

Test Group Summary Report

C16 Volatile Organic Compounds in Water

January 2025 PT Round

Issued: February 28, 2025

Table of Contents

1.0	The Proficiency Testing Report	1
2.0	Definitions	1
3.0	Scoring System	1
3.1	Homogeneity and Stability Assessment	2
3.2	The z score	2
3.2	Composite (PT) Score	2
3.3	Identifying Bias	2
3.4	Deviations from Evaluation Procedure	3
4.0	PT Round Specific Data Summary	3
4.1	Summary statistics	3
4.2	z- Score Plots	3
4.3	kernel density plots.....	3
4.4	stability and homogeneity Plots.....	3
4.5	Box-and-Whisker Plots	3
4.6	Historic Comparison Plot	3
	Annex A Summary by Analyte	4

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 is 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.
$\pm u$:	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 – *Conformity assessment- General requirements for the competence of proficiency testing providers*, 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).

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:

$$z - Score = \frac{(x - \bar{X})}{SDPA} \quad \text{where: } x = \text{participant result};$$

\bar{X} = the Assigned Value;
SDPA = the Standard Deviation for Proficiency Assessment.

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.

$$RSZ = \frac{\sum z}{\sqrt{N}} \quad \text{where } z = \text{the z- score}$$

N = the number of samples

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

$RSZ \geq -2$ and ≤ 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.

4.5 BOX-AND-WHISKER PLOTS

Box-and-Whisker plots are another way to display the distribution of the data. The box denotes the first and third quartile and the whiskers are the 5th and 95th percentile.

4.6 HISTORIC COMPARISON PLOT

The Historic Comparison Plot is a plot of robust mean against robust standard deviation for the previous ten PT rounds as well as the current PT round. This plot can be used to identify possible changes in the sample formulation.

1,1,1-TRICHLOROETHANE

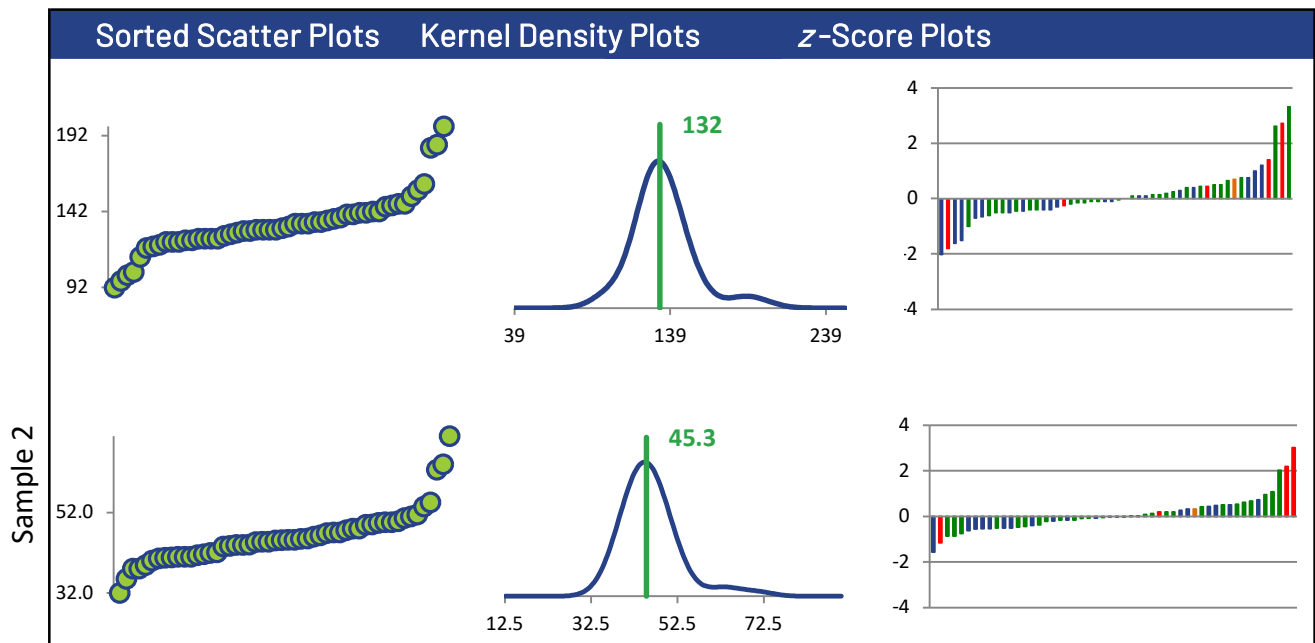
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	52	52	52	50
Median µg/L	131	45.2	88.7	13.3
Robust Mean µg/L	132	45.3	89.5	13.3
U µg/L	2.34	0.860	1.57	0.283
Robust Standard Deviation µg/L	13.5	4.96	9.07	1.60
Regression Standard Deviation µg/L	19.8	6.80	13.4	1.99
Stability Flag				
Homogeneity Flag		Homogeneity		Homogeneity
Standard Deviation Used (SDPA) µg/L	19.8	8.55	13.4	2.00
Outliers	0	0	0	2
z >3.0	1	1	2	0
2< z <3	3	2	1	1

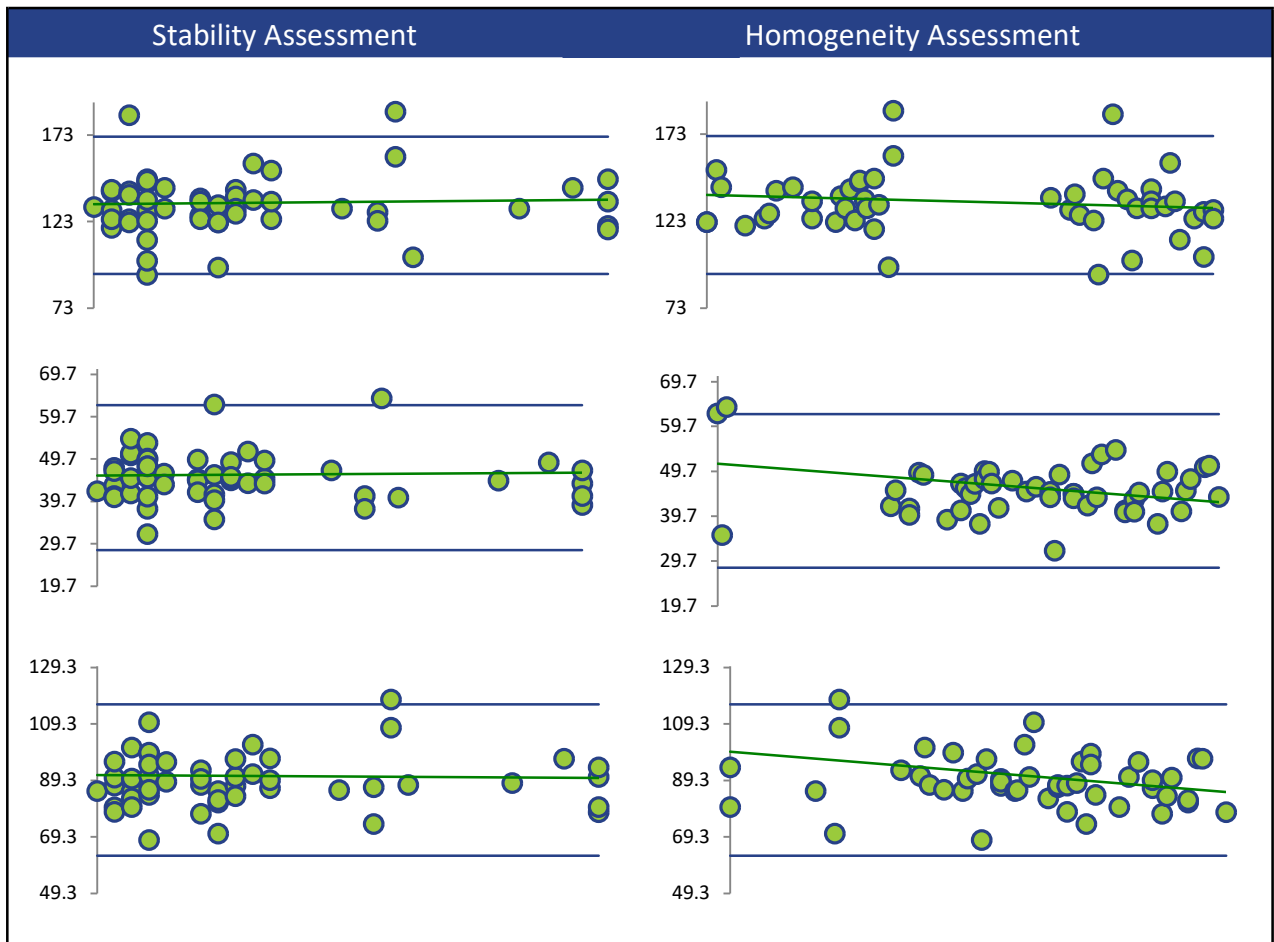
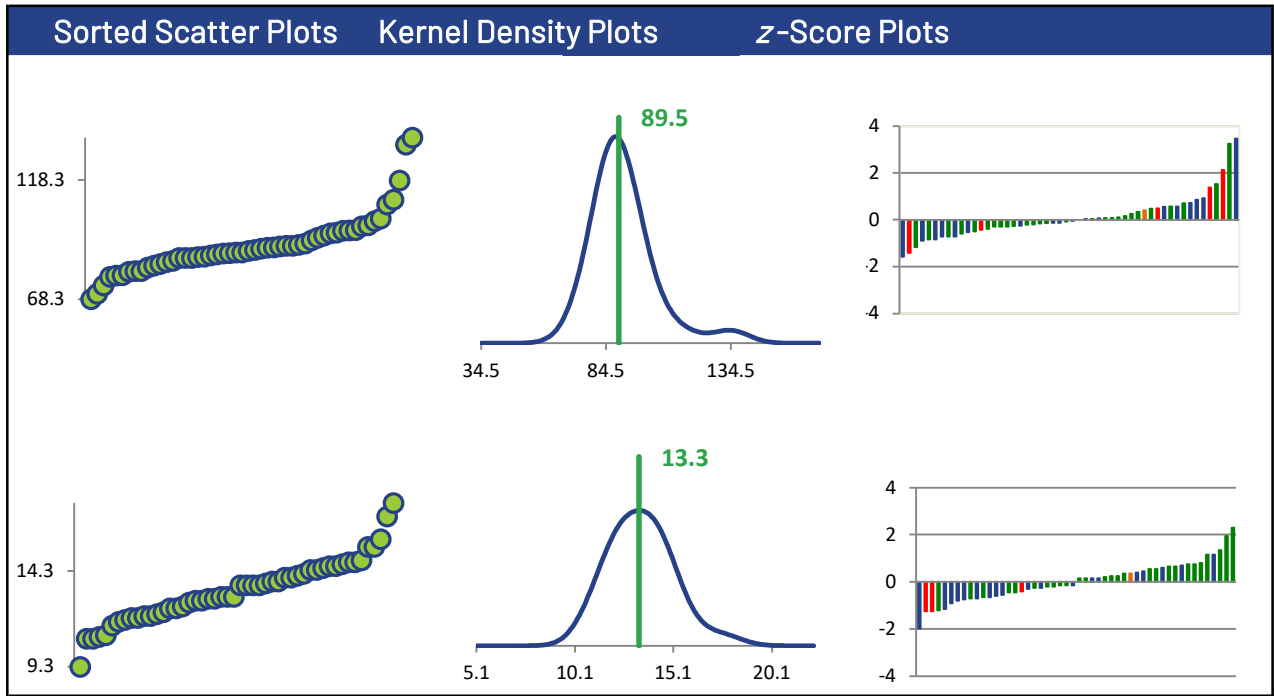
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	19	19
GC/MS (Red)	5	5	5	3
GC/MS - PURGE AND TRAP (Green)	27	27	27	27
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1

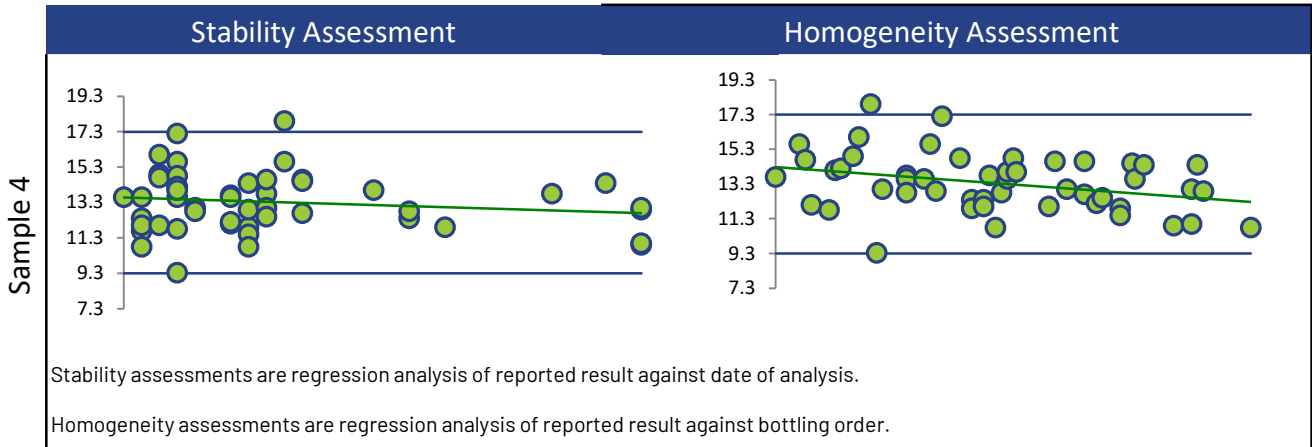
All summary stats and the plots below are based on the data excluding any flagged outliers



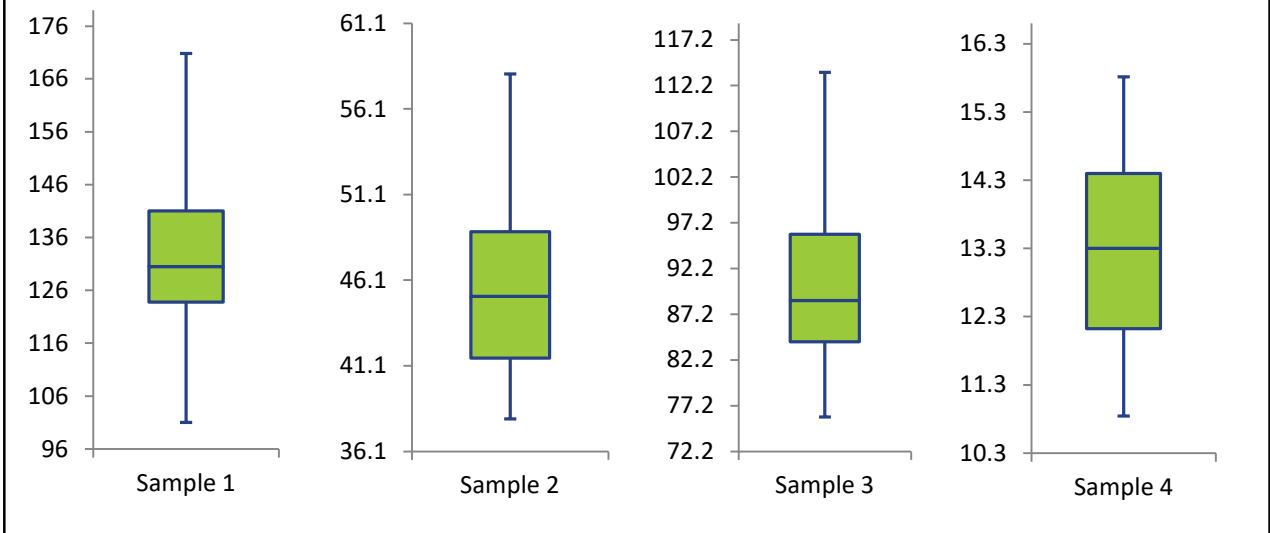
1,1,1-TRICHLOROETHANE



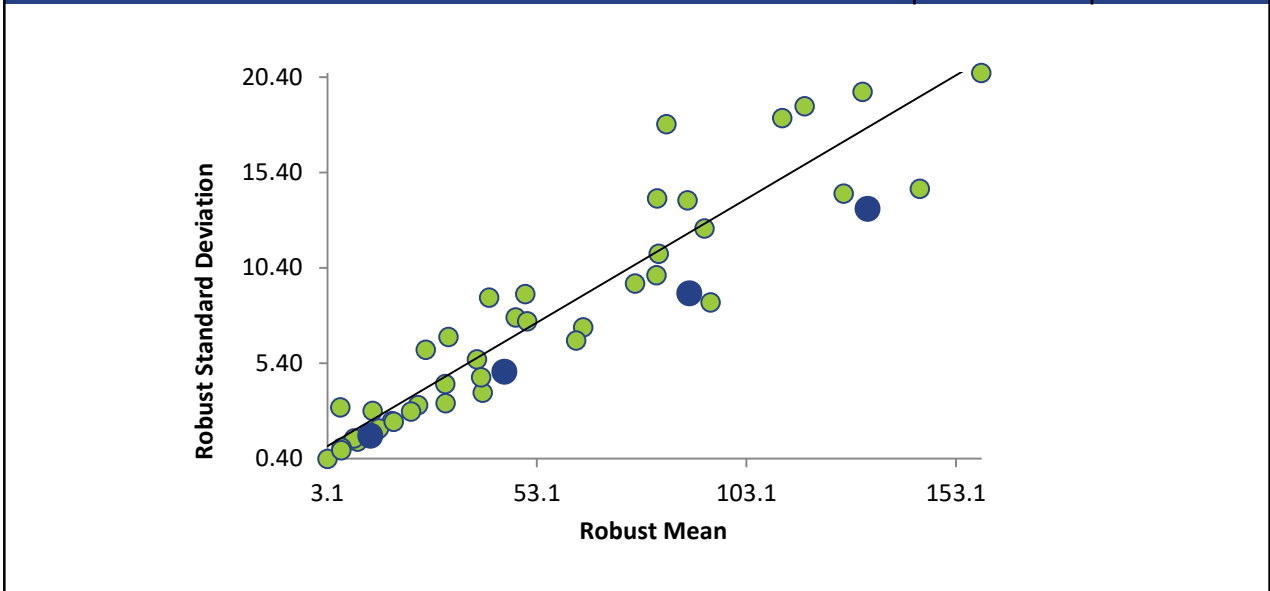
1,1,1-TRICHLOROETHANE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



1,1,2,2-TETRACHLOROETHANE

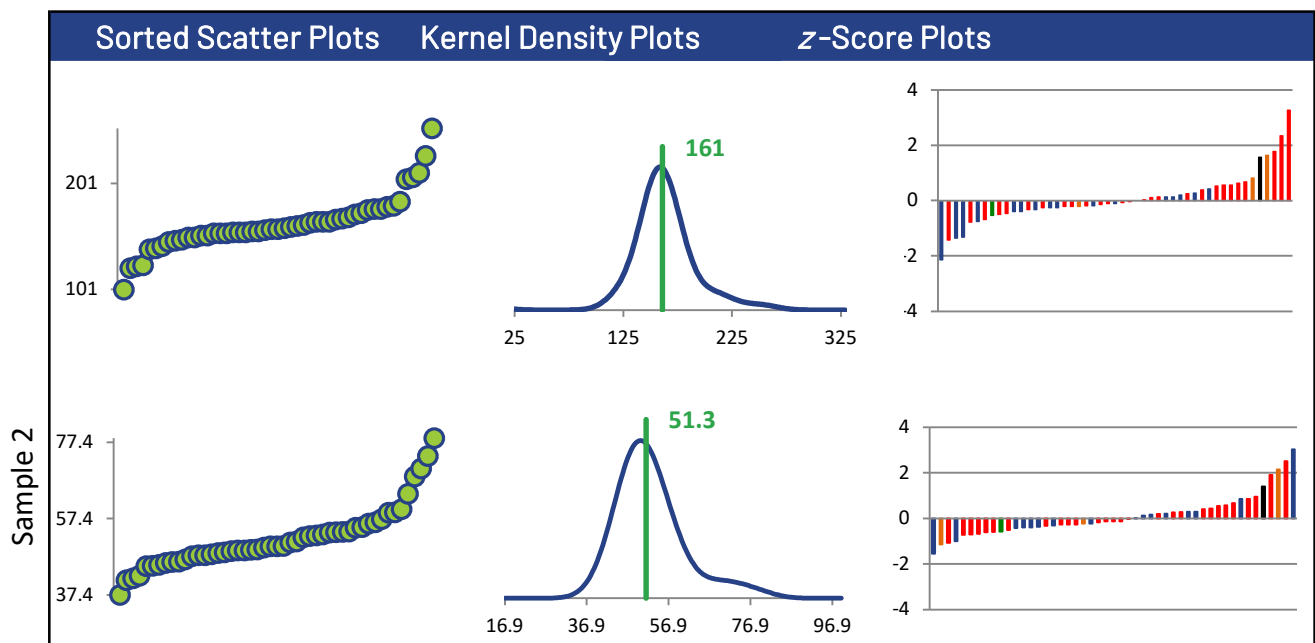
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	49	49	49	49
Median µg/L	158	50.1	107	16.0
Robust Mean µg/L	161	51.3	107	16.2
U µg/L	3.07	1.10	2.38	0.361
Robust Standard Deviation µg/L	17.2	6.18	13.3	2.02
Regression Standard Deviation µg/L	28.1	8.97	18.6	2.84
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	28.1	8.97	18.6	2.84
Outliers	0	0	0	0
z >3.0	1	1	0	2
2< z <3	2	2	4	1

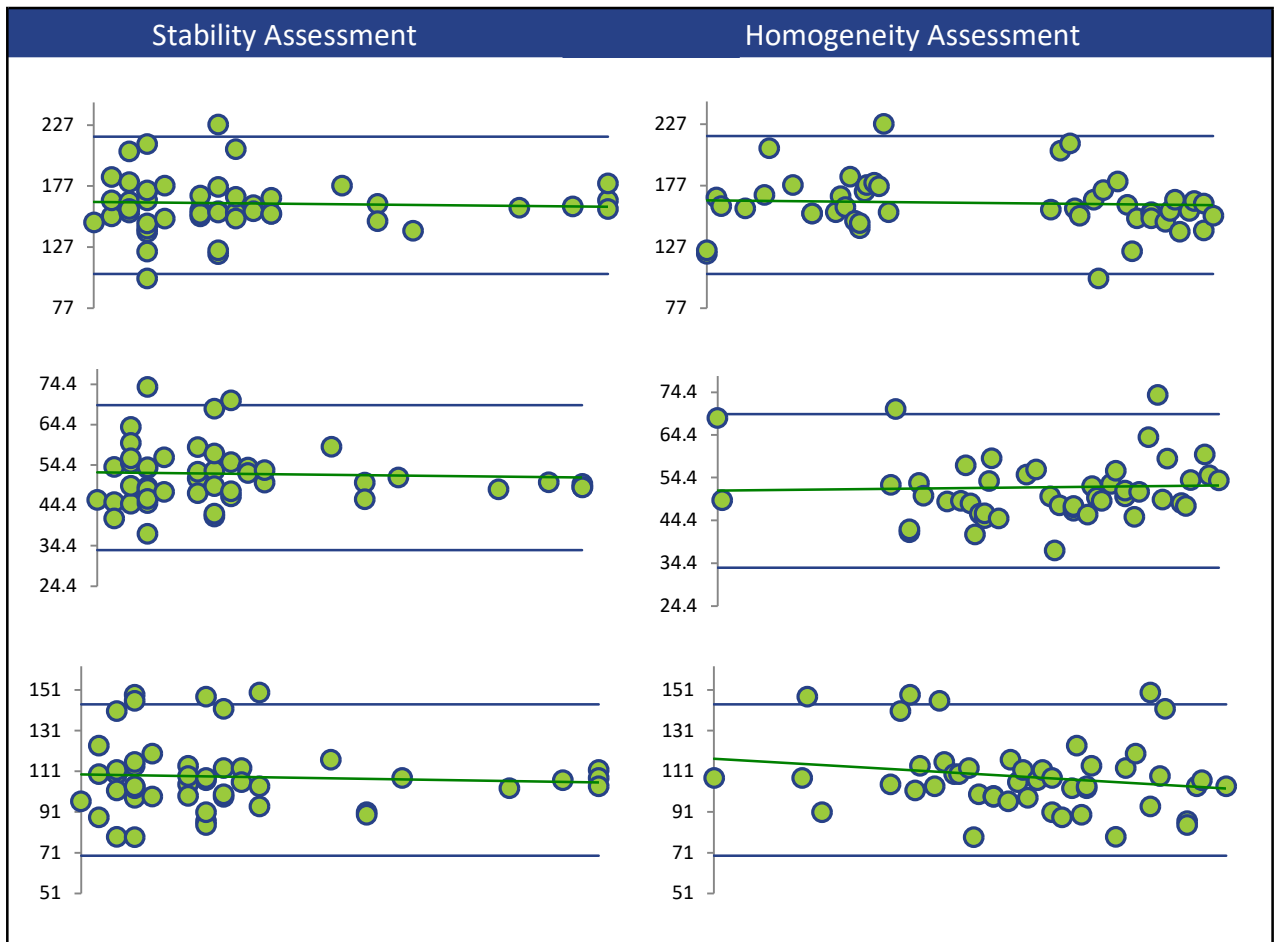
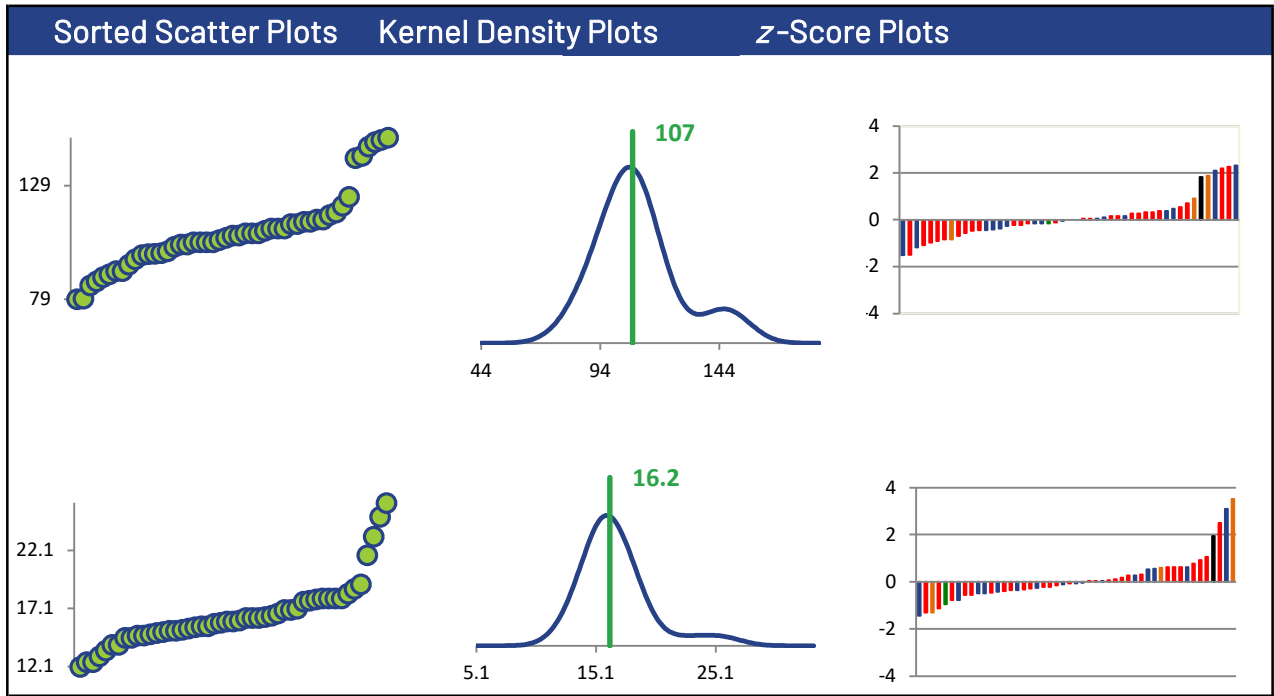
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	16	16	16	16
GC/MS - PURGE AND TRAP (Red)	28	28	28	28
GC/FID - PURGE AND TRAP (Green)	1	1	1	1
GC/MS (Orange)	3	3	3	3
GC/MS/MS - HEADSPACE (Black)	1	1	1	1

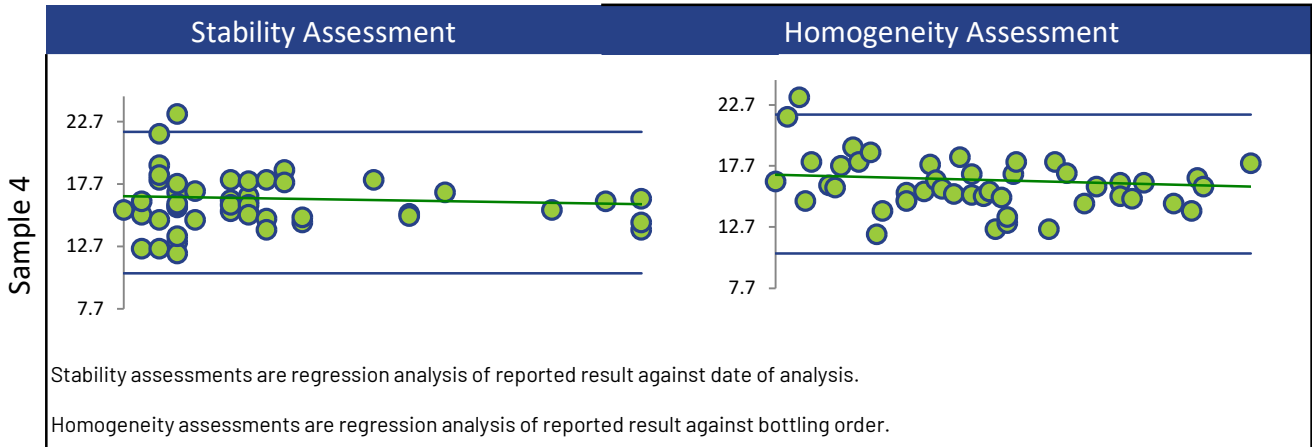
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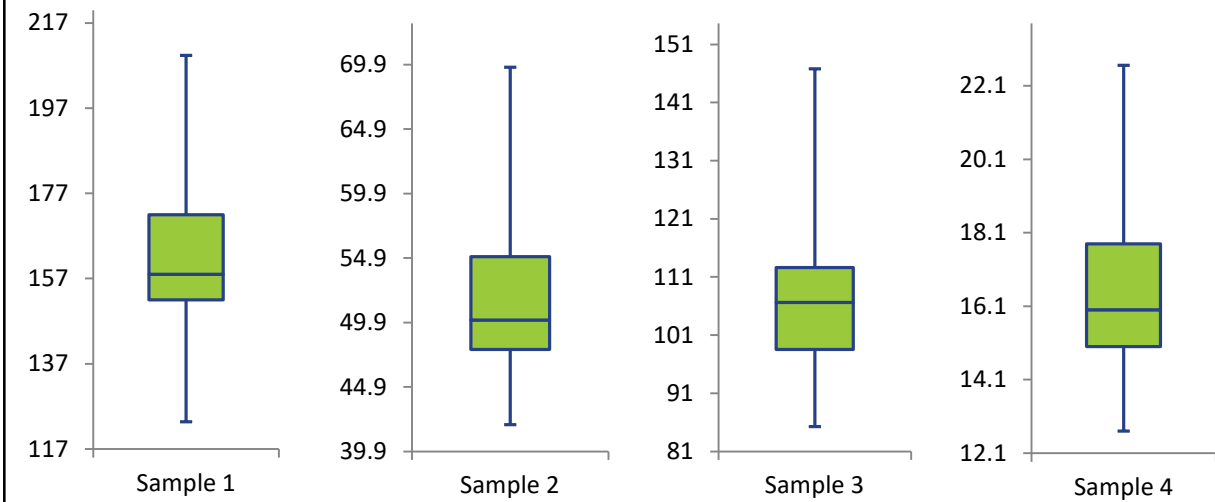
1,1,2,2-TETRACHLOROETHANE



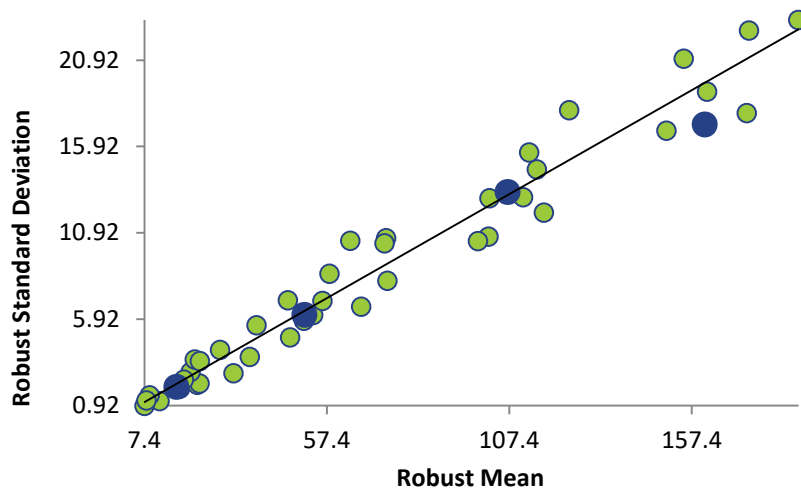
1,1,2,2-TETRACHLOROETHANE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



1,1,2-TRICHLOROETHANE

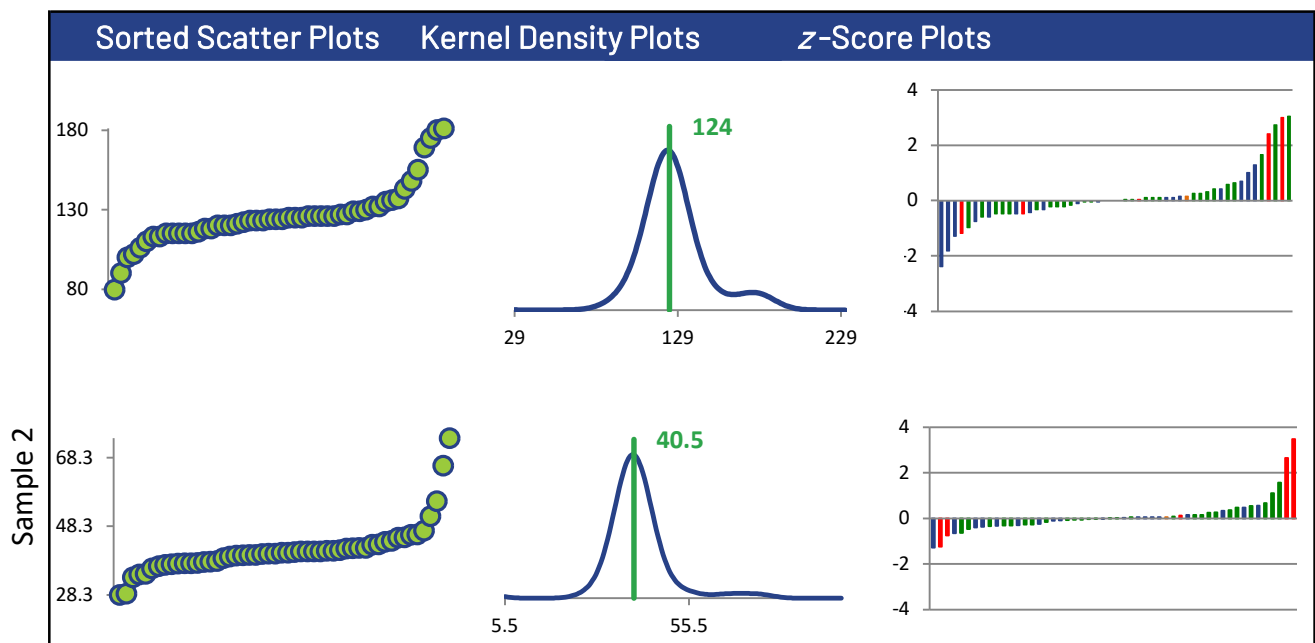
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	52	52	52	51
Median µg/L	124	40.6	82.2	12.6
Robust Mean µg/L	124	40.5	83.0	12.6
U µg/L	2.03	0.676	1.23	0.217
Robust Standard Deviation µg/L	11.7	3.90	7.11	1.24
Regression Standard Deviation µg/L	18.6	6.08	12.4	1.89
Stability Flag				
Homogeneity Flag		Homogeneity	Homogeneity	
Standard Deviation Used (SDPA) µg/L	18.6	9.63	19.4	1.89
Outliers	0	0	0	1
z >3.0	2	1	0	1
2< z <3	3	1	1	3

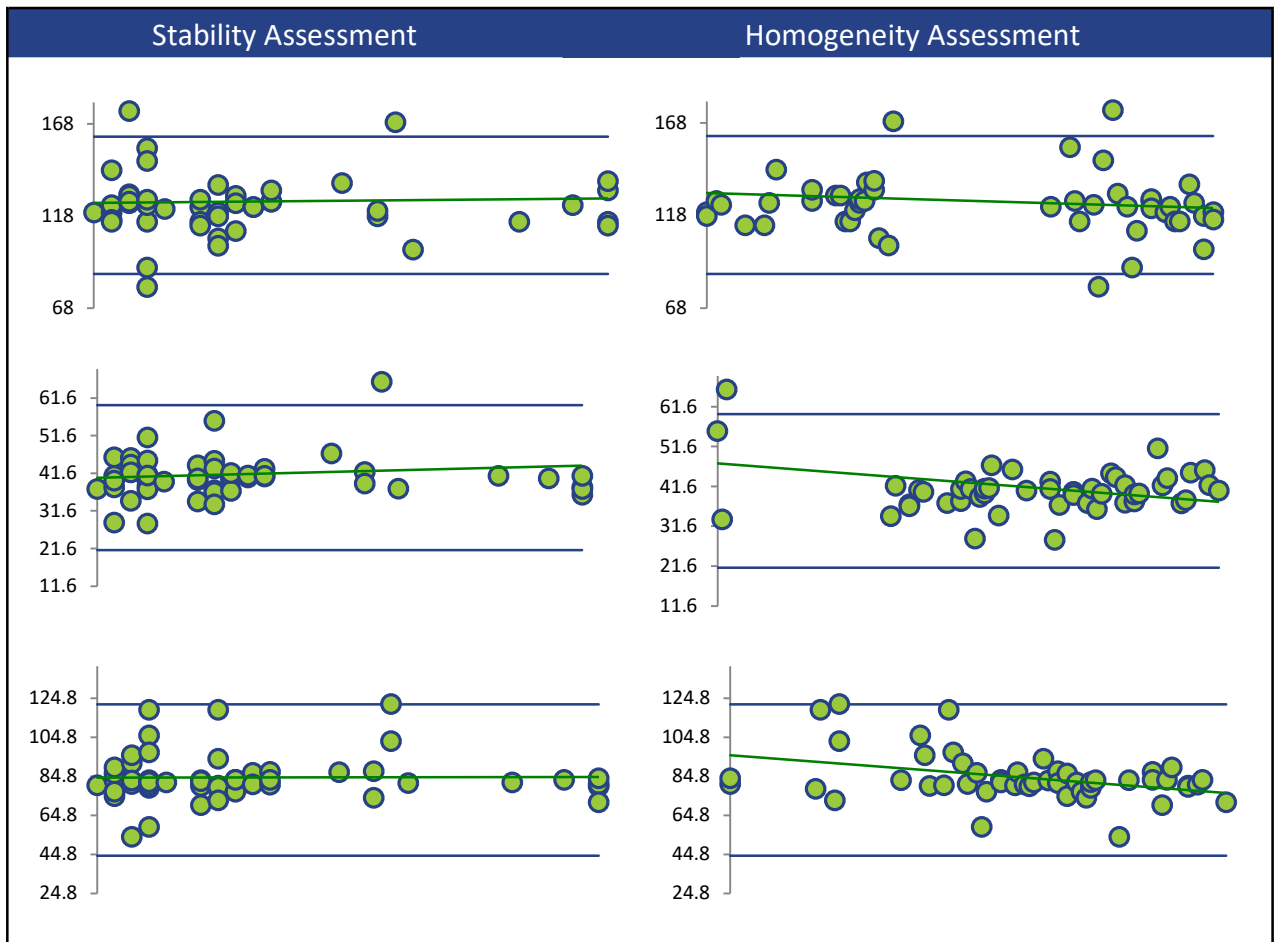
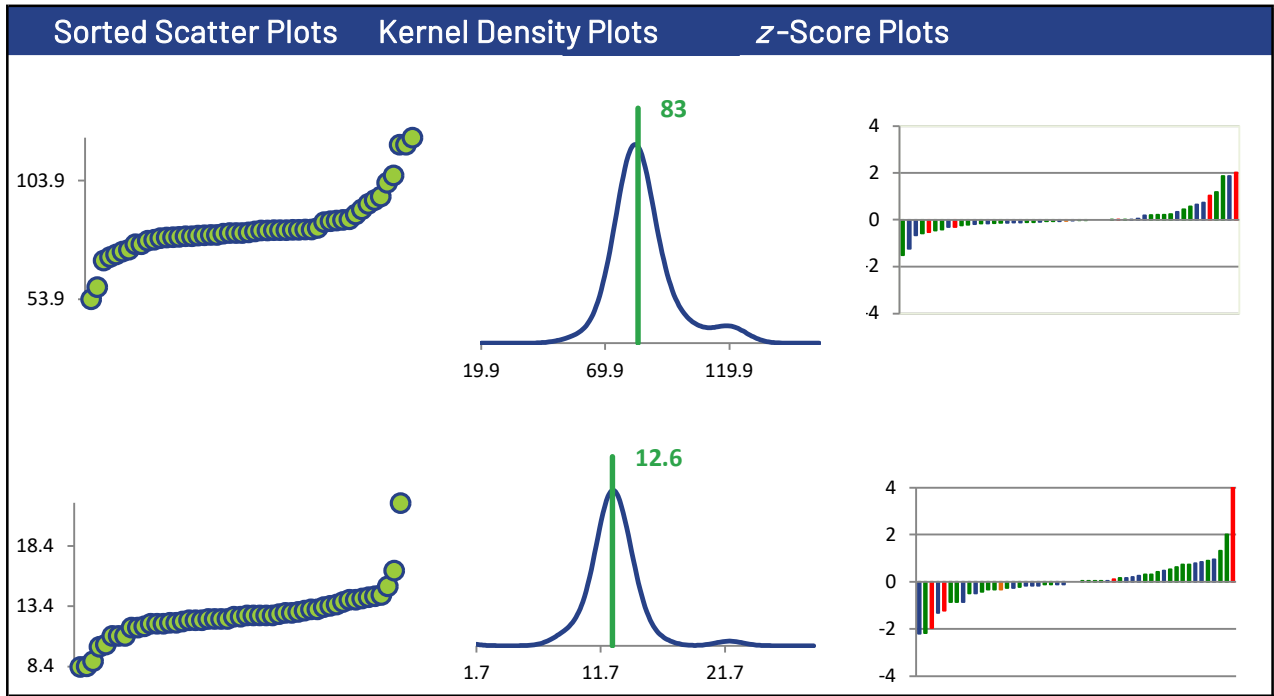
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	19	19
GC/MS (Red)	5	5	5	4
GC/MS - PURGE AND TRAP (Green)	27	27	27	27
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1

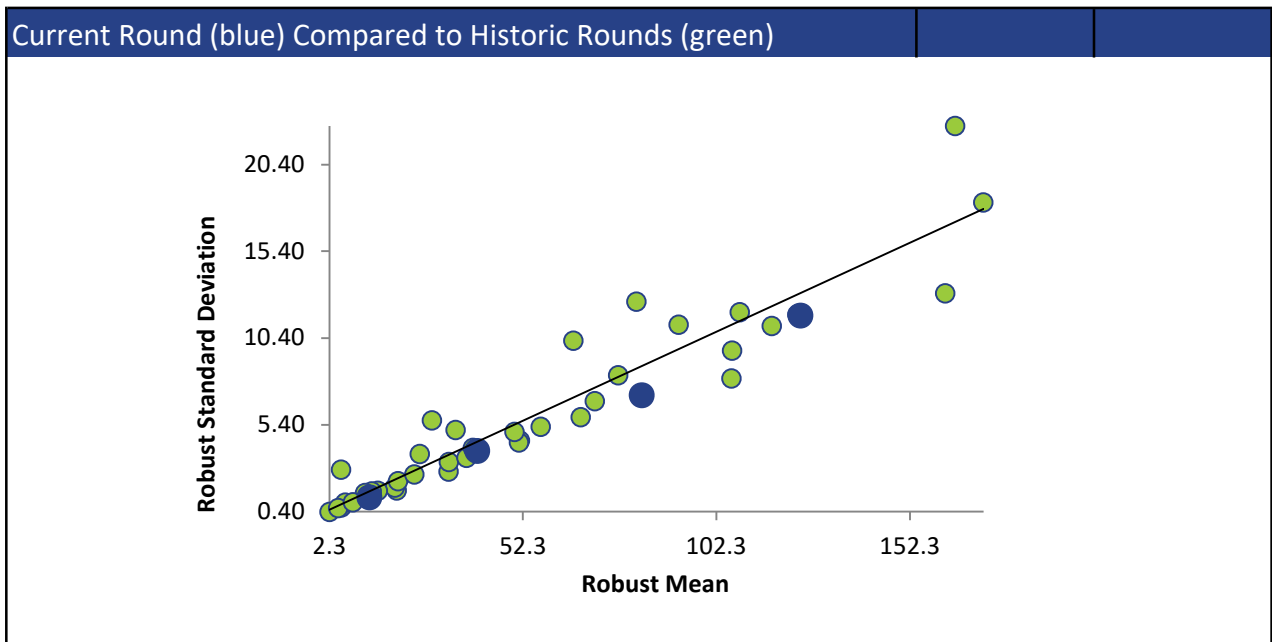
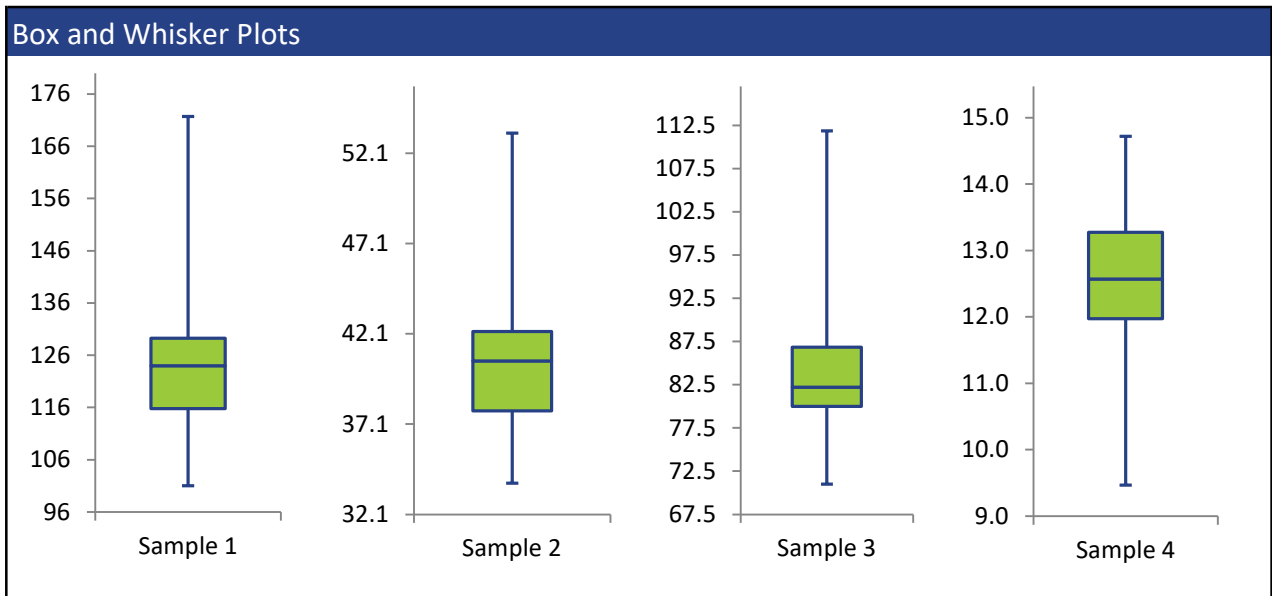
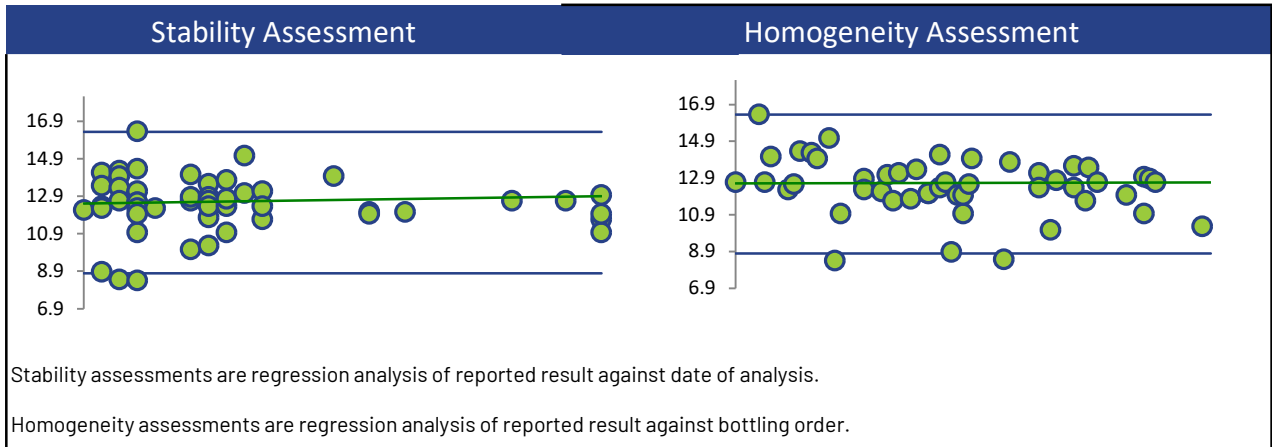
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1,1,2-TRICHLOROETHANE



1,1,2-TRICHLOROETHANE



1,1-DICHLOROETHANE

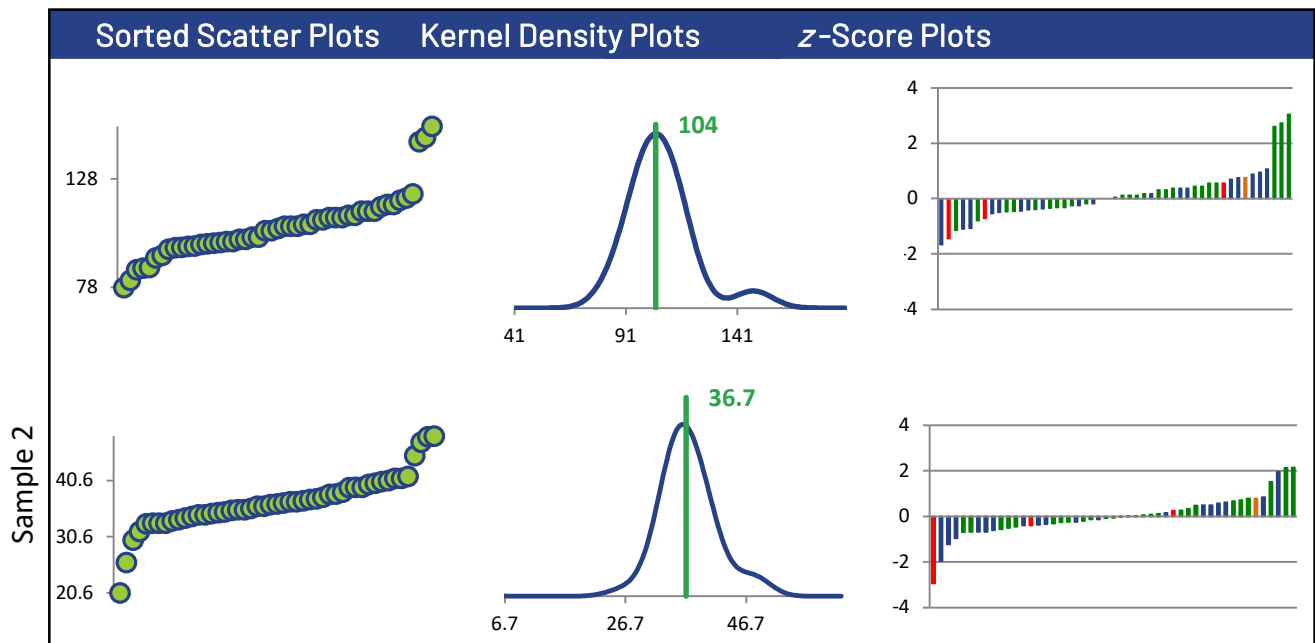
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	49	49	48	48
Median µg/L	105	36.4	71.2	10.7
Robust Mean µg/L	104	36.7	71.6	10.8
U µg/L	2.00	0.648	1.18	0.222
Robust Standard Deviation µg/L	11.2	3.63	6.55	1.23
Regression Standard Deviation µg/L	15.7	5.50	10.7	1.63
Stability Flag				
Homogeneity Flag			Homogeneity	Homogeneity
Standard Deviation Used (SDPA) µg/L	15.7	5.50	12.0	2.36
Outliers	0	0	1	1
z >3.0	1	0	0	0
2< z <3	2	3	3	1

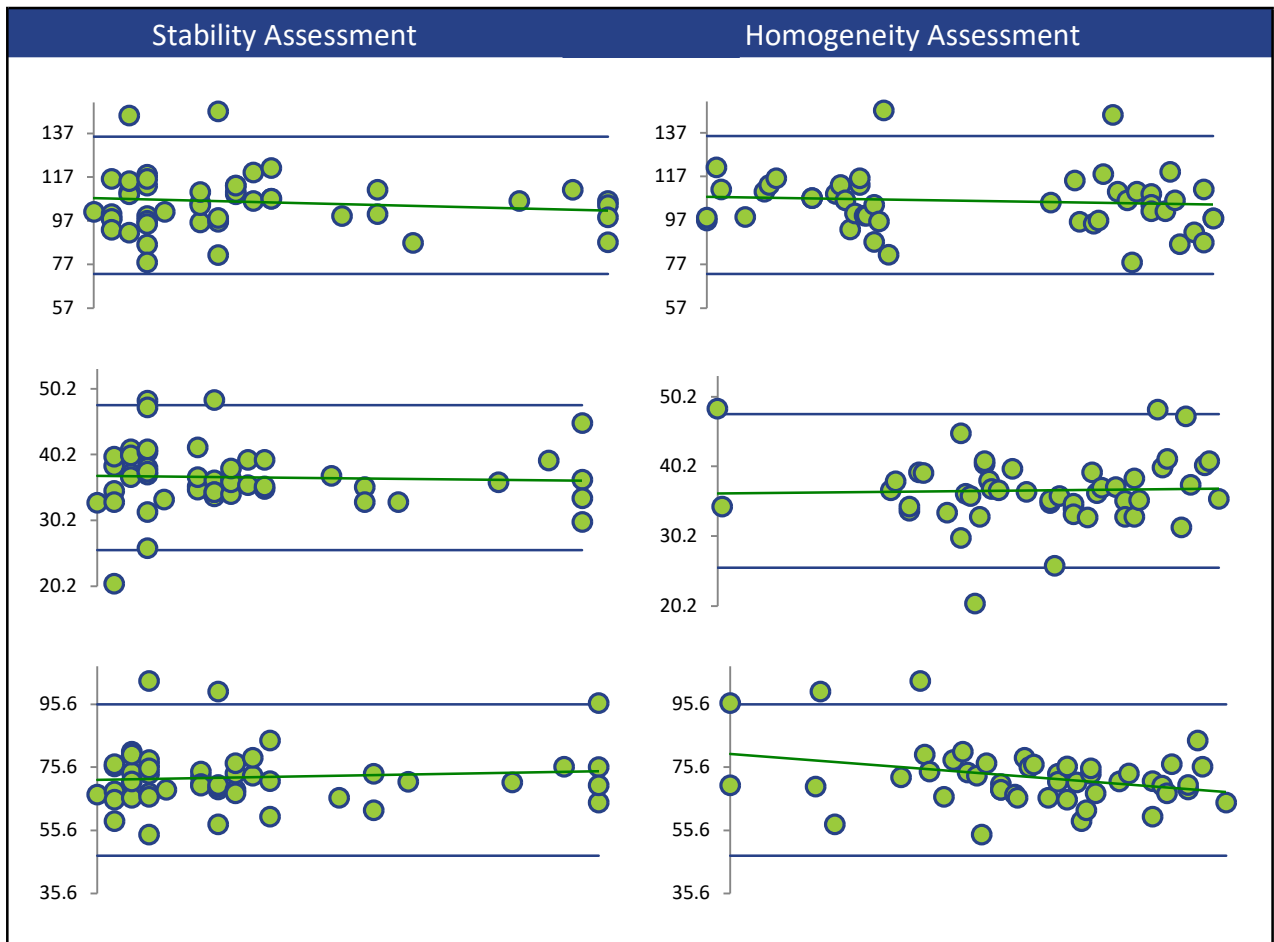
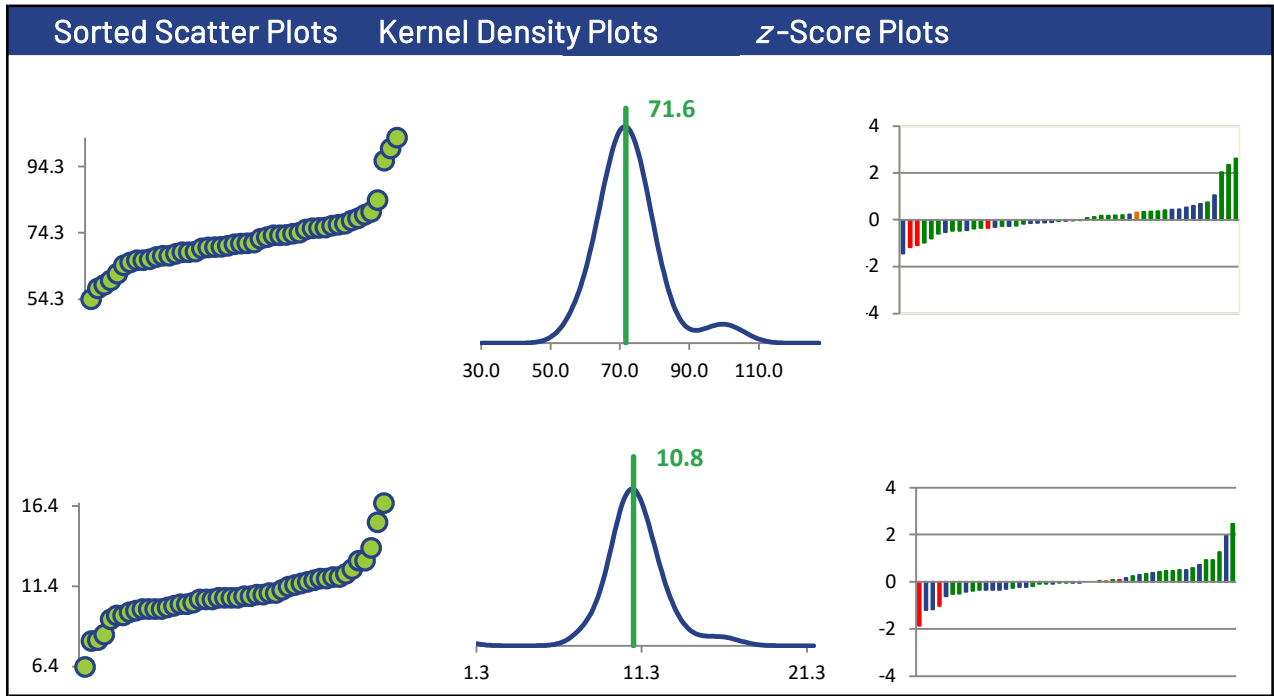
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	18	19
GC/MS (Red)	3	3	3	3
GC/MS - PURGE AND TRAP (Green)	26	26	26	25
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1

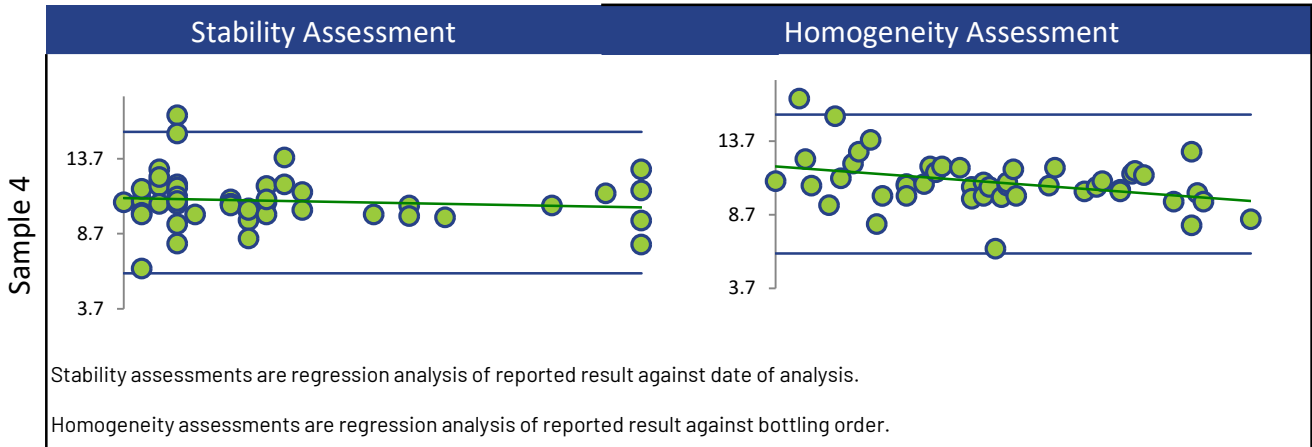
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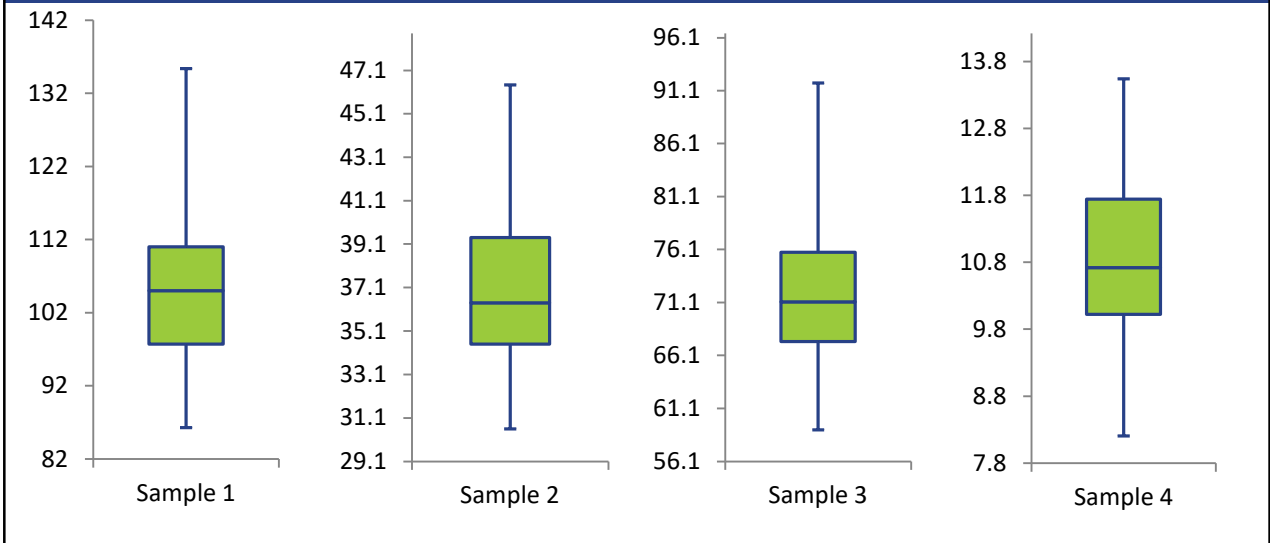
1,1-DICHLOROETHANE



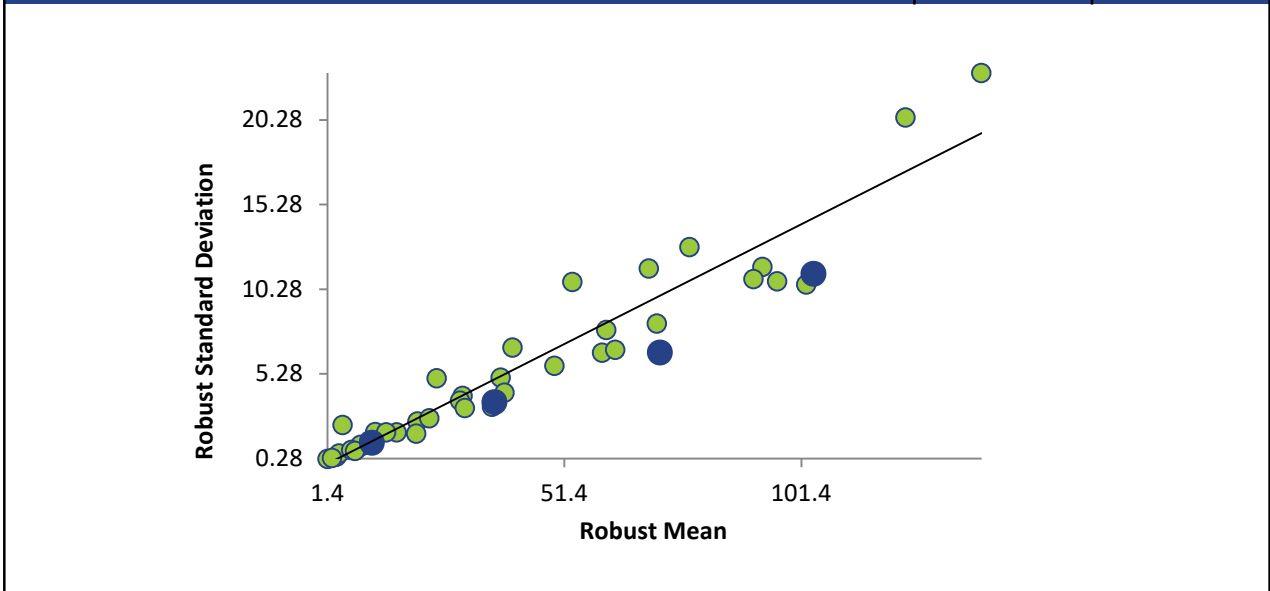
1,1-DICHLOROETHANE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



1,1-DICHLOROETHYLENE

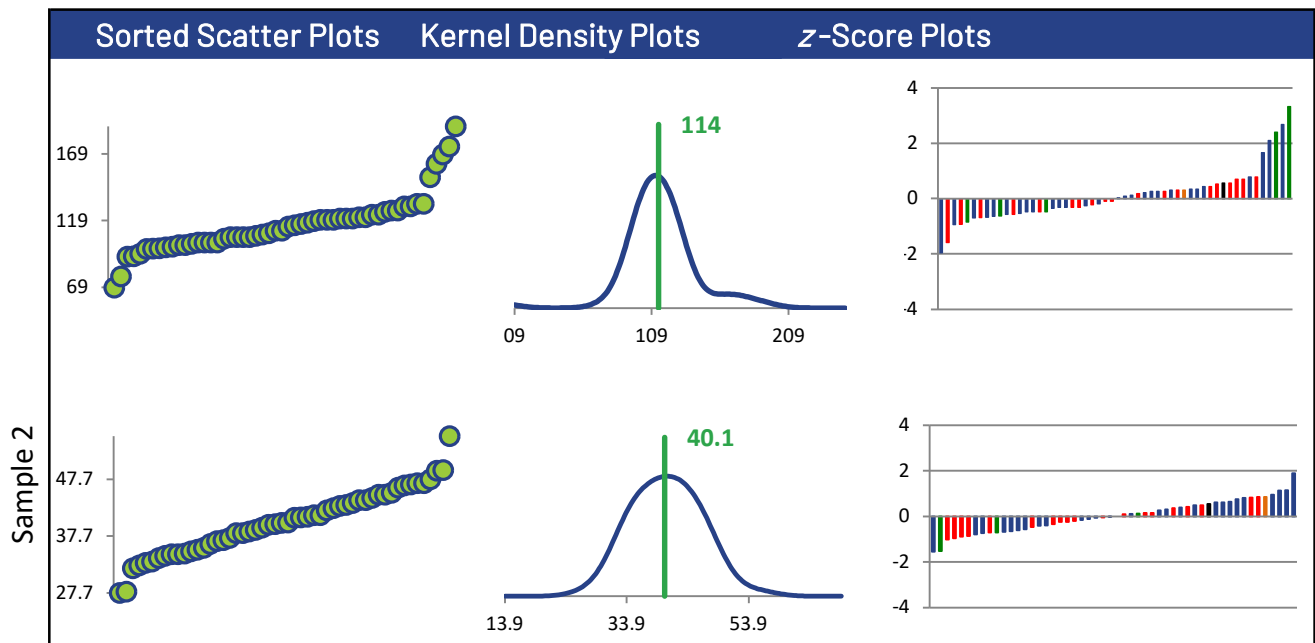
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	54	52	53	52
Median µg/L	114	40.1	79.0	11.7
Robust Mean µg/L	114	40.1	79.0	11.9
U µg/L	2.60	1.01	1.82	0.300
Robust Standard Deviation µg/L	15.3	5.82	10.6	1.73
Regression Standard Deviation µg/L	22.8	8.03	15.8	2.38
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	22.8	8.03	15.8	2.38
Outliers	0	2	1	2
z >3.0	1	0	0	0
2< z <3	3	0	1	2

