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2024 Quantitative Chemical (Cocaine) Proficiency Test
FTS-24-QUANT2 Summary Report

The Submission Deadline for this test was November 22, 2024

The test was manufactured by FTS at the FTS Laboratory Facility (127 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. No activities were subcontracted in regards to this test. This is the summary report issued on 12/13/24. 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 53 of 63 tests distributed (84% response rate).

Summary statistics of participant's responses are as follows:

Mean	31.28%
Median	31.10%
Maximum	33.70%
Minimum	29.26%
Robust mean (H15)	31.26%
Robust standard deviation (H15)	1.00%
Assigned Value (X_{pt})	31.26%
Target standard deviation (σ_{pt})	1.56%
Robust mean standard uncertainty ($u(X_{pt})$)	0.17%
Robust mean standard deviation (S*)	1.00%
Uncertainty of the assigned value ($U(\chi_{pt})$)	0.17%
Expanded uncertainty of the assigned value ($U(X_{pt})$)	0.34%
Mean of participant's reported measurement uncertainties (k=2)	2.61%
Median of participant's reported measurement uncertainties (k=2)	2.70%
Participants with $\lvert$z-score$\rvert$ (z_i)<2	53 of 53 (100%)
Participants with $\lvert$z-score$\rvert$ (z_i)>2 &≤3	0 of 53 (0%)
Participants with $\lvert$z-score$\rvert$ (z_i)>3	0 of 53 (0%)
Participants with $\lvert E_n$-score$\rvert$ $(E_n)_i$≤1	51 of 53 (96%)
Participants with $\lvert E_n$-score$\rvert$ $(E_n)_i$>1	2 of 53 (4%)

Robust statistics were calculated by utilizing an Excel Add-In provided by the Royal Society of Chemistry (http://www.rsc.org/membership/networking/interestgroups/analytical/amc/software/RobustStatistics.asp). The statistical methods, participant's responses, z-scores and E_n-scores are summarized below.

Summary of Participant's Responses: Formatted for Statistical Analysis (Uncertainties Recalculated to k=2):

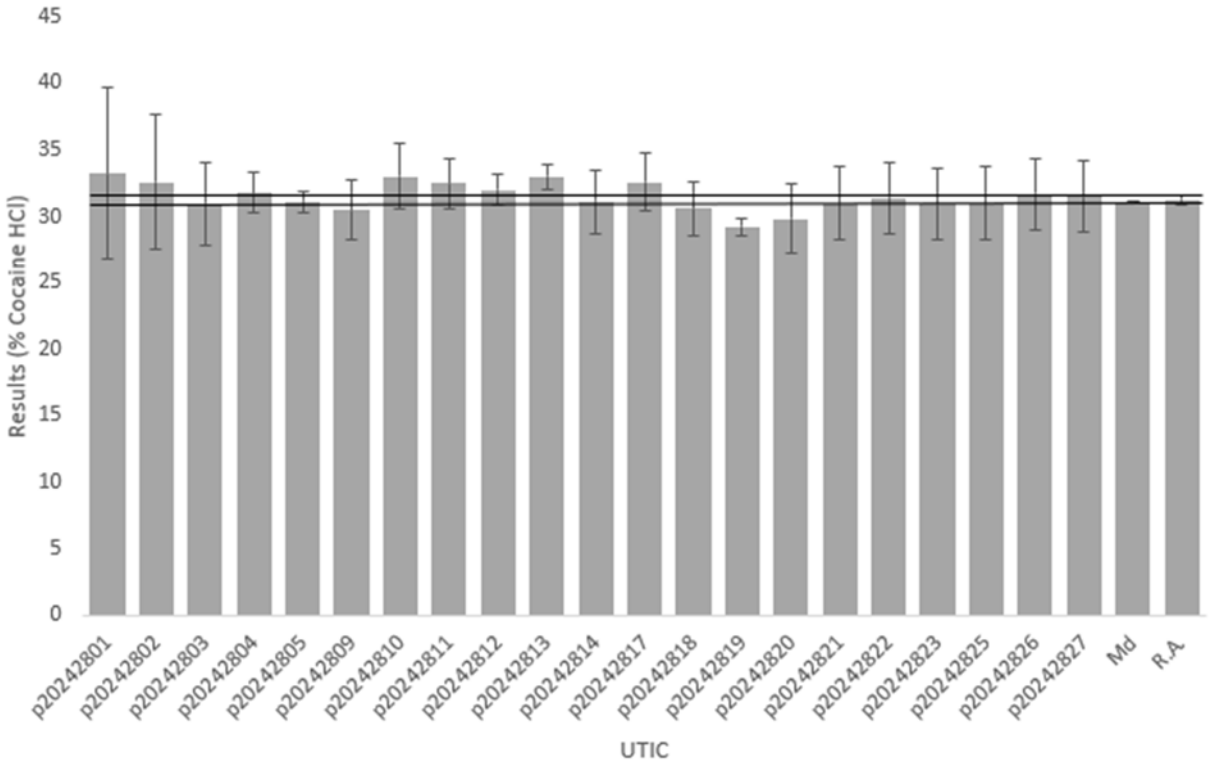
UTIC	Webcode	Reported Quantitation Result %	Reported Uncertainty Result (%)	Reported Coverage Factor	Uncertainty corrected for coverage factor k=2 (%)	Z-score (z_i)	|En|score $(E_n)_i$
p20242801	W182	33.20	6.42	2.00	6.42	1.24	0.30
p20242802	W182	32.60	5.00	2.00	5.00	0.86	0.27
p20242803	W061	31.00	3.10	2.00	3.10	-0.17	0.08
p20242804	W061	31.80	1.47	2.00	1.47	0.35	0.36
p20242805	W061	31.10	1.10	2.00	1.10	-0.10	0.14
p20242809	W163	30.50	2.30	2.00	2.30	-0.49	0.33
p20242810	W163	33.00	2.49	2.00	2.49	1.12	0.69
p20242811	W170	32.50	2.00	2.10	1.90	0.79	0.64
p20242812	W170	32.00	1.20	2.00	1.20	0.47	0.59
p20242813	W170	33.00	1.00	2.13	0.94	1.12	1.74
p20242814	W170	31.10	3.90	3.30	2.36	-0.10	0.07
p20242817	W132	32.60	2.20	2.00	2.20	0.86	0.60
p20242818	W153	30.60	2.00	2.00	2.00	-0.42	0.33
p20242819	W244	29.26	0.67	2.00	0.67	-1.28	2.65
p20242820	W071	29.80	2.60	2.00	2.60	-0.94	0.56
p20242821	W071	31.00	2.70	2.00	2.70	-0.17	0.10
p20242822	W071	31.40	2.70	2.00	2.70	0.09	0.05
p20242823	W071	30.90	2.70	2.00	2.70	-0.23	0.13
p20242825	W071	31.00	2.70	2.00	2.70	-0.17	0.10
p20242826	W071	31.70	2.70	2.00	2.70	0.28	0.16
p20242827	W071	31.50	2.70	2.00	2.70	0.15	0.09
p20242828	W071	30.90	2.70	2.00	2.70	-0.23	0.13
p20242829	W071	31.30	2.70	2.00	2.70	0.03	0.01
p20242830	W071	30.20	2.60	2.00	2.60	-0.68	0.40
p20242831	W071	30.60	2.70	2.00	2.70	-0.42	0.24
p20242832	W071	30.90	2.70	2.00	2.70	-0.23	0.13
p20242833	W071	31.00	2.70	2.00	2.70	-0.17	0.10
p20242834	W071	30.30	2.60	2.00	2.60	-0.62	0.37
p20242835	W071	30.70	2.70	2.00	2.70	-0.36	0.21
p20242837	W071	30.30	2.60	2.00	2.60	-0.62	0.37
p20242838	W071	30.80	2.70	2.00	2.70	-0.29	0.17
p20242839	W071	30.80	2.70	2.00	2.70	-0.29	0.17
p20242840	W071	29.40	2.60	2.00	2.60	-1.19	0.71
p20242841	W071	30.80	2.70	2.00	2.70	-0.29	0.17
p20242845	W130	31.10	2.80	1.98	2.83	-0.10	0.06
p20242846	W130	29.80	2.70	1.98	2.73	-0.94	0.53

