*Quality Analysis ...* *Innovative Technologies*

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| **Date Submitted:** | 05-Apr-13 |
| **Invoice No.:** | A13-03893 |
| **Invoice Date:** | 22-Apr-13 |
| **Your Reference:** | EXPLO2013PROD |

**Lac Des Iles Mine**
**556 Tenth Avenue**
**Thunder Bay ON P7B 2R2**
**Canada**

**ATTN: Manager John Corkery**

# CERTIFICATE OF ANALYSIS

31 Core samples and 4 Pulp samples were submitted for analysis.

The following analytical package was requested: Code LDI-Production Package (OES) Whole Rock Analysis-XRF/Fire Assay ICPOES

REPORT **A13-03893**

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Notes:

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

**ACTIVATION LABORATORIES LTD.**

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# Activation Laboratories Ltd. Report: A13-03893

| Method Code | FA-ICP | FA-ICP | FA-ICP | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit Symbol | ppb | ppb | ppb | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| Analyte Symbol | Au | Pd | Pt | SiO2 | Al2O3 | Fe2O3(T) | MnO | MgO | CaO | Na2O | K2O | TiO2 | P2O5 | V2O5 | LOI | Total | Cr | Ni | Co | Cu |
| Package Code | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O | LDI-Production Package (O |
| Date Analyzed | Apr 16 2013 2:26PM | Apr 16 2013 2:26PM | Apr 16 2013 2:26PM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM | Apr 21 2013 10:51AM |
| 13-001-141 | < 2 | < 5 | < 5 | 4.18 | < 0.01 | 0.05 | 0.057 | 22.06 | 30.27 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.003 | 43.05 | 99.42 | < 0.01 | < 0.003 | < 0.004 | < 0.004 |
| 13-001-142 | 3400 | 2010 | 311 | 56.18 | 12.34 | 12.11 | 0.088 | 4.43 | 4.18 | 1.28 | 1.78 | 0.43 | 0.11 | 0.020 | 6.59 | 99.86 | 0.04 | 0.068 | 0.004 | 0.216 |
| 13-001-143 | 6 | < 5 | 6 | 66.48 | 13.35 | 6.50 | 0.107 | 2.39 | 4.28 | 3.34 | 1.12 | 0.62 | 0.14 | 0.014 | 1.39 | 99.75 | < 0.01 | 0.008 | < 0.004 | 0.004 |
| 13-001-144 | 9 | 205 | 29 | 53.07 | 13.01 | 11.01 | 0.177 | 10.06 | 7.64 | 1.92 | 0.54 | 0.22 | 0.01 | 0.018 | 2.64 | 100.4 | < 0.01 | 0.021 | 0.010 | < 0.004 |
| 13-001-145 | 3 | 156 | 18 | 51.18 | 14.08 | 10.88 | 0.178 | 10.68 | 7.90 | 2.22 | 0.44 | 0.19 | 0.01 | 0.028 | 2.25 | 100.1 | 0.01 | 0.028 | 0.007 | < 0.004 |
| 13-001-146 | 6 | 159 | 17 | 50.57 | 14.40 | 11.06 | 0.175 | 10.44 | 8.06 | 2.19 | 0.40 | 0.23 | < 0.01 | 0.024 | 2.56 | 100.2 | < 0.01 | 0.031 | 0.010 | < 0.004 |
