

Base Data

Roads

- Highway
- Primary Road
- Secondary Road
- Tertiary Road

Trails

- Canoe Route
- Hiking
- Portage
- Snowmobile

- Railway
- Streams
- Township
- Lakes

Mining Data

Abandoned Mines Information System (AMIS)

- Mine Sites
- Features

Ontario Drill Holes (ODH)

- Diamond Drill Hole
- Overburden Drill Hole (Auger,Wacker)
- Percussion Drill Hole
- Reverse Circulation (Sonic)
- Underground Drilling
- Wedged Diamond Drill Hole

Mineral Deposit Inventory Version 2 (MDI2)

- Developed Prospect with Reserves
- Developed Prospect without Reserves
- Discretionary Occurance
- Occurance
- Past Producing Mine with Reserves
- Past Producing Mine without Reserves
- Producing Mine
- Prospect

Assessment File Research Image (AFRI)

- Airborne Geophysics
- Ground Geophysics
- Geology
- Geochemistry
- Diamond Drilling
- Physical Work
- Other

Geophysical Anomalies

Keating Coefficients

- Positive Coefficient
- Negative Coefficient

EM Anomalies

Conductance (Siemens)

- < 1
- 2 - 5
- 6 - 10
- 11 - 20
- 21 - 30
- > 30

Mineral Exploration Inventory (MEI)

Exploration Area Boundaries

- Large Exploration Area
-
-
-
-
-
-
-
-
-
-
-
-

NTS Grids

- NTS Quadrants
- NTS 50K index
- NTS 250K index

CLAIMaps

Pending Dispositions

Freehold Patent

- Surface and Mining Rights
- Surface Rights Only
- Mining Rights Only

Leasehold Patent

- Surface and Mining Rights
- Surface Rights Only
- Mining Rights Only

Licence of Occupation

- Surface and Mining Rights
- Surface Rights Only
- Mining Rights Only

Undefined Element

Order-in-Council

WPLA Water Power Lease Agreement

LIB Land Use Permit

Active Dispositions

Freehold Patent

- Surface and Mining Rights
- Surface Rights Only
- Mining Rights Only

Leasehold Patent

- Surface and Mining Rights
- Surface Rights Only
- Mining Rights Only

Licence of Occupation

- Surface and Mining Rights
- Surface Rights Only
- Mining Rights Only

Undefined Element

Order-in-Council

WPLA Water Power Lease Agreement

LIB Land Use Permit

Pending Withdrawals and Notifications

Active Withdrawals and Notifications





































Pending Dispositions

Active Dispositions

Pending Mining Claims

Active Mining Claims

Northern Ontario Engineering Geology Terrain Study

	LOCAL DUNE AREA		Index		
	QUARRY/MINE WORKINGS	Landforms			Alluvial
	SMALL LANDSLIDE SCAR				Slope failure
	SAND/GRAVEL PIT		End moraine		Talus pile
	TALUS		Ground moraine		Slopewash and debris creep
	ABANDONED RIVER CHANNEL		Hummocky moraine		Sand dunes
	ABANDONED SHORELINE		Ice contact delta		Organics
	ESCARPMENT		Esker		Bedrock plateau
	ESKER		Kame		Bedrock knob
	MAJOR END MORAINES		Outwash plain		Bedrock plain
	DRUMLIN		Raised beach		Bedrock ridge
	OTHER LINEAR ICE-FLOW FEATURES		Glaciolacustrine delta		Bedrock below drift veneer
	STEEP-WALLED VALLEYS		Glaciolacustrine plain		