UTIC	Webcode	Reported Quantitation Result %	Reported Uncertainty Result (%)	Reported Coverage Factor	Uncertainty corrected for coverage factor k=2 (%)	Z-score (z_i)	|En|score $(E_n)_i$
p20242847	W130	32.00	2.90	1.98	2.93	0.47	0.25
p20242848	W130	31.20	2.90	1.98	2.93	-0.04	0.02
p20242849	W130	32.00	2.90	1.98	2.93	0.47	0.25
p20242850	W130	30.40	2.80	1.98	2.83	-0.55	0.30
p20242851	W130	29.90	2.70	1.98	2.73	-0.87	0.49
p20242852	W130	29.40	2.70	1.98	2.73	-1.19	0.68
p20242853	W130	31.70	2.90	1.98	2.93	0.28	0.15
p20242854	W130	31.90	2.90	1.98	2.93	0.41	0.22
p20242855	W130	32.10	2.90	1.98	2.93	0.54	0.28
p20242856	W130	32.90	3.00	1.98	3.03	1.05	0.54
p20242857	W130	31.60	2.90	1.98	2.93	0.22	0.12
p20242858	W130	31.70	2.90	1.98	2.93	0.28	0.15
p20242859	W130	31.90	2.90	1.98	2.93	0.41	0.22
p20242860	W051	31.90	2.00	2.00	2.00	0.41	0.32
p20242861	W214	33.70	3.24	2.00	3.24	1.56	0.75
p20242862	W042	31.20	3.70	4.30	1.72	-0.04	0.03
p20242863	W042	31.68	3.70	4.30	1.72	0.27	0.24

*Uncertainty calculated at the discretion of the proficiency test provider.

Figure 1: Participant Results (with Expanded Uncertainties Represented by Error Bars)

Assigned Value = 31.26% +/- 0.34% (k=2)

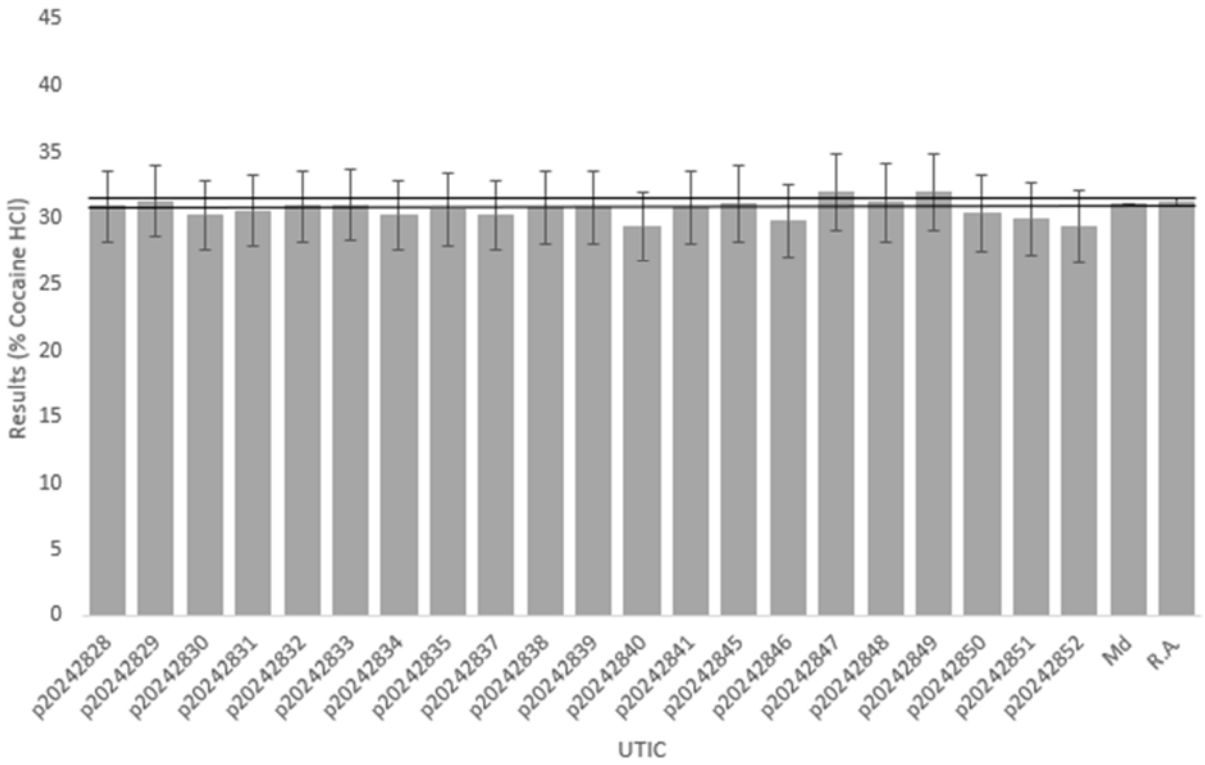


Error bars represent participant's stated uncertainty (k=2).

Independent estimates of analyte concentration with associated uncertainties (k=2):
Md = Robust Median
R.A. = Robust Average

Figure 2: Participant Results (with Expanded Uncertainties Represented by Error Bars)

Assigned Value = 31.26% +/- 0.34% (k=2)

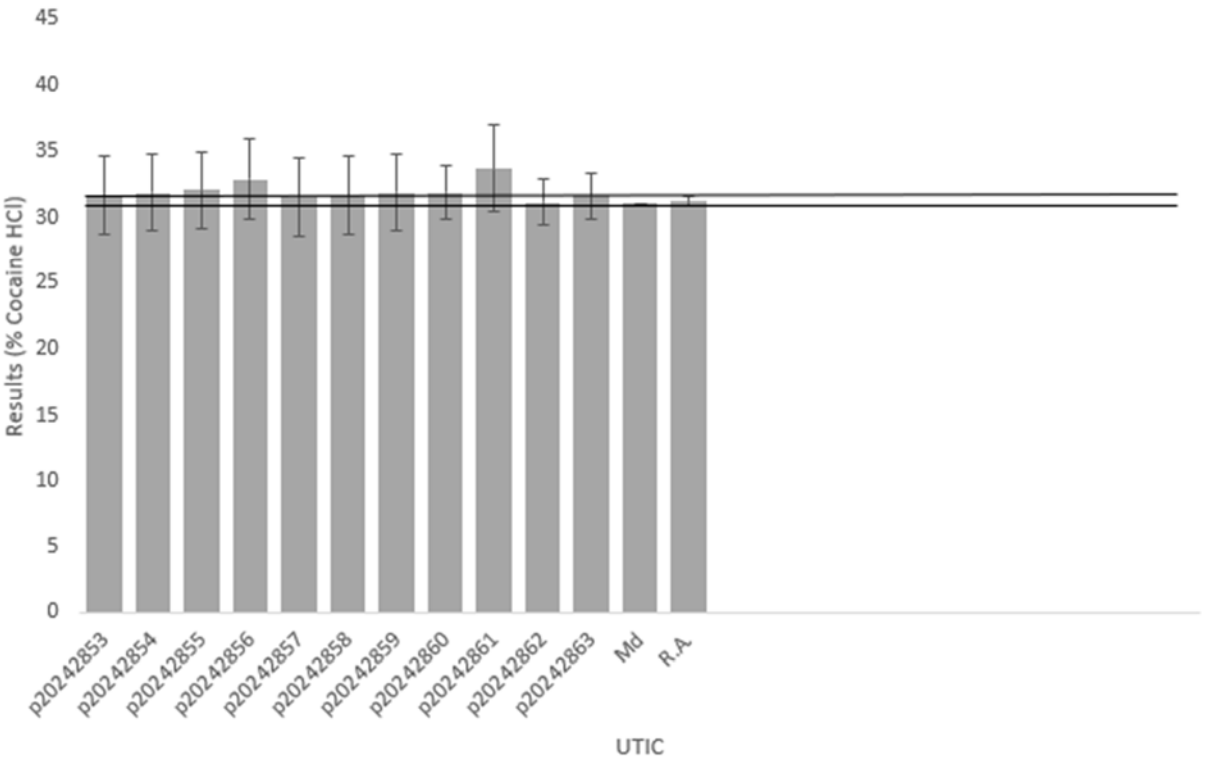


Error bars represent participant's stated uncertainty (k=2).

