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These data accompany
Preliminary Map P.3813, *Precambrian Geology of Adrian Township, Shebandowan Greenstone Belt, Wawa–Abitibi Terrane*.

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Miscellaneous Release—Data 346

Geological, Geochemical and Geophysical Data from Adrian Township, Shebandowan Greenstone Belt, Wawa–Abitibi Terrane

by L.M. Ratcliffe

This publication can be downloaded from

http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD346

This digital data release consists of geological information (field descriptions and field photographs), whole-rock geochemical data, petrographic data and magnetic susceptibility data, derived from bedrock geological mapping in 2015 and 2016, at a scale of 1:20 000, in Adrian Township within the Shebandowan greenstone belt. This release comprises 56 photographs (as *.jpg* files), 4 Microsoft® Excel® 2010 (*.xlsx*) files and 3 documents in portable document format (*.pdf*). These data augment Preliminary Map P.3813, *Precambrian Geology of Adrian Township, Shebandowan Greenstone Belt, Wawa–Abitibi Terrane*; the marginal notes and the geological legend for this map are also provided.

Data are organized into 5 folders:

1. Field Data
2. Geochemistry
3. Geology
4. Geophysics
5. Petrography

1. Field Data. This folder contains 1 Microsoft® Excel® 2010 (.xlsx) workbook file and 1 subfolder with 56 photographs (as .jpg files). Photos in the “Field Photographs” subfolder were taken during the summers of 2015 and 2016 as part of the mapping project.

MRD346_Adrian_Field-Data-2015-2016.xlsx consists of 3 worksheets of information collected by L.M. Ratcliffe and field assistants during the summers of 2015 and 2016 (or through follow-up work) as part of bedrock geological mapping in 2015 and 2016, at a scale of 1:20 000, in Adrian Township. Locations are provided as Universal Transverse Mercator (UTM) co-ordinates using North American Datum 1983 (NAD83), Zone 16.

“Station_summary” worksheet provides a summary of each station mapped in Adrian Township during the summers of 2015 and 2016. The worksheet includes the geographic co-ordinates for each station in Universal Transverse Mercator (UTM), a description of the outcrop and the rock code for that station, as published on Preliminary Map P.3813 (Ratcliffe 2017). In addition, columns labelled “Field Photograph”, “Geochemical Sample with Number” and “Thin Section with Number” show which stations have additional data related to that station available as part of this data release (MRD 346). The column labelled “Geochronology Sample with Number” indicates the stations at which samples were collected for geochronological analysis.

“Structural_data” worksheet contains the raw structural data collected using a customized ESRI® ArcPad® application on a portable computer (Trimble® Juno™ SB handheld global positioning system (GPS) device). The data set includes station information, structure type, structure symbol, orientations and notes of each feature. The symbol abbreviations in this worksheet correspond to those listed in Jackson, Muir and Romkey (1995, 2010).

“Field-photographs_captions” worksheet provides the field photograph number, station number, map unit and rock code, and a brief photo description that identifies the scale used in the photo. Photo file names for the .jpg files are based on station number, e.g., 15LMR031, and a number of photos from that station, e.g., 15LMR031-2 is photograph number 2 (“-2”) from station 15LMR031 in 2015.

Field Photographs subfolder contains 56 photos (as .jpg images) that are representative of the primary rock types observed in Adrian Township in 2015 and 2016. Each image is labelled according to the station number for the outcrop at which the photograph was taken. The photo number, listed in the “Station_summary” worksheet under the heading “Field Photograph”, includes the station number.

2. Geochemistry. This folder contains 1 Microsoft® Excel® 2010 (.xlsx) file and 1 portable document format (.pdf) file.

MRD346_Adrian_Geochemistry.xlsx consists of 1 worksheet that contains the results of all geochemical analyses performed at the Geoscience Laboratories (Geo Labs), Ontario Geological Survey, Sudbury, for samples collected in Adrian Township. Analyses for major and trace elements (and oxides), specific gravity and loss-on-ignition values, as well as assay analyses for gold, platinum and palladium are included. The methods used, lower detection limit for each method, and reported units for each method are included for each element (and oxide) listed. This worksheet also contains general information, including “Sample Number”, “Map Code”, “Rock Type”, “Field Description” and location data (“Township”, “Easting” and “Northing”), for each sample collected; UTM co-ordinates are provided in NAD83, Zone 16.