Bedrock Geology of Ontario - 1993

— Iron Formations

▨ Granulites

Dikes

— 34b-Frontenac

— 34a-Grenville

— 31e-Abitibi

— 31b-Pigeon River & Pukaskwa

— 30b-Sudbury

— 30a-Mackenzie

— 23c-North Channel

— 23b-Wabigoon

— 23a-Molson

— 21e-Mafic Dikes & Plutons of Uncertain Age

— 21c-Kenora-Fort Francis

— 21b-Marathon

— 21a-Preissac

— 17a-Matachewan & Hearst

Faults

— Subsurface Fault











— Surface Fault

Bedrock

- 17a Matachewan and Hearst swarms (2454 Ma): diabase dikes (see Dikes)
- 60a Mattagami Fm.; Mistuskwia Beds
- 60b Evans Strait Fm.
- 58 Shale: Port Lambton Gp.
- 57a Kettle Point Fm.
- 57b Long Rapids Fm.
- 56a Hamilton Gp.
- 56b Marcellus Fm.
- 56c Dundee Fm.
- 56d Detroit River Gp.; Onondaga Fm.
- 56e Williams Island Fm.
- 56f Murray Island Fm.
- 56g Moose River Fm.
- 56h Kwataboahagan Fm.
- 55a Bois Blanc Fm.; Oriskany Fm.
- 55b Stopping River Fm.
- 55c Sextant Fm.
- 54a Bass Islands Fm.
- 54b Bertie Fm.
- 54c Salina Fm.
- 54d Kenogami River Fm.
- 53a Guelph Fm.
- 53b Lockport Fm.
- 53c Armabel Fm.
- 53d Clinton Gp.; Cataract Gp.
- 53e Thornloe Fm.; Earleton Fm.
- 53f Wabi Gp.
- 53g Attawapiskat Fm.
- 53h Ekwon River Fm.
- 53i Severn River Fm.
- 52a Queenston Fm.
- 52b Georgian Bay Fm.; Blue Mountain Fm.; Billings Fm.; Collingwood Mb.; Eastview Mb. MinStr:
- 52c Liskeard Gp.
- 52d Red Head Rapids Fm.
- 52e Churchill River Gp.
- 52f Bad Cache Rapids Gp.
- 51a Ottawa Gp.; Simcoe Gp.; Shadow Lake Fm.
- 51b Chazy Gp.; Rockcliffe Fm.
- 50 Dolostone, sandstone: Beekmantown Gp.






























- 49 Conglomerate, sandstone, shale, dolostone: Potsdam Gp.; Nepean Fm.; Covey Hill Fm.
- 48 Tectonite unit
- 47 Late felsic plutonic rocks
- 46 Mafic to ultramafic plutonic rocks
- 45 Alkalic plutonic rocks
- 44 Early felsic plutonic rocks
- 43 Carbonate metasedimentary rocks
- 42 Clastic metasedimentary rocks
- 41 Mafic to felsic metavolcanic rocks
- 40 Felsic igneous rocks
- 39 Anorthosite and alkalic igneous rocks
- 38 Migmatitic rocks and gneisses of uncertain protolith
- 37 Mafic rocks
- 36 Gneisses of metasedimentary origin
- 35 Carbonate-alkalic intrusive suite (450 to 600 Ma)
- 35a Carbonate-alkalic intrusive rocks of uncertain age
- 34c Gabbro, diorite, ultramafic rocks, granophyre
- 33 Jacobsville Gp.; Oronto Gp.
- 32 Carbonatite-alkalic intrusive suite (1.0 to 1.2 Ga)
- 31a Logan and Nipigon sills (1109 Ma): diabase sills
- 31c Ultramafic, gabbroic and granophyric intrusions
- 31d Felsic to intermediate intrusive rocks
- 29a Basalt and associated conglomerate and arkose
- 29b Rhyolite, quartz feldspar porphyry; associated conglomerate and arkose
- 28 Sibley Gp.
- 27 Felsic intrusive rocks
- 27a Killamey monzogranite and granite rocks (1.7 and 1.4 Ga); intermediate to felsic volcanic rock (1.8 to 1.9 Ga)
- 27b Granite, alkali granite, granodiorite, quartz feldspar porphyry; minor related volcanic rocks (1.4 to 1.5 Ga)
- 26 Sudbury Igneous Complex (1850 Ma)
- 25 Whitewater Gp.
- 24 Carbonatite-alkalic intrusive suite (ca. 1.9 Ga)
- 23a Molson swarm (1884 Ma) diabase dikes; and Sutton Inlier:diabase sills
- 22a Animikie Gp.: wacke, shale, iron formation, limestone, minor volcanic rocks
- 22b Sutton Inlier: dolostone, chert breccias, argillite, wacke, conglomerate, iron formation
- 21d Nipissing sills (2219 Ma): diabase sills, dikes and related granophyre (see Dikes)
- 20 Felsic intrusive rocks (Murray Granite 2388 Ma, Creighton Granite 2333 Ma): granite
- 19 Cobalt Gp.
- 18a Conglomerate, wacke, arkose, quartz arenite, argillite, limestone, dolostone
- 18b Volcanic rocks of the Elliot Lake Gp.
- 17b Gabbro, anorthosite
- 16 Diorite-nepheline syenite suite
- 15 Massive granodiorite to granite
- 15a Potassium feldspar megacrystic units
- 14-Diorite-monzodiorite-granodiorite suite
- 13 Muscovite-bearing granitic rock
- 12 Foliated tonalite suite
- 11 Gneissic tonalite suite
- 10 Mafic and ultramafic rocks
- 9 Coarse clastic metasedimentary rocks
- 8 Migmatized supracrustal rocks
- 7 Metasedimentary rocks
- 7a Paragneisses and migmatites
- 7b Conglomerate and arenite
- 6 Felsic to intermediate metavolcanic rocks
- 5 Mafic to intermediate metavolcanic rocks
- 5a Andesitic flows, tuffs and breccias with minor rhyolites
- 4 Mafic to ultramafic metavolcanic rocks
- 3 Mafic metavolcanic and metasedimentary rocks
- 2 Felsic to intermediate metavolcanic rocks
- 1 Metasedimentary rocks and mafic to ultramafic metavolcanic rocks
- Non_Geological