Independent estimates of analyte concentration with associated uncertainties (k=2):
Md = Robust Median
R.A. = Robust Average

Figure 3: Participant Results (with Expanded Uncertainties Represented by Error Bars)

Assigned Value = 31.26% +/- 0.34% (k=2)



Error bars represent participant's stated uncertainty (k=2).

Independent estimates of analyte concentration with associated uncertainties (k=2):
Md = Robust Median
R.A. = Robust Average

Statistical Methods

Invalid results or Extreme Outliers

Results that are identifiably invalid (e.g. expressed in the wrong units, transpositions and other gross errors) or are extreme outliers (e.g. outside the range of 2.5Sd of the mean of reported values) may be excluded before any statistical calculations.

Reported/Adjusted Uncertainties

Participants were asked to report their measurement uncertainty at a coverage factor of k=2 and were also asked to report the coverage factor used. As the data used for the evaluation criteria must all be at the same coverage factor, if the reported coverage factor was different than 2.00, the expanded uncertainty of the participant's result was adjusted to 2.00 using the formula:

$U(X_i) = U_R(2.00/C_R)$

$U(X_i)$ = the expanded uncertainty of the participant's result

U_R = the participant's reported expanded uncertainty

C_R = the participant's reported coverage factor

Assigned Value

For this proficiency test, assigned value is calculated as the robust mean using the procedure described in "ISO 13528:2022, Statistical methods for use in proficiency testing by interlaboratory comparisons – Annex C".

Between-Laboratory Coefficient of Variation

The between-laboratory coefficient of variation is a measure of the between laboratory variation that in the judgment of the study coordinator would be expected from participants given the analyte concentration. It is important to note this is not the coefficient of variation of participant results. For the purpose of this proficiency test, this figure will be 5%.

Target Standard Deviation

The target standard deviation (σ_{pt}) is the product of the assigned value (X_{pt}) and the between laboratory coefficient of variation (CV) as presented in Equation 1. This value is used for calculation of participant z-scores.

Equation 1: $\sigma_{pt} = X_{pt} * CV$

z-Score

For each participant result a z-score is calculated according to Equation 2 below:

Equation 2: $z_i = \frac{(X_i - X_{pt})}{\sigma_{pt}}$

where:

z_i = z-score

X_i = participant result

X_{pt} = the study assigned value

σ_{pt} = the target standard deviation from *Equation 1*

E_n-score

The E_n-score is complementary to the z-score in assessment of laboratory performance.

En-score includes measurement uncertainty and is calculated according to Equation 3 below:

Equation 3:

$$(E_n)_i = \frac{(X_i - X_{pt})}{\sqrt{U(X_i)^2 + U(X_{pt})^2}}$$

where:
$(E_n)_i$= En-score
X_i= participant result
X_{pt}= the study assigned value
$U(X_i)$= the expanded uncertainty of the participant's result
$U(X_{pt})$ = the expanded uncertainty of the assigned value

The consensus of participants' results is not traceable to any external reference, so although expressed in SI units, metrological traceability has not been established.

The uncertainty is estimated as:
$u(X_{pt}) = 1.25 \times S^* / \sqrt{p}$
where:
$u(X_{pt})$ = robust mean standard uncertainty
S^* = robust mean standard deviation
p = number of results

The expanded uncertainty ($U(X_{pt})$) is the standard uncertainty multiplied by a coverage factor of 2, a level of confidence of approximately 95%.

Criteria for the evaluation of performance of participants
Evaluation of participant's performance is the responsibility of the subscriber and the accreditation body (if applicable) based on comparison of the participant's result to the consensus responses. FTS does not evaluate participant's performance. Typically, z-scores and E_n-scores are evaluated using the following criteria:

z-score with absolute value ($|z_i|$):
$|z_i| \leq 2$ is satisfactory;
$|z_i| > 2 \leq 3$ is questionable;
$|z_i| > 3$ is unsatisfactory.

E_n-score with absolute value ($|(E_n)_i|$):
$|(E_n)_i| \leq 1$ is satisfactory;
$|(E_n)_i| > 1$ is unsatisfactory.

Again, FTS does not perform this evaluation. For the convenience of subscribers, Responses with $|z_i|$ of greater than 2 or $|(E_n)_i|$ greater than 1 are highlighted in the summary report.

In general terms, the z-score provides a measure of how close the reported value is to the assigned value, with no relation to the reported uncertainty. The E_n-score provides a measure of how close the reported value is to the assigned value, considering the reported uncertainty. A participant that has a satisfactory z-score but an unsatisfactory En-score should evaluate whether their reported measurement uncertainty is sufficient.

Manufacturer's Information

Preparation of Questioned Sample

The questioned samples were prepared by weighing 14.07 grams of Cocaine Hydrochloride Standard (Cayman Chemical, COA 100.0%, Batch# 0644260-1, Item# 22165) and 28.48 grams Inositol (#101106, Jarrow Formulas, Lot #SG618) on a calibrated Mettler AE163 balance. The sample was combined and sifted three times. The sample was ground with a mortar and pestle in several batches that were recombined, shaken together and re-ground with a mortar and pestle multiple times. The mixture was transferred into a stainless-steel grinding container and was manually shaken for 10 minutes. The mixture was further ground with a mortar and pestle in batches and sifted to recombine.

After homogenization, individual samples were weighed on a calibrated Mettler AE163 analytical balance and consisted of at least 0.50 gram of the mixture. These samples were packaged in glassine paper folded packets utilized for sample weighing and glassine envelopes that were hand numbered in the order that they were filled from the bulk sample. After homogeneity testing, the glassine envelopes were labeled with a UTIC number, further sealed in a heatsealed evidence envelope and labeled per FTS guidelines.

Homogeneity & Stability Quality Control Testing

Homogeneity testing was performed after the samples were packaged in paper folds, hand labeled in fill order. Ten of the packaged units were selected by random sampling throughout the fill sequence by selection of the hand labeled fill number with computer random number generation software (Ablebits Random Number Generator, Add-in Express, Ltd., Belarus, BY).

Each selected sample was homogenized, and then two approximately 0.025g test portions were weighed from each. The test portions were labeled as "48A", "48B", etc. and prepared for UV-VIS analysis by diluting with distilled water to a concentration of approximately 1 mg/ml in 50ml volumetric flasks.

The samples were quantitated via UV-VIS (Perkin-Elmer Lambda 2) in the FTS laboratory facility. The samples were quantitated at 274.9 nm based on four-point cocaine standard calibration curve that ranged from 0.40 mg/ml – 0.05 mg/ml. Five replicates of each sample were examined and analytical data averaged.

Stability was not tested as the samples are not reasonably expected to change when sealed in heatsealed envelopes.

Statistical Analysis of Homogeneity Data

Table 1: Duplicated results for ten distribution units and intermediate stages of calculation in Cochran's test

Sample	A (%)	B (%)	D=A-B	S=A+B	$D^2=(A-B)^2$
48	32.53	32.86	-0.33	65.40	0.11
1	32.82	33.09	-0.27	65.92	0.07
59	32.64	32.85	-0.21	65.49	0.04
40	32.87	32.94	-0.07	65.81	0.01
78	32.92	33.07	-0.14	65.99	0.02
11	32.69	32.83	-0.14	65.52	0.02
34	32.69	32.67	0.02	65.35	0.00
13	32.88	33.05	-0.17	65.92	0.03
73	33.05	32.56	0.48	65.61	0.23
63	32.68	32.85	-0.17	65.53	0.03

Cochran's Test

Analytical outliers should be deleted from the data before one-way analysis of variance (ANOVA) is carried out; Cochran's test is suitable.