2015 Geo Labs Brochure.pdf describes the analytical methods used at the Ontario Geological Survey Geoscience Laboratories for samples collected in 2015 and 2016.

3. Geology. This folder contains 2 portable document format (.pdf) files related to a map associated with this project. Preliminary reports on the geological mapping of Adrian Township were published by Ratcliffe (2015, 2016); these reports are related to this project, but are not provided herein.

P3813_Legend.pdf is the general legend (rock codes) used as the base for Ontario Geological Survey Preliminary Map P.3813, *Precambrian Geology of Adrian Township, Shebandowan Greenstone Belt, Wawa–Abitibi Terrane* (Ratcliffe 2017). Material in the geochemistry and thin section workbook files are cross-referenced to the map codes in this legend.

P3813_Marginal Notes.pdf provides additional information about Adrian Township using a version of the marginal notes, with 2 figures and 3 tables, from Preliminary Map P.3813. Figure 1 is an interpretation of the stratigraphic units in Adrian Township; and Figure 2 shows the second vertical derivative of the residual magnetic field and electromagnetic conductors. Table 1 summarizes the diamond-drill core data; Table 2 summarizes the geochronological data; and the “Occurrences” table lists the main mineral occurrences in the township.

4. Geophysics. This folder contains 1 Microsoft® Excel® 2010 (.xlsx) file.

MRD346_Adrian_Magnetic Susceptibility Data-2015-2016.xlsx contains 2 worksheets.

“Mag sus data_Adrian” worksheet provides magnetic susceptibility data from the study area collected during the summers of 2015 and 2016.

Measurements were collected using an Exploranium® KT-10 magnetic susceptibility meter. Magnetic susceptibility is defined as the degree to which a substance can be magnetized and, in this case, is expressed as the ratio of the intensity of magnetization (k) to the ratio of the Earth’s magnetic field to magnetic field induced by the susceptibility meter. The readings (k) are expressed as 10^{-3} times the SI unit for susceptibility and are dimensionless. The minimum value that can be recorded by the meter is 0.01×10^{-3} SI units; the largest value is 999×10^{-3} SI units. Sample location information is given in UTM co-ordinates, NAD83, Zone 16.

“Pick Lists, Notes” worksheet provides additional information about the pick-lists for fields (“Geological Province”, “Meter Number”, “UTM Zone”, “Rock Type Pick List”, “Rock Types Corresponding to Pick List”, “Dike Swarm Name”, “Metamorphic Grade”) used in the workbook.

5. Petrography. This folder contains 1 Microsoft® Excel® 2010 (.xlsx) file.

MRD346_Adrian_Petrography.xlsx consists of 1 worksheet that contains brief descriptions of thin sections of samples collected from Adrian Township during the 2015 and 2016 field seasons.

Abbreviations Used

Abbreviation	Description
ank	ankerite
c	carbonate
chl	chlorite
cp	chalcopyrite
cv	calcite vein
grt	garnet
hem	hematite
po	pyrrhotite
py	pyrite
qv	quartz vein
slf	silicification
SM	sulphide mineralization
srp	serpentine

References

Jackson, S.L., Muir, T.L. and Romkey, S.W. 1995. A library of digital bedrock mapping symbols. Part 1: Figures and descriptions; Ontario Geological Survey, Open File Report 5909, 56p.

——— 2010. Digital bedrock mapping symbols; Ontario Geological Survey, Miscellaneous Release—Data 252.

Ratcliffe, L.M. 2015. Geology and mineral potential of Adrian Township, Shebandowan greenstone belt, Wawa–Abitibi terrane; *in* Summary of Field Work and Other Activities, 2015, Ontario Geological Survey, Open File Report 6313, p.11-1 to 11-14.

——— 2016. Preliminary results from geological mapping in Adrian and Marks townships, Shebandowan greenstone belt, Wawa–Abitibi terrane; *in* Summary of Field Work and Other Activities, 2016, Ontario Geological Survey, Open File Report 6323, p.12-1 to 12-14.

——— 2017. Precambrian geology of Adrian Township, Shebandowan greenstone belt, Wawa–Abitibi terrane; Ontario Geological Survey, Preliminary Map P.3813, scale 1:20 000.