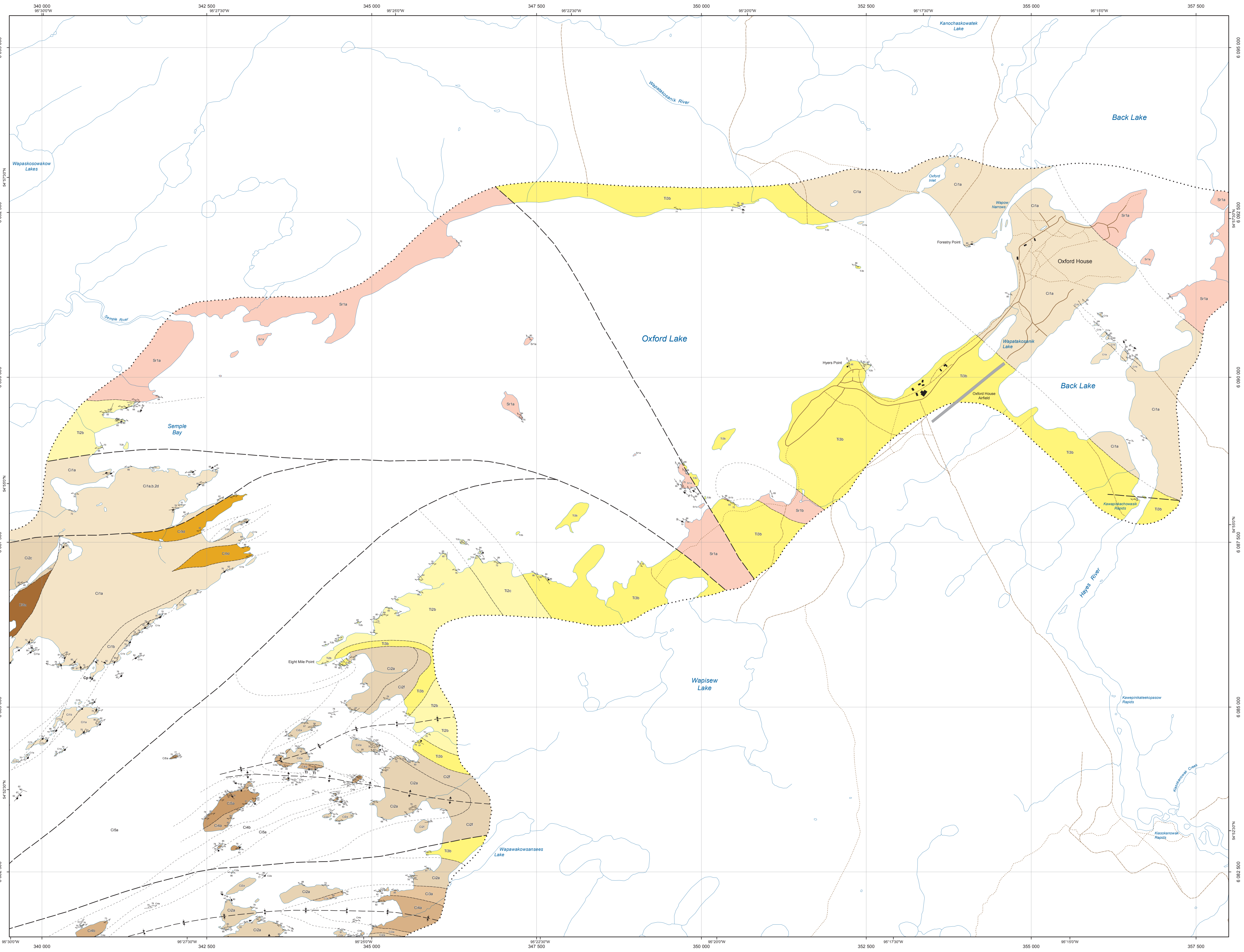


Geology and structure of northeastern Oxford Lake, Manitoba (parts of NTS 53L13, 14): sheet 2



