# CDN Resource Laboratories Ltd.

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## REFERENCE MATERIAL:  CDN-ME-11

Recommended values and the "Between Lab" Two Standard Deviations

| | | | |
|---|---|---|---|
| *Gold* | *1.38  g/t* | *±* | *0.10  g/t* |
| *Silver* | *79.3  g/t* | *±* | *6.0  g/t* |
| *Copper* | *2.44  %* | *±* | *0 .11 %* |
| *Lead* | *0.86  %* | *±* | *0.10  %* |
| *Zinc* | *0.96  %* | *±* | *0.06  %* |

**PREPARED BY**:          CDN Resource Laboratories Ltd.
**CERTIFIED BY:**          Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia
**INDEPENDENT GEOCHEMIST:**  Dr. Barry Smee., Ph.D., P. Geo.
**DATE OF CERTIFICATION:**  June 14, 2010

## METHOD OF PREPARATION:
Reject ore material was dried, crushed, pulverized and then passed through a 270 mesh screen.  The +270 material was discarded.  The -270 material was mixed for 5 days in a double-cone mixer.  Splits were taken and sent to 14 laboratories for round robin assaying.

## ORIGIN OF REFERENCE MATERIAL:

This standard is made from a mixture of a number of ores as well as some Cu, Pb and Zn concentrates.

**Approximate chemical composition (from whole rock analysis) is as follows**:

| | Percent | | | Percent |
|---|---|---|---|---|
| SiO2 | 56.6 | | MgO | 3.1 |
| Al2O3 | 11.7 | | K2O | 2.7 |
| Fe2O3 | 8.9 | | TiO2 | 0.6 |
| CaO | 3.7 | | LOI | 6.7 |
| Na2O | 2.0 | | S | 4.3 |
| C | 0.8 | | | |

**Statistical Procedures:**

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ±2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data.  This method is different from that used by Government agencies in that the actual "between-laboratory" standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from individual analyses, unlike the Confidence Limits published on other standards.

**Assay Procedures:**

  **Au:**   Fire assay pre-concentration, AA or ICP finish  (30g sub-sample).
  **Ag, Cu, Pb, Zn:**   4-acid digestion, AA or ICP finish.

