

NEW MINERAL EXPLORATION TARGETS

2010 GEOSCIENCE PROJECTS



New Mineral Exploration Targets

2010 Geoscience Projects

PRO 2010-06

Introduction

Géologie Québec presents all the targets of economic interest identified during its 2010 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 their fieldwork, geologists of the Ministère des Ressources naturelles et de la Faune identified zones with a favourable geological setting for mineral exploration. These areas of interest have not been studied in detail but warrant further investigations by exploration companies. Newly acquired data on these areas of interest were processed in a preliminary fashion and will be made public during Québec Exploration 2010.

2010 Mineral Exploration Targets

In this document, a target corresponds to a zone where the geological setting is favourable for mineral exploration and where further exploration work is deemed relevant. The data provided on these targets are essentially based on field observations. These exploration targets are not, for the moment, archived in Québec's Geomining Information System (SIGEOM). They may eventually be classified as a "showing" once their economic value has been confirmed, notably by geochemical analyses.

As a result of the geoscience projects completed in 2010, 91 targets have been identified. There are three categories of

targets: (1) punctual 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.

Target locations are shown on the map of Québec. They are briefly described in a table, in which they are grouped by geological region and by mineral substance. The table also indicates their precise geographical location and their administrative region. Finally, the name of the project from which they originate and the corresponding poster number are also listed. For further information, those who plan to attend Québec Exploration 2010 are invited to consult the posters of knowledge acquisition projects and meet the project geologists, to find out more about these new exploration targets and about the mineral potential in Québec's various regions. In addition, these various targets are located on the site "Gestion des titres miniers, GESTIM" at the following address:

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

For further details concerning our geoscience knowledge acquisition projects, interested parties can inquire at the Bureau d'exploration géologique du Québec or communicate by e-mail with the persons in charge:

Bureau d'exploration géologique du Québec
400, boulevard Lamaque, suite 1.02
Val-d'Or (Québec) J9P 3L4
Telephone: 819 354-4514
Fax: 819 354-4508

Contact	Project	E-mail
Daniel Bandyayera, regional geologist	Mapping – Réservoir La Grande 3 East area, Baie-James	daniel.bandyayera@mrfn.gouv.qc.ca
Isabelle d'Amours, geophysicist	Airborne geophysical survey – Baie-James, Schefferville and Abitibi area	isabelle.damours@mrfn.gouv.qc.ca
Hanafi Hammouche, regional geologist	Mapping – Lac Zeni area	Hanafi.hammouche@mrfn.gouv.qc.ca
François Leclerc, regional geologist	Mapping and compilation – Lac Scott area	francois.leclerc@mrfn.gouv.qc.ca
Abdelali Moukhsil, regional geologist	Mapping – Lac du Milieu area	abdelali.moukhsil@mrfn.gouv.qc.ca
Pierre Pilote, metallogenist	Mapping and compilation – Matagami area	pierre.pilote@mrfn.gouv.qc.ca
Martin Simard, regional geologist	Mapping – Lac Kinglet area	martin.simard@mrfn.gouv.qc.ca

Please note that other areas of economic interest were also identified during 2010 and are presented in the following publications

D'AMOURS, I. – MAURICE, C. – GOSSELIN, C., 2010 – Exploration targets south of LG4, Baie-James, Québec : Interpretation of a new geophysical survey. Ministère des Ressources naturelles et de la Faune, Québec; PRO 2010-04, 12 pages. [This report identifies 66 unclaimed diamond targets and 14 unclaimed uranium targets from the airborne geophysical magnetic and gamma-ray spectrometry survey performed on sheets 33A09 to 16 and 33B09, 10,15 and 16].

LAMOTHE, D., 2010 – Modélisation de cibles de l'environnement secondaire par des techniques de seuils naturels et de régression spatiale multiple. Ministère des Ressources naturelles et de la Faune, Québec; EP 2010-01, 28 pages, digital data available.

MORIN, S.J. – HURTUBISE, E. – LABBÉ, J.-Y., 2010 – New Lake-Bottom Sediment Geochemistry Data in the Côte-Nord Region. Ministère des Ressources naturelles et de la Faune, Québec; PRO 2010-02, 8 pages.

