

# Test Group Summary Report

## C16 VOCs in Water

### June 2021 PT Round

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**Issued: October 13, 2021**

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## 1.0 The Proficiency Testing Report

The Proficiency Testing Report consists of two parts.

- *PTC Proficiency Testing Report*: This report contains participant-specific data and other confidential information. This report is emailed to participants at the end of the PT round.
- *Test Group Summary Report*: A Test Group Summary Report is created for each quantified test group at the end of the PT round. These reports contain more detailed information on the round than are found in the participant-specific PTC Proficiency Testing Report. These reports do not contain any confidential information and are made available on the PTC web site.

## 2.0 Definitions

The participant-specific PTC Proficiency Testing Report contains some terms that new participants may not be familiar with.

<i>Code:</i>	The registration code that is unique to each analyte that a participant is registered for.
<i>App:</i>	If a participant is accredited by CALA, this three-digit number is the appendix number that the accredited method is assigned to.
<i>N:</i>	The number of participants results that were used to calculate the summary statistics. This excludes qualified data (e.g., <) and any results that were flagged as outliers.
<i>Assigned:</i>	The Assigned Value is the robust mean of the reported results, outliers excluded. This is often referred to as the “target” value.
<i>±U:</i>	The uncertainty of the assigned value.
<i>Reported:</i>	The result reported by the participant.
<i>s:</i>	The Standard Deviation of Proficiency Assessment (SDPA). This value is used to determine the acceptance limits for the PT evaluation.
<i>z-Score:</i>	A value assigned to each reported result that is a measure of the degree to which it deviates from the Assigned Value.
<i>Score:</i>	The composite score of the four results reported for each analyte. It is normalized to a score out of 100.
<i>Bias:</i>	A flag assigned if bias is detected using the re-scaled z-score procedure.

## 3.0 Scoring System

Participant performance is evaluated for each proficiency testing sample by a quantitative method that is consistent with ISO/IEC 17043:2010 *Conformity assessment – General requirements for proficiency testing*, the *International Harmonized Protocol for Proficiency Testing of (Chemical) Analytical Laboratories* (2006), and ISO 13528:2015 *Statistical methods for use in proficiency testing by interlaboratory comparisons*.

The following is a brief description of the evaluation procedure used by PTC. The detailed evaluation procedure is described in PROC09 – PT Evaluation *Procedure*, which is available on the PTC website [www.PTCCanada.org](http://www.PTCCanada.org)).

### 3.1 HOMOGENEITY AND STABILITY ASSESSMENT

Homogeneity and stability are assessed using participant data. Regression analysis is performed on reported result against order of sample production (Homogeneity) and reported result against date of analysis (Stability). If the slope is significantly different than zero for either then the Standard Deviation of Proficiency Assessment (s) is increased to minimize the impact.

### 3.2 THE Z SCORE

A "z-score" is calculated for each reported result as follows:

$$z - Score = \frac{(x - \bar{X})}{SDPA} \quad \text{where: } \begin{array}{l} x = \text{participant result;} \\ \bar{X} = \text{the Assigned Value;} \\ SDPA = \text{the Standard Deviation for Proficiency Assessment.} \end{array}$$

The assigned value  $\bar{X}$  is generally estimated from the inter-laboratory Robust mean after outliers due to obvious gross errors (e.g., reported in wrong units) have been removed.

The Standard Deviation for Proficiency Assessment, s, is determined as follows:

- The inter-laboratory Robust standard deviation ( $Stdev_{rob}$ ) is calculated using reported results, obvious outliers removed;
- The regression equation standard deviation ( $Stdev_{reg}$ ) is estimated from regression equations derived from previous studies (see PROC11- *PT Regression Equations* for details);
- The SDPA is the higher of  $Stdev_{rob}$  and  $Stdev_{reg}$ ;
- When a laboratory reports its detection limit, s will be estimated using a pooled variance procedure that uses both the inter-laboratory data and the reported detection limit.

### 3.2 COMPOSITE (PT) SCORE

Since each PT round involves four or two separate samples of distinct concentration for each test, it is necessary to calculate a composite PT score for each test to determine overall performance. The composite score is calculated by first averaging the absolute z-scores for the four results and then calculating a final score as  $100 + (-15 \times \text{avg } |z|)$ .

Acceptable PT Scores equal or exceed 70.

### 3.3 IDENTIFYING BIAS

The proficiency testing report provides flags for bias. These are determined using the re-scaled z-score procedure.

$$RSZ = \frac{\sum z}{\sqrt{N}}$$

where z= the z- score  
N = the number of samples

Flags are assigned for each test group/parameter combination as follows:

$RSZ \geq -2$ and $\leq 2$	no flag assigned
$RSZ > 2$	H (High)
$RSZ > 3$	VH (Very High)
$RSZ < -2$	L (LOW)
$RSZ < -3$	VL (Very Low)

### 3.4 DEVIATIONS FROM EVALUATION PROCEDURE

Other than changes to the Standard Deviation of Proficiency Assessment due to homogeneity or stability flags, any deviation from the published evaluation procedure is described on the cover page(s) of the final *PTC Proficiency Testing Report*.

## 4.0 PT Round Specific Data Summary

The following pages provide more detailed information about the PT round indicated in the cover page of this report than is found in the participant-specific PTC Proficiency Testing Report. The graphical representations and the statistical summaries are based upon the data after outliers have been removed.

### 4.1 SUMMARY STATISTICS

In addition to some of the statistics found in the customer reports, this table includes additional summary statistics such as Median, different measures of dispersion, the number of outliers removed, the number of results in the Questionable range ( $|z|$  between 2 and 3) and the Unacceptable range ( $z > 3$ ), and whether a data set was flagged for Homogeneity or Stability. This section also includes sorted scatter plots of the data for each sample.

### 4.2 z - SCORE PLOTS

The z-scores for each sample are ranked in increasing order and plotted. When the data is normally distributed, the plot should show a slight sigmoidal curve, with an equal number of points above zero as below. Each bar in these plots is colour-coded to indicate the analytical method used by the participant.

### 4.3 KERNEL DENSITY PLOTS

Kernel density plots are generated for each data set. These plots are a graphical way to represent the overall data distribution and are used to visualize possible deviations from normality and unimodality.

### 4.4 STABILITY AND HOMOGENEITY PLOTS

Plots of reported result against analysis date, and reported result against order of bottling are displayed, along with the regression line. These regression analyses are used to determine if the SDPA should be adjusted due to homogeneity or stability.

# 1,1,1-TRICHLOROETHANE

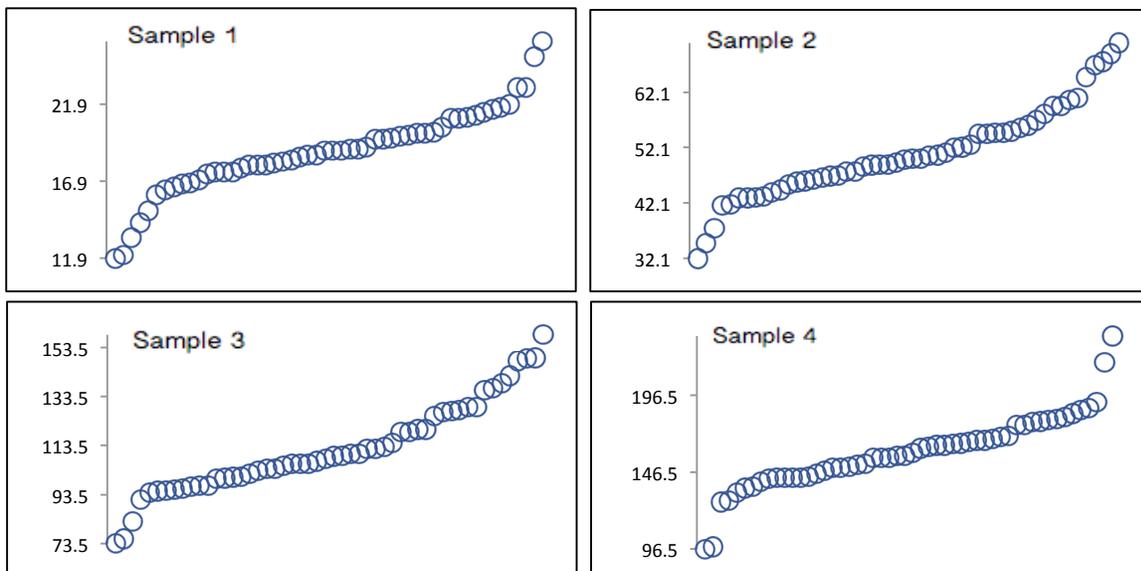
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	52	52	52	52
Median	18.9	50.0	109	158
Robust Mean	18.9	50.8	112	159
U	0.41	1.32	3.2	3.6
Robust Standard Deviation	2.34	7.61	18.3	20.6
Regression Standard Deviation	2.83	7.61	16.7	23.9
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	2.83	12.1	18.3	23.9
Outliers	0	0	0	0
z >3.0	0	0	0	1
2< z <3	5	0	4	3

## Methods Used

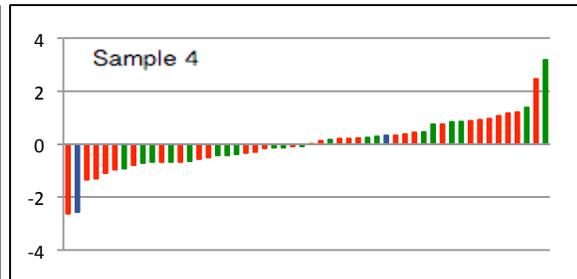
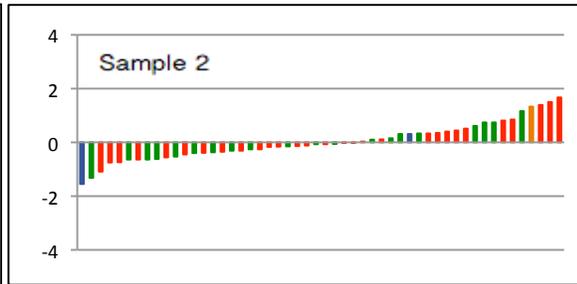
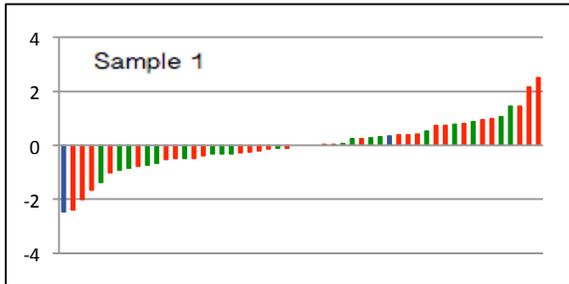
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	2	2	2	2
P/T-GCMS	29	29	29	29
HS-GCMS	20	20	20	20
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

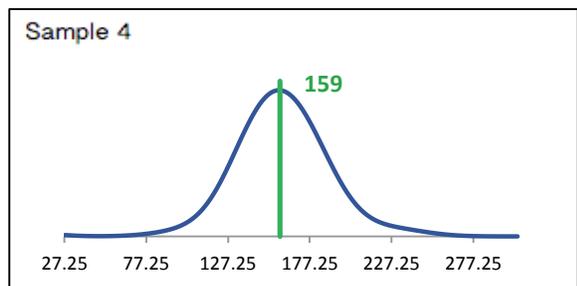
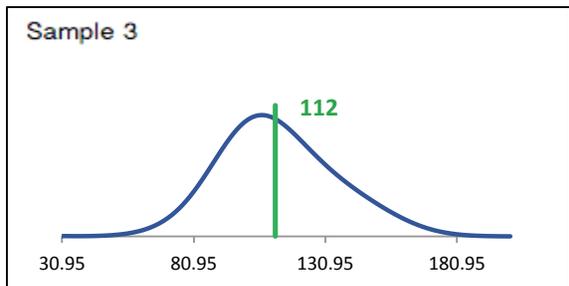
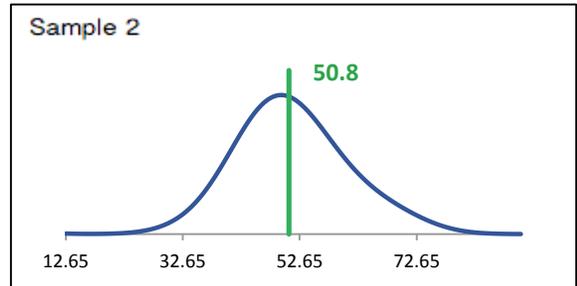
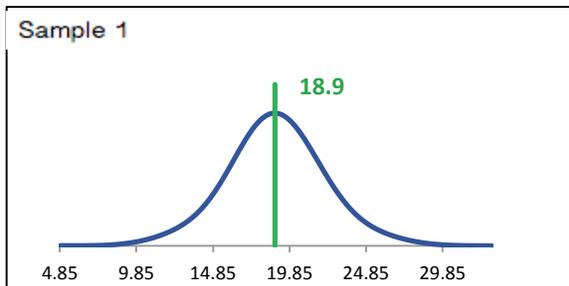


# 1,1,1-TRICHLOROETHANE

## z-Score Plots

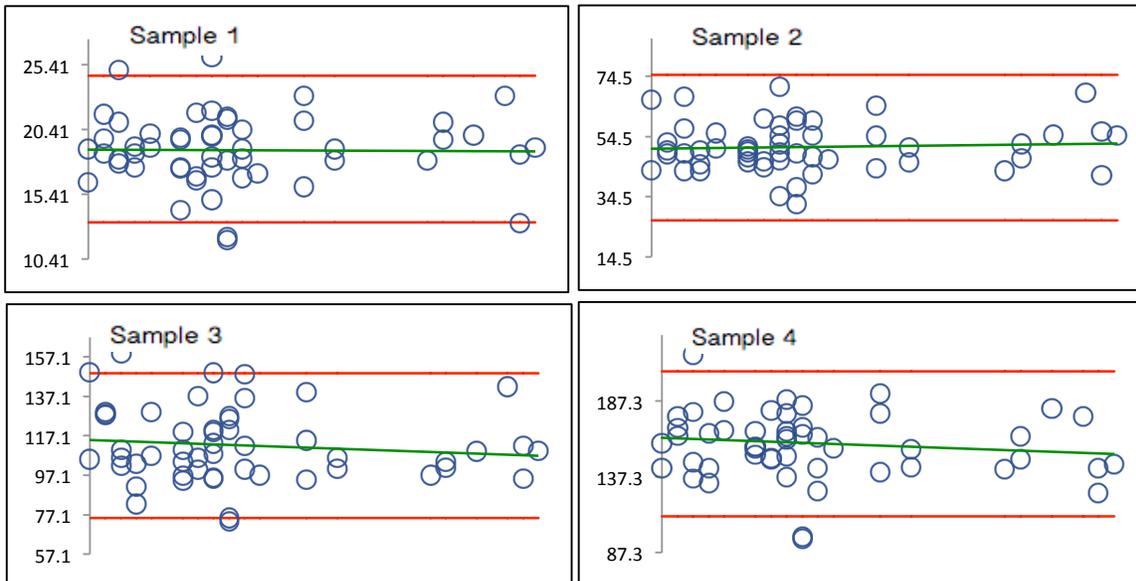


## Kernel Density Plots



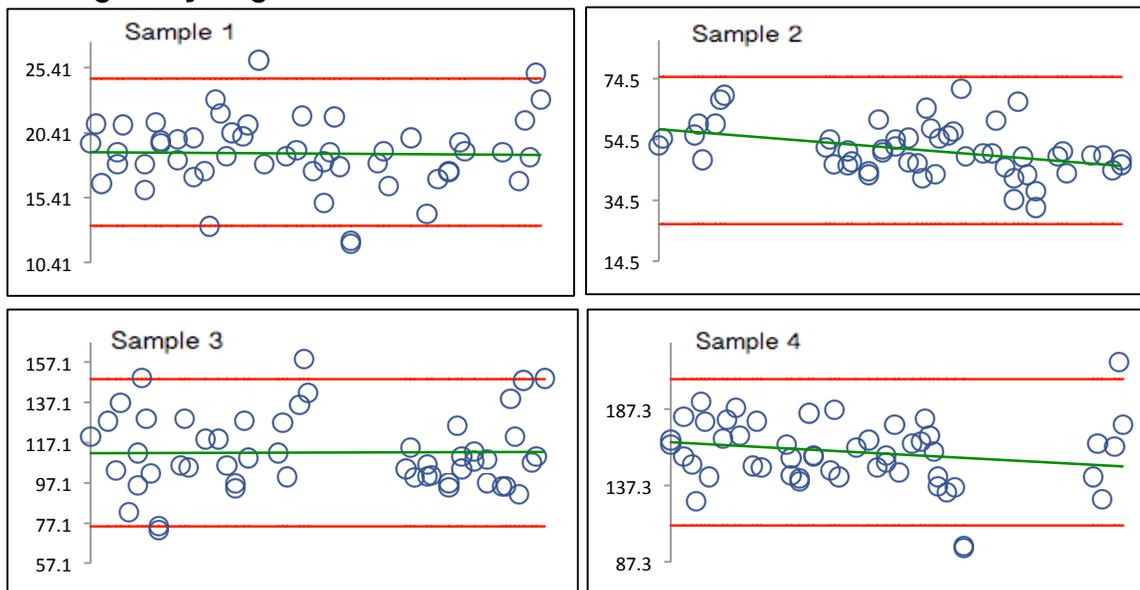
# 1,1,1-TRICHLOROETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,1,2,2-TETRACHLOROETHANE

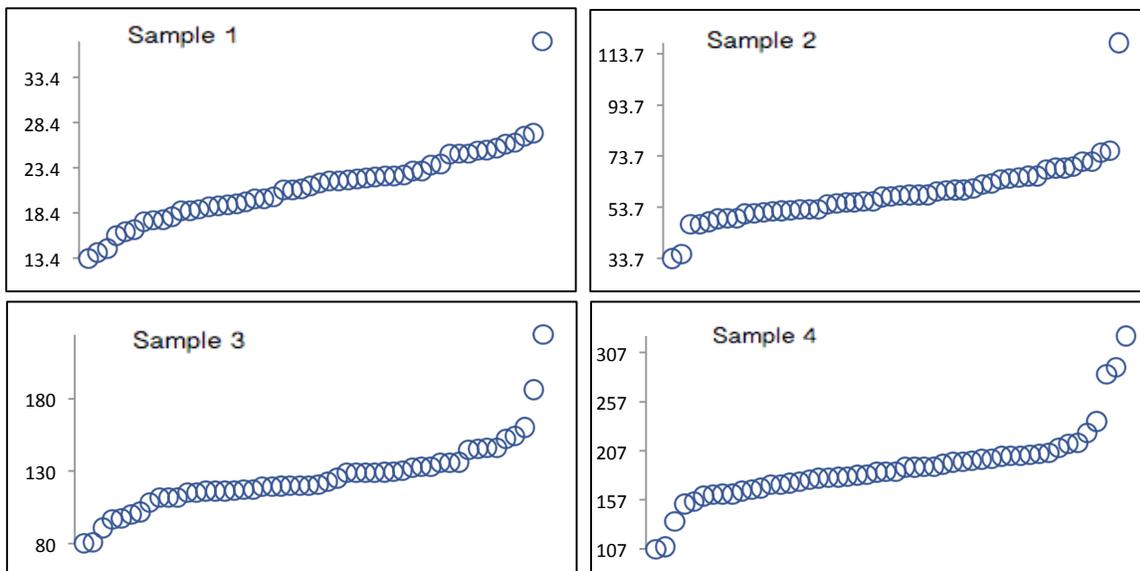
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	50	50	50	50
Median	21.6	58.2	121	186
Robust Mean	21.3	58.4	124	187
U	0.66	1.57	3.2	4.1
Robust Standard Deviation	3.71	8.88	18.0	23.3
Regression Standard Deviation	3.72	10.20	21.7	32.7
Stability Flag				
Homogeneity Flag	Homogeneity			
Standard Deviation Used (SDPA)	4.47	10.2	21.7	32.7
Outliers	0	0	0	0
z >3.0	1	1	1	2
2< z <3	0	2	2	3

## Methods Used

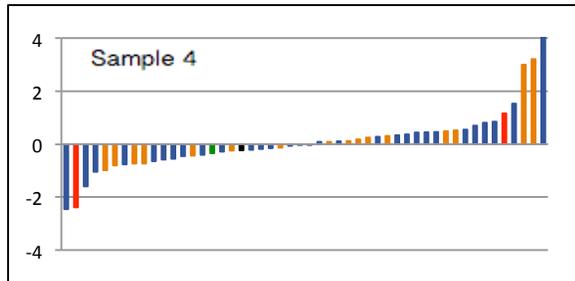
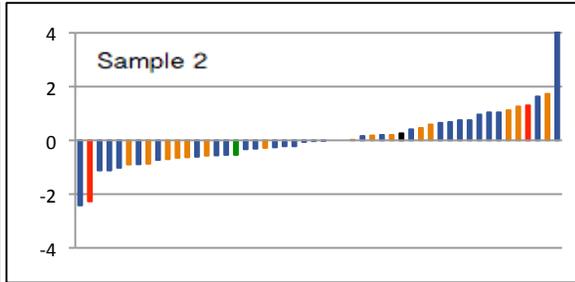
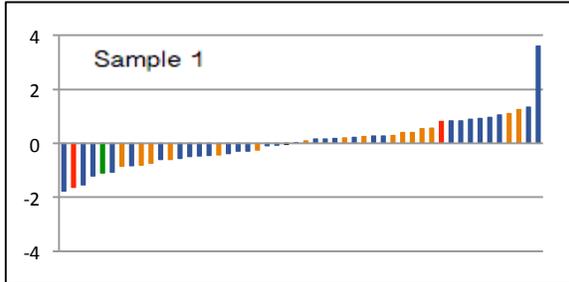
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	30	30	30	30
P/T-FID	2	2	2	2
GC/MS/MSHEAD	1	1	1	1
HS-GCMS	16	16	16	16
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

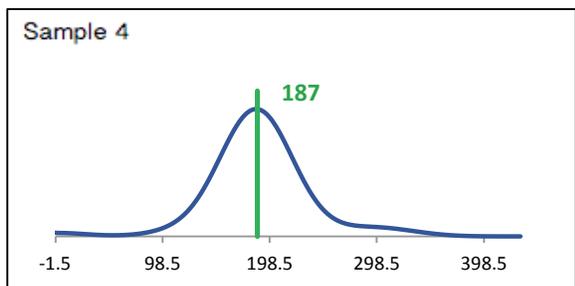
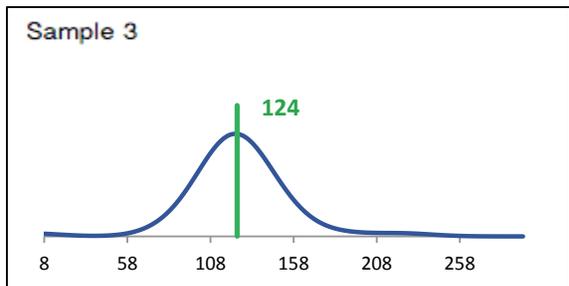
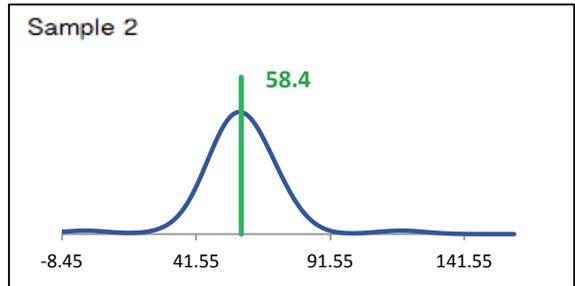
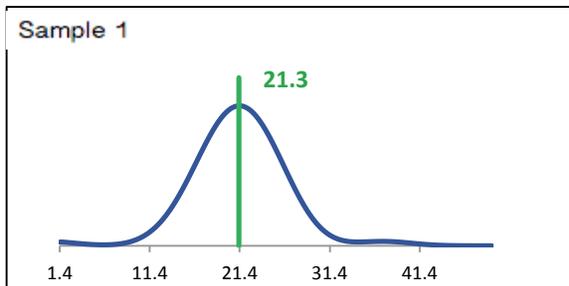


# 1,1,2,2-TETRACHLOROETHANE

## z-Score Plots

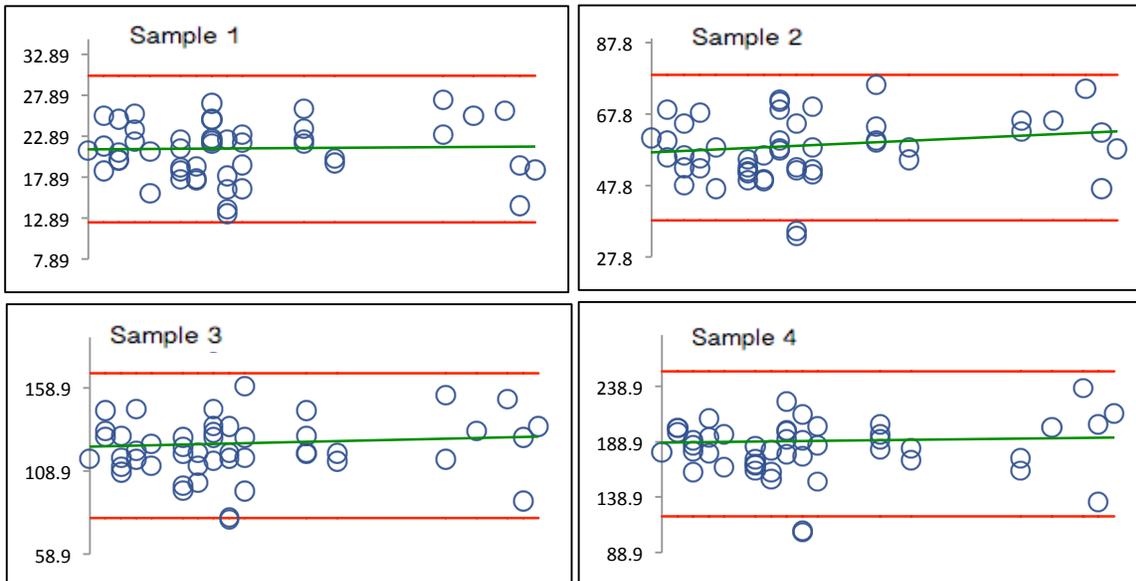


## Kernel Density Plots



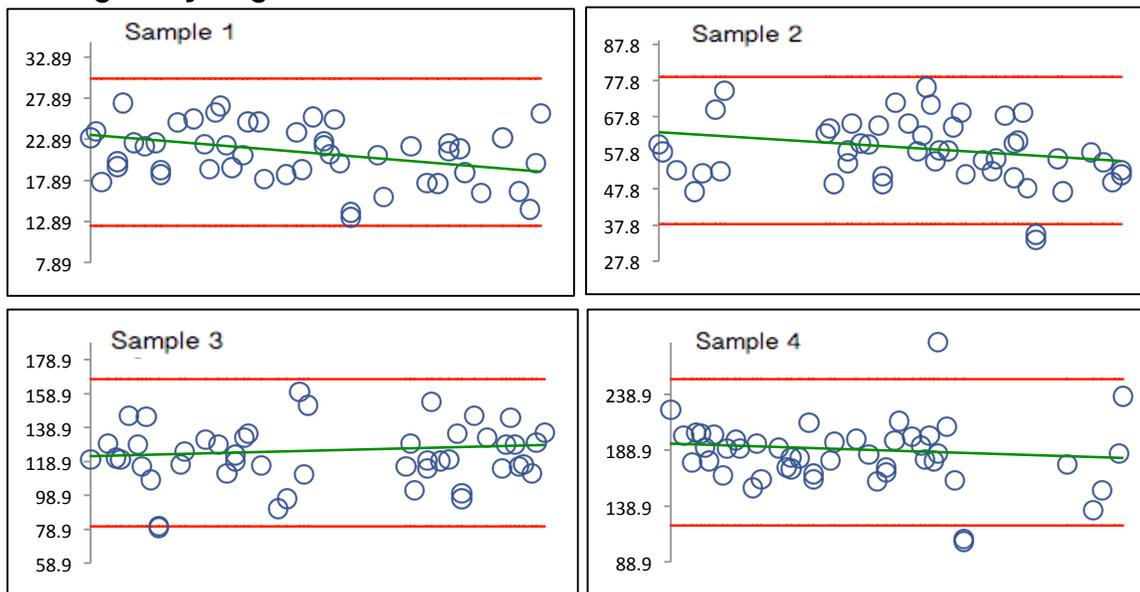
# 1,1,2,2-TETRACHLOROETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,1,2-TRICHLOROETHANE

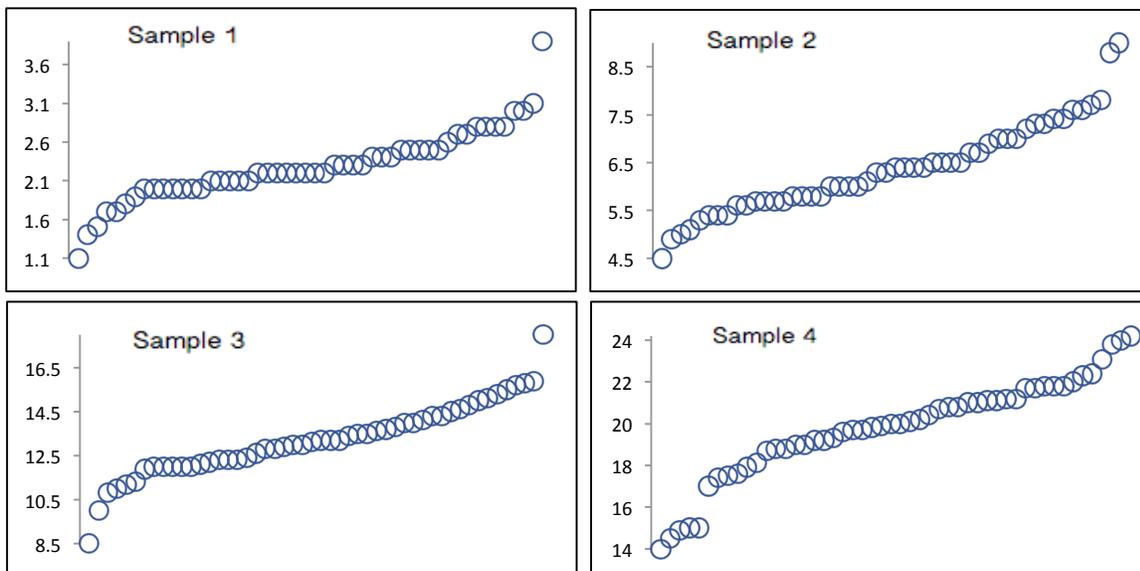
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	50	50	50	50
Median	2.20	6.35	13.2	20.0
Robust Mean	2.28	6.34	13.2	19.9
U	0.071	0.17	0.28	0.38
Robust Standard Deviation	0.403	0.932	1.58	2.17
Regression Standard Deviation	0.342	0.951	1.98	2.99
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	0.403	0.951	1.98	2.99
Outliers	0	0	0	0
z >3.0	1	0	0	0
2< z <3	3	2	2	0

## Methods Used

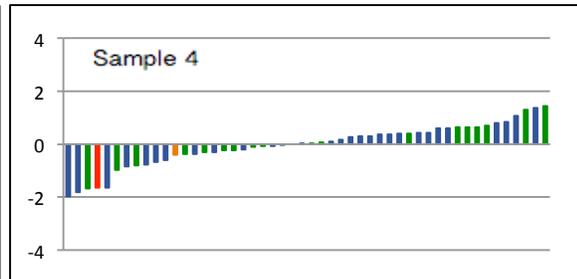
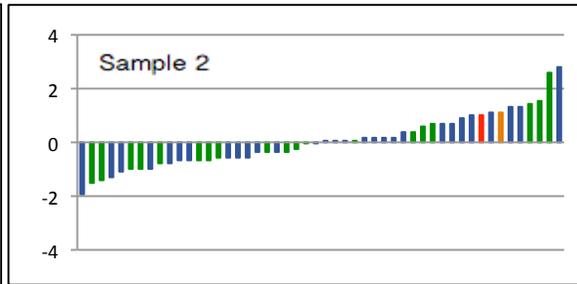
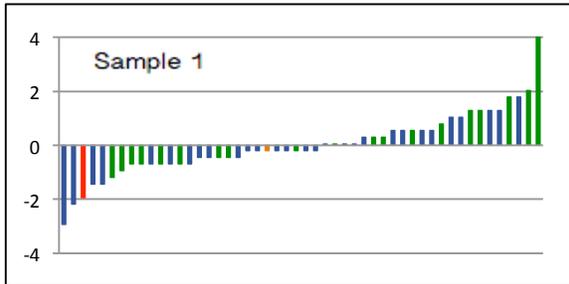
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	29	29	29	29
P/T-FID	1	1	1	1
HS-GCMS	19	19	19	19
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

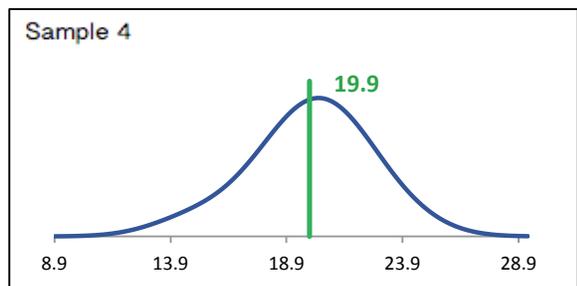
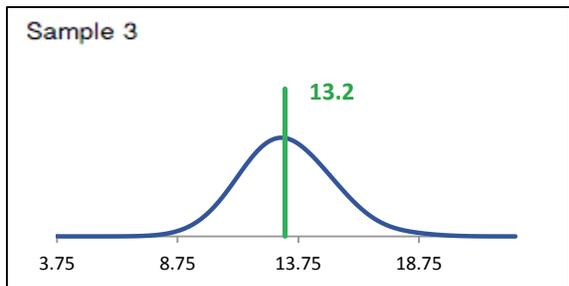
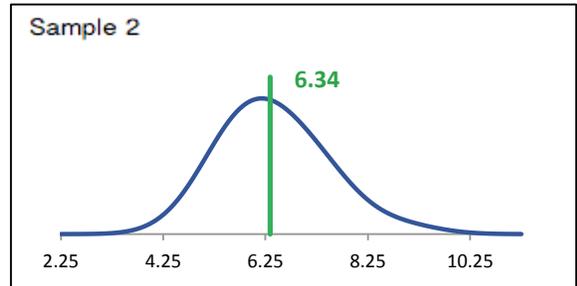
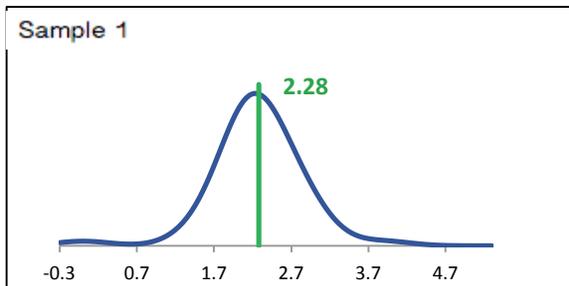


# 1,1,2-TRICHLOROETHANE

## z-Score Plots

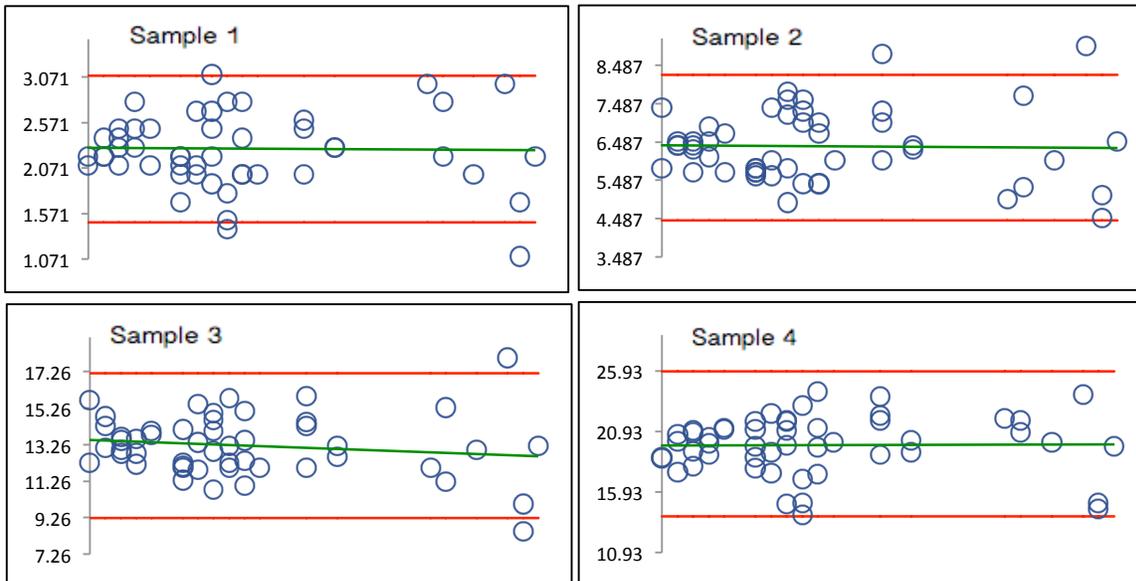


## Kernel Density Plots



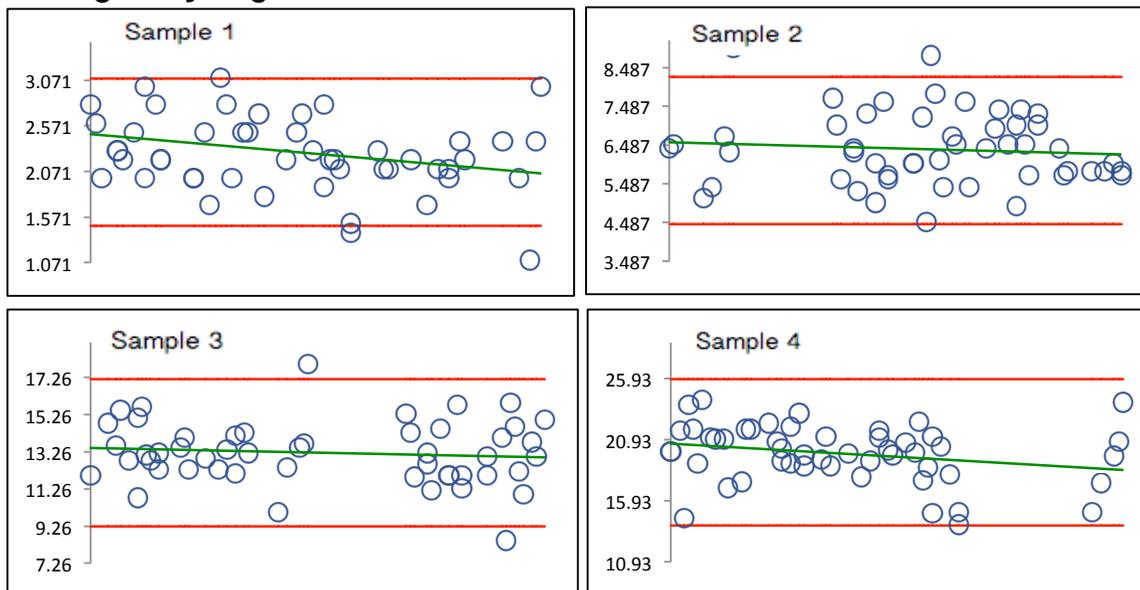
# 1,1,2-TRICHLOROETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,1-DICHLOROETHANE

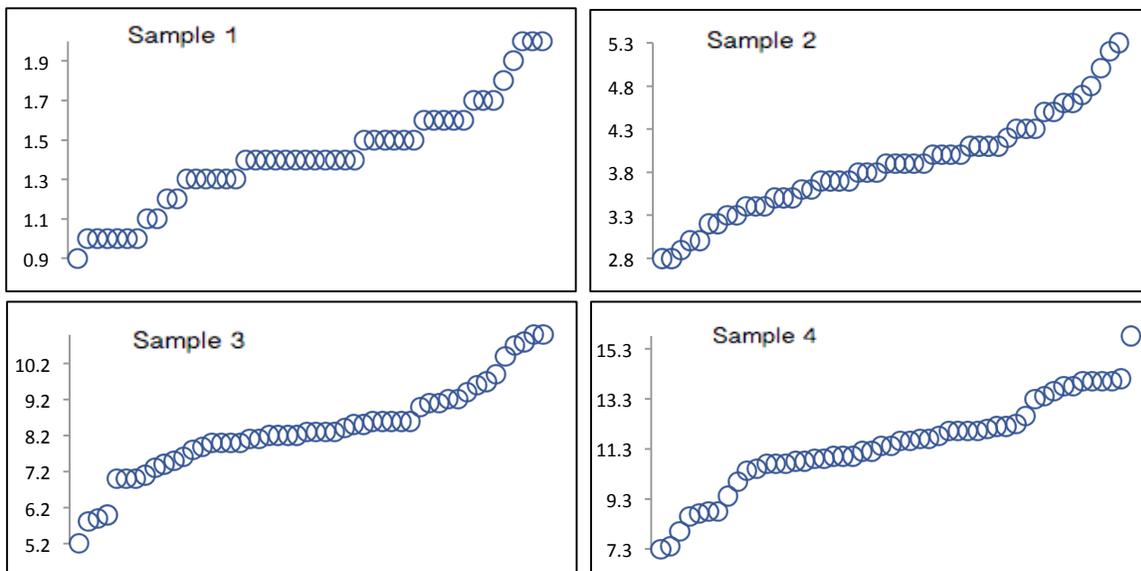
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	48	50	50	50
Median	1.40	3.90	8.30	11.5
Robust Mean	1.40	3.86	8.34	11.5
U	0.051	0.11	0.19	0.33
Robust Standard Deviation	0.280	0.594	1.10	1.87
Regression Standard Deviation	0.211	0.579	1.25	1.73
Stability Flag				
Homogeneity Flag				Homogeneity
Standard Deviation Used (SDPA)	0.280	0.594	1.25	1.96
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	3	2	4	3

## Methods Used

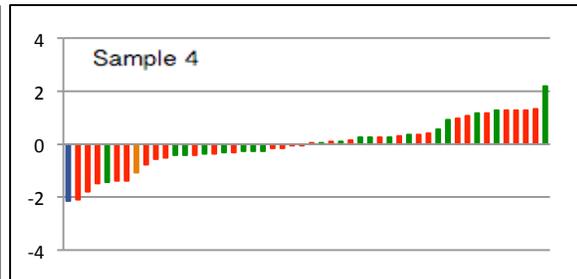
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	1	1	1	1
P/T-GCMS	29	29	29	29
HS-GCMS	17	19	19	19
GC/MSE	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

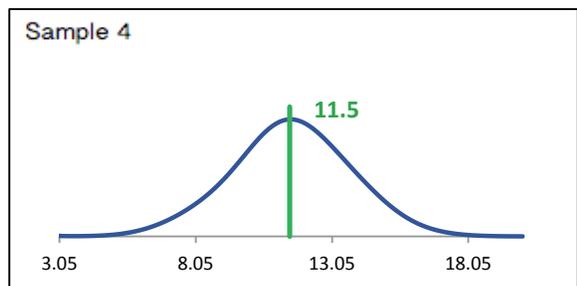
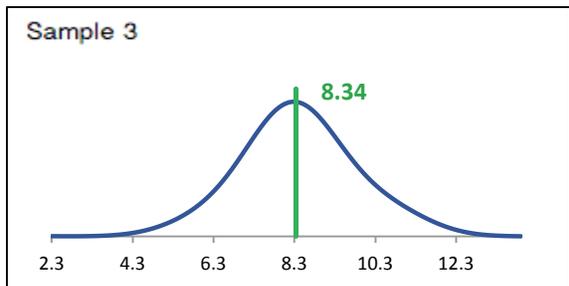
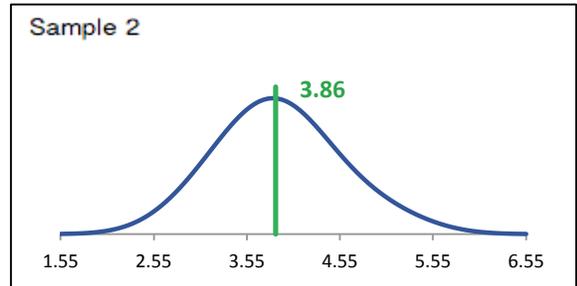
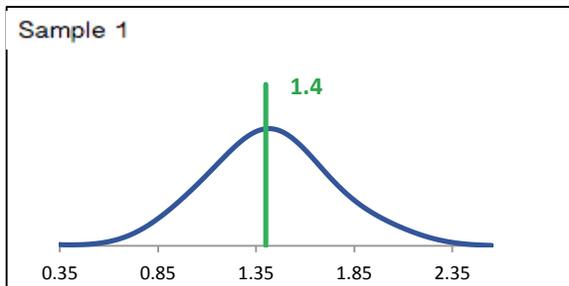


# 1,1-DICHLOROETHANE

## z-Score Plots

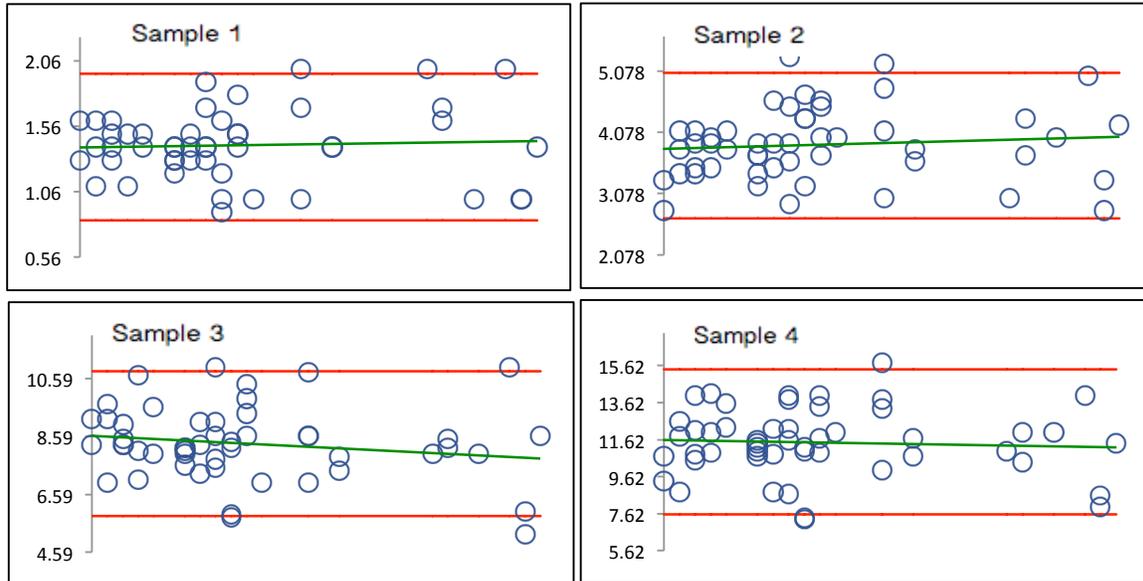


## Kernel Density Plots



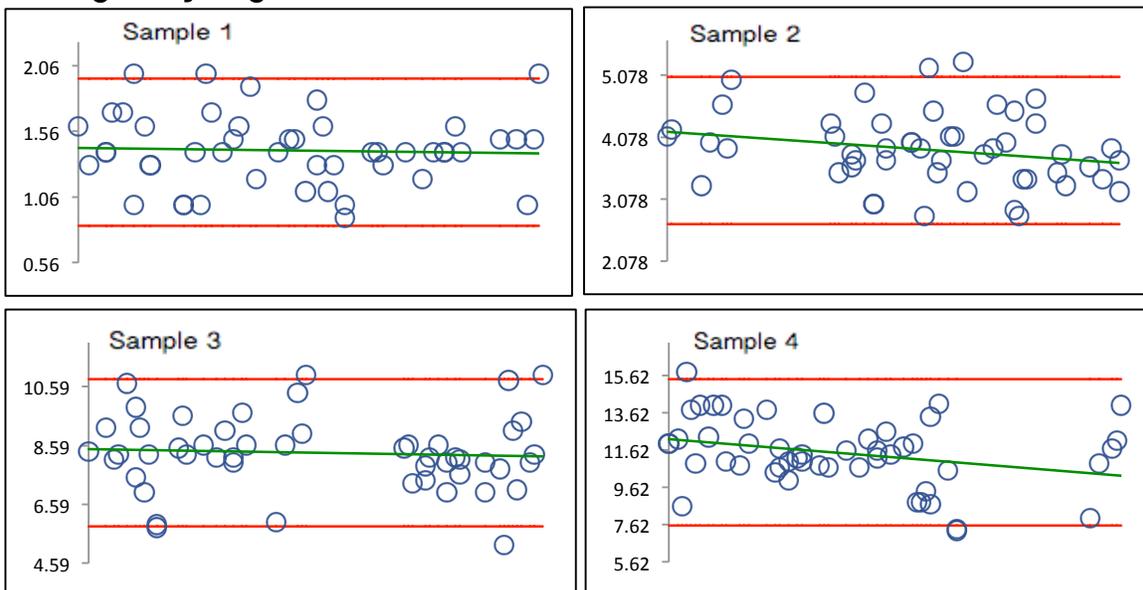
# 1,1-DICHLOROETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,1-DICHLOROETHYLENE

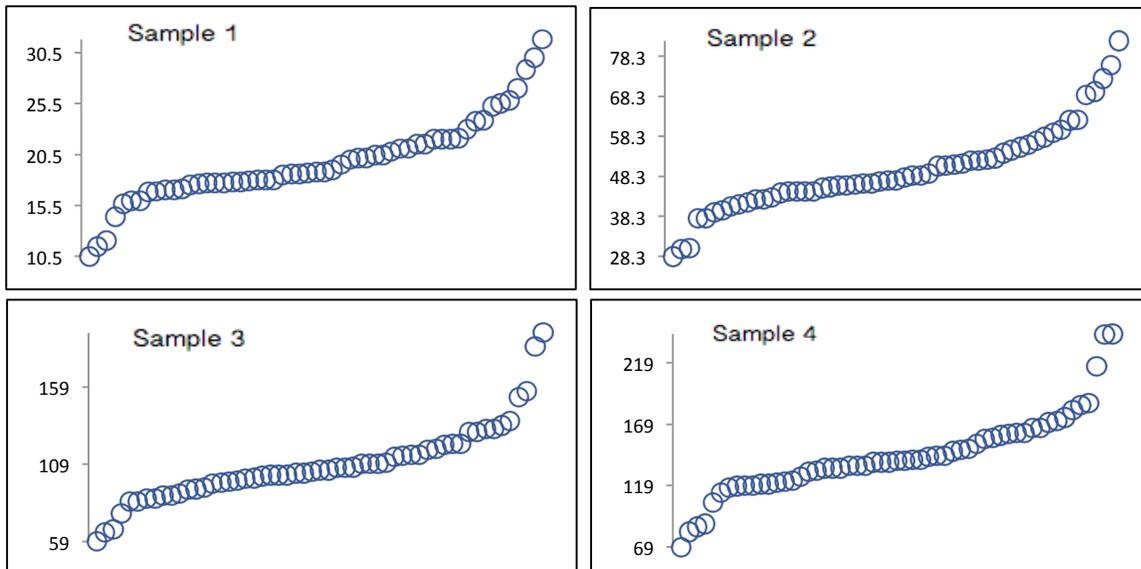
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	55	55	55	55
Median	18.8	47.2	105	139
Robust Mean	19.5	49.0	107	142
U	0.578	1.48	3.27	4.43
Robust Standard Deviation	3.43	8.79	19.4	26.3
Regression Standard Deviation	3.91	9.81	21.4	28.3
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	3.91	12.8	21.4	28.3
Outliers	0	0	0	0
z >3.0	1	0	2	2
2< z <3	4	2	3	3

