*Quality Analysis ...* *Innovative Technologies*

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|---|---|
| **Date Submitted:** | 01-Apr-13 |
| **Invoice No.:** | A13-03559 |
| **Invoice Date:** | 24-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 **A13-03559**

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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: A13-03559

| 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 15 2013 10:04AM | Apr 15 2013 10:04AM | Apr 15 2013 10:04AM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM | Apr 11 2013 12:34PM |
| 13-001-281 | < 2 | 6 | < 5 | 7.12 | < 0.01 | 0.10 | 0.056 | 21.32 | 29.20 | < 0.01 | < 0.01 | 0.01 | 0.01 | < 0.003 | 41.15 | 98.88 | < 0.01 | < 0.003 | < 0.004 | < 0.004 |
| 13-001-282 | 3360 | 1990 | 272 | 55.67 | 12.10 | 11.80 | 0.090 | 4.42 | 4.10 | 1.32 | 1.75 | 0.41 | 0.10 | 0.024 | 6.41 | 98.51 | 0.03 | 0.068 | 0.006 | 0.209 |
| 13-001-283 | < 2 | < 5 | < 5 | 66.38 | 13.29 | 6.30 | 0.107 | 2.37 | 4.17 | 3.21 | 1.11 | 0.61 | 0.14 | 0.021 | 1.25 | 98.98 | < 0.01 | < 0.003 | < 0.004 | 0.004 |
| 13-001-284 | 60 | 326 | 41 | 49.67 | 19.38 | 7.85 | 0.115 | 7.58 | 9.07 | 2.44 | 0.23 | 0.17 | 0.01 | 0.017 | 2.59 | 99.27 | 0.01 | 0.061 | 0.004 | 0.069 |
| 13-001-285 | 135 | 648 | 82 | 49.10 | 20.29 | 7.21 | 0.105 | 7.19 | 10.14 | 2.15 | 0.31 | 0.18 | 0.01 | 0.010 | 2.46 | 99.37 | 0.01 | 0.091 | 0.004 | 0.100 |
| 13-001-286 | 248 | 828 | 106 | 48.01 | 23.66 | 5.59 | 0.067 | 4.51 | 11.35 | 2.50 | 0.49 | 0.17 | 0.01 | 0.012 | 2.24 | 98.87 | < 0.01 | 0.100 | 0.004 | 0.149 |
| 13-001-287 | 136 | 765 | 95 | 48.86 | 20.50 | 7.87 | 0.104 | 7.51 | 10.11 | 2.06 | 0.24 | 0.18 | 0.01 | 0.013 | 2.54 | 100.2 | 0.01 | 0.096 | 0.005 | 0.111 |
| 13-001-288 | 162 | 839 | 114 | 49.19 | 19.90 | 7.97 | 0.117 | 7.40 | 10.02 | 2.25 | 0.25 | 0.17 | < 0.01 | 0.008 | 2.45 | 99.95 | 0.01 | 0.098 | 0.005 | 0.105 |
| 13-001-289 | 165 | 748 | 135 | 48.58 | 19.16 | 8.27 | 0.109 | 7.93 | 9.62 | 1.86 | 0.33 | 0.19 | 0.02 | 0.015 | 2.71 | 98.97 | 0.02 | 0.082 | 0.007 | 0.067 |
| 13-001-290 | 325 | 1160 | 136 | 48.84 | 19.25 | 8.39 | 0.111 | 7.64 | 9.64 | 2.11 | 0.24 | 0.18 | 0.01 | 0.015 | 2.75 | 99.45 | 0.02 | 0.125 | 0.004 | 0.129 |
| 13-001-291 | 338 | 953 | 141 | 50.22 | 20.63 | 7.10 | 0.095 | 6.73 | 9.87 | 2.54 | 0.24 | 0.12 | 0.01 | 0.010 | 2.24 | 100.1 | 0.01 | 0.138 | 0.005 | 0.126 |
| 13-001-292 | 270 | 786 | 92 | 50.08 | 22.87 | 6.08 | 0.065 | 4.09 | 11.20 | 2.96 | 0.39 | 0.24 | 0.01 | 0.020 | 1.80 | 100.0 | < 0.01 | 0.103 | 0.004 | 0.128 |
| 13-001-293 | 317 | 1180 | 169 | 48.62 | 17.59 | 9.26 | 0.122 | 9.51 | 9.69 | 1.58 | 0.17 | 0.18 | 0.01 | 0.018 | 2.83 | 99.95 | 0.02 | 0.163 | 0.007 | 0.173 |
