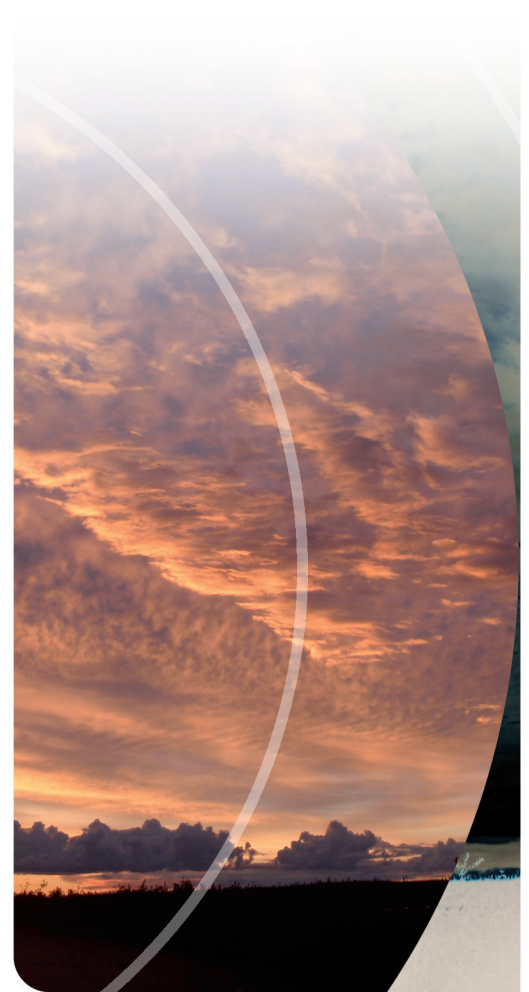


NEW MINERAL EXPLORATION TARGETS

2015 GEOSCIENCE PROJECTS



New Mineral Exploration Targets

2015 Geoscience Projects

PRO 2015-06

Introduction

In this report, Géologie Québec presents the targets of economic interest identified during its 2015 geoscience projects. Geoscience knowledge acquisition is one of the main missions of Géologie Québec. This knowledge is acquired in order to encourage the mining industry to develop Québec's mineral resources by increasing exploration activity and discovering new deposits.

During 2015 fieldwork, geologists of the *ministère de l'Énergie et des Ressources naturelles* have identified zones where the geological setting is considered favourable for mineral exploration. These areas of interest have not been studied in detail but warrant further investigation by exploration companies. Newly acquired data on these areas of interest will be made public in late November during Québec Mines 2015.

2015 Mineral Exploration Targets

A target corresponds to a zone where the geological setting is considered favourable for mineral exploration. The data provided on these targets are essentially based on field observations made by the **Ministère** geologists. There are three categories of targets: (1) **outcrop-sized** targets measuring less than 100 metres, (2) **local** targets between 100 metres and 1 kilometre in size, and (3) **regional** targets greater than 1 kilometre in size.

As a result of the geoscience projects completed in 2015, **85 targets** were identified that correspond to favorable geological environments, anomalous zones or mineralized showings. The targets are all located in areas open to mineral exploration and non staked as of October 9th 2015. It should be noted that by the time of this writing, only part of geochemical analysis results have been received. The arrival of

new data could possibly confirm the existence of showings. In this case, the information will be recorded in the *Système d'information géominère du Québec* (SIGÉOM).

Target locations are shown on the map of Québec and briefly described in a table that includes their precise geographical location, the name of the associated project, and the corresponding poster number. For further information, Québec Mines 2015 attendees are invited to visit the geoscience posters, where they can meet the project geologists and find out more about these new exploration targets and about the mineral potential in Québec's various regions.

Exploration targets are also shown on the SIGÉOM interactive map available at the following address:

http://sigecom.mrn.gouv.qc.ca/signet/classes/I1108_afchCartelIntr

In addition, the 2015 targets are shown on the *Système de Gestion des Titres miniers* (GESTIM) site at the following address:

https://gestim.mines.gouv.qc.ca/MRN_Gestim_Presentation/ODM02101_login.aspx

For further details concerning our geoscience projects, interested parties can get more information by contacting the *Bureau de la Connaissance géoscientifique du Québec* or communicating by e-mail with the persons in charge:

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Pénélope Burniaux	Mapping - Lac Joubert area, Baie-James region	Pénélope.Burniaux@mern.gouv.qc.ca
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Abdelali Moukhsil	Mapping - Clova area, Haute-Mauricie region, mapping - Les Escoumins Project, Côte Nord region	Abdelali.Moukhsil@mern.gouv.qc.ca
Robert Thériault	Mapping - Rivière Patapédia area, Bas-Saint-Laurent region	Robert.Theriault@mern.gouv.qc.ca

Other targets identified in 2015 appeared in the following publications:

INTISSAR, R. – ALLARD, G. – BENAHMED, S., 2015 – Qualitative interpretation of aeromagnetic data in the rivière Buron and rivière Brochant areas, west coast of Ungava Bay. *Ministère de l'Énergie et des Ressources naturelles*; PRO 2015-03, 12 pages.

DUBÉ-LOUBERT, H. – DAUBOIS, V. – ALLARD, G. – ROY, M., 2015 – Exploration targets identified by Quaternary surveys in the southeastern part of the Churchill Province. *Ministère de l'Énergie et des Ressources naturelles*; PRO 2015-04, 8 pages.