Quarternary Geology of Ontario - 1997








-  Dunes
-  beach, bar or spit
-  bedrock escarpment
-  bedrock escarpment a
-  drumlin or area of drumlins
-  esker or area of eskers; direction of flow know or assumed
-  terrace escarpment (abandoned shore bluff)
-  terrace escarpment; fluvial
-  trend of end moraine crest
-  area of DeGeer or minor moraine forms

Geology




-  1: Bedrock
-  2: Bedrock, post-Precambrian
-  3: Catfish Creek Till
-  4: Maryhill Till

-  5: Tavistock Till
-  6: Mornington Till
-  7: Stratford Till
-  8: Wartburg Till
-  9: Port Stanley Till
-  10: Elma Till
-  11: Rannoch Till
-  12: Dunkeld Till
-  13: Newmarket Till
-  14: Wentworth Till
-  15: St. Joseph Till
-  16: Kettleby Till
-  17: Halton Till
-  18: Till
-  19: Till
-  20: Till
-  21: Till, fine-grained
-  22: Glaciofluvial Ice
-  23: Glaciofluvial Outwash deposits
-  24: Glaciolacustrine deposits
-  25: Glaciolacustrine deposits
-  26: Glaciomarine and marine deposits
-  27: Glaciomarine and marine deposits
-  28: Fluvial deposits
-  29: Lacustrine deposits
-  30: Lacustrine deposits
-  31: Fluvial deposits
-  32: Organic deposits
-  33: Lakes




Phoenix Bedrock Mapping Project - 2002









-  Assays
-  Geochemistry
-  Obrien Geochemistry
-  Sutcliffe Geochemistry
-  Tomlinson Geochemistry
-  Faults
-  Townships

Diamond Drill Hole



-  ddhi
-  dhd
-  dhrc

Geology




















-  Mafic Intrusive
-  Post-tectonic Mafic Intrusion
-  Syn-volcanic Felsic Intrusive

-  Syn-volcanic Mafic Intrusion
-  Clastic Metasediments
-  Chemical Metasediments
-  Int to felsic Metavolcanic
-  Int to Mafic Metavolcanic
-  Mafic Metavolcanic
-  Sibley Group
-  Ultramafic Intrusive