Target (No. and Name)	Size	Localisation (UTM NAD83)	NTS Sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
Superior Province (Far North) – Nord-du-Québec administrative region								
(1) Ceinture de Pie	Regional	Zone 18 554115 mE 5987385 mN	33J01	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Multiple	Volcano-sedimentary belt, 10 km long by 1 to 5 km wide, continuing south (33G16). Some rusty zones in lava and iron formation. Strong magnetic anomaly and Au, Cu, Mo and Zn anomalies in lake-bottom sediments.
(2) Ceinture de Gnaït	Regional	Zone 18 519801 mE 5986500 mN	33J02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Multiple	Volcano-sedimentary belt, 30 km long by 1 to 5 km wide and continuing south (33G15). Some rusty zones in lava and paragneiss. Cu, Zn, Mo and Ni anomalies in lake-bottom sediments nearby.
(3) Brèche du Nord-Est	Local	Zone 18 519809 mE 6087477 mN	33J15	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Cu-Ag-Mo-U	Breccia and stockworks with QZ+CB±HM in fractured and altered (HM-SR-Cl-FK) granite. Mineralized boulder (BN-MC-CP-MO, 78 g/t Au) at 3487 ppm Cu nearby. U, Mo and Cu anomalies in lake-bottom sediments.
(4) Lac Bailloud	Local	Zone 18 332950 mE 6021932 mN	33K02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Multiple	Felsic to intermediate tuf layer 8 m wide and over 750 m long mineralized with PY+MO (1 to 5% sulphides). Associated with a mylonitic zone and alterations (EP-QZ-BO-F+Cl). Mo and Zn anomalies in lake-bottom sediments nearby.
(5) Brèche du Réservoir	Ponctuel	Zone 18 426216 mE 5998938-BmN	33K01	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	U-Au-REE	Fault breccia with granitic fragments in hematite matrix, continuous over a length of 25 m. Surrounding granite is cataclased, altered (SR-Cl-FK) and contains QZ-HM veins. Selected sample with 430 ppm U, U and Au anomalies in lake-bottom sediments nearby.
(6) IL-3324	Local	Zone 18 522088 mE 5989054 mN	33J02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Multiple	Rusty zones, 1 to 5 m wide, in contact with mafic to felsic lavas of Granitic Belt. One of the levels continues onto 165 m in length. Five to 15% sulphides (PY+CP+AS) and important altered zones (SR-K-MV-BO-EP-QZ). Cu anomalies in lake-bottom sediments.
(7) Chauvreuil	Local	Zone 18 530143 mE 6023101 mN	33J07	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Mo-Cu	QZ-HM stockwork zone, 10 m long in strongly altered granite (HM-Cl, EP-Cl), Trace sulphides (PY, MO, CP), Mo, Cu and Zn anomalies in lake-bottom sediments nearby.
(8) Dervilliers	Ponctuel	Zone 18 506135 mE 6067065 mN	33J10	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Mo-Cu	Stockwork zone (QZ+HM veins), 1.5 m by 30 m in hematized granite. Mo and Cu anomalies in lake-bottom sediments.
(9) Lac Dachat	Ponctuel	Zone 18 371511 mE 5986495 mN	33K02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Mo-Cu	Breccia with granitic matrix and gabro and pyroxenite fragments. Trace to 2% sulphides (MO, PY, CP) in granite.
(10) MS-109	Ponctuel	Zone 18 551141 mE 5990610 mN	33J01	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Multiple	QZ-HM breccias and stockworks at least 50 m in altered granodiorite (HM-Cl-EP) in contact with hematized gabbro. Mo anomalies in lake-bottom sediments.
(11) Lac Nudant	Local	Zone 18 400399 mE 6002121 mN	33K02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Multiple	Quartz vein over 4 m wide, quartz veinlets and alteration zones (QZ-Mv-HM) in paragneiss. Two to 4% disseminated PY, <23 ppm Pb, 1 g/t Ag and 61 ppm Au in a chosen sample. Several rusty and sulphidized zones (<5% PO, PY, CP) in paragneiss.
(12) Lac Lorin	Local	Zone 18 373701 mE 6001344 mN	33K02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Mo	Hematite alteration zone and QZ+EP+HM veinlets in HB porphyritic monzonolite. Alteration over 500 m. Association with a NW-SE lineament. Mo anomalies in lake-bottom sediments nearby.
(13) MP-1104	Local	Zone 18 545764 mE 6047919 mN	33J10	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Th-U	Felsic intrusion showing graphic texture zones, pegmatic phases and a yellowish alteration. 149 ppm Au in a chosen sample.
(14) IL-3129	Local	Zone 18 566749 mE 5984190 mN	33J01	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Au-Mo	Banded iron formation over 200 m thick associated with a positive magnetic anomaly. Felsic lava layers and several rusty zones sometime rich in sulphides (up to 25% PY+CP). Chosen sample with 2.4 g/t Ag and 5.3 ppm As. Mo and Au anomalies in lake-bottom sediments nearby.
(15) Lac Valdant	Local	Zone 18 386167 mE 6009343 mN	33K02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Au-Cu	Pangneis with several rusty and sulphidized zones (5-10% PY). Contains some discontinuous intermediate sulphidized tuff layers (3.5% P+PO). Ni anomalies in lake-bottom sediments.
(16) Brèche Menellier	Ponctuel	Zone 18 512199 mE 6032206 mN	33J07	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Mo	Fault breccia in altered (HM-Cl) and fractured granite, injected with QZ veinlets. Mo and Zn anomalies in lake-bottom sediments.
(17) IL-3173	Ponctuel	Zone 18 530014 mE 5989871 mN	33J02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Multiple	Rusty horizon, 2 to 5 m wide traced laterally for 30 to 35 m, between amphibolite and paragneiss. Contains several sulphidized zones (3.5% P+PO). Chosen sample with 363 ppm Cu, 0.3 % Cr et 272 ppm Ni. Zn, Mo and Cu anomalies in lake-bottom sediments nearby.
(18) MP-1361	Local	Zone 18 391555 mE 5987809 mN	33K02	Mapping – Lac Kinglet area	153	Martin Simard Isabelle Lafrance	Multiple	Rusty zone 3 m thick, associated to a strong alteration (FK-EP-SR-Cl) and 2 to 5% pyrite. In the same area, fuscile, sericite, staurolite, rutile and andalusite zones and rusty zones in paragneiss.

