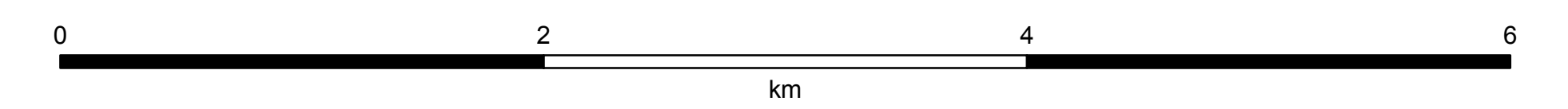


MAP 2016-01
 OPEN FILE NFLD/3268
GEOLOGY OF THE TOMMY'S ARM RIVER - LOON POND AREA
(PARTS OF NTS 12H/08 AND NTS 02E/05), CENTRAL NEWFOUNDLAND;
ROBERT'S ARM VOLCANIC BELT AND ADJACENT ROCKS: MAP 1 OF 3

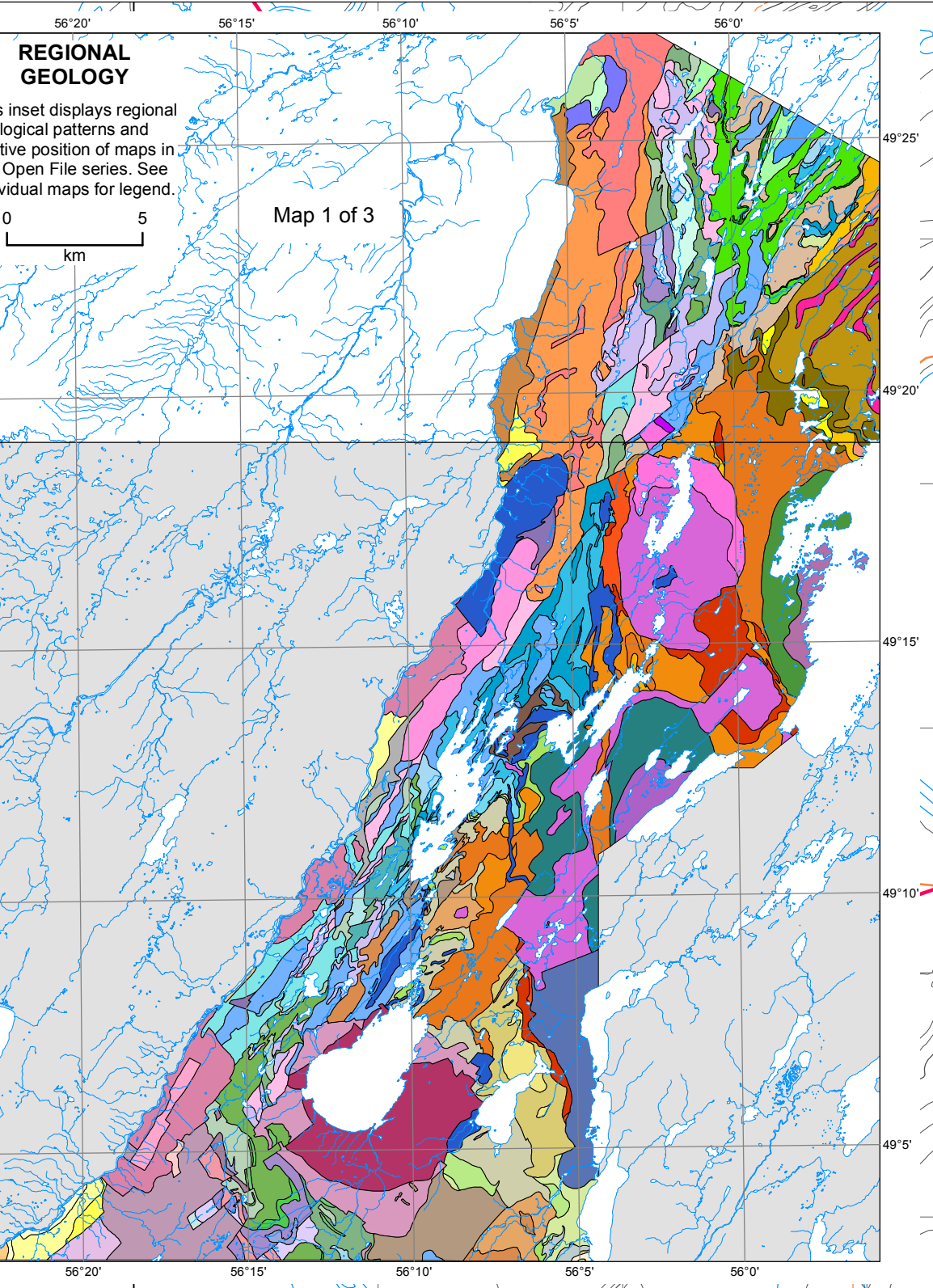
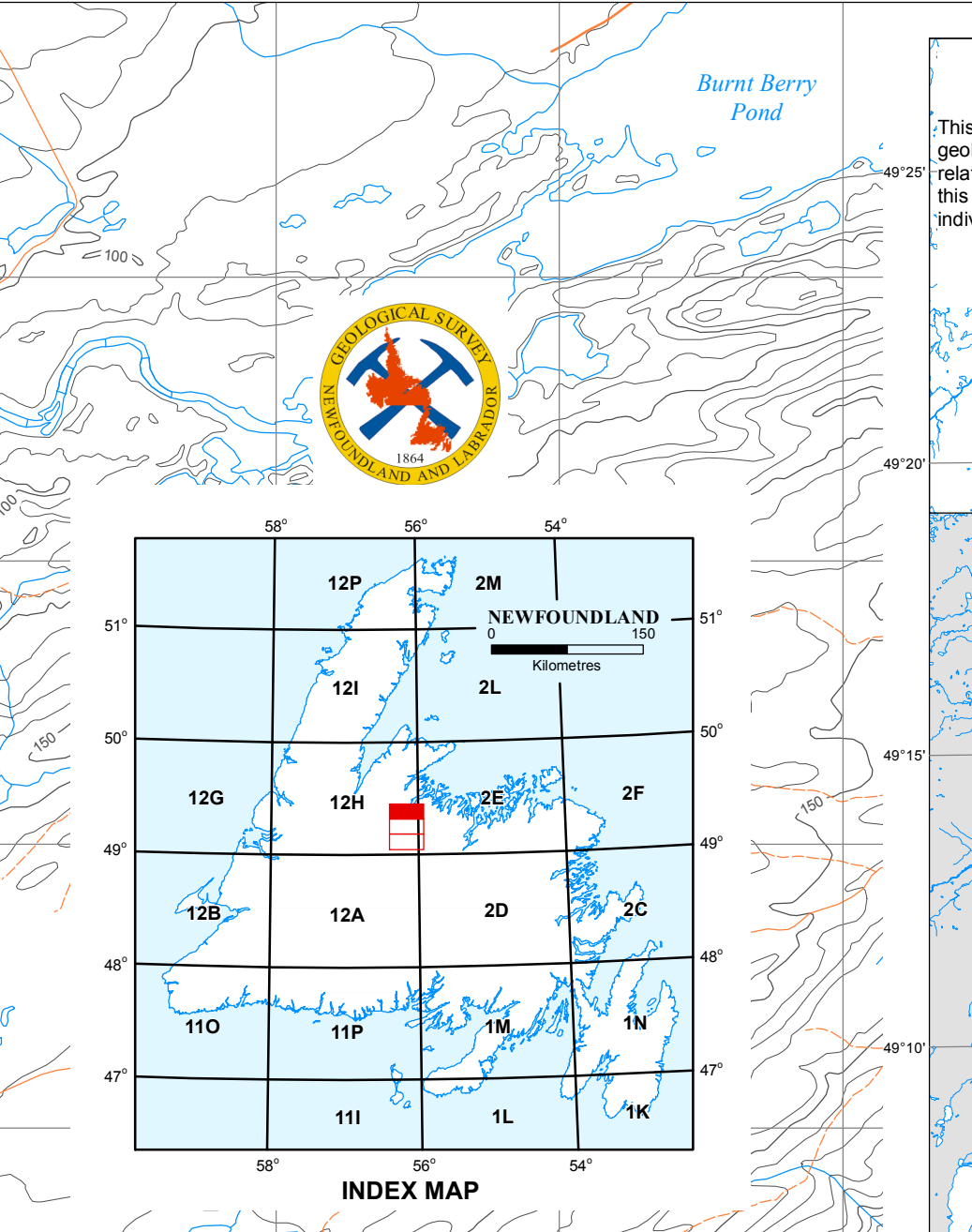
Scale 1:25 000



