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**Standard Reference Sample Project**

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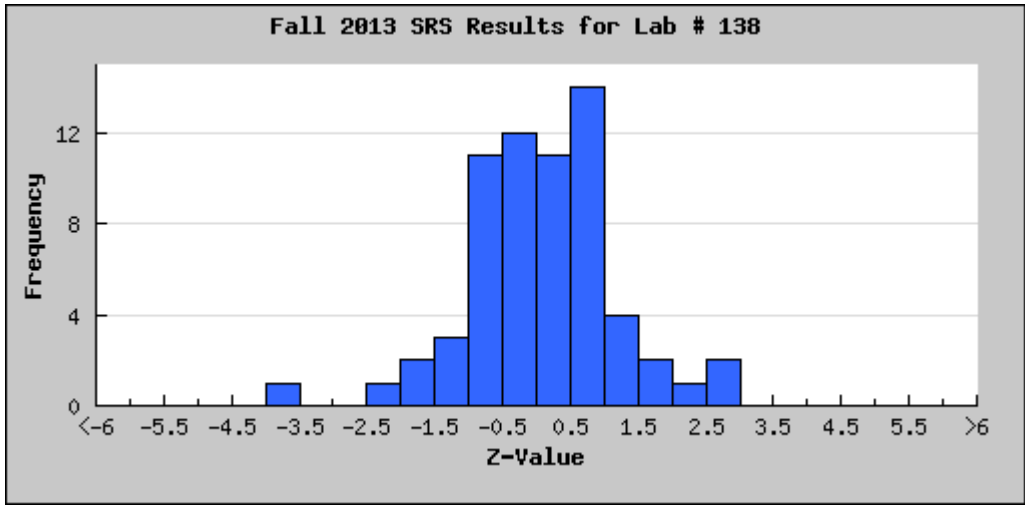
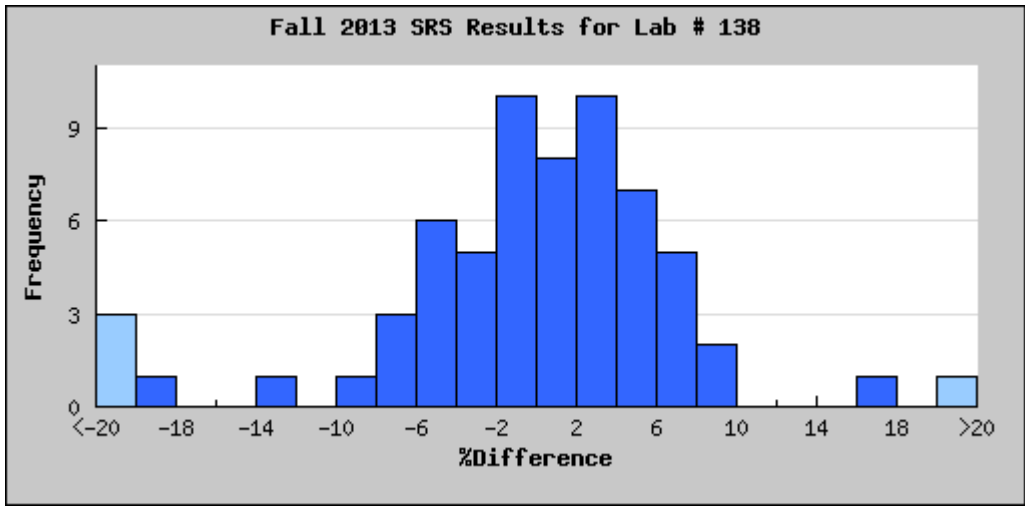
# Fall 2013 SRS Results for Lab # 138




| Number of data points per sample | NUTRIENT (LOW) | NUTRIENT (HIGH) | MAJOR | TRACE | MERCURY | PRECIPITATION |
|---|---|---|---|---|---|---|
| | 6 | 6 | 16 | 27 | 1 | 10 |

| SRS | Analyte | Method | RV | MPV | Fps | Z-value | %difference |
|---|---|---|---|---|---|---|---|
| N-119 | Ammonia + Organic Nitrogen as N | 22 Colorimetric | 0.281 mg/L | 0.267 | 0.037 | 0.38 | 5.24 |
| N-119 | Ammonia as N | 22 Colorimetric | 0.228 mg/L | 0.222 | 0.020 | 0.30 | 2.70 |
| N-119 | Nitrate as N | 07 Ion chromatography | 0.256 mg/L | 0.272 | 0.017 | -0.94 | -5.88 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| N-119 | Nitrite + Nitrate as N | 22 Colorimetric | 0.268 mg/L | 0.271 | 0.013 | -0.23 | -1.11 |
| N-119 | Orthophosphate as P | 22 Colorimetric | 0.210 mg/L | 0.200 | 0.039 | 0.26 | 5.00 |
| N-119 | Total Phosphorus as P | 22 Colorimetric | 0.245 mg/L | 0.230 | 0.012 | 1.25 | 6.52 |
| | | | | | | | |
| N-120 | Ammonia + Organic Nitrogen as N | 22 Colorimetric | 0.546 mg/L | 0.540 | 0.081 | 0.07 | 1.11 |
| N-120 | Ammonia as N | 22 Colorimetric | 0.493 mg/L | 0.490 | 0.033 | 0.09 | 0.61 |
| N-120 | Nitrate as N | 07 Ion chromatography | 0.678 mg/L | 0.679 | 0.029 | -0.03 | -0.15 |
| N-120 | Nitrite + Nitrate as N | 22 Colorimetric | 0.688 mg/L | 0.692 | 0.028 | -0.14 | -0.58 |
| N-120 | Orthophosphate as P | 22 Colorimetric | 0.616 mg/L | 0.651 | 0.025 | -1.40 | -5.38 |
| N-120 | Total Phosphorus as P | 22 Colorimetric | 0.687 mg/L | 0.663 | 0.027 | 0.89 | 3.62 |
| | | | | | | | |
| M-208 | Alkalinity as CaCO3 | 21 Titration: electrometric | 74.2 mg/L | 75.0 | 2.74 | -0.29 | -1.07 |
| M-208 | Chloride | 07 Ion chromatography | 62.8 mg/L | 64.0 | 1.45 | -0.83 | -1.88 |
| M-208 | Fluoride | 40 Ion selective electrode | 0.177 mg/L | 0.174 | 0.044 | 0.07 | 1.72 |
| M-208 | pH | 41 Electrometric | 9.60 | 10.0 | 0.222 | -1.80 | -4.00 |
| M-208 | Residue on Evaporation | 50 Gravimetric | 253 mg/L | 253 | 14.8 | 0.00 | 0.00 |
| M-208 | Specific Conductance | 41 Electrometric | 439 µS/cm | 428 | 10.4 | 1.06 | 2.57 |
| M-208 | Sulfate | 07 Ion chromatography | 33.0 mg/L | 33.4 | 0.741 | -0.54 | -1.20 |