## Methods Used

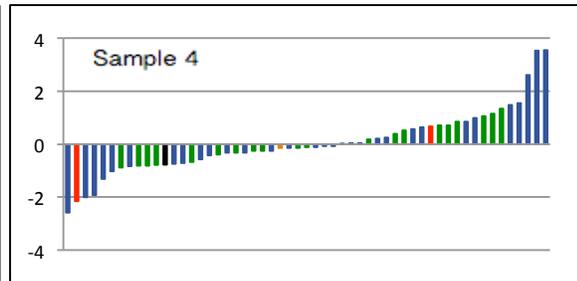
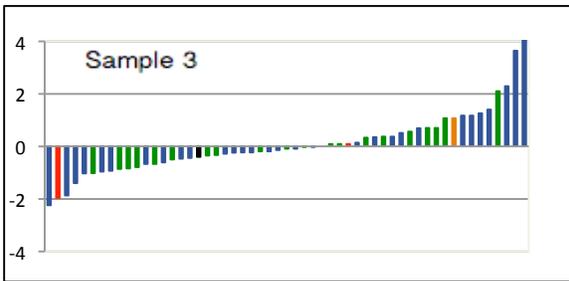
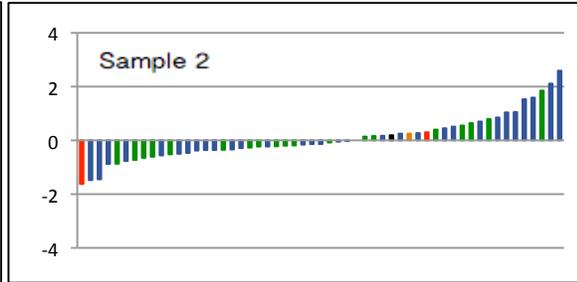
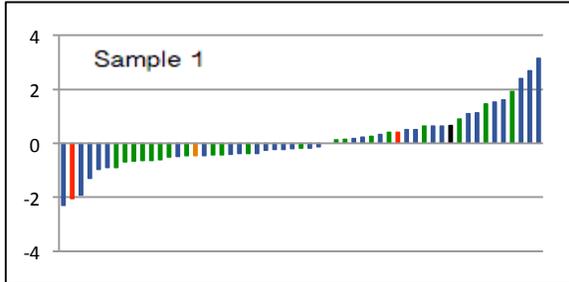
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	31	31	31	31
P/T-FID	2	2	2	2
HS-GCMS	20	20	20	20
GC/MS/MSHEAD	1	1	1	1
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

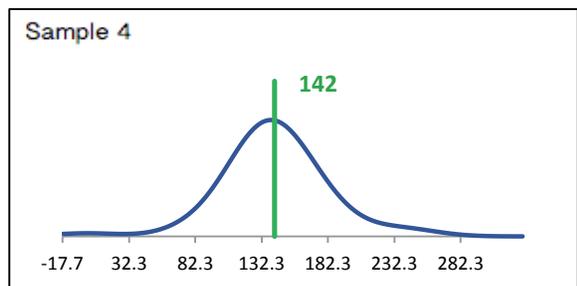
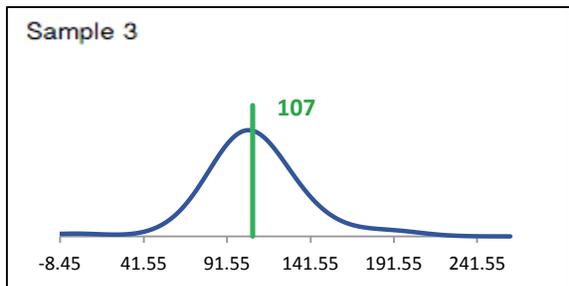
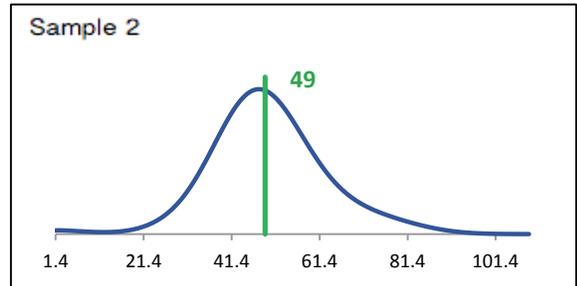
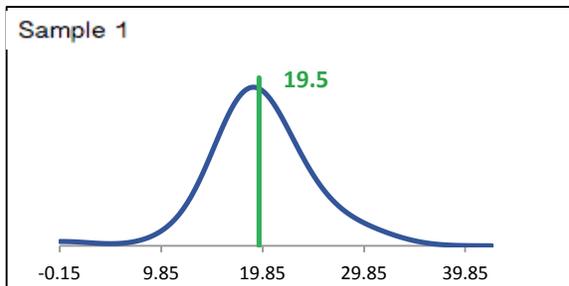


# 1,1-DICHLOROETHYLENE

## z-Score Plots

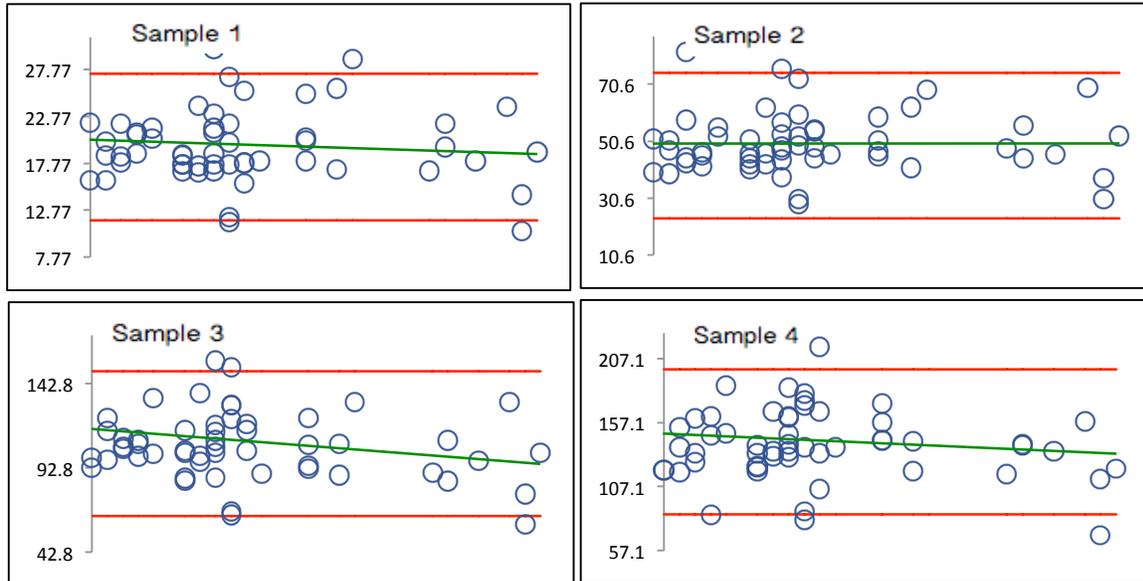


## Kernel Density Plots



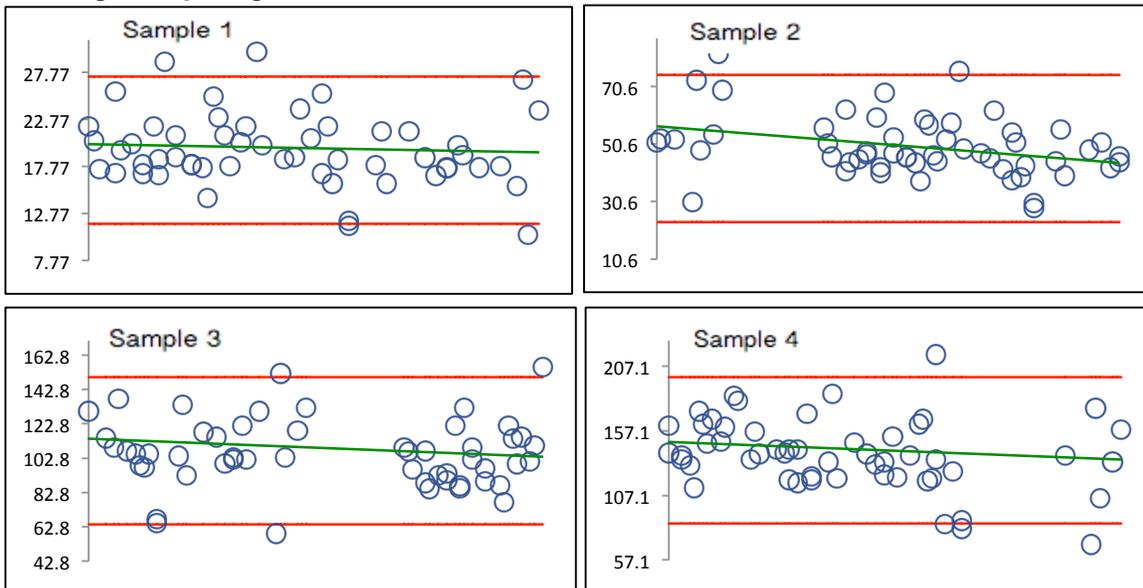
# 1,1-DICHLOROETHYLENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,2-DICHLOROBENZENE

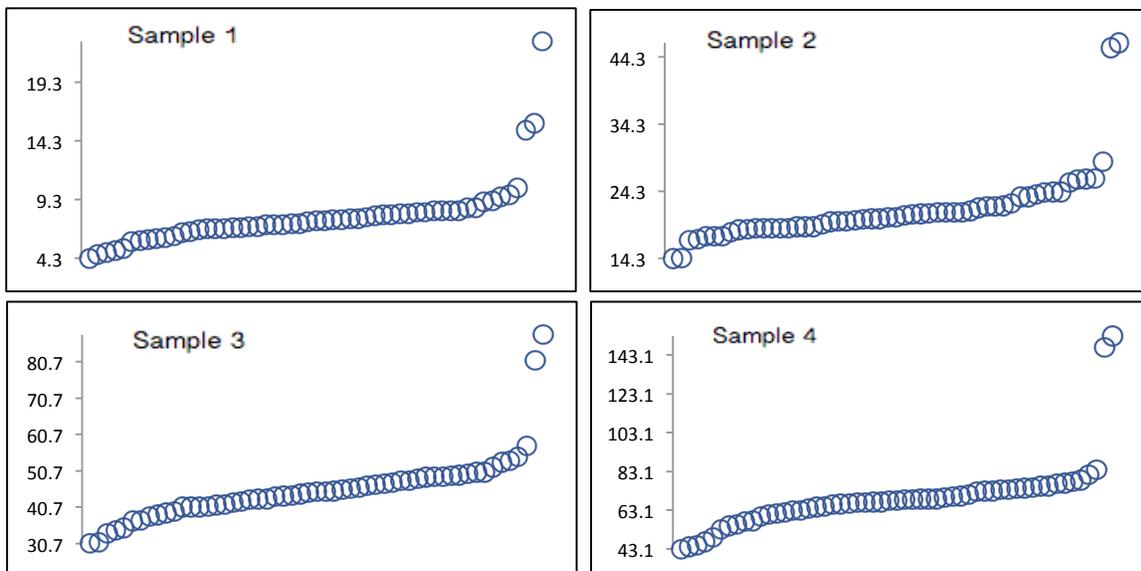
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	55	55	55	55
Median	7.50	20.5	45.0	68.3
Robust Mean	7.46	20.8	44.8	67.6
U	0.234	0.49	1.03	1.54
Robust Standard Deviation	1.39	2.89	6.14	9.15
Regression Standard Deviation	1.12	3.12	6.71	10.1
Stability Flag				
Homogeneity Flag	Homogeneity			
Standard Deviation Used (SDPA)	2.81	3.12	6.71	10.1
Outliers	0	0	0	0
z >3.0	1	2	2	2
2< z <3	2	3	2	4

## Methods Used

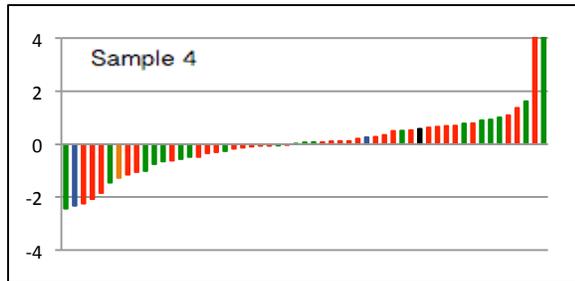
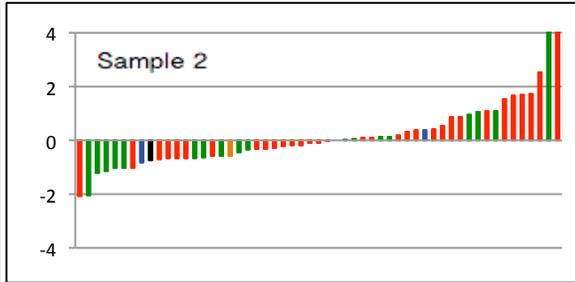
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	2	2	2	2
P/T-GCMS	32	32	32	32
HS-GCMS	19	19	19	19
GC/MS/MSHEAD	1	1	1	1
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

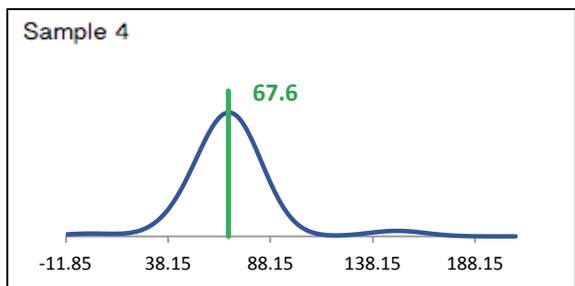
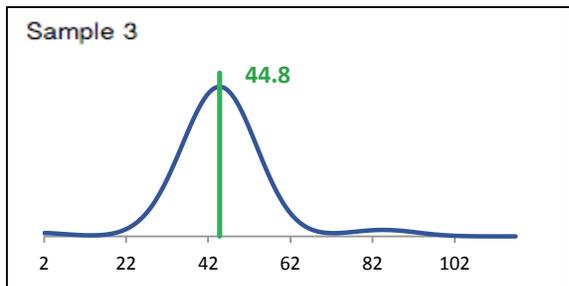
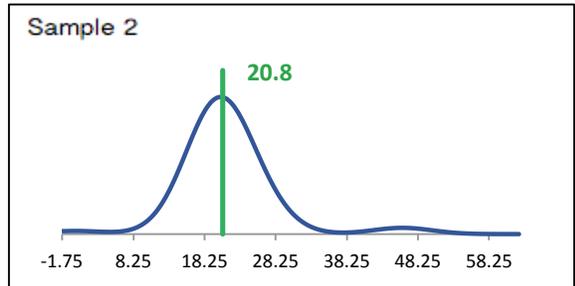
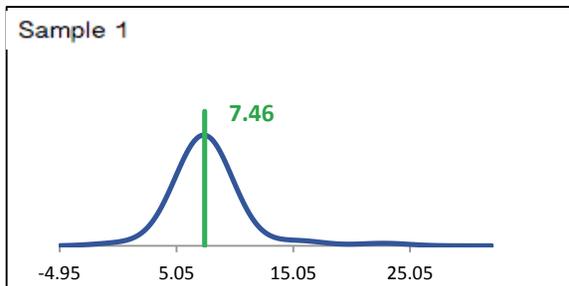


# 1,2-DICHLOROBENZENE

## z-Score Plots

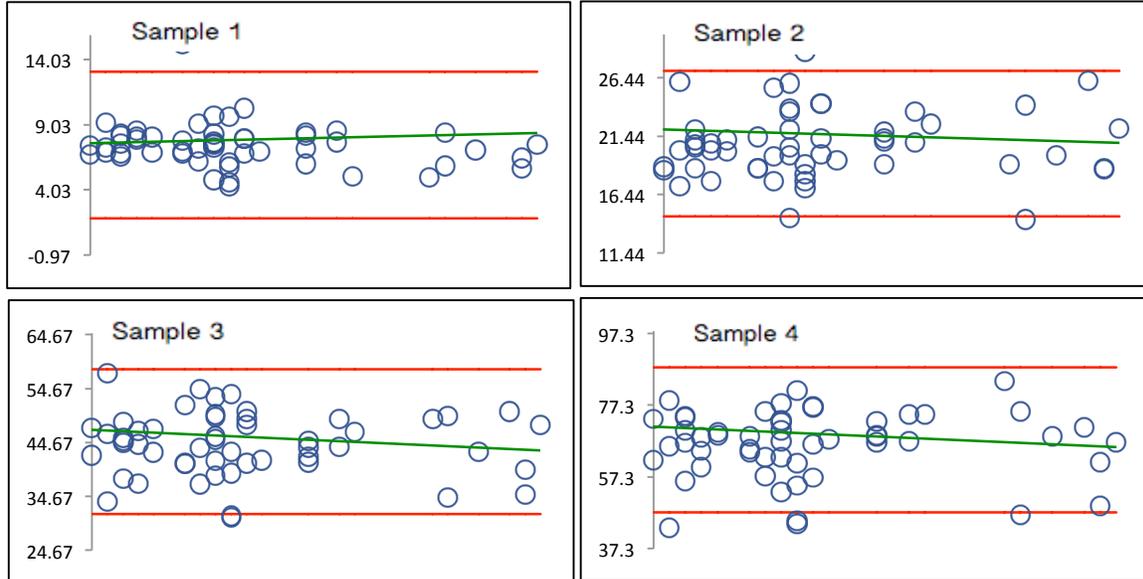


## Kernel Density Plots



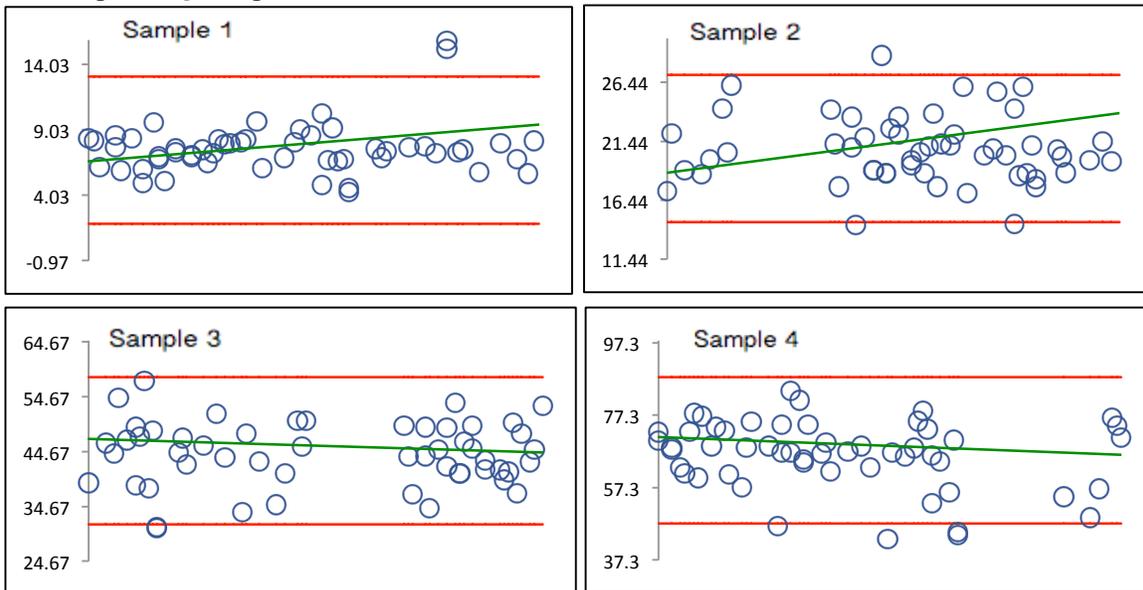
# 1,2-DICHLOROBENZENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,2-DICHLOROETHANE

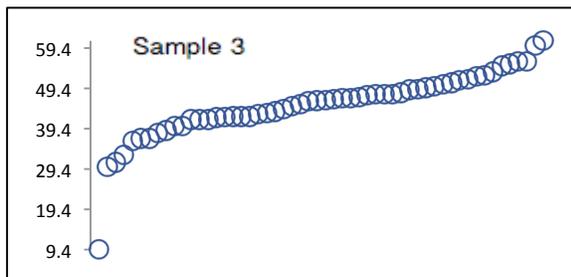
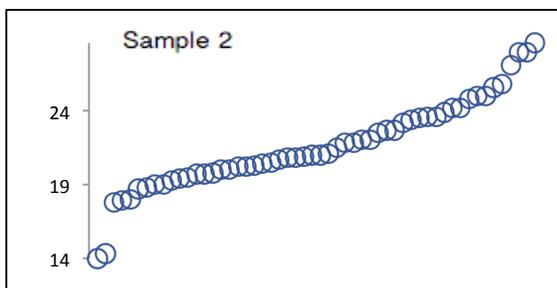
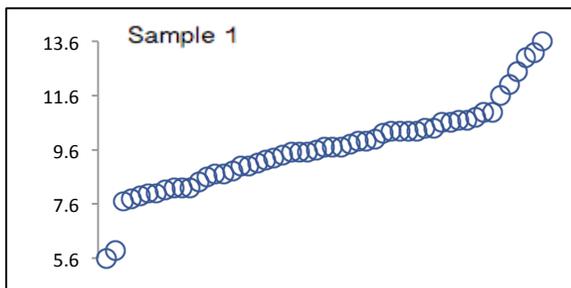
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	53	54	54	54
Median	9.70	21.0	46.5	66.1
Robust Mean	9.62	21.6	45.8	66.6
U	0.237	0.48	1.16	1.65
Robust Standard Deviation	1.38	2.81	6.79	9.72
Regression Standard Deviation	1.44	3.24	6.87	10.0
Stability Flag			Stability	
Homogeneity Flag				
Standard Deviation Used (SDPA)	1.44	3.24	8.80	10.0
Outliers	0	0	0	0
z >3.0	0	0	1	2
2< z <3	5	3	0	5

## Methods Used

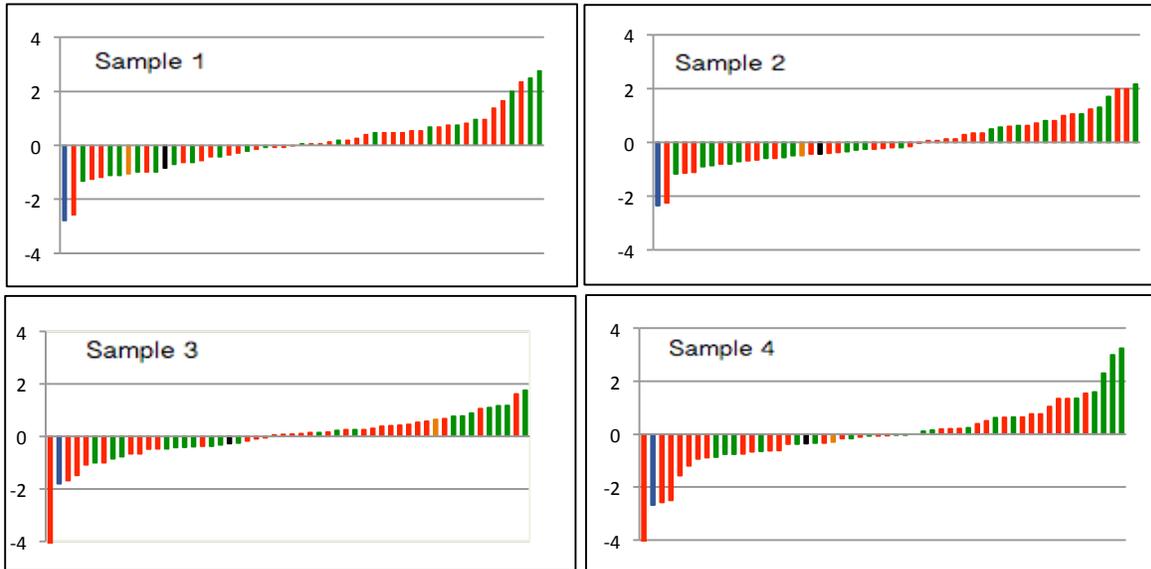
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	1	1	1	1
P/T-GCMS	31	31	31	31
HS-GCMS	19	20	20	20
GC/MSE	1	1	1	1
GC/MS/MSHEAD	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

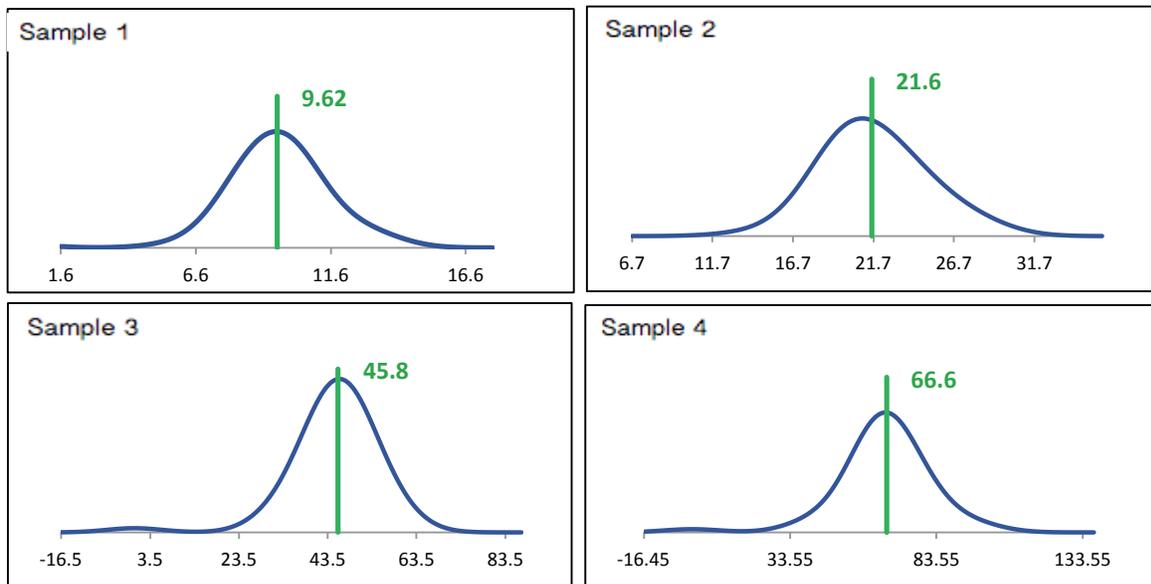


# 1,2-DICHLOROETHANE

## z-Score Plots

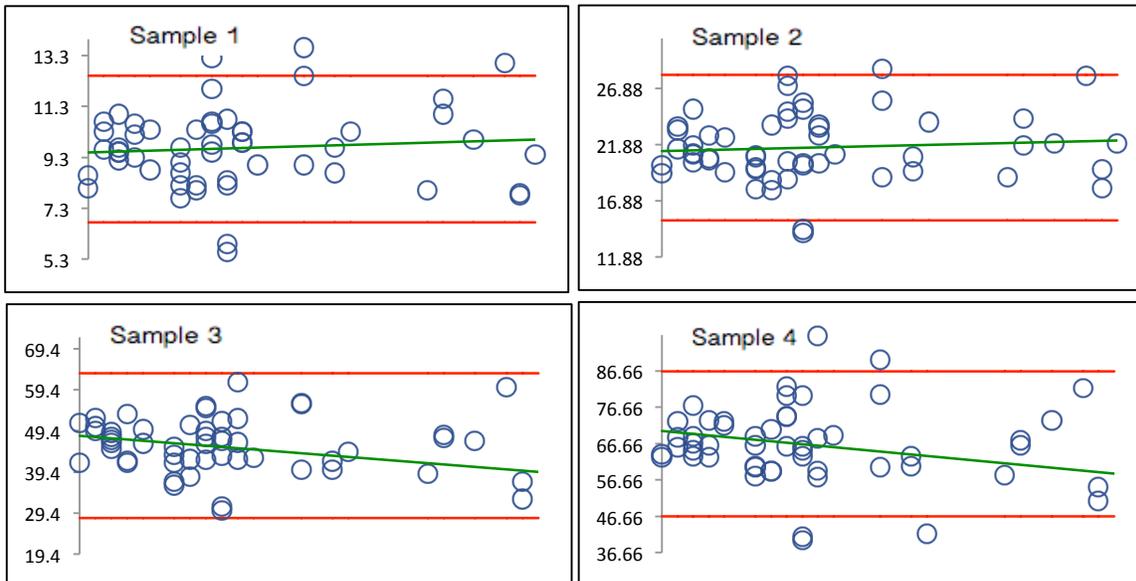


## Kernel Density Plots



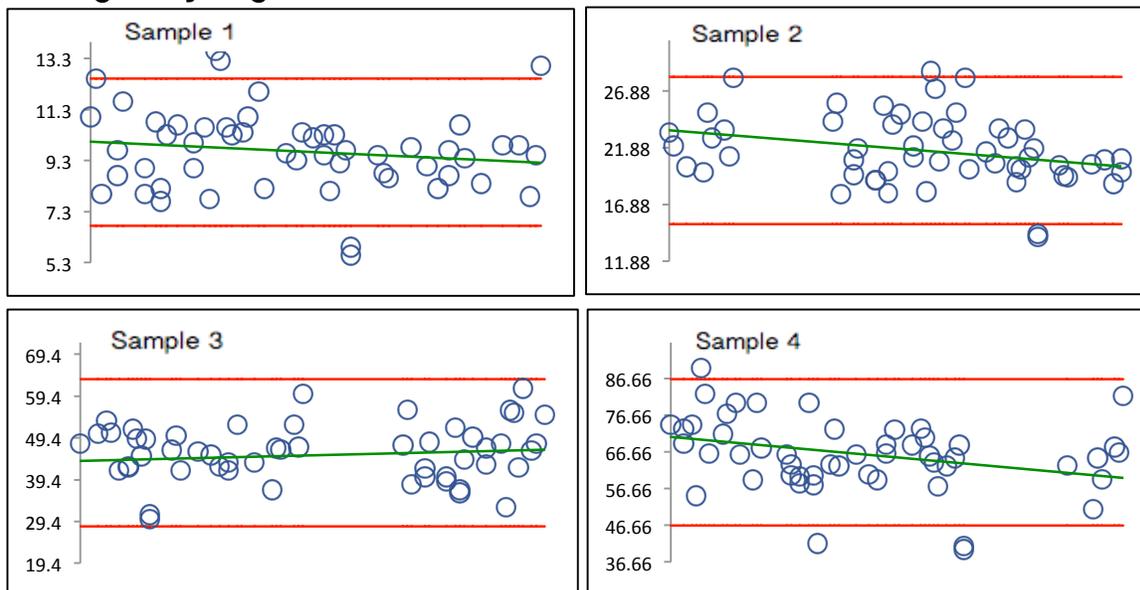
# 1,2-DICHLOROETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,2-DICHLOROPROPANE

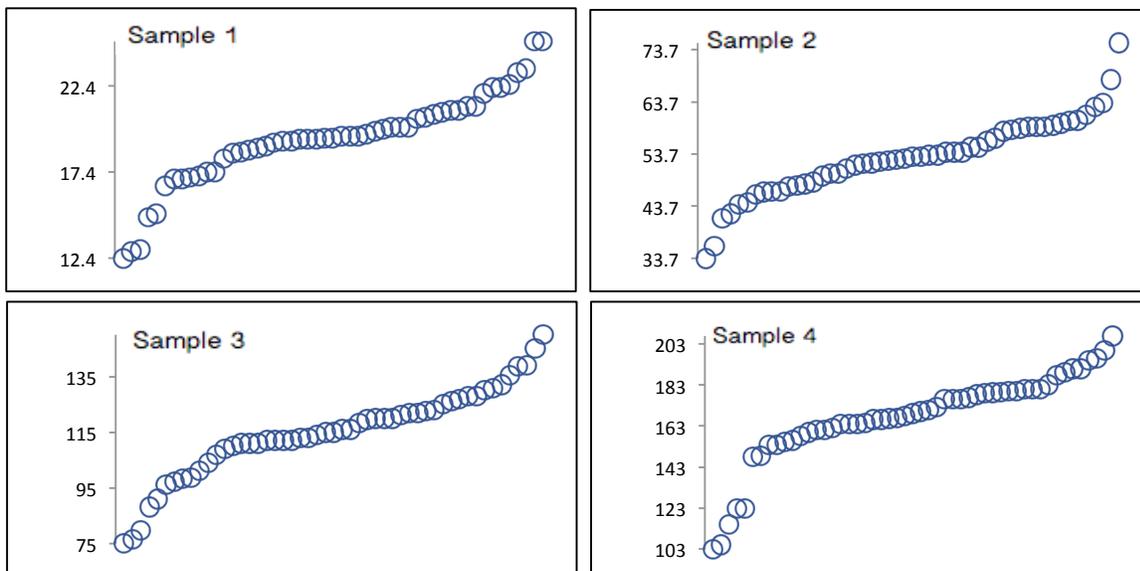
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	51	51	51	51
Median	19.4	53.2	115	169
Robust Mean	19.4	53.0	116	170
U	0.394	1.18	2.56	2.96
Robust Standard Deviation	2.25	6.72	14.6	16.9
Regression Standard Deviation	2.92	7.96	17.3	25.5
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	2.92	8.31	17.3	25.5
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	3	3	3	3

## Methods Used

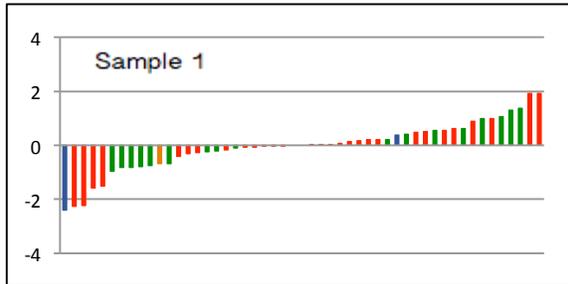
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	2	2	2	2
P/T-GCMS	29	29	29	29
HS-GCMS	19	19	19	19
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

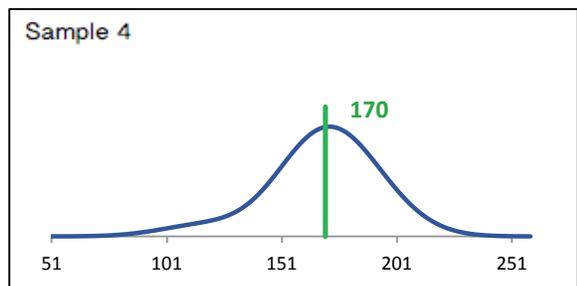
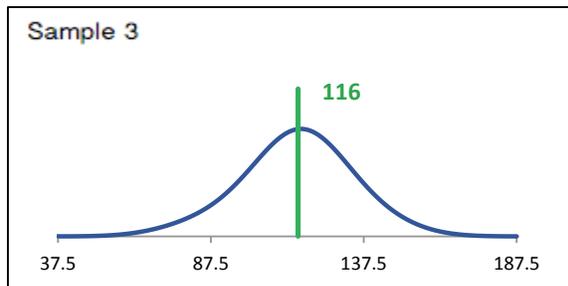
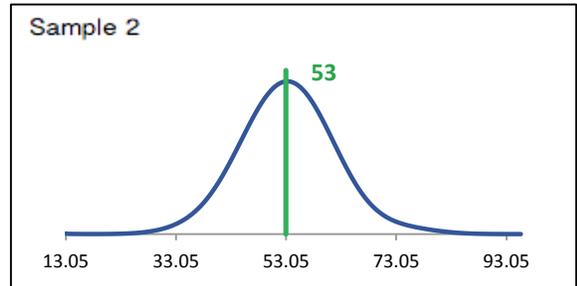
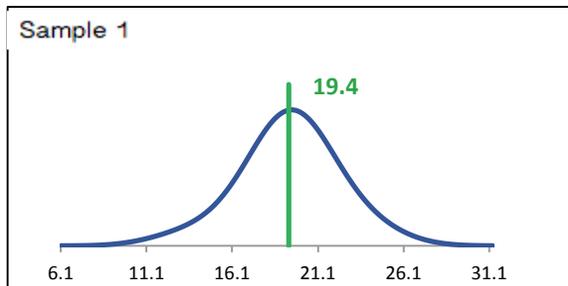


# 1,2-DICHLOROPROPANE

## z-Score Plots

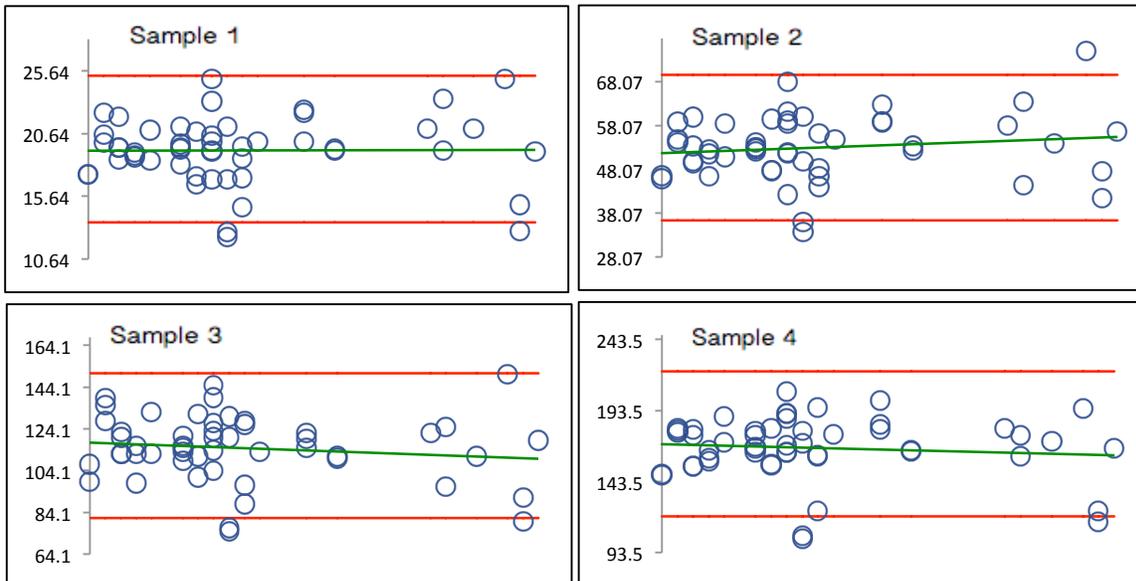


## Kernel Density Plots



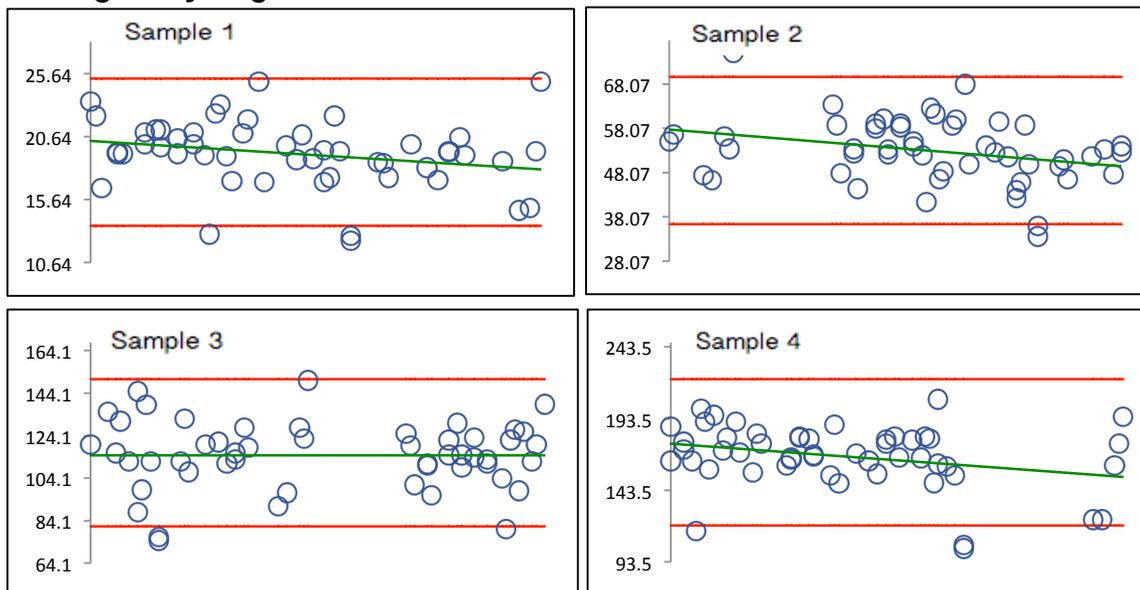
# 1,2-DICHLOROPROPANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,3-DICHLOROBENZENE

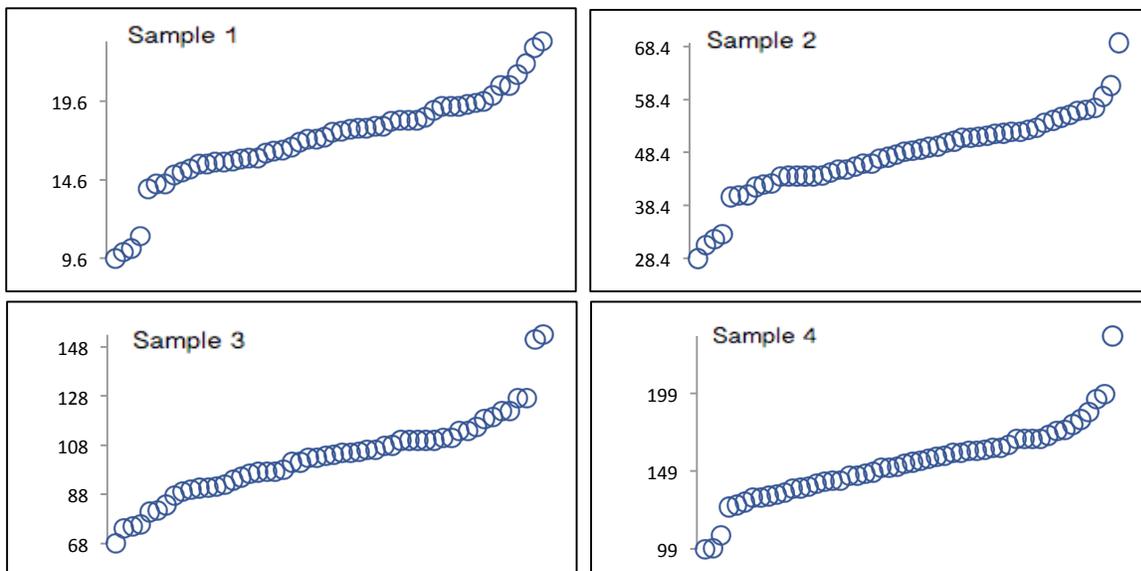
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	52	52	52	52
Median	17.5	48.7	104	154
Robust Mean	17.3	48.3	102	154
U	0.428	1.11	2.62	3.57
Robust Standard Deviation	2.47	6.43	15.1	20.6
Regression Standard Deviation	2.60	7.24	15.4	23.0
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	2.60	11.2	15.4	23.0
Outliers	0	0	0	0
z >3.0	0	0	2	1
2< z <3	6	0	1	2

## Methods Used

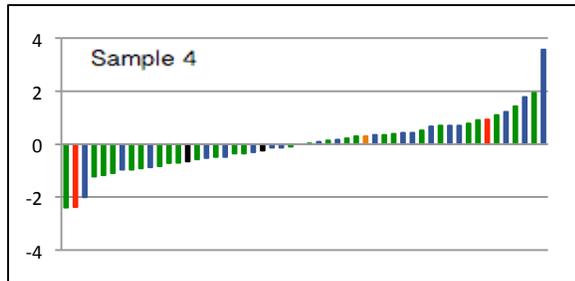
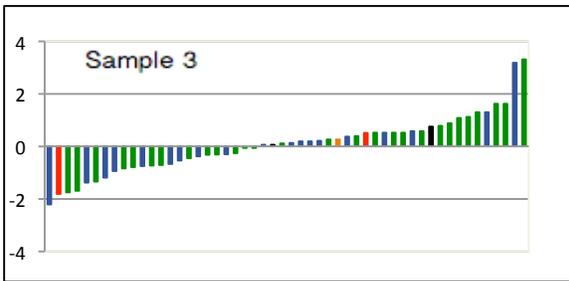
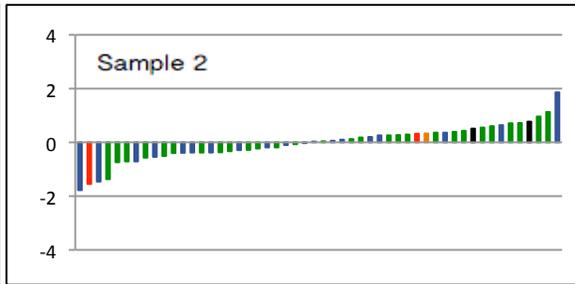
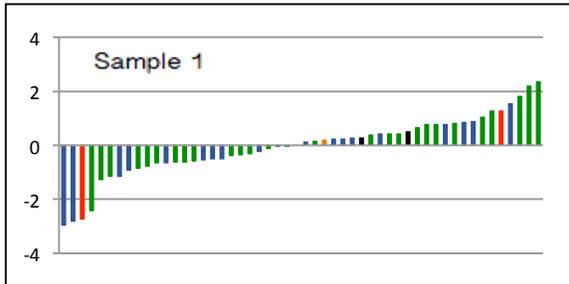
Method	C16-1	C16-2	C16-3	C16-4
HS-GCMS	19	19	19	19
P/T-FID	2	2	2	2
P/T-GCMS	28	28	28	28
GC/FID-1	1	1	1	1
GC/MS1	2	2	2	2

All summary stats and the plots below are based on the data excluding any flagged outliers

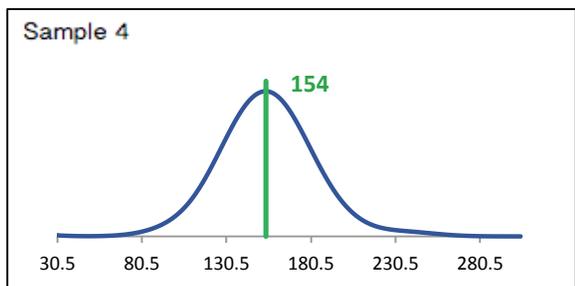
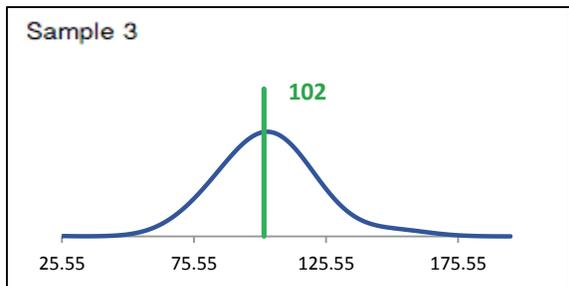
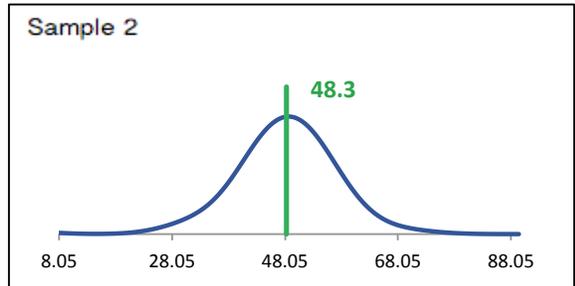
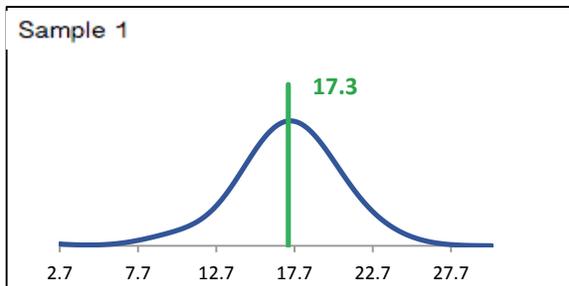


# 1,3-DICHLOROBENZENE

## z-Score Plots

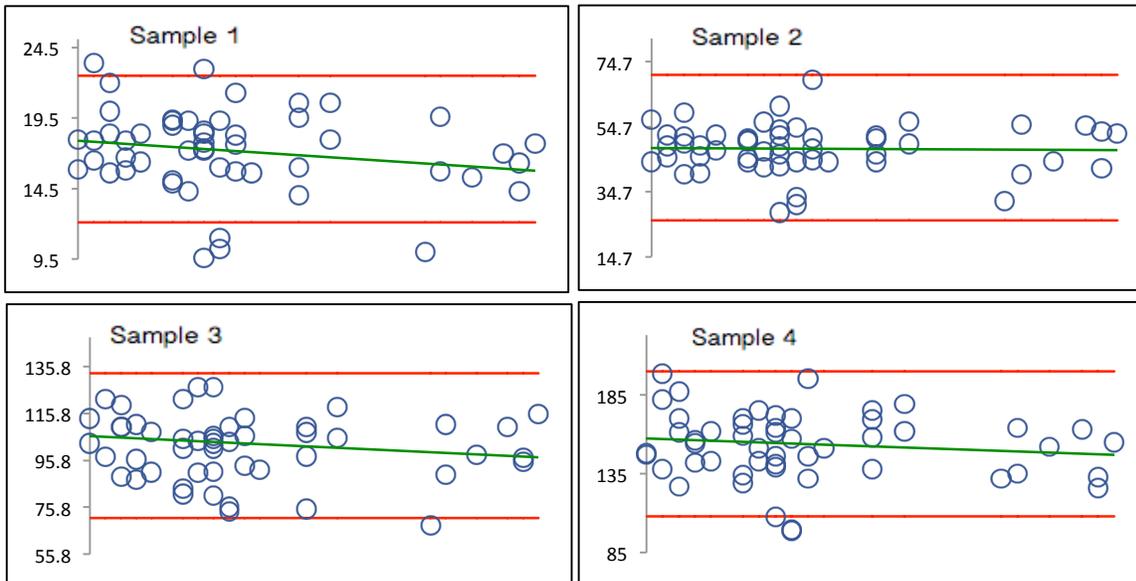


## Kernel Density Plots



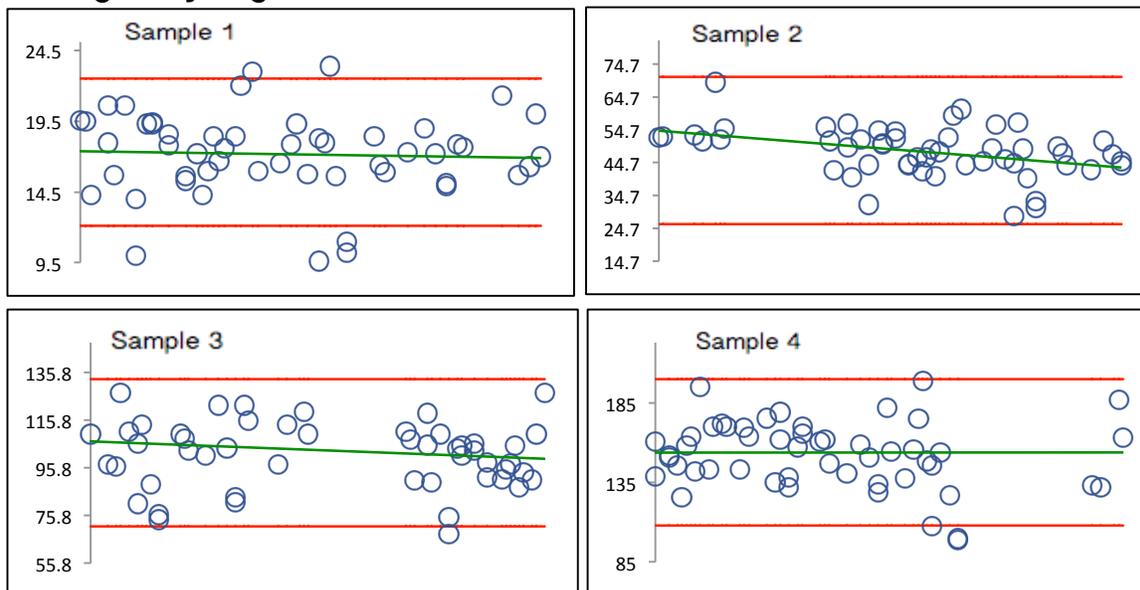
# 1,3-DICHLOROBENZENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# 1,4-DICHLOROBENZENE

