Air and Emissions Lead, Total

Shipments: 405  Matrix: Air and Emissions
Analyte: Lead, Total
Sample: 0519A
Technology: FAAS
Prep Method: ME-016-16-001
Target: 0.92 mg/cubic meter
Limits: 0.634 to 1.12 mg/cubic meter
Basis: Linear Regression
Robust Mean: 0.9 mg/cubic meter
Std Dev: 0.0759 mg/cubic meter
Median: 0.91 mg/cubic meter

Totals for Matrix/Analyte/Technology:
Labs: Pass: 23 Fail: 1 Total: 24

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

Air and Emissions Lead, Total

Shipments: 405  Matrix: Air and Emissions
Analyte: Lead, Total
Sample: 0519
Technology: GFAAS
Prep Method:
Target: 4.6 ug/cubic meter
Limits: 3.34 to 5.37 ug/cubic meter
Basis: Linear Regression
Robust Mean: 7.6 ug/cubic meter
Std Dev: 0 ug/cubic meter
Median: 7.62 ug/cubic meter

Totals for Matrix/Analyte/Technology:
Labs: Pass: 4 Fail: 1 Total: 5

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

Air and Emissions Lead, Total

Shipments: 405  Matrix: Air and Emissions
Analyte: Lead, Total
Sample: 0519A
Technology: ICP-AES
Prep Method:
Target: 0.92 mg/cubic meter
Limits: 0.634 to 1.12 mg/cubic meter
Basis: Linear Regression
Robust Mean: 0.9 mg/cubic meter
Std Dev: 0.3626 mg/cubic meter
Median: 0.94 mg/cubic meter

Totals for Matrix/Analyte/Technology:
Labs: Pass: 6 Fail: 1 Total: 7

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Proficiency Test Statistics
Page 1 of 386
Air and Emissions Lead, Total

<table>
<thead>
<tr>
<th>Shipment</th>
<th>405</th>
<th>Matrix: Air and Emissions Lead, Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>0519A</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>ICP-AES</td>
<td></td>
</tr>
<tr>
<td>Prep Method</td>
<td>40 CFR PART 50 APP G</td>
<td></td>
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<td>Target</td>
<td>0.92 mg/cubic meter</td>
<td></td>
</tr>
<tr>
<td>Limits</td>
<td>0.634 to 1.12 mg/cubic meter</td>
<td></td>
</tr>
<tr>
<td>Basis</td>
<td>Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean</td>
<td>0.9 mg/cubic meter</td>
<td></td>
</tr>
<tr>
<td>Std Dev</td>
<td>0 mg/cubic meter</td>
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<tr>
<td>Median</td>
<td>0.86 mg/cubic meter</td>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1, Fail: 0, Total: 1

Air and Emissions Lead, Total

<table>
<thead>
<tr>
<th>Shipment</th>
<th>405</th>
<th>Matrix: Air and Emissions Lead, Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>0519</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>ICP-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>4.6 ug/cubic meter</td>
<td></td>
</tr>
<tr>
<td>Limits</td>
<td>3.34 to 5.37 ug/cubic meter</td>
<td></td>
</tr>
<tr>
<td>Basis</td>
<td>Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean</td>
<td>4 ug/cubic meter</td>
<td></td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.3945 ug/cubic meter</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>4.035 ug/cubic meter</td>
<td></td>
</tr>
</tbody>
</table>

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

Non Potable Water 1,1,1,2-Tetrachloroethane

<table>
<thead>
<tr>
<th>Shipment</th>
<th>405</th>
<th>Matrix: Non Potable Water 1,1,1,2-Tetrachloroethane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>0513</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method</td>
<td>EPA 5030C</td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>130 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits</td>
<td>84.5 to 176 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis</td>
<td>Target Value +/- a fixed percent</td>
<td></td>
</tr>
<tr>
<td>Robust Mean</td>
<td>121.8 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev</td>
<td>6.3443 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>122 ug/L</td>
<td></td>
</tr>
</tbody>
</table>

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

Non Potable Water 1,1,1,2-Tetrachloroethane

Score Date: 09/01/2017

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Non Potable Water 1,1,1-Trichloroethane

Shipments: 405
Matrix: Non Potable Water
Sample: 0513
Technology: GC-ELCD
Prep Method:
Target: 47.1 ug/L
Limits: 28.3 to 65.9 ug/L

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

Fail: 0
Labs: Pass: 35
Total: 35

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1
Fail: 0
Total: 1

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

Non Potable Water 1,1,2,2-Tetrachloroethane

Shipments: 405
Matrix: Non Potable Water
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 47.1 ug/L
Limits: 28.3 to 65.9 ug/L

Fail: 0
Labs: Pass: 35
Total: 35

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15
Fail: 0
Total: 15

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

Non Potable Water 1,1,1-Trichloroethane

Shipments: 405
Matrix: Non Potable Water
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 47.1 ug/L
Limits: 28.3 to 65.9 ug/L

Fail: 0
Labs: Pass: 35
Total: 35

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15
Fail: 0
Total: 15

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

Non Potable Water 1,1,2,2-Tetrachloroethane

Shipments: 405
Matrix: Non Potable Water
Sample: 0513
Technology: GC-ELCD
Prep Method:
Target: 22.6 ug/L
Limits: 14.7 to 30.5 ug/L

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

Fail: 0
Labs: Pass: 35
Total: 35

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1
Fail: 0
Total: 1

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

Non Potable Water 1,1,2,2-Tetrachloroethane

Score Date: 09/01/2017
Proficiency Test Statistics
Non Potable Water 1,1,2,2-Tetrachloroethane

Test Results (End Groups Include Outliers)

Number of Labs

19.8
20.7
21.5
22.3
24
25.6

Robust Mean: 22.5 ug/L
Std Dev: 1.5968 ug/L
Median: 22.2 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15 Fail: 0 Total: 15

Totals for Matrix/Analyte:
Labs: Pass: 35 Fail: 0 Total: 35

Non Potable Water 1,1,2-Trichloroethane

Test Results (End Groups Include Outliers)

Number of Labs

18.2
19.8
20.7
21.5
22.3
23.1
24
24.8
25.6

Robust Mean: 34.8 ug/L
Std Dev: 0 ug/L
Median: 34.8 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 35 Fail: 0 Total: 35

Non Potable Water 1,1,2-Trichloroethane

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

Non Potable Water 1,1,2-Trichloroethane

Test Results (End Groups Include Outliers)

Number of Labs

30.9
32.3
33.7
35.1
36.5
37.9
42

Robust Mean: 35.1 ug/L
Std Dev: 2.4678 ug/L
Median: 34.9 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15 Fail: 0 Total: 15

Totals for Matrix/Analyte:
Labs: Pass: 35 Fail: 0 Total: 35
Non Potable Water 1,1,2-Trichloroethane

Test Results (End Groups Include Outliers)

- Number of Labs
  - 26.8
  - 28.2
  - 30.9
  - 32.3
  - 33.7
  - 35.1
  - 36.5
  - 37.9
  - 39.3
  - 42

- Labs:  Pass: 35  Fail: 0  Total: 35

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

Non Potable Water 1,1-Dichloroethane

- Number of Labs
  - 94
  - 105
  - 110
  - 115
  - 120
  - 126
  - 131
  - 136

- Labs:  Pass: 35  Fail: 0  Total: 35

- Laboratories

Score Date: 09/01/2017
Non Potable Water 1,1-Dichloroethene

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,1-Dichloroethene
Sample: 0513
Technology: GC-ELCD
Prep Method:
Target: 104 ug/L
Limits: 59.7 to 150 ug/L
Basis: Linear Regression
Robust Mean: 107 ug/L
  Std Dev: 0 ug/L
  Median: 107 ug/L
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 1  Fail: 0  Total: 1
Totals for Matrix/Analyte:
  Labs: Pass: 33  Fail: 2  Total: 35

Non Potable Water 1,1-Dichloroethene

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,1-Dichloroethene
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 104 ug/L
Limits: 59.7 to 150 ug/L
Basis: Linear Regression
Robust Mean: 107.7 ug/L
  Std Dev: 29.4435 ug/L
  Median: 107 ug/L
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 15  Fail: 0  Total: 15
Totals for Matrix/Analyte:
  Labs: Pass: 33  Fail: 2  Total: 35

Non Potable Water 1,1-Dichloroethene

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,1-Dichloroethene
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 104 ug/L
Limits: 59.7 to 150 ug/L
Basis: Linear Regression
Robust Mean: 107.7 ug/L
  Std Dev: 29.4435 ug/L
  Median: 107 ug/L
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 17  Fail: 2  Total: 19
Totals for Matrix/Analyte:
  Labs: Pass: 33  Fail: 2  Total: 35

Non Potable Water 1,2,3-Trichloropropane

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,2,3-Trichloropropane
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 56.6 ug/L
Limits: 26.4 to 90.7 ug/L
Basis: Linear Regression
Robust Mean: 34.8462 ug/L
  Std Dev: 2.603 ug/L
  Median: 34.8 ug/L
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 4  Fail: 0  Total: 4
Totals for Matrix/Analyte:
  Labs: Pass: 23  Fail: 0  Total: 23

Non Potable Water 1,2,3-Trichloropropane

Score Date: 09/01/2017
Proficiency Test Statistics
Non Potable Water 1,2,3-Trichloropropane

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Lab Number</th>
<th>45.5</th>
<th>49.4</th>
<th>51.4</th>
<th>53.4</th>
<th>55.3</th>
<th>57.3</th>
<th>59.3</th>
<th>63.2</th>
<th>65.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>45.5</td>
<td>49.4</td>
<td>51.4</td>
<td>53.4</td>
<td>55.3</td>
<td>57.3</td>
<td>59.3</td>
<td>63.2</td>
<td>65.2</td>
</tr>
</tbody>
</table>

**Number of Labs**

- **45.5**: 1 lab
- **49.4**: 1 lab
- **51.4**: 1 lab
- **53.4**: 1 lab
- **55.3**: 1 lab
- **57.3**: 1 lab
- **59.3**: 1 lab
- **63.2**: 1 lab
- **65.2**: 1 lab

**Matrix:** 405

**Fail:** 0

**Labs:** Pass: 23

**Total:** 23

**Robust Mean:** 57.4 ug/L

**Std Dev:** 13.8333 ug/L

**Median:** 57.7 ug/L

**Basis:** Linear Regression

**Analyte:** 1,2,3-Trichloropropane

**Sample:**

**Limits:** 26.4 to 90.7 ug/L

**Prep Method:**

**Technology:** GC-MS

**Prep Method:** EPA 5030C

**Target:** 59.8 ug/L

**Limit:** 26.4 to 90.7 ug/L

**Basis:** Linear Regression

**Robust Mean:** 57.4 ug/L

**Std Dev:** 13.8333 ug/L

**Median:** 57.7 ug/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 19
- **Fail:** 0
- **Total:** 19

**Totals for Matrix/Analyte:**

- **Labs:** Pass: 23
- **Fail:** 0
- **Total:** 23

---

Non Potable Water 1,2,4-Trichlorobenzene

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Lab Number</th>
<th>16.3</th>
<th>39.5</th>
<th>47.3</th>
<th>55</th>
<th>62.8</th>
<th>70.5</th>
<th>78.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>16.3</td>
<td>39.5</td>
<td>47.3</td>
<td>55</td>
<td>62.8</td>
<td>70.5</td>
<td>78.3</td>
</tr>
</tbody>
</table>

**Number of Labs**

- **16.3**: 0 labs
- **39.5**: 1 lab
- **47.3**: 1 lab
- **55**: 1 lab
- **62.8**: 1 lab
- **70.5**: 1 lab
- **78.3**: 1 lab

**Matrix:** 405

**Fail:** 0

**Labs:** Pass: 32

**Total:** 32

**Robust Mean:** 62.2 ug/L

**Std Dev:** 2.6163 ug/L

**Median:** 62.15 ug/L

**Basis:** Linear Regression

**Analyte:** 1,2,4-Trichlorobenzene

**Sample:**

**Limits:** 14.7 to 99.9 ug/L

**Target:** 83 ug/L

**Technology:** GC-ECD

**Prep Method:** EPA 5030C

**Target:** 83 ug/L

**Limit:** 14.7 to 99.9 ug/L

**Basis:** Linear Regression

**Robust Mean:** 62.2 ug/L

**Std Dev:** 2.6163 ug/L

**Median:** 62.15 ug/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 2
- **Fail:** 0
- **Total:** 2

**Totals for Matrix/Analyte:**

- **Labs:** Pass: 32
- **Fail:** 0
- **Total:** 32

---

Non Potable Water 1,2,4-Trichlorobenzene

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Lab Number</th>
<th>16.3</th>
<th>39.5</th>
<th>47.3</th>
<th>55</th>
<th>62.8</th>
<th>70.5</th>
<th>78.3</th>
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<tr>
<td>Count</td>
<td>16.3</td>
<td>39.5</td>
<td>47.3</td>
<td>55</td>
<td>62.8</td>
<td>70.5</td>
<td>78.3</td>
</tr>
</tbody>
</table>

**Number of Labs**

- **16.3**: 0 labs
- **39.5**: 1 lab
- **47.3**: 1 lab
- **55**: 1 lab
- **62.8**: 1 lab
- **70.5**: 1 lab
- **78.3**: 1 lab

**Matrix:** 405

**Fail:** 0

**Labs:** Pass: 32

**Total:** 32

**Robust Mean:** 53.3 ug/L

**Std Dev:** 14.4777 ug/L

**Median:** 55.7 ug/L

**Basis:** Linear Regression

**Analyte:** 1,2,4-Trichlorobenzene

**Sample:**

**Limits:** 14.7 to 99.9 ug/L

**Target:** 83 ug/L

**Technology:** GC-MS

**Prep Method:** EPA 3510C

**Target:** 83 ug/L

**Limit:** 14.7 to 99.9 ug/L

**Basis:** Linear Regression

**Robust Mean:** 53.3 ug/L

**Std Dev:** 14.4777 ug/L

**Median:** 55.7 ug/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 14
- **Fail:** 0
- **Total:** 14

**Totals for Matrix/Analyte:**

- **Labs:** Pass: 32
- **Fail:** 0
- **Total:** 32

---

Non Potable Water 1,2,4-Trichlorobenzene

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Lab Number</th>
<th>16.3</th>
<th>39.5</th>
<th>47.3</th>
<th>55</th>
<th>62.8</th>
<th>70.5</th>
<th>78.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>16.3</td>
<td>39.5</td>
<td>47.3</td>
<td>55</td>
<td>62.8</td>
<td>70.5</td>
<td>78.3</td>
</tr>
</tbody>
</table>

**Number of Labs**

- **16.3**: 0 labs
- **39.5**: 1 lab
- **47.3**: 1 lab
- **55**: 1 lab
- **62.8**: 1 lab
- **70.5**: 1 lab
- **78.3**: 1 lab

**Matrix:** 405

**Fail:** 0

**Labs:** Pass: 32

**Total:** 32

**Robust Mean:** 53.3 ug/L

**Std Dev:** 14.4777 ug/L

**Median:** 55.7 ug/L

**Basis:** Linear Regression

**Analyte:** 1,2,4-Trichlorobenzene

**Sample:**

**Limits:** 14.7 to 99.9 ug/L

**Target:** 83 ug/L

**Technology:** GC-MS

**Prep Method:** EPA 3510C

**Target:** 83 ug/L

**Limit:** 14.7 to 99.9 ug/L

**Basis:** Linear Regression

**Robust Mean:** 53.3 ug/L

**Std Dev:** 14.4777 ug/L

**Median:** 55.7 ug/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 14
- **Fail:** 0
- **Total:** 14

**Totals for Matrix/Analyte:**

- **Labs:** Pass: 32
- **Fail:** 0
- **Total:** 32

---

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water 1,2,4-Trichlorobenzene

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,2,4-Trichlorobenzene
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3520C
Target: 83 ug/L
Limits: 14.7 to 99.9 ug/L
Basis: Linear Regression
Robust Mean: 36.3 ug/L
Std Dev: 0 ug/L
Median: 36.3 ug/L

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

Non Potable Water 1,2,4-Trimethylbenzene

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,2,4-Trimethylbenzene
Sample: 0513
Technology: GC-MS
Prep Method: EPA 5030C
Target: 16.4 ug/L
Limits: 10.7 to 22.1 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 14.7 ug/L
Std Dev: 1.2356 ug/L
Median: 14.7 ug/L

Non Potable Water 1,2,4-Trimethylbenzene

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,2,4-Trimethylbenzene
Sample: 0513
Technology: GC-MS
Prep Method: EPA 5030C
Target: 16.4 ug/L
Limits: 10.7 to 22.1 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 14.8 ug/L
Std Dev: 1.7596 ug/L
Median: 15 ug/L

Non Potable Water 1,2-Dibromo-3-chloropropane

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,2-Dibromo-3-chloropropane
Sample: 0513
Technology: GC-MS
Prep Method: EPA 3520C
Target: 42.6 ug/L
Limits: 25.6 to 59.6 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 39.6 ug/L
Std Dev: 3.2066 ug/L
Median: 39.2 ug/L

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Non Potable Water 1,2-Dibromo-3-chloropropane

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Proficiency Test Statistics

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### Non Potable Water 1,2-Dichlorobenzene

**Shipments:**
- **405**
  - **Matrix:** Non Potable Water
  - **Analyte:** 1,2-Dichlorobenzene
  - **Sample:** 0513
  - **Technology:** GC-ELCD
  - **Prep Method:**
    - **Target:** 112 ug/L
    - **Limits:** 78.4 to 146 ug/L
    - **Basis:** Target Value +/- a fixed percent
    - **Robust Mean:** 104 ug/L
      - **Std Dev:** 0 ug/L
      - **Median:** 104 ug/L

**Test Results (End Groups Include Outliers):**
- **Number of Labs:**
  - 97
  - 101
  - 106
  - 110
  - 114
  - 119
  - 123
- **Fail:** 0
- **Pass:** 40
- **Total:** 40

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

### Non Potable Water 1,2-Dichlorobenzene

**Shipments:**
- **405**
  - **Matrix:** Non Potable Water
  - **Analyte:** 1,2-Dichlorobenzene
  - **Sample:** 0513
  - **Technology:** GC-MS
  - **Prep Method:**
    - **Target:** 112 ug/L
    - **Limits:** 78.4 to 146 ug/L
    - **Basis:** Target Value +/- a fixed percent
    - **Robust Mean:** 110.1 ug/L
      - **Std Dev:** 6.2189 ug/L
      - **Median:** 110 ug/L

**Test Results (End Groups Include Outliers):**
- **Number of Labs:**
  - 88
  - 92
  - 97
  - 101
  - 106
  - 110
  - 114
  - 119
  - 123
- **Fail:** 0
- **Pass:** 40
- **Total:** 40

### Non Potable Water 1,2-Dichlorobenzene

**Shipments:**
- **405**
  - **Matrix:** Non Potable Water
  - **Analyte:** 1,2-Dichlorobenzene
  - **Sample:** 0513
  - **Technology:** GC-MS
  - **Prep Method:**
    - **Target:** 112 ug/L
    - **Limits:** 78.4 to 146 ug/L
    - **Basis:** Target Value +/- a fixed percent
    - **Robust Mean:** 108.2 ug/L
      - **Std Dev:** 12.0018 ug/L
      - **Median:** 113 ug/L

**Test Results (End Groups Include Outliers):**
- **Number of Labs:**
  - 88
  - 92
  - 97
  - 101
  - 106
  - 110
  - 114
  - 119
  - 123
- **Fail:** 0
- **Pass:** 40
- **Total:** 40

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

### Non Potable Water 1,2-Dichlorobenzene

**Shipments:**
- **405**
  - **Matrix:** Non Potable Water
  - **Analyte:** 1,2-Dichlorobenzene
  - **Sample:** 0513
  - **Technology:** GC-PID
  - **Prep Method:**
    - **Target:** 112 ug/L
    - **Limits:** 78.4 to 146 ug/L
    - **Basis:** Target Value +/- a fixed percent
    - **Robust Mean:** 105.5 ug/L
      - **Std Dev:** 2.1213 ug/L
      - **Median:** 105.5 ug/L

**Test Results (End Groups Include Outliers):**
- **Number of Labs:**
  - 88
  - 92
  - 97
  - 101
  - 106
  - 110
  - 114
  - 119
  - 123
- **Fail:** 0
- **Pass:** 40
- **Total:** 40

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 10 of 386
Non Potable Water 1,2-Dichloropropane

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,2-Dichloropropane  
Sample: 0513  
Technology: GC-ELCD  
Prep Method:  
Target: 77.5 ug/L  
Limits: 54.3 to 101 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 59.2 ug/L  
Std Dev: 0 ug/L  
Median: 59.2 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 35  
Fail: 0  
Total: 35

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

Non Potable Water 1,2-Dibromoethane

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,2-Dibromoethane  
Sample: 0513  
Technology: GC-MS  
Prep Method:  
Target: 112 ug/L  
Limits: 72.8 to 151 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 109.3 ug/L  
Std Dev: 5,909 ug/L  
Median: 110.5 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 24  
Fail: 0  
Total: 24
Non Potable Water 1,2-Dibromoethane

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,2-Dibromoethane  
Sample: 0513  
Technology: GC-MS  
Prep Method: EPA 5030C  
Target: 112 ug/L  
Limits: 72.8 to 151 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 109.7 ug/L  
Std Dev: 14.4052 ug/L  
Median: 108.5 ug/L  

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

Non Potable Water 1,4-Dichlorobenzene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,4-Dichlorobenzene  
Sample: 0513  
Technology: GC-ELCD  
Prep Method:  
Target: 72 ug/L  
Limits: 50.4 to 93.6 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 64.8 ug/L  
Std Dev: 0 ug/L  
Median: 64.8 ug/L  

Non Potable Water 1,4-Dichlorobenzene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,4-Dichlorobenzene  
Sample: 0513  
Technology: GC-MS  
Prep Method:  
Target: 72 ug/L  
Limits: 50.4 to 93.6 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 69 ug/L  
Std Dev: 4.4618 ug/L  
Median: 67.4 ug/L  

Non Potable Water 1,4-Dichlorobenzene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,4-Dichlorobenzene  
Sample: 0513  
Technology: GC-MS  
Prep Method: EPA 5030C  
Target: 72 ug/L  
Limits: 50.4 to 93.6 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 68.4 ug/L  
Std Dev: 16.5936 ug/L  
Median: 67.9 ug/L  

Non Potable Water 1,4-Dichlorobenzene

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Non Potable Water 1,4-Dichlorobenzene

Shipments: 405  Matrix: Non Potable Water
Analyte: 1,4-Dichlorobenzene
Sample: 0513
Technology: GC-PID
Prep Method:
Target: 72 ug/L
Limits: 50.4 to 93.6 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 66.6 ug/L
Std Dev: 2.5456 ug/L
Median: 66.6 ug/L

Totals for Matrix/Analyte/Technology:
   Labs: Pass: 2  Fail: 0  Total: 2

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

Non Potable Water 2,4,5-T

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,4,5-T
Sample: 0518
Technology: GC-ECD
Prep Method:
Target: 8.81 ug/L
Limits: 2.01 to 12.6 ug/L
Basis: Linear Regression
Robust Mean: 6.7 ug/L
Std Dev: 2.0568 ug/L
Median: 6.825 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

Non Potable Water 2,4,5-T

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,4,5-T
Sample: 0518
Technology: HPLC-TSMS
Prep Method: EPA 3535A
Target: 8.81 ug/L
Limits: 2.01 to 12.6 ug/L
Basis: Linear Regression
Robust Mean: 10.1 ug/L
Std Dev: 0 ug/L
Median: 10.1 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: HPLC-TSMS due to the limited number of participants.

Non Potable Water 2,4,5-Trichlorophenol

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,4,5-Trichlorophenol
Sample: 0535
Technology: GC-MS
Prep Method:
Target: 182 ug/L
Limits: 66.5 to 221 ug/L
Basis: Linear Regression
Robust Mean: 148.8 ug/L
Std Dev: 28.326 ug/L
Median: 155 ug/L

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

Totals for Matrix/Analyte: Labs: Pass: 27  Fail: 0  Total: 27

Non Potable Water 2,4,5-Trichlorophenol

Score Date: 09/01/2017  Proficiency Test Statistics  Page 13 of 386
Non Potable Water 2,4,5-Trichlorophenol

- **Matrix:** Non Potable Water
- **Analyte:** 2,4,5-Trichlorophenol
- **Sample:** 0535
- **Technology:** GC-MS
- **Prep Method:** EPA 3510C
- **Target:** 182 ug/L
- **Limits:** 66.5 to 221 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 125.1 ug/L
  - **Std Dev:** 23.8493 ug/L
  - **Median:** 124 ug/L
- **Number of Labs:**
  - Total: 27
  - Pass: 27
  - Fail: 0
- **Shipment:**
  - Robust Mean: 125.1 ug/L
  - Std Dev: 23.8493 ug/L
  - Median: 124 ug/L
- **Limits:**
  - 66.5 to 221 ug/L
- **Target:** 182 ug/L
- **Prep Method:** EPA 3510C

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 74, Fail: 0, Total: 74

---

Non Potable Water 2,4,5-Trichlorophenol

- **Matrix:** Non Potable Water
- **Analyte:** 2,4,5-Trichlorophenol
- **Sample:** 0535
- **Technology:** GC-MS
- **Prep Method:** EPA 3520C
- **Target:** 182 ug/L
- **Limits:** 66.5 to 221 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 140 ug/L
  - **Std Dev:** 9.8995 ug/L
  - **Median:** 140 ug/L
- **Number of Labs:**
  - Total: 31
  - Pass: 31
  - Fail: 0
- **Shipment:**
  - Robust Mean: 140 ug/L
  - Std Dev: 9.8995 ug/L
  - Median: 140 ug/L
- **Limits:**
  - 66.5 to 221 ug/L
- **Target:** 182 ug/L
- **Prep Method:** EPA 3520C

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2, Fail: 0, Total: 2

---

Non Potable Water 2,4,6-Trichlorophenol

- **Matrix:** Non Potable Water
- **Analyte:** 2,4,6-Trichlorophenol
- **Sample:** 0535
- **Technology:** GC-FID
- **Prep Method:** EPA 3520C
- **Target:** 120 ug/L
- **Limits:** 44.7 to 146 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 78.7 ug/L
  - **Std Dev:** 0 ug/L
  - **Median:** 78.7 ug/L
- **Number of Labs:**
  - Total: 1
  - Pass: 1
  - Fail: 0
- **Shipment:**
  - Robust Mean: 78.7 ug/L
  - Std Dev: 0 ug/L
  - Median: 78.7 ug/L
- **Limits:**
  - 44.7 to 146 ug/L
- **Target:** 120 ug/L
- **Prep Method:** EPA 3520C

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 31, Fail: 0, Total: 31

---

Non Potable Water 2,4,6-Trichlorophenol

- **Matrix:** Non Potable Water
- **Analyte:** 2,4,6-Trichlorophenol
- **Sample:** 0535
- **Technology:** GC-MS
- **Prep Method:** EPA 3520C
- **Target:** 120 ug/L
- **Limits:** 44.7 to 146 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 90.3 ug/L
  - **Std Dev:** 14.2214 ug/L
  - **Median:** 92.1 ug/L
- **Number of Labs:**
  - Total: 15
  - Pass: 15
  - Fail: 0
- **Shipment:**
  - Robust Mean: 90.3 ug/L
  - Std Dev: 14.2214 ug/L
  - Median: 92.1 ug/L
- **Limits:**
  - 44.7 to 146 ug/L
- **Target:** 120 ug/L
- **Prep Method:** EPA 3520C

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 31, Fail: 0, Total: 31
Non Potable Water 2,4-Dichlorophenol

Ship: 405  Matrix: Non Potable Water
Analyte: 2,4-Dichlorophenol
Sample: 0535
Technology: GC-MS
Prep Method: EPA 3510C
Target: 53.3 ug/L
Limits: 19 to 65.2 ug/L
Basis: Linear Regression
Robust Mean: 36.3 ug/L
Std Dev: 7.9051 ug/L
Median: 37.6 ug/L

Test Results (End Groups Include Outliers)

Number of Labs

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Fail: 0  Labs: 31  Pass: 31  Total: 31

Totals for Matrix/Analyte/Technology:
 Labs: 14  Pass: 14  Total: 14

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

Non Potable Water 2,4-D

Ship: 405  Matrix: Non Potable Water
Analyte: 2,4-D
Sample: 0535
Technology: GC-ECD
Prep Method: EPA 3520C
Target: 3.2 ug/L
Limits: 0.32 to 5.14 ug/L
Basis: Manual Limits
Robust Mean: 2.5 ug/L
Std Dev: 0.7643 ug/L
Median: 2.405 ug/L

Test Results (End Groups Include Outliers)

Number of Labs

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Fail: 0  Labs: 20  Pass: 20  Total: 20

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

Non Potable Water 2,4-D

Ship: 405  Matrix: Non Potable Water
Analyte: 2,4-D
Sample: 0518
Technology: HPLC-TSMS
Prep Method:
Target: 3.2 ug/L
Limits: 0.32 to 5.14 ug/L
Basis: Manual Limits
Robust Mean: 4.2 ug/L
Std Dev: 0 ug/L
Median: 4.2 ug/L

Test Results (End Groups Include Outliers)

Number of Labs

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<tr>
<th>Limits</th>
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Fail: 0  Labs: 20  Pass: 20  Total: 20

Totals for Matrix/Analyte/Technology:
 Labs: 1  Pass: 1  Total: 1

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

Score Date: 09/08/2017  Proficiency Test Statistics  Page 16 of 386
### Non Potable Water 2,4-D

**Shipment:** 405  |  **Matrix:** Non Potable Water  
**Analyte:** 2,4-D  
**Sample:** 0518  
**Technology:** HPLC-TSMS  
**Prep Method:** EPA 3535A  
**Target:** 3.2 ug/L  
**Limits:** 0.32 to 5.14 ug/L  
**Basis:** Manual Limits  
**Robust Mean:** 3 ug/L  
**Std Dev:** 2.98 ug/L  
**Median:** 0 ug/L  
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**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** 2,4-Dimethylphenol  
**Sample:** 0535  
**Technology:** GC-FID  
**Prep Method:**  
**Target:** 59.7 ug/L  
**Limits:** 17.2 to 75.2 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 44.1 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 44.1 ug/L  
**Totals for Matrix/Analyte/Technology:**  
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**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** 2,4-Dimethylphenol  
**Sample:** 0535  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 59.7 ug/L  
**Limits:** 17.2 to 75.2 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 40.4 ug/L  
**Std Dev:** 11.3946 ug/L  
**Median:** 43.7 ug/L  
**Totals for Matrix/Analyte/Technology:**  
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**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** 2,4-Dimethylphenol  
**Sample:** 0535  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 59.7 ug/L  
**Limits:** 17.2 to 75.2 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 40.4 ug/L  
**Std Dev:** 8.9934 ug/L  
**Median:** 42.2 ug/L  
**Totals for Matrix/Analyte/Technology:**  
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**Score Date:** 09/01/2017  
Proficiency Test Statistics  
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Non Potable Water 2,4-Dimethylphenol

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water 2,4-Dinitrotoluene

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,4-Dinitrotoluene
Sample: 0536
Technology: HPLC-UV
Prep Method:
Target: 189 ug/L
Limits: 83.4 to 228 ug/L
Basis: Linear Regression
Robust Mean: 167 ug/L
Std Dev: 0 ug/L
Median: 167 ug/L

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

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

Non Potable Water 2,6-Dichlorophenol

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,6-Dichlorophenol
Sample: 0535
Technology: GC-MS
Prep Method:
Target: 105 ug/L
Limits: 33.3 to 132 ug/L
Basis: Linear Regression
Robust Mean: 67.7 ug/L
Std Dev: 19.9158 ug/L
Median: 71.3 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 6  Fail: 0  Total: 6
Labs: Pass: 8  Fail: 0  Total: 8

Non Potable Water 2,6-Dichlorophenol

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,6-Dichlorophenol
Sample: 0535
Technology: GC-MS
Prep Method:
Target: 105 ug/L
Limits: 33.3 to 132 ug/L
Basis: Linear Regression
Robust Mean: 74.2 ug/L
Std Dev: 9.051 ug/L
Median: 74.2 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2
Labs: Pass: 8  Fail: 0  Total: 8

Non Potable Water 2-Chloronaphthalene

Shipments: 405  Matrix: Non Potable Water
Analyte: 2-Chloronaphthalene
Sample: 0536
Technology: GC-ECD
Prep Method:
Target: 37 ug/L
Limits: 10.8 to 46.7 ug/L
Basis: Linear Regression
Robust Mean: 37.5 ug/L
Std Dev: 0 ug/L
Median: 37.5 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1
Labs: Pass: 32  Fail: 0  Total: 32

Non Potable Water 2-Chloronaphthalene

Score Date: 09/01/2017
Non Potable Water 2-Chloronaphthalene

**Analyte:** 2-Chloronaphthalene

**Sample:** 0536

**Technology:** GC-MS

**Prep Method:**
- **Target:** 37 ug/L
- **Limits:** 10.8 to 46.7 ug/L
- **Basis:** Linear Regression

**Robust Mean:** 27.0 ug/L

**Std Dev:** 7.3418 ug/L

**Median:** 25.3 ug/L

**Number of Labs:**
- Total: 32

**Fail:** 0

**Pass:** 32

**Shipment:** 405

**Matrix:** Non Potable Water

**Limits:** 10.8 to 46.7 ug/L

**Target:** 37 ug/L

**Basis:** Linear Regression

**Robust Mean:** 27.0 ug/L

**Std Dev:** 7.3418 ug/L

**Median:** 25.3 ug/L

**Number of Labs:**
- Total: 32

**Fail:** 0

**Pass:** 32

**Shipment:** 405

**Matrix:** Non Potable Water

**Limits:** 10.8 to 46.7 ug/L

**Target:** 37 ug/L

**Basis:** Linear Regression

**Robust Mean:** 27.0 ug/L

**Std Dev:** 7.3418 ug/L

**Median:** 25.3 ug/L

**Number of Labs:**
- Total: 32

**Fail:** 0

**Pass:** 32

**Shipment:** 405

**Matrix:** Non Potable Water

**Limits:** 10.8 to 46.7 ug/L

**Target:** 37 ug/L

**Basis:** Linear Regression

**Robust Mean:** 27.0 ug/L

**Std Dev:** 7.3418 ug/L

**Median:** 25.3 ug/L

**Number of Labs:**
- Total: 32

**Fail:** 0

**Pass:** 32

**Shipment:** 405

**Matrix:** Non Potable Water

**Limits:** 55.9 to 237 ug/L

**Target:** 199 ug/L

**Basis:** Linear Regression

**Robust Mean:** 132 ug/L

**Std Dev:** 0 ug/L

**Median:** 132 ug/L

**Number of Labs:**
- Total: 1

**Fail:** 0

**Pass:** 1

**Shipment:** 405

**Matrix:** Non Potable Water

**Limits:** 55.9 to 237 ug/L

**Target:** 199 ug/L

**Basis:** Linear Regression

**Robust Mean:** 132 ug/L

**Std Dev:** 0 ug/L

**Median:** 132 ug/L

**Number of Labs:**
- Total: 1

**Fail:** 0

**Pass:** 1

**Shipment:** 405

**Matrix:** Non Potable Water

**Limits:** 55.9 to 237 ug/L

**Target:** 199 ug/L

**Basis:** Linear Regression

**Robust Mean:** 132 ug/L

**Std Dev:** 0 ug/L

**Median:** 132 ug/L

**Number of Labs:**
- Total: 1

**Fail:** 0

**Pass:** 1

**Score Date:** 09/01/2017

**Proficiency Test Statistics**
Non Potable Water 2-Chlorophenol

Shipments and Matrices:
- **Non Potable Water**

Analytes:
- 2-Chlorophenol

Samples:
- 0535

Technologies:
- GC-MS

Prep Methods:
- EPA 3510C
  - Target: 199 ug/L
  - Limits: 55.9 to 237 ug/L
  - Basis: Linear Regression
  - Robust Mean: 128.2 ug/L
  - Std Dev: 30.2751 ug/L
  - Median: 129.5 ug/L

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

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

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

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 15
- Fail: 0
- Total: 15

Non Potable Water 2-Methyl-4,6-dinitrophenol

Shipments and Matrices:
- **Non Potable Water**

Analytes:
- 2-Methyl-4,6-dinitrophenol

Samples:
- 0535

Technologies:
- GC-FID

Prep Methods:
- EPA 3520C
  - Target: 199 ug/L
  - Limits: 55.9 to 237 ug/L
  - Basis: Linear Regression
  - Robust Mean: 87.3 ug/L
  - Std Dev: 0 ug/L
  - Median: 87.3 ug/L

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

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1
- Fail: 0
- Total: 1

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

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 29
- Fail: 1
- Total: 30

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water 2-Methyl-4,6-dinitrophenol

Test Results (End Groups Include Outliers)

Number of Labs

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<tbody>
<tr>
<td>32.8</td>
<td>36.5</td>
<td>40.3</td>
<td>47.9</td>
<td>51.7</td>
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Totals for Matrix/Analyte/Technology:
Labs: Pass: 14  Fail: 0  Total: 14

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

Non Potable Water 2-Methylphenol

Test Results (End Groups Include Outliers)

Number of Labs

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<tr>
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<tbody>
<tr>
<td>63.9</td>
<td>75</td>
<td>86.1</td>
<td>97.2</td>
<td>119.4</td>
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Totals for Matrix/Analyte/Technology:
Labs: Pass: 7  Fail: 0  Total: 7

Totals for Matrix/Analyte:
Labs: Pass: 23  Fail: 1  Total: 24
Non Potable Water 2-Methylphenol

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
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</thead>
<tbody>
<tr>
<td>Analyte: 2-Methylphenol</td>
<td></td>
</tr>
<tr>
<td>Sample: 0535</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3510C</td>
<td></td>
</tr>
<tr>
<td>Target: 148 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 33.6 to 173 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 87.1 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 29.2381 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 80.4 ug/L</td>
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</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology:</td>
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<tr>
<td>Labs: Pass: 19.5 Fail: 63.9 Total: 86.1</td>
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</tr>
<tr>
<td>Labs: Pass: 97.2 Fail: 130.5 Total: 227.7</td>
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</tr>
</tbody>
</table>

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

Non Potable Water 4,4'-DDE

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<tr>
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<th>Matrix: Non Potable Water</th>
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</thead>
<tbody>
<tr>
<td>Analyte: 4,4'-DDE</td>
<td></td>
</tr>
<tr>
<td>Sample: 0517</td>
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</tr>
<tr>
<td>Technology: GC-ECD</td>
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<tr>
<td>Prep Method: EPA 3520C</td>
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</tr>
<tr>
<td>Target: 1.34 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 0.541 to 1.96 ug/L</td>
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<tr>
<td>Basis: Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 1.2 ug/L</td>
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<tr>
<td>Std Dev: 0.2076 ug/L</td>
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<tr>
<td>Median: 1.18 ug/L</td>
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<td>Totals for Matrix/Analyte/Technology:</td>
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<td>Labs: Pass: 0 Fail: 1 Total: 1</td>
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Non Potable Water 4,4'-DDE

<table>
<thead>
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<th>Matrix: Non Potable Water</th>
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<tbody>
<tr>
<td>Analyte: 4,4'-DDE</td>
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<tr>
<td>Sample: 0517</td>
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</tr>
<tr>
<td>Technology: GC-ECD</td>
<td></td>
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<tr>
<td>Prep Method: EPA 3510C</td>
<td></td>
</tr>
<tr>
<td>Target: 1.34 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 0.541 to 1.96 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 1.1 ug/L</td>
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</tr>
<tr>
<td>Std Dev: 0.3479 ug/L</td>
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<tr>
<td>Median: 1.14 ug/L</td>
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Score Date: 09/01/2017
<table>
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<tr>
<th>Shipment</th>
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<th>Analyte: 4,4'-DDE</th>
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</thead>
<tbody>
<tr>
<td>Technology: GC-ECD</td>
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<tr>
<td>Prep Method: EPA 3535A</td>
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<td>Target: 1.34 µg/L</td>
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<tr>
<td>Limits: 0.541 to 1.96 µg/L</td>
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<tr>
<td>Basis: Linear Regression</td>
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<td></td>
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<tr>
<td>Robust Mean: 1 µg/L</td>
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<tr>
<td>Std Dev: 0 µg/L</td>
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<tr>
<td>Median: 0.96 µg/L</td>
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<tr>
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<td>Labs: Pass: 32 Total: 33</td>
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<table>
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<tr>
<th>Shipment</th>
<th>Matrix: Non Potable Water</th>
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<tbody>
<tr>
<td>Technology: GC-MS</td>
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<td>Prep Method: EPA 3510C</td>
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<tr>
<td>Target: 1.34 µg/L</td>
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<tr>
<td>Limits: 0.541 to 1.96 µg/L</td>
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</tr>
<tr>
<td>Basis: Linear Regression</td>
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<td></td>
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<tr>
<td>Robust Mean: 1.4 µg/L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 µg/L</td>
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<tr>
<td>Median: 1.4 µg/L</td>
<td></td>
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<tr>
<td>Fail: 0</td>
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<td>Labs: Pass: 32 Total: 33</td>
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<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Non Potable Water</th>
<th>Analyte: 4-Chloro-3-methylphenol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology: GC-FID</td>
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</tr>
<tr>
<td>Prep Method: EPA 2690C</td>
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</tr>
<tr>
<td>Target: 73.1 µg/L</td>
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</tr>
<tr>
<td>Limits: 27.8 to 90.4 µg/L</td>
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<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 56.9 µg/L</td>
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</tr>
<tr>
<td>Std Dev: 0 µg/L</td>
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</tr>
<tr>
<td>Median: 56.9 µg/L</td>
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<tr>
<td>Fail: 0</td>
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<tr>
<td>Labs: Pass: 31 Total: 31</td>
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A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.
Non Potable Water 4-Chloro-3-methylphenol

Test Results (End Groups Include Outliers)

Number of Labs

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<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>36.4</td>
<td>46.3</td>
<td>50.3</td>
<td>54.2</td>
<td>56.1</td>
<td>62.1</td>
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</tbody>
</table>

Robust Mean: 54.4 ug/L
Std Dev: 7.3095 ug/L
Median: 53.8 ug/L

Basis: Linear Regression

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15 Fail: 0 Total: 15

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

Non Potable Water 4-Chloro-3-methylphenol

Test Results (End Groups Include Outliers)

Number of Labs

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<tr>
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<tbody>
<tr>
<td>34.5</td>
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<td>42.4</td>
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</table>

Robust Mean: 51.8 ug/L
Std Dev: 8.6513 ug/L
Median: 53.4 ug/L

Basis: Linear Regression

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

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

Non Potable Water 4-Chloro-3-methylphenol

Test Results (End Groups Include Outliers)

Number of Labs

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<tbody>
<tr>
<td>62.9 ug/L</td>
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</tr>
<tr>
<td>62.9 ug/L</td>
<td></td>
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</tbody>
</table>

Robust Mean: 62.9 ug/L
Std Dev: 0 ug/L
Median: 62.9 ug/L

Basis: Manual Limits

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

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

Non Potable Water 4-Methylphenol

Test Results (End Groups Include Outliers)

Number of Labs

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<tbody>
<tr>
<td>61.6</td>
<td>72.8</td>
<td>83.9</td>
<td>117.4</td>
<td>139.7</td>
<td></td>
</tr>
</tbody>
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Robust Mean: 92 ug/L
Std Dev: 26.4823 ug/L
Median: 82.6 ug/L

Basis: Manual Limits

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

Totals for Matrix/Analyte:
Labs: Pass: 23 Fail: 0 Total: 23

Non Potable Water 4-Methylphenol

Score Date: 09/08/2017
Non Potable Water 4-Methylphenol

Test Results (End Groups Include Outliers)

Number of Labs

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<th>61.8</th>
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<th>106.2</th>
<th>117.4</th>
<th>128.5</th>
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Non Potable Water

Matrix:

Fail: 0
Labs: 23
Pass: 0
Total: 23

Totals for Matrix/Analyte/Technology:

Labs: Pass: 15 Fail: 0 Total: 15

Non Potable Water 4-Methylphenol

Test Results (End Groups Include Outliers)

Number of Labs

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<th>51.2</th>
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<td>1</td>
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Non Potable Water

Matrix:

Fail: 0
Labs: 29
Pass: 1
Total: 30

Totals for Matrix/Analyte/Technology:

Labs: Pass: 15 Fail: 0 Total: 15

Non Potable Water 4-Nitrophenol

Test Results (End Groups Include Outliers)

Number of Labs

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Non Potable Water

Matrix:

Fail: 0
Labs: 29
Pass: 1
Total: 30

Totals for Matrix/Analyte/Technology:

Labs: Pass: 15 Fail: 0 Total: 15

Non Potable Water 4-Nitrophenol
Non Potable Water 4-Nitrophenol

**Test Results (End Groups Include Outliers)**

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<tr>
<td>3.0</td>
</tr>
<tr>
<td>4.0</td>
</tr>
<tr>
<td>5.0</td>
</tr>
</tbody>
</table>

**Number of Labs**

- 0
- 1
- 2
- 3
- 4
- 5

**Fail:** 1

**Labs:** 29

**Pass:** 1

**Total:** 30

**Robust Mean:** 38.9 ug/L

**Std Dev:** 16.4839 ug/L

**Median:** 36.6 ug/L

**Totals for Matrix/Analyte/Technology:**

- Labs: 11
- Fail: 1
- Total: 12

**Totals for Matrix/Analyte:**

- Labs: 13
- Pass: 2
- Total: 13

**Non Potable Water alpha-BHC**

**Test Results (End Groups Include Outliers)**

<table>
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<tbody>
<tr>
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<tr>
<td>1.0</td>
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<tr>
<td>3.0</td>
</tr>
<tr>
<td>4.0</td>
</tr>
<tr>
<td>5.0</td>
</tr>
</tbody>
</table>

**Number of Labs**

- 0
- 1
- 2
- 3
- 4
- 5

**Fail:** 1

**Labs:** 32

**Pass:** 1

**Total:** 33

**Robust Mean:** 7.1 ug/L

**Std Dev:** 1.8968 ug/L

**Median:** 7.46 ug/L

**Totals for Matrix/Analyte/Technology:**

- Labs: 16
- Fail: 1
- Total: 17

**Totals for Matrix/Analyte:**

- Labs: 29
- Pass: 2
- Total: 30
Non Potable Water alpha-BHC

Shipments: 405  Matrix: Non Potable Water
Analyte: alpha-BHC
Sample: 0517
Technology: GC-ECD
Prep Method: EPA 3535A
Target: 8.82 ug/L
Limits: 3.86 to 12 ug/L
Basis: Manual Limits
Robust Mean: 6 ug/L
Std Dev: 0 ug/L
Median: 6.02 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 32  Fail: 1  Total: 33

Non Potable Water alpha-BHC

Shipments: 405  Matrix: Non Potable Water
Analyte: alpha-BHC
Sample: 0517
Technology: GC-MS
Prep Method: EPA 3510C
Target: 8.82 ug/L
Limits: 3.86 to 12 ug/L
Basis: Manual Limits
Robust Mean: 10.6 ug/L
Std Dev: 0 ug/L
Median: 10.6 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water alpha-BHC

Shipments: 405  Matrix: Non Potable Water
Analyte: alpha-BHC
Sample: 0517
Technology: GC-MS
Prep Method: EPA 3510C
Target: 8.82 ug/L
Limits: 3.86 to 12 ug/L
Basis: Manual Limits
Robust Mean: 7.4 ug/L
Std Dev: 0 ug/L
Median: 7.41 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Acidity

Shipments: 405  Matrix: Non Potable Water
Analyte: Acidity
Sample: 0560
Technology: TITR
Prep Method:
Target: 1450 mg/L
Limits: 1310 to 1600 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1369.9 mg/L
Std Dev: 140.0932 mg/L
Median: 1368 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 6  Fail: 3  Total: 9

A histogram is not displayed for
Technology: GC-ECD due to the limited number of participants.
Non Potable Water alpha-Chlordane

Shipments: 405  
Matrix: Non Potable Water  
Sample: 0517  
Technology: GC-ECD  
Prep Method:  
Target: 8.84 ug/L  
Limits: 3.99 to 11.7 ug/L  
Basis: Linear Regression  
Robust Mean: 8.7 ug/L  
Std Dev: 0 ug/L  
Median: 8.7 ug/L  

A histogram is not displayed for Technology: GC-ECD 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: 18  
Fail: 1  
Total: 19  

Non Potable Water alpha-Chlordane

Shipments: 405  
Matrix: Non Potable Water  
Sample: 0517  
Technology: GC-ECD  
Prep Method: EPA 3510C  
Target: 8.84 ug/L  
Limits: 3.99 to 11.7 ug/L  
Basis: Linear Regression  
Robust Mean: 6.9 ug/L  
Std Dev: 1.5491 ug/L  
Median: 7.38 ug/L  

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
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<th>3</th>
<th>4</th>
<th>5</th>
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<td>8.5</td>
<td>9.5</td>
<td>10</td>
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A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 16  
Fail: 1  
Total: 17  

Totals for Matrix/Analyte:  
Labs: Pass: 18  
Fail: 1  
Total: 19  

Non Potable Water alpha-Chlordane

Shipments: 405  
Matrix: Non Potable Water  
Sample: 0517  
Technology: GC-ECD  
Prep Method: EPA 3535A  
Target: 8.84 ug/L  
Limits: 3.99 to 11.7 ug/L  
Basis: Linear Regression  
Robust Mean: 5.7 ug/L  
Std Dev: 0 ug/L  
Median: 5.7 ug/L  

A histogram is not displayed for Technology: GC-ECD 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: 18  
Fail: 1  
Total: 19  

Non Potable Water Silver, Total

Shipments: 405  
Matrix: Non Potable Water  
Sample: 0511A  
Technology: FAAS  
Prep Method:  
Target: 833 ug/L  
Limits: 708 to 958 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 827 ug/L  
Std Dev: 0 ug/L  
Median: 827 ug/L  

A histogram is not displayed for Technology: FAAS 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: 66  
Fail: 4  
Total: 70
Non Potable Water Silver, Total

**Technology:** FAAS            due to the limited number of participants.

**Robust Mean:** 846 ug/L
**Median:** 846 ug/L

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
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<tr>
<td><strong>Labs:</strong></td>
<td>Pass: 66</td>
<td>Fail: 4</td>
<td>Total: 70</td>
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Totals for Matrix/Analyte/Technology:

| Labs: | Pass: 1 | Fail: 0 | Total: 1 |

Non Potable Water Silver, Total

**Technology:** GFAAS            due to the limited number of participants.

**Robust Mean:** 818 ug/L
**Median:** 818 ug/L

**Test Results (End Groups Include Outliers)**

<table>
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<th>Number of Labs</th>
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<th>749</th>
<th>812</th>
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<tbody>
<tr>
<td><strong>Fail:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Labs:</strong></td>
<td>Pass: 66</td>
<td>Fail: 4</td>
<td>Total: 70</td>
</tr>
</tbody>
</table>

Totals for Matrix/Analyte/Technology:

| Labs: | Pass: 1 | Fail: 0 | Total: 1 |

Non Potable Water Silver, Total

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

**Robust Mean:** 829.1 ug/L
**Median:** 823 ug/L

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>707</th>
<th>749</th>
<th>770</th>
<th>791</th>
<th>812</th>
<th>833</th>
<th>854</th>
<th>875</th>
<th>896</th>
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<tbody>
<tr>
<td><strong>Fail:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Labs:</strong></td>
<td>Pass: 66</td>
<td>Fail: 4</td>
<td>Total: 70</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Totals for Matrix/Analyte/Technology:

| Labs: | Pass: 23 | Fail: 2 | Total: 25 |

Non Potable Water Silver, Total

Score Date: 09/01/2017
Non Potable Water Silver, Total

Test Results (End Groups Include Outliers)

Number of Labs

<table>
<thead>
<tr>
<th>Test Level</th>
<th>Number of Labs</th>
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<tbody>
<tr>
<td>0</td>
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<tr>
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<tr>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

Totals for Matrix/Analyte/Technology:

Labs: 70
Pass: 66
Fail: 4

Totals for Matrix/Analyte:

Labs: 5
Pass: 4
Total: 5

Score Date: 09/01/2017

Proficiency Test Statistics Page 31 of 386
Non Potable Water Silver, Total

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

Test Results (End Groups Include Outliers)

Number of Labs

Robust Mean: 837 ug/L
Std Dev: 0 ug/L
Median: 837 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte:
Labs: Pass: 66 Fail: 4 Total: 70

Score Date: 09/01/2017

Proficiency Test Statistics Page 32 of 386
### Non Potable Water Silver, Total

**Shipments**: 405  
**Matrix**: Non Potable Water  
**Analytes**: Silver, Total  
**Samples**: 0511A  
**Technology**: ICP-MS  
**Prep Method**: EPA 3015A  
**Target**: 833 ug/L  
**Limits**: 708 to 958 ug/L  
**Basis**: Target Value +/- a fixed percent  
**Robust Mean**: 832.5 ug/L  
  **Std Dev**: 38.0624 ug/L  
  **Median**: 832.5 ug/L  
**Totals for Matrix/Analyte/Technology:**  
  **Labs**: Pass: 2  Fail: 0  Total: 2  
**Totals for Matrix/Analyte:**  
  **Labs**: Pass: 66  Fail: 4  Total: 70

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

### Non Potable Water Aluminum, Total

**Shipments**: 405  
**Matrix**: Non Potable Water  
**Analytes**: Aluminum, Total  
**Samples**: 0511A  
**Technology**: ICP-AES  
**Prep Method**: EPA 200.2  
**Target**: 1630 ug/L  
**Limits**: 1350 to 1870 ug/L  
**Basis**: Linear Regression  
**Robust Mean**: 1583.3 ug/L  
  **Std Dev**: 40.4145 ug/L  
  **Median**: 1590 ug/L  
**Totals for Matrix/Analyte/Technology:**  
  **Labs**: Pass: 3  Fail: 0  Total: 3  
**Totals for Matrix/Analyte:**  
  **Labs**: Pass: 48  Fail: 0  Total: 48

### Non Potable Water Aluminum, Total

**Shipments**: 405  
**Matrix**: Non Potable Water  
**Analytes**: Aluminum, Total  
**Samples**: 0511A  
**Technology**: ICP-AES  
**Prep Method**: EPA 3005A  
**Target**: 1630 ug/L  
**Limits**: 1350 to 1870 ug/L  
**Basis**: Linear Regression  
**Robust Mean**: 1595 ug/L  
  **Std Dev**: 83.4666 ug/L  
  **Median**: 1585 ug/L  
**Totals for Matrix/Analyte/Technology:**  
  **Labs**: Pass: 4  Fail: 0  Total: 4  
**Totals for Matrix/Analyte:**  
  **Labs**: Pass: 48  Fail: 0  Total: 48

### Non Potable Water Aluminum, Total

**Shipments**: 405  
**Matrix**: Non Potable Water  
**Analytes**: Aluminum, Total  
**Samples**: 0511A  
**Technology**: ICP-AES  
**Prep Method**: EPA 3015A  
**Target**: 1630 ug/L  
**Limits**: 1350 to 1870 ug/L  
**Basis**: Linear Regression  
**Robust Mean**: 1625.7 ug/L  
  **Std Dev**: 75.3683 ug/L  
  **Median**: 1625 ug/L  
**Totals for Matrix/Analyte/Technology:**  
  **Labs**: Pass: 14  Fail: 0  Total: 14  
**Totals for Matrix/Analyte:**  
  **Labs**: Pass: 48  Fail: 0  Total: 48

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 33 of 386
# Non Potable Water Aluminum, Total

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1466</td>
</tr>
<tr>
<td>1590</td>
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<tr>
<td>1631</td>
</tr>
<tr>
<td>1673</td>
</tr>
<tr>
<td>1755</td>
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</table>

<table>
<thead>
<tr>
<th>Non Potable Water Matrix:</th>
<th>405</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: Aluminum, Total</td>
<td></td>
</tr>
<tr>
<td>Sample: 0511A</td>
<td></td>
</tr>
<tr>
<td>Technology: ICP-AES</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3010A</td>
<td></td>
</tr>
<tr>
<td>Target: 1630 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 1350 to 1870 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 1610 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 92.7362 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 1625 ug/L</td>
<td></td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs</th>
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<tr>
<td>Fail: 0</td>
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<td>Total: 1466</td>
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<table>
<thead>
<tr>
<th>Non Potable Water Matrix:</th>
<th>405</th>
</tr>
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<tbody>
<tr>
<td>Analyte: Aluminum, Total</td>
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</tr>
<tr>
<td>Sample: 0511A</td>
<td></td>
</tr>
<tr>
<td>Technology: ICP-AES</td>
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<tr>
<td>Prep Method: EPA 3015A</td>
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<tr>
<td>Target: 1630 ug/L</td>
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<tr>
<td>Limits: 1350 to 1870 ug/L</td>
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</tr>
<tr>
<td>Basis: Linear Regression</td>
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</tr>
<tr>
<td>Robust Mean: 1480 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/L</td>
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<tr>
<td>Median: 1480 ug/L</td>
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**Totals for Matrix/Analyte/Technology:**

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<table>
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<th>Non Potable Water Matrix:</th>
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</thead>
<tbody>
<tr>
<td>Analyte: Aluminum, Total</td>
<td></td>
</tr>
<tr>
<td>Sample: 0511A</td>
<td></td>
</tr>
<tr>
<td>Technology: ICP-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 200.2</td>
<td></td>
</tr>
<tr>
<td>Target: 1630 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 1350 to 1870 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
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</tr>
<tr>
<td>Robust Mean: 1580 ug/L</td>
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</tr>
<tr>
<td>Std Dev: 28.2843 ug/L</td>
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</tr>
<tr>
<td>Median: 1580 ug/L</td>
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**Totals for Matrix/Analyte/Technology:**

<table>
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<table>
<thead>
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<tbody>
<tr>
<td>Analyte: Aluminum, Total</td>
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<tr>
<td>Sample: 0511A</td>
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</tr>
<tr>
<td>Technology: ICP-MS</td>
<td></td>
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<tr>
<td>Prep Method: EPA 3010A</td>
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</tr>
<tr>
<td>Target: 1630 ug/L</td>
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</tr>
<tr>
<td>Limits: 1350 to 1870 ug/L</td>
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<tr>
<td>Basis: Linear Regression</td>
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<tr>
<td>Robust Mean: 1610 ug/L</td>
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</tr>
<tr>
<td>Std Dev: 92.7362 ug/L</td>
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<tr>
<td>Median: 1625 ug/L</td>
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**Totals for Matrix/Analyte/Technology:**

<table>
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<tr>
<th>Labs</th>
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<tbody>
<tr>
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<tr>
<td>Total: 1755</td>
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</tbody>
</table>

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

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

Score Date: 09/01/2017

Proficiency Test Statistics

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### Non Potable Water Aluminum, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Aluminum, Total  
**Sample:** 0511A  
**Technology:** ICP-MS  
**Prep Method:** EPA 3005A  
**Target:** 1630 ug/L  
**Limits:** 1350 to 1870 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 1567.5 ug/L  
**Std Dev:** 80.1561 ug/L  
**Median:** 1550 ug/L  

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>Test Results (End Groups Include Outliers)</th>
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<tbody>
<tr>
<td>1508</td>
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<td>1673</td>
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**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass 48  
- Fail: 0  
- Total: 48

### Non Potable Water Aluminum, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Aluminum, Total  
**Sample:** 0511A  
**Technology:** ICP-MS  
**Prep Method:** EPA 3010A  
**Target:** 1630 ug/L  
**Limits:** 1350 to 1870 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 1566.3 ug/L  
**Std Dev:** 118.7448 ug/L  
**Median:** 1530 ug/L  

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>Test Results (End Groups Include Outliers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1466</td>
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<td>1549</td>
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<td>1714</td>
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**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass 48  
- Fail: 0  
- Total: 48

### Non Potable Water Aluminum, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Aluminum, Total  
**Sample:** 0511A  
**Technology:** ICP-MS  
**Prep Method:** EPA 3015A  
**Target:** 1630 ug/L  
**Limits:** 1350 to 1870 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 1545 ug/L  
**Std Dev:** 106.066 ug/L  
**Median:** 1545 ug/L  

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>Test Results (End Groups Include Outliers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1466</td>
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<tr>
<td>1549</td>
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<td>1714</td>
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**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass 2  
- Fail: 0  
- Total: 2

### Non Potable Water Aldrin

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Aldrin  
**Sample:** 0517  
**Technology:** GC-ECD  
**Prep Method:**  
**Target:** 7.38 ug/L  
**Limits:** 2.61 to 9.94 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 5.7 ug/L  
**Std Dev:** 1.4405 ug/L  
**Median:** 5.74 ug/L  

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>Test Results (End Groups Include Outliers)</th>
</tr>
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<tbody>
<tr>
<td>3.4</td>
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</tr>
<tr>
<td>4.1</td>
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</tr>
<tr>
<td>4.9</td>
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<td>5.7</td>
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<td>8</td>
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**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass 13  
- Fail: 0  
- Total: 13

### Non Potable Water Aldrin

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
**Page 35 of 386**
Non Potable Water Aldrin

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Alkalinity

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Alkalinity</td>
</tr>
<tr>
<td>Sample:</td>
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</tr>
<tr>
<td>Technology:</td>
<td>TITR</td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td>193 mg/L</td>
</tr>
<tr>
<td>Limits:</td>
<td>164 to 222 mg/L</td>
</tr>
<tr>
<td>Basis:</td>
<td>Fixed Percent (2)</td>
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<tr>
<td>Robust Mean:</td>
<td>188.2 mg/L</td>
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<tr>
<td>Std Dev:</td>
<td>27.3273 mg/L</td>
</tr>
<tr>
<td>Median:</td>
<td>188 mg/L</td>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 176
- Fail: 0
- Total: 176

Non Potable Water Anthracene

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
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<tbody>
<tr>
<td>Analyte:</td>
<td>Anthracene</td>
</tr>
<tr>
<td>Sample:</td>
<td>0536</td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-MS</td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td>134 ug/L</td>
</tr>
<tr>
<td>Limits:</td>
<td>57.2 to 160 ug/L</td>
</tr>
<tr>
<td>Basis:</td>
<td>Linear Regression</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>101.2 ug/L</td>
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<tr>
<td>Std Dev:</td>
<td>16.902 ug/L</td>
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<tr>
<td>Median:</td>
<td>99.6 ug/L</td>
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</table>

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

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

Non Potable Water Anthracene

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Anthracene</td>
</tr>
<tr>
<td>Sample:</td>
<td>0536</td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-MS</td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 3510C</td>
</tr>
<tr>
<td>Target:</td>
<td>134 ug/L</td>
</tr>
<tr>
<td>Limits:</td>
<td>57.2 to 160 ug/L</td>
</tr>
<tr>
<td>Basis:</td>
<td>Linear Regression</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>103.3 ug/L</td>
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<td>Std Dev:</td>
<td>21.2114 ug/L</td>
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<tr>
<td>Median:</td>
<td>105 ug/L</td>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 31
- Fail: 0
- Total: 31

Non Potable Water Anthracene

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
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<tbody>
<tr>
<td>Analyte:</td>
<td>Anthracene</td>
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<tr>
<td>Sample:</td>
<td>0536</td>
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<tr>
<td>Technology:</td>
<td>GC-MS</td>
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<td>Prep Method:</td>
<td>EPA 3520C</td>
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<td>Target:</td>
<td>134 ug/L</td>
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<tr>
<td>Limits:</td>
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<tr>
<td>Basis:</td>
<td>Linear Regression</td>
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<tr>
<td>Robust Mean:</td>
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<tr>
<td>Std Dev:</td>
<td>0 ug/L</td>
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<tr>
<td>Median:</td>
<td>110 ug/L</td>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1
- Fail: 0
- Total: 1

Non Potable Water Acenaphthylene
Non Potable Water Acenaphthylene

Shipments: Non Potable Water
Matrix: Non Potable Water
Analyte: Acenaphthylene
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3510C
Target: 143 ug/L
Limits: 50.5 to 179 ug/L
Basis: Linear Regression
Robust Mean: 104 ug/L
Std Dev: 22.1666 ug/L
Median: 109 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15 Fail: 0 Total: 15

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

Non Potable Water Arsenic, Total

Shipments: Non Potable Water
Matrix: Non Potable Water
Analyte: Arsenic, Total
Sample: 0511A
Technology: CRC-ICP/MS
Prep Method: EPA 3520C
Target: 299 ug/L
Limits: 244 to 351 ug/L
Basis: Linear Regression
Robust Mean: 291 ug/L
Std Dev: 0 ug/L
Median: 291 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

A histogram is not displayed for Technology: CRC-ICP/MS due to the limited number of participants.
Non Potable Water Arsenic, Total

Test Results (End Groups Include Outliers)

Number of Labs

0 - 0.5 - 1 - 1.5 - 2 - 2.5

250 273 289 297 305

Robust Mean: 293.8 ug/L
Std Dev: 143.8893 ug/L
Median: 288 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 5  Fail: 2  Total: 7

Totals for Matrix/Analyte:
Labs: Pass: 5  Fail: 6  Total: 71

Shipment: 405  Matrix: Non Potable Water
Analyte: Arsenic, Total
Sample: 0511A
Technology: GFAAS
Prep Method: EPA 3005A
Target: 299 ug/L
Limits: 244 to 351 ug/L
Basis: Linear Regression
Robust Mean: 310 ug/L
Std Dev: 219.2031 ug/L
Median: 338.5 ug/L

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

Non Potable Water Arsenic, Total

Test Results (End Groups Include Outliers)

Number of Labs

0 - 0.5 - 1 - 1.5 - 2 - 2.5

244 245 246 247 248

Robust Mean: 278 ug/L
Std Dev: 0 ug/L
Median: 205 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 0  Fail: 1  Total: 1

Totals for Matrix/Analyte:
Labs: Pass: 65  Fail: 6  Total: 71

Shipment: 405  Matrix: Non Potable Water
Analyte: Arsenic, Total
Sample: 0511A
Technology: GFAAS
Prep Method: EPA 3010A
Target: 299 ug/L
Limits: 244 to 351 ug/L
Basis: Linear Regression
Robust Mean: ug/L
Std Dev: 75.2864 ug/L
Median: 295.5 ug/L

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

Non Potable Water Arsenic, Total

Test Results (End Groups Include Outliers)

Number of Labs

0 - 1 - 2 - 3 - 4 - 5 - 6

0 281 297 305 313 328

Robust Mean: 278 ug/L
Std Dev: 75.2864 ug/L
Median: 295.5 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15  Fail: 1  Total: 16

Totals for Matrix/Analyte:
Labs: Pass: 65  Fail: 6  Total: 71

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Arsenic, Total

| Shipment:  | 405 | Matrix: | Non Potable Water |
| Analyte:  | Arsenic, Total |
| Sample:   | 0511A |
| Technology: | ICP-AES |
| Prep Method: | EPA 200.2 |
| Target:   | 299 ug/L |
| Limits:   | 244 to 351 ug/L |
| Basis:    | Linear Regression |
| Robust Mean: | 293 ug/L |
| Std Dev:  | 10.3348 ug/L |
| Median:   | 296.2 ug/L |

Totals for Matrix/Analyte/Technology:
- Labs: Pass 5, Fail 0, Total: 5

Non Potable Water Arsenic, Total

| Shipment:  | 405 | Matrix: | Non Potable Water |
| Analyte:  | Arsenic, Total |
| Sample:   | 0511A |
| Technology: | ICP-AES |
| Prep Method: | EPA 3005A |
| Target:   | 299 ug/L |
| Limits:   | 244 to 351 ug/L |
| Basis:    | Linear Regression |
| Robust Mean: | 287 ug/L |
| Std Dev:  | 9.2014 ug/L |
| Median:   | 288 ug/L |

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

Non Potable Water Arsenic, Total

| Shipment:  | 405 | Matrix: | Non Potable Water |
| Analyte:  | Arsenic, Total |
| Sample:   | 0511A |
| Technology: | ICP-AES |
| Prep Method: | EPA 3010A |
| Target:   | 299 ug/L |
| Limits:   | 244 to 351 ug/L |
| Basis:    | Linear Regression |
| Robust Mean: | 286.9 ug/L |
| Std Dev:  | 84.214 ug/L |
| Median:   | 284 ug/L |

Totals for Matrix/Analyte/Technology:
- Labs: Pass 11, Fail 1, Total: 12

Non Potable Water Arsenic, Total

| Shipment:  | 405 | Matrix: | Non Potable Water |
| Analyte:  | Arsenic, Total |
| Sample:   | 0511A |
| Technology: | ICP-AES |
| Prep Method: | EPA 3015A |
| Target:   | 299 ug/L |
| Limits:   | 244 to 351 ug/L |
| Basis:    | Linear Regression |
| Robust Mean: | 306 ug/L |
| Std Dev:  | 0 ug/L |
| Median:   | 306 ug/L |

Totals for Matrix/Analyte/Technology:
- Labs: Pass 1, Fail 0, Total: 1

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

Score Date: 09/01/2017
Non Potable Water Arsenic, Total

Shipment: 405  
Matrix: Non Potable Water

Analyte: Arsenic, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 4.1.3
Target: 299 ug/L
Limits: 244 to 351 ug/L
Basis: Linear Regression
Robust Mean: 314 ug/L
Std Dev: 0 ug/L
Median: 314 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 65  Fail: 6  Total: 71

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

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 41 of 386
Non Potable Water Arsenic, Total

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1

Test Results (End Groups Include Outliers)

Shipment: 405  Matrix: Non Potable Water
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3010A
Target: 299 ug/L
Limits: 244 to 351 ug/L
Basis: Linear Regression
Robust Mean: 314.7 ug/L
Std Dev: 12.5033 ug/L
Median: 315 ug/L

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

Totals for Matrix/Analyte:
Pass: 12

Non Potable Water Arsenic, Total

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

Non Potable Water Acetone

Test Results (End Groups Include Outliers)

Number of Labs

0 2 4 6 8

Test Results (End Groups Include Outliers)

Shipment: 405  Matrix: Non Potable Water
Sample: 0513
Technology: GC-MS
Prep Method: EPA 5030C
Target: 62.1 ug/L
Limits: 15.6 to 102 ug/L
Basis: Linear Regression
Robust Mean: 71.6 ug/L
Std Dev: 26.3226 ug/L
Median: 63.95 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15  Fail: 3  Total: 18

Totals for Matrix/Analyte:
Pass: 15

Non Potable Water Bis(2-chloroethyl)ether

Test Results (End Groups Include Outliers)

Number of Labs

0 2 4 6 8

Test Results (End Groups Include Outliers)

Shipment: 405  Matrix: Non Potable Water
Sample: 0513
Technology: GC-MS
Prep Method: EPA 5030C
Target: 62.1 ug/L
Limits: 15.6 to 102 ug/L
Basis: Linear Regression
Robust Mean: 71.6 ug/L
Std Dev: 26.3226 ug/L
Median: 63.95 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15  Fail: 3  Total: 18

Totals for Matrix/Analyte:
Pass: 15
Non Potable Water Bis(2-chloroethyl)ether

**Shipment:** 405  **Matrix:** Non Potable Water

**Sample:** 0536

**Technology:** GC-MS

**Prep Method:**
- **Target:** 142 ug/L
- **Limits:** 36.5 to 170 ug/L
- **Basis:** Linear Regression

**Robust Mean:** 97.9 ug/L

**Std Dev:** 27.0486 ug/L

**Median:** 98.7 ug/L

**Test Results (End Groups Include Outliers):**

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>26.1</th>
<th>62.4</th>
<th>86.6</th>
<th>98.7</th>
<th>110.8</th>
<th>135</th>
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</thead>
</table>

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 26, Fail: 62, Total: 15
- **Labs:** Pass: 86, Fail: 98, Total: 105
- **Labs:** Pass: 110, Fail: 135, Total: 250

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

Non Potable Water Bis(2-chloroethyl)ether

**Shipment:** 405  **Matrix:** Non Potable Water

**Sample:** 0536

**Technology:** GC-MS

**Prep Method:**
- **Target:** 142 ug/L
- **Limits:** 36.5 to 170 ug/L
- **Basis:** Linear Regression

**Robust Mean:** 98.6 ug/L

**Std Dev:** 32.2617 ug/L

**Median:** 102 ug/L

**Test Results (End Groups Include Outliers):**

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<th>62.4</th>
<th>74.5</th>
<th>86.6</th>
<th>98.7</th>
<th>102</th>
</tr>
</thead>
</table>

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 13, Fail: 1, Total: 15
- **Labs:** Pass: 14, Fail: 2, Total: 15
- **Labs:** Pass: 28, Fail: 30, Total: 30

Non Potable Water 2,2'-Oxybis(1-chloropropane)

**Shipment:** 405  **Matrix:** Non Potable Water

**Sample:** 0536

**Technology:** GC-MS

**Prep Method:**
- **Target:** 142 ug/L
- **Limits:** 36.5 to 170 ug/L
- **Basis:** Linear Regression

**Robust Mean:** 47.8 ug/L

**Std Dev:** 0 ug/L

**Median:** 47.8 ug/L

**Test Results (End Groups Include Outliers):**

<table>
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<tr>
<th>Number of Labs</th>
<th>26.1</th>
<th>62.4</th>
<th>74.5</th>
<th>86.6</th>
<th>98.7</th>
<th>102</th>
</tr>
</thead>
</table>

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 1, Fail: 0, Total: 1
- **Labs:** Pass: 15, Fail: 0, Total: 15
- **Labs:** Pass: 30, Fail: 0, Total: 30

Non Potable Water 2,2'-Oxybis(1-chloropropane)

**Score Date:** 09/01/2017

Proficiency Test Statistics
Non Potable Water 2,2’-Oxybis(1-chloropropane)

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,2’-Oxybis(1-chloropropane)
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3510C
Target: 78.4 ug/L
Limits: 19.5 to 98.2 ug/L
Basis: Linear Regression
Robust Mean: 56.4 ug/L
Std Dev: 12.8433 ug/L
Median: 58.7 ug/L

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
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<td>63.9</td>
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</table>

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

Non Potable Water Bis(2-ethylhexyl) phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Bis(2-ethylhexyl) phthalate
Sample: 0536
Technology: GC-ECD
Prep Method: EPA 3520C
Target: 25.1 ug/L
Limits: 6.88 to 38.8 ug/L
Basis: Linear Regression
Robust Mean: 13 ug/L
Std Dev: 0 ug/L
Median: 13 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 29  Fail: 3  Total: 32
Non Potable Water Bis(2-ethylhexyl) phthalate

Shipments: 405 Matrix: Non Potable Water
Analyte: Bis(2-ethylhexyl) phthalate
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3510C
Target: 25.1 ug/L
Limits: 6.88 to 38.8 ug/L
Basis: Linear Regression
Robust Mean: 21.9 ug/L
Std Dev: 8.1862 ug/L
Median: 22 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 29 Fail: 0 Total: 29
Labs: Pass: 405 Fail: 0 Total: 405

Non Potable Water Bis(2-ethylhexyl) phthalate

Shipments: 405 Matrix: Non Potable Water
Analyte: Bis(2-ethylhexyl) phthalate
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3520C
Target: 25.1 ug/L
Limits: 6.88 to 38.8 ug/L
Basis: Linear Regression
Robust Mean: 23.3 ug/L
Std Dev: 0 ug/L
Median: 23.3 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 29 Fail: 0 Total: 29
Labs: Pass: 405 Fail: 0 Total: 405