# REFERENCE MATERIAL   CDN-ME-11

**Results from round-robin assaying:**

| | Lab 1 | Lab 2 | Lab 3 | Lab 4 | Lab 5 | Lab 6 | Lab 7 | Lab 8 | Lab 9 | Lab 10 | Lab 11 | Lab 12 | Lab 13 | Lab 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t | Au g/t |
| CDN-ME-11-1 | 1.38 | 1.30 | 1.37 | 1.44 | 1.15 | 1.28 | 1.32 | 1.36 | 1.36 | 1.36 | 1.32 | 1.36 | 1.36 | 1.43 |
| CDN-ME-11-2 | 1.35 | 1.41 | 1.43 | 1.40 | 1.18 | 1.37 | 1.43 | 1.34 | 1.34 | 1.38 | 1.33 | 1.43 | 1.40 | 1.32 |
| CDN-ME-11-3 | 1.44 | 1.48 | 1.49 | 1.36 | 1.30 | 1.28 | 1.37 | 1.36 | 1.34 | 1.42 | 1.32 | 1.35 | 1.44 | 1.36 |
| CDN-ME-11-4 | 1.42 | 1.41 | 1.42 | 1.36 | 1.13 | 1.30 | 1.34 | 1.44 | 1.36 | 1.47 | 1.35 | 1.55 | 1.31 | 1.48 |
| CDN-ME-11-5 | 1.29 | 1.37 | 1.45 | 1.38 | 1.21 | 1.32 | 1.34 | 1.32 | 1.30 | 1.50 | 1.33 | 1.41 | 1.44 | 1.45 |
| CDN-ME-11-6 | 1.45 | 1.42 | 1.40 | 1.36 | 1.25 | 1.38 | 1.29 | 1.39 | 1.31 | 1.36 | 1.37 | 1.43 | 1.40 | 1.43 |
| CDN-ME-11-7 | 1.34 | 1.31 | 1.37 | 1.36 | 1.40 | 1.37 | 1.33 | 1.42 | 1.37 | 1.52 | 1.31 | 1.44 | 1.43 | 1.42 |
| CDN-ME-11-8 | 1.33 | 1.43 | 1.42 | 1.45 | 1.22 | 1.42 | 1.31 | 1.30 | 1.37 | 1.47 | 1.29 | 1.39 | 1.37 | 1.37 |
| CDN-ME-11-9 | 1.28 | 1.32 | 1.38 | 1.36 | 1.36 | 1.41 | 1.32 | 1.32 | 1.38 | 1.55 | 1.38 | 1.37 | 1.41 | 1.37 |
| CDN-ME-11-10 | 1.33 | 1.39 | 1.47 | 1.38 | 1.20 | 1.38 | 1.37 | 1.35 | 1.32 | 1.38 | 1.34 | 1.41 | 1.46 | 1.43 |
| | | | | | | | | | | | | | | |
| Mean | 1.36 | 1.38 | 1.42 | 1.39 | 1.24 | 1.35 | 1.34 | 1.36 | 1.35 | 1.44 | 1.33 | 1.41 | 1.40 | 1.41 |
| Std. Devn. | 0.0597 | 0.0600 | 0.0414 | 0.0334 | 0.0876 | 0.0523 | 0.0397 | 0.0450 | 0.0276 | 0.0702 | 0.0272 | 0.0570 | 0.0452 | 0.0490 |
| % RSD | 4.39 | 4.34 | 2.91 | 2.41 | 7.07 | 3.87 | 2.96 | 3.31 | 2.05 | 4.87 | 2.04 | 4.03 | 3.22 | 3.48 |
| | | | | | | | | | | | | | | |
| | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t | Ag g/t |
| CDN-ME-11-1 | 80 | 76.7 | 79.0 | 78.9 | 70 | 84.0 | 79 | 80 | 75 | 80 | 70 | 75.7 | 80.7 | 80.6 |
| CDN-ME-11-2 | 79 | 76.9 | 77.9 | 77.3 | 70.4 | 81.8 | 83 | 80 | 76 | 84 | 75 | 77.2 | 78.7 | 80.7 |
| CDN-ME-11-3 | 80 | 77.1 | 77.5 | 80.2 | 70.9 | 83.7 | 82 | 80 | 75 | 83 | 70 | 76.6 | 80.7 | 82.0 |
| CDN-ME-11-4 | 80 | 74.6 | 78.4 | 78.7 | 70.8 | 82.8 | 82 | 80 | 76 | 88 | 75 | 75.6 | 79.7 | 78.3 |
| CDN-ME-11-5 | 81 | 77.2 | 76.4 | 78.9 | 74.4 | 85.4 | 87 | 80 | 74 | 80 | 75 | 76.3 | 82.1 | 82.2 |
| CDN-ME-11-6 | 79 | 71.5 | 80.6 | 78.7 | 69.9 | 83.1 | 83 | 80 | 75 | 81 | 75 | 77.1 | 75.6 | 81.9 |
| CDN-ME-11-7 | 78 | 72.8 | 80.4 | 81.8 | 69.1 | 81.7 | 82 | 70 | 74 | 82 | 75 | 78.7 | 83.9 | 80.4 |
| CDN-ME-11-8 | 80 | 78.1 | 79.9 | 81.7 | 71.1 | 84.3 | 82 | 80 | 77 | 85 | 75 | 79.5 | 83.2 | 76.6 |
| CDN-ME-11-9 | 80 | 76.4 | 77.1 | 77.6 | 70.4 | 83.3 | 78 | 80 | 76 | 83 | 80 | 78.1 | 80.8 | 76.5 |
| CDN-ME-11-10 | 78 | 77.1 | 79.4 | 78.6 | 71.1 | 85.2 | 80 | 80 | 78 | 77 | 70 | 80.3 | 80.9 | 85.8 |
| | | | | | | | | | | | | | | |
| Mean | 79.5 | 75.8 | 78.7 | 79.2 | 70.8 | 83.5 | 81.8 | 79.0 | 75.6 | 82.3 | 74.0 | 77.5 | 80.6 | 80.5 |
| Std. Devn. | 0.9718 | 2.1583 | 1.4347 | 1.5349 | 1.4067 | 1.2579 | 2.4855 | 3.1623 | 1.2649 | 3.0569 | 3.1623 | 1.5982 | 2.3448 | 2.8312 |
| % RSD | 1.22 | 2.85 | 1.82 | 1.94 | 1.99 | 1.51 | 3.04 | 4.00 | 1.67 | 3.71 | 4.27 | 2.06 | 2.91 | 3.52 |

