*Quality Analysis ...* *Innovative Technologies*

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| **Date Submitted:** | 05-Apr-13 |
| **Invoice No.:** | A13-03887 |
| **Invoice Date:** | 01-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 (OES) Whole Rock Analysis-XRF/Fire Assay ICPOES

REPORT **A13-03887**

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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: A13-03887

| 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 2:27PM | Apr 16 2013 2:27PM | Apr 16 2013 2:27PM | 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 |
| 13-001-421 | < 2 | < 5 | < 5 | 7.19 | < 0.01 | 0.06 | 0.047 | 21.71 | 29.49 | < 0.01 | < 0.01 | 0.01 | 0.01 | 0.003 | 41.03 | 99.54 | < 0.01 | < 0.003 | < 0.004 | < 0.004 |
| 13-001-422 | 3520 | 1890 | 302 | 55.81 | 11.85 | 11.97 | 0.082 | 4.44 | 4.12 | 1.22 | 1.77 | 0.43 | 0.11 | 0.013 | 6.64 | 98.77 | 0.03 | 0.068 | < 0.004 | 0.208 |
| 13-001-423 | 8 | 8 | < 5 | 66.97 | 13.51 | 6.36 | 0.102 | 2.37 | 4.25 | 3.11 | 1.13 | 0.62 | 0.13 | 0.018 | 1.46 | 100.0 | < 0.01 | 0.004 | < 0.004 | 0.004 |
| 13-001-424 | 273 | 4560 | 559 | 47.12 | 14.90 | 14.09 | 0.153 | 9.37 | 9.13 | 1.30 | 0.16 | 0.41 | < 0.01 | 0.040 | 3.39 | 100.6 | 0.01 | 0.239 | 0.010 | 0.272 |
| 13-001-425 | 187 | 3180 | 415 | 49.42 | 14.89 | 12.24 | 0.139 | 8.52 | 8.55 | 1.70 | 0.20 | 0.32 | < 0.01 | 0.030 | 3.30 | 99.75 | 0.02 | 0.218 | 0.010 | 0.191 |
| 13-001-426 | 222 | 3680 | 480 | 47.55 | 15.68 | 12.33 | 0.143 | 8.80 | 9.15 | 1.57 | 0.23 | 0.30 | < 0.01 | 0.030 | 3.44 | 99.67 | 0.01 | 0.205 | 0.010 | 0.217 |
| 13-001-427 | 228 | 3650 | 465 | 48.12 | 13.96 | 13.73 | 0.163 | 10.46 | 8.35 | 1.31 | 0.18 | 0.34 | 0.01 | 0.047 | 3.52 | 100.6 | 0.02 | 0.207 | 0.011 | 0.212 |
| 13-001-428 | 146 | 3170 | 401 | 49.48 | 13.63 | 13.64 | 0.165 | 9.17 | 8.38 | 1.73 | 0.16 | 0.47 | 0.01 | 0.051 | 2.96 | 100.2 | 0.01 | 0.149 | 0.011 | 0.153 |
| 13-001-429 | 79 | 1970 | 253 | 48.57 | 15.76 | 13.08 | 0.142 | 8.23 | 8.93 | 1.88 | 0.14 | 0.50 | 0.01 | 0.045 | 2.83 | 100.3 | < 0.01 | 0.086 | 0.013 | 0.089 |
| 13-001-430 | 3 | 35 | < 5 | 47.83 | 15.07 | 12.46 | 0.157 | 8.86 | 8.72 | 1.59 | 0.17 | 0.47 | 0.01 | 0.049 | 3.17 | 98.60 | < 0.01 | 0.022 | 0.007 | 0.010 |
| 13-001-431 | 5 | 110 | 17 | 48.88 | 15.57 | 11.67 | 0.143 | 8.59 | 8.47 | 1.82 | 0.16 | 0.38 | < 0.01 | 0.043 | 3.49 | 99.27 | < 0.01 | 0.022 | 0.008 | 0.013 |
| 13-001-432 | < 2 | 13 | < 5 | 48.76 | 15.03 | 12.11 | 0.157 | 8.99 | 8.33 | 1.75 | 0.16 | 0.40 | < 0.01 | 0.035 | 3.19 | 98.95 | < 0.01 | 0.017 | 0.007 | < 0.004 |
| 13-001-433 | 3 | 19 | < 5 | 51.03 | 15.81 | 10.65 | 0.149 | 7.97 | 8.21 | 2.22 | 0.21 | 0.30 | 0.01 | 0.023 | 2.68 | 99.37 | 0.03 | 0.066 | 0.005 | 0.010 |
| 13-001-434 | < 2 | 49 | < 5 | 49.61 | 15.48 | 11.65 | 0.150 | 8.65 | 8.12 | 1.95 | 0.29 | 0.34 | < 0.01 | 0.034 | 3.09 | 99.40 | < 0.01 | 0.017 | 0.007 | < 0.004 |