Target (No. and Name)	Size	Localisation (UTM NAD83)	NTS Sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
Churchill Province (Far North) –Nord-du-Québec administrative region								
(19) Granite de Ramusio	Regional	Zone 20 448315 mE 6093640 mN	131-13	Mapping – Lac Zeni area	193-195	Hanafi Hammouche Jean Goutier	REE, Y, Zr, BeU	Late granite with local fluorite, associated with spectrometric U, Th, aeromagnetic (negative) and geochemical (Be, Y et U in lake-bottom sediments) anomalies.
(20) Syénite de Juillet	Regional	Zone 20 423462 mE 6069547 mN	23109-23116	Mapping – Lac Zeni area	193-195	Hanafi Hammouche Jean Goutier	REE, Y, Zr	Late syenite associated with positive aeromagnetic anomalies showing an annular and concentric arrangement. Low U and Th spectrometric anomalies. Historical analysis reaching 3100 ppm Zr and 0.25% REE oxides.
(21) Lac Matinace	Regional	Zone 19 639332 mE 6090090 mN	23J15	Airborne magnetic and spectrometric survey – Lac Attikamagen (DP 2010-02)	197	Isabelle D'Amours	U	Spectrometric anomaly with a maximum eqU / eqTh value of 2.9 compared to the general background noise level (3.9 ppm max eqU)
(22) Schefferville-1	Regional	Zone 19 644288 mE 6078974 mN	23J15	Airborne magnetic and spectrometric survey – Lac Attikamagen (DP 2010-02)	197	Isabelle D'Amours	U	Spectrometric anomaly with a maximum eqU / eqTh value of 3.5 compared to the general background noise level (5.4 ppm max eqU)
(23) Schefferville-2	Regional	Zone 19 636281 mE 6075265 mN	23J15	Airborne magnetic and spectrometric survey – Lac Attikamagen (DP 2010-02)	197	Isabelle D'Amours	U	Spectrometric anomaly with a maximum eqU / eqTh value of 3 compared to the general background noise level (2.9 ppm max eqU)
(24) Lac aux Goélands-1	Regional	Zone 20 409200 mE 6140750 mN	23P08	Airborne magnetic and spectrometric survey – Lac Ramusio (DP 2010-02)	197	Isabelle D'Amours	U	Spectrometric anomaly with a maximum eqU / eqTh value of 2.9 compared to the general background noise level (4 ppm max eqU)
(25) Lac aux Goélands-2	Regional	Zone 20 406467 mE 6144390 mN	23P08	Airborne magnetic and spectrometric survey – Lac Ramusio (DP 2010-02)	197	Isabelle D'Amours	U	Spectrometric anomaly with a maximum eqU / eqTh value of 3 compared to the general background noise level (3.3 ppm max eqU)
(26) Lac aux Goélands-3	Regional	Zone 20 406196 mE 6151127 mN	23P08-23P09	Airborne magnetic and spectrometric survey – Lac Ramusio (DP 2010-02)	197	Isabelle D'Amours	U	Spectrometric anomaly with a maximum eqU / eqTh value of 2.8 compared to the general background noise level (2.3 ppm max eqU)
(27) Lac aux Goélands-4	Regional	Zone 20 406930 mE 6147835 mN	23P08	Airborne magnetic and spectrometric survey – Lac Ramusio (DP 2010-02)	197	Isabelle D'Amours	U	Spectrometric anomaly with a maximum eqU / eqTh value of 2.3 compared to the general background noise level (3.2 ppm max eqU)
(28) Anchor Bay-1	Regional	Zone 19 532800 mE 6498900 mN	24K09	Airborne magnetic survey – Kuujjuaq (DP 2010-08)	197	Isabelle D'Amours	Kimberlite	Grouping of five aeromagnetic anomalies within a large mass of granitoid with Keating coefficients between 80 to 93% (cylinder of 100 m radius).
(29) Rivière Qalalauip	Regional	Zone 19 5262175 mE 6506475 mN	24K10	Airborne magnetic survey – Kuujjuaq (DP 2010-08)	197	Isabelle D'Amours	Kimberlite	Group of five aeromagnetic anomalies within a large mass of granitoid with Keating coefficients between 80 to 91% (cylinder of 100 m radius). The magnetic map suggests a complex network of dykes in the area.
(30) Rivière Kukuluk 1, 2 et 3	Regional	Zone 19 557625 mE 6476775 mN 555150 mE 6467025 mN 558975 mE 64686825 mN	24K08-24J05	Airborne magnetic survey – Kuujjuaq (DP 2010-08)	197	Isabelle D'Amours	Kimberlite	Circular anomalies with Keating coefficients of 90 to 93% (cylinder of 100 m radius).
Superior Province (James Bay) – Nord-du-Québec administrative region								
(31) Fernande La Grande-Nord	Local	Zone 18 524657 mE 5968811 mN	33G15	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Ag-Cu	Polygenic intrusive breccia over 100 m wide and at least 200 m long, in contact with amphibolitized basalt and diorite. Semi-massive sulphides (CP-PY-PO) in breccia fragments, as well as disseminations in the dioritic matrix.
(32) Cactus	Local	Zone 18 524249 mE 5966025 mN	33G15	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Ag-Cu	Polygenic intrusive breccia with fragments of semi-massive sulfides (PY-PO-CP) in contact between diorite and amphibolitized basalt. Mineralized zone of at least 10 m wide, extending laterally over 800 m. The amphibolite cut by 5% sulphide veins (PY-PO).
(33) Mintisch	Regional	Zone 18 518599 mE 5975576 mN	33G15	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Multiple	New volcano-sedimentary unit (Fm. of Minisch) about 10 km long and 2.5 km wide, consisting of mafic and ultramafic rocks and calc-silicate rocks. Several outcrops of mineralized amphibolite (disseminated PY-PO) associated with E-W magnetic lineaments.
(34) 10-SA-5203	Local	Zone 18 517658 mE 5975873 mN	33G15	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Au-Cu-Ag	Rusty zone 200 m by 100 m with metric levels of disseminated to semi-massive sulphides (PY-PO) in foliated amphibolite.
(35) 10-SB-6181	Local	Zone 18 5055501 mE 5974737 mN	33G15	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Au	Amphibolite mineralized in semi-massive to disseminated PY-PO-AS-CP (2 m wide and 20 m long) in contact with a granite intrusion. Local remobilization by late QZ-PG veins. Regional anomaly in lake-bottom sediments (15 ppb Au, 103 ppm Cu et 2 ppm Ag).
(36) 10-GM-2232	Ponctuel	Zone 18 521314 mE 597845 mN	33G15	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Au	Three zones mineralized in massive to semi-massive PY-PO cut by metric QZ-PY veins in contact with gabbro and metatexite. Metatexite also contains 5% disseminated PY.
(37) 10-PL-4166	Ponctuel	Zone 18 561232 mE 5982540 mN	33G16	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Au	Amphibolitized gabbro with 1-2% PY-PO intersected by QZ-PG veins with 3% PY-PO. The gabbro is cut by a QFP dyke with 2% PY-CP-PO.
(38) 10-SB-6169	Local	Zone 18 549325 mE 5981860 mN	33G16	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Au	Felsic lapilli tuff with disseminated PY (2%) and malachite plating in contact with amphibolitized basalt. Located in the new volcano-sedimentary Fm. Bel.