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www.mern.gouv.qc.ca/produits-services/mines.jsp

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Number and Name	Size	Location (UTM NAD83)*	NTS sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
Superior Province (Baie-James) – Nord-du-Québec administrative region								
(1) Lac Chaboullié	Regional	Zone 18 292671 mE 5641142 mN to 301533 mE 5647145 mN	32K13	Mapping – Lac Rodayer area, Baie-James	G28	Daniel Bandyayera Yannick Daoudene Simon Bourassa	Cu-Pb-Zn-Ag-Au	Iron-rich sedimentary rocks and rusty zones with <10 % PO-PY-CP disseminations and veinlets in metre-wide deformation corridors cutting a mafic and intermediate volcanic sequence.
(2) Marais Niskachekw	Regional	Zone 18 327393 mE 5668551 mN to 348907 mE 5670621 mN	32N03	Mapping – Lac Rodayer area, Baie-James	G28	Daniel Bandyayera Yannick Daoudene Simon Bourassa	Cu-Pb-Zn-Ag-Au	Decametre-wide semi-massive to massive sulfide (PO-PY) lenses and rusty zones that contain <10 % disseminated PO-PY-CP in metre-wide deformation corridors cutting mafic and intermediate volcanic rocks.
(3) Syénite du lac Rodayer	Regional	Zone 18 296627 mE 5642679 mN to 313577 mE 5636384 mN	32K13	Mapping – Lac Rodayer area, Baie-James	G28	Daniel Bandyayera Yannick Daoudene Simon Bourassa	Au + REE	Alkaline complex (18 km x 4 km) formed of syenite porphyry with <90 % K-feldspar. This complex is located between the Rivière Nottaway and the Lac Colomb shear zones.
(4) Zone de cisaillement de la rivière Nottaway	Regional	Zone 18 288932 mE 5625747 mN to 304901 mE 5637925 mN	32K13	Mapping – Lac Rodayer area, Baie-James	G28	Daniel Bandyayera Yannick Daoudene Simon Bourassa	Cu-Pb-Zn-Ag-Au	Decametre to kilometre-scale amphibolite lenses in the Rivière Nottaway Shear Zone. Decimetre-scale mineralized zones, locally brecciated, containing <20 % disseminated sulfides.
Superior Province (Baie-James) – Nord-du-Québec administrative region								
(5) 15-HH-2047	Outcrop-sized	Zone 18 672545 mE 5898053 mN	33H01	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au	Enclave of foliated amphibolite in the Rivière Galinée Pluton, cut by PY-bearing QZ veins.
(6) 15-NC-6074	Outcrop-sized	Zone 18 696015 mE 5887473 mN	33H01	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au	Foliated and folded amphibolite unit cuts by decimeter-scale schistose zones with disseminated sulfides (PY-PO) and GR-AM-DP assemblage.
(7) 15-CL-5143	Outcrop-sized	Zone 19 365955 mE 5900193 mN	23E04	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au	Meter-scale graphitic rusty layers along an amphibolite-migmatitic paragneiss contact, visible >10 m.
(8) 15-AR-4213	Outcrop-sized	Zone 19 317603 mE 5892516 mN	23E04	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au-Cu	Many small rusty horizons in a paragneiss with disseminated sulfides (PO-PY-CP).
(9) 15-AR-4089	Outcrop-sized	Zone 19 319009 mE 5892583 mN	23E04	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au-Cu	Altered paragneiss containing small rusty layers with <10 % disseminated sulfides (PY-CP-AS). Strongly rusty QZ vein and an altered layer showing an AM-DP-GR assemblage. Some PO-MG.
(10) 15-CL-5156	Outcrop-sized	Zone 19 329559 mE 5884238 mN	23E04	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au-Cu	Decametre-scale horizons with disseminated PY-PO-CP within a schistose GR paragneiss.
(11) 15-AR-4085	Outcrop-sized	Zone 19 329533 mE 5882535 mN	23E04	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au-Cu	PY-bearing altered paragneiss with a 0.5 metre-thick rusty sulfide horizon.
(12) 15-CL-5009	Outcrop-sized	Zone 18 678949 mE 5900932 mN	33H01	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Ni-Cr-PGE	Shear zone cutting a fine-grained olivine pyroxenite.
(13) 15-PB-1037	Outcrop-sized	Zone 19 311457 mE 5898493 mN	23E04	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au	Oxide-iron formation in a paragneiss, 5 m wide, with sulfide mineralization (PY, AS).
(14) 15-AR-4240	Outcrop-sized	Zone 19 330113 mE 5901592 mN	23E03	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au	Oxide-iron formation, 3 m wide, rich in sulfides.