Calculate the test statistic (C):

$$C = \frac{D_{MAX}^2}{\sum D_i^2}$$

$$= \frac{0.23}{0.57} = 0.40$$

Where C=Cochran's statistic test
D_{MAX}=the largest difference between duplicates
D_i=difference of each pair of duplicates

Table 2: Critical Values for the Cochran test statistic for duplicates

m^1	95%
10	*0.602*
11	*0.570*
12	*0.541*
13	*0.515*

Where m^1 = number of samples that have been measured in duplicate.

The 5% critical value for ten samples from Table 2 is 0.602.
In the data from Table 1, no analytical outliers were identified.

Estimate of Analytical and Sampling Variances

One-way ANOVA is used to estimate the analytical and sampling variance and is performed in Excel.

Table 3: One-way ANOVA Output

Source of Variation	SS	df	MS	F	P-Value	F crit
Between Groups	0.246339	9	0.027371	0.968591	0.514466	3.020383
Within Groups	0.282586	10	0.028259			

So $S_{an}^2 = MS_{within}$ =0.028259

where S_{an}^2 = the analytical variance

and $S_{sam}^2 = \frac{MS\ between - MS\ within}{2}$

$= \frac{0.027371 - 0.028259}{2} = -0.0004$

where S_{sam}^2 = the between sample variance

Test for Sufficient Analytical Precision

The target standard deviation (σ_{pt}) is the product of the mean of all duplicate results (χ) and the between-laboratory coefficient of variation (CV) which is established by the study coordinator.

$\sigma_{pt} = \chi$ (CV)
= 32.83 (0.05)
= 1.64%

The analytical standard deviation (S_{an}) is the square root of the analytical variance estimated from ANOVA above.
S_{an}/σ_{pt} = 0.17/1.64 = 0.10

This is less than the critical value of 0.50. The method is precise enough to detect significant inhomogeneity.

Test for Acceptable Between Sample Variance

Calculate the allowable sampling variance (σ_{all}^2) as
$\sigma_{all}^2 = (0.3 \times \sigma_{pt})^2$
$= (0.3 \times 1.64)^2$
= 0.24
Where σ_{pt} = target standard deviation
The critical value is:
$c = F_1 (\sigma_{all}^2) + F_2 (S_{an}^2)$

= 1.88 (0.24) + 1.01 (0.028259)
= 0.48

The values for factors F_1 and F_2 are presented in Table 4.

Table 4: Factors F_1 and F_2 for use in testing for sufficient homogeneity

m^1	13	12	11	10
F_1	1.75	1.79	1.83	1.88
F_2	0.80	0.86	0.93	1.01

Where m^1 = number of samples that have been measured in duplicate.

Compare the sampling variance S^2_{sam} with the critical value.

The sampling variance (S^2_{sam} = -0.0004) is less than the critical value (0.48). The samples are sufficiently homogenous.

The results of the sufficient homogeneity testing are summarized in Table 5.

Table 5: Homogeneity test results

	Value	Critical	Result
Cochran	0.40	0.602	Pass
S_{an}/σ_{pt}	0.10	0.50	Pass
S^2sam	-0.0004	0.48	Pass

Please quantitate the following item containing Cocaine HCl:

Item Submitted

Item 1: Sample of powder containing Cocaine HCl.

3) Indicate the Method and Parameters Used for Quantitation:

Example: GC-FID: column: SGE 12 m x 0.22 mm (F/N054046). 4-point calibration: 0 - 1.25 mg/mL. Internal standard: Tetracosane, Solvent: Methanol.

UTIC	Webcode	Indicate the Method and Parameters Used for Quantitation
p20242801	W182	GC-FID, Column: 30M HP-5MS 30M x 0.25mm ID x 0.25um film, 3-point calibration: 0.241-0.964mg/ml, internal standard tetracosane, solvent 1:1 MeOH: CH2Cl2.
p20242802	W182	UV-VIS, 274.9nm, 4 point calibration
p20242803	W061	Agilent HPLC-DAD Column: Phenomenex Luna 3 um C8(2) 100 A, 100 x 2 mm 7-point calibration: 0.072 - 1.45 mg/mL Internal Standard: N/A Solvent: 25% ACN, 75% H2O, 0.5% diethylamine @ pH 7
p20242804	W061	UPLC-PDA, column: Acquity BEH C18 1.7 micrometer (2.1 x 100mm), 3-point calibration, IS: dibutylphthalte, DS: ACN:H2O (75:25), MP: gradient, ammonium formate/ACN.
p20242805	W061	NMR 400MHz, proton quantitative NMR, internal standard: 1,4-Bis(trimethylsilyl)benzene (TMSB), solvent: CDCl3
p20242809	W163	HPLC with UV detection. Column: Luna 2.5um C18(2)-HST 100 A (LC Column 100 x 3mm). Solvent: 200mL Acetonitrile + 800mL Water + 1mL of 2.5M Suplhuric Acid + 10mL conc. Hydrochloric Acid. 3 point calibration: 0.00408 - 0.321372 mg/mL.
p20242810	W163	Column: Luna 2.5um C18(2)-HST 100 A (LC Column 100 x 3mm) 3 points calibration: 0.000004208g/ml - 0.000294591g/ml Solvent: Water:Acetonitrile: H2SO4, 80:20:0.1
p20242811	W170	CGMS-Column:Rxi-1MS 10 m x 0,1 mm. 5 Point Calibration 0,3 mg/ml -0,7 mg/ml. Internal Standard: Tetracosane, solvent: Ethanol.
p20242812	W170	GC-MS: column: DB5 30 m x 0.250 mm x 0.50 um (UST261312H). 5-point calibration: 433 - 576 mg/mL. Internal standard: Tetracosane, Solvent: Ethanol.
p20242813	W170	GCMS: Colum: DB-5MS 30 m length x 0.25 mm Diam x 0.1 µm Film 5-Point calibration: 300-400-500-600-700 mg/L Internal standard: Tetracosane Solvent: Ethanol
p20242814	W170	GC-MS: column: HP-5MS 30 m x 0.25 mm, DI 0.25. 5-point calibration: 300 - 700 mg/L. Internal standard: Tetracosane, Solvent: Ethanol.

UTIC	Webcode	Indicate the Method and Parameters Used for Quantitation
p20242817	W132	Ultimate 3000 DAD, column: Hypersil GPLD: 150mm x 4.6mm, particle size 5u (25005-154630). 6-point calibration: 0.5-4.0 mg/mL. Solvent water and acetonitrile. Check standard.
p20242818	W153	HPLC-DAD. Column Poroshell C18. 4 point calibration 0-100 mg/L. No internal standard
p20242819	W244	GC-MS; Cloumn: TG-5MS 30m X 0.25mm X 0.25um. 6-Point Calibration: 0.1-0.5mg/ml Internal Standard: Tetracosane Solvent: Methanol:Chloroform (1:9)
p20242820	W071	GC-FID Column: HP-5MS / DB-5MS (30m, 0.25µm film thickness) 5-point calibration: 0.102 - 1.011 mg/mL Internal standard: Triacontane Solvent: Chloroform
p20242821	W071	GC-FID: column HP-5MS 30m x 0.250mm x 0.25um. 5-point calibration: 0.102 to 1.011 mg/mL. Internal standard: Triacontane (C30), Solvent: Chloroform.
p20242822	W071	GC-FID Column: HP5-MS 5% Diphenyl Dimethylsiloxane or Equivalent. (30m, 0.25µm film thickness). 5-point calibration curve: 0.102mg/mL – 1.011mg/mL. Internal Standard: n-Triacontane (C30)(>98% purity), solvent: Chloroform
p20242823	W071	GC-FID: HP-5MS column (30m, 0.25 um film thickness), 5-point calibration: 0.102 - 1.011 mg/ml. Internal Standard: N-triacontane, Solvent: Chloroform
p20242825	W071	Column: HP-5MS / DB-5MS (30m, 0.25µm film thickness) 5-point calibration: 0.102 – 1.011 mg/mL Internal Standard: Triacontane (C30) Solvent: Chloroform
p20242826	W071	GC/FID Column: HP-5MS 30m x 0.250 mm x 0.25um 5-point calibration curve: 0.102 mg/mL to 1.011 mg/mL IS: C30 Solvent: chloroform
p20242827	W071	GC-FID: Column HP-5MS 30 m x 0.25 mm. 5-point calibration: 0.102 - 1.011 mg/mL. Internal Standard: N-Triacontane, Solvent: Chloroform
p20242828	W071	GC-FID: column: HP-5 MS = (5% Diphenyl)–Dimethylpolysiloxane 5 point calibration (0.102 to 1.011 mg/mL) Internal standard: C30 (Triacontane) Solvent: Chloroform