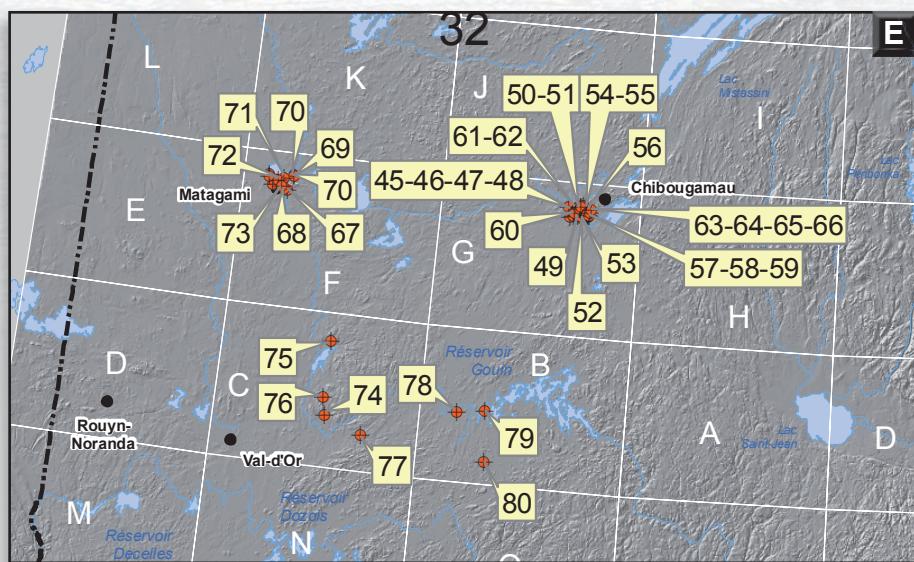
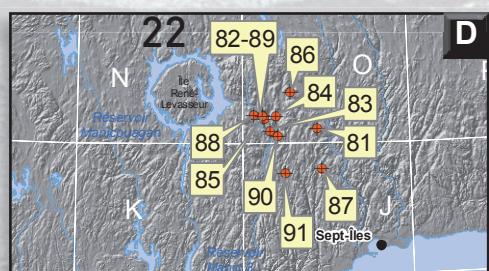
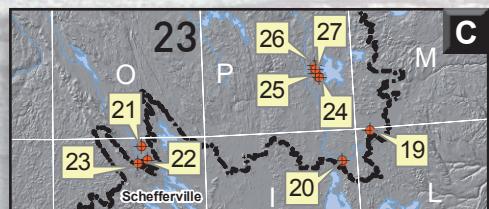
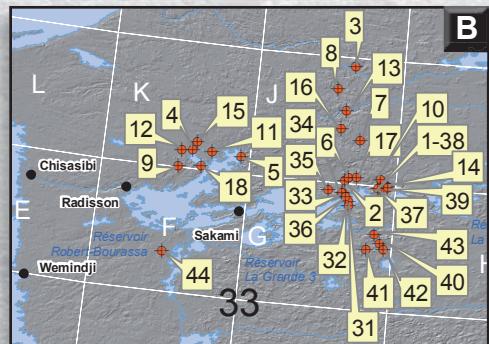
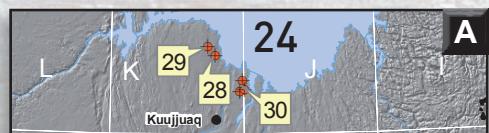
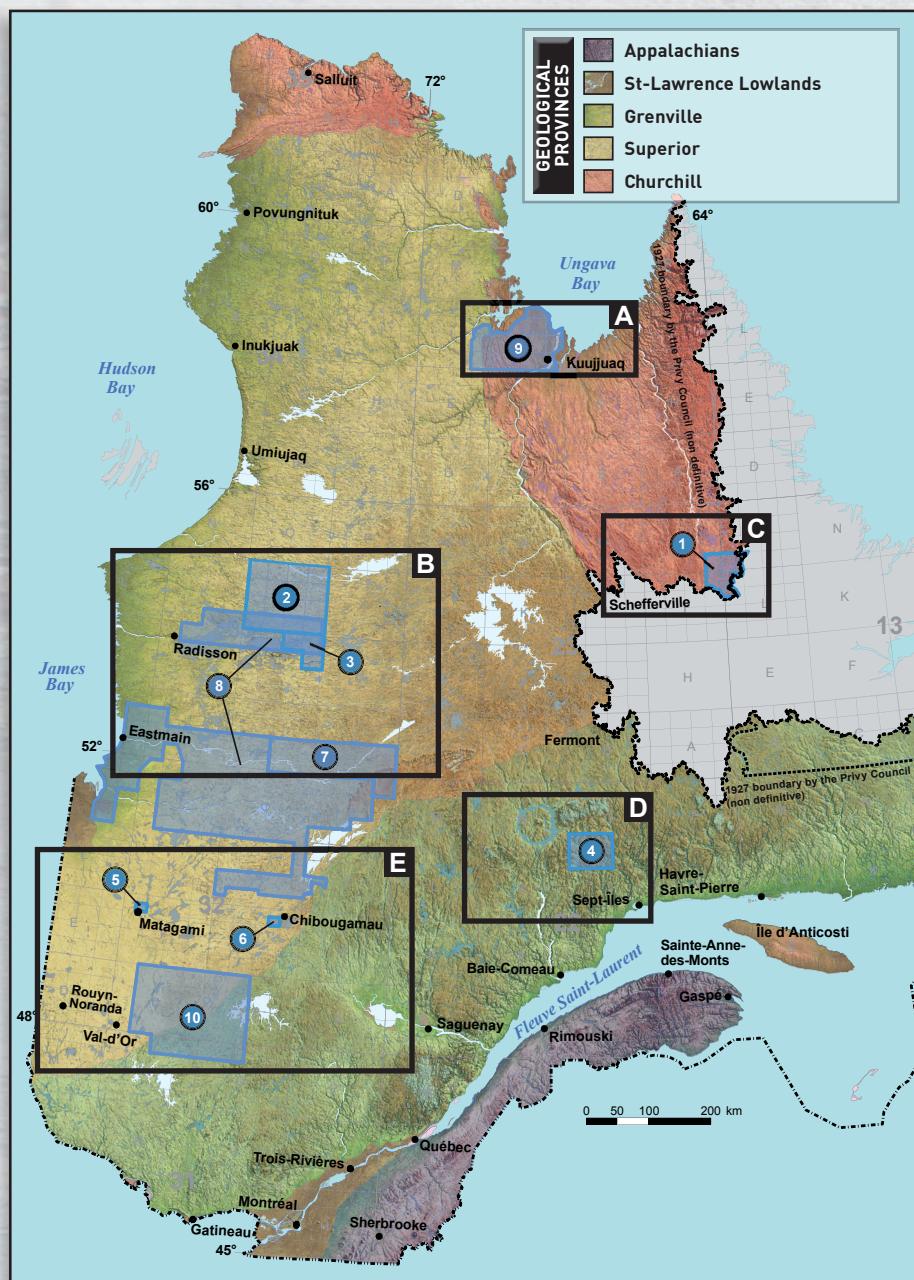
Target (No. and Name)	Size	Localisation (UTM NAD83)	NTS Sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
(39) 10-SB-6252	Local	Zone 18 59836590 mN	33G16	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Au	Silicate-facies iron formation ± sulphides (PY-PO) visible over a thickness of 2 m at the contact between a schistose wacke and decametric oxyde-facies iron formation of the Pie-Belt.
(40) 10-SB-6326	Ponctual	Zone 18 59346477 mN	33G09	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Mo-Cu	Mineralized wacke (3% PY-CP) in contact with a pegmatite containing 7% CP and 4% MO. Mineralization associated with a magnetic lineament and a regional SW-NE shear zone at the northern contact of sediments of the Magin Formation with tonalite of La Grande.
(41) 10-SA-5051	Local	Zone 18 59283392 mN	33G09	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Au	Deformed and mineralized wackes (3% disseminated PY-PO-AS) at the contact of a lamprophyre with an strongly epidotized amphibolitized basalt. Quartz veins containing PY (7%) and MG (5%). Located in an area of 500 m by 200 m characterized by a strong magnetic anomaly.
(42) 10-DB-1046	Local	Zone 18 59292961 mN	33G09	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	Ni-Cu-PGE	Pegmatite and pyroxenite contact corresponding to a magnetic anomaly, 100 m thick and about 1 km long. Disseminated PO (1%) throughout the peridotite.
(43) 10-SB-6006	Ponctual	Zone 18 59419177 mN	33G09	Mapping – Réservoir La Grande 3 East area, Baie-James	151-152	Daniel Bandyayera Pénélope Burniaux	U-Th	U and Th mineralization potential associated with a white pegmatite which gave scintillometer reading of 4600 cps. The spectrometer indicates a content of 2.2% K, 89.9 ppm and 125.7 ppm eq.Th.