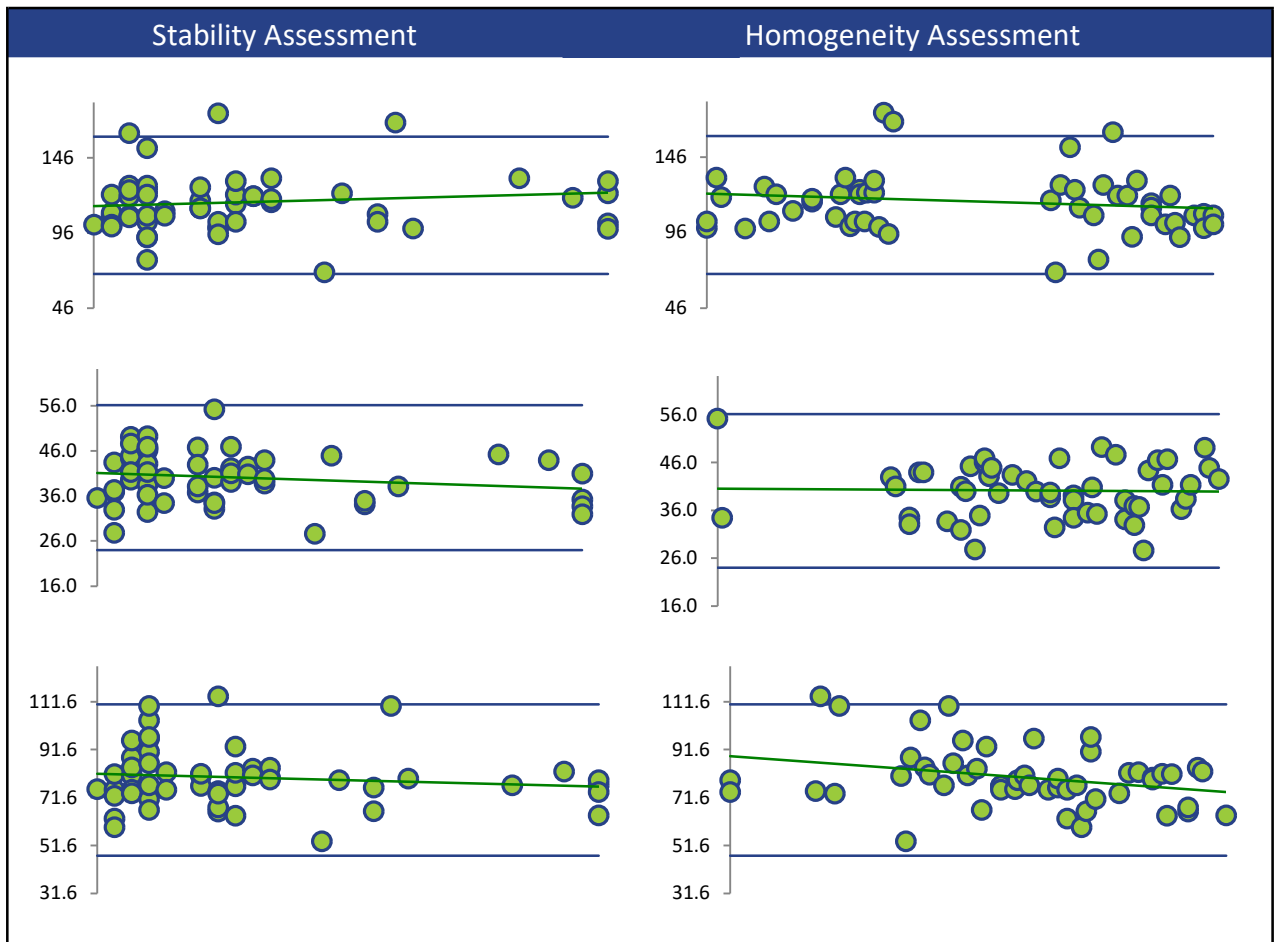
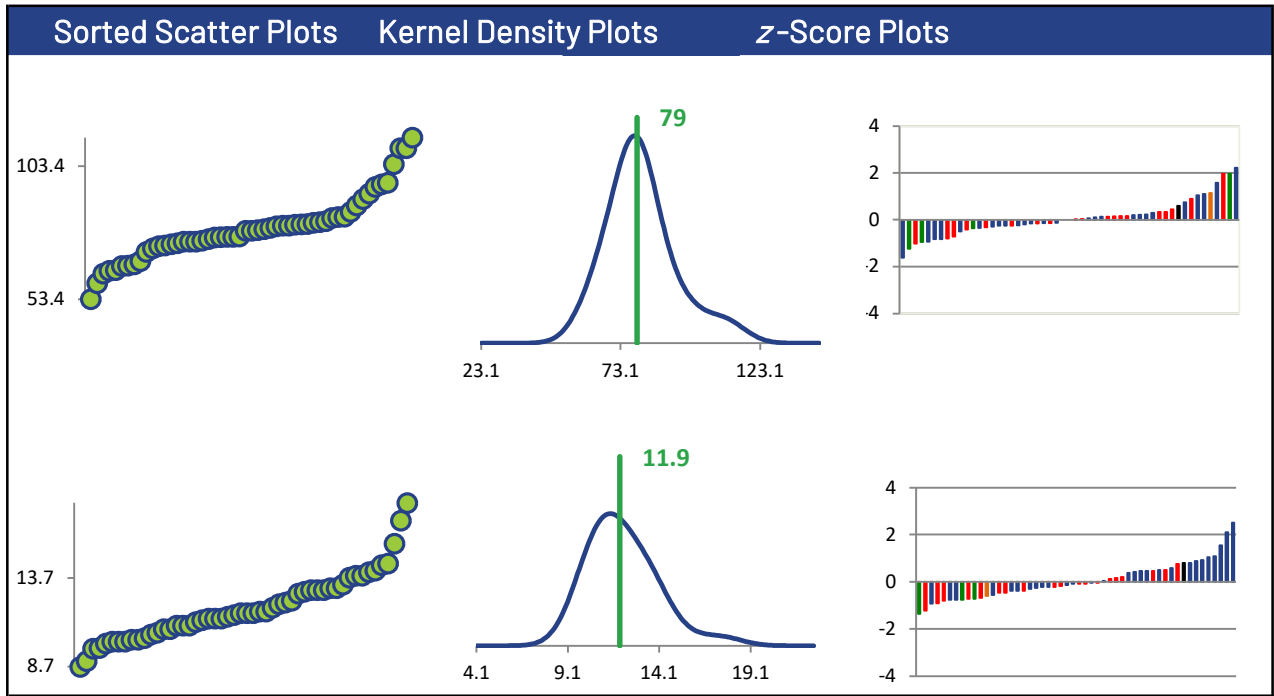
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	28	28	28	28
GC/MS - HEADSPACE (Red)	19	19	19	19
GC/MS (Green)	5	3	4	3
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1

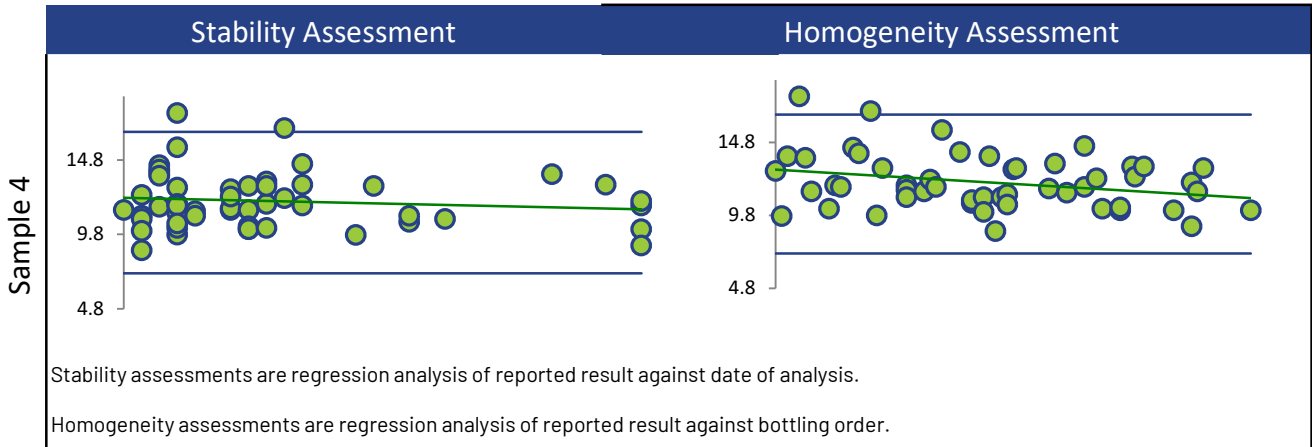
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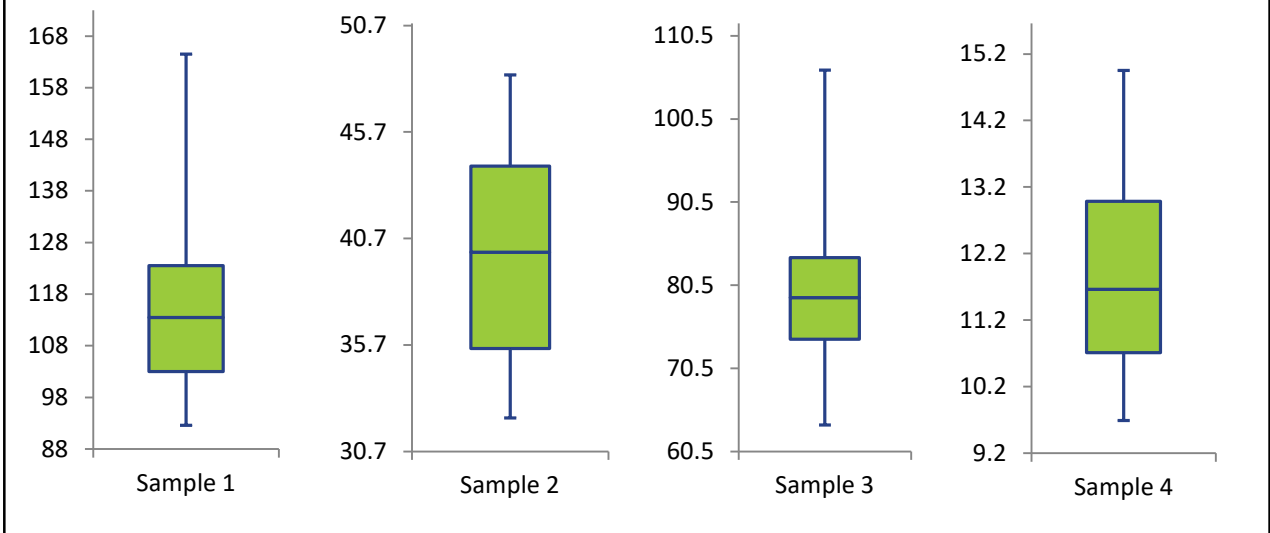
1,1-DICHLOROETHYLENE



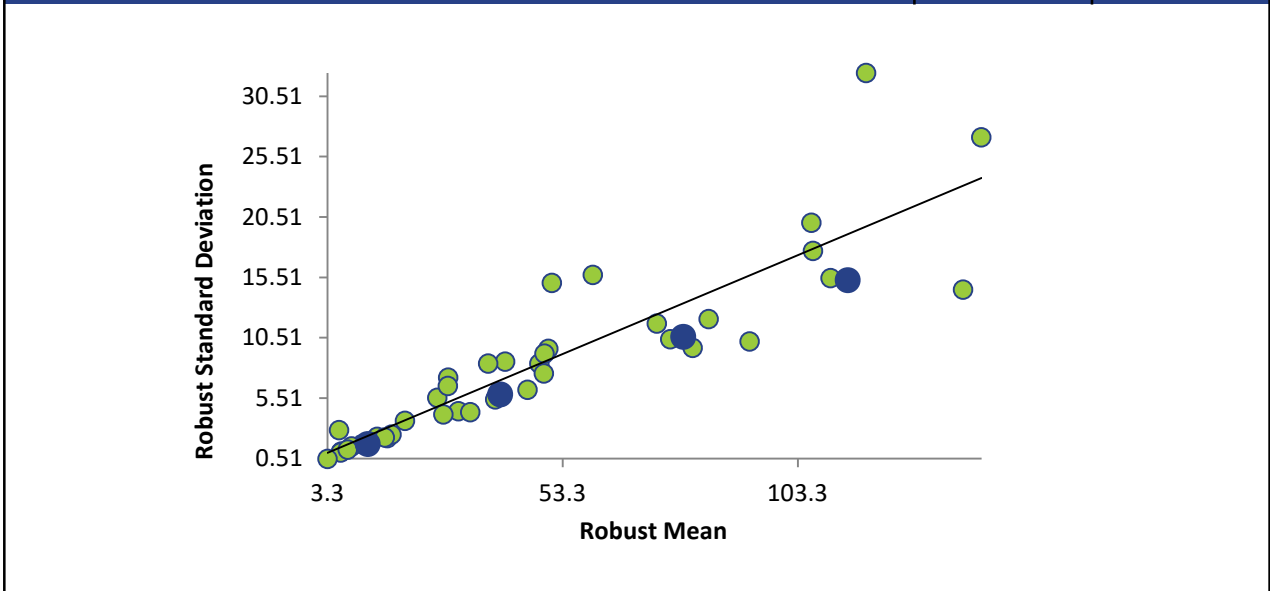
1,1-DICHLOROETHYLENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



1,2-DICHLOROBENZENE

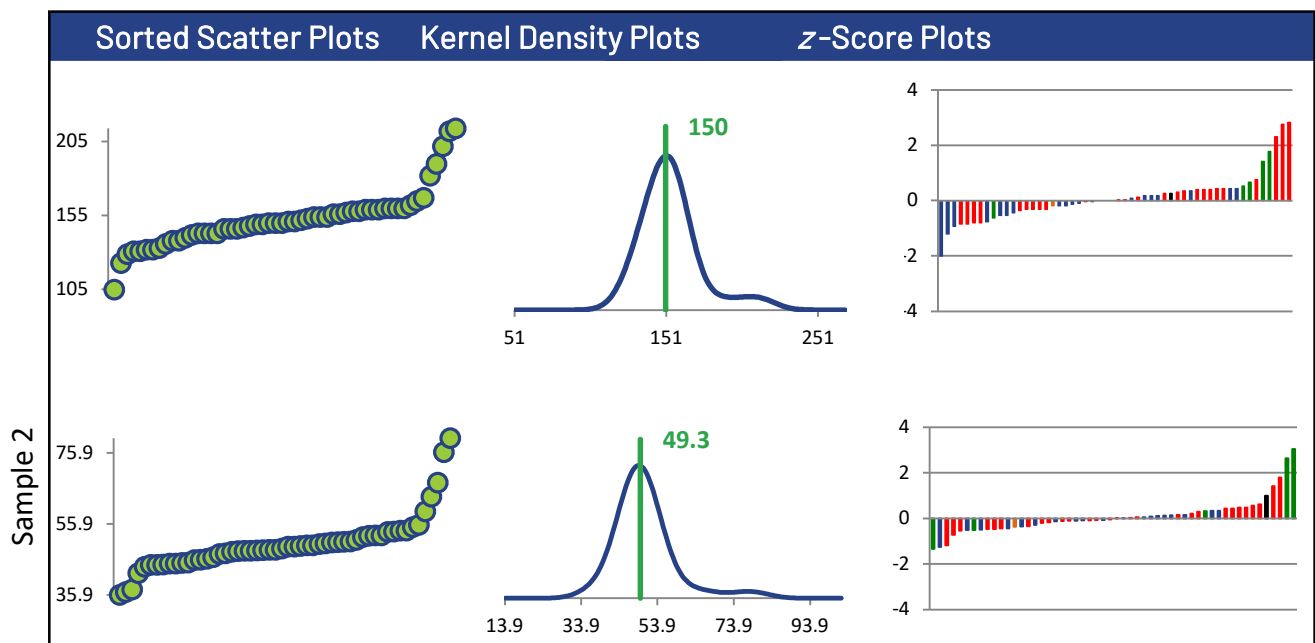
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	54	54	54	53
Median µg/L	151	49.2	98.8	14.7
Robust Mean µg/L	150	49.3	97.7	14.6
U µg/L	2.28	0.789	1.58	0.359
Robust Standard Deviation µg/L	13.4	4.64	9.27	2.09
Regression Standard Deviation µg/L	22.5	7.39	14.7	2.19
Stability Flag				
Homogeneity Flag		Homogeneity	Homogeneity	
Standard Deviation Used (SDPA) µg/L	22.5	10.1	22.5	2.19
Outliers	1	1	1	2
z >3.0	0	1	0	2
2< z <3	3	1	1	2

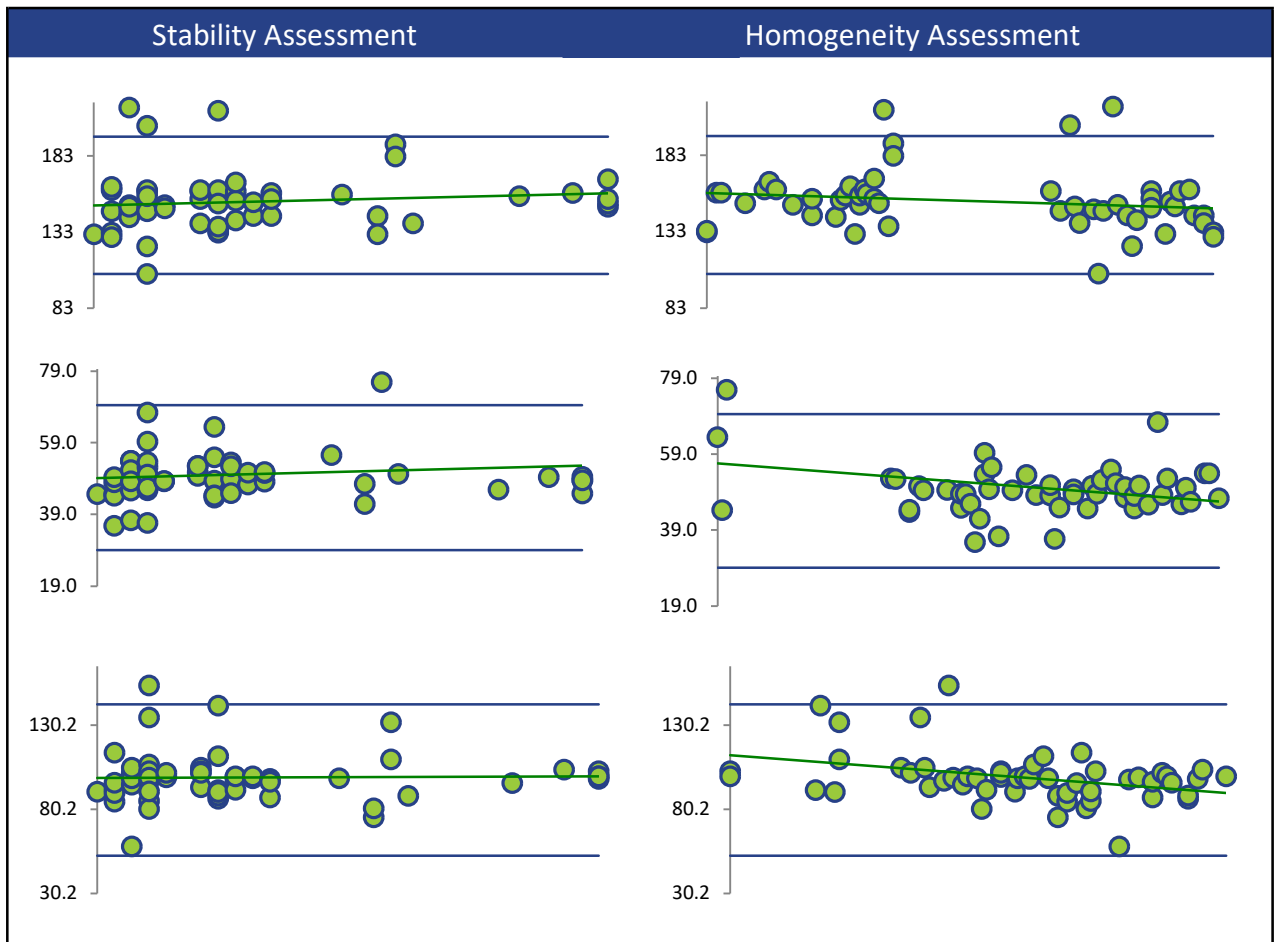
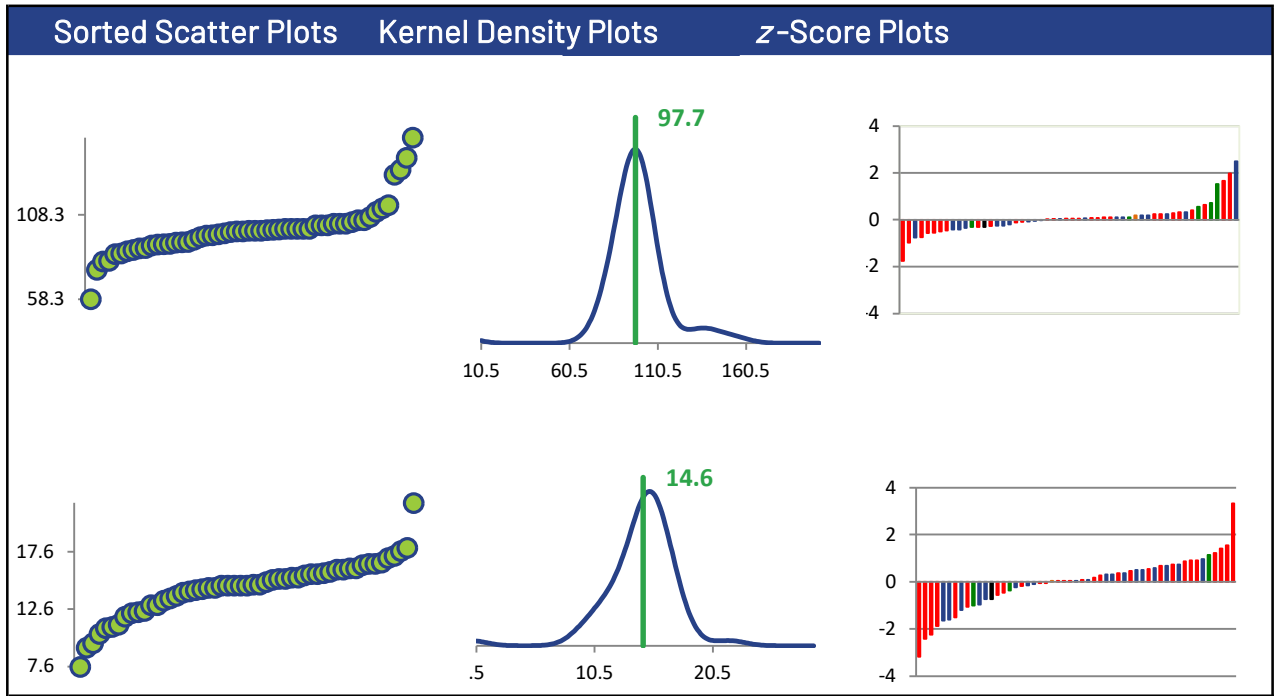
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	19	19
GC/MS - PURGE AND TRAP (Red)	28	28	28	29
GC/MS (Green)	5	5	5	3
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

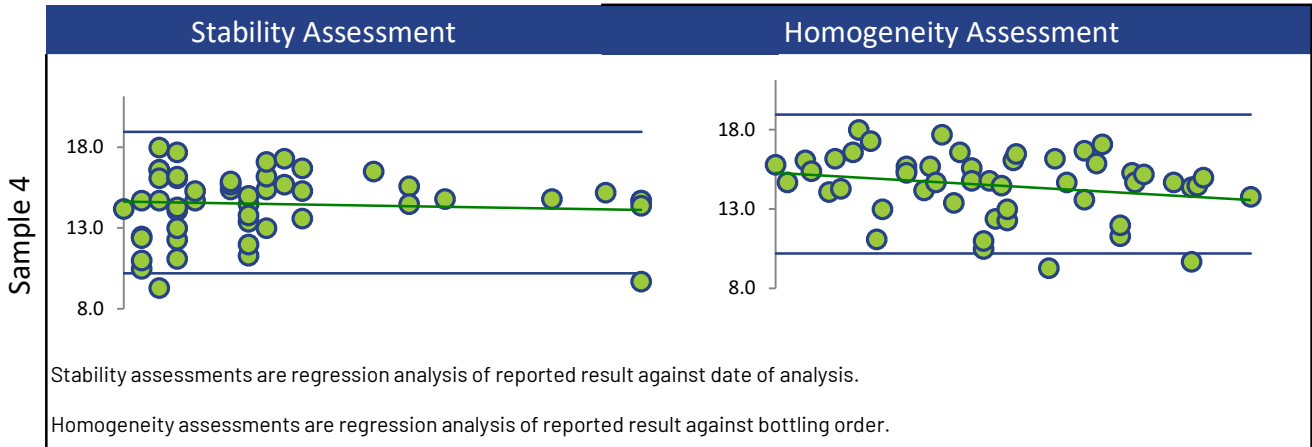
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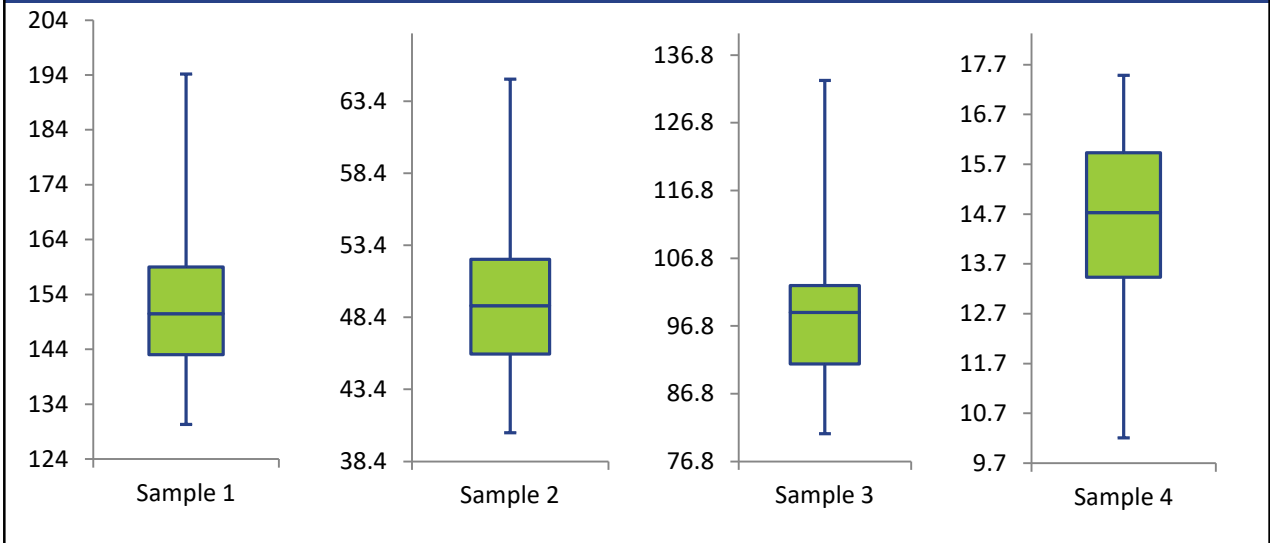
1,2-DICHLOROBENZENE



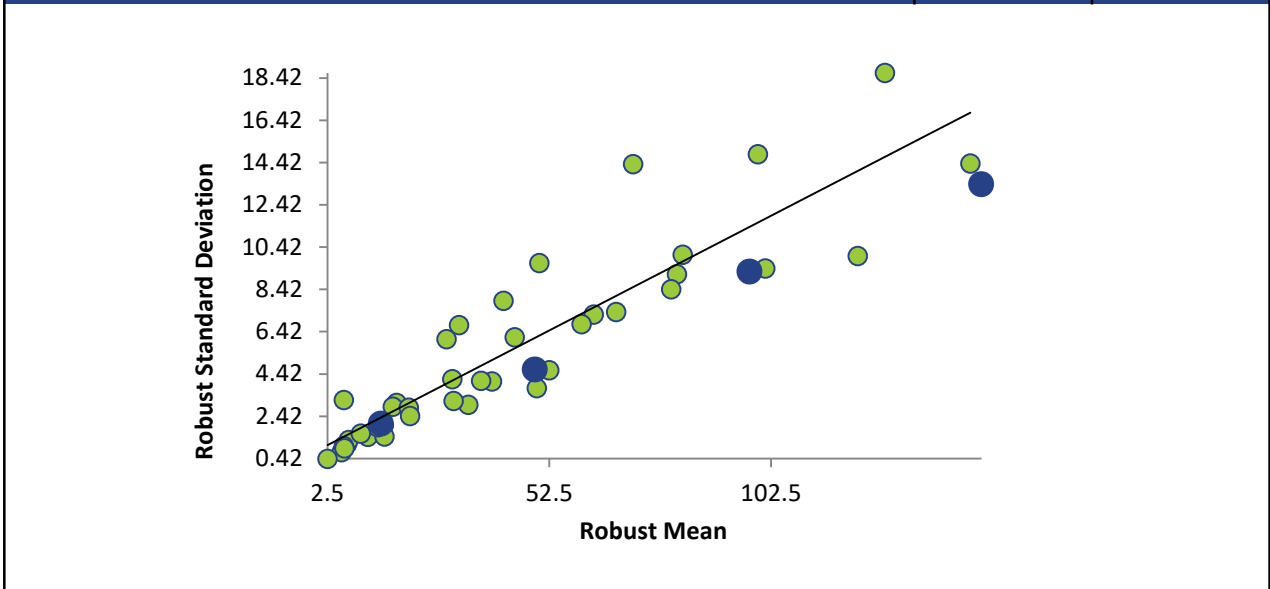
1,2-DICHLOROBENZENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



1,2-DICHLOROETHANE

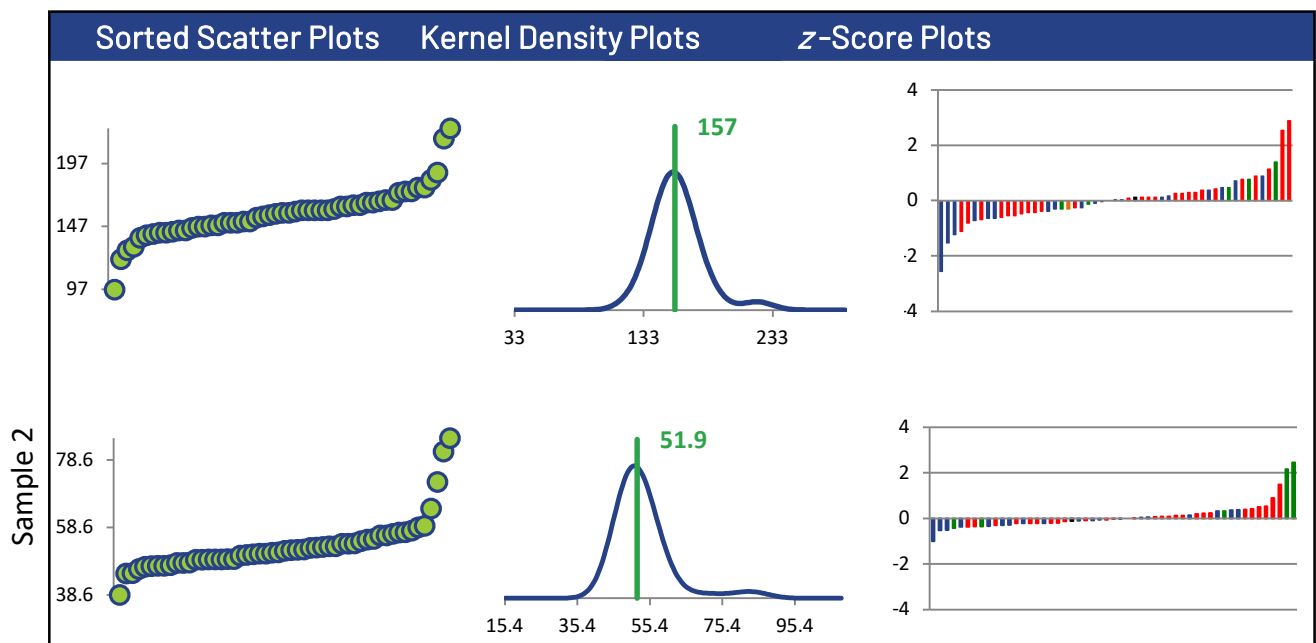
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	53	53	53	52
Median µg/L	158	51.6	104	16.0
Robust Mean µg/L	157	51.9	104	15.9
U µg/L	2.61	0.798	1.41	0.317
Robust Standard Deviation µg/L	15.2	4.65	8.22	1.83
Regression Standard Deviation µg/L	23.5	7.78	15.6	2.38
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA) µg/L	23.5	13.5	15.6	2.38
Outliers	1	1	1	2
z >3.0	0	0	0	1
2< z <3	3	2	2	0

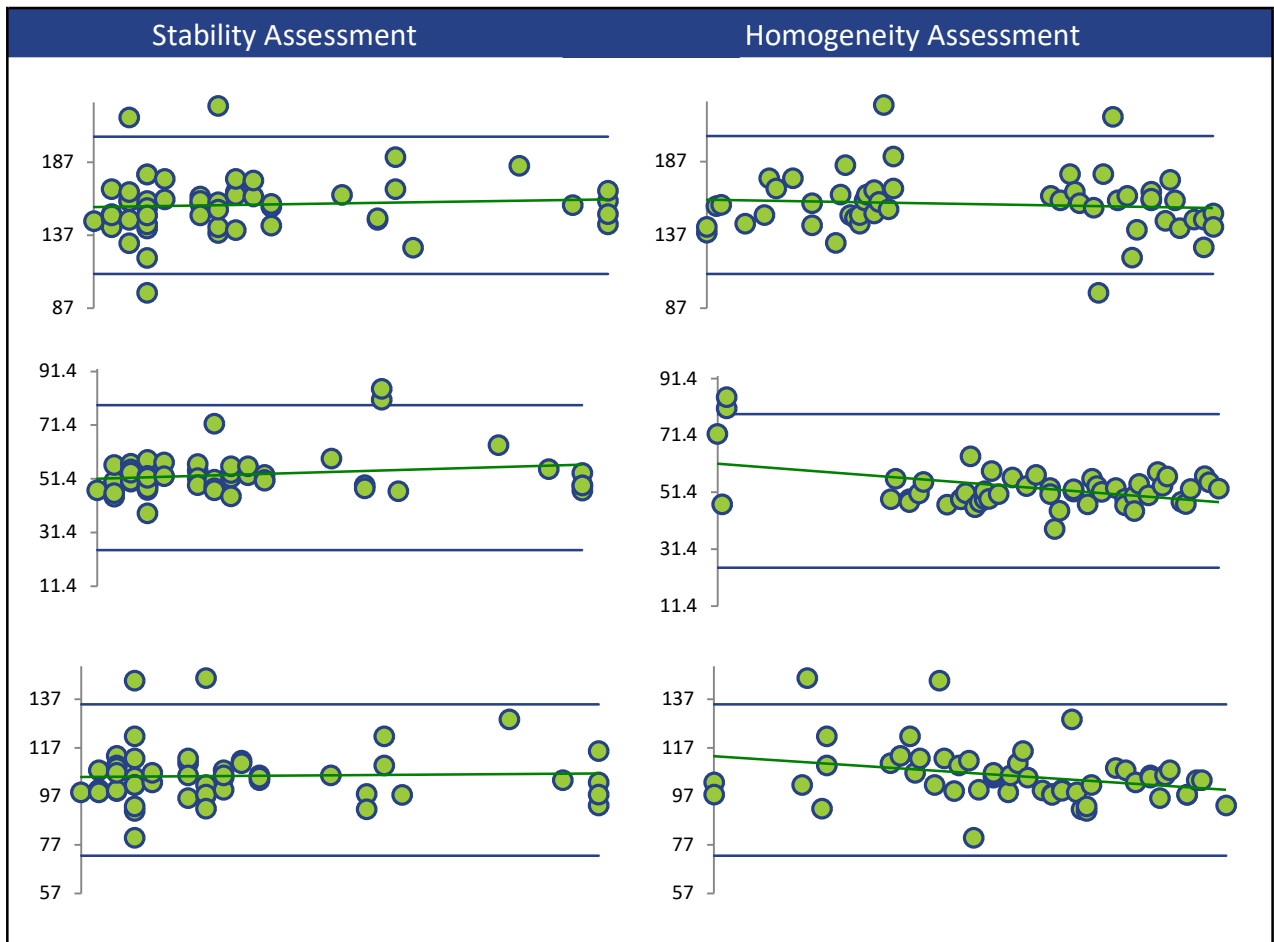
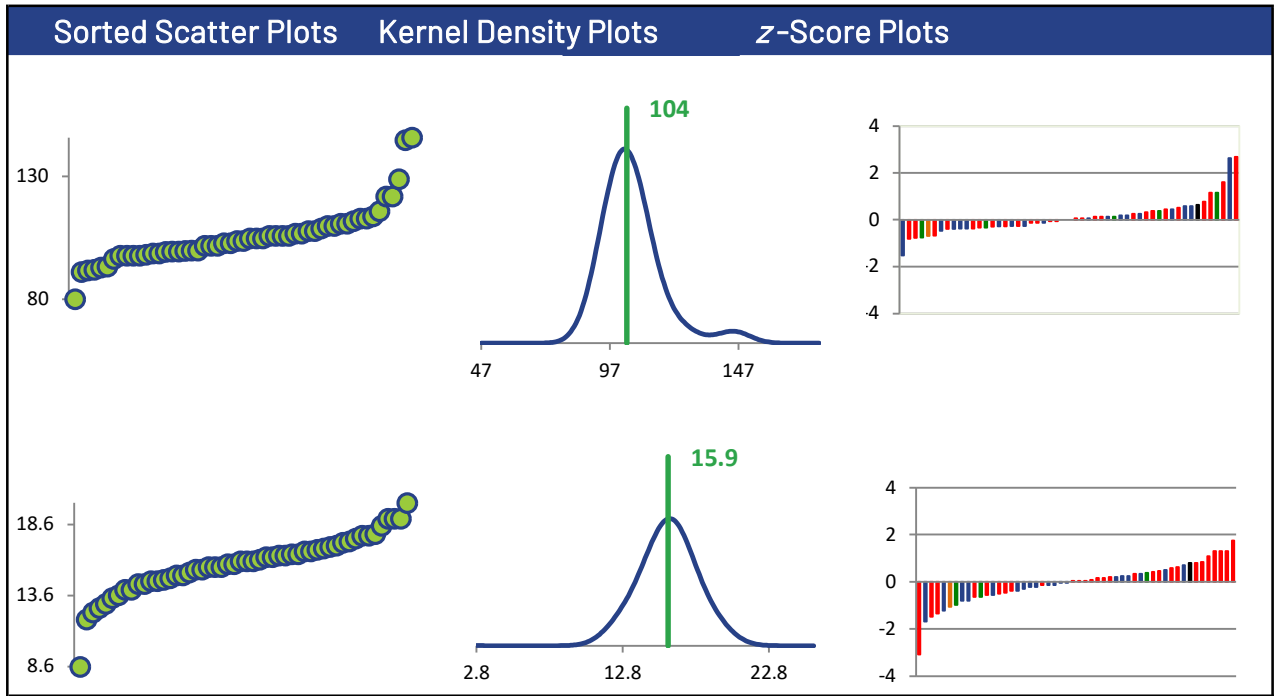
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	19	19
GC/MS - PURGE AND TRAP (Red)	27	27	27	28
GC/MS (Green)	5	5	5	3
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1

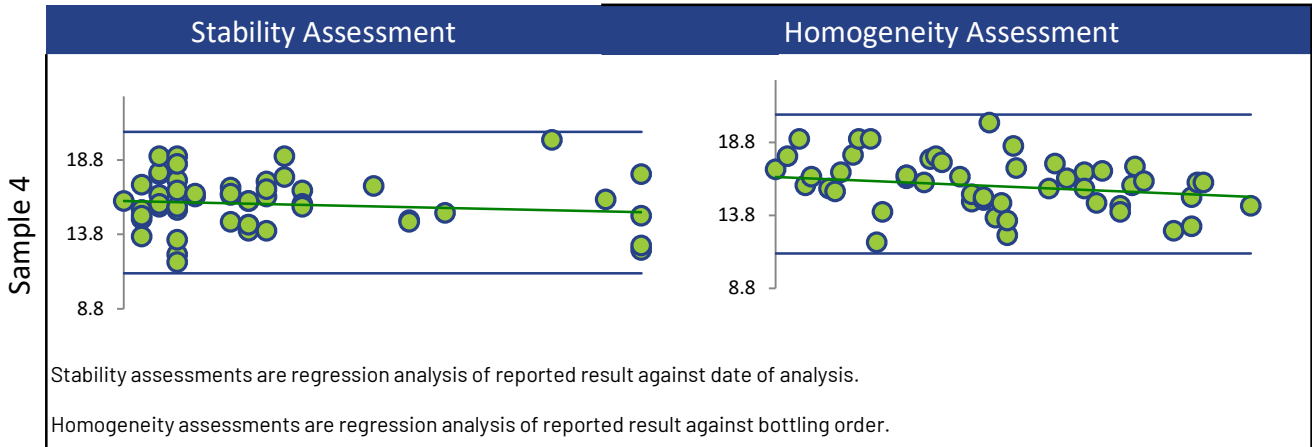
All summary stats and the plots below are based on the data excluding any flagged outliers



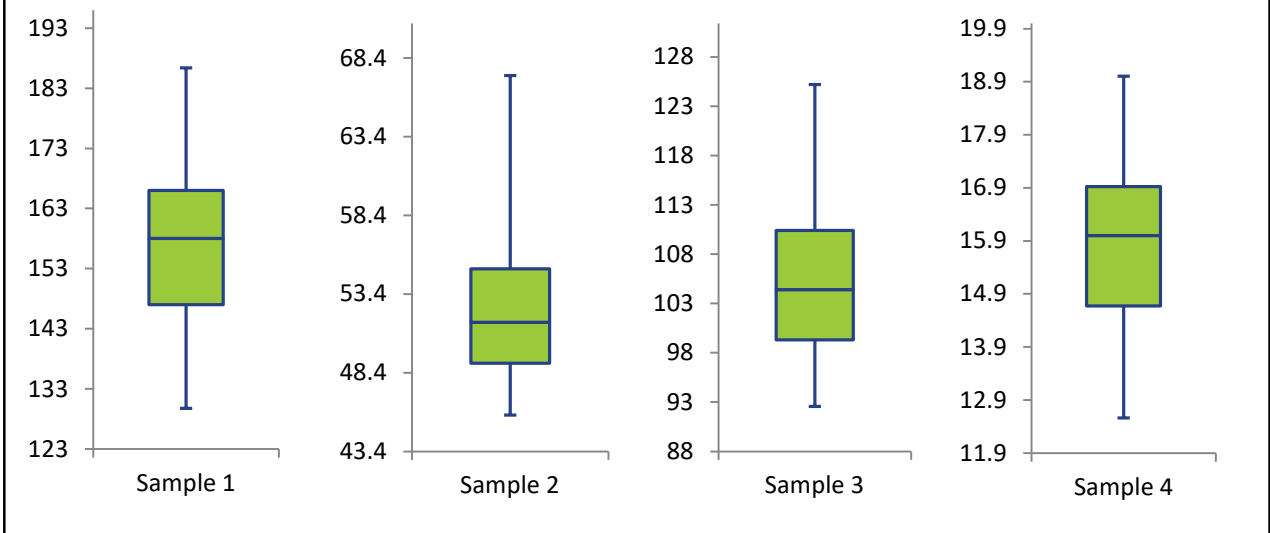
1,2-DICHLOROETHANE



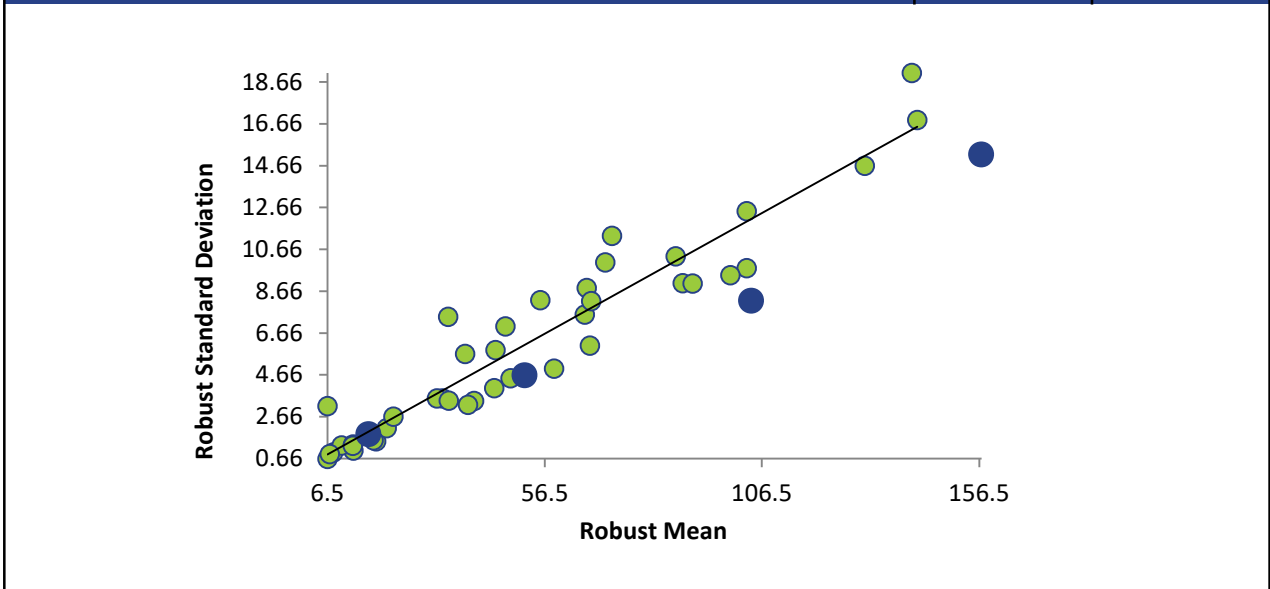
1,2-DICHLOROETHANE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



1,2-DICHLOROPROPANE

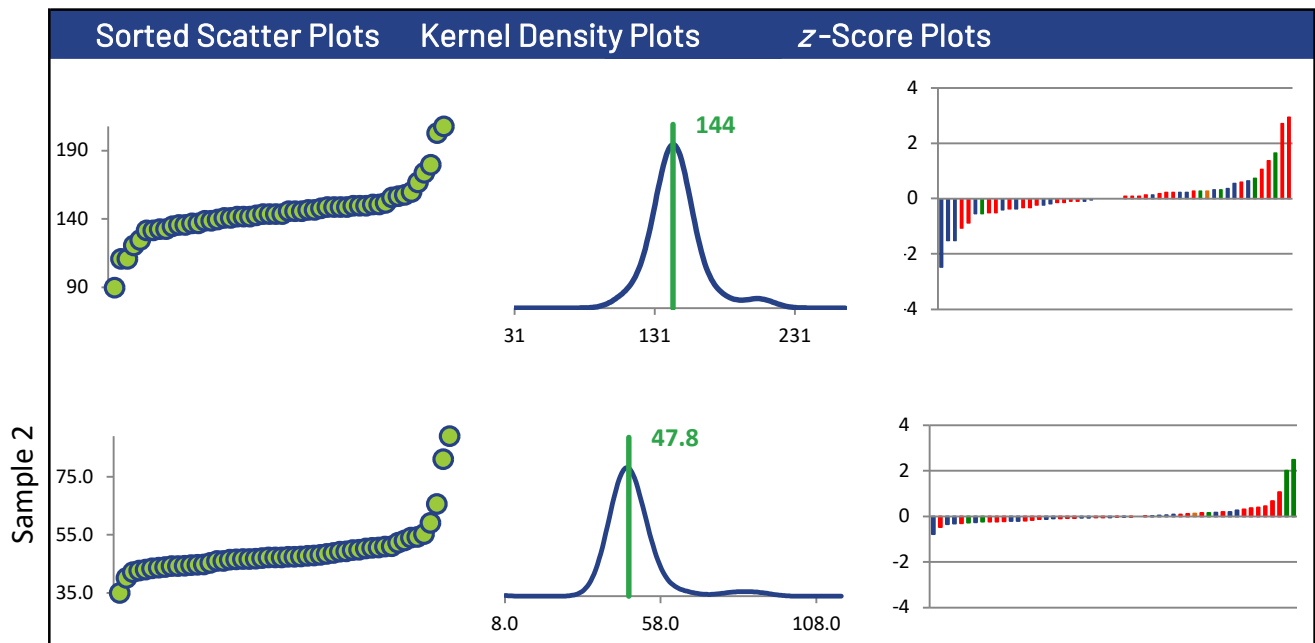
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	52	52	52	50
Median µg/L	144	47.3	96.2	14.4
Robust Mean µg/L	144	47.8	96.1	14.3
U µg/L	1.92	0.711	1.10	0.233
Robust Standard Deviation µg/L	11.1	4.10	6.37	1.32
Regression Standard Deviation µg/L	21.7	7.17	14.4	2.15
Stability Flag				
Homogeneity Flag		Homogeneity		
Standard Deviation Used (SDPA) µg/L	21.7	16.6	14.4	2.15
Outliers	0	0	0	2
z >3.0	0	0	0	0
2< z <3	3	1	4	0

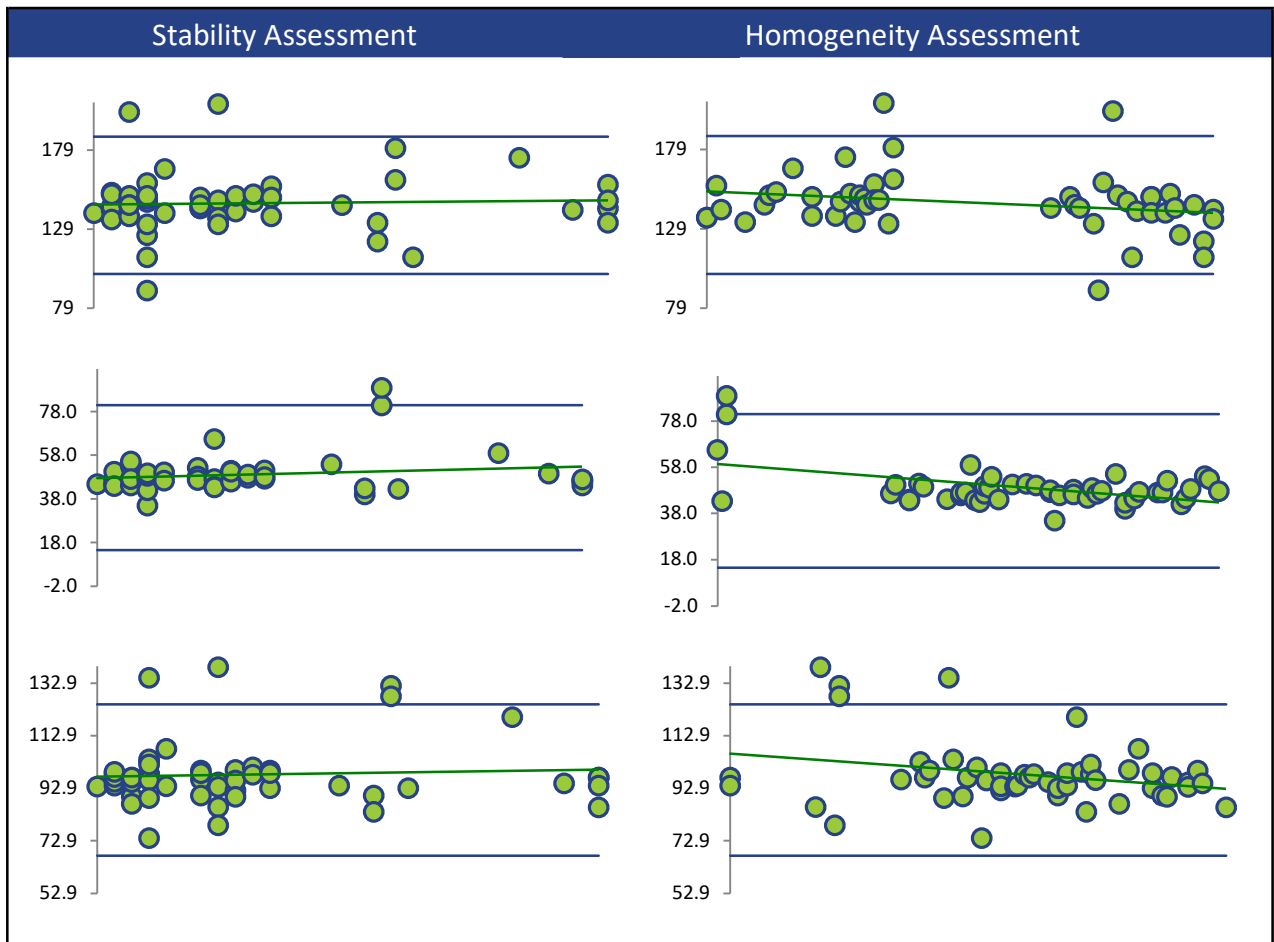
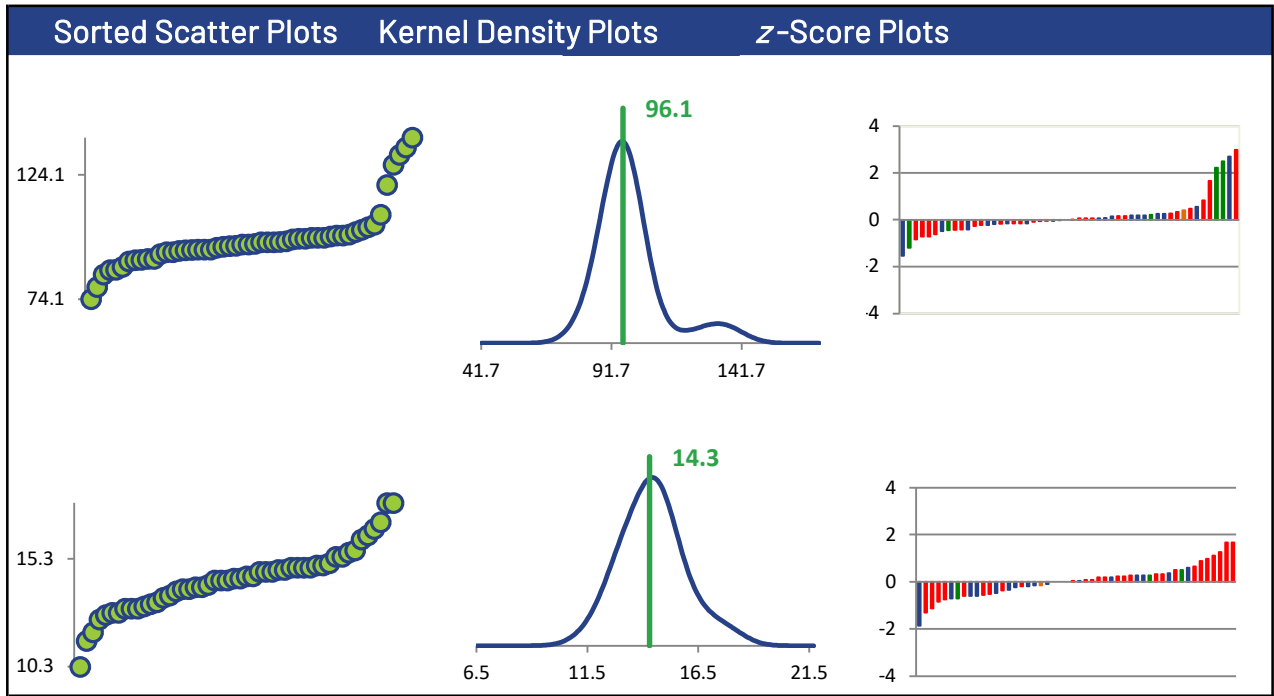
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	19	19
GC/MS - PURGE AND TRAP (Red)	27	27	27	27
GC/MS (Green)	5	5	5	3
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1

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



1,2-DICHLOROPROPANE



1,3-DICHLOROBENZENE

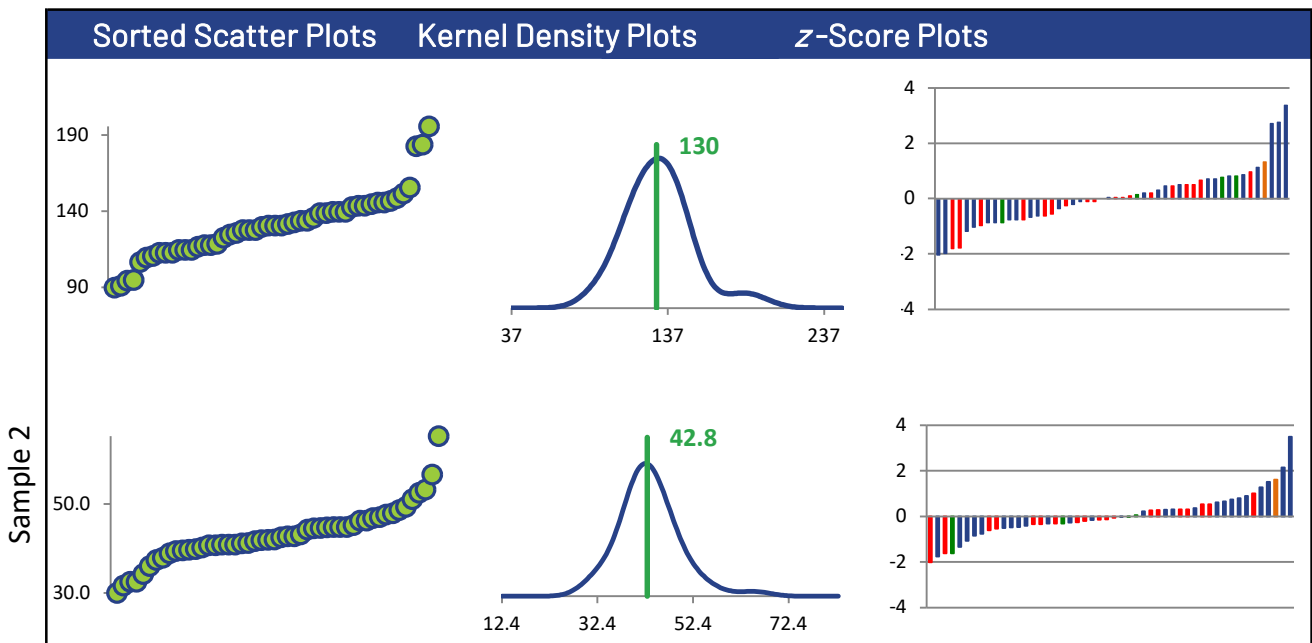
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	50	50	50	50
Median µg/L	131	42.3	84.9	12.8
Robust Mean µg/L	130	42.8	85.5	12.7
U µg/L	3.16	0.894	1.54	0.334
Robust Standard Deviation µg/L	17.9	5.06	8.72	1.89
Regression Standard Deviation µg/L	19.5	6.41	12.8	1.90
Stability Flag				
Homogeneity Flag			Homogeneity	Homogeneity
Standard Deviation Used (SDPA) µg/L	19.5	6.41	18.0	2.38
Outliers	0	0	0	0
z >3.0	1	1	0	1
2< z <3	3	1	3	0

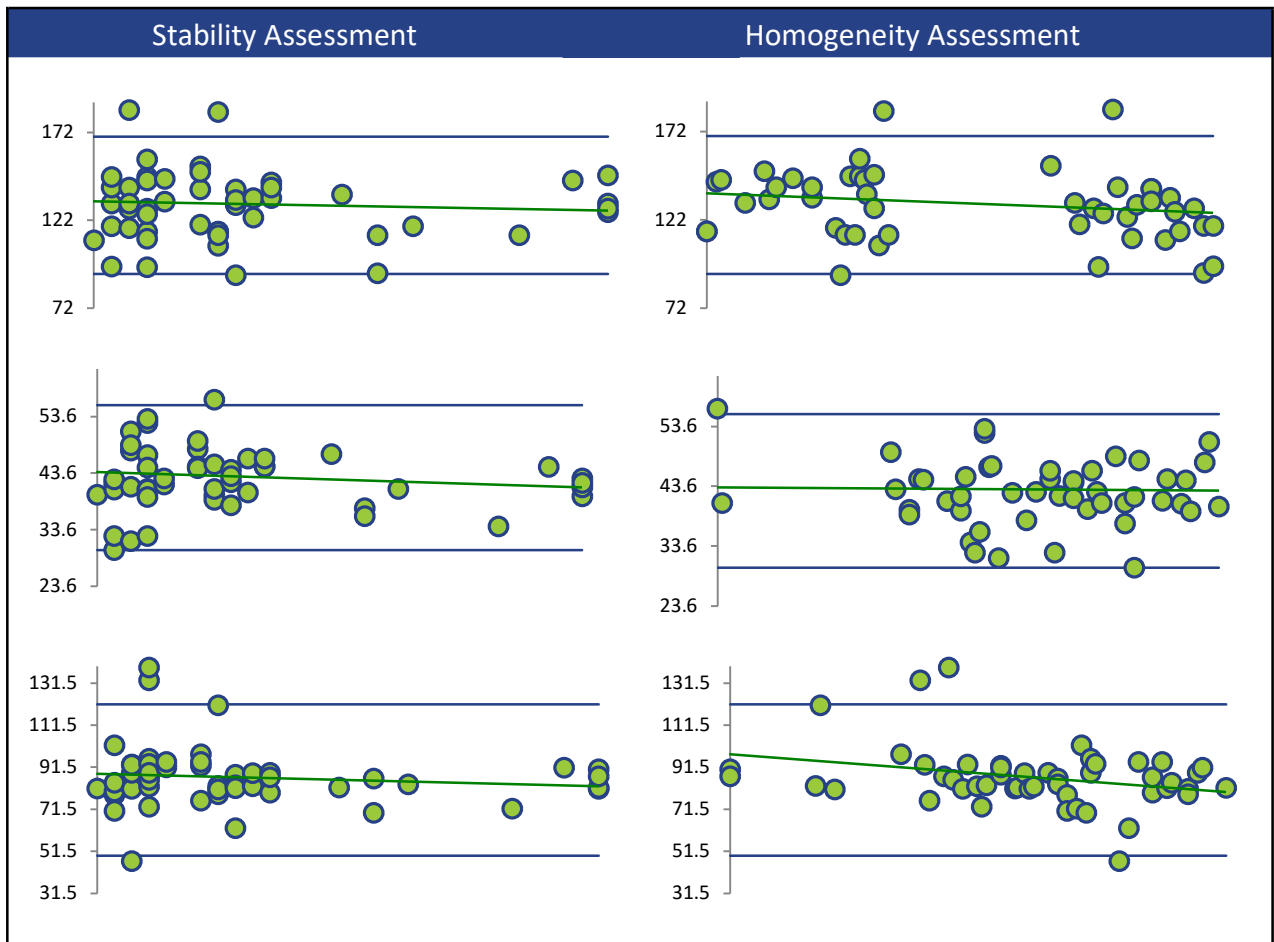
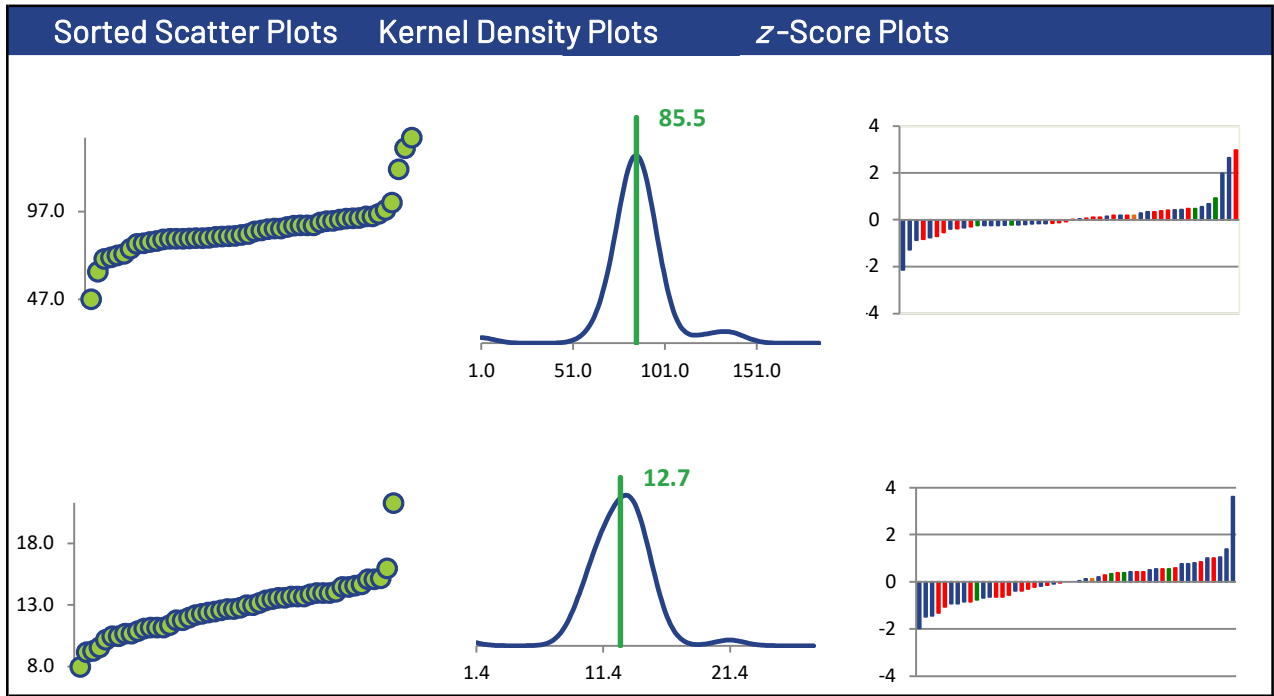
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	26	26	26	26
GC/MS - HEADSPACE (Red)	19	19	19	19
GC/MS (Green)	4	4	4	4
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1

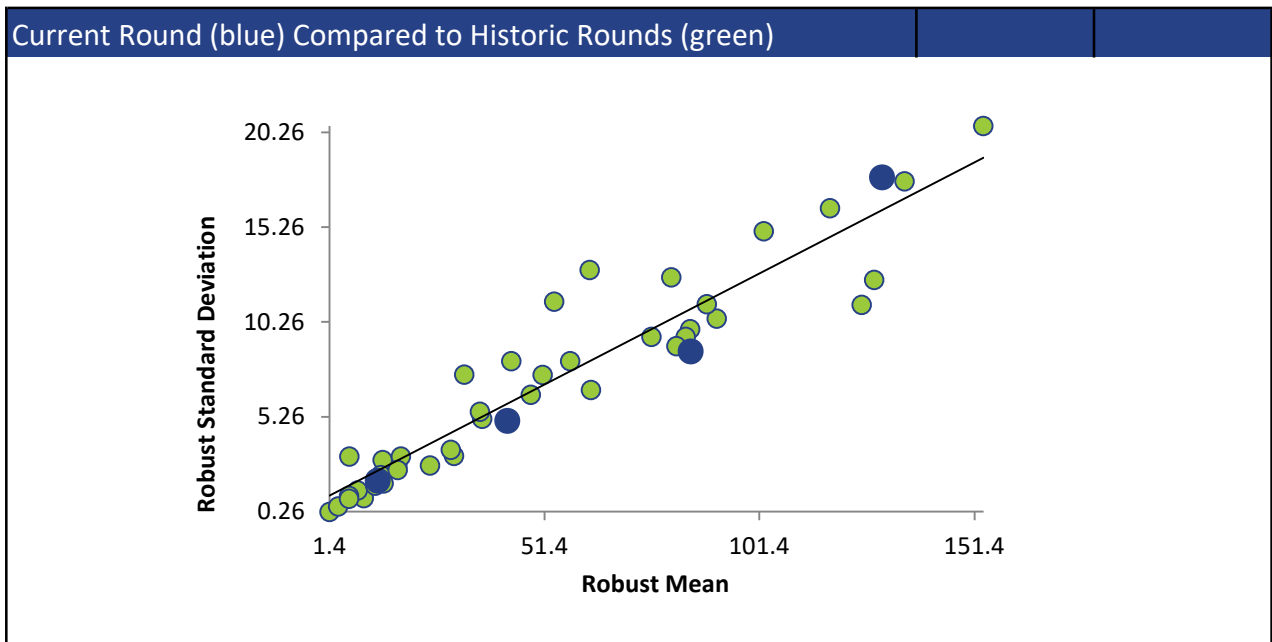
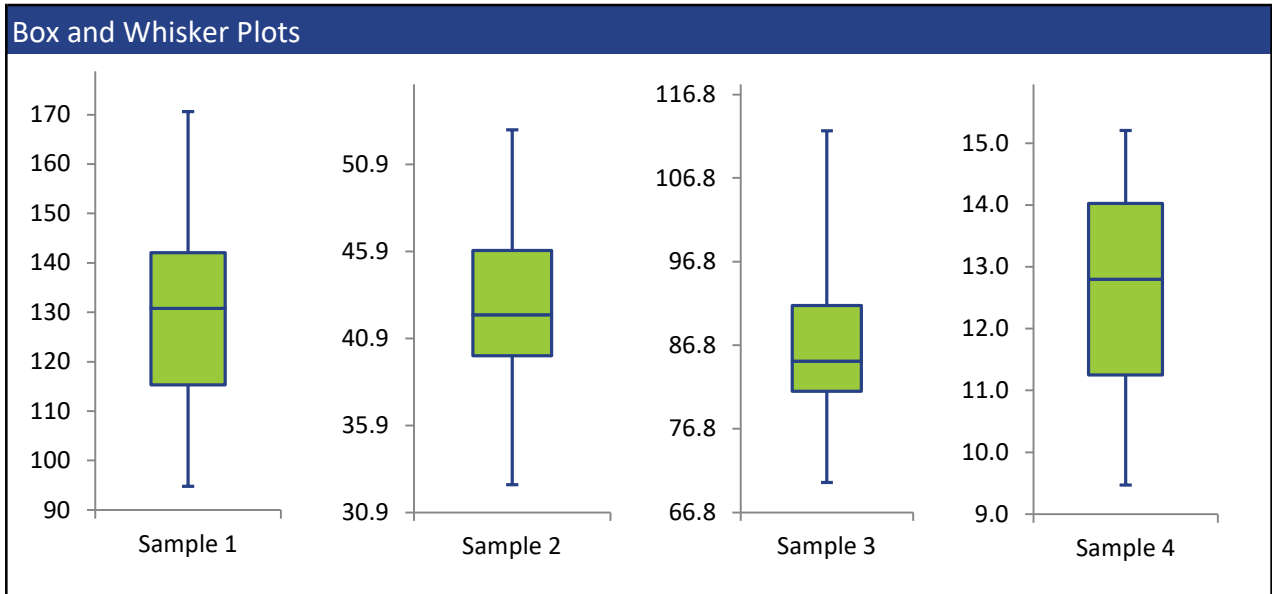
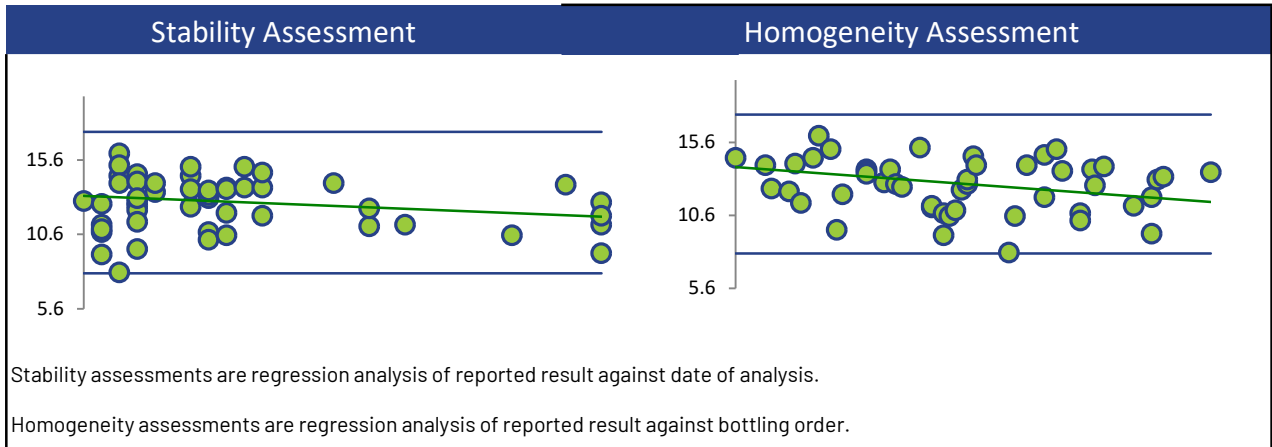
All summary stats and the plots below are based on the data excluding any flagged outliers



1,3-DICHLOROBENZENE



1,3-DICHLOROBENZENE



1,4-DICHLOROBENZENE

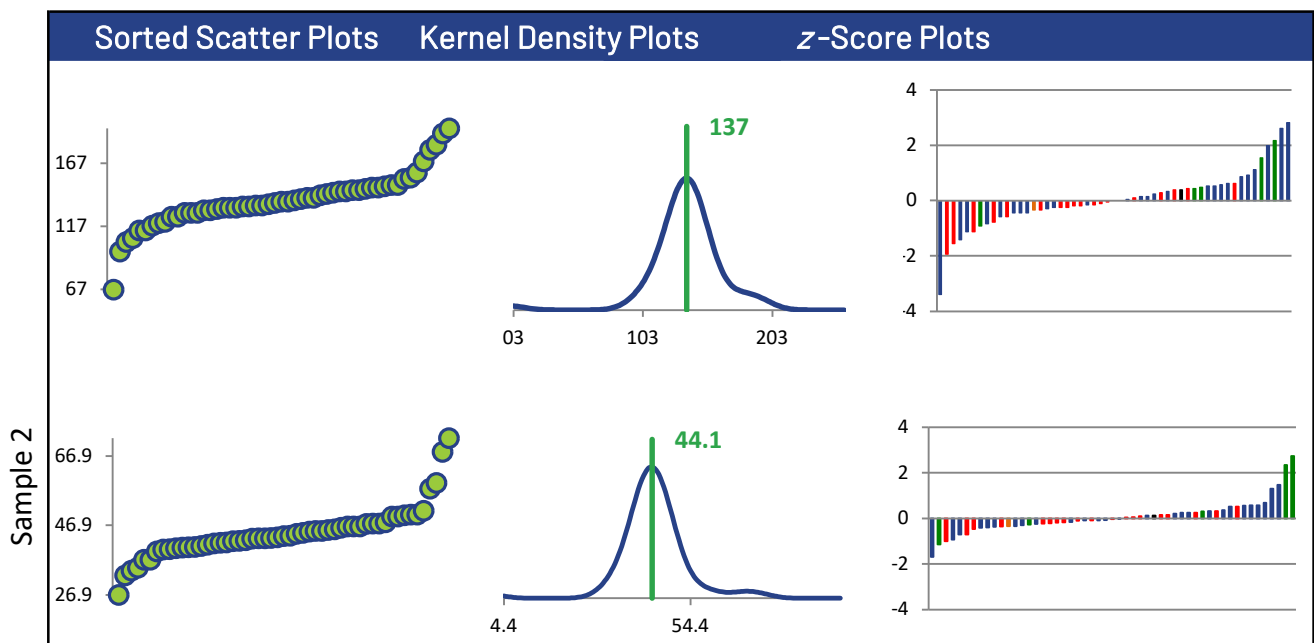
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	53	53	53	51
Median µg/L	137	43.8	89.0	13.4
Robust Mean µg/L	137	44.1	89.4	13.2
U µg/L	2.76	0.841	1.41	0.345
Robust Standard Deviation µg/L	16.1	4.90	8.24	1.97
Regression Standard Deviation µg/L	20.6	6.62	13.4	1.98
Stability Flag				
Homogeneity Flag		Homogeneity	Homogeneity	
Standard Deviation Used (SDPA) µg/L	20.6	10.2	17.5	1.98
Outliers	0	0	0	2
z >3.0	1	0	1	1
2< z <3	3	2	1	2

