Collaborative Testing Services, Inc
FORENSIC TESTING PROGRAM

Quantitative Drug Analysis - Methamphetamine HCl
Test No. 17-505 Summary Report

This test was sent to 110 participants. Each sample set consisted of two items with different concentrations of methamphetamine HCl. Participants were asked to determine the concentration of methamphetamine HCl in each item. Data were returned from 100 participants (91% response rate) and are compiled into the following tables:

Manufacturer's Information

Each sample pack consisted of two items containing different concentrations of methamphetamine HCl and caffeine. Participants were requested to analyze each item and report the quantitative determination of methamphetamine HCl present in the samples.

SAMPLE PREPARATION-
The appropriate amount of methamphetamine HCl and caffeine for each Item were mixed using a mortar and pestle to ensure homogeneity.

ITEMS 1 and 2 (PREPARATION): For each Item, approximately 500 mg of the powder was weighed out and deposited into a glassine bag, which was folded and secured with a label. The folded glassine bag was placed into a small zip top bag and heat sealed closed. The heat sealed bag was then placed into a pre-labeled 5 1/2 inch coin envelope.

SAMPLE PACK ASSEMBLY: One of each of the Item 1 and Item 2 envelopes was placed into a larger pre-labeled sample pack envelope.

VERIFICATION: Laboratories that conducted predistribution analysis of the samples reported consistent results that were comparable to the preparation concentrations of methamphetamine HCl. The following methods were used to examine the items: GC/FID, GC, and LC.

Item	Preparation methamphetamine HCl
1	57%
2	85%

Summary Comments

This test was designed to allow participants to assess their proficiency in the determination of methamphetamine HCl concentration. Each participant was supplied with a sample set consisting of two items containing caffeine and different concentrations of methamphetamine HCl. Participants were requested to determine the methamphetamine HCl concentration for both items. (Refer to the Manufacturer's Information for preparation details.)

The results are separated into two tables, the reported results and the raw analytical data. 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 data shows the results from each determination made by the laboratory to produce their reported results.

The raw data was used to calculate the grand mean and the standard deviation for each item. Participants with "extreme" data (±3 STD from grand mean) have been marked with an "X" and their results were excluded from the calculations of the grand mean and standard deviation. Six participants reported extreme data for Item 1 and seven participants reported extreme data for Item 2. Of those, five of the participants reported "extreme" data for both Items and the mean of their raw data was lower than the grand mean. The grand mean and standard deviation are supplied to assist the participants and accrediting bodies in determining the acceptability of the results.

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, an ellipse was drawn so that 95% of the time a randomly selected participant was inside it. Seven participants whose results fell outside of the 95% ellipse, but within the 99% control limit have been marked with a "*". An additional eight participants with results that fell outside the 99% control limit have been marked with an "X" and their 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.

Participants used a variety of methods to examine the samples. The most common method of analysis utilized was GC/FID.

Reported Results

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

TABLE 1 - Reported Results

WebCode	Item 1	Item 2	
Preparation concentration:	**57%**	**85%**	**Coverage factor k**
2WPZBC	59 ± 6 (%)	86 ± 9 (%)	3
3PPZDV	56.0 ± 5.2 (%)	80.8 ± 7.5 (%)	2
3RHPZW	56.7 ± 5.3 (%)	83.5 ± 7.8 (%)	2
69C4DT	55.2 ± 5.1 (%)	82.4 ± 7.7 (%)	2
6XVG4R	56 ± 7 (%)	83 ± 7 (%)	2
6YNBYB	59.0% ± 5.9% (%)	79.0% ± 7.9% (%)	
77ZTR9	57.7 ± 4.9 %	85.7 ± 7.0 %	2.65
7CP9H2	44.7 ± 4.8 (%)	64.0 ± 5.0 (%)	2.025
7HWWZ9	54.9 ± 5.0 (% (as HCl salt))	83.3 ± 5.0 (% (as HCl salt))	2
8HTUJ4	51.9 ± 5.5 (%)	78.5 ± 9.0 (%)	2
8JKTX2	55.2 (%)	82.7 (%)	
97HEJP	56.3 ± 5.3 (%)	87.2 ± 8.1 (%)	
9BTK33	52.98 ± 3.71 (%)	80.94 ± 5.67 (%)	95
9ER4WN	56.0 ± 5.2 (%)	83.8 ± 7.8 (%)	2
9MYMDY	54.9 ± 2.9 (wt%)	82.9 ± 4.3 (wt%)	2
ACEZG3	55 ± 6 (%)	83 ± 9 (%)	3
ARR2KK	60 ± 5 (%)	89 ± 5 (%)	2.05
AYC8BZ	53.8 ± 3.2 (% (w/w))	84.5 ± 5.1 (% (w/w))	2
B2CXW7	55.8 ± 3.5 (%)	84.3 ± 5.3 (%)	3
BD73BX	56.1 ± 3.6 (%w/w)	84.4 ± 5.4 (%w/w)	2
BEJQLX	54.5 ± 4.2 (wt%)	83.5 ± 6.4 (wt%)	3
BMCX63	52 ± 3 (%)	80 ± 4 (%)	2

TABLE 1 - Reported Results

WebCode	Item 1	Item 2	
Preparation concentration:	**57%**	**85%**	**Coverage factor k**
BN9JLZ	54 ± 28 (%)	83 ± 9.2 (%)	3
BUD9GM	56.9 ± 5.3 (%)	83.5 ± 7.8 (%)	2
CEEMAX	54.6 ± 3.2 (% (w/w))	81.7 ± 4.8 (% (w/w))	2
CHD2WM	55.4 ± 5.2 (%)	85.3 ± 7.9 (%)	2
CQBWUL	54.4 ± 5.1 (%)	83.4 ± 7.8 (%)	2
CRFLWU	56.9 ± 0.6 (%)	85.2 ± 1.0 (%)	2
CYKCPZ	0.28 ± 0.02 (grams)	0.43 ± 0.03 (grams)	2
E7XQL3	54.4 ± 10 (%)	83.9 ± 10 (%)	3
EULJMG	54 ± 28 (%)	84 ± 9.2 (%)	3
FGANPX	56 ± 3 (%)	84 ± 4 (%)	2
GEJW8Y	60 ± 10 (%)	88 ± 15 (%)	2
GFBUGR	56 ± 3 (%)	85 ± 3 (%)	2.025
GKR9AR	55.09 ± 1.5 (wgt/vol)	84.95 ± 2.1 (wgt/vol)	
GN3B7V	58.7 ± 5.5 (%)	88.8 ± 8.3 (%)	2
GQDBAG	56.5 ± 5.2 (%)	82.6 ± 7.7 (%)	2
GZ24KD	50 ± 6 (%)	76 ± 9 (%)	2.576
H3LD7Y	57 ± 6 (%)	87 ± 7 (%)	2.571
HBY7GU	56.3 ± 8.4 (%)	95.9 ± 15.7 (%)	2.65
HUAXJW	55 ± 6 (%)	82 ± 6 (%)	2
JDX46T	54.3 ± 5.1 (%)	84.4 ± 7.9 (%)	2
JJNCPL	53.5 ± 0.619 (%)	83.0 ± 0.470 (%)	
JLUQLR	0.28 ± 0.02 (grams)	0.41 ± 0.02 (grams)	2
JRK8TC	55 ± 28 (%)	85 ± 9.2 (%)	3
JZCP4E	51.6 ± 4.8 (%)	82.9 ± 7.7 (%)	2