Non Potable Water Barium, Total

Shipments: 405 Matrix: Non Potable Water
Analyte: Barium, Total
Sample: 0511A
Technology: FAAS
Prep Method: EPA 3005A
Target: 1860 ug/L
Limits: 1580 to 2140 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1715 ug/L
Std Dev: 0 ug/L
Median: 1715 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 58 Fail: 0 Total: 58
Labs: Pass: 405 Fail: 0 Total: 405

Non Potable Water Barium, Total

Shipments: 405 Matrix: Non Potable Water
Analyte: Barium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method:
Target: 1860 ug/L
Limits: 1580 to 2140 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1875.7 ug/L
Std Dev: 83.5343 ug/L
Median: 1878.81 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 15 Fail: 0 Total: 15
Labs: Pass: 58 Fail: 0 Total: 58

Score Date: 09/01/2017
Proficiency Test Statistics Page 45 of 386
### Non Potable Water Barium, Total

**Analyte:** Barium, Total

**Sample:** 0511A

**Technology:** ICP-AES

**Prep Method:** EPA 200.2

**Target:** 1860 ug/L

**Limits:** 1580 to 2140 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 1953.3 ug/L

**Std Dev:** 86.2168 ug/L

**Median:** 1970 ug/L

**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 3  Fail: 0  Total: 3

**Test Results (End Groups Include Outliers):**

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Non Potable Water</th>
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<tbody>
<tr>
<td>Labs: Pass</td>
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</tr>
<tr>
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<tr>
<td>0.5</td>
<td>1</td>
</tr>
</tbody>
</table>

A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.
| Shipment | Matrix: Non Potable Water | Analyte: Barium, Total | Sample: 0511A | Technology: ICP-MS | Prep Method: | Target: 1860 ug/L | Limits: 1580 to 2140 ug/L | Basis: Target Value +/- a fixed percent | Robust Mean: 1822.2 ug/L | Std Dev: 45.2155 ug/L | Median: 1820 ug/L |
|----------|--------------------------|-----------------------|--------------|-------------------|---------------|-------------------|-----------------------------|--------------------------|---------------------|---------------------|
|          |                          |                       |              |                   |               |                  |                             |                          |                     |                     |
| **Number of Labs** | 1722 | 1796 | 1833 | 1870 | 1907 | 0 | 0.5 | 1 | 1.5 | 2 | 2.5 |
| **Test Results (End Groups Include Outliers)** | 0 | 1 | 2 | 3 | 4 | 0 | 1 | 2 | 3 | 4 | 5 |
| **Number of Labs** | 1722 | 1796 | 1833 | 1870 | 1907 | 0 | 0.5 | 1 | 1.5 | 2 | 2.5 |
| **Test Results (End Groups Include Outliers)** | 0 | 1 | 2 | 3 | 4 | 0 | 1 | 2 | 3 | 4 | 5 |
| **Totals for Matrix/Analyte/Technology** | Labs: 58 | Fail: 0 | Total: 58 | Labs: 58 | Fail: 0 | Total: 58 | Labs: 58 | Fail: 0 | Total: 58 | Labs: 58 | Fail: 0 | Total: 58 |
| **Totals for Matrix/Analyte:** | Labs: 5 | Fail: 0 | Total: 5 | Labs: 5 | Fail: 0 | Total: 5 | Labs: 5 | Fail: 0 | Total: 5 | Labs: 5 | Fail: 0 | Total: 5 |
| **Score Date:** | 09/01/2017 | Proficiency Test Statistics | Page 47 of 386 |
Non Potable Water Barium, Total

**Analyte:** Barium, Total

**Matrix:** Non Potable Water

**Sample:** 0511A

**Technology:** ICP-MS

**Prep Method:** EPA 3015A

**Target:** 1980 ug/L

**Limits:** 1580 to 2140 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 1855 ug/L

**Std Dev:** 77.7817 ug/L

**Median:** 1855 ug/L

**Technology:** ICP-MS

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

**Fail:** 0

**Labs:** Pass: 58

**Fail:** 0

**Total:** 58

**Robust Mean:**

**Basis:** Linear Regression

**Technology:** GC-MS

**Prep Method:** EPA 3510C

**Target:** 89.4 ug/L

**Limits:** 42.5 to 108 ug/L

**Basis:** Linear Regression

**Robust Mean:** 77.6 ug/L

**Std Dev:** 8.632 ug/L

**Median:** 76.5 ug/L

**Technology:** GC-MS

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

**Fail:** 0

**Labs:** Pass: 31

**Fail:** 0

**Total:** 31

**Robust Mean:**

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

**Fail:** 0

**Labs:** Pass: 31

**Fail:** 0

**Total:** 31

**Robust Mean:**

**Basis:** Linear Regression

**Technology:** GC-MS

**Prep Method:** EPA 3520C

**Target:** 85 ug/L

**Limits:** 42.5 to 108 ug/L

**Basis:** Linear Regression

**Robust Mean:** 85 ug/L

**Std Dev:** 0 ug/L

**Median:** 85 ug/L

**Technology:** GC-MS

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

**Fail:** 0

**Labs:** Pass: 31

**Fail:** 0

**Total:** 31

**Robust Mean:**

**Basis:** Linear Regression

**Technology:** GC-MS

**Prep Method:** EPA 3510C

**Target:** 89.4 ug/L

**Limits:** 42.5 to 108 ug/L

**Basis:** Linear Regression

**Robust Mean:** 77.6 ug/L

**Std Dev:** 8.632 ug/L

**Median:** 76.5 ug/L

**Technology:** GC-MS

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

**Fail:** 0

**Labs:** Pass: 31

**Fail:** 0

**Total:** 31
Non Potable Water Benzo(b)fluoranthene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Benzo(b)fluoranthene  
Sample: 0536  
Technology: GC-MS  
Prep Method:  
Target: 68.7 ug/L  
Limits: 26.2 to 88.5 ug/L  
Basis: Linear Regression  
Robust Mean: 58.9 ug/L  
Std Dev: 10.0346 ug/L  
Median: 60.8 ug/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass 35  
Fail: 0  
Total: 35

Test Results (End Groups Include Outliers)

Number of Labs

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<tr>
<th>35.4</th>
<th>40.4</th>
<th>45.4</th>
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Non Potable Water Benzo(b)fluoranthene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Benzo(b)fluoranthene  
Sample: 0536  
Technology: GC-MS  
Prep Method: EPA 3510C  
Target: 68.7 ug/L  
Limits: 26.2 to 88.5 ug/L  
Basis: Linear Regression  
Robust Mean: 59.6 ug/L  
Std Dev: 12.4312 ug/L  
Median: 60.2 ug/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass 15  
Fail: 0  
Total: 15

Test Results (End Groups Include Outliers)

Number of Labs

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<th>35.4</th>
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Non Potable Water Benzo(b)fluoranthene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Benzo(b)fluoranthene  
Sample: 0536  
Technology: GC-MS  
Prep Method: EPA 3520C  
Target: 68.7 ug/L  
Limits: 26.2 to 88.5 ug/L  
Basis: Linear Regression  
Robust Mean: 65 ug/L  
Std Dev: 0 ug/L  
Median: 65 ug/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass 1  
Fail: 0  
Total: 1

Test Results (End Groups Include Outliers)

Number of Labs

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<tr>
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<th>45.4</th>
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Non Potable Water beta-BHC

Shipments: 405  
Matrix: Non Potable Water  
Analyte: beta-BHC  
Sample: 0517  
Technology: GC-ECD  
Prep Method:  
Target: 7.59 ug/L  
Limits: 3.59 to 10.3 ug/L  
Basis: Linear Regression  
Robust Mean: 6.2 ug/L  
Std Dev: 1.086 ug/L  
Median: 6.45 ug/L

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

Test Results (End Groups Include Outliers)

Number of Labs

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<th>4.4</th>
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<td>4</td>
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Non Potable Water beta-BHC

Score Date: 09/01/2017  
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Non Potable Water beta-BHC

Test Results (End Groups Include Outliers)

<table>
<thead>
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<th>Number of Labs</th>
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<td>6</td>
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<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
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</tbody>
</table>

Totals for Matrix/Analyte/Technology:

Labs: Pass: 16 Fail: 1 Total: 17

Totals for Matrix/Analyte:

Labs: Pass: 1 Total: 1

Non Potable Water beta-BHC

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

Non Potable Water beta-BHC

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

Non Potable Water Beryllium, Total

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.
A histogram is not displayed for Technology: GFAAS due to the limited number of participants.
Non Potable Water Beryllium, Total

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Beryllium, Total

- **Shipments**: 405
- **Matrix**: Non Potable Water
- **Analyte**: Beryllium, Total
- **Sample**: 0511A
- **Technology**: ICP-MS
- **Prep Method**: EPA 3005A
- **Target**: 300 ug/L
- **Limits**: 255 to 345 ug/L
- **Basis**: Target Value +/- a fixed percent
- **Robust Mean**: 302.2 ug/L
  - Std Dev: 9.6799 ug/L
  - Median: 299 ug/L

**Totals for Matrix/Analyte/Technology**:
- Labs: Pass: 57, Fail: 2, Total: 59

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

Non Potable Water Benzene

- **Shipments**: 405
- **Matrix**: Non Potable Water
- **Analyte**: Benzene
- **Sample**: 0513
- **Technology**: GC-MS
- **Prep Method**: EPA 3015A
- **Target**: 300 ug/L
- **Limits**: 255 to 345 ug/L
- **Basis**: Target Value +/- a fixed percent
- **Robust Mean**: 293.0 ug/L
  - Std Dev: 10.014 ug/L
  - Median: 290.0 ug/L

**Totals for Matrix/Analyte/Technology**:
- Labs: Pass: 20, Fail: 0, Total: 20

**Histogram**: A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Non Potable Water Benzene

**Sample:** 0513
**Technology:** GC-MS
**Prep Method:** EPA 5030C
**Target:** 83.7 ug/L
**Limits:** 58.6 to 109 ug/L
**Basis:** Target Value +/- a fixed percent
**Robust Mean:** 82 ug/L
**Std Dev:** 7.5343 ug/L
**Median:** 83.15 ug/L

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

**Basis:** Target Value +/- a fixed percent

Non Potable Water Benzo(ghi)perylene

**Sample:** 0536
**Technology:** GC-MS
**Prep Method:** EPA 3510C
**Target:** 16.9 ug/L
**Limits:** 7.58 to 23.5 ug/L
**Basis:** Linear Regression
**Robust Mean:** 15 ug/L
**Std Dev:** 4.4604 ug/L
**Median:** 15.2 ug/L

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

**Basis:** Linear Regression
Non Potable Water Benzo(ghi)perylene

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(ghi)perylene
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3520C
Target: 16.9 ug/L
Limits: 7.58 to 23.5 ug/L

Basis: Linear Regression
Robust Mean: 14.4 ug/L
Std Dev: 0 ug/L
Median: 14.4 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Bromide

Shipments: 405  Matrix: Non Potable Water
Analyte: Bromide
Sample: 0508
Technology: IC
Prep Method:
Target: 6.01 mg/L
Limits: 5.02 to 7.01 mg/L

Basis: Linear Regression
Robust Mean: 6 mg/L
Std Dev: 0 mg/L
Median: 5.95 mg/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Bromide

Analyte: Bromide
Sample: 0508
Technology: IC-COND
Prep Method:
Target: 6.01 mg/L
Limits: 5.02 to 7.01 mg/L

Basis: Linear Regression
Robust Mean: 6.1 mg/L
Std Dev: 1.8882 mg/L
Median: 6.115 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 19  Fail: 1  Total: 20

Non Potable Water Bromide

Analyte: Bromide
Sample: 0508
Technology: TITR
Prep Method:
Target: 6.01 mg/L
Limits: 5.02 to 7.01 mg/L

Basis: Linear Regression
Robust Mean: 6.3 mg/L
Std Dev: 0 mg/L
Median: 6.29 mg/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Benzo(k)fluoranthene

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Non Potable Water Benzo(k)fluoranthene

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(k)fluoranthene
Sample: 0536
Technology: GC-MS
Prep Method:
Target: 194 ug/L
Limits: 49.8 to 273 ug/L
Basis: Linear Regression
Robust Mean: 162.9 ug/L
Std Dev: 31.4617 ug/L
Median: 170 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass 15  Fail 0  Total: 15

Non Potable Water Benzo(k)fluoranthene

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(k)fluoranthene
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3510C
Target: 194 ug/L
Limits: 49.8 to 273 ug/L
Basis: Linear Regression
Robust Mean: 167.7 ug/L
Std Dev: 24.7976 ug/L
Median: 170 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass 15  Fail 0  Total: 15

Non Potable Water Benzo(k)fluoranthene

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(k)fluoranthene
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3520C
Target: 194 ug/L
Limits: 49.8 to 273 ug/L
Basis: Linear Regression
Robust Mean: 175 ug/L
Std Dev: 0 ug/L
Median: 175 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass 1  Fail 0  Total: 1

Non Potable Water Biochemical Oxygen Demand

Shipments: 405  Matrix: Non Potable Water
Analyte: Biochemical Oxygen Demand
Sample: 0501
Technology: TITR
Prep Method:
Target: 110 mg/L
Limits: 36.7 to 102 mg/L
Basis: Linear Regression
Robust Mean: 70.2 mg/L
Std Dev: 14.1598 mg/L
Median: 70.15 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass 81  Fail 1  Total: 82

Non Potable Water Boron, Total

Score Date: 09/01/2017
Non Potable Water Boron, Total

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Boron, Total  
Sample: 0511A  
Technology: ICP-AES  
Prep Method: EPA 3010A  
Target: 2000 μg/L  
Limits: 1700 to 2300 μg/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 1986 μg/L  
Std Dev: 815.7389 μg/L  
Median: 1970 μg/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 5  Fail: 1  Total: 6  
Scores Date: 09/01/2017  
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Non Potable Water Boron, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Boron, Total
Sample: 0511A
Technology: ICP-MS
Prep Method:
Target: 2000 ug/L
Limits: 1700 to 2300 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1855 ug/L
Std Dev: 63.6396 ug/L
Median: 1855 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Non Potable Water Bromoform

Shipment: 405  Matrix: Non Potable Water
Analyte: Bromoform
Sample: 0513
Technology: GC-ELCD
Prep Method:
Target: 80.7 ug/L
Limits: 48.4 to 113 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 82.4 ug/L
Std Dev: 0 ug/L
Median: 82.4 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

A histogram is not displayed for Technology: GC-ELCD due to the limited number of participants.
Non Potable Water Bromoform

Test Results (End Groups Include Outliers)

Number of Labs

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<th>Test Results (End Groups Include Outliers)</th>
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Totals for Matrix/Analyte/Technology:

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Non Potable Water Calcium, Total

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

Non Potable Water Calcium, Total

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

Non Potable Water Calcium, Total

Non Potable Water Calcium, Total

Score Date: 09/01/2017

Proficiency Test Statistics

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Non Potable Water Calcium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Calcium, Total
Sample: 0537
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 50.5 mg/L
Limits: 42.9 to 58.1 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 48.4 mg/L
Std Dev: 0.8057 mg/L
Median: 48.65 mg/L

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1 1.5 2

47.8 48.4 49.3

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4  Fail: 0  Total: 4

Totals for Matrix/Analyte:

Labs: Pass: 40  Fail: 2  Total: 42

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

Non Potable Water Calcium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Calcium, Total
Sample: 0537
Technology: ICP-AES
Prep Method: EPA 3005A
Target: 50.5 mg/L
Limits: 42.9 to 58.1 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 49.4 mg/L
Std Dev: 2.8991 mg/L
Median: 49.35 mg/L

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1 1.5 2

46.7 49.3 50.2 51 54.5

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 40  Fail: 2  Total: 42

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

Non Potable Water Calcium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Calcium, Total
Sample: 0537
Technology: ICP-AES
Prep Method: EPA 3010A
Target: 50.5 mg/L
Limits: 42.9 to 58.1 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 49.2 mg/L
Std Dev: 15.6479 mg/L
Median: 49.6 mg/L

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1 1.5 2 3 4

46.7 49.3 50.2 51 54.5

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9  Fail: 1  Total: 10

Totals for Matrix/Analyte:

Labs: Pass: 40  Fail: 2  Total: 42

Non Potable Water Calcium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Calcium, Total
Sample: 0537
Technology: ICP-MS
Prep Method: EPA 3005A
Target: 50.5 mg/L
Limits: 42.9 to 58.1 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 48 mg/L
Std Dev: 0.3536 mg/L
Median: 47.95 mg/L

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1 1.5 2

46.7 49.3 50.2 51

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 40  Fail: 2  Total: 42

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

Score Date: 09/01/2017
Non Potable Water Calcium, Total

Analyte: Calcium, Total

Sample: 0537

Technology: ICP-MS

Prep Method: EPA 3010A

Target: 50.5 mg/L

Limits: 42.9 to 58.1 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 50.6 mg/L

Std Dev: 0 mg/L

Median: 50.6 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

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

Non Potable Water Calcium, Total

Analyte: Calcium, Total

Sample: 0537

Technology: ICP-MS

Prep Method: EPA 3015A

Target: 50.5 mg/L

Limits: 42.9 to 58.1 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 48.1 mg/L

Std Dev: 0 mg/L

Median: 48.1 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

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

Non Potable Water Calcium, Total

Analyte: Calcium, Total

Sample: 0537

Technology: TITR

Prep Method:

Target: 50.5 mg/L

Limits: 42.9 to 58.1 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: mg/L

Std Dev: 0 mg/L

Median: 56.9 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

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

Non Potable Water Carbonaceous BOD

Analyte: Carbonaceous BOD

Sample: 0501

Technology: TITR

Prep Method:

Target: 110 mg/L

Limits: 28.5 to 97.1 mg/L

Basis: Linear Regression

Robust Mean: 63 mg/L

Std Dev: 16.2717 mg/L

Median: 63.15 mg/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 64 Fail: 2 Total: 66

Test Results (End Groups Include Outliers)
Non Potable Water Carbon tetrachloride

**Shipments:**
- **Matrix:** Non Potable Water
- **Analyte:** Carbon tetrachloride
- **Sample:** 0513
- **Technology:** GC-ELCD
- **Prep Method:**
  - **Target:** 35.2 \(\mu g/L\)
  - **Limits:** 19.3 to 48.2 \(\mu g/L\)
  - **Basis:** Linear Regression
  - **Robust Mean:** 31.1 \(\mu g/L\)
  - **Std Dev:** 0 \(\mu g/L\)
  - **Median:** 0 \(\mu g/L\)

**Test Results (End Groups Include Outliers):**
- **Number of Labs:**
  - 29.6
  - 31.2
  - 32.8
  - 34.4
  - 36
  - 37.6
  - 38.2
  - 43.9
- **Fail:** 0
- **Labs: Pass:** 35
- **Fail:** 0
- **Total:** 35

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 1, Fail: 0, Total: 1

**Non Potable Water Carbon tetrachloride**

**Shipments:**
- **Matrix:** Non Potable Water
- **Analyte:** Carbon tetrachloride
- **Sample:** 0513
- **Technology:** GC-MS
- **Prep Method:**
  - **Target:** 35.2 \(\mu g/L\)
  - **Limits:** 19.3 to 48.2 \(\mu g/L\)
  - **Basis:** Linear Regression
  - **Robust Mean:** 34.2 \(\mu g/L\)
  - **Std Dev:** 9.2556 \(\mu g/L\)
  - **Median:** 34.7 \(\mu g/L\)

**Test Results (End Groups Include Outliers):**
- **Number of Labs:**
  - 26.5
  - 29.6
  - 31.2
  - 32.8
  - 34.4
  - 36
  - 37.6
  - 38.2
  - 43.9
- **Fail:** 0
- **Labs: Pass:** 35
- **Fail:** 0
- **Total:** 35

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 15, Fail: 0, Total: 15

**Non Potable Water Carbon tetrachloride**

**Shipments:**
- **Matrix:** Non Potable Water
- **Analyte:** Carbon tetrachloride
- **Sample:** 0513
- **Technology:** GC-MS
- **Prep Method:**
  - **Target:** 35.2 \(\mu g/L\)
  - **Limits:** 19.3 to 48.2 \(\mu g/L\)
  - **Basis:** Linear Regression
  - **Robust Mean:** 34.2 \(\mu g/L\)
  - **Std Dev:** 8.3678 \(\mu g/L\)
  - **Median:** 35.1 \(\mu g/L\)

**Test Results (End Groups Include Outliers):**
- **Number of Labs:**
  - 26.5
  - 29.6
  - 31.2
  - 32.8
  - 34.4
  - 36
  - 37.6
  - 38.2
  - 43.9
- **Fail:** 0
- **Labs: Pass:** 35
- **Fail:** 0
- **Total:** 35

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 19, Fail: 0, Total: 19

**Non Potable Water Cadmium, Total**

**Shipments:**
- **Matrix:** Non Potable Water
- **Analyte:** Cadmium, Total
- **Sample:** 0511A
- **Technology:** FAAS
- **Prep Method:**
  - **Target:** 701 \(\mu g/L\)
  - **Limits:** 596 to 806 \(\mu g/L\)
  - **Basis:** Target Value +/- a fixed percent
  - **Robust Mean:** 695 \(\mu g/L\)
  - **Std Dev:** 46.669 \(\mu g/L\)
  - **Median:** 695 \(\mu g/L\)

**Test Results (End Groups Include Outliers):**
- **Number of Labs:**
  - 28.5
  - 29.6
  - 31.2
  - 32.8
  - 34.4
  - 36
  - 37.6
  - 38.2
  - 43.9
- **Fail:** 0
- **Labs: Pass:** 74
- **Fail:** 2
- **Total:** 76

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2, Fail: 0, Total: 2

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

**Score Date:** 09/01/2017
Non Potable Water Cadmium, Total

Score Date: 09/01/2017

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Non Potable Water Cadmium, Total

Analyte: Cadmium, Total
Sample: 0511A
Technology: GFAAS
Prep Method: EPA 3010A
Target: 701 ug/L
Limits: 596 to 806 ug/L
Basis: Target Value +/- a fixed percent

Robust Mean: 720 ug/L
Std Dev: 40 ug/L
Median: 720 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 0 Fail: 1 Total: 1

Totals for Matrix/Analyte:
Labs: Pass: 74 Fail: 2 Total: 76

Non Potable Water Cadmium, Total

Analyte: Cadmium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 701 ug/L
Limits: 596 to 806 ug/L
Basis: Target Value +/- a fixed percent

Robust Mean: 661.1 ug/L
Std Dev: 162.9497 ug/L
Median: 694 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 18 Fail: 1 Total: 19

Totals for Matrix/Analyte:
Labs: Pass: 74 Fail: 2 Total: 76

Non Potable Water Cadmium, Total

Analyte: Cadmium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3005A
Target: 701 ug/L
Limits: 596 to 806 ug/L
Basis: Target Value +/- a fixed percent

Robust Mean: 703.5 ug/L
Std Dev: 19.2267 ug/L
Median: 700.5 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 74 Fail: 2 Total: 76

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.
Non Potable Water Cadmium, Total

Test Results (End Groups Include Outliers)

Number of Labs

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<th>764</th>
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Non Potable Water
Matrix:

Fail: 0
Labs: Pass: 74
Fail: 2
Total: 76

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

Shipments:
Robust Mean: 700.9 ug/L
Std Dev: 40.8217 ug/L
Median: 692 ug/L

Technology: ICP-AES
Prep Method: EPA 3010A
Target: 701 ug/L
Limits: 596 to 806 ug/L
Basis: Target Value +/- a fixed percent

Analyte: Cadmium, Total

Score Date: 09/01/2017

Non Potable Water Cadmium, Total

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

Non Potable Water Cadmium, Total

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

Non Potable Water Cadmium, Total

A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.
Non Potable Water Cadmium, Total

**Shipments:**
- 405

**Matrix:** Non Potable Water

**Analyte:** Cadmium, Total

**Sample:** 0511A

**Technology:** ICP-MS

**Prep Method:**
- EPA 200.2

**Target:** 701 ug/L

**Limits:** 596 to 806 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 689.3 ug/L
  - Std Dev: 12.5033 ug/L
  - Median: 689 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 0
- Fail: 0
- Total: 0

- Labs: Pass: 74
- Fail: 2
- Total: 76

**Shipment:**
- 672

**Matrix:** Non Potable Water

**Analyte:** Cadmium, Total

**Sample:** 0511A

**Technology:** ICP-MS

**Prep Method:**
- EPA 3005A

**Target:** 701 ug/L

**Limits:** 596 to 806 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 720 ug/L
  - Std Dev: 17.0587 ug/L
  - Median: 721 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 5
- Fail: 0
- Total: 5

- Labs: Pass: 74
- Fail: 2
- Total: 76

**Shipment:**
- 698

**Matrix:** Non Potable Water

**Analyte:** Cadmium, Total

**Sample:** 0511A

**Technology:** ICP-MS

**Prep Method:**
- EPA 3010A

**Target:** 701 ug/L

**Limits:** 596 to 806 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 697.3 ug/L
  - Std Dev: 7.2342 ug/L
  - Median: 701 ug/L

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

- Labs: Pass: 74
- Fail: 2
- Total: 76

**Shipment:**
- 724

**Matrix:** Non Potable Water

**Analyte:** Cadmium, Total

**Sample:** 0511A

**Technology:** ICP-MS

**Prep Method:**
- EPA 3015A

**Target:** 701 ug/L

**Limits:** 596 to 806 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 712.5 ug/L
  - Std Dev: 0.7071 ug/L
  - Median: 712.5 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2
- Fail: 0
- Total: 2

- Labs: Pass: 74
- Fail: 2
- Total: 76

---

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

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Bromomethane

Analyte: Bromomethane
Sample: 0513
Technology: GC-ELCD
Prep Method:
Target: 87.3 ug/L
Limits: 34.9 to 140 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 85.9 ug/L
Std Dev: 0 ug/L
Median: 85.9 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte:
Labs: Pass: 15 Total: 15

Non Potable Water Bromomethane

Analyte: Bromomethane
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 87.3 ug/L
Limits: 34.9 to 140 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 81.5 ug/L
Std Dev: 24.4819 ug/L
Median: 85.1 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 18 Fail: 1 Total: 19

Totals for Matrix/Analyte:
Labs: Pass: 34 Fail: 1 Total: 35

Non Potable Water Chloromethane

Analyte: Chloromethane
Sample: 0513
Technology: GC-ELCD
Prep Method:
Target: 34.2 ug/L
Limits: 13.7 to 54.7 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 39.5 ug/L
Std Dev: 0 ug/L
Median: 39.5 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte:
Labs: Pass: 34 Fail: 1 Total: 35

Score Date: 09/01/2017
Proficiency Test Statistics
### Non Potable Water Chloromethane

**Sample:** 0513  
**Technology:** GC-MS

**Prep Method:** EPA 5030C  
**Target:** 34.2 ug/L  
**Limits:** 13.7 to 54.7 ug/L

**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 37 ug/L  
**Std Dev:** 10.0597 ug/L  
**Median:** 36 ug/L

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 18  
- Fail: 1  
- Total: 19

### Non Potable Water Calcium Hardness

**Sample:** 0537  
**Technology:** CALC

**Prep Method:**  
**Target:** 126 mg/L  
**Limits:** 107 to 145 mg/L

**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 120.7 mg/L  
**Std Dev:** 3.0551 mg/L  
**Median:** 120 mg/L

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 3  
- Fail: 0  
- Total: 3
Non Potable Water Calcium Hardness

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Calcium Hardness  
Sample: 0537  
Technology: ICP-AES  
Prep Method: EPA 200.2  
Target: 126 mg/L  
Limits: 107 to 145 mg/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 123 mg/L  
   Std Dev: 0 mg/L  
   Median: 123 mg/L  
Totals for Matrix/Analyte/Technology:  
   Labs: Pass: 23  Fail: 2  Total: 25  

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

Non Potable Water Calcium Hardness

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Calcium Hardness  
Sample: 0537  
Technology: TITR  
Prep Method:  
Target: 126 mg/L  
Limits: 107 to 145 mg/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 126 mg/L  
   Std Dev: 63.148 mg/L  
   Median: 128 mg/L  
Totals for Matrix/Analyte/Technology:  
   Labs: Pass: 4  Fail: 0  Total: 4  

Non Potable Water Chloride

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Chloride  
Sample: 0508  
Technology: AMP  
Prep Method:  
Target: 190 mg/L  
Limits: 168 to 213 mg/L  
Basis: Linear Regression  
Robust Mean: 188.3 mg/L  
   Std Dev: 2.0817 mg/L  
   Median: 189 mg/L  
Totals for Matrix/Analyte/Technology:  
   Labs: Pass: 3  Fail: 0  Total: 3  

Non Potable Water Chloride

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Chloride  
Sample: 0508  
Technology: AUTO  
Prep Method:  
Target: 190 mg/L  
Limits: 168 to 213 mg/L  
Basis: Linear Regression  
Robust Mean: 196 mg/L  
   Std Dev: 0 mg/L  
   Median: 196 mg/L  
Totals for Matrix/Analyte/Technology:  
   Labs: Pass: 1  Fail: 0  Total: 1  

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 69 of 386
Non Potable Water Chloride

Analyte: Chloride
Sample: 0508
Technology: COLOR
Prep Method:
Target: 190 mg/L
Limits: 168 to 213 mg/L
Basis: Linear Regression
Robust Mean: 193 mg/L
Std Dev: 9.6954 mg/L
Median: 194 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 174 Fail: 0 Total: 174

Non Potable Water Chloride

Analyte: Chloride
Sample: 0508
Technology: IC
Prep Method:
Target: 190 mg/L
Limits: 168 to 213 mg/L
Basis: Linear Regression
Robust Mean: 190 mg/L
Std Dev: 0 mg/L
Median: 190 mg/L

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

Non Potable Water Chloride

Analyte: Chloride
Sample: 0508
Technology: IC-COND
Prep Method:
Target: 190 mg/L
Limits: 168 to 213 mg/L
Basis: Linear Regression
Robust Mean: 190.5 mg/L
Std Dev: 36.3218 mg/L
Median: 191 mg/L

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

Non Potable Water Chloride

Analyte: Chloride
Sample: 0508
Technology: TITR
Prep Method:
Target: 190 mg/L
Limits: 168 to 213 mg/L
Basis: Linear Regression
Robust Mean: 192.3 mg/L
Std Dev: 39.7606 mg/L
Median: 193.5 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 23 Fail: 1 Total: 24

Non Potable Water Chlordane Total

Score Date: 09/01/2017
Proficiency Test Statistics
Page 70 of 386
Non Potable Water Trichlorofluoromethane

**Analyte:** Trichlorofluoromethane

**Sample:** 0513

**Technology:** GC-ELCD

**Prep Method:**
- Target: 95.8 ug/L
- Limits: 38.3 to 153 ug/L
- Basis: Target Value +/- a fixed percent

**Robust Mean:** 89 ug/L
- Std Dev: 0 ug/L
- Median: 89 ug/L

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

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>77.9</th>
<th>83.3</th>
<th>88.7</th>
<th>94.1</th>
<th>99.5</th>
<th>104.9</th>
<th>110.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs</td>
<td>77</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Shipments:**
- Robust Mean: 89 ug/L
- Std Dev: 0 ug/L
- Median: 89 ug/L

**Basis:** Target Value +/- a fixed percent

**Limits:**
- 38.3 to 153 ug/L

**Target:** 95.8 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1
- Fail: 0
- Total: 1

**Totals for Matrix/Analyte:**
- Labs: Pass: 34
- Fail: 1
- Total: 35

Non Potable Water Chlorobenzene

**Analyte:** Chlorobenzene

**Sample:** 0513

**Technology:** GC-ELCD

**Prep Method:**
- Target: 99.5 ug/L
- Limits: 69.7 to 129 ug/L
- Basis: Target Value +/- a fixed percent

**Robust Mean:** 82.8 ug/L
- Std Dev: 0 ug/L
- Median: 82.8 ug/L

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

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>67.1</th>
<th>72.5</th>
<th>77.9</th>
<th>83.3</th>
<th>88.7</th>
<th>94.1</th>
<th>99.5</th>
<th>104.9</th>
<th>110.3</th>
<th>116.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**Shipments:**
- Robust Mean: 82.8 ug/L
- Std Dev: 0 ug/L
- Median: 82.8 ug/L

**Basis:** Target Value +/- a fixed percent

**Limits:**
- 69.7 to 129 ug/L

**Target:** 99.5 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1
- Fail: 0
- Total: 1

**Totals for Matrix/Analyte:**
- Labs: Pass: 39
- Fail: 0
- Total: 39

**Score Date:** 09/01/2017

Proficiency Test Statistics
Non Potable Water Chlorobenzene

Shipments: 405  Matrix: Non Potable Water
Analyte: Chlorobenzene
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 99.5 ug/L
Limits: 69.7 to 129 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 96.7 ug/L
Std Dev: 6.9035 ug/L
Median: 97.9 ug/L

Test Results (End Groups Include Outliers)

Number of Labs

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

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

Non Potable Water Dibromochloromethane

Shipments: 405  Matrix: Non Potable Water
Analyte: Dibromochloromethane
Sample: 0513
Technology: GC-ELCD
Prep Method:
Target: 42.1 ug/L
Limits: 25.3 to 58.9 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 41.4 ug/L
Std Dev: 0 ug/L
Median: 41.4 ug/L

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

Score Date: 09/01/2017
Non Potable Water Dibromochloromethane

Score Date: 09/01/2017 Proficiency Test Statistics Page 74 of 386
Non Potable Water Chloroethane

Number of Labs
78 85.3 92.6 99.9 107.2 114.5 121.8 129.1 143.7

Test Results (End Groups Include Outliers)

Non Potable Water Chloroform

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

Score Date: 09/01/2017
Proficiency Test Statistics
**Non Potable Water Cyanide, Total**

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Cyanide, Total</td>
</tr>
<tr>
<td>Sample:</td>
<td>0512</td>
</tr>
<tr>
<td>Technology:</td>
<td>AMP</td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td>0.84 mg/L</td>
</tr>
<tr>
<td>Limits:</td>
<td>0.546 to 1.13 mg/L</td>
</tr>
<tr>
<td>Basis:</td>
<td>Target Value +/- a fixed percent</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td></td>
</tr>
<tr>
<td>Std Dev:</td>
<td>0.0523 mg/L</td>
</tr>
<tr>
<td>Median:</td>
<td>0.71 mg/L</td>
</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology:</td>
<td></td>
</tr>
<tr>
<td>Labs: Pass:</td>
<td>40</td>
</tr>
<tr>
<td>Fail:</td>
<td>4</td>
</tr>
<tr>
<td>Total:</td>
<td>44</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Cyanide, Total</td>
</tr>
<tr>
<td>Sample:</td>
<td>0512</td>
</tr>
<tr>
<td>Technology:</td>
<td>AUTO</td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td>0.84 mg/L</td>
</tr>
<tr>
<td>Limits:</td>
<td>0.546 to 1.13 mg/L</td>
</tr>
<tr>
<td>Basis:</td>
<td>Target Value +/- a fixed percent</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td></td>
</tr>
<tr>
<td>Std Dev:</td>
<td>0.0876 mg/L</td>
</tr>
<tr>
<td>Median:</td>
<td>0.8 mg/L</td>
</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology:</td>
<td></td>
</tr>
<tr>
<td>Labs: Pass:</td>
<td>14</td>
</tr>
<tr>
<td>Fail:</td>
<td>1</td>
</tr>
<tr>
<td>Total:</td>
<td>15</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Cyanide, Total</td>
</tr>
<tr>
<td>Sample:</td>
<td>0512</td>
</tr>
<tr>
<td>Technology:</td>
<td>AUTO 9010C</td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td>0.84 mg/L</td>
</tr>
<tr>
<td>Limits:</td>
<td>0.546 to 1.13 mg/L</td>
</tr>
<tr>
<td>Basis:</td>
<td>Target Value +/- a fixed percent</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td></td>
</tr>
<tr>
<td>Std Dev:</td>
<td>0.0989 mg/L</td>
</tr>
<tr>
<td>Median:</td>
<td>0.76 mg/L</td>
</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology:</td>
<td></td>
</tr>
<tr>
<td>Labs: Pass:</td>
<td>4</td>
</tr>
<tr>
<td>Fail:</td>
<td>0</td>
</tr>
<tr>
<td>Total:</td>
<td>4</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Cyanide, Total</td>
</tr>
<tr>
<td>Sample:</td>
<td>0512</td>
</tr>
<tr>
<td>Technology:</td>
<td>COLOR</td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td>0.84 mg/L</td>
</tr>
<tr>
<td>Limits:</td>
<td>0.546 to 1.13 mg/L</td>
</tr>
<tr>
<td>Basis:</td>
<td>Target Value +/- a fixed percent</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td></td>
</tr>
<tr>
<td>Std Dev:</td>
<td>0.2513 mg/L</td>
</tr>
<tr>
<td>Median:</td>
<td>0.81 mg/L</td>
</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology:</td>
<td></td>
</tr>
<tr>
<td>Labs: Pass:</td>
<td>10</td>
</tr>
<tr>
<td>Fail:</td>
<td>1</td>
</tr>
<tr>
<td>Total:</td>
<td>11</td>
</tr>
</tbody>
</table>

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Cyanide, Total

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8 mg/L</td>
<td>0.2227 mg/L</td>
<td>0.84 mg/L</td>
</tr>
</tbody>
</table>


Non Potable Water Cyanide, Total

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

Non Potable Water Cobalt, Total

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>679 ug/L</td>
<td>0 ug/L</td>
<td>679 ug/L</td>
</tr>
</tbody>
</table>


Non Potable Water Cobalt, Total

A histogram is not displayed for Technology: CRC-ICP/MS due to the limited number of participants.
Non Potable Water Cobalt, Total

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

Robust Mean: 677.3 ug/L
Std Dev: 12.0381 ug/L
Median: 680.5 ug/L

Fails: 0
Labs: 50
Total: 50

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

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

Score Date: 09/01/2017
Proficiency Test Statistics
Non Potable Water Cobalt, Total

Shipments: 405  
Matrix: Non Potable Water
Analyte: Cobalt, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 200.2
Target: 664 ug/L
Limits: 564 to 764 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 656 ug/L
Std Dev: 25.4558 ug/L
Median: 656 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

Automatically generated.
Non Potable Water Cobalt, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Cobalt, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3015A
Target: 664 ug/L
Limits: 564 to 764 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 688 ug/L
  Std Dev: 35.3553 ug/L
  Median: 688 ug/L

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

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

Non Potable Water Chemical Oxygen Demand

Shipments: 405  Matrix: Non Potable Water
Analyte: Chemical Oxygen Demand
Sample: 0501
Technology: COLOR
Prep Method:
Target: 112 mg/L
Limits: 86.4 to 133 mg/L
Basis: Linear Regression
Robust Mean: 111.9 mg/L
  Std Dev: 8.0442 mg/L
  Median: 111 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 47  Fail: 1  Total: 48

Non Potable Water Chemical Oxygen Demand

Shipments: 405  Matrix: Non Potable Water
Analyte: Chemical Oxygen Demand
Sample: 0501
Technology: TITR
Prep Method:
Target: 112 mg/L
Limits: 86.4 to 133 mg/L
Basis: Linear Regression
Robust Mean: 99.9 mg/L
  Std Dev: 10.748 mg/L
  Median: 99.9 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:
Labs: Pass: 45  Fail: 1  Total: 46

Totals for Matrix/Analyte:
Labs: Pass: 47  Fail: 1  Total: 48

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

Non Potable Water Color

Shipments: 405  Matrix: Non Potable Water
Analyte: Color
Sample: 0556
Technology: COLOR
Prep Method:
Target: 71 Color Units
Limits: 52.7 to 83 Color Units
Basis: Linear Regression
Robust Mean: 65.4 Color Units
  Std Dev: 19.7211 Color Units
  Median: 66 Color Units

Totals for Matrix/Analyte/Technology:
Labs: Pass: 29  Fail: 4  Total: 33

Totals for Matrix/Analyte:
Labs: Pass: 29  Fail: 4  Total: 33
### Non Potable Water Chromium, Total

**Sample**
- **Score Date:** 09/01/2017
- **Matrix:** Non Potable Water
- **Analyte:** Chromium, Total
- **Sample:** 0511A
- **Technology:** CRC-ICP/MS
- **Prep Method:**
  - **Target:** 633 ug/L
  - **Limits:** 538 to 728 ug/L
  - **Basis:** Target Value +/- a fixed percent
  - **Robust Mean:** 655 ug/L
    - **Std Dev:** 0 ug/L
    - **Median:** 655 ug/L
- **Totals for Matrix/Analyte/Technology:**
  - Labs: Pass: 1, Fail: 0, Total: 1
  - Total: 68

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

### Non Potable Water Chromium, Total

**Sample**
- **Matrix:** Non Potable Water
- **Analyte:** Chromium, Total
- **Sample:** 0511A
- **Technology:** FAAS
- **Prep Method:**
  - **Target:** 633 ug/L
  - **Limits:** 538 to 728 ug/L
  - **Basis:** Target Value +/- a fixed percent
  - **Robust Mean:** 608 ug/L
    - **Std Dev:** 429.9209 ug/L
    - **Median:** 579.5 ug/L
- **Totals for Matrix/Analyte/Technology:**
  - Labs: Pass: 2, Fail: 0, Total: 2
  - Total: 68

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

### Non Potable Water Chromium, Total

**Sample**
- **Matrix:** Non Potable Water
- **Analyte:** Chromium, Total
- **Sample:** 0511A
- **Technology:** FAAS
- **Prep Method:** EPA 3005A
- **Target:** 633 ug/L
- **Limits:** 538 to 728 ug/L
- **Basis:** Target Value +/- a fixed percent
- **Robust Mean:** 572 ug/L
  - **Std Dev:** 0 ug/L
  - **Median:** 572 ug/L
- **Totals for Matrix/Analyte/Technology:**
  - Labs: Pass: 1, Fail: 0, Total: 1
  - Total: 68

### Non Potable Water Chromium, Total

**Sample**
- **Matrix:** Non Potable Water
- **Analyte:** Chromium, Total
- **Sample:** 0511A
- **Technology:** GFAAS
- **Prep Method:**
  - **Target:** 633 ug/L
  - **Limits:** 538 to 728 ug/L
  - **Basis:** Target Value +/- a fixed percent
  - **Robust Mean:** 688 ug/L
    - **Std Dev:** 0 ug/L
    - **Median:** 688 ug/L
- **Totals for Matrix/Analyte/Technology:**
  - Labs: Pass: 1, Fail: 0, Total: 1
  - Total: 68

**A histogram is not displayed for Technology: GFAAS due to the limited number of participants.**
Non Potable Water Chromium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Chromium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3005A
Target: 633 ug/L
Limits: 538 to 728 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 633.3 ug/L
Std Dev: 10.2103 ug/L
Median: 633 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 66  Fail: 2  Total: 68

Non Potable Water Chromium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Chromium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3010A
Target: 633 ug/L
Limits: 538 to 728 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 639.3 ug/L
Std Dev: 179.1354 ug/L
Median: 632 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 66  Fail: 2  Total: 68

Score Date: 09/01/2017
Non Potable Water Chromium, Total

Score Date: 09/01/2017
Proficiency Test Statistics
Non Potable Water Chromium, Total

**Analyte:** Chromium, Total

**Sample:** 0511A

**Technology:** ICP-MS

**Prep Method:** EPA 3005A

**Target:** 633 ug/L

**Limits:** 538 to 728 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 632.54 ug/L

**Std Dev:** 11.327 ug/L

**Median:** 636 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 66, Fail: 2, Total: 68

---

Non Potable Water Chromium VI

**Analyte:** Chromium VI

**Sample:** 0532

**Technology:** COLOR

**Prep Method:**

**Target:** 799 ug/L

**Limits:** 673 to 914 ug/L

**Basis:** Linear Regression

**Robust Mean:** 777.2 ug/L

**Std Dev:** 196.7546 ug/L

**Median:** 780.5 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 29, Fail: 3, Total: 32

---

**A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.**
### Non Potable Water Chromium VI

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: Chromium VI</td>
<td></td>
</tr>
<tr>
<td>Sample: 0532</td>
<td></td>
</tr>
<tr>
<td>Technology: IC</td>
<td></td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target: 799 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 673 to 914 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 762 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 762 ug/L</td>
<td></td>
</tr>
</tbody>
</table>

#### Totals for Matrix/Analyte/Technology:

| Labs: Pass: 1 | Fail: 0 | Total: 1 |

#### Totals for Matrix/Analyte:

| Labs: Pass: 30 | Fail: 3 | Total: 33 |

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

---

### Non Potable Water Copper, Total

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: Copper, Total</td>
<td></td>
</tr>
<tr>
<td>Sample: 0511A</td>
<td></td>
</tr>
<tr>
<td>Technology: CRC-ICP/MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target: 935 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 795 to 1080 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Target Value +/- a fixed percent</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 925 ug/L</td>
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<tr>
<td>Std Dev: 0 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 925 ug/L</td>
<td></td>
</tr>
</tbody>
</table>

#### Totals for Matrix/Analyte/Technology:

| Labs: Pass: 1 | Fail: 0 | Total: 1 |

#### Totals for Matrix/Analyte:

| Labs: Pass: 71 | Fail: 1 | Total: 72 |

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

---

### Non Potable Water Copper, Total

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: Copper, Total</td>
<td></td>
</tr>
<tr>
<td>Sample: 0511A</td>
<td></td>
</tr>
<tr>
<td>Technology: FAAS</td>
<td></td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target: 935 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 795 to 1080 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Target Value +/- a fixed percent</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 915.8 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 27.061 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 912 ug/L</td>
<td></td>
</tr>
</tbody>
</table>

#### Totals for Matrix/Analyte/Technology:

| Labs: Pass: 5 | Fail: 0 | Total: 5 |

#### Totals for Matrix/Analyte:

| Labs: Pass: 71 | Fail: 1 | Total: 72 |

---

### Non Potable Water Copper, Total

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: Copper, Total</td>
<td></td>
</tr>
<tr>
<td>Sample: 0511A</td>
<td></td>
</tr>
<tr>
<td>Technology: GFAAS</td>
<td></td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target: 935 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 795 to 1080 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Target Value +/- a fixed percent</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 956 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 956 ug/L</td>
<td></td>
</tr>
</tbody>
</table>

#### Totals for Matrix/Analyte/Technology:

| Labs: Pass: 1 | Fail: 0 | Total: 1 |

#### Totals for Matrix/Analyte:

| Labs: Pass: 71 | Fail: 1 | Total: 72 |

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

---

### Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Copper, Total

Number of Labs:
- 0
- 1
- 2
- 3
- 4

Number of Labs:
- 1
- 2
- 3
- 4

Number of Labs:
- 1
- 2
- 3
- 4

Number of Labs:
- 1
- 2
- 3
- 4

Non Potable Water
Matrix:
- 405

Fail:
- 0

Labs:  Pass:
- 71
- 1

Total:
- 72

Totals for Matrix/Analyte/Technology:
- Labs:  Pass: 18  Fail: 1  Total: 19

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

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

Totals for Matrix/Analyte:
- Labs:  Pass: 71  Fail: 1  Total: 72

Shipments:
- 405
  - 5

Matrix: Non Potable Water

Sample: 0511A

Technology: ICP-AES

Prep Method:
- EPA 200.2
- EPA 3005A
- EPA 3010A

Target: 935 ug/L

Limits: 795 to 1080 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean:
- 889.3 ug/L
- 937.1 ug/L
- 963 ug/L
- 951.3 ug/L

Std Dev:
- 218.8517 ug/L
- 21.447 ug/L
- 46.2241 ug/L
- 266.4381 ug/L

Median:
- 943.12 ug/L
- 928 ug/L
- 946.5 ug/L
- 956 ug/L

Limits:
- 795 to 1080 ug/L

Target:
- 935 ug/L
- 935 ug/L
- 935 ug/L
- 935 ug/L

Technology:
- ICP-AES
- ICP-AES
- ICP-AES

Prep Method:
- EPA 200.2
- EPA 3005A
- EPA 3010A

Score Date: 09/01/2017
Non Potable Water Copper, Total

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

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

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

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Copper, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Copper, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3005A
Target: 935 ug/L
Limits: 795 to 1080 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 948.4 ug/L
  Std Dev: 34.3482 ug/L
  Median: 934 ug/L
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 920 Fail: 937 Total: 989

Non Potable Water Copper, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Copper, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3010A
Target: 935 ug/L
Limits: 795 to 1080 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 939 ug/L
  Std Dev: 9 ug/L
  Median: 939 ug/L
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 937 Fail: 954 Total: 1041

Non Potable Water Copper, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Copper, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3015A
Target: 935 ug/L
Limits: 795 to 1080 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 975 ug/L
  Std Dev: 63.6396 ug/L
  Median: 975 ug/L
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 1047 Fail: 1123 Total: 2170

Non Potable Water Dibenzo(a,h)anthracene

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

Non Potable Water Dibenzo(a,h)anthracene

Score Date: 09/01/2017
Proficiency Test Statistics
Non Potable Water Dibenzo(a,h)anthracene

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

Non Potable Water 1,2-Dibromo-3-chloropropane, Low Level

Non Potable Water delta-BHC

Score Date: 09/01/2017  Proficiency Test Statistics  Page 89 of 386
Non Potable Water delta-BHC

**Test Results (End Groups Include Outliers)**

- **Number of Labs:**
  - 6.9
  - 10.3
  - 12
  - 13.7
  - 15.4
  - 17.1
  - 18.8
  - 20.5
  - 22.2

- **Fail:**
  - 0
  - 1
  - 2
  - 3
  - 4

- **Labs:**
  - Pass: 31
  - Fail: 1
  - Total: 32

- **Shipment:** 405
- **Matrix:** Non Potable Water
- **Analyte:** delta-BHC
- **Sample:** 0517
- **Technology:** GC-ECD
- **Prep Method:** EPA 3510C
- **Target:** 18.9 ug/L
- **Limits:** 8.32 to 26 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 15.4 ug/L
  - **Std Dev:** 3.8587 ug/L
  - **Median:** 15.8 ug/L

- **Totals for Matrix/Analyte/Technology:**
  - Labs: Pass: 16 Fail: 1 Total: 17

- **Totals for Matrix/Analyte:**
  - Labs: Pass: 1 Total: 1

- **Robust Mean:** 11.4 ug/L
  - **Std Dev:** 0 ug/L
  - **Median:** 11.4 ug/L

- **Limits:** 8.32 to 26 ug/L

- **Target:** 18.9 ug/L

- **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: 31 Fail: 1 Total: 32

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

---

Non Potable Water Di-n-butyl phthalate

- **Score Date:** 09/01/2017
- **Proficiency Test Statistics**

---
Non Potable Water Di-n-butyl phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Di-n-butyl phthalate
Sample: 0536
Technology: GC-MS
Prep Method:
Target: 117 ug/L
Limits: 41.4 to 151 ug/L
Basis: Linear Regression
Robust Mean: 90.6 ug/L
Std Dev: 14.5563 ug/L
Median: 91.8 ug/L

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

Non Potable Water Diethyl phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Diethyl phthalate
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3510C
Target: 117 ug/L
Limits: 41.4 to 151 ug/L
Basis: Linear Regression
Robust Mean: 90 ug/L
Std Dev: 15.8346 ug/L
Median: 92.6 ug/L

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

Non Potable Water Diethyl phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Diethyl phthalate
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3520C
Target: 117 ug/L
Limits: 41.4 to 151 ug/L
Basis: Linear Regression
Robust Mean: 103 ug/L
Std Dev: 0 ug/L
Median: 103 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

Non Potable Water Diethyl phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Diethyl phthalate
Sample: 0536
Technology: GC-ECD
Prep Method:
Target: 86.6 ug/L
Limits: 15.3 to 121 ug/L
Basis: Linear Regression
Robust Mean: 49 ug/L
Std Dev: 0 ug/L
Median: 49 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

Non Potable Water Diethyl phthalate

Score Date: 09/01/2017
Non Potable Water Diethyl phthalate

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Diethyl phthalate

**Sample:** 0536

**Technology:** GC-MS

**Prep Method:**

- **Target:** 86.6 µg/L
- **Limits:** 15.3 to 121 µg/L
- **Basis:** Linear Regression
- **Robust Mean:** 67.1 µg/L
- **Std Dev:** 16.1539 µg/L
- **Median:** 66.9 µg/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 32  Fail: 0  Total: 32

**Non Potable Water Dicamba**

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Diethyl phthalate

**Sample:** 0536

**Technology:** GC-MS

**Prep Method:**

- **Target:** 86.6 µg/L
- **Limits:** 15.3 to 121 µg/L
- **Basis:** Linear Regression
- **Robust Mean:** 65.7 µg/L
- **Std Dev:** 14.084 µg/L
- **Median:** 68.4 µg/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 15  Fail: 0  Total: 15

**Non Potable Water Dieldrin**

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Diethyl phthalate

**Sample:** 0536

**Technology:** GC-MS

**Prep Method:**

- **Target:** 86.6 µg/L
- **Limits:** 15.3 to 121 µg/L
- **Basis:** Linear Regression
- **Robust Mean:** 74.9 µg/L
- **Std Dev:** 0 µg/L
- **Median:** 74.9 µg/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 1  Fail: 0  Total: 1

**Non Potable Water Dieldrin**

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Dicamba

**Sample:** 0518

**Technology:** GC-ECD

**Prep Method:**

- **Target:** 7.42 µg/L
- **Limits:** 1.76 to 10.4 µg/L
- **Basis:** Linear Regression
- **Robust Mean:** 5.8 µg/L
- **Std Dev:** 1.6958 µg/L
- **Median:** 5.855 µg/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 14  Fail: 0  Total: 14

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Non Potable Water Dieldrin

**Sample**: 0517
**Analyte**: Dieldrin
**Technology**: GC-ECD
**Prep Method**: EPA 3510C
**Limits**: 7.32 to 18.8 ug/L
**Target**: 14.3 ug/L
**Basis**: Linear Regression
**Robust Mean**: 12.1 ug/L
**Std Dev**: 2.687 ug/L
**Median**: 12.7 ug/L

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.6</td>
<td>1</td>
</tr>
<tr>
<td>9.1</td>
<td>1</td>
</tr>
<tr>
<td>10.6</td>
<td>1</td>
</tr>
<tr>
<td>12.1</td>
<td>1</td>
</tr>
<tr>
<td>13.6</td>
<td>1</td>
</tr>
<tr>
<td>15.1</td>
<td>1</td>
</tr>
<tr>
<td>16.6</td>
<td>1</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology**

- **Labs**: 12
- **Fail**: 1
- **Total**: 13

**Proficiency Test Statistics**

- **Score Date**: 09/01/2017
### Non Potable Water Dieldrin

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Dieldrin  
**Sample:** 0517  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 14.3 ug/L  
**Limits:** 7.32 to 18.8 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 14.9 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 14.9 ug/L  

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

**Fail:** 0  
**Labs:** Pass: 30  
**Fail:** 3  
**Total:** 33  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 1  
**Fail:** 0  
**Total:** 1  

**Totals for Matrix/Analyte:**  
**Labs:** Pass: 30  
**Fail:** 3  
**Total:** 33  

### Non Potable Water Dimethyl phthalate

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Dimethyl phthalate  
**Sample:** 0536  
**Technology:** GC-ECD  
**Prep Method:** EPA 3510C  
**Target:** 62.9 ug/L  
**Limits:** 6.29 to 94.1 ug/L  
**Basis:** Manual Limits  
**Robust Mean:** 64 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 64 ug/L  

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

**Fail:** 1  
**Labs:** Pass: 28  
**Fail:** 4  
**Total:** 32  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 1  
**Fail:** 0  
**Total:** 1  

**Totals for Matrix/Analyte:**  
**Labs:** Pass: 14  
**Fail:** 1  
**Total:** 15  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 28  
**Fail:** 4  
**Total:** 32  

### Non Potable Water Dimethyl phthalate

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Dimethyl phthalate  
**Sample:** 0536  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 62.9 ug/L  
**Limits:** 6.29 to 94.1 ug/L  
**Basis:** Manual Limits  
**Robust Mean:** 44.8 ug/L  
**Std Dev:** 16.8922 ug/L  
**Median:** 52.9 ug/L  

**Fail:** 3  
**Labs:** Pass: 12  
**Fail:** 3  
**Total:** 15  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 28  
**Fail:** 4  
**Total:** 32  

**Totals for Matrix/Analyte:**  
**Labs:** Pass: 12  
**Fail:** 3  
**Total:** 15  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 28  
**Fail:** 4  
**Total:** 32
Non Potable Water Dimethyl phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Dimethyl phthalate
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3520C
Target: 62.9 ug/L
Limits: 6.29 to 94.1 ug/L
Basis: Manual Limits
Robust Mean: 53.3 ug/L
Std Dev: 0 ug/L
Median: 53.3 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Non Potable Water Di-n-octyl phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Di-n-octyl phthalate
Sample: 0536
Technology: GC-ECD
Prep Method:
Target: 52.6 ug/L
Limits: 15 to 76.9 ug/L
Basis: Linear Regression
Robust Mean: 47 ug/L
Std Dev: 0 ug/L
Median: 47 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Non Potable Water Di-n-octyl phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Di-n-octyl phthalate
Sample: 0536
Technology: GC-MS
Prep Method:
Target: 52.6 ug/L
Limits: 15 to 76.9 ug/L
Basis: Linear Regression
Robust Mean: 46.9 ug/L
Std Dev: 8.3792 ug/L
Median: 48.9 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15  Fail: 0  Total: 15

Non Potable Water Di-n-octyl phthalate

Shipments: 405  Matrix: Non Potable Water
Analyte: Di-n-octyl phthalate
Sample: 0536
Technology: GC-MS
Prep Method:
Target: 52.6 ug/L
Limits: 15 to 76.9 ug/L
Basis: Linear Regression
Robust Mean: 46.5 ug/L
Std Dev: 13.6482 ug/L
Median: 46.3 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 14  Fail: 1  Total: 15

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Non Potable Water Di-n-octyl phthalate

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Di-n-octyl phthalate  
Sample: 0536  
Technology: GC-MS  
Prep Method: EPA 3520C  
Target: 52.6 ug/L  
Limits: 15 to 76.9 ug/L  
Basis: Linear Regression  
Robust Mean: 52.2 ug/L  
Std Dev: 0 ug/L  
Median: 52.2 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 0 Fail: 0 Total: 1  
Totals for Matrix/Analyte:  
Labs: Pass: 31 Fail: 1 Total: 32  

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

Non Potable Water Diesel Range Organics

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Diesel Range Organics  
Sample: 0562  
Technology: GC-FID  
Prep Method:  
Target: 5802 ug/L  
Limits: 1680 to 7160 ug/L  
Basis: Linear Regression  
Robust Mean: 5340 ug/L  
Std Dev: 0 ug/L  
Median: 5340 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 1 Fail: 0 Total: 1  
Totals for Matrix/Analyte:  
Labs: Pass: 14 Fail: 1 Total: 15  

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

Non Potable Water Diesel Range Organics

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Diesel Range Organics  
Sample: 0562  
Technology: GC-FID  
Prep Method:  
Target: 5802 ug/L  
Limits: 1680 to 7160 ug/L  
Basis: Linear Regression  
Robust Mean: 4177.7 ug/L  
Std Dev: 1442.2337 ug/L  
Median: 4360 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 13 Fail: 1 Total: 14  
Totals for Matrix/Analyte:  
Labs: Pass: 14 Fail: 1 Total: 15  

Non Potable Water 1,2-Dibromoethane, Low Level

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,2-Dibromoethane, Low Level  
Sample: 0567  
Technology: GC-ECD  
Prep Method:  
Target: 0.993 ug/L  
Limits: 0.56 to 1.35 ug/L  
Basis: Linear Regression  
Robust Mean: 1.1 ug/L  
Std Dev: 0.3152 ug/L  
Median: 0.95 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 4 Fail: 1 Total: 5  
Totals for Matrix/Analyte:  
Labs: Pass: 4 Fail: 1 Total: 5  

Non Potable Water Endrin aldehyde

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Non Potable Water Endrin aldehyde

Shipments: 405  Matrix: Non Potable Water

Analyte: Endrin aldehyde

Sample: 0517  Technology: GC-ECD

Prep Method: EPA 3510C  Target: 2.25 ug/L

Limits: 0 to 2.25 ug/L  Basis: Natural Blanks

Robust Mean: 1.1 ug/L  Std Dev: 0.5319 ug/L

Median: 1.42 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 17  Fail: 0  Total: 17

Totals for Matrix/Analyte:

Labs: Pass: 32  Fail: 0  Total: 32

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

Non Potable Water Endrin Ketone

Score Date: 09/01/2017 Proficiency Test Statistics Page 97 of 386
<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
<th>Analyte: Endrin Ketone</th>
<th>Sample: 0517</th>
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<tbody>
<tr>
<td>Technology:</td>
<td>GC-ECD</td>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Test Results</td>
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**Non Potable Water Matrix:** 405

**Fail:** 0

**Labs:** 17

**Pass:** 17

**Total:** 19

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

**Totals for Matrix/Analyte:**
- Labs: Pass: 13
- Total: 13

**Shipment:** 405

**Matrix:** Non Potable Water

**Analyte:** Endrin Ketone

**Sample:** 0517

**Technology:** GC-ECD

**Prep Method:** EPA 3510C

**Target:** 7.44 ug/L

**Limits:** 3.93 to 10.1 ug/L

**Basis:** Linear Regression

**Robust Mean:** 6.7 ug/L

**Std Dev:** 2.0462 ug/L

**Median:** 6.97 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 13
- Fail: 2
- Total: 15

**Totals for Matrix/Analyte:**
- Labs: Pass: 13
- Total: 13

**Shipment:** 405

**Matrix:** Non Potable Water

**Analyte:** Endrin Ketone

**Sample:** 0517

**Technology:** GC-ECD

**Prep Method:** EPA 3535A

**Target:** 7.44 ug/L

**Limits:** 3.93 to 10.1 ug/L

**Basis:** Linear Regression

**Robust Mean:** 5.4 ug/L

**Std Dev:** 0 ug/L

**Median:** 5.4 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1
- Fail: 0
- Total: 1

**Totals for Matrix/Analyte:**
- Labs: Pass: 17
- Fail: 2
- Total: 19

**Shipment:** 405

**Matrix:** Non Potable Water

**Analyte:** Endrin

**Sample:** 0517

**Technology:** GC-ECD

**Prep Method:**

**Target:** 16.4 ug/L

**Limits:** 7.21 to 23.1 ug/L

**Basis:** Linear Regression

**Robust Mean:** 13.7 ug/L

**Std Dev:** 3.3277 ug/L

**Median:** 13.2 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 13
- Fail: 0
- Total: 13

**Totals for Matrix/Analyte:**
- Labs: Pass: 33
- Fail: 0
- Total: 33

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

Test Results (End Groups Include Outliers)

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<th>Test Results (Non Potable Water)</th>
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<tbody>
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<tr>
<td>Technology: GC-ECD</td>
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<td>Prep Method: EPA 3510C</td>
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<tr>
<td>Target: 16.4 ug/L</td>
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<tr>
<td>Limits: 7.21 to 23.1 ug/L</td>
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<tr>
<td>Basis: Linear Regression</td>
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<td>Robust Mean: 13.2 ug/L</td>
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<tr>
<td>Std Dev: 3.1482 ug/L</td>
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<td>Median: 13.7 ug/L</td>
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<td>Labs: Pass: 8.6</td>
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<td>Total: 13.3</td>
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<td>Totals for Matrix/Analyte:</td>
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<td>Totals for Matrix/Analyte/Technology:</td>
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Score Date: 09/01/2017

Proficiency Test Statistics

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Non Potable Water Endosulfan I

Test Results (End Groups Include Outliers)

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<th>Number of Labs</th>
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<th>Test Results</th>
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<tbody>
<tr>
<td>Robust Mean: 8.7 ug/L</td>
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<tr>
<td>Std Dev: 2.2078 ug/L</td>
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<tr>
<td>Median: 8.85 ug/L</td>
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</table>

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

Non Potable Water Endosulfan I

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

Non Potable Water Endosulfan I

Test Results (End Groups Include Outliers)

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<th>Number of Labs</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Test Results</th>
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<tr>
<td>Robust Mean: 12.1 ug/L</td>
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<td>Std Dev: 2.4033 ug/L</td>
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<tr>
<td>Median: 12.3 ug/L</td>
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Totals for Matrix/Analyte/Technology:
- Labs: 13
- Pass: 13
- Fail: 0
- Total: 13

Non Potable Water Endosulfan II

Test Results (End Groups Include Outliers)

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<td>Robust Mean: 10.3 ug/L</td>
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<td>Std Dev: 0 ug/L</td>
</tr>
<tr>
<td>Median: 10.3 ug/L</td>
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Totals for Matrix/Analyte/Technology:
- Labs: 1
- Pass: 1
- Fail: 0
- Total: 1

Non Potable Water Endosulfan II

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

Non Potable Water Endosulfan II

Test Results (End Groups Include Outliers)

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<table>
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<tr>
<th>Test Results</th>
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<tbody>
<tr>
<td>Robust Mean: 11.2 ug/L</td>
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<td>Std Dev: 4.32 ug/L</td>
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<tr>
<td>Median: 11.2 ug/L</td>
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</table>

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

Non Potable Water Endosulfan II

Score Date: 09/01/2017
**Non Potable Water Endosulfan II**

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Endosulfan II  
**Sample:** 0517  
**Technology:** GC-ECD  
**Prep Method:** EPA 3510C  
**Target:** 14.1 ug/L  
**Limits:** 5.88 to 19 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 11.5 ug/L  
**Std Dev:** 2.7841 ug/L  
**Median:** 12 ug/L

---

**Totals for Matrix/Analyte/Technology:**  
**Labs:** 17  
**Pass:** 31  
**Fail:** 0  
**Total:** 31

---

**Non Potable Water Endosulfan II**

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Endosulfan II  
**Sample:** 0517  
**Technology:** GC-ECD  
**Prep Method:** EPA 3535A  
**Target:** 14.1 ug/L  
**Limits:** 5.88 to 19 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 9 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 9 ug/L

---

**Totals for Matrix/Analyte/Technology:**  
**Labs:** 1  
**Pass:** 1  
**Fail:** 0  
**Total:** 1

---

**Non Potable Water Endosulfan sulfate**

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Endosulfan sulfate  
**Sample:** 0517  
**Technology:** GC-ECD  
**Prep Method:** EPA 3510C  
**Target:** 9.15 ug/L  
**Limits:** 4.21 to 12.9 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 7.7 ug/L  
**Std Dev:** 1.5796 ug/L  
**Median:** 7.92 ug/L

---

**Totals for Matrix/Analyte/Technology:**  
**Labs:** 13  
**Pass:** 31  
**Fail:** 1  
**Total:** 32

---

**Non Potable Water Endosulfan sulfate**

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Endosulfan sulfate  
**Sample:** 0517  
**Technology:** GC-ECD  
**Prep Method:** EPA 3510C  
**Target:** 9.15 ug/L  
**Limits:** 4.21 to 12.9 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 7.5 ug/L  
**Std Dev:** 1.8345 ug/L  
**Median:** 7.78 ug/L

---

**Totals for Matrix/Analyte/Technology:**  
**Labs:** 16  
**Pass:** 17  
**Fail:** 1  
**Total:** 17

---

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

---

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
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Non Potable Water Endosulfan sulfate

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Endosulfan sulfate  
Sample: 0517  
Technology: GC-ECD  
Prep Method: EPA 3535A  
Target: 9.15 ug/L  
Limits: 4.21 to 12.9 ug/L  
Basis: Linear Regression  
Robust Mean: 5.9 ug/L  
Std Dev: 0 ug/L  
Median: 5.86 ug/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 31  Fail: 1  Total: 32

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

Non Potable Water Ethyl benzene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Ethyl benzene  
Sample: 0513  
Technology: GC-MS  
Prep Method: EPA 3510C  
Target: 42.8 ug/L  
Limits: 30 to 55.6 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 42.2 ug/L  
Std Dev: 2.3401 ug/L  
Median: 42.4 ug/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 37  Fail: 0  Total: 37

Non Potable Water Ethyl benzene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Ethyl benzene  
Sample: 0513  
Technology: GC-MS  
Prep Method: EPA 5030C  
Target: 42.8 ug/L  
Limits: 30 to 55.6 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 41.8 ug/L  
Std Dev: 4.6832 ug/L  
Median: 42.3 ug/L

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

Non Potable Water Ethyl benzene

Score Date: 09/01/2017  
Proficiency Test Statistics  
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Non Potable Water Ethyl benzene

Shipments: 405  Matrix: Non Potable Water
Analyte: Ethyl benzene
Sample: 0513
Technology: GC-PID
Prep Method:
Target: 42.8 ug/L
Limits: 30 to 55.6 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 37.9 ug/L
Std Dev: 4.0305 ug/L
Median: 37.85 ug/L

Totals for Matrix/Analyte/Technology:
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<tr>
<th>Labs</th>
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A histogram is not displayed for Technology: GC-PID due to the limited number of participants.