Legend*

- Post-tectonic dikes (Pt)**
- Pt4 Lamprophyre (?)
 - Pt3 Gabbro (unknown swarm)
 - Pt2 Diabase (MacKenzie swarm)
 - Pt1 Diabase (Molson swarm)

- Semple River pluton (Sr)**
- Sr1 Granodiorite, granite
 - a) Homogeneous
 - b) Quartz-phytic
 - c) Feldspar-phytic
 - d) Associated porphyry dikes

- Central panel**
- Thomsen assemblage (Ti)**
- Ti4 Quartz arenite; locally trough crossbedded
 - a) Includes sericitic mudstone
 - b) Includes quartz-pebble conglomerate
 - Ti3 Greywacke, mudstone, feldspathic; planar bedded
 - a) Monotonous
 - b) Includes pebble conglomerate
 - c) Includes minor subvolcanic mudstone or iron formation
 - Ti2 Polymictic conglomerate
 - a) Intrabasinal clasts (volcanic and sedimentary)
 - b) Includes high-sphincticity granitoid clasts
 - c) Includes interbeds of greywacke and mudstone
 - Ti1 Aphric basalt and basaltic andesite flows; pillowed

- North panel**
- Carghill Channel layered intrusion (Cc)**
- Cc1 Peridotite (serpentinized)

- Carghill assemblage (C)**
- Ca Subvolcanic intrusions; aphanitic groundmass; local amygdules
 - a) Plagioclase-phryic basalt or andesite
 - b) Plagioclase-pyroxene-phryic basalt or andesite
 - c) Aphric basalt or andesite
 - d) Aphric to sparsely plagioclase-phryic dacite
 - e) Plagioclase-quartz-phryic rhyolite
 - Cb Gabbro; fine to medium grained
 - a) Homogeneous
 - b) Abundant pyroxene and anorthite inclusions
 - c) Leucogabbro to quartz diorite
 - d) Layered leucogabbro; local spinifex and amygdules
 - e) Pyroxenite

- Iron formation**
- a) Oxide facies
 - b) Silice facies

- Mafic volcaniclastic rocks**
- C3 a) Mafic tuff breccia, lapilli tuff
 - b) Pillow-fragment breccia; local peperite
 - C2 Basaltic andesite and andesite flows; massive to brecciated, locally pillowed
 - a) Plagioclase- and pyroxene-phryic
 - b) Pyroxene-phryic
 - c) Aphric
 - d) Varolitic
 - e) Plagioclase-phryic
 - f) Dense plagioclase-phryic shoshonite flows (>50% phenocrysts)

- Basalt and basaltic andesite flows; pillowed, locally massive or brecciated**
- C1 a) Aphric
 - b) Plagioclase-phryic
 - c) Garnet amphibolite; basalt precursor

Symbols

- Planar structure**
- Foliation: generation unknown, 1, 2
 - Bedding: tops unknown, known, overturned
 - Flow contact: tops unknown, known, overturned
 - Igneous layering: tops unknown, known, overturned
 - Pillows: tops unknown, known, overturned
 - Crenulation cleavage: generation unknown, 2
 - Spaced cleavage: generation unknown
 - Gneissosity: generation unknown, 1
 - Fault: sense unknown, dextral, sinistral
 - Shear zone: sense unknown, dextral, sinistral
 - Shear band (sinistral): generation unknown
 - Shear band (dextral): generation 3

- Geological contacts**
- Contact defined
 - Contact approximate
 - Contact underwater
 - Fault or shear zone
 - Iron formation
 - Limit of mapping

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This map is a provisional summary of work carried out during the summer field season and is produced directly from the geologist's manuscript. It is not to be regarded as a final interpretation of the geology of the area.