Number and Name	Size	Location (UTM NAD83)*	NTS sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
(15) Ultramafite de Dutreuil	Local	Zone 19 330885 mE 5886260 mN to 331245 mE 5883170 mN	23E04	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Ni-Cu	Olivine pyroxenite schist associated with a strong magnetic anomaly 2.5 km x 0.9 km.
(16) 15-HH-2091	Local	Zone 19 332286 mE 5887173 mN to 335626 mE 5884721 mN	23E03	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Cu-Zn-Au-Ag	Mafic volcanic belt, 4 km x 0.7 km with some rare felsic horizons. Most outcrops are mineralized in PY-PO-AS.
(17) Formation de Trieste	Local	Zone 18 672004 mE 5893765 mN to 667131 mE 5893201 mN	33H01	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au	Extension of the volcano-sedimentary belt (Trieste Fm.), 4 km x 0.3 km, in the deformation zone between the La Grande and Opinaca subprovinces.
(18) Zone de cisaillement de Joubert	Regional	Zone 19 335160 mE 5900260 mN to 341600 mE 5883160 mN	23E03	Mapping – Lac Joubert area, Baie-James	G29	Pénélope Burniaux Hanafi Hammouche	Au-Ag	Regional shear zone cutting the metasediment of the Rivière Salomon Fm. A gold showing (Scrou-Ten; 3.7 to 39.2 g/t Au and 25 g/t Ag) is located in this area.
Superior Province (Baie-James) – Nord-du-Québec administrative region								
(19) Iléosud	Regional	Zone 18 430321 mE 5901672 mN to 431757 mE 5900933 mN	33F08	Mapping – Lac de Villaret area, Baie-James	G30	Jean Goutier Joséphine Gigon	Cu	Five types of mineralization in paragneiss (Opinaca Subprov.) along a magnetic anomaly: GP-PO-PY schist, metric zones of sheared and altered paragneiss, centimetric AM-DP-PG-CP-PO-PY zones, massive remobilized PO veins (70 % PO) and TL-PO granite.
Superior Province (Chapais) – Nord-du-Québec administrative region								
(20) 113-PH	Outcrop-sized	Zone 18 522353 mE 5515491 mN	32G15	Mapping and compilation – Lac à l'Eau Jaune area, Chapais	G32	François Leclerc Mehdi Guemache Francis Talla Takam	Cu-Zn-Ag	Porphyritic and massive to pillowed rhyolites cut by millimetre to centimetre-scale QZ-PY veins and veinlets.
(21) Bosum-Sud	Outcrop-sized	Zone 18 510552 mE 5504354 mN	32G10	Mapping and compilation – Lac à l'Eau Jaune area, Chapais	G32	François Leclerc Mehdi Guemache Francis Talla Takam	Cu-Zn-Ag	Massive sulfides bed (PY-PO), 50 cm thick, within a massive basalt unit cut by a comagmatic gabbro sill and a porphyritic granite dike.
(22) Lac à l'Eau Jaune-5	Outcrop-sized	Zone 18 520453 mE 5501014 mN	32G10	Mapping and compilation – Lac à l'Eau Jaune area, Chapais	G32	François Leclerc Mehdi Guemache Francis Talla Takam	Cu-Zn-Ag	Disseminated sulfides (PY-CP) within a GP-rich mudrock unit at the contact with pillowed basalts.
(23) Lac Philippon-3	Regional	Zone 18 525994 mE 5529247 mN	32G15	Mapping and compilation – Lac à l'Eau Jaune area, Chapais	G32	François Leclerc Mehdi Guemache Francis Talla Takam	Cu	Millimetre to centimetre-scale QC-CB veins with disseminated CP within a QZ gabbro of the Bourbeau Sill. Vein margins show a strong malachite alteration.
(24) Dimanche	Regional	Zone 18 518812 mE 5522614 mN to 519497 mE 5523446 mN	32G15	Mapping and compilation – Lac à l'Eau Jaune area, Chapais	G32	François Leclerc Mehdi Guemache Francis Talla Takam	Cu-Zn-Ag	Coarse lapilli tuffs and flow breccia of andesitic composition. Stretched EP-rich fragments in a PG-rich matrix with disseminated sulfides (PY-PO).
Grenville Province – Mauricie, Abitibi-Témiscamingue, Laurentides and Outaouais administrative regions								
(25) Indice Galipeau1 (15-FS-1072B)	Outcrop-sized	Zone 18 497674 mE 5262904 mN	31O11	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	REE	Pinkish granitic pegmatite dyke (<1 m wide) cutting a magnetic gabbro. This dyke contains allanite, monazite and REE carbonates. >5636 ppm TREE (599 ppm Nd) and 648 ppm Th.
(26) Indice Galipeau2 (15-FS-1074C)	Outcrop-sized	Zone 18 496247 mE 5266023 mN	31O11	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Th	Pinkish granitic pegmatite dyke (<40 cm wide) cutting a foliated, medium-grained, weakly hematized, and moderately deformed granite. 554 ppm Th.

Number and Name	Size	Location (UTM NAD83)*	NTS sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
(27) Koroleff (15-DG-8008C)	Outcrop-sized	Zone 18 494485 mE 5301931 mN	31O14	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	REE	Pinkish granitic pegmatite dyke (50 to 70 cm wide) intruded into a mangerite. 1072 ppm REE, 120 ppm Th and 14 ppm U.