Non Potable Water Iron, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Iron, Total
Sample: 0511A
Technology: FAAS
Prep Method:
Target: 2530 ug/L
Limits: 2150 to 2910 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 2514.4 ug/L
Std Dev: 89.3689 ug/L
Median: 2470 ug/L

Totals for Matrix/Analyte/Technology:
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Non Potable Water Iron, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Iron, Total
Sample: 0511A
Technology: ICP-AES
Prep Method:
Target: 2530 ug/L
Limits: 2150 to 2910 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 2546.5 ug/L
Std Dev: 591.1157 ug/L
Median: 2544.58 ug/L

Totals for Matrix/Analyte/Technology:
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Non Potable Water Iron, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Iron, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 2530 ug/L
Limits: 2150 to 2910 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 2608 ug/L
Std Dev: 60.5805 ug/L
Median: 2600 ug/L

Totals for Matrix/Analyte/Technology:
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Score Date: 09/01/2017
Proficiency Test Statistics
Non Potable Water Iron, Total

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

A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.
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<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
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<tbody>
<tr>
<td>Analyte: Iron, Total</td>
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<tr>
<td>Sample: 0511A</td>
<td></td>
</tr>
<tr>
<td>Technology: ICP-MS</td>
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<tr>
<td>Prep Method:</td>
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<tr>
<td>Target: 2530 ug/L</td>
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<tr>
<td>Limits: 2150 to 2910 ug/L</td>
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<tr>
<td>Basis: Target Value +/- a fixed percent</td>
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<tr>
<td>Robust Mean: 2310 ug/L</td>
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<td>Std Dev: 0 ug/L</td>
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<td>Median: 2310 ug/L</td>
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Non Potable Water Iron, Total

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<td>Robust Mean: 2580 ug/L</td>
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<td>Std Dev: 0 ug/L</td>
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</tr>
<tr>
<td>Median: 2580 ug/L</td>
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</table>

Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs: Pass</th>
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<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
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</tbody>
</table>

Non Potable Water Iron, Total

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

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: Iron, Total</td>
<td></td>
</tr>
<tr>
<td>Sample: 0511A</td>
<td></td>
</tr>
<tr>
<td>Technology: ICP-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3010A</td>
<td></td>
</tr>
<tr>
<td>Target: 2530 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 2150 to 2910 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Target Value +/- a fixed percent</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 2430 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 2430 ug/L</td>
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</tr>
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Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs: Pass</th>
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<th>Total</th>
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</thead>
<tbody>
<tr>
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Non Potable Water Iron, Total

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

<table>
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<tr>
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<th>Matrix: Non Potable Water</th>
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<tbody>
<tr>
<td>Analyte: Iron, Total</td>
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<tr>
<td>Sample: 0511A</td>
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<tr>
<td>Technology: ICP-MS</td>
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<td>Prep Method: EPA 3015A</td>
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<tr>
<td>Limits: 2150 to 2910 ug/L</td>
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<tr>
<td>Basis: Target Value +/- a fixed percent</td>
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<tr>
<td>Robust Mean: 2440 ug/L</td>
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<td>Std Dev: 70.7107 ug/L</td>
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<tr>
<td>Median: 2440 ug/L</td>
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Totals for Matrix/Analyte/Technology:

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Non Potable Water Fluorene

Score Date: 09/01/2017

Proficiency Test Statistics

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**Non Potable Water Fluorene**

**Sample:** 0536  
**Technology:** GC-MS  
**Prep Method:**  
**Target:** 75.9 ug/L  
**Limits:** 32 to 91.2 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 60.3 ug/L  
**Std Dev:** 12.6341 ug/L  
**Median:** 61.4 ug/L

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 32  Fail: 4  Total: 36

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

**Non Potable Water Fluoride, Total**

**Sample:** 0508  
**Technology:** COLOR  
**Prep Method:**  
**Target:** 3.83 mg/L  
**Limits:** 3.11 to 4.39 mg/L  
**Basis:** Linear Regression  
**Robust Mean:** 3.4 mg/L  
**Std Dev:** 1.9581 mg/L  
**Median:** 3.59 mg/L

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

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

---

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Non Potable Water Fluoride, Total

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Fluoride, Total  
**Sample:** 0508  
**Technology:** IC  
**Prep Method:**  
**Target:** 3.83 mg/L  
**Limits:** 3.11 to 4.39 mg/L  
**Basis:** Linear Regression  
**Robust Mean:** 3.9 mg/L  
**Std Dev:** 0 mg/L  
**Median:** 3.92 mg/L  

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

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 1  Fail: 0  Total: 1

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<th>Test Results (End Groups Include Outliers)</th>
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**Non Potable Water Fluoride, Total**

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Fluoride, Total  
**Sample:** 0508  
**Technology:** IC-COND  
**Prep Method:**  
**Target:** 3.83 mg/L  
**Limits:** 3.11 to 4.39 mg/L  
**Basis:** Linear Regression  
**Robust Mean:** 3.8 mg/L  
**Std Dev:** 0.3159 mg/L  
**Median:** 3.78 mg/L  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 22  Fail: 0  Total: 22

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**Non Potable Water Fluoride, Total**

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Fluoride, Total  
**Sample:** 0508  
**Technology:** POT  
**Prep Method:**  
**Target:** 3.83 mg/L  
**Limits:** 3.11 to 4.39 mg/L  
**Basis:** Linear Regression  
**Robust Mean:** 3.8 mg/L  
**Std Dev:** 0.2471 mg/L  
**Median:** 3.8 mg/L  

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

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**Non Potable Water Gasoline Range Organics**

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Gasoline Range Organics  
**Sample:** 0561  
**Technology:** GC-FID  
**Prep Method:**  
**Target:** 804 ug/L  
**Limits:** 225 to 1480 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 665.3 ug/L  
**Std Dev:** 188.7562 ug/L  
**Median:** 666.5 ug/L  

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

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**Non Potable Water Gasoline Range Organics**

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
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Non Potable Water Gasoline Range Organics

Shipments: 405

Matrix: Non Potable Water

Analyte: Gasoline Range Organics

Sample: 0561

Technology: GC-FID

Prep Method: EPA 5030C

Target: 804 µg/L

Limits: 225 to 1480 µg/L

Basis: Linear Regression

Robust Mean: 709.2 µg/L

Std Dev: 365.7831 µg/L

Median: 825 µg/L

Test Results (End Groups Include Outliers)

Number of Labs

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</table>

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

Non Potable Water Hexachlorobenzene

Shipments: 405

Matrix: Non Potable Water

Sample: 0536

Technology: GC-ECD

Prep Method: E5030C

Target: 146 µg/L

Limits: 65.4 to 175 µg/L

Basis: Linear Regression

Robust Mean: 125 µg/L

Std Dev: 10 µg/L

Median: 125 µg/L

Test Results (End Groups Include Outliers)

Number of Labs

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<td>126</td>
<td>133</td>
<td>149</td>
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Non Potable Water Hexachlorobenzene

Shipments: 405

Matrix: Non Potable Water

Sample: 0536

Technology: GC-MS

Prep Method: E5030C

Target: 146 µg/L

Limits: 65.4 to 175 µg/L

Basis: Linear Regression

Robust Mean: 114.8 µg/L

Std Dev: 21.5815 µg/L

Median: 119 µg/L

Test Results (End Groups Include Outliers)

Number of Labs

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<tr>
<td>0</td>
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<td>95</td>
<td>103</td>
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Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Hexachlorobenzene

Score Date: 09/11/2017

Proficiency Test Statistics

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### Non Potable Water Hexachlorobutadiene

**Shipments**: 405  
**Matrix**: Non Potable Water  
**Analyte**: Hexachlorobutadiene  
**Sample**: 0536  
**Technology**: GC-MS  
**Prep Method**: EPA 3510C  
**Target**: 67.4 ug/L  
**Limits**: 6.74 to 83.4 ug/L  
**Basis**: Manual Limits  
**Robust Mean**: 42.3 ug/L  
**Std Dev**: 12.6619 ug/L  
**Median**: 46.6 ug/L  

![Histogram](image)  
**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>14.6</th>
<th>21.6</th>
<th>35.6</th>
<th>42.6</th>
<th>49.6</th>
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<tr>
<td>Labs: Pass</td>
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<td></td>
</tr>
<tr>
<td>Labs: Fail</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Total:</td>
<td></td>
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</table>

**Totals for Matrix/Analyte/Technology**:  
Labs: Pass: 15  
Fail: 0  
Total: 15

**Totals for Matrix/Analyte**:  
Labs: Pass: 33  
Fail: 0  
Total: 33

### Non Potable Water Hexachloroethane

**Shipments**: 405  
**Matrix**: Non Potable Water  
**Analyte**: Hexachloroethane  
**Sample**: 0536  
**Technology**: GC-ECD  
**Prep Method**: EPA 3520C  
**Target**: 85.5 ug/L  
**Limits**: 8.55 to 94.2 ug/L  
**Basis**: Manual Limits  
**Robust Mean**: 48.1 ug/L  
**Std Dev**: 0 ug/L  
**Median**: 48.1 ug/L  

![Histogram](image)  
**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>10</th>
<th>10</th>
<th>10</th>
<th>10</th>
<th>10</th>
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<tbody>
<tr>
<td>Labs: Pass</td>
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<tr>
<td>Labs: Fail</td>
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<tr>
<td>Total:</td>
<td></td>
<td></td>
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</table>

**Totals for Matrix/Analyte/Technology**:  
Labs: Pass: 1  
Fail: 0  
Total: 1

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

### Non Potable Water Hexachloroethane

**Shipments**: 405  
**Matrix**: Non Potable Water  
**Analyte**: Hexachloroethane  
**Sample**: 0536  
**Technology**: GC-MS  
**Prep Method**: EPA 3510C  
**Target**: 85.5 ug/L  
**Limits**: 8.55 to 94.2 ug/L  
**Basis**: Manual Limits  
**Robust Mean**: 51.6 ug/L  
**Std Dev**: 21.699 ug/L  
**Median**: 51.4 ug/L  

![Histogram](image)  
**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
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<th>10</th>
<th>10</th>
<th>10</th>
<th>10</th>
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<td>Labs: Fail</td>
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<tr>
<td>Total:</td>
<td></td>
<td></td>
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**Totals for Matrix/Analyte/Technology**:  
Labs: Pass: 15  
Fail: 0  
Total: 15

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

### Non Potable Water Hexachloroethane

**Score Date**: 09/11/2017

Proficiency Test Statistics  
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Non Potable Water Hexachloroethane

Shipments: 405  Matrix: Non Potable Water
Analyte: Hexachloroethane
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3510C
Target: 85.5 ug/L
Limits: 8.55 to 94.2 ug/L
Basis: Manual Limits
Robust Mean: 41.1 ug/L
Std Dev: 15.908 ug/L
Median: 54.4 ug/L

Test Results (End Groups Include Outliers)

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

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

Non Potable Water Hexachlorocyclopentadiene

Shipments: 405  Matrix: Non Potable Water
Analyte: Hexachlorocyclopentadiene
Sample: 0536
Technology: GC-ECD
Prep Method: EPA 3520C
Target: 85.5 ug/L
Limits: 8.55 to 94.2 ug/L
Basis: Manual Limits
Robust Mean: 19.4 ug/L
Std Dev: 0 ug/L
Median: 19.4 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 31  Fail: 1  Total: 32
Non Potable Water Hexachlorocyclopentadiene

Shipments: 405  Matrix: Non Potable Water
Analyte: Hexachlorocyclopentadiene
Sample: 0536
Technology: GC-MS
Prep Method:
Target: 59.8  ug/L
Limits: 5.98 to 82.5  ug/L
Basis: Manual Limits
Robust Mean: 34.3  ug/L
Std Dev: 18.6915  ug/L
Median: 29.75  ug/L
Totals for Matrix/Analyte/Technology:
   Labs:  Pass:  Fail:  Total:
        9.2  17.3  25.5  33.6  41.8  66.2  74.4
Non Potable Water Matrix: 405
Fail:  0  Labs:  Pass:  31  Fail:  1  Total:  32

Totals for Matrix/Analyte:
   Labs:  Pass:  Fail:  Total:
        14  0  1  15

Non Potable Water Hexachlorocyclopentadiene

Shipments: 405  Matrix: Non Potable Water
Analyte: Hexachlorocyclopentadiene
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3510C
Target: 59.8  ug/L
Limits: 5.98 to 82.5  ug/L
Basis: Manual Limits
Robust Mean: 36.5  ug/L
Std Dev: 16.7466  ug/L
Median: 35.5  ug/L
Totals for Matrix/Analyte/Technology:
   Labs:  Pass:  Fail:  Total:
        14  0  0  14

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

Non Potable Water Hexachlorocyclopentadiene

Shipments: 405  Matrix: Non Potable Water
Analyte: Hexachlorocyclopentadiene
Sample: 0536
Technology: GC-MS
Prep Method: EPA 3520C
Target: 59.8  ug/L
Limits: 5.98 to 82.5  ug/L
Basis: Manual Limits
Robust Mean: 10  ug/L
Std Dev: 0  ug/L
Median: 10  ug/L
Totals for Matrix/Analyte/Technology:
   Labs:  Pass:  Fail:  Total:
        1  0  0  1

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

Non Potable Water Heptachlor

Shipments: 405  Matrix: Non Potable Water
Analyte: Heptachlor
Sample: 0517
Technology: GC-ECD
Prep Method:
Target: 4.31  ug/L
Limits: 1.51 to 5.88  ug/L
Basis: Linear Regression
Robust Mean: 3.5  ug/L
Std Dev: 0.8157  ug/L
Median: 3.46  ug/L
Totals for Matrix/Analyte/Technology:
   Labs:  Pass:  Fail:  Total:
        13  0  0  13

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

Non Potable Water Heptachlor

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

Non Potable Water Heptachlor

Score Date: 09/01/2017  Proficiency Test Statistics  Page 112 of 386
Non Potable Water Heptachlor

**Test Results (End Groups Include Outliers)**

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Non Potable Water Matrix: 405 Fail: 0 Labs: 33 Pass: 33 Total: 33

**Totals for Matrix/Analyte/Technology:**
- Labs: 17
- Pass: 17
- Total: 17

**Robust Mean:**
- 3.4 ug/L
- Std Dev: 0.8511 ug/L
- Median: 3.46 ug/L

**Technology:** GC-ECD
**Prep Method:** EPA 3510C
**Target:** 4.31 ug/L
**Limits:** 1.51 to 5.88 ug/L
**Basis:** Linear Regression

---

Non Potable Water Heptachlor epoxide

**Test Results (End Groups Include Outliers)**

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</tr>
</tbody>
</table>


**Totals for Matrix/Analyte/Technology:**
- Labs: 13
- Pass: 13
- Total: 13

**Robust Mean:**
- 3 ug/L
- Std Dev: 0.606 ug/L
- Median: 3.11 ug/L

**Technology:** GC-ECD
**Prep Method:** EPA 3510C
**Target:** 3.58 ug/L
**Limits:** 1.77 to 4.81 ug/L
**Basis:** Linear Regression

---

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

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

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### Non Potable Water Heptachlor epoxide

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Heptachlor epoxide

<table>
<thead>
<tr>
<th>Technology</th>
<th>GC-ECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep Method</td>
<td>EPA 3510C</td>
</tr>
<tr>
<td>Target</td>
<td>3.58 ug/L</td>
</tr>
<tr>
<td>Limits</td>
<td>1.77 to 4.81 ug/L</td>
</tr>
<tr>
<td>Basis</td>
<td>Linear Regression</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>3 ug/L</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.924 ug/L</td>
</tr>
<tr>
<td>Median</td>
<td>3 ug/L</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 16  
**Fail:** 1  
**Total:** 17

**Totals for Matrix/Analyte:**  
**Labs:** Pass: 1  
**Total:** 1

### Non Potable Water Mercury, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Mercury, Total

<table>
<thead>
<tr>
<th>Technology</th>
<th>GC-MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep Method</td>
<td>EPA 3510C</td>
</tr>
<tr>
<td>Target</td>
<td>3.58 ug/L</td>
</tr>
<tr>
<td>Limits</td>
<td>1.77 to 4.81 ug/L</td>
</tr>
<tr>
<td>Basis</td>
<td>Linear Regression</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>3.1 ug/L</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.1344 ug/L</td>
</tr>
<tr>
<td>Median</td>
<td>3.095 ug/L</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 2  
**Fail:** 0  
**Total:** 2

**Totals for Matrix/Analyte:**  
**Labs:** Pass: 44  
**Fail:** 2  
**Total:** 46

### Non Potable Water Mercury, Low Level

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Mercury, Low Level

<table>
<thead>
<tr>
<th>Technology</th>
<th>GC-MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep Method</td>
<td>EPA 3510C</td>
</tr>
<tr>
<td>Target</td>
<td>3.58 ug/L</td>
</tr>
<tr>
<td>Limits</td>
<td>1.77 to 4.81 ug/L</td>
</tr>
<tr>
<td>Basis</td>
<td>Linear Regression</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>3.1 ug/L</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0.1344 ug/L</td>
</tr>
<tr>
<td>Median</td>
<td>3.095 ug/L</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 44  
**Fail:** 2  
**Total:** 46

**Totals for Matrix/Analyte:**  
**Labs:** Pass: 44  
**Fail:** 2  
**Total:** 46

---

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Non Potable Water Mercury, Low Level

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Mercury, Low Level  
**Sample:** 0558  
**Technology:** CVAFS  
**Prep Method:**  
**Target:** 42 ng/L  
**Limits:** 28.7 to 55 ng/L  
**Basis:** Linear Regression  
**Robust Mean:** 43.3 ng/L  
**Std Dev:** 2.6577 ng/L  
**Median:** 42 ng/L  

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

**Test Results (End Groups Include Outliers):**

Non Potable Water Matrix: 405  
Fail: 0  
Labs:  Pass: 7  
Fail: 0  
Total: 7

Robust Mean: 43.3 ng/L  
Std Dev: 2.6577 ng/L  
Median: 42 ng/L

**Totals for Matrix/Analyte:**  
Labs: Pass: 7  
Total: 7

**Non Potable Water 2-Hexanone**

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** 2-Hexanone  
**Sample:** 0513  
**Technology:** GC-MS  
**Prep Method:**  
**Target:** 44.6 ug/L  
**Limits:** 17.8 to 69.5 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 48.7 ug/L  
**Std Dev:** 6.7352 ug/L  
**Median:** 45.2 ug/L  

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

**Test Results (End Groups Include Outliers):**

Non Potable Water Matrix: 405  
Fail: 0  
Labs:  Pass: 22  
Fail: 0  
Total: 22

Robust Mean: 48.7 ug/L  
Std Dev: 6.7352 ug/L  
Median: 45.2 ug/L

**Totals for Matrix/Analyte:**  
Labs: Pass: 22  
Total: 22

**Non Potable Water 2-Hexanone**

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** 2-Hexanone  
**Sample:** 0513  
**Technology:** GC-MS  
**Prep Method:** EPA 5030C  
**Target:** 44.6 ug/L  
**Limits:** 17.8 to 69.5 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 44 ug/L  
**Std Dev:** 9.016 ug/L  
**Median:** 42.6 ug/L  

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

**Test Results (End Groups Include Outliers):**

Non Potable Water Matrix: 405  
Fail: 0  
Labs:  Pass: 22  
Fail: 0  
Total: 22

Robust Mean: 44 ug/L  
Std Dev: 9.016 ug/L  
Median: 42.6 ug/L

**Totals for Matrix/Analyte:**  
Labs: Pass: 22  
Total: 22

**Non Potable Water Indeno(1,2,3-cd)pyrene**

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Indeno(1,2,3-cd)pyrene  
**Sample:** 0536  
**Technology:** GC-MS  
**Prep Method:**  
**Target:** 82.5 ug/L  
**Limits:** 24 to 103 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 73.9 ug/L  
**Std Dev:** 13.4682 ug/L  
**Median:** 78.1 ug/L  

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 15  
Fail: 0  
Total: 15  

**Test Results (End Groups Include Outliers):**

Non Potable Water Matrix: 405  
Fail: 0  
Labs:  Pass: 31  
Fail: 0  
Total: 31

Robust Mean: 73.9 ug/L  
Std Dev: 13.4682 ug/L  
Median: 78.1 ug/L

**Totals for Matrix/Analyte:**  
Labs: Pass: 31  
Total: 31
Non Potable Water Indeno(1,2,3-cd)pyrene

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.4</td>
</tr>
<tr>
<td>44.9</td>
</tr>
<tr>
<td>59.4</td>
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<tr>
<td>66.7</td>
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<tr>
<td>72.9</td>
</tr>
<tr>
<td>81.2</td>
</tr>
<tr>
<td>88.4</td>
</tr>
<tr>
<td>95.7</td>
</tr>
</tbody>
</table>

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Non Potable Water Isophorone

Analysis Data:

- **Matrix**: Non Potable Water
- **Sample**: 0536
- **Technology**: GC-MS
- **Prep Method**: EPA 3510C
- **Target**: 98.4 μg/L
- **Limits**: 35.9 to 123 μg/L
- **Basis**: Linear Regression
- **Robust Mean**: 72.2 μg/L
  - Std Dev: 17.6121 μg/L
  - Median: 77.7 μg/L

Test Results (End Groups Include Outliers)

- **Number of Labs**: 30
  - 47.1
  - 55.3
  - 63.5
  - 71.7
  - 79.9
  - 88.1

- **Fail**: 1
- **Pass**: 28
- **Total**: 30

Totals for Matrix/Analyte/Technology:

- **Labs**: 14
- **Fail**: 1
- **Total**: 15

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

Non Potable Water Potassium, Total

Analysis Data:

- **Matrix**: Non Potable Water
- **Sample**: 0537
- **Technology**: FAAS
- **Prep Method**: EPA 3520C
- **Target**: 27.7 mg/L
- **Limits**: 22.2 to 33.2 mg/L
- **Basis**: Target Value +/- a fixed percent
- **Robust Mean**: 28 mg/L
  - Std Dev: 1.6971 mg/L
  - Median: 28 mg/L

Test Results (End Groups Include Outliers)

- **Number of Labs**: 40
  - 30.7
  - 47.1
  - 55.3
  - 63.5
  - 71.7
  - 79.9
  - 88.1

- **Fail**: 0
- **Pass**: 39
- **Total**: 40

A histogram is not displayed for
Technology: FAAS due to the limited number of participants.
Non Potable Water Potassium, Total

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Potassium, Total

Shipments: 405  
Matrix: Non Potable Water

Analyte: Potassium, Total

Sample: 0537

Technology: ICP-MS

Prep Method: EPA 3010A

Target: 27.7 mg/L

Limits: 22.2 to 33.2 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 27.2 mg/L

Std Dev: 0 mg/L

Median: 27.2 mg/L

Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs</th>
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<th>Total</th>
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<tbody>
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<td></td>
<td>1</td>
<td>0</td>
<td>1</td>
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</table>

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

Non Potable Water Potassium, Total

Shipments: 405  
Matrix: Non Potable Water

Analyte: Potassium, Total

Sample: 0537

Technology: ICP-MS

Prep Method: EPA 3015A

Target: 27.7 mg/L

Limits: 22.2 to 33.2 mg/L

Basis: Target Value +/- a fixed percent

Robust Mean: 26.6 mg/L

Std Dev: 0 mg/L

Median: 26.6 mg/L

Totals for Matrix/Analyte/Technology:

<table>
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<tr>
<th>Labs</th>
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<th>Total</th>
</tr>
</thead>
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<td>1</td>
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</table>

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

Non Potable Water Kjeldahl Nitrogen, Total
Non Potable Water Kjeldahl Nitrogen, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Kjeldahl Nitrogen, Total  
**Sample:** 0504  
**Technology:** TITR  
**Prep Method:**  
- **Target:** 10.3 mg/L  
- **Limits:** 7.55 to 12.9 mg/L  
- **Basis:** Linear Regression  
- **Robust Mean:** 10.2 mg/L  
  - **Std Dev:** 3.9049 mg/L  
  - **Median:** 9.84 mg/L

**Test Results (End Groups Include Outliers):**

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<thead>
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<th>Number of Labs</th>
<th>8</th>
<th>9.3</th>
<th>9.7</th>
<th>10</th>
<th>10.7</th>
<th>11.3</th>
<th>11.6</th>
<th>12</th>
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</thead>
<tbody>
<tr>
<td><strong>Number of Labs</strong></td>
<td>9</td>
<td>9.3</td>
<td>9.7</td>
<td>10</td>
<td>10.7</td>
<td>11.3</td>
<td>11.6</td>
<td>12</td>
</tr>
<tr>
<td><strong>Fail:</strong></td>
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<td>1</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>49</td>
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<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
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<td>55</td>
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<td>55</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**

- **Labs:** 11  
- **Pass:** 9  
- **Fail:** 2  
- **Total:** 13

**Fail:** 0  
**Pass:** 9  
**Total:** 9

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

Non Potable Water Acenaphthene Low Level

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Acenaphthene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:**  
- **Target:** 8.44 ug/L  
- **Limits:** 2.87 to 10.3 ug/L  
- **Basis:** Linear Regression  
- **Robust Mean:** 7.1 ug/L  
  - **Std Dev:** 0 ug/L  
  - **Median:** 7.07 ug/L

**Test Results (End Groups Include Outliers):**

<table>
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<tr>
<th>Number of Labs</th>
<th>5.9</th>
<th>7.6</th>
<th>8.2</th>
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</thead>
<tbody>
<tr>
<td><strong>Number of Labs</strong></td>
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<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>Fail:</strong></td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Pass:</strong></td>
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<td>7</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
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**Totals for Matrix/Analyte/Technology:**

- **Labs:** 9  
- **Pass:** 9  
- **Fail:** 0  
- **Total:** 9

Score Date: 09/01/2017  
Proficiency Test Statistics  
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Non Potable Water Acenaphthene Low Level

Shipments: 405  
Matrix: Non Potable Water
Analyte: Acenaphthene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3520C
Target: 8.44 ug/L
Limits: 2.87 to 10.3 ug/L
Basis: Linear Regression
Robust Mean: 5.1 ug/L
Std Dev: 0 ug/L
Median: 5.13 ug/L
A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Acenaphthylene Low Level

Shipments: 405  
Matrix: Non Potable Water
Analyte: Acenaphthylene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3510C
Target: 11.1 ug/L
Limits: 4.78 to 12.7 ug/L
Basis: Linear Regression
Robust Mean: 9.6 ug/L
Std Dev: 0 ug/L
Median: 9.56 ug/L
A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Scores for the Timely Submission of Analytes

Analyte: Acenaphthylene Low Level
Limits: 4.78 to 12.7 ug/L
Target: 11.1 ug/L
Technology: GC-MS
Prep Method: EPA 3520C
Robust Mean: 7 ug/L
Std Dev: 0 ug/L
Median: 6.99 ug/L
A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1
Non Potable Water Anthracene Low Level

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Sample:** 0548  
**Technology:** GC-MS

**Prep Method:**
- **Target:** 2.48 ug/L  
- **Limits:** 0.731 to 3.35 ug/L

**Basis:** Linear Regression  
**Robust Mean:** 2.2 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 2.19 ug/L

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

**Test Results (End Groups Include Outliers):**
- **Number of Labs:** 1.8, 1.9, 2, 2.1, 2.3
- **Number of Labs:**
  - **1.8:** 0, 0.5, 1, 1.5, 2
  - **1.9:** 2
  - **2:** 0
  - **2.1:** 1, 2
  - **2.3:** 0

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 1, Fail: 0, Total: 1

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

**Score Date:** 09/01/2017

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Non Potable Water Benzo(a)anthracene Low Level

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(a)anthracene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3510C
Target: 2.7 ug/L
Limits: 1.77 to 3.05 ug/L
Basis: Linear Regression
Robust Mean: 2.1 ug/L
    Std Dev: 0.2954 ug/L
    Median: 2.14 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Non Potable Water Benzo(a)pyrene Low Level

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(a)pyrene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3520C
Target: 2.7 ug/L
Limits: 1.77 to 3.05 ug/L
Basis: Linear Regression
Robust Mean: 2.1 ug/L
    Std Dev: 0 ug/L
    Median: 2.09 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Non Potable Water Benzo(a)pyrene Low Level

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(a)pyrene Low Level
Sample: 0548
Technology: GC-MS
Prep Method:
Target: 4.56 ug/L
Limits: 1.94 to 5.28 ug/L
Basis: Linear Regression
Robust Mean: 4.3 ug/L
    Std Dev: 0 ug/L
    Median: 4.29 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Benzo(a)pyrene Low Level

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(a)pyrene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3510C
Target: 4.56 ug/L
Limits: 1.94 to 5.28 ug/L
Basis: Linear Regression
Robust Mean: 3.7 ug/L
    Std Dev: 0.5624 ug/L
    Median: 3.57 ug/L

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

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

Score Date: 09/01/2017  Proficiency Test Statistics  Page 124 of 386
Non Potable Water Benzo(a)pyrene Low Level

Shipment: 405  Matrix: Non Potable Water
Analyte: Benzo(a)pyrene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3520C
Target: 4.56 ug/L
Limits: 1.94 to 5.28 ug/L
Basis: Linear Regression
Robust Mean: 3.6 ug/L
Std Dev: 0 ug/L
Median: 3.58 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Benzo(b)fluoranthene Low Level

Shipment: 405  Matrix: Non Potable Water
Analyte: Benzo(b)fluoranthene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3520C
Target: 4.56 ug/L
Limits: 1.94 to 5.28 ug/L
Basis: Linear Regression
Robust Mean: 3.6 ug/L
Std Dev: 0 ug/L
Median: 3.58 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Benzo(b)fluoranthene Low Level

Shipment: 405  Matrix: Non Potable Water
Analyte: Benzo(b)fluoranthene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3520C
Target: 4.56 ug/L
Limits: 1.94 to 5.28 ug/L
Basis: Linear Regression
Robust Mean: 3.6 ug/L
Std Dev: 0 ug/L
Median: 3.58 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Benzo(b)fluoranthene Low Level

Shipment: 405  Matrix: Non Potable Water
Analyte: Benzo(b)fluoranthene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3510C
Target: 4.56 ug/L
Limits: 2.16 to 5.44 ug/L
Basis: Linear Regression
Robust Mean: 3.6 ug/L
Std Dev: 1.4021 ug/L
Median: 3.72 ug/L

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

Non Potable Water Benzo(b)fluoranthene Low Level

Shipment: 405  Matrix: Non Potable Water
Analyte: Benzo(b)fluoranthene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3520C
Target: 4.56 ug/L
Limits: 2.16 to 5.44 ug/L
Basis: Linear Regression
Robust Mean: 3.6 ug/L
Std Dev: 0 ug/L
Median: 3.55 ug/L

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

Non Potable Water Benzo(b)fluoranthene Low Level

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Non Potable Water Benzo(g,h,i)perylene Low Level

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(g,h,i)perylene Low Level
Sample: 0548
Technology: GC-MS
Prep Method:
Target: 2.59 µg/L
Limits: 0.762 to 3.37 µg/L
Basis: Linear Regression
Robust Mean: 2.4 µg/L
Std Dev: 0.4162 µg/L
Median: 1.88 µg/L

A histogram is not displayed for Technology: GC-MS 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: 9  Fail: 0  Total: 9

Non Potable Water Benzo(g,h,i)perylene Low Level

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(g,h,i)perylene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3510C
Target: 2.59 µg/L
Limits: 0.762 to 3.37 µg/L
Basis: Linear Regression
Robust Mean: 2.03 µg/L
Std Dev: 0.64 µg/L
Median: 0.64 µg/L

A histogram is not displayed for Technology: GC-MS 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: 8  Fail: 1  Total: 9

Non Potable Water Benzo(k)fluoranthene Low Level

Shipments: 405  Matrix: Non Potable Water
Analyte: Benzo(k)fluoranthene Low Level
Sample: 0548
Technology: GC-MS
Prep Method: EPA 3520C
Target: 0.653 µg/L
Limits: 0.301 to 0.853 µg/L
Basis: Linear Regression
Robust Mean: 0.653 µg/L
Std Dev: 0.0 ug/L
Median: 0.64 µg/L

A histogram is not displayed for Technology: GC-MS 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: 8  Fail: 1  Total: 9

Non Potable Water Benzo(k)fluoranthene Low Level

Score Date: 09/01/2017
Non Potable Water Benzo(k)fluoranthene Low Level

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Benzo(k)fluoranthene Low Level  
Sample: 0548  
Technology: GC-MS  
Prep Method: EPA 3510C  
Target: 0.653 ug/L  
Limits: 0.301 to 0.853 ug/L  
Basis: Linear Regression  
Robust Mean: 0.5 ug/L  
Std Dev: 0 ug/L  
Median: 0.49 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 6  Fail: 1  Total: 7  

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

Non Potable Water Chrysene Low Level

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Chrysene Low Level  
Sample: 0548  
Technology: GC-MS  
Prep Method: EPA 3520C  
Target: 1.45 ug/L  
Limits: 0.776 to 1.83 ug/L  
Basis: Linear Regression  
Robust Mean: 1.3 ug/L  
Std Dev: 0 ug/L  
Median: 1.29 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 1  Fail: 0  Total: 1  

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

Score Date: 09/01/2017  
Proficiency Test Statistics  
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Non Potable Water Chrysene Low Level

Shipments: 405  
Matrix: Non Potable Water  
Sample: 0548  
Technology: GC-MS  
Prep Method: EPA 3520C  
Target: 1.45 ug/L  
Limits: 0.776 to 1.83 ug/L  
Basis: Linear Regression  
Robust Mean: 1.1 ug/L  
Std Dev: 0.0 ug/L  
Median: 1.14 ug/L  

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

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 1  Fail: 0  Total: 1  

Non Potable Water Dibenzo(a,h)anthracene Low Level

Shipments: 405  
Matrix: Non Potable Water  
Sample: 0548  
Technology: GC-MS  
Prep Method:  
Target: 1.68 ug/L  
Limits: 0.544 to 2.24 ug/L  
Basis: Linear Regression  
Robust Mean: 1.5 ug/L  
Std Dev: 0.0 ug/L  
Median: 1.52 ug/L  

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

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 1  Fail: 0  Total: 1  

Non Potable Water Dibenzo(a,h)anthracene Low Level

Shipments: 405  
Matrix: Non Potable Water  
Sample: 0548  
Technology: GC-MS  
Prep Method: EPA 3510C  
Target: 1.68 ug/L  
Limits: 0.544 to 2.24 ug/L  
Basis: Linear Regression  
Robust Mean: 1.3 ug/L  
Std Dev: 0.3478 ug/L  
Median: 1.19 ug/L  

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

Non Potable Water Dibenzo(a,h)anthracene Low Level

Shipments: 405  
Matrix: Non Potable Water  
Sample: 0548  
Technology: GC-MS  
Prep Method: EPA 3520C  
Target: 1.68 ug/L  
Limits: 0.544 to 2.24 ug/L  
Basis: Linear Regression  
Robust Mean: 1.3 ug/L  
Std Dev: 0.0 ug/L  
Median: 1.29 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 1  Fail: 0  Total: 1  

Scores Date: 09/01/2017
### Non Potable Water Fluoranthene Low Level

**Shipments:**
- **405**

**Matrix:**
- Non Potable Water

**Sample:**
- 0548

**Technology:**
- GC-MS

**Prep Method:**
- A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

**Target:**
- 2.86 ug/L

**Limits:**
- 1.52 to 3.42 ug/L

**Basis:**
- Linear Regression

**Robust Mean:**
- 2.52 ug/L

**Std Dev:**
- 0 ug/L

**Median:**
- 2.52 ug/L

---

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1 Fail: 0 Total: 1

---

### Non Potable Water Fluorene Low Level

**Shipments:**
- **405**

**Matrix:**
- Non Potable Water

**Sample:**
- 0548

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3510C

**Target:**
- 2.86 ug/L

**Limits:**
- 1.52 to 3.42 ug/L

**Basis:**
- Linear Regression

**Robust Mean:**
- 2.3 ug/L

**Std Dev:**
- 0.2537 ug/L

**Median:**
- 2.23 ug/L

---

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 8 Fail: 0 Total: 8

---

### Non Potable Water Fluorene Low Level

**Shipments:**
- **405**

**Matrix:**
- Non Potable Water

**Sample:**
- 0548

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3520C

**Target:**
- 2.86 ug/L

**Limits:**
- 1.52 to 3.42 ug/L

**Basis:**
- Linear Regression

**Robust Mean:**
- 2.24 ug/L

**Std Dev:**
- 0 ug/L

**Median:**
- 2.24 ug/L

---

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1 Fail: 0 Total: 1

---

### Non Potable Water Fluorene Low Level

**Shipments:**
- **405**

**Matrix:**
- Non Potable Water

**Sample:**
- 0548

**Technology:**
- GC-MS

**Prep Method:**
- A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

**Target:**
- 6.81 ug/L

**Limits:**
- 2.86 to 7.95 ug/L

**Basis:**
- Linear Regression

**Robust Mean:**
- 5.9 ug/L

**Std Dev:**
- 0 ug/L

**Median:**
- 5.9 ug/L

---

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1 Fail: 0 Total: 1

---

**Score Date:** 09/01/2017

Proficiency Test Statistics

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### Non Potable Water Fluorene Low Level

**Analyte:** Fluorene Low Level

**Sample:** 0548

**Technology:** GC-MS

**Prep Method:** EPA 3510C

**Target:** 6.81 ug/L

**Limits:** 2.86 to 7.95 ug/L

**Basis:** Linear Regression

**Robust Mean:** 5.4 ug/L

- **Std Dev:** 0.8823 ug/L
- **Median:** 5.25 ug/L

**Totals for Matrix/Analyte/Technology:**

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<td>4.9</td>
<td>5.7</td>
<td>6.1</td>
</tr>
</tbody>
</table>

**Number of Labs:**

- 4.4
- 4.9
- 5.7
- 6.1
- 7

**Test Results (End Groups Include Outliers):**

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

### Non Potable Water Indeno(1,2,3-cd)pyrene Low Level

**Analyte:** Indeno(1,2,3-cd)pyrene Low Level

**Sample:** 0548

**Technology:** GC-MS

**Prep Method:** EPA 3520C

**Target:** 1.11 ug/L

**Limits:** 0.457 to 1.49 ug/L

**Basis:** Linear Regression

**Robust Mean:** 1 ug/L

- **Std Dev:** 0 ug/L
- **Median:** 0.99 ug/L

**Totals for Matrix/Analyte/Technology:**

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<tr>
<th>Labs</th>
<th>Pass</th>
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<tr>
<td>4.4</td>
<td>4.9</td>
<td>5.7</td>
<td>6.1</td>
</tr>
</tbody>
</table>

**Test Results (End Groups Include Outliers):**

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
**Non Potable Water Indeno(1,2,3-cd)pyrene Low Level**

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Indeno(1,2,3-cd)pyrene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3520C  
**Target:** 1.11 ug/L  
**Limits:** 0.457 to 1.49 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 0.9 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 0.93 ug/L  
**A histogram is not displayed for Technology: GC-MS due to the limited number of participants.**

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Indeno(1,2,3-cd)pyrene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3520C  
**Target:** 1.11 ug/L  
**Limits:** 0.457 to 1.49 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 0.9 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 0.93 ug/L  
**A histogram is not displayed for Technology: GC-MS due to the limited number of participants.**

**Non Potable Water Naphthalene Low Level**

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Naphthalene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 2.62 ug/L  
**Limits:** 0.781 to 3.23 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 2.1 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 2.08 ug/L  
**A histogram is not displayed for Technology: GC-MS due to the limited number of participants.**

**Non Potable Water Naphthalene Low Level**

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Naphthalene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 2.62 ug/L  
**Limits:** 0.781 to 3.23 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 1.8 ug/L  
**Std Dev:** 0.357 ug/L  
**Median:** 1.84 ug/L  
**Non Potable Water Naphthalene Low Level**

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Naphthalene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 2.62 ug/L  
**Limits:** 0.781 to 3.23 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 1.8 ug/L  
**Std Dev:** 0.357 ug/L  
**Median:** 1.84 ug/L  
**Non Potable Water Naphthalene Low Level**

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Naphthalene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3520C  
**Target:** 1.2 ug/L  
**Limits:** 0.781 to 3.23 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 1.2 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 1.17 ug/L  
**Non Potable Water Lindane**

**Score Date:** 09/01/2017
Non Potable Water Lindane Test Results (End Groups Include Outliers)

Number of Labs

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<td>17.8</td>
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<td>21.8</td>
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</table>

Matrix: Non Potable Water

Analyte: Lindane

Sample: 0517

Technology: GC-ECD

Prep Method: EPA 3510C

Target: 19.5 ug/L

Limits: 8.58 to 26.6 ug/L

Basis: Linear Regression

Robust Mean: 15.6 ug/L

Std Dev: 4.2121 ug/L

Median: 16.1 ug/L

Totals for Matrix/Analyte: Labs: Pass: 16 Fail: 1 Total: 17

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

Shipment: 405

Score Date: 09/01/2017

Proficiency Test Statistics

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### Non Potable Water Lindane

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Lindane  
**Sample:** 0517  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 19.5 ug/L  
**Limits:** 8.58 to 26.6 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 16.6 ug/L  
**Std Dev:** 1.8385 ug/L  
**Median:** 16.6 ug/L  

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

#### Totals for Matrix/Analyte/Technology:

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#### Totals for Matrix/Analyte:

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---

### Non Potable Water Phenanthrene Low Level

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Phenanthrene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 2.39 ug/L  
**Limits:** 1.19 to 2.84 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 2.1 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 2.07 ug/L  

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

#### Totals for Matrix/Analyte/Technology:

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#### Totals for Matrix/Analyte:

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### Non Potable Water Phenanthrene Low Level

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Phenanthrene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3510C  
**Target:** 2.39 ug/L  
**Limits:** 1.19 to 2.84 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 1.8 ug/L  
**Std Dev:** 0.2019 ug/L  
**Median:** 1.725 ug/L  

#### Totals for Matrix/Analyte/Technology:

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#### Totals for Matrix/Analyte:

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### Non Potable Water Phenanthrene Low Level

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Phenanthrene Low Level  
**Sample:** 0548  
**Technology:** GC-MS  
**Prep Method:** EPA 3520C  
**Target:** 2.39 ug/L  
**Limits:** 1.19 to 2.84 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 1.7 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 1.68 ug/L  

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

#### Totals for Matrix/Analyte/Technology:

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#### Totals for Matrix/Analyte:

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<tbody>
<tr>
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<td></td>
<td></td>
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</tbody>
</table>
### Non Potable Water Pyrene Low Level

- **Shipments:** 405
- **Matrix:** Non Potable Water
- **Technology:** GC-MS
- **Prep Method:**
  - Target: 2.62 ug/L
  - Limits: 1.43 to 3.09 ug/L
  - Basis: Linear Regression
  - Robust Mean: 2.4 ug/L
  - Std Dev: 0 ug/L
  - Median: 2.36 ug/L

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

### Non Potable Water Pyrene Low Level

- **Shipments:** 405
- **Matrix:** Non Potable Water
- **Technology:** GC-MS
- **Prep Method:**
  - Target: 2.62 ug/L
  - Limits: 1.43 to 3.09 ug/L
  - Basis: Linear Regression
  - Robust Mean: 2 ug/L
  - Std Dev: 0.3065 ug/L
  - Median: 2 ug/L

### Non Potable Water Methylene chloride

- **Shipments:** 405
- **Matrix:** Non Potable Water
- **Sample:** 0513
- **Technology:** GC-ELCD
- **Prep Method:**
  - Target: 102 ug/L
  - Limits: 61.2 to 143 ug/L
  - Basis: Target Value +/- a fixed percent
  - Robust Mean: 89.3 ug/L
  - Std Dev: 0 ug/L
  - Median: 89.3 ug/L

A histogram is not displayed for **Technology: GC-ELCD** due to the limited number of participants.
Non Potable Water Methylene chloride

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Methylene chloride  
**Sample:** 0513  
**Technology:** GC-MS  
**Prep Method:**  
**Target:** 102 ug/L  
**Limits:** 61.2 to 143 ug/L  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 100.1 ug/L  
**Std Dev:** 7.3013 ug/L  
**Median:** 101.5 ug/L  
**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 38  
**Total:** 38  

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Methylene chloride  
**Sample:** 0513  
**Technology:** GC-MS  
**Prep Method:** EPA 5030C  
**Target:** 102 ug/L  
**Limits:** 61.2 to 143 ug/L  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 100.1 ug/L  
**Std Dev:** 8.7937 ug/L  
**Median:** 101 ug/L  
**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 17  
**Total:** 17  

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Magnesium, Total  
**Sample:** 0537  
**Technology:** FAAS  
**Prep Method:**  
**Target:** 20.2 mg/L  
**Limits:** 17.2 to 23.2 mg/L  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 18.9 mg/L  
**Std Dev:** 0.7544 mg/L  
**Median:** 18.95 mg/L  
**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 4  
**Total:** 4  

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Magnesium, Total  
**Sample:** 0537  
**Technology:** IC-COND  
**Prep Method:**  
**Target:** 20.2 mg/L  
**Limits:** 17.2 to 23.2 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  
**Total:** 1  

A histogram is not displayed for  
Technology: IC-COND due to the limited number of participants.
Non Potable Water Magnesium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Magnesium, Total
Sample: 0537
Technology: ICP-AES
Prep Method: Target: 20.2 mg/L
Limits: 17.2 to 23.2 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 19.1 mg/L
Std Dev: 4.4382 mg/L
Median: 19.3 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 17  Fail: 2  Total: 19

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Non Potable Water Magnesium, Total

**Analyte:** Magnesium, Total

**Sample:** 0537

**Technology:** ICP-MS

**Prep Method:** EPA 3005A

**Target:** 20.2 mg/L

**Limits:** 17.2 to 23.2 mg/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 19.1 mg/L

**Std Dev:** 0 mg/L

**Median:** 19.1 mg/L

**A histogram is not displayed for Technology: ICP-MS 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: 40 Fail: 3  Total: 43

---

Non Potable Water Manganese, Total

**Analyte:** Manganese, Total

**Sample:** 0511A

**Technology:** FAAS

**Prep Method:**

- **Target:** 433 ug/L
- **Limits:** 368 to 498 ug/L
- **Basis:** Target Value +/- a fixed percent
- **Robust Mean:** 427 ug/L
- **Std Dev:** 32.1403 ug/L
- **Median:** 411 ug/L

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 3  Fail: 0  Total: 3

**Totals for Matrix/Analyte:**

- **Labs:** Pass: 57 Fail: 1  Total: 58

---

Score Date: 09/01/2017
Non Potable Water Manganese, Total

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Manganese, Total

**Sample:** 0511A  
**Technology:** ICP-AES  
**Prep Method:**  
- **Target:** 433 ug/L  
- **Limits:** 368 to 498 ug/L

**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 434.6 ug/L  
- **Std Dev:** 18.158 ug/L  
- **Median:** 432.5 ug/L

**Test Results (End Groups Include Outliers):**

- **Number of Labs:** 58
- **Pass:** 57
- **Fail:** 1

**Totals for Matrix/Analyte/Technology:**

- **Labs:** 18
- **Pass:** 18
- **Total:** 18

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**

---

Non Potable Water Manganese, Total

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Manganese, Total

**Sample:** 0511A  
**Technology:** ICP-AES  
**Prep Method:**  
- **Target:** 433 ug/L  
- **Limits:** 368 to 498 ug/L

**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 439 ug/L  
- **Std Dev:** 8.8882 ug/L  
- **Median:** 442 ug/L

**Test Results (End Groups Include Outliers):**

- **Number of Labs:** 58
- **Pass:** 57
- **Fail:** 1

**Totals for Matrix/Analyte/Technology:**

- **Labs:** 3  
- **Pass:** 3  
- **Total:** 3

---

Non Potable Water Manganese, Total

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Manganese, Total

**Sample:** 0511A  
**Technology:** ICP-AES  
**Prep Method:** EPA 3005A  
- **Target:** 433 ug/L  
- **Limits:** 368 to 498 ug/L

**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 425.5 ug/L  
- **Std Dev:** 8.5049 ug/L  
- **Median:** 422.5 ug/L

**Test Results (End Groups Include Outliers):**

- **Number of Labs:** 58
- **Pass:** 57
- **Fail:** 1

---

Non Potable Water Manganese, Total

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Manganese, Total

**Sample:** 0511A  
**Technology:** ICP-AES  
**Prep Method:** EPA 3010A  
- **Target:** 433 ug/L  
- **Limits:** 368 to 498 ug/L

**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 442.7 ug/L  
- **Std Dev:** 135.192 ug/L  
- **Median:** 447 ug/L

**Test Results (End Groups Include Outliers):**

- **Number of Labs:** 58
- **Pass:** 57
- **Fail:** 1

**Totals for Matrix/Analyte/Technology:**

- **Labs:** 11
- **Pass:** 10
- **Fail:** 1
- **Total:** 11
### Non Potable Water Manganese, Total

**Shipments:**
- 405

**Matrix:** Non Potable Water

**Technology:**
- ICP-AES

**Prep Method:**
- EPA 3015A

**Target:**
- 433 ug/L

**Limits:**
- 368 to 498 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:**
- 449 ug/L

**Std Dev:**
- 0 ug/L

**Median:**
- 449 ug/L

#### A histogram is not displayed for Technology: ICP-AES 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: 57
- Fail: 1
- Total: 58

---

### Non Potable Water Manganese, Total

**Shipments:**
- 405

**Matrix:** Non Potable Water

**Technology:** ICP-MS

**Prep Method:**
- EPA 200.2

**Target:**
- 433 ug/L

**Limits:**
- 368 to 498 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:**
- 421.5 ug/L

**Std Dev:**
- 16.2635 ug/L

**Median:**
- 421.5 ug/L

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

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2
- Fail: 0
- Total: 2

**Totals for Matrix/Analyte:**
- Labs: Pass: 57
- Fail: 1
- Total: 58

---

### Non Potable Water Manganese, Total

**Shipments:**
- 405

**Matrix:** Non Potable Water

**Technology:** ICP-MS

**Prep Method:**
- EPA 3005A

**Target:**
- 433 ug/L

**Limits:**
- 368 to 498 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:**
- 435.5 ug/L

**Std Dev:**
- 11.9304 ug/L

**Median:**
- 440 ug/L

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

**Totals for Matrix/Analyte:**
- Labs: Pass: 57
- Fail: 1
- Total: 58

---

**Score Date:** 09/01/2017
Test Results (End Groups Include Outliers)

Non Potable Water Manganese, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Manganese, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3010A
Target: 433 ug/L
Limits: 368 to 498 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 421.3 ug/L
Std Dev: 5.8595 ug/L
Median: 419 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 413  Fail: 0  Total: 413

Non Potable Water Molybdenum, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: GFAAS
Prep Method:
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 317 ug/L
Std Dev: 0 ug/L
Median: 317 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 413  Fail: 0  Total: 413

Non Potable Water Molybdenum, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-AES
Prep Method:
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 327.5 ug/L
Std Dev: 80.6625 ug/L
Median: 327 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 413  Fail: 0  Total: 413

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Non Potable Water Molybdenum, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 323.8 ug/L
Std Dev: 7.4106 ug/L
Median: 323 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 319  Fail: 0  Total: 319
Labs: Pass: 325  Fail: 0  Total: 325
Labs: Pass: 331  Fail: 0  Total: 331

Test Results (End Groups Include Outliers)

Number of Labs
0 0.5 1 1.5 2
319 325 331

Non Potable Water Molybdenum, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 323.8 ug/L
Std Dev: 7.4106 ug/L
Median: 323 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 319  Fail: 0  Total: 319
Labs: Pass: 325  Fail: 0  Total: 325
Labs: Pass: 331  Fail: 0  Total: 331

Test Results (End Groups Include Outliers)

Number of Labs
0 0.5 1 1.5 2
319 325 331

Non Potable Water Molybdenum, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-AES
Prep Method: EPA 3005A
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 325.8 ug/L
Std Dev: 17.8101 ug/L
Median: 328 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 50  Fail: 2  Total: 52

Test Results (End Groups Include Outliers)

Number of Labs
0 0.5 1 1.5 2
313 319 325 331 337 343

Non Potable Water Molybdenum, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 323.8 ug/L
Std Dev: 7.4106 ug/L
Median: 323 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 319  Fail: 0  Total: 319
Labs: Pass: 325  Fail: 0  Total: 325
Labs: Pass: 331  Fail: 0  Total: 331

Test Results (End Groups Include Outliers)

Number of Labs
0 0.5 1 1.5 2
319 325 331 337

Non Potable Water Molybdenum, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-MS
Prep Method: EPA 200.2
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 323.8 ug/L
Std Dev: 7.4106 ug/L
Median: 323 ug/L

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

Test Results (End Groups Include Outliers)

Number of Labs
0 0.5 1 1.5 2
307 319 325 337
Non Potable Water Molybdenum, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-MS
Prep Method: EPA 200.2
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 313.5 ug/L
Std Dev: 23.3345 ug/L
Median: 313.5 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:
Labs: Pass: 50  Fail: 2  Total: 52

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

Non Potable Water Molybdenum, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-MS
Prep Method: EPA 3005A
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 328.8 ug/L
Std Dev: 5.6745 ug/L
Median: 329 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 50  Fail: 2  Total: 52

Non Potable Water Molybdenum, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-MS
Prep Method: EPA 3010A
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 316.5 ug/L
Std Dev: 182.732 ug/L
Median: 317 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 50  Fail: 2  Total: 52

Non Potable Water Molybdenum, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Molybdenum, Total
Sample: 0511B
Technology: ICP-MS
Prep Method: EPA 3015A
Target: 333 ug/L
Limits: 286 to 376 ug/L
Basis: Linear Regression
Robust Mean: 332 ug/L
Std Dev: 0 ug/L
Median: 332 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:
Labs: Pass: 50  Fail: 2  Total: 52

Non Potable Water m/p-Xylenes

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Non Potable Water Methoxychlor

**Sample:** 0517  
**Technology:** GC-ECD  
**Prep Method:** EPA 3510C  
**Target:** 10.2 ug/L  
**Limits:** 4.4 to 14.8 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 8.6 ug/L  
**Std Dev:** 2.564 ug/L  
**Median:** 8.58 ug/L

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

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

Non Potable Water Methoxychlor

**Sample:** 0517  
**Technology:** GC-MS  
**Prep Method:** EPA 3535A  
**Target:** 10.2 ug/L  
**Limits:** 4.4 to 14.8 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 6.3 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 6.26 ug/L

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

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

Non Potable Water Sodium, Total

**Sample:** 0537  
**Technology:** FAAS  
**Prep Method:**  
**Target:** 80.5 mg/L  
**Limits:** 64.4 to 96.6 mg/L  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 81.3 mg/L  
**Std Dev:** 2.5007 mg/L  
**Median:** 80.2 mg/L

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: **40**  Fail: 3  Total: **43**
Non Potable Water Sodium, Total

**Shipments:**
- Matrix: Non Potable Water
- Technology: IC-COND
- Prep Method:
  - Target: 80.5 mg/L
  - Limits: 64.4 to 96.6 mg/L
  - Basis: Target Value +/- a fixed percent
- Robust Mean: 85.7 mg/L
  - Std Dev: 0 mg/L
  - Median: 85.7 mg/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 40 Fail: 3 Total: 43

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

**Shipments:**
- Matrix: Non Potable Water
- Technology: ICP-AES
- Prep Method:
  - Target: 80.5 mg/L
  - Limits: 64.4 to 96.6 mg/L
  - Basis: Target Value +/- a fixed percent
- Robust Mean: 80.2 mg/L
  - Std Dev: 18.8429 mg/L
  - Median: 80.3 mg/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 18 Fail: 1 Total: 19

**Shipments:**
- Matrix: Non Potable Water
- Technology: ICP-AES
- Prep Method:
  - Target: 80.5 mg/L
  - Limits: 64.4 to 96.6 mg/L
  - Basis: Target Value +/- a fixed percent
- Robust Mean: 75.7 mg/L
  - Std Dev: 3.6945 mg/L
  - Median: 75.35 mg/L

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

**Shipments:**
- Matrix: Non Potable Water
- Technology: ICP-AES
- Prep Method:
  - Target: 80.5 mg/L
  - Limits: 64.4 to 96.6 mg/L
  - Basis: Target Value +/- a fixed percent
- Robust Mean: 77.2 mg/L
  - Std Dev: 6.7882 mg/L
  - Median: 77.2 mg/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2 Fail: 0 Total: 2

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

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Proficiency Test Statistics
### Non Potable Water Sodium, Total

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<th>Matrix:</th>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1, Fail: 0, Total: 1

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

### Non Potable Water Sodium, Total

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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 9, Fail: 2, Total: 11

### Non Potable Water Sodium, Total

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<td>Median:</td>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1, Fail: 0, Total: 1

### Non Potable Water Sodium, Total

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<td>Robust Mean:</td>
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<td>Median:</td>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 40, Fail: 3, Total: 43

### Non Potable Water Naphthalene

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Non Potable Water Naphthalene

**Analyte:** Naphthalene
**Sample:** 0536
**Technology:** GC-MS
**Prep Method:**
- **Target:** 94.9 ug/L
- **Limits:** 22.7 to 113 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 62.1 ug/L
  - **Std Dev:** 18.5643 ug/L
  - **Median:** 61.4 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 28
- Fail: 4
- Total: 32

**Shipment:** 405
**Matrix:** Non Potable Water

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

Non Potable Water Ammonia (as N)

**Analyte:** Ammonia (as N)
**Sample:** 0507
**Technology:** AUTO
**Prep Method:**
- **Target:** 19.1 mg/L
- **Limits:** 15.4 to 22.6 mg/L
- **Basis:** Linear Regression
- **Robust Mean:** 19 mg/L
  - **Std Dev:** 1.0254 mg/L
  - **Median:** 19.05 mg/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 28
- Fail: 0
- Total: 28

Score Date: 09/01/2017

Proficiency Test Statistics
Non Potable Water Ammonia (as N)

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
</tr>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>1.0</td>
</tr>
<tr>
<td>1.5</td>
</tr>
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<td>2.0</td>
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<tr>
<td>2.5</td>
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<td>3.0</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Results (End Groups Include Outliers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.1</td>
</tr>
<tr>
<td>18.9</td>
</tr>
<tr>
<td>19.5</td>
</tr>
<tr>
<td>20.1</td>
</tr>
<tr>
<td>20.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non Potable Water Ammonia (as N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix: Non Potable Water</td>
</tr>
<tr>
<td>Analyte: Ammonia (as N)</td>
</tr>
<tr>
<td>Sample: 0507</td>
</tr>
<tr>
<td>Technology: AUTO</td>
</tr>
<tr>
<td>Prep Method: SM 4500-NH3 B-97,-11</td>
</tr>
<tr>
<td>Target: 19.1 mg/L</td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
</tr>
<tr>
<td>Robust Mean: 19.2 mg/L</td>
</tr>
<tr>
<td>Std Dev: 1.6215 mg/L</td>
</tr>
<tr>
<td>Median: 19.4 mg/L</td>
</tr>
</tbody>
</table>

Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.1</td>
<td>18.9</td>
<td>19.5</td>
</tr>
<tr>
<td>20.1</td>
<td>20.7</td>
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Totals for Matrix/Analyte:

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<thead>
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<th>Labs: Pass</th>
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<th>Total</th>
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</thead>
<tbody>
<tr>
<td>72</td>
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<td>75</td>
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Scores:

<table>
<thead>
<tr>
<th>Shipment: 405</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix: Non Potable Water</td>
</tr>
<tr>
<td>Analyte: Ammonia (as N)</td>
</tr>
<tr>
<td>Sample: 0507</td>
</tr>
<tr>
<td>Technology: COLOR</td>
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<tr>
<td>Prep Method:</td>
</tr>
<tr>
<td>Target: 19.1 mg/L</td>
</tr>
<tr>
<td>Limits: 15.4 to 22.6 mg/L</td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
</tr>
<tr>
<td>Robust Mean: 20.3 mg/L</td>
</tr>
<tr>
<td>Std Dev: 2.2627 mg/L</td>
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<tr>
<td>Median: 20.3 mg/L</td>
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Totals for Matrix/Analyte/Technology:

<table>
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<tr>
<th>Labs: Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>3</td>
<td>75</td>
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</table>

Scores:

<table>
<thead>
<tr>
<th>Shipment: 405</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix: Non Potable Water</td>
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<tr>
<td>Analyte: Ammonia (as N)</td>
</tr>
<tr>
<td>Sample: 0507</td>
</tr>
<tr>
<td>Technology: IC-COND</td>
</tr>
<tr>
<td>Prep Method:</td>
</tr>
<tr>
<td>Target: 19.1 mg/L</td>
</tr>
<tr>
<td>Limits: 15.4 to 22.6 mg/L</td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
</tr>
<tr>
<td>Robust Mean: 17.4 mg/L</td>
</tr>
<tr>
<td>Std Dev: 0 mg/L</td>
</tr>
<tr>
<td>Median: 17.4 mg/L</td>
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</tbody>
</table>

Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>3</td>
<td>75</td>
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Scores:

<table>
<thead>
<tr>
<th>Shipment: 405</th>
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</thead>
<tbody>
<tr>
<td>Matrix: Non Potable Water</td>
</tr>
<tr>
<td>Analyte: Ammonia (as N)</td>
</tr>
<tr>
<td>Sample: 0507</td>
</tr>
<tr>
<td>Technology: POT</td>
</tr>
<tr>
<td>Prep Method:</td>
</tr>
<tr>
<td>Target: 19.1 mg/L</td>
</tr>
<tr>
<td>Limits: 15.4 to 22.6 mg/L</td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
</tr>
<tr>
<td>Robust Mean: 17.4 mg/L</td>
</tr>
<tr>
<td>Std Dev: 7.6368 mg/L</td>
</tr>
<tr>
<td>Median: 18.65 mg/L</td>
</tr>
</tbody>
</table>

Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>3</td>
<td>75</td>
</tr>
</tbody>
</table>

Scores:

Score Date: 09/01/2017

Proficiency Test Statistics

Page 148 of 386
Non Potable Water Ammonia (as N)

Shipments: 405  Matrix: Non Potable Water
Analyte: Ammonia (as N)
Sample: 0507
Technology: POT
Prep Method: SM 4500-NH3 B-97,-11
Target: 19.1 mg/L
Limits: 15.4 to 22.6 mg/L
Basis: Linear Regression
Robust Mean: 19.8 mg/L
Std Dev: 1.5716 mg/L
Median: 19.1 mg/L

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

Totals for Matrix/Analyte:
Labs: Pass: 16 Fail: 0 Total: 17

Shipment: 405  Matrix: Non Potable Water
Analyte: Ammonia (as N)
Sample: 0507
Technology: TITR
Prep Method: SM 4500-NH3 B-97,-11
Target: 19.1 mg/L
Limits: 15.4 to 22.6 mg/L
Basis: Linear Regression
Robust Mean: 18.5 mg/L
Std Dev: 4.7054 mg/L
Median: 18.56 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 16 Fail: 1 Total: 17

Totals for Matrix/Analyte:
Labs: Pass: 8 Fail: 0 Total: 8

Non Potable Water Nickel, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Nickel, Total
Sample: 0511A
Technology: CRC-ICP/MS
Prep Method: SM 4500-NH3 B-97,-11
Target: 1860 ug/L
Limits: 1650 to 2080 ug/L
Basis: Linear Regression
Robust Mean: 1690 ug/L
Std Dev: 0 ug/L
Median: 1690 ug/L

A histogram is not displayed for Technology: CRC-ICP/MS 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: 68 Fail: 2 Total: 70
Non Potable Water Nickel, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Nickel, Total
Sample: 0511A
Technology: FAAS
Prep Method: EPA 3005A
Target: 1860 ug/L
Limits: 1650 to 2080 ug/L
Basis: Linear Regression
Robust Mean: 1882 ug/L
Std Dev: 0 ug/L
Median: 1882 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1
Labs: Pass: 68  Fail: 2  Total: 70

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

Non Potable Water Nickel, Total

Shipment: 405  Matrix: Non Potable Water
Analyte: Nickel, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 1860 ug/L
Limits: 1650 to 2080 ug/L
Basis: Linear Regression
Robust Mean: 1899.5 ug/L
Std Dev: 60.3221 ug/L
Median: 1880 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 5  Fail: 0  Total: 5
Labs: Pass: 68  Fail: 2  Total: 70

Non Potable Water Nickel, Total

Score Date: 09/01/2017
Proficiency Test Statistics
Non Potable Water Nickel, Total

**Test Results (End Groups Include Outliers)**

|----------|----------------------------|------------------------|----------------|---------------------|-----------------------|-------------------|--------------------------|--------------------------|------------------------|--------------------|------------------|

<table>
<thead>
<tr>
<th>Totals for Matrix/Analyte/Technology:</th>
<th>Labs: Pass 1909</th>
<th>Fail 1949</th>
<th>Total 1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs: Pass: 1909</td>
<td>Fail: 0</td>
<td>Total: 1988</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fail: 0</th>
<th>Labs: Pass: 68</th>
<th>Total: 70</th>
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</thead>
<tbody>
<tr>
<td>Lamps: Pass: 68</td>
<td>Fail: 2</td>
<td>Total: 70</td>
</tr>
</tbody>
</table>

**Robust Mean:** 1942.5 ug/L

**Std Dev:** 35.9398 ug/L

**Median:** 1955 ug/L

**Sample:**

- **Limits:** 1650 to 2080 ug/L
- **Target:** 1860 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 1942.5 ug/L
- **Std Dev:** 35.9398 ug/L
- **Median:** 1955 ug/L

| Labs: Pass: 68 | Fail: 2 | Total: 70 |

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

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Non Potable Water Nickel, Total

**Test Results (End Groups Include Outliers)**

|----------|----------------------------|------------------------|----------------|---------------------|-----------------------|-------------------|--------------------------|--------------------------|------------------------|--------------------|------------------|

<table>
<thead>
<tr>
<th>Totals for Matrix/Analyte/Technology:</th>
<th>Labs: Pass 1973</th>
<th>Fail 1752</th>
<th>Total 1791</th>
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<tbody>
<tr>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Fail: 0</th>
<th>Labs: Pass: 68</th>
<th>Total: 70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamps: Pass: 68</td>
<td>Fail: 2</td>
<td>Total: 70</td>
</tr>
</tbody>
</table>

**Robust Mean:** 1871.5 ug/L

**Std Dev:** 104.9481 ug/L

**Median:** 1860 ug/L

**Sample:**

- **Limits:** 1650 to 2080 ug/L
- **Target:** 1860 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 1871.5 ug/L
- **Std Dev:** 104.9481 ug/L
- **Median:** 1860 ug/L

| Labs: Pass: 68 | Fail: 2 | Total: 70 |

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

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Non Potable Water Nickel, Total

**Test Results (End Groups Include Outliers)**

|----------|----------------------------|------------------------|----------------|---------------------|-----------------------|-------------------|--------------------------|--------------------------|------------------------|--------------------|------------------|

<table>
<thead>
<tr>
<th>Totals for Matrix/Analyte/Technology:</th>
<th>Labs: Pass 1969</th>
<th>Fail 1751</th>
<th>Total 1831</th>
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<tbody>
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<td>Labs: Pass: 1969</td>
<td>Fail: 0</td>
<td>Total: 1831</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Fail: 0</th>
<th>Labs: Pass: 68</th>
<th>Total: 70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamps: Pass: 68</td>
<td>Fail: 2</td>
<td>Total: 70</td>
</tr>
</tbody>
</table>

**Robust Mean:** 1930 ug/L

**Std Dev:** 0 ug/L

**Median:** 1930 ug/L

**Sample:**

- **Limits:** 1650 to 2080 ug/L
- **Target:** 1860 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 1930 ug/L
- **Std Dev:** 0 ug/L
- **Median:** 1930 ug/L

**Totals for Matrix/Analyte: Labs: Pass: 1969 | Fail: 1751 | Total: 1831 |
| Labs: Pass: 68 | Fail: 2 | Total: 70 |

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

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Non Potable Water Nickel, Total

**Test Results (End Groups Include Outliers)**

|----------|----------------------------|------------------------|----------------|---------------------|-----------------------|-------------------|--------------------------|--------------------------|------------------------|--------------------|------------------|

<table>
<thead>
<tr>
<th>Totals for Matrix/Analyte/Technology:</th>
<th>Labs: Pass 1909</th>
<th>Fail 1949</th>
<th>Total 1988</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs: Pass: 1909</td>
<td>Fail: 0</td>
<td>Total: 1988</td>
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</table>

<table>
<thead>
<tr>
<th>Fail: 0</th>
<th>Labs: Pass: 68</th>
<th>Total: 70</th>
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</thead>
<tbody>
<tr>
<td>Lamps: Pass: 68</td>
<td>Fail: 2</td>
<td>Total: 70</td>
</tr>
</tbody>
</table>

**Robust Mean:** 1896.5 ug/L

**Std Dev:** 85.5599 ug/L

**Median:** 1896.5 ug/L

**Sample:**

- **Limits:** 1650 to 2080 ug/L
- **Target:** 1860 ug/L
- **Basis:** Linear Regression
- **Robust Mean:** 1896.5 ug/L
- **Std Dev:** 85.5599 ug/L
- **Median:** 1896.5 ug/L

| Labs: Pass: 68 | Fail: 2 | Total: 70 |

**A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.**
Non Potable Water Nickel, Total

Number of Labs

Totals for Matrix/Analyte/Technology:
Labs: 70  Pass: 70  Fail: 0  Total: 70

Non Potable Water Nickel, Total

Number of Labs

Totals for Matrix/Analyte/Technology:
Labs: 70  Pass: 70  Fail: 0  Total: 70

Non Potable Water Nickel, Total

Number of Labs

Totals for Matrix/Analyte/Technology:
Labs: 70  Pass: 70  Fail: 0  Total: 70

Non Potable Water Nickel, Total

Number of Labs

Totals for Matrix/Analyte/Technology:
Labs: 70  Pass: 70  Fail: 0  Total: 70
Non Potable Water Nickel, Total

Shipments: 605  
Matrix: Non Potable Water  
Analyte: Nickel, Total  
Sample: 0511A  
Technology: ICP-MS  
Prep Method: EPA 3015A  
Target: 1650 to 2080 ug/L  
Limits: 405 ug/L  
Robust Mean: 1905 ug/L  
Std Dev: 106.066 ug/L  
Median: 1905 ug/L  
Fail: 0  
Labs:  Pass: 68  
Fail: 2  
Total: 70  
Totals for Matrix/Analyte/Technology:  
Labs:  Pass: 2  
Fail: 0  
Total: 2  
A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

Non Potable Water Nitrobenzene

Shipments: 605  
Matrix: Non Potable Water  
Analyte: Nitrobenzene  
Sample: 0536  
Technology: GC-MS  
Prep Method: EPA 3510C  
Target: 196 ug/L  
Limits: 64.3 to 230 ug/L  
Robust Mean: 134.2 ug/L  
Std Dev: 37.4185 ug/L  
Median: 138 ug/L  
Fail: 0  
Labs:  Pass: 30  
Fail: 1  
Total: 31  
Totals for Matrix/Analyte/Technology:  
Labs:  Pass: 14  
Fail: 0  
Total: 14  
A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Non Potable Water Nitrobenzene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Nitrobenzene  
Sample: 0536  
Technology: HPLC-UV  
Prep Method:  
Target: 196 ug/L  
Limits: 64.3 to 230 ug/L  
Basis: Linear Regression  
Robust Mean: 179 ug/L  
Std Dev: 0 ug/L  
Median: 179 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  

Non Potable Water N-Nitrosodimethylamine

Shipments: 405  
Matrix: Non Potable Water  
Analyte: N-Nitrosodimethylamine  
Sample: 0536  
Technology: GC-MS  
Prep Method:  
Target: 117 ug/L  
Limits: 11.7 to 132 ug/L  
Basis: Manual Limits  
Robust Mean: 55.4 ug/L  
Std Dev: 28.3916 ug/L  
Median: 51.3 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 15  
Fail: 0  
Total: 15  

Totals for Matrix/Analyte:  
Labs: Pass: 29  
Fail: 1  
Total: 30  

Non Potable Water N-Nitrosodiphenylamine

Shipments: 405  
Matrix: Non Potable Water  
Analyte: N-Nitrosodiphenylamine  
Sample: 0536  
Technology: GC-MS  
Prep Method: EPA 3510C  
Target: 117 ug/L  
Limits: 11.7 to 132 ug/L  
Basis: Manual Limits  
Robust Mean: 51.7 ug/L  
Std Dev: 29.0466 ug/L  
Median: 46.85 ug/L  

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

Totals for Matrix/Analyte:  
Labs: Pass: 29  
Fail: 1  
Total: 30  

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
## Non Potable Water N-Nitrosodiphenylamine

### Test Results (End Groups Include Outliers)

<table>
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<tr>
<th>Number of Labs</th>
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<tbody>
<tr>
<td>66</td>
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</tbody>
</table>

### Number of Labs

<table>
<thead>
<tr>
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<th>Labs: Fail</th>
<th>Total:</th>
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</thead>
<tbody>
<tr>
<td>30</td>
<td>0</td>
<td>30</td>
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</tbody>
</table>

### Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Labs: Fail</th>
<th>Total:</th>
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</thead>
<tbody>
<tr>
<td>15</td>
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<td>15</td>
</tr>
</tbody>
</table>

### Robust Mean: 117.7 ug/L

### Std Dev: 25.298 ug/L

### Median: 120 ug/L

### Limits: 31 to 249 ug/L

### Target: 180 ug/L

### Technology: GC-MS

### Prep Method:

<table>
<thead>
<tr>
<th>Target: 180 ug/L</th>
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<tbody>
<tr>
<td>Limits: 31 to 249 ug/L</td>
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<tr>
<td>Basis: Linear Regression</td>
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</tbody>
</table>

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

## Non Potable Water N-Nitrosodi-n-propylamine

### Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
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</thead>
<tbody>
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### Number of Labs

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Labs: Fail</th>
<th>Total:</th>
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</thead>
<tbody>
<tr>
<td>29</td>
<td>1</td>
<td>30</td>
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</tbody>
</table>

### Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Labs: Fail</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>0</td>
<td>14</td>
</tr>
</tbody>
</table>

### Robust Mean: 37.5 ug/L

### Std Dev: 9.6254 ug/L

### Median: 36.9 ug/L

### Limits: 15.7 to 61.8 ug/L

### Target: 49 ug/L

### Technology: GC-MS

### Prep Method:

<table>
<thead>
<tr>
<th>Target: 49 ug/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limits: 15.7 to 61.8 ug/L</td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
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### Score Date: 09/01/2017

### Proficiency Test Statistics
Non Potable Water N-Nitrosodi-n-propylamine

Sample: 0536
Technology: GC-MS
Prep Method: EPA 3510C
Target: 49 ug/L
Limits: 15.7 to 61.8 ug/L
Basis: Linear Regression
Robust Mean: 35.8 ug/L
Std Dev: 7.192 ug/L
Median: 37.15 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 24 Fail: 0 Total: 24

Totals for Matrix/Analyte:
Labs: Pass: 28 Fail: 0 Total: 28

Totals for Technology:
Labs: Pass: 24 Fail: 0 Total: 24

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

Non Potable Water Nitrite (as N)

Sample: 0541
Technology: AUTO
Prep Method:
Target: 1.2 mg/L
Limits: 0.988 to 1.41 mg/L
Basis: Linear Regression
Robust Mean: 1.2 mg/L
Std Dev: 0.4484 mg/L
Median: 1.225 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 18 Fail: 2 Total: 20

Totals for Matrix/Analyte:
Labs: Pass: 62 Fail: 4 Total: 66

Score Date: 09/01/2017
**Non Potable Water Nitrite (as N)**

**Shipments:**
- 405

**Matrix:** Non Potable Water

**Sample:** 0541

**Technology:** IC-COND

**Prep Method:**
- Target: 1.2 mg/L
- Limits: 0.988 to 1.41 mg/L
- Basis: Linear Regression
- Robust Mean: 1.2 mg/L
  - Std Dev: 0.3563 mg/L
  - Median: 1.23 mg/L

**Test Results (End Groups Include Outliers):**

<table>
<thead>
<tr>
<th>Number of Labs</th>
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<tbody>
<tr>
<td>1.1</td>
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<tr>
<td>1.3</td>
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<td>1.4</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**
- Labs: 66
- Pass: 62
- Fail: 4

**Score Date:** 09/01/2017

---

**Non Potable Water Nitrate-Nitrite (as N)**

**Shipments:**
- 405

**Matrix:** Non Potable Water

**Sample:** 0507

**Technology:** AUTO

**Prep Method:**
- Target: 8.55 mg/L
- Limits: 7.09 to 9.94 mg/L
- Basis: Linear Regression
- Robust Mean: 8.6 mg/L
  - Std Dev: 0.3186 mg/L
  - Median: 8.57 mg/L

**Test Results (End Groups Include Outliers):**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>8.1</td>
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<td>9</td>
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<td>9.2</td>
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</table>

**Totals for Matrix/Analyte/Technology:**
- Labs: 23
- Pass: 23
- Fail: 0

**Score Date:** 09/01/2017

---

**Non Potable Water Nitrate-Nitrite (as N)**

**Shipments:**
- 405

**Matrix:** Non Potable Water

**Sample:** 0507

**Technology:** COLOR

**Prep Method:**
- Target: 8.55 mg/L
- Limits: 7.09 to 9.94 mg/L
- Basis: Linear Regression
- Robust Mean: 8.7 mg/L
  - Std Dev: 0.2409 mg/L
  - Median: 8.55 mg/L

**Test Results (End Groups Include Outliers):**

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<thead>
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<tr>
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<tr>
<td>8.9</td>
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</tbody>
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**Totals for Matrix/Analyte/Technology:**
- Labs: 3
- Pass: 3
- Fail: 0

**Score Date:** 09/01/2017

---

**Non Potable Water Nitrate-Nitrite (as N)**

**Shipments:**
- 405

**Matrix:** Non Potable Water

**Sample:** 0507

**Technology:** IC-COND

**Prep Method:**
- Target: 8.55 mg/L
- Limits: 7.09 to 9.94 mg/L
- Basis: Linear Regression
- Robust Mean: 8.6 mg/L
  - Std Dev: 0.3754 mg/L
  - Median: 8.35 mg/L

**Test Results (End Groups Include Outliers):**

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<thead>
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**Totals for Matrix/Analyte/Technology:**
- Labs: 3
- Pass: 3
- Fail: 0

**Score Date:** 09/01/2017

---

**Non Potable Water Nitrate (as N)**

- **Shipment:** 405
- **Matrix:** Non Potable Water
- **Sample:** 0541
- **Technology:** IC-COND
- **Prep Method:**
  - **Target:** 1.2 mg/L
  - **Limits:** 0.988 to 1.41 mg/L
  - **Basis:** Linear Regression
  - **Robust Mean:** 1.2 mg/L
    - **Std Dev:** 0.3563 mg/L
    - **Median:** 1.23 mg/L

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 66
  - **Pass:** 62
  - **Fail:** 4

**Score Date:** 09/01/2017

---

**Non Potable Water Nitrate-Nitrite (as N)**

- **Shipment:** 405
- **Matrix:** Non Potable Water
- **Sample:** 0507
- **Technology:** AUTO
- **Prep Method:**
  - **Target:** 8.55 mg/L
  - **Limits:** 7.09 to 9.94 mg/L
  - **Basis:** Linear Regression
  - **Robust Mean:** 8.6 mg/L
    - **Std Dev:** 0.3186 mg/L
    - **Median:** 8.57 mg/L

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 23
  - **Pass:** 23
  - **Fail:** 0

**Score Date:** 09/01/2017

---

**Non Potable Water Nitrate-Nitrite (as N)**

- **Shipment:** 405
- **Matrix:** Non Potable Water
- **Sample:** 0507
- **Technology:** COLOR
- **Prep Method:**
  - **Target:** 8.55 mg/L
  - **Limits:** 7.09 to 9.94 mg/L
  - **Basis:** Linear Regression
  - **Robust Mean:** 8.7 mg/L
    - **Std Dev:** 0.2409 mg/L
    - **Median:** 8.55 mg/L

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 3
  - **Pass:** 3
  - **Fail:** 0

**Score Date:** 09/01/2017

---

**Non Potable Water Nitrate (as N)**

- **Shipment:** 405
- **Matrix:** Non Potable Water
- **Sample:** 0541
- **Technology:** IC-COND
- **Prep Method:**
  - **Target:** 1.2 mg/L
  - **Limits:** 0.988 to 1.41 mg/L
  - **Basis:** Linear Regression
  - **Robust Mean:** 1.2 mg/L
    - **Std Dev:** 0.3563 mg/L
    - **Median:** 1.23 mg/L

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 66
  - **Pass:** 62
  - **Fail:** 4
Non Potable Water Nitrate (as N)

**Shipments:**
- **405**
- **Matrix:** Non Potable Water
- **Sample:** 0507
- **Technology:** AUTO
- **Prep Method:** Non Potable Water Nitrate (as N)
- **Target:** 8.55 mg/L
- **Limits:** 7.04 to 10 mg/L
- **Basis:** Linear Regression
- **Robust Mean:** 8.7 mg/L
  - **Std Dev:** 0.3527 mg/L
  - **Median:** 8.63 mg/L
- **Totals for Matrix/Analyte/Technology:**
  - **Labs:** Pass: 7.8, Fail: 8.1, Total: 8.3, 8.5, 8.8, 9.1, 9.3

**Shipment:**
- **405**
- **Matrix:** Non Potable Water
- **Sample:** 0507
- **Technology:** COLOR
- **Prep Method:** Non Potable Water Nitrate (as N)
- **Target:** 8.55 mg/L
- **Limits:** 7.04 to 10 mg/L
- **Basis:** Linear Regression
- **Robust Mean:** 8.5 mg/L
  - **Std Dev:** 0.3396 mg/L
  - **Median:** 8.44 mg/L
- **Totals for Matrix/Analyte/Technology:**
  - **Labs:** Pass: 8, Fail: 8.1, Total: 8.3, 8.5, 8.6, 8.9

**Shipment:**
- **405**
- **Matrix:** Non Potable Water
- **Sample:** 0507
- **Technology:** IC-COND
- **Prep Method:** Non Potable Water Nitrate (as N)
- **Target:** 8.55 mg/L
- **Limits:** 7.04 to 10 mg/L
- **Basis:** Linear Regression
- **Robust Mean:** 8.6 mg/L
  - **Std Dev:** 1.7374 mg/L
  - **Median:** 8.6 mg/L
- **Totals for Matrix/Analyte/Technology:**
  - **Labs:** Pass: 8.5, Fail: 8.6, Total: 8.8, 8.9

