*Quality Analysis ...* *Innovative Technologies*

| | |
|---|---|
| **Date Submitted:** | 01-Apr-13 |
| **Invoice No.:** | A13-03567 |
| **Invoice Date:** | 29-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 **A13-03567**

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

CERTIFIED BY :

Emmanuel Eseme , Ph.D.
Quality Control

ISO/IEC 17025
SCC Accredited
LAB 266
LAB 266
Accrédité CCN

**ACTIVATION LABORATORIES LTD.**

1336 Sandhill Drive, Ancaster, Ontario Canada L9G 4V5 TELEPHONE +1.905.648.9611 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

# Activation Laboratories Ltd. Report: A13-03567

| 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 |
| 13-001-071 | < 2 | < 5 | < 5 | 6.84 | 0.06 | 0.08 | 0.060 | 21.65 | 29.47 | < 0.01 | 0.01 | 0.01 | 0.02 | < 0.003 | 41.12 | 99.32 | < 0.01 | < 0.003 | < 0.004 | < 0.004 |
| 13-001-072 | 3410 | 1890 | 272 | 56.70 | 12.14 | 11.95 | 0.089 | 4.48 | 4.13 | 1.28 | 1.79 | 0.42 | 0.12 | 0.017 | 6.35 | 99.79 | 0.03 | 0.068 | < 0.004 | 0.214 |
| 13-001-073 | 3 | < 5 | < 5 | 66.93 | 13.76 | 6.25 | 0.106 | 2.46 | 4.17 | 3.25 | 1.14 | 0.60 | 0.14 | 0.015 | 1.28 | 100.1 | 0.01 | 0.006 | < 0.004 | < 0.004 |
| 13-001-074 | 8 | 65 | 19 | 48.91 | 14.83 | 12.07 | 0.191 | 9.37 | 9.76 | 1.97 | 0.11 | 0.38 | 0.03 | 0.043 | 1.60 | 99.31 | 0.01 | 0.022 | 0.007 | 0.008 |
| 13-001-075 | 10 | 84 | 12 | 49.45 | 15.05 | 12.48 | 0.186 | 9.81 | 9.24 | 1.98 | 0.10 | 0.44 | 0.04 | 0.039 | 1.90 | 100.8 | 0.02 | 0.020 | 0.007 | 0.010 |
| 13-001-076 | 12 | 241 | 40 | 48.12 | 16.91 | 13.23 | 0.168 | 7.12 | 10.45 | 2.29 | 0.13 | 0.63 | 0.03 | 0.046 | 1.59 | 100.8 | 0.01 | 0.026 | 0.007 | 0.019 |
| 13-001-077 | 3 | 40 | < 5 | 49.81 | 18.86 | 8.49 | 0.131 | 7.51 | 9.77 | 2.49 | 0.19 | 0.18 | 0.01 | 0.020 | 1.39 | 98.89 | 0.02 | 0.014 | 0.005 | < 0.004 |
| 13-001-078 | 3 | 38 | < 5 | 50.42 | 19.14 | 8.57 | 0.130 | 7.87 | 9.83 | 2.34 | 0.18 | 0.17 | 0.01 | 0.021 | 1.39 | 100.1 | 0.02 | 0.017 | 0.005 | < 0.004 |
| 13-001-079 | < 2 | 34 | < 5 | 49.96 | 19.25 | 8.56 | 0.130 | 8.28 | 9.94 | 2.06 | 0.17 | 0.16 | 0.02 | 0.022 | 1.18 | 99.78 | 0.03 | 0.016 | < 0.004 | 0.004 |
| 13-001-080 | < 2 | 39 | < 5 | 50.57 | 18.65 | 8.80 | 0.138 | 8.46 | 9.97 | 2.19 | 0.15 | 0.17 | 0.01 | 0.020 | 1.61 | 100.8 | 0.02 | 0.016 | 0.005 | < 0.004 |
| 13-001-081 | < 2 | 47 | < 5 | 51.01 | 18.05 | 9.68 | 0.146 | 8.13 | 9.91 | 2.24 | 0.13 | 0.22 | 0.02 | 0.021 | 1.16 | 100.8 | 0.02 | 0.019 | 0.005 | 0.006 |
| 13-001-082 | 3 | 44 | < 5 | 50.70 | 19.06 | 8.82 | 0.134 | 8.31 | 10.10 | 2.02 | 0.16 | 0.17 | 0.01 | 0.016 | 1.23 | 100.8 | 0.02 | 0.016 | 0.005 | < 0.004 |
