Potable Water 1,1,1,2-Tetrachloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,1,1,2-Tetrachloroethane

Sample: 9720 Technology: GC-MS Prep Method:

Target: 15.9 ug/L Limits: 12.7 to 19.1 ug/L Basis: Fixed Percent (2) Robust Mean: 15.8 ug/L Std Dev: 1.356 ug/L Median: 15.8 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29 Totals for Matrix/Analyte:

Fail: 1 Total: 30

Labs: Pass: 30

Fail: 1

Total: 31

13.1

5.

3-

2

Number of Labs

Potable Water 1,1,1,2-Tetrachloroethane

14.4

15

A histogram is not displayed for

limited number of participants.

Technology: GCELCD/PID

15.7

Test Results (End Groups Include Outliers)

16.4

due to the

17.7

10.1

10.5

18.3

Shipment: 397 Matrix: Potable Water

Analyte: 1,1,1,2-Tetrachloroethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 15.9 ug/L Limits: 12.7 to 19.1 ug/L Basis: Fixed Percent (2) Robust Mean: 15 ug/L Std Dev: 0 ug/L Median: 15 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 30

Fail: 1 Total: 31

8

Number of Labs

Potable Water 1,1,1-Trichloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,1,1-Trichloroethane

Sample: 9720 Technology: GC-MS Prep Method:

Target: 8.89 ug/L Limits: 5.33 to 12.4 ug/L Basis: Fixed Percent (2) Robust Mean: 9.1 ug/L Std Dev: 0.8822 ug/L Median: 9.23 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30

Fail: 0

Total: 30

Totals for Matrix/Analyte:

Labs: Pass: 31

Fail: 0 Total: 31

7.3

0.

Potable Water 1,1,1-Trichloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,1,1-Trichloroethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 8.89 ug/L Limits: 5.33 to 12.4 ug/L Basis: Fixed Percent (2) Robust Mean: 9.4 ug/L Std Dev: 0 ug/L

Median: 9.42 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

8.7

9.1

Test Results (End Groups Include Outliers)

Potable Water 1,1,2,2-Tetrachloroethane

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 1 of 76

Potable Water 1,1,2,2-Tetrachloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,1,2,2-Tetrachloroethane

Sample: 9720 Technology: GC-MS Prep Method:

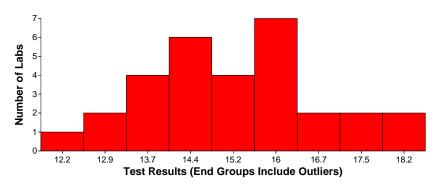
Target: 15.5 ug/L Limits: 12.4 to 18.6 ug/L Basis: Fixed Percent (2) Robust Mean: 15.3 ug/L Std Dev: 3.1356 ug/L Median: 15.25 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29

Fail: 1 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31



Potable Water 1,1,2,2-Tetrachloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,1,2,2-Tetrachloroethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 15.5 ug/L Limits: 12.4 to 18.6 ug/L Basis: Fixed Percent (2) Robust Mean: 14.7 ug/L Std Dev: 0 ug/L Median: 14.7 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,1,2-Trichloroethane

8

Shipment: 397 Matrix: Potable Water

Analyte: 1,1,2-Trichloroethane

Sample: 9720 Technology: GC-MS Prep Method:

Target: 7.4 ua/L Limits: 4.44 to 10.4 ug/L Basis: Fixed Percent (2) Robust Mean: 7.4 ug/L Std Dev: 0.5502 ug/L Median: 7.42 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Number of Labs 0 6.4 7.2 7.4 7.7 7.9 8.5 Test Results (End Groups Include Outliers)

Potable Water 1,1,2-Trichloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,1,2-Trichloroethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 7.4 ug/L Limits: 4.44 to 10.4 ug/L Basis: Fixed Percent (2) Robust Mean: 7.4 ug/L Std Dev: 0 ug/L

Median: 7.42 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,1-Dichloroethane

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 2 of 76

Potable Water 1,1-Dichloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,1-Dichloroethane

Sample: 9720 Technology: GC-MS Prep Method:

Target: 17.1 ug/L Limits: 13.7 to 20.5 ug/L Basis: Fixed Percent (2) Robust Mean: 17.8 ug/L Std Dev: 1.4165 ug/L Median: 17.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30

Fail: 0 Totals for Matrix/Analyte:

Total: 30

Labs: Pass: 31

10 Number of Labs 0 15.5 16.2 17 17.7 18.4 19.2 19.9 20.7 **Test Results (End Groups Include Outliers)** Fail: 0 Total: 31

Potable Water 1,1-Dichloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,1-Dichloroethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 17.1 ug/L Limits: 13.7 to 20.5 ug/L Basis: Fixed Percent (2) Robust Mean: 17.2 ug/L Std Dev: 0 ug/L Median: 17.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 31 Fail: 0 A histogram is not displayed for Technology: GCELCD/PID due to the

limited number of participants.

Potable Water 1,1-Dichloroethene

Total: 31

Shipment: 397 Matrix: Potable Water

Analyte: 1,1-Dichloroethene

Sample: 9720 Technology: GC-MS

Prep Method:

Target: 7.7 ua/L Limits: 4.62 to 10.8 ug/L Basis: Fixed Percent (2) Robust Mean: 8.3 ug/L Std Dev: 0.8862 ug/L Median: 8.255 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Total: 30 Fail: 0

Totals for Matrix/Analyte:

Labs: Pass: 31

Potable Water 1,1-Dichloroethene

Total: 31

Shipment: 397 Matrix: Potable Water

Analyte: 1,1-Dichloroethene

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Score Date:

Target: 7.7 ug/L Limits: 4.62 to 10.8 ug/L Basis: Fixed Percent (2) Robust Mean: 7.9 ug/L Std Dev: 0 ug/L

Median: 7.94 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

11/04/2016

Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Potable Water 1,1-Dichloropropene

Proficiency Test Statistics

6. Number of Labs 5 2 6.5 7.4 7.8 8.3 8.7 10.1 Test Results (End Groups Include Outliers) Fail: 0

A histogram is not displayed for Technology: GCELCD/PID

due to the

Page 3 of 76

limited number of participants.

Potable Water 1,1-Dichloropropene

Shipment: 397 Matrix: Potable Water

Analyte: 1,1-Dichloropropene

Sample: 9720 Technology: GC-MS Prep Method:

Target: 17.3 ug/L Limits: 13.8 to 20.8 ug/L Basis: Fixed Percent (2) Robust Mean: 18.1 ug/L Std Dev: 1.9936 ug/L Median: 17.7 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 27

Fail: 3

Total: 30

Total: 1

Fail: 3

6-

5

2

Number of Labs

Totals for Matrix/Analyte:

Labs: Pass: 28

Fail: 3

Number of Labs

6

5

3-

2

Potable Water 1,1-Dichloropropene

Total: 31

16

15

Shipment: 397 Matrix: Potable Water

Analyte: 1,1-Dichloropropene

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 17.3 ug/L Limits: 13.8 to 20.8 ug/L Basis: Fixed Percent (2) Robust Mean: 16.9 ug/L Std Dev: 0 ug/L Median: 16.9 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 28 A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

16.9

17.8

Test Results (End Groups Include Outliers)

18.7

19.7

20.6

21.5

10.5

Total: 31

Potable Water 1,2,3-Trichloropropane

Shipment: 397 Matrix: Potable Water

Analyte: 1,2,3-Trichloropropane

Sample: 9720 Technology: GC-MS Prep Method:

Target: 9.38 ua/L Limits: 5.63 to 13.1 ug/L Basis: Fixed Percent (2) Robust Mean: 9.2 ug/L Std Dev: 1.8331 ug/L Median: 9.24 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29 Fail: 0 Total: 29

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 0

Total: 30

Potable Water 1,2,3-Trichloropropane

7.9

Shipment: 397 Matrix: Potable Water

Analyte: 1,2,3-Trichloropropane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 9.38 ug/L Limits: 5.63 to 13.1 ug/L Basis: Fixed Percent (2) Robust Mean: 9.5 ug/L

Std Dev: 0 ug/L Median: 9.46 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 0 Total: 30

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

9.2

Test Results (End Groups Include Outliers)

9.5

Potable Water 1,2,4-Trichlorobenzene

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Potable Water 1,2,4-Trichlorobenzene

Shipment: 397 Matrix: Potable Water

Analyte: 1,2,4-Trichlorobenzene

Sample: 9721 Technology: GC-MS Prep Method:

Target: 3.82 ug/L Limits: 2.29 to 5.35 ug/L Basis: Fixed Percent (2) Robust Mean: 3.7 ug/L Std Dev: 1.0054 ug/L Median: 3.71 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29

Fail: 1 Totals for Matrix/Analyte: Labs: Pass: 30

Shipment: 397 Matrix: Potable Water

Analyte: 1,2,4-Trichlorobenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 3.82 ug/L Limits: 2.29 to 5.35 ug/L Basis: Fixed Percent (2) Robust Mean: 3.5 ug/L Std Dev: 0 ug/L

Median: 3.53 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte:

Total: 1

Labs: Pass: 30 Fail: 1

Total: 30

Number of Labs 6 2.9 3.1 3.5 3.7 3.9 4.3 4.5 **Test Results (End Groups Include Outliers)**

Fail: 1 Total: 31

Potable Water 1,2,4-Trichlorobenzene

A histogram is not displayed for

Technology: GCELCD/PID due to the limited number of participants.

Total: 31

Potable Water 1,2,4-Trimethylbenzene

Shipment: 397 Matrix: Potable Water Analyte: 1,2,4-Trimethylbenzene

Sample: 9721

Technology: GC-MS Prep Method:

Target: 4.63 ua/L Limits: 2.78 to 6.48 ug/L Basis: Fixed Percent (2) Robust Mean: 4.7 ug/L Std Dev: 0,4304 ug/L Median: 4.625 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Total: 30 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

6. Number of Labs 5 3-2 3.8 4.5 4.7 4.9 5.1 5.6 Test Results (End Groups Include Outliers)

Potable Water 1,2,4-Trimethylbenzene

Shipment: 397 Matrix: Potable Water

Analyte: 1,2,4-Trimethylbenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method: **Target:** 4.63 ug/L Limits: 2.78 to 6.48 ug/L Basis: Fixed Percent (2) Robust Mean: 4.3 ug/L Std Dev: 0 ug/L

Median: 4.33 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,2-Dibromo-3-chloropropane

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Potable Water 1,2-Dibromo-3-chloropropane

Shipment: 397 Matrix: Potable Water

Analyte: 1,2-Dibromo-3-chloropropane

Sample: 9722
Technology: GC-ECD
Prep Method:

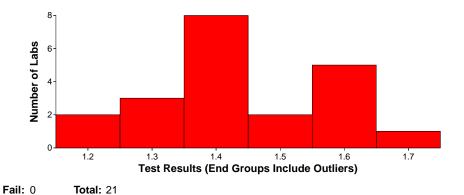
Target: 1.41 ug/L Limits: 0.846 to 1.97 ug/L Basis: Target Value +/- a fixed percent

Robust Mean: 1.4 ug/L Std Dev: 0.1503 ug/L Median: 1.41 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 21 Fail: 0 Total: 21

Totals for Matrix/Analyte: Labs: Pass: 21



Potable Water 1,2-Dichloroethane

Shipment: 397 **Matrix:** Potable Water

Analyte: 1,2-Dichloroethane

Sample: 9720 Technology: GC-MS Prep Method:

Target: 8.65 ug/L
Limits: 5.19 to 12.1 ug/L
Basis: Fixed Percent (2)
Robust Mean: 8.8 ug/L
Std Dev: 0.6051 ug/L
Median: 8.72 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31

Fail: 0 Total: 31

Potable Water 1,2-Dichloroethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,2-Dichloroethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 8.65 ug/L
Limits: 5.19 to 12.1 ug/L
Basis: Fixed Percent (2)
Robust Mean: 8.9 ug/L
Std Dev: 0 ug/L
Median: 8.85 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,2-Dichlorobenzene

Test Results (End Groups Include Outliers)

Shipment: 397 Matrix: Potable Water

Analyte: 1,2-Dichlorobenzene

Sample: 9721
Technology: GC-MS
Prep Method:
Target: 9.32 ug/L
Limits: 5.59 to 13 ug/L
Basis: Fixed Percent (2)
Robust Mean: 9.3 ug/L

Basis: Fixed Percent (2)
Robust Mean: 9.3 ug/L
Std Dev: 0.709 ug/L
Median: 9.4 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Score Date: 11/04/2016 Proficiency Test Statistics Page 6 of 76

Potable Water 1,2-Dichlorobenzene

Shipment: 397 Matrix: Potable Water

Analyte: 1,2-Dichlorobenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

 Target:
 9.32
 ug/L

 Limits:
 5.59 to 13 ug/L

 Basis:
 Fixed Percent (2)

 Robust Mean:
 8.6 ug/L

 Std Dev:
 0 ug/L

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Totals for Matrix/Analyte/Technology:

Median: 8.64 ug/L

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Potable Water cis-1,2-Dichloroethene

Shipment: 397 Matrix: Potable Water

Analyte: cis-1,2-Dichloroethene

Sample: 9720 Technology: GC-MS Prep Method:

Target: 19.2 ug/L
Limits: 15.4 to 23 ug/L
Basis: Fixed Percent (2)
Robust Mean: 18.9 ug/L
Std Dev: 3.731 ug/L
Median: 19.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29 Fail: 1 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 3

Fail: 1 Total: 31

21.8

Potable Water cis-1,2-Dichloroethene

Shipment: 397 Matrix: Potable Water

Analyte: cis-1,2-Dichloroethene

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Shipment: 397

Target: 19.2 ug/L
Limits: 15.4 to 23 ug/L
Basis: Fixed Percent (2)
Robust Mean: 16.4 ug/L
Std Dev: 0 ug/L
Median: 16.4 ug/L

Analyte: 1,2-Dichloropropane

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31

Matrix: Potable Water

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,2-Dichloropropane

Sample: 9720
Technology: GC-MS
Prep Method:
Target: 17.2 ug/L
Limits: 13.8 to 20.6 ug/L
Basis: Fixed Percent (2)
Robust Mean: 17.5 ug/L
Std Dev: 4.5549 ug/L
Median: 17.75 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 28 Fail: 2

Labs: Pass: 28 Fail: 2 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 2 Totals

Test Results (End Groups Include Outliers)

Potable Water 1,2-Dichloropropane

Shipment: 397 Matrix: Potable Water

Analyte: 1,2-Dichloropropane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 17.2 ug/L
Limits: 13.8 to 20.6 ug/L
Basis: Fixed Percent (2)
Robust Mean: 17.1 ug/L
Std Dev: 0 ug/L

Std Dev: 0 ug/L Median: 17.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 2 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,2-Dibromoethane

Shipment: 397 Matrix: Potable Water

Analyte: 1,2-Dibromoethane

Sample: 9722 Technology: GC-ECD Prep Method:

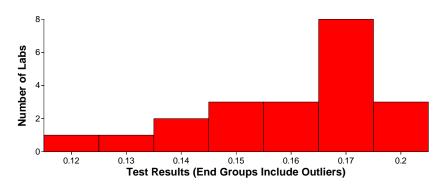
Target: 0.161 ug/L
Limits: 0.0966 to 0.225 ug/L
Basis: Target Value +/- a fixed percent

Robust Mean: 0.2 ug/L Std Dev: 0.0406 ug/L Median: 0.17 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 20 Fail: 1 Total: 21

Totals for Matrix/Analyte: Labs: Pass: 20 Fail: 1 Total: 21



4.2

Test Results (End Groups Include Outliers)

4.4

Potable Water 1,3,5-Trimethylbenzene

6

5

3-

2.

0

3.3

Number of Labs

Shipment: 397 Matrix: Potable Water

Analyte: 1,3,5-Trimethylbenzene

Sample: 9721 Technology: GC-MS Prep Method:

Target: 4.15 ug/L
Limits: 2.49 to 5.81 ug/L
Basis: Fixed Percent (2)
Robust Mean: 4.2 ug/L
Std Dev: 0.4188 ug/L
Median: 4.095 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

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Potable Water 1,3,5-Trimethylbenzene

Shipment: 397 Matrix: Potable Water

Analyte: 1,3,5-Trimethylbenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:
Target: 4.15 ug/L
Limits: 2.49 to 5.81 u

Limits: 2.49 to 5.81 ug/L
Basis: Fixed Percent (2)
Robust Mean: 4.2 ug/L
Std Dev: 0 ug/L
Median: 4.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,3-Dichlorobenzene

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Potable Water 1,3-Dichlorobenzene

5.

Shipment: 397 Matrix: Potable Water

Analyte: 1,3-Dichlorobenzene

Sample: 9721 Technology: GC-MS Prep Method:

Target: 8.13 ug/L
Limits: 4.88 to 11.4 ug/L
Basis: Fixed Percent (2)
Robust Mean: 8.2 ug/L
Std Dev: 0.655 ug/L
Median: 7.995 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Test Results (End Groups Include Outliers)

Potable Water 1,3-Dichlorobenzene

Shipment: 397 Matrix: Potable Water

Analyte: 1,3-Dichlorobenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 8.13 ug/L
Limits: 4.88 to 11.4 ug/L
Basis: Fixed Percent (2)
Robust Mean: 7.6 ug/L
Std Dev: 0 ug/L
Median: 7.61 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,3-Dichloropropane

10-

Shipment: 397 **Matrix:** Potable Water **Analyte:** 1,3-Dichloropropane

Sample: 9720 Technology: GC-MS

Technology: GC-MS
Prep Method:

Target: 9.15 ug/L
Limits: 5.49 to 12.8 ug/L
Basis: Fixed Percent (2)
Robust Mean: 9 ug/L
Std Dev: 1.7521 ug/L
Median: 8.99 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

7.8 8.1 8.4 8.7 9 9.4 9.7 10 10.3 Test Results (End Groups Include Outliers)

Potable Water 1,3-Dichloropropane

Shipment: 397 Matrix: Potable Water

Analyte: 1,3-Dichloropropane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 9.15 ug/L
Limits: 5.49 to 12.8 ug/L
Basis: Fixed Percent (2)
Robust Mean: 9.3 ug/L
Std Dev: 0 ug/L

Median: 9.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 1,4-Dichlorobenzene

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Potable Water 1,4-Dichlorobenzene

Shipment: 397 Matrix: Potable Water

Analyte: 1,4-Dichlorobenzene

Sample: 9721 Technology: GC-MS Prep Method:

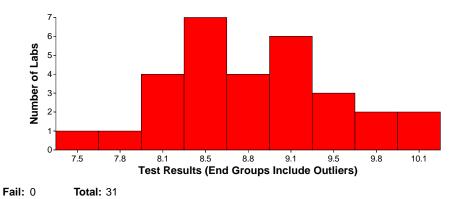
Target: 8.8 ug/L Limits: 5.28 to 12.3 ug/L Basis: Fixed Percent (2) Robust Mean: 8.9 ug/L Std Dev: 0.6742 ug/L Median: 8.72 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30

Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31



Potable Water 1,4-Dichlorobenzene

Shipment: 397 Matrix: Potable Water

Analyte: 1,4-Dichlorobenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 8.8 ug/L Limits: 5.28 to 12.3 ug/L Basis: Fixed Percent (2) Robust Mean: 8.2 ug/L Std Dev: 0 ug/L Median: 8.16 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water 2,4-D

Shipment: 397 Matrix: Potable Water

Analyte: 2,4-D **Sample:** 9717 Technology: GC-ECD

Prep Method:

Target: 13.3 ua/L Limits: 6.65 to 20 ug/L

Basis: Target Value +/- a fixed percent

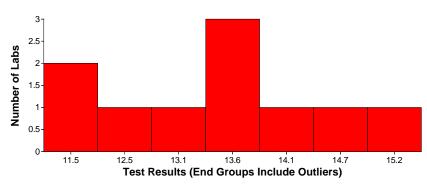
Robust Mean: 13.6 ug/L Std Dev: 4.4068 ug/L Median: 13.5 ug/L

Totals for Matrix/Analyte/Technology:

Fail: 0 Total: 10 Labs: Pass: 10

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0

Total: 11



due to the

Potable Water 2,4-D

A histogram is not displayed for

limited number of participants.

Technology: HPLC-UV

Shipment: 397 Matrix: Potable Water

Analyte: 2,4-D **Sample: 9717** Technology: HPLC-UV Prep Method: **Target: 13.3**

ug/L Limits: 6.65 to 20 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 13.9 ug/L Std Dev: 0 ug/L Median: 13.9 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0 Total: 11

Potable Water 2-Chlorotoluene

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 10 of 76

Potable Water 2-Chlorotoluene

Shipment: 397 Matrix: Potable Water

Analyte: 2-Chlorotoluene

Sample: 9721 Technology: GC-MS

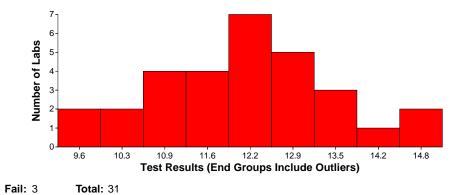
Prep Method:

Target: 12.5 ug/L **Limits**: 10 to 15 ug/L Basis: Fixed Percent (2) Robust Mean: 12.3 ug/L Std Dev: 2.5773 ug/L Median: 12.15 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 27 Fail: 3 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 28



Potable Water 2-Chlorotoluene

Shipment: 397 Matrix: Potable Water

Analyte: 2-Chlorotoluene

Sample: 9721

Technology: GCELCD/PID

Prep Method: **Target:** 12.5

ug/L Limits: 10 to 15 ug/L Basis: Fixed Percent (2) Robust Mean: 10.9 ug/L Std Dev: 0 ug/L Median: 10.9 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 28

Technology: GCELCD/PID due to the limited number of participants.

A histogram is not displayed for

Fail: 3 Total: 31

Potable Water 3-Hydroxy Carbofuran

Shipment: 397 Matrix: Potable Water

Analyte: 3-Hydroxy Carbofuran

Sample: 9715

Technology: HPLC-FLUOR

Prep Method:

Shipment: 397

Analyte: 4-Chlorotoluene

Target: 77.2 ug/L Limits: 61.8 to 92.6 ug/L

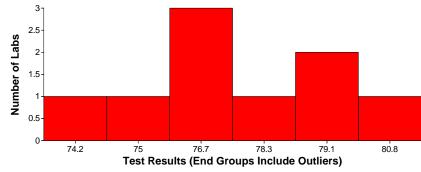
Basis: Target Value +/- a fixed percent

Robust Mean: 77.5 ug/L Std Dev: 34,194 ug/L Median: 77 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 8 Fail: 1 Total: 9 Totals for Matrix/Analyte: Labs: Pass: 8 Fail: 1

Matrix: Potable Water



Total: 9

Potable Water 4-Chlorotoluene

Sample: 9721 Technology: GC-MS Prep Method: **Target: 17.8** ug/L Limits: 14.2 to 21.4 ug/L Basis: Fixed Percent (2) Robust Mean: 17.7 ug/L Std Dev: 1.6828 ug/L Median: 17.65 ug/L Totals for Matrix/Analyte/Technology: Labs: Pass: 29

Totals for Matrix/Analyte:

Fail: 1

Total: 30 Labs: Pass: 30

Fail: 1 Total: 31

6-Number of Labs 3-2-15.1 15.9 16.7 17.5 18.3 19.1 19.9 20.7 Test Results (End Groups Include Outliers)

Potable Water 4-Chlorotoluene

A histogram is not displayed for

limited number of participants.