(28) Indice Tamarac (15-TC-5152A)	Outcrop-sized	Zone 18 458519 mE 5325142 mN	32B04	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Ni-Cu	Foliated, fine-grained and moderately deformed websterite. Sulfide mineralization (5 % PO, PY, CP) is disseminated as millimetre grains. 3090 ppm Cu, 1370 ppm Ni, 150 ppb Au, 1200 ppm Cr, 2,2 ppm Ag and 0.97 % S.
(29) Victorine (15-TC-5073B)	Outcrop-sized	Zone 18 454091 mE 5325100 mN	32B04	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Ni-Cu	Sulfide-bearing clinopyroxenite (5 % PO, CP) associated with altered peridotite and dunite. Sulfide mineralization is disseminated as millimetre grains in the clinopyroxenite. 210 ppm Cu, 245 ppm Ni, 1.01 % S.
(30) Vance (15-FS-1096D)	Outcrop-sized	Zone 18 433319 mE 5334985 mN	32B04	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Ni-Cu	Medium-grained clinopyroxenite horizon (10 cm wide) in a migmatitic paragneiss. The sulfide mineralization (5 %, PO, PY, tr CP) in the clinopyroxenite consists of millimetre disseminated grains. 232 ppm Cu, 13 ppm Ni and 1.98 % S.
(31) Hayes (15-GC-2242A)	Outcrop-sized	Zone 18 457289 mE 5311116 mN	31O13	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Ni-Cu	Massive medium-grained pyroxenite with disseminated sulfide mineralization (5 %, 3 % PO, 1 % PY, 1 % CP). Fine MG grains (2 %) are also present. 494 ppm Cu, 194 ppm Ni and 0.88 % S.
(32) Fouad (15-SJ-3123B)	Outcrop-sized	Zone 18 442814 mE 5314243 mN	31O13	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Ni-Cu	Clinopyroxenite enclaves (10-20 cm wide) in a gabbro-norite. The medium-grained clinopyroxenite contains a sulfide mineralization consisting of millimetre grains of PO (2 %), PY (1 %) and rare CP (<1 %). 813 ppm Cu, 522 ppm Ni and 6.18 % S.
(33) Adverse (15-SJ-3130B)	Outcrop-sized	Zone 18 455685 mE 5313218 mN	31O13	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Ni-Cu	Clinopyroxenite clusters (1-40 cm) in a QZ monzodiorite with disseminated sulfide (7 %) consisting of PO (4 %), PY (2%) and CP (<1%). 716 ppm Cu, 456 ppm Ni and 5.14 % S.
(34) Jens (15-FS-1065C)	Outcrop-sized	Zone 18 434616 mE 5272758 mN	31O12	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Ni-Cu	Medium-grained, foliated and magnetic GR-bearing gabbro-norite, with sulfide mineralization (3 % ; 2 % PO, 1 % PY, <1 % CP) consisting of PO (2 %), PY (1 %) and CP (<1%). 1020 ppm Cu, 25 ppm Ni and 1.12 % S.
(35) Ted (15-AM-164A)	Outcrop-sized	Zone 18 486498 mE 5334411 mN	32B03	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Fe-Ti-P	Coarse-grained, massive gabbro-norite with iron-titanium oxides (25 %), mainly MG and IM. Rare millimetre grains of apatite (2 %) were also observed (OAGN-type mineralization). 13 % Fe, 3.4 % TiO ₂ and 0.37 % P ₂ O ₅ .
(36) Yarvard (15-SB-6090A)	Outcrop-sized	Zone 18 443248 mE 5300573 mN	31O13	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Fe-Ti-P	Medium to coarse-grained highly deformed gabbro-norite, with ophitic and locally coronitic structures. The rock contains about 10 % iron-titanium oxides (MG and IM) and ±5 % apatite as millimetre grains. 12.5 % Fe, 2.14 % P ₂ O ₅ and 3.68 % TiO ₂ .
(37) Portia (15-SB-6060A)	Outcrop-sized	Zone 18 455785 mE 5330973 mN	32B04	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	GP-SM	Banded, stromatic, medium-grained GR paragneiss with disseminated GP flakes (3 %) and 1-5 mm-long SM rods (3 %). 18.7 % Al ₂ O ₃ .
(38) Indice Rust (15-GC-2161A)	Outcrop-sized	Zone 18 431643 mE 5304915 mN	31O13	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	GP	Medium-grained paragneiss with disseminated GP (12 %) as millimetre flakes parallel to the gneissosity. The GP is associated with disseminated PO (2 %), 2.67 % C and 1.08 % S.
(39) Péronne (15-TC-5084A)	Outcrop-sized	Zone 18 429465 mE 5322477 mN	32B04	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	GP-SM	Banded medium-grained GR paragneiss with millimetre SM crystals (35 %) and disseminated GP flakes (2 %). 18.5 % Al ₂ O ₃ .
(40) Canot (15-GC-2213A)	Outcrop-sized	Zone 18 491810 mE 5291162 mN	31O14	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	SM	Banded medium-grained GR paragneiss with SM (30 %).
(41) Moon (15-AM-147A)	Outcrop-sized	Zone 18 443311 mE 5317000 mN	32B04	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Architectural stone	Coarse-grained porphyritic pinkish syenite with large K-feldspar crystals (<1.5 cm). The syenite outcrop is easily accessible, and shows considerable volume.
(42) Réjane (15-SB-6022C)	Local	Zone 18 464980 mE 5323567 mN to 466217 mE 5324646 mN	32B03	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Fe	Banded iron formation consisting of centimetre bands of iron silicates, chert (1 cm thick), grenatite (4 cm thick) and massive MG. 20 % Fe, 860 ppm Cu, 165 ppm Ni, 3.8 ppm Ag and 13.8 % S.