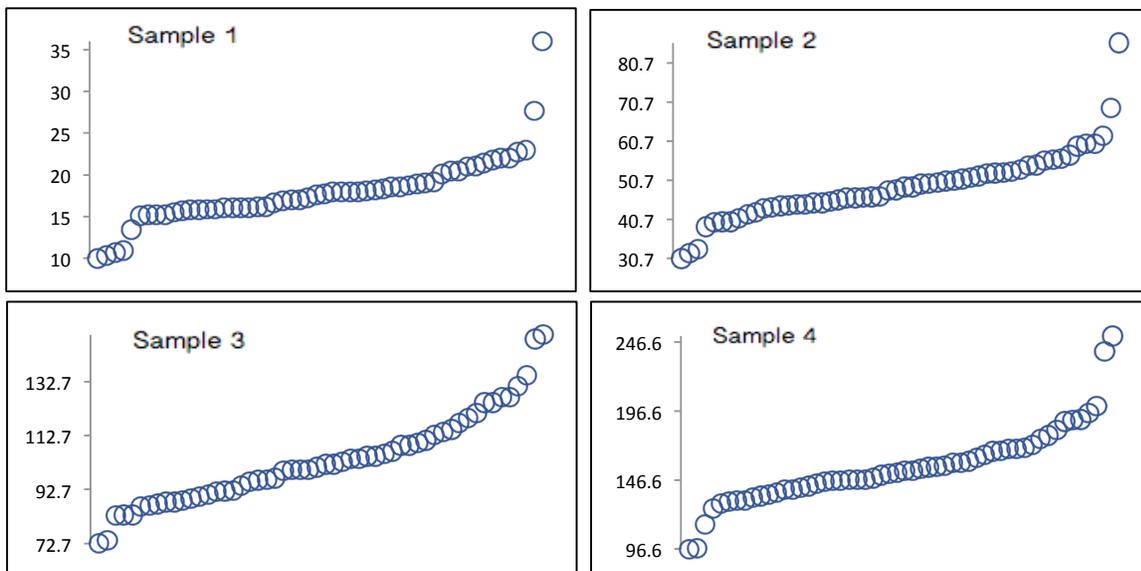
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	54	54	54	54
Median	17.7	48.6	102	153
Robust Mean	17.7	48.7	103	155
U	0.504	1.22	2.76	3.78
Robust Standard Deviation	2.96	7.20	16.2	22.2
Regression Standard Deviation	2.66	7.30	15.4	23.2
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	2.96	9.70	16.2	23.2
Outliers	0	0	0	0
z >3.0	2	1	0	2
2< z <3	4	1	2	2

## Methods Used

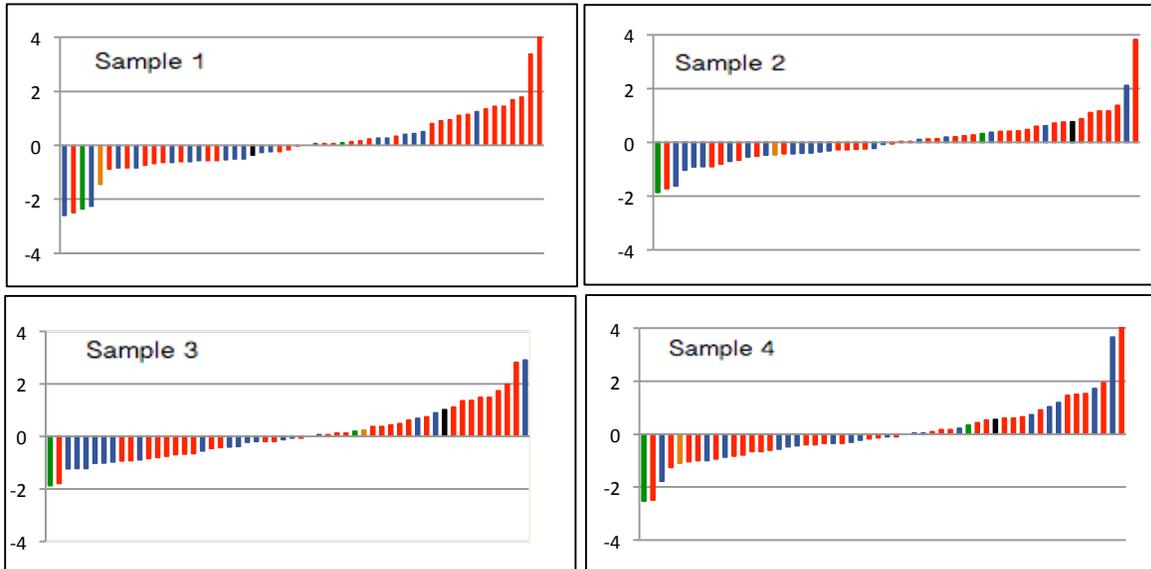
Method	C16-1	C16-2	C16-3	C16-4
HS-GCMS	19	19	19	19
P/T-GCMS	31	31	31	31
P/T-FID	2	2	2	2
GC/MS/MSHEAD	1	1	1	1
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

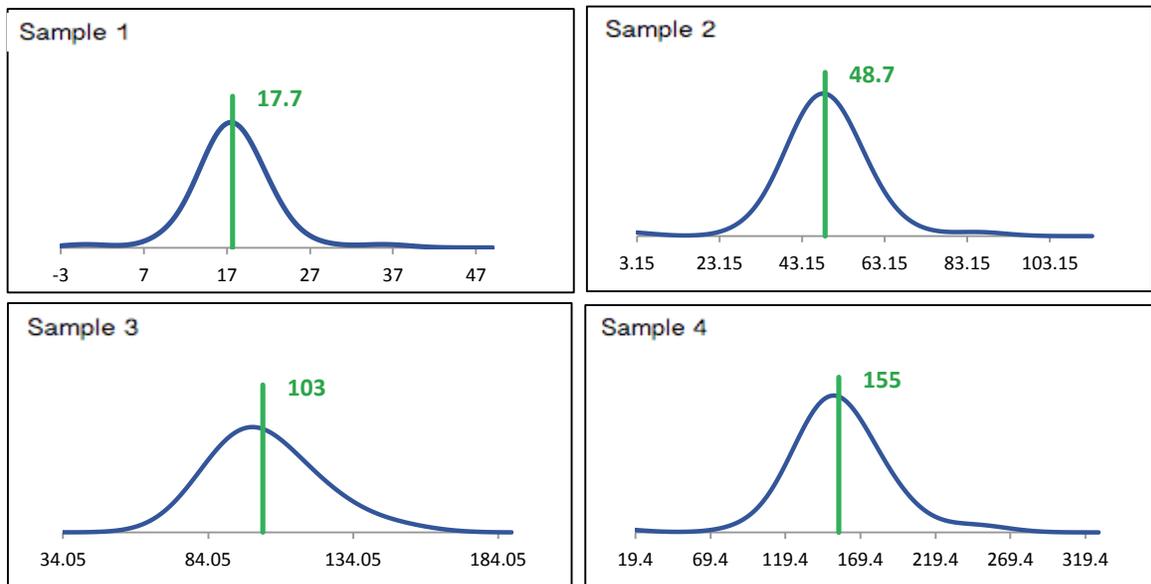


# 1,4-DICHLOROBENZENE

## z-Score Plots

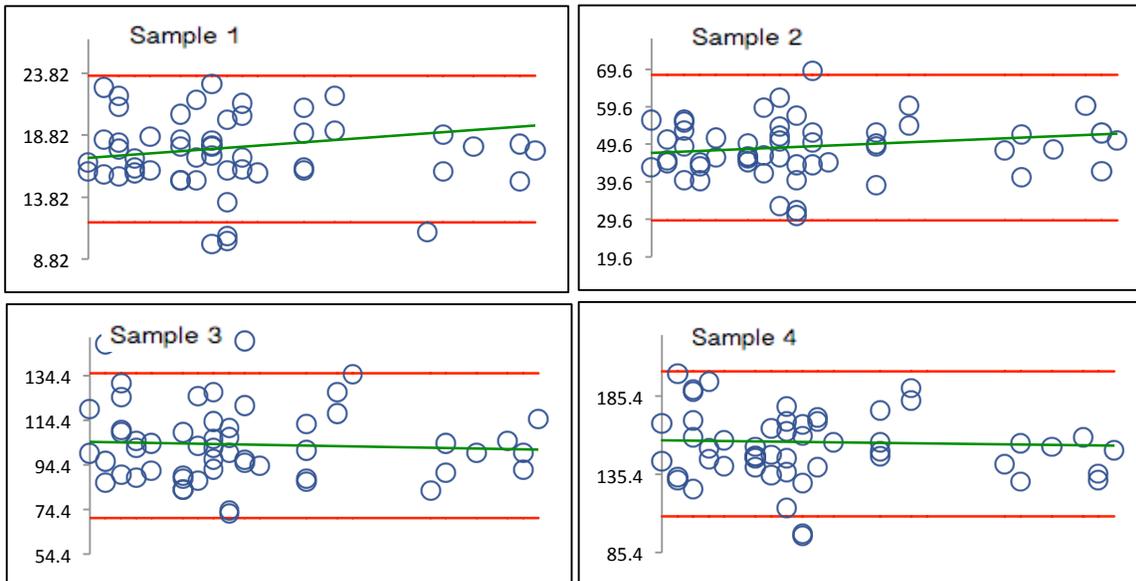


## Kernel Density Plots



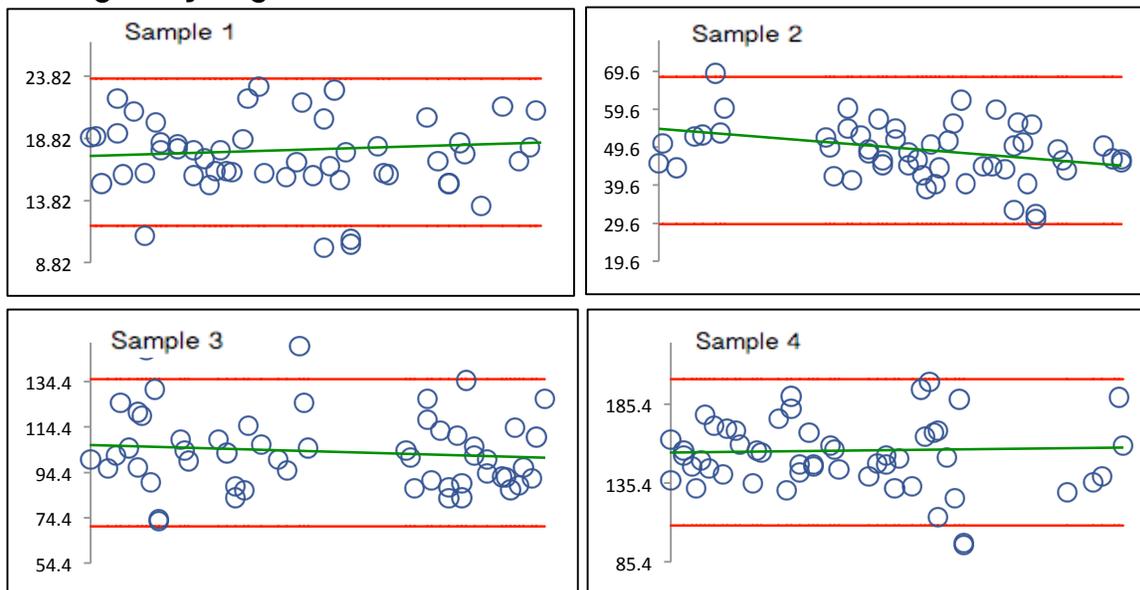
# 1,4-DICHLOROBENZENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## ACETONE (2-PROPANONE)

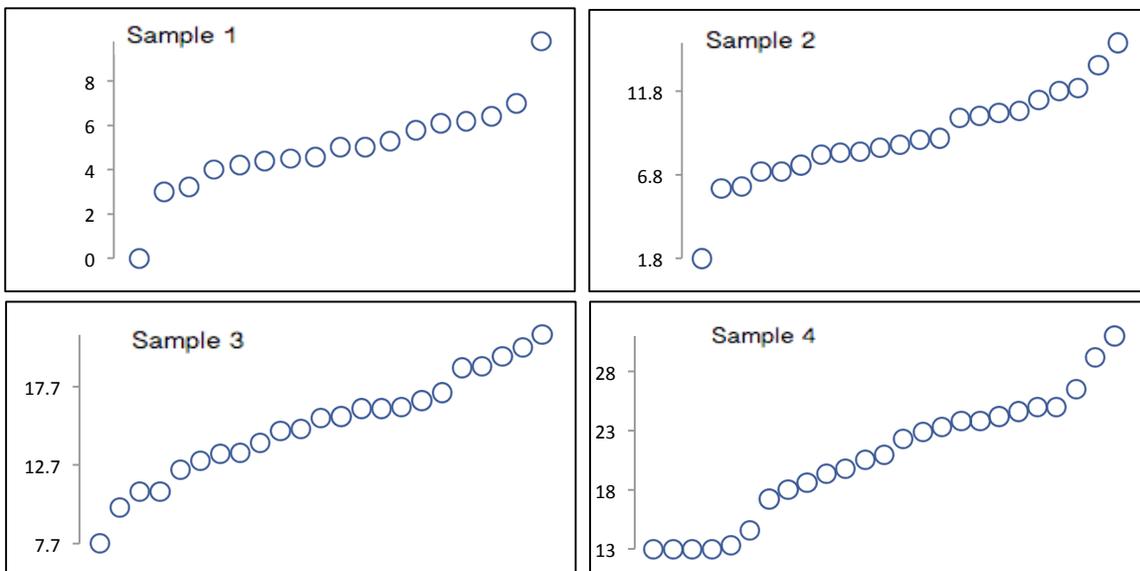
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	17	22	23	25
Median	5.00	8.75	15.7	21.0
Robust Mean	4.98	9.12	15.3	20.6
U	0.470	0.68	0.95	1.46
Robust Standard Deviation	1.55	2.54	3.63	5.82
Regression Standard Deviation	3.21	4.17	5.61	6.84
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	3.21	4.17	5.61	6.84
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	0	0	0	0

### Methods Used

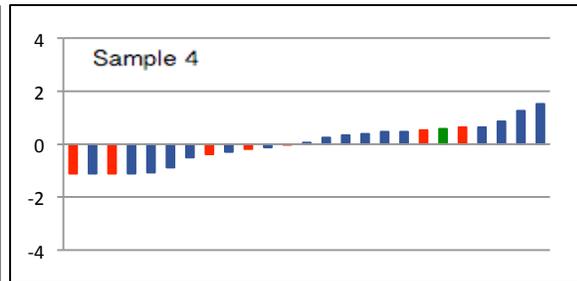
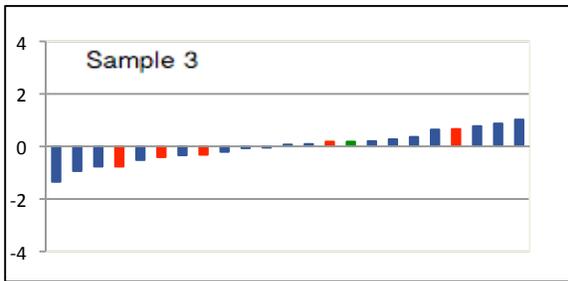
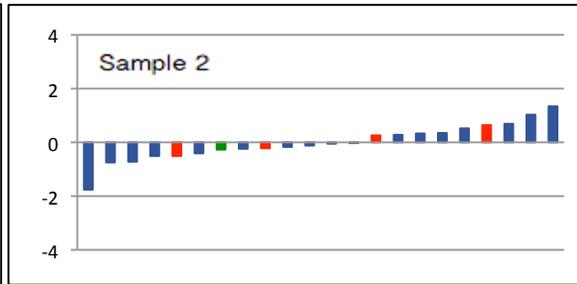
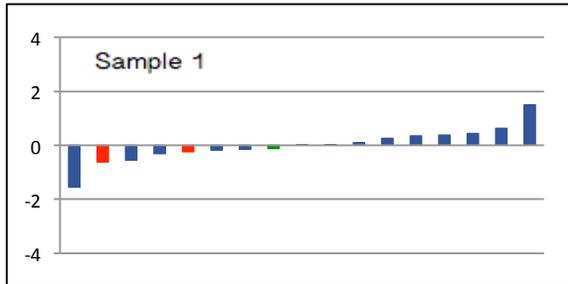
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	14	17	17	17
HS-GCMS	2	4	5	7
P/T-FID	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

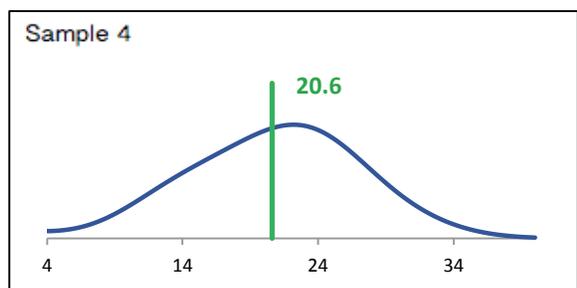
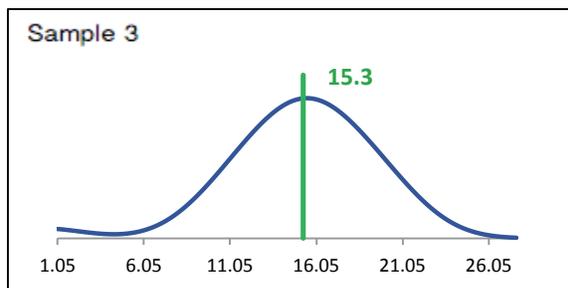
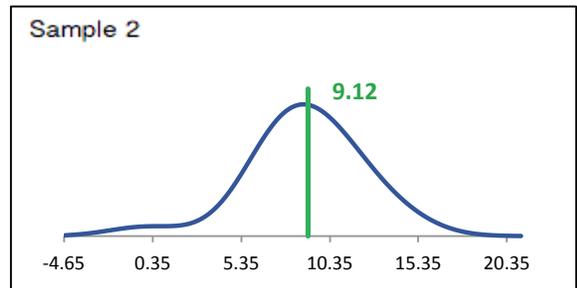
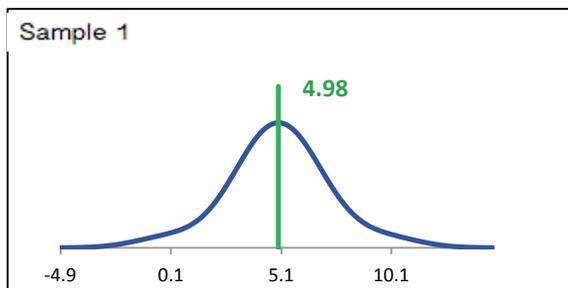


# ACETONE (2-PROPANONE)

## z-Score Plots

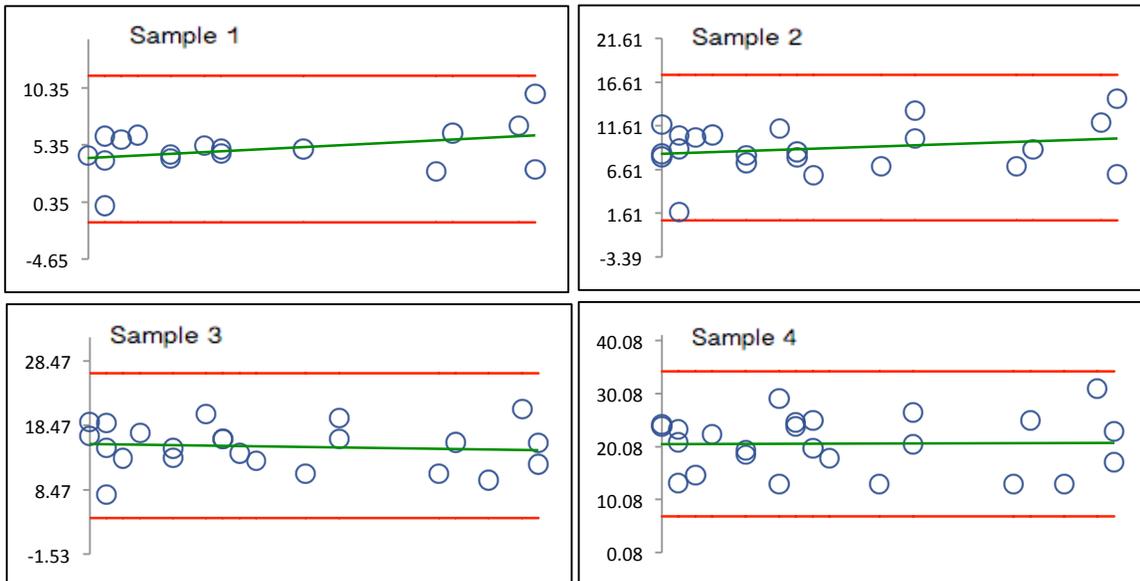


## Kernel Density Plots



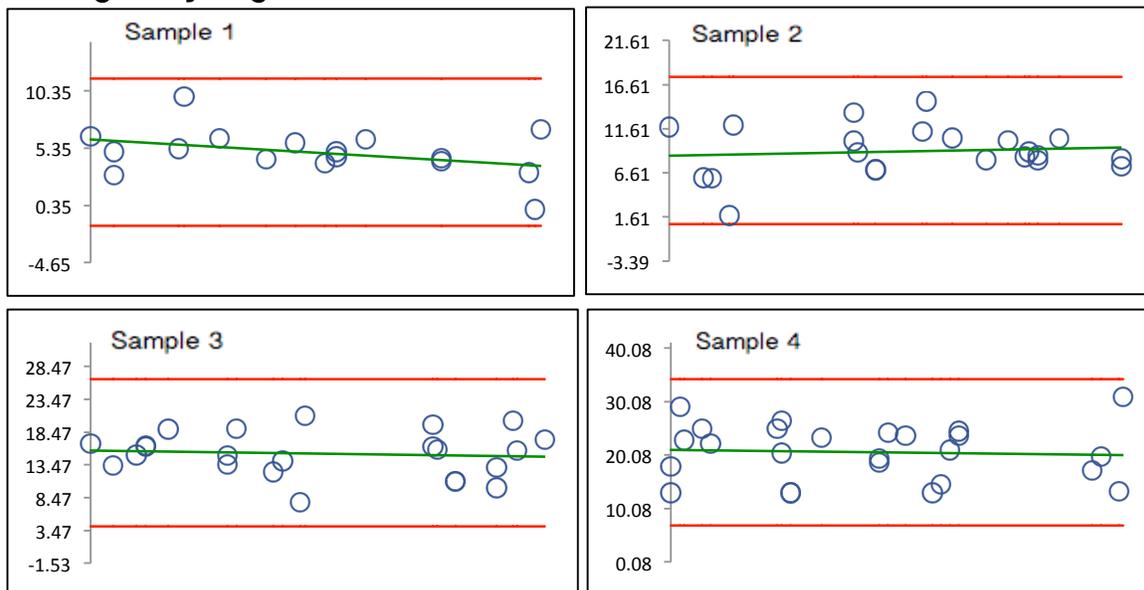
# ACETONE (2-PROPANONE)

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## BENZENE

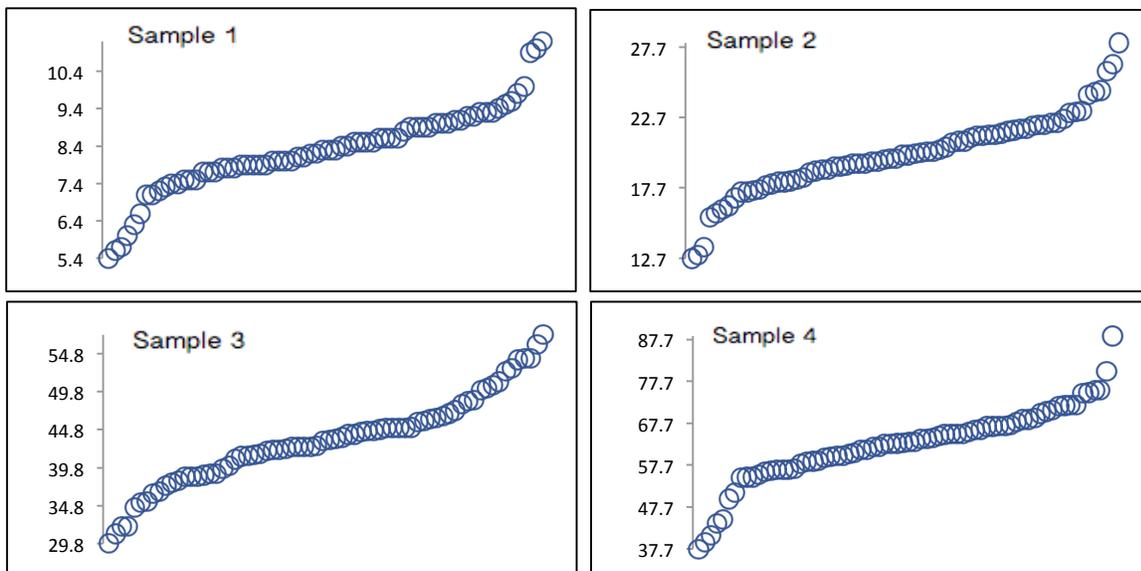
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	70	70	70	70
Median	8.30	20.0	43.4	63.1
Robust Mean	8.30	20.1	43.3	63.0
U	0.141	0.38	0.86	1.13
Robust Standard Deviation	0.942	2.52	5.72	7.57
Regression Standard Deviation	1.24	3.01	6.50	9.44
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	1.24	3.01	6.50	9.44
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	6	5	2	5

### Methods Used

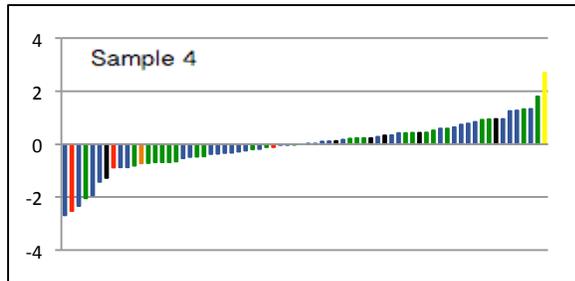
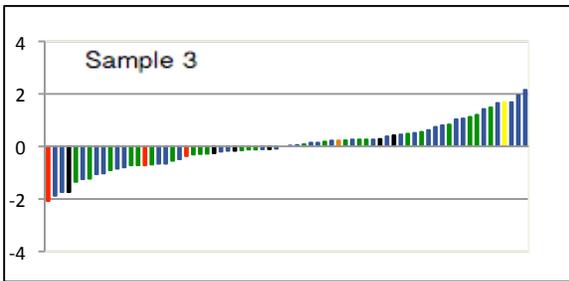
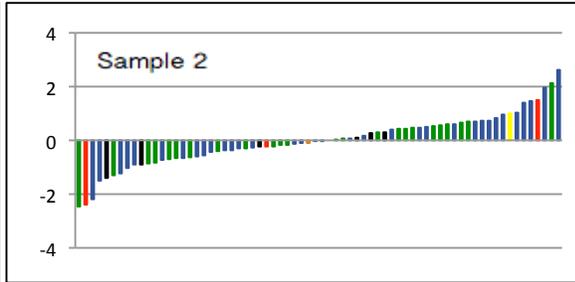
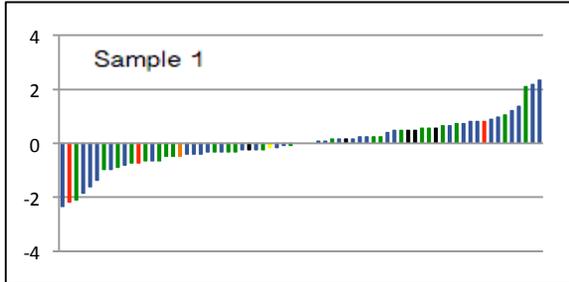
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	35	35	35	35
P/T-FID	3	3	3	3
HS-GCMS	24	24	24	24
GC/MS/MSHEAD	1	1	1	1
GC/MS1	6	6	6	6
HS-GCF	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

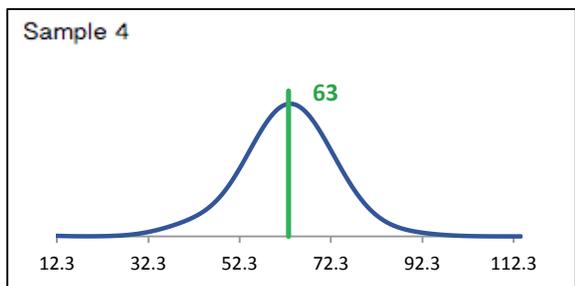
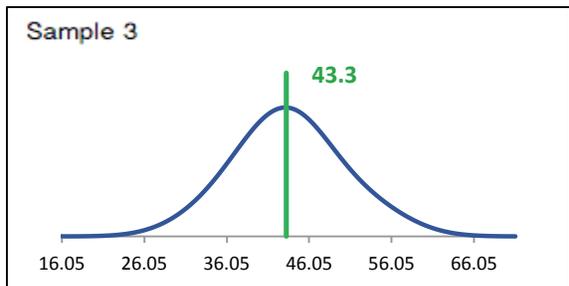
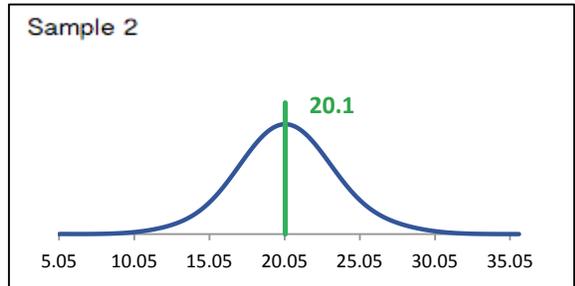
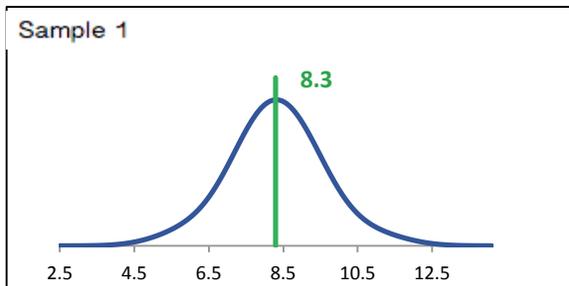


# BENZENE

## z-Score Plots

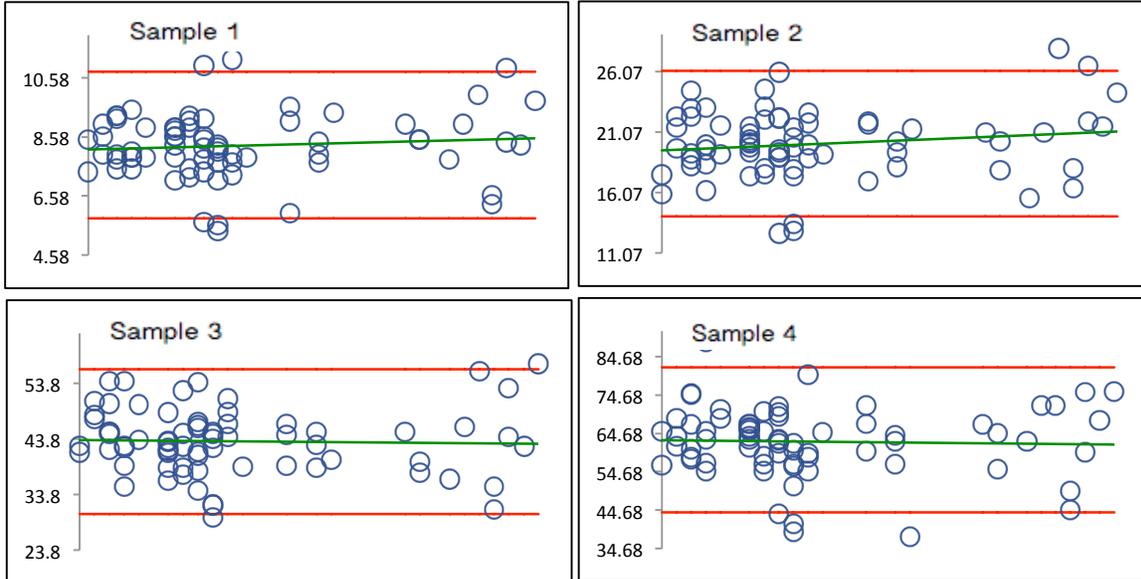


## Kernel Density Plots



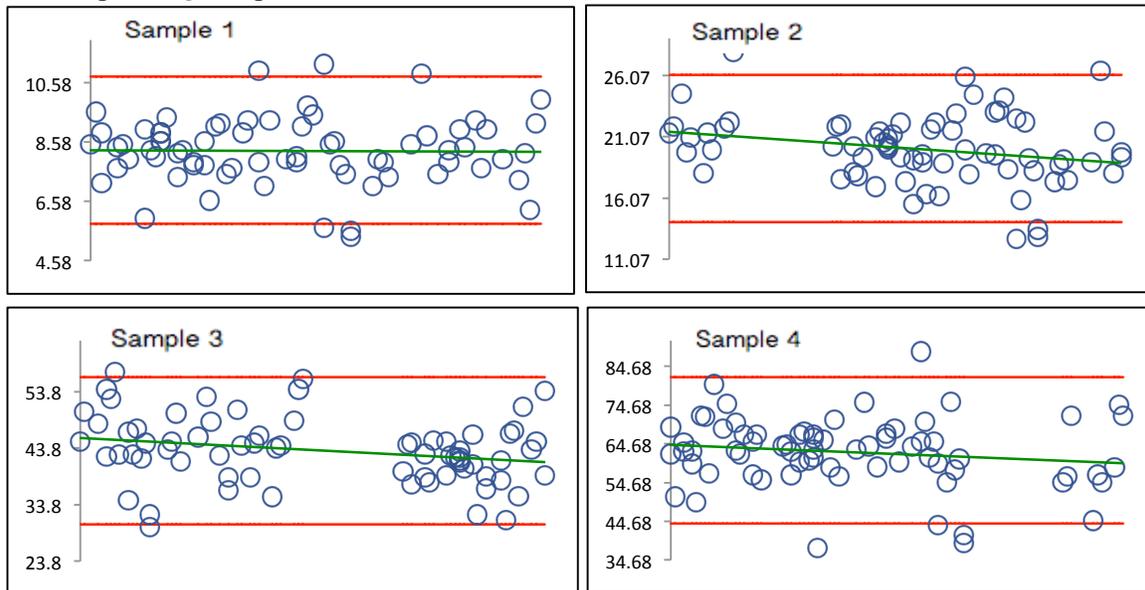
# BENZENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## BROMODICHLOROMETHANE

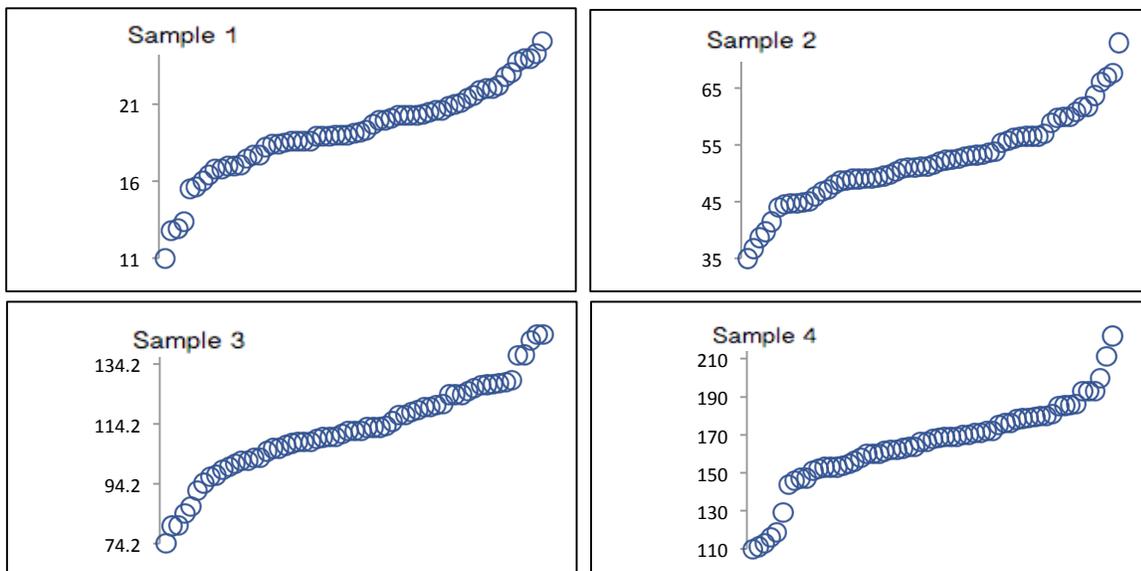
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	61	61	61	61
Median	19.1	51.6	112	168
Robust Mean	19.4	52.1	113	166
U	0.415	1.12	2.29	2.88
Robust Standard Deviation	2.59	6.98	14.3	18.0
Regression Standard Deviation	2.91	7.81	16.9	25.0
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	2.91	7.81	16.9	25.0
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	4	2	1	4

### Methods Used

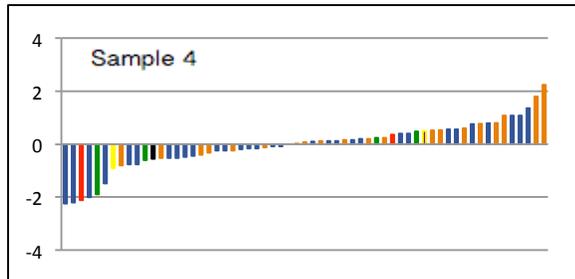
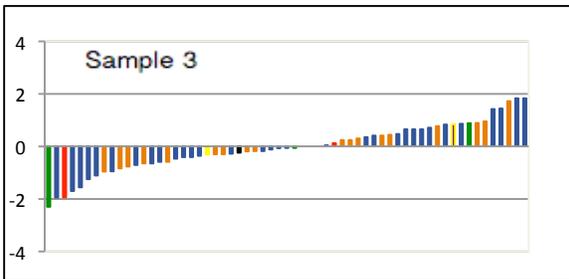
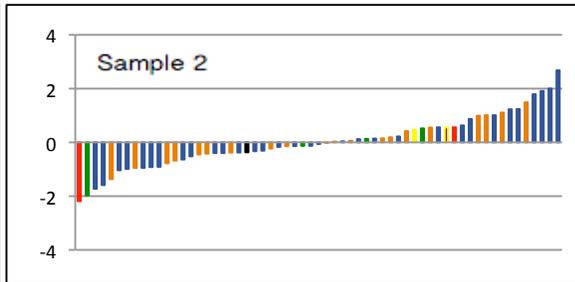
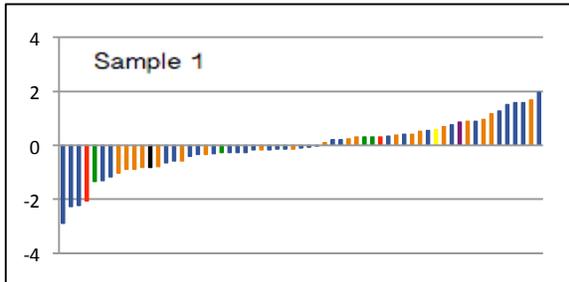
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	32	32	32	32
P/T-FID	2	2	2	2
GC/MS1	4	4	4	4
HS-GCMS	20	20	20	20
GC/MS/MSHEAD	1	1	1	1
P/T-GCECD	1	1	1	1
GC/ECD-1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

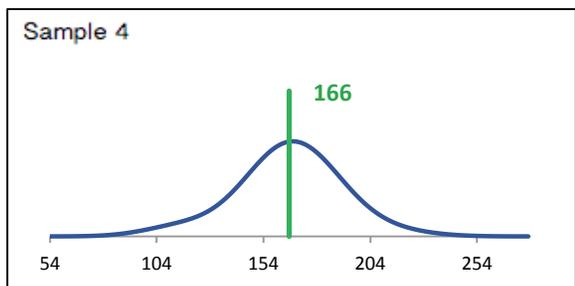
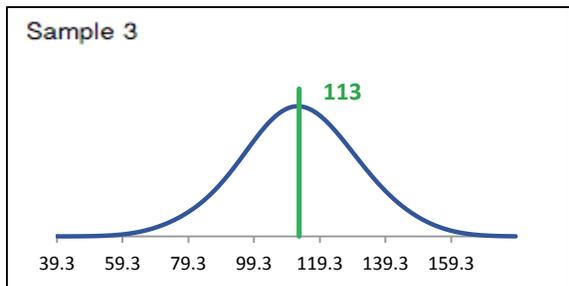
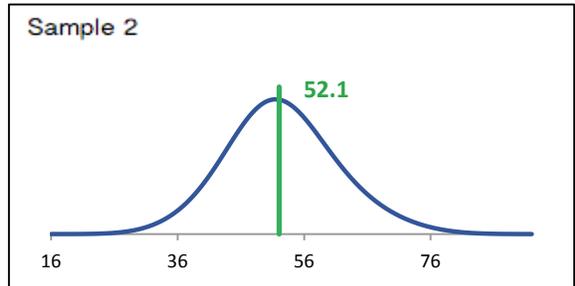
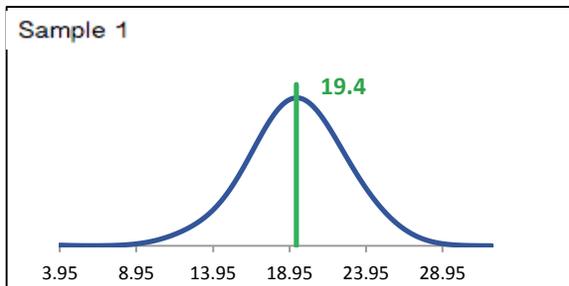


# BROMODICHLOROMETHANE

## z-Score Plots

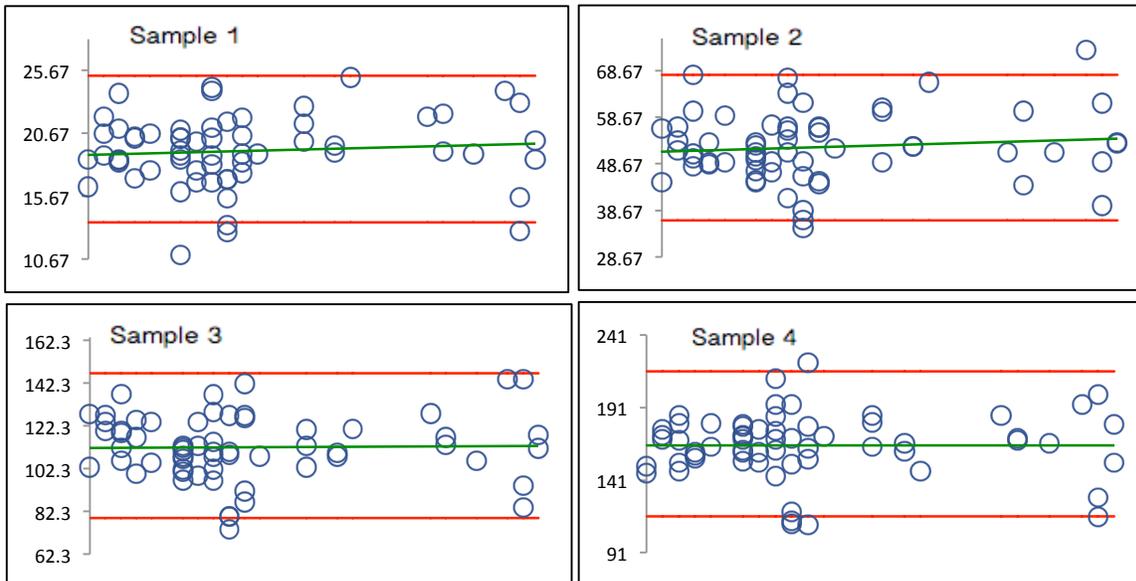


## Kernel Density Plots



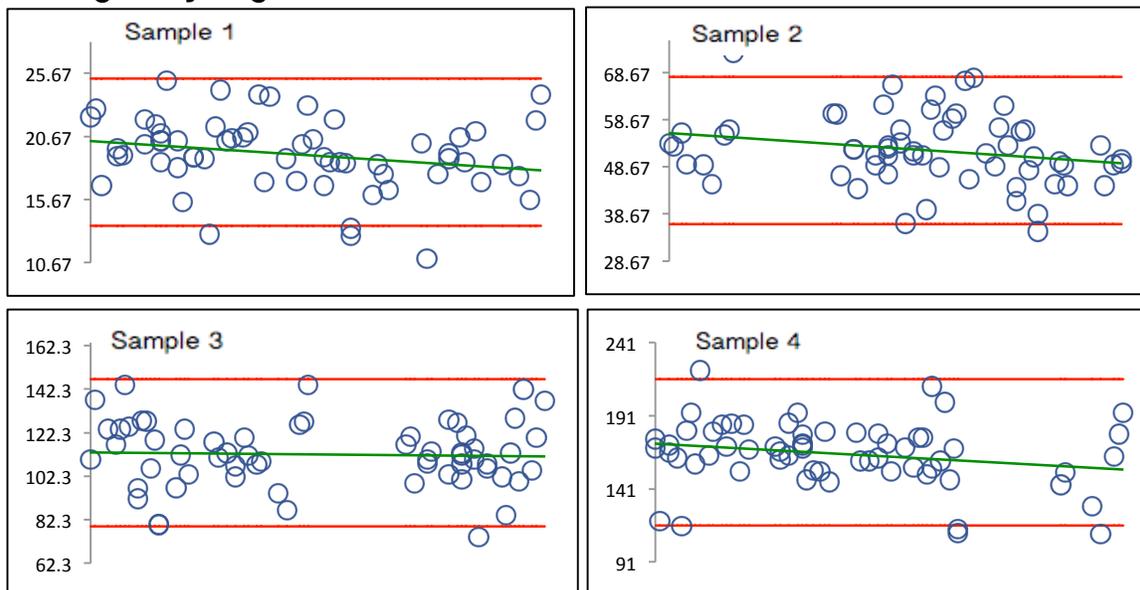
# BROMODICHLOROMETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## BROMOFORM

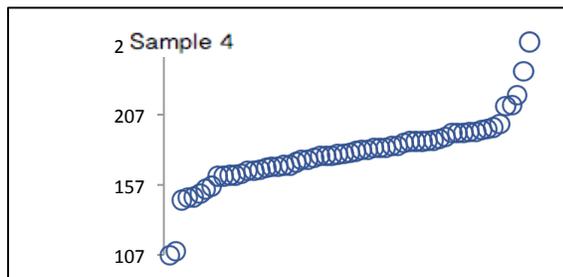
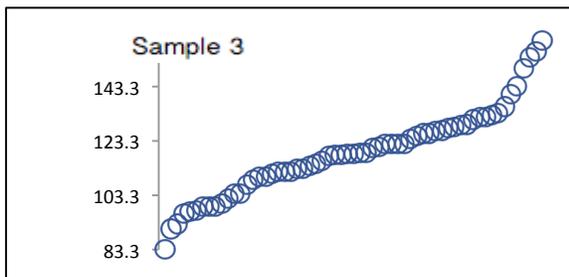
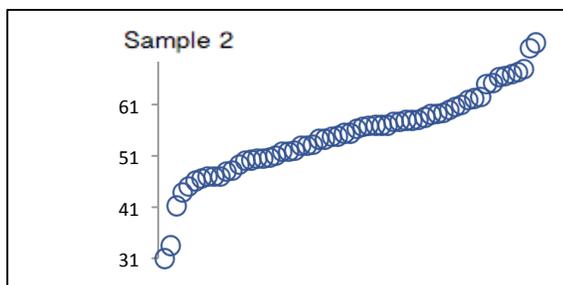
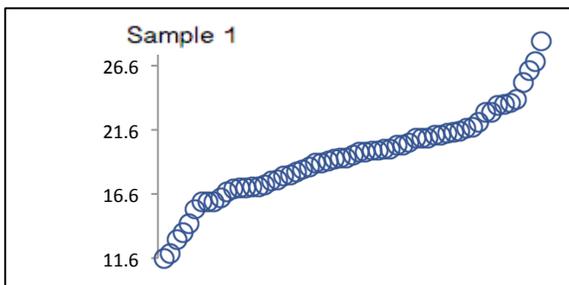
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	61	61	61	61
Median	19.6	55.4	119	180
Robust Mean	19.5	55.4	118	179
U	0.501	1.24	2.45	2.80
Robust Standard Deviation	3.13	7.75	15.3	17.5
Regression Standard Deviation	2.92	8.31	17.7	26.9
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	3.13	8.55	17.7	26.9
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	6	3	3	4

### Methods Used

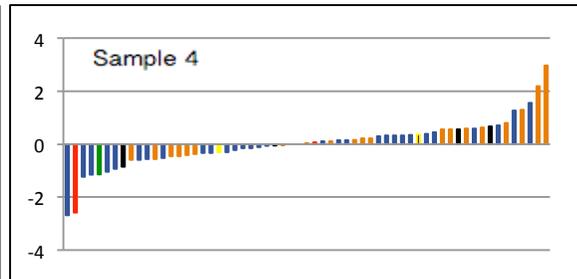
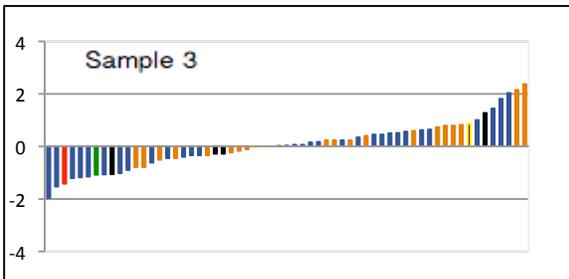
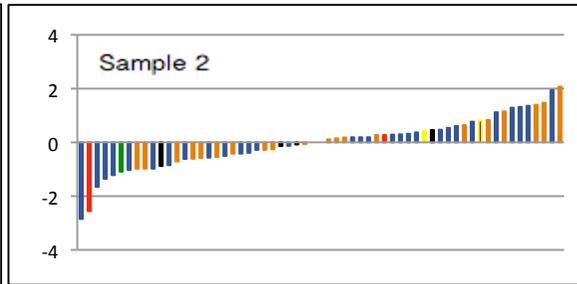
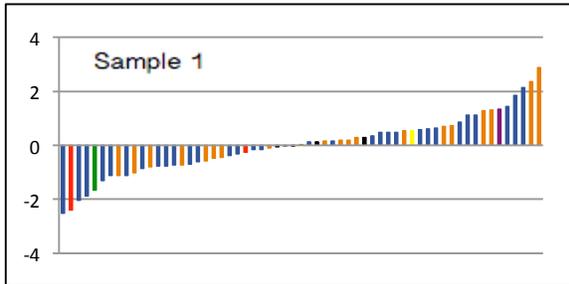
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	32	32	32	32
P/T-FID	2	2	2	2
GC/MS/MSHEAD	1	1	1	1
HS-GCMS	20	20	20	20
GC/MS1	4	4	4	4
P/T-GCECD	1	1	1	1
GC/ECD-1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