**Shipments:**
- **405**
- **Matrix:** Non Potable Water
- **Sample:** 0507
- **Technology:** POT
- **Prep Method:** Non Potable Water Nitrate (as N)
- **Target:** 8.55 mg/L
- **Limits:** 7.04 to 10 mg/L
- **Basis:** Linear Regression
- **Robust Mean:** 8.62 mg/L
  - **Std Dev:** 0 mg/L
  - **Median:** 11.6 mg/L
- **Totals for Matrix/Analyte/Technology:**
  - **Labs:** Pass: 0, Fail: 1, Total: 1

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

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 158 of 386
Non Potable Water Oil and Grease Total Recoverable (HEM)

Test Results (End Groups Include Outliers)

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<thead>
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<th>Number of Labs</th>
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Non Potable Water Phenol

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

Non Potable Water Phenol

Score Date: 09/11/2017

Proficiency Test Statistics
Non Potable Water Phenol

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

Non Potable Water o-Xylene

Non Potable Water o-Xylene

Non Potable Water o-Xylene

Non Potable Water PCB-1242
Non Potable Water PCB-1242

Shipments: 405  
Matrix: Non Potable Water  
Analyte: PCB-1242  
Sample: 0538  
Technology: GC-ECD  
Prep Method: EPA 3510C  
Target: 4.11 ug/L  
Limits: 1.54 to 5.69 ug/L  
Basis: Linear Regression  
Robust Mean: 3.5 ug/L  
Std Dev: 1.0416 ug/L  
Median: 3.53 ug/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 19  Fail: 2  Total: 21

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

Non Potable Water Lead, Total

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Lead, Total  
Sample: 0511A  
Technology: FAAS  
Prep Method:  
Target: 534 ug/L  
Limits: 454 to 614 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 544 ug/L  
Std Dev: 314.0785 ug/L  
Median: 544 ug/L  

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

Totals for Matrix/Analyte:  
Labs: Pass: 79  Fail: 2  Total: 81

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 161 of 386
Non Potable Water Lead, Total

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

Non Potable Water Lead, Total

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.
Non Potable Water Lead, Total

**Shipments:**
- **405**

**Matrix:** Non Potable Water

**Analyte:** Lead, Total

**Sample:** 0511A

**Technology:** ICP-AES

**Prep Method:**
- EPA 200.2
- EPA 3005A
- EPA 3010A

**Target:** 534 ug/L

**Limits:** 454 to 614 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:**
- 513.8 ug/L
- 538.3 ug/L
- 543.2 ug/L

**Std Dev:**
- 127.2351 ug/L
- 9.5409 ug/L
- 25.7721 ug/L

**Median:**
- 538 ug/L
- 536.7 ug/L
- 545 ug/L

**Scores:**
- **Pass:**
  - Labs: 79
  - Total: 81

**Totals for Matrix/Analyte/Technology:**
- Labs: 18
- Fail: 1
- Total: 19

**Proficiency Test Statistics**

**Score Date:** 09/01/2017

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Non Potable Water Lead, Total

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

Shipments: 405  
Matrix: Non Potable Water
Analyte: Lead, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 200.2
Target: 534 µg/L
Limits: 454 to 614 µg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 532.3 µg/L
Std Dev: 18.1475 µg/L
Median: 525 µg/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 3  Fail: 0  Total: 3
Labs: Pass: 79  Fail: 2  Total: 81

Non Potable Water Lead, Total

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

Shipments: 405  
Matrix: Non Potable Water
Analyte: Lead, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 4.1.3
Target: 534 µg/L
Limits: 454 to 614 µg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 548.5 µg/L
Std Dev: 12.0208 µg/L
Median: 548.5 µg/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2
Labs: Pass: 79  Fail: 2  Total: 81

Non Potable Water Lead, Total

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

Shipments: 405  
Matrix: Non Potable Water
Analyte: Lead, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3015A
Target: 534 µg/L
Limits: 454 to 614 µg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 533 µg/L
Std Dev: 0 µg/L
Median: 533 µg/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1
Labs: Pass: 79  Fail: 2  Total: 81

Score Date: 09/01/2017  
Proficiency Test Statistics  
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### Non Potable Water Lead, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Lead, Total  
**Sample:** 0511A  
**Technology:** ICP-MS  
**Prep Method:** EPA 3005A  
**Target:** 534 ug/L  
**Limits:** 454 to 614 ug/L  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 532.4 ug/L  
**Std Dev:** 9.3968 ug/L  
**Median:** 530 ug/L  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 5  
- Fail: 0  
- Total: 5

**Test Results (End Groups Include Outliers):**

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**Totals for Matrix/Analyte:**  
- Labs: Pass: 79  
- Fail: 2  
- Total: 81

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

### Non Potable Water Lead, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Lead, Total  
**Sample:** 0511A  
**Technology:** ICP-MS  
**Prep Method:** EPA 3010A  
**Target:** 534 ug/L  
**Limits:** 454 to 614 ug/L  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 530.7 ug/L  
**Std Dev:** 21.362 ug/L  
**Median:** 522 ug/L  

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

**Totals for Matrix/Analyte:**  
- Labs: Pass: 79  
- Fail: 2  
- Total: 81

_A histogram is not displayed for Technology: GC-FID due to the limited number of participants._

### Non Potable Water Lead, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Lead, Total  
**Sample:** 0511A  
**Technology:** ICP-MS  
**Prep Method:** EPA 3015A  
**Target:** 511 ug/L  
**Limits:** 454 to 614 ug/L  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 511 ug/L  
**Std Dev:** 24,0416 ug/L  
**Median:** 511 ug/L  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 2  
- Fail: 0  
- Total: 2

**Totals for Matrix/Analyte:**  
- Labs: Pass: 79  
- Fail: 2  
- Total: 81

### Non Potable Water Pentachlorophenol

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Pentachlorophenol  
**Sample:** 0535  
**Technology:** GC-FID  
**Prep Method:**  
**Target:** 91.4 ug/L  
**Limits:** 29.3 to 124 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 81.8 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 81.8 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: GC-FID due to the limited number of participants._

Score Date: 09/01/2017  
Proficiency Test Statistics  
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Non Potable Water Pentachlorophenol

Analyte: Pentachlorophenol
Sample: 0535
Technology: GC-MS
Prep Method: EPA 3510C
Target: 91.4 ug/L
Limits: 29.3 to 124 ug/L
Basis: Linear Regression
Robust Mean: 76.6 ug/L
Std Dev: 27.0963 ug/L
Median: 75.45 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 1 Total: 1

Shipment: 405 Matrix: Non Potable Water

Non Potable Water Orthophosphate (as P)

Analyte: Orthophosphate (as P)
Sample: 0507
Technology: AUTO
Prep Method:
Target: 4.56 mg/L
Limits: 3.88 to 5.24 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 4.6 mg/L
Std Dev: 0.1057 mg/L
Median: 4.625 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 8 Fail: 0 Total: 8

Totals for Matrix/Analyte:
Labs: Pass: 54 Fail: 4 Total: 58

Score Date: 09/01/2017
Proficiency Test Statistics
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Non Potable Water Orthophosphate (as P)

Shipment: 405  Matrix: Non Potable Water
Analyte: Orthophosphate (as P)
Sample: 0507
Technology: COLOR
Prep Method:
Target: 4.56 mg/L
Limits: 3.88 to 5.24 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 4.6 mg/L
Std Dev: 1.3137 mg/L
Median: 4.57 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 4  Fail: 54  Total: 58

Non Potable Water Orthophosphate (as P)

Shipment: 405  Matrix: Non Potable Water
Analyte: Orthophosphate (as P)
Sample: 0507
Technology: IC-COND
Prep Method:
Target: 4.56 mg/L
Limits: 3.88 to 5.24 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 4.5 mg/L
Std Dev: 1.1889 mg/L
Median: 4.49 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 3  Fail: 2  Total: 15

Non Potable Water 4-Methyl-2-Pentanone

Shipment: 405  Matrix: Non Potable Water
Analyte: 4-Methyl-2-Pentanone
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 106 ug/L
Limits: 63 to 147 ug/L
Basis: Linear Regression
Robust Mean: 95.4 ug/L
Std Dev: 28.9262 ug/L
Median: 102 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 7  Fail: 2  Total: 9

Non Potable Water 4-Methyl-2-Pentanone

Shipment: 405  Matrix: Non Potable Water
Analyte: 4-Methyl-2-Pentanone
Sample: 0513
Technology: GC-MS
Prep Method: EPA 5030C
Target: 106 ug/L
Limits: 63 to 147 ug/L
Basis: Linear Regression
Robust Mean: 85.7 ug/L
Std Dev: 21.8892 ug/L
Median: 89.55 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15  Fail: 3  Total: 18

Non Potable Water Pyrene

Score Date: 09/01/2017
Proficiency Test Statistics  Page 167 of 386
Non Potable Water Pyrene

Number of Labs

Test Results (End Groups Include Outliers)

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Totals for Matrix/Analyte/Technology:

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Non Potable Water Solids, Total Dissolved

Number of Labs

Test Results (End Groups Include Outliers)

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Totals for Matrix/Analyte/Technology:

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

Non Potable Water Solids, Total Suspended

Totals for Matrix/Analyte/Technology:

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</table>

Score Date: 09/01/2017

Proficiency Test Statistics

Page 168 of 386
Non Potable Water Solids, Total Suspended

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Solids, Total Suspended  
Sample: 0502  
Technology: GRAV  
Prep Method:  
Target: 50.9 mg/L  
Limits: 39.6 to 58.2 mg/L  
Basis: Linear Regression  
Robust Mean: 47.8 mg/L  
Std Dev: 9.6306 mg/L  
Median: 48 mg/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 125  Fail: 0  Total: 125  

Non Potable Water Solids, Total

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Solids, Total  
Sample: 0502  
Technology: GRAV  
Prep Method:  
Target: 322 mg/L  
Limits: 277 to 367 mg/L  
Basis: Linear Regression  
Robust Mean: 320 mg/L  
Std Dev: 68.016 mg/L  
Median: 320 mg/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 44  Fail: 2  Total: 46  

Non Potable Water Solids, Volatile

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Solids, Volatile  
Sample: 0503  
Technology: GRAV  
Prep Method:  
Target: 112 mg/L  
Limits: 52.3 to 154 mg/L  
Basis: Linear Regression  
Robust Mean: 123.3 mg/L  
Std Dev: 49.1331 mg/L  
Median: 122 mg/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 10  Fail: 3  Total: 13  

Non Potable Water 1,2-Dichlorobenzene, Semi-volatile

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Solids, Semi-volatile  
Sample: 0502  
Technology: GRAV  
Prep Method:  
Target: 0.5 mg/L  
Limits: 0.25 to 1.0 mg/L  
Basis: Linear Regression  
Robust Mean: 0.5 mg/L  
Std Dev: 0.201 mg/L  
Median: 0.5 mg/L  

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 125  Fail: 0  Total: 125  

Score Date: 09/01/2017  
Proficiency Test Statistics  
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### Non Potable Water 1,2-Dichlorobenzene, Semi-volatile

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: 1,2-Dichlorobenzene, Semi-volatile</td>
<td></td>
</tr>
<tr>
<td>Sample: 0536</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: Target: 108 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 13.7 to 125 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 89.4 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 9.2631 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 89.35 ug/L</td>
<td></td>
</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology: Labs: Pass: 0 Fail: 0 Total: 0</td>
<td></td>
</tr>
</tbody>
</table>

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

### Non Potable Water 1,3-Dichlorobenzene, Semi-volatile

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: 1,3-Dichlorobenzene, Semi-volatile</td>
<td></td>
</tr>
<tr>
<td>Sample: 0536</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: Target: 108 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 13.7 to 125 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 62.5 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 17.8532 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 64.55 ug/L</td>
<td></td>
</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology: Labs: Pass: 2 Fail: 0 Total: 2</td>
<td></td>
</tr>
</tbody>
</table>

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

### Non Potable Water 1,2-Dichlorobenzene, Semi-volatile

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: 1,2-Dichlorobenzene, Semi-volatile</td>
<td></td>
</tr>
<tr>
<td>Sample: 0536</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: Target: 108 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 13.7 to 125 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 62.5 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 17.8532 ug/L</td>
<td></td>
</tr>
<tr>
<td>Median: 64.55 ug/L</td>
<td></td>
</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology: Labs: Pass: 2 Fail: 0 Total: 2</td>
<td></td>
</tr>
</tbody>
</table>

### Non Potable Water 1,3-Dichlorobenzene, Semi-volatile

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: 1,3-Dichlorobenzene, Semi-volatile</td>
<td></td>
</tr>
<tr>
<td>Sample: 0536</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: Target: 164 ug/L</td>
<td></td>
</tr>
<tr>
<td>Limits: 16.4 to 189 ug/L</td>
<td></td>
</tr>
<tr>
<td>Basis: Manual Limits</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 136.5 ug/L</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 23.3345 ug/L</td>
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</tr>
<tr>
<td>Median: 136.5 ug/L</td>
<td></td>
</tr>
<tr>
<td>Totals for Matrix/Analyte/Technology: Labs: Pass: 2 Fail: 0 Total: 2</td>
<td></td>
</tr>
</tbody>
</table>

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

---

Score Date: 09/08/2017

Proficiency Test Statistics

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Non Potable Water 1,3-Dichlorobenzene, Semi-volatile

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.0</td>
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</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>0</td>
<td>18</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte:**

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>0</td>
<td>18</td>
</tr>
</tbody>
</table>

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** 1,3-Dichlorobenzene, Semi-volatile

**Sample:** 0536

**Technology:** GC-MS

**Prep Method:** EPA 3510C

**Target:** 164 ug/L

**Limits:** 16.4 to 189 ug/L

**Basis:** Manual Limits

**Robust Mean:** 91.8 ug/L

**Std Dev:** 23.451 ug/L

**Median:** 92.9 ug/L

**Score Date:** 09/01/2017

Proficiency Test Statistics

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Non Potable Water Antimony, Total

**Technology:** GFAAS
**Prep Method:** EPA 3005A
**Target:** 334 ug/L
**Limits:** 263 to 394 ug/L
**Basis:** Linear Regression
**Robust Mean:** 347 ug/L
**Std Dev:** 0 ug/L
**Median:** 347 ug/L

A histogram is not displayed for Technology: GFAAS 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: 60
- Fail: 0
- Total: 60

---

Non Potable Water Antimony, Total

**Technology:** ICP-AES
**Prep Method:** EPA 200.2
**Target:** 334 ug/L
**Limits:** 263 to 394 ug/L
**Basis:** Linear Regression
**Robust Mean:** 326.7 ug/L
**Std Dev:** 11.7886 ug/L
**Median:** 326 ug/L

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

**Totals for Matrix/Analyte:**
- Labs: Pass: 60
- Fail: 0
- Total: 60

---

Non Potable Water Antimony, Total

**Technology:** ICP-AES
**Prep Method:** EPA 3005A
**Target:** 334 ug/L
**Limits:** 263 to 394 ug/L
**Basis:** Linear Regression
**Robust Mean:** 331.8 ug/L
**Std Dev:** 21.4931 ug/L
**Median:** 331 ug/L

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

**Totals for Matrix/Analyte:**
- Labs: Pass: 60
- Fail: 0
- Total: 60
Non Potable Water Antimony, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Antimony, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3010A
Target: 334 ug/L
Limits: 263 to 394 ug/L
Basis: Linear Regression
Robust Mean: 364 ug/L
Std Dev: 0 ug/L
Median: 364 ug/L

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

Totals for Matrix/Analyte:
  Labs: Pass: 60  Fail: 0  Total: 60

Non Potable Water Antimony, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Antimony, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3015A
Target: 334 ug/L
Limits: 263 to 394 ug/L
Basis: Linear Regression
Robust Mean: 339 ug/L
Std Dev: 0 ug/L
Median: 339 ug/L

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

Totals for Matrix/Analyte:
  Labs: Pass: 60  Fail: 0  Total: 60

Non Potable Water Antimony, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Antimony, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 200.2
Target: 334 ug/L
Limits: 263 to 394 ug/L
Basis: Linear Regression
Robust Mean: 356.5 ug/L
Std Dev: 205.962 ug/L
Median: 364 ug/L

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

Totals for Matrix/Analyte:
  Labs: Pass: 60  Fail: 0  Total: 60

Non Potable Water Antimony, Total

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Non Potable Water Antimony, Total

Shipments: 405  Matrix: Non Potable Water

Analyte: Antimony, Total

Sample: 0511A

Technology: ICP-MS

Prep Method: EPA 3005A

Target: 334 ug/L

Limits: 263 to 394 ug/L

Basis: Linear Regression

Robust Mean: 337.6 ug/L

Std Dev: 16.2671 ug/L

Median: 344 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 7  Fail: 0  Total: 7

Totals for Matrix/Analyte:

Labs: Pass: 60  Fail: 0  Total: 60

Non Potable Water Specific Conductance

Shipments: 405  Matrix: Non Potable Water

Analyte: Specific Conductance

Sample: 0530

Technology: COND

Prep Method:

Target: 1041 umhos/cm

Limits: 937 to 1150 umhos/cm

Basis: Target Value +/- a fixed percent

Robust Mean: 1018.1 umhos/cm

Std Dev: 232.7253 umhos/cm

Median: 1030 umhos/cm

Totals for Matrix/Analyte/Technology:

Labs: Pass: 50  Fail: 7  Total: 57

Totals for Matrix/Analyte:

Labs: Pass: 50  Fail: 7  Total: 57

Non Potable Water Selenium, Total

Shipments: 405  Matrix: Non Potable Water

Analyte: Selenium, Total

Sample: 0511A

Technology: CRC-ICP/MS

Prep Method:

Target: 834 ug/L

Limits: 709 to 959 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 802 ug/L

Std Dev: 0 ug/L

Median: 802 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 64  Fail: 1  Total: 65
### Non Potable Water Selenium, Total

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>741</td>
</tr>
<tr>
<td>825</td>
</tr>
<tr>
<td>846</td>
</tr>
<tr>
<td>909</td>
</tr>
</tbody>
</table>

**Non Potable Water**

<table>
<thead>
<tr>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Technology: GFAAS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Prep Method: EPA 3005A</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Target: 834 ug/L</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Limits: 709 to 959 ug/L</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Basis: Target Value +/- a fixed percent</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Robust Mean: 876 ug/L</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Std Dev: 0 ug/L</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Median: 876 ug/L</th>
</tr>
</thead>
</table>

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>1</td>
<td>65</td>
</tr>
</tbody>
</table>

**Scores:**

- **Score Date:** 09/01/2017
- **Proficiency Test Statistics:** Page 175 of 386
Non Potable Water Selenium, Total

**Score Date:** 09/01/2017

**Proficiency Test Statistics**

**Non Potable Water Matrix:** Non Potable Water

**Analyte:** Selenium, Total

**Sample:** 0511A

**Technology:** ICP-AES

**Prep Method:** EPA 200.2

**Target:**
- 834 ug/L

**Limits:**
- 709 to 959 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:**
- 803.3 ug/L
- Std Dev: 34.4032 ug/L
- Median: 817.5 ug/L

**Numbers of Labs:**
- 762
- 825
- 0

**Fail:**
- 0

**Labs:**
- Pass: 64
- Fail: 1

**Total:**
- 65

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

**Non Potable Water Matrix:** Non Potable Water

**Analyte:** Selenium, Total

**Sample:** 0511A

**Technology:** ICP-AES

**Prep Method:** EPA 3005A

**Target:**
- 834 ug/L

**Limits:**
- 709 to 959 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:**
- 807 ug/L
- Std Dev: 47.7354 ug/L
- Median: 810 ug/L

**Numbers of Labs:**
- 741
- 783
- 825
- 867

**Fail:**
- 1

**Labs:**
- Pass: 64
- Fail: 1

**Total:**
- 65

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

**Non Potable Water Matrix:** Non Potable Water

**Analyte:** Selenium, Total

**Sample:** 0511A

**Technology:** ICP-AES

**Prep Method:** EPA 3010A

**Target:**
- 834 ug/L

**Limits:**
- 709 to 959 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:**
- 820.9 ug/L
- Std Dev: 240.1895 ug/L
- Median: 808 ug/L

**Numbers of Labs:**
- 699
- 741
- 804
- 825
- 846
- 930

**Fail:**
- 1

**Labs:**
- Pass: 64
- Fail: 1

**Total:**
- 65

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 11
- Fail: 1
- Total: 12

**Non Potable Water Matrix:** Non Potable Water

**Analyte:** Selenium, Total

**Sample:** 0511A

**Technology:** ICP-AES

**Prep Method:** EPA 3015A

**Target:**
- 834 ug/L

**Limits:**
- 709 to 959 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:**
- 916 ug/L
- Std Dev: 0 ug/L
- Median: 916 ug/L

**Numbers of Labs:**
- 699
- 783
- 804
- 825
- 846
- 930

**Fail:**
- 1

**Labs:**
- Pass: 64
- Fail: 1

**Total:**
- 65

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1
- Fail: 0
- Total: 1

**A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.**
Non Potable Water Selenium, Total

Analyte: Selenium, Total

Sample: 0511A

Technology: ICP-MS

Prep Method:

Target: 834 ug/L

Limits: 709 to 959 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 831.3 ug/L

Std Dev: 46.757 ug/L

Median: 825 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 8 Fail: 0 Total: 8

Test Results (End Groups Include Outliers)

Number of Labs

Robust Mean: 826.7 ug/L

Std Dev: 20.4042 ug/L

Median: 822 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5 Fail: 0 Total: 5

Test Results (End Groups Include Outliers)

Robust Mean: 830.3 ug/L

Std Dev: 12.0968 ug/L

Median: 826 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Test Results (End Groups Include Outliers)

Robust Mean: 834 ug/L

Std Dev: 25.0013 ug/L

Median: 828 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Test Results (End Groups Include Outliers)

Robust Mean: 834 ug/L

Std Dev: 25.0013 ug/L

Median: 828 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Test Results (End Groups Include Outliers)

Robust Mean: 834 ug/L

Std Dev: 25.0013 ug/L

Median: 828 ug/L

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Test Results (End Groups Include Outliers)
Non Potable Water Selenium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Selenium, Total
Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3015A
Target: 834 ug/L
Limits: 709 to 959 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 879.5 ug/L
Std Dev: 57.2756 ug/L
Median: 879.5 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

Non Potable Water Silica, Dissolved

Shipments: 405  Matrix: Non Potable Water
Analyte: Silica, Dissolved
Sample: 0557
Technology: AUTO
Prep Method:
Target: 130 mg/L
Limits: 97.5 to 163 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 131.7 mg/L
Std Dev: 3.7859 mg/L
Median: 130 mg/L

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

Non Potable Water Silica, Dissolved

Shipments: 405  Matrix: Non Potable Water
Analyte: Silica, Dissolved
Sample: 0557
Technology: COLOR
Prep Method:
Target: 130 mg/L
Limits: 97.5 to 163 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 122.5 mg/L
Std Dev: 9.1924 mg/L
Median: 122.5 mg/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

Non Potable Water Silica, Dissolved

Shipments: 405  Matrix: Non Potable Water
Analyte: Silica, Dissolved
Sample: 0557
Technology: ICP-AES
Prep Method:
Target: 130 mg/L
Limits: 97.5 to 163 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 119.6 mg/L
Std Dev: 13.706 mg/L
Median: 122 mg/L

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

Score Date: 09/01/2017
Non Potable Water Silica, Dissolved

Shipments: 405  Matrix: Non Potable Water
Analyte: Silica, Dissolved
Sample: 0557
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 130 mg/L
Limits: 97.5 to 163 mg/L
Basis: Target Value +/- a fixed percent
Robust Mean: 127 mg/L
  Std Dev: 0 mg/L
  Median: 127 mg/L

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

Non Potable Water 2,4,5-TP (Silvex)

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,4,5-TP (Silvex)
Sample: 0518
Technology: GC-ECD
Prep Method:
  Target: 4.48 ug/L
  Limits: 1.08 to 6.7 ug/L
  Basis: Linear Regression
Robust Mean: 3.6 ug/L
  Std Dev: 0.9554 ug/L
  Median: 3.78 ug/L

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

Non Potable Water 2,4,5-TP (Silvex)

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,4,5-TP (Silvex)
Sample: 0518
Technology: HPLC-TSMS
Prep Method:
  Target: 4.48 ug/L
  Limits: 1.08 to 6.7 ug/L
  Basis: Linear Regression
Robust Mean: 2.9 ug/L
  Std Dev: 0 ug/L
  Median: 2.9 ug/L

Totals for Matrix/Analyte/Technology:
  Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water 2,4,5-TP (Silvex)

Shipments: 405  Matrix: Non Potable Water
Analyte: 2,4,5-TP (Silvex)
Sample: 0518
Technology: HPLC-TSMS
Prep Method: EPA 3535A
Target: 4.48 ug/L
Limits: 1.08 to 6.7 ug/L
Basis: Linear Regression
Robust Mean: 4 ug/L
  Std Dev: 0 ug/L
  Median: 4.01 ug/L

Totals for Matrix/Analyte/Technology:
  Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Tin, Total

Score Date: 09/01/2017  Proficiency Test Statistics  Page 179 of 386
Non Potable Water Tin, Total

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>1104</th>
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Totals for Matrix/Analyte/Technology:
Labs: Pass: 10 Fail: 0 Total: 10

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

Non Potable Water Tin, Total

Test Results (End Groups Include Outliers)

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Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

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

Non Potable Water Tin, Total

Test Results (End Groups Include Outliers)

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Totals for Matrix/Analyte/Technology:
Labs: Pass: 4 Fail: 1 Total: 5

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

Non Potable Water Tin, Total

Test Results (End Groups Include Outliers)

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

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

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Non Potable Water Tin, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Tin, Total
Sample: 0511B
Technology: ICP-MS
Prep Method: Target: 1230 ug/L
Limits: 861 to 1600 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1209.5 ug/L
Std Dev: 0.7071 ug/L
Median: 1209.5 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Non Potable Water Tin, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Tin, Total
Sample: 0511B
Technology: ICP-MS
Prep Method: Target: 1230 ug/L
Limits: 861 to 1600 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1270 ug/L
Std Dev: 14.1421 ug/L
Median: 1270 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Non Potable Water Tin, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Tin, Total
Sample: 0511B
Technology: ICP-MS
Prep Method: Target: 1230 ug/L
Limits: 861 to 1600 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1250 ug/L
Std Dev: 42.4264 ug/L
Median: 1250 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Non Potable Water Sulfate (as SO4)

Analyte: Sulfate (as SO4)
Sample: 0508
Technology: COLOR
Prep Method: Target: 117 mg/L
Limits: 97.8 to 133 mg/L
Basis: Linear Regression
Robust Mean: 115.1 mg/L
Std Dev: 8.5178 mg/L
Median: 114 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 15  Fail: 0  Total: 15

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

Non Potable Water Sulfate (as SO4)

Analyte: Sulfate (as SO4)
Sample: 0508
Technology: COLOR
Prep Method: Target: 117 mg/L
Limits: 97.8 to 133 mg/L
Basis: Linear Regression
Robust Mean: 115.1 mg/L
Std Dev: 8.5178 mg/L
Median: 114 mg/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 46  Fail: 1  Total: 47

A histogram is not displayed for Technology: COLOR due to the limited number of participants.
Non Potable Water Sulfate (as SO4)

Shipments: 405
Matrix: Non Potable Water
Analyte: Sulfate (as SO4)
Sample: 0508
Technology: GRAV
Prep Method:
Target: 117 mg/L
Limits: 97.8 to 133 mg/L
Basis: Linear Regression
Robust Mean: 117.1 mg/L
Std Dev: 4.1719 mg/L
Median: 117.05 mg/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

Test Results (End Groups Include Outliers)

Number of Labs

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Non Potable Water Sulfate (as SO4)

Shipments: 405
Matrix: Non Potable Water
Analyte: Sulfate (as SO4)
Sample: 0508
Technology: IC
Prep Method:
Target: 117 mg/L
Limits: 97.8 to 133 mg/L
Basis: Linear Regression
Robust Mean: 115 mg/L
Std Dev: 0 mg/L
Median: 116 mg/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

Test Results (End Groups Include Outliers)

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Non Potable Water Sulfate (as SO4)

Shipments: 405
Matrix: Non Potable Water
Analyte: Sulfate (as SO4)
Sample: 0508
Technology: IC-COND
Prep Method:
Target: 117 mg/L
Limits: 97.8 to 133 mg/L
Basis: Linear Regression
Robust Mean: 115.5 mg/L
Std Dev: 22.129 mg/L
Median: 116 mg/L

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

Test Results (End Groups Include Outliers)

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Non Potable Water Strontium, Total

Shipments: 405
Matrix: Non Potable Water
Analyte: Strontium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method:
Target: 134 ug/L
Limits: 114 to 154 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 132.3 ug/L
Std Dev: 5.0332 ug/L
Median: 133 ug/L

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

Test Results (End Groups Include Outliers)

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Non Potable Water Strontium, Total

Score Date: 09/01/2017
Proficiency Test Statistics
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Non Potable Water Strontium, Total

Analyte: Strontium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 200.2
Target: 134 ug/L
Limits: 114 to 154 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 133.5 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

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

Non Potable Water Strontium, Total

Analyte: Strontium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3005A
Target: 134 ug/L
Limits: 114 to 154 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 136 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

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

Non Potable Water Strontium, Total

Analyte: Strontium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3010A
Target: 134 ug/L
Limits: 114 to 154 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 131 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 5 Fail: 1 Total: 6

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

Non Potable Water Strontium, Total

Analyte: Strontium, Total
Sample: 0511A
Technology: ICP-MS
Prep Method:
Target: 134 ug/L
Limits: 114 to 154 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 128.8 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 20 Fail: 1 Total: 21
Non Potable Water Strontium, Total

Salient points:
- Technology: ICP-MS
- Prep Method: EPA 3005A
- Target: 134 ug/L
- Limits: 114 to 154 ug/L
- Basis: Target Value +/- a fixed percent
- Robust Mean: 134 ug/L
- Median: 134 ug/L
- A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1, Fail: 0, Total: 1

Non Potable Water Styrene

Salient points:
- Technology: GC-MS
- Prep Method: EPA 5030C
- Target: 64.4 ug/L
- Limits: 41.9 to 86.9 ug/L
- Basis: Target Value +/- a fixed percent
- Robust Mean: 62.6 ug/L
- Std Dev: 15.3832 ug/L
- Median: 61.1 ug/L
- A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1, Fail: 0, Total: 1
Non Potable Water Sulfide (as S)

**Test Results (End Groups Include Outliers)**

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**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 20, Fail: 1, Total: 21

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Sulfide (as S)  
**Sample:** 0543  
**Technology:** COLOR  
**Prep Method:**  
  - Target: 0.328 mg/L  
  - Limits: 0.191 to 0.479 mg/L  
  - Basis: Linear Regression  
  - Robust Mean: 0.4 mg/L  
  - Std Dev: 0.0572 mg/L  
  - Median: 0.36 mg/L  

**Non Potable Water Surfactant (MBAS)**

**Test Results (End Groups Include Outliers)**

**Number of Labs**

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**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 20, Fail: 1, Total: 21

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Surfactant (MBAS)  
**Sample:** 0543  
**Technology:** COLOR  
**Prep Method:**  
  - Target: 0.328 mg/L  
  - Limits: 0.191 to 0.479 mg/L  
  - Basis: Linear Regression  
  - Robust Mean: 0.4 mg/L  
  - Std Dev: 0.0572 mg/L  
  - Median: 0.36 mg/L  

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
**Page 185 of 386**
Non Potable Water 1,2,3-Trichloropropane, Low Level

Shipment: 405  Matrix: Non Potable Water
Analyte: 1,2,3-Trichloropropane, Low Level
Sample: 0567
Technology: GC-ECD
Prep Method:
Target: 1.79 ug/L
Limits: 1.01 to 2.43 ug/L
Basis: Linear Regression
Robust Mean: 2 ug/L
Std Dev: 0 ug/L
Median: 2.01 ug/L

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

Non Potable Water
Matrix:

Fail:
Labs:  Pass:
Total:

Totals for Matrix/Analyte/Technology:
Labs: Pass: Fail: Total:

Non Potable Water Tetrachloroethene

Shipment: 405  Matrix: Non Potable Water
Analyte: Tetrachloroethene
Sample: 0513
Technology: GC-ELCD
Prep Method:
Target: 120 ug/L
Limits: 68.6 to 156 ug/L
Basis: Linear Regression
Robust Mean: 116 ug/L
Std Dev: 0 ug/L
Median: 116 ug/L

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

Non Potable Water Tetrachloroethene

Shipment: 405  Matrix: Non Potable Water
Analyte: Tetrachloroethene
Sample: 0513
Technology: GC-MS
Prep Method:
Target: 120 ug/L
Limits: 68.6 to 156 ug/L
Basis: Linear Regression
Robust Mean: 112.5 ug/L
Std Dev: 12.0878 ug/L
Median: 112 ug/L

Test Results (End Groups Include Outliers)

Non Potable Water Tetrachloroethene

Shipment: 405  Matrix: Non Potable Water
Analyte: Tetrachloroethene
Sample: 0513
Technology: GC-MS
Prep Method: EPA 5030C
Target: 120 ug/L
Limits: 68.6 to 156 ug/L
Basis: Linear Regression
Robust Mean: 106.1 ug/L
Std Dev: 19.2907 ug/L
Median: 109 ug/L

Test Results (End Groups Include Outliers)

Non Potable Water Hardness, Total

Score Date: 09/01/2017  Proficiency Test Statistics  Page 186 of 386
Non Potable Water Hardness, Total

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Hardness, Total  
**Sample:** 0537  
**Technology:** CALC  
**Prep Method:**
- **Target:** 209 mg/L  
- **Limits:** 178 to 240 mg/L  
- **Basis:** Target Value +/- a fixed percent  

- **Robust Mean:** 204 mg/L  
  - **Std Dev:** 77.2926 mg/L  
  - **Median:** 204 mg/L  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 187  
- Fail: 11  
- Total: 198

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Hardness, Total  
**Sample:** 0537  
**Technology:** ICP-AES  
**Prep Method:**
- **Target:** 209 mg/L  
- **Limits:** 178 to 240 mg/L  
- **Basis:** Target Value +/- a fixed percent  

- **Robust Mean:** 201 mg/L  
  - **Std Dev:** 65.2389 mg/L  
  - **Median:** 201.5 mg/L  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 179  
- Fail: 0  
- Total: 181

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Hardness, Total  
**Sample:** 0537  
**Technology:** TITR  
**Prep Method:**
- **Target:** 209 mg/L  
- **Limits:** 178 to 240 mg/L  
- **Basis:** Target Value +/- a fixed percent  

- **Robust Mean:** 202.1 mg/L  
  - **Std Dev:** 5.9199 mg/L  
  - **Median:** 203.5 mg/L  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 187  
- Fail: 0  
- Total: 187

**Shipment:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Titanium, Total  
**Sample:** 0511B  
**Technology:** ICP-AES  
**Prep Method:**
- **Target:** 200 ug/L  
- **Limits:** 170 to 230 ug/L  
- **Basis:** Target Value +/- a fixed percent  

- **Robust Mean:** 202.4 ug/L  
  - **Std Dev:** 61.2503 ug/L  
  - **Median:** 202 ug/L  

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

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Non Potable Water Titanium, Total

Score Date: 09/01/2017

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Shipments:

<table>
<thead>
<tr>
<th>Shipments</th>
<th>Matrix: Non Potable Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Titanium, Total</td>
</tr>
<tr>
<td>Sample:</td>
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</tr>
<tr>
<td>Technology:</td>
<td>ICP-AES</td>
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<tr>
<td>Prep Method:</td>
<td>EPA 200.2</td>
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<td>Target:</td>
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<td>Limits:</td>
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Totals for Matrix/Analyte/Technology:

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

Test Results (End Groups Include Outliers)

Number of Labs

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<td>Test Results (End Groups Include Outliers)</td>
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Shipments:

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<th>Matrix: Non Potable Water</th>
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<tbody>
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<td>Analyte:</td>
<td>Titanium, Total</td>
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<td>Sample:</td>
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<td>Technology:</td>
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<td>Target:</td>
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<td>Target Value +/- a fixed percent</td>
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<tr>
<td>Robust Mean:</td>
<td>202.3 ug/L</td>
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<td>Std Dev:</td>
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<td>Median:</td>
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Totals for Matrix/Analyte/Technology:

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Shipments:

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<td>Analyte:</td>
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<td>Sample:</td>
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<td>Robust Mean:</td>
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<td>Std Dev:</td>
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<td>Median:</td>
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Totals for Matrix/Analyte/Technology:

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Shipments:

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<td>Analyte:</td>
<td>Titanium, Total</td>
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<td>Sample:</td>
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<tr>
<td>Technology:</td>
<td>ICP-MS</td>
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<td>Prep Method:</td>
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A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

Test Results (End Groups Include Outliers)

Number of Labs

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<th>Number of Labs</th>
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<tbody>
<tr>
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</tr>
<tr>
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<tr>
<td>Test Results (End Groups Include Outliers)</td>
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196 200 204 211

Shipments:

<table>
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<th>Shipments</th>
<th>Matrix: Non Potable Water</th>
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<tbody>
<tr>
<td>Analyte:</td>
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<td>Prep Method:</td>
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Non Potable Water Titanium, Total

Severity: 405
Matrix: Non Potable Water

Technology: ICP-MS
Prep Method: EPA 3005A
Target: 200 ug/L
Limits: 170 to 230 ug/L
Basis: Target Value +/- a fixed percent

Robust Mean: 197.5 ug/L
Std Dev: 0.7071 ug/L
Median: 197.5 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 26 Fail: 0 Total: 26

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

Non Potable WaterTitanium, Total

Severity: 405
Matrix: Non Potable Water

Technology: ICP-MS
Prep Method: EPA 3010A
Target: 200 ug/L
Limits: 170 to 230 ug/L
Basis: Target Value +/- a fixed percent

Robust Mean: 193.5 ug/L
Std Dev: 3.5355 ug/L
Median: 193.5 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 26 Fail: 0 Total: 26

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

Non Potable Water Thallium, Total

Severity: 405
Matrix: Non Potable Water

Technology: FAAS
Prep Method:
Target: 380 ug/L
Limits: 309 to 444 ug/L
Basis: Linear Regression

Robust Mean: 354 ug/L
Std Dev: 0 ug/L
Median: 354 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte: Labs: Pass: 57 Fail: 0 Total: 57

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

Non Potable Water Thallium, Total

Severity: 405
Matrix: Non Potable Water

Technology: GFAAS
Prep Method:
Target: 380 ug/L
Limits: 309 to 444 ug/L
Basis: Linear Regression

Robust Mean: 398 ug/L
Std Dev: 8.4853 ug/L
Median: 398 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 57 Fail: 0 Total: 57

A histogram is not displayed for Technology: GFAAS due to the limited number of participants.
Non Potable Water Thallium, Total

Analyte: Thallium, Total

Sample: 0511A

Technology: GFAAS

Prep Method: EPA 200.2

Target: 380 ug/L

Limits: 309 to 444 ug/L

Basis: Linear Regression

Robust Mean: 353 ug/L

Std Dev: 0 ug/L

Median: 353 ug/L

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

Totals for Matrix/Analyte/Technology:

Labs: Pass: 0 Fail: 0 Total: 0

Totals for Matrix/Analyte:

Labs: Pass: 57 Fail: 0 Total: 57

Non Potable Water Thallium, Total

Analyte: Thallium, Total

Sample: 0511A

Technology: GFAAS

Prep Method: EPA 3005A

Target: 380 ug/L

Limits: 309 to 444 ug/L

Basis: Linear Regression

Robust Mean: 392 ug/L

Std Dev: 5.6569 ug/L

Median: 392 ug/L

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

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 57 Fail: 0 Total: 57

Non Potable Water Thallium, Total

Analyte: Thallium, Total

Sample: 0511A

Technology: GFAAS

Prep Method: EPA 3020A

Target: 380 ug/L

Limits: 309 to 444 ug/L

Basis: Linear Regression

Robust Mean: 392 ug/L

Std Dev: 0 ug/L

Median: 392 ug/L

A histogram is not displayed for Technology: GFAAS 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: 57 Fail: 0 Total: 57

Non Potable Water Thallium, Total

Analyte: Thallium, Total

Sample: 0511A

Technology: ICP-AES

Prep Method:

Target: 380 ug/L

Limits: 309 to 444 ug/L

Basis: Linear Regression

Robust Mean: 386.2 ug/L

Std Dev: 13.3405 ug/L

Median: 389.5 ug/L

Test Results (End Groups Include Outliers)

Number of Labs

Score Date: 09/01/2017
**Non Potable Water Thallium, Total**

**Analyte:** Thallium, Total  
**Sample:** 0511A  
**Technology:** ICP-AES  
**Prep Method:** EPA 200.2  
**Target:** 380 ug/L  
**Limits:** 309 to 444 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 386.7 ug/L  
**Std Dev:** 6.1101 ug/L  
**Median:** 388 ug/L  

**Test Results (End Groups Include Outliers)**

- **Number of Labs:** 378  
- **Fail:** 0  
- **Pass:** 57  
- **Total:** 57

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 3  
- **Fail:** 0  
- **Total:** 3

---

**Non Potable Water Thallium, Total**

**Analyte:** Thallium, Total  
**Sample:** 0511A  
**Technology:** ICP-AES  
**Prep Method:** EPA 3005A  
**Target:** 380 ug/L  
**Limits:** 309 to 444 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 400.3 ug/L  
**Std Dev:** 25.1313 ug/L  
**Median:** 404 ug/L  

**Test Results (End Groups Include Outliers)**

- **Number of Labs:** 394  
- **Fail:** 0  
- **Pass:** 57  
- **Total:** 57

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 4  
- **Fail:** 0  
- **Total:** 4

---

**Non Potable Water Thallium, Total**

**Analyte:** Thallium, Total  
**Sample:** 0511A  
**Technology:** ICP-AES  
**Prep Method:** EPA 3010A  
**Target:** 380 ug/L  
**Limits:** 309 to 444 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 369.9 ug/L  
**Std Dev:** 123.8787 ug/L  
**Median:** 366 ug/L  

**Test Results (End Groups Include Outliers)**

- **Number of Labs:** 378  
- **Fail:** 0  
- **Pass:** 57  
- **Total:** 57

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 9  
- **Fail:** 0  
- **Total:** 9

---

**Non Potable Water Thallium, Total**

**Analyte:** Thallium, Total  
**Sample:** 0511A  
**Technology:** ICP-AES  
**Prep Method:** EPA 3015A  
**Target:** 380 ug/L  
**Limits:** 309 to 444 ug/L  
**Basis:** Linear Regression  
**Robust Mean:** 397 ug/L  
**Std Dev:** 0 ug/L  
**Median:** 397 ug/L  

**Test Results (End Groups Include Outliers)**

- **Number of Labs:** 370  
- **Fail:** 0  
- **Pass:** 57  
- **Total:** 57

**Totals for Matrix/Analyte/Technology:**

- **Labs:** Pass: 1  
- **Fail:** 0  
- **Total:** 1

---

A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.
Non Potable Water Thallium, Total

**Score Date:** 09/01/2017

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Non Potable Water Thallium, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Thallium, Total  

**Sample:** 0511A  
**Technology:** ICP-MS  
**Prep Method:** EPA 3015A  
**Target:** 390 ug/L  
**Limits:** 309 to 444 ug/L  
**Basis:** Linear Regression

**Robust Mean:** 399.5 ug/L  
**Std Dev:** 3.5355 ug/L  
**Median:** 399.5 ug/L  

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

**Fail:** 0  
**Labs:** 57  
**Total:** 57

**Totals for Matrix/Analyte:**  
**Labs:** 2  
**Pass:** 2  
**Total:** 2

**Totals for Matrix/Analyte/Technology:**  
**Labs:** 57  
**Pass:** 57  
**Fail:** 0  
**Total:** 57

---

Non Potable Water Organic Carbon, Total

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Organic Carbon, Total  

**Sample:** 0501  
**Technology:** IR  
**Prep Method:**  
**Target:** 44.4 mg/L  
**Limits:** 36.9 to 51.6 mg/L  
**Basis:** Linear Regression

**Robust Mean:** 44.1 mg/L  
**Std Dev:** 7.8464 mg/L  
**Median:** 44.1 mg/L  

**Fail:** 1  
**Labs:** 33  
**Total:** 34

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

**Totals for Matrix/Analyte/Technology:**  
**Labs:** 2  
**Pass:** 2  
**Total:** 2

---

Non Potable Water Toluene

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Toluene  

**Sample:** 0513  
**Technology:** GC-MS  
**Prep Method:**  
**Target:** 55.6 ug/L  
**Limits:** 38.9 to 72.3 ug/L  
**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 53.8 ug/L  
**Std Dev:** 3.8494 ug/L  
**Median:** 54.6 ug/L  

**Fail:** 0  
**Labs:** 39  
**Total:** 39

**Totals for Matrix/Analyte:**  
**Labs:** 39  
**Pass:** 39  
**Fail:** 0  
**Total:** 39

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

---

Non Potable Water Toluene

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Toluene  

**Sample:** 0513  
**Technology:** GC-MS  
**Prep Method:** EPA 5030C  
**Target:** 55.6 ug/L  
**Limits:** 38.9 to 72.3 ug/L  
**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 54.3 ug/L  
**Std Dev:** 4.7282 ug/L  
**Median:** 54.55 ug/L  

**Fail:** 0  
**Labs:** 39  
**Total:** 39

**Totals for Matrix/Analyte:**  
**Labs:** 39  
**Pass:** 39  
**Fail:** 0  
**Total:** 39

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

---

Non Potable Water Toluene

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Toluene  

**Sample:** 0513  
**Technology:** GC-MS  
**Prep Method:** EPA 5030C  
**Target:** 55.6 ug/L  
**Limits:** 38.9 to 72.3 ug/L  
**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 54.3 ug/L  
**Std Dev:** 4.7282 ug/L  
**Median:** 54.55 ug/L  

**Fail:** 0  
**Labs:** 39  
**Total:** 39

**Totals for Matrix/Analyte:**  
**Labs:** 39  
**Pass:** 39  
**Fail:** 0  
**Total:** 39

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

---

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Proficiency Test Statistics  
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Non Potable Water Toluene

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Toluene

**Sample:** 0513

**Technology:** GC-PID

**Prep Method:**
- **Target:** 55.6 ug/L
- **Limits:** 38.9 to 72.3 ug/L
- **Basis:** Target Value +/- a fixed percent

**Robust Mean:** 50 ug/L
- **Std Dev:** 3.0406 ug/L
- **Median:** 49.95 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 39  Fail: 0  Total: 39

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

Non Potable Water Toxaphene

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Toxaphene

**Sample:** 0533

**Technology:** GC-ECD

**Prep Method:**
- **Target:** 25.6 ug/L
- **Limits:** 5.78 to 39.4 ug/L
- **Basis:** Linear Regression

**Robust Mean:** 29.3 ug/L
- **Std Dev:** 7.9023 ug/L
- **Median:** 27.2 ug/L

**Limits:**
- **Target:** 55.6 ug/L
- **Sample Limits:** 38.9 to 72.3 ug/L

**Target:** 25.6 ug/L
- **Sample Limits:** 5.78 to 39.4 ug/L
- **Basis:** Linear Regression

**Robust Mean:** Toxaphene
- **Std Dev:** 8.0228 ug/L
- **Median:** 25 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 26  Fail: 6  Total: 32

Non Potable Water Toxaphene

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Toxaphene

**Sample:** 0533

**Technology:** GC-ECD

**Prep Method:** EPA 3510C

**Target:** 25.6 ug/L
- **Limits:** 5.78 to 39.4 ug/L
- **Basis:** Linear Regression

**Robust Mean:** 25.3 ug/L
- **Std Dev:** 8.0228 ug/L
- **Median:** 25 ug/L

**Limits:**
- **Target:** 25.6 ug/L
- **Sample Limits:** 5.78 to 39.4 ug/L

**Target:** 25.6 ug/L
- **Sample Limits:** 5.78 to 39.4 ug/L
- **Basis:** Linear Regression

**Robust Mean:** Toxaphene
- **Std Dev:** 0 ug/L
- **Median:** 50 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 18  Fail: 2  Total: 20

Non Potable Water Toxaphene

**Shipment:** 405  **Matrix:** Non Potable Water

**Analyte:** Toxaphene

**Sample:** 0533

**Technology:** GC-ECD

**Prep Method:** EPA 3535A

**Target:** 25.6 ug/L
- **Limits:** 5.78 to 39.4 ug/L
- **Basis:** Linear Regression

**Robust Mean:** ug/L
- **Std Dev:** 0 ug/L
- **Median:** 50 ug/L

**Limits:**
- **Target:** 25.6 ug/L
- **Sample Limits:** 5.78 to 39.4 ug/L

**Target:** 25.6 ug/L
- **Sample Limits:** 5.78 to 39.4 ug/L
- **Basis:** Linear Regression

**Robust Mean:** Toxaphene
- **Std Dev:** 0 ug/L
- **Median:** 50 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1  Fail: 1  Total: 2

Totals for Matrix/Analyte:
- Labs: Pass: 26  Fail: 6  Total: 32
Non Potable Water Toxaphene

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Toxaphene  
Sample: 0533

Technology: GC-MS  
Prep Method: EPA 3510C  
Target: 25.6 ug/L  
Limits: 5.78 to 39.4 ug/L  
Basis: Linear Regression  
Robust Mean: 27.4 ug/L  
Std Dev: 0 ug/L  
Median: 27.4 ug/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 1  Fail: 0  Total: 1

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

Non Potable Water Phosphorus, Total

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Phosphorus, Total  
Sample: 0504

Technology: AUTO  
Prep Method:  
Target: 4.07 mg/L  
Limits: 3.36 to 4.74 mg/L  
Basis: Linear Regression  
Robust Mean: 4.2 mg/L  
Std Dev: 1.6905 mg/L  
Median: 4.24 mg/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 10  Fail: 1  Total: 11

Non Potable Water Phosphorus, Total

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Phosphorus, Total  
Sample: 0504

Technology: COLOR  
Prep Method:  
Target: 4.07 mg/L  
Limits: 3.36 to 4.74 mg/L  
Basis: Linear Regression  
Robust Mean: 4.2 mg/L  
Std Dev: 0.9253 mg/L  
Median: 4.205 mg/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 40  Fail: 2  Total: 42

Non Potable Water Phosphorus, Total

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Phosphorus, Total  
Sample: 0504

Technology: COLOR  
Prep Method: SM 4500-P B(5)-99,-11  
Target: 4.07 mg/L  
Limits: 3.36 to 4.74 mg/L  
Basis: Linear Regression  
Robust Mean: 4.1 mg/L  
Std Dev: 1.5641 mg/L  
Median: 4.24 mg/L

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 11  Fail: 2  Total: 13

Non Potable Water Phosphorus, Total

Score Date: 09/01/2017
Non Potable Water Phosphorus, Total

Shipments:
- Non Potable Water

Samples:
- 0504

Technologies:
- ICP-AES

Prep Methods:
- Target: 4.07 mg/L
- Limits: 3.36 to 4.74 mg/L
- Basis: Linear Regression

Robust Mean: 4 mg/L
- Std Dev: 0.0778 mg/L
- Median: 4.035 mg/L

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

Totals for Matrix/Analyte/Technology:
- Labs: 68
  - Pass: 63
  - Fail: 5

Non Potable Water Trichloroethene

Shipments:
- Non Potable Water

Samples:
- 0513

Technologies:
- GC-ELCD

Prep Methods:
- Target: 99.2 ug/L
- Limits: 63.1 to 129 ug/L
- Basis: Linear Regression

Robust Mean: 83 ug/L
- Std Dev: 0 ug/L
- Median: 83 ug/L

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

Totals for Matrix/Analyte/Technology:
- Labs: 35
  - Pass: 35
  - Fail: 0

Non Potable Water Trichloroethene

Shipments:
- Non Potable Water

Samples:
- 0513

Technologies:
- GC-MS

Prep Methods:
- Target: 99.2 ug/L
- Limits: 63.1 to 129 ug/L
- Basis: Linear Regression

Robust Mean: 95.1 ug/L
- Std Dev: 11.1112 ug/L
- Median: 95.7 ug/L

Totals for Matrix/Analyte/Technology:
- Labs: 35
  - Pass: 35
  - Fail: 0

Non Potable Water Trichloroethene

Shipments:
- Non Potable Water

Samples:
- 0513

Technologies:
- GC-MS

Prep Methods:
- Target: 99.2 ug/L
- Limits: 63.1 to 129 ug/L
- Basis: Linear Regression

Robust Mean: 96.9 ug/L
- Std Dev: 12.1294 ug/L
- Median: 95.8 ug/L

Totals for Matrix/Analyte/Technology:
- Labs: 35
  - Pass: 35
  - Fail: 0

Non Potable Water Total Petroleum Hydrocarbons

Score Date: 09/01/2017
Proficiency Test Statistics
### Non Potable Water Total Petroleum Hydrocarbons

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Total Petroleum Hydrocarbons  
**Sample:** 0544  
**Technology:** GRAV  
**Prep Method:**  
- **Target:** 98.8 mg/L  
- **Limits:** 46.5 to 143 mg/L  
- **Basis:** Linear Regression  
**Robust Mean:** 70.7 mg/L  
- **Std Dev:** 21.654 mg/L  
- **Median:** 76 mg/L  
**Totals for Matrix/Analyte/Technology:**  
- **Labs:** Pass: 19  
- **Fail:** 4  
- **Total:** 23  

### Non Potable Water Turbidity

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Turbidity  
**Sample:** 0552  
**Technology:** COLOR  
**Prep Method:**  
- **Target:** 17.6 NTU  
- **Limits:** 14.7 to 20.6 NTU  
- **Basis:** Linear Regression  
**Robust Mean:** 16.8 NTU  
- **Std Dev:** 1.2213 NTU  
- **Median:** 16.7 NTU  
**Totals for Matrix/Analyte/Technology:**  
- **Labs:** Pass: 40  
- **Fail:** 0  
- **Total:** 40  

### Non Potable Water Total Xylenes

**Shipments:** 405  
**Matrix:** Non Potable Water  
**Analyte:** Total Xylenes  
**Sample:** 0513  
**Technology:** GC-MS  
**Prep Method:**  
- **Target:** 183 ug/L  
- **Limits:** 110 to 256 ug/L  
- **Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 178.1 ug/L  
- **Std Dev:** 11.5169 ug/L  
- **Median:** 178 ug/L  
**Totals for Matrix/Analyte/Technology:**  
- **Labs:** Pass: 15  
- **Fail:** 0  
- **Total:** 15  

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
Page 197 of 386
Non Potable Water Total Xylenes

Shipments: 405  Matrix: Non Potable Water
Analyte: Total Xylenes
Sample: 0513
Technology: GC-PID
Prep Method:
Target: 183 ug/L
Limits: 110 to 256 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 160.5 ug/L
Std Dev: 19.0919 ug/L
Median: 160.5 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Non Potable Water Vanadium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Vanadium, Total
Sample: 0511A
Technology: CRC-ICP/MS
Prep Method:
Target: 1930 ug/L
Limits: 1640 to 2220 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1960 ug/L
Std Dev: 0 ug/L
Median: 1960 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Non Potable Water Vanadium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Vanadium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method:
Target: 1930 ug/L
Limits: 1640 to 2220 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1915.3 ug/L
Std Dev: 78.6513 ug/L
Median: 1933 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 14  Fail: 0  Total: 14

Non Potable Water Vanadium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Vanadium, Total
Sample: 0511A
Technology: ICP-AES
Prep Method:
Target: 1930 ug/L
Limits: 1640 to 2220 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1983.3 ug/L
Std Dev: 35.1188 ug/L
Median: 1980 ug/L
Totals for Matrix/Analyte/Technology:
Labs: Pass: 3  Fail: 0  Total: 3

Non Potable Water Vanadium, Total

Score Date: 09/01/2017  Proficiency Test Statistics  Page 198 of 386
Non Potable Water Vanadium, Total

Shipments: 405
Matrix: Non Potable Water

Analyte: Vanadium, Total

Sample: 0511A

Technology: ICP-AES

Prep Method: EPA 3005A

Target: 1930 ug/L

Limits: 1640 to 2220 ug/L

Basis: Target Value +/- a fixed percent

Robust Mean: 1907.5 ug/L

Std Dev: 60.7591 ug/L

Median: 1905 ug/L

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1840 Fail: 1880 Total: 1920

Totals for Matrix/Analyte:

Score Date: 09/01/2017

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Non Potable Water Vanadium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Vanadium, Total

Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 200.2
Target: 1930 ug/L
Limits: 1640 to 2220 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1870 ug/L
Std Dev: 0 ug/L
Median: 1870 ug/L

A histogram is not displayed for Technology: ICP-MS 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: 3  Fail: 0  Total: 3

Totals for Shipment:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Vanadium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Vanadium, Total

Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3005A
Target: 1930 ug/L
Limits: 1640 to 2220 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1937.5 ug/L
Std Dev: 85.3913 ug/L
Median: 1975 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 2  Fail: 0  Total: 2

Totals for Shipment:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Vanadium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Vanadium, Total

Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3010A
Target: 1930 ug/L
Limits: 1640 to 2220 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1891 ug/L
Std Dev: 96.3483 ug/L
Median: 1940 ug/L

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

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

Totals for Shipment:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water Vanadium, Total

Shipments: 405  Matrix: Non Potable Water
Analyte: Vanadium, Total

Sample: 0511A
Technology: ICP-MS
Prep Method: EPA 3015A
Target: 1930 ug/L
Limits: 1640 to 2220 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1845 ug/L
Std Dev: 63.6396 ug/L
Median: 1845 ug/L

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Totals for Shipment:
Labs: Pass: 1  Fail: 0  Total: 1

Non Potable Water 1,2,4-Trichlorobenzene, Volatile

Score Date: 09/01/2017  Proficiency Test Statistics  Page 200 of 386
Non Potable Water 1,2,4-Trichlorobenzene, Volatile

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,2,4-Trichlorobenzene, Volatile  
Sample: 0513  
Technology: GC-MS  
Prep Method:  
Target: 43.1 ug/L  
Limits: 17.6 to 58.8 ug/L  
Basis: Linear Regression  
Robust Mean: 37.3 ug/L  
Std Dev: 1.2583 ug/L  
Median: 37.5 ug/L  

Number of Labs  
35.7  
37.9  
0  
0.5  
1  
1.5  
2  

Test Results (End Groups Include Outliers)  
Number of Labs

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

Totals for Matrix/Analyte:  
Labs: Pass: 22  Fail: 0  Total: 22

Non Potable Water 1,2,4-Trichlorobenzene, Volatile

Shipments: 405  
Matrix: Non Potable Water  
Analyte: 1,2,4-Trichlorobenzene, Volatile  
Sample: 0513  
Technology: GC-MS  
Prep Method: EPA 5030C  
Target: 43.1 ug/L  
Limits: 17.6 to 58.8 ug/L  
Basis: Linear Regression  
Robust Mean: 40 ug/L  
Std Dev: 4.7021 ug/L  
Median: 40.3 ug/L  

Number of Labs  
29.4  
31.5  
37.9  
40  
42.1  
44.3  
46.4  

Test Results (End Groups Include Outliers)  
Number of Labs

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

Totals for Matrix/Analyte:  
Labs: Pass: 22  Fail: 0  Total: 22

Non Potable Water Vinyl chloride

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Vinyl chloride  
Sample: 0513  
Technology: GC-ELCD  
Prep Method:  
Target: 26.8 ug/L  
Limits: 10.7 to 42.9 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 25.9 ug/L  
Std Dev: 0 ug/L  
Median: 25.9 ug/L  

Number of Labs  
22.1  
23.9  
27.4  
29.2  
30.9  
37.9  

Test Results (End Groups Include Outliers)  
Number of Labs

A histogram is not displayed for  
Technology: GC-ELCD  
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: 32  Fail: 3  Total: 35

Non Potable Water Vinyl chloride

Shipments: 405  
Matrix: Non Potable Water  
Analyte: Vinyl chloride  
Sample: 0513  
Technology: GC-MS  
Prep Method:  
Target: 26.8 ug/L  
Limits: 10.7 to 42.9 ug/L  
Basis: Target Value +/- a fixed percent  
Robust Mean: 27 ug/L  
Std Dev: 7.5778 ug/L  
Median: 28.1 ug/L  

Number of Labs  
22.1  
23.9  
27.4  
29.2  
30.9  
37.9  

Test Results (End Groups Include Outliers)  
Number of Labs

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 14  Fail: 1  Total: 15

Totals for Matrix/Analyte:  
Labs: Pass: 32  Fail: 3  Total: 35

Non Potable Water Vinyl chloride

Score Date: 09/01/2017  
Proficiency Test Statistics  
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Non Potable Water Vinyl chloride

<table>
<thead>
<tr>
<th>Score Date:</th>
<th>09/01/2017</th>
</tr>
</thead>
</table>

**Shipments:**
- 405  
- 0513

**Matrix:** Non Potable Water

**Analyte:** Vinyl chloride

**Sample:** 0513

**Technology:** GC-MS

**Prep Method:** EPA 5030C

**Target:** 26.8 ug/L

**Limits:** 10.7 to 42.9 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 27.9 ug/L

<table>
<thead>
<tr>
<th>Number of Labs</th>
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</thead>
<tbody>
<tr>
<td>0.0</td>
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<tr>
<td>2.0</td>
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<tr>
<td>4.0</td>
</tr>
<tr>
<td>5.0</td>
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<td>6.0</td>
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**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Test Results</th>
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<tbody>
<tr>
<td>16.9</td>
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<td>25.6</td>
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<td>27.4</td>
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<tr>
<td>29.2</td>
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<td>32.7</td>
</tr>
<tr>
<td>34.4</td>
</tr>
<tr>
<td>36.2</td>
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<tr>
<td>37.9</td>
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**Fail:** 0

**Labs:** Pass: 32  Fail: 3  Total: 35

**Totals for Matrix/Analyte/Technology:**

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<tr>
<th>Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>17</td>
<td>2</td>
<td>19</td>
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</tbody>
</table>

**Non Potable Water Zinc, Total**

**Shipments:**
- 405  
- 0511A

**Matrix:** Non Potable Water

**Sample:** 0511A

**Technology:** CRC-ICP/MS

**Prep Method:**

**Target:** 1070 ug/L

**Limits:** 910 to 1230 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 999 ug/L

<table>
<thead>
<tr>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ug/L</td>
<td>999 ug/L</td>
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**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>930</td>
</tr>
<tr>
<td>1034</td>
</tr>
<tr>
<td>1060</td>
</tr>
<tr>
<td>1086</td>
</tr>
<tr>
<td>1112</td>
</tr>
</tbody>
</table>

**Fail:** 0

**Labs:** Pass: 68  Fail: 1  Total: 69

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs</th>
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<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Non Potable Water Zinc, Total**

**Shipments:**
- 405  
- 0511A

**Matrix:** Non Potable Water

**Sample:** 0511A

**Technology:** FAAS

**Prep Method:**

**Target:** 1070 ug/L

**Limits:** 910 to 1230 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 1044.8 ug/L

<table>
<thead>
<tr>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>72.8196 ug/L</td>
<td>1051 ug/L</td>
</tr>
</tbody>
</table>

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>930</td>
</tr>
<tr>
<td>1034</td>
</tr>
<tr>
<td>1060</td>
</tr>
<tr>
<td>1086</td>
</tr>
<tr>
<td>1112</td>
</tr>
</tbody>
</table>

**Fail:** 0

**Labs:** Pass: 68  Fail: 1  Total: 69

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

**Non Potable Water Zinc, Total**

**Shipments:**
- 405  
- 0511A

**Matrix:** Non Potable Water

**Sample:** 0511A

**Technology:** ICP-AES

**Prep Method:**

**Target:** 1070 ug/L

**Limits:** 910 to 1230 ug/L

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 1003.4 ug/L

<table>
<thead>
<tr>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>243.1759 ug/L</td>
<td>1045 ug/L</td>
</tr>
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</table>

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Test Results</th>
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<tbody>
<tr>
<td>930</td>
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<tr>
<td>1138</td>
</tr>
<tr>
<td>1190</td>
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</table>

**Fail:** 0

**Labs:** Pass: 68  Fail: 1  Total: 69

**Totals for Matrix/Analyte/Technology:**

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<tr>
<th>Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19</td>
<td>1</td>
<td>20</td>
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</tbody>
</table>

**Non Potable Water Zinc, Total**

**Shipments:**
- 405  
- 0511A

**Matrix:** Non Potable Water

**Sample:** 0511A

**Technology:** CRC-ICP/MS

**Prep Method:**

**Fail:** 0

**Labs:** Pass: 32  Fail: 3  Total: 35

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs</th>
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<th>Total</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>17</td>
<td>2</td>
<td>19</td>
</tr>
</tbody>
</table>

**Non Potable Water Zinc, Total**

**Shipments:**
- 405  
- 0511A

**Matrix:** Non Potable Water

**Sample:** 0511A

**Technology:** FAAS

**Prep Method:**

**Fail:** 0

**Labs:** Pass: 68  Fail: 1  Total: 69

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs</th>
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<th>Total</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>5</td>
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**Non Potable Water Zinc, Total**

**Shipments:**
- 405  
- 0511A

**Matrix:** Non Potable Water

**Sample:** 0511A

**Technology:** ICP-AES

**Prep Method:**

**Fail:** 0

**Labs:** Pass: 68  Fail: 1  Total: 69

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs</th>
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<th>Fail</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>19</td>
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<td>20</td>
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**Non Potable Water Zinc, Total**

**Shipments:**
- 405  
- 0511A

**Matrix:** Non Potable Water

**Sample:** 0511A

**Technology:** CRC-ICP/MS

**Prep Method:**

**Fail:** 0

**Labs:** Pass: 68  Fail: 1  Total: 69

**Totals for Matrix/Analyte/Technology:**

<table>
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<tr>
<th>Labs</th>
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<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
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</table>
Non Potable Water Zinc, Total

Test Results (End Groups Include Outliers)

Number of Labs

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<tr>
<th>1004</th>
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</tr>
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<tbody>
<tr>
<td>0.5</td>
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<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

| Shipment: 405 | Matrix: Non Potable Water
| Analyte: Zinc, Total
| Sample: 0511A
| Technology: ICP-AES
| Prep Method: EPA 3005A
| Target: 1070 ug/L
| Limits: 910 to 1230 ug/L
| Basis: Target Value +/- a fixed percent
| Robust Mean: 1070 ug/L
| Std Dev: 35.5903 ug/L
| Median: 1060 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 68  Fail: 1  Total: 69

Shipment: 405  Matrix: Non Potable Water
Analyte: Zinc, Total
Sample: 0511A
Technology: ICP-AES
Prep Method: EPA 3010A
Target: 1070 ug/L
Limits: 910 to 1230 ug/L
Basis: Target Value +/- a fixed percent
Robust Mean: 1073.9 ug/L
Std Dev: 70.8407 ug/L
Median: 1070 ug/L

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

Totals for Matrix/Analyte:
Labs: Pass: 68  Fail: 1  Total: 69

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

Score Date: 09/01/2017
### Non Potable Water Zinc, Total

**Shipments:**
- 405

**Matrix:**
- Non Potable Water

**Sample:**
- 0511A

**Technology:**
- ICP-AES

**Prep Method:**
- EPA 4.1.3

**Target:**
- 1070 ug/L

**Limits:**
- 910 to 1230 ug/L

**Basis:**
- Target Value +/- a fixed percent

**Robust Mean:**
- 1073 ug/L

**Std Dev:**
- 38.1838 ug/L

**Median:**
- 1073 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2, Fail: 0, Total: 2

---

**Shipments:**
- 405

**Matrix:**
- Non Potable Water

**Sample:**
- 0511A

**Technology:**
- ICP-MS

**Prep Method:**
- EPA 200.2

**Target:**
- 1070 ug/L

**Limits:**
- 910 to 1230 ug/L

**Basis:**
- Target Value +/- a fixed percent

**Robust Mean:**
- 1046.7 ug/L

**Std Dev:**
- 5.7735 ug/L

**Median:**
- 1050 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 3, Fail: 0, Total: 3

---

**Shipments:**
- 405

**Matrix:**
- Non Potable Water

**Sample:**
- 0511A

**Technology:**
- ICP-MS

**Prep Method:**
- EPA 3005A

**Target:**
- 1070 ug/L

**Limits:**
- 910 to 1230 ug/L

**Basis:**
- Target Value +/- a fixed percent

**Robust Mean:**
- 1135 ug/L

**Std Dev:**
- 19.1485 ug/L

**Median:**
- 1140 ug/L

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 4, Fail: 0, Total: 4

---

**Score Date:**
- 09/01/2017

**Proficiency Test Statistics**
Non Potable Water Zinc, Total

Number of Labs

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

Total for Matrix/Analyte/Technology:

Labs: Pass: Total:

Total: 3

Non Potable Water Zinc, Total

Solid and Hazardous Waste 1,1,1,2-Tetrachloroethane

Total for Matrix/Analyte/Technology:

Labs: Pass: Total:

Total: 3

Solid and Hazardous Waste 1,1,1,2-Tetrachloroethane

Score Date: 09/01/2017
### Solid and Hazardous Waste 1,1,1,2-Tetrachloroethane

**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-L  
**Limit:** 1310 to 2850 ug/kg  
**Target:** 2014 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 2030 ug/kg  
**Std Dev:** 197.9899 ug/kg  
**Median:** 2030 ug/kg  

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

#### Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>1546</th>
<th>1695</th>
<th>1843</th>
<th>1992</th>
<th>2140</th>
<th>2289</th>
<th>2437</th>
<th>2586</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Labs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**

---

### Solid and Hazardous Waste 1,1,1,2-Tetrachloroethane

**Sample:** 0565  
**Technology:** GC-ECLCD/PID  
**Prep Method:** EPA 5035A-L  
**Limit:** 1310 to 2850 ug/kg  
**Target:** 2014 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 1910 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 1910 ug/kg  

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

#### Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>1546</th>
<th>1695</th>
<th>1843</th>
<th>1992</th>
<th>2140</th>
<th>2289</th>
<th>2437</th>
<th>2586</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Labs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**

---

### Solid and Hazardous Waste 1,1,2,2-Tetrachloroethane

**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-H  
**Limit:** 1140 to 3640 ug/kg  
**Target:** 2468 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 2140 ug/kg  
**Std Dev:** 298.7166 ug/kg  
**Median:** 2150 ug/kg  

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

#### Test Results (End Groups Include Outliers)

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<thead>
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<th>1695</th>
<th>1843</th>
<th>1992</th>
<th>2140</th>
<th>2289</th>
<th>2437</th>
<th>2586</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Labs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
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</table>

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**
### Solid and Hazardous Waste 1,1,2,2-Tetrachloroethane

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,1,2,2-Tetrachloroethane  
**Sample:** 0565

<table>
<thead>
<tr>
<th>Technology</th>
<th>GC-MS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prep Method:</strong></td>
<td>EPA 5035A-L</td>
</tr>
<tr>
<td><strong>Target:</strong></td>
<td>2468 ug/kg</td>
</tr>
<tr>
<td><strong>Limits:</strong></td>
<td>1140 to 3640 ug/kg</td>
</tr>
<tr>
<td><strong>Basis:</strong></td>
<td>Linear Regression</td>
</tr>
<tr>
<td><strong>Robust Mean:</strong></td>
<td>2275 ug/kg</td>
</tr>
<tr>
<td><strong>Std Dev:</strong></td>
<td>332.3402 ug/kg</td>
</tr>
<tr>
<td><strong>Median:</strong></td>
<td>2275 ug/kg</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass:</th>
<th>Fail:</th>
<th>Total:</th>
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<tbody>
<tr>
<td>25</td>
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**Totals for Matrix/Analyte/Technology:**

<table>
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<tr>
<th>Labs</th>
<th>Pass:</th>
<th>Fail:</th>
<th>Total:</th>
</tr>
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<tbody>
<tr>
<td>25</td>
<td>0</td>
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<td>25</td>
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</tbody>
</table>

### Solid and Hazardous Waste 1,1,2,2-Tetrachloroethane

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,1,2,2-Tetrachloroethane  
**Sample:** 0565

<table>
<thead>
<tr>
<th>Technology</th>
<th>GC-ELCD/PID</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prep Method:</strong></td>
<td>EPA 5035A-L</td>
</tr>
<tr>
<td><strong>Target:</strong></td>
<td>2468 ug/kg</td>
</tr>
<tr>
<td><strong>Limits:</strong></td>
<td>1140 to 3640 ug/kg</td>
</tr>
<tr>
<td><strong>Basis:</strong></td>
<td>Linear Regression</td>
</tr>
<tr>
<td><strong>Robust Mean:</strong></td>
<td>1910 ug/kg</td>
</tr>
<tr>
<td><strong>Std Dev:</strong></td>
<td>0 ug/kg</td>
</tr>
<tr>
<td><strong>Median:</strong></td>
<td>1910 ug/kg</td>
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</tbody>
</table>

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

<table>
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<tr>
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**Totals for Matrix/Analyte/Technology:**

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<tr>
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<th>Total:</th>
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</thead>
<tbody>
<tr>
<td>25</td>
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### Solid and Hazardous Waste 1,1,2-Trichloroethane

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,1,2-Trichloroethane  
**Sample:** 0565

<table>
<thead>
<tr>
<th>Technology</th>
<th>GC-MS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prep Method:</strong></td>
<td>EPA 5035A-H</td>
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<tr>
<td><strong>Target:</strong></td>
<td>8693 ug/kg</td>
</tr>
<tr>
<td><strong>Limits:</strong></td>
<td>6060 to 11400 ug/kg</td>
</tr>
<tr>
<td><strong>Basis:</strong></td>
<td>Linear Regression</td>
</tr>
<tr>
<td><strong>Robust Mean:</strong></td>
<td>8070 ug/kg</td>
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<tr>
<td><strong>Std Dev:</strong></td>
<td>381.8377 ug/kg</td>
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<tr>
<td><strong>Median:</strong></td>
<td>8070 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

<table>
<thead>
<tr>
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<tbody>
<tr>
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**Totals for Matrix/Analyte/Technology:**

<table>
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<tr>
<th>Labs</th>
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<th>Total:</th>
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<tbody>
<tr>
<td>25</td>
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### Solid and Hazardous Waste 1,1,2-Trichloroethane

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,1,2-Trichloroethane  
**Sample:** 0565

<table>
<thead>
<tr>
<th>Technology</th>
<th>GC-MS</th>
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<tbody>
<tr>
<td><strong>Prep Method:</strong></td>
<td>EPA 5035A-H</td>
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<tr>
<td><strong>Target:</strong></td>
<td>8693 ug/kg</td>
</tr>
<tr>
<td><strong>Limits:</strong></td>
<td>6060 to 11400 ug/kg</td>
</tr>
<tr>
<td><strong>Basis:</strong></td>
<td>Linear Regression</td>
</tr>
<tr>
<td><strong>Robust Mean:</strong></td>
<td>8338.7 ug/kg</td>
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<tr>
<td><strong>Std Dev:</strong></td>
<td>618.2434 ug/kg</td>
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<tr>
<td><strong>Median:</strong></td>
<td>8200 ug/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass:</th>
<th>Fail:</th>
<th>Total:</th>
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<tbody>
<tr>
<td>20</td>
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<td>20</td>
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</table>

**Totals for Matrix/Analyte/Technology:**

<table>
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<th>Labs</th>
<th>Pass:</th>
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<th>Total:</th>
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<tbody>
<tr>
<td>25</td>
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Score Date: 09/01/2017
Solid and Hazardous Waste 1,1,2-Trichloroethane