Number and Name	Size	Location (UTM NAD83)*	NTS sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
(43) Duchamp (15-AM-51C)	Local	Zone 18 474504 mE 5332123 mN to 476266 mE 5332063 mN	32B03	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Fe	Banded iron formation composed of laminar and repetitive bands of iron silicates (7-10 cm wide), chert (5-10 cm), iron oxides (1-10 cm) and grenatite (<5 cm). 24.7 % Fe.
(44) Foligné (15-TC-5055B)	Local	Zone 18 476534 mE 5333421 mN to 477417 mE 5333727 mN	32B03	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Ni-Cu	Coarse-grained GR and MG-bearing gabbronorite, with coronitic structure and millimetre grains of disseminated sulfides (3 % PY, PO and CP). 327 ppm Cu, 34 ppm Ni and 0.39 % S.
(45) Indice Siam (15-FS-1177C et B)	Outcrop-sized	Zone 18 485354 mE 5262060 mN	31O11	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Cu-Ag	Pinkish pegmatitic QZ syenite dyke (0.5 m thick). Presence of AM, CX, MG, PY, CP. 2800 ppm Cu, 13 ppm Ni, 2.1 ppm Ag and 1.1% S; 6.3 ppm Ag.
(46) Apok (15-FS-1035C)	Outcrop-sized	Zone 18 497171 mE 5343437 mN	32B03	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Cu	Horizons (5-10 cm-thick) of rusty quartzite with disseminated sulfides (PO, PY, CP), interbedded with a BO paragneiss. 933 ppm Cu, 39 ppb Au, 5.89 % S.
(47) Indice Le Breton (15-DG-8116A)	Outcrop-sized	Zone 18 459127 mE 5301931 mN	31O13	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	Cu	GR-rich amphibolite (10-20 %) probably derived from a mafic volcanic rock. 3470 ppm Cu, 1.7 ppm Ag and 0.13 % S.
(48) Indice de la Colombe (15-FS-1125D)	Outcrop-sized	Zone 18 428100 mE 5302279 mN	31O13	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	GP-Zn-Ag	GP-bearing horizons (5-10 %) in BO paragneiss with sulfides (<2 % PO-PY) disseminated as millimetre grains. 3.43 % C, 1560 ppm Zn, 2.2 ppm Ag and 1.25 % S.
(49) Indice Kekek (15-AM-200B)	Outcrop-sized	Zone 18 433158 mE 5342784 mN	32B04	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	REE	MV-bearing granitic pegmatite (albitized) cutting a migmatitic paragneiss. 1860 ppm REE (269 ppm Nd).
(50) Indice Shingle (15-GC-2122C)	Outcrop-sized	Zone 18 496508 mE 5282091 mN	31O11	Mapping – Clova area, Haute-Mauricie	G67	Abdelali Moukhsil Saïd Belkacim Fabien Solgadi	REE	Migmatitic gabbro cut by dykes of granitic pegmatite (<1 m-thick). 2541 ppm REE (471 ppm Nd, 128.79 ppm HREE) and 286 ppm Y.
Grenville Province – Côte Nord administrative regions								
(51) Pentland (15-PA-163F)	Outcrop-sized	Zone 19 458637 mE 5354261 mN	22C05	Mapping – Les Escoumins project, Côte Nord	G61	Abdelali Moukhsil Pierre-Arthur Groulier	Cu-Zn-Pb-Ag-Au	Boulders (decimetre to metre-scale) of mineralized metavolcanic rock (PO-CP-SP-GL-PY). The boulders were found close to an alteration zone in a volcanic sequence.
(52) Philiat (15-PA-243C)	Outcrop-sized	Zone 19 487160 mE 5389242 mN	22C11	Mapping – Les Escoumins project, Côte Nord	G61	Abdelali Moukhsil Pierre-Arthur Groulier	Pb-Zn-Ag	Hydrothermal breccia (decimetre to metrewide) with local cockade structure. Breccia with centimetre PY crystals, several sulfide generations, fine-grained GL and SP in the matrix.
(53) Truchon (15-PA-262B+L)	Outcrop-sized	Zone 19 463333 mE 5375284 mN	22C11	Mapping – Les Escoumins project, Côte Nord	G61	Abdelali Moukhsil Pierre-Arthur Groulier	Ni-Cu-PGE	Olivine gabbronorite with 1 % sulfide globules (PO-CP-PD).
(54) Tonia (15-PA-299B)	Outcrop-sized	Zone 19 473106 mE 5375740 mN	22C11	Mapping – Les Escoumins project, Côte Nord	G61	Abdelali Moukhsil Pierre-Arthur Groulier	Mo-Ni-Cu-PGE	Centimetre-wide vein with semi-massive to massive sulfides (PO-PD-CP) cutting a gabbronorite. This rock is also cut by a tonalitic dyke with 1-2 % MO.
Churchill Province (Great North) – Nord-du-Québec administrative region								
(55) 15-IL-3059	Outcrop-sized	Zone 19 606348 mE 6264060 mN	24B11	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Fe ± Au	Multiple 1 to 10 m thick layers with disseminated sulfides (PO-PY) in a volcano-sedimentary sequence, mostly mafic and ultramafic rocks. Correspond to a strong magnetic anomaly of approximately 2 km x 1 km. 28.5 % Fe ₂ O ₃ .
(56) 15-JC-5067	Outcrop-sized	Zone 19 597009 mE 6270633 mN	24B11	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Body of semi-massive sulfides (1-3 m), and PO-PY-bearing amphibolites. Alteration zone marked by GR-BO-AC-CB calcsilicate rock. Coincides with a high magnetic lineament 300 m x 1 km showing an E-W fold. 620 ppm Cu, 620 ppm Zn and 420 ppm Ni.
(57) 15-MP-1041	Outcrop-sized	Zone 19 602031 mE 6279948 mN	24B11	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Highly magnetic metasedimentary rocks and GP-PO-PY silicate iron formation. Corresponds to a high magnetic lineament of 350 m x 5 km. A Zn lake-bottom sediments target located <1.5 km WNW. 1840 ppm Zn, 570 ppm Cu and 320 ppm Ni.

