*Quality Analysis ...* *Innovative Technologies*

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| **Date Submitted:** | 01-Apr-13 |
| **Invoice No.:** | A13-03561 |
| **Invoice Date:** | 02-May-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 Tbay (OES) Whole Rock Analysis-XRF/Fire Assay ICPOES

REPORT **A13-03561**

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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: A13-03561

| 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 Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb | LDI-Production Package Tb |
| Date Analyzed | Apr 20 2013 2:19PM | Apr 20 2013 2:19PM | Apr 20 2013 2:19PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM | Apr 11 2013 12:45PM |
| 13-001-036 | < 2 | < 5 | < 5 | 8.01 | 0.31 | 0.08 | 0.063 | 21.86 | 28.67 | < 0.01 | 0.01 | 0.01 | 0.01 | < 0.003 | 40.27 | 99.26 | < 0.01 | < 0.003 | < 0.004 | < 0.004 |
| 13-001-037 | 3470 | 2050 | 313 | 55.90 | 12.37 | 11.65 | 0.085 | 4.49 | 4.08 | 1.31 | 1.79 | 0.42 | 0.11 | 0.019 | 6.41 | 98.94 | 0.03 | 0.068 | < 0.004 | 0.208 |
| 13-001-038 | 3 | < 5 | < 5 | 67.05 | 13.59 | 6.20 | 0.109 | 2.47 | 4.15 | 3.21 | 1.14 | 0.61 | 0.14 | 0.022 | 1.35 | 100.1 | < 0.01 | 0.006 | < 0.004 | 0.005 |
| 13-001-039 | 3 | 118 | < 5 | 48.67 | 19.50 | 8.11 | 0.146 | 8.46 | 7.93 | 2.91 | 0.40 | 0.19 | 0.01 | 0.015 | 3.62 | 100.0 | 0.03 | 0.021 | 0.008 | < 0.004 |
| 13-001-040 | < 2 | 51 | < 5 | 49.47 | 19.83 | 8.07 | 0.128 | 7.73 | 9.56 | 2.28 | 0.42 | 0.19 | 0.01 | 0.019 | 2.44 | 100.2 | 0.02 | 0.016 | < 0.004 | < 0.004 |
| 13-001-041 | < 2 | 61 | < 5 | 49.17 | 19.34 | 8.31 | 0.135 | 7.67 | 9.52 | 2.43 | 0.27 | 0.18 | < 0.01 | 0.010 | 2.38 | 99.46 | 0.02 | 0.017 | < 0.004 | < 0.004 |
| 13-001-042 | < 2 | 56 | 6 | 49.78 | 17.37 | 9.77 | 0.165 | 9.33 | 9.17 | 1.89 | 0.21 | 0.18 | < 0.01 | 0.020 | 2.58 | 100.5 | 0.02 | 0.016 | 0.004 | < 0.004 |
| 13-001-043 | < 2 | 59 | < 5 | 49.47 | 19.21 | 8.38 | 0.132 | 8.08 | 9.71 | 2.08 | 0.25 | 0.17 | 0.01 | 0.019 | 2.44 | 100.0 | 0.03 | 0.017 | < 0.004 | 0.004 |
| 13-001-044 | < 2 | 58 | < 5 | 49.71 | 19.17 | 8.75 | 0.142 | 8.25 | 9.69 | 2.06 | 0.24 | 0.18 | 0.02 | 0.028 | 2.06 | 100.3 | 0.02 | 0.013 | 0.004 | 0.004 |
| 13-001-045 | < 2 | 40 | < 5 | 49.67 | 18.89 | 8.78 | 0.143 | 8.49 | 9.55 | 2.10 | 0.26 | 0.17 | 0.02 | 0.019 | 2.31 | 100.4 | 0.02 | 0.016 | 0.005 | < 0.004 |
| 13-001-046 | < 2 | 50 | < 5 | 49.86 | 18.87 | 8.76 | 0.140 | 8.40 | 9.51 | 2.16 | 0.27 | 0.18 | 0.02 | 0.019 | 2.30 | 100.5 | 0.02 | 0.015 | 0.004 | < 0.004 |
| 13-001-047 | < 2 | 45 | < 5 | 49.77 | 19.40 | 8.07 | 0.122 | 7.70 | 9.84 | 2.35 | 0.21 | 0.17 | 0.01 | 0.027 | 2.03 | 99.73 | 0.02 | 0.014 | < 0.004 | < 0.004 |
| 13-001-048 | < 2 | 54 | < 5 | 49.82 | 19.99 | 7.80 | 0.117 | 7.44 | 10.09 | 2.28 | 0.25 | 0.17 | 0.02 | 0.005 | 2.40 | 100.4 | 0.03 | 0.014 | < 0.004 | 0.006 |
| 13-001-049 | < 2 | 48 | < 5 | 50.06 | 19.66 | 7.87 | 0.122 | 7.52 | 9.82 | 2.33 | 0.21 | 0.17 | 0.03 | 0.018 | 2.18 | 100.0 | 0.02 | 0.016 | 0.007 | < 0.004 |
| 13-001-050 | < 2 | 59 | < 5 | 48.95 | 19.17 | 8.69 | 0.118 | 8.39 | 9.40 | 2.17 | 0.29 | 0.19 | 0.01 | 0.024 | 2.55 | 100.0 | 0.03 | 0.012 | 0.006 | 0.006 |