| 13-001-147 | 11 | 140 | 18 | 49.56 | 14.89 | 10.73 | 0.165 | 10.52 | 8.52 | 1.81 | 0.30 | 0.22 | 0.01 | 0.029 | 2.43 | 99.23 | < 0.01 | 0.025 | 0.007 | 0.006 |
| 13-001-148 | 15 | 156 | 20 | 50.02 | 14.72 | 11.35 | 0.182 | 11.20 | 8.74 | 1.76 | 0.20 | 0.24 | 0.01 | 0.023 | 1.70 | 100.2 | < 0.01 | 0.028 | 0.007 | 0.008 |
| 13-001-149 | 13 | 169 | 23 | 50.54 | 14.20 | 11.06 | 0.176 | 11.11 | 8.35 | 1.78 | 0.31 | 0.25 | < 0.01 | 0.028 | 1.91 | 99.78 | < 0.01 | 0.028 | 0.010 | 0.005 |
| 13-001-150 | 15 | 147 | 21 | 49.65 | 15.20 | 11.13 | 0.178 | 11.24 | 8.59 | 1.80 | 0.23 | 0.24 | 0.01 | 0.025 | 1.63 | 100.0 | 0.02 | 0.082 | 0.010 | < 0.004 |
| 13-001-151 | 14 | 150 | 25 | 49.51 | 14.99 | 11.08 | 0.178 | 11.15 | 8.61 | 1.65 | 0.22 | 0.25 | 0.01 | 0.029 | 2.17 | 99.91 | 0.01 | 0.029 | 0.007 | 0.007 |
| 13-001-152 | 10 | 137 | 25 | 50.57 | 14.72 | 10.64 | 0.174 | 10.61 | 8.10 | 2.06 | 0.34 | 0.25 | 0.01 | 0.020 | 2.46 | 100.00 | < 0.01 | 0.029 | 0.006 | 0.005 |
| 13-001-153 | 7 | 128 | 24 | 49.38 | 14.04 | 11.20 | 0.176 | 11.43 | 8.16 | 1.77 | 0.27 | 0.20 | 0.01 | 0.027 | 3.62 | 100.4 | 0.02 | 0.039 | 0.008 | 0.005 |
| 13-001-154 | 8 | 157 | 26 | 49.86 | 13.87 | 10.83 | 0.170 | 10.96 | 6.99 | 2.49 | 0.31 | 0.21 | < 0.01 | 0.022 | 3.46 | 99.22 | < 0.01 | 0.030 | 0.008 | < 0.004 |
| 13-001-155 | 10 | 153 | 28 | 51.79 | 14.31 | 9.64 | 0.162 | 9.85 | 7.82 | 2.01 | 0.30 | 0.16 | 0.01 | 0.018 | 2.94 | 99.09 | < 0.01 | 0.027 | 0.006 | 0.039 |
| 13-001-156 | 21 | 142 | 26 | 50.93 | 15.38 | 9.19 | 0.144 | 9.16 | 8.12 | 2.36 | 0.42 | 0.15 | < 0.01 | 0.020 | 2.88 | 98.79 | < 0.01 | 0.023 | 0.009 | 0.005 |
| 13-001-157 | 11 | 156 | 24 | 49.62 | 15.01 | 10.33 | 0.162 | 10.46 | 8.37 | 1.94 | 0.31 | 0.16 | 0.01 | 0.012 | 2.99 | 99.42 | < 0.01 | 0.024 | 0.008 | < 0.004 |
| 13-001-158 | 11 | 167 | 21 | 50.50 | 14.78 | 10.74 | 0.165 | 10.64 | 8.36 | 1.99 | 0.26 | 0.20 | < 0.01 | 0.029 | 2.61 | 100.4 | 0.03 | 0.080 | 0.007 | 0.004 |
| 13-001-159 | 12 | 167 | 22 | 50.23 | 14.45 | 11.01 | 0.178 | 11.06 | 8.40 | 1.71 | 0.28 | 0.18 | 0.01 | 0.024 | 2.02 | 99.61 | < 0.01 | 0.039 | 0.006 | 0.008 |
| 13-001-160 | 1260 | 6240 | 1470 | 44.90 | 22.20 | 7.15 | 0.082 | 8.74 | 12.96 | 1.30 | 0.10 | 0.10 | 0.01 | 0.009 | 2.59 | 100.3 | 0.08 | 0.064 | 0.006 | 0.017 |