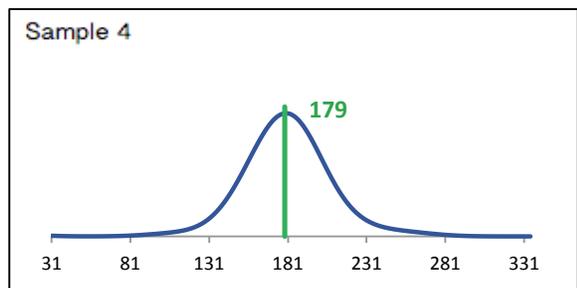
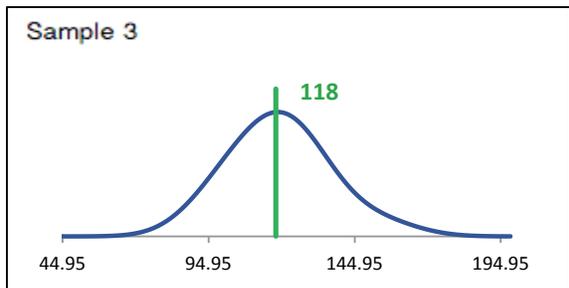
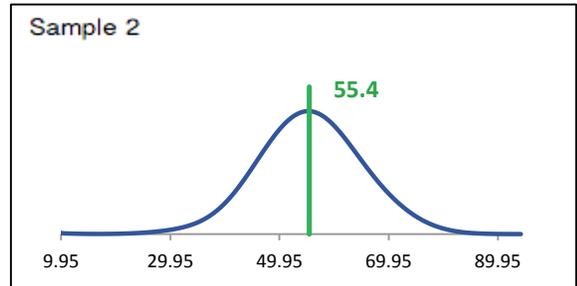
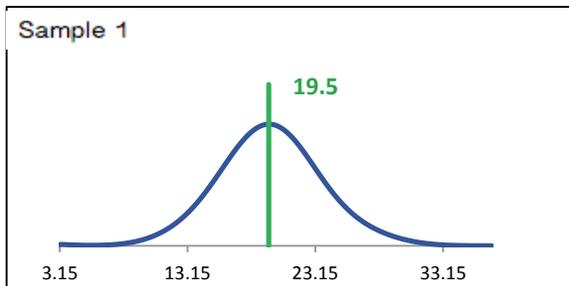


# BROMOFORM

## z-Score Plots

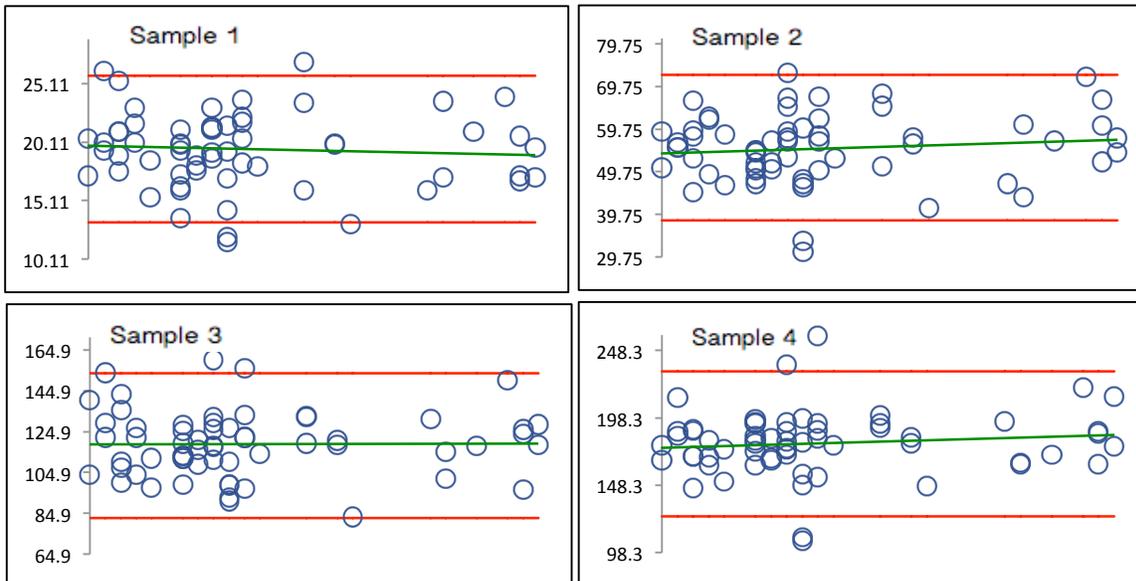


## Kernel Density Plots



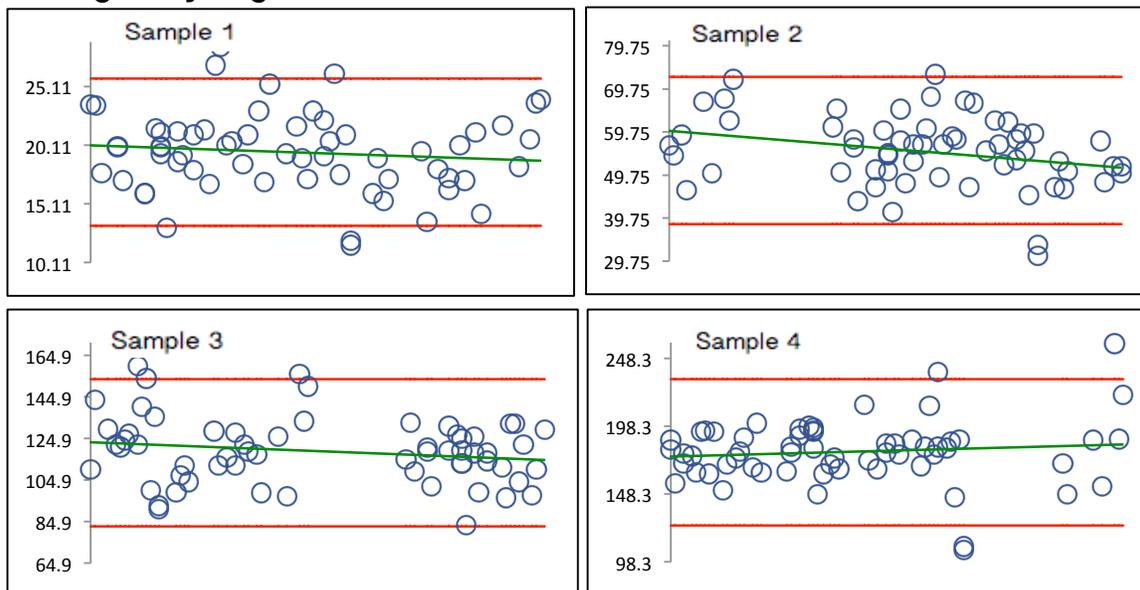
# BROMOFORM

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## CARBON TETRACHLORIDE

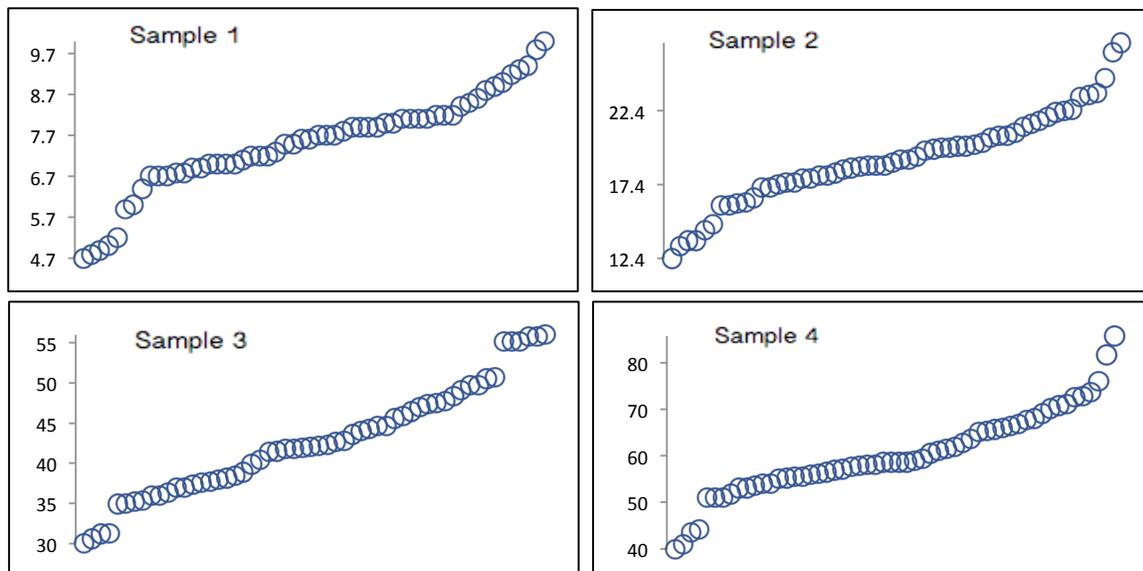
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	56	56	56	56
Median	7.65	19.0	42.1	58.5
Robust Mean	7.56	19.1	42.6	60.2
U	0.182	0.50	1.19	1.42
Robust Standard Deviation	1.09	2.97	7.11	8.52
Regression Standard Deviation	1.13	2.87	6.38	9.03
Stability Flag				
Homogeneity Flag		Homogeneity		Homogeneity
Standard Deviation Used (SDPA)	1.13	5.29	7.11	9.34
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	6	0	0	4

### Methods Used

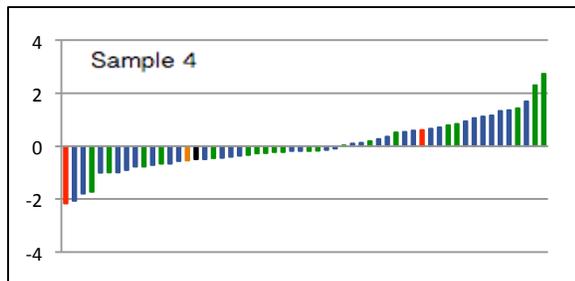
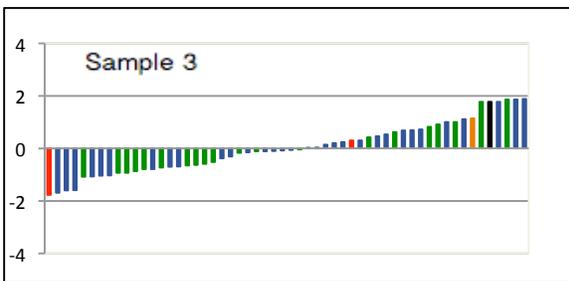
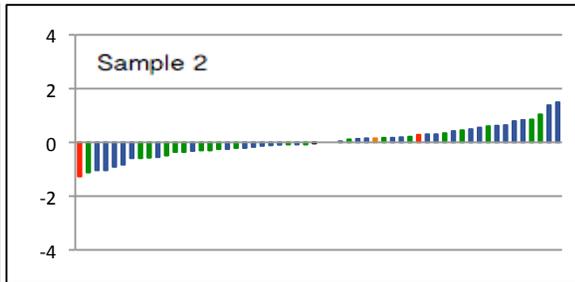
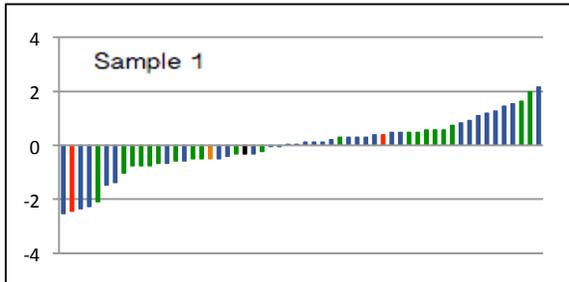
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	32	32	32	32
P/T-FID	2	2	2	2
HS-GCMS	20	20	20	20
GC/MS/MSHEAD	1	1	1	1
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

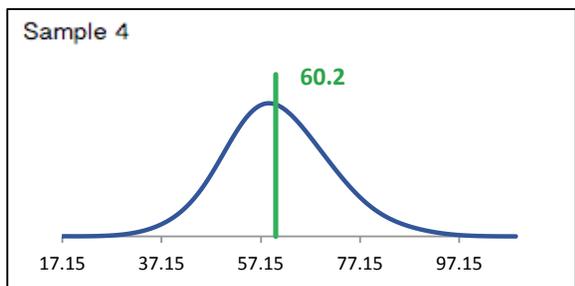
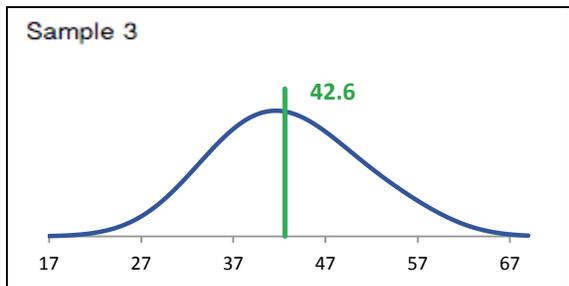
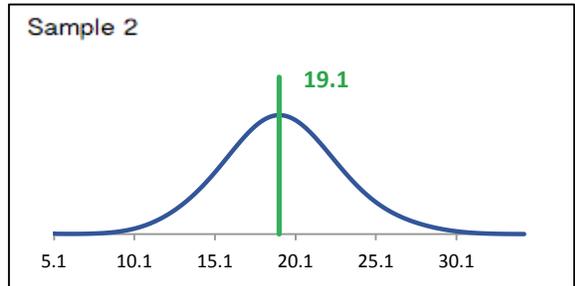
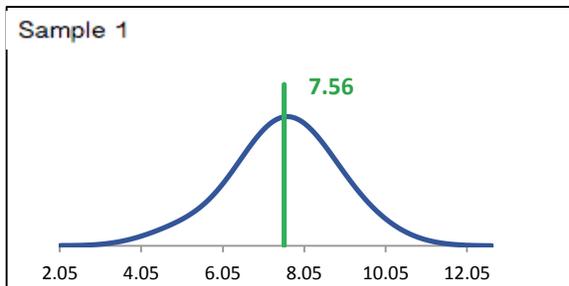


# CARBON TETRACHLORIDE

## z-Score Plots

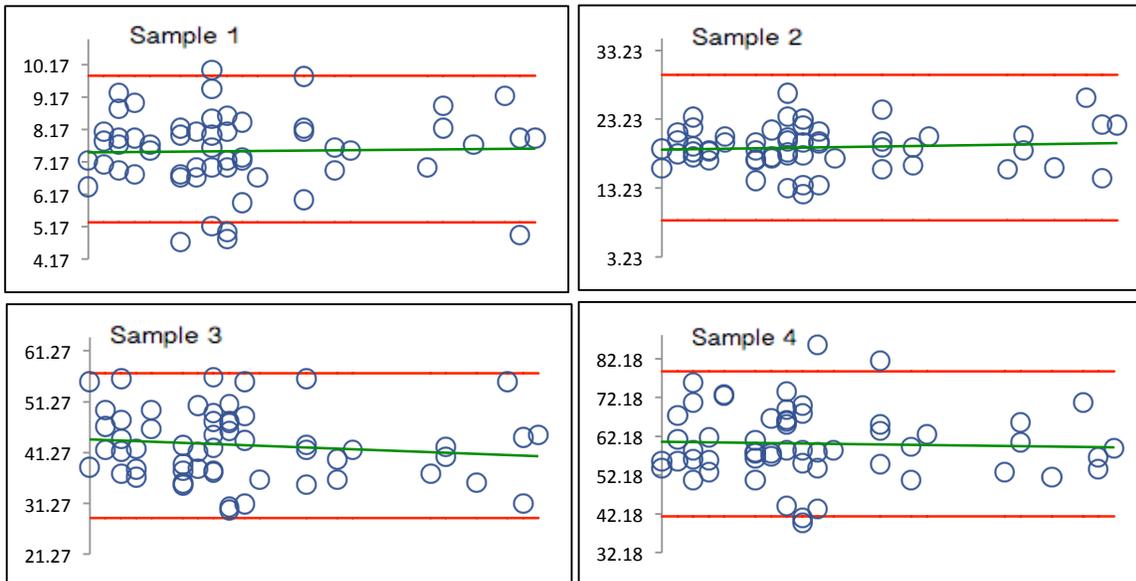


## Kernel Density Plots



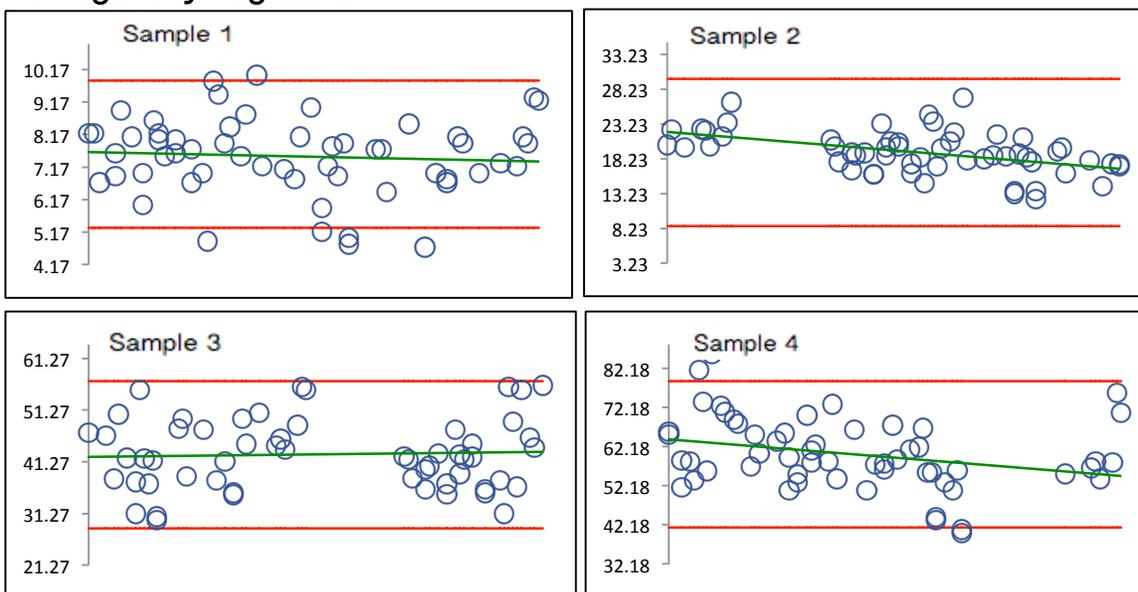
# CARBON TETRACHLORIDE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## CHLOROBENZENE

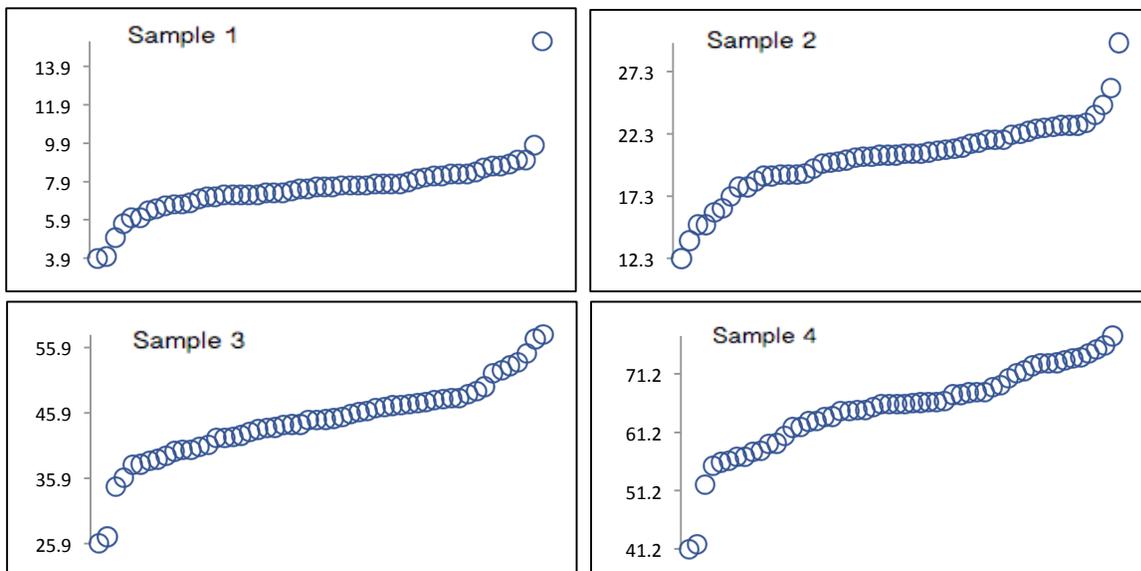
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	54	54	54	54
Median	7.60	20.7	44.8	66.1
Robust Mean	7.54	20.6	44.7	65.7
U	0.160	0.40	0.90	1.18
Robust Standard Deviation	0.938	2.32	5.27	6.93
Regression Standard Deviation	1.13	3.08	6.71	9.85
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	1.13	3.11	6.71	9.85
Outliers	0	0	0	0
z >3.0	3	0	0	0
2< z <3	1	3	2	2

### Methods Used

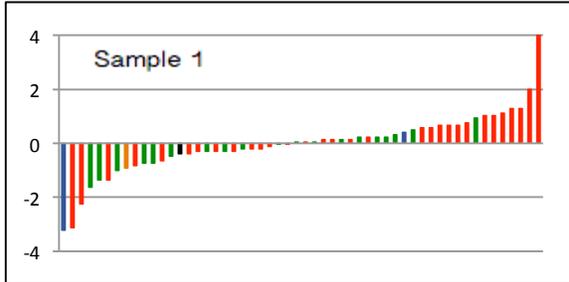
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	2	2	2	2
P/T-GCMS	31	31	31	31
HS-GCMS	19	19	19	19
GC/MS/MSHEAD	1	1	1	1
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

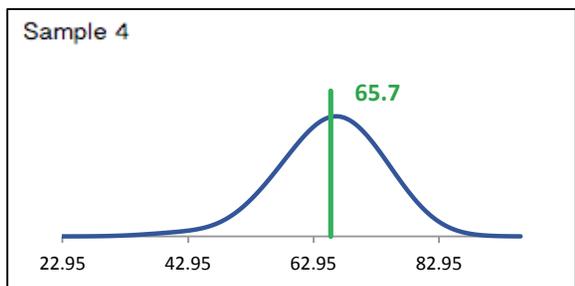
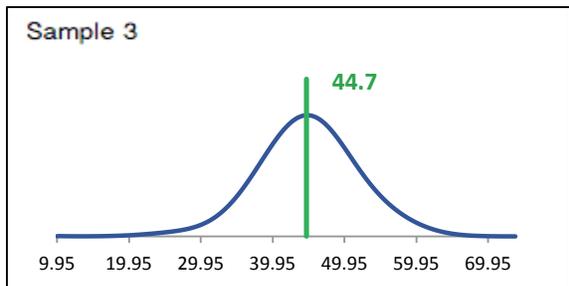
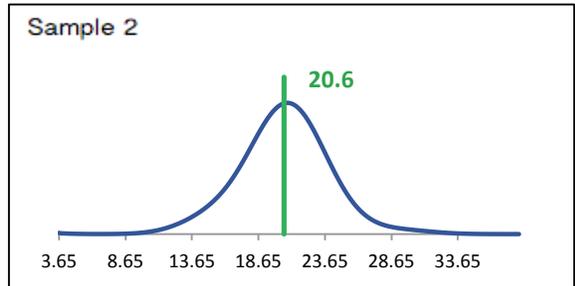
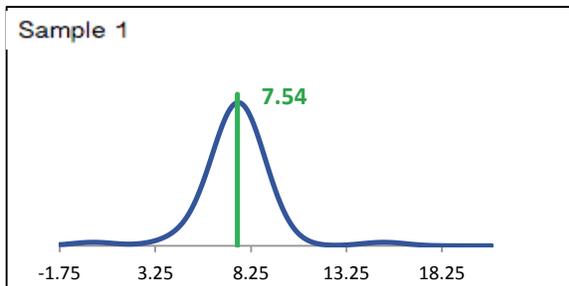


# CHLOROBENZENE

## z-Score Plots

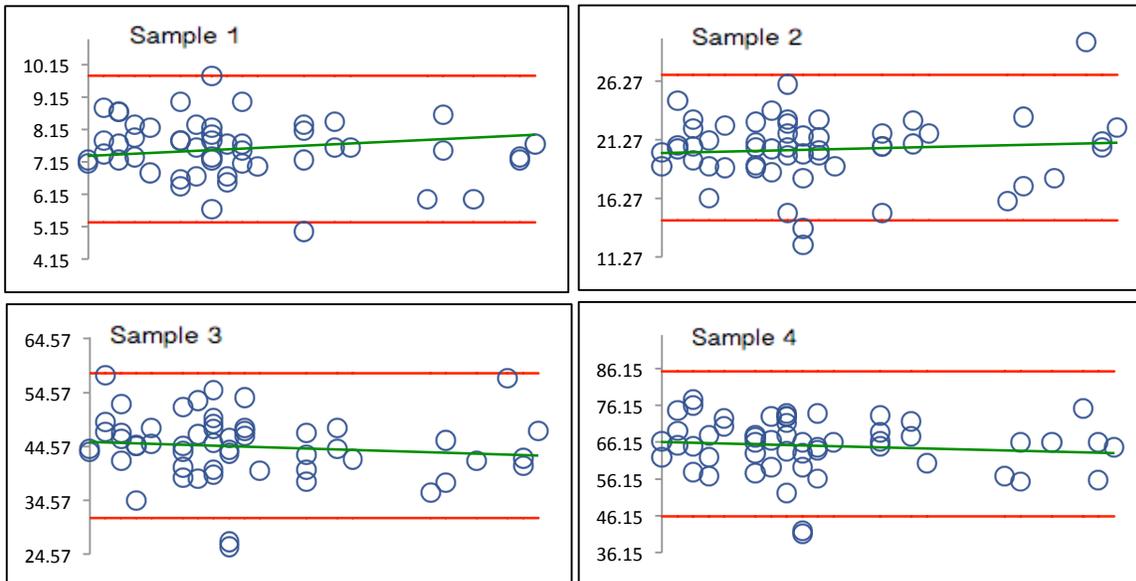


## Kernel Density Plots



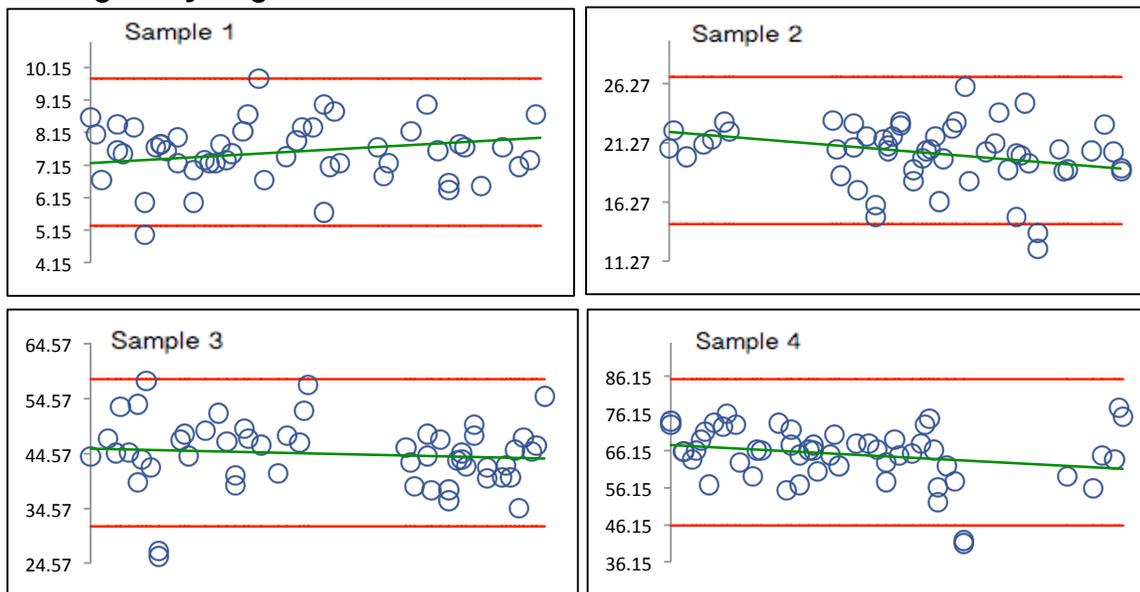
# CHLOROBENZENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# CHLORODIBROMOMETHANE

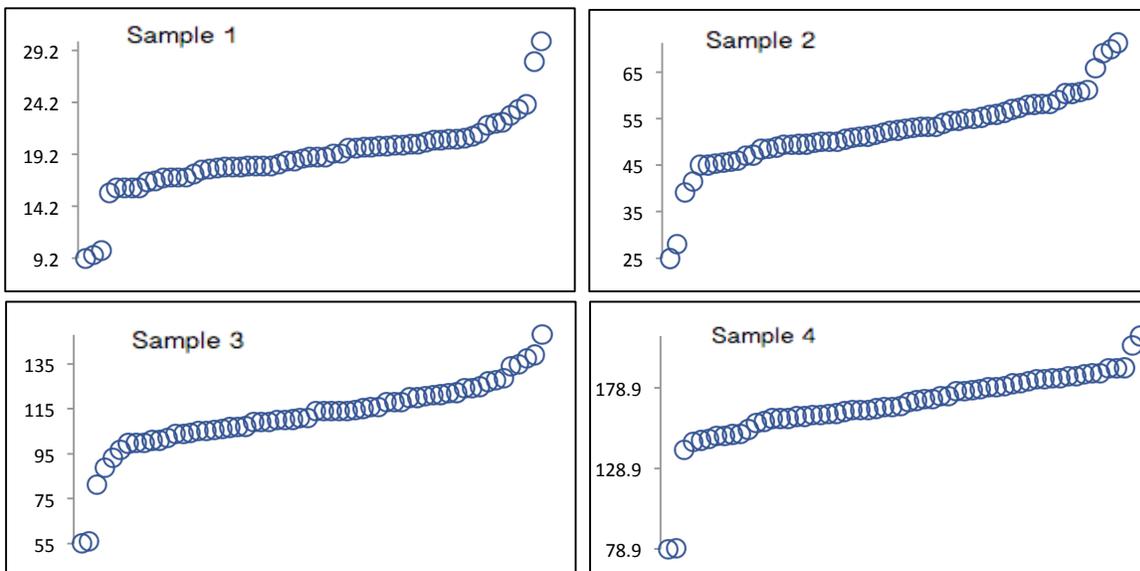
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	60	60	60	60
Median	19.0	52.5	113	169
Robust Mean	19.0	52.6	112	170
U	0.381	0.98	1.95	2.66
Robust Standard Deviation	2.36	6.06	12.1	16.5
Regression Standard Deviation	2.85	7.89	16.9	25.4
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	2.85	8.59	16.9	25.4
Outliers	0	0	0	0
z >3.0	5	1	2	2
2< z <3	0	3	1	0

## Methods Used

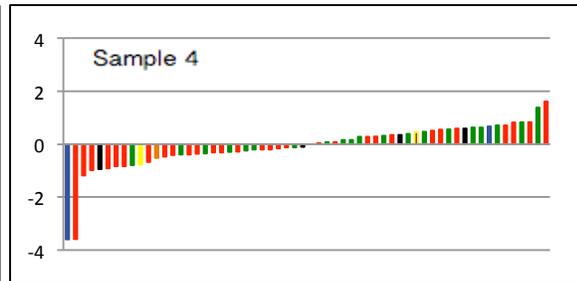
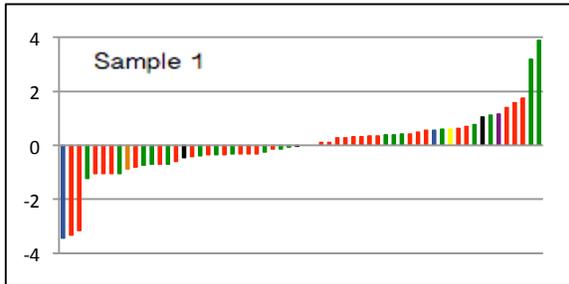
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	2	2	2	2
P/T-GCMS	31	31	31	31
HS-GCMS	20	20	20	20
GC/MS/MSHEAD	1	1	1	1
GC/MS1	4	4	4	4
P/T-GCECD	1	1	1	1
GC/ECD-1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

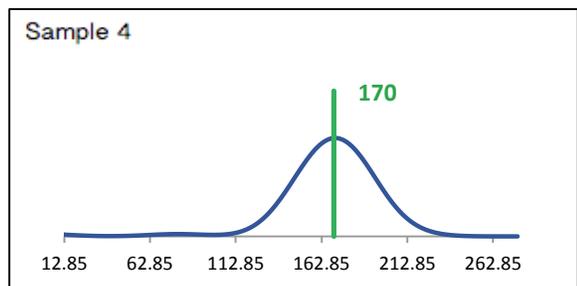
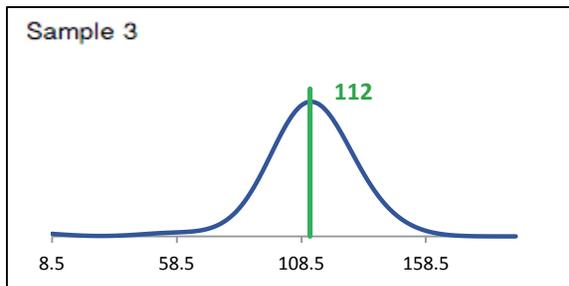
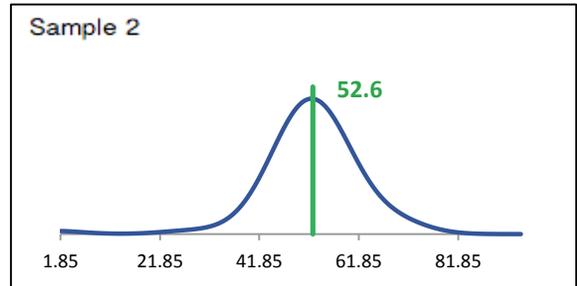
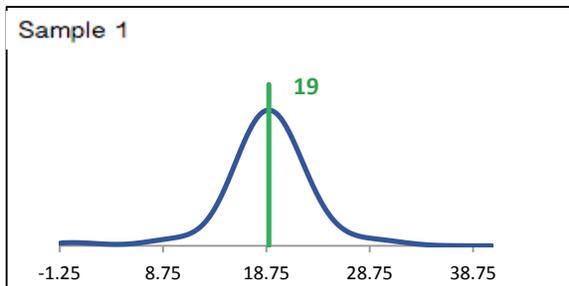


# CHLORODIBROMOMETHANE

## z-Score Plots

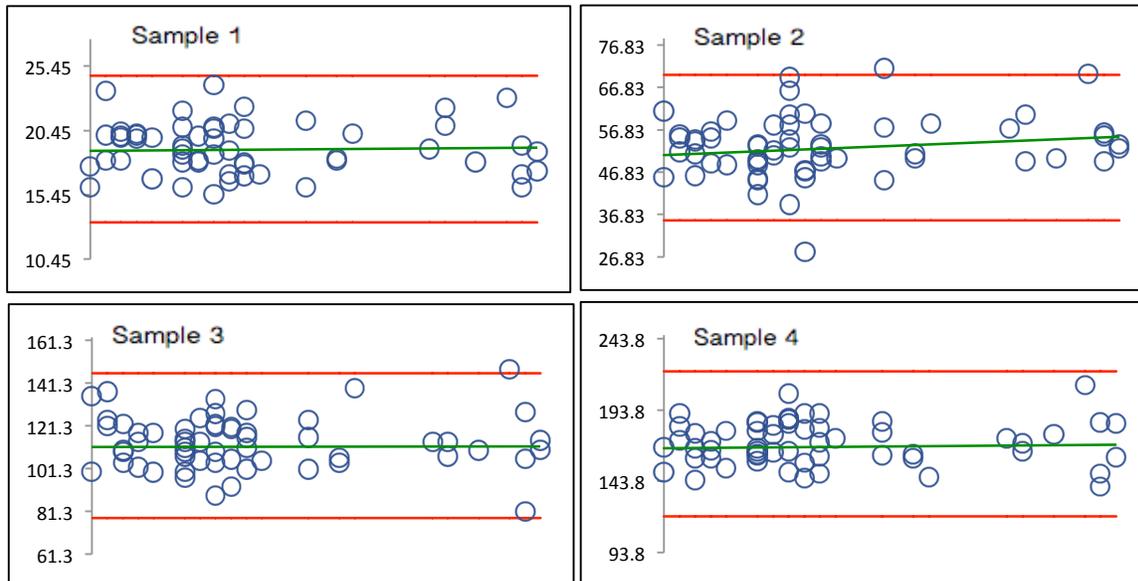


## Kernel Density Plots



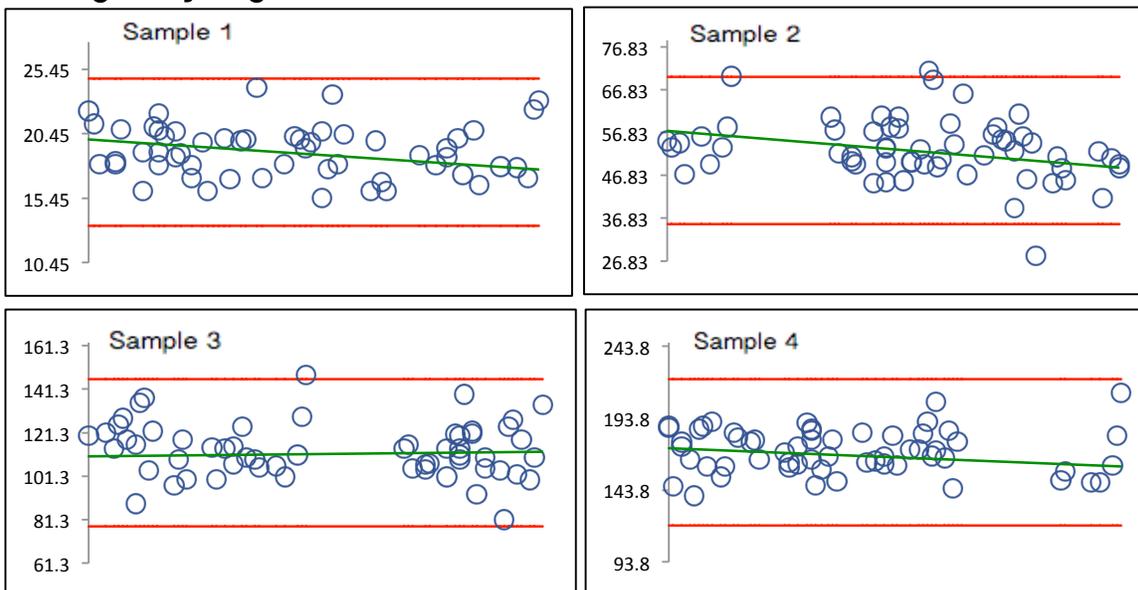
# CHLORODIBROMOMETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# CHLOROFORM

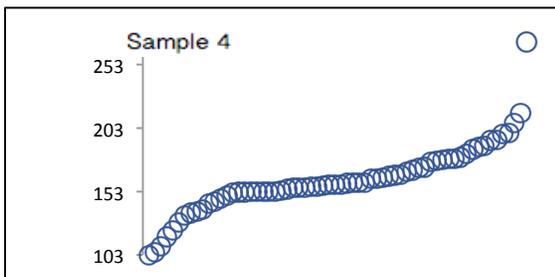
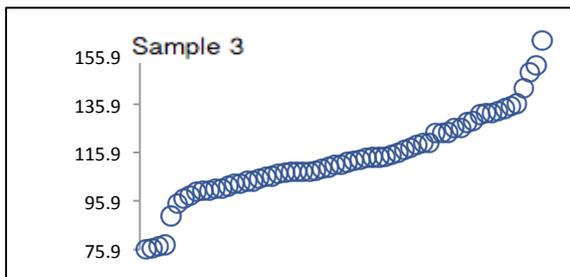
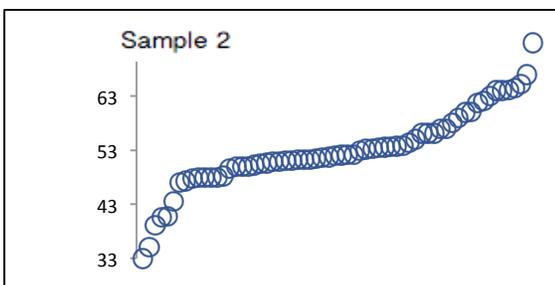
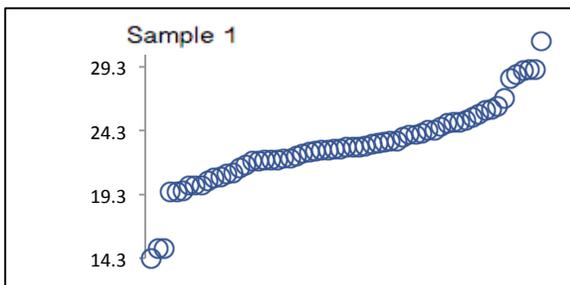
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	63	64	64	64
Median	23.0	52.0	112	158
Robust Mean	23.1	53.0	113	161
U	0.405	0.99	2.41	3.33
Robust Standard Deviation	2.57	6.33	15.4	21.3
Regression Standard Deviation	3.46	7.96	17.0	24.2
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	3.46	7.96	17.0	24.2
Outliers	0	0	0	0
z >3.0	0	0	0	1
2< z <3	4	3	7	4

## Methods Used

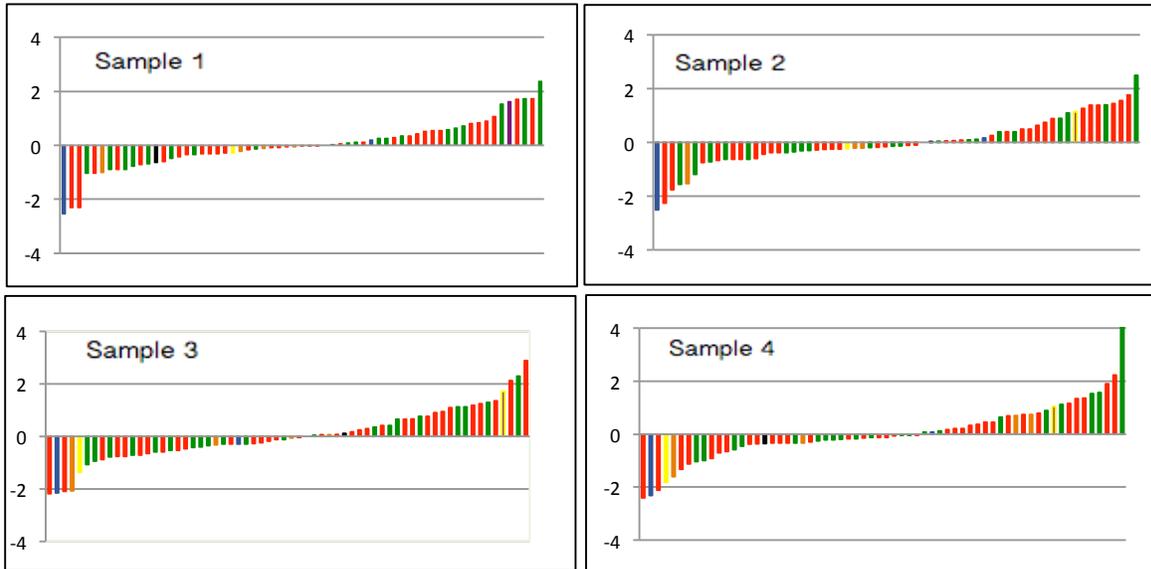
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	2	2	2	2
P/T-GCMS	34	34	34	34
HS-GCMS	20	21	21	21
GC/MS1	4	4	4	4
GC/MS/MSHEAD	1	1	1	1
P/T-GCECD	1	1	1	1
GC/ECD-1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

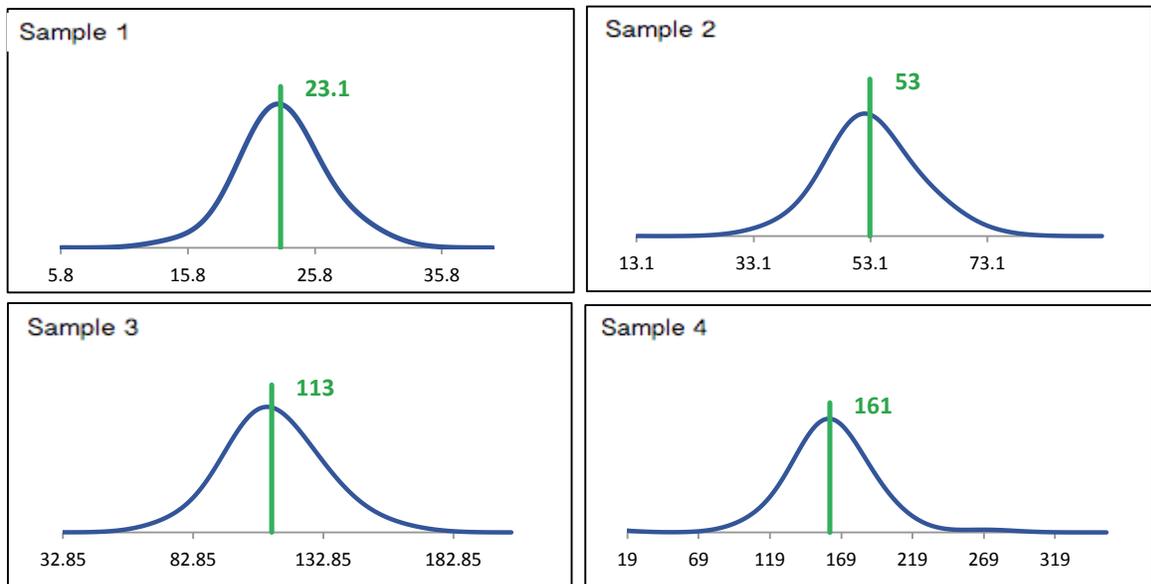


# CHLOROFORM

## z-Score Plots

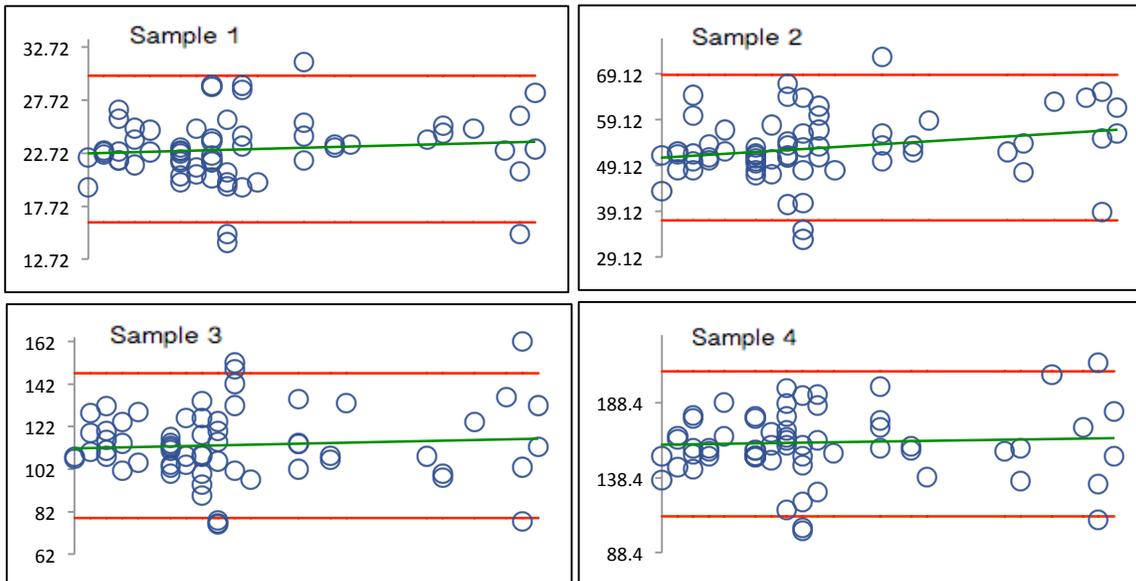


## Kernel Density Plots



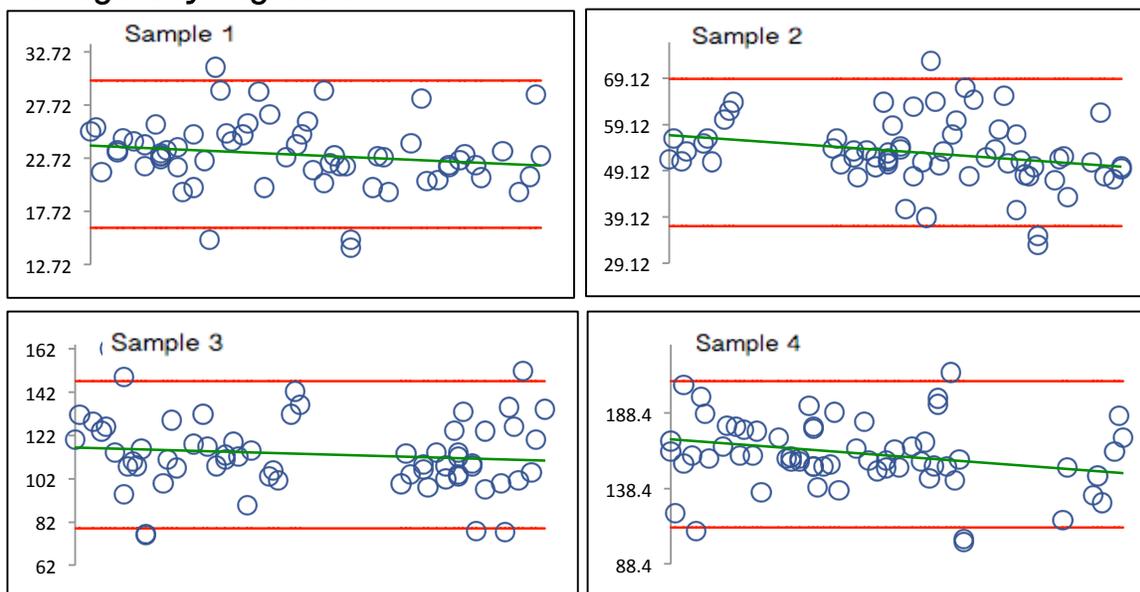
# CHLOROFORM

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## CIS-1,2-DICHLOROETHYLENE

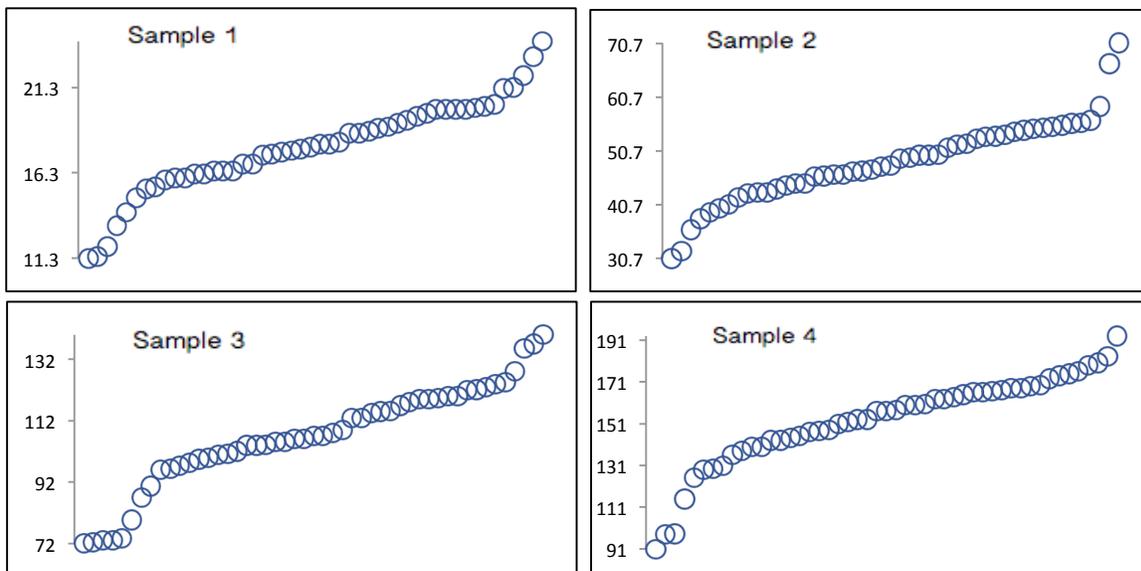
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	48	48	49	49
Median	17.9	48.7	107	157
Robust Mean	17.9	48.6	108	154
U	0.458	1.25	2.80	3.46
Robust Standard Deviation	2.54	6.94	15.7	19.4
Regression Standard Deviation	2.68	7.29	16.2	23.2
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA)	2.68	9.24	16.2	23.2
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	4	1	5	3

