

We are committed to providing [accessible customer service](#).
If you need accessible formats or communications supports, please [contact us](#).

Nous tenons à améliorer [l'accessibilité des services à la clientèle](#).
Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez [nous contacter](#).

2016 GEOLOGICAL MAPPING PROGRAM: NIPISSING DIABASE PROJECT

LONG TOWNSHIP, SAULT STE. MARIE MINING DIVISION, ONTARIO, CANADA

DARIEN AGGREGATES INC.

222 MARTINDALE RD.

RR#3

ST. CATHARINES, ON

L2R 6P9

December 5th, 2016

Prepared By:



JMK EXPLORATION CONSULTING

147 LAKESIDE DR.

NORTH BAY, ONTARIO

P1A 3E1

JOERG KLEINBOECK, B.SC., P.GEO.

TABLE OF CONTENTS

1.0 INTRODUCTION	2
2.0 PROPERTY DETAILS	2
2.1 Location and Access	2
2.2 Topography and Vegetation	3
2.3 Claims	3
3.0 PREVIOUS WORK.....	4
4.0 GEOLOGY	5
4.1 Regional and Property Geology	5
5.0 GEOLOGICAL MAPPING PROGRAM.....	6
5.1 Methods.....	6
6.0 CONCLUSIONS & RECOMMENDATIONS.....	7
6.0 REFERENCES	8

LIST OF FIGURES

Figure 1: Location of the Nipissing Diabase Project.....	3
Figure 2: Tenure of the Nipissing Diabase Project.....	5

LIST OF TABLES

Table 1: Claim Details of the Nipissing Diabase Project.....	4
--	---

LIST OF APPENDICES

Appendix I Statement of Qualifications

MAPS

Map 1: Updated Geology of the Nipissing Diabase Project

1.0 INTRODUCTION

JMK Exploration Consulting was contracted by Darien Aggregates Inc. (“Darien”) to complete a technical report for assessment purposes on the geological mapping program that was completed on the Nipissing Diabase Project.

During the installation of ground water monitoring wells in January of 2015, the diamond drill core was logged by the author. In some cases, the geology encountered in the drill holes did not correspond with the geology shown in OGS Map 2186, and therefore it was recommended by the author to complete a geological mapping program in the areas identified by Darien as having potential to host a high quality aggregate resource within the Nipissing Diabase to confirm lithological boundaries of the various rock types on the Property.

From June 27th through to July 1st, 2016, geological mapping was completed on unpatented claims 4219196, 4223995, and 3009531.

2.0 PROPERTY DETAILS

2.1 Location and Access

The Nipissing Diabase Project is situated in Long Township, located approximately 140 km west-southwest of Sudbury, Ontario (Figure 1). The Project is bounded by UTM coordinates 363800E to 367650E, and 5116850N to 5121915N (NAD83, Z17N) and is covered by National Topographic System (NTS) map sheets 41J/07 and 41J/02.

Access to the claims is provided by an atv trail located along the side of Pronto Road, located 15km east of Blind River, Ontario. The western part of the Property can be accessed by boat through Lake Lauzon.

Limited resources and lodging are available in the nearby town of Blind River. However, a full range of equipment, supplies, services, and skilled labour that would be required for any exploration and mining work are available in the nearby city of Sudbury, Ontario.

2.2 Topography and Vegetation

The topography of the area is variable from relatively flat lying, gentle relief in the area of Highway 17 and the north shore of Lake Huron where the elevation is approximately 180 m ASL to relatively rugged with a maximum of 270 m ASL. The topography is controlled by bedrock features and the Nipissing Diabase forms topographic highs with locally steep scarps into lakes and drainages (Lavigne, 2009).

2.3 Claims

The Nipissing Diabase Project consists of 8 contiguous unpatented mining claims, as well as 1 non-contiguous unpatented mining claim totalling 832 ha in area (Figure 2). Details of the unpatented mining claims are provided in Table 1. Darien acquired the property by staking.



Figure 1: Location of the Nipissing Diabase Project.

Table 1: Claim Details of the Nipissing Diabase Project.