LEGEND

- An extended legend describing the characteristics of each of the map units is available with this open file map; the Open File number is the same.
- Plutonic rock units not included in the Robert's Arm volcanic belt**
 - MID PALEOZOIC INTRUSIONS (UNMETAMORPHOSED INTRUSIVE ROCKS)
 - SILURIAN?
 - HODGES HILL INTRUSIVE SUITE
 - S.H. Post-metamorphic plutonic suite in the Robert's Arm volcanic belt
 - Stratified rock units of the Notre Dame Subzone of the Dunnage Zone (REGIONALLY METAMORPHOSED ROCKS (ORDOVICIAN AND SILURIAN EVENTS))
 - EARLY AND MIDDLE ORDOVICIAN
 - Robert's Arm volcanic belt (northwest part)
 - Late Middle Ordovician
 - Crescent Composite structural tract (CCT)
 - mO.CC Deer Pond division
 - Stratified rock units not included in the Robert's Arm volcanic belt**
 - PRE-CARBONIFEROUS TERRESTRIAL OVERSTEP SEQUENCE
 - REGIONALLY METAMORPHOSED ROCKS (SILURIAN OR YOUNGER EVENT)
 - EARLY-MIDDLE SILURIAN
 - SPRINGDALE GROUP (lower part)
 - S.S. Volcanosedimentary basin fill (Kings Brook sequence)
 - PRE-MIDDLE SILURIAN MARINE OVERSTEP SEQUENCES** (REGIONALLY METAMORPHOSED ROCKS (SYN-SILURIAN EVENT))
 - LATE ORDOVICIAN SHOAL ARM FORMATION** (O-SA Transgressive high-stand sedimentary cover (eastern))
 - ROCKS FORMED IN THE IAPETUS OCEAN**
 - Stratified rock units from the Exploits Subzone of the Dunnage Zone (REGIONALLY METAMORPHOSED ROCKS (SYN-SILURIAN EVENT))
 - MIDDLE ORDOVICIAN
 - WILD BIGHT GROUP (upper part)
 - mO.WP Arc-related turbidites (younger Wild Bight sequence)
 - Phonyx Brook Formation (middle and upper divisions)
 - ROCKS OF THE ROBERT'S ARM VOLCANIC BELT**
 - EARLY ORDOVICIAN-LATE ORDOVICIAN
 - Stratified rock units from the Mid-Iapetus realm of the Dunnage Zone (REGIONALLY METAMORPHOSED ROCKS (LATE ORDOVICIAN-EARLY SILURIAN AND YOUNGER EVENT))
 - MIDDLE ORDOVICIAN
 - WILD BIGHT GROUP (lower part)
 - mO.WP Arc-related turbidites (younger Wild Bight sequence)
 - Phonyx Brook Formation (middle and upper divisions)
 - Plutonic units coeval with rocks of the Robert's Arm volcanic belt**
 - REGIONALLY METAMORPHOSED INTRUSIVE ROCKS (SYN-ORDOVICIAN AND LATER EVENTS)
 - LATE EARLY ORDOVICIAN?
 - eO.F Pre-tectonic intrusions in the northwest part of the Robert's Arm volcanic belt
 - Late Middle Ordovician**
 - Catsaman Brook structural tract (CBT)
 - mO.CB Jones Lake division
 - Late Middle Ordovician?**
 - Burnt Pond structural tract (BPT)
 - Sops Head Complex (in part)
 - mO.BHC Burtons Harbour - Herring Cove division
 - Middle Ordovician?**
 - Burnt Pond structural tract (BPT)
 - mO.BP Jules Harbour division

Geology by H. O'Brien, P. O'Brien, P. G. Thompson, and J. G. Thompson (2016).
 Geology of the Tommy's Arm River - Loon Pond area (parts of NTS 12H/08 and NTS 02E/05), central Newfoundland; Robert's Arm Volcanic Belt and Adjacent Rocks. Map 1 of 3. 25 000. Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, Map 2016-01, Open File NFLD/3268.