### Methods Used

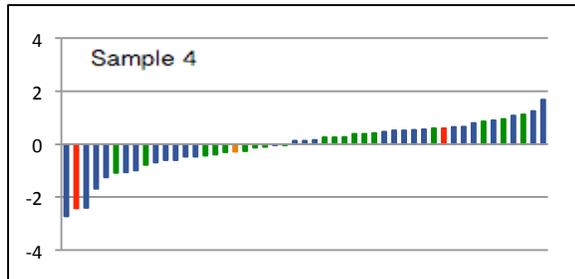
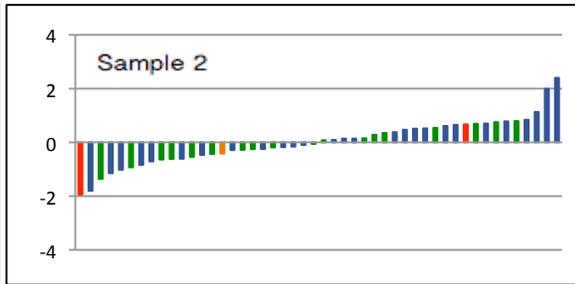
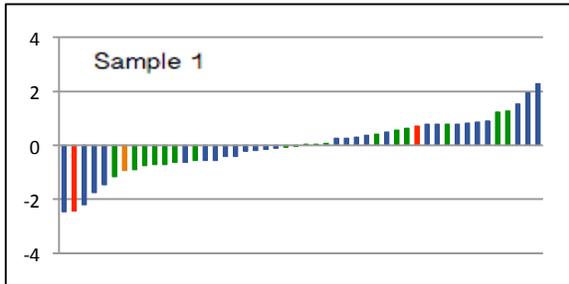
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	27	27	27	27
P/T-FID	2	2	2	2
HS-GCMS	18	18	19	19
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

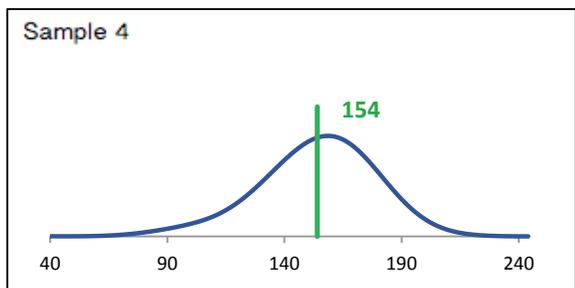
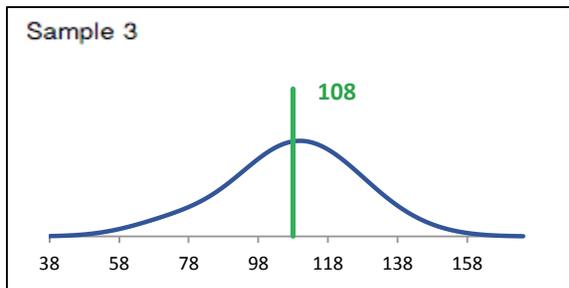
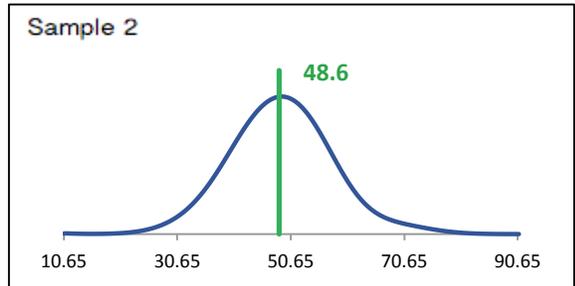
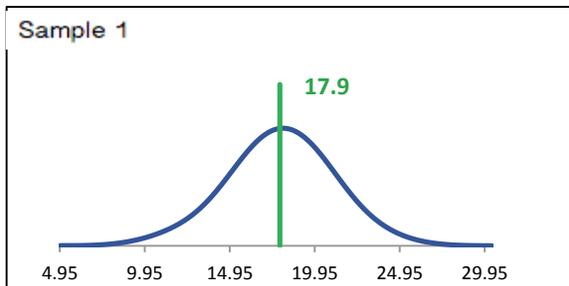


# CIS-1,2-DICHLOROETHYLENE

## z-Score Plots

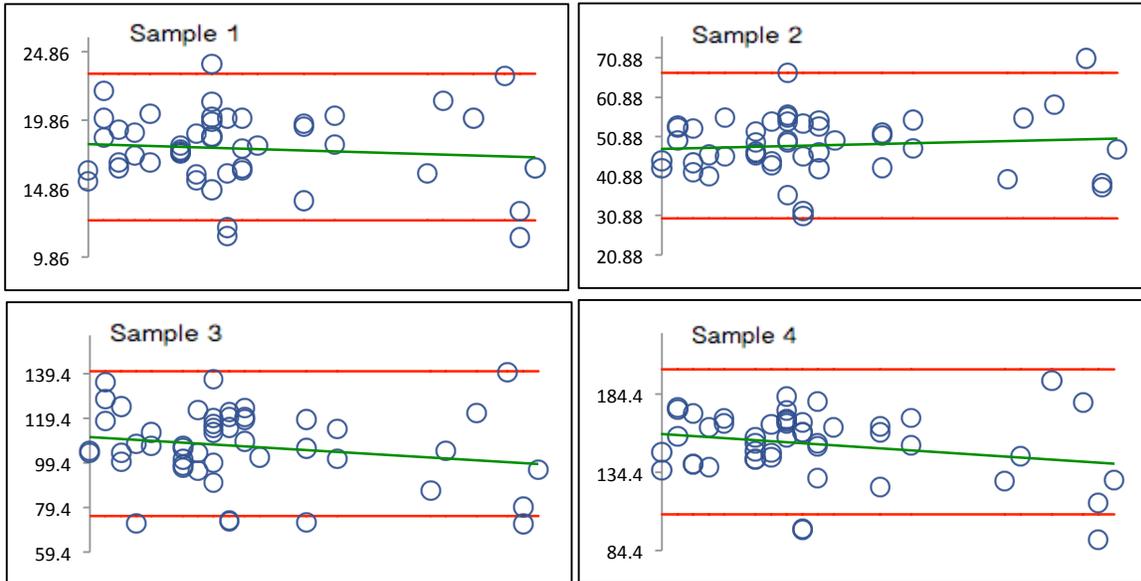


## Kernel Density Plots



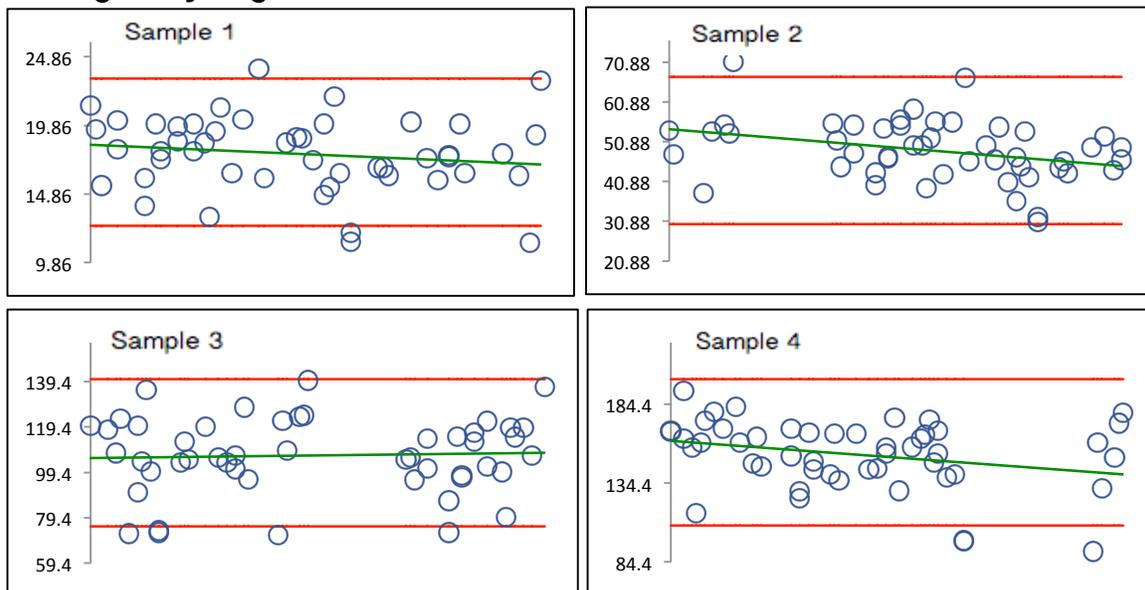
# CIS-1,2-DICHLOROETHYLENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

### CIS-1,3-DICHLOROPROPENE

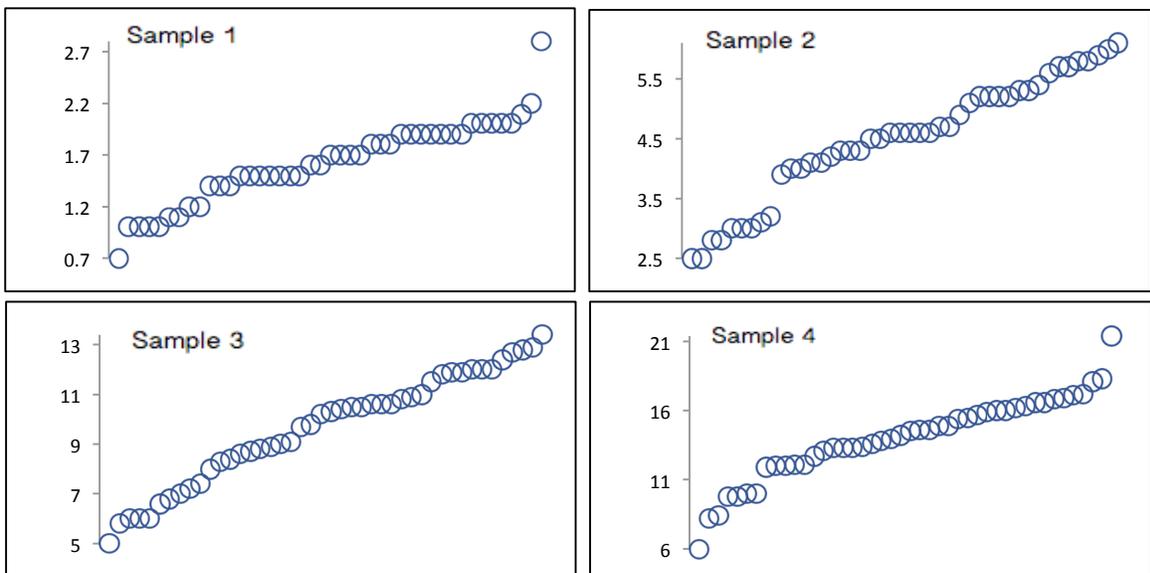
#### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	43	44	44	44
Median	1.70	4.60	10.3	14.4
Robust Mean	1.62	4.51	9.7	14.1
U	0.077	0.21	0.47	0.55
Robust Standard Deviation	0.403	1.12	2.50	2.90
Regression Standard Deviation	0.243	0.677	1.45	2.11
Stability Flag	Stability	Stability	Stability	Stability
Homogeneity Flag				
Standard Deviation Used (SDPA)	0.632	1.15	3.24	4.18
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	0	0	0	0

#### Methods Used

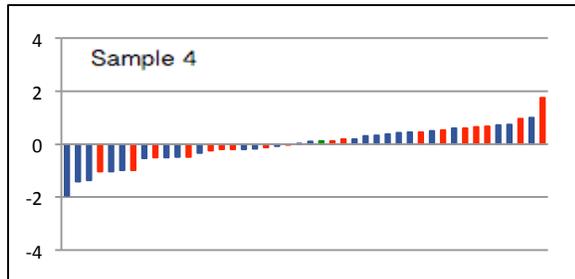
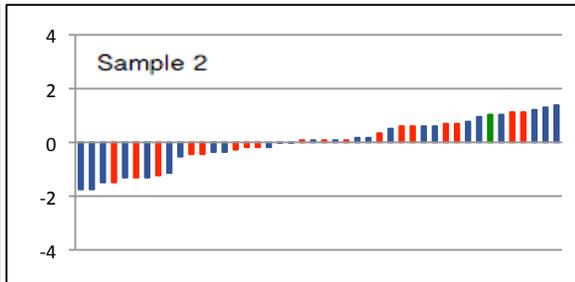
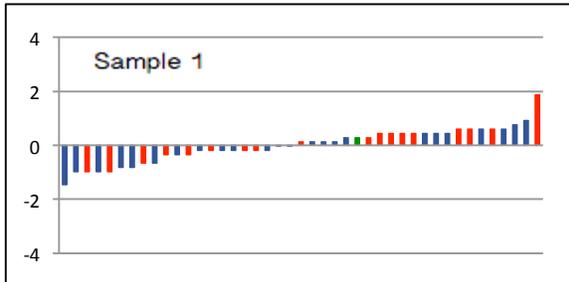
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	24	25	25	25
HS-GCMS	18	18	18	18
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

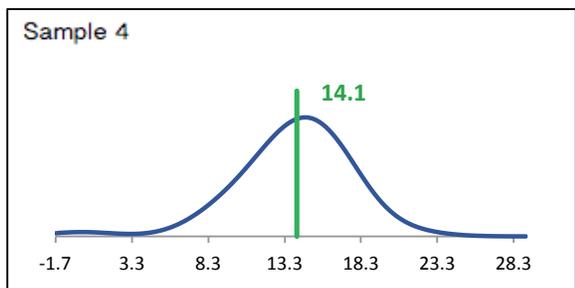
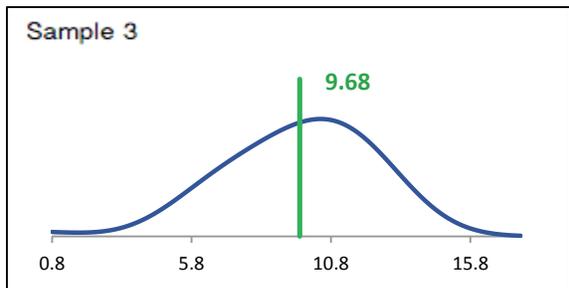
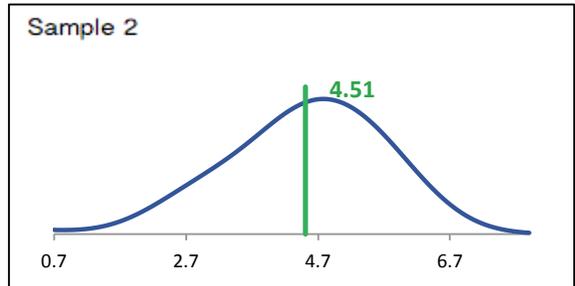
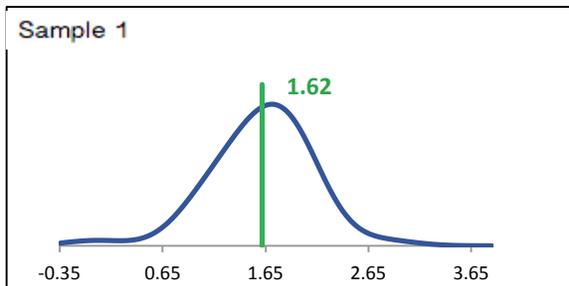


# CIS-1,3-DICHLOROPROPENE

## z-Score Plots

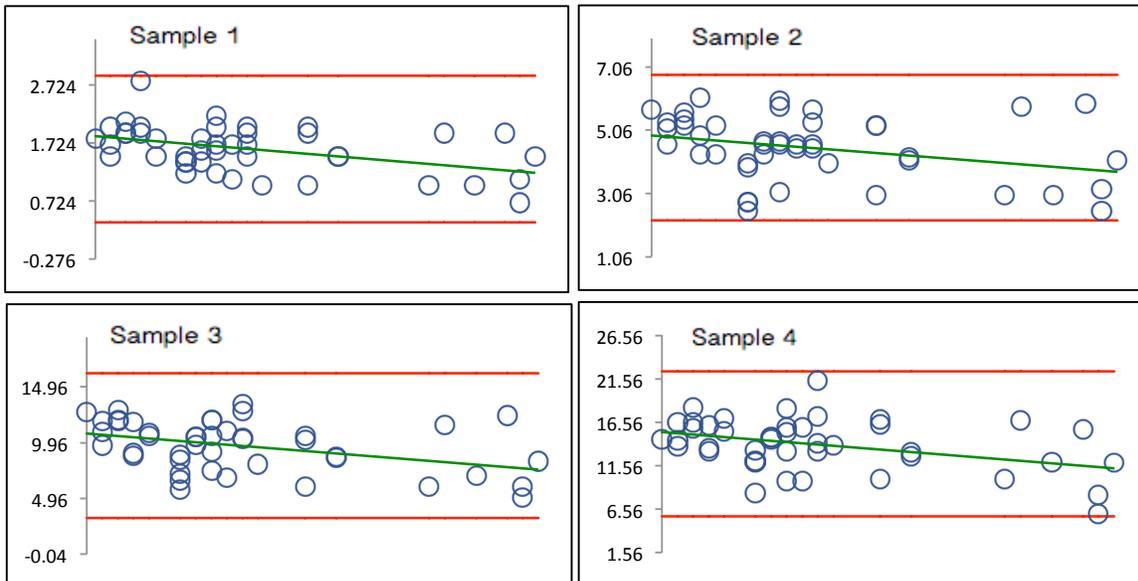


## Kernel Density Plots



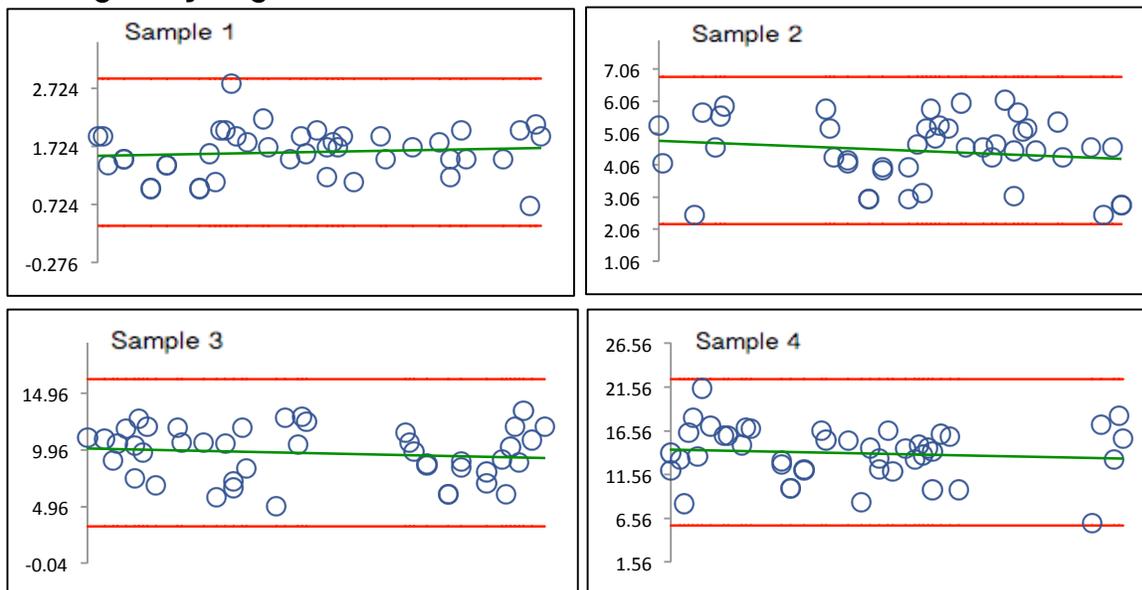
# CIS-1,3-DICHLOROPROPENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## DICHLOROMETHANE

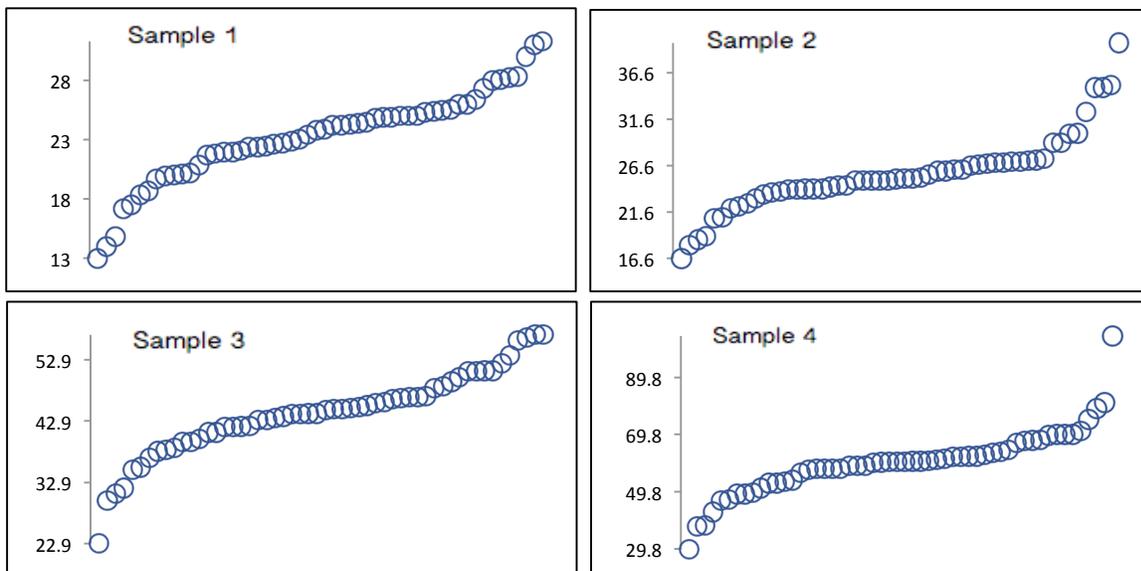
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	54	54	54	54
Median	23.9	25.2	44.4	60.3
Robust Mean	23.4	25.4	44.4	59.9
U	0.602	0.51	1.06	1.51
Robust Standard Deviation	3.54	3.02	6.23	8.86
Regression Standard Deviation	4.10	4.45	7.77	10.5
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	4.10	4.45	7.77	10.5
Outliers	0	0	0	0
z >3.0	0	1	0	1
2< z <3	3	3	1	4

### Methods Used

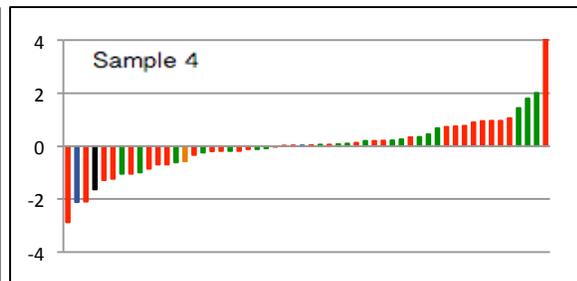
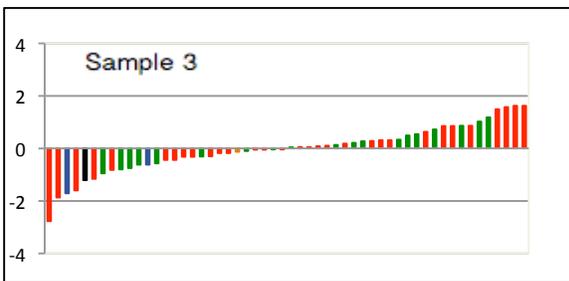
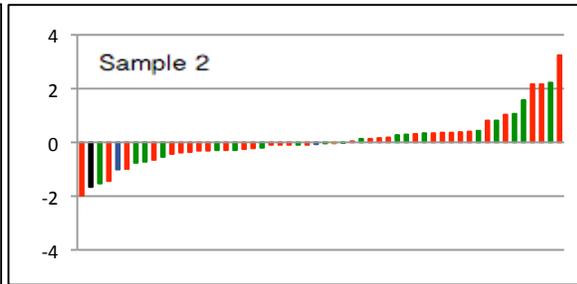
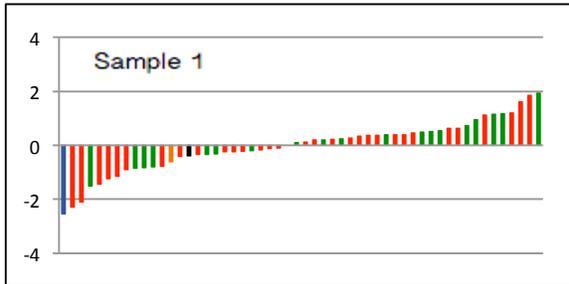
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	2	2	2	2
P/T-GCMS	31	31	31	31
HS-GCMS	19	19	19	19
GC/MS/MSHEAD	1	1	1	1
GC/MSE	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

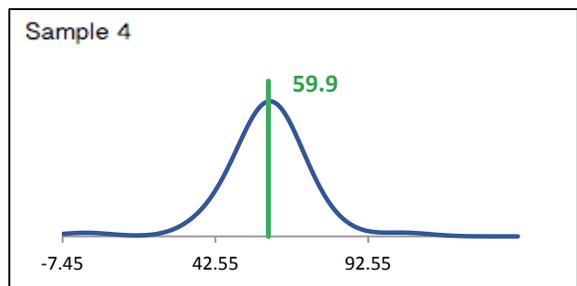
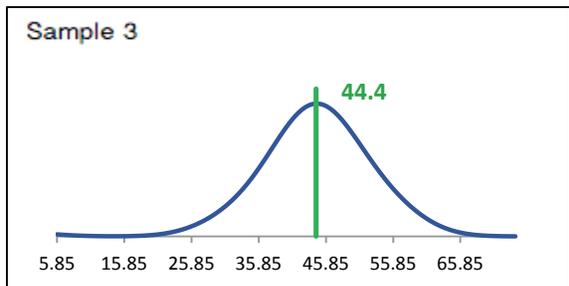
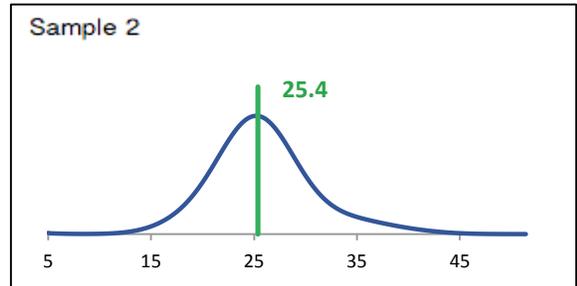
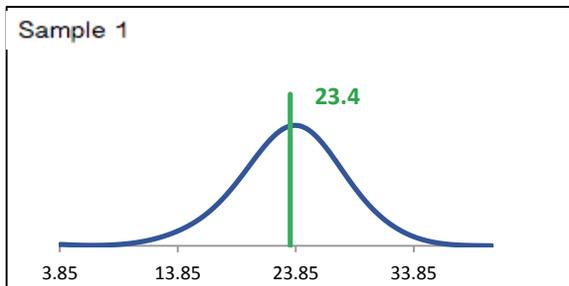


# DICHLOROMETHANE

## z-Score Plots

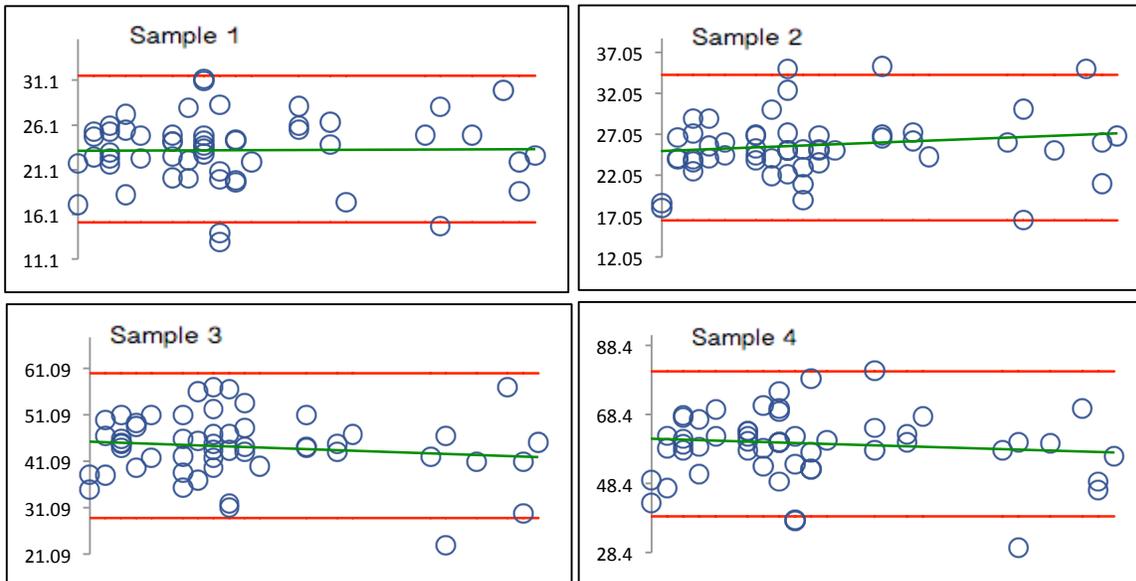


## Kernel Density Plots



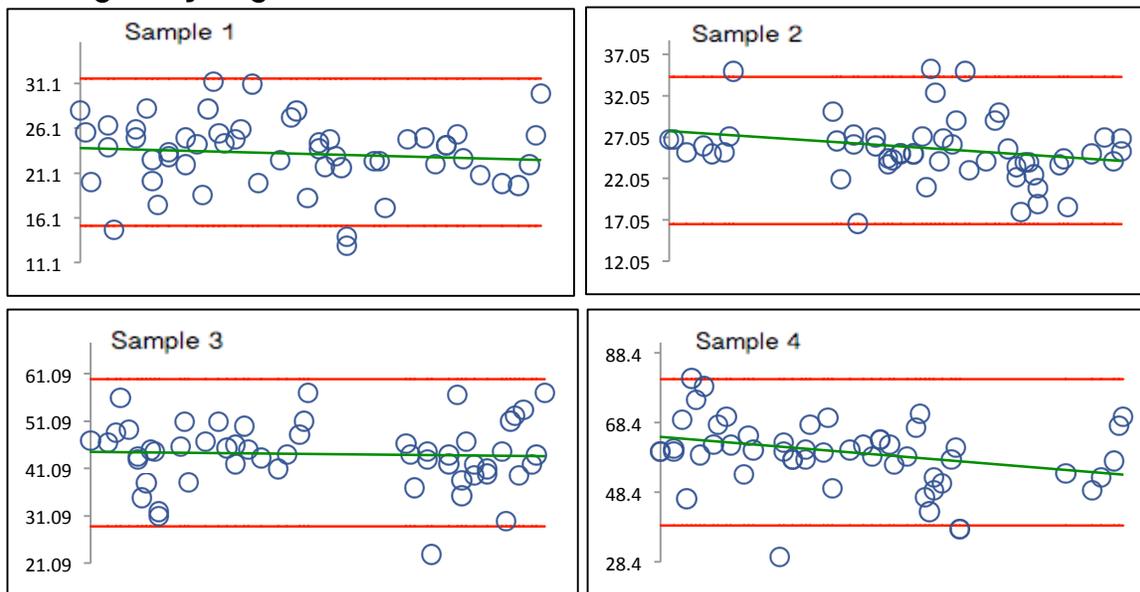
# DICHLOROMETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## ETHYLBENZENE

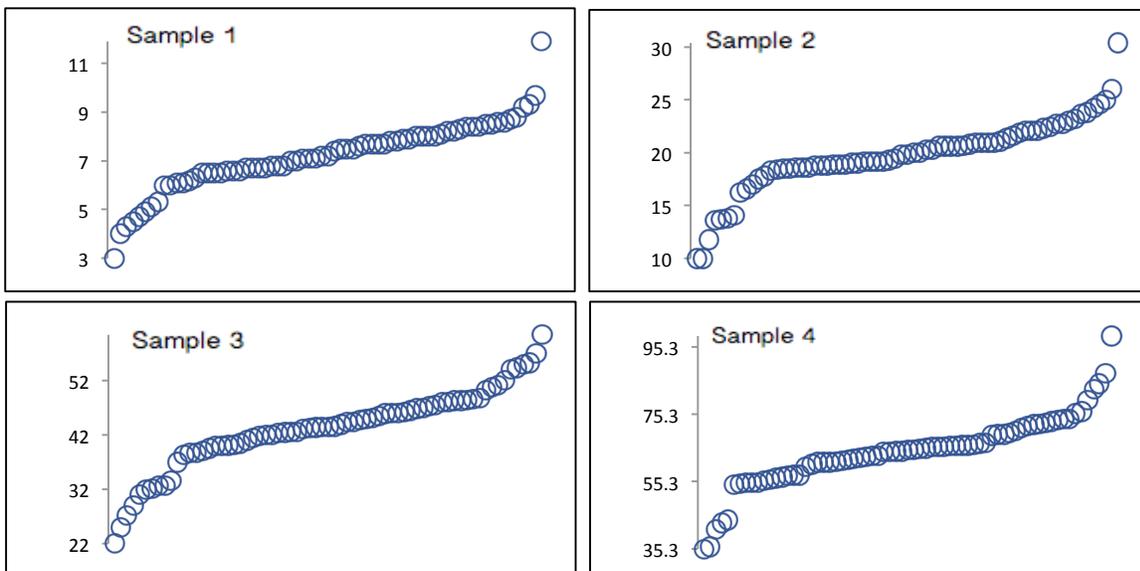
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	69	69	69	69
Median	7.20	19.8	43.4	64.6
Robust Mean	7.26	19.9	43.5	64.4
U	0.179	0.40	0.99	1.24
Robust Standard Deviation	1.19	2.63	6.55	8.25
Regression Standard Deviation	1.09	2.99	6.52	9.67
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	1.19	2.99	6.55	9.67
Outliers	0	0	0	0
z >3.0	2	3	1	2
2< z <3	5	5	5	6

### Methods Used

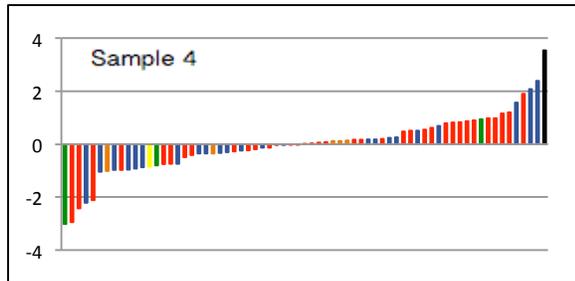
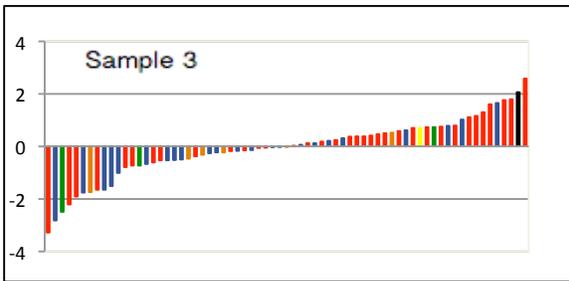
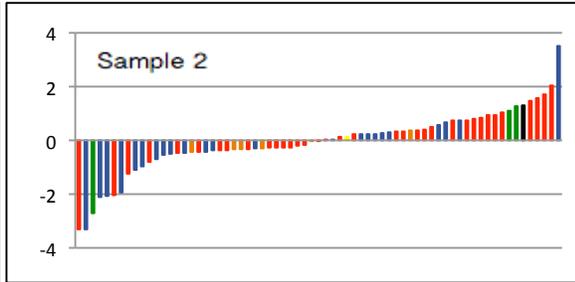
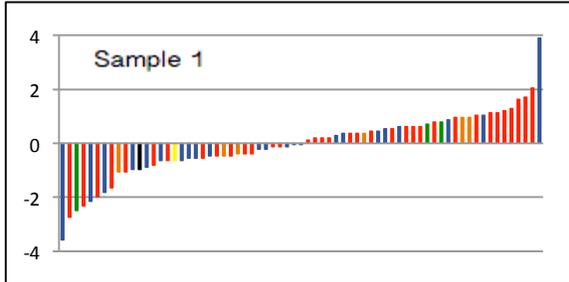
Method	C16-1	C16-2	C16-3	C16-4
HS-GCMS	23	23	23	23
P/T-GCMS	35	35	35	35
P/T-FID	3	3	3	3
GC/MS1	6	6	6	6
HS-GCF	1	1	1	1
GC/MS/MSHEAD	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

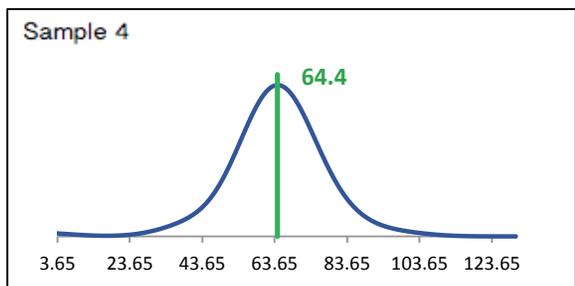
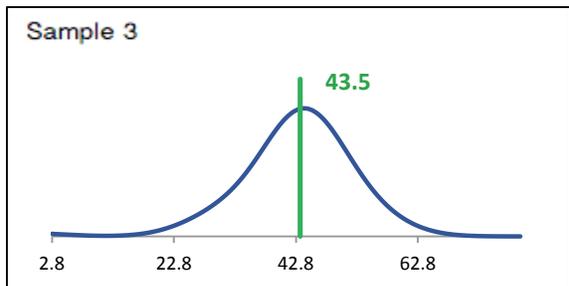
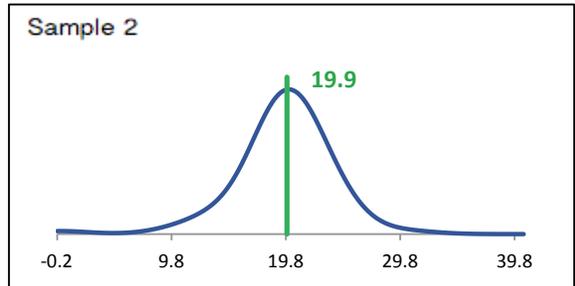
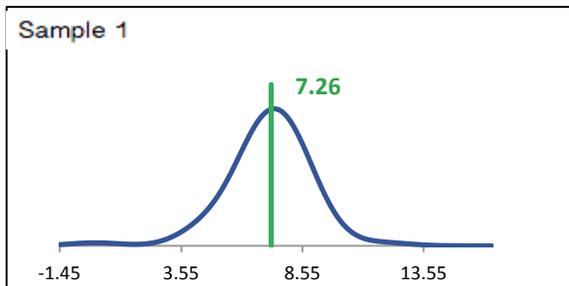


# ETHYLBENZENE

## z-Score Plots

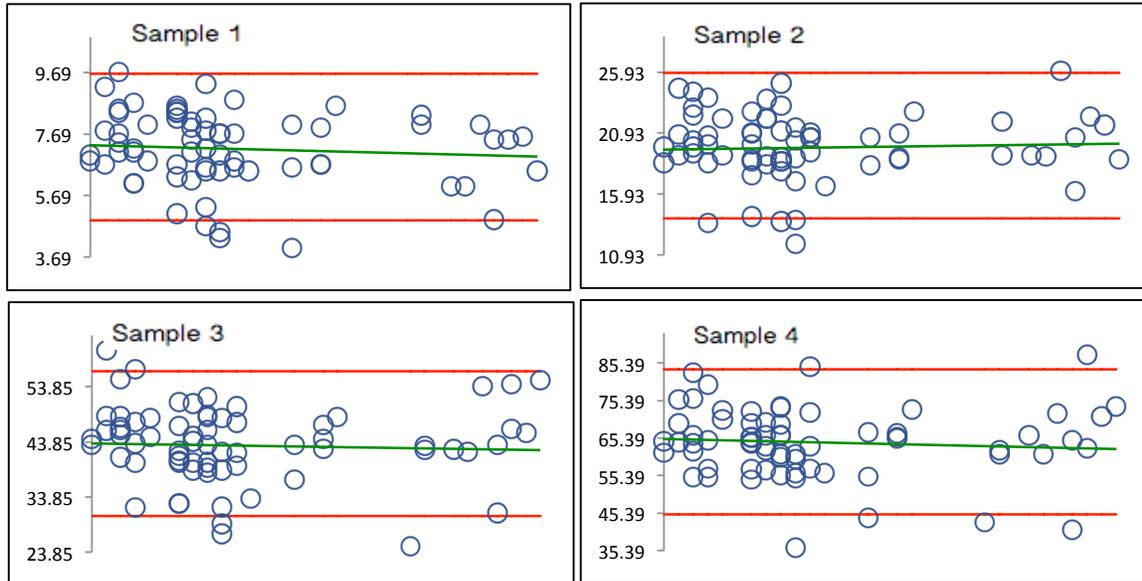


## Kernel Density Plots



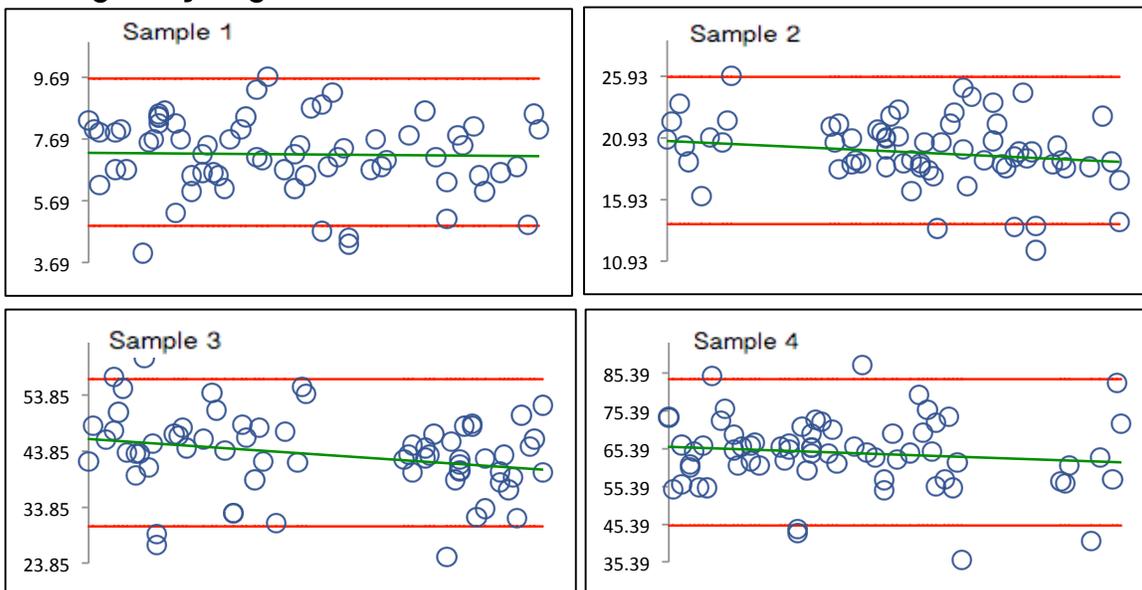
# ETHYLBENZENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## ETHYLENE DIBROMIDE

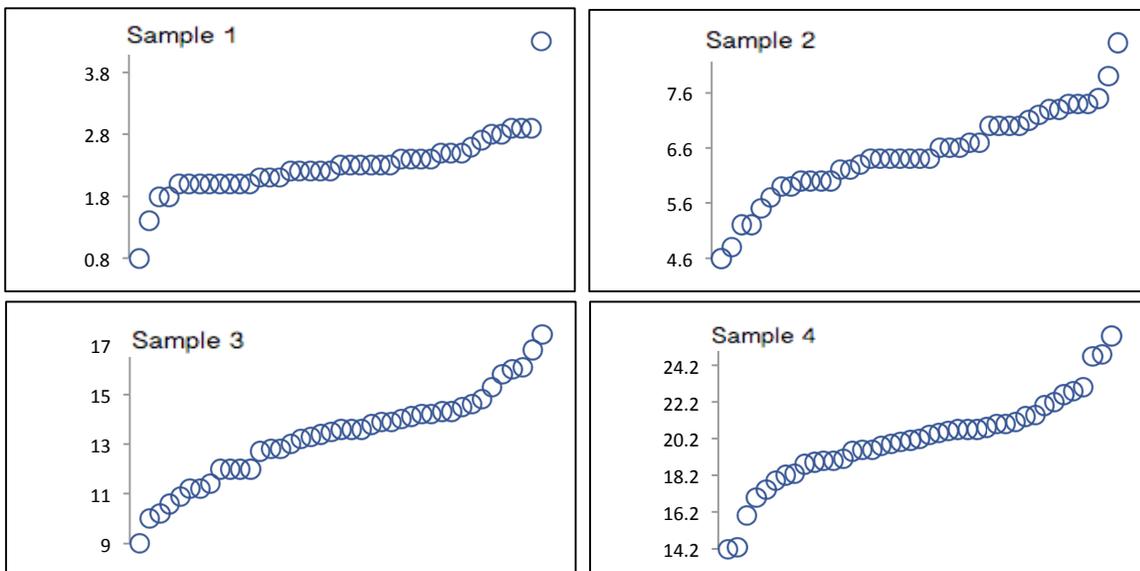
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	41	41	41	41
Median	2.30	6.40	13.6	20.2
Robust Mean	2.28	6.51	13.3	20.2
U	0.070	0.15	0.37	0.40
Robust Standard Deviation	0.357	0.763	1.88	2.05
Regression Standard Deviation	0.342	0.977	2.00	3.02
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	0.357	0.977	2.00	3.02
Outliers	0	0	0	0
z >3.0	2	0	0	0
2< z <3	1	1	2	0

### Methods Used

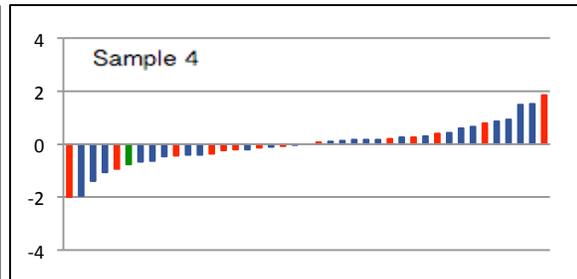
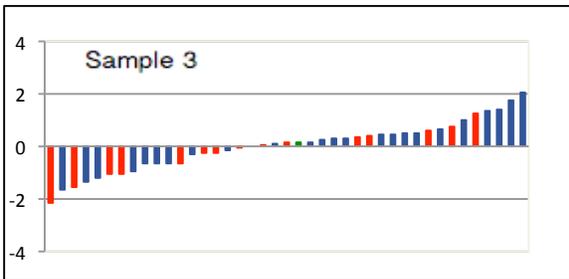
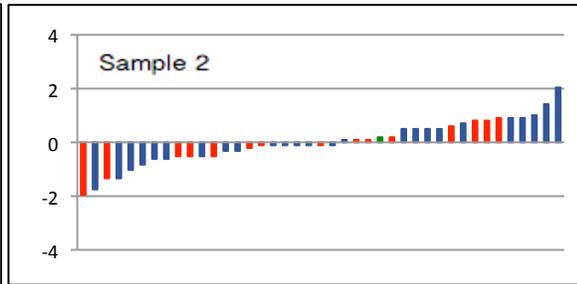
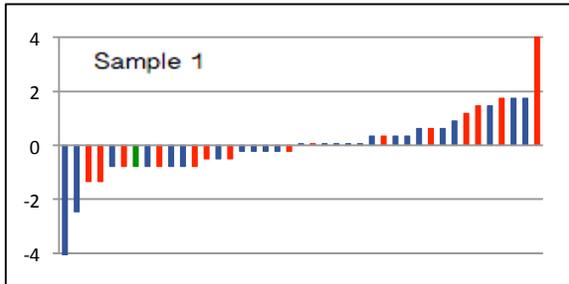
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	25	25	25	25
HS-GCMS	15	15	15	15
GC/MSE	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

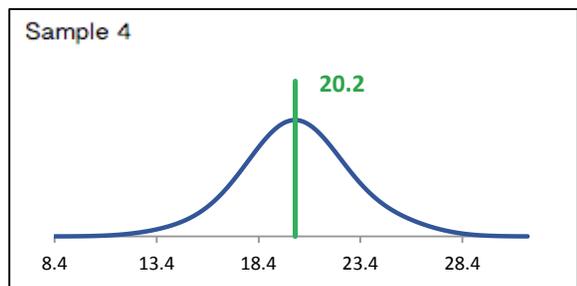
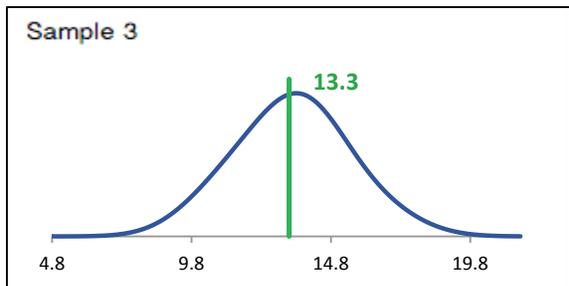
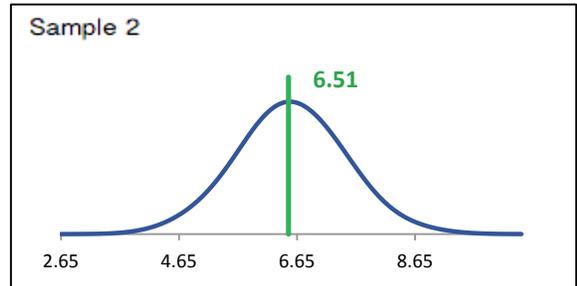
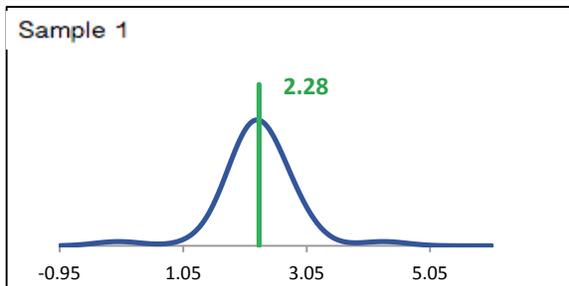