Township / Area	Claim Number	Recording Date	Claim Due Date	Work Required	Total Applied	Total Reserve	Claim Bank
LONG	3009531	2009-Nov-25	2017-Nov-25	\$854	\$18,746	\$0	\$0
LONG	4219196	2007-Jun-08	2017-Jun-08	\$5,900	\$48,100	\$0	\$0
LONG	4223995	2007-Jun-08	2017-Jun-08	\$3,904	\$39,296	\$0	\$0
LONG	4242337	2012-Jul-17	2020-Jul-17	\$344	\$2,456	\$0	\$0
LONG	4268515	2012-Jan-17	2017-Jan-17	\$768	\$5,632	\$0	\$0
LONG	4268517	2012-Jan-17	2017-Jan-17	\$1,600	\$4,800	\$0	\$0
LONG	4268518	2012-Jan-17	2018-Jan-17	\$785	\$3,215	\$0	\$0
LONG	4277091	2012-Jan-17	2017-Jan-17	\$1,600	\$4,800	\$0	\$0
LONG	4277092	2012-Jan-17	2017-Jan-17	\$1,200	\$3,600	\$0	\$0

3.0 PREVIOUS WORK

2006: Darien Resources Inc. completed limited reconnaissance prospecting.

2009: Darien Resources Inc. completed 5 diamond drill holes totalling 301 m located to the northwest of the current land package.

2011: Darien Resources Inc. completed trenching and bulk sampling on claims 3009531, 4219196, and 4223995.

2015: Darien Resources Inc. completed the installation of 7 ground water monitoring wells. The diamond drill core was logged and submitted for assessment.

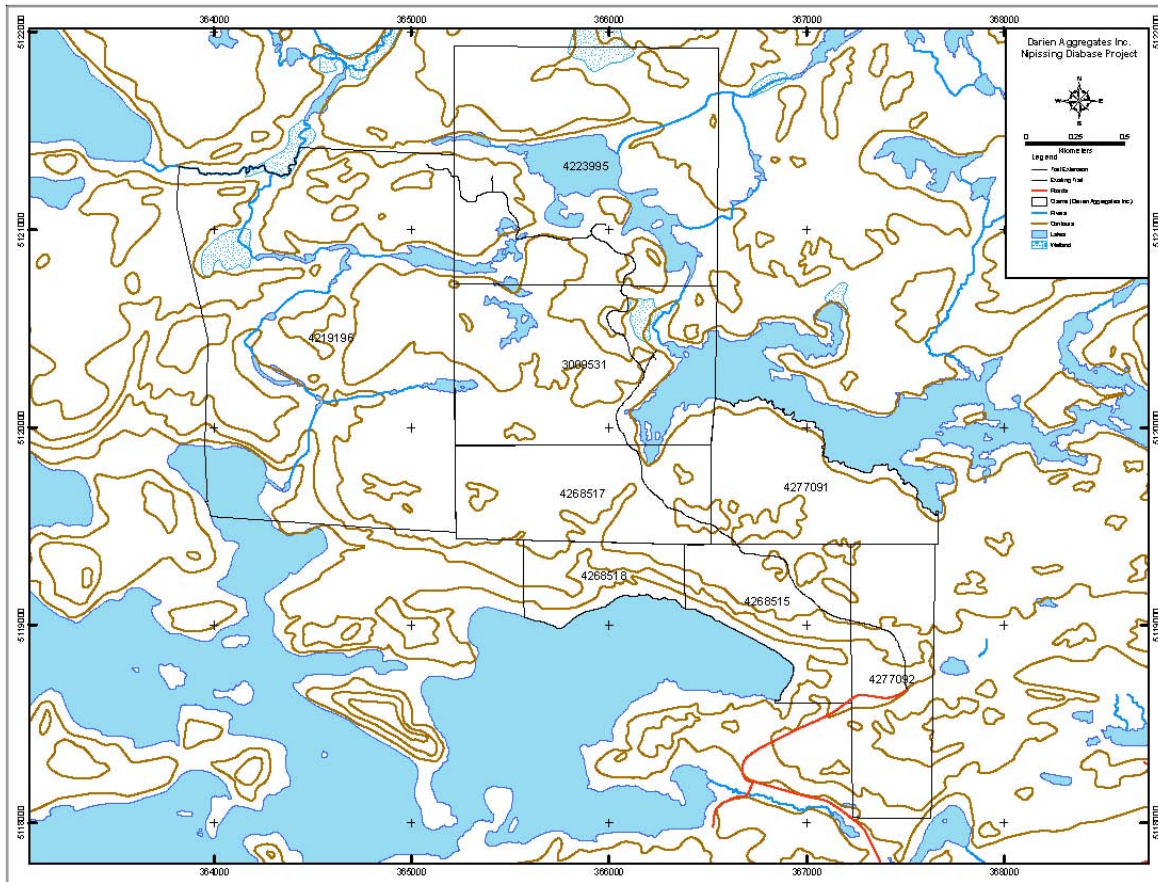


Figure 2: Tenure of the Nipissing Diabase Project.

