

MRD322-REV METADATA

GENERAL INFORMATION

Title

Indicator Mineral and Geochemistry Data for the Till and Alluvium Sampling Survey in the McFaulds Lake ("Ring of Fire") Area, Northern Ontario

Alternate Title

MRD322-REV

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Date of Publication

March 2, 2021

Abstract

This digital data release is a revision of Miscellaneous Release—Data (MRD) 322, which was published in 2016. These digital data present the results of a regional till and modern alluvium sampling survey in the McFaulds Lake ("Ring of Fire") area, in northern Ontario. The samples were collected during the summer field seasons between 2011 and 2015.

The data consist of indicator mineral grain counts, geochemical and compositional data of kimberlite indicator minerals (KIMs), chromite, metamorphic/magmatic massive sulphide indicator minerals (MMSIM^{®1}), and gold grains recovered from till and river sand and gravel (alluvium) samples. In addition, this revised version provides bulk mineralogy of fine-fraction, 0.125–0.25 mm nonmagnetic heavy mineral concentrates (HMC); proportional dot maps of the spatial distribution of the fine-fraction detrital chromite grains; and an expanded microprobe data of detrital chromite grains, including those from sand- to pebble-size chromitite clasts.

In this digital data release, Appendix 8 has been revised, and Appendixes 18, 19 and 20 provide new data.

The files contain specific information on sample site locations, sample processing data, KIMs picked and picking remarks, electron probe microanalyzer results of KIM and chromite grains, adjusted KIM results, gold grain data, MMSIM^{®1} data, clastic lithology data and geochemical data from the <0.063 mm fraction of the bulk samples, as well as the spatial distribution of the fine-fraction detrital chromite grains and photomicrographs of the chromitite clasts. This release comprises 19 Microsoft[®] Excel[®] 2010 and Microsoft[®] Excel[®] for Office 365 (.xlsx) files, 20 backscattered electron images (.tif files) and 1 document in portable document format (.pdf).

This release supplements Open File Report (OFR) 6309 (available separately) providing the data (as 20 appendixes) generated during the study. Four of the appendixes (1, 6, 9, 11) are included in OFR 6309. Three appendixes (18, 19, 20) provide new data, and are not discussed in OFR 6309.

Footnote: ¹ MMSIM is a registered trademark of Overburden Drilling Management Limited, Nepean, Ontario.

Additional information can be found within a readme file provided with the product.

Purpose or Objective

This publication reports on part of a multi-year study of the McFaulds Lake ("Ring of Fire") area, northern Ontario.

The objective of this product is to collect and disseminate geoscience information for Ontario.

Keywords

Geological Survey

Geology

Ministry of Energy, Northern Development and Mines

ENDM

Ministry of Northern Development and Mines

MNDM

Ontario Geological Survey

OGS

Miscellaneous Release—Data

MRD

Glacial Dispersal

Till

Alluvium

Sampling

Prospecting

Indicator Minerals

Metamorphic/Magmatic Massive Sulphide Indicator Mineral (MMSIM)

Chromite

Northern Ontario

Business Themes

Geological Survey

Geology

GEOGRAPHIC INFORMATION

Geographic bounding box (decimal degrees)

North bounding latitude:	53.7492°
West bounding longitude:	-87.4980°
East bounding longitude:	-85.7738°
South bounding latitude:	52.1180°

Description of Completeness: irregularly shaped study area - completeness not available

MAPPING INFORMATION:

Grid Coordinate System Used:	Universal Transverse Mercator
Map Projection:	Transverse Mercator
Horizontal Geodetic Datum:	NAD83
Vertical Datum:	Not Applicable
Horizontal Position Accuracy of Features:	Precise ± 5 m
Vertical Position Accuracy of Features:	Not Applicable

DATA SOURCE INFORMATION

Data Source Type and Description

Includes Bibliographic Information: Product includes references to other sources of information

Data Source Type and Description

Direct Field Collection: Field work conducted from July 2011 to Aug 2015.

Current Status of the Data: Complete

Frequency of Changes or Additions to be made to the Data: Not Planned

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Gao, C., Crabtree, D.C., Dyer, R.D. and Clarke, S.A. 2021. Indicator mineral and geochemistry data for the till and alluvium sampling survey in the McFaulds Lake (“Ring of Fire”) area, northern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 322-Revised.
ISBN 978-1-4868-5024-2 (CD) ISBN 978-1-4868-5025-9 (zip file)

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The Language in which Data are Distributed: English

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METADATA

Date of this Metadata Description: March 2, 2021