

**MRD 126 - Revision 1**  
**1:250 000 Scale Bedrock Geology of Ontario**

**LEGEND<sup>ax</sup>**

In general, older bedrock units are named after younger ones. For example, unit 59e is older than unit 59d.

**PHANEROZOIC<sup>b</sup> (Present to 542.0 Ma)**

**MESOZOIC (65.5 Ma to 251.0 Ma)**

**CRETACEOUS AND JURASSIC (65.5 Ma to 199.6 Ma)**

**LOWER CRETACEOUS AND MIDDLE JURASSIC**

**63 Kaolinitic clay, clay, sand, lignite**

63a Mattagami Fm.; Mistuskwia Beds  
63b Evans Strait Fm.

**JURASSIC (145.5 Ma to 199.6 Ma)**

● **Alkalic dikes and intrusions:** kimberlite and lamprophyre

**PALEOZOIC (251.0 Ma to 542.0 Ma)**

**MISSISSIPPIAN TO DEVONIAN<sup>c</sup> (318.1 Ma to 416.0 Ma)**

**61 Shale:** Port Lambton Gp.

**DEVONIAN (359.2 Ma to 416.0 Ma)**

**UPPER DEVONIAN**

**60 Shale**

60a Kettle Point Fm.  
60b Long Rapids Fm.

**MIDDLE DEVONIAN**

**59 Limestone, dolostone, shale**

59a Hamilton Gp.  
59b Marcellus Fm.  
59c Dundee Fm.  
59d Detroit River Gp.; Onondaga Fm.  
59e Williams Island Fm.  
59f Murray Island Fm.  
59g Moose River Fm.  
59h Kwataboahagan Fm.

**LOWER DEVONIAN**

**58 Sandstone, dolostone, limestone**

58a Bois Blanc Fm.; Oriskany Fm.  
58b Stooping River Fm.  
58c Sextant Fm.

**SILURIAN (416.0 Ma to 443.7 Ma)**

**UPPER SILURIAN**

**57 Limestone, dolostone, shale, sandstone, gypsum, salt**

57a Bass Islands Fm.  
57b Bertie Fm.  
57c Salina Fm.  
57d Kenogami River Fm. (Upper Silurian to Lower Devonian)

**LOWER SILURIAN**

**56 Sandstone, shale, dolostone, siltstone**

56a Guelph Fm. (also present in the Upper Silurian)  
56b Lockport Fm.  
56c Amabel Fm.

- 56d Clinton Gp.; Cataract Gp.
- 56e Thornloe Fm.; Earleton Fm.
- 56f Wabi Gp.
- 56g Attawapiskat Fm. (also present in the Upper Silurian)
- 56h Ekwon River Fm.
- 56i Severn River Fm.

## ORDOVICIAN (443.7 Ma to 488.3 Ma)

### UPPER ORDOVICIAN

#### 55 Shale, limestone, dolostone, siltstone

- 55a Queenston Fm.
- 55b Georgian Bay Fm.; Blue Mountain Fm.; Billings Fm.; Collingwood Mb.; Eastview Mb.
- 55c Liskeard Gp.
- 55d Red Head Rapids Fm.
- 55e Churchill River Gp.
- 55f Bad Cache Rapids Gp.

### MIDDLE ORDOVICIAN

#### 54 Limestone, dolostone, shale, arkose, sandstone

- 54a Ottawa Gp.; Simcoe Gp.; Shadow Lake Fm. (now considered Upper Ordovician)
- 54b Chazy Gp.; Rockcliffe Fm.

### LOWER ORDOVICIAN

#### 53 Dolostone, sandstone: Beekmantown Gp.

## CAMBRIAN (488.3 Ma to 542.0 Ma)

#### 52 Conglomerate, sandstone, shale, dolostone: Potsdam Gp.; Nepean Fm.; Covey Hill Fm.

### UNCONFORMITY

## PRECAMBRIAN<sup>d</sup> (0.542 Ga to <3.85 Ga)

### *GRENVILLE PROVINCE<sup>e</sup>*

## PROTEROZOIC (0.542 Ga to 2.50 Ga)

### NEO- TO MESOPROTEROZOIC (0.542 Ga to 1.6 Ga)

- 51 **Tectonite unit:** tectonites, straight gneisses, porphyroclastic gneisses, unsubdivided gneisses in major deformation zones, mylonites, protomylonites