| 13-001-083 | < 2 | 41 | < 5 | 50.00 | 18.51 | 8.98 | 0.138 | 8.53 | 9.61 | 2.15 | 0.32 | 0.17 | 0.01 | 0.019 | 2.30 | 100.8 | 0.03 | 0.017 | 0.006 | < 0.004 |
| 13-001-084 | < 2 | 48 | < 5 | 49.28 | 18.34 | 8.72 | 0.144 | 8.14 | 9.42 | 2.13 | 0.28 | 0.17 | < 0.01 | 0.019 | 1.89 | 98.57 | 0.02 | 0.015 | 0.005 | < 0.004 |
| 13-001-085 | < 2 | 51 | < 5 | 50.64 | 18.66 | 8.81 | 0.131 | 8.05 | 9.51 | 2.37 | 0.27 | 0.16 | 0.02 | 0.016 | 2.05 | 100.7 | 0.02 | 0.018 | 0.005 | 0.006 |
| 13-001-086 | < 2 | 38 | < 5 | 49.94 | 19.24 | 8.24 | 0.141 | 8.28 | 9.66 | 2.11 | 0.20 | 0.17 | < 0.01 | 0.022 | 2.04 | 100.1 | 0.03 | 0.014 | 0.004 | < 0.004 |
| 13-001-087 | 2 | 66 | 6 | 50.07 | 18.40 | 8.69 | 0.138 | 8.42 | 9.55 | 2.07 | 0.25 | 0.19 | 0.02 | 0.020 | 1.95 | 99.82 | 0.03 | 0.017 | 0.004 | 0.005 |
| 13-001-088 | < 2 | 60 | < 5 | 54.28 | 17.86 | 7.35 | 0.116 | 7.31 | 8.73 | 2.71 | 0.28 | 0.16 | 0.02 | 0.017 | 1.88 | 100.8 | 0.02 | 0.015 | 0.004 | 0.004 |
| 13-001-089 | < 2 | 43 | < 5 | 52.03 | 18.58 | 7.49 | 0.114 | 8.10 | 9.16 | 2.38 | 0.23 | 0.20 | 0.02 | 0.022 | 2.36 | 100.7 | 0.01 | 0.016 | 0.004 | < 0.004 |
| 13-001-090 | 1230 | 6170 | 1480 | 45.40 | 21.74 | 6.94 | 0.088 | 8.64 | 12.76 | 1.29 | 0.12 | 0.09 | 0.02 | 0.009 | 2.42 | 99.69 | 0.08 | 0.063 | 0.004 | 0.019 |
| 13-001-091 | < 2 | 39 | < 5 | 50.40 | 18.50 | 7.82 | 0.125 | 8.46 | 9.69 | 2.25 | 0.21 | 0.17 | 0.02 | 0.018 | 2.37 | 100.1 | 0.02 | 0.018 | 0.005 | < 0.004 |
| 13-001-092 | < 2 | 40 | < 5 | 50.90 | 18.94 | 7.61 | 0.127 | 8.49 | 9.64 | 2.37 | 0.24 | 0.16 | 0.02 | 0.021 | 2.23 | 100.8 | 0.02 | 0.018 | 0.005 | < 0.004 |
| 13-001-093 | < 2 | 42 | < 5 | 50.51 | 18.59 | 7.35 | 0.121 | 9.00 | 9.30 | 2.22 | 0.26 | 0.17 | < 0.01 | 0.025 | 2.70 | 100.3 | 0.02 | 0.023 | < 0.004 | < 0.004 |
| 13-001-094 | < 2 | 42 | < 5 | 50.67 | 18.78 | 7.33 | 0.118 | 9.15 | 9.73 | 2.13 | 0.19 | 0.17 | 0.02 | 0.019 | 2.39 | 100.7 | 0.02 | 0.023 | 0.004 | < 0.004 |
| 13-001-095 | 3 | 335 | 31 | 51.38 | 18.68 | 7.36 | 0.123 | 8.54 | 9.27 | 2.43 | 0.26 | 0.16 | 0.02 | 0.022 | 2.27 | 100.6 | 0.02 | 0.033 | 0.004 | 0.006 |
| 13-001-096 | < 2 | 34 | < 5 | 52.03 | 18.48 | 7.22 | 0.124 | 8.64 | 9.31 | 2.37 | 0.26 | 0.15 | 0.02 | 0.013 | 2.10 | 100.8 | 0.02 | 0.020 | 0.005 | < 0.004 |
| 13-001-097 | 10 | 622 | 58 | 51.40 | 20.22 | 7.20 | 0.100 | 6.45 | 9.65 | 2.81 | 0.42 | 0.33 | 0.02 | 0.029 | 1.89 | 100.6 | 0.01 | 0.024 | < 0.004 | 0.021 |
| 13-001-098 | 13 | 1730 | 198 | 49.73 | 19.54 | 8.42 | 0.113 | 5.97 | 10.23 | 2.85 | 0.37 | 0.30 | 0.02 | 0.031 | 1.77 | 99.41 | < 0.01 | 0.027 | 0.006 | 0.025 |