| 13-001-051 | < 2 | 85 | 15 | 49.62 | 20.25 | 7.09 | 0.112 | 6.64 | 9.66 | 2.52 | 0.25 | 0.17 | 0.01 | 0.023 | 2.13 | 98.51 | 0.02 | 0.011 | 0.005 | < 0.004 |
| 13-001-052 | < 2 | 36 | < 5 | 49.33 | 15.28 | 11.04 | 0.175 | 10.93 | 8.43 | 1.46 | 0.14 | 0.23 | < 0.01 | 0.023 | 2.80 | 99.89 | 0.03 | 0.020 | 0.004 | < 0.004 |
| 13-001-053 | < 2 | 34 | < 5 | 48.40 | 13.89 | 12.28 | 0.192 | 12.50 | 7.00 | 1.41 | 0.18 | 0.25 | < 0.01 | 0.034 | 3.72 | 99.93 | 0.03 | 0.022 | 0.007 | < 0.004 |
| 13-001-054 | < 2 | 44 | < 5 | 49.15 | 13.49 | 12.75 | 0.210 | 12.74 | 6.81 | 1.41 | 0.23 | 0.23 | 0.01 | 0.031 | 3.32 | 100.5 | 0.04 | 0.021 | 0.009 | < 0.004 |
| 13-001-055 | 1320 | 6420 | 1260 | 45.83 | 22.44 | 6.88 | 0.087 | 8.85 | 12.67 | 1.22 | 0.13 | 0.09 | 0.01 | 0.013 | 2.38 | 100.8 | 0.08 | 0.063 | 0.005 | 0.020 |
| 13-001-056 | < 2 | 31 | < 5 | 49.72 | 13.66 | 12.15 | 0.197 | 11.99 | 7.38 | 1.48 | 0.17 | 0.24 | 0.02 | 0.031 | 3.62 | 100.7 | 0.03 | 0.022 | 0.005 | < 0.004 |
| 13-001-057 | < 2 | 37 | < 5 | 49.71 | 14.14 | 12.23 | 0.187 | 11.33 | 7.49 | 1.67 | 0.18 | 0.23 | 0.01 | 0.014 | 2.92 | 100.2 | 0.02 | 0.018 | 0.010 | 0.006 |
| 13-001-058 | < 2 | 32 | 5 | 49.36 | 13.65 | 12.15 | 0.184 | 11.88 | 7.58 | 1.37 | 0.16 | 0.24 | 0.01 | 0.032 | 3.30 | 99.98 | 0.03 | 0.020 | 0.007 | < 0.004 |
| 13-001-059 | 3 | 46 | 7 | 50.32 | 14.33 | 11.72 | 0.182 | 11.37 | 8.22 | 1.47 | 0.19 | 0.22 | 0.01 | 0.038 | 2.33 | 100.5 | 0.03 | 0.022 | 0.009 | 0.009 |
| 13-001-060 | < 2 | 30 | < 5 | 49.98 | 13.62 | 11.87 | 0.191 | 11.83 | 7.76 | 1.45 | 0.12 | 0.24 | 0.01 | 0.012 | 2.82 | 99.95 | 0.02 | 0.022 | 0.008 | < 0.004 |
| 13-001-061 | < 2 | 38 | < 5 | 50.05 | 14.69 | 11.16 | 0.184 | 11.55 | 8.14 | 1.47 | 0.13 | 0.20 | 0.01 | 0.026 | 2.41 | 100.1 | 0.03 | 0.019 | 0.009 | < 0.004 |
| 13-001-062 | < 2 | 34 | 6 | 48.92 | 15.39 | 11.26 | 0.182 | 10.06 | 8.30 | 1.67 | 0.15 | 0.21 | 0.01 | 0.028 | 2.56 | 98.78 | 0.02 | 0.018 | 0.004 | < 0.004 |
| 13-001-063 | 8 | 50 | 14 | 49.84 | 21.16 | 7.64 | 0.113 | 5.73 | 10.82 | 2.78 | 0.27 | 0.20 | 0.01 | 0.017 | 1.74 | 100.3 | < 0.01 | 0.012 | < 0.004 | < 0.004 |
| 13-001-064 | < 2 | 43 | 9 | 49.45 | 20.10 | 8.41 | 0.137 | 6.73 | 10.46 | 2.38 | 0.16 | 0.21 | 0.01 | 0.034 | 1.72 | 99.84 | 0.01 | 0.015 | 0.004 | 0.006 |
| 13-001-065 | 3 | 58 | 10 | 48.52 | 18.89 | 10.05 | 0.148 | 6.96 | 10.44 | 2.29 | 0.21 | 0.41 | < 0.01 | 0.037 | 1.79 | 99.77 | < 0.01 | 0.009 | 0.004 | 0.007 |
| 13-001-066 | 45 | 109 | 14 | 47.35 | 15.69 | 14.36 | 0.188 | 7.73 | 9.93 | 2.08 | 0.21 | 0.79 | 0.01 | 0.099 | 1.86 | 100.4 | < 0.01 | 0.021 | 0.007 | 0.025 |
| 13-001-067 | < 2 | 29 | < 5 | 50.88 | 16.38 | 11.12 | 0.170 | 10.43 | 8.74 | 1.84 | 0.11 | 0.21 | < 0.01 | 0.025 | 0.76 | 100.7 | 0.02 | 0.017 | 0.005 | < 0.004 |
| 13-001-068 | 5 | 59 | 8 | 49.75 | 16.52 | 10.47 | 0.168 | 9.47 | 8.87 | 1.85 | 0.13 | 0.17 | 0.01 | 0.022 | 2.63 | 100.1 | 0.03 | 0.020 | 0.010 | 0.009 |
| 13-001-069 | 3 | 61 | < 5 | 50.04 | 15.65 | 11.71 | 0.180 | 9.71 | 9.34 | 1.84 | 0.14 | 0.27 | 0.01 | 0.046 | 1.28 | 100.3 | 0.01 | 0.019 | 0.007 | 0.006 |
| 13-001-070 | 1310 | 5860 | 1340 | 45.18 | 22.28 | 6.79 | 0.094 | 8.69 | 12.47 | 1.21 | 0.12 | 0.11 | 0.01 | 0.010 | 2.53 | 99.66 | 0.08 | 0.064 | < 0.004 | 0.021 |