TABLE 1 - Reported Results

WebCode	Item 1	Item 2	
Preparation concentration:	**57%**	**85%**	**Coverage factor k**
JZUN9P	57.6 ± 1.3 (%)	84.6 ± 1.9 (%)	2.2
K3WXQK	57.1% ± 1.14%	84.3% ± 0.428%	
KAULNC	56.2 ± 5.2 (%)	82.5 ± 7.7 (%)	2
KFJ9DP	58.4 ± 7.4 (%)	87.5 ± 14.2 (%)	
KGXHFP	55.41 ± 1.5 (wgt/vol)	80.23 ± 2.1 (wgt/vol)	
KVBXEE	55.3 ± 5.2% (%)	85.9 ± 8.0 (%)	2
LACW3B	53 ± 28 (%)	81 ± 9.2 (%)	3
LDAHML	57 ± 3 (%)	86 ± 3 (%)	2.025
LKQWQR	56.3 ± 7.4 (%)	86.8 ± 22.1 (%)	2.65
LUHARC	53.7 ± 5.0 (%)	83.7 ± 7.8 (%)	2
MBL4YC	58.5 ± 5.5 (% meth HCl)	82.5 ± 7.7 (% meth HCl)	2
MD83W8	56 ± 6 (%)	86 ± 6 (%)	2
MHXHJT	58.1 ± 2.1	87.8 ± 2.1	1.05327
MQRRPH	56.6 ± 1.4 (%)	86.7 ± 1.3 (%)	2
N2BJU7	56 ± 6 (%)	86 ± 6 (%)	2
NQ89HP	55 ± 3 (%)	84 ± 4 (%)	2
PCLBX7	57 ± 7 (%)	86 ± 7 (%)	95
PHTM9L	57.0 ± 4.5 (%)	86.8 ± 7.8 (%)	2.65
PM33FN	56 ± 3 (%)	84 ± 4 (%)	2
QD2QAM	54.7 ± 2.8 (%)	78.6 ± 4.0 (%)	2
QU3RMK	54 ± 28 (%)	84 ± 9.2 (%)	3
QZ7GH8	53.4 ± 5.0 (%)	79.0 ± 7.4 (%)	2
R93QAH	58.7 ± 3 (%)	86.4 ± 4.4 (%)	2

TABLE 1 - Reported Results

WebCode	Item 1	Item 2	
Preparation concentration:	**57%**	**85%**	**Coverage factor k**
RAB4RJ	methamphetamine 56% ± 0.28 ± 0.02 (grams)	82% meth ± 0.41 ± 0.02 (grams)	6%
REL6NM	57.1 ± 5.5%	85.8 ± 7.1%	2.65
RGBDCQ	56.5 ± 1.9 (%)	84.4 ± 1.9 (%)	2
RXBLRG	58 ± 4.50 (%)	86 ± 4.50 (%)	2
TFBPB7	54.2 ± 5.1 (%)	84.8 ± 7.9 (%)	2
TPXRCE	55 ± 3 (%)	84 ± 4 (%)	
TV7FPF	54.5 ± 3.4 (% (w/w)	84.5 ± 5.3 (% (w/w))	2
UG43B4	56.9 ± 5.3 (%)	83.6 ± 7.8 (%)	2
UJT9VZ	58 ± 5 (%)	84 ± 5 (%)	2.05
V3X9FK	0.181 ± 0.0362 (mg/mg)	0.367 ± 0.0734 (mg/mg)	2
V4DK4H	54 ± 3 (%)	84 ± 4 (%)	2
V7GDXG	55 ± 28 (%)	84 ± 9.2 (%)	3
VZA2QH	58 ± 6 (%)	87 ± 10 (%)	3
W2LTLK	57.6 ± 10.2 (%)	85.3 ± 15.2 (%)	2.23
W8LF9D	54.6 ± 3.5 (% (w/w))	82.2 ± 5.2 (% (w/w))	2
WL468F	57.6 ± 7.0 (%)	84.2 ± 7.0 (%)	2
XA8JGB	55.4 ± 1.8 (% w/w)	81.7 ± 2.7 (% w/w)	
XFYJ2X	55.4 ± 3.3 (%)	84.8 ± 3.3 (%)	3
XJYUWX	56 ± 28 (%)	85 ± 9.2 (%)	3
XXGP6G	54 ± 6 (%)	83 ± 6 (%)	2
XYMARG	55 ± 6 (%)	84 ± 6 (%)	2
XZ7VPE	56.6 ± 7.3 (%)	92.1 ± 8.1 (%)	2.65
Y7QDHF	54.5 ± 3.1% (%)	83.2 ± 3.5% (%)	2

TABLE 1 - Reported Results

WebCode	Item 1	Item 2	
Preparation concentration:	**57%**	**85%**	**Coverage factor k**
Y9C7JB	57.8 ± 2.1 (%)	88.8 ± 3.2 (%)	2
YJQC7C	55 ± 3 (%)	84 ± 4 (%)	2
Z6N7Q8	54 ± 3 (%)	83 ± 3 (%)	2.025
Z9R2AB	57.8 ± 5.2 %	85.7 ± 7.7 %	2.65
ZF9CNC	59.2 ± 6.4 ((%) HCl)	86.7 ± 9.0 ((%) HCl)	2.65
ZKMXMB	61 ± 6.1 (%)	91 ± 9.1 (%)	
ZU9D3X	54.8 ± 5.1 (%)	83.6 ± 7.8 (%)	2

Reporting Procedures

TABLE 2

WebCode	Reporting Procedures
2WPZBC	The mean of duplicate/several determinations.
3PPZDV	The mean of duplicate/several determinations.
3RHPZW	The mean of duplicate/several determinations.
69C4DT	The mean of duplicate/several determinations.
6XVG4R	The mean of duplicate/several determinations.
6YNBYB	The mean of duplicate/several determinations. Average normalized area
77ZTR9	The mean of duplicate/several determinations.
7CP9H2	The mean of duplicate/several determinations.
7HWWZ9	The mean of duplicate/several determinations.
8HTUJ4	The mean of duplicate/several determinations.
8JKTX2	The mean of duplicate/several determinations.
97HEJP	The mean of duplicate/several determinations.
9BTK33	The mean of duplicate/several determinations.
9ER4WN	The mean of duplicate/several determinations.
9MYMDY	The mean of duplicate/several determinations.
ACEZG3	The mean of duplicate/several determinations.
ARR2KK	The lowest value of duplicate/several determinations.
AYC8BZ	The mean of duplicate/several determinations.
B2CXW7	The mean of duplicate/several determinations.
BD73BX	The mean of duplicate/several determinations.
BEJQLX	The mean of duplicate/several determinations.
BMCX63	Average of 6 different integrals
BN9JLZ	The mean of duplicate/several determinations.
BUD9GM	The mean of duplicate/several determinations.
CEEMAX	The mean of duplicate/several determinations.

