*Quality Analysis ...* *Innovative Technologies*

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| **Date Submitted:** | 05-Apr-13 |
| **Invoice No.:** | A13-03885 |
| **Invoice Date:** | 30-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 **A13-03885**

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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: A13-03885

| 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 8:39AM | Apr 16 2013 8:39AM | Apr 16 2013 8:39AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM | Apr 21 2013 10:48AM |
| 13-001-351 | < 2 | < 5 | < 5 | 5.81 | 0.19 | 0.15 | 0.050 | 21.40 | 29.90 | < 0.01 | < 0.01 | 0.01 | < 0.01 | < 0.003 | 41.95 | 99.48 | 0.07 | < 0.003 | < 0.004 | < 0.004 |
| 13-001-352 | 3310 | 1940 | 296 | 56.26 | 12.20 | 12.10 | 0.090 | 4.41 | 4.13 | 1.26 | 1.79 | 0.43 | 0.11 | 0.016 | 6.56 | 99.57 | 0.02 | 0.078 | < 0.004 | 0.207 |
| 13-001-353 | 2 | < 5 | < 5 | 67.26 | 13.60 | 6.46 | 0.100 | 2.38 | 4.26 | 3.29 | 1.14 | 0.63 | 0.14 | 0.023 | 1.43 | 100.7 | < 0.01 | 0.009 | < 0.004 | 0.004 |
| 13-001-354 | < 2 | 15 | < 5 | 50.69 | 13.00 | 14.60 | 0.210 | 12.30 | 7.44 | 1.51 | 0.17 | 0.35 | 0.01 | 0.024 | 0.36 | 100.7 | 0.02 | 0.032 | 0.014 | < 0.004 |
| 13-001-355 | < 2 | 11 | < 5 | 49.78 | 12.50 | 14.40 | 0.200 | 12.30 | 7.31 | 1.55 | 0.22 | 0.34 | 0.01 | 0.038 | 1.97 | 100.7 | 0.03 | 0.035 | 0.012 | < 0.004 |
| 13-001-356 | < 2 | 20 | < 5 | 49.68 | 14.00 | 12.90 | 0.180 | 10.80 | 7.57 | 1.95 | 0.19 | 0.30 | 0.01 | 0.033 | 2.12 | 99.71 | 0.02 | 0.040 | 0.009 | < 0.004 |
| 13-001-357 | < 2 | 12 | < 5 | 52.34 | 14.90 | 11.10 | 0.150 | 9.22 | 7.01 | 2.80 | 0.27 | 0.29 | 0.02 | 0.029 | 1.80 | 99.99 | 0.02 | 0.042 | 0.010 | 0.004 |
| 13-001-358 | 3 | 10 | < 5 | 49.85 | 13.70 | 13.30 | 0.180 | 11.30 | 7.38 | 1.93 | 0.23 | 0.30 | 0.01 | 0.032 | 1.90 | 100.3 | 0.05 | 0.091 | 0.009 | 0.005 |
| 13-001-359 | < 2 | 23 | < 5 | 49.93 | 12.30 | 14.30 | 0.200 | 11.90 | 7.35 | 1.50 | 0.17 | 0.35 | < 0.01 | 0.042 | 2.65 | 100.7 | 0.03 | 0.029 | 0.009 | 0.004 |
| 13-001-360 | 4 | 17 | < 5 | 50.58 | 12.40 | 12.90 | 0.180 | 11.00 | 6.53 | 2.23 | 0.19 | 0.27 | 0.01 | 0.031 | 2.80 | 99.16 | 0.03 | 0.024 | 0.007 | < 0.004 |
| 13-001-361 | 24 | 338 | 40 | 52.60 | 15.00 | 10.80 | 0.150 | 8.55 | 6.74 | 3.10 | 0.27 | 0.27 | 0.03 | 0.030 | 2.23 | 99.85 | 0.05 | 0.060 | 0.008 | 0.017 |
| 13-001-362 | 2 | 68 | < 5 | 49.76 | 12.50 | 14.50 | 0.190 | 12.40 | 7.07 | 1.34 | 0.19 | 0.33 | 0.01 | 0.036 | 1.05 | 99.45 | 0.02 | 0.026 | 0.012 | < 0.004 |
| 13-001-363 | 3 | 78 | < 5 | 49.79 | 14.00 | 13.40 | 0.180 | 10.80 | 7.73 | 1.71 | 0.27 | 0.36 | 0.01 | 0.040 | 1.56 | 99.95 | 0.02 | 0.025 | 0.011 | 0.008 |
| 13-001-364 | 3 | 52 | < 5 | 49.47 | 16.30 | 11.80 | 0.160 | 9.66 | 8.82 | 1.94 | 0.22 | 0.30 | 0.01 | 0.032 | 1.43 | 100.2 | 0.01 | 0.026 | 0.011 | < 0.004 |