| 13-001-294 | 202 | 555 | 76 | 49.60 | 20.03 | 7.20 | 0.094 | 7.87 | 10.16 | 2.08 | 0.17 | 0.17 | 0.01 | 0.013 | 2.57 | 100.2 | 0.02 | 0.089 | 0.004 | 0.098 |
| 13-001-295 | 150 | 642 | 92 | 49.87 | 21.37 | 7.12 | 0.086 | 5.96 | 10.58 | 2.37 | 0.23 | 0.24 | 0.01 | 0.027 | 1.96 | 100.0 | 0.01 | 0.076 | 0.005 | 0.095 |
| 13-001-296 | 306 | 1210 | 161 | 49.85 | 20.45 | 7.74 | 0.092 | 6.25 | 10.08 | 2.24 | 0.31 | 0.20 | 0.01 | 0.017 | 2.45 | 100.0 | 0.01 | 0.138 | 0.007 | 0.177 |
| 13-001-297 | 190 | 1090 | 159 | 49.86 | 19.84 | 7.84 | 0.101 | 7.27 | 9.78 | 2.11 | 0.20 | 0.15 | 0.01 | 0.014 | 2.36 | 99.79 | 0.01 | 0.119 | 0.006 | 0.118 |
| 13-001-298 | 243 | 734 | 108 | 50.74 | 19.96 | 7.16 | 0.099 | 7.12 | 9.51 | 2.46 | 0.19 | 0.13 | 0.01 | 0.013 | 2.30 | 99.89 | 0.01 | 0.088 | 0.006 | 0.093 |
| 13-001-299 | 333 | 788 | 155 | 50.00 | 21.15 | 6.71 | 0.088 | 6.42 | 10.50 | 2.47 | 0.18 | 0.12 | 0.01 | 0.012 | 2.14 | 100.0 | 0.01 | 0.099 | 0.005 | 0.105 |
| 13-001-300 | 1310 | 5900 | 1250 | 45.49 | 22.05 | 6.98 | 0.087 | 8.64 | 12.81 | 1.28 | 0.12 | 0.09 | 0.01 | 0.008 | 2.48 | 100.2 | 0.08 | 0.063 | 0.004 | 0.021 |
| 13-001-301 | 190 | 1080 | 161 | 49.02 | 20.35 | 7.61 | 0.099 | 7.40 | 10.67 | 2.03 | 0.15 | 0.14 | 0.01 | 0.014 | 2.47 | 100.2 | 0.02 | 0.115 | 0.007 | 0.132 |
| 13-001-302 | 212 | 1730 | 244 | 49.12 | 20.58 | 7.20 | 0.096 | 7.02 | 10.95 | 2.15 | 0.29 | 0.14 | 0.01 | 0.013 | 2.41 | 100.2 | 0.01 | 0.103 | 0.005 | 0.143 |
| 13-001-303 | 121 | 1420 | 200 | 49.63 | 18.94 | 8.26 | 0.113 | 7.73 | 10.42 | 2.11 | 0.15 | 0.17 | 0.01 | 0.017 | 2.37 | 100.1 | 0.01 | 0.095 | 0.005 | 0.084 |
| 13-001-304 | 132 | 1140 | 175 | 50.13 | 23.31 | 5.84 | 0.075 | 3.94 | 11.75 | 2.94 | 0.23 | 0.22 | 0.02 | 0.013 | 1.67 | 100.3 | < 0.01 | 0.067 | 0.004 | 0.084 |
| 13-001-305 | 146 | 1320 | 271 | 49.33 | 24.34 | 5.44 | 0.070 | 3.84 | 11.95 | 2.77 | 0.32 | 0.17 | 0.01 | 0.009 | 1.72 | 100.1 | < 0.01 | 0.046 | < 0.004 | 0.095 |
| 13-001-306 | 86 | 3370 | 405 | 48.44 | 20.12 | 8.06 | 0.110 | 7.16 | 10.45 | 2.04 | 0.19 | 0.20 | 0.01 | 0.015 | 2.06 | 98.98 | 0.01 | 0.060 | 0.006 | 0.053 |
| 13-001-307 | 151 | 9130 | 807 | 48.60 | 19.24 | 9.31 | 0.124 | 7.94 | 10.02 | 1.84 | 0.25 | 0.21 | 0.01 | 0.019 | 2.60 | 100.3 | 0.02 | 0.068 | 0.005 | 0.076 |
| 13-001-308 | 31 | 290 | 32 | 49.86 | 18.30 | 9.48 | 0.124 | 7.97 | 9.40 | 2.43 | 0.15 | 0.26 | 0.01 | 0.027 | 2.19 | 100.3 | 0.02 | 0.028 | 0.005 | 0.012 |
| 13-001-309 | 3 | 153 | 15 | 49.53 | 18.51 | 9.43 | 0.138 | 8.36 | 9.87 | 1.99 | 0.15 | 0.23 | 0.01 | 0.025 | 2.21 | 100.5 | 0.02 | 0.024 | 0.007 | 0.006 |