UTIC	Webcode	Indicate the Method and Parameters Used for Quantitation
p20242829	W071	GC-FID Column Type: HP-5 MS = (5% Diphenyl)–Dimethylpolysiloxane (30m x 0.250 mm x 0.25 µm) 5-point calibration: 0.102 - 1.011 mg/mL Internal standard: Triacontane Solvent: Chloroform
p20242830	W071	GC-FID Cocaine NYSP.mth: HP-5MS30 x 0.250mm x 0.25µm 5- point calibration 0.102-1.011 mg/ml (7 replicate injections) Internal Standard: Triacontane Solvent: Chloroform
p20242831	W071	GCFID: column Hp5MS 30 x 0.25 um. 5 point calibration: 0.102 mg/mL to 1.011 mg/mL IS: n-Triacontane, solvent: chloroform
p20242832	W071	GC-FID: column: HP-5MS 30 m x 0.25 mm ID x 0.25 um film thickness, 5-point calibration: 0.102 mg/mL - 1.011 mg/mL with a dilution factor of 1. Internal standard: Triacontane, Solvent: Chloroform
p20242833	W071	GC-FID column: 30m x 0.25mm HP-5ms 5 point calibration, 0.102 - 1.011 mg/ml internal std: triacontance
p20242834	W071	GC-FID column HP-5MS: 30mm X 0.25MM X 25un 5 point curve 0.102 mg/ml to 1.011 mg/ml IS -Triacontane Solvent - CHCl3
p20242835	W071	GC FID, Column HP-5MS 5% Diphenyl Dimethylsiloxane, 5 point calibration curve, Tricontane C30 internal standard, Chloroform as solvent Range for #2 0.102 mg/mL- 1.011 mg/mL
p20242837	W071	GC-FID: column: HP-5MS (30m, 0.25um film thickness) 5-point calibration, range: 0.102 mg/mL - 1.011 mg/mL (dilution factor: 1) Internal Standard: Triacontane (C30) Solvent: Chloroform
p20242838	W071	GCFID Column= HP5-MS, Serial # = US0493537H 5 point calibration (0.102-1.011 mg/mL) IS= 0.500mg/mL Triacontane (C30) Solvent= Chloroform
p20242839	W071	GC-FID; Column: DB-5MS UI 30m x 0.25mm x 0.25um; 5-point calibration (0.102 mg/mL - 1.011 mg/mL); IS: n-Triacontane; Solvent: Chloroform
p20242840	W071	GC-FID: HP-5 MS = (5% Diphenyl)–Dimethylpolysiloxane or equivalent (30m, 0.25µm film thickness) 5-point calibration: Curve range 0.102 mg/mL to 1.011 mg/mL Internal standard: Triacontane (C30), Solvent: Chloroform

UTIC	Webcode	Indicate the Method and Parameters Used for Quantitation
p20242841	W071	GC/FID: Perkin Elmer Clarus 680 Column: HP5MS (30mx0.250mmx0.25um) 5 point calibration: 0.1018mg/ml to 1.013mg/ml Cocaine #2091 (L1-L3) (Australian Government National Measurement Institute (19-D-02) from Cerilliant #2092 (L4-L5) (Australian Government National Measurement Institute (19-D-02) from Cerilliant Purity 99.8% Internal standard: Triacontane (C30) Sigma-Aldrich BCCH1526 Solvent: Chloroform Controls: Cocaine #1866 Batch #239 and #240 (Lipomed 156.1B21.1)
p20242845	W130	GC/FID/MS: Column: Rtx-5MS 15m X 0.25 mm X 0.25 µm 5% diphenyl-95% dimethylpolysiloxane (stationary phase) Solvent: Methanol/ Dichloromethane Internal Standard: n-Tetracosane in methanol/dichloromethane solution 5 point calibration (Cocaine HCl/ Heroin HCl/ n-Tetracosane concentration): [25µg/ml/50µg/ml/50µg/ml, 50µg/ml/100µg/ml/50µg/ml, 100µg/ml/150µg/ml/50µg/ml,200µg/ml/200µg/ml/50µg/ml, 300µg/ml/250µg/ml/50µg/ml] Method: CHQUANTN
p20242846	W130	GC-FID: column: RTX-5MS 15m x 0.25mm x 0.25µm 5% diphenyl-95%dimethylpolysiloxane. 5-point calibration: 25µg/mL, 50µg/mL, 100µg/mL, 200µg/mL, 300µg/mL Internal standard: n-tetracosane Solvent: Methanol
p20242847	W130	Agilent 6890N/7890A GC-FID: Column: Rtx-5MS 15 m x 0.25 mm x 0.25 µm, 5-point calibration: 25 µg/mL - 300 µg/mL.Internal standard: Tetracosane. Solvent: Dichloromethane/Methanol.
p20242848	W130	Restek 15m X 250µm X 0.25µm. 5 point calibration 25mg/ml-300mg/ml Internal standard: N-Tetracosane Solvent: Methanol
p20242849	W130	GC-FID: column: Rtx-5MS 15 m x 0.25 mm x 0.25 um, Stationary phase: 5% diphenyl- 95% dimethylpolysiloxane, 5-point calibration: 0-300 mg/mL, Internal Standard: n-Tetracosane, Solvent: Dichloromethane/methanol solution
p20242850	W130	-Agilent 6890N/7890A GC-FID: Column Rtx-5MS 15m x 0.25mm x 0.25µm, 5-point calibration: 25µg/mL - 300µg/mL. Internal standard: Tetracosane, Solvent: Dichloromethane / Methanol.

UTIC	Webcode	Indicate the Method and Parameters Used for Quantitation
p20242851	W130	GC-FID:Agilent 6890N/7890A Rtx-5MS 15 m X 0.25 mmX0.25 um. 5 point calibration:25-300 ug/ml. Internal standard:Tetracosane, solvent; methanol.
p20242852	W130	GC-FID: Column: RTX-5ms 15m X 0.25mm X 0.25um Restek 1643455. 5-point calibration: 25ug/mL - 300ug/mL. Internal Standard: Tetracosane. Solvent: Methanol.
p20242853	W130	GC-FID-MS: column: Rtx-5MS 15m X 0.25mm X 0.25um. 5-Point Calibration: 25, 50, 100, 200, 300 ug/mL. Internal Standard: N-tetracosane, Solvent: Methanol
p20242854	W130	Restek 15m x 250 µm x 0.25 µm 5 point calibration 25mg/ml -300mg/ml Internal standard N-tetracosane Solvent- Methanol
p20242855	W130	GC/FID/MS: column: Agilent 6890N/7890A 15 m x 0.25 mm. 4-point calibration 25mg/mL-300mg/mL. Internal Standard: n-Tetracosane, Solvent: Methanol
p20242856	W130	GC-FID: Column: Rtx-5MS 15m x 0.25mm x 0.25um Agilent 6890N17890A.5 point calibration. Internal Standard: N.Tetracosane,Solvent: Methanol.
p20242857	W130	GC/FID/MS: Column Rtx-5MS 15 m x 0.25 mm x 0.25 um (stationary phase 5% diphenyl- 95% dimethylpolysiloxane), 5 point calibration: 2.5-30ug/mL. Internal standard: N-Tetracosane, Solvent N-tetracosane/Methanol/dichloromethane.
p20242858	W130	GC/FID Column parameters: 15m x 0.25mm x 0.25µm 5 points calibration: 25µg/mL, 50µg/mL, 100µg/mL, 200µg/mL, and 300µg/mL Internal standard: N-Tetracosane Solvent: Methanol and Dichloromethane
p20242859	W130	GD-FID: column Restek 15m x 250 µm x 0.25 µm 5 point calibration 25mg/mL - 300mg/mL Internal standard: N-tetracosane Solvent: Methanol
p20242860	W051	LC: column : Agilent Lichrospher 60 RP-select B, 25cm x 4.0mm i.d., 5 µm. 1-point calibration : 0.502 mg/mL. Internal standard: Lidocaine. Solvent: Methanol.
p20242861	W214	ID: GC-MS, FTIR PURITY: GC-FID Column: Restek RXi-5MS 30m x 0.32mmID 4 point calibration 0.05-1.00mg/ml Internal Standard: Methadone Solvent: Methanol

