*Quality Analysis ...* *Innovative Technologies*

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| **Date Submitted:** | 05-Apr-13 |
| **Invoice No.:** | A13-03894 |
| **Invoice Date:** | 23-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 **A13-03894**

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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: A13-03894

| 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 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM | Apr 21 2013 10:54AM |
| 13-001-316 | < 2 | < 5 | < 5 | 6.01 | 0.24 | 0.12 | 0.070 | 22.10 | 29.60 | < 0.01 | < 0.01 | 0.02 | < 0.01 | < 0.003 | 41.41 | 99.53 | < 0.01 | < 0.003 | < 0.004 | < 0.004 |
| 13-001-317 | 3320 | 1910 | 307 | 55.91 | 11.90 | 12.40 | 0.100 | 4.39 | 4.22 | 1.25 | 1.77 | 0.45 | 0.12 | 0.014 | 6.57 | 99.45 | 0.08 | 0.067 | 0.009 | 0.210 |
| 13-001-318 | 8 | < 5 | 7 | 66.02 | 13.40 | 6.58 | 0.110 | 2.41 | 4.28 | 3.24 | 1.13 | 0.62 | 0.14 | 0.017 | 1.42 | 99.40 | 0.02 | 0.010 | < 0.004 | 0.006 |
| 13-001-319 | 4 | 84 | < 5 | 49.30 | 21.40 | 7.61 | 0.100 | 6.09 | 10.90 | 2.50 | 0.25 | 0.24 | 0.01 | 0.017 | 1.86 | 100.4 | 0.01 | 0.060 | 0.004 | < 0.004 |
| 13-001-320 | 12 | 119 | 9 | 49.08 | 20.50 | 8.39 | 0.110 | 6.52 | 10.30 | 2.54 | 0.18 | 0.27 | < 0.01 | 0.023 | 1.99 | 100.1 | 0.04 | 0.125 | 0.005 | 0.013 |
| 13-001-321 | 4 | 99 | < 5 | 50.42 | 18.40 | 8.28 | 0.120 | 6.90 | 9.49 | 2.85 | 0.37 | 0.26 | < 0.01 | 0.021 | 2.33 | 99.49 | < 0.01 | 0.010 | < 0.004 | < 0.004 |
| 13-001-322 | 4 | 80 | < 5 | 54.14 | 18.50 | 7.06 | 0.090 | 5.34 | 8.08 | 3.33 | 0.52 | 0.24 | 0.02 | 0.026 | 2.43 | 100.0 | 0.04 | 0.203 | 0.009 | 0.011 |
| 13-001-323 | < 2 | 77 | < 5 | 50.75 | 18.40 | 8.07 | 0.110 | 6.12 | 9.63 | 2.71 | 0.43 | 0.22 | 0.02 | 0.013 | 2.69 | 99.26 | 0.03 | 0.061 | < 0.004 | < 0.004 |
| 13-001-324 | < 2 | 38 | < 5 | 55.75 | 17.90 | 7.23 | 0.100 | 5.60 | 7.80 | 3.17 | 0.39 | 0.23 | 0.01 | 0.018 | 1.75 | 100.1 | 0.03 | 0.116 | 0.004 | < 0.004 |
| 13-001-325 | < 2 | 41 | < 5 | 50.03 | 20.90 | 7.74 | 0.110 | 5.98 | 10.40 | 2.71 | 0.28 | 0.21 | < 0.01 | 0.024 | 1.76 | 100.2 | 0.03 | 0.043 | 0.004 | 0.004 |
| 13-001-326 | < 2 | 38 | < 5 | 49.32 | 18.90 | 9.43 | 0.140 | 7.78 | 9.60 | 2.36 | 0.34 | 0.24 | 0.01 | 0.025 | 2.31 | 100.6 | 0.02 | 0.093 | 0.007 | < 0.004 |
| 13-001-327 | < 2 | 54 | < 5 | 49.29 | 17.90 | 9.93 | 0.140 | 8.03 | 9.23 | 2.34 | 0.26 | 0.29 | 0.01 | 0.028 | 2.19 | 99.85 | 0.05 | 0.097 | 0.007 | 0.004 |