(44) Sakami	Regional	Zone 18 363540 mE	33F06	Airborne magnétique survey – Radisson area (DP 201-06)	197	Isabelle D'Amours	Kimberlite	Three anomalies with Keating coefficients of 90 to 94% (cylinder of 100 m radius) near a Proterozoic S dyke. One anomaly is located beneath a lake.
Superior Province (Chapais) – Nord-du-Québec administrative region								
(45) Route 113 - Lac Sainte-Lucie	Regional	Zone 18 5614126 mN à 523474 mE 5515652 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au, Cu, Zn, Ag, Pb	Disseminated PY in rhyolites, rhytholitic lapilli-block tuffs, and triple junctions of andesitic pillowed basalts. Epidote and chlorite alteration.
(46) Poignard 1	Ponctual	Zone 18 519121 mE 5621569 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Cu	Tonalite of the Chibougamau Pluton with fragments of diorite, cut by a network of QZ-EP-TL veins with disseminated sulfides (± CP).
(47) Lac Scott SO-2	Ponctual	Zone 18 5618627 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	Tonalite of the Chibougamau Pluton intersected by a N020° fault. Disseminated mineralization of PY-CP. Epidote and chlorite alteration.
(48) Grosse île Lac Scott	Ponctual	Zone 18 5621108 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	Tonalite of the Chibougamau Pluton intersected by the NNE Scott Lake shear zone, with folded QZ veins containing disseminated PY.
(49) Caissement Hydro	Ponctual	Zone 18 56151461 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	Quartz diorite of the Chibougamau Pluton transformed into Cl-SR-AK-EP schist and cut by a TL-QZ-F-Y vein in a E-W shear zone.
(50) Lac Simon Sud-2	Ponctual	Zone 18 5616425 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ-CB-PY vein in a E-W shear zone crosscutting a breccia consisting of a diorite injected by tonalite (Chibougamau Pluton).