UTIC	Webcode	Indicate the Method and Parameters Used for Quantitation
p20242862	W042	HPLC Agilent 1260 HPLC Column: Agilent Zorbax Rapid Resolution HT Reverse Phase 4.6x50mm, 1.8um Three Point Calibration: 0.125, 0.250, 0.500 mg/mL Two Controls: 0.200, 0.400 mg/mL Cerilliant external control: 0.3 mg/mL
p20242863	W042	HPLC: Agilent Zorbax Rapid Resolution HT reverse phase 4.6x50mm 1.8µ column, 2.0ml/min flow, mobile phase-65:35 aqueous to organic, 233nm @ 45°C

4) What standard was used and, if given, it's stated purity?

Example: Sigma-Aldrich Batch 079K1053 96.5%

UTIC	Webcode	What standard was used and, if given, it's stated purity?
p20242801	W182	Cocaine HCl- Cayman Chemical Batch 0644260-1
p20242802	W182	Cocaine HCl- Cayman Chemical Batch 0644260-1
p20242803	W061	NMI 19-D-02 99.8%
p20242804	W061	NMI D747, Batch 12-D-06, 99.8 +/- 1.0%
p20242805	W061	Internal standard: NMIA QNMR011b:1,4-Bis(trimethylsilyl)benzene (TMSB) Batch 20-Q-02 99.7%
p20242809	W163	British Pharmacopoeia, batch 4397, 99.3%
p20242810	W163	British Pharmacopoeia, 99.3% batch: 4397
p20242811	W170	Lipomed Batch 156.1B26.1 Cocaine hydrochloride 99,503 % and Lipomed Batch 156.1B27.1 Cocaine hydrochloride 99,247 %
p20242812	W170	LIPOMED Batch 156.1B26.1 99.503%
p20242813	W170	Cocaine HCl Lipomed Lot #156.1B26.1 [99.5%] Internal Standard: TETRACOSANE, SIGMA-ALDRICH Lot # MKCN2863 [99%]
p20242814	W170	Lipomed, Batch 156.1B26.1, 99.9%
p20242817	W132	Georgelle batch 16E16/C1 >98.5%.
p20242818	W153	LIPOMED. Batch 156.1B25.1 99,90 %
p20242819	W244	Cocaine : National Measurement Institute Batch #: 19-D-02 Purity: 99.8% +/-0.3%
p20242820	W071	Australian Measurement Institute, Batch 19-D-02 (99.8% 0.3%)
p20242821	W071	Australian Government National Measurement Institute (19-D-02) 99.8%

UTIC	Webcode	What standard was used and, if given, it's stated purity?
p20242822	W071	L1-L5 created using Cerilliant Cocaine Base, Lot#19-D-02. Purity of Standard 99.8%. Standard manufactured by Australian Government National Measurement Institute but ordered through Cerilliant.
p20242823	W071	Cocaine 99.8 ±0.3%, from Australian Government's National Measurement Institute (Batch 19-D-02), ordered thru Cerilliant.
p20242825	W071	Curve: Cocaine Base, Australian Government National Measurement Institute (ordered from Cerilliant), Lot #19-D-02, Purity 99.8%
p20242826	W071	Curve: Cocaine 99.8% purity (Australian Government National Measurement Institute 19-D-02)
p20242827	W071	Austrailian Government National Measurement Institute Batch #: 19-D-02 99.8 ± 0.3 % (95 %)
p20242828	W071	Australian Government National Measurement Institute (Lot# 19-D-02) 99.8% +/- 0.3%
p20242829	W071	Process Control: Sigma Aldrich - Cocaine Hydrochloride Lot #SLCG4403 98.2% Calibration Curve: National Measure Institute - Cocaine Base Batch #19-D-02 99.8%
p20242830	W071	Australian Government National Measurement Institute (NMI) Cocaine Base Batch no. 19-D-02 99.8 ± 0.3% Lipomed Cocaine lot: 156.1B21 99.550 ± 0.012%
p20242831	W071	Cocaine - Australian Government National Measurement Institute #19-D-02. Purity 99.8 +/- 0.3%
p20242832	W071	Cocaine Base - Australian Government National Measurement Institute Batch No. 19-D-02 99.8 ± 0.3% (95% confidence limit, k = 2)
p20242833	W071	Australian Government National Measurement Instiute 19-D-02, 99.8%
p20242834	W071	Australian Government National Measurment Institute (19-D-02) 99.8%
p20242835	W071	Cocaine Base, Cerilliant 19-D-02 #2091 and #2092, 99.8% purity
p20242837	W071	Curve: Cocaine # 2091 (Levels 1 - 3) [Austrailian Government National Measurement Institute (19-D-02) ordered from Cerilliant] Cocaine # 2092 (Levels 4 - 5) [Austrailian Government National Measurement Institute (19-D-02) ordered from Cerilliant] Purity: 99.8%
p20242838	W071	cal curve made using a cocaine base standard from the National Measurement Institute (Australian Government) batch = 19-D-02 , purity = 99.8 ± 0.3%
p20242839	W071	Cerilliant NMI Cocaine Base Batch #19-D-02 (99.8 +/- 0.3%)
p20242840	W071	Calibrators: Australian Government National Measurement Institute (Lot: 19-D-02) from Cerilliant, Purity 99.8%

UTIC	Webcode	What standard was used and, if given, it's stated purity?
p20242841	W071	Cocaine #2091 (L1-L3) (Australian Government National Measurement Institute (19-D-02) from Cerilliant #2092 (L4-L5) (Australian Government National Measurement Institute (19-D-02) from Cerilliant Purity 99.8%
p20242845	W130	Calibration Standard: Cocaine HCl Lipomed 156.1B27.1 99.199 +/- 0.006%
p20242846	W130	Lipomed 156.1B27.1 , purity: n/a
p20242847	W130	Lipomed #156.1B27.1, 99.199 ± 0.006%
p20242848	W130	Cocaine HCl Lipomed 156.1B27.1 98.5%
p20242849	W130	Cocaine HCl Lipomed 156.1B27.1, 98.5%
p20242850	W130	Lipomed # 156.1B27.1 99.199±0.006%
p20242851	W130	LIPOMED 156.1B27.1
p20242852	W130	Lipomed 156.1B27.1 99.1%
p20242853	W130	Lipomed 156.1B27.1 Purity: 99.199 +/- 0.006 %
p20242854	W130	Cocaine HCl Lipomed 156.1B27.1 Purity 98.5%
p20242855	W130	Lipomed 156.1B127.1
p20242856	W130	LIPOMED 156.1B27 99.199%
p20242857	W130	LIPOMED 156.1B27.1
p20242858	W130	Lipomed 156.1B27.1 Purity: 99.199% +/- 0.006%
p20242859	W130	Cocaine HCl Lipomed 156.1B27.1 Purity 98.5%
p20242860	W051	Lipomed (156.1B27.1) Purity 99.199 ± 0.006 %
p20242861	W214	LGC Batch 1236891 1.007mg/ml
p20242862	W042	Cocaine (Sigma Lot# 072K1328)
p20242863	W042	Cocaine HCl Sigma Lot# 72K1328

5) Method for Estimating Uncertainty:

Example: Uncertainty estimate is based on method reproducibility. CRM uncertainty and sample homogeneity.

UTIC	Webcode	Method for Estimating Uncertainty
p20242801	W182	Uncertainty estimate is based on bias of control samples.
p20242802	W182	% of mean, bias of CT samples.
p20242803	W061	Top Down - Precision and estimates of the method and laboratory bias
p20242804	W061	Method Reproducibility, sample homogeneity and CRM uncertainty.