A histogram is not displayed for

limited number of participants.

A histogram is not displayed for

limited number of participants.

Technology: HPLC-UV

Technology: GC-ECD

due to the

due to the

due to the

265

Test Results (End Groups Include Outliers)

277

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Technology: GCELCD/PID

Shipment: 397 Matrix: Potable Water

Analyte: 4-Chlorotoluene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 17.8 ug/L Limits: 14.2 to 21.4 ug/L Basis: Fixed Percent (2)

Robust Mean: 16.4 ug/L Std Dev: 0 ug/L Median: 16.4 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31

Total: 1

Potable Water Acifluorofen

Shipment: 397 Matrix: Potable Water

Analyte: Acifluorofen **Sample:** 9717 Technology: GC-ECD Prep Method:

Target: 54.1 ug/L Limits: 27.1 to 81.2 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 51.1 ug/L Std Dev: 3.8184 ug/L Median: 51.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 3 Fail: 0 Total: 3

Potable Water Acifluorofen

Shipment: 397 Matrix: Potable Water

Analyte: Acifluorofen **Sample:** 9717

Technology: HPLC-UV

Prep Method:

Target: 54.1 ua/l Limits: 27.1 to 81.2 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 55 ug/L Std Dev: 0 ug/L Median: 55 ug/L

Totals for Matrix/Analyte/Technology:

Fail: 0 Labs: Pass: 1 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 3 Fail: 0 Total: 3

Potable Water Silver, Total

Shipment: 397 Matrix: Potable Water

Analyte: Silver, Total **Sample:** 9706 Technology: FAAS Prep Method: Target: 270 ug/L Limits: 189 to 351 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 264.3 ug/L Std Dev: 9.0738 ug/L Median: 263 ug/L

Score Date:

Totals for Matrix/Analyte/Technology:

Total: 3 Labs: Pass: 3 Fail: 0 Totals for Matrix/Analyte: Labs: Pass: 50

11/04/2016

Fail: 0 Total: 50

253

Number of Labs

Potable Water Silver, Total

Proficiency Test Statistics

Potable Water Silver, Total

Shipment: 397 Matrix: Potable Water

Analyte: Silver, Total **Sample: 9706** Technology: GFAAS Prep Method:

Target: 270 ug/L Limits: 189 to 351 ug/L

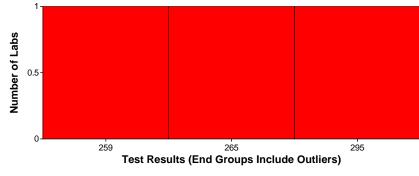
Basis: Target Value +/- a fixed percent

Robust Mean: 273.3 ug/L Std Dev: 17.9258 ug/L Median: 264 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Totals for Matrix/Analyte: Labs: Pass: 50 Fail: 0 Total: 50



Potable Water Silver, Total

Shipment: 397 Matrix: Potable Water Analyte: Silver, Total **Sample:** 9706 Technology: ICP-AES

Prep Method:

Target: 270 ug/L Limits: 189 to 351 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 272.8 ug/L Std Dev: 59.2612 ug/L Median: 272.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 22 Fail: 0 Total: 22

Totals for Matrix/Analyte: Labs: Pass: 50

5-Number of Labs 247 271 277 283 289 295 **Test Results (End Groups Include Outliers)**

Fail: 0 Total: 50

Potable Water Silver, Total

Shipment: 397 Matrix: Potable Water Analyte: Silver, Total

Sample: 9706 Technology: ICP-MS Prep Method:

Target: 270 ua/L Limits: 189 to 351 ug/L

Basis: Target Value +/- a fixed percent

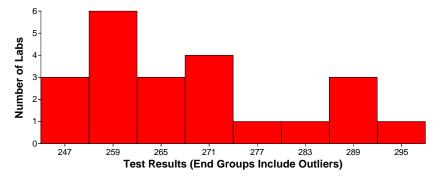
Robust Mean: 270.2 ug/L Std Dev: 80,4372 ug/L Median: 266 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 22 Fail: 0 Total: 22

Totals for Matrix/Analyte: Labs: Pass: 50

Fail: 0 Total: 50



Potable Water Aluminum, Total

Shipment: 397 Matrix: Potable Water

Analyte: Aluminum, Total

Sample: 9706

Technology: GFAAS Prep Method: Target: 301 ug/L Limits: 241 to 361 ug/L Basis: Fixed Percent (2) Robust Mean: ug/L Std Dev: 0 ug/L

Median: 636.1 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 0 Fail: 1 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 40 Fail: 1 Total: 41

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.

Potable Water Aluminum, Total

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 13 of 76

Potable Water Aluminum, Total

Shipment: 397 Matrix: Potable Water

Analyte: Aluminum, Total

Sample: 9706 Technology: ICP-AES

Prep Method:

Target: 301 ug/L Limits: 241 to 361 ug/L Basis: Fixed Percent (2) Robust Mean: 296.8 ug/L Std Dev: 26.7378 ug/L Median: 293 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 21 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 40

Potable Water Aluminum, Total

Shipment: 397 Matrix: Potable Water

Analyte: Aluminum, Total

Sample: 9706 Technology: ICP-MS

Prep Method:

Target: 301 ug/L Limits: 241 to 361 ug/L Basis: Fixed Percent (2) Robust Mean: 296.7 ug/L Std Dev: 25.1039 ug/L Median: 296 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 19 Fail: 0 Total: 19

Totals for Matrix/Analyte: Labs: Pass: 40

6-Number of Labs 5 3. 2 247 259 271 283 295 307 319 343 **Test Results (End Groups Include Outliers)**

Fail: 1 Total: 41

Total: 21

Number of Labs 3-247 259 271 283 295 307 331 343 **Test Results (End Groups Include Outliers)**

Fail: 1 Total: 41

Shipment: 397 Matrix: Potable Water

Analyte: Alachlor Sample: 9707B Technology: GC-ECD

Prep Method:

Target: 12.7 ug/L Limits: 6.99 to 18.4 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 13.7 ug/L Std Dev: 5.6872 ug/L Median: 13.15 ug/L

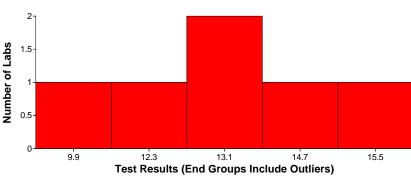
Totals for Matrix/Analyte/Technology:

Labs: Pass: 6 Fail: 0 Total: 6

Totals for Matrix/Analyte: Labs: Pass: 18

Fail: 0 Total: 18

Potable Water Alachlor



Shipment: 397 Matrix: Potable Water

Analyte: Alachlor Sample: 9707B Technology: GC-MS Prep Method: Target: 12.7 ug/L

Limits: 6.99 to 18.4 ug/L

Basis: Target Value +/- a fixed percent

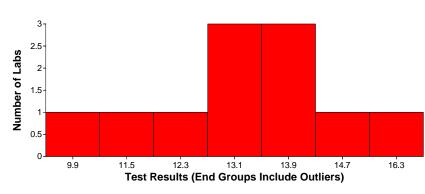
Robust Mean: 13.2 ug/L Std Dev: 1.9778 ug/L Median: 13.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 11 Fail: 0

Total: 11 Totals for Matrix/Analyte: Labs: Pass: 18

Potable Water Alachlor



Fail: 0 Total: 18

Potable Water Alachlor

Shipment: 397 Matrix: Potable Water

Analyte: Alachlor Sample: 9707B Technology: GC-NPD Prep Method:

Target: 12.7 ug/L Limits: 6.99 to 18.4 ug/L Basis: Target Value +/- a fixed percent

Robust Mean: 12.1 ug/L Std Dev: 0 ug/L Median: 12.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 18 Fail: 0 Total: 18

A histogram is not displayed for Technology: GC-NPD due to the limited number of participants.

Potable Water Aldicarb

Shipment: 397 Matrix: Potable Water

Analyte: Aldicarb **Sample:** 9715

Technology: HPLC-FLUOR

Prep Method:

Target: 91.3 ug/L Limits: 68.5 to 114 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 87.3 ug/L Std Dev: 29.1966 ug/L Median: 86.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 9

2.5 Number of Labs 1.5 81.4 85.8 87.3 88.8 90.3 Test Results (End Groups Include Outliers)

Fail: 0 Total: 9

Shipment: 397

Analyte: Aldrin Sample: 9707A Technology: GC-ECD

Prep Method:

Analyte: Aldrin

Target: 0.508 ug/L Limits: 0.22 to 0.653 ug/L Basis: Linear Regression Robust Mean: 0.4 ug/L Std Dev: 0.0802 ug/L Median: 0.455 ug/L

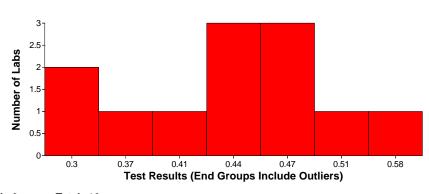
Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 0 Total: 12

Totals for Matrix/Analyte: Labs: Pass: 16 Fail: 0 Total: 16

Matrix: Potable Water

Potable Water Aldrin



Shipment: 397 Matrix: Potable Water

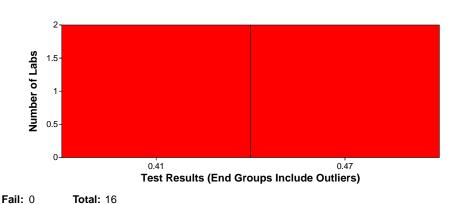
Sample: 9707A Technology: GC-MS Prep Method: **Target:** 0.508 ug/L Limits: 0.22 to 0.653 ug/L Basis: Linear Regression Robust Mean: 0.4 ug/L Std Dev: 0.0495 ug/L Median: 0.43 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4 Fail: 0 Total: 4

Totals for Matrix/Analyte: Labs: Pass: 16

Potable Water Aldrin



Potable Water Aldicarb Sulfone

Potable Water Aldicarb Sulfone

Shipment: 397 Matrix: Potable Water

Analyte: Aldicarb Sulfone

Sample: 9715

Technology: HPLC-FLUOR

Prep Method:

Target: 44.8 ug/L Limits: 33.6 to 56 ug/L

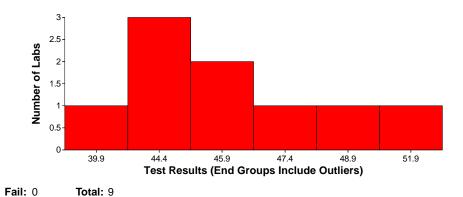
Basis: Target Value +/- a fixed percent

Robust Mean: 45.8 ug/L Std Dev: 3.4234 ug/L Median: 45.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 9



due to the

Potable Water Alkalinity

A histogram is not displayed for

limited number of participants.

Technology: COLOR

Shipment: 397 Matrix: Potable Water

Analyte: Alkalinity **Sample: 9701** Technology: COLOR Prep Method:

Target: 89.6 mg/L Limits: 80.6 to 98.6 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 87.9 mg/L Std Dev: 5.2326 mg/L Median: 87.9 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 51 Total: 52

Fail: 1

Potable Water Alkalinity

Shipment: 397 Matrix: Potable Water Analyte: Alkalinity **Sample: 9701** Technology: TITR Prep Method: Target: 89.6 mg/L

Limits: 80.6 to 98.6 mg/L

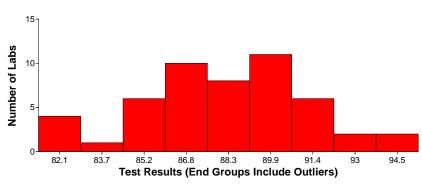
Basis: Target Value +/- a fixed percent

Robust Mean: 88.1 mg/L Std Dev: 12.8297 mg/L Median: 88.15 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 49 Total: 50

Totals for Matrix/Analyte: Labs: Pass: 51 Fail: 1 Total: 52



Potable Water Arsenic, Total

Shipment: 397 Matrix: Potable Water

Analyte: Arsenic, Total **Sample: 9706** Technology: GFAAS Prep Method: **Target: 27.6** ug/L Limits: 19.3 to 35.9 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 27.4 ug/L Std Dev: 8.03 ug/L Median: 27.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 11 Fail: 1 Total: 12

Totals for Matrix/Analyte: Labs: Pass: 37

Number of Labs 25 26.2 26.9 27.5 28.1 28.8 30 **Test Results (End Groups Include Outliers)** Fail: 2 Total: 39

Potable Water Arsenic, Total

Potable Water Arsenic, Total

A histogram is not displayed for

limited number of participants.

Technology: ICP-AES

Shipment: 397 Matrix: Potable Water

Analyte: Arsenic, Total

Sample: 9706

Technology: ICP-AES

Prep Method:

Target: 27.6 ug/L Limits: 19.3 to 35.9 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 28.3 ug/L Std Dev: 1.4142 ug/L Median: 28.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2

Fail: 0 Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 37

Fail: 2 Total: 39

Potable Water Arsenic, Total

Potable Water Atrazine

Shipment: 397 Matrix: Potable Water Analyte: Arsenic, Total **Sample:** 9706 Technology: ICP-MS Prep Method: **Target:** 27.6 ug/L

Limits: 19.3 to 35.9 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 27.4 ug/L Std Dev: 9.1516 ug/L Median: 27.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 24

Fail: 1 Total: 25

Totals for Matrix/Analyte:

Labs: Pass: 37

6-Number of Labs 5 3. 2 25 25.6 26.2 26.9 27.5 28.1 28.8 30

due to the

Test Results (End Groups Include Outliers)

Fail: 2 Total: 39

Shipment: 397 Matrix: Potable Water

Analyte: Atrazine Sample: 9707B Technology: GC-ECD

Prep Method:

Target: 13.9 ua/L Limits: 7.65 to 20.2 ug/L

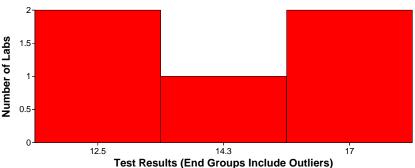
Basis: Target Value +/- a fixed percent

Robust Mean: 14.5 ug/L Std Dev: 2.2466 ug/L Median: 14.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 0 Total: 5

Totals for Matrix/Analyte: Labs: Pass: 18



Fail: 0 Total: 18

Shipment: 397 Matrix: Potable Water

Analyte: Atrazine Sample: 9707B Technology: GC-MS Prep Method: **Target: 13.9** ug/L

Limits: 7.65 to 20.2 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 15.4 ug/L Std Dev: 1.7117 ug/L Median: 15.5 ug/L

Totals for Matrix/Analyte/Technology:

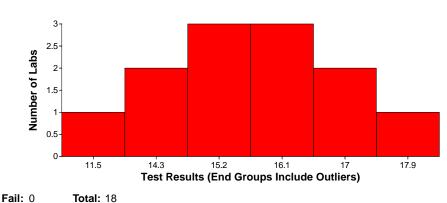
Labs: Pass: 12 Totals for Matrix/Analyte:

Fail: 0

Labs: Pass: 18

Total: 12

Potable Water Atrazine



Potable Water Atrazine

Shipment: 397 Matrix: Potable Water

Analyte: Atrazine
Sample: 9707B
Technology: GC-NPD
Prep Method:

Target: 13.9 ug/L **Limits:** 7.65 **to** 20.2 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 14.1 ug/L Std Dev: 0 ug/L Median: 14.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 18 Fail: 0 Total: 18

A histogram is not displayed for Technology: GC-NPD due to the limited number of participants.

Potable Water Di (2-ethylhexyl) adipate

Shipment: 397 **Matrix:** Potable Water

Analyte: Di (2-ethylhexyl) adipate

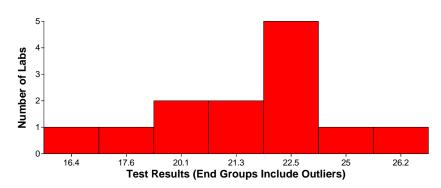
Sample: 9708 Technology: GC-MS Prep Method:

Target: 23.6 ug/L
Limits: 13.9 to 31.6 ug/L
Basis: Linear Regression
Robust Mean: 21.1 ug/L
Std Dev: 6.3341 ug/L
Median: 22.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 1 Total: 13

Totals for Matrix/Analyte: Labs: Pass: 12 Fail: 1 Total: 13



Potable Water Bis(2-ethylhexyl) phthalate

Shipment: 397 **Matrix:** Potable Water

Analyte: Bis(2-ethylhexyl) phthalate

Sample: 9708
Technology: GC-MS
Prep Method:
Target: 39.4 ug/L
Limits: 20 to 55.2 ug/L
Basis: Linear Regression
Robust Mean: 35.4 ug/L
Std Dev: 7.1706 ug/L
Median: 33.6 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 1 Total: 13

Totals for Matrix/Analyte: Labs: Pass: 12 Fail: 1 Total: 13

Potable Water Barium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Barium, Total
Sample: 9706
Technology: GFAAS
Prep Method:
Target: 701 ug/L
Limits: 596 to 806 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: ug/L Std Dev: 0 ug/L Median: 441 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 0 Fail: 1 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 47 Fail: 2 Total: 49

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.

Potable Water Barium, Total

Score Date: 11/04/2016 Proficiency Test Statistics Page 18 of 76

Potable Water Barium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Barium, Total **Sample: 9706**

Technology: ICP-AES

Prep Method:

Target: 701 ug/L Limits: 596 to 806 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 713.2 ug/L Std Dev: 33.3982 ug/L Median: 713.5 ug/L

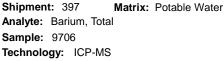
Totals for Matrix/Analyte/Technology:

Labs: Pass: 24 Fail: 0 Total: 24

Totals for Matrix/Analyte: Labs: Pass: 47 Fail: 2

Potable Water Barium, Total

Potable Water Benzo(a)pyrene



Prep Method: Target: 701 ug/L

Limits: 596 to 806 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 696.4 ug/L Std Dev: 197.983 ug/L Median: 700 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 23 Fail: 1 Total: 24

Totals for Matrix/Analyte: Labs: Pass: 47 Number of Labs 3. 645 675 691 706 721 737 752 767 **Test Results (End Groups Include Outliers)** Total: 49

Number of Labs 645 675 691 706 721 737 767 **Test Results (End Groups Include Outliers)**

Fail: 2 Total: 49

5

Number of Labs

Shipment: 397 Matrix: Potable Water

Analyte: Benzo(a)pyrene

Sample: 9709 Technology: GC-MS Prep Method:

Target: 0.627 ug/L Limits: 0.185 to 0.869 ug/L Basis: Linear Regression Robust Mean: 0.6 ug/L Std Dev: 0.0977 ug/L Median: 0.57 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 13 Fail: 0 Total: 13

Totals for Matrix/Analyte: Labs: Pass: 13 Fail: 0

Total: 13

0.4

Shipment: 397 Matrix: Potable Water

Analyte: Bromobenzene

Sample: 9721 Technology: GC-MS Prep Method: Target: 11.7

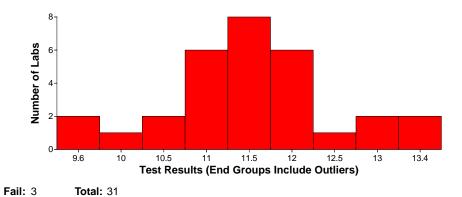
ug/L Limits: 9.36 to 14 ug/L Basis: Fixed Percent (2) Robust Mean: 11.4 ug/L Std Dev: 2.3202 ug/L Median: 11.6 ug/L

Totals for Matrix/Analyte/Technology:

Total: 30 Labs: Pass: 27 Fail: 3

Totals for Matrix/Analyte: Labs: Pass: 28

Potable Water Bromobenzene



0.57

Test Results (End Groups Include Outliers)

0.61

0.73

0.52

Potable Water Bromobenzene

Shipment: 397 Matrix: Potable Water

Analyte: Bromobenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 11.7 ug/L
Limits: 9.36 to 14 ug/L
Basis: Fixed Percent (2)
Robust Mean: 11 ug/L
Std Dev: 0 ug/L

Median: 11 ug/L

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 28 Fail: 3 Total: 31

Potable Water Bromochloroacetic acid

Shipment: 397 Matrix: Potable Water

Analyte: Bromochloroacetic acid

Sample: 9726 Technology: GC-ECD Prep Method:

Target: 34.7 ug/L **Limits**: 20.8 **to** 48.6 ug/L

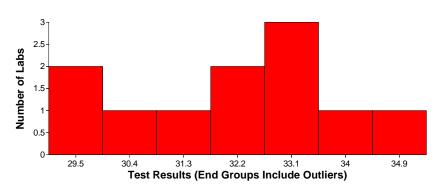
Basis: Target Value +/- a fixed percent

Robust Mean: 32.2 ug/L Std Dev: 1.7975 ug/L Median: 32.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 11 Fail: 0 Total: 11

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0



Total: 11

8

Potable Water Bromochloromethane

Shipment: 397 **Matrix:** Potable Water **Analyte:** Bromochloromethane

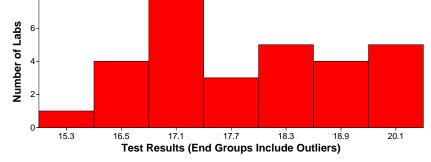
Sample: 9720 Technology: GC-MS Prep Method:

Target: 17.4 ug/L
Limits: 13.9 to 20.9 ug/L
Basis: Fixed Percent (2)
Robust Mean: 17.8 ug/L
Std Dev: 4.6555 ug/L
Median: 17.75 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 28 Fail: 2 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 2 Total: 31



Potable Water Bromochloromethane

Shipment: 397 Matrix: Potable Water

Analyte: Bromochloromethane

Sample: 9720

Technology: GCELCD/PID

 Prep Method:

 Target:
 17.4
 ug/L

 Limits:
 13.9 to 20.9 ug/L

 Basis:
 Fixed Percent (2)

 Robust Mean:
 17.5 ug/L

 Std Dev:
 0 ug/L

Totals for Matrix/Analyte/Technology:

Median: 17.5 ug/L

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 2 Total: 31

Technology: GCELCD/PID due to the limited number of participants.