| 13-001-365 | 4 | 61 | < 5 | 49.85 | 13.70 | 12.90 | 0.170 | 10.70 | 7.33 | 1.89 | 0.27 | 0.32 | 0.02 | 0.035 | 2.55 | 99.74 | 0.02 | 0.040 | 0.006 | 0.006 |
| 13-001-366 | 13 | 302 | 31 | 50.03 | 11.70 | 14.00 | 0.200 | 11.50 | 7.08 | 1.43 | 0.24 | 0.35 | 0.01 | 0.041 | 3.36 | 100.0 | 0.03 | 0.060 | 0.013 | 0.018 |
| 13-001-367 | 6 | 191 | 19 | 48.80 | 12.40 | 15.10 | 0.210 | 12.50 | 7.04 | 1.45 | 0.20 | 0.36 | < 0.01 | 0.037 | 1.85 | 100.1 | 0.07 | 0.162 | 0.011 | 0.013 |
| 13-001-368 | 8 | 86 | 7 | 49.32 | 12.50 | 14.70 | 0.210 | 12.20 | 7.21 | 1.44 | 0.18 | 0.33 | 0.01 | 0.040 | 2.30 | 100.7 | 0.10 | 0.156 | 0.010 | 0.004 |
| 13-001-369 | < 2 | 34 | < 5 | 49.93 | 13.60 | 14.00 | 0.200 | 11.50 | 7.49 | 1.71 | 0.20 | 0.36 | 0.01 | 0.037 | 1.09 | 100.2 | 0.03 | 0.039 | 0.012 | 0.005 |
| 13-001-370 | 1230 | 6280 | 1520 | 45.33 | 22.40 | 7.06 | 0.090 | 8.63 | 12.80 | 1.26 | 0.10 | 0.09 | 0.01 | 0.009 | 2.48 | 100.4 | 0.07 | 0.070 | 0.004 | 0.018 |
| 13-001-371 | 4 | 45 | < 5 | 49.87 | 14.10 | 13.40 | 0.190 | 11.10 | 7.99 | 1.79 | 0.17 | 0.33 | < 0.01 | 0.032 | 0.79 | 99.81 | 0.02 | 0.037 | 0.009 | 0.006 |
| 13-001-372 | < 2 | 33 | < 5 | 50.52 | 15.50 | 12.60 | 0.180 | 10.50 | 8.31 | 1.83 | 0.19 | 0.31 | 0.01 | 0.024 | 0.80 | 100.8 | < 0.01 | 0.036 | 0.005 | 0.004 |
| 13-001-373 | 2 | 45 | 5 | 50.55 | 14.20 | 12.90 | 0.170 | 10.90 | 7.64 | 1.88 | 0.20 | 0.30 | 0.01 | 0.036 | 1.02 | 99.95 | 0.01 | 0.031 | 0.012 | 0.006 |
| 13-001-374 | < 2 | 30 | < 5 | 50.73 | 12.60 | 14.10 | 0.200 | 11.80 | 6.98 | 1.69 | 0.21 | 0.31 | 0.01 | 0.033 | 0.57 | 99.33 | 0.02 | 0.026 | 0.012 | < 0.004 |
| 13-001-375 | < 2 | 12 | < 5 | 49.76 | 13.20 | 14.50 | 0.210 | 12.10 | 7.38 | 1.62 | 0.14 | 0.34 | < 0.01 | 0.037 | 0.57 | 99.88 | 0.02 | 0.027 | 0.012 | < 0.004 |
| 13-001-376 | < 2 | 21 | < 5 | 50.54 | 11.40 | 15.40 | 0.220 | 13.00 | 6.74 | 1.39 | 0.15 | 0.39 | 0.01 | 0.043 | 0.34 | 99.65 | 0.03 | 0.031 | 0.013 | < 0.004 |
| 13-001-377 | < 2 | 11 | < 5 | 50.75 | 9.90 | 16.30 | 0.220 | 13.70 | 5.91 | 1.24 | 0.19 | 0.36 | < 0.01 | 0.036 | 0.31 | 98.96 | 0.02 | 0.031 | 0.012 | < 0.004 |
| 13-001-378 | < 2 | 13 | < 5 | 49.68 | 9.60 | 17.00 | 0.230 | 14.80 | 5.79 | 1.07 | 0.17 | 0.37 | 0.01 | 0.047 | 1.43 | 100.3 | 0.03 | 0.042 | 0.013 | < 0.004 |
| 13-001-379 | < 2 | 15 | < 5 | 48.24 | 9.65 | 16.80 | 0.240 | 14.40 | 6.09 | 0.93 | 0.18 | 0.35 | 0.01 | 0.042 | 2.95 | 99.98 | 0.03 | 0.042 | 0.009 | < 0.004 |
| 13-001-380 | < 2 | 12 | < 5 | 50.82 | 11.50 | 14.90 | 0.220 | 12.60 | 6.15 | 1.75 | 0.26 | 0.32 | < 0.01 | 0.043 | 1.89 | 100.5 | 0.03 | 0.061 | 0.010 | < 0.004 |
| 13-001-381 | < 2 | 14 | < 5 | 49.79 | 9.95 | 17.10 | 0.230 | 14.70 | 5.99 | 1.05 | 0.17 | 0.38 | 0.01 | 0.039 | 0.98 | 100.5 | 0.03 | 0.061 | 0.016 | < 0.004 |