Bedrock Geology of Ontario - 2006


-  FAULTS
-  Iron Formations

Dikes

-  37 Mafic intrusive rocks: diabase dikes, gabbro, diorite, ultramafic rocks, granophyre
-  37a Grenville swarm (~575 Ma): diabase dikes
-  34 Mafic and related intrusive rocks (Keweenaw age): diabase dikes and sills, ultramafic, gabbroic, granophyric and felsic to intermediate intrusive rocks
-  34a Logan and Nipigon sills (1109 Ma): diabase sills
-  34b Pigeon River and Pukaskwa swarms: diabase dikes
-  34c Ultramafic gabbroic and granophyric intrusions
-  34d Felsic to intermediate intrusive rocks
-  34e Abitibi swarm (1141 Ma): diabase dikes
-  33 Mafic intrusive rocks; diabase dikes
-  33a Makenzie swarm (1267 Ma): diabase dikes
-  33b Sudbury swarm (1141 Ma): diabase dikes
-  26 Mafic intrusive rocks: diabase dikes and sills
-  26a Molson swarm (1884 Ma): diabase dikes; Sutton Inlier diabase sills
-  23 Mafic and related intrusive rocks: diabase sills, dikes and related granophyres, mafic dikes and plutons of uncertain age
-  23a Preissac swarm: diabase dikes
-  23b Marathon swarm: diabase dikes
-  23c Kenora - Fort Frances swarm: diabase dikes
-  23e Mafic dikes and plutons of uncertain age
-  17 Mafic and ultramafic intrusive rocks
-  17a Matachewan Hearst swarms (2454 Ma): diabase dikes
-  7 Meta Sedimentary rocks
-  7c