(51) Pointe	Ponctual	Zone 18 562177 mE 552145 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ-TL-AK-PY-BR vein in a N115° shear zone, crosscutting tonalite of the Chibougamau Pluton.
(52) Lac Simon Sud-1	Ponctual	Zone 18 5628575 mE 5516755 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	Tonalite of the Chibougamau Pluton cut by QZ-CB veins with disseminated PY in a E-W shear zone.
(53) Lac Travers Nord	Ponctual	Zone 18 5629159 mE 5515652 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	Forty centimeter wide QZ-PY vein in a NNE shear zone, which cuts a gabbro of the Chibougamau Pluton. Disseminated PY in the gabbro along the contact with aplite dykes.
(54) Bejopipa	Ponctual	Zone 18 5622957 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ vein with disseminated or clusters of PY (± 5%), injected into a sheared tonalite (N45°).
(55) île Deschêne Ouest	Local	Zone 18 5620238 mE à 531139 mE 5519959 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ-AK-CL-TL-SR veins with PY-CP-MC mineralization in NE and NNE shear zones cutting a tonalite brecciated by a tonalite of the Chibougamau Pluton.
(56) Lac Simon Nord-2	Ponctual	Zone 18 531953 mE 5622297 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	Folded and boudinaged QZ-TL-SR veins with PY-CP-MC mineralization in NE shear zone (2 m wide) that cuts the granophyre of the Lac Doré Complex.
(57) Lac Duleux Nord	Ponctual	Zone 18 5618361 mE 5518257 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ veins with disseminated to massive PY-CP in E-W shear zone that cuts the diorite and tonalite of the Chibougamau Pluton.
(58) JP-2	Ponctual	Zone 18 532945 mE 5616218 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ veins with disseminated to massive PY-PO in early NNE shear zone that cuts an intrusive breccia in the Chibougamau Pluton. Remobilization of sulphides in E-W schistosity plane.