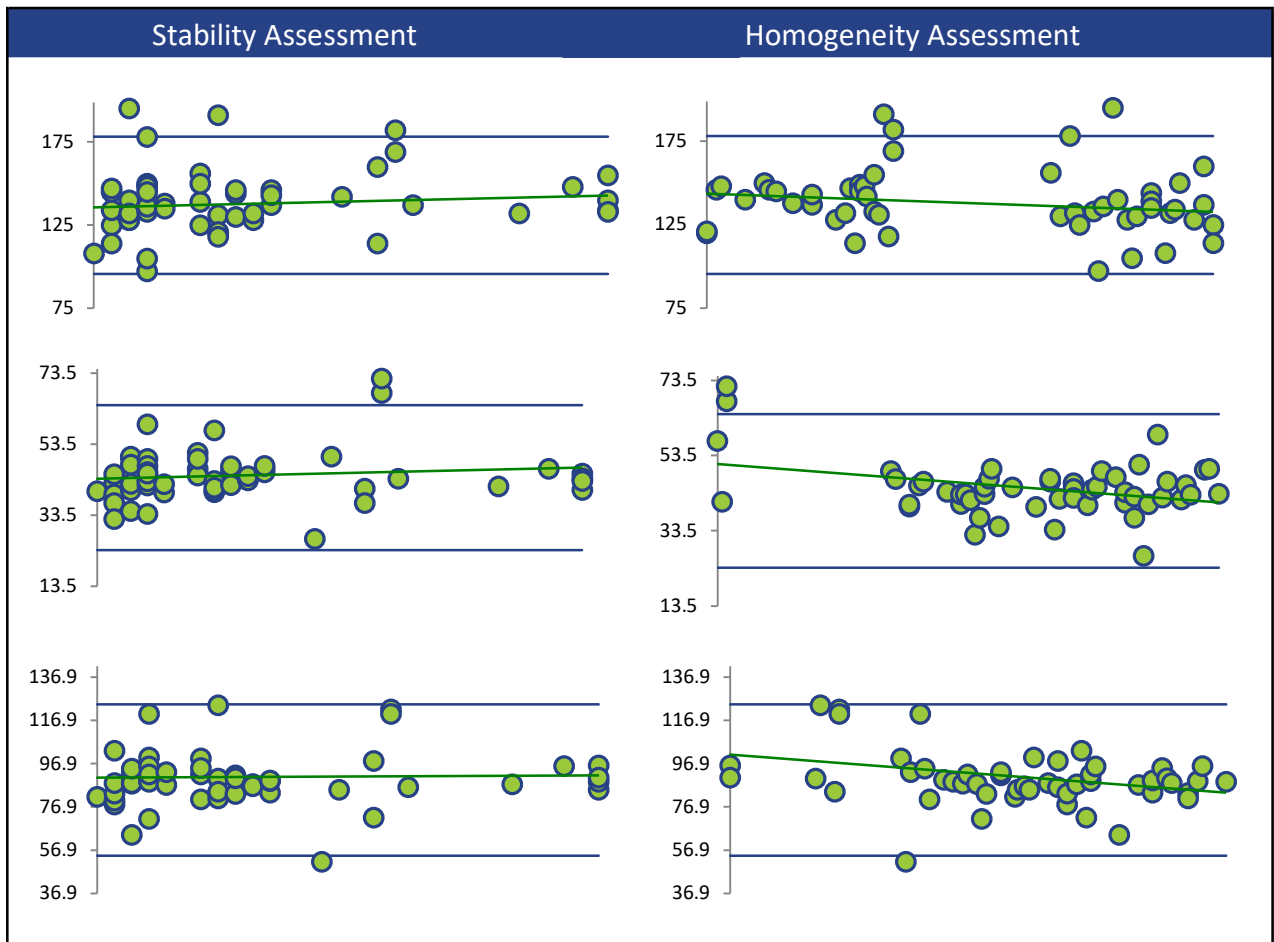
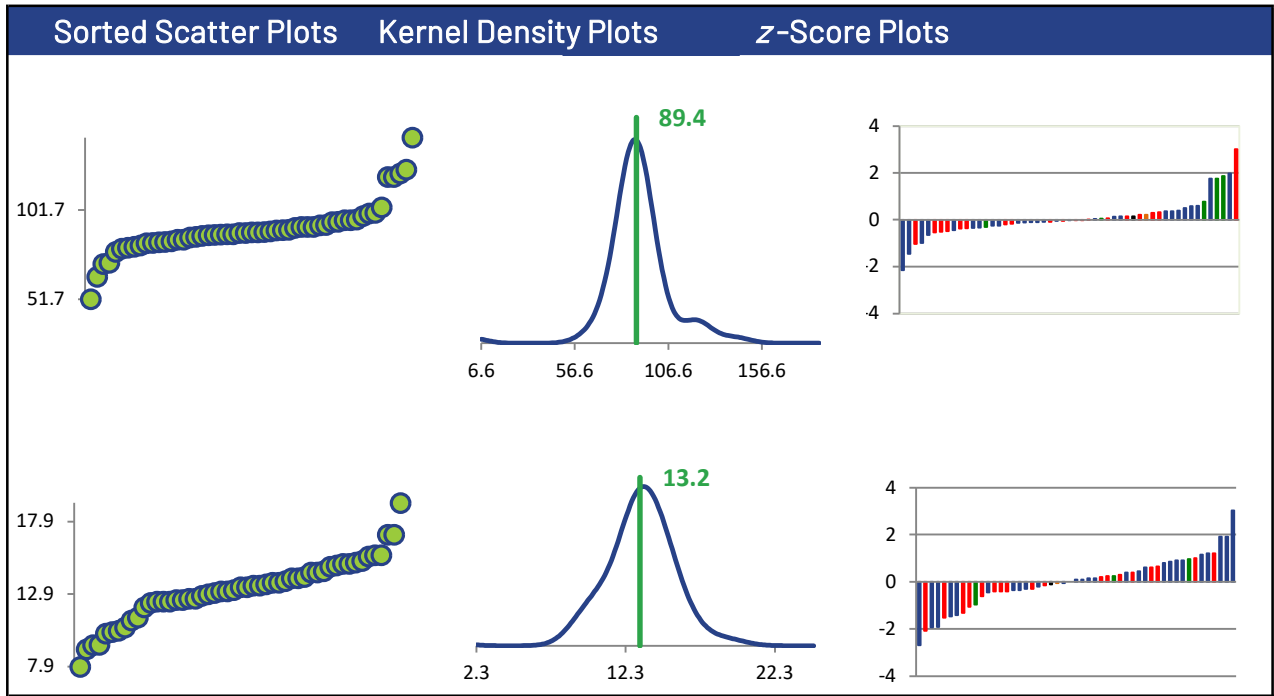
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	27	27	27	27
GC/MS - HEADSPACE (Red)	19	19	19	19
GC/MS (Green)	5	5	5	3
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

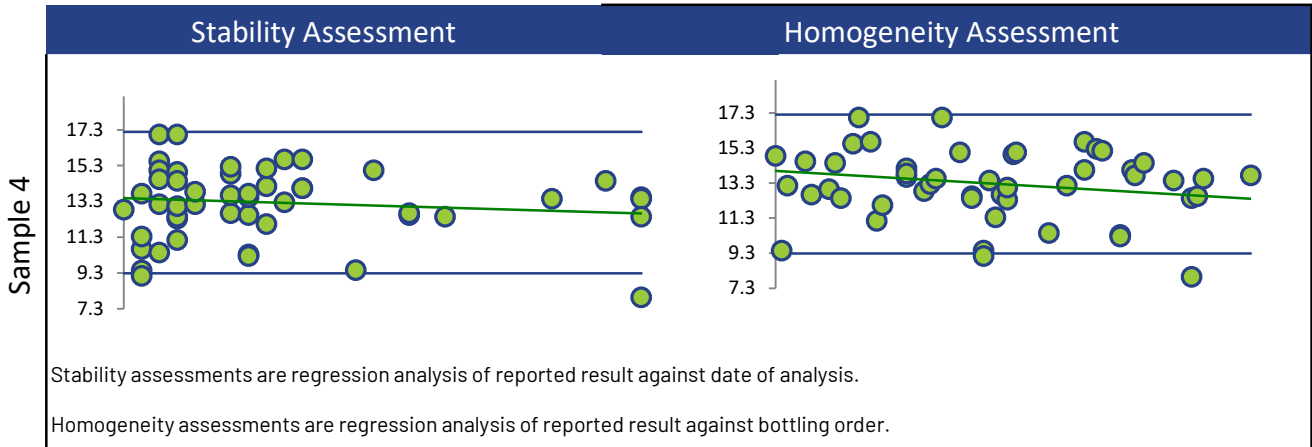
All summary stats and the plots below are based on the data excluding any flagged outliers



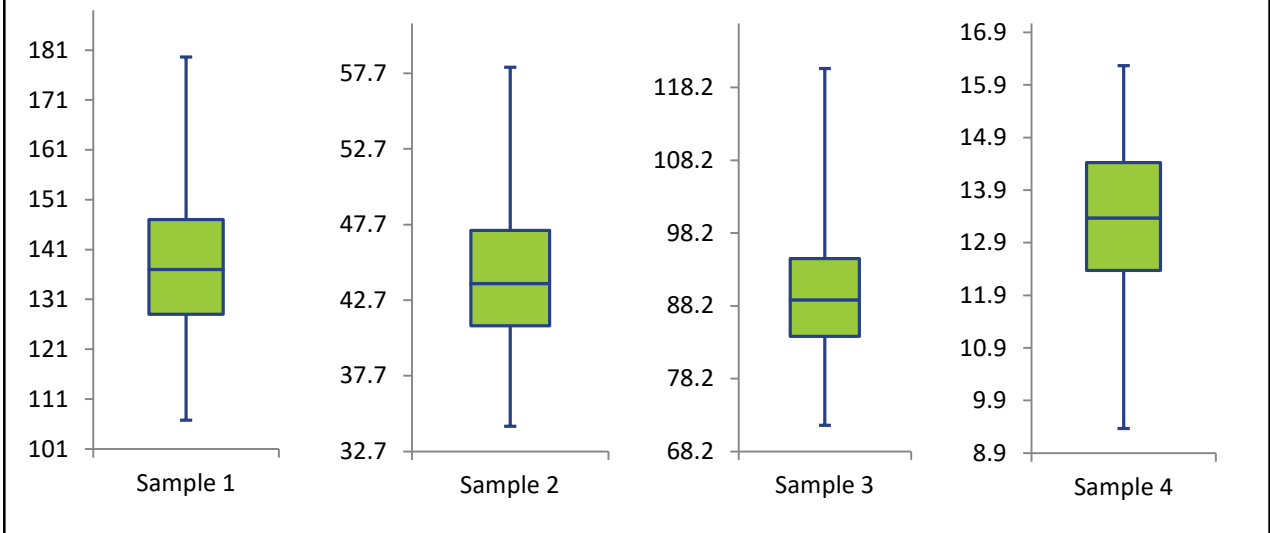
1,4-DICHLOROBENZENE



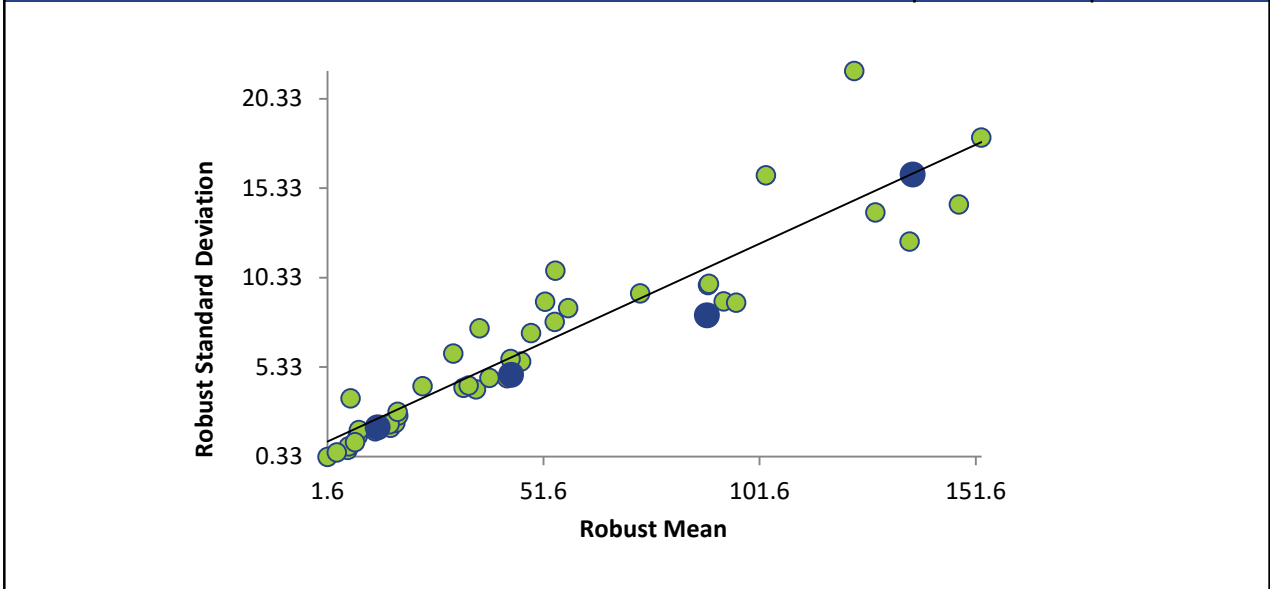
1,4-DICHLOROBENZENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



ACETONE (2-PROPANONE)

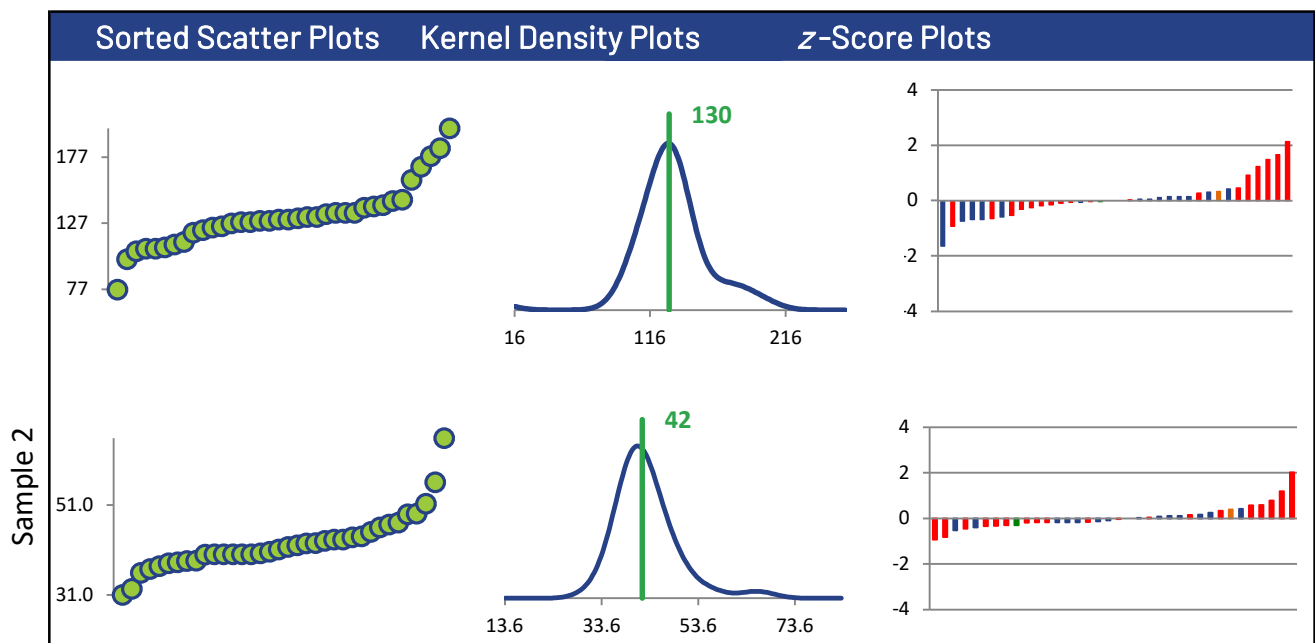
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	36	36	36	28
Median µg/L	130	41.4	87.3	14.8
Robust Mean µg/L	130	42.0	88.6	15.0
U µg/L	3.75	0.975	2.25	0.572
Robust Standard Deviation µg/L	18.0	4.68	10.8	2.42
Regression Standard Deviation µg/L	32.3	11.8	22.7	5.54
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	32.3	11.8	22.7	5.54
Outliers	2	2	2	2
z >3.0	0	0	0	0
2< z <3	1	1	0	0

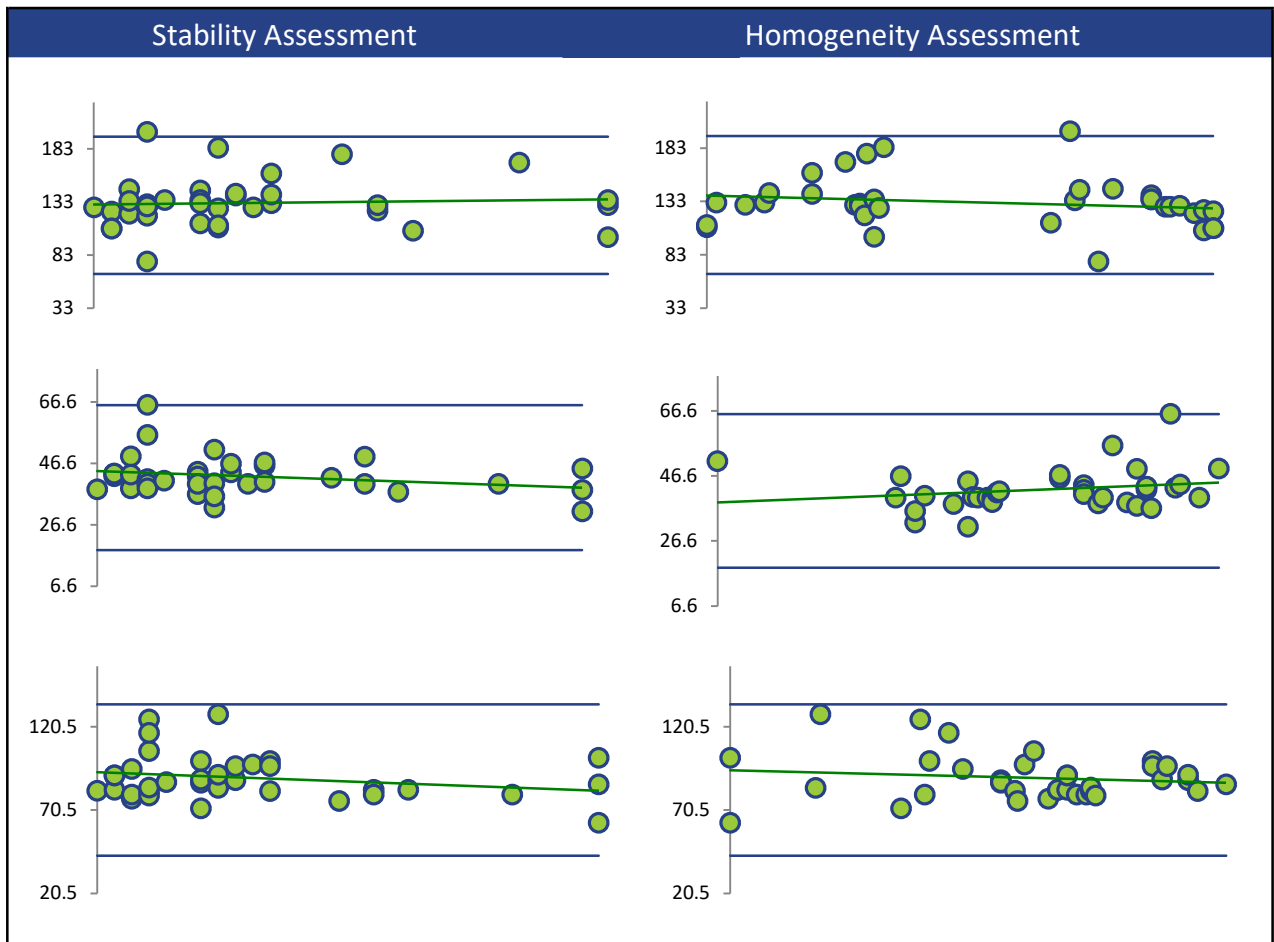
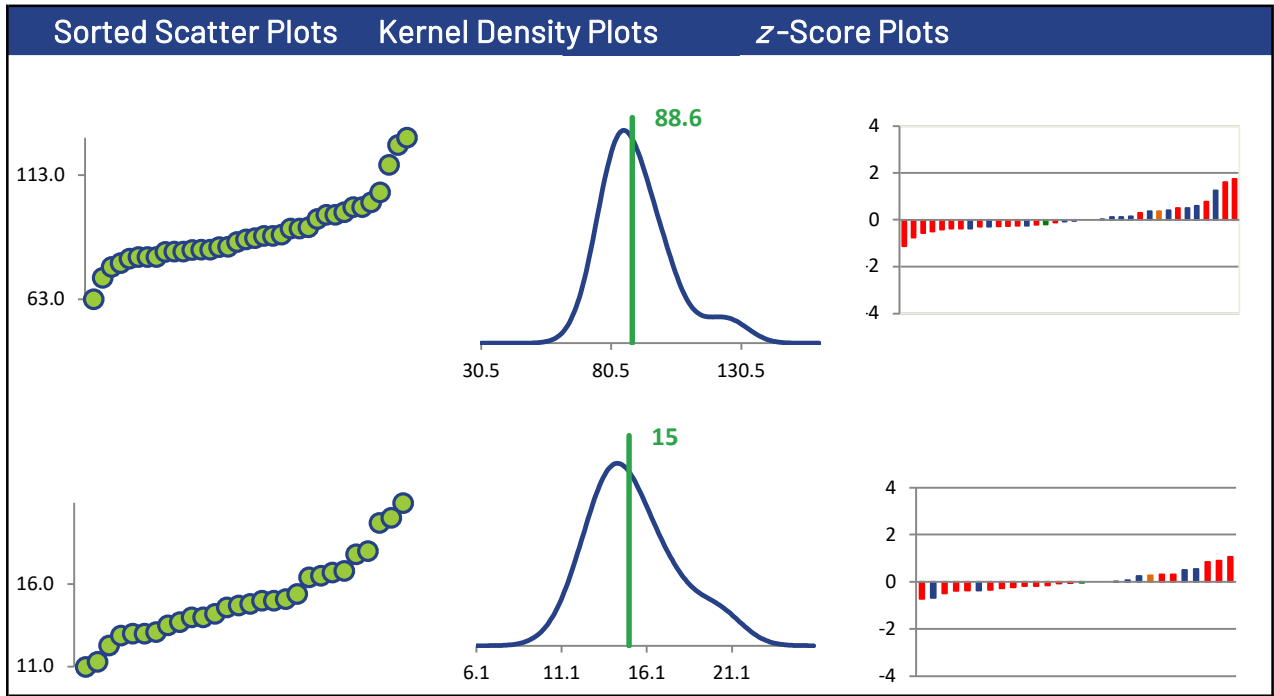
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	14	14	14	9
GC/MS - PURGE AND TRAP (Red)	20	20	20	17
GC/FID - PURGE AND TRAP (Green)	1	1	1	1
GC/MS (Orange)	1	1	1	1

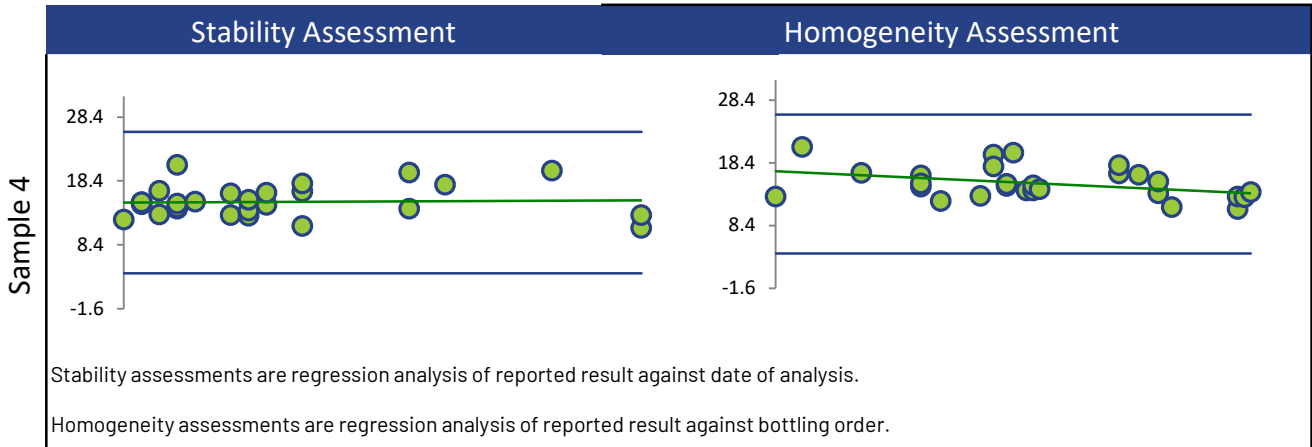
All summary stats and the plots below are based on the data excluding any flagged outliers



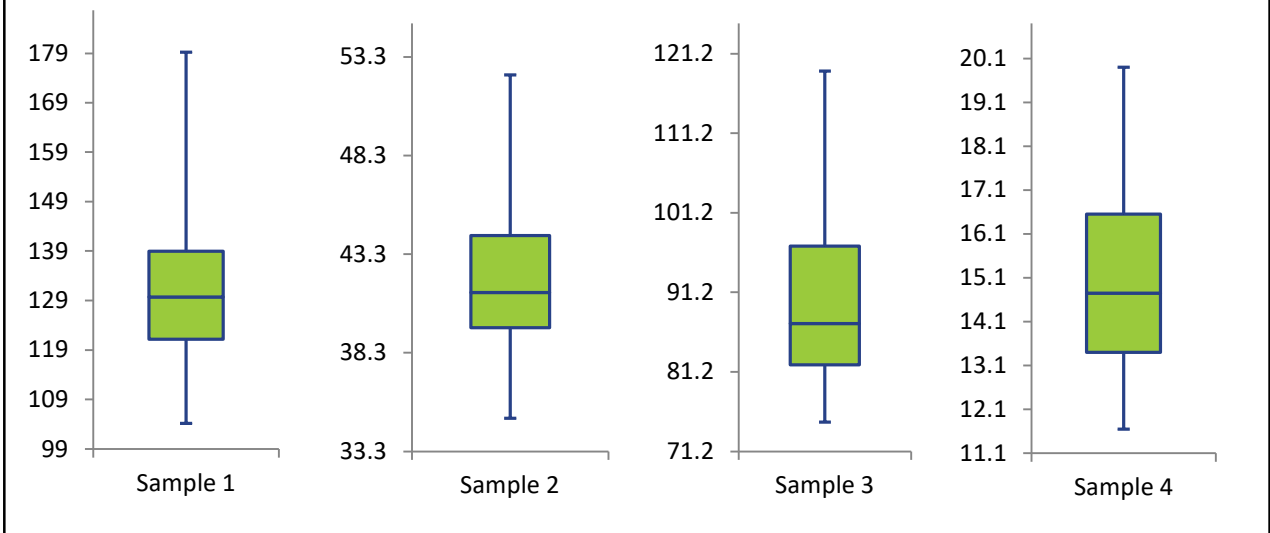
ACETONE (2-PROPANONE)



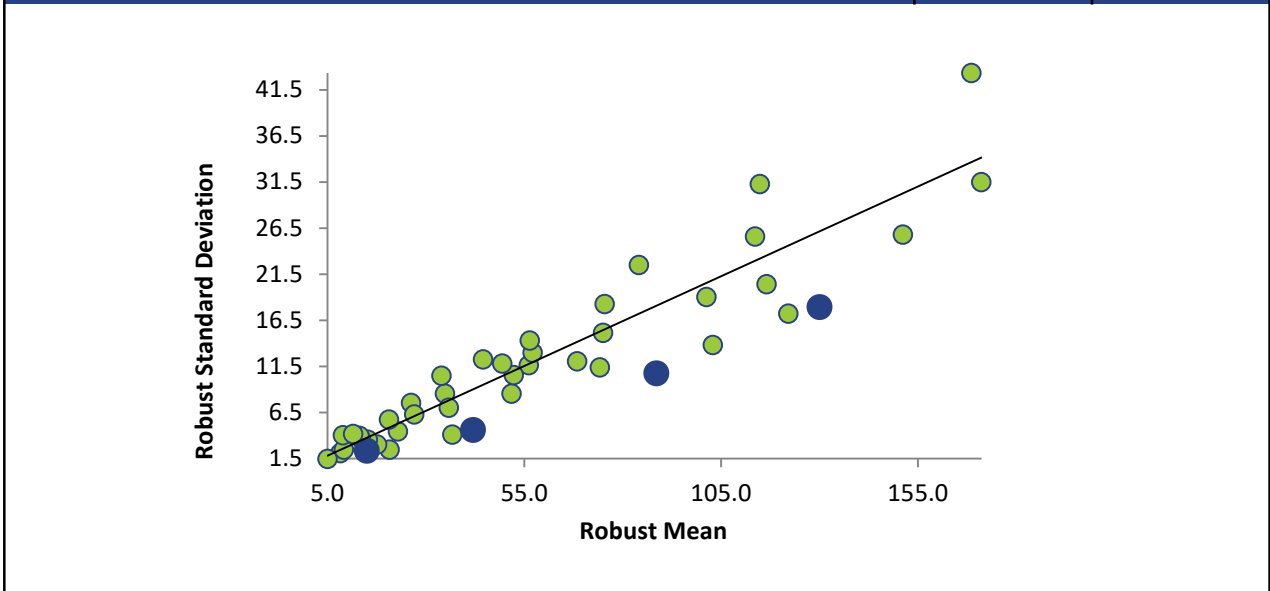
ACETONE (2-PROPANONE)



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



BENZENE

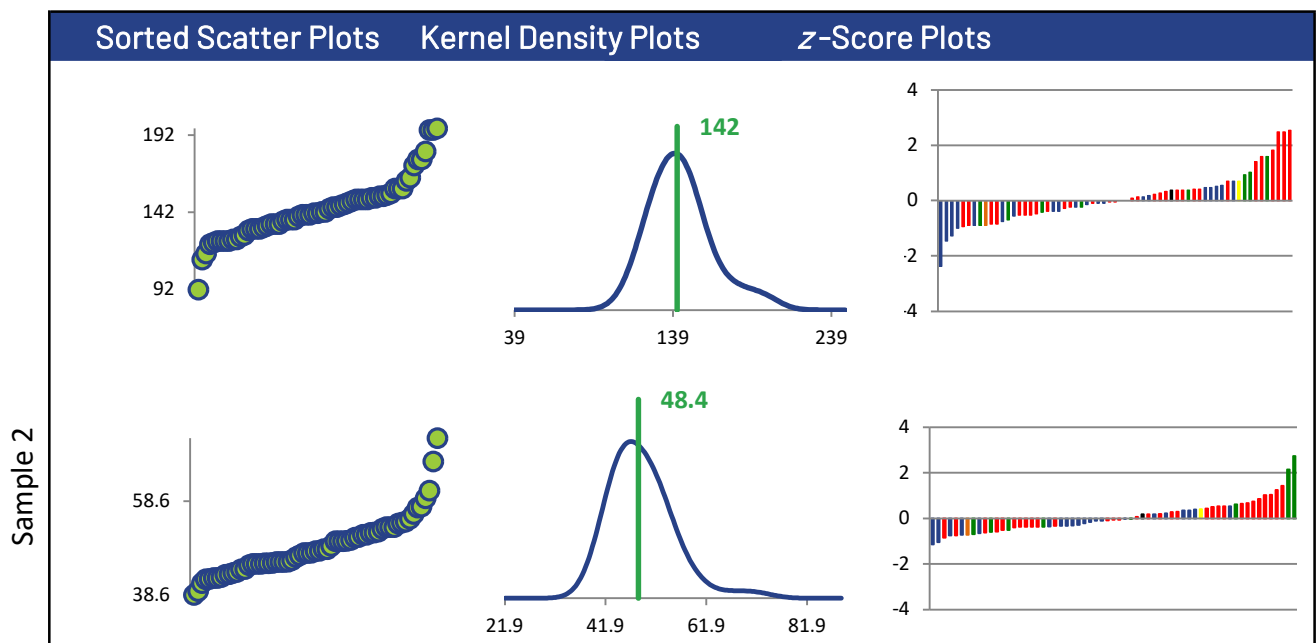
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	63	63	63	64
Median µg/L	141	47.9	96.3	14.4
Robust Mean µg/L	142	48.4	96.3	14.5
U µg/L	2.60	0.844	1.43	0.261
Robust Standard Deviation µg/L	16.5	5.36	9.05	1.67
Regression Standard Deviation µg/L	21.3	7.26	14.4	2.17
Stability Flag				
Homogeneity Flag		Homogeneity	Homogeneity	
Standard Deviation Used (SDPA) µg/L	21.3	8.65	16.8	2.17
Outliers	2	2	2	1
z >3.0	0	0	0	2
2< z <3	4	2	2	1

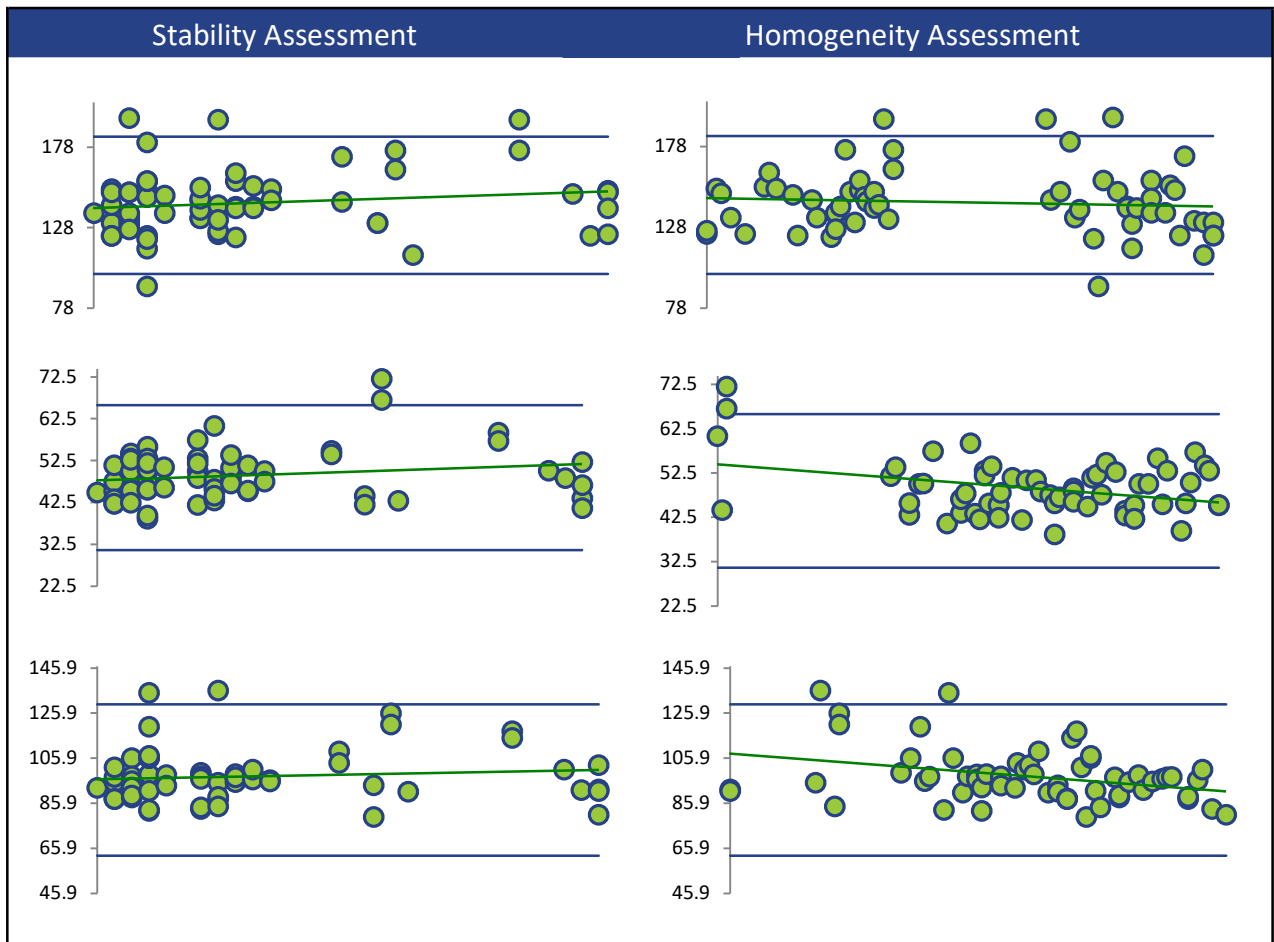
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	21	21	21	22
GC/MS - PURGE AND TRAP (Red)	31	31	31	31
GC/MS (Green)	8	8	8	8
GC/FID - HEADSPACE (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1
GC/FID - PURGE AND TRAP (Yellow)	1	1	1	1

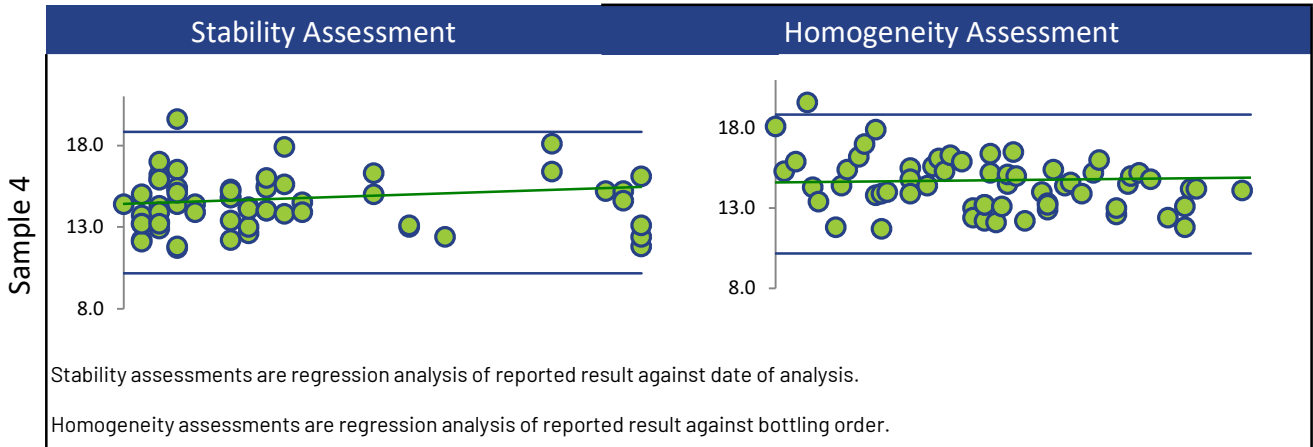
All summary stats and the plots below are based on the data excluding any flagged outliers



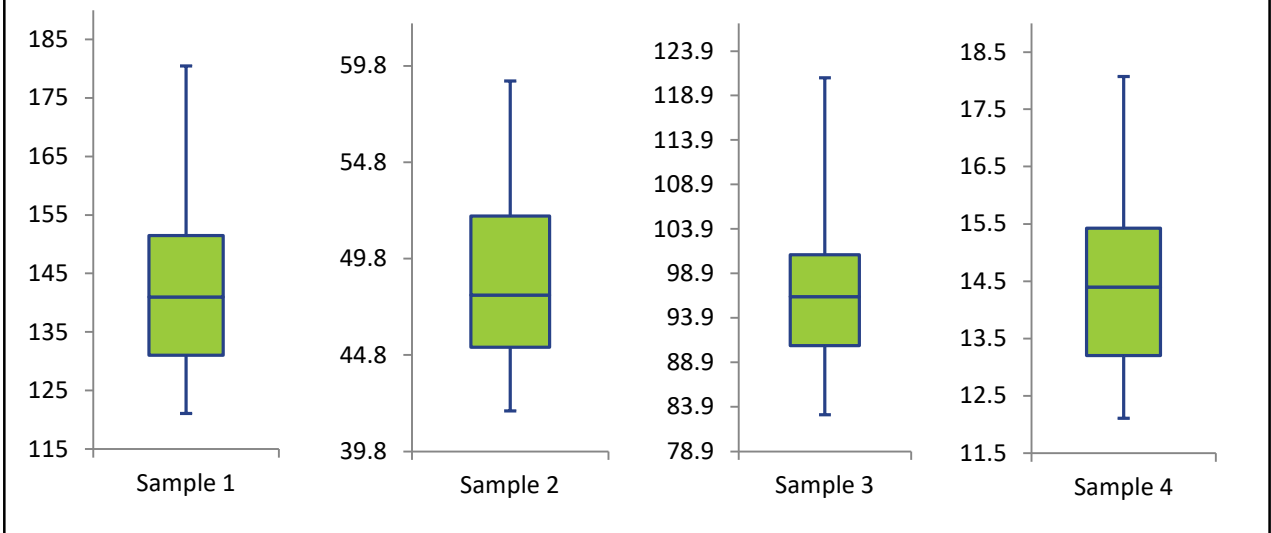
BENZENE



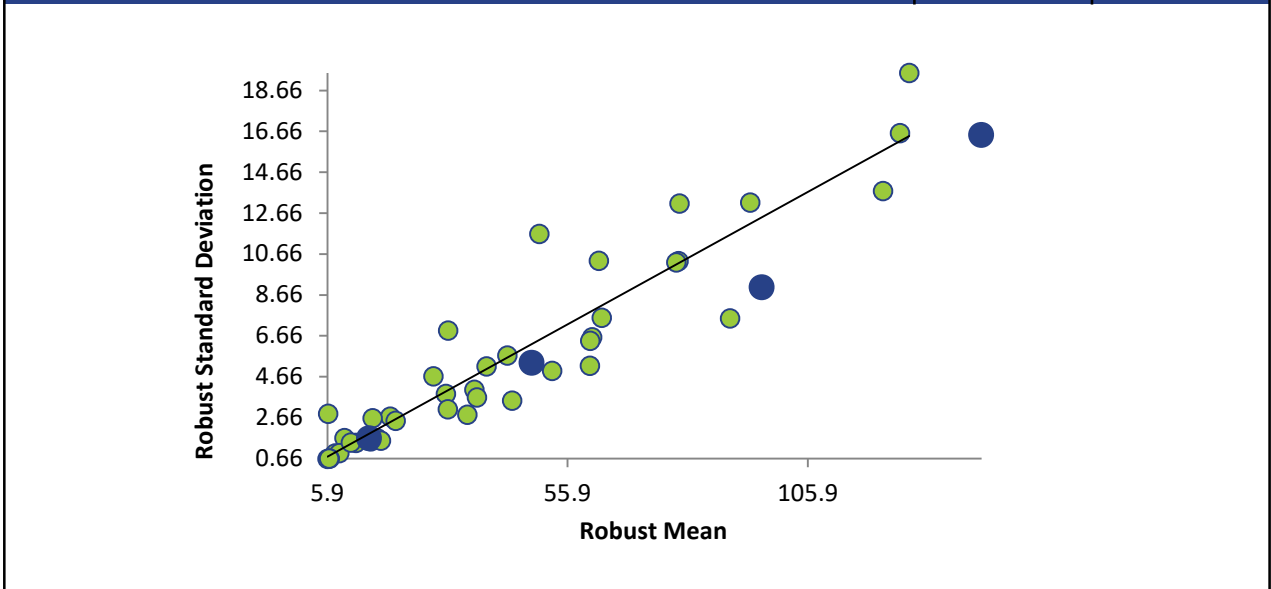
BENZENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



BROMODICHLOROMETHANE

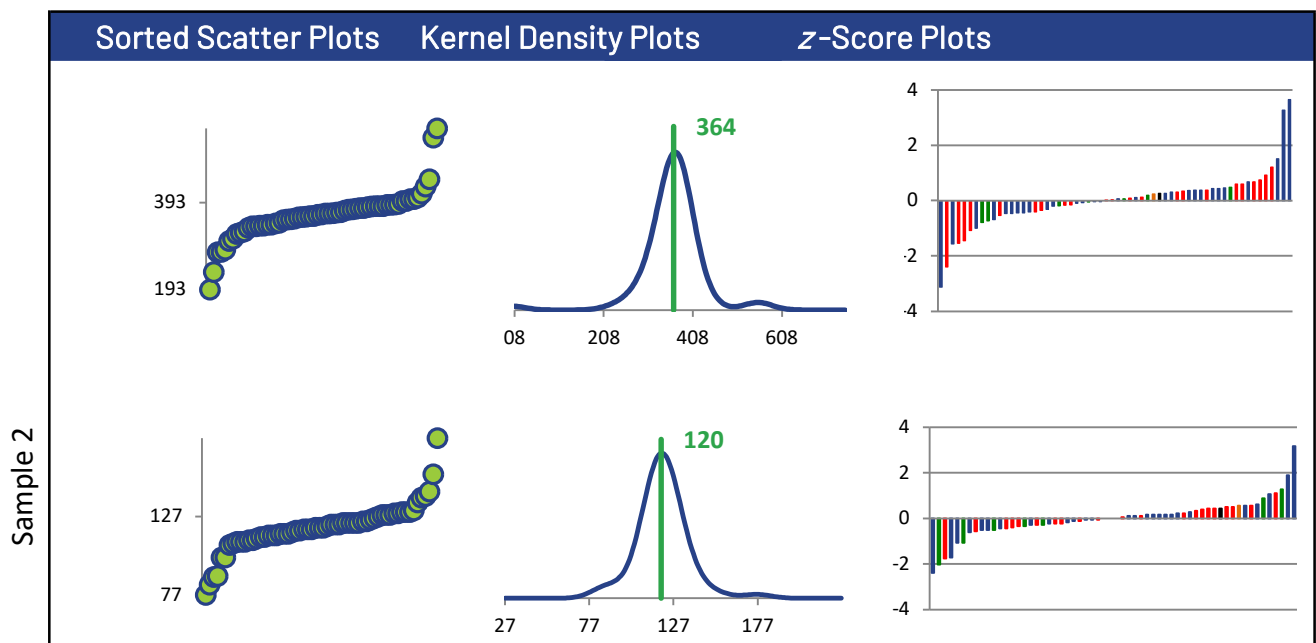
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	60	60	60	60
Median µg/L	367	120	244	37.3
Robust Mean µg/L	364	120	244	37.1
U µg/L	5.57	1.59	3.16	0.704
Robust Standard Deviation µg/L	34.5	9.83	19.6	4.36
Regression Standard Deviation µg/L	54.6	18.0	36.6	5.57
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	54.6	18.0	36.6	5.57
Outliers	0	0	0	0
z >3.0	3	1	1	0
2< z <3	1	2	2	2

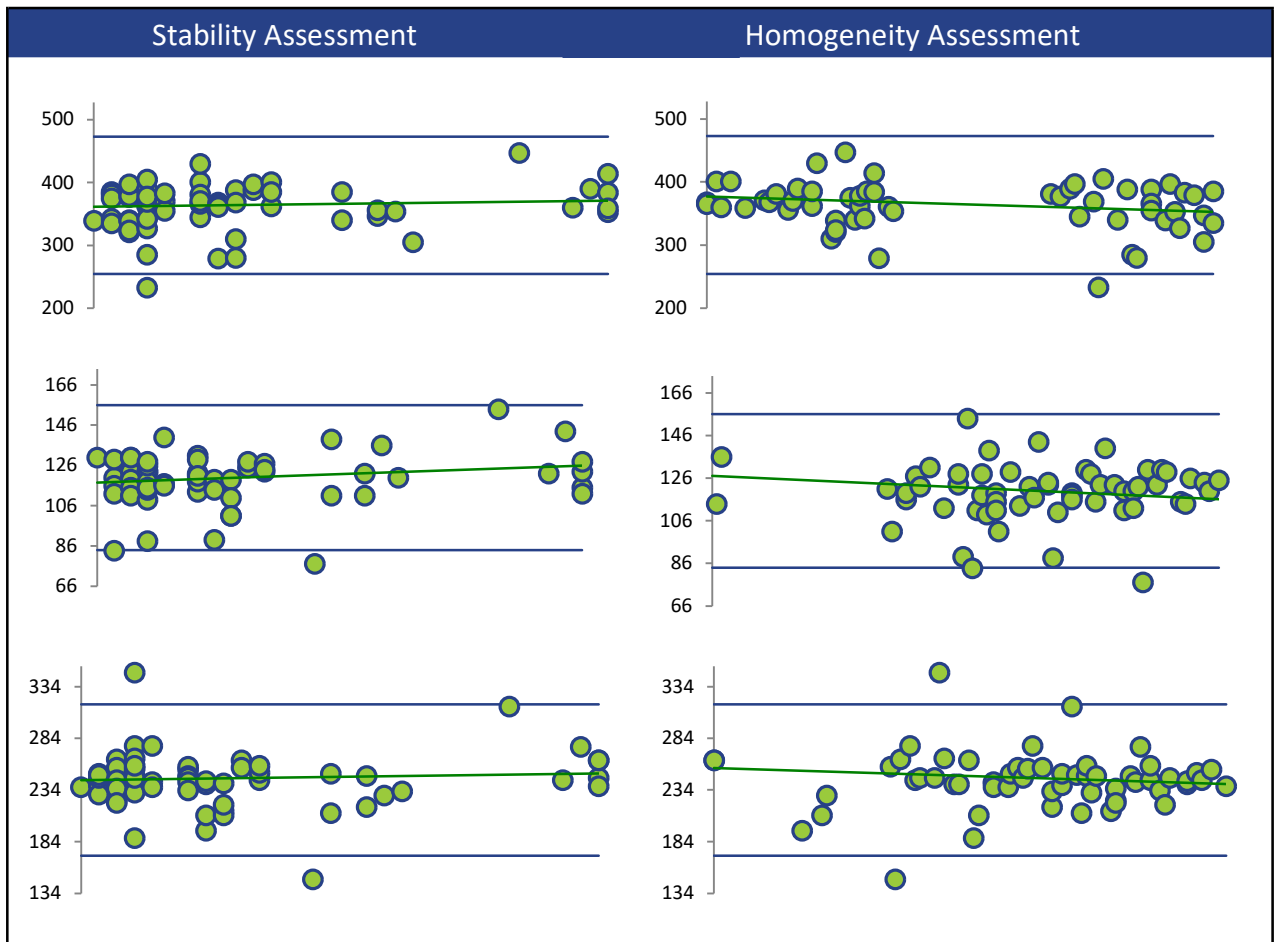
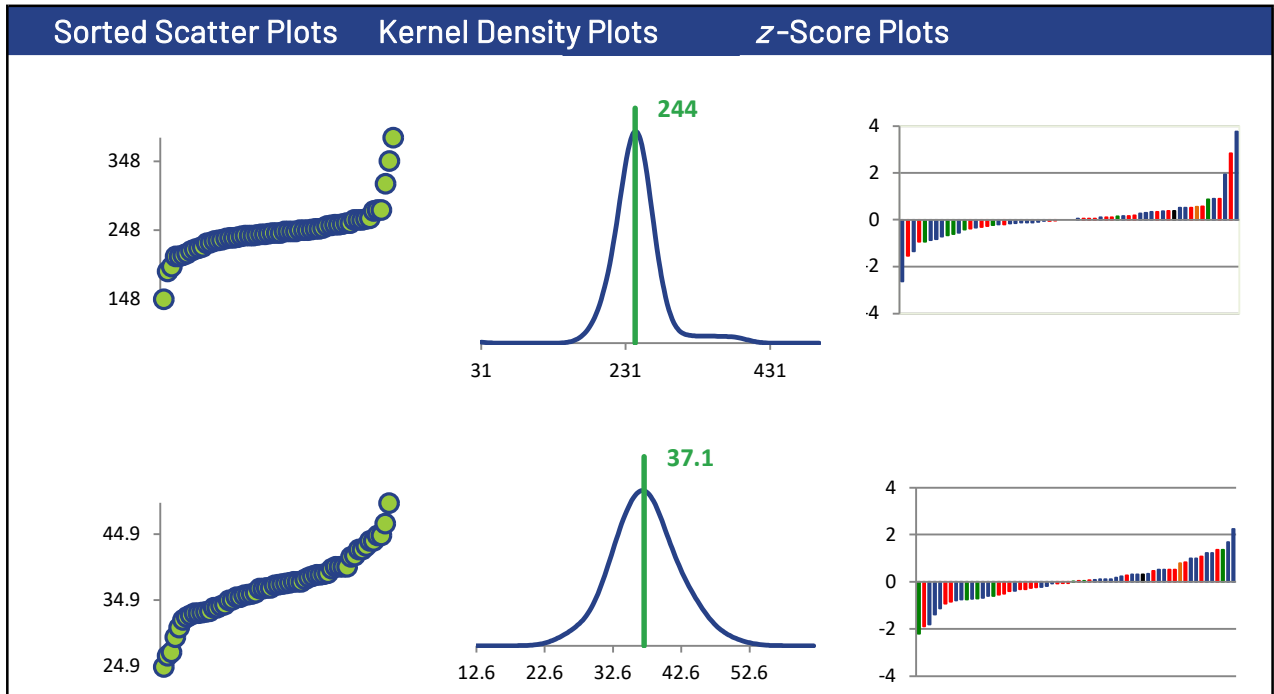
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	29	29	29	29
GC/MS - HEADSPACE (Red)	22	22	22	22
GC/MS (Green)	7	7	7	7
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

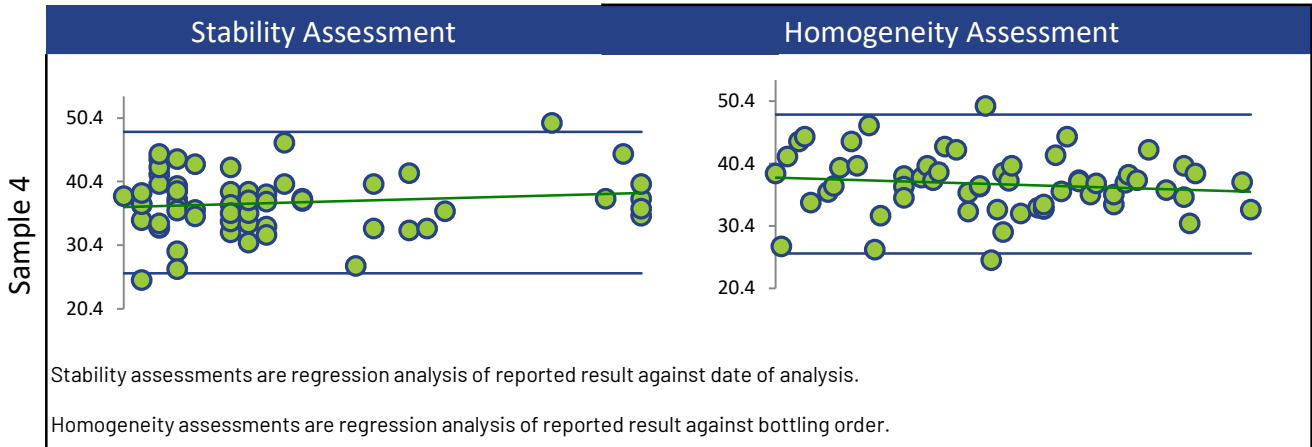
All summary stats and the plots below are based on the data excluding any flagged outliers



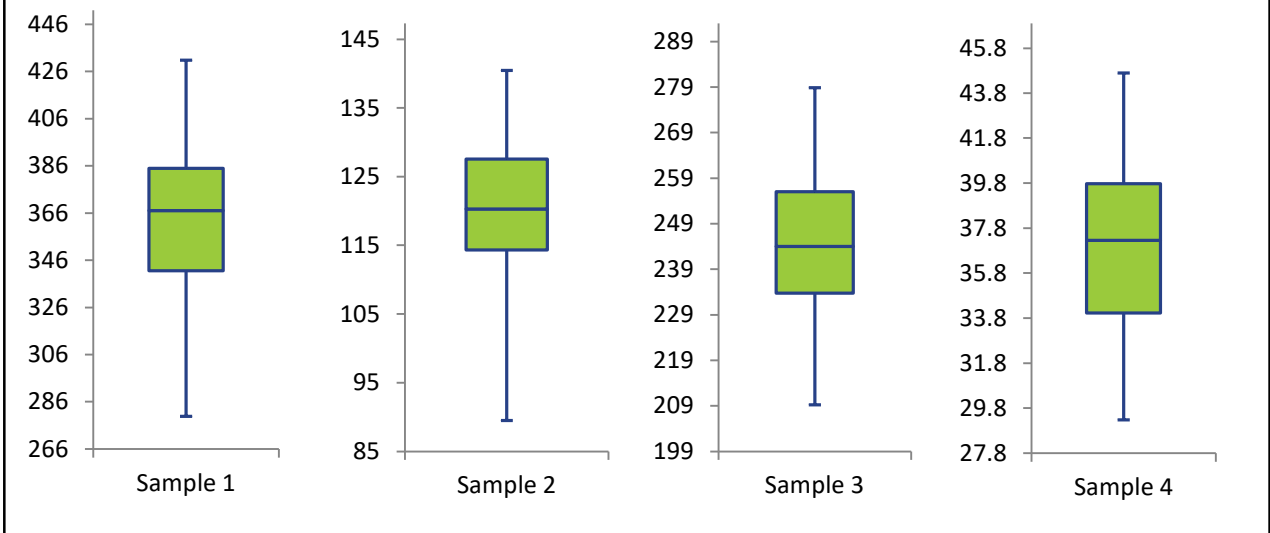
BROMODICHLOROMETHANE



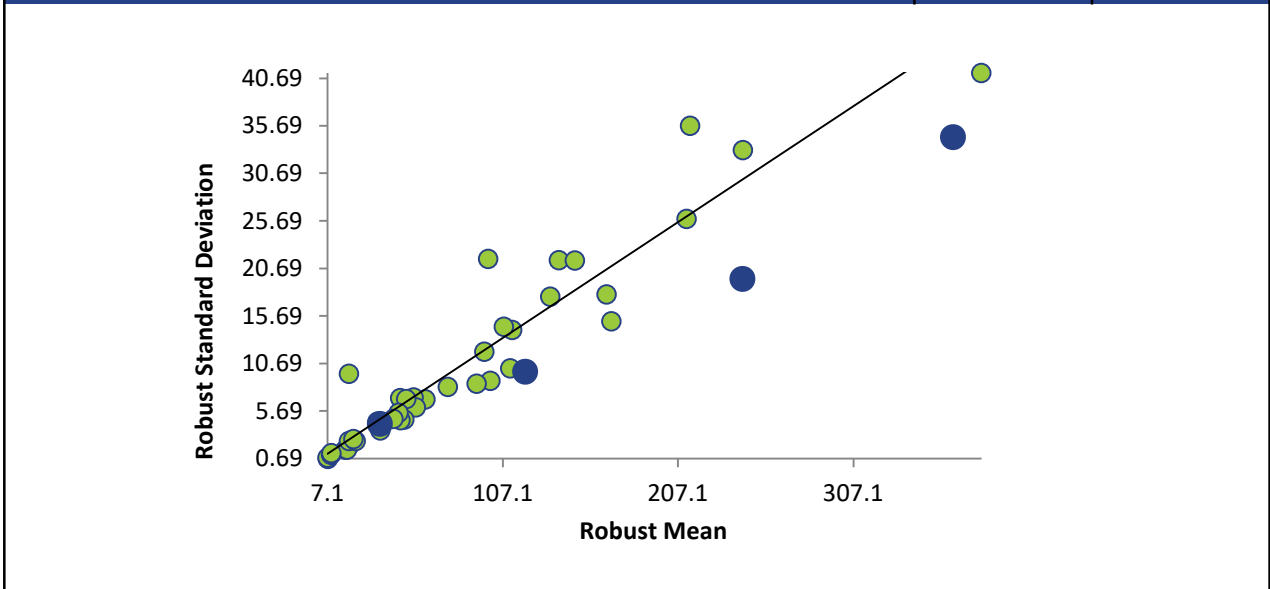
BROMODICHLOROMETHANE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



BROMOFORM

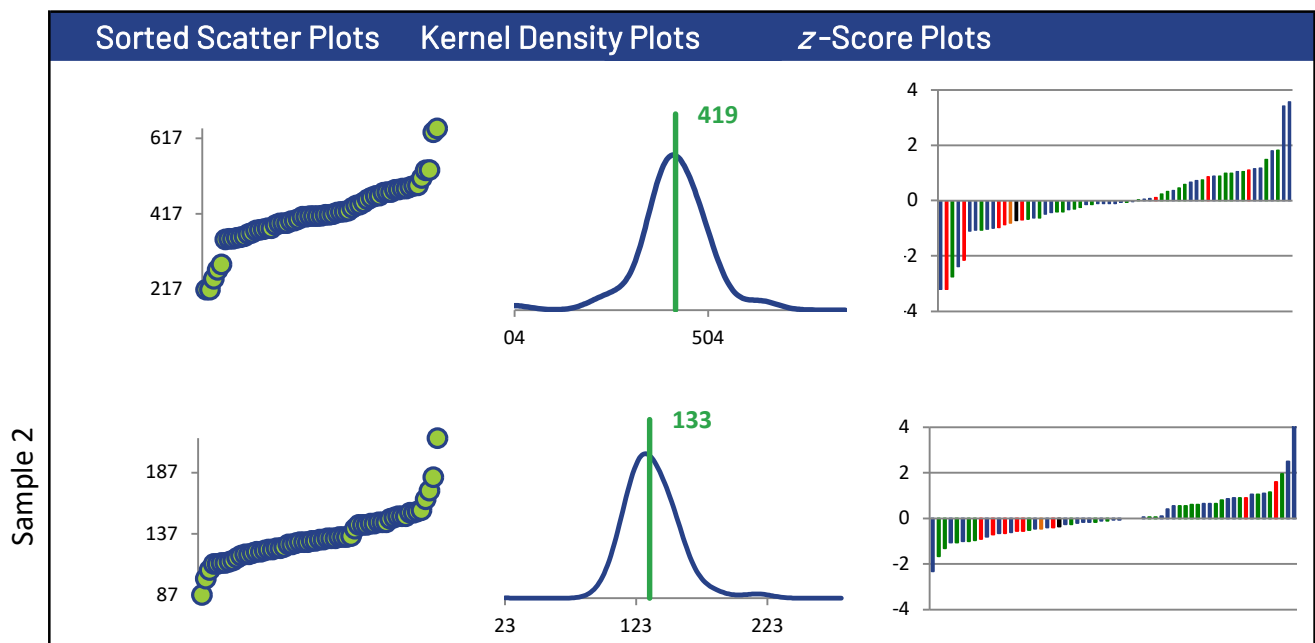
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	61	61	61	61
Median µg/L	413	132	276	42.0
Robust Mean µg/L	419	133	277	41.2
U µg/L	10.1	2.69	6.16	1.04
Robust Standard Deviation µg/L	62.9	16.8	38.5	6.47
Regression Standard Deviation µg/L	62.8	20.0	41.6	6.19
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	62.9	20.0	41.6	6.47
Outliers	0	0	0	0
z >3.0	4	1	1	0
2< z <3	3	2	4	1

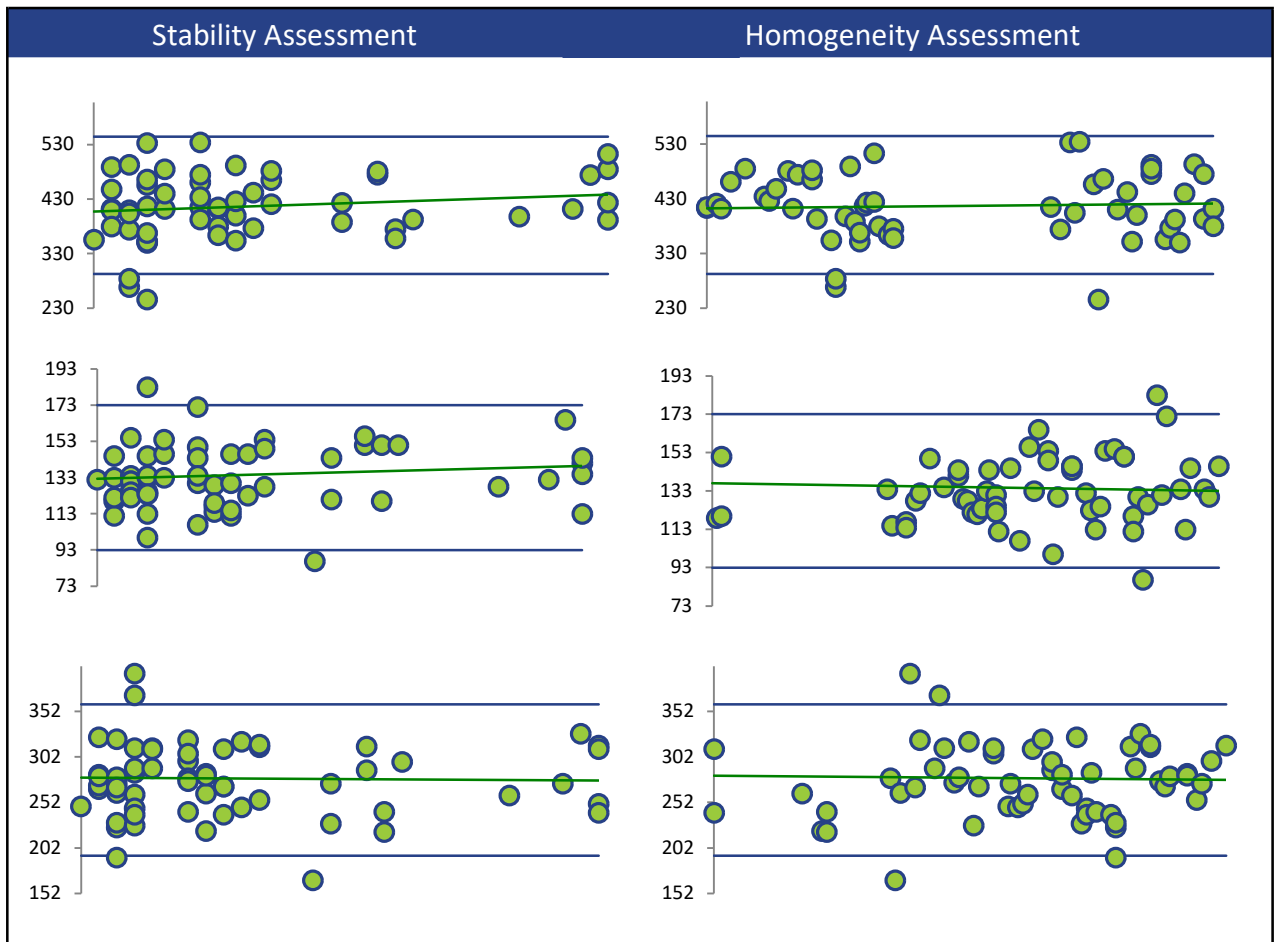
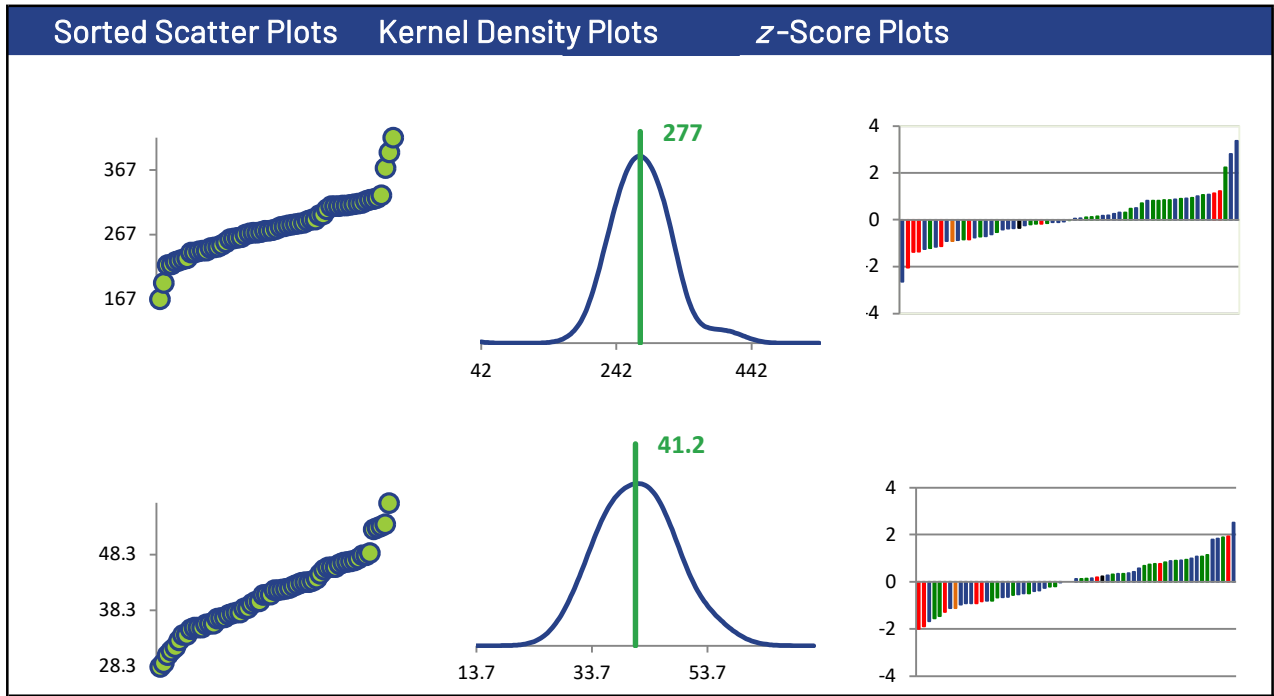
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	29	29	29	29
GC/MS (Red)	8	8	8	8
GC/MS - HEADSPACE (Green)	22	22	22	22
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1

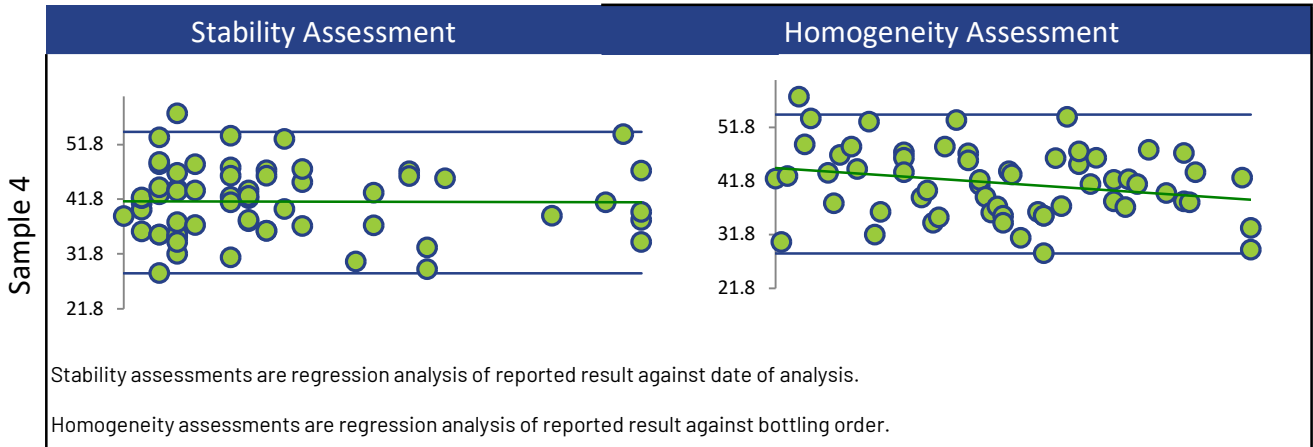
All summary stats and the plots below are based on the data excluding any flagged outliers