| 13-001-328 | < 2 | 21 | < 5 | 50.93 | 16.20 | 10.90 | 0.150 | 8.59 | 7.95 | 2.38 | 0.47 | 0.33 | 0.02 | 0.026 | 2.44 | 100.5 | 0.02 | 0.039 | 0.007 | < 0.004 |
| 13-001-329 | < 2 | 16 | < 5 | 58.33 | 14.70 | 8.36 | 0.110 | 6.42 | 6.16 | 2.88 | 0.54 | 0.31 | 0.01 | 0.021 | 2.63 | 100.5 | 0.01 | 0.032 | < 0.004 | < 0.004 |
| 13-001-330 | < 2 | 17 | < 5 | 50.92 | 15.20 | 11.60 | 0.160 | 9.17 | 7.52 | 2.27 | 0.60 | 0.31 | 0.01 | 0.038 | 2.48 | 100.3 | 0.02 | 0.028 | 0.007 | < 0.004 |
| 13-001-331 | 5 | 13 | < 5 | 51.69 | 14.70 | 12.20 | 0.160 | 7.64 | 7.61 | 2.55 | 0.24 | 0.62 | 0.10 | 0.044 | 2.51 | 100.2 | 0.03 | 0.033 | 0.006 | 0.018 |
| 13-001-332 | < 2 | 20 | < 5 | 48.80 | 15.30 | 12.20 | 0.160 | 10.20 | 8.40 | 1.76 | 0.31 | 0.31 | < 0.01 | 0.034 | 2.86 | 100.5 | 0.03 | 0.032 | 0.007 | 0.006 |
| 13-001-333 | 3 | 49 | 6 | 50.33 | 14.80 | 12.40 | 0.160 | 9.75 | 7.48 | 2.12 | 0.31 | 0.34 | 0.02 | 0.039 | 2.68 | 100.5 | 0.01 | 0.027 | 0.008 | 0.006 |
| 13-001-334 | < 2 | 17 | < 5 | 48.84 | 15.00 | 12.30 | 0.160 | 10.20 | 8.07 | 1.85 | 0.27 | 0.28 | 0.01 | 0.029 | 3.08 | 100.1 | 0.03 | 0.046 | 0.007 | < 0.004 |
| 13-001-335 | 1200 | 5900 | 1400 | 45.15 | 21.10 | 6.95 | 0.080 | 8.63 | 12.90 | 1.04 | 0.11 | 0.12 | < 0.01 | 0.010 | 2.57 | 98.71 | 0.07 | 0.066 | < 0.004 | 0.020 |
| 13-001-336 | < 2 | 19 | < 5 | 48.85 | 14.70 | 13.50 | 0.180 | 11.00 | 8.14 | 1.63 | 0.26 | 0.33 | 0.01 | 0.039 | 1.52 | 100.3 | 0.03 | 0.043 | 0.010 | 0.004 |
| 13-001-337 | < 2 | 37 | < 5 | 49.25 | 14.20 | 13.30 | 0.190 | 10.30 | 7.25 | 1.92 | 0.23 | 0.33 | 0.01 | 0.034 | 2.89 | 100.0 | 0.06 | 0.097 | 0.012 | 0.004 |
| 13-001-338 | < 2 | 25 | < 5 | 48.67 | 13.90 | 14.30 | 0.200 | 11.20 | 7.84 | 1.61 | 0.17 | 0.36 | 0.01 | 0.036 | 1.56 | 99.94 | 0.03 | 0.037 | 0.013 | < 0.004 |
| 13-001-339 | < 2 | 19 | < 5 | 49.92 | 14.00 | 13.80 | 0.190 | 11.90 | 7.65 | 1.69 | 0.16 | 0.31 | 0.01 | 0.037 | 0.63 | 100.4 | 0.03 | 0.044 | 0.012 | < 0.004 |
| 13-001-340 | < 2 | 27 | < 5 | 48.98 | 14.20 | 13.70 | 0.190 | 11.80 | 7.45 | 1.44 | 0.20 | 0.29 | 0.01 | 0.037 | 1.49 | 99.87 | 0.03 | 0.045 | 0.012 | < 0.004 |
| 13-001-341 | < 2 | 25 | < 5 | 49.07 | 13.90 | 12.60 | 0.170 | 10.80 | 7.58 | 1.65 | 0.16 | 0.26 | 0.02 | 0.027 | 3.23 | 99.63 | 0.03 | 0.050 | 0.009 | 0.004 |
| 13-001-342 | < 2 | 24 | < 5 | 48.68 | 14.10 | 13.30 | 0.180 | 11.60 | 7.56 | 1.51 | 0.20 | 0.29 | 0.01 | 0.029 | 3.09 | 100.6 | 0.03 | 0.044 | 0.009 | < 0.004 |
| 13-001-343 | < 2 | 26 | < 5 | 48.86 | 15.70 | 12.80 | 0.170 | 11.00 | 7.93 | 1.77 | 0.26 | 0.28 | 0.01 | 0.029 | 1.54 | 100.4 | 0.03 | 0.036 | 0.010 | < 0.004 |