# ETHYLENE DIBROMIDE

## z-Score Plots

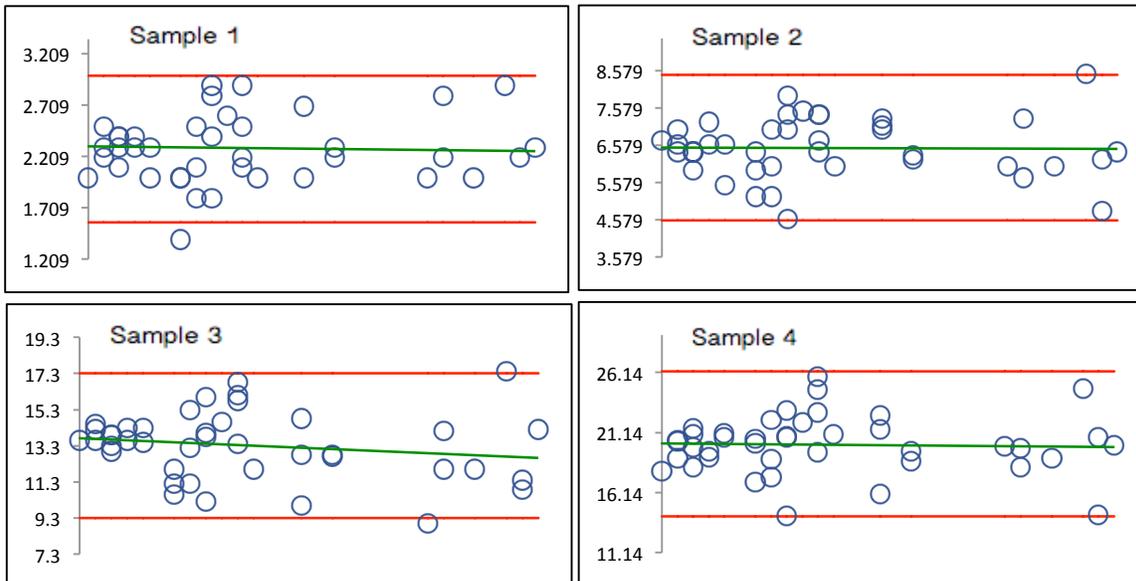


## Kernel Density Plots



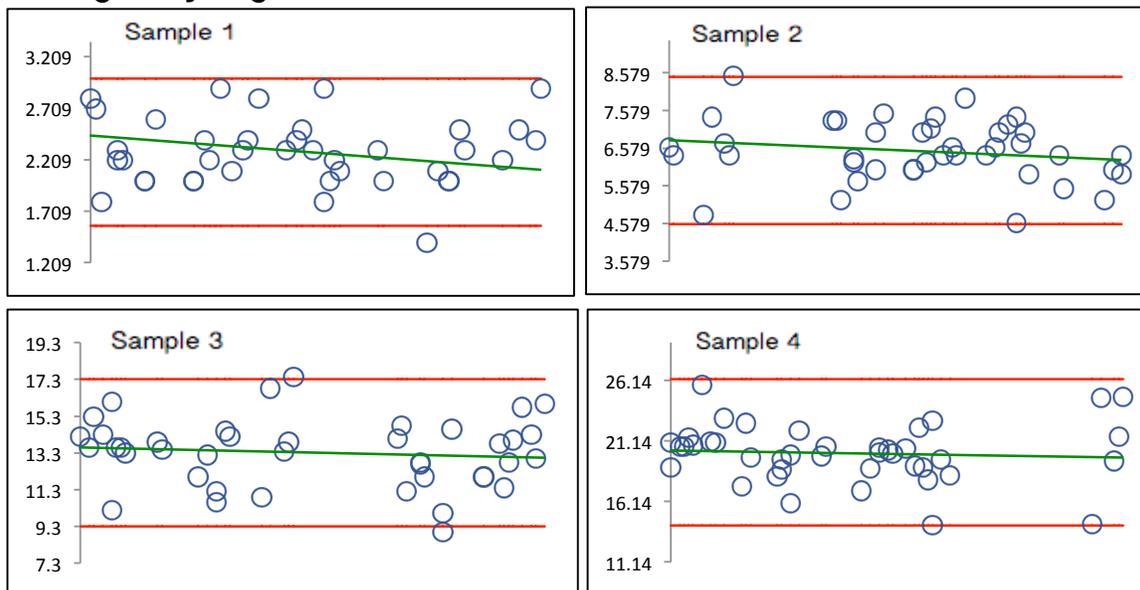
# ETHYLENE DIBROMIDE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

### M,P-XYLENE

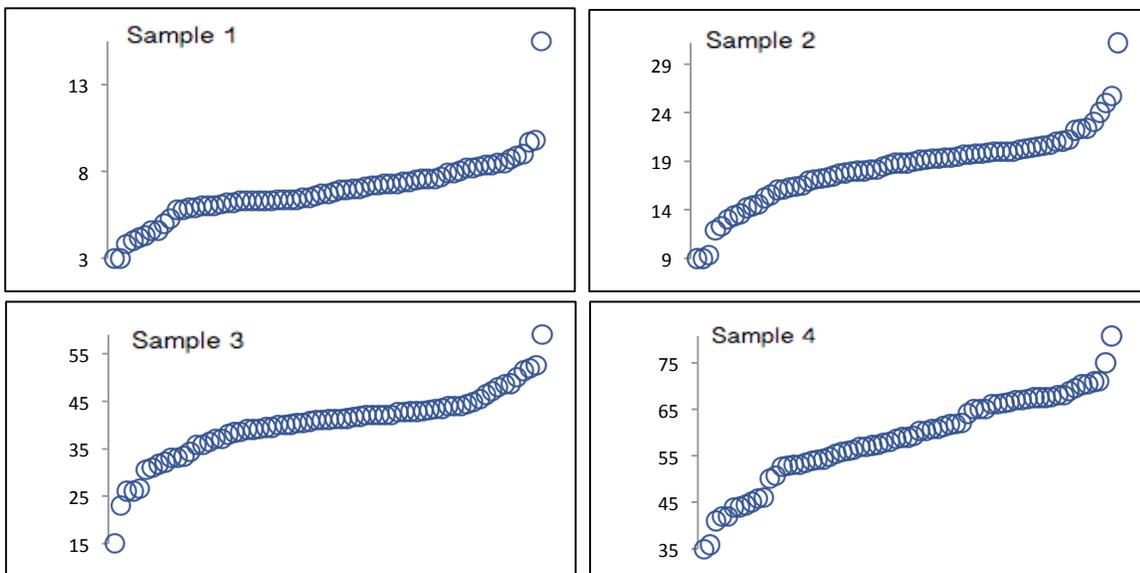
#### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	69	69	69	69
Median	6.70	18.8	41.1	59.0
Robust Mean	6.83	18.4	40.4	58.9
U	0.205	0.46	0.88	1.44
Robust Standard Deviation	1.36	3.03	5.86	9.58
Regression Standard Deviation	1.02	2.77	6.07	8.84
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	1.36	3.03	6.07	9.58
Outliers	0	0	0	0
z >3.0	1	3	2	0
2< z <3	6	5	5	3

#### Methods Used

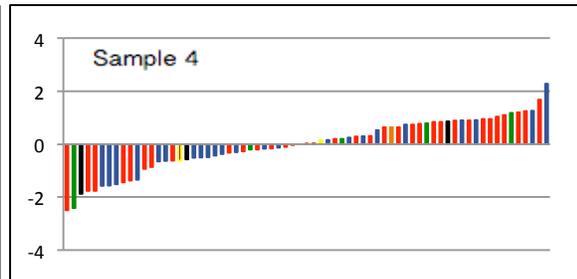
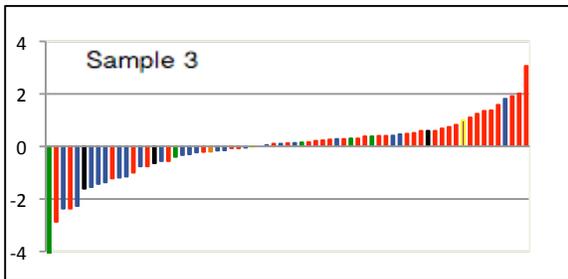
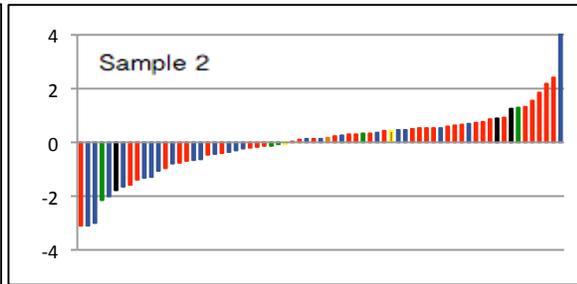
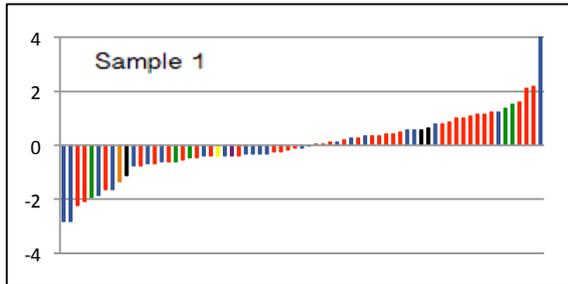
Method	C16-1	C16-2	C16-3	C16-4
HS-GCMS	23	23	23	23
P/T-GCMS	35	35	35	35
GC/MS1	5	5	5	5
HS-GCF	1	1	1	1
P/T-FID	3	3	3	3
GC/MSE	1	1	1	1
GC/MS/MSHEAD	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

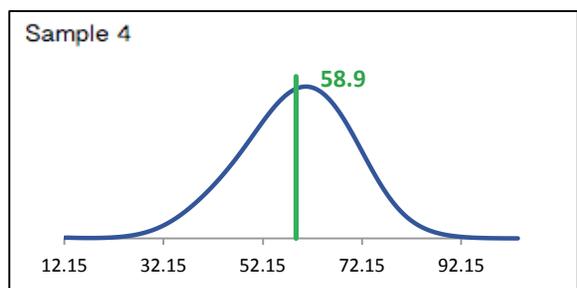
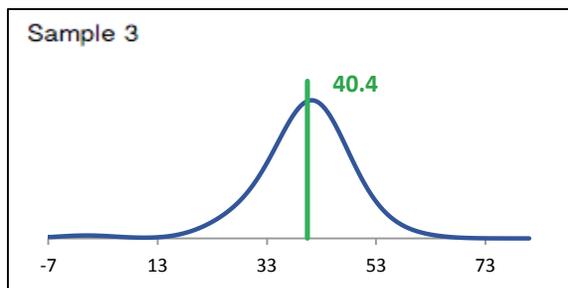
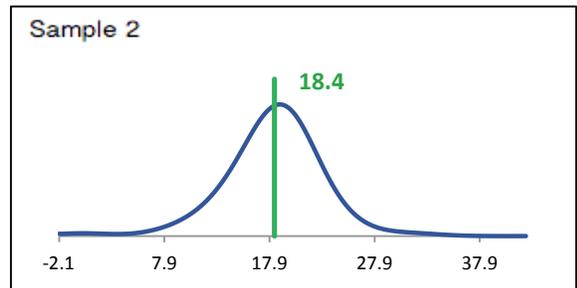
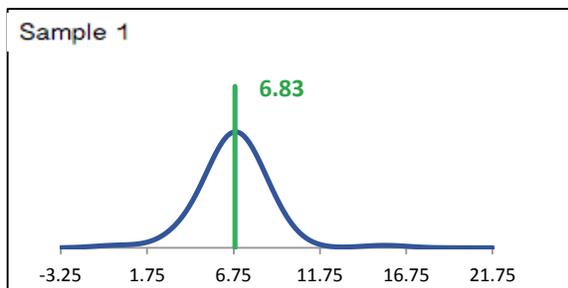


# M,P-XYLENE

## z-Score Plots

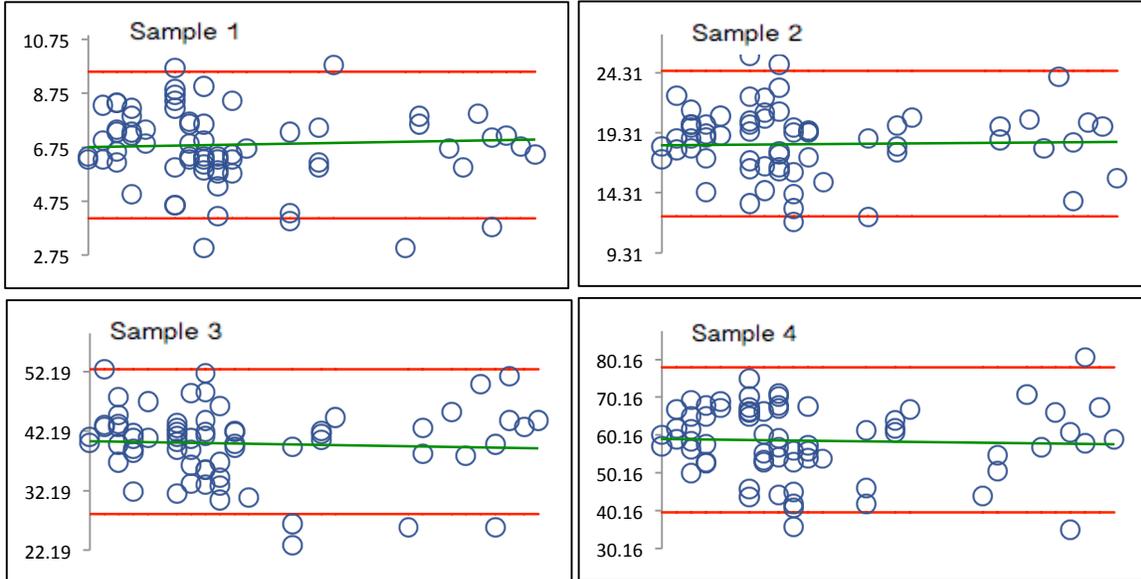


## Kernel Density Plots



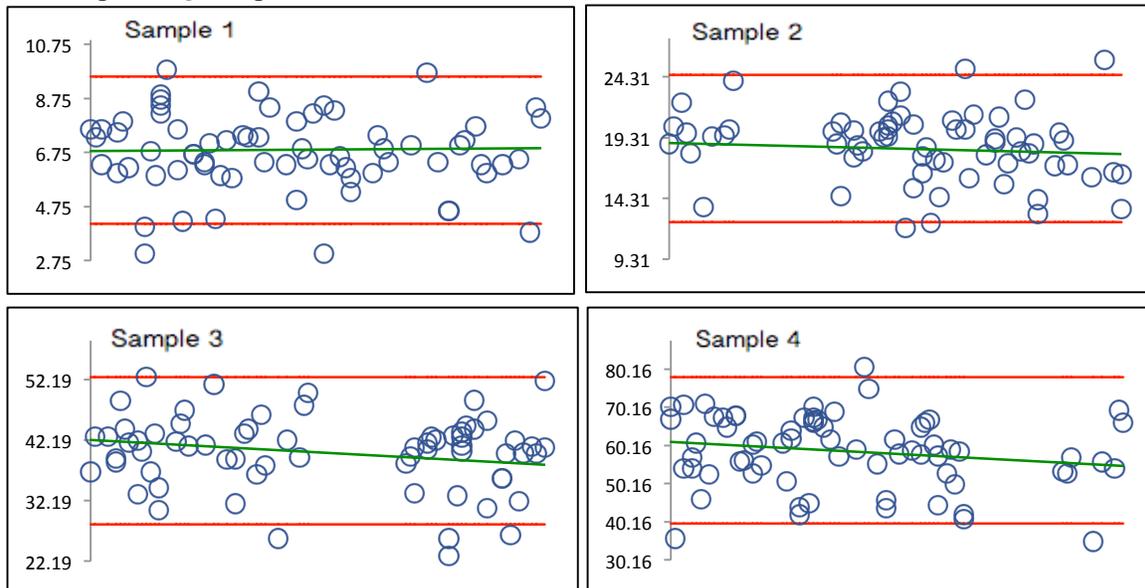
# M,P-XYLENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# METHYL ETHYL KETONE

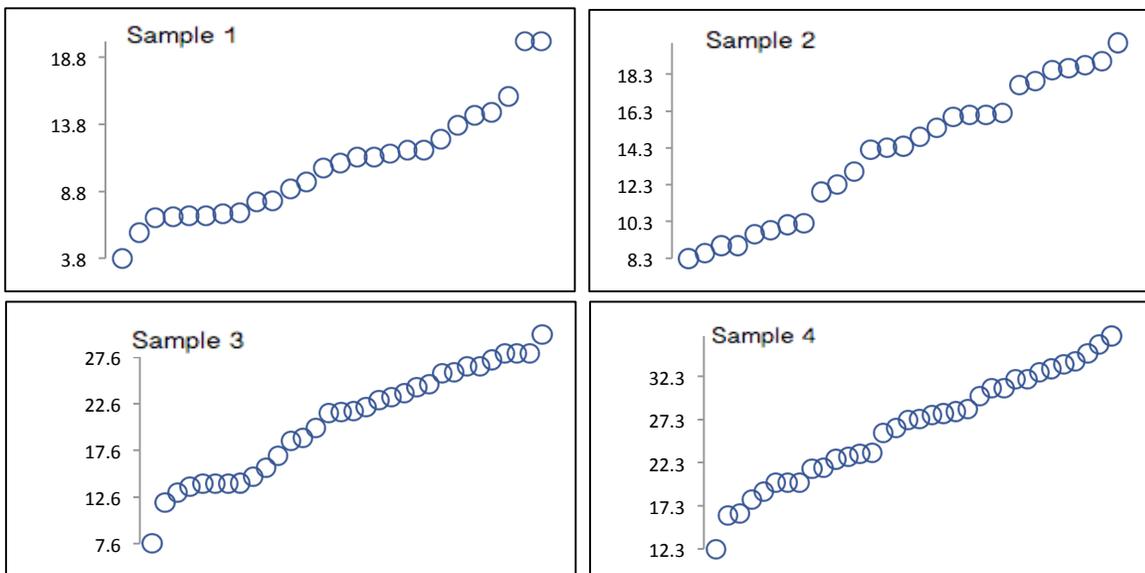
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	26	27	32	34
Median	10.7	14.4	21.8	27.3
Robust Mean	10.4	14.1	20.7	26.4
U	0.961	1.02	1.43	1.50
Robust Standard Deviation	3.92	4.23	6.47	7.00
Regression Standard Deviation	2.34	3.17	4.67	5.94
Stability Flag			Stability	
Homogeneity Flag				
Standard Deviation Used (SDPA)	3.92	4.23	6.73	7.00
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	2	0	0	1

## Methods Used

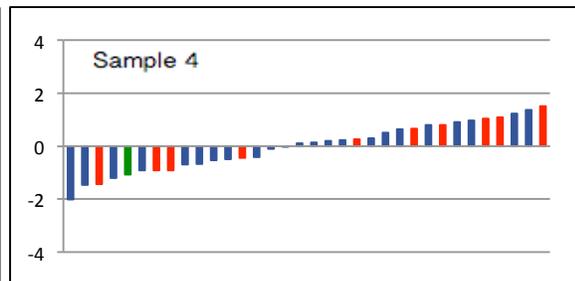
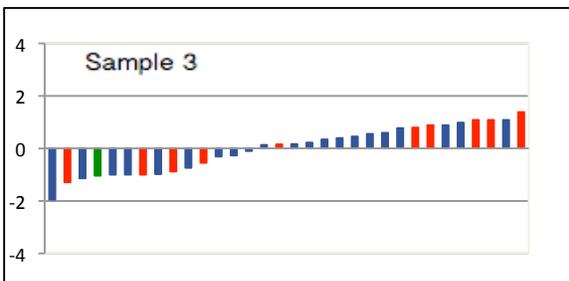
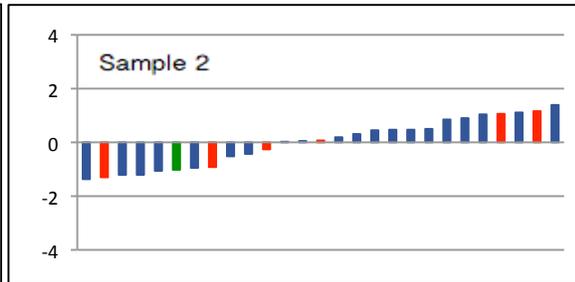
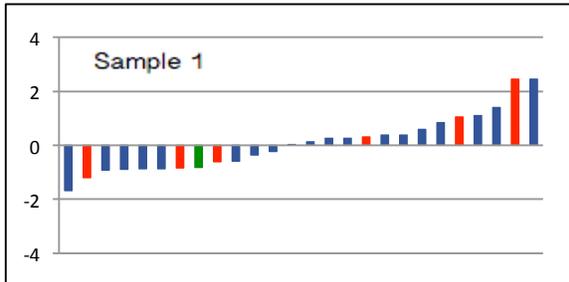
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	19	20	21	23
HS-GCMS	6	6	10	10
P/T-FID	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

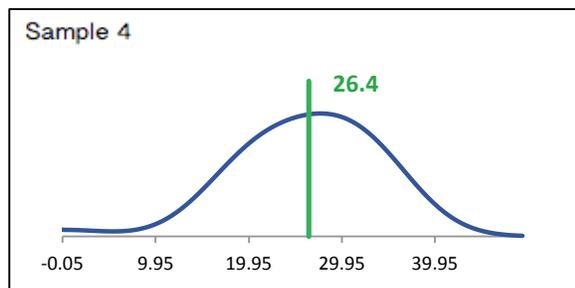
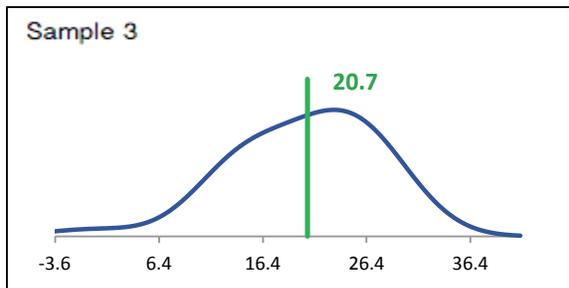
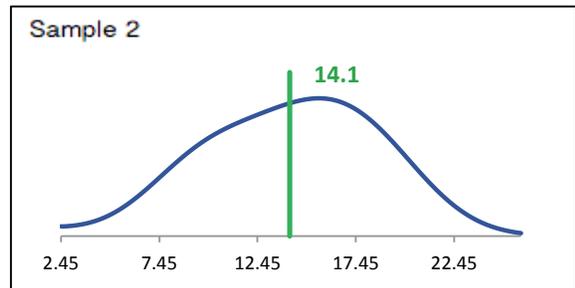
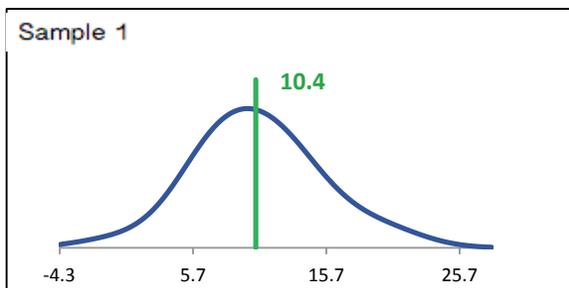


# METHYL ETHYL KETONE

## z-Score Plots

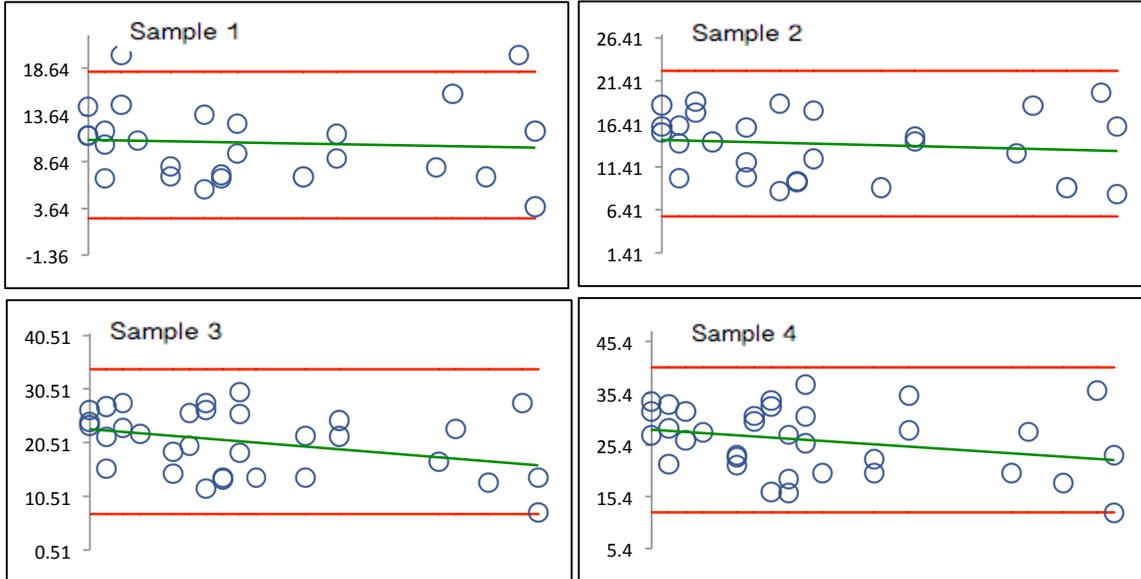


## Kernel Density Plots



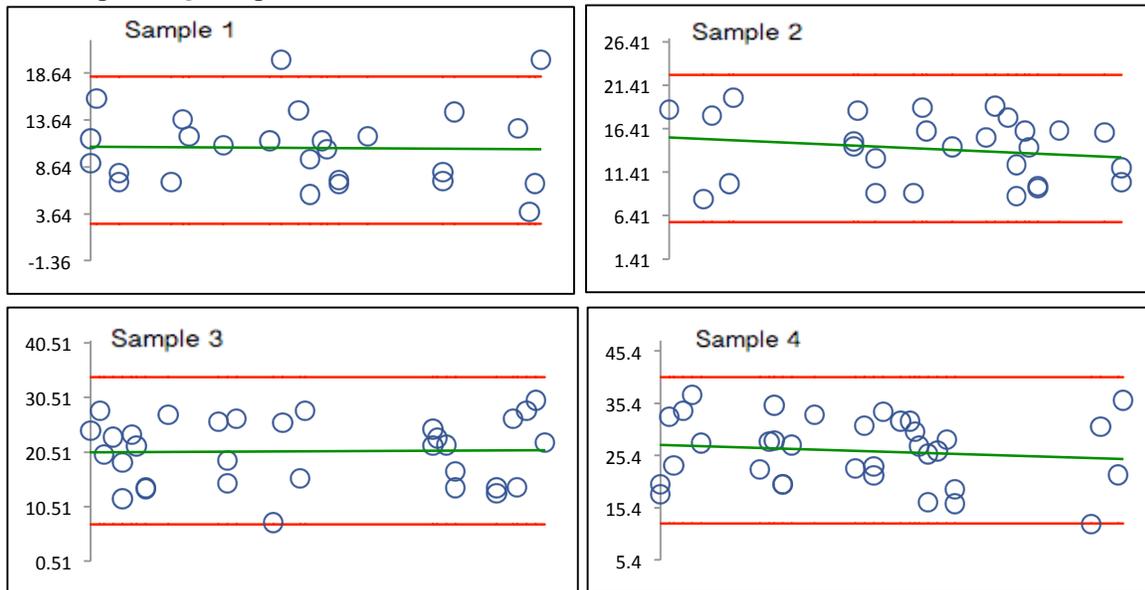
# METHYL ETHYL KETONE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## METHYL ISOBUTYL KETONE (MIBK)

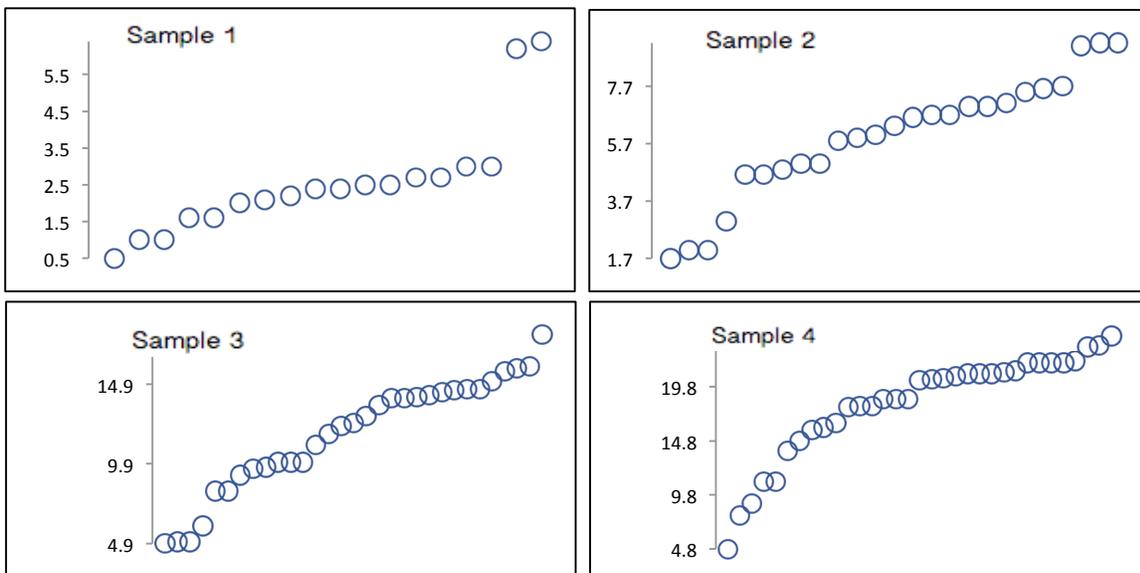
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	18	25	31	33
Median	2.40	6.30	12.5	20.4
Robust Mean	2.27	6.02	11.9	18.7
U	0.279	0.55	0.83	0.91
Robust Standard Deviation	0.948	2.21	3.69	4.17
Regression Standard Deviation	0.341	0.90	1.79	2.81
Stability Flag		Stability	Stability	
Homogeneity Flag				
Standard Deviation Used (SDPA)	0.948	2.70	4.80	4.17
Outliers	0	0	0	0
z >3.0	2	0	0	1
2< z <3	0	0	0	2

### Methods Used

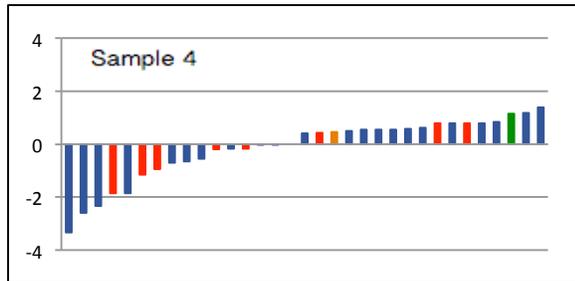
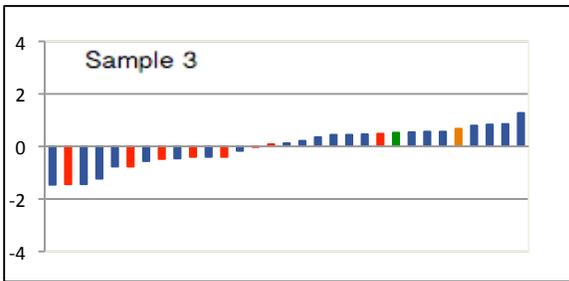
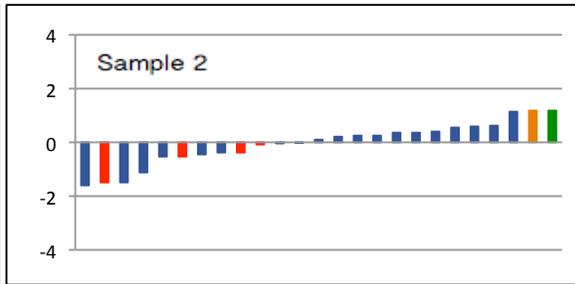
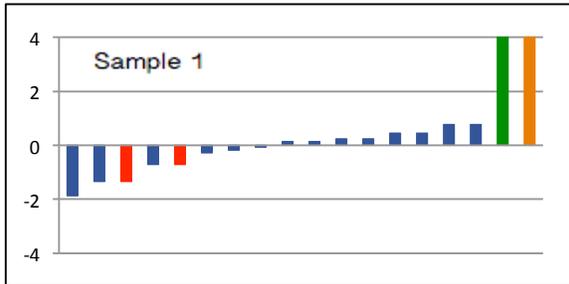
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	14	19	21	22
HS-GCMS	2	4	8	9
GC/MS1	1	1	1	1
GC/FID-1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

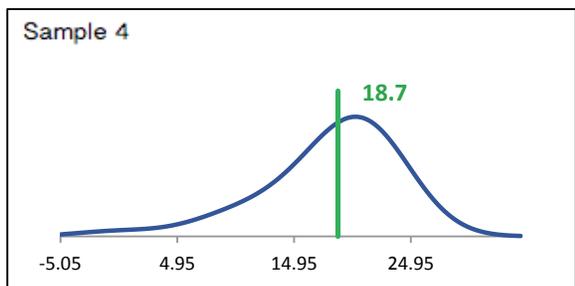
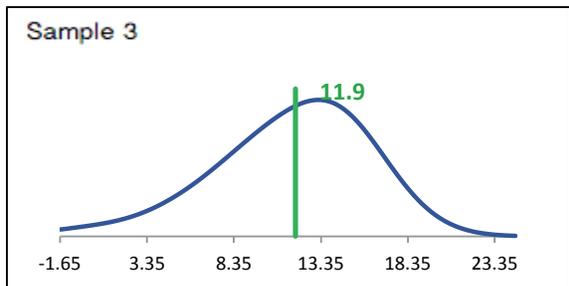
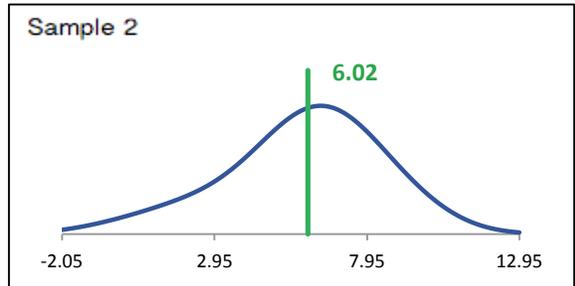
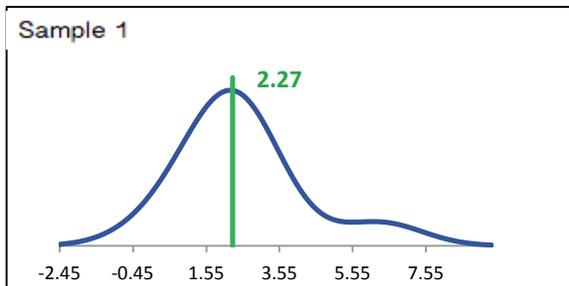


# METHYL ISOBUTYL KETONE (MIBK)

## z-Score Plots

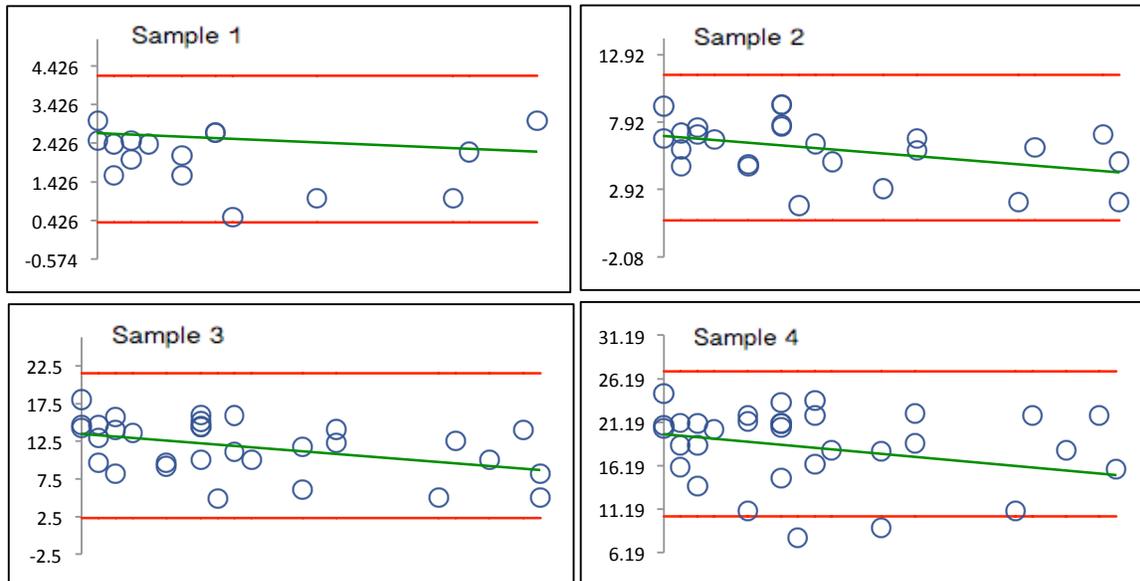


## Kernel Density Plots



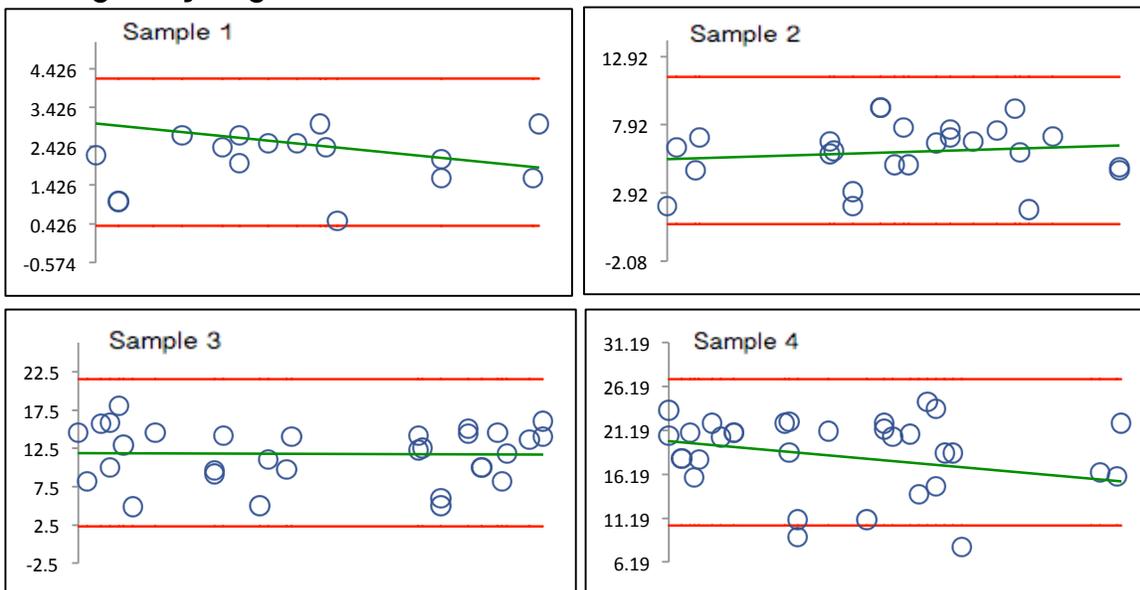
# METHYL ISOBUTYL KETONE (MIBK)

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## METHYL T-BUTYL ETHER

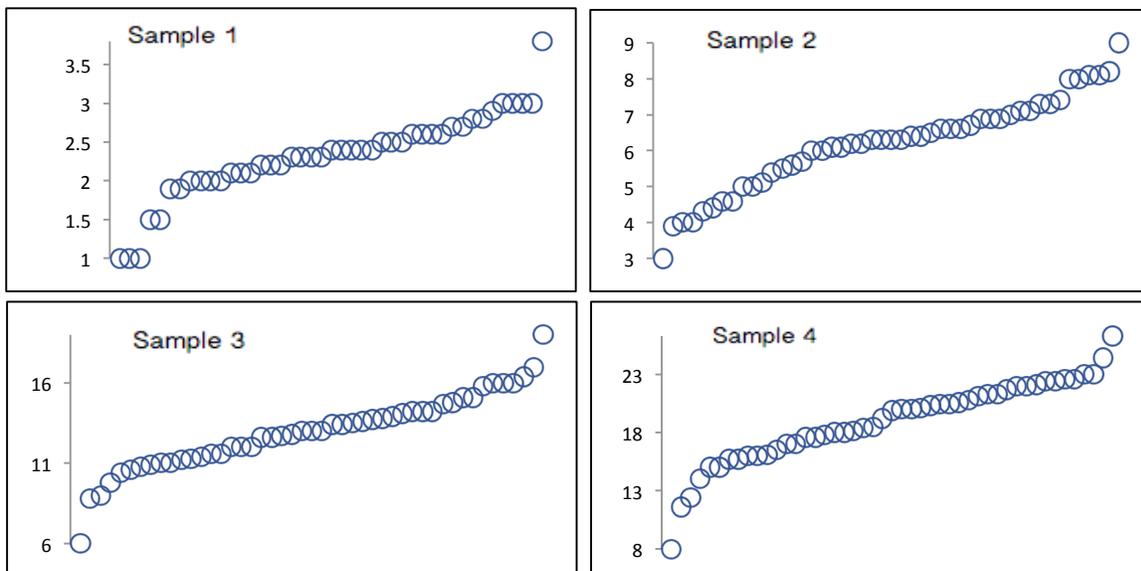
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	43	47	47	47
Median	2.40	6.30	13.0	19.9
Robust Mean	2.35	6.22	13.0	19.1
U	0.089	0.24	0.41	0.61
Robust Standard Deviation	0.465	1.34	2.27	3.33
Regression Standard Deviation	0.470	1.24	2.60	3.82
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	0.470	1.34	2.60	3.82
Outliers	0	0	0	0
z >3.0	1	0	0	0
2< z <3	3	2	2	1

### Methods Used

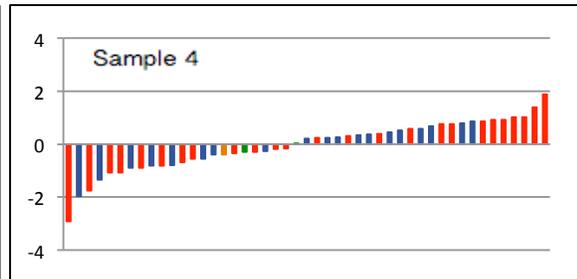
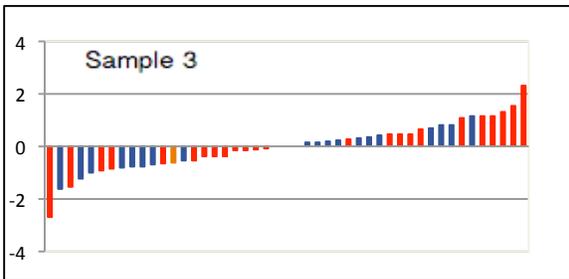
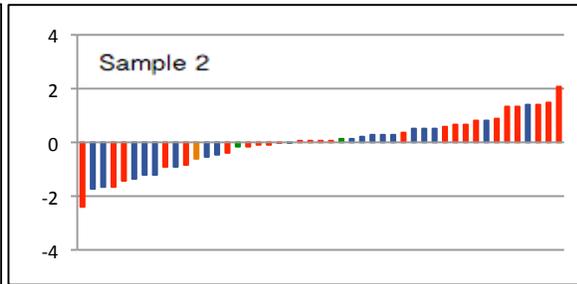
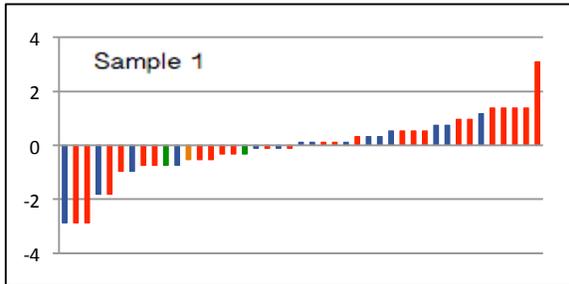
Method	C16-1	C16-2	C16-3	C16-4
HS-GCMS	15	19	19	19
P/T-GCMS	25	25	25	25
GC/MS1	2	2	2	2
HS-GCF	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

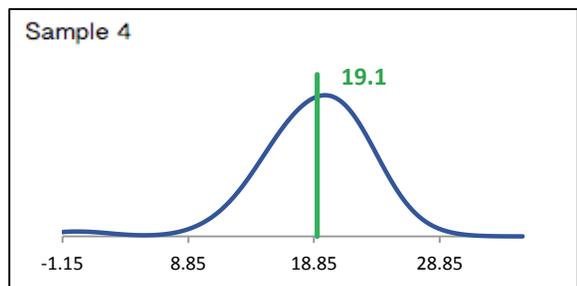
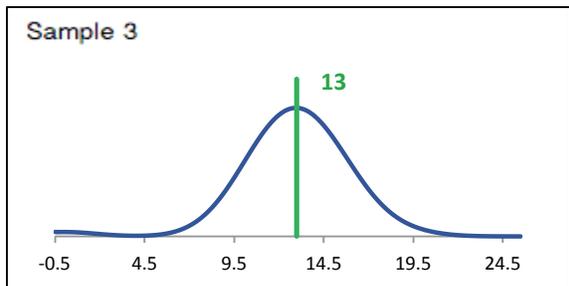
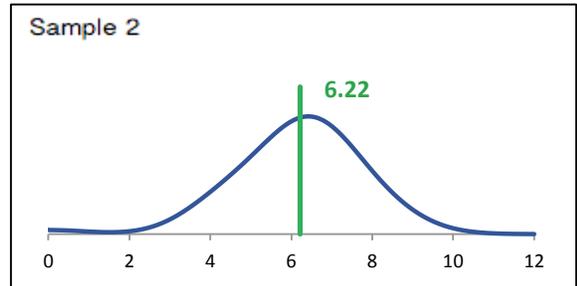
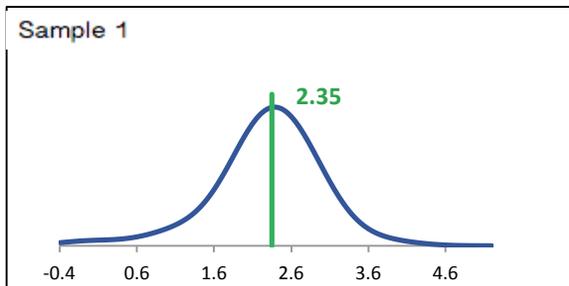


# METHYL T-BUTYL ETHER

## z-Score Plots

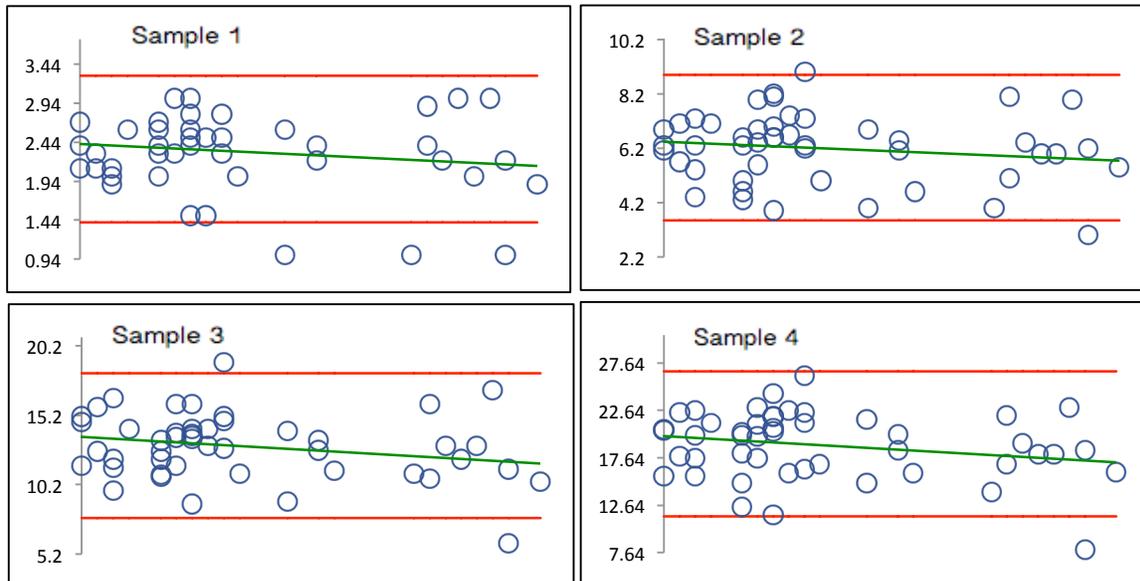


## Kernel Density Plots



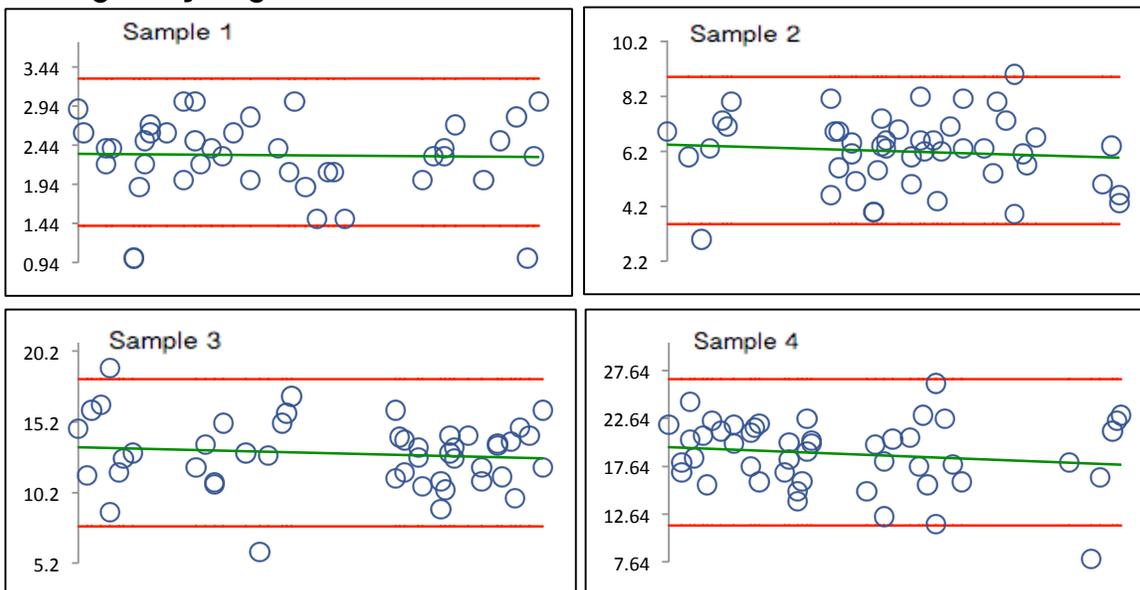
# METHYL T-BUTYL ETHER

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## O-XYLENE

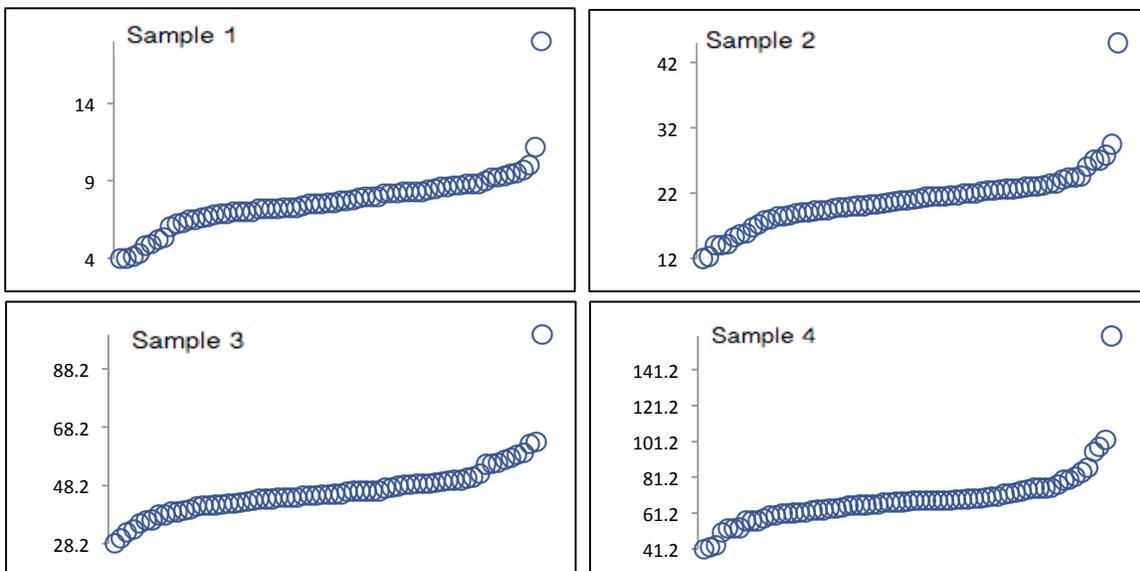
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	68	68	69	69
Median	7.60	21.0	45.0	67.5
Robust Mean	7.64	20.8	45.6	67.2
U	0.202	0.47	1.01	1.32
Robust Standard Deviation	1.33	3.08	6.70	8.79
Regression Standard Deviation	1.15	3.13	6.83	10.1
Stability Flag				
Homogeneity Flag			Homogeneity	
Standard Deviation Used (SDPA)	1.33	3.13	7.09	10.1
Outliers	0	0	0	0
z >3.0	1	1	1	3
2< z <3	7	7	4	4