Shipments:
- **405**

Matrix: Solid and Hazardous Waste

Analyte: 1,1,2-Trichloroethane

Sample: 0565

Technology: GC-MS

Prep Method: EPA 5035A-L

Target: 8693 ug/kg

Limits: 6060 to 11400 ug/kg

Basis: Linear Regression

Robust Mean: 9195 ug/kg

Std Dev: 954.5942 ug/kg

Median: 9195 ug/kg

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

Fail: 0

Labs: Pass: 25 Fail: 0 Total: 25

Total Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

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

Solid and Hazardous Waste 1,1-Dichloroethane

Shipments:
- **405**

Matrix: Solid and Hazardous Waste

Analyte: 1,1-Dichloroethane

Sample: 0565

Technology: GC-MS

Prep Method: EPA 5035A-L

Target: 8693 ug/kg

Limits: 6060 to 11400 ug/kg

Basis: Linear Regression

Robust Mean: 7650 ug/kg

Std Dev: 0 ug/kg

Median: 7650 ug/kg

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

Fail: 1

Labs: Pass: 24 Fail: 1 Total: 25

Total Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

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

Solid and Hazardous Waste 1,1-Dichloroethane

Shipments:
- **405**

Matrix: Solid and Hazardous Waste

Analyte: 1,1-Dichloroethane

Sample: 0565

Technology: GC-MS

Prep Method: EPA 5035A-H

Target: 6366 ug/kg

Limits: 4210 to 8800 ug/kg

Basis: Linear Regression

Robust Mean: 6260 ug/kg

Std Dev: 226.2742 ug/kg

Median: 6260 ug/kg

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

Fail: 1

Labs: Pass: 24 Fail: 1 Total: 25

Total Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 24 Fail: 1 Total: 25

Score Date: 09/01/2017
Solid and Hazardous Waste 1,1-Dichloroethane

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Analyte:** 1,1-Dichloroethane
- **Sample:** 0565
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-L
- **Target:** 6330 µg/kg
- **Limits:** 4210 to 8800 µg/kg
- **Basis:** Linear Regression
- **Robust Mean:** 6330 µg/kg
- **Std Dev:** 4475.9859 µg/kg
- **Median:** 7135 µg/kg

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 24
- **Fail:** 1
- **Total:** 25

**Score Date:** 09/01/2017

Proficiency Test Statistics
### Solid and Hazardous Waste 1,1-Dichloroethene

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
<th>Analyte: 1,1-Dichloroethene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample:</td>
<td>0565</td>
<td></td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 5035A-L</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td>2949 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits:</td>
<td>1470 to 4420 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis:</td>
<td>Target Value +/- a fixed percent</td>
<td></td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>3485 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev:</td>
<td>629.325 ug/kg</td>
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</tr>
<tr>
<td>Median:</td>
<td>3485 ug/kg</td>
<td></td>
</tr>
</tbody>
</table>

#### Totals for Matrix/Analyte/Technology:

- Labs: Pass: 2, Fail: 0, Total: 2
- Labs: Pass: 24, Fail: 1, Total: 25

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

### Solid and Hazardous Waste 1,1-Dichloroethene

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
<th>Analyte: 1,1-Dichloroethene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample:</td>
<td>0565</td>
<td></td>
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<tr>
<td>Technology:</td>
<td>GCE/LCD/PID</td>
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</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 5035A-L</td>
<td></td>
</tr>
<tr>
<td>Target:</td>
<td>2949 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits:</td>
<td>1470 to 4420 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis:</td>
<td>Target Value +/- a fixed percent</td>
<td></td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>2740 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev:</td>
<td>0 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median:</td>
<td>2740 ug/kg</td>
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</tr>
</tbody>
</table>

#### Totals for Matrix/Analyte/Technology:

- Labs: Pass: 1, Fail: 0, Total: 1
- Labs: Pass: 24, Fail: 1, Total: 25

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

### Solid and Hazardous Waste 1,2,3-Trichloropropane

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
<th>Analyte: 1,2,3-Trichloropropane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample:</td>
<td>0565</td>
<td></td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method:</td>
<td>Target: 2255 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits:</td>
<td>828 to 3790 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis:</td>
<td>Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>2145 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev:</td>
<td>1239.236 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median:</td>
<td>2100 ug/kg</td>
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#### Totals for Matrix/Analyte/Technology:

- Labs: Pass: 3, Fail: 0, Total: 3
- Labs: Pass: 21, Fail: 0, Total: 21

### Solid and Hazardous Waste 1,2,3-Trichloropropane

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
<th>Analyte: 1,2,3-Trichloropropane</th>
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</thead>
<tbody>
<tr>
<td>Sample:</td>
<td>0565</td>
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<tr>
<td>Technology:</td>
<td>GC-MS</td>
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<tr>
<td>Prep Method:</td>
<td>Target: 2255 ug/kg</td>
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<tr>
<td>Limits:</td>
<td>828 to 3790 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis:</td>
<td>Linear Regression</td>
<td></td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>2162.7 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev:</td>
<td>162.0602 ug/kg</td>
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<tr>
<td>Median:</td>
<td>2120 ug/kg</td>
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#### Totals for Matrix/Analyte/Technology:

- Labs: Pass: 15, Fail: 0, Total: 15
- Labs: Pass: 21, Fail: 0, Total: 21

### Solid and Hazardous Waste 1,2,3-Trichloropropane

Score Date: 09/01/2017

Proficiency Test Statistics

Page 210 of 386
Solid and Hazardous Waste 1,2,3-Trichloropropane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: 1,2,3-Trichloropropane
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 2255 ug/kg
Limits: 828 to 3790 ug/kg
Basis: Linear Regression
Robust Mean: 2355 ug/kg
Std Dev: 35.3553 ug/kg
Median: 2355 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Solid and Hazardous Waste 1,2,3-Trichloropropane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: 1,2,3-Trichloropropane
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 2255 ug/kg
Limits: 828 to 3790 ug/kg
Basis: Linear Regression
Robust Mean: 2220 ug/kg
Std Dev: 0 ug/kg
Median: 2220 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Solid and Hazardous Waste 1,2-Dibromo-3-chloropropane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: 1,2-Dibromo-3-chloropropane
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 8790 ug/kg
Limits: 5270 to 12300 ug/kg
Basis: Target Value +/- a fixed percent
Robust Mean: 7130 ug/kg
Std Dev: 1654.6299 ug/kg
Median: 7130 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Solid and Hazardous Waste 1,2-Dibromo-3-chloropropane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: 1,2-Dibromo-3-chloropropane
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-H
Target: 8790 ug/kg
Limits: 5270 to 12300 ug/kg
Basis: Target Value +/- a fixed percent
Robust Mean: 7659.6 ug/kg
Std Dev: 900.371 ug/kg
Median: 7293 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Score Date: 09/01/2017  Proficiency Test Statistics  Page 211 of 386
Solid and Hazardous Waste 1,2-Dibromo-3-chloropropane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dibromo-3-chloropropane  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-L  
**Target:** 8790 ug/kg  
**Limits:** 5270 to 12300 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 9180 ug/kg  
**Median:** 9180 ug/kg  
**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 2  
**Fail:** 0  
**Total:** 2  

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

Solid and Hazardous Waste 1,2-Dichloroethane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dichloroethane  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-H  
**Target:** 8158 ug/kg  
**Limits:** 6030 to 10400 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 7946.1 ug/kg  
**Median:** 7950 ug/kg  
**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 20  
**Fail:** 0  
**Total:** 20  

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

Solid and Hazardous Waste 1,2-Dichloroethane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dichloroethane  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-L  
**Target:** 8158 ug/kg  
**Limits:** 6030 to 10400 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 8920 ug/kg  
**Median:** 8920 ug/kg  
**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 2  
**Fail:** 0  
**Total:** 2  

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste 1,2-Dichloroethane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: 1,2-Dichloroethane
Sample: 0565
Technology: GCELC/PID
Prep Method: EPA 5035A-L
Target: 8158 ug/kg
Limits: 6030 to 10400 ug/kg
Basis: Linear Regression
Robust Mean: 6770 ug/kg

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

Fail: 0  Labs: 25  Pass: 0  Total: 1

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

Basis: Target Value +/- a fixed percent

Robust Mean: 6245 ug/kg

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

Totals for Matrix/Analyte/Technology:
Labs: 22  Fail: 0  Total: 2

Basis: Target Value +/- a fixed percent

Robust Mean: 6505 ug/kg

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

Totals for Matrix/Analyte/Technology:
Labs: 22  Fail: 0  Total: 2
### Solid and Hazardous Waste cis-1,2-Dichloroethene

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** cis-1,2-Dichloroethene  
**Sample:** 0565  
**Technology:** GC/CLCD/PID  
**Prep Method:** EPA 5035A-L  
**Target:** 6489 ug/kg  
**Limits:** 3990 to 9080 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 5060 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 5060 ug/kg  
**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 1  
- Fail: 0  
- Total: 1

### Solids and Hazardous Waste 1,2-Dichloropropane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dichloropropane  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-H  
**Target:** 5960 ug/kg  
**Limits:** 4170 to 7750 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 5935.9 ug/kg  
**Std Dev:** 1366.3325 ug/kg  
**Median:** 5900 ug/kg  
**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 19  
- Fail: 1  
- Total: 20

### Solid and Hazardous Waste cis-1,2-Dichloroethene

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

### Solid and Hazardous Waste 1,2-Dichloropropane

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

### Score Date: 09/01/2017

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### Solid and Hazardous Waste 1,2-Dichloropropane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dichloropropane  
**Sample:** 0565  
**Technology:** GC-ELCD/PID  
**Prep Method:** EPA 5035A-L  
**Target:** 5960 ug/kg  
**Limits:** 4170 to 7750 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 5160 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 5160 ug/kg  

**A histogram is not displayed for Technology: GC-ELCD/PID due to the limited number of participants.**

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 1  Fail: 0  Total: 1

### Solid and Hazardous Waste 1,2-Dibromoethane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dibromoethane  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:**  
**Target:** 2636 ug/kg  
**Limits:** 1580 to 3690 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 2335 ug/kg  
**Std Dev:** 49.4975 ug/kg  
**Median:** 2335 ug/kg  

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

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 2  Fail: 0  Total: 2

### Solid and Hazardous Waste 1,2-Dibromoethane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dibromoethane  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-H  
**Target:** 2601.4 ug/kg  
**Limits:** 1580 to 3690 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 2690 ug/kg  
**Std Dev:** 149.8741 ug/kg  
**Median:** 2580 ug/kg  

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Results</td>
<td>2402</td>
<td>2496</td>
<td>2570</td>
<td>2654</td>
<td>2738</td>
<td>2822</td>
<td>2990</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 15  Fail: 0  Total: 15

### Solid and Hazardous Waste 1,2-Dibromoethane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dibromoethane  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-L  
**Target:** 2690 ug/kg  
**Limits:** 1580 to 3690 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 2690 ug/kg  
**Std Dev:** 240.4163 ug/kg  
**Median:** 2690 ug/kg  

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

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 2  Fail: 0  Total: 2

### Solid and Hazardous Waste 1,2-Dibromoethane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 1,2-Dibromoethane  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:**  
**Target:** 2636 ug/kg  
**Limits:** 1580 to 3690 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 2636 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 2636 ug/kg  

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

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

### Solid and Hazardous Waste 1,4-Dichlorobenzene

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
**Page:** 215 of 386
Solid and Hazardous Waste 1,4-Dichlorobenzene

**Shipments and Matrix:**
- **Solid and Hazardous Waste**

**Analytes:**
- 1,4-Dichlorobenzene

**Sample:**
- 0565

**Technology:**
- GC-MS

**Prep Method:**
- EPA 5035A-H

**Target:**
- 1187 ug/kg

**Limits:**
- 738 to 1760 ug/kg

**Basis:**
- Linear Regression

**Robust Mean:**
- 1155 ug/kg

**Std Dev:**
- 21.2132 ug/kg

**Median:**
- 1115 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: 24, Fail: 1, Total: 25

**Totals for Matrix/Analyte:**
- Labs: 2, Fail: 0, Total: 2

**Shipment:**
- Robust Mean: 1184.3 ug/kg

**Std Dev:**
- 279.6157 ug/kg

**Median:**
- 1190 ug/kg

**Basis:**
- Linear Regression

**Analyte:**
- 1,4-Dichlorobenzene

**Sample:**
- Limits: 738 to 1760 ug/kg

**Target:**
- 1187 ug/kg

**Technology:**
- GC-MS

**Prep Method:**
- EPA 5035A-L

**Robust Mean:**
- 1220 ug/kg

**Std Dev:**
- 0 ug/kg

**Median:**
- 1060 ug/kg

**Basis:**
- Linear Regression

**Totals for Matrix/Analyte/Technology:**
- Labs: 1, Fail: 0, Total: 1

**Totals for Matrix/Analyte:**
- Labs: 24, Fail: 1, Total: 25

**Robust Mean:**
- 1060 ug/kg

**Std Dev:**
- 0 ug/kg

**Median:**
- 1060 ug/kg

**Basis:**
- Linear Regression

**Analyte:**
- 1,4-Dichlorobenzene

**Sample:**
- Limits: 738 to 1760 ug/kg

**Target:**
- 1187 ug/kg

**Technology:**
- GCELCD/PID

**Prep Method:**
- EPA 5035A-L

**Robust Mean:**
- 1060 ug/kg

**Std Dev:**
- 0 ug/kg

**Median:**
- 1060 ug/kg

**Basis:**
- Linear Regression

**Totals for Matrix/Analyte/Technology:**
- Labs: 1, Fail: 0, Total: 1

**Totals for Matrix/Analyte:**
- Labs: 24, Fail: 1, Total: 25

---

**Solid and Hazardous Waste 2,4,5-T**
Solid and Hazardous Waste 2,4,5-T

Analyte: 2,4,5-T
Sample: 0528
Technology: GC-ECD
Prep Method:
Target: 496 ug/kg
Limits: 84.9 to 611 ug/kg
Basis: BiWeight Norm
Robust Mean: 317.3 ug/kg
Std Dev: 109.6052 ug/kg
Median: 362.5 ug/kg

Test Results (End Groups Include Outliers)

Number of Labs: 62 118 175 288 344 401

Fail: 0
Labs: 13
Fail: 2
Total: 15

Solid and Hazardous Waste 2,4,5-T

Analyte: 2,4,5-T
Sample: 0528
Technology: HPLC-TSMS
Prep Method: EPA 3545A
Target: 496 ug/kg
Limits: 84.9 to 611 ug/kg
Basis: BiWeight Norm
Robust Mean: 659 ug/kg
Std Dev: 0 ug/kg
Median: 659 ug/kg

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

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

Solid and Hazardous Waste 2,4,6-Trichlorophenol

Analyte: 2,4,6-Trichlorophenol
Sample: 0524
Technology: GC-MS
Prep Method:
Target: 12351 ug/kg
Limits: 2060 to 13600 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 4980 ug/kg
Std Dev: 0 ug/kg
Median: 4980 ug/kg

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

Solid and Hazardous Waste 2,4,6-Trichlorophenol

Analyte: 2,4,6-Trichlorophenol
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 12351 ug/kg
Limits: 2060 to 13600 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 7820 ug/kg
Std Dev: 2941.5642 ug/kg
Median: 7820 ug/kg

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2
Solid and Hazardous Waste 2,4,6-Trichlorophenol

Shipments and Analysis Details:

- **Matrix**: Solid and Hazardous Waste
- **Analyte**: 2,4,6-Trichlorophenol
- **Sample**: 0524
- **Technology**: GC-MS
- **Prep Method**: EPA 3541
- **Target**: 12351 ug/kg
- **Limits**: 2060 to 13600 ug/kg
- **Basis**: Stat_Norm in SW with conditions for the 10% -11
- **Robust Mean**: 4300 ug/kg
- **Std Dev**: 0 ug/kg
- **Median**: 4300 ug/kg

**Test Results (End Groups Include Outliers):**

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>6700</td>
<td>7970</td>
</tr>
<tr>
<td>9240</td>
<td>10510</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**

- **Labs**: 21
- **Pass**: 21
- **Fail**: 0
- **Total**: 21

**Basis**: Stat_Norm in SW with conditions for the 10% -11

---

**Total for Matrix/Analyte:**

- **Labs**: 4
- **Pass**: 4
- **Total**: 4

---

**Total for Matrix/Analyte:**

- **Labs**: 9
- **Pass**: 9
- **Total**: 9

---

**Total for Matrix/Analyte:**

- **Labs**: 21
- **Pass**: 21
- **Fail**: 0
- **Total**: 21

---

Additional information:

- Robust Mean: 8580 ug/kg
- Std Dev: 1423.1186 ug/kg
- Median: 8410 ug/kg

- Robust Mean: 8915 ug/kg
- Std Dev: 2882.4816 ug/kg
- Median: 9135 ug/kg

- Robust Mean: 5468.9 ug/kg
- Std Dev: 1694.8115 ug/kg
- Median: 5880 ug/kg

---

**Score Date**: 09/01/2017

**Proficiency Test Statistics**
### Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Shipments</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>2,4-Dichlorophenol</td>
</tr>
<tr>
<td>Sample:</td>
<td>0524</td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-MS</td>
</tr>
</tbody>
</table>

**Shipments:**

- **405**
- **405**
- **405**
- **405**

**Matrix:**

- **Solid and Hazardous Waste**
- **Solid and Hazardous Waste**
- **Solid and Hazardous Waste**
- **Solid and Hazardous Waste**

**Analyte:**

- **2,4-Dichlorophenol**
- **2,4-Dichlorophenol**
- **2,4-Dichlorophenol**
- **2,4-Dichlorophenol**

**Sample:**

- **0524**
- **0524**
- **0524**
- **0524**

**Technology:**

- **GC-MS**
- **GC-MS**
- **GC-MS**
- **GC-MS**

**Prep Method:**

- **EPA 3540C**
- **EPA 3540C**
- **EPA 3541**
- **EPA 3545A**

**Target:**

- **1924 ug/kg**
- **1924 ug/kg**
- **1924 ug/kg**
- **1924 ug/kg**

**Limits:**

- **192 to 2120 ug/kg**
- **192 to 2120 ug/kg**
- **192 to 2120 ug/kg**
- **192 to 2120 ug/kg**

**Basis:**

- **Manual Limits**
- **Manual Limits**
- **Manual Limits**
- **Manual Limits**

**Robust Mean:**

- **790 ug/kg**
- **1196 ug/kg**
- **520 ug/kg**
- **1377.5 ug/kg**

**Std Dev:**

- **0 ug/kg**
- **0 ug/kg**
- **0 ug/kg**
- **80.5709 ug/kg**

**Median:**

- **790 ug/kg**
- **1196 ug/kg**
- **520 ug/kg**
- **1390 ug/kg**

**Test Results (End Groups Include Outliers):**

- **Robust Mean:**
  - **1174**
  - **1374**

- **Test Results:**
  - **1174**
  - **1374**

**Number of Labs:**

- **0**
- **0**
- **0**
- **0**

**Score Date:**

- **09/08/2017**

**Proficiency Test Statistics**

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Solid and Hazardous Waste 2,4-Dichlorophenol

Shipments:

- **405** Matrix: Solid and Hazardous Waste

Analytes:

- 2,4-Dichlorophenol

Sample:

- 0524

Technology:

- GC-MS

Prep Method:

- EPA 3546

Target:

- 1924 ug/kg

Limits:

- 192 to 2120 ug/kg

Basis:

- Manual Limits

Robust Mean:

- 1163.5 ug/kg

Std Dev:

- 358.5977 ug/kg

Median:

- 1162 ug/kg

Totals for Matrix/Analyte/Technology:

- Labs: 21
- Pass: 0
- Fail: 0
- Total: 21

Shipment:

- 405 Matrix: Solid and Hazardous Waste

Analyte:

- 2,4-Dichlorophenol

Sample:

- 0524

Technology:

- GC-MS

Prep Method:

- EPA 3550C

Target:

- 1924 ug/kg

Limits:

- 192 to 2120 ug/kg

Basis:

- Manual Limits

Robust Mean:

- 763.6 ug/kg

Std Dev:

- 246.322 ug/kg

Median:

- 806 ug/kg

Totals for Matrix/Analyte/Technology:

- Labs: 15
- Pass: 14
- Fail: 0
- Total: 15

Shipment:

- 405 Matrix: Solid and Hazardous Waste

Analyte:

- 2,4-D

Sample:

- 0528

Technology:

- GC-ECD

Prep Method:

- EPA 3545A

Target:

- 285 ug/kg

Limits:

- 28.5 to 429 ug/kg

Basis:

- Stat_Norm in SW with conditions for the 10% -11

Robust Mean:

- 189.2 ug/kg

Std Dev:

- 75.0238 ug/kg

Median:

- 209.5 ug/kg

Totals for Matrix/Analyte/Technology:

- Labs: 15
- Pass: 14
- Fail: 1
- Total: 15

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

Score Date: 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste 2,4-Dinitrotoluene

**Shipments**:
- **Matrix**: Solid and Hazardous Waste

**Sample**: 0524

**Technology**: GC-MS

**Prep Method**:
- **Target**: 12122 ug/kg
- **Limits**: 1960 to 13300 ug/kg

**Basis**: Manual Limits

**Robust Mean**: 8795 ug/kg

**Std Dev**: 4249.7118 ug/kg

**Median**: 8795 ug/kg

**Tests Results**:
- **Number of Labs**: 303
- **Pass**: 0
- **Fail**: 2
- **Total**: 303

**Failure Limits**:
- **Limits**: 1960 to 13300 ug/kg
- **Target**: 12122 ug/kg

**Technology**:
- **GC-MS**
- **Prep Method**: EPA 3540C

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
### Solid and Hazardous Waste 2,4-Dinitrotoluene

**Shipments:** 405

**Matrix:** Solid and Hazardous Waste

**Analyst:** 2,4-Dinitrotoluene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3545A

**Target:** 12122 ug/kg

**Limits:** 1960 to 13300 ug/kg

**Basis:** Manual Limits

**Robust Mean:** 5910.4 ug/kg

**Std Dev:** 1516.9268 ug/kg

**Median:** 5850 ug/kg

**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 9, Fail: 0, Total: 9
- Labs: Pass: 21, Fail: 0, Total: 21

**Test Results (End Groups Include Outliers):**

- Shipment: 3310
- Robust Mean: 5700 ug/kg
- Std Dev: 0 ug/kg
- Median: 5700 ug/kg

**Technology: GC-MS** due to the limited number of participants.

---

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste 2,6-Dinitrotoluene

Shipments: 405
Matrix: Solid and Hazardous Waste
Analyte: 2,6-Dinitrotoluene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 13227 ug/kg
Limits: 3380 to 14500 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 12900 ug/kg
Std Dev: 0 ug/kg
Median: 12900 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 21 Fail: 0 Total: 21

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

Solid and Hazardous Waste 2,6-Dinitrotoluene

Shipments: 405
Matrix: Solid and Hazardous Waste
Analyte: 2,6-Dinitrotoluene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3541
Target: 13227 ug/kg
Limits: 3380 to 14500 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 6300 ug/kg
Std Dev: 0 ug/kg
Median: 6300 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

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

Solid and Hazardous Waste 2,6-Dinitrotoluene

Shipments: 405
Matrix: Solid and Hazardous Waste
Analyte: 2,6-Dinitrotoluene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 10050 ug/kg
Limits: 1557.9046 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 9380 ug/kg
Std Dev: 2424.4312 ug/kg
Median: 10180 ug/kg

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

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

Score Date: 09/01/2017
Proficiency Test Statistics
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Solid and Hazardous Waste 2,6-Dinitrotoluene

Shipments:
- 405

Matrix: Solid and Hazardous Waste

Analyte: 2,6-Dinitrotoluene

Sample: 0524

Technology: GC-MS

Prep Method: EPA 3550C

Target: 13227 ug/kg

Limits: 3380 to 14500 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11

Robust Mean: 6648.7 ug/kg

Std Dev: 1933.0135 ug/kg

Median: 6940 ug/kg

Totals for Matrix/Analyte/Technology:
- Labs: 39
- Pass: 15
- Fail: 0
- Total: 15

Test Results (End Groups Include Outliers)

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

Solid and Hazardous Waste 2-Chloronaphthalene

Shipments:
- 405

Matrix: Solid and Hazardous Waste

Analyte: 2-Chloronaphthalene

Sample: 0524

Technology: GC-MS

Prep Method: EPA 3580A

Target: 13227 ug/kg

Limits: 3380 to 14500 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11

Robust Mean: 6540 ug/kg

Std Dev: 0 ug/kg

Median: 6540 ug/kg

Totals for Matrix/Analyte/Technology:
- Labs: 39
- Pass: 15
- Fail: 0
- Total: 15

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

Solid and Hazardous Waste 2-Chloronaphthalene

Shipments:
- 405

Matrix: Solid and Hazardous Waste

Analyte: 2-Chloronaphthalene

Sample: 0524

Technology: GC-MS

Prep Method: EPA 3540C

Target: 13227 ug/kg

Limits: 3380 to 14500 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11

Robust Mean: 6540 ug/kg

Std Dev: 0 ug/kg

Median: 6540 ug/kg

Totals for Matrix/Analyte/Technology:
- Labs: 39
- Pass: 15
- Fail: 0
- Total: 15

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste 2-Chloronaphthalene

**Test Results (End Groups Include Outliers)**

Number of Labs

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>2-Chloronaphthalene</td>
</tr>
</tbody>
</table>

**Technology:** GC-MS  
**Prep Method:** EPA 3541  
**Target:** 1106 ug/kg  
**Limits:** 111 to 1220 ug/kg  
**Basis:** Manual Limits  
**Robust Mean:** 400 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 400 ug/kg

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 1  
Fail: 0  
Total: 1

---

**Solid and Hazardous Waste 2-Methylnaphthalene**

**Test Results (End Groups Include Outliers)**

Number of Labs

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>2-Chloronaphthalene</td>
</tr>
</tbody>
</table>

**Technology:** GC-MS  
**Prep Method:** EPA 3545A  
**Target:** 1106 ug/kg  
**Limits:** 111 to 1220 ug/kg  
**Basis:** Manual Limits  
**Robust Mean:** 768.5 ug/kg  
**Std Dev:** 72.3533 ug/kg  
**Median:** 786 ug/kg

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

---

**Solid and Hazardous Waste 2-Chloronaphthalene**

**Test Results (End Groups Include Outliers)**

Number of Labs

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>2-Chloronaphthalene</td>
</tr>
</tbody>
</table>

**Technology:** GC-MS  
**Prep Method:** EPA 3546  
**Target:** 1106 ug/kg  
**Limits:** 111 to 1220 ug/kg  
**Basis:** Manual Limits  
**Robust Mean:** 620.8 ug/kg  
**Std Dev:** 204.5375 ug/kg  
**Median:** 602 ug/kg

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

---

**Solid and Hazardous Waste 2-Chloronaphthalene**

**Test Results (End Groups Include Outliers)**

Number of Labs

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>2-Chloronaphthalene</td>
</tr>
</tbody>
</table>

**Technology:** GC-MS  
**Prep Method:** EPA 3550C  
**Target:** 1106 ug/kg  
**Limits:** 111 to 1220 ug/kg  
**Basis:** Manual Limits  
**Robust Mean:** 552.2 ug/kg  
**Std Dev:** 159.1625 ug/kg  
**Median:** 603 ug/kg

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

---

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
**Page 225 of 386**
Solid and Hazardous Waste 2-Methylnaphthalene

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: 2-Methylnaphthalene
Sample: 0524
Technology: GC-MS
Prep Method:
Target: 11302 ug/kg
Limits: 2150 to 12400 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 4600 ug/kg
Std Dev: 848.5281 ug/kg
Median: 4600 ug/kg

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

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

Solid and Hazardous Waste 2-Methylnaphthalene

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: 2-Methylnaphthalene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 11302 ug/kg
Limits: 2150 to 12400 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 7155 ug/kg
Std Dev: 675.7968 ug/kg
Median: 7270 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 4  Fail: 0  Total: 4
Labs: Pass: 20  Fail: 0  Total: 20

Solid and Hazardous Waste 2-Methylnaphthalene

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: 2-Methylnaphthalene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 11302 ug/kg
Limits: 2150 to 12400 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 6607.5 ug/kg
Std Dev: 2315.0288 ug/kg
Median: 6835 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 9  Fail: 0  Total: 9
Labs: Pass: 20  Fail: 0  Total: 20

Score Date: 09/01/2017  Proficiency Test Statistics  Page 226 of 386
Solid and Hazardous Waste 2-Methylnaphthalene

Shipments: 405  
Matrix: Solid and Hazardous Waste
Analyte: 2-Methylnaphthalene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3580A
Target: 11302 ug/kg
Limits: 2150 to 12400 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% - 11
Robust Mean: 5830 ug/kg
Std Dev: 0 ug/kg
Median: 5830 ug/kg

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

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

Solid and Hazardous Waste 2-Methylphenol

Shipments: 405  
Matrix: Solid and Hazardous Waste
Analyte: 2-Methylphenol
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 8902 ug/kg
Limits: 890 to 9790 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% - 11
Robust Mean: 3090 ug/kg
Std Dev: 0 ug/kg
Median: 3090 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 21  Fail: 0  Total: 21

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste 2-Methylphenol Test Results (End Groups Include Outliers)

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<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte: 2-Methylphenol</td>
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<tr>
<td>Sample: 0524</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3545A</td>
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</tr>
<tr>
<td>Target: 8902 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 890 to 9790 ug/kg</td>
<td></td>
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<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
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</tr>
<tr>
<td>Robust Mean: 5607.5 ug/kg</td>
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<tr>
<td>Std Dev: 572.9082 ug/kg</td>
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<tr>
<td>Median: 5695 ug/kg</td>
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<table>
<thead>
<tr>
<th>Shipment: 405</th>
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<tbody>
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<td>Analyte: 2-Methylphenol</td>
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<td>Sample: 0524</td>
<td></td>
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<tr>
<td>Technology: GC-MS</td>
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<tr>
<td>Prep Method: EPA 3546</td>
<td></td>
</tr>
<tr>
<td>Target: 8902 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 890 to 9790 ug/kg</td>
<td></td>
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<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
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<tr>
<td>Robust Mean: 5058 ug/kg</td>
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<tr>
<td>Std Dev: 1627.8665 ug/kg</td>
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<td>Median: 5055 ug/kg</td>
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<td>Sample: 0524</td>
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<td>Prep Method: EPA 3550C</td>
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<td>Target: 8902 ug/kg</td>
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<tr>
<td>Limits: 890 to 9790 ug/kg</td>
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<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
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<tr>
<td>Robust Mean: 3139.4 ug/kg</td>
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<tr>
<td>Std Dev: 1129.3041 ug/kg</td>
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</tr>
<tr>
<td>Median: 3330 ug/kg</td>
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<td>Totals for Matrix/Analyte/Technology: Labs: Pass: 9 Fail: 0 Total: 9</td>
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<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte: 2-Nitrophenol</td>
<td></td>
</tr>
<tr>
<td>Sample: 0524</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
</tr>
<tr>
<td>Target: 7361 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 736 to 8100 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
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<tr>
<td>Robust Mean: 2140 ug/kg</td>
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<tr>
<td>Std Dev: 2140 ug/kg</td>
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<td>Median: 2140 ug/kg</td>
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<td>Totals for Matrix/Analyte/Technology: Labs: Pass: 1 Fail: 0 Total: 1</td>
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<tr>
<td>Totals for Matrix/Analyte: Labs: Pass: 21 Fail: 0 Total: 21</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
### Solid and Hazardous Waste 2-Nitrophenol

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte: 2-Nitrophenol</td>
<td></td>
</tr>
<tr>
<td>Sample: 0524</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3540C</td>
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</tr>
<tr>
<td>Target: 7361 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 736 to 8100 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
<td></td>
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<tr>
<td>Robust Mean: 3595 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 1774.838 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median: 3595 ug/kg</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
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<td>Sample: 0524</td>
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<tr>
<td>Technology: GC-MS</td>
<td></td>
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<tr>
<td>Prep Method: EPA 3541</td>
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<tr>
<td>Target: 7361 ug/kg</td>
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<tr>
<td>Limits: 736 to 8100 ug/kg</td>
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</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
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</tr>
<tr>
<td>Robust Mean: 1500 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median: 1500 ug/kg</td>
<td></td>
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</tbody>
</table>

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

<table>
<thead>
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<tbody>
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</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3545A</td>
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</tr>
<tr>
<td>Target: 7361 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 736 to 8100 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 4810 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 467.8319 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median: 4955 ug/kg</td>
<td></td>
</tr>
</tbody>
</table>

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

### Test Results (End Groups Include Outliers)

<table>
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<tr>
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<tr>
<td>Technology: GC-MS</td>
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<tr>
<td>Prep Method: EPA 3546</td>
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</tr>
<tr>
<td>Target: 7361 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 736 to 8100 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
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</tr>
<tr>
<td>Robust Mean: 4332.5 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 2036.8665 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median: 4125 ug/kg</td>
<td></td>
</tr>
</tbody>
</table>

### Score Date:
09/01/2017

### Proficiency Test Statistics
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Solid and Hazardous Waste 2-Nitrophenol

**Analyte:** 2-Nitrophenol

| Technology | GC-MS |
| Sample: 0524 |
| Prep Method: EPA 3550C |
| Target: 7361 ug/kg |
| Limits: 736 to 8100 ug/kg |
| Basis: Stat. Norm in SW with conditions for the 10% -11 |
| Robust Mean: 2163.6 ug/kg |
| Std Dev: 905.0187 ug/kg |
| Median: 2410 ug/kg |

**Test Results (End Groups Include Outliers)**

- Number of Labs: 1380, 2215, 3050, 3885
- 0 Fail, 1 Pass

**Shipment:**
- Robust Mean: 2163.6 ug/kg
- Std Dev: 905.0187 ug/kg
- Median: 2410 ug/kg

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

Solid and Hazardous Waste 4,4'-DDE

**Analyte:** 4,4'-DDE

| Technology | GC-ECD |
| Sample: 0527 |
| Prep Method: GPA 3540C |
| Target: 448 ug/kg |
| Limits: 134 to 514 ug/kg |
| Basis: BiWeight LRE |
| Robust Mean: 367 ug/kg |
| Std Dev: 0 ug/kg |
| Median: 367 ug/kg |

**Test Results (End Groups Include Outliers)**

- Number of Labs: 244, 326, 367
- 0 Fail, 1 Pass

**Shipment:**
- Robust Mean: 314 ug/kg
- Std Dev: 64.2106 ug/kg
- Median: 331 ug/kg

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

A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.
Solid and Hazardous Waste 4,4'-DDE

**Analyte:** 4,4'-DDE

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3545A

**Target:** 448 ug/kg

**Limits:** 134 to 514 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 392.5 ug/kg

**Std Dev:** 95.2418 ug/kg

**Median:** 375 ug/kg

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

**Shipment:** 405

**Matrix:** Solid and Hazardous Waste

**Test Results (End Groups Include Outliers)**

A histogram is not displayed for

**Analyte:** 4,4'-DDT

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3546

**Target:** 448 ug/kg

**Limits:** 134 to 514 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 325.6 ug/kg

**Std Dev:** 101.761 ug/kg

**Median:** 358 ug/kg

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

**Shipment:** 405

**Matrix:** Solid and Hazardous Waste

**Test Results (End Groups Include Outliers)**

A histogram is not displayed for

**Analyte:** 4,4'-DDT

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3550C

**Target:** 448 ug/kg

**Limits:** 134 to 514 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 277.8 ug/kg

**Std Dev:** 81.9455 ug/kg

**Median:** 303.5 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 8
- Fail: 0
- Total: 8

**Shipment:** 405

**Matrix:** Solid and Hazardous Waste

**Test Results (End Groups Include Outliers)**

A histogram is not displayed for

**Analyte:** 4,4'-DDT

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:**

**Target:** 304 ug/kg

**Limits:** 61 to 361 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 244 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 244 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1
- Fail: 0
- Total: 1

**Shipment:** 405

**Matrix:** Solid and Hazardous Waste

**Test Results (End Groups Include Outliers)**
Solid and Hazardous Waste 4,4'-DDT

Analyte: 4,4'-DDT
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3540C
Target: 304 ug/kg
Limits: 61 to 361 ug/kg
Basis: BiWeight LRE
Robust Mean: 212.7 ug/kg
Std Dev: 41.7892 ug/kg
Median: 230 ug/kg

Number of Labs: 186

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

Solid and Hazardous Waste 4,4'-DDT

Analyte: 4,4'-DDT
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3541
Target: 304 ug/kg
Limits: 61 to 361 ug/kg
Basis: BiWeight LRE
Robust Mean: 210 ug/kg
Std Dev: 0 ug/kg
Median: 210 ug/kg

Number of Labs: 186

Solid and Hazardous Waste 4,4'-DDT

Analyte: 4,4'-DDT
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3545A
Target: 304 ug/kg
Limits: 61 to 361 ug/kg
Basis: BiWeight LRE
Robust Mean: 250.8 ug/kg
Std Dev: 53.8973 ug/kg
Median: 241.5 ug/kg

Number of Labs: 186

Solid and Hazardous Waste 4,4'-DDT

Analyte: 4,4'-DDT
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3546
Target: 304 ug/kg
Limits: 61 to 361 ug/kg
Basis: BiWeight LRE
Robust Mean: 204.2 ug/kg
Std Dev: 47.4099 ug/kg
Median: 192 ug/kg

Number of Labs: 236
Solid and Hazardous Waste 4,4'-DDT

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: 4,4'-DDT
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3550C
Target: 304 ug/kg
Limits: 61 to 361 ug/kg
Basis: BiWeight LRE
Robust Mean: 182.5 ug/kg
Std Dev: 65.2074 ug/kg
Median: 197.5 ug/kg

Number of Labs:
- 87
- 111
- 161
- 186
- 211
- 236
- 261

Test Results (End Groups Include Outliers):

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix</th>
<th>Analyte</th>
<th>Sample</th>
<th>Technology</th>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>SW</td>
<td>4,4'-DDT</td>
<td>0527</td>
<td>GC-ECD</td>
<td>EPA 3550C</td>
<td>304</td>
<td>61-361</td>
<td>BiWeight LRE</td>
<td>182.5</td>
<td>65.2074</td>
<td>197.5</td>
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</table>

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 111
- Fail: 0
- Total: 111

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

Solid and Hazardous Waste 4-Chloro-3-methylphenol

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: 4-Chloro-3-methylphenol
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 12934 ug/kg
Limits: 2720 to 14200 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 5050 ug/kg
Std Dev: 0 ug/kg
Median: 5050 ug/kg

Number of Labs:
- 77
- 111
- 161
- 186
- 211
- 236
- 261

Test Results (End Groups Include Outliers):

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix</th>
<th>Analyte</th>
<th>Sample</th>
<th>Technology</th>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
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<td>SW</td>
<td>4-Chloro-3-methylphenol</td>
<td>0524</td>
<td>GC-MS</td>
<td>EPA 3540C</td>
<td>12934</td>
<td>2720-14200</td>
<td>Stat_Norm in SW with conditions for the 10%-11</td>
<td>5050</td>
<td>0</td>
<td>5050</td>
</tr>
</tbody>
</table>

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 21
- Fail: 0
- Total: 21

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

Score Date: 09/01/2017  Proficiency Test Statistics  Page 233 of 386
Solid and Hazardous Waste 4-Chloro-3-methylphenol

Shipments:

1. **Matrix:** Solid and Hazardous Waste
   **Sample:** 0524
   **Technology:** GC-MS
   **Prep Method:** EPA 3545A
   **Target:** 12934 ug/kg
   **Limits:** 2720 to 14200 ug/kg
   **Basis:** Stat_Norm in SW with conditions for the 10% -11
   **Robust Mean:** 9297.5 ug/kg
   **Std Dev:** 1375.6059 ug/kg
   **Median:** 9035 ug/kg

2. **Matrix:** Solid and Hazardous Waste
   **Sample:** 0524
   **Technology:** GC-MS
   **Prep Method:** EPA 3546
   **Target:** 12934 ug/kg
   **Limits:** 2720 to 14200 ug/kg
   **Basis:** Stat_Norm in SW with conditions for the 10% -11
   **Robust Mean:** 9150 ug/kg
   **Std Dev:** 2738.4424 ug/kg
   **Median:** 9720 ug/kg

3. **Matrix:** Solid and Hazardous Waste
   **Sample:** 0524
   **Technology:** GC-MS
   **Prep Method:** EPA 3550C
   **Target:** 12934 ug/kg
   **Limits:** 2720 to 14200 ug/kg
   **Basis:** Stat_Norm in SW with conditions for the 10% -11
   **Robust Mean:** 5270.6 ug/kg
   **Std Dev:** 1637.5257 ug/kg
   **Median:** 5410 ug/kg

Totals for Matrix/Analyte/Technology:

- **Labs:** Pass: 4 Fail: 0 Total: 4
- **Labs:** Pass: 9 Fail: 0 Total: 9
- **Labs:** Pass: 21 Fail: 0 Total: 21

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

Solid and Hazardous Waste 4-Nitrophenol

Shipments:

1. **Matrix:** Solid and Hazardous Waste
   **Sample:** 0524
   **Technology:** GC-MS
   **Prep Method:**
   **Target:** 6440 ug/kg
   **Limits:** 644 to 7080 ug/kg
   **Basis:** Manual Limits
   **Robust Mean:** 2010 ug/kg
   **Std Dev:** 0 ug/kg
   **Median:** 2010 ug/kg

Totals for Matrix/Analyte/Technology:

- **Labs:** Pass: 1 Fail: 0 Total: 1
- **Labs:** Pass: 19 Fail: 2 Total: 21

Score Date: 09/08/2017
Proficiency Test Statistics
Solid and Hazardous Waste 4-Nitrophenol

Shipments:
- **405**  
  Matrix: Solid and Hazardous Waste

Sample: 0524

Technology: GC-MS

Prep Method: EPA 3540C

Target: 6440 ug/kg

Limits: 644 to 7080 ug/kg

Basis: Manual Limits

Robust Mean: 3420 ug/kg

Std Dev: 2278.8838 ug/kg

Median: 3420 ug/kg

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

Fail: 0

Labs:  Pass: 19  Fail: 2  Total: 21

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:
- Labs: Pass: 3  Fail: 0  Total: 4

Solid and Hazardous Waste 4-Nitrophenol

Shipments:
- **405**  
  Matrix: Solid and Hazardous Waste

Sample: 0524

Technology: GC-MS

Prep Method: EPA 3541

Target: 6440 ug/kg

Limits: 644 to 7080 ug/kg

Basis: Manual Limits

Robust Mean: 1900 ug/kg

Std Dev: 0 ug/kg

Median: 1900 ug/kg

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

Fail: 0

Labs:  Pass: 19  Fail: 2  Total: 21

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1  Fail: 0  Total: 1

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

Solid and Hazardous Waste 4-Nitrophenol

Shipments:
- **405**  
  Matrix: Solid and Hazardous Waste

Sample: 0524

Technology: GC-MS

Prep Method: EPA 3545A

Target: 6440 ug/kg

Limits: 644 to 7080 ug/kg

Basis: Manual Limits

Robust Mean: 3492.5 ug/kg

Std Dev: 2144.9689 ug/kg

Median: 4385 ug/kg

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

Fail: 0

Labs:  Pass: 19  Fail: 2  Total: 21

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 3  Fail: 1  Total: 4

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

Solid and Hazardous Waste 4-Nitrophenol

Shipments:
- **405**  
  Matrix: Solid and Hazardous Waste

Sample: 0524

Technology: GC-MS

Prep Method: EPA 3546

Target: 6440 ug/kg

Limits: 644 to 7080 ug/kg

Basis: Manual Limits

Robust Mean: 3575.5 ug/kg

Std Dev: 1286.1668 ug/kg

Median: 4765 ug/kg

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

Fail: 0

Labs:  Pass: 19  Fail: 2  Total: 21

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

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

Score Date: 09/08/2017
Solid and Hazardous Waste 4-Nitrophenol

Number of Labs

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<td>1150</td>
<td>1995</td>
<td>2840</td>
<td>3685</td>
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Test Results (End Groups Include Outliers)

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<tr>
<th>Technology</th>
<th>GC-MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep Method</td>
<td>EPA 3550C</td>
</tr>
<tr>
<td>Target</td>
<td>6440 ug/kg</td>
</tr>
<tr>
<td>Limits</td>
<td>644 to 7080 ug/kg</td>
</tr>
<tr>
<td>Basis</td>
<td>Manual Limits</td>
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<tr>
<td>Robust Mean</td>
<td>2025.3 ug/kg</td>
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<tr>
<td>Std Dev</td>
<td>968.5128 ug/kg</td>
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<td>Median</td>
<td>2230 ug/kg</td>
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Totals for Matrix/Analyte/Technology:

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<th>Total</th>
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</thead>
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Solid and Hazardous Waste Matrix:

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<thead>
<tr>
<th>Analyte</th>
<th>4-Nitrophenol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>0524</td>
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</table>

Solid and Hazardous Waste alpha-BHC

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

Solid and Hazardous Waste alpha-BHC

<table>
<thead>
<tr>
<th>Technology</th>
<th>GC-ECD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep Method</td>
<td>EPA 3540C</td>
</tr>
<tr>
<td>Target</td>
<td>86.2 ug/kg</td>
</tr>
<tr>
<td>Limits</td>
<td>11.6 to 94.8 ug/kg</td>
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<tr>
<td>Basis</td>
<td>Manual Limits</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>50.7 ug/kg</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0 ug/kg</td>
</tr>
<tr>
<td>Median</td>
<td>50.7 ug/kg</td>
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Totals for Matrix/Analyte/Technology:

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<th>Total</th>
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</thead>
<tbody>
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Solid and Hazardous Waste alpha-BHC

<table>
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<tr>
<th>Analyte</th>
<th>alpha-BHC</th>
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</thead>
<tbody>
<tr>
<td>Sample</td>
<td>0527</td>
</tr>
</tbody>
</table>

Solid and Hazardous Waste matrix:

<table>
<thead>
<tr>
<th>Analyte</th>
<th>alpha-BHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>0527</td>
</tr>
</tbody>
</table>

Solid and Hazardous Waste alpha-BHC

<table>
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<th>Technology</th>
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</thead>
<tbody>
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<td>Prep Method</td>
<td>EPA 3541</td>
</tr>
<tr>
<td>Target</td>
<td>86.2 ug/kg</td>
</tr>
<tr>
<td>Limits</td>
<td>11.6 to 94.8 ug/kg</td>
</tr>
<tr>
<td>Basis</td>
<td>Manual Limits</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>50.7 ug/kg</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0 ug/kg</td>
</tr>
<tr>
<td>Median</td>
<td>50.7 ug/kg</td>
</tr>
</tbody>
</table>

Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
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<td>1</td>
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Solid and Hazardous Waste alpha-BHC

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

Solid and Hazardous Waste alpha-BHC

<table>
<thead>
<tr>
<th>Analyte</th>
<th>alpha-BHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>0527</td>
</tr>
</tbody>
</table>

Solid and Hazardous Waste matrix:

<table>
<thead>
<tr>
<th>Analyte</th>
<th>alpha-BHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>0527</td>
</tr>
</tbody>
</table>

Score Date: 09/08/2017

Proficiency Test Statistics

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Solid and Hazardous Waste alpha-BHC

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: alpha-BHC

Sample: 0527

Technology: GC-ECD

Prep Method: EPA 3545A

Target: 86.2 ug/kg

Limits: 11.6 to 94.8 ug/kg

Basis: Manual Limits

Robust Mean: 64.4 ug/kg

Std Dev: 10.2116 ug/kg

Median: 61.4 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 52.8  Fail: 59.7  Total: 66.6  80.4

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1

Test Results (End Groups Include Outliers)

Robust Mean: 64.4 ug/kg  
Std Dev: 10.2116 ug/kg  
Median: 61.4 ug/kg

Solid and Hazardous Waste alpha-BHC

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: alpha-BHC

Sample: 0527

Technology: GC-ECD

Prep Method: EPA 3546

Target: 86.2 ug/kg

Limits: 11.6 to 94.8 ug/kg

Basis: Manual Limits

Robust Mean: 55.2 ug/kg

Std Dev: 14.3441 ug/kg

Median: 56.1 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 32.1  Fail: 52.8  Total: 66.6  73.5

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1

Test Results (End Groups Include Outliers)

Robust Mean: 55.2 ug/kg  
Std Dev: 14.3441 ug/kg  
Median: 56.1 ug/kg

Solid and Hazardous Waste alpha-BHC

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: alpha-BHC

Sample: 0527

Technology: GC-ECD

Prep Method: EPA 3550C

Target: 86.2 ug/kg

Limits: 11.6 to 94.8 ug/kg

Basis: Manual Limits

Robust Mean: 41.4 ug/kg

Std Dev: 15.6195 ug/kg

Median: 43.9 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 18.3  Fail: 25.2  Total: 32.1  32.1  32.1  32.1

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1

Test Results (End Groups Include Outliers)

Robust Mean: 41.4 ug/kg  
Std Dev: 15.6195 ug/kg  
Median: 43.9 ug/kg

Solid and Hazardous Waste alpha-Chlordane

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: alpha-Chlordane

Sample: 0527

Technology: GC-ECD

Prep Method: EPA 3550C

Target: 416 ug/kg

Limits: 416 to 458 ug/kg

Basis: Manual Limits

Robust Mean: 289 ug/kg

Std Dev: 34.6554 ug/kg

Median: 308 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5  Fail: 0  Total: 5

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1

Test Results (End Groups Include Outliers)

Robust Mean: 289 ug/kg  
Std Dev: 34.6554 ug/kg  
Median: 308 ug/kg

Score Date: 09/11/2017

Proficiency Test Statistics

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Solid and Hazardous Waste alpha-Chlordane

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: alpha-Chlordane

Sample: 0527

Technology: GC-ECD

Prep Method:
- EPA 3540C
- EPA 3545A
- EPA 3550C

Target:
- 416 ug/kg

Limits: 41.6 to 458 ug/kg

Basis: Manual Limits

Robust Mean:
- EPA 3540C: 301.5 ug/kg
- EPA 3545A: 309.7 ug/kg
- EPA 3550C: 276.7 ug/kg

Std Dev:
- EPA 3540C: 10.6066 ug/kg
- EPA 3545A: 157.9164 ug/kg
- EPA 3550C: 115.0875 ug/kg

Median:
- EPA 3540C: 301.5 ug/kg
- EPA 3545A: 331 ug/kg
- EPA 3550C: 255 ug/kg

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 3  Fail: 0  Total: 3
- Labs: Pass: 18  Fail: 1  Total: 19

Score Date: 09/11/2017
Solid and Hazardous Waste Silver, Total

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Silver, Total  Sample: 0522
Technology: FAAS  Prep Method:
Target: 74.5 mg/kg  Limits: 51 to 101 mg/kg
Basis: BiWeight LRE  Robust Mean: 77.1 mg/kg
Med: 77.1 mg/kg

Totals for Matrix/Analyte/Technology:
Ls: 1  Fa: 0  Tl: 1

Totals for Matrix/Analyte:
Ls: 35  Fa: 1  Tl: 36

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

---

Solid and Hazardous Waste Silver, Total

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Silver, Total  Sample: 0522
Technology: FAAS  Prep Method:
Target: 74.5 mg/kg  Limits: 51 to 101 mg/kg
Basis: BiWeight LRE  Robust Mean: 76.1 mg/kg
Med: 76.1 mg/kg

Totals for Matrix/Analyte/Technology:
Ls: 1  Fa: 0  Tl: 1

Totals for Matrix/Analyte:
Ls: 35  Fa: 1  Tl: 36

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

---

Solid and Hazardous Waste Silver, Total

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Silver, Total  Sample: 0522
Technology: ICP-AES  Prep Method:
Target: 74.5 mg/kg  Limits: 51 to 101 mg/kg
Basis: BiWeight LRE  Robust Mean: 71.8 mg/kg
Med: 71.8 mg/kg

Totals for Matrix/Analyte/Technology:
Ls: 1  Fa: 0  Tl: 1

Totals for Matrix/Analyte:
Ls: 35  Fa: 1  Tl: 36

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

---

Solid and Hazardous Waste Silver, Total

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Silver, Total  Sample: 0522
Technology: ICP-AES  Prep Method:
Target: 74.5 mg/kg  Limits: 51 to 101 mg/kg
Basis: BiWeight LRE  Robust Mean: 76.6 mg/kg
Med: 76.3 mg/kg

Totals for Matrix/Analyte/Technology:
Ls: 20  Fa: 0  Tl: 20

Totals for Matrix/Analyte:
Ls: 35  Fa: 1  Tl: 36

Score Date: 09/01/2017
Proficiency Test Statistics
Solid and Hazardous Waste Silver, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste

**Sample:** 0522

**Technology:** ICP-AES

**Prep Method:** EPA 3051A

**Target:** 74.5 mg/kg

**Limits:** 51 to 101 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 69.5 mg/kg

**Std Dev:** 31.4714 mg/kg

**Median:** 65.1 mg/kg

**Totals for Matrix/Analyte/Technology:**

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<thead>
<tr>
<th>Labs</th>
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<th>Fail</th>
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<tbody>
<tr>
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**Test Results (End Groups Include Outliers)**

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<td>0.50 to 0.99</td>
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<td>1.00 to 1.49</td>
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<tr>
<td>1.50 to 1.99</td>
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<td>2.00 to 2.49</td>
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**Score Date:** 09/01/2017

Proficiency Test Statistics  
Page 240 of 386
A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.

**Solid and Hazardous Waste Aluminum, Total**

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:**  
**Target:** 7058 mg/kg  
**Limits:** 2430 to 11500 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 7830 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 7830 mg/kg  

**Test Results (End Groups Include Outliers)**

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<thead>
<tr>
<th>Score</th>
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<tbody>
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Labs: Pass: 1  Fail: 0  Total: 1

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

**Totals for Matrix:**  
Labs: Pass: 22  Fail: 1  Total: 23

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:**  
**Target:** 7058 mg/kg  
**Limits:** 2430 to 11500 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 7058 mg/kg  
**Std Dev:** 7058 mg/kg  
**Median:** 7058 mg/kg  

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Score</th>
<th>Number of Labs</th>
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</thead>
<tbody>
<tr>
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<td>6604</td>
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<td>6960</td>
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<tr>
<td>7317</td>
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**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 5  Fail: 0  Total: 5

**Totals for Matrix/Analyte:**  
Labs: Pass: 22  Fail: 1  Total: 23

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0522  
**Technology:** ICP-MS  
**Prep Method:**  
**Target:** 7058 mg/kg  
**Limits:** 2430 to 11500 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 6596 mg/kg  
**Std Dev:** 6596 mg/kg  
**Median:** 6596 mg/kg  

**Test Results (End Groups Include Outliers)**

<table>
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<tr>
<th>Score</th>
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<tbody>
<tr>
<td>5534</td>
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<tr>
<td>6604</td>
<td>1</td>
</tr>
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<td>7317</td>
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**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 5  Fail: 0  Total: 5

**Totals for Matrix/Analyte:**  
Labs: Pass: 22  Fail: 1  Total: 23

**Score Date:** 09/01/2017

**Proficiency Test Statistics**
Solid and Hazardous Waste Aldrin

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Aldrin
Sample: 0527
Technology: GC-ECD
Prep Method:
Target: 152 ug/kg
Limits: 32.8 to 167 ug/kg
Basis: Manual Limits
Robust Mean: 110 ug/kg
Std Dev: 0 ug/kg
Median: 110 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

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

Solid and Hazardous Waste Aldrin

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Aldrin
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3540C
Target: 152 ug/kg
Limits: 32.8 to 167 ug/kg
Basis: Manual Limits
Robust Mean: 96.2 ug/kg
Std Dev: 11.0038 ug/kg
Median: 96.5 ug/kg

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

Solid and Hazardous Waste Aldrin

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Aldrin
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3541
Target: 152 ug/kg
Limits: 32.8 to 167 ug/kg
Basis: Manual Limits
Robust Mean: 105 ug/kg
Std Dev: 0 ug/kg
Median: 105 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1 Fail: 0 Total: 1

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

Solid and Hazardous Waste Aldrin

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Aldrin
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3545A
Target: 152 ug/kg
Limits: 32.8 to 167 ug/kg
Basis: Manual Limits
Robust Mean: 115.5 ug/kg
Std Dev: 27.6038 ug/kg
Median: 108 ug/kg

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

Solid and Hazardous Waste Aldrin

Score Date: 09/08/2017
Solid and Hazardous Waste Aldrin

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Aldrin
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3546
Target: 152 ug/kg
Limits: 32.8 to 167 ug/kg
Basis: Manual Limits
Robust Mean: 101.9 ug/kg
Std Dev: 18.4777 ug/kg
Median: 99.7 ug/kg

Test Results (End Groups Include Outliers)

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>78.8</th>
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<tr>
<td>Labs: Pass:</td>
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Totals for Matrix/Analyte/Technology:

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

Solid and Hazardous Waste Acenaphthene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Acenaphthene
Sample: 0524
Technology: GC-MS
Prep Method:
Target: 8258 ug/kg
Limits: 1770 to 9080 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 3685 ug/kg
Std Dev: 544.4722 ug/kg
Median: 3685 ug/kg

Test Results (End Groups Include Outliers)

<table>
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<tr>
<th>Number of Labs</th>
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<th>98.1</th>
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Totals for Matrix/Analyte/Technology:

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</table>

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Acenaphthene

Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 8258 ug/kg
Limits: 1770 to 9080 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 5652.5 ug/kg
Std Dev: 737.8968 ug/kg
Median: 5785 ug/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 4 Fail: 0 Total: 4

Totals for Matrix/Analyte:
Labs: Pass: 21 Fail: 0 Total: 21

Solid and Hazardous Waste Acenaphthene

Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 8258 ug/kg
Limits: 1770 to 9080 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 5562.5 ug/kg
Std Dev: 1672.2714 ug/kg
Median: 5835 ug/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 4 Fail: 0 Total: 4

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

Solid and Hazardous Waste Acenaphthene

Sample: 0524
Technology: GC-MS
Prep Method: EPA 3550C
Target: 8258 ug/kg
Limits: 1770 to 9080 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 4250 ug/kg
Std Dev: 1017.9391 ug/kg
Median: 4080 ug/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte:
Labs: Pass: 21 Fail: 0 Total: 21

Solid and Hazardous Waste Anthracene

Sample: 0524
Technology: GC-MS
Prep Method:
Target: 11207 ug/kg
Limits: 2300 to 12300 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 5595 ug/kg
Std Dev: 572.7565 ug/kg
Median: 5595 ug/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte:
Labs: Pass: 21 Fail: 0 Total: 21

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Anthracene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Anthracene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 11207 ug/kg
Limits: 2300 to 12300 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 7510 ug/kg
  Std Dev: 1909.1833 ug/kg
  Median: 7510 ug/kg
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 2  Fail: 0  Total: 2
Totals for Matrix/Analyte:
  Labs: Pass: 21  Fail: 0  Total: 21

Solid and Hazardous Waste Anthracene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Anthracene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 11207 ug/kg
Limits: 2300 to 12300 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 7852.5 ug/kg
  Std Dev: 1419.8914 ug/kg
  Median: 7755 ug/kg
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 4  Fail: 0  Total: 4
Totals for Matrix/Analyte:
  Labs: Pass: 21  Fail: 0  Total: 21

Solid and Hazardous Waste Anthracene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Anthracene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 11207 ug/kg
Limits: 2300 to 12300 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 8101 ug/kg
  Std Dev: 2621.555 ug/kg
  Median: 9035 ug/kg
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 4  Fail: 0  Total: 4
Totals for Matrix/Analyte:
  Labs: Pass: 21  Fail: 0  Total: 21

Solid and Hazardous Waste Anthracene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Anthracene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3550C
Target: 11207 ug/kg
Limits: 2300 to 12300 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 5765.2 ug/kg
  Std Dev: 1705.1871 ug/kg
  Median: 5420 ug/kg
Totals for Matrix/Analyte/Technology:
  Labs: Pass: 9  Fail: 0  Total: 9
Totals for Matrix/Analyte:
  Labs: Pass: 21  Fail: 0  Total: 21

Solid and Hazardous Waste Acenaphthylene

Score Date: 09/01/2017  Proficiency Test Statistics  Page 245 of 386
Solid and Hazardous Waste Acenaphthylene

Score Date: 09/01/2017
Proficiency Test Statistics

Shipments:
- **405**  
  **Matrix:** Solid and Hazardous Waste
  **Analyte:** Acenaphthylene
  **Sample:** 0524
  **Technology:** GC-MS
  **Prep Method:** EPA 3540C
  **Target:** 4066 ug/kg
  **Limits:** 678 to 4470 ug/kg
  **Basis:** Stat_Norm in SW with conditions for the 10% - 11
  **Robust Mean:** 2815 ug/kg
    - Std Dev: 954.5942 ug/kg
    - Median: 2815 ug/kg
  **Totals for Matrix/Analyte/Technology:**
    - Labs: Pass: 2  Fail: 0  Total: 2

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

Shipments:
- **405**  
  **Matrix:** Solid and Hazardous Waste
  **Analyte:** Acenaphthylene
  **Sample:** 0524
  **Technology:** GC-MS
  **Prep Method:** EPA 3545A
  **Target:** 4066 ug/kg
  **Limits:** 678 to 4470 ug/kg
  **Basis:** Stat_Norm in SW with conditions for the 10% - 11
  **Robust Mean:** 2810 ug/kg
    - Std Dev: 1015.0075 ug/kg
    - Median: 2845 ug/kg
  **Totals for Matrix/Analyte/Technology:**
    - Labs: Pass: 4  Fail: 0  Total: 4

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

Shipments:
- **405**  
  **Matrix:** Solid and Hazardous Waste
  **Analyte:** Acenaphthylene
  **Sample:** 0524
  **Technology:** GC-MS
  **Prep Method:** EPA 3546
  **Target:** 4066 ug/kg
  **Limits:** 678 to 4470 ug/kg
  **Basis:** Stat_Norm in SW with conditions for the 10% - 11
  **Robust Mean:** 2677.8 ug/kg
    - Std Dev: 184.5716 ug/kg
    - Median: 2795 ug/kg
  **Totals for Matrix/Analyte/Technology:**
    - Labs: Pass: 4  Fail: 0  Total: 4

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

Shipments:
- **405**  
  **Matrix:** Solid and Hazardous Waste
  **Analyte:** Acenaphthylene
  **Sample:** 0524
  **Technology:** GC-MS
  **Prep Method:** EPA 3547
  **Target:** 4066 ug/kg
  **Limits:** 678 to 4470 ug/kg
  **Basis:** Stat_Norm in SW with conditions for the 10% - 11
  **Robust Mean:** 2677.8 ug/kg
    - Std Dev: 184.5716 ug/kg
    - Median: 2795 ug/kg
  **Totals for Matrix/Analyte/Technology:**
    - Labs: Pass: 4  Fail: 0  Total: 4

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

Shipments:
- **405**  
  **Matrix:** Solid and Hazardous Waste
  **Analyte:** Acenaphthylene
  **Sample:** 0524
  **Technology:** GC-MS
  **Prep Method:** EPA 3548
  **Target:** 4066 ug/kg
  **Limits:** 678 to 4470 ug/kg
  **Basis:** Stat_Norm in SW with conditions for the 10% - 11
  **Robust Mean:** 2677.8 ug/kg
    - Std Dev: 184.5716 ug/kg
    - Median: 2795 ug/kg
  **Totals for Matrix/Analyte/Technology:**
    - Labs: Pass: 4  Fail: 0  Total: 4

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
### Solid and Hazardous Waste Acenaphthylene

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analyte:</strong> Acenaphthylene</td>
<td></td>
</tr>
<tr>
<td><strong>Sample:</strong> 0524</td>
<td></td>
</tr>
<tr>
<td><strong>Technology:</strong> GC-MS</td>
<td></td>
</tr>
<tr>
<td><strong>Prep Method:</strong> EPA 3550C</td>
<td></td>
</tr>
<tr>
<td><strong>Target:</strong> 406 ug/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Limits:</strong> 678 to 4470 ug/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Basis:</strong> Stat_Norm in SW with conditions for the 10%-11% rule</td>
<td></td>
</tr>
<tr>
<td><strong>Robust Mean:</strong> 2019.1 ug/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Std Dev:</strong> 559.1246 ug/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Median:</strong> 2220 ug/kg</td>
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</tbody>
</table>

#### Total for Matrix/Analyte/Technology:

- **Pass:** 9
- **Fail:** 0
- **Total:** 9

#### Total for Matrix/Analyte:

- **Pass:** 21
- **Total:** 21

---

### Solid and Hazardous Waste Arsenic, Total

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td><strong>Analyte:</strong> Arsenic, Total</td>
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<tr>
<td><strong>Sample:</strong> 0522</td>
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<tr>
<td><strong>Technology:</strong> GFAAS</td>
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</tr>
<tr>
<td><strong>Prep Method:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Target:</strong> 185 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Limits:</strong> 131 to 239 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Basis:</strong> BiWeight LRE</td>
<td></td>
</tr>
<tr>
<td><strong>Robust Mean:</strong> 207 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Std Dev:</strong> 0 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Median:</strong> 207 mg/kg</td>
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</tr>
</tbody>
</table>

#### Total for Matrix/Analyte/Technology:

- **Pass:** 1
- **Fail:** 0
- **Total:** 1

#### Total for Matrix/Analyte:

- **Pass:** 39
- **Total:** 39

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### Solid and Hazardous Waste Arsenic, Total

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<th>Shipment: 405</th>
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<tbody>
<tr>
<td><strong>Analyte:</strong> Arsenic, Total</td>
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<td><strong>Sample:</strong> 0522</td>
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<td><strong>Technology:</strong> GFAAS</td>
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<tr>
<td><strong>Prep Method:</strong> EPA 3050B</td>
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<tr>
<td><strong>Target:</strong> 185 mg/kg</td>
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<td><strong>Limits:</strong> 131 to 239 mg/kg</td>
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<tr>
<td><strong>Basis:</strong> BiWeight LRE</td>
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<tr>
<td><strong>Robust Mean:</strong> 164 mg/kg</td>
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<tr>
<td><strong>Std Dev:</strong> 0 mg/kg</td>
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<tr>
<td><strong>Median:</strong> 164 mg/kg</td>
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#### Total for Matrix/Analyte/Technology:

- **Pass:** 1
- **Fail:** 0
- **Total:** 1

#### Total for Matrix/Analyte:

- **Pass:** 39
- **Total:** 39

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### Solid and Hazardous Waste Arsenic, Total

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<th>Shipment: 405</th>
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<tr>
<td><strong>Basis:</strong> BiWeight LRE</td>
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<tr>
<td><strong>Robust Mean:</strong> 196.5 mg/kg</td>
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<tr>
<td><strong>Std Dev:</strong> 10.6066 mg/kg</td>
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</tr>
<tr>
<td><strong>Median:</strong> 196.5 mg/kg</td>
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#### Total for Matrix/Analyte/Technology:

- **Pass:** 2
- **Fail:** 0
- **Total:** 2

#### Total for Matrix/Analyte:

- **Pass:** 39
- **Total:** 39

---

*Score Date: 09/01/2017*
Solid and Hazardous Waste Arsenic, Total

Score Date: 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste Arsenic, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Arsenic, Total
Sample: 0522
Technology: ICP-MS
Prep Method: EPA 3050B
Target: 185 mg/kg
Limits: 131 to 239 mg/kg
Basis: BiWeight LR
Robust Mean: 200 mg/kg

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

Solid and Hazardous Waste Acetone

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Acetone
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-H
Target: 5902 ug/kg
Limits: 1510 to 9100 ug/kg
Basis: Linear Regression
Robust Mean: 6600.9 ug/kg

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
### Solid and Hazardous Waste Acetone

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Acetone  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-L  
**Target:** 5902 ug/kg  
**Limits:** 1510 to 9100 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 6030 ug/kg  
**Median:** 6030 ug/kg  

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

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass</th>
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<tbody>
<tr>
<td>Total</td>
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**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 2,2'-Oxybis(1-chloropropane)  
**Sample:** 0524  
**Technology:** GC-MS  
**Prep Method:** EPA 3540C  
**Target:** 4342 ug/kg  
**Limits:** 434 to 4780 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 1290 ug/kg  
**Median:** 1290 ug/kg  

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

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<thead>
<tr>
<th>Labs</th>
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<tbody>
<tr>
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**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 2,2'-Oxybis(1-chloropropane)  
**Sample:** 0524  
**Technology:** GC-MS  
**Prep Method:** EPA 3541  
**Target:** 4342 ug/kg  
**Limits:** 434 to 4780 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 2175 ug/kg  
**Median:** 2175 ug/kg  

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

<table>
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</thead>
<tbody>
<tr>
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**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** 2,2'-Oxybis(1-chloropropane)  
**Sample:** 0524  
**Technology:** GC-MS  
**Prep Method:** EPA 354A-L  
**Target:** 5902 ug/kg  
**Limits:** 1510 to 9100 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 6030 ug/kg  
**Median:** 6030 ug/kg  

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

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
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<tbody>
<tr>
<td>Total</td>
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</table>
Solid and Hazardous Waste 2,2'-Oxybis(1-chloropropane)

Score Date: 09/01/2017

Proficiency Test Statistics

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Solid and Hazardous Waste Bis(2-ethylhexyl) phthalate

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Analyte:** Bis(2-ethylhexyl) phthalate

**Sample:** 0524

**Technologies:**
- **GC-MS**

**Prep Method:**
- **EPA 3540C**
- **EPA 3545A**
- **EPA 3550C**

**Targets:**
- **1808 ug/kg**
- **1808 ug/kg**
- **1808 ug/kg**

**Limits:**
- **217 to 2620 ug/kg**
- **217 to 2620 ug/kg**
- **217 to 2620 ug/kg**

**Basis:** BiWeight LRE

**Robust Means:**
- **1575 ug/kg**
- **1510 ug/kg**
- **1445 ug/kg**

**Std Devs:**
- **403.0509 ug/kg**
- **770.9031 ug/kg**
- **308.2748 ug/kg**

**Medians:**
- **1575 ug/kg**
- **1570 ug/kg**
- **1400 ug/kg**

**Test Results (End Groups Include Outliers):**

- **Number of Labs:**
  - **1420**
  - **1226**
  - **838**
  - **670**

- **Robust Mean:**
  - **1575 ug/kg**
  - **1510 ug/kg**
  - **1445 ug/kg**

- **Std Dev:**
  - **403.0509 ug/kg**
  - **770.9031 ug/kg**
  - **308.2748 ug/kg**

- **Median:**
  - **1575 ug/kg**
  - **1570 ug/kg**
  - **1400 ug/kg**

- **Limits:**
  - **217 to 2620 ug/kg**
  - **217 to 2620 ug/kg**
  - **217 to 2620 ug/kg**

- **Target:**
  - **1808 ug/kg**
  - **1808 ug/kg**
  - **1808 ug/kg**

- **Technology:** GC-MS

- **Prep Method:**
  - **EPA 3540C**
  - **EPA 3545A**
  - **EPA 3550C**

- **Scores:**
  - **Pass:**
    - **20**
    - **10**
    - **9**
  - **Fail:**
    - **1**
    - **0**
    - **1**

- **Total:**
  - **21**
  - **21**
  - **21**

**Score Date:** 09/01/2017

---

**Proficiency Test Statistics**

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Solid and Hazardous Waste Barium, Total

**Shipment:** 405   **Matrix:** Solid and Hazardous Waste

**Analyte:** Barium, Total

**Sample:** 0522

**Technology:** FAAS

**Prep Method:**

- **Target:** 252 mg/kg
- **Limits:** 184 to 316 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 252 mg/kg
- **Std Dev:** 0 mg/kg
- **Median:** 252 mg/kg

**Totals for Matrix/Analyte/Technology:**

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**Shipment:** 405   **Matrix:** Solid and Hazardous Waste

**Analyte:** Barium, Total

**Sample:** 0522

**Technology:** ICP-AES

**Prep Method:**

- **Target:** 252 mg/kg
- **Limits:** 184 to 316 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 221 mg/kg
- **Std Dev:** 0 mg/kg
- **Median:** 221 mg/kg

**Totals for Matrix/Analyte/Technology:**

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**Score Date:** 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste Barium, Total

Shipments: 405, Matrix: Solid and Hazardous Waste

Analyte: Barium, Total
Sample: 0522

Technology: ICP-AES
Prep Method: EPA 3051A
Target: 252 mg/kg
Limits: 184 to 316 mg/kg
Basis: BiWeight LRE
Robust Mean: 251.3 mg/kg
Std Dev: 38.8887 mg/kg
Median: 233 mg/kg

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

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

Solid and Hazardous Waste Barium, Total

Shipments: 405, Matrix: Solid and Hazardous Waste

Analyte: Barium, Total
Sample: 0522

Technology: ICP-MS
Prep Method:
Target: 252 mg/kg
Limits: 184 to 316 mg/kg
Basis: BiWeight LRE
Robust Mean: 227 mg/kg
Std Dev: 0 mg/kg
Median: 227 mg/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1, Fail: 0, Total: 1

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

Solid and Hazardous Waste Barium, Total

Shipments: 405, Matrix: Solid and Hazardous Waste

Analyte: Barium, Total
Sample: 0522

Technology: ICP-MS
Prep Method: EPA 3050B
Target: 252 mg/kg
Limits: 184 to 316 mg/kg
Basis: BiWeight LRE
Robust Mean: 254.8 mg/kg
Std Dev: 15.1888 mg/kg
Median: 255 mg/kg

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

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

Solid and Hazardous Waste Barium, Total

Shipments: 405, Matrix: Solid and Hazardous Waste

Analyte: Barium, Total
Sample: 0522

Technology: ICP-MS
Prep Method: EPA 3051A
Target: 252 mg/kg
Limits: 184 to 316 mg/kg
Basis: BiWeight LRE
Robust Mean: 273 mg/kg
Std Dev: 0 mg/kg
Median: 273 mg/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1, Fail: 0, Total: 1

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

Solid and Hazardous Waste Benzo(a)anthracene

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 254 of 386
Solid and Hazardous Waste Benzo(a)anthracene

Shipment: 405   Matrix: Solid and Hazardous Waste
Analyte: Benzo(a)anthracene
Sample: 0524
Technology: GC-MS
Prep Method:
Target: 1954 ug/kg
Limits: 481 to 2300 ug/kg
Basis: BiWeight LRE
Robust Mean: 1165 ug/kg
Std Dev: 49.4975 ug/kg
Median: 1165 ug/kg

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2   Fail: 0   Total: 2

Totals for Matrix/Analyte:
Labs: Pass: 21   Fail: 0   Total: 21

Shipment: 405   Matrix: Solid and Hazardous Waste
Analyte: Benzo(a)anthracene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 1954 ug/kg
Limits: 481 to 2300 ug/kg
Basis: BiWeight LRE
Robust Mean: 1420 ug/kg
Std Dev: 311.127 ug/kg
Median: 1420 ug/kg

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2   Fail: 0   Total: 2

Totals for Matrix/Analyte:
Labs: Pass: 21   Fail: 0   Total: 21

Shipment: 405   Matrix: Solid and Hazardous Waste
Analyte: Benzo(a)anthracene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 1954 ug/kg
Limits: 481 to 2300 ug/kg
Basis: BiWeight LRE
Robust Mean: 1627.5 ug/kg
Std Dev: 222.4672 ug/kg
Median: 1615 ug/kg

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

Totals for Matrix/Analyte:
Labs: Pass: 21   Fail: 0   Total: 21

Shipment: 405   Matrix: Solid and Hazardous Waste
Analyte: Benzo(a)anthracene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 1954 ug/kg
Limits: 481 to 2300 ug/kg
Basis: BiWeight LRE
Robust Mean: 1482.5 ug/kg
Std Dev: 430.6874 ug/kg
Median: 1615 ug/kg

