*Quality Analysis ...* *Innovative Technologies*

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|---|---|
| **Date Submitted:** | 01-Apr-13 |
| **Invoice No.:** | A13-03560 |
| **Invoice Date:** | 19-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 Tbay (OES) Whole Rock Analysis-XRF/Fire Assay ICPOES

REPORT **A13-03560**

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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: A13-03560

| 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 12 2013 2:50PM | Apr 12 2013 2:50PM | Apr 12 2013 2:50PM | 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 |
| 13-001-106 | < 2 | < 5 | < 5 | 7.61 | 0.14 | 0.07 | 0.061 | 21.91 | 28.89 | 0.01 | 0.02 | 0.02 | 0.01 | < 0.003 | 40.67 | 99.42 | < 0.01 | < 0.003 | < 0.004 | < 0.004 |
| 13-001-107 | 3090 | 2000 | 282 | 56.08 | 12.39 | 11.67 | 0.084 | 4.51 | 4.07 | 1.34 | 1.78 | 0.41 | 0.12 | 0.020 | 6.39 | 99.18 | 0.03 | 0.070 | < 0.004 | 0.212 |
| 13-001-108 | 5 | < 5 | < 5 | 67.31 | 13.45 | 6.25 | 0.109 | 2.40 | 4.16 | 3.19 | 1.15 | 0.62 | 0.14 | 0.018 | 1.30 | 100.1 | < 0.01 | 0.006 | < 0.004 | 0.005 |
| 13-001-109 | 38 | 145 | 91 | 50.54 | 13.31 | 10.45 | 0.178 | 12.39 | 8.15 | 1.62 | 0.33 | 0.24 | 0.02 | 0.029 | 3.45 | 100.8 | 0.02 | 0.029 | 0.005 | 0.005 |
| 13-001-110 | 10 | 105 | 35 | 52.07 | 13.82 | 9.83 | 0.174 | 11.19 | 7.85 | 2.01 | 0.24 | 0.21 | 0.02 | 0.024 | 3.04 | 100.6 | 0.03 | 0.040 | 0.010 | 0.006 |
| 13-001-111 | 8 | 121 | 18 | 49.86 | 12.45 | 11.37 | 0.189 | 12.77 | 7.81 | 1.19 | 0.21 | 0.17 | 0.01 | 0.032 | 3.68 | 99.81 | 0.02 | 0.035 | < 0.004 | 0.004 |
| 13-001-112 | 10 | 138 | 18 | 49.55 | 12.02 | 11.18 | 0.190 | 13.13 | 7.66 | 1.15 | 0.24 | 0.20 | < 0.01 | 0.023 | 4.00 | 99.41 | 0.01 | 0.032 | 0.007 | 0.008 |
| 13-001-113 | 6 | 144 | 19 | 49.49 | 12.82 | 10.82 | 0.188 | 12.72 | 7.85 | 1.39 | 0.39 | 0.20 | 0.01 | 0.021 | 3.66 | 99.62 | 0.02 | 0.031 | 0.007 | < 0.004 |
| 13-001-114 | < 2 | 88 | 12 | 49.13 | 13.21 | 10.48 | 0.171 | 11.77 | 8.84 | 2.02 | 0.43 | 0.40 | 0.08 | 0.034 | 3.26 | 99.92 | 0.06 | 0.024 | 0.004 | < 0.004 |
| 13-001-115 | 27 | 165 | 46 | 50.32 | 14.07 | 10.19 | 0.175 | 12.35 | 7.94 | 1.55 | 0.57 | 0.21 | 0.01 | 0.012 | 3.29 | 100.8 | 0.02 | 0.029 | 0.008 | 0.008 |
| 13-001-116 | 14 | 190 | 24 | 51.02 | 14.23 | 10.32 | 0.170 | 12.07 | 8.20 | 1.56 | 0.40 | 0.22 | 0.02 | 0.019 | 2.13 | 100.4 | 0.02 | 0.027 | 0.008 | 0.009 |
| 13-001-117 | 13 | 180 | 20 | 50.24 | 13.61 | 10.34 | 0.177 | 12.39 | 8.00 | 1.64 | 0.32 | 0.21 | 0.01 | 0.017 | 3.05 | 100.1 | 0.02 | 0.028 | 0.009 | 0.005 |
| 13-001-118 | 16 | 195 | 24 | 50.44 | 13.60 | 10.67 | 0.176 | 12.69 | 7.93 | 1.43 | 0.25 | 0.22 | 0.01 | 0.033 | 2.20 | 99.71 | 0.02 | 0.031 | 0.006 | 0.006 |
| 13-001-119 | 12 | 176 | 24 | 51.09 | 13.90 | 10.59 | 0.178 | 12.68 | 8.01 | 1.56 | 0.21 | 0.20 | 0.01 | 0.030 | 2.19 | 100.7 | 0.02 | 0.031 | 0.008 | 0.009 |
| 13-001-120 | 13 | 158 | 27 | 50.88 | 13.33 | 10.70 | 0.181 | 12.78 | 7.89 | 1.48 | 0.23 | 0.22 | 0.01 | 0.025 | 1.60 | 99.39 | 0.02 | 0.032 | 0.008 | 0.005 |
| 13-001-121 | 14 | 194 | 24 | 50.76 | 14.65 | 10.37 | 0.177 | 12.18 | 8.41 | 1.61 | 0.28 | 0.20 | < 0.01 | 0.026 | 1.68 | 100.4 | 0.01 | 0.030 | 0.007 | 0.005 |