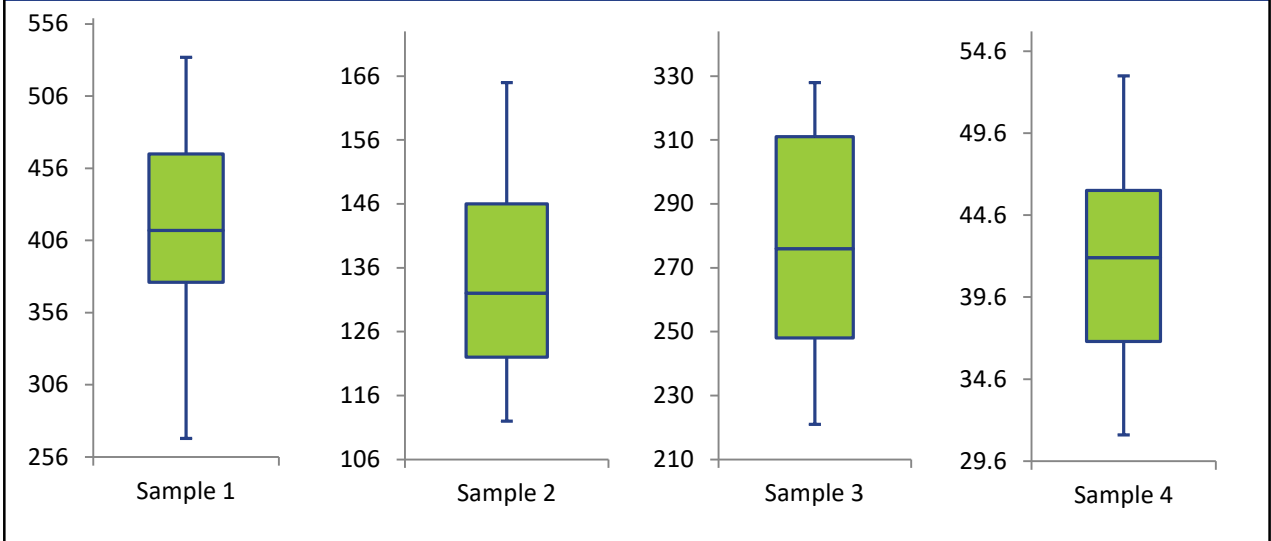
BROMOFORM



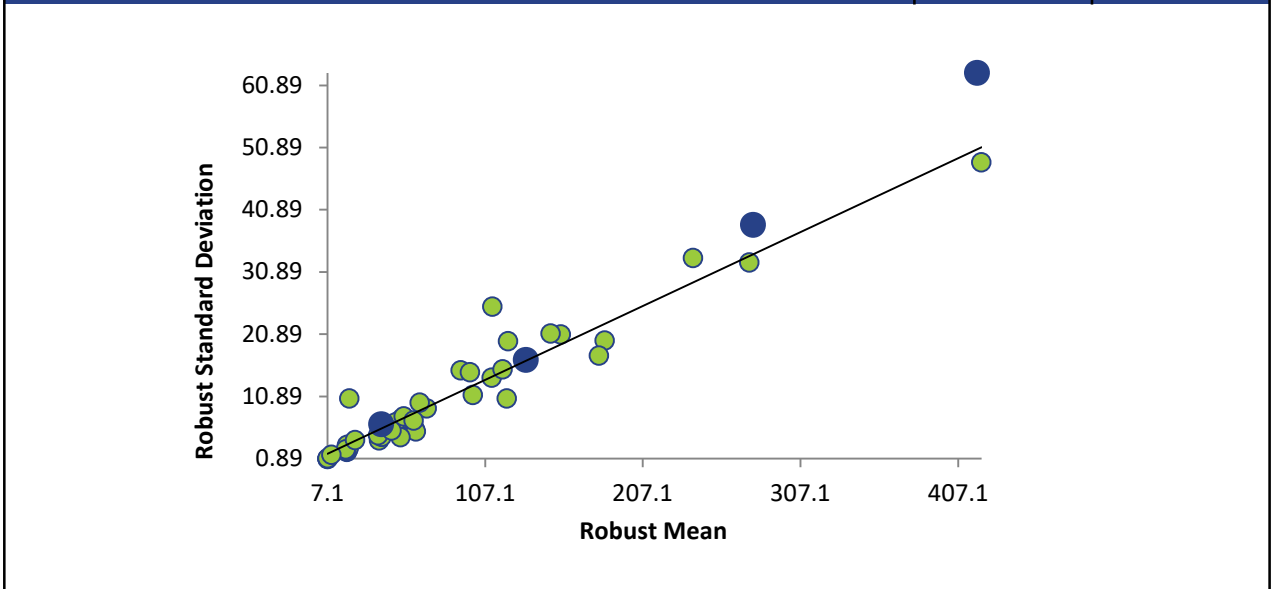
BROMOFORM



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



CARBON TETRACHLORIDE

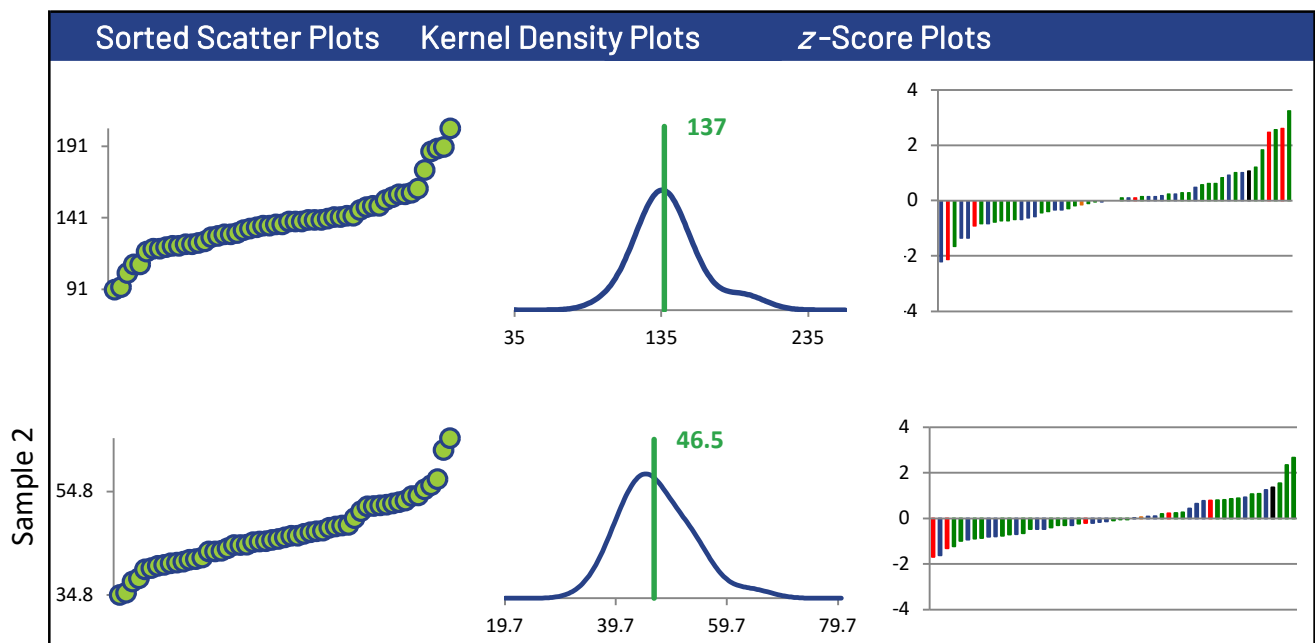
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	53	53	53	54
Median µg/L	137	45.9	93.3	13.7
Robust Mean µg/L	137	46.5	93.6	13.6
U µg/L	3.16	1.05	1.87	0.345
Robust Standard Deviation µg/L	18.4	6.09	10.9	2.03
Regression Standard Deviation µg/L	20.6	6.97	14.0	2.04
Stability Flag				
Homogeneity Flag				Homogeneity
Standard Deviation Used (SDPA) µg/L	20.6	6.97	14.0	2.35
Outliers	1	1	1	0
z >3.0	1	0	1	0
2< z <3	5	2	2	3

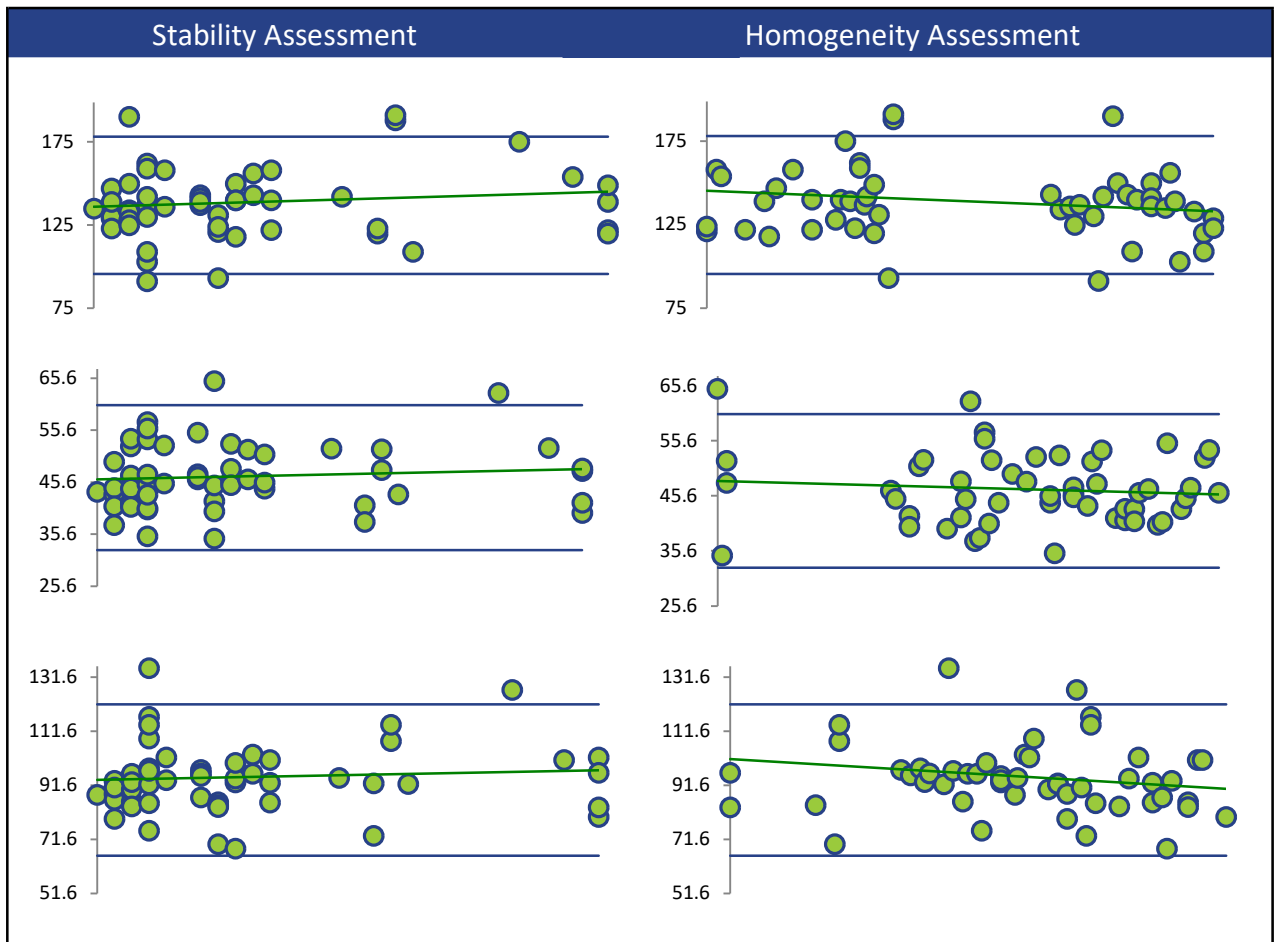
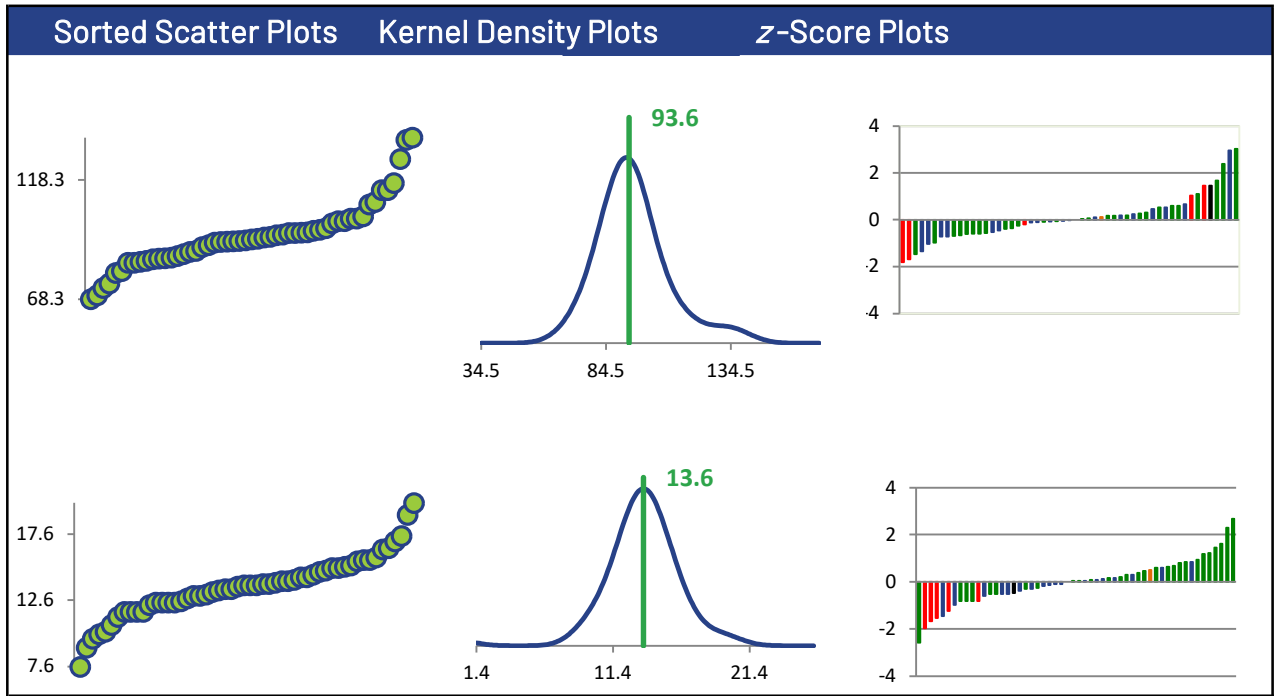
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	19	19
GC/MS (Red)	5	5	5	5
GC/MS - PURGE AND TRAP (Green)	27	27	27	28
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

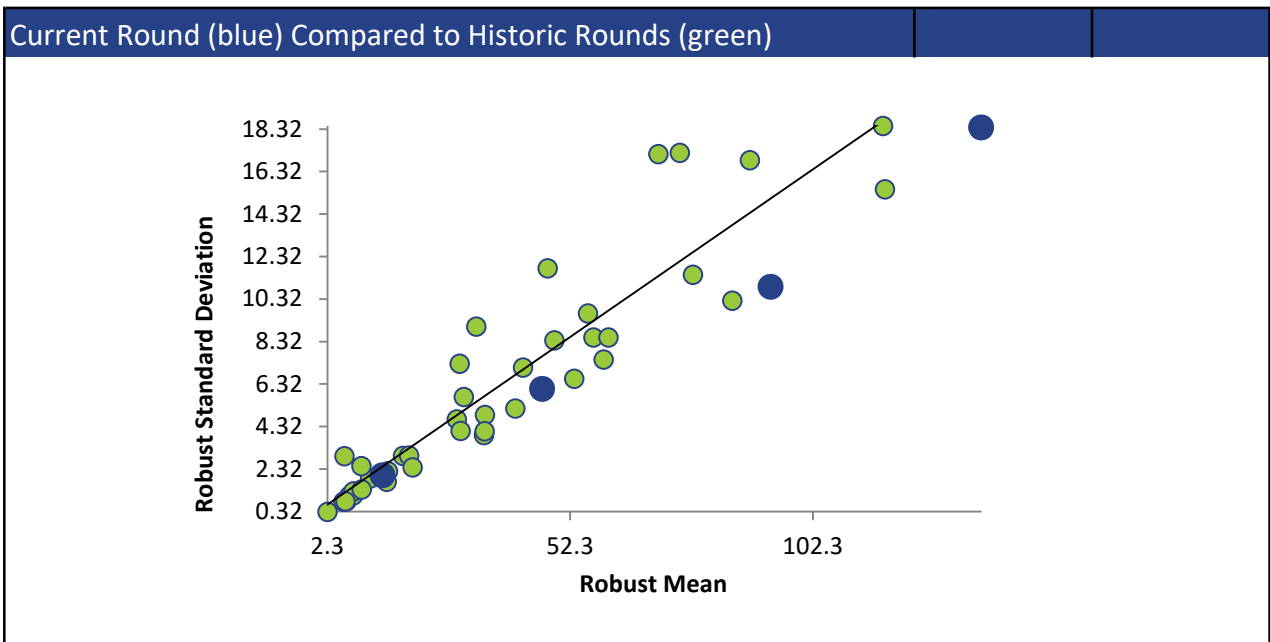
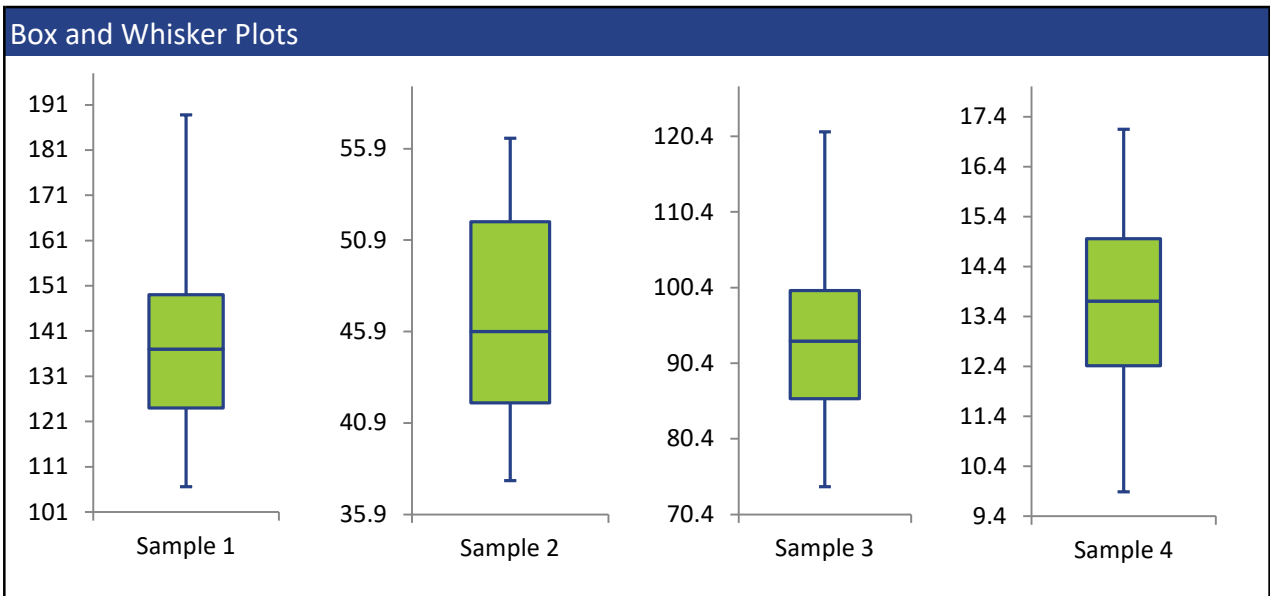
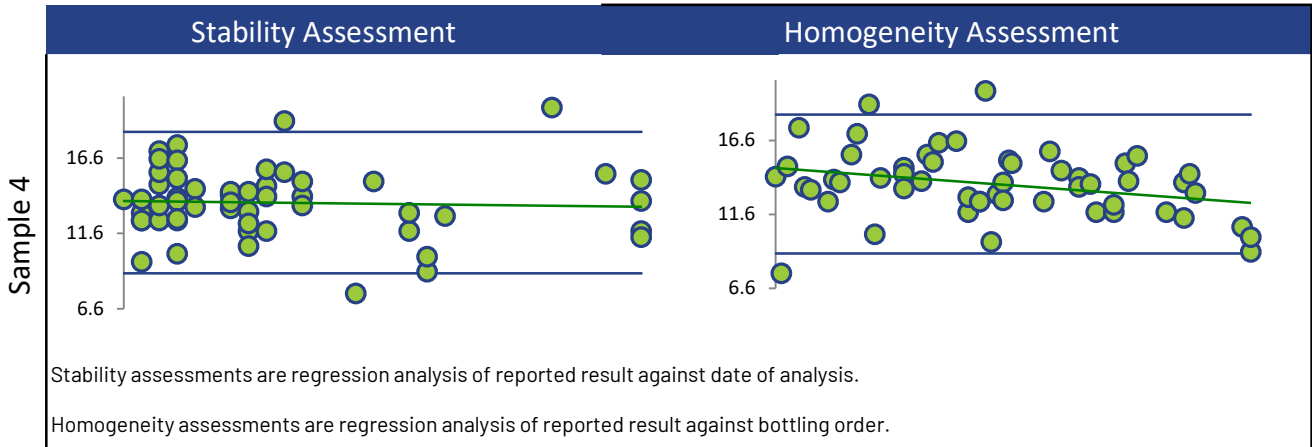
All summary stats and the plots below are based on the data excluding any flagged outliers



CARBON TETRACHLORIDE



CARBON TETRACHLORIDE



CHLOROBENZENE

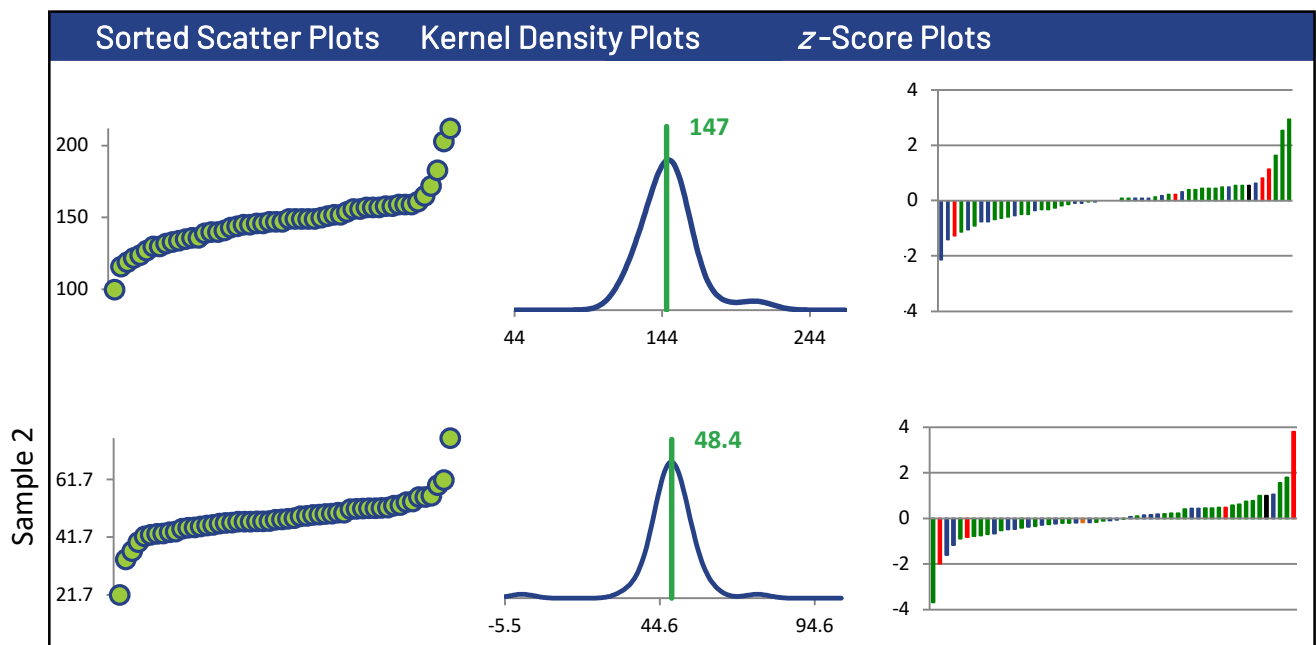
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	53	54	53	53
Median µg/L	147	47.9	97.2	14.5
Robust Mean µg/L	147	48.4	97.5	14.5
U µg/L	2.42	0.832	1.22	0.280
Robust Standard Deviation µg/L	14.1	4.89	7.13	1.63
Regression Standard Deviation µg/L	22.0	7.26	14.6	2.17
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	22.0	7.26	14.6	2.17
Outliers	1	0	1	1
z >3.0	0	2	1	1
2< z <3	3	0	1	2

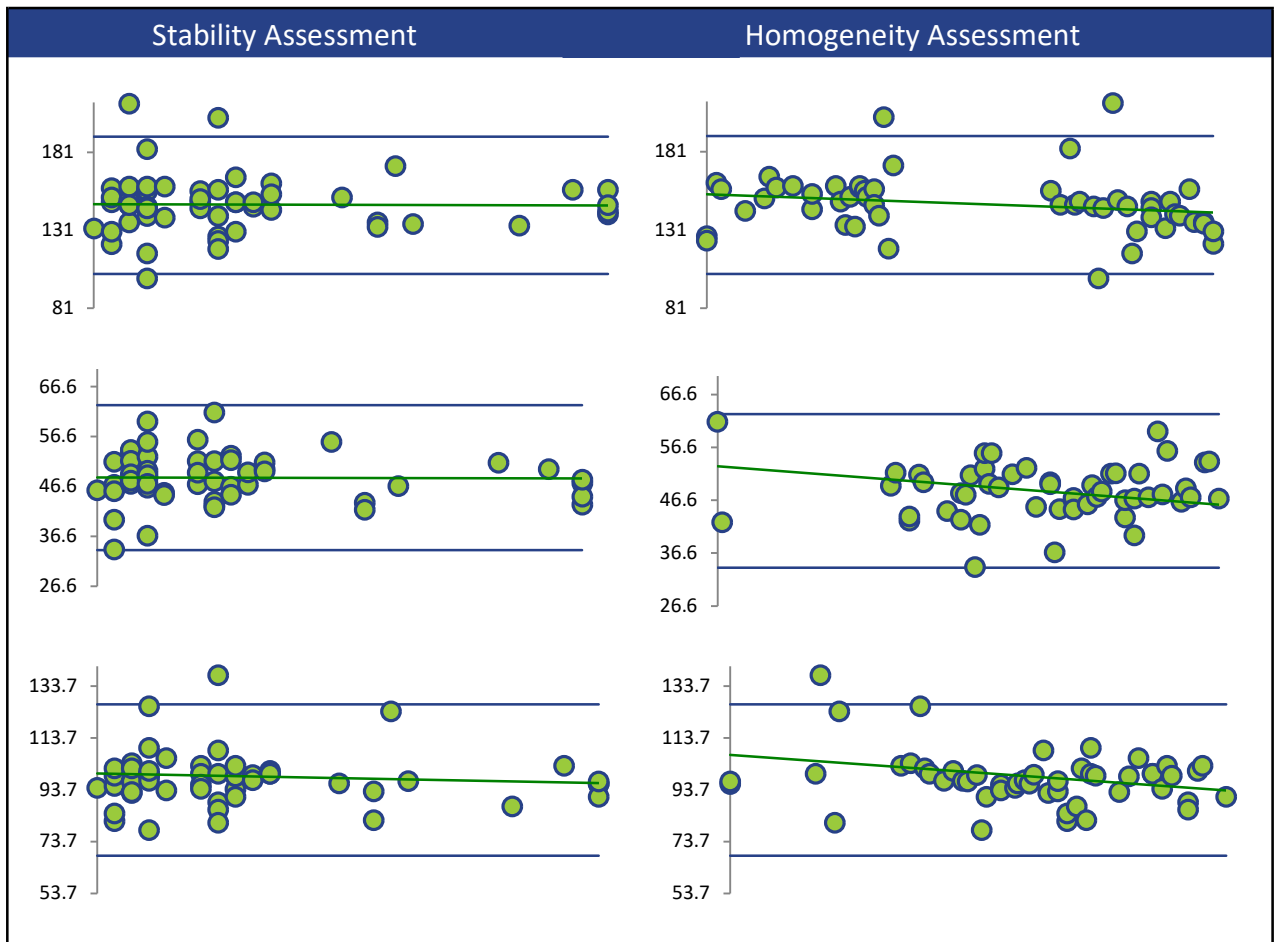
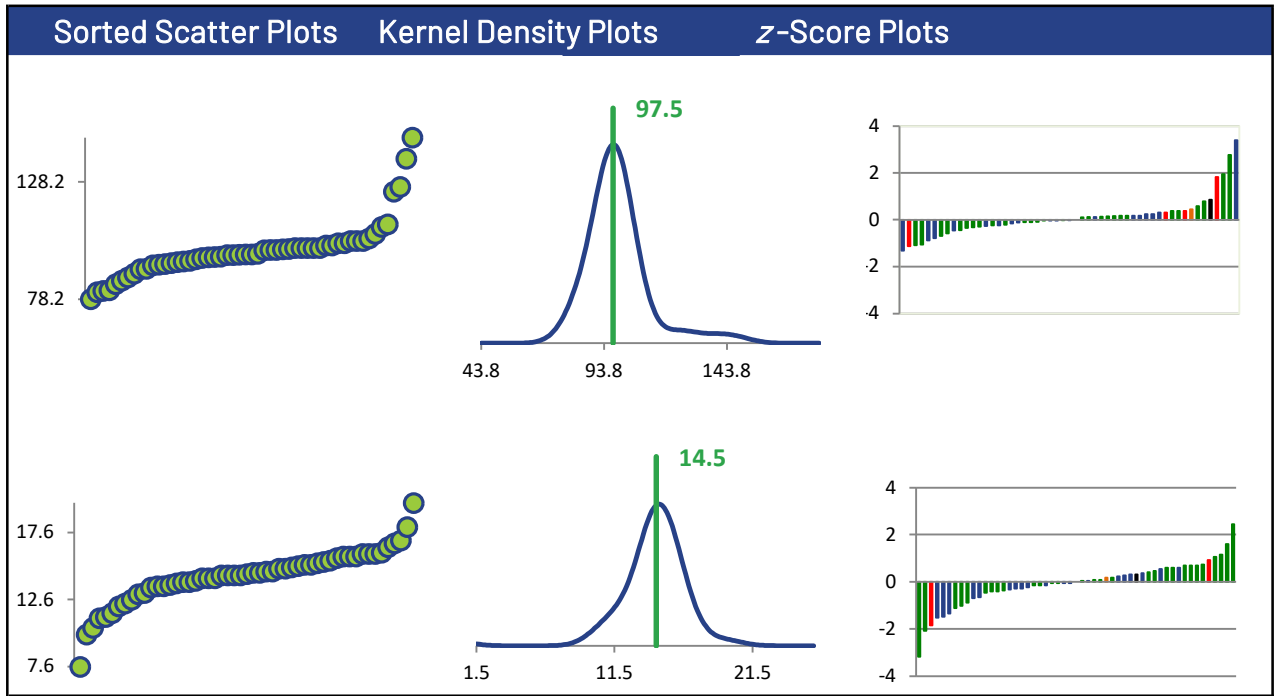
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	19	19
GC/MS (Red)	4	4	4	3
GC/MS - PURGE AND TRAP (Green)	28	29	28	29
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

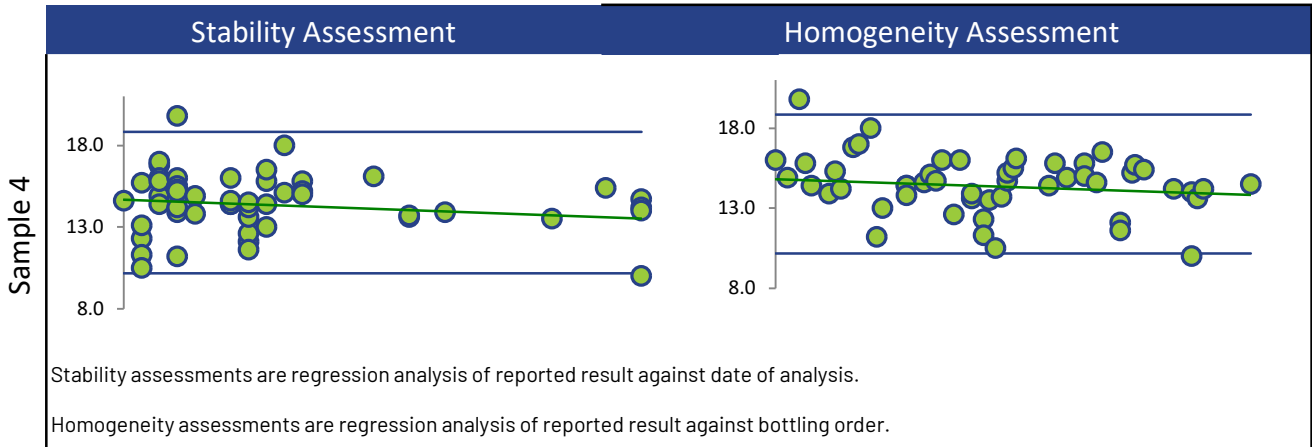
All summary stats and the plots below are based on the data excluding any flagged outliers



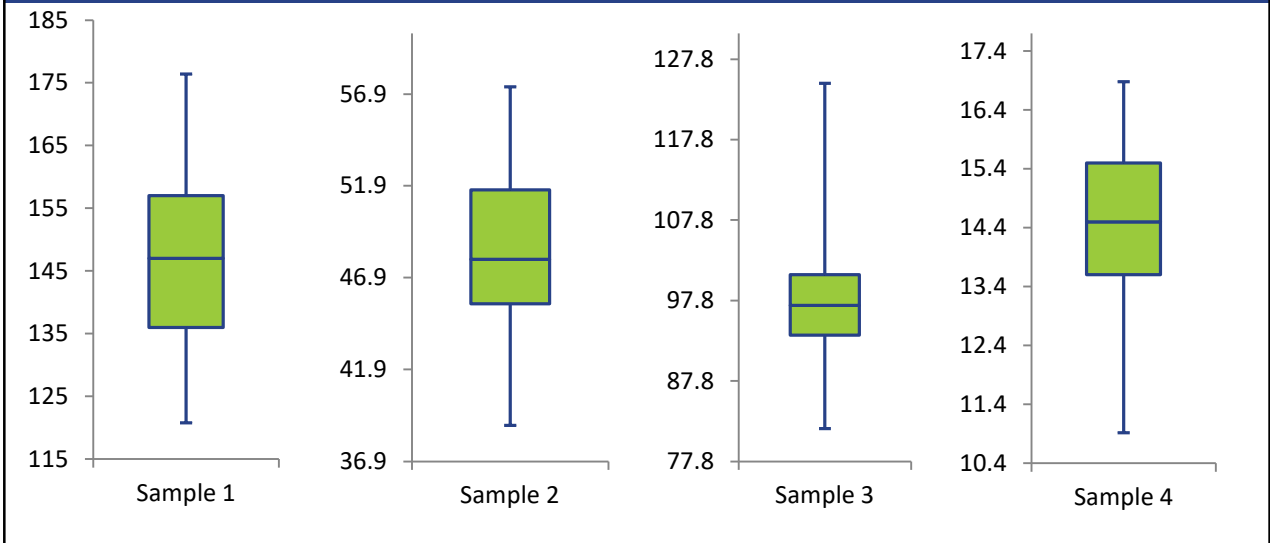
CHLOROBENZENE



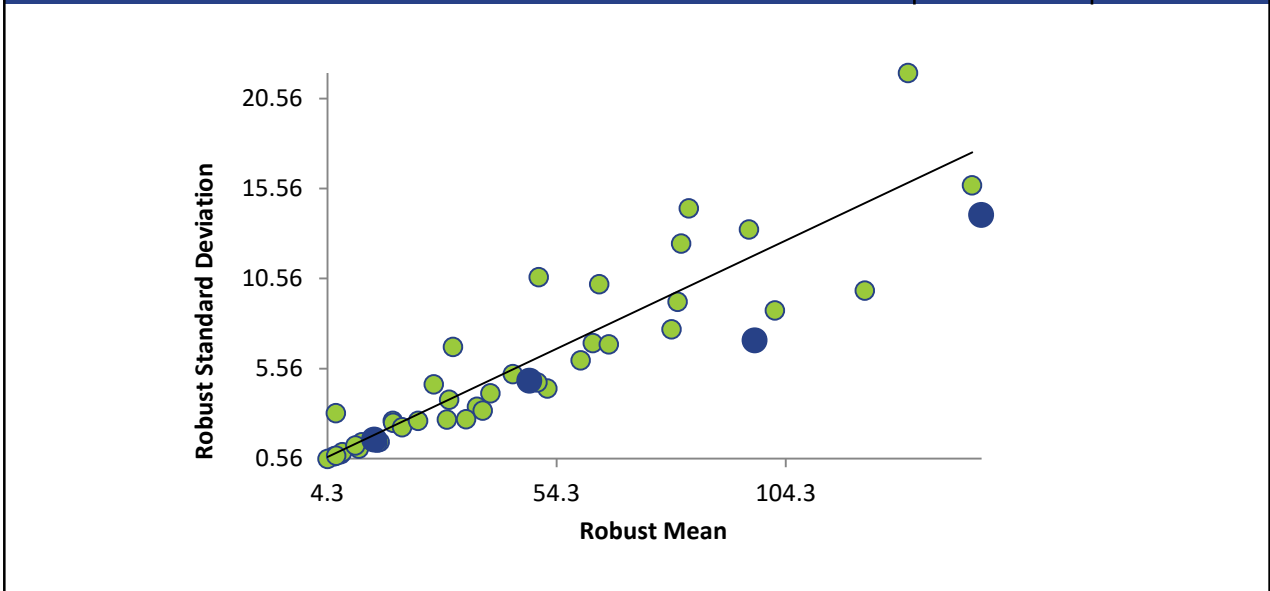
CHLOROBENZENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



CHLORODIBROMOMETHANE

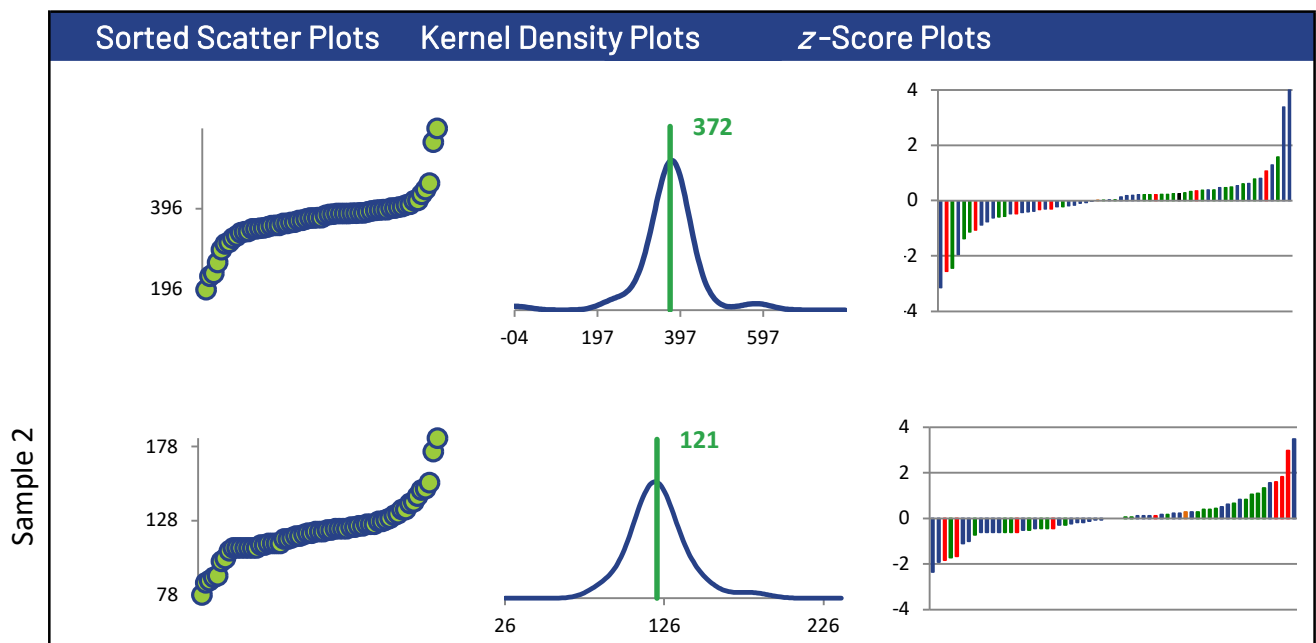
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	61	61	61	61
Median µg/L	374	121	248	37.3
Robust Mean µg/L	372	121	245	37.5
U µg/L	5.75	2.19	3.87	0.757
Robust Standard Deviation µg/L	35.9	13.7	24.2	4.73
Regression Standard Deviation µg/L	55.8	18.1	36.8	5.62
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	55.8	18.1	36.8	5.62
Outliers	0	0	0	0
z >3.0	3	1	1	0
2< z <3	2	2	2	2

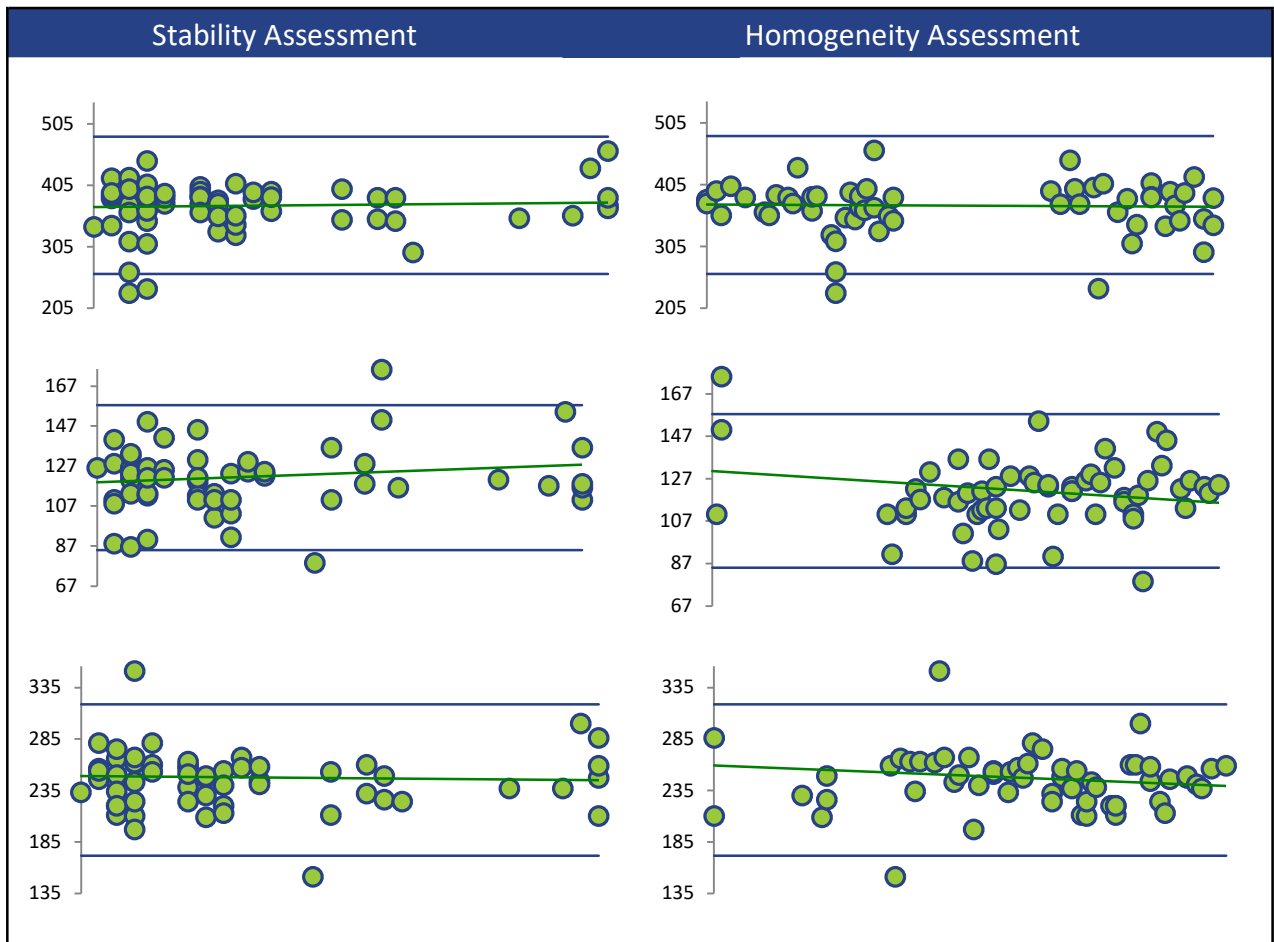
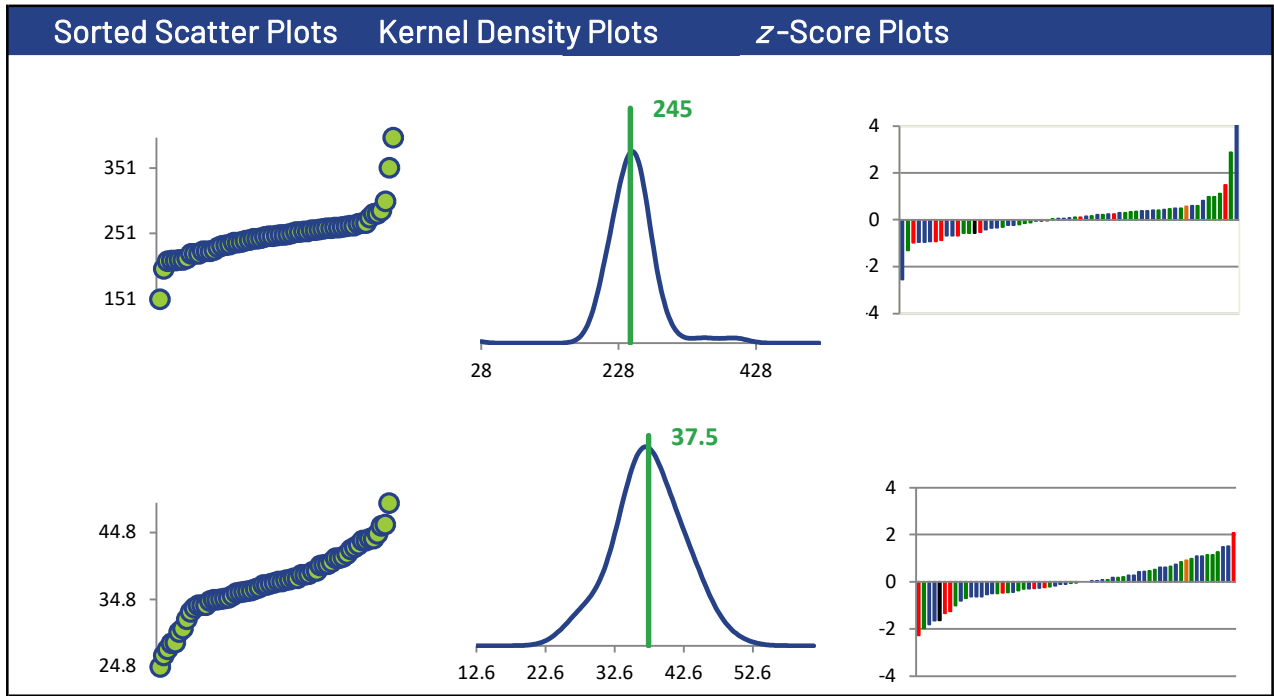
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	29	29	29	29
GC/MS (Red)	8	8	8	8
GC/MS - HEADSPACE (Green)	22	22	22	22
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

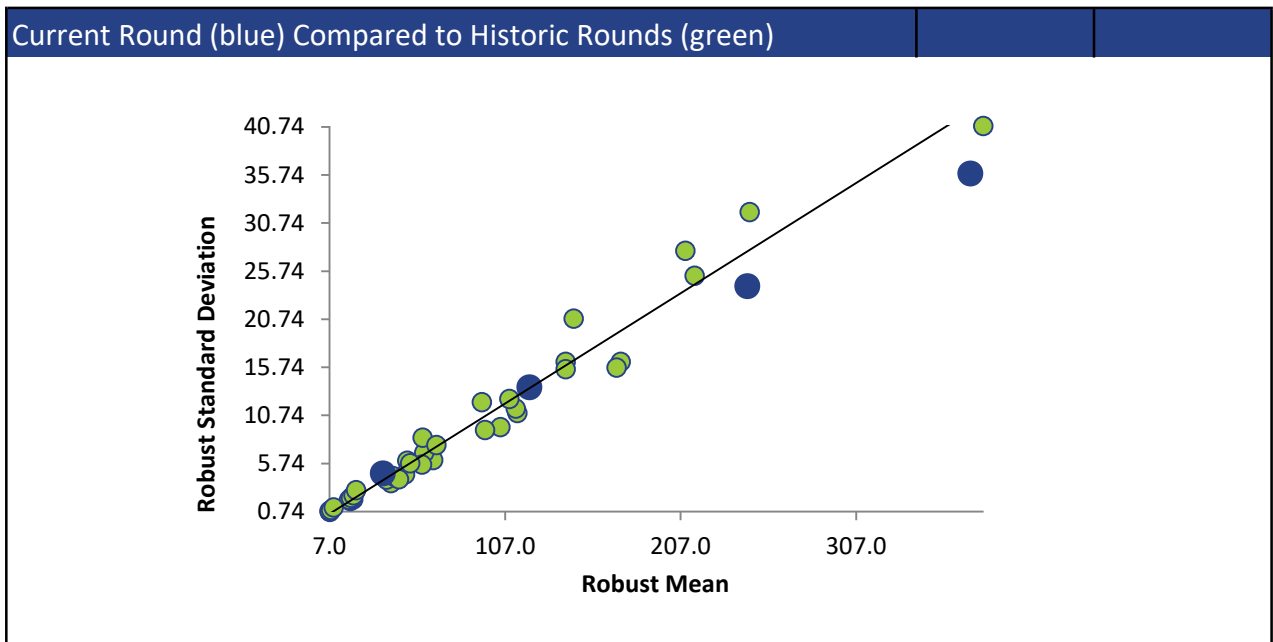
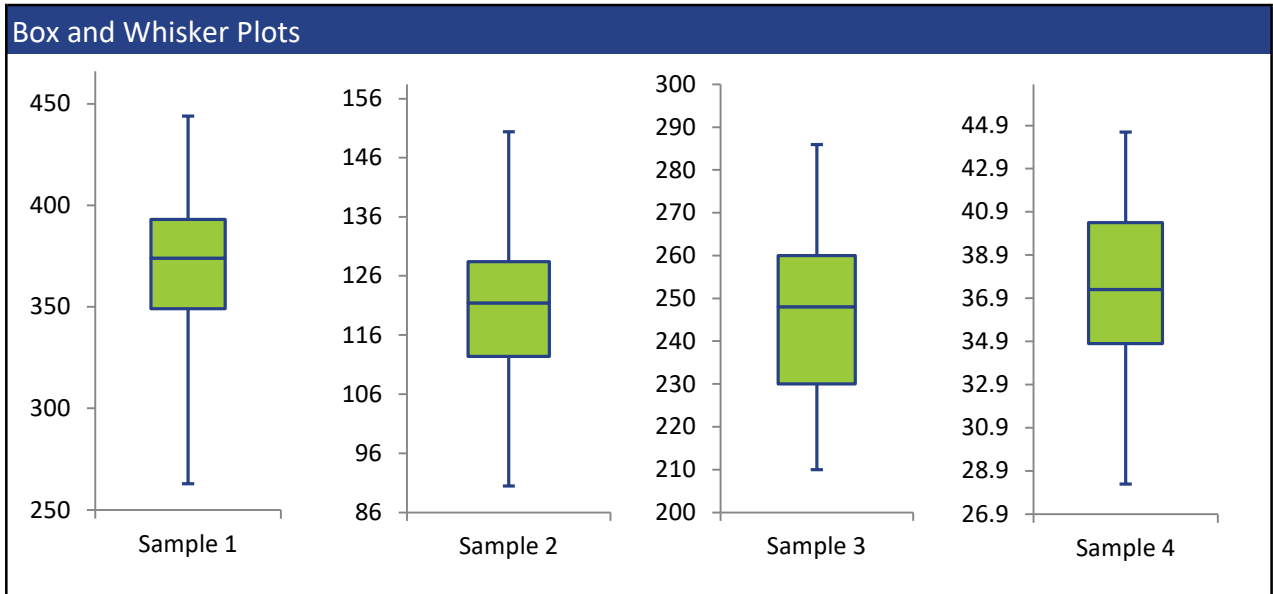
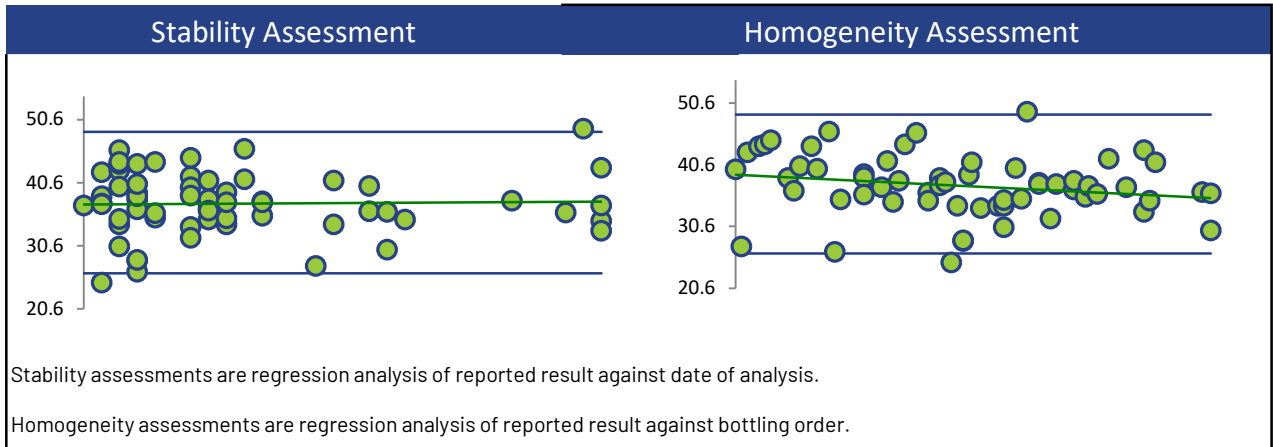
All summary stats and the plots below are based on the data excluding any flagged outliers



CHLORODIBROMOMETHANE



CHLORODIBROMOMETHANE



CHLOROFORM

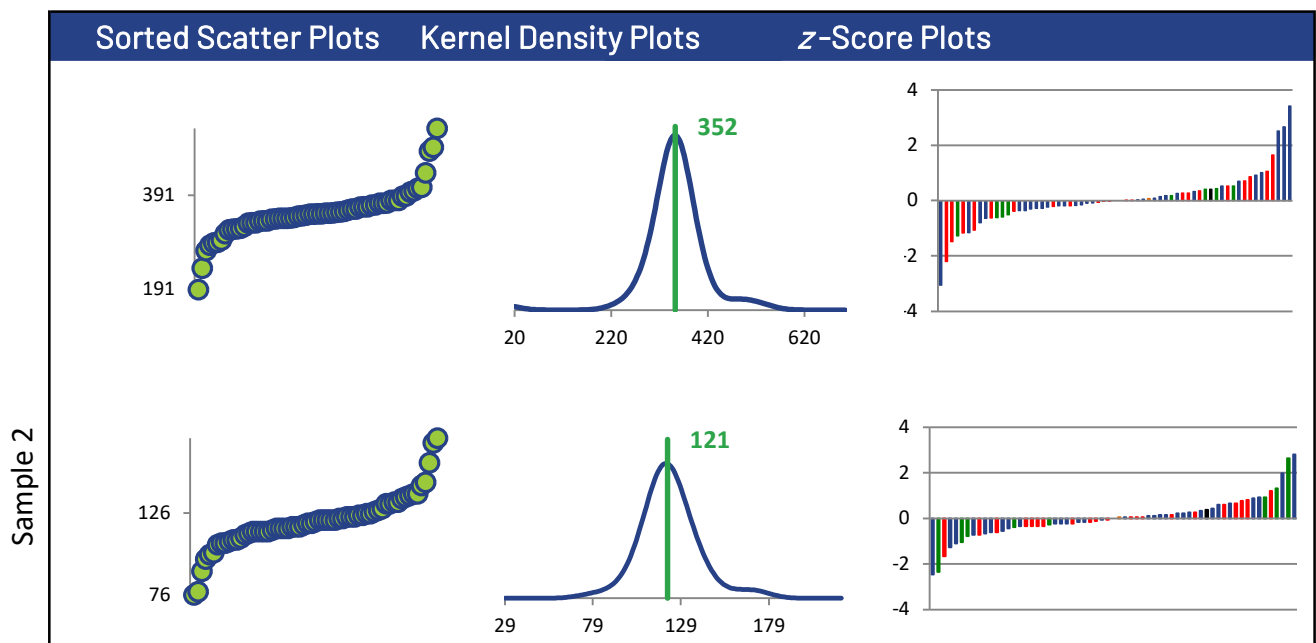
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	63	63	63	63
Median µg/L	352	121	240	37.2
Robust Mean µg/L	352	121	241	37.1
U µg/L	5.39	1.92	3.09	0.583
Robust Standard Deviation µg/L	34.2	12.2	19.6	3.70
Regression Standard Deviation µg/L	52.8	18.2	36.1	5.57
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	52.8	18.2	36.1	5.57
Outliers	0	0	0	0
z >3.0	2	0	1	0
2< z <3	3	4	3	2

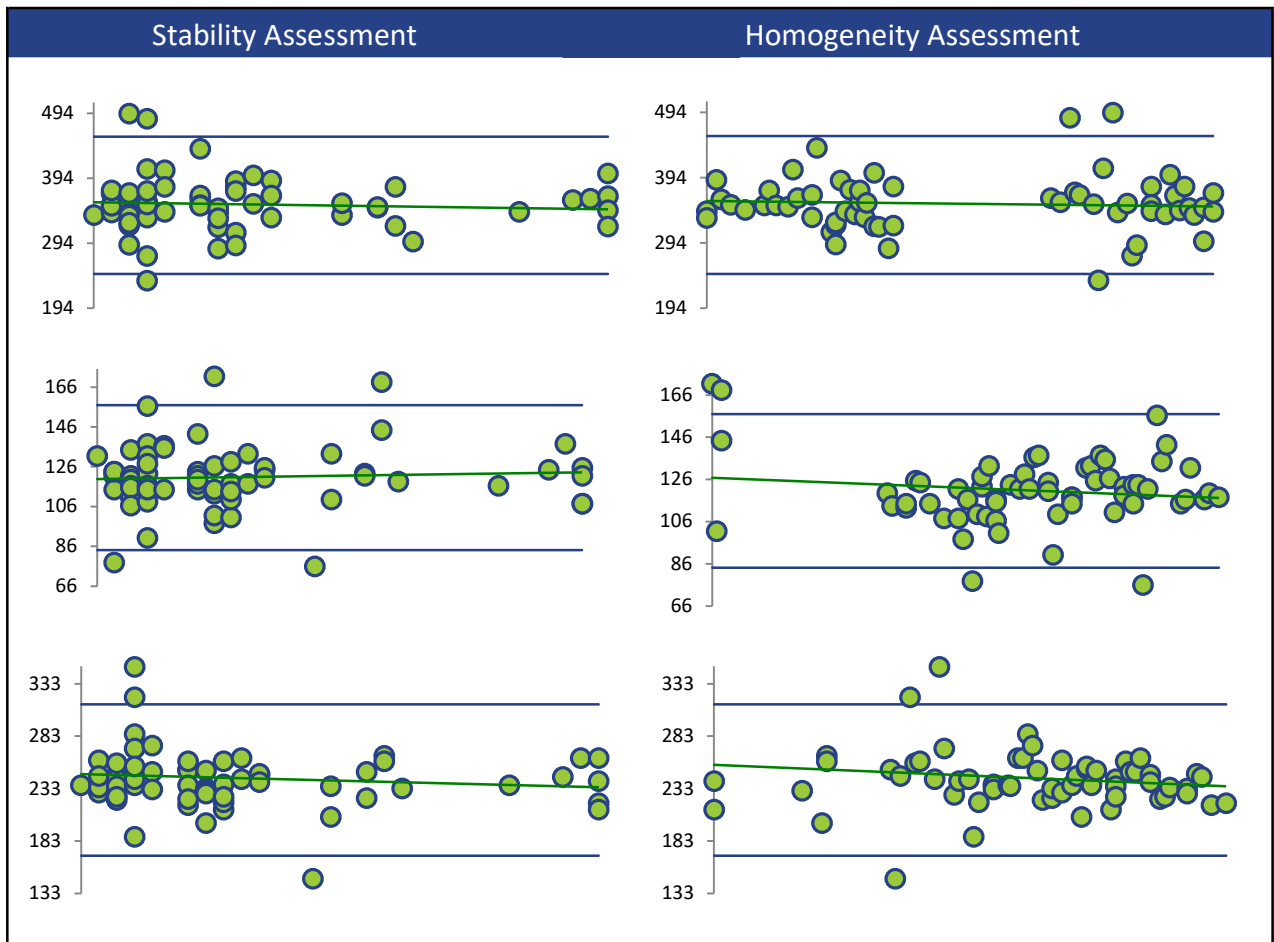
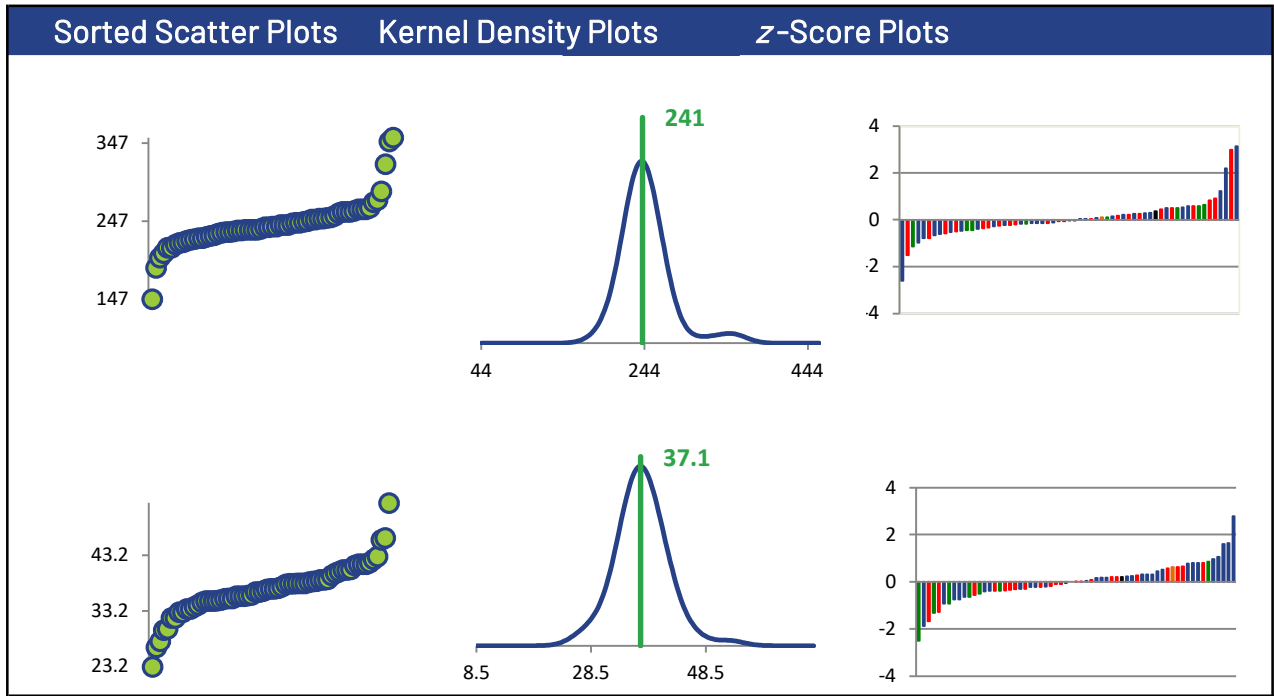
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	31	31	31	31
GC/MS - HEADSPACE (Red)	22	22	22	22
GC/MS (Green)	8	8	8	8
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

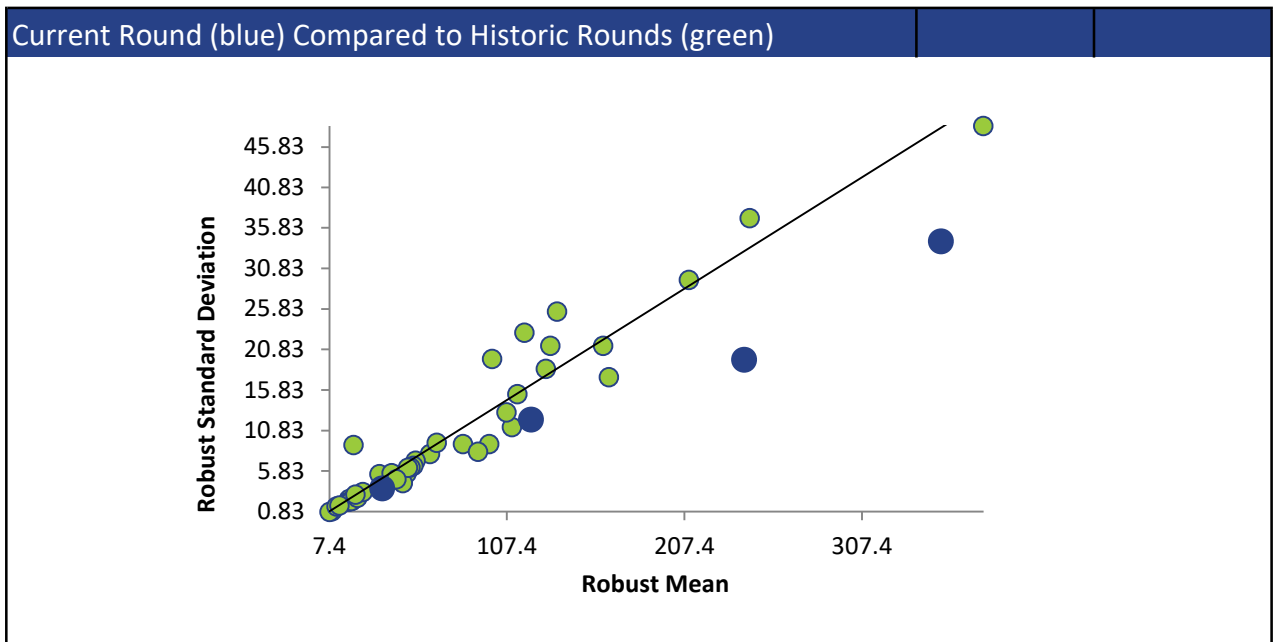
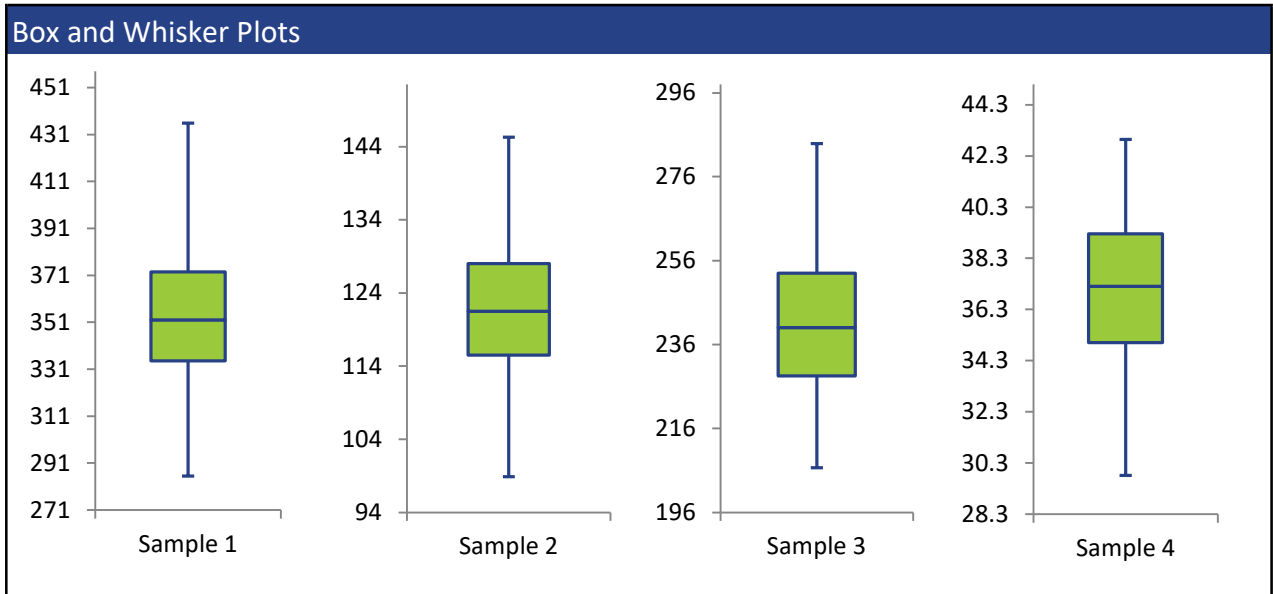
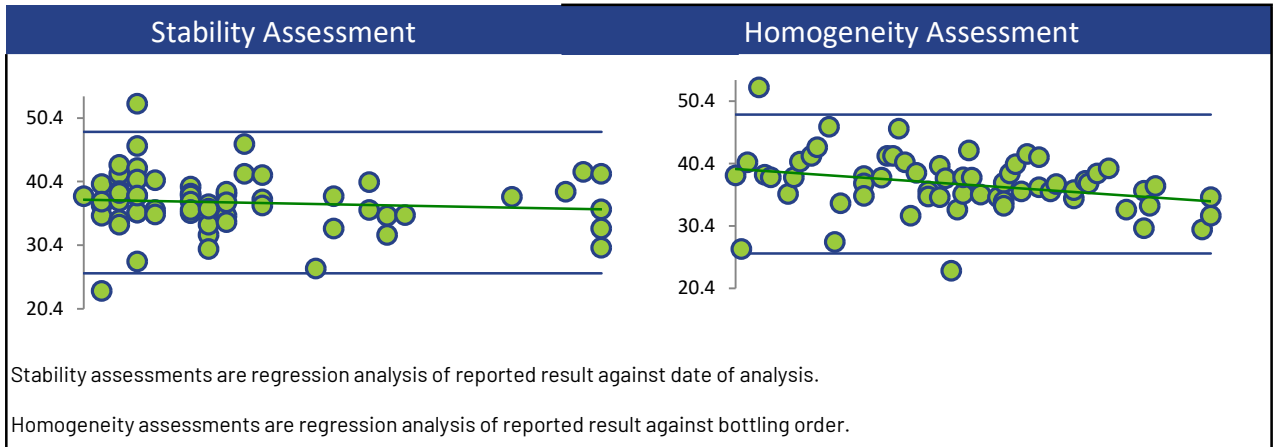
All summary stats and the plots below are based on the data excluding any flagged outliers



CHLOROFORM



CHLOROFORM



CIS-1,2-DICHLOROETHYLENE

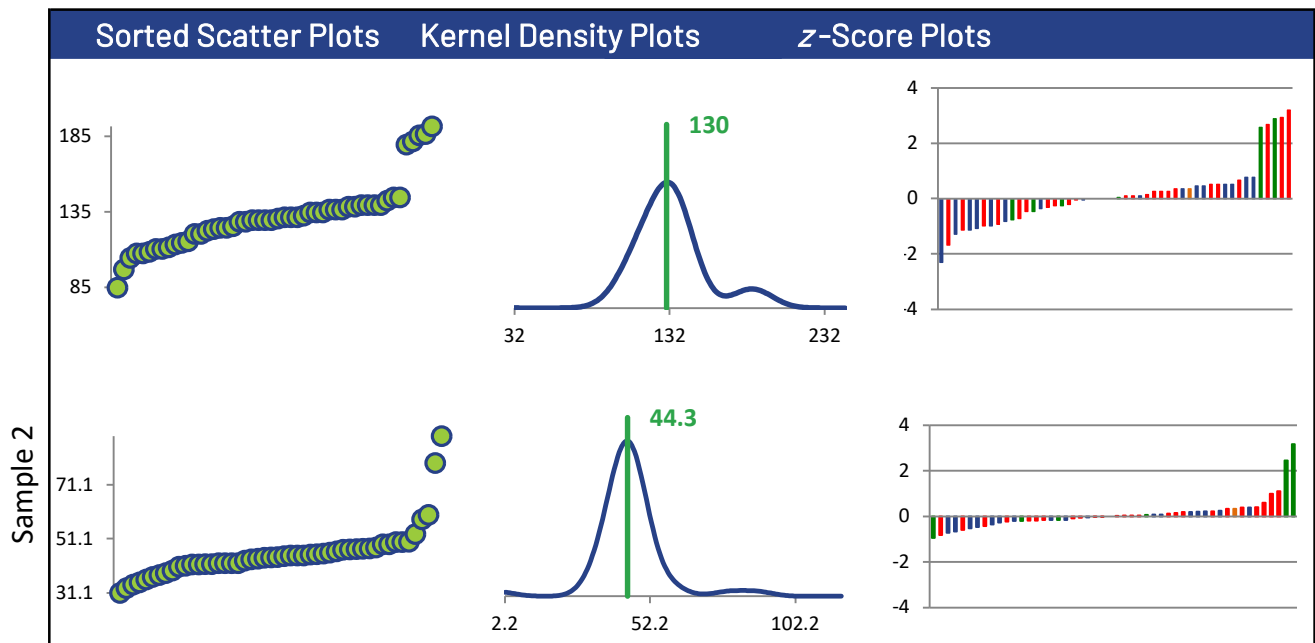
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	50	50	50	47
Median µg/L	131	44.5	88.7	13.1
Robust Mean µg/L	130	44.3	87.6	12.9
U µg/L	2.74	0.932	1.55	0.301
Robust Standard Deviation µg/L	15.5	5.27	8.74	1.65
Regression Standard Deviation µg/L	19.4	6.64	13.1	1.94
Stability Flag				
Homogeneity Flag		Homogeneity	Homogeneity	Homogeneity
Standard Deviation Used (SDPA) µg/L	19.4	14.1	19.5	3.16
Outliers	0	0	0	3
z >3.0	1	1	0	0
2< z <3	5	1	0	1