UTIC	Webcode	Method for Estimating Uncertainty
p20242805	W061	Top down approach - precision and estimated method and laboratory bias. Uncertainty estimate is based on method reproducibility and CRM uncertainty. Sample homogeneity incorporated in method reproducibility. Use of Eurachem/CITAC guide. Duplicate analysis of samples, control samples that are previously analysed real seizure samples.
p20242809	W163	Uncertainty estimate is based on the combined Relative Standard Deviation % of the intermediate precision and bias, expanded with a 95% confidence interval.
p20242810	W163	Precision and Bias.
p20242811	W170	Uncertainty estimate is based on method reproducibility, CRM uncertainty and sample homogeneity.
p20242812	W170	Uncertainty estimate is based on method reproducibility. CRM uncertainty and sample homogeneity.
p20242813	W170	Guide to the expression of uncertainty in measurement (GUM guide)
p20242814	W170	Uncertainty estimate is based on method reproducibility. CRM uncertainty and sample homogeneity.
p20242817	W132	Measurment of uncertainty is based on intermediate precssion of the method. The highest RSD during these experiments was 3.5% using a k factor of 2 = 7%.
p20242818	W153	Accuracy profile based on intermediate precision and repaeatability
p20242819	W244	Uncertainty estimate is based on method reproducibility Certified Reference Material Microbalance Micropipette
p20242820	W071	Uncertainty is estimated based on reproducibility, uncertainty in calibration curve, weighing, CRM uncertainty, and volumetric measurement.
p20242821	W071	Uncertainty estimate based on evaluation and combination of uncertainties using the Root-Sum-Square method and expanded using a k factor related to the specified confidence level. Some uncertainties include, but are not limited to: uncertainty related to balance and volumetric flasks, CRM uncertainty, and sample homogeneity.
p20242822	W071	Uncertainty estimate calculation is based on several factors including: the uncertainty of the reference materials used to create the calibration curve, sample homogeneity, uncertainty of calibrated glassware, uncertainty of balance(s), temperature, repeatability, etc.
p20242823	W071	Standard methods for the calculation of uncertainties were employed which included the identification, evaluation, and statistical treatment of factors (i.e. Cocaine and N-triacontane purities, calibrated glassware and balance uncertainties) which contribute to the uncertainty for each type of measurement. Specifically, Type A and B uncertainties were evaluated and combined using the Root-Sum-Square (RSS) method. The resulting standard uncertainties were expanded using a k factor to a specified confidence level.

UTIC	Webcode	Method for Estimating Uncertainty
p20242825	W071	Uncertainty is based on temperature, repeatability of results, variation, uncertainty in the calibration curve, homogeneity of the sample, the calibrators used to make the curve, the purity of the certified reference material, and the traceability of the glassware and balances used.
p20242826	W071	The uncertainty estimation is based on repeatability variation, uncertainty in the calibration curve, balance weighing, purity of reference materials, volumetric mearurements, sampling and resolution.
p20242827	W071	Uncertainty estimate is based on method repeatability, calibration curve, weighing in sample preparation/calibration curve, reference material uncertainty, volumetric glassware uncertainty in calibration curve/sample preparation and sample homogenity, resolution of concentration.
p20242828	W071	Uncertainty estimate is estimated based on the combination of a multitude of factors including but not limited to: repeatability, uncertainty from the calibration standard, uncertainty from the calibrated glassware, and sample homogeneity.
p20242829	W071	Uncertainty esimate is based on repeatability variation, uncertainty in the calibration curve, balance and glassware uncertainty, reference material purity, and volumetric measurements.
p20242830	W071	Type A and B uncertainties were evaluated and combined using the Root-Sum-Square (RSS) Method. The resulting standard uncertainties were expanded using a k factor correlating to a 99% confidence level.
p20242831	W071	Standard methods for calculating uncertainty were emploed which include identification, evaluation and statistical treatment of factors which contribute to the uncertainty for each type of measurement. For example: reproducibility, sample preparation and purity of reference materials. Uncertainties were expanded using a k factor correlating to confidence level.
p20242832	W071	Uncertainty estimate is based upon: Sampling; Resolution; Repeatability Variation; Uncertainty in Calibration Curve; Weighing in Sample Preparation; Weighing in Calibration; Purity of Reference Materials; Volumetric Measurement in Calibration; and Volumetric Measurement in Sample Preparation.
p20242833	W071	Uncertainty estimate is based on method reproducibility. CRM uncertainty and sample homogeneity.
p20242834	W071	Standard method for calculating uncertainty were employed which are identification, evaluation and statistical treatment. These factors contribute to the uncertainty for each type of measurement, specifically Type A and B uncertainties. These were evaluated and combined using the Root-Sum square (RSS) method. The resulting standard uncertainties were expanded using the K factor correlation to a specified confidence level.
p20242835	W071	Resolution, Repeatability Variation, Uncertainty in Calibration Curve, Weighing in Sample Preparation, Weighing in Calibration, Purity of Reference Material, Volumetric Measurement in Calibration, Volumetric Measurement in Sample Preparation, Temperature Effect, and Sampling

UTIC	Webcode	Method for Estimating Uncertainty
p20242837	W071	Uncertainty estimate is based on repeatability, resolution, sampling, temperature, balance weighings, uncertainty in the calibration curve, reference materials purity, and volumetric measurements.
p20242838	W071	Uncertainy measurement is based on the statistical treatment of factors that can contribute to the uncertainty. There are different types of uncertainty that get evaluated and combined using the Root-Sum-Square method. The resulting standard uncertainties, for each factor, are expanded using a k factor that correlates to the chosen confidence level, in this case 99%. Final uncertainties are rounded to two decimal places. Factors that are included in the uncertainty estimate are repeatability, equipment used (balances and glassware), sample homogeneity, resolution of concentration, purity of reference materials used and the uncertainty within the curve.
p20242839	W071	Uncertainty estimate based on, but not limited to, the following contributing factors: Repeatability, Calibration Curve, balance, CRM, glassware, temperature, sampling, resolution, etc.
p20242840	W071	Uncertainty was determined by identifying and evaluating Type A and B uncertainties, combining using the Root-Sum-Square (RSS) method, and expanding the uncertainty. Sources of uncertainty include repeatability, uncertainty of the calibration curve, balance uncertainty, purity of reference materials, uncertainty of class A glassware, and sample homogeneity.
p20242841	W071	Method for estimating uncertainity: purity of reference materials, temperature, sample homogenuity, resolution, repeatability (repeatability variation), uncertainty in calibration curve, balance (weighing in sample preparation and weighing in calibration), volumetric measurement in sample preparation, volumetric measurement in calibration
p20242845	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242846	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242847	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242848	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242849	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242850	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.

UTIC	Webcode	Method for Estimating Uncertainty
p20242851	W130	(blank)
p20242852	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242853	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242854	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242855	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242856	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogenity, and uncertainty of calibrated equipment used.
p20242857	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used
p20242858	W130	Uncertainty estimate is based on method reproducibility, the purity of the reference material, sample homogeneity, and the uncertainty of calibrated equipment used.
p20242859	W130	Uncertainty estimate is based on method reproducibility, purity of the reference material, sample homogeneity, and uncertainty of calibrated equipment used.
p20242860	W051	Uncertainty estimate is based on top-down approach by estimating the precision and bias of the method.
p20242861	W214	Uncertainty estimate based on method reproducibility and equipment uncertainty. Method reports results in base and as such uncertainty is calculated as base. Result and uncertainty have been converted using a conversion factor of 0.89.
p20242862	W042	Uncertainty estimate is based on systematic and random error combined for each of the controls run. The highest is selected.
p20242863	W042	The sum of the random and systematic error for the run

6) Please report your quantitation result, reported in % as the HCl salt:

Example: 95.3%

7) Please report your expanded measurement uncertainty, reported in % as the HCl salt at a 95% confidence level. If no uncertainty is reported "0" will be used for statistical purposes.