| 13-001-161 | 12 | 152 | 24 | 51.81 | 14.85 | 10.18 | 0.156 | 10.19 | 8.19 | 1.96 | 0.25 | 0.17 | 0.01 | 0.017 | 2.17 | 100.0 | < 0.01 | 0.039 | 0.007 | 0.005 |
| 13-001-162 | 6 | 130 | 20 | 49.88 | 15.04 | 10.50 | 0.162 | 10.70 | 8.21 | 1.89 | 0.27 | 0.16 | < 0.01 | 0.020 | 3.42 | 100.3 | 0.01 | 0.038 | 0.008 | < 0.004 |
| 13-001-163 | 9 | 133 | 21 | 53.86 | 13.61 | 9.92 | 0.145 | 9.70 | 7.92 | 1.69 | 0.20 | 0.16 | < 0.01 | 0.022 | 3.11 | 100.4 | 0.01 | 0.050 | 0.007 | 0.009 |
| 13-001-164 | 13 | 129 | 18 | 52.73 | 14.42 | 10.06 | 0.162 | 9.84 | 7.63 | 2.13 | 0.31 | 0.17 | < 0.01 | 0.015 | 2.57 | 100.2 | 0.03 | 0.125 | 0.008 | 0.007 |
| 13-001-165 | 14 | 205 | 28 | 50.12 | 14.82 | 11.31 | 0.176 | 11.16 | 8.35 | 1.90 | 0.27 | 0.16 | 0.01 | 0.017 | 2.20 | 100.6 | 0.01 | 0.042 | 0.008 | 0.008 |
| 13-001-166 | 6 | 179 | 22 | 51.88 | 14.87 | 10.36 | 0.163 | 10.36 | 7.92 | 2.11 | 0.29 | 0.17 | < 0.01 | 0.017 | 1.81 | 99.98 | < 0.01 | 0.028 | 0.006 | < 0.004 |
| 13-001-167 | 14 | 227 | 25 | 51.56 | 15.48 | 10.35 | 0.170 | 10.36 | 7.88 | 2.32 | 0.29 | 0.19 | < 0.01 | 0.019 | 1.68 | 100.4 | 0.01 | 0.041 | 0.007 | 0.007 |
| 13-001-168 | 10 | 211 | 28 | 50.97 | 14.32 | 10.65 | 0.182 | 10.58 | 8.15 | 2.14 | 0.41 | 0.22 | 0.01 | 0.022 | 2.38 | 100.6 | 0.12 | 0.401 | 0.010 | 0.010 |
| 13-001-169 | 21 | 166 | 27 | 50.61 | 14.57 | 10.51 | 0.158 | 10.47 | 7.97 | 2.20 | 0.35 | 0.23 | < 0.01 | 0.020 | 3.00 | 100.1 | < 0.01 | 0.042 | 0.010 | < 0.004 |
| 13-001-170 | 18 | 279 | 32 | 50.49 | 15.33 | 10.42 | 0.171 | 10.46 | 8.33 | 2.11 | 0.34 | 0.22 | 0.01 | 0.021 | 2.50 | 100.7 | 0.06 | 0.188 | 0.009 | 0.013 |
| 13-001-171 | 20 | 333 | 35 | 49.75 | 14.31 | 11.19 | 0.175 | 11.44 | 8.08 | 1.79 | 0.32 | 0.23 | 0.01 | 0.021 | 2.73 | 100.1 | 0.01 | 0.042 | 0.009 | 0.014 |
| 13-001-172 | 36 | 569 | 55 | 49.52 | 13.87 | 11.64 | 0.184 | 11.78 | 8.27 | 1.63 | 0.20 | 0.23 | 0.01 | 0.028 | 2.42 | 99.91 | 0.01 | 0.072 | 0.010 | 0.034 |
| 13-001-173 | 12 | 208 | 23 | 54.99 | 13.88 | 9.50 | 0.156 | 9.28 | 7.22 | 2.15 | 0.17 | 0.19 | < 0.01 | 0.018 | 2.35 | 99.97 | < 0.01 | 0.042 | 0.007 | 0.009 |
| 13-001-174 | 12 | 208 | 28 | 49.87 | 15.09 | 10.95 | 0.176 | 10.73 | 8.22 | 1.84 | 0.19 | 0.19 | 0.01 | 0.018 | 2.58 | 99.92 | 0.01 | 0.037 | 0.006 | 0.008 |
| 13-001-175 | 1290 | 6430 | 1510 | 45.14 | 22.23 | 7.08 | 0.080 | 8.80 | 12.88 | 1.24 | 0.11 | 0.10 | 0.01 | 0.005 | 2.57 | 100.4 | 0.08 | 0.066 | 0.005 | 0.018 |