4.0 GEOLOGY

4.1 Regional and Property Geology

The Project is located within the Southern Structural Province of the Canadian Shield which, in general terms, consists of an Archean basement overlain by the Early Proterozoic Huronian Supergroup and intruded by a number of felsic to mafic intrusive bodies that range in age from Early to Middle Proterozoic. The Archean rocks exposed on in the Project area consist dominantly of massive to gneissic granitic rocks. Huronian rocks present in the Project area include the Lower and Middle Mississagi Formations (feldspathic quartzite, arkose to greywacke, siltstone and argillite respectively) and the

Gowganda Formation (interbedded conglomerate, feldspathic quartzite, argillite, and siltstone). The southeastern part of the main block of claims include mafic metavolcanic rocks and related chloritic sedimentary rocks. Both the Archean granitic rocks and the Huronian sedimentary rocks are intruded by mafic intrusive rocks known as Nipissing Diabase during the Hudsonian Orogeny at approximately 2155 Ma. In the Project area, these intrusions form west to northwest trending, vertical to steeply dipping, dyke or sill-like bodies that typically range in thickness from a few metres to < 100 metres, however, a number of thicker intrusions have been mapped. The dykes consist dominantly of diabase, gabbro, and diorite (Lavigne, 2009).

5.0 GEOLOGICAL MAPPING PROGRAM

5.1 Methods

JMK Exploration Consulting was contracted by Darien Aggregates Inc. (“Darien”) to complete a technical report for assessment purposes on the geological mapping program that was completed on the Nipissing Diabase Project.

During the installation of ground water monitoring wells in January of 2015, the diamond drill core was logged by the author. In some cases, the geology encountered in the drill holes did not correspond with the geology shown in OGS Map 2186, and therefore it was recommended by the author to complete a geological mapping program in the areas identified by Darien as having potential to host a high quality aggregate resource within the Nipissing Diabase to confirm lithological boundaries of the various rock types on the Property.

From June 27th through to July 1st, 2016, geological mapping was completed on unpatented claims 4219196, 4223995, and 3009531.

The mapping confirmed that the lithological contacts of the Nipissing Diabase differs from what is shown on OGS Map 2186. Although, not conclusive, it would appear that the contacts of the Nipissing Diabase are sub-vertical to vertical. Typically the contact is marked by low lying linear wetlands. On the north side of the Nipissing Diabase sill on unpatented claim 4219195, one outcrop did show the contact to be steeply dipping to the south. There is also evidence of a northeast trending fault that offsets the Nipissing Diabase dextrally for a distance of approximately 250 m. The orientation of this interpreted fault is also shown as a regional structural trend on Map 2186. Two northwest trending olivine diabase dykes were also mapped in the field. These dykes are strongly magnetic and cross cut all lithologies in the mapping area.

Map 1, located in the back pocket, displays the results from the geological mapping program.

6.0 CONCLUSIONS & RECOMMENDATIONS

The lithological contacts of the Nipissing Diabase were found to differ from what is shown on OGS Map 2186. The updated geological interpretations should be incorporated into Darien's future plans for obtaining an aggregate permit for this area.

Darien should also complete a reconnaissance geological mapping in the southern half of unpatented claim 4219195 to verify that there is no further occurrences of Nipissing Diabase.

6.0 REFERENCES

Johns, G.W., McIlraith, S., and Muir, T.L. 2003. Precambrian Geology compilation map –Sault Ste. Marie-Blind River sheet; Ontario Geological Survey, Map 2670, scale 1:250 000.

Lavigne, J. 2009. Report on Diamond Drilling on Claim 4223988, Nipissing Diabase Project, Long and Striker Townships, Sault Ste. Marie Mining Division. Darien Resources Inc., 11 p.

Appendix I

Statement of Qualifications

I, Joerg Martin Kleinboeck of 147 Lakeside Drive, North Bay, Ontario, do hereby certify that:

I am a graduate of Laurentian University, Sudbury, Ontario with a B.Sc. Geology, 2000, and have been practising my profession as a geologist since.

I am a member with the Association of Professional Geoscientists of Ontario (#1411).