Bedrock Geology of Ontario - 2006 CONTINUED

Bedrock

	63 Kaolinitic clay, clay, sand, lignite		47b Granodiorite		21 Cobalt Gp.: siltstone, argillite, sandstone, conglomerate
	63a Mattagami Fm.; Mistuskwia Beds		47c Trondjemite		21a Bar River Formation: quartz sandstone, hematitic sandstone, sandstone
	63b Evans Strait Fm.		47e Tonalite		21b Gordon Lake Formation: siltstone, argillite, sandstone
	62 Alkalic dikes and intrusions: kimberlite and lamprophyre (see kimberlites theme)		46 Carbonate metasedimentary rocks		21c Lorrain Formation: quartz sandstone, minor conglomerate, siltstone
	61 Shale: Port Lambton Gp.		45 Clastic metasedimentary rocks		21d Gowganda Formation: conglomerate, sandstone, siltstone, argillite
	60 Shale		44 Mafic to felsic metavolcanic rocks		20 Quirk Lake Gp.: sandstone, siltstone, conglomerate, limestone, dolostone
	60a Kettle Point Fm.		43 Felsic igneous rocks		20a Serpent Formation: quartz-feldspar sandstone, sandstone with minor siltstone, calcareous siltstone and conglomerate
	60b Long Rapids Fm.		42 Anorthosite and alkalic igneous rocks		20b Espanola Formation: limestone, dolostone, siltstone, sandstone
	59 Limestone, dolostone, shale		41 Migmatitic rocks and gneisses of uncertain protolith		20c Bruce Formation: conglomerate with minor sandstone and siltstone
	59a Hamilton Gp.		39 Gneisses of metasedimentary origin		19 Hough Lake Gp.: siltstone, wacke, argillite, quartz-feldspar sandstone, conglomerate, sandstone
	59b Marcellus Fm.		38 Carbonate-alkalic intrusive suite (450 to 600 Ma)		19a Mississagi Formation: quartz-feldspar sandstone, argillite and conglomerate
	59c Dundee Fm.		38a Carbonate-alkalic intrusive rocks of uncertain age		19b Pecors Formation: siltstone, argillite, wacke, minor sandstone
	59d Detroit River Gp.; Onondaga Fm.		37 Mafic intrusive rocks		19c Ramsay Lake Formation: conglomerate, minor sandstone, siltstone
	59e Williams Island Fm.		37a Grenville swarm (~575 Ma): diabase dikes		18 Elliot Lake Gp.: siltstone, wacke, argillite, quartz-feldspar sandstone, conglomerate, mafic, intermediate and felsic metavolcanic rocks, intercalated metasedimentary rocks and epiclastic rocks
	59f Murray Island Fm.		37b Frontenac swarm (850 to 900 Ma): diabase dikes		18a McKim Formation: siltstone, wacke, argillite
	59g Moose River Fm.		37c Gabbro, diorite, ultramafic rocks, granophyre		18b Matinenda Formation: quartz feldspar sandstone, conglomerate, sandstone
	59h Kwataboahagan Fm.		36 Jacobsville Gp.; Oronto Gp		18c Volcanic rocks: includes mafic, intermediate and felsic metavolcanic rocks, intercalated metasedimentary rocks and epiclastic rocks
	58 Sandstone, dolostone, limestone		35 Carbonate-alkalic intrusive suite (1.0 to 1.2 Ga)		17 Mafic and ultramafic intrusive rocks
	58a Bois Blanc Fm.; Oriskany Fm.		34 Mafic and related intrusive rocks (Keweenawan age)		17a Matachewan and Hearst swarms (2454 Ma): diabase dikes (see Dikes)
	58b Stooping River Fm.		34a Logan and Nipigon sills (1109 Ma): diabase sills		17b Gabbro, anorthosite
	58c Sextant Fm.		34b Pigeon River and Pukaskwa swarms: diabase dikes		16 Hornblende - nepheline syenite suite
	57 Limestone, dolostone, shale, sandstone, gypsum, salt		34c Ultramafic, gabbroic and granophyric intrusions		16a hornblende, pyroxenite
	57a Bass Islands Fm.		34d Felsic to intermediate intrusive rocks		16b gabbro, diorite, monzonite
	57b Bertie Fm.		31e Abitibi swarm (1141 Ma): diabase dikes		16c syenite, nepheline and/or foid-bearing syenite
	57c Salina Fm.		33 Mafic intrusive rocks		15 Massive granodiorite to granite
	57d Kenogami River Fm.		33a Mackenzie swarm (1267 Ma): diabase dikes		15a Potassium feldspar megacrystic units
	56 Sandstone, shale, dolostone, siltstone		33b Sudbury swarm (1238 Ma): diabase dikes		14-Diorite-monzodiorite-granodiorite suite
	56a Guelph Fm.		32 Osler Gp., Maminse Point Fm., Michipicoten Island Fm.		14a Diorite, monzonite, quartz monzonite
	56b Lockport Fm.		32a Basalt and associated conglomerate and arkose		14b Granodiorite, granite
	56c Armabel Fm.		32b Rhyolite, quartz feldspar porphyry; associated conglomerate and arkose		14c Syenite