TABLE 2

WebCode	Reporting Procedures
CHD2WM	The mean of duplicate/several determinations.
CQBWUL	The mean of duplicate/several determinations.
CRFLWU	The mean of duplicate/several determinations.
CYKCPZ	The mean of duplicate/several determinations.
E7XQL3	The mean of duplicate/several determinations.
EULJMG	The mean of duplicate/several determinations.
FGANPX	The mean of duplicate/several determinations.
GEJW8Y	The mean of duplicate/several determinations.
GFBUGR	The mean of duplicate/several determinations.
GKR9AR	The mean of duplicate/several determinations.
GN3B7V	The mean of duplicate/several determinations.
GQDBAG	The mean of duplicate/several determinations.
GZ24KD	The mean of duplicate/several determinations.
H3LD7Y	The mean of duplicate/several determinations.
HBY7GU	The mean of duplicate/several determinations.
HUAXJW	Triplicate injection average of one sample each
JDX46T	The mean of duplicate/several determinations.
JJNCPL	The lowest value of duplicate/several determinations.
JLUQLR	The mean of duplicate/several determinations.
JRK8TC	The mean of duplicate/several determinations.
JZCP4E	The mean of duplicate/several determinations.
JZUN9P	The mean of duplicate/several determinations.
K3WXQK	The mean of duplicate/several determinations.
KAULNC	The mean of duplicate/several determinations.
KFJ9DP	The mean of duplicate/several determinations.
KGXHFP	The mean of duplicate/several determinations.

TABLE 2

WebCode	Reporting Procedures
KVBXEE	The mean of duplicate/several determinations.
LACW3B	The mean of duplicate/several determinations.
LDAHML	The mean of duplicate/several determinations.
LKQWQR	The mean of duplicate/several determinations.
LUHARC	The mean of duplicate/several determinations.
MBL4YC	The mean of duplicate/several determinations.
MD83W8	The mean of duplicate/several determinations.
MHXHJT	The mean of duplicate/several determinations.
MQRRPH	The lowest value of duplicate/several determinations.
N2BJU7	The mean of duplicate/several determinations.
NQ89HP	The mean of duplicate/several determinations.
PCLBX7	The mean of duplicate/several determinations.
PHTM9L	replicate relative standard deviation
PM33FN	The mean of duplicate/several determinations.
QD2QAM	The lowest value of duplicate/several determinations.
QU3RMK	The mean of duplicate/several determinations.
QZ7GH8	The mean of duplicate/several determinations.
R93QAH	The mean of duplicate/several determinations.
RAB4RJ	The mean of duplicate/several determinations.
REL6NM	The mean of duplicate/several determinations.
RGBDCQ	The mean of duplicate/several determinations.
RXBLRG	The mean of duplicate/several determinations.
TFBPB7	The mean of duplicate/several determinations.
TPXRCE	The mean of duplicate/several determinations.
TV7FPF	The mean of duplicate/several determinations.
UG43B4	The mean of duplicate/several determinations.

TABLE 2

WebCode	Reporting Procedures
UJT9VZ	The lowest value of duplicate/several determinations.
V4DK4H	single point determination
V7GDXG	The mean of duplicate/several determinations.
VZA2QH	The mean of duplicate/several determinations.
W2LTLK	The mean of duplicate/several determinations.
W8LF9D	The mean of duplicate/several determinations.
WL468F	The mean of duplicate/several determinations.
XA8JGB	The mean of duplicate/several determinations.
XFYJ2X	The lowest value of duplicate/several determinations.
XJYUWX	The mean of duplicate/several determinations.
XXGP6G	The mean of duplicate/several determinations.
XYMARG	The mean of duplicate/several determinations.
XZ7VPE	The mean of duplicate/several determinations.
Y7QDHF	The mean of duplicate/several determinations.
Y9C7JB	The mean of duplicate/several determinations.
YJQC7C	One determination
Z6N7Q8	The mean of duplicate/several determinations.
Z9R2AB	The mean of duplicate/several determinations.
ZF9CNC	The mean of duplicate/several determinations.
ZKMXMB	The mean of duplicate/several determinations.
ZU9D3X	The mean of duplicate/several determinations.

Response Summary   Participants: 98

The mean of duplicate/several determinations:	86	(87.8%)
The lowest value of duplicate/several determinations:	6	(6.1%)
Other:	6	(6.1%)

Raw Data

List of raw data determinations in percent.

TABLE 3 - Item 1

WebCode	Item 1		Preparation target concentration : 57%					Mean
2WPZBC	58.08	58.94						58.51
3PPZDV	57.05	55.14						56.10
3RHPZW	45.56	45.91						45.74 X
69C4DT	55.26	55.28						55.27
6XVG4R	55.00	56.00	58.00					56.33
6YNBYB	59.04							59.04
77ZTR9	56.48	58.51	56.83	58.45	57.65	57.98		57.65
7CP9H2	44.78	44.62						44.70 X
7HWWZ9	54.40	55.00	55.40	56.20	54.70	53.60	55.00	54.90
8HTUJ4	52.43	51.65	53.16	52.43	49.17	52.79		51.94
8JKTX2	56.60	53.70						55.15
97HEJP	56.83	55.91						56.37
9BTK33	54.01	51.95						52.98
9ER4WN	56.30	55.80						56.05
9MYMDY	54.35	55.48						54.92
ACEZG3	54.79	55.36						55.08
ARR2KK	60.90	60.90	60.90	62.60	61.90	62.60		61.63 X
AYC8BZ	53.85	54.02	53.54	53.60				53.75
B2CXW7	55.20	56.40						55.80
BD73BX	55.43	56.84						56.14
BEJQLX	55.20	55.20	53.90	53.80				54.53
BMCX63	52.80							52.80
BN9JLZ	54.22	54.66						54.44
BUD9GM	58.82	55.03						56.93
CEEMAX	55.02	55.15	53.96	54.15				54.57
CHD2WM	55.81	55.10						55.46
CQBWUL	54.00	54.93						54.47
CRFLWU	56.88	56.86	57.00	56.95				56.92
CYKCPZ	57.16	56.53	57.01	56.70				56.85
E7XQL3	54.40	54.40	54.50	54.50				54.45