**NOTE:**     **Au and Ag data from Lab. 5 was excluded for failing the "t" test.**

# REFERENCE MATERIAL   CDN-ME-11

## Results from round-robin assaying:

| | Lab 1 | Lab 2 | Lab 3 | Lab 4 | Lab 5 | Lab 6 | Lab 7 | Lab 8 | Lab 9 | Lab 10 | Lab 11 | Lab 12 | Lab 13 | Lab 14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu | % Cu |
| CDN-ME-11-1 | 2.48 | 2.42 | 2.43 | 2.37 | 2.59 | 2.49 | 2.48 | 2.33 | 2.52 | 2.43 | 2.50 | 2.54 | 2.38 | 2.34 |
| CDN-ME-11-2 | 2.45 | 2.37 | 2.38 | 2.41 | 2.58 | 2.49 | 2.46 | 2.35 | 2.54 | 2.45 | 2.52 | 2.47 | 2.41 | 2.33 |
| CDN-ME-11-3 | 2.45 | 2.40 | 2.38 | 2.50 | 2.65 | 2.50 | 2.50 | 2.32 | 2.46 | 2.50 | 2.44 | 2.52 | 2.44 | 2.34 |
| CDN-ME-11-4 | 2.47 | 2.42 | 2.44 | 2.43 | 2.61 | 2.47 | 2.44 | 2.40 | 2.44 | 2.47 | 2.52 | 2.51 | 2.42 | 2.34 |
| CDN-ME-11-5 | 2.47 | 2.41 | 2.34 | 2.48 | 2.66 | 2.49 | 2.49 | 2.31 | 2.51 | 2.49 | 2.46 | 2.52 | 2.43 | 2.34 |
| CDN-ME-11-6 | 2.43 | 2.40 | 2.38 | 2.46 | 2.60 | 2.49 | 2.43 | 2.48 | 2.41 | 2.43 | 2.47 | 2.52 | 2.41 | 2.36 |
| CDN-ME-11-7 | 2.43 | 2.38 | 2.42 | 2.44 | 2.60 | 2.46 | 2.43 | 2.45 | 2.44 | 2.45 | 2.49 | 2.54 | 2.42 | 2.33 |
| CDN-ME-11-8 | 2.43 | 2.38 | 2.47 | 2.44 | 2.58 | 2.50 | 2.37 | 2.41 | 2.53 | 2.48 | 2.53 | 2.55 | 2.42 | 2.31 |
| CDN-ME-11-9 | 2.47 | 2.38 | 2.34 | 2.42 | 2.60 | 2.48 | 2.45 | 2.39 | 2.45 | 2.49 | 2.45 | 2.49 | 2.41 | 2.35 |
| CDN-ME-11-10 | 2.44 | 2.32 | 2.47 | 2.42 | 2.58 | 2.51 | 2.41 | 2.33 | 2.46 | 2.45 | 2.50 | 2.48 | 2.42 | 2.35 |
| Mean | 2.45 | 2.39 | 2.41 | 2.44 | 2.61 | 2.49 | 2.45 | 2.38 | 2.48 | 2.46 | 2.49 | 2.51 | 2.42 | 2.34 |
| Std. Devn. | 0.0189 | 0.0297 | 0.0481 | 0.0352 | 0.0284 | 0.0148 | 0.0392 | 0.0583 | 0.0450 | 0.0255 | 0.0316 | 0.0267 | 0.0158 | 0.0137 |
| % RSD | 0.77 | 1.25 | 2.00 | 1.44 | 1.09 | 0.59 | 1.60 | 2.45 | 1.82 | 1.03 | 1.27 | 1.06 | 0.65 | 0.59 |
| | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb | % Pb |
| CDN-ME-11-1 | 0.87 | 0.789 | 0.83 | 0.955 | 0.99 | 0.90 | 0.946 | 0.834 | 0.796 | 0.85 | 0.842 | 0.862 | 0.859 | 0.846 |