   Example: 0.9%

8) Please report the coverage factor (k) for your measurement uncertainty:

   Example: k=2 (confidence level of approximately 95%, assuming the net mass follows a normal distribution)

UTIC	Webcode	Quantitation Result	Uncertainty Result	Coverage Factor
p20242801	W182	33.2%	6.42%	k=2
p20242802	W182	32.6%	5%	k=2
p20242803	W061	31.0%	3.1%	k=2
p20242804	W061	31.80%	1.47%	k = 2
p20242805	W061	31.1%	1.1%	k=2 95% confidence level
p20242809	W163	30.5%	2.3%	k=2 (confidence level of 95%)
p20242810	W163	33%	30.5118 - 35.4882%	K=2, confidence level at 95%.
p20242811	W170	32,5%	2,0%	K=2,1 (confidence level of approx 95%)
p20242812	W170	32.0%	1.2%	2
p20242813	W170	33%	1%	2,13
p20242814	W170	31,1	3,9%, 95% confidence level	k=3,3
p20242817	W132	32.6%	2.2%	2
p20242818	W153	30.6	2.0	k=2
p20242819	W244	29.26%	0.67%	k=2 (Confidence level of approx. 95%)
p20242820	W071	29.8%	2.6%	k=2
p20242821	W071	31.0%	2.7%	k=2
p20242822	W071	31.4%	2.7%	2
p20242823	W071	30.9%	2.7%	K=2
p20242825	W071	31.0%	2.7%	K=2 (95%)
p20242826	W071	31.7%	2.7%	k=2, 95% confidence
p20242827	W071	31.5	2.7	k=2
p20242828	W071	30.9%	2.7%	k=2, 95% confidence
p20242829	W071	31.3%	2.7%	k=2
p20242830	W071	30.2%	2.6%	k=2
p20242831	W071	30.6%	2.7%	k=2
p20242832	W071	30.9%	2.7%	k = 2
p20242833	W071	31.0%	2.7%	k=2
p20242834	W071	30.3%	2.6%	2

UTIC	Webcode	Quantitation Result	Uncertainty Result	Coverage Factor
p20242835	W071	30.7%	2.7%	k=2
p20242837	W071	30.3%	2.6%	k=2
p20242838	W071	30.8	2.7	2
p20242839	W071	30.8%	2.7%	k=2 (95% confidence level)
p20242840	W071	29.4%	2.6%	2
p20242841	W071	30.8%	2.7%	k=2
p20242845	W130	31.1%	2.8%	k= 1.98
p20242846	W130	29.8	2.7	1.98
p20242847	W130	32.0%	2.9%	1.98
p20242848	W130	31.2%	2.9%	1.98
p20242849	W130	32.0%	2.9%	k=1.98
p20242850	W130	30.4%	2.8%	1.98
p20242851	W130	29.9	2.7	1.98
p20242852	W130	29.4%	2.7%	1.98
p20242853	W130	31.7%	2.9%	1.98
p20242854	W130	31.9%	2.9%	1.98
p20242855	W130	32.1%	2.9%	1.98
p20242856	W130	32.9%	3%	1.98
p20242857	W130	31.6	2.9	K=1.98
p20242858	W130	31.7%	2.9%	k = 1.98
p20242859	W130	31.9%	2.9%	k=1.98
p20242860	W051	31.9%	2.0%	k=2
p20242861	W214	33.70% HCl (30.00% base)	3.24%	2
p20242862	W042	31.2%	3.7%	4.3
p20242863	W042	31.68%	3.7%	4.3

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

10) Did you find this test to be a fair test of the process of the quantitation of cocaine?

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 quantitation of cocaine?
p20242801	W182	8 hours	Yes
p20242802	W182	8	Yes

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 quantitation of cocaine?
p20242803	W061	2 hours	Yes
p20242804	W061	2	Yes
p20242805	W061	3	Yes
p20242809	W163	2	Yes
p20242810	W163	1 hour.	Yes
p20242811	W170	24	Yes
p20242812	W170	16	Yes
p20242813	W170	eight hours	Yes
p20242814	W170	48 hour	Yes
p20242817	W132	6.5	Yes
p20242818	W153	8	Yes
p20242819	W244	12 Hours	Yes
p20242820	W071	4	No
p20242821	W071	6 hours	Yes
p20242822	W071	1.5	Yes
p20242823	W071	5	Yes
p20242825	W071	13 hours	Yes
p20242826	W071	8hrs	Yes
p20242827	W071	2.5	Yes
p20242828	W071	3	Yes
p20242829	W071	4 hours	Yes
p20242830	W071	~3 hours	Yes
p20242831	W071	8	Yes
p20242832	W071	~ 3 hours	Yes
p20242833	W071	2 hrs, not inclusive of run time	Yes
p20242834	W071	9	Yes
p20242835	W071	8 hours	Yes
p20242837	W071	4	Yes
p20242838	W071	~7 hrs (2 sets of aliquots. inst maint)	Yes
p20242839	W071	8	Yes
p20242840	W071	3	Yes
p20242841	W071	3 hours	Yes
p20242845	W130	3	Yes
p20242846	W130	3 hours	Yes
p20242847	W130	3.5 hours	Yes
p20242848	W130	3	Yes
p20242849	W130	4	Yes
p20242850	W130	Approximately 4 hours	Yes
p20242851	W130	3 Hrs	Yes
p20242852	W130	4-5 Hours	Yes
p20242853	W130	1	Yes

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 quantitation of cocaine?
p20242854	W130	3	Yes
p20242855	W130	2	Yes
p20242856	W130	2 hours	Yes
p20242857	W130	1	Yes
p20242858	W130	4.5 hrs	Yes
p20242859	W130	1	Yes
p20242860	W051	16 hours	Yes
p20242861	W214	2	Yes
p20242862	W042	2	Yes
p20242863	W042	4	Yes

11) 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. 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
p20242801	W182	Good test, no changes needed.	
p20242803	W061	No comments at this time. Inositol was identified as a component of the powder.	
p20242814	W170	Inform when results are available for review	Quality Managers are emailed Individual Report Forms so that results can be reviewed approximately one week prior to the publishing of the Summary Report.
p20242820	W071	No, the small amount of substance and its texture are not representative of what I encounter in regular casework. I found it to be difficult to work with.	Thank you for bringing this to our attention.

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
p20242825	W071	I would have thought the sample would be less sticky. It stuck to the plastic bag when homogenized and to the spatula when weighing, which made the process difficult and uncertain. Also, I would have liked to see a place to report the answer as Cocaine Base in the test.	Thank you for bringing this to our attention. While we recognize some participants would prefer to report in the base rather than the HCl form, the sample is distributed as the HCl salt and under our quality system, the samples must be reported in the salt form distributed.
p20242830	W071	The sample itself was very staticky and there is such a small amount given, while casework can mimic these conditions its not very common.	Thank you for bringing this to our attention.
p20242831	W071	Amount given does not meet our regular testing thresholds.	Thank you for letting us know. FTS can provide custom PTs with larger quantities, if requested.
p20242838	W071	When performing quantitations in casework there are weight cut-offs required to qualify for such a prep. This test is present as en exception to that, but that is the only thing that could be changed to better represent true analysis.	Thank you for the suggestion.
p20242849	W130	Take out Questions 3 and 4.	As a PT Provider, we are encouraged to ask and share responses to questions such as those in Summary Reports for informative reasons.
p20242852	W130	I would recommend including a sample for pure weight determination along with purity analysis.	Thank you for the suggestion.
p20242861	W214	If possible could samples in solution be sent for testing - we are looking at various extraction methods for drugs disolved in a variety of soluttions - water, alcohol etc	Thank you for the suggestion.

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
p20242862	W042	Have the results reported in milligram content, not percent. Additionally, our laboratory incorporates a base factor into our quantitative calculations. Since we do not know whether a submission is HCl or base form, we use the base factor to be as conservative as possible in our results. These calculations have been altered for purposes of this test, removing the base factor entirely.	Please see FTS comment for p2024825.
p20242863	W042	Salt for and percentage is not the normal testing method for our laboratory. We report in cocaine base and an actual milligram content. This is my only issue with this test. The calculations for percentage, while not difficult, are outside of our normal method calculations.	Please see FTS comment for p2024825.