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Miscellaneous Release—Data 294

Results from the Shining Tree, Chester Township and Matachewan Gold Projects and the Northern Cobalt Embayment Polymetallic Vein Project

Edited by J.A. Ayer¹, D.J. Kontak², R.L. Linnen³ and S. Lin⁴

¹Ayer and Associates Consulting, 352 Laval St., Sudbury, Ontario

²Department of Earth Sciences, Laurentian University, Sudbury, Ontario

³Department of Earth Sciences, Western University, London, Ontario

⁴Department of Earth and Environmental Sciences, University of Waterloo, Waterloo, Ontario

This release provides the results of studies—as part of the Discover Abitibi Initiative—on Archean gold mineralization in a number of different areas of the southern Abitibi greenstone belt and a study of Proterozoic vein mineralization. This data release consists of 3 sections, each co-authored by the research groups in the various areas:

Section 1: *Shining Tree and Gowganda Archean Gold Study and Northern Cobalt Embayment Proterozoic Vein Study*, by J.A. Ayer, T.J. Barrett, R.A. Creaser, M.A. Hamilton, B. Lafrance and G.M. Stott

Section 2: *Geological and Geochemical Studies of the Côté Lake Au(-Cu) Deposit Area, Chester Township*, by D.J. Kontak, R.A. Creaser and M.A. Hamilton

Section 3: *Synthesis of the Structure, Petrology, Geochronology and Geochemistry of the Young–Davidson Gold Deposit and Surrounding Area*, by R.L. Linnen, S. Lin, J. Zhang, R.D. Martin, N. Naderi, D.W. Davis, M.A. Hamilton, R.A. Creaser, B.R. Berger, N.R. Banerjee, B.A. Wing and C. Wu

Each section includes comprehensive results based on field studies and various analytical techniques including U/Pb zircon and Re/Os geochronology, lithogeochemistry, petrographic examination of thin sections, scanning electron microscope analysis of alteration and ore mineralogy, and stable isotopes (oxygen, sulphur and carbon) as well as detailed geological and structural mapping. This information has been used to provide syntheses of the setting, timing and characteristics of Archean gold mineralization in the study areas. Location data are provided in the Universal Transverse Mercator (UTM) projection and grid system, Zone 17, North American Datum 1983 (NAD83). Report files are provided in portable document format (.pdf) and analytical results, as Microsoft® Excel® (.xls and/or .xlsx) files.

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File or Folder Name	Description
<i>Readme.pdf</i>	This document. Contains the <i>Terms of Use</i> and information about this MRD.
<i>Metadata.pdf</i>	MRD 294 metadata
Section 1_ ShiningTree_Gowganda Folder	<p>Contains a main report (<i>Section 1 ShiningTree_GowgandaReport.pdf</i>) and 2 subfolders (Back Pocket Map + Section 1 Appendix Tables)</p> <p><u>Report:</u> <i>Shining Tree and Gowganda Archean Gold Study and Northern Cobalt Embayment Proterozoic Vein Study</i> by J.A. Ayer, T.J. Barrett, R.A. Creaser, M.A. Hamilton, B. Lafrance and G.M. Stott</p> <p><u>Back Pocket Map folder</u> contains <i>DA_SHINING_TREE_back pocket map.pdf</i>, a geological map of the Shining Tree area, showing MDI occurrences and geochronology information</p> <p><u>Appendix Tables folder</u> contains 2 Microsoft®Excel®2003 (.xls) and 4 Microsoft®Excel® 2010 tables (.xlsx) discussed in the Section 1 report:</p> <ul style="list-style-type: none">• Table 1A. TIMS zircon data.xls• Table 1B. LA-ICPMS zircon data.xls• Table 2 SHINING TREE 2011geochem.xlsx• Table 3 SHINING TREE historical geochem.xlsx• Table 4. Silicate Oxide %.xlsx• Table 5. Carbonate Cation Proportions.xlsx
Section 2_CoteLake Folder	<p>Contains a report (<i>Section 2 CoteLakeReport.pdf</i>) and 1 subfolder (Analyses Appendix Folder)</p> <p><u>Report:</u> <i>Geological and Geochemical Studies of the Côté Lake Au(-Cu) Deposit Area, Chester Township</i> by D.J. Kontak, R.A. Creaser and M.A. Hamilton</p> <p><u>Analyses Appendix Folder</u> contains 3 Microsoft®Excel®2003 (.xls) tables discussed in the Section 2 report:</p> <ul style="list-style-type: none">• Table 1 U_Pb analyses.xls• Table 3 Major and trace geochem.xls• Table 4 Isotopes.xls

Section 3_YoungDavidson Folder

Contains a report (*Section 3_YoungDavidsonReport.pdf*) and 1 subfolder (Analyses Appendix Folder)

Report: *Synthesis of the Structure, Petrology, Geochronology and Geochemistry of the Young–Davidson Gold Deposit and Surrounding Area*

by R.L. Linnen, S. Lin, J. Zhang, R.D. Martin, N. Naderi, D.W. Davis, M.A. Hamilton, R.A. Creaser, B.R. Berger, N.R. Banerjee, B.A. Wing and C. Wu

Analyses Appendix Folder contains 1 Microsoft®Excel®2003 (.xls) and 2 Microsoft®Excel® 2010 tables (.xlsx) discussed in the Section 3 report:

- 180 Whole Rock appendix.xlsx
- Table 1A. TIMS zircon data.xls
(Note: this file is from Section 1 of the MRD)
- Wholerock appendix.xlsx

This publication can be downloaded from

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Discover Abitibi

A project of innovation, cooperation and revitalization

Découvrons l'Abitibi

Un projet d'innovation, de coopération et de renouvellement

Discover Abitibi Initiative

The Discover Abitibi Initiative is a regional, cluster economic development project based on geoscientific investigations of the western Abitibi greenstone belt. The initiative, centred on the Kirkland Lake and Timmins mining camps, will complete 19 projects developed and directed by the local stakeholders. FedNor, Northern Ontario Heritage Fund Corporation, municipalities and private sector investors have provided the funding for the initiative.

Initiative Découvrons l'Abitibi

L'initiative Découvrons l'Abitibi est un projet de développement économique régional dans une grappe d'industries, projet fondé sur des études géoscientifiques de la ceinture de roches vertes de l'Abitibi occidental. Cette initiative, centrée sur les zones minières de Kirkland Lake et de Timmins, mènera à bien 19 projets élaborés et dirigés par des intervenants locaux. FedNor, la Société de gestion du Fonds du patrimoine du Nord de l'Ontario, municipalités et des investisseurs du secteur privé ont fourni les fonds de cette initiative.