| CDN-ME-11-2 | 0.87 | 0.775 | 0.82 | 0.961 | 0.99 | 0.90 | 0.961 | 0.864 | 0.807 | 0.87 | 0.856 | 0.848 | 0.857 | 0.863 |
| CDN-ME-11-3 | 0.86 | 0.775 | 0.81 | 0.953 | 1.00 | 0.91 | 0.962 | 0.866 | 0.794 | 0.90 | 0.856 | 0.860 | 0.859 | 0.849 |
| CDN-ME-11-4 | 0.87 | 0.790 | 0.83 | 0.943 | 0.99 | 0.91 | 0.936 | 0.815 | 0.790 | 0.90 | 0.852 | 0.853 | 0.857 | 0.865 |
| CDN-ME-11-5 | 0.87 | 0.771 | 0.79 | 0.955 | 1.00 | 0.91 | 0.968 | 0.825 | 0.789 | 0.87 | 0.836 | 0.860 | 0.864 | 0.854 |
| CDN-ME-11-6 | 0.86 | 0.764 | 0.83 | 0.942 | 0.99 | 0.91 | 0.983 | 0.881 | 0.788 | 0.88 | 0.838 | 0.861 | 0.874 | 0.870 |
| CDN-ME-11-7 | 0.86 | 0.752 | 0.82 | 0.930 | 0.98 | 0.90 | 0.970 | 0.847 | 0.785 | 0.87 | 0.852 | 0.870 | 0.858 | 0.871 |
| CDN-ME-11-8 | 0.86 | 0.766 | 0.82 | 0.940 | 0.97 | 0.90 | 0.980 | 0.868 | 0.790 | 0.88 | 0.850 | 0.867 | 0.852 | 0.854 |
| CDN-ME-11-9 | 0.85 | 0.779 | 0.81 | 0.962 | 1.00 | 0.90 | 0.939 | 0.827 | 0.807 | 0.87 | 0.844 | 0.863 | 0.857 | 0.864 |
| CDN-ME-11-10 | 0.85 | 0.763 | 0.79 | 0.945 | 0.92 | 0.91 | 0.970 | 0.853 | 0.796 | 0.85 | 0.852 | 0.849 | 0.864 | 0.860 |
| Mean | 0.862 | 0.772 | 0.815 | 0.949 | 0.983 | 0.905 | 0.962 | 0.848 | 0.794 | 0.874 | 0.848 | 0.859 | 0.860 | 0.860 |
| Std. Devn. | 0.0079 | 0.0118 | 0.0151 | 0.0102 | 0.0241 | 0.0053 | 0.0163 | 0.0220 | 0.0076 | 0.0171 | 0.0073 | 0.0072 | 0.0060 | 0.0086 |
| % RSD | 0.92 | 1.53 | 1.85 | 1.08 | 2.45 | 0.58 | 1.69 | 2.59 | 0.96 | 1.96 | 0.86 | 0.84 | 0.70 | 1.00 |
| | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn | % Zn |
| CDN-ME-11-1 | 0.99 | 0.887 | 0.97 | 0.982 | 0.96 | 0.99 | 0.891 | 0.927 | 0.764 | 0.96 | 0.981 | 0.974 | 0.964 | 0.927 |
| CDN-ME-11-2 | 1.00 | 0.878 | 0.96 | 0.981 | 0.95 | 0.98 | 0.889 | 0.953 | 0.779 | 0.97 | 1.000 | 0.960 | 0.963 | 0.93 |
| CDN-ME-11-3 | 0.99 | 0.873 | 0.93 | 0.982 | 0.95 | 0.98 | 0.899 | 0.971 | 0.763 | 0.98 | 1.020 | 0.970 | 0.960 | 0.93 |
| CDN-ME-11-4 | 0.99 | 0.897 | 0.98 | 0.973 | 0.95 | 0.98 | 0.873 | 0.913 | 0.765 | 0.99 | 1.000 | 0.966 | 0.959 | 0.936 |