| 13-001-310 | 5 | 115 | 18 | 49.97 | 20.31 | 8.40 | 0.121 | 6.82 | 10.40 | 2.28 | 0.20 | 0.18 | 0.01 | 0.016 | 1.55 | 100.3 | 0.02 | 0.017 | 0.004 | 0.005 |
| 13-001-311 | < 2 | 150 | 38 | 50.55 | 18.41 | 9.64 | 0.138 | 8.15 | 9.23 | 2.15 | 0.20 | 0.17 | 0.01 | 0.015 | 1.72 | 100.4 | 0.02 | 0.020 | 0.005 | < 0.004 |
| 13-001-312 | 19 | 132 | 24 | 48.86 | 18.74 | 9.69 | 0.134 | 8.27 | 9.87 | 1.94 | 0.18 | 0.25 | 0.01 | 0.024 | 2.36 | 100.4 | 0.02 | 0.020 | 0.005 | 0.008 |
| 13-001-313 | 29 | 124 | 46 | 49.18 | 19.93 | 8.45 | 0.120 | 7.17 | 10.34 | 2.21 | 0.17 | 0.27 | 0.02 | 0.025 | 2.04 | 99.98 | 0.02 | 0.015 | 0.007 | 0.006 |
| 13-001-314 | 6 | 98 | < 5 | 50.24 | 21.77 | 6.92 | 0.098 | 5.55 | 11.15 | 2.69 | 0.24 | 0.26 | 0.02 | 0.031 | 1.58 | 100.6 | 0.01 | 0.012 | 0.004 | 0.006 |
| 13-001-315 | 1220 | 6100 | 1210 | 45.65 | 22.13 | 6.99 | 0.089 | 8.70 | 12.86 | 1.30 | 0.12 | 0.10 | 0.02 | 0.008 | 2.43 | 100.6 | 0.08 | 0.063 | < 0.004 | 0.022 |

## 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** | 2013-04-15 10:04:31 | 2013-04-15 10:04:31 | 2013-04-15 10:04:31 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 | 2013-04-11 12:34:22 |
| 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 | 1240 | 6280 | 1360 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-22 LABSTD | 1130 | 6290 | 1260 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 512 | 2040 | 481 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 510 | 1970 | 441 | | | | | | | | | | | | | | | | | |
| 13-001-291 Replicate Original | 394 | 947 | 128 | | | | | | | | | | | | | | | | | |
| 13-001-291 LABDUP | 281 | 958 | 153 | | | | | | | | | | | | | | | | | |
| 13-001-300 Replicate Original | | | | 45.27 | 22.09 | 6.97 | 0.088 | 8.63 | 12.77 | 1.28 | 0.12 | 0.10 | 0.01 | 0.004 | 2.48 | 99.98 | 0.08 | 0.063 | 0.004 | 0.021 |
| 13-001-300 LABDUP | | | | 45.70 | 22.00 | 6.99 | 0.087 | 8.64 | 12.84 | 1.29 | 0.12 | 0.09 | 0.01 | 0.011 | 2.48 | 100.4 | 0.08 | 0.063 | 0.004 | 0.021 |
| 13-001-301 Replicate Original | 186 | 1120 | 168 | | | | | | | | | | | | | | | | | |
| 13-001-301 LABDUP | 194 | 1050 | 155 | | | | | | | | | | | | | | | | | |
| 13-001-310 Split Original | 5 | 115 | 18 | 49.97 | 20.31 | 8.40 | 0.121 | 6.82 | 10.40 | 2.28 | 0.20 | 0.18 | 0.01 | 0.016 | 1.55 | 100.3 | 0.02 | 0.017 | 0.004 | 0.005 |
| 13-001-310 LABPREP | 6 | 113 | 14 | 49.81 | 20.20 | 8.36 | 0.121 | 6.76 | 10.42 | 2.20 | 0.20 | 0.17 | 0.01 | 0.014 | 1.58 | 99.93 | 0.02 | 0.018 | 0.044 | 0.005 |
| 13-001-312 Replicate Original | 20 | 138 | 26 | | | | | | | | | | | | | | | | | |
| 13-001-312 LABDUP | 18 | 126 | 22 | | | | | | | | | | | | | | | | | |