| 13-001-099 | 4 | 78 | 6 | 52.23 | 13.89 | 10.05 | 0.164 | 10.65 | 8.34 | 2.01 | 0.30 | 0.19 | 0.02 | 0.021 | 2.53 | 100.4 | 0.01 | 0.026 | 0.007 | 0.004 |
| 13-001-100 | 7 | 102 | 10 | 50.67 | 14.79 | 10.14 | 0.171 | 11.68 | 8.61 | 1.77 | 0.31 | 0.23 | 0.02 | 0.021 | 2.16 | 100.6 | 0.01 | 0.026 | 0.007 | 0.007 |
| 13-001-101 | 8 | 109 | 11 | 50.75 | 12.80 | 11.00 | 0.183 | 12.49 | 7.89 | 1.64 | 0.29 | 0.24 | 0.02 | 0.028 | 2.44 | 99.84 | 0.02 | 0.033 | 0.009 | 0.007 |
| 13-001-102 | 9 | 110 | 13 | 51.04 | 12.75 | 11.59 | 0.191 | 13.24 | 8.09 | 1.40 | 0.19 | 0.24 | 0.02 | 0.028 | 1.90 | 100.7 | 0.02 | 0.033 | 0.007 | 0.008 |
| 13-001-103 | 8 | 94 | 9 | 51.12 | 12.82 | 10.92 | 0.184 | 12.68 | 8.03 | 1.52 | 0.26 | 0.24 | 0.02 | 0.026 | 2.89 | 100.8 | 0.02 | 0.031 | 0.007 | 0.007 |
| 13-001-104 | 8 | 119 | 12 | 50.85 | 13.53 | 10.33 | 0.173 | 11.99 | 8.22 | 1.60 | 0.35 | 0.23 | 0.02 | 0.029 | 3.37 | 100.8 | 0.02 | 0.030 | 0.007 | 0.008 |
| 13-001-105 | 1200 | 5750 | 1390 | 45.63 | 22.44 | 6.92 | 0.085 | 8.81 | 12.66 | 1.22 | 0.12 | 0.09 | 0.02 | 0.014 | 2.47 | 100.6 | 0.08 | 0.064 | < 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 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 | 1130 | 6230 | 1320 | | | | | | | | | | | | | | | | | |
| CDN-PGMS-23 LABSTD | 511 | 1890 | 490 | | | | | | | | | | | | | | | | | |
| 13-001-081 Replicate Original | < 2 | 45 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-081 LABDUP | < 2 | 49 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-090 Replicate Original | | | | 45.23 | 21.76 | 6.94 | 0.089 | 8.69 | 12.79 | 1.30 | 0.12 | 0.09 | 0.02 | 0.010 | 2.42 | 99.62 | 0.08 | 0.063 | 0.004 | 0.019 |
| 13-001-090 LABDUP | | | | 45.56 | 21.71 | 6.95 | 0.087 | 8.59 | 12.74 | 1.28 | 0.12 | 0.10 | 0.02 | 0.009 | 2.42 | 99.75 | 0.08 | 0.063 | 0.004 | 0.020 |
| 13-001-091 Replicate Original | 2 | 36 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-091 LABDUP | < 2 | 42 | < 5 | | | | | | | | | | | | | | | | | |
| 13-001-100 Split Original | 7 | 102 | 10 | 50.67 | 14.79 | 10.14 | 0.171 | 11.68 | 8.61 | 1.77 | 0.31 | 0.23 | 0.02 | 0.021 | 2.16 | 100.6 | 0.01 | 0.026 | 0.007 | 0.007 |
| 13-001-100 LABPREP | 6 | 106 | 11 | 50.34 | 14.24 | 10.30 | 0.169 | 11.42 | 8.56 | 1.74 | 0.33 | 0.23 | 0.02 | 0.023 | 2.23 | 99.67 | 0.02 | 0.028 | 0.007 | 0.007 |
| 13-001-102 Replicate Original | 10 | 110 | 13 | | | | | | | | | | | | | | | | | |
| 13-001-102 LABDUP | 9 | 111 | 12 | | | | | | | | | | | | | | | | | |