TABLE 3 - Item 1

WebCode	Item 1		Preparation target concentration : 57%				Mean
EULJMG	54.09	54.23					54.16
FGANPX	56.16	56.02	55.94	55.84	56.03	56.02	56.00
GEJW8Y	59.59	60.42					60.01
GFBUGR	56.88	57.27	55.79				56.65
GKR9AR	55.57	54.60					55.09
GN3B7V	59.56	57.96					58.76
GQDBAG	56.72	56.43					56.57
GZ24KD	49.00	49.00	51.00				49.67 X
H3LD7Y	56.54	56.53	57.37	58.23	56.48	58.97	57.35
HBY7GU	53.15	55.52	55.10	56.30	56.21	61.36	56.27
HUAXJW	55.39	55.15	55.39				55.31
JDX46T	55.20	53.50					54.35
JDYUDW	48.82						48.82 X
JJNCPL	53.10	53.80	53.30	53.90			53.53
JLUQLR	56.07	56.54	55.90	56.54			56.26
JRK8TC	54.80	54.60					54.70
JZCP4E	51.81	51.43					51.62
JZUN9P	56.79	58.49					57.64
K3WXQK	56.80	57.10	56.30	58.00			57.05
KAULNC	56.73	55.76					56.25
KFJ9DP	60.55	58.00	59.63	59.43	54.25	58.48	58.39
KGXHFP	55.56	55.28					55.42
KVBXEE	54.98	55.82					55.40
LACW3B	52.16	53.58	52.47	53.58	54.51	53.00	53.22
LDAHML	57.73	56.53	56.77				57.01
LKQWQR	53.14	56.05	59.05	58.86	55.43	55.43	56.33
LUHARC	52.89	54.68					53.78
MBL4YC	57.63	59.42					58.53
MD83W8	56.96	56.79	56.51				56.76
MHXHJT	57.82	58.19	58.72	57.97			58.17
MQRRPH	57.80	56.30	56.40	55.80			56.58
N2BJU7	56.27	55.88	55.86				56.01

TABLE 3 - Item 1

WebCode	Item 1	Preparation target concentration : 57%					Mean
NQ89HP	55.94	55.62					55.78
PCLBX7	57.03	57.79	58.87				57.90
PHTM9L	56.79	57.53	56.67	56.70	56.83	57.30	56.97
PM33FN	56.37	56.38	56.81	56.78			56.59
QD2QAM	55.50	54.70					55.10
QU3RMK	53.96	53.90					53.93
QZ7GH8	53.60	53.20					53.40
R93QAH	58.71	58.74					58.73
RAB4RJ	56.63	57.38	56.10	57.20			56.83
REL6NM	57.48	55.89	59.15	55.84	57.50	56.85	57.12
RGBDCQ	56.50	56.40					56.45
RXBLRG	57.97	57.13					57.55
TFBPB7	54.30	54.10					54.20
TPXRCE	56.24	56.31	55.91	55.49			55.99
TV7FPF	55.28	55.27	53.69	53.74			54.50
UG43B4	55.69	58.28					56.99
UJT9VZ	58.00	58.00	58.00	59.00	59.00	58.80	58.47
V3X9FK	18.11						18.11 X
V4DK4H	54.96						54.96
V7GDXG	55.31	54.76					55.04
VZA2QH	57.55	59.43					58.49
W2LTLK	58.10	56.10	58.60				57.60
W8LF9D	55.36	55.55	53.74	53.64			54.57
WL468F	61.37	58.15	55.78	56.92	55.91	57.19	57.55
XA8JGB	54.82	56.10					55.46
XFYJ2X	56.10	55.70	55.20	55.10	55.00		55.42
XJYUWX	56.00	57.00					56.50
XXGP6G	54.66	54.74	54.74				54.71
XYMARG	55.56	55.63	55.64				55.61
XZ7VPE	57.49	53.73	54.39	56.52	58.77	58.93	56.64
Y7QDHF	54.52	54.57	54.52	54.68			54.57
Y9C7JB	58.20	57.40					57.80

TABLE 3 - Item 1

WebCode	Item 1	Preparation target concentration : 57%					Mean
YJQC7C	55.00						55.00
Z6N7Q8	55.78	54.26	53.50				54.51
Z9R2AB	56.70	57.83	56.61	58.38	57.93	59.42	57.81
ZF9CNC	61.42	60.96	58.82	59.07	57.18	57.74	59.20
ZKMXMB	60.10	62.10					61.10
ZU9D3X	54.11	55.68					54.90

Statistical Analysis for Item 1

Grand Mean	56.00	Number of Participants Included	94	Number of Participants without Raw Data or Data that was not reported in %	0
Standard Deviation	1.747	Number of Participants Excluded	6		

TABLE 3 - Item 2

WebCode	Item 2		Preparation target concentration : 85%						Mean	
2WPZBC	86.65	86.14							86.40	
3PPZDV	80.35	81.38							80.86	
3RHPZW	67.71	66.99							67.35	X
69C4DT	82.75	82.17							82.46	
6XVG4R	83.00	84.00	82.00						83.00	
6YNBYB	79.05								79.05	
77ZTR9	84.41	85.76	86.80	85.96	84.95	86.60			85.75	
7CP9H2	64.64	63.47							64.06	X
7HWWZ9	87.70	85.20	86.60	83.60	79.20	81.40	81.40	81.40	83.31	
8HTUJ4	75.33	79.40	81.16	76.60	77.01	81.40			78.48	
8JKTX2	79.60	85.70							82.65	
97HEJP	86.41	88.17							87.29	
9BTK33	81.56	80.31							80.94	
9ER4WN	83.00	84.60							83.80	
9MYMDY	82.61	83.13							82.87	
ACEZG3	82.96	82.94							82.95	
ARR2KK	89.20	89.60	89.20	91.40	91.00	91.00			90.23	
AYC8BZ	86.50	87.14	86.24	86.60					86.62	
B2CXW7	83.70	84.90							84.30	
BD73BX	83.47	85.50							84.49	
BEJQLX	83.80	82.70	83.60	84.10					83.55	
BMCX63	80.09								80.09	
BN9JLZ	84.12	82.94							83.53	
BUD9GM	82.26	84.75							83.51	
CEEMAX	81.60	81.64	81.71	81.99					81.74	
CHD2WM	86.06	84.74							85.40	
CQBWUL	83.34	83.57							83.46	
CRFLWU	85.72	85.60	84.67	84.87					85.22	
CYKCPZ	86.62	87.34	86.26	87.56					86.95	
E7XQL3	83.60	83.10	84.60	84.30					83.90	
EULJMG	84.02	83.87							83.95	
FGANPX	85.15	84.80	84.40	84.51	84.98	84.76			84.77	