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

Totals for Matrix/Analyte:
Labs: Pass: 21   Fail: 0   Total: 21

Score Date: 09/01/2017
Proficiency Test Statistics
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Solid and Hazardous Waste Benzo(a)anthracene

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste

**Analyte:** Benzo(a)anthracene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3550C

**Target:** 1954 ug/kg

**Limits:** 481 to 2300 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1266.1 ug/kg

**Std Dev:** 338.6556 ug/kg

**Median:** 1230 ug/kg

**Totals for Matrix/Analyte/Technology:**

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**Test Results (End Groups Include Outliers)**

**Number of Labs**

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Solid and Hazardous Waste Benzo(b)fluoranthene

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste

**Analyte:** Benzo(b)fluoranthene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3550C

**Target:** 7813 ug/kg

**Limits:** 1920 to 9060 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 4575 ug/kg

**Std Dev:** 176.7767 ug/kg

**Median:** 4575 ug/kg

**Totals for Matrix/Analyte/Technology:**

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

Solid and Hazardous Waste Benzo(b)fluoranthene

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste

**Analyte:** Benzo(b)fluoranthene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3545A

**Target:** 7813 ug/kg

**Limits:** 1920 to 9060 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 6260 ug/kg

**Std Dev:** 2093.0361 ug/kg

**Median:** 6260 ug/kg

**Totals for Matrix/Analyte/Technology:**

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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Benzo(b)fluoranthene

Test Results (End Groups Include Outliers)

Number of Labs

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Solid and Hazardous Waste Matrix:

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Fail: 0 Labs; Pass: 21 Total: 21

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4 Fail: 0 Total: 4

Totals for Matrix/Analyte:

Labs: Pass: 9 Total: 9

Solid and Hazardous Waste Benzo(b)fluoranthene

Test Results (End Groups Include Outliers)

Robust Mean: 6302.3 ug/kg
Std Dev: 2027.3629 ug/kg
Median: 7169.5 ug/kg

Solid and Hazardous Waste Matrix:

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Fail: 0 Labs; Pass: 22 Total: 22

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9 Fail: 0 Total: 9

Totals for Matrix/Analyte:

Labs: Pass: 1 Total: 1

Solid and Hazardous Waste beta-BHC

Test Results (End Groups Include Outliers)

Robust Mean: 4843.2 ug/kg
Std Dev: 1295.3671 ug/kg
Median: 4600 ug/kg

Solid and Hazardous Waste Matrix:

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

Solid and Hazardous Waste beta-BHC

Test Results (End Groups Include Outliers)

Robust Mean: 324 ug/kg
Std Dev: 0 ug/kg
Median: 324 ug/kg

Solid and Hazardous Waste Matrix:

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Fail: 0 Labs; Pass: 22 Total: 22

Totals for Matrix/Analyte/Technology:

Labs: Pass: 3 Fail: 0 Total: 3

Totals for Matrix/Analyte:

Labs: Pass: 3 Total: 3

Score Date: 09/01/2017

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Solid and Hazardous Waste beta-BHC

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: beta-BHC
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3541
Target: 467 ug/kg
Limits: 73.8 to 514 ug/kg
Basis: BiWeight LRE
Robust Mean: 290 ug/kg
Std Dev: 0 ug/kg
Median: 290 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 0  Fail: 0  Total: 1

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

Solid and Hazardous Waste beta-BHC

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: beta-BHC
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3545A
Target: 467 ug/kg
Limits: 73.8 to 514 ug/kg
Basis: BiWeight LRE
Robust Mean: 348.3 ug/kg
Std Dev: 67,9822 ug/kg
Median: 322 ug/kg

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

Solid and Hazardous Waste beta-BHC

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: beta-BHC
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3546
Target: 467 ug/kg
Limits: 73.8 to 514 ug/kg
Basis: BiWeight LRE
Robust Mean: 312.6 ug/kg
Std Dev: 48,4747 ug/kg
Median: 311 ug/kg

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

Solid and Hazardous Waste beta-BHC

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: beta-BHC
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3550C
Target: 467 ug/kg
Limits: 73.8 to 514 ug/kg
Basis: BiWeight LRE
Robust Mean: 231.4 ug/kg
Std Dev: 88,2495 ug/kg
Median: 242 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 8  Fail: 0  Total: 8

Score Date: 09/01/2017  Proficiency Test Statistics  Page 258 of 386
Solid and Hazardous Waste Beryllium, Total

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Beryllium, Total

**Sample:** 0522

**Technology:** ICP-AES

**Prep Method:**
- **Target:** 115 mg/kg
- **Limits:** 86.1 to 144 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 106 mg/kg
- **Std Dev:** 0 mg/kg
- **Median:** 106 mg/kg

**Totals for Matrix/Analyte/Technology:**
- **Pass:** 29
- **Fail:** 0
- **Total:** 29

**Shipment:**
- Robust Mean: 114.4 mg/kg
- Std Dev: 7.3383 mg/kg
- Median: 113 mg/kg

**Basis:** BiWeight LRE

**Analyte:** Beryllium, Total

**Sample:** Limits: 86.1 to 144 mg/kg

**Target:** 115 mg/kg

**Prep Method:** EPA 3050B

**Basis:** BiWeight LRE

**Robust Mean:** 116 mg/kg

**Std Dev:** 4.3205 mg/kg

**Median:** 117 mg/kg

**Totals for Matrix/Analyte/Technology:**
- **Pass:** 4
- **Fail:** 0
- **Total:** 4

**Basis:** BiWeight LRE

**Analyte:** Beryllium, Total

**Sample:** Limits: 86.1 to 144 mg/kg

**Target:** 115 mg/kg

**Prep Method:** EPA 3051A

**Basis:** BiWeight LRE

**Robust Mean:** 102 mg/kg

**Std Dev:** 0 mg/kg

**Median:** 102 mg/kg

**Totals for Matrix/Analyte/Technology:**
- **Pass:** 1
- **Fail:** 0
- **Total:** 1

**Basis:** BiWeight LRE

Score Date: 09/01/2017

Proficiency Test Statistics

Page 259 of 386
Solid and Hazardous Waste Beryllium, Total

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<td>Beryllium, Total</td>
<td>0522</td>
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<tr>
<td>Technology</td>
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<td>Limits:</td>
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<td>Basis:</td>
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<td>Std Dev:</td>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 5 Fail: 0 Total: 5

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

Solid and Hazardous Waste Beryllium, Total

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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 29 Fail: 0 Total: 29

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

Solid and Hazardous Waste Benzene

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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte: Labs: Pass: 24 Fail: 1 Total: 25

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

Solid and Hazardous Waste Benzene

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<td>Limits:</td>
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Totals for Matrix/Analyte/Technology:
- Labs: Pass: 19 Fail: 1 Total: 20

Totals for Matrix/Analyte: Labs: Pass: 24 Fail: 1 Total: 25
Solid and Hazardous Waste Benzene

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Analyte:** Benzene
- **Sample:** 0565
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-L
- **Target:** 5121 μg/kg
- **Limits:** 3710 to 6630 μg/kg
- **Basis:** Linear Regression
- **Robust Mean:** 5550 μg/kg
- **Std Dev:** 961.6652 μg/kg
- **Median:** 5550 μg/kg

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

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2, Fail: 0, Total: 2

**Totals for Matrix/Analyte:**
- Labs: Pass: 24, Fail: 1, Total: 25

---

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Analyte:** Benzene
- **Sample:** 0565
- **Technology:** GCELCD/PID
- **Prep Method:** EPA 5035A-L
- **Target:** 5121 μg/kg
- **Limits:** 3710 to 6630 μg/kg
- **Basis:** Linear Regression
- **Robust Mean:** 4750 μg/kg
- **Std Dev:** 0 μg/kg
- **Median:** 4750 μg/kg

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: 24, Fail: 1, Total: 25

---

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Analyte:** Benzo(ghi)perylene
- **Sample:** 0524
- **Technology:** GC-MS
- **Prep Method:** EPA 3540C
- **Target:** 1901 μg/kg
- **Limits:** 271 to 2330 μg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 836 μg/kg
- **Std Dev:** 231.931 μg/kg
- **Median:** 836 μg/kg

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

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2, Fail: 0, Total: 2

**Totals for Matrix/Analyte:**
- Labs: Pass: 21, Fail: 0, Total: 21

---

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Analyte:** Benzo(ghi)perylene
- **Sample:** 0524
- **Technology:** GC-MS
- **Prep Method:** EPA 3540C
- **Target:** 1901 μg/kg
- **Limits:** 271 to 2330 μg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 836 μg/kg
- **Std Dev:** 231.931 μg/kg
- **Median:** 836 μg/kg

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

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2, Fail: 0, Total: 2

**Totals for Matrix/Analyte:**
- Labs: Pass: 21, Fail: 0, Total: 21

---
Solid and Hazardous Waste Benzo(ghi)perylene

**Score Date:** 09/01/2017

**Proficiency Test Statistics**

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Benzo(ghi)perylene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3545A

**Target:** 1901 ug/kg

**Limits:** 271 to 2330 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1730 ug/kg

**Std Dev:** 225.5364 ug/kg

**Median:** 1745 ug/kg

**Number of Labs:**
- 1546
- 1792
- 2038

**Fail:** 0

**Labs:** Pass: 21

**Total:** 21

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

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Benzo(ghi)perylene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3546

**Target:** 1901 ug/kg

**Limits:** 271 to 2330 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1493.5 ug/kg

**Std Dev:** 436.7558 ug/kg

**Median:** 1685 ug/kg

**Number of Labs:**
- 316
- 562
- 1054
- 1300
- 1546
- 2038

**Fail:** 2

**Labs:** Pass: 7

**Total:** 21

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

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Benzo(ghi)perylene

**Sample:** 0563

**Technology:** IC-COND

**Prep Method:**
- Target: 10.4 mg/kg
- Limits: 6.42 to 14 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1180 ug/kg

**Std Dev:** 440.9263 ug/kg

**Median:** 1190 ug/kg

**Number of Labs:**
- 316
- 562
- 1054
- 1300
- 1546
- 2038

**Fail:** 2

**Labs:** Pass: 7

**Total:** 9

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 7
- Fail: 2
- Total: 9

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Bromide

**Sample:** 0563

**Technology:** IC-COND

**Prep Method:**
- Target: 10.4 mg/kg
- Limits: 6.42 to 14 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 10.1 mg/kg

**Std Dev:** 3.9357 mg/kg

**Median:** 10.1 mg/kg

**Number of Labs:**
- 3.9
- 6
- 10.1
- 14.2

**Fail:** 6

**Labs:** Pass: 7

**Total:** 9

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 7
- Fail: 2
- Total: 9

**Shipments:**
- 405
Solid and Hazardous Waste Benzo(k)fluoranthene

**Shipments:**
- 405
- Matrix: Solid and Hazardous Waste
- Analyte: Benzo(k)fluoranthene
- Sample: 0524
- Technology: GC-MS
- Prep Method: EPA 3540C
  - Target: 8448 µg/kg
  - Limits: 2160 to 10100 µg/kg
- Basis: BiWeight LRE
- Robust Mean: 7240 µg/kg
- Std Dev: 2658.7215 µg/kg
- Median: 7240 µg/kg

**Test Results:**
- Number of Labs: 6160
- Test Results (End Groups Include Outliers)
- Number of Labs: 6160

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<tbody>
<tr>
<td>Proficiency Test Statistics</td>
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</tr>
</tbody>
</table>
Solid and Hazardous Waste Benzo(k)fluoranthene

Shipments: 405  
Matrix: Solid and Hazardous Waste  
Analyte: Benzo(k)fluoranthene

Sample: 0524  
Technology: GC-MS  
Prep Method: EPA 3550C  
Target: 8448 ug/kg  
Limits: 2160 to 10100 ug/kg  
Basis: BiWeight LR  
Robust Mean: 5310.6 ug/kg  
Std Dev: 1632.6061 ug/kg  
Median: 5380 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 21  Fail: 0  Total: 21

Test Results (End Groups Include Outliers)

Solid and Hazardous Waste Boron, Total

Shipments: 405  
Matrix: Solid and Hazardous Waste  
Analyte: Boron, Total

Sample: 0522  
Technology: ICP-AES  
Prep Method:  
Target: 383 mg/kg  
Limits: 225 to 525 mg/kg  
Basis: Target Value +/- a fixed percent (uses Robust Me)  
Robust Mean: 377 mg/kg  
Std Dev: 32.7872 mg/kg  
Median: 372 mg/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 17  Fail: 1  Total: 18

Test Results (End Groups Include Outliers)

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

Solid and Hazardous Waste Boron, Total

Shipments: 405  
Matrix: Solid and Hazardous Waste  
Analyte: Boron, Total

Sample: 0522  
Technology: ICP-AES  
Prep Method: EPA 3010A  
Target: 383 mg/kg  
Limits: 225 to 525 mg/kg  
Basis: Target Value +/- a fixed percent (uses Robust Me)  
Robust Mean: 446 mg/kg  
Std Dev: 0 mg/kg  
Median: 446 mg/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Test Results (End Groups Include Outliers)

Solid and Hazardous Waste Boron, Total

Shipments: 405  
Matrix: Solid and Hazardous Waste  
Analyte: Boron, Total

Sample: 0522  
Technology: ICP-AES  
Prep Method: EPA 3050B  
Target: 383 mg/kg  
Limits: 225 to 525 mg/kg  
Basis: Target Value +/- a fixed percent (uses Robust Me)  
Robust Mean: 371.3 mg/kg  
Std Dev: 24.1816 mg/kg  
Median: 378 mg/kg

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

Test Results (End Groups Include Outliers)

Solid and Hazardous Waste Boron, Total

Shipments: 405  
Matrix: Solid and Hazardous Waste  
Analyte: Boron, Total

Sample: 0522  
Technology: ICP-AES  
Prep Method:  
Target: 383 mg/kg  
Limits: 225 to 525 mg/kg  
Basis: Target Value +/- a fixed percent (uses Robust Me)  
Robust Mean:  
Std Dev:  
Median: 

Totals for Matrix/Analyte/Technology:
Labs: Pass: 17  Fail: 1  Total: 18

Test Results (End Groups Include Outliers)

Score Date: 09/01/2017  
Proficiency Test Statistics  
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### Solid and Hazardous Waste Boron, Total

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<th>Technology</th>
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<th>Target</th>
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<td>Boron, Total</td>
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<td>EPA 3051A</td>
<td>383 mg/kg</td>
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A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.

### totals for matrix/analyte/technology:

- Labs: 2
- Pass: 17
- Fail: 1
- Total: 18

### Solid and Hazardous Waste Boron, Total

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<td>Boron, Total</td>
<td>ICP-MS</td>
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<td>225 to 525 mg/kg</td>
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A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

### totals for matrix/analyte/technology:

- Labs: 1
- Pass: 17
- Fail: 1
- Total: 18

### Solid and Hazardous Waste Boron, Total

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<td>Boron, Total</td>
<td>ICP-MS</td>
<td>EPA 3050B</td>
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<td>225 to 525 mg/kg</td>
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A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

### totals for matrix/analyte/technology:

- Labs: 2
- Pass: 17
- Fail: 1
- Total: 18

### Solid and Hazardous Waste Benzyl butyl phthalate

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<td>405</td>
<td>Solid and Hazardous Waste</td>
<td>Benzyl butyl phthalate</td>
<td>GC-MS</td>
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<td>2614 ug/kg</td>
<td>520 to 3280 ug/kg</td>
<td>BiWeight LRE</td>
<td>1470 ug/kg</td>
<td>183.8478 ug/kg</td>
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<td>2</td>
<td>21</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

### totals for matrix/analyte/technology:

- Labs: 2
- Pass: 21
- Fail: 0
- Total: 21
Solid and Hazardous Waste Benzyl butyl phthalate

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<td>Target:</td>
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<tr>
<td>Basis:</td>
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<td>Robust Mean:</td>
<td>2090 ug/kg</td>
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<tr>
<td>Std Dev:</td>
<td>664.6804 ug/kg</td>
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<tr>
<td>Median:</td>
<td>2090 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 0
- Fail: 0
- Total: 0

**Totals for Matrix/Analyte:**
- Labs: Pass: 2
- Fail: 0
- Total: 2

**Shipment: Robust Mean:**
- 2090 ug/kg
- Std Dev: 664.6804 ug/kg
- Median: 2090 ug/kg

**Basis:** BiWeight LRE

**Analyte:** Benzyl butyl phthalate

**Sample:**
- Limits: 520 to 3280 ug/kg
- Target: 2614 ug/kg
- Prep Method: EPA 3540C
- Technology: GC-MS
- Basis: BiWeight LRE
- Robust Mean: 2090 ug/kg
- Std Dev: 664.6804 ug/kg
- Median: 2090 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2
- Fail: 0
- Total: 2

**Totals for Matrix/Analyte:**
- Labs: Pass: 21
- Fail: 0
- Total: 21

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

---

**Solid and Hazardous Waste Benzyl butyl phthalate**

**Shipment: 405 Matrix: Solid and Hazardous Waste**

**Analyte:** Benzyl butyl phthalate

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3545A

**Target:** 2614 ug/kg

**Limits:** 520 to 3280 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 2232.5 ug/kg

**Std Dev:** 437.369 ug/kg

**Median:** 2105 ug/kg

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

**Totals for Matrix/Analyte:**
- Labs: Pass: 21
- Fail: 0
- Total: 21

**Shipment: Robust Mean:**
- 2232.5 ug/kg
- Std Dev: 437.369 ug/kg
- Median: 2105 ug/kg

**Basis:** BiWeight LRE

**Analyte:** Benzyl butyl phthalate

**Sample:**
- Limits: 520 to 3280 ug/kg
- Target: 2614 ug/kg
- Prep Method: EPA 3545A
- Technology: GC-MS
- Basis: BiWeight LRE
- Robust Mean: 2232.5 ug/kg
- Std Dev: 437.369 ug/kg
- Median: 2105 ug/kg

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

**Totals for Matrix/Analyte:**
- Labs: Pass: 21
- Fail: 0
- Total: 21

---

**Solid and Hazardous Waste Benzyl butyl phthalate**

**Shipment: 405 Matrix: Solid and Hazardous Waste**

**Analyte:** Benzyl butyl phthalate

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3546

**Target:** 2614 ug/kg

**Limits:** 520 to 3280 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 2037.5 ug/kg

**Std Dev:** 593.9346 ug/kg

**Median:** 2165 ug/kg

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

**Totals for Matrix/Analyte:**
- Labs: Pass: 21
- Fail: 0
- Total: 21

**Shipment: Robust Mean:**
- 2037.5 ug/kg
- Std Dev: 593.9346 ug/kg
- Median: 2165 ug/kg

**Basis:** BiWeight LRE

**Analyte:** Benzyl butyl phthalate

**Sample:**
- Limits: 520 to 3280 ug/kg
- Target: 2614 ug/kg
- Prep Method: EPA 3546
- Technology: GC-MS
- Basis: BiWeight LRE
- Robust Mean: 2037.5 ug/kg
- Std Dev: 593.9346 ug/kg
- Median: 2165 ug/kg

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

**Totals for Matrix/Analyte:**
- Labs: Pass: 21
- Fail: 0
- Total: 21

---

**Score Date:** 09/01/2017

Proficiency Test Statistics

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Solid and Hazardous Waste Calcium, Total

**Analyte:** Calcium, Total

**Sample:** 0522

**Technology:** ICP-AES

**Prep Method:**
- **Target:** 11589 mg/kg
- **Limits:** 8570 to 14000 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 10600 mg/kg
- **Std Dev:** 0 mg/kg
- **Median:** 10600 mg/kg

A histogram is not displayed for Technology: ICP-AES 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: 23  Fail: 0  Total: 23

---

Solid and Hazardous Waste Calcium, Total

**Analyte:** Calcium, Total

**Sample:** 0522

**Technology:** ICP-AES

**Prep Method:**
- **Target:** 11589 mg/kg
- **Limits:** 8570 to 14000 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 11424.2 mg/kg
- **Std Dev:** 916.316 mg/kg
- **Median:** 11500 mg/kg

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

**Totals for Matrix/Analyte:**
- **Labs:** Pass: 23  Fail: 0  Total: 23

---

Solid and Hazardous Waste Calcium, Total

**Analyte:** Calcium, Total

**Sample:** 0522

**Technology:** ICP-AES

**Prep Method:**
- **Target:** 11589 mg/kg
- **Limits:** 8570 to 14000 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 10585 mg/kg
- **Std Dev:** 1011.1627 mg/kg
- **Median:** 10585 mg/kg

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2  Fail: 0  Total: 2

**Totals for Matrix/Analyte:**
- **Labs:** Pass: 23  Fail: 0  Total: 23

---

Solid and Hazardous Waste Calcium, Total

**Analyte:** Calcium, Total

**Sample:** 0522

**Technology:** ICP-MS

**Prep Method:**
- **Target:** 11589 mg/kg
- **Limits:** 8570 to 14000 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 11050 mg/kg
- **Std Dev:** 636.3961 mg/kg
- **Median:** 11050 mg/kg

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2  Fail: 0  Total: 2

**Totals for Matrix/Analyte:**
- **Labs:** Pass: 23  Fail: 0  Total: 23
Solid and Hazardous Waste Calcium, Total

- **Shipments:** 405
- **Matrix:** Solid and Hazardous Waste
- **Analyte:** Calcium, Total
- **Sample:** 0522
- **Technology:** ICP-MS
- **Prep Method:** EPA 3051A
- **Target:** 11589 mg/kg
- **Limits:** 8570 to 14000 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 12200 mg/kg
  - **Std Dev:** 0 mg/kg
  - **Median:** 12200 mg/kg

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

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 0
  - **Total:** 1
- **Fail:** 0
  - **Total:** 0
- **Total:** 23

Solid and Hazardous Waste Carbon tetrachloride

- **Shipments:** 405
- **Matrix:** Solid and Hazardous Waste
- **Analyte:** Carbon tetrachloride
- **Sample:** 0565
- **Technology:** GC-MS
- **Prep Method:** EPA 3051A-H
- **Target:** 2337 ug/kg
- **Limits:** 1360 to 3310 ug/kg
- **Basis:** Linear Regression
- **Robust Mean:** 1995 ug/kg
  - **Std Dev:** 7.0711 ug/kg
  - **Median:** 1995 ug/kg

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

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 24
  - **Total:** 25
- **Fail:** 1
  - **Total:** 25

**Test Results (End Groups Include Outliers)**

- **Robust Mean:** 2327.2 ug/kg
  - **Std Dev:** 753.6384 ug/kg
  - **Median:** 2330 ug/kg

**Basis:** Linear Regression

**Analyte:** Carbon tetrachloride

**Sample:** Limits: 1360 to 3310 ug/kg
**Target:** 2337 ug/kg
**Technology:** GC-MS
**Prep Method:** EPA 5035A-H

**Score Date:** 09/01/2017
### Solid and Hazardous Waste Carbon tetrachloride

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

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<td>Matrix:</td>
<td>Solid and Hazardous Waste</td>
</tr>
<tr>
<td>Analyte:</td>
<td>Cadmium, Total</td>
</tr>
<tr>
<td>Sample:</td>
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<td>Technology:</td>
<td>FAAS</td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 3050B</td>
</tr>
<tr>
<td>Target:</td>
<td>176 mg/kg</td>
</tr>
<tr>
<td>Limits:</td>
<td>129 to 222 mg/kg</td>
</tr>
<tr>
<td>Basis:</td>
<td>BiWeight LRE</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>190 mg/kg</td>
</tr>
<tr>
<td>Std Dev:</td>
<td>0 mg/kg</td>
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<tr>
<td>Median:</td>
<td>190 mg/kg</td>
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A histogram is not displayed for Technology: FAAS due to the limited number of participants.

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<tr>
<td>Analyte:</td>
<td>Cadmium, Total</td>
</tr>
<tr>
<td>Sample:</td>
<td>0522</td>
</tr>
<tr>
<td>Technology:</td>
<td>FAAS</td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 3050B</td>
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<td>Limits:</td>
<td>129 to 222 mg/kg</td>
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<td>Basis:</td>
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<td>Robust Mean:</td>
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A histogram is not displayed for Technology: FAAS due to the limited number of participants.

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<tr>
<td>Technology:</td>
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<td>EPA 3050B</td>
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<td>Limits:</td>
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A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.

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<tbody>
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<td>38</td>
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Score Date: 09/01/2017
Solid and Hazardous Waste Cadmium, Total

**Shipments**:
- 405
- 405
- 405

**Matrix**:
- Solid and Hazardous Waste
- Solid and Hazardous Waste
- Solid and Hazardous Waste

**Sample**:
- 0522
- 0522
- 0522

**Technology**:
- ICP-AES
- ICP-AES
- ICP-MS

**Prep Method**:
- EPA 3050B
- EPA 3051A
- EPA 3050B

**Target**:
- 176 mg/kg
- 176 mg/kg
- 176 mg/kg

**Limits**:
- 129 to 222 mg/kg
- 129 to 222 mg/kg
- 129 to 222 mg/kg

**Basis**:
- BiWeight LRE
- BiWeight LRE
- BiWeight LRE

**Robust Mean**:
- 175.7 mg/kg
- 166.6 mg/kg
- 162 mg/kg

**Std Dev**:
- 11.4538 mg/kg
- 5.4129 mg/kg
- 0 mg/kg

**Median**:
- 175 mg/kg
- 166 mg/kg
- 162 mg/kg

**Limits**:
- 129 to 222 mg/kg
- 129 to 222 mg/kg
- 129 to 222 mg/kg

**Target**:
- 176 mg/kg
- 176 mg/kg
- 176 mg/kg

**Technology**:
- ICP-AES
- ICP-MS
- ICP-AES

**Prep Method**:
- EPA 3050B
- EPA 3050B
- EPA 3050B

**Sample**:
- 0522
- 0522
- 0522

**Matrix**:
- Solid and Hazardous Waste
- Solid and Hazardous Waste
- Solid and Hazardous Waste

**Analyte**:
- Cadmium, Total
- Cadmium, Total
- Cadmium, Total

**Score Date**:
- 09/01/2017

A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.
### Solid and Hazardous Waste Cadmium, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analytes:** Cadmium, Total  
**Sample:** 0522  
**Technology:** ICP-MS  
**Prep Method:** EPA 3051A  
**Target:** 176 mg/kg  
**Limits:** 129 to 222 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 190.5 mg/kg  
**Std Dev:** 19.0919 mg/kg  
**Median:** 190.5 mg/kg  

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

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 2  
- Fail: 0  
- Total: 2

**Totals for Matrix/Analyte:**  
- Labs: Pass: 38  
- Fail: 0  
- Total: 38

---

### Solid and Hazardous Waste Chloride

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analytes:** Chloride  
**Sample:** 0563  
**Technology:** COLOR  
**Prep Method:**  
**Target:** 692 mg/kg  
**Limits:** 464 to 848 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 680 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 680 mg/kg  

A histogram is not displayed for Technology: COLOR 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: 14  
- Fail: 0  
- Total: 14

---

### Solid and Hazardous Waste Chloride

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analytes:** Chloride  
**Sample:** 0563  
**Technology:** IC-COND  
**Prep Method:**  
**Target:** 692 mg/kg  
**Limits:** 464 to 848 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 649.7 mg/kg  
**Std Dev:** 60.1041 mg/kg  
**Median:** 647 mg/kg  

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

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

---

### Solid and Hazardous Waste Chloride

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analytes:** Chloride  
**Sample:** 0563  
**Technology:** TITR  
**Prep Method:**  
**Target:** 692 mg/kg  
**Limits:** 464 to 848 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 664.4 mg/kg  
**Std Dev:** 124.9142 mg/kg  
**Median:** 691 mg/kg  

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

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

---

**Score Date:** 09/01/2017

**Proficiency Test Statistics**
Solid and Hazardous Waste Chlordane Total

Score Date: 09/01/2017

Proficiency Test Statistics

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Solid and Hazardous Waste Chlordane Total

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Chlordane Total

Sample: 0529

Technology: GC-ECD

Prep Method: EPA 3546

Target: 679 ug/kg

Limits: 120 to 792 ug/kg

Basis: BiWeight LRE

Robust Mean: 518.6 ug/kg

Std Dev: 88.8061 ug/kg

Median: 482 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 389  Fail: 458  Total: 597

Test Results (End Groups Include Outliers)

Number of Labs

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

Solid and Hazardous Waste Chrysene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Chrysene

Sample: 0524

Technology: GC-MS

Prep Method: EPA 3540C

Target: 2329 ug/kg

Limits: 580 to 2680 ug/kg

Basis: BiWeight LRE

Robust Mean: 1280 ug/kg

Std Dev: 197.9899 ug/kg

Median: 1560 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 458  Fail: 597  Total: 1055

Test Results (End Groups Include Outliers)

Number of Labs

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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Chrysene

**Test Results (End Groups Include Outliers)**

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<th>Matrix: Solid and Hazardous Waste</th>
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<tr>
<td>Analyte: Chrysene</td>
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<tr>
<td>Sample: 0524</td>
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<td>Technology: GC-MS</td>
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<tr>
<td>Prep Method: EPA 3545A</td>
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<tr>
<td>Target: 2329 ug/kg</td>
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<tr>
<td>Limits: 580 to 2680 ug/kg</td>
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</tr>
<tr>
<td>Basis: BiWeight LRE</td>
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</tr>
<tr>
<td>Robust Mean: 1890 ug/kg</td>
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</tr>
<tr>
<td>Std Dev: 184.5716 ug/kg</td>
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<tr>
<td>Median: 1845 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**

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**Test Results (End Groups Include Outliers)**

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<th>Shipment: 405</th>
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<td>Analyte: Chrysene</td>
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<td>Sample: 0524</td>
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<tr>
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<td>Prep Method: EPA 3546</td>
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<td>Target: 2329 ug/kg</td>
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<tr>
<td>Limits: 580 to 2680 ug/kg</td>
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<td>Basis: BiWeight LRE</td>
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<tr>
<td>Robust Mean: 1815 ug/kg</td>
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<td>Std Dev: 550.7873 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**

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**Test Results (End Groups Include Outliers)**

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<tr>
<td>Technology: GC-MS</td>
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<td>Prep Method: EPA 3550C</td>
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<tr>
<td>Target: 2329 ug/kg</td>
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<td>Limits: 580 to 2680 ug/kg</td>
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<td>Basis: BiWeight LRE</td>
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<tr>
<td>Robust Mean: 1504.3 ug/kg</td>
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<td>Std Dev: 441.8444 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**

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**Test Results (End Groups Include Outliers)**

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<td>Analyte: Chloroform</td>
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<td>Technology: GC-MS</td>
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<td>Prep Method:</td>
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<tr>
<td>Target: 5624 ug/kg</td>
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<tr>
<td>Limits: 3840 to 7460 ug/kg</td>
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<tr>
<td>Basis: Linear Regression</td>
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<tr>
<td>Robust Mean: 5430 ug/kg</td>
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<td>Std Dev: 42.4264 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**

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**Test Results (End Groups Include Outliers)**

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Chloroform

Analyte: Chloroform
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-H
Target: 5624 ug/kg
Limits: 3840 to 7460 ug/kg
Basis: Linear Regression
Robust Mean: 5516.8 ug/kg
Std Dev: 425.7928 ug/kg
Median: 5630 ug/kg

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

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

Solid and Hazardous Waste Chloroform

Analyte: Chloroform
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 5624 ug/kg
Limits: 3840 to 7460 ug/kg
Basis: Linear Regression
Robust Mean: 6065 ug/kg
Std Dev: 982.8784 ug/kg
Median: 6065 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Solid and Hazardous Waste Chloroform

Analyte: Chloroform
Sample: 0565
Technology: GC-ELCD/PID
Prep Method: EPA 5035A-L
Target: 5624 ug/kg
Limits: 3840 to 7460 ug/kg
Basis: Linear Regression
Robust Mean: 4880 ug/kg
Std Dev: 0 ug/kg
Median: 4880 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Solid and Hazardous Waste Cyanide, Total

Analyte: Cyanide, Total
Sample: 0542
Technology: AUTO
Prep Method:
Target: 56.1 mg/kg
Limits: 17.2 to 79 mg/kg
Basis: BiWeight LRE
Robust Mean: 40.5 mg/kg
Std Dev: 15.9193 mg/kg
Median: 37 mg/kg

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

Score Date: 09/01/2017
Proficiency Test Statistics
Solid and Hazardous Waste Cyanide, Total

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste

**Analyte:** Cyanide, Total

**Sample:** 0542

**Technology:** AUTO

**Prep Method:** EPA 9010C

**Target:** 56.1 mg/kg

**Limits:** 17.2 to 79 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 55.6 mg/kg

**Std Dev:** 19.4617 mg/kg

**Median:** 67.1 mg/kg

**Number of Labs:**
- 26
- 37
- 59
- 70
- 81

**Test Results (End Groups Include Outliers):**

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**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 5  Fail: 0  Total: 5

**Totals for Matrix/Analyte:**

- Labs: Pass: 18  Fail: 2  Total: 20

---

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste

**Analyte:** Cyanide, Total

**Sample:** 0542

**Technology:** COLOR

**Prep Method:** EPA 9010C

**Target:** 56.1 mg/kg

**Limits:** 17.2 to 79 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 48.2 mg/kg

**Std Dev:** 28.6467 mg/kg

**Median:** 55.1 mg/kg

**Number of Labs:**
- 4
- 59
- 70
- 81

**Test Results (End Groups Include Outliers):**

<table>
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<th>Number of Labs</th>
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**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 3  Fail: 1  Total: 4

**Totals for Matrix/Analyte:**

- Labs: Pass: 18  Fail: 2  Total: 20

---

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste

**Analyte:** Cyanide, Total

**Sample:** 0542

**Technology:** COLOR

**Prep Method:** EPA 9010C

**Target:** 56.1 mg/kg

**Limits:** 17.2 to 79 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 46.5 mg/kg

**Std Dev:** 21.8949 mg/kg

**Median:** 34.5 mg/kg

**Number of Labs:**
- 4
- 59
- 70
- 81

**Test Results (End Groups Include Outliers):**

<table>
<thead>
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<th>Fail</th>
<th>Total</th>
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<td>0</td>
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<td>0.5</td>
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<tr>
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<tr>
<td>3</td>
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<td>2</td>
</tr>
</tbody>
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**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 6  Fail: 1  Total: 7

**Totals for Matrix/Analyte:**

- Labs: Pass: 18  Fail: 2  Total: 20

---

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste

**Analyte:** Cobalt, Total

**Sample:** 0522

**Technology:** ICP-AES

**Prep Method:**

**Target:** 85.5 mg/kg

**Limits:** 62.5 to 106 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 75.5 mg/kg

**Std Dev:** 0 mg/kg

**Median:** 75.5 mg/kg

**Number of Labs:**
- 81

**Test Results (End Groups Include Outliers):**

<table>
<thead>
<tr>
<th>Number of Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>0.5</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
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<td>2</td>
</tr>
<tr>
<td>1.5</td>
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<td>1</td>
<td>2</td>
</tr>
<tr>
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<td>1</td>
<td>1</td>
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<td>2.5</td>
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</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 1  Fail: 0  Total: 1

**Totals for Matrix/Analyte:**

- Labs: Pass: 25  Fail: 1  Total: 26

---

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

---

**Solid and Hazardous Waste Cobalt, Total**

**Score Date:** 09/01/2017

**Proficiency Test Statistics**

Page 276 of 386
Solid and Hazardous Waste Cobalt, Total

Shipments: 405
Matrix: Solid and Hazardous Waste
Analyte: Cobalt, Total
Sample: 0522
Technology: ICP-AES
Prep Method: EPA 3050B
Target: 85.5 mg/kg
Limits: 62.5 to 106 mg/kg
Basis: BiWeight LRE
Robust Mean: 82.9 mg/kg
Std Dev: 27.7109 mg/kg
Median: 84 mg/kg

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

Number of Labs

Test Results (End Groups Include Outliers)

Shipment: 405
Matrix: Solid and Hazardous Waste
Analyte: Cobalt, Total
Sample: 0522
Technology: ICP-MS
Prep Method:
Target: 85.5 mg/kg
Limits: 62.5 to 106 mg/kg
Basis: BiWeight LRE
Robust Mean: 79.3 mg/kg
Std Dev: 0 mg/kg
Median: 79.3 mg/kg

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

Test Results (End Groups Include Outliers)

Score Date: 09/01/2017
Proficiency Test Statistics Page 277 of 386
Solid and Hazardous Waste Cobalt, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Cobalt, Total
Sample: 0522
Technology: ICP-MS
Prep Method: EPA 3051A
Target: 85.5 mg/kg
Limits: 62.5 to 106 mg/kg
Basis: BiWeight LRE
Robust Mean: 86.6 mg/kg
Std Dev: 0 mg/kg
Median: 86.6 mg/kg

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

Fail: 0  Labs:  Pass: 25  Fail: 1  Total: 26

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:

Labs:  Pass: 25  Fail: 1  Total: 26

Score Date: 09/01/2017

Proficiency Test Statistics  Page 278 of 386
Solid and Hazardous Waste Chromium, Total

Shipments: 405  

Matrix: Solid and Hazardous Waste

Analyte: Chromium, Total

Sample: 0522

Technology: ICP-AES

Prep Method:

Target: 192 mg/kg

Limits: 136 to 248 mg/kg

Basis: BiWeight LRE

Robust Mean: 176 mg/kg

Std Dev: 0 mg/kg

Median: 176 mg/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  
Fail: 0  
Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 5  
Fail: 0  
Total: 5

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

Test Results (End Groups Include Outliers)

Number of Labs

151 155 158 165 178 185 192 193 195 206 212 226

Robust Mean: 173 mg/kg

Std Dev: 0 mg/kg

Median: 173 mg/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  
Fail: 0  
Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 37  
Fail: 1  
Total: 38

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 279 of 386
Solid and Hazardous Waste Chromium, Total

Shipment: 405  Matrix: Solid and Hazardous Waste

Analyte: Chromium, Total
Sample: 0522
Technology: ICP-MS
Prep Method: EPA 3050B
Target: 192 mg/kg
Limits: 136 to 248 mg/kg
Basis: BiWeight LRE
Robust Mean: 205 mg/kg
Std Dev: 13.1149 mg/kg
Median: 200 mg/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 206  Fail: 0  Total: 206
Labs: Pass: 226  Fail: 0  Total: 226
Labs: Pass: 199  Fail: 0  Total: 199

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

Solid and Hazardous Waste Chromium VI

Shipment: 405  Matrix: Solid and Hazardous Waste

Analyte: Chromium VI
Sample: 0546
Technology: COLOR
Prep Method: EPA 3060A
Target: 221 mg/kg
Limits: 104 to 380 mg/kg
Basis: BiWeight LRE
Robust Mean: 251.9 mg/kg
Std Dev: 35.8913 mg/kg
Median: 266 mg/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 17  Fail: 0  Total: 17
Labs: Pass: 221  Fail: 0  Total: 221
Labs: Pass: 217  Fail: 0  Total: 217

Score Date: 09/01/2017  Proficiency Test Statistics  Page 280 of 386
Solid and Hazardous Waste Chromium VI

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste  
**Analyte:** Chromium VI  
**Sample:** 0546  
**Technology:** IC  
**Prep Method:**  
- **Target:** 221 mg/kg  
- **Limits:** 104 to 380 mg/kg  
- **Basis:** BiWeight LRE  
- **Robust Mean:** 239 mg/kg  
- **Std Dev:** 0 mg/kg  
- **Median:** 239 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 1  
- Fail: 0  
- Total: 1  

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

Solid and Hazardous Waste Copper, Total

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste  
**Analyte:** Copper, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:**  
- **Target:** 139 mg/kg  
- **Limits:** 102 to 170 mg/kg  
- **Basis:** BiWeight LRE  
- **Robust Mean:** 130 mg/kg  
- **Std Dev:** 0 mg/kg  
- **Median:** 130 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 1  
- Fail: 0  
- Total: 1  

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

Solid and Hazardous Waste Copper, Total

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste  
**Analyte:** Copper, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:** EPA 3050B  
- **Target:** 139 mg/kg  
- **Limits:** 102 to 170 mg/kg  
- **Basis:** BiWeight LRE  
- **Robust Mean:** 137 mg/kg  
- **Std Dev:** 33.0599 mg/kg  
- **Median:** 137 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 18  
- Fail: 1  
- Total: 19  

Solid and Hazardous Waste Copper, Total

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste  
**Analyte:** Copper, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:** EPA 3051A  
- **Target:** 139 mg/kg  
- **Limits:** 102 to 170 mg/kg  
- **Basis:** BiWeight LRE  
- **Robust Mean:** 131.3 mg/kg  
- **Std Dev:** 13.8414 mg/kg  
- **Median:** 130.5 mg/kg  

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

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
**Page 281 of 386**
Solid and Hazardous Waste Copper, Total

**Score Date:** 09/01/2017

**Analyte:** Copper, Total

**Sample:** 0522

**Technology:** ICP-MS

**Prep Method:**
- **Target:** 139 mg/kg
- **Limits:** 102 to 170 mg/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 122 mg/kg
- **Std Dev:** 0 mg/kg
- **Median:** 122 mg/kg

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 31 Fail: 1 Total: 32

**Shipment:**

**Robust Mean:** 122 mg/kg

**Std Dev:** 0 mg/kg

**Median:** 122 mg/kg

**Basis:** BiWeight LRE

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

---

Solid and Hazardous Waste delta-BHC

**Score Date:** 09/01/2017

**Analyte:** delta-BHC

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:**
- **Target:** 302 ug/kg
- **Limits:** 59.8 to 350 ug/kg
- **Basis:** BiWeight LRE
- **Robust Mean:** 227 ug/kg
- **Std Dev:** 0 ug/kg
- **Median:** 227 ug/kg

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 22 Fail: 0 Total: 22

**Shipment:**

**Robust Mean:** 227 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 227 ug/kg

A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.
Solid and Hazardous Waste delta-BHC Test Results (End Groups Include Outliers)

Number of Labs

<table>
<thead>
<tr>
<th>Number</th>
<th>Count</th>
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Test Results (End Groups Include Outliers)

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<th>Shipment</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Matrix</td>
<td>Solid and Hazardous Waste</td>
</tr>
<tr>
<td>Analyte</td>
<td>delta-BHC</td>
</tr>
<tr>
<td>Sample</td>
<td>0527</td>
</tr>
<tr>
<td>Technology</td>
<td>GC-ECD</td>
</tr>
<tr>
<td>Prep Method</td>
<td>EPA 3540C</td>
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<tr>
<td>Target</td>
<td>302 ug/kg</td>
</tr>
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<td>Limits</td>
<td>59.8 to 350 ug/kg</td>
</tr>
<tr>
<td>Basis</td>
<td>BiWeight LRE</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>198.7 ug/kg</td>
</tr>
<tr>
<td>Std Dev</td>
<td>36.1709 ug/kg</td>
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<tr>
<td>Median</td>
<td>217 ug/kg</td>
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Totals for Matrix/Analyte/Technology:

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

Solid and Hazardous Waste delta-BHC

Test Results (End Groups Include Outliers)

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<th>Shipment</th>
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<tbody>
<tr>
<td>Matrix</td>
<td>Solid and Hazardous Waste</td>
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<td>Analyte</td>
<td>delta-BHC</td>
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<td>Sample</td>
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<tr>
<td>Limits</td>
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</tr>
<tr>
<td>Basis</td>
<td>BiWeight LRE</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>200 ug/kg</td>
</tr>
<tr>
<td>Std Dev</td>
<td>0 ug/kg</td>
</tr>
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<td>Median</td>
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Totals for Matrix/Analyte/Technology:

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Solid and Hazardous Waste delta-BHC

Test Results (End Groups Include Outliers)

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<th>Shipment</th>
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<td>delta-BHC</td>
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<td>Technology</td>
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<td>Limits</td>
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</tr>
<tr>
<td>Basis</td>
<td>BiWeight LRE</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>233 ug/kg</td>
</tr>
<tr>
<td>Std Dev</td>
<td>54.8817 ug/kg</td>
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<tr>
<td>Median</td>
<td>214 ug/kg</td>
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Totals for Matrix/Analyte/Technology:

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Solid and Hazardous Waste delta-BHC

Test Results (End Groups Include Outliers)

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<tbody>
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<td>Matrix</td>
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<td>Analyte</td>
<td>delta-BHC</td>
</tr>
<tr>
<td>Sample</td>
<td>0527</td>
</tr>
<tr>
<td>Technology</td>
<td>GC-ECD</td>
</tr>
<tr>
<td>Prep Method</td>
<td>EPA 3546</td>
</tr>
<tr>
<td>Target</td>
<td>302 ug/kg</td>
</tr>
<tr>
<td>Limits</td>
<td>59.8 to 350 ug/kg</td>
</tr>
<tr>
<td>Basis</td>
<td>BiWeight LRE</td>
</tr>
<tr>
<td>Robust Mean</td>
<td>220.4 ug/kg</td>
</tr>
<tr>
<td>Std Dev</td>
<td>32.3775 ug/kg</td>
</tr>
<tr>
<td>Median</td>
<td>231 ug/kg</td>
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Totals for Matrix/Analyte/Technology:

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Score Date: 09/01/2017

Proficiency Test Statistics Page 283 of 386
Solid and Hazardous Waste delta-BHC

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix</th>
<th>Analyte</th>
<th>Technology</th>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
<th>Robust Mean</th>
<th>Std Dev</th>
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<tbody>
<tr>
<td>405</td>
<td>Solid and Hazardous Waste</td>
<td>delta-BHC</td>
<td>GC-ECD</td>
<td>EPA 3550C</td>
<td>302 ug/kg</td>
<td>59.8 to 350 ug/kg</td>
<td>BiWeight LRE</td>
<td>165.7 ug/kg</td>
<td>63.7626 ug/kg</td>
<td>167 ug/kg</td>
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Test Results (End Groups Include Outliers)

Number of Labs: 22

Solid and Hazardous Waste Dibromomethane

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix</th>
<th>Analyte</th>
<th>Technology</th>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>Solid and Hazardous Waste</td>
<td>Dibromomethane</td>
<td>GC-MS</td>
<td></td>
<td></td>
<td>2890 to 6740 ug/kg</td>
<td>Target Value +/- a fixed percent</td>
<td>4680 ug/kg</td>
<td>419.4043 ug/kg</td>
<td>4610 ug/kg</td>
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</table>

Test Results (End Groups Include Outliers)

Number of Labs: 22

Solid and Hazardous Waste Dibromomethane

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix</th>
<th>Analyte</th>
<th>Technology</th>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>Solid and Hazardous Waste</td>
<td>Dibromomethane</td>
<td>GC-MS</td>
<td>EPA 5035A-H</td>
<td>4813 ug/kg</td>
<td>2890 to 6740 ug/kg</td>
<td>Target Value +/- a fixed percent</td>
<td>4586.3 ug/kg</td>
<td>445.8851 ug/kg</td>
<td>4655 ug/kg</td>
</tr>
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</table>

Test Results (End Groups Include Outliers)

Number of Labs: 22

Solid and Hazardous Waste Dibromomethane

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix</th>
<th>Analyte</th>
<th>Technology</th>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>Solid and Hazardous Waste</td>
<td>Dibromomethane</td>
<td>GC-MS</td>
<td>EPA 5035A-L</td>
<td>4813 ug/kg</td>
<td>2890 to 6740 ug/kg</td>
<td>Target Value +/- a fixed percent</td>
<td>5075 ug/kg</td>
<td>629.325 ug/kg</td>
<td>5075 ug/kg</td>
</tr>
</tbody>
</table>

Test Results (End Groups Include Outliers)

Number of Labs: 22
Solid and Hazardous Waste Dibromomethane

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Dibromomethane
Sample: 0565
Technology: GCELCD/PID
Prep Method: EPA 5035A-L
Target: 4813 ug/kg
Limits: 2890 to 6740 ug/kg
Basis: Target Value +/- a fixed percent
Robust Mean: 4050 ug/kg
Std Dev: 0 ug/kg
Median: 4050 ug/kg

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: 22  Fail: 0  Total: 22

Solid and Hazardous Waste Dibenzofuran

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Dibenzofuran
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 10656 ug/kg
Limits: 2220 to 11700 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 5320 ug/kg
Std Dev: 0 ug/kg
Median: 5320 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 20  Fail: 0  Total: 20

Solid and Hazardous Waste Dibenzofuran

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Dibenzofuran
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3541
Target: 10656 ug/kg
Limits: 2220 to 11700 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 8150 ug/kg
Std Dev: 0 ug/kg
Median: 8150 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 20  Fail: 0  Total: 20

Score Date: 09/01/2017
Proficiency Test Statistics
Page 285 of 386
Solid and Hazardous Waste Dibenzofuran

Test Results (End Groups Include Outliers)

Number of Labs

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Robust Mean: 7420 ug/kg</td>
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<tr>
<td>Std Dev: 2214.4224 kg</td>
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<td>Median: 7825 ug/kg</td>
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Totals for Matrix/Analyte/Technology:

Labs: Pass: 4 Fail: 0 Total: 4

Labs: Pass: 21 Fail: 0 Total: 21

Solid and Hazardous Waste Diethyl phthalate

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Diethyl phthalate

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Diethyl phthalate
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 2464 ug/kg
Limits: 302 to 2980 ug/kg
Basis: BiWeight LRE
Robust Mean: 1415 ug/kg
Std Dev: 7.0711 ug/kg
Median: 1415 ug/kg

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

Fail: 0  Labs:  Pass: 21  Total: 21

Totals for Matrix/Analyte/Technology:
Labs:  Pass: 2  Fail: 0  Total: 2

Test Results (End Groups Include Outliers)
Number of Labs

Solid and Hazardous Waste Diethyl phthalate

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Diethyl phthalate
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 2464 ug/kg
Limits: 302 to 2980 ug/kg
Basis: BiWeight LRE
Robust Mean: 2095 ug/kg
Std Dev: 302.4897 ug/kg
Median: 2095 ug/kg

Fail: 0  Labs:  Pass: 21  Total: 21

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

Test Results (End Groups Include Outliers)
Number of Labs

Solid and Hazardous Waste Diethyl phthalate

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Diethyl phthalate
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 2464 ug/kg
Limits: 302 to 2980 ug/kg
Basis: BiWeight LRE
Robust Mean: 1867.5 ug/kg
Std Dev: 513.7039 ug/kg
Median: 1975 ug/kg

Fail: 0  Labs:  Pass: 21  Total: 21

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

Test Results (End Groups Include Outliers)
Number of Labs

Solid and Hazardous Waste Diethyl phthalate

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Diethyl phthalate
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3550C
Target: 2464 ug/kg
Limits: 302 to 2980 ug/kg
Basis: BiWeight LRE
Robust Mean: 1488.1 ug/kg
Std Dev: 346.406 ug/kg
Median: 1420 ug/kg

Fail: 0  Labs:  Pass: 21  Total: 21

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

Test Results (End Groups Include Outliers)
Number of Labs

Score Date: 09/01/2017  Proficiency Test Statistics  Page 287 of 386
Solid and Hazardous Waste Dicamba

Shipments: 405  |  Matrix: Solid and Hazardous Waste
Analyte: Dicamba
Sample: 0528
Technology: GC-ECD
Prep Method:
Target: 548 ug/kg
Limits: 54.8 to 774 ug/kg
Basis: Stat. Norm in SW with conditions for the 10% - 11
Robust Mean: 354.9 ug/kg
Std Dev: 121.0762 ug/kg
Median: 365.5 ug/kg

Number of Labs

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

Solid and Hazardous Waste Dieldrin

Shipments: 405  |  Matrix: Solid and Hazardous Waste
Analyte: Dieldrin
Sample: 0527
Technology: GC-ECD
Prep Method:
Target: 188 ug/kg
Limits: 42.7 to 207 ug/kg
Basis: Manual Limits
Robust Mean: 130 ug/kg
Std Dev: 0 ug/kg
Median: 130 ug/kg

Number of Labs

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

Solid and Hazardous Waste Dieldrin

Shipments: 405  |  Matrix: Solid and Hazardous Waste
Analyte: Dieldrin
Sample: 0527
Technology: GC-ECD
Prep Method:
Target: 188 ug/kg
Limits: 42.7 to 207 ug/kg
Basis: Manual Limits
Robust Mean: 115.8 ug/kg
Std Dev: 15.7817 ug/kg
Median: 120 ug/kg

Number of Labs

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

Solid and Hazardous Waste Dieldrin

Shipments: 405  |  Matrix: Solid and Hazardous Waste
Analyte: Dieldrin
Sample: 0527
Technology: GC-ECD
Prep Method:
Target: 188 ug/kg
Limits: 42.7 to 207 ug/kg
Basis: Manual Limits
Robust Mean: 130 ug/kg
Std Dev: 0 ug/kg
Median: 130 ug/kg

Number of Labs

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

Score Date: 09/11/2017
Proficiency Test Statistics
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Solid and Hazardous Waste Dieldrin

**Shipments:**
- 405
- 84.5
- 91.3
- 98
- 104.8
- 138.5

**Matrix:** Solid and Hazardous Waste

**Analyte:** Dieldrin

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3545A

**Target:** 188 ug/kg

**Limits:** 42.7 to 207 ug/kg

**Basis:** Manual Limits

**Robust Mean:** 141 ug/kg

**Std Dev:** 27.5439 ug/kg

**Median:** 135 ug/kg

**Totals for Matrix/Analyte:**
- Labs: 22
- Fail: 0
- Total: 22

**Shipment:**
- Robust Mean: 135 ug/kg
- Std Dev: 15.7639 ug/kg
- Median: 131 ug/kg

**Analyte:** Dieldrin

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3546

**Target:** 188 ug/kg

**Limits:** 42.7 to 207 ug/kg

**Basis:** Manual Limits

**Robust Mean:** 104.6 ug/kg

**Std Dev:** 32.3272 ug/kg

**Median:** 105 ug/kg

**Totals for Matrix/Analyte:**
- Labs: 9
- Fail: 0
- Total: 9

**Shipment:**
- Robust Mean: 95.8 ug/kg
- Std Dev: 42.5763 ug/kg
- Median: 100 ug/kg

**Analyte:** Dinoseb

**Sample:** 0528

**Technology:** GC-ECD

**Prep Method:**
- Target: 199 ug/kg
- Limits: 70.4 to 219 ug/kg
- Basis: Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 95.8 ug/kg

**Std Dev:** 42.5763 ug/kg

**Median:** 100 ug/kg

**Totals for Matrix/Analyte:**
- Labs: 9
- Fail: 0
- Total: 9

**Shipment:**
- Robust Mean: 188 ug/kg
- Std Dev: 27.5439 ug/kg
- Median: 135 ug/kg

**Analyte:** Dinoseb

**Sample:** 0528

**Technology:** GC-ECD

**Prep Method:**
- Target: 199 ug/kg
- Limits: 70.4 to 219 ug/kg
- Basis: Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 95.8 ug/kg

**Std Dev:** 42.5763 ug/kg

**Median:** 100 ug/kg

**Totals for Matrix/Analyte:**
- Labs: 9
- Fail: 0
- Total: 9

**Shipment:**
- Robust Mean: 104.6 ug/kg
- Std Dev: 32.3272 ug/kg
- Median: 105 ug/kg

**Analyte:** Dinoseb

**Sample:** 0528

**Technology:** GC-ECD

**Prep Method:**
- Target: 199 ug/kg
- Limits: 70.4 to 219 ug/kg
- Basis: Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 95.8 ug/kg

**Std Dev:** 42.5763 ug/kg

**Median:** 100 ug/kg

**Totals for Matrix/Analyte:**
- Labs: 9
- Fail: 0
- Total: 9

**Shipment:**
- Robust Mean: 135 ug/kg
- Std Dev: 15.7639 ug/kg
- Median: 131 ug/kg

**Analyte:** Dieldrin

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3545A

**Target:** 188 ug/kg

**Limits:** 42.7 to 207 ug/kg

**Basis:** Manual Limits

**Robust Mean:** 141 ug/kg

**Std Dev:** 27.5439 ug/kg

**Median:** 135 ug/kg

**Totals for Matrix/Analyte:**
- Labs: 22
- Fail: 0
- Total: 22

**Shipment:**
- Robust Mean: 135 ug/kg
- Std Dev: 15.7639 ug/kg
- Median: 131 ug/kg

**Analyte:** Dieldrin

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3546

**Target:** 188 ug/kg

**Limits:** 42.7 to 207 ug/kg

**Basis:** Manual Limits

**Robust Mean:** 104.6 ug/kg

**Std Dev:** 32.3272 ug/kg

**Median:** 105 ug/kg

**Totals for Matrix/Analyte:**
- Labs: 9
- Fail: 0
- Total: 9

**Shipment:**
- Robust Mean: 188 ug/kg
- Std Dev: 27.5439 ug/kg
- Median: 135 ug/kg

**Analyte:** Dieldrin

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3545A

**Target:** 188 ug/kg

**Limits:** 42.7 to 207 ug/kg

**Basis:** Manual Limits

**Robust Mean:** 141 ug/kg

**Std Dev:** 27.5439 ug/kg

**Median:** 135 ug/kg

**Totals for Matrix/Analyte:**
- Labs: 22
- Fail: 0
- Total: 22
Solid and Hazardous Waste Dimethyl phthalate

Shipments:

Matrix: Solid and Hazardous Waste
Sample: 0524
Technology: GC-MS

Prep Method:
Target: 14105 ug/kg
Limits: 3260 to 15500 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11

Robust Mean: 6930 ug/kg
Std Dev: 466.6905 ug/kg
Median: 6930 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte:
Labs: Pass: 21 Fail: 0 Total: 21

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

Score Date: 09/01/2017
Solid and Hazardous Waste Dimethyl phthalate

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Analyte:** Dimethyl phthalate

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3550C

**Target:** 14105 ug/kg

**Limits:** 3260 to 15500 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 7311 ug/kg

**Std Dev:** 1861.4253 ug/kg

**Median:** 6640 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 4660
- Labs: Fail: 0
- Total: 4660

**Scores:**
- 0
- 0.5
- 1
- 1.5
- 2

**Test Results:**

**Number of Labs:**
- 4660
- 5890
- 7120
- 8350
- 9580

**Fail:** 0

**Labs:** Pass: 21

**Fail:** 0

**Total:** 21

---

Solid and Hazardous Waste Diesel Range Organics

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Analyte:** Diesel Range Organics

**Sample:** 0553

**Technology:** GC-FID

**Prep Method:**
- **EPA 3545A**

**Target:** 2795 mg/kg

**Limits:** 884 to 3300 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 2229.2 mg/kg

**Std Dev:** 1124.1429 mg/kg

**Median:** 2130 mg/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1337
- Labs: Fail: 1
- Total: 1338

**Scores:**
- 0
- 0.5
- 1
- 1.5
- 2

**Test Results:**

**Number of Labs:**
- 1337
- 2090
- 2216
- 2467

**Fail:** 1

**Labs:** Pass: 17

**Fail:** 1

**Total:** 18

---

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

---

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Analyte:** Diesel Range Organics

**Sample:** 0553

**Technology:** GC-FID

**Prep Method:**
- **EPA 3546**

**Target:** 2795 mg/kg

**Limits:** 884 to 3300 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1992 mg/kg

**Std Dev:** 231.5599 mg/kg

**Median:** 1970 mg/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1588
- Labs: Fail: 0
- Total: 5

**Scores:**
- 0
- 0.5
- 1
- 1.5
- 2

**Test Results:**

**Number of Labs:**
- 1588
- 1965
- 2216
- 2467

**Fail:** 0

**Labs:** Pass: 17

**Fail:** 1

**Total:** 18

---

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Analyte:** Diesel Range Organics

**Sample:** 0553

**Technology:** GC-FID

**Prep Method:**
- **EPA 3545A**

**Target:** 2795 mg/kg

**Limits:** 884 to 3300 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1720 mg/kg

**Std Dev:** 1216.2237 mg/kg

**Median:** 2372 mg/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2
- Labs: Fail: 0
- Total: 2

**Scores:**
- 0
- 0.5
- 1
- 1.5
- 2

**Test Results:**

**Number of Labs:**
- 185
- 324
- 456
- 589
- 712

**Fail:** 0

**Labs:** Pass: 17

**Fail:** 1

**Total:** 18

---

Solid and Hazardous Waste Diesel Range Organics

**Score Date:** 09/01/2017
### Solid and Hazardous Waste Diesel Range Organics

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**Totals for Matrix/Analyte/Technology:**

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**Score Date:** 09/06/2017

### Solid and Hazardous Waste Endrin aldehyde

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**Score Date:** 09/06/2017

### Solid and Hazardous Waste Endrin aldehyde

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<td>Median:</td>
<td>1.7 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**

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**Score Date:** 09/06/2017

### Solid and Hazardous Waste Endrin aldehyde

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**Totals for Matrix/Analyte/Technology:**

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**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 0 |
- Fail: 0 |
- Total: 0

**Test Results (End Groups Include Outliers):**
- Shipment: 0 |
- Labs: Pass: 0 |
- Fail: 0 |
- Total: 0

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<th>Shipment</th>
<th>405</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Endrin aldehyde</td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>0527</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>GC-ECD</td>
<td></td>
</tr>
<tr>
<td>Prep Method</td>
<td>EPA 3546</td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>50 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 0 to 50 ug/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basis</td>
<td>Natural Blanks</td>
<td></td>
</tr>
<tr>
<td>Robust Mean</td>
<td>5 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev</td>
<td>0 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>5 ug/kg</td>
<td></td>
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</tbody>
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**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 5 |
- Fail: 0 |
- Total: 5

**Test Results (End Groups Include Outliers):**
- Shipment: 0.5 |
- Labs: Pass: 5 |
- Fail: 0 |
- Total: 5

---

<table>
<thead>
<tr>
<th>Shipment</th>
<th>405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Endrin aldehyde</td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>0527</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>GC-ECD</td>
<td></td>
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<tr>
<td>Prep Method</td>
<td>EPA 3550C</td>
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<tr>
<td>Target</td>
<td>50 ug/kg</td>
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<td>Limits: 0 to 50 ug/kg</td>
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<tr>
<td>Basis</td>
<td>Natural Blanks</td>
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<tr>
<td>Robust Mean</td>
<td>4.6 ug/kg</td>
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<tr>
<td>Std Dev</td>
<td>1.1773 ug/kg</td>
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<td>Median</td>
<td>5 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 8 |
- Fail: 0 |
- Total: 8

**Test Results (End Groups Include Outliers):**
- Shipment: 1.5 |
- Labs: Pass: 8 |
- Fail: 0 |
- Total: 8

---

<table>
<thead>
<tr>
<th>Shipment</th>
<th>405</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Endrin Ketone</td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>0527</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>GC-ECD</td>
<td></td>
</tr>
<tr>
<td>Prep Method:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>332 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 69 to 381 ug/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basis</td>
<td>BiWeight LRE</td>
<td></td>
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<tr>
<td>Robust Mean</td>
<td>210.5 ug/kg</td>
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</tr>
<tr>
<td>Std Dev</td>
<td>24.4609 ug/kg</td>
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<tr>
<td>Median</td>
<td>206 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 4 |
- Fail: 0 |
- Total: 4

**Test Results (End Groups Include Outliers):**
- Shipment: 3 |
- Labs: Pass: 4 |
- Fail: 0 |
- Total: 4

---

**Score Date:** 09/01/2017

**Proficiency Test Statistics**
Solid and Hazardous Waste Endrin Ketone

Shipments:
- 405
- 0527

Analyte: Endrin Ketone
Sample: 0527

Technology: GC-ECD
Prep Method: EPA 3540C
Target: 332 ug/kg
Limits: 69 to 381 ug/kg
Basis: BiWeight LRE
Robust Mean: 230 ug/kg
Std Dev: 1.4142 ug/kg
Median: 230 ug/kg

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

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

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1 1.5 2

199 253 307

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1 1.5 2

226 253 280

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1 1.5 2

91 172 253 280

Test Results (End Groups Include Outliers)

Number of Labs

0 0.5 1 1.5 2

199 253 307

Score Date: 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste Endrin

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Endrin
Sample: 0527
Technology: GC-ECD

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

Prep Method:

Target: 496 ug/kg
Limits: 179 to 546 ug/kg
Basis: Manual Limits
Robust Mean: 348 ug/kg
Std Dev: 348 ug/kg
Median: 348 ug/kg

Fail: 0  
Labs: Pass: 20  Fail: 2  Total: 22

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Endrin
Sample: 0527
Technology: GC-ECD

Prep Method: EPA 3540C

Target: 496 ug/kg
Limits: 179 to 546 ug/kg
Basis: Manual Limits
Robust Mean: 319 ug/kg
Std Dev: 25,9422 ug/kg
Median: 327 ug/kg

Fail: 0  
Labs: Pass: 3  Fail: 0  Total: 3

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:
Labs: Pass: 20  Fail: 2  Total: 22

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Endrin
Sample: 0527
Technology: GC-ECD

Prep Method: EPA 3541

Target: 496 ug/kg
Limits: 179 to 546 ug/kg
Basis: Manual Limits
Robust Mean: 330 ug/kg
Std Dev: 0 ug/kg
Median: 330 ug/kg

Fail: 0  
Labs: Pass: 20  Fail: 2  Total: 22

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Endrin
Sample: 0527
Technology: GC-ECD

Prep Method: EPA 3545A

Target: 496 ug/kg
Limits: 179 to 546 ug/kg
Basis: Manual Limits
Robust Mean: 393 ug/kg
Std Dev: 96,4883 ug/kg
Median: 371 ug/kg

Fail: 0  
Labs: Pass: 20  Fail: 2  Total: 22

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

Totals for Matrix/Analyte:
Labs: Pass: 20  Fail: 2  Total: 22

Score Date: 09/11/2017
Proficiency Test Statistics
Solid and Hazardous Waste Endrin

Shipment: 405  
Matrix: Solid and Hazardous Waste

Analyte: Endrin
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3546
Target: 496 ug/kg
Limits: 179 to 546 ug/kg
Basis: Manual Limits
Robust Mean: 374.4 ug/kg
Std Dev: 64.4306 ug/kg
Median: 413 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 272  Fail: 350  Total: 428

Test Results (End Groups Include Outliers)

Number of Labs

Solid and Hazardous Waste Endrin Test Results (End Groups Include Outliers)

Number of Labs

Solid and Hazardous Waste Endosulfan I

Shipment: 405  
Matrix: Solid and Hazardous Waste

Analyte: Endosulfan I
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3550C
Target: 496 ug/kg
Limits: 179 to 546 ug/kg
Basis: Manual Limits
Robust Mean: 322.5 ug/kg
Std Dev: 114.6199 ug/kg
Median: 337 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 155  Fail: 214  Total: 363

Test Results (End Groups Include Outliers)

Number of Labs

Solid and Hazardous Waste Endosulfan I Test Results (End Groups Include Outliers)

Number of Labs

Solid and Hazardous Waste Endosulfan I

Shipment: 405  
Matrix: Solid and Hazardous Waste

Analyte: Endosulfan I
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3540C
Target: 345 ug/kg
Limits: 81.7 to 380 ug/kg
Basis: Manual Limits
Robust Mean: 236 ug/kg
Std Dev: 0 ug/kg
Median: 236 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 165  Fail: 214  Total: 383

Test Results (End Groups Include Outliers)

Number of Labs

Solid and Hazardous Waste Endosulfan I Test Results (End Groups Include Outliers)

Number of Labs

Solid and Hazardous Waste Endosulfan I

Shipment: 405  
Matrix: Solid and Hazardous Waste

Analyte: Endosulfan I
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3540C
Target: 345 ug/kg
Limits: 81.7 to 380 ug/kg
Basis: Manual Limits
Robust Mean: 218.7 ug/kg
Std Dev: 41.6693 ug/kg
Median: 223 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 165  Fail: 214  Total: 383

Test Results (End Groups Include Outliers)

Number of Labs

Solid and Hazardous Waste Endosulfan I Test Results (End Groups Include Outliers)

Number of Labs

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

Score Date: 09/11/2017
Proficiency Test Statistics  Page 296 of 386
## Solid and Hazardous Waste Endosulfan I

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte:</td>
<td>Endosulfan I</td>
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<tr>
<td>Sample:</td>
<td>0527</td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-ECD</td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 3541</td>
</tr>
<tr>
<td>Target:</td>
<td>345 ug/kg</td>
</tr>
<tr>
<td>Limits:</td>
<td>81.7 to 380 ug/kg</td>
</tr>
<tr>
<td>Basis:</td>
<td>Manual Limits</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>220 ug/kg</td>
</tr>
<tr>
<td>Std Dev:</td>
<td>0 ug/kg</td>
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<tr>
<td>Median:</td>
<td>220 ug/kg</td>
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A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.