SUGGESTED REFERENCE:
Anderson, S.D., Kremer, P.D. and Martins, T. 2013. Geology and structure of northeastern Oxford Lake, Manitoba (parts of NTS 53L13, 14): sheet 2; Manitoba Mineral Resources, Manitoba Geological Survey, Preliminary Map PMAP2013-2, scale 1:20 000.

South panel

- Intra-tectonic intrusive rocks (It)**
- It4 Biotite tonalite; equigranular (Cat Eye Bay pluton; intrudes Cb)
 - It3 Syenogranite; aplitic to pegmatitic; dikes cut BI, Lb
 - It2 Biotite tonalite; plagioclase-porphyrific; dikes cut Cb
 - It1 Diabase; dikes cut HI, BI, Lb

Lynx Bay intrusive suite (Lb)

- Lb3 Gabbro
 - a) Equigranular
 - b) Plagioclase-porphyrific
- Lb2 Pyroxenite
- Lb1 Peridotite (serpentinized); minor serpentine veins
 - a) Cumulate texture; locally layered
 - b) Brecciated; talc-schist matrix

Bayle Lake intrusive complex (Bi)

- Bi3 Biotite tonalite, granodiorite
 - a) Equigranular
 - b) Porphyritic (quartz/plagioclase)
- Bi2 Biotite-hornblende tonalite
 - a) Equigranular
 - b) Porphyritic
- Bi1 Orthogneiss; gabbroic to tonalitic

Hyers assemblage (Hi)

- Hi5 Phyllonite; sulphidic; uncertain precursor
 - a) Sericite-chlorite
 - b) Chlorite-sericite
- Hi4 Subvolcanic porphyry intrusions
 - a) Plagioclase-quartz porphyry
 - b) Quartz porphyry
- Hi3 Volcanogenic alteration and mineralization; massive to stringer
 - a) Arkerite; local arkerite-sericite phyllonite
 - b) Pyrite-chalcopyrite
- Hi2 Volcanic conglomerate; minor volcanic sandstone
 - a) Oligomictic; felspar-phryic; dacite clasts
 - b) Polymictic; intermediate to felsic volcanic clasts
- Hi1 Intermediate to felsic volcaniclastic rocks
 - a) Crystal tuff
 - b) Lapilli tuff, tuff breccia, breccia

Cat Eye Bay assemblage (Cb)

- Cb6 Tectonite, phyllonite; sulphidic
 - a) Amphibole-chlorite/biotite, garnet
 - b) Biotite-muscovite/garnet, cordierite; minor quartz-sericite schist
- Cb5 Iron formation
 - a) Oxide facies
 - b) Sulphide facies
- Cb4 Quartzite; fuchsilite
- Cb3 Volcaniclastic rocks
 - a) Felsic tuff; lapilli tuff; locally bedded
 - b) Heterolithic tuff breccia
 - c) Mafic tuff, chert, bedded
- Cb2 Aphric basalt; pillowed; with minor massive or brecciated flows
 - a) Garnetiferous (F=Kg alteration)
 - b) Non-garnetiferous
- Cb1 Komatiite; massive
 - a) Spinifex
 - b) Cumulate

*This legend is revised and expanded from PMAP2012-1 and PMAP2012-2, and is applicable to all Preliminary Maps listed below. Uncoloured units in this legend do not define unique polygons on the 2013 map set.

PMAP2012-1: Geology and structure of southwest Oxford Lake (west part), Manitoba (parts of NTS 53L12, 13, 639, 10)
PMAP2012-2: Geology and structure of southwest Oxford Lake (east part), Manitoba (parts of NTS 53L12, 13)
PMAP2013-1: Geology and structure of northeastern Oxford Lake, Manitoba (parts of 53L13, 14): sheet 1
PMAP2013-2: Geology and structure of northeastern Oxford Lake, Manitoba (parts of 53L13, 14): sheet 2
PMAP2013-3: Geology and structure of northeastern Oxford Lake, Manitoba (parts of 53L13, 14): sheet 3

Location map