### Methods Used

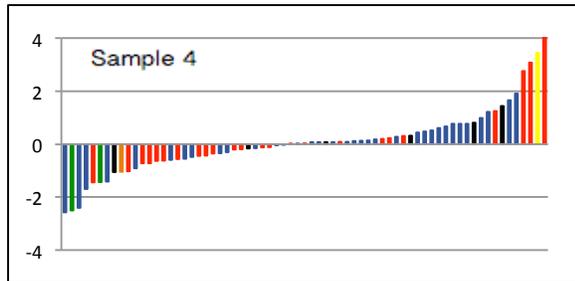
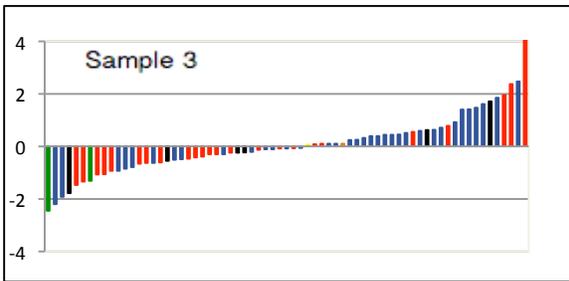
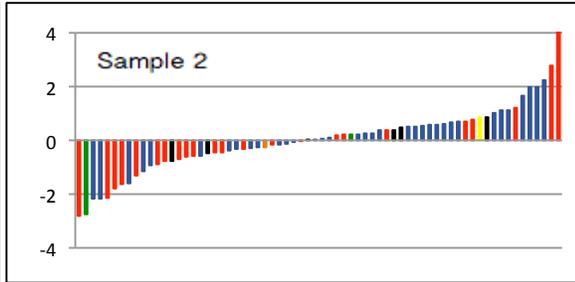
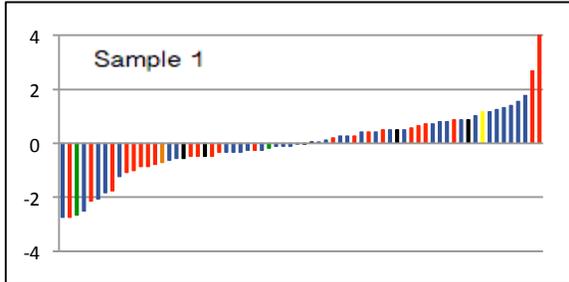
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	35	35	35	35
HS-GCMS	23	23	24	24
P/T-FID	2	2	2	2
GC/MS/MSHEAD	1	1	1	1
GC/MS1	6	6	6	6
HS-GCF	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

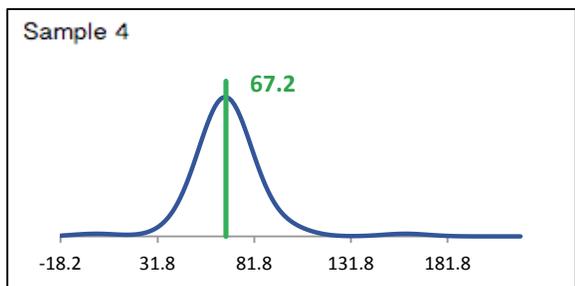
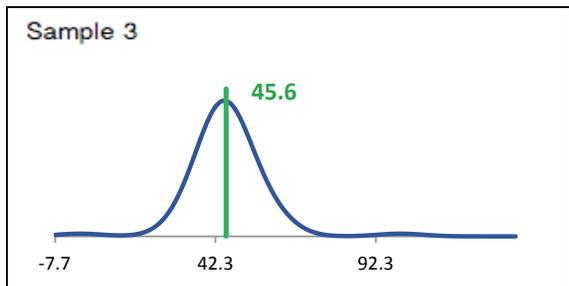
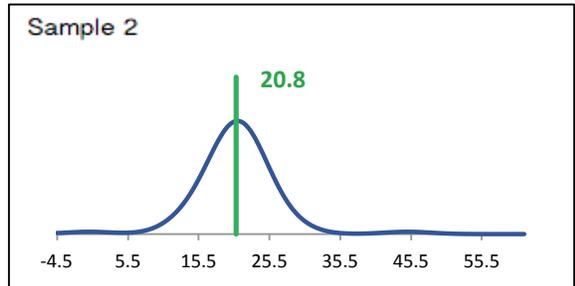
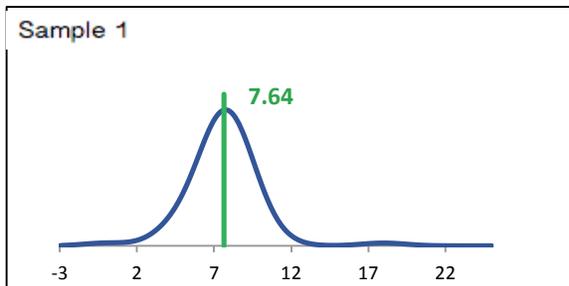


# O-XYLENE

## z-Score Plots

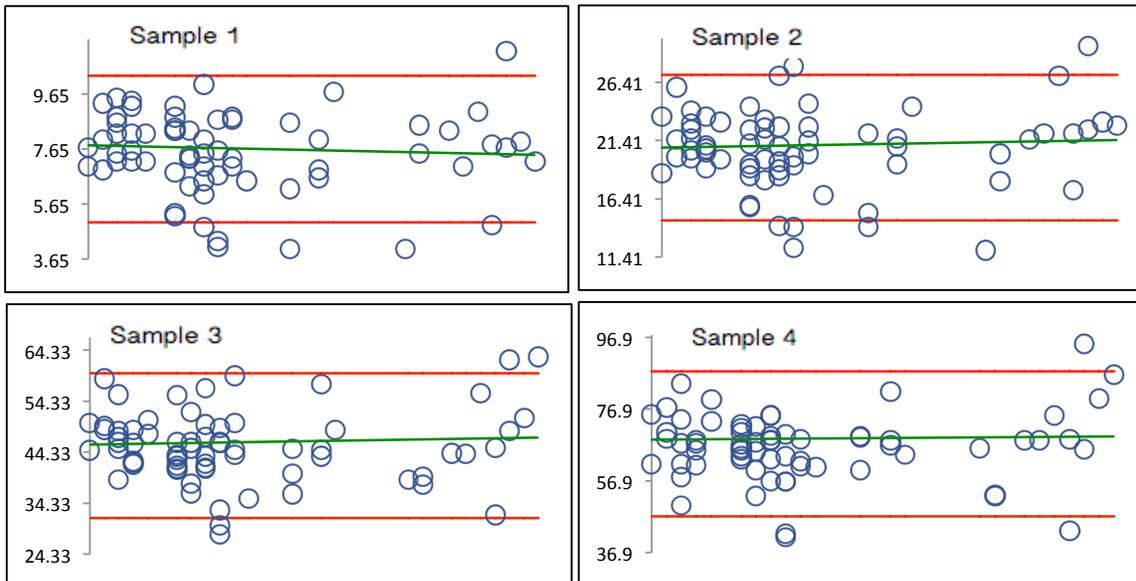


## Kernel Density Plots



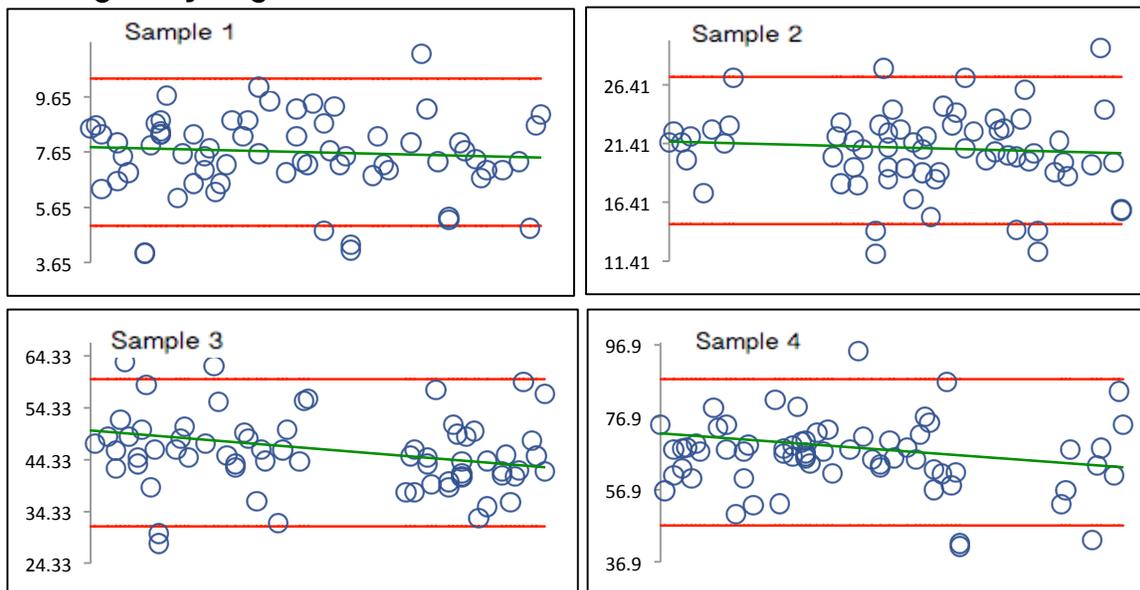
# O-XYLENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

# STYRENE

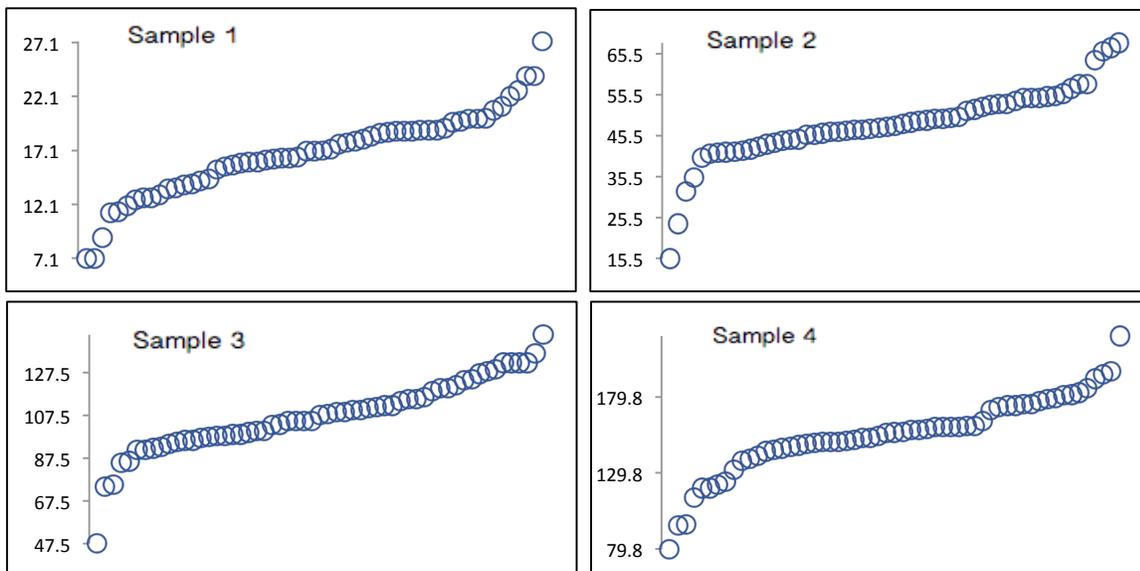
## Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	57	57	57	57
Median	17.0	47.9	107	157
Robust Mean	16.9	48.5	108	156
U	0.601	1.13	2.68	3.74
Robust Standard Deviation	3.63	6.83	16.2	22.6
Regression Standard Deviation	2.53	7.28	16.2	23.5
Stability Flag			Stability	
Homogeneity Flag				
Standard Deviation Used (SDPA)	3.63	7.28	19.7	23.5
Outliers	0	0	0	0
z >3.0	0	2	1	1
2< z <3	4	5	0	3

## Methods Used

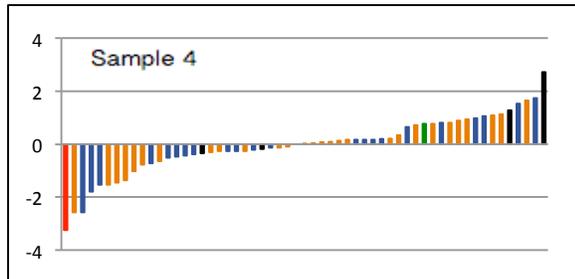
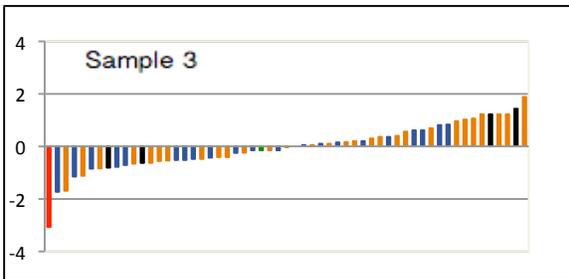
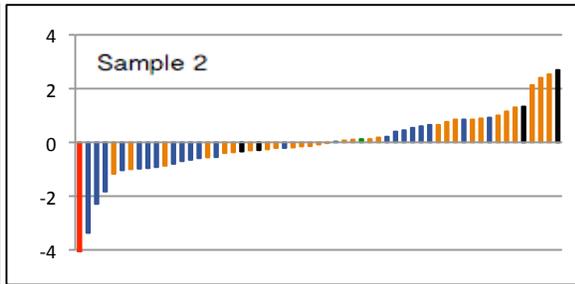
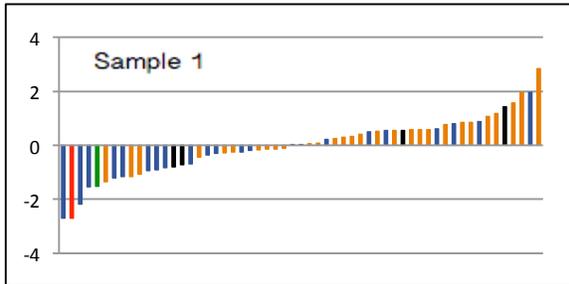
Method	C16-1	C16-2	C16-3	C16-4
HS-GCMS	22	22	22	22
GC/PID	1	1	1	1
HS-GCF	1	1	1	1
P/T-GCMS	29	29	29	29
GC/MS1	4	4	4	4

All summary stats and the plots below are based on the data excluding any flagged outliers

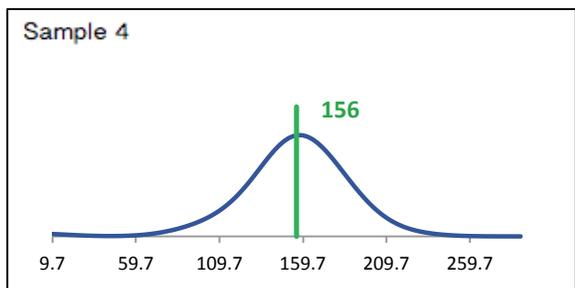
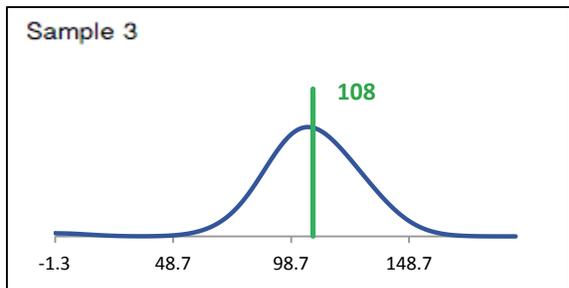
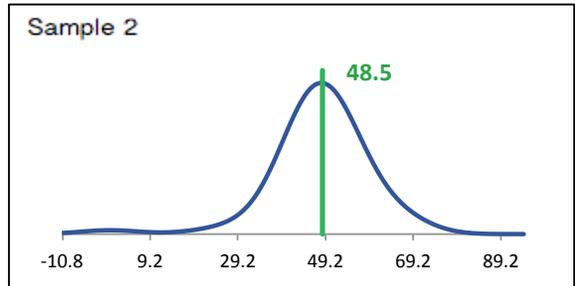
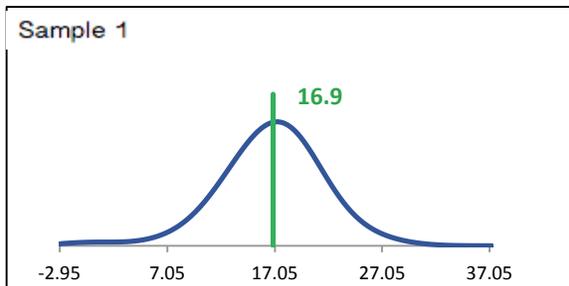


# STYRENE

## z-Score Plots

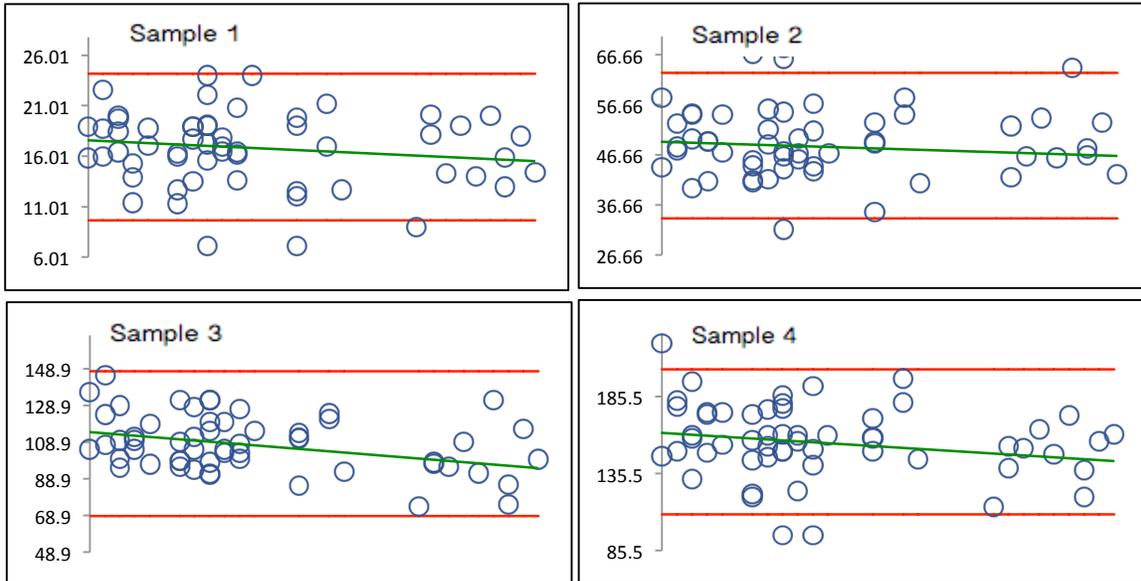


## Kernel Density Plots



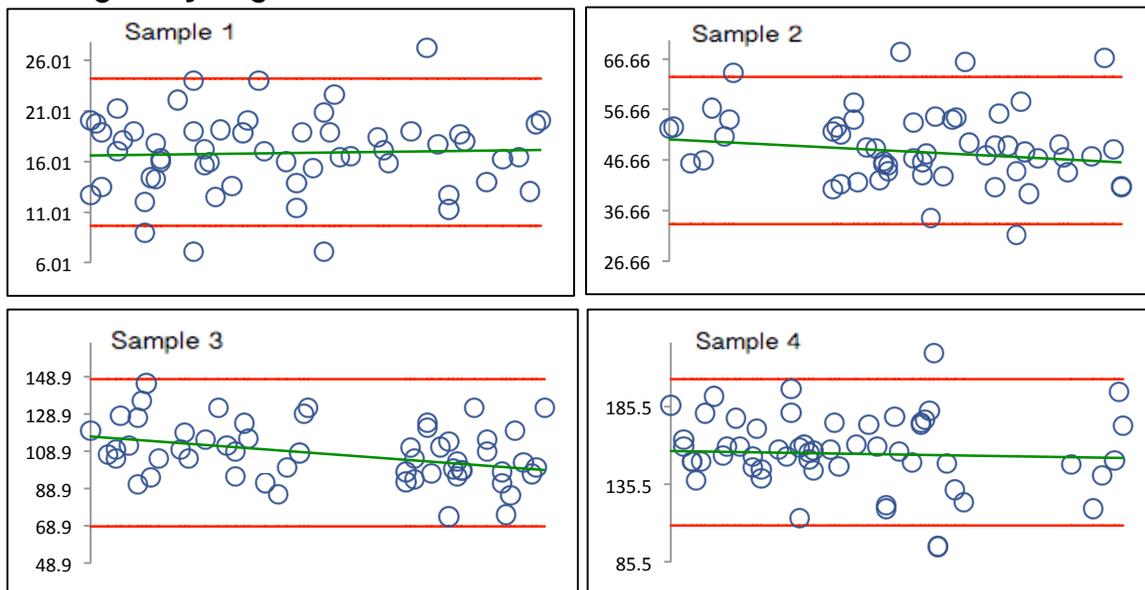
# STYRENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## TETRACHLOROETHYLENE

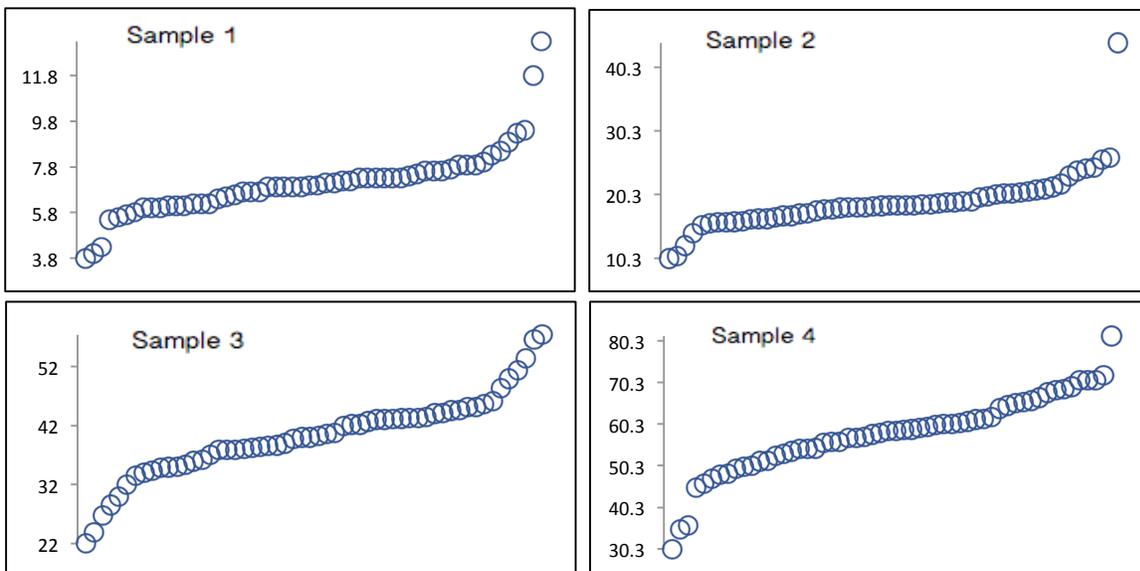
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	56	56	56	56
Median	7.00	18.6	40.1	58.7
Robust Mean	6.98	18.7	40.2	58.3
U	0.170	0.45	0.98	1.45
Robust Standard Deviation	1.02	2.70	5.88	8.66
Regression Standard Deviation	1.05	2.80	6.03	8.75
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	1.05	2.80	6.03	8.75
Outliers	0	0	0	0
z >3.0	3	1	1	1
2< z <3	4	7	5	3

### Methods Used

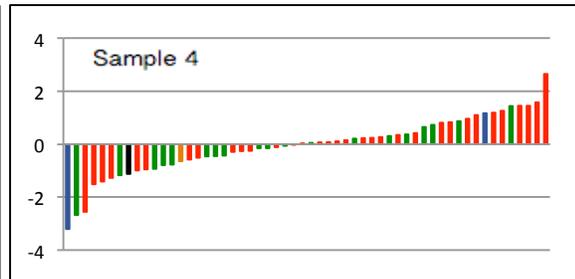
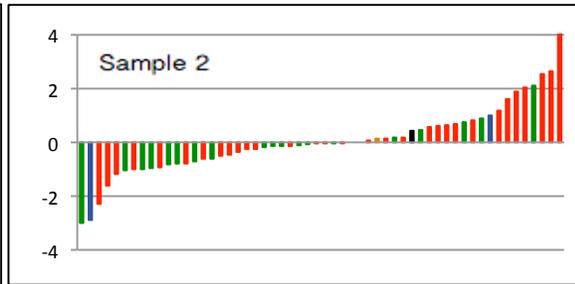
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	2	2	2	2
P/T-GCMS	33	33	33	33
HS-GCMS	19	19	19	19
GC/MSE	1	1	1	1
GC/MS/MSHEAD	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

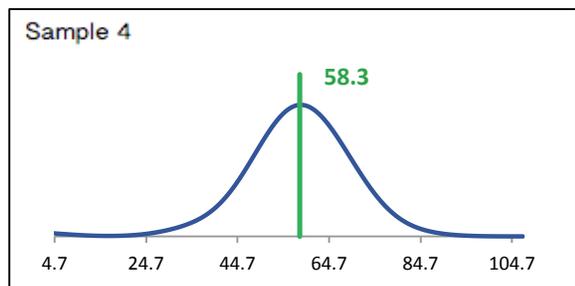
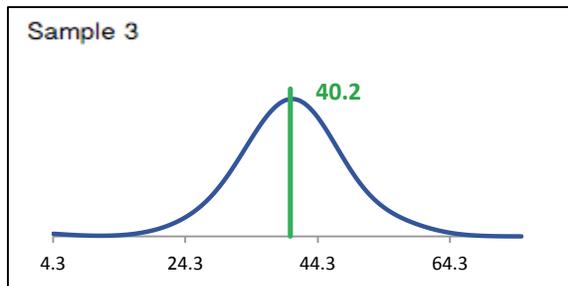
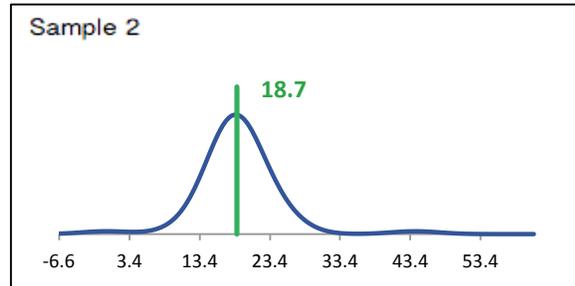
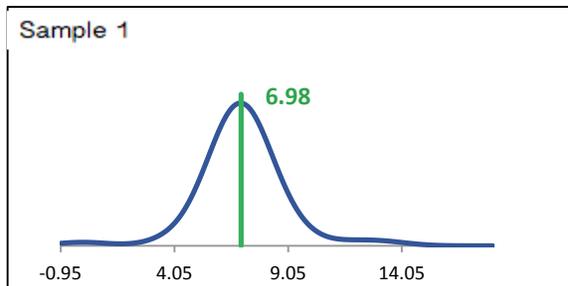


# TETRACHLOROETHYLENE

## z-Score Plots

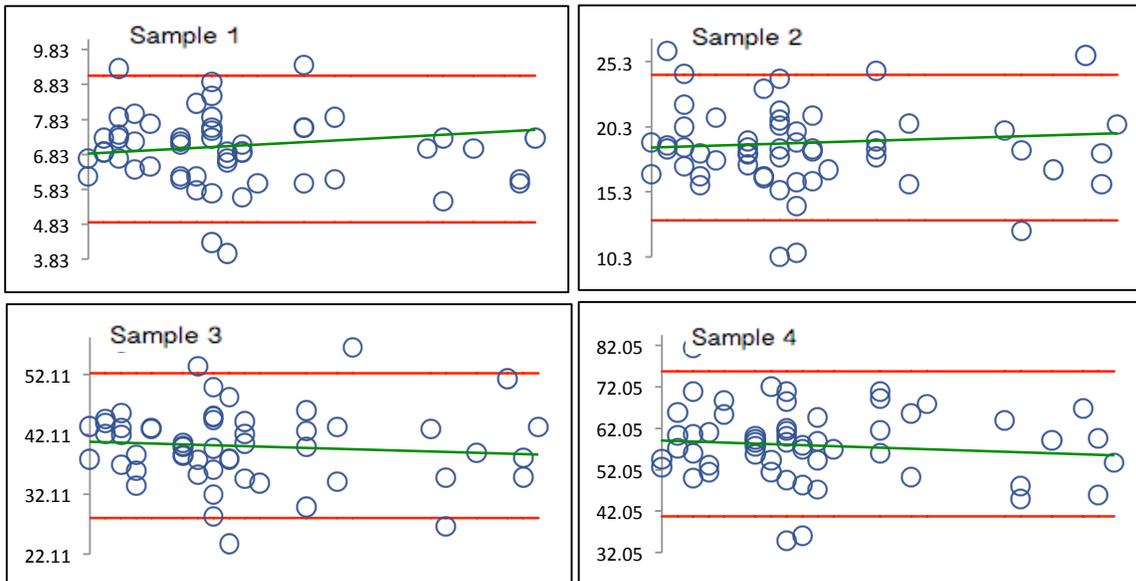


## Kernel Density Plots



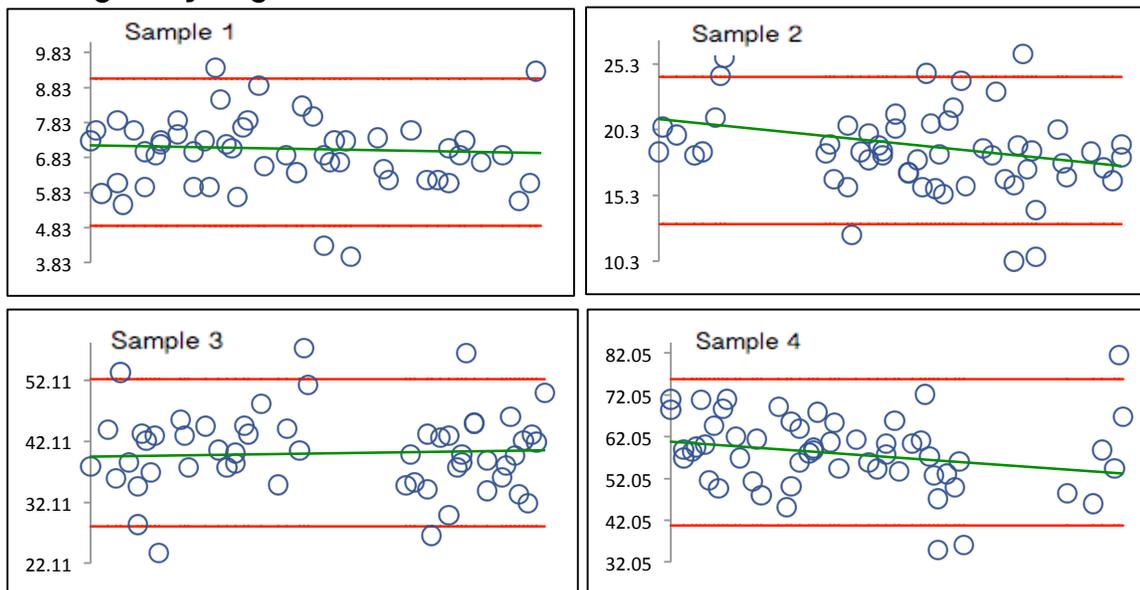
# TETRACHLOROETHYLENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## TOLUENE

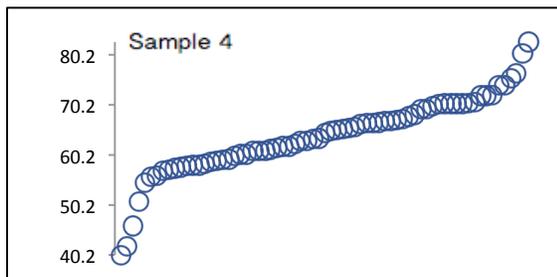
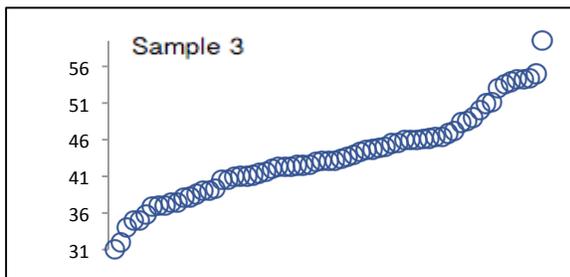
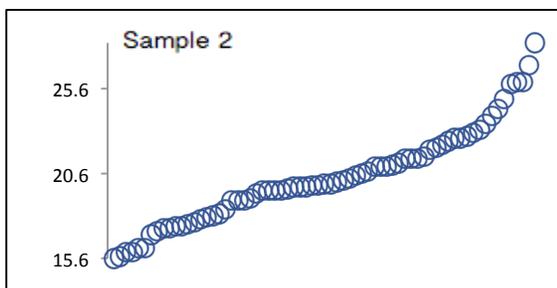
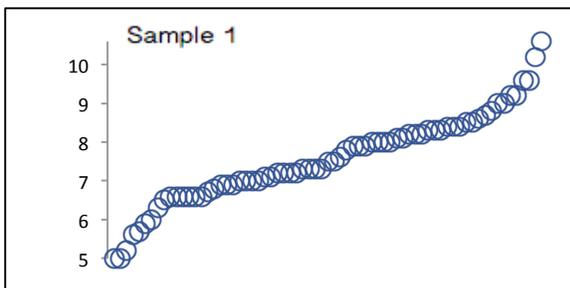
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	69	69	69	69
Median	7.50	20.0	43.2	64.6
Robust Mean	7.56	20.2	43.5	64.3
U	0.167	0.42	0.87	1.02
Robust Standard Deviation	1.11	2.76	5.76	6.81
Regression Standard Deviation	1.13	3.03	6.53	9.64
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	1.13	3.03	6.53	9.64
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	5	2	1	2

### Methods Used

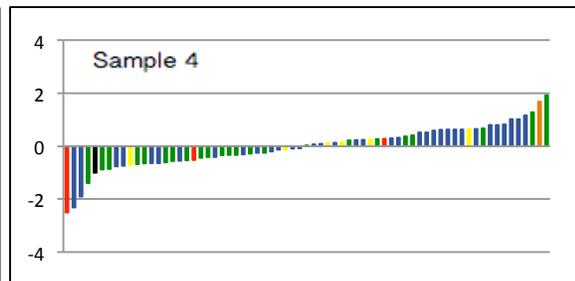
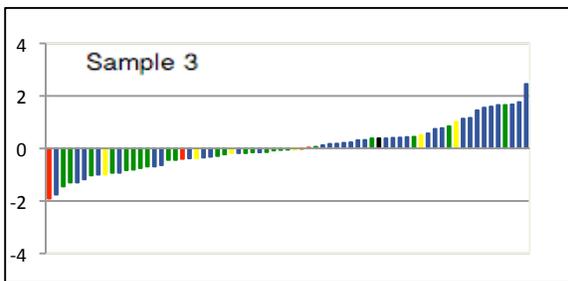
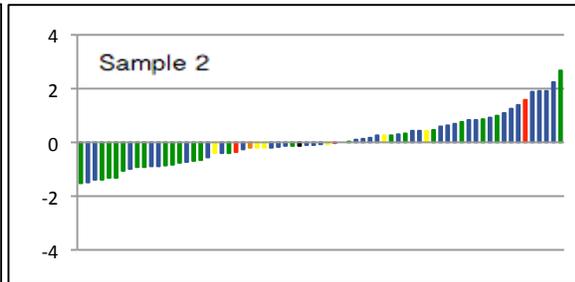
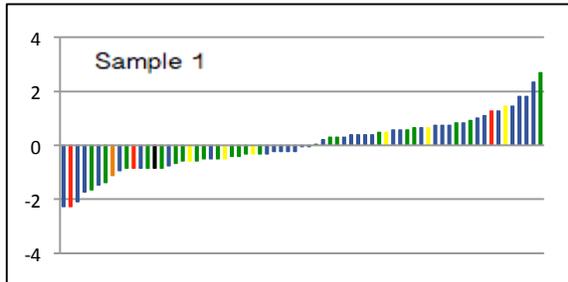
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	35	35	35	35
P/T-FID	3	3	3	3
HS-GCMS	23	23	23	23
HS-GCF	1	1	1	1
GC/MS/MSHEAD	1	1	1	1
GC/MS1	6	6	6	6

All summary stats and the plots below are based on the data excluding any flagged outliers

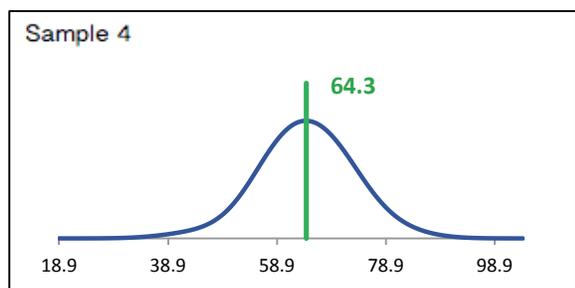
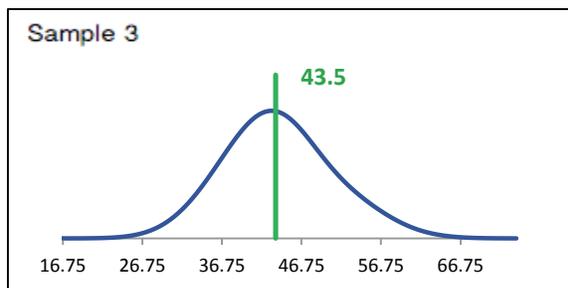
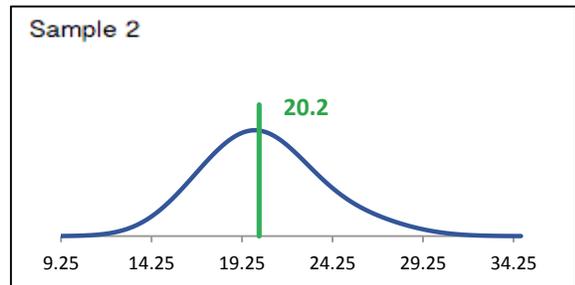
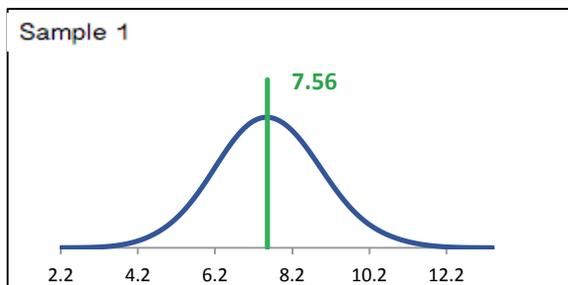


# TOLUENE

## z-Score Plots

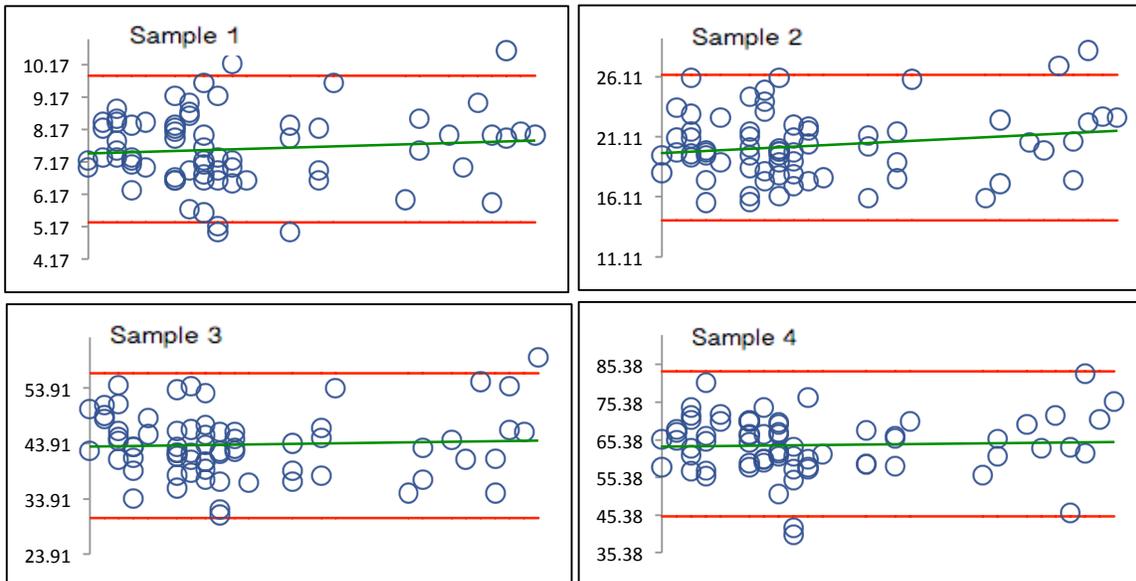


## Kernel Density Plots



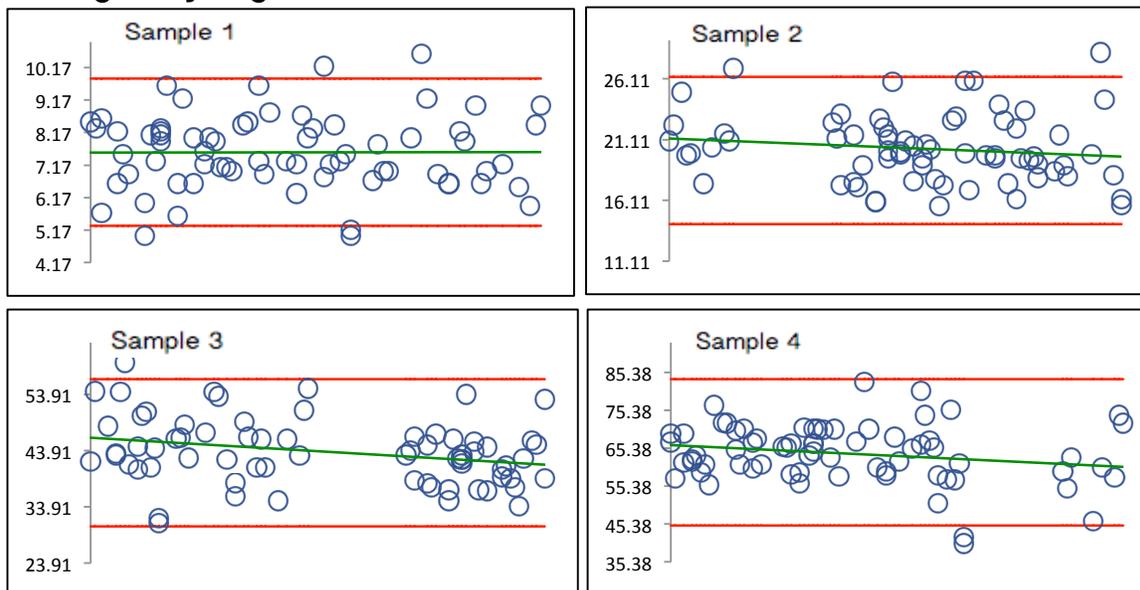
# TOLUENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## TRANS-1,2-DICHLOROETHYLENE

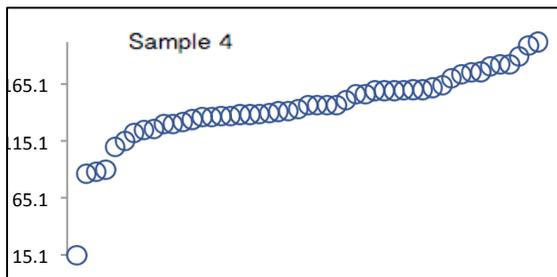
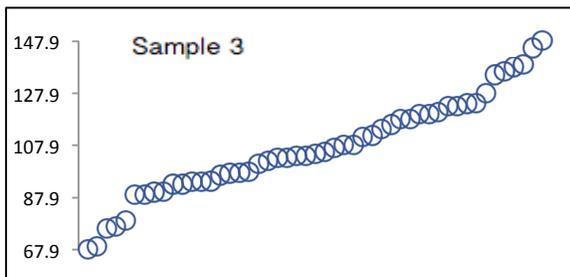
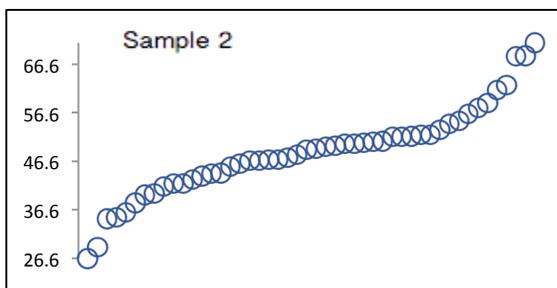
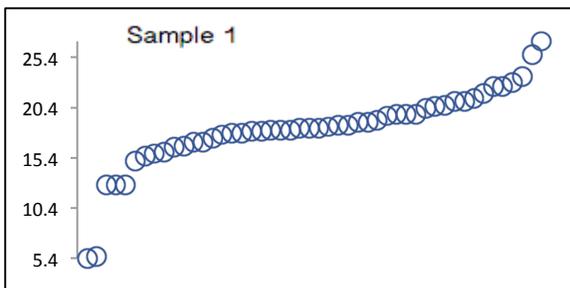
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	48	48	49	49
Median	18.4	49.1	105	146
Robust Mean	18.6	48.3	107	147
U	0.509	1.47	3.52	4.52
Robust Standard Deviation	2.82	8.16	19.7	25.3
Regression Standard Deviation	2.79	7.25	16.0	22.1
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	2.82	8.16	19.7	25.3
Outliers	0	0	0	0
z >3.0	2	0	0	1
2< z <3	5	5	1	5

### Methods Used

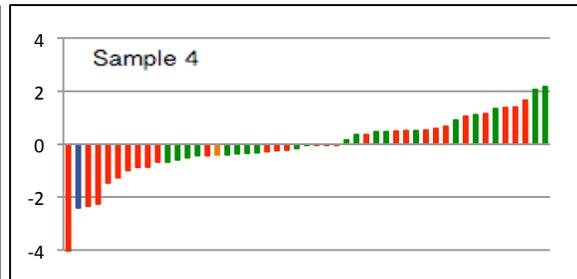
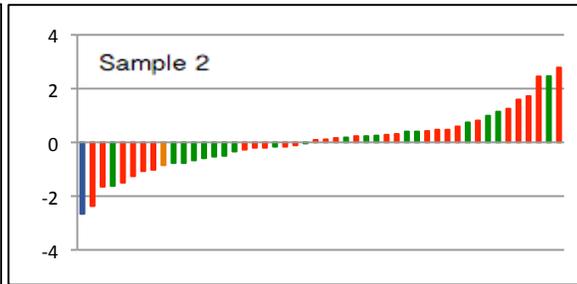
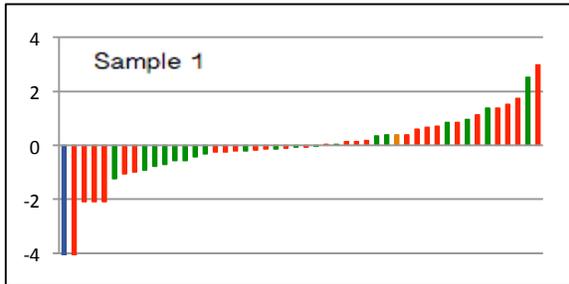
Method	C16-1	C16-2	C16-3	C16-4
P/T-FID	1	1	1	1
P/T-GCMS	27	27	27	27
HS-GCMS	19	19	20	20
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

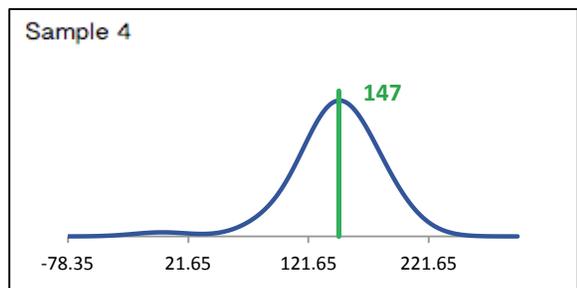
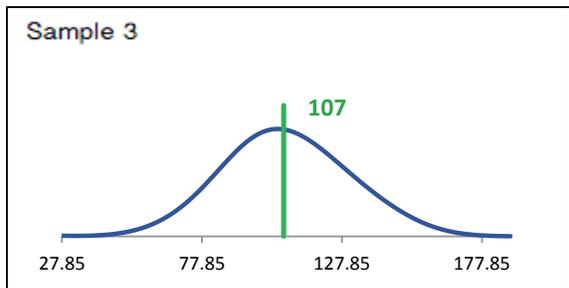
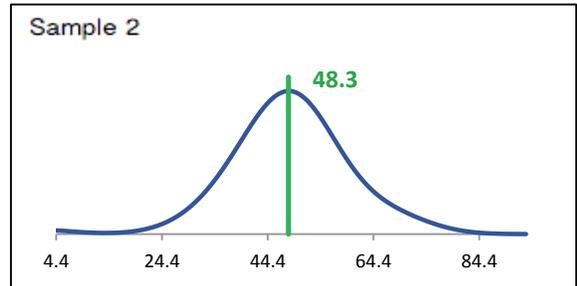
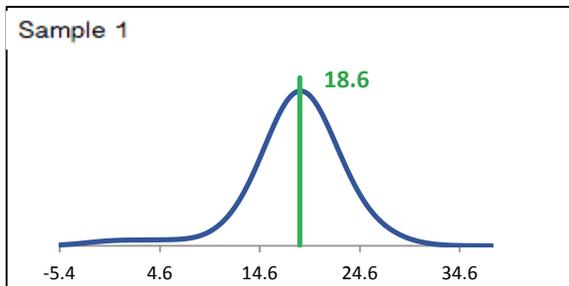