A histogram is not displayed for

Potable Water Beryllium, Total

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Potable Water Beryllium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Beryllium, Total

Sample: 9706 Technology: GFAAS Prep Method:

Target: 2.51 ug/L Limits: 2.13 to 2.89 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 2.2 ug/L Std Dev: 1.5556 ug/L Median: 2.92 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 1

Totals for Matrix/Analyte: Labs: Pass: 38 Fail: 7 Total: 45

Total: 2

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.

Potable Water Beryllium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Beryllium, Total

Sample: 9706 Technology: ICP-AES

Prep Method:

Target: 2.51 ug/L Limits: 2.13 to 2.89 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 2.6 ug/L Std Dev: 0.6557 ug/L Median: 2.595 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 13 Fail: 5 Total: 18

Totals for Matrix/Analyte: Labs: Pass: 38 Number of Labs 3-2.1 2.4 2.5 2.6 2.8 2.9 **Test Results (End Groups Include Outliers)**

Fail: 7 Total: 45

Shipment: 397 Matrix: Potable Water

Analyte: Beryllium, Total

Sample: 9706 Technology: ICP-MS Prep Method:

Target: 2.51 ug/L Limits: 2.13 to 2.89 ug/L

Basis: Target Value +/- a fixed percent

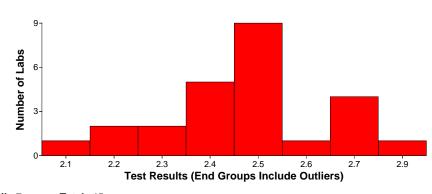
Robust Mean: 2.5 ug/L Std Dev: 0.183 ug/L Median: 2.45 ug/L

Totals for Matrix/Analyte/Technology:

Fail: 1 Total: 25 Labs: Pass: 24

Totals for Matrix/Analyte: Labs: Pass: 38 Fail: 7

Potable Water Beryllium, Total



Total: 45

Shipment: 397 Matrix: Potable Water

Sample: 9721 Technology: GC-MS Prep Method: Target: 11.9 ug/L Limits: 9.52 to 14.3 ug/L Basis: Fixed Percent (2) Robust Mean: 12.2 ug/L Std Dev: 0.9101 ug/L Median: 12.15 ug/L

Analyte: Benzene

Score Date:

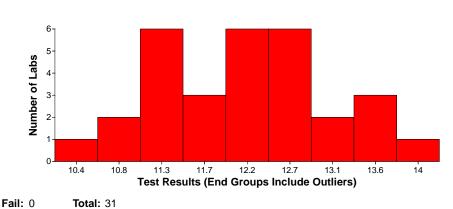
Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

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Totals for Matrix/Analyte: Labs: Pass: 31

Potable Water Benzene



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Proficiency Test Statistics

Potable Water Benzene

Shipment: 397 Matrix: Potable Water

Analyte: Benzene **Sample: 9721**

Technology: GCELCD/PID

Prep Method:

Target: 11.9 ug/L Limits: 9.52 to 14.3 ug/L Basis: Fixed Percent (2) Robust Mean: 11.2 ug/L Std Dev: 0 ug/L Median: 11.2 ug/L

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Potable Water Bromide

Shipment: 397 Matrix: Potable Water Analyte: Bromide

Sample: 9729

Technology: IC-COND

Prep Method:

Target: 180 ug/L Limits: 153 to 207 ug/L

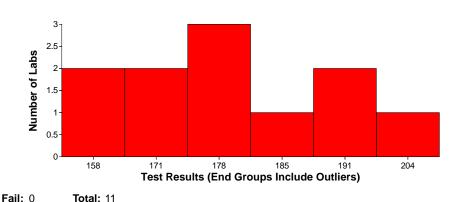
Basis: Target Value +/- a fixed percent

Robust Mean: 178.4 ug/L Std Dev: 13.2686 ug/L Median: 175 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 11 Fail: 0 Total: 11

Totals for Matrix/Analyte: Labs: Pass: 11



Total: 11

Shipment: 397 Matrix: Potable Water Analyte: Boron, Total **Sample: 9706** Technology: ICP-AES

Prep Method:

ug/L **Target:** 1380 Limits: 1170 to 1590 ug/L

Basis: Target Value +/- a fixed percent

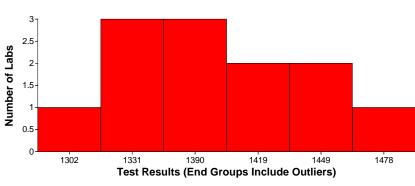
Robust Mean: 1390.8 ug/L Std Dev: 58.186 ug/L Median: 1400 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 0 Total: 12

Totals for Matrix/Analyte: Labs: Pass: 12

Potable Water Boron, Total



Fail: 0 Total: 12

Potable Water Bromodichloromethane

Shipment: 397 Matrix: Potable Water

Analyte: Bromodichloromethane

Sample: 9713 Technology: GC-MS Prep Method: Target: 15 ug/L Limits: 12 to 18 ug/L

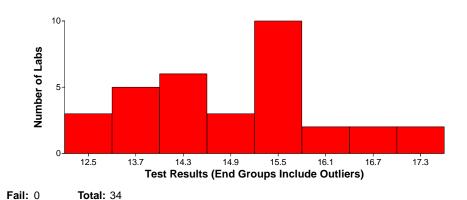
Basis: Target Value +/- a fixed percent

Robust Mean: 14.9 ug/L Std Dev: 1.2254 ug/L Median: 14.8 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 33 Fail: 0

Total: 33 Totals for Matrix/Analyte: Labs: Pass: 34



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Potable Water Bromodichloromethane

Shipment: 397 Matrix: Potable Water

Analyte: Bromodichloromethane

Sample: 9713

Technology: GCELCD/PID

Prep Method:

Target: 15 ug/L Limits: 12 to 18 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 15.2 ug/L Std Dev: 0 ug/L Median: 15.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 34 Fail: 0 Total: 34

Total: 1

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Bromoform

Shipment: 397 Matrix: Potable Water Analyte: Bromoform **Sample:** 9713 Technology: GC-MS Prep Method: **Target: 25.6** ug/L Limits: 20.5 to 30.7 ug/L Basis: Target Value +/- a fixed percent

Robust Mean: 24.4 ug/L Std Dev: 4.8215 ug/L Median: 24.4 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 31 Fail: 2 Total: 33

Totals for Matrix/Analyte: Labs: Pass: 32

10-Number of Labs n 19.9 22.1 23.2 24.3 25.4 26.5 28.7 **Test Results (End Groups Include Outliers)**

Fail: 2 Total: 34

Potable Water Bromoform

Shipment: 397 Matrix: Potable Water

Analyte: Bromoform **Sample:** 9713

Technology: GCELCD/PID

Prep Method:

Target: 25.6 ua/L Limits: 20.5 to 30.7 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 24.8 ug/L Std Dev: 0 ug/L Median: 24.8 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 32 Fail: 2 Total: 34

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Shipment: 397 Matrix: Potable Water

Sample: 9729 Technology: IC-COND Prep Method: **Target:** 20.4 ug/L

Analyte: Bromate

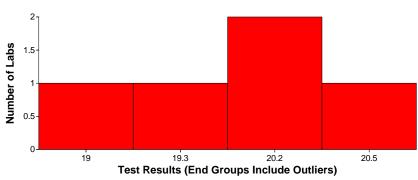
Limits: 14.3 to 26.5 ug/L Basis: Target Value +/- a fixed percent

Robust Mean: 19.8 ug/L Std Dev: 0.7021 ug/L Median: 20.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 0 Total: 5 Totals for Matrix/Analyte: Labs: Pass: 6

Potable Water Bromate



Fail: 0 Total: 6

Potable Water Bromate

A histogram is not displayed for

limited number of participants.

Technology: IC-ESI-MS

Shipment: 397 Matrix: Potable Water

Analyte: Bromate **Sample:** 9729

Technology: IC-ESI-MS

Prep Method:

Target: 20.4 ug/L Limits: 14.3 to 26.5 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 19.8 ug/L Std Dev: 0 ug/L Median: 19.8 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 6 Fail: 0 Total: 6

Potable Water Butachlor

Shipment: 397 Matrix: Potable Water

Analyte: Butachlor Sample: 9707B Technology: GC-MS Prep Method: **Target:** 6.37

ug/L Limits: 3.5 to 9.24 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 6.6 ug/L Std Dev: 1.9794 ug/L Median: 6.81 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 1 Total: 13

Totals for Matrix/Analyte: Labs: Pass: 13

2.5 Number of Labs 2 1.5 5.5 6.2 6.6 7.3 8.1 **Test Results (End Groups Include Outliers)**

due to the

Total: 14

Fail: 1

Potable Water Butachlor

Shipment: 397 Matrix: Potable Water

Analyte: Butachlor Sample: 9707B Technology: GC-NPD Prep Method:

ug/L **Target:** 6.37 Limits: 3.5 to 9.24 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 6.5 ug/L Std Dev: 0 ug/L Median: 6.46 ug/L

Totals for Matrix/Analyte/Technology:

Fail: 0 Labs: Pass: 1 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 13 Fail: 1 Total: 14

A histogram is not displayed for Technology: GC-NPD due to the limited number of participants.

A histogram is not displayed for

limited number of participants.

due to the

Potable Water Calcium, Total

Technology: FAAS

Shipment: 397 Matrix: Potable Water

Analyte: Calcium, Total **Sample:** 9732 Technology: FAAS Prep Method: Target: 60.2 mg/L

Limits: 51.2 to 69.2 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 51.2 mg/L Std Dev: 36,1968 mg/L Median: 50.695 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 0 Total: 2 Fail: 2

Totals for Matrix/Analyte: Labs: Pass: 33 Fail: 3 Total: 36

Potable Water Calcium, Total

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Potable Water Calcium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Calcium, Total **Sample:** 9732 Technology: IC Prep Method:

Target: 60.2 mg/L Limits: 51.2 to 69.2 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 58.7 mg/L Std Dev: 1.6263 mg/L Median: 58.65 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 33 Fail: 3 Total: 36

A histogram is not displayed for Technology: IC due to the limited number of participants.

Potable Water Calcium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Calcium, Total

Sample: 9732 Technology: ICP-AES

Prep Method:

Target: 60.2 mg/L Limits: 51.2 to 69.2 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 60.3 mg/L Std Dev: 2.886 mg/L Median: 60.65 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 28 Fail: 0 Total: 28

Totals for Matrix/Analyte: Labs: Pass: 33 Number of Labs ٥ 53.7 55.3 56.8 58.4 59.9 61.5 63 64.6 66.1 Test Results (End Groups Include Outliers)

Fail: 3 Total: 36

Shipment: 397 Matrix: Potable Water

Analyte: Calcium, Total **Sample:** 9732 Technology: ICP-MS Prep Method:

Target: 60.2 mg/L Limits: 51.2 to 69.2 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 58 mg/L Std Dev: 0 mg/L Median: 58 mg/L

Totals for Matrix/Analyte/Technology:

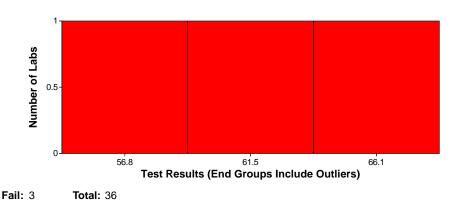
Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 33 Fail: 3 Total: 36

Potable Water Calcium, Total

A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

Potable Water Calcium, Total



Shipment: 397 Matrix: Potable Water

Analyte: Calcium, Total **Sample:** 9732 Technology: TITR

Prep Method: Target: 60.2 mg/L Limits: 51.2 to 69.2 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 59.3 mg/L Std Dev: 34.314 mg/L Median: 61.6 mg/L

Totals for Matrix/Analyte/Technology:

Total: 3 Labs: Pass: 2 Fail: 1 Totals for Matrix/Analyte: Labs: Pass: 33

Potable Water Carbofuran

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Potable Water Carbofuran

Number of Labs

Shipment: 397 Matrix: Potable Water

Analyte: Carbofuran Sample: 9715

Technology: HPLC-FLUOR

Prep Method:

Shipment: 397 Analyte: Carbaryl Sample: 9715

Prep Method: Target: 72

Target: 28.8 ug/L **Limits:** 15.8 **to** 41.8 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 27 ug/L Std Dev: 9.1204 ug/L Median: 27.6 ug/L

Totals for Matrix/Analyte/Technology:

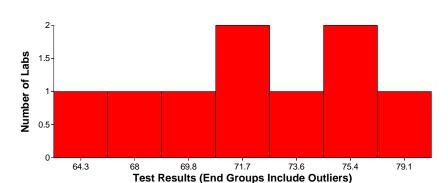
Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 9 Fail: 0 Total: 9

Matrix: Potable Water

Potable Water Carbaryl

24.7



27.1

Test Results (End Groups Include Outliers)

27.9

3.2

Test Results (End Groups Include Outliers)

28.7

30.3

3.6

26.3

Basis: Target Value +/- a fixed percent
Robust Mean: 71.1 ug/L
Std Day: 23.0041 ug/l

ug/L

Std Dev: 23.9941 ug/L Median: 72.4 ug/L

Technology: HPLC-FLUOR

Limits: 54 to 90 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 8 Fail: 1 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 8

9.

Number of Labs

Fail: 1

Potable Water Carbon tetrachloride

Total: 9

Shipment: 397 Matrix: Potable Water

Analyte: Carbon tetrachloride **Sample:** 9720

Technology: GC-MS
Prep Method:
Target: 3.16 ug/L
Limits: 1.9 to 4.42 ug/L
Basis: Fixed Percent (2)
Robust Mean: 3.1 ug/L
Std Dev: 0.3841 ug/L
Median: 3.185 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Potable Water Carbon tetrachloride

2.4

Shipment: 397 Matrix: Potable Water

Analyte: Carbon tetrachloride

Sample: 9720

Technology: GCELCD/PID

Prep Method:
Target: 3.16 ug/L
Limits: 1.9 to 4.42 ug/L
Basis: Fixed Percent (2)
Robust Mean: 3.7 ug/L
Std Dev: 0 ug/L
Median: 3.69 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Cadmium, Total

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Potable Water Cadmium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Cadmium, Total

Sample: 9706 Technology: GFAAS

Prep Method:

Target: 42.5 ug/L **Limits:** 34 **to** 51 ug/L

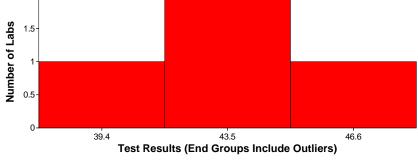
Basis: Target Value +/- a fixed percent

Robust Mean: 42 ug/L Std Dev: 21.0813 ug/L Median: 43.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4 Fail: 0 Total: 4

Totals for Matrix/Analyte: Labs: Pass: 49 Fail: 0 Total: 49



Potable Water Cadmium, Total

Shipment: 397 **Matrix:** Potable Water

Analyte: Cadmium, Total

Sample: 9706 Technology: ICP-AES

Prep Method:

Target: 42.5 ug/L **Limits:** 34 **to** 51 ug/L

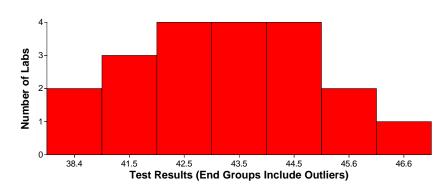
Basis: Target Value +/- a fixed percent

Robust Mean: 43.3 ug/L Std Dev: 9.8688 ug/L Median: 43.55 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 20 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 49



Fail: 0 Total: 49

Shipment: 397 Matrix: Potable Water

Analyte: Cadmium, Total **Sample:** 9706

Technology: ICP-MS
Prep Method:

Target: 42.5 ug/L **Limits:** 34 **to** 51 ug/L

Basis: Target Value +/- a fixed percent

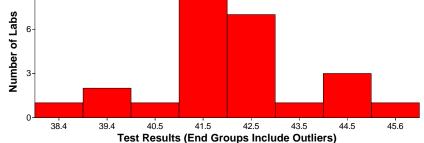
Robust Mean: 42 ug/L Std Dev: 1.6681 ug/L Median: 41.8 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 25 Fail: 0 Total: 25

Totals for Matrix/Analyte: Labs: Pass: 49

et: 42.5 ug/L



Labs: Pass: 49 Fail: 0 Total: 49

Total: 20

Shipment: 397 Matrix: Potable Water

Analyte: Bromomethane

 Sample:
 9720

 Technology:
 GC-MS

 Prep Method:
 ug/L

 Limits:
 16.6
 to 38.8 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 28.8 ug/L Std Dev: 5.0088 ug/L Median: 27.65 ug/L

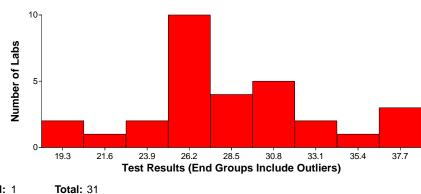
Totals for Matrix/Analyte/Technology:

Labs: Pass: 29 Fail: 1 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1

Potable Water Bromomethane

Potable Water Cadmium, Total



Potable Water Bromomethane

A histogram is not displayed for

limited number of participants.

Technology: GCELCD/PID

Shipment: 397 Matrix: Potable Water

Analyte: Bromomethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 27.7 ug/L **Limits:** 16.6 **to** 38.8 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 30.8 ug/L Std Dev: 0 ug/L Median: 30.8 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs

Labs: Pass: 30 Fail: 1

Total: 31

Potable Water Chloromethane

Shipment: 397 Matrix: Potable Water

Analyte: Chloromethane

Sample: 9720 Technology: GC-MS Prep Method:

Target: 31.7 ug/L **Limits:** 19 **to** 44.4 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 33.7 ug/L Std Dev: 4.4613 ug/L Median: 33.85 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31

Test Results (End Groups Include Outliers)

due to the

due to the

Fail: 0 Total: 31

Totals for Matrix/Analyte: Labs: Pass

Potable Water Chloromethane

Shipment: 397 Matrix: Potable Water

Analyte: Chloromethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 31.7 ug/L **Limits:** 19 **to** 44.4 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 32.6 ug/L Std Dev: 0 ug/L Median: 32.6 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Labs. 1 ass. 1 I all. 0 Iotal. 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Potable Water Calcium Hardness

Shipment: 397 Matrix: Potable Water

Analyte: Calcium Hardness

 Sample:
 9703

 Technology:
 AUTO

 Prep Method:
 mg/L

 Limits:
 185
 to 251 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 203 mg/L Std Dev: 0 mg/L Median: 203 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 44 Fail: 1 Total: 45

A histogram is not displayed for Technology: AUTO due to the limited number of participants.

A histogram is not displayed for

limited number of participants.

Technology: GCELCD/PID

Potable Water Calcium Hardness

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Potable Water Calcium Hardness

Shipment: 397 Matrix: Potable Water

Analyte: Calcium Hardness

Sample: 9703 Technology: CALC Prep Method:

Target: 218 mg/L Limits: 185 to 251 mg/L

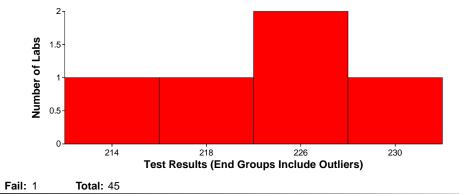
Basis: Target Value +/- a fixed percent

Robust Mean: 223.2 mg/L Std Dev: 6.6483 mg/L Median: 227 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 0 Total: 5

Totals for Matrix/Analyte: Labs: Pass: 44



Potable Water Calcium Hardness

Shipment: 397 Matrix: Potable Water

Analyte: Calcium Hardness

Sample: 9703 Technology: FAAS Prep Method:

Target: 218 mg/L Limits: 185 to 251 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 199 mg/L Std Dev: 0 mg/L Median: 199 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 44

Matrix: Potable Water

A histogram is not displayed for Technology: FAAS due to the limited number of participants.