Target (No. and Name)	Size	Localisation (UTM NAD83)	NTS Sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
(59) Aéroport Ouest	Regional	Zone 18 5515161 mN à 534487 mE 5516223 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au ±Cu	Cp-PY mineralization in NW and E-W shear zones at the contact between tonalite, aplite and diorite dykes and host rock (intrusion breccia). QZ-Cl-EP-MG veins with disseminated PY in NS faults.
(60) Lac Scott SO-3	Punctual	Zone 18 523790 mE 5517478 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	Disseminated PY and clusters in sericitized tonalite of the Chibougamau Pluton. QZ-CB-PY veins.
(61) Lac Scott Nord-1	Punctual	Zone 18 527359 mE 5520972 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ-SR-AK vein (1 mm wide) of NS direction with disseminated PY-CP-MC in tonalite of the Chibougamau Pluton.
(62) Lac Scott Nord-2	Punctual	Zone 18 528064 mE 5522136 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	N120° shear zone (100 m wide in tonalite (chlorite schist) injected by dioritic dykes (Chibougamau Pluton). Disseminated PY-CP in tonalite throughout the shear zone.
(63) Indice Smith Sud	Local	Zone 18 533389 mE 5517462 mN à 533453 mE 5517589 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ-FC veins in N-S to NNE faults and shear zones crosscutting intrusion breccia located Between the Chibougamau Pluton and the Lac Doré Complex. Disseminated PY in silicified breccia.
(64) Lac Buckett	Local	Zone 18 532533 mE 5516642 mN à 532948 mE 5517778 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	QZ-Cl-EP-PY veins in NS to NNE shear zones and mineralized (PY-PC) aplite dykes in intrusion breccia located between the Chibougamau Pluton and the Lac Doré Complex.
(65) Lac David Sud - Route	Punctual	Zone 18 534480 mE 5516622 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Cu ±Au	QZ-Cl-EP veins and disseminated PY in NW shear zones and fractures, hosted in an intrusive breccia located between the Chibougamau Pluton and the Lac Doré Complex.
(66) Lac David SO	Regional	Zone 18 535527 mE 5518392 mN à 535630 mE 5520551 mN	32G15	Mapping and compilation – Lac Scott area	193	François Leclerc Patrick Houle	Au	NNW and NNW shear zones with QZ-CB-Cl-EP-PY-CP-MC veins in the Layered Zone of Lac Doré Complex.
Superior Province (Matagami) – Nord-du-Québec administrative region								
(67) île-Dieu-1	Local	Zone 18 314000 mE 5515500 mN à 316200 mE 5515000 mN	32F13	Mapping and compilation – Matagami area	156-157	Pierre Pilote	Zn, Cu	Extension of the stratigraphic level of rhyolite hosting the Radioré mine orebody, cut and offset by a dyke.
(68) île-Dieu-2	Regional	Zone 18 305500 mE 5515500 mN à 313700 mE 5515000 mN	32F13	Mapping and compilation – Matagami area	156-157	Pierre Pilote	Zn, Cu	Extension of the stratigraphic level of rhyolite hosting the Norita and Radioré mines orebodies, north of the rivière Bell Complex.
(69) île-Dieu-3	Regional	Zone 18 302300 mE 5524800 mN à 320300 mE 5525700 mN	32F13	Mapping and compilation – Matagami area	156-157	Pierre Pilote	Au, Ag	QZ-CB-Au-Ag veins hosted by the ENE Matagami Lake shear zone.
(70) île-Dieu-4	Regional	Zone 18 302300 mE 5523500 mN à 320250 mE 5524900 mN	32F13	Mapping and compilation – Matagami area	156-157	Pierre Pilote	Au, Ag	QZ-CB-Au-Ag veins hosted by the Waswanipi River ENE to EW shear zone.
(71) île-Dieu-5	Local	Zone 18 313197 mE 5524094 mN	32F13	Mapping and compilation – Matagami area	156-157	Pierre Pilote	Zn, Cu, Se, Cd	Mineralized cherty exhalite, Zn (2400-2700 ppm), Cu (270-900 ppm), Se and Cd, on the south shore of Matagami Lake. This exhalite is 2.5 m thick.
(72) île-Dieu	Local	Zone 18 309495 mE 5521755 mN	32F13	Mapping and compilation – Matagami area	156-157	Pierre Pilote	Cu, Au, As	Quartz-ankerite veins hosted in NE shear zones , with 900 to 2000 ppm Cu and anomalous values of Au and As.
(73) Barrière - île-Dieu	Local	Zone 18 312223 mE 5517175 mN	32F13	Mapping and compilation – Matagami area	156-157	Pierre Pilote	Cu, Ag, As	Quartz veins with CP-PY (more than 10 000 ppm Cu) with anomalous Ag and As. The veins are oriented NW-SE.