SYMBOLS

- Trace of Early Formed Faults**
 - Folded thrust fault (barbs drawn on hangingwall plate; teeth indicate present direction of fault dip, approximate)
 - Late stage synform in klippe; upright or steeply inclined asymmetrical; plunge direction indicated by multiple arrows on axial trace
- Trace of Late Formed Faults**
 - Symmetromorphic reverse fault associated with late formed folds (white barbs drawn on hangingwall plate; teeth indicate original fault dip, approximate)
 - Ductile reverse fault affecting overlap sequence strata (barbs drawn on hangingwall plate; teeth indicate original fault dip, approximate)
- Trace of Late Stage Faults**
 - Transparent or lateral fault (sinistral strike-slip, approximate)
 - Transparent or lateral fault (dextral strike-slip, approximate)
- Contacts**
 - Unconformity, approximate
 - Stratigraphic contact, approximate
 - Intrusive contact, approximate
 - Limit of geological mapping
 - Cordierite-andalusite-magnetite isograd
- Major Structures**
 - Axial Trace of Early Formed Folds
 - Late stage synform in klippe; upright or steeply inclined asymmetrical; plunge direction indicated by multiple arrows on axial trace
 - Late stage antiform in fender; upright or steeply inclined asymmetrical; plunge direction indicated by multiple arrows on axial trace
 - Overturned syncline or synform; tick on axial trace indicates dip direction of axial surface; plunge direction indicated by single arrow
 - Overturned anticline or antiform; tick on axial trace indicates dip direction of axial surface; plunge direction indicated by single arrow
 - Upright syncline or synform; plunge direction indicated by single arrow on axial trace
 - Upright anticline or antiform; plunge direction indicated by single arrow on axial trace (variably plunging to vertical)
 - Axial Trace of Late Formed Folds
 - Overturned syncline or synform; tick on axial trace indicates dip direction of axial surface; plunge direction indicated by single arrow (subhorizontal to reclined)
 - Overturned anticline or antiform; tick on axial trace indicates dip direction of axial surface; plunge direction indicated by single arrow (subhorizontal to reclined)
 - Upright syncline or synform; plunge direction indicated by single arrow on axial trace (variably plunging to vertical)
 - Upright anticline or antiform; plunge direction indicated by single arrow on axial trace (variably plunging to vertical)
 - Upright syncline affecting terrestrial overlap sequence strata (gentle plunge direction indicated on axial trace)
 - Upright anticline affecting terrestrial overlap sequence strata (gentle plunge direction indicated on axial trace)
- Transportation**
 - Trans Canada Highway
 - Paved public road
 - Unpaved public road
 - Resource road
 - Abandoned resource road
 - Unknown road/trail
- Geochemistry**
 - Mineral occurrence (metallic)
 - Lithochemostronomy (Whole rock) sample site
- Sample Stations**
 - S. Swinden and P. Sacks (1986)
 - B. O'Brien (1996)
 - B. O'Brien (2002)
- Minor Structures**
 - Bedding (tops known, overturned; tick for dip direction, dot for facing direction)
 - Bedding (tops unknown; tick for dip direction, dot for facing direction)
 - Igneous layering (tops known)
 - W-fold axis (generation unknown)
 - S-fold axis (generation unknown, 1st, 2nd)
 - Fold axial surface (generation unknown)
 - Metamorphic foliation (generation unknown, 1st, 2nd)
 - Joint (direction of dip indicated)
 - Ven (direction of dip indicated)