Fail: 1 Total: 45

Shipment: 397

Analyte: Calcium Hardness

Sample: 9703

Technology: ICP-AES

Prep Method:

Target: 218 mg/L Limits: 185 to 251 mg/L

Basis: Target Value +/- a fixed percent

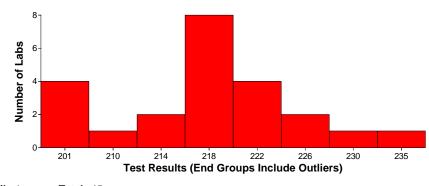
Robust Mean: 218.6 mg/L Std Dev: 63.573 mg/L Median: 219 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 22 Fail: 1 Total: 23

Totals for Matrix/Analyte: Labs: Pass: 44

Potable Water Calcium Hardness



Fail: 1 Total: 45

Shipment: 397 Matrix: Potable Water

Analyte: Calcium Hardness

Sample: 9703 Technology: TITR Prep Method: Target: 218 mg/L Limits: 185 to 251 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 216.8 mg/L Std Dev: 6.3144 mg/L Median: 217 mg/L

Score Date:

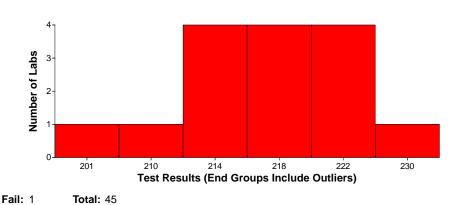
Totals for Matrix/Analyte/Technology:

Labs: Pass: 15 Fail: 0 Total: 15

Totals for Matrix/Analyte: Labs: Pass: 44

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Potable Water Calcium Hardness



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Potable Water Chloride

Technology: AMP

A histogram is not displayed for

A histogram is not displayed for

limited number of participants.

due to the

due to the

Shipment: 397 Matrix: Potable Water

Analyte: Chloride **Sample:** 9702 Technology: AMP Prep Method: Target: 62.8

mg/L Limits: 53.4 to 72.2 mg/L

Robust Mean: 62.1 mg/L Std Dev: 0 mg/L

Median: 62.14 mg/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 61 Fail: 0 Total: 61

limited number of participants. Basis: Target Value +/- a fixed percent

Total: 1

Potable Water Chloride

Technology: AUTO

Shipment: 397 Matrix: Potable Water

Analyte: Chloride **Sample:** 9702 Technology: AUTO Prep Method:

Target: 62.8 mg/L Limits: 53.4 to 72.2 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 62.8 mg/L

Std Dev: 0 mg/L Median: 62.8 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 61 Fail: 0 Total: 61

Potable Water Chloride

61.1

Shipment: 397 Matrix: Potable Water Analyte: Chloride Sample: 9702 Technology: COLOR

Prep Method: Target: 62.8 mg/L

Limits: 53.4 to 72.2 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 63.1 mg/L Std Dev: 1.2212 mg/L Median: 62.9 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 7 Fail: 0 Total: 7

Totals for Matrix/Analyte: Labs: Pass: 61 Fail: 0 Total: 61

Potable Water Chloride

Number of Labs

Shipment: 397 Matrix: Potable Water

Sample: 9702 Technology: IC-COND Prep Method: Target: 62.8 mg/L

Analyte: Chloride

Limits: 53.4 to 72.2 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 62.8 mg/L Std Dev: 10.9092 mg/L Median: 62.7 mg/L

Totals for Matrix/Analyte/Technology:

Total: 34 Labs: Pass: 34 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 61

6-Number of Labs 59.5 60.3 61.1 61.9 62.7 63.5 64.3 65.1 65.9 Test Results (End Groups Include Outliers) Fail: 0 Total: 61

62.7

Test Results (End Groups Include Outliers)

64.3

65.1

Potable Water Chloride

Potable Water Chloride

Shipment: 397 Matrix: Potable Water

Analyte: Chloride **Sample:** 9702 Technology: TITR Prep Method:

Target: 62.8 mg/L Limits: 53.4 to 72.2 mg/L

Basis: Target Value +/- a fixed percent Robust Mean: 62.5 mg/L

Std Dev: 1.5768 mg/L Median: 62.25 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 18 Fail: 0 Total: 18

Totals for Matrix/Analyte: Labs: Pass: 61

Number of Labs 3. 60.3 61.1 61.9 62.7 63.5 64.3 65.1 65.9 **Test Results (End Groups Include Outliers)** Fail: 0 Total: 61

Potable Water Chlordane Total

Shipment: 397 Matrix: Potable Water

Analyte: Chlordane Total

Sample: 9714 Technology: GC-ECD

Prep Method:

Target: 19 ug/L Limits: 10.5 to 27.6 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.3 ug/L Std Dev: 2.3067 ug/L Median: 17.85 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 14 Fail: 0 Total: 14

Totals for Matrix/Analyte: Labs: Pass: 17

6-5-Number of Labs 12.7 15.3 16.7 18 19.3 20.7 **Test Results (End Groups Include Outliers)**

Fail: 0 Total: 17

Shipment: 397 Matrix: Potable Water

Analyte: Chlordane Total

Sample: 9714 Technology: GC-MS Prep Method:

Target: 19 ua/L Limits: 10.5 to 27.6 ug/L

Basis: Target Value +/- a fixed percent

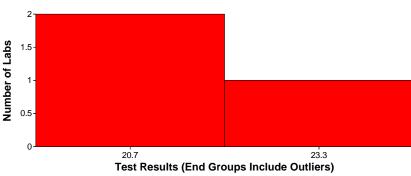
Robust Mean: 22.1 ug/L Std Dev: 3.3486 ug/L Median: 20.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17

Potable Water Chlordane Total



Potable Water Trichlorofluoromethane

Shipment: 397 Matrix: Potable Water

Analyte: Trichlorofluoromethane

Sample: 9720 Technology: GC-MS Prep Method: Target: 13.1 ug/L Limits: 7.86 to 18.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 13.7 ug/L Std Dev: 1.9139 ug/L Median: 14.1 ug/L

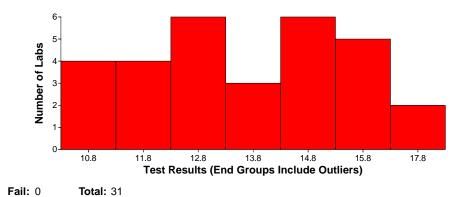
Score Date:

Totals for Matrix/Analyte/Technology:

Total: 30 Labs: Pass: 30 Fail: 0

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Totals for Matrix/Analyte: Labs: Pass: 31



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Potable Water Trichlorofluoromethane

Shipment: 397 Matrix: Potable Water

Analyte: Trichlorofluoromethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 13.1 ug/L Limits: 7.86 to 18.3 ug/L Basis: Target Value +/- a fixed percent

Robust Mean: 15.5 ug/L

Std Dev: 0 ug/L Median: 15.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 31

Fail: 0

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Chlorobenzene

Total: 31

Shipment: 397 Matrix: Potable Water

Analyte: Chlorobenzene

Sample: 9721 Technology: GC-MS Prep Method:

Target: 7.44 ug/L Limits: 4.46 to 10.4 ug/L Basis: Fixed Percent (2) Robust Mean: 7.5 ug/L Std Dev: 0.543 ug/L

Median: 7.445 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 30

Fail: 0 Total: 30

Totals for Matrix/Analyte:

Labs: Pass: 31

Number of Labs 6.4 6.7 6.9 7.2 7.4 7.7 7.9 8.2 8.5

Test Results (End Groups Include Outliers)

Fail: 0 Total: 31

Potable Water Chlorobenzene

Shipment: 397 Matrix: Potable Water

Analyte: Chlorobenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 7.44 ua/L Limits: 4.46 to 10.4 ug/L Basis: Fixed Percent (2) Robust Mean: 7 ug/L Std Dev: 0 ug/L Median: 7 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Dibromochloromethane

Total: 34

Shipment: 397 Matrix: Potable Water

Analyte: Dibromochloromethane

Sample: 9713 Technology: GC-MS Prep Method: **Target: 16.8** ug/L Limits: 13.4 to 20.2 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 16.3 ug/L Std Dev: 1.6794 ug/L Median: 16.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 31

Score Date:

Total: 33 Fail: 2

Fail: 2

Totals for Matrix/Analyte: Labs: Pass: 32

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9. Number of Labs 13.1 13.9 14.7 15.5 16.3 17.1 17.9 18.7 19.5 Test Results (End Groups Include Outliers)

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Potable Water Dibromochloromethane

Shipment: 397 Matrix: Potable Water

Analyte: Dibromochloromethane

Sample: 9713

Technology: GCELCD/PID

Prep Method:

Target: 16.8 ug/L
Limits: 13.4 to 20.2 ug/L
Resis: Target Value L/ a fixed person

Basis: Target Value +/- a fixed percent

Robust Mean: 15.7 ug/L Std Dev: 0 ug/L Median: 15.7 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 32 Fail: 2 Total: 34

Total: 1

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Chloroethane

Shipment: 397 Matrix: Potable Water

Analyte: Chloroethane
Sample: 9720
Technology: GC-MS
Prep Method:
Target: 48.7 ug/L

Target: 48.7 ug/L **Limits:** 29.2 **to** 68.2 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 48.6 ug/L Std Dev: 10.8734 ug/L Median: 49.6 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 27 Fail: 1 Total: 28

Totals for Matrix/Analyte: Labs: Pass: 28

Fail: 1 Total: 29

Potable Water Chloroethane

Shipment: 397 Matrix: Potable Water

Analyte: Chloroethane **Sample:** 9720

Technology: GCELCD/PID

Prep Method:

Target: 48.7 ug/L **Limits:** 29.2 **to** 68.2 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 47.5 ug/L Std Dev: 0 ug/L Median: 47.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 28 Fail: 1 Total: 29

A histogram is not displayed for Technology: GCELCD/PID due to the

limited number of participants.

Potable Water Chlorite

Shipment: 397 Matrix: Potable Water Analyte: Chlorite

 Sample:
 9730

 Technology:
 AMP

 Prep Method:
 308
 ug/L

 Limits:
 146
 to 270 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 219 ug/L Std Dev: 0 ug/L Median: 219 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 7 Fail: 0 Total: 7

A histogram is not displayed for Technology: AMP due to the limited number of participants.

Potable Water Chlorite

Score Date: 11/04/2016 Proficiency Test Statistics Page 33 of 76

Potable Water Chlorite

Shipment: 397 Matrix: Potable Water

Analyte: Chlorite **Sample:** 9730 Technology: IC-COND

Prep Method:

Target: 208 ug/L Limits: 146 to 270 ug/L

Basis: Target Value +/- a fixed percent

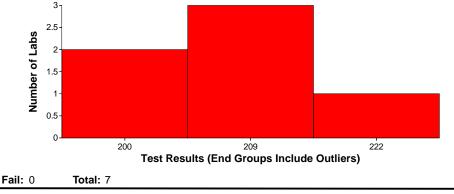
Robust Mean: 207.8 ug/L Std Dev: 8.6583 ug/L Median: 208 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 6 Fail: 0 Total: 6

Totals for Matrix/Analyte: Labs: Pass: 7

Potable Water Chlorate



Shipment: 397 Matrix: Potable Water

Analyte: Chlorate Sample: 9730

Technology: IC-COND

Prep Method:

Target: 103 ug/L Limits: 72.1 to 134 ug/L

Basis: Target Value +/- a fixed percent

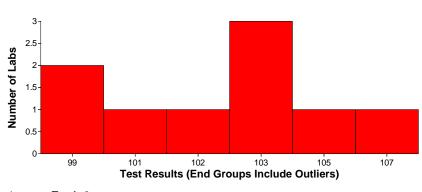
Robust Mean: 102 ug/L Std Dev: 34.0608 ug/L Median: 103 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 8 Fail: 1 Total: 9

Matrix: Potable Water

Totals for Matrix/Analyte: Labs: Pass: 8



Fail: 1 Total: 9

15-

Potable Water Chloroform

Analyte: Chloroform **Sample:** 9713 Technology: GC-MS Prep Method:

Shipment: 397

Target: 26.1 ua/L Limits: 20.9 to 31.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 26.6 ug/L Std Dev: 2.2759 ug/L Median: 26.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 32 Fail: 1 Total: 33

Totals for Matrix/Analyte:

Number of Labs 10 5 21.7 22.9 24.1 25.3 26.5 27.7 28.9 31.3

Test Results (End Groups Include Outliers)

Labs: Pass: 33 Fail: 1 Total: 34

Shipment: 397 Matrix: Potable Water

Analyte: Chloroform **Sample:** 9713

Technology: GCELCD/PID

Prep Method: **Target:** 26.1 ug/L Limits: 20.9 to 31.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 22.1 ug/L Std Dev: 0 ug/L Median: 22.1 ug/L

Totals for Matrix/Analyte/Technology:

Fail: 0 Labs: Pass: 1 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 33 Fail: 1 Total: 34

Potable Water Chloroform

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Cyanide

Shipment: 397 Matrix: Potable Water

Analyte: Cyanide **Sample:** 9705 Technology: AMP Prep Method:

Target: 0.289 mg/L Limits: 0.217 to 0.361 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 0.3 mg/L Std Dev: 0 mg/L Median: 0.27 mg/L

Totals for Matrix/Analyte/Technology:

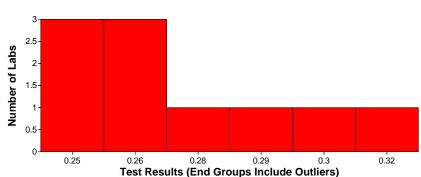
Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 21 Fail: 1 Total: 22

Total: 1

A histogram is not displayed for Technology: AMP due to the limited number of participants.

Potable Water Cyanide



Total: 22

Potable Water Cyanide

Fail: 1

3-

2.5

1.5

Number of Labs

Fail: 1

Shipment: 397 Matrix: Potable Water

Analyte: Cyanide **Sample:** 9705 Technology: AUTO Prep Method:

Target: 0.289 mg/L Limits: 0.217 to 0.361 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 0.3 mg/L Std Dev: 0.0242 mg/L Median: 0.27 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 21

Shipment: 397 Matrix: Potable Water

Analyte: Cyanide **Sample:** 9705 Technology: COLOR Prep Method:

Target: 0.289 mg/L Limits: 0.217 to 0.361 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 0.3 mg/L Std Dev: 0.0878 mg/L Median: 0.245 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 21

Total: 22 **Potable Water Cyanide**

0.21

Shipment: 397 Matrix: Potable Water

Analyte: Cyanide **Sample:** 9705 Technology: POT Prep Method: **Target:** 0.289

mg/L Limits: 0.217 to 0.361 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 0.3 mg/L Std Dev: 0 mg/L Median: 0.26 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 21 Fail: 1 Total: 22

A histogram is not displayed for Technology: POT due to the limited number of participants.

0.23

0.25

Test Results (End Groups Include Outliers)

0.26

0.32

Potable Water Corrosivity

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 35 of 76

Potable Water Corrosivity

Shipment: 397 Matrix: Potable Water

Analyte: Corrosivity **Sample:** 9738 Technology: CALC Prep Method:

Target: -1.52 Saturation Index Limits: -1.92 to -1.12 Saturation Index

Basis: PW Corrosivity

Robust Mean: -1.6 Saturation Index Std Dev: 0.0991 Saturation Index Median: -1.55 Saturation Index Totals for Matrix/Analyte/Technology:

Labs: Pass: 17 Fail: 0 Total: 17

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0

20 Number of Labs 15 10 -0.213 **Test Results (End Groups Include Outliers)**

Total: 17

Potable Water Chromium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Chromium, Total

Sample: 9706 Technology: GFAAS Prep Method:

Target: 17.5 ug/L Limits: 14.9 to 20.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.3 ug/L Std Dev: 1.3 ug/L Median: 17.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Number of Labs 0.5-15.9 17.4 18.5

Test Results (End Groups Include Outliers)

Totals for Matrix/Analyte: Labs: Pass: 47 Fail: 3 Total: 50

Potable Water Chromium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Chromium, Total

Sample: 9706 Technology: ICP-AES

Prep Method:

Target: 17.5 ua/L Limits: 14.9 to 20.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.2 ug/L Std Dev: 6.0918 ug/L Median: 17.4 ug/L

Totals for Matrix/Analyte/Technology:

Fail: 1 Total: 22 Labs: Pass: 21

Totals for Matrix/Analyte: Labs: Pass: 47

6. Number of Labs 5-4-3-2-15.9 17.4 18.1 **Test Results (End Groups Include Outliers)**

Fail: 3 Total: 50

Potable Water Chromium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Chromium, Total

Sample: 9706 Technology: ICP-MS Prep Method: **Target: 17.5** ug/L Limits: 14.9 to 20.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.4 ug/L Std Dev: 4.8796 ug/L Median: 17.5 ug/L

Totals for Matrix/Analyte/Technology:

Total: 25 Labs: Pass: 23 Fail: 2

Totals for Matrix/Analyte: Labs: Pass: 47

5. Number of Labs 15.9 16.3 16.7 17 17.4 17.8 18.1 18.5 18.9 Test Results (End Groups Include Outliers) Fail: 3 Total: 50

Potable Water Copper, Total

Potable Water Copper, Total

Shipment: 397 Matrix: Potable Water

Analyte: Copper, Total **Sample: 9706** Technology: FAAS Prep Method:

Target: 876 ug/L Limits: 788 to 964 ug/L

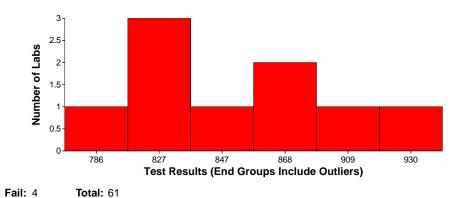
Basis: Target Value +/- a fixed percent

Robust Mean: 855 ug/L Std Dev: 42.1396 ug/L Median: 839 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 57



Potable Water Copper, Total

Shipment: 397 Matrix: Potable Water

Analyte: Copper, Total **Sample: 9706** Technology: GFAAS Prep Method:

Target: 876 ug/L Limits: 788 to 964 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 907.6 ug/L Std Dev: 34.7189 ug/L Median: 907.55 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 57 Fail: 4 Total: 61

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.

Potable Water Copper, Total

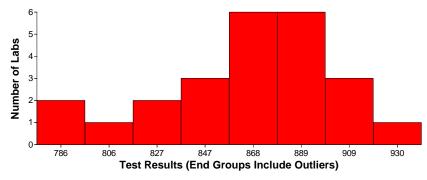
Shipment: 397 Matrix: Potable Water Analyte: Copper, Total **Sample: 9706** Technology: ICP-AES Prep Method: Target: 876 ua/L Limits: 788 to 964 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 870.3 ug/L Std Dev: 181.3353 ug/L Median: 870.5 ug/L

Totals for Matrix/Analyte/Technology: Fail: 2

Labs: Pass: 22 Total: 24 Totals for Matrix/Analyte: Labs: Pass: 57 Fail: 4 Total: 61



Shipment: 397 Matrix: Potable Water

Analyte: Copper, Total **Sample: 9706** Technology: ICP-MS Prep Method: Target: 876 ug/L Limits: 788 to 964 ug/L

Basis: Target Value +/- a fixed percent

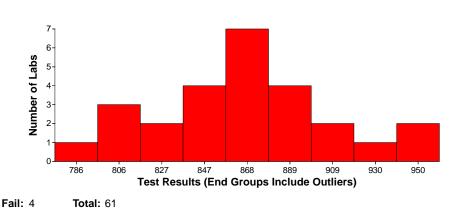
Robust Mean: 871.1 ug/L Std Dev: 48.71 ug/L Median: 867 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 24 Fail: 2 Total: 26

Totals for Matrix/Analyte: Labs: Pass: 57

Potable Water Copper, Total



Potable Water Dalapon

Potable Water Dalapon

2.5

2

1.5

Number of Labs

Fail: 0

Shipment: 397 Matrix: Potable Water

Analyte: Dalapon **Sample: 9717** Technology: GC-ECD Prep Method:

Target: 95.3 ug/L Limits: 47.7 to 143 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 85.4 ug/L Std Dev: 8.7886 ug/L Median: 86.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 11 Fail: 0 Total: 11

Totals for Matrix/Analyte: Labs: Pass: 11

Potable Water Dibromoacetic acid

72.2

Total: 11

Shipment: 397 Matrix: Potable Water

Analyte: Dibromoacetic acid

Sample: 9726 Technology: GC-ECD Prep Method:

Target: 25.8 ug/L Limits: 15.5 to 36.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 23.9 ug/L Std Dev: 1.9632 ug/L Median: 23.75 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 16 Fail: 0 Total: 16

Totals for Matrix/Analyte: Labs: Pass: 17 Number of Labs 20.1 21 22 23 24 25 26 27 27.9 **Test Results (End Groups Include Outliers)**

81.1

85.6

Test Results (End Groups Include Outliers)

90.1

94.5

99

Fail: 0 Total: 17

Potable Water Dibromoacetic acid

Shipment: 397 Matrix: Potable Water

Analyte: Dibromoacetic acid

Sample: 9726

Technology: IC-ESI-MS

Prep Method:

Shipment: 397

Target: 25.8 ua/L Limits: 15.5 to 36.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 25.7 ug/L Std Dev: 0 ug/L Median: 25.7 ug/L

Analyte: Dibromomethane

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17

Matrix: Potable Water

A histogram is not displayed for Technology: IC-ESI-MS due to the limited number of participants.

Potable Water Dibromomethane

Sample: 9720 Technology: GC-MS Prep Method: **Target:** 5.08 ug/L Limits: 3.05 to 7.11 ug/L Basis: Fixed Percent (2) Robust Mean: 5.1 ug/L Std Dev: 0.9806 ug/L Median: 5.11 ug/L Totals for Matrix/Analyte/Technology: Labs: Pass: 30 Fail: 0

Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31

9. Number of Labs 4.5 4.6 4.8 4.9 5.1 5.3 5.4 5.6 5.8 Test Results (End Groups Include Outliers) Fail: 0 Total: 31

Potable Water Dibromomethane

Shipment: 397 Matrix: Potable Water

Analyte: Dibromomethane

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 5.08 ug/L Limits: 3.05 to 7.11 ug/L Basis: Fixed Percent (2) Robust Mean: 5.1 ug/L Std Dev: 0 ug/L

Median: 5.12 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Dichloroacetic acid

Shipment: 397 Matrix: Potable Water

Analyte: Dichloroacetic acid

Sample: 9726 Technology: GC-ECD Prep Method:

Target: 38.1 ug/L Limits: 22.9 to 53.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 34.3 ug/L Std Dev: 2.6272 ug/L Median: 33.65 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 16 Fail: 0 Total: 16

Totals for Matrix/Analyte: Labs: Pass: 17 Number of Labs 3-30.1 32.9 34.3 35.7 37.1 38.5 **Test Results (End Groups Include Outliers)**

Fail: 0 Total: 17

Potable Water Dichloroacetic acid

Shipment: 397 Matrix: Potable Water

Analyte: Dichloroacetic acid

Sample: 9726

Technology: IC-ESI-MS

Prep Method:

Target: 38.1 ua/L Limits: 22.9 to 53.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 36.3 ug/L Std Dev: 0 ug/L Median: 36.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17

A histogram is not displayed for Technology: IC-ESI-MS due to the limited number of participants.

Shipment: 397 Matrix: Potable Water

Analyte: Dicamba **Sample: 9717** Technology: GC-ECD Prep Method: Target: 82.3 ug/L Limits: 41.2 to 123 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 76.1 ug/L Std Dev: 9.676 ug/L Median: 75.6 ug/L

Score Date:

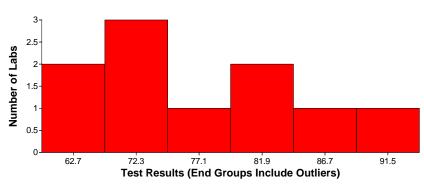
Totals for Matrix/Analyte/Technology:

Total: 10 Labs: Pass: 10 Fail: 0

11/04/2016

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0 Total: 11

Potable Water Dicamba



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Potable Water Dicamba

A histogram is not displayed for

limited number of participants.

