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These data accompany
Preliminary Map P.3785, *Precambrian Geology of the Mud Lake Area, Grenville Province*.

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Miscellaneous Release—Data 327

Geological, Geochemical and Geophysical Data Related to the Mud Lake Area, Grenville Province

by M. Duguet

This publication can be downloaded from

http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD327

This release contains field photographs, and whole-rock chemistry and magnetic susceptibility data collected as part of 1:20 000 scale mapping in the Mud Lake area (Project Unit 13-014) during the summers of 2013, 2014 and 2015. Also included are previously published articles related to the project. This release comprises 78 photographs (as *jpg* files), 2 Microsoft[®] Excel[®] 2003 (*.xls*) workbook files and 3 documents in portable document format (*.pdf*). These data augment Preliminary Map P.3785, *Precambrian Geology of the Mud Lake Area, Grenville Province*; the geological legend for the map is also provided.

Data are organized into 4 folders:

1. Geochemistry
2. Geology and Publication
3. Geophysics
4. Photographs

1. Geochemistry. This folder contains 1 Microsoft® Excel® 2003 (.xls) file.

MRD327_Mud Lake_Geochemistry.xls consists of 1 worksheet that contains the results of whole-rock geochemical analyses performed at the Geoscience Laboratories (Geo Labs), Ontario Geological Survey, Sudbury.

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 location data (“Easting”, “Northing”, and “Township”), “Rock Type”, and stratigraphic information, if known, for each sample collected; UTM co-ordinates are provided in North American Datum 1983 (NAD83), Zone 18.

“Whole rock data” worksheet contains 248 whole-rock geochemical analyses and 11 duplicate analyses from this study acquired from samples collected during the summer of 2013. Sample descriptions and thin section descriptions (when available) are also provided.

2. Geology and Publication. This folder contains 2 portable document format (.pdf) files, one of which is a publication associated with this project.

MRD327_SoFW2013-15_Duguet et al.pdf: An article (Duguet, Dubé-Bourgeois and Ma 2013), published in the Ontario Geological Survey *Summary of Field Work and Other Activities, 2013* volume, outlines the activities and results of field work for this project (Project Unit 13-014) during the summer of 2013.

P3785_Legend.pdf is the general legend used as the base for Ontario Geological Survey Preliminary Map P.3785, *Precambrian Geology of the Mud Lake Area, Grenville Province* (Duguet, Dubé-Bourgeois and Ma 2016). Material in the geochemistry file and the photograph captions file are cross-referenced to map codes in the legend.

3. Geophysics. This folder contains 1 Microsoft® Excel® 2003 (.xls) file.

MRD327_Mud Lake_Magnetic Susceptibility Data.xls contains 2 worksheets.

“Mag sus data” worksheet provides magnetic susceptibility data from the study area collected during the summers of 2013, 2014 and 2015.

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 0.001×10^{-3} SI units; the largest value is 999×10^{-3} SI units. Sample location information is given in UTM co-ordinates, Zone 18, NAD83.

“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.

4. Photographs. This folder contains 78 field photographs (as .jpg files) and 1 portable document format (.pdf) file. The photographs were taken during the summers of 2013, 2014 and 2015 as part of the mapping project.

MRD327_Mud Lake_Photo Captions.pdf provides the station location, a brief photo description and identifies the scale used in the photo. Photo file names for the .jpg files are based on station location, e.g., 13MD006C_N is photograph number 3 (“C”), from station MD006 in 2013, with the camera facing to the north. Station location information is given in UTM co-ordinates, Zone 18, NAD83.

Mineral Abbreviations Used in Data Files

ab	albite	ep	epidote	py	pyrite
act	actinolite	fsp	feldspar	qtz	quartz
amph	amphibolite	grt	garnet	rt	rutile
ap	apatite	gru	grünerite	scp	scapolite
bt	biotite	hbl	hornblende	sill	sillimanite
cal	calcite	ilm	ilmenite	spl	spinel
carb	carbonate	kfs	potassium feldspar	spn	sphene (titanite)
chl	chlorite	mag	magnetite	tr	tremolite
cpx	clinopyroxene	ms	muscovite	tur	tourmaline
di	diopside	phl	phlogopite	zo	zoisite
dol	dolomite				

References

Duguet, M., Dubé-Bourgeois, V. and Ma, S. 2013. Geology and mineral potential of the Admaston–Horton and Mud Lake map areas, northeastern Central Metasedimentary Belt, Grenville Province; *in* Summary of Field Work and Other Activities 2013, Ontario Geological Survey, Open File Report 6290, p.15-1 to 15-12.

——— 2016. Precambrian geology of the Mud Lake area, Grenville Province; Ontario Geological Survey, Preliminary Map P.3785, scale 1:20 000.

Duguet, M., Magnus, S.J. and Ratcliffe, L. 2014. Precambrian geology of the Admaston area, Grenville Province; Ontario Geological Survey, Preliminary Map P.3783, scale 1:20 000.