Target (No. and Name)	Size	Localisation (UTM NAD83)	NTS Sheet	Project	Poster	Person(s) in charge	Substance(s)	Description
Superior Province (Senneterre) – Abitibi-Témiscamingue administrative region								
(74) Lac Fallon	Regional	Zone 18 357930 mE 535701 mN	32C09	Airborne magnetic survey – Senneterre area (DP 2010-04)	197	Isabelle D'Amours	Kimberlite	Abnormalities with Keating coefficients of 92% (cylinder of 100 m radius) within a large granitoid mass. Other circular negative anomalies in the vicinity.
(75) Lac Parent	Local	Zone 18 5410290 mE 5410290 mN	32C-5	Airborne magnetic survey – Senneterre area (DP 2010-04)	197	Isabelle D'Amours	Kimberlite	Abnormalities with Keating coefficients of 96% (cylinder of 100 m radius).
(76) Ruisseau Sunday	Ponctual	Zone 18 355950 mE 5363670 mN	32C07	Airborne magnetic survey – Senneterre area (DP 2010-04)	197	Camille St-Hilaire	Kimberlite	Isolated anomaly, not part of a structural lineament (dyke, fault, fold), nice round shape, good Keating coefficient (97.2%) and high amplitude (142).
(77) Lac Cartier	Ponctual	Zone 18 5344230 mE 5370030 mN	32C02	Airborne magnetic survey – Senneterre area (DP 2010-04)	197	Camille St-Hilaire	Kimberlite	Isolated anomaly, not part of a structural lineament (dyke, fault, fold), nice round shape, good Keating coefficient (96.2%) and high amplitude (241).
(78) Lac Pascagama	Ponctual	Zone 18 452070 mE 5368050 mN	32B05	Airborne magnetic survey – Senneterre area (DP 2010-04)	197	Camille St-Hilaire	Kimberlite	Isolated anomaly, not part of a structural lineament (dyke, fault, fold), nice round shape, good Keating coefficient (96.7%) and high amplitude (159).
(79) Lac du Mâle	Ponctual	Zone 18 472470 mE 5370030 mN	32B06	Airborne magnetic survey – Senneterre area (DP 2010-04)	197	Camille St-Hilaire	Kimberlite	Isolated anomaly, not part of a structural lineament (dyke, fault, fold), nice round shape, good Keating coefficient (96.7%) and high amplitude (217).
(80) Lac Bûs	Ponctual	Zone 18 474450 mE 5333330 mN	32B03	Airborne magnetic survey – Senneterre area (DP 2010-04)	197	Camille St-Hilaire	Kimberlite	Isolated anomaly, not part of a structural lineament (dyke, fault, fold), nice round shape, good Keating coefficient (97.1%) and high amplitude (458).
Grenville Province – Côte-Nord administrative region								
(81) Petit Garenmand	Ponctual	Zone 19 633103 mE 56638872 mN	22D03	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	Ni, Cu, Industrial minerals (sillimanite and graphite)	Garnet-sillimanite-graphite paragneiss with thin gabbro layers. Contains up to 5% finely disseminated sulphides (0.01% Ni, 0.01% Cu, 1.19% S) and 23% Al2O3.
(82) Dechêne Est	Ponctual	Zone 19 585571 mE 5674904 mN	22D04	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	Industrial minerals (sillimanite)	Sillimanite with interbeds rich in sillimanite (up to 50% sillimanite and 26% Al2O3).
(83) Carole	Local	Zone 19 593397 mE 5661509 mN	22D04	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	Industrial minerals (sillimanite and graphite)	Paragneiss with up to 25% sillimanite and 19% Al2O3.
(84) Du Milieu	Ponctual	Zone 19 598118 mE 5674674 mN	22D04	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	Industrial minerals (sillimanite)	Sillimanite paragneiss with up to 30% sillimanite and 21% Al2O3.
(85) Marie-L	Regional	Zone 19 587891 mE 5671995 mN	22D04	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	Industrial minerals (sillimanite and graphite)	Paragneiss with levels rich in sillimanite (up to 50% sillimanite) and 20% Al2O3 on average.
(86) Tou-5	Ponctual	Zone 19 609063 mE 5694615 mN	22D06	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	Ni-Cu	Olivine clinopyroxene with trace sulphides (1569 ppm Ni).
(87) Cacaoui	Ponctual	Zone 19 637061 mE 5630262 mN	22J14	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	Architectural stone	Quartz mangerite, greenish, little fractured
(88) Bardoux	Local	Zone 19 578363 mE 5675317 mN	22D04	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	Architectural stone	Porphyritic granite gray-black, garnet, locally with rapakivi texture, little fractured, large volume
(89) Robs	Ponctual	Zone 19 586057 mE 5673956 mN	22D04	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	REE	White pegmatite dyke, discordant, about 50 cm (1545 ppm total REE)
(90) Sév	Local	Zone 19 599463 mE 5657197 mN	22D04	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	REE	Granitic whitish migmatite (1614 ppm total REE)
(91) Arthur Est	Local	Zone 19 606088 mE 5625623 mN	22J14	Mapping – Lac du Milieu area	199	Abdelai Moukhsil Pierre Lacombe	REE	Masses and dykes of pink granitic pegmatite containing allanite (1336 ppm total REE)

Coordinates indicate the centre of the exploration target or both ends of a linear target.

LOCATION OF PROJECTS AND MINERAL EXPLORATION TARGETS



PROJECTS

1. Mapping – Lac Zeni area
2. Mapping – Lac Kinglet area
3. Mapping – Réservoir La Grande 3 East area, Baie-James
4. Mapping – Lac du Milieu area
5. Mapping and compilation – Matagami area
6. Mapping and compilation – Lac Scott area
7. Airborne magnetic and spectrometric survey - Baie-James area
8. Airborne geophysical survey - Baie-James area
9. Airborne geophysical survey - Kuujjuaq area
10. Airborne geophysical survey - Senneterre area

Target