## 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 Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) | LDI-Production Package Tbay (OES) |
| **Date Analyzed** | 2013-04-20 14:19:03 | 2013-04-20 14:19:03 | 2013-04-20 14:19:03 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 | 2013-04-11 12:45:04 |
| 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 |
| 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 73a (Fusion) LABSTD | | | | 36.32 | 2.40 | | | 32.56 | | | | | | | | | 0.20 | 1.43 | 0.031 | 0.093 |
| CDN-PGMS-22 LABSTD | 1290 | 6710 | 1470 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1310 | 6470 | 1470 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1270 | 6180 | 1390 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 455 | 2010 | 438 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 548 | 2090 | 482 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 458 | 1920 | 438 | | | | | | | | | | | | | | | | | |
| 13-001-046 Replicate Original | 2 | 53 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-046 LABDUP | < 2 | 48 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-055 Replicate Original | | | | 45.74 | 22.48 | 6.87 | 0.087 | 8.89 | 12.70 | 1.20 | 0.13 | 0.10 | 0.01 | 0.012 | 2.38 | 100.8 | 0.08 | 0.063 | 0.006 | 0.019 |
| 13-001-055 LABDUP | | | | 45.92 | 22.41 | 6.90 | 0.088 | 8.80 | 12.64 | 1.25 | 0.13 | 0.09 | 0.01 | 0.013 | 2.38 | 100.8 | 0.07 | 0.063 | 0.004 | 0.021 |
| 13-001-056 Replicate Original | 2 | 26 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-056 LABDUP | < 2 | 37 | 6 | | | | | | | | | | | | | | | | | |
| 13-001-065 Split Original | 3 | 58 | 10 | 48.52 | 18.89 | 10.05 | 0.148 | 6.96 | 10.44 | 2.29 | 0.21 | 0.41 | < 0.01 | 0.037 | 1.79 | 99.77 | < 0.01 | 0.009 | 0.004 | 0.007 |
| 13-001-065 LABPREP | 3 | 52 | 7 | 48.79 | 19.04 | 10.12 | 0.153 | 7.01 | 10.51 | 2.30 | 0.24 | 0.40 | 0.01 | 0.038 | 1.89 | 100.5 | 0.01 | 0.012 | 0.005 | 0.009 |
| 13-001-065 LABPREP | 3 | 52 | 7 | | | | | | | | | | | | | | | | | |
| 13-001-067 Replicate Original | < 2 | 26 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-067 LABDUP | < 2 | 33 | < 5 | | | | | | | | | | | | | | | | | |