| CDN-ME-11-5 | 0.99 | 0.891 | 0.94 | 0.975 | 0.94 | 0.98 | 0.901 | 0.925 | 0.778 | 0.99 | 0.989 | 0.962 | 0.959 | 0.933 |
| CDN-ME-11-6 | 0.98 | 0.885 | 0.95 | 0.972 | 0.98 | 0.98 | 0.913 | 0.968 | 0.767 | 0.97 | 0.979 | 0.970 | 0.972 | 0.953 |
| CDN-ME-11-7 | 0.99 | 0.866 | 0.94 | 0.968 | 0.95 | 0.98 | 0.899 | 0.938 | 0.755 | 0.95 | 0.995 | 0.986 | 0.960 | 0.955 |
| CDN-ME-11-8 | 0.98 | 0.893 | 0.94 | 0.969 | 0.96 | 0.98 | 0.908 | 0.949 | 0.761 | 1.00 | 0.999 | 0.979 | 0.959 | 0.931 |
| CDN-ME-11-9 | 0.99 | 0.897 | 0.93 | 0.977 | 0.98 | 0.98 | 0.878 | 0.918 | 0.773 | 0.98 | 0.995 | 0.958 | 0.965 | 0.934 |
| CDN-ME-11-10 | 0.98 | 0.884 | 0.97 | 0.965 | 0.93 | 0.98 | 0.900 | 0.951 | 0.773 | 0.98 | 1.010 | 0.969 | 0.960 | 0.941 |
| Mean | 0.988 | 0.885 | 0.951 | 0.974 | 0.955 | 0.981 | 0.895 | 0.941 | 0.768 | 0.977 | 0.997 | 0.969 | 0.962 | 0.937 |
| Std. Devn. | 0.0063 | 0.0103 | 0.0179 | 0.0061 | 0.0158 | 0.0032 | 0.0125 | 0.0203 | 0.0077 | 0.0149 | 0.0123 | 0.0087 | 0.0041 | 0.0098 |
| % RSD | 0.64 | 1.16 | 1.88 | 0.62 | 1.66 | 0.32 | 1.40 | 2.16 | 1.01 | 1.53 | 1.24 | 0.89 | 0.43 | 1.04 |

NOTE:    Cu and Pb data from Lab. 5 was excluded for failing the "t" test.
Zn data from Lab. 9 was excluded for failing the "t" test.

# REFERENCE MATERIAL   CDN-ME-11
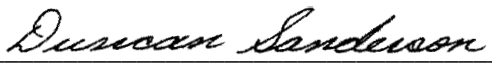
**Participating Laboratories:**
(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver
Actlabs-Ancaster, Ontario, Canada
Actlabs-Thunder Bay, Ontario, Canada
AGAT Laboratories Ltd., Ontario, Canada
Alaska Assay Laboratory, Alaska, USA
Alex Stewart Argentina SA
ALS Chemex Laboratories, North Vancouver
Assayers Canada Ltd., Vancouver
Genalysis Laboratory, Australia
IPL, Richmond, B.C. Canada
Labtium Laboratory, Finland
Omac Laboratories Ltd., Ireland
TSL Laboratories Ltd., Saskatoon
Ultra Trace Analytical Laboratories, Australia

Certified by        _____
                    Duncan Sanderson, Certified Assayer of B.C.


Geochemist          _____
                    Dr. Barry Smee,  Ph.D.,  P. Geo.