| 13-001-122 | 14 | 185 | 26 | 50.82 | 14.72 | 10.36 | 0.175 | 11.89 | 8.28 | 1.66 | 0.28 | 0.20 | 0.01 | 0.015 | 1.96 | 100.4 | 0.02 | 0.031 | 0.007 | 0.008 |
| 13-001-123 | 11 | 150 | 19 | 51.41 | 12.81 | 11.33 | 0.189 | 13.16 | 7.65 | 1.46 | 0.20 | 0.22 | 0.01 | 0.030 | 2.05 | 100.6 | 0.02 | 0.031 | 0.006 | 0.006 |
| 13-001-124 | 15 | 163 | 24 | 51.62 | 13.19 | 11.26 | 0.186 | 13.12 | 7.59 | 1.60 | 0.20 | 0.21 | 0.01 | 0.013 | 1.64 | 100.7 | 0.02 | 0.031 | 0.007 | 0.010 |
| 13-001-125 | 1200 | 6210 | 1380 | 45.85 | 22.17 | 6.88 | 0.086 | 8.68 | 12.67 | 1.25 | 0.11 | 0.11 | 0.01 | 0.021 | 2.44 | 100.4 | 0.08 | 0.064 | 0.005 | 0.018 |
| 13-001-126 | 12 | 177 | 23 | 51.57 | 14.12 | 10.75 | 0.176 | 12.04 | 7.68 | 1.83 | 0.22 | 0.21 | 0.01 | 0.031 | 1.62 | 100.3 | 0.01 | 0.031 | 0.004 | 0.006 |
| 13-001-127 | 16 | 174 | 31 | 51.67 | 14.25 | 10.72 | 0.181 | 12.14 | 8.03 | 1.76 | 0.20 | 0.21 | 0.01 | 0.025 | 1.05 | 100.3 | 0.02 | 0.030 | 0.004 | 0.007 |
| 13-001-128 | 13 | 170 | 25 | 51.36 | 13.76 | 11.26 | 0.189 | 12.73 | 7.91 | 1.61 | 0.22 | 0.21 | 0.01 | 0.021 | 1.22 | 100.6 | 0.02 | 0.031 | 0.010 | 0.006 |
| 13-001-129 | 13 | 161 | 22 | 51.74 | 13.29 | 10.96 | 0.180 | 12.42 | 7.34 | 1.65 | 0.20 | 0.22 | 0.01 | 0.024 | 1.77 | 99.86 | 0.01 | 0.028 | 0.010 | 0.005 |
| 13-001-130 | 9 | 156 | 22 | 53.60 | 13.73 | 10.51 | 0.177 | 11.59 | 7.07 | 1.92 | 0.33 | 0.20 | 0.01 | 0.028 | 1.38 | 100.6 | 0.02 | 0.026 | 0.009 | < 0.004 |
| 13-001-131 | 6 | 167 | 21 | 52.04 | 13.20 | 11.41 | 0.196 | 12.44 | 7.30 | 1.63 | 0.25 | 0.17 | < 0.01 | 0.016 | 2.05 | 100.8 | 0.01 | 0.031 | 0.007 | 0.006 |
| 13-001-132 | 7 | 131 | 17 | 52.72 | 12.52 | 11.00 | 0.191 | 11.79 | 7.00 | 1.81 | 0.24 | 0.18 | 0.01 | 0.018 | 3.24 | 100.8 | 0.01 | 0.027 | 0.007 | < 0.004 |
| 13-001-133 | 10 | 171 | 22 | 51.82 | 12.57 | 12.45 | 0.205 | 13.06 | 6.61 | 1.61 | 0.26 | 0.37 | 0.02 | 0.026 | 1.67 | 100.7 | 0.02 | 0.031 | 0.006 | 0.008 |
| 13-001-134 | 14 | 153 | 23 | 52.44 | 12.53 | 11.78 | 0.195 | 13.08 | 6.95 | 1.50 | 0.23 | 0.26 | 0.01 | 0.012 | 1.71 | 100.8 | 0.03 | 0.033 | 0.009 | 0.006 |
| 13-001-135 | 10 | 135 | 18 | 50.94 | 12.38 | 11.81 | 0.199 | 12.92 | 6.98 | 1.55 | 0.29 | 0.25 | 0.01 | 0.029 | 1.73 | 99.16 | 0.03 | 0.030 | 0.005 | 0.005 |
| 13-001-136 | 6 | 117 | 16 | 53.56 | 13.97 | 9.47 | 0.148 | 10.20 | 6.48 | 2.48 | 0.39 | 0.24 | 0.03 | 0.023 | 3.08 | 100.1 | 0.01 | 0.025 | 0.005 | < 0.004 |
| 13-001-137 | < 2 | 58 | 9 | 59.77 | 16.76 | 5.39 | 0.090 | 5.09 | 6.44 | 4.04 | 0.41 | 0.22 | 0.05 | 0.019 | 2.14 | 100.4 | < 0.01 | 0.011 | < 0.004 | < 0.004 |
| 13-001-138 | 8 | 148 | 17 | 50.89 | 12.91 | 11.61 | 0.192 | 12.73 | 7.24 | 1.48 | 0.38 | 0.18 | 0.01 | 0.008 | 2.82 | 100.5 | 0.02 | 0.029 | 0.007 | 0.006 |
| 13-001-139 | 6 | 142 | 19 | 52.49 | 12.58 | 11.29 | 0.208 | 11.84 | 6.64 | 1.74 | 0.43 | 0.19 | 0.01 | 0.031 | 2.45 | 99.96 | 0.02 | 0.031 | 0.007 | < 0.004 |
| 13-001-140 | 1260 | 6250 | 1390 | 45.96 | 22.29 | 6.90 | 0.090 | 8.75 | 12.66 | 1.26 | 0.14 | 0.10 | 0.02 | 0.010 | 2.45 | 100.8 | 0.08 | 0.066 | < 0.004 | 0.018 |