## Quality Control

| Method Code | FA-ICP | FA-ICP | FA-ICP | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF | FUS-XRF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Unit Symbol** | ppb | ppb | ppb | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| **Analyte Symbol** | Au | Pd | Pt | SiO2 | Al2O3 | Fe2O3(T) | MnO | MgO | CaO | Na2O | K2O | TiO2 | P2O5 | V2O5 | LOI | Total | Cr | Ni | Co | Cu |
| **Package Code** | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) | LDI-Production Package (OES) |
| **Date Analyzed** | 2013-04-16 14:26:26 | 2013-04-16 14:26:26 | 2013-04-16 14:26:26 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 | 2013-04-21 10:51:48 |
| MICA-FE LABSTD | | | | 32.45 | 19.48 | 25.68 | 0.352 | 4.56 | 0.42 | 0.35 | 8.80 | 2.48 | 0.42 | 0.026 | | | 0.02 | 0.004 | < 0.004 | < 0.004 |
| AN-G LABSTD | | | | 46.35 | 29.85 | 3.35 | 0.041 | 1.82 | 15.96 | 1.63 | 0.14 | 0.23 | 0.02 | 0.013 | | | 0.01 | 0.003 | 0.004 | < 0.004 |
| BE-N LABSTD | | | | 38.32 | 10.05 | 12.90 | 0.201 | 13.18 | 13.89 | 3.15 | 1.41 | 2.63 | 1.08 | 0.042 | | | 0.04 | 0.027 | 0.007 | 0.008 |
| AC-E LABSTD | | | | 70.36 | 14.72 | 2.58 | 0.060 | 0.06 | 0.36 | 6.52 | 4.51 | 0.12 | | | | | < 0.01 | < 0.003 | < 0.004 | < 0.004 |
| OREAS 14P LABSTD | | | | | | | | | | | | | | | | | | 2.11 | 0.076 | 0.994 |
| Oreas 74a (Fusion) LABSTD | | | | 32.38 | 2.25 | | | 27.88 | | | | | | | | | 0.18 | 3.23 | 0.059 | 0.125 |
| CDN-PGMS-22 LABSTD | 1130 | 6110 | 1350 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1260 | 6220 | 1430 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1190 | 6160 | 1400 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 455 | 2060 | 468 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 445 | 2070 | 483 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 497 | 2010 | 455 | | | | | | | | | | | | | | | | | |
| 13-001-149 Replicate Original | | | | 50.12 | 14.15 | 11.01 | 0.178 | 11.02 | 8.28 | 1.79 | 0.31 | 0.25 | 0.01 | 0.033 | 1.89 | 99.10 | 0.01 | 0.028 | 0.010 | 0.006 |
| 13-001-149 LABDUP | | | | 50.97 | 14.25 | 11.11 | 0.174 | 11.20 | 8.43 | 1.77 | 0.31 | 0.25 | < 0.01 | 0.023 | 1.93 | 100.5 | < 0.01 | 0.028 | 0.010 | 0.004 |
| 13-001-150 Replicate Original | 17 | 149 | 23 | | | | | | | | | | | | | | | | | |
| 13-001-150 LABDUP | 14 | 144 | 19 | | | | | | | | | | | | | | | | | |
| 13-001-160 Replicate Original | 1220 | 6250 | 1410 | | | | | | | | | | | | | | | | | |
| 13-001-160 LABDUP | 1300 | 6230 | 1520 | | | | | | | | | | | | | | | | | |
| 13-001-170 Replicate Original | 18 | 282 | 32 | | | | | | | | | | | | | | | | | |
| 13-001-170 Split Original | 18 | 279 | 32 | 50.49 | 15.33 | 10.42 | 0.171 | 10.46 | 8.33 | 2.11 | 0.34 | 0.22 | 0.01 | 0.021 | 2.50 | 100.7 | 0.06 | 0.188 | 0.009 | 0.013 |
| 13-001-170 LABDUP | 18 | 276 | 31 | | | | | | | | | | | | | | | | | |
| 13-001-170 LABPREP | 18 | 260 | 35 | 50.41 | 15.28 | 10.47 | 0.171 | 10.58 | 8.40 | 2.03 | 0.35 | 0.21 | 0.01 | 0.022 | 2.38 | 100.6 | 0.03 | 0.184 | 0.008 | 0.014 |