### Test Results (End Groups Include Outliers)

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### Totals for Matrix/Analyte/Technology:

- Labs: 22
- Pass: 22
- Fail: 0
- Total: 22

### Solid and Hazardous Waste Endosulfan I

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Endosulfan I</td>
</tr>
<tr>
<td>Sample:</td>
<td>0527</td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-ECD</td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 3545A</td>
</tr>
<tr>
<td>Target:</td>
<td>345 ug/kg</td>
</tr>
<tr>
<td>Limits:</td>
<td>81.7 to 380 ug/kg</td>
</tr>
<tr>
<td>Basis:</td>
<td>Manual Limits</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>245.8 ug/kg</td>
</tr>
<tr>
<td>Std Dev:</td>
<td>64.2826 ug/kg</td>
</tr>
<tr>
<td>Median:</td>
<td>225 ug/kg</td>
</tr>
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</table>

### Totals for Matrix/Analyte/Technology:

- Labs: 22
- Pass: 4
- Fail: 0
- Total: 4

### Solid and Hazardous Waste Endosulfan I

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte:</td>
<td>Endosulfan I</td>
</tr>
<tr>
<td>Sample:</td>
<td>0527</td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-ECD</td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 3546</td>
</tr>
<tr>
<td>Target:</td>
<td>345 ug/kg</td>
</tr>
<tr>
<td>Limits:</td>
<td>81.7 to 380 ug/kg</td>
</tr>
<tr>
<td>Basis:</td>
<td>Manual Limits</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>229.8 ug/kg</td>
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<tr>
<td>Std Dev:</td>
<td>50.0819 ug/kg</td>
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<tr>
<td>Median:</td>
<td>234 ug/kg</td>
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</tbody>
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### Totals for Matrix/Analyte/Technology:

- Labs: 22
- Pass: 5
- Fail: 0
- Total: 5

### Solid and Hazardous Waste Endosulfan I

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte:</td>
<td>Endosulfan I</td>
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<tr>
<td>Sample:</td>
<td>0527</td>
</tr>
<tr>
<td>Technology:</td>
<td>GC-ECD</td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 3550C</td>
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<tr>
<td>Target:</td>
<td>345 ug/kg</td>
</tr>
<tr>
<td>Limits:</td>
<td>81.7 to 380 ug/kg</td>
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<tr>
<td>Basis:</td>
<td>Manual Limits</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>179.8 ug/kg</td>
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<tr>
<td>Std Dev:</td>
<td>54.9554 ug/kg</td>
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<tr>
<td>Median:</td>
<td>195.5 ug/kg</td>
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</tbody>
</table>

### Totals for Matrix/Analyte/Technology:

- Labs: 22
- Pass: 8
- Fail: 0
- Total: 8

### Score Date: 09/11/2017

Proficiency Test Statistics

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Solid and Hazardous Waste Endosulfan II

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Endosulfan II
Sample: 0527
Technology: GC-ECD
Prep Method:
Target: 358 ug/kg
Limits: 86.6 to 403 ug/kg
Basis: BiWeight LRE
Robust Mean: 255 ug/kg
Std Dev: 0 ug/kg
Median: 255 ug/kg

A histogram is not displayed for Technology: GC-ECD 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: 21  Fail: 1  Total: 22

Test Results (End Groups Include Outliers)

Number of Labs

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix</th>
<th>Analyte</th>
<th>Sample</th>
<th>Technology</th>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
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</thead>
<tbody>
<tr>
<td>405</td>
<td>Solid and Hazardous Waste</td>
<td>Endosulfan II</td>
<td>0527</td>
<td>GC-ECD</td>
<td>EPA 3540C</td>
<td>358</td>
<td>86.6 to 403 ug/kg</td>
<td>BiWeight LRE</td>
<td>236.7 ug/kg</td>
<td>24,0069 ug/kg</td>
<td>249 ug/kg</td>
</tr>
<tr>
<td>405</td>
<td>Solid and Hazardous Waste</td>
<td>Endosulfan II</td>
<td>0527</td>
<td>GC-ECD</td>
<td>EPA 3541</td>
<td>358</td>
<td>86.6 to 403 ug/kg</td>
<td>BiWeight LRE</td>
<td>240 ug/kg</td>
<td>0 ug/kg</td>
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<tr>
<td>405</td>
<td>Solid and Hazardous Waste</td>
<td>Endosulfan II</td>
<td>0527</td>
<td>GC-ECD</td>
<td>EPA 3545A</td>
<td>358</td>
<td>86.6 to 403 ug/kg</td>
<td>BiWeight LRE</td>
<td>272.8 ug/kg</td>
<td>57.1044 ug/kg</td>
<td>260.5 ug/kg</td>
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Robust Mean:
405

Median:
405

Score Date: 09/01/2017
Solid and Hazardous Waste Endosulfan II

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Number of Labs</th>
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</thead>
<tbody>
<tr>
<td>222</td>
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<tr>
<td>243</td>
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<tr>
<td>264</td>
</tr>
<tr>
<td>286</td>
</tr>
</tbody>
</table>

**Matrix:** Solid and Hazardous Waste

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3546

**Target:** 358 ug/kg

**Limits:** 86.6 to 403 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 258.2 ug/kg

**Std Dev:** 30.0782 ug/kg

**Median:** 267 ug/kg

**Totals for Matrix/Analyte/Technology:**

Labs: Pass 5, Fail 0, Total 5

**Totals for Matrix/Analyte:**

Labs: Pass 21, Fail 1, Total 22

### Shipment: 405

**Robust Mean:** 213.9 ug/kg

**Std Dev:** 91.5945 ug/kg

**Median:** 199.5 ug/kg

**Basis:** BiWeight LRE

**Analyte:** Endosulfan II

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3540C

**Target:** 179 ug/kg

**Limits:** 26.9 to 211 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 125 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 125 ug/kg

**Totals for Matrix/Analyte/Technology:**

Labs: Pass 3, Fail 0, Total 3

**Totals for Matrix/Analyte:**

Labs: Pass 21, Fail 1, Total 22

### Shipment: 405

**Robust Mean:** 116.7 ug/kg

**Std Dev:** 12.8582 ug/kg

**Median:** 122 ug/kg

**Basis:** BiWeight LRE

**Analyte:** Endosulfan sulfate

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3540C

**Target:** 179 ug/kg

**Limits:** 26.9 to 211 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 116.7 ug/kg

**Std Dev:** 12.8582 ug/kg

**Median:** 122 ug/kg

**Totals for Matrix/Analyte/Technology:**

Labs: Pass 3, Fail 0, Total 3

**Totals for Matrix/Analyte:**

Labs: Pass 21, Fail 1, Total 22

### Shipment: 405

**Robust Mean:** 116.7 ug/kg

**Std Dev:** 12.8582 ug/kg

**Median:** 122 ug/kg

**Basis:** BiWeight LRE

**Analyte:** Endosulfan sulfate

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3540C

**Target:** 179 ug/kg

**Limits:** 26.9 to 211 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 116.7 ug/kg

**Std Dev:** 12.8582 ug/kg

**Median:** 122 ug/kg

**Totals for Matrix/Analyte/Technology:**

Labs: Pass 3, Fail 0, Total 3

**Totals for Matrix/Analyte:**

Labs: Pass 21, Fail 1, Total 22

---

A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.
Solid and Hazardous Waste Endosulfan sulfate

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Endosulfan sulfate
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3541
Target: 179 ug/kg
Limits: 26.9 to 211 ug/kg
Basis: BiWeight LRE
Robust Mean: 100 ug/kg
Std Dev: 0 ug/kg
Median: 0 ug/kg

A histogram is not displayed for Technology: GC-ECD 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: 21  Fail: 1  Total: 22

Solid and Hazardous Waste Endosulfan sulfate

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Endosulfan sulfate
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3545A
Target: 179 ug/kg
Limits: 26.9 to 211 ug/kg
Basis: BiWeight LRE
Robust Mean: 139.3 ug/kg
Std Dev: 32.1805 ug/kg
Median: 132.5 ug/kg

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

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

Solid and Hazardous Waste Endosulfan sulfate

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Endosulfan sulfate
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3546
Target: 179 ug/kg
Limits: 26.9 to 211 ug/kg
Basis: BiWeight LRE
Robust Mean: 124.2 ug/kg
Std Dev: 6.2209 ug/kg
Median: 125 ug/kg

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

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

Solid and Hazardous Waste Endosulfan sulfate

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Endosulfan sulfate
Sample: 0527
Technology: GC-ECD
Prep Method: EPA 3550C
Target: 179 ug/kg
Limits: 26.9 to 211 ug/kg
Basis: BiWeight LRE
Robust Mean: 106 ug/kg
Std Dev: 48.0925 ug/kg
Median: 97.4 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 7  Fail: 1  Total: 8

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

Solid and Hazardous Waste Ethyl benzene

Score Date: 09/01/2017  Proficiency Test Statistics  Page 300 of 386
Solid and Hazardous Waste Ethyl benzene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Ethyl benzene
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-H
Target: 2577 ug/kg
Limits: 1780 to 3550 ug/kg
Basis: Linear Regression
Robust Mean: 2330 ug/kg
Std Dev: 183.8478 ug/kg
Median: 2330 ug/kg

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

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 2, Fail: 0, Total: 2

Totals for Matrix/Analyte:  
Labs: Pass: 24, Fail: 1, Total: 25

Solid and Hazardous Waste Ethyl benzene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Ethyl benzene
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 2577 ug/kg
Limits: 1780 to 3550 ug/kg
Basis: Linear Regression
Robust Mean: 2517.7 ug/kg
Std Dev: 598.9847 ug/kg
Median: 2517.7 ug/kg

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

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 2, Fail: 1, Total: 2

Totals for Matrix/Analyte:  
Labs: Pass: 24, Fail: 1, Total: 25

Solid and Hazardous Waste Ethyl benzene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Ethyl benzene
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 2577 ug/kg
Limits: 1780 to 3550 ug/kg
Basis: Linear Regression
Robust Mean: 2690 ug/kg
Std Dev: 353.5534 ug/kg
Median: 2690 ug/kg

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

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 2, Fail: 1, Total: 1

Totals for Matrix/Analyte:  
Labs: Pass: 24, Fail: 1, Total: 25

Solid and Hazardous Waste Ethyl benzene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Ethyl benzene
Sample: 0565
Technology: GCELCD/PID
Prep Method: EPA 5035A-L
Target: 2577 ug/kg
Limits: 1780 to 3550 ug/kg
Basis: Linear Regression
Robust Mean: 2350 ug/kg
Std Dev: 0 ug/kg
Median: 2350 ug/kg

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: 24, Fail: 1, Total: 25

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 301 of 386
Solid and Hazardous Waste Iron, Total

Shipments: 405  Matrix: Solid and Hazardous Waste

Analyte: Iron, Total
Sample: 0522
Technology: ICP-AES
Prep Method:
Target: 10199 mg/kg
Limits: 2410 to 18200 mg/kg
Basis: BiWeight LRE
Robust Mean: 9580 mg/kg
Std Dev: 0 mg/kg
Median: 9580 mg/kg

A histogram is not displayed for Technology: ICP-AES 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: 26  Fail: 0  Total: 26

Score Date: 09/01/2017  Proficiency Test Statistics  Page 302 of 386
### Solid and Hazardous Waste Iron, Total

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<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte</td>
<td>Iron, Total</td>
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<tr>
<td>Sample</td>
<td>0522</td>
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<tr>
<td>Technology: ICP-MS</td>
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<tr>
<td>Prep Method: EPA 3051A</td>
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<tr>
<td>Target: 10199 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 2410 to 18200 mg/kg</td>
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</tr>
<tr>
<td>Basis: BiWeight LRE</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 10900 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 mg/kg</td>
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</tr>
<tr>
<td>Median: 10900 mg/kg</td>
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### Solid and Hazardous Waste Fluoranthene

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<thead>
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<th>Shipment</th>
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<tbody>
<tr>
<td>Analyte</td>
<td>Fluoranthene</td>
</tr>
<tr>
<td>Sample</td>
<td>0524</td>
</tr>
<tr>
<td>Technology: GC-MS</td>
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<tr>
<td>Prep Method: EPA 3540C</td>
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</tr>
<tr>
<td>Target: 9282 ug/kg</td>
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</tr>
<tr>
<td>Limits: 2680 to 10200 ug/kg</td>
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<tr>
<td>Basis: BiWeight LRE</td>
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<tr>
<td>Robust Mean: 7080 ug/kg</td>
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<tr>
<td>Std Dev: 1796.0512 ug/kg</td>
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<td>Median: 7080 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

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### Solid and Hazardous Waste Fluoranthene

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Analyte</td>
<td>Fluoranthene</td>
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<tr>
<td>Sample</td>
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<tr>
<td>Technology: GC-MS</td>
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<td>Prep Method: EPA 3545A</td>
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<td>Target: 9282 ug/kg</td>
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<tr>
<td>Limits: 2680 to 10200 ug/kg</td>
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<tr>
<td>Basis: BiWeight LRE</td>
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<tr>
<td>Robust Mean: 7575 ug/kg</td>
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<td>Std Dev: 1573.7535 ug/kg</td>
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<td>Median: 7520 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

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<tbody>
<tr>
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<td>0</td>
<td>21</td>
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</tbody>
</table>
Solid and Hazardous Waste Fluoranthene

Shipments: 405  Matrix: Solid and Hazardous Waste

Analyte: Fluoranthene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 9282 ug/kg
Limits: 2680 to 10200 ug/kg
Basis: BiWeight LRE
Robust Mean: 7225 ug/kg
Std Dev: 2304.5679 ug/kg
Median: 8270 ug/kg

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

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

Solid and Hazardous Waste Fluoranthene

Shipments: 405  Matrix: Solid and Hazardous Waste

Analyte: Fluoranthene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3550C
Target: 9282 ug/kg
Limits: 2680 to 10200 ug/kg
Basis: BiWeight LRE
Robust Mean: 5717.9 ug/kg
Std Dev: 1467.6197 ug/kg
Median: 5290 ug/kg

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

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

Solid and Hazardous Waste Fluorene

Shipments: 405  Matrix: Solid and Hazardous Waste

Analyte: Fluorene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 10176 ug/kg
Limits: 2630 to 11200 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 6185 ug/kg
Std Dev: 317.425 66 ug/kg
Median: 6185 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass 2  Fail 0  Total: 2

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Fluorene

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Fluorene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3545A

**Target:** 10176 ug/kg

**Limits:** 2630 to 11200 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% - 11

**Robust Mean:** 7257.5 ug/kg

**Std Dev:** 1203.6161 ug/kg

**Median:** 7315 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: 21
- Pass: 21
- Fail: 0
- Total: 21

---

Solid and Hazardous Waste Fluorene

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Fluorene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3546

**Target:** 10176 ug/kg

**Limits:** 2630 to 11200 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 7202.5 ug/kg

**Std Dev:** 2315.9357 ug/kg

**Median:** 7690 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: 21
- Pass: 21
- Fail: 0
- Total: 21

---

Solid and Hazardous Waste Fluorene

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Fluorene

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3550C

**Target:** 10176 ug/kg

**Limits:** 2630 to 11200 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 5640.6 ug/kg

**Std Dev:** 1344.8756 ug/kg

**Median:** 5360 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: 21
- Pass: 21
- Fail: 0
- Total: 21

---

Solid and Hazardous Waste Fluoride, Total

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Fluoride, Total

**Sample:** 0563

**Technology:** IC-COND

**Prep Method:**

**Target:** 156 mg/kg

**Limits:** 53.2 to 201 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 128.6 mg/kg

**Std Dev:** 51.6748 mg/kg

**Median:** 131.5 mg/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: 7
- Pass: 7
- Fail: 1
- Total: 8

---

Solid and Hazardous Waste gamma-Chlordane

**Score Date:** 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste gamma-Chlordane

**Analyte:** gamma-Chlordane
**Sample:** 0527
**Technology:** GC-ECD

<table>
<thead>
<tr>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>113 ug/kg</td>
<td>32.3 to 131 ug/kg</td>
<td>BiWeight LRE</td>
<td>79 ug/kg</td>
<td>11.164 ug/kg</td>
<td>83.5 ug/kg</td>
</tr>
</tbody>
</table>

**Total for Matrix/Analyte/Technology:**
Labs: Pass 3, Fail: 0, Total: 3

**Test Results (End Groups Include Outliers):**

---

**Analyte:** gamma-Chlordane
**Sample:** 0527
**Technology:** GC-ECD

<table>
<thead>
<tr>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
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<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
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</thead>
<tbody>
<tr>
<td>EPA 3545A</td>
<td>113 ug/kg</td>
<td>32.3 to 131 ug/kg</td>
<td>BiWeight LRE</td>
<td>96.1 ug/kg</td>
<td>21.194 ug/kg</td>
<td>90.9 ug/kg</td>
</tr>
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</table>

**Total for Matrix/Analyte/Technology:**
Labs: Pass 4, Fail: 0, Total: 4

**Test Results (End Groups Include Outliers):**

---

**Analyte:** gamma-Chlordane
**Sample:** 0527
**Technology:** GC-ECD

<table>
<thead>
<tr>
<th>Prep Method</th>
<th>Target</th>
<th>Limits</th>
<th>Basis</th>
<th>Robust Mean</th>
<th>Std Dev</th>
<th>Median</th>
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</thead>
<tbody>
<tr>
<td>EPA 3546</td>
<td>113 ug/kg</td>
<td>32.3 to 131 ug/kg</td>
<td>BiWeight LRE</td>
<td>79.7 ug/kg</td>
<td>3.297 ug/kg</td>
<td>78.0 ug/kg</td>
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**Total for Matrix/Analyte/Technology:**
Labs: Pass 3, Fail: 0, Total: 3

**Test Results (End Groups Include Outliers):**
**Solid and Hazardous Waste gamma-Chlordane**

- **Shipments:** 405  
  **Matrix:** Solid and Hazardous Waste  
- **Analyte:** gamma-Chlordane  
- **Sample:** 0527  
- **Technology:** GC-ECD  
- **Prep Method:** EPA 3550C  
- **Target:** 113 ug/kg  
- **Limits:** 32.3 to 131 ug/kg  
- **Robust Mean:** 69.4 ug/kg  
  **Std Dev:** 21.7195 ug/kg  
  **Median:** 72.9 ug/kg  
- **Basis:** BiWeight LRE  

**Test Results (End Groups Include Outliers)**

- **Number of Labs:**  
  - 41.7  
  - 57.2  
  - 72.7  
  - 80.4  
  - 88.2  
  - 103.7  
- **Fail:** 0  
- **Pass:** 19  
- **Total:** 19

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 7  
- **Fail:** 0  
- **Total:** 7

**Solid and Hazardous Waste Gasoline Range Organics**

- **Shipments:** 405  
  **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Gasoline Range Organics  
- **Sample:** 0555  
- **Technology:** GC-FID  
- **Prep Method:**  
  - **Target:** 1045 mg/kg  
  - **Limits:** 117 to 1470 mg/kg  
  - **Basis:** Stat_Norm in SW with conditions for the 10% -11
- **Robust Mean:** 970.6 mg/kg  
  **Std Dev:** 205.9413 mg/kg  
  **Median:** 1030 mg/kg

**Test Results (End Groups Include Outliers)**

- **Number of Labs:**  
  - 641  
  - 943  
  - 1094  
- **Fail:** 0  
- **Pass:** 10  
- **Total:** 10

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 5  
- **Fail:** 0  
- **Total:** 5

**Solid and Hazardous Waste Gasoline Range Organics**

- **Shipments:** 405  
  **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Gasoline Range Organics  
- **Sample:** 0555  
- **Technology:** GC-FID  
- **Prep Method:**  
  - **Target:** 1045 mg/kg  
  - **Limits:** 117 to 1470 mg/kg  
  - **Basis:** Stat_Norm in SW with conditions for the 10% -11
- **Robust Mean:** 587.2 mg/kg  
  **Std Dev:** 234.1201 mg/kg  
  **Median:** 512 mg/kg

**Test Results (End Groups Include Outliers)**

- **Number of Labs:**  
  - 339  
  - 490  
  - 792  
- **Fail:** 0  
- **Pass:** 10  
- **Total:** 10

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 5  
- **Fail:** 0  
- **Total:** 5

**Solid and Hazardous Waste Hexachlorobenzene**

- **Shipments:** 405  
  **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Hexachlorobenzene  
- **Sample:** 0524  
- **Technology:** GC-MS  
- **Prep Method:**  
  - **Target:** 10676 ug/kg  
  - **Limits:** 2910 to 11700 ug/kg  
  - **Basis:** Manual Limits  
- **Robust Mean:** 5620 ug/kg  
  **Std Dev:** 0 ug/kg  
  **Median:** 5620 ug/kg

**Test Results (End Groups Include Outliers)**

- **Number of Labs:**  
  - 393  
  - 490  
  - 792  
- **Fail:** 0  
- **Pass:** 21  
- **Total:** 21

**Totals for Matrix/Analyte/Technology:**
- **Labs:** 1  
- **Fail:** 0  
- **Total:** 1

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Hexachlorobenzene

Shipments:
- **405** Matrix: Solid and Hazardous Waste
- **0524**

Analysis:
- **Analyte:** Hexachlorobenzene

Technologies:
- **Technology:** GC-MS

Preparation Methods:
- **Prep Method:**
  - EPA 3540C
  - EPA 3541
  - EPA 3545A
  - EPA 3546

Targets:
- **Target:**
  - 10676 ug/kg

Limits:
- **Limits:**
  - 2910 to 11700 ug/kg

Basis:
- **Manual Limits**

Robust Mean:
- **Robust Mean:**
  - 7370 ug/kg

Std Dev:
- **Std Dev:**
  - 975.8074 ug/kg

Median:
- **Median:**
  - 7370 ug/kg

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

Totals for Matrix/Analyte/Technology:
- **Labs:**
  - Pass: 2
  - Fail: 0
  - Total: 2

Totals for Matrix/Analyte:
- **Labs:**
  - Pass: 21
  - Fail: 0
  - Total: 21

**Score Date:** 09/11/2017

Proficiency Test Statistics

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Solid and Hazardous Waste Hexachlorobenzene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Hexachlorobenzene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3550C
Target: 10676 ug/kg
Limits: 2910 to 11700 ug/kg
Basis: Manual Limits
Robust Mean: 6488.8 ug/kg
Std Dev: 1675.1451 ug/kg
Median: 5940 ug/kg

Test Results (End Groups Include Outliers)

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Totals for Matrix/Analyte/Technology:

Labs: 9  Pass: 0  Fail: 0  Total: 9

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

Solid and Hazardous Waste Hexachlorobutadiene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Hexachlorobutadiene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 7610 ug/kg
Limits: 761 to 8370 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 2980 ug/kg
Std Dev: 0 ug/kg
Median: 2980 ug/kg

Test Results (End Groups Include Outliers)

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<tbody>
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Totals for Matrix/Analyte/Technology:

Labs: 9  Pass: 0  Fail: 0  Total: 9

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

Solid and Hazardous Waste Hexachlorobutadiene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Hexachlorobutadiene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3541
Target: 7610 ug/kg
Limits: 761 to 8370 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 3540 ug/kg
Std Dev: 240.4163 ug/kg
Median: 3540 ug/kg

Test Results (End Groups Include Outliers)

<table>
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<tbody>
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Totals for Matrix/Analyte/Technology:

Labs: 9  Pass: 0  Fail: 0  Total: 9

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

Solid and Hazardous Waste Hexachlorobutadiene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Hexachlorobutadiene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3541
Target: 7610 ug/kg
Limits: 761 to 8370 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 1800 ug/kg
Std Dev: 0 ug/kg
Median: 1800 ug/kg

Test Results (End Groups Include Outliers)

<table>
<thead>
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<tbody>
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<td>21</td>
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</table>

Totals for Matrix/Analyte/Technology:

Labs: 9  Pass: 0  Fail: 0  Total: 9

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

Score Date: 09/01/2017
Solid and Hazardous Waste Hexachlorobutadiene

Score Date: 09/01/2017  Proficiency Test Statistics  Page 310 of 386
Solid and Hazardous Waste Hexachloroethane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Hexachloroethane
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 12407 ug/kg
Limits: 1240 to 13600 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 4480 ug/kg
  Std Dev: 919.2388 ug/kg
  Median: 4480 ug/kg

Totals for Matrix/Analyte/Technology:
  Labs: Pass: 2  Fail: 0  Total: 2

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

Solid and Hazardous Waste Hexachloroethane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Hexachloroethane
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3541
Target: 12407 ug/kg
Limits: 1240 to 13600 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 1800 ug/kg
  Std Dev: 0 ug/kg
  Median: 1800 ug/kg

Totals for Matrix/Analyte/Technology:
  Labs: Pass: 1  Fail: 0  Total: 1

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

Solid and Hazardous Waste Hexachloroethane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Hexachloroethane
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 12407 ug/kg
Limits: 1240 to 13600 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 4657.5 ug/kg
  Std Dev: 939.765 ug/kg
  Median: 4775 ug/kg

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

Solid and Hazardous Waste Hexachloroethane

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Hexachloroethane
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 12407 ug/kg
Limits: 1240 to 13600 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 3337.5 ug/kg
  Std Dev: 2190.972 ug/kg
  Median: 3345 ug/kg

Totals for Matrix/Analyte/Technology:
  Labs: Pass: 3  Fail: 1  Total: 4

Score Date: 09/01/2017  Proficiency Test Statistics  Page 311 of 386
### Solid and Hazardous Waste Hexachloroethane

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Hexachloroethane  
**Sample:** 0524  
**Technology:** GC-MS  
**Prep Method:** EPA 3550C  
**Target:** 12407 ug/kg  
**Limits:** 1240 to 13600 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10%-11  
**Robust Mean:** 2271.1 ug/kg  
**Std Dev:** 992.9054 ug/kg  
**Median:** 1910 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 6  
- Fail: 1  
- Total: 9  

**Sample:** 1460  
**Technology:** GC-MS  
**Prep Method:** EPA 3550C  
**Target:** 12407 ug/kg  
**Limits:** 1240 to 13600 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10%-11  
**Robust Mean:** 2271.1 ug/kg  
**Std Dev:** 992.9054 ug/kg  
**Median:** 1910 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 6  
- Fail: 1  
- Total: 9  

**Sample:** 2285  
**Technology:** GC-MS  
**Prep Method:** EPA 3550C  
**Target:** 12407 ug/kg  
**Limits:** 1240 to 13600 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10%-11  
**Robust Mean:** 2271.1 ug/kg  
**Std Dev:** 992.9054 ug/kg  
**Median:** 1910 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 6  
- Fail: 1  
- Total: 9  

**Sample:** 3110  
**Technology:** GC-MS  
**Prep Method:** EPA 3550C  
**Target:** 12407 ug/kg  
**Limits:** 1240 to 13600 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10%-11  
**Robust Mean:** 2271.1 ug/kg  
**Std Dev:** 992.9054 ug/kg  
**Median:** 1910 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 6  
- Fail: 1  
- Total: 9  

**Sample:** 3935  
**Technology:** GC-MS  
**Prep Method:** EPA 3550C  
**Target:** 12407 ug/kg  
**Limits:** 1240 to 13600 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10%-11  
**Robust Mean:** 2271.1 ug/kg  
**Std Dev:** 992.9054 ug/kg  
**Median:** 1910 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 6  
- Fail: 1  
- Total: 9

### Solid and Hazardous Waste Heptachlor

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Heptachlor  
**Sample:** 0527  
**Technology:** GC-ECD  
**Prep Method:** EPA 3540C  
**Target:** 176 ug/kg  
**Limits:** 41 to 197 ug/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 126 ug/kg  
**Std Dev:** 7.2111 ug/kg  
**Median:** 115 ug/kg  

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

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Heptachlor  
**Sample:** 0527  
**Technology:** GC-ECD  
**Prep Method:** EPA 3541  
**Target:** 176 ug/kg  
**Limits:** 41 to 197 ug/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 126 ug/kg  
**Std Dev:** 7.2111 ug/kg  
**Median:** 115 ug/kg  

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

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Heptachlor  
**Sample:** 0527  
**Technology:** GC-ECD  
**Prep Method:** EPA 3540C  
**Target:** 176 ug/kg  
**Limits:** 41 to 197 ug/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 126 ug/kg  
**Std Dev:** 7.2111 ug/kg  
**Median:** 115 ug/kg  

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

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Heptachlor  
**Sample:** 0527  
**Technology:** GC-ECD  
**Prep Method:** EPA 3541  
**Target:** 176 ug/kg  
**Limits:** 41 to 197 ug/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 126 ug/kg  
**Std Dev:** 7.2111 ug/kg  
**Median:** 115 ug/kg  

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

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Heptachlor  
**Sample:** 0527  
**Technology:** GC-ECD  
**Prep Method:** EPA 3540C  
**Target:** 176 ug/kg  
**Limits:** 41 to 197 ug/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 126 ug/kg  
**Std Dev:** 7.2111 ug/kg  
**Median:** 115 ug/kg  

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

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Heptachlor  
**Sample:** 0527  
**Technology:** GC-ECD  
**Prep Method:** EPA 3541  
**Target:** 176 ug/kg  
**Limits:** 41 to 197 ug/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 126 ug/kg  
**Std Dev:** 7.2111 ug/kg  
**Median:** 115 ug/kg  

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

### Proficiency Test Statistics

**Score Date:** 09/01/2017
Solid and Hazardous Waste Heptachlor

**Analyte:** Heptachlor

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3545A

**Target:** 176 ug/kg

**Limits:** 41 to 197 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 121.7 ug/kg

**Std Dev:** 61.2828 ug/kg

**Median:** 126.5 ug/kg

**Totals for Matrix/Analyte/Technology:**

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**Solid and Hazardous Waste Heptachlor**

**Analyte:** Heptachlor

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3546

**Target:** 176 ug/kg

**Limits:** 41 to 197 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 118 ug/kg

**Std Dev:** 19.8696 ug/kg

**Median:** 114 ug/kg

**Totals for Matrix/Analyte/Technology:**

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**Solid and Hazardous Waste Heptachlor**

**Analyte:** Heptachlor

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3550C

**Target:** 176 ug/kg

**Limits:** 41 to 197 ug/kg

**Basis:** BiWeight LRE

**Robust Mean:** 100.8 ug/kg

**Std Dev:** 29.4681 ug/kg

**Median:** 110 ug/kg

**Totals for Matrix/Analyte/Technology:**

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**Solid and Hazardous Waste Heptachlor epoxide**

**Analyte:** Heptachlor epoxide

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:**

**Target:** 242 ug/kg

**Limits:** 66.7 to 266 ug/kg

**Basis:** Manual Limits

**Robust Mean:** 152 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 152 ug/kg

**Totals for Matrix/Analyte/Technology:**

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<thead>
<tr>
<th>Labs</th>
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<th>Total</th>
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A histogram is not displayed for Technology: GC-ECD due to the limited number of participants.
Solid and Hazardous Waste Heptachlor epoxide

Shipments:
- 405
- 405
- 405
- 405

Matrix:
- Solid and Hazardous Waste
- Solid and Hazardous Waste
- Solid and Hazardous Waste
- Solid and Hazardous Waste

Analyte:
- Heptachlor epoxide
- Heptachlor epoxide
- Heptachlor epoxide
- Heptachlor epoxide

Sample:
- 0527
- 0527
- 0527
- 0527

Technology:
- GC-ECD
- GC-ECD
- GC-ECD
- GC-ECD

Prep Method:
- EPA 3540C
- EPA 3541
- EPA 3545A
- EPA 3546

Target:
- 242 ug/kg
- 242 ug/kg
- 242 ug/kg
- 242 ug/kg

Limits:
- 66.7 to 266 ug/kg
- 66.7 to 266 ug/kg
- 66.7 to 266 ug/kg
- 66.7 to 266 ug/kg

Basis:
- Manual Limits
- Manual Limits
- Manual Limits
- Manual Limits

Robust Mean:
- 155.3 ug/kg
- 170 ug/kg
- 190 ug/kg
- 170.2 ug/kg

Std Dev:
- 21.0792 ug/kg
- 0 ug/kg
- 36.8691 ug/kg
- 18.2538 ug/kg

Median:
- 167 ug/kg
- 170 ug/kg
- 185 ug/kg
- 171 ug/kg

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 3 Fail: 0 Total: 3
- Labs: Pass: 1 Fail: 0 Total: 1
- Labs: Pass: 4 Fail: 0 Total: 4
- Labs: Pass: 5 Fail: 0 Total: 5

Totals for Matrix/Analyte:
- Labs: Pass: 22 Fail: 0 Total: 22
- Labs: Pass: 22 Fail: 0 Total: 22
- Labs: Pass: 22 Fail: 0 Total: 22
- Labs: Pass: 22 Fail: 0 Total: 22

Score Date: 09/11/2017

Proficiency Test Statistics
Solid and Hazardous Waste Heptachlor epoxide

**Analyte:** Heptachlor epoxide

**Sample:** 0527

**Technology:** GC-ECD

**Prep Method:** EPA 3550C

**Target:** 242 ug/kg

**Limits:** 66.7 to 266 ug/kg

**Basis:** Manual Limits

**Robust Mean:** 135.7 ug/kg

**Std Dev:** 41.8876 ug/kg

**Median:** 145.5 ug/kg

**Test Results (End Groups Include Outliers)**

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**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 8
- Fail: 0
- Total: 8

**Totals for Matrix/Analyte:**

- Labs: Pass: 22
- Fail: 0
- Total: 22

---

Solid and Hazardous Waste Mercury, Total

**Analyte:** Mercury, Total

**Sample:** 0522

**Technology:** CVAAS

**Prep Method:**

- Target: 8.1 mg/kg
- Limits: 4.12 to 11.9 mg/kg
- Basis: BiWeight LRE

**Robust Mean:** 8 mg/kg

**Std Dev:** 2.5999 mg/kg

**Median:** 8.105 mg/kg

**Test Results (End Groups Include Outliers)**

<table>
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<tr>
<th>Number of Labs</th>
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**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 28
- Fail: 2
- Total: 30

**Totals for Matrix/Analyte:**

- Labs: Pass: 28
- Fail: 2
- Total: 30

---

Solid and Hazardous Waste Ignitability

**Analyte:** Ignitability

**Sample:** 0564

**Technology:** 99

**Prep Method:**

- Target: 154 Degrees Fahrenheit
- Limits: 128 to 180 Degrees Fahrenheit
- Basis: Manual Limits

**Robust Mean:** 158.3 Degrees Fahrenheit

**Std Dev:** 16.563 Degrees Fahrenheit

**Median:** 160 Degrees Fahrenheit

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
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<th>2</th>
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<th>4</th>
<th>5</th>
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</table>

**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 3
- Fail: 0
- Total: 3

**Totals for Matrix/Analyte:**

- Labs: Pass: 25
- Fail: 1
- Total: 26

---

Solid and Hazardous Waste Ignitability

**Analyte:** Ignitability

**Sample:** 0564

**Technology:** FLPT

**Prep Method:**

- Target: 154 Degrees Fahrenheit
- Limits: 128 to 180 Degrees Fahrenheit
- Basis: Manual Limits

**Robust Mean:** 163 Degrees Fahrenheit

**Std Dev:** 35.8031 Degrees Fahrenheit

**Median:** 162 Degrees Fahrenheit

**Test Results (End Groups Include Outliers)**

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**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 21
- Fail: 1
- Total: 22

**Totals for Matrix/Analyte:**

- Labs: Pass: 25
- Fail: 1
- Total: 26

---

Score Date: 09/06/2017

Proficiency Test Statistics
Solid and Hazardous Waste Ignitability

Score Date: 09/01/2017

Proficiency Test Statistics

Page 316 of 386
Solid and Hazardous Waste Isophorone

**Shipments:**
- 405

**Matrix:**
- Solid and Hazardous Waste

**Sample:**
- 0524

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3545A

**Target:**
- 9447 µg/kg

**Limits:**
- 1890 to 10400 µg/kg

**Basis:**
- Stat._Norm in SW with conditions for the 10% - 11

**Robust Mean:**
- 6787.5 µg/kg

**Std Dev:**
- 1345.9414 µg/kg

**Median:**
- 6945 µg/kg

**Number of Labs:**
- 4705

**Fail:**
- 0

**Labs:**
- 21

**Total:**
- 21

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

---

**Shipments:**
- 405

**Matrix:**
- Solid and Hazardous Waste

**Sample:**
- 0524

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3546

**Target:**
- 9447 µg/kg

**Limits:**
- 1890 to 10400 µg/kg

**Basis:**
- Stat._Norm in SW with conditions for the 10% - 11

**Robust Mean:**
- 6125 µg/kg

**Std Dev:**
- 1962.6767 µg/kg

**Median:**
- 6250 µg/kg

**Number of Labs:**
- 3820

**Fail:**
- 0

**Labs:**
- 21

**Total:**
- 21

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

---

**Shipments:**
- 405

**Matrix:**
- Solid and Hazardous Waste

**Sample:**
- 0524

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3550C

**Target:**
- 9447 µg/kg

**Limits:**
- 1890 to 10400 µg/kg

**Basis:**
- Stat._Norm in SW with conditions for the 10% - 11

**Robust Mean:**
- 4871.6 µg/kg

**Std Dev:**
- 1321.3447 µg/kg

**Median:**
- 4830 µg/kg

**Number of Labs:**
- 2050

**Fail:**
- 3

**Labs:**
- 22

**Total:**
- 25

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

---

**Shipments:**
- 405

**Matrix:**
- Solid and Hazardous Waste

**Sample:**
- 0522

**Technology:**
- FAAS

**Prep Method:**
- EPA 3050B

**Target:**
- 2063 mg/kg

**Limits:**
- 1130 to 2790 mg/kg

**Basis:**
- BiWeight LRE

**Robust Mean:**
- 1920 mg/kg

**Std Dev:**
- 0 mg/kg

**Median:**
- 1920 mg/kg

**Number of Labs:**
- 22

**Fail:**
- 3

**Labs:**
- 25

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass 1 Fail 0 Total 1

---

**Score Date:**
- 09/01/2017

**Proficiency Test Statistics**

---

A histogram is not displayed for Technology: FAAS due to the limited number of participants.
### Solid and Hazardous Waste Potassium, Total

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Potassium, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:** EPD 3050B  
**Target:** 2063 mg/kg  
**Limits:** 1130 to 2790 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 2340 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 2340 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 1  
- Fail: 0  
- Total: 1  

**Totals for Matrix/Analyte:**  
- Labs: Pass: 18  
- Fail: 2  
- Total: 20  

**Test Results (End Groups Include Outliers):**

![Histogram](image)

**Score Date:** 09/01/2017

---

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Potassium, Total  
**Sample:** 0522  
**Technology:** ICP-MS  
**Prep Method:** EPD 3050B  
**Target:** 2063 mg/kg  
**Limits:** 1130 to 2790 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 1565 mg/kg  
**Std Dev:** 35,355 mg/kg  
**Median:** 1565 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 2  
- Fail: 0  
- Total: 2  

**Totals for Matrix/Analyte:**  
- Labs: Pass: 22  
- Fail: 3  
- Total: 25  

---

**Score Date:** 09/01/2017
Solid and Hazardous Waste Potassium, Total

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<td>Median: 3490 mg/kg</td>
<td></td>
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</table>

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

Totals for Matrix/Analyte/Technology:

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<th>Fail</th>
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Totals for Matrix/Analyte:

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<tbody>
<tr>
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Solid and Hazardous Waste Acenaphthene Low Level

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: Acenaphthene Low Level</td>
<td></td>
</tr>
<tr>
<td>Sample: 0550</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3540C</td>
<td></td>
</tr>
<tr>
<td>Target: 583 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 58.3 to 641 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 234 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median: 234 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Totals for Matrix/Analyte/Technology:

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Totals for Matrix/Analyte:

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Solid and Hazardous Waste Acenaphthene Low Level

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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</thead>
<tbody>
<tr>
<td>Analyte: Acenaphthene Low Level</td>
<td></td>
</tr>
<tr>
<td>Sample: 0550</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3541</td>
<td></td>
</tr>
<tr>
<td>Target: 583 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 58.3 to 641 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 180 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/kg</td>
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<tr>
<td>Median: 180 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Totals for Matrix/Analyte/Technology:

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Totals for Matrix/Analyte:

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Solid and Hazardous Waste Acenaphthene Low Level

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte: Acenaphthene Low Level</td>
<td></td>
</tr>
<tr>
<td>Sample: 0550</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3545A</td>
<td></td>
</tr>
<tr>
<td>Target: 583 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 58.3 to 641 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 377.5 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 74.2462 ug/kg</td>
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</tr>
<tr>
<td>Median: 377.5 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Totals for Matrix/Analyte/Technology:

<table>
<thead>
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Totals for Matrix/Analyte:

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Score Date: 09/01/2017
### Solid and Hazardous Waste Acenaphthene Low Level

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0550  
**Analyte:** Acenaphthene Low Level

**Technology:** GC-MS  
**Prep Method:** EPA 3546  
**Target:** 583 ug/kg  
**Limits:** 58.3 to 641 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 247 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 247 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 6  
- Fail: 0  
- Total: 6

---

### Solid and Hazardous Waste Acenaphthylene Low Level

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0550  
**Analyte:** Acenaphthylene Low Level

**Technology:** GC-MS  
**Prep Method:** EPA 3540C  
**Target:** 740 ug/kg  
**Limits:** 74 to 814 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 242 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 242 ug/kg

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

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 2  
- Fail: 0  
- Total: 2

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

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### Solid and Hazardous Waste Acenaphthylene Low Level

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0550  
**Analyte:** Acenaphthylene Low Level

**Technology:** GC-MS  
**Prep Method:** EPA 3541  
**Target:** 740 ug/kg  
**Limits:** 74 to 814 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 210 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 210 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 6  
- Fail: 0  
- Total: 6

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### Solid and Hazardous Waste Acenaphthylene Low Level

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0550  
**Analyte:** Acenaphthylene Low Level

**Technology:** GC-MS  
**Prep Method:** EPA 3545A  
**Target:** 740 ug/kg  
**Limits:** 74 to 814 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 319.5 ug/kg  
**Std Dev:** 13.435 ug/kg  
**Median:** 319.5 ug/kg

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

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 2  
- Fail: 0  
- Total: 2

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

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**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
**Page 320 of 386**
Solid and Hazardous Waste Acenaphthylene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Acenaphthylene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3546
Target: 740 ug/kg
Limits: 74 to 814 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 229 ug/kg
  Std Dev: 0 ug/kg
  Median: 229 ug/kg
A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Scores:
Labs: Pass: 6  Fail: 0  Total: 6

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

Solid and Hazardous Waste Anthracene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Anthracene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3540C
Target: 566 ug/kg
Limits: 56.6 to 623 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 251 ug/kg
  Std Dev: 0 ug/kg
  Median: 251 ug/kg
A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Scores:
Labs: Pass: 6  Fail: 0  Total: 6

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

Solid and Hazardous Waste Anthracene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Anthracene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3541
Target: 566 ug/kg
Limits: 56.6 to 623 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 190 ug/kg
  Std Dev: 0 ug/kg
  Median: 190 ug/kg
A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Scores:
Labs: Pass: 6  Fail: 0  Total: 6

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

Solid and Hazardous Waste Anthracene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Anthracene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3545A
Target: 566 ug/kg
Limits: 56.6 to 623 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 300.5 ug/kg
  Std Dev: 40.3051 ug/kg
  Median: 300.5 ug/kg
A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

Scores:
Labs: Pass: 6  Fail: 0  Total: 6

Totals for Matrix/Analyte/Technology:
Labs: Pass: 6  Fail: 0  Total: 6
### Solid and Hazardous Waste Anthracene Low Level

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Anthracene Low Level  
**Sample:** 0550  
**Technology:** GC-MS  
**Prep Method:** EPA 3546  
**Target:** 566 ug/kg  
**Limits:** 56.6 to 623 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% - 11%  
**Robust Mean:** 219 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 219 ug/kg

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

<table>
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**Totals for Matrix/Analyte/Technology:** 6  
**Labs:** 6  
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**Total:** 6

### Solid and Hazardous Waste Benzo(a)anthracene Low Level

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Benzo(a)anthracene Low Level  
**Sample:** 0550  
**Technology:** GC-MS  
**Prep Method:** EPA 3540C  
**Target:** 141 ug/kg  
**Limits:** 30 to 155 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% - 11%  
**Robust Mean:** 86.8 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 86.8 ug/kg

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

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**Totals for Matrix/Analyte/Technology:** 6  
**Labs:** 6  
**Fail:** 0  
**Total:** 6

### Solid and Hazardous Waste Benzo(a)anthracene Low Level

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Benzo(a)anthracene Low Level  
**Sample:** 0550  
**Technology:** GC-MS  
**Prep Method:** EPA 3541  
**Target:** 141 ug/kg  
**Limits:** 30 to 155 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% - 11%  
**Robust Mean:** 78.9 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 78.9 ug/kg

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

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**Totals for Matrix/Analyte/Technology:** 6  
**Labs:** 6  
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### Solid and Hazardous Waste Benzo(a)anthracene Low Level

**Shipment:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Benzo(a)anthracene Low Level  
**Sample:** 0550  
**Technology:** GC-MS  
**Prep Method:** EPA 3545A  
**Target:** 141 ug/kg  
**Limits:** 30 to 155 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% - 11%  
**Robust Mean:** 112 ug/kg  
**Std Dev:** 26.8701 ug/kg  
**Median:** 112 ug/kg

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

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**Totals for Matrix/Analyte/Technology:** 6  
**Labs:** 6  
**Fail:** 0  
**Total:** 6

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**Score Date:** 09/01/2017  
Proficiency Test Statistics  
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### Solid and Hazardous Waste Benzo(a)anthracene Low Level

**Shipments:**
- **405**

**Matrix:**
- Solid and Hazardous Waste

**Sample:**
- 0550

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3546

**Target:**
- 141 ug/kg

**Limits:**
- 30 to 155 ug/kg

**Basis:**
- Stat_Norm in SW with conditions for the 10%-11

**Robust Mean:**
- 70.1 ug/kg

**Std Dev:**
- 0 ug/kg

**Median:**
- 70.1 ug/kg

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

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

### Solid and Hazardous Waste Benzo(a)pyrene Low Level

**Shipments:**
- **405**

**Matrix:**
- Solid and Hazardous Waste

**Sample:**
- 0550

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3540C

**Target:**
- 320 ug/kg

**Limits:**
- 32 to 352 ug/kg

**Basis:**
- Stat_Norm in SW with conditions for the 10%-11

**Robust Mean:**
- 115 ug/kg

**Std Dev:**
- 0 ug/kg

**Median:**
- 115 ug/kg

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

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2 Fail: 0 Total: 2

### Solid and Hazardous Waste Benzo(a)pyrene Low Level

**Shipments:**
- **405**

**Matrix:**
- Solid and Hazardous Waste

**Sample:**
- 0550

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3541

**Target:**
- 320 ug/kg

**Limits:**
- 32 to 352 ug/kg

**Basis:**
- Stat_Norm in SW with conditions for the 10%-11

**Robust Mean:**
- 130 ug/kg

**Std Dev:**
- 0 ug/kg

**Median:**
- 130 ug/kg

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

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1 Fail: 0 Total: 1

### Solid and Hazardous Waste Benzo(a)pyrene Low Level

**Shipments:**
- **405**

**Matrix:**
- Solid and Hazardous Waste

**Sample:**
- 0550

**Technology:**
- GC-MS

**Prep Method:**
- EPA 3545A

**Target:**
- 320 ug/kg

**Limits:**
- 32 to 352 ug/kg

**Basis:**
- Stat_Norm in SW with conditions for the 10%-11

**Robust Mean:**
- 182 ug/kg

**Std Dev:**
- 41.0122 ug/kg

**Median:**
- 182 ug/kg

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

**Totals for Matrix/Analyte/Technology:**
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<tbody>
<tr>
<td>Analyte</td>
<td>Benzo(a)pyrene Low Level</td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>0550</td>
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<tr>
<td>Technology</td>
<td>GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method</td>
<td>EPA 3546</td>
<td></td>
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<tr>
<td>Target</td>
<td>320 ug/kg</td>
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<tr>
<td>Limits</td>
<td>32 to 352 ug/kg</td>
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<tr>
<td>Basis</td>
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<tr>
<td>Robust Mean</td>
<td>120 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**

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**Score Date:** 09/01/2017

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**Solid and Hazardous Waste Benzo(b)fluoranthene Low Level**

<table>
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<tr>
<th>Shipment</th>
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<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte</td>
<td>Benzo(b)fluoranthene Low Level</td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>0550</td>
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</tr>
<tr>
<td>Technology</td>
<td>GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method</td>
<td>EPA 3540C</td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>493 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits</td>
<td>111 to 542 ug/kg</td>
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<tr>
<td>Basis</td>
<td>Stat_Norm in SW with conditions for the 10%-11</td>
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</tr>
<tr>
<td>Robust Mean</td>
<td>215 ug/kg</td>
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<tr>
<td>Std Dev</td>
<td>0 ug/kg</td>
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</tr>
<tr>
<td>Median</td>
<td>215 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**

<table>
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**Solid and Hazardous Waste Benzo(b)fluoranthene Low Level**

<table>
<thead>
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<th>Matrix: Solid and Hazardous Waste</th>
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</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Benzo(b)fluoranthene Low Level</td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>0550</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>GC-MS</td>
<td></td>
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<tr>
<td>Prep Method</td>
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<tr>
<td>Target</td>
<td>493 ug/kg</td>
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<tr>
<td>Limits</td>
<td>111 to 542 ug/kg</td>
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</tr>
<tr>
<td>Basis</td>
<td>Stat_Norm in SW with conditions for the 10%-11</td>
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<tr>
<td>Robust Mean</td>
<td>260 ug/kg</td>
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<tr>
<td>Std Dev</td>
<td>0 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>260 ug/kg</td>
<td></td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs: Pass</th>
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<th>Total</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

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**Solid and Hazardous Waste Benzo(b)fluoranthene Low Level**

<table>
<thead>
<tr>
<th>Shipment</th>
<th>405</th>
<th>Matrix: Solid and Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyte</td>
<td>Benzo(b)fluoranthene Low Level</td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td>0550</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method</td>
<td>EPA 3545A</td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>493 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits</td>
<td>111 to 542 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis</td>
<td>Stat_Norm in SW with conditions for the 10%-11</td>
<td></td>
</tr>
<tr>
<td>Robust Mean</td>
<td>282 ug/kg</td>
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</tr>
<tr>
<td>Std Dev</td>
<td>199.4041 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>349 ug/kg</td>
<td></td>
</tr>
</tbody>
</table>

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs: Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

---
Solid and Hazardous Waste Benzo(b)fluoranthene Low Level

**Shipments: 405**  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Benzo(b)fluoranthene Low Level  
**Sample:** 0550  
**Technology:** GC-MS  
**Prep Method:** EPA 3546  
**Target:** 493 ug/kg  
**Limits:** 111 to 542 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 243 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 243 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 1  
Fail: 0  
Total: 1  

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

---

Solid and Hazardous Waste Benzo(g,h,i)perylene Low Level

**Shipments: 405**  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Benzo(g,h,i)perylene Low Level  
**Sample:** 0550  
**Technology:** GC-MS  
**Prep Method:** EPA 3540C  
**Target:** 196 ug/kg  
**Limits:** 19.6 to 216 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 83.6 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 83.6 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 2  
Fail: 0  
Total: 2  

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

---

Solid and Hazardous Waste Benzo(g,h,i)perylene Low Level

**Shipments: 405**  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Benzo(g,h,i)perylene Low Level  
**Sample:** 0550  
**Technology:** GC-MS  
**Prep Method:** EPA 3541  
**Target:** 196 ug/kg  
**Limits:** 19.6 to 216 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 74.2 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 74.2 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 1  
Fail: 0  
Total: 1  

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

---

Solid and Hazardous Waste Benzo(g,h,i)perylene Low Level

**Shipments: 405**  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Benzo(g,h,i)perylene Low Level  
**Sample:** 0550  
**Technology:** GC-MS  
**Prep Method:** EPA 3545A  
**Target:** 196 ug/kg  
**Limits:** 19.6 to 216 ug/kg  
**Basis:** Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean:** 95.3 ug/kg  
**Std Dev:** 67.3873 ug/kg  
**Median:** 115.65 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 2  
Fail: 0  
Total: 2  

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

---

Score Date: 09/01/2017  
Proficiency Test Statistics  
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Solid and Hazardous Waste Benzo(g,h,i)perylene Low Level

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0550
- **Technology:** GC-MS
- **Prep Method:** EPA 3546
- **Target:** 196 ug/kg
- **Limits:** 19.6 to 216 ug/kg
- **Basis:** Stat_Norm in SW with conditions for the 10% -11
- **Robust Mean:** 80.2 ug/kg
- **Std Dev:** 0 ug/kg
- **Median:** 80.2 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 6 Fail: 0 Total: 6

---

Solid and Hazardous Waste Benzo(k)fluoranthene Low Level

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0550
- **Technology:** GC-MS
- **Prep Method:** EPA 3540C
- **Target:** 198 ug/kg
- **Limits:** 39.2 to 218 ug/kg
- **Basis:** Stat_Norm in SW with conditions for the 10% -11
- **Robust Mean:** 92.8 ug/kg
- **Std Dev:** 0 ug/kg
- **Median:** 92.8 ug/kg

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

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2 Fail: 0 Total: 2

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

---

Solid and Hazardous Waste Benzo(k)fluoranthene Low Level

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0550
- **Technology:** GC-MS
- **Prep Method:** EPA 3541
- **Target:** 198 ug/kg
- **Limits:** 39.2 to 218 ug/kg
- **Basis:** Stat_Norm in SW with conditions for the 10% -11
- **Robust Mean:** 93.8 ug/kg
- **Std Dev:** 0 ug/kg
- **Median:** 93.8 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 6 Fail: 0 Total: 6

---

Solid and Hazardous Waste Benzo(k)fluoranthene Low Level

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0550
- **Technology:** GC-MS
- **Prep Method:** EPA 3545A
- **Target:** 198 ug/kg
- **Limits:** 39.2 to 218 ug/kg
- **Basis:** Stat_Norm in SW with conditions for the 10% -11
- **Robust Mean:** 131 ug/kg
- **Std Dev:** 21.2132 ug/kg
- **Median:** 131 ug/kg

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

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2 Fail: 0 Total: 2

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

---

**Score Date:** 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste Benzo(k)fluoranthene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Benzo(k)fluoranthene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3546
Target: 198 ug/kg
Limits: 39.2 to 218 ug/kg

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

Robust Mean: 114 ug/kg
Std Dev: 0 ug/kg
Median: 114 ug/kg

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

Solid and Hazardous Waste Chrysene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Chrysene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3540C
Target: 140 ug/kg
Limits: 19.2 to 154 ug/kg

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

Robust Mean: 73.7 ug/kg
Std Dev: 0 ug/kg
Median: 73.7 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

Solid and Hazardous Waste Chrysene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Chrysene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3541
Target: 140 ug/kg
Limits: 19.2 to 154 ug/kg

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

Robust Mean: 64.5 ug/kg
Std Dev: 0 ug/kg
Median: 64.5 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

Solid and Hazardous Waste Chrysene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Chrysene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3545A
Target: 140 ug/kg
Limits: 19.2 to 154 ug/kg

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

Robust Mean: 103.4 ug/kg
Std Dev: 23.4759 ug/kg
Median: 103.4 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

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

Score Date: 09/01/2017
### Solid and Hazardous Waste Chrysene Low Level

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Chrysene Low Level  
**Prep Method:** EPA 3546  
**Target:** 140 ug/kg  
**Limits:** 19.2 to 154 ug/kg  
**Basis:** Stat. Norm in SW with conditions for the 10%-11  
**Robust Mean:** 67.9 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 67.9 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
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<thead>
<tr>
<th>Labs</th>
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<tbody>
<tr>
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### Solid and Hazardous Waste Dibenzo(a,h)anthracene Low Level

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Dibenzo(a,h)anthracene Low Level  
**Prep Method:** EPA 3540C  
**Target:** 360 ug/kg  
**Limits:** 63.8 to 396 ug/kg  
**Basis:** Manual Limits  
**Robust Mean:** 239 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 239 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
<table>
<thead>
<tr>
<th>Labs</th>
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<th>Fail</th>
<th>Total</th>
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### Solid and Hazardous Waste Dibenzo(a,h)anthracene Low Level

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Dibenzo(a,h)anthracene Low Level  
**Prep Method:** EPA 3541  
**Target:** 360 ug/kg  
**Limits:** 63.8 to 396 ug/kg  
**Basis:** Manual Limits  
**Robust Mean:** 180 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 180 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
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</thead>
<tbody>
<tr>
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### Solid and Hazardous Waste Dibenzo(a,h)anthracene Low Level

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Dibenzo(a,h)anthracene Low Level  
**Prep Method:** EPA 3545A  
**Target:** 360 ug/kg  
**Limits:** 63.8 to 396 ug/kg  
**Basis:** Manual Limits  
**Robust Mean:** 264 ug/kg  
**Std Dev:** 79.196 ug/kg  
**Median:** 264 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
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<thead>
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<th>Labs</th>
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**Score Date:** 09/11/2017  
**Proficiency Test Statistics**  
**Page 328 of 386**
### Solid and Hazardous Waste Dibenzo(a,h)anthracene Low Level

<table>
<thead>
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<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte: Dibenzo(a,h)anthracene Low Level</td>
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<tr>
<td>Sample: 0550</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3546</td>
<td></td>
</tr>
<tr>
<td>Target: 360 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 63.8 to 396 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Manual Limits</td>
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</tr>
<tr>
<td>Robust Mean: 157 ug/kg</td>
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<tr>
<td>Std Dev: 0 ug/kg</td>
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</tr>
<tr>
<td>Median: 157 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS 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: 6, Fail: 0, Total: 6

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### Solid and Hazardous Waste Fluoranthene Low Level

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<thead>
<tr>
<th>Shipment: 405</th>
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<tbody>
<tr>
<td>Analyte: Fluoranthene Low Level</td>
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<tr>
<td>Sample: 0550</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3540C</td>
<td></td>
</tr>
<tr>
<td>Target: 649 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 144 to 714 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 395 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/kg</td>
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</tr>
<tr>
<td>Median: 395 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2, Fail: 0, Total: 2

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

---

### Solid and Hazardous Waste Fluoranthene Low Level

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte: Fluoranthene Low Level</td>
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<tr>
<td>Sample: 0550</td>
<td></td>
</tr>
<tr>
<td>Technology: GC-MS</td>
<td></td>
</tr>
<tr>
<td>Prep Method: EPA 3541</td>
<td></td>
</tr>
<tr>
<td>Target: 649 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 144 to 714 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 330 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Std Dev: 0 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median: 330 ug/kg</td>
<td></td>
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A histogram is not displayed for Technology: GC-MS 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: 6, Fail: 0, Total: 6

---

### Solid and Hazardous Waste Fluoranthene Low Level

<table>
<thead>
<tr>
<th>Shipment: 405</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte: Fluoranthene Low Level</td>
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<tr>
<td>Sample: 0550</td>
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</tr>
<tr>
<td>Technology: GC-MS</td>
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</tr>
<tr>
<td>Prep Method: EPA 3545A</td>
<td></td>
</tr>
<tr>
<td>Target: 649 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Limits: 144 to 714 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Basis: Stat_Norm in SW with conditions for the 10% -11</td>
<td></td>
</tr>
<tr>
<td>Robust Mean: 479 ug/kg</td>
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<tr>
<td>Std Dev: 100.4092 ug/kg</td>
<td></td>
</tr>
<tr>
<td>Median: 479 ug/kg</td>
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A histogram is not displayed for Technology: GC-MS due to the limited number of participants.

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2, Fail: 0, Total: 2

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

---

**Score Date:** 09/01/2017

**Proficiency Test Statistics**
### Solid and Hazardous Waste Fluoranthene Low Level

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Fluoranthene Low Level

**Sample:** 0550

**Technology:** GC-MS

**Prep Method:** EPA 3546

**Target:** 649 ug/kg

**Limits:** 144 to 714 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 304 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 304 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1, Fail: 0, Total: 1

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

### Solid and Hazardous Waste Fluorene Low Level

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Fluorene Low Level

**Sample:** 0550

**Technology:** GC-MS

**Prep Method:** EPA 3540C

**Target:** 330 ug/kg

**Limits:** 36.7 to 363 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 167 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 167 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2, Fail: 0, Total: 2

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

### Solid and Hazardous Waste Fluorene Low Level

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Fluorene Low Level

**Sample:** 0550

**Technology:** GC-MS

**Prep Method:** EPA 3541

**Target:** 330 ug/kg

**Limits:** 36.7 to 363 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 100 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 100 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 1, Fail: 0, Total: 1

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

### Solid and Hazardous Waste Fluorene Low Level

**Shipments:**
- 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Fluorene Low Level

**Sample:** 0550

**Technology:** GC-MS

**Prep Method:** EPA 3545A

**Target:** 330 ug/kg

**Limits:** 36.7 to 363 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 226 ug/kg

**Std Dev:** 49.4975 ug/kg

**Median:** 226 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 2, Fail: 0, Total: 2

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Fluorene Low Level

**Analyte:** Fluorene Low Level

**Sample:** 0550

**Matrix:** Solid and Hazardous Waste

**Technology:** GC-MS

**Prep Method:** EPA 3546

**Target:** 330 ug/kg

**Limits:** 36.7 to 363 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% - 11

**Robust Mean:** 160 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 160 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 6  Fail: 0  Total: 6

---

Solid and Hazardous Waste Indeno(1,2,3-cd)pyrene Low Level

**Analyte:** Indeno(1,2,3-cd)pyrene Low Level

**Sample:** 0550

**Matrix:** Solid and Hazardous Waste

**Technology:** GC-MS

**Prep Method:** EPA 3540C

**Target:** 447 ug/kg

**Limits:** 53.6 to 492 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% - 11

**Robust Mean:** 242 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 242 ug/kg

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

**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 2  Fail: 0  Total: 2

**Totals for Matrix/Analyte:**

- Labs: Pass: 6  Fail: 0  Total: 6

---

Solid and Hazardous Waste Indeno(1,2,3-cd)pyrene Low Level

**Analyte:** Indeno(1,2,3-cd)pyrene Low Level

**Sample:** 0550

**Matrix:** Solid and Hazardous Waste

**Technology:** GC-MS

**Prep Method:** EPA 3541

**Target:** 447 ug/kg

**Limits:** 53.6 to 492 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% - 11

**Robust Mean:** 230 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 230 ug/kg

**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 1  Fail: 0  Total: 1

**Totals for Matrix/Analyte:**

- Labs: Pass: 6  Fail: 0  Total: 6

---

Solid and Hazardous Waste Indeno(1,2,3-cd)pyrene Low Level

**Analyte:** Indeno(1,2,3-cd)pyrene Low Level

**Sample:** 0550

**Matrix:** Solid and Hazardous Waste

**Technology:** GC-MS

**Prep Method:** EPA 3545A

**Target:** 447 ug/kg

**Limits:** 53.6 to 492 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% - 11

**Robust Mean:** 239 ug/kg

**Std Dev:** 168.9985 ug/kg

**Median:** 295.5 ug/kg

**Totals for Matrix/Analyte/Technology:**

- Labs: Pass: 2  Fail: 0  Total: 2

**Totals for Matrix/Analyte:**

- Labs: Pass: 6  Fail: 0  Total: 6

---

**Score Date:** 09/01/2017

**Proiciency Test Statistics**
Solid and Hazardous Waste Indeno(1,2,3-cd)pyrene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Indeno(1,2,3-cd)pyrene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3546
Target: 447 ug/kg
Limits: 53.6 to 492 ug/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 190 ug/kg
Std Dev: 0 ug/kg
Median: 190 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 6  Fail: 0  Total: 6

Score Date: 09/01/2017

Proficiency Test Statistics  Page 332 of 386
### Solid and Hazardous Waste Naphthalene Low Level

- **Shipments:** 405  
- **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Naphthalene Low Level  
- **Sample:** 0550  
- **Technology:** GC-MS  
- **Prep Method:** EPA 3546  
- **Target:** 971 ug/kg  
- **Limits:** 97.1 to 1070 ug/kg  
- **Basis:** Stat. Norm in SW with conditions for the 10% -11  
- **Robust Mean:** 321 ug/kg  
  - **Std Dev:** 0 ug/kg  
  - **Median:** 321 ug/kg  

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

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### Solid and Hazardous Waste Lindane

- **Shipments:** 405  
- **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Lindane  
- **Sample:** 0527  
- **Technology:** GC-ECD  
- **Prep Method:** EPA 3540C  
- **Target:** 375 ug/kg  
- **Limits:** 79 to 412 ug/kg  
- **Basis:** Manual Limits  
- **Robust Mean:** 236 ug/kg  
  - **Std Dev:** 0 ug/kg  
  - **Median:** 296 ug/kg  

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

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### Solid and Hazardous Waste Lindane

- **Shipments:** 405  
- **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Lindane  
- **Sample:** 0527  
- **Technology:** GC-ECD  
- **Prep Method:** EPA 3541  
- **Target:** 375 ug/kg  
- **Limits:** 79 to 412 ug/kg  
- **Basis:** Manual Limits  
- **Robust Mean:** 240 ug/kg  
  - **Std Dev:** 0 ug/kg  
  - **Median:** 240 ug/kg  

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

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### Solid and Hazardous Waste Lindane

- **Shipments:** 405  
- **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Lindane  
- **Sample:** 0527  
- **Technology:** GC-ECD  
- **Prep Method:** EPA 3546  
- **Target:** 375 ug/kg  
- **Limits:** 79 to 412 ug/kg  
- **Basis:** Manual Limits  
- **Robust Mean:** 296 ug/kg  
  - **Std Dev:** 0 ug/kg  
  - **Median:** 296 ug/kg  

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### Solid and Hazardous Waste Lindane

- **Shipments:** 405  
- **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Lindane  
- **Sample:** 0527  
- **Technology:** GC-ECD  
- **Prep Method:** EPA 3540C  
- **Target:** 375 ug/kg  
- **Limits:** 79 to 412 ug/kg  
- **Basis:** Manual Limits  
- **Robust Mean:** 233 ug/kg  
  - **Std Dev:** 40.2865 ug/kg  
  - **Median:** 250 ug/kg  

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### Solid and Hazardous Waste Lindane

- **Shipments:** 405  
- **Matrix:** Solid and Hazardous Waste  
- **Analyte:** Lindane  
- **Sample:** 0527  
- **Technology:** GC-ECD  
- **Prep Method:** EPA 3541  
- **Target:** 375 ug/kg  
- **Limits:** 79 to 412 ug/kg  
- **Basis:** Manual Limits  
- **Robust Mean:** 240 ug/kg  
  - **Std Dev:** 0 ug/kg  
  - **Median:** 240 ug/kg  

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

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<tr>
<td>Robust Mean:</td>
<td>251.6 ug/kg</td>
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<tr>
<td>Std Dev:</td>
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<td>Median:</td>
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<td>Robust Mean:</td>
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**Solid and Hazardous Waste Phenanthrene Low Level**

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<td>Analyte:</td>
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<tr>
<td>Technology:</td>
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<tr>
<td>Prep Method:</td>
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<tr>
<td>Target:</td>
<td>524 ug/kg</td>
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<tr>
<td>Limits:</td>
<td>92.5 to 576 ug/kg</td>
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<tr>
<td>Basis:</td>
<td>Stat_Norm in SW with conditions for the 10%-11</td>
<td></td>
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<tr>
<td>Robust Mean:</td>
<td>270 ug/kg</td>
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<tr>
<td>Std Dev:</td>
<td>0 ug/kg</td>
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<td>Median:</td>
<td>270 ug/kg</td>
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**A histogram is not displayed for Technology: GC-MS due to the limited number of participants.**
Solid and Hazardous Waste Phenanthrene Low Level

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Phenanthrene Low Level

Sample: 0550

Technology: GC-MS

Prep Method: EPA 3541

Target: 524 ug/kg

Limits: 92.5 to 576 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11

Robust Mean: 220 ug/kg

Std Dev: 0 ug/kg

Median: 220 ug/kg

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

Totals for Matrix/Analyte/Technology:

Labs: Pass: 6 Fail: 0 Total: 6

Totals for Matrix/Analyte:

Labs: Pass: 6 Fail: 0 Total: 6

Solid and Hazardous Waste Phenanthrene Low Level

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Phenanthrene Low Level

Sample: 0550

Technology: GC-MS

Prep Method: EPA 3545A

Target: 524 ug/kg

Limits: 92.5 to 576 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11

Robust Mean: 302 ug/kg

Std Dev: 213.5462 ug/kg

Median: 374.5 ug/kg

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

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 6 Fail: 0 Total: 6

Solid and Hazardous Waste Phenanthrene Low Level

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Phenanthrene Low Level

Sample: 0550

Technology: GC-MS

Prep Method: EPA 3546

Target: 524 ug/kg

Limits: 92.5 to 576 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11

Robust Mean: 246 ug/kg

Std Dev: 0 ug/kg

Median: 246 ug/kg

A histogram is not displayed for Technology: GC-MS 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: 6 Fail: 0 Total: 6

Solid and Hazardous Waste Pyrene Low Level

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Pyrene Low Level

Sample: 0550

Technology: GC-MS

Prep Method: EPA 3540C

Target: 168 ug/kg

Limits: 28.3 to 185 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11

Robust Mean: 83.6 ug/kg

Std Dev: 0 ug/kg

Median: 83.6 ug/kg

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

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 6 Fail: 0 Total: 6

Score Date: 09/01/2017

Proficiency Test Statistics

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Solid and Hazardous Waste Pyrene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Pyrene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3541
Target: 168 ug/kg
Limits: 28.3 to 185 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 86 ug/kg
Std Dev: 0 ug/kg
Median: 86 ug/kg

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

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Solid and Hazardous Waste Pyrene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Pyrene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3545A
Target: 168 ug/kg
Limits: 28.3 to 185 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 119.5 ug/kg
Std Dev: 20.5061 ug/kg
Median: 119.5 ug/kg

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

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Solid and Hazardous Waste Pyrene Low Level

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Pyrene Low Level
Sample: 0550
Technology: GC-MS
Prep Method: EPA 3546
Target: 168 ug/kg
Limits: 28.3 to 185 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 91.5 ug/kg
Std Dev: 0 ug/kg
Median: 91.5 ug/kg

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

Totals for Matrix/Analyte/Technology:
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Solid and Hazardous Waste Methylene chloride

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Methylene chloride
Sample: 0565
Technology: GC-MS
Prep Method:
Target: 2595 ug/kg
Limits: 1340 to 3810 ug/kg
Basis: Linear Regression
Robust Mean: 2595 ug/kg
Std Dev: 148.4924 ug/kg
Median: 2595 ug/kg

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

Totals for Matrix/Analyte/Technology:
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Solid and Hazardous Waste Methylene chloride

Score Date: 09/01/2017
### Solid and Hazardous Waste Methylene chloride

**Shipments:**
- **Analyte:** Methylene chloride
- **Sample:** 0565
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-H
- **Target:** 2595 ug/kg
- **Limits:** 1340 to 3810 ug/kg
- **Basis:** Linear Regression
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Totals for Matrix/Analyte:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Scores:**
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Analyte:** Methylene chloride
- **Sample Limits:** 1340 to 3810 ug/kg
- **Target:** 2595 ug/kg
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-H
- **Basis:** Linear Regression
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Totals for Matrix/Analyte:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Scores:**
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Analyte:** Methylene chloride
- **Sample Limits:** 1340 to 3810 ug/kg
- **Target:** 2595 ug/kg
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-H
- **Basis:** Linear Regression
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Totals for Matrix/Analyte:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Scores:**
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Analyte:** Methylene chloride
- **Sample Limits:** 1340 to 3810 ug/kg
- **Target:** 2595 ug/kg
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-H
- **Basis:** Linear Regression
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Totals for Matrix/Analyte:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Scores:**
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Analyte:** Methylene chloride
- **Sample Limits:** 1340 to 3810 ug/kg
- **Target:** 2595 ug/kg
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-H
- **Basis:** Linear Regression
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Totals for Matrix/Analyte:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Scores:**
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Analyte:** Methylene chloride
- **Sample Limits:** 1340 to 3810 ug/kg
- **Target:** 2595 ug/kg
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-H
- **Basis:** Linear Regression
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Totals for Matrix/Analyte:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Scores:**
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Analyte:** Methylene chloride
- **Sample Limits:** 1340 to 3810 ug/kg
- **Target:** 2595 ug/kg
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-H
- **Basis:** Linear Regression
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Totals for Matrix/Analyte:**
- Labs: Pass: 19, Fail: 1, Total: 20

**Scores:**
- **Robust Mean:** 2803.7 ug/kg
- **Std Dev:** 667.2353 ug/kg
- **Median:** 2755 ug/kg

### Solid and Hazardous Waste 2-Butanone (Methylethyl ketone)

**Shipments:**
- **Analyte:** 2-Butanone (Methylethyl ketone)
- **Sample:** 0565
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-L
- **Target:** 2595 ug/kg
- **Limits:** 1340 to 3810 ug/kg
- **Basis:** Linear Regression
- **Robust Mean:** 2630 ug/kg
- **Std Dev:** 0 ug/kg
- **Median:** 2630 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 24, Fail: 1, Total: 25

**Totals for Matrix/Analyte:**
- Labs: Pass: 24, Fail: 1, Total: 25

**Scores:**
- **Robust Mean:** 18466.7 ug/kg
- **Std Dev:** 1767.2955 ug/kg
- **Median:** 17600 ug/kg

**Analyte:** 2-Butanone (Methylethyl ketone)
- **Sample Limits:** 4710 to 25300 ug/kg
- **Target:** 16749 ug/kg
- **Technology:** GC-MS
- **Prep Method:** EPA 5035A-L
- **Basis:** Linear Regression
- **Robust Mean:** 18466.7 ug/kg
- **Std Dev:** 1767.2955 ug/kg
- **Median:** 17600 ug/kg

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 23, Fail: 0, Total: 23

**Totals for Matrix/Analyte:**
- Labs: Pass: 23, Fail: 0, Total: 23

**Scores:**
- **Robust Mean:** 18466.7 ug/kg
- **Std Dev:** 1767.2955 ug/kg
- **Median:** 17600 ug/kg
Solid and Hazardous Waste 2-Butanone (Methylethyl ketone)

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: 2-Butanone (Methylethyl ketone)
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-H
Target: 16749 ug/kg
Limits: 4710 to 25300 ug/kg
Basis: Linear Regression
Robust Mean: 16336.8 ug/kg
Std Dev: 2337.5068 ug/kg
Median: 16300 ug/kg

Totals for Matrix/Analyte/Technology:
  Labs: Pass 23  Fail 0  Total 23

Score Date: 09/01/2017  Proficiency Test Statistics  Page 338 of 386
## Solid and Hazardous Waste Magnesium, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Magnesium, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:** EPA 3051A  
**Target:** 3914 mg/kg  
**Limits:** 2690 to 5090 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 3830 mg/kg  
**Std Dev:** 2708.219 mg/kg  
**Median:** 4415 mg/kg  

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

### Totals for Matrix/Analyte/Technology:

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### Totals for Matrix/Analyte:

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### Shipment:

**Robust Mean:** 3700 mg/kg  
**Std Dev:** 2616.2951 mg/kg  
**Median:** 3265 mg/kg  

**Basis:** BiWeight LRE  
**Analyte:** Magnesium, Total  
**Sample:** Limits: 2690 to 5090 mg/kg  
**Target:** 3914 mg/kg  
**Technology:** ICP-MS  
**Prep Method:** EPA 3050B  
**Target:** 3914 mg/kg  
**Limits:** 2690 to 5090 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 3700 mg/kg  
**Std Dev:** 2616.2951 mg/kg  
**Median:** 3265 mg/kg  

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

### Totals for Matrix/Analyte/Technology:

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### Totals for Matrix/Analyte:

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### Shipment:

**Robust Mean:** 873 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 873 mg/kg  

**Basis:** BiWeight LRE  
**Analyte:** Manganese, Total  
**Sample:** Limits: 822 to 1260 mg/kg  
**Target:** 1045 mg/kg  
**Technology:** ICP-AES  
**Prep Method:** EPA 3051A  
**Target:** 1045 mg/kg  
**Limits:** 822 to 1260 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 873 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 873 mg/kg  

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

### Totals for Matrix/Analyte/Technology:

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### Totals for Matrix/Analyte:

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### Score Date:

09/01/2017  
Proficiency Test Statistics  
Page 339 of 386
### Solid and Hazardous Waste Manganese, Total

**Shipments:**
- **405** Matrix: Solid and Hazardous Waste

**Sample:** 0522

**Technology:**
- ICP-AES

**Prep Method:**
- EPA 3050B

**Target:** 1045 mg/kg

**Limits:** 822 to 1260 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1037.7 mg/kg

**Median:** 1040 mg/kg

**Number of Labs**

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</table>

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass 18, Fail 0, Total 18

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

---

### Solid and Hazardous Waste Manganese, Total

**Shipments:**
- **405** Matrix: Solid and Hazardous Waste

**Sample:** 0522

**Technology:**
- ICP-AES

**Prep Method:**
- EPA 3051A

**Target:** 1045 mg/kg

**Limits:** 822 to 1260 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1090 mg/kg

**Median:** 1090 mg/kg

**Number of Labs**

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</table>

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass 1, Fail 0, Total 1

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

---

### Solid and Hazardous Waste Manganese, Total

**Shipments:**
- **405** Matrix: Solid and Hazardous Waste

**Sample:** 0522

**Technology:**
- ICP-MS

**Prep Method:**
- EPA 3050B

**Target:** 1045 mg/kg

**Limits:** 822 to 1260 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 932 mg/kg

**Median:** 932 mg/kg

**Number of Labs**

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**Totals for Matrix/Analyte/Technology:**
- Labs: Pass 1, Fail 0, Total 1

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

---

### Solid and Hazardous Waste Manganese, Total

**Shipments:**
- **405** Matrix: Solid and Hazardous Waste

**Sample:** 0522

**Technology:**
- ICP-MS

**Prep Method:**
- EPA 3050B

**Target:** 1045 mg/kg

**Limits:** 822 to 1260 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 1070 mg/kg

**Median:** 1040 mg/kg

**Number of Labs**

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**Totals for Matrix/Analyte/Technology:**
- Labs: Pass 5, Fail 0, Total 5

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

---

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**  
**Page 340 of 386**
Solid and Hazardous Waste Manganese, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Manganese, Total
Sample: 0522
Technology: ICP-MS
Prep Method: EPA 3051A
Target: 1045 mg/kg
Limits: 822 to 1260 mg/kg
Basis: BiWeight LRE
Robust Mean: 1087 mg/kg
Std Dev: 0 mg/kg
Median: 1087 mg/kg

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 27  Fail: 0  Total: 27

Solid and Hazardous Waste Molybdenum, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Molybdenum, Total
Sample: 0522
Technology: ICP-AES
Prep Method:
Target: 43.2 mg/kg
Limits: 27.7 to 57.1 mg/kg
Basis: BiWeight LRE
Robust Mean: 38.2 mg/kg
Std Dev: 0 mg/kg
Median: 38.2 mg/kg

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 29  Fail: 0  Total: 29

Solid and Hazardous Waste Molybdenum, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Molybdenum, Total
Sample: 0522
Technology: ICP-AES
Prep Method:
Target: 43.2 mg/kg
Limits: 27.7 to 57.1 mg/kg
Basis: BiWeight LRE
Robust Mean: 42 mg/kg
Std Dev: 3.6012 mg/kg
Median: 42.5 mg/kg

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

Solid and Hazardous Waste Molybdenum, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Molybdenum, Total
Sample: 0522
Technology: ICP-AES
Prep Method:
Target: 43.2 mg/kg
Limits: 27.7 to 57.1 mg/kg
Basis: BiWeight LRE
Robust Mean: 42.6 mg/kg
Std Dev: 2.5697 mg/kg
Median: 41.2 mg/kg

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

Score Date: 09/01/2017  Proficiency Test Statistics  Page 341 of 386
### Solid and Hazardous Waste Molybdenum, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Molybdenum, Total  
**Sample:** 0522  
**Technology:** ICP-MS  
**Prep Method:**  
- **Target:** 43.2 mg/kg  
- **Limits:** 27.7 to 57.1 mg/kg  
- **Basis:** BiWeight LRE  
- **Robust Mean:** 37.9 mg/kg  
- **Std Dev:** 0 mg/kg  
- **Median:** 37.9 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
- **Labs:** 29  
- **Pass:** 29  
- **Fail:** 0  
- **Total:** 29

---

### Solid and Hazardous Waste Molybdenum, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Molybdenum, Total  
**Sample:** 0522  
**Technology:** ICP-MS  
**Prep Method:** EPA 3050B  
**Target:** 43.2 mg/kg  
**Limits:** 27.7 to 57.1 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 44 mg/kg  
**Std Dev:** 4.9862 mg/kg  
**Median:** 45.6 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
- **Labs:** 5  
- **Pass:** 5  
- **Fail:** 0  
- **Total:** 5

---

### Solid and Hazardous Waste Molybdenum, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Molybdenum, Total  
**Sample:** 0522  
**Technology:** ICP-MS  
**Prep Method:** EPA 3051A  
**Target:** 43.2 mg/kg  
**Limits:** 27.7 to 57.1 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 46.1 mg/kg  
**Std Dev:** 2.9698 mg/kg  
**Median:** 46.1 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
- **Labs:** 2  
- **Pass:** 2  
- **Fail:** 0  
- **Total:** 2

---

### Solid and Hazardous Waste Methyl tert-butyl ether

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Methyl tert-butyl ether  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:**  
- **Target:** 7434 ug/kg  
- **Limits:** 5200 to 9660 ug/kg  
- **Basis:** Target Value +/- a fixed percent  
- **Robust Mean:** 7705 ug/kg  
- **Std Dev:** 572.7565 ug/kg  
- **Median:** 7705 ug/kg  

**Totals for Matrix/Analyte/Technology:**  
- **Labs:** 20  
- **Pass:** 19  
- **Fail:** 1  
- **Total:** 20

---

**Score Date:** 09/01/2017  
**Proficiency Test Statistics**

---
Solid and Hazardous Waste Methyl tert-butyl ether

Shipments:
- 405
- 6798
- 7104
- 7410
- 7716
- 8022
- 8634
- 9246

*Matrix:* Solid and Hazardous Waste

*Analyte:* Methyl tert-butyl ether

*Sample:* 0565

**Technology:** GC-MS

**Prep Method:** EPA 5035A-H

**Target:** 7434 ug/kg

**Limits:** 5200 to 9660 ug/kg

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 7272.9 ug/kg

**Std Dev:** 2546.0347 ug/kg

**Median:** 7250 ug/kg

---

**Totals for Matrix/Analyte/Technology:**

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**Test Results (End Groups Include Outliers):**

Number of Labs: 8634

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

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**Totals for Matrix/Analyte:**

