laboratory

ANAB Certificate No.

A2LA Certificate No.

Step 2: Complete the Laboratory Identifying Information in its entirety

Authorized Contact Person and Title

Laboratory Name

Location (City/State)