### *CENTRAL METASEDIMENTARY BELT*

- 50 **Late felsic plutonic rocks<sup>f</sup>:** granodiorite, granite, syenite, pegmatite, alkalic granite, migmatitic gneisses

- 50a Granitic and syenitic gneisses
- 50b Granitic gneisses with metasedimentary xenoliths, migmatites, injection gneisses, pegmatites

- 49 **Mafic to ultramafic plutonic rocks<sup>f</sup>:** diorite, gabbro, peridotite, pyroxenite, anorthosite, derived metamorphic rocks

- 49a Gabbro
- 49b Diorite
- 49c Anorthosite, gabbroic anorthosite

- 48 **Alkalic plutonic rocks:** nepheline syenite, alkalic syenite, fenite; associated mafic, ultramafic and carbonatitic rocks

- 48a Syenite
- 48b Nepheline syenite

- 47 **Early felsic plutonic rocks<sup>f</sup>:** granodiorite, tonalite, monzogranite, syenogranite; derived gneisses and migmatites

- 47a Monzo- and syenogranite
- 47b Granodiorite
- 47c Trondhjemite
- 47d Tonalite

### *GRENVILLE SUPERGROUP AND FLINTON GROUP<sup>g</sup>*

- 46 **Carbonate metasedimentary rocks:** marble, calc-silicate rocks, skarn, tectonic breccias

- 45 **Clastic metasedimentary rocks<sup>f</sup>:** conglomerate, wacke, quartz arenite, arkose, limestone, siltstone, chert, minor iron formation, minor metavolcanic rocks

- 44 **Mafic to felsic metavolcanic rocks:** flows, tuffs, breccias, minor iron formation, minor metasedimentary rocks; includes reworked pyroclastic units, amphibolite

## MESOPROTEROZOIC (1.0 Ga to 1.6 Ga)

CENTRAL GNEISS BELT

- 43 **Felsic igneous rocks:** tonalite, granodiorite, monzonite, granite, syenite; derived gneisses
- 42 **Anorthosite and alkalic igneous rocks:** anorthosite, anorthositic gabbro, gabbro and related gneisses, nepheline syenite, alkalic syenite
- 41 **Migmatitic rocks and gneisses of undetermined protolith:** commonly layered biotite gneisses and migmatites; locally includes quartzofeldspathic gneisses, orthogneisses, paragneisses
- 40 **Mafic rocks:** amphibolite, gabbro, diorite, mafic gneisses
- 39 **Gneisses of metasedimentary origin:** quartzofeldspathic gneisses, pelitic to semi-pelitic gneisses, calc-silicate gneisses, minor quartzite, minor marble and marble breccia

SOUTHERN and SUPERIOR<sup>h</sup> PROVINCES

EARLY PALEOZOIC TO NEOPROTEROZOIC (443.7 Ma to 1.0 Ga)

- 38 **Carbonate-alkalic intrusive suite (443.7 Ma to 600 Ma):** carbonatite, nepheline syenite, alkalic syenite, ijolite, fenite; associated mafic and ultramafic intrusions
- 38a Intrusions of uncertain age
- 37 **Mafic intrusive rocks<sup>i</sup>**
- 37a Grenville or Rideau mafic dike swarm (575-590 Ma)
- 37b Frontenac mafic dike swarm (circa 1160 Ma)
- 37c Gabbro, diorite, ultramafic rocks, and granophyre

MESOPROTEROZOIC (1.0 Ga to 1.6 Ga)

UPPER KEWEENAWAN SUPERGROUP (<1086 Ma)

- 36 **Sandstone, shale, conglomerate:** Jacobsville Gp.; Oronto Gp
- INTRUSIVE CONTACT
- 35 **Alkalic intrusive suite and carbonatite (circa 1.1 to 1.2 Ga):** alkalic syenite, ijolite, nepheline syenite, fenite, associated mafic and ultramafic rocks, and minor carbonatite
- 35a Martison Carbonatite Complex
- 34 **Mafic dikes and related intrusive rocks (Keweenawan age)<sup>i</sup> (circa 1.1 to 1.2 Ga)**
- 34a Logan and Nipigon mafic sills (circa 1100-1115 Ma)
- 34b Mafic sills and dikes (circa 1130-1180 Ma), including the Mine Centre dike (circa 1137±20 Ma), the Empey Lake dike (circa 1178±31 Ma), and the Kipling (Abitibi) dike (circa 1140 Ma).
- 34c Ultramafic, gabbroic and granophyric intrusions (probably related to unit 35)
- 34d Felsic to intermediate intrusive rocks
- 34e Abitibi swarm (1141 Ma) mafic dikes
- Mafic intrusive rocks<sup>i</sup> and mafic dikes**
- 33a Mackenzie mafic dike swarm (1267 Ma)
- 33b Sudbury mafic dike swarm (circa 1235-1238 Ma)