| 13-001-435 | 6 | 59 | 8 | 49.93 | 17.68 | 10.30 | 0.137 | 7.73 | 8.58 | 2.40 | 0.30 | 0.31 | 0.01 | 0.028 | 2.79 | 100.2 | < 0.01 | 0.023 | 0.007 | 0.006 |
| 13-001-436 | 3 | 31 | < 5 | 49.17 | 15.88 | 12.27 | 0.170 | 9.23 | 8.39 | 1.84 | 0.16 | 0.34 | 0.01 | 0.037 | 2.62 | 100.5 | 0.04 | 0.322 | 0.007 | < 0.004 |
| 13-001-437 | < 2 | 53 | 6 | 48.47 | 15.33 | 12.92 | 0.164 | 9.63 | 8.06 | 1.66 | 0.17 | 0.34 | 0.01 | 0.041 | 3.01 | 99.84 | < 0.01 | 0.024 | 0.007 | < 0.004 |
| 13-001-438 | 7 | 101 | 7 | 48.31 | 15.73 | 13.24 | 0.166 | 9.41 | 8.04 | 1.59 | 0.18 | 0.37 | < 0.01 | 0.051 | 2.89 | 100.0 | 0.01 | 0.028 | 0.009 | 0.010 |
| 13-001-439 | 2 | 12 | < 5 | 47.11 | 15.00 | 15.21 | 0.164 | 9.48 | 8.01 | 1.66 | 0.17 | 0.57 | 0.01 | 0.080 | 2.89 | 100.4 | 0.02 | 0.036 | 0.007 | 0.006 |
| 13-001-440 | 1260 | 6370 | 1410 | 45.54 | 22.11 | 6.99 | 0.076 | 8.77 | 12.83 | 1.15 | 0.11 | 0.11 | 0.01 | 0.011 | 2.58 | 100.5 | 0.08 | 0.067 | < 0.004 | 0.018 |
| 13-001-441 | 23 | 574 | 27 | 50.61 | 17.48 | 10.59 | 0.128 | 6.66 | 8.64 | 2.82 | 0.22 | 0.31 | < 0.01 | 0.046 | 2.47 | 100.0 | < 0.01 | 0.046 | 0.009 | 0.021 |
| 13-001-442 | 13 | 117 | 27 | 48.21 | 19.97 | 9.74 | 0.126 | 5.97 | 10.95 | 2.56 | 0.25 | 0.35 | 0.01 | 0.039 | 2.12 | 100.4 | < 0.01 | 0.038 | 0.004 | 0.018 |
| 13-001-443 | 15 | 145 | 18 | 48.25 | 18.93 | 9.73 | 0.121 | 6.17 | 10.47 | 2.45 | 0.25 | 0.33 | 0.01 | 0.054 | 2.00 | 98.81 | < 0.01 | 0.026 | 0.006 | 0.016 |
| 13-001-444 | 57 | 572 | 81 | 47.93 | 18.91 | 9.47 | 0.118 | 5.74 | 10.92 | 2.44 | 0.33 | 0.35 | 0.01 | 0.045 | 2.35 | 98.72 | < 0.01 | 0.037 | 0.007 | 0.070 |
| 13-001-445 | 53 | 994 | 129 | 48.48 | 17.39 | 10.25 | 0.117 | 6.10 | 10.77 | 2.36 | 0.38 | 0.35 | 0.01 | 0.057 | 2.29 | 98.68 | < 0.01 | 0.059 | 0.005 | 0.057 |
| 13-001-446 | 68 | 1450 | 167 | 47.31 | 14.47 | 14.22 | 0.161 | 8.57 | 9.88 | 1.66 | 0.20 | 0.52 | 0.01 | 0.076 | 2.77 | 100.0 | 0.01 | 0.086 | 0.007 | 0.088 |
| 13-001-447 | 57 | 922 | 122 | 50.37 | 13.12 | 12.29 | 0.160 | 9.29 | 8.15 | 1.69 | 0.17 | 0.28 | 0.01 | 0.044 | 3.15 | 98.85 | < 0.01 | 0.057 | 0.008 | 0.060 |
| 13-001-448 | 50 | 920 | 112 | 48.95 | 14.33 | 12.82 | 0.173 | 9.71 | 9.10 | 1.72 | 0.15 | 0.31 | < 0.01 | 0.052 | 2.69 | 100.2 | 0.01 | 0.089 | 0.010 | 0.057 |
| 13-001-449 | 102 | 1810 | 216 | 47.74 | 14.68 | 13.37 | 0.166 | 9.34 | 9.24 | 1.50 | 0.19 | 0.36 | < 0.01 | 0.054 | 2.76 | 99.63 | 0.01 | 0.102 | 0.008 | 0.104 |
| 13-001-450 | 96 | 2490 | 296 | 52.75 | 14.92 | 11.42 | 0.144 | 7.57 | 8.03 | 2.38 | 0.26 | 0.31 | 0.01 | 0.041 | 2.44 | 100.6 | 0.03 | 0.125 | 0.009 | 0.113 |
| 13-001-451 | 134 | 2980 | 344 | 48.64 | 13.83 | 13.75 | 0.166 | 9.61 | 8.39 | 1.65 | 0.24 | 0.33 | < 0.01 | 0.052 | 3.11 | 100.1 | < 0.01 | 0.136 | 0.012 | 0.150 |