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**Shipment:** 405

**Matrix:** Solid and Hazardous Waste

**Analyte:** Methyl tert-butyl ether

**Sample:** 0565

**Technology:** GC-MS

**Prep Method:** EPA 5035A-L

**Target:** 7434 ug/kg

**Limits:** 5200 to 9660 ug/kg

**Basis:** Target Value +/- a fixed percent

**Robust Mean:** 7650 ug/kg

**Std Dev:** 5409.3669 ug/kg

**Median:** 8595 ug/kg

**Totals for Matrix/Analyte:**

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

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**Totals for Matrix/Analyte/Technology:**

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**Shipments:**
- 405
- 6798
- 7104
- 7410
- 7716
- 8022
- 8634
- 9246

*Matrix:* Solid and Hazardous Waste

*Analyte:* Methoxychlor

*Sample:* 0527

**Technology:** GC-ECD

**Prep Method:**

**Target:** 178 ug/kg

**Limits:** 17.8 to 232 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 128 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 128 ug/kg

**Totals for Matrix/Analyte:**

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

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**Totals for Matrix/Analyte/Technology:**

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**Shipments:**
- 405
- 6798
- 7104
- 7410
- 7716
- 8022
- 8634
- 9246

*Matrix:* Solid and Hazardous Waste

*Analyte:* Methoxychlor

*Sample:* 0527

**Technology:** GC-ECD

**Prep Method:**

**Target:** 178 ug/kg

**Limits:** 17.8 to 232 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% -11

**Robust Mean:** 128 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 128 ug/kg

**Totals for Matrix/Analyte:**

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

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**Totals for Matrix/Analyte/Technology:**

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**Score Date:** 09/01/2017
Solid and Hazardous Waste Methoxychlor

Shipments: 405  Matrix: Solid and Hazardous Waste

Sample: 0527

Technology: GC-ECD

Prep Method: EPA 3540C

Target: 178 ug/kg

Limits: 17.8 to 232 ug/kg

Basis: Stat. Norm in SW with conditions for the 10% -11

Robust Mean: 100.4 ug/kg

Std Dev: 27.4787 ug/kg

Median: 111 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 118  Fail: 0  Total: 118

Totals for Matrix/Analyte:

Labs: Pass: 22  Fail: 0  Total: 22

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

Solid and Hazardous Waste Methoxychlor

Shipments: 405  Matrix: Solid and Hazardous Waste

Sample: 0527

Technology: GC-ECD

Prep Method: EPA 3541

Target: 178 ug/kg

Limits: 17.8 to 232 ug/kg

Basis: Stat. Norm in SW with conditions for the 10% -11

Robust Mean: 89.3 ug/kg

Std Dev: 0 ug/kg

Median: 89.3 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 22  Fail: 0  Total: 22

Solid and Hazardous Waste Methoxychlor

Shipments: 405  Matrix: Solid and Hazardous Waste

Sample: 0527

Technology: GC-ECD

Prep Method: EPA 3545A

Target: 178 ug/kg

Limits: 17.8 to 232 ug/kg

Basis: Stat. Norm in SW with conditions for the 10% -11

Robust Mean: 142 ug/kg

Std Dev: 30.6268 ug/kg

Median: 141.5 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4  Fail: 0  Total: 4

Totals for Matrix/Analyte:

Labs: Pass: 22  Fail: 0  Total: 22

Solid and Hazardous Waste Methoxychlor

Shipments: 405  Matrix: Solid and Hazardous Waste

Sample: 0527

Technology: GC-ECD

Prep Method: EPA 3546

Target: 178 ug/kg

Limits: 17.8 to 232 ug/kg

Basis: Stat. Norm in SW with conditions for the 10% -11

Robust Mean: 125.6 ug/kg

Std Dev: 22.4406 ug/kg

Median: 118 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 5  Fail: 0  Total: 5

Totals for Matrix/Analyte:

Labs: Pass: 22  Fail: 0  Total: 22

Score Date: 09/01/2017
Solid and Hazardous Waste Methoxychlor

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Methoxychlor  
**Sample:** 0527  
**Technology:** GC-ECD  
**Prep Method:** EPA 3550C  
**Target:** 178 ug/kg  
**Limits:** 17.8 to 232 ug/kg  
**Basis:** Stat. Norm in SW with conditions for the 10%-11  
**Robust Mean:** 104 ug/kg  
**Std Dev:** 52.8111 ug/kg  
**Median:** 108.05 ug/kg  

**Test Results (End Groups Include Outliers)**  
Number of Labs: 25  
44  
81  
137  
155  
174  
0  
0.5  
1  
1.5  
2  

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

Solid and Hazardous Waste Sodium, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Sodium, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:**  
**Target:** 3256 mg/kg  
**Limits:** 2120 to 4260 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 3160 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 3160 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 1  
Fail: 0  
Total: 1  

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

Solid and Hazardous Waste Sodium, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Sodium, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:** EPA 3050B  
**Target:** 3256 mg/kg  
**Limits:** 2120 to 4260 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 3210.9 mg/kg  
**Std Dev:** 827.2678 mg/kg  
**Median:** 3170 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 16  
Fail: 1  
Total: 17  

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

Solid and Hazardous Waste Sodium, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Sodium, Total  
**Sample:** 0522  
**Technology:** ICP-MS  
**Prep Method:** EPA 3050B  
**Target:** 3256 mg/kg  
**Limits:** 2120 to 4260 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 3180 mg/kg  
**Std Dev:** 254.5584 mg/kg  
**Median:** 3180 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 2  
Fail: 0  
Total: 2  

**A histogram is not displayed for Technology: ICP-MS** due to the limited number of participants.
Solid and Hazardous Waste Naphthalene

**Shipments:**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0524
- **Technology:** GC-MS
- **Prep Method:** EPA 3540C
- **Target:** 3853 μg/kg
- **Limits:** 394 to 4240 μg/kg
- **Basis:** Stat Norm in SW with conditions for the 10% -11
- **Robust Mean:** 1815 μg/kg
  - **Std Dev:** 219.2031 μg/kg
  - **Median:** 1815 μg/kg

**Totals for Matrix/Analyte/Technology:**
- **Labs: Pass:** 2, **Fail:** 0, **Total:** 2

**Totals for Matrix/Analyte:**
- **Labs: Pass:** 2, **Fail:** 0, **Total:** 2

**Shipment:**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0524
- **Technology:** GC-MS
- **Prep Method:** EPA 3545A
- **Target:** 3853 μg/kg
- **Limits:** 394 to 4240 μg/kg
- **Basis:** Stat Norm in SW with conditions for the 10% -11
- **Robust Mean:** 1770.5 μg/kg
  - **Std Dev:** 732.6943 μg/kg
  - **Median:** 1701 μg/kg

**Totals for Matrix/Analyte/Technology:**
- **Labs: Pass:** 4, **Fail:** 0, **Total:** 4

**Totals for Matrix/Analyte:**
- **Labs: Pass:** 21, **Fail:** 0, **Total:** 21

**Score Date:** 09/01/2017

Proficiency Test Statistics Page 346 of 386
Solid and Hazardous Waste Naphthalene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Naphthalene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3550C
Target: 3953 ug/kg
Limits: 394 to 4240 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% - 11
Robust Mean: 1454.3 ug/kg
Std Dev: 450.1493 ug/kg
Median: 1420 ug/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 9  Fail: 0  Total: 9

Solid and Hazardous Waste Nickel, Total

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Nickel, Total
Sample: 0522
Technology: FAAS
Prep Method:
Target: 270 mg/kg
Limits: 204 to 346 mg/kg
Basis: BiWeight LRE
Robust Mean: 256 mg/kg
Std Dev: 0 mg/kg
Median: 256 mg/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Solid and Hazardous Waste Nickel, Total

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Nickel, Total
Sample: 0522
Technology: FAAS
Prep Method: EPA 3050B
Target: 270 mg/kg
Limits: 204 to 346 mg/kg
Basis: BiWeight LRE
Robust Mean: 299 mg/kg
Std Dev: 0 mg/kg
Median: 299 mg/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

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

Solid and Hazardous Waste Nickel, Total

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Nickel, Total
Sample: 0522
Technology: ICP-AES
Prep Method:
Target: 270 mg/kg
Limits: 204 to 346 mg/kg
Basis: BiWeight LRE
Robust Mean: 250 mg/kg
Std Dev: 0 mg/kg
Median: 250 mg/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1

A histogram is not displayed for Technology: ICP-AES due to the limited number of participants.
Solid and Hazardous Waste Nickel, Total

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 348 of 386
### Solid and Hazardous Waste Nickel, Total

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### Solid and Hazardous Waste Nitrobenzene

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<td>Target:</td>
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<td>Limits:</td>
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### Solid and Hazardous Waste Nitrobenzene

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<td>4285 ug/kg</td>
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**Totals for Matrix/Analyte/Technology:**

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### Solid and Hazardous Waste Nitrobenzene

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

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### Solid and Hazardous Waste Nitrobenzene

Score Date: 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste Nitrobenzene

Analyte: Nitrobenzene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 9537 ug/kg
Limits: 954 to 10500 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 5576.7 ug/kg
Std Dev: 840.1389 ug/kg
Median: 5760 ug/kg

Number of Labs

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

Solid and Hazardous Waste Nitrobenzene

Analyte: Nitrobenzene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 9537 ug/kg
Limits: 954 to 10500 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 3440 ug/kg
Std Dev: 2838.3211 ug/kg
Median: 3315 ug/kg

Number of Labs

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Totals for Matrix/Analyte/Technology:
Labs: Pass: 3 Fail: 1 Total: 4

Solid and Hazardous Waste Nitrobenzene

Analyte: Nitrobenzene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3550C
Target: 9537 ug/kg
Limits: 954 to 10500 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 3116.4 ug/kg
Std Dev: 1066.8851 ug/kg
Median: 3290 ug/kg

Number of Labs

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

Solid and Hazardous Waste N-Nitrosodi-n-propylamine

Analyte: N-Nitrosodi-n-propylamine
Sample: 0524
Technology: GC-MS
Prep Method:
Target: 11335 ug/kg
Limits: 1130 to 12500 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 7330 ug/kg
Std Dev: 2432.4473 ug/kg
Median: 7330 ug/kg

Number of Labs

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Totals for Matrix/Analyte/Technology:
Labs: Pass: 2 Fail: 0 Total: 2

Solid and Hazardous Waste N-Nitrosodi-n-propylamine

Analyte: N-Nitrosodi-n-propylamine
Sample: 0524
Technology: GC-MS
Prep Method:
Target: 11335 ug/kg
Limits: 1130 to 12500 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11
Robust Mean: 7330 ug/kg
Std Dev: 2432.4473 ug/kg
Median: 7330 ug/kg

Number of Labs

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Totals for Matrix/Analyte/Technology:
Labs: Pass: 20 Fail: 1 Total: 21
Solid and Hazardous Waste N-Nitrosodi-n-propylamine

**Analyte:** N-Nitrosodi-n-propylamine

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3540C

**Target:** 11335 ug/kg

**Limits:** 1130 to 12500 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% - 11%

**Robust Mean:** 7350 ug/kg

**Std Dev:** 1682.9141 ug/kg

**Median:** 7350 ug/kg

**Totals for Matrix/Analyte/Technology:**

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**Totals for Matrix/Analyte:**

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**Shipments:**

- **Robust Mean:** 7350 ug/kg
- **Std Dev:** 1682.9141 ug/kg
- **Median:** 7350 ug/kg

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

---

Solid and Hazardous Waste N-Nitrosodi-n-propylamine

**Analyte:** N-Nitrosodi-n-propylamine

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3541

**Target:** 11335 ug/kg

**Limits:** 1130 to 12500 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% - 11%

**Robust Mean:** 3500 ug/kg

**Std Dev:** 0 ug/kg

**Median:** 3500 ug/kg

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
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<th>Total</th>
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**Totals for Matrix/Analyte:**

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<th>Labs</th>
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<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
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</table>

**Shipments:**

- **Robust Mean:** 3500 ug/kg
- **Std Dev:** 0 ug/kg
- **Median:** 3500 ug/kg

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

---

Solid and Hazardous Waste N-Nitrosodi-n-propylamine

**Analyte:** N-Nitrosodi-n-propylamine

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3545A

**Target:** 11335 ug/kg

**Limits:** 1130 to 12500 ug/kg

**Basis:** Stat_Norm in SW with conditions for the 10% - 11%

**Robust Mean:** 7040 ug/kg

**Std Dev:** 1126.4102 ug/kg

**Median:** 6760 ug/kg

**Totals for Matrix/Analyte/Technology:**

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

**Totals for Matrix/Analyte:**

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<tr>
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<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Shipments:**

- **Robust Mean:** 7040 ug/kg
- **Std Dev:** 1126.4102 ug/kg
- **Median:** 6760 ug/kg

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste N-Nitrosodi-n-propylamine

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Sample:** 0524

**Technology:** GC-MS

**Prep Method:** EPA 3550C

**Target:** 1130 ug/kg to 12500 ug/kg

**Basis:** Stat. Norm in SW with conditions for the 10% - 11

**Robust Mean:** 5122.4 ug/kg

**Std Dev:** 1539.4313 ug/kg

**Median:** 5180 ug/kg

---

**Solid and Hazardous Waste Nitrate (as N)**

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Sample:** 0563

**Technology:** IC-COND

**Prep Method:**
- **Target:** 423 mg/kg
- **Limits:** 346 to 540 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 443.2 mg/kg

**Std Dev:** 34.6434 mg/kg

**Median:** 442 mg/kg

---

**Solid and Hazardous Waste Nitrate (as N)**

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Sample:** 0563

**Technology:** POT

**Prep Method:**
- **Target:** 423 mg/kg
- **Limits:** 346 to 540 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 715 mg/kg

**Std Dev:** 219.0801 mg/kg

**Median:** 777 mg/kg

---

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

**Solid and Hazardous Waste Oil and Grease Total Recoverable (HEM)**

**Shipments:**
- **405**

**Matrix:** Solid and Hazardous Waste

**Sample:** 0554

**Technology:** GRAV

**Prep Method:**
- **Target:** 866 mg/kg
- **Limits:** 138 to 1370 mg/kg

**Basis:** BiWeight LRE

**Robust Mean:** 715 mg/kg

**Std Dev:** 219.0801 mg/kg

**Median:** 777 mg/kg

---
Solid and Hazardous Waste Phenol

Shipments:
- 405
  Technology: GC-MS
  Sample: 0524

Analyte: Phenol
Matrix: Solid and Hazardous Waste

Prep Method:
- EPA 3540C
  Target: 2970 ug/kg
  Limits: 297 to 3270 ug/kg

Basis: Stat_Norm in SW with conditions for the 10% -11%

Robust Mean: 944 ug/kg
  Std Dev: 0 ug/kg
  Median: 944 ug/kg

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:
- Labs: Pass: 2  Fail: 0  Total: 2

Fail: 0
Labs: 21
Pass: 21
Total: 21

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

Shipment: 405  Matrix: Solid and Hazardous Waste

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

Analyte: Phenol
Sample: 0524
Technology: GC-MS
Prep Method: 
Target: 2970 ug/kg
Limits: 297 to 3270 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11%

Robust Mean: 1003.5 ug/kg
  Std Dev: 150.6137 ug/kg
  Median: 1003.5 ug/kg

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:
- Labs: Pass: 21  Fail: 0  Total: 21

Fail: 0
Labs: 21
Pass: 21
Total: 21

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

Shipment: 405  Matrix: Solid and Hazardous Waste

Analyte: Phenol
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3541
Target: 2970 ug/kg
Limits: 297 to 3270 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11%

Robust Mean: 730 ug/kg
  Std Dev: 0 ug/kg
  Median: 730 ug/kg

Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:
- Labs: Pass: 21  Fail: 0  Total: 21

Fail: 0
Labs: 21
Pass: 21
Total: 21

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

Shipment: 405  Matrix: Solid and Hazardous Waste

Analyte: Phenol
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 2970 ug/kg
Limits: 297 to 3270 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% -11%

Robust Mean: 1820 ug/kg
  Std Dev: 366.9686 ug/kg
  Median: 1670 ug/kg

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

Totals for Matrix/Analyte:
- Labs: Pass: 21  Fail: 0  Total: 21

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

Score Date: 09/01/2017
Proficiency Test Statistics
Solid and Hazardous Waste Phenol

**Shipments:**
- 405
- 0524

**Matrix:** Solid and Hazardous Waste

**Analyte:** Phenol

**Sample:**
- 0524

**Technology:** GC-MS

**Prep Method:**
- EPA 3546

**Target:** 2970 ug/kg

**Limits:** 297 to 3270 ug/kg

**Basis:** Stat. Norm in SW with conditions for the 10% -11

**Robust Mean:** 1657.5 ug/kg

**Std Dev:** 440.9365 ug/kg

**Median:** 1585 ug/kg

**Test Results (End Groups Include Outliers):**
- Number of Labs: 1220, 1465, 1709, 2198
- 0, 0.5, 1, 1.5, 2, 2.5, 3

**Fail Labs:** 0

**Pass Labs:** 21

**Total Labs:** 21

**Totals for Matrix/Analyte/Technology:**
- Labs: Pass = 4, Fail = 0, Total = 4

**Totals for Matrix/Analyte:**
- Labs: Pass = 9, Total = 9

**Score Date:** 09/11/2017

Proficiency Test Statistics

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## Solid and Hazardous Waste Lead, Total

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
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</thead>
<tbody>
<tr>
<td>Analyte:</td>
<td>Lead, Total</td>
</tr>
<tr>
<td>Sample:</td>
<td>0522</td>
</tr>
<tr>
<td>Technology:</td>
<td>FAAS</td>
</tr>
<tr>
<td>Prep Method:</td>
<td>EPA 3050B</td>
</tr>
<tr>
<td>Target:</td>
<td>156 mg/kg</td>
</tr>
<tr>
<td>Limits:</td>
<td>114 to 196 mg/kg</td>
</tr>
<tr>
<td>Basis:</td>
<td>BiWeight LRE</td>
</tr>
<tr>
<td>Robust Mean:</td>
<td>160.6 mg/kg</td>
</tr>
<tr>
<td>Std Dev:</td>
<td>11.6864 mg/kg</td>
</tr>
<tr>
<td>Median:</td>
<td>158.7 mg/kg</td>
</tr>
</tbody>
</table>

### Totals for Matrix/Analyte/Technology:
- Labs: Pass: 8, Fail: 0, Total: 8
- Labs: Pass: 53, Fail: 1, Total: 54

---

## Solid and Hazardous Waste Lead, Total

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tr>
<td>Analyte:</td>
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<td>Sample:</td>
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<tr>
<td>Technology:</td>
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<td>Prep Method:</td>
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<td>Target:</td>
<td>156 mg/kg</td>
</tr>
<tr>
<td>Limits:</td>
<td>114 to 196 mg/kg</td>
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<tr>
<td>Basis:</td>
<td>BiWeight LRE</td>
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<tr>
<td>Robust Mean:</td>
<td>176.5 mg/kg</td>
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<tr>
<td>Std Dev:</td>
<td>4.9497 mg/kg</td>
</tr>
<tr>
<td>Median:</td>
<td>176.5 mg/kg</td>
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</tbody>
</table>

### Totals for Matrix/Analyte/Technology:
- Labs: Pass: 2, Fail: 0, Total: 2
- Labs: Pass: 53, Fail: 1, Total: 54

---

## Solid and Hazardous Waste Lead, Total

<table>
<thead>
<tr>
<th>Shipment</th>
<th>Matrix: Solid and Hazardous Waste</th>
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<tbody>
<tr>
<td>Analyte:</td>
<td>Lead, Total</td>
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<td>Sample:</td>
<td>0522</td>
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<tr>
<td>Technology:</td>
<td>FAAS</td>
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<tr>
<td>Prep Method:</td>
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<tr>
<td>Target:</td>
<td>156 mg/kg</td>
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<td>Limits:</td>
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<td>Basis:</td>
<td>BiWeight LRE</td>
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<tr>
<td>Robust Mean:</td>
<td>157 mg/kg</td>
</tr>
<tr>
<td>Std Dev:</td>
<td>0 mg/kg</td>
</tr>
<tr>
<td>Median:</td>
<td>157 mg/kg</td>
</tr>
</tbody>
</table>

### Totals for Matrix/Analyte/Technology:
- Labs: Pass: 1, Fail: 0, Total: 1
- Labs: Pass: 53, Fail: 1, Total: 54

---

A histogram is not displayed for Technology: FAAS due to the limited number of participants.
Solid and Hazardous Waste Lead, Total

Shipments: 405

Matrix: Solid and Hazardous Waste

Analyte: Lead, Total

Sample: 0522

Technology: ICP-MS

Prep Method:

Target: 156 mg/kg
Limits: 114 to 196 mg/kg

Basis: BiWeight LRE

Robust Mean: 141 mg/kg

Std Dev: 0 mg/kg

Median: 141 mg/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1 Fail: 0 Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 53 Fail: 1 Total: 54

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

Solid and Hazardous Waste Lead, Total

Shipments: 405

Matrix: Solid and Hazardous Waste

Analyte: Lead, Total

Sample: 0522

Technology: ICP-MS

Prep Method:

Target: 156 mg/kg
Limits: 114 to 196 mg/kg

Basis: BiWeight LRE

Robust Mean: 157.8 mg/kg

Std Dev: 71.0296 mg/kg

Median: 161 mg/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4 Fail: 1 Total: 5

Totals for Matrix/Analyte:

Labs: Pass: 53 Fail: 1 Total: 54

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

Solid and Hazardous Waste Lead, Total

Shipments: 405

Matrix: Solid and Hazardous Waste

Analyte: Lead, Total

Sample: 0522

Technology: ICP-MS

Prep Method:

Target: 156 mg/kg
Limits: 114 to 196 mg/kg

Basis: BiWeight LRE

Robust Mean: 160 mg/kg

Std Dev: 14,1421 mg/kg

Median: 160 mg/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2 Fail: 0 Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 53 Fail: 1 Total: 54

Solid and Hazardous Waste Lead in Dust Wipes

Shipments: 405

Matrix: Solid and Hazardous Waste

Analyte: Lead in Dust Wipes

Sample: 0526

Technology: FAAS

Prep Method:

Target: 64.5 ug/sq ft
Limits: 45.8 to 77.6 ug/sq ft

Basis: Robust Statistics (Normal Distribution)

Robust Mean: 61.7 ug/sq ft

Std Dev: 5,1601 ug/sq ft

Median: 63.9 ug/sq ft

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4 Fail: 0 Total: 4

Totals for Matrix/Analyte:

Labs: Pass: 41 Fail: 0 Total: 41

Score Date: 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste Lead in Dust Wipes

**Test Results**

**Shipments**
- **Shipments:** 405
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0526
- **Technology:** FAAS
- **Prep Method:** ASTM E-1644-04
- **Target:** 64.5 ug/sq ft
- **Limits:** 45.8 to 77.6 ug/sq ft
- **Basis:** Robust Statistics (Normal Distribution)

**Robust Mean:** 63.5 ug/sq ft
- **Std Dev:** 10.6066 ug/sq ft
- **Median:** 63.5 ug/sq ft

**Fail:** 0
**Labs:** 41
**Pass:** 41
**Total:** 41

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2 Fail: 0 Total: 2

**Test Results (End Groups Include Outliers)

**Shipments**
- **Shipments:** 405
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0526
- **Technology:** FAAS
- **Prep Method:** ASTM E-1979-12
- **Target:** 64.5 ug/sq ft
- **Limits:** 45.8 to 77.6 ug/sq ft
- **Basis:** Robust Statistics (Normal Distribution)

**Robust Mean:** 61.6 ug/sq ft
- **Std Dev:** 6.5054 ug/sq ft
- **Median:** 61.6 ug/sq ft

**Fail:** 0
**Labs:** 41
**Pass:** 41
**Total:** 41

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2 Fail: 0 Total: 2

**Test Results (End Groups Include Outliers)

**Shipments**
- **Shipments:** 405
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0526
- **Technology:** FAAS
- **Prep Method:** EPA 3050B
- **Target:** 64.5 ug/sq ft
- **Limits:** 45.8 to 77.6 ug/sq ft
- **Basis:** Robust Statistics (Normal Distribution)

**Robust Mean:** 60.4 ug/sq ft
- **Std Dev:** 6.6893 ug/sq ft
- **Median:** 60.98 ug/sq ft

**Fail:** 0
**Labs:** 41
**Pass:** 41
**Total:** 41

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 10 Fail: 0 Total: 10

**Test Results (End Groups Include Outliers)

**Shipments**
- **Shipments:** 405
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0526
- **Technology:** FAAS
- **Prep Method:** EPA 3051A
- **Target:** 64.5 ug/sq ft
- **Limits:** 45.8 to 77.6 ug/sq ft
- **Basis:** Robust Statistics (Normal Distribution)

**Robust Mean:** 69 ug/sq ft
- **Std Dev:** 7.0711 ug/sq ft
- **Median:** 69 ug/sq ft

**Fail:** 0
**Labs:** 41
**Pass:** 41
**Total:** 41

**Totals for Matrix/Analyte/Technology:**
- **Labs:** Pass: 2 Fail: 0 Total: 2
Solid and Hazardous Waste Lead in Dust Wipes

Shipments: 405  
Matrix: Solid and Hazardous Waste

Sample: 0526

Technology: ICP-AES

Prep Method: ASTM E-1644-04

Target: 64.5 ug/sq ft

Limits: 45.8 to 77.6 ug/sq ft

Basis: Robust Statistics (Normal Distribution)

Robust Mean: 57.2 ug/sq ft

Std Dev: 0 ug/sq ft

Median: 57.2 ug/sq ft

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Basis:

Robust Statistics (Normal Distribution)

Analyte:

Lead in Dust Wipes

Sample:

Limits:

45.8 to 77.6 ug/sq ft

Target:

64.5 ug/sq ft

Prep Method:

ASTM E-1644-04

Technology:

ICP-AES

Totals for Matrix/Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Totals for Matrix:

Labs: Pass: 1  Fail: 0  Total: 15

Totals for Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Sample:

Limits:

45.8 to 77.6 ug/sq ft

Target:

64.5 ug/sq ft

Prep Method:

ASTM E-1644-04

Technology:

ICP-AES

Totals for Matrix:

Labs: Pass: 15  Fail: 0  Total: 15

Totals for Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Sample:

Limits:

45.8 to 77.6 ug/sq ft

Target:

64.5 ug/sq ft

Prep Method:

ASTM E-1644-04

Technology:

ICP-AES

Totals for Matrix:

Labs: Pass: 15  Fail: 0  Total: 15

Totals for Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Sample:

Limits:

45.8 to 77.6 ug/sq ft

Target:

64.5 ug/sq ft

Prep Method:

ASTM E-1644-04

Technology:

ICP-AES

Totals for Matrix:

Labs: Pass: 15  Fail: 0  Total: 15

Totals for Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Sample:

Limits:

45.8 to 77.6 ug/sq ft

Target:

64.5 ug/sq ft

Prep Method:

ASTM E-1644-04

Technology:

ICP-AES

Totals for Matrix:

Labs: Pass: 15  Fail: 0  Total: 15

Totals for Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Sample:

Limits:

45.8 to 77.6 ug/sq ft

Target:

64.5 ug/sq ft

Prep Method:

ASTM E-1644-04

Technology:

ICP-AES

Totals for Matrix:

Labs: Pass: 15  Fail: 0  Total: 15

Totals for Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Sample:

Limits:

45.8 to 77.6 ug/sq ft

Target:

64.5 ug/sq ft

Prep Method:

ASTM E-1644-04

Technology:

ICP-AES

Totals for Matrix:

Labs: Pass: 15  Fail: 0  Total: 15

Totals for Analyte:

Labs: Pass: 41  Fail: 0  Total: 41

Sample:

Limits:

45.8 to 77.6 ug/sq ft

Target:

64.5 ug/sq ft

Prep Method:

ASTM E-1644-04

Technology:

ICP-AES

Totals for Matrix:

Labs: Pass: 15  Fail: 0  Total: 15

Totals for Analyte:

Labs: Pass: 41  Fail: 0  Total: 41
Solid and Hazardous Waste Lead in Dust Wipes

**Shipments:**

- **405**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0526
- **Technology:** ICP-AES
- **Prep Method:** EPA 3051A
- **Target:** 64.5 ug/sq ft
- **Limits:** 45.8 to 77.6 ug/sq ft
- **Basis:** Robust Statistics (Normal Distribution)
- **Robust Mean:** 58.2 ug/sq ft
- **Std Dev:** 0 ug/sq ft
- **Median:** 58.2 ug/sq ft
- **Fail:** 0
- **Labs:** 41
- **Pass:** 41
- **Total:** 41

**Totals for Matrix/Analyte/Technology:**

- **Labs:** 1
- **Pass:** 1
- **Fail:** 0
- **Total:** 1

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

Solid and Hazardous Waste Lead in Dust Wipes

**Shipments:**

- **405**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0526
- **Technology:** ICP-MS
- **Prep Method:** EPA 3050B
- **Target:** 64.5 ug/sq ft
- **Limits:** 45.8 to 77.6 ug/sq ft
- **Basis:** Robust Statistics (Normal Distribution)
- **Robust Mean:** 64.7 ug/sq ft
- **Std Dev:** 0 ug/sq ft
- **Median:** 64.7 ug/sq ft
- **Fail:** 0
- **Labs:** 41
- **Pass:** 41
- **Total:** 41

**Totals for Matrix/Analyte/Technology:**

- **Labs:** 1
- **Pass:** 1
- **Fail:** 0
- **Total:** 1

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

Solid and Hazardous Waste Lead in Dust Wipes

**Shipments:**

- **405**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0526
- **Technology:** ICP-MS
- **Prep Method:** EPA 3051A
- **Target:** 64.5 ug/sq ft
- **Limits:** 45.8 to 77.6 ug/sq ft
- **Basis:** Robust Statistics (Normal Distribution)
- **Robust Mean:** 66 ug/sq ft
- **Std Dev:** 0 ug/sq ft
- **Median:** 66 ug/sq ft
- **Fail:** 0
- **Labs:** 41
- **Pass:** 41
- **Total:** 41

**Totals for Matrix/Analyte/Technology:**

- **Labs:** 1
- **Pass:** 1
- **Fail:** 0
- **Total:** 1

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

Solid and Hazardous Waste Lead in Paint

**Shipments:**

- **405**
- **Matrix:** Solid and Hazardous Waste
- **Sample:** 0521
- **Technology:** FAAS
- **Prep Method:**
- **Target:** 5.43 %
- **Limits:** 4.06 to 6.62 %
- **Basis:** Robust Statistics (Normal Distribution)
- **Robust Mean:** 5.3 %
- **Std Dev:** 0.3558 %
- **Median:** 5.25 %
- **Fail:** 0
- **Labs:** 5
- **Pass:** 5
- **Total:** 5

**Totals for Matrix/Analyte/Technology:**

- **Labs:** 5
- **Pass:** 5
- **Fail:** 0
- **Total:** 5

**Totals for Matrix/Analyte:**

- **Labs:** 42
- **Pass:** 42
- **Fail:** 3
- **Total:** 45
### Solid and Hazardous Waste Lead in Paint

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Lead in Paint  
**Sample:** 0521  
**Technology:** FAAS  
**Prep Method:** ASTM E-1979-12  
**Target:** 5.43 %  
**Limits:** 4.06 to 6.62 %  
**Basis:** Robust Statistics (Normal Distribution)  
**Robust Mean:** 5.3 %  
**Std Dev:** 0 %  
**Median:** 5.32 %  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 1  
  - Fail: 0  
  - Total: 1  

**Totals for Matrix/Analyte:**  
- Labs: Pass: 42  
  - Fail: 3  
  - Total: 45  

---

### Solid and Hazardous Waste Lead in Paint

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Lead in Paint  
**Sample:** 0521  
**Technology:** FAAS  
**Prep Method:** EPA 3050B  
**Target:** 5.43 %  
**Limits:** 4.06 to 6.62 %  
**Basis:** Robust Statistics (Normal Distribution)  
**Robust Mean:** 5.4 %  
**Std Dev:** 1.6897 %  
**Median:** 5.53 %  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 10  
  - Fail: 1  
  - Total: 11  

**Totals for Matrix/Analyte:**  
- Labs: Pass: 42  
  - Fail: 3  
  - Total: 45  

---

### Solid and Hazardous Waste Lead in Paint

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Lead in Paint  
**Sample:** 0521  
**Technology:** FAAS  
**Prep Method:** EPA 3051A  
**Target:** 5.43 %  
**Limits:** 4.06 to 6.62 %  
**Basis:** Robust Statistics (Normal Distribution)  
**Robust Mean:** 5.4 %  
**Std Dev:** 0.3111 %  
**Median:** 5.38 %  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 2  
  - Fail: 0  
  - Total: 2  

**Totals for Matrix/Analyte:**  
- Labs: Pass: 42  
  - Fail: 3  
  - Total: 45  

---

### Solid and Hazardous Waste Lead in Paint

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Lead in Paint  
**Sample:** 0521  
**Technology:** FAAS  
**Prep Method:** EPA 600/R-93/200  
**Target:** 5.43 %  
**Limits:** 4.06 to 6.62 %  
**Basis:** Robust Statistics (Normal Distribution)  
**Robust Mean:** 5 %  
**Std Dev:** 0 %  
**Median:** 5.01 %  

**Totals for Matrix/Analyte/Technology:**  
- Labs: Pass: 1  
  - Fail: 0  
  - Total: 1  

**Totals for Matrix/Analyte:**  
- Labs: Pass: 42  
  - Fail: 3  
  - Total: 45  

---

Score Date: 09/01/2017  
Proficiency Test Statistics
Solid and Hazardous Waste Lead in Paint

**Analyte:** Lead in Paint

**Sample:** 0521

**Technology:** ICP-AES

**Prep Method:** ASTM E-1979-12

**Target:** 5.43%

**Limits:** 4.06 to 6.62%

**Basis:** Robust Statistics (Normal Distribution)

**Robust Mean:** 5.5%

**Std Dev:** 0%

**Median:** 5.49%

**Fail:** 0

**Labs:** 42

**Pass:** 42

**Total:** 45

**Shipment:**

**Robust Mean:** 5.5%

**Std Dev:** 0%

**Median:** 5.49%

**Fail:** 0

**Labs:** 42

**Pass:** 42

**Total:** 45

**Totals for Matrix/Analyte/Technology:**

**Labs:** 1

**Fail:** 0

**Total:** 1

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

---

Solid and Hazardous Waste Lead in Paint

**Analyte:** Lead in Paint

**Sample:** 0521

**Technology:** ICP-MS

**Prep Method:** EPA 3050B

**Target:** 5.43%

**Limits:** 4.06 to 6.62%

**Basis:** Robust Statistics (Normal Distribution)

**Robust Mean:** 5.4%

**Std Dev:** 1.6307%

**Median:** 5.285%

**Fail:** 0

**Labs:** 42

**Pass:** 42

**Total:** 45

**Shipment:**

**Robust Mean:** 5.4%

**Std Dev:** 0%

**Median:** 5.265%

**Fail:** 0

**Labs:** 42

**Pass:** 42

**Total:** 45

**Totals for Matrix/Analyte/Technology:**

**Labs:** 1

**Fail:** 0

**Total:** 1

A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.
### Solid and Hazardous Waste Pentachlorophenol

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste  
**Analyte**: Pentachlorophenol  
**Sample**: 0528  
**Technology**: GC-ECD  
**Prep Method**:  
- **Target**: 172 ug/kg  
- **Limits**: 103 to 189 ug/kg  
**Basis**: Stat_Norm in SW with conditions for the 10% -11  
**Robust Mean**: 113 ug/kg  
- **Std Dev**: 4.2426 ug/kg  
- **Median**: 113 ug/kg  
**Totals for Matrix/Analyte/Technology**:  
- **Labs**: Pass: 2  
- **Fail**: 0  
- **Total**: 2

---

### Solid and Hazardous Waste Phenanthrene

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste  
**Analyte**: Phenanthrene  
**Sample**: 0524  
**Technology**: GC-MS  
**Prep Method**:  
- **Target**: 11360 ug/kg  
- **Limits**: 3090 to 12500 ug/kg  
**Basis**: Manual Limits  
**Robust Mean**: 5835 ug/kg  
- **Std Dev**: 657.6093 ug/kg  
- **Median**: 5835 ug/kg  
**Totals for Matrix/Analyte/Technology**:  
- **Labs**: Pass: 2  
- **Fail**: 0  
- **Total**: 2

---

### Solid and Hazardous Waste Phenanthrene

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste  
**Analyte**: Phenanthrene  
**Sample**: 0524  
**Technology**: GC-MS  
**Prep Method**: EPA 3540C  
- **Target**: 11360 ug/kg  
- **Limits**: 3090 to 12500 ug/kg  
**Basis**: Manual Limits  
**Robust Mean**: 7660 ug/kg  
- **Std Dev**: 1668.772 ug/kg  
- **Median**: 7660 ug/kg  
**Totals for Matrix/Analyte/Technology**:  
- **Labs**: Pass: 2  
- **Fail**: 0  
- **Total**: 2

---

### Solid and Hazardous Waste Phenanthrene

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste  
**Analyte**: Phenanthrene  
**Sample**: 0524  
**Technology**: GC-MS  
**Prep Method**: EPA 3545A  
- **Target**: 11360 ug/kg  
- **Limits**: 3090 to 12500 ug/kg  
**Basis**: Manual Limits  
**Robust Mean**: 7922.5 ug/kg  
- **Std Dev**: 1591.3385 ug/kg  
- **Median**: 8135 ug/kg  
**Totals for Matrix/Analyte/Technology**:  
- **Labs**: Pass: 4  
- **Fail**: 0  
- **Total**: 4

---

**Score Date**: 09/11/2017  
**Proficiency Test Statistics**  
**Page 364 of 386**
Solid and Hazardous Waste Phenanthrene

**Shipments:** 405   **Matrix:** Solid and Hazardous Waste
**Analyte:** Phenanthrene
**Sample:** 0524
**Technology:** GC-MS
**Prep Method:** EPA 3546
**Target:** 11360 ug/kg
**Limits:** 3090 to 12500 ug/kg
**Basis:** Manual Limits
**Robust Mean:** 8547.5 ug/kg
**Std Dev:** 2545.0917 ug/kg
**Median:** 9555 ug/kg
**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 9  Fail: 0  Total: 9

**Shipments:** 405   **Matrix:** Solid and Hazardous Waste
**Analyte:** Phenanthrene
**Sample:** 0524
**Technology:** GC-MS
**Prep Method:** EPA 3550C
**Target:** 11360 ug/kg
**Limits:** 3090 to 12500 ug/kg
**Basis:** Manual Limits
**Robust Mean:** 6566 ug/kg
**Std Dev:** 1875.8449 ug/kg
**Median:** 5810 ug/kg
**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 9  Fail: 0  Total: 9

**Shipments:** 405   **Matrix:** Solid and Hazardous Waste
**Analyte:** PCBs in Oil
**Sample:** 0566
**Technology:** GC-ECD
**Prep Method:**
**Target:** 35.2 mg/kg
**Limits:** 6.1 to 48 mg/kg
**Basis:** Linear Regression
**Robust Mean:** 32 mg/kg
**Std Dev:** 5.5516 mg/kg
**Median:** 31.45 mg/kg
**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 4  Fail: 0  Total: 4

**Shipments:** 405   **Matrix:** Solid and Hazardous Waste
**Analyte:** PCBs in Oil
**Sample:** 0566
**Technology:** GC-ECD
**Prep Method:** EPA 3580A
**Target:** 35.2 mg/kg
**Limits:** 6.1 to 48 mg/kg
**Basis:** Linear Regression
**Robust Mean:** 35.5 mg/kg
**Std Dev:** 10.8781 mg/kg
**Median:** 35.55 mg/kg
**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 16  Fail: 1  Total: 17

**Shipments:** 405   **Matrix:** Solid and Hazardous Waste
**Analyte:** 4-Methyl-2-Pentanone
**Sample:**
**Technology:**
**Prep Method:**
**Target:**
**Limits:**
**Basis:**
**Robust Mean:**
**Std Dev:**
**Median:**
**Totals for Matrix/Analyte/Technology:**
- Labs: Pass: 16  Fail: 1  Total: 17

**Score Date:** 09/01/2017
Solid and Hazardous Waste 4-Methyl-2-Pentanone

Shipments: 045  Matrix: Solid and Hazardous Waste
Analyte: 4-Methyl-2-Pentanone
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 11350ug/kg
Limits: 6420 to 15100ug/kg
Basis: Linear Regression
Robust Mean: 10349.4ug/kg
Std Dev: 3768.7225ug/kg
Median: 10000ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 14  Fail: 2  Total: 16

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

Solid and Hazardous Waste Pyrene

Shipments: 045  Matrix: Solid and Hazardous Waste
Analyte: Pyrene
Sample: 0524
Technology: GC-MS
Prep Method:
Target: 6541ug/kg
Limits: 1680 to 7200ug/kg
Basis: Manual Limits
Robust Mean: 3360ug/kg
Std Dev: 480.8326ug/kg
Median: 3360ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2

A histogram is not displayed for Technology: GC-MS due to the limited number of participants.
Solid and Hazardous Waste Pyrene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Pyrene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3540C
Target: 6541 ug/kg
Limits: 1680 to 7200 ug/kg
Basis: Manual Limits
Robust Mean: 4710 ug/kg
Std Dev: 1484.9242 ug/kg
Median: 4710 ug/kg

Test Results (End Groups Include Outliers)

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

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 21  Fail: 0  Total: 21

Totals for Matrix:

Labs: Pass: 0  Fail: 0  Total: 0

Solid and Hazardous Waste Pyrene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Pyrene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3545A
Target: 6541 ug/kg
Limits: 1680 to 7200 ug/kg
Basis: Manual Limits
Robust Mean: 4972.5 ug/kg
Std Dev: 787.9668 ug/kg
Median: 4770 ug/kg

Test Results (End Groups Include Outliers)

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4  Fail: 0  Total: 4

Totals for Matrix/Analyte:

Labs: Pass: 21  Fail: 0  Total: 21

Solid and Hazardous Waste Pyrene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Pyrene
Sample: 0524
Technology: GC-MS
Prep Method: EPA 3546
Target: 6541 ug/kg
Limits: 1680 to 7200 ug/kg
Basis: Manual Limits
Robust Mean: 5187.3 ug/kg
Std Dev: 1464.7902 ug/kg
Median: 5625 ug/kg

Test Results (End Groups Include Outliers)

Totals for Matrix/Analyte/Technology:

Labs: Pass: 9  Fail: 0  Total: 9

Totals for Matrix/Analyte:

Labs: Pass: 21  Fail: 0  Total: 21

Solid and Hazardous Waste Antimony, Total
Solid and Hazardous Waste Antimony, Total

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Antimony, Total
Sample: 0522
Technology: ICP-AES
Prep Method: EPA 3050B
Target: 109 mg/kg
Limits: 10.9 to 282 mg/kg
Basis: Stat_Norm in SW with conditions for the 10%-11
Robust Mean: 97.3 mg/kg
Std Dev: 38.7512 mg/kg
Median: 84.9 mg/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 35  Fail: 0  Total: 35
Labs: Pass: 60  Fail: 0  Total: 60
Labs: Pass: 111  Fail: 0  Total: 111
Labs: Pass: 137  Fail: 0  Total: 137
Labs: Pass: 162  Fail: 0  Total: 162

Score Date: 09/01/2017  Proficiency Test Statistics  Page 368 of 386
Solid and Hazardous Waste Antimony, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Antimony, Total
Sample: 0522
Technology: ICP-MS
Prep Method: EPA 3051A
Target: 109 mg/kg
Limits: 10.9 to 282 mg/kg
Basis: Stat_Norm in SW with conditions for the 10%-11%
Robust Mean: 182 mg/kg
Std Dev: 182 mg/kg
A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.

Total for Matrix/Analyte: Labs: Pass: 28  Fail: 0  Total: 28

Solid and Hazardous Waste Selenium, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Selenium, Total
Sample: 0522
Technology: GFAAS
Prep Method: EPA 3050B
Target: 288 mg/kg
Limits: 203 to 380 mg/kg
Basis: BiWeight LRE
Robust Mean: 266 mg/kg
Std Dev: 0 mg/kg
Median: 266 mg/kg
A histogram is not displayed for Technology: GFAAS due to the limited number of participants.

Total for Matrix/Analyte: Labs: Pass: 36  Fail: 2  Total: 38

Score Date: 09/01/2017
A histogram is not displayed for Technology: ICP-MS due to the limited number of participants.
Solid and Hazardous Waste Selenium, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Selenium, Total
Sample: 0522
Technology: ICP-MS
Prep Method: EPA 3050B
Target: 288 mg/kg
Limits: 203 to 380 mg/kg
Basis: BiWeight LRE
Robust Mean: 312.6 mg/kg
Std Dev: 42.8521 mg/kg
Median: 320 mg/kg

Totals for Matrix/Analyte/Technology:
   Labs: Pass: 244 Fail: 307 Total: 323

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

Solid and Hazardous Waste Selenium, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Selenium, Total
Sample: 0522
Technology: ICP-MS
Prep Method: EPA 3051A
Target: 288 mg/kg
Limits: 203 to 380 mg/kg
Basis: BiWeight LRE
Robust Mean: 309.5 mg/kg
Std Dev: 37.4767 mg/kg
Median: 309.5 mg/kg

Totals for Matrix/Analyte/Technology:
   Labs: Pass: 194 Fail: 259 Total: 388

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

Solid and Hazardous Waste 2,4,5-TP (Silvex)

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: 2,4,5-TP (Silvex)
Sample: 0528
Technology: GC-ECD
Prep Method:
Target: 845 ug/kg
Limits: 267 to 930 ug/kg
Basis: Manual Limits
Robust Mean: 545.2 ug/kg
Std Dev: 161.0405 ug/kg
Median: 598 ug/kg

Totals for Matrix/Analyte/Technology:
   Labs: Pass: 259 Fail: 388 Total: 646

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

Solid and Hazardous Waste 2,4,5-TP (Silvex)

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: 2,4,5-TP (Silvex)
Sample: 0528
Technology: HPLC-TSMS
Prep Method: EPA 3545A
Target: 845 ug/kg
Limits: 267 to 930 ug/kg
Basis: Manual Limits
Robust Mean: 635 ug/kg
Std Dev: 0 ug/kg
Median: 635 ug/kg

Totals for Matrix/Analyte/Technology:
   Labs: Pass: 13 Fail: 2 Total: 15

Score Date: 09/08/2017  Proficiency Test Statistics  Page 371 of 386
# Solid and Hazardous Waste Tin, Total

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste  
**Analyte**: Tin, Total  
**Sample**: 0522  
**Technology**: ICP-AES  
**Prep Method**:  
- **Target**: 141 mg/kg  
- **Limits**: 80.1 to 190 mg/kg  
- **Basis**: Manual Limits  
- **Robust Mean**: 125 mg/kg  
- **Std Dev**: 0 mg/kg  
- **Median**: 0 mg/kg  

**Results**:  
- **Pass**: 19 Labs  
- **Fail**: 1 Lab  
- **Total**: 20 Labs  

**Shipment**  
**Robust Mean**: 125 mg/kg  
**Std Dev**: 0 mg/kg  
**Median**: 0 mg/kg  
**Basis**: Manual Limits  
**Analyte**: Tin, Total  
**Sample**:  
- **Limits**: 80.1 to 190 mg/kg  
- **Target**: 141 mg/kg  

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

---

# Solid and Hazardous Waste Tin, Total

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste  
**Analyte**: Tin, Total  
**Sample**: 0522  
**Technology**: ICP-AES  
**Prep Method**:  
- **Target**: 141 mg/kg  
- **Limits**: 80.1 to 190 mg/kg  
- **Basis**: Manual Limits  
- **Robust Mean**: 135.4 mg/kg  
- **Std Dev**: 35.397 mg/kg  
- **Median**: 134 mg/kg  

**Results**:  
- **Pass**: 14 Labs  
- **Fail**: 1 Lab  
- **Total**: 15 Labs  

**Shipment**  
**Robust Mean**: 135.4 mg/kg  
**Std Dev**: 35.397 mg/kg  
**Median**: 134 mg/kg  
**Basis**: Manual Limits  
**Analyte**: Tin, Total  
**Sample**:  
- **Limits**: 80.1 to 190 mg/kg  
- **Target**: 141 mg/kg  

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

---

# Solid and Hazardous Waste Tin, Total

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste  
**Analyte**: Tin, Total  
**Sample**: 0522  
**Technology**: ICP-MS  
**Prep Method**:  
- **Target**: 141 mg/kg  
- **Limits**: 80.1 to 190 mg/kg  
- **Basis**: Manual Limits  
- **Robust Mean**: 136.3 mg/kg  
- **Std Dev**: 10.0167 mg/kg  
- **Median**: 137 mg/kg  

**Results**:  
- **Pass**: 3 Labs  
- **Fail**: 0 Lab  
- **Total**: 3 Labs  

**Shipment**  
**Robust Mean**: 136.3 mg/kg  
**Std Dev**: 10.0167 mg/kg  
**Median**: 137 mg/kg  
**Basis**: Manual Limits  
**Analyte**: Tin, Total  
**Sample**:  
- **Limits**: 80.1 to 190 mg/kg  
- **Target**: 141 mg/kg  

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

---

# Score Date: 09/01/2017  
Proficiency Test Statistics
Solid and Hazardous Waste Sulfate (as SO4)

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Sulfate (as SO4)
Sample: 0563
Technology: COLOR
Prep Method:
Target: 1830 mg/kg
Limits: 1100 to 2640 mg/kg
Basis: BiWeight LRE
Robust Mean: 1721.3 mg/kg
Std Dev: 110.0969 mg/kg
Median: 1732 mg/kg

Number of Labs:
1630
1750
1870
1930
2110
0
0.5
1
1.5
2
2.5
3

0
0.5
1
1.5
2
2.5
3

Test Results (End Groups Include Outliers)

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 3  Fail: 0  Total: 3
Totals for Matrix/Analyte:
Labs: Pass: 14  Fail: 0  Total: 14

Solid and Hazardous Waste Sulfate (as SO4)

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Sulfate (as SO4)
Sample: 0563
Technology: IC-COND
Prep Method:
Target: 1830 mg/kg
Limits: 1100 to 2640 mg/kg
Basis: BiWeight LRE
Robust Mean: 1900.9 mg/kg
Std Dev: 103.1944 mg/kg
Median: 1910 mg/kg

Number of Labs:
208
245
257
294
0
0.5
1
1.5
2
2.5
3

0
0.5
1
1.5
2
2.5
3

Test Results (End Groups Include Outliers)

Totals for Matrix/Analyte/Technology:
Labs: Pass: 7  Fail: 0  Total: 7
Totals for Matrix/Analyte:
Labs: Pass: 10  Fail: 0  Total: 10

Solid and Hazardous Waste Strontium, Total

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Strontium, Total
Sample: 0522
Technology: ICP-AES
Prep Method:
Target: 249 mg/kg
Limits: 173 to 315 mg/kg
Basis: BiWeight LRE
Robust Mean: 237 mg/kg
Std Dev: 0 mg/kg
Median: 237 mg/kg

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

Number of Labs:
1750
1810
1870
1930
1990
2110
0
0.5
1
1.5
2
2.5
3

0
0.5
1
1.5
2
2.5
3

Test Results (End Groups Include Outliers)

Totals for Matrix/Analyte/Technology:
Labs: Pass: 1  Fail: 0  Total: 1
Totals for Matrix/Analyte:
Labs: Pass: 10  Fail: 0  Total: 10

Solid and Hazardous Waste Strontium, Total

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Strontium, Total
Sample: 0522
Technology: ICP-AES
Prep Method:
Target: 249 mg/kg
Limits: 173 to 315 mg/kg
Basis: BiWeight LRE
Robust Mean: 249.4 mg/kg
Std Dev: 24.6093 mg/kg
Median: 243 mg/kg

Number of Labs:
208
245
257
294
0
0.5
1
1.5
2
2.5
3

0
0.5
1
1.5
2
2.5
3

Test Results (End Groups Include Outliers)

Totals for Matrix/Analyte/Technology:
Labs: Pass: 7  Fail: 0  Total: 7
Totals for Matrix/Analyte:
Labs: Pass: 10  Fail: 0  Total: 10

Score Date: 09/01/2017
Solid and Hazardous Waste Strontium, Total

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Strontium, Total
Sample: 0522
Technology: ICP-MS
Prep Method: EPA 3050B
Target: 249 mg/kg
Limits: 173 to 315 mg/kg
Basis: BiWeight LRE
Robust Mean: 230 mg/kg
Std Dev: 48.0833 mg/kg
Median: 230 mg/kg

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

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

Solid and Hazardous Waste Styrene

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Styrene
Sample: 0565
Technology: GC-MS
Prep Method:
Target: 3654 ug/kg
Limits: 2190 to 5120 ug/kg
Basis: Target Value +/- a fixed percent
Robust Mean: 3585 ug/kg
Std Dev: 261.6295 ug/kg
Median: 3585 ug/kg

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2
Labs: Pass: 21  Fail: 1  Total: 22

Solid and Hazardous Waste Styrene

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Styrene
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-H
Target: 3654 ug/kg
Limits: 2190 to 5120 ug/kg
Basis: Target Value +/- a fixed percent
Robust Mean: 3652.8 ug/kg
Std Dev: 918.4176 ug/kg
Median: 3590 ug/kg

Totals for Matrix/Analyte/Technology:
Labs: Pass: 16  Fail: 1  Total: 17
Labs: Pass: 21  Fail: 1  Total: 22

Solid and Hazardous Waste Styrene

Shipment: 405  Matrix: Solid and Hazardous Waste
Analyte: Styrene
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 3654 ug/kg
Limits: 2190 to 5120 ug/kg
Basis: Target Value +/- a fixed percent
Robust Mean: 3905 ug/kg
Std Dev: 445.4773 ug/kg
Median: 3905 ug/kg

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

Totals for Matrix/Analyte/Technology:
Labs: Pass: 2  Fail: 0  Total: 2
Labs: Pass: 21  Fail: 1  Total: 22

Score Date: 09/01/2017  Proficiency Test Statistics  Page 374 of 386
Solid and Hazardous Waste Styrene

Shipments: 405  
Matrix: Solid and Hazardous Waste  
Analyte: Styrene  
Sample: 0565  
Technology: GCELCD/PID  
Prep Method: EPA 5035A-L  
Target: 3654 ug/kg  
Limits: 2190 to 5120 ug/kg  
Basis: Target Value +/- a fixed percent  
Robust Mean: 3420 ug/kg  
Std Dev: 0 ug/kg  
Median: 3420 ug/kg  

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: 21  Fail: 1  Total: 22

Solid and Hazardous Waste trans-1,2-Dichloroethene

Shipments: 405  
Matrix: Solid and Hazardous Waste  
Analyte: trans-1,2-Dichloroethene  
Sample: 0565  
Technology: GC-MS  
Prep Method: EPA 5035A-H  
Target: 8828 ug/kg  
Limits: 5300 to 12400 ug/kg  
Basis: Target Value +/- a fixed percent  
Robust Mean: 9071.3 ug/kg  
Std Dev: 888.0743 ug/kg  
Median: 9285 ug/kg  

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

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 2  Fail: 0  Total: 2

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

Score Date: 09/01/2017  
Proficiency Test Statistics  
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Solid and Hazardous Waste trans-1,2-Dichloroethene

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste  
**Analyte:** trans-1,2-Dichloroethene  
**Sample:** 0565  
**Technology:** GCELCD/PID  
**Prep Method:** EPA 5035A-L  
**Target:** 8828 ug/kg  
**Limits:** 5300 to 12400 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 7880 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 7880 ug/kg  

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: 25  Fail: 0  Total: 25

---

Solid and Hazardous Waste Thallium, Total

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste  
**Analyte:** Thallium, Total  
**Sample:** 0522  
**Technology:** GFAAS  
**Prep Method:** EPA 3050B  
**Target:** 191 mg/kg  
**Limits:** 131 to 249 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 9.34 mg/kg  

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

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 0  Fail: 1  Total: 1  
**Totals for Matrix/Analyte:** 
**Labs:** Pass: 26  Fail: 1  Total: 27

---

Solid and Hazardous Waste Thallium, Total

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste  
**Analyte:** Thallium, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:**  
**Target:** 191 mg/kg  
**Limits:** 131 to 249 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 167 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 167 mg/kg  

A histogram is not displayed for Technology: ICP-AES 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: 26  Fail: 1  Total: 27

---

Solid and Hazardous Waste Thallium, Total

**Shipments:** 405  **Matrix:** Solid and Hazardous Waste  
**Analyte:** Thallium, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:** EPA 3050B  
**Target:** 191 mg/kg  
**Limits:** 131 to 249 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 167 mg/kg  
**Std Dev:** 16.207 mg/kg  
**Median:** 187 mg/kg  

**Totals for Matrix/Analyte/Technology:**  
**Labs:** Pass: 16  Fail: 0  Total: 16  
**Totals for Matrix/Analyte:** 
**Labs:** Pass: 26  Fail: 1  Total: 27

---

Score Date: 09/01/2017  
Proficiency Test Statistics  
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Solid and Hazardous Waste Thallium, Total

**Shipments**
- **405**
- **Matrix**: Solid and Hazardous Waste
- **Sample**: 0522

**Technology**
- **ICP-AES**
  - **Prep Method**: EPA 3051A
  - **Target**: 191 mg/kg
  - **Limits**: 131 to 249 mg/kg
  - **Basis**: BiWeight LRE
  - **Robust Mean**: 188.5 mg/kg
  - **Std Dev**: 4.9497 mg/kg
  - **Median**: 188.5 mg/kg

**Totals for Matrix/Analyte/Technology**
- **Labs**: Pass: 26 Fail: 1 Total: 27

**Shipment**
- **405**
- **Matrix**: Solid and Hazardous Waste
- **Sample**: 0522

**Technology**
- **ICP-MS**
  - **Prep Method**: EPA 3050B
  - **Target**: 191 mg/kg
  - **Limits**: 131 to 249 mg/kg
  - **Basis**: BiWeight LRE
  - **Robust Mean**: 198.2 mg/kg
  - **Std Dev**: 12.112 mg/kg
  - **Median**: 197 mg/kg

**Totals for Matrix/Analyte/Technology**
- **Labs**: Pass: 5 Fail: 0 Total: 5

**Shipment**
- **405**
- **Matrix**: Solid and Hazardous Waste
- **Sample**: 0522

**Technology**
- **ICP-MS**
  - **Prep Method**: EPA 3051A
  - **Target**: 191 mg/kg
  - **Limits**: 131 to 249 mg/kg
  - **Basis**: BiWeight LRE
  - **Robust Mean**: 184 mg/kg
  - **Std Dev**: 0 mg/kg
  - **Median**: 184 mg/kg

**Totals for Matrix/Analyte/Technology**
- **Labs**: Pass: 1 Fail: 0 Total: 1

**Score Date**: 09/01/2017

**Proficiency Test Statistics**

**Page 377 of 386**
Solid and Hazardous Waste Toluene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Toluene
Sample: 0565
Technology: GC-MS

Prep Method: 
Target: 1993 ug/kg  
Limits: 1370 to 2650 ug/kg

Basis: Linear Regression
Robust Mean: 1875 ug/kg  
Std Dev: 106.066 ug/kg
Median: 1875 ug/kg

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:  
Labs: Pass: 24  Fail: 1  Total: 25

Shipment: 405  
Matrix: Solid and Hazardous Waste

Analyte: Toluene
Sample: 0565
Technology: GC-MS

Prep Method: EPA 5035A-H
Target: 1993 ug/kg  
Limits: 1370 to 2650 ug/kg

Basis: Linear Regression
Robust Mean: 1998.9 ug/kg  
Std Dev: 466.1251 ug/kg
Median: 1995 ug/kg

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 19  Fail: 1  Total: 20

Totals for Matrix/Analyte:  
Labs: Pass: 24  Fail: 1  Total: 25

Shipment: 405  
Matrix: Solid and Hazardous Waste

Analyte: Toluene
Sample: 0565
Technology: GC-MS

Prep Method: EPA 5035A-L
Target: 1993 ug/kg  
Limits: 1370 to 2650 ug/kg

Basis: Linear Regression
Robust Mean: 2150 ug/kg  
Std Dev: 268.7006 ug/kg
Median: 2150 ug/kg

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:  
Labs: Pass: 24  Fail: 1  Total: 25

Shipment: 405  
Matrix: Solid and Hazardous Waste

Analyte: Toluene
Sample: 0565
Technology: GC/ECD/PID

Prep Method: EPA 5035A-L
Target: 1993 ug/kg  
Limits: 1370 to 2650 ug/kg

Basis: Linear Regression
Robust Mean: 1870 ug/kg  
Std Dev: 0 ug/kg
Median: 1870 ug/kg

Totals for Matrix/Analyte/Technology:  
Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:  
Labs: Pass: 24  Fail: 1  Total: 25

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 378 of 386
Solid and Hazardous Waste Toxaphene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Toxaphene

Sample: 0534

Technology: GC-ECD

Prep Method: EPA 3540C

Target: 816 ug/kg

Limits: 81.6 to 1260 ug/kg

Basis: Stat. Norm in SW with conditions for the 10% -11

Robust Mean: 799 ug/kg

Std Dev: 0 ug/kg

Median: 799 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  
Fail: 0  
Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 22  
Fail: 0  
Total: 22

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

---

Solid and Hazardous Waste Toxaphene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Toxaphene

Sample: 0534

Technology: GC-ECD

Prep Method: EPA 3541

Target: 816 ug/kg

Limits: 81.6 to 1260 ug/kg

Basis: Stat. Norm in SW with conditions for the 10% -11

Robust Mean: 660 ug/kg

Std Dev: 0 ug/kg

Median: 660 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  
Fail: 0  
Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 22  
Fail: 0  
Total: 22

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

---

Solid and Hazardous Waste Toxaphene

Shipments: 405  
Matrix: Solid and Hazardous Waste

Analyte: Toxaphene

Sample: 0534

Technology: GC-ECD

Prep Method: EPA 3545A

Target: 816 ug/kg

Limits: 81.6 to 1260 ug/kg

Basis: Stat. Norm in SW with conditions for the 10% -11

Robust Mean: 823.3 ug/kg

Std Dev: 211.5016 ug/kg

Median: 796 ug/kg

Totals for Matrix/Analyte/Technology:

Labs: Pass: 4  
Fail: 0  
Total: 4

Totals for Matrix/Analyte:

Labs: Pass: 22  
Fail: 0  
Total: 22

Score Date: 09/01/2017

Proficiency Test Statistics
Solid and Hazardous Waste Toxaphene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Toxaphene
Sample: 0534
Technology: GC-ECD
Prep Method: EPA 3546
Target: 816 ug/kg
Limits: 81.6 to 1260 ug/kg
Basis: Stat_Norm in SW with conditions for the 10% - 11
Robust Mean: 625.6 ug/kg
Std Dev: 110.0604 ug/kg
Median: 617 ug/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 468  Fail: 574  Total: 681
Labs: Pass: 5  Fail: 0  Total: 5

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

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Toxaphene
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-H
Target: 638 ug/kg
Limits: 0 to 638 ug/kg
Basis: Natural Blanks
Robust Mean: 638 ug/kg
Std Dev: 325.6465 ug/kg
Median: 638 ug/kg
Totals for Matrix/Analyte/Technology:
Labs: Pass: 17  Fail: 3  Total: 20
Labs: Pass: 22  Fail: 3  Total: 25

Score Date: 09/06/2017
Solid and Hazardous Waste Trichloroethene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Trichloroethene
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-L
Target: 638 ug/kg
Limits: 0 to 638 ug/kg
Basis: Natural Blanks
Robust Mean: 638 ug/kg
Std Dev: 451.1341 ug/kg

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

Fail: 0  Labs: Pass: 22  Fail: 3  Total: 25

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 22  Fail: 3  Total: 25

Solid and Hazardous Waste Trichloroethene

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Trichloroethene
Sample: 0565
Technology: GC/ECD/PID
Prep Method: EPA 5035A-L
Target: 638 ug/kg
Limits: 0 to 638 ug/kg
Basis: Natural Blanks
Robust Mean: ug/kg
Std Dev: 0 ug/kg
Median: 443 ug/kg

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

Fail: 0  Labs: Pass: 24  Fail: 1  Total: 25

Totals for Matrix/Analyte/Technology:

Labs: Pass: 1  Fail: 0  Total: 1

Totals for Matrix/Analyte:

Labs: Pass: 22  Fail: 3  Total: 25

Solid and Hazardous Waste Total Xylenes

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Total Xylenes
Sample: 0565
Technology: GC-MS
Prep Method:
Target: 8619 ug/kg
Limits: 6000 to 11700 ug/kg
Basis: Linear Regression
Robust Mean: 8240 ug/kg
Std Dev: 480.8326 ug/kg
Median: 8240 ug/kg

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

Fail: 1  Labs: Pass: 24  Fail: 1  Total: 25

Totals for Matrix/Analyte/Technology:

Labs: Pass: 2  Fail: 0  Total: 2

Totals for Matrix/Analyte:

Labs: Pass: 24  Fail: 1  Total: 25

Solid and Hazardous Waste Total Xylenes

Shipments: 405  Matrix: Solid and Hazardous Waste
Analyte: Total Xylenes
Sample: 0565
Technology: GC-MS
Prep Method: EPA 5035A-H
Target: 8619 ug/kg
Limits: 6000 to 11700 ug/kg
Basis: Linear Regression
Robust Mean: 8561.9 ug/kg
Std Dev: 2018.0226 ug/kg
Median: 8593 ug/kg

Fail: 1  Labs: Pass: 19  Fail: 1  Total: 20

Totals for Matrix/Analyte/Technology:

Labs: Pass: 24  Fail: 1  Total: 25

Totals for Matrix/Analyte:

Labs: Pass: 24  Fail: 1  Total: 25

Score Date: 09/01/2017  Proficiency Test Statistics  Page 381 of 386
Solid and Hazardous Waste Total Xylenes

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-L  
**Target:** 8619 ug/kg  
**Limits:** 6000 to 11700 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 9145 ug/kg  
**Std Dev:** 1011.1627 ug/kg  
**Median:** 9145 ug/kg  

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

**Totals for Matrix/Analyte/Technology:**  
Labs: Pass: 2  Fail: 0  Total: 2  

**Totals for Matrix/Analyte:**  
Labs: Pass: 24  Fail: 1  Total: 25

---

Solid and Hazardous Waste Total Xylenes

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0565  
**Technology:** GC/ECD/PID  
**Prep Method:** EPA 5035A-L  
**Target:** 8619 ug/kg  
**Limits:** 6000 to 11700 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 8000 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 8000 ug/kg  

The histogram is not displayed for Technology: GC/ECD/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: 24  Fail: 1  Total: 25

---

Solid and Hazardous Waste Vanadium, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:**  
**Target:** 266 mg/kg  
**Limits:** 193 to 321 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 234 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 234 mg/kg  

The histogram is not displayed for Technology: ICP-AES 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: 25  Fail: 0  Total: 25

---

Solid and Hazardous Waste Vanadium, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:** EPA 3050B  
**Target:** 266 mg/kg  
**Limits:** 193 to 321 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 258.8 mg/kg  
**Std Dev:** 16.4865 mg/kg  
**Median:** 256 mg/kg  

**Test Results (End Groups Include Outliers)**

<table>
<thead>
<tr>
<th>Test Results</th>
<th>Number of Labs</th>
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<tbody>
<tr>
<td>230-239</td>
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<tr>
<td>240-244</td>
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<td>255-259</td>
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<td>290-294</td>
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</tr>
</tbody>
</table>

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

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

---

Score Date: 09/01/2017  
Proficiency Test Statistics  
Page 382 of 386
Solid and Hazardous Waste Vanadium, Total

**Analyte:** Vanadium, Total  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0522  
**Technology:** ICP-MS  
**Prep Method:**  
**Target:** 266 mg/kg  
**Limits:** 193 to 321 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 231 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 231 mg/kg

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

**Shipments:**  
**Robust Mean:** 231 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 231 mg/kg

Test Results (End Groups Include Outliers)

- **Labs:** 25  
- **Pass:** 25  
- **Fail:** 0  
- **Total:** 25

**Totals for Matrix/Analyte/Technology:****  
**Labs:** 1  
**Pass:** 1  
**Total:** 1

**Totals for Matrix/Analyte:**  
**Labs:** 5  
**Pass:** 5  
**Total:** 5

**Shipments:**  
**Robust Mean:** 216 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 216 mg/kg

Test Results (End Groups Include Outliers)

- **Labs:** 25  
- **Pass:** 25  
- **Fail:** 0  
- **Total:** 25

**Totals for Matrix/Analyte/Technology:****  
**Labs:** 1  
**Pass:** 1  
**Total:** 1

**Totals for Matrix/Analyte:**  
**Labs:** 2  
**Pass:** 2  
**Total:** 2

**Shipments:**  
**Robust Mean:** 267.8 mg/kg  
**Std Dev:** 9.2844 mg/kg  
**Median:** 270 mg/kg

Test Results (End Groups Include Outliers)

- **Labs:** 21  
- **Pass:** 21  
- **Fail:** 0  
- **Total:** 21

**Totals for Matrix/Analyte/Technology:****  
**Labs:** 2  
**Pass:** 2  
**Total:** 2

**Totals for Matrix/Analyte:**  
**Labs:** 2  
**Pass:** 2  
**Total:** 2

Solid and Hazardous Waste 1,2,4-Trichlorobenzene, Volatile

**Analyte:** 1,2,4-Trichlorobenzene, Volatile  
**Matrix:** Solid and Hazardous Waste  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:**  
**Target:** 5829 ug/kg  
**Limits:** 3500 to 8160 ug/kg  
**Basis:** Target Value +/- a fixed percent  
**Robust Mean:** 4950 ug/kg  
**Std Dev:** 353.5534 ug/kg  
**Median:** 4950 ug/kg

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

**Shipments:**  
**Robust Mean:** 4950 ug/kg  
**Std Dev:** 353.5534 ug/kg  
**Median:** 4950 ug/kg

Test Results (End Groups Include Outliers)

- **Labs:** 21  
- **Pass:** 21  
- **Fail:** 0  
- **Total:** 21
Solid and Hazardous Waste 1,2,4-Trichlorobenzene, Volatile

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste

**Sample**: 0565

**Technology**: GC-MS

**Prep Method**: EPA 5035A-H

**Target**: 5829 ug/kg

**Limits**: 3500 to 8160 ug/kg

**Basis**: Target Value +/- a fixed percent

**Robust Mean**: 5761.5 ug/kg

**Std Dev**: 589.626 ug/kg

**Median**: 5870 ug/kg

**Totals for Matrix/Analyte/Technology**:

- Labs: Pass 17  Fail 0  Total: 17

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

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste

**Sample**: 0565

**Technology**: GC-MS

**Prep Method**: EPA 5035A-L

**Target**: 6020 ug/kg

**Limits**: 3500 to 8160 ug/kg

**Basis**: Target Value +/- a fixed percent

**Robust Mean**: 6020 ug/kg

**Std Dev**: 1781.9091 ug/kg

**Median**: 6020 ug/kg

**Totals for Matrix/Analyte/Technology**:

- Labs: Pass 2  Fail 0  Total: 2

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

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste

**Sample**: 0565

**Technology**: GC-MS

**Prep Method**: EPA 5035A-H

**Target**: 3794 ug/kg

**Limits**: 2050 to 5310 ug/kg

**Basis**: Linear Regression

**Robust Mean**: 3955 ug/kg

**Std Dev**: 360.6245 ug/kg

**Median**: 3555 ug/kg

**Totals for Matrix/Analyte/Technology**:

- Labs: Pass 2  Fail 0  Total: 2

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

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste

**Sample**: 0565

**Technology**: GC-MS

**Prep Method**: EPA 5035A-H

**Target**: 3794 ug/kg

**Limits**: 2050 to 5310 ug/kg

**Basis**: Linear Regression

**Robust Mean**: 3553.8 ug/kg

**Std Dev**: 355.1139 ug/kg

**Median**: 3555 ug/kg

**Totals for Matrix/Analyte/Technology**:

- Labs: Pass 18  Fail 0  Total: 18

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

**Shipments**: 405  
**Matrix**: Solid and Hazardous Waste

**Sample**: 0565

**Technology**: GC-MS

**Prep Method**: EPA 5035A-L

**Target**: 3794 ug/kg

**Limits**: 2050 to 5310 ug/kg

**Basis**: Linear Regression

**Robust Mean**: 3555 ug/kg

**Std Dev**: 355.1139 ug/kg

**Median**: 3555 ug/kg

**Totals for Matrix/Analyte/Technology**:

- Labs: Pass 23  Fail 0  Total: 23

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

Score Date: 09/01/2017  
Proficiency Test Statistics
### Solid and Hazardous Waste Naphthalene, Volatile

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Naphthalene, Volatile  
**Sample:** 0565  
**Technology:** GC-MS  
**Prep Method:** EPA 5035A-L  
**Target:** 3794 ug/kg  
**Limits:** 2050 to 5310 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 3655 ug/kg  
**Std Dev:** 799.0307 ug/kg  
**Median:** 3655 ug/kg  

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

### Totals for Matrix/Analyte/Technology:

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### Solid and Hazardous Waste Naphthalene, Volatile

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Naphthalene, Volatile  
**Sample:** 0565  
**Technology:** GCELCD/PID  
**Prep Method:** EPA 5035A-L  
**Target:** 3794 ug/kg  
**Limits:** 2050 to 5310 ug/kg  
**Basis:** Linear Regression  
**Robust Mean:** 3310 ug/kg  
**Std Dev:** 0 ug/kg  
**Median:** 3310 ug/kg  

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

### Totals for Matrix/Analyte/Technology:

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### Solid and Hazardous Waste Zinc, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Zinc, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:**  
**Target:** 251 mg/kg  
**Limits:** 180 to 327 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 228 mg/kg  
**Std Dev:** 0 mg/kg  
**Median:** 228 mg/kg  

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

### Totals for Matrix/Analyte/Technology:

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</table>

### Solid and Hazardous Waste Zinc, Total

**Shipments:** 405  
**Matrix:** Solid and Hazardous Waste  
**Analyte:** Zinc, Total  
**Sample:** 0522  
**Technology:** ICP-AES  
**Prep Method:** EPA 3050B  
**Target:** 251 mg/kg  
**Limits:** 180 to 327 mg/kg  
**Basis:** BiWeight LRE  
**Robust Mean:** 253.6 mg/kg  
**Std Dev:** 21.2197 mg/kg  
**Median:** 251.5 mg/kg  

### Test Results (End Groups Include Outliers)

![Histogram of test results](image)

### Totals for Matrix/Analyte/Technology:

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>0</td>
<td>18</td>
</tr>
</tbody>
</table>

### Totals for Matrix/Analyte:

<table>
<thead>
<tr>
<th>Labs</th>
<th>Pass</th>
<th>Fail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31</td>
<td>0</td>
<td>31</td>
</tr>
</tbody>
</table>

### Score Date:

09/01/2017  

Proficiency Test Statistics  

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Solid and Hazardous Waste Zinc, Total

Analyte: Zinc, Total

Sample: 0522

Technology: ICP-AES
Prep Method: EPA 3051A
Target: 251 mg/kg
Limits: 180 to 327 mg/kg
Basis: BiWeight LRE
Robust Mean: 240.3 mg/kg
Std Dev: 6.1847 mg/kg
Median: 242 mg/kg

Test Results (End Groups Include Outliers)

Number of Labs

0.5 1 1.5 2 2.5 3

Robust Mean: 240.3 mg/kg
Std Dev: 6.1847 mg/kg
Median: 242 mg/kg

Basis: BiWeight LRE

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

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

Score Date: 09/01/2017