MIDDLE AND LOWER KEWEENAWAN SUPERGROUP (1086 to 1107 Ma)

- 32 **Osler Gp., Mamainse Point Fm., Michipicoten Island Fm.**
- 32a Basalt and associated conglomerate and arkose
- 32b Rhyolite, quartz-feldspar porphyry; associated conglomerate and arkose
- 31 **Sibley Gp. (circa 1.34 Ga):** conglomerate, sandstone, shale

MESO- TO PALEOPROTEROZOIC (1.0 Ga to 2.5 Ga)

- 30 **Felsic intrusive rocks**
- 30a Granite, alkali granite, granodiorite, quartz-feldspar porphyry; minor related volcanic rocks<sup>j</sup> (1.5 to 1.6 Ga)
- 30b Killarney monzogranite and granitic rocks<sup>k</sup> (1.7 and 1.4 Ga)
- 30c Intermediate to felsic volcanic rocks<sup>k</sup> (1.8 to 1.9 Ga.)

INTRUSIVE CONTACT

PALEOPROTEROZOIC (1.6 Ga to 2.5 Ga)

- 29 **Sudbury Igneous Complex (1850 Ma):** norite, gabbro, granophyre
- 29a Granophyre
- 29b Norite-gabbro, quartz norite, sublayer and offset rocks
- 28 **Whitewater Gp.<sup>l</sup>:** fragmental rocks, mudstone, wacke

- 28a Chelmsford Formation: wacke, minor siltstone
- 28b Onwatin Formation: carbonaceous slate
- 28c Onaping Formation: lapilli tuff, breccia, felsic flows and intrusions, minor carbonate and chert

**27 Carbonatite-alkalic intrusive suite (circa 1.8 to 1.9 Ga):** carbonatite complexes, nepheline syenite, alkalic syenite, ijolite, fenite; associated mafic and ultramafic rocks

**26 Mafic intrusive rocks<sup>1</sup>, mafic dikes and mafic sills**

- 26a Molson mafic dike swarm (circa 1889 to 1871 Ma) and mafic sills of the Sutton Inliers (circa 1871 Ma)
- 26b Pickle Crow mafic dike; normally magnetized northwest-trending subswarm (Molson swarm) (circa 1876 Ma)
- 26c Pickle Crow mafic dike; reversely magnetized northwest-trending subswarm (Molson swarm) (circa 1876 Ma)
- 26d Mafic dikes and mafic plutons of uncertain age; gabbro, diorite, quartz diorite
- 26e North Channel mafic dike swarm

#### INTRUSIVE CONTACT

**25 Trans-Hudson Orogen Supracrustal rocks / sedimentary rocks (Sutton Inliers):** dolostone, chert breccias, argillite, wacke, conglomerate, iron formation

- 25a Mafic and ultramafic metavolcanic rocks, metasedimentary rocks, differentiated mafic to ultramafic intrusions of the Fox River belt
- 25b Undifferentiated clastic and carbonate metasedimentary rocks
- 25c Sutton Inliers – Sutton Ridges Formation: unsubdivided clastic metasedimentary rocks (including wacke, siltstone, argillite, chert breccia and conglomerate), and chert-banded and clastic iron formation
- 25d Sutton Inliers – Nowashe Formation: carbonate metasedimentary rocks (dolomite, cherty dolomite, stromatolitic dolomite, argillaceous dolomite)
- 25e Undifferentiated clastic metasedimentary migmatite

**24 Sedimentary rocks (Animikie Group)<sup>m</sup>:** wacke, shale, iron formation, limestone, minor volcanic rocks, conglomerate, taconite, algal chert, carbonate rocks, argillite-tuff

- 24a Rove Formation: argillite, shale, wacke, minor volcanic rocks
- 24b Gunflint Formation: conglomerate, taconite, algal chert, chert, carbonate rocks, argillite-tuff