	56d Clinton Gp.; Cataract Gp.		31 Sibley Gp.		13 Muscovite-bearing granitic rock
	56e Thornloe Fm.; Earlton Fm.		30 Felsic intrusive rocks		12 Foliated tonalite suite
	56f Wabi Gp.		30a Granite, alkali granite, granodiorite, quartz feldspar porphyry; minor related volcanic rocks (1.4 to 1.5 Ga)		11 Gneissic tonalite suite
	56g Attawapiskat Fm.		30b Killarney monzogranite		10 Mafic and ultramafic rocks
	56h Ekwan River Fm.		30c Intermediate to felsic volcanic rocks (1.8 to 1.9 Ga.)		10a Gabbro
	56i Severn River Fm.		29 Sudbury Igneous Complex (1850 Ma), norite, gabbro, granophyre		10b Anorthosite
	55 Shale, limestone, dolostone, siltstone		29a Granophyre		10c Ultramafic rocks
	55a Queenston Fm.		29b Norite-gabbro, quartz norite, sublayer and offset rocks		9 Coarse clastic metasedimentary rocks
	55b Georgian Bay Fm.; Blue Mountain Fm.; Billings Fm.; Collingwood Mb.; Eastview Mb. MinStr:		28 Whitewater Gp.		9a Metasedimentary rocks: conglomerate, arkose, arenite, wacke, sandstone, siltstone, argillite
	55c Liskeard Gp.		28a Chelmsford Formation: wacke, minor siltstone		9b Alkaline metavolcanic rocks: mafic to felsic metavolcanic flows, tufts and breccias
	55d Red Head Rapids Fm.		28b Onwatin Formation: carbonaceous slate		8 Migmatized supracrustal rocks
	55e Churchill River Gp.		28c Onaping Formation: lapilli tuff, breccia, felsic flows and intrusions, minor carbonate and cherty		7 Metasedimentary rocks
	55f Bad Cache Rapids Gp.		27 Carbonate-alkalic intrusive suite (ca. 1.9 Ga)		7a Paragneisses and migmatites
	54 Limestone, dolostone, shale, arkose, sandstone		26 Mafic intrusive rocks		7b Conglomerate and arenite
	54a Ottawa Gp.; Simcoe Gp.; Shadow Lake Fm.		26a Molson swarm (1884 Ma) diabase dikes; and Sutton Inlier: diabase sills		7c Marble, chert, iron formation, minor metavolcanic rocks
	54b Chazy Gp.; Rockcliffe Fm.		26b Wabigoon swarm: diabase dikes		7d Conglomerate and arenite
	53 Dolostone, sandstone: Beekmantown Gp.		26c North Channel swarm: diabase dikes		7e Paragneiss and migmatites
	52 Conglomerate, sandstone, shale, dolostone: Potsdam Gp; Nepean Fm.; Covey Hill Fm.		25 Sedimentary Rocks (Sutton Inlier): dolostone, chert breccias, argillite, wacke, conglomerate, iron formation		6 Felsic to intermediate metavolcanic rocks
	51 Tectonite unit		24 Sedimentary Rocks (Animikie Group): wacke, shale, iron formation, limestone, minor volcanic rocks, conglomerate, taconite, aldal chert, carbonate rocks, argillite-tuff		6a Dacitic and Andesitic flows, tufts and breccias
	50 Late felsic plutonic rocks		24a Rove Formation: argillite, shale, wacke, minor volcanic rocks		6b Rhyolitic, rhyodacitic flows, tufts and breccias
	50a Granitic and syenitic gneisses		24b Gunflint Formation: conglomerate, taconite, algal chert, chert, carbonate rocks, argillite-tuff		5 Mafic to intermediate metavolcanic rocks
	50b Granitic gneisses with metasedimentary xenoliths, migmatites, injection gneisses, pegmatites		23 Mafic and related intrusive rocks		5a Andesitic flows, tufts and breccias with minor rhyolites
	49 Mafic to ultramafic plutonic rocks		23a Preissac swarm: diabase dike (see Dikes)		5b Basaltic and andesitic flows, tufts and breccias
	49a Gabbro		23b Marathon swarm: diabase dikes (see Dikes)		4 Mafic to ultramafic metavolcanic rocks
	49b Diorite		23c Kenora-Fort Frances swarm: diabase dikes (see Dikes)		4a Ultramafic metavolcanic rocks
	49c Anorthosite, gabbroic anorthosite		23d Nipissing sills (2219 Ma): diabase sills, dikes and related granophyre (see Dikes)		4b Mafic metavolcanic rocks metasedimentary rocks and pyroclastic rocks
	48 Alkalic plutonic rocks		23e Mafic dikes of uncertain age (see Dikes)		3 Mafic metavolcanic and metasedimentary rocks
	48a Syenite		23f Mafic plutons of uncertain age		2 Felsic to intermediate metavolcanic rocks
	48b Nepheline Syenite		22 Felsic intrusive rocks (Murray Granite 2388 Ma, Creighton Granite 2333 Ma): granite		1 Metasedimentary rocks and mafic to ultramafic metavolcanic rocks
	47 Early felsic plutonic rocks				1b Mafic metavolcanic rocks, marble, quartz arenite, iron formation
	47a Monzo and syenogranite				