Number and Name	Size	Location (UTM NAD83)*	NTS sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
(58) 15-MO-7068	Outcrop-sized	Zone 19 588350 mE 6269417 mN	24B12	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Meter thick massive sulfide lenses and metagabbro with disseminated sulfides in a paraschist sequence. Associated with a magnetic lineament forming the southern limb of an E-W fold. 700 ppm Cu, 390 ppm Zn and 390 Ni.
(59) 15-MP-1058	Outcrop-sized	Zone 19 647731 mE 6291461 mN	24B10	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn ± Au ± Ag	Four gossans zones up to 7 m x 100 m in paragneiss with disseminated sulfides and local GP.
(60) 15-NL-4053	Outcrop-sized	Zone 19 601714 mE 6275680 mN	24B11	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Semi-massive sulfides and GR amphibolite (180 m x 20 m) with <15 % PO in disseminations or veinlets. Corresponds to a high magnetic lineament of approximately 5 km x 300 m. 1080 ppm Cu, 2800 ppm Zn et 460 ppm Ni; 1550 ppm Zn and 110 ppm Mo.
(61) 15-IL-3124	Outcrop-sized	Zone 19 621464 mE 6209529 mN	24B03	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Gossan of approximately 50 m x 4 m at the contact between a fine-grained amphibolite and a graphitic metasedimentary rock. Disseminated PO in both lithologies associated with CB veins.
(62) 15-NL-4171	Outcrop-sized	Zone 19 646437 mE 6207770 mN	23O15	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Decimetre to metre-sized gossan with 1 % to 3 % PO (disseminated or in veinlets) in a metabasalt. Associated with CL and CB alteration.
(63) 15-BC-6060	Outcrop-sized	Zone 19 589096 mE 6276105 mN	24B12	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Ni-Cu	Amphibolitized ultramafic rock with ±2 % PY-PO ± CP in small mm to cm-sized clusters. Associated with a strong circular magnetic anomaly of 1-2 km in diameter. 899 ppm Ni, 240 ppm Cu and 1.9 % TiO ₂ .
(64) 15-IL-3020	Outcrop-sized	Zone 19 648568 mE 6314956 mN	24B15	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Ni-Cu	Mafic to ultramafic rocks with some rusty layers. Located approximately 2 km away from a Cu lake-bottom sediments target.
(65) 15-MP-1085	Regional	Zone 19 593507 mE 6270644 mN to 596154 mE 6271533 mN	24B11	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Massive sulfides (<5-7 m thick) including QZ-rich fragments and amphibolites with disseminated sulfides. Associated with a low magnetic anomaly in the core of an E-W fold. Less than 400 m away from a Zn lake-bottom sediments target.
(66) 15-IL-3041	Regional	Zone 19 584652 mE 6297689 mN to 585796 mE 6298245 mN	24B13	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn-Au	Metre thick layers (<6 m) with disseminated sulfides and alteration zones (DP-HB-CL-PO carbonated rocks) in a GP-rich metasediment. Corresponds to a very strong magnetic lineament of 250 m x 10 km associated to a fault.
(67) 15-MP-1112	Regional	Zone 19 610647 mE 6250930 mN to 614489 mE 6248962 mN	24B06	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Zones of disseminated sulfides (mostly PO; 5-10%) associated with a mainly mafic metavolcanic sequence. Mineralisation generally associated with felsic and intermediate rocks or schistose layers. 940 ppm Zn and 180 ppm Cu.
(68) 15-MO-7163	Regional	Zone 19 669693 mE 6187465 mN to 676410 mE 6184128 mN	23O16	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Decimetre to metre thick rusty layers in metabasalts with disseminated sulfides (1 % to 5 % PY-PO ± AS). These layers are present in 2 distinct areas 5 km apart, and correspond to a NW-SE magnetic lineament.
(69) 15-LP-2183	Regional	Zone 19 637667 mE 6216197 mN to 639886 mE 6212074 mN	24B02	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn	Rusty layers with disseminated PO-PY in a metabasalt sequence. The 2 visited areas are 3 km apart and belong to the same strongly magnetic NNW-SSE lineament.
(70) 15-IL-3086	Regional	Zone 19 561739 mE 6277386 mN to 589560 mE 6273017 mN	24B12	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	REE-Nb-Ta	Regional alteration zone at the contact with the Labrador Trough characterized by the omnipresence of CB and radiating AC, and by QZ-CB ± sulfide veins. In continuation of the Le Moyne Complex carbonatite. 159 ppm Nb, 9.4 ppm Ta and 497 ppm REE.