**23 Mafic and related intrusive rocks<sup>1</sup> and mafic dikes**

- 23a Marathon mafic dike; north-northwest to north-northeast-trending subswarm (circa 2101 to 2126 Ma)
- 23b Fort Frances mafic dike; northwest-trending subswarm (circa 2075 Ma)
- 23c Marathon, Kapuskasing or Biscotasing mafic dike; northeast-trending subswarm (circa 2101-2126 or circa 2167-2171 Ma)
- 23d Nipissing mafic sills (2219 Ma): mafic sills, mafic dikes and related granophyre
- 23e Biscotasing mafic dike; north-northeast-trending swarm (circa 2167-2171 Ma)
- 23f Mafic dikes of uncertain age
- 23g Mafic plutons of uncertain age

**22 Felsic intrusive rocks (Murray Granite 2388 Ma, Creighton Granite 2333 Ma):** granite

#### HURONIAN SUPERGROUP (2.2 Ga to 2450 Ma)

**21 Cobalt Gp.<sup>n</sup>:** siltstone, argillite, sandstone, conglomerate

- 21a Bar River Formation: quartz sandstone, hematitic sandstone, sandstone
- 21b Gordon Lake Formation: siltstone, argillite, sandstone
- 21c Lorrain Formation: quartz sandstone, minor conglomerate, siltstone
- 21d Gowganda Formation: conglomerate, sandstone, siltstone, argillite

**20 Quirke Lake Gp.:** sandstone, siltstone, conglomerate, limestone, dolostone

- 20a Serpent Formation: quartz-feldspar sandstone, sandstone with minor siltstone, calcareous siltstone and conglomerate
- 20b Espanola Formation: limestone, dolostone, siltstone, sandstone
- 20c Bruce Formation: conglomerate with minor sandstone and siltstone

**19 Hough Lake Gp.:** siltstone, wacke, argillite, quartz-feldspar sandstone, conglomerate, sandstone

- 19a Mississagi Formation: quartz-feldspar sandstone, argillite and conglomerate
- 19b Pecors Formation: siltstone, argillite, wacke, minor sandstone
- 19c Ramsay Lake Formation: conglomerate, minor sandstone, siltstone

**18 Elliot Lake Gp.:** siltstone, wacke, argillite, quartz-feldspar sandstone, conglomerate, mafic, intermediate and felsic metavolcanic rocks, intercalated metasedimentary rocks and epiclastic rocks

- 18a McKim Formation: siltstone, wacke, argillite
- 18b Matinenda Formation: quartz-feldspar sandstone, conglomerate, sandstone
- 18c Volcanic rocks: includes mafic, intermediate and felsic metavolcanic rocks, intercalated metasedimentary rocks and epiclastic rocks

#### INTRUSIVE CONTACT

**17 Mafic and ultramafic intrusive rocks and mafic dikes**

- 17a Matachewan mafic dike swarm (circa 2454 Ma)
- 17b Gabbro, anorthosite

*SUPERIOR PROVINCE*  
**ARCHEAN (2.5 Ga to <3.85 Ga)**  
**NEOARCHEAN (2.5 Ga to 2.8 Ga)**

INTRUSIVE CONTACT

- 16 **Hornblendite - nepheline syenite suite<sup>60</sup>**: pyroxenite, diorite, monzonite, syenite, nepheline syenite (saturated to undersaturated suite)
- 16a Hornblendite, pyroxenite
  - 16b Gabbro, diorite, monzonite
  - 16c Syenite, nepheline and/or foid-bearing syenite

**NEO- TO MESOARCHEAN (2.5 Ga to 3.2 Ga)<sup>60P</sup>**

INTRUSIVE CONTACT

- 15 **Massive granodiorite to granite**: massive to foliated granodiorite to granite
- 15a Potassium feldspar megacrystic units
- 14 **Diorite-monzodiorite-granodiorite suite**: diorite, quartz diorite, minor tonalite, monzonite, granodiorite, syenite and hypabyssal equivalents (saturated to oversaturated suite)
- 14a Diorite, monzonite, quartz monzonite
  - 14b Granodiorite, granite
  - 14c Syenite
- 13 **Muscovite-bearing granitic rocks**: muscovite-biotite and cordierite-biotite granite, granodiorite-tonalite
- 12 **Foliated tonalite suite**: tonalite to granodiorite - foliated to massive
- 12a Biotite tonalite to granodiorite
  - 12b Hornblende tonalite to granodiorite
- 11 **Gneissic tonalite suite**: tonalite to granodiorite - foliated to gneissic - with minor supracrustal inclusions
- 10 **Mafic and ultramafic rocks<sup>61</sup>**: gabbro, anorthosite, ultramafic rocks
- 10a Gabbro
  - 10b Anorthosite
  - 10c Ultramafic rocks