TABLE 3 - Item 2

WebCode	Item 2		Preparation target concentration : 85%				Mean
GEJW8Y	91.90	84.89					88.40
GFBUGR	85.60	85.41	85.56				85.52
GKR9AR	84.73	85.18					84.96
GN3B7V	86.80	90.97					88.89
GQDBAG	82.81	82.50					82.65
GZ24KD	75.00	76.00	78.00				76.33 X
H3LD7Y	85.83	86.75	87.20	86.57	88.00	86.91	86.88
HBY7GU	91.07	93.45	104.03	100.83	93.36	92.65	95.90 X
HUAXJW	82.46	82.57	82.43				82.49
JDX46T	84.00	84.80					84.40
JDYUDW	74.52						74.52 X
JJNCPL	83.40	83.00	82.90	82.70			83.00
JLUQLR	82.76	83.47	84.74	85.35			84.08
JRK8TC	85.10	85.60					85.35
JZCP4E	83.23	82.73					82.98
JZUN9P	84.81	84.49					84.65
K3WXQK	84.50	84.30	84.40	83.90			84.28
KAULNC	80.18	84.89					82.54
KFJ9DP	90.62	94.27	89.68	82.40	83.04	85.27	87.55
KGXHFP	78.85	81.60					80.23
KVBXEE	86.25	85.71					85.98
LACW3B	81.47	80.90	80.18	82.44	81.12	80.49	81.10
LDAHML	85.88	86.27	85.96				86.04
LKQWQR	75.69	83.62	80.57	92.96	94.76	93.26	86.81
LUHARC	84.93	82.63					83.78
MBL4YC	82.81	82.33					82.57
MD83W8	86.37	86.65	86.67				86.56
MHXHJT	88.10	88.52	87.95	87.00			87.89
MQRRPH	86.70	87.70	85.80	86.70			86.73
N2BJU7	85.82	86.17	86.13				86.04
NQ89HP	84.13	84.12					84.13
PCLBX7	86.65	85.34	86.52				86.17

TABLE 3 - Item 2

WebCode	Item 2		Preparation target concentration : 85%				Mean	
PHTM9L	85.18	85.27	85.86	87.22	88.11	88.89	86.76	
PM33FN	85.06	85.11	84.87	84.88			84.98	
QD2QAM	78.60	83.70					81.15	
QU3RMK	83.40	84.45					83.93	
QZ7GH8	78.00	79.80					78.90	
R93QAH	86.76	85.94					86.35	
RAB4RJ	84.30	84.37	80.29	82.87			82.96	
REL6NM	86.01	85.59	86.25	84.75	87.28	84.71	85.77	
RGBDCQ	84.40	84.40					84.40	
RXBLRG	85.08	87.38					86.23	
TFBPB7	86.30	83.40					84.85	
TPXRCE	84.50	84.18	83.93	83.97	84.15	84.10	84.14	
TV7FPF	84.81	85.05	83.99	84.10			84.49	
UG43B4	83.81	83.53					83.67	
UJT9VZ	84.90	84.10	84.50	85.90	85.40	85.60	85.07	
V3X9FK	36.71						36.71	X
V4DK4H	84.34						84.34	
V7GDXG	83.61	83.52					83.57	
VZA2QH	87.99	86.20					87.10	
W2LTLK	86.20	83.20	86.50				85.30	
W8LF9D	82.48	83.36	81.58	81.40			82.21	
WL468F	84.63	84.51	85.76	84.24	82.97	83.28	84.23	
XA8JGB	81.54	81.75					81.65	
XFYJ2X	84.70	84.40	84.20	85.40	85.20		84.78	
XJYUWX	85.00	85.00					85.00	
XXGP6G	84.65	84.68	84.42				84.58	
XYMARG	83.92	84.12	84.31				84.12	
XZ7VPE	91.04	91.86	93.51	94.33	91.18	90.73	92.11	X
Y7QDHF	83.43	83.48	82.92	83.00			83.21	
Y9C7JB	88.80	88.70					88.75	
YJQC7C	84.00						84.00	
Z6N7Q8	82.18	84.98	83.29				83.48	

TABLE 3 - Item 2

WebCode	Item 2				Preparation target concentration : 85%			Mean
Z9R2AB	85.78	86.79	85.06	87.66	83.16	85.48		85.66
ZF9CNC	86.85	84.61	84.91	86.59	86.29	90.99		86.71
ZKMXMB	92.50	89.30						90.90
ZU9D3X	83.63	83.65						83.64

Statistical Analysis for Item 2

Grand Mean	84.42	Number of Participants Included	93	Number of Participants without Raw Data or Data that was not reported in %	0
Standard Deviation	2.298	Number of Participants Excluded	7		

TABLE 3 - Response Summary

Response Summary	Item 1	Item 2
Preparation concentration:	**57%**	**85%**
Grand Mean	56.00	84.42
Standard Deviation	1.747	2.298

Method of Analysis

TABLE 4 - Methods

WebCode	GC	LC	FTIR	GC/MS	LC/MS	UV	GC/FID	Other
2WPZBC							✓	
3PPZDV							✓	
3RHPZW							✓	
69C4DT							✓	
6XVG4R		✓				✓		
6YNBYB			✓				✓	
77ZTR9	✓						✓	
7CP9H2				✓				
7HWWZ9							✓	
8HTUJ4							✓	
8JKTX2								LC/DAD
97HEJP							✓	
9BTK33				✓				
9ER4WN	✓							
9MYMDY								NMR
ACEZG3							✓	
ARR2KK							✓	
AYC8BZ		✓						
B2CXW7							✓	
BD73BX								UPLC
BEJQLX							✓	
BMCX63								NMR
BN9JLZ							✓	
BUD9GM							✓	
CEEMAX		✓						
CHD2WM							✓	
CQBWUL							✓	
CRFLWU							✓	
CYKCPZ	✓							
E7XQL3							✓	
EULJMG							✓	

TABLE 4 - Methods

WebCode	GC	LC	FTIR	GC/MS	LC/MS	UV	GC/FID	Other
FGANPX								NMR- nuclear Magnetic Resonance Spectroscopy
GEJW8Y					✓			
GFBUGR		✓						
GKR9AR		✓						
GN3B7V							✓	
GQDBAG							✓	
GZ24KD					✓			
H3LD7Y								HPLC
HBY7GU							✓	
HUAXJW							✓	
JDX46T							✓	
JDYUDW							✓	
JJNCPL				✓				
JLUQLR	✓							
JRK8TC			✓	✓			✓	
JZCP4E							✓	
JZUN9P								quantitative proton NMR
K3WXQK								qNMR
KAULNC			✓				✓	
KFJ9DP	✓							
KGXHFP		✓						
KVBXEE							✓	
LACW3B							✓	
LDAHML		✓						
LKQWQR							✓	
LUHARC							✓	
MBL4YC							✓	
MD83W8							✓	
MHXHJT							✓	
MQRRPH								qNMR
N2BJU7							✓	
NQ89HP	✓							

(23)

TABLE 4 - Methods

WebCode	GC	LC	FTIR	GC/MS	LC/MS	UV	GC/FID	Other
PCLBX7		✓				✓		
PHTM9L							✓	
PM33FN							✓	
QD2QAM							✓	
QU3RMK							✓	
QZ7GH8							✓	
R93QAH							✓	
RAB4RJ	✓							
REL6NM							✓	
RGBDCQ							✓	
RXBLRG								HPLC
TFBPB7	✓							
TPXRCE								NMR
TV7FPF		✓						
UG43B4	✓							
UJT9VZ							✓	
V3X9FK								LC-MS/MS
V4DK4H								NMR
V7GDXG							✓	
VZA2QH							✓	
W2LTLK				✓				
W8LF9D		✓						
WL468F							✓	
XA8JGB							✓	
XFYJ2X	✓							
XJYUWX							✓	
XXGP6G							✓	
XYMARG							✓	
XZ7VPE							✓	
Y7QDHF							✓	
Y9C7JB		✓						
YJQC7C								NMR