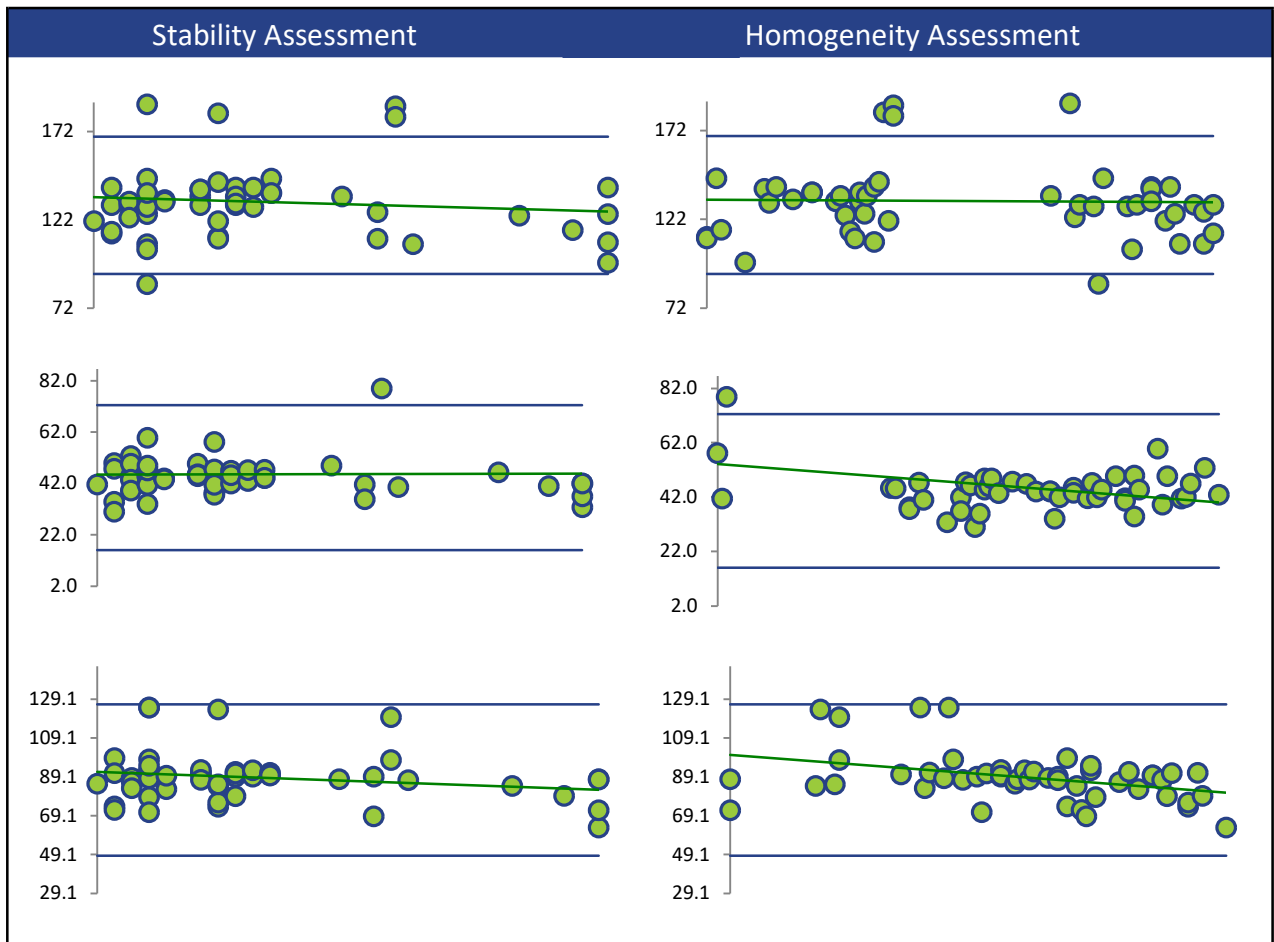
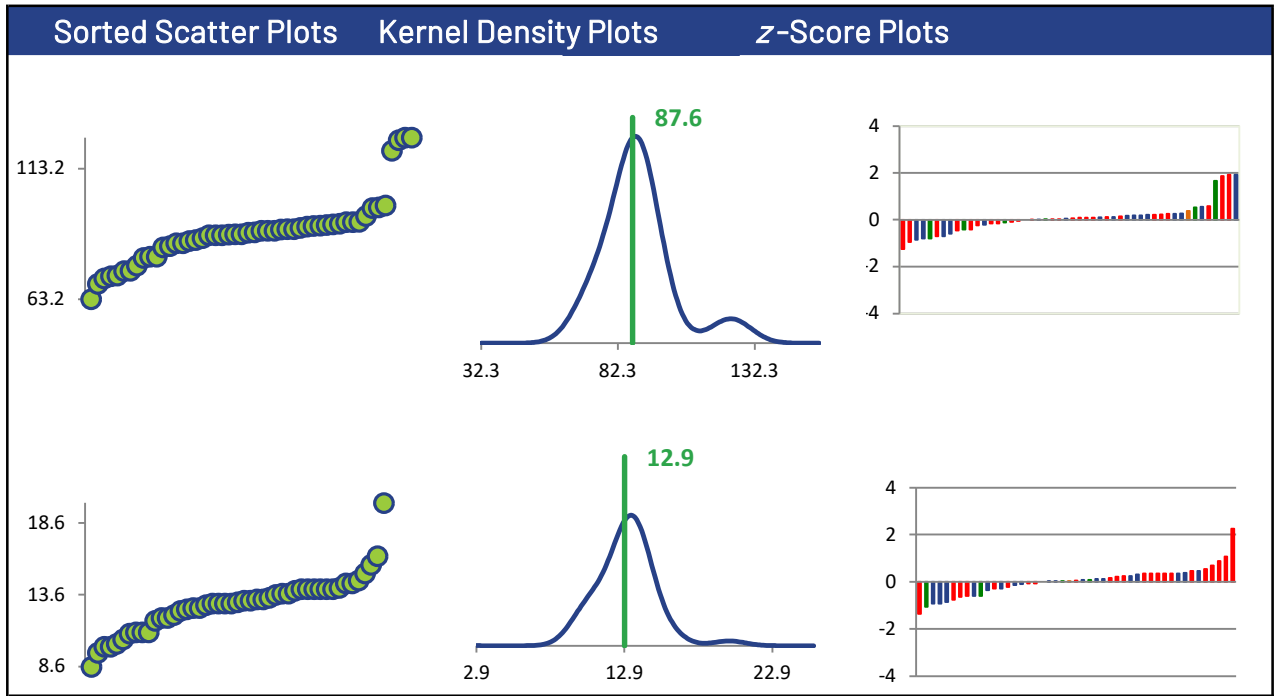
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	18	18	18	18
GC/MS - PURGE AND TRAP (Red)	25	25	25	24
GC/MS (Green)	6	6	6	4
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1

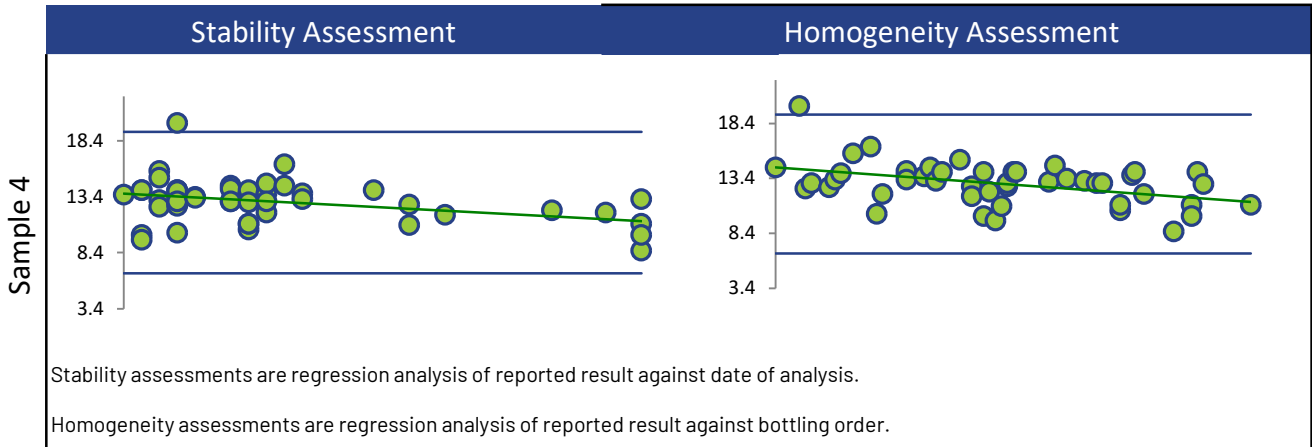
All summary stats and the plots below are based on the data excluding any flagged outliers



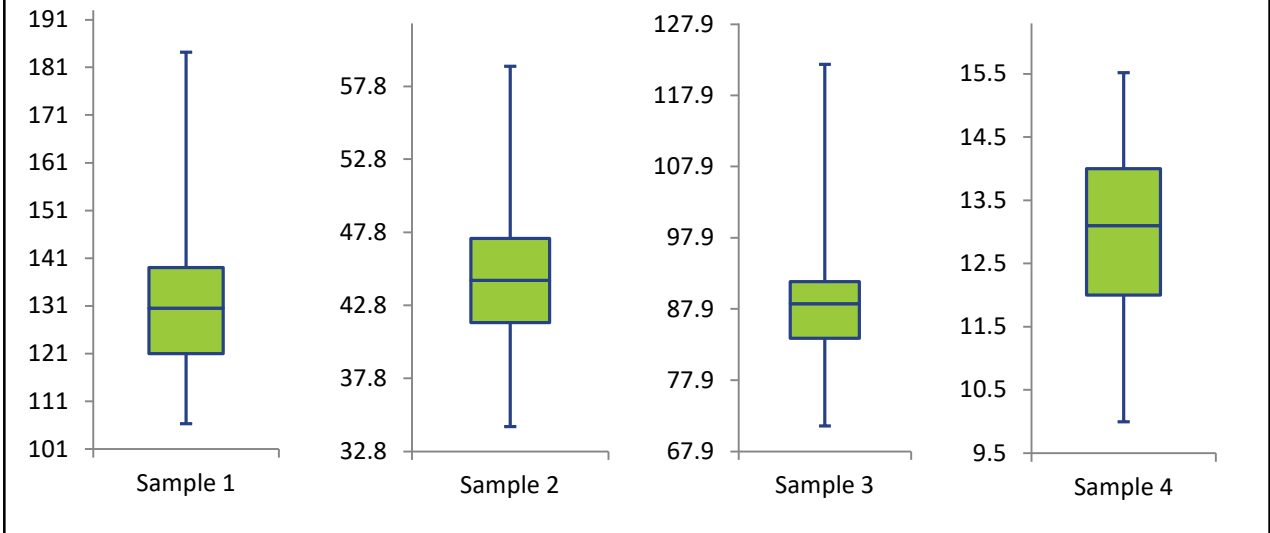
CIS-1,2-DICHLOROETHYLENE



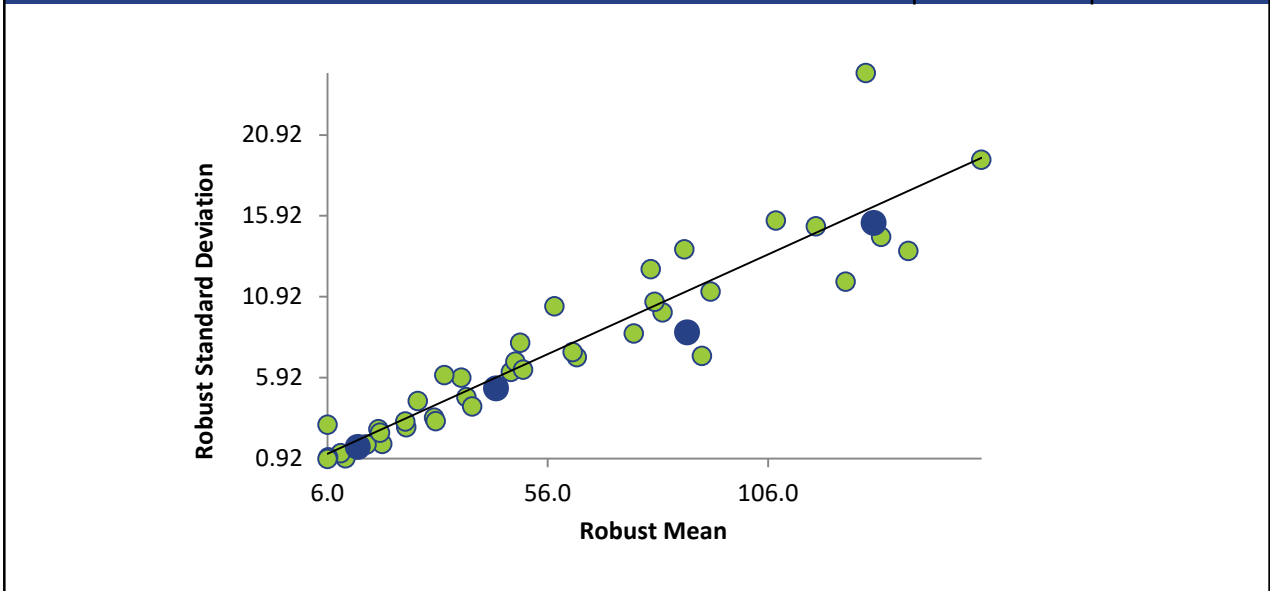
CIS-1,2-DICHLOROETHYLENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



CIS-1,3-DICHLOROPROPENE

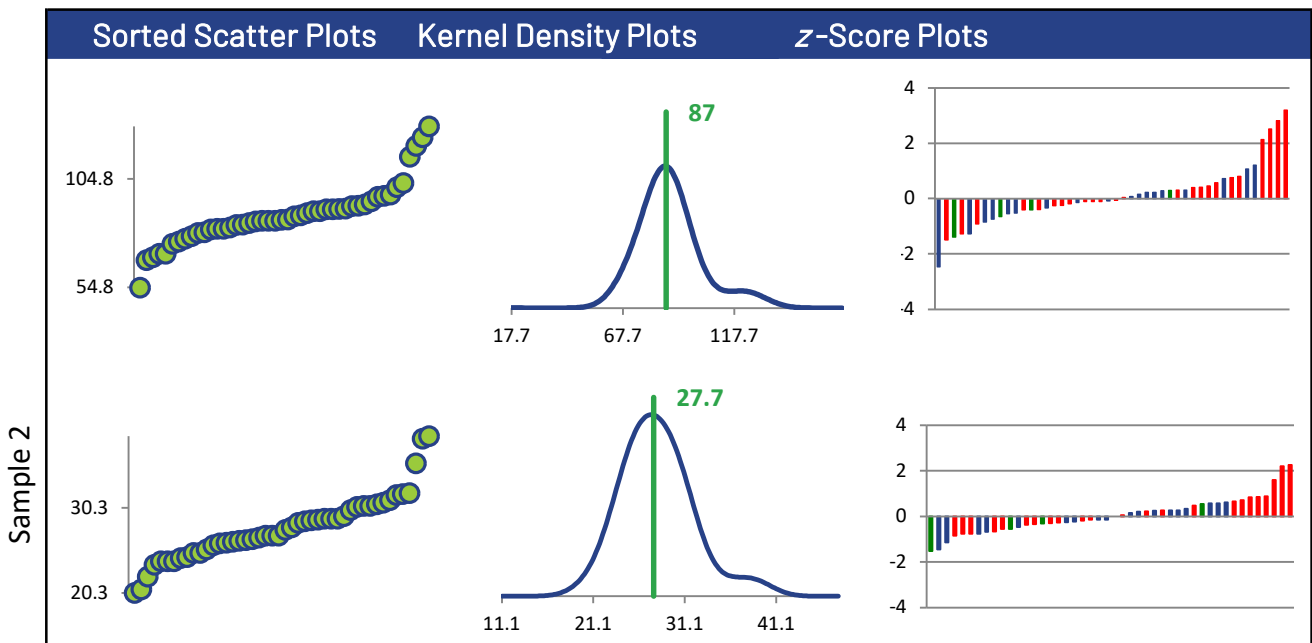
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	46	46	46	46
Median µg/L	86.1	27.4	55.3	8.00
Robust Mean µg/L	87.0	27.7	55.5	7.99
U µg/L	1.95	0.616	1.26	0.252
Robust Standard Deviation µg/L	10.6	3.34	6.81	1.37
Regression Standard Deviation µg/L	13.1	4.16	8.32	1.20
Stability Flag		Stability		Stability
Homogeneity Flag			Homogeneity	
Standard Deviation Used (SDPA) µg/L	13.1	4.87	12.9	1.88
Outliers	0	0	0	0
z >3.0	1	0	0	0
2< z <3	4	2	1	1

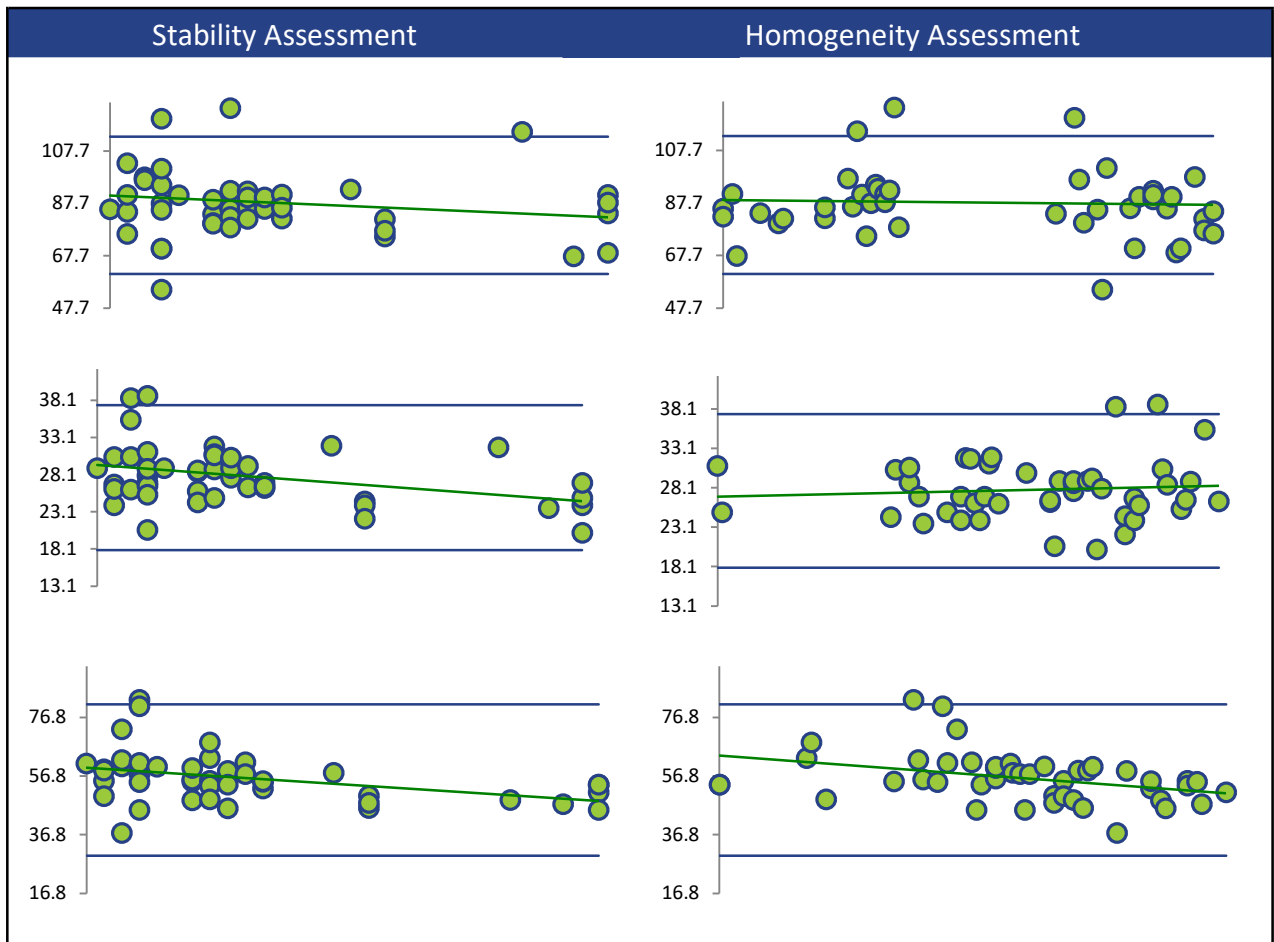
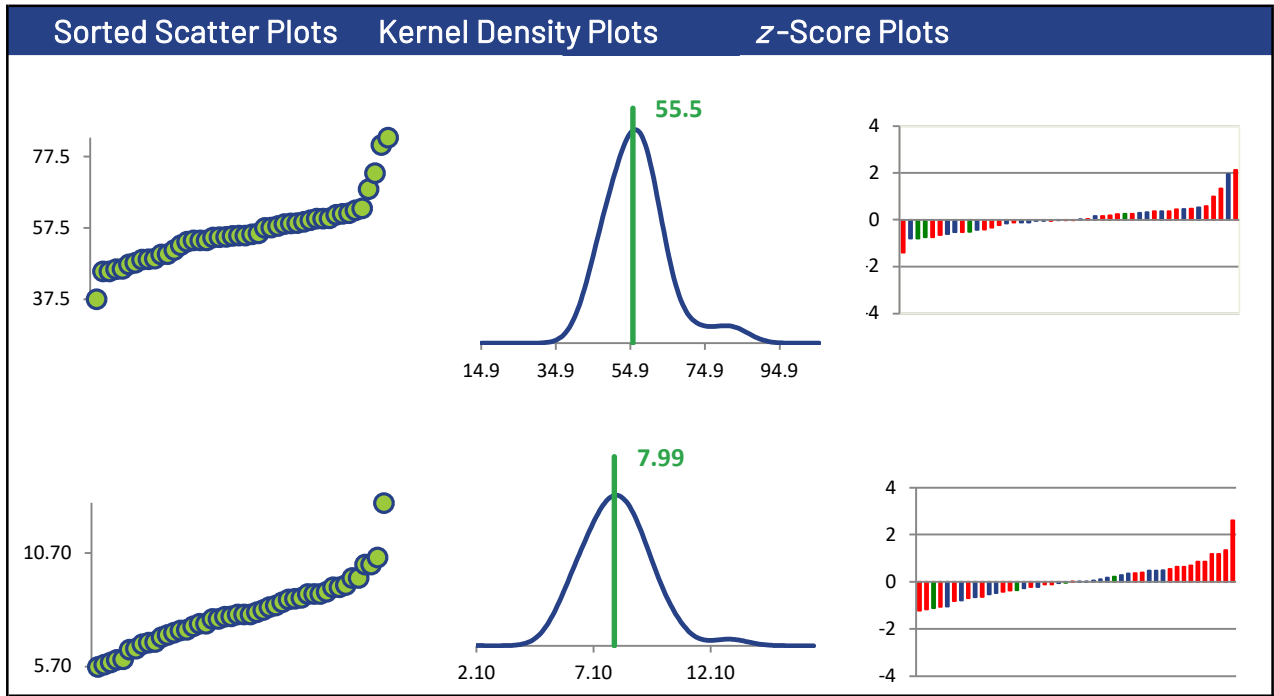
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	18	18	18	18
GC/MS - PURGE AND TRAP (Red)	24	24	24	24
GC/MS (Green)	4	4	4	4

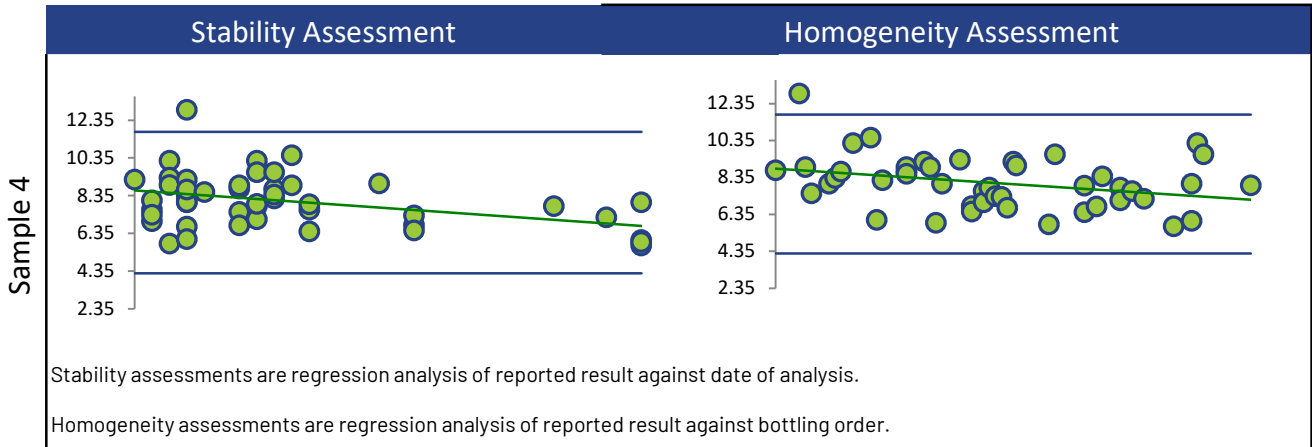
All summary stats and the plots below are based on the data excluding any flagged outliers



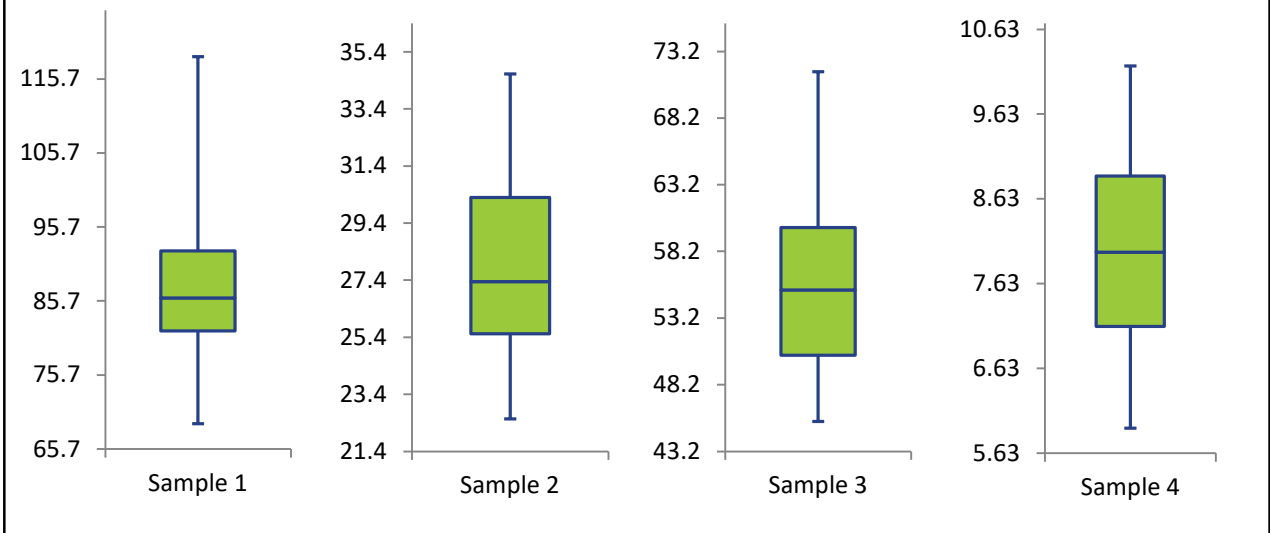
CIS-1,3-DICHLOROPROPENE



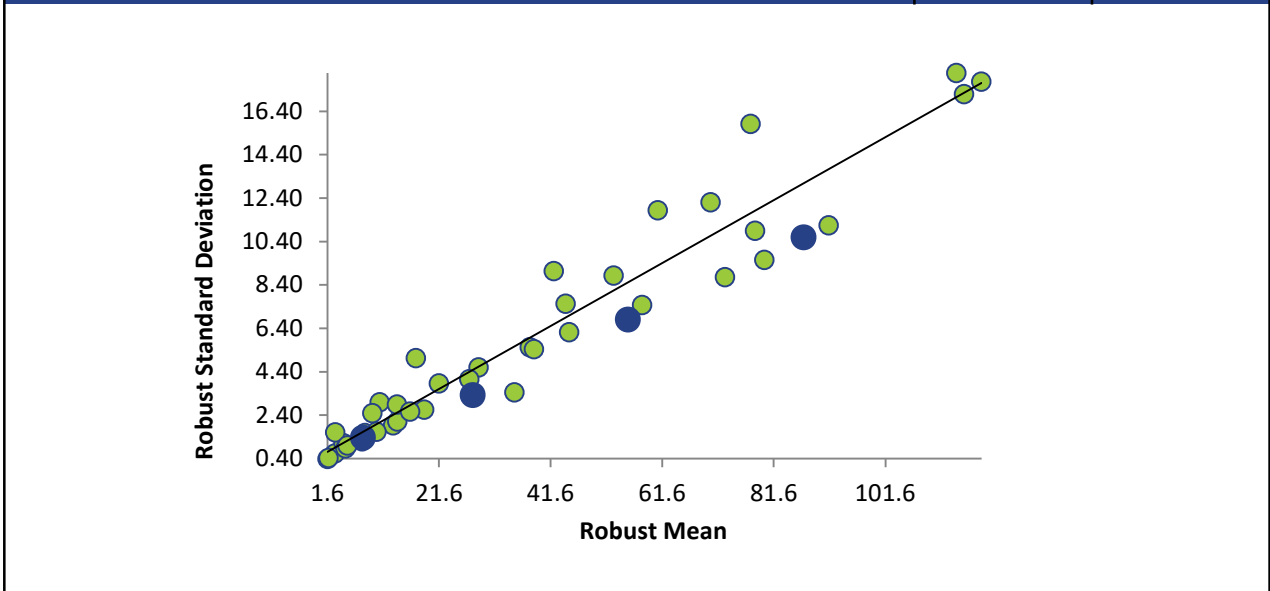
CIS-1,3-DICHLOROPROPENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



DICHLOROMETHANE

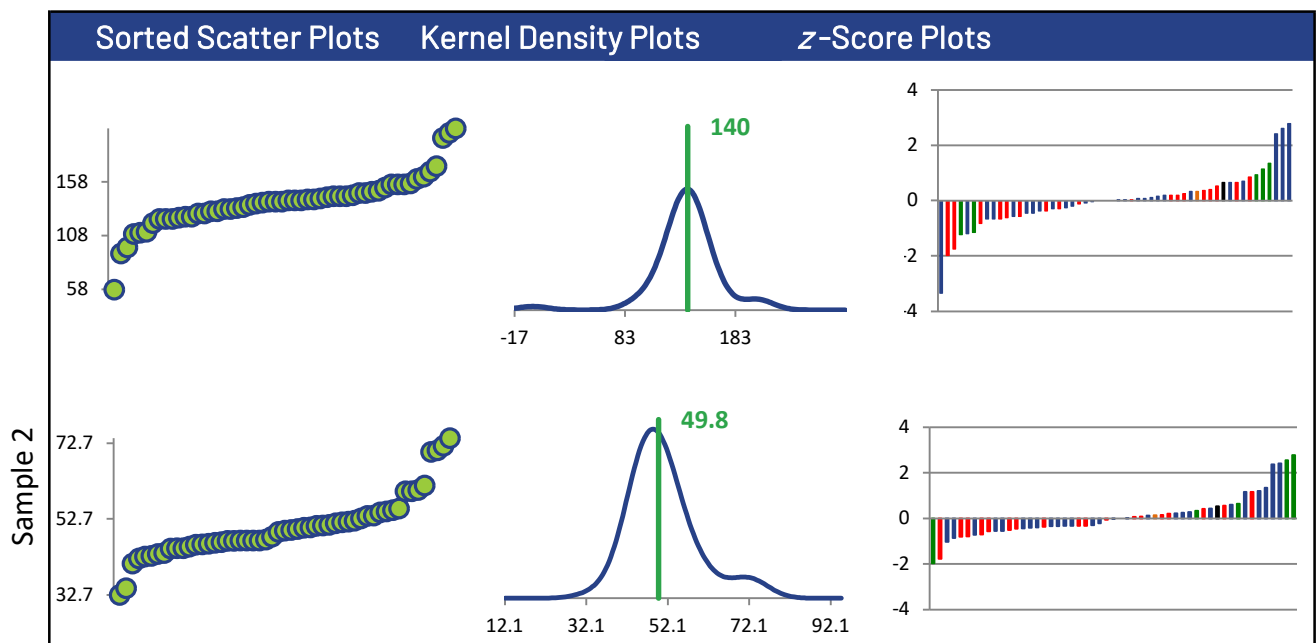
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	54	53	53	54
Median µg/L	141	49.6	96.0	16.3
Robust Mean µg/L	140	49.8	96.5	16.6
U µg/L	2.98	1.06	1.73	0.384
Robust Standard Deviation µg/L	17.5	6.15	10.1	2.26
Regression Standard Deviation µg/L	24.4	8.71	16.9	2.90
Stability Flag				
Homogeneity Flag				Homogeneity
Standard Deviation Used (SDPA) µg/L	24.4	8.71	16.9	4.14
Outliers	0	1	1	0
z >3.0	1	0	0	2
2< z <3	3	4	2	2

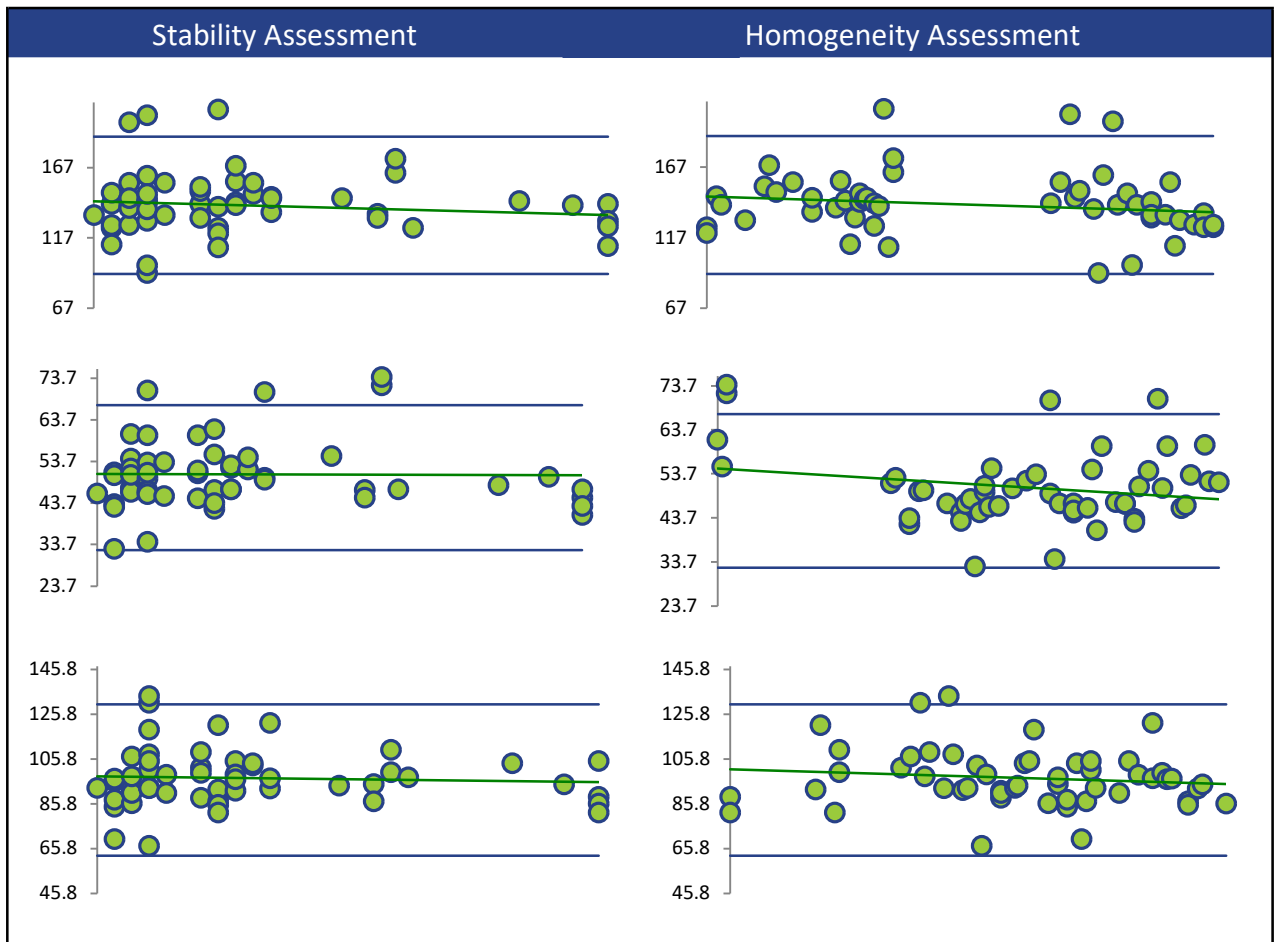
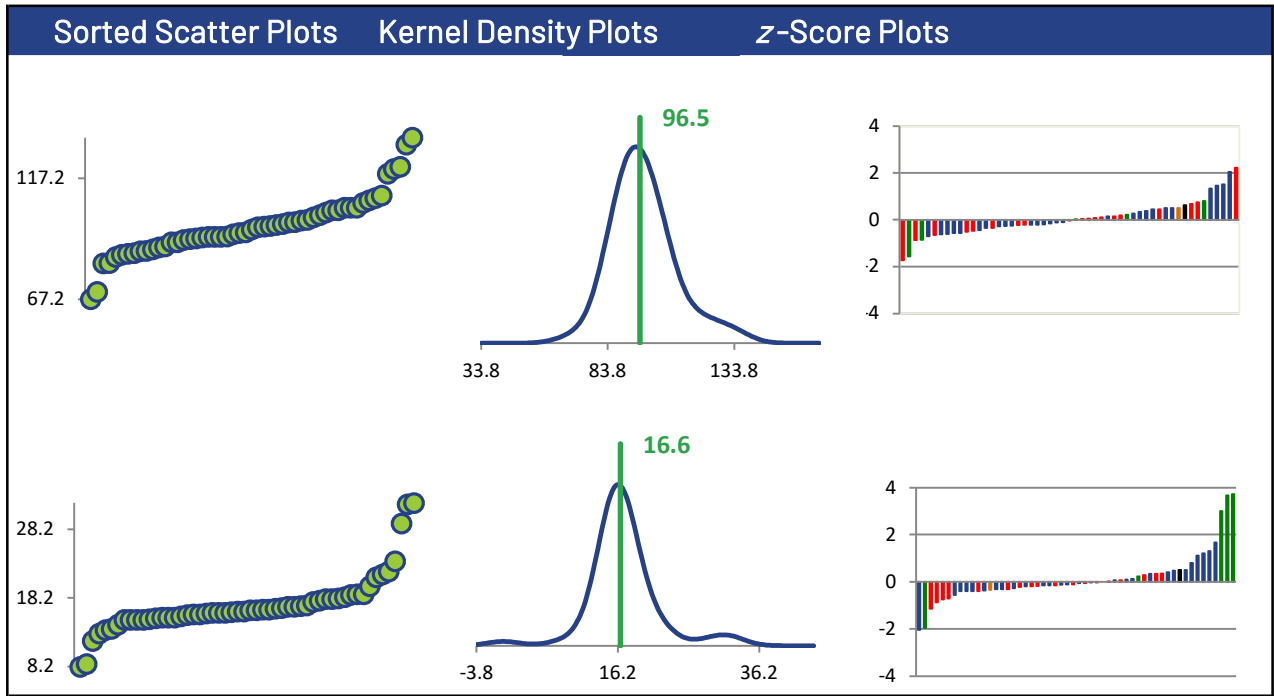
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	28	27	27	28
GC/MS - HEADSPACE (Red)	19	19	19	19
GC/MS (Green)	5	5	5	5
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1

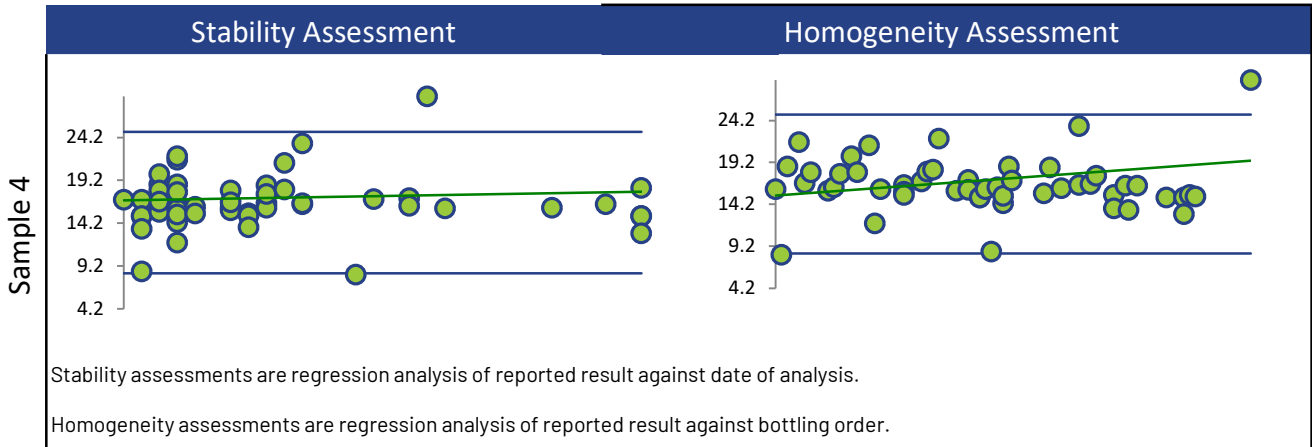
All summary stats and the plots below are based on the data excluding any flagged outliers



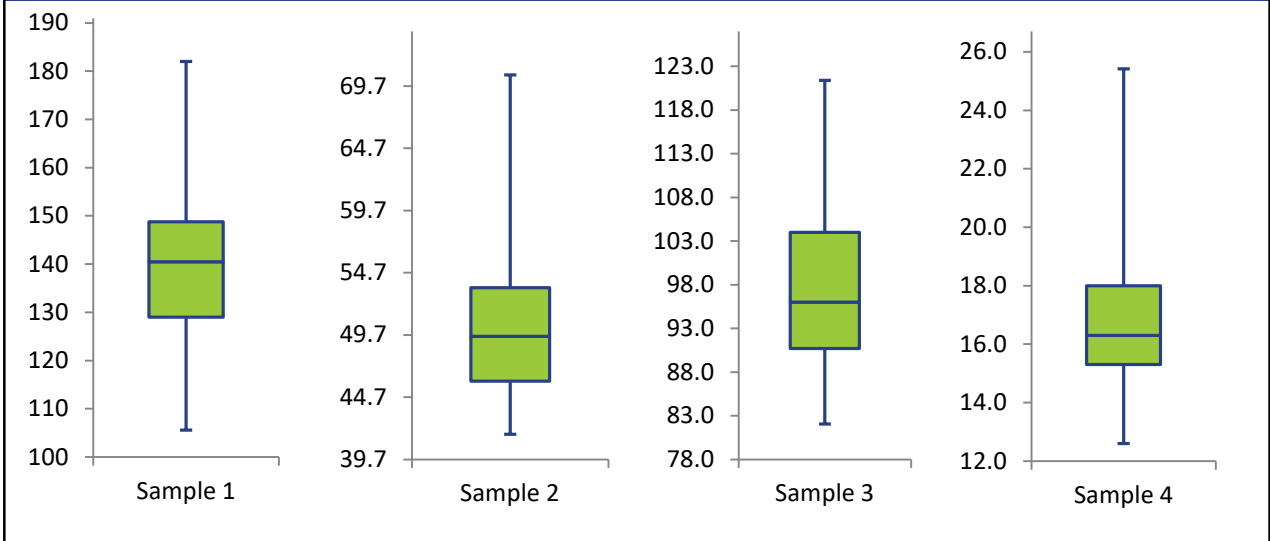
DICHLOROMETHANE



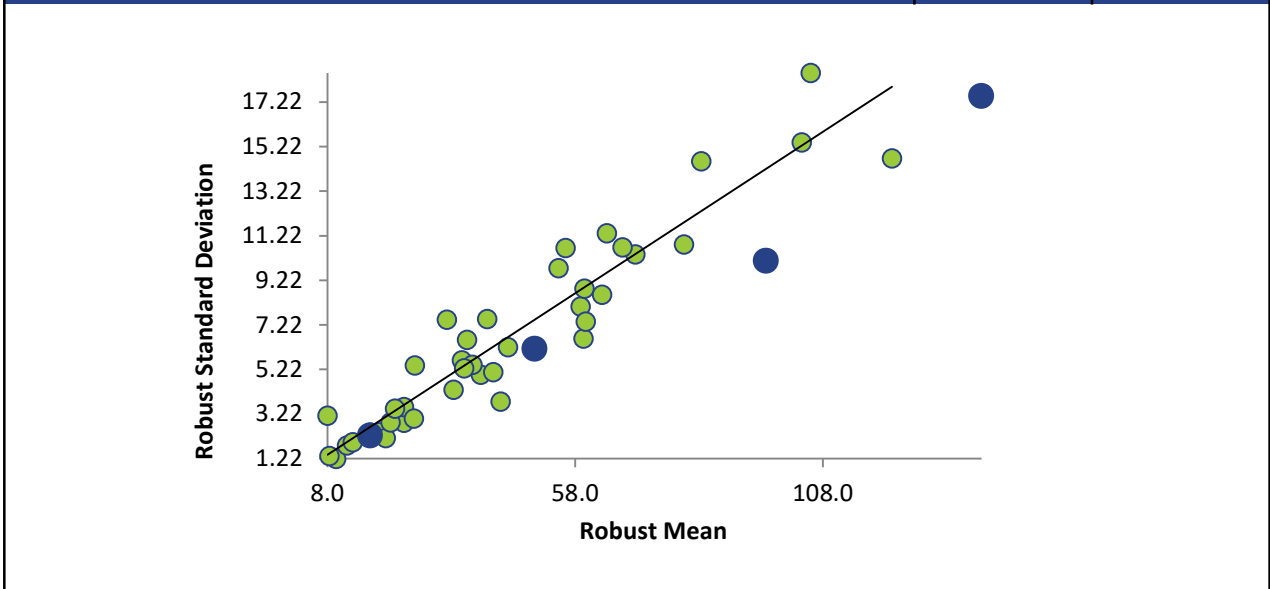
DICHLOROMETHANE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



ETHYLBENZENE

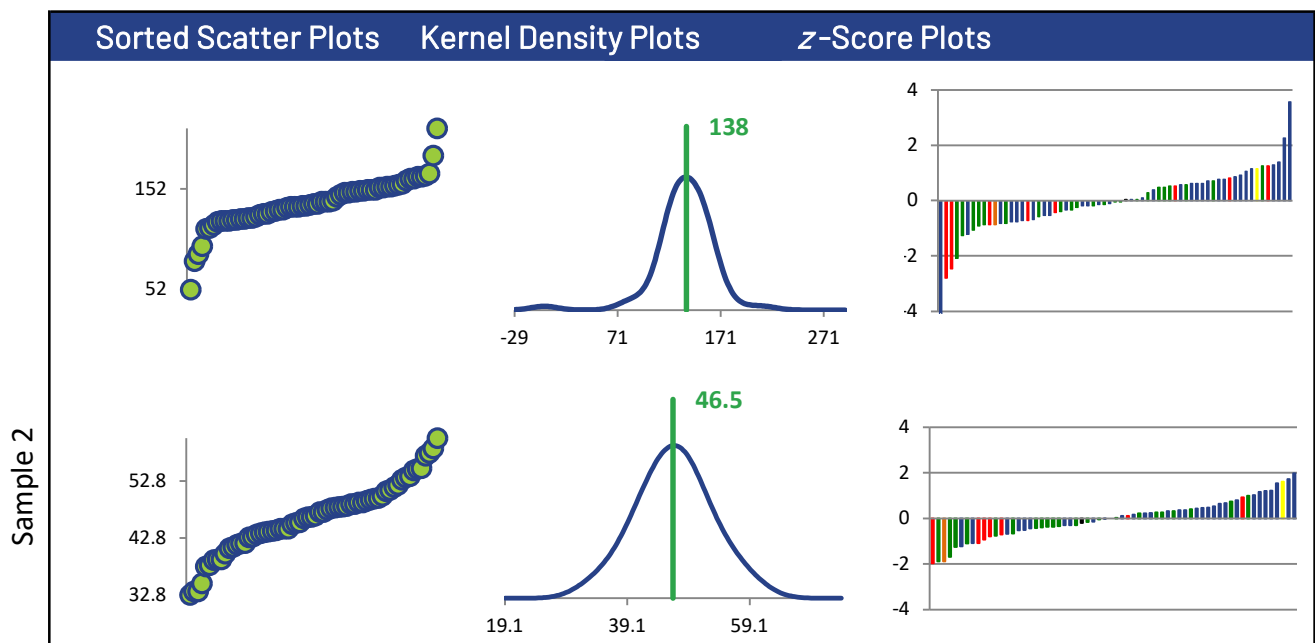
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	65	64	65	65
Median µg/L	137	46.6	93.8	13.7
Robust Mean µg/L	138	46.5	92.0	13.4
U µg/L	2.98	0.936	1.80	0.395
Robust Standard Deviation µg/L	19.2	5.99	11.6	2.55
Regression Standard Deviation µg/L	20.7	6.97	13.8	2.01
Stability Flag				
Homogeneity Flag				Homogeneity
Standard Deviation Used (SDPA) µg/L	20.7	6.97	13.8	2.72
Outliers	0	1	0	0
z >3.0	2	0	4	0
2< z <3	4	0	4	6

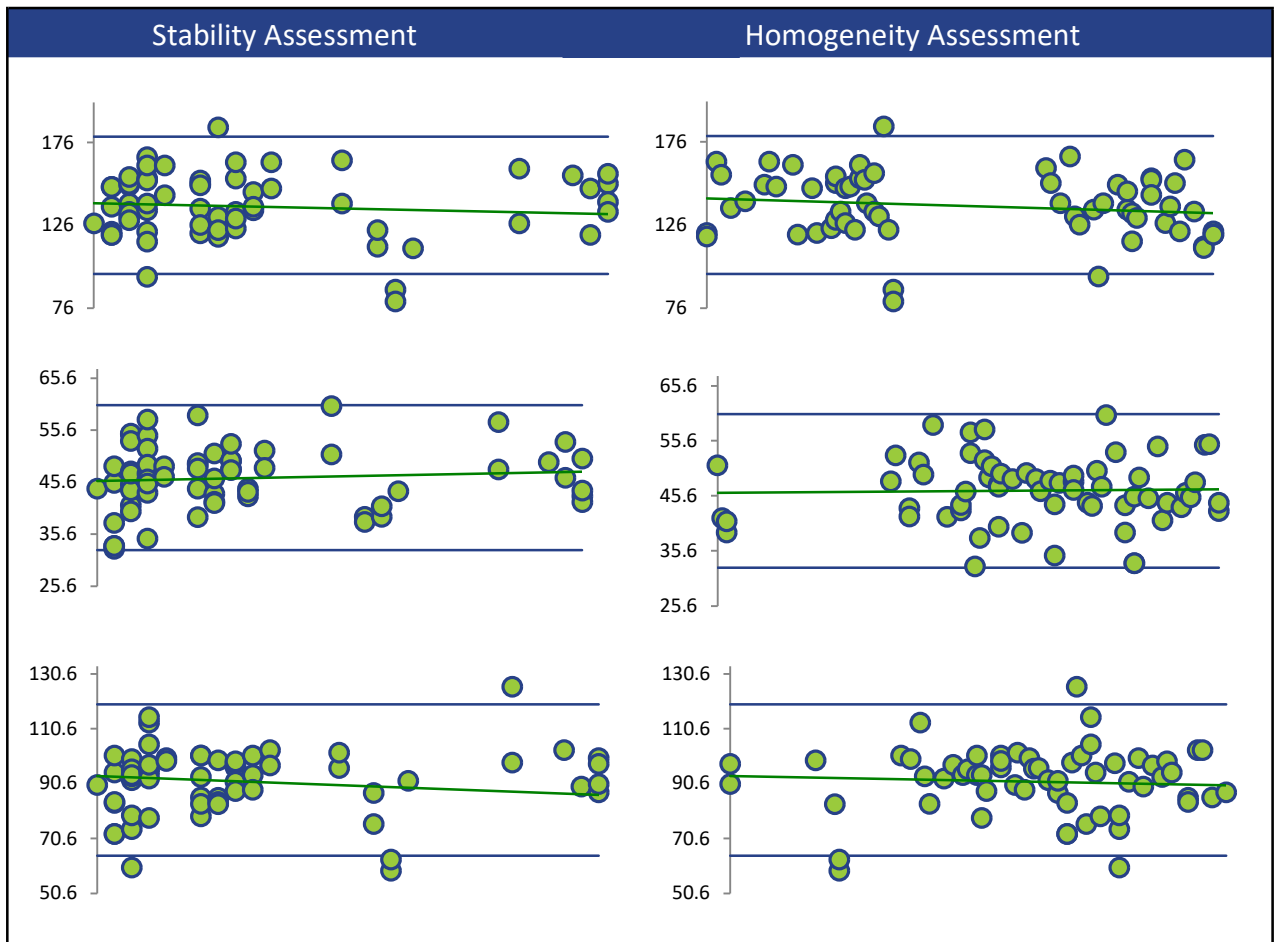
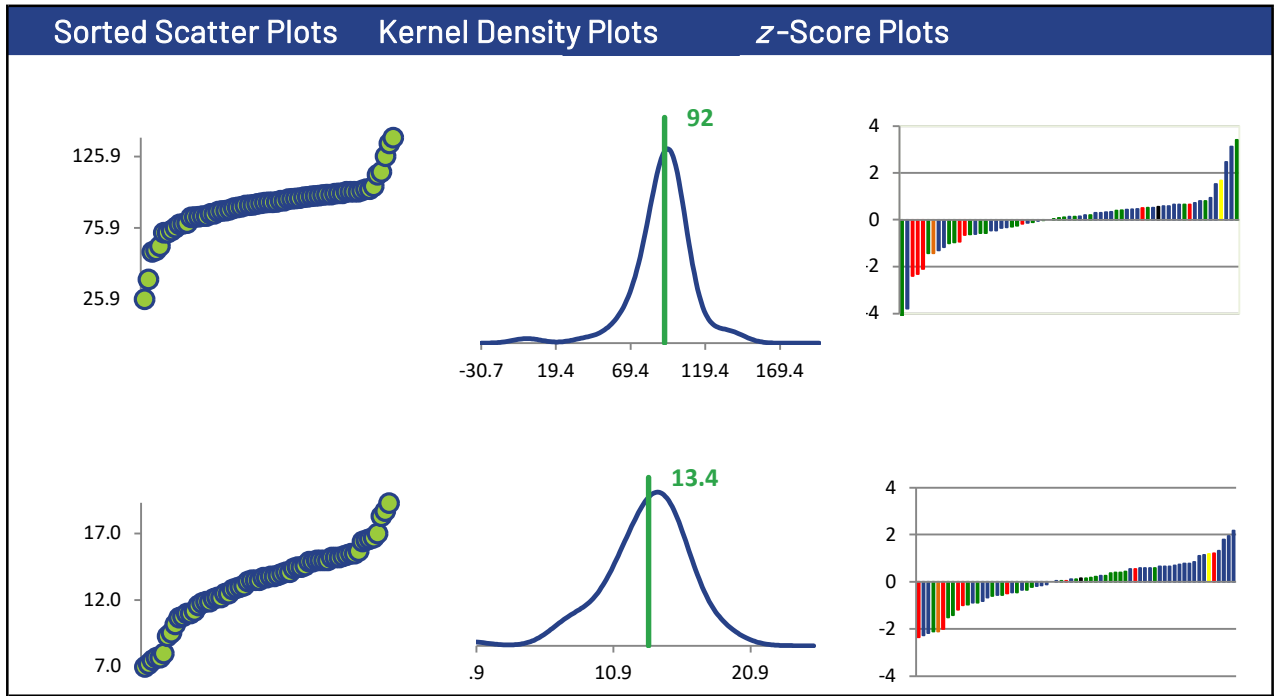
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	32	31	32	32
GC/MS (Red)	8	8	8	8
GC/MS - HEADSPACE (Green)	22	22	22	22
GC/FID - HEADSPACE (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1
GC/FID - PURGE AND TRAP (Yellow)	1	1	1	1

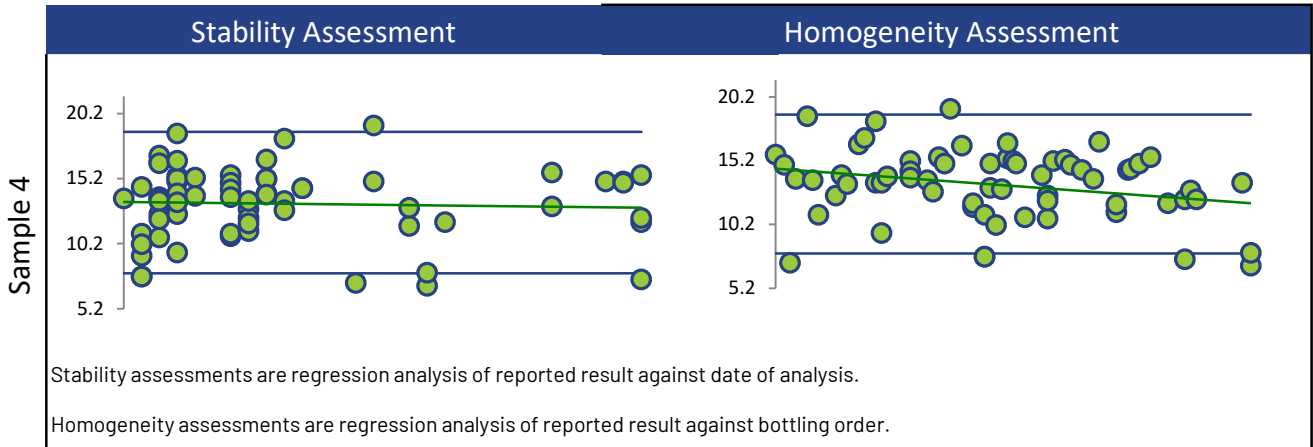
All summary stats and the plots below are based on the data excluding any flagged outliers



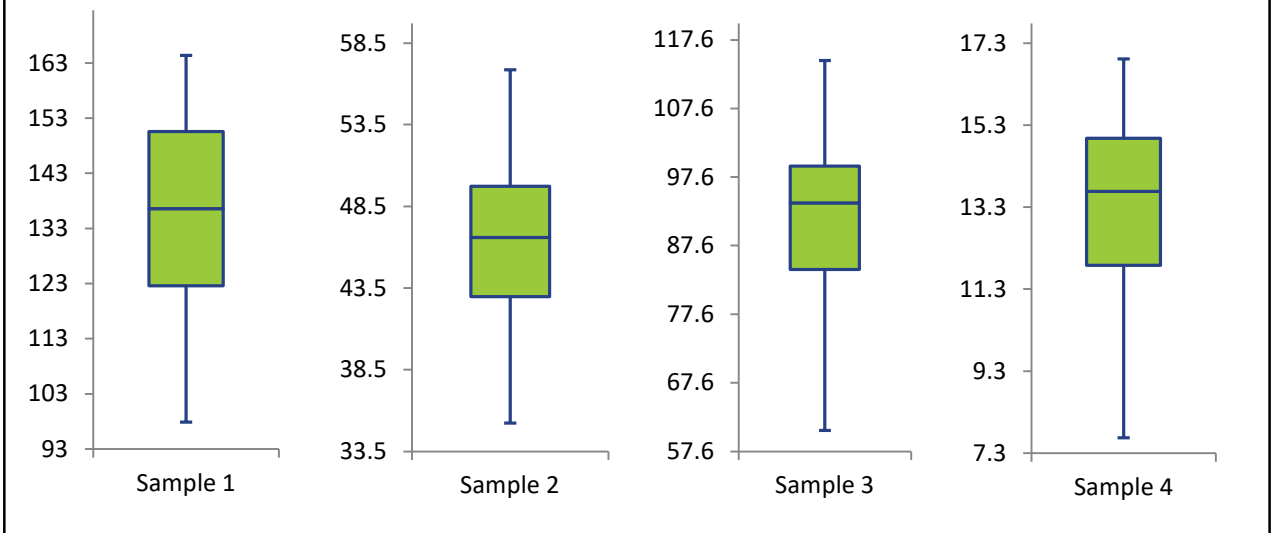
ETHYLBENZENE



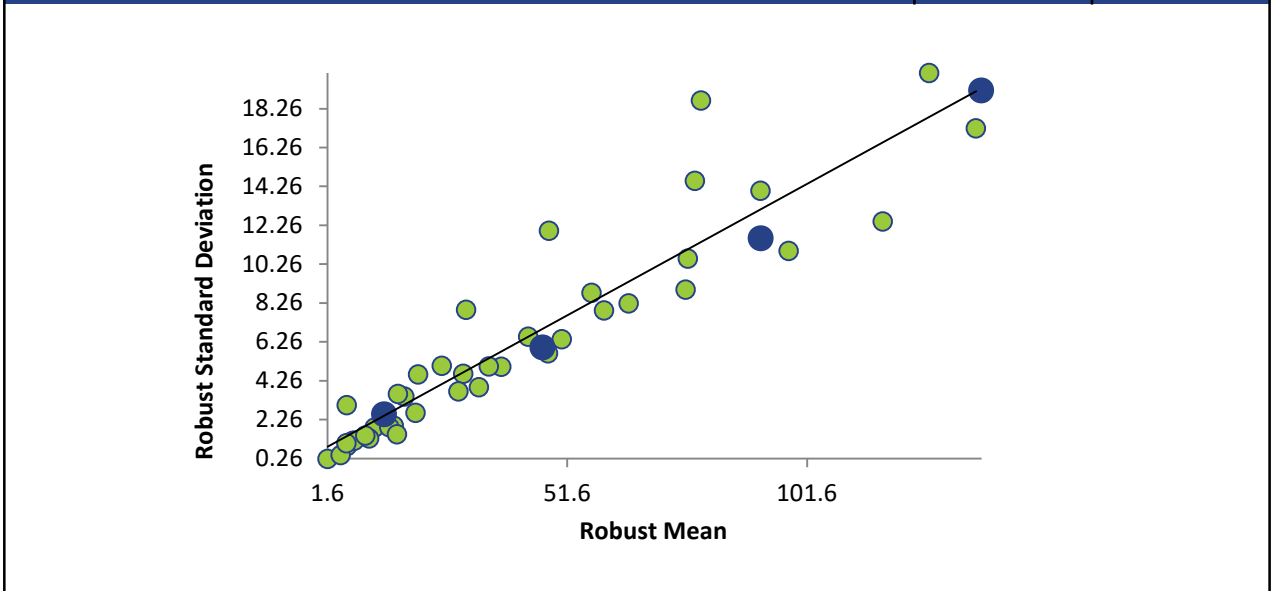
ETHYLBENZENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



ETHYLENE DIBROMIDE

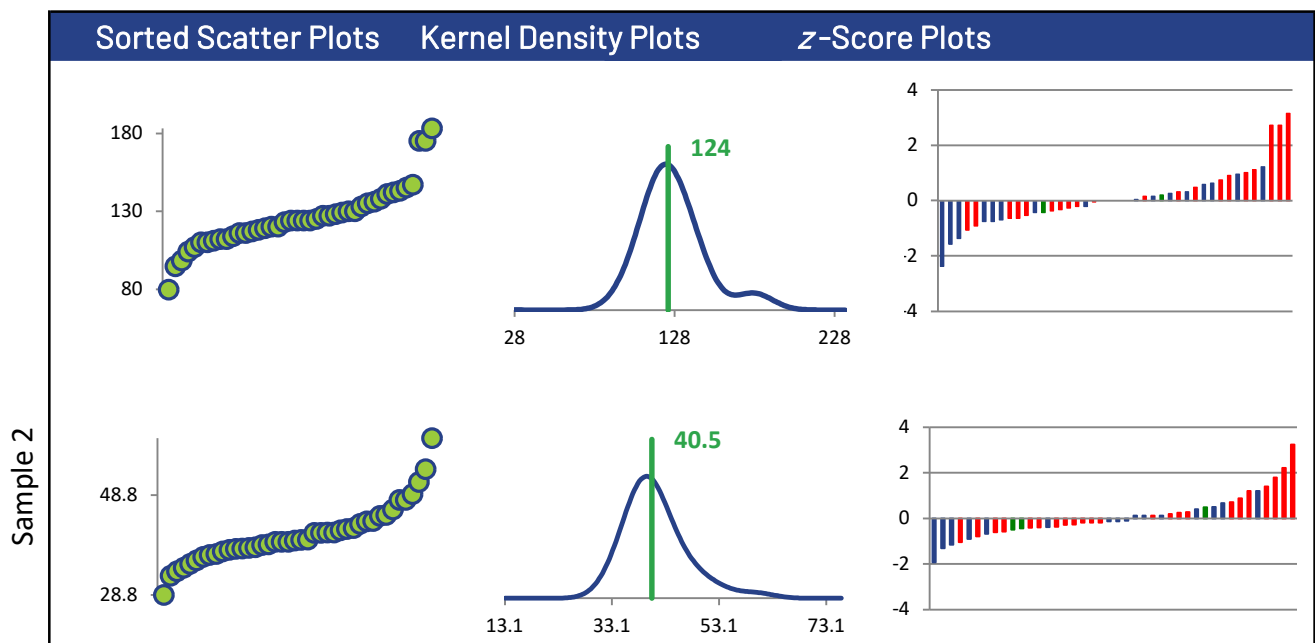
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	42	42	42	42
Median µg/L	124	39.8	82.0	12.6
Robust Mean µg/L	124	40.5	83.3	12.5
U µg/L	3.03	0.943	1.53	0.309
Robust Standard Deviation µg/L	15.7	4.89	7.91	1.60
Regression Standard Deviation µg/L	18.7	6.08	12.5	1.88
Stability Flag				
Homogeneity Flag			Homogeneity	Homogeneity
Standard Deviation Used (SDPA) µg/L	18.7	6.08	16.7	2.41
Outliers	0	0	0	0
z >3.0	1	1	0	0
2< z <3	3	1	3	1

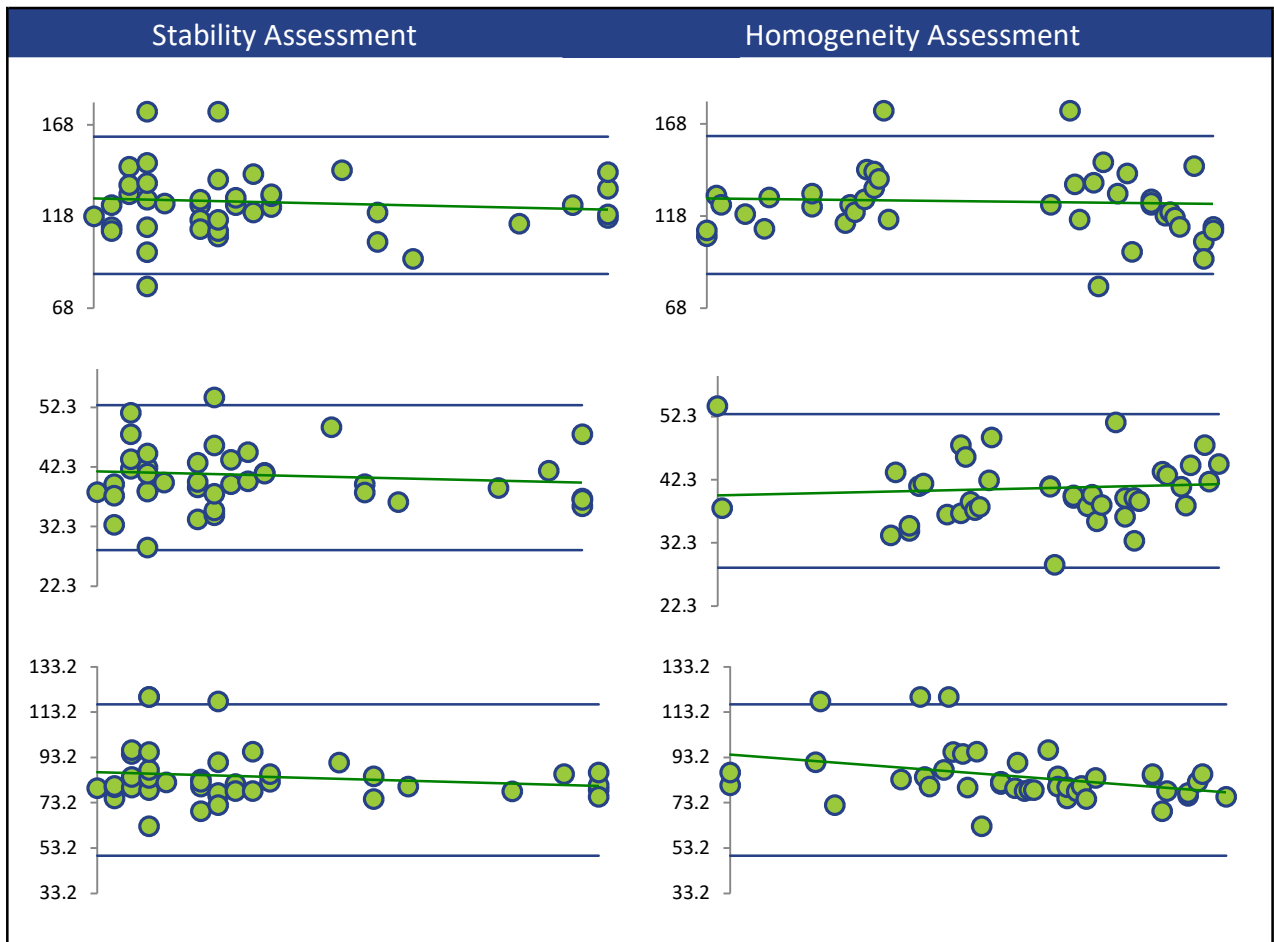
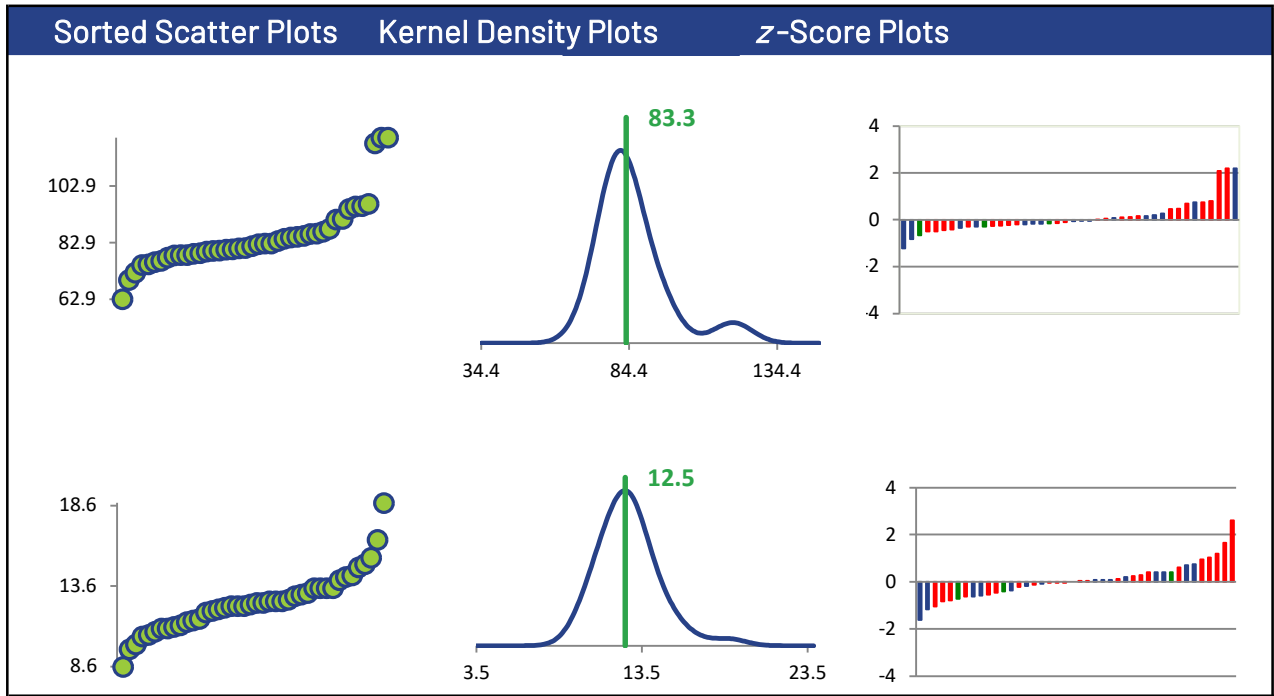
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	16	16	16	16
GC/MS - PURGE AND TRAP (Red)	23	23	23	23
GC/MS (Green)	3	3	3	3