| M-208 | Total Phosphorus as P | 22 Colorimetric | 0.132 mg/L | 0.132 | 0.007 | 0.00 | 0.00 |
| M-208 | Silica | 04 Inductively coupled plasma | 13.2 mg/L | 12.5 | 0.667 | 1.05 | 5.60 |
| M-208 | Boron | 04 Inductively coupled plasma | 94.5 µg/L | 90.0 | 7.71 | 0.58 | 5.00 |
| M-208 | Calcium | 04 Inductively coupled plasma | 37.8 mg/L | 35.4 | 1.24 | 1.94 | 6.78 |
| M-208 | Magnesium | 04 Inductively coupled plasma | 11.5 mg/L | 11.2 | 0.371 | 0.81 | 2.68 |
| M-208 | Potassium | 04 Inductively coupled plasma | 4.86 mg/L | 4.69 | 0.271 | 0.63 | 3.62 |
| M-208 | Sodium | 04 Inductively coupled plasma | 29.3 mg/L | 27.6 | 1.19 | 1.43 | 6.16 |
| M-208 | Strontium | 04 Inductively coupled plasma | 196 µg/L | 196 | 6.67 | 0.00 | 0.00 |
| M-208 | Vanadium | 04 Inductively coupled plasma | 8.71 µg/L | 9.15 | 0.717 | -0.61 | -4.81 |
| | | | | | | | |
| T-215 | Silica | 04 Inductively coupled plasma | 2.36 mg/L | 2.22 | 0.141 | 0.99 | 6.31 |
| T-215 | Calcium | 04 Inductively coupled plasma | 31.6 mg/L | 29.4 | 1.12 | 1.96 | 7.48 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| T-215 | Iron | 04 Inductively coupled plasma | 104 µg/L | 86.0 | 6.75 | 2.67 | **20.93** |
| T-215 | Magnesium | 04 Inductively coupled plasma | 10.9 mg/L | 10.5 | 0.445 | 0.90 | 3.81 |
| T-215 | Manganese | 04 Inductively coupled plasma | 84.0 µg/L | 76.9 | 2.74 | 2.59 | 9.23 |
| T-215 | Potassium | 04 Inductively coupled plasma | 1.69 mg/L | 1.62 | 0.104 | 0.67 | 4.32 |
| T-215 | Sodium | 04 Inductively coupled plasma | 30.3 mg/L | 28.6 | 1.82 | 0.93 | 5.94 |
| T-215 | Strontium | 04 Inductively coupled plasma | 262 µg/L | 257 | 5.19 | 0.96 | 1.95 |
| T-215 | Vanadium | 04 Inductively coupled plasma | <2.00 µg/L | 0.312 | 0.028 | -- | -- |
| T-215 | Aluminum | 06 Inductively coupled plasma/mass spectrometry | 124 µg/L | 121 | 9.64 | 0.31 | 2.48 |
| T-215 | Antimony | 06 Inductively coupled plasma/mass spectrometry | 1.55 µg/L | 1.59 | 0.096 | -0.42 | -2.52 |
| T-215 | Arsenic | 06 Inductively coupled plasma/mass spectrometry | 0.365 µg/L | 0.510 | 0.136 | -1.07 | **-28.43** |
| T-215 | Barium | 06 Inductively coupled plasma/mass spectrometry | 39.5 µg/L | 39.0 | 1.22 | 0.41 | 1.28 |
| T-215 | Beryllium | 06 Inductively coupled plasma/mass spectrometry | 0.459 µg/L | 0.485 | 0.030 | -0.87 | -5.36 |
| T-215 | Boron | 06 Inductively coupled plasma/mass spectrometry | 14.7 µg/L | 15.8 | 1.15 | -0.96 | -6.96 |