Technology: HPLC-UV

Shipment: 397 Matrix: Potable Water

Analyte: Dicamba **Sample: 9717** Technology: HPLC-UV

Prep Method:

Target: 82.3 ug/L Limits: 41.2 to 123 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 85 ug/L Std Dev: 0 ug/L Median: 85 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 11

Total: 11

Fail: 0

Shipment: 397 Matrix: Potable Water

Analyte: Dieldrin Sample: 9707A Technology: GC-ECD Prep Method:

Target: 1.08 ug/L Limits: 0.594 to 1.57 ug/L

Basis: Target Value +/- a fixed percent

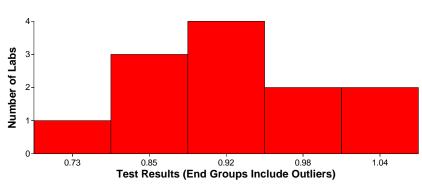
Robust Mean: 0.9 ug/L Std Dev: 0.094 ug/L Median: 0.92 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 0 Total: 12 Labs: Pass: 19

Totals for Matrix/Analyte:

Potable Water Dieldrin



due to the

Fail: 0 Total: 19

Shipment: 397 Matrix: Potable Water

Analyte: Dieldrin Sample: 9707A Technology: GC-MS Prep Method:

Target: 1.08 ug/L Limits: 0.594 to 1.57 ug/L

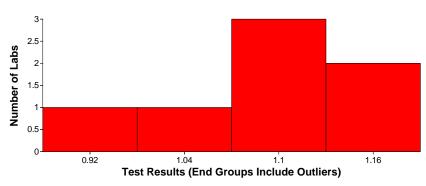
Basis: Target Value +/- a fixed percent

Robust Mean: 1.1 ug/L Std Dev: 0.0801 ug/L Median: 1.11 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 7 Fail: 0 Total: 7

Totals for Matrix/Analyte: Labs: Pass: 19 Potable Water Dieldrin



Fail: 0 Total: 19

Shipment: 397 Matrix: Potable Water

Analyte: Dinoseb **Sample: 9717** Technology: GC-ECD Prep Method: **Target: 46.9** ug/L Limits: 16 to 65.3 ug/L Basis: Linear Regression Robust Mean: 43.1 ug/L

Median: 44.25 ug/L

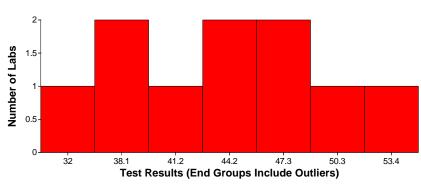
Std Dev: 6.9599 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10 Totals for Matrix/Analyte: Labs: Pass: 11

Fail: 0 Total: 11

Potable Water Dinoseb



Potable Water Dinoseb

Shipment: 397 Matrix: Potable Water

Analyte: Dinoseb **Sample: 9717** Technology: HPLC-UV

Prep Method: **Target: 46.9** ug/L Limits: 16 to 65.3 ug/L Basis: Linear Regression Robust Mean: 46.5 ug/L

Std Dev: 0 ug/L Median: 46.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0 Total: 11

A histogram is not displayed for Technology: HPLC-UV due to the limited number of participants.

Potable Water Diquat

Shipment: 397 Matrix: Potable Water

Analyte: Diquat **Sample:** 9710 Technology: HPLC-UV Prep Method:

Target: 18.8 ug/L Limits: 9.4 to 28.2 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 13.5 ug/L Std Dev: 2.2454 ug/L Median: 14.7 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 6 Fail: 0 Total: 6

Totals for Matrix/Analyte: Labs: Pass: 6 Number of Labs **Test Results (End Groups Include Outliers)**

Potable Water Organic Carbon, Dissolved

Total: 6

Fail: 0

Shipment: 397 Matrix: Potable Water Analyte: Organic Carbon, Dissolved

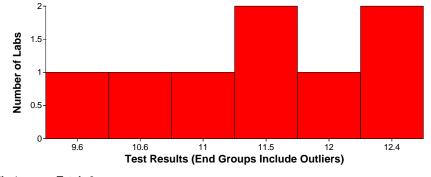
Sample: 9733 Technology: IR Prep Method:

Target: 11.9 mg/L Limits: 10.6 to 13.1 mg/L Basis: Manual Limits Robust Mean: 11.4 mg/L Std Dev: 0.9925 mg/L Median: 11.55 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 7 Total: 8

Totals for Matrix/Analyte: Labs: Pass: 7



Fail: 1 Total: 8

Shipment: 397 Matrix: Potable Water

Analyte: Endothall **Sample:** 9711 Technology: GC-MS Prep Method: Target: 206 ug/L Limits: 103 to 309 ug/L

Basis: Target Value +/- a fixed percent

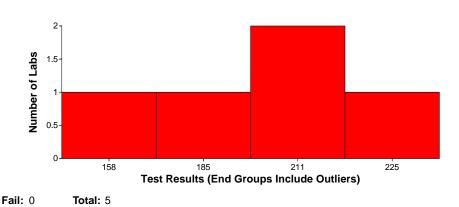
Robust Mean: 196.2 ug/L Std Dev: 27.4151 ug/L Median: 205.2 ug/L

Totals for Matrix/Analyte/Technology:

Total: 5 Labs: Pass: 5 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 5

Potable Water Endothall



Potable Water Endrin

Potable Water Endrin

Shipment: 397 Matrix: Potable Water

Analyte: Endrin Sample: 9707A Technology: GC-ECD Prep Method:

Target: 0.46 ug/L Limits: 0.322 to 0.598 ug/L Basis: Target Value +/- a fixed percent

Robust Mean: 0.4 ug/L Std Dev: 0.0835 ug/L Median: 0.42 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 2 Total: 14

Totals for Matrix/Analyte: Labs: Pass: 15

2.5 Number of Labs 2 1.5 0.27 0.36 0.41 0.46 0.5 0.55 **Test Results (End Groups Include Outliers)**

Potable Water Endrin

Total: 19

Fail: 4

Fail: 4

Shipment: 397 Matrix: Potable Water

Analyte: Endrin Sample: 9707A Technology: GC-MS Prep Method:

Target: 0.46 ug/L Limits: 0.322 to 0.598 ug/L Basis: Target Value +/- a fixed percent

Robust Mean: 0.5 ug/L Std Dev: 0.0799 ug/L Median: 0.57 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 2 Total: 5

Matrix: Potable Water

Totals for Matrix/Analyte: Labs: Pass: 15 Number of Labs 0.41 0.46 0.55 0.6 Test Results (End Groups Include Outliers)

Total: 19

Analyte: Ethyl benzene **Sample: 9721** Technology: GC-MS

Shipment: 397

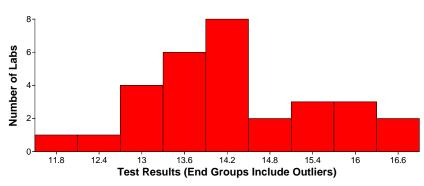
Prep Method: Target: 14 ua/L Limits: 11.2 to 16.8 ug/L Basis: Fixed Percent (2) Robust Mean: 14.2 ug/L Std Dev: 2.8284 ug/L Median: 14.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1

Potable Water Ethyl benzene



Total: 31

Potable Water Ethyl benzene

Shipment: 397 Matrix: Potable Water

Analyte: Ethyl benzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 14 ug/L Limits: 11.2 to 16.8 ug/L Basis: Fixed Percent (2) Robust Mean: 12.8 ug/L Std Dev: 0 ug/L

Median: 12.8 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Total: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Iron, Total

Total: 31

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Potable Water Iron, Total

Shipment: 397 Matrix: Potable Water

Analyte: Iron, Total **Sample: 9706** Technology: FAAS Prep Method:

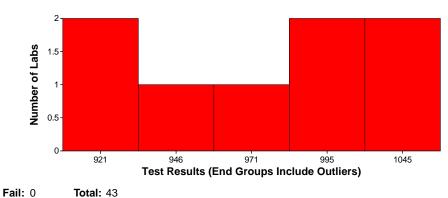
Target: 1030 ug/L Limits: 876 to 1180 ug/L Basis: Fixed Percent (2) Robust Mean: 976.9 ug/L Std Dev: 49.0727 ug/L Median: 972.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 8 Totals for Matrix/Analyte:

Fail: 0 Total: 8

Labs: Pass: 43



Total: 43

Potable Water Iron, Total

Matrix: Potable Water Shipment: 397

Analyte: Iron, Total **Sample:** 9706 Technology: GFAAS Prep Method:

Target: 1030 ug/L Limits: 876 to 1180 ug/L Basis: Fixed Percent (2) Robust Mean: 1090 ug/L Std Dev: 0 ug/L Median: 1090 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 43 Fail: 0

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.

Potable Water Iron, Total

Total: 43

Shipment: 397 Matrix: Potable Water Analyte: Iron, Total

Sample: 9706 Technology: ICP-AES Prep Method:

ug/L **Target:** 1030 Limits: 876 to 1180 ug/L Basis: Fixed Percent (2) Robust Mean: 1024.8 ug/L Std Dev: 46.6724 ug/L Median: 1030 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 33

Totals for Matrix/Analyte: Labs: Pass: 43

Number of Labs 921 946 971 995 1020 1045 1069 1119 Test Results (End Groups Include Outliers) Total: 33 Fail: 0

Fail: 0 Total: 43

10-

Potable Water Iron, Total

Shipment: 397 Matrix: Potable Water

Analyte: Iron, Total **Sample: 9706** Technology: ICP-MS Prep Method: Target: 1030 ug/L Limits: 876 to 1180 ug/L Basis: Fixed Percent (2) Robust Mean: 1030 ug/L Std Dev: 0 ug/L Median: 1030 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 43 Fail: 0 Total: 43

A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

Potable Water Fluoride, Total

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Potable Water Fluoride, Total

Shipment: 397 Matrix: Potable Water

Analyte: Fluoride, Total **Sample:** 9702 Technology: COLOR

Prep Method:

Target: 2.18 mg/L Limits: 1.96 to 2.4 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 2.3 mg/L Std Dev: 1.6263 mg/L Median: 2.65 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 1 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 50 Fail: 8 Total: 58

A histogram is not displayed for Technology: COLOR due to the limited number of participants.

Potable Water Fluoride, Total

Shipment: 397 Matrix: Potable Water

Analyte: Fluoride, Total

Sample: 9702 Technology: IC-COND

Prep Method:

Target: 2.18 mg/L Limits: 1.96 to 2.4 mg/L

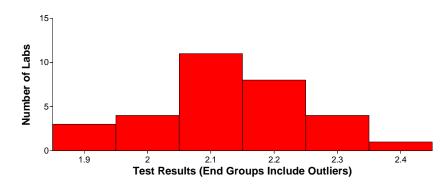
Basis: Target Value +/- a fixed percent

Robust Mean: 2.1 mg/L Std Dev: 0.406 mg/L Median: 2.13 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 28 Fail: 3 Total: 31

Totals for Matrix/Analyte: Labs: Pass: 50



Fail: 8 Total: 58

Shipment: 397 Matrix: Potable Water Analyte: Fluoride, Total

Sample: 9702 Technology: POT Prep Method:

Target: 2.18 mg/L Limits: 1.96 to 2.4 mg/L

Basis: Target Value +/- a fixed percent

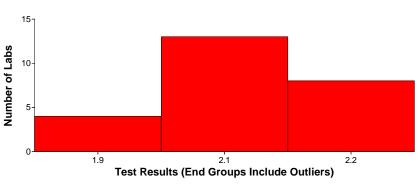
Robust Mean: 2.1 mg/L Std Dev: 0.1028 mg/L Median: 2.12 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 21 Fail: 4 Total: 25

Totals for Matrix/Analyte: Labs: Pass: 50 Fail: 8 Total: 58

Potable Water Fluoride, Total



Shipment: 397 Matrix: Potable Water

Analyte: Glyphosate **Sample:** 9712 Technology: HPLC-UV Prep Method:

Target: 512 ua/L Limits: 410 to 614 ug/L

Basis: Target Value +/- a fixed percent

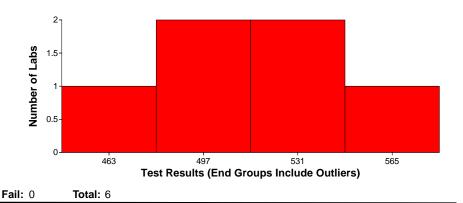
Robust Mean: 513.5 ug/L Std Dev: 35.9263 ug/L Median: 515.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 6 Total: 6 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 6

Potable Water Glyphosate



Potable Water Hexachlorobenzene

Potable Water Hexachlorobenzene

Shipment: 397 Matrix: Potable Water

Analyte: Hexachlorobenzene

Sample: 9707A Technology: GC-ECD

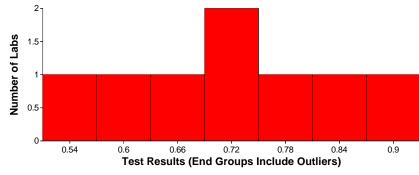
Prep Method:

Target: 0.793 ug/L Limits: 0.373 to 1.02 ug/L Basis: Linear Regression Robust Mean: 0.7 ug/L Std Dev: 0.1198 ug/L Median: 0.705 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 8 Fail: 0 Total: 8

Totals for Matrix/Analyte: Labs: Pass: 18 Fail: 0



Potable Water Hexachlorobenzene

Total: 18

Shipment: 397 Matrix: Potable Water

Analyte: Hexachlorobenzene

Sample: 9707A Technology: GC-MS

Prep Method:

Target: 0.793 ug/L Limits: 0.373 to 1.02 ug/L Basis: Linear Regression Robust Mean: 0.7 ug/L Std Dev: 0.1288 ug/L Median: 0.72 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 18 Number of Labs 0.6 0.72 0.78 0.84 0.97 Test Results (End Groups Include Outliers)

Fail: 0 Total: 18

Potable Water Hexachlorobutadiene

Shipment: 397 Matrix: Potable Water

Analyte: Hexachlorobutadiene

Sample: 9721 Technology: GC-MS

Prep Method:

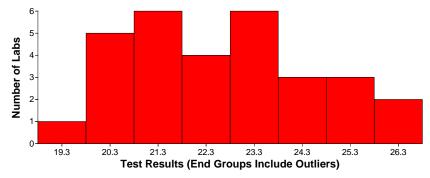
Target: 23.2 ua/L Limits: 18.6 to 27.8 ug/L Basis: Fixed Percent (2) Robust Mean: 22.4 ug/L Std Dev: 4,4666 ug/L Median: 22.4 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29 Total: 30 Fail: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1

Total: 31



Potable Water Hexachlorobutadiene

Shipment: 397 Matrix: Potable Water

Analyte: Hexachlorobutadiene

Sample: 9721

Technology: GCELCD/PID

Prep Method: **Target: 23.2** ug/L Limits: 18.6 to 27.8 ug/L Basis: Fixed Percent (2)

Robust Mean: 20.3 ug/L Std Dev: 0 ug/L Median: 20.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Hexachlorocyclopentadiene

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Potable Water Hexachlorocyclopentadiene

Shipment: 397 Matrix: Potable Water

Analyte: Hexachlorocyclopentadiene Sample: 9707A

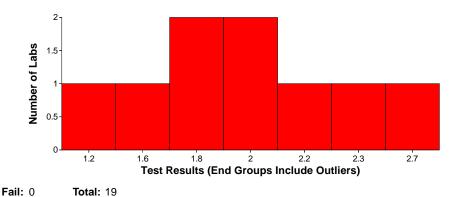
Technology: GC-ECD Prep Method:

Target: 2.41 ug/L Limits: 0.615 to 3.66 ug/L Basis: Linear Regression Robust Mean: 2 ug/L Std Dev: 0.4499 ug/L Median: 1.94 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 19



Potable Water Hexachlorocyclopentadiene

Shipment: 397 Matrix: Potable Water

Analyte: Hexachlorocyclopentadiene

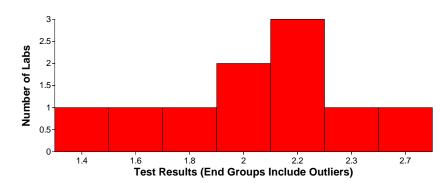
Sample: 9707A Technology: GC-MS Prep Method:

Target: 2.41 ug/L Limits: 0.615 to 3.66 ug/L Basis: Linear Regression Robust Mean: 2 ug/L Std Dev: 0.3265 ug/L Median: 2.045 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 19



Total: 19

Fail: 0

Shipment: 397 Matrix: Potable Water Analyte: Heptachlor Sample: 9707A Technology: GC-ECD

Prep Method:

Target: 2.19 ug/L Limits: 1.2 to 3.18 ug/L

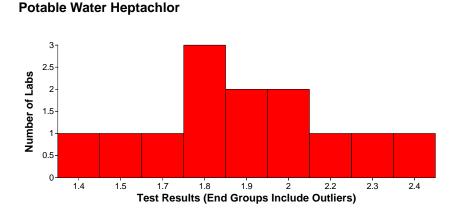
Basis: Target Value +/- a fixed percent

Robust Mean: 1.9 ug/L Std Dev: 0.3006 ug/L Median: 1.92 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 13 Fail: 0 Total: 13

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17



Shipment: 397 Matrix: Potable Water

Analyte: Heptachlor Sample: 9707A Technology: GC-MS Prep Method: **Target: 2.19** ug/L Limits: 1.2 to 3.18 ug/L

Basis: Target Value +/- a fixed percent

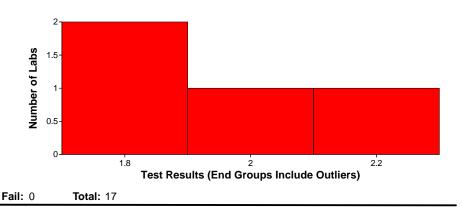
Robust Mean: 1.9 ug/L Std Dev: 0.1519 ug/L Median: 1.91 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4 Fail: 0 Total: 4

Totals for Matrix/Analyte: Labs: Pass: 17

Potable Water Heptachlor



Potable Water Mercury, Total

Potable Water Mercury, Total

Shipment: 397 Matrix: Potable Water

Analyte: Mercury, Total **Sample: 9706** Technology: CVAAS

Prep Method: Target: 5 ug/L

Limits: 3.5 to 6.5 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 4.7 ug/L Std Dev: 0.5854 ug/L Median: 4.83 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 25 Fail: 0 Total: 25

Totals for Matrix/Analyte: Labs: Pass: 35 Fail: 1 Total: 36

Potable Water Mercury, Total

Shipment: 397 Matrix: Potable Water

Analyte: Mercury, Total **Sample:** 9706

Technology: ICP-MS Prep Method:

Target: 5 ug/L Limits: 3.5 to 6.5 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 5.1 ug/L Std Dev: 1.6434 ug/L Median: 4.89 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 1 Total: 11

Totals for Matrix/Analyte: Labs: Pass: 35 Number of Labs 3.7 4.2 4.5 4.8 5.1 5.4 **Test Results (End Groups Include Outliers)**

Number of Labs 3.7 4.2 4.8 5.1 5.9 **Test Results (End Groups Include Outliers)**

due to the limited

Total: 36 Potable Water Potassium, Total

A histogram is not displayed for

Fail: 1

Shipment: 397 Matrix: Potable Water

Analyte: Potassium, Total

Sample: 9732 Technology: IC Prep Method:

Target: 20 mg/L Limits: 17 to 23 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 19.2 mg/L Std Dev: 0 mg/L Median: 19.2 mg/L

Shipment: 397

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 25 Fail: 0 Total: 25

Matrix: Potable Water

Potable Water Potassium, Total

Technology: IC

number of participants.

Analyte: Potassium, Total **Sample:** 9732 Technology: ICP-AES Prep Method: Target: 20 mg/L Limits: 17 to 23 mg/L Basis: Target Value +/- a fixed percent Robust Mean: 19.8 mg/L Std Dev: 0.9838 mg/L Median: 20 mg/L

Totals for Matrix/Analyte/Technology:

Total: 23 Labs: Pass: 23 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 25

6-Number of Labs 2. 17.9 18.4 18.9 19.3 19.8 20.3 20.7 21.7 Test Results (End Groups Include Outliers) Fail: 0 Total: 25

Score Date: 11/04/2016 Page 47 of 76 **Proficiency Test Statistics**

Potable Water Potassium, Total

A histogram is not displayed for

limited number of participants.

Technology: ICP-MS

Shipment: 397 Matrix: Potable Water

Analyte: Potassium, Total

Sample: 9732 Technology: ICP-MS Prep Method:

Target: 20 mg/L Limits: 17 to 23 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 19.1 mg/L Std Dev: 0 mg/L Median: 19.1 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 25 Fail: 0 Total: 25

Shipment: 397 Matrix: Potable Water

Analyte: Lindane Sample: 9707A Technology: GC-ECD Prep Method:

Target: 0.86 ug/L Limits: 0.473 to 1.25 ug/L Basis: Target Value +/- a fixed percent

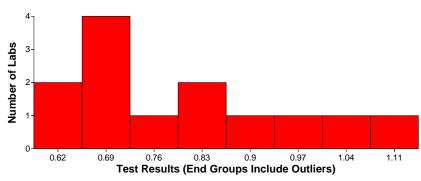
Robust Mean: 0.8 ug/L Std Dev: 0.1538 ug/L Median: 0.76 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 13 Fail: 0 Total: 13

Totals for Matrix/Analyte: Labs: Pass: 19

Potable Water Lindane



due to the

Fail: 0 Total: 19

Shipment: 397 Matrix: Potable Water

Analyte: Lindane Sample: 9707A Technology: GC-MS Prep Method:

Target: 0.86 ua/L Limits: 0.473 to 1.25 ug/L

Basis: Target Value +/- a fixed percent

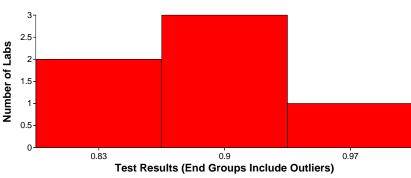
Robust Mean: 0.9 ug/L Std Dev: 0.0467 ug/L Median: 0.875 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 6 Fail: 0 Total: 6

Totals for Matrix/Analyte: Labs: Pass: 19 Fail: 0 Total: 19

Potable Water Lindane



Potable Water Monobromoacetic acid

Shipment: 397 Matrix: Potable Water

Analyte: Monobromoacetic acid

Sample: 9726 Technology: GC-ECD Prep Method: **Target:** 43.9 ug/L Limits: 26.3 to 61.5 ug/L

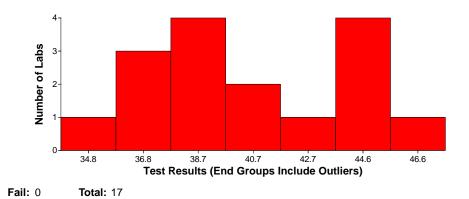
Basis: Target Value +/- a fixed percent

Robust Mean: 40.5 ug/L Std Dev: 3.5114 ug/L Median: 39.9 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 16 Fail: 0

Total: 16 Totals for Matrix/Analyte: Labs: Pass: 17



Score Date: 11/04/2016 Page 48 of 76 **Proficiency Test Statistics**

Potable Water Monobromoacetic acid

Shipment: 397 Matrix: Potable Water

Analyte: Monobromoacetic acid

Sample: 9726

Technology: IC-ESI-MS

Prep Method:

Target: 43.9 ug/L Limits: 26.3 to 61.5 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 45.9 ug/L Std Dev: 0 ug/L Median: 45.9 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17

Total: 1

A histogram is not displayed for Technology: IC-ESI-MS due to the limited number of participants.