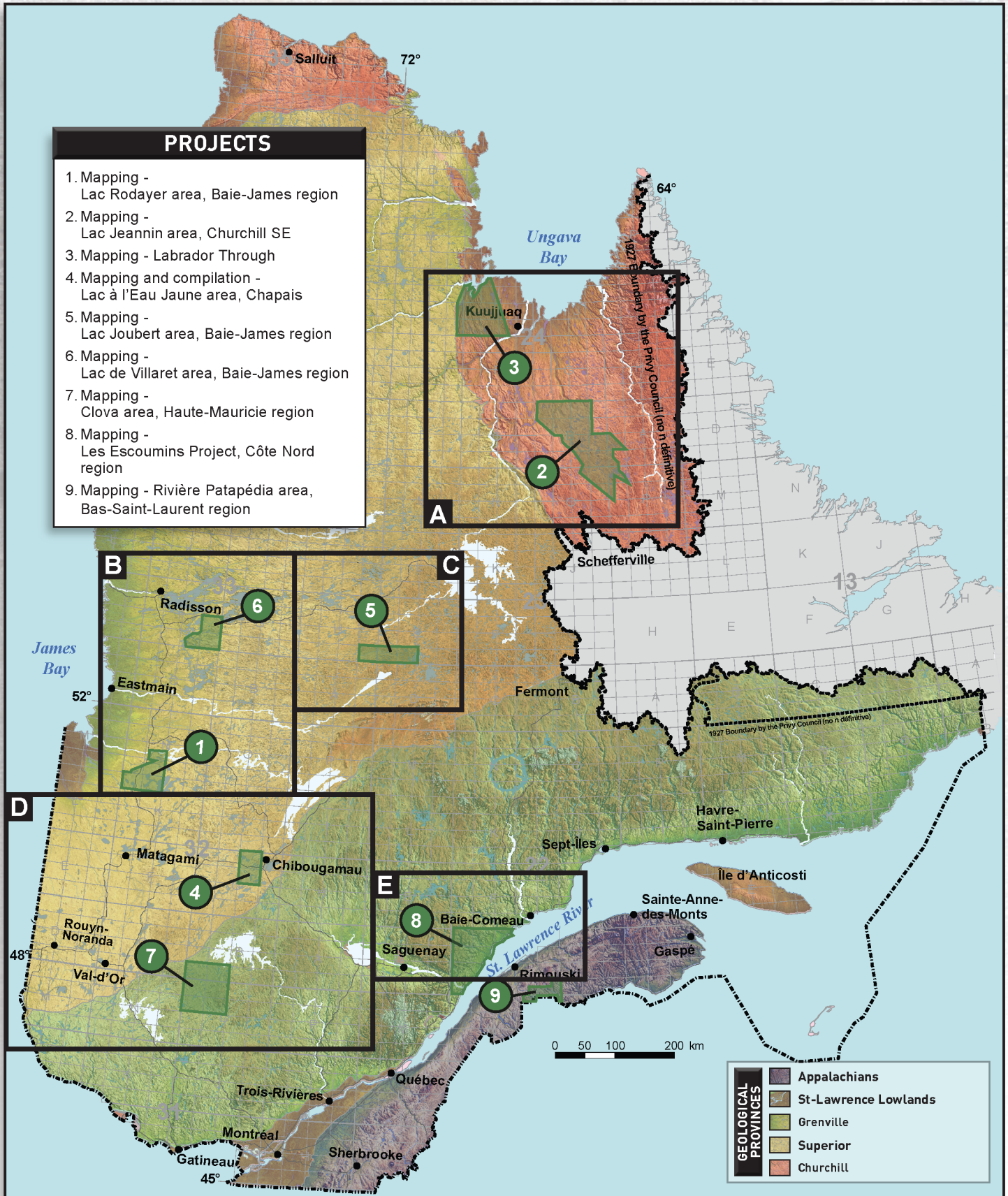
Number and Name	Size	Location (UTM NAD83)*	NTS sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
(71) 15-JC-5212	Regional	Zone 19 661714 mE 6292387 mN to 664360 mE 6291864 mN	24B09	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn ± Au ± Ag	Metre-scale rusty zones with sulfide and GP in a migmatitic paragneiss. Mineralisation include <10 % PO in both paragneiss and leucosome. Corresponds to a strong magnetic E-W lineament. 430 ppm Cu, 370 Ni and 130 ppm Zn.
(72) 15-JC-5206	Regional	Zone 19 615155 mE 6300724 mN to 619160 mE 6299124 mN	24B14	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu-Zn ± Au ± Ag	Multiple rusty zones in migmatitic paragneiss, 5 m to 30 m thick. Mineralisation includes 2-5 % sulfides (mostly PO) disseminated or in veinlets, and QZ-PO veins.
(73) Indice Champdoré Sud	Outcrop-sized	Zone 20 330830 mE 6191428 mN	23P13	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Ag	QZ monzodiorite with K-feldspar phenocrysts. 10.8 g/t Ag, 41 ppm Th and 311 ppm TREE.
(74) Indice Marcel	Outcrop-sized	Zone 19 550225 mE 6305951 mN	24C16	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	GP	GP-bearing meta-argillite, schistose and rusty. 7.7 % C, 60 ppm As, 31 ppm U, 24 ppb Au, 767 ppm V and 76 ppm Mo.
(75) 15-MP-1212	Outcrop-sized	Zone 19 665143 mE 6242991 mN	24B08	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Cu	Horizon with 1-2 % disseminated PY, 2 m wide, in a strongly migmatized paragneiss. Corresponds to a magnetic lineament of 300 m x 2 km. 2240 ppm Cu.
(76) 15-BC-6047	Outcrop-sized	Zone 19 590463 mE 6292244 mN	24B13	Mapping – Lac Jeannin area, Churchill SE	G68	Isabelle Lafrance Benoit Charette	Zn-Cu	Rusty zone 5 m x 5 m in a GP and GR-bearing meta-argillite with some disseminated sulfides (1-4 % PY-CP). 3830 ppm Zn and 480 ppm Cu; 2220 ppm Zn and 540 ppm Cu.
Churchill Province (Great North) – Nord-du-Québec administrative region								
(77) 15-MB-4097-B	Outcrop-sized	Zone 19 444347 mE 6438089 mN	24K04	Mapping – Labrador Trough	G70	Carl Bilodeau	Polymetallic	Up to 10 % PO in massive and homogenous mesocratic gabbro near the contact with rusty metasediments injected by CC veinlets.
(78) 15-CB-1044-A	Outcrop-sized	Zone 19 478544 mE 6471350 mN	24K06	Mapping – Labrador Trough	G70	Carl Bilodeau	Various	Silty sediment within mineralized basalt with up to 10 % PO. The siltstone shows a whitish alteration (hydrothermalism?).
(79) Kaslac – Sud	Regional	Zone 19 504996 mE 6507048 mN to 504628 mE 6501882 mN	24K10	Mapping – Labrador Trough	G70	Carl Bilodeau	Fe-Ti ± V	Fe-Ti-V mineralization associated with MG and GR-rich metaferrogabbros. Oxide-rich metre wide corridors with some sulfides (1 % PY-CP).
(80) Boulder – Contact Est	Regional	Zone 19 488888 mE 6460100 mN to 494036 mE 6452188 mN	24K03	Mapping – Labrador Trough	G70	Carl Bilodeau	Polymetallic	Paraschist, meta-arenite and microgabbro with up to 10 % PY. Intense deformation NE of the Boulder Klippe marked by QZ boudins and multiple QZ-CB injections.
(81) Lac Ballantyne Nord – Extension	Regional	Zone 19 482854 mE 6495666 mN to 483803 mE 6492021 mN	24K11	Mapping – Labrador Trough	G70	Carl Bilodeau	Cu-Ni-Ag	Sulfide mineralization in the upper and lower contacts of a locally silicified amphibolite unit. Continuous zone over 100 m wide associated with Li, Cu, Y and As lake-bottom sediments anomalies.
(82) Lac en crochets – Extension	Regional	Zone 19 446654 mE 6443992 mN to 447138 mE 6439278 mN	24K04	Mapping – Labrador Trough	G70	Carl Bilodeau	Polymetallic	Several metre wide layers with <15 % PO-PY in a mesocratic gabbro (sometimes glomeroporphyritic) in contact with sulfide-bearing black shale and iron formation. Altered and strongly deformed area with abundance of QZ-PY veins.
(83) Lac Olmstead-Sud (zone 1)	Regional	Zone 19 496473 mE 6462055 mN to 499906 mE 6452359 mN	24K03 24K06	Mapping – Labrador Trough	G70	Carl Bilodeau	Cu-Zn-Ag	Alternating layers of metasedimentary units and amphibolite schist with PY, fractured and silicified zones with QZ-CB veinlets. Area characterized by U, Cu, Y, La and Zn lake-bottom sediments anomalies.