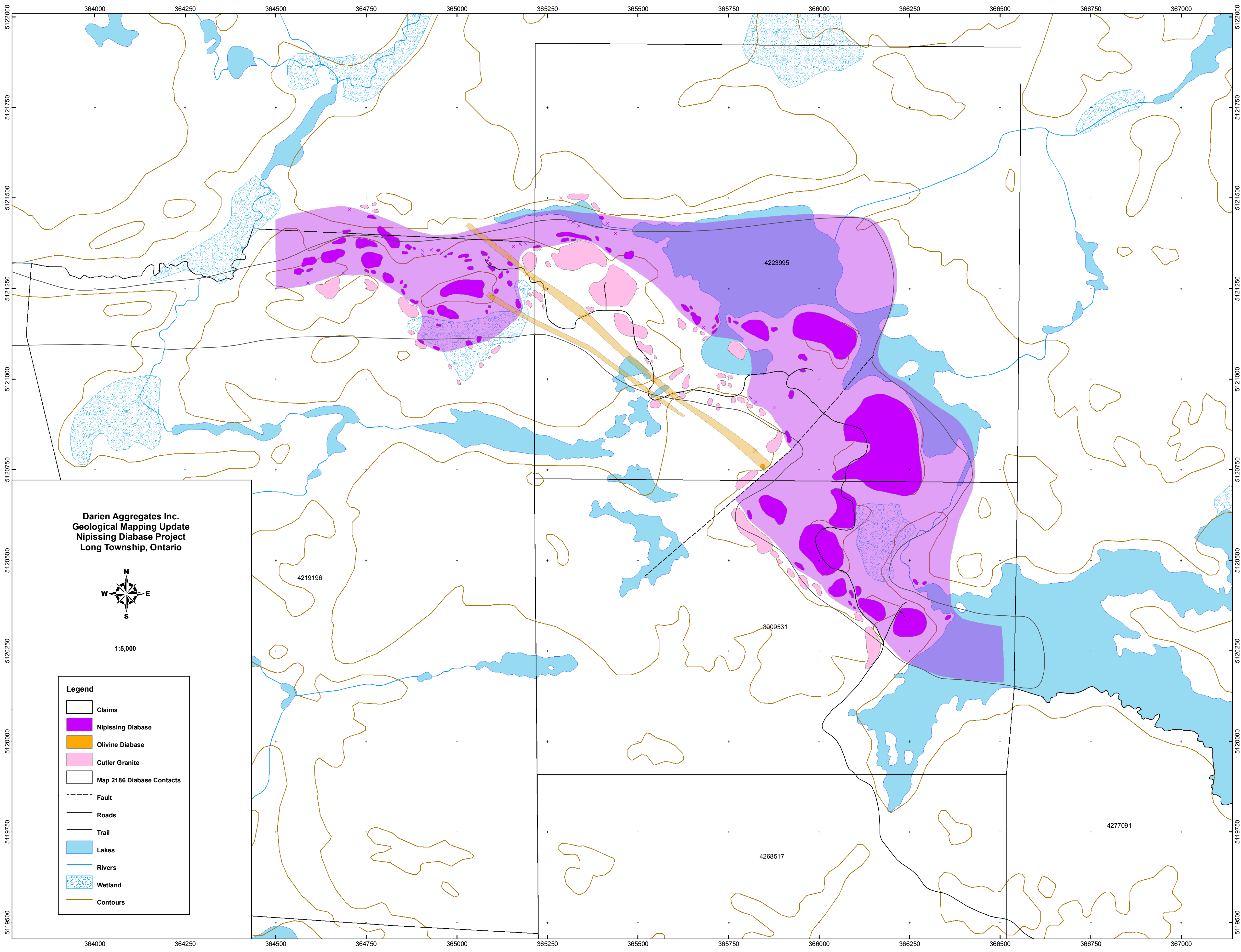
I am a member of the Prospectors & Developers Association of Canada (PDAC).

I hold no interests in the securities of Darien Aggregates Inc.

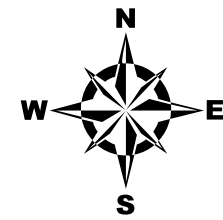


Joerg Martin Kleinboeck
JMK Exploration Consulting
North Bay, Ontario
December 5th, 2016

Maps
(Back Pocket)



**Darien Aggregates Inc.
Geological Mapping Update
Nipissing Diabase Project
Long Township, Ontario**



1:5,000

Legend

- Claims
- Nipissing Diabase
- Olivine Diabase
- Cutler Granite
- Map 2186 Diabase Contacts
- Fault
- Roads
- Trail
- Lakes
- Rivers
- Wetland
- Contours