TABLE 4 - Methods

WebCode	GC	LC	FTIR	GC/MS	LC/MS	UV	GC/FID	Other
Z6N7Q8		✓						
Z9R2AB	✓						✓	
ZF9CNC							✓	
ZKMXMB		✓						
ZU9D3X							✓	

Response Summary								
Participants	**GC**	**LC**	**FTIR**	**GC/MS**	**LC/MS**	**UV**	**GC/FID**	
	11	13	3	5	2	2	58	
Percent	11.0%	13.0%	3.0%	5.0%	2.0%	2.0%	58.0%	

Additional Comments

TABLE 5

WebCode	Additional Comments
2WPZBC	Item 1 contained caffeine
69C4DT	An ATR was performed on each exhibit prior to quantitation in accordance to our local practice for quantitation analysis.
6YNBYB	Caffeine was identified by GC/MS in Items 1 & 2.
8JKTX2	Cutting agent in Item 1 : Caffeine (37,9 %). Cutting agent in Item 2 : Caffeine (14,2 %)
9MYMDY	Caffeine also detected in both items. Note that the "raw data" values reported in section 2 [Table 3 - Raw Data] are each an average of percentages derived from six methamphetamine peak integrals. Below are the raw data values which were used to generate the average values reported in section 2. Item 1, Run A (%): 54.39, 54.26, 54.24, 54.42, 54.25, 54.55; Item 1, Run B (%): 55.89, 55.36, 55.12, 55.30, 55.47, 55.72; Item 2, Run A (%): 83.16, 82.42, 82.19, 82.45, 82.48, 82.95; Item 2, Run A (%): 83.54, 83.14, 82.66, 83.00, 82.96, 83.47
ACEZG3	Item 1 contained caffeine.
BD73BX	Caffeine indicated in each of items 1 and 2. Detector: PDA. Column Acquity UPLC BEH C18, 1.7um, 2.1x100mm. Calibration: 3 point. Primary Standard: Methylamphetamine.HCL; Origin: NMI; Purity: 99.8% +/-1.9% Batch:14D12
CHD2WM	Our procedure calculates Methamphetamine base. Mathematical conversion was done to results in order to report Methamphetamine HCl.
FGANPX	Only one weighing of each item but the result is the average of multiple signals on the NMR
GFBUGR	GC/MS and FTIR were used to qualitatively analyze Item 1 and Item 2.
JDYUDW	ITEM 1 - Contains Caffeine. ITEM 2- Contains Caffeine
JZCP4E	Our raw data is for the base not the salt. The raw data is actually in mg/ml as well and then it is converted to % based on volumes and weights measured out. So in converting the raw data we obtain to the above listed values [Table 3 - Raw Data] our [Laboratory] policy is to multiply the percentage we calculate from the raw data times 1.24.
JZUN9P	Items 1 and 2 both also contained caffeine.
KAULNC	Salt-form percentages shown above [Table 3 - Raw Data] were calculated from the base-form percentages* and truncated to two decimals. The average of the two results was truncated to one decimal for reporting. *base % x MW meth. HCl (185.7) / MW meth. base (149.2) = salt (HCl) %
PM33FN	The purity of each item was determined by preparing two separate samples for quantitation, then each of these solutions was injected in duplicate on the GC-FID. Each column in part 2 [The column formatting reference is found on the data sheet and cannot be recreated in Table 3 - Raw Data] represents a separate sample preparation for each item, the two entries in each column represent the duplicate injections of each solution on the instrument.
RAB4RJ	diluted w/ caffeine as indicated by GC-MS
REL6NM	Samples also contained Caffeine (non-controlled, not quantitated)
RXBLRG	Also detected caffeine in item 1 and 2.
VZA2QH	Item 1 contained caffeine

TABLE 5

WebCode	Additional Comments
XA8JGB	In routine practice concentration (% purity) is calculated based on methamphetamine base, and in the case report the weight of methamphetamine base for the whole sample was reported, not the concentration.
XFYJ2X	We report "_____ grams methamphetamine actual". We do not include % methamphetamine on our reports
XJYUWX	GC/MS, color tests, and GC-FID data used for qualitative examination.
XXGP6G	a correction factor of 0.9884 was applied to all raw data
XYMARG	A correction factor of 0.98955 was applied to the raw data.
ZF9CNC	% as methamphetamine HCl
ZKMXMB	Caffeine was identified in each sample.

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 bi-variate 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 95% 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 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 CPVs for the two samples, such as a +1.5 CPV for Item 1 and a -2.2 CPV for Item 2.

	Key for Data Flags	
Data Flag	Statistically Included/Excluded	Explanation
*	Included	Results fall outside 95% ellipse, but within a 99% control limit (ellipse) that is calculated.
X	Excluded	Results fall outside of 99% control limit.

Bivariate Control Analysis

WebCode	Data Flag	Item 1			Item 2		
		Participant Mean	Difference from Grand Mean	CPV	Participant Mean	Difference from Grand Mean	CPV
2WPZBC		58.51	2.487	1.36	86.40	1.918	0.86
3PPZDV		56.10	0.073	0.04	80.86	-3.616	-1.61
3RHPZW	X	45.74	-10.288	-5.61	67.35	-17.127	-7.64
69C4DT		55.27	-0.754	-0.41	82.46	-2.015	-0.90
6XVG4R		56.33	0.311	0.17	83.00	-1.477	-0.66
6YNBYB	X	59.04	3.017	1.65	79.05	-5.427	-2.42
77ZTR9		57.65	1.627	0.89	85.75	1.270	0.57
7CP9H2	X	44.70	-11.323	-6.18	64.06	-20.422	-9.12
7HWWZ9		54.90	-1.123	-0.61	83.31	-1.165	-0.52
8HTUJ4	*	51.94	-4.084	-2.23	78.48	-5.994	-2.68
8JKTX2		55.15	-0.873	-0.48	82.65	-1.827	-0.82
97HEJP		56.37	0.347	0.19	87.29	2.815	1.26
9BTK33		52.98	-3.040	-1.66	80.94	-3.540	-1.58
9ER4WN		56.05	0.027	0.01	83.80	-0.677	-0.30
9MYMDY		54.92	-1.108	-0.60	82.87	-1.607	-0.72
ACEZG3		55.08	-0.948	-0.52	82.95	-1.527	-0.68
ARR2KK	*	61.63	5.611	3.06	90.23	5.756	2.57
AYC8BZ	*	53.75	-2.270	-1.24	86.62	2.143	0.96
B2CXW7		55.80	-0.223	-0.12	84.30	-0.177	-0.08
BD73BX		56.14	0.112	0.06	84.49	0.008	0.00
BEJQLX		54.53	-1.498	-0.82	83.55	-0.927	-0.41
BMCX63		52.80	-3.227	-1.76	80.09	-4.386	-1.96
BN9JLZ		54.44	-1.583	-0.86	83.53	-0.947	-0.42