INTRUSIVE CONTACT

**NEOARCHEAN (2.5 Ga to 2.8 Ga)**

SUPRACRUSTAL ROCKS

- 9 **Coarse clastic metasedimentary rocks<sup>62</sup>**: mainly coarse clastic metasedimentary rocks, with minor, mainly alkalic, mafic to felsic metavolcanic flows, tuffs and breccias
- 9a Metasedimentary rocks: conglomerate, arkose, arenite, wacke, sandstone, siltstone, argillite
  - 9b Alkaline metavolcanic rocks: mafic to felsic metavolcanic flows, tuffs and breccias

**NEO- TO MESOARCHEAN (2.5 Ga to 3.2 Ga)**

SUPRACRUSTAL ROCKS

- 8 **Migmatized supracrustal rocks<sup>63</sup>**: metavolcanic rocks, minor metasedimentary rocks, mafic gneisses of uncertain protolith, granitic gneisses
- 7 **Metasedimentary rocks<sup>64</sup>**: wacke, siltstone, arkose, argillite, slate, mudstone, marble, chert, iron formation, minor metavolcanic rocks, conglomerate, arenite, paragneiss, migmatites
- 7a Wacke, siltstone, arkose
  - 7b Argillite, slate, mudstone
  - 7c Marble, chert, iron formation, minor metavolcanic rocks
  - 7d Conglomerate and arenite
  - 7e Paragneiss and migmatites<sup>65</sup>
- 6 **Felsic to intermediate metavolcanic rocks<sup>66</sup>**: rhyolitic, rhyodacitic, dacitic and andesitic flows, tuffs and breccias, chert, iron formation, minor metasedimentary and intrusive rocks; related migmatites
- 6a Dacitic and andesitic flows, tuffs and breccias
  - 6b Rhyolitic, rhyodacitic flows, tuffs and breccias
- 5 **Mafic to intermediate metavolcanic rocks<sup>67</sup>**: basaltic and andesitic flows, tuffs and breccias, chert, iron formation, minor metasedimentary and intrusive rocks, related migmatites
- 5a Andesitic flows, tuffs and breccias with minor rhyolites<sup>u</sup>
  - 5b Basaltic and andesitic flows, tuffs and breccias
- 4 **Mafic to ultramafic metavolcanic rocks<sup>68</sup>**: mafic metavolcanic and basaltic rocks with minor komatiitic flows, metasedimentary and pyroclastic rocks

- 4a Ultramafic metavolcanic rocks
- 4b Mafic metavolcanic rocks, metasedimentary rocks and pyroclastic rocks

## MESOARCHEAN (2.8 Ga to 3.2 Ga)<sup>y</sup>

### SUPRACRUSTAL ROCKS

- 3** **Mafic metavolcanic and metasedimentary rocks<sup>tw</sup>**: mafic metavolcanic rocks, minor iron formation
- 2** **Felsic to intermediate metavolcanic rocks<sup>l</sup>**: rhyolitic, rhyodacitic, dacitic and andesitic flows, tuffs and breccias
- 1** **Metasedimentary rocks and mafic to ultramafic metavolcanic rocks<sup>tw</sup>**: coarse clastic metasedimentary rocks, marble, quartz arenite, iron formation, komatiite, mafic metavolcanic rocks, and minor felsic metavolcanic rocks