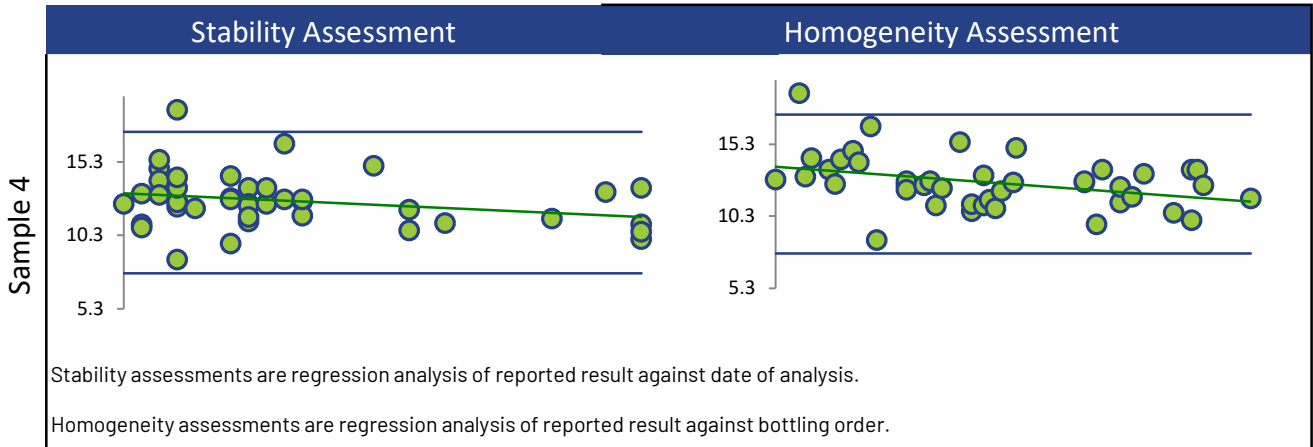
All summary stats and the plots below are based on the data excluding any flagged outliers



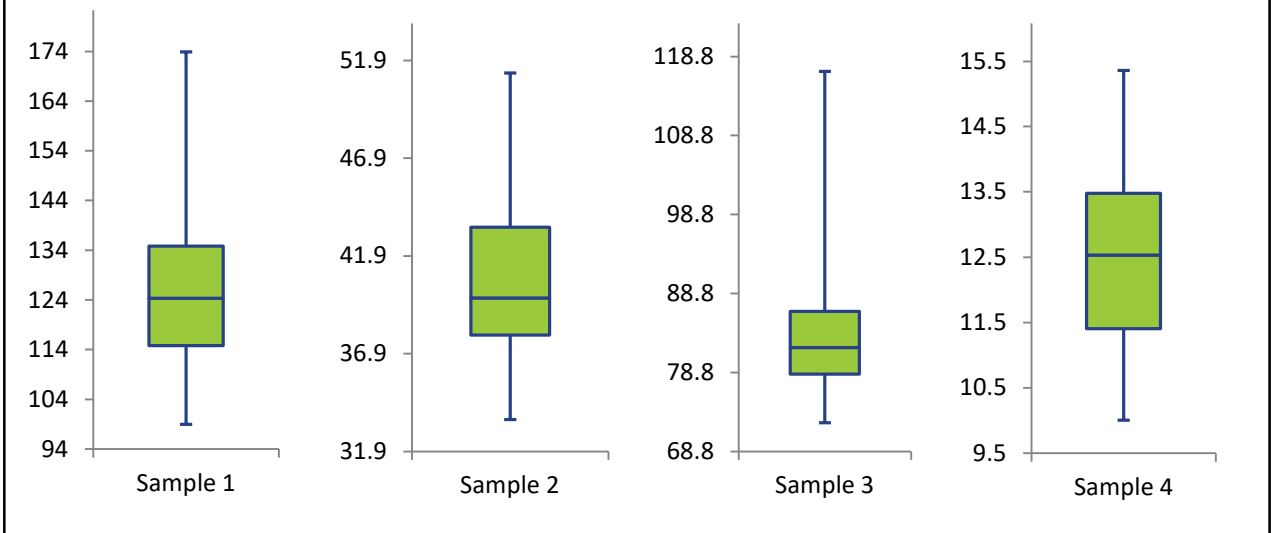
ETHYLENE DIBROMIDE



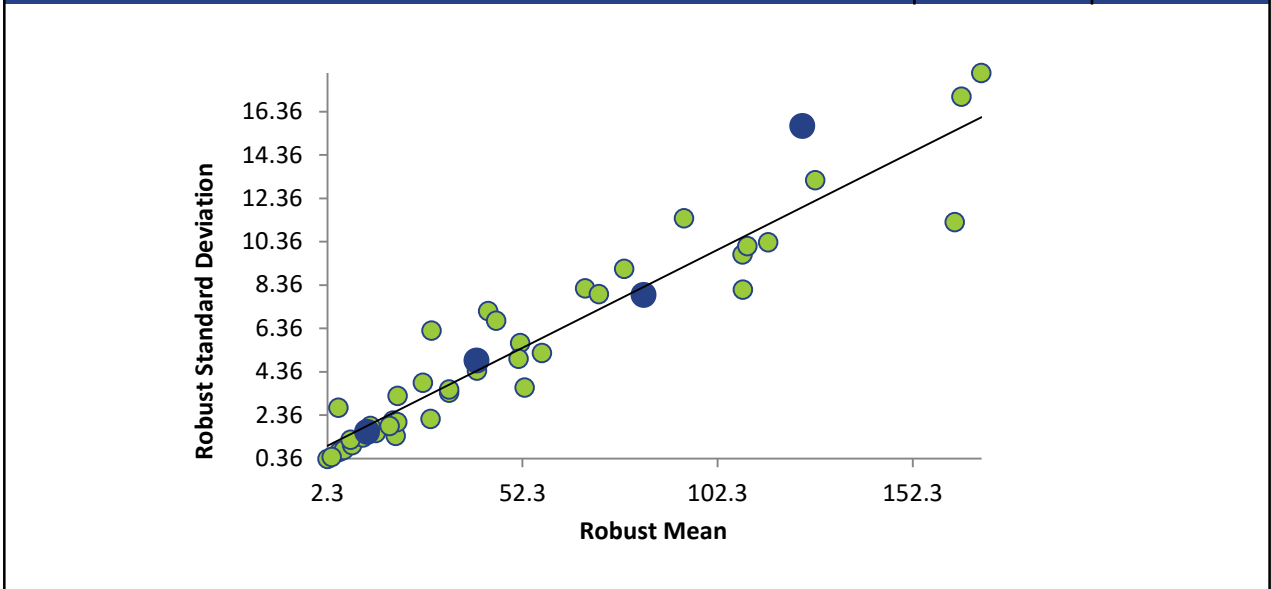
ETHYLENE DIBROMIDE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



M,P-XYLENE

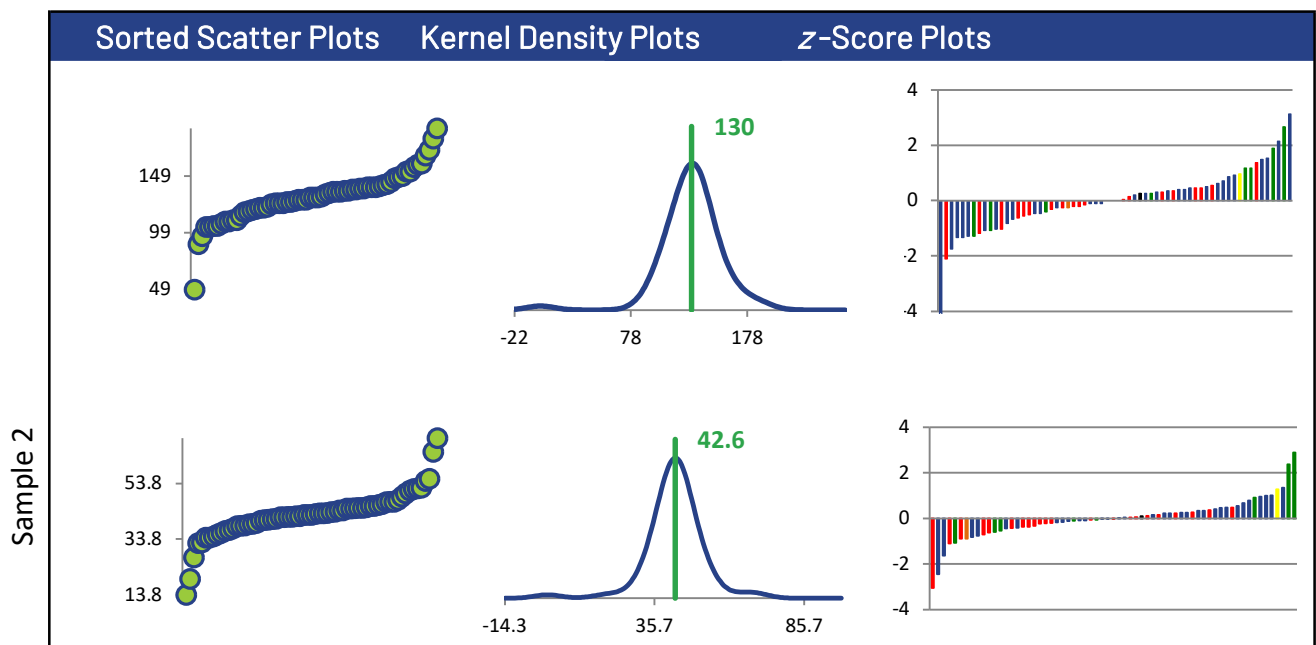
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	64	65	64	63
Median µg/L	130	42.5	87.3	12.2
Robust Mean µg/L	130	42.6	87.4	12.2
U µg/L	2.92	0.936	1.69	0.340
Robust Standard Deviation µg/L	18.7	6.04	10.8	2.16
Regression Standard Deviation µg/L	19.5	6.39	13.1	1.83
Stability Flag				
Homogeneity Flag		Homogeneity	Homogeneity	
Standard Deviation Used (SDPA) µg/L	19.5	9.47	17.3	2.16
Outliers	1	0	1	2
z >3.0	2	1	0	1
2< z <3	3	3	1	4

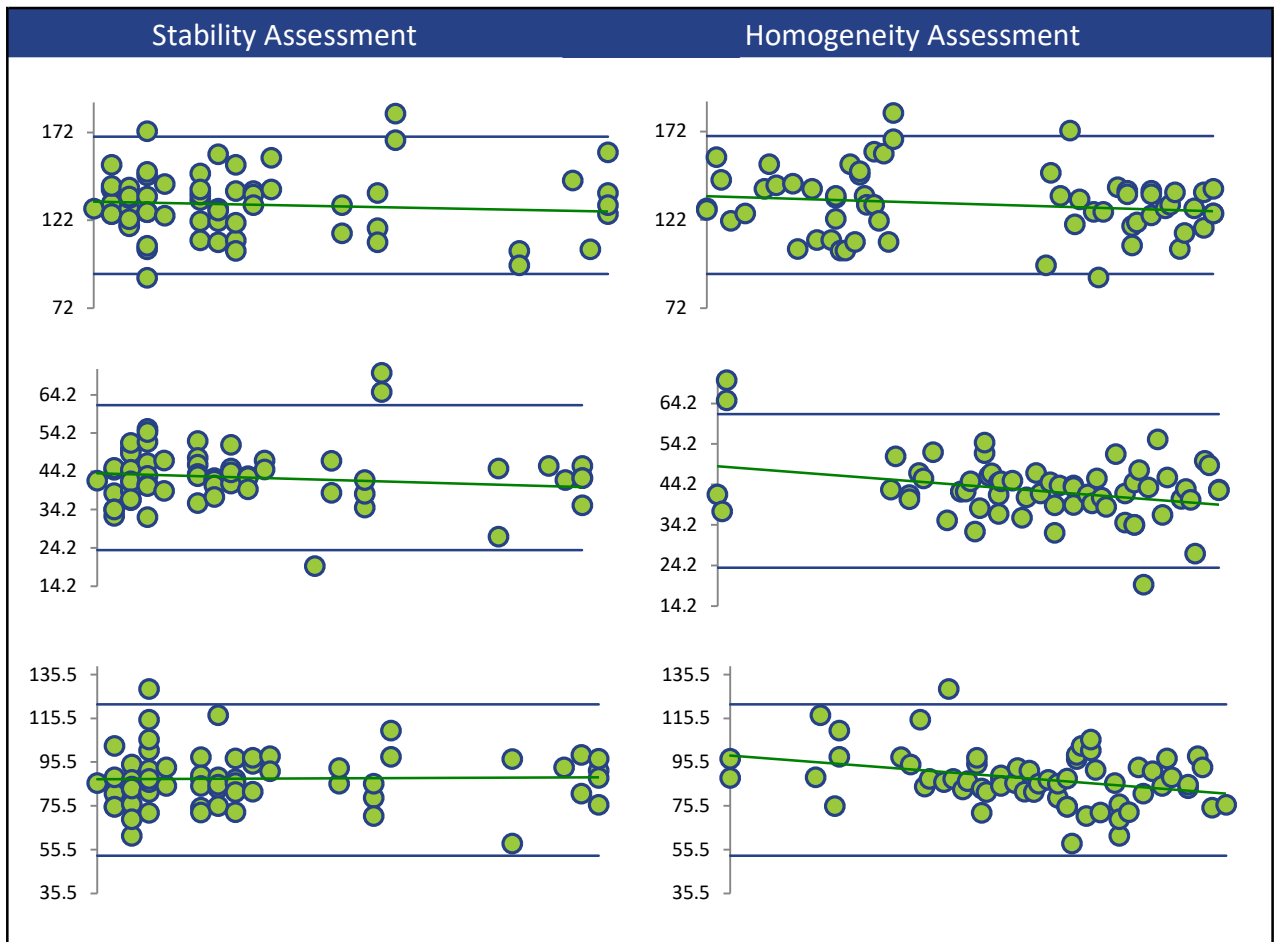
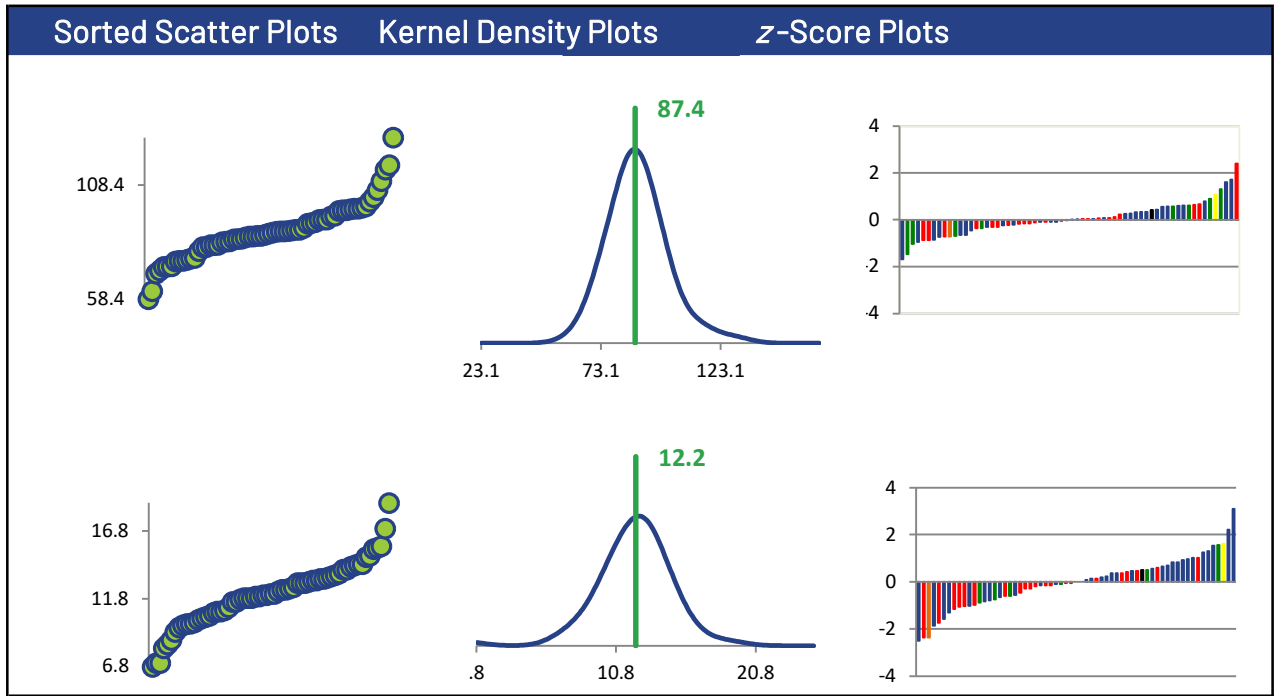
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	32	32	31	32
GC/MS - HEADSPACE (Red)	21	22	22	22
GC/MS (Green)	8	8	8	6
GC/FID - HEADSPACE (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1
GC/FID - PURGE AND TRAP (Yellow)	1	1	1	1

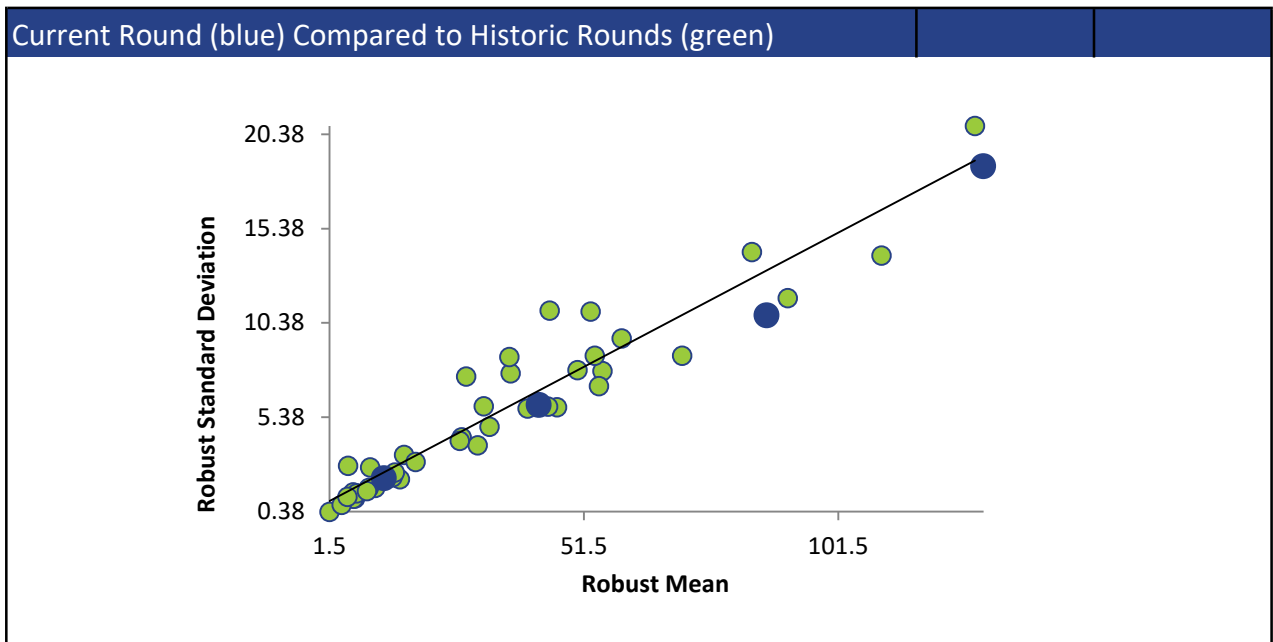
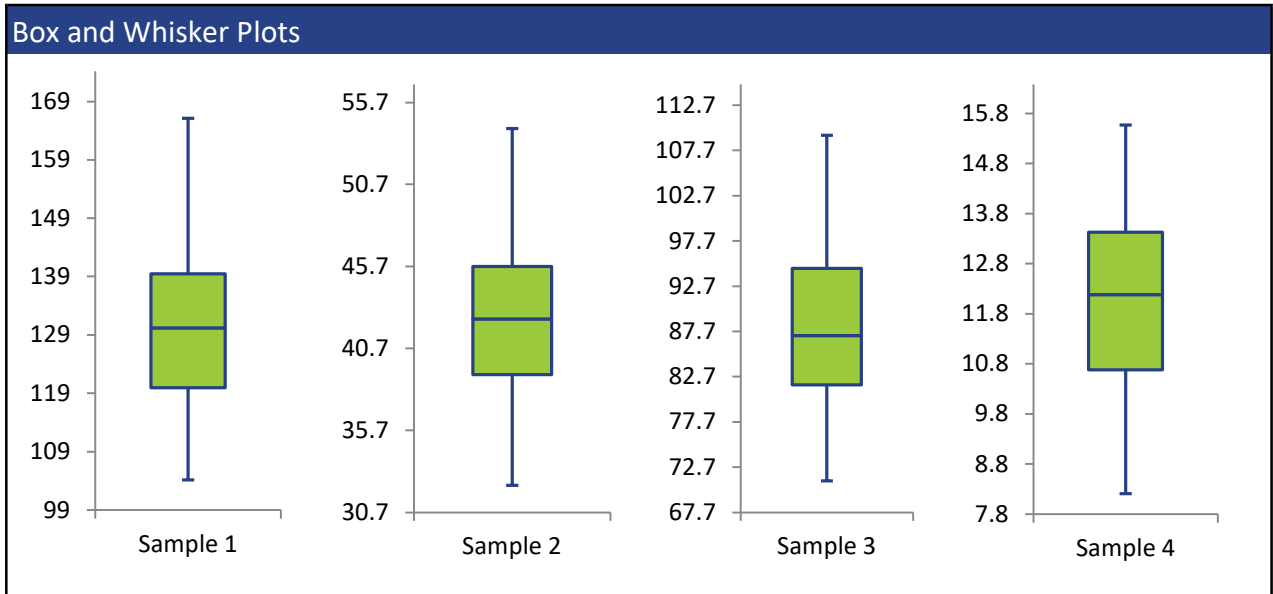
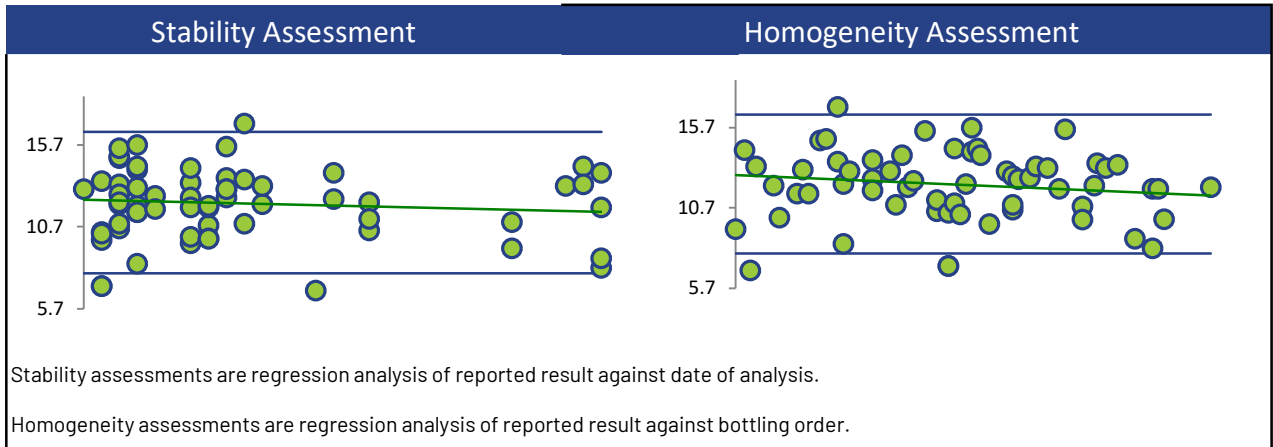
All summary stats and the plots below are based on the data excluding any flagged outliers



M,P-XYLENE



M,P-XYLENE



METHYL ETHYL KETONE

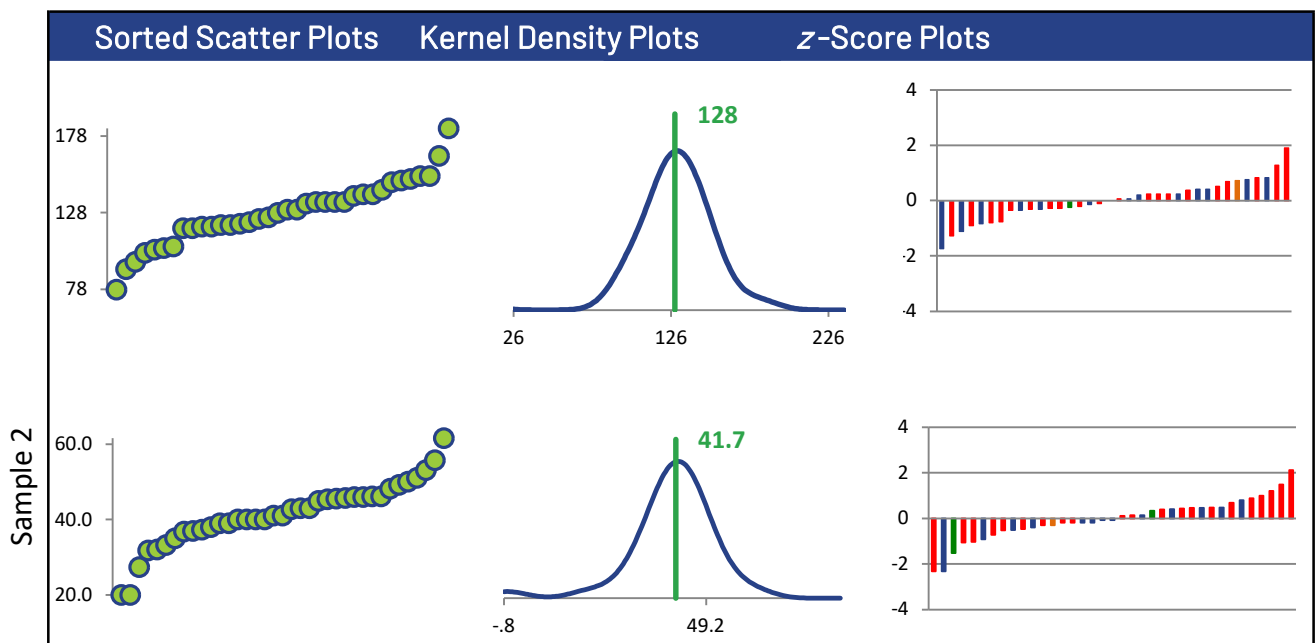
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	36	37	36	27
Median µg/L	129	41.0	85.9	15.4
Robust Mean µg/L	128	41.7	85.9	15.4
U µg/L	4.10	1.53	2.94	0.707
Robust Standard Deviation µg/L	19.7	7.45	14.1	2.94
Regression Standard Deviation µg/L	28.8	9.39	19.3	3.47
Stability Flag				
Homogeneity Flag				Homogeneity
Standard Deviation Used (SDPA) µg/L	28.8	9.39	19.3	5.92
Outliers	1	0	1	1
z >3.0	0	0	0	0
2< z <3	0	3	2	0

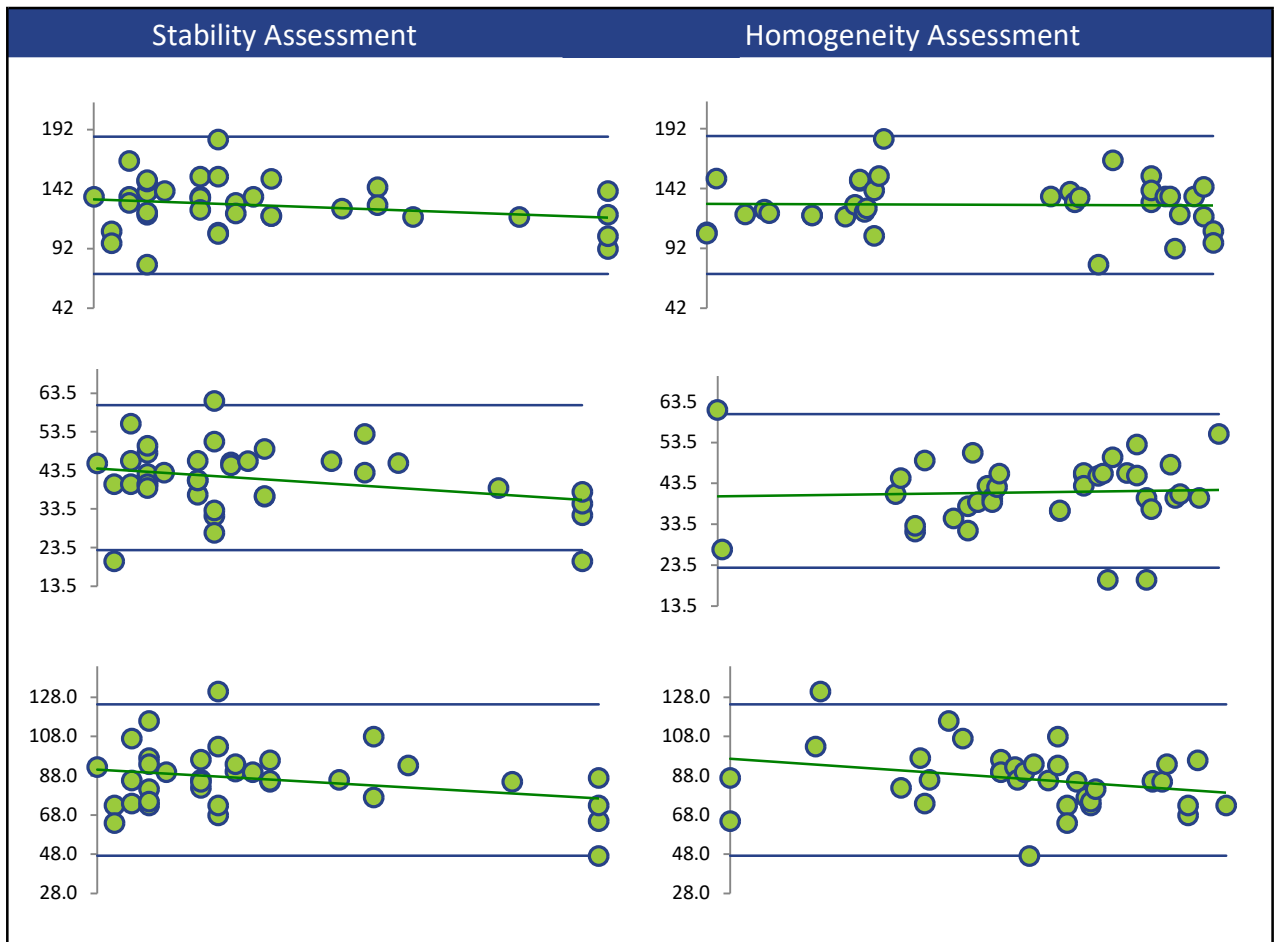
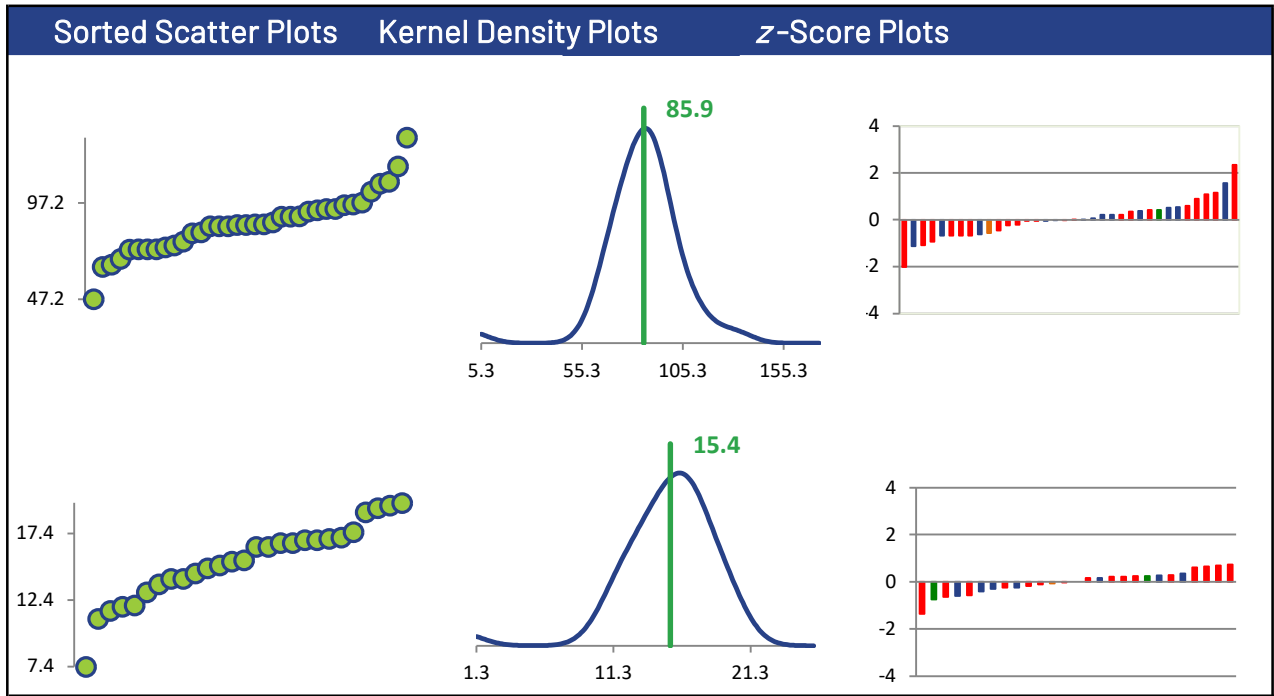
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	13	13	13	7
GC/MS - PURGE AND TRAP (Red)	21	21	21	17
GC/MS (Green)	1	2	1	2
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1

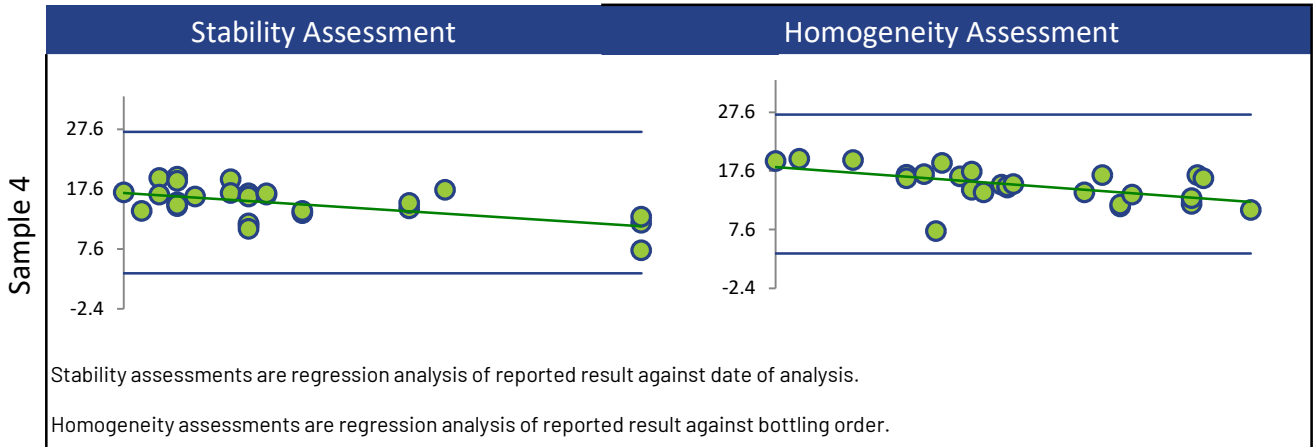
All summary stats and the plots below are based on the data excluding any flagged outliers



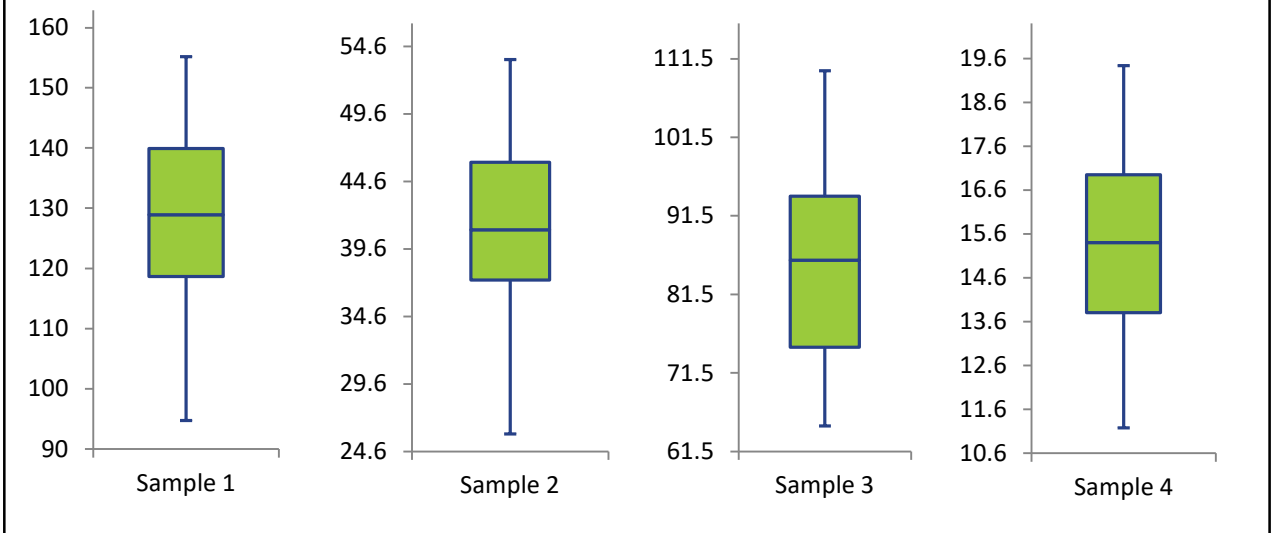
METHYL ETHYL KETONE



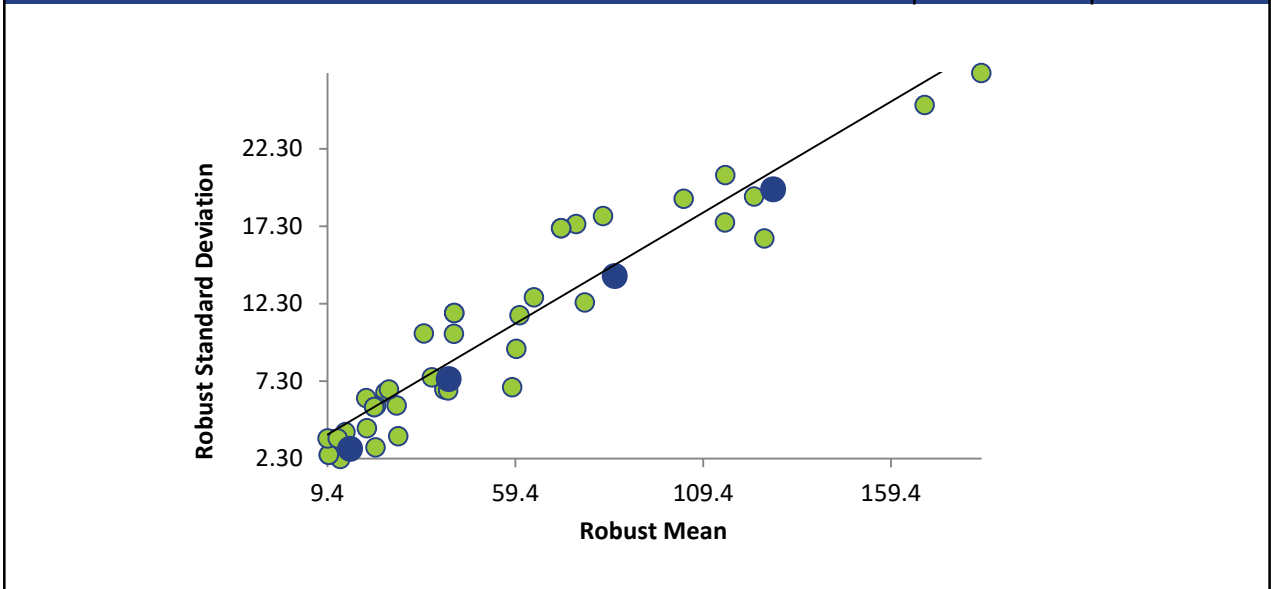
METHYL ETHYL KETONE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



METHYL ISOBUTYL KETONE (MIBK)

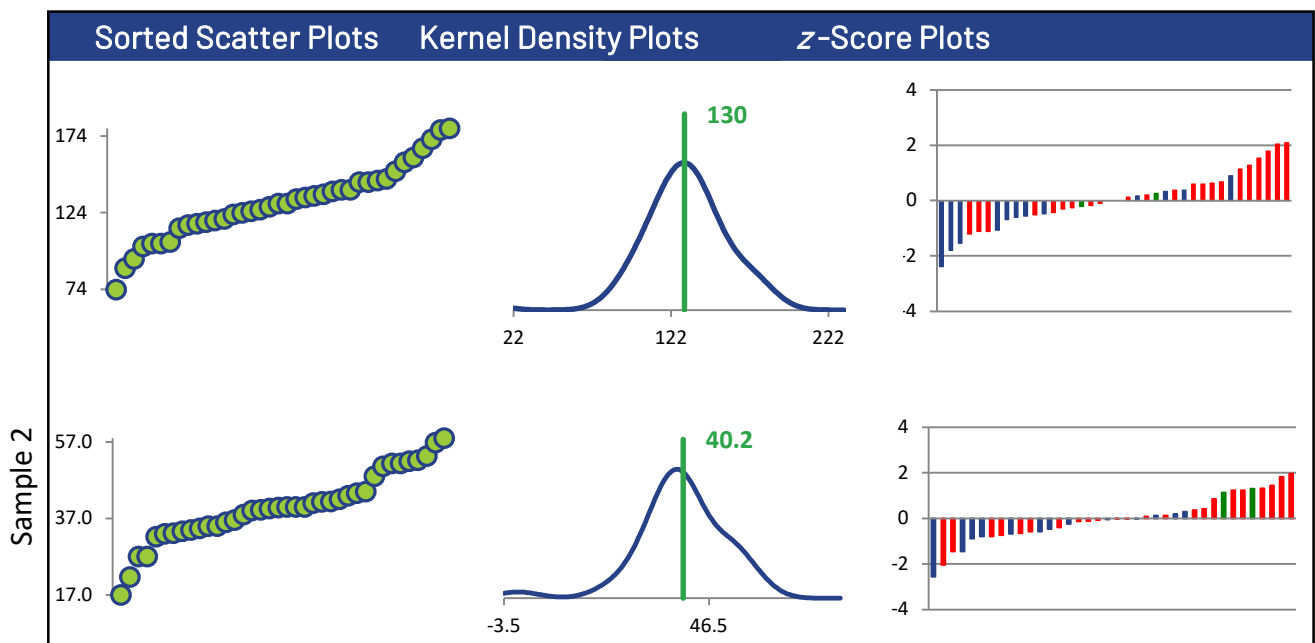
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	38	38	37	28
Median µg/L	130	39.9	86.2	12.6
Robust Mean µg/L	130	40.2	85.9	12.5
U µg/L	4.74	1.85	2.98	0.553
Robust Standard Deviation µg/L	23.4	9.10	14.5	2.34
Regression Standard Deviation µg/L	19.6	6.03	12.9	1.88
Stability Flag				Stability
Homogeneity Flag			Homogeneity	
Standard Deviation Used (SDPA) µg/L	23.4	9.10	28.0	5.29
Outliers	0	0	0	0
z >3.0	0	0	0	0
2< z <3	3	2	0	0

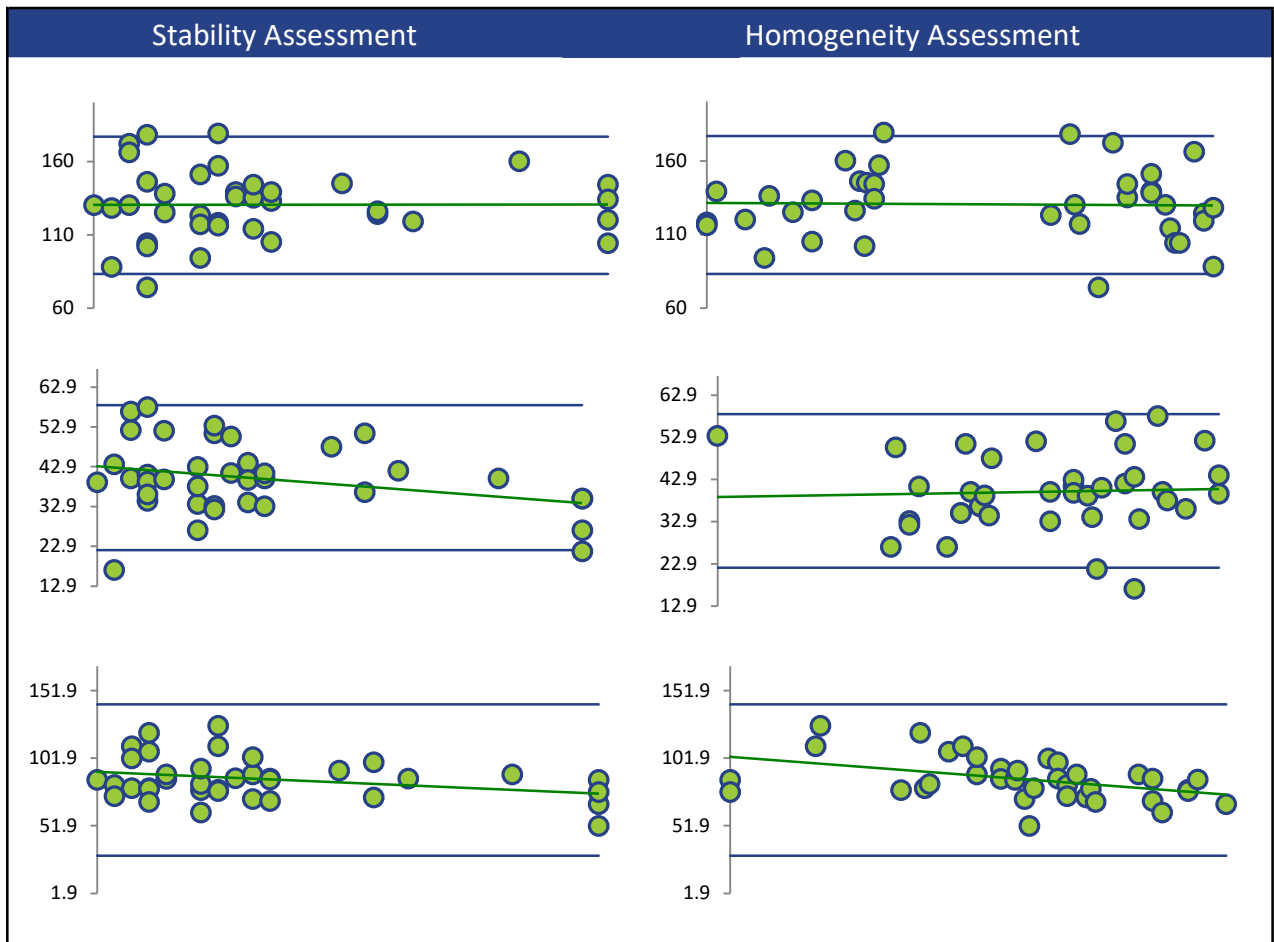
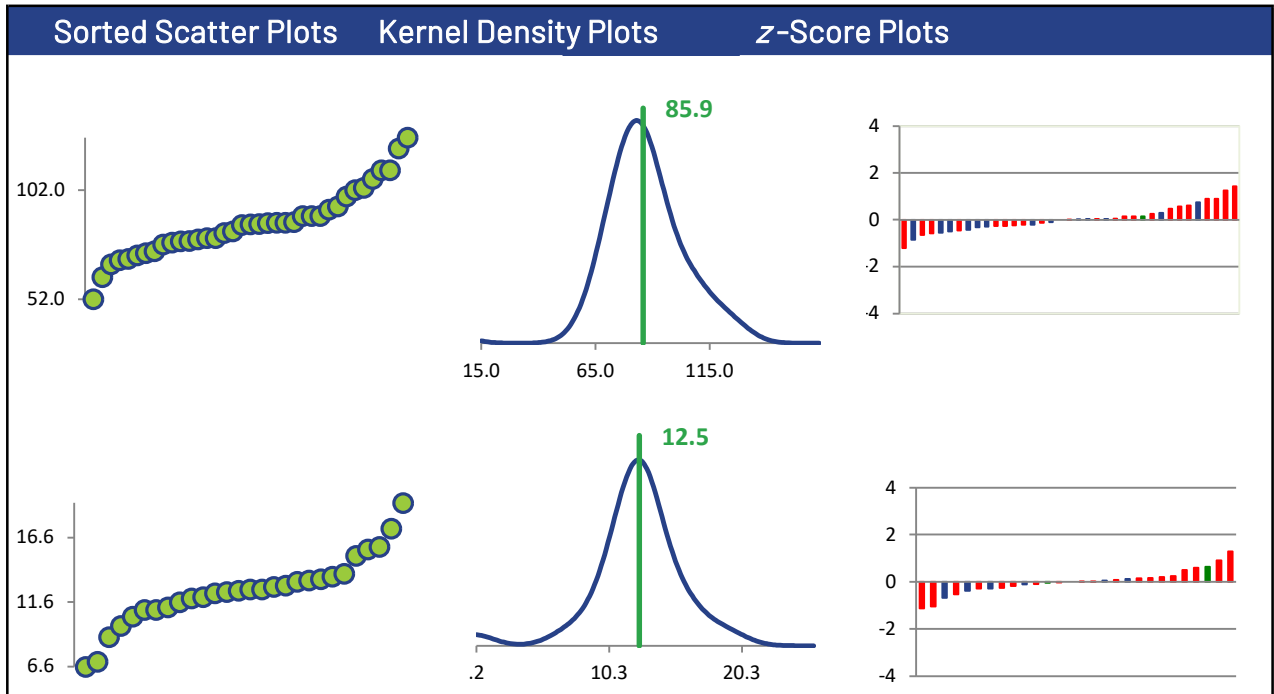
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	13	13	13	7
GC/MS - PURGE AND TRAP (Red)	23	23	23	19
GC/MS (Green)	2	2	1	2

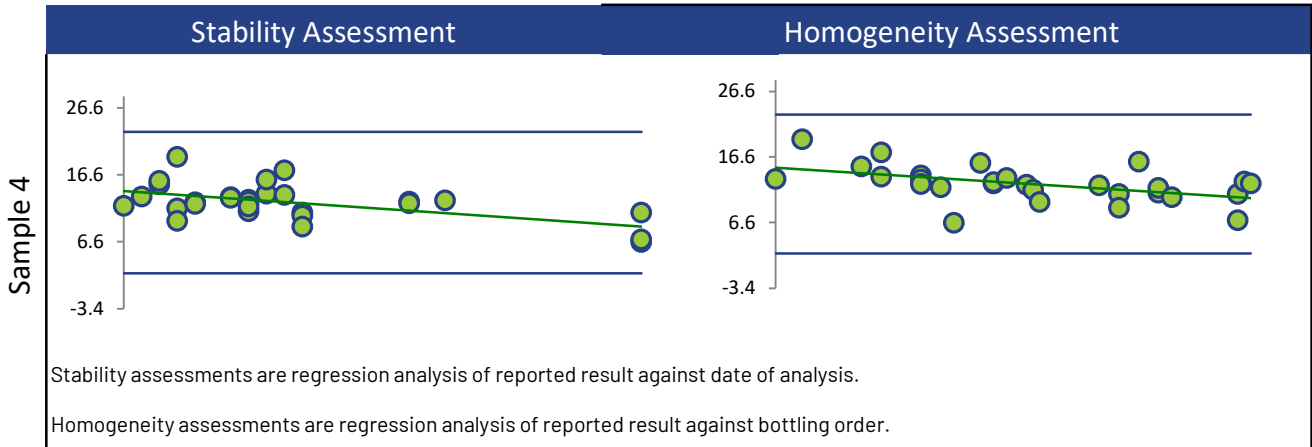
All summary stats and the plots below are based on the data excluding any flagged outliers



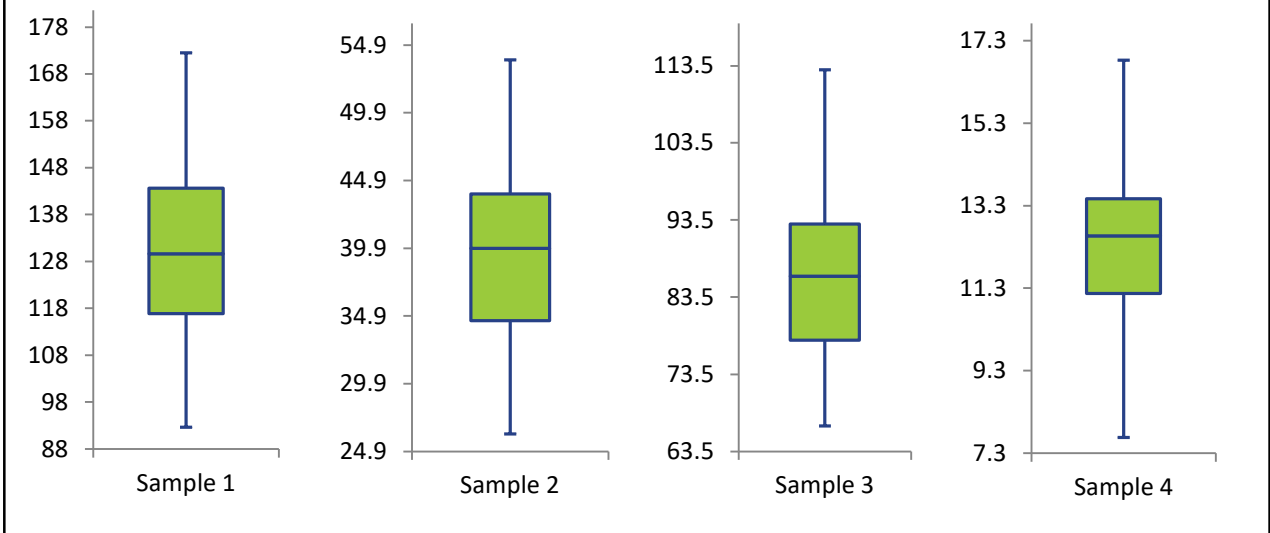
METHYL ISOBUTYL KETONE (MIBK)



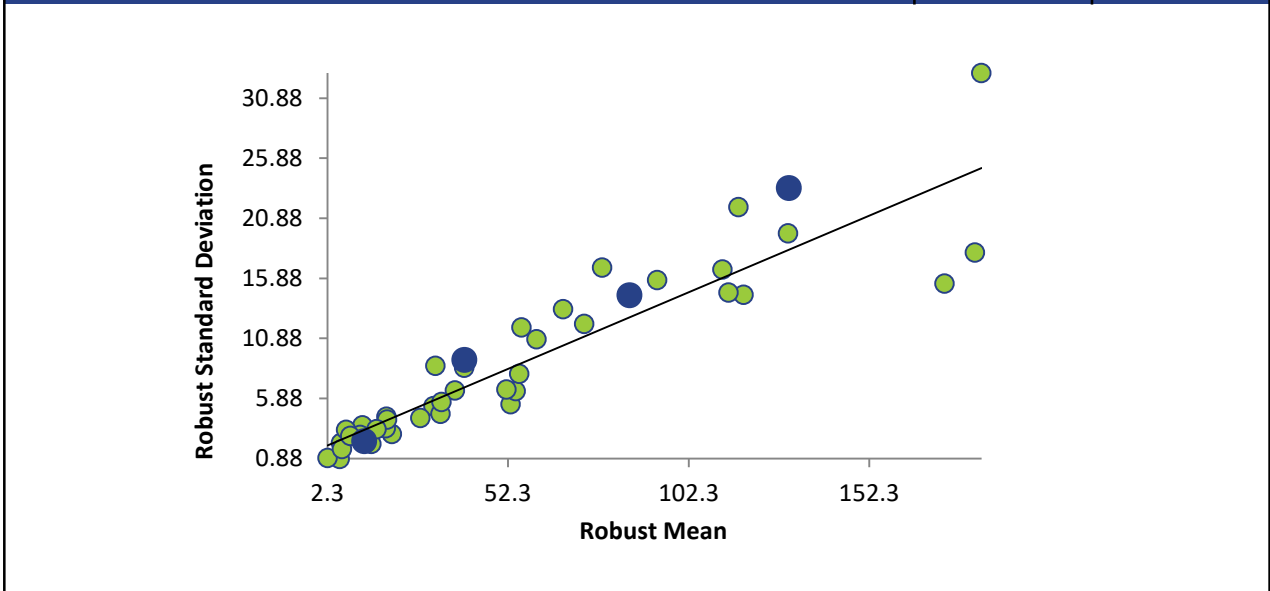
METHYL ISOBUTYL KETONE (MIBK)



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



METHYL T-BUTYL ETHER

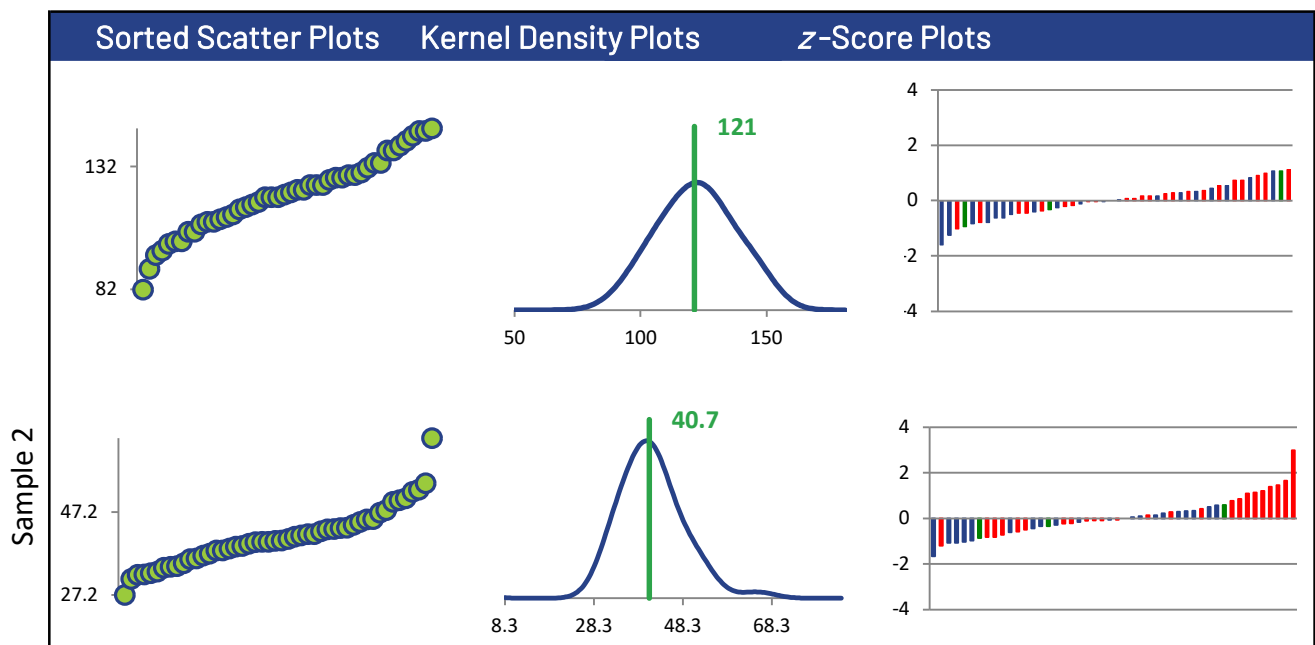
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	46	48	48	48
Median µg/L	122	40.3	83.7	13.7
Robust Mean µg/L	121	40.7	81.8	13.7
U µg/L	3.02	1.19	2.24	0.379
Robust Standard Deviation µg/L	16.4	6.62	12.4	2.10
Regression Standard Deviation µg/L	24.2	8.14	16.4	2.74
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	24.2	8.14	16.4	2.74
Outliers	2	0	0	0
z >3.0	0	0	0	0
2< z <3	0	1	1	0

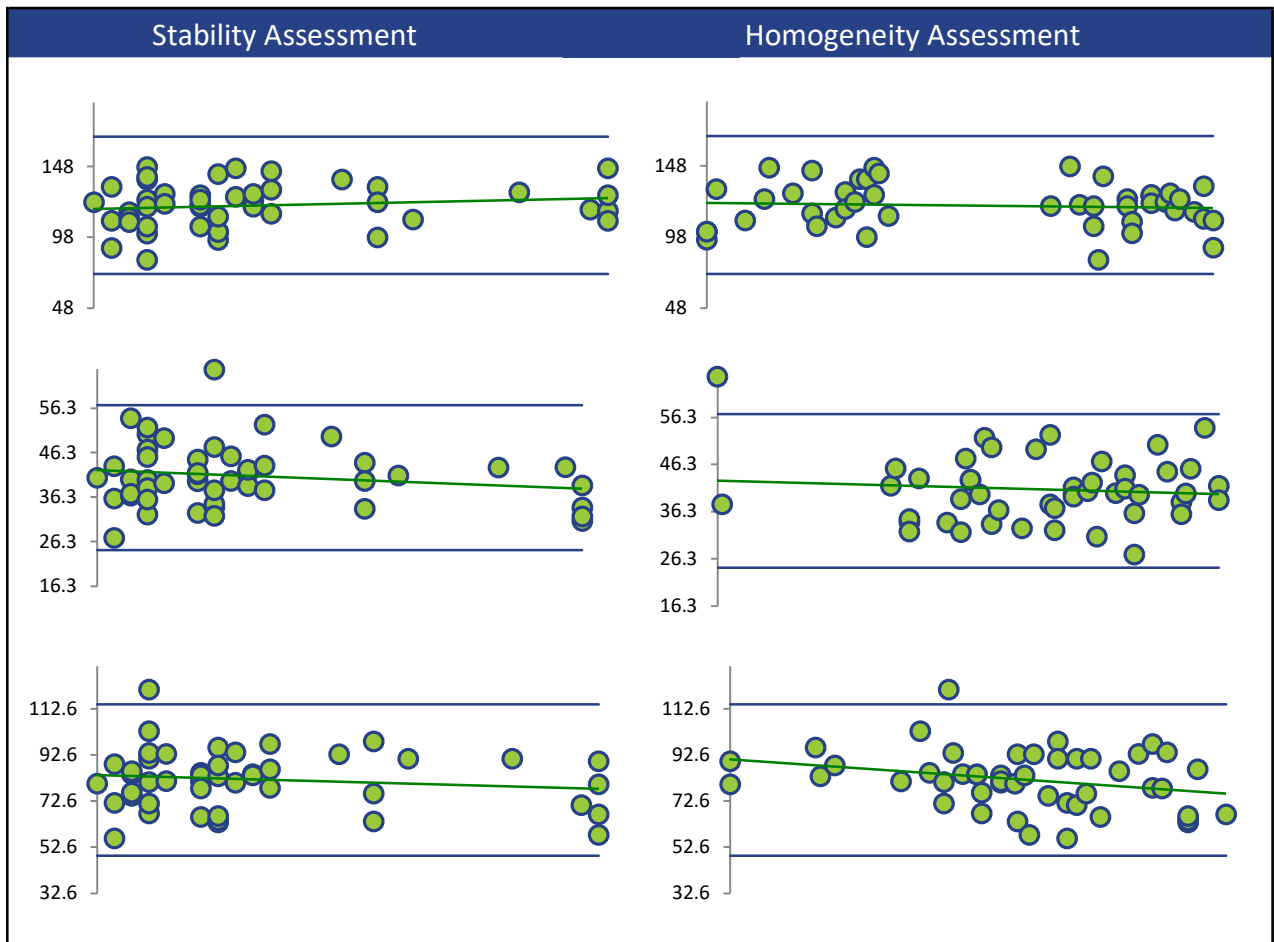
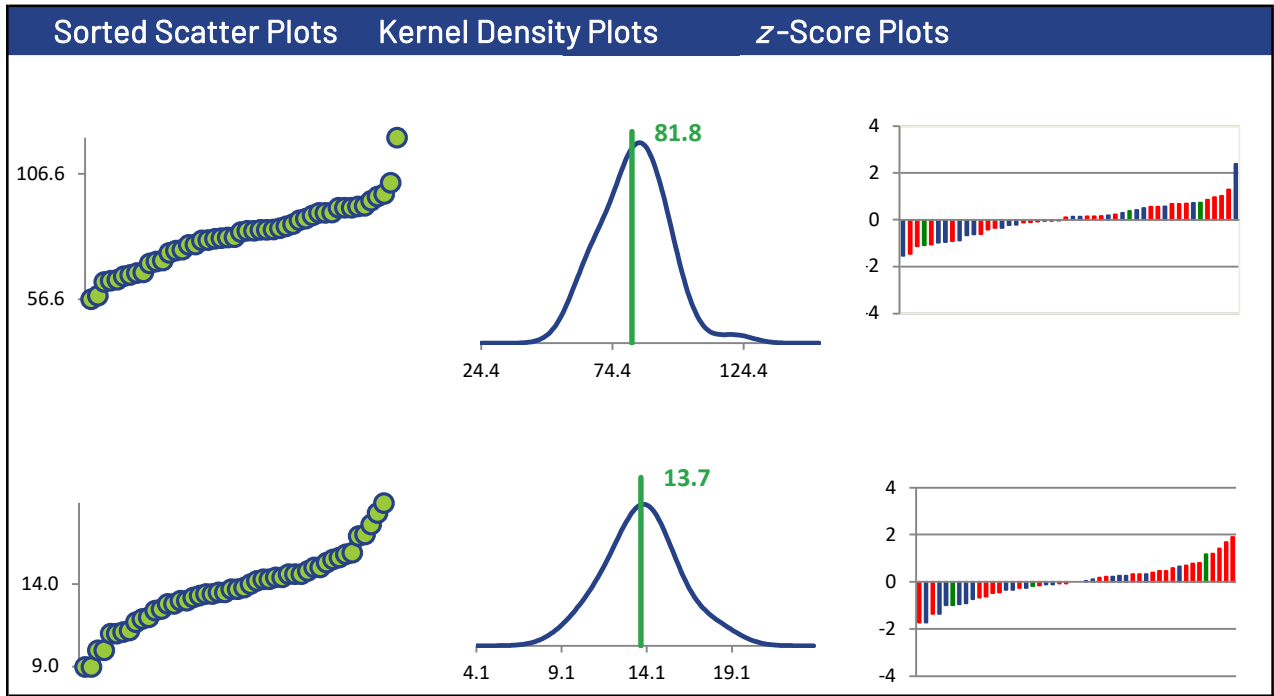
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	20	20	20	20
GC/MS - PURGE AND TRAP (Red)	23	25	25	25
GC/MS (Green)	3	3	3	3

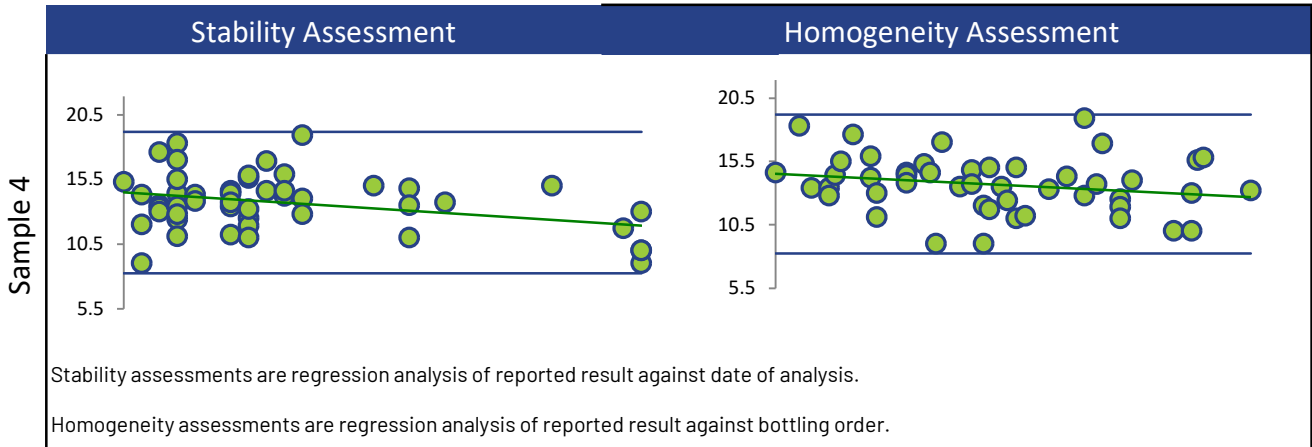
All summary stats and the plots below are based on the data excluding any flagged outliers



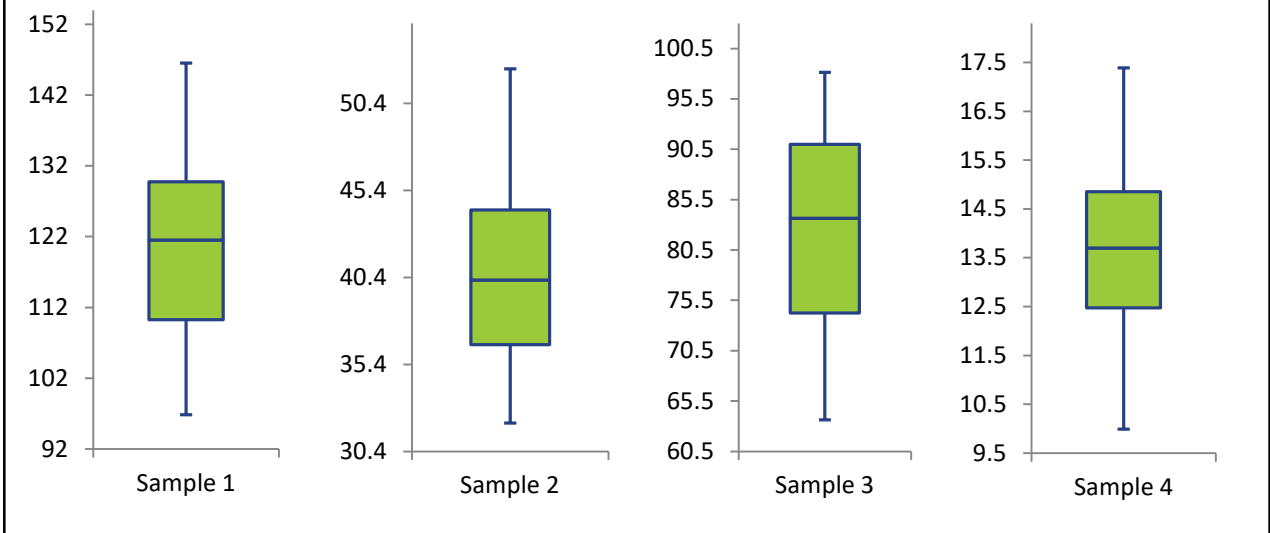
METHYL T-BUTYL ETHER



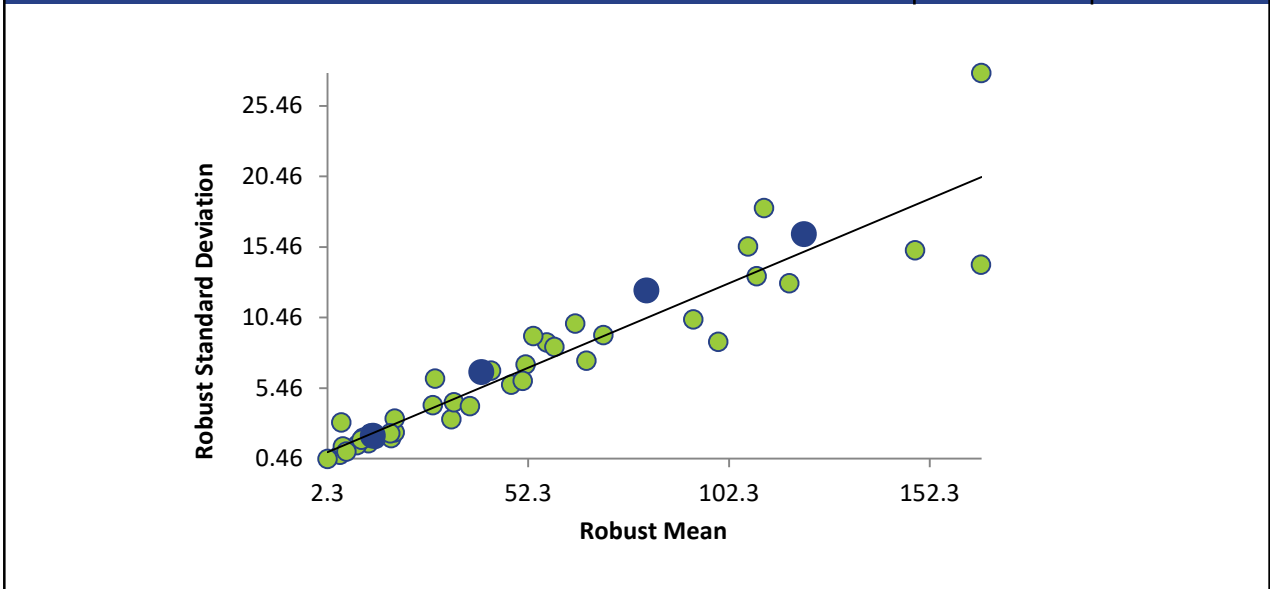
METHYL T-BUTYL ETHER



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



O-XYLENE

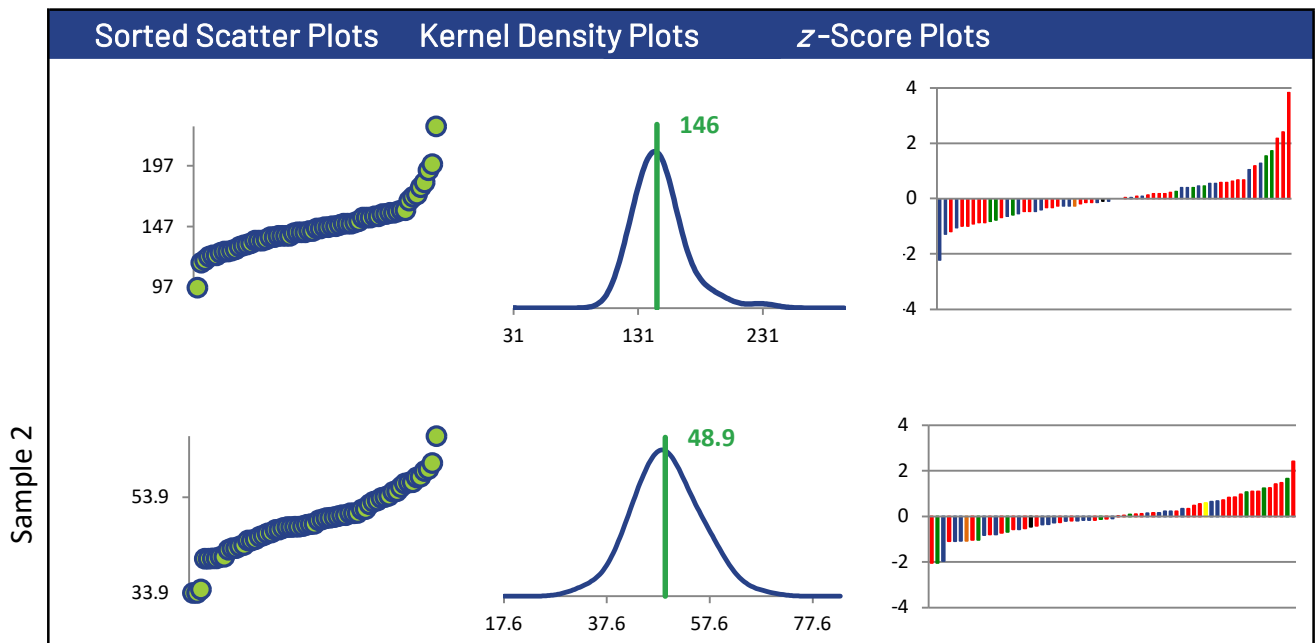
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	63	63	64	65
Median µg/L	146	48.3	97.7	14.3
Robust Mean µg/L	146	48.9	98.3	14.2
U µg/L	2.60	0.975	1.78	0.385
Robust Standard Deviation µg/L	16.5	6.19	11.4	2.48
Regression Standard Deviation µg/L	21.9	7.34	14.7	2.13
Stability Flag				
Homogeneity Flag			Homogeneity	
Standard Deviation Used (SDPA) µg/L	21.9	7.34	18.8	2.48
Outliers	2	2	1	0
z >3.0	1	0	0	3
2< z <3	3	3	2	2

