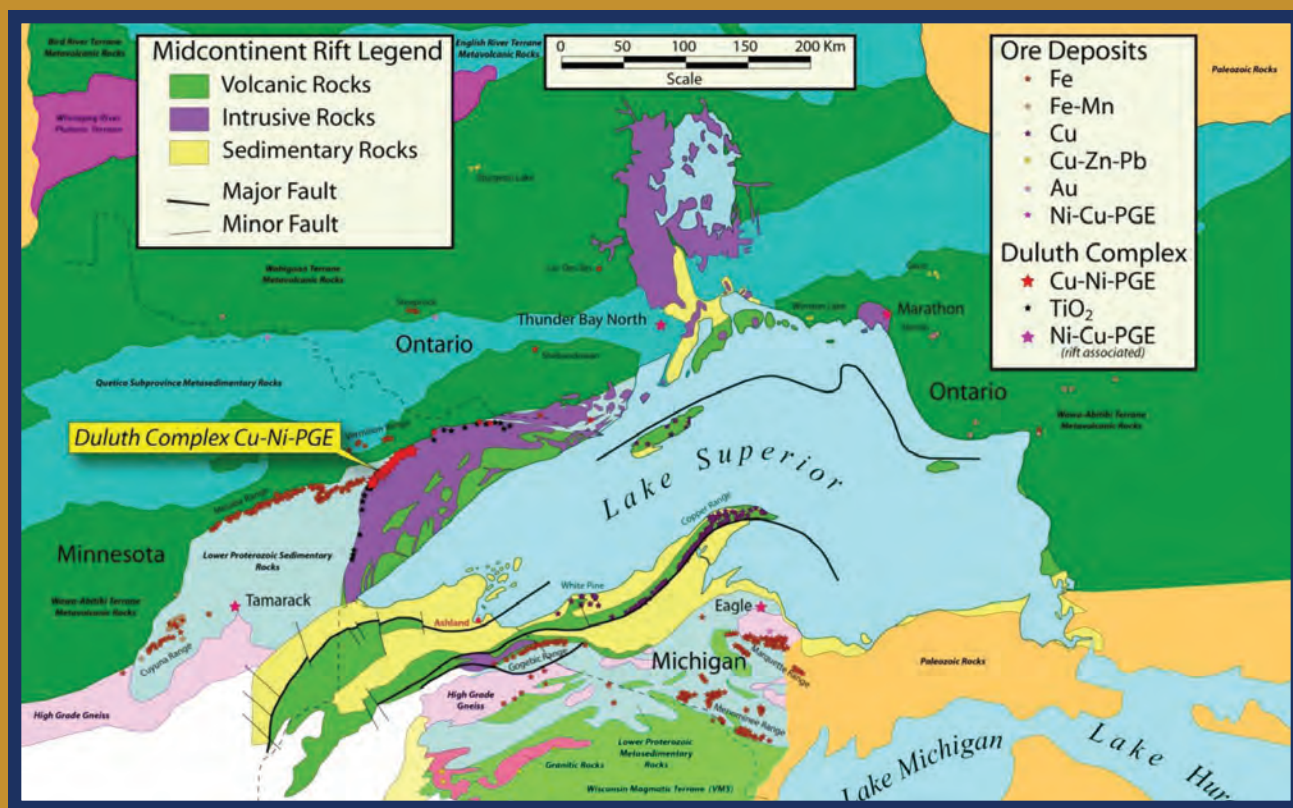




www.segweb.org

Non-Ferrous Mineralization Associated with the Wawa-Abitibi Terrane and Duluth Complex Cu-Ni-PGM Deposits, Northeastern Minnesota



Prepared for the Society of Economic Geologists Field Trip
September 22-25, 2014

Field Trip Leaders
G.J. Hudak and D. Peterson

SOCIETY OF ECONOMIC GEOLOGISTS, INC.

GUIDEBOOK SERIES
OF THE
SOCIETY OF ECONOMIC GEOLOGISTS, INC.

Guidebook 47

Print

ISSN 1547-3090

ISBN 978-1-629490-52-6

CD-ROM

ISSN 1547-3104

ISBN 978-1-629490-53-3

Online

ISSN 2374-6955

ISBN 978-1-629494-84-5

Digital version (on CD-ROM or as a pdf file) available from
Society of Economic Geologists, Inc.
7811 Shaffer Parkway
Littleton, Colorado 80127

Tel. 1.720.981.7882

Fax: 1.720.981.7874

Bookstore: www.segweb.org/store

Publication date: September 2014

On the cover: Map showing the regional geology of the Lake Superior area illustrating wide variety of mineral deposit types (modified from D. M. Peterson, 2013). See p. 2.

CONTENTS

Introduction	
<i>George J. Hudak and Dean Peterson</i>	1
Part 1 - Day 1. Lithostratigraphy, Hydrothermal Alteration, and Mineralization.	5
Field Trip [Introduction].	35
Field Trip Stops [Day 1].	38
Part 2 - Day 2. Cu-Ni-PGM Deposits of the Duluth Complex.	63
Field Trip Stops [Day 2].	64
Part 3 - Day 3. Drill Core Examination.	79
PolyMet NorthMet Deposit.	92
Teck American Mesaba Deposit.	111
Twin Metals Minnesota Maturi Deposit.	127
References.	141