- a - The letter "G" preceding a map unit number indicates lithologic information interpreted from geophysical data.
- b - Phanerozoic stratigraphic nomenclature varies in the level of detail to match the variable level of detail displayed on the map face.
- c - Unassigned.
- d - Subdivisions of Precambrian geologic time and units characterized by a range of ages are cited in terms of Ga. The subdivisions of geologic time correspond to international standards. All ages of individual units cited in the legend are based on high precision U/Pb zircon ages, and are cited in terms of Ma.
- e - Granulite grade units are shown by screened overprint.
- f - The rocks of the Central Granulite Terrane in Quebec are coded in a lithologic sense only and represent units of ca. 1050 to 1150 Ma in age. Equivalents of these rocks are not known to be present in Ontario.
- g - Rocks in these groups are subdivided lithologically. The order does not imply age relationship within or among groups.
- h - This part of the legend describes Proterozoic units of the Southern Province, and those Proterozoic units within the Superior Province. Most diabase dike and alkalic intrusive rock map units listed for the Grenville Province cut Grenville and Southern provinces; therefore, they are listed in the Southern Province part of the legend.
- i - A generalized distribution of diabase dikes is shown. Some individual swarms occur in more than one geological province.
- j - This unit has a geographic distribution from the west shore of Lake Nipigon to the north shore of Lake Huron, including the Cutler, Chief Lake, Croker Island, English Bay and Manitoulin granites.
- k - This unit includes the Killarney and related granitoids and equivalent metavolcanic units, as well as the Killarney area granitoids.
- l - This unit includes the Chelmsford, Onwatin and Onaping formations.
- m - This unit includes the Gunflint and Rove formations.
- n - This unit includes the Gowganda, Lorrain, Gordon Lake and Bar River formations.
- o - This unit was formerly classified as Algoman and/or Laurentian. Units 13, 14 and 15 are mainly Neoproterozoic except in areas of the Sachigo Subprovince, where some examples of Mesoarchean age occur.
- p - The intrusive rocks of Archean age range from approximately 2.65 Ga to 3.2 Ga.
- q - This unit was formerly classified as Haileyburian.
- r - This unit was formerly classified as Timiskaming. This unit comprises fluvial to marine metasedimentary rocks with minor, commonly alkalic, metavolcanic rocks that locally unconformably overlie units 1 to 6. They have generally only undergone the late deformation common in greenstone belts.
- s - These units are shown only in the English River and Quetico subprovinces.
- t - This unit was formerly classified as Keewatin. Most of these sequences range in age from 2.7 Ga to 2.8 Ga, based on U/Pb zircon ages.
- u - These units are large enough to show at the map scale only within the Abitibi Subprovince, forming the Blake River Group and units south of Lake Abitibi.
- v - The units under this heading include those greenstone belts that are older than 2.9 Ga, based on U/Pb zircon chronology. All other Archean greenstone sequences have been placed in the Neo- to Mesoarchean subdivision of the legend.
- w - This unit comprises those greenstone sequences in which shallow-water supermature sediments (quartz arenites, shallow-water carbonates) have been identified. This type of unit unconformably overlies older granitoid rocks in the Steeprock Lake area, and notably in older greenstone belts in the North Caribou Lake region.
- x - Number codes subdivided into a, b, c, etc., are generally arranged—especially for Proterozoic units—from younger to older.

#### Additional Notes

This compilation represents the Ontario Geological Survey's current interpretation of the Precambrian bedrock geology. The primary goal in creating this theme was to create a seamless product providing blanket coverage of the province. The understanding of Ontario's Precambrian geology will grow with the knowledge acquired through core business-unit-related geoscience studies.

**This digital theme was prepared for the sole purpose of portraying the bedrock geology of Ontario at 1:250 000 scale. It can not be used for any other purpose. Use of this theme is governed by the following principles:**

1. The theme is scale dependent. Use of the information on this theme at any scale larger than 1:250 000 is unwarranted and will result in erroneous conclusions.
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3. The OGS is continually collecting, synthesizing and compiling new data throughout the province. Users should be aware that the digital theme was current at time of posting, but new information may substantially change the interpretation in any area. Users should verify the currency of data in any area before proceeding.
4. The digital theme was prepared from the 1:250 000 manuscript *Geology of Ontario* maps created between 1986 and 1990. These maps were updated within the confines of the available time with information collected post-1990. No attempt was made to check source material published prior to the creation of the manuscript maps.
5. The geology was subdivided to aid identification of economically important rock units.

Numerical subdivisions of the Geological time scale are from the International Commission on Stratigraphy, International Stratigraphic Chart (<http://www.stratigraphy.org/upload/ISChart2009.pdf>), August 2009.

Users of OGS products are encouraged to contact those Aboriginal communities whose traditional territories may be located in the mineral exploration area to discuss their project.