Number and Name	Size	Location (UTM NAD83)*	NTS sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
(84) Lac Olmstead-Sud (zone 2)	Regional	Zone 19 493414 mE 6465337 mN to 494575 mE 6459148 mN	24K06	Mapping – Labrador Trough	G70	Carl Bilodeau	Cu-Zn-Pb-Cd	Rusty and magnetic ultramafic rock in contact with metasediments and amphibolite schists. Disseminated PO mineralization in very thin layers. Y, U, Cu and La lake-bottom sediments anomalies.
Appalachian Province – Bas-Saint-Laurent administrative regions								
(85) Lac Castor	Regional	Zone 19 546045 mE 5320309 mN to 553467 mE 5325960 mN	22C01	Mapping – Patapédia River area, Bas-Saint-Laurent	G14	Robert Thériault Claude Dion Charles St-Hilaire	Architectural stone, Si	Metre to decametre beds of massive polygenic conglomerate interbedded with quartzose sandstone. The conglomerate is composed of rounded pebbles of diverse composition (white sandstone, greenish volcanic rock, red mudstone, etc.).

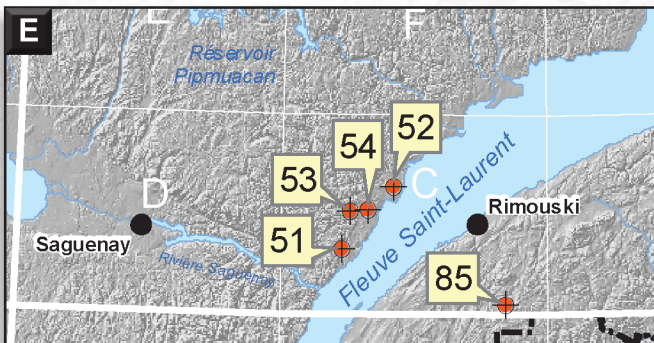
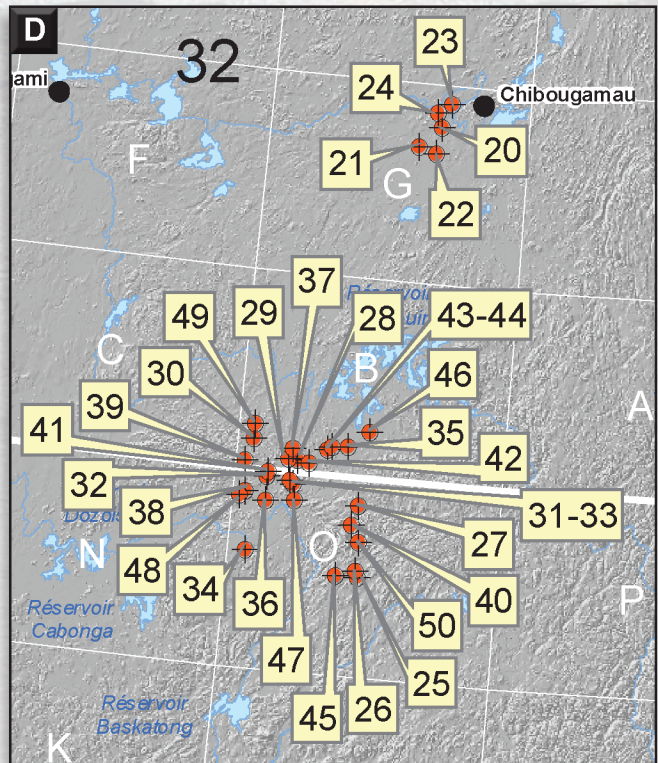
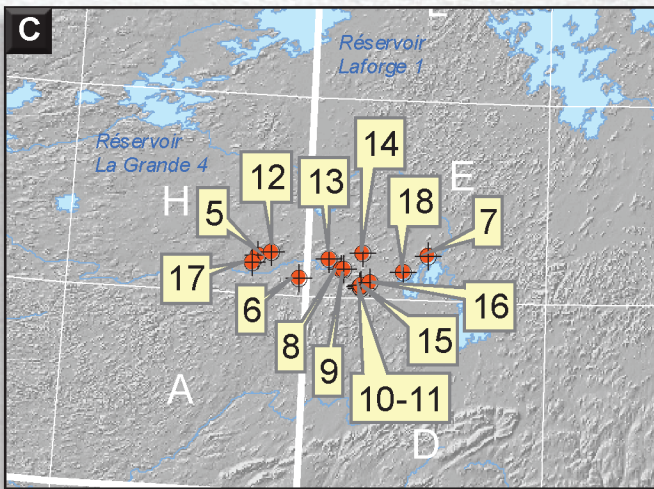
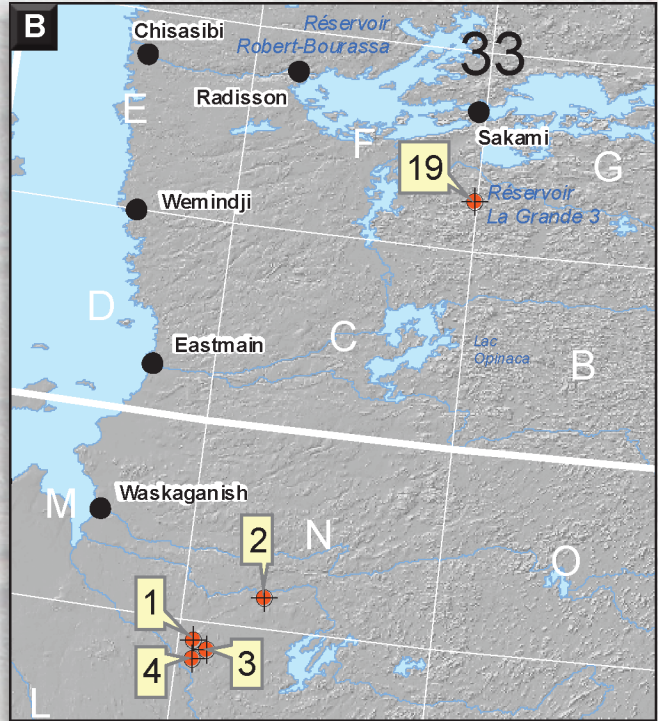
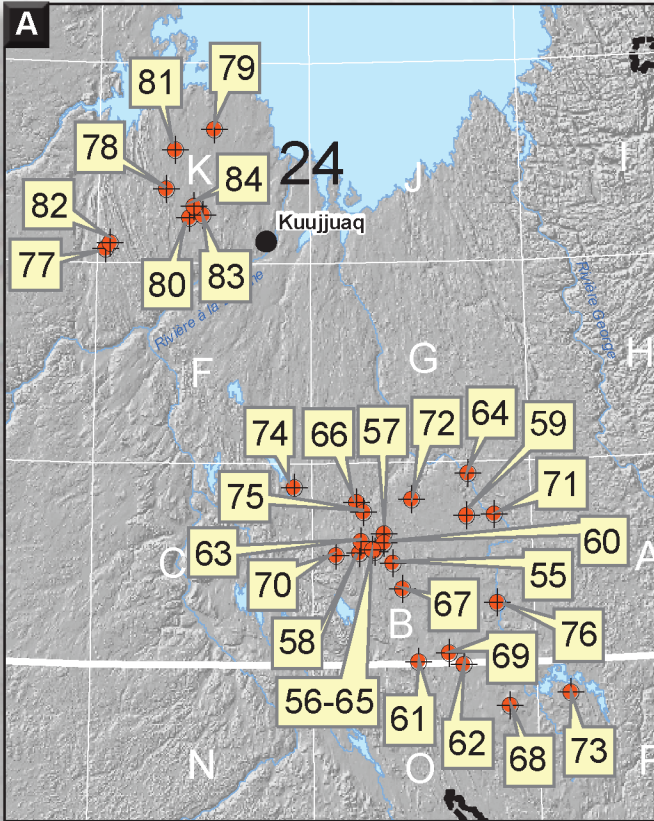
* Coordinates indicate the center of an outcrop-sized target or both ends of a local or regional target.

Note: Mineral abbreviations are listed in the report DV 2014-06 (pages 47-50), available free of charge in the SIGÉOM Examine.

LOCATION OF 2015 GEOSCIENCE PROJECTS



LOCATION OF MINERAL EXPLORATION TARGETS



 Target