| T-215 | Cadmium | 06 Inductively coupled plasma/mass spectrometry | 3.86 µg/L | 3.85 | 0.141 | 0.07 | 0.26 |
| T-215 | Chromium | 06 Inductively coupled plasma/mass spectrometry | 2.43 µg/L | 2.80 | 0.188 | -1.97 | -13.21 |
| T-215 | Cobalt | 06 Inductively coupled plasma/mass spectrometry | 1.12 µg/L | 1.19 | 0.124 | -0.56 | -5.88 |
| T-215 | Copper | 06 Inductively coupled plasma/mass spectrometry | 0.620 µg/L | 0.764 | 0.143 | -1.01 | -18.85 |
| T-215 | Lead | 06 Inductively coupled plasma/mass spectrometry | 0.416 µg/L | 0.400 | 0.030 | 0.53 | 4.00 |
| T-215 | Molybdenum | 06 Inductively coupled plasma/mass spectrometry | 1.42 µg/L | 1.56 | 0.067 | -2.09 | -8.97 |
| T-215 | Nickel | 06 Inductively coupled plasma/mass spectrometry | 0.285 µg/L | 0.540 | 0.334 | -0.76 | **-47.22** |
| T-215 | Selenium | 06 Inductively coupled plasma/mass spectrometry | 0.370 µg/L | 0.580 | 0.299 | -0.70 | **-36.21** |
| T-215 | Silver | 06 Inductively coupled plasma/mass spectrometry | 5.95 µg/L | 5.69 | 0.259 | 1.00 | 4.57 |
| T-215 | Thallium | 06 Inductively coupled plasma/mass spectrometry | 7.04 µg/L | 7.03 | 0.330 | 0.03 | 0.14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| T-215 | Uranium | 06 Inductively coupled plasma/mass spectrometry | 1.61 µg/L | 1.67 | 0.096 | -0.62 | -3.59 |
| T-215 | Zinc | 06 Inductively coupled plasma/mass spectrometry | 4.32 µg/L | 4.45 | 0.460 | -0.28 | -2.92 |
| Hg-57 | Mercury | 09 Atomic fluorescence | 0.00293 µg/L | 0.003 | 0.000 | 0.00 | -2.33 |
| P-61 | Chloride | 07 Ion chromatography | 11.8 mg/L | 11.9 | 0.382 | -0.26 | -0.84 |
| P-61 | Fluoride | 40 Ion selective electrode | 0.237 mg/L | 0.244 | 0.037 | -0.19 | -2.87 |
| P-61 | Orthophosphate as P | 22 Colorimetric | 0.062 mg/L | 0.066 | 0.006 | -0.67 | -6.06 |
| P-61 | pH | 41 Electrometric | 3.80 | 4.10 | 0.082 | -3.66 | -7.32 |
| P-61 | Specific Conductance | 41 Electrometric | 69.4 µS/cm | 67.0 | 3.40 | 0.71 | 3.58 |
| P-61 | Sulfate | 07 Ion chromatography | 0.573 mg/L | 0.490 | 0.117 | 0.71 | 16.94 |
| P-61 | Calcium | 04 Inductively coupled plasma | 0.622 mg/L | 0.603 | 0.021 | 0.90 | 3.15 |
| P-61 | Magnesium | 04 Inductively coupled plasma | 0.243 mg/L | 0.239 | 0.019 | 0.21 | 1.67 |
| P-61 | Sodium | 04 Inductively coupled plasma | 5.12 mg/L | 4.67 | 0.184 | 2.45 | 9.64 |
| P-61 | Potassium | 04 Inductively coupled plasma | <0.300 mg/L | 0.255 | 0.029 | -- | -- |