| 13-001-382 | < 2 | 26 | < 5 | 50.07 | 12.50 | 14.50 | 0.220 | 12.50 | 6.79 | 1.28 | 0.16 | 0.24 | 0.01 | 0.038 | 2.23 | 100.6 | 0.02 | 0.032 | 0.012 | < 0.004 |
| 13-001-383 | 61 | 1200 | 152 | 52.27 | 16.60 | 10.10 | 0.140 | 7.71 | 8.47 | 2.63 | 0.35 | 0.22 | 0.01 | 0.023 | 1.90 | 100.6 | < 0.01 | 0.082 | 0.004 | 0.062 |
| 13-001-384 | 213 | 4500 | 580 | 49.34 | 19.10 | 10.20 | 0.115 | 6.11 | 9.99 | 2.55 | 0.22 | 0.22 | 0.01 | 0.021 | 1.92 | 100.3 | < 0.01 | 0.257 | 0.012 | 0.229 |
| 13-001-385 | 1190 | 6520 | 1380 | 45.36 | 22.30 | 7.11 | 0.080 | 8.69 | 12.90 | 1.21 | 0.11 | 0.10 | 0.01 | 0.009 | 2.37 | 100.4 | 0.07 | 0.068 | 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 08:39:44 | 2013-04-16 08:39:44 | 2013-04-16 08:39:44 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 | 2013-04-21 10:48:43 |
| 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 | 1150 | 6310 | 1310 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1300 | 6350 | 1340 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1360 | 6500 | 1510 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1230 | 6080 | 1340 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1150 | 5930 | 1370 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1330 | 6310 | 1510 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 448 | 1960 | 447 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 469 | 1870 | 435 | | | | | | | | | | | | | | | | | |
| 13-001-355 Replicate Original | 2 | 11 | < 5 | 49.76 | 12.50 | 14.40 | 0.200 | 12.30 | 7.32 | 1.57 | 0.22 | 0.34 | 0.01 | 0.037 | 1.96 | 100.7 | 0.03 | 0.036 | 0.010 | < 0.004 |
| 13-001-355 LABDUP | < 2 | 11 | < 5 | 49.81 | 12.50 | 14.40 | 0.200 | 12.30 | 7.29 | 1.52 | 0.23 | 0.35 | 0.01 | 0.040 | 1.99 | 100.7 | 0.03 | 0.035 | 0.014 | < 0.004 |
| 13-001-365 Replicate Original | 4 | 60 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-365 LABDUP | 5 | 63 | 6 | | | | | | | | | | | | | | | | | |
| 13-001-375 Replicate Original | < 2 | 11 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-375 LABDUP | < 2 | 12 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-380 Split Original | < 2 | 12 | < 5 | 50.82 | 11.50 | 14.90 | 0.220 | 12.60 | 6.15 | 1.75 | 0.26 | 0.32 | < 0.01 | 0.043 | 1.89 | 100.5 | 0.03 | 0.061 | 0.010 | < 0.004 |
| 13-001-380 LABPREP | 2 | 16 | < 5 | 50.37 | 11.50 | 15.00 | 0.220 | 12.80 | 6.22 | 1.68 | 0.24 | 0.32 | < 0.01 | 0.041 | 1.88 | 100.4 | 0.03 | 0.064 | 0.010 | 0.004 |
| 13-001-384 Replicate Original | | | | 49.35 | 19.10 | 10.20 | 0.110 | 6.11 | 10.00 | 2.56 | 0.23 | 0.22 | 0.01 | 0.018 | 1.92 | 100.3 | < 0.01 | 0.261 | 0.012 | 0.230 |
| 13-001-384 LABDUP | | | | 49.33 | 19.10 | 10.20 | 0.120 | 6.10 | 9.99 | 2.54 | 0.22 | 0.22 | 0.02 | 0.025 | 1.92 | 100.3 | < 0.01 | 0.253 | 0.012 | 0.228 |