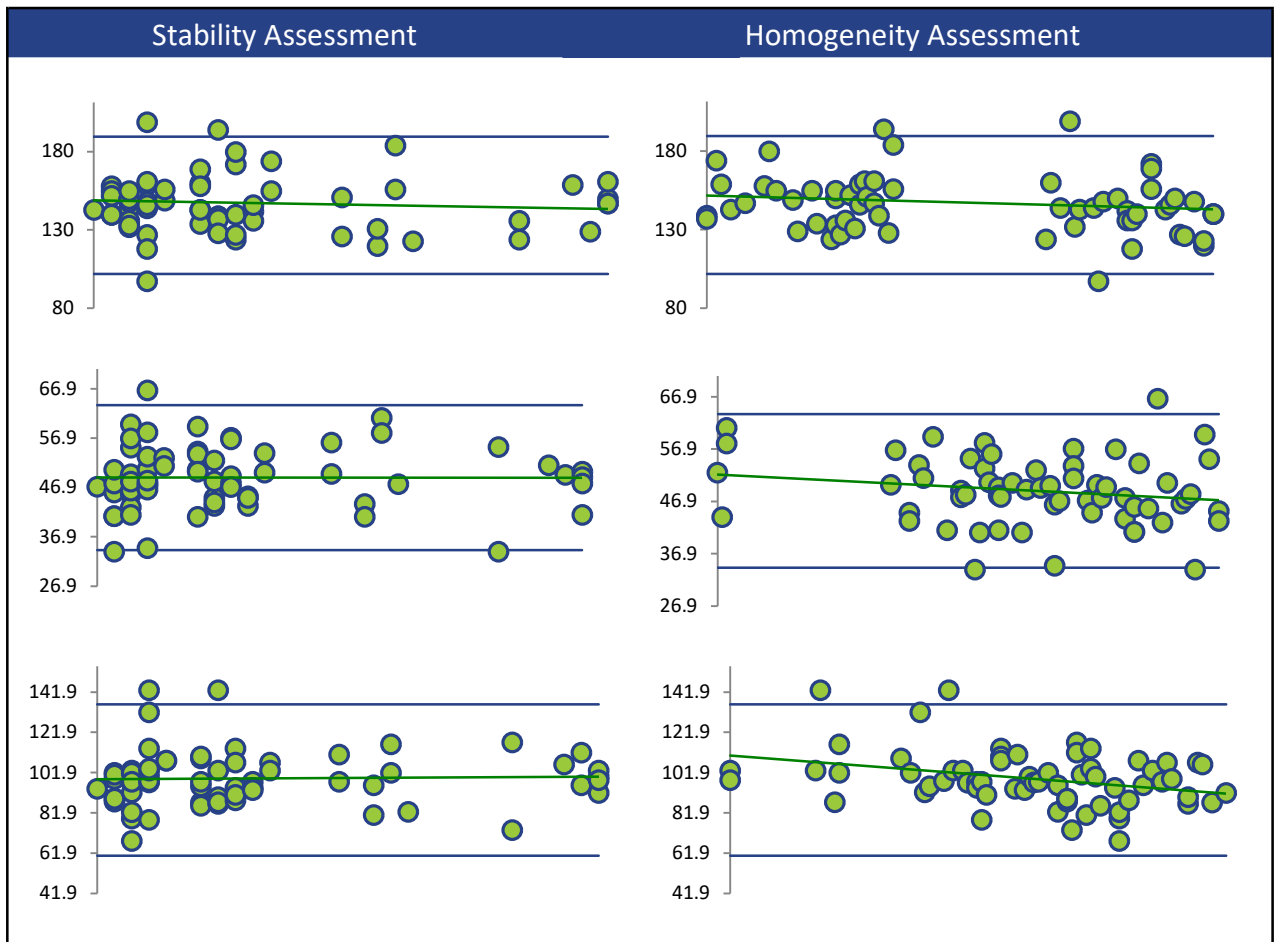
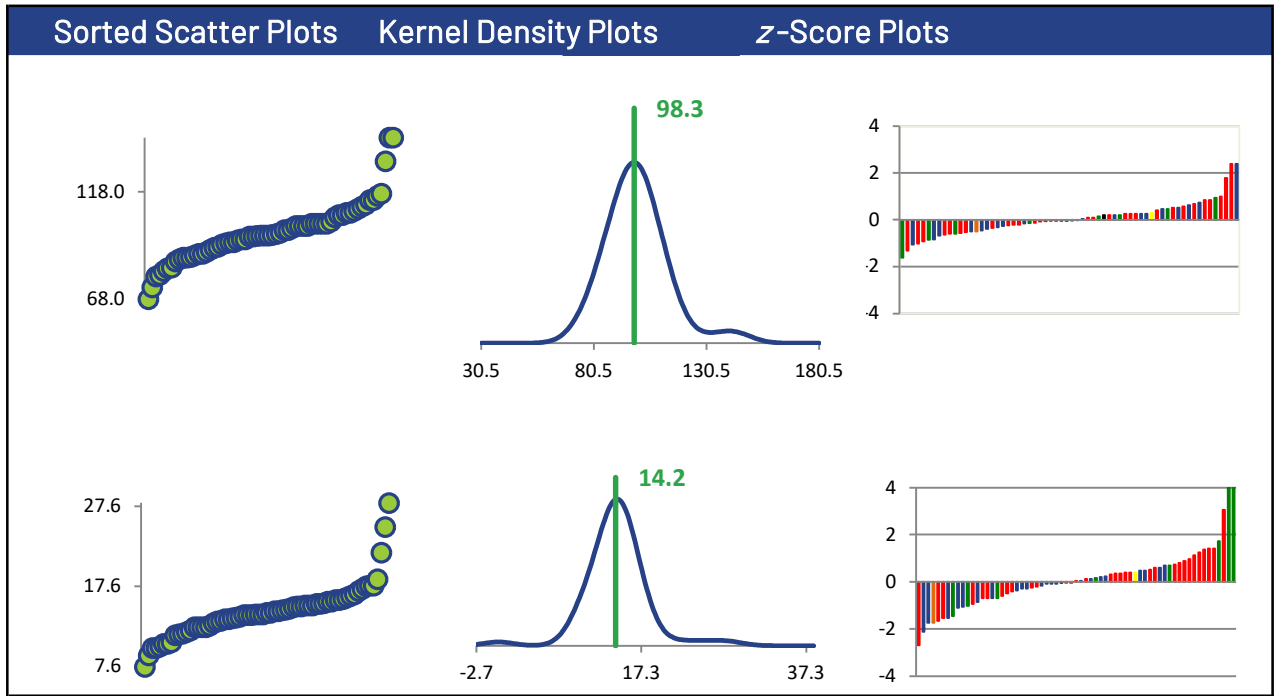
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	21	21	22	22
GC/MS - PURGE AND TRAP (Red)	31	31	31	32
GC/MS (Green)	8	8	8	8
GC/FID - HEADSPACE (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1
GC/FID - PURGE AND TRAP (Yellow)	1	1	1	1

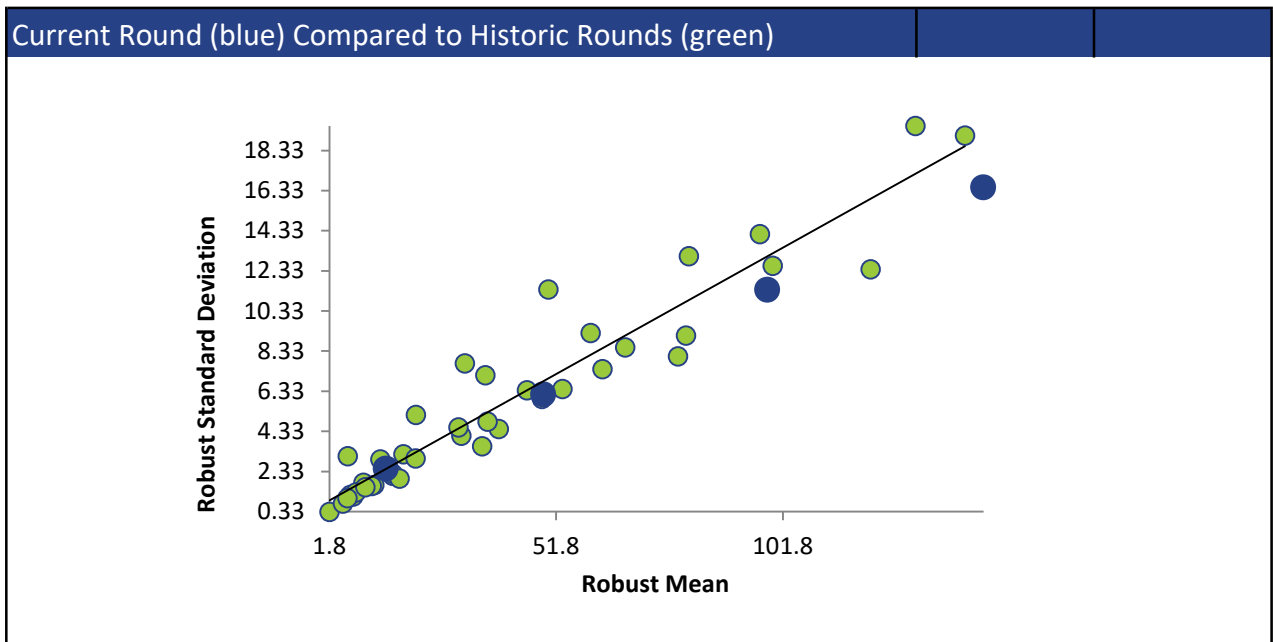
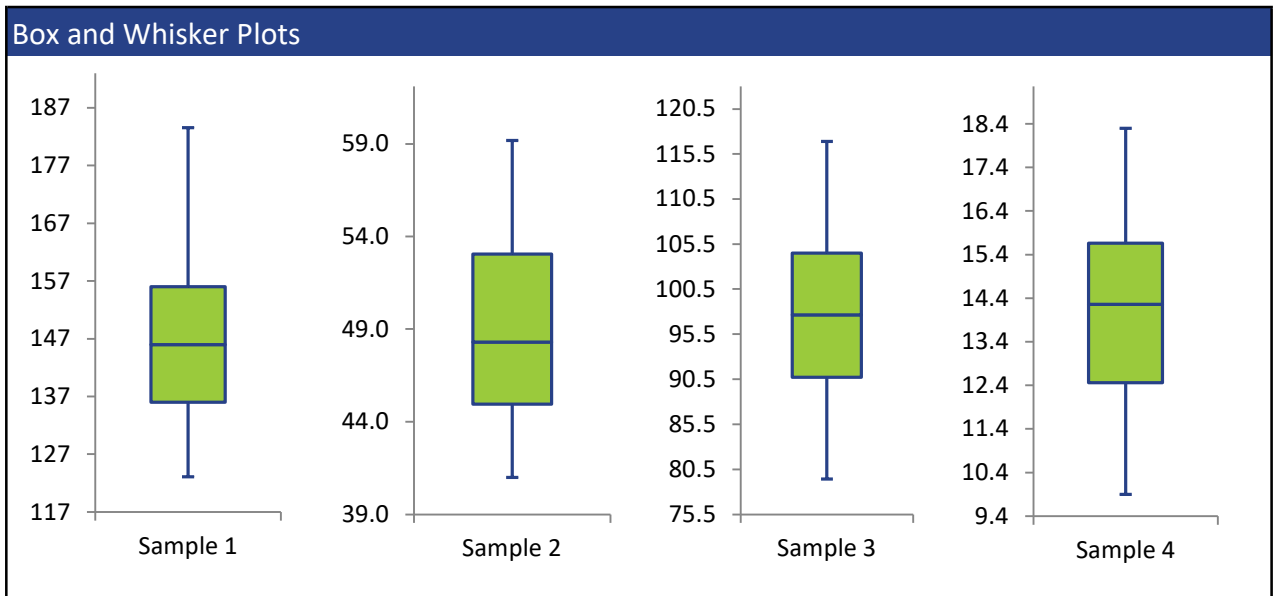
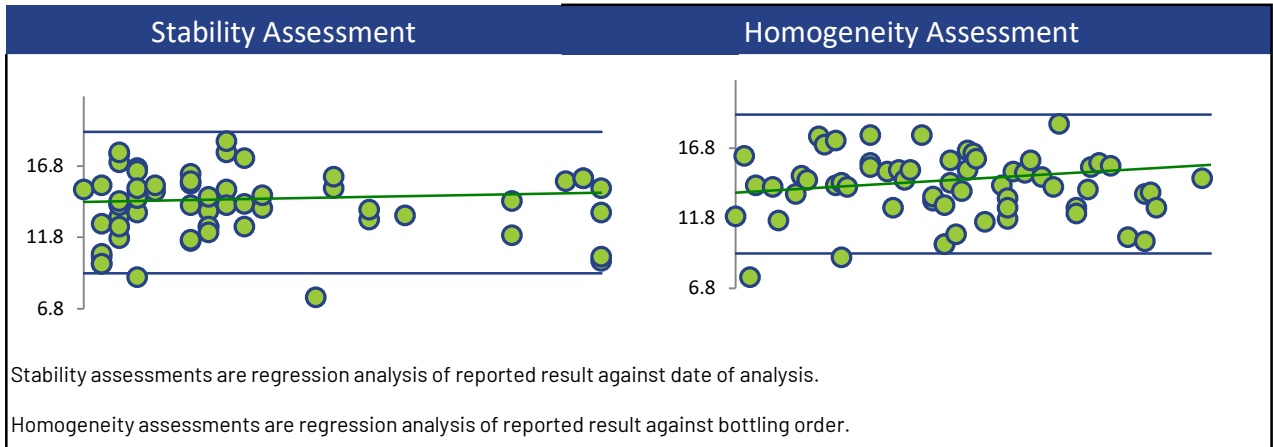
All summary stats and the plots below are based on the data excluding any flagged outliers



O-XYLENE



O-XYLENE



STYRENE

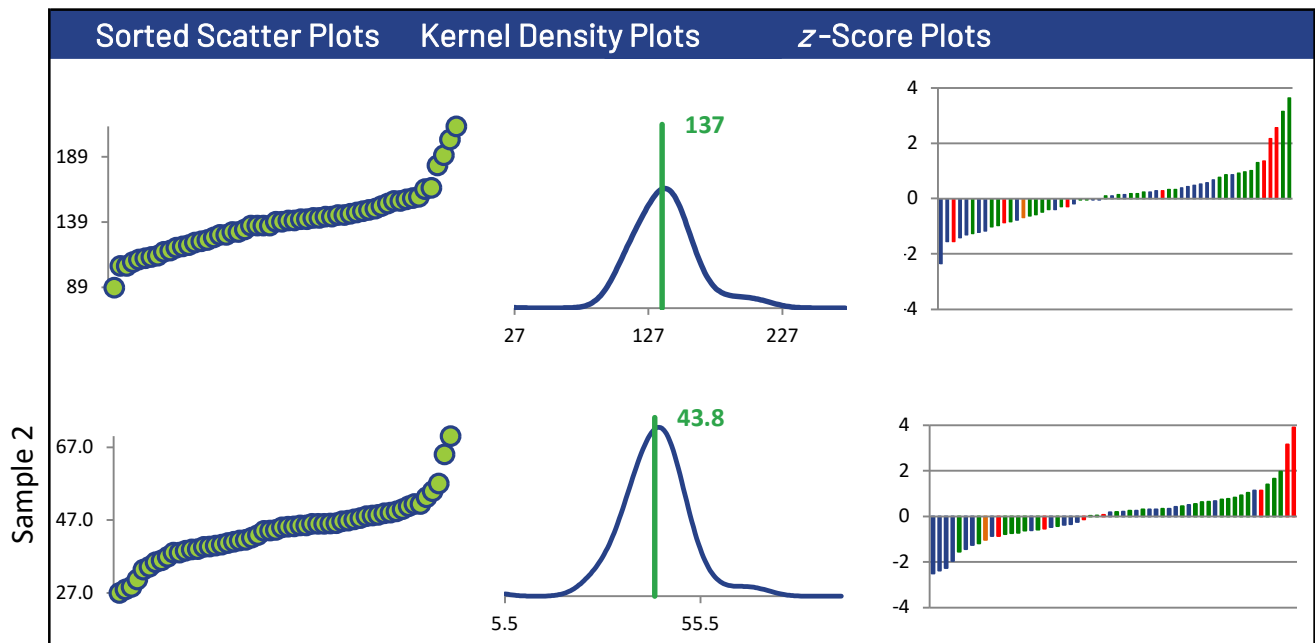
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	56	56	55	54
Median µg/L	140	45.1	91.8	12.8
Robust Mean µg/L	137	43.8	89.9	12.4
U µg/L	3.31	1.12	1.72	0.498
Robust Standard Deviation µg/L	19.8	6.72	10.2	2.93
Regression Standard Deviation µg/L	20.6	6.57	13.5	1.87
Stability Flag				
Homogeneity Flag				Homogeneity
Standard Deviation Used (SDPA) µg/L	20.6	6.72	13.5	3.16
Outliers	0	0	1	2
z >3.0	2	2	0	0
2< z <3	3	3	2	4

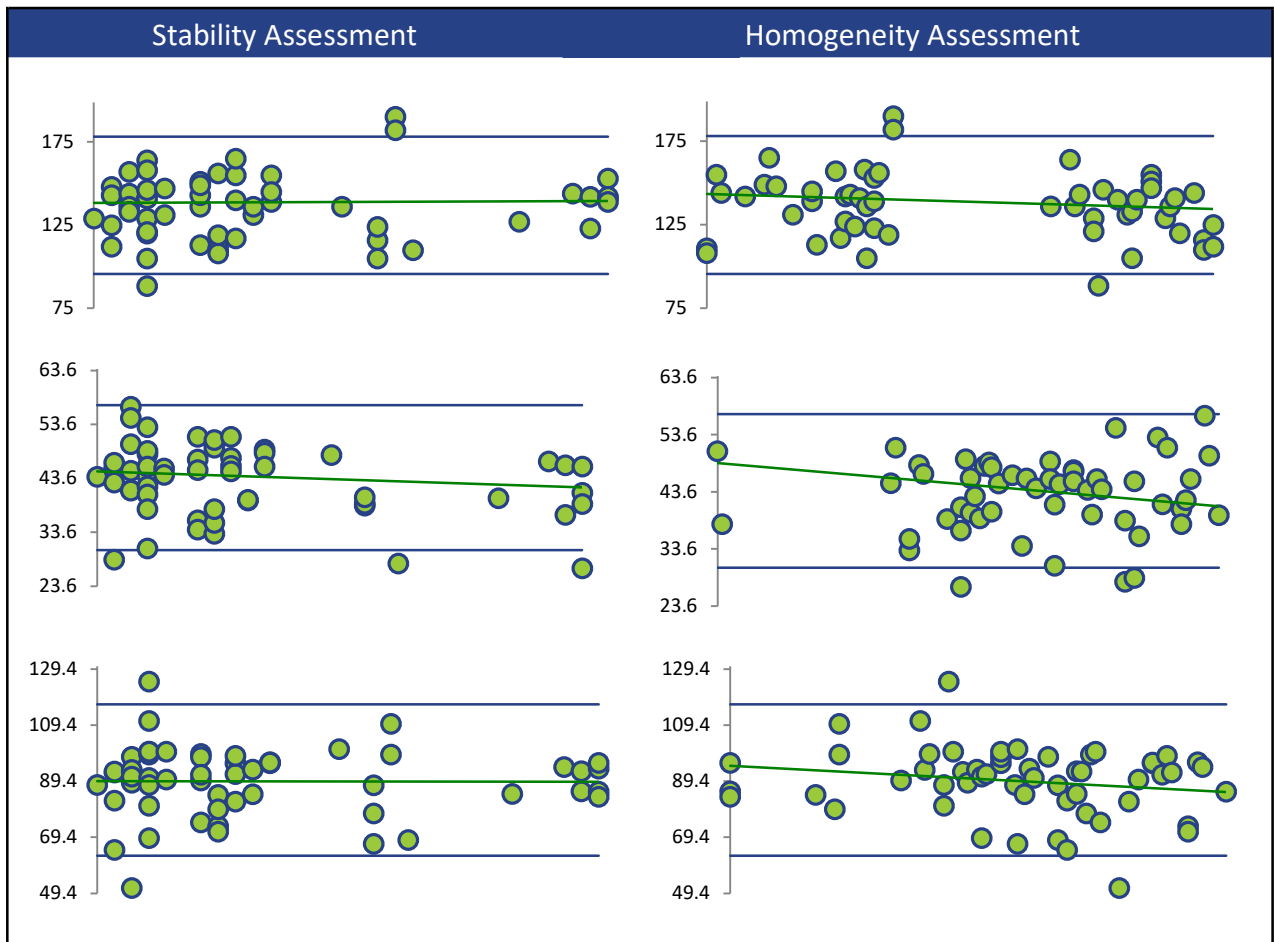
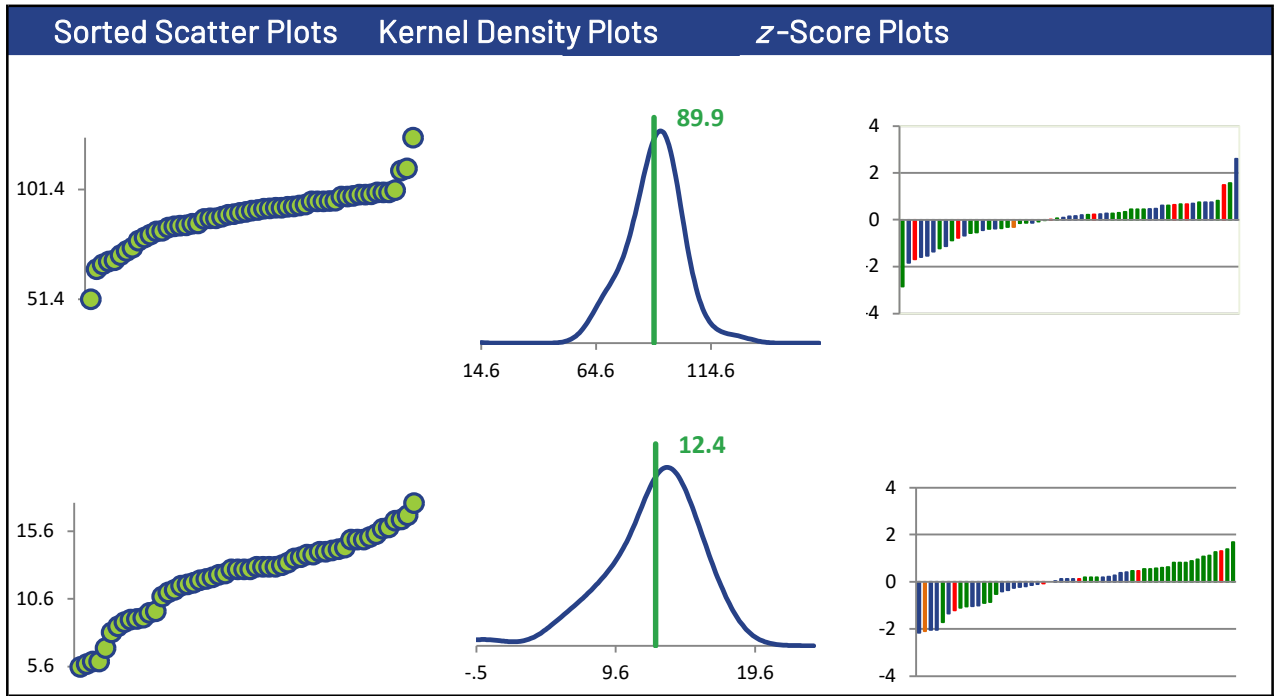
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	22	22	22	22
GC/MS (Red)	7	7	7	5
GC/MS - PURGE AND TRAP (Green)	26	26	25	26
GC/PID (Orange)	1	1	1	1

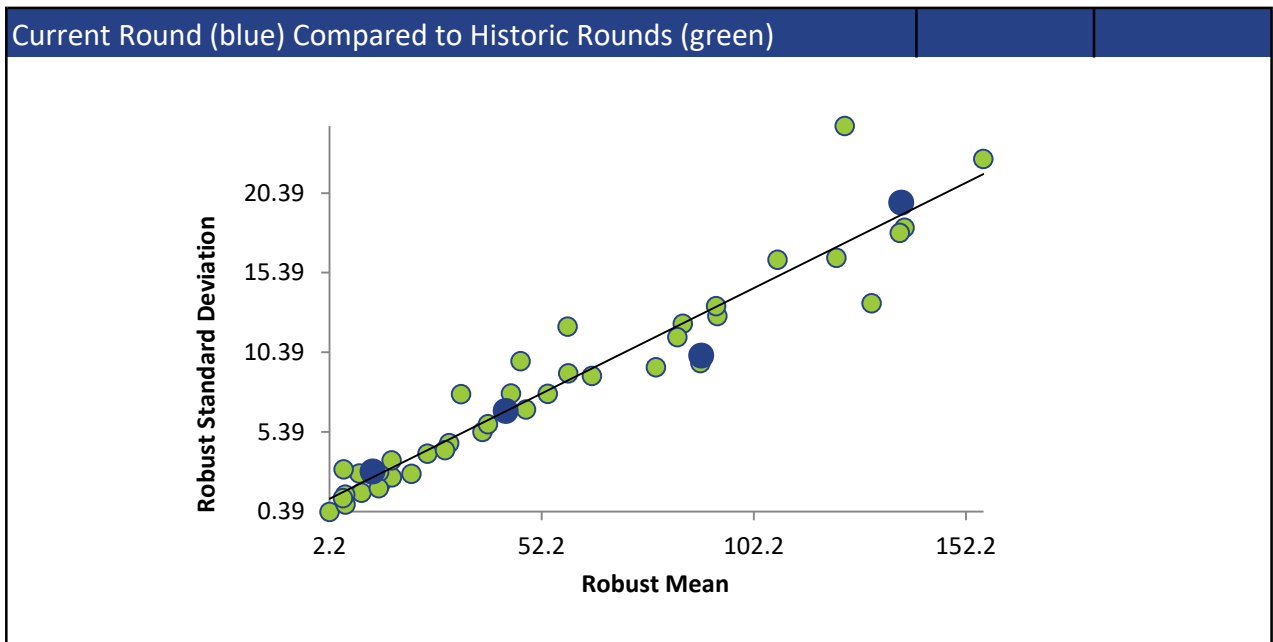
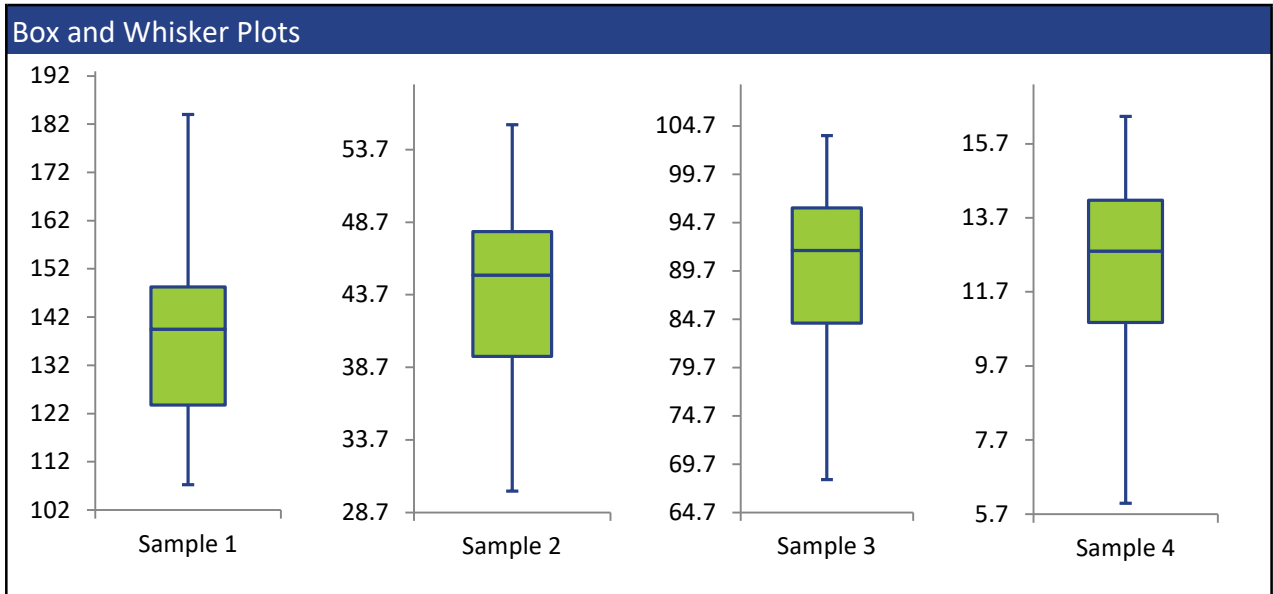
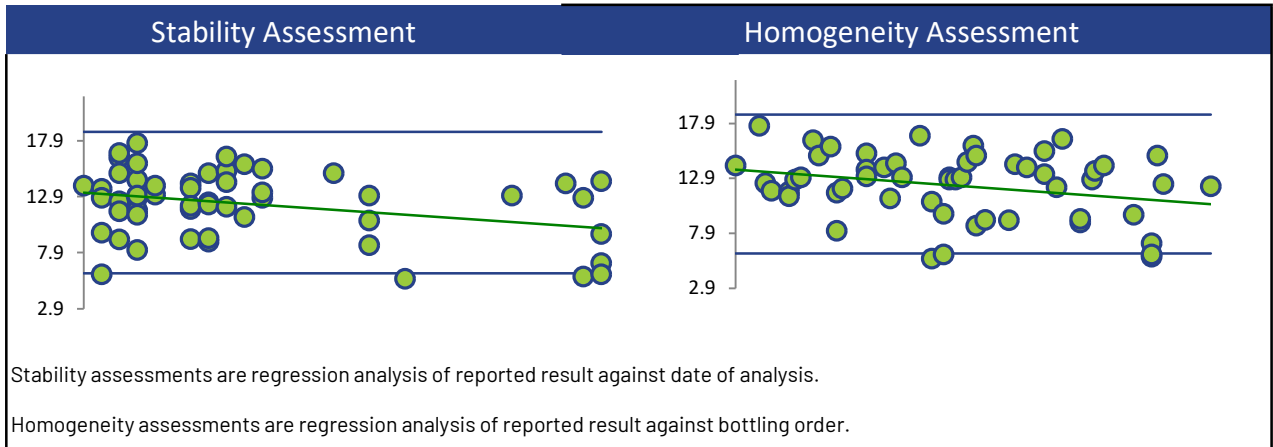
All summary stats and the plots below are based on the data excluding any flagged outliers



STYRENE



STYRENE



TETRACHLOROETHYLENE

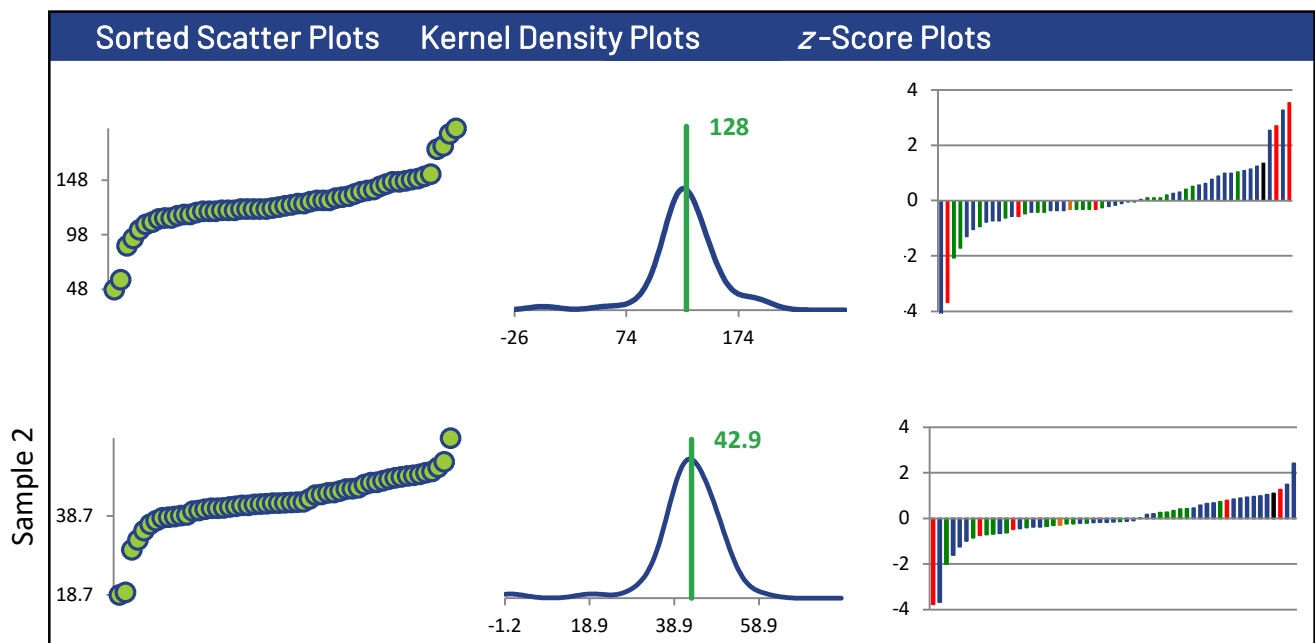
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	55	55	55	55
Median µg/L	125	42.0	84.4	12.3
Robust Mean µg/L	128	42.9	85.0	12.4
U µg/L	2.95	0.858	1.90	0.281
Robust Standard Deviation µg/L	17.5	5.09	11.3	1.67
Regression Standard Deviation µg/L	19.2	6.44	12.8	1.85
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	19.2	6.44	12.8	1.85
Outliers	0	0	0	0
z >3.0	4	2	4	1
2< z <3	3	1	3	3

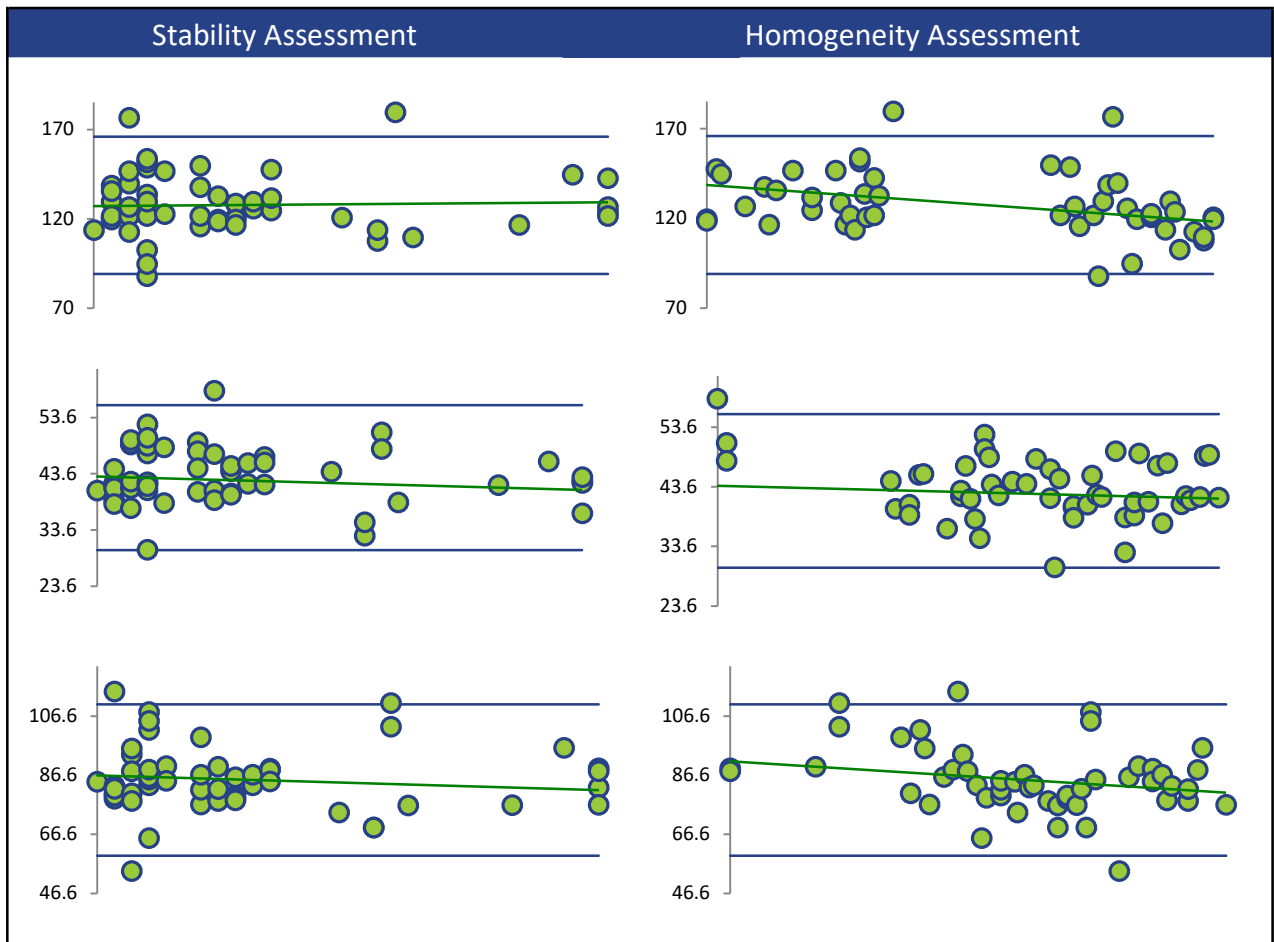
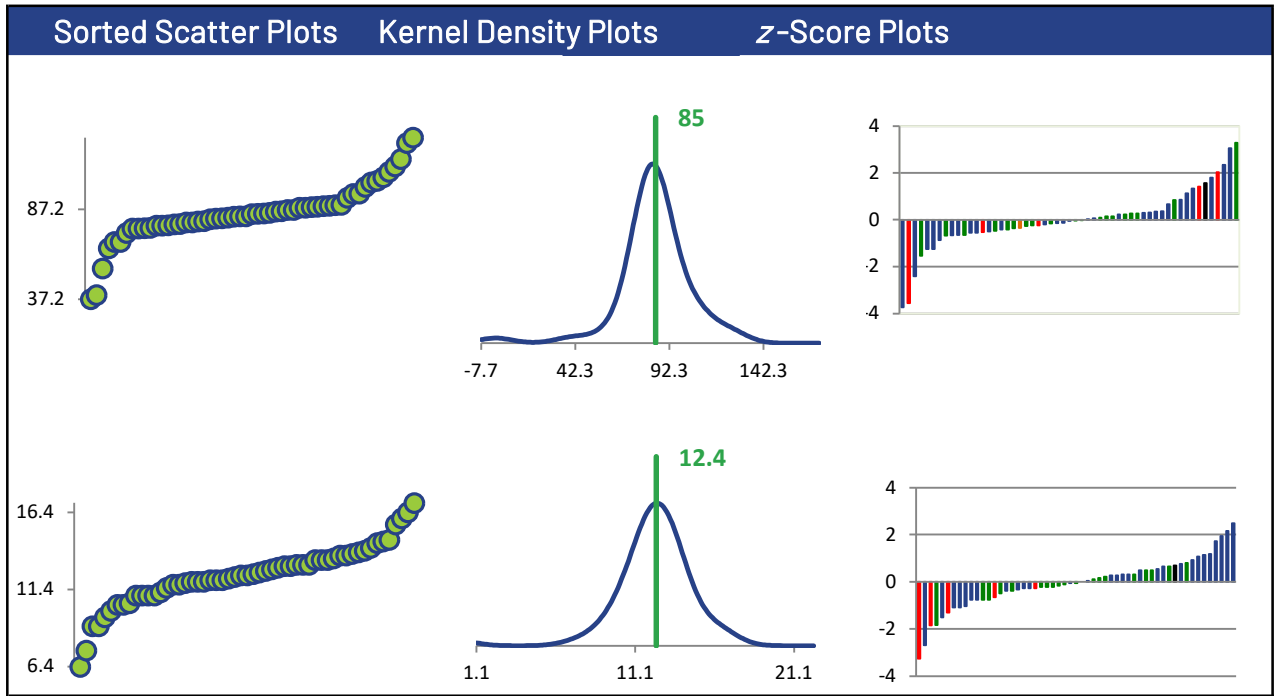
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	29	29	29	29
GC/MS (Red)	5	5	5	5
GC/MS - HEADSPACE (Green)	19	19	19	19
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

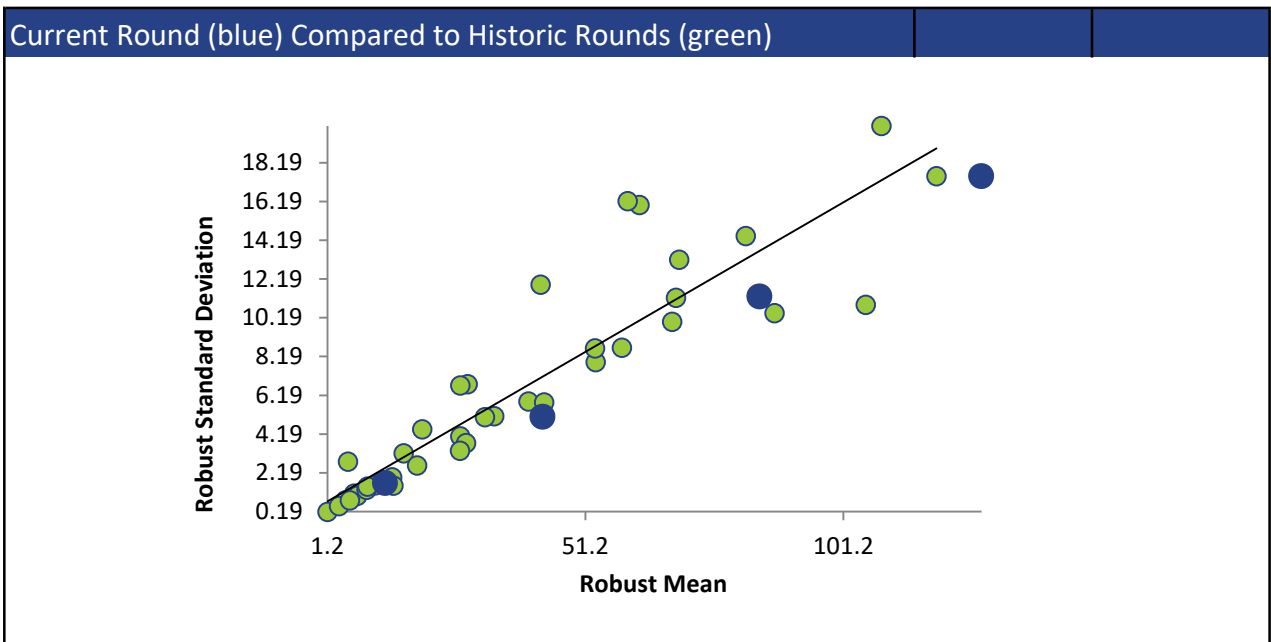
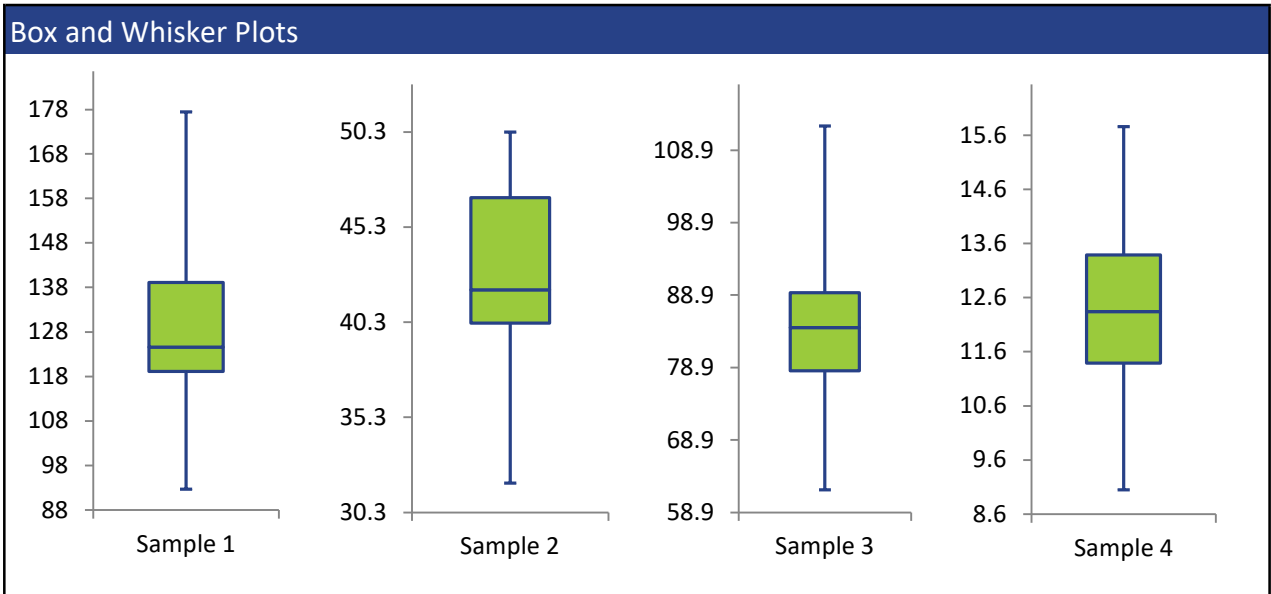
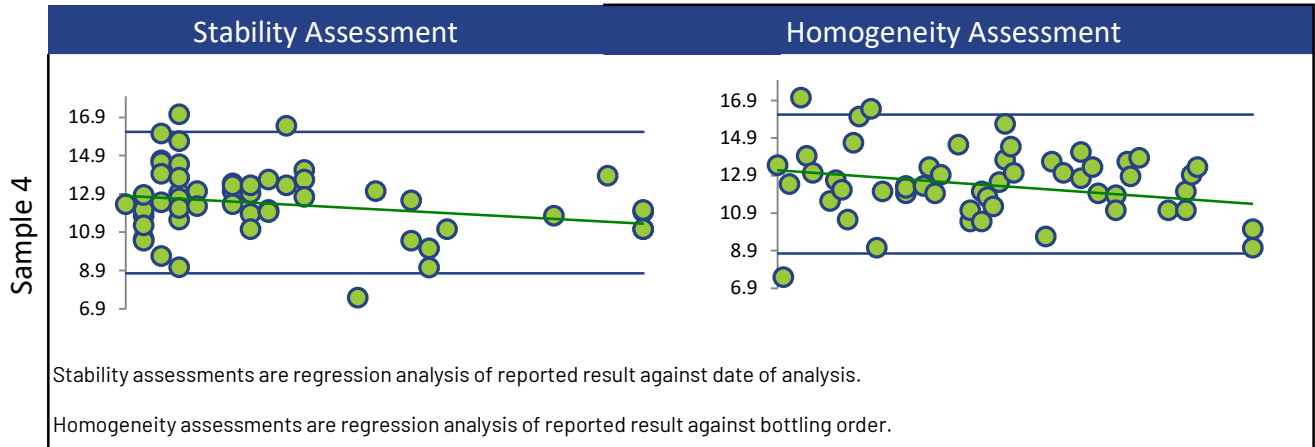
All summary stats and the plots below are based on the data excluding any flagged outliers



TETRACHLOROETHYLENE



TETRACHLOROETHYLENE



TOLUENE

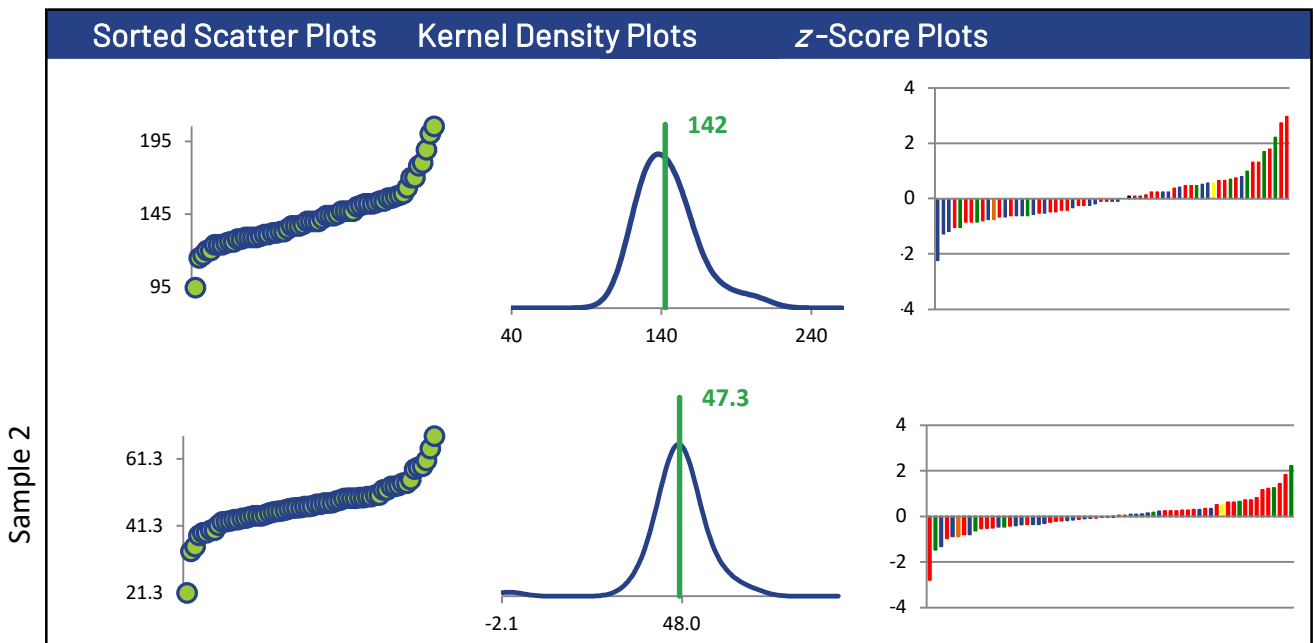
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	63	64	64	64
Median µg/L	140	47.1	93.5	14.1
Robust Mean µg/L	142	47.3	94.1	13.8
U µg/L	2.63	0.877	1.61	0.295
Robust Standard Deviation µg/L	16.7	5.61	10.3	1.89
Regression Standard Deviation µg/L	21.2	7.10	14.1	2.08
Stability Flag				
Homogeneity Flag		Homogeneity	Homogeneity	
Standard Deviation Used (SDPA) µg/L	21.2	9.34	16.6	2.08
Outliers	1	1	1	1
z >3.0	0	0	1	1
2< z <3	4	2	3	4

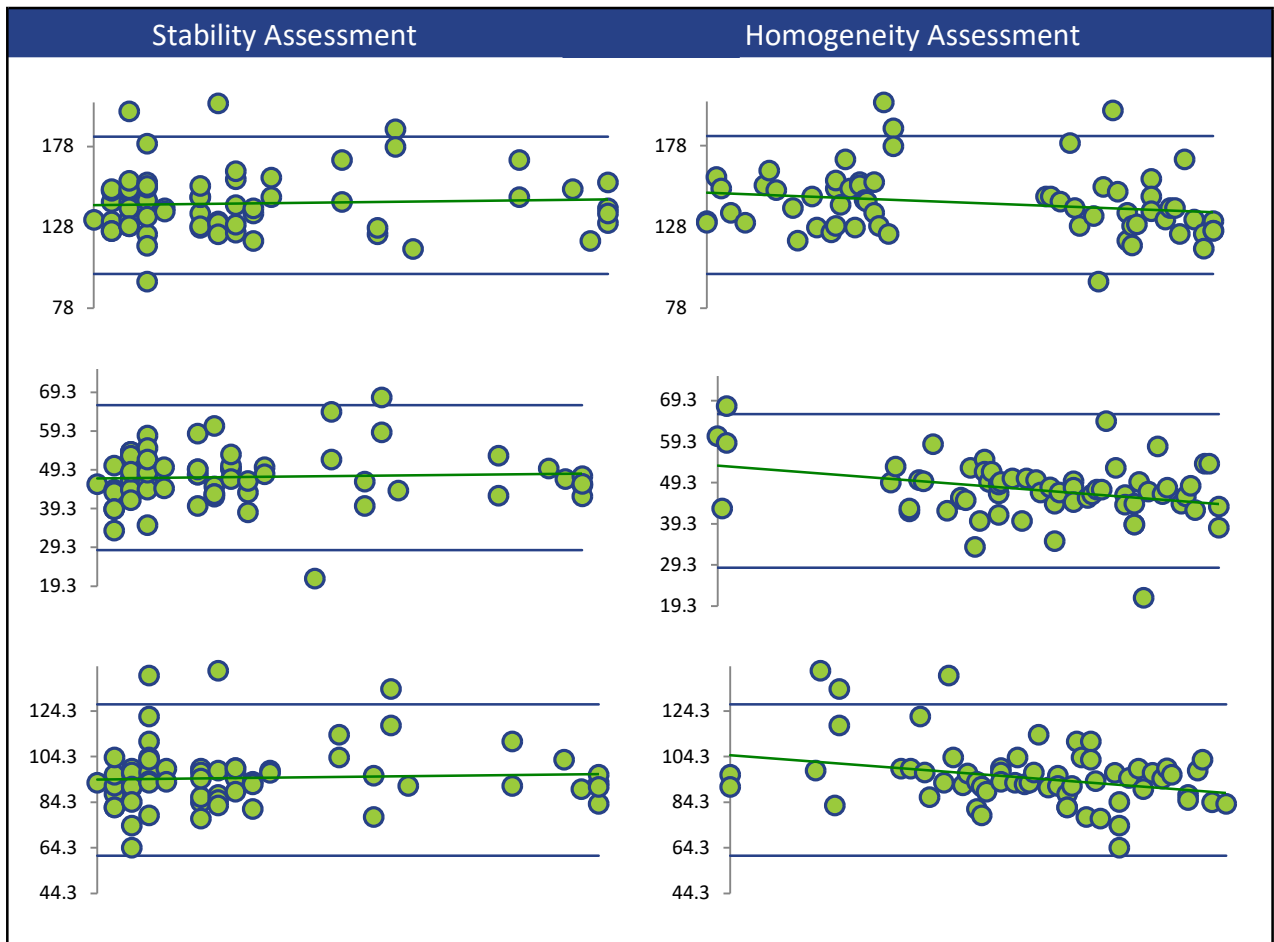
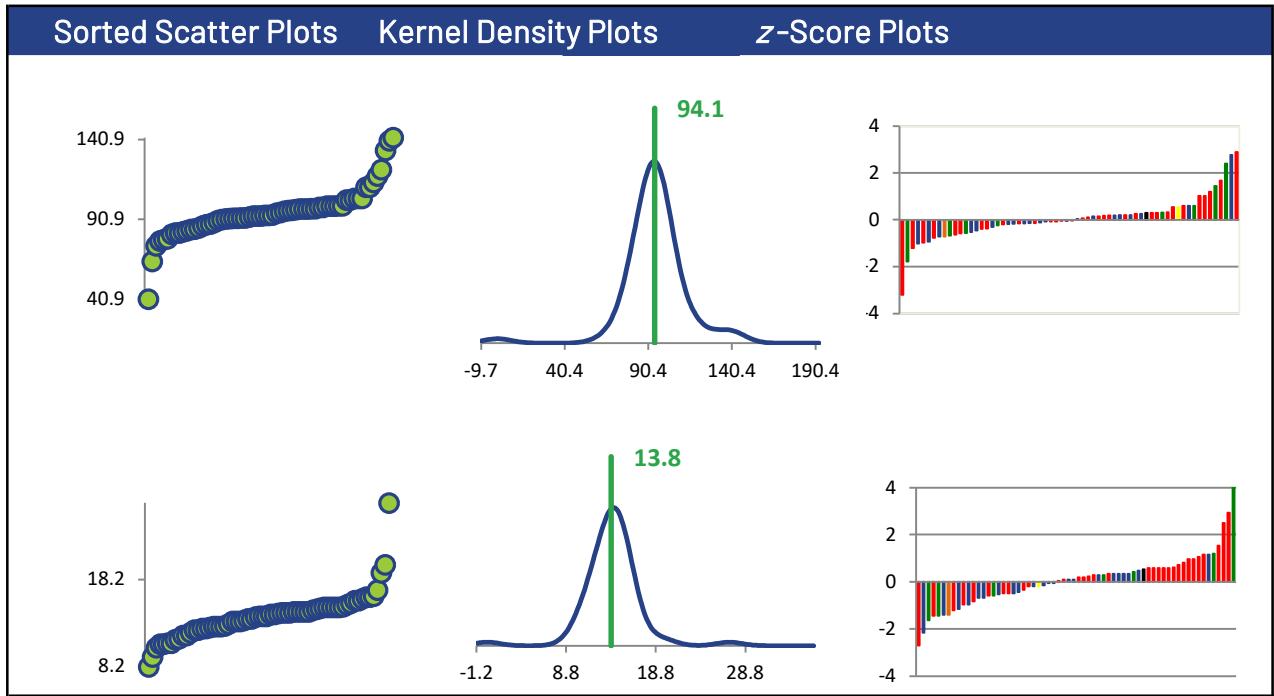
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	21	21	21	22
GC/MS - PURGE AND TRAP (Red)	31	32	32	32
GC/MS (Green)	8	8	8	7
GC/FID - HEADSPACE (Orange)	1	1	1	1
GC/MS/MS - HEADSPACE (Black)	1	1	1	1
GC/FID - PURGE AND TRAP (Yellow)	1	1	1	1

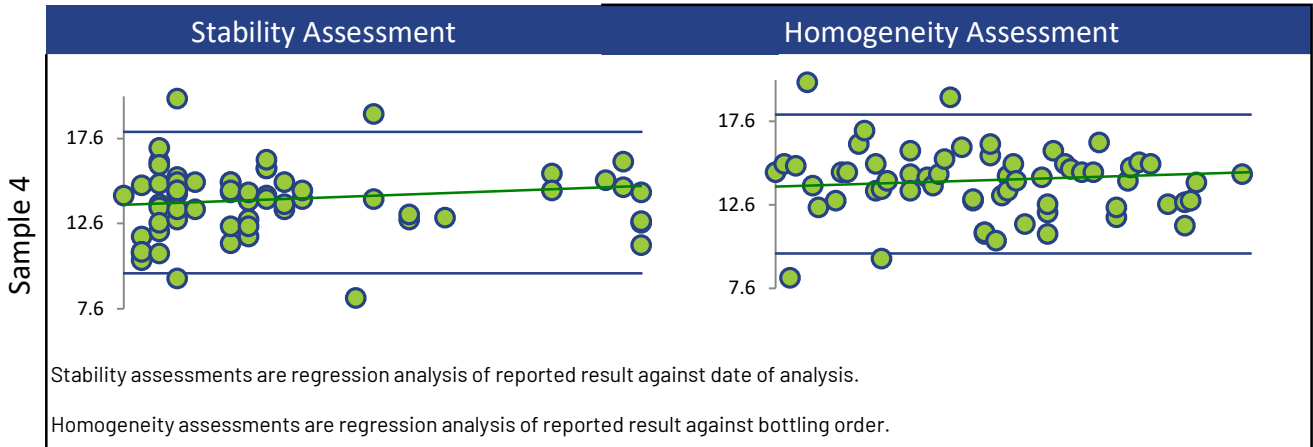
All summary stats and the plots below are based on the data excluding any flagged outliers



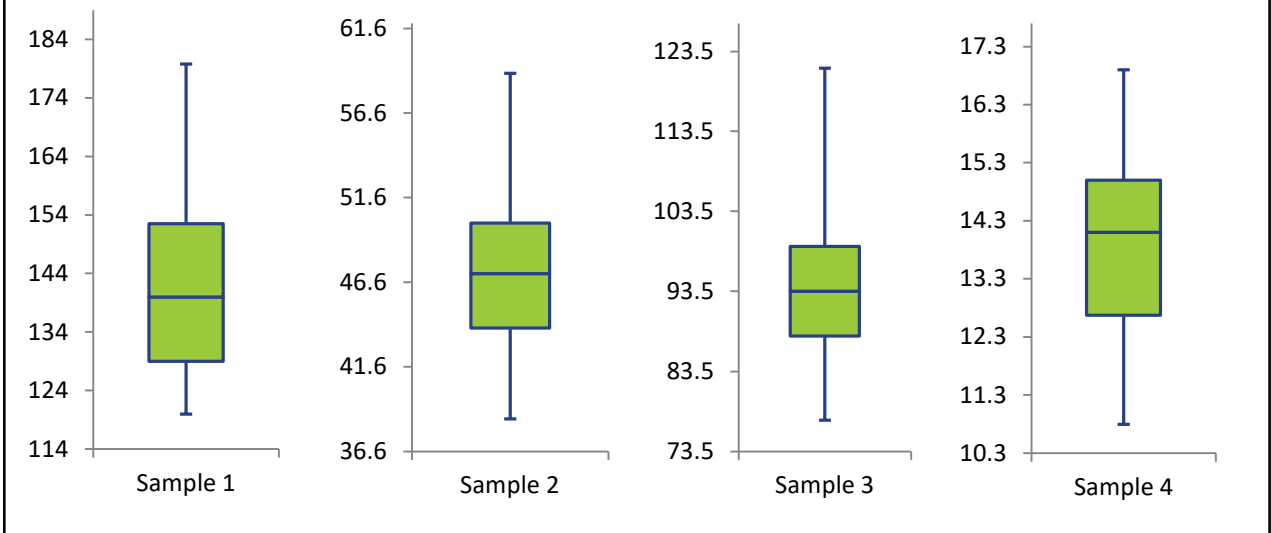
TOLUENE



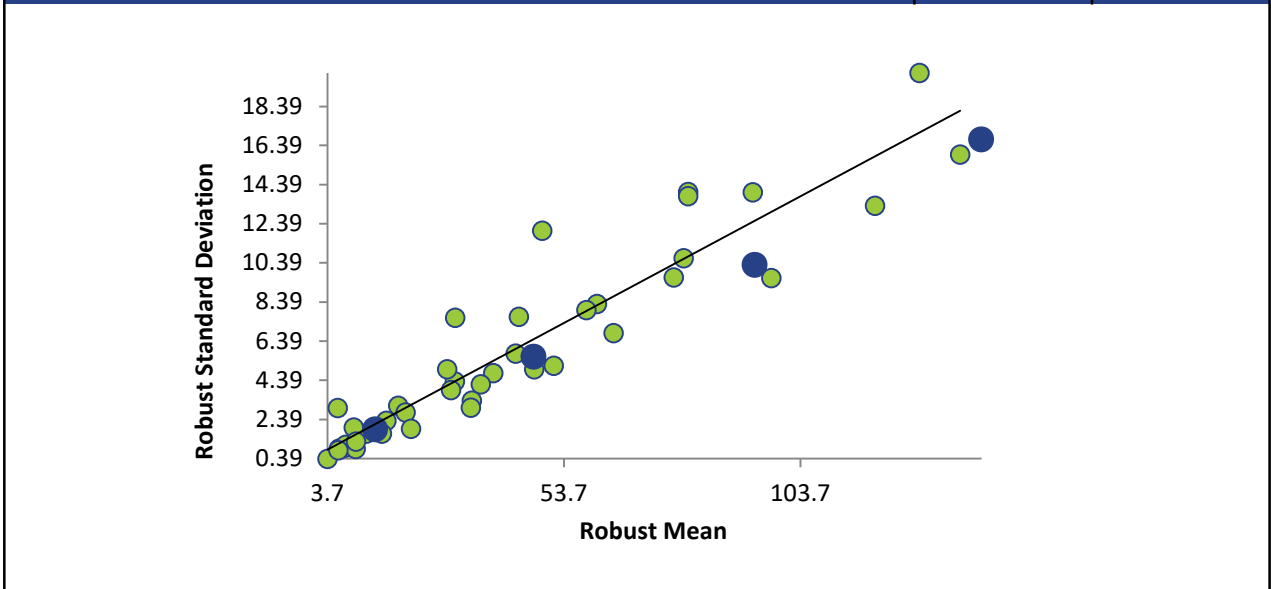
TOLUENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



TRANS-1,2-DICHLOROETHYLENE

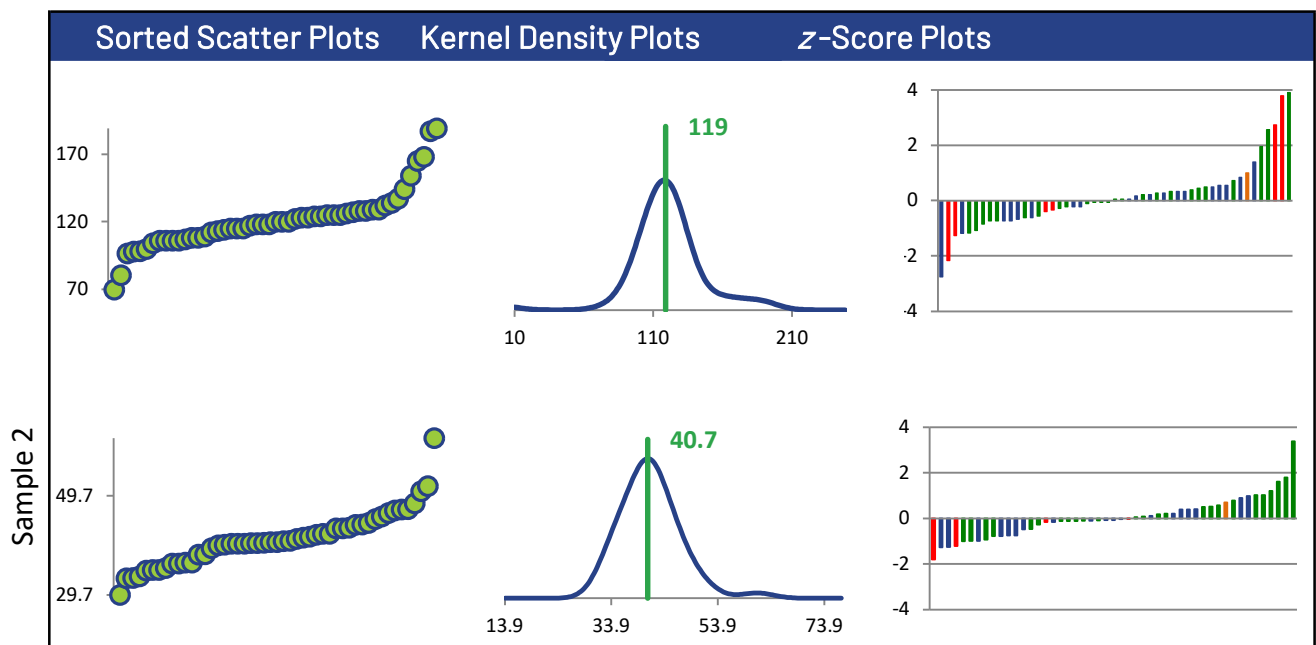
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	51	49	51	49
Median µg/L	120	40.3	79.6	11.9
Robust Mean µg/L	119	40.7	79.7	11.8
U µg/L	2.63	0.895	1.54	0.280
Robust Standard Deviation µg/L	15.0	5.01	8.82	1.57
Regression Standard Deviation µg/L	17.9	6.10	12.0	1.77
Stability Flag				
Homogeneity Flag			Homogeneity	
Standard Deviation Used (SDPA) µg/L	17.9	6.10	15.7	1.77
Outliers	0	2	0	2
z >3.0	2	1	0	0
2< z <3	4	0	3	4