## Quality Control

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **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** | 2013-04-12 14:50:33 | 2013-04-12 14:50:33 | 2013-04-12 14:50:33 | 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 | 1240 | 6330 | 1470 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1170 | 6140 | 1360 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 549 | 1950 | 456 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 477 | 2020 | 431 | | | | | | | | | | | | | | | | | |
| 13-001-116 Replicate Original | 14 | 185 | 24 | | | | | | | | | | | | | | | | | |
| 13-001-116 LABDUP | 14 | 195 | 24 | | | | | | | | | | | | | | | | | |
| 13-001-125 Replicate Original | | | | 45.74 | 22.32 | 6.87 | 0.087 | 8.74 | 12.66 | 1.24 | 0.11 | 0.10 | 0.01 | 0.017 | 2.44 | 100.5 | 0.08 | 0.064 | 0.004 | 0.019 |
| 13-001-125 LABDUP | | | | 45.96 | 22.03 | 6.88 | 0.084 | 8.62 | 12.69 | 1.27 | 0.12 | 0.11 | 0.01 | 0.024 | 2.44 | 100.4 | 0.08 | 0.063 | 0.006 | 0.017 |
| 13-001-126 Replicate Original | 12 | 178 | 22 | | | | | | | | | | | | | | | | | |
| 13-001-126 LABDUP | 11 | 175 | 23 | | | | | | | | | | | | | | | | | |
| 13-001-135 Split Original | 10 | 135 | 18 | 50.94 | 12.38 | 11.81 | 0.199 | 12.92 | 6.98 | 1.55 | 0.29 | 0.25 | 0.01 | 0.029 | 1.73 | 99.16 | 0.03 | 0.030 | 0.005 | 0.005 |
| 13-001-135 LABPREP | 13 | 149 | 22 | 51.15 | 12.68 | 11.92 | 0.201 | 13.08 | 6.99 | 1.59 | 0.30 | 0.25 | 0.02 | 0.034 | 1.72 | 100.00 | 0.02 | 0.031 | 0.006 | 0.006 |
| 13-001-137 Replicate Original | 3 | 61 | 12 | | | | | | | | | | | | | | | | | |
| 13-001-137 LABDUP | < 2 | 55 | 7 | | | | | | | | | | | | | | | | | |