| 13-001-344 | < 2 | 27 | < 5 | 48.80 | 15.10 | 12.40 | 0.180 | 10.60 | 7.64 | 1.99 | 0.28 | 0.27 | 0.01 | 0.032 | 1.46 | 98.75 | 0.05 | 0.035 | 0.010 | < 0.004 |
| 13-001-345 | < 2 | 39 | 7 | 50.63 | 13.65 | 12.65 | 0.195 | 11.90 | 7.76 | 1.63 | 0.16 | 0.29 | 0.01 | 0.035 | 0.97 | 99.99 | 0.03 | 0.042 | 0.013 | < 0.004 |
| 13-001-346 | 8 | 61 | 6 | 50.97 | 14.40 | 12.80 | 0.180 | 10.80 | 7.41 | 2.17 | 0.21 | 0.26 | 0.01 | 0.026 | 0.71 | 100.1 | 0.03 | 0.046 | 0.011 | 0.006 |
| 13-001-347 | 2 | 19 | 7 | 50.67 | 13.20 | 13.90 | 0.210 | 12.30 | 7.27 | 1.84 | 0.17 | 0.22 | 0.01 | 0.028 | 0.68 | 100.6 | 0.03 | 0.040 | 0.010 | < 0.004 |
| 13-001-348 | < 2 | 179 | 32 | 51.49 | 13.40 | 13.50 | 0.190 | 11.10 | 6.96 | 2.15 | 0.27 | 0.28 | 0.03 | 0.035 | 1.01 | 100.4 | 0.03 | 0.037 | 0.010 | 0.004 |
| 13-001-349 | < 2 | 57 | 8 | 50.55 | 12.90 | 14.10 | 0.190 | 12.40 | 7.45 | 1.41 | 0.19 | 0.32 | < 0.01 | 0.046 | 0.37 | 99.92 | 0.02 | 0.024 | 0.009 | < 0.004 |
| 13-001-350 | 1180 | 6180 | 1410 | 45.03 | 22.30 | 7.16 | 0.080 | 8.77 | 13.00 | 1.32 | 0.12 | 0.10 | 0.02 | 0.010 | 2.49 | 100.5 | 0.08 | 0.064 | < 0.004 | 0.020 |

## 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 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 | 2013-04-21 10:54:46 |
| 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 | | | | | | | | | | | | | | | | | |
| 13-001-319 Replicate Original | 5 | 85 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-319 LABDUP | 3 | 83 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-329 Replicate Original | < 2 | 16 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-329 LABDUP | < 2 | 16 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-339 Replicate Original | < 2 | 19 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-339 LABDUP | < 2 | 18 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-345 Replicate Original | | | | 50.64 | 13.80 | 12.70 | 0.190 | 11.90 | 7.68 | 1.62 | 0.15 | 0.28 | 0.01 | 0.035 | 0.98 | 100.1 | 0.03 | 0.041 | 0.013 | < 0.004 |
| 13-001-345 Split Original | < 2 | 39 | 7 | 50.63 | 13.65 | 12.65 | 0.195 | 11.90 | 7.76 | 1.63 | 0.16 | 0.29 | 0.01 | 0.035 | 0.97 | 99.99 | 0.03 | 0.042 | 0.013 | < 0.004 |
| 13-001-345 LABDUP | | | | 50.61 | 13.50 | 12.60 | 0.200 | 11.90 | 7.83 | 1.64 | 0.17 | 0.30 | 0.01 | 0.034 | 0.95 | 99.91 | 0.03 | 0.042 | 0.012 | < 0.004 |
| 13-001-345 LABPREP | 4 | 50 | < 5 | 50.27 | 13.80 | 12.70 | 0.180 | 11.90 | 7.71 | 1.59 | 0.15 | 0.29 | 0.01 | 0.025 | 0.84 | 99.49 | 0.03 | 0.044 | 0.011 | 0.004 |