# TRANS-1,2-DICHLOROETHYLENE

## z-Score Plots

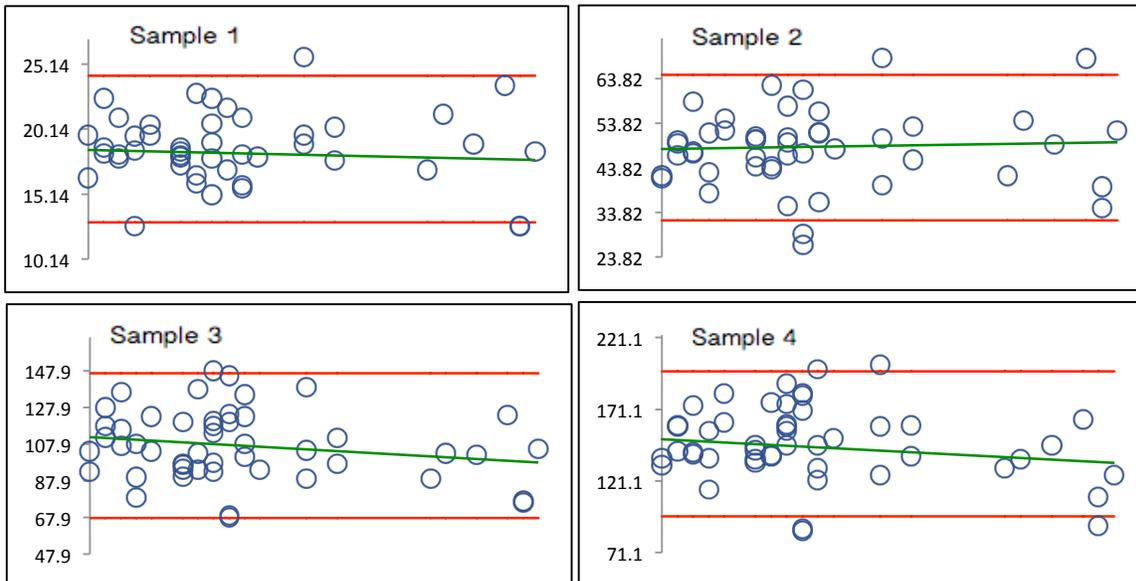


## Kernel Density Plots



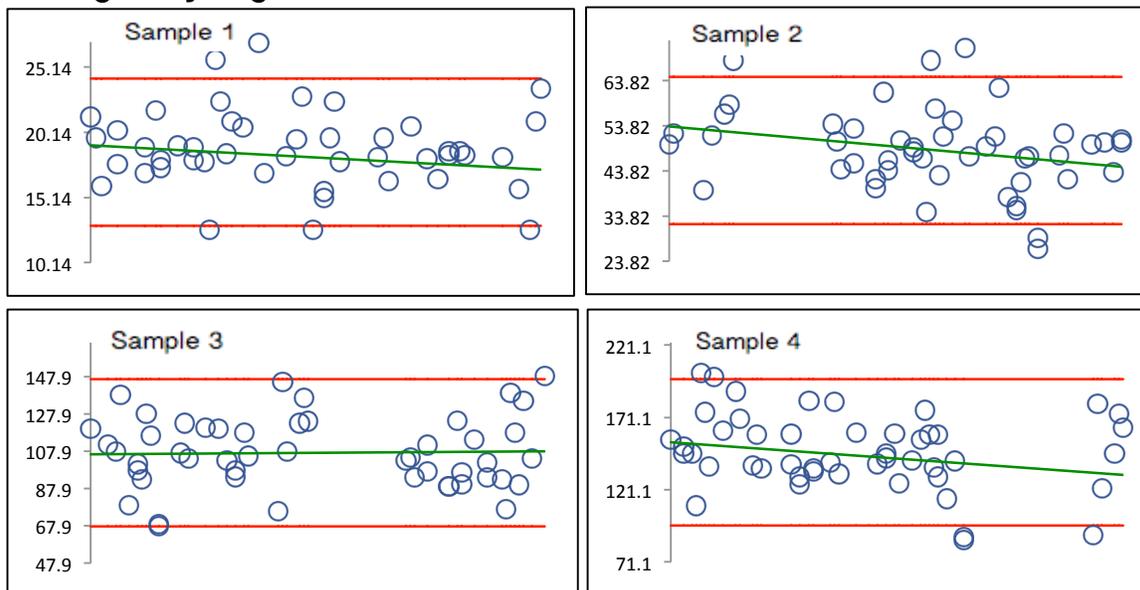
# TRANS-1,2-DICHLOROETHYLENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## TRANS-1,3-DICHLOROPROPENE

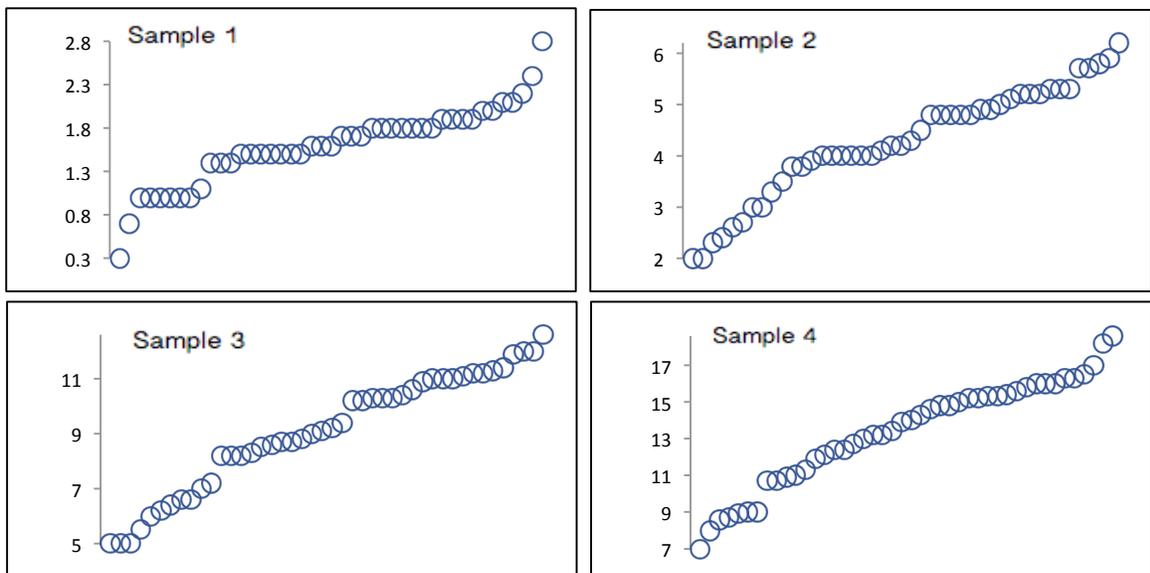
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	43	44	44	44
Median	1.60	4.25	9.15	14.0
Robust Mean	1.60	4.31	9.14	13.4
U	0.083	0.22	0.44	0.59
Robust Standard Deviation	0.434	1.14	2.34	3.12
Regression Standard Deviation	0.240	0.647	1.37	2.01
Stability Flag	Stability		Stability	Stability
Homogeneity Flag				
Standard Deviation Used (SDPA)	0.600	1.14	2.82	3.90
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	1	2	0	0

### Methods Used

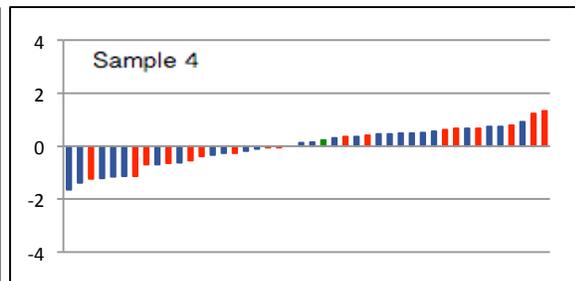
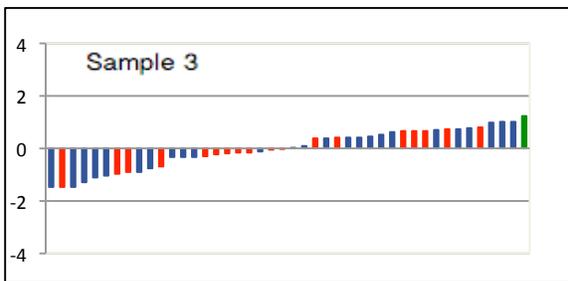
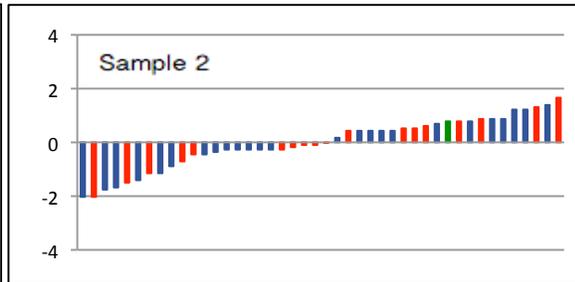
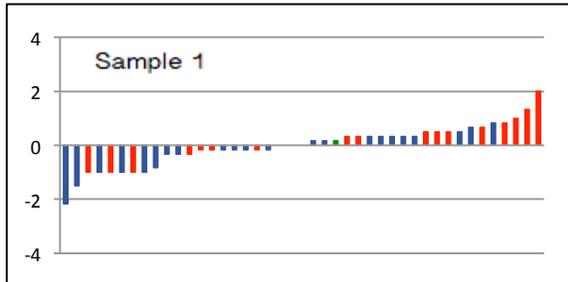
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	24	25	25	25
HS-GCMS	18	18	18	18
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

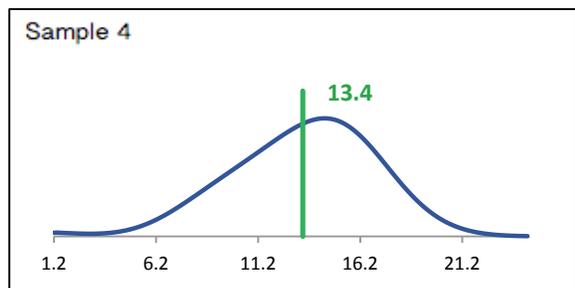
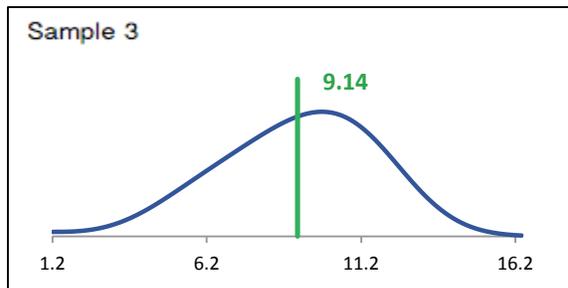
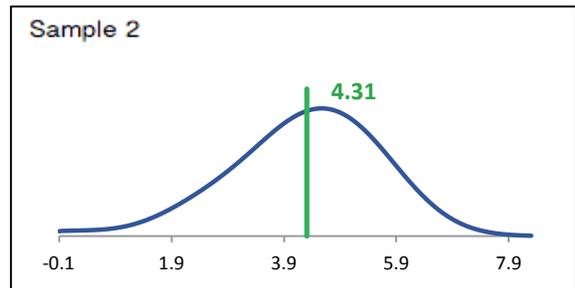
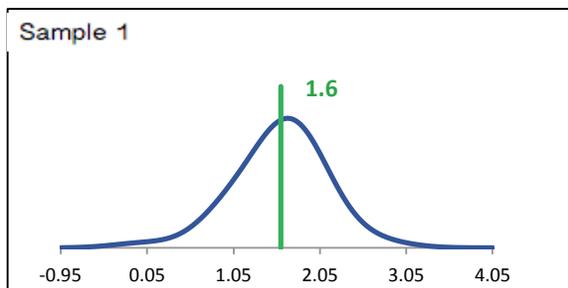


# TRANS-1,3-DICHLOROPROPENE

## z-Score Plots

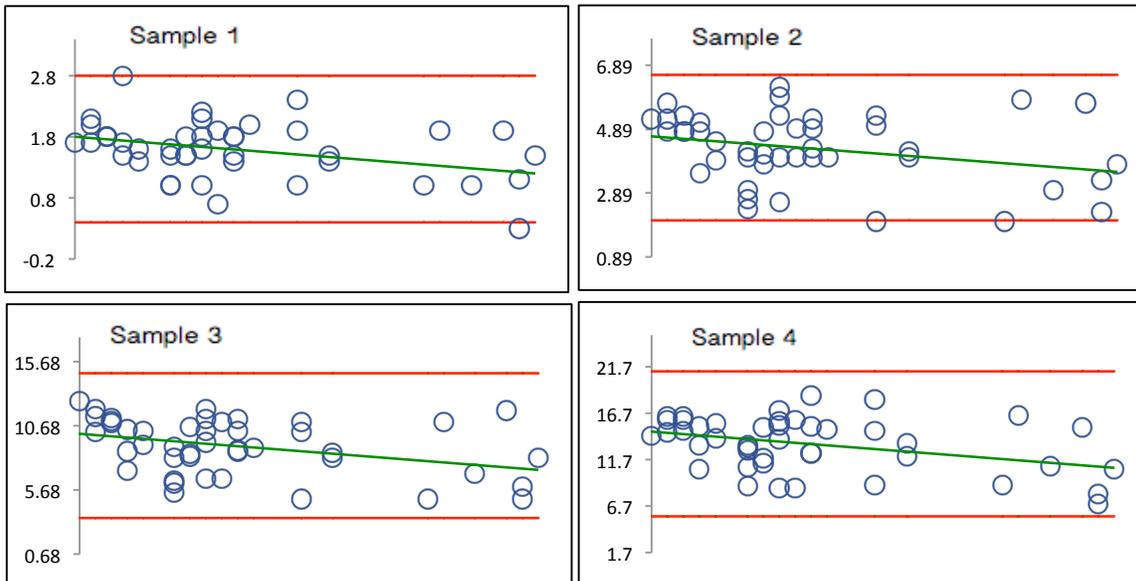


## Kernel Density Plots



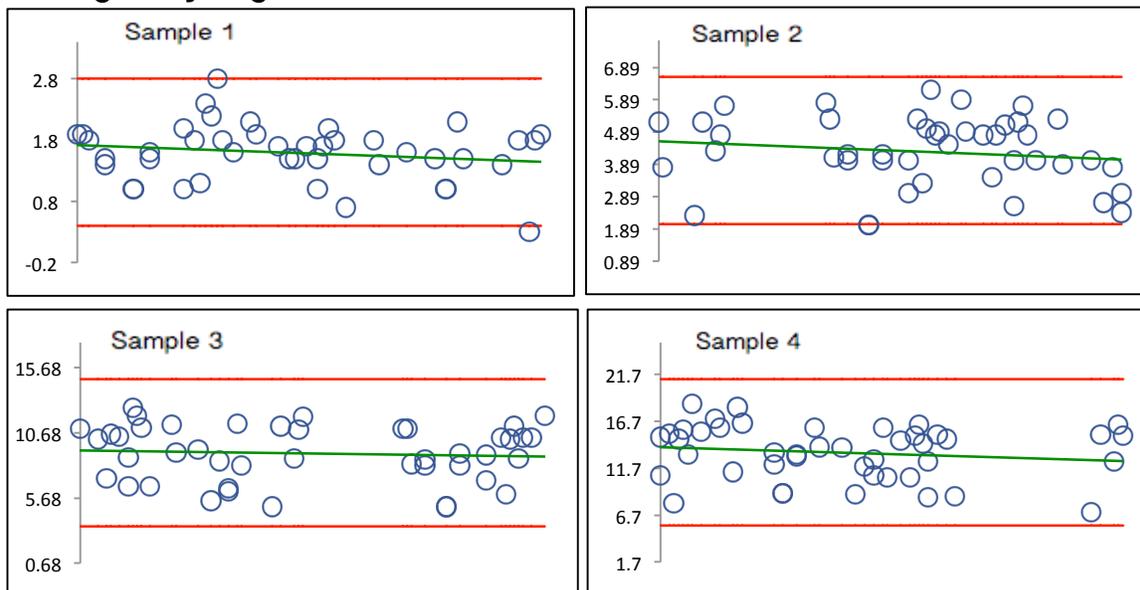
# TRANS-1,3-DICHLOROPROPENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## TRICHLOROETHYLENE

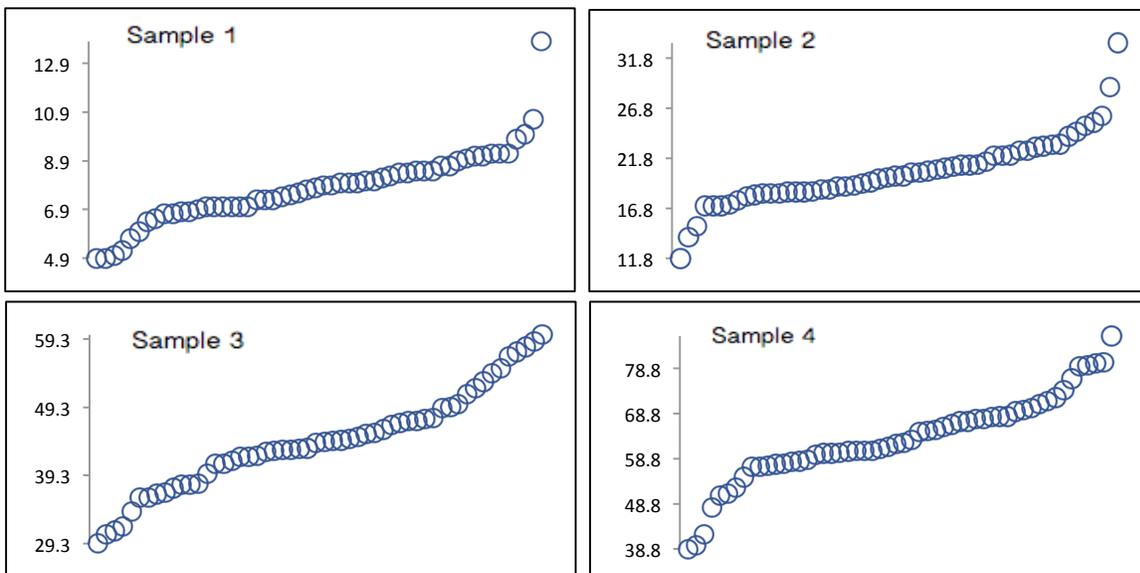
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	54	54	54	54
Median	7.85	20.0	44.2	62.2
Robust Mean	7.75	20.3	44.2	63.3
U	0.214	0.48	1.25	1.50
Robust Standard Deviation	1.26	2.80	7.37	8.80
Regression Standard Deviation	1.36	3.55	7.74	11.1
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	1.36	3.55	7.74	11.1
Outliers	0	0	0	0
z >3.0	1	1	0	0
2< z <3	4	2	1	3

### Methods Used

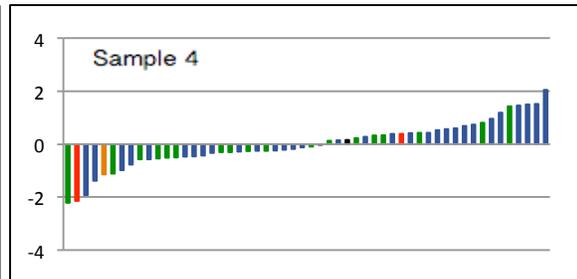
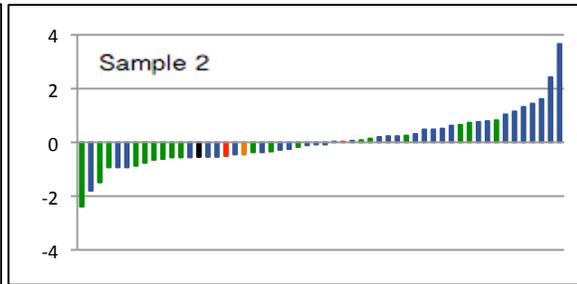
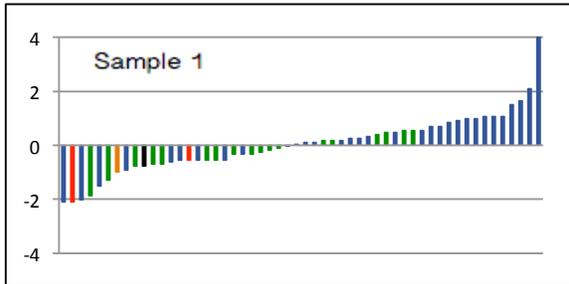
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	32	32	32	32
P/T-FID	2	2	2	2
HS-GCMS	18	18	18	18
GC/MS/MSHEAD	1	1	1	1
GC/MSE	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

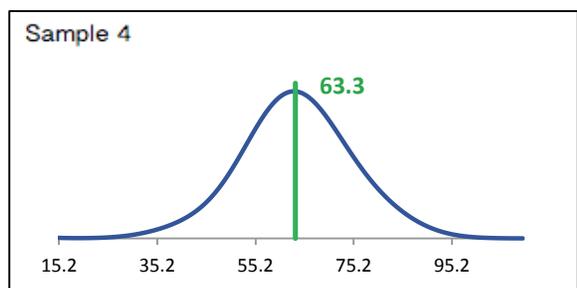
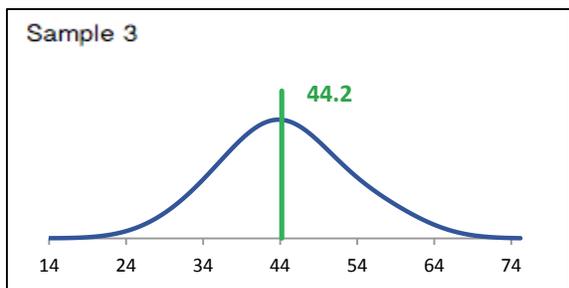
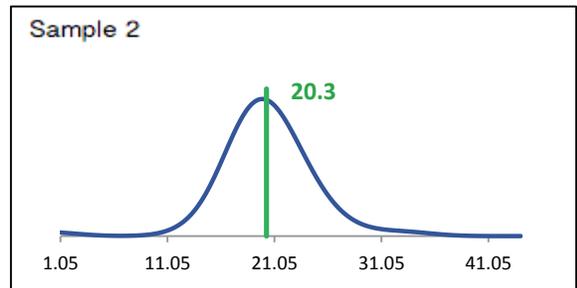
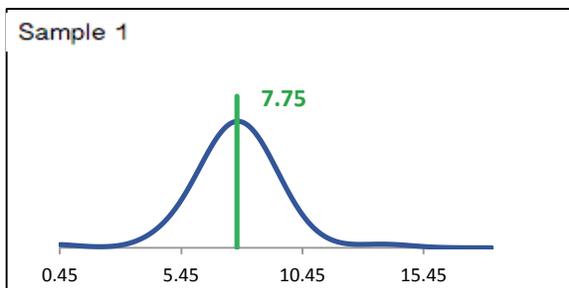


# TRICHLOROETHYLENE

## z-Score Plots

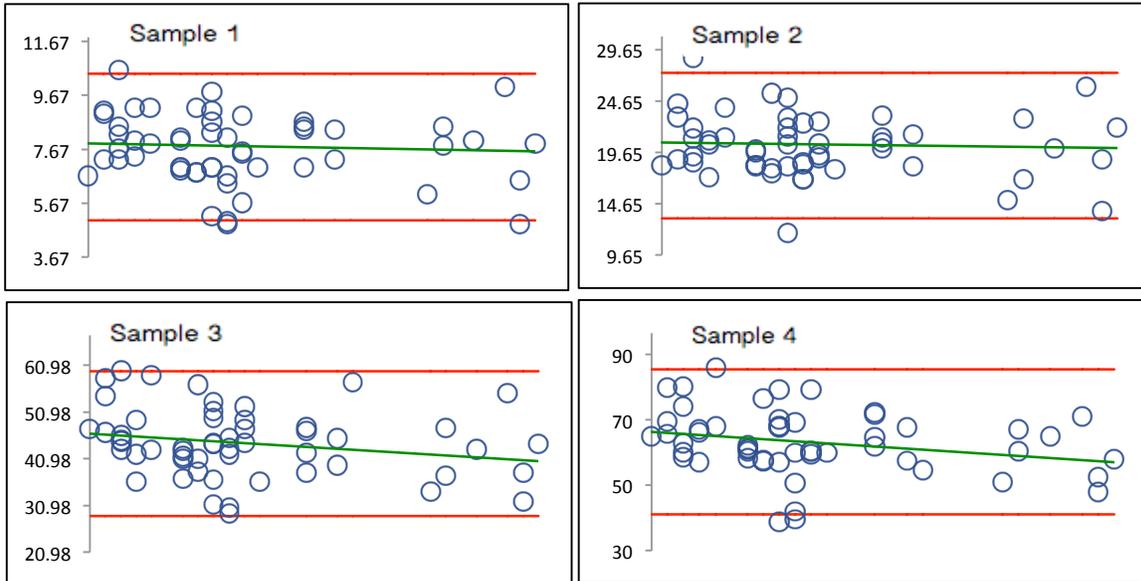


## Kernel Density Plots



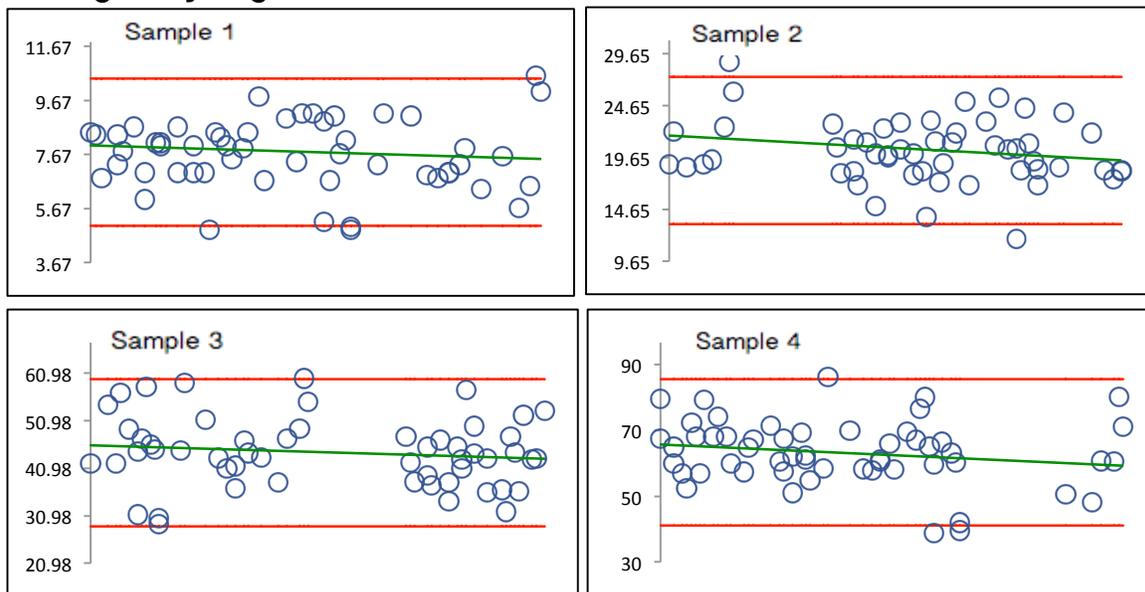
# TRICHLOROETHYLENE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## TRICHLOROFLUOROMETHANE

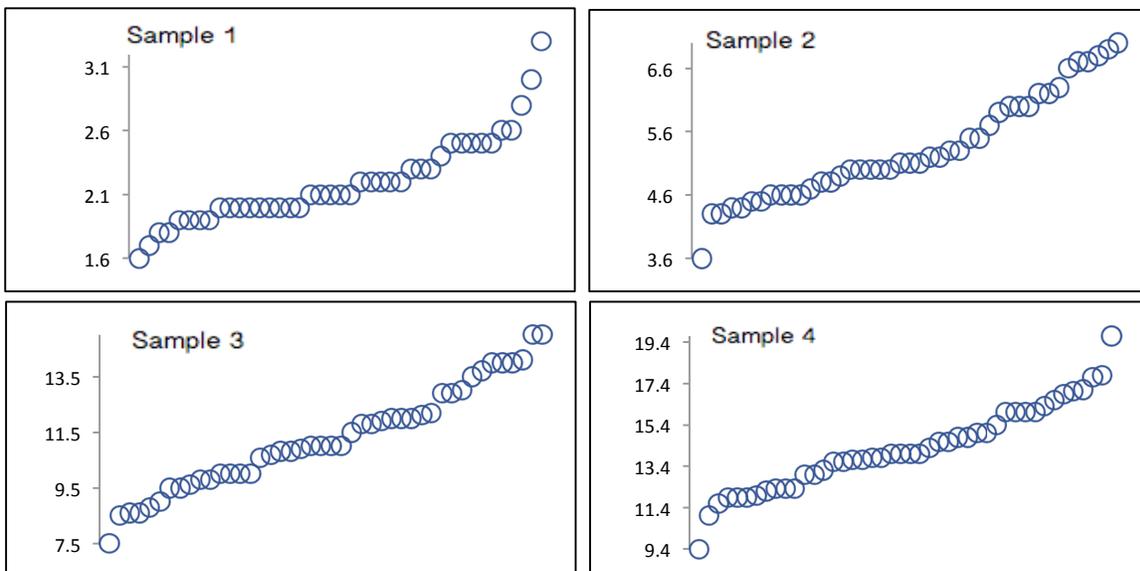
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	41	43	44	44
Median	2.10	5.10	11.0	14.0
Robust Mean	2.17	5.31	11.3	14.2
U	0.060	0.17	0.38	0.40
Robust Standard Deviation	0.307	0.884	2.01	2.11
Regression Standard Deviation	0.434	1.06	2.25	2.85
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	0.434	1.06	2.25	2.85
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	1	0	0	0

### Methods Used

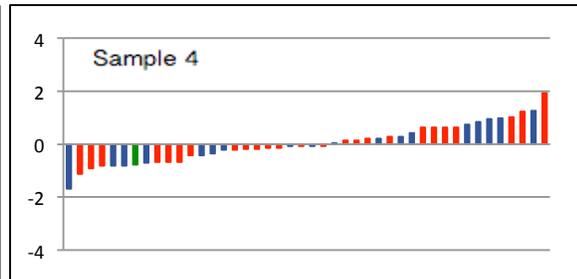
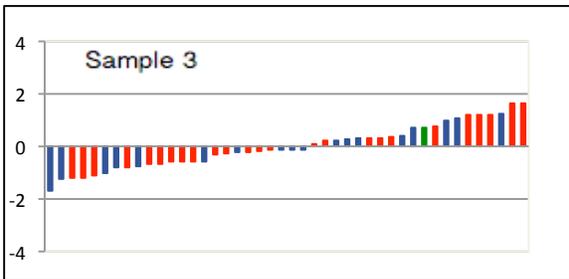
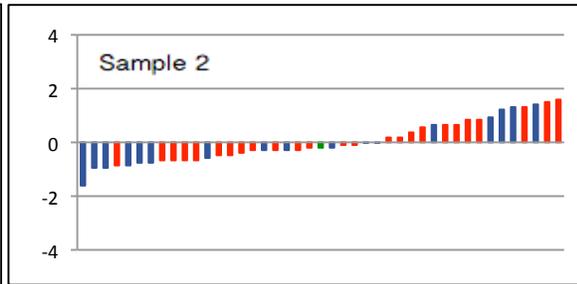
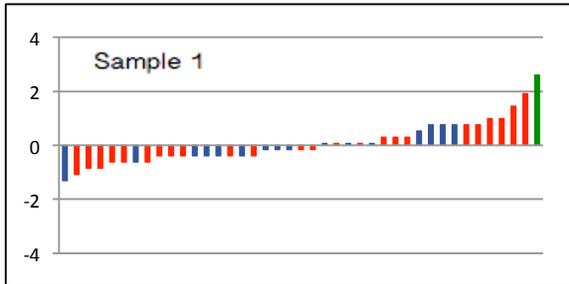
Method	C16-1	C16-2	C16-3	C16-4
HS-GCMS	16	17	18	18
P/T-GCMS	24	25	25	25
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

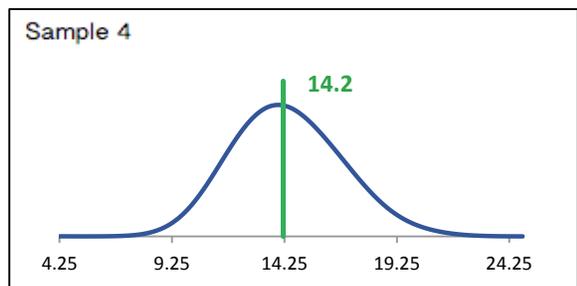
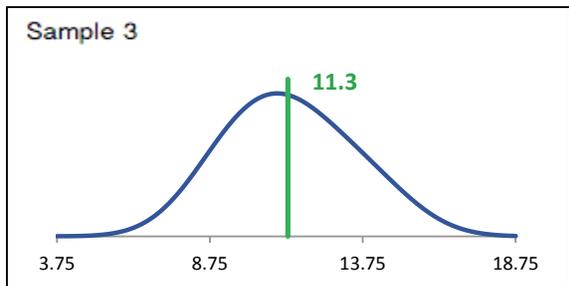
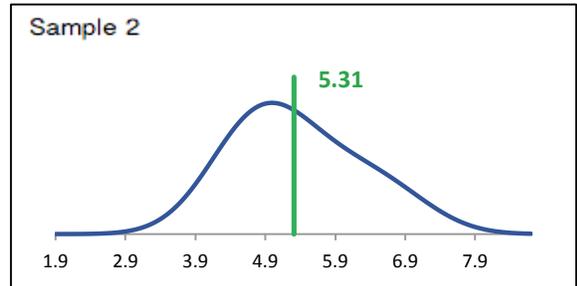
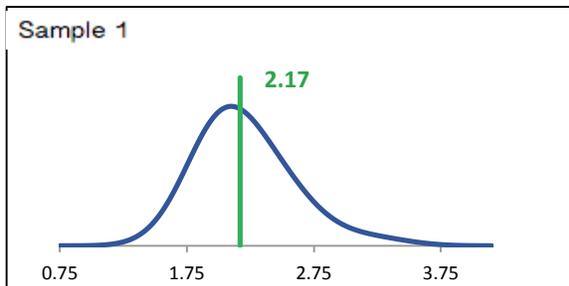


# TRICHLOROFLUOROMETHANE

## z-Score Plots

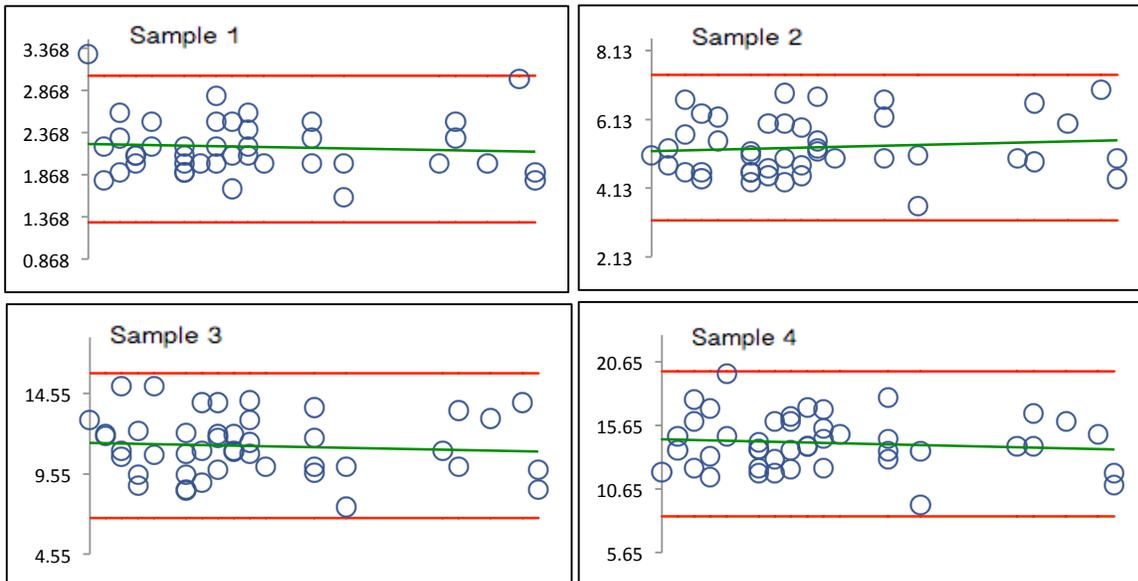


## Kernel Density Plots



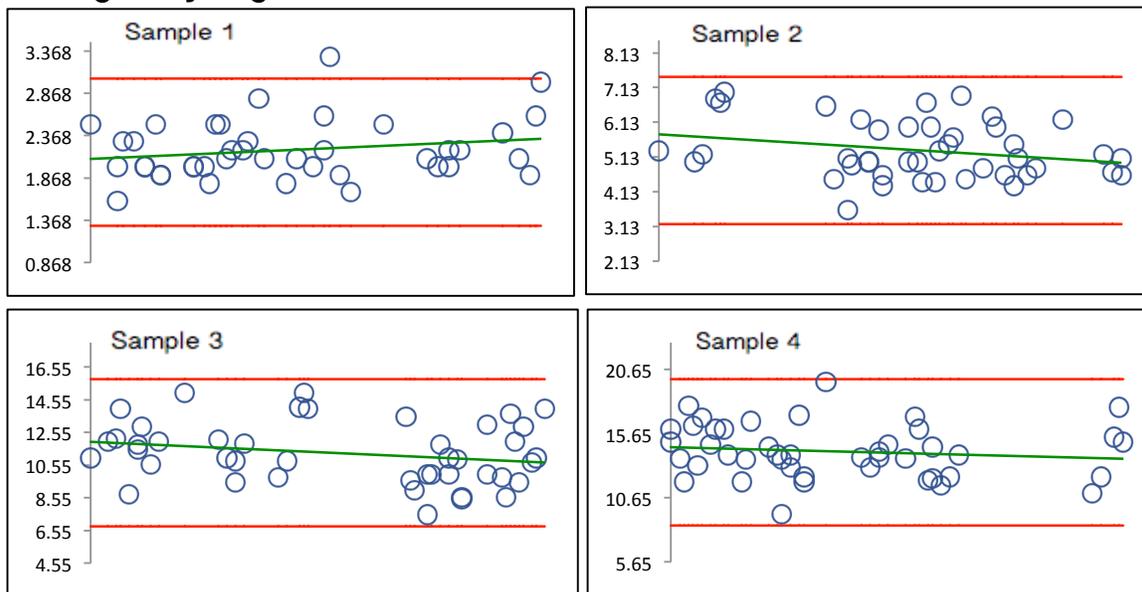
# TRICHLOROFLUOROMETHANE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).

## VINYL CHLORIDE

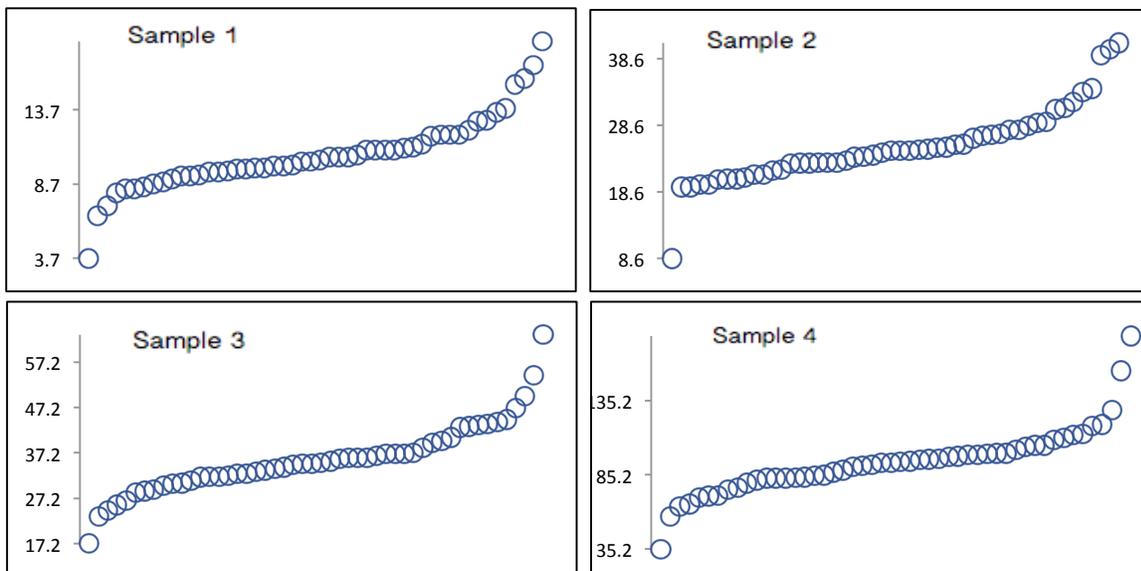
### Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	50	50	50	50
Median	10.3	24.7	34.9	93.7
Robust Mean	10.5	25.0	35.4	92.7
U	0.336	0.79	1.16	2.99
Robust Standard Deviation	1.90	4.44	6.55	16.9
Regression Standard Deviation	2.36	5.63	7.96	20.9
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA)	2.36	5.63	7.96	20.9
Outliers	0	0	0	0
z >3.0	1	0	1	1
2< z <3	4	4	2	2

### Methods Used

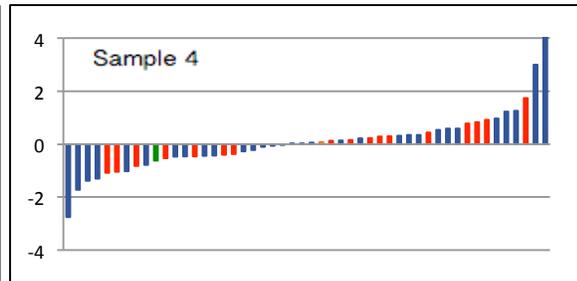
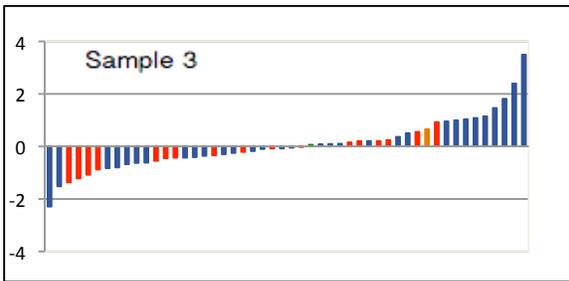
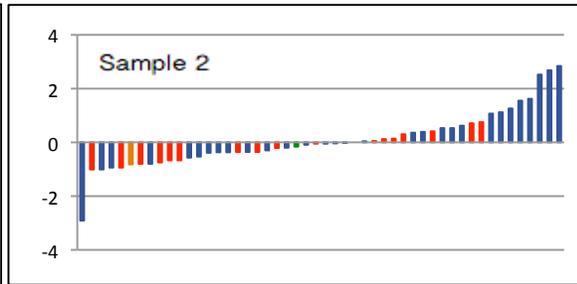
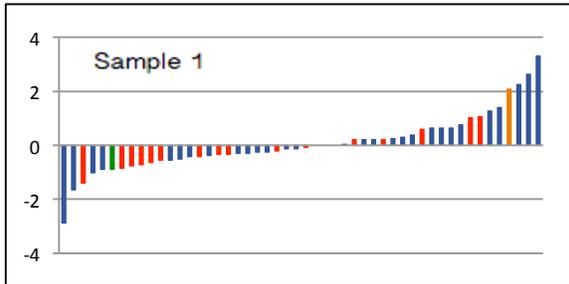
Method	C16-1	C16-2	C16-3	C16-4
P/T-GCMS	31	31	31	31
HS-GCMS	17	17	17	17
GC/MS/MSHEAD	1	1	1	1
GC/MS1	1	1	1	1

All summary stats and the plots below are based on the data excluding any flagged outliers

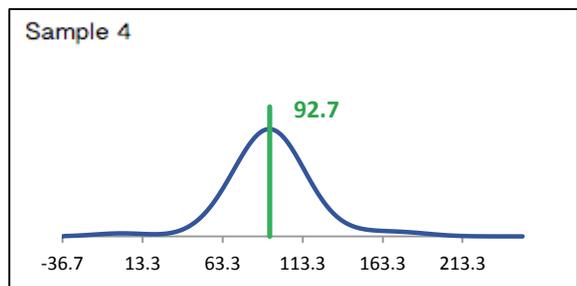
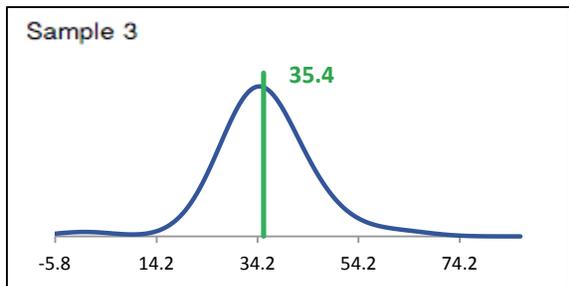
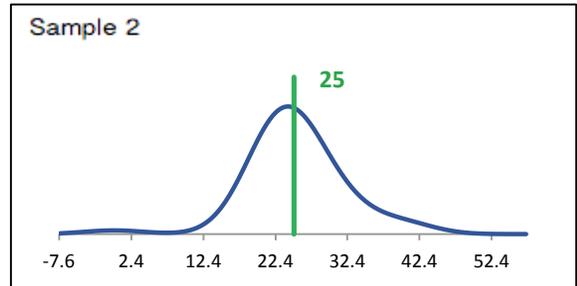
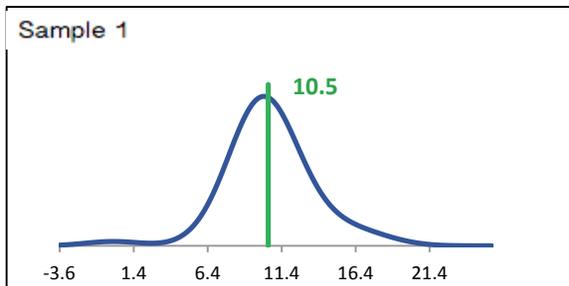


# VINYL CHLORIDE

## z-Score Plots

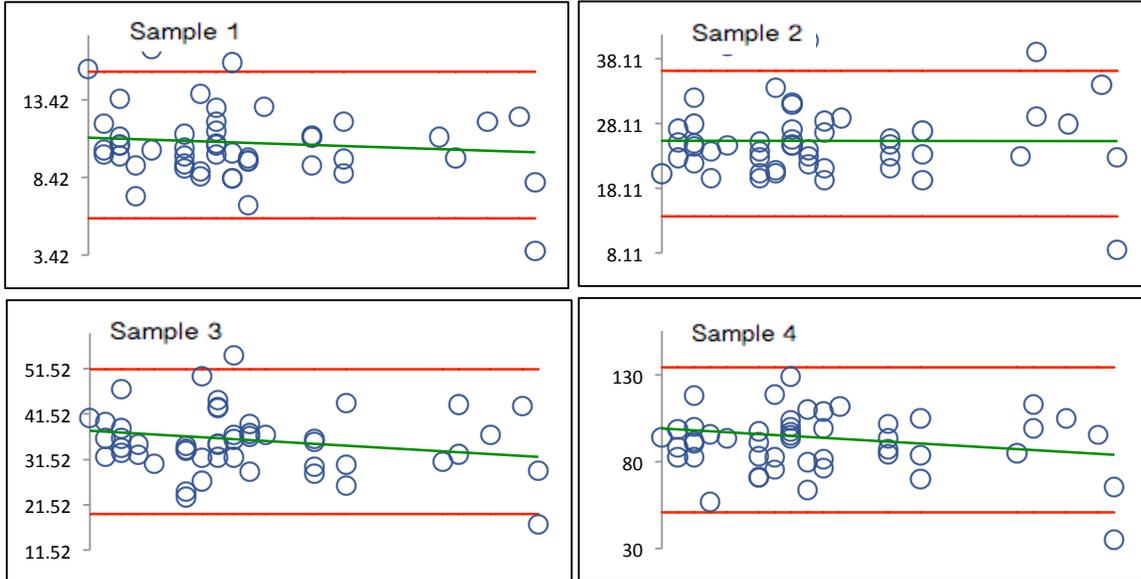


## Kernel Density Plots



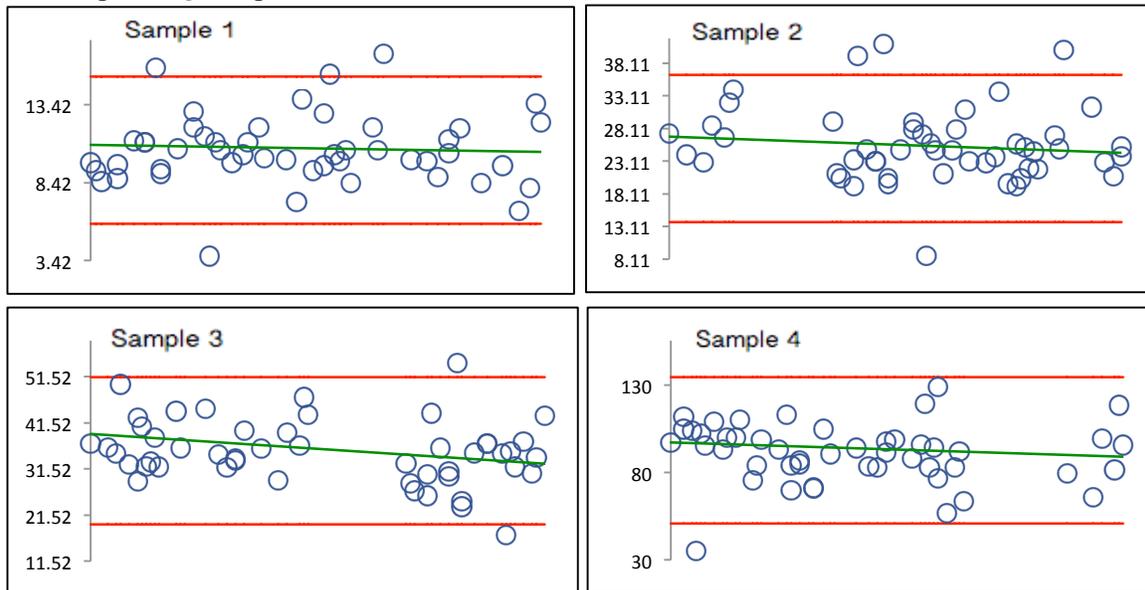
# VINYL CHLORIDE

## Stability Regression



Reported results (Y-axis) plotted against reported analysis date (X-axis)

## Homogeneity Regression



Reported results (Y-axis) plotted against bottling order (X-axis).