		Item 1				Item 2	
WebCode	**Data Flag**	**Participant Mean**	**Difference from Grand Mean**	**CPV**	**Participant Mean**	**Difference from Grand Mean**	**CPV**
BUD9GM		56.93	0.902	0.49	83.51	-0.972	-0.43
CEEMAX		54.57	-1.453	-0.79	81.74	-2.742	-1.22
CHD2WM		55.46	-0.568	-0.31	85.40	0.923	0.41
CQBWUL		54.47	-1.558	-0.85	83.46	-1.022	-0.46
CRFLWU		56.92	0.900	0.49	85.22	0.738	0.33
CYKCPZ		56.85	0.827	0.45	86.95	2.468	1.10
E7XQL3		54.45	-1.573	-0.86	83.90	-0.577	-0.26
EULJMG		54.16	-1.863	-1.02	83.95	-0.532	-0.24
FGANPX		56.00	-0.021	-0.01	84.77	0.289	0.13
GEJW8Y		60.01	3.982	2.17	88.40	3.918	1.75
GFBUGR		56.65	0.624	0.34	85.52	1.046	0.47
GKR9AR		55.09	-0.938	-0.51	84.96	0.478	0.21
GN3B7V		58.76	2.737	1.49	88.89	4.408	1.97
GQDBAG		56.57	0.550	0.30	82.65	-1.824	-0.81
GZ24KD	X	49.67	-6.356	-3.47	76.33	-8.144	-3.63
H3LD7Y		57.35	1.331	0.73	86.88	2.400	1.07
HBY7GU	X	56.27	0.251	0.14	95.90	11.421	5.10
HUAXJW		55.31	-0.713	-0.39	82.49	-1.990	-0.89
JDX46T		54.35	-1.673	-0.91	84.40	-0.077	-0.03
JDYUDW	X	48.82	-7.203	-3.93	74.52	-9.957	-4.44
JJNCPL		53.53	-2.498	-1.36	83.00	-1.477	-0.66
JLUQLR		56.26	0.240	0.13	84.08	-0.397	-0.18
JRK8TC		54.70	-1.323	-0.72	85.35	0.873	0.39
JZCP4E	*	51.62	-4.404	-2.40	82.98	-1.495	-0.67

WebCode	Data Flag	Item 1			Item 2		
		Participant Mean	Difference from Grand Mean	CPV	Participant Mean	Difference from Grand Mean	CPV
JZUN9P		57.64	1.617	0.88	84.65	0.173	0.08
K3WXQK		57.05	1.027	0.56	84.28	-0.202	-0.09
KAULNC		56.25	0.222	0.12	82.54	-1.942	-0.87
KFJ9DP		58.39	2.367	1.29	87.55	3.070	1.37
KGXHFP		55.42	-0.603	-0.33	80.23	-4.252	-1.90
KVBXEE		55.40	-0.622	-0.34	85.98	1.501	0.67
LACW3B		53.22	-2.806	-1.53	81.10	-3.377	-1.51
LDAHML		57.01	0.987	0.54	86.04	1.560	0.70
LKQWQR		56.33	0.304	0.17	86.81	2.333	1.04
LUHARC		53.78	-2.238	-1.22	83.78	-0.695	-0.31
MBL4YC	*	58.53	2.502	1.36	82.57	-1.907	-0.85
MD83W8		56.76	0.734	0.40	86.56	2.085	0.93
MHXHJT		58.17	2.149	1.17	87.89	3.418	1.53
MQRRPH		56.58	0.552	0.30	86.73	2.248	1.00
N2BJU7		56.01	-0.017	-0.01	86.04	1.564	0.70
NQ89HP		55.78	-0.242	-0.13	84.13	-0.352	-0.16
PCLBX7		57.90	1.874	1.02	86.17	1.693	0.76
PHTM9L		56.97	0.947	0.52	86.76	2.278	1.02
PM33FN		56.59	0.563	0.31	84.98	0.503	0.22
QD2QAM		55.10	-0.923	-0.50	81.15	-3.327	-1.49
QU3RMK		53.93	-2.093	-1.14	83.93	-0.552	-0.25
QZ7GH8	*	53.40	-2.623	-1.43	78.90	-5.577	-2.49
R93QAH		58.73	2.702	1.47	86.35	1.873	0.84
RAB4RJ		56.83	0.805	0.44	82.96	-1.520	-0.68

| | | Item 1 | | | Item 2 | | |
WebCode	Data Flag	Participant Mean	Difference from Grand Mean	CPV	Participant Mean	Difference from Grand Mean	CPV
REL6NM		57.12	1.096	0.60	85.77	1.288	0.57
RGBDCQ		56.45	0.427	0.23	84.40	-0.077	-0.03
RXBLRG		57.55	1.525	0.83	86.23	1.756	0.78
TFBPB7		54.20	-1.823	-0.99	84.85	0.373	0.17
TPXRCE		55.99	-0.037	-0.02	84.14	-0.340	-0.15
TV7FPF		54.50	-1.528	-0.83	84.49	0.010	0.00
UG43B4		56.99	0.962	0.52	83.67	-0.807	-0.36
UJT9VZ		58.47	2.444	1.33	85.07	0.590	0.26
V3X9FK	X	18.11	-37.913	-20.68	36.71	-47.767	-21.32
V4DK4H		54.96	-1.068	-0.58	84.34	-0.134	-0.06
V7GDXG		55.04	-0.988	-0.54	83.57	-0.912	-0.41
VZA2QH		58.49	2.467	1.35	87.10	2.618	1.17
W2LTLK		57.60	1.577	0.86	85.30	0.823	0.37
W8LF9D		54.57	-1.450	-0.79	82.21	-2.272	-1.01
WL468F		57.55	1.531	0.83	84.23	-0.245	-0.11
XA8JGB		55.46	-0.563	-0.31	81.65	-2.832	-1.26
XFYJ2X		55.42	-0.603	-0.33	84.78	0.303	0.14
XJYUWX		56.50	0.477	0.26	85.00	0.523	0.23
XXGP6G		54.71	-1.309	-0.71	84.58	0.106	0.05
XYMARG		55.61	-0.413	-0.23	84.12	-0.360	-0.16
XZ7VPE	X	56.64	0.616	0.34	92.11	7.631	3.41
Y7QDHF		54.57	-1.453	-0.79	83.21	-1.268	-0.57
Y9C7JB		57.80	1.777	0.97	88.75	4.273	1.91
YJQC7C		55.00	-1.023	-0.56	84.00	-0.477	-0.21

		Item 1				Item 2		
WebCode	**Data Flag**	**Participant Mean**	**Difference from Grand Mean**	**CPV**		**Participant Mean**	**Difference from Grand Mean**	**CPV**
Z6N7Q8		54.51	-1.509	-0.82		83.48	-0.994	-0.44
Z9R2AB		57.81	1.789	0.98		85.66	1.178	0.53
ZF9CNC		59.20	3.176	1.73		86.71	2.230	1.00
ZKMXMB	*	61.10	5.077	2.77		90.90	6.423	2.87
ZU9D3X		54.90	-1.128	-0.62		83.64	-0.837	-0.37