Potable Water Monochloroacetic acid

Shipment: 397 Matrix: Potable Water

Analyte: Monochloroacetic acid

Sample: 9726 Technology: GC-ECD Prep Method:

Target: 35.1 ug/L Limits: 21.1 to 49.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 32.8 ug/L Std Dev: 3.9415 ug/L Median: 32.95 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 16 Fail: 0 Total: 16

Totals for Matrix/Analyte: Labs: Pass: 17 Number of Labs 25.9 29.5 31.2 33 34.8 36.5 40.1 **Test Results (End Groups Include Outliers)**

Fail: 0 Total: 17

Potable Water Monochloroacetic acid

Shipment: 397 Matrix: Potable Water

Analyte: Monochloroacetic acid

Sample: 9726

Technology: IC-ESI-MS

Prep Method:

Shipment: 397

Target: 35.1 ua/L Limits: 21.1 to 49.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 35.2 ug/L Std Dev: 0 ug/L Median: 35.2 ug/L

Analyte: Methylene chloride

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17

Matrix: Potable Water

A histogram is not displayed for Technology: IC-ESI-MS due to the limited number of participants.

Potable Water Methylene chloride

Sample: 9720 Technology: GC-MS Prep Method: **Target: 3.38** ug/L Limits: 2.03 to 4.73 ug/L Basis: Fixed Percent (2) Robust Mean: 3.6 ug/L Std Dev: 0.7619 ug/L Median: 3.59 ug/L Totals for Matrix/Analyte/Technology: Labs: Pass: 29 Fail: 1

Total: 30

Totals for Matrix/Analyte: Labs: Pass: 30

6-Number of Labs 2. 3.2 3.4 3.6 3.8 4.2 4.5 2.8 Test Results (End Groups Include Outliers) Fail: 1 Total: 31

Potable Water Methylene chloride

A histogram is not displayed for

limited number of participants.

Technology: GCELCD/PID

Shipment: 397 Matrix: Potable Water

Analyte: Methylene chloride

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 3.38 ug/L Limits: 2.03 to 4.73 ug/L Basis: Fixed Percent (2) Robust Mean: 3.7 ug/L

Std Dev: 0 ug/L Median: 3.74 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31

Potable Water Methomyl

Shipment: 397 Matrix: Potable Water

Analyte: Methomyl **Sample:** 9715

Technology: HPLC-FLUOR

Prep Method:

Target: 44.9 ug/L Limits: 35.9 to 53.9 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 44.5 ug/L Std Dev: 3.5406 ug/L Median: 44.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 9

2.5 Number of Labs 1.5 38.1 43 44.7 46.4 49.7 Test Results (End Groups Include Outliers)

16.7

A histogram is not displayed for

limited number of participants.

Technology: GC-NPD

Test Results (End Groups Include Outliers)

due to the

19.5

due to the

Fail: 0 Total: 9

5

2-

Number of Labs

Potable Water Metolachlor

Shipment: 397 Matrix: Potable Water

Analyte: Metolachlor Sample: 9707B Technology: GC-MS Prep Method:

ug/L **Target:** 15.4 Limits: 8.47 to 22.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 15.9 ug/L Std Dev: 2,0013 ug/L Median: 15.9 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 13 Fail: 0 Total: 13

Totals for Matrix/Analyte: Labs: Pass: 14 Fail: 0 Total: 14

Potable Water Metolachlor

13

Shipment: 397 Matrix: Potable Water

Analyte: Metolachlor Sample: 9707B Technology: GC-NPD Prep Method: **Target: 15.4** ug/L Limits: 8.47 to 22.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 15.3 ug/L Std Dev: 0 ug/L Median: 15.3 ug/L

Score Date:

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

11/04/2016

Totals for Matrix/Analyte: Labs: Pass: 14 Fail: 0 Total: 14

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Potable Water Metribuzin

Shipment: 397 Matrix: Potable Water

Analyte: Metribuzin Sample: 9707B Technology: GC-ECD

Prep Method:

Target: 19.4 ug/L Limits: 9.7 to 29.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.1 ug/L Std Dev: 0 ug/L Median: 17.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 13

A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.

Potable Water Metribuzin

Total: 14

Shipment: 397 Matrix: Potable Water

Analyte: Metribuzin Sample: 9707B Technology: GC-MS Prep Method: **Target:** 19.4 ug/L

Limits: 9.7 to 29.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.5 ug/L Std Dev: 3.8315 ug/L Median: 18.65 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 11 Fail: 1 Total: 12

Totals for Matrix/Analyte: Labs: Pass: 13

2.5 Number of Labs 2 1.5 11.9 15 16.5 18 19.5 21 22.6

Test Results (End Groups Include Outliers)

due to the

Fail: 1 Total: 14

Fail: 1

Potable Water Metribuzin

Shipment: 397 Matrix: Potable Water

Analyte: Metribuzin Sample: 9707B Technology: GC-NPD Prep Method:

Target: 19.4 ug/L Limits: 9.7 to 29.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.9 ug/L Std Dev: 0 ug/L Median: 17.9 ug/L

Totals for Matrix/Analyte/Technology:

Fail: 0 Labs: Pass: 1 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 13 Fail: 1 Total: 14

A histogram is not displayed for Technology: GC-NPD due to the limited number of participants.

A histogram is not displayed for

limited number of participants.

Potable Water Magnesium, Total

Technology: FAAS

Shipment: 397 Matrix: Potable Water

Analyte: Magnesium, Total

Sample: 9732 Technology: FAAS Prep Method: Target: 3.8 mg/L Limits: 3.23 to 4.37 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 4.2 mg/L Std Dev: 0.0849 mg/L Median: 4.18 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Total: 2 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 32 Fail: 0 Total: 32

Potable Water Magnesium, Total

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 51 of 76

Potable Water Magnesium, Total

Technology: IC

number of participants.

A histogram is not displayed for

Shipment: 397 Matrix: Potable Water

Analyte: Magnesium, Total

Sample: 9732 Technology: IC Prep Method:

Target: 3.8 mg/L Limits: 3.23 to 4.37 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 3.7 mg/L Std Dev: 0.1485 mg/L Median: 3.705 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2

Fail: 0 Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 32

Fail: 0

Shipment: 397 Matrix: Potable Water

Analyte: Magnesium, Total

Sample: 9732 Technology: ICP-AES

Prep Method:

Target: 3.8 mg/L Limits: 3.23 to 4.37 mg/L

Basis: Target Value +/- a fixed percent

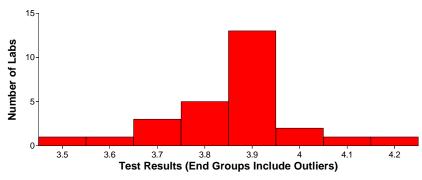
Robust Mean: 3.9 mg/L Std Dev: 0.1545 mg/L Median: 3.85 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 27 Fail: 0 Total: 27

Totals for Matrix/Analyte: Labs: Pass: 32 Potable Water Magnesium, Total

Total: 32



due to the limited

Fail: 0 Total: 32

Shipment: 397 Matrix: Potable Water

Analyte: Magnesium, Total

Sample: 9732 Technology: ICP-MS Prep Method:

Target: 3.8 mg/L Limits: 3.23 to 4.37 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 3.6 mg/L Std Dev: 0 mg/L Median: 3.57 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 32 Fail: 0 Total: 32

A histogram is not displayed for Technology: ICP-MS due to the

limited number of participants.

Potable Water Manganese, Total

Potable Water Magnesium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Manganese, Total

Sample: 9706 Technology: FAAS Prep Method: Target: 75 ug/L Limits: 63.8 to 86.3 ug/L

Basis: Target Value +/- a fixed percent

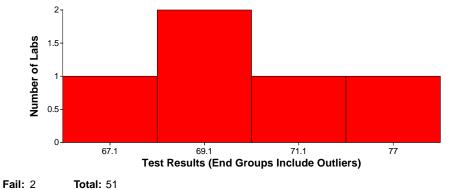
Robust Mean: 70.2 ug/L Std Dev: 4,3465 ug/L Median: 70 ug/L

Totals for Matrix/Analyte/Technology:

Total: 5 Labs: Pass: 5 Fail: 0 Totals for Matrix/Analyte: Labs: Pass: 49

Potable Water Manganese, Total

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 52 of 76



Potable Water Manganese, Total

Shipment: 397 Matrix: Potable Water

Analyte: Manganese, Total

Sample: 9706

Technology: ICP-AES

Prep Method:

Target: 75 ug/L Limits: 63.8 to 86.3 ug/L

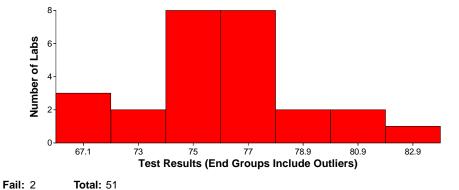
Basis: Target Value +/- a fixed percent

Robust Mean: 76.2 ug/L Std Dev: 20.9799 ug/L Median: 76.15 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 24 Fail: 2 Total: 26

Totals for Matrix/Analyte: Labs: Pass: 49



Potable Water Manganese, Total

Shipment: 397 Matrix: Potable Water

Analyte: Manganese, Total

Sample: 9706 Technology: ICP-MS

Prep Method:

Target: 75 ug/L Limits: 63.8 to 86.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 74.2 ug/L Std Dev: 3.5628 ug/L Median: 74.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 20

Fail: 0 Total: 20

Totals for Matrix/Analyte:

6-5-

Number of Labs 67.1 71.1 73 75 77 78.9

Test Results (End Groups Include Outliers)

Labs: Pass: 49 Fail: 2 Total: 51

Potable Water Molybdenum, Total

Shipment: 397 Matrix: Potable Water

Analyte: Molybdenum, Total

Sample: 9706 Technology: ICP-AES

Prep Method:

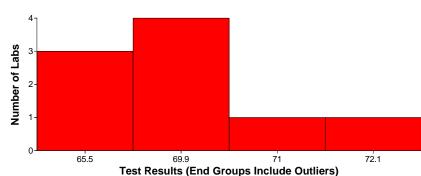
Target: 72.6 ua/L Limits: 61.7 to 83.5 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 69.7 ug/L Std Dev: 30.7826 ug/L Median: 69.7 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 8 Fail: 1 Total: 9 Totals for Matrix/Analyte: Labs: Pass: 18 Fail: 1



Total: 19

Fail: 1

Potable Water Molybdenum, Total

Shipment: 397 Matrix: Potable Water

Analyte: Molybdenum, Total

Sample: 9706 Technology: ICP-MS Prep Method: **Target: 72.6** ug/L Limits: 61.7 to 83.5 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 70 ug/L Std Dev: 2.1802 ug/L Median: 70.7 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 18 Number of Labs 73.2 66.6 67.7 69.9 71 72.1 **Test Results (End Groups Include Outliers)**

Potable Water Methoxychlor

Total: 19

Potable Water Methoxychlor

Shipment: 397 Matrix: Potable Water

Analyte: Methoxychlor Sample: 9707A Technology: GC-ECD Prep Method:

Target: 3.14 ug/L Limits: 1.73 to 4.55 ug/L

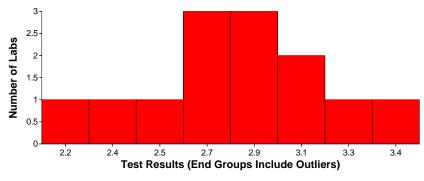
Basis: Target Value +/- a fixed percent

Robust Mean: 2.8 ug/L Std Dev: 0.3214 ug/L Median: 2.83 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 13 Fail: 0 Total: 13

Totals for Matrix/Analyte: Labs: Pass: 20 Fail: 0 Total: 20



Potable Water Methoxychlor

Shipment: 397 Matrix: Potable Water

Analyte: Methoxychlor Sample: 9707A Technology: GC-MS Prep Method:

Target: 3.14 ug/L Limits: 1.73 to 4.55 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 3.1 ug/L Std Dev: 0.4462 ug/L Median: 3.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 7 Fail: 0 Total: 7

Matrix: Potable Water

Totals for Matrix/Analyte: Labs: Pass: 20 Number of Labs 1.5 2.7 3.3 3.6 Test Results (End Groups Include Outliers)

Fail: 0 Total: 20

Analyte: Sodium, Total **Sample:** 9732 Technology: FAAS Prep Method:

Shipment: 397

mg/L **Target: 21.2** Limits: 18 to 24.4 mg/L

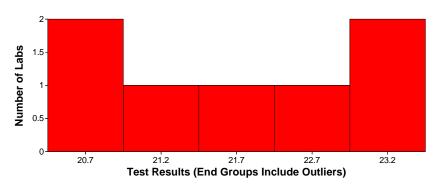
Basis: Target Value +/- a fixed percent

Robust Mean: 21.6 mg/L Std Dev: 8,2381 mg/L Median: 21.5 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 6 Fail: 1 Total: 7

Totals for Matrix/Analyte: Labs: Pass: 37 Potable Water Sodium, Total



Fail: 2 Total: 39

Potable Water Sodium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Sodium, Total **Sample:** 9732 Technology: IC Prep Method: Target: 21.2 mg/L Limits: 18 to 24.4 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 21.3 mg/L Std Dev: 0.495 mg/L Median: 21.25 mg/L

Totals for Matrix/Analyte/Technology:

Total: 2 Labs: Pass: 2 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 37 Fail: 2 Total: 39

A histogram is not displayed for Technology: IC due to the limited number of participants.

Potable Water Sodium, Total

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Potable Water Sodium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Sodium, Total Sample: 9732 Technology: ICP-AES

Prep Method:

Target: 21.2 mg/L **Limits:** 18 **to** 24.4 mg/L

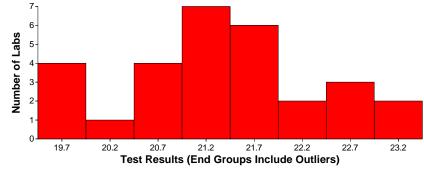
Basis: Target Value +/- a fixed percent

Robust Mean: 21.3 mg/L Std Dev: 4.0747 mg/L Median: 21.2 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 28 Fail: 1 Total: 29

Totals for Matrix/Analyte: Labs: Pass: 37 Fail: 2 Total: 39



Potable Water Sodium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Sodium, Total Sample: 9732 Technology: ICP-MS Prep Method:

Target: 21.2 mg/L **Limits:** 18 **to** 24.4 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 19.8 mg/L Std Dev: 0 mg/L Median: 19.8 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 37 Fail: 2 Total: 39

A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

Potable Water Naphthalene

Shipment: 397 Matrix: Potable Water Analyte: Naphthalene
Sample: 9721
Technology: GC-MS
Prep Method:
Target: 20.2 ug/L
Limits: 14.1 to 26.3 ug/L
Basis: Fixed Percent (2)

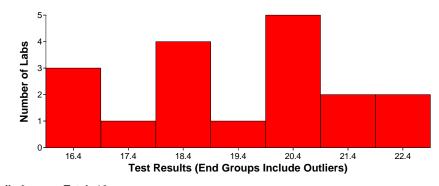
Limits: 14.1 to 26.3 ug/L
Basis: Fixed Percent (2)
Robust Mean: 19.3 ug/L
Std Dev: 1.9594 ug/L
Median: 19.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 18 Fail: 0 Total: 18

Totals for Matrix/Analyte: Labs: Pass: 18 Fail: 0 Total: 18

Matrix: Potable Water



Potable Water Nickel, Total

Analyte: Nickel, Total
Sample: 9706
Technology: FAAS
Prep Method:
Target: 245 ug/L
Limits: 208 to 282 ug/L
Paging: Target Volume 4/ a fixed page

Shipment: 397

Basis: Target Value +/- a fixed percent **Robust Mean:** 256 ug/L

Robust Mean: 256 ug/L **Std Dev:** 147.8321 ug/L **Median:** 259 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 1 Total: 3
Totals for Matrix/Analyte: Labs: Pass: 49

Test Results (End Groups Include Outliers)

Fail: 2 Total: 51

Potable Water Nickel, Total

Shipment: 397 Matrix: Potable Water

Analyte: Nickel, Total **Sample: 9706**

Technology: ICP-AES

Prep Method:

Target: 245 ug/L Limits: 208 to 282 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 245.3 ug/L Std Dev: 70.9533 ug/L Median: 245 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 22 Fail: 1 Total: 23

Totals for Matrix/Analyte: Labs: Pass: 49 Fail: 2 Total: 51

Total: 25

Number of Labs 225 230 235 239 244 249 253 258 263 **Test Results (End Groups Include Outliers)**

Potable Water Nickel, Total

Shipment: 397 Matrix: Potable Water

Analyte: Nickel, Total **Sample:** 9706 Technology: ICP-MS Prep Method: Target: 245 ug/L

Limits: 208 to 282 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 241.3 ug/L Std Dev: 49.0364 ug/L Median: 242 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 25 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 49

5-Number of Labs 225 230 235 239 244 249 253 263 Test Results (End Groups Include Outliers)

Fail: 2 Total: 51

Shipment: 397 Matrix: Potable Water

Analyte: Nitrite (as N) **Sample: 9727** Technology: AUTO Prep Method:

Target: 1.81 mg/L Limits: 1.54 to 2.08 mg/L

Basis: Target Value +/- a fixed percent

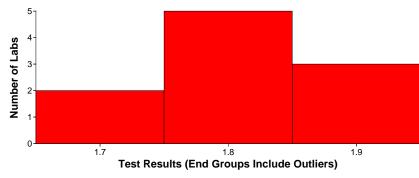
Robust Mean: 1.8 mg/L Std Dev: 0.0602 mg/L Median: 1.82 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 50

Potable Water Nitrite (as N)



Fail: 1 Total: 51

Shipment: 397 Matrix: Potable Water

Analyte: Nitrite (as N) **Sample: 9727** Technology: COLOR Prep Method: **Target: 1.81** mg/L

Limits: 1.54 to 2.08 mg/L

Basis: Target Value +/- a fixed percent

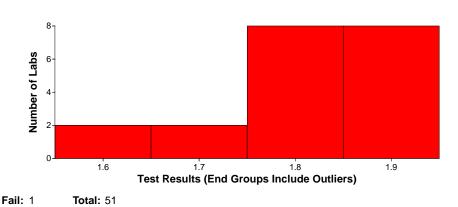
Robust Mean: 1.8 mg/L Std Dev: 0.4151 mg/L Median: 1.825 mg/L

Totals for Matrix/Analyte/Technology:

Total: 20 Labs: Pass: 19 Fail: 1

Totals for Matrix/Analyte: Labs: Pass: 50

Potable Water Nitrite (as N)



Potable Water Nitrite (as N)

Potable Water Nitrite (as N)

Shipment: 397 Matrix: Potable Water

Analyte: Nitrite (as N) **Sample: 9727** Technology: IC-COND

Prep Method:

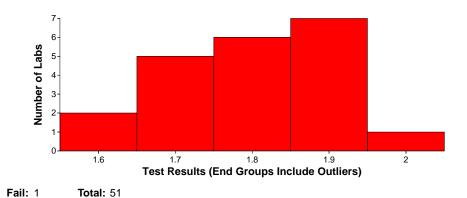
Target: 1.81 mg/L Limits: 1.54 to 2.08 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 1.8 mg/L Std Dev: 0.1089 mg/L Median: 1.79 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 21 Fail: 0 Total: 21

Totals for Matrix/Analyte: Labs: Pass: 50



Potable Water Nitrate (as N)

Shipment: 397 Matrix: Potable Water

Analyte: Nitrate (as N) **Sample:** 9702 Technology: AUTO Prep Method: **Target:** 9.89

mg/L Limits: 8.9 to 10.9 mg/L

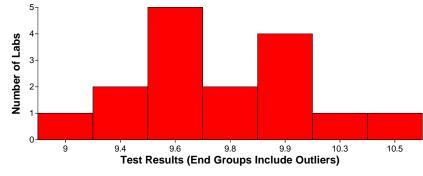
Basis: Target Value +/- a fixed percent

Robust Mean: 9.8 mg/L Std Dev: 2.4571 mg/L Median: 9.695 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 15 Total: 16 Labs: Pass: 61

Totals for Matrix/Analyte:



Fail: 2 Total: 63

Shipment: 397 Matrix: Potable Water Analyte: Nitrate (as N) **Sample:** 9702 Technology: COLOR

Prep Method:

Target: 9.89 mg/L Limits: 8.9 to 10.9 mg/L

Basis: Target Value +/- a fixed percent

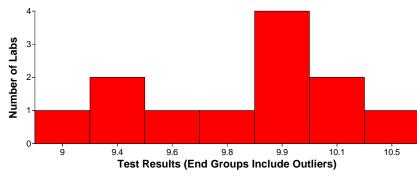
Robust Mean: 9.8 mg/L Std Dev: 0.4218 mg/L Median: 9.96 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Total: 12 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 61 Fail: 2

Potable Water Nitrate (as N)



Total: 63

Shipment: 397 Matrix: Potable Water

Analyte: Nitrate (as N) **Sample: 9702** Technology: IC-COND

Prep Method: **Target:** 9.89

mg/L Limits: 8.9 to 10.9 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 9.8 mg/L Std Dev: 0.3477 mg/L Median: 9.78 mg/L

Totals for Matrix/Analyte/Technology:

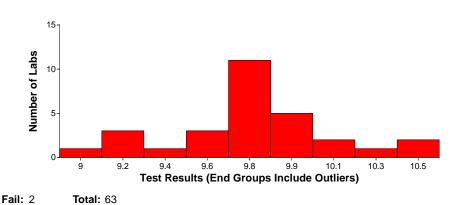
Labs: Pass: 29 Totals for Matrix/Analyte:

Fail: 0

Total: 29

Labs: Pass: 61

Potable Water Nitrate (as N)



Potable Water Nitrate (as N)

Potable Water Nitrate (as N)

Number of Labs

Shipment: 397 Matrix: Potable Water

Analyte: Nitrate (as N) **Sample: 9702** Technology: POT Prep Method:

Target: 9.89 mg/L Limits: 8.9 to 10.9 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 9.7 mg/L Std Dev: 3.9548 mg/L Median: 9.615 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 1 Total: 6

Totals for Matrix/Analyte: Labs: Pass: 61

9

Shipment: 397 Matrix: Potable Water

Analyte: Aldicarb Sulfoxide

Sample: 9715

Technology: HPLC-FLUOR

Prep Method:

Target: 69.7 ug/L Limits: 52.3 to 87.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 71.5 ug/L Std Dev: 5.3519 ug/L Median: 72.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 9

Fail: 2 Total: 63 **Potable Water Aldicarb Sulfoxide** Number of Labs

Test Results (End Groups Include Outliers)

10.1

79

9.6

70 72.2 76.7 **Test Results (End Groups Include Outliers)**

Fail: 0 Total: 9

Shipment: 397 Matrix: Potable Water

Analyte: Lead, Total **Sample:** 9706 Technology: GFAAS Prep Method:

Target: 22.5 ug/L Limits: 15.8 to 29.3 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 21.8 ug/L Std Dev: 6.3796 ug/L Median: 21.9 ug/L

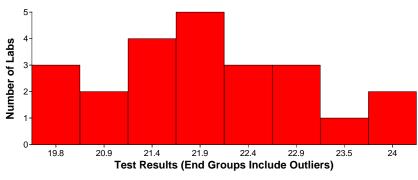
Totals for Matrix/Analyte/Technology:

Labs: Pass: 23 Fail: 0 Total: 23

Totals for Matrix/Analyte: Labs: Pass: 54

Potable Water Lead, Total

63.2



Fail: 0 Total: 54

Shipment: 397 Matrix: Potable Water

Analyte: Lead, Total **Sample: 9706** Technology: ICP-AES Prep Method:

Target: 22.5 ug/L Limits: 15.8 to 29.3 ug/L

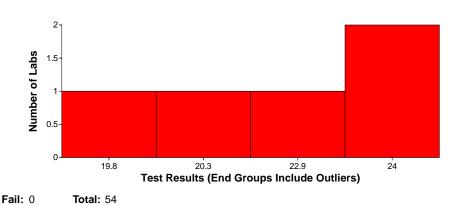
Basis: Target Value +/- a fixed percent

Robust Mean: 21.8 ug/L Std Dev: 9,8799 ug/L Median: 23 ug/L

Totals for Matrix/Analyte/Technology:

Total: 5 Labs: Pass: 5 Fail: 0 Totals for Matrix/Analyte: Labs: Pass: 54

Potable Water Lead, Total



Potable Water Lead, Total

Shipment: 397 Matrix: Potable Water

Analyte: Lead, Total
Sample: 9706
Technology: ICP-MS
Prep Method:

Target: 22.5 ug/L **Limits:** 15.8 **to** 29.3 ug/L

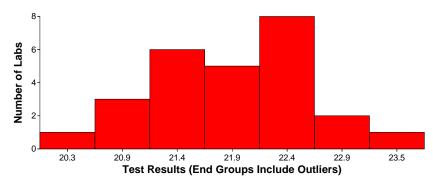
Basis: Target Value +/- a fixed percent

Robust Mean: 21.9 ug/L Std Dev: 0.7291 ug/L Median: 22 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 26 Fail: 0 Total: 26

Totals for Matrix/Analyte: Labs: Pass: 54 Fail: 0 Total: 54



Potable Water PCB, Total (as decachlorobiphenyl)

Shipment: 397 **Matrix:** Potable Water **Analyte:** PCB,Total (as decachlorobiphenyl)

Sample: 9725 Technology: GC-ECD Prep Method:

Target: 1.4 ug/L
Limits: 0.14 to 2.8 ug/L
Basis: Manual Limits
Robust Mean: 1.3 ug/L
Std Dev: 0.225 ug/L
Median: 1.34 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Totals for Matrix/Analyte: Labs: Pass: 3

Test Results (End Groups Include Outliers)

2.7

Test Results (End Groups Include Outliers)

2.8

Total: 3

Potable Water Pentachlorophenol

Fail: 0

6

5

Number of Labs

Shipment: 397 Matrix: Potable Water

Analyte: Pentachlorophenol

Sample: 9717
Technology: GC-ECD
Prep Method:

Target: 2.97 ug/L **Limits**: 1.49 **to** 4.46 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 2.7 ug/L Std Dev: 1.1413 ug/L Median: 2.72 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0 Total: 11

Totals for matrix/Analyte. Labs. 1 ass. 11 I all. 0 Total.

Potable Water Pentachlorophenol

Shipment: 397 Matrix: Potable Water

Analyte: Pentachlorophenol

Sample: 9717

Technology: HPLC-UV
Prep Method:
Target: 2.97 ug/L
Limits: 1.49 to 4.46 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 2.6 ug/L Std Dev: 0 ug/L Median: 2.58 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0 Total: 11

A histogram is not displayed for Technology: HPLC-UV due to the limited number of participants.

Potable Water p-Isopropyltoluene (P-Cymene)

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Potable Water p-Isopropyltoluene (P-Cymene)

Shipment: 397 **Matrix:** Potable Water **Analyte:** p-Isopropyltoluene (P-Cymene)

Sample: 9721 Technology: GC-MS Prep Method:

Target: 5.27 ug/L
Limits: 3.16 to 7.38 ug/L
Basis: Fixed Percent (2)
Robust Mean: 5.2 ug/L
Std Dev: 0.5697 ug/L
Median: 5.225 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Fail: 0 Total: 30
Totals for Matrix/Analyte: Labs: Pass: 31

Shipment: 397 **Matrix:** Potable Water **Analyte:** p-Isopropyltoluene (P-Cymene)

Sample: 9721

Technology: GCELCD/PID

Prep Method:

 Target:
 5.27
 ug/L

 Limits:
 3.16
 to 7.38 ug/L

 Basis:
 Fixed Percent (2)

 Robust Mean:
 4.7 ug/L

Std Dev: 0 ug/L Median: 4.74 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

due to the

Potable Water p-Isopropyltoluene (P-Cymene)

Total: 31

Fail: 0

A histogram is not displayed for

limited number of participants.

Technology: GCELCD/PID

Potable Water Perchlorate

Shipment: 397 **Matrix:** Potable Water **Analyte:** Perchlorate

Sample: 9737

Technology: HPLC-ESMS

Prep Method:

Shipment: 397

Prep Method: Target: 11.5

Analyte: Perchlorate
Sample: 9737
Technology: IC-COND

Target: 11.5 ug/L **Limits:** 9.2 **to** 13.8 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 10.7 ug/L Std Dev: 0 ug/L Median: 10.7 ug/L

Totals for Matrix/Analyte/Technology:

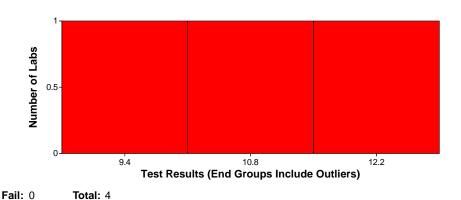
Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 4 Fail: 0 Total: 4

Matrix: Potable Water

A histogram is not displayed for Technology: HPLC-ESMS due to the limited number of participants.

Potable Water Perchlorate



Std Dev: 1.2478 ug/L Median: 10.9 ug/L

Limits: 9.2 to 13.8 ug/L

Robust Mean: 10.8 ug/L

Totals for Matrix/Analyte/Technology:

ug/L

Basis: Target Value +/- a fixed percent

Labs: Pass: 3 Fail: 0 Total: 3

Totals for Matrix/Analyte: Labs: Pass: 4

Potable Water Picloram

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Potable Water Picloram

Number of Labs

Fail: 0

Shipment: 397 Matrix: Potable Water

Analyte: Picloram **Sample: 9717** Technology: GC-ECD Prep Method:

Target: 91.7 ug/L Limits: 45.9 to 138 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 84.7 ug/L Std Dev: 10.4879 ug/L Median: 86.8 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 11

Potable Water Picloram

66.2

Total: 11

Shipment: 397 Matrix: Potable Water

Analyte: Picloram **Sample: 9717**

Technology: HPLC-UV

Prep Method:

Target: 91.7 ug/L Limits: 45.9 to 138 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 96.7 ug/L Std Dev: 0 ug/L Median: 96.7 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0 Total: 11

A histogram is not displayed for Technology: HPLC-UV due to the limited number of participants.

71.4

87

Test Results (End Groups Include Outliers)

92.2

97.4

Potable Water Orthophosphate (as P)

Shipment: 397 Matrix: Potable Water **Analyte:** Orthophosphate (as P)

Sample: 9702 Technology: AUTO Prep Method:

Target: 4.3 mg/L Limits: 3.66 to 4.95 mg/L

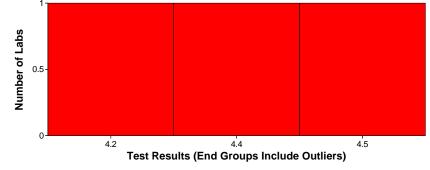
Basis: Target Value +/- a fixed percent

Robust Mean: 4.3 mg/L Std Dev: 0.1481 mg/L Median: 4.34 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Total: 3

Totals for Matrix/Analyte: Labs: Pass: 38 Fail: 1 Total: 39



Potable Water Orthophosphate (as P)

Shipment: 397 Matrix: Potable Water

Analyte: Orthophosphate (as P)

Sample: 9702 Technology: COLOR Prep Method: Target: 4.3 mg/L Limits: 3.66 to 4.95 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 4.3 mg/L Std Dev: 1.0909 mg/L Median: 4.295 mg/L

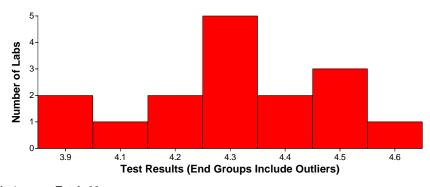
Totals for Matrix/Analyte/Technology:

Labs: Pass: 15

Total: 16 Fail: 1

Totals for Matrix/Analyte: Labs: Pass: 38

Fail: 1 Total: 39



Potable Water Orthophosphate (as P)

Potable Water Orthophosphate (as P)

Shipment: 397 Matrix: Potable Water

Analyte: Orthophosphate (as P)

Sample: 9702 Technology: IC-COND

Prep Method:

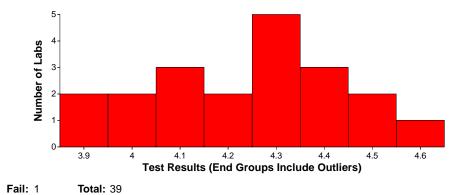
Target: 4.3 mg/L Limits: 3.66 to 4.95 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 4.2 mg/L Std Dev: 0.186 mg/L Median: 4.26 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 20 Fail: 0 Total: 20

Totals for Matrix/Analyte: Labs: Pass: 38



Potable Water Propachlor

Shipment: 397 Matrix: Potable Water

Analyte: Propachlor Sample: 9707A Technology: GC-ECD Prep Method:

Target: 9.74 ug/L Limits: 5.36 to 14.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 9.2 ug/L Std Dev: 0.2822 ug/L Median: 9.17 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 0 Total: 5

Number of Labs 9.1 9.5 **Test Results (End Groups Include Outliers)**

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17

Potable Water Propachlor

Shipment: 397 Matrix: Potable Water

Analyte: Propachlor Sample: 9707A Technology: GC-MS

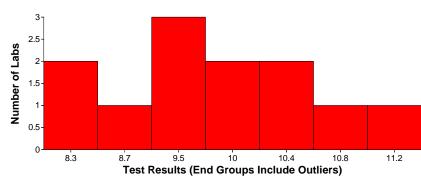
Prep Method: **Target:** 9.74 ua/L Limits: 5.36 to 14.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 9.7 ug/L Std Dev: 0.9579 ug/L Median: 9.72 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 0 Total: 12 Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0



Potable Water Solids, Total Dissolved

Total: 17

10-

Fail: 1

Shipment: 397 Matrix: Potable Water

Analyte: Solids, Total Dissolved

Sample: 9731 Technology: GRAV Prep Method: Target: 693 mg/L Limits: 554 to 832 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 686.8 mg/L Std Dev: 149.3859 mg/L Median: 686.5 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 41

Fail: 1 Total: 42

Totals for Matrix/Analyte: Labs: Pass: 41 Number of Labs 646 657 667 678 688 698 709 719 **Test Results (End Groups Include Outliers)**

Total: 42 **Potable Water Antimony, Total**

Potable Water Antimony, Total

Shipment: 397 Matrix: Potable Water

Analyte: Antimony, Total

Sample: 9706 Technology: GFAAS Prep Method:

Target: 15 ug/L Limits: 10.5 to 19.5 ug/L

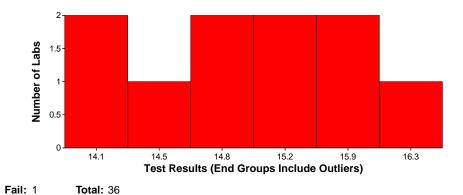
Basis: Target Value +/- a fixed percent

Robust Mean: 15.1 ug/L Std Dev: 0.7391 ug/L Median: 15.05 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 35



Potable Water Antimony, Total

Shipment: 397 Matrix: Potable Water

Analyte: Antimony, Total

Sample: 9706 Technology: ICP-AES

Prep Method:

Target: 15 ug/L Limits: 10.5 to 19.5 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 15.3 ug/L Std Dev: 0.9899 ug/L Median: 15.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 35 Fail: 1 Total: 36

A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.

Potable Water Antimony, Total

6-

5

2

Number of Labs

Shipment: 397 Matrix: Potable Water Analyte: Antimony, Total **Sample:** 9706 Technology: ICP-MS Prep Method:

Target: 15 ua/L Limits: 10.5 to 19.5 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 15.3 ug/L Std Dev: 3.2167 ug/L Median: 15.2 ug/L

Totals for Matrix/Analyte:

Totals for Matrix/Analyte/Technology:

Labs: Pass: 23 Fail: 1 Total: 24

Totals for Matrix/Analyte: Labs: Pass: 35 Fail: 1 Total: 36

Labs: Pass: 31

Potable Water sec-Butylbenzene

14.5

14.8

15.2

Test Results (End Groups Include Outliers)

15.6

15.9

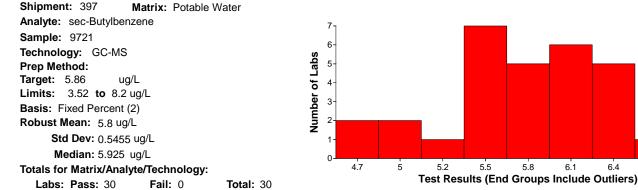
16.3

6.7

6.9

16.6

14.1



Fail: 0

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Total: 31

Potable Water sec-Butylbenzene

Shipment: 397 Matrix: Potable Water

Analyte: sec-Butylbenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 5.86 ug/L Limits: 3.52 to 8.2 ug/L Basis: Fixed Percent (2) Robust Mean: 5.2 ug/L Std Dev: 0 ug/L

Totals for Matrix/Analyte/Technology:

Median: 5.23 ug/L

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Specific Conductance

Shipment: 397 Matrix: Potable Water

Analyte: Specific Conductance

Sample: 9724 Technology: COND Prep Method:

Target: 1069 umhos/cm Limits: 962 to 1180 umhos/cm Basis: Target Value +/- a fixed percent Robust Mean: 1053.9 umhos/cm Std Dev: 34.2105 umhos/cm Median: 1059 umhos/cm Totals for Matrix/Analyte/Technology:

Labs: Pass: 47 Total: 47

Totals for Matrix/Analyte: Labs: Pass: 47

10-Number of Labs 994 1027 1043 1060 1077 1093 1110 **Test Results (End Groups Include Outliers)**

Total: 47

Potable Water Selenium, Total

Shipment: 397 Matrix: Potable Water Analyte: Selenium, Total

Sample: 9706 Technology: GFAAS Prep Method:

Target: 60.1 ua/L Limits: 48.1 to 72.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 59 ug/L Std Dev: 2,2663 ug/L Median: 59.15 ug/L

Totals for Matrix/Analyte/Technology:

Total: 10 Labs: Pass: 10 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 36

Fail: 0

Number of Labs 54.2 59.1 61.6

Test Results (End Groups Include Outliers)

Fail: 1 Total: 37

Potable Water Selenium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Selenium, Total

Sample: 9706 Technology: ICP-AES

Prep Method: Target: 60.1 ug/L Limits: 48.1 to 72.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 62.4 ug/L Std Dev: 0.2828 ug/L Median: 62.4 ug/L

Totals for Matrix/Analyte/Technology:

Total: 2 Labs: Pass: 2 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 36 Fail: 1 Total: 37

Technology: ICP-AES due to the limited number of participants.

A histogram is not displayed for

Potable Water Selenium, Total

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 64 of 76

Potable Water Selenium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Selenium, Total Sample: 9706

Technology: ICP-MS
Prep Method:

Target: 60.1 ug/L **Limits**: 48.1 **to** 72.1 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 58.8 ug/L **Std Dev:** 19.6586 ug/L **Median:** 58.9 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 24 Fail: 1 Total: 25

Totals for Matrix/Analyte: Labs: Pass: 36 Fail: 1 Total: 37

7 6 5 5 4 1 0 54.2 55.4 56.6 57.9 59.1 60.3 61.6 64 Test Results (End Groups Include Outliers)

Potable Water Silica, Dissolved

Shipment: 397 Matrix: Potable Water

Analyte: Silica, Dissolved

Sample: 9728
Technology: AUTO
Prep Method:

Target: 60.1 mg/L **Limits:** 51.1 **to** 69.1 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 64 mg/L Std Dev: 0 mg/L Median: 64 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 8 Fail: 1 Total: 9

A histogram is not displayed for Technology: AUTO due to the limited number of participants.

Potable Water Silica, Dissolved

Shipment: 397 Matrix: Potable Water

Analyte: Silica, Dissolved

Sample: 9728
Technology: COLOR
Prep Method:

Target: 60.1 mg/L **Limits:** 51.1 **to** 69.1 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 62.5 mg/L Std Dev: 2.4042 mg/L Median: 62.5 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 8 Fail: 1 Total: 9

A histogram is not displayed for Technology: COLOR due to the limited number of participants.

Shipment: 397 Matrix: Potable Water

Analyte: Silica, Dissolved

Sample: 9728

Technology: ICP-AES

 Prep Method:

 Target:
 60.1
 mg/L

 Limits:
 51.1
 to 69.1 mg/L

Basis: Target Value +/- a fixed percent

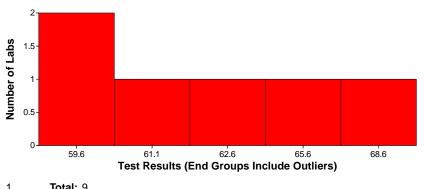
Robust Mean: 63.1 mg/L Std Dev: 4.0848 mg/L Median: 61.95 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 1 Total: 6
Totals for Matrix/Analyte: Labs: Pass: 8

Fail: 1 Total: 9

Potable Water Silica, Dissolved



Potable Water Simazine

Potable Water Simazine

Shipment: 397 Matrix: Potable Water

Analyte: Simazine Sample: 9707B Technology: GC-ECD Prep Method:

Target: 16.8 ug/L Limits: 9.24 to 24.4 ug/L

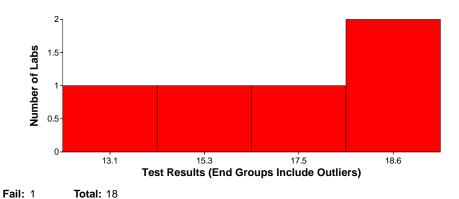
Basis: Target Value +/- a fixed percent

Robust Mean: 17.8 ug/L Std Dev: 8.0495 ug/L Median: 18 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4 Fail: 1 Total: 5

Totals for Matrix/Analyte: Labs: Pass: 17



Potable Water Simazine

Matrix: Potable Water Shipment: 397

Analyte: Simazine Sample: 9707B Technology: GC-MS Prep Method:

Target: 16.8 ug/L Limits: 9.24 to 24.4 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.5 ug/L Std Dev: 2.3383 ug/L Median: 17.2 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 12 Fail: 0 Total: 12

Totals for Matrix/Analyte: Labs: Pass: 17 Number of Labs 14.2 16.4 17.5 18.6 19.7 20.8 **Test Results (End Groups Include Outliers)**

Fail: 1 Total: 18

Potable Water Simazine

Shipment: 397 Matrix: Potable Water

Analyte: Simazine Sample: 9707B Technology: GC-NPD

Prep Method: ug/L **Target: 16.8** Limits: 9.24 to 24.4 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 17.5 ug/L Std Dev: 0 ug/L Median: 17.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 1

A histogram is not displayed for Technology: GC-NPD due to the

limited number of participants.

Total: 18

Shipment: 397 Matrix: Potable Water Analyte: 2,4,5-TP (Silvex)

Sample: 9717 Technology: GC-ECD

Prep Method: **Target: 41.9** ug/L Limits: 21 to 62.9 ug/L

Basis: Target Value +/- a fixed percent

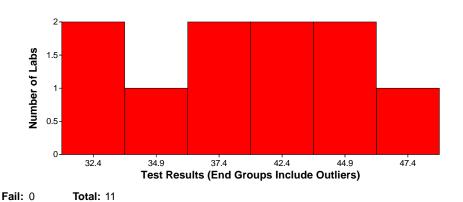
Robust Mean: 39.4 ug/L Std Dev: 4.945 ug/L Median: 39.75 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 0 Total: 10

Totals for Matrix/Analyte: Labs: Pass: 11

Potable Water 2,4,5-TP (Silvex)



Potable Water 2,4,5-TP (Silvex)

A histogram is not displayed for

limited number of participants.

A histogram is not displayed for

limited number of participants.

Technology: AUTO

due to the

due to the

Technology: HPLC-UV

Shipment: 397 Matrix: Potable Water

Analyte: 2,4,5-TP (Silvex)

Sample: 9717 Technology: HPLC-UV

Prep Method: **Target:** 41.9 ug/L Limits: 21 to 62.9 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 42.5 ug/L Std Dev: 0 ug/L Median: 42.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 11 Fail: 0 Total: 11

Total: 1

Potable Water Sulfate (as SO4)

Shipment: 397 Matrix: Potable Water

Analyte: Sulfate (as SO4)

Sample: 9702 Technology: AUTO Prep Method:

Target: 190 mg/L Limits: 162 to 219 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 186 mg/L Std Dev: 0 mg/L Median: 186 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 48 Fail: 1 Total: 49

Potable Water Sulfate (as SO4)

3-

2.5

1.5

Number of Labs

Shipment: 397 Matrix: Potable Water Analyte: Sulfate (as SO4)

Sample: 9702 Technology: COLOR

Prep Method: mg/L Target: 190 Limits: 162 to 219 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 188 mg/L Std Dev: 13,7579 mg/L Median: 184 mg/L

Totals for Matrix/Analyte/Technology:

Total: 12 Labs: Pass: 11 Fail: 1

Totals for Matrix/Analyte: Labs: Pass: 48

Fail: 1 Total: 49

Potable Water Sulfate (as SO4)

170

Shipment: 397 Matrix: Potable Water

Analyte: Sulfate (as SO4)

Sample: 9702 Technology: GRAV Prep Method: Target: 190 mg/L Limits: 162 to 219 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 197 mg/L Std Dev: 0 mg/L Median: 197 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 48 Fail: 1 Total: 49

Potable Water Sulfate (as SO4)

Score Date: 11/04/2016 **Proficiency Test Statistics** Page 67 of 76

A histogram is not displayed for Technology: GRAV

due to the limited number of participants.