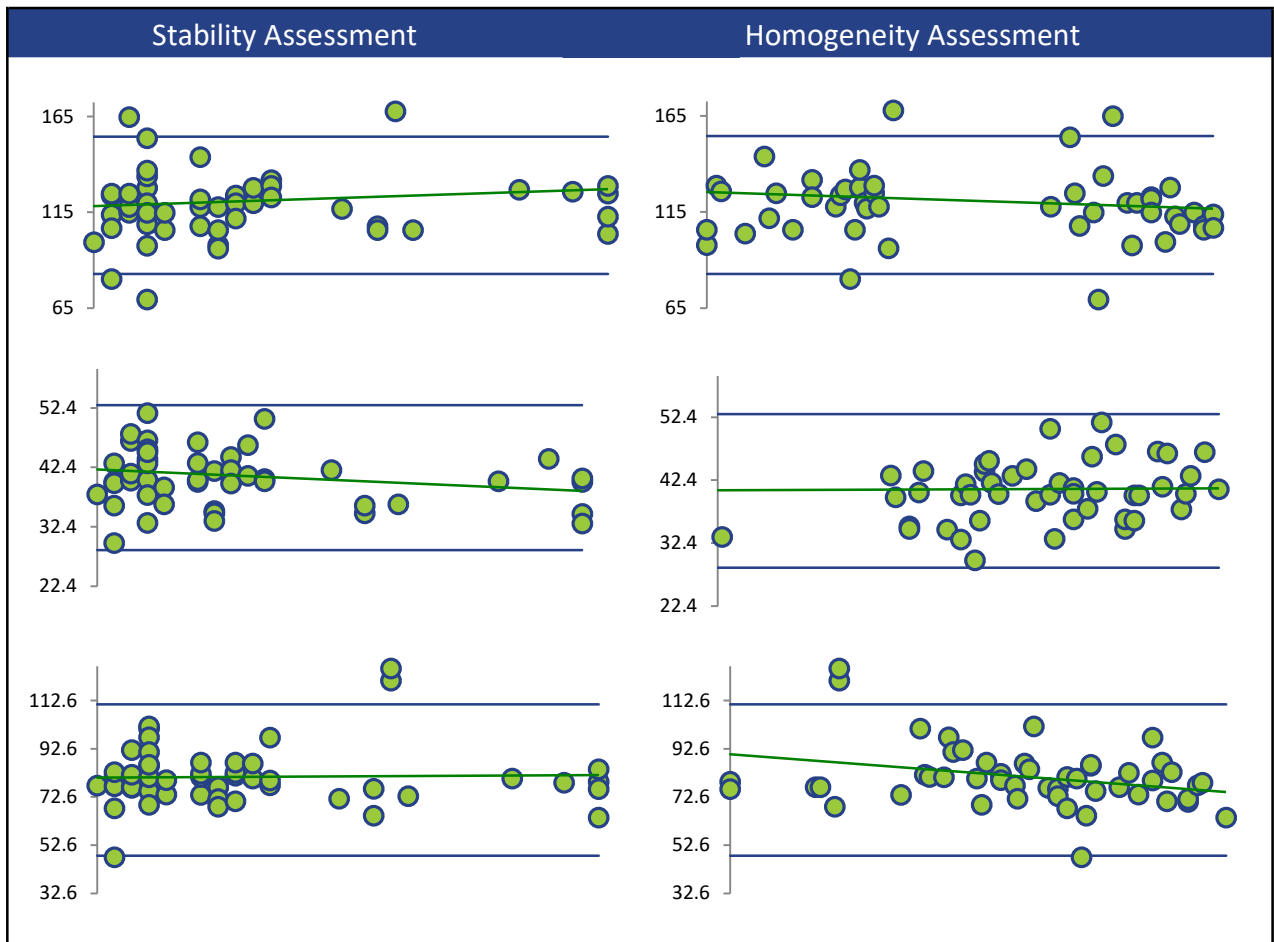
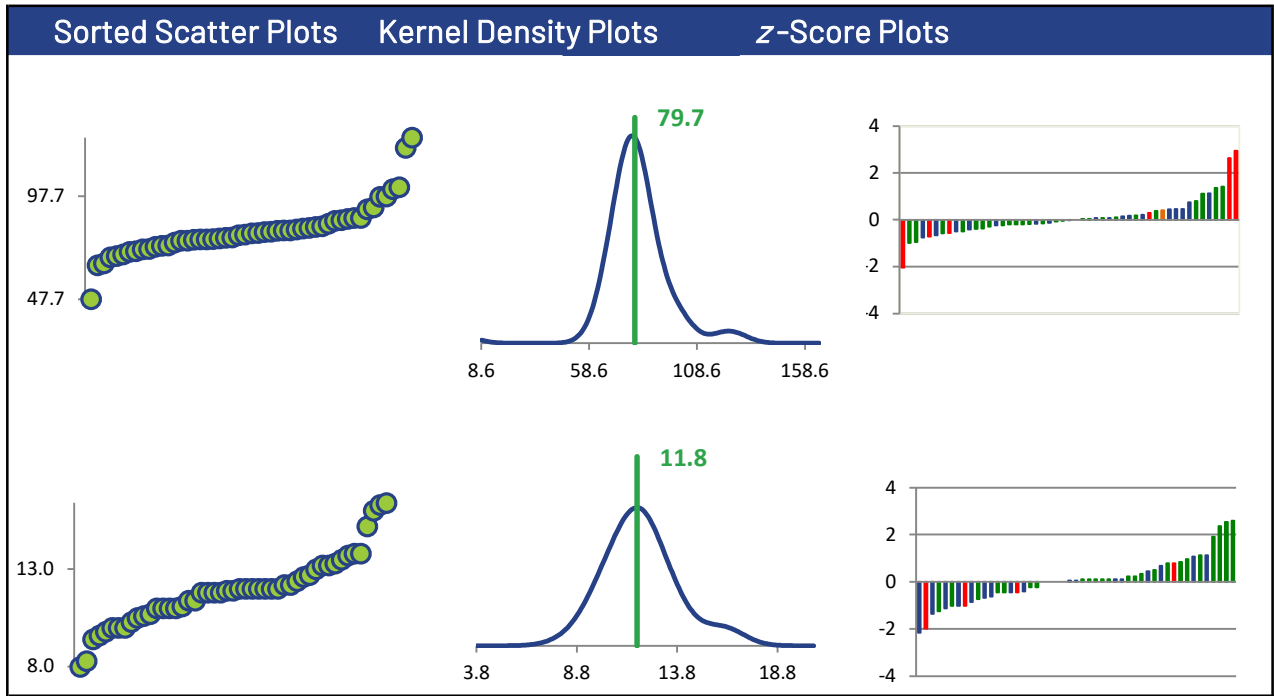
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	19	19	19	19
GC/MS (Red)	6	4	6	4
GC/MS - PURGE AND TRAP (Green)	25	25	25	25
GC/FID - PURGE AND TRAP (Orange)	1	1	1	1

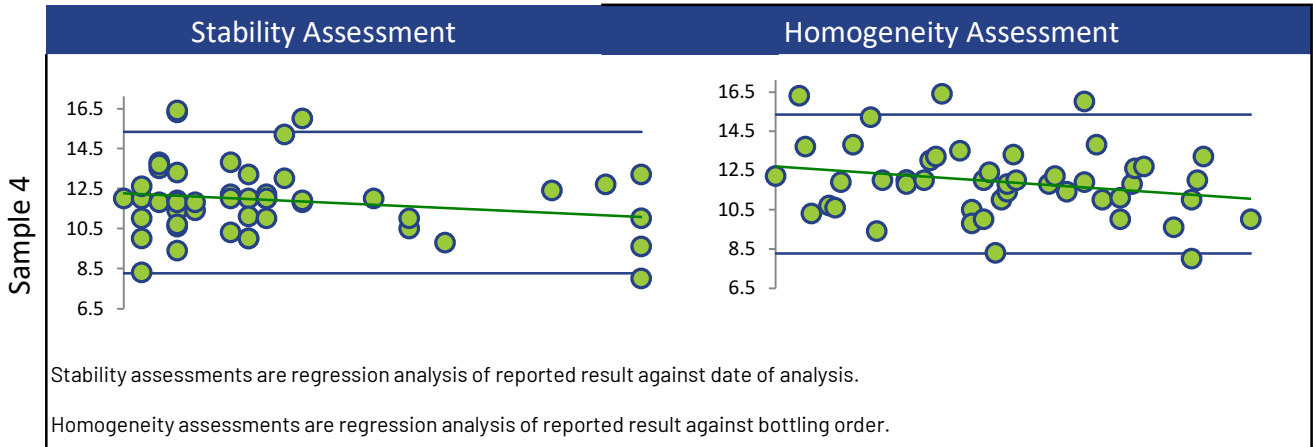
All summary stats and the plots below are based on the data excluding any flagged outliers



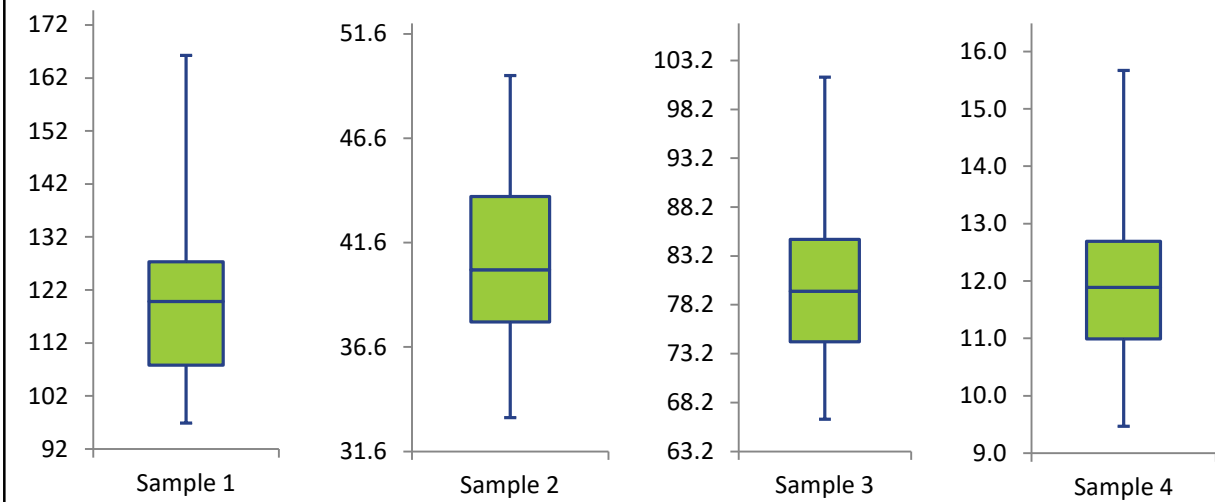
TRANS-1,2-DICHLOROETHYLENE



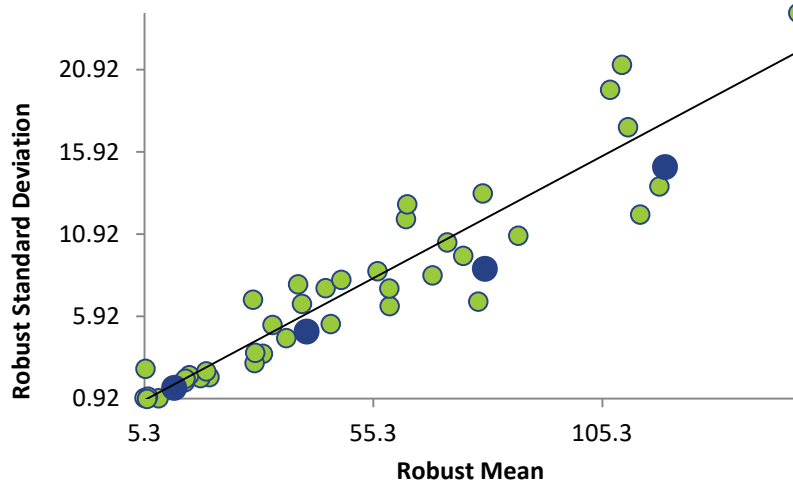
TRANS-1,2-DICHLOROETHYLENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



TRANS-1,3-DICHLOROPROPENE

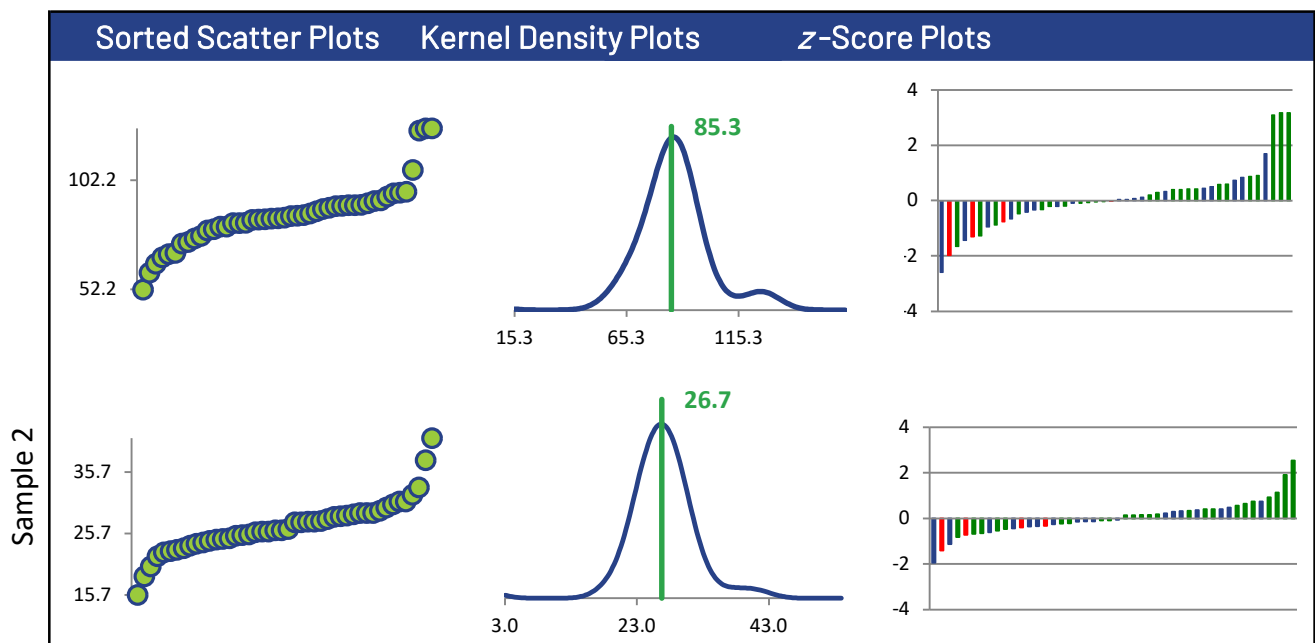
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	46	46	46	46
Median µg/L	85.5	26.3	54.9	7.83
Robust Mean µg/L	85.3	26.7	55.2	7.94
U µg/L	1.94	0.632	1.24	0.247
Robust Standard Deviation µg/L	10.5	3.43	6.73	1.34
Regression Standard Deviation µg/L	12.8	4.00	8.28	1.19
Stability Flag		Stability	Stability	Stability
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	12.8	5.70	9.93	1.61
Outliers	0	0	0	0
z >3.0	3	0	1	1
2< z <3	1	1	1	0

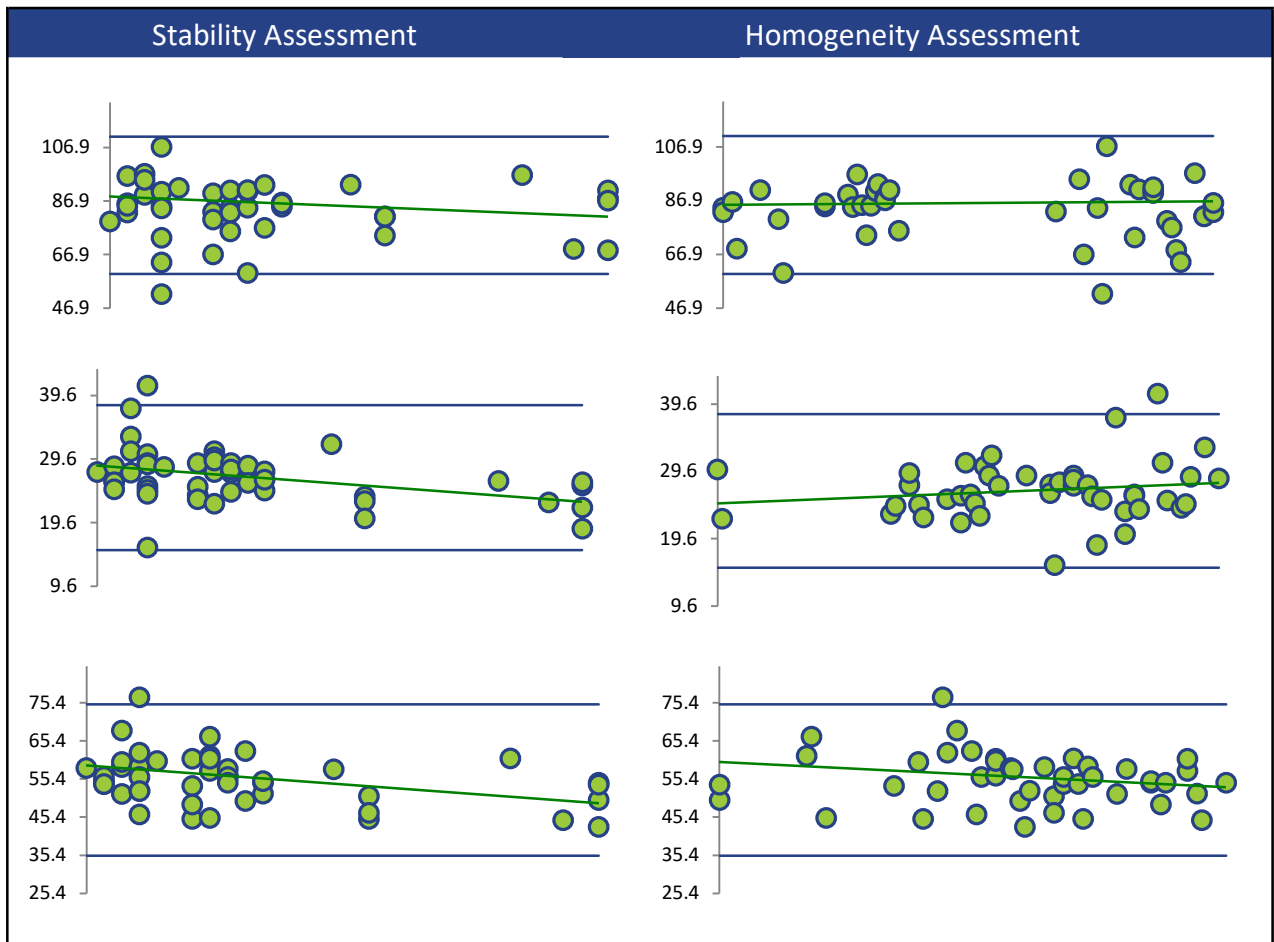
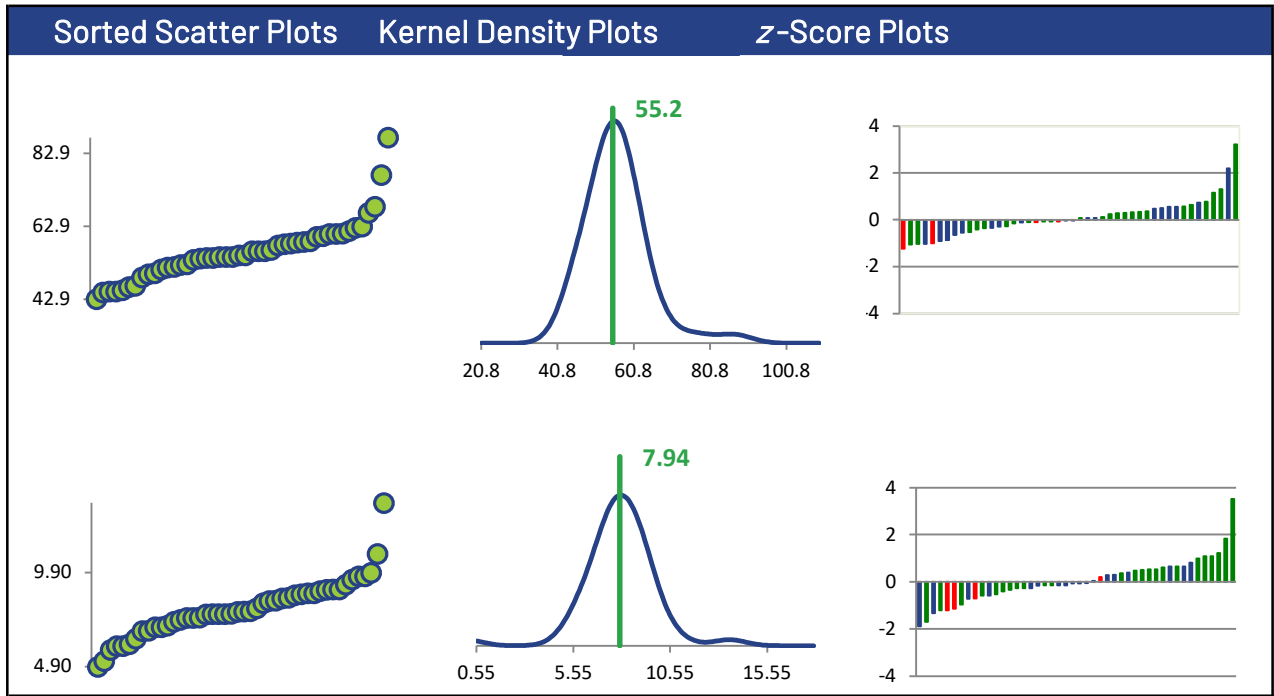
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	18	18	18	18
GC/MS (Red)	4	4	4	4
GC/MS - PURGE AND TRAP (Green)	24	24	24	24

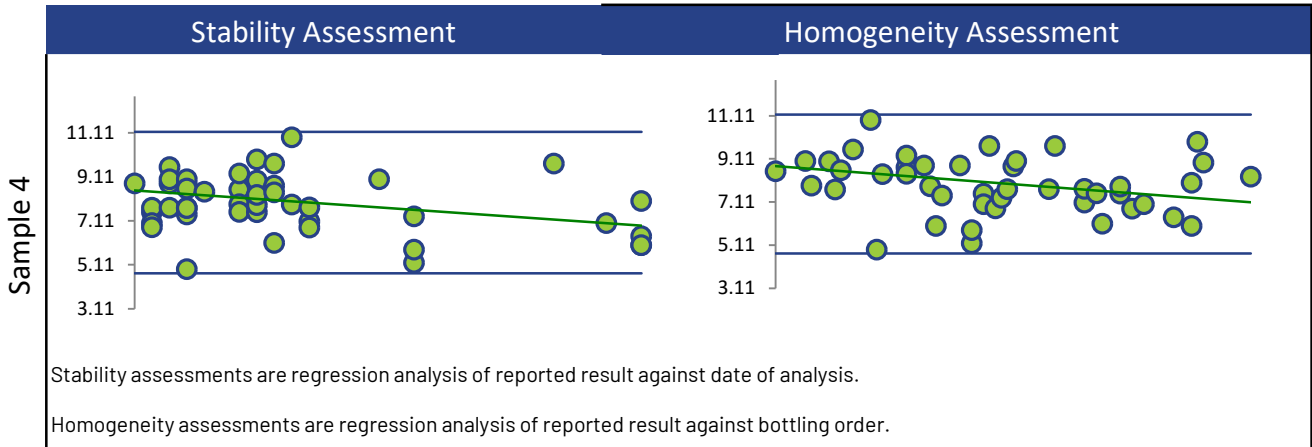
All summary stats and the plots below are based on the data excluding any flagged outliers



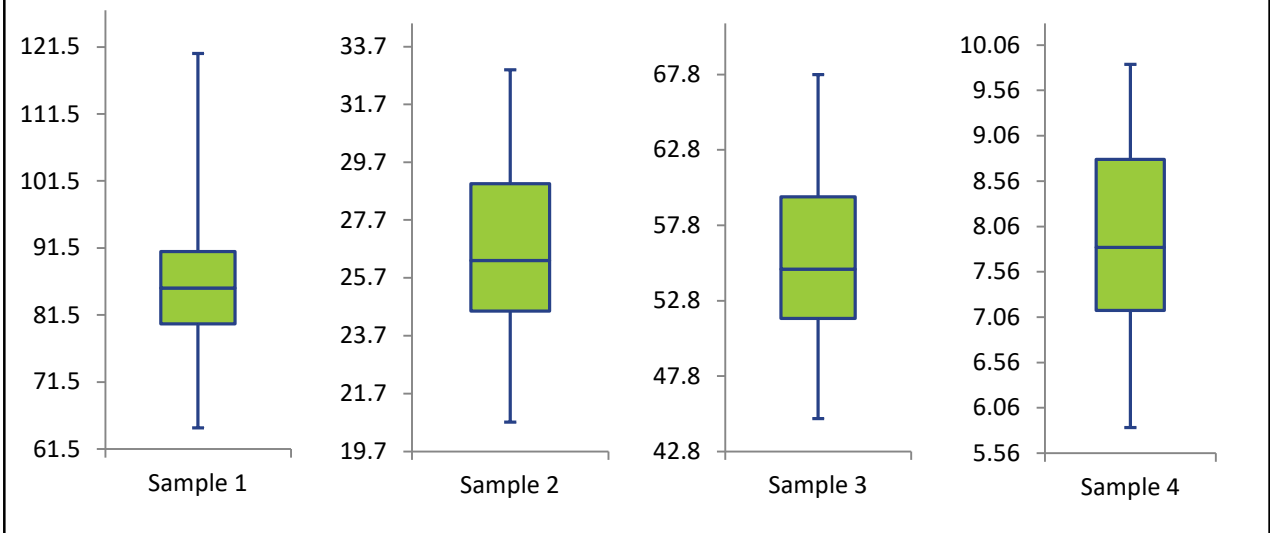
TRANS-1,3-DICHLOROPROPENE



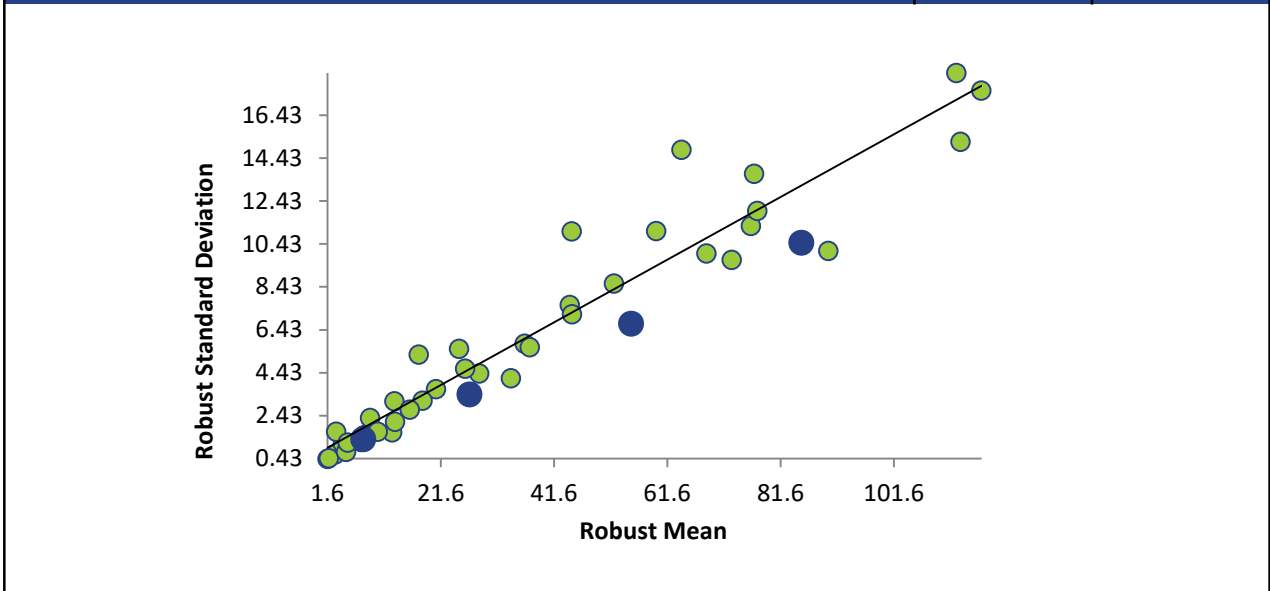
TRANS-1,3-DICHLOROPROPENE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



TRICHLOROETHYLENE

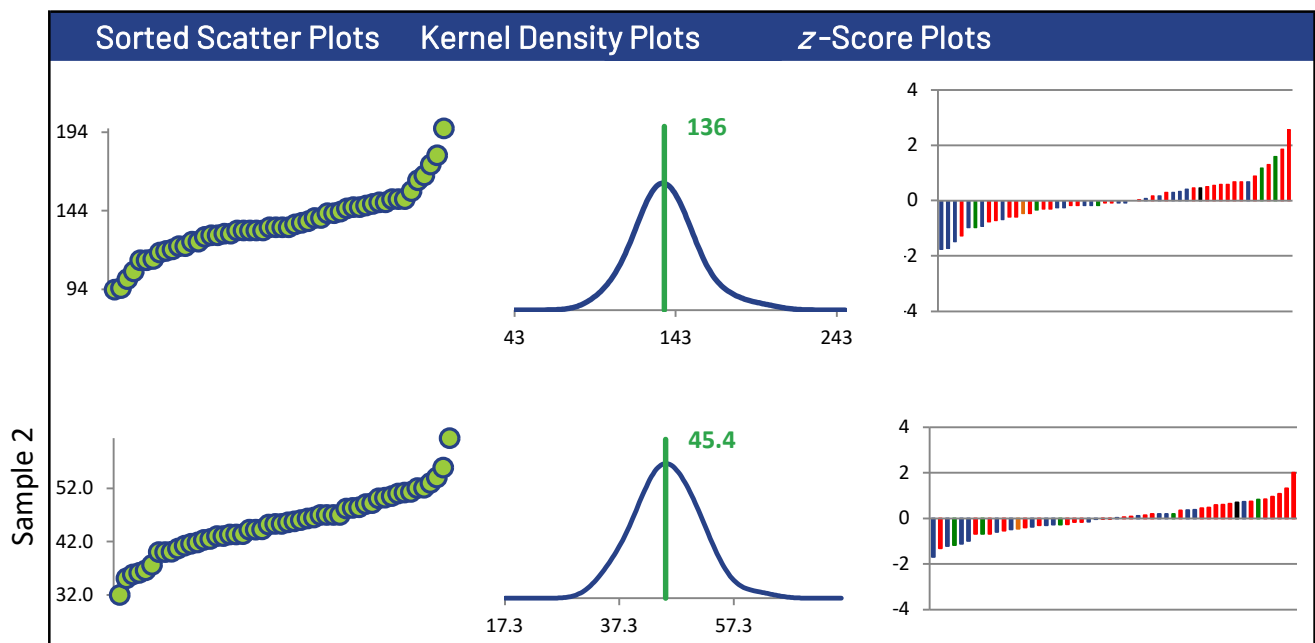
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	52	52	52	53
Median µg/L	134	45.5	89.5	13.3
Robust Mean µg/L	136	45.4	90.1	13.1
U µg/L	3.00	0.945	1.53	0.321
Robust Standard Deviation µg/L	17.3	5.45	8.83	1.87
Regression Standard Deviation µg/L	23.7	7.95	15.8	2.29
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	23.7	7.95	15.8	2.29
Outliers	1	1	1	0
z >3.0	0	0	0	0
2< z <3	1	1	2	1

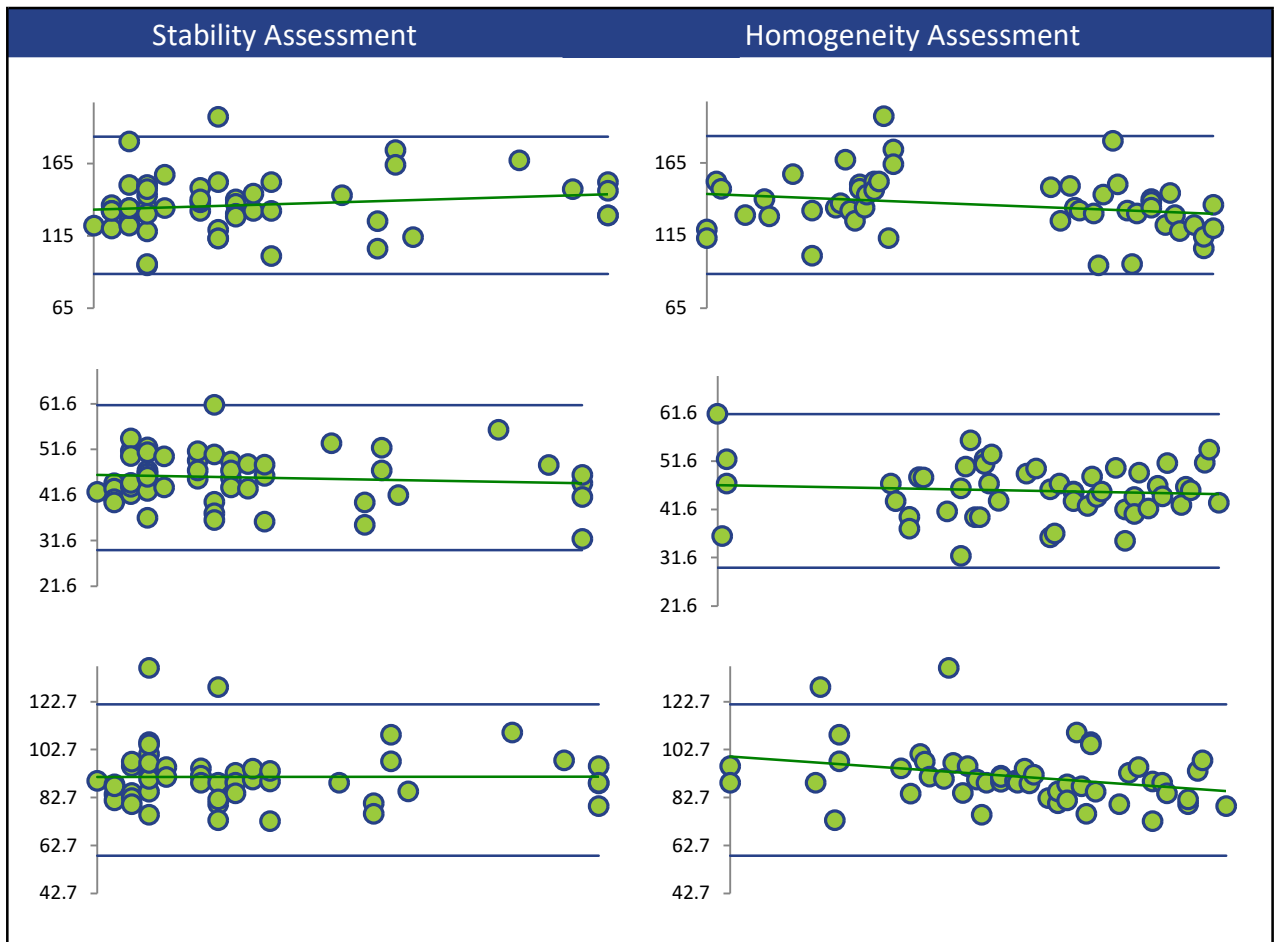
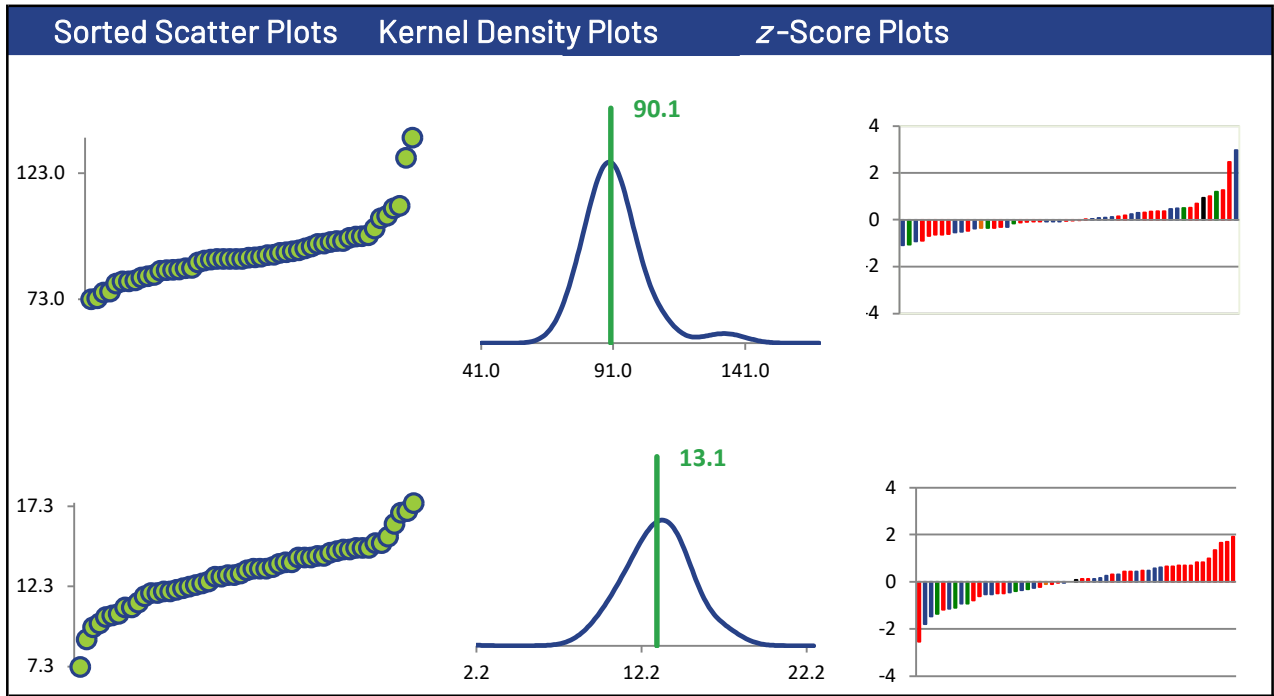
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - HEADSPACE (Blue)	18	18	18	18
GC/MS - PURGE AND TRAP (Red)	27	27	27	28
GC/MS (Green)	5	5	5	5
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1
GC/FID - PURGE AND TRAP (Black)	1	1	1	1

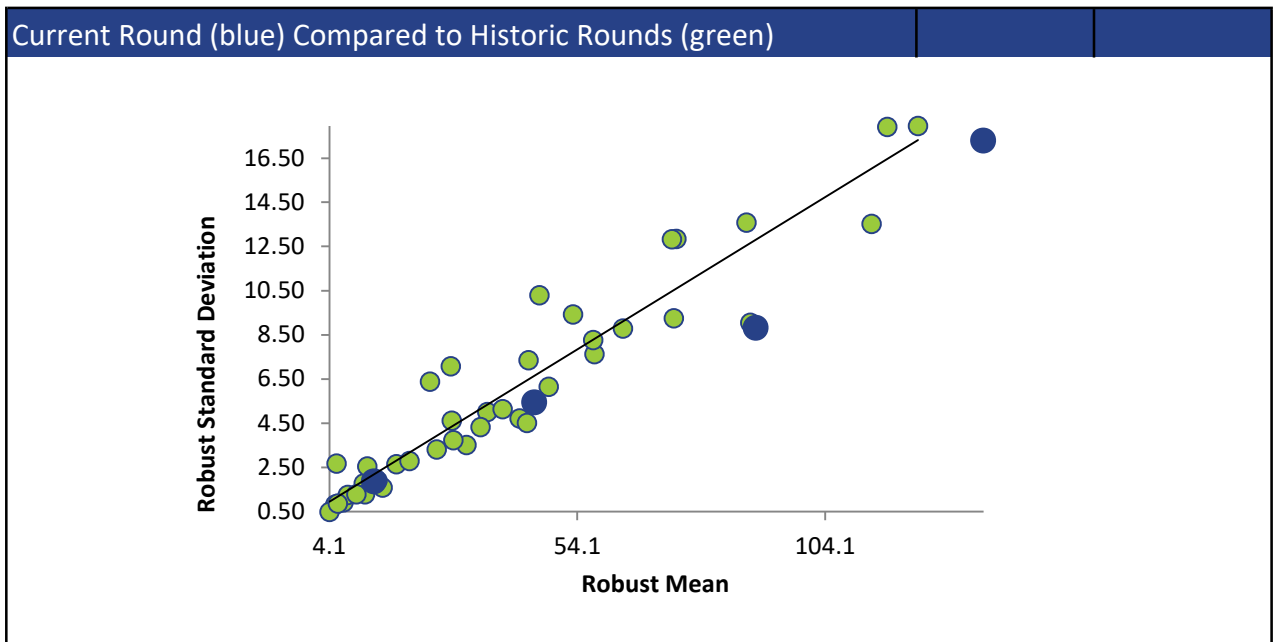
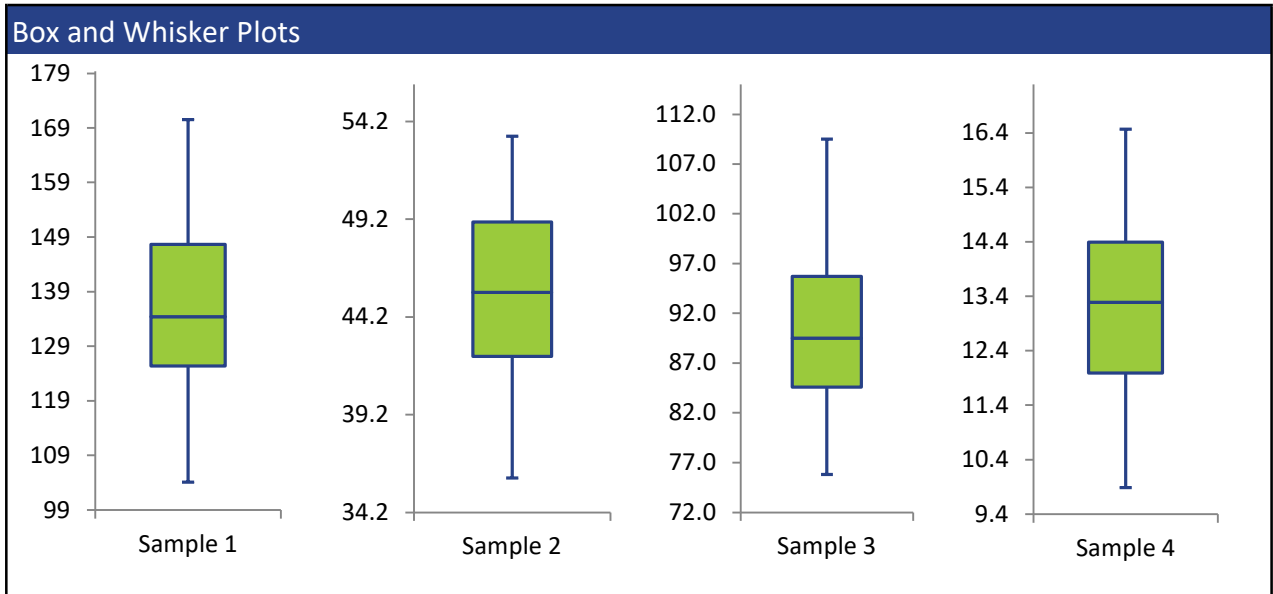
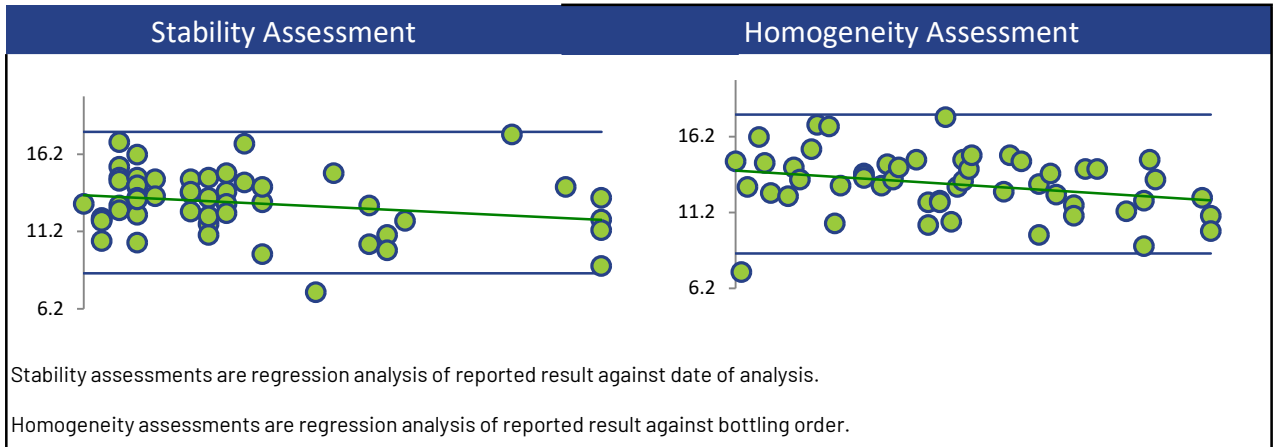
All summary stats and the plots below are based on the data excluding any flagged outliers



TRICHLOROETHYLENE



TRICHLOROETHYLENE



TRICHLOROFLUOROMETHANE

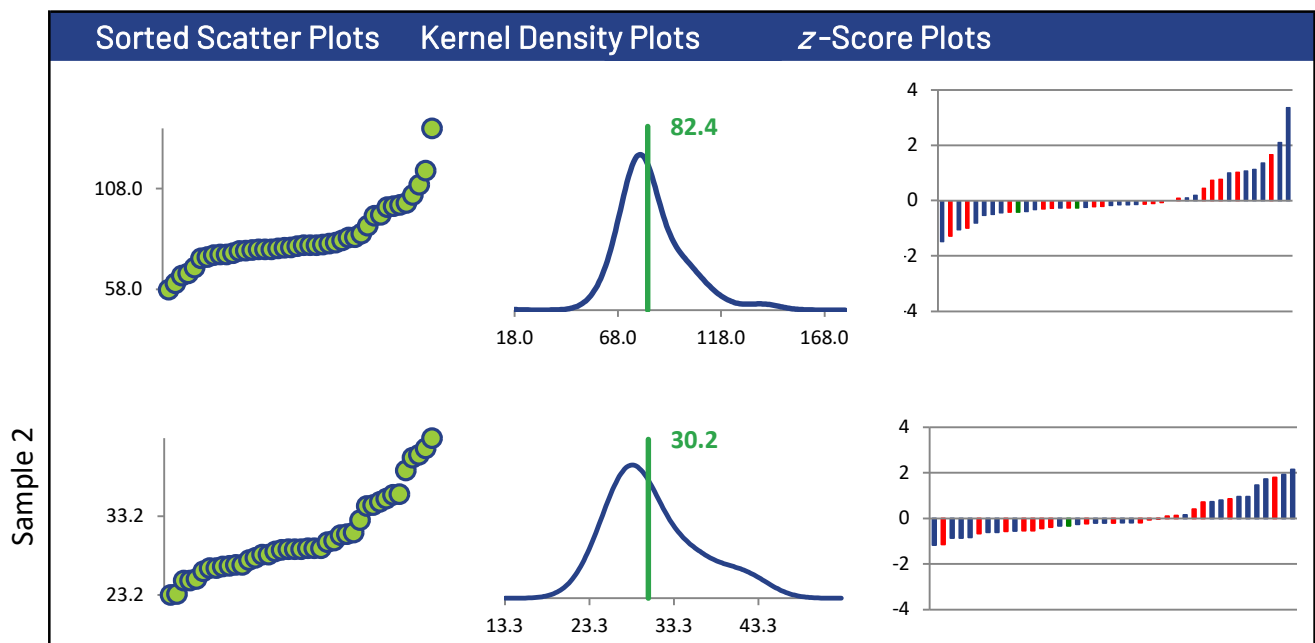
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	42	41	42	39
Median µg/L	79.8	29.0	56.7	8.84
Robust Mean µg/L	82.4	30.2	58.3	9.06
U µg/L	2.43	0.929	1.60	0.260
Robust Standard Deviation µg/L	12.6	4.76	8.30	1.30
Regression Standard Deviation µg/L	16.5	6.03	11.7	1.81
Stability Flag				
Homogeneity Flag			Homogeneity	
Standard Deviation Used (SDPA) µg/L	16.5	6.03	16.1	1.81
Outliers	0	1	0	1
z >3.0	1	0	0	0
2< z <3	1	1	2	0

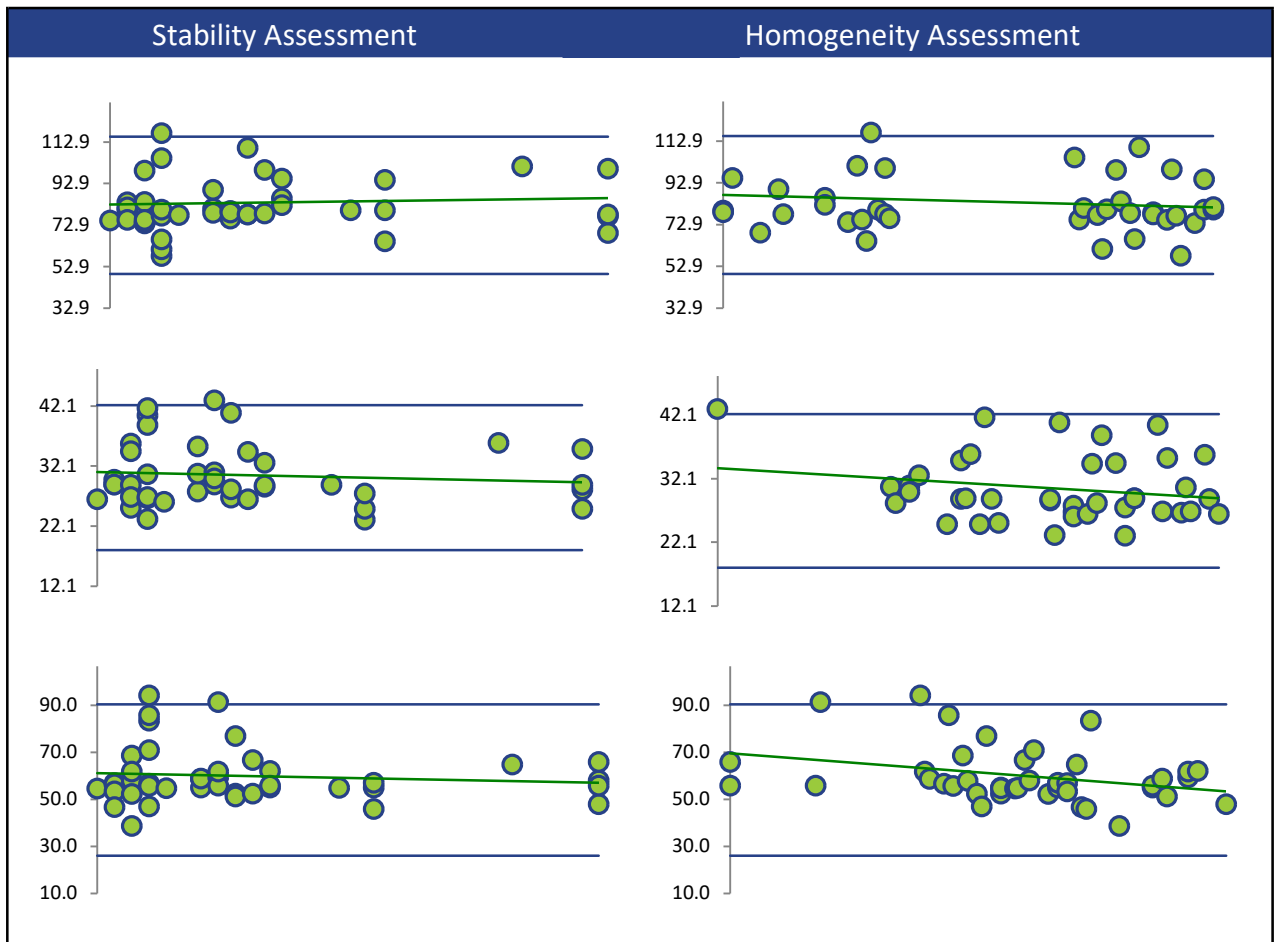
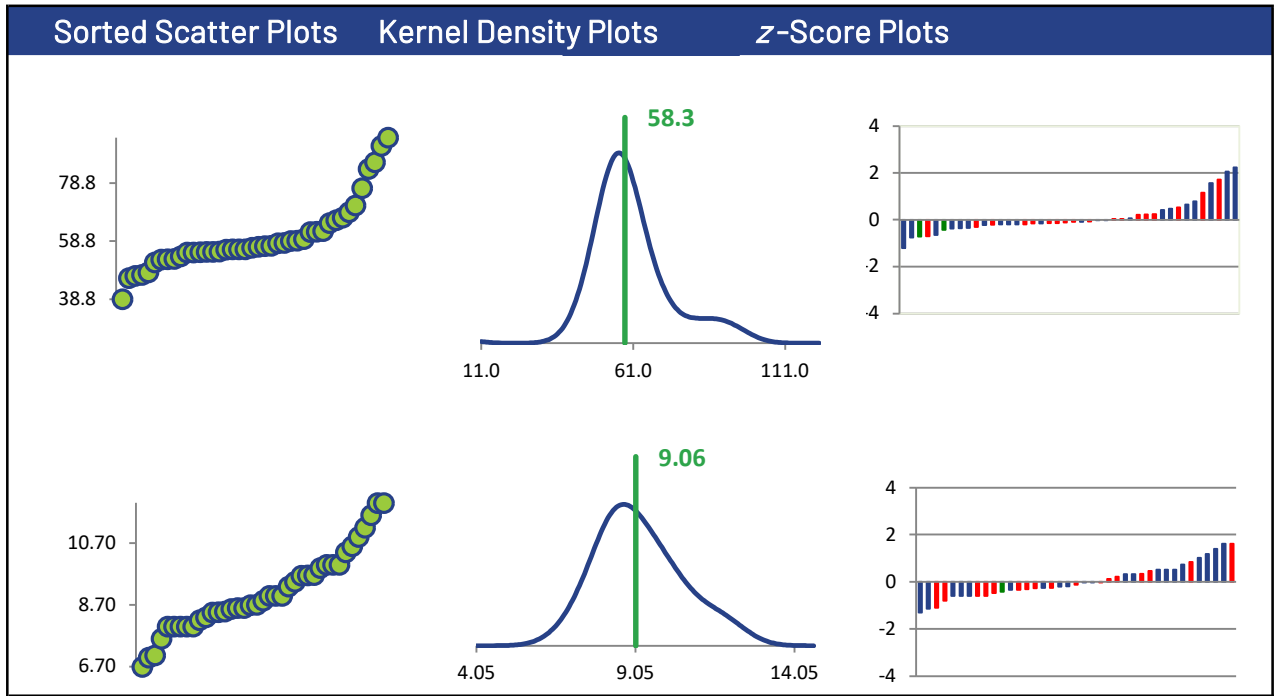
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS - PURGE AND TRAP (Blue)	22	22	22	21
GC/MS - HEADSPACE (Red)	18	18	18	17
GC/MS (Green)	2	1	2	1

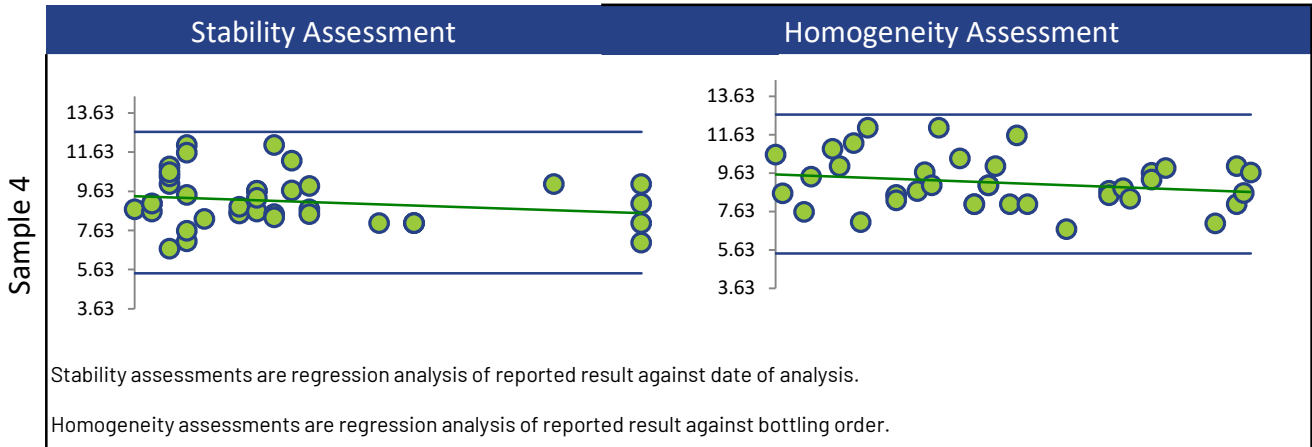
All summary stats and the plots below are based on the data excluding any flagged outliers



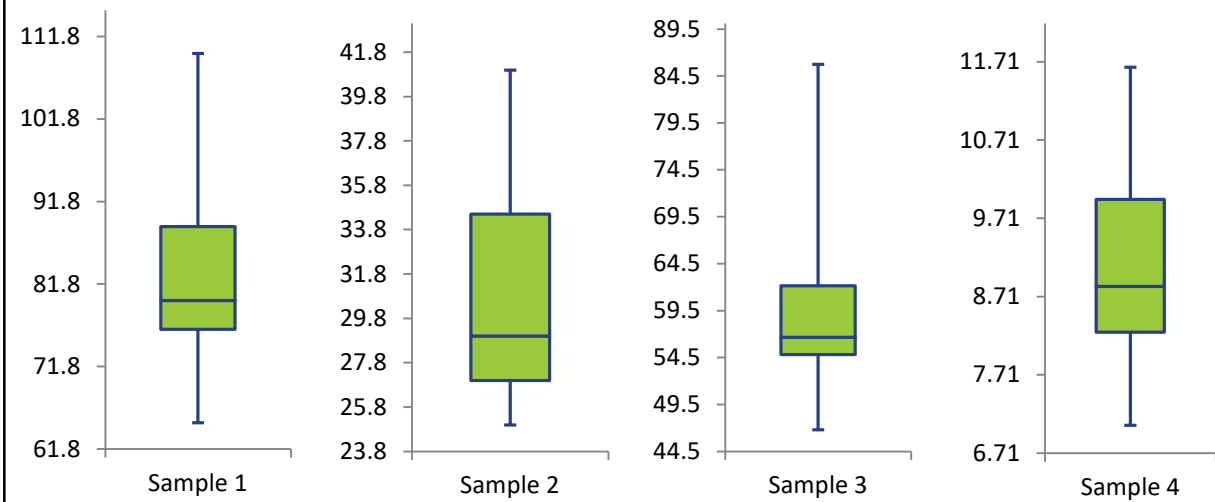
TRICHLOROFLUOROMETHANE



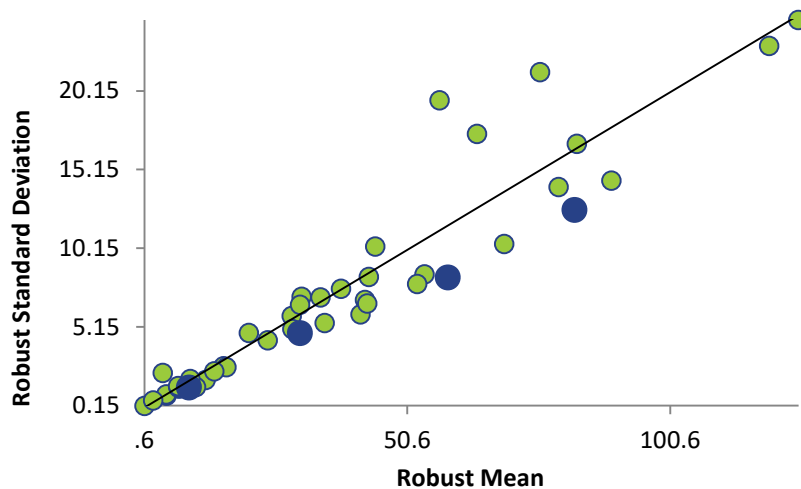
TRICHLOROFLUOROMETHANE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)



VINYL CHLORIDE

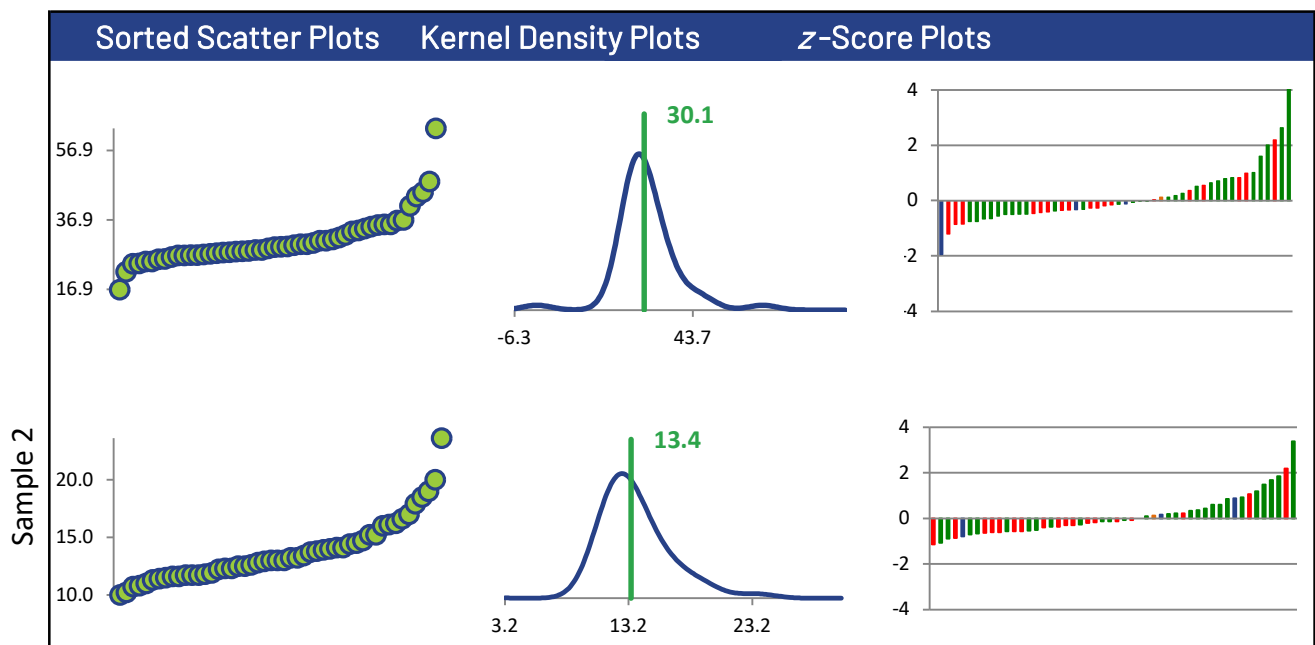
Summary Statistics

Statistic	C16-1	C16-2	C16-3	C16-4
N	50	50	50	52
Median µg/L	29.2	13.0	26.8	5.40
Robust Mean µg/L	30.1	13.4	27.6	5.61
U µg/L	0.875	0.400	0.771	0.196
Robust Standard Deviation µg/L	4.95	2.26	4.36	1.13
Regression Standard Deviation µg/L	6.77	3.02	6.21	1.26
Stability Flag				
Homogeneity Flag				
Standard Deviation Used (SDPA) µg/L	6.77	3.02	6.21	1.26
Outliers	2	2	2	0
z >3.0	1	1	1	1
2< z <3	3	1	1	2

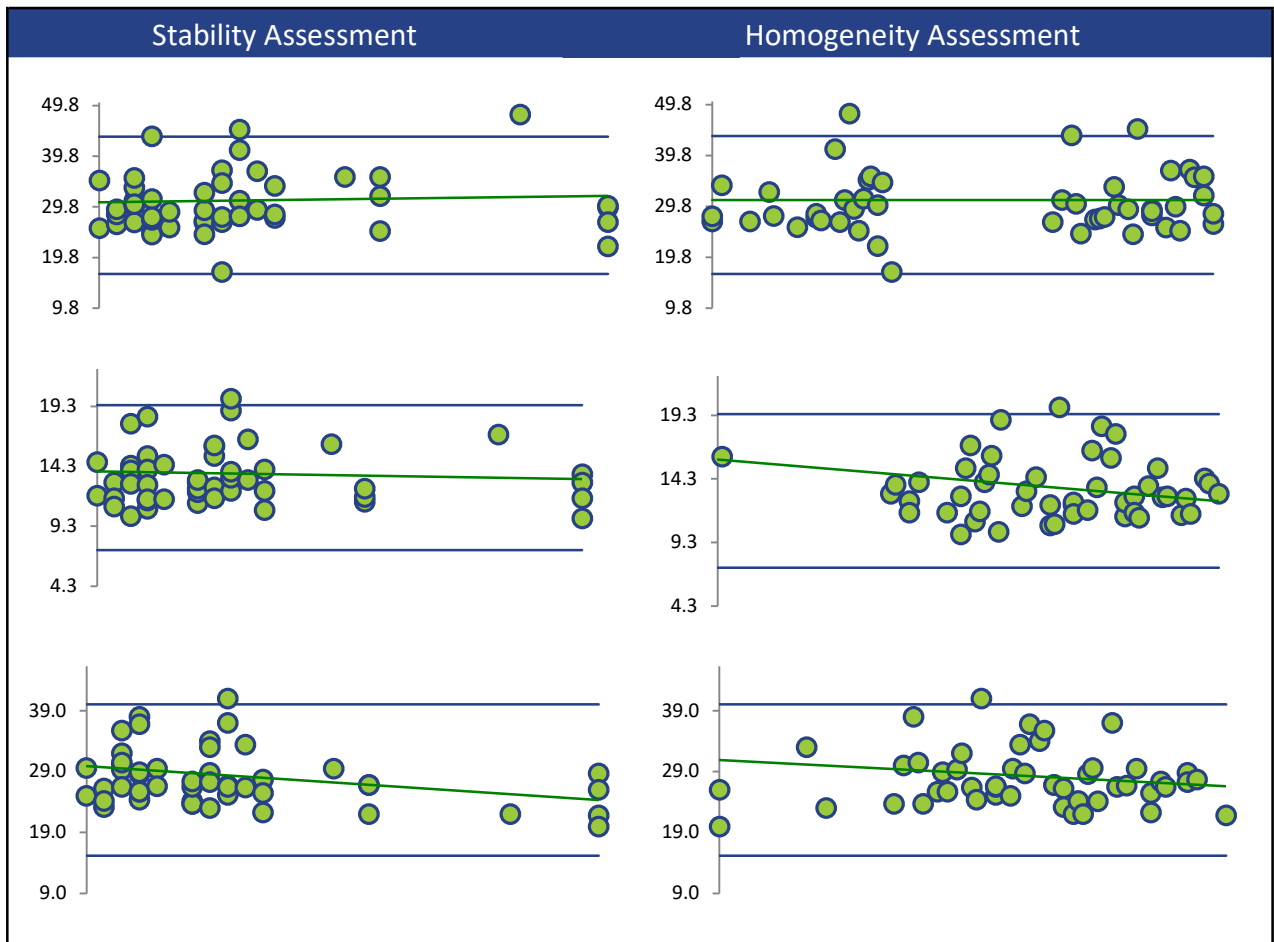
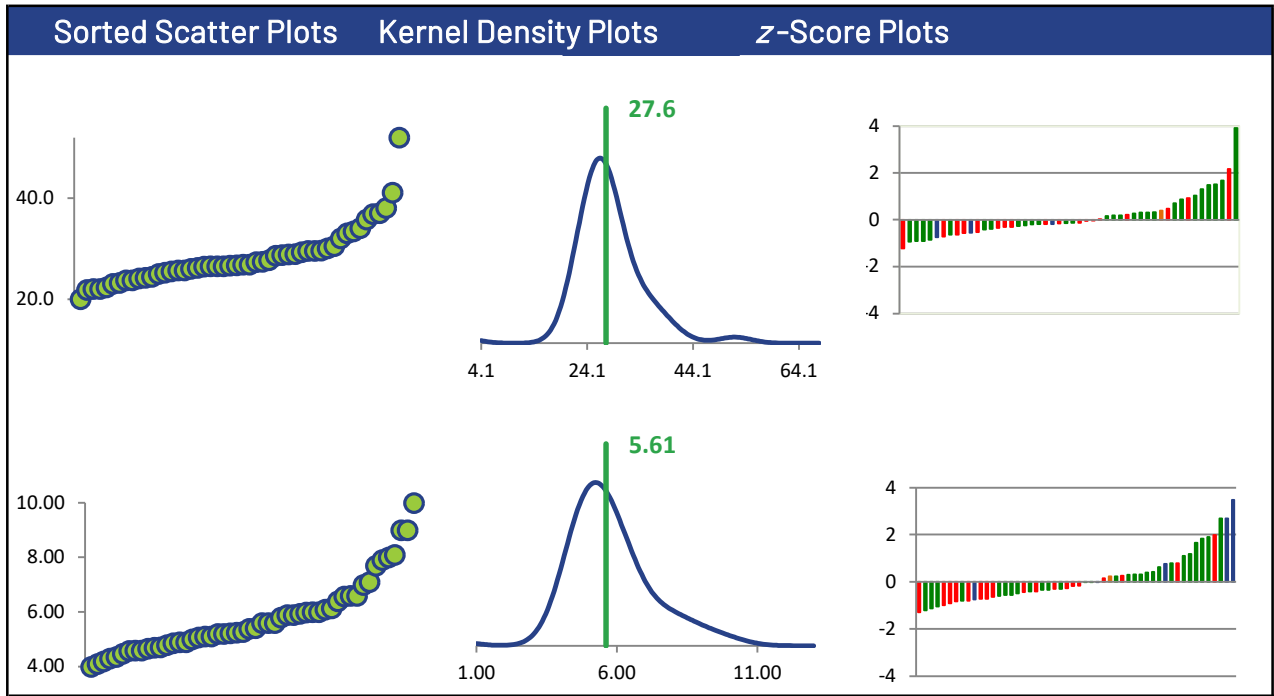
Methods Used

Method	C16-1	C16-2	C16-3	C16-4
GC/MS (Blue)	3	3	3	5
GC/MS - HEADSPACE (Red)	18	18	18	18
GC/MS - PURGE AND TRAP (Green)	28	28	28	28
GC/MS/MS - HEADSPACE (Orange)	1	1	1	1

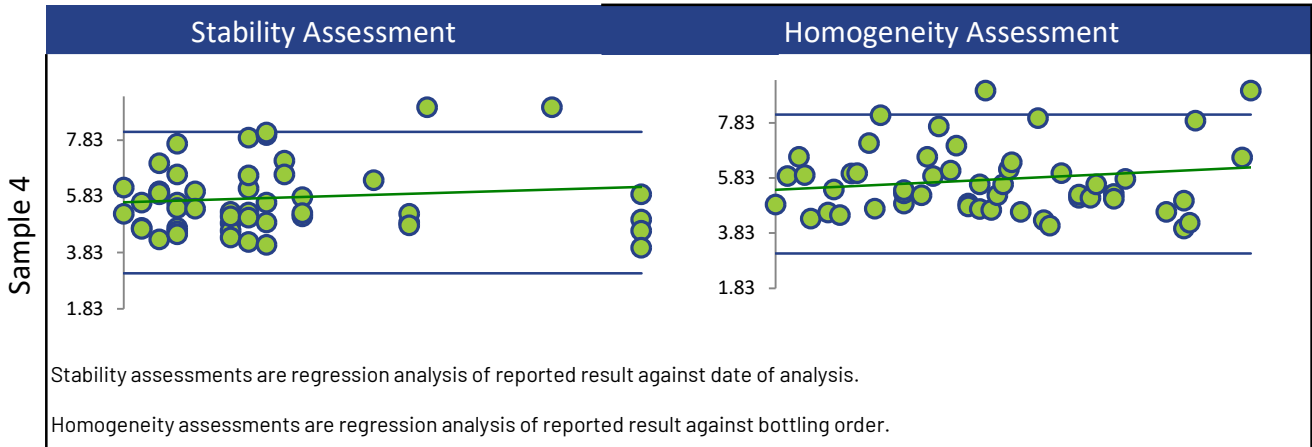
All summary stats and the plots below are based on the data excluding any flagged outliers



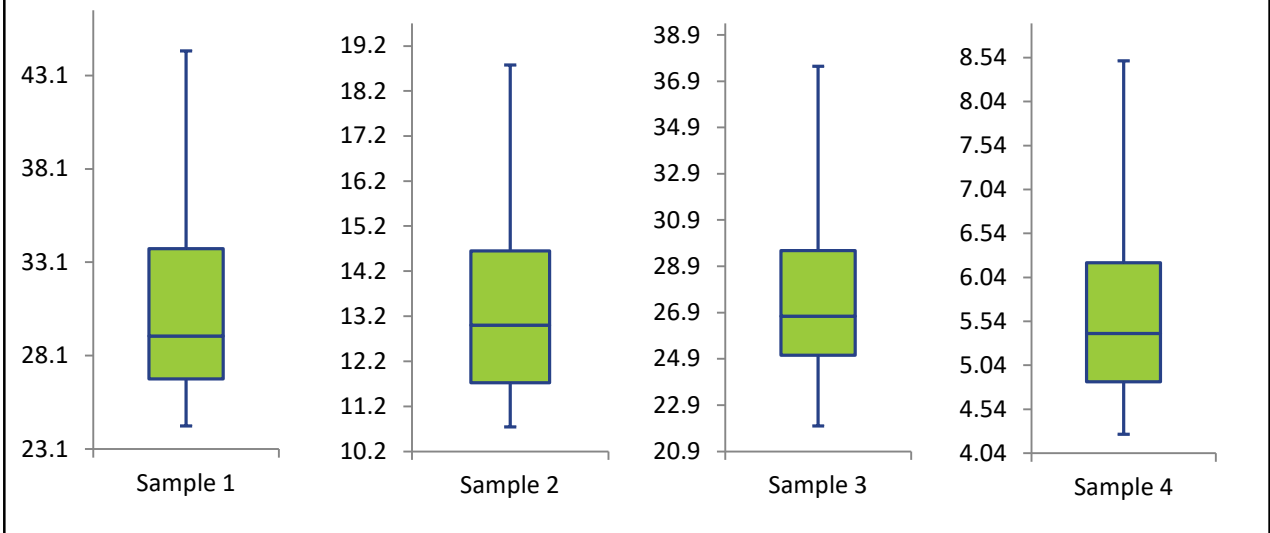
VINYL CHLORIDE



VINYL CHLORIDE



Box and Whisker Plots



Current Round (blue) Compared to Historic Rounds (green)