| 13-001-452 | 122 | 2320 | 271 | 49.40 | 13.82 | 12.72 | 0.164 | 9.26 | 9.39 | 1.67 | 0.17 | 0.28 | < 0.01 | 0.038 | 2.91 | 100.1 | 0.01 | 0.141 | 0.010 | 0.133 |
| 13-001-453 | 170 | 2930 | 347 | 47.86 | 12.22 | 14.90 | 0.196 | 11.40 | 8.08 | 0.97 | 0.15 | 0.27 | < 0.01 | 0.044 | 3.51 | 99.94 | 0.03 | 0.146 | 0.012 | 0.153 |
| 13-001-454 | 113 | 2080 | 243 | 48.21 | 12.59 | 14.43 | 0.190 | 11.33 | 7.98 | 1.10 | 0.12 | 0.25 | < 0.01 | 0.043 | 3.39 | 99.87 | 0.02 | 0.114 | 0.011 | 0.096 |
| 13-001-455 | 1190 | 6500 | 1310 | 45.41 | 22.18 | 7.02 | 0.079 | 8.72 | 12.82 | 1.15 | 0.11 | 0.11 | 0.01 | 0.005 | 2.52 | 100.3 | 0.07 | 0.069 | 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 14:27:29 | 2013-04-16 14:27:29 | 2013-04-16 14:27:29 | 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 | 1250 | 6130 | 1330 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1230 | 6110 | 1370 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1190 | 6400 | 1440 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1210 | 6310 | 1420 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1240 | 6380 | 1350 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1200 | 6280 | 1330 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1190 | 6140 | 1310 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 442 | 1980 | 468 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 473 | 2070 | 440 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 481 | 2150 | 472 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 441 | 1940 | 417 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 442 | 2120 | 441 | | | | | | | | | | | | | | | | | |
| 13-001-426 Replicate Original | 202 | 3570 | 436 | | | | | | | | | | | | | | | | | |
| 13-001-426 LABDUP | 242 | 3790 | 523 | | | | | | | | | | | | | | | | | |
| 13-001-436 Replicate Original | 2 | 31 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-436 LABDUP | 4 | 31 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-440 Replicate Original | | | | 45.57 | 22.17 | 7.02 | 0.078 | 8.82 | 12.87 | 1.15 | 0.11 | 0.11 | 0.01 | 0.012 | 2.56 | 100.6 | 0.08 | 0.066 | < 0.004 | 0.017 |
| 13-001-440 LABDUP | | | | 45.52 | 22.06 | 6.97 | 0.075 | 8.72 | 12.79 | 1.16 | 0.11 | 0.10 | 0.01 | 0.010 | 2.59 | 100.3 | 0.08 | 0.068 | 0.019 | 0.018 |
| 13-001-446 Replicate Original | 66 | 1460 | 168 | | | | | | | | | | | | | | | | | |
| 13-001-446 LABDUP | 70 | 1450 | 166 | | | | | | | | | | | | | | | | | |
| 13-001-450 Split Original | 96 | 2490 | 296 | 52.75 | 14.92 | 11.42 | 0.144 | 7.57 | 8.03 | 2.38 | 0.26 | 0.31 | 0.01 | 0.041 | 2.44 | 100.6 | 0.03 | 0.125 | 0.009 | 0.113 |
| 13-001-450 LABPREP | 93 | 2230 | 256 | 52.54 | 14.55 | 11.37 | 0.136 | 7.50 | 8.05 | 2.34 | 0.26 | 0.32 | 0.01 | 0.039 | 2.47 | 99.84 | < 0.01 | 0.124 | 0.010 | 0.116 |