180

184

Test Results (End Groups Include Outliers)

198

208

Potable Water Sulfate (as SO4)

Shipment: 397 Matrix: Potable Water

Analyte: Sulfate (as SO4)

Sample: 9702 Technology: IC-COND

Prep Method:

Target: 190 mg/L Limits: 162 to 219 mg/L

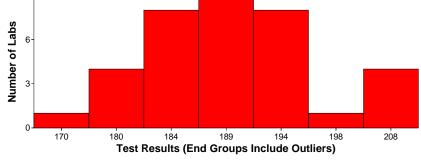
Basis: Target Value +/- a fixed percent

Robust Mean: 190 mg/L Std Dev: 9.3861 mg/L Median: 189 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 35 Fail: 0 Total: 35

Totals for Matrix/Analyte: Labs: Pass: 48 Fail: 1



Potable Water Styrene

Total: 49

Shipment: 397 Matrix: Potable Water Analyte: Styrene

Sample: 9721 Technology: GC-MS Prep Method:

Target: 10.2 ug/L Limits: 8.16 to 12.2 ug/L Basis: Fixed Percent (2) Robust Mean: 10.1 ug/L Std Dev: 1.0638 ug/L Median: 9.925 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 28 Fail: 2 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 29 Number of Labs ٥ 9.5 10 10.5 11.5 12 Test Results (End Groups Include Outliers)

Fail: 2 Total: 31

Shipment: 397 Matrix: Potable Water

Analyte: Styrene **Sample: 9721**

Technology: GCELCD/PID

Prep Method:

Shipment: 397

Totals for Matrix/Analyte:

Target: 10.2 ug/L Limits: 8.16 to 12.2 ug/L Basis: Fixed Percent (2) Robust Mean: 9.3 ug/L Std Dev: 0 ug/L Median: 9.33 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Total: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 2 Total: 31

Labs: Pass: 17

Matrix: Potable Water

Potable Water Styrene

A histogram is not displayed for

Technology: GCELCD/PID due to the

0.22

0.19

limited number of participants.

Potable Water Surfactant (MBAS)

Analyte: Surfactant (MBAS) 5. **Sample:** 9736 Technology: COLOR Number of Labs Prep Method: 3. **Target:** 0.15 mg/L Limits: 0.0627 to 0.242 mg/L Basis: Linear Regression Robust Mean: 0.2 mg/L Std Dev: 0.0317 mg/L Median: 0.17 mg/L 0.11 0.12 0.13 0.15 0.16 0.18 Totals for Matrix/Analyte/Technology: **Test Results (End Groups Include Outliers)** Labs: Pass: 17 Fail: 0 Total: 17

Fail: 0

Potable Water trans-1,2-Dichloroethene

Total: 17

Potable Water trans-1,2-Dichloroethene

Shipment: 397 Matrix: Potable Water

Analyte: trans-1,2-Dichloroethene

Sample: 9720 Technology: GC-MS

Prep Method: **Target:** 5.96 ug/L Limits: 3.58 to 8.34 ug/L Basis: Fixed Percent (2) Robust Mean: 6.3 ug/L Std Dev: 0.6368 ug/L Median: 6.185 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 30 Totals for Matrix/Analyte:

Fail: 0

Total: 30

Labs: Pass: 31 Fail: 0

5.3

6-

5

2

Number of Labs

Potable Water trans-1,2-Dichloroethene

Total: 31

Shipment: 397 Matrix: Potable Water

Analyte: trans-1,2-Dichloroethene

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Target: 5.96 ug/L Limits: 3.58 to 8.34 ug/L Basis: Fixed Percent (2) Robust Mean: 6.4 ug/L Std Dev: 0 ug/L Median: 6.36 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

5.9

6.2

Test Results (End Groups Include Outliers)

6.5

6.9

7.2

7.5

Shipment: 397 Matrix: Potable Water Analyte: tert-Butylbenzene

Sample: 9721 Technology: GC-MS

Prep Method:

Target: 16.1 ua/L Limits: 12.9 to 19.3 ug/L Basis: Fixed Percent (2) Robust Mean: 15.9 ug/L Std Dev: 3.132 ug/L Median: 16.15 ug/L

Totals for Matrix/Analyte/Technology:

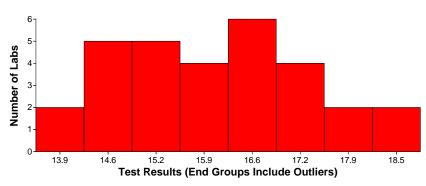
Labs: Pass: 29 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 30

Fail: 1

Potable Water tert-Butylbenzene

Total: 31



due to the

Total: 31

Potable Water tert-Butylbenzene

A histogram is not displayed for

limited number of participants.

Technology: GCELCD/PID

Shipment: 397 Matrix: Potable Water

Analyte: tert-Butylbenzene

Sample: 9721

Technology: GCELCD/PID

Prep Method: Target: 16.1 ug/L Limits: 12.9 to 19.3 ug/L Basis: Fixed Percent (2) Robust Mean: 14.9 ug/L Std Dev: 0 ug/L

Median: 14.9 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Total: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31

Potable Water Trichloroacetic acid

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Potable Water Trichloroacetic acid

Number of Labs

Shipment: 397 Matrix: Potable Water

Analyte: Trichloroacetic acid

Sample: 9726
Technology: GC-ECD
Prep Method:

Target: 6.21 ug/L **Limits:** 3.73 **to** 8.69 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 6 ug/L Std Dev: 0.8272 ug/L Median: 6.015 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 16 Fail: 0 Total: 16

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17

Potable Water Trichloroacetic acid

5.3

4.5

Shipment: 397 Matrix: Potable Water

Analyte: Trichloroacetic acid

Sample: 9726

Technology: IC-ESI-MS

Prep Method:

Shipment: 397

Sample: 9720

Prep Method: Target: 3.51

Technology: GC-MS

Target: 6.21 ug/L **Limits:** 3.73 **to** 8.69 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 6.2 ug/L Std Dev: 0 ug/L Median: 6.17 ug/L

Analyte: Tetrachloroethene

Limits: 2.11 **to** 4.91 ug/L **Basis:** Fixed Percent (2)

Std Dev: 0.7479 ug/L **Median:** 3.485 ug/L

Totals for Matrix/Analyte/Technology:

Robust Mean: 3.5 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 17 Fail: 0 Total: 17

Matrix: Potable Water

A histogram is not displayed for Technology: IC-ESI-MS due to the limited number of participants.

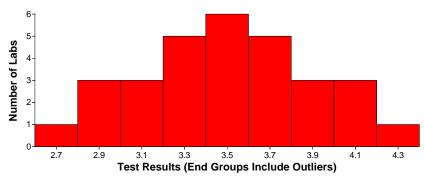
6

Test Results (End Groups Include Outliers)

6.4

7.2

Potable Water Tetrachloroethene



Labs: Pass: 30 Fail: 0 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Shipment: 397 Matrix: Potable Water

ua/L

Analyte: Tetrachloroethene

Sample: 9720

Technology: GCELCD/PID

 Prep Method:

 Target:
 3.51
 ug/L

 Limits:
 2.11
 to 4.91 ug/L

 Basis:
 Fixed Percent (2)

 Robust Mean:
 3.9 ug/L

 Std Dev:
 0 ug/L

Totals for Matrix/Analyte/Technology:

Median: 3.93 ug/L

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 31 Fail: 0 Total: 31

Potable Water Tetrachloroethene

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Trifluralin

Shipment: 397 Matrix: Potable Water

Analyte: Trifluralin Sample: 9707A Technology: GC-ECD Prep Method:

Target: 3.8 ug/L Limits: 2.09 to 5.51 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 3.8 ug/L Std Dev: 0 ug/L Median: 3.79 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0

Totals for Matrix/Analyte: Labs: Pass: 6 Fail: 0 Total: 6

Total: 1

A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.

Potable Water Trifluralin

Matrix: Potable Water Shipment: 397

Analyte: Trifluralin Sample: 9707A Technology: GC-MS Prep Method:

Target: 3.8 ug/L Limits: 2.09 to 5.51 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 3.6 ug/L Std Dev: 0.2046 ug/L Median: 3.56 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 0 Total: 5

Totals for Matrix/Analyte: Labs: Pass: 6 Number of Labs 0.5-3.3 3.5 3.6 3.7 3.8 Test Results (End Groups Include Outliers)

Total: 6

Shipment: 397 Matrix: Potable Water Analyte: Thallium, Total

Sample: 9706 Technology: GFAAS Prep Method:

Target: 2.5 ua/L Limits: 1.75 to 3.25 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 2.6 ug/L Std Dev: 0.8925 ug/L Median: 2.63 ug/L

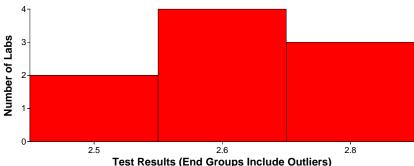
Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 34

Potable Water Thallium, Total

Fail: 0



Test Results (End Groups Include Outliers)

Fail: 0 Total: 34

Shipment: 397 Matrix: Potable Water

Analyte: Thallium, Total

Sample: 9706 Technology: ICP-MS Prep Method: Target: 2.5 ug/L Limits: 1.75 to 3.25 ug/L

Basis: Target Value +/- a fixed percent

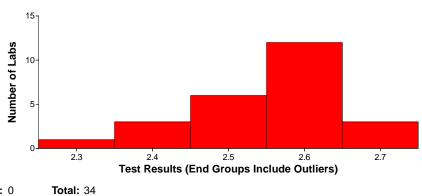
Robust Mean: 2.5 ug/L Std Dev: 0.1115 ug/L Median: 2.55 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 25 Fail: 0 Total: 25

Totals for Matrix/Analyte: Labs: Pass: 34 Fail: 0

Potable Water Thallium, Total



Potable Water Organic Carbon, Total

Shipment: 397 Matrix: Potable Water

Analyte: Organic Carbon, Total

Sample: 9733 Technology: IR Prep Method:

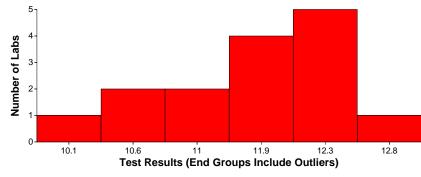
Target: 11.9 mg/L Limits: 9.52 to 14.3 mg/L Basis: Target Value +/- a fixed percent

Robust Mean: 11.7 mg/L Std Dev: 0.9359 mg/L Median: 12.1 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 15 Fail: 0 Total: 15

Totals for Matrix/Analyte: Labs: Pass: 15 Fail: 0



Potable Water Toluene

Total: 15

Shipment: 397 Matrix: Potable Water

Analyte: Toluene **Sample: 9721** Technology: GC-MS Prep Method:

Target: 14.5 ug/L Limits: 11.6 to 17.4 ug/L Basis: Fixed Percent (2) Robust Mean: 14.6 ug/L Std Dev: 2.8311 ug/L Median: 14.6 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29 Fail: 1 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 30

6-Number of Labs 3. 2. 12.4 13.5 14 14.5 15 15.5 16.6 Test Results (End Groups Include Outliers)

Total: 31

Fail: 1

Potable Water Toluene

Shipment: 397 Matrix: Potable Water

Analyte: Toluene **Sample: 9721**

Technology: GCELCD/PID

Prep Method:

Shipment: 397

Target: 14.5 ug/L Limits: 11.6 to 17.4 ug/L Basis: Fixed Percent (2) Robust Mean: 13.3 ug/L Std Dev: 0 ug/L Median: 13.3 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31

Matrix: Potable Water

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Toxaphene

Analyte: Toxaphene **Sample:** 9716 Technology: GC-ECD Prep Method: Target: 3.06 ua/L Limits: 1.68 to 4.44 ug/L Basis: Target Value +/- a fixed percent Robust Mean: 3.2 ug/L Std Dev: 0.5306 ug/L Median: 3.34 ug/L Totals for Matrix/Analyte/Technology:

Labs: Pass: 13 Fail: 0

Total: 13 Totals for Matrix/Analyte: Labs: Pass: 13

3. 2.5 Number of Labs 1.5 2.4 2.7 2.9 3.2 3.5 3.8 **Test Results (End Groups Include Outliers)** Fail: 0 Total: 13

Potable Water Trichloroethene

Potable Water Trichloroethene

Shipment: 397 Matrix: Potable Water

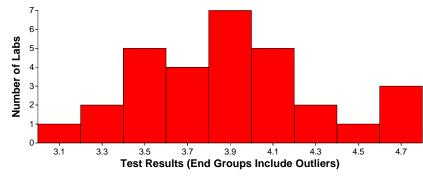
Analyte: Trichloroethene Sample: 9720 Technology: GC-MS Prep Method:

Target: 3.75 ug/L
Limits: 2.25 to 5.25 ug/L
Basis: Fixed Percent (2)
Robust Mean: 3.9 ug/L
Std Dev: 0.8252 ug/L
Median: 3.955 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 29 Fail: 1 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31



Potable Water Trichloroethene

Shipment: 397 Matrix: Potable Water

Analyte: Trichloroethene

Sample: 9720

Technology: GCELCD/PID

Prep Method:

Shipment: 397

Sample: 9734 Technology: COLOR

Prep Method:

Target: 3.74

Analyte: Turbidity

Target: 3.75 ug/L
Limits: 2.25 to 5.25 ug/L
Basis: Fixed Percent (2)
Robust Mean: 4.4 ug/L
Std Dev: 0 ug/L
Median: 4.36 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 30 Fail: 1 Total: 31

Matrix: Potable Water

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Turbidity

Sq 10-10-3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4 Test Results (End Groups Include Outliers)

Std Dev: 0.9329 NTU

Limits: 3.15 to 4.26 NTU Basis: Linear Regression Robust Mean: 3.6 NTU

Median: 3.6 NTU

Totals for Matrix/Analyte/Technology:

NTU

Labs: Pass: 39 Fail: 6 Total: 45

Totals for Matrix/Analyte: Labs: Pass: 39 Fail: 6 Total: 45

Shipment: 397 Matrix: Potable Water

Analyte: Total Xylenes
Sample: 9721
Technology: GC-MS
Prep Method:
Target: 49.2 ug/L
Limits: 39.4 to 59 ug/L
Basis: Fixed Percent (2)
Robust Mean: 50.7 ug/L
Std Dev: 4.0203 ug/L
Median: 49.75 ug/L

Score Date:

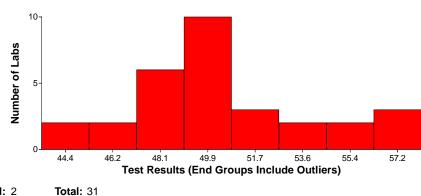
Totals for Matrix/Analyte/Technology:

Labs: Pass: 28 Fail: 2 Total: 30

11/04/2016

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 2

Potable Water Total Xylenes



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Potable Water Total Xylenes

A histogram is not displayed for

limited number of participants.

A histogram is not displayed for

limited number of participants.

Technology: COLOR

due to the

due to the

Technology: GCELCD/PID

Shipment: 397 Matrix: Potable Water

Analyte: Total Xylenes

Sample: 9721

Technology: GCELCD/PID

Prep Method:

Target: 49.2 ug/L Limits: 39.4 to 59 ug/L Basis: Fixed Percent (2) Robust Mean: 43.6 ug/L Std Dev: 0 ug/L

Median: 43.6 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 29

Fail: 2 Total: 31

Potable Water Uranium (Mass)

Shipment: 397 Matrix: Potable Water

Analyte: Uranium (Mass) **Sample:** 9706

Technology: COLOR Prep Method:

Target: 37.6 ug/L Limits: 30.3 to 41.9 ug/L Basis: Linear Regression

Robust Mean: 39 ug/L Std Dev: 0 ug/L Median: 39.02 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1

Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 7

Fail: 0 Total: 7

Potable Water Uranium (Mass)

34.4

Shipment: 397 Matrix: Potable Water Analyte: Uranium (Mass)

Sample: 9706 Technology: ICP-MS Prep Method:

Target: 37.6 ua/L Limits: 30.3 to 41.9 ug/L Basis: Linear Regression Robust Mean: 35.7 ug/L Std Dev: 1.2863 ug/L Median: 35.9 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 6 Fail: 0

Totals for Matrix/Analyte:

Labs: Pass: 7

Fail: 0 Total: 7

Total: 6

Number of Labs

Shipment: 397 Matrix: Potable Water

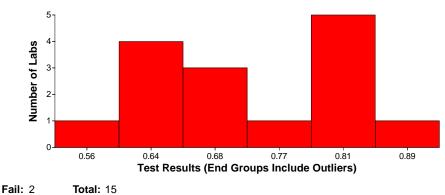
Analyte: UV 254 **Sample:** 9739 Technology: COLOR Prep Method: **Target:** 0.726 cm -1 Limits: 0.591 to 0.858 cm -1 Basis: Linear Regression Robust Mean: 0.7 cm -1 Std Dev: 0.2655 cm -1 Median: 0.7 cm -1

Totals for Matrix/Analyte/Technology:

Labs: Pass: 13 Fail: 2 Total: 15

Totals for Matrix/Analyte: Labs: Pass: 13

Potable Water UV 254 5.



36.1

Test Results (End Groups Include Outliers)

37.8

Potable Water Vanadium, Total

Potable Water Vanadium, Total

Shipment: 397 Matrix: Potable Water

Analyte: Vanadium, Total

Sample: 9706 Technology: ICP-AES

Prep Method:

Target: 275 ug/L **Limits:** 234 **to** 316 ug/L

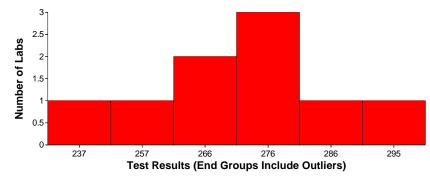
Basis: Target Value +/- a fixed percent

Robust Mean: 270.5 ug/L **Std Dev:** 16.9869 ug/L **Median:** 274 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 19 Fail: 1 Total: 20



Potable Water Vanadium, Total

Shipment: 397 **Matrix:** Potable Water

Analyte: Vanadium, Total

Sample: 9706 Technology: ICP-MS

Prep Method:

Target: 275 ug/L **Limits:** 234 **to** 316 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 284 ug/L Std Dev: 24.4663 ug/L Median: 282 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 10 Fail: 1 Total: 11

Totals for Matrix/Analyte: Labs: Pass: 19

2.51.50.5247
257
266
286
295
305
315

Test Results (End Groups Include Outliers)

Total: 20

Analyte: Vinyl chloride
Sample: 9720
Technology: GC-MS
Prep Method:

Shipment: 397

Target: 42 ug/L **Limits:** 25.2 **to** 58.8 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 43.9 ug/L **Std Dev:** 11.879 ug/L **Median:** 44.025 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 28 Fail: 2 Total: 30

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 2 Total: 31

Matrix: Potable Water

tais for matrix/Ariaryte: Labs. 1 ass. 25 1 an. 2 fotal. 5

Shipment: 397 Matrix: Potable Water

Analyte: Vinyl chloride **Sample:** 9720

Technology: GCELCD/PID

 Prep Method:

 Target:
 42
 ug/L

 Limits:
 25.2
 to 58.8 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 43.3 ug/L Std Dev: 0 ug/L Median: 43.3 ug/L

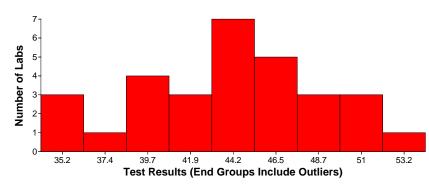
Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 2 Total: 31

Potable Water Vinyl chloride

Fail: 1



Potable Water Vinyl chloride

A histogram is not displayed for Technology: GCELCD/PID due to the limited number of participants.

Potable Water Oxamyl

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Potable Water Oxamyl

21.7

Total: 9

2.5

2

1.5

Number of Labs

Shipment: 397 Matrix: Potable Water

Analyte: Oxamyl **Sample: 9715**

Technology: HPLC-FLUOR

Prep Method:

Target: 24.9 ug/L Limits: 18.7 to 31.1 ug/L

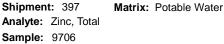
Basis: Target Value +/- a fixed percent

Robust Mean: 26.1 ug/L Std Dev: 2.2793 ug/L Median: 26.1 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte: Labs: Pass: 9 Fail: 0



Technology: FAAS Prep Method: **Target:** 1450

ug/L Limits: 1230 to 1670 ug/L Basis: Target Value +/- a fixed percent

Robust Mean: 1414.5 ug/L Std Dev: 634.0132 ug/L Median: 1420 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 0 Total: 5

Totals for Matrix/Analyte: Labs: Pass: 52 Potable Water Zinc, Total Number of Labs

26.2

Test Results (End Groups Include Outliers)

28.5

29.6

1548

25.1

1413 1467 **Test Results (End Groups Include Outliers)**

Fail: 1 Total: 53

Shipment: 397 Matrix: Potable Water

Analyte: Zinc, Total **Sample: 9706** Technology: ICP-AES

Prep Method:

Target: 1450 ua/L Limits: 1230 to 1670 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 1459.5 ug/L Std Dev: 291.7503 ug/L Median: 1445 ug/L

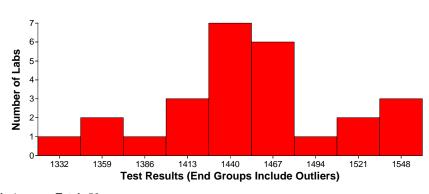
Totals for Matrix/Analyte/Technology:

Labs: Pass: 25 Fail: 1 Total: 26

Totals for Matrix/Analyte: Labs: Pass: 52 Fail: 1 Total: 53

Potable Water Zinc, Total

1359



Shipment: 397 Matrix: Potable Water

Analyte: Zinc, Total **Sample: 9706** Technology: ICP-MS Prep Method: **Target:** 1450 ua/L Limits: 1230 to 1670 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 1424.7 ug/L Std Dev: 307.0562 ug/L Median: 1430 ug/L

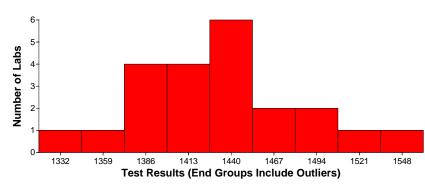
Totals for Matrix/Analyte/Technology:

Labs: Pass: 22 Totals for Matrix/Analyte:

Fail: 0

Total: 22 Labs: Pass: 52

Potable Water Zinc, Total



Fail: 1 Total: 53