Response Summary	Item 1	Item 2
Preparation Concentration	**57%**	**85%**
Grand Mean	56.02	84.48
Standard Deviation	1.833	2.240
Number of Participants Included: 92	Number of Participants Excluded: 8	

Bivariate Control Analysis

Item 1 Grand Mean : 56.02   Item 2 Grand Mean: 84.48
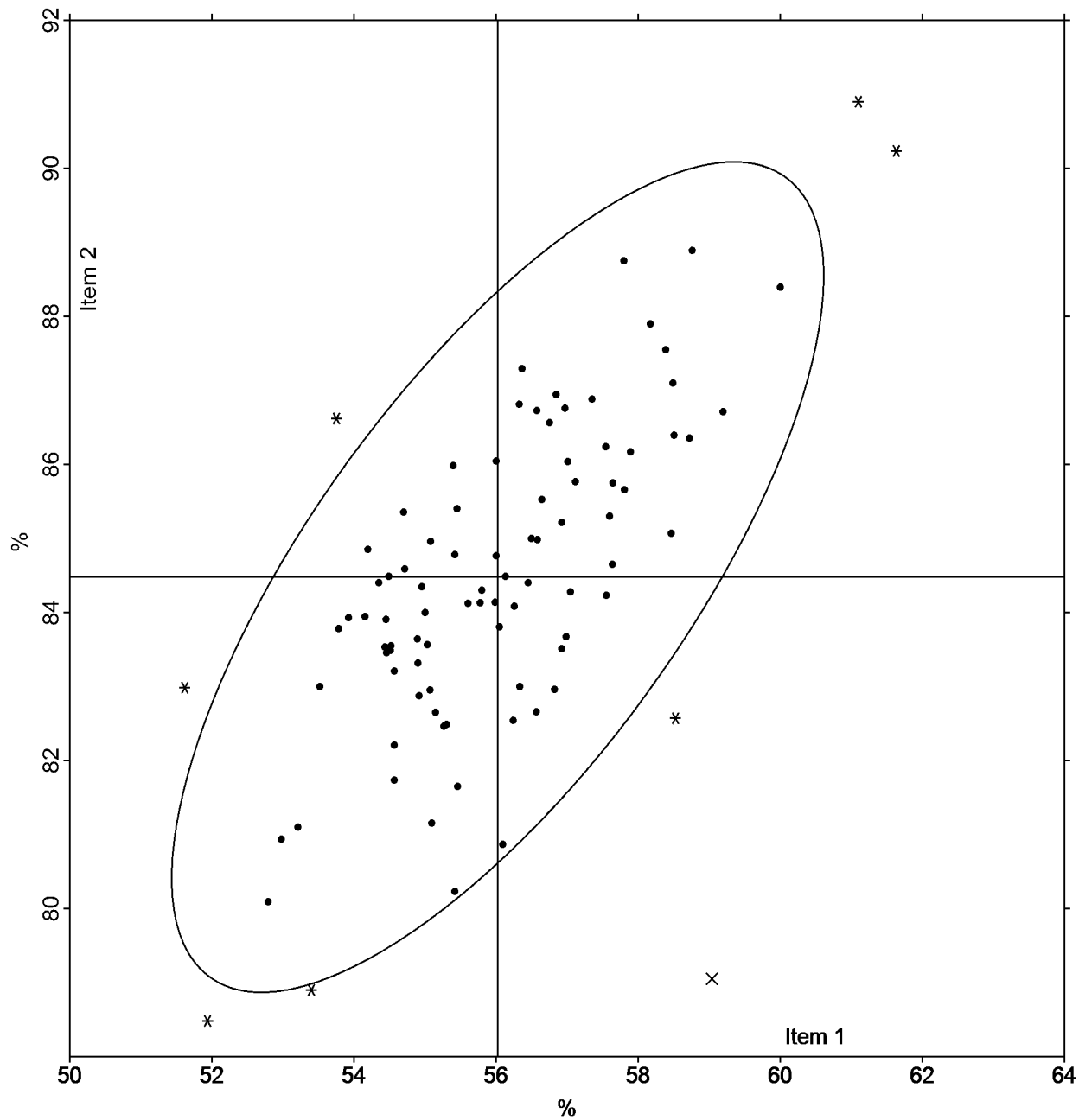
Appendix: Data Sheet

Collaborative Testing Services ~ Forensic Testing Program   *****

Test No. 17-505: Quantitative Drug Analysis - Methamphetamine HCl

DATA MUST BE RECEIVED BY _June 26, 2017_ TO BE INCLUDED IN THE REPORT

Participant Code: WebCode:

Accreditation Release Statement

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

☐ This participant's data is intended for submission to ASCLD/LAB, ANAB, and/or A2LA. **(Accreditation Release section on the last page must be completed and submitted.)**

☐ This participant's data is **NOT** intended for submission to ASCLD/LAB, ANAB or A2LA.

Scenario:

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.

Note:
-Please follow your laboratory's policies and procedures for sample homogenization.
-This is not intended as a qualitative test but rather as a quantitative examination of the methamphetamine HCl present in the samples.

Items Submitted (Sample Pack DQT):
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): _____

Please return all pages of this data sheet.   Page 1 of 3

Participant Code:

WebCode:

2.) Please list your raw data determinations below in percent of Methamphetamine HCl.
(Results not reported in % will be excluded from statistical calculations).

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

_____   _____   _____   _____

_____   _____   _____   _____

_____   _____   _____   _____

_____   _____   _____   _____

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

☐ GC   ☐ LC   ☐ FTIR

☐ GC/MS   ☐ LC/MS   ☐ UV

☐ GC/FID   ☐ Other (specify): _____

4.) Additional Comments

_____

_____

_____

_____

_____

_____

Please return all pages of this data sheet.

Collaborative Testing Services ~ Forensic Testing Program

RELEASE OF DATA TO ACCREDITATION BODIES

The following Accreditation Releases will apply only to:

Participant Code: WebCode:

for Test No. **17-505: Quantitative Drug Analysis - Methamphetamine HCl**

This release page must be completed and received by _June 26, 2017_ to have this participant's submitted data included in the reports forwarded to the respective Accreditation Bodies.

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

ASCLD/LAB Certificate No.   _____

ANAB Certificate No.   _____

A2LA Certificate No.   _____

Step 2: Complete the Laboratory Identifying Information in its entirety

Signature and Title   _____

Laboratory Name   _____

Location (City/State)   _____

Accreditation Release

Return Instructions

Please submit the completed Accreditation Release at the same time as your full data sheet. See Data Sheet Return Instructions on the previous page.

Questions? Contact us 8 am-4:30 pm EST
Telephone: +1-571-434-1925
email: forensics@cts